

U1387A-1H-1A

Expedition 339: Mediterranean Outflow

U1387A 1H 1A

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
How in?	2.5Y 4/1	Clay Silt	Silt Med Sand	Mottled	BI:3 Slight	1 cm SS	<del>Type 2: Silty mud</del> Silty mud w/ biogenic Carbonate common shell fragments	NN	9/Dec/2011
		Clay Silt	Silt Fine Sand	Bioturbated contact Mottled	BI:2 Sparse		<del>Type 1: Nano mud</del> Silty mud with biogenic Carbonate shell fractions burrow filled with silty clay burrow from upper unit		
							80 burrow?		
							87 Scapopada's shell		
							133 Shell fractions		

(JK)  
 SS 1cm  
 Silty mud w/ biocarb  
 Top:  
 Silty mud w/ Biocarb

Undisturbed bed

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					N U	9/Dec/21
--0--							Type 1: <del>Nano mud</del> continued from A		
--10--						6	Silty mud w/ biogenic Carbonate Shell fragments		
						17			
--20--						23	Shell fragments		
--30--									
--40--									
--50--									
53				Bioturbated contact					
--60--	2.5Y 4/1	fine sand	Medium sand	BI:2 Sparse			Type 3: <del>Silt</del> Sandy Silt with Biogenic Carbonate		
--70--	Undisturbed			Mottled		69.55	dispersed shell fragments 69 cm Sandy silt with biogenic Carbonate 70 shell fragments partly bioturbated. 71		SS 69cm Sandy silt w/ biocarb (JK)
--80--									
77				Erosional Contact					
--80--	2.5Y 4/1	<del>Clay Silt</del>	Silt Fine Sand	BI:2 Sparse			Type 1: <del>Nano mud</del>		
--90--				Mottled			Sandy Silty mud with biogenic Carbonate dispersed shell fragments		Nano Mud is OK JK
--100--									
--110--									
--120--						118.55	Silty Mud w/ bio Carb (JK)		
125				Bioturbated contact					
--130--	2.5Y 4/1	Silt	<del>Very fine sand</del> Med Sand	BI:3 slight			Type 2: <del>Silt</del> mud		
				Mottled			Sandy Silty mud with Biogenic Carbonate		
138				Bioturbated contact		136			
--140--	2.5Y 4/1	<del>Clay Silt</del>	Silt Fine Sand	BI:3 slight		144	Silty Mud w/ biogenic Carbonate		
--150--				Mottled			Type 1: <del>Nano mud</del>		

MAJOR LITHOLOGY:

MINOR LITHOLOGY:





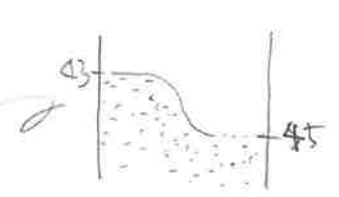


	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --								NN	9/Dec/2011	
							Type 2: Silty mud			
-- 10 --							} Dispersed shell fractions			
-- 20 --										
23										
							Paleo - sample			
29										
-- 30 --										
-- 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.						
							Type 2: Silty Mud (continued from 1A)	NN	9/Dec/2011
				Mottled					
				Disruptive contact	BI:2		Type 1: Nano mud		
	10YR 4/1	Clay	Silt				30SS - Nano Mud		
				Mottled					
				Disruptive contact	BI:2		Type 2: Silty Mud → sandy silt w/BC		
	2.5Y 4/1	Silt	Silt MS						
				Mottled			62 shell fragment		
							dispersed shell fragments		
							81 shell fragments		
				discontinuous faint parallel lamination					
				gradational					
				Sharp contact	BI:2		relatively coarse (silt - very fine sand)		
	2.5Y 4/1	Silt	Silt MS				Type 2: Silty mud → sandy silt w/BC		
							98 scaphopoda shell (black)		
				Erosional contact	BI:2		Type 1: Nano mud		
	10YR 4/1	Clay	Silt						
				Gradational contact	BI:2		Type 2: Silty mud		
	2.5Y 4/1	Silt	Silt MS						
							mud filled burrows		
				Erosional contact	BI:2		Type 1: Nano mud		
	10YR 4/1	Clay	Silt ↑ filling burrows						

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



U 1387

A

2-H 3A

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Expedition 339: Mediterranean Outflow

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
								NN	9/Dec/2011
	2.5Y 4/1	silt	<del>silt</del> MS	Bioturbated contact	BI:2		Type 1: Nanno mud continued from 2A Type 2: Silty mud — Sandy silt w/BC		
				Mottled			} dispersed shell fragments (throughout this section)		
	2.5Y 4/1	clay	silt ↑ in burrows	Gradational contact Mottled	BI:2		Type 1: Nanno mud		
	2.5Y 4/1	silt	<del>silt</del> MS	Gradational contact	BI:3		Type 2: Silty mud Sandy silt w/BC		
				Mottled			↑ fining upward		
	2.5Y 4/1	clay	silt	Bioturbated contact	BI:3		Type 1: Nanno mud		
				Mottled					
	2.5Y 4/1	silt	<del>silt</del> M.S	Bioturbated contact	BI:3		Type 2: Silty mud Sandy silt w/BC		
				Mottled					
							-122 shell fragments		
							-123 ↓ burrow		
							-124 		
							-133 burrows 		

MAJOR LITHOLOGY:

MINOR LITHOLOGY:











Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
								NN	9/Dec/2011
5	2.5Y 4/1	Clay	Silt	Bioturbation contact	BI:2		Type I: Nonne sand		
10							Shell fractions		
28									
30							Paleo sampling		
33									
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.						
	10Y5/1	silt	M.S.	massive Bio.C.	3		SILTY MUD	MASU	9/DEC/2011
		clay	M.S.	massive Bio.C.	3		CLAY		
		silt	M.S.	massive Bio.C.	3		SILTY MUD		
							CLAY		
		clay	M.S.	massive	3				
				Grad.C					
		silt	M.S.	normal grading	3		SILTY MUD		
				Grad.C					
		V.F.S.	M.S.	massive	3		SILTY SAND		
							pyritized sand-filled burrows		

SSFAAS

Small Shell Fragments All Along the Section

undisturbance

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: MASU	Date: 9/DEC/21
		Avg.	Max.						
-- 0 --							S.A.A. SSFAAS		
				Grad. C			6		
-- 10 --	10Y4/1	Silt	M.S.	Inversely grading	3		SANDY SILT Scattered plant frags $\phi$ 1 cm		
-- 20 --							28 22		
-- 30 --				Grad. C			31		
-- 40 --		clay	M.S.	massive	3		SILTY MUD		
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --				Grad. C			139-138 shell fragments 143		
		V.F.S.	M.S.	massive	3		SILTY SAND		
-- 150 --									

undisturbance

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
	10Y4/1	VFS	M.S.	massive	3		SILTY SAND SSFAAS	MAM	9/DEC/2011
				G.C.					
		clay	M.S.				SILTY MUD		
				massive					
				G.C.					
		CLAY	M.S.				<del>CLAY</del> MUD		
				massive					
				G.C.					
		silt	M.S.	massive			SANDY SILT		

undisturbance

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: MASU	Date: 9/DEC/2011
		Avg.	Max.						
-- 0 --	10YR4/1						S.A.A.		
-- 10 --				Grad. C.					
-- 20 --		Clay	M.S.	massive	3		15 SILTY MUD		
-- 30 --				Grad. C.					
-- 40 --		Silt	M.S.	massive	4	FOSS	31 SANDY SILT. Silty mud w/Bio Carb		
-- 50 --				↑ Grad. C.					
-- 60 --	10Y4/1	V.F.S.	C.S.	Normal g.	4		56 VERY FINE SAND → hear after "Silty sand"		
-- 70 --							mottled		
-- 80 --									
-- 90 --				Inverse g.					
-- 100 --				Grad. C.					
-- 110 --		Silt	M.S.	massive	4		101 SANDY SILT		
-- 120 --				Bio. C.					
-- 130 --		Very fine sand	M.S.	massive	3		121 VERY FINE SAND SILTY SAND		
-- 140 --		Silt	M.S.	massive	3		139 SANDY SILT		
-- 150 --									

undisturbance

Biogradational. G.

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --	10Y4/1						S.A.A	MPSM	9/DEC/2011
-- 10 --							SSFAAS		
-- 20 --				Grad.C.					
		V.F.S.	C.S.			3	20 VERY FINE SAND Silty sand		
-- 30 --				Grad.C.					
		clay	M.S.			2	39 35 CLAY		
-- 40 --				Sharp.C.					
		F.S.	M.C.S.			2	PINE SAND		
-- 50 --				Bio. 49.					
				Bio.C		4			
-- 60 --									
		Silt	M.S.			4	54 SANDY SILT mottled.		
-- 70 --									
				Bio.C					
-- 80 --		clay	M.S.				75 SILTY MUD		
-- 90 --						3	83 84 pyritized sand-filled burrow		
-- 100 --				Bo.C					
				Bo.C					
-- 110 --						2	100 Silty sand		
		Very fine sand.	M.S.	massive					
-- 120 --				Bo.C					
				Bo.C			116 SILTY MUD		
-- 130 --		clay	M.S.	massive		3			
				sharp.C					
-- 140 --									
							CLAY		
-- 150 --									
		clay	M.S.	massive					

undisturbance

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: MASM	Date: 9/DEC/2011
			Avg.	Max.						
-- 0 --								0-137.		
-- 10 --								clay slightly bioturbated.		
-- 20 --								scatter pyrite grains.		
-- 30 --										
-- 40 --		10X 5/1	clay	msd foram						
-- 50 --										
-- 60 --						3				
-- 70 --	undisturbance									
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --								12755 Nanno Mud (XRD-CARB) CaCO <sub>3</sub> 27.6%		
137										
-- 140 --							IW			
142										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



Expedition 339: Mediterranean Outflow

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3H7A

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	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --									YPSU	9/DEC/2011
-- 10 --								0-57.   Same as 6A. Clay Slightly bioturbated. Scattered pyrite grains.		
-- 20 --										
-- 30 --	undisturbance	10Y 5/1		clay in sd (foam)		3				
-- 40 --										
-- 50 --										
57.5										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

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3HCC

12-8

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.					NAM	9/DEC/201
-- 0 --	undisturbance	10Y 5/1	clay	msd (loam)			0-28 same as 7A			
-- 10 --										
-- 20 --										
28										
-- 30 --						PAL				
37.5										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										



MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
								MASU	9/DEC/2011
-- 0 --									
	10YR5/1	Clay	m. sand	massive	Z		SSFAAS Small shell fragments All Along the Section CLAY		
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --				Inclined & gradational c					
	10Y4/1	F.S.	M.S.	grading	Z		52 FINE SAND		
				Sharp. C			54		
-- 60 --	10Y5/1	Clay	M. Sand	massive			57 $\phi$ 2cm. sand clast (injection? burrow? ...?)		
-- 70 --					Z		CLAY		
-- 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.						
	10Y4/1						S A A	MASU	9/DEC/2017
							SSFAAS		
-- 0 --									
-- 10 --				Bio. C					
		Clay	M.S.	massive			SILTY MUD		
				Grad. C					
-- 20 --		Clay	M.S.	massive			MUD		
				Grad. C.					
		clay	M.S.	massive			SILTY MUD		
				Grad. C.					
-- 30 --		clay	M.S.	massive			MUD		
-- 40 --							43 sand-filled burrow		
-- 50 --							49 Sand filled burrow		
				Grad					
-- 60 --		Clay	M.S.	massive			CLAY		
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --							S.A.A.	UAFM	9/DEC/2011
-- 10 --									
-- 20 --									
-- 30 --							SSFAAS		
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --				Grad. C					
	10Y4/1	Clay	M.S.	massive			71		
-- 80 --				Bio. C					
		V.F.S.	C.S.	massive			80		
-- 90 --									
-- 100 --				Grad. C					
		F.S.	C.S.	massive			98		
-- 110 --									
-- 120 --				Sharp. C					
		clay	M.S.	massive					
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



Expedition 339: Mediterranean Outflow

U1387A

4H4A

1252

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --									mas	9/25/2011
-- 10 --								S. A. A		
-- 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 --							S.S.A.	YAFM	9/Dec/2011
-- 10 --									
-- 20 --							SS.F.A.A.S		
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 75 --				Grad. C.	3				
-- 80 --	10Y5/1	Clay	M.S.	normal grading	3		75 SILTY MUD		
-- 87 --				Grad. C.					
-- 90 --	5G4S/1	V.F.S.	M.S.	normal grading	3		87 FINE SAND		
-- 100 --									
-- 105 --									
-- 110 --		F.S.							
-- 112 --				Erosional C.					
-- 113-114 --	10YR5/1	clay	M.S.	med. c.	3		113-114 ⊙ φ1.5 sand clast (burrow? injection?) MUD		
-- 120 --									
-- 130 --									
-- 140 --									
-- 147 --									
-- 150 --									

normal grading

TD ?

SS 105 — Sand w/ BioCorb

137 SS — Silty Mud w/ Bio Corb  
CaCO<sub>3</sub> 29.4%

IW

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --	10YR5/2	Clay	M.S.				S.A. - A	mas	9/DEC/2011
-- 10 --									
-- 20 --							SSFAAS		
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --		Clay	M.S.	Normal Grad. C			SS SILTY MUD		
-- 70 --									
-- 80 --		very fine sand	M.S.	Normal Grad. C			7 VERY FINE SAND silty sand		
-- 90 --		Clay	M.S.	Inclined C			83 MUD		
-- 100 --									
-- 110 --		Clay	M.S.	Normal Grad. C			93 SILTY MUD		
-- 120 --									
-- 130 --		Clay	M.S.	Sharp. C			113 MUD		
-- 140 --									
-- 150 --									

T.D. ?

T.D. ?

