

IODP-MSP (Exp. 364) VISUAL SECTION UNIT DESCRIPTION

Exp. 364	Site 77	Hole A	Core 10	Type R	Section 2
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Date 24.09.16	Time 10:30	Observers RW EC
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[cm]	Image	Unit #	Lithology	Veins and Alteration	Structures	Burrows	Ichnofabrics	Fossils	Core Disturbance	Description	
0	Image	1	marlstone	calc?				forams		Flame structure	
10										laminated marlstone, of 1cm thick bed alternations darker layer 2.5Y 3/1 (very dark gray) with forams lighter layer 2.5Y 3/2 (very dark grayish brown)	
20										- Few nodules (~2mm) of (no identified) at 16.2cm (0.5mm) of pyrite? at 8cm	
30										- Fracture between 12 and 15cm	
40			2	marlstone	pyr vein (42-43) nodules pyr				forams		bioturbated marlstone 2.5Y 4/2 (dark grayish brown) nodules of pyrite → 2.4cm length → follow a bed 2mm width
50										forams and black flat microelement (organic) vertical fracture with pyrite (42-47cm)	
60			3	marlstone	56-57 cm pyr vein calcite (55-59) nodules (70cm)				forams		- laminated marlstone with alternation of 5/5cm thick with forams. darker beds 2.5Y 3/1 (very dark gray) lighter beds 2.5Y 3/2 (very dark grayish brown)
70		- 86.5 to (1cm thick) laminated limestone 87.5cm (few forams?) sharp contact at the top 2.5Y 4/2 (dark grayish brown) truncation at the base → 2 lighter beds inside									
80		- 94.5 to 96 cm claystone - thinner in the center thicker in the edges									
90		- 2 lighter beds (1mm thick) at the bottom of the unit. 2.5Y 7/4 (light gray) 6mm packstone									
100					fracture filled by clay at the top calcite at the base				forams		- 98-104cm - uncontinuous beds with high truncation base coarsening - up - chert nodules at the base (2mm - 1mm) base with flame structure
110											color: dark layer 2.5Y 3/1 light 2.5Y 4/2
120				marlstone							upper 10cm, alternations of layers to 1cm thick 3mm
130											- at 108.5cm, bioturbated sediment (ichno. 3) to 118.5cm → inclined base
140											- dark layer of 4.5cm thick. down up less bioturbated (ichno 2)
150											- 113.5 to 115cm - 3 horz fract with silicified
160										- 115 to 131.5cm - laminated layers with inclination - ↳ 2 uncontinuous and 1 continuous (131.5cm) inter layers lighter. Packstone with marlstone (fining up) cross laminated - (1.5 to 3mm thick) with truncated surface	

From 138.5 to 141.5cm - laminated marlstone with two big silicified
from 143 to 148cm layers (3 and 5cm thick) with microfault in lighter layers

CT facies

unit 1

- alternation of (high atomic n° + high density) light gray + (low AN + low density) dark gray
- pyrite layers appear in white

unit 2

- bioturbated unit appears light gray with pyrite nodules and vein appears white

unit 3

- alternation of light gray and dark gray
- pyrite nodule appears on CT facies white but doesn't appear on surface sediment.
- lighter bed with high moisture appears light gray.
- claystone appears black but the fracture is white!
- the limestone appears white and the nodule ^{at the base} are not well remarkable on the CT scan.

unit 4

- the 3 silicified layers appear black
- the top of the inclined unit appear light gray.
- the two main silicified ^{thick} layers at the base appear light gray