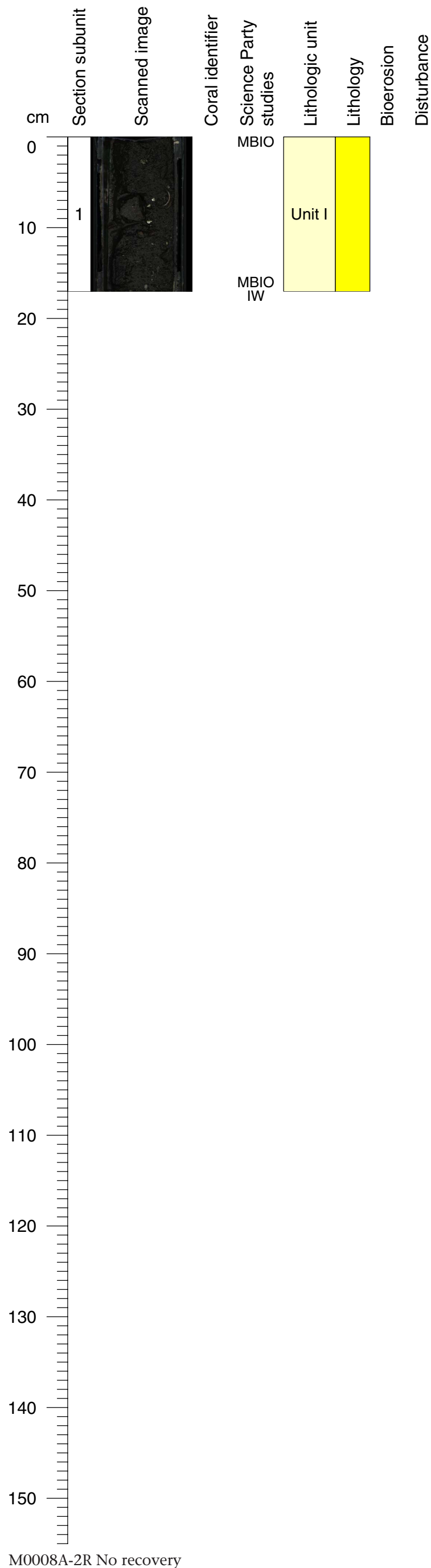


**Core Photo**



Coral identifier	Science Party studies	Lithologic unit	Lithology	Bioerosion	Disturbance
MBIO		Unit I			
MBIO IW					

310-M0008A-1R-1 (Section top: 1.5 mbsf)

UNIT TYPE: Sand

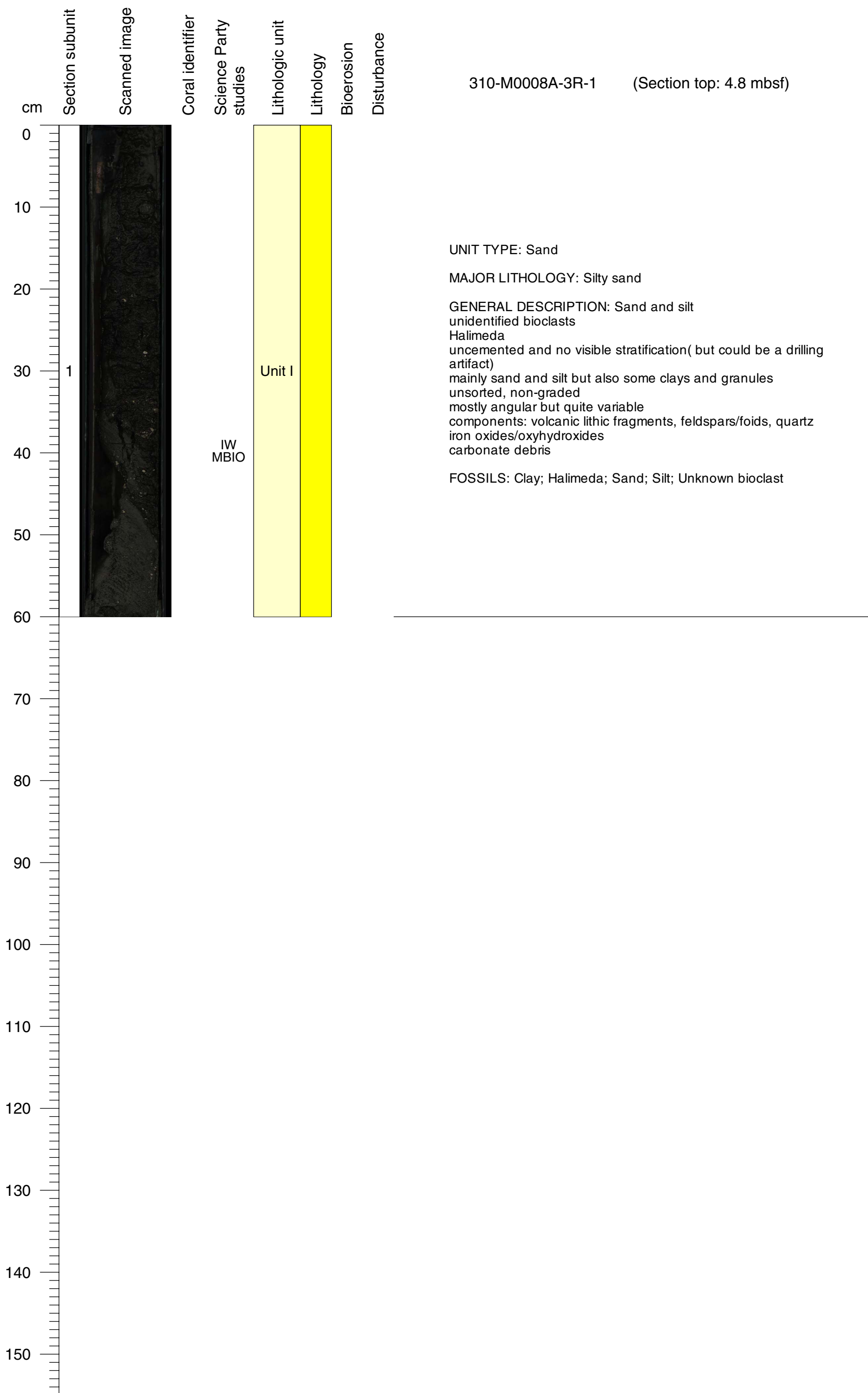
MAJOR LITHOLOGY: Silty sand

GENERAL DESCRIPTION: sand and silt (volcanoclastic) massive and uncemented (no visible stratification) variable size from silt to sand plus occasional granules and pebbles very poorly sorted and no grading variable shapes but mainly subangular components are: lithic fragments mainly volcanogenic in origin quartz, feldspars/foids iron oxides/oxyhydroxides carbonate debris including bivalves, gastropods and unidentified bioclasts

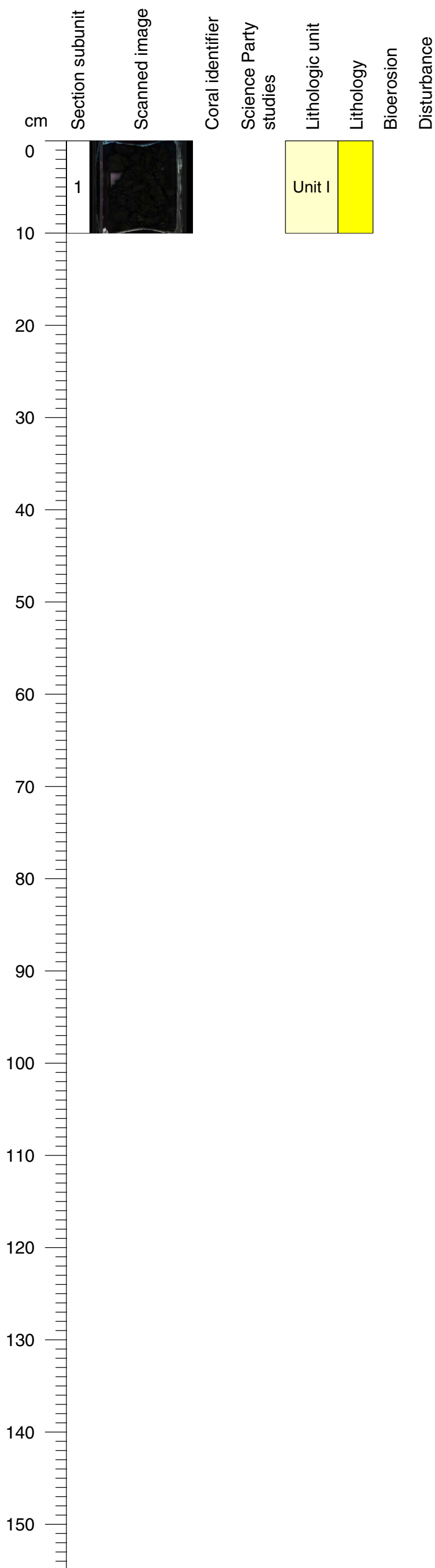
FOSSILS: Basalt pebbles; Basalt sand grains; Bivalve; Gastropod; Mollusc; Sand; Silt; Unknown bioclast; Volcanic sand and silt

**Core Photo**

310-M0008A-3R-1 (Section top: 4.8 mbsf)



**Core Photo**



310-M0008A-3R-2 (Section top: 5.4 mbsf)

UNIT TYPE: Sand

MAJOR LITHOLOGY: Sand

GENERAL DESCRIPTION: Volcaniclastic sand and silt

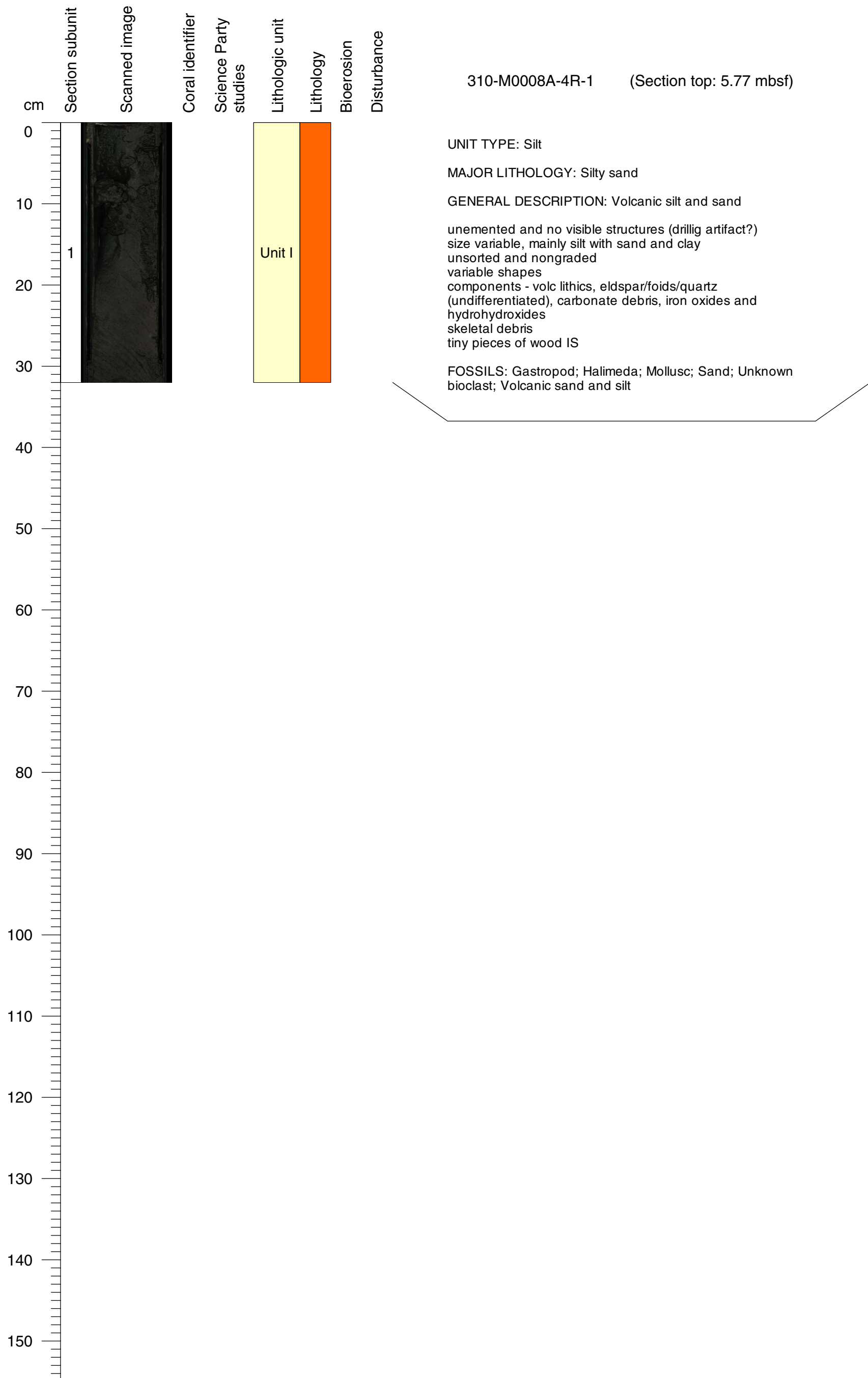
- uncemented-unlithified (drilling artifact?)
- mainly sand and silt, plus granules and clays
- unsorted, not graded
- sand and silt are angular but granules are subround
- components include volcanic lithics, carbonate debris, feldspar/foids/quartz (undifferentiated), iron oxides/oxyhydroxides, bioclasts

FOSSILS: Coral frags., unident.; Echinoderm; Encrusting coraline algae; Halimeda; Unknown bioclast

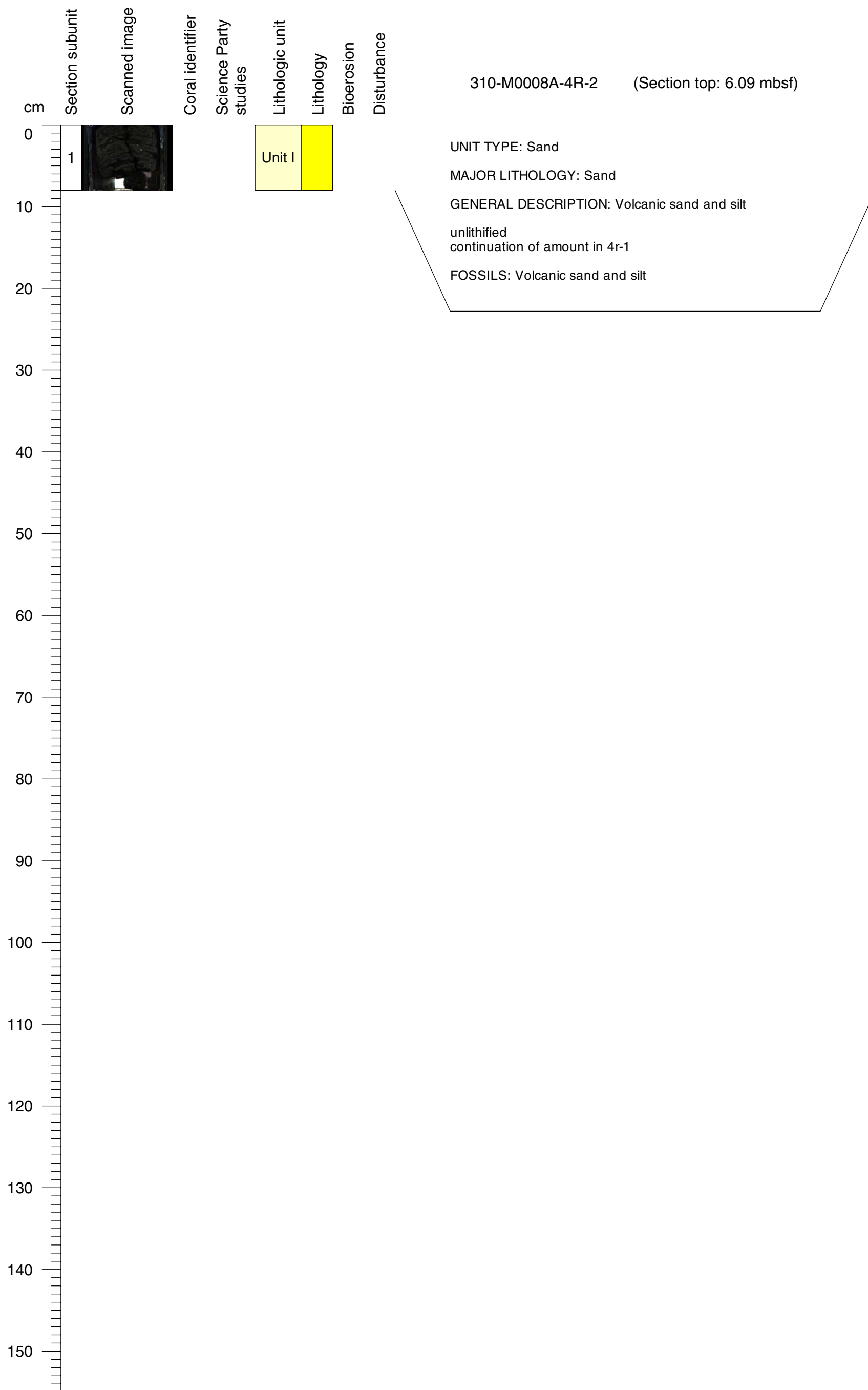
Unit I	
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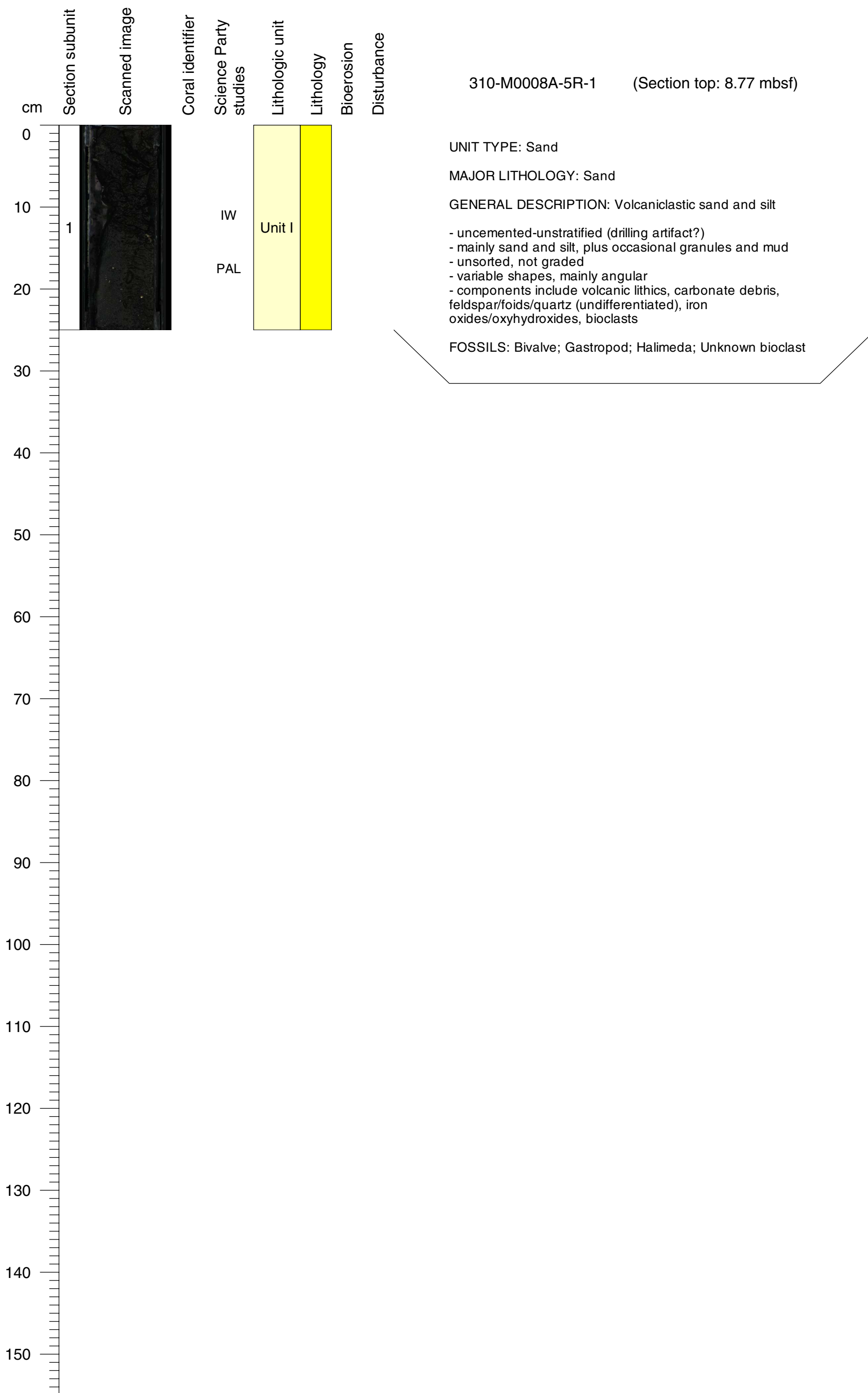
**Core Photo**



**Core Photo**

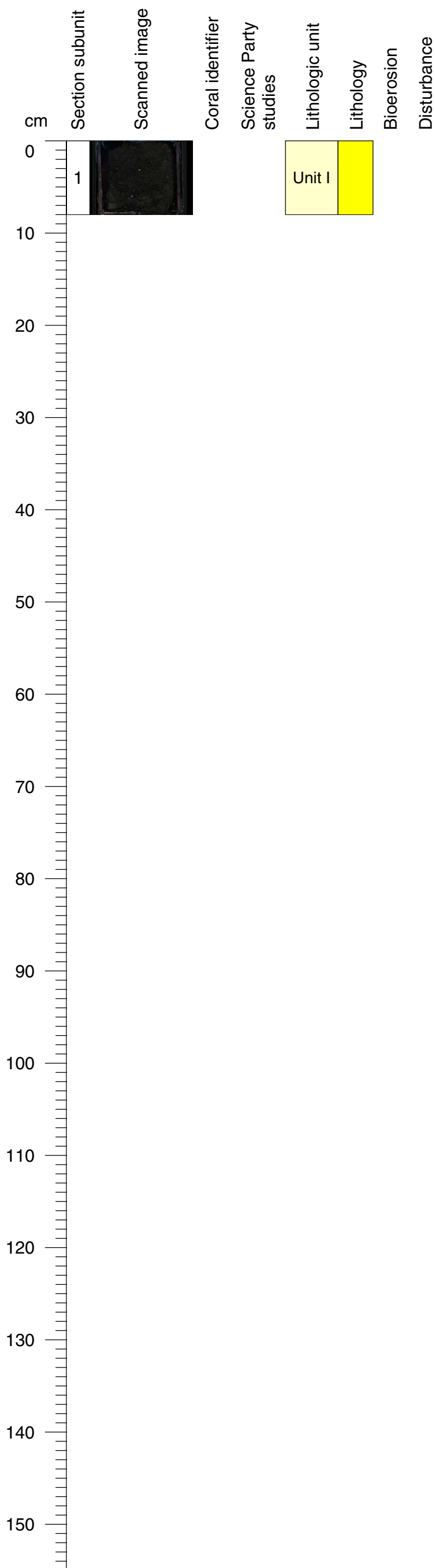


**Core Photo**



**Core Photo**

310-M0008A-5R-2 (Section top: 9.02 mbsf)



Lithologic unit

Unit I

Lithology

UNIT TYPE: Sand

MAJOR LITHOLOGY: Sand

GENERAL DESCRIPTION: Volcaniclastic sand and silt

- weakly cemented-lithified
- mainly sand and silt, plus granules
- unsorted, not graded
- sand and silt are subangular but granules are subround to round
- components include volcanic lithics, carbonate debris, feldspar/foids/quartz (undifferentiated), iron oxides/oxyhydroxides, bioclasts

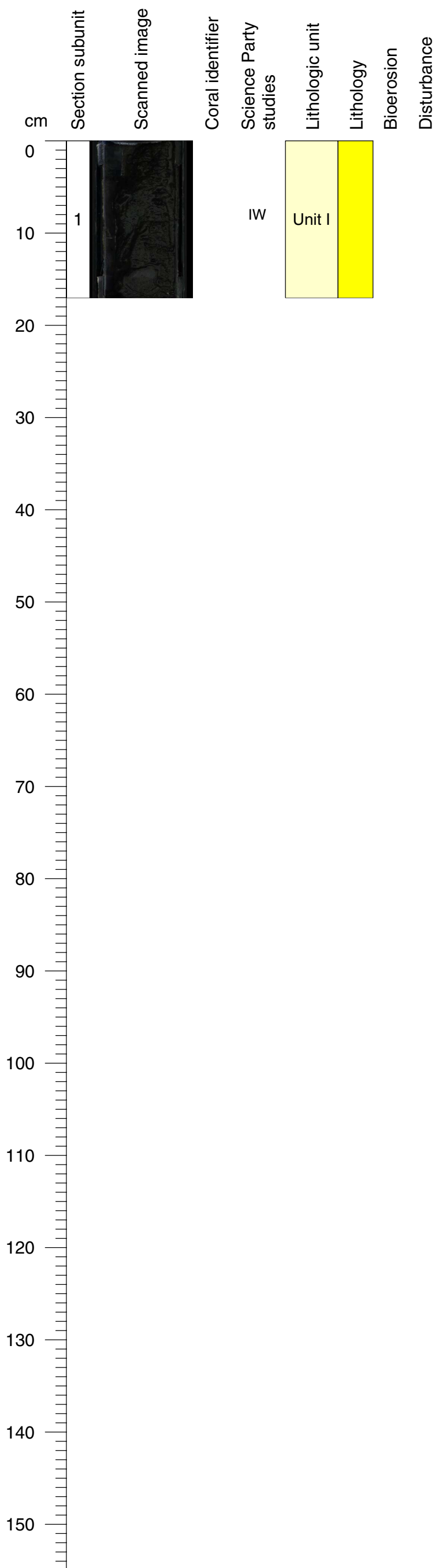
Bioclast include wood (roots) in situ!

FOSSILS: Basalt sand grains; Gastropod; Halimeda; Unknown bioclast



**Core Photo**

310-M0008A-6R-1 (Section top: 11.77 mbsf)



UNIT TYPE: Sand

MAJOR LITHOLOGY: Sand

GENERAL DESCRIPTION: Volcaniclastic sand and silt

- uncemented- unstratified
- mainly sand and silt, plus mud and a few granules and pebbles
- unsorted, not graded
- variable shapes, mainly subangular and angular
- components include volcanic lithics, carbonate debris, feldspar/foids/quartz (undifferentiated), iron oxides/oxyhydroxides, bioclasts

Bioclast include wood (roots) in situ!

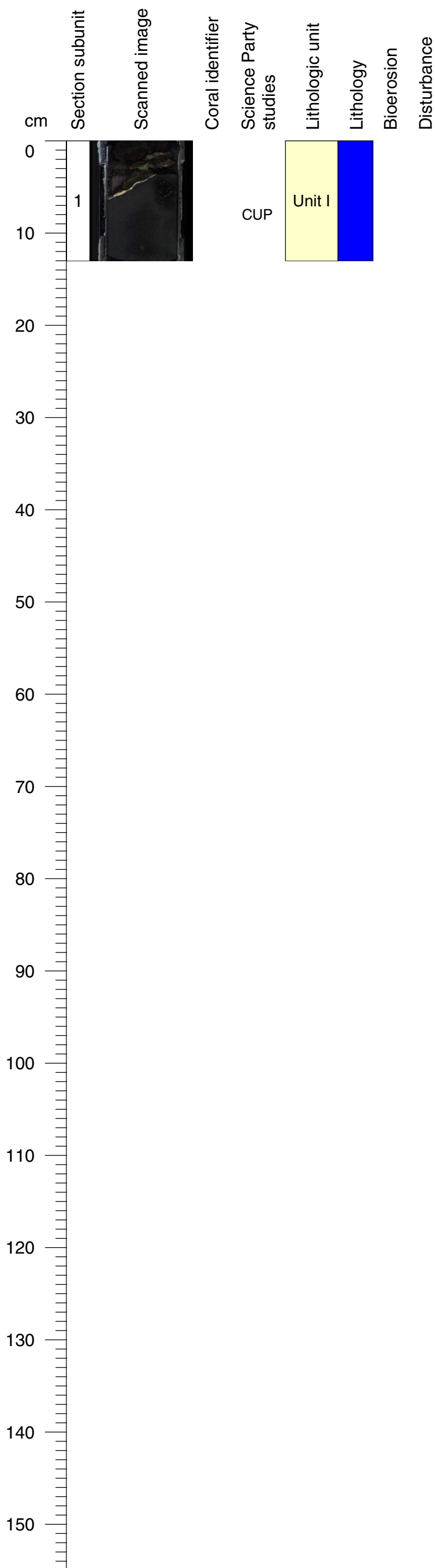
FOSSILS: Basalt sand grains; Foram; Unknown bioclast





**Core Photo**

310-M0008A-7R-1 (Section top: 14.77 mbsf)



UNIT TYPE: Cobble

MAJOR LITHOLOGY: Sand

GENERAL DESCRIPTION: VOLCANIC

**BASALT COBBLE**  
 Subangular  
 Fine to med grained  
 Sparsely phyric  
 - 1-6 mm  
 - mainly pyroxene, olivine  
 - altered/replaced  
 - aphanitic groundmass  
 Nonvesicular  
 Slightly to moderately altered

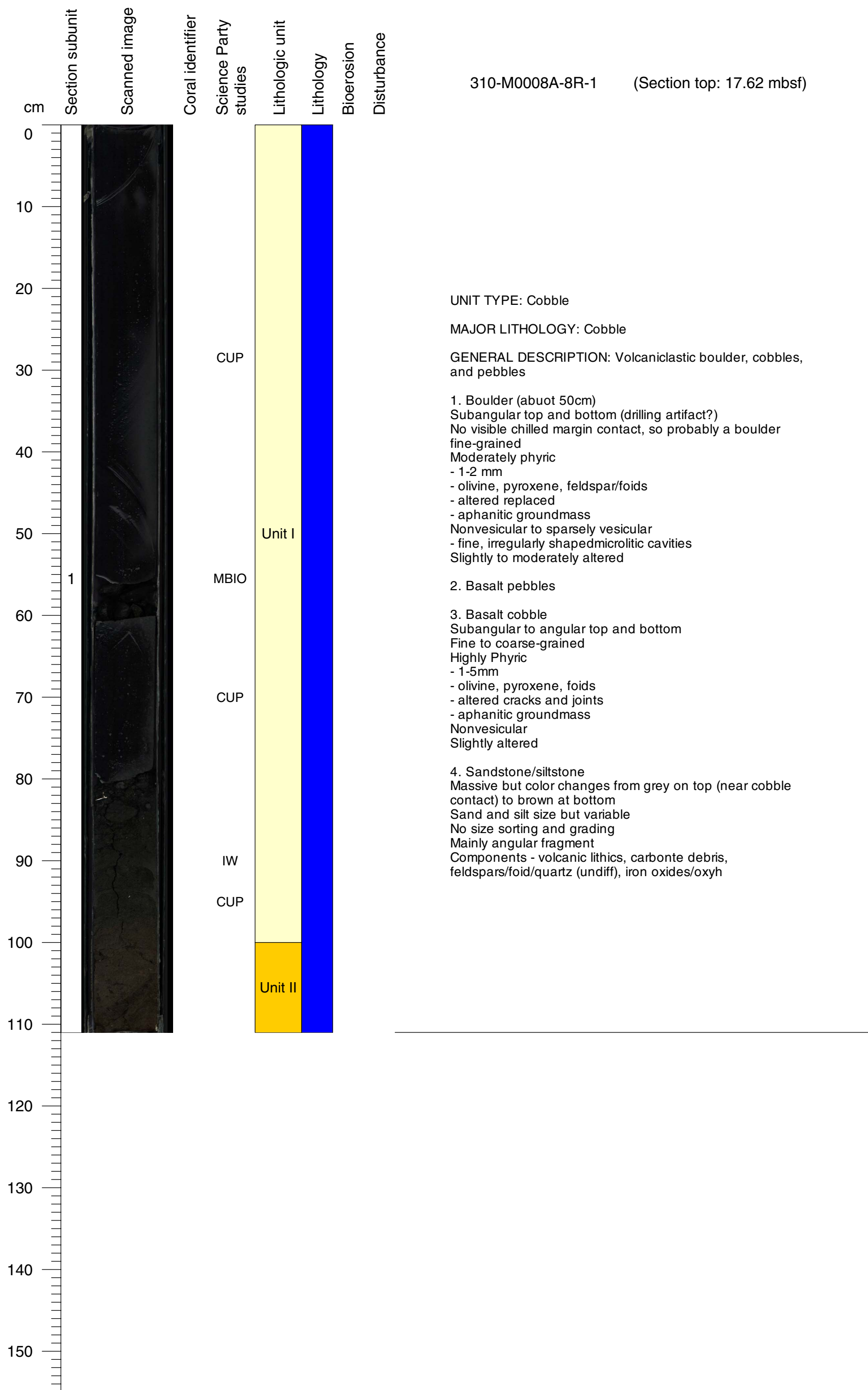
Pebble of granule conglomerate or very coarse sandstone  
 No visible structures, moderately indurated  
 Variable size from sand to granule  
 Poorly sorted, no grading  
 Shapes variable, mainly subangular  
 Mainly volcanic lithics, unknown bioclasts, carbonate debris,  
 iron oxides/oxyhydroxides

FOSSILS: Encrusting coralline algae; Sand; Unknown bioclast

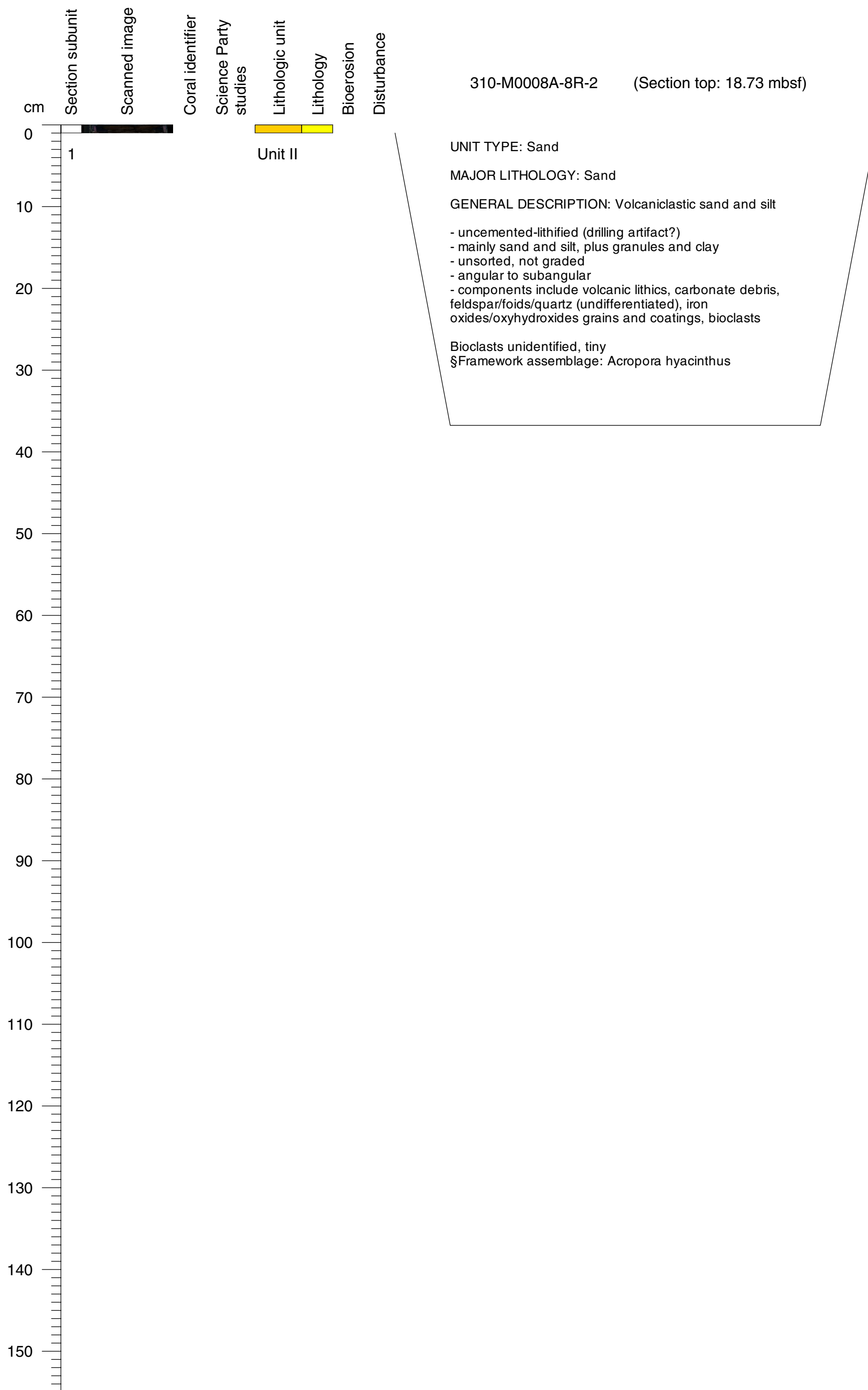


Core Photo

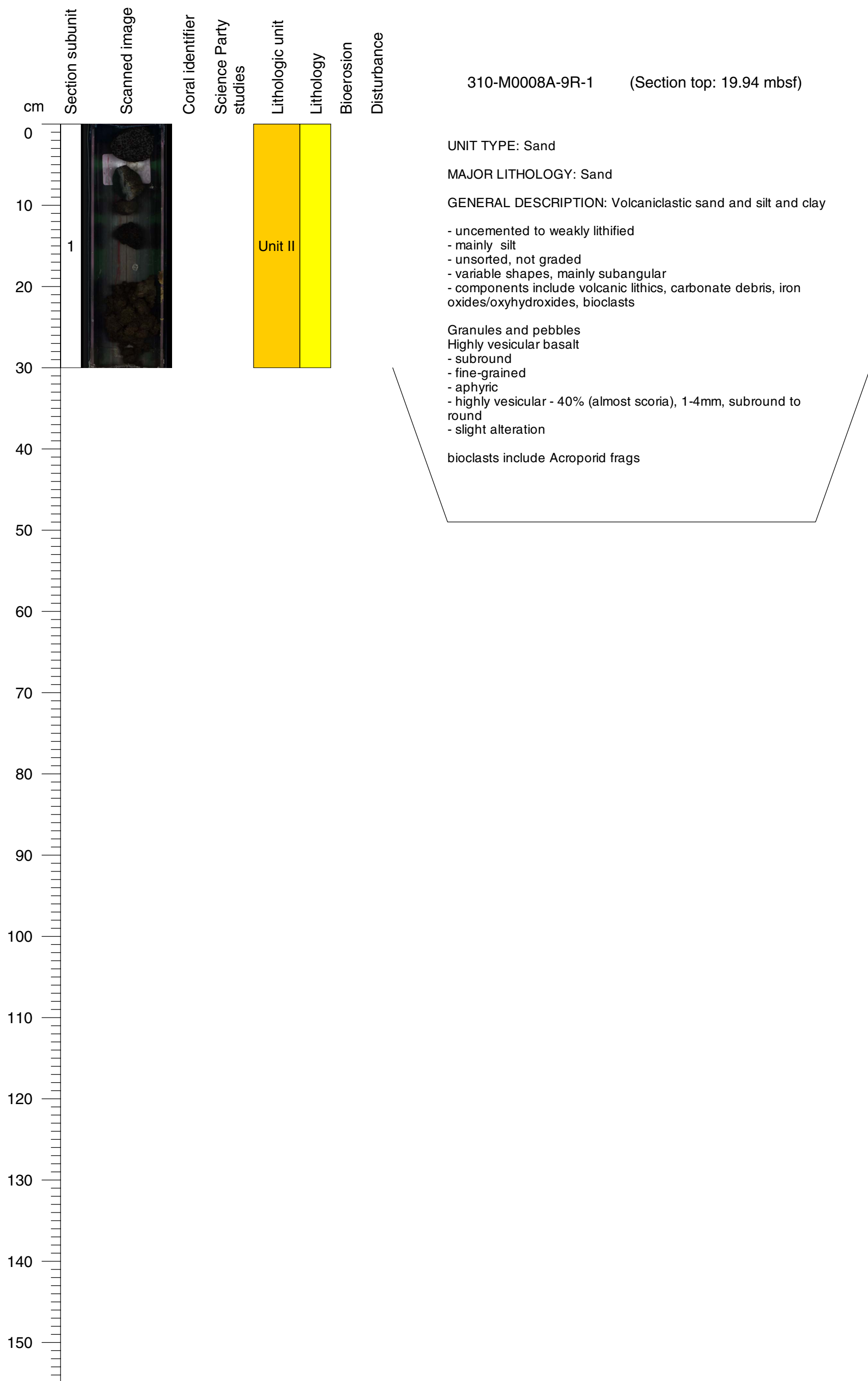
310-M0008A-8R-1 (Section top: 17.62 mbsf)



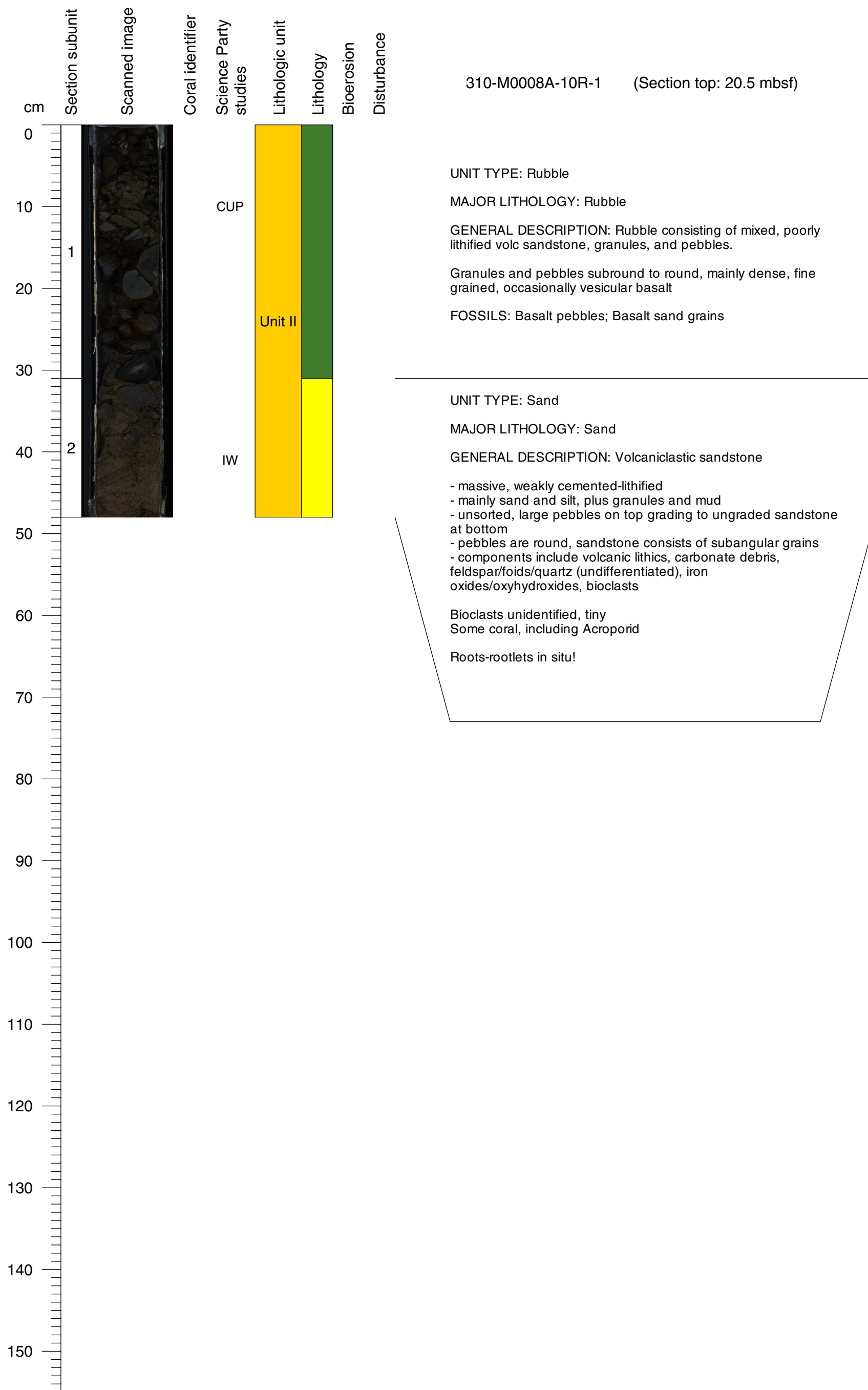
**Core Photo**



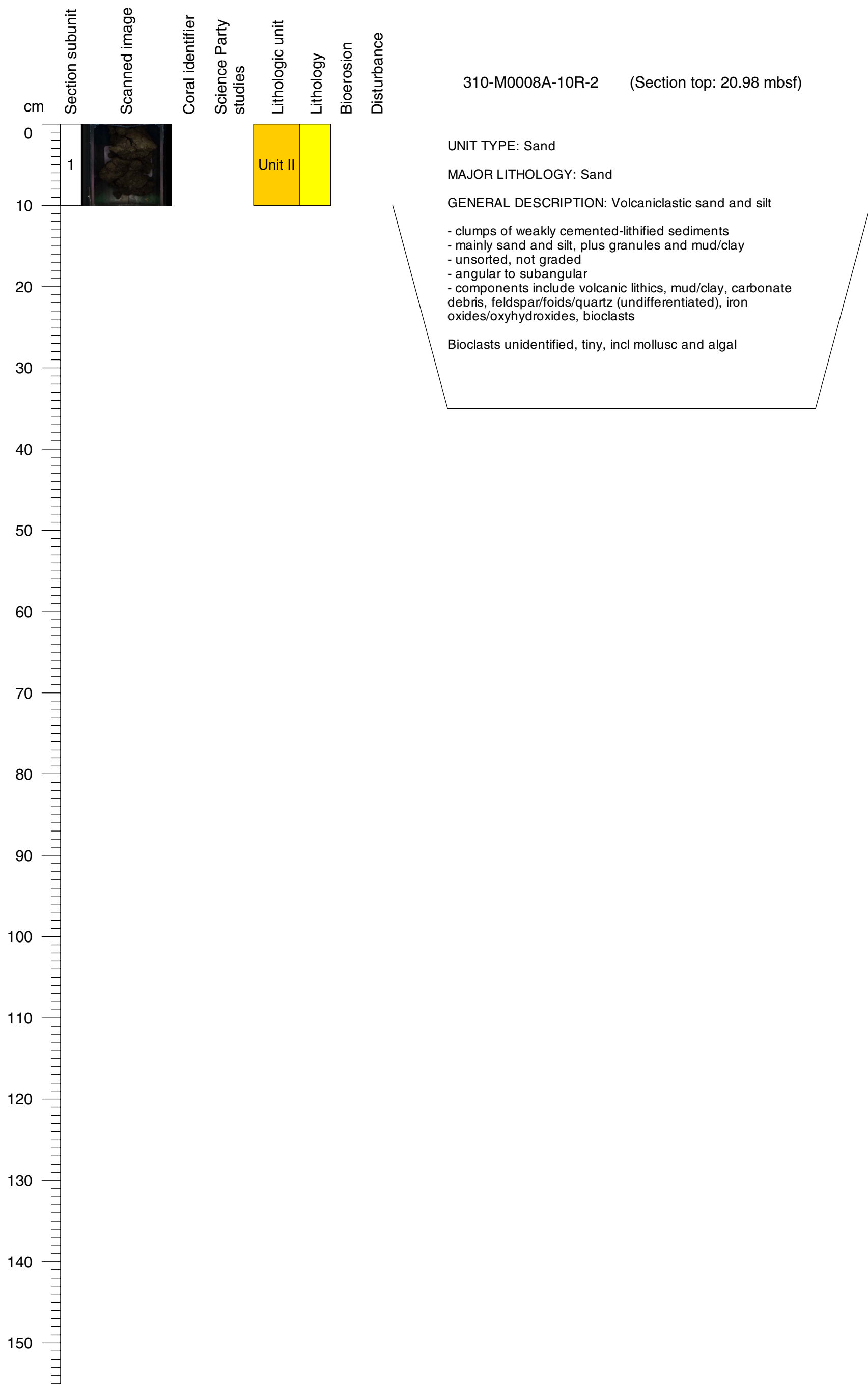
**Core Photo**



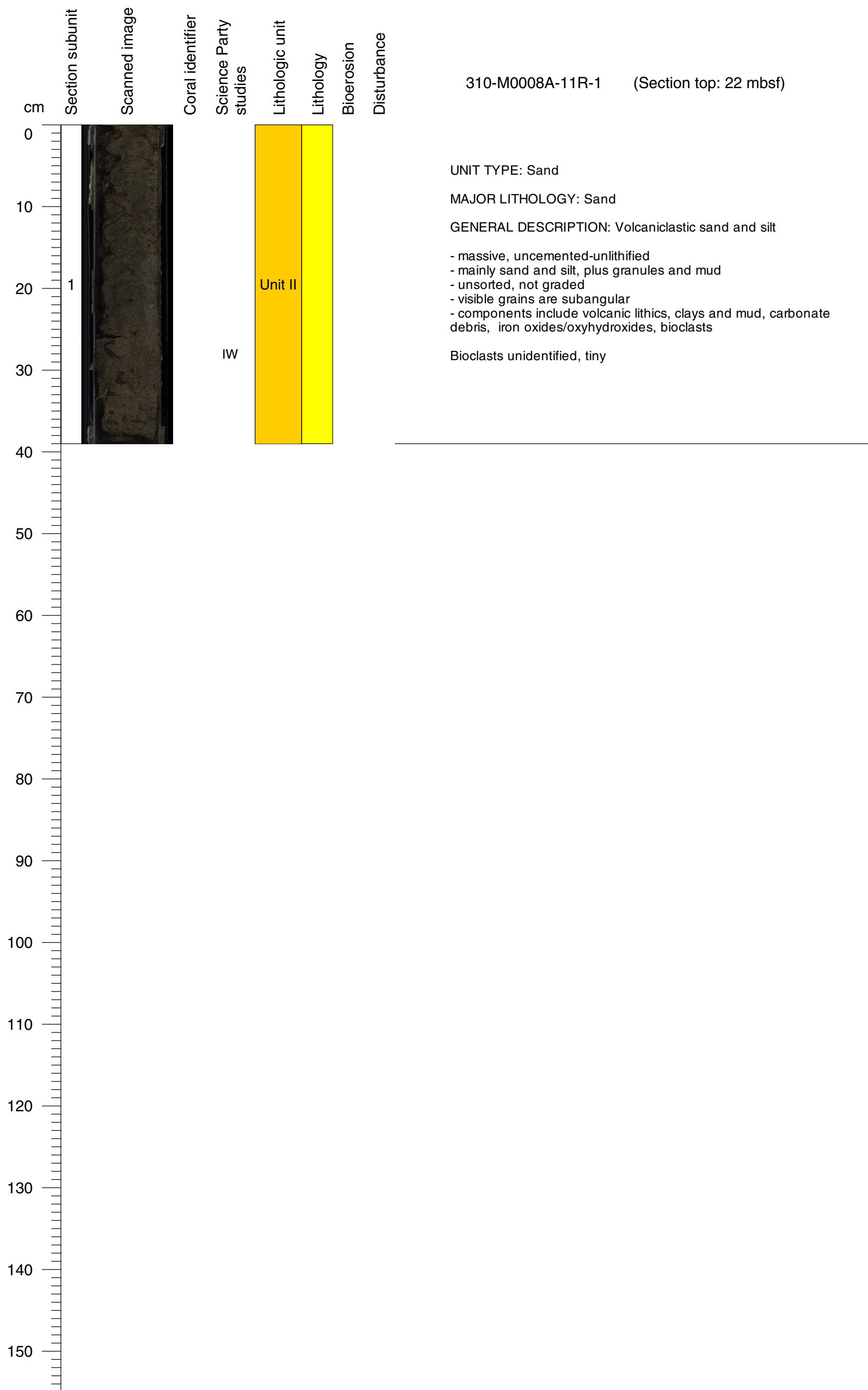
Core Photo



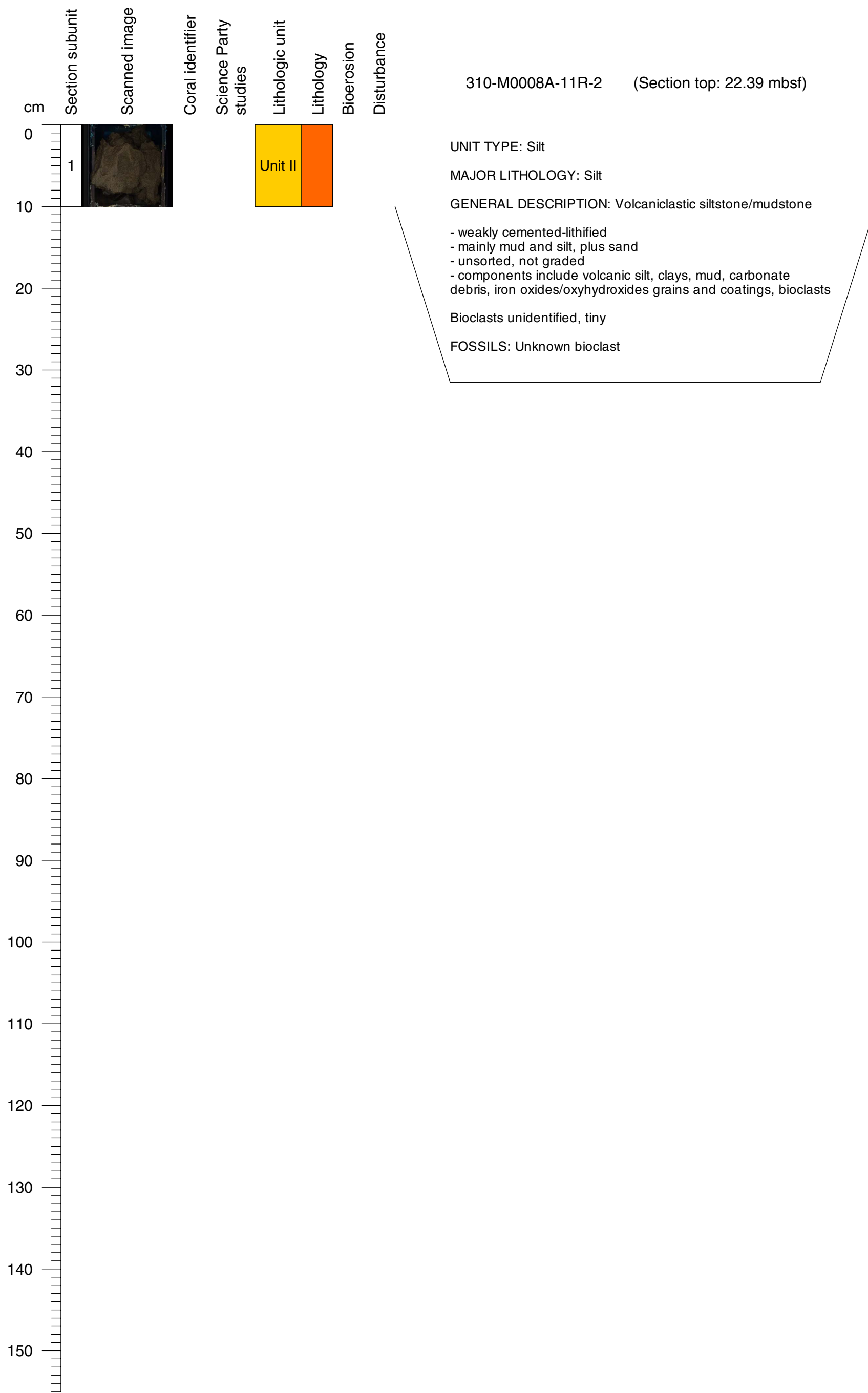
**Core Photo**



**Core Photo**

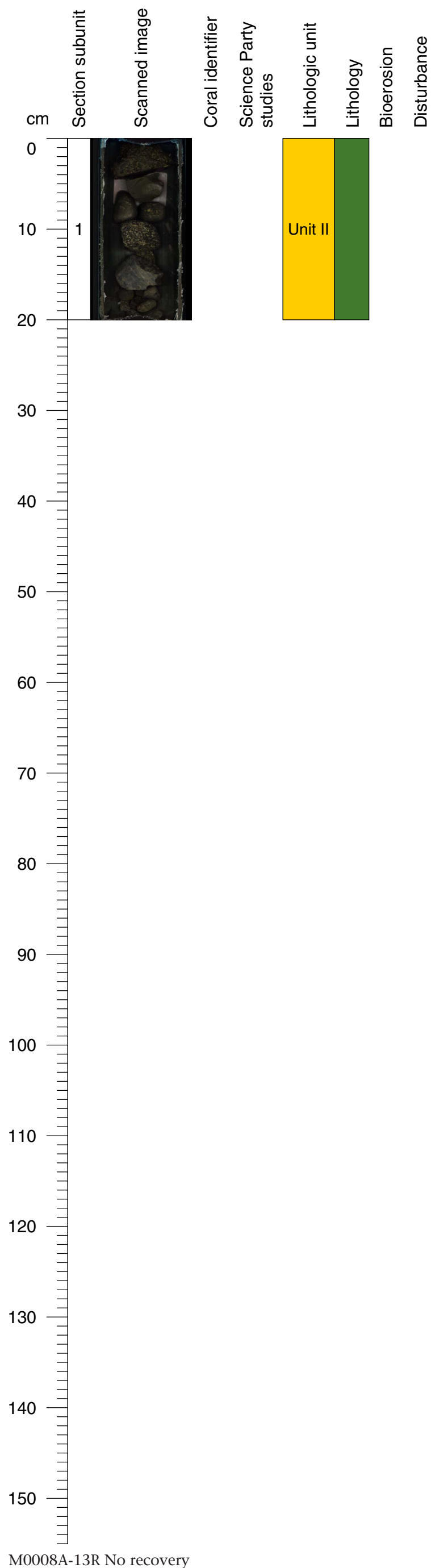


**Core Photo**





**Core Photo**



310-M0008A-12R-1 (Section top: 24 mbsf)

UNIT TYPE: Rubble

MAJOR LITHOLOGY: Rubble

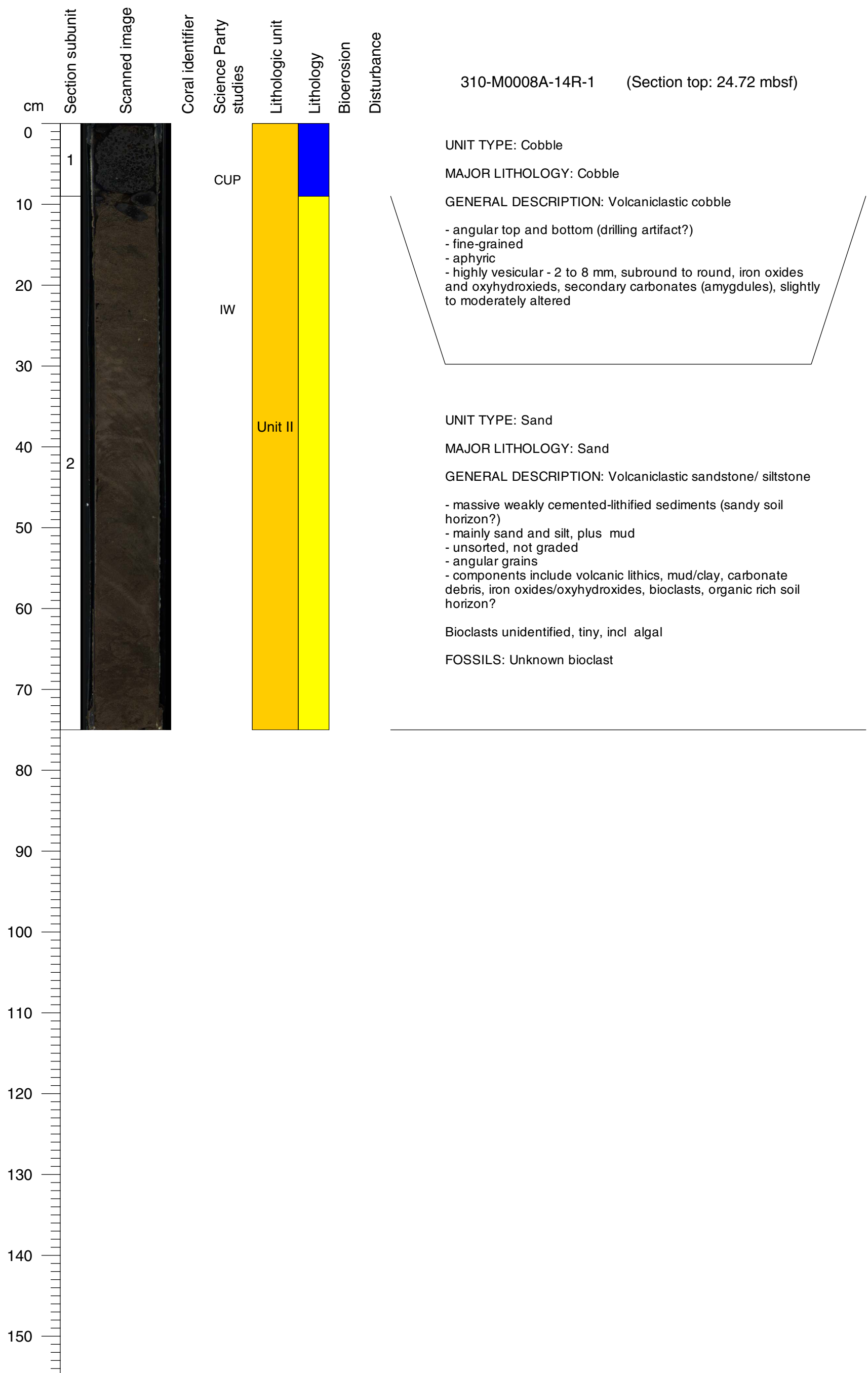
GENERAL DESCRIPTION: Volcaniclastic rubble

- includes a basalt cobble -
- angular
- fine to coarse grained
- moderately phytic - 2 to 10 mm, pyroxene and olivine, at times cumulophyric, aphanitic ground mass
- highly vesicular - 1-11 mm, subround to round, elongated parallel to flow (?), iron oxide linings and secondary carbonate fillings (amygdules)

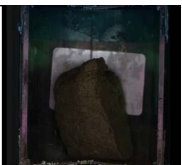
M0008A-13R No recovery



Core Photo



**Core Photo**

cm	Section subunit	Scanned image	Coral identifier	Science Party studies	Lithologic unit	Lithology	Bioerosion	Disturbance
0					Unit II			
1								
10								
20								
30								
40								
50								
60								
70								
80								
90								
100								
110								
120								
130								
140								
150								

310-M0008A-14R-2 (Section top: 25.47 mbsf)

UNIT TYPE: Sand

MAJOR LITHOLOGY: Sand

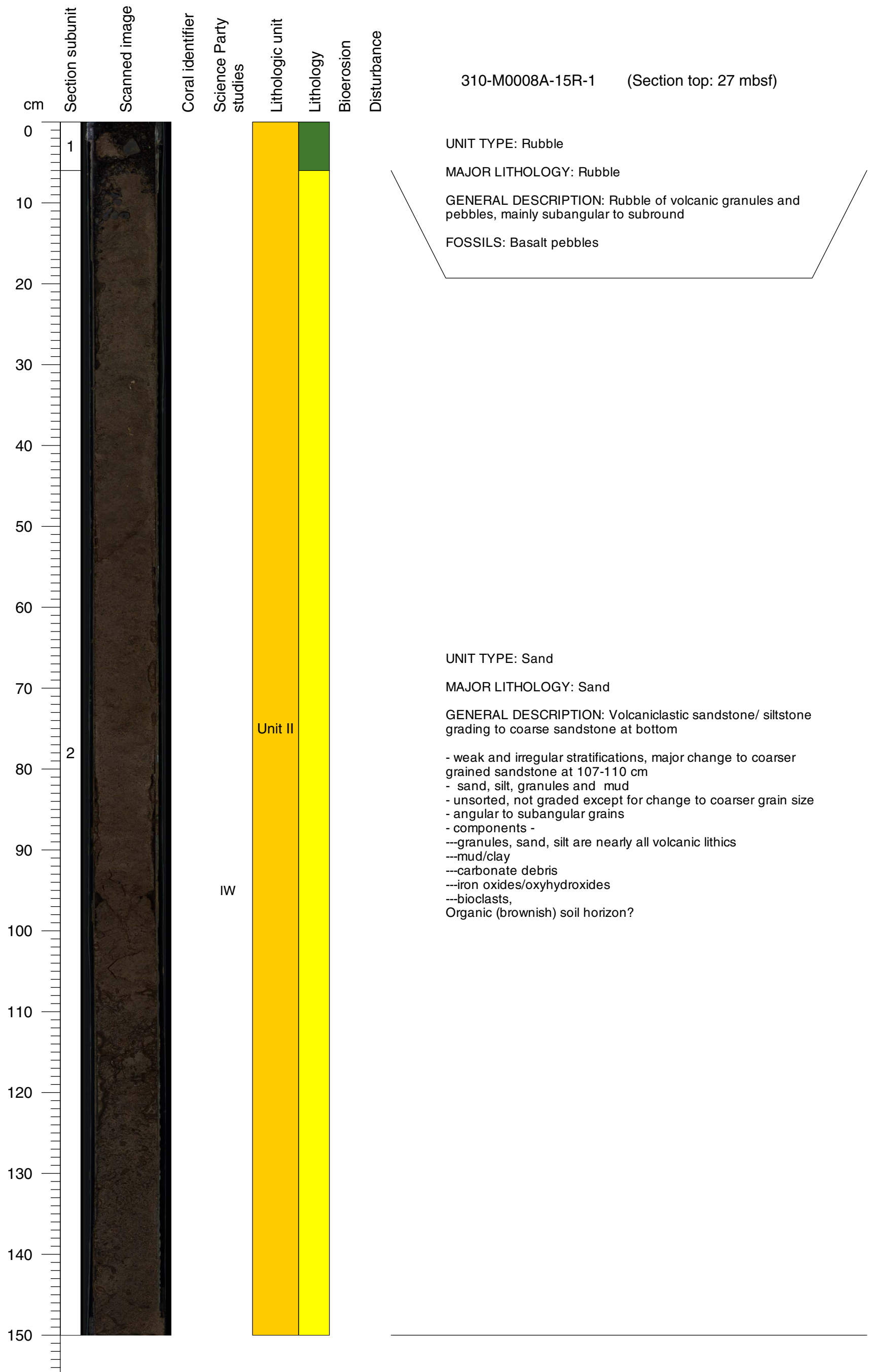
GENERAL DESCRIPTION: Volcaniclastic sandstone/ siltstone

- massive weakly cemented-lithified sediments (sandy soil horizon?)
- mainly sand and silt, plus mud
- unsorted, not graded
- angular grains
- components include volcanic lithics, mud/clay, carbonate debris, iron oxides/oxyhydroxides, bioclasts, organic rich soil horizon?

