

Expedition 339: Mediterranean Outflow

222A

11-7

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



MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --									
-- 10 --	1014/1			MASSIVE	slight				
-- 20 --									
25.5				MASSIVE	ABSENT		Grain size change		
-- 30 --							② Silty mud - Forams present		
31				MASSIVE	slight		Grain size change (sharp)		
							① Fine mud - Forams present		
-- 40 --							Grain size change (gradational)		
				MASSIVE	slight		② Silty mud		
-- 50 --						SS@ 48	Forams & v. small shell fragments present		
58							Grain size change contact (sharp)		
-- 60 --				MASSIVE	slight		① Fine mud		
-- 70 --	✓								
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

226C

1153



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

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

U1386C-3W-1A

Expedition 339: Mediterranean Outflow

U1386C

3W1A

1/54



	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --										
-- 10 --		10Y4/1						WASH Disturbed fall in		
-- 20 --								Fine mud		
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

Disturbed

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --									CS	6/12/11
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										



fill in

10y₄



Massive

Slight

① Fine mud
 small shell fragments present
 Forams present

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --		AS ABOVE						AS ABOVE	CS	6/12/11
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

VOID up to 2cm on left of core

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

	Drilling disturb.	Color	Grain-size		Sed. / struct. / contact	Bioturb.	Samples	Comments	Logged by: CS	Date: 6/12/11
			Avg.	Max.						
-- 0 --										
-- 10 --		As H30/E						As H30/E		
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										



MAJOR LITHOLOGY:

MINOR LITHOLOGY:

U1216 B

42 4A

1158

Expedition 339: Mediterranean Outflow

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --									CS	6/12/11
-- 10 --		AS ABOVE						AS ABOVE		
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										



MAJOR LITHOLOGY:

MINOR LITHOLOGY:

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.					CS	6/12/11
-- 0 --		As Above						AS ABOVE		
-- 10 --	Disturbed							Some disturbance (brecking) of dense clay on right hand side of section		
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

35

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

V1386C 4R 6A

1060

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --									CRZ	6/12/11
-- 10 --								As above		
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										



MAJOR LITHOLOGY:

MINOR LITHOLOGY:



	Drilling disturb.	Color	Grain-size		Sed. / struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --								As above	C12	6/12/11
-- 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 --										
-- 10 --		10y4/1			Massive	slight		WASH Dense fine mud Heavy disturbed.		
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

C1386 C

SW 2A

Expedition 339: Mediterranean Outflow

INTEGRATED
OCEANOGRAPHY

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



MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow



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

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

11326C

SW CCA



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

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: Masu	Date: 6/DE/2011
		Avg.	Max.						
-- 0 --									
Disturb.									
Undisturb	10Y3/1	clay	silt	Massive	/		CLAY		4
Disturb									7
UD	10Y3/1	V.F.S.	V.F.S.	Parallel ?	/		10 Shell fragment SILTY SAND		8
Disturb									11
Undisturb	10Y3/1	Very fine sand	V.F.S.	Parallel lamina	/		SILTY SAND		14
Disturb.									23
									26
-- 30 --	10Y3/1	Very fine sand.	V.F.S.	Parallel ? Grad.c	/		SILTY SAND		
	10Y3/1	F.S.	M.S.	Sharp.c	/		31 32 FINE SAND		
-- 40 --	10Y3/1	clay	M.S. (Foram ?)	Parallel lamina	/		MUD alternating layers of clay & silt		
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --	10Y3/1	clay	silt	Low-angled cross-lamina	/		86 87 FINE SAND rip-up clast at base of mud		
-- 100 --	10Y3/1	silt	Medium sand	Grad.c	/		96 SANDY SILT		
-- 110 --	10Y3/1	Fine sand	Medium sand	Normal G.	/		100 SILTY MUD		
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

Small Shell Fragment. All Along the Core!



MISS - Calcareous silty mud

(possible) turbidite.

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

U1386C BRCCA



	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --	UD	10Y4/1	Medium Sand	Coarse Sand	Normal grading massive	/		burrows in this part	masu	6/Dec/2011
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
								mpm	6 Dec 2011
--0--									
--10--	10Y4/1	clay	silt	massive			SSFAAS (Small Shell Fragms All Along the Section) SILTY MUD		
--20--							26 tip-up clast		
--30--					Z		28 burrow diam		
							34-36 cordrites		
--40--				Grad. C					
--50--	10Y4/1	silt	F. sand		Z		42 SANDY SILT mottled		
				Sharp. C					
--60--	10Y4/1	clay	silt				57 CLAY		
				Sharp. C					
--70--	10Y4/1	V.F.S.	M.S.				66 SILTY SAND		
				Parallel laminated			Very thin silt layers are intercalated		
--80--							VTSLT		
--90--									
							96 tip-up clast ϕ 1.5cm		
--100--	10Y4/1	clay	clay	Sharp. C	/		97 98 MUD		
		V.F.S.	M.S.				SILTY SAND		
--110--				Para. l.			very thin silt layers intercalated		
--120--									
		clay	clay	S.C. G.C.			125 126 MUD		
--130--		V.F.S.	M.S.	Para. l.			SILTY SAND VTSLT		
		clay	clay	G.C. G.C.			132 133 MUD		
		V.F.S.	M.S.	Para. l.			SILTY SAND VTSLT		
--140--		clay	silt	Sharp. C			134 MUD		
	V. SAA.			massive					
--150--									



MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					MASU	6/DEC/2011
-0--	10Y4/1			Grad. C			MUD S.A.A.		
		F.S.	M.S.	Normal grady	/	4			
-10--				Sharp. C		7	hip-up clast ϕ 0.5cm FINE SAND		
						11	SANDY SILT		
-20--									
-30--		Silt	M.S.	Parallel lamina	/				
-40--									
-50--									
-60--									
		F.S.	M.S.	Grad. C Sharp. C	/	63			
						64	FINE SAND hip-up clast		
-70--						67	hip-up clast ϕ 0.5-1cm		
				Inclined lamina	/		SANDY SILT		
-80--									
-90--									
-100--				Parallel Inclined. C	/	99			
						102	spiral shell		
-110--		F.S.	C.S.	Inclined. C	/	108	FINE SAND		
						109	SANDY SILT		
-120--				Inclined lamina Inclined. C	/				
		V. coarse sand	Coarse pebble	Massive	/	122	PEBBLY SAND		
-130--									
-140--		clay	silt	Sharp. C Grad. C	/	142	MUD		
		V. c. s.	Granule	massive	/	144	PEBBLY SAND		
-150--									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: MOSU	Date: 6/DEC/2011
		Avg.	Max.						
	10Y4/1						Same As Above		
							SSFAAC		
				G.C.					
		F.S.	V.C.S	Contacted siltstone			22 S.S.D		FINE SAND
				Irregular C			30		
		SILT	V.C.S	Contacted s.s.			35		SANDY SILT
				I.C.			40		SILTY SAND
				Contacted s.			51		Soft sediment deformation
		Medium Sand	Grande				64		
				S.C			76		MEDIUM SAND
		M.S.	C.S	maxie Stamp C			79		Soft sediment deformation
		SILT	M.S.	C.S			82		SILT
				Sharp C			98		MEDIUM SAND
		M.S.	C.C	Sharp C			99		MEDIUM SAND
									SANDY SILT
		SILT	M.S	C.S					
				Irregular C					
				C.S			115		MEDIUM SAND
		M.S.	V.C.S	Irregular C			121		
									SILT
		Silt	M.S.	Massie					
							133		SANDY SILT
		Silt	M.S.	Parallel laminae			139-140		Medium Sand layer
							140, 140.5		2 Medium Sand layers
							143		
									MEDIUM SAND
				Maxie					
		M.S.	C.S						

Biscuit

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					MORW	6/DEC/201
-- 0 --	N3/1	Medium sand	Gravel		/				
-- 10 --							SSFAAS		
-- 20 --							MEDIUM SAND		
-- 30 --				massive					
-- 40 --									
-- 50 --	Biscuit								
-- 60 --	undisturbance								
-- 70 --		SILT	SAND	S.C. mass					
		M.S.	C.S.	S.C. Inclined lam.					
		SILT	SAND	Inclined C. massive					
-- 80 --				Inclined C.					
-- 90 --		M.S.	V.C.S.	Concreted strata.					
							shell MEDIUM SAND (MS)		
-- 100 --									
-- 110 --									
-- 120 --		SILT	V.P.S.	S.C.					
		M.S.	V.C.S.	S.C. Parallel lam					
-- 130 --		SILT	M.S.	Sharp C. Parallel L. S.C.					
-- 140 --		M.S.	V.C.S.	massive					
						TSB 138cm			
							pebble (disc shape) MS		
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.					MASA	6/DEC/2011
--0--	10Y/3	M.S.	V.C.S.	massive	1		MEDIUM SAND		
		Clay	Silt	Sharp C	1		SILT	4	
				Sharp C				5	
--10--					1	9SS (clast) 12SS (matrix)	MEDIUM SAND with mud clast		
--20--							20-21 mud clast		
							27-24 mud clast		
--30--							28-29 mud clast		
--40--									
--50--		M.S.	V.C.S.	Strata			46-49 mud clast		
--60--							62-64 mud clast		
--70--				contorted					
--80--							80-86 mud clast		
--90--									
--100--							93		
							mud clast		
--110--							105		
--120--									
--130--									
--140--									
--150--									