MB10

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					YPM	9/5/2011
-- 0 --							0-58		
		clay	med fossil				clay slightly bioturbated scatter pyrite grains and shell fragments.		
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
58									
58-60	d.H	S-Lt	co sd	gradual	3		58-60. S-Lt. Scattered m.c. sand grains.		
				gradual					
-- 70 --									
75.5	d.H	vf sd.	c sd.		3		60-75.5. vf sand silty slightly bioturbated. Scatter shell fragments.		
-- 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 --									Masm	9/25/01
			vf. sd.	c. sand		3		0-11 Same as above.		
-- 10 -- "					gradual			11-63.5.		
-- 20 --								silty mud. slightly bioturbated. scattered pyrite grains and shell fragments		
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 -- 63.5										
-- 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.						
	10YR4/1							MASW	9/DEC/2011
--0--	Fall-in								
--10--									
--20--		Fine Sand	Very Coarse Sand		3		FINE SAND Small Shell Fragments All Along the Section echinoderm spine.		
--30--									
--40--		Clay	M.S.	Grad. c. massive			--38-- SILTY MUD		
--50--									
--60--		Clay	M.S.	Sharp. C. massive			53 MUD		
--70--	Undisturbance	Very Fine Sand	M.S.	Grad. c. massive			68 339U1387A SH1A 73-74 73 cold coral fragments. VERY FINE SAND		
--80--		Clay	M.S.	Grad. c. massive			82 84 Silty MUD		
--90--		Very Fine Sand	M.S.	Grad. c. massive			VERY FINE SAND Silty Sand		
--100--		Clay	M.S.	Bio. C. I.G.			91 SILTY MUD		
--110--									
--120--		Very Fine Sand	M.S.	Grad. c. normal grading			121 VERY FINE SAND		
--130--		Clay	M.S.	Bio. C. massive			127 Silty sand MUD		
--140--									
--150--									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --	10YR5/2							MDSM	2/Dec/2011
-- 10 --		V.F.S	M.S.	Massive	} 15 ss		3 VERY FINE SAND ↕ silty sand? Cementite? Silty Mud w/BC		
-- 20 --				erosional c			20	SILTY MUD	
-- 50 --		clay	M.S.						
-- 60 --				massive					
-- 135 --				Grad. c			135		
-- 140 --		clay	M.S.	massive	↓		MUD		
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					MAM	9/DEC/2011
-- 0 --							S.A.A		
-- 10 --				Grad. C			10		
		Clay	M.S.	massive	3		SILTY MUD		
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --				Grad. C			80		
		Clay	M.S.	massive	3		mud		
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --				Grad. C			143		
		very fine sand.	M.S.	massive	3				
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					MASU	9/DEC/2011
-- 0 --							0-15.5. clay slightly bioturbated.		
-- 10 --							Scatter pyrite grains		
-- 20 --							mottled red:ch and green:ch colour through the section.		
-- 30 --							shell fragments and a narrow coaral fossil scattered also.		
-- 40 --	10YR 5/1						43-44. burrow filled pyrite grains.		
-- 50 --							75-76.5 coaral tube. white d=1mm.		
-- 60 --					3				
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --			clay	msd (foram)				0-145.5	f.	
-- 10 --								clay slightly bioturbated, scattered pyrite grains and shell fragments, mottled red:ch and green:ch color through the section.		
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --		10YR 5/1				3		3.5. Pyrite nodule d=5mm.		
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

un disturbed

10YR 5/1

3

3.5.

Pyrite nodule  
d=5mm.

IW

IW

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

U1387A

5H6A.

1269

Drilling disturb.	Color	Grain-size		Sed. / struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --							0-139.	F.	
-- 10 --			clay msd (forams)				Same as above.		
-- 20 --									
-- 30 --									
-- 40 --	10YR 5/1				3				
-- 50 --									
-- 60 --	undisturbed								
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --						127 SS	Normal Mud CaCO <sub>3</sub> 26.1%		
139									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Depth	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --			clay	msd foram				0-30 same as above.	f.	12/9/2011
-- 10 --	undisturbed	10YR 5/1				3				
-- 20 --								122. crack.		
-- 30 --							PAL			
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										



MAJOR LITHOLOGY:

MINOR LITHOLOGY:



Expedition 339: Mediterranean Outflow

U13A7 6H 2A

1265

Drilling disturb.	Color	Grain-size		Sed. struct./ contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					YASU	9/DEC/2011
-- 0 --	564/1	clay	M.S.	massive	3		MUD		
-- 10 --		clay	M.S.	massive	3		silty mud		
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --				erosion					
-- 80 --	SA	clay	M.S.	massive	3		MUD		
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

Silty mud w/ Biog. Carb.

Nano mud

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

01387A 6H-3

12/6

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --		10/25/11	Clay	M.S.	massive	2			YGS	9/DEC/2011
-- 10 --								mud Nanno mud		
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

undisturbed

93cm Nanno Mud  
SS - 93-94cm CaCO3 20.9%

But -  
"CAUTION  
DISTURVED"  
Label on  
cap.

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

U1387A

6HCC-

-1267.

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --		10YR5/1	Clay	M.S.	massive	2			YDSW	9/25/2011
-- 10 --								MUD Nano mud		
-- 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.					MAM	9/DEC/2011
-- 0 --	5G5/1	clay	M.S.	massive	3				
-- 10 --									
-- 20 --									
-- 30 --	change ↓ 10Y4/1								
-- 40 --									
-- 50 --									
-- 60 --	change ↓ 10YR4/1								
-- 70 --	Bioturb.								
-- 80 --									
-- 90 --							88cm Bivalves	339-U1387A7X1A 88-88	Bivalve
-- 100 --							94 cm Silty Mud w/ Biogenic Carbonate		
-- 110 --									
-- 120 --									
-- 130 --							-131 Sand w/ shell fragment - filled burrow		
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: MDS	Date: 9/DEC/2011
		Avg.	Max.						
-- 0 --							SILTY MUD		
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

Clay M.G. massive 3

G.C ↑  
Normal G.  
G.C  
Inverse G.  
G.C ↓

SS

105 SANDY SILT w/ BIOGENIC CARB.  
113 VERY FINE SAND  
121cm: Sand w/ Biogenic Carbonate shell fragm.  
125 SANDY SILT mottled w/ biogenic carbonate  
131 SILTY mud w/ biogenic carbonate  
mottled  
--- Contact?

Continuity?

CaCO3 29.1%

IW

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --									yaam	9/DE/01
-- 10 --	Biscuit		Clay	M.S.	massive	3		= 7-8 shell fragments.		
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --	Biscuit									
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

10X5/1  
 Mouse-like disturbance

ss  
 105 cm  
 Nano Mud

Expedition 339: Mediterranean Outflow

U1387A

7XCC.

1-61

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.					nam	9/dec/01
-- 0 --		10GY5/1	Clay	M.S	massive	3		MUD		
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

Piscrete

PAL

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
--0--	10Y5/1							gasr	9/DEC/2011
		clay	M.S.	inverse grading	3		mottled		
--10--				Grad. C					
	10Y5/1	clay	M.S.	massive	3		silty mud w/ biogenic carbonate		
--20--									
--30--									
--40--									
--50--									
--60--									
		V.F.S.		G.C. massive	3	63	VERY FINE SAND w/ biog. carb.		
		Clay		G.C. massive		64	MUD <i>Nanno mud</i>		
		V.F.S.		G.C. massive		65	VERY FINE SAND w/ B.C.		
		Clay		G.C. massive		66	MUD <i>Nanno Mud</i>		
--70--		V.F.S.		massive B.C.		69	VERY FINE SAND w/ B.C.		
						74			
						75-76	pyritized burrows		
--80--				massive			SILTY MUD w/ b.c.		
--90--									
--100--									
				Grad. c					
						103	MUD <i>Nanno mud</i>		
--110--			M.S.	massive					
--120--									
--130--									
--140--									
--150--	148 10YR4/1								

These layers are important!

Biscuit

Conduites

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --		10Y4/1	C. clay	M.S.	massive	2			Masm	9/28/20
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

Bisquit

change  
↓  
10YR4/2

SS 125 cm Nonno mud mottled

IW

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --	10YR4/2	Clay	M.S.	massive	3		Mud	Masm	9/DEC/2011
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --		Clay	M.S.	normal gradng	3		89 SILTY MUD w/ b.c.		
-- 100 --	10Y4/1			massive					
-- 110 --				Grad. c					
-- 116 --		Silt	M.S.	normal gradng	3		116 SANDY SILT w/ b.c. Mottled		
-- 120 --				Bio. C					
-- 120 --		V.F.S.	M.S.	massive	3		120 VERY FINE SAND w/ b.c. Mottled		
-- 130 --				erosional c. Irregular c. Bio. C.					
-- 138 --					SS		138 cm: Nanno mud		
-- 140 --		Clay	M.S.	massive	3		138 mud nanno mud		
-- 150 --									



T.D. 2.

MB10

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
	10Y5/1	clay	M.S.				MUD	gsm	2/22/2011
				massive			15-17 sand-filled burrow		
							21 shell fragments		
							Nanno mud		
				Bio. c massive B.c			44 SILTY MUD w/ bc		
		very fine sand	F.S.	massive B.C			46 SILTY SAND w/ bc		
		clay	M.S.	massive B.C			50 SILTY MUD w/ b.c.		
		silt	F.S.	massive B.c			52 SANDY SILT w/ b.c.		
		Very fine sand	M.S.	massive			58 VERY FINE SAND w/ b.c.		
				Irregular C			70 MUD		
		clay	M.S.	massive			SS 78 cm: Nanno mud CaCO <sub>3</sub> 30.0%		
							82 echinoderm spine		

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

V1387A

8XCC

1277



Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --							S.A.A.	YPSU	9/25/2011
-- 10 --	10YR4/1	Clay	M.S.	Grad. C. massive	3		SILTY MUD w/ b.c.		
-- 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 --	10Y5/1	clay	M.S				<u>lay d</u>	ngsm	9/5/2011
-- 10 --				massive	BI 2.		Small shell Fragments All Along the Section.		
-- 20 --									
-- 30 --									
-- 40 --				massive					
-- 50 --									
-- 60 --							57cm some shell fragments φ 0.5 ~ 1.5 cm.		
-- 70 --									
-- 80 --									
-- 90 --				massive					
-- 100 --									
-- 110 --							339U1387A ax2A III-III Gastropod. III gastropods		
-- 120 --	10Y5/1 ↓ 10YR 4/1	clay	M.S	gradational contact.	BI 2.		<u>lay d</u>		
-- 130 --				massive					
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: satoshi masu	Date: 2/25/2011
		Avg.	Max.						
-- 0 --	10YR 3/1	clay	M.S	massive	BI 2		med (continued from 2A)		
-- 10 --									
-- 20 --									
-- 30 --	10YR 3/1 ↓ 10YR 4/1			grad c					
-- 30 --		clay	M.S	massive	BI 3				
-- 40 --									
-- 50 --	biscuit?								
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --							102. coral fragment		
-- 110 --									
-- 120 --									
-- 130 --	10YR 4/1 ↓ GLEI 3/1			grad c			127 wood fragment		
-- 130 --		clay	M.S.						
-- 140 --									
-- 150 --							146. wood fragment.		

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.					MASU	9/5/02
-- 0 --								(continued from 3A)		
-- 10 --										
-- 20 --										
-- 30 --										
39					bioturbated					
-- 40 --		GLAY 1 4/1	clay	r.s.	contact massive	BI 3		mud		
-- 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.					YACM	9/DEC/2011
-- 0 --								continued from 4A		
-- 10 --		GLTY 4/1			grad					
12		↓			Contact					
-- 20 --		10YR 3/2	clay	M-S	massive	BI 3	20 ss	20 cm Nanofossil Mud		
	biscuit?									
-- 30 --								33cm Py. burrow		
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --								80cm ~ Small shell fragments		
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --								131-132 CaCO <sub>3</sub> 29.6%		
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

M

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --							continued from 5A	MDSU	9/DEC/2011
-- 10 -- 13				gradational contact					
-- 20 --	10YR 4/1	silt	M.S	massive (mottled)	BI:2	20 SS	<u>silty mud</u> 20cm: Sandy silt with biogenic carbonate		
29 -- 30 --				bioturbated contact					
-- 40 --	10YR 3/1	clay	M.S	massive	BI:2		<u>mud.</u>		
45 -- 50 --				sharp (+bioturbated) massive (mottled)	BI:2		<u>silty mud</u>		
-- 60 --				sharp contact			<u>mud.</u>		
-- 70 --				massive	BI:2				
-- 80 --	GLEI 4/1	clay	M.S						
-- 90 --									
-- 100 --									
-- 110 --									
112 -- 120 --							112		
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:





	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --								continued from 6A	mam	9/FEC/2011
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
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 --							continued from 7A 4cm. thin silt layer.	mpm	9/20/20
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --									
42									
-- 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.						
	5y 4/1	clay	sand (Fossil)	massive	B2 =2 slight		Nanno wad (1) Fossils present (few)	OR	10/12/11
--0-- --10-- 12 16							-12 - Py burrow -15: Py burrow		
--20-- --30-- --40-- --50-- --60-- --70--									
--70-- --80--	5y 4/2						-70: color change		
--90-- --100-- --110-- 114							-114: shell fragments		
--120-- --130-- --140-- --150--									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: CR	Date: 10/12/11
			Avg.	Max.						
-- 0 --								Same as above		
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --								contact: 1		
-- 110 --	und.	5y 412			marine	BZ =2		Silty mud (2) Forams present		
							110 SS	110 cm: Sandy silt w/ biogenic carbonate		
-- 120 --								contact: irregular		
-- 130 --	und	5y 411			marine	BZ =2		hard mud (1)		
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

M

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --	same						Same as above	012	10/12/14
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
56	same			unstr	BI		contact: gradational Silty mud (2) w/ b.c.		
-- 60 --					=2				
67	same			unstr	BI		contact: gradational Nannal mud (1)		
-- 70 --					=2		Fossils present Small shell fragments (few)		
-- 80 --						75SS	75cm: Nannofossil mud		
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
134							134: color change		
-- 140 --	5g 4/2								
-- 150 --									

MB10

MAJOR LITHOLOGY:

MINOR LITHOLOGY:


Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: AR	Date: 10/12/11
		Avg.	Max.						
-- 0 --							Same as above		
8							-8: shell frag.		
-- 10 --									
12							-12 shell frag.		
-- 20 --									
-- 30 --									
-- 40 --									
45							-45: shell frag.		
-- 50 --									
-- 60 --									
-- 70 --									
74							-74: shell frag.		
-- 80 --							-80: shell frag.		
-- 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 --								CR	10/12/11
							Nanno nodule (1) Forams present 		
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
53									
	10Gy			massive	B1				
58	3/1				=2		color change		
-- 60 --	5y			massive	B1				
	4/2				=2				
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

dis  
falcon

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --							Same as above	CR	10/12/11
-- 10 --	und								
12							contact irregular		
-- 20 --	und same			massive	BZ =2		Silty sand (3) Forams present Shell frags (small)		
-- 30 --									
36							contact: irregular		
38				massive	BZ =2		-38 shell frag		
-- 40 --	und same						Nanno level (1) Forams present Small shell frags present		
-- 50 --									
-- 60 --									
-- 70 --									
79							-79: shell frag		
-- 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 gy 511						Same as above	CR	10/12/11
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
68 69 -- 70 --							68 69 > Forams		
-- 80 --									
-- 90 --									
-- 100 --									
106 -- 110 --	10Gy 411						-106: Py band		
111 -- 120 --				wash	BZ = 2		② silty mud Forams present small shell frags.	111 → shell frags.	
-- 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 Forams present Small shell fragm.	CR	10/12/11
--10--									
12							12 Py burrow		
--20--									
--30--									
37							37: Py burrow		
--40--									
43	same			massive	B <sub>1</sub> =2		contact: gradual Nanno nodule ① Forams present Small shell fragm.		
--50--									
--60--									
--70--									
--80--									
--90--									
--100--									
108							108 Shell fragm.		
--110--									
--120--									
126							126: Shell fragm		
128							128: sea-urchin spicule (fragm).		
--130--									
--140--									
--150--									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					C12	20/12/16
--0--	10 Gy 411						Same as above Forams present Small shell fragm.		①
--10--									
--20--									
--30--									
--40--									
--50--									
--60--									
--70--						20 SS	70: Silty mud w/ biogenic carbonate		
--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 --	und	same						CR	20/12/11	
-- 10 --										
16							contact: gradual silty mud (2)			
-- 20 --										
-- 30 --							Shell fragments (small) Forams present Smear slide: silty mud w/ biogenic carbonate			
35							contact: gradual Nanno mud (1)			
-- 40 --										
46							Forams present Shell fragments (small) -46: Py burrow			
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
104							100-101 CaCO <sub>3</sub> 35.28% -104: Py burrow			
107							-107: Py burrow			
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