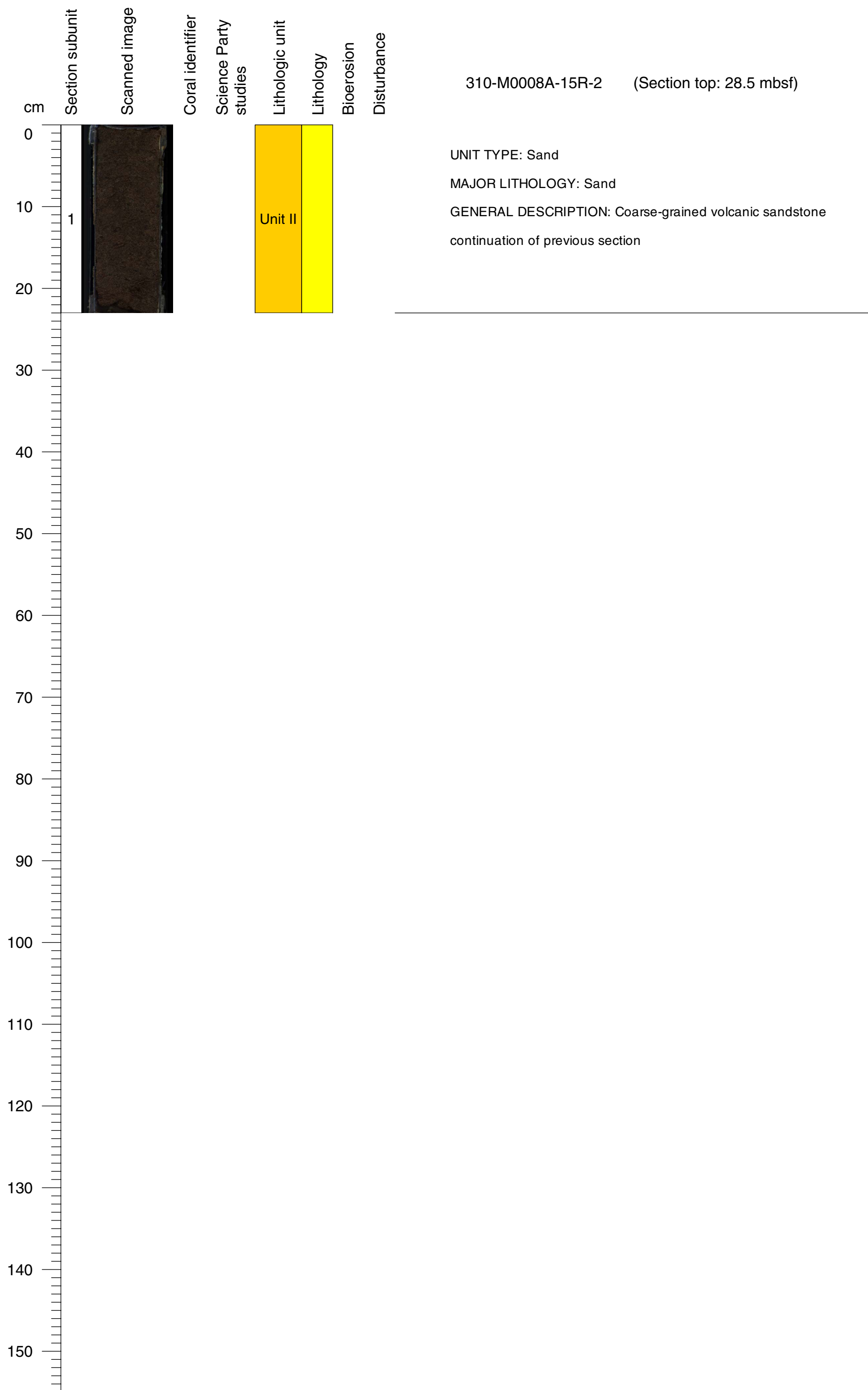
Bioclasts unidentified, tiny, incl algal



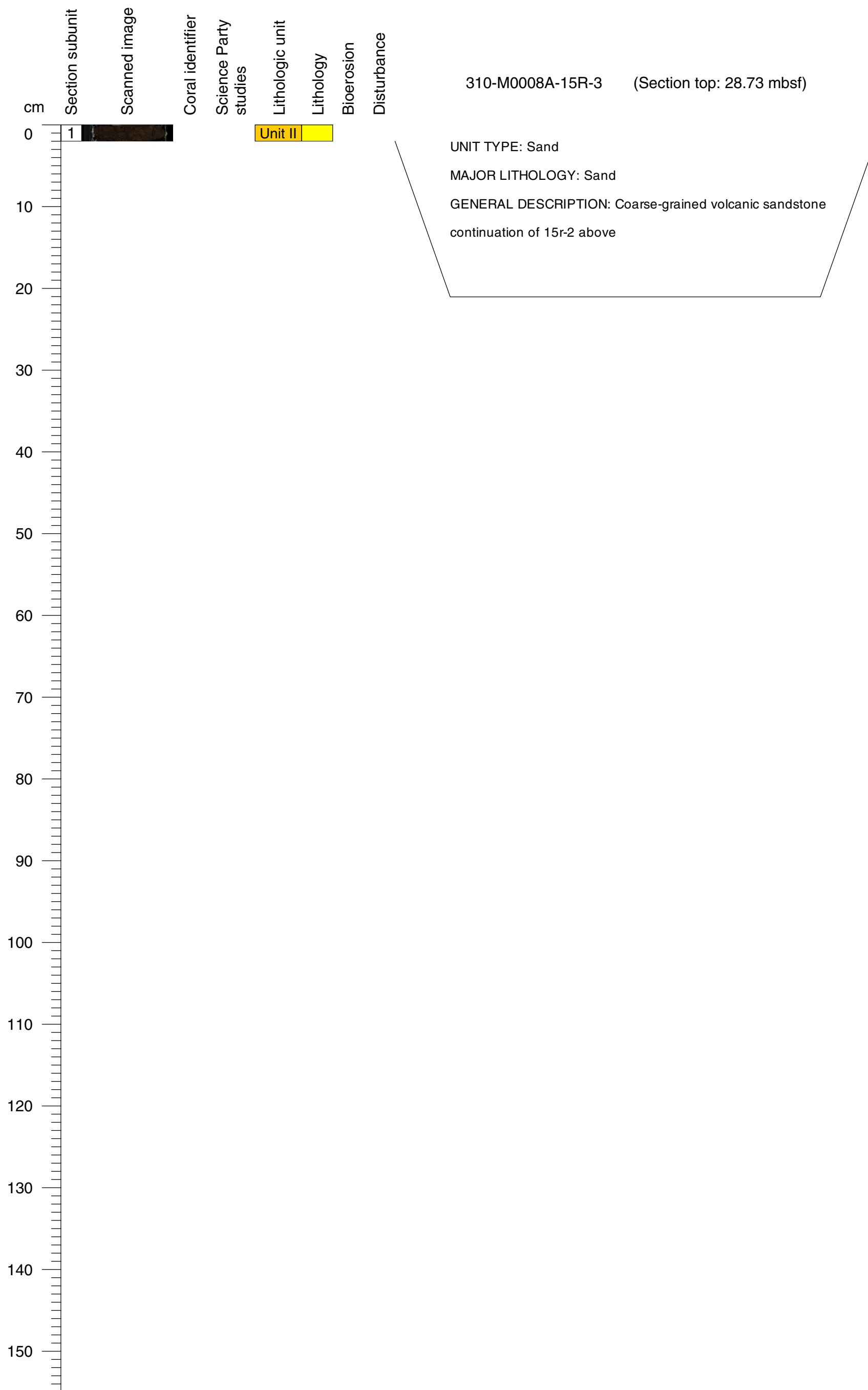
**Core Photo**



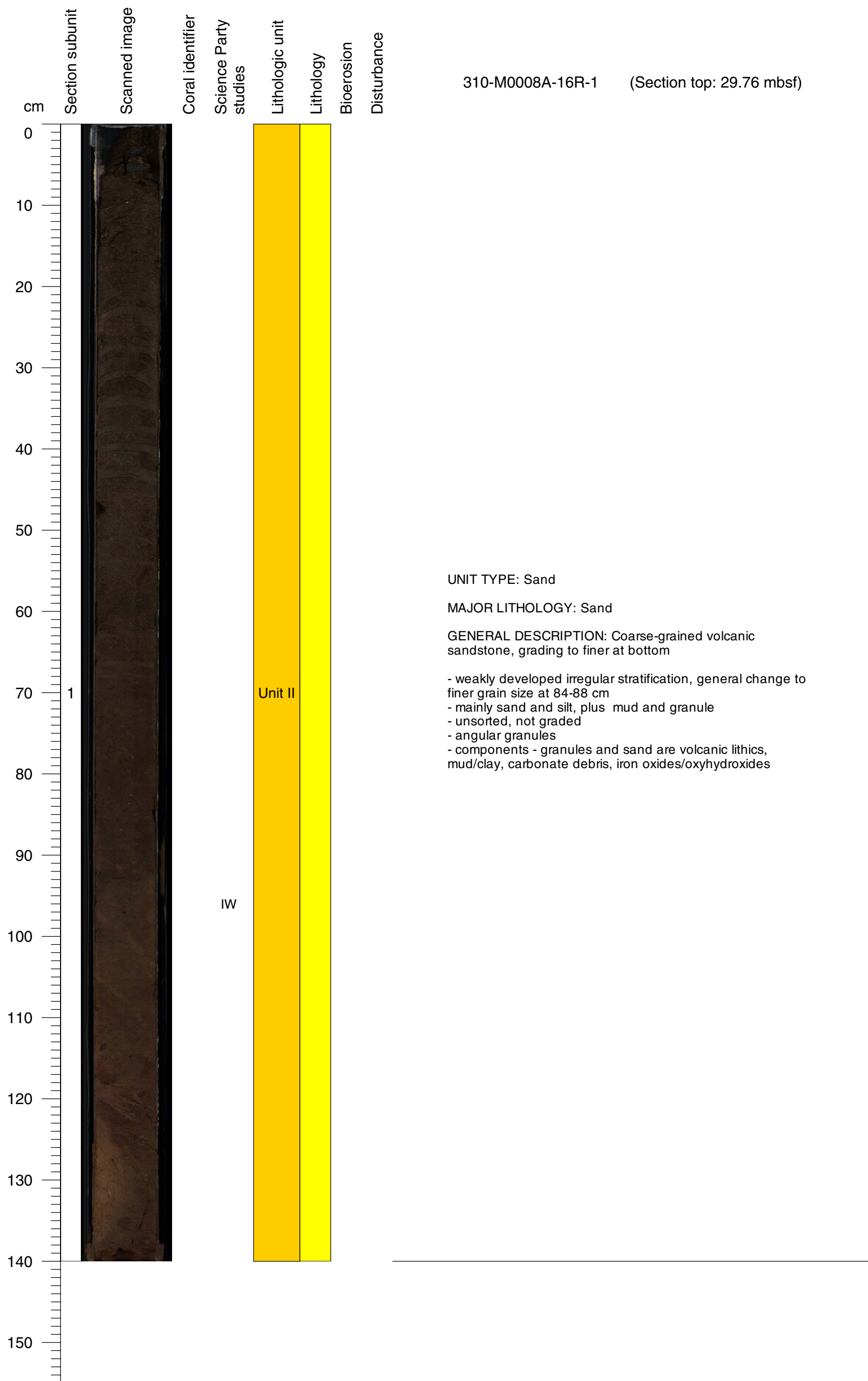
**Core Photo**



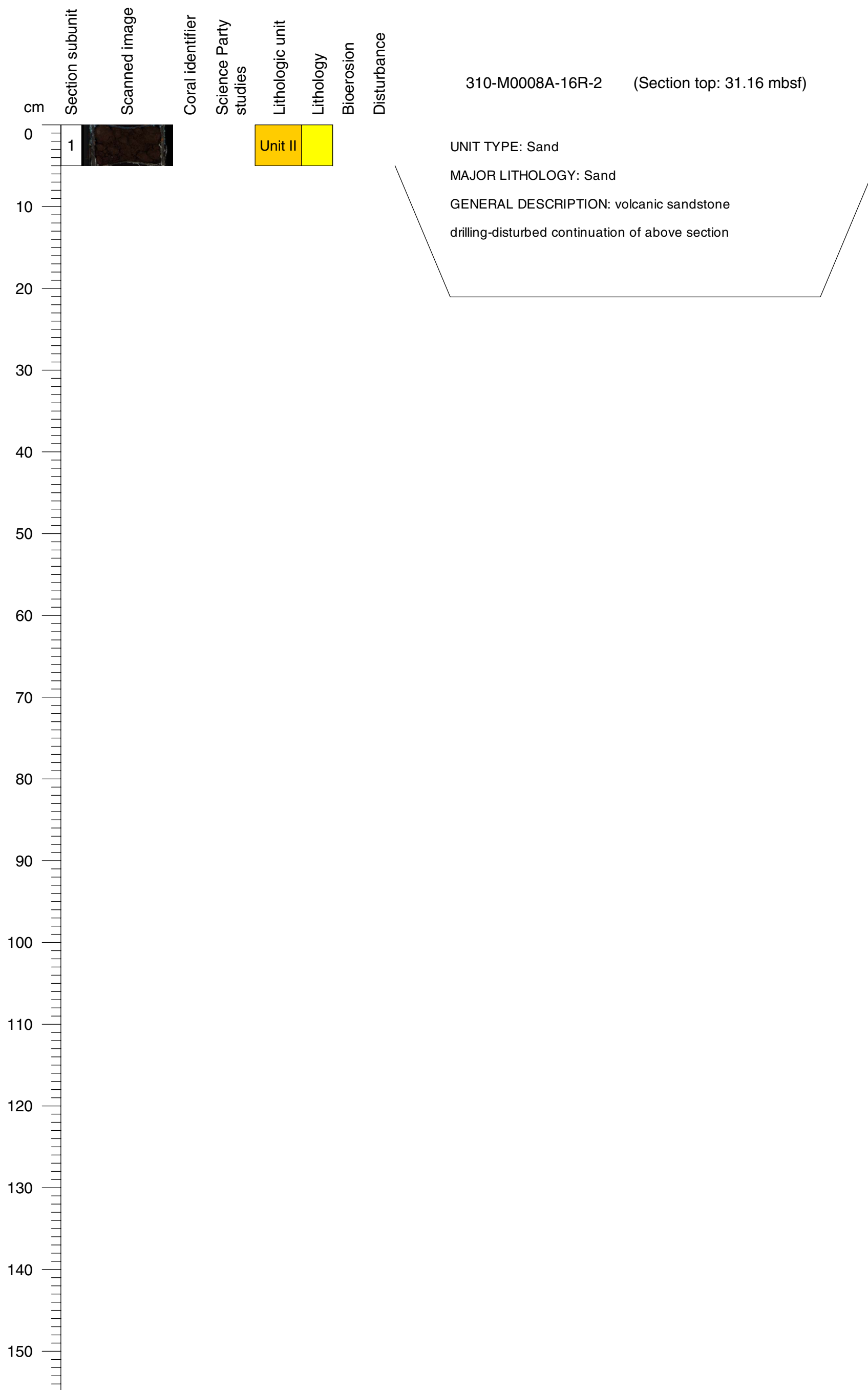
**Core Photo**



Core Photo

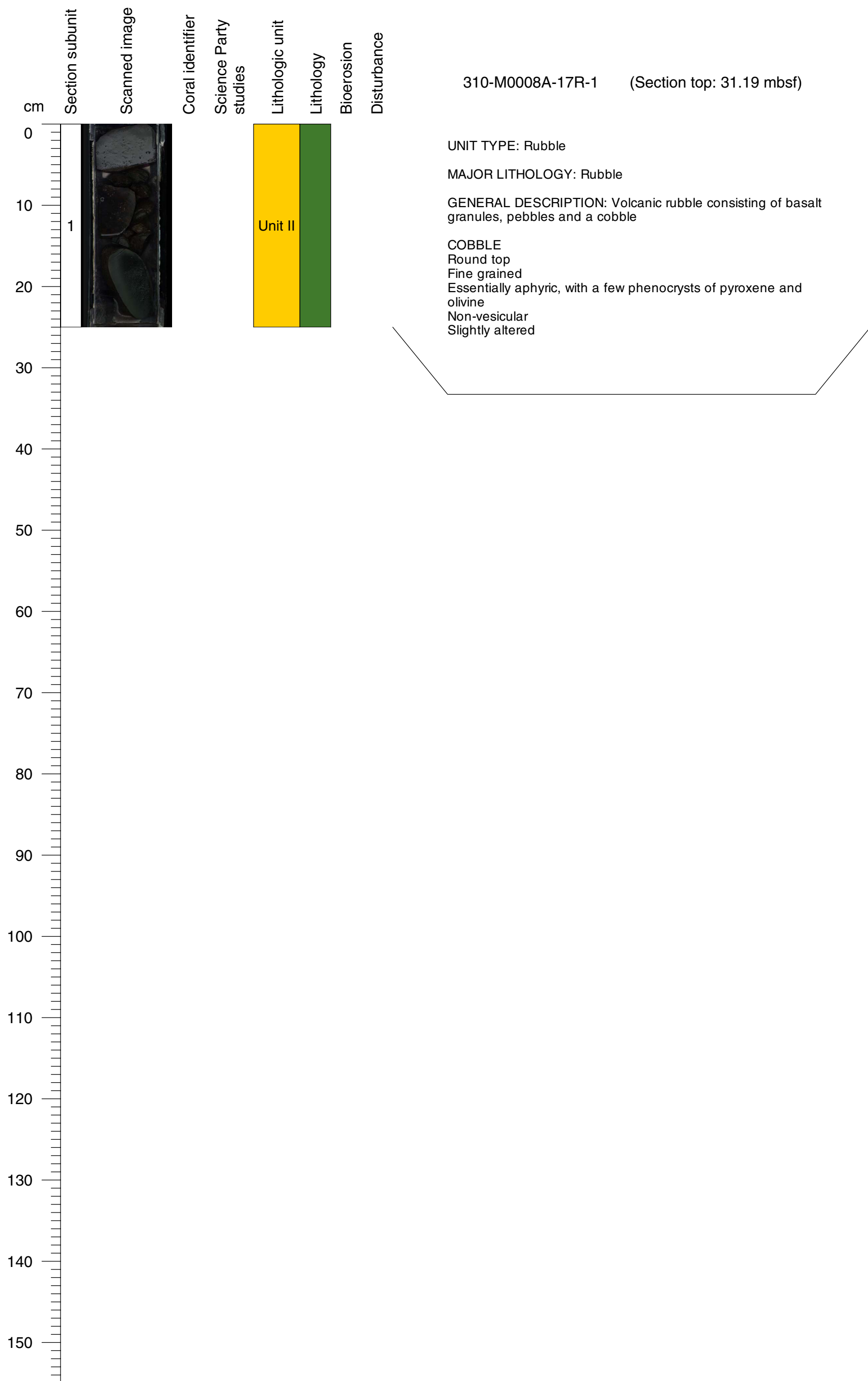


**Core Photo**

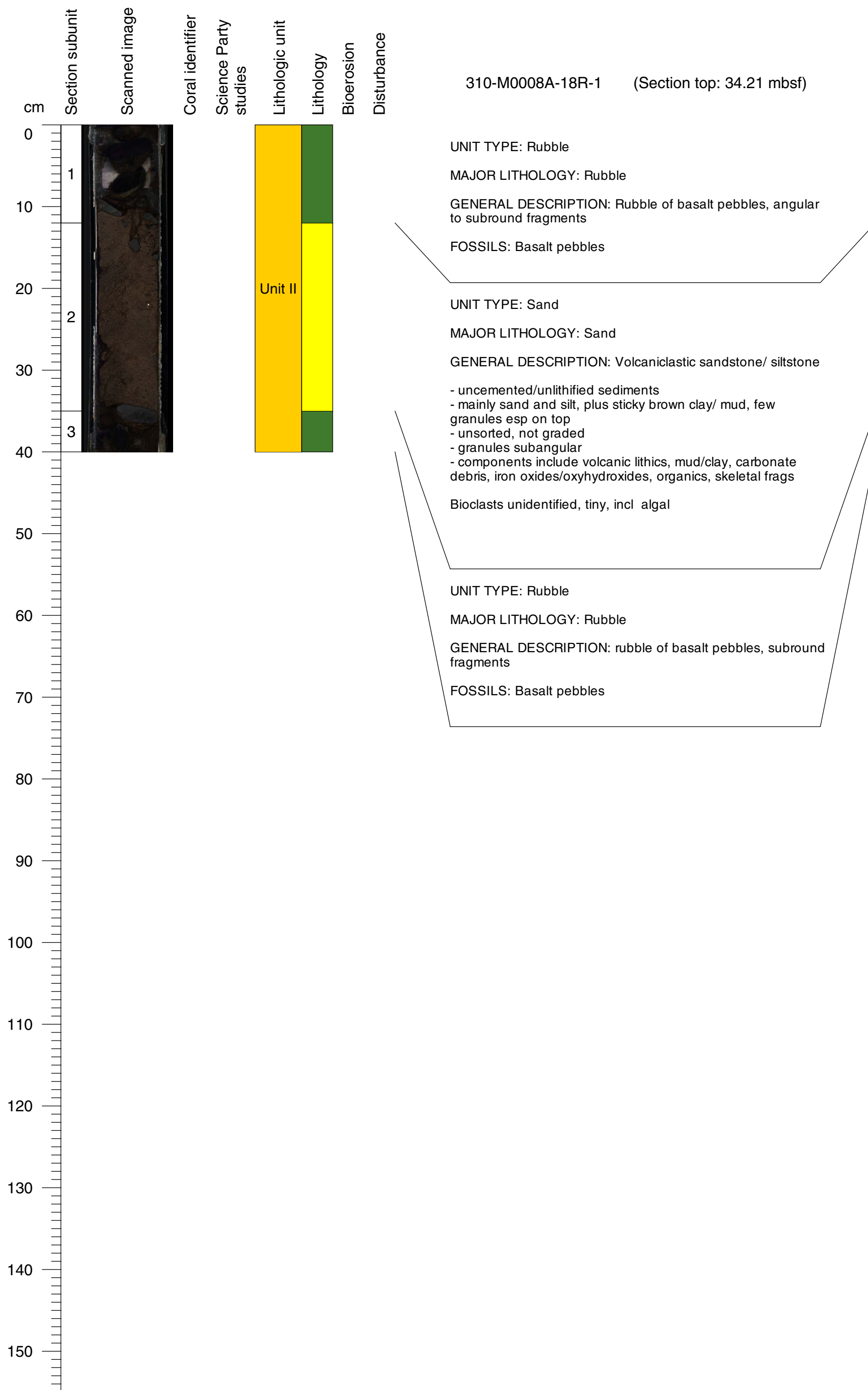




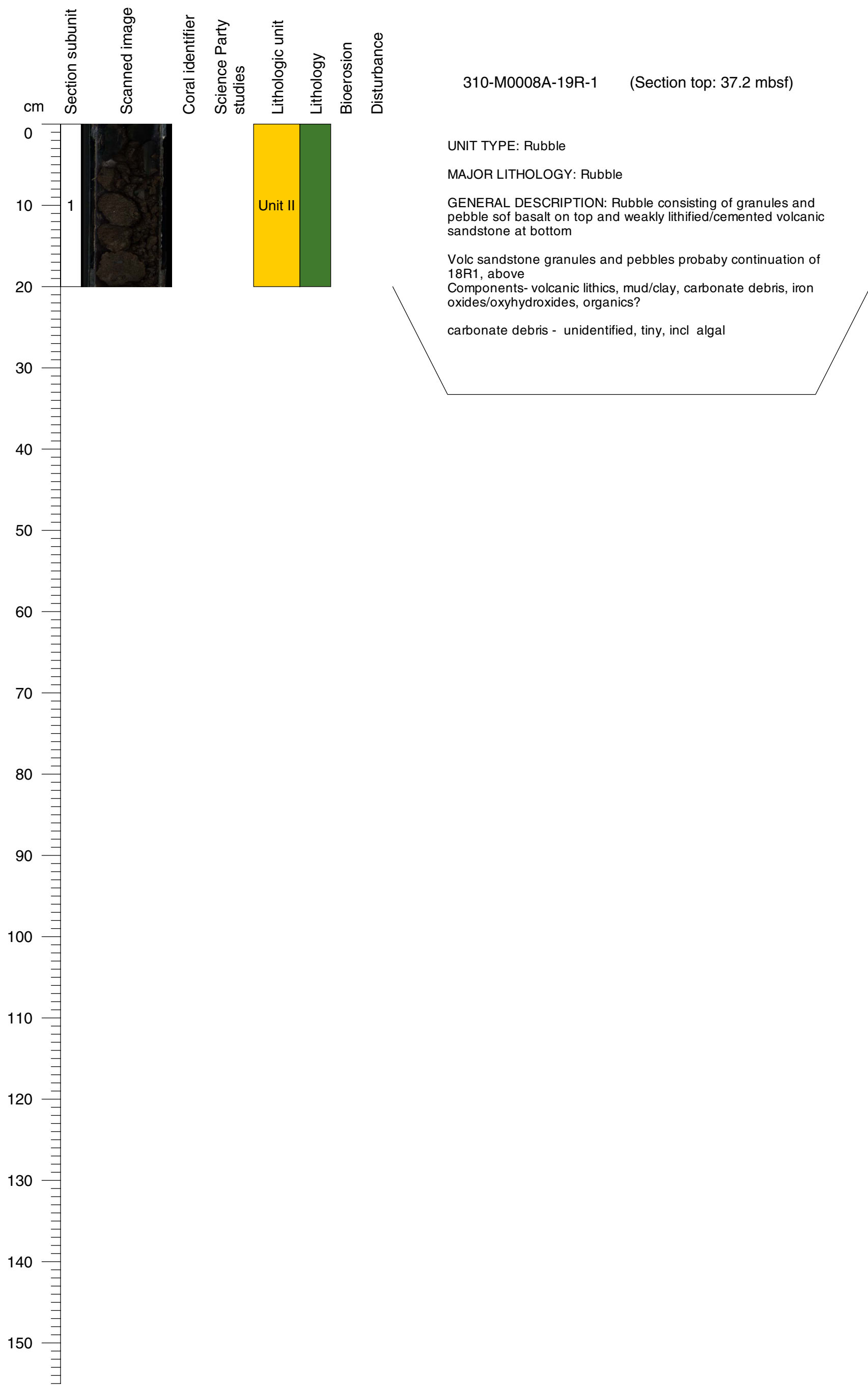
**Core Photo**



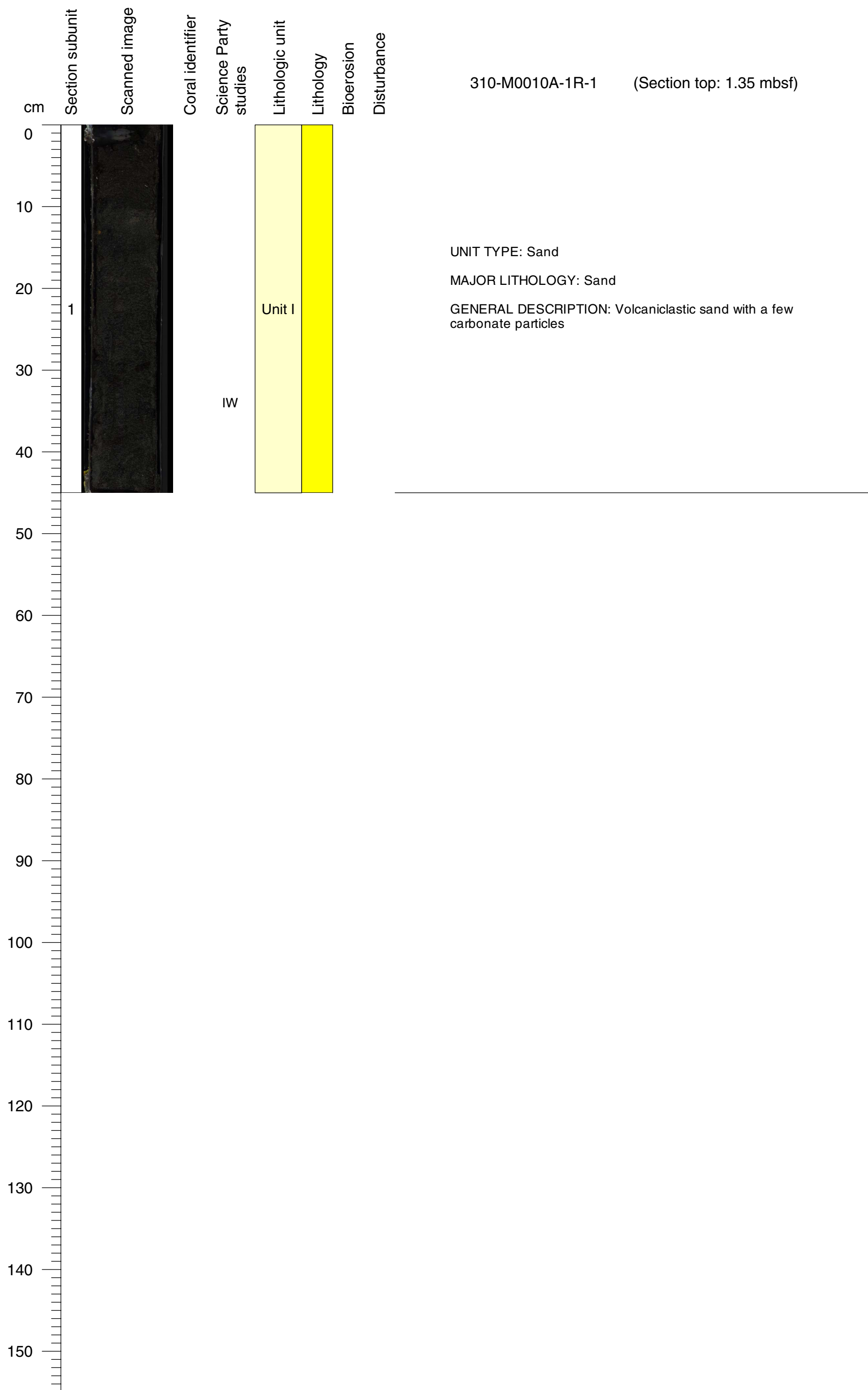
Core Photo



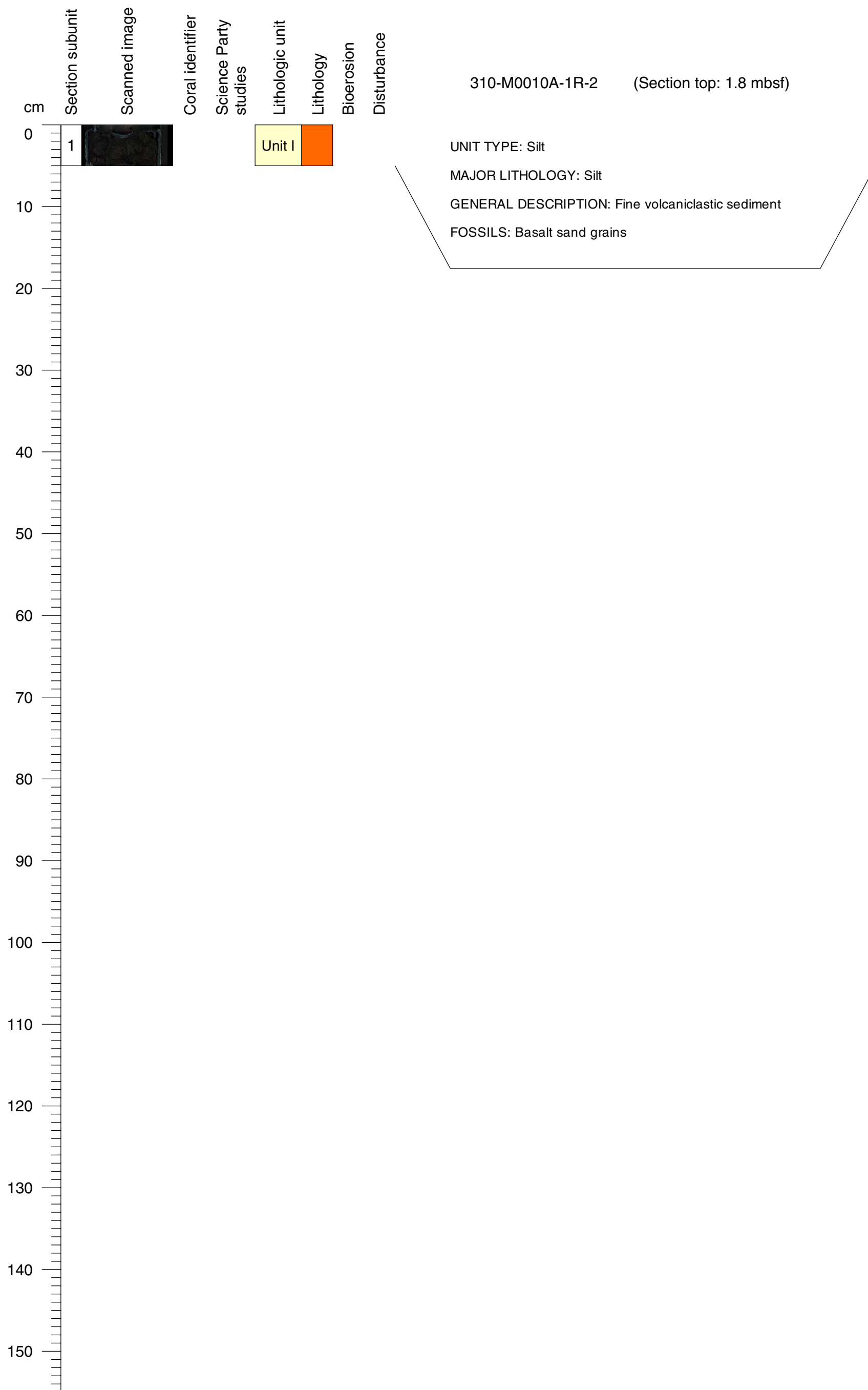
**Core Photo**



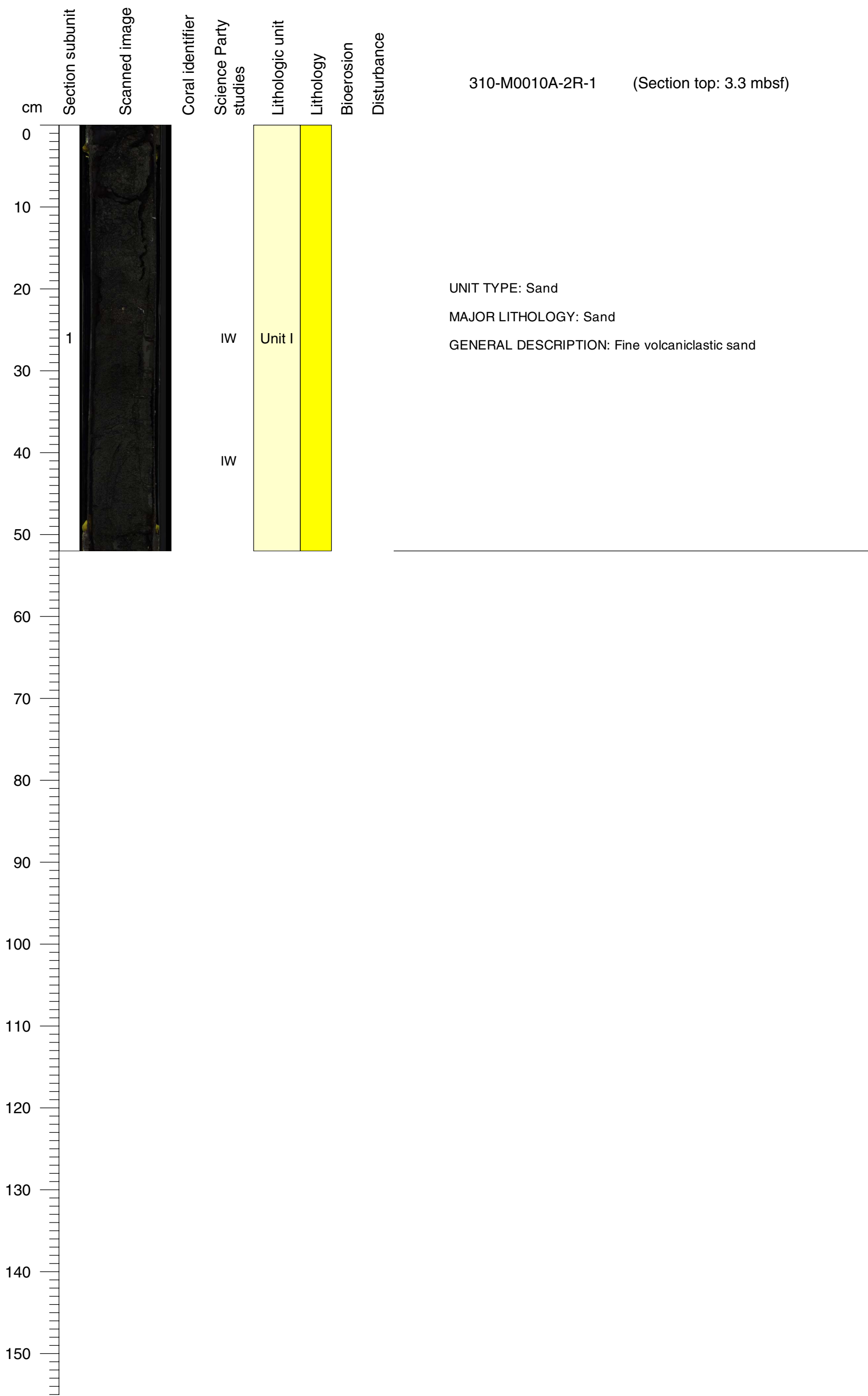
**Core Photo**



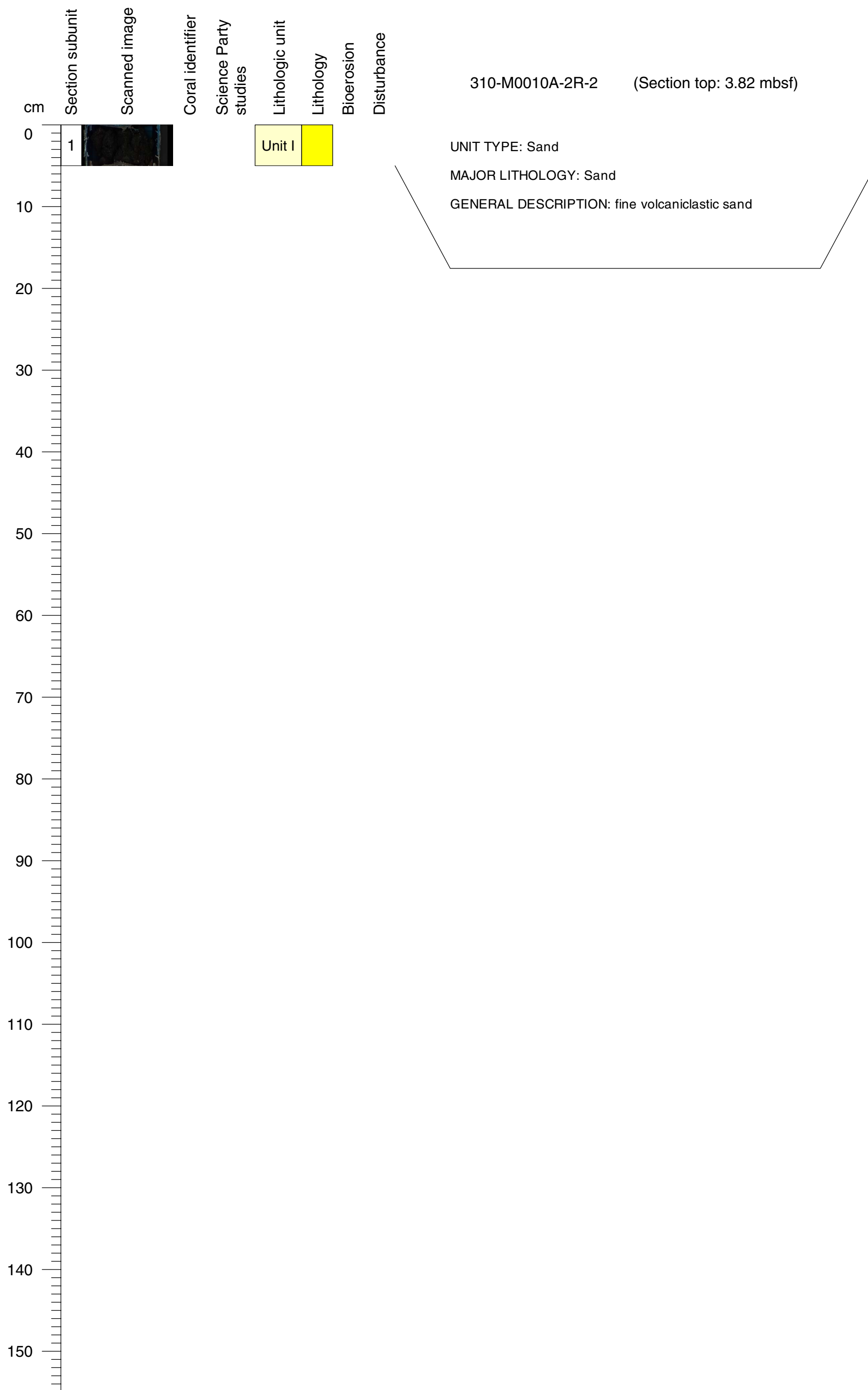
**Core Photo**



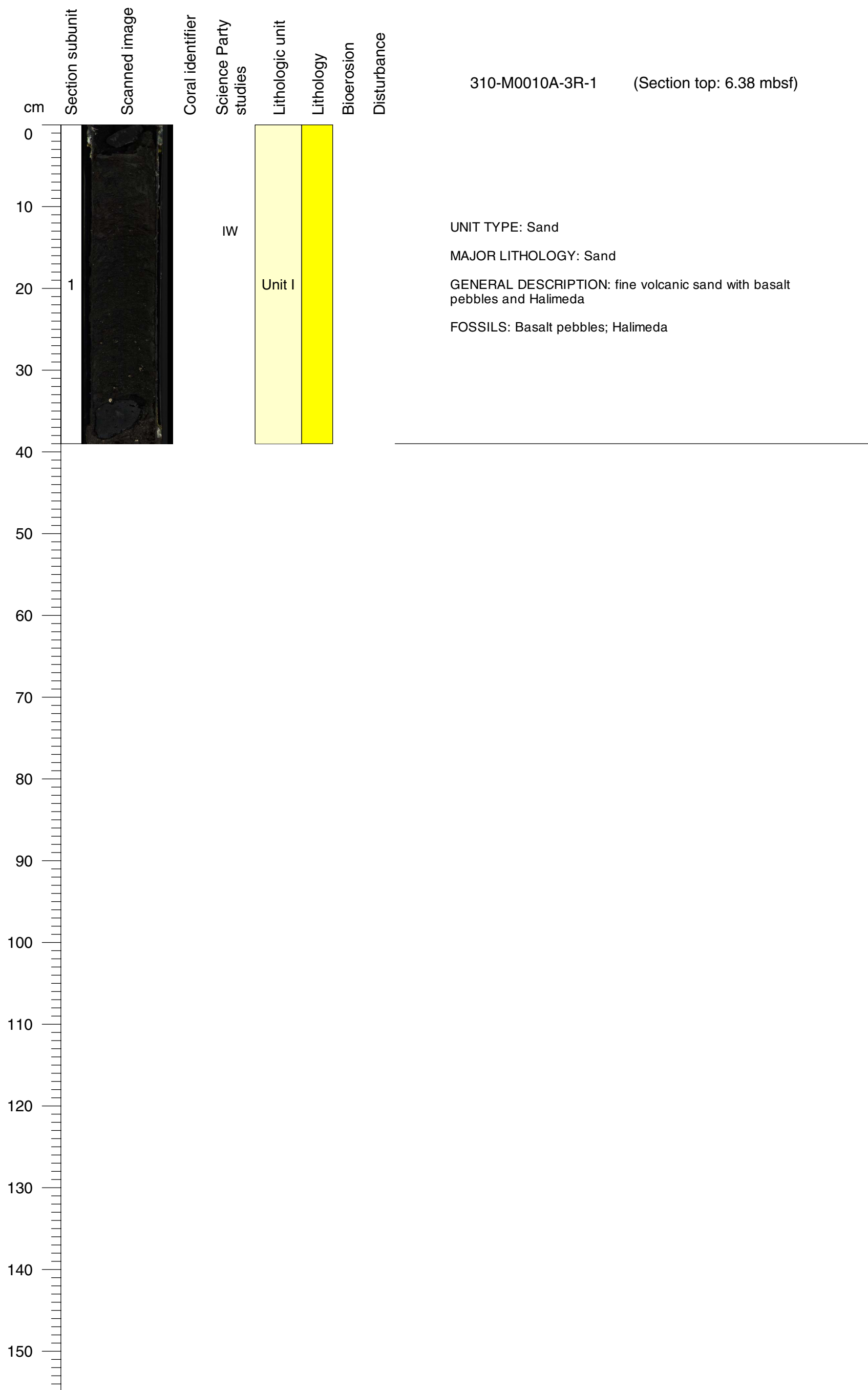
**Core Photo**



**Core Photo**

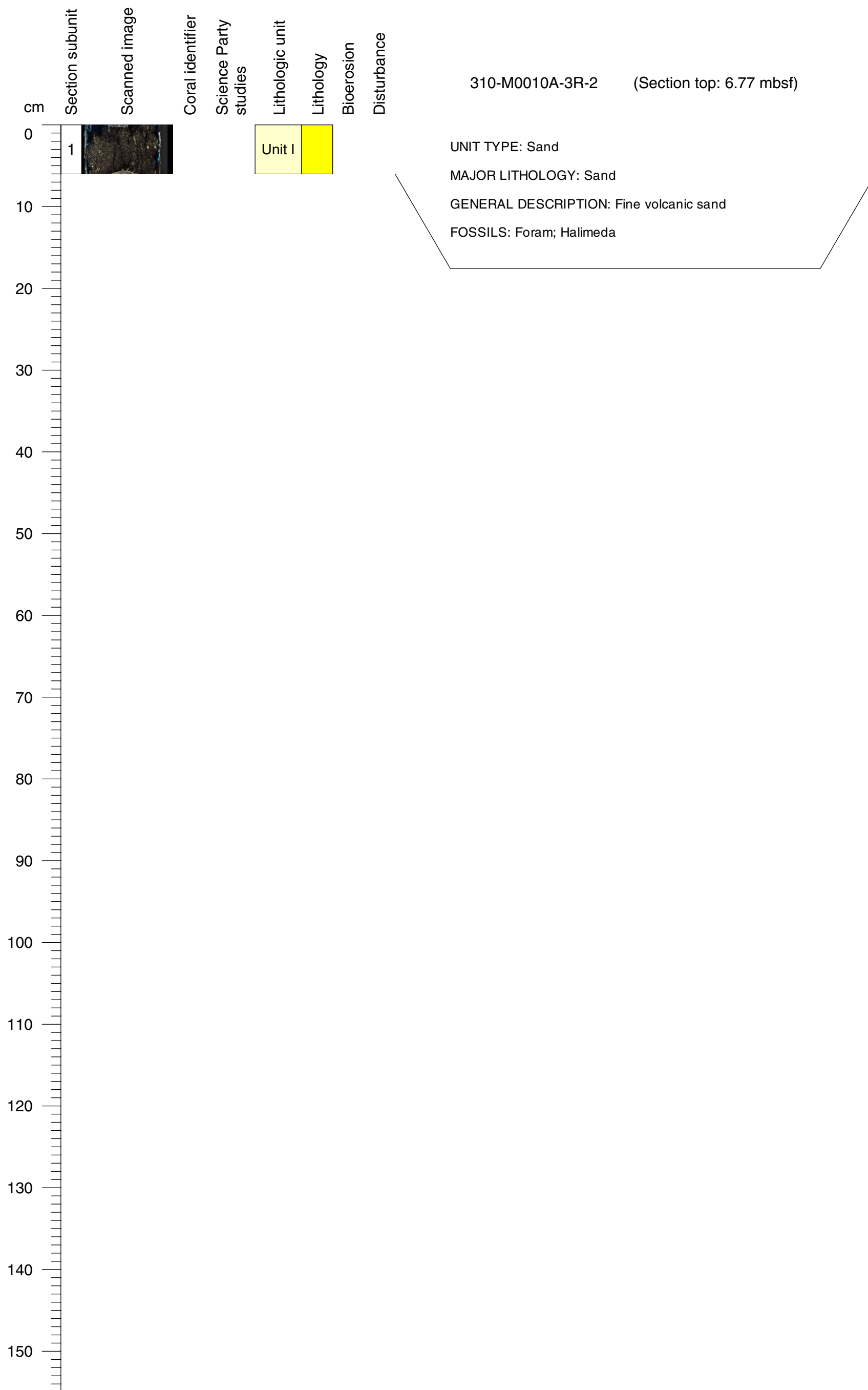


Core Photo

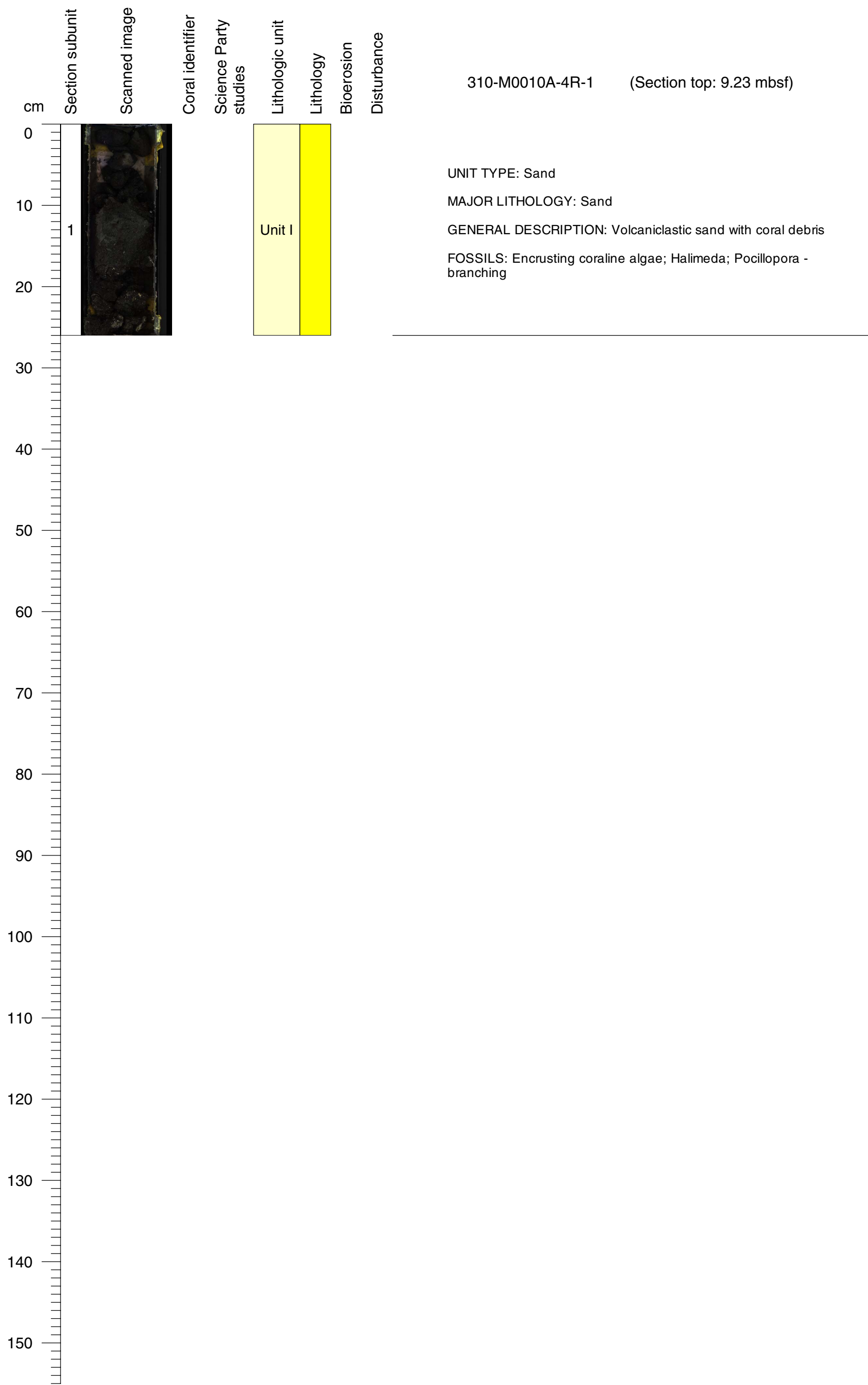




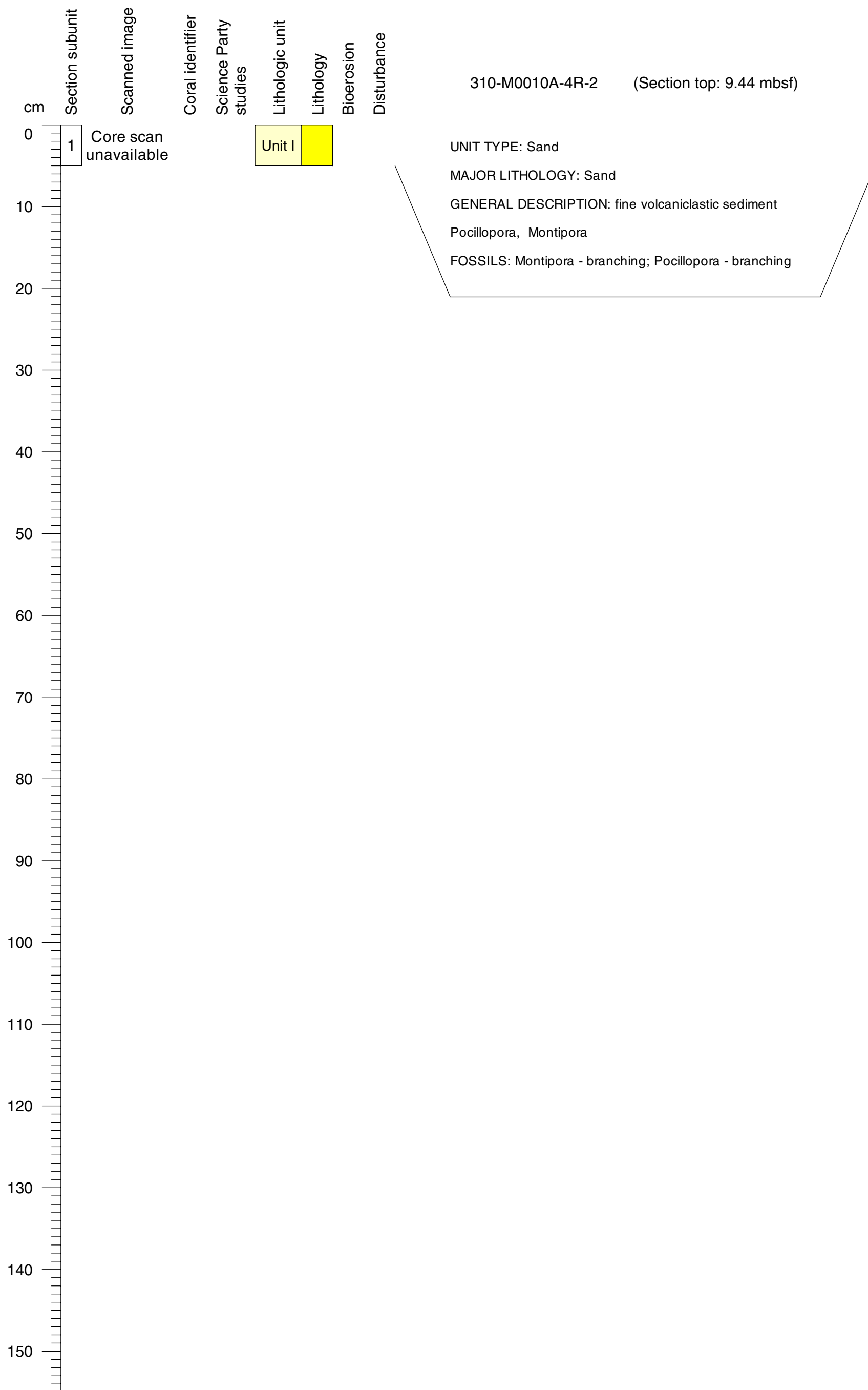
**Core Photo**



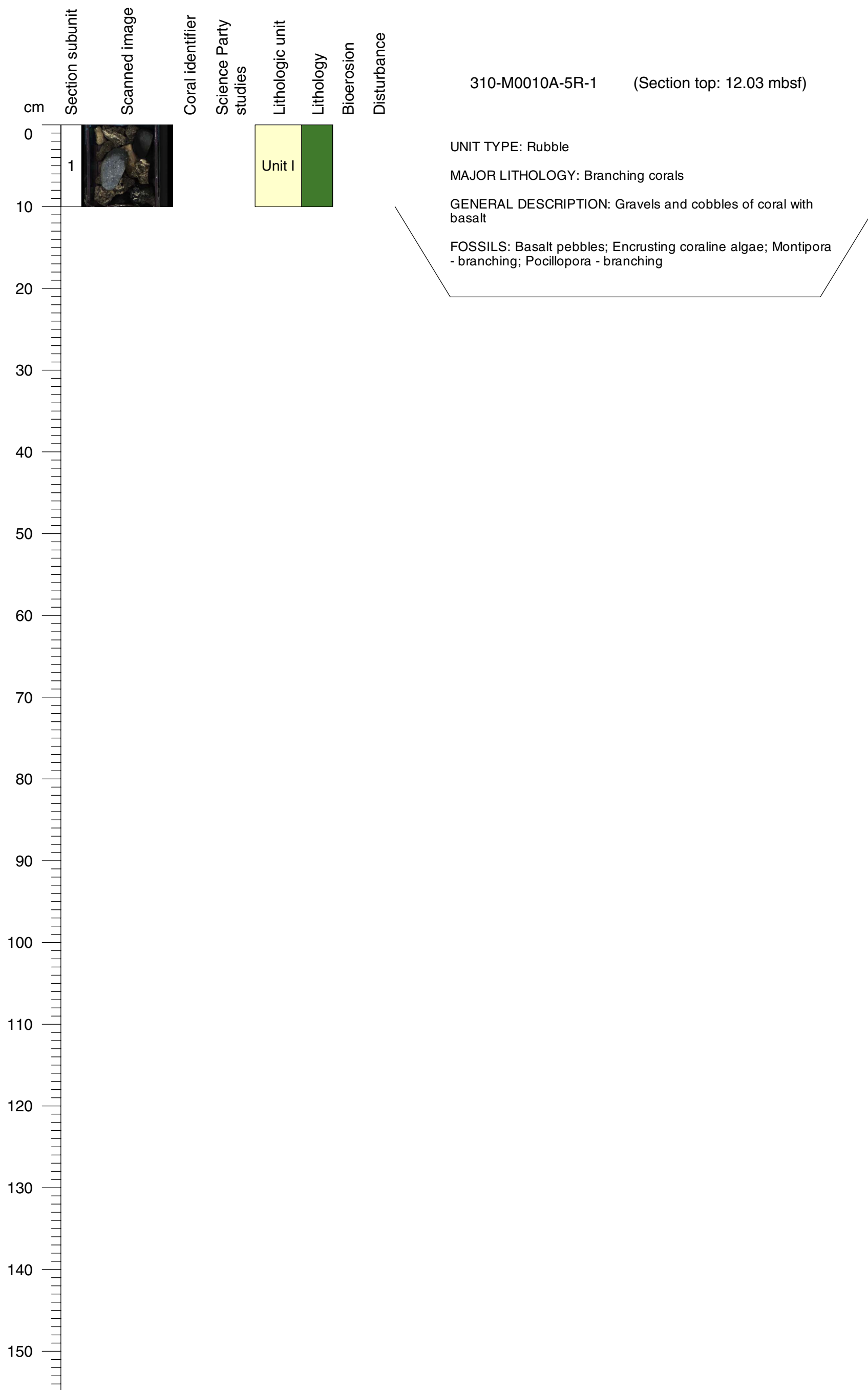
**Core Photo**



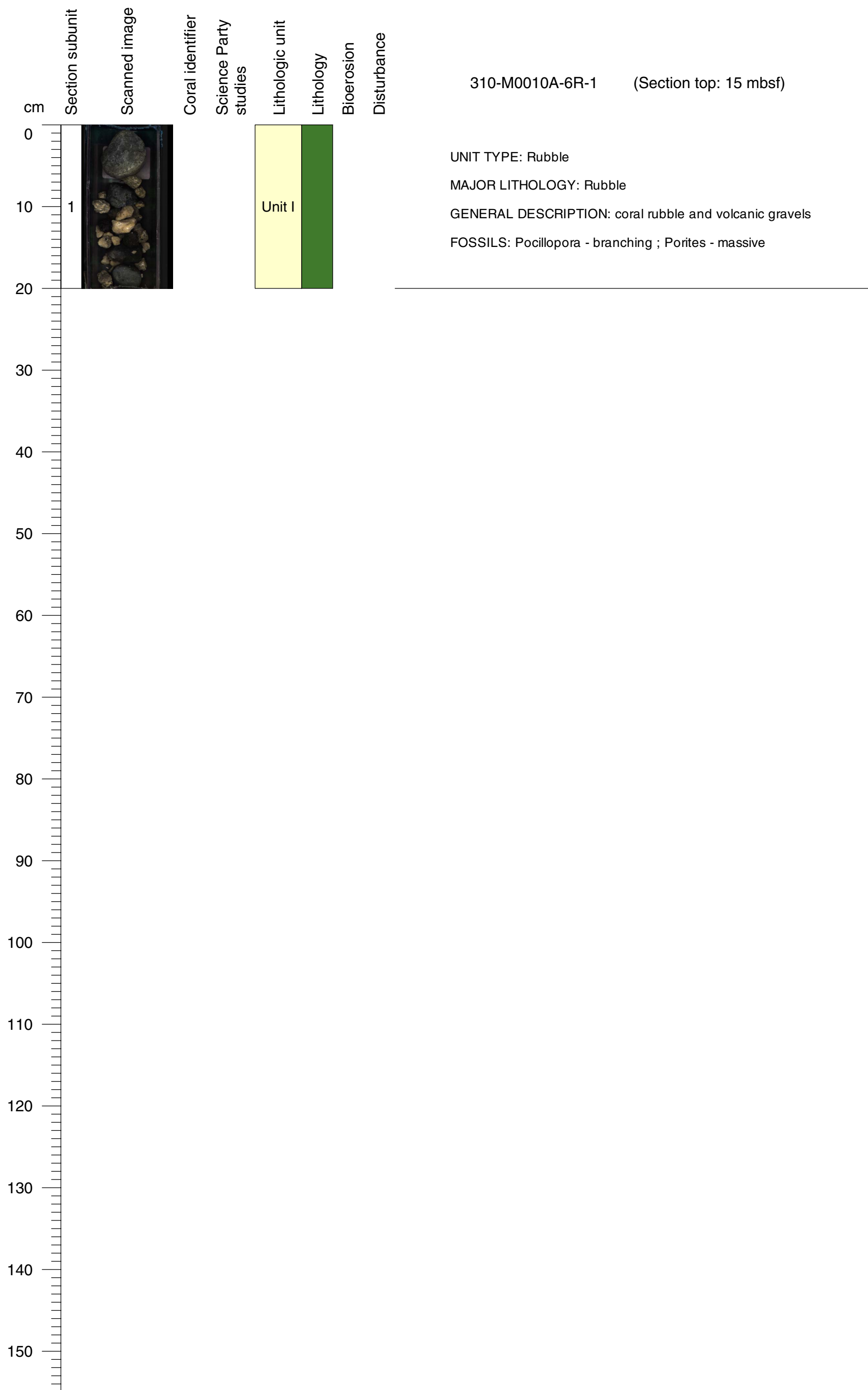
**Core Photo**



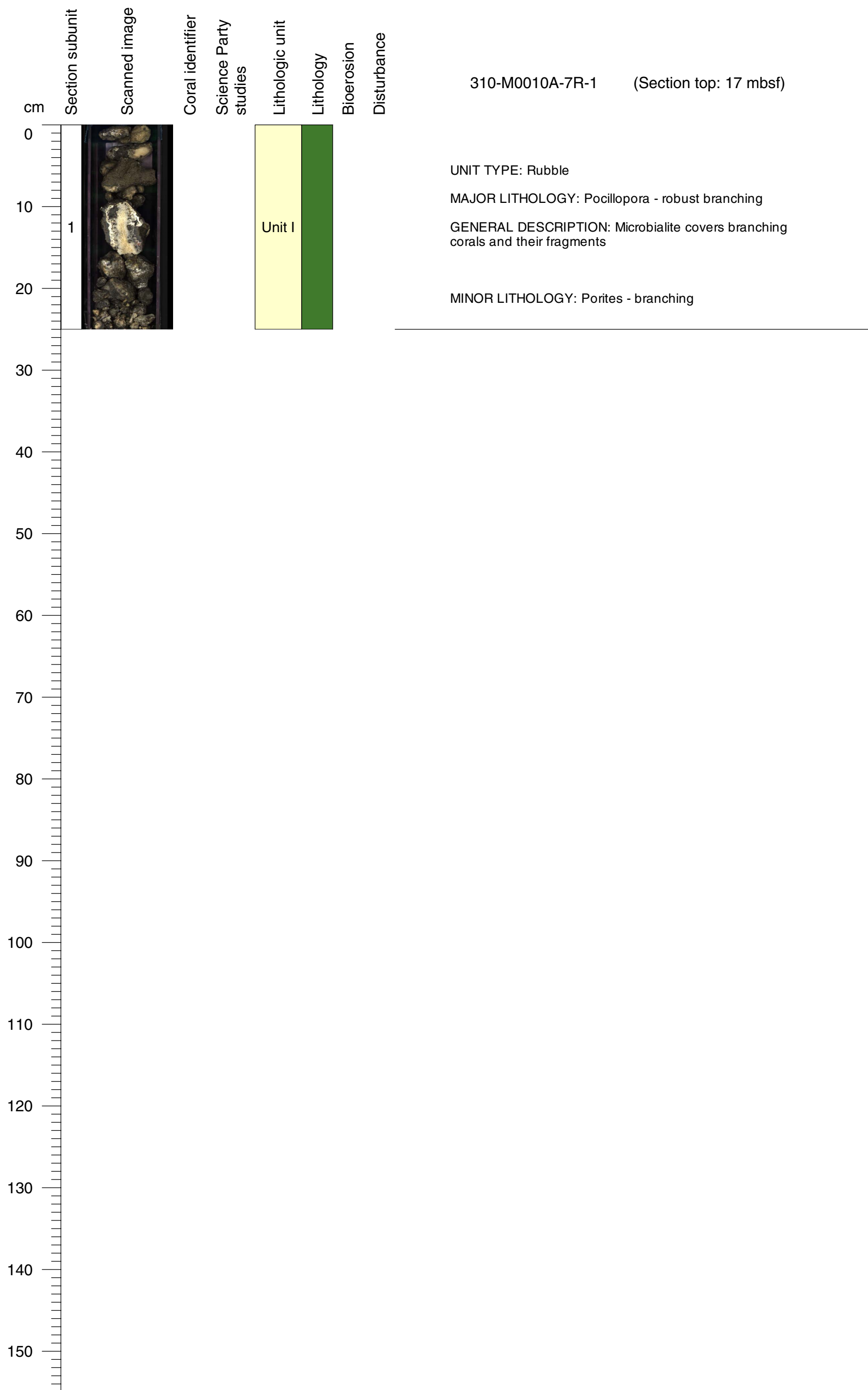
**Core Photo**



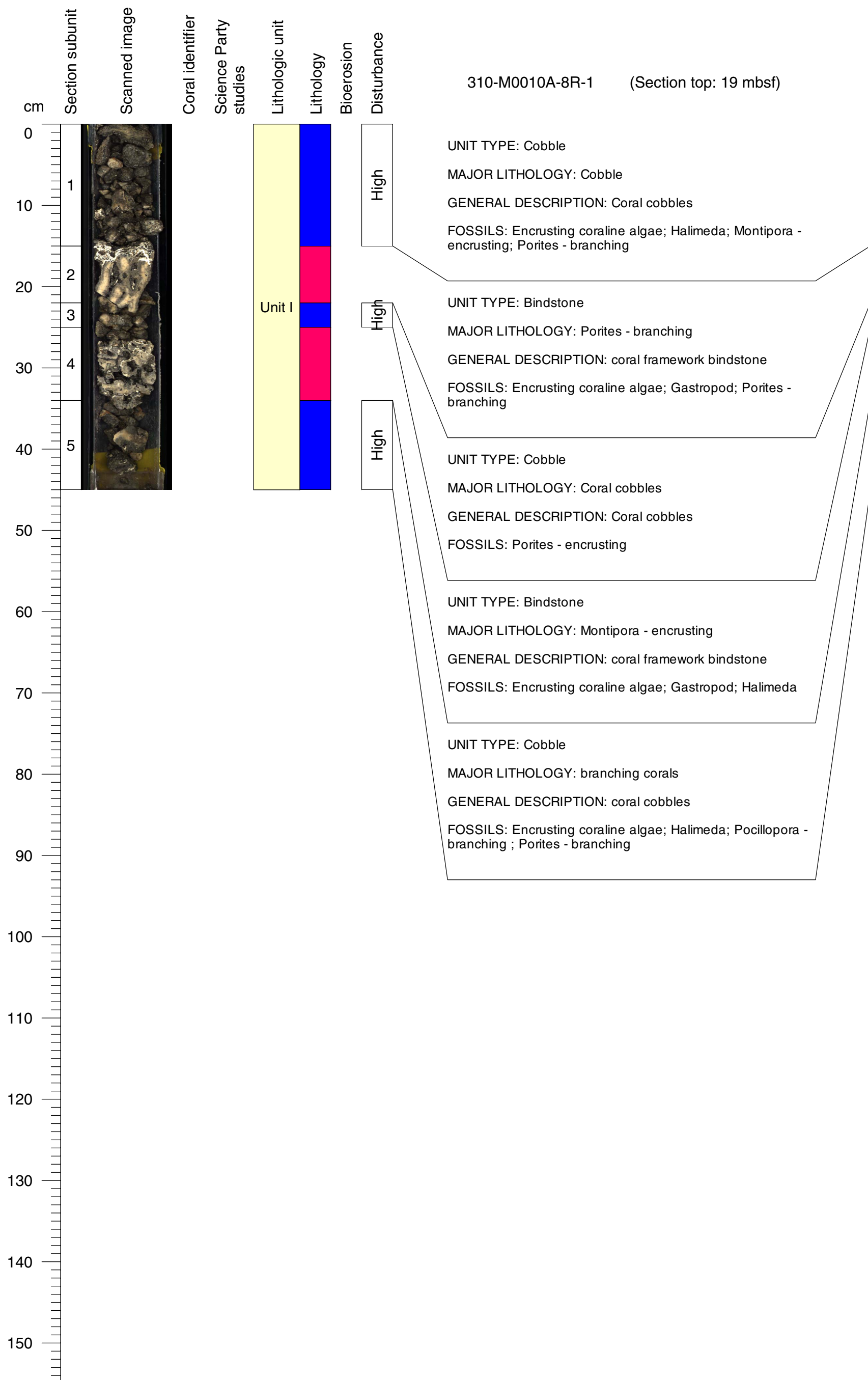
**Core Photo**



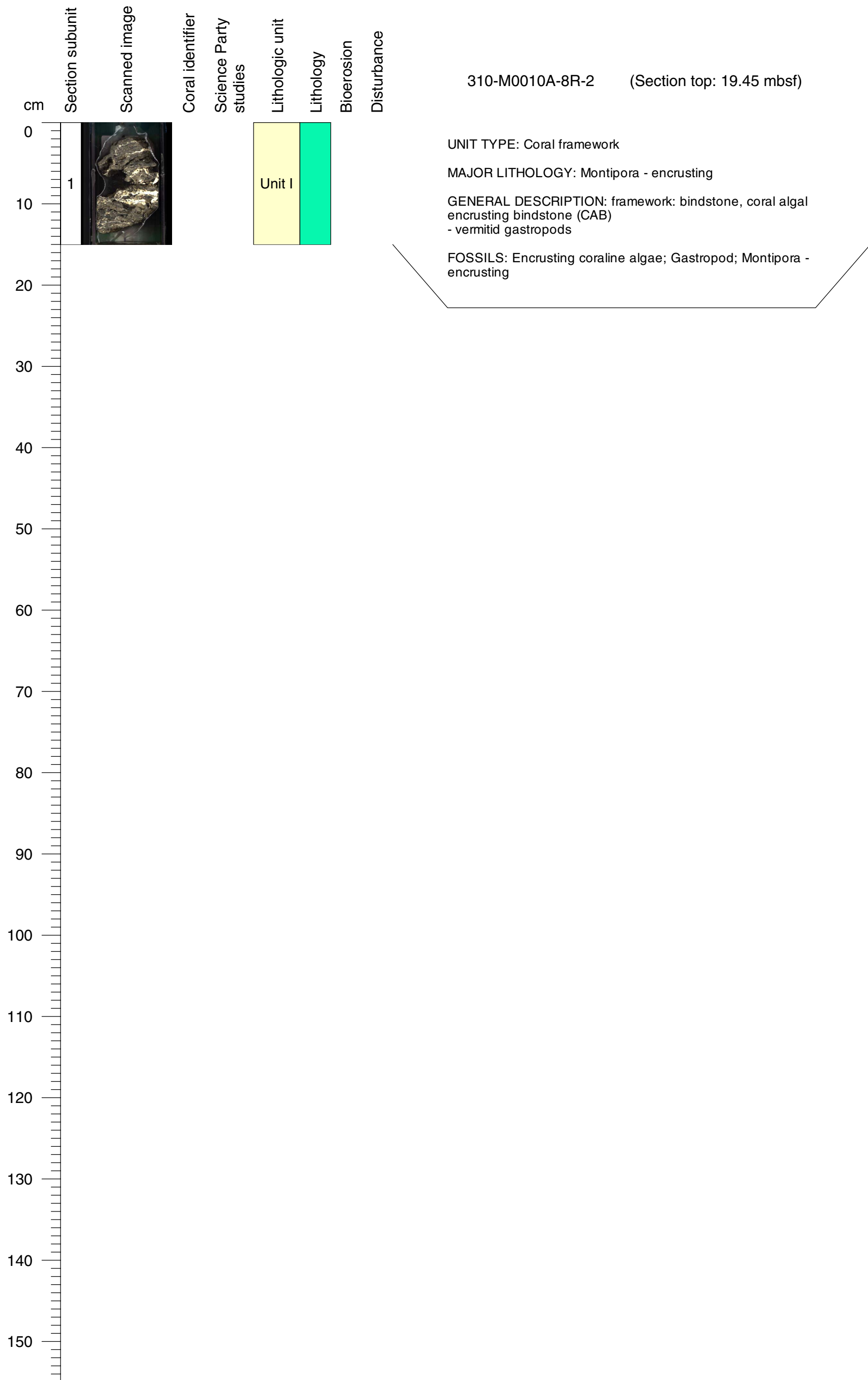
**Core Photo**



Core Photo

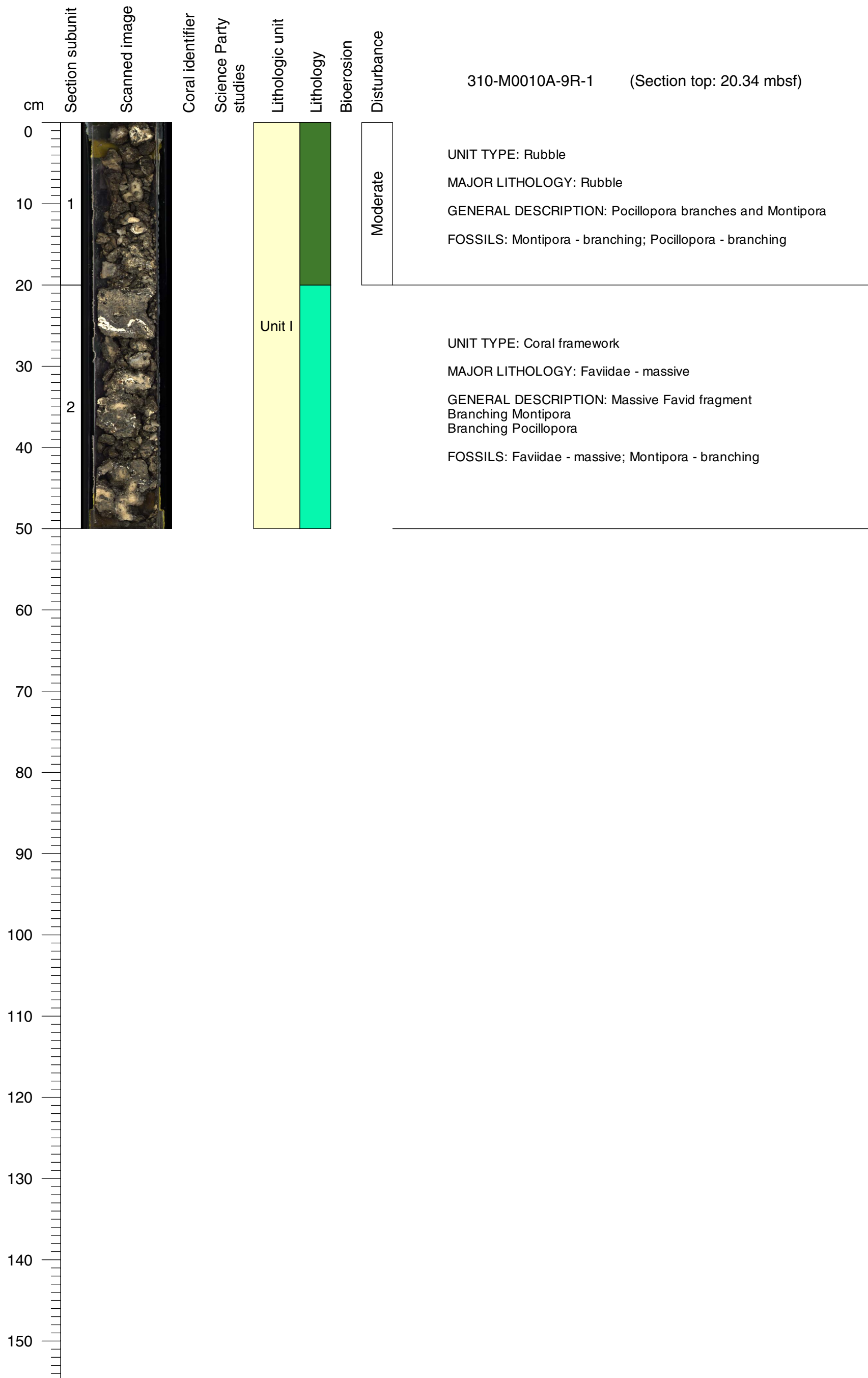


**Core Photo**

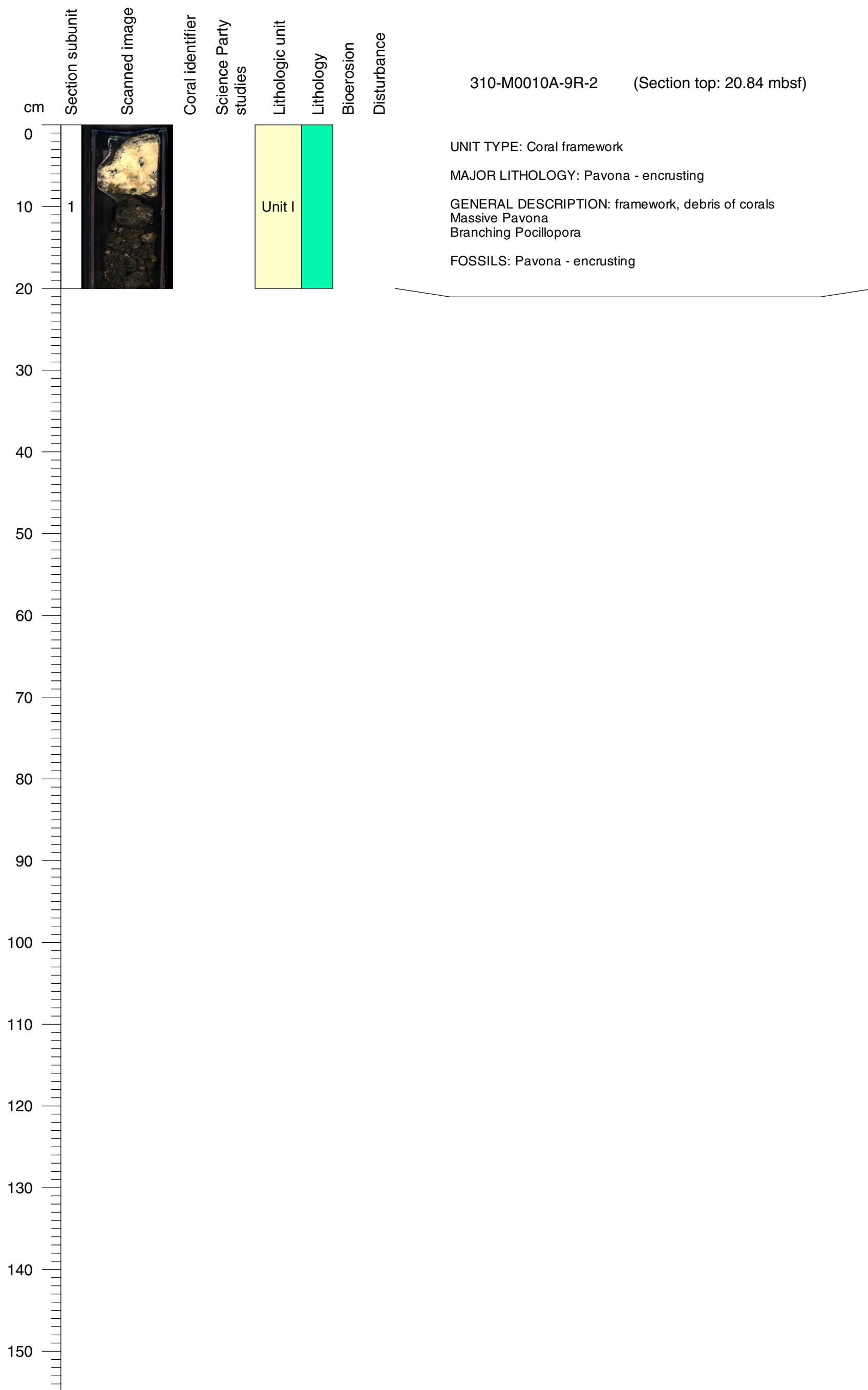




**Core Photo**

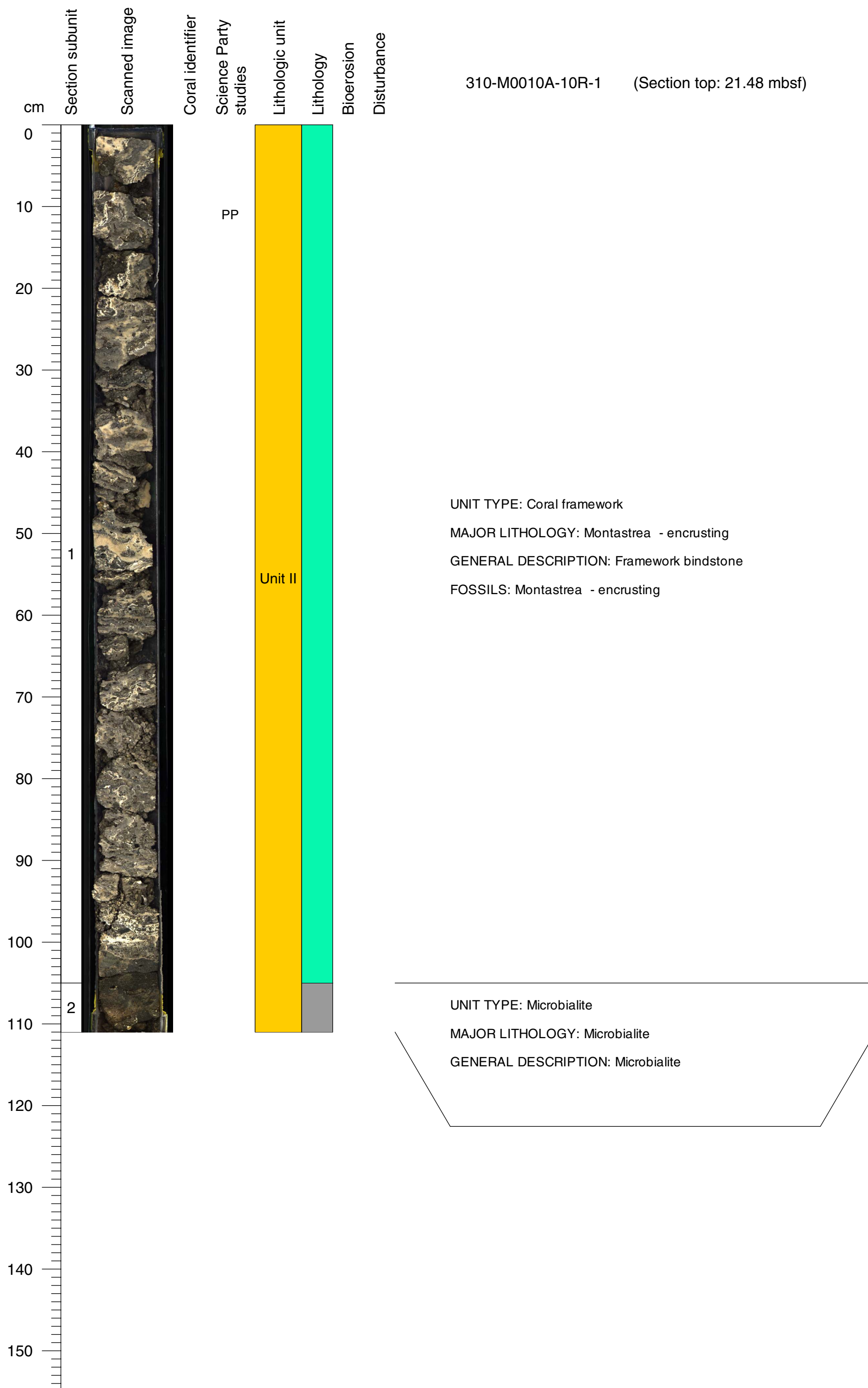


**Core Photo**

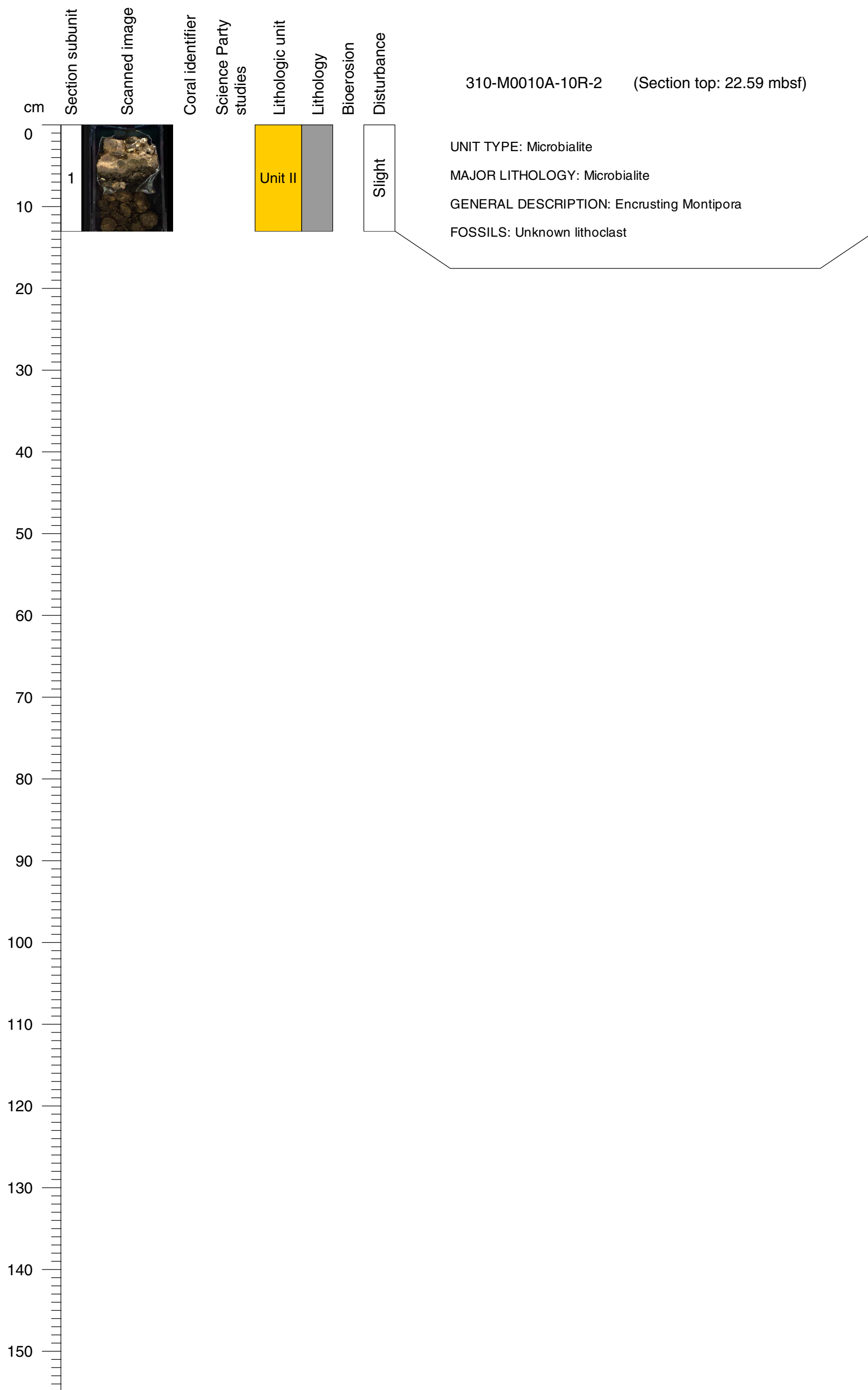


**Core Photo**

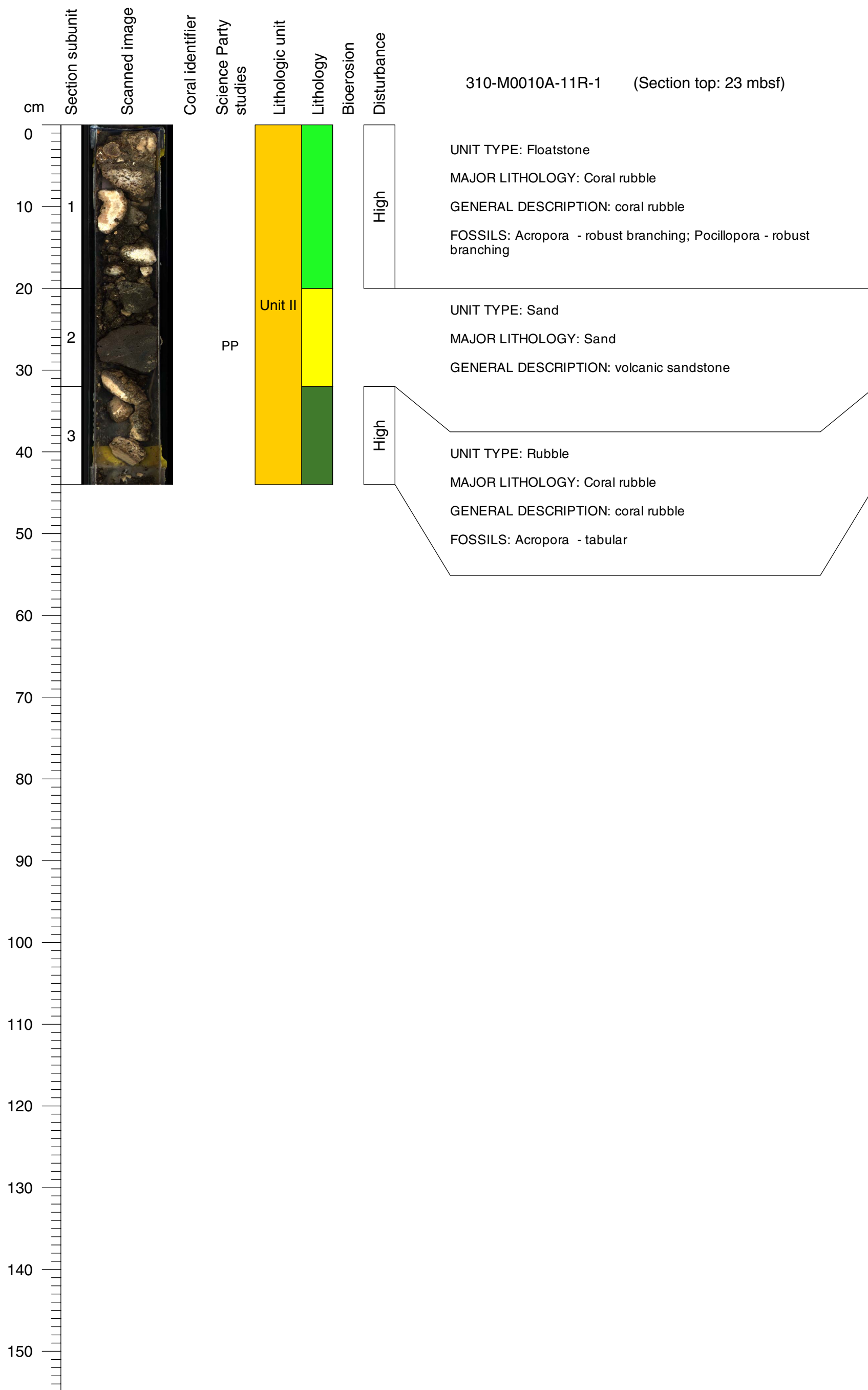
310-M0010A-10R-1 (Section top: 21.48 mbsf)



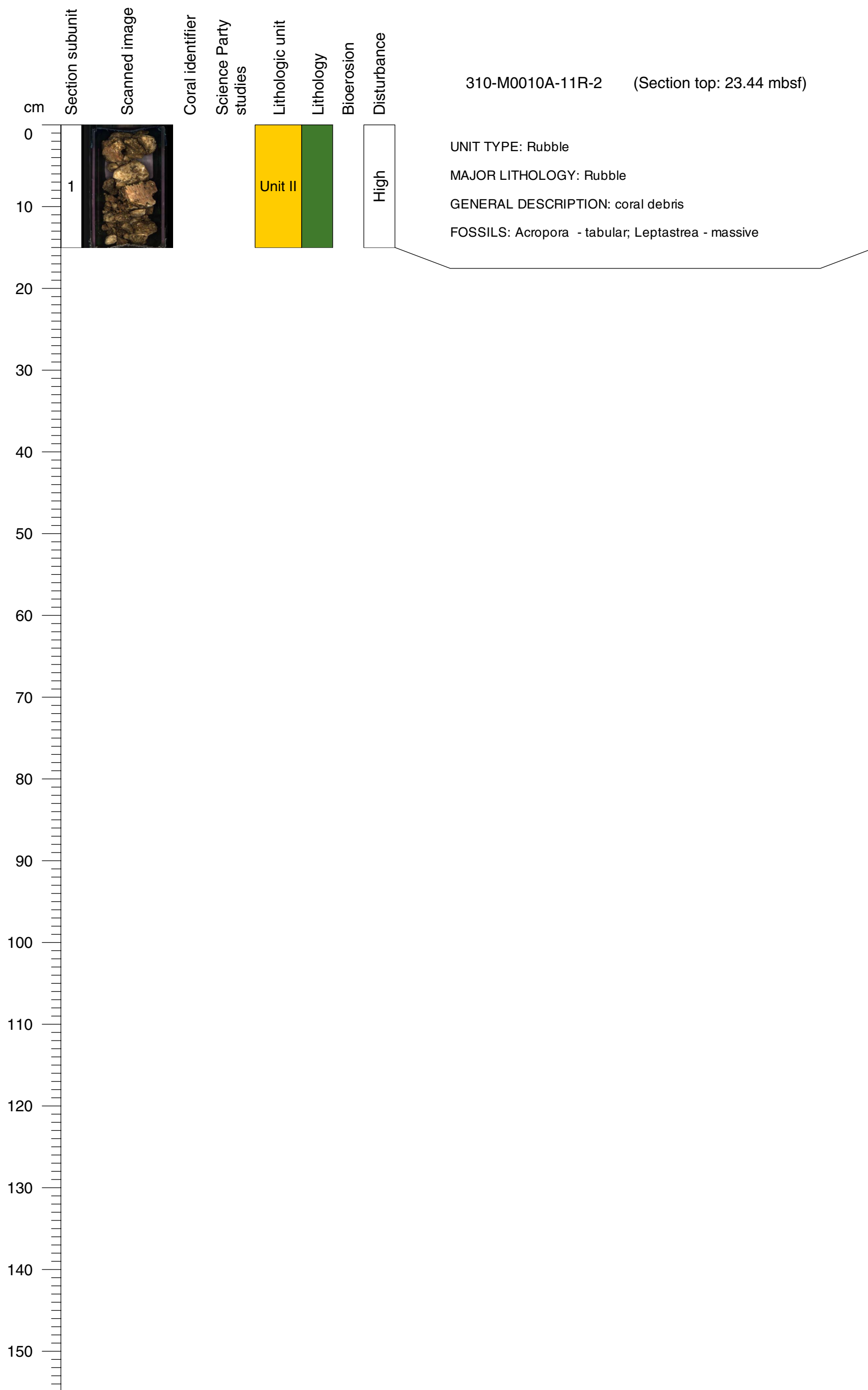
**Core Photo**



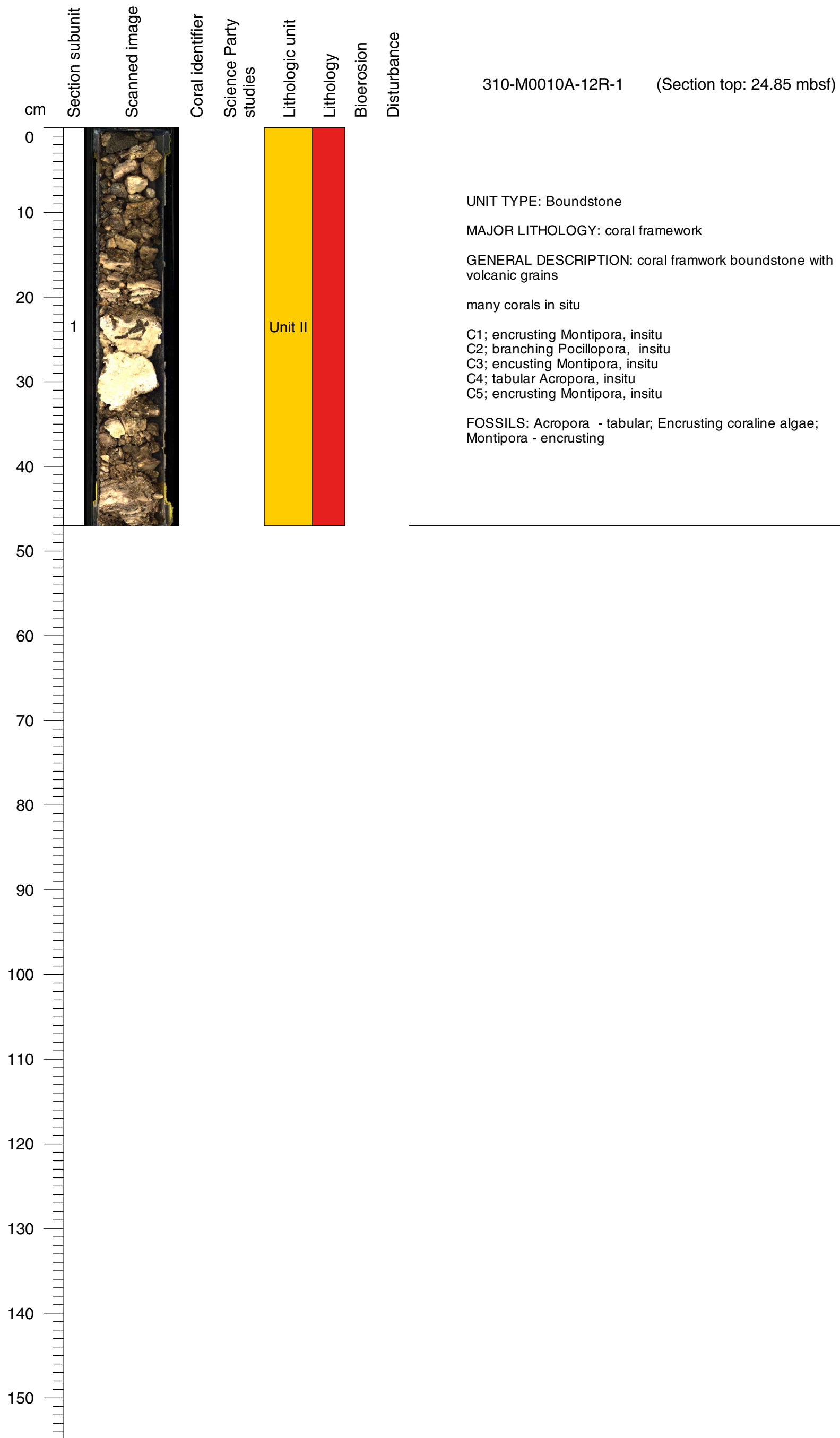
Core Photo



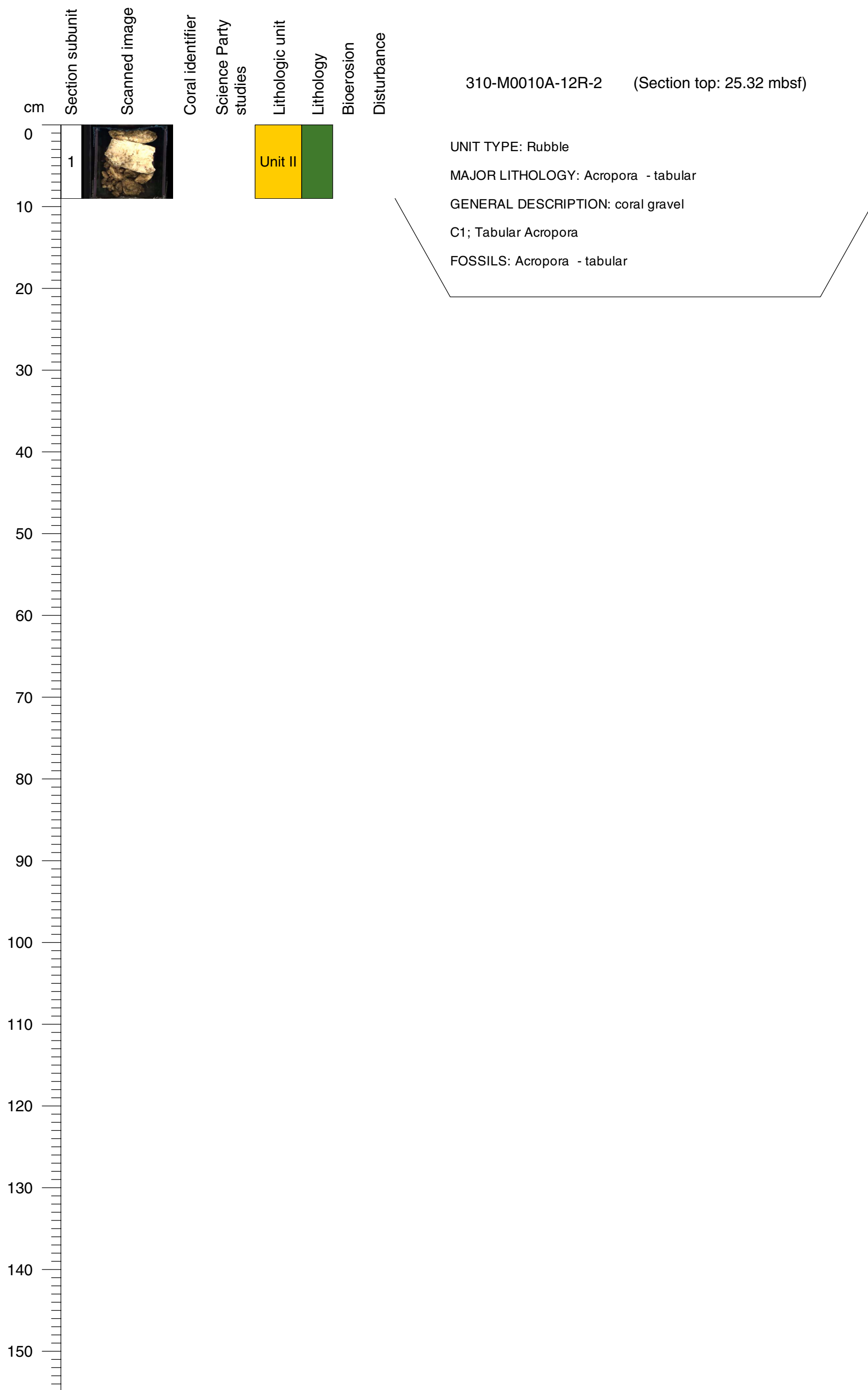
**Core Photo**



**Core Photo**

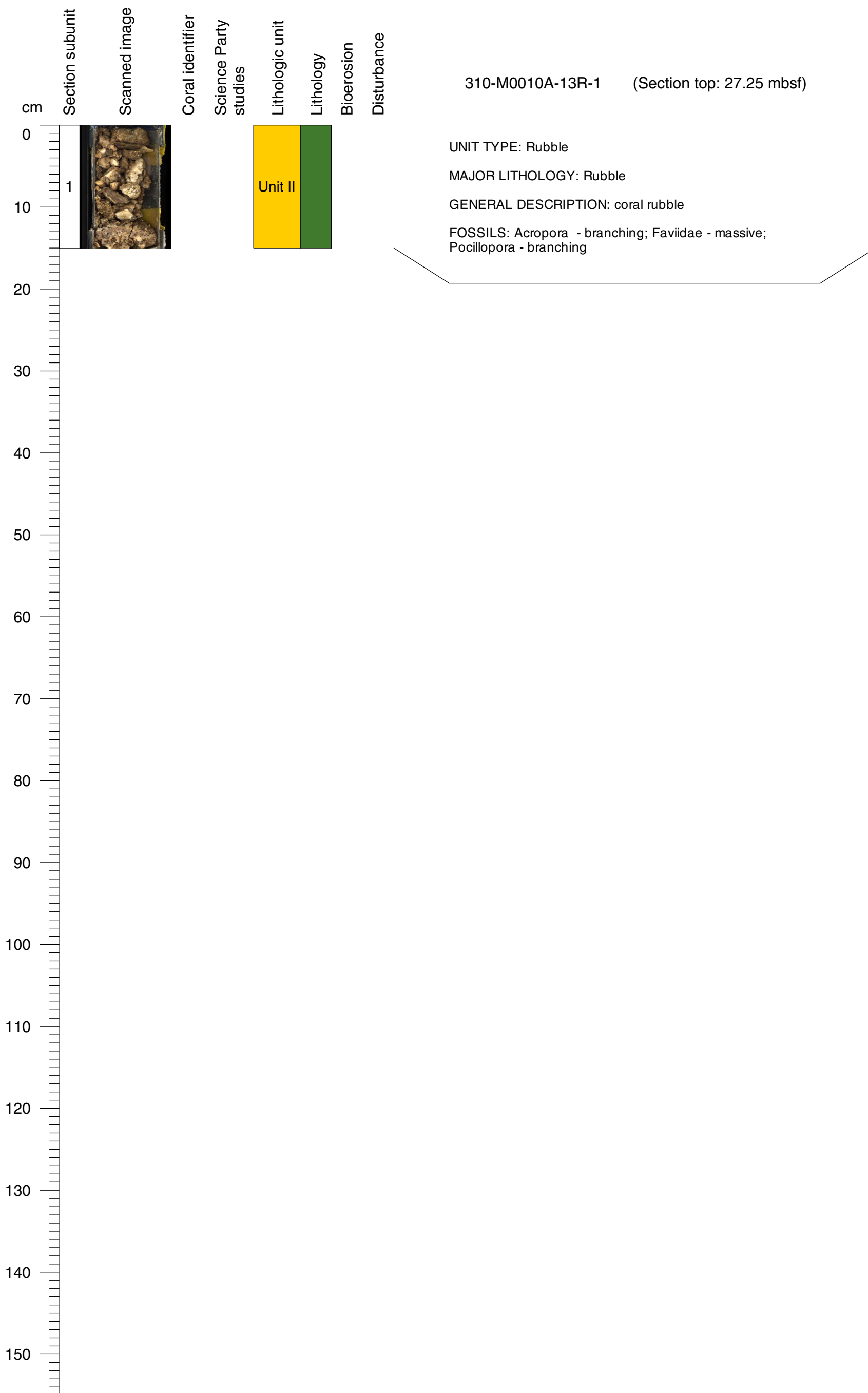


**Core Photo**

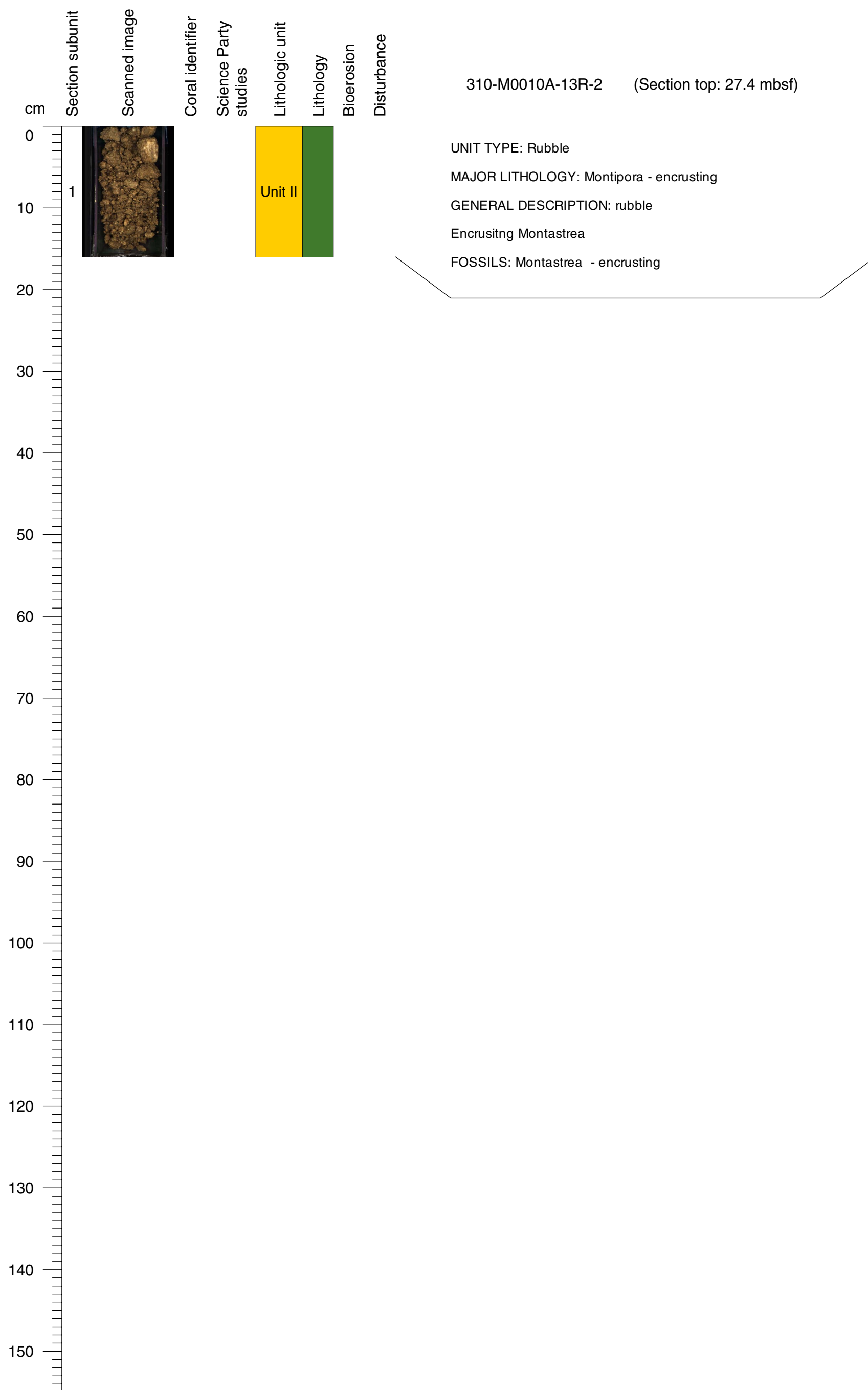




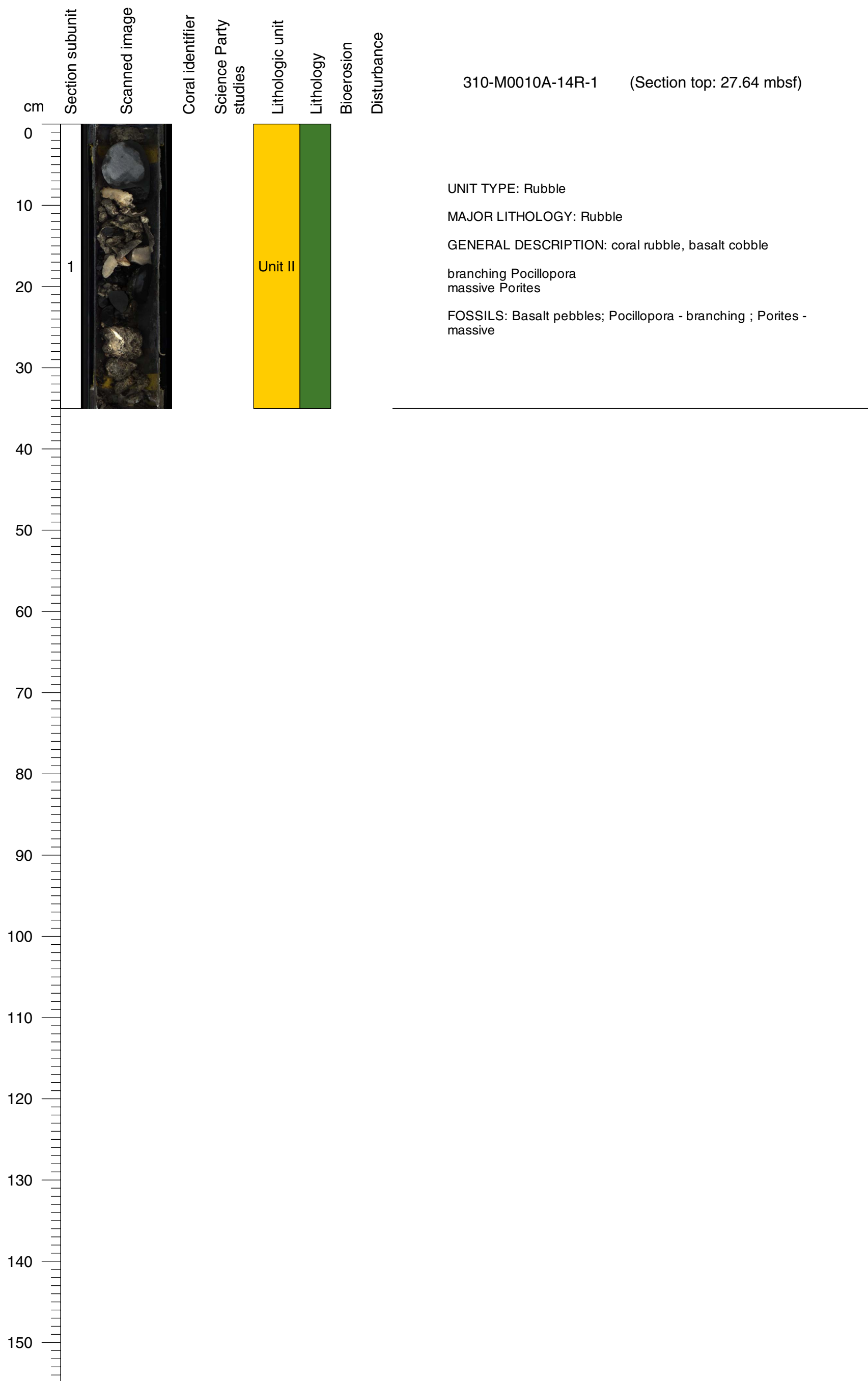
**Core Photo**



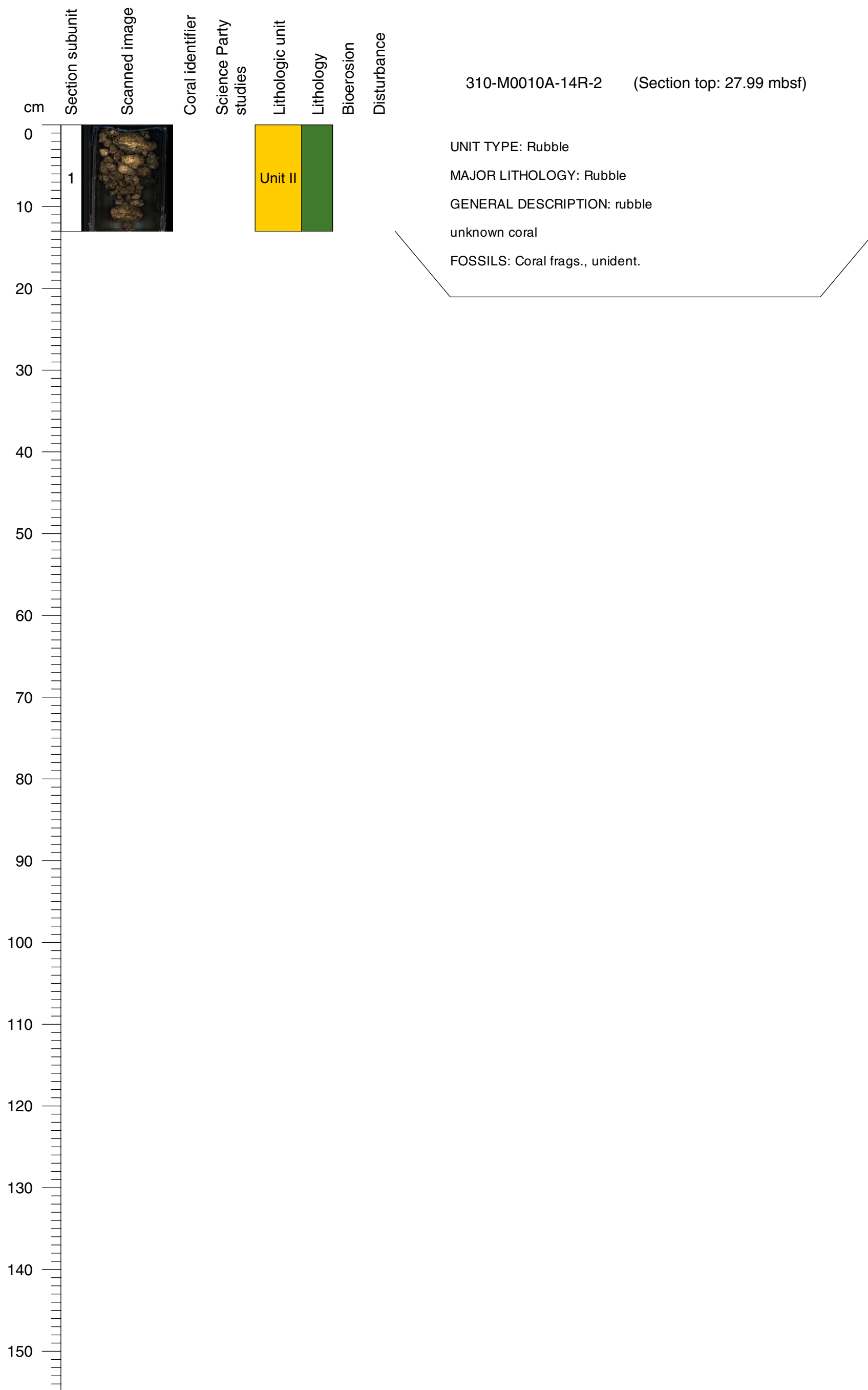
**Core Photo**



**Core Photo**



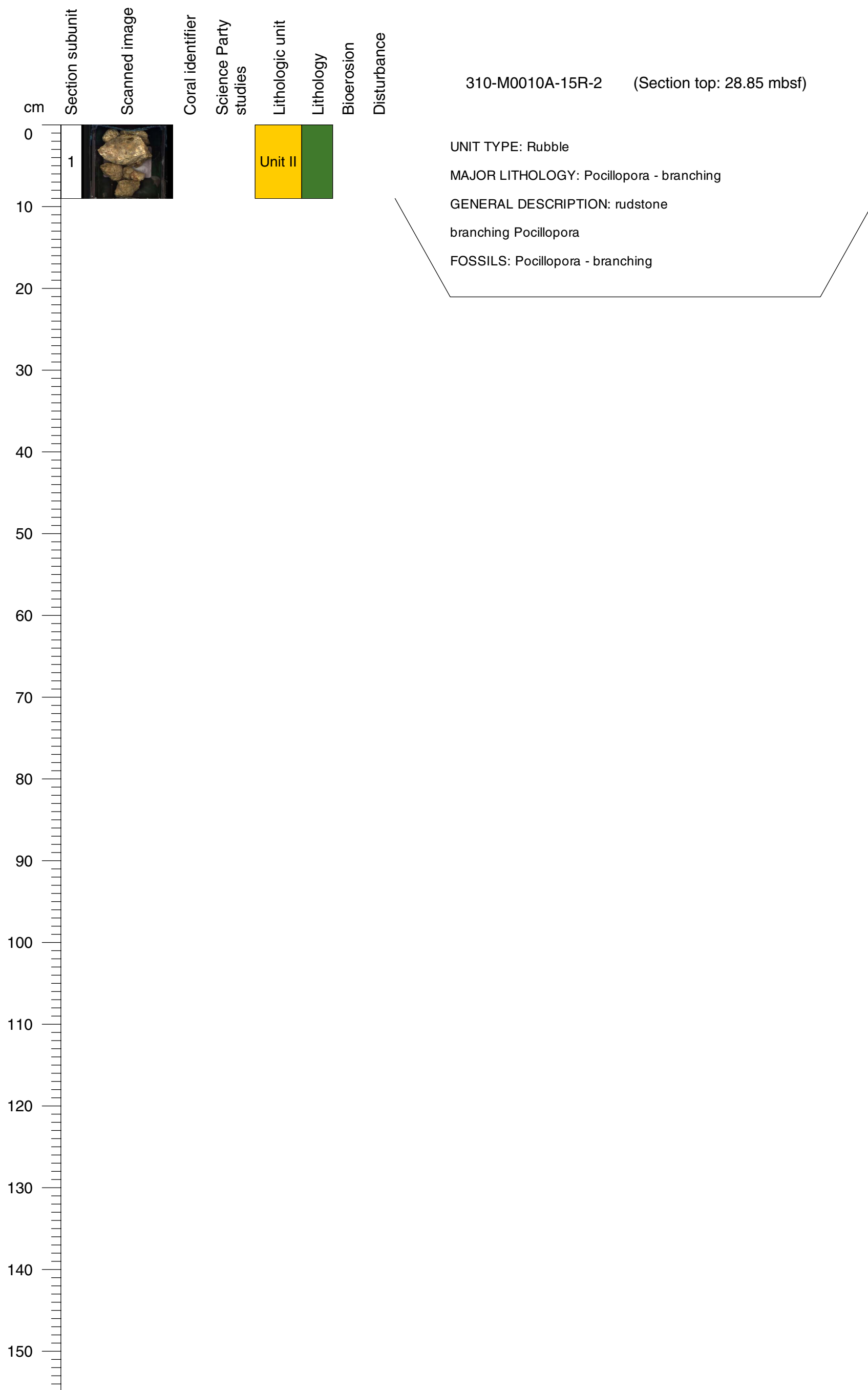
**Core Photo**



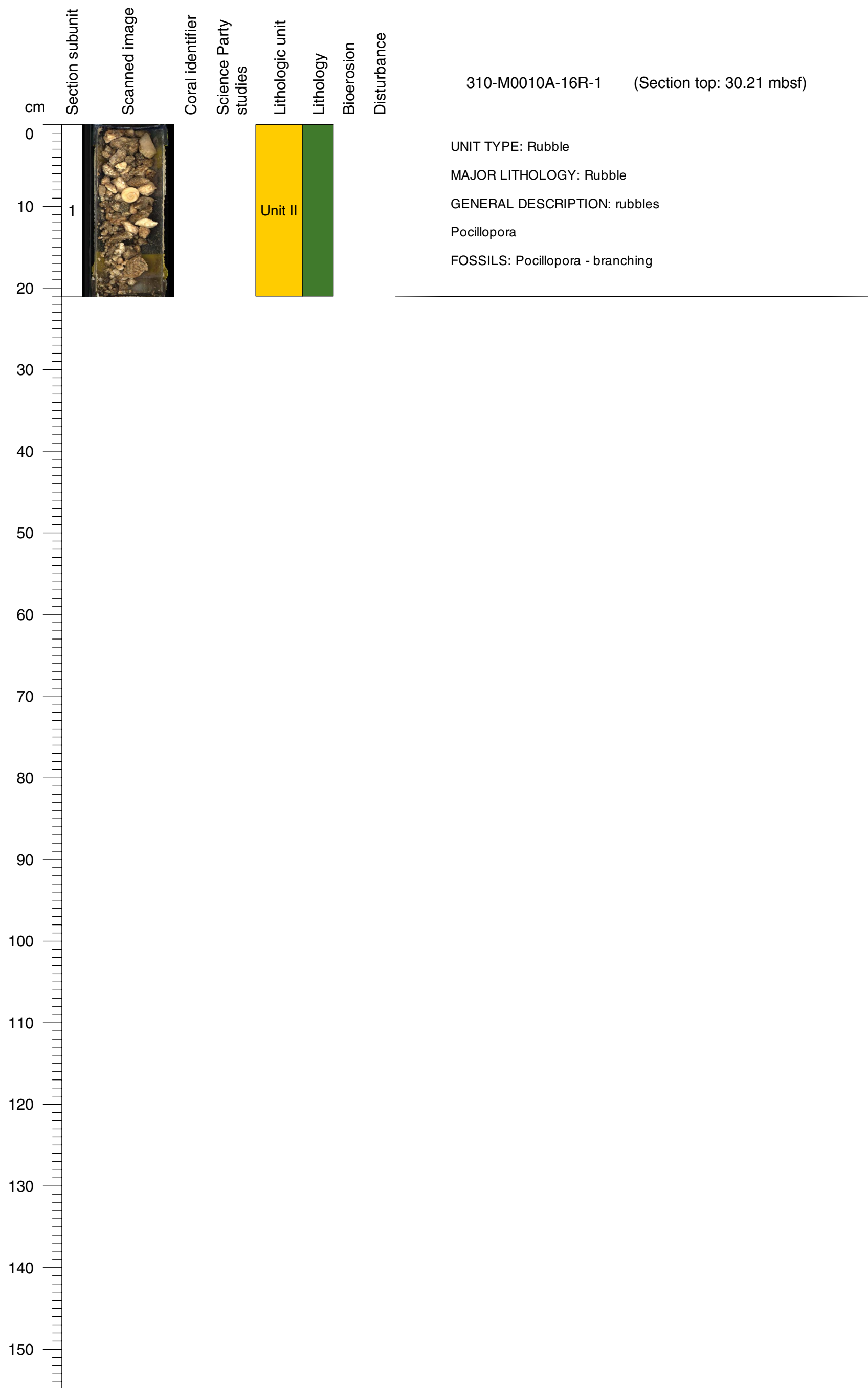
**Core Photo**



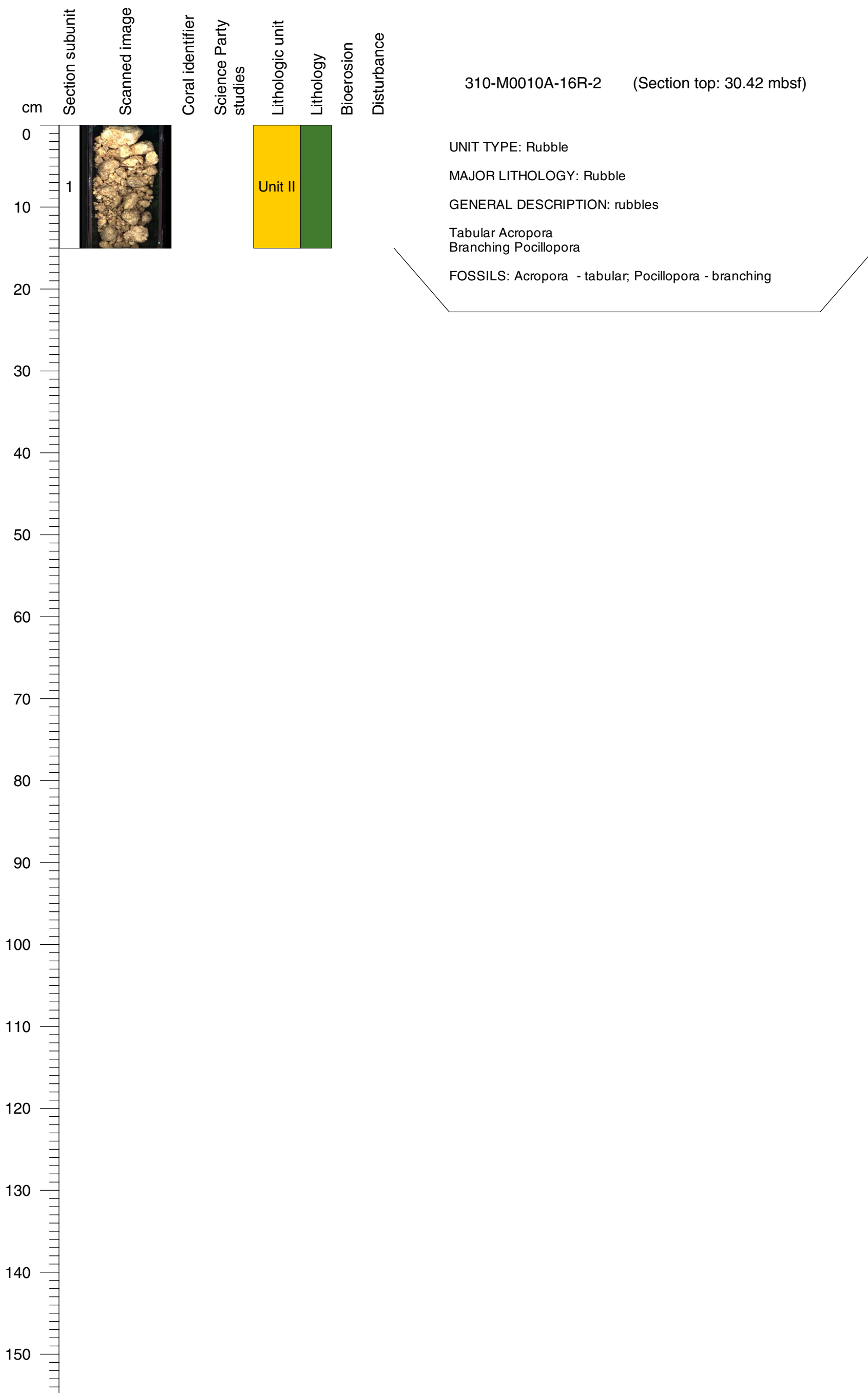
Core Photo



**Core Photo**

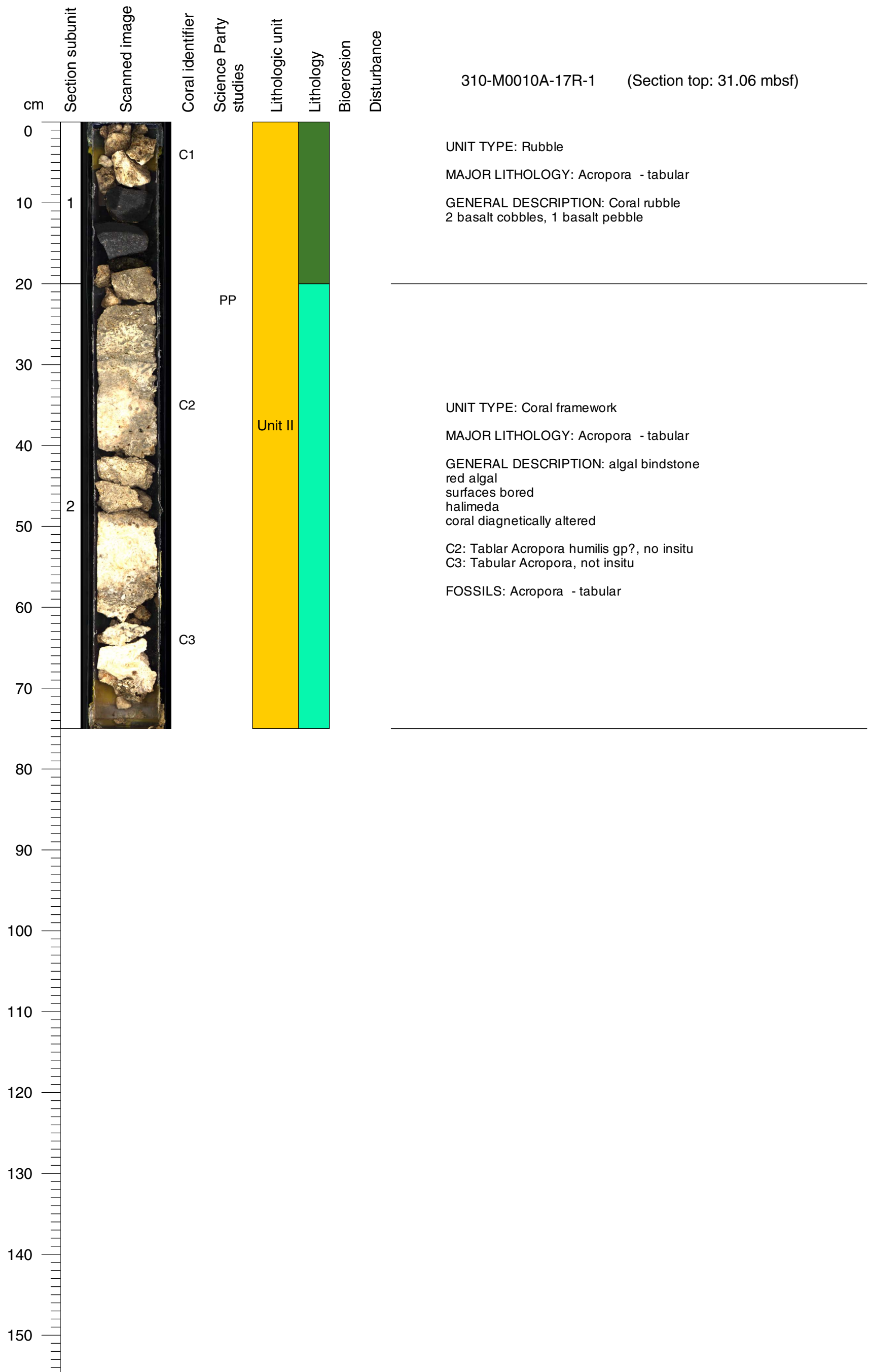


**Core Photo**

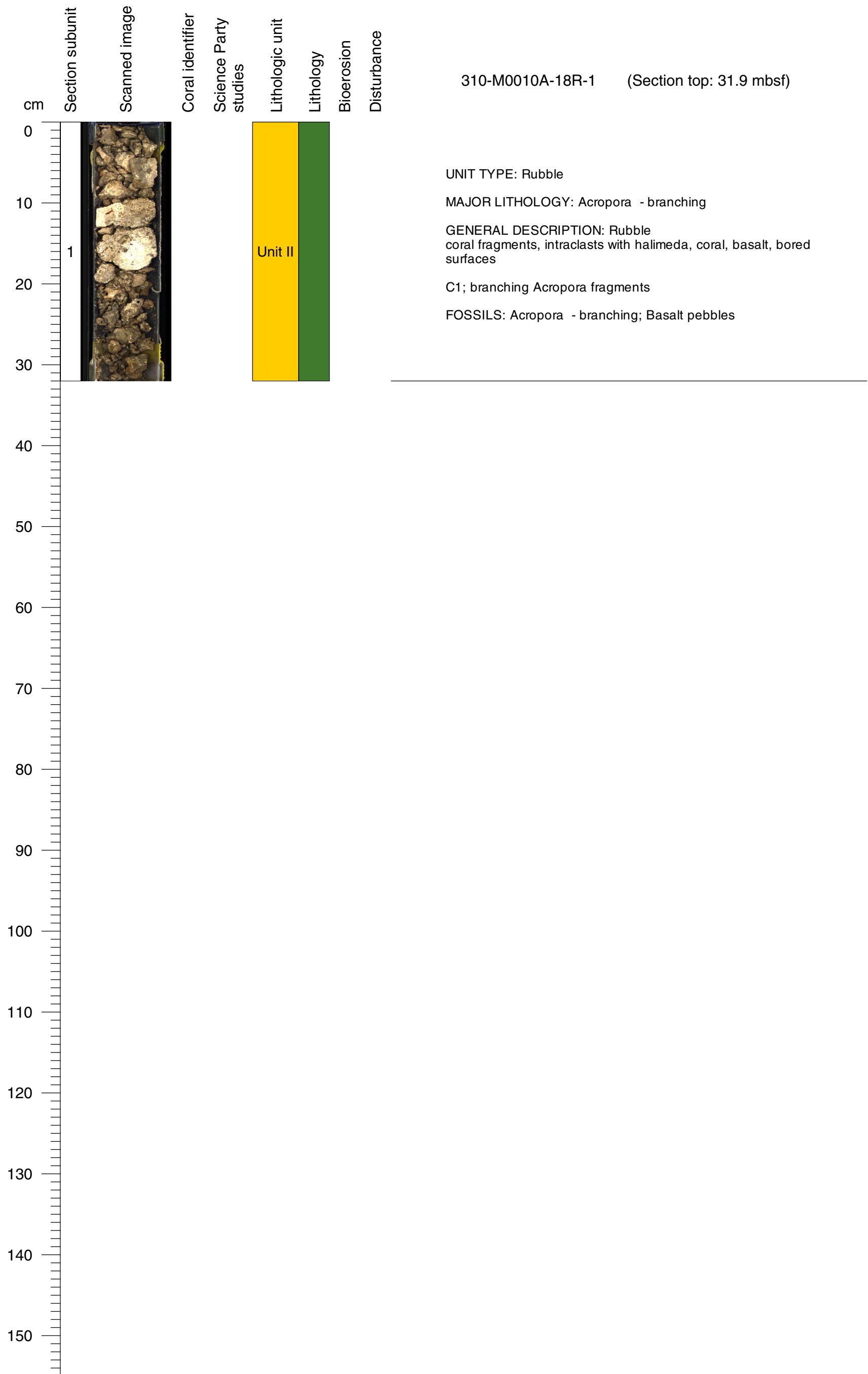




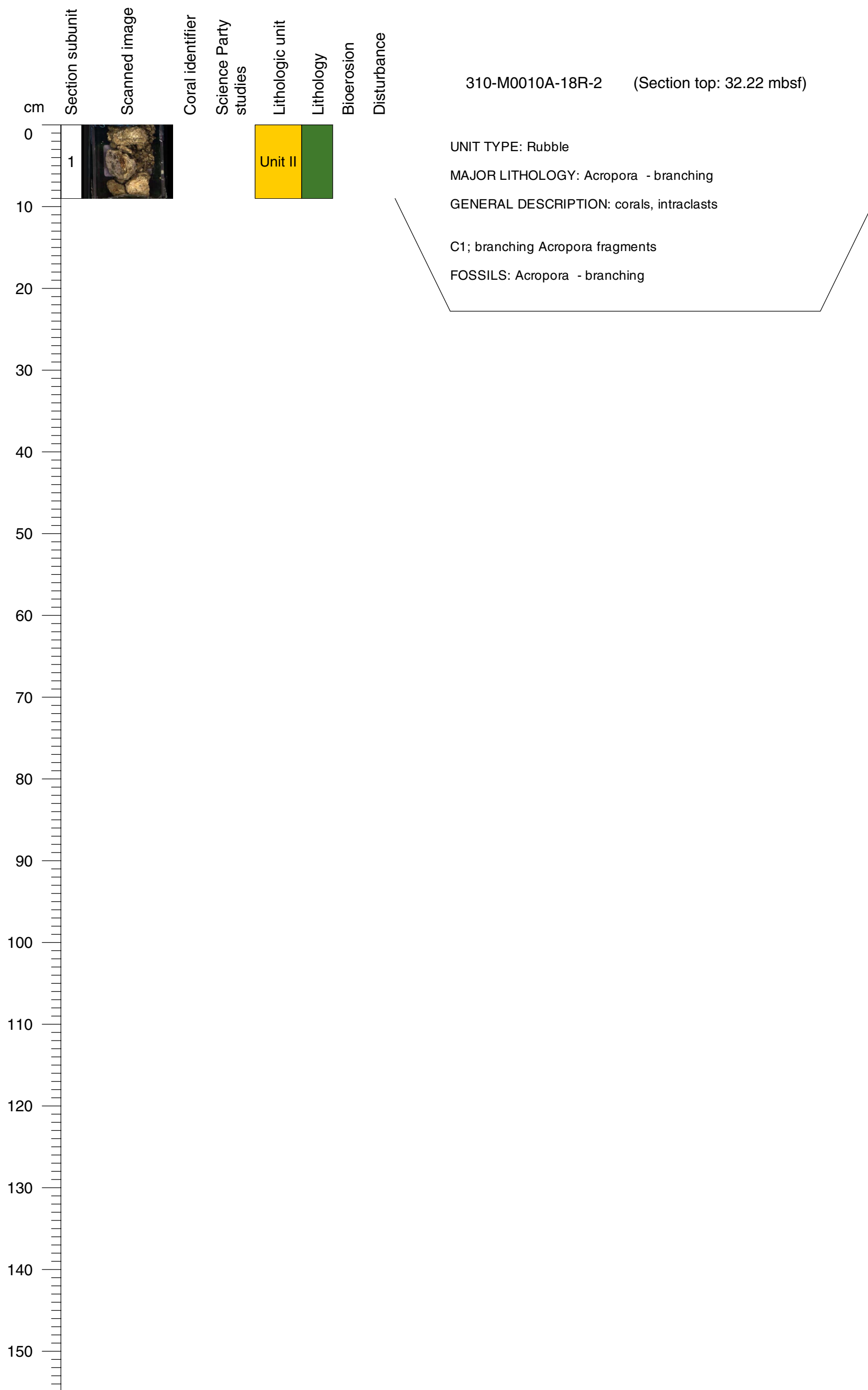
Core Photo



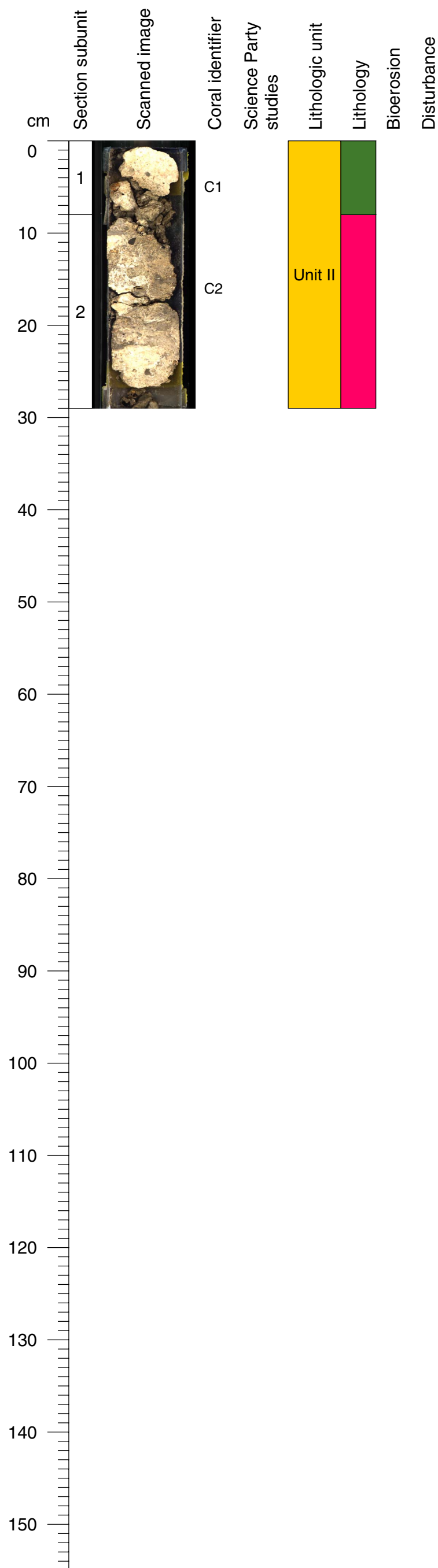
**Core Photo**



Core Photo



Core Photo



310-M0010A-19R-1 (Section top: 32.67 mbsf)

UNIT TYPE: Rubble

MAJOR LITHOLOGY: Rubble

GENERAL DESCRIPTION: Rubble corals fragments dominate  
basalt pebbles = angular to subangular, fine to medium grained, sparsely phyric, fine feldspathoid laths, aphanitic groundmass  
sparsely vesicular, <1 mm, fresh??

FOSSILS: Acroporidae - branching; Basalt pebbles

UNIT TYPE: Bindstone

MAJOR LITHOLOGY: Acropora - tabular

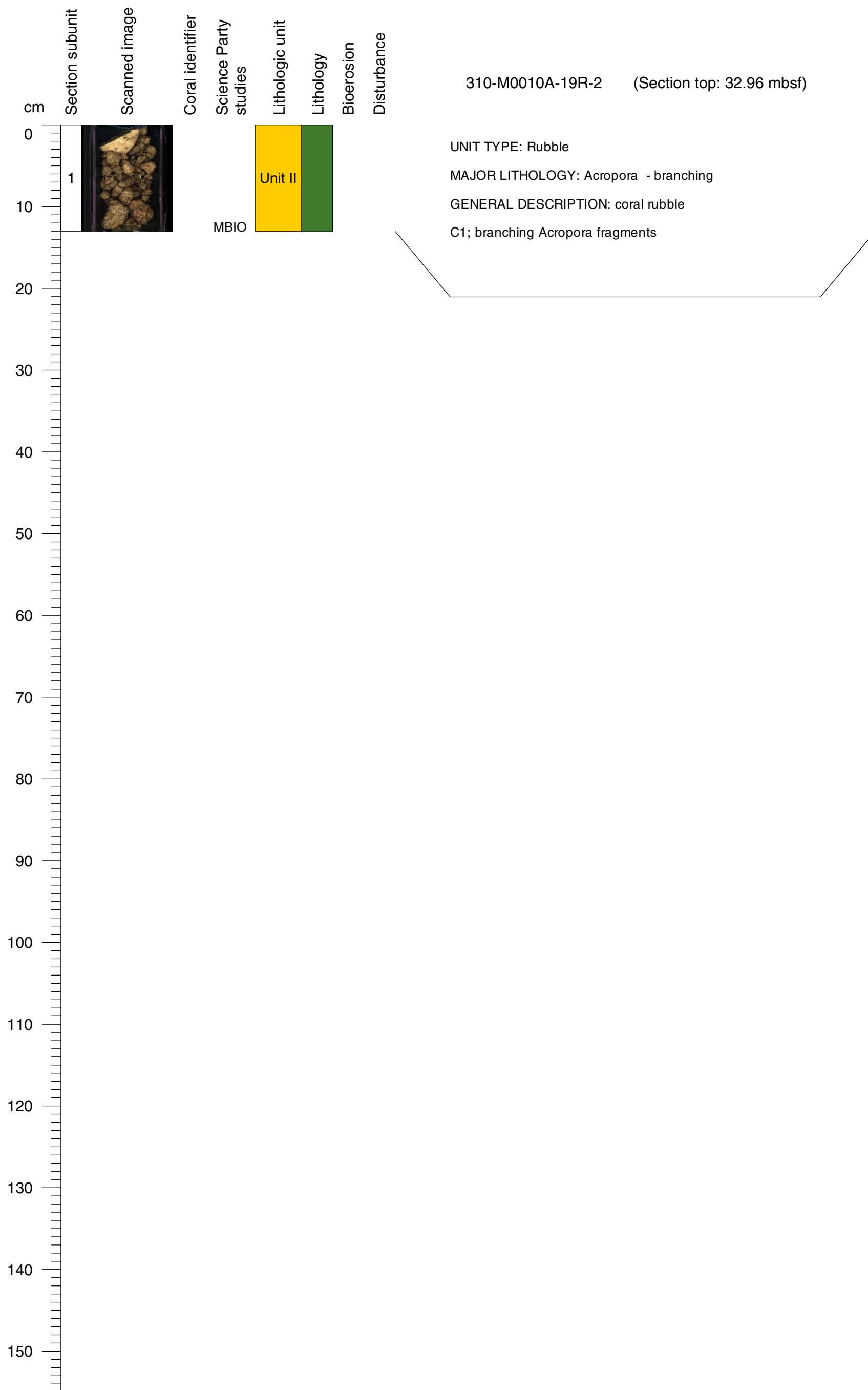
GENERAL DESCRIPTION: encrusting coralline algae, heavily bored, major comp corals, boring bivalves  
basalt pebbles, angular to subangular, fresh to medium grained, sparsely phyric, fine feldspathoids lats, aphanitic groundmass, sparsely vesicular, fresh??

C2; Tabular Acropora humilis gp?, not insitu  
C3; Tabular Acropora, not insitu

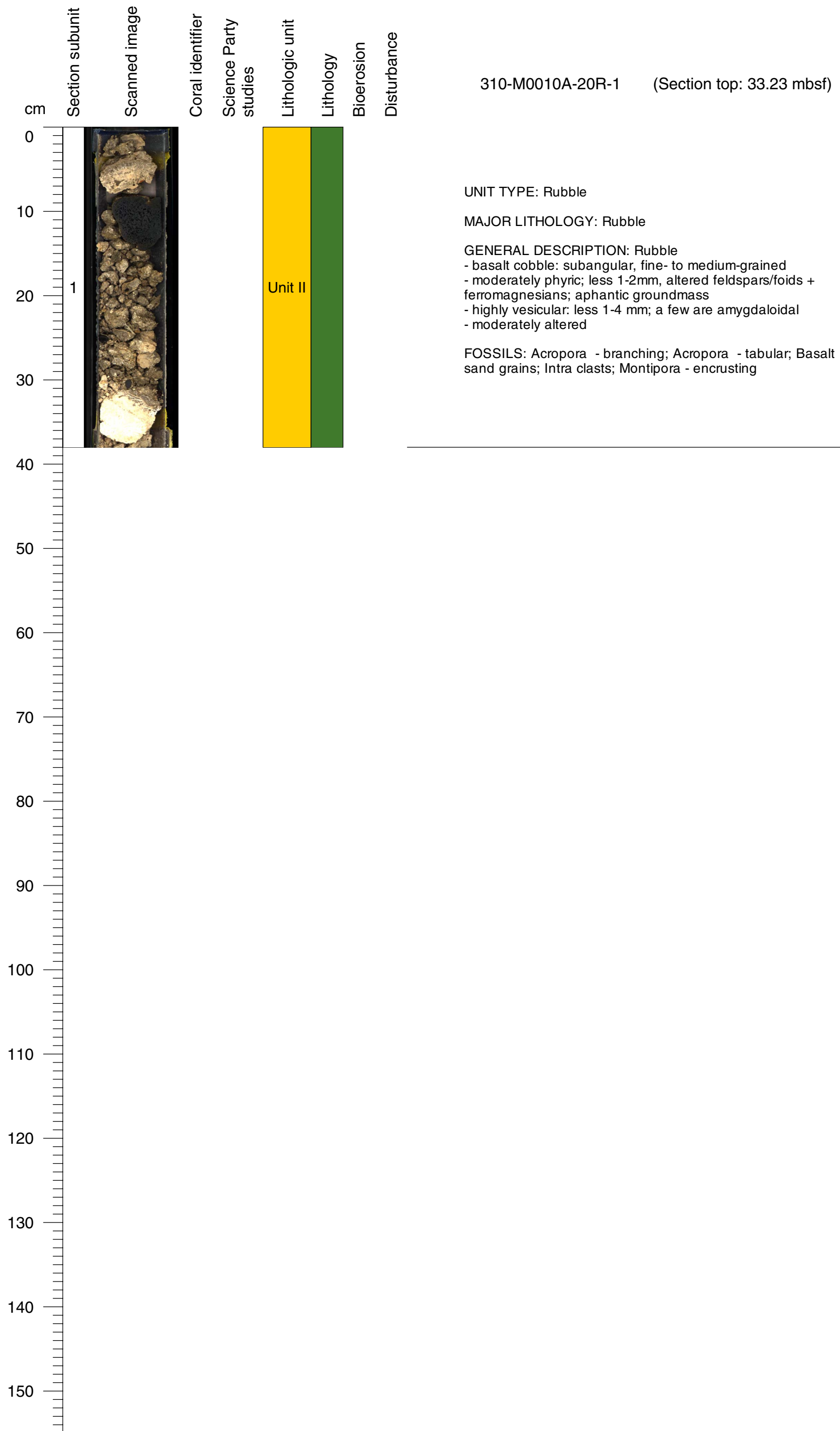
FOSSILS: Acropora - tabular



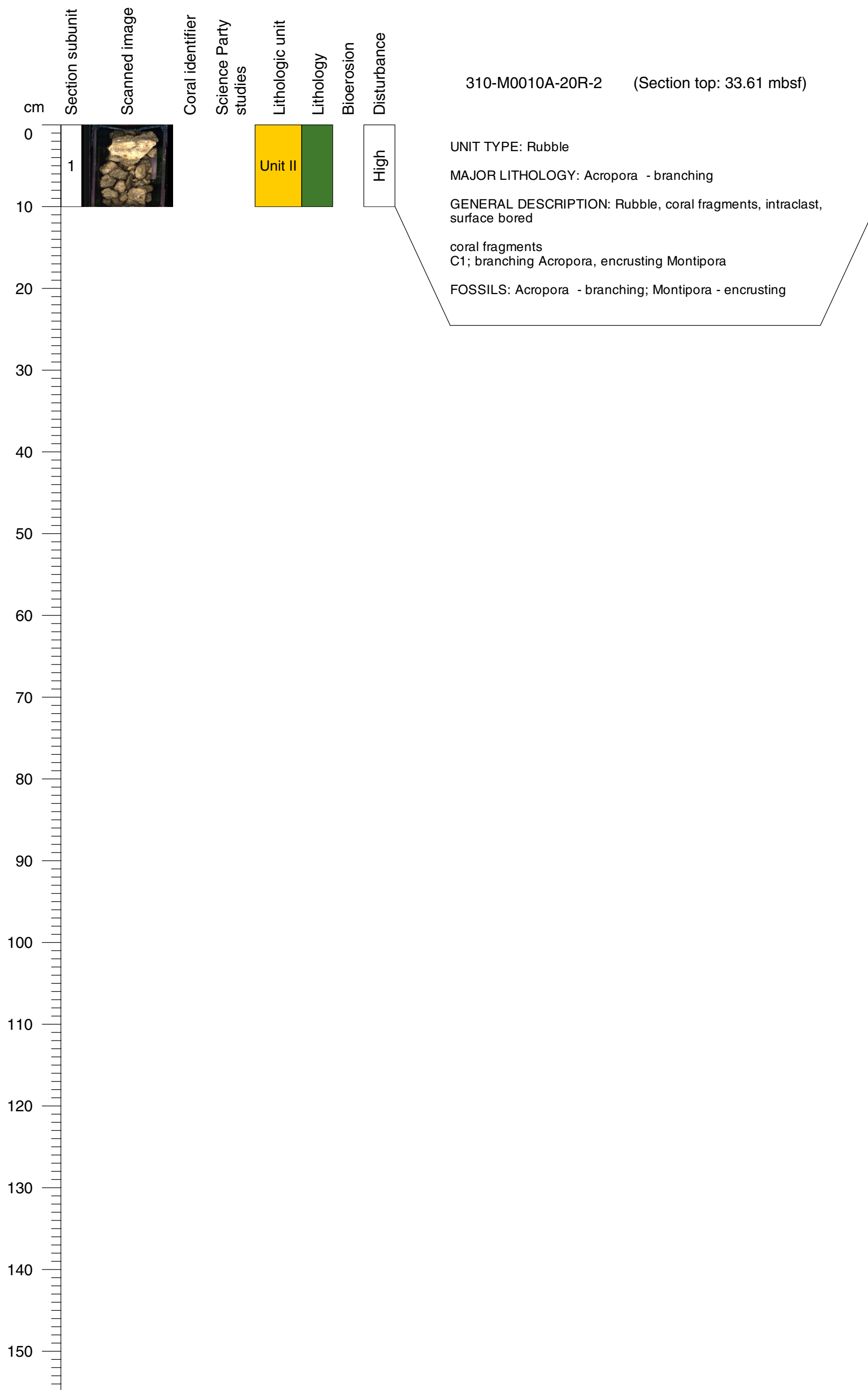
**Core Photo**



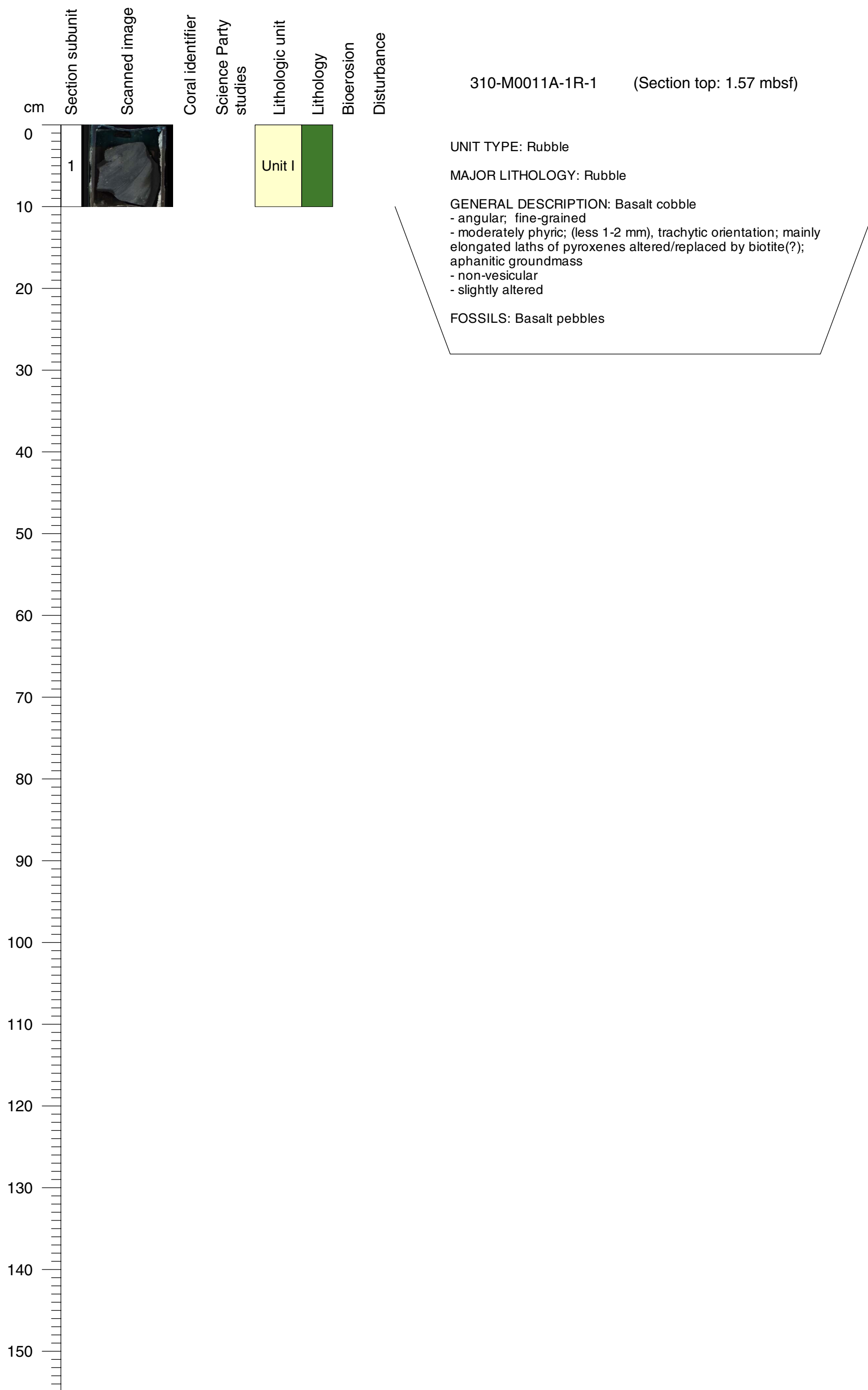
**Core Photo**



Core Photo

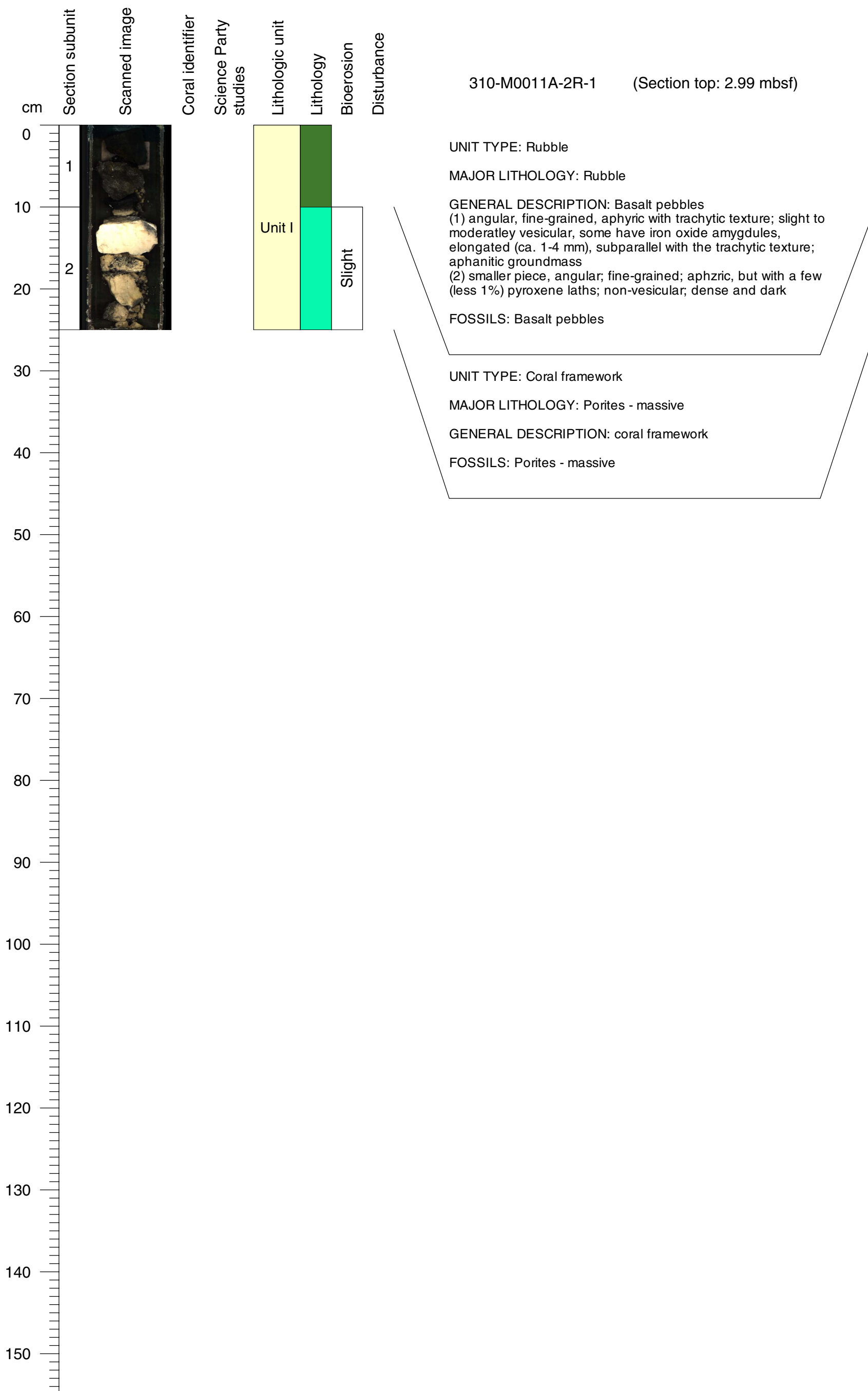


**Core Photo**



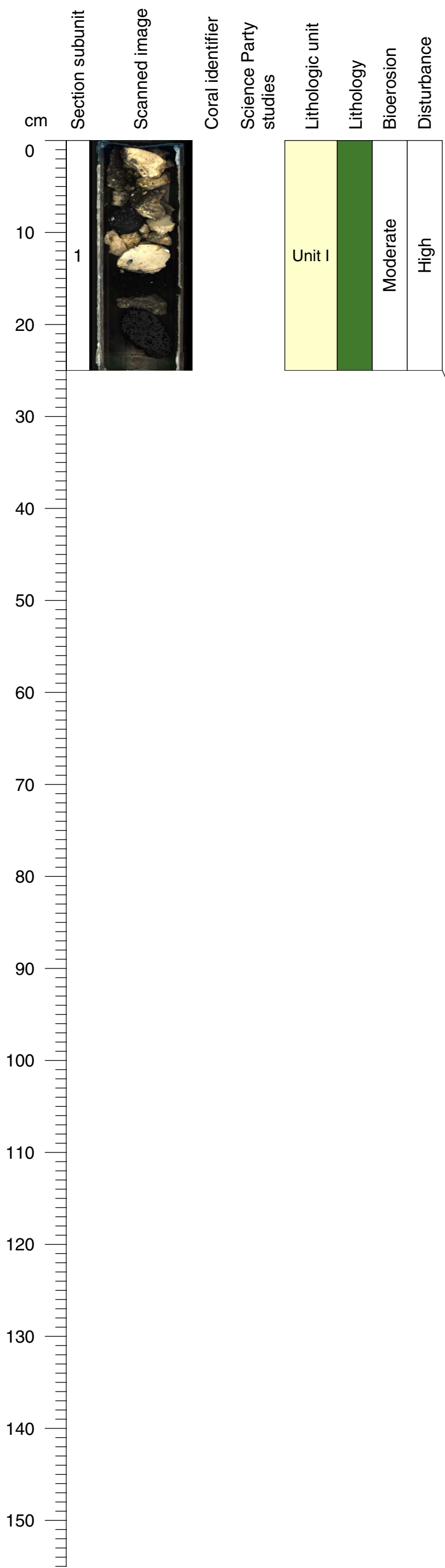


**Core Photo**



**Core Photo**

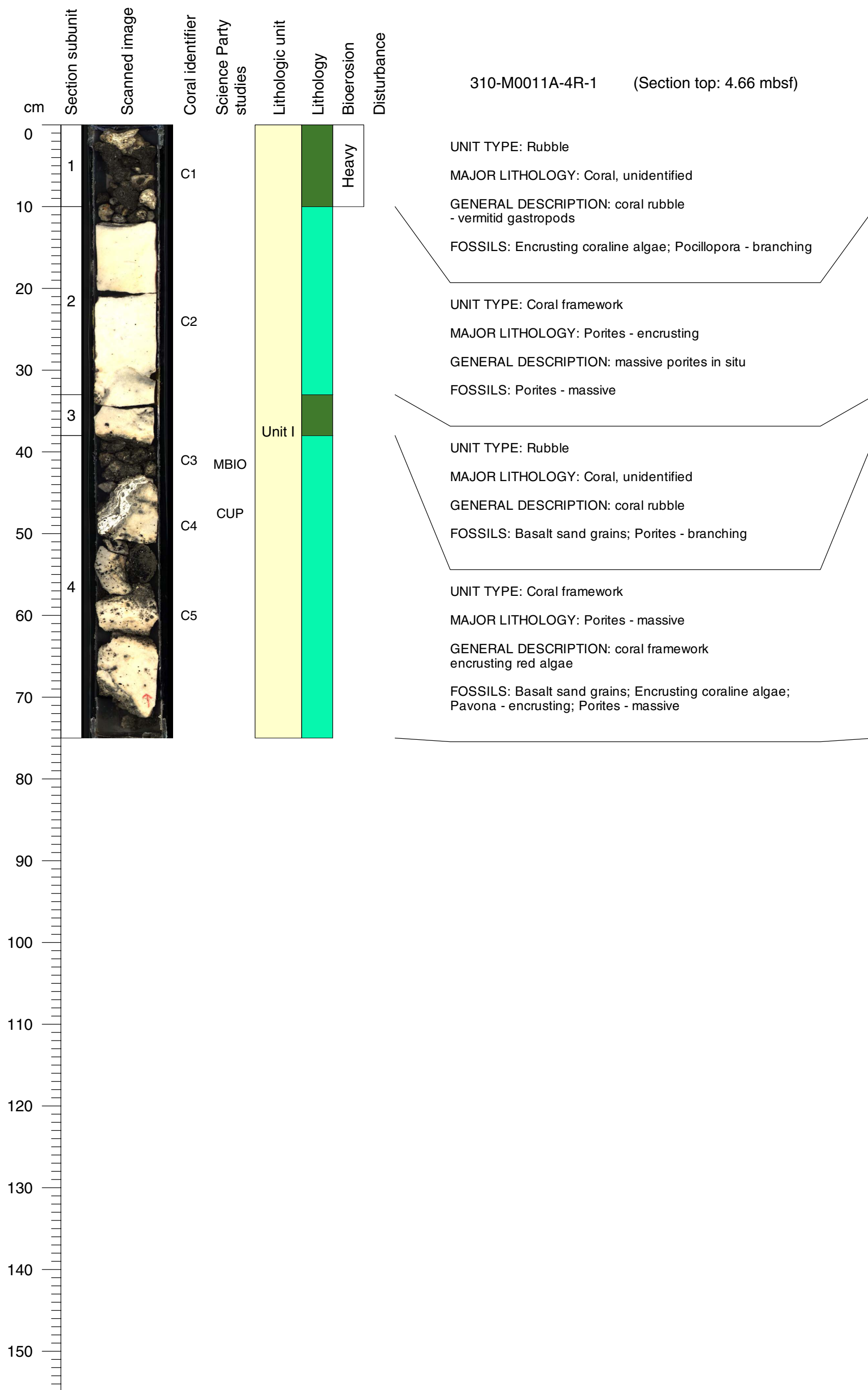
310-M0011A-3R-1 (Section top: 3.31 mbsf)



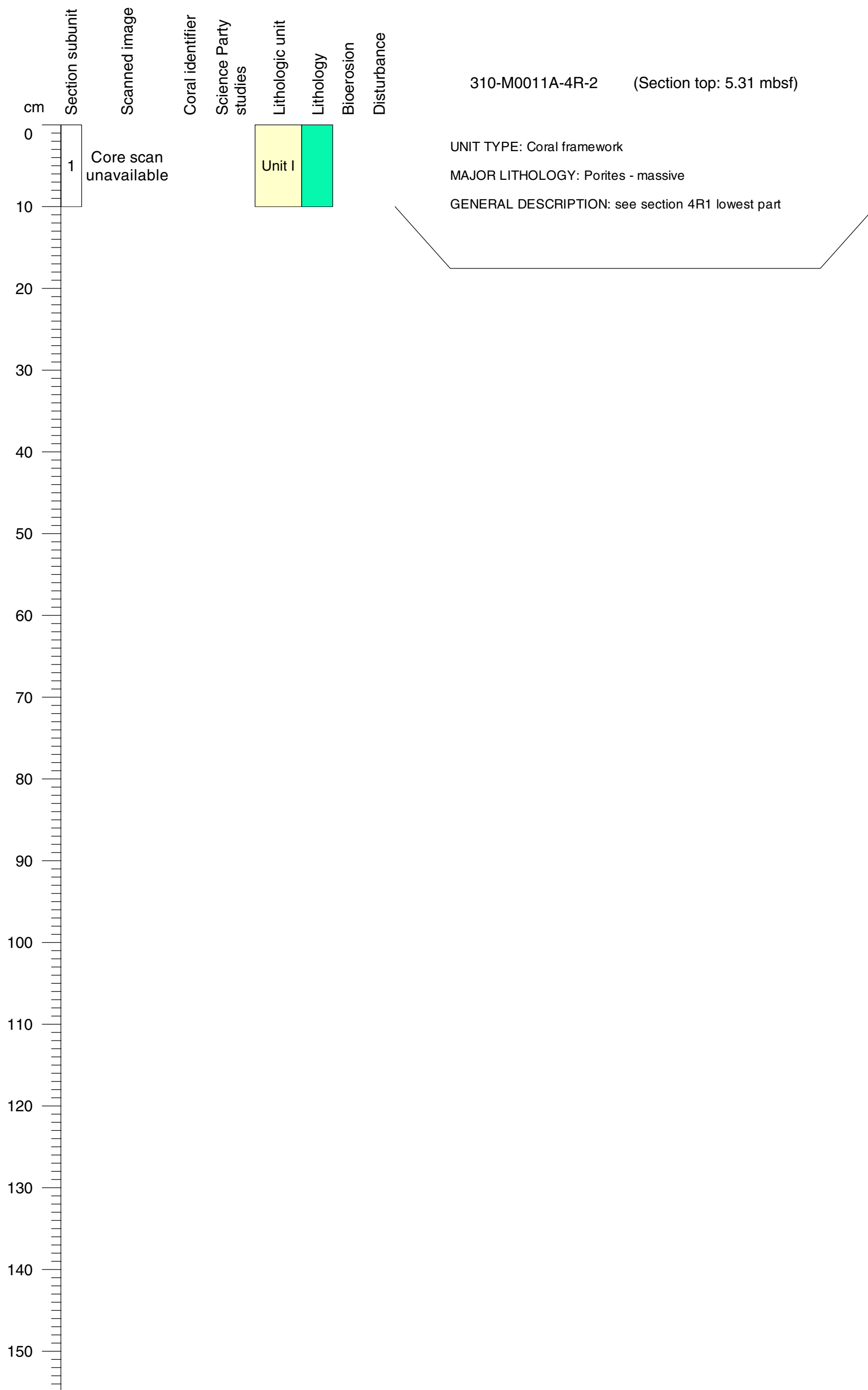
UNIT TYPE: Rubble  
 MAJOR LITHOLOGY: Porites - massive  
 GENERAL DESCRIPTION: rubble: broken framework  
 NOT - corallites preserved in encrusting Montipora  
 BASALT cobble:  
 - subround fragments  
 - fine-grained  
 - sparsely phyric  
 - pyroxene and feldspars/foids </-2mm  
 - aphanitic groundmass  
 - highly vesicular  
 - </-3 mm, round  
 - slightly altered  
 FOSSILS: Basalt pebbles; Encrusting coraline algae; Montipora - encrusting; Porites - branching ; Porites - massive

Core Photo

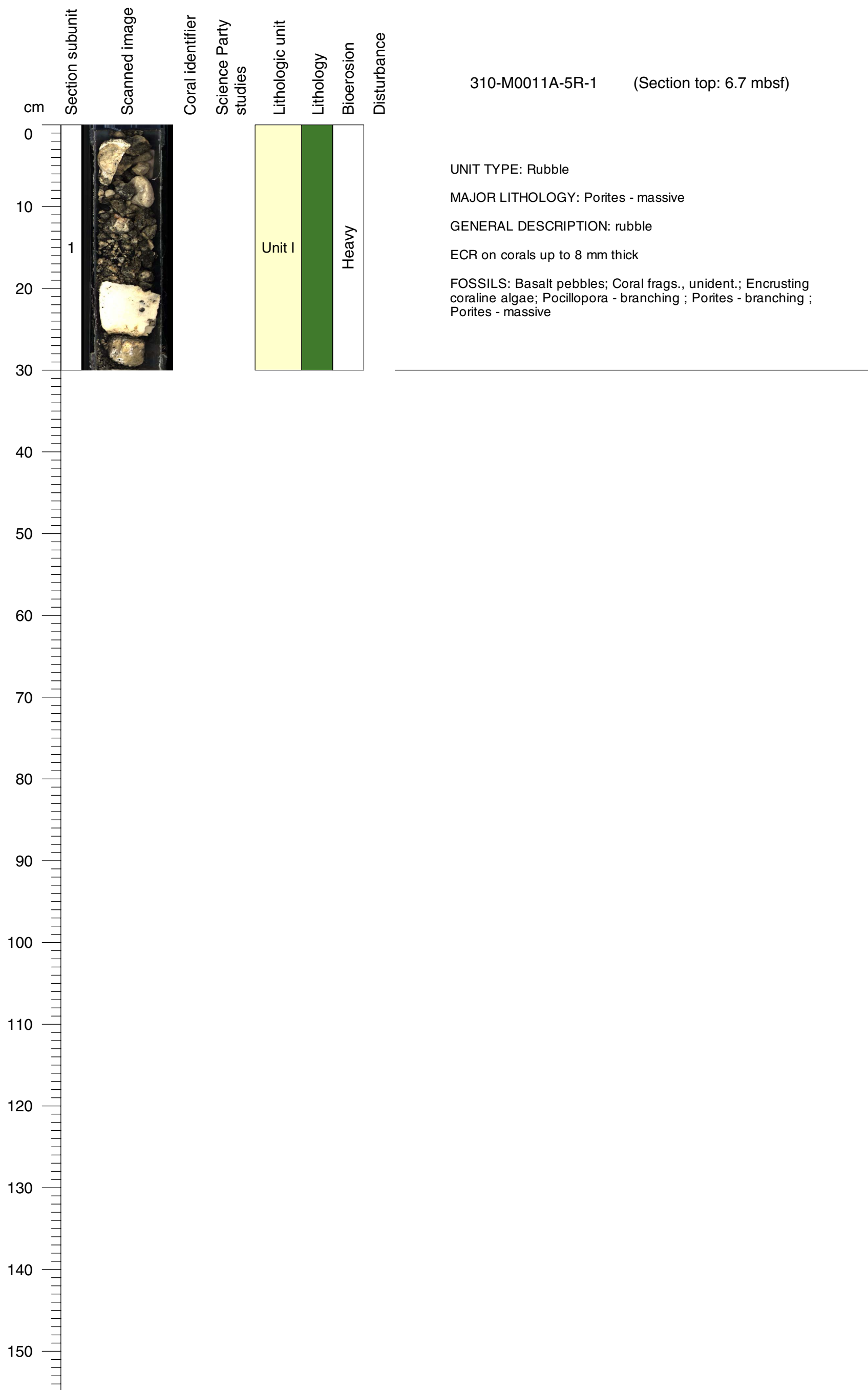
310-M0011A-4R-1 (Section top: 4.66 mbsf)



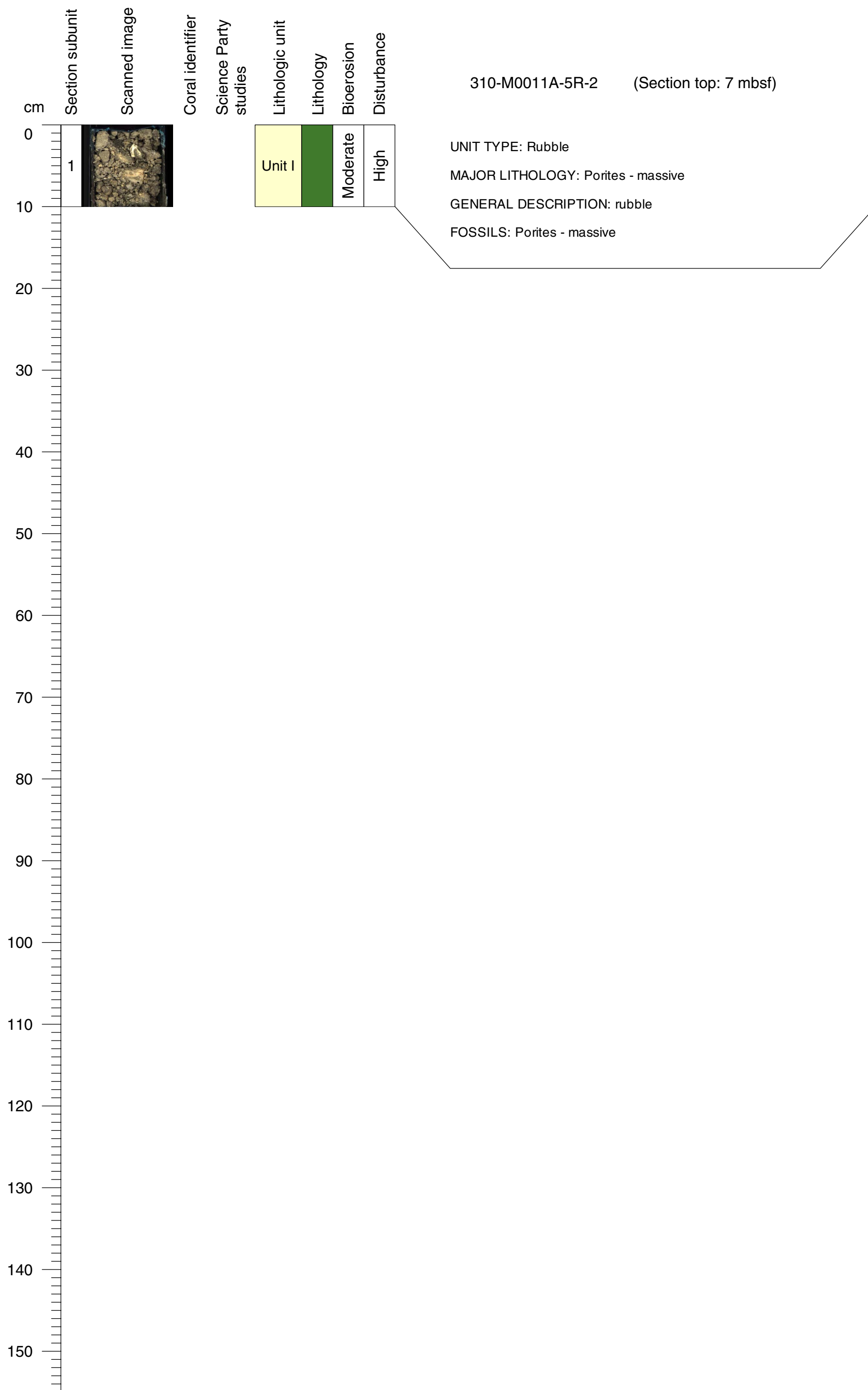
**Core Photo**



**Core Photo**

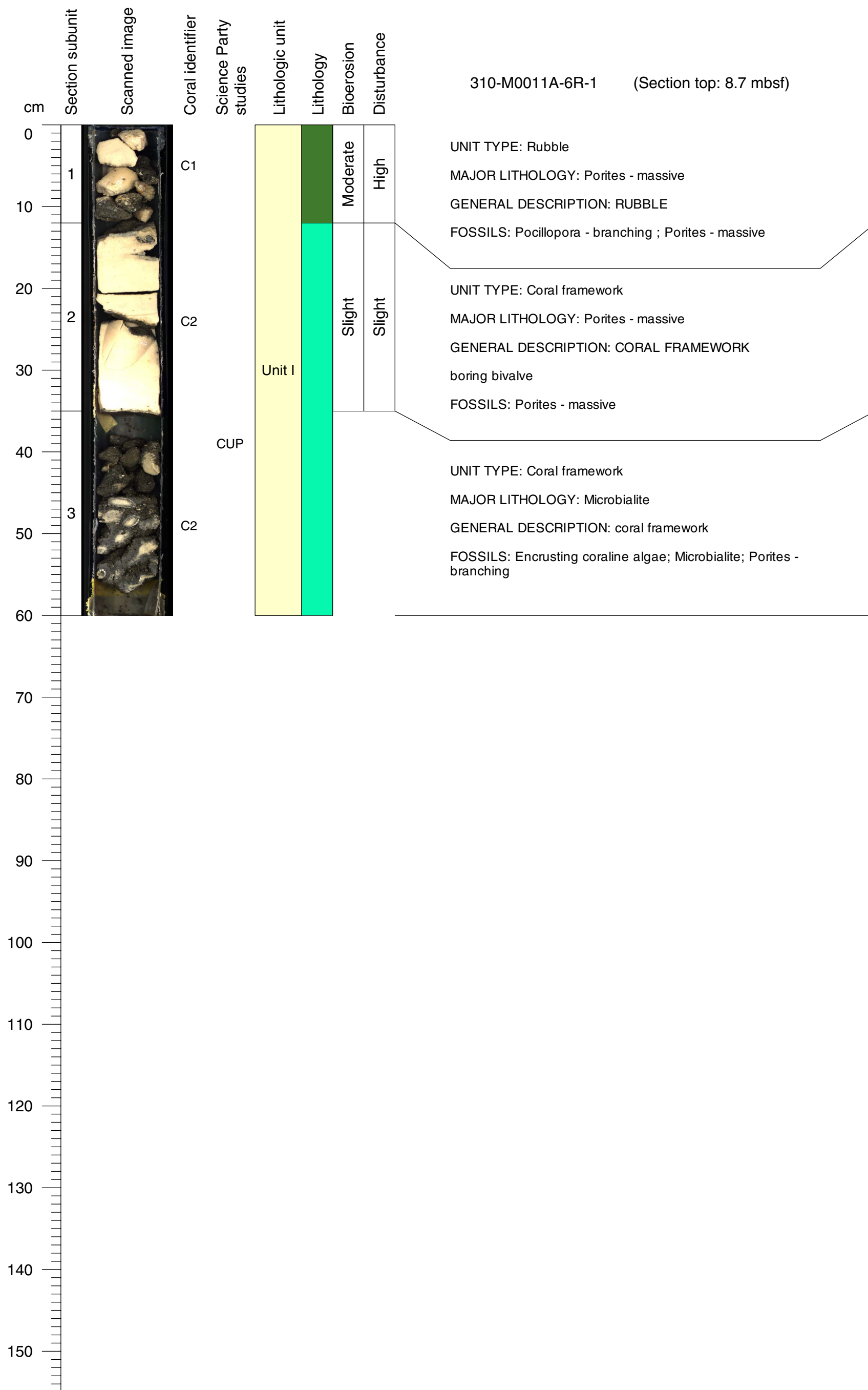


**Core Photo**

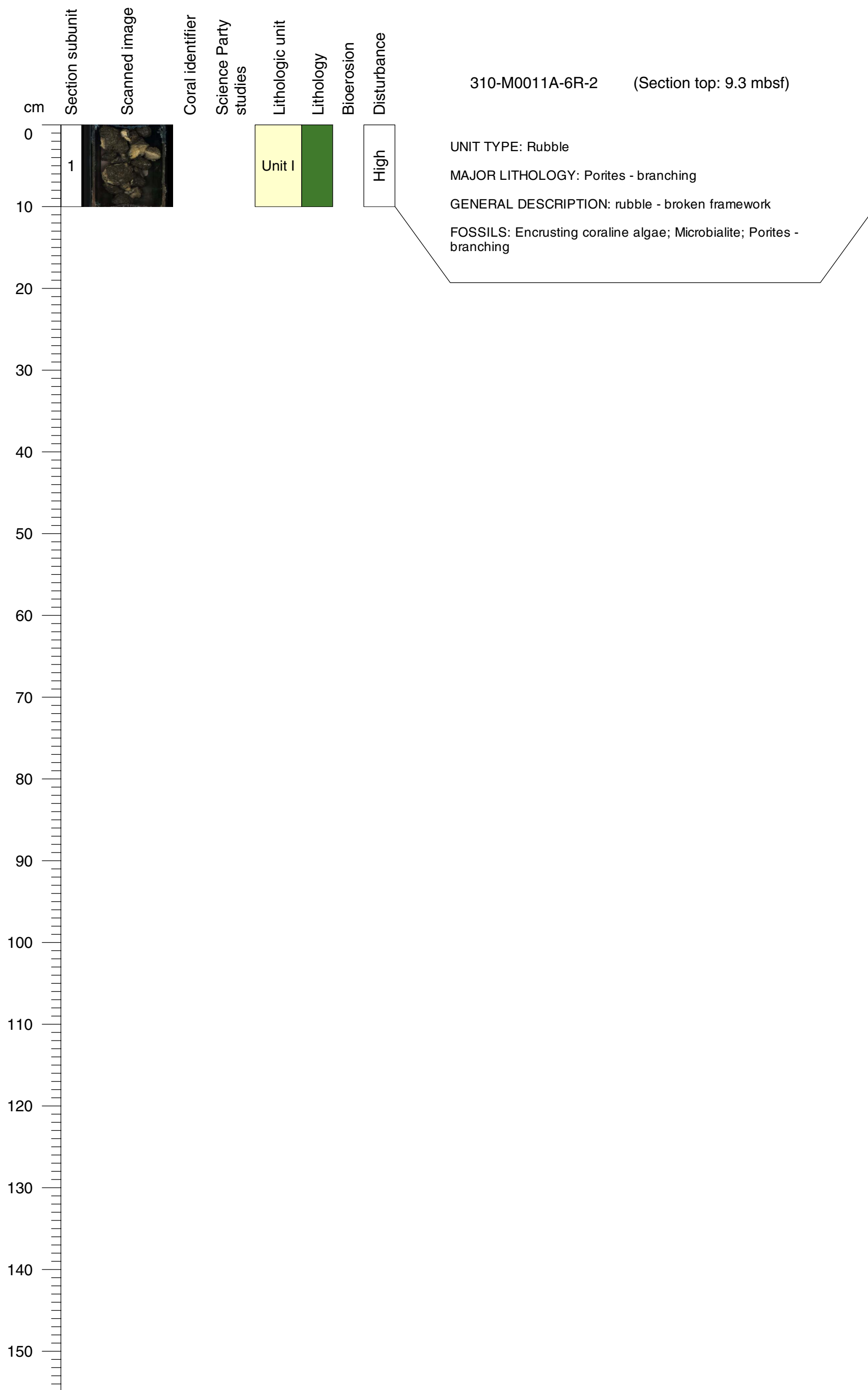


Core Photo

310-M0011A-6R-1 (Section top: 8.7 mbsf)

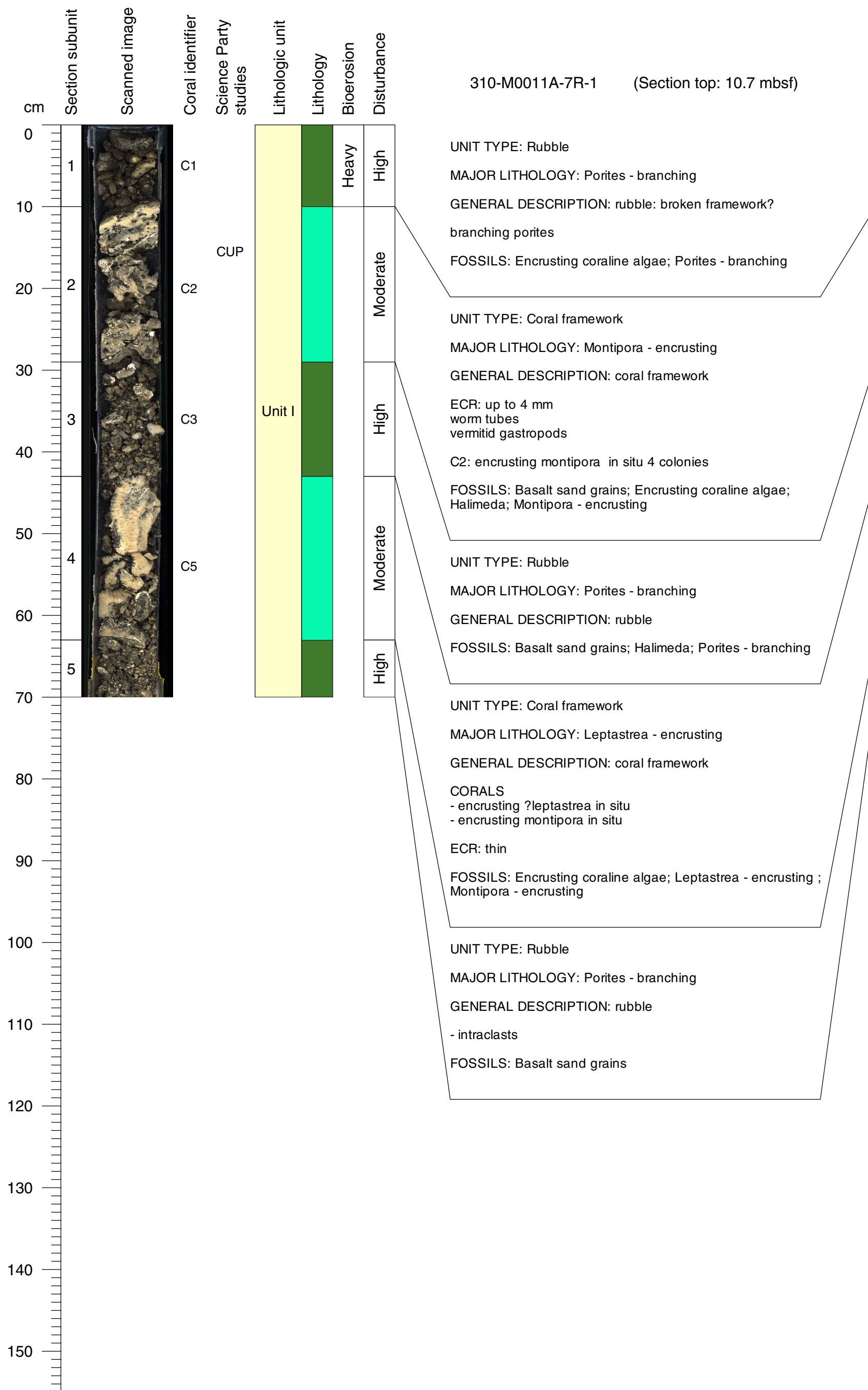


**Core Photo**

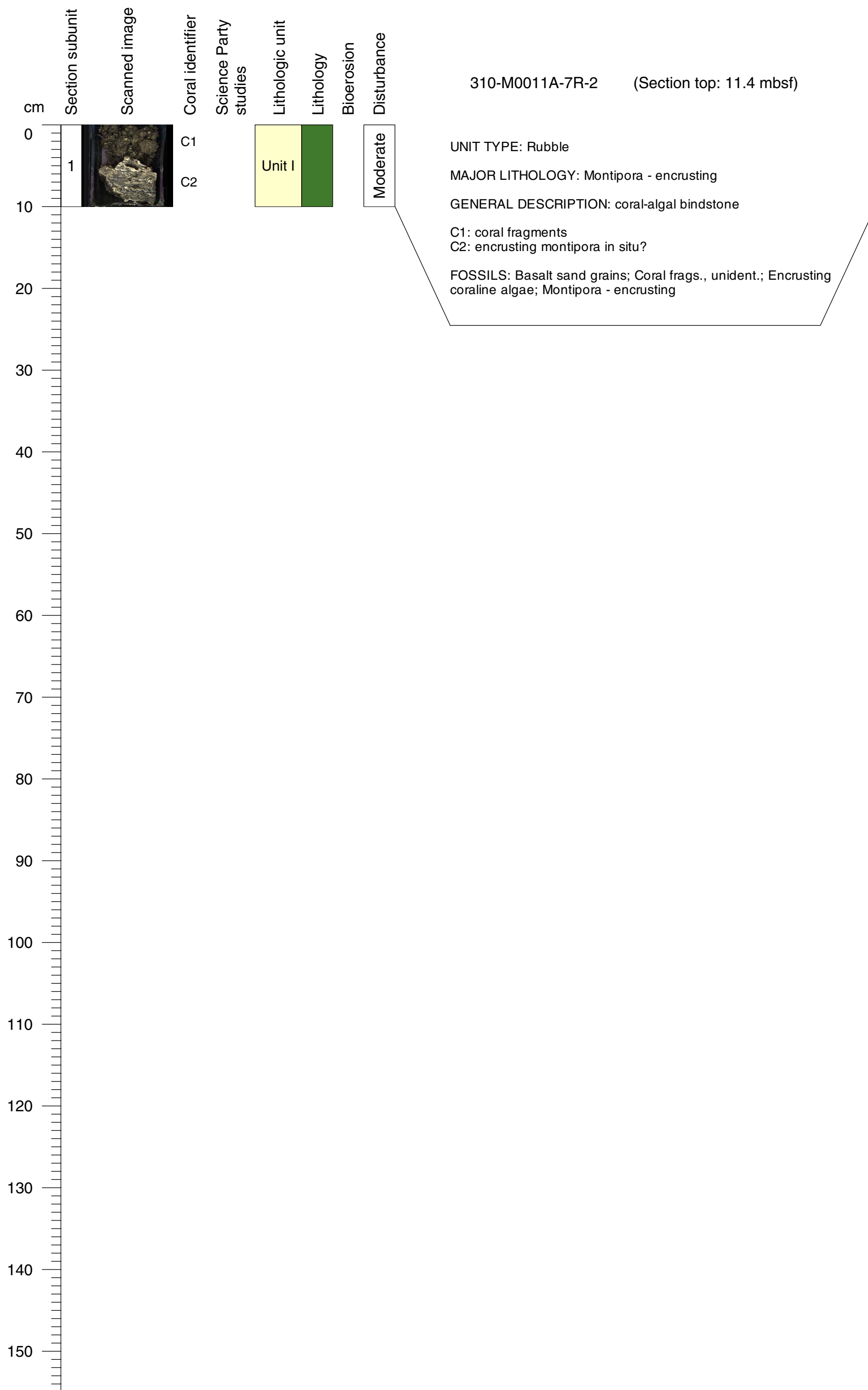




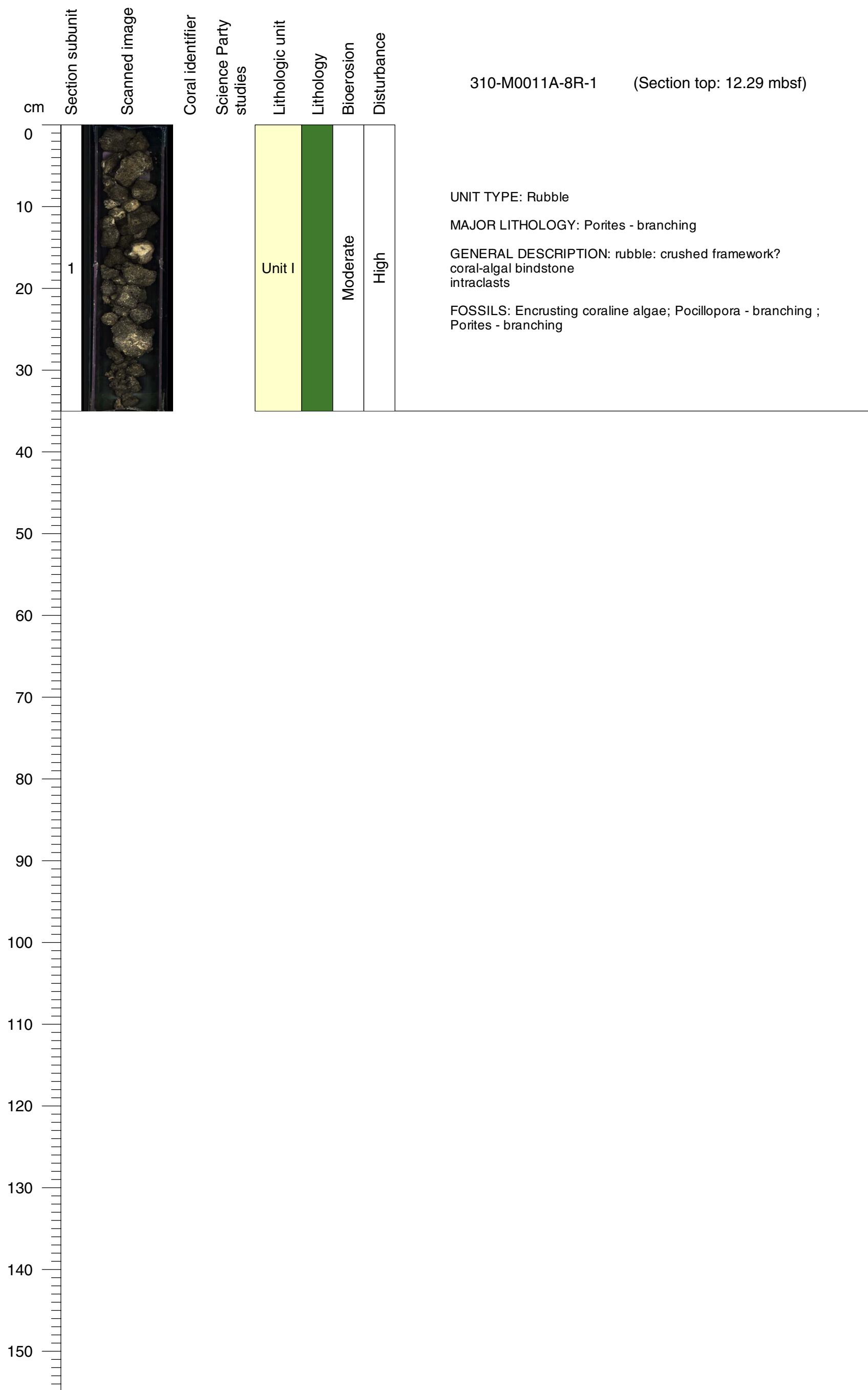
Core Photo



**Core Photo**

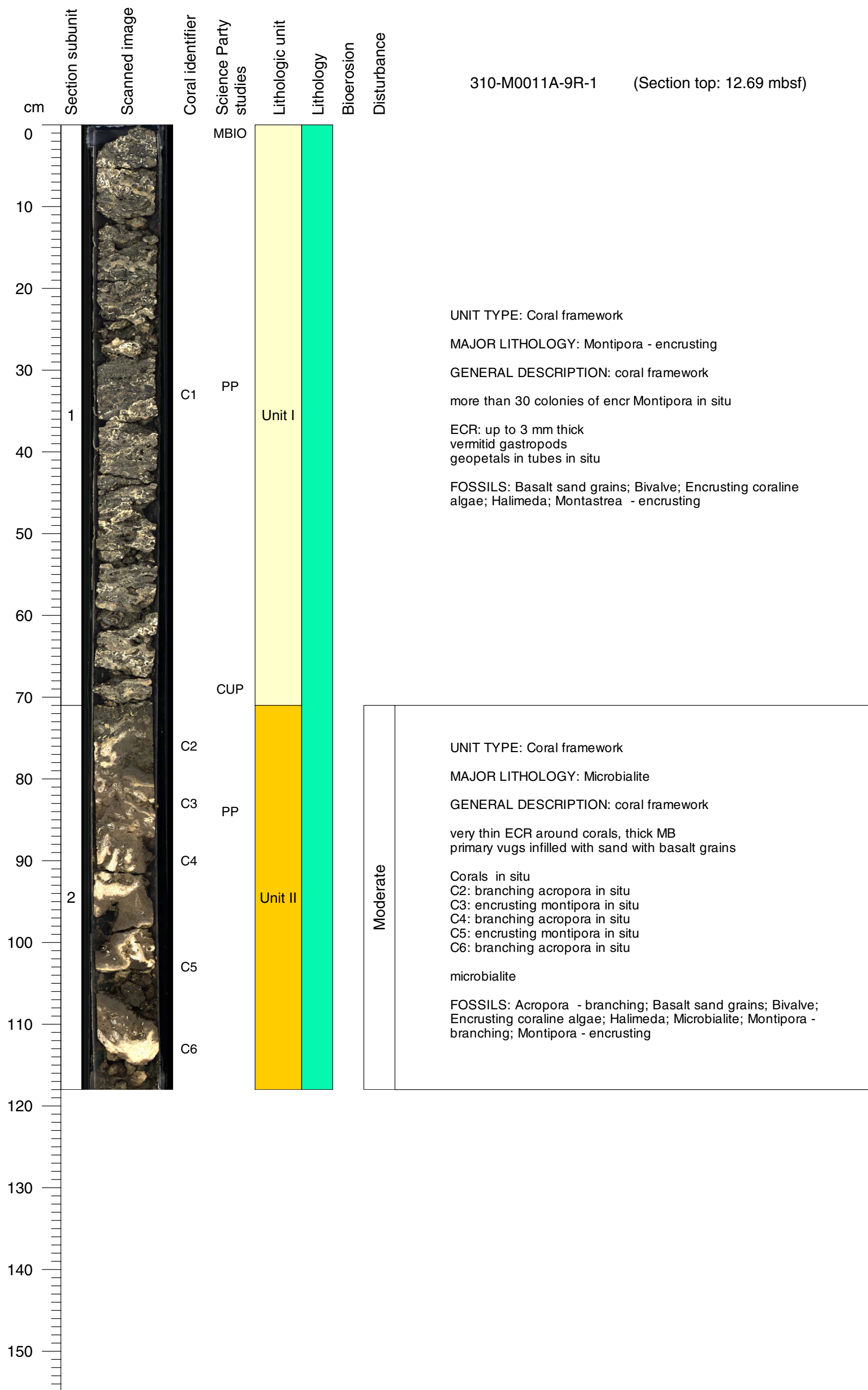


**Core Photo**

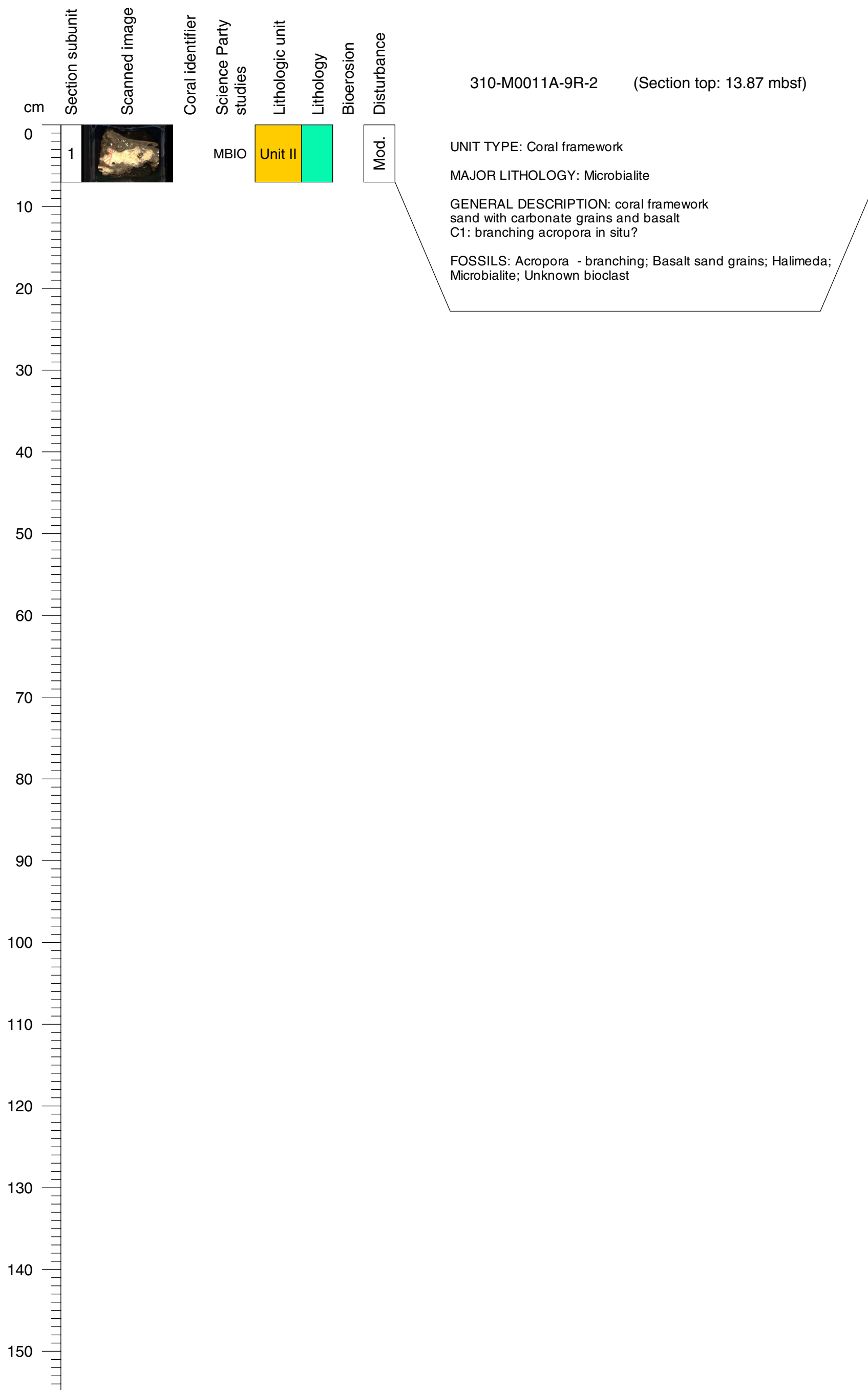


Core Photo

310-M0011A-9R-1 (Section top: 12.69 mbsf)

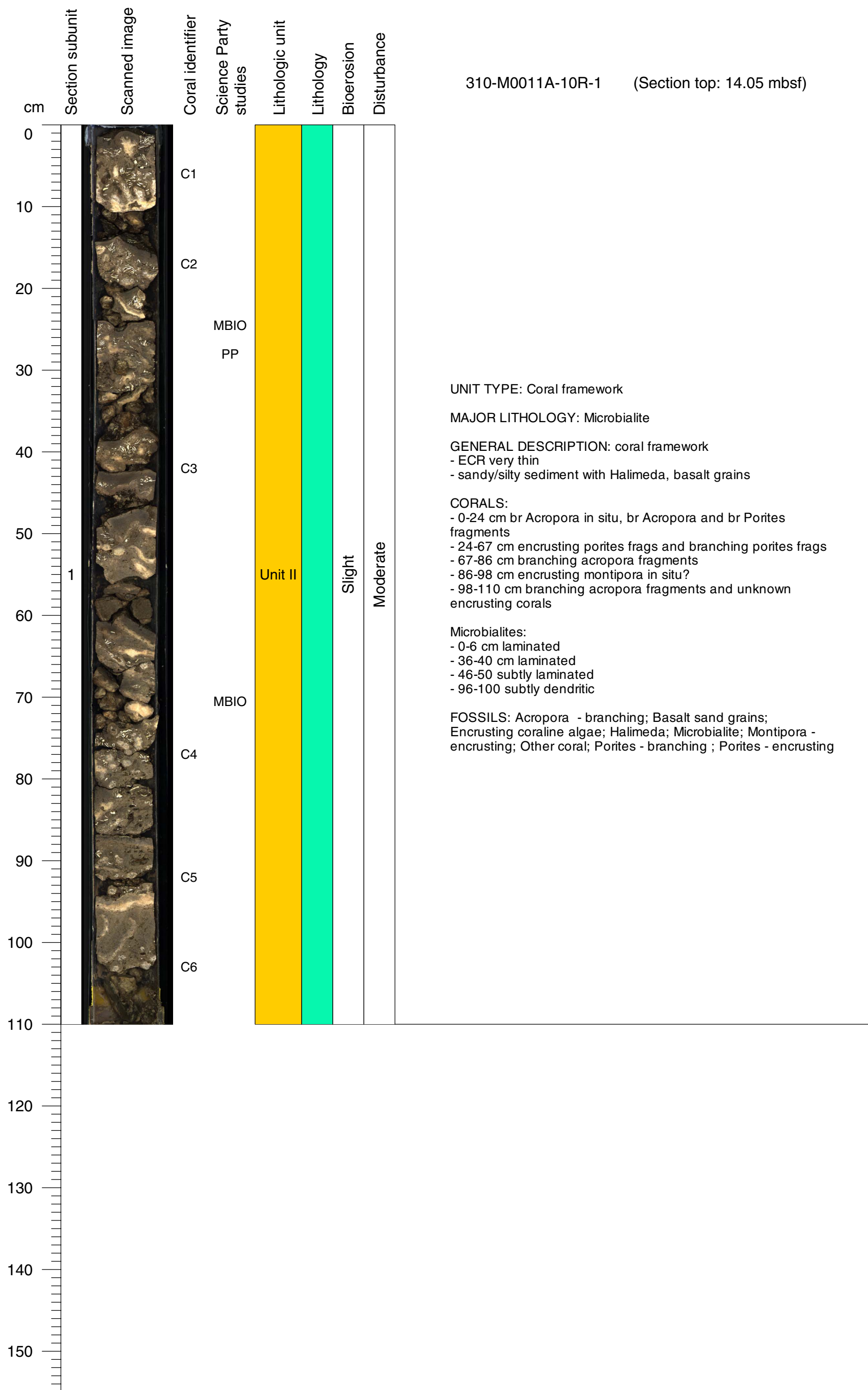


**Core Photo**

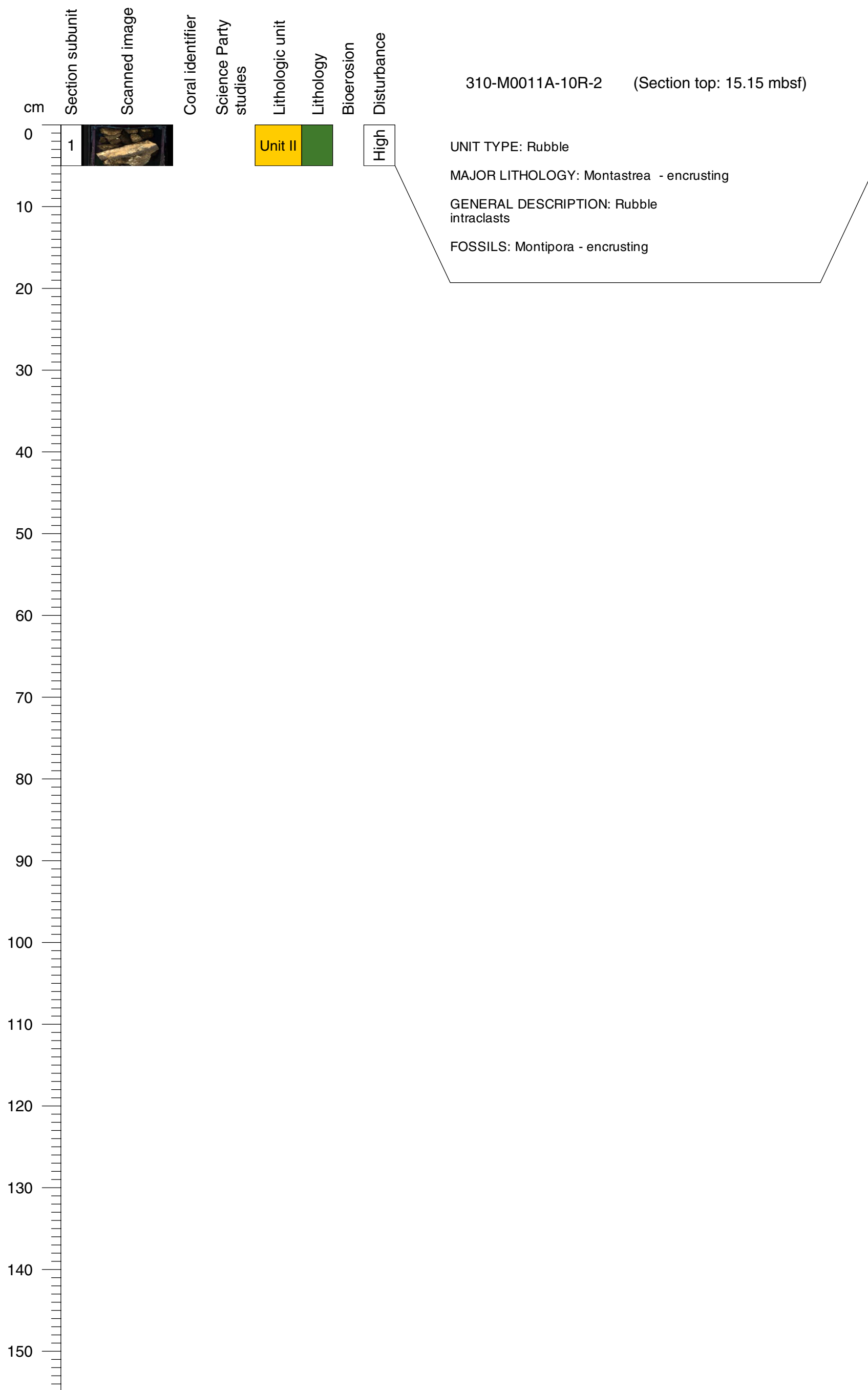


Core Photo

310-M0011A-10R-1 (Section top: 14.05 mbsf)

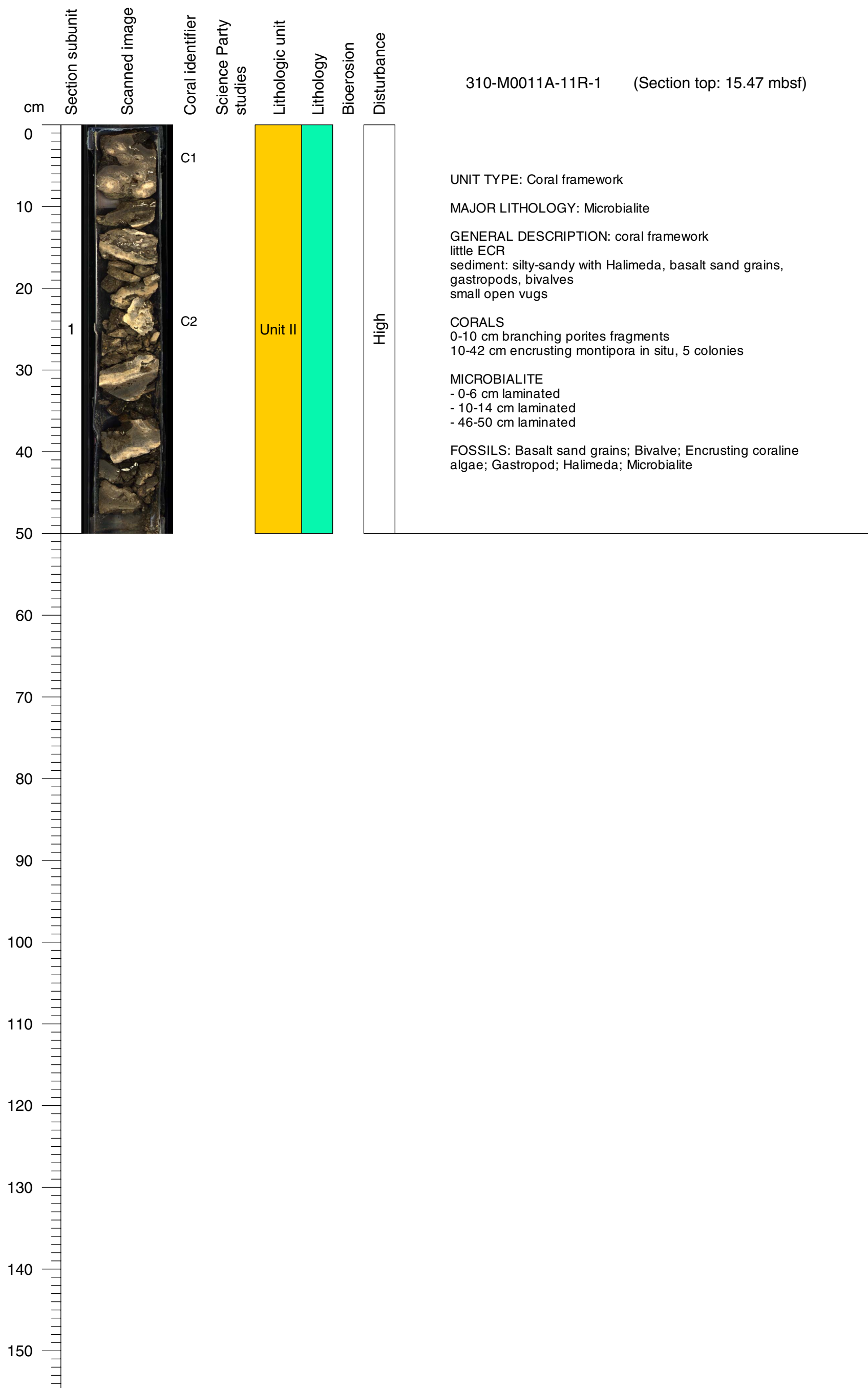


**Core Photo**



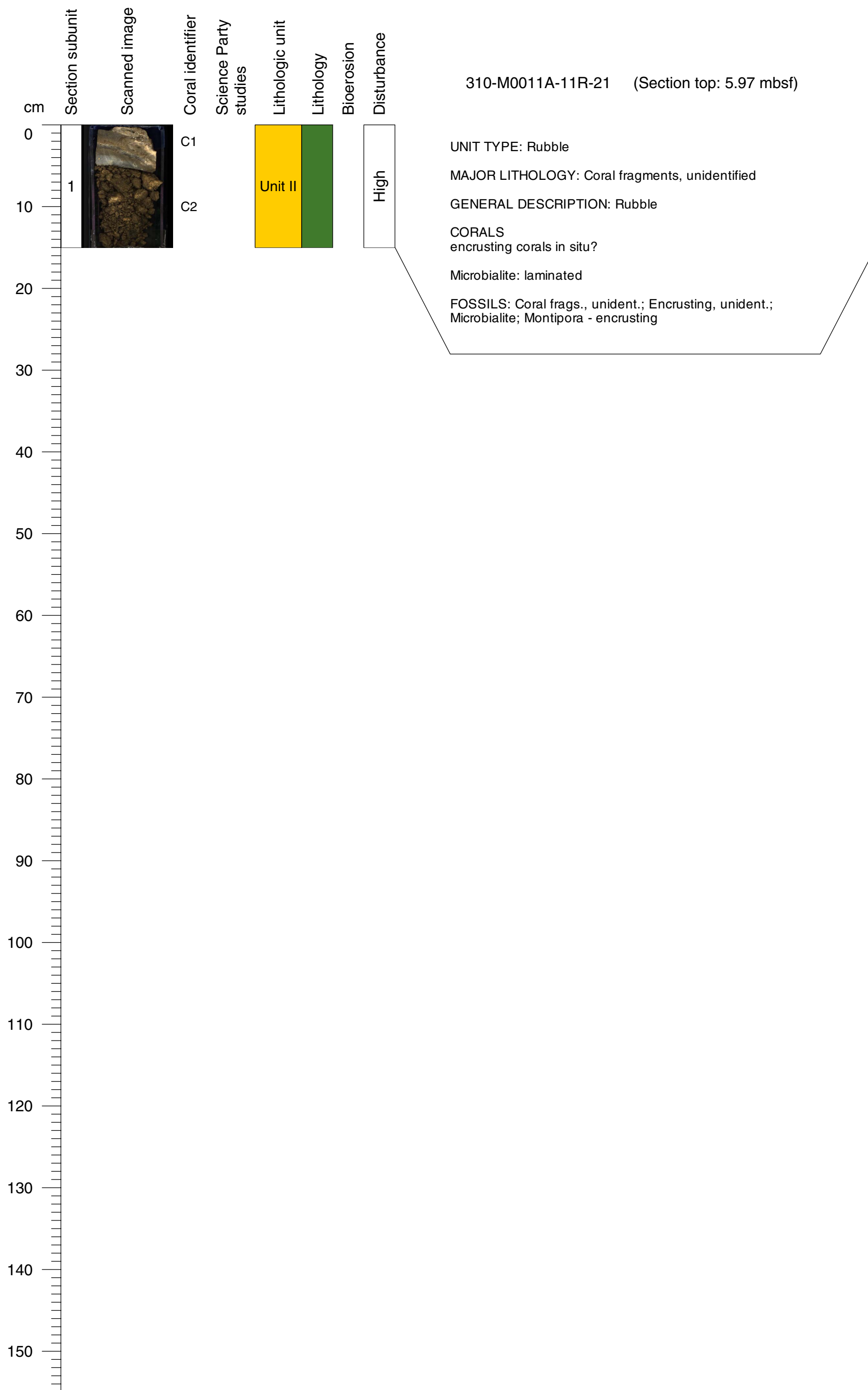
**Core Photo**

310-M0011A-11R-1 (Section top: 15.47 mbsf)



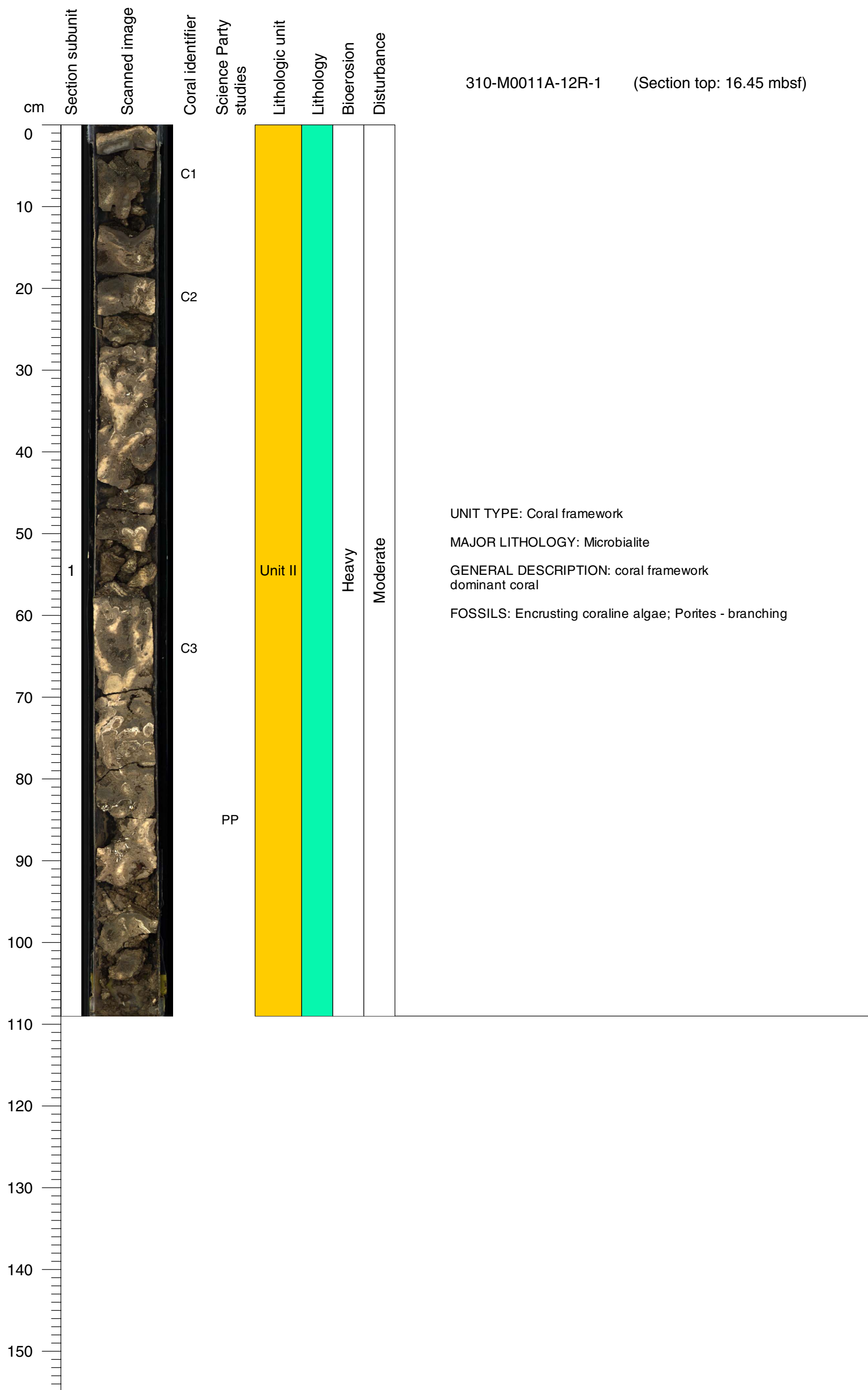


**Core Photo**

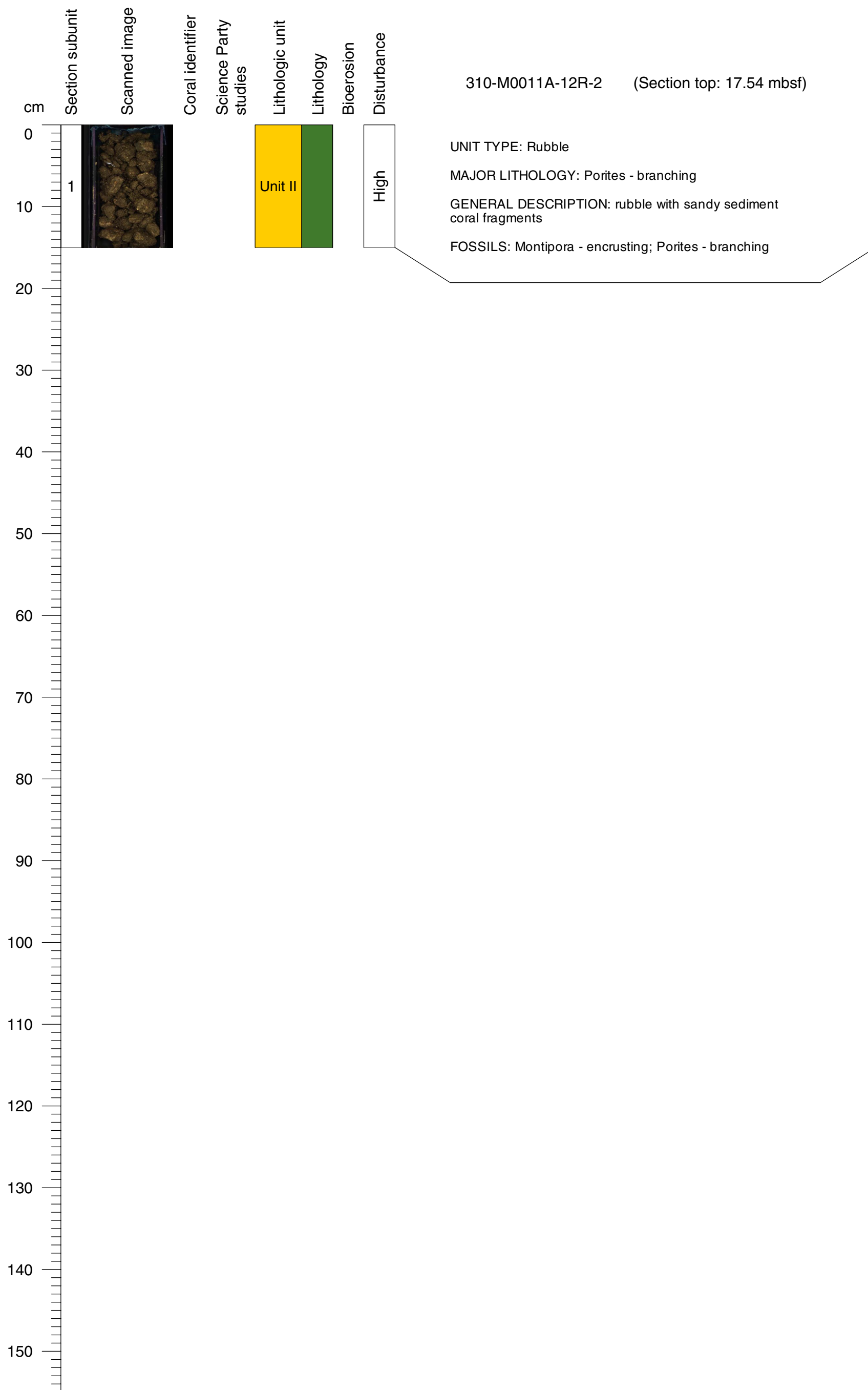


**Core Photo**

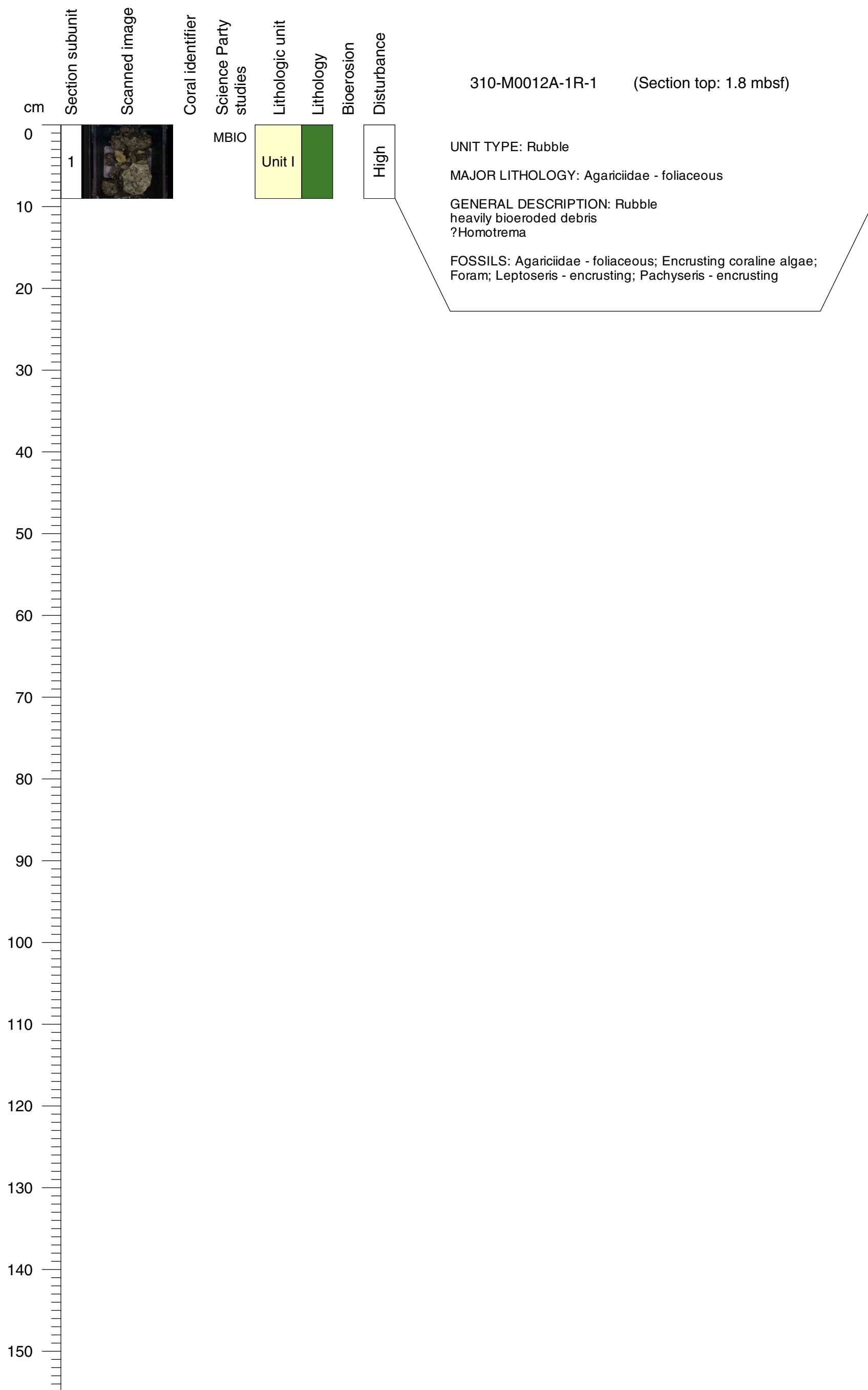
310-M0011A-12R-1 (Section top: 16.45 mbsf)



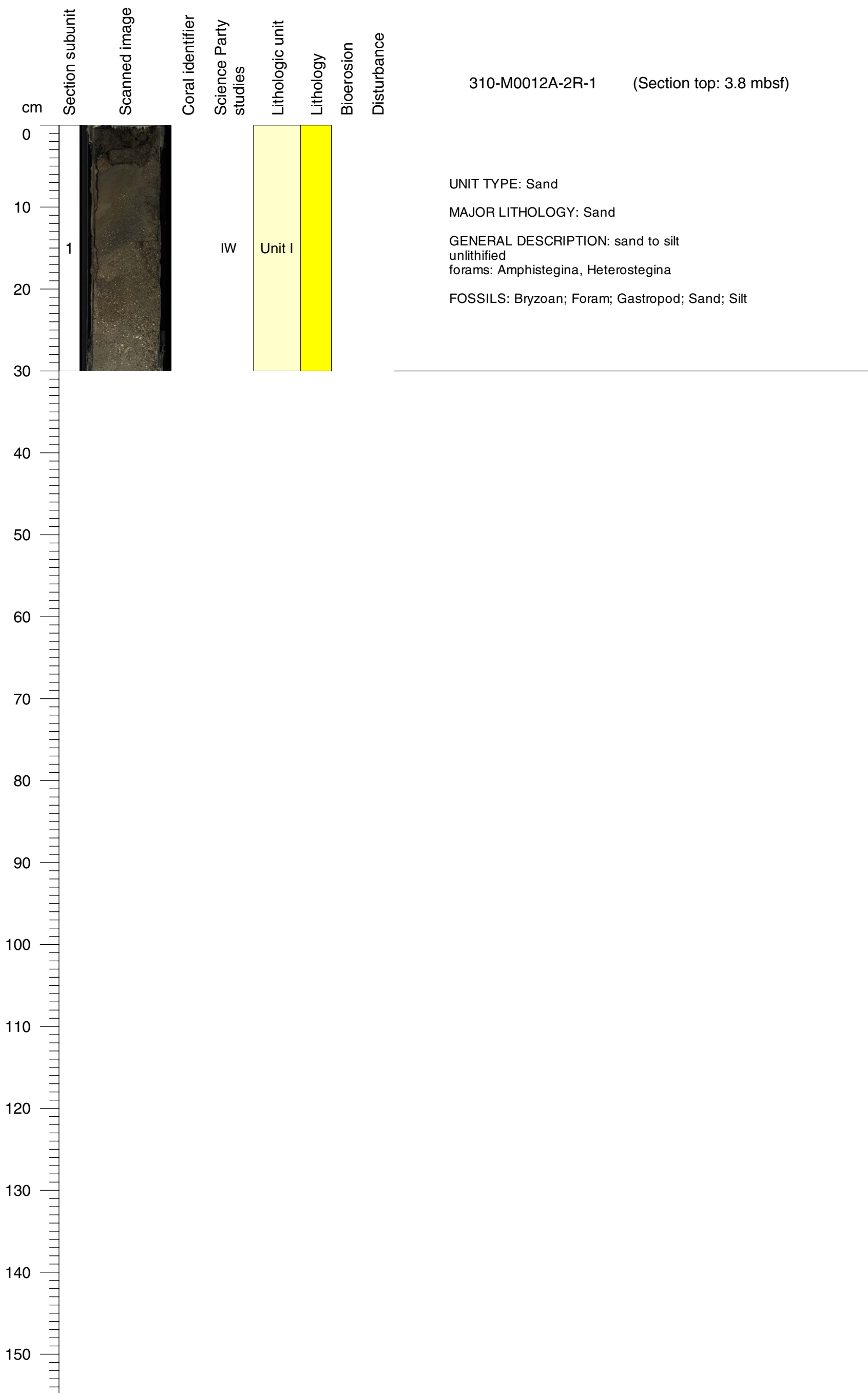
**Core Photo**



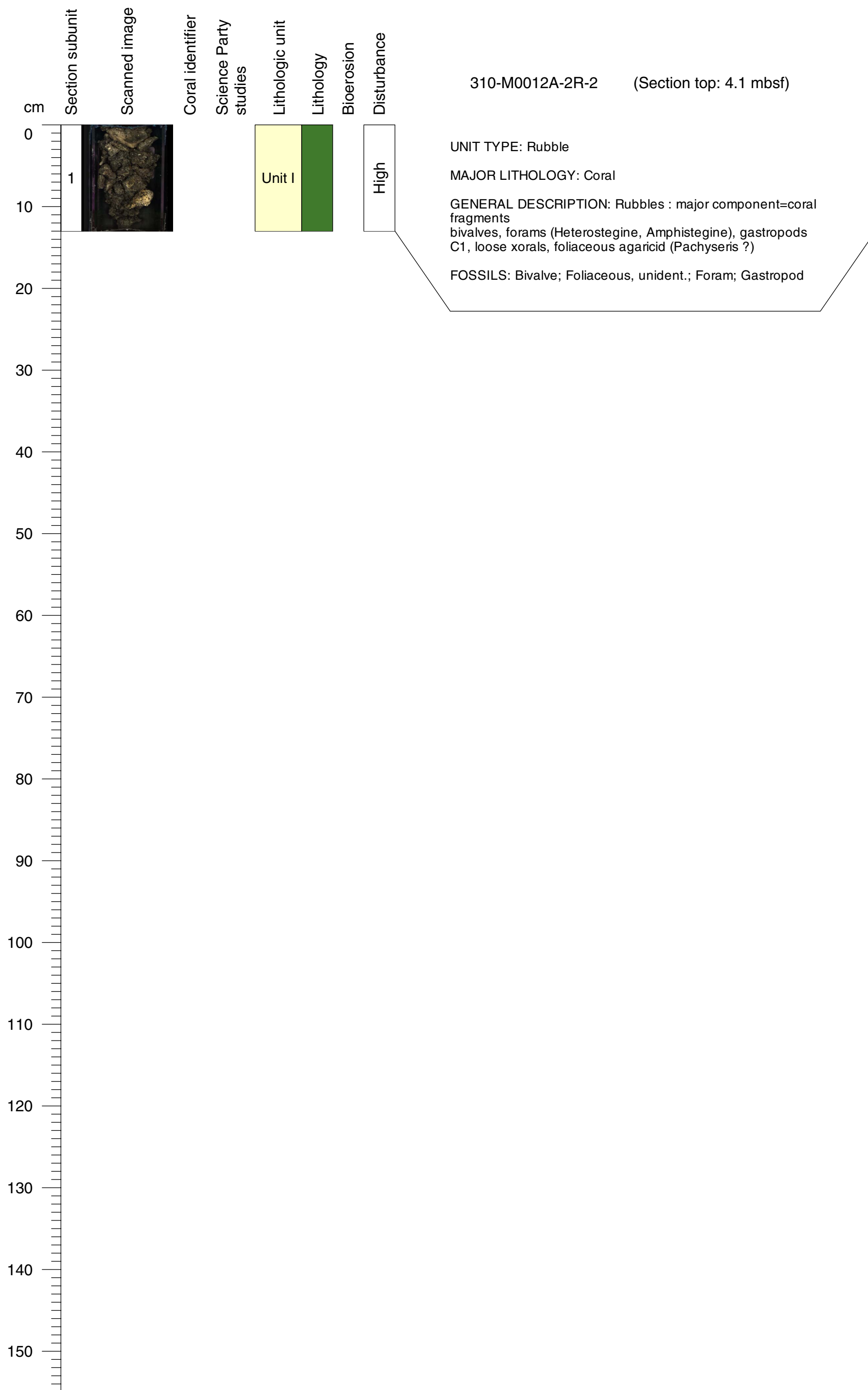
**Core Photo**



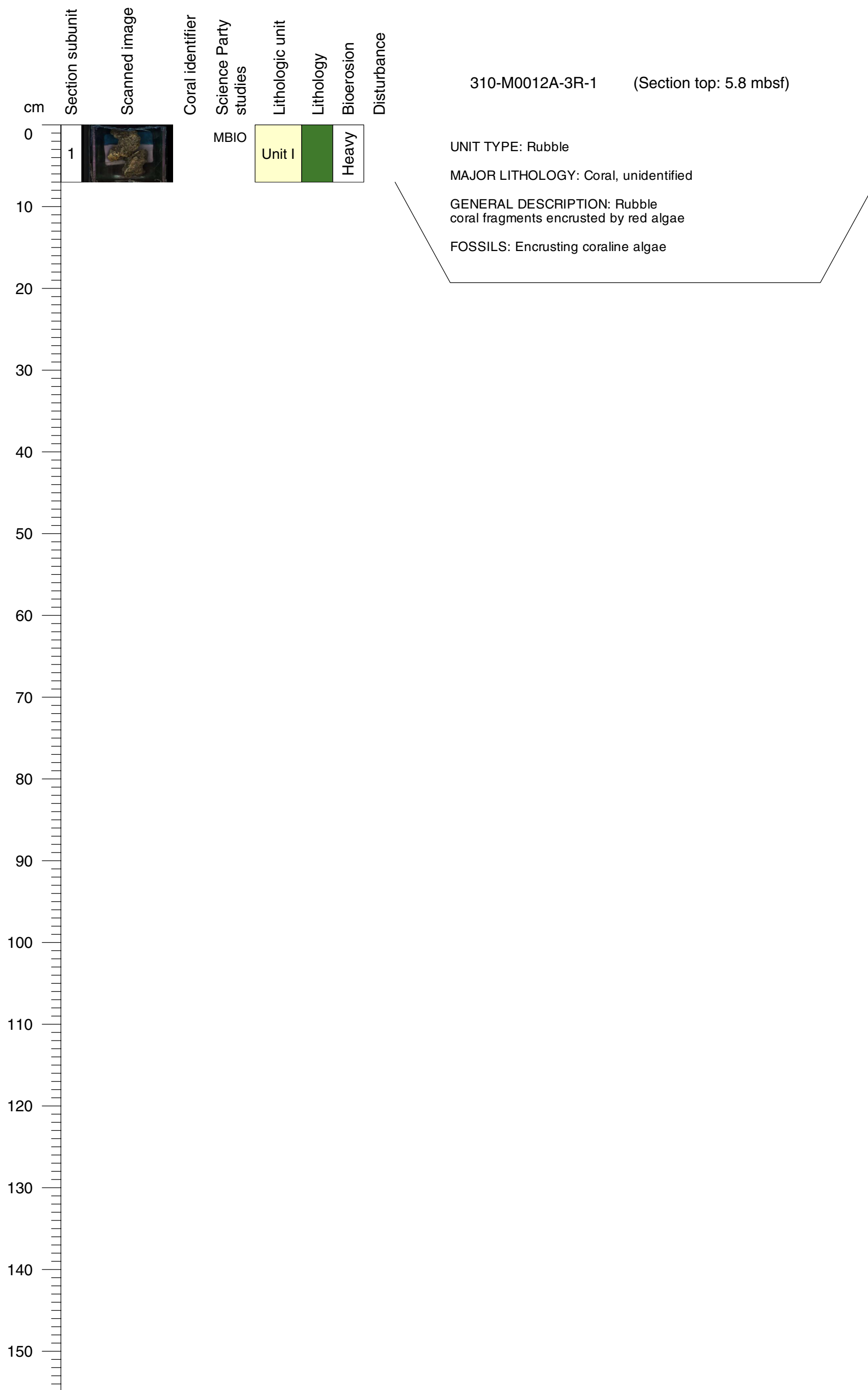
**Core Photo**



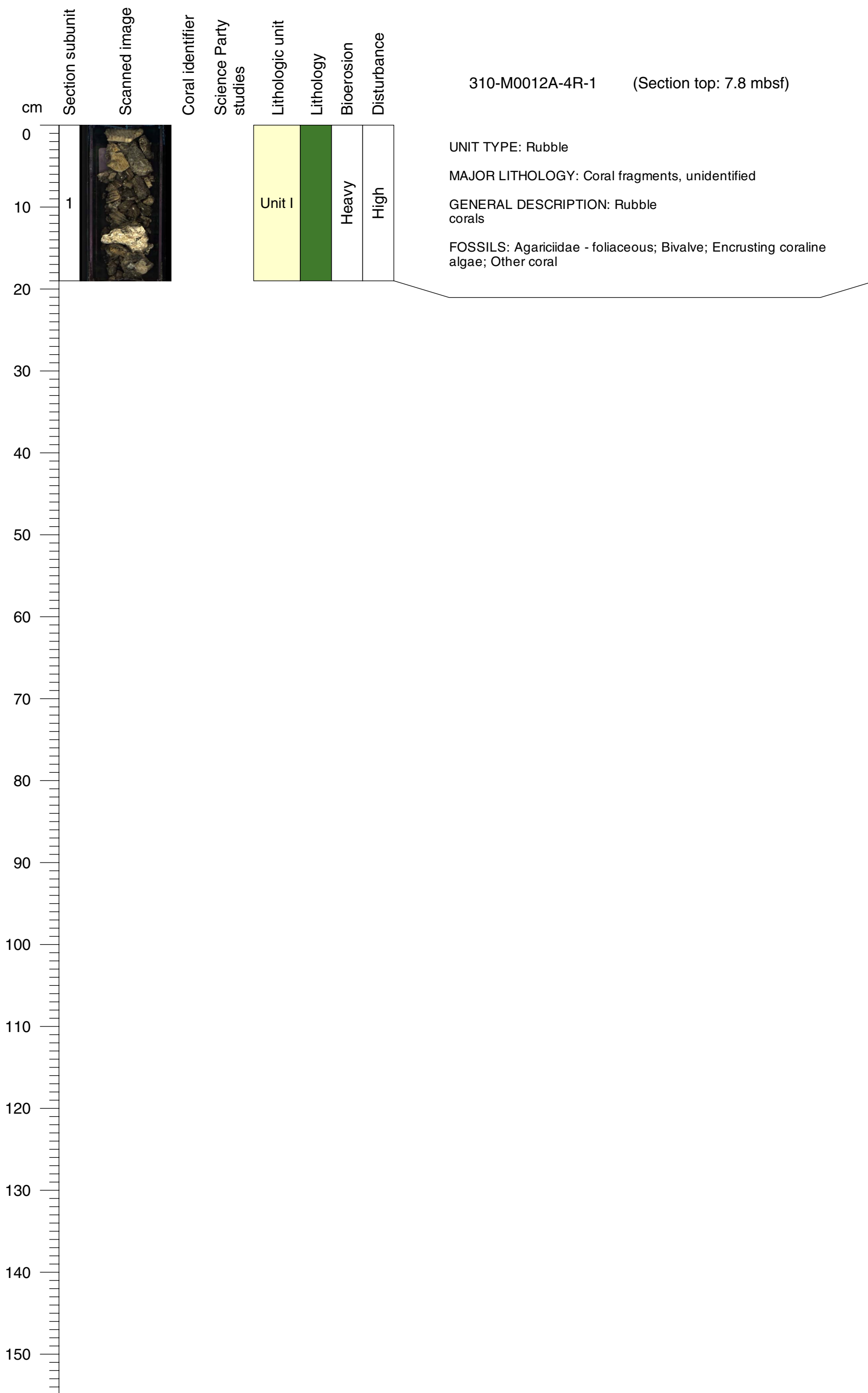
Core Photo



**Core Photo**

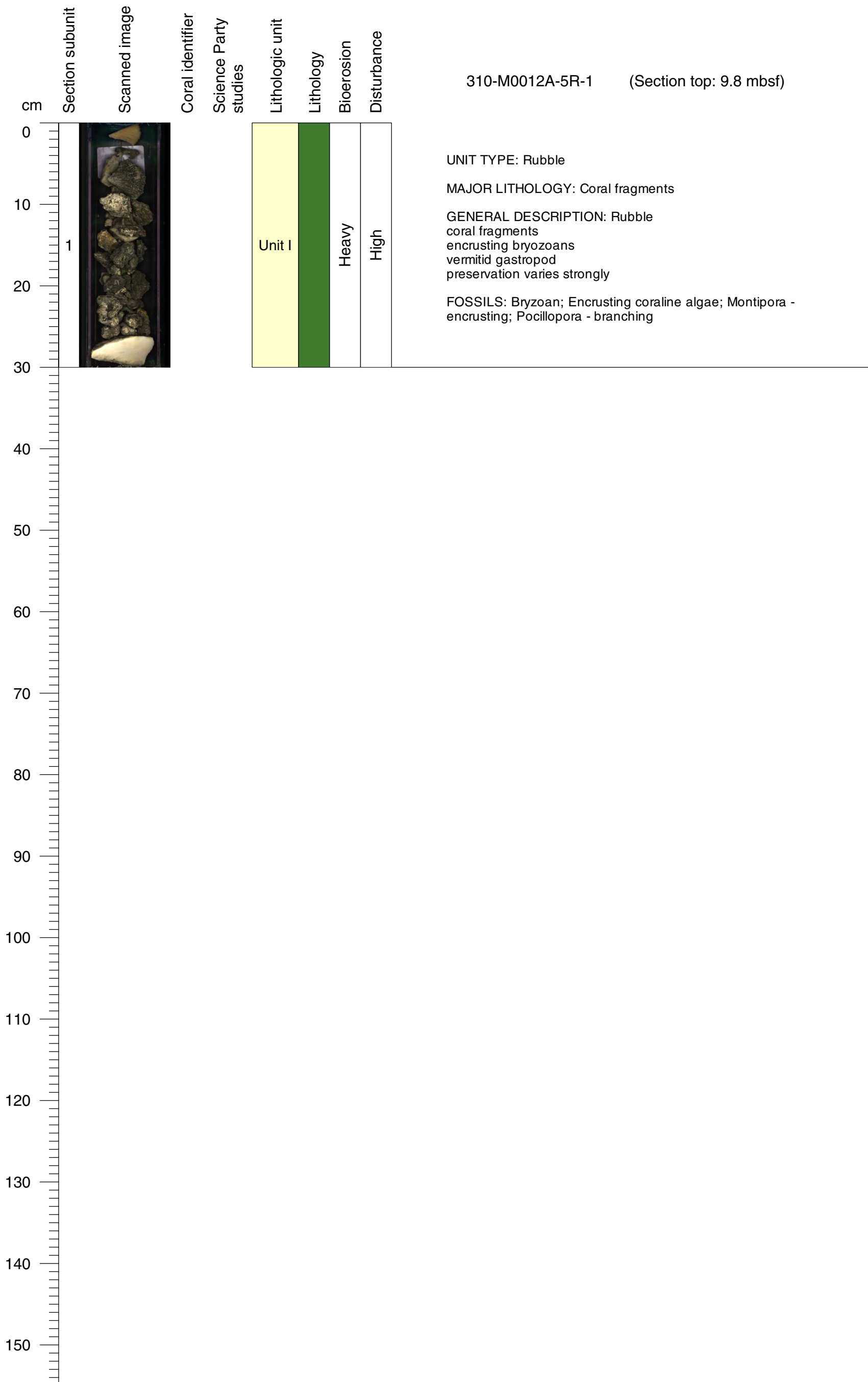


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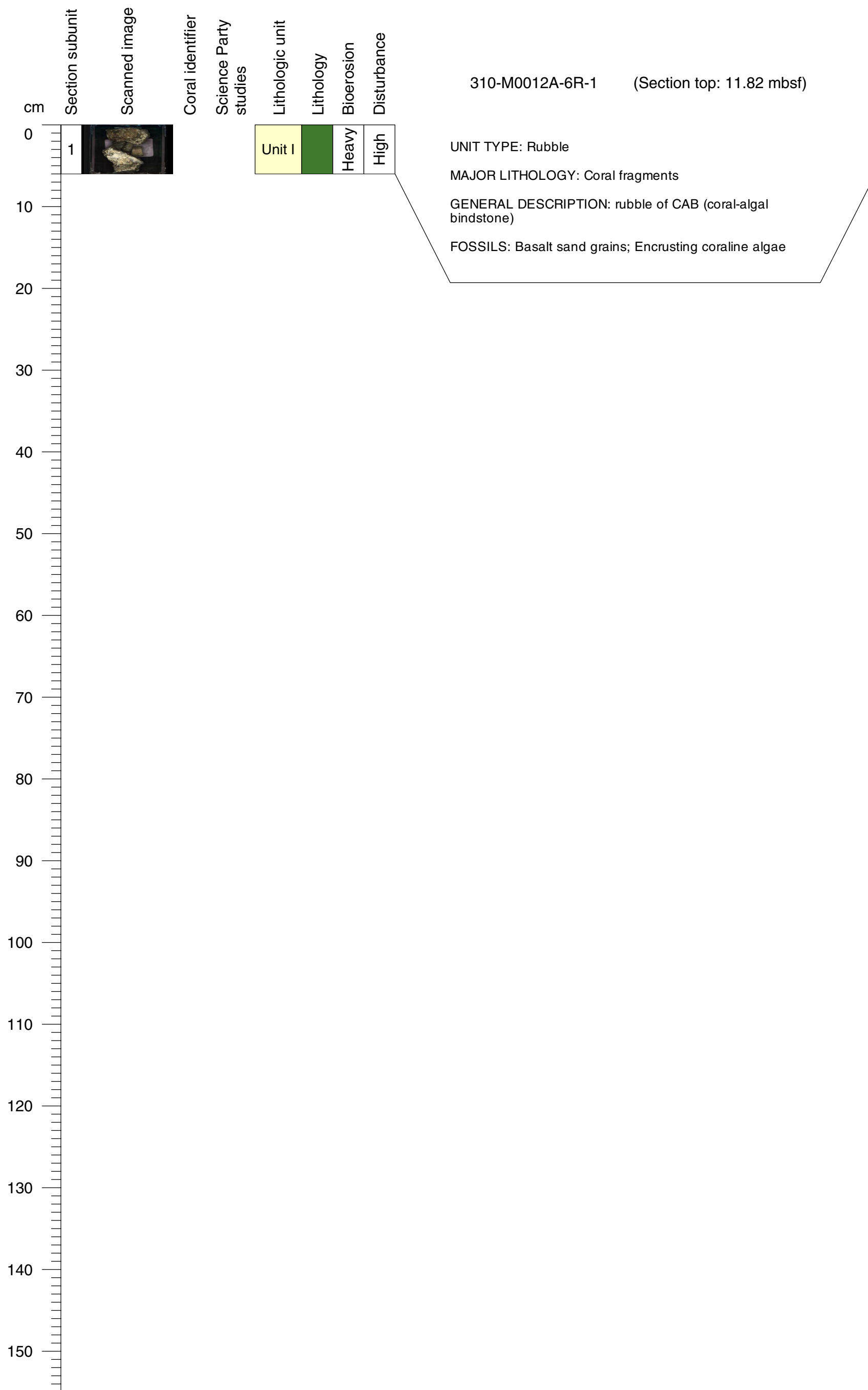




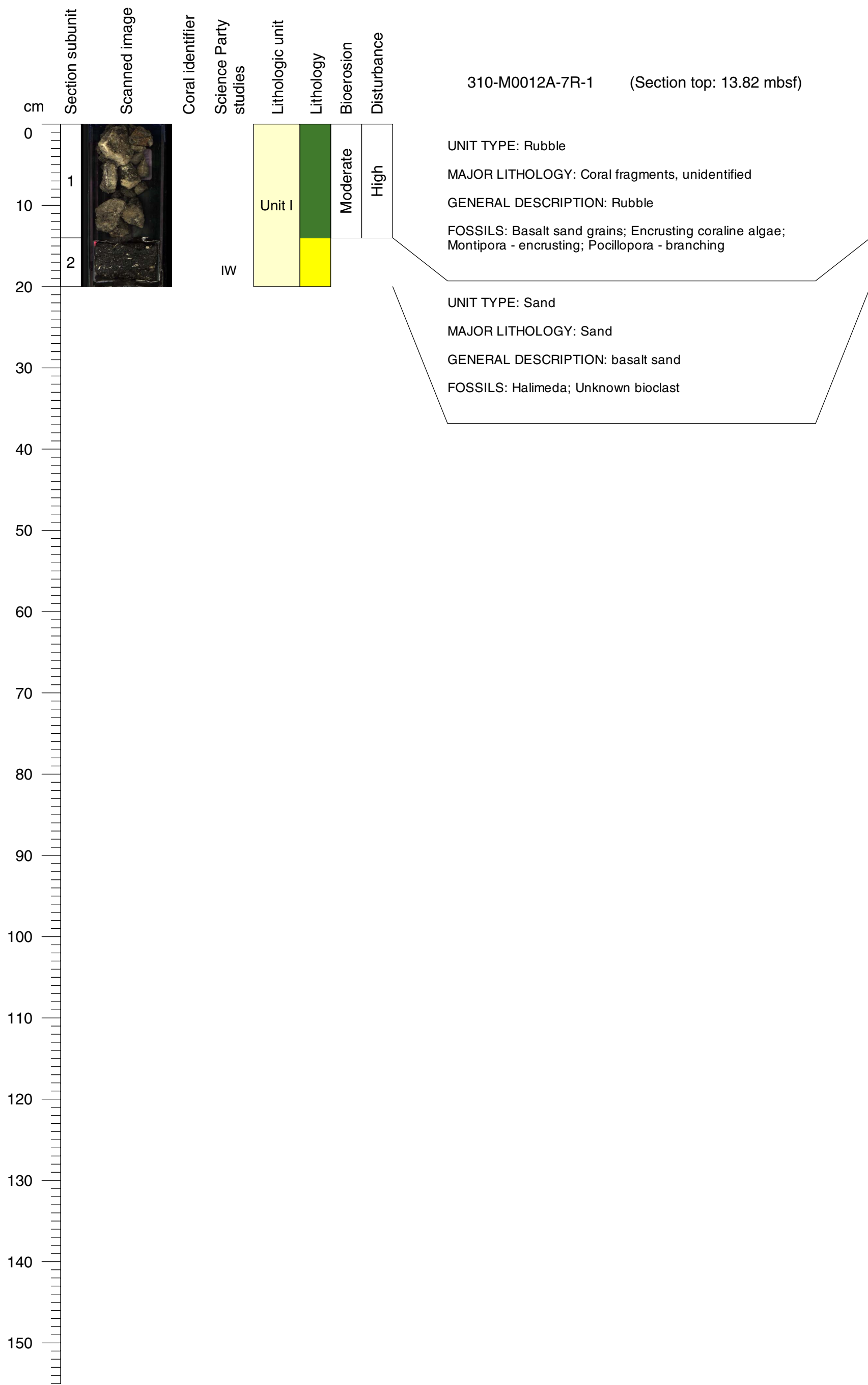
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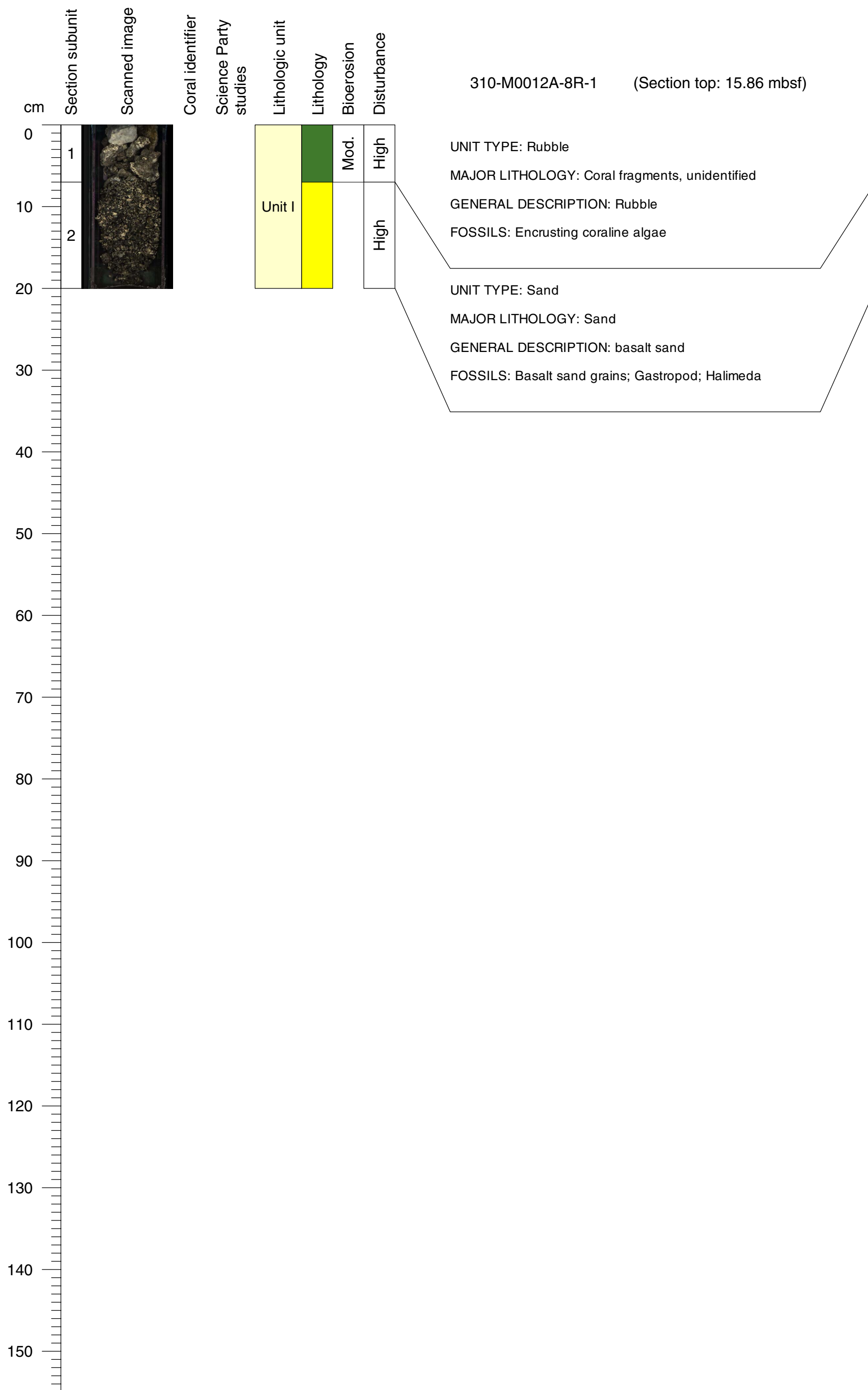
**Core Photo**



Core Photo

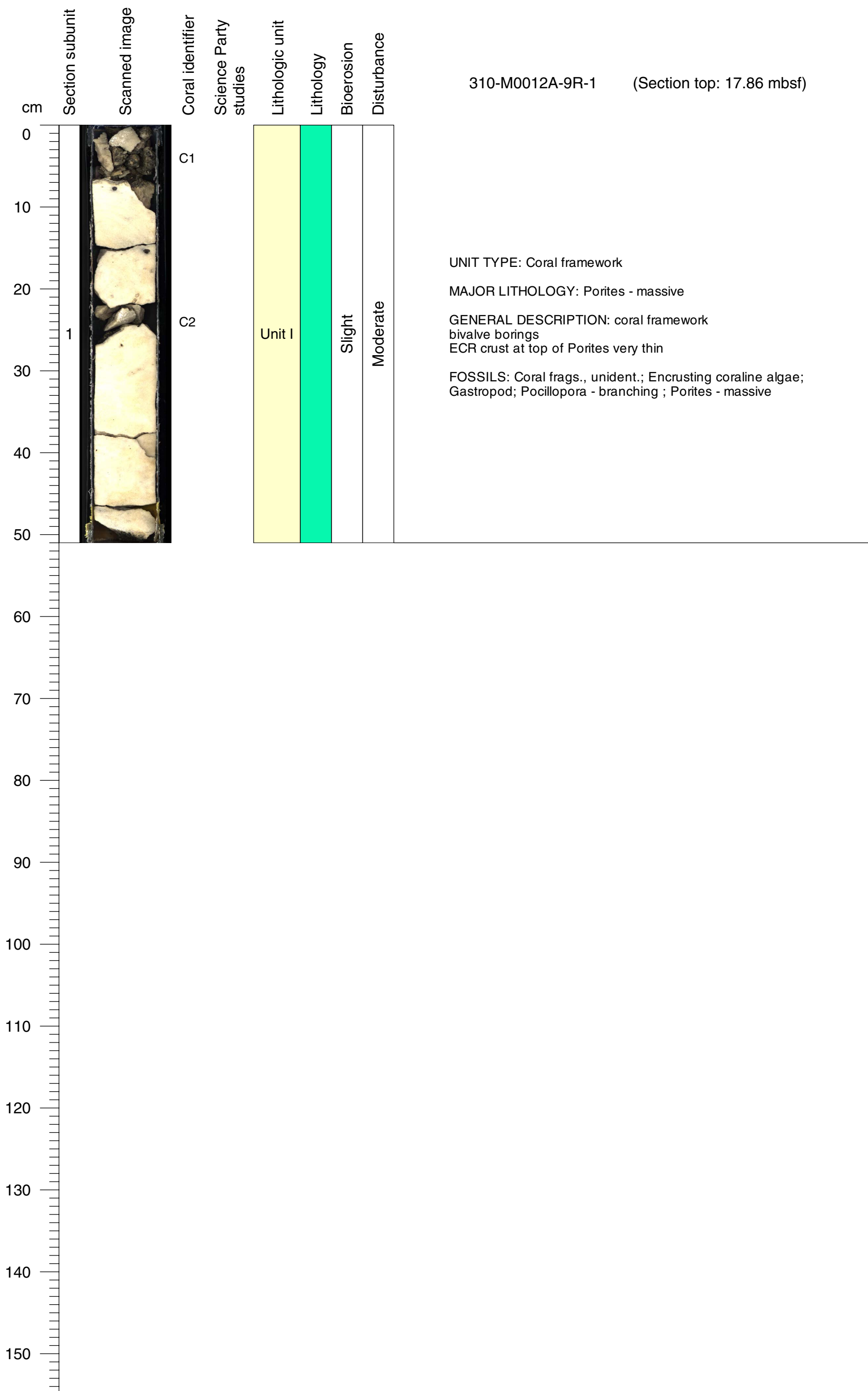


**Core Photo**

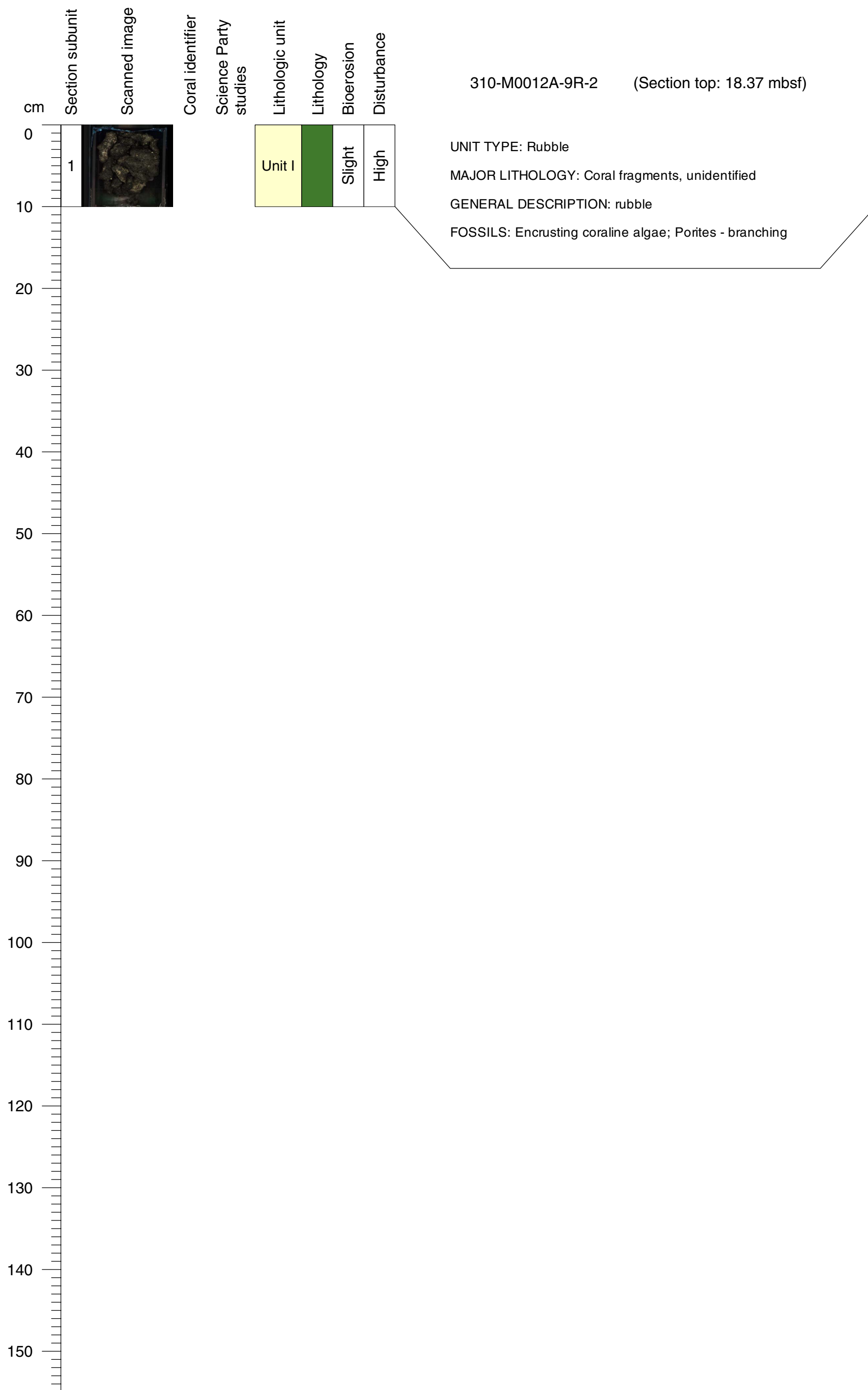


**Core Photo**

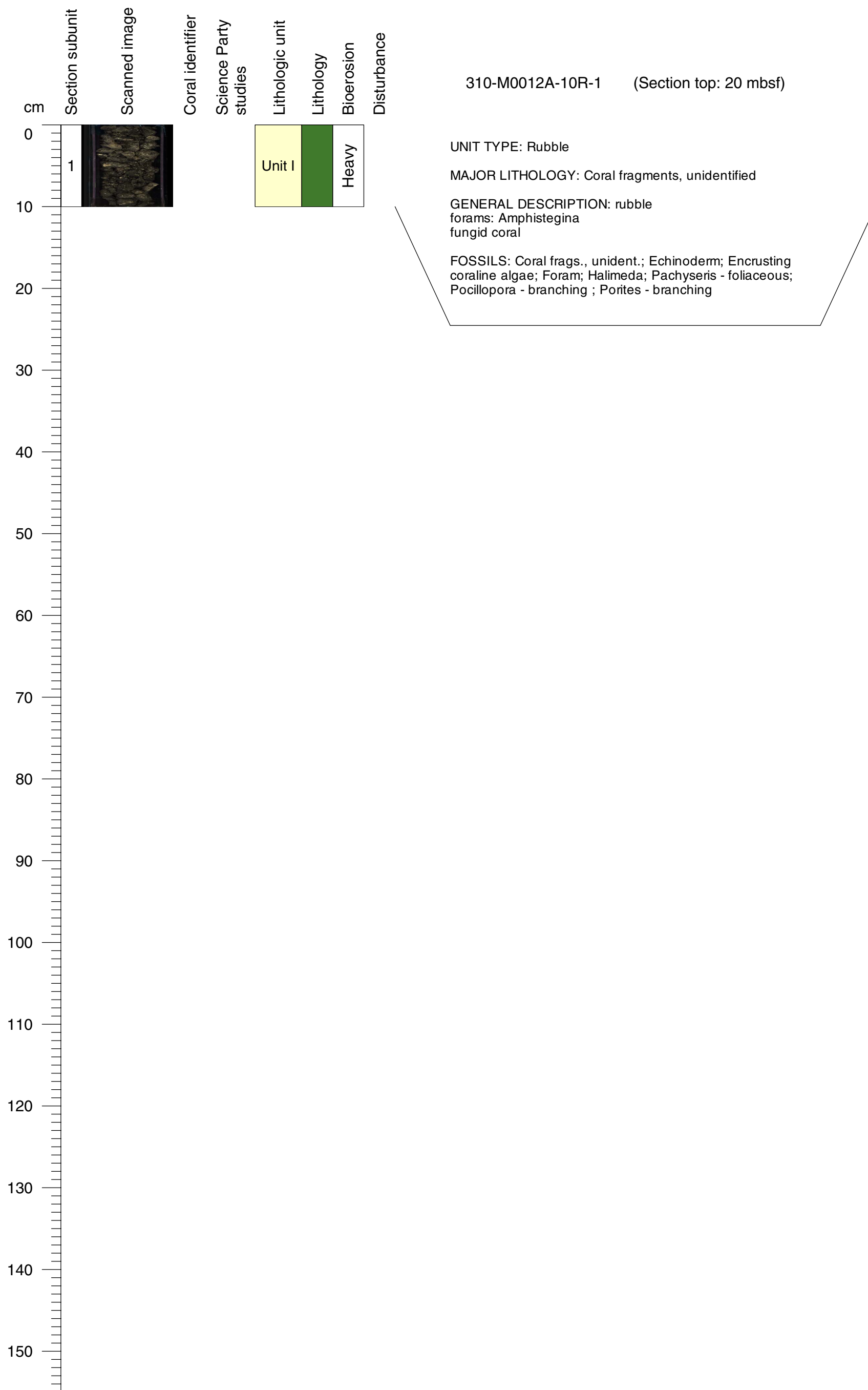
310-M0012A-9R-1 (Section top: 17.86 mbsf)



**Core Photo**

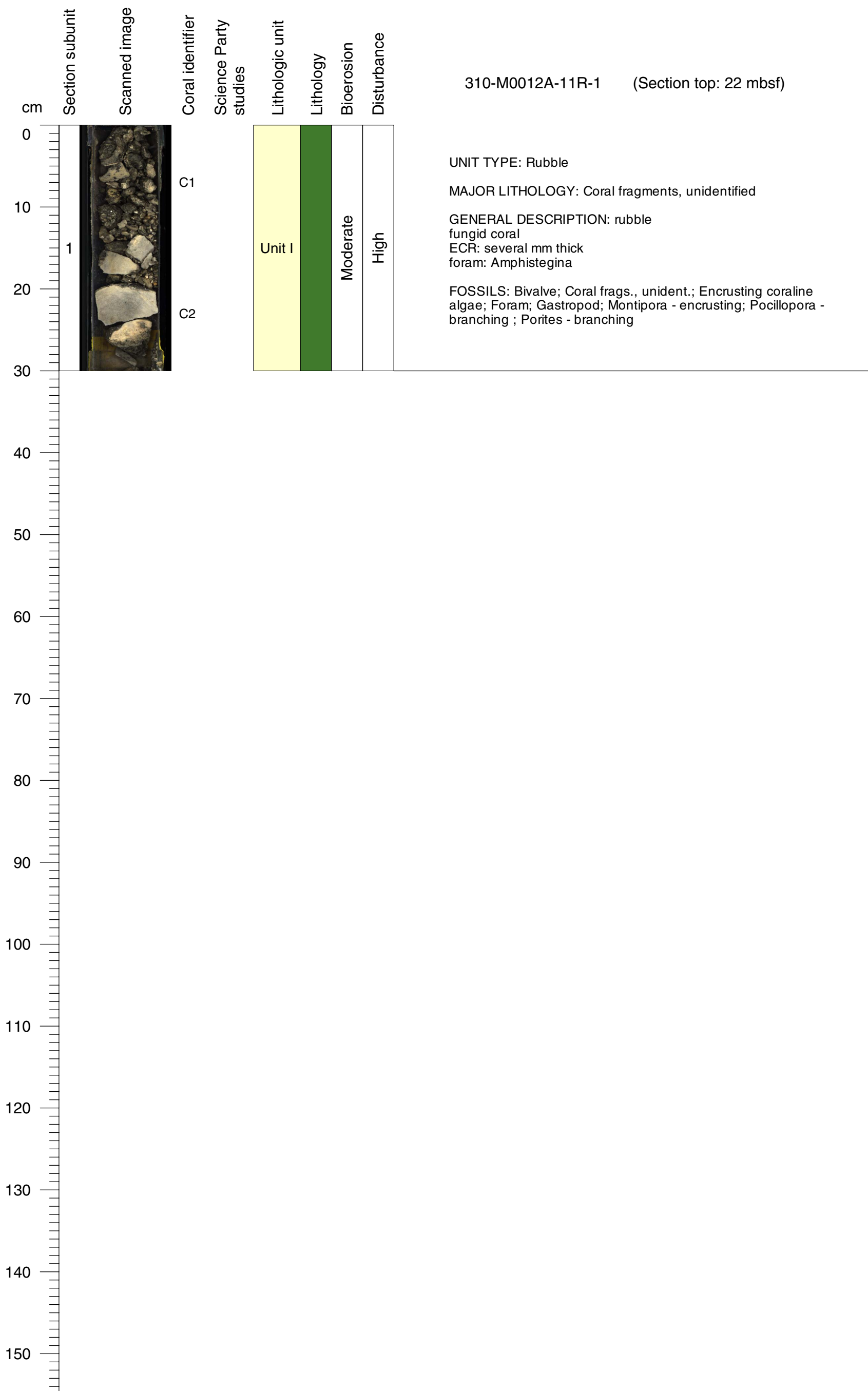


**Core Photo**



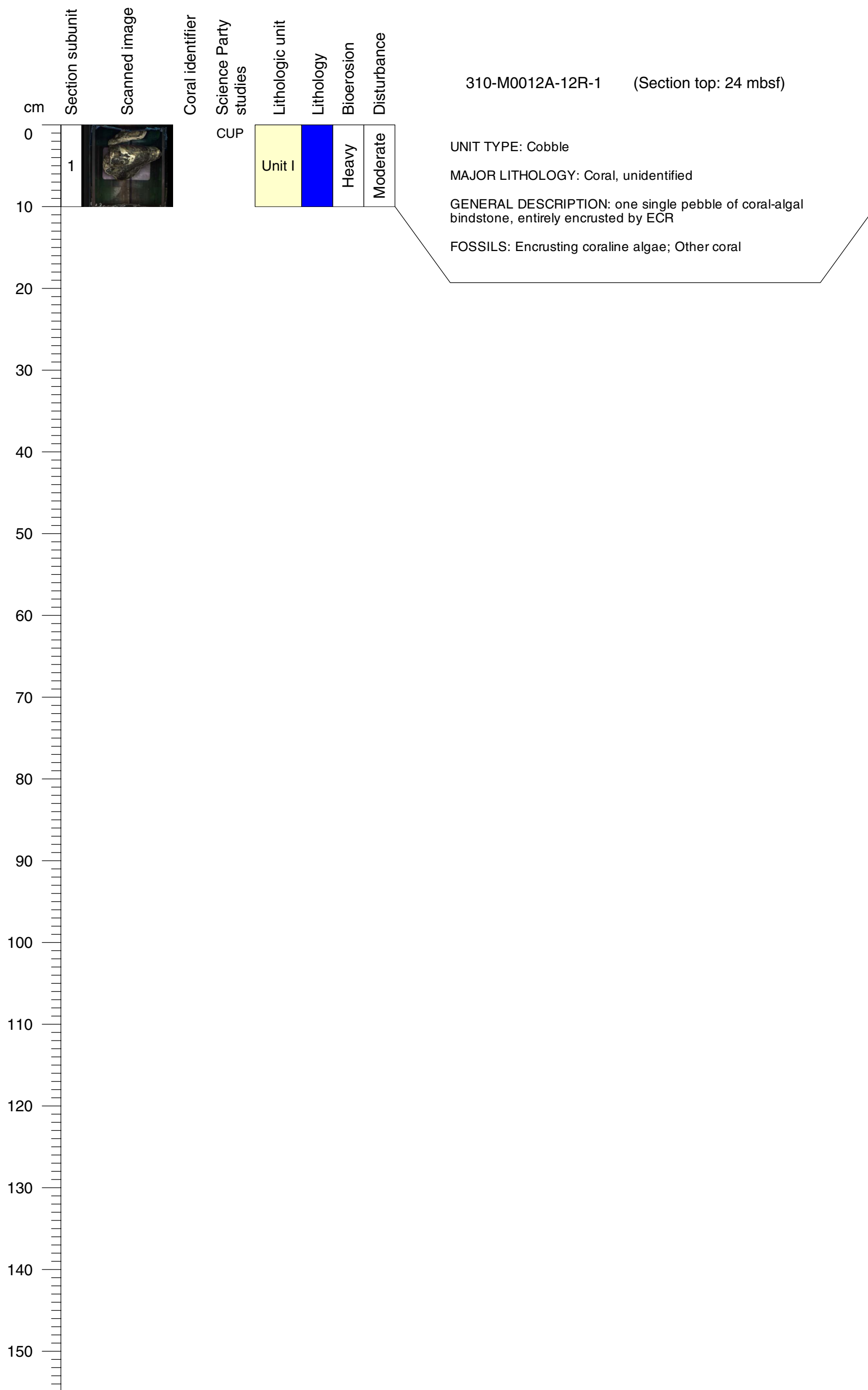
**Core Photo**

310-M0012A-11R-1 (Section top: 22 mbsf)



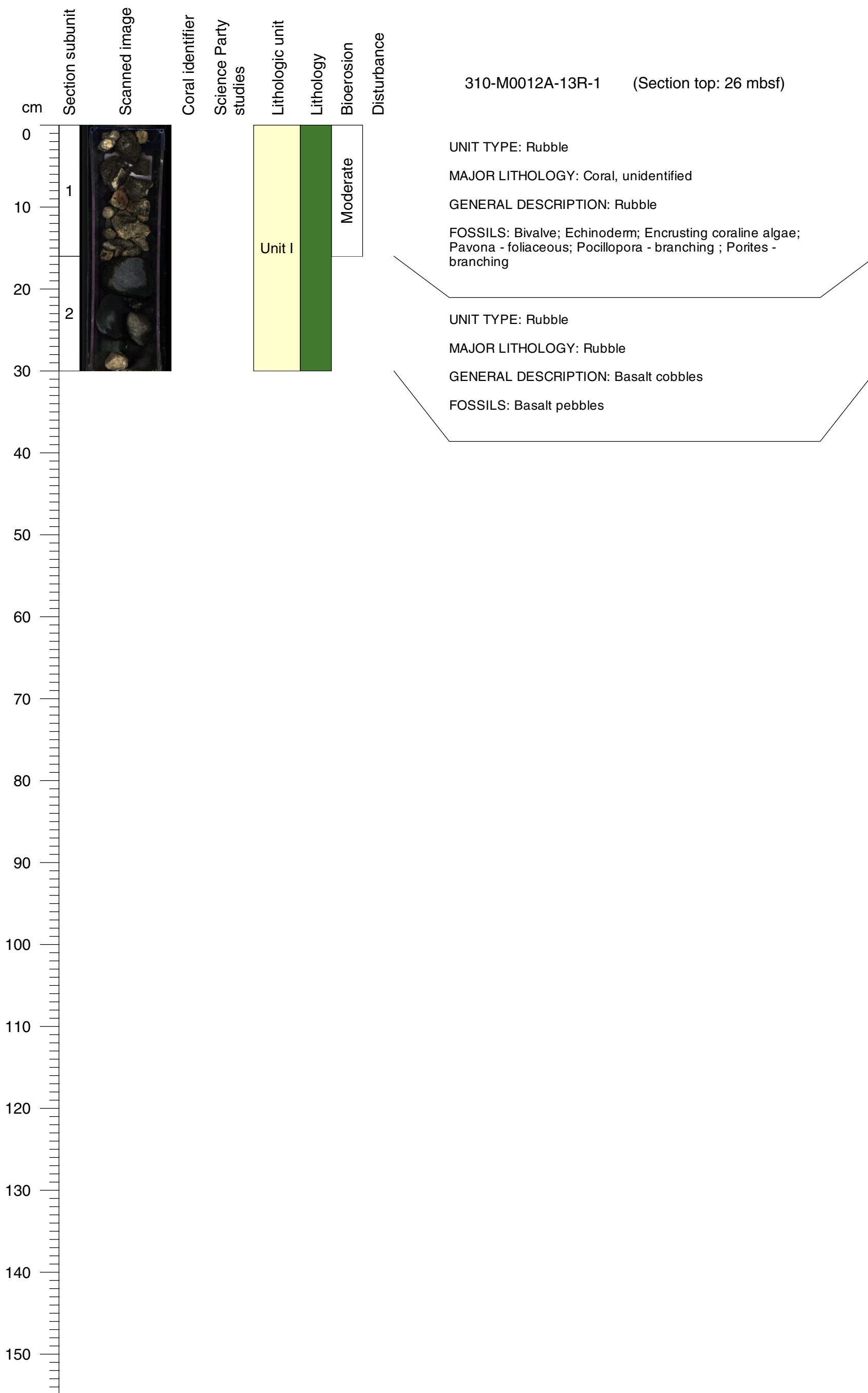


**Core Photo**

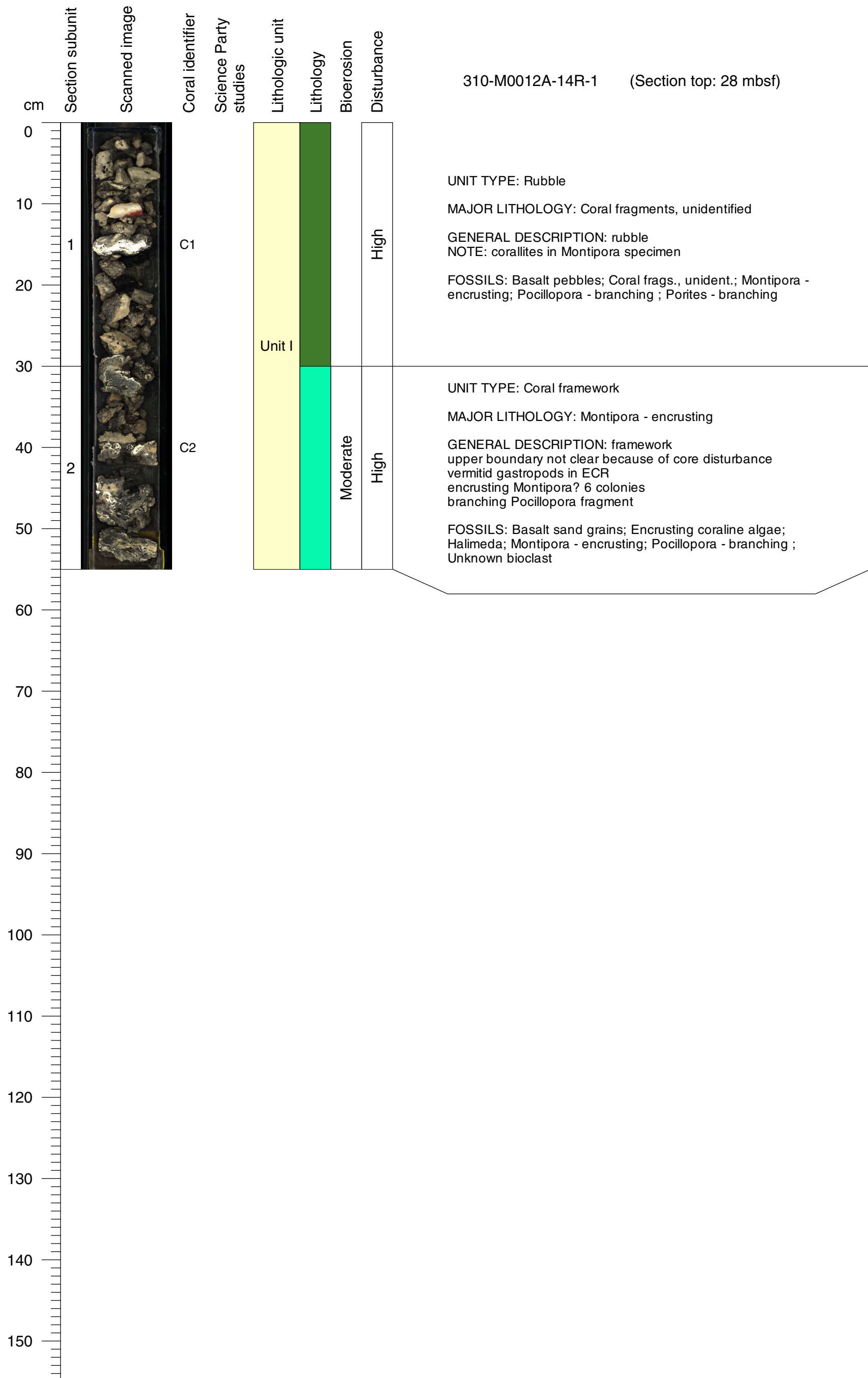


Core Photo

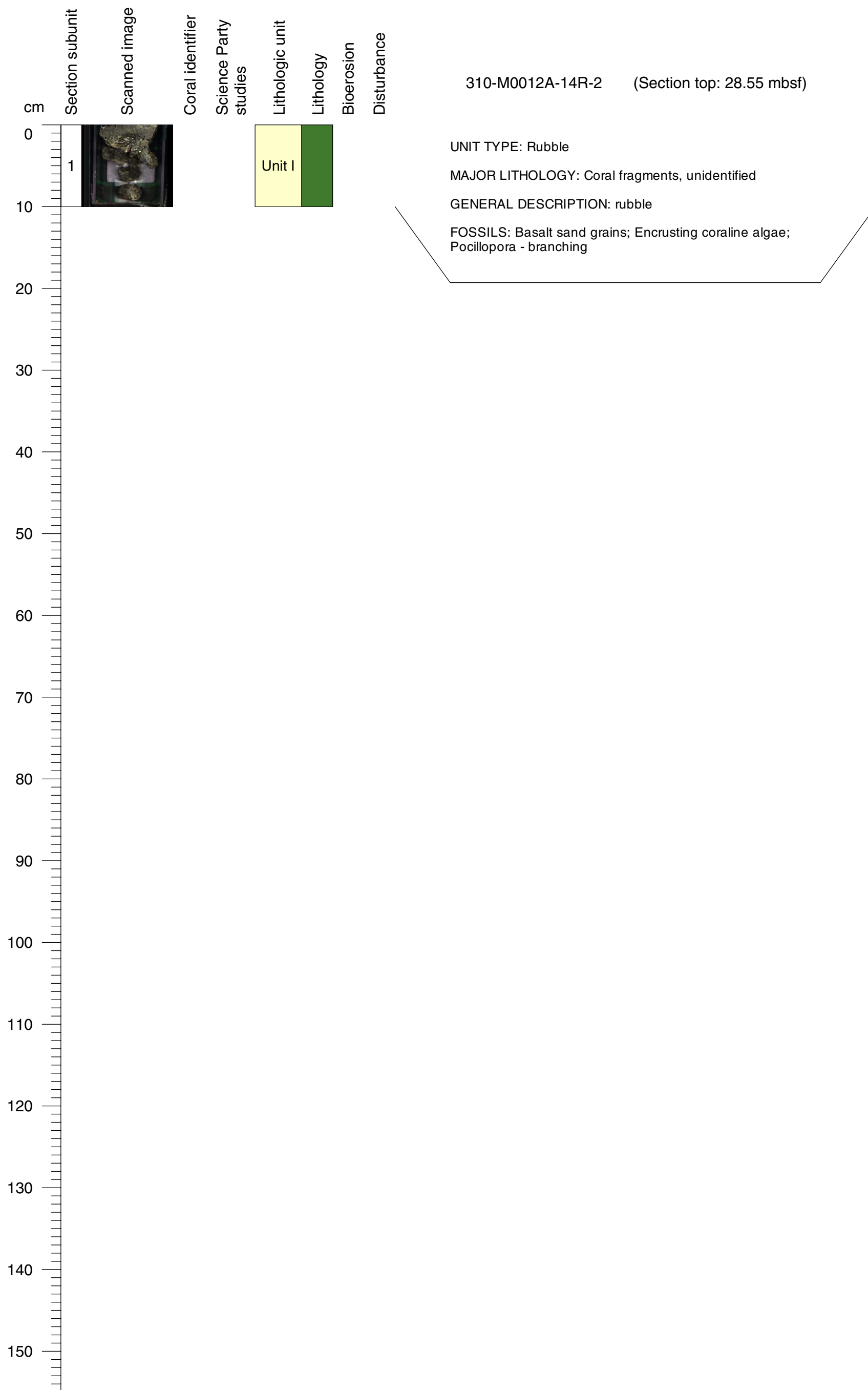
310-M0012A-13R-1 (Section top: 26 mbsf)



Core Photo

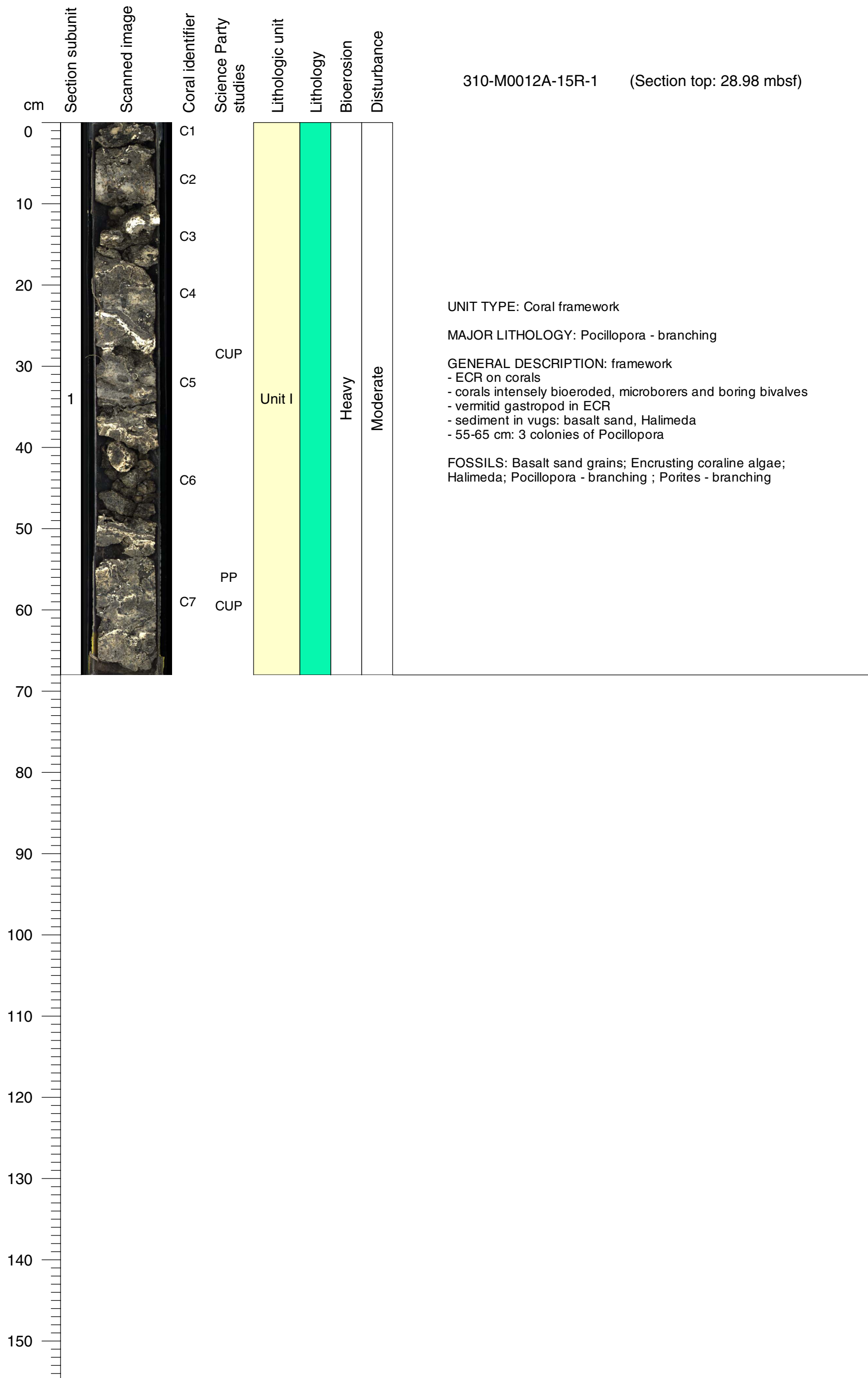


Core Photo



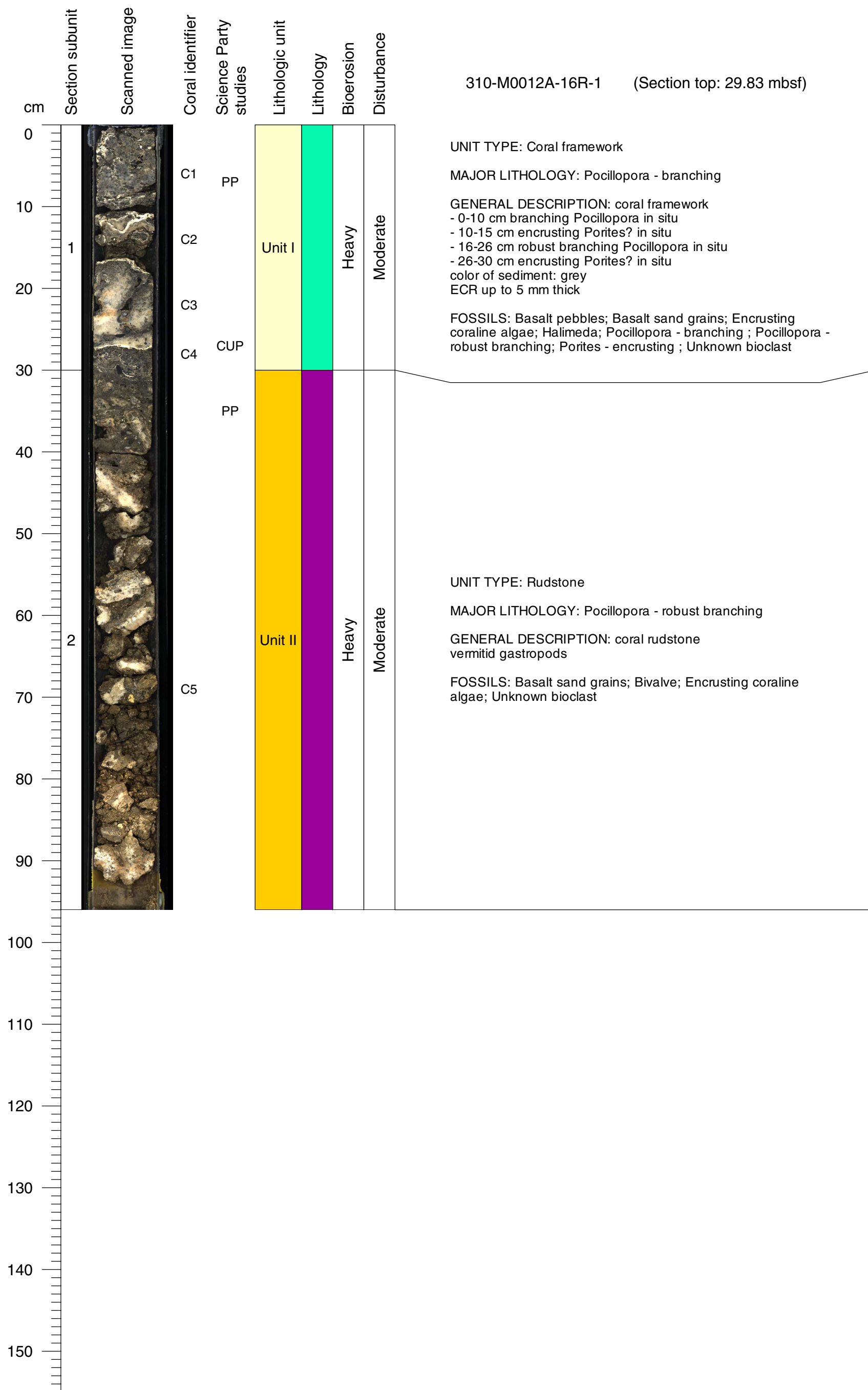
**Core Photo**

310-M0012A-15R-1 (Section top: 28.98 mbsf)

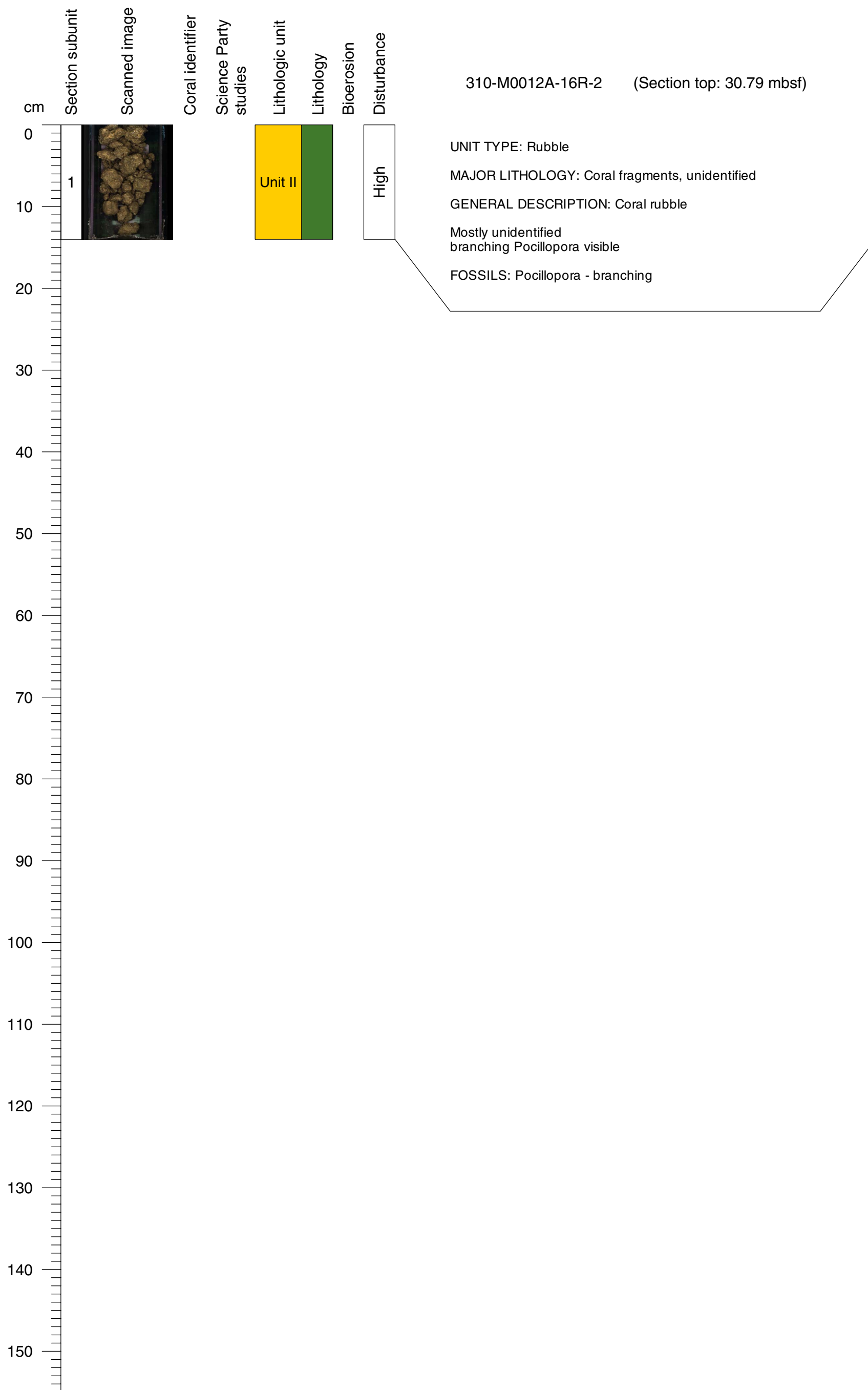


Core Photo

310-M0012A-16R-1 (Section top: 29.83 mbsf)

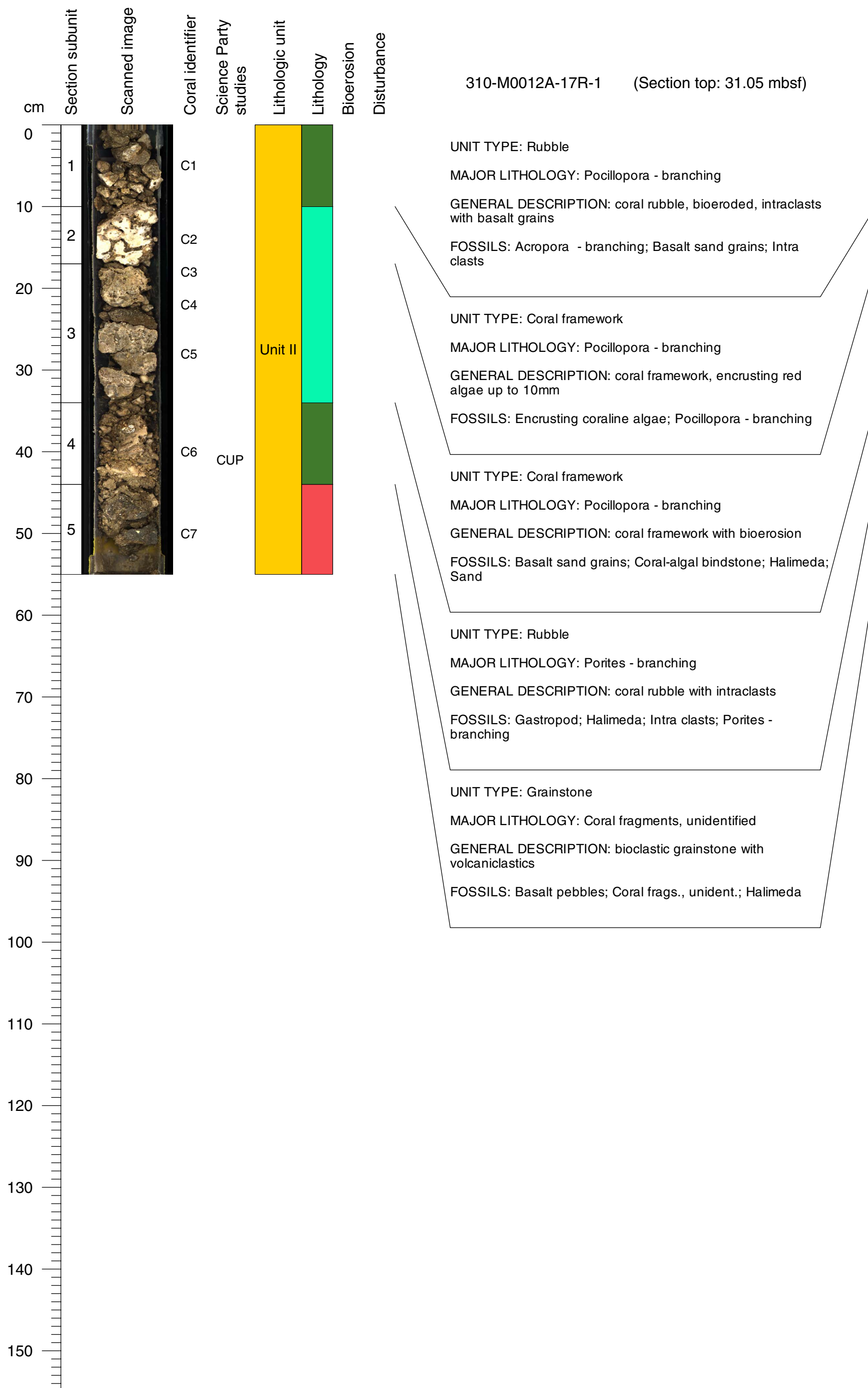


**Core Photo**



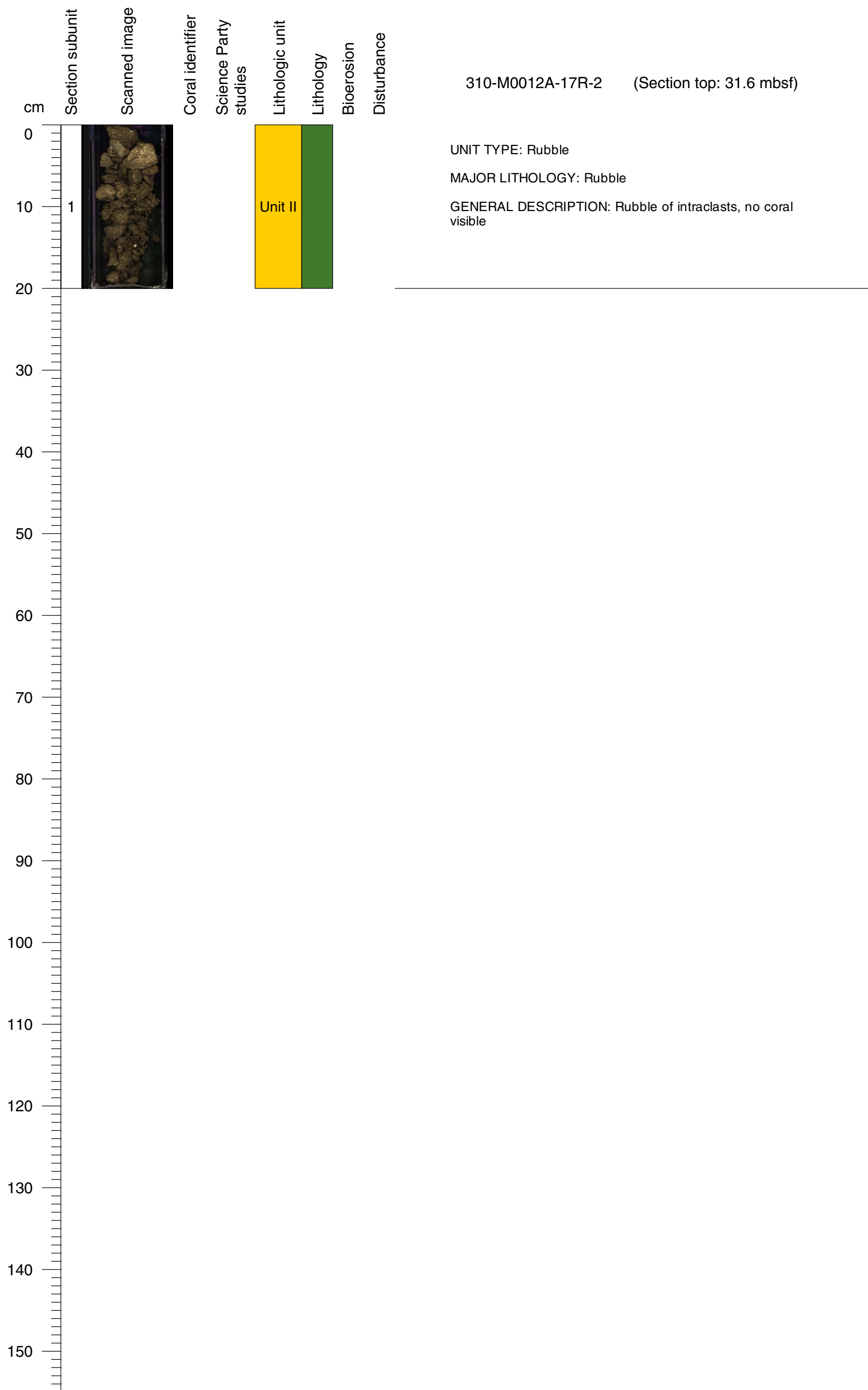
Core Photo

310-M0012A-17R-1 (Section top: 31.05 mbsf)



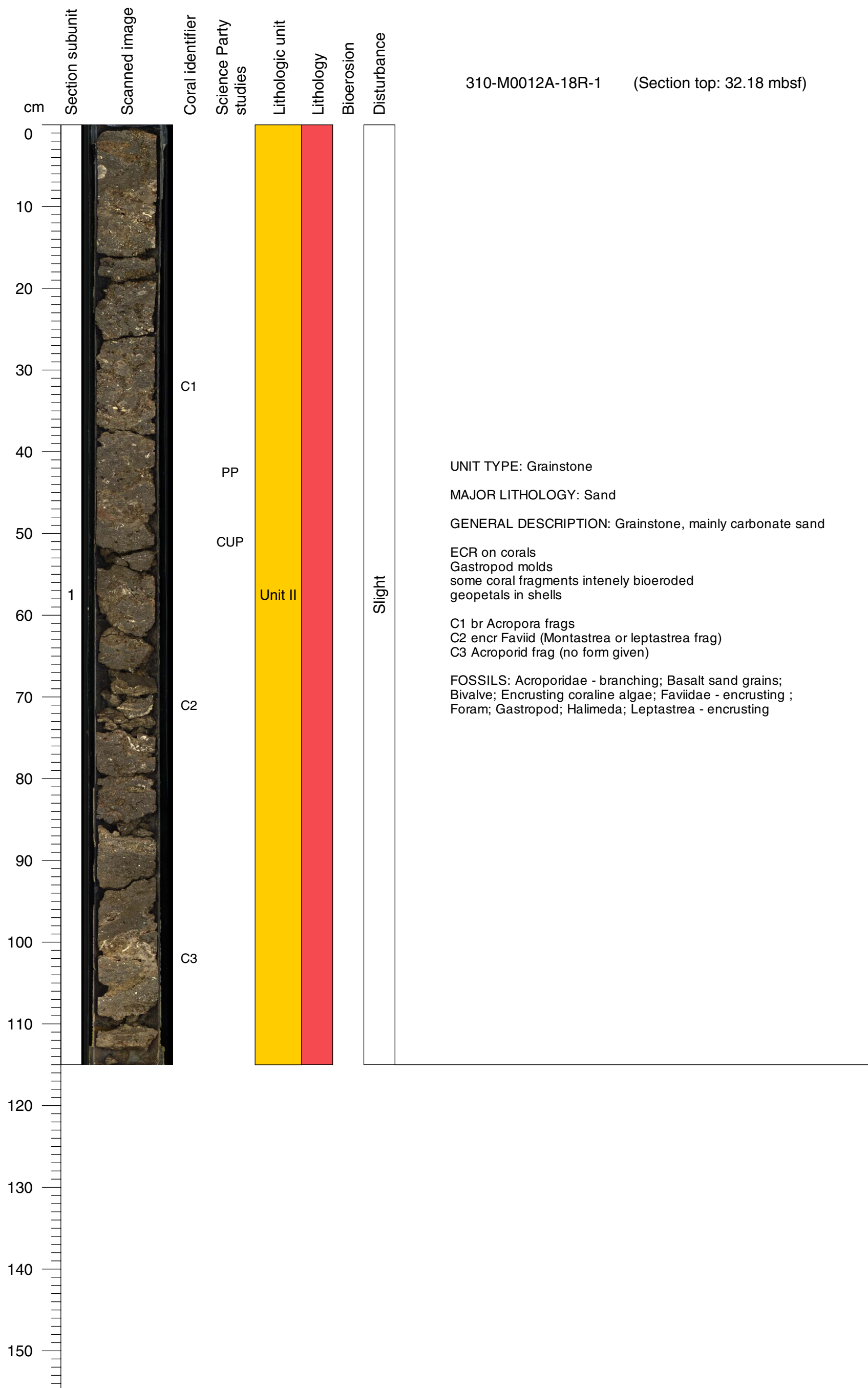


**Core Photo**

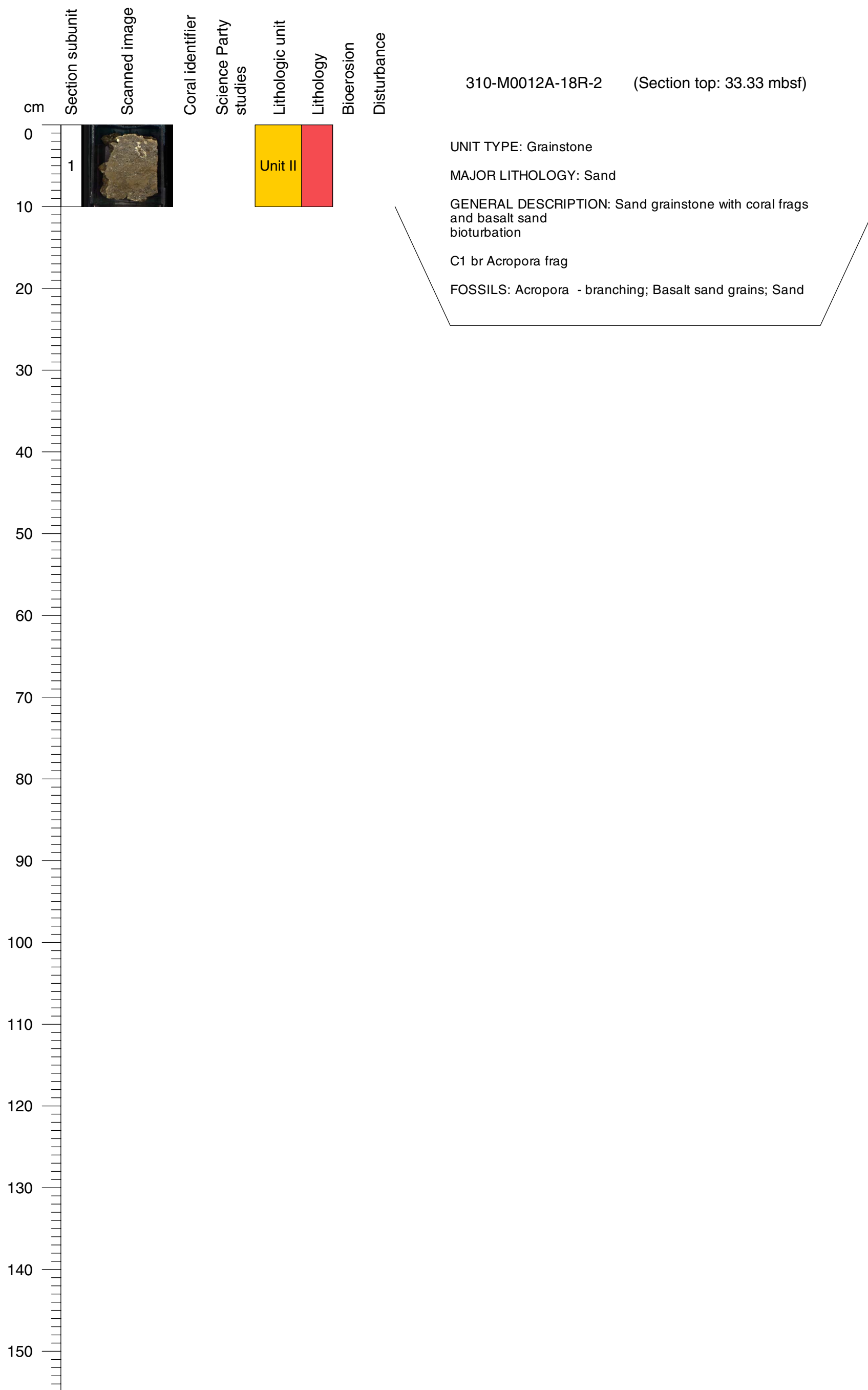


Core Photo

310-M0012A-18R-1 (Section top: 32.18 mbsf)

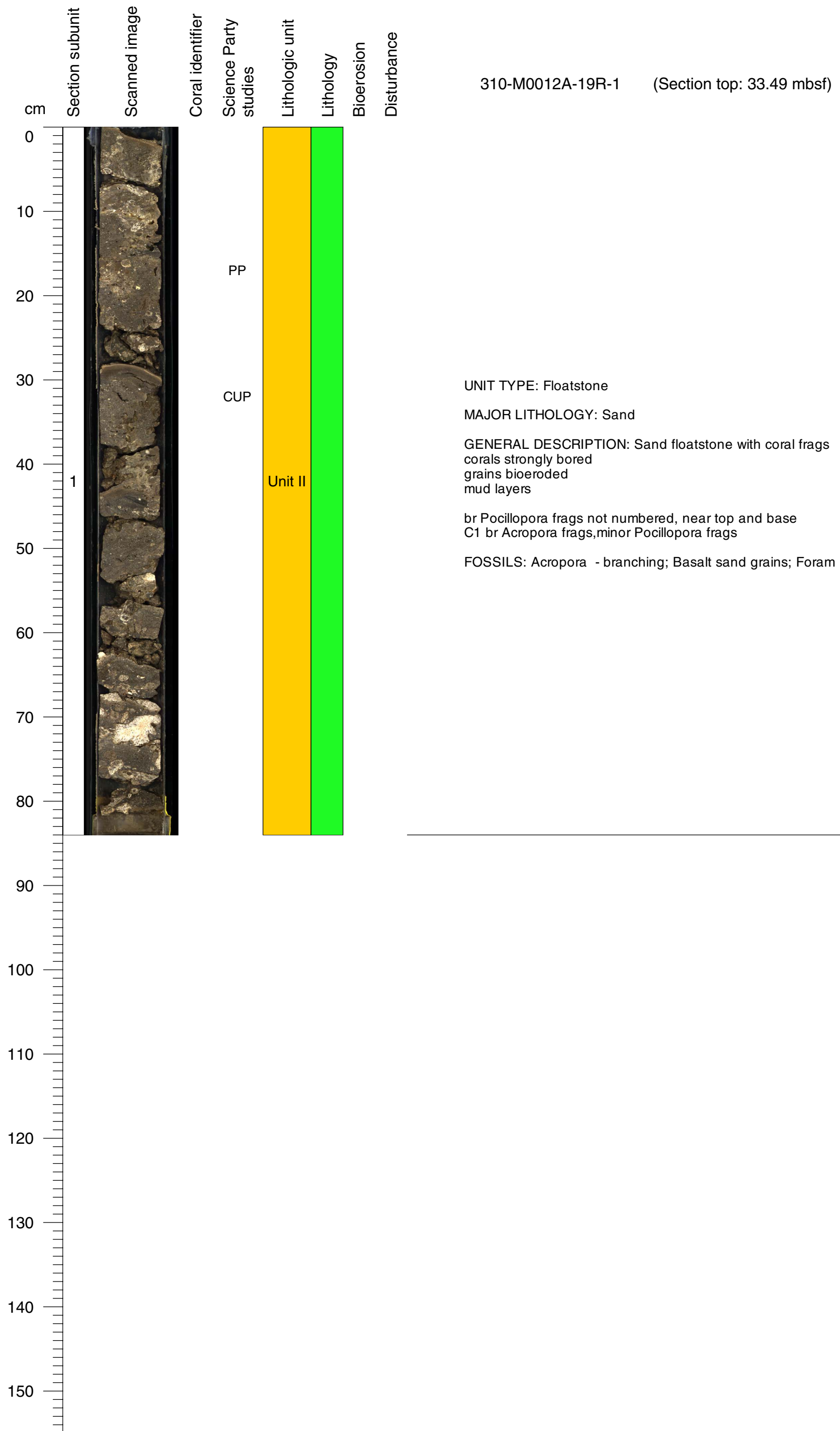


**Core Photo**

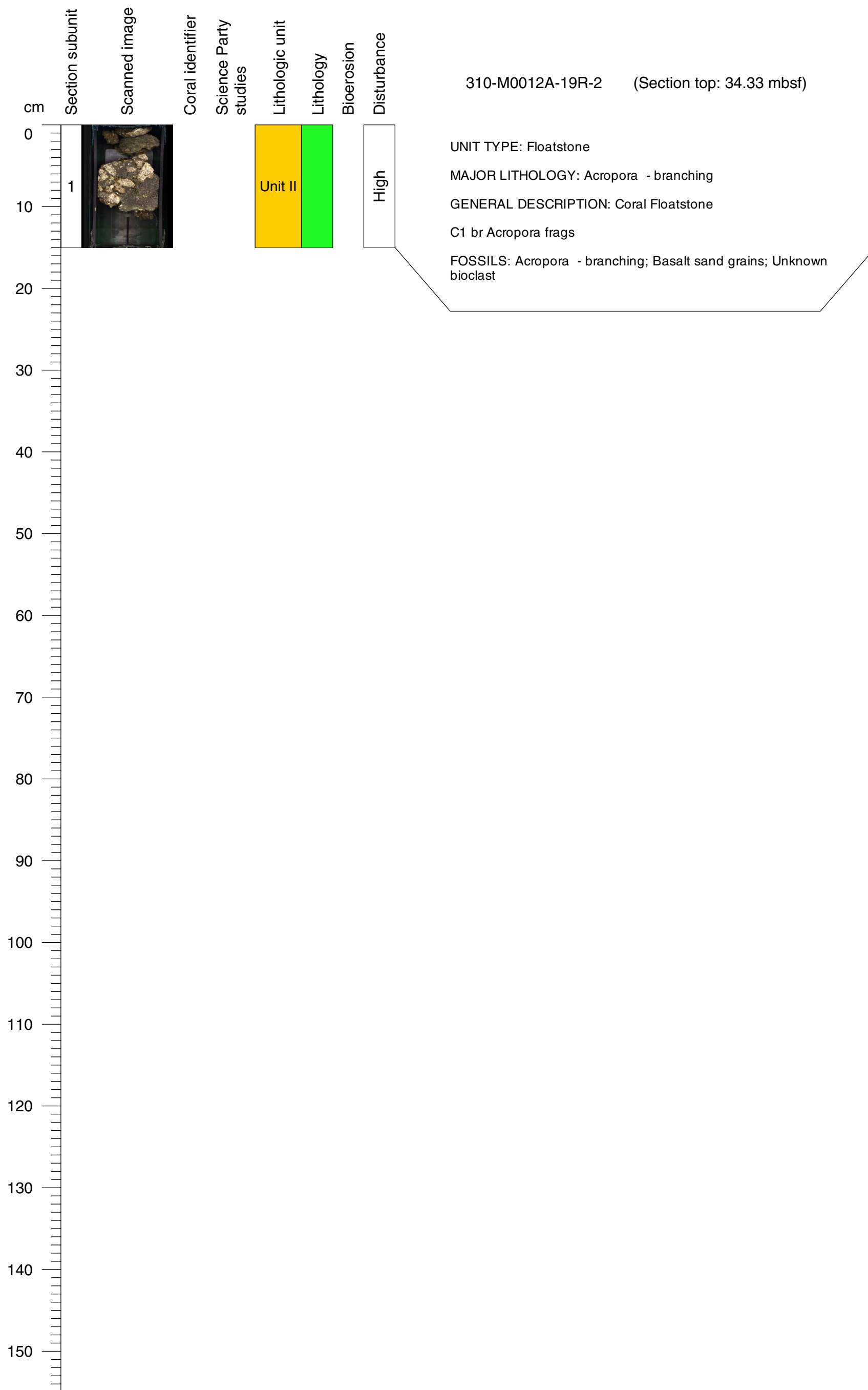


**Core Photo**

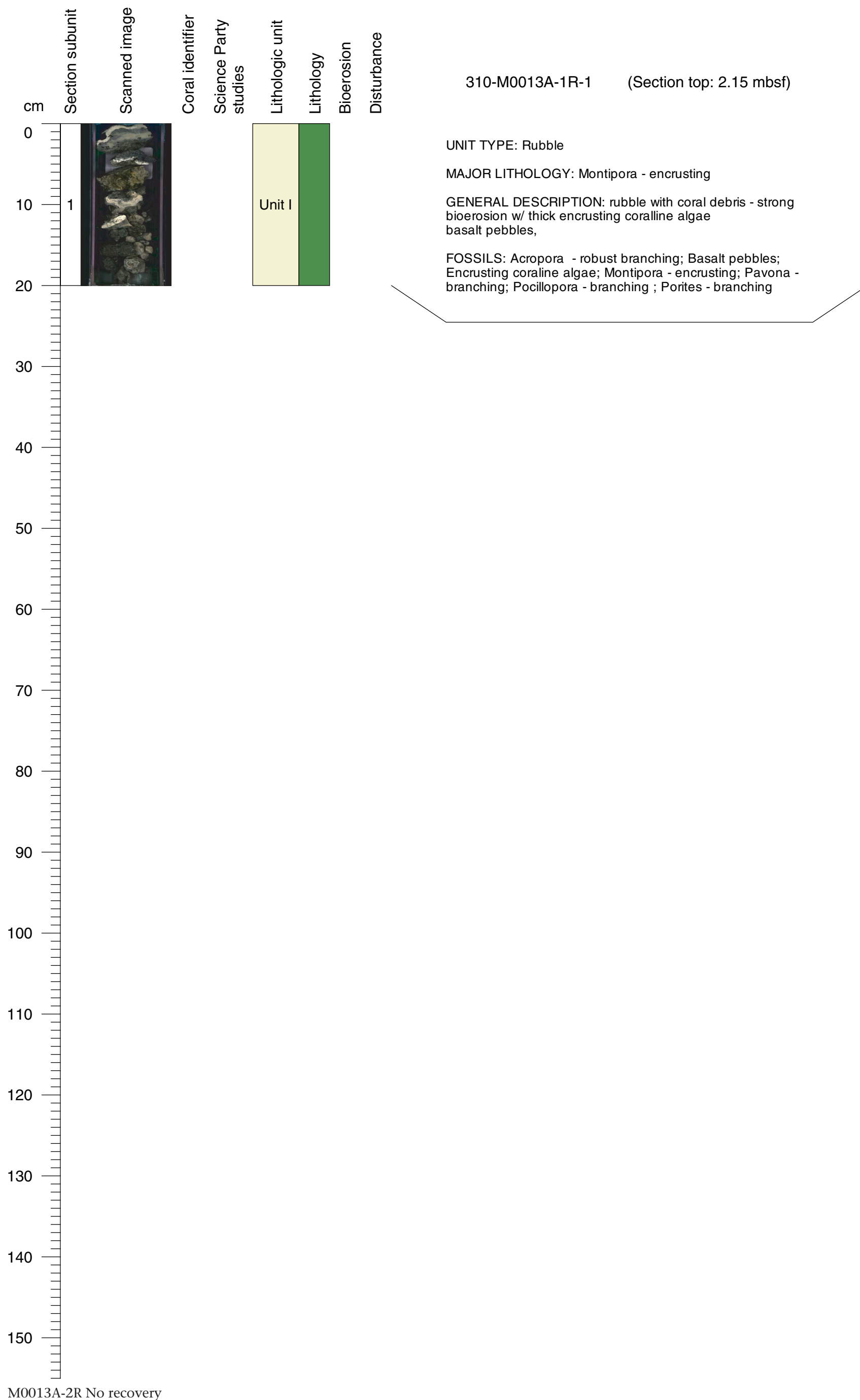
310-M0012A-19R-1 (Section top: 33.49 mbsf)



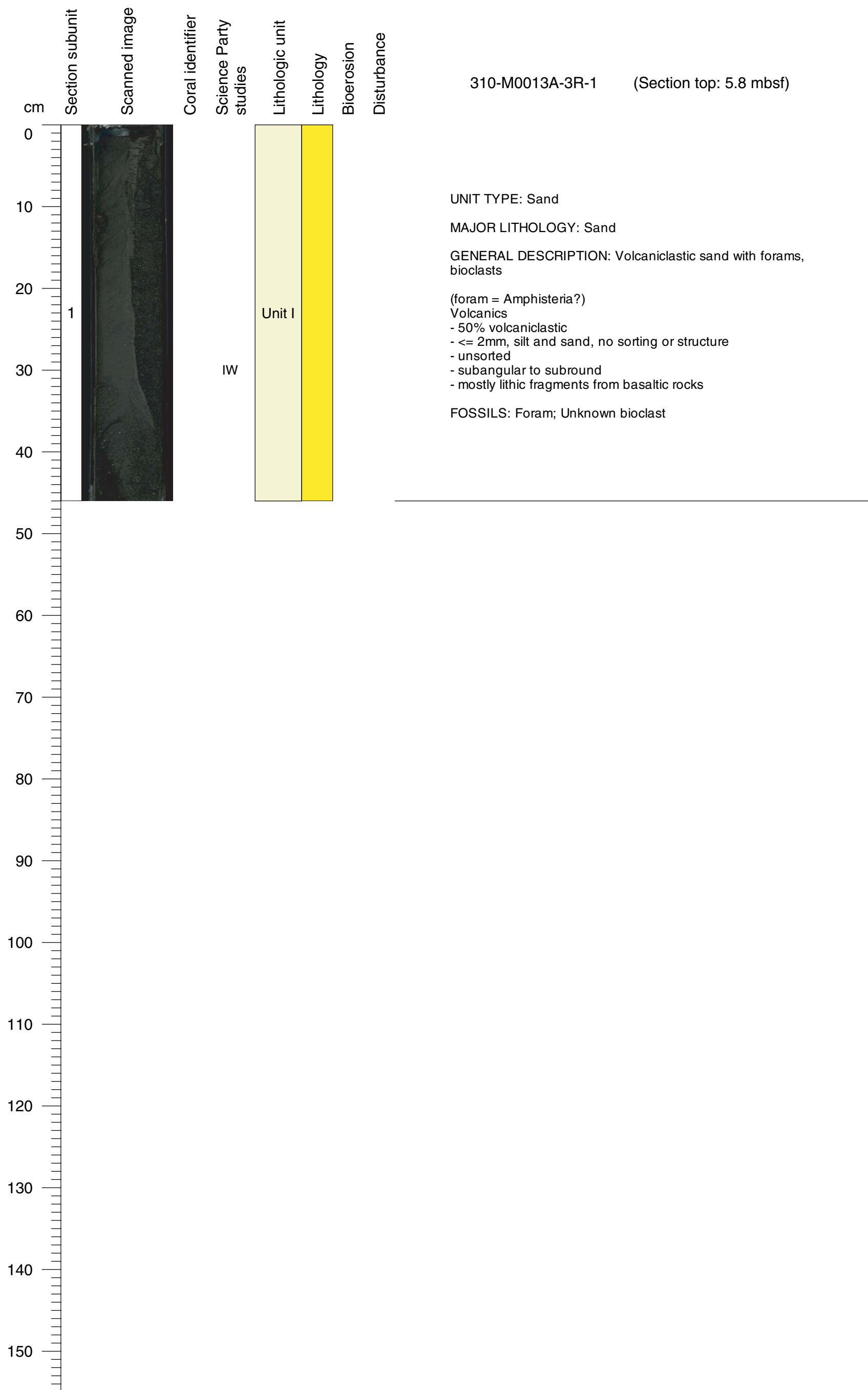
**Core Photo**



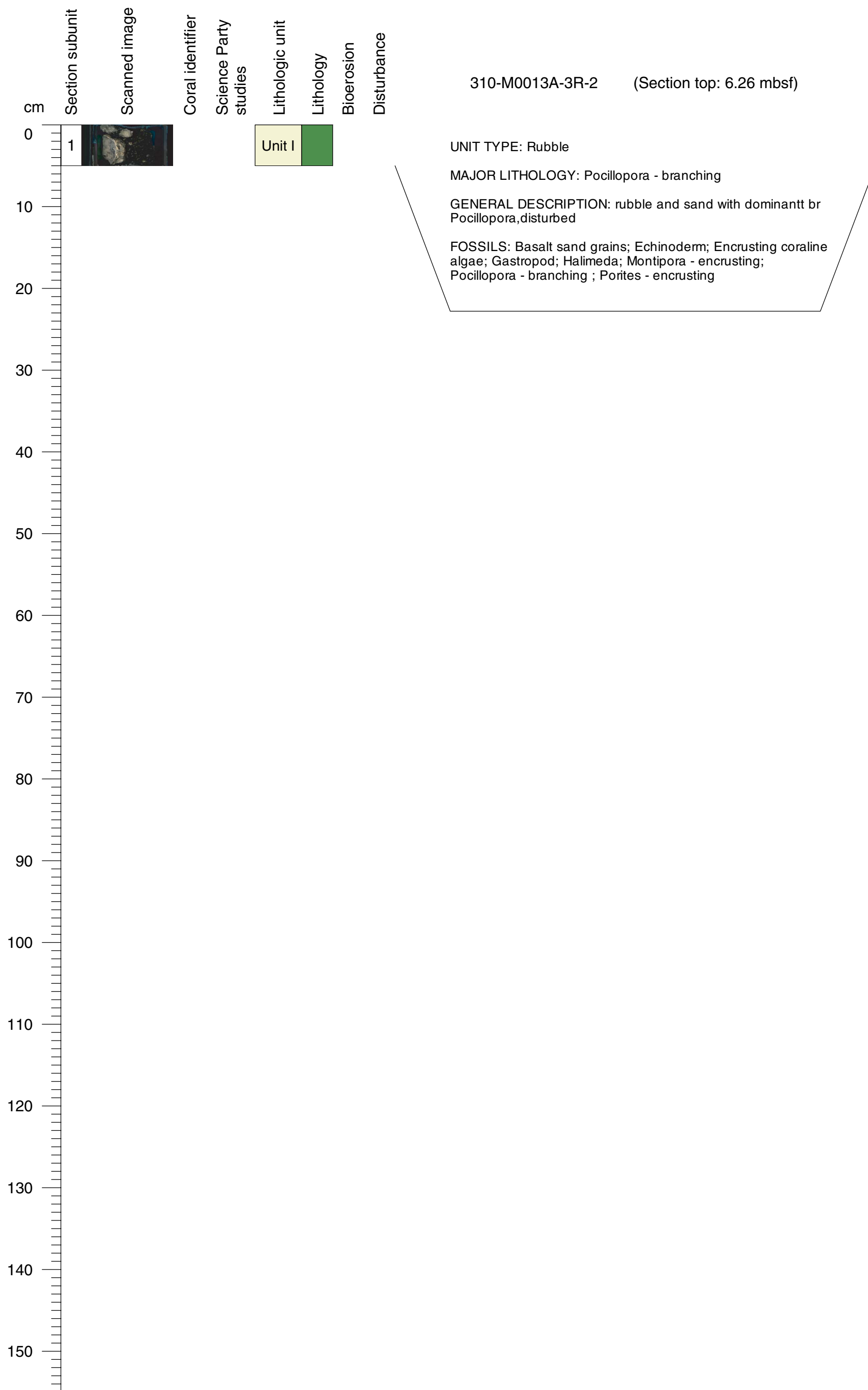
**Core Photo**



Core Photo

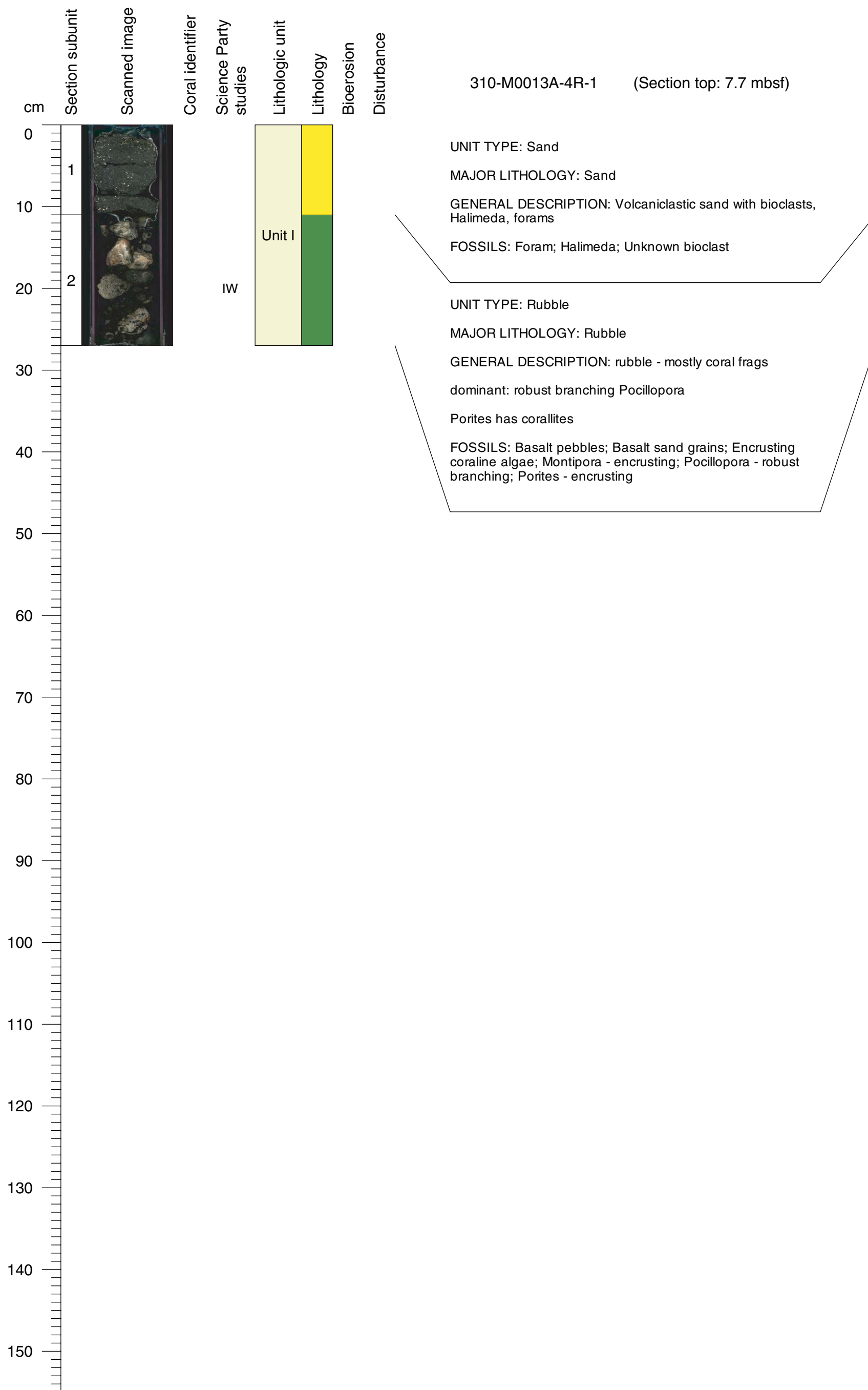


**Core Photo**

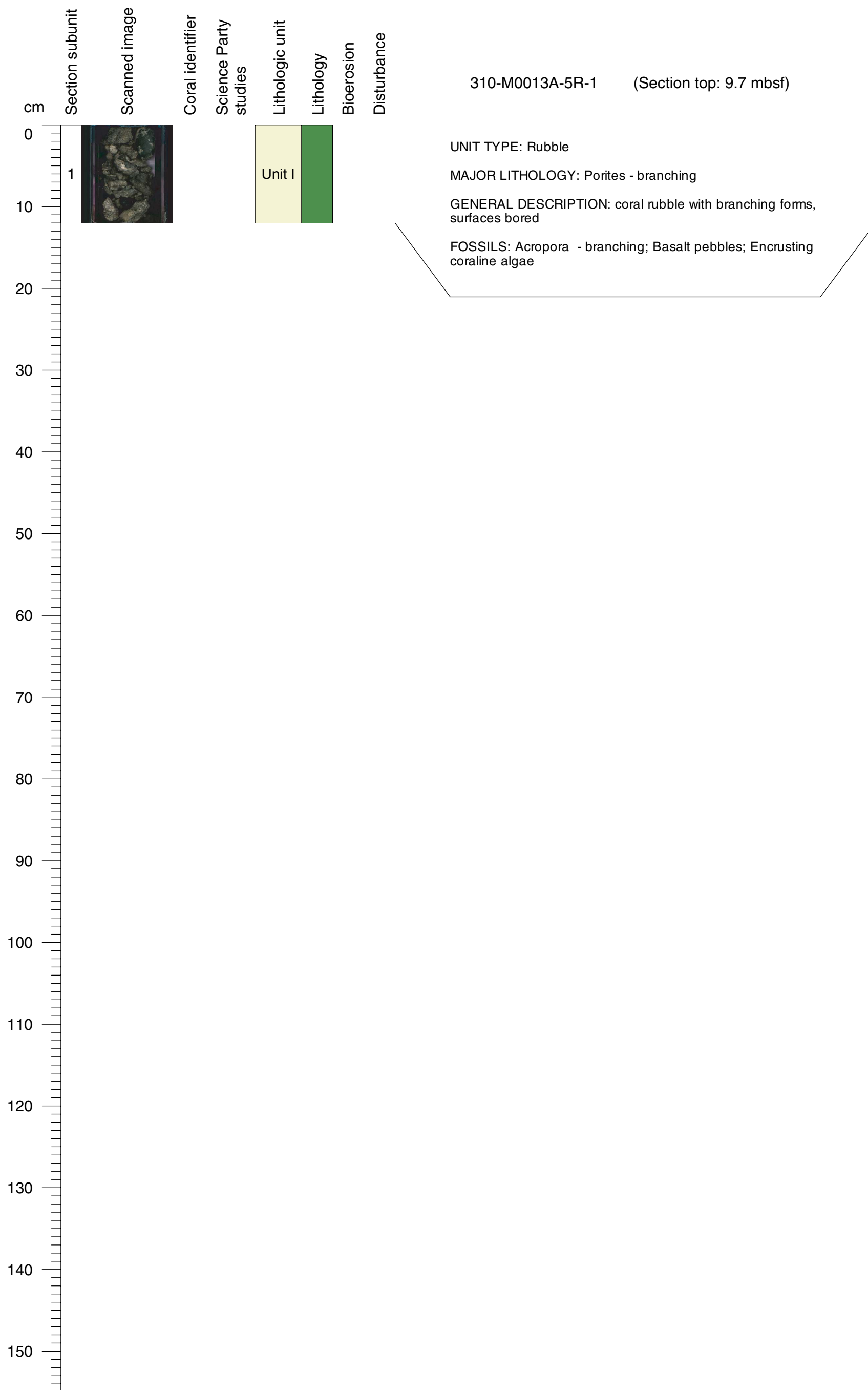




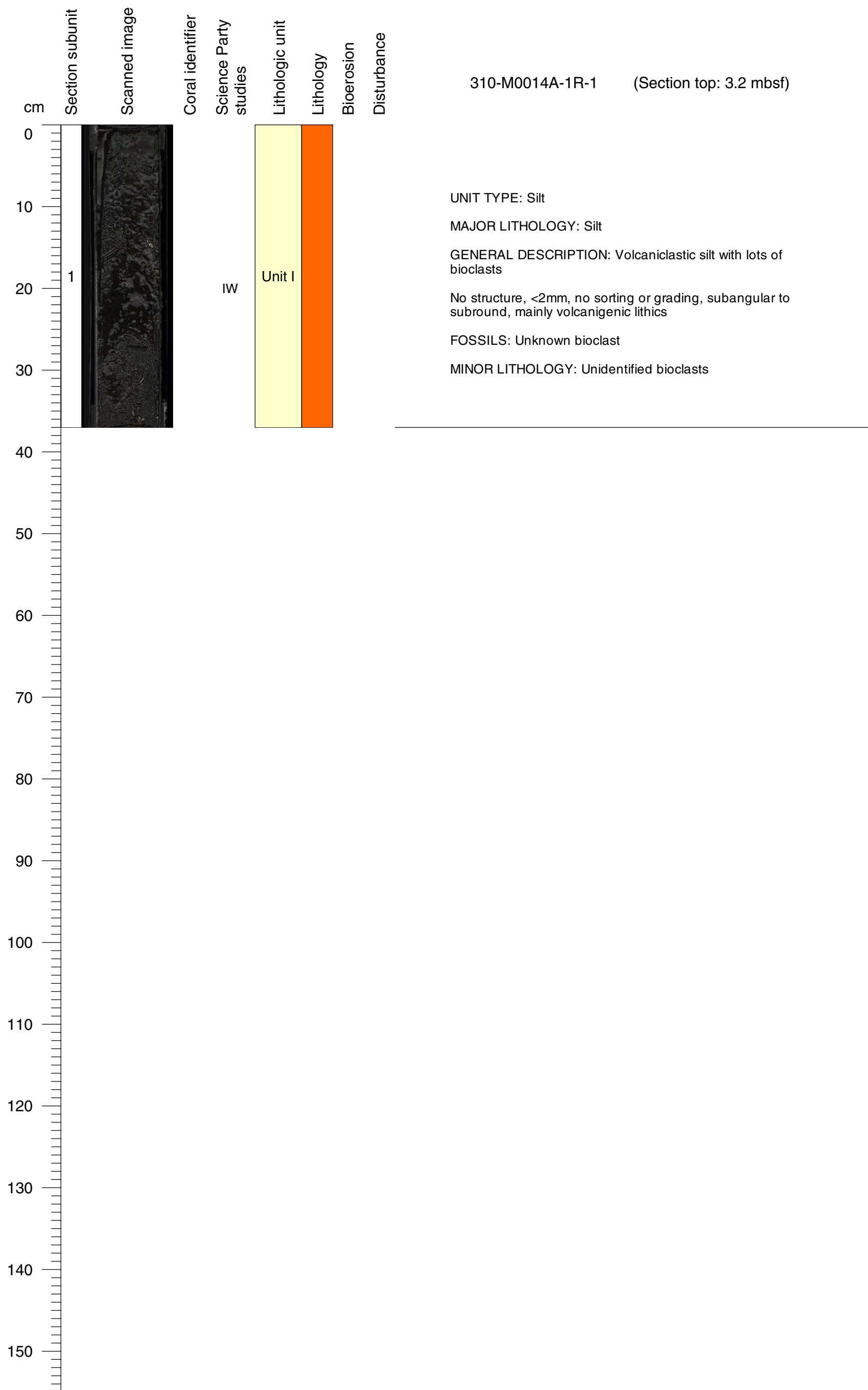
**Core Photo**



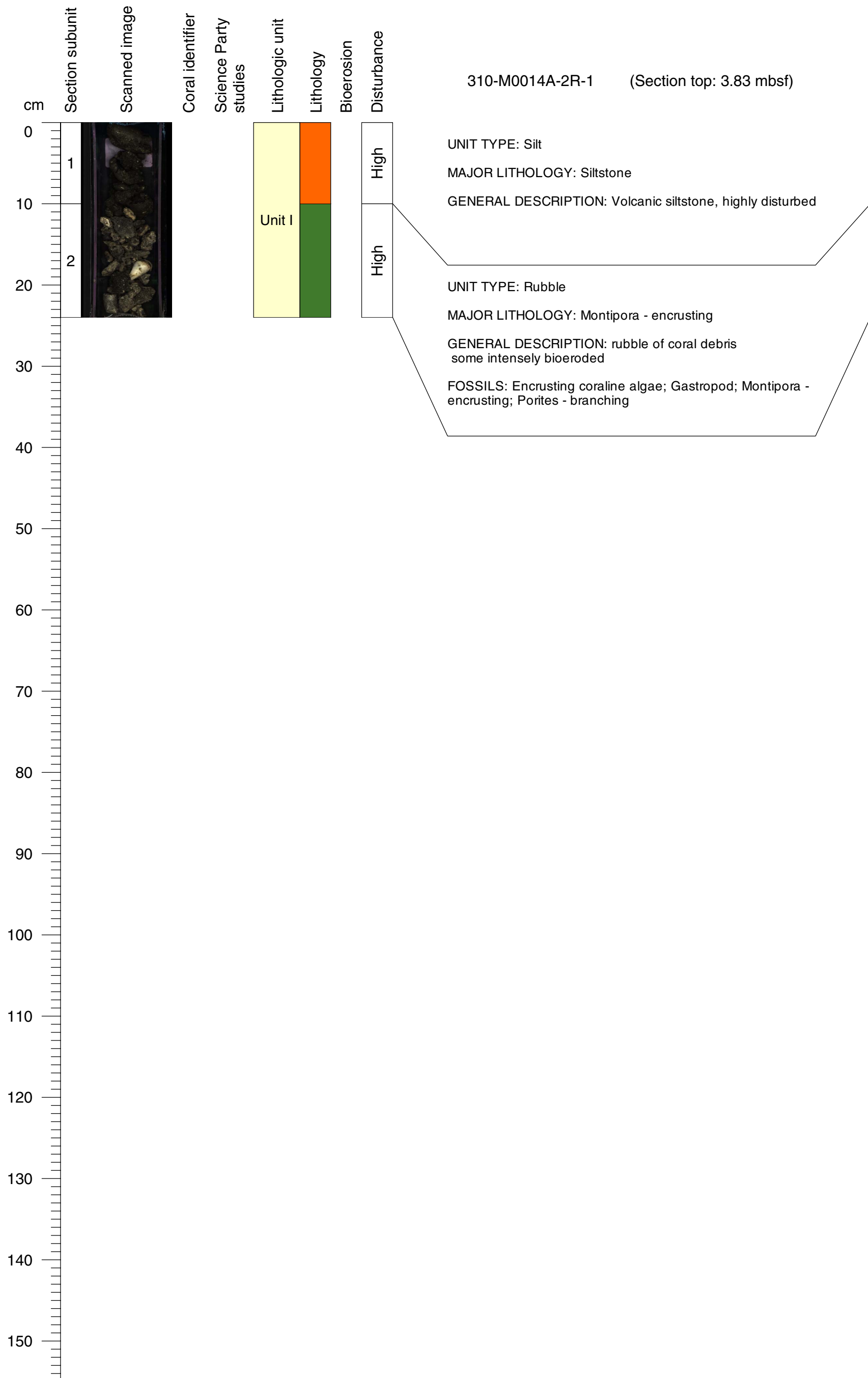
**Core Photo**



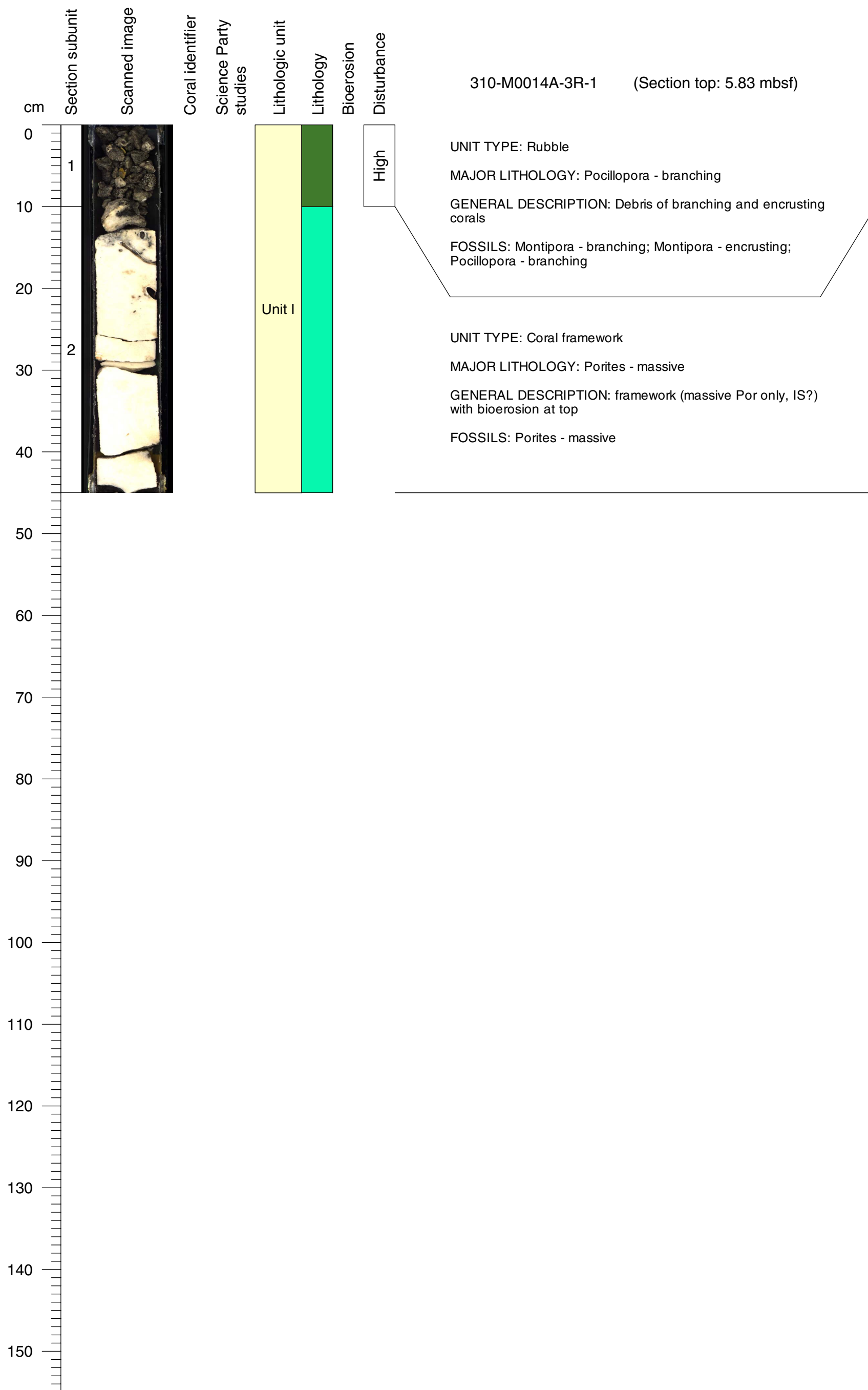
**Core Photo**



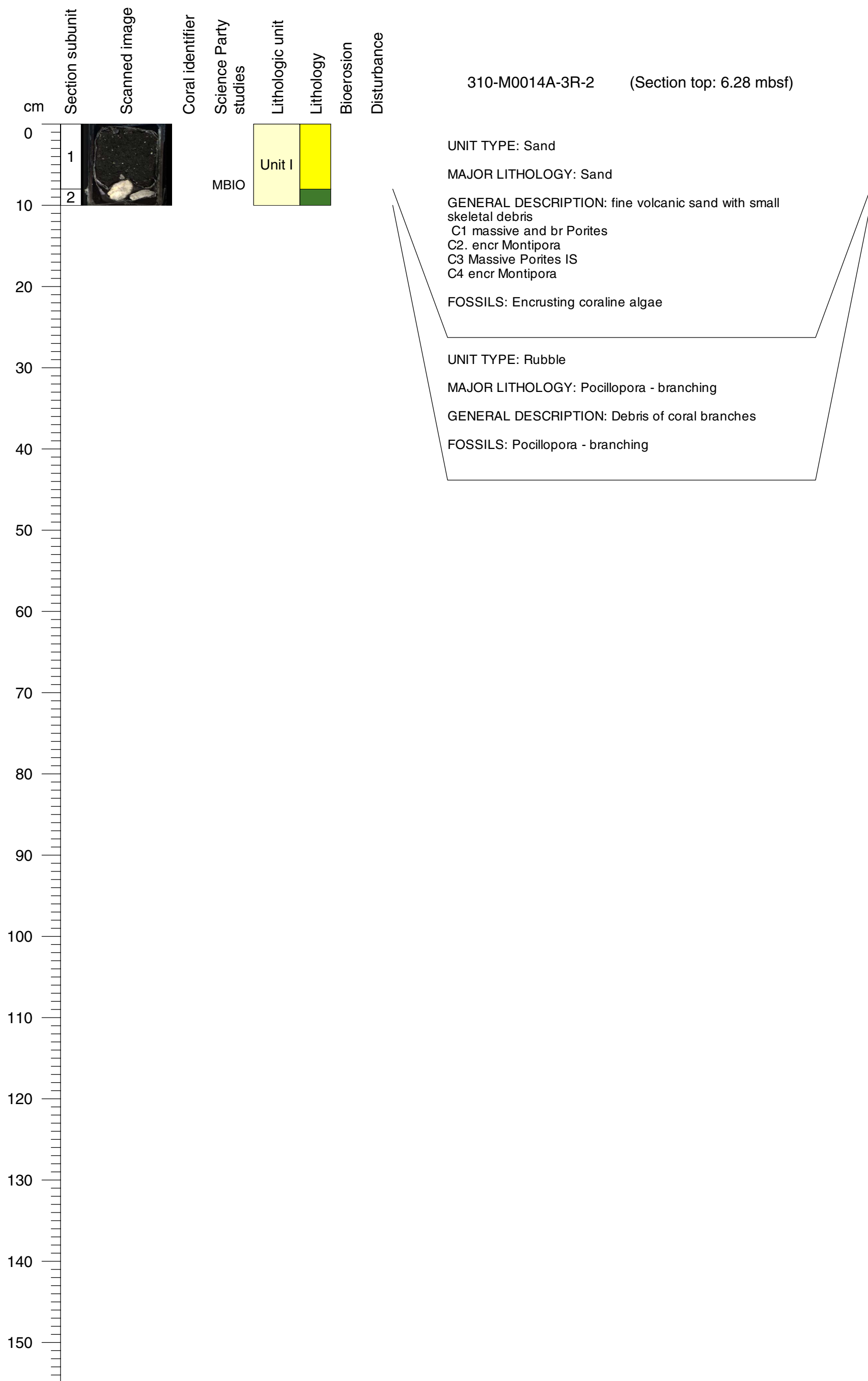
Core Photo



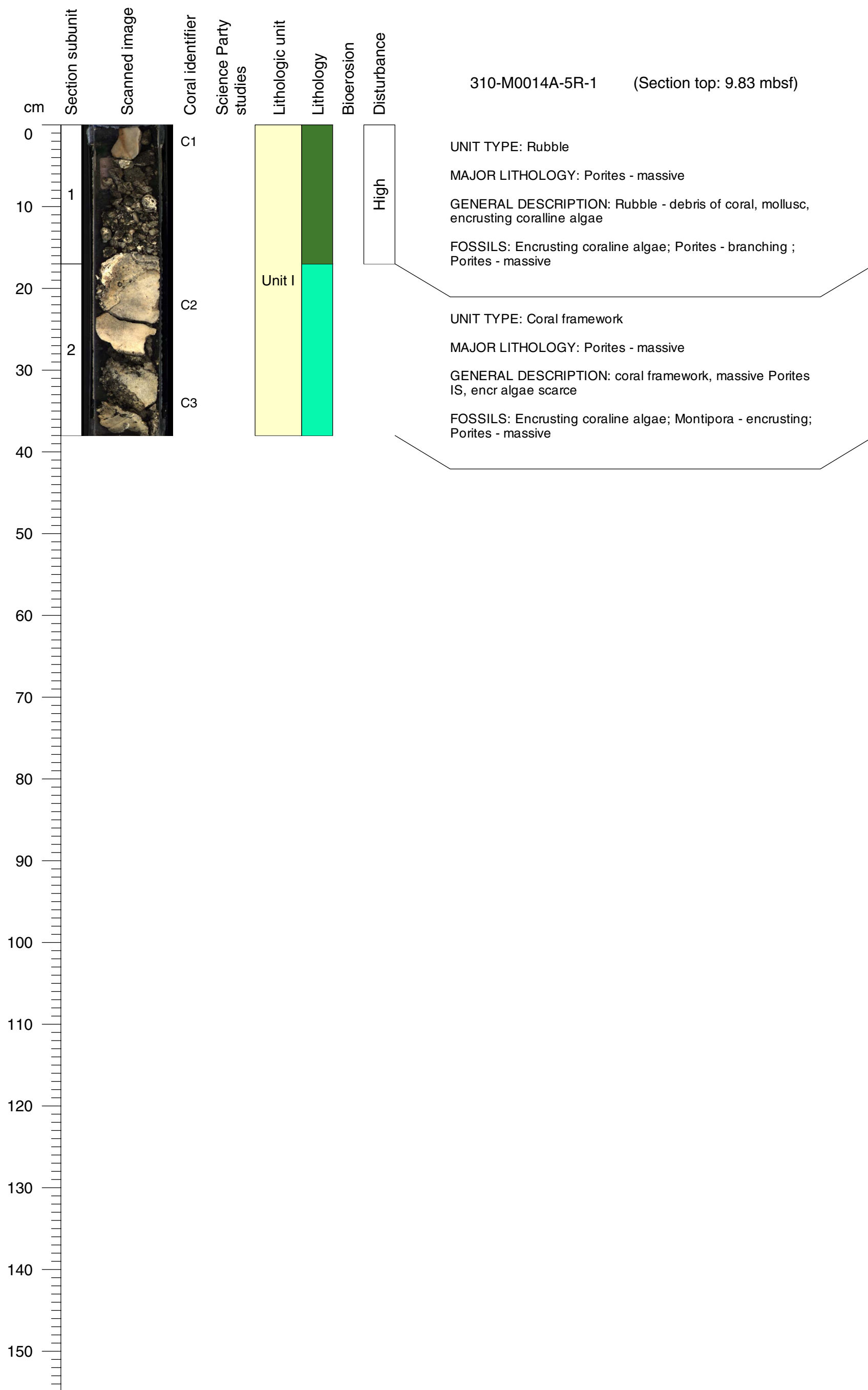
Core Photo



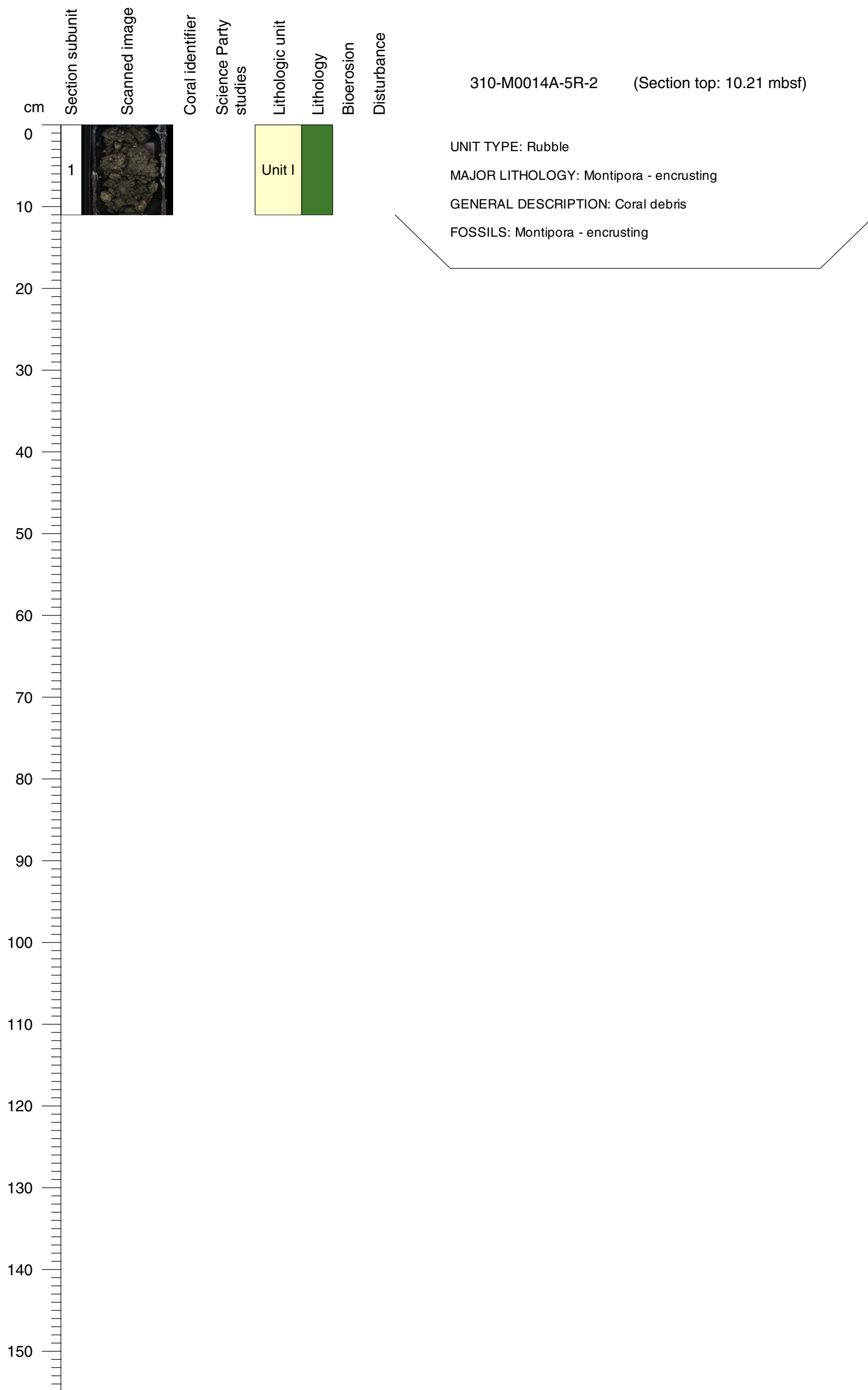
**Core Photo**



Core Photo

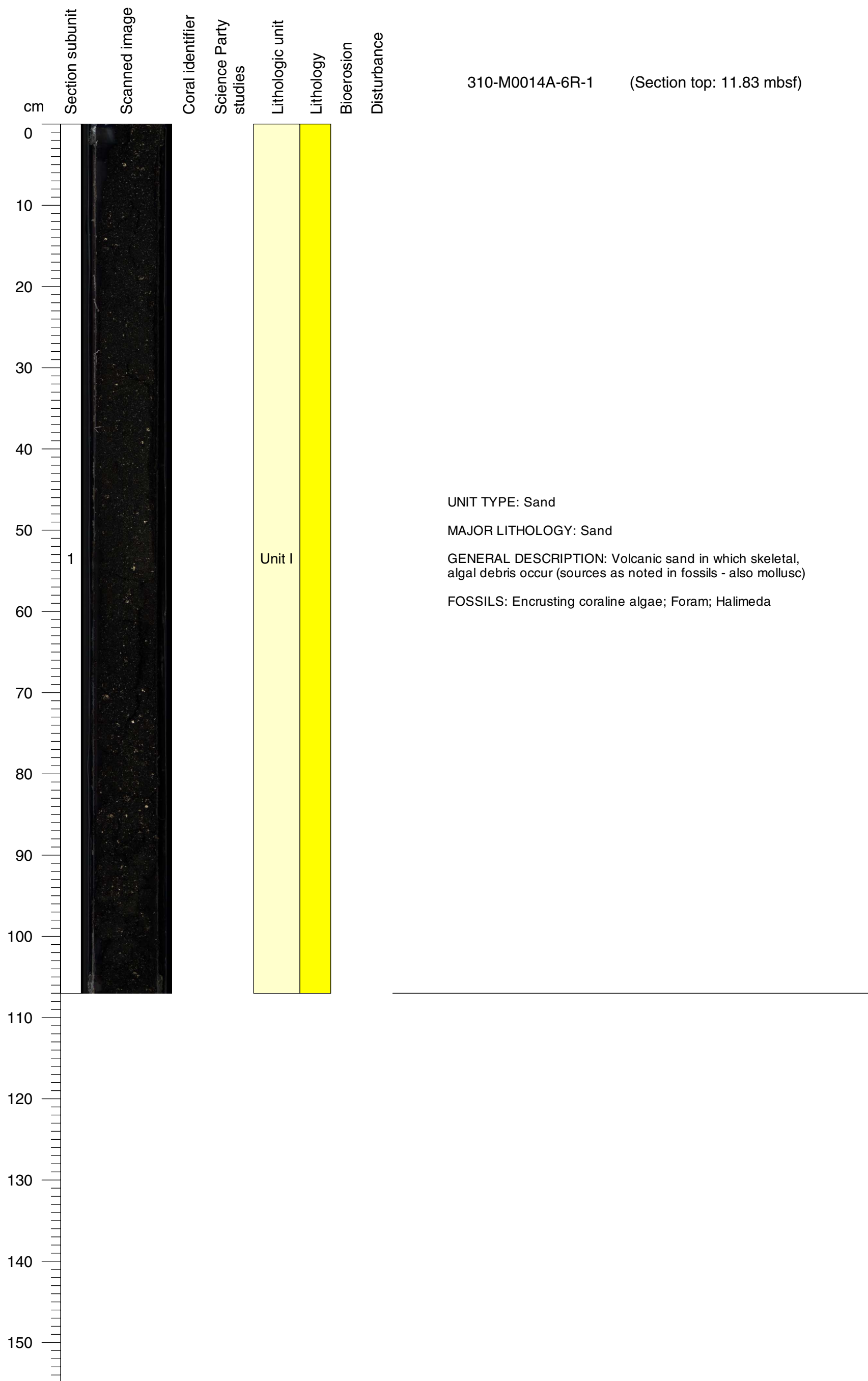


**Core Photo**

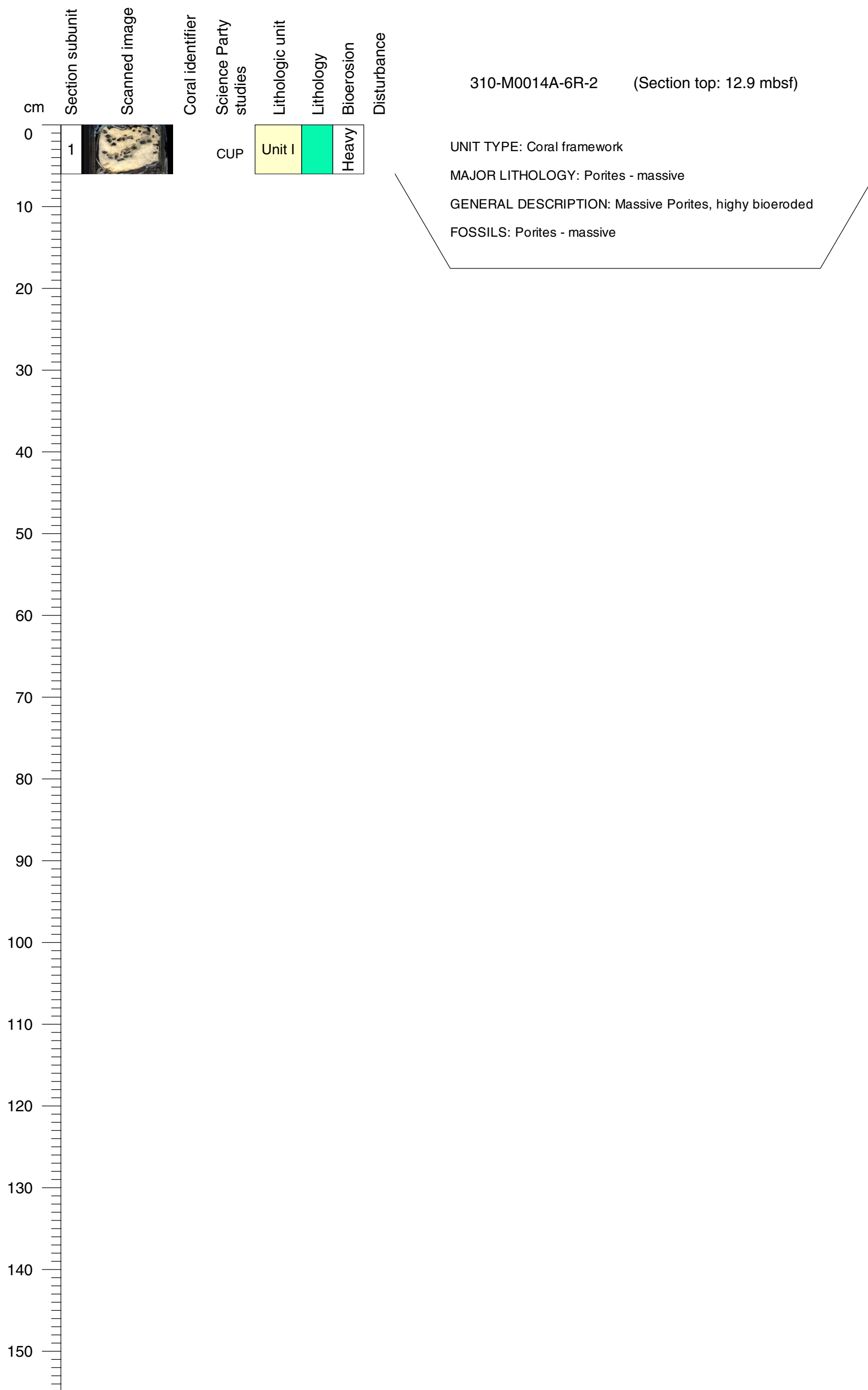




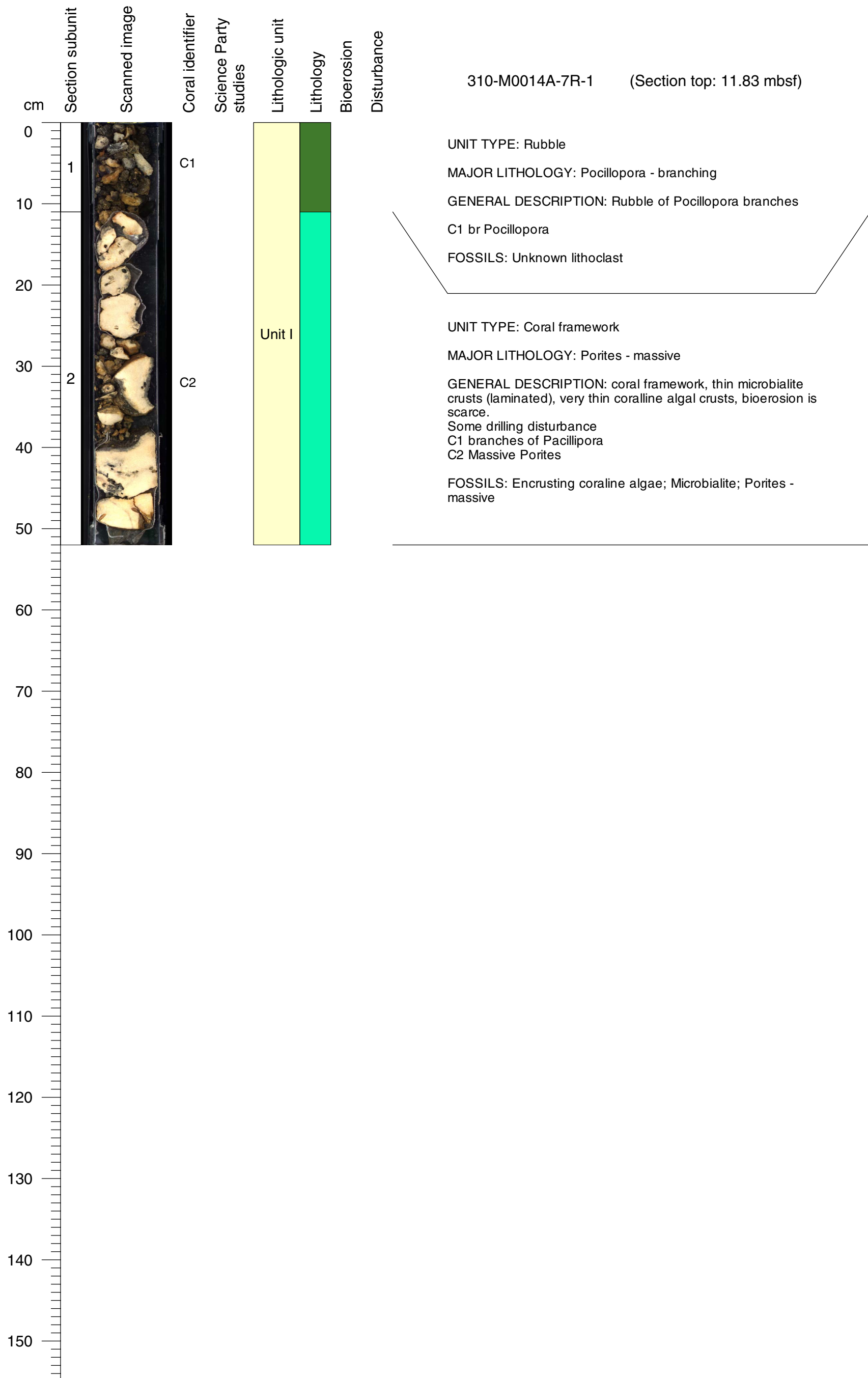
**Core Photo**



**Core Photo**

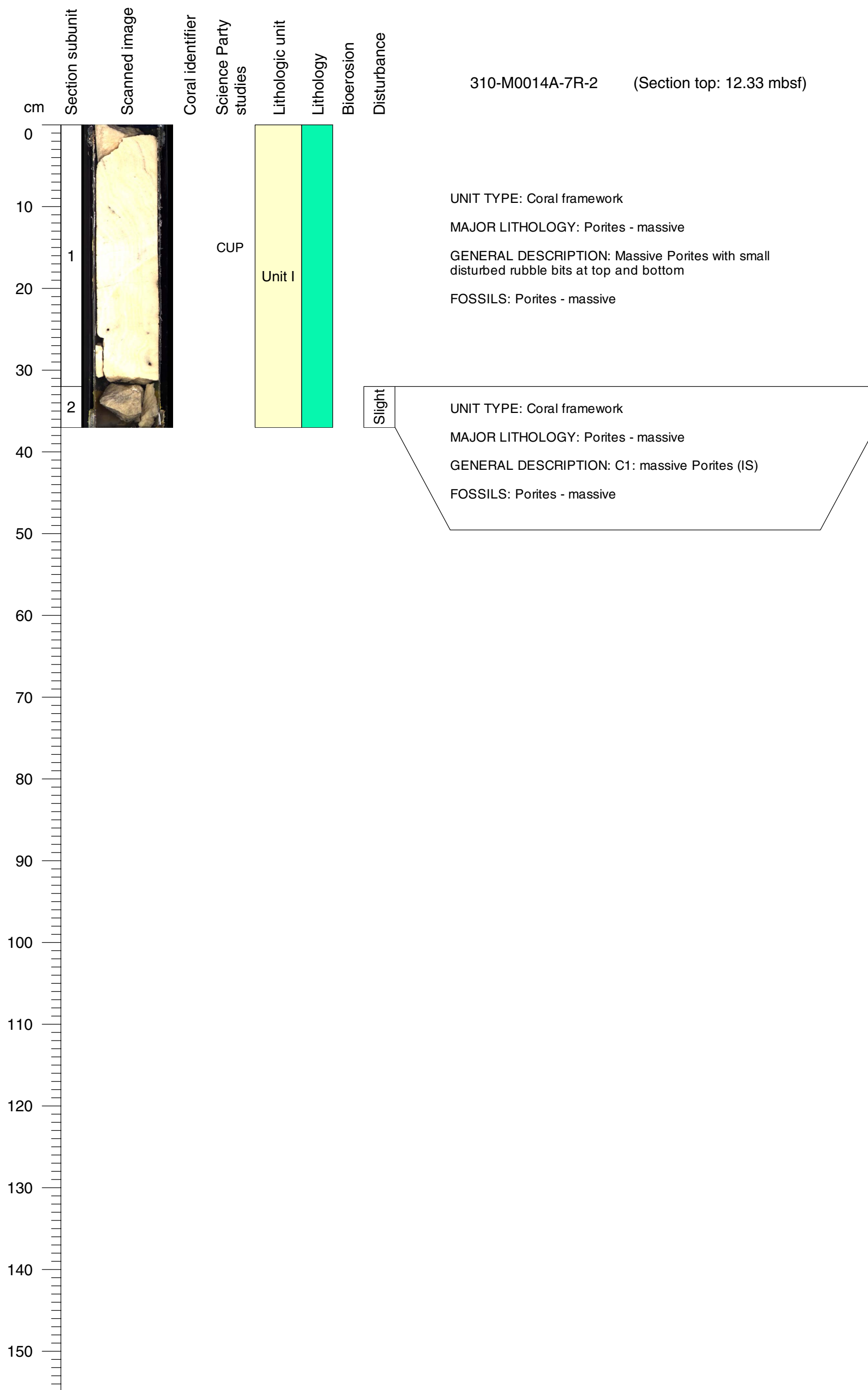


**Core Photo**

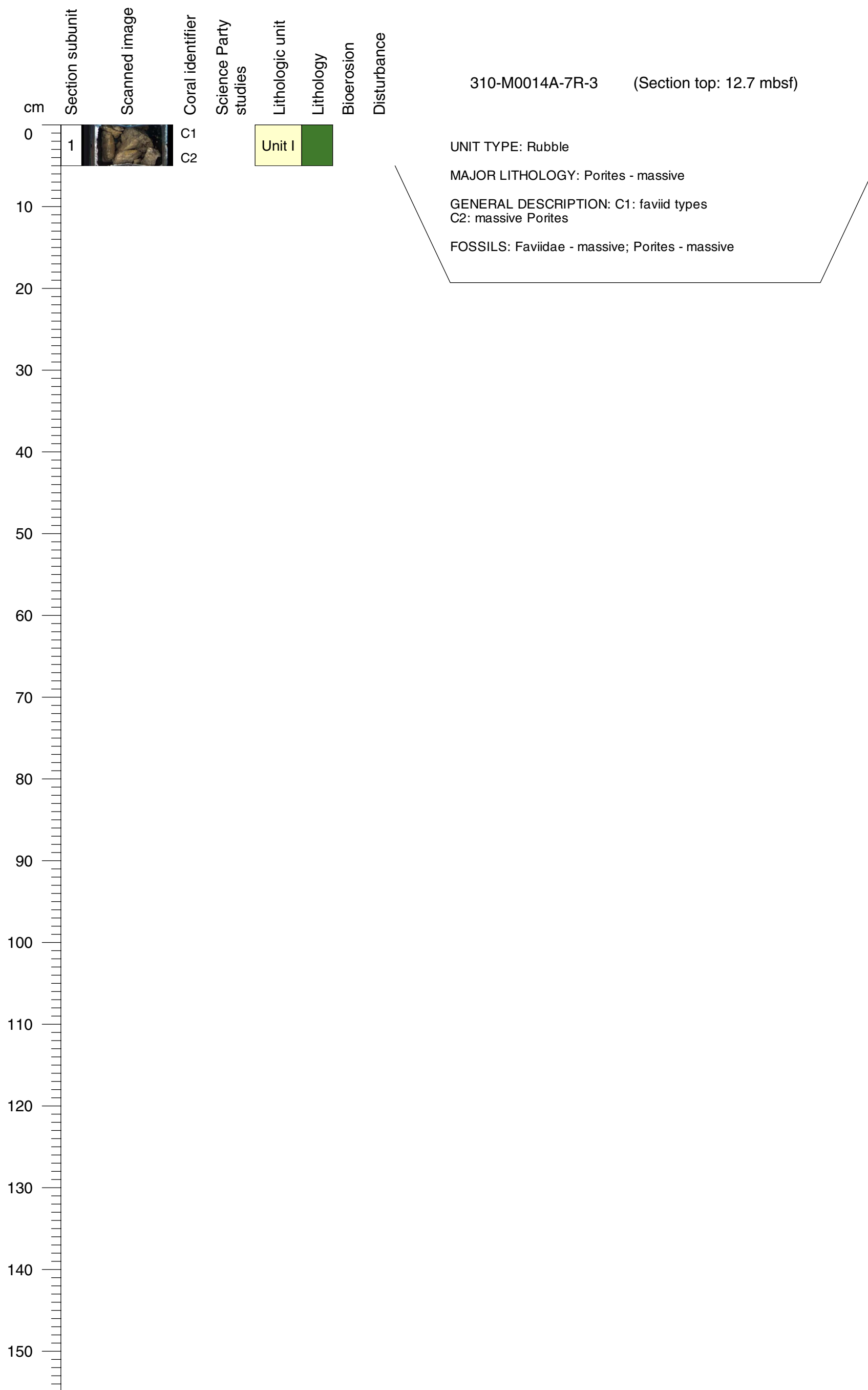


Core Photo

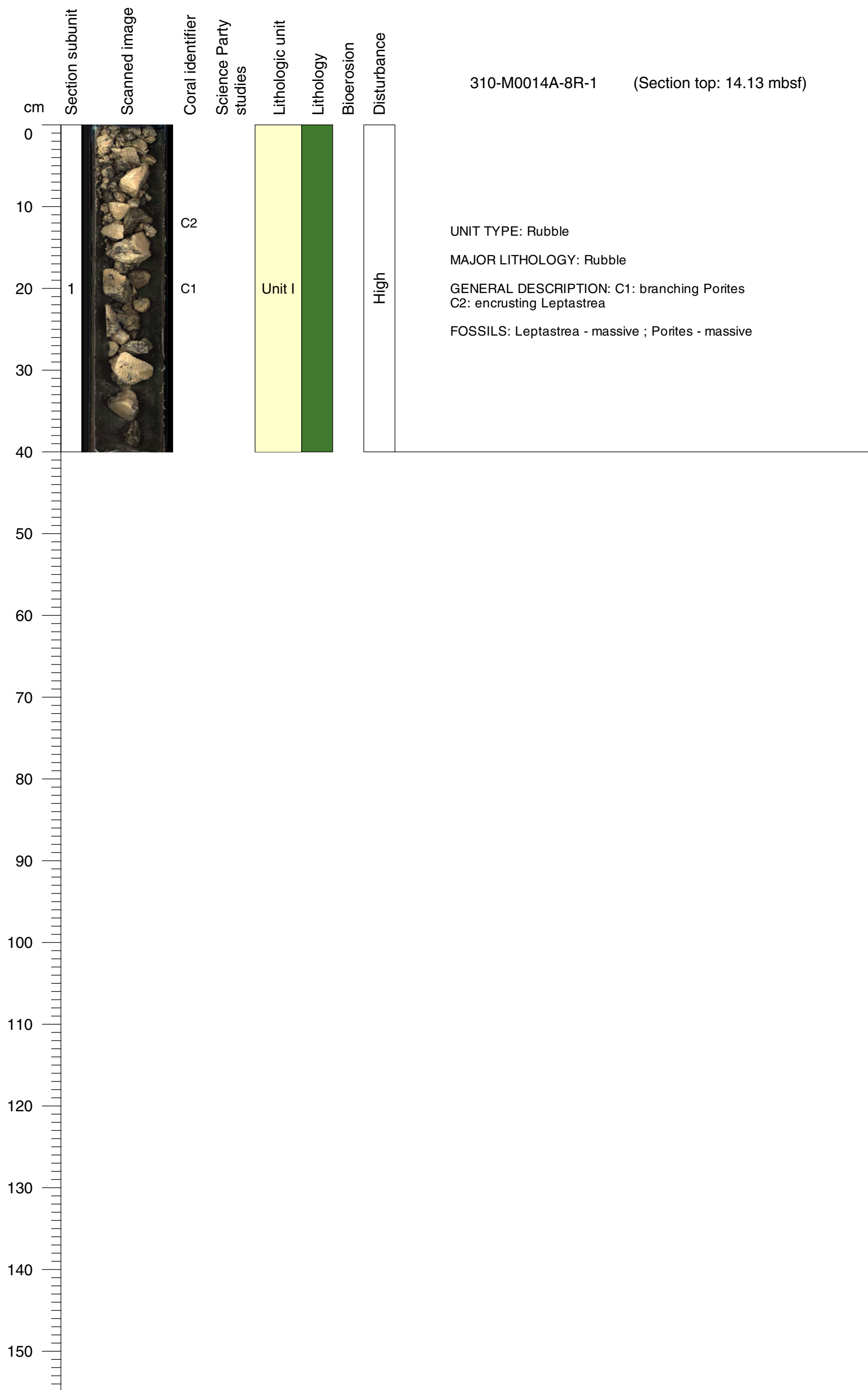
310-M0014A-7R-2 (Section top: 12.33 mbsf)



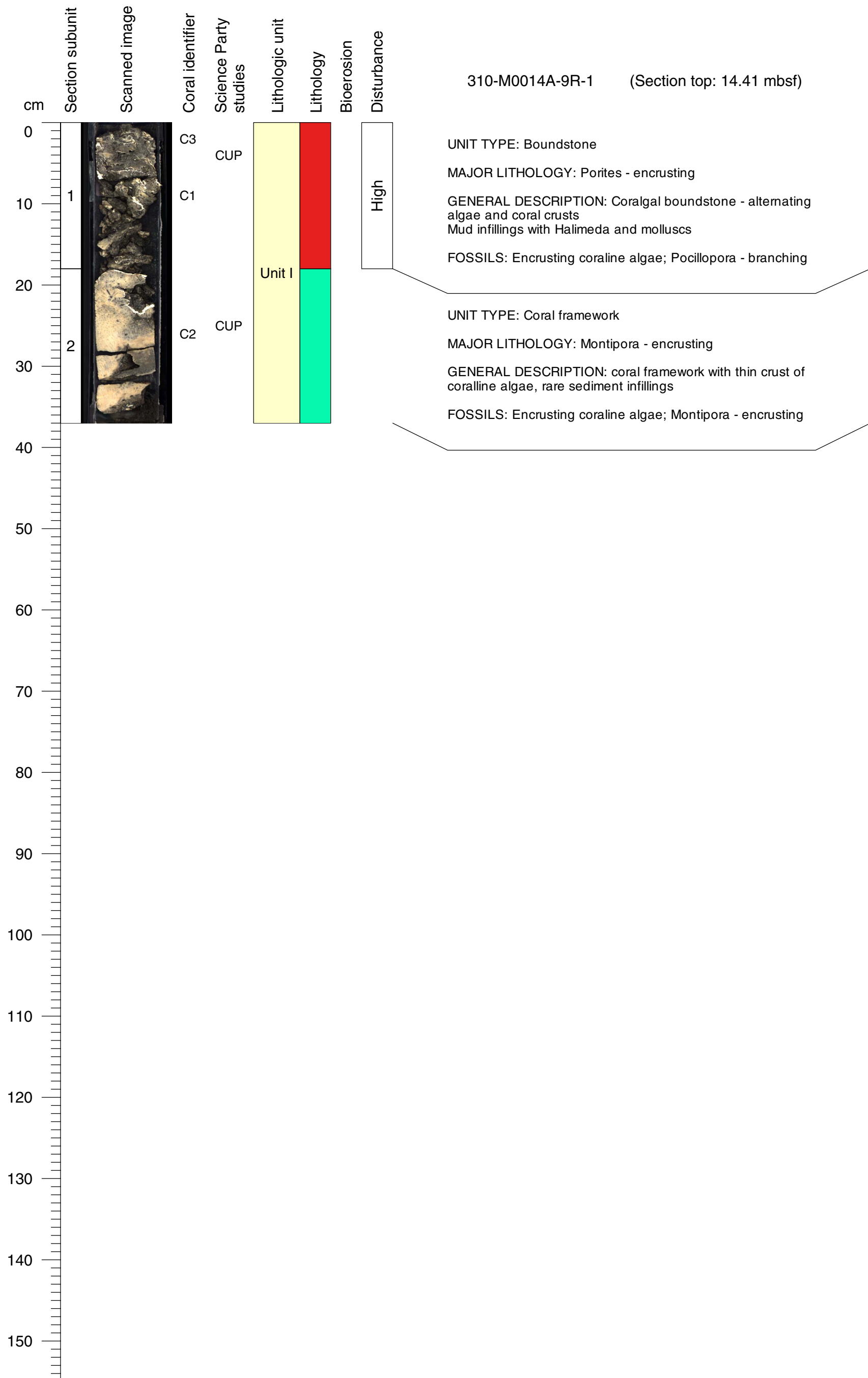
**Core Photo**



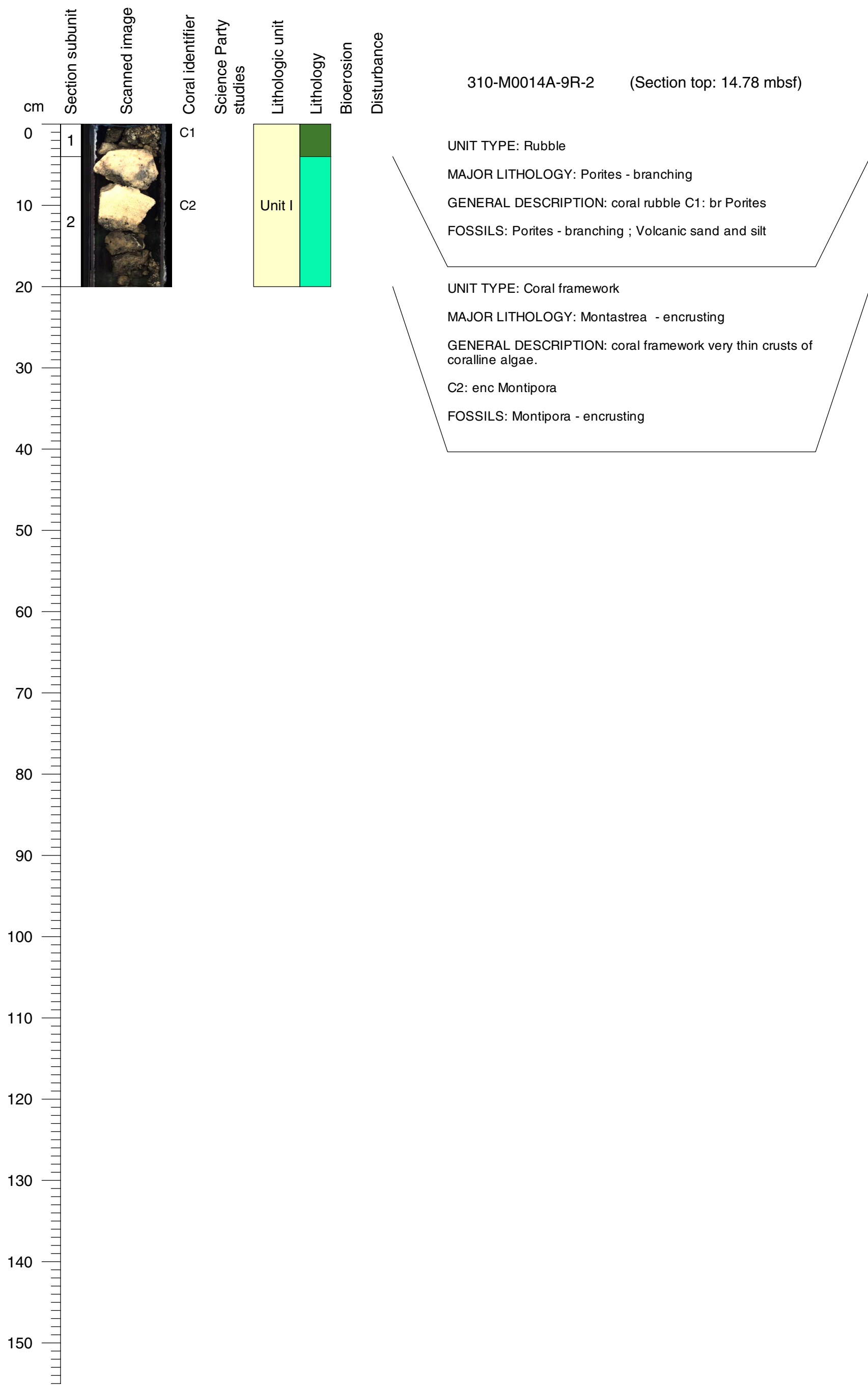
**Core Photo**



Core Photo

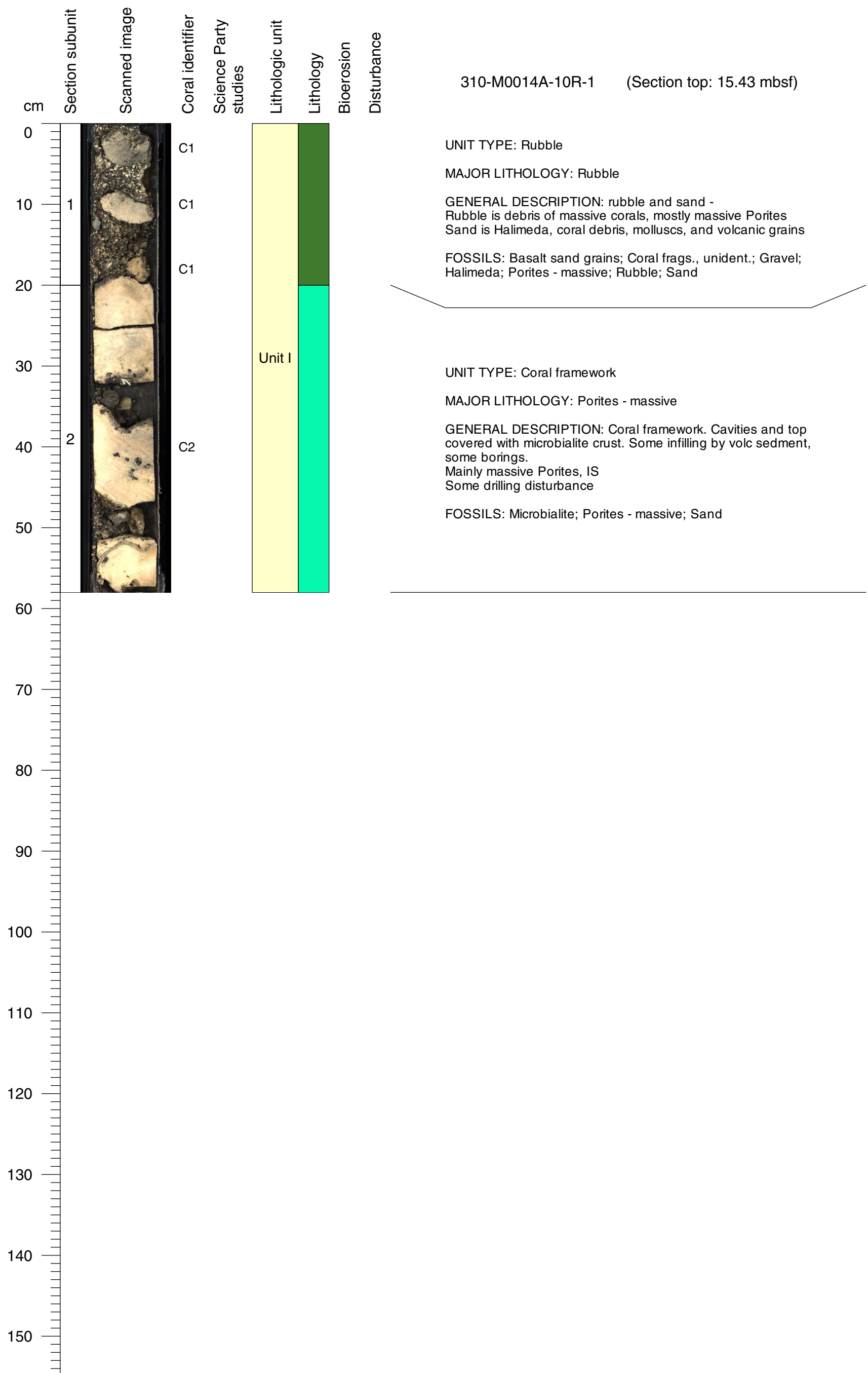


**Core Photo**

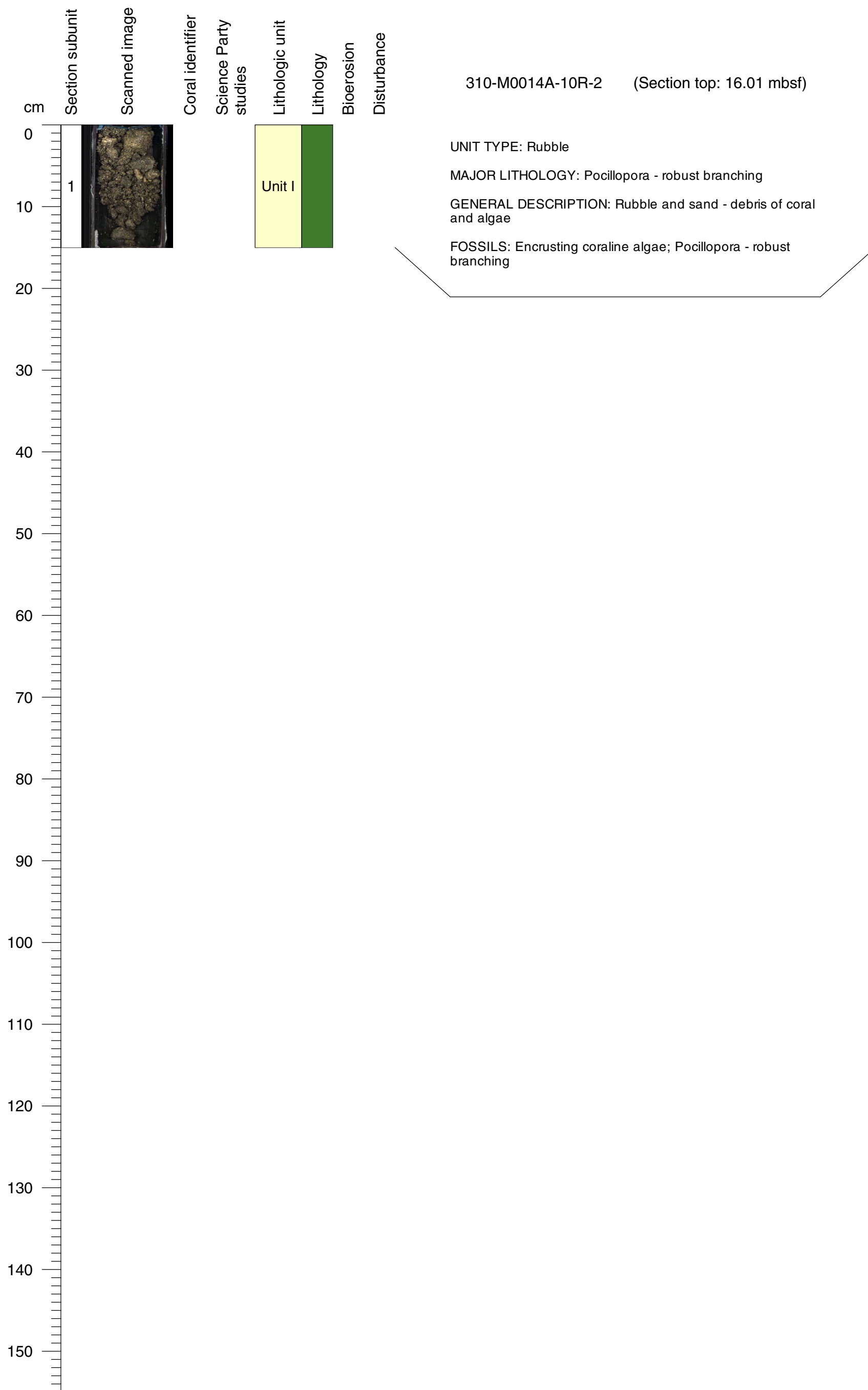




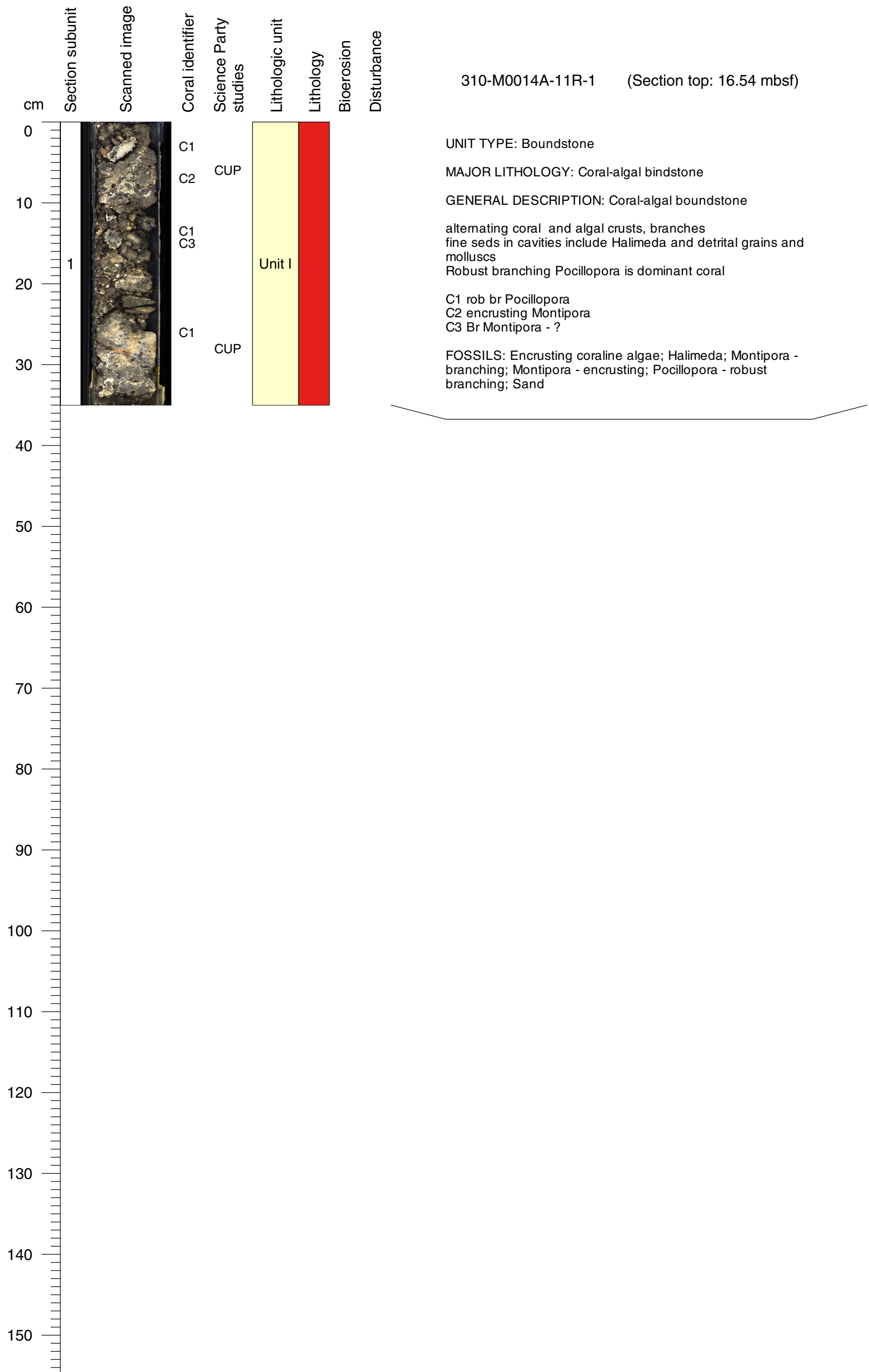
**Core Photo**



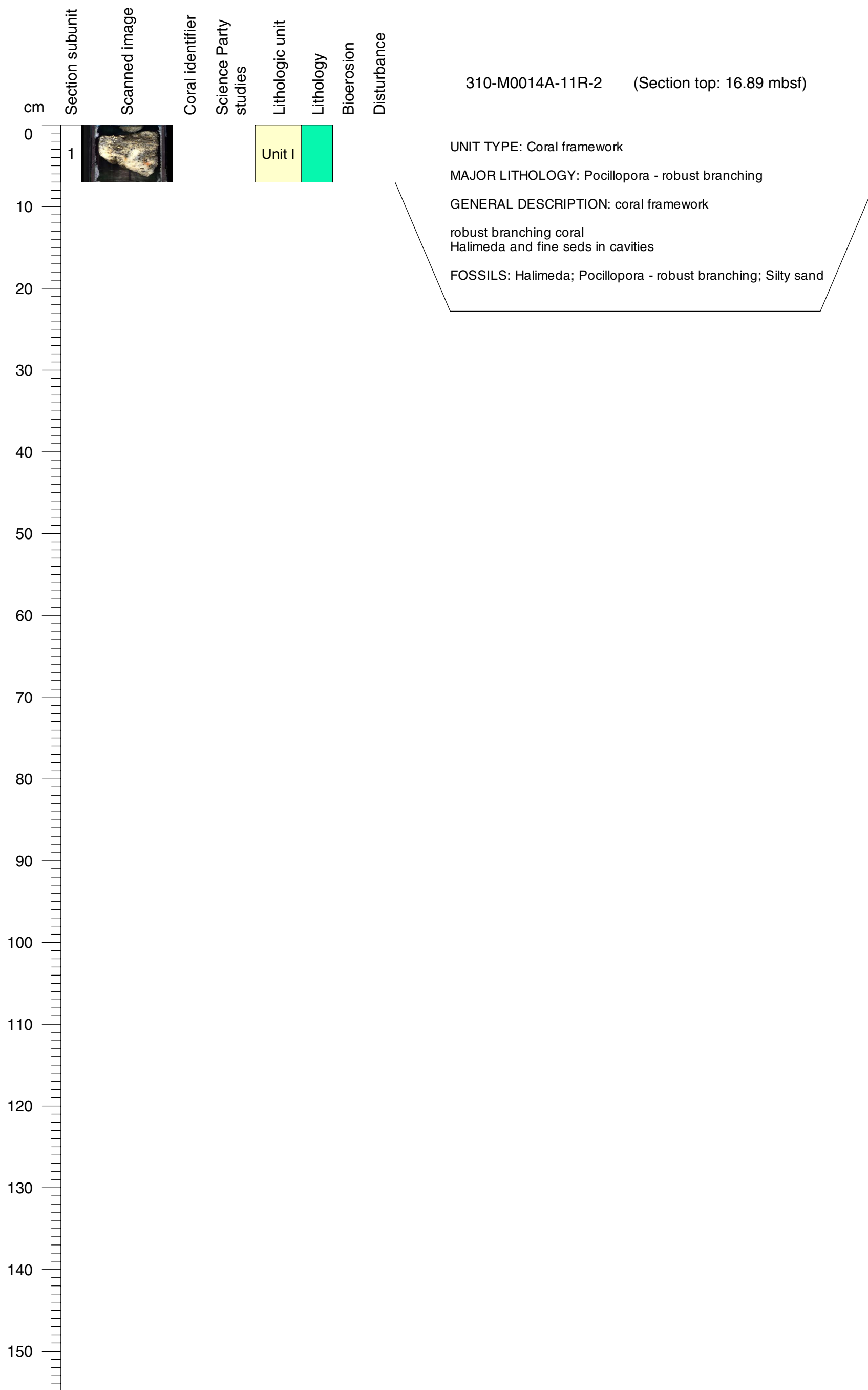
**Core Photo**



**Core Photo**

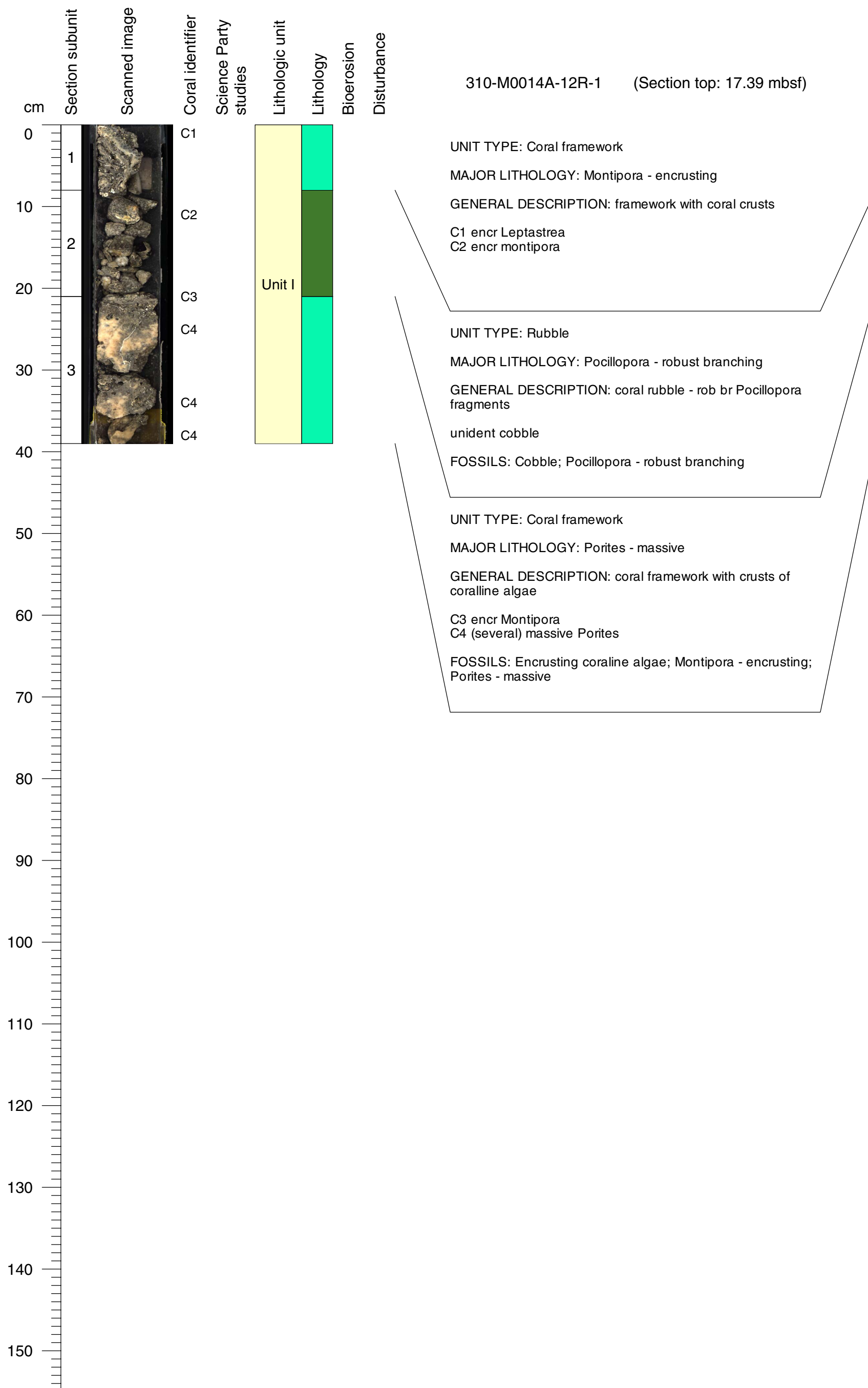


**Core Photo**

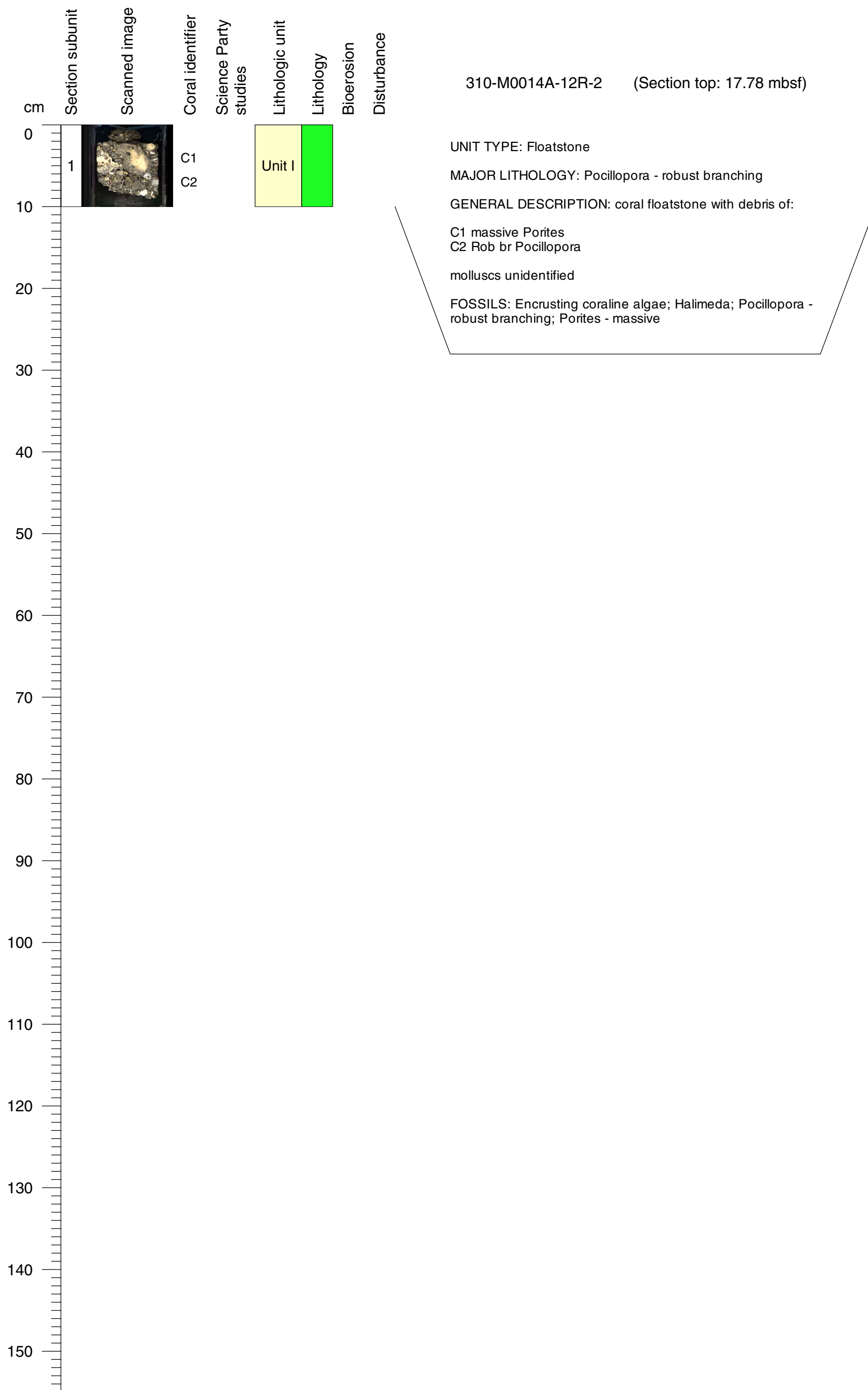


Core Photo

310-M0014A-12R-1 (Section top: 17.39 mbsf)

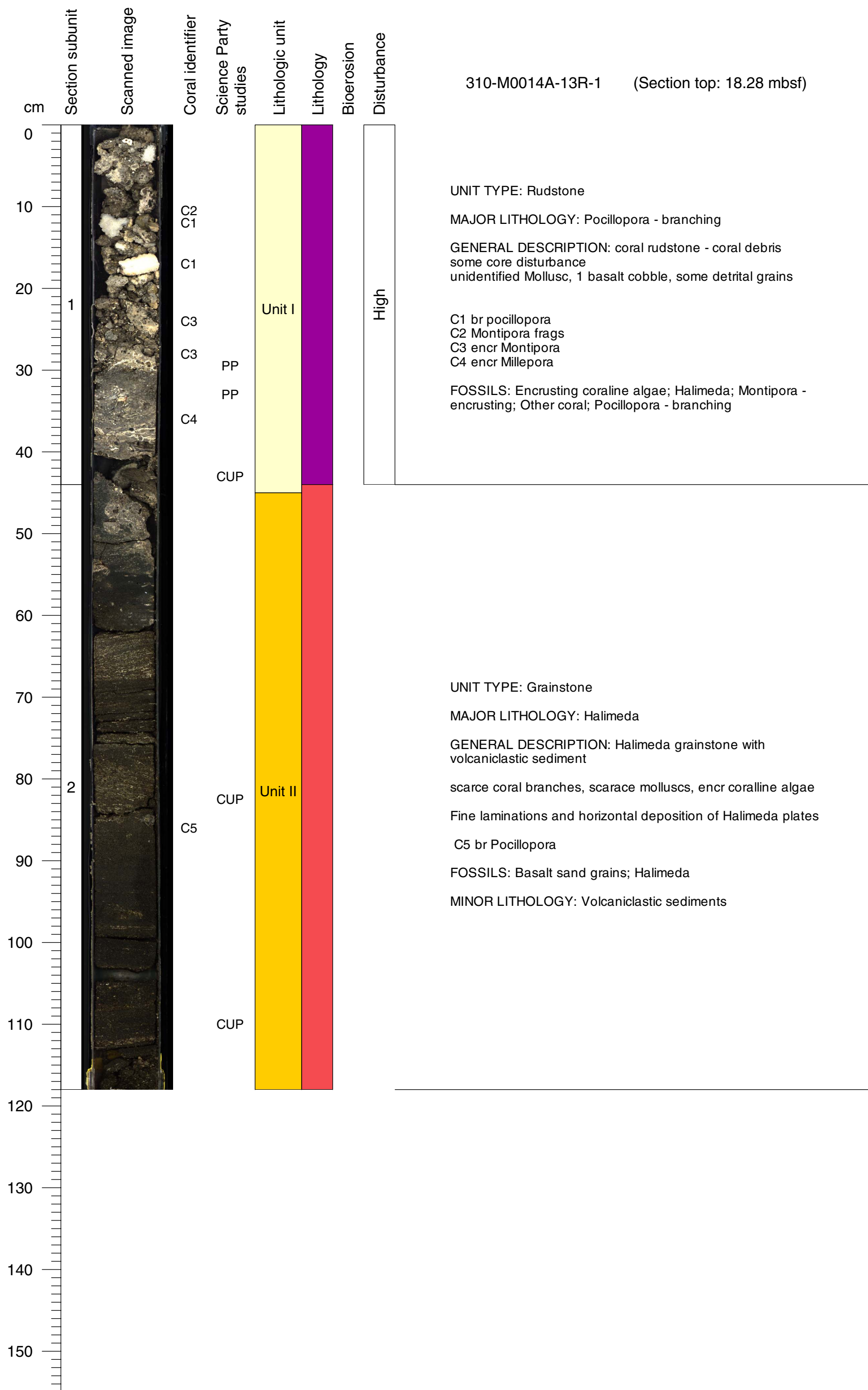


**Core Photo**

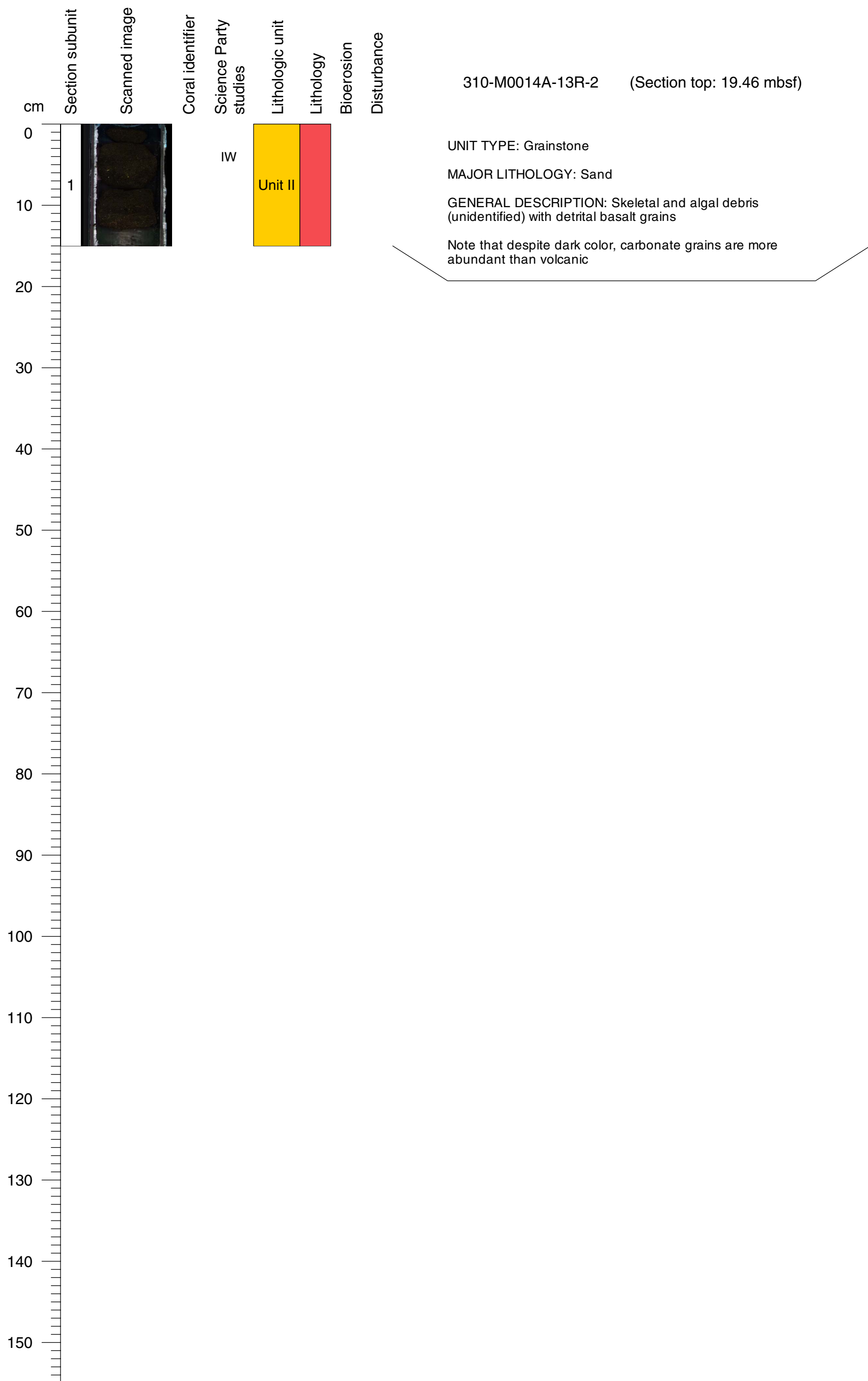


Core Photo

310-M0014A-13R-1 (Section top: 18.28 mbsf)

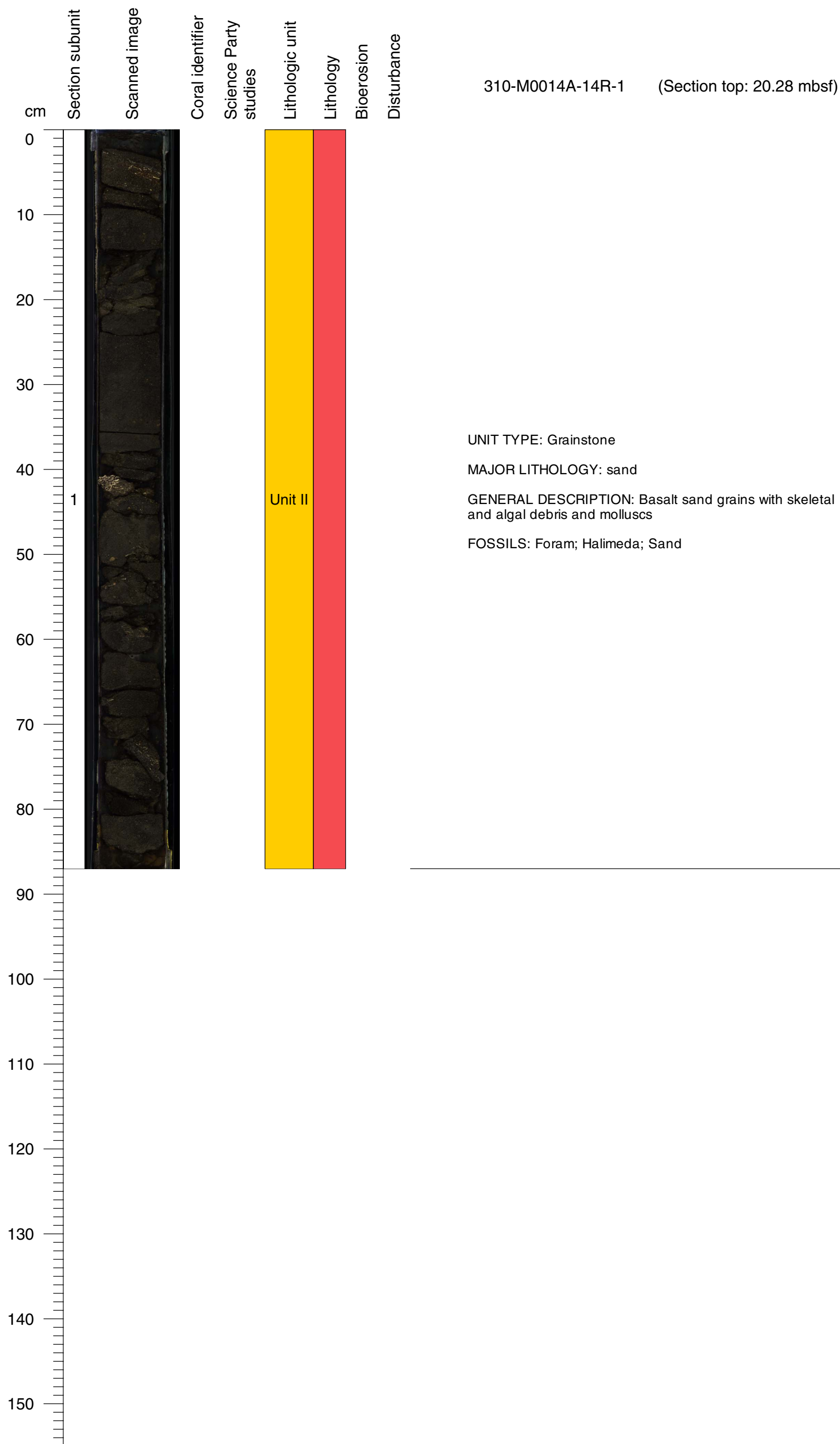


**Core Photo**

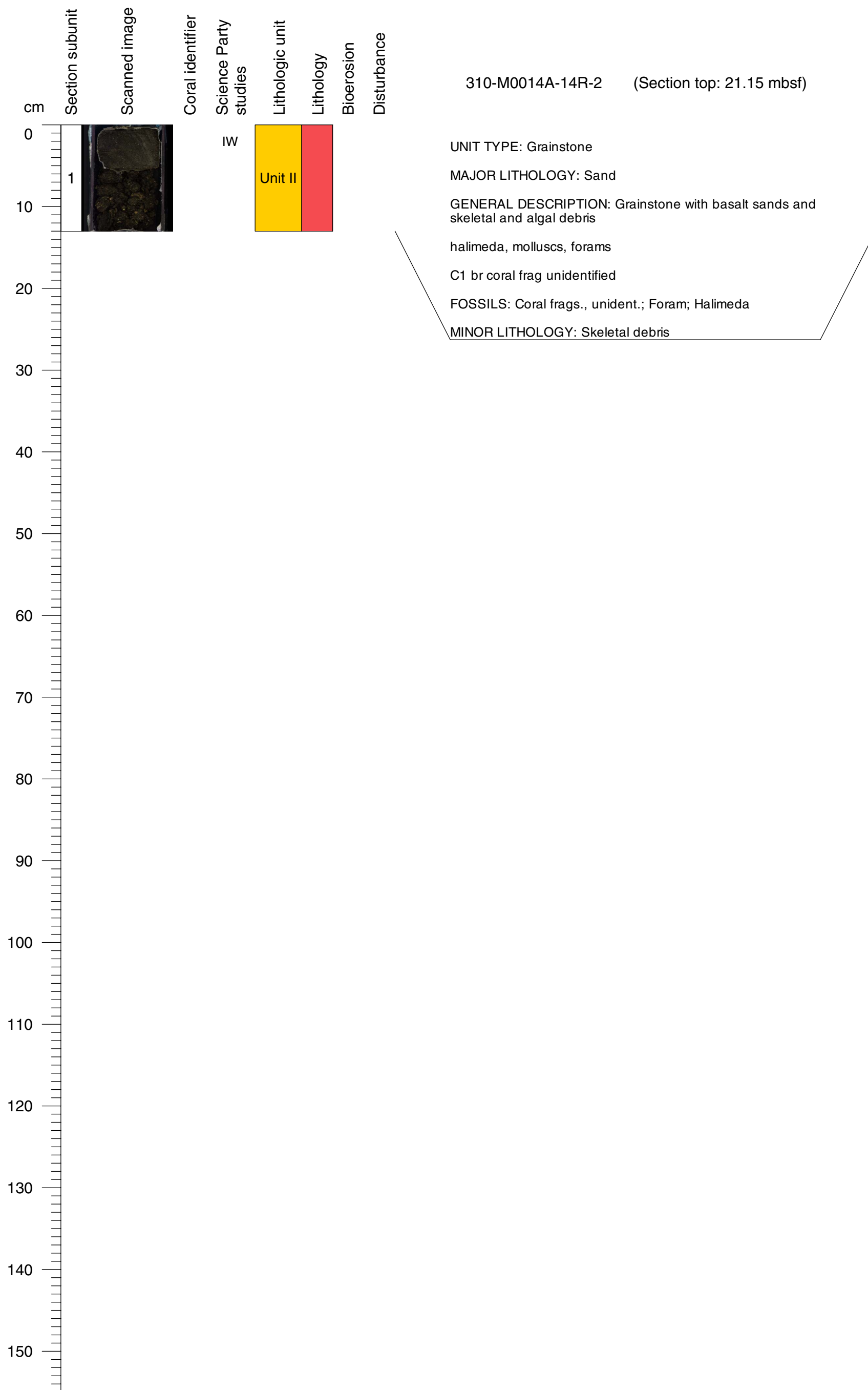




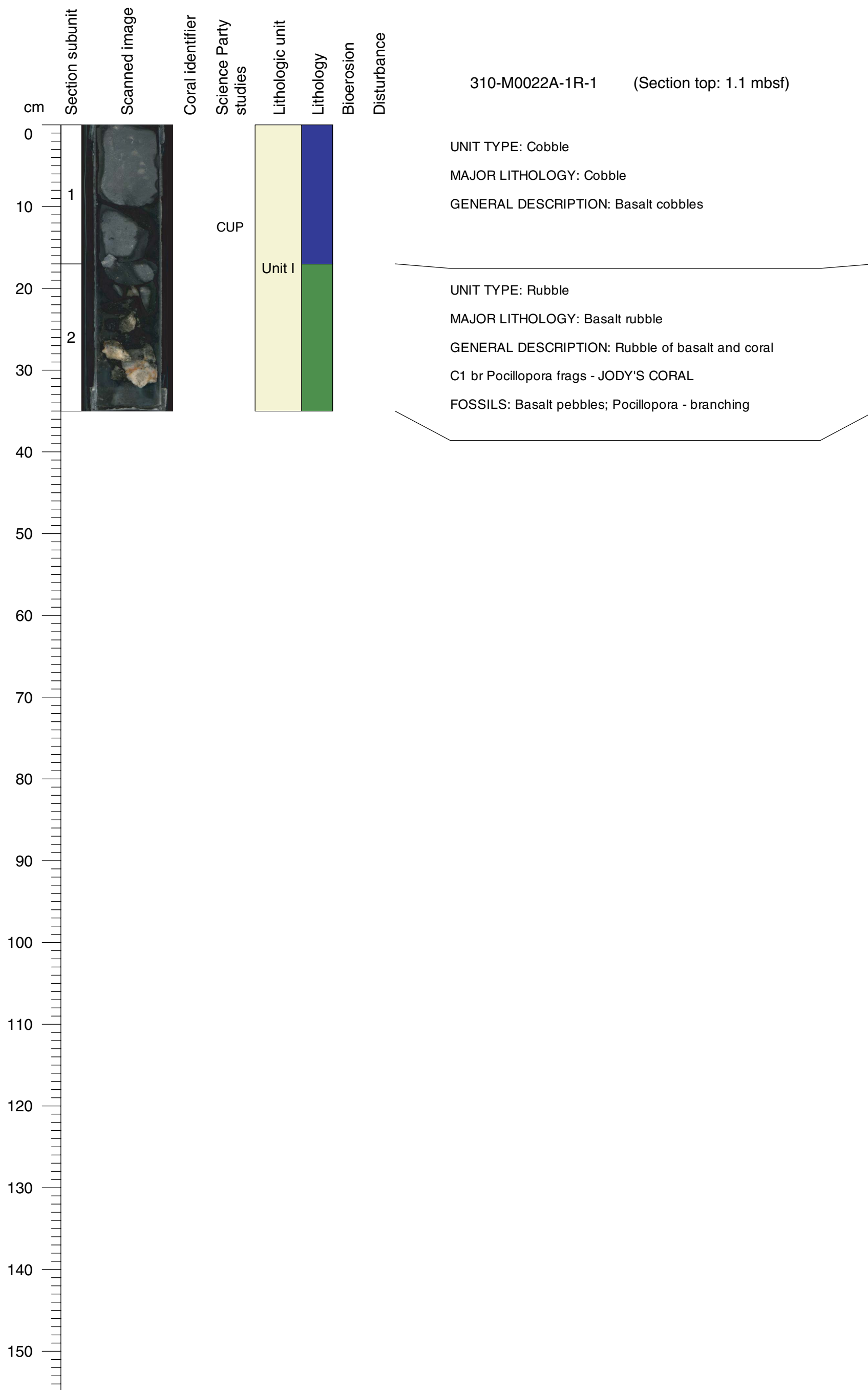
**Core Photo**



**Core Photo**

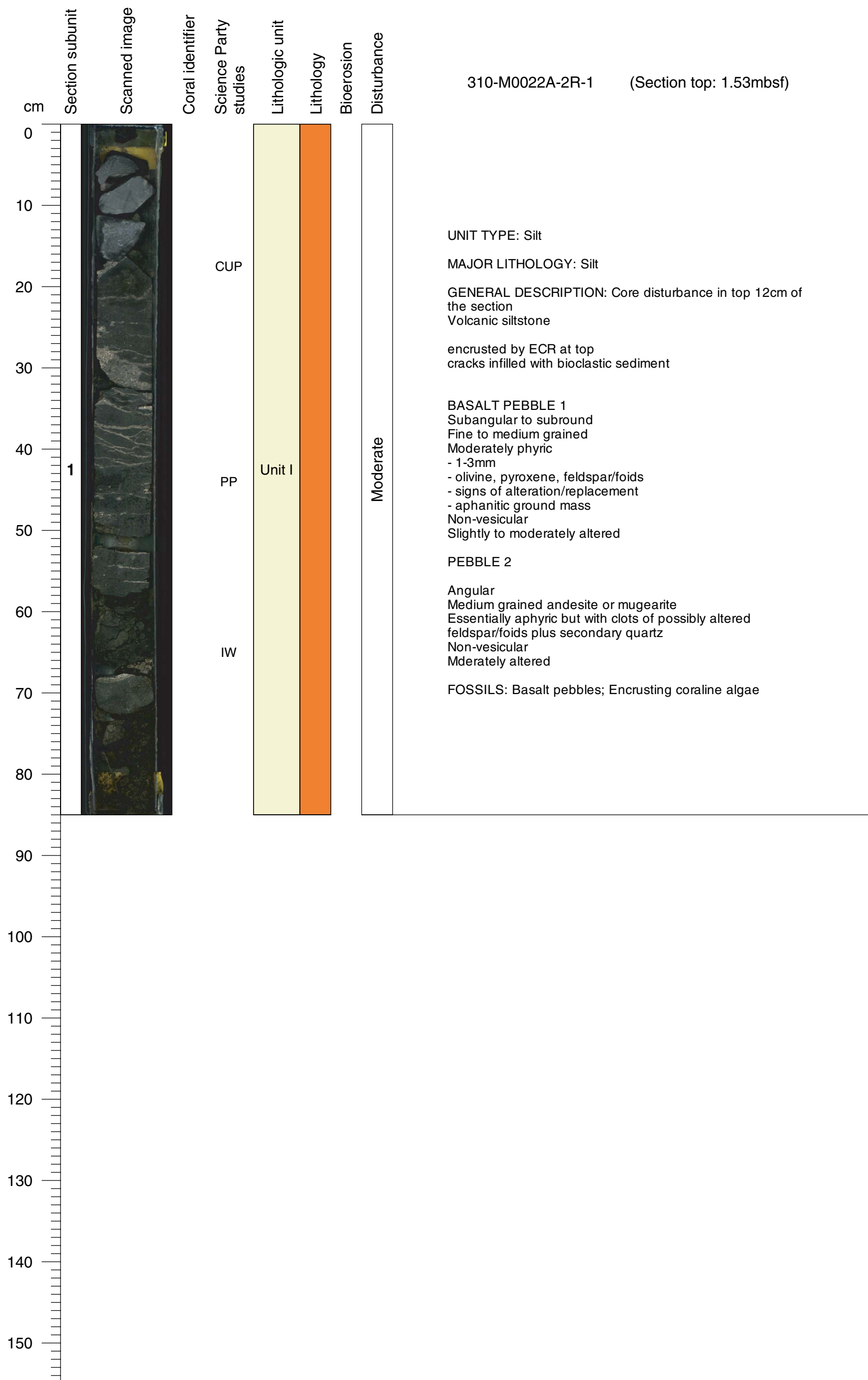


Core Photo



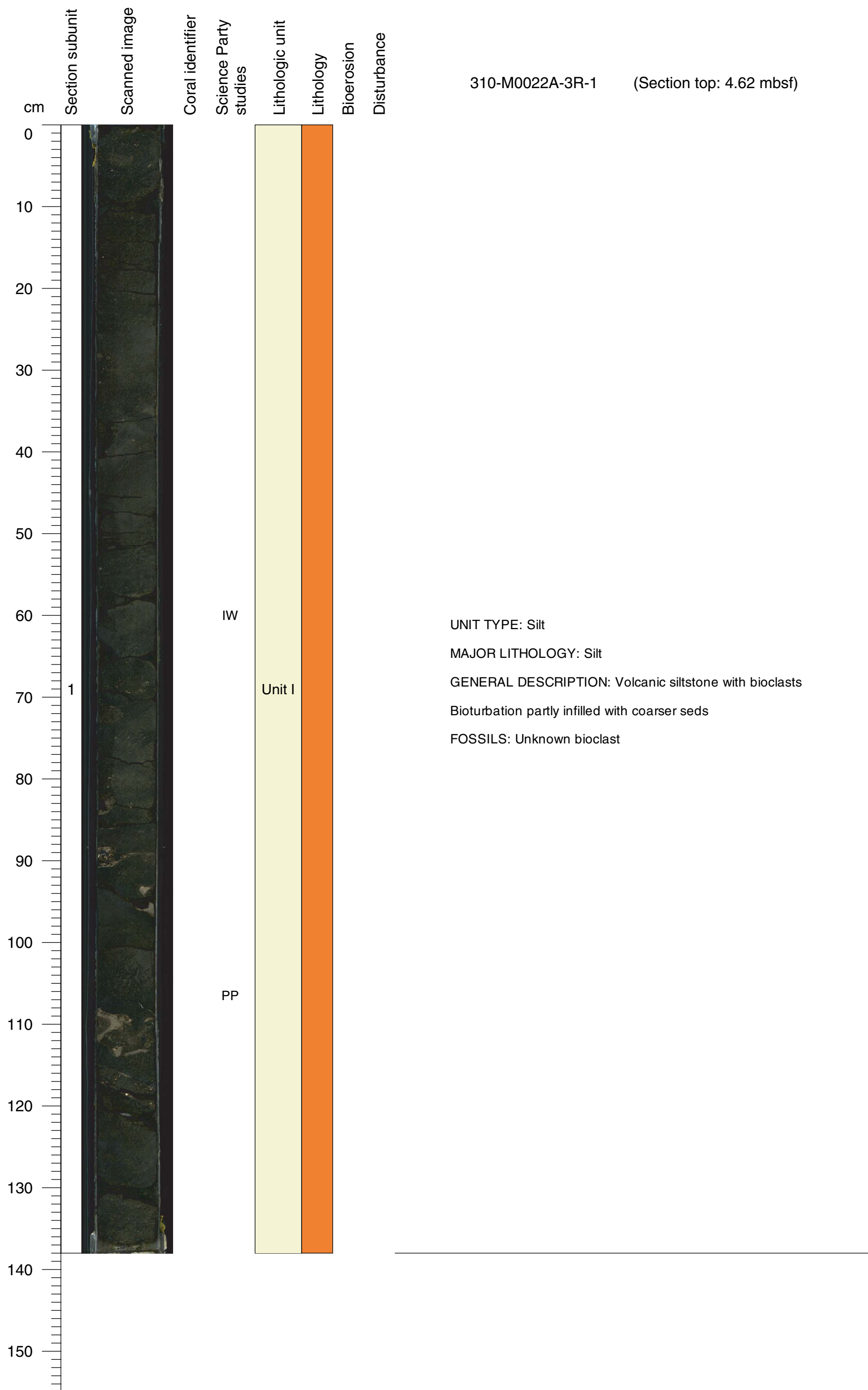
Core Photo

310-M0022A-2R-1 (Section top: 1.53mbsf)

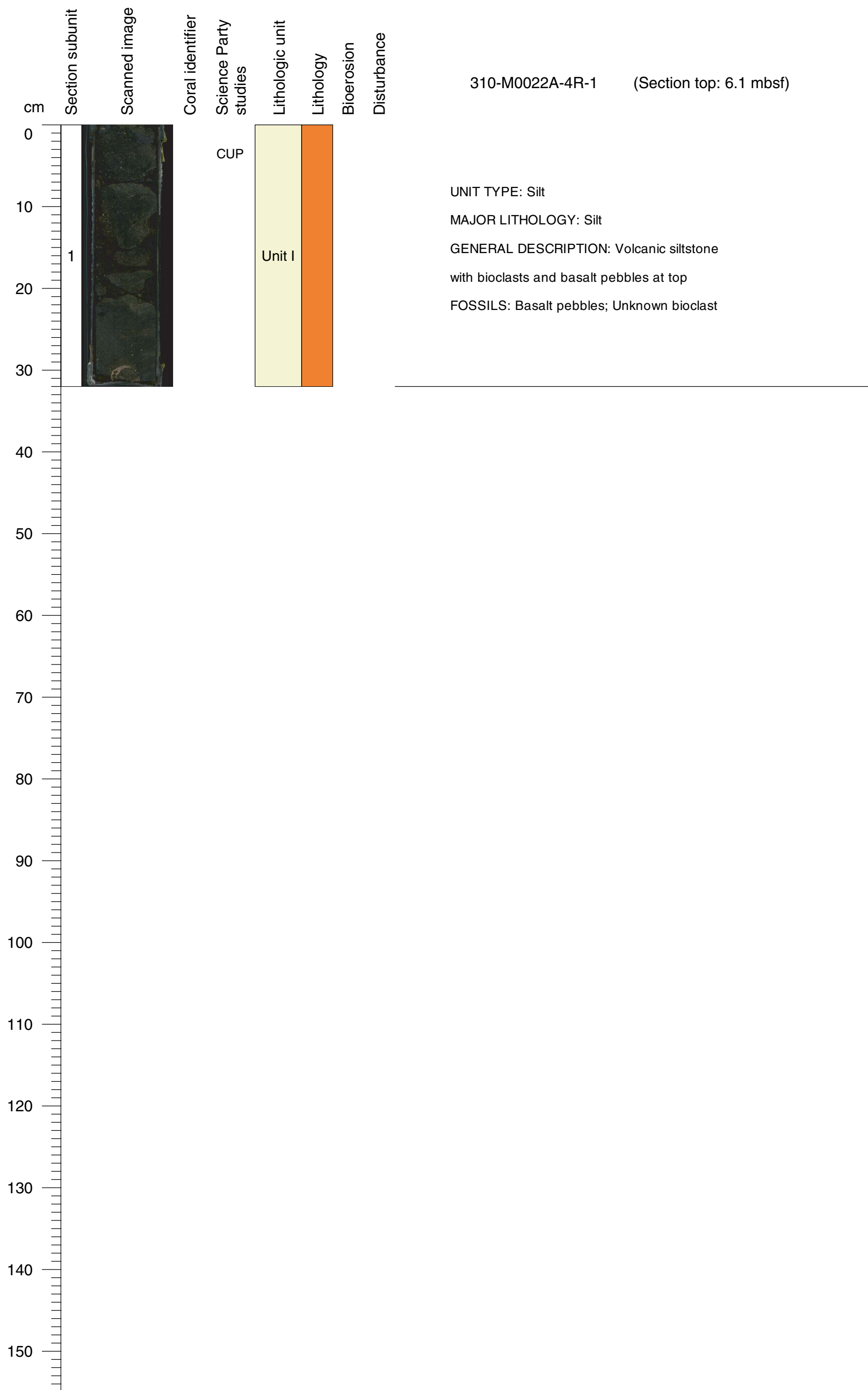


Core Photo

310-M0022A-3R-1 (Section top: 4.62 mbsf)



**Core Photo**



**Core Photo**

310-M0022A-4R-2 (Section top: 6.42 mbsf)