undisturbed Biscuit

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: MASAN	Date: 6/DEC/2011
			Avg.	Max.						
--0--	Soup-like Disturbance							Rounded mudstone gravel φ 2cm		
--10--										
--20--		16 10Y4/1	Silt	M.S.	massive			SILTY MUD		
--30--	Biscuit Fragmented disturbance									
--40--					sharp sharp			40.5 - 41.5 peat layer PEAT		
--50--		10Y4/1	Silt	M.S.	massive			48 wood fragm.		
--60--										
--70--								65 wood fragm.		
--80--								67 wood fragment L=1cm		
--90--										
--100--										
--110--										
--120--										
--130--										
--140--										
--150--										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: Mason	Date: 6/DEC/2011
		Avg.	Max.						
	10Y4/1						SILTY MUD		
		silt	M.S.	massive			normal grading		
				Grad. c.			12		
		F.S.	M.S.	Sharp. c.			13	FINE SAND	
		silt	M.S.	massive				SILTY MUD	
				sharp					
	10Y3/1	Fine sand	Medium sand		3		23	FINE SAND	
	10Y4/1			?			26	Mottled clay-filled burrows	
		silt	M.S.					SILTY MUD	
				massive			42		
									42-52 Condrites
				Inclined c.			52		
		Clay	M.S.	massive				MUD	

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

8Rcc.

1176-



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

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: MASU	Date: 6/DEC/2011
		Avg.	Max.						
-- 0 --	5GY4/1	clay	Silt	massive			CLAY		
					2				
-- 10 --				Grad. G					
		Silt	Silt	massive			13 SILTY CLAY		
				Grad. G			15		
-- 20 --		clay	Silt	massive			CLAY		
-- 30 --									
-- 40 --									
-- 50 --				Grad. G			50		
-- 60 --		Silt	Silt	massive			SILTY CLAY		
-- 70 --									
	Biscuit								
-- 80 --				Grad. G			79		
		clay	Silt	massive			CLAY		
-- 90 --									
-- 100 --									
-- 110 --									
				Grad. G			118		
-- 120 --		Silt	Silt	massive			SILTY CLAY		
				Grad. G			123		
		clay	Silt	massive			CLAY		
-- 130 --				Grad. G			130		
		Silt	Silt	massive			SILTY CLAY		
				Grad. G			132		
-- 140 --	✓	Clay	Silt		✓		CLAY		
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --									MDSU	6/DEC/2011
		5GY5/1	clay	silt		2				
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
	Biscuit									
-- 60 --										
-- 70 --										
-- 80 --										
								83		
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										



MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: MASU	Date: 6/DEC/2011
			Avg.	Max.						
-- 0 --		N3/1	Clay	Silt	massive	2		SILTY MUD		
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --					Grad. C					
			V.F.S.	F.S.	normal grady	2		SILTY SAND		Turbidite ↑
-- 50 --					Sharp C			MUD		
			Clay	Silt		2				
-- 60 --										
-- 70 --					Grad. C					
			V.F.S.	F.S.	Normal g. ?	1		SILTY SAND		Turbidite ↑
-- 80 --			Clay	Silt	Grad. C	2		MUD		
			V.F.S.	F.S.	N.G. ?	1		SILTY SAND		Turbidite ↑
-- 90 --										
			Clay	Silt	massive			MUD		
-- 100 --						2				
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: <i>yasu</i>	Date: <i>6/5/2011</i>
		Avg.	Max.						
-- 0 --	<i>EGYPT</i>	<i>Clay</i>	<i>Silt</i>	<i>massive</i>	<i>2</i>		<i>MUD</i>		
-- 10 --									
-- 20 --							<i>-24.5 lenticular fine-grained sand</i>		
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --				<i>sharp. C</i>					
		<i>Very Fine S.</i>	<i>F.S.</i>		<i>2</i>		<i>63.5 SILTY SAND</i>		<i>TD</i>
-- 70 --		<i>Clay</i>	<i>Silt</i>	<i>Sharp. C</i>			<i>-68 -70.5 lenticular fine-grained sand</i>		
					<i>3</i>		<i>MUD</i>		
-- 80 --		<i>V.F.S.</i>	<i>V.F.S.</i>	<i>G.C.</i>	<i>?</i>		<i>81 FINE SAND</i>		<i>Turbidite (TD)</i>
				<i>Sharp</i>			<i>81.5</i>		
-- 90 --		<i>Clay</i>	<i>silt</i>		<i>2</i>		<i>MUD</i>		
-- 100 --				<i>Massive</i>					
-- 110 --									
-- 120 --									
-- 130 --									
				<i>?</i>			<i>130 SILTY MUD</i>		
-- 140 --		<i>Clay</i>	<i>Silt</i>	<i>massive</i>	<i>?</i>				
				<i>?</i>			<i>141</i>		
		<i>Clay</i>	<i>Silt</i>		<i>2</i>		<i>MUD</i>		
-- 150 --				<i>massive</i>					

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: MASU	Date: 6/DEC/2011
		Avg.	Max.						
--0--		Clay	F.S.	massive			SILTY MUD		
--10--							11 sand-filled burrow 14 sand-filled burrow		
				Sharp C.			17		
--20--		Clay	Silt	massive			SILTY MUD		
				Grad. C.			25		
--30--		Clay	Silt				SILTY MUD		
--40--				massive					
--50--									
		VFS	FS	G.C.			56.5 VERY FINE SAND		T.D
--60--				S.C.			57 SILTY MUD		
				massive					
--70--									
		VFS	FS	G.C.			76 VERY FINE SAND		T.D
--80--				S.C.			77 SILTY MUD		
--90--				massive					
--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: NPSU	Date: 6/28/2011
		Avg.	Max.						
-- 0 --	10Y5/1						MUD		
-- 10 --		Clay	Silt	massive	Z				
-- 15 --				Grad G			15		
-- 20 --		V.F.S.	F.S.	massive			SILTY SAND		
-- 30 --				?			31		
-- 35 --		Clay	Silt				SILTY MUD		
-- 40 --				MUD					
-- 50 --									
-- 55 --				Grad.G.			55		
-- 60 --		V.F.S.	M.S.	normal G.			SILTY SAND		
-- 65 --									Normal gradig
-- 70 --				Grad.G.			71		
-- 75 --		F.S.	M.S.				FINE SAND		
-- 80 --				massive					
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

TD ???
Basal part
↓
unknown

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow



Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: MGM	Date: 6/DEC/2011
		Avg.	Max.						
-- 0 --	10Y7/1	Granule	Fine Pebble	massive	/		GRANULE Qz. > Forms. Shell frag , Glauconite		
-- 10 --		Clay	silt	Sharp c.	/		8- 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: MASU	Date: 6/DEC/2011
		Avg.	Max.						
--0--	10Y4/1	Clay	Medium sand	massive	2		1 MUD		
--10--				9 Concreted strata 14	3				
--20--				24	2				
--30--				massive					
--40--									
--50--		Clay	Silt	52 normal grad. Irregular c	2		53 MUD		
--60--		Clay	Silt	57 normal grad. Irregular c	2		58 MUD		
--70--	Biscuit			massive					
--80--		Clay	Silt				79		
		Clay	Clay	Sharp c normal grad grady	2		81 SILTY MUD MUD		
--90--				89 massive			93 94 95-97	mud clast mud clast chondrites	
--100--			Silt		101 104		101 104 107	Inclined lamina mud clast	
--110--									
--120--									
--130--									
--140--									
--150--									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: YASU	Date: 6/DEC/01
		Avg.	Max.						
--0--	10Y5/1	Clay	Silt	massive	2		SILTY CLAY		
--10--	10Y5/1	Silt	M. sand	massive	1		SANDY SILT		
--20--	10Y3/1	Clay	Silt	massive	1		21 -24 sand clast -26 sand clast SILTY MUD		
--30--	10Y4/1	Silt	M. Sand	Parallel lamina	2		28.5 SILTY SAND small shell frags.		
--40--	10Y4/1	Silt	Fine sand	Inclined lamina Good C	1		36 SANDY SILT		
	10Y4/1	Fine sand	Medium sand	parallel lamina	1		42 FINE SAND small shell frags.		
--50--	10Y3/1	Clay	silt	Sharp. C Inclined 2.	1		45 MUD		
	10Y4/1	Clay	silt	Sharp. C Parallel ?	1		56 SILTY MUD		
--60--	10Y3/1	Clay	silt	Sharp. C	1		58 MUD		
--70--	10Y4/1	Silt	M. S.	Erosional C.			68 -71 Crack by drilling rotation SANDY SILT		
--80--				massive					
--90--				90					
				consolidated					
--100--									
--110--		Clay Silt	Silty Fine Sand	Sharp. C	1		111 111.5 MUD SANDY SILT		
--120--		Clay	silt	Inclined C.	1		114 MUD		
				Inclined lamina	1		122-124 sand injection		
--130--				Sharp. C					
		V. COARSE sand	Coarse pebble	massive	1		130 VERY COARSE SAND Common shell fragments		
--140--									
--150--									



↑ TD

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by: MASU	Date: 6 Dec 2011
		Avg.	Max.						
-- 0 --	10Y4/1	Very coarse sand	C. pebble	Concreted	/		Major Lithology common shell fragments <u>VERY COARSE SAND</u> Major: Minor = 8:2 Thick bedded		
-- 10 --									
-- 20 --	10Y3/1	Silt	Fine sand	Concreted	/		Minor Lithology <u>SILTY MUD</u> <u>Soft Sediment Deformation</u> SSD		
-- 30 --									
-- 40 --	10Y4/1			Massive	A		Major L.		
-- 50 --									
-- 60 --	10Y3/1			Thin laminae	1		Minor L.		
-- 70 --	10Y4/1			Massive	A		Major L.		
	10Y3/1			Massive	1		Minor L.		
-- 80 --									
-- 90 --	10Y4/1			Massive	A		Major L.		
-- 100 --									
-- 110 --	10Y3/1			Inclined laminae	A		Minor L.		
-- 120 --	10Y4/1			Massive	A		Major L.		
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --							3 Major L 6 Minor	yasu	6/DEC/2011
	10Y4,1				A		Major. L.		
-- 10 --							11 Minor. L.		
	10Y3,1						18		
-- 20 --							Major. L.		
				Convolute bedding			25		
-- 30 --							Minor. L.		
							39		
-- 40 --							Major.		
-- 50 --									
							65		
-- 70 --							Minor. L.		
							72		
-- 80 --							Major. L.		
-- 90 --									
-- 100 --									
-- 110 --				V Indirect laminae			109		
							114		
-- 120 --				Massive			Major. L.		
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

U1386C

10R4A

194

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --							Shell fragments common	Yasu	6/Dec/2011
-- 10 --				Massic					
-- 20 --	10/4, 1				A		Major L. - Bivalve @ 18-22 cm (large)		
-- 30 --				28					
-- 40 --				Convoluted bedding					
-- 50 --									
-- 60 --	10/3, 1			Thinly laminated			Minor L. Shell fragments common		
-- 70 --									
-- 80 --							- gastropod		
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

1386C-12R-CC A



Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --								masu	6/Dec/2011
	10Y4/1	Silt	Fine sand	massive	/		3 SANDY SILT Shell Fragments		
-- 10 --							13		
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --									
-- 10 --							Core disturbance Fall IN		
-- 20 --									
-- 25 --									
-- 30 --							Major L: V. Coarse shelly sand minor L: Silty mud		
-- 40 --					A				
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --							81 Minor L: Silty mud with shell fragments Slight bioturbation in minor lithology		
-- 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 --								Major L...		
-- 20 --										
-- 30 --										
-- 40 --	NO	10/4/1								
-- 50 --										
-- 60 --								• Large Bivalve sample per photo @ 54-55		
-- 70 --										
-- 80 --										
-- 90 --	NO NO	10/3/1			Thin laminated	A		--- Sharp grain size contact Fine silty mud Thinly laminated Horizontal lamination		
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --					Thin laminated	A		Inclined from 135 ↓		
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

U13860

BR 3A

1198

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --	No	10Y 3/1			Massive	1				
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --		10Y 4/1			Massive	A		Gradational grain size contact MAJOR L. V. Coarse shelly sand		

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --		↓ From Above				↓		Minor L: Silty mud As layers upto 4cm thick in major lithology		
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --		1043/1			Massive			Grain size change Major L: Silty mud Minor L: Coarse shelly sand.		
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

U1386C BR 5A CC 100



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

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --										
-- 10 --										
16								Sharp grain size contact (inclined)		
-- 20 --	No	10Y3/1			Thinly laminated			Major L: Fine silty mud		
-- 30 --						Spase				
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --	AS ABOVE						As Above with v. fine sand filled burrows ↓		
-- 10 --									
-- 20 --									
-- 30 --				Thinly laminated					
-- 40 --					A				
-- 50 --									
-- 60 --									
-- 70 --							Burrow @ 70		
-- 80 --						SSD 75			
-- 85 --							Burrow 85		
-- 90 --							Burrow 89		
-- 100 --									
-- 110 --							Isolated sand fill burrows ↓		
-- 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 --	No	10y3/1								
-- 10 --		10						Catalan colour change contact Major: Silty mud Large pyrite & isolated sand (v.fine) filled burrows & isolated small shell fragments		
-- 20 --		10y4/1			Massive	Slight				
-- 30 --										
-- 40 --										
-- 50 --	No							50 Minor lithology v. coarse shelly sand		
-- 60 --										
-- 70 --								70		
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --									
-- 10 --				Massive	A		Minor Li coarse shelly sand		
-- 20 --									
-- 30 --	10/4			Massive	Slight		Layer		
-- 40 --									
-- 50 --							42 Minor: coarse shelly sand Grading into minor lithology		
-- 60 --						SSR 57	58 Minor lithology		
-- 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--										
--10--	fall in							fall in		
--20--										
--27--										
--30--		10/4/1			Thinly laminated sparse			Major lithology: Fine silty mud shell fragments present thru Section 5, Sec		
--40--										
--50--										
--60--										
--70--										
--76--					Medium laminated			Medium laminated to v. thinly bedded		
--80--										
--90--										
--100--					convolute			convolute bedding		
--104--										
--110--										
--112--										
--120--										
--130--					thinly laminated			Minor lith: silty sand thinly laminated.		
--140--										
--150--										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --							↑ minor lith		
-- 10 --							Major lith.		
-- 20 --									
-- 30 --							Isolated sand filled burrows - Burrow 30		
-- 40 --									
-- 50 --							- Burrow 48-49		
-- 60 --									
-- 70 --							Minor lith: silty sand. small shell fragments		
-- 80 --									
-- 90 --							86 OVER-LAP v. coarse shelly sand		
-- 100 --							errosion contact @ base		
-- 110 --							Minor lith: silty sand.		
-- 120 --							Major lith		
-- 130 --							"Cross bedded?"		
-- 140 --									
-- 150 --									

Medium
medium
laminated

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --				Complete beddy					
-- 10 --				Deformed		10	MAJOR LITH ↓ Soft Sediment deformation		
-- 20 --	As above						recumbent fold		
-- 30 --									
-- 40 --				inclined laminae thinly			inclined		
-- 50 --							Pyrite present Shell fragments present		
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --	As Above			Convolute	A		MASOR LITH Deformed (folded) bedding.		
-- 10 --									
-- 20 --				Thinly laminated			laminated.		
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 125 --									
-- 130 --							Minor lith silty sand with shell fragments		
-- 140 --									
-- 150 --							V. coarse shelly sand gastropod		

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --									
-- 10 --	10/4/17			Convolute	A		grain size contact change - V. coarse shelly sand with intraclasts of silty mud. - Angular to sub rounded mud clasts up to 7cm - large shell fragments		
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
97									
-- 100 --	10/4/17			Thinly laminated	A		77 - Grain size contact MAJOR LITH Silty mud ↓		
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:



Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --	As ABOVE						As ABOVE		
-- 10 --									
-- 12 --							Minor Lith silty sand with shell fragments		
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
-- 60 --									
-- 70 --									
-- 80 --									
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

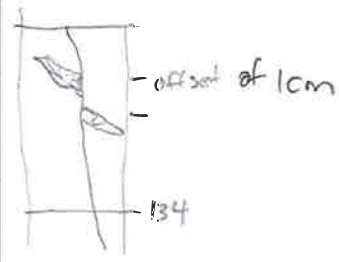
MINOR LITHOLOGY:

Depth	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --										
-- 10 --										
-- 20 --										
-28										
-- 30 --					Thinly laminated horizontal			MAJOR 1 Fine silty mud		
-- 40 --		10Y3, 1								
-- 50 --					↑ 48 inches ↓					
-- 60 --					horizontal					
-- 70 --										
-- 80 --										
-86								Sharp grain size change		
-- 90 --								MAJOR 2 Coarse shelly sand shell fragments		
-- 100 --		10Y3, 1						interbedded Major 1 silty mud	↑ 95 ↓ 98	
-- 110 --								interbed of Major 1 silty mud	↑ 110 ↓ 121	
-- 120 --										
128								Grain size contact — sharp —		
-- 130 --					Thinly laminated			MAJOR 1 Fine silty mud		
-- 140 --		10Y3, 1								
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-0--									
	AS ABOVE				A		AS ABOVE MAJOR 1		
-10--									
-13--				Convolute 13-13					
-20--	1013	Med sand	2mm	Poorly laminated 13-29	Sparse		MAJOR 2 coarse shelly sand convolute @ top & poorly laminated @ base Large quartz grains up to 2mm		
-29--									
-30--									
-40--	1044			Massive	Slight		MAJOR 1: silty mud		
-46--							Gradational grain size change		
-50--							MAJOR 2 c. shelly sand		
-60--	1044	Coarse sand							
-65--			4mm	Massive	A		Minor Very coarse shelly sand quartz grains up to 4mm large shell fragments bivalves + gastropods		
-70--									
-80--									
-90--									
-91--							Sharp grain size contact		91
-100--	1044			Fine-med inclined laminations	Sparse		MAJOR 1 fine silty mud isolated sand filled burrows inclined fine-med laminations		
-110--									
-120--							Micro fault offset		
-130--									
-140--									
-148--									
-150--							Several microfaults between 146 & 148. SHARP GRAIN SIZE CONTACT		148



MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Depth	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
0										
10		10Y4/1			Med to thickly laminated	Sparse		MAJOR 2 coarse shelly sand.		
26			fred sand	8mm				Minor v. coarse shelly sand qtz upto 8mm v. large shell fragments (bracles)		
43		10Y4/1			Massive	slight		Grain size change contact MAJOR 1 - silty mud		
70								70 - gradual grain size change MAJOR 2 - med-coarse sand.		
88		10Y4/1			Massive	slight		Minor v. coarse shelly sand		
90								Sharp grain size change contact		
100		10Y4/1			Thinly laminated	Sparse		MAJOR 1 silty mud Isolated burrows present.		
110										
120										
130										
140										
150										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --										
		AS ABOVE						AS ABOVE		
-- 10 --										
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
- 95 -								Gradational grain size change -		
-- 100 --		10/4			Massive	A		MAJOR 2: med-coarse chelly sand		
- 106 -								gradational grain size change		
-- 110 --		10/4			Thinly laminated	Spars		MAJOR 1:		
-- 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 --		AS ABOVE						AS ABOVE		
-- 20 --										
-- 30 --										
-- 40 --										
-- 50 --										
-- 60 --								Gradational grain size change		
-- 70 --		10Y4/1			Massive	A		MAJOR 2: med-coarse shelly sand		
-- 80 --										
-- 81 --								Minor V. coarse shelly sand		
-- 90 --					Thinly laminated	Sparse		Sharp grain size change		
-- 91 --								MAJOR 1 silty mud. isolated burrows.		
-- 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	10Y4/1			Massive	A		1 - Gradational grain size change - MAJOR 2 med-coarse shelly sand		
10							12 (minor) v. coarse shelly sand		
17			med sand ~4mm				17 sharp grain size change - MAJOR 1 Fine silty mud.		
20	10Y3/1				Slight		Sand filled burrows from 19 to 35		
30							35		
40				Inclined thinly laminated			Thinly laminated.		
50							sand filled burrows		
58							58 grain size change gradational -		
60	10Y3/1			Massive	Slight		MAJOR 2 med-coarse shelly sand.		
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.						
	Grey 10Y 3/1	Clay	Medium Sand	Faint laminations	BI: 2 sparse		Major lithology - Very thick bedded - 75% Calc. silty mud rich burrows 29.5 32 burrow 	NN	7/Dec/21
	Undisturbed								
	Grey 10Y 4/1	Clay	Medium sand ↑ in burrows	Gradational contact Massive (col faint laminations?)	BI: 2 (sparse)		Minor lithology - Thick bedded - 25%		

Interval 1

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
		Clay		Massive (or faint laminar?)	BI:2 (sparse)		- 4 Py burrow - 5 Py layer	NN	7/Dec/2011
							- 13 (Chemical) burrow ← Greenish margin		
							Silty sand		
							partly bioturbated * Medium sand layer is present above contact (log?) thin		
39.5				Sharp Contact	BI:2 (sparse)				
	GLEXY 10Y3/1	Clay	Coarse sand ↑ (in burrows)				- 43 } Major lithology - 49 } burrows - 60% - 51 } - Medium bedded		Interval 2
							Silty mud		
				Gradational contact ↓					
	GLEXY 10Y4/1	Silt	Very coarse sand Granule	Massive	BI:2 (sparse)		- 76.5 Py burrow Major lithology - 40% - Medium bedded - Matrix: Silt + "floated" sand grains - Fining upward (but ill sorted) - Shell fragments		
				probably sharp contact ↓					
	GLEXY 10Y4/1	Clay	Medium sand ↑ (in burrows?)	Massive (faint laminar, etc?)	BI:2 (sparse)		Major lithology - Av. Silt (but this section is clay) - Very thick bedded - 75% (↔ 25% Minor)		Interval 3 ↓ to the end of this core (17R)
							Silty mud		
				Gradational change					
	GLEXY 10Y4/1	Silt	Granule	Massive	BI:2 (sparse)		Minor lithology - Av. silt (Matrix) + "floated" coarse sand - Medium bedded - 25% (↔ 75% Major)		
				Sharp contact					
143	GLEXY 10Y4/1	Silt	Medium sand (in burrows)		BI:2 (sparse)		Major lithology - Av. (Silt)		

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --								NN	5/Dec/2011
9 -- 10 --	↑ destroyed ↓ GLEXY 10Y4/1	Silt	Granule	Gradational contact ?	BI: ?		Minor lithology Silty sand		
18 -- 20 --	GLEXY 10Y4/1	Silt	Very coarse (in burrows)	Sharp? contact	BI: 2 (sparse)		Major lithology Sandy silt		
-- 30 --				Massive					
42 -- 50 --	↑ destroyed ↓ GLEXY 10Y4/1	Silt	Granule	Gradational contact ?	BI: ?		Minor lithology		
54 -- 60 --	GLEXY 10Y4/1	Silt	Very coarse (in burrows?)	Sharp? contact			Major lithology		
-- 70 --				Massive	BI: 1?				
85.5 -- 80 --	↑ destroyed ↓ GLEXY 10Y4/1	Silt	Granule	Gradational contact ?	BI: ?		Minor lithology		
89.5 -- 90 --	GLEXY 10Y4/1	Silt	Silt	Sharp? contact lamination	BI: 2		Major lithology		
99.5 -- 100 --	↑ destroyed ↓ GLEXY 10Y4/1	Silt	Granule	Gradational contact sharp?	BI: ?		Minor lithology		
-- 110 --	destroyed	Silt	Very fine sand	contact	BI: 2 (sparse)		Major lithology		
-- 120 --				fine lamination			Silty mud		
-- 130 --									
-- 140 --	Undisturbed								
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-0--								NN	Dec/21	
-10--										
-20--										
-30--										
-40--							-38 Py burrow? -42 Py burrow			
-50--										
-60--										
-70--										
-80--										
-90--										
-100--										
-108										
-110--										
-120--										
-130--										
-133										
-140--										
-150--										

Major lithology (continued from 3A)

-38 Py burrow?

-42 Py burrow

-64 shells

Gradational contact

Undisturbed

disturbed

Undisturbed

GLE Y1
10Y4/1

Silt

fine sand

Massive

BI:2
(sparse)

Major lithology

GLE Y1
10Y4/1

Silt

fine sand
(in burrows)

Faint
lamination

BI:2
Sparse

Major lithology

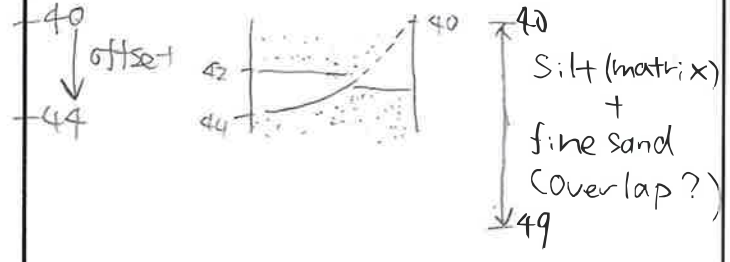
burrows filled with fine sand

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

Major lithology (continued from 4A)

Silty mud

37 } burrows filled with sand, shells & gyrite.
39 }



54 } sheared burrows? irregular form.
59 }



Expedition 339: Mediterranean Outflow



	Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
			Avg.	Max.						
-- 0 --	Undisturbed							NN	5/Dec/2011	Major lithology (continued from 4A)
-- 10 --							-10 -7 -12 PL burrow			
18										
-- 20 --										Paleo-sampling
23.5										
-- 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 --	Fall in							Fall in		
-- 10 --					Thinly laminated			Fine-grained sandy silt	MAJORE	
-- 20 --		1043			17					
-- 30 --					Bioturb. slight					
-- 40 --					Mudstone					
-- 50 --										
-- 60 --										
-- 70 --										
-- 80 --										
-- 90 --										
-- 100 --										
-- 110 --										
-- 120 --										
-- 130 --										
-- 140 --										
-- 150 --										

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --									
-- 10 --									
-- 20 --									
-- 30 --									
-- 40 --									
-- 50 --									
55							AS ABOVE ↓ Gradual colour change sandy silt (MAJOR)		
-- 60 --	10Y4/1			Massive	Slight				
-- 70 --									
-- 80 --									
-- 90 --									
95							Gradational grain size change To a v. fine silty sand. light grey (MAJOR)		
-- 100 --	10Y5/1			Massive	Slight				
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --							AS ABOVE		
-- 10 --	AS ABOVE								
-- 20 --									
-- 26 --							26 - med-coarse silty sand		
-- 30 --							Minor		
-- 38 --							38 -		
-- 40 --									
-- 50 --									
-- 55 --							55 - Gradational grain size change		
-- 60 --	10/5, 1						Fine mud.		
-- 70 --				Massive	Slight				
-- 80 --									
-- 86 --							86 - Gradational color change contact (bioturbated)		
-- 90 --							Fine mud.		
-- 100 --	10/4, 1			Massive	Slight				
-- 110 --				poorly laminated					
-- 120 --									
-- 130 --							Poorly laminated 124-135		
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Drilling disturb.	Color	Grain-size		Sed. struct. / contact	Bioturb.	Samples	Comments	Logged by:	Date:
		Avg.	Max.						
-- 0 --	1044 ₁								
-- 10 --							Poorly laminated & discrete burrows		
-- 20 --									
-- 30 --							- Gradational color change ↓		
-- 40 --									
-- 50 --	1043 ₁								
-- 60 --									
-- 70 --									
-- 80 --									
82	1043 ₁	silt	~3mm	MASSIVE	NONE		v. coarse silty sand. quite grainy up to 3mm		
-- 90 --									
-- 100 --									
-- 110 --									
-- 120 --									
-- 130 --									
-- 140 --									
-- 150 --									

MAJOR LITHOLOGY:

MINOR LITHOLOGY:

Expedition 339: Mediterranean Outflow

v 386

18R CC

1227



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

MAJOR LITHOLOGY:

MINOR LITHOLOGY: