



MD04-139 ASSEMBLAGE 1

Description of Core MD04-2754

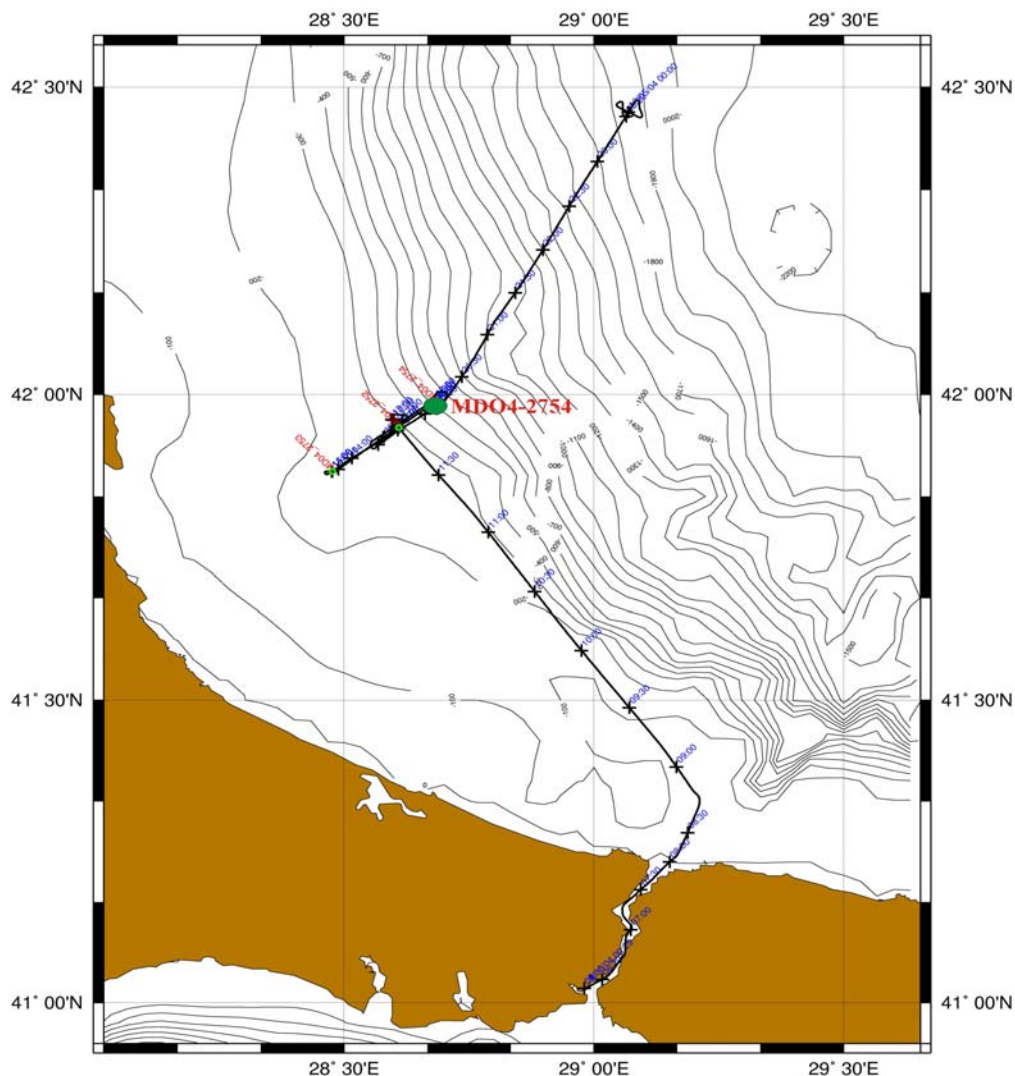


7.3. DESCRIPTION OF CORE MD04-2754

7.3.1. Site presentation

Core MD04-2754 was recovered on a transect profile shot during BlaSON2 survey in 2002. The target has been chosen on the base of the seismic interpretation of the Ifremer Chirp sonar system hull mounted on "Le Suroit". The target is located at the foot of the shelf slope in the western part of the Black Sea at the border between Turkey and Bulgaria. It has been chosen for its important sediment sequence presenting an important succession of seismic layer not deformed or structured by tectonic. This core seems to be a good candidate for paleoenvironmental and paleoclimatic studies.

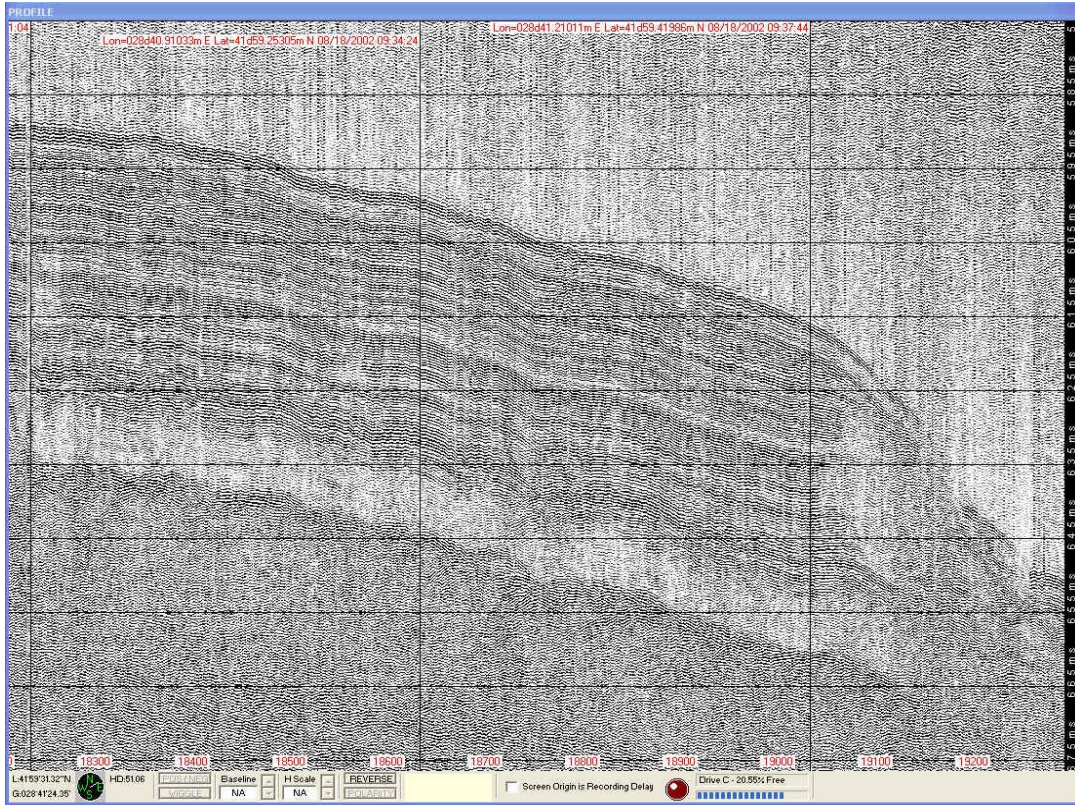
7.3.2. Location map for core MD04-2754



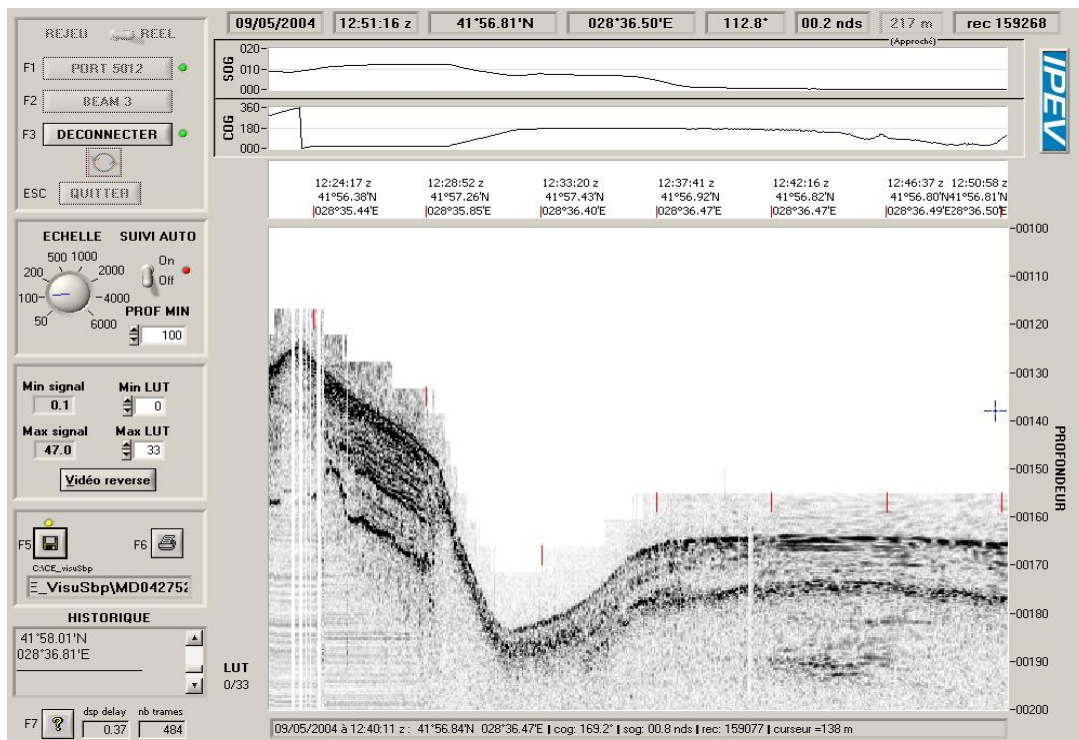
GMT 2004 May 10 03:41:44 IPEV/MD 139_ASSM

7.3.3. MD04-2754 precise Site Survey

7.3.3.1. Profile acquired during BlaSON2



7.3.3.2. MD04-2754 Site Survey



7.3.3. MD04-2754 Coring Form

INSTITUT PAUL EMILE VICTOR

MARION DUFRESNE

NOM DE LA CAMPAGNE
MD 139 ASSEMBLAGE

Date : **09-05-2004**
N° de station **ASSMD33**

Météo : (force) / Direction
Vent :
Mer :
Variation tension (maxi) :

CAROTTE (N°) :
MD 04-2754
(MD - année - milles - centaines)

CAROTTE (longueur) :
32,17 m

POSITION :
Latitude : **41°59.23N**
Longitude : **28°40.99E**

CAROTTIER (type) ⁽¹⁾ : **CALYPSO II**

Poids total (air) : t

Poids total (eau) : **4.5** t

REGLAGES :
Tubes (longueur) : **41,9** m
Câbles :
Chute libre : **1,5** m
Boucle : **1,6** m
LC poids : m

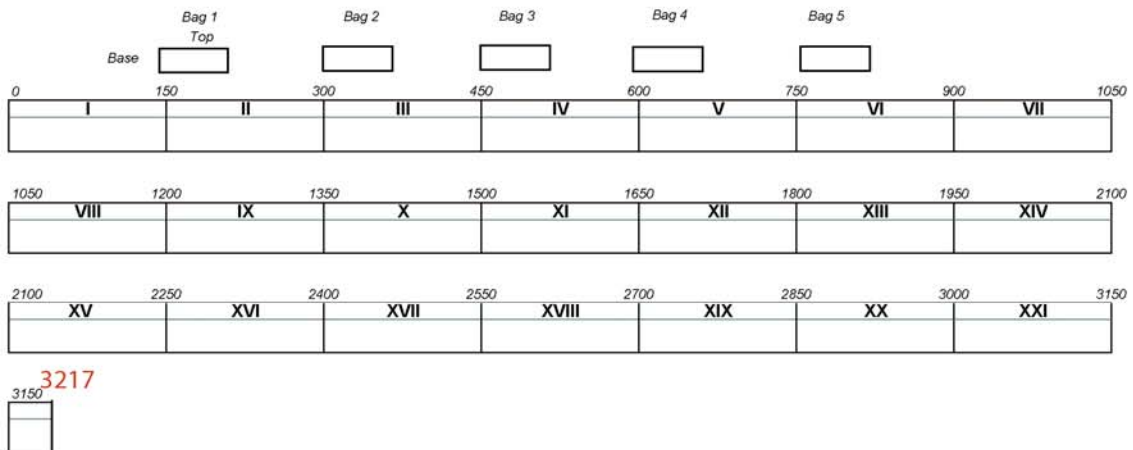
CONTREPOIDS :
Type (2) :
Longueur PVC : m
Pénétration : m
Longueur de carotte : m

PARAMETRES MESURES :
Sonde corrigée : **453** m
Ligne filée : **414** m
Arrachement/total (tonne) : **10.5** t
Arrachement/différentiel (tonne) : t
Pénétration/apparente (m) : **30** m
Pénétration/tensiomètre (m) : **30** m

HEURES (GMT)
En station : **18h37**
Début manœuvre : **18h49**
Déclenchement : **19h02**
Fin de manœuvre : **19h50**
Durée de manœuvre : **1h01**
Départ station :

INSTRUMENTATION OPERATIONS ANNEXES
Pinger :
Flux de chaleur :
CTD (hydro) :
CTD (bouteilles) :
Filet à plancton :
Autres :

Description / incidents :



(1) CALYPSO - CALYPSO GRAVI/FLUX - BOX CORER 1/4m ou carré géant

(2) Cylindrique 100 kg / Plat / Préleveur



7.3.4. MD04-2754 Photography table

MD04-2754 : Sections 1 à 11



MD04-2754 : Sections 12 à 22



S22



S21



S20



S19



S18



S17



S16



S15



S14



S13



S12


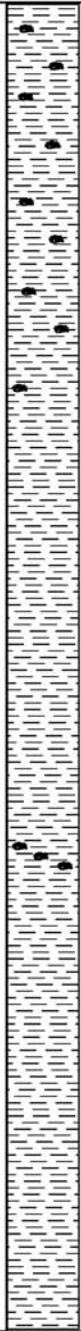
7.3.5. MD04-2754 Log description

Mission: ASSEMBLAGE



Core : MD04-2754	Depth : 453 m	Sections: I/XXII	Lenght top/bottom(cm): 0-150
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Author : M.Stotca


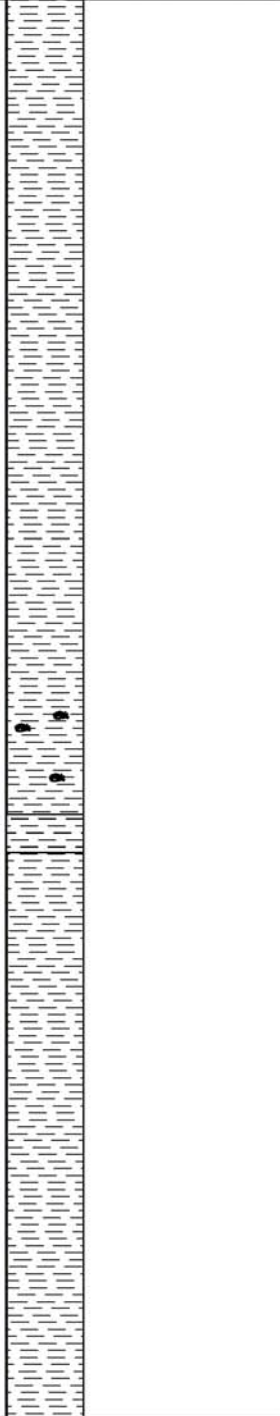
Sample	Lithology	Mud						Sand						Fossils	Bioturbation	Detailed description
		C	CS	S	v	f	m	e	v	f	m	e				
0																0-50 : gray mud with thin white coccolith lamination (<1mm)
10																
20																
30																
40																
50																50-60 : laminated interval with iron sulfides laminae
60																
70																60-70 : gray mud with white laminae of coccolithe
80																70-94 : gray mud with dark thin lamine of iron sulfides
90																
100																94-98 : thin interval with coccolith lamina
110																98-149 : gray mud with thin laminae (<1mm) of iron sulfides
120																
130																
140																
150																

Mission: ASSEMBLAGE



Core : MD04-2754	Depth : 453 m	Sections: II/XXII	Lenght top/bottom(cm): 150-300
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Author : M.Stotca

Sample	Lithology	Mud						Sand						Fossils	Bioturbation	Detailed description
		C	CS	S	S	vf	f	m	c	vf	f	m	c			
0																<p>0-72 : gray mud with thin dark laminae of iron sulfides. The distance between laminae is 0.1-1 cm.</p> <p>72-86 : gray mud with few thin white (<1mm) laminae of coccolithe</p> <p>86-90 : dark gray mud transition interval 90-150 : gray mud with no visible structure (omogenous interval)</p>
10																
20																
30																
40																
50																
60																
70																
80																
90																
100																
110																
120																
130																
140																
150																


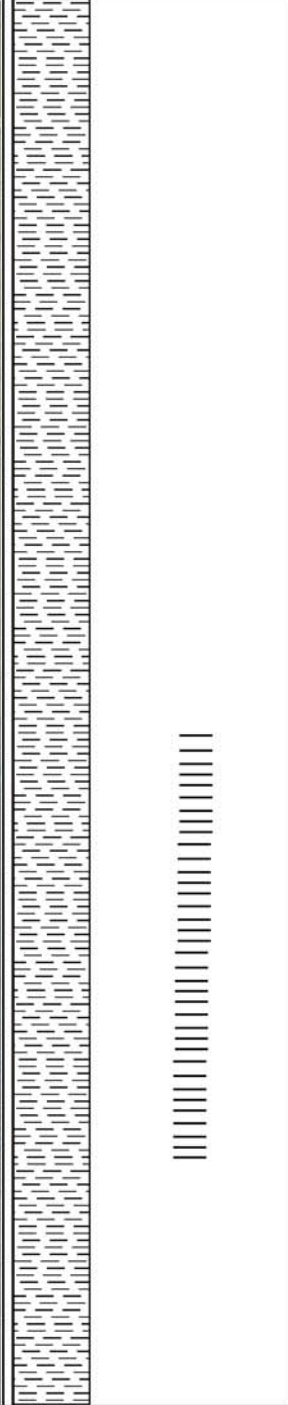


Mission: ASSEMBLAGE



Core : MD04-2754	Depth : 453 m	Sections:III/XXII	Lenght top/bottom(cm): 300-450
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Author : M.Stoica

Sample	Lithology	Mud						Sand				Fossils	Bioturbation	Detailed description
		C	CS	S				v	f	m	e			
0														<p>0-81: gray mud with no visible structures. Few microgastropod shells can be seen on the bottom of this interval</p> <p>81-126 : Dark blackish iron sulfides with gray mud irregular intercalations</p> <p>126-150 : gray mud</p>
10														
20														
30														
40														
50														
60														
70														
80														
90														
100														
110														
120														
130														
140														
150														





Mission: ASSEMBLAGE



Core : MD04-2754	Depth : 453 m	Sections:IV/XXII	Lenght top/bottom(cm): 450-600
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Author : M.Stoica

Sample	Lithology	Mud		Sand			Fossils	Bioturbation	Detailed description
		C	CS	S	v	f			
0									<p>0-150: monotonous interval of polycolor mud (clay) with no visible structures - some dark spots are due to the contamination during the extraction of the core.</p> <p>The colors :</p> <p>0-25 : gray mud 25-41 : light brown mud 41-54 : gray mud 54-124 : dominate light brown mud 124-150 : gray mud</p>
10									
20									
30									
40									
50									
60									
70									
80									
90									
100									
110									
120									
130									
140									
150									


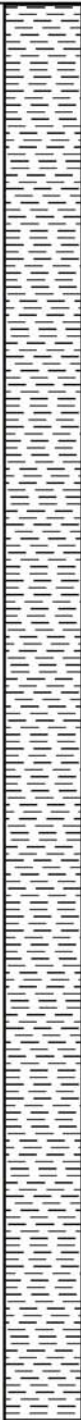


Mission: ASSEMBLAGE



Core : MD04-2754	Depth : 453 m	Sections: V/XXII	Lenght top/bottom(cm): 600-750
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Author : M.Stoica

Sample	Lithology	Mud		Sand				Fossils	Bioturbation	Detailed description
		C	CS	S	vf	f	m			
0										0-150 : gray soft clay with no visible structures
10										
20										
30										
40										
50										
60										
70										
80										
90										
100										
110										
120										
130										
140										
150										


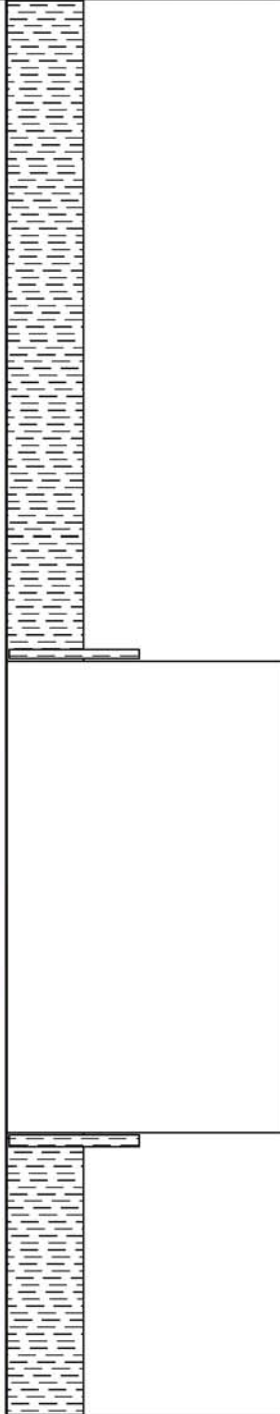


Mission: ASSEMBLAGE



Core : MD04-2754	Depth : 453 m	Sections: VI/XXII	Lenght top/bottom(cm): 750-900
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Author : M.Stoica

Sample	Lithology	Mud		Sand				Fossils	Bioturbation	Detailed description	
		C	CS	S	v	f	m				c
0										0-69 : gray soft clay witout sedimentary structures	
10											
20											
30											
40											
50											
60											
69											
70											69-121 : core gap : but in the margin of this gap can be seen ~ 1 cm of dark silts.
80											
90											
100											
110											
120											
121											121-150 : gray soft clay
130											
140											
150											





Mission: ASSEMBLAGE



Core : MD04-2754	Depth : 453 m	Sections: VII/XXII	Lenght top/bottom(cm):900-1050
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Author : M.Stoica

Sample	Lithology	Mud						Sand						Fossils	Bioturbation	Detailed description
		C	CS	S	S	S	S	vf	f	m	c	S	S			
0																0-150 : gray soft clay with no visible sedimentary structures (maybe some degaseification holes)
10																
20																
30																
40																
50																
60																
70																
80																
90																
100																
110																
120																
130																
140																
150																





Mission: ASSEMBLAGE



Core : MD04-2754	Depth : 453 m	Sections: VIII/XXII	Lenght top/bottom(cm): 1050-1200
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Author : M.Stoica

Sample	Lithology	Mud		Sand			Fossils	Bioturbation	Detailed description
		C	CS	S	v	f			
0									<p>0-150 : gray soft clay with no sedimentary structures</p> <p>0-110 : few degaseification holes</p> <p>Some dark spots of sapropel can be seen diseminated</p>
10									
20									
30									
40									
50									
60									
70									
80									
90									
100									
110									
120									
130									
140									
150									


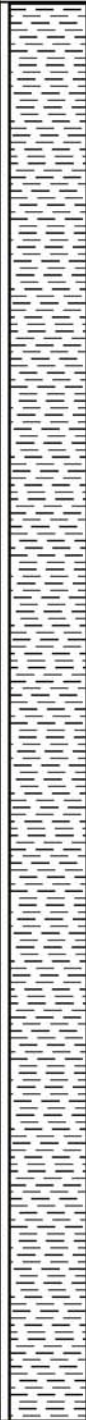


Mission: ASSEMBLAGE



Core : MD04-2754	Depth : 453 m	Sections: IX/XXII	Lenght top/bottom(cm):1200-1350
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Author : M.Stoica

Sample	Lithology	Mud		Sand				Fossils	Bioturbation	Detailed description
		C	CS	S	v	f	m			
0										0-150 : gray soft clay with few dark spots of iron sulfides. No sedimentary structures noticed.
10										
20										
30										
40										
50										
60										
70										
80										
90										
100										
110										
120										
130										
140										
150										


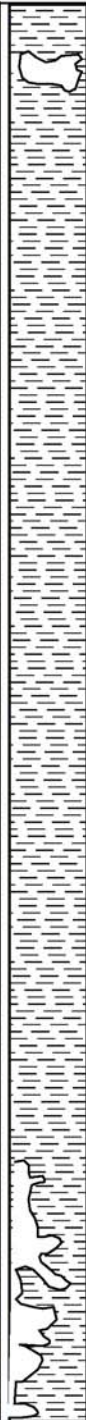


Mission: ASSEMBLAGE



Core : MD04-2754	Depth : 453 m	Sections: X/XXII	Lenght top/bottom(cm):1350-1500
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Author : M.Stoica

Sample	Lithology	Mud		Sand				Fossils	Bioturbation	Detailed description
		C	CS	S	vf	f	m			
0										0-150 : gray soft clay with thin dark lens and spots of iron sulfides (1-2mm thickness) Few degaseification holes are present.
10										
20										
30										
40										
50										
60										
70										
80										
90										
100										
110										
120										
130										
140										
150										


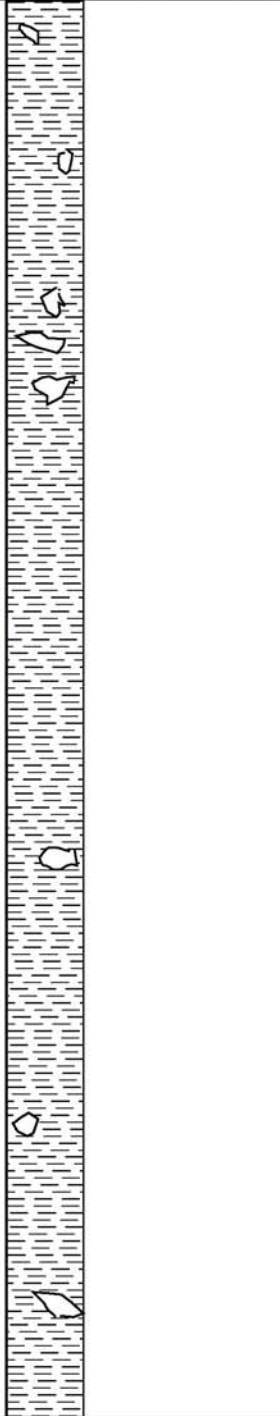


Mission: ASSEMBLAGE



Core : MD04-2754	Depth : 453 m	Sections: XI/XXII	Lenght top/bottom(cm):1500-1650
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Author : M.Stoica

Sample	Lithology	Mud						Sand						Fossils	Bioturbation	Detailed description
		C	CS	S	S	vf	f	m	c	vf	f	m	c			
0																0-150 : gray clay with very thin black lens and spots of sapropel Few degaseification holes can be seen
10																
20																
30																
40																
50																
60																
70																
80																
90																
100																
110																
120																
130																
140																
150																


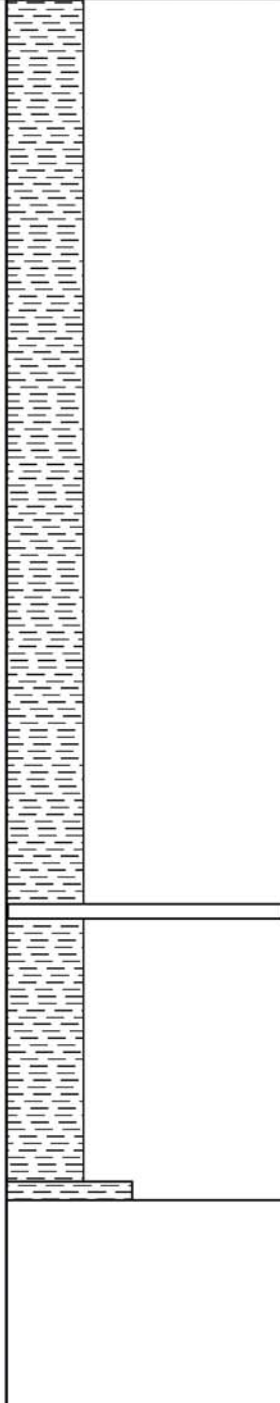


Mission: ASSEMBLAGE



Core : MD04-2754	Depth : 453 m	Sections: XII/XXII	Lenght top/bottom(cm):1650-1800
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Author : F. Lemy

Sample	Lithology	Mud		Sand				Fossils	Bioturbation	Detailed description	
		C	CS	S	v	f	m				c
0										0-125 : gray clay with black stripes and patches of iron sulfides Scattered shell-fragments bioturbated.	
10											
20											
30											
40											
50											
60											
70											
80											
90											
100											96-97 : void
110											
120											125-127 : silty olive grey layer
130											127-150 : core gap
140											




Mission: ASSEMBLAGE



Core : MD04-2754	Depth : 453 m	Sections: XIII/XXII	Lenght top/bottom(cm): 1800-1950
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Author : F. Lemy

Sample	Lithology	Mud						Sand						Fossils	Bioturbation	Detailed description
		C	CS	S	v	f	m	c	v	f	m	c				
0															0-20 : core gap	
10																
20															20-27 : brownish grey silty mud with erosive base	
30															27-150 : grey clay with black patches of iron sulfides, scattered shells, bioturbated.	
40																
50																
60																
70																
80																
90																
100																
110																
120																
130																
140																
150																




Mission: ASSEMBLAGE



Core : MD04-2754	Depth : 453 m	Sections: XIV/XXII	Lenght top/bottom(cm): 1950-2100
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Author : F. Lemy

Sample	Lithology	Mud							Sand			Fossils	Bioturbation	Detailed description
		C	CS	S	vf	f	m	c						
0														0-150 : Medium stiff homogeneous, clay with abundant black patches and spots of iron sulfides throughout the section Only very rare small shell fragments.
10														
20														
30														
40														
50														
60														
70														
80														
90														
100														
110														
120														
130														
140														
150														





Mission: ASSEMBLAGE



Core : MD04-2754	Depth : 453 m	Sections: XV/XXII	Lenght top/bottom(cm): 2100-2250
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Author : F. Lemy

Sample	Lithology	Mud						Sand						Fossils	Bioturbation	Detailed description
		C	CS	S				vf	f	m	c					
0																0-110 : Medium stiff homogeneous, clay with abundant black patches and spots of iron sulfides throughout the section Only very rare small shell fragments.
10																
20																
30																
40																
50																
60																
70																
80																
90																
100															110-150 : Strongly disturbed during the coring process, some remaining sediment, soft. Gray clay with abundant shell fragments	
110																
120																
130																
140																
150																





Mission: ASSEMBLAGE



Core : MD04-2754	Depth : 453 m	Sections:XVI/XXII	Lenght top/bottom(cm):2250-2400
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Author : F. Lemy

Sample	Lithology	Mud Sand							Fossils	Bioturbation	Detailed description
		C	CS	S	vf	f	m	c			
0										C	0-150 : Medium stiff homogeneous, clay with abundant black patches and spots of iron sulfides throughout the section Only very rare small shell fragments.
10											
20											
30											
40											
50											
60											
70											
80										C	89-96 : Core gap
90											
100										C	
110											
120											
130											
140											
150											



Mission: ASSEMBLAGE



Core : MD04-2754	Depth : 453m	Sections: XVII/XXII	Lenght top/bottom(cm): 2400-2550
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Author : F. Lemy

Sample	Lithology	Mud		Sand				Fossils	Bioturbation	Detailed description
		C	CS	S	vf	f	m			
0										0-3 : Medium stiff homogeneous, clay with abundant black patches and spots of iron sulfides throughout the section
10								C		3-5 : silty layer with shell hash.
20										5-18 : core gap
30										18-150 : medium sticky gray clay with rare small shell fragments
40										slight color banding on cm-scale color layers with iron sulfides.
50								C		Other intervals with dark patches and spots of iron sulfides.
60										
70										
80								C		
90										74-77 : void
100										
110								C		
120								C		
130								C		
140								C		
150								C		

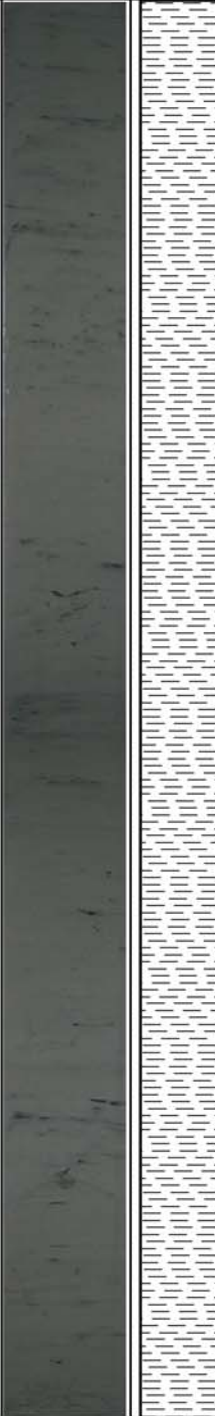


Mission: ASSEMBLAGE



Core : MD04-2754	Depth : 453m	Sections: XVIII/XXII	Lenght top/bottom(cm): 2550-2700
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Author : F. Lemy

Sample	Lithology	Mud						Sand						Fossils	Bioturbation	Detailed description
		C	CS	S	S	vf	f	m	c	S	S	S	S			
0																<p>0-150 : Medium stiff, very homogeneous, grey clay with only occasional black patches and spots of iron sulfides Very rare small shell fragments</p>
10																
20																
30																
40																
50																
60																
70																
80																
90																
100																
110																
120																
130																
140																
150																



Mission: ASSEMBLAGE



Core : MD04-2754	Depth : 453m	Sections: XIX/XXII	Lenght top/bottom(cm): 2700-2850
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Author :

Sample	Lithology	Mud						Sand						Fossils	Bioturbation	Detailed description
		C	CS	S	S	vf	f	m	c	vf	f	m	c			
0																0-86 : Medium stiff, very homogeneous, grey clay with only occasional black patches and spots of iron sulfides
10																0-5 : voids 16-19 : voids
20																
30																
40																
50																
60																
70																
80																
90																86-91 : core gap 91-150 : same as above but more but more abundant dark patches and spots of iron sulfides.
100																
110																
120																
130																
140																
150																



Mission: ASSEMBLAGE



Core : MD04-2754	Depth : 453m	Sections:XX/XXII	Lenght top/bottom(cm):2850-3000
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Author :

Sample	Lithology	Mud						Sand						Fossils	Bioturbation	Detailed description
		C	CS	S	S	S	S	vf	f	m	c	S	S			
0																0-150: homogeneous grey clay, only occasional dark patches and spots No visible shell fragments 9-15 : voids
10																
20																
30																
40																
50																
60																
70																
80																
90																
100																98-105 : voids
110																
120																
130																
140																
150																




















Mission: ASSEMBLAGE



Core : MD04-2754	Depth : 453m	Sections:XXI/XXII	Lenght top/bottom(cm):3000-3150
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Author : F.Lemy

Sample	Lithology	Mud Sand							Fossils	Bioturbation	Detailed description
		C	CS	S	vf	f	m	c			
0									C		0-150: homogeneous grey clay, occasional dark patches and spots of iron sulfides. Occasional shell fragments throughout
10											
20											
30											
40											
50											
60											
70											
80											
90											
100											
110											
120											
130											
140											
150											





Mission: ASSEMBLAGE

Core : MD04-2754	Depth : 453m	Sections:XXII/XXII	Lenght top/bottom(cm):3150-3217
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Author : F.Lemy

Sample	Lithology	Mud						Sand				Fossils	Bioturbation	Detailed description	
		C	CS	S	S	vf	f	m	e						
0															0-150: homogeneous grey clay, occasionnal dark patches and spots of iron sulfides. Occasionnal shell fragments throughout
10															12-22 : void
20															
30															
40															
50															
60															
70															
80															
90															
100															
110															
120															
130															
140															
150															