U1387A 11X7A

(297)

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --									OR	10/12/11
								Now no mud (1) Same as above		
-- 10 --										
13 -								-13: Py burrow		
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
57 -								-57: Shell fragm.		
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										



MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

V1387 11x CCA

1298

	Drilling disturb.	Color	Grain-size		Sed. / struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --									GR	10/12/14
-- 10 --								Same 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: SF	Date: 2011 12/10
		Avg.	Max.						
--0--	GLTY1 4/1	clay	M.S				① mud		
--10-- bisuit ②				massive	BI3				
--20-- 25				bioturbated contact					
--30-- bisuit ②	GLTY1 4/1	silt	M.S	massive (mottled)	BI2	35cm S.S	③ silt 35 cm Nonnofossil mud		
--40-- 45				gradational contact					
--50--	GLTY1 4/1	silt	M.S	massive	BI3		② silty mud		
--60--							60cm Gastropoda		
--70-- bisuit ②									
--80--									
--90--									
--100--							95cm Py burrow		
--110--									
--120--									
136 --130--				gradational contact					
--140--	GLTY1 5/1	clay	M.S	massive	BI2		④ mud		
--150--									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



Expedition 339: Mediterranean Outflow

U1387A 12X2A

1300

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: SF	Date: 2011-12/10
		Avg.	Max.						
-- 0 --							continued from 1A		
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --							78cm Py burrow		
-- 90 --							92. shell fragment φ=0.5 ~ 2mm		
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

biscuit?

78cm Py burrow

92. shell fragment  
φ=0.5 ~ 2mm

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

V1387A 12X~~3~~3A

1301

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: SF	Date: 2011 12/10
			Avg.	Max.						
-- 0 --								continued from (2A)		
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 65 --		biscuit <sup>(1)</sup>								
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --		GLTY1 4/1	clay	M.S	gradational Contact			① mud		
-- 130 --					massive.	BIZ				
-- 135 --		biscuit <sup>(1)</sup>								
-- 140 --										
-- 145 --										
-- 150 --										
										144 Gastropoda

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

U1387A

[2X4A

1302

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: SF	Date: 2011 12/10
		Avg.	Max.						
-- 0 --							continued from 3A		
-- 10 --									
-- 20 --									
-- 30 --	biscuit								
-- 40 --									
-- 50 --									
56				gradational contact					
-- 60 --	biscuit	GLT 1 4/1	clay MS	massive	BI 3		① mud		
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --							98cm Pj burrow		
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									


MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

~~U1387A~~ U1387A 12x 6A

1304  
3

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: SF	Date: 2011 12/10
		Avg.	Max.						
-- 0 --							continued from 4A		
-- 10 --							12cm P. burrow		
-- 20 --	biscuit								
-- 30 --						30.58	30 cm Nanno mud		
-- 40 --							45cm P. burrow		
-- 50 --									
-- 60 --				bioturbated contact					
62	GLEI 3/1	clay	MS				⊙ mud contain a lot of foram		
-- 70 --									
-- 80 --	biscuit				BI3				
-- 90 --							large burrow		
-- 100 --									
-- 110 --						108 SS	108 cm Nanno mud		
120				gradational contact					
120							⊙ Mud		
-- 130 --	biscuit	GLEI 4/1	clay MS		BI2				
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

M

Expedition 339: Mediterranean Outflow

V1387A 12x7A GA

(305)  
4

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					SF	2011 12/10
-- 0 --							Continued from 5A		
-- 10 --									
-- 20 --									
-- 30 --							30 Py burrow 32. greenish layer.		
-- 40 --									
-- 50 --							48. foram patch (1-2mm) 51. py burrow, contain shell fragment φ = 1-2mm		
-- 60 --									
-- 70 --									
-- 80 --							78. Py burrow		
-- 90 --									
-- 100 --									
-- 110 --							106. Py burrow		
-- 120 --							121-122 25.3% CaCO <sub>3</sub> 125. contain shell fragments φ = 0.5-2mm		
-- 130 --									126
-- 140 --									
-- 150 --									

b. sedit

MBIO

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

J 1387A 12x9A

1305

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: SF	Date: 2011 12/10
		Avg.	Max.						
-- 0 --							continued from 6A.		
-- 10 --									
-- 20 --							18cm Py burrow		
-- 30 --							28cm Py burrow		
-- 40 --	biscuit								
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

90

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

U1387A 12XCCA

1306



	Drilling disturb.	Color	Grain-size		Sed. / struct. / contact	Bioturb.	Samples	Comments	Logged by: SF	Date: 2011 / 12 / 10
			Avg.	Max.						
-- 0 --								Continued from 7A.		
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

byssite

30

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
--0--	fall in	GLEJ1							CR	10/2/11
4	one	10y	clay		massive	B1 "2		Nanno fused (1) Forams present		
--10--		411						-10 - Py Sarcos		
11								-11 - " "		
14								-14 - " "		
--20--										
28								-28 Forams		
--30--										
--40--										
--50--										
--60--										
--70--										
--80--										
89								-89: Py Sarcos		
--90--										
93								-93: Py Sarcos		
94								-94: Py Sarcos		
--100--										
--110--								-110: Benthic		
--120--										
--130--										
139								-139: Py Sarcos		
--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 Forams present through the site	CR	10/12/11
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --									
41							40 41 → Forams		
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
108									
-- 110 --									
112							108 112 → <i>P. summa</i> 2 cm φ		
118							118 : Scaphopoda shell fragment		
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

V1387A 13X 3A

1309

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --							Same as above	CR	10/12/11
-- 10 --							Forams present through the section		
-- 20 --									
-- 30 --									
32							- 32 > Py burrows		
35							- 35 > Py burrows > zebra long		
-- 40 --									
-- 50 --									
54							- 54 shell frag.		
-- 60 --									
-- 70 --									
-- 80 --									
86							- 86: Py burrow		
-- 90 --									
94							- 94: Foram		
-- 100 --									
106							- 106 > Py burrow		
108							- 108 > Shell frag.		
-- 110 --									
							- - - gradual color change		
-- 120 --									
	OLEY <sub>1</sub>								
	5Gy								
	411								
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

U1387A 13 X 4A

(310)

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --	grey 50y 4/1						Same as above Forams present	Gr2	10/12/11
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --						-50 SS	50 cm Nanno mud		
-- 60 --									
-- 70 --									
-- 80 --									
88 --							-88: Py bones		
-- 90 --									
98 --							-98: Shell fragments.		
-- 100 --									
105 --									
-- 110 --									
-- 120 --									
-- 130 --	grey 10S 4/1						gradual color change		
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
								CR	10/12/11
-- 0 --							Same as above		
							Forams present		
-- 10 --									
-- 20 --									
28									
-- 30 --									
-- 40 --									
-- 50 --									
52									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
97									
-- 100 --									
-- 110 --									
-- 120 --									
121									
-- 130 --									
-- 140 --									
-- 150 --									

und

5y  
7/2

52

10y  
4/1

5y  
4/2

121  
SS

-28: Py burrow

-55: Py burrow

----- gradual color change

-99  
-100 > Py burrow

121 cm:  
Nano mud

M

Expedition 339: Mediterranean Outflow

V 1387A

(3x6A)

1312

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --									CF2	10/12/11
								Same as above Forams present		
-- 10 --										
-- 20 --										
24--								-26: shell frags.		
28--								gradual color change		
-- 30 --		Grey 1								
		109								
		411								
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

102  
sacs 29.1%

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

U1387A 13X7A

1313

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --										
-- 10 --								Same as above Forams present Small shell frag.		
15								-15 > Forams		
16								-17 > Forams		
-- 20 --		5g								
		412								
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

V1387A 13XCCA

1314

STRUCTURE BY CCA  
FOR AWACSI  
PAPER 01/10/04

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: CR	Date: 10/12/11
		Avg.	Max.						
-- 0 --							Same as above Forams present		
9 -- 10 --							-9 > coal branch frag.		
"							-11: shell frag.		
-- 20 --									
24 -- 30 --							-24: shell frag.		
-- 40 --									
-- 50 --							-50: shell frag.		
-- 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								CR	10/12/11
4	5y			massive	B1 = 2				
6	4/1						> coral branch		
10	↓								
13									
20									
30									
32									
34									
40									
50									
60									
66									
70					B2 = 3				
73									
80									
90									
100									
110									
120									
130									
140									
141									
150	10y 4/1								

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



Depth	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
0		10g							CR	20/2/11
7	410	411						Saw as above -7: shell frag.		
10										
20										
25			gradual with change							
30		5g								
35		411								
45										
50		10g								
55		411								
60										
65					massive	BZ -2		contact: gradual Silty mud (2)		
70										
80										
85										
90		10g			massive	BZ -2		contact: irregular Mud (1) Fossils present		
95		411								
96								-96 > Shell frag.		
100								-100 >		
110										
120										
124								-124 > P <sub>2</sub> burrow		
127								-127 >		
130										
140										
150										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

U1387A 14X3A

(1317)

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					C12	20/12/11
-- 0 --							Same as above Forams present		Teil (1)
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
76 --									
78 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
127 --									
-- 130 --									
-- 140 --									
-- 150 --									

-76 -> Py bones  
-78 -> Py bones

-127: Bivalve shell frag.

2

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --							Same as above	OR	01/2/11
-- 10 --									
-- 20 --									
-- 30 --									
31							-30 > shell frag. -31 > coral branch frag.		
33									
38	10y 411			manru	B12		-38: shell frag. Silty mud (2)		
-- 40 --									
-- 50 --									
-- 60 --									
65							contact: gradual silty sand (3)		
-- 70 --							shell frag.		
-- 80 --									
88							contact: gradual (2)		
-- 90 --							silty mud		
-- 100 --									
104							contact: irregular few Forams (4)		
-- 110 --									
116							-116 > P. berinus		
119							-119 > P. berinus		
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: ER	Date: 10/12/11
		Avg.	Max.						
-- 0 --							Same as above; mud (1) Forams present (few)		
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 -- 121-							121: Py burrow		
-- 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: Fed (1) few shell frags. (small) Forams present	CR	10/12/17
-- 10 --									
-- 20 --									
-- 30 --						30 SS	30 cm: Nanno mud		
-- 40 --									
-- 50 --									
54							shell frags.		
-- 60 --									
-- 70 --									
-- 80 --									
82							82: Forams		
-- 90 --									
-- 100 --									
105									
-- 110 --									
							105: 105: forams CaCO3 26.2%		
-- 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--		209							LR	10/12/11
		411			Homogeneous ↓	B1 B2 ↓		Mud		①
--10--		↓								
16								16		
18								18		> Shell fragments (bivalves)
--20--										
--30--										
36								36		
38								38		> Py burrow
--40--										
										Silty mud
										Shell frag (small)
--50--								50		
								SS		
										50 cm: silty mud with w/ biogenic carb.
--60--										
--70--										
--80--										
--90--										
--100--										
--110--										
--120--										
--130--										
--140--										
--150--										

VOID

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

V1387A 14XCCA

1322



	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.					C12	10/12/11
-- 0 --								Dirty mud (Same as above)		
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: CR	Date: 10/12/11
			Avg.	Max.						
-- 0 --	md ↓	GLY1 10y	clay ↓		massive ↓	BI =2 ↓				
-- 10 --		4/1 ↓								
-- 20 --										
22										-22: shell frag.
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
76										-76: shell frag.
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										-110: shell fragment
114										-114 > Bivalve shells fragments
115										-115 > Bivalve shells fragments
119										-119: Py burrow
-- 120 --										-120: shell frag.
-- 130 --										
-- 140 --										
146										-146: Py burrow
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: CR	Date: 10/12/11
		Avg.	Max.						
-- 0 --							① Same as above Forams present		
-- 10 --									
18							18 20 > Py burrow		
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
65							Contact: gradational		
-- 70 --	OLEY1 10g 4/1			massive	BI =2		Silty mud ② shell fragments were abundant than above		
-- 80 --							80 81 > coral branch fragment		
81									
-- 90 --									
95							95: Bivalve shell frag.		
-- 100 --									
108							shell frag.		
-- 110 --									
-- 120 --									
125							125: coral branch		
-- 130 --									
-- 140 --							Contact: irregular		
-- 150 --	OLEY1 10g 4/1			massive	BI =2		MUD ① Forams present few shell frags. (small)		

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: CR	Date: 20/12/11
		Avg.	Max.						
-- 0 --							Red (Same as above)		(1)
							Forams present		
-- 10 --									
-- 20 --									
-- 30 --									
38							-38' Shell frag.		
-- 40 --									
44							-44' Shell frag.		
-- 50 --									
55							-55' Py burrow		
-- 60 --									
-- 70 --									
-- 80 --						81 SS	81 cm: Nano fossil mud		
-- 90 --									
95							-95' Py burrow		
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
142							-142' Py burrow		
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

U 1387 A 15 X 4A

1326

Expedition 339: Mediterranean Outflow

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: CR	Date: 10/12/11
		Avg.	Max.						
-- 0 --							Mud (Same as above) Foraminifera present		① ↓
-- 10 -- 14	GLY1 10y								
-- 20 --	3/1								
-- 30 --									
-- 40 -- 43							43: Py bands		
-- 45 -- 49							45: Py bands		
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 -- 112							112: Py bands		
-- 120 --									
-- 130 -- B2	GLY1 10y								
-- 140 --	4/1								
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --							① Mud Forams present Shell frags.	CR	10/12/11
-- 10 --									
-- 20 --									
-- 30 --									
35									
36									
-- 40 --									
46									
47									
-- 50 --									
-- 60 --									
62									
63									
-- 70 --									
							contact: gradational Silty mud ②		
-- 80 --									
							contact: gradational Mud ①		
-- 90 --									
95									
97									
-- 100 --									
103									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									



MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --							① Mud (Same as above) Forams present	C12	10/12/11
-- 10 --									
-- 20 --									
27							-27: Shell frag		
-- 30 --									
-- 40 --									
-- 50 --	Same			laminar	B-1 2		contact: gradual ② Silty mud Forams present		
-- 60 --							60 cm: Silty mud w/ biog. carbonate		
-- 70 --									
76							contact: gradual		
78							-78: Shell frag. ① Mud		
-- 80 --									
-- 90 --									
-- 100 --									
102							-102: Bivalve shell frag.		
-- 110 --									
112							-112: Py s.		
-- 120 --							115-116 28.4% CaCO <sub>3</sub>		
-- 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 Forams present	(R)	10/12/11
-- 10 --							-10: Py burrow		
-- 12 --							-12: Py burrow		
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

C1387A

15x CCA

(330)

08/12/2011 10:04:00 AM



	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --									CR	10/12/11
-- 10 --								Same as above Tonow present		
-- 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 --	Biscuits?							Type 1: Mud (continued from 7A)	NN	(10/Dec/2011)	
-- 10 --											
-- 20 --											
26.5											Paleo - sample
-- 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: SF	Date: 2011 12/10
		Avg.	Max.						
-- 0 --							(continued from 16H) 4cm. shell fragment (1cm)		
-- 10 --									
-- 20 --									
-- 30 --							29cm. shell fragment		
-- 40 --							39 ↓ 43 shell fragments		
48.				gradational contact					
-- 50 --							<u>silty mud (type 2)</u>		
-- 60 --				massive (mottled?)		BZ 2			
-- 70 --									
-- 80 --									
-- 90 --							88cm. Py burrow 90cm		
-- 100 --									
-- 110 --							shell fragments.		
-- 120 --							124 sea ocean fragment (5mm)		
-- 130 --							136 S.S		
-- 140 --							130cm: Sandy silt with biogenic carb.		
-- 144 --				Bioturbated contact					
-- 150 --				massive		BZ 2	mud (type 1)		

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: SF	Date: 2011 12/10
		Avg.	Max.						
-- 0 --							continued from 1A		
-- 10 --							11cm shell fragment (0.5 mm)		
-- 20 --									
-- 30 --									
-- 40 --							45cm shell fragment (2mm)		
-- 50 --									
-- 60 --									
-- 70 --	biscuit						76cm shell fragments		
-- 80 --									
-- 90 --							shell fragments present ( < 1mm )		
-- 100 --							102cm foram patch (1mm)		
-- 110 --							114cm foram patch (1mm)		
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

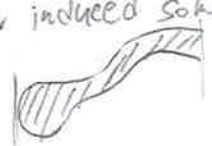

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: SF	Date: 2011 12/10
		Avg.	Max.						
-- 0 --							continued from 2A		
-- 10 --									
-- 20 --									
-- 30 --							32cm shell fragment (5mm)		
-- 40 --							43cm shell fragment (5mm)		
-- 50 --							46cm shell fragment		
59cm				Bioturbated			59cm foram patch (2mm)		
-- 60 --	GLT 3/1	clay	m. sand	Contact massive	BI3		hyd		
-- 70 --									
-- 80 --									
-- 90 --							92cm shell fragment (2mm)		
-- 100 --									
107cm				gradational					
-- 110 --	GLT 4/1	clay	m. sand	Contact massive	BI3		114cm shell fragment (0.5mm)		
-- 120 --							121 shell fragments (<0.5mm)		
-- 130 --									
-- 140 --									
-- 150 --							146cm P <sub>1</sub> burrow (1mm)		

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: SF	Date: 2011 12/10		
			Avg.	Max.								
-- 0 --	biscuit									continued from 3A		
-- 10 --												
18cm					gradational					10cm Py burrow		
-- 20 --	biscuit	GLET 3/1	clay	m. sand	contact (+ bioturbation)	massive	BI-3				36cm Py burrow	
-- 30 --												
-- 40 --												42cm shell fragments
-- 50 --												
-- 60 --												
-- 70 --												
-- 80 --											79cm Scaphopoda fragment (1cm) 81cm Py burrow	
-- 90 --												
96cm					bioturbated							
-- 100 --	biscuit	GLET 4/1	clay	m. sand	Contact.	massive	BI-3				97cm burrow induced something? 	
-- 110 --												
120					bi-turbated						111cm large burrow? 115cm 115cm - Py burrow 	
120					contact.							
-- 130 --	biscuit	GLET 3/1	clay	m. sand			BI-3				127cm Py burrow (3mm)	
-- 140 --												
143					bioturbated						139cm Py burrow (2mm)	
140					contact							
-- 150 --	biscuit	GLET 4/1	clay	m. sand	contact		BI-3				147cm Py burrow (4mm)	

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: SF	Date: 2011 12/10
		Avg.	Max.						
-- 0 --							continued from 4A 3cm foram patch (2mm)		
-- 10 --				bioturbated					
11cm	GLAY 3/1.	clay	m. sand	contact	BIZ		mud 18cm Py burrow 20cm foram patch (1mm)		
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --							53cm shell fragments (< 1mm) 56cm Py burrow (5mm)		
-- 60 --									
-- 70 --									
-- 80 --							74cm shell fragment 75cm: <i>Junior Slide</i> <i>Nanno Mud</i>		
-- 90 --							95cm foram patch (0.5mm)		
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --							131cm Py burrow (2mm) 133cm Py burrows (< 3mm)		
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

M

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: SF	Date: 2011 12/10
			Avg.	Max.						
-- 0 --								continued from 5A		
								-4cm Py burrow		
-- 10 --								-17 18cm Py burrow		
								↑ shell fragments		
-- 20 --								↓		
								-21		
								-26 Py burrows		
-- 30 --								-27 Py burrows		
-- 40 --										
								-44cm Py burrow		
-- 50 --								-48cm Py burrow		
								-50cm Py burrow		
-- 60 --								-59 patch (contain some shell fragments.)		
	biscuit.							↑ 3cm		
-- 70 --								-62		
-- 80 --										
-- 90 --								-93cm shell fragment.		
								-94cm foram patch (2mm)		
-- 100 --								100 CaCO <sub>3</sub> 26.1%		
-- 110 --										
	112cm									
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



Expedition 339: Mediterranean Outflow

U1387A (17x CCA)

(1346)



Depth (cm)	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
0								SF	2011	
6							continued from 47A 6cm. shell fragments		12/10	
11							11cm. Ty burrow.			
21							21cm. shell fragment.			
24							24cm. shell fragment.			
26										
31										
30										
40										
50										
60										
70										
80										
90										
100										
110										
120										
130										
140										
150										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: CR	Date: 10/12/11
		Avg.	Max.						
0--	Fall in	GLEY					Mud ①		
5--	6m	10Y		massive	B1		↓ Few Forams throughout the section (and core)		
10--	↓	4/1		↓	=2				
20--									
27--							27: Py burrow		
30--									
40--									
50--									
60--									
70--									
80--									
83--							83: Py burrow		
90--									
100--									
107--							107 > Py burrow		
108--							108		
110--							111: shell frag.		
120--									
130--									
133--							133: shell frag.		
140--									
150--									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



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

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --	5G4 411						Thud ① Same as above	CR	10/12/11
-- 10 --									
12							- Py burrow		
-- 20 --									
27							- 27: Py burrow		
-- 30 --									
-- 40 --									
47							- 47: Py b.		
-- 50 --									
-- 60 --									
66							- 66 - Py b.		
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
108							- 108: Py b.		
-- 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 --	Sand						Well ① Same as above	OR	10/12/11
-- 10 --									
-- 20 --	10y 4/1								
27							-27: Py brown		
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
71							71: Py brown		
-- 80 --							75 cm Nanno mud		
-- 90 --									
93							-93 > Py b.		
94							-94 > Py b.		
97							-97: Py		
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									



MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

U1387A

18-X5A5A

1353

20000117124  
10000000  
10000000

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

48-49 cm  
CaCO<sub>3</sub> 26.5%

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: C12	Date: 20/12/11
			Avg.	Max.						
-- 0 --								Mud 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: SF	Date: 2011 12/10
		Avg.	Max.						
-- 0 --	GLT1 10Y4/1	clay	m. sand	massive	BZ3		<del>mud (type 1)</del> - 3cm. Py burrow		
-- 10 --									
-- 20 --									
-- 30 --							- 31cm shell fragment (5mm)		
-- 40 --									
-- 50 --							- 50cm Py burrow		
-- 56 --							- 56cm shell fragment (1mm)		
-- 57 --							- 57cm shell fragment (1mm)		
-- 59 --							- 59cm foram patch (0.5mm)		
-- 60 --									
-- 63 --							- 63cm shell fragment (1mm)		
-- 66 --							- 66cm shell fragment (4mm)		
-- 70 --	biscuit								
-- 80 --									
-- 90 --									
-- 100 --									
-- 107 --							- 107cm shell fragment (1mm)		
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
145cm				bioturbated					
biscuit	5Y 4/1	clay	m. sand	contact	BZ3		<del>mud (type 1)</del>		
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: SF	Date: 2011 12/10
		Avg.	Max.						
-- 0 --							continued from 1A - shell fragments		
-- 10 --									
-- 20 --							- 17cm. shell fragment (1mm)		
-- 30 --							- 24cm foram patch (1mm)		
-- 40 --									
-- 50 --							- 52cm P <sub>1</sub> burrow		
-- 60 --							- 55cm P <sub>1</sub> burrow, shell fragment		
-- 70 --							- 61cm P <sub>1</sub> burrow		
-- 80 --							- 75cm shell fragment		
-- 90 --							- 85cm foram patch (2mm)		
-- 100 --							- 98cm Bivalvia fragment - 99cm fossil - 101cm		
-- 110 --							- 115cm shell fragment		
-- 120 --							- 122cm foram patch (2mm)		
-- 130 --							- 126 - shell fragments		
-- 140 --							- 138cm P <sub>1</sub> burrow		
-- 150 --							- 142		

biscuit

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



Expedition 339: Mediterranean Outflow

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: SF	Date: 2011 12/10
		Avg.	Max.						
-- 0 --	Biscuit						continued from 2A		
-- 10 --		GLE11 10Y 4/1	clay	m. sand	gradational contact		mud (type 1)		
-- 20 --				massive	BI 2		24cm shell fragment, (2mm)		
-- 30 --									
-- 40 --									
-- 50 --							51cm shell fragment (1mm)		
-- 60 --	Biscuit						65cm shell fragments		
-- 70 --							73cm		
-- 80 --							Dispersed shell fragments (~1mm)		
-- 90 --									
-- 100 -- /64					bioturbated				
-- 110 --	Biscuit	GLE11 10Y 4/1	silt	m. sand	contact	BI 3	Silty mud (type 2) Sandy silt w/B.C		
-- 120 --				massive (mottled)			116cm shell fragment (8mm)		
-- 130 --							Dispersed shell fragments (~3mm)		
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: SF	Date: 2011 12/10
		Avg.	Max.						
-- 0 --							Continued from 3A		
7				Gradation contact					
-- 10 --	10 Y 4/1	clay	m. s	massive	BI 2		<ul style="list-style-type: none"> <li>19cm. shell fragments (~2mm)</li> <li>22cm. shell fragment.</li> <li>29cm. shell fragment.</li> <li>39cm. coral?</li> <li>45cm. shell fragments (~2mm)</li> <li>61cm. shell fragment.</li> <li>81cm. shell fragment (~4mm)</li> <li>89cm. shell fragment (~3mm)</li> <li>102 foram patch (2mm)</li> <li>123ca. shell fragments (~1mm)</li> </ul>		
-- 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: SF	Date: 2011 12/10
		Avg.	Max.						
-- 0 --							continued from 4A		
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --							70cm large burrow? 1.5cm 75cm SS Nano Mud		
-- 90 --							89cm shell fragment (1mm) 90cm Ty burrow		
-- 100 --							101cm shell fragments (~1mm)		
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

Biscuit

70cm large burrow?  
1.5cm  
75cm SS  
Nano Mud

89cm shell fragment (1mm)  
90cm Ty burrow

101cm shell fragments (~1mm)

IW

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: SF	Date: 2011 12/10
			Avg.	Max.						
-- 0 --								continued from 5A		
-- 10 --										
-- 20 --								25cm. foram patch (2mm)		
-- 30 --										
-- 40 --										
-- 50 --								49cm. shell fragment (2mm)		
-- 60 --								59cm. Coral? fragment (2mm)		
-- 70 --								66cm. shell fragment (2mm)		
-- 80 --								74cm. shell fragments (2mm)		
-- 84cm					gradational contact					
-- 90 --					massive	BI 2				
-- 100 --										
-- 110 --										
-- 112										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

Biscuit

Biscuit

GLAY 1/4

silt. m. sand

gradational contact

massive

BI 2

silty mud (type 2)

dispersed shell fragments (2mm)

103-114 35.6%

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: SF	Date: 2011 12/10
			Avg.	Max.						
-- 0 --										
-- 10 --										
-- 20 --										
-- 30 --										
41 -- 40 --	discut				gradational contact					
48 -- 45 --	discut 10x4/1	GLY 1	silt	m. sand	massive (mottled) bloturbated	BI 2	45cm S.S	Sandy silt (type 3) dispersed sponge sea ocean and shell fragments		
-- 50 --		GLY 1	clay	m. sand	contact			mud (type 1)		
-- 60 --	discut 10x4/1									
-- 70 --										
73 -- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

U1387A 19X CC-A 1361

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: SF	Date: 2011 12/10
			Avg.	Max.						
-- 0 --								continued from 7A.		
-- 10 --								13cm. shell fragment (2mm)		
-- 20 --										
-- 30 --										
36cm										
PAL										
-- 40 --										
40cm										
-- 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: YAFM	Date: 10 APR 2011
			Avg.	Max.						
-- 0 --										
-- 10 --								S.A.A.		
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
	Biscuit									
-- 110 --		10Y4/1	clay	M.S.	Grad. c. → normal s.			109		
						3			SILTY SAND	
-- 120 --		10Y4/1	clay	M.S.	Grad. c. ↓ inverse s.			120		
									MUD	
-- 130 --										
-- 140 --					massive			135		
								140	pyritized burrow	condrites
								143		
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --		10Y4/1	Clay	M.S.	massive	3			YDSW	10/DEC/2011
-- 10 --								MUD <span style="border: 1px solid black; padding: 2px;">S.S.F.A.A.S</span>		
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --	Biscuit							--- 70 --- (shelly mud) --- 73 ---		
-- 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: MDSM	Date: 19/FEB/2011
		Avg.	Max.						
-- 0 --							S. A. A.		
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --							68 pyritized burrows.		
-- 71 --							71		
-- 73 --							73-74 fragment of Gastropod.		
-- 80 --	Biscuit								
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 123 --		Clay	F.S.	Grad. C			123 SILTY MUD		
-- 124 --		V.F.S.	F.S.	normal gradip			124 VERY FINE SAND Silty Sand		TB
-- 126 --		Clay	M.S.	sharp C			126 SILTY MUD		
-- 129 --				grad. C			129 VERY FINE SAND		TB ?
-- 130 --	10Y4/1								
-- 140 --		V.F.S.	M.S.	Massive					
-- 142 --				Irregular C			142		
-- 150 --		Clay	M.S.	Massive			MUD		

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

3015 1578 2004 A  
 10/20/01  
 10/20/01

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --		10YR5/1 (only colour changes to reddish)	Clay	M.S.	massive	3		msn	10/DEC/2011	
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --	Biscuit									
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --							136 shell fragments. 138SS NANNO MUD (XRD Carb) ≥5.3% CaCO <sub>3</sub>			
-- 150 --										

S.S.F.A.A.S

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

U1387A

20x7A

1368



	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --		10YR 5/1						S. A. A	masu	16 DEC 2011
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --		Biscuit								
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --								S. A. A.	mpsu	10/DEC/2011
-- 10 --										
-- 20 --								-- pyritized burrow (very shiny!)		
-- 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: Masa	Date: 10/DEC/2011
			Avg.	Max.						
-- 0 --										
-- 10 --	Fall-in	10Y4/1	clay	M.S.				-12 shell fragments.		
-- 14 --										
-- 20 --								Small Shell Fragments All Along the Section		
-- 30 --								<u>MUD</u>		
-- 40 --					massive } }					
-- 50 --									-53-55 shell fragments.	
-- 60 --										
-- 70 --										
-- 80 --	Biscuit									
-- 90 --										
-- 100 --										
-- 110 --								-106-108 shell fragments.		
-- 120 --		10Y4/1	V.F.S.	M.S.	massive } }			-116 <del>VERY FINE SAND</del> SILTY SAND		
-- 130 --		10Y4/1			Grad. C. } }			-124 SILTY MUD slightly sandy		
-- 140 --			clay	M.S.	massive } }					
-- 150 --		10Y4/1	clay	M.S.	massive } }			-144 MUD		

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

U1387 A

21X 2A

1371

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
								masm	10/DEC/2011
-- 0 --							S. A. A.		
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --							<div style="border: 1px solid black; display: inline-block; padding: 2px;">MUD</div> 52 sand-filled bullow 54 "		
-- 60 --									
-- 70 --									
-- 80 --	Biscuit								
-- 90 --									
-- 100 --							94 55 — Normal Mud		
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:





Expedition 339: Mediterranean Outflow

V1387 A

2X4A

1373

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
	10Y4/1							MAS	10/DEC/2011
-- 0 --									
-- 10 --									
-- 20 --									
-- 30 --		Clay	M.S.	massive			S.S.F.A.A.S.		
-- 40 --									
-- 50 --									
-- 60 --					3		54 Bivalves.		
-- 60 --	10Y4/1	Clay	M.S.	Grad. C mod. G			60 SILTY MUD		
-- 70 --					3				
-- 70 --	10Y4/1						67 VERY FINE SAND		
-- 80 --		Very fine sand	Medium sand		3				
-- 90 --				massive					
-- 100 --							97SS - Calcareous Silty Sand		
-- 100 --							97 shell fragments		
-- 110 --							104		
-- 110 --	10Y4/1	Clay	M.S.	Inclined c			108 sand-filled burrow $\varnothing$ L=4cm MUD		
-- 120 --				massive	3				
-- 130 --									
-- 140 --									
-- 150 --									

Biscuit

Flow-in

Biscuit

TA

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

V1387A

21X5A

1377

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					Masm	10/DEC/2011
-- 0 --	5GY5/1	clay	M.S.		3		mud		
-- 10 --							SSFAAS		
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --	Biscuit								
-- 90 --									
-- 100 --									
-- 105 --	10Y4/1	clay	M.S.	Grad. C	3		<del>SILTY SAND</del>		
-- 110 --	10Y4/1	V.F.S.	M.S.	Grad. C massive	3		<del>VERY FINE SAND</del> SILTY SAND		
-- 120 --					3				
-- 128 --	10Y4/1	clay	M.S.	Bio. C massive	3		SILTY MUD		
-- 136 --	10YR4/1	clay	M.S.	Massive	3		MUD		
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

M

Expedition 339: Mediterranean Outflow

V1387 A

21x6A

1375



Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --	10YR 5/1	Clay	M.S.	massive	3		0 ↑ ↓ 8 sand-filled burrows. φ 1~3 cm	YASU	10/26/2011
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --	Biscuit								
-- 70 --									
-- 80 --									
-- 90 --						92-93 CaCO <sub>3</sub> 30.6%			
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

U1387A

21X 7A

1376

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

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

V1387A

21XCC


1377

	Drilling disturb.	Color	Grain-size		Sed. / struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --									masu	10/25/2011
-- 10 --								S A A .		
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										



MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: MASU	Date: 10/DEC/2011
		Avg.	Max.						
	10Y4/1	clay	M.S.	massive	3		SILTY MUD		
	10Y4/1	V.F.S.		Grad. C min. 2g	7		11 12-13 crack SILTY SAND		
	10Y4/1	clay	F.S.	massive Bio .c	3		SILTY MUD		
	10Y4/1	clay	M.S.	massive Grad. c	3		26 MUD		
							 <p>label on the red cap.</p>		



MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

U1387

22X2A

1379

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					MASU	10/DEC/2011
-- 0 --	10Y4/1	clay	M.S.						
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --		clay	M.S.	Grad. C massive	3		46 SILTY MUD		
-- 60 --		clay	M.S.	Grad. C massive	3		52 MUD		
-- 70 --									
-- 80 --		clay	M.S.	Bio. C. massive	3		80 SILTY MUD		
-- 90 --		U.F.S.	M.S.	Bio. C. massive	3		85 <del>VERY FINE SAND</del> SILTY SAND		
-- 100 --		F.S.	M.S.				101 (FINE SAND)		
-- 110 --									
-- 120 --		clay	M.S.	Bio. C. normal, gray	3		115 SILTY MUD		
-- 130 --		very fine sand	M.S.	Grad. C massive	3		121 <del>VERY FINE SAND</del> SILTY SAND		
-- 140 --									
-- 150 --		clay	M.S.	Bio. C. massive	3		148 SILTY MUD		

S.A.A.  
Small Shell Fragments  
All Along the core

Biscuit

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: masu	Date: 10/DEC/2011
		Avg.	Max.						
-- 0 --	10Y4/1								
-- 10 --							S. A. A.		
-- 20 --				massive					
-- 30 --									
-- 40 --				Grad. C					
	10Y4/1	Clay	M.S.	massive	3		81 SILTY MUD		
	10Y4/1	Clay	M.S.	Grad. C massive	3		84 MUD		
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --				Grad. C					
	10Y4/1	Clay	M.S.	massive	3		89 SILTY MUD		
-- 90 --									
	10Y4/1	Clay	M.S.	Grad. C massive	3		92 MUD		
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

Biscuit

L = > 5cm  
 pyritized sand-filled burrow

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

U1387A 22X4A 1381

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.					MASU	10/DEC/2011
-- 0 --										
-- 10 --								SS A.		
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --								60 [SS] Calcareous Mud		
-- 70 --										
-- 80 --	Biscuit									
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



Expedition 339: Mediterranean Outflow

U1387A

22X6A

1383

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					YASU	10/DEC/2011
-- 0 --	10Y4/1	Clay	M.S.		3		MUD		
-- 10 --									
-- 20 --							S.A.A.		
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --							SSFAAS		
-- 70 --									
-- 80 --	Biscuit								
-- 90 --									
-- 100 --									
-- 110 --				Grad. C					
		Clay	M.S.	normal grad.	3		SILTY MUD		
				Grad. C					
-- 120 --		V.F.S.	M.S.	normal	3		SILTY SAND		
							[SS] 12/10m CALCAREOUS SILTY SAND		
-- 130 --		Clay	M.S.	mass	3		MUD		
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

MB10

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: NFSU	Date: 10/DEC/2011
			Avg.	Max.						
-- 0 --			clay	msd				0-93 mud		
-- 10 --								Slightly bioturbated		
-- 20 --								Scattered pyrite grains		
-- 30 --								and shell fragments.		
-- 40 --		10Y 4/1				3				
-- 50 --										
-- 60 --										
-- 70 --	Biscuit									
-- 80 --										
-- 90 --	93				gradual					
			clay	msd		3		93-97.		
	97				gradual			<u>Silty mud.</u>		
-- 100 --			vf sd	msd				97-113		
		10Y 4/1				3		<u>vf sand.</u>		
-- 110 --										
	113				gradual					
			clay	msd				113-132		
-- 120 --		10Y 4/1				3		<u>Silty mud.</u>		
-- 130 --										
	132									
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --		10Y 4/1	clay	m sd	gradual.			0-6 mdl. Scattered phylite grains.	MPSM	10/DEC/2011
-- 10 --			vf sd	m sd		3		63.5 - 28. silty mdl.		
-- 20 --	Biscuit	10Y 4/1								
-- 30 --	31.5	10Y 4/1	clay	m sd.	gradual.			28 - 31.5. mdl.		
	37						PAL			
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



Expedition 339: Mediterranean Outflow

01387 A 23x 2A

1387

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

MAJOR LITHOLOGY:

MINOR LITHOLOGY:





Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: MASU	Date: 10 DEC 2011
		Avg.	Max.						
-- 0 --	10YR/1	V.F.S	M.S				SILTY SAND		
-- 10 --									
-- 20 --				massive	}		SSFAAS		
-- 30 --									
-- 40 --									
-- 46 --				Grad.C					
-- 50 --		clay	M.S				SILTY MUD (slightly sandy)		
-- 60 --									
-- 60 --					}				
-- 70 --							SILTY MUD		
-- 80 --	Biscuit			Normal grading					
-- 90 --									
-- 92 --									
-- 95 --				Grad.C					
-- 100 --		clay	M.S.						
-- 110 --				massive	}				
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

M





	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --									MPS	10/28/2011
-- 10 --								S.A.A.		
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --								45-48 cm crack		
-- 60 --								VOID		
-- 70 --								S.A.A.		
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										



VOID

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

U1387 A

~~25~~ XCC

393



	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --									mpm	10/5/01
-- 10 --								S.A.A.		
-- 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.						
	10Y4/1	clay	m.s.	massive	3		Small Shell Fragments All Along the Section	MPK	10/DEC/2011
-- 0 --									
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --								mpen	10/20/2011
-- 10 --							N. ed. cl.		
-- 20 --	Bis cut								
-- 30 --									
-- 40 --									
-- 50 --							BSF AdS		
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --				grad. c					
	10Y4/1	Clay	M.S.	massive	3		96 SILTY MUD		
	10Y4/1	Clay	M.S.	Grad C			100 MUD		
-- 110 --				massive	3				
-- 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 --									MAM	10/02/2004
-- 10 --										
-- 20 --										
-- 30 --	Big cut							P.A.A.		
-- 40 --								SSFAAS		
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --					Grad. C massive		97	SILTY MUD		
	1074/1	clay	M.S.				103	<del>SILTY SAND</del> Silty mud		
-- 110 --					Grad. C massive		110	SS		
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					Masm	10/2002/2011
-- 0 --	10Y4/1						N. A. A.		
-- 10 --							11 crack / shelly sand-filled burrow $\phi$ 2cm		
-- 20 --				massive					
-- 30 --							[S. Protolite]		
-- 40 --				Grad. C	3				
-- 40 --		clay	M. S.	normal grading 44-48			40 SILTY MUD		
-- 50 --		V.F.S.	M. S.	Grad. C			47 SILTY SAND		
-- 60 --				massive					
-- 70 --				Grad. C 68			68		
-- 70 --		clay	M. S.	inverse grading			68 SILTY MUD		
-- 80 --				Grad. C			78		
-- 80 --		clay	M. S.	massive			MUD		
-- 90 --									
-- 100 --									
-- 110 --				Grad. C			112		
-- 110 --							SILTY MUD		
-- 120 --		clay	M. S.	massive					
-- 130 --									
-- 140 --				Grad. C			142		
-- 140 --		clay	M. S.	massive			MUD		
-- 150 --									

Discontinuity

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. / struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --							S.A.A.	masu	10/DEC/2011
-- 10 --									
-- 20 --									
-- 30 --							<u>1 SP10/10</u>		
-- 40 --									
-- 50 --	Biscuit						47-48 shell fragments		
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --				crad. c.					
-- 110 --	N411	Clay	M.S.	massive	3		Silty mud SANDY MUD		
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

U1387A

24x6A

1399

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
	10Y4/1							M. P. S. 1	10/15/201
-- 0 --									
-- 10 --									
-- 20 --							Sed. A.		
-- 30 --							SSFAAS?		
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --	Biscuit								
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

MS Rest

MS Rest

136-137 CaCO<sub>3</sub>  
26.4%

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: masm	Date: 10/10/2011
		Avg.	Max.						
-- 0 --				Grad. c.			Scab		
	10Y4/1	clay	M. S.				mud		
-- 10 --				massive.					
-- 20 --							<del>SIFTING</del>		
-- 30 --				Grad. C					
	10Y4/1	clay	M. S.	normal grading			SILTY MUD		
-- 40 --				Grad. c.					
	10Y4/1	Very Fine Sand	M. S.				SANDY SILTY MUD SAND		
-- 50 --				normal grading					
-- 60 --				Grad. C					
	10Y4/1	Fine Sand	M. S.	normal grading					
-- 70 --				Inclined c.					
	10Y4/1	Clay	M. S.				SS TO SAND		
-- 80 --							mud sand filled burrow $\phi$ 1.3 cm mottled		
		Clay	M. S.	Grad. C normal g					
-- 90 --				Grad. C					
		U.F.S.	M. S.				SILTY SAND		
				Grad. C					
		Clay	M. S.	inverse g					
-- 100 --				Grad. C					
		Clay	M. S.				SILTY MUD		
-- 110 --									
							mud sand-filled burrow $\phi$ 1 cm		
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

Bisenic

TA.  
A24x-7  
40-71cm  
↕  
B24x-4  
37-70cm  
Turbidite  
(correlated)  
by Correlator

CR.

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

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



MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

U1387A

24X CC

1402



Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --								Mpsm	10/25/2011
-- 10 --							P. Sed.		
-- 20 --									
-- 30 --							SS Folds		
-- 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 --	5G4/1	clay	M. s.	massive	3		MUD	hasu	10/DEC/2011
-- 10 --									
-- 20 --									
-- 30 --	5G5/1								
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --	Biscuit								
-- 90 --									
-- 100 --	N4/1								
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



Expedition 339: Mediterranean Outflow

25x2A

1404

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --		10G4/1	Clay	M.S.	massive	3			mas	10/DEC 2011
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --	Biscuit									
-- 100 --										
-- 110 --		10G4/1	Clay	M.S.	Grad. c. massive	3.		105 SILTY MUD		
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

25X3A

1405

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --		10Y4/1	Clay	M.S.	massive	3		SILTY MUD	YAS	10/22/01
-- 10 --								10 [SS]		
-- 20 --										
-- 30 --										
-- 34 --								34-35 shell fragments		
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --	Biscuit									
-- 90 --										
-- 100 --		10G4/1								
-- 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.					MAM	10/DEC/2011
-- 0 --			Clay	M.S.		3		MUD		
-- 10 --										
-- 20 --										
-- 30 --		10Y4/1			massive					
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 73 --								73 [SS] greenish mud darker		
-- 78 --	Biscuit	5G4/1	Clay	M.S.	Color c.	3		MUD		
-- 80 --										
-- 90 --										
-- 90 --								90 [SS] greenish mud lighter		
-- 100 --					massive					
-- 110 --										
-- 120 --										
-- 125 --		5G4/1								
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: Mason	Date: 10/DEC/2011
		Avg.	Max.						
-- 0 --		Clay	M.S.				MUD		
-- 10 --				massive	3				
-- 20 --									
-- 30 --									
-- 40 --				Grad. C.			43		
-- 50 --		Clay	M.S.				SILTY MUD		
-- 60 --	Discontinuity			massive					
-- 70 --							171		
-- 80 --							SILTY MUD (slightly sandy)		
-- 90 --		V.F.S	M.S.	Grad. C. normal grady	87		88		
-- 100 --							SILTY SAND		
-- 110 --				inverse grady			100		
-- 120 --		Clay	M.S.	Grad. C.	111-112		110		
-- 130 --							SILTY MUD		
-- 140 --							119 coral (?) fragment		
-- 150 --							339U13817 25X6A 119-119 coral fragment		

CR

CaCO<sub>3</sub> 26.1%

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

25X7A

1409

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --									MAM	10/DEC/2011
-- 10 --		10Y4/1						S.A.A.		
-- 20 --										
-- 30 --										
-- 40 --										
-- 40 --								39		
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

39  
SILTY MUD  
40 (slightly sandy)

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

U1387A 25X CC 1410

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --							Sed.	mpm	10/Dec/2011
-- 10 --							15.16 shell fragment		
-- 20 --					3				
-- 26 --				Grad. c					
-- 30 --	(0.4/1)	Very fine sand	M.S.	(Slightly) Parallel lamination			SILTY SAND small shell fragments		
-- 40 --					3				
-- 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.					MAM	10/DEC/2011
-- 0 --	10Y4/1	Clay	M. s.	massive	3		SILTY MUD		
-- 10 --	10Y4/1	Clay	M. S.	massive	3		8 MUD		
-- 20 --									
-- 30 --									
-- 40 --							Crack 35-39		
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --							109-110 shelly pyritized burrow ø 2cm (?)		
-- 120 --							121 pyritized burrow (?)		
-- 130 --									
-- 140 --									
-- 150 --									



Risquit

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					MASM	10/DEC/2011
-- 0 --	10Y4/1	Clay	M.S.	?	3		SILTY MUD		
-- 10 --									
-- 20 --				massive					
-- 30 --									
-- 40 --									
-- 50 --				normal grading			Small shell fragments. scattered		
-- 60 --		Very fine sand	M.S.	Grad. c.	3		SILTY SAND		
-- 70 --									
-- 80 --				massive					
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --		Clay	M.S.	Grad. c.			SILTY MUD		
-- 140 --				massive	3		shell fragments		
-- 150 --									

Biscuit

normal grading

Grad. c.

massive

inverse grading

Grad. c.

massive

42

58

127

Continued?

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

26x3A

143

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --									masu	10/DEC/2011
-- 10 --								S.A.A.		
-- 20 --										
-- 30 --						3				
-- 40 --										
-- 50 --			clay	M.S.						
-- 60 --										
-- 70 --										
-- 80 --	Biscuit			Grad. C	70					
-- 80 --		10Y4/1	very fine sand.	M.S.	normal grading			80		SILTY SAND
-- 90 --						3				
-- 100 --					95			100cm		Nanno mud
-- 110 --										
-- 120 --										
-- 130 --					normal grading					
-- 130 --					inverse?					
-- 140 --		10Y4/1	clay	M.S.	Grad. C			136		SILTY MUD
-- 140 --						3				
-- 150 --										
-- 150 --					146					

CONTINUE?

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

26X4A

414

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

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



Expedition 339: Mediterranean Outflow

26XSA #15

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

Biscuit

MB10

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

2686A

7416

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --									masu	10/DEC/2011
-- 10 --								P.A.A.		
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --	Biscuit							60 [SS] Sandy silt w/ biogenic carbonate		
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --								107 pyritized burrows $\phi$ 1-2cm		
-- 120 --								114 110-111 CaCO <sub>3</sub> 23.7%		
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --				Grad. C			SODA	MASU	10/DEC/2011
	10Y4/1	Very fine sand	M.S.	massive Grad. C	3		SILTY SAND		
-- 10 --									
	10Y4/1	Clay	M.S.	massive	3		MUD		
-- 20 --									
							116 sand-filled burrow $\phi$ 1.5cm		
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

Biscuit

FAL

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: masu	Date: 10/DEC/2011
		Avg.	Max.						
--0--									
--10--	10Y4/1	clay	M.S.	massive Bio.C	3		crack		SILTY MUD (type 2)
--20--									MUD (type 1)
--30--					3		28		sand-filled burrow $\phi$ 2cm
--40--							39		sand-filled burrow $\phi$ 2cm
--50--		clay	M.S.	massive					
--60--									
--70--							69		cold coral fragment L=1cm 339 U1387A 27X1A 69-69 Cold Coral Branch
--80--									
--90--									
--100--									
--110--									
--120--		clay	M.S.	normal grading Grad.C	3				SILTY MUD (type 2)
--130--		Very Fine Sand	M.S.	massive	3				SILTY SAND (type 2)
--140--							140		Sandy silt w/ biogenic Carbonate
--150--		clay	M.S.	inverse grading	3				SILTY MUD (type 2)

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
	10Y4/1	Clay	M. S.	grad. c.			1 Mud (type 1)	MASM	10/28/2011
				massive	3				
				grad. c.			50 Silty mud (type 2)		
		Clay	M. S.	massive					
				grad. c.			76 Mud (type 1)		
		Clay	M. S.						
				massive					

Biscuit

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: Satoshi MASU	Date: 10/DEC/2011
		Avg.	Max.						
-- 0 --							SAA		
-- 10 --									
-- 20 --									
-- 30 --							26cm shell fragments		
-- 40 --							31cm Py burrow		
-- 50 --							36cm scaecian fragments?		
-- 60 --							48cm Py burrow		
-- 70 --									
-- 80 --							58cm forampatch (1cm)		
-- 90 --							shell fragments (~ 1cm)		
-- 100 --							88cm Py burrow		
-- 110 --							91cm Py burrow		
-- 120 --							111cm Py burrow shell fragments (~ 2cm)		
-- 130 --									
-- 140 --									
-- 150 --							127cm Py burrow		

Biscuit

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: satoshi masu	Date: 10/DEC/2011
		Avg.	Max.						
-- 0 --							SAA		
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --							44cm Py burrow		
-- 60 --									
-- 70 --							no SS	Nanno fossil mud	
-- 80 --	Biscuit						178cm Py burrow		
-- 90 --							90cm foram Patch (1mm)		
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --							Py burrow		

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: Satoshi MPSU	Date: 10/DEC/2011
			Avg.	Max.						
-- 0 --								S11A		
-- 10 --								12cm P <sub>1</sub> burrow		
-- 20 --								21cm forampatch (1mm)		
-- 30 --								33cm forampatch (1mm)		
-- 40 --										
-- 50 --										
-- 60 --								66cm forampatch (1mm)		
-- 70 --										
-- 80 --	Biscuit									
-- 90 --								90cm. shell fragments (~ 1mm)		
-- 100 --										
-- 110 --								112cm. shell fragments (~ 1mm)		
-- 120 --										
-- 130 --										
-- 140 --								142cm. shell fragments		
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Depth (cm)	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: Satoshi YDSM	Date: 10/DEC/2011
			Avg.	Max.						
-- 0 --								~ 5cm Py burrow		
-- 10 --								- 10.5 cm Py burrow (shell fragments filled) - 13cm Py burrow		
-- 20 --										
-- 30 --										
-- 40 --								- 39cm foram patch (1mm)		
-- 50 --	Biscuit							- 54cm foram patch (2mm)		
-- 60 --								- 58cm shell fragments (~1mm)		
-- 70 --								- 68cm shell fragment (1mm)		
-- 80 --								- 76-78cm clacking - 78cm foram patches (~3mm)		
-- 90 -- 93cm					gradational contact					
-- 100 --	Biscuit	10Y 4/1	silt.	msand	massive	BI 2	93-94	= silty mud (type 2) 22.2%		
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

28 JUL 1978 07:17A  
716 150501  
10m water depth



Depth	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: Saijohi YPSU	Date: 10/DEC/01
			Avg.	Max.						
-- 0 --								SIA		
-- 10 --								dispersed shell fragments (~2mm)		
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
55cm		10Y 4/1	silt	m. sand	gradational contact massive		BI 2	33) clacking. 36) clacking. 39cm shell fragment (3mm) 41cm shell fragment (4mm) 45cm forampatch (1mm) 48cm forampatch (1mm) Sandy silt (type 2: same as above)		
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

Biscuit

gradational contact

33) clacking.  
36) clacking.

39cm shell fragment (3mm)  
41cm shell fragment (4mm)  
45cm forampatch (1mm)  
48cm forampatch (1mm)

Sandy silt (type 2: same as above)

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: Satoshi Matsu	Date: 10/FEC/2011
		Avg.	Max.						
-- 0 --							SAA-type 2		
-- 10 --							11cm - foram patch (1mm) 14cm - dispersed shell fragments (N/mm)		
-- 20 --	Biscuit.						- 18cm foram patch (0.5mm) - 19cm foram patch (0.5mm) - 20cm foram patch (1mm)		
-- 30 --									
33	PAL								
38									
-- 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.						
	6LEy1 56y 411			massive	B1 =2		Truck → (1)	OR	11/12/11
--0--									
--10--									
18							-18 Forams		
--20--									
--30--									
33							-33 Py burrow		
--40--									
--50--									
54 55							-54 -55 Py burrow		
--60--									
--70--									
74							-70: Py burrow -74: " "		
--80--									
--90--									
--100--									
109									
111							-109 } Shell frag. -111 }		
--120--									
--130--									
133							-133: Forams		
--140--									
--150--									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
--0-- same ↓	Sand			Mud ↓	B1 =2 ↓		① Same as above		
--10-- 12							contact: gradational		
	GLAY 1 10g 4/1						② silty mud shell frag.		
--20-- 26							-26: Py burrows		
--30--									
--40--									
47 --50--					-47 SS		Sandy silt w/ biogenic carbonate		
--60--									
58 --70--							contact: gradational ③ silty sand -73 shell frags.		
75 --80--							contact: gradational ② silty mud shell frag.		
--90--									
							contact: gradational		
--100--							① Mud Shell frag present (less than above)		
--110--									
--120--									
--130--									
--140--									
--150--									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

V1387A

28X 3A

(1429)

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
								GR	11/12/11
	GLY 1 10y 4/1			uname	B2 =2		Flud (1) ↓ Forams present		Same as above
-- 0 --									
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Depth	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
0		OLEY, 10y	clay		marine	B3			CR	11/12/11
7	↓	3/1						Recl ① ↓		
10								-7: Forams		
20										
30										
40										
48								-48: Forams		
50								-50: Py b.		
60										
70										
73							73 SS	Non-porous Mud		
80										
90										
100		OLEY, 56y						-90: Py borrow		
110		4/1								
111								-111: Py b.		
114								-114: Py b.		
115								-115: Py b.		
120										
130										
134								-134: Py b.		
137								-137: Py b.		
140										
145								-145: Small shell frag.		
150										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
	(GLY) 10y 4/1	clay		Med. m. f.	BI = 2		(1) Trace Forams present	CR	11/12/11
--0--									
--10--									
12							-12 > shell frag.		
13									
12									
14							-14 > Py b.		
--20--									
--30--									
--40--									
49							-49: shell frag.		
--50--									
--60--									
--70--									
--80--									
--90--									
--100--									
--110--									
--120--									
122							-122: Py b.		
--130--									
--140--									
--150--									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --							Red ① Same as above Forams present	C12	11/12/11
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

high NGR

98-99 - 21.1% CaCO<sub>3</sub>

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

215 12/19/11 11:21 AM  
 10/26/11 10:17 AM  
 Printed: 11/12/11

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --									CR	11/12/11
								Red Same as above Fossils present Shell frag. present		
-- 10 --										
-- 20 --										
28										
-- 30 --										
33										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

- 28: P<sub>3</sub> b.  
 - 33: P<sub>3</sub> b.

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



Depth	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --									C12	11/12/11
6								Same as above		
10								Forams { -6		
-- 10 --										
19								contact: gradational		
-- 20 --										
27								-27: Py b.		
-- 30 --										
34										
35								-34 } Forams		
-- 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: SF	Date: 2011 1/2/10
			Avg.	Max.						
-- 0 --								Same as above (SAA)		
								7cm Py burrow		
-- 10 --								10cm Py burrow		
								21cm shell fragment (2mm)		
-- 20 --								25cm foram patch (2mm)		
								30cm Py burrow		
-- 30 --								34cm Py burrow		
								39 ) shell fragments (~0.5mm)		
-- 40 --								43 )		
								48cm shell fragment (4mm)		
-- 50 --								51cm Py burrow		
-- 60 --										
								69cm Py burrow		
-- 70 --										
	Biscuit							80cm foram patch (2mm)		
-- 80 --										
								93cm shell fragment (2mm)		
-- 90 --										
								104cm shell fragments (~1mm)		
-- 100 --										
-- 110 --										
								118 dispersed shell fragments (~1mm)		
-- 120 --										
128										
-- 130 --		10Y 4/1	silt	fine sand	Bioturbated contact			Silty mud (types)		
	Biscuit				massive (bottled)	BZ 2				
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: SF	Date: 2011 12/10
		Avg.	Max.						
--0--							SAA		
5.				gradational contact					
--10--	10Y 4/1	clay	in. sand		BI 3		mud (type 1) 12cm. silt filled burrow		
--20--				massive					
--30--									
--40--									
--50--							52cm. P. burrow		
--60--									
--70--	BISCH-1						62 dispersed shell fragments (~1mm)		
--80--							72 81cm. foram patch 83cm. P. burrow		
--90--							93cm. shell fragment (2mm)		
--100--							102cm. shell fragments (~1mm)		
--110--									
--120--							118 shell fragment (1mm)		
--130--							124. shell fragment (2mm)		
							129 P. burrow		
--140--							131 dispersed shell fragments (~1mm)		
--150--									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: SF	Date: 2011 12/11
			Avg.	Max.						
-- 0 --								S.A.A		
-- 10 --										
-- 20 --										
-- 30 --								31cm Py burrow 34cm Py burrow		
-- 40 --										
-- 50 --										
-- 60 --								57cm shell fragment (2m)		
70					Bioturbated					
70					Contact			Silty mud (type 2)		
		GLY 1 10Y 4/1	silt	lo sand	massive	BI 3				
-- 80 --										
-- 90 --								95cm foram patch (1cm) dispersed shell fragments (ca 1mm)		
-- 100 --										
108					Bioturbated					
-- 110 --					Contact			mud (type 1)		
		10Y 4/1	clay	lo sand	massive	BI 2		115 Py burrow		
-- 120 --										
-- 130 --								132cm foram patch (2mm)		
-- 140 --								141 Py burrow 144cm Py burrow		
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

U 1387 A

29x 5A

440  
439

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: SF	Date: 2011 12/11
			Avg.	Max.						
-- 0 --								S.A.A.		
								6cm shell fragment (1mm)		
-- 10 --								14cm foram patch (1cm)		
								15cm shell fragment (2mm)		
-- 20 --								26cm P. burrow		
-- 30 --								35cm foram patch (3mm)		
-- 40 --										
-- 50 --										
-- 60 --								63cm P. burrow		
-- 70 --										
-- 80 --								82cm P. burrow		
-- 90 --								91cm foram patches (~2mm)		
-- 100 --								105cm P. burrow		
-- 110 --								110cm: Nanno mud		
								115cm P. burrow		
-- 120 --								125 P. burrow		
								128 P. burrow		
-- 130 --								132 P. burrow		
								135 P. burrow		
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:







	Drilling disturb.	Color	Grain-size		Sed. struct./ contact	Bioturb.	Samples	Comments	Logged by: SF	Date: 2011 12/10
			Avg.	Max.						
0	4 biscuits				Bioturbated contact			SAA		
10		10Y 4/1	clay	hr sand	contact	BL3		fine mud (type 1)		
20					massive			silty mud filled burrows		
30	biscuit							14. foram patch (2mm)		
40								34. shell fragments (1/2mm)		
50								42. shell fragment (2mm)		
60								53. shell fragment (3mm)		
60								56. shell fragment (1/2mm)		
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: SF	Date: 2011 12/11
		Avg.	Max.						
-- 0 --							S/A - 3. Py burrow		
-- 10 --									
-- 20 --							- 16 } dispersed shell fragments - 21 } (~ 2mm)		
-- 30 --							- 25 } shell fragments (~ 2mm)		
-- 35 --							- 27 } shell fragment (4mm)		
-- 40 --							- 28 } shell fragment (1cm)		
-- 45 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:





Expedition 339: Mediterranean Outflow

V1387A 30x2A

1449

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

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Depth	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --		Same			mainly				CR	11/12/11
-- 10 --	↓	↓			↓	Bz = 2		Mud ① Same as above few shell frag		
-- 25 --								Silty mud ②		
-- 30 --								shell frag.		
-- 42 --								contact: gradual		
-- 50 --								Silty sand ③ shell frags (more abundant)		
-- 60 --						+60 SS		Silty mud w/ biogenic Carbonate		
-- 90 --								contact: gradual		
-- 100 --								Silty mud ② shell frag (few)		
-- 120 --								contact: gradual		
-- 130 --								Mud ①		
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --							Unit ① Same as above Forams present	CR	11/2/11
-- 10 --									
-- 20 -- 24							20 24 > Shell frag		
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --					B1 =3				
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
129 -- 130 --					B1 =2		129: Pgs.		
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: OR	Date: 11/12/11
			Avg.	Max.						
-- 0 --										
9						BZ = 2		Track Same as above		
-- 10 --								- 9: shell frag.		
-- 20 --										
-- 30 --										
36								- 36: Py b.		
-- 40 --										
47								- 47: shell frag.		
-- 50 --										
55								- 55: Py b.		
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
112								- shell frag. <sup>110</sup> (112)		
-- 120 --										
-- 130 --										
136								- 136 -> shell frag.		
137								- 137 -> shell frag.		
-- 140 --										
-- 150 --										

MBIO

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --							Red ① Same as above	CR	11/12/11
-- 10 --									
-- 20 --									
-- 30 --									
-- 38 --							contact: gradational		
-- 40 --	Sand			Same	Same		② Silty mud few shell frag.		
-- 50 --									
-- 57 --							contact: gradational		
-- 60 --							Red Forams present		
-- 70 --						70 SS	70 cm Nanno mud		
-- 80 --									
-- 90 --									
-- 100 --									
112							112 shell frag.		
-- 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 --							Mud ① Same as above - 5: Forams Few shell frags.	GR	11/12/11
5 -									
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									



MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

V 1387 A 30x CCA

1451



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

MAJOR LITHOLOGY:

MINOR LITHOLOGY:





Expedition 339: Mediterranean Outflow

U1387A

31X 2A

1453

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: R	Date: 11/12/11
			Avg.	Max.						
-- 0 --								Same as above		
-- 10 --										
12								-12: Py b.		
-- 20 --										
26								-26: Py b.		
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

U1387A 31X SA 1454

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --									CR	11/12/11
-- 10 --										
-- 20 --										
-- 30 --								-30: Py b.		
-- 40 -- 41								-41: Py b.		
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 -- 113								-113 > Py burrows		
115 -- 120 --								-119 > Py burrows		
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

V 1387A 31 x 4A

(1455)

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



MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

1387A <sup>31x</sup>~~30x~~ 5A (1454)

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --							Same as above	CR	11/12/11
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --							-40: Py siltw		
-- 50 --									
-- 60 --							-60: Forams		
-- 70 --									
-- 75 --						75 SS	75 cm Nanno Mud		
-- 80 --									
-- 90 --									
-- 100 --									
104							-104: Py b.		
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

1387A 31x  
~~30x~~ 6A

(1457)

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: OR	Date: 11/12/11
			Avg.	Max.						
-- 0 --								Same as above		
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
67								67 Gastropoda shell (intact)		
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
102								contact: irregular		
	same	same			same	same		(2) silty mud		
-- 110 --	↓	↓			↓	↓				
114								114 cm: sandy silt with biogenic carbonate		
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

94-95 CaCO<sub>3</sub> 22.9%

114 cm: sandy silt with biogenic carbonate

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

V1387A 31X CCA

(1458)

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
--0--									CR	11/12/11
7								② silty mud contact: irregular		
--10--	same	same			same	same		① mud -s: shell fragments		
--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: SF	Date: 2011 12/11
		Avg.	Max.						
-- 0 --	10Y 4/1	clay	m. sand	massive	BI3		• mud (type 1)		
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --	Biscuit						- 48cm. foram patch (1mm)		
-- 54 --							- 54-56) foram patches (~2mm)		
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --							- 97. shell fragment (2mm)		
-- 110 --									
-- 120 --							- 129 P. burrow - 125 shell fragment (3mm)		
-- 130 --							- 129 P. burrow		
32	Biscuit	10Y 4/1	silt	m. sand	contact massive	BI 3	- silt mud (type 2) - dispersed shell fragments (~1mm)		
-- 140 --									
148									
-- 150 --		10Y 4/1	fine sand	m. sand	contact massive (mottled)	BI 2	- silt sand (type 3)		

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: SF	Date: 2011 12/11
			Avg.	Max.						
--0--								Same as above (SAA)		
7	Biscuit				gradational contact			- 4. shell fragment (1mm) - 6. shell fragment (2mm)		
--10--	Biscuit	10Y 4/1	silt	m. sand	massive	BI 2		- Silty mud (type 2)		
16					bioturbated contact			- dispersed shell fragments (~1mm)		
--20--			clay	m. sand	massive			<u>mud (type 1)</u>		
--30--						BZ 3				
--40--								- 38. foram patch - 40. P <sub>1</sub> burrow		
--50--		10Y 4/1								
--60--										
--70--	Biscuit									
--80--								- 77. shell fragment (2mm)		
--90--										
--100--										
--110--					gradational contact + bioturbation			- 108. P <sub>1</sub> burrow - 111 shell fragments (~3mm)		
121			silt	m. sand	massive	BZ 3		<u>silty mud (type 2)</u> dispersed shell fragments		
--120--		10Y 4/1								
--130--										
--140--	Biscuit									
--150--										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

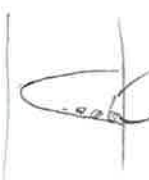


	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: SF	Date: 2011 12/11
			Avg.	Max.						
-- 0 --								SAA		
-- 10 --								15. shell fragment (5mm) (relatively coarser part)		
-- 20 --								34. shell fragments (~2mm)		
-- 30 --								45. foram patch (2mm)		
-- 40 --										
-- 50 --										
-- 60 --		Biscuit						64. shell fragments (~1mm)		
-- 70 --								79. shell fragments (~2mm)		
-- 80 --										
-- 90 --								98. Py burrow		
-- 100 --										
-- 110 --										
-- 120 --								122. shell fragment.		
-- 130 --										
-- 140 --										
-- 150 --		LW								

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

M

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: SF	Date: 26/11 12/11			
			Avg.	Max.									
--0--	Biscuit	10Y 4/1	silt	m. sand	massive	BI2		Silty mud (type 2)					
--10--													
17					Bioturbated contact								
--20--	Biscuit	10Y 4/1	clay	m. sand	massive	BI3							
--30--													
											30		silt filled burrow? pyrite
--40--													
											46		foram patch (1mm) Py burrow
--50--													
											55		foram patch (2mm)
--60--													
											59		foram patches (1mm)
--70--													
											64		shell fragment (1mm)
--80--													
	76		Py burrow										
--90--													
	83		shell fragment										
--100--													
	105		Py burrow										
--110--													
	113		shell fragments (~1mm)										
--120--													
	119		foram patch (1mm)										
--130--													
	125		shell fragment (8mm)										
	131		Py burrow										
	133		Py burrow										
--140--													
	139		shell fragment (1mm)										
--150--													

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

10Y  
4/1  
(greenish)

Depth	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --								SAA	SF	2011 12/11
-- 10 --								14. shell fragments (~1mm) 15 Py burrow		
-- 20 --										
-- 30 --								33 shell fragment (3mm)		
-- 40 --										
-- 50 --										
-- 60 --								59. shell fragments (~1mm) 61 foram patch 66. foram patch, Py burrow		
-- 70 --								72. shell fragments (~2mm)		
-- 80 --								81 shell fragments (~2mm) 85. shell fragments (~2mm)		
-- 90 --								91. shell fragment (1mm)		
-- 93 --					gradational contact			<u>Silty mud (type 2)</u>		
-- 100 --		10x 4/1	silt	in sand	massive	BZ 2		98. shell fragments (~1mm)		
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

Biscuit

Biscuit

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: SF	Date: 2011/12/11
			Avg.	Max.						
--0--								SAA		
8.	Dis cut				gradational contact					
--10--		10Y 4/1	clay	m. sand	massive	BI 2		<u>- mud (type 1)</u>		
--20--										
--30--								-29 py burrow		
--40--	Dis cut							-40. foram patch -42. shell fragment (2mm)		
--50--										
59										
--60--	VOID									
61										
--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: ST	Date: 2011 12/11
			Avg.	Max.						
--0--	Biscuit	10Y 4/1	silt	m. sand	massive	BZ 2		silty mud (type 2) 1m foram patch (1m)		
--10--										
--20--	Biscuit	10Y 4/1	clay	m. sand	gradational contact massive	BZ 2		mud (type 1) 20, foram patch (1m)		
--30--										
	PAL							30. foram patch (2m)		
--40--										
--50--										
--60--										
--70--										
--80--										
--90--										
--100--										
--110--										
--120--										
--130--										
--140--										
--150--										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

U1387A-33X-1A

Expedition 339: Mediterranean Outflow

U1387A 33X 1A

(1467)

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
--0--	Dip ↓	GREY 1	clay		massive	BZ = 2		Mud (1) Forams present ↓	CR	11/12/11
10		10 <sup>g</sup>								
--10--		4/1								
--20--										
--30--										
--40--										
--50--										
--60--										
--70--										
--80--										
--90--										
--100--										
--110--										
112										
--120--										
--130--										
--140--										
142										
--146--										
146										
--150--										

-112: P<sub>g</sub> b.

-142: shell frag.

-146: P<sub>g</sub> b.

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					CR	11/12/11
--0--									
3-							Same as above ; Forams present (rare) -3: Shell frag.		
--10--									
--20--									
--30--									
--40--									
44-							-44: Py b.		
--50--									
55-							-55: Py b.		
--60--									
--70--									
--80--							-80: Py b.		
--90--									
--100--							-100: Py b.		
104-							-104: Py b.		
--110--									
117-							-117: Shell frag		
--120--									
--130--									
--140--									
--150--									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

U13876 33x 3A

1469

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					CR	11/12/11
-- 0 --							Same as above (trace) Forams present		
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
53 -							-53: shell frag		
-- 60 --									
64 -							-60: Py b. -64: shell frag.		
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
128 -							-128: Py b.		
-- 130 --									
-- 140 --									
146 -							-146 > Py b.		
147 -									
-- 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 (mud) ↓	CR	11/12/14
-- 10 --									
-- 20 --									
-- 30 --									
33							contact gradual		
	OLE 1	clay		massive	B1		② silty mud		
-- 40 --	109	↓		▽	=2				
44	411				↓		contact gradual		
-- 50 --							① mud		
							Forams present		
-- 60 --									
-- 70 --							contact: gradual		
							② silty mud		
-- 80 --							shell frags.		
-- 90 --									
98							contact gradual		
-- 100 --							① mud		
							Forams present		
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

V1387A 33X 5A

(1472)

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					CR	11/12/11
-- 0 --							Same as above (mud) Forams present		
-- 10 -- 11							-11: Bivalve shell frag.		
-- 20 --									
-- 30 --									
34 35							-34 -35 } Py burrows		
-- 40 --									
-- 50 --									
57							-57: Py b. -60: shell frag.		
-- 60 --									
-- 70 --									
13							-73 SS 73 cm: Nanno mud		
-- 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--								CR	11/2/11	
	disturb	10 y 411			man ↓	B1 =2 ↓				
--10--							Same as above contact: gradational Silty sand Shells frag.			
--20--										
--30--										
36							contact: irregular Red (1)			
--40--										
--50--									fine upwards	
52							contact: gradational Silty mud (2)			
--60--										
--70--							contact: gradational Silty sand (3) shell frag. Foram present			
66										
--80--						80 SS	80 cm Silty sand with biogenic carbonate		coarse	
--90--										
--100--										
102							contact: gradational Silty mud			
--110--									fine downwards	
--120--							contact irregular Red			
--130--										
--140--										
							137-138 CaCO3 26.8%			
--150--										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

V13817A 33x 9A

~~1474~~  
1473



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

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

U1387A 33X CC<sub>1</sub>

(475)  
(479)



Drilling disturb.	Color	Grain-size		Sed. / struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --								CR	11/12/11
4 -							Flud (Same as above) -4: Shell frag		
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:





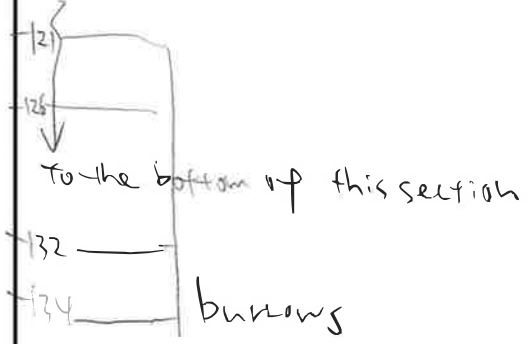




Depth	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
0									NN	11/Dec/2011
5								Type 1: Mud continued from 3A		
10								Shell fractions		
19										
53								VOID		
55										
58								58 Foraminifera		
70								70 cm: <i>Nanno mud</i>		
76								76 Condensed shell fractions (in burrow?)		
82								82 Shell fragment		
96								96 shell fractions		
110					Sharp Contact					
110		GLY1 10Y4/1	Silt	Silt	Massive? (Mottled)	BI-2		Type 2: Silty Mud		
120								Shell fractions		
125								to the bottom of this section		
132										
134								burrows		
150										

Biscuits

70 cm: *Nanno mud*





Depth	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --								NN	11/Dec/2011	
							Type 1: Mud (continued from 5A)			
-- 10 --							Foram patches			
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
52										
								Void		
58										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
145										
-- 150 --										



MAJOR LITHOLOGY:

MINOR LITHOLOGY:

137-138 CaCO3 20.4%

Biscuits

4  
10  
20  
32.5

Void

69 Foram patch

75  
↓  
Foram patches rich  
(to the bottom of this section)

98  
105 } Py burrows





U1387A-35X-1A

U1387 A 35X 1A

1483

Expedition 339: Mediterranean Outflow

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --	Discont	OLEY1	clay		massive	B1 =2		Mud Forams present	CR	11/Dec 2011
-- 10 --		5G4								
-- 20 --		4/1								
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



Expedition 339: Mediterranean Outflow

U'387A 35X 2A

1489

Drilling disturb.	Color	Grain-size		Sed. / struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					CR	11/12/11
-- 0 --							Same as above 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

U1387A 35 3A

(485)

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --							Same as above Forams present ↴	UR	11/12/11
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 -- 131 -- 132 --							131 > Py burrow 132 >		
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



Expedition 339: Mediterranean Outflow

0/38<sup>n</sup> A

35X 5A

1487

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: GR	Date: 11/12/11
		Avg.	Max.						
-- 0 --							Same as above		
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
104						100 SS	100 cm: Silty mud with biogenic carb. 104: shell frag.		
-- 110 --									
-- 120 --									
-- 130 --									
disturb	GL 5/1 10g 4/1			fine		51 -2	trac		
-- 140 --									
-- 150 --									



MAJOR LITHOLOGY:

MINOR LITHOLOGY:

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

104-105 28.4% CaCO3

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



U187A 35x 7A



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

Recl: same as above

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. / struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --							Fluc. same as above	CR	11/12/11
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 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 --								Type 1: Mud (continued from 1A)	NN	11/Dec/2011
-- 5 --								Foram patch		
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 46 --								Shell fragments		
-- 50 --										
-- 54 --								Foram patch		
-- 60 --										
-- 70 --										
-- 81 --								81 cm: Nanno silty mud		
-- 81.55 --								81.55 - 81 Foram patch		
-- 91 --								91 Foram patches rich.		
-- 100 --								} (to the bottom of this section)		
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

Biscuits

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					NN	11/Dec/2011
--0--	GLEXY (OY 4/1)						Type 1: Mud (continued from 2A)		
--10--									
--20--									
--30--									
--40--							-41 Foram patches		
--50--	GLEXY (OY 4/1)	Silt	Fine sand (foram)	Bioturbated coherent? Massive? Mottled	BI:2		Type 2: Silty mud		
--60--							-57 } Foram patches -62 } -64 shell fraction		
--70--	Biscuits								
--80--									
--90--							-93 Foram patch		
--100--									
--110--	GLEXY (OY 4/1)	Clay	Fine sand (foram)	Bioturbated coherent? Massive? (Mottled)	BI:2		-108 Foram patch Type 1: Mud		
--120--							-117 } -124 } Py below -128 } Foram patches -132 } -133 }		
--130--									
--140--									
--150--							-147 Shell fragments		

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Depth	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --								NN	(11 Dec 2011)	Type 1: Mud (continued from 34)
-- 10 --										10 ↓ Foram patches ↓ 21
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										49 shell fragments
-- 60 --										
-- 70 --										63 Py burrow 69
-- 80 --										
-- 90 --										88 Shell fragment
-- 100 --										
-- 110 --										111 Gastropod (well preservation)
-- 120 --										117.5 Foram patch 126 135
-- 130 --										
-- 140 --										
-- 150 --										

Biscuits

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
								NN	11/Dec/2011
-0-- 2	GLEI (OY4/1)	Silt	Very fine sand (foram)	Gradational contact Massive? (Mottled)	BI:2		Type 1: mud (continued from 4A) Type 2: Silty mud		
-10--									
-20--									
-30--							-30 shell fraction		
-40--							-36 shell fraction		
-50--									
-60--									
-70--							-68 Foram patch		
-73--	GLEI (OY4/1)	Very fine sand	Very fine sand	Gradational contact?	BI:2		Type 3: Silty sand		
-80--				Massive? (Mottled)	BI:2		-83 Foram patch		
-90--	Biscuits						-90SS 90 cm: Silty sand with biogenic carbonate		
-100--									
-110--									
-120--									
-122--	GLEI (OY4/1)	Silt	Very fine sand (foram)	Bioturb. bed contact?	BI:2		Type 2: Silty mud		
-130--				Massive? (Mottled)			-123 burrow filled with silty sand		
-140--							-139 } shell fragments -144 }		
-150--									

fining upward

Gradational grading

Coarsening upward

Depth	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
0									NN	11 Dec 2011
5.5								Type 2: Silty mud confirmed from 5A Foram patches		
18								Foram patches		
20								Shell fragments		
52								Shell fragments		
59										
64								Foram patch		
65								Void		
80.5								Foram patch		
97								Foram patches		
102										
109								Foram patch		
110		GLE 1 10Y 4/1	Clay	Finesand (foam)	Gradational contact Massive? (mottled)	BI 2		Type 1: Mud		
138								Foram patches		
140-141								CaCO <sub>3</sub> 28.6%		
140										
145										

Biscuits

1010

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --								NN	11/Dec/2011	
							Type 1: Mud (confirmed from 6A)			
-- 10 --							Py burrow			
							2: Foram patch			
-- 20 --										
-- 30 --										
-- 40 --										
							43			
								Foram patches		
-- 50 --							51			
-- 60 --										
							66			
							68.5	Foram patches		
							69			
-- 70 --							71			
							74	Shell fractions		
-- 80 --										
							77	Foram patch		
-- 90 --										
-- 100 --										
101							98	Foram patch		
-- 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 --								Type 1: Mud continued from 7A Foram patches high		11/Dec/2011
-- 20 --										
-- 30 --										
-- 40 --										
-- 49 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

Biscuits

Type 1: Mud continued from 7A  
Foram patches high

Foram patches high

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



Depth	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
0								NN	11/Dec/2011	
0-10							Type 1: Mud continued from 8A			
10-20	Biscuits						19-20] Foram patches	Relatively denser (compact)		
20-30							28-31] Foram patches			
30-40										
40-43										
43-48							Paleo-sample			
48-50										
50-150										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:





Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --							Same as above	CR	11/12/11
-- 10 --							Forams present Shell fragments present		
-- 20 --									
26							26 Py b.		
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
81							80 > Py b. 81 > Py b.		
-- 90 --									
92									
94							92 > Py b. 94 > Py b.		
-- 100 --									
-- 110 --									
117									
118							117 > Py b. 118 > Py b.		
-- 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 Forams present	CR	11/12/11
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --							-70: Py burrow		
-- 80 --						-80 SS			
-- 89 --							-89: Py b.		
-- 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 --									CDZ	11/12/11
								Same as above Forams present		
-- 10 --										
-- 20 --										
-- 30 --										
33 -								-33 Py b.		
-- 40 --										
-- 50 --										
-- 60 --										
67 -								-67 Py b.		
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
138 -								-138 > Py b.		
139 -								-139 > Py b.		
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. / struct. / contact	Bioturb.	Samples	Comments	Logged by: GR	Date: 11/12/11
		Avg.	Max.						
-- 0 --							Same as above		
-- 10 --							Forams present few shell fragments		
-- 20 --									
-- 30 -- 33 -							-33? wood?		
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --							-110: Py b.		
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

U1387A 37X6A

1509

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --									UR	11/12/11
-- 10 --								Same as above		
14										
15								Py b. and shell frag.		
-- 20 --										
-- 30 --										
37								contact: gradational		
-- 40 --		GLY/			washie	BY		Silty mud		
		10y			↓	2		Forams present		
		411								
-- 50 --		↓								
-- 60 --							-60			
							SS			
-- 70 --										
-- 80 --								contact: irregular		
	same	same			same	same		Mud		
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

98-99 CaCO<sub>3</sub> 28.9%

Drilling disturb.	Color	Grain-size		Sed. / struct. / contact	Bioturb.	Samples	Comments	Logged by: AR	Date: 11/12/11
		Avg.	Max.						
-- 0 --							Same as above : mud shell frags present Forams present		
-- 10 --									
-- 20 --									
-- 30 --									
32							contact: gradual		
-- 40 --	GLIST 10g 4/1			massive	B1 =2		Silty mud shell frag. present Forams more abundant than above		
-- 50 --									
57									
58									
-- 60 --							= 57 = 58 > Py b.		
-- 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	CR	11/12/11
9							contact: gradational		
--10--	biscuit Clay 10g 4/1			medium	B1 =2		Silty sand		
--20--									
--30--							30: Gammaropoda shell (intact)		
--40--									
--50--									
--60--									
--70--									
--80--									
--90--									
--100--									
--110--									
--120--									
--130--									
--140--									
--150--									



MAJOR LITHOLOGY:

MINOR LITHOLOGY:



U1387A-38X-1A

Expedition 339: Mediterranean Outflow

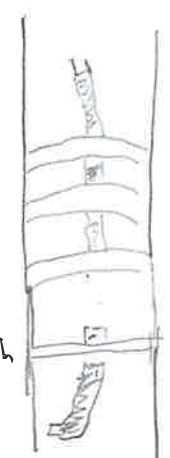
U1387A 38X 9A

1508

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --	GLEXY 10Y4/1	Clay	Very fine sand (foram)	Massive? Mottled	BJ:2		Type 1: Mud - 5 shell fragments	NN	11/Dec/2011
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --							- 37 Py burrow		
-- 50 --							- 44 shell fragments		
-- 60 --							- 51 Py burrow		
-- 70 --							- 57.5 shell fragments		
-- 80 --									
-- 90 --									
-- 100 --							- 84 Py burrow		
-- 110 --							- 97 ↓ burrow - 105 - 113 - 114 Foram patch		
-- 120 --									
-- 130 --									
-- 140 --							- 136 ↓ Foram patches - 139		
-- 150 --									



Biscuits



MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Depth	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --								NN	11/Dec/2011	
								Type 1: Mud (Continued from 1A)		
-- 10 --										13 Foram patches
-- 20 --										
-- 30 --										33 Foram patch
-- 40 --										
-- 50 --										51.5 Foram patches
-- 60 --										
-- 70 --										72 Foram patches
-- 80 --										85 Shell fractions
-- 90 --										91 Foram patches
-- 94 --										94 cm: Nanno Mud
-- 98 --										98 Foram patches
-- 110 --										
-- 119 --										119 Foram patches
-- 130 --										130 Foram patches
-- 140 --										
-- 150 --										

Biscuity

94.55

91  
↓  
98 Foram patches

119  
┌  
Foram patches  
└  
130

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --									NN	11/Dec/2011
-- 10 --								Type 1: Mud continued from 2A 3 5 ↓ 15 Foram patches		
-- 20 --								27 shell fractions		
-- 30 --								30 shell fractions		
-- 40 --										
-- 50 --										
-- 60 --										
66					Gradational contact					
-- 70 --		GREY 10Y 9/1	Silt	fine sand (foram)		B.T. 2		Type 2: Silty mud 73 shell fractions		
-- 80 --					Massive? (Mottled)					
-- 90 --										
-- 100 --								101 Foram patches		
-- 110 --										
-- 120 --							117 SS	117 cm: Silty mud w/ biogenic carbonate		
-- 130 --										
-- 140 --								137 ↓ 137 Foram patches		
-- 150 --										

Biscuits

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					NN	11/Dec/2011
							Type 2: Silty mud		continued from 3A
	GLEXY 10Y3/1	very fine sand	fine sand	Gradational contact?			Type 3: Silty sand		
	GLEXY 10Y4/1	Clay	fine sand (foram)	Sharp contact & partly burrowed	BI:2		Type 1: Mud		
				Massive? (mottled)			Foram abundant		
							to the bottom of this section		
							-87 Py burrow		
							-100 Shell fragments		
							-133 -134 Py burrow		

Muddy turbidite?  
(by Drick)

High NGR

Biscuits

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --									NN	11 Dec 2011
								Type 1: Mud (continued from 4A) -5 Foram patch		
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --								-52 Foram patch		
-- 60 --										
-- 70 --										
-- 80 --								-179 Foram patch		
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --								-139 Foram patch		
								Iw sample		
-- 150 --										



MAJOR LITHOLOGY:

MINOR LITHOLOGY:

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --								NM	11/Dec/2011	
-- 10 --							Type 1 - Mud continued from 6A			
-- 20 --							16 Foram patch			
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --							55 Foram patch			
-- 70 --	Biscuits									
-- 74 --							70 } Foram patches			
-- 80 --										
-- 90 --								90 } Foram patches		
-- 92 --								92 } Py burrow		
-- 97.5 --							97.5 Foram patch			
-- 110 --							110 Foram patch			
-- 116 --							116			
-- 130 --							132 } CaCO3 18.0%			
-- 136 --							136 } Py burrow			
-- 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: Mud continued from 6A	NN	11/Dec/2011
								↳ Foram patch		
-- 10 --								↳ Shell fragments		
-- 20 --								↳ 25.5 Py burrow		
-- 30 --								↳ 36 Foram patch		
-- 40 --								↳ 42 Foram patch		
-- 50 --								↳ 49 Py burrow		
53										
-- 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 --									MN	11/Dec/2011
-- 10 --								Type 1: Mud continued from 7A		
-- 20 --										
-- 30 --										
36										
-- 40 --										
42.5										
		GLY 1 10Y4/1	Silt	Silt	Bioturbated? contact Massive BI:2?			Type 2: Silty mud		
47.5								Paleo-sample		
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

Biscuits

12 Forampu-ches  
↓  
21



MAJOR LITHOLOGY:

MINOR LITHOLOGY: