

Supplementary Materials *Coral Reefs*

Global sea surface salinity and temperature impacts on trace elements, crystallography, and organics in massive *Porites* coral skeletons from a museum collection

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ORCID: (GF) 0000-0001-5204-7044, (DT) 0000-0002-6181-1259, (AMQ) 0000-0002-4247-3055, (ACK) 0000-0001-7178-7910

Content:

APPENDIX 1

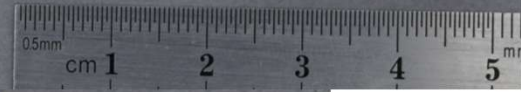
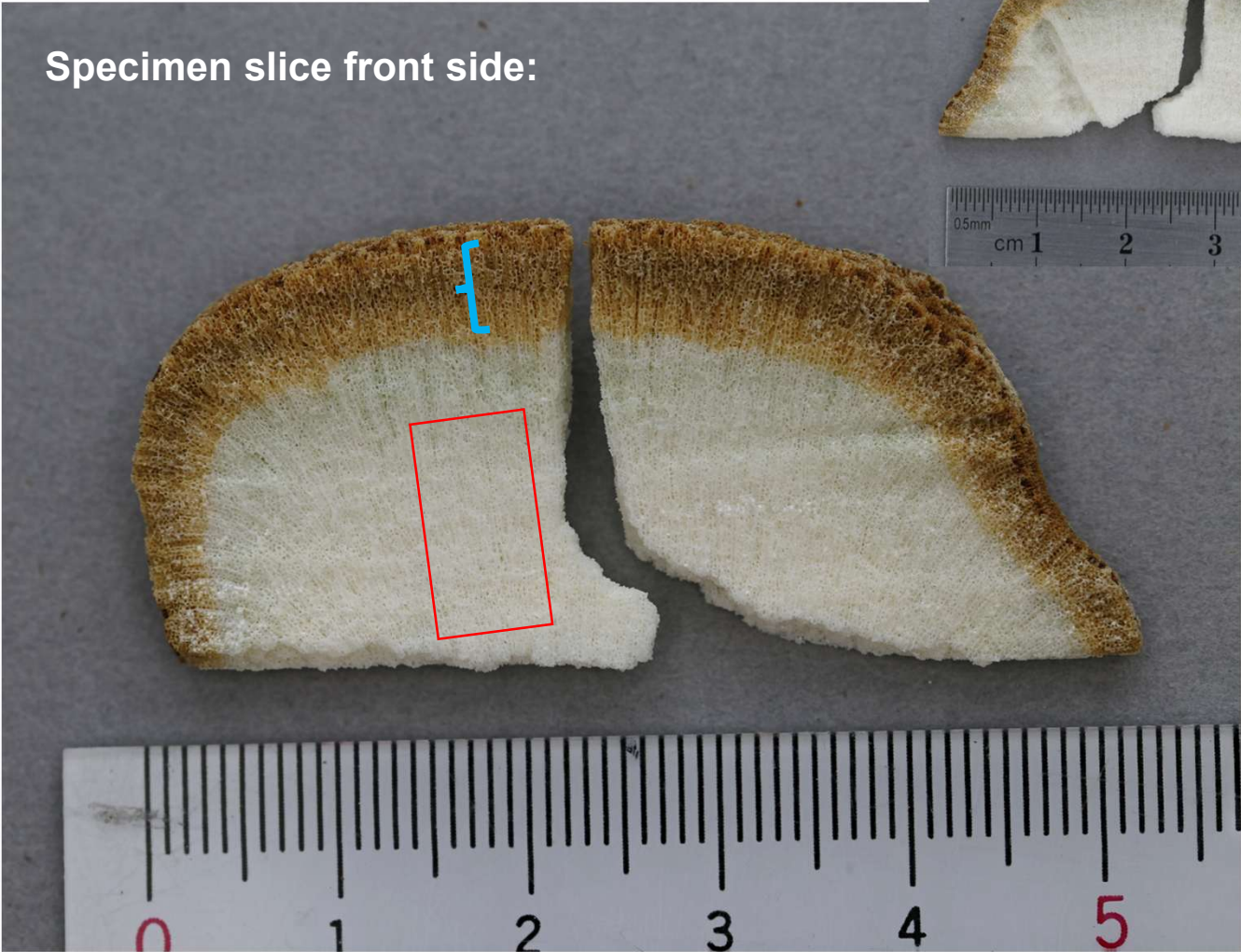
Dry Coral Samples from the National Coral Collection used in this study

- Whole colony specimens
- Slices of specimens
- Outlined regions that were milled for powders

EXAMPLE Coral Specimen:

Back of specimen slice:

Specimen slice front side:



Areas that were milled for powders

Tissue layer thickness

Full specimen:

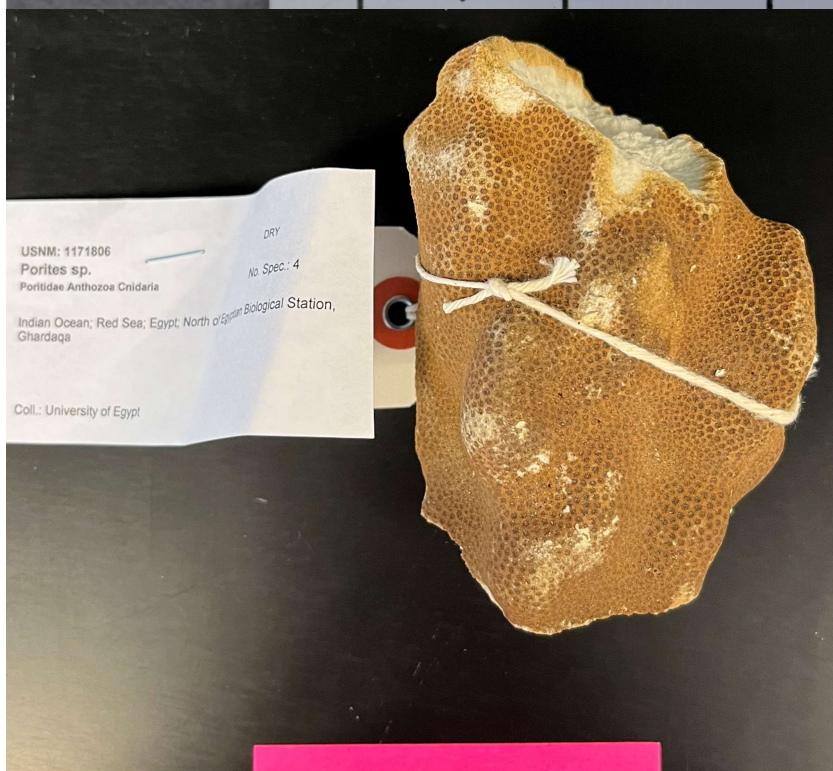
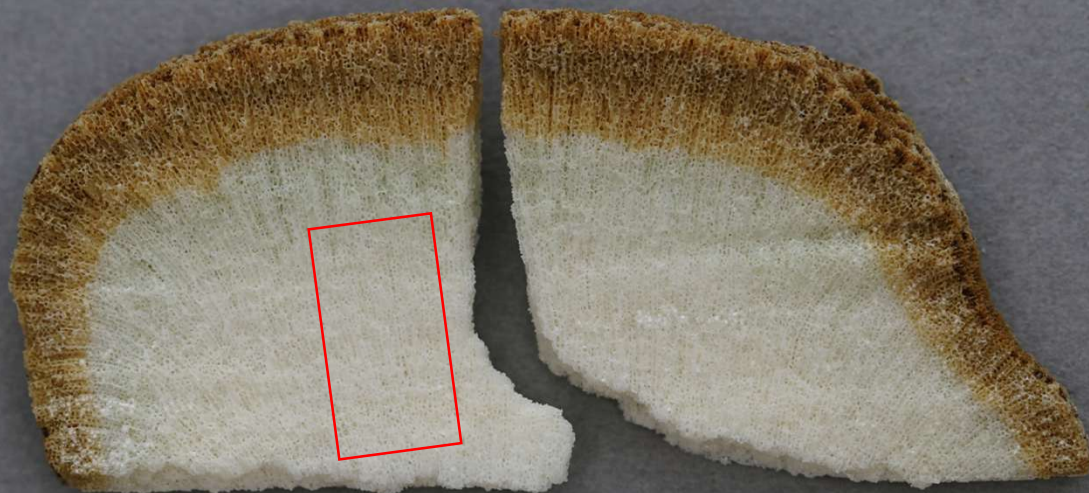
USNM: 1171806
Porites sp.
Poritidae Anthozoa Cnidaria
Indian Ocean; Red Sea, Egypt; North of Suez Biological Station,
Ghardaqa
Coll.: University of Egypt



**Standard Post-It note for scale
(3 inches/7.6 cm)**

USNM1171806_1

USNM1171806
Porites sp.
Red Sea, Egypt,
Bio station



USNM: 1171806
Porites sp.
Poritidae Anthozoa Cnidaria
Indian Ocean; Red Sea; Egypt; North of Egyptian Biological Station,
Ghardaqa
Coll.: University of Egypt

USNM1171806_2

USNM 1171806

Porites sp.

Red sea, Egypt



USNM: 1171806
Porites sp.
Poritidae Anthozoa Cnidaria
Indian Ocean; Red Sea, Egypt, North of Egyptian Biological Station,
Ghardaqa
Coll.: University of Egypt

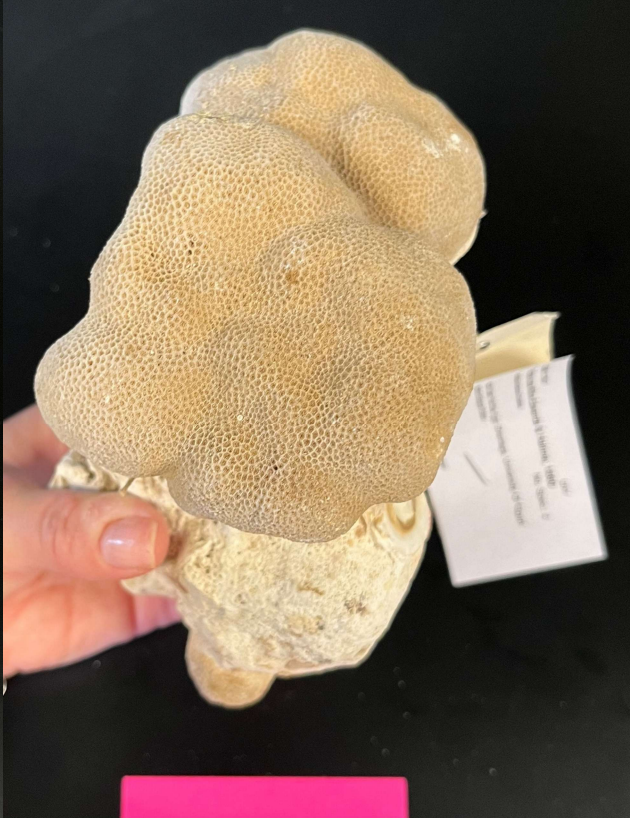
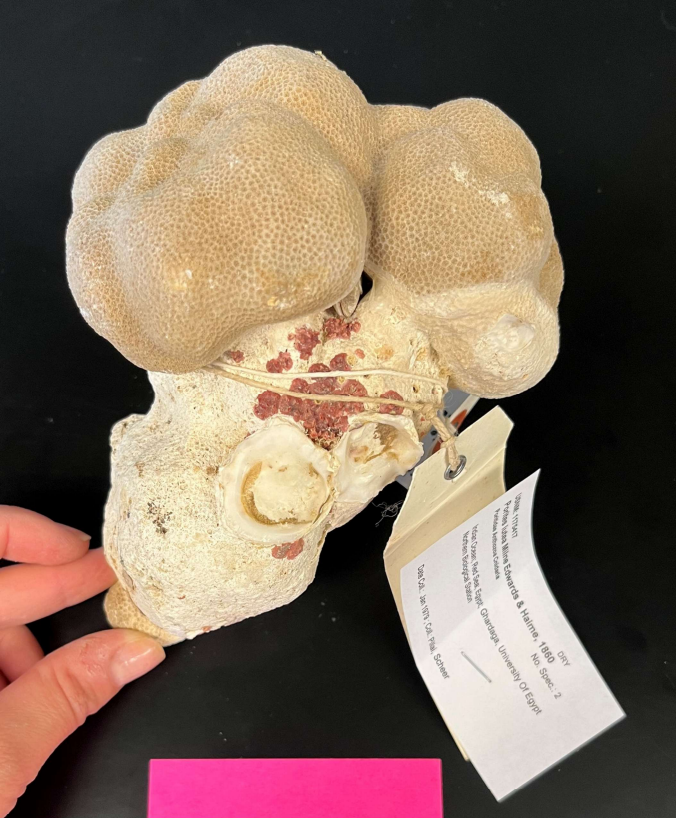
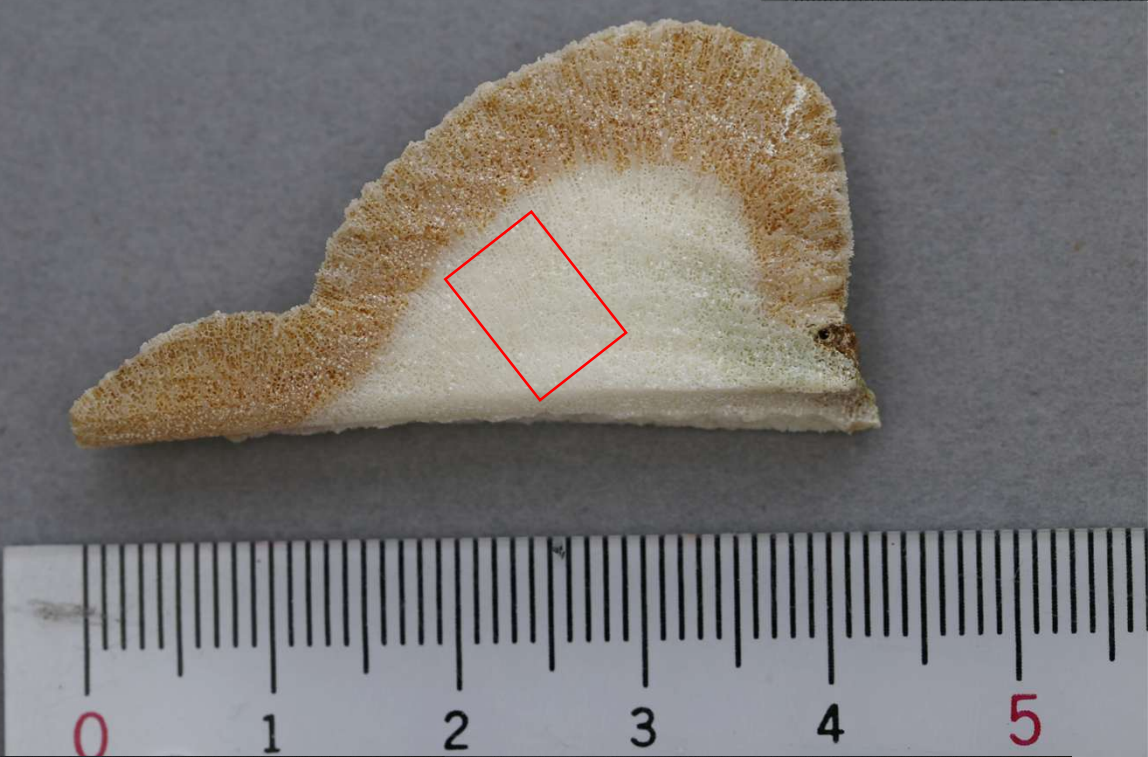
DRY
No. Spec.: 4



Porites
USNM 1171806
Egyptian Biological
Station, Ghardaqa
Red Sea

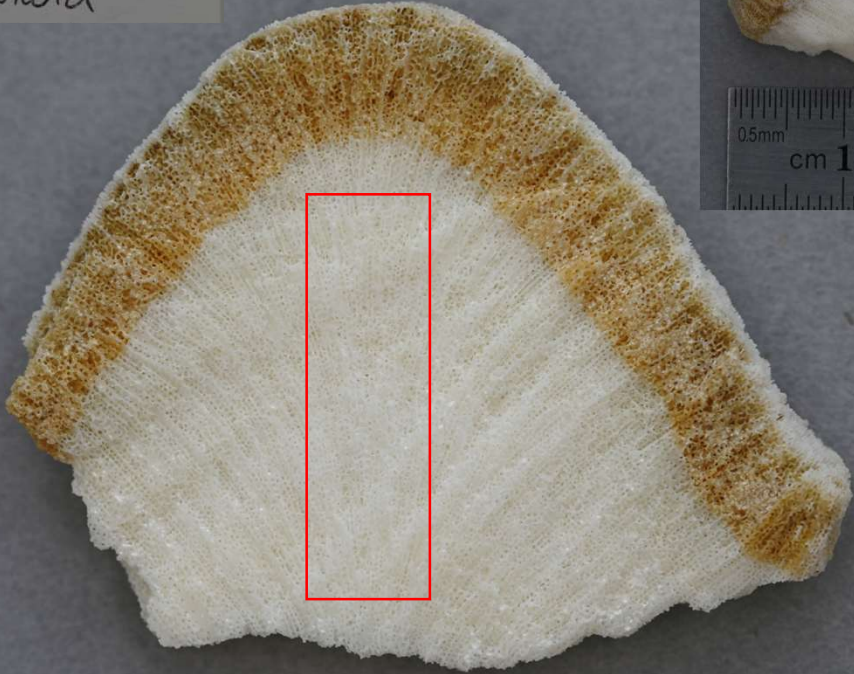
USNM 1175417

USNM 1175417
Red Sea, Egypt,
University of Egypt Biological
Station



USNM 1174881

USNM 1174881
Porites lutea
Arabian Sea,
Jaraid Island



USNM: 1174881
Porites lutea Milne Edwards & Haime, 1860
Poritidae Anthozoa Cnidaria
Indian Ocean; Arabian Sea, Persian Gulf; Saudi Arabia; Jaraid Island
Date Coll.: 5 Oct 1956; Coll.: C. Dawson
No. Spec.: 1



10-5-
JARAID
CED

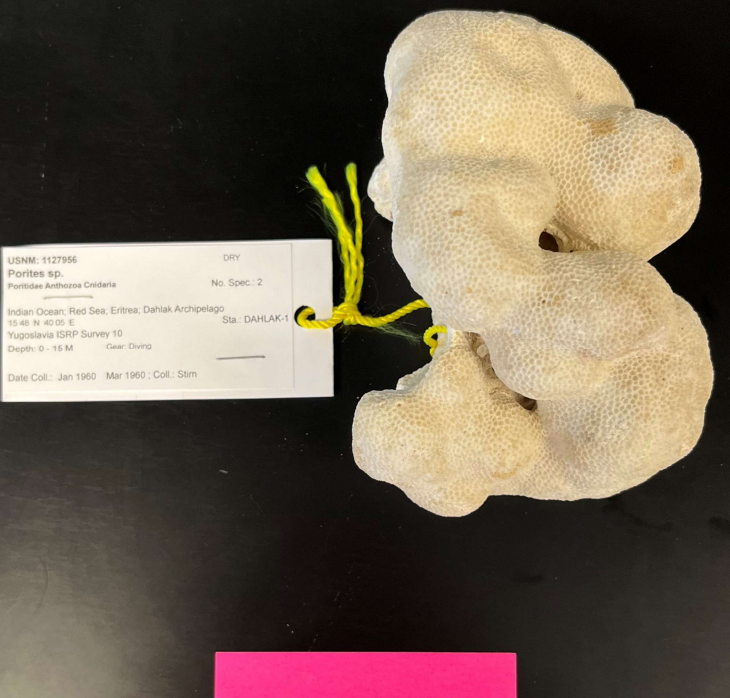
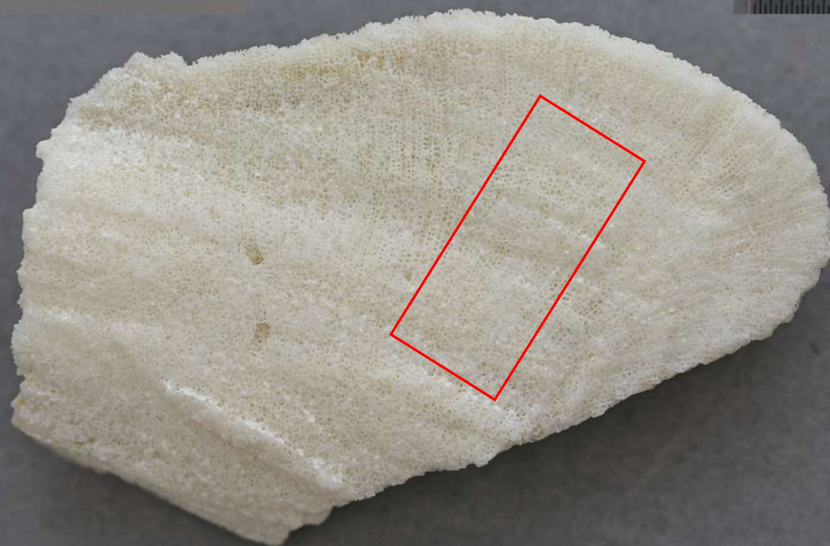
USNM 1127956

USNM 1127956

Porites sp.

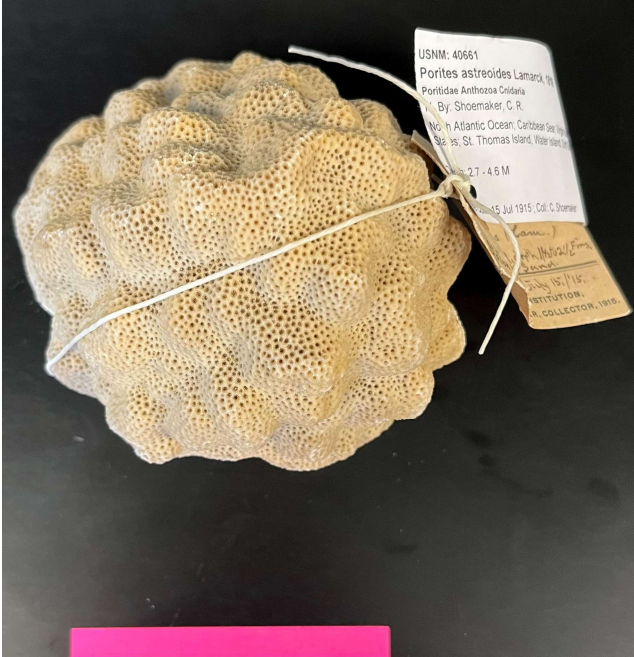
Red Sea, Eritrea

Dahlak Archipelago



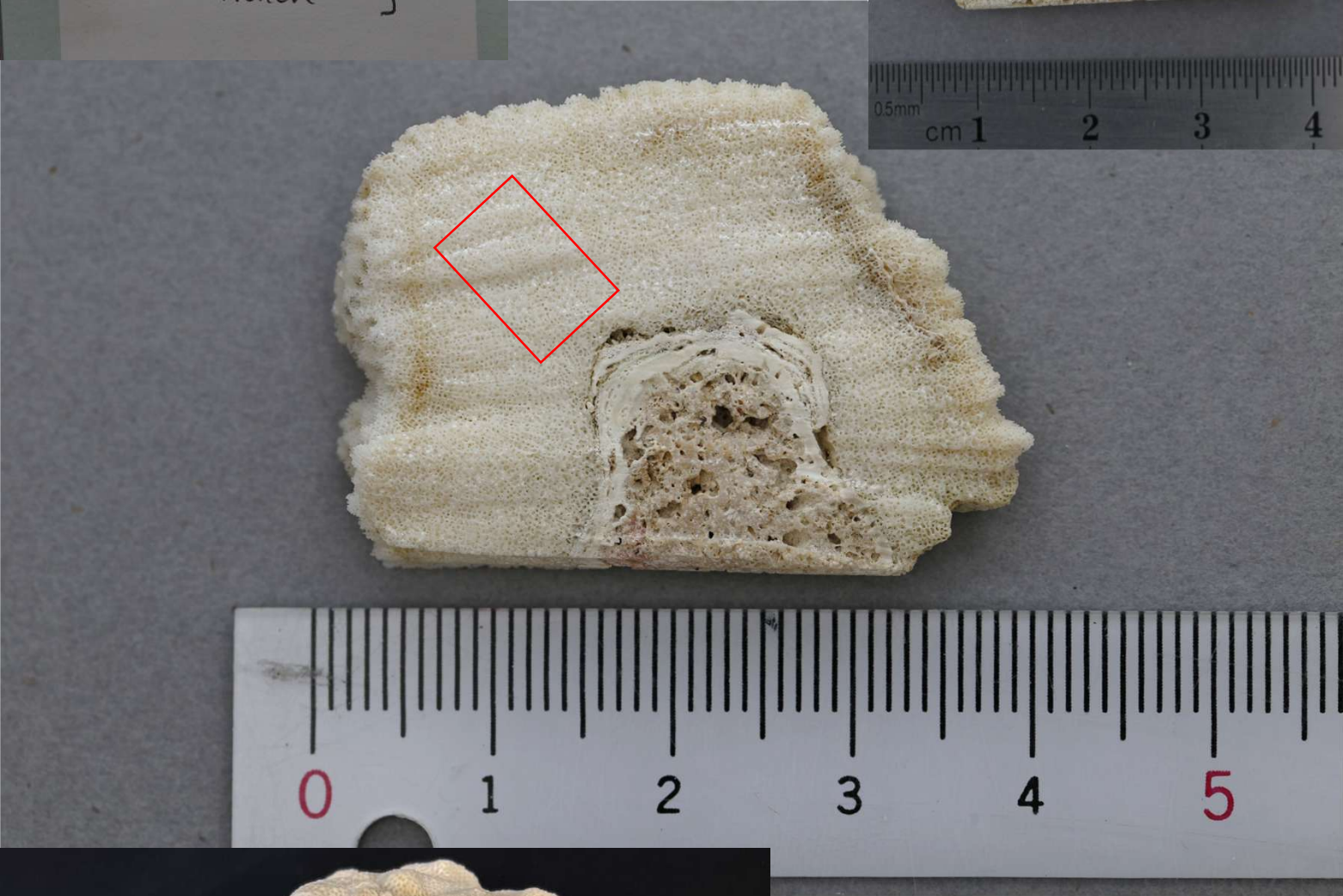
USNM 40661

USNM 40661
Porites asteroides
Virgin Islands,
St. Thomas Island
Water Island, Drift
S. O. ... Ban



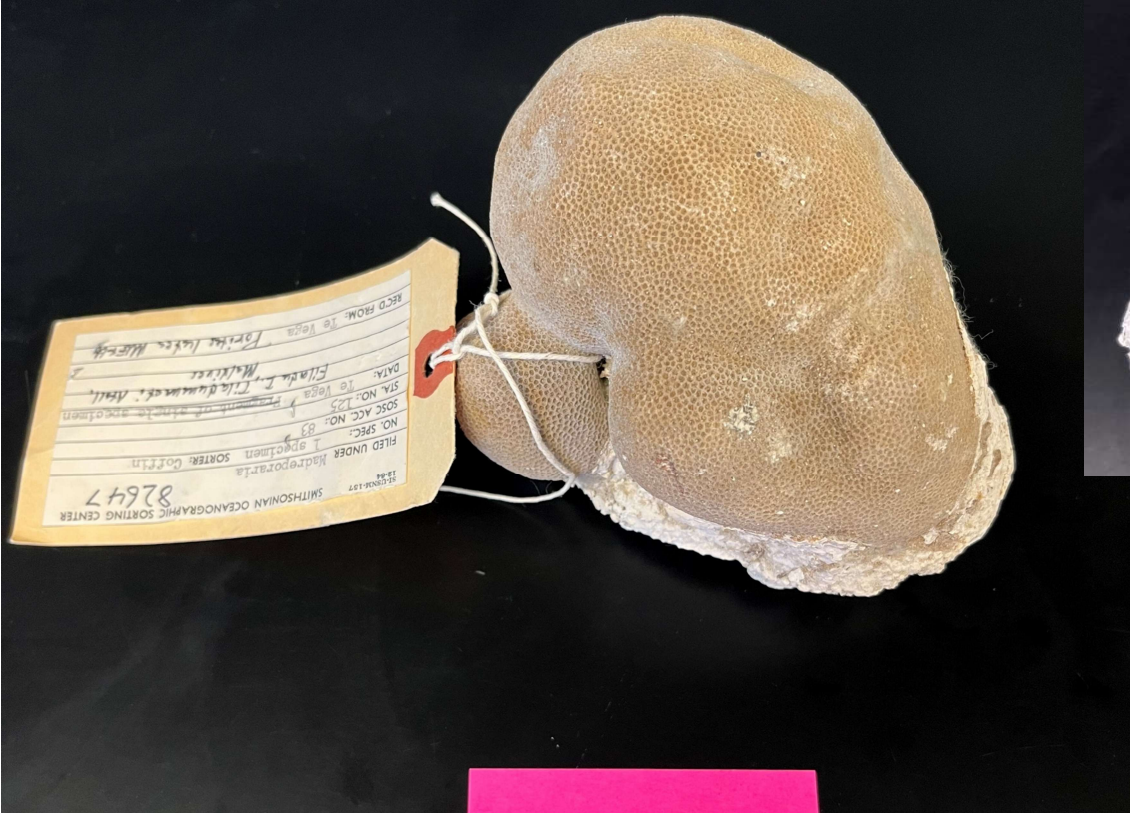
USNM 40660

USNM 40660
Porites astreoides
Virgin Islands, St. Thomas,
French Bay



USNM 82647

USNM 82647
Porites lutea
Maldives, Tiladummati
Atoll, Fildda Island

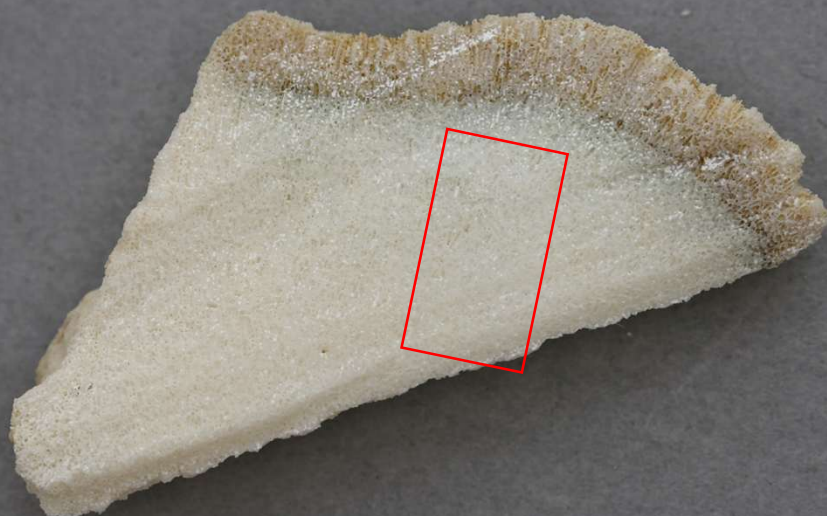


USNM 82669

USNM 82669

Porites lutea

Maldives, Tiladummati
Atoll, Filada Island



PORITES LUTEA
MILNE EDWARDS + HAIME
SQ. DRY LARGE
INDIAN OCEAN; MALDIVES;;
TILADUMMATI ATOLL, FILADA ISLAND

125
; TE VEGA R/V

82669
— APR 1964

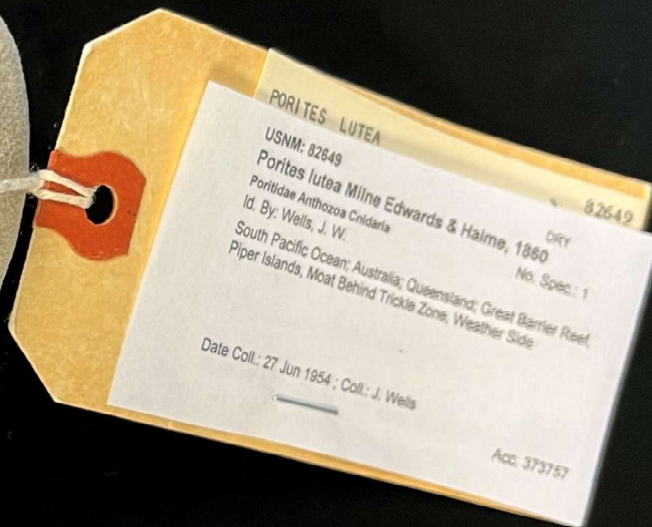
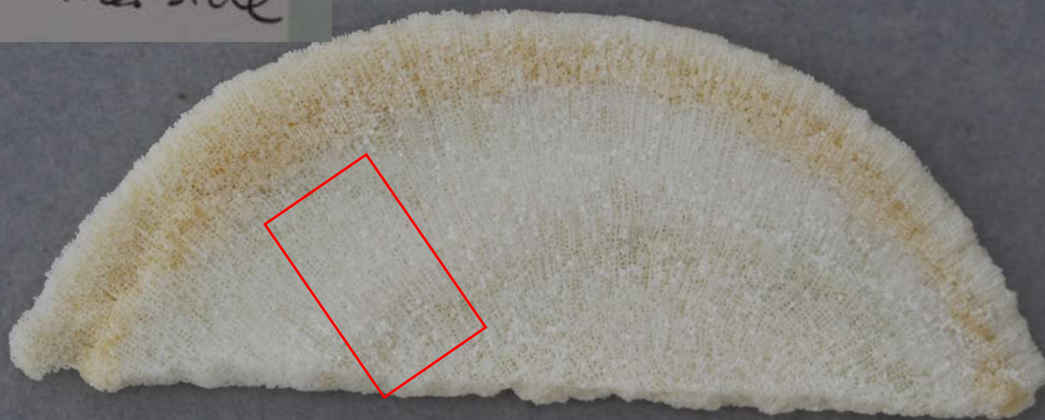
SOSC ACC. #83

WELLS, J.W. 373757
USNM - DEPARTMENT OF INVERTEBRATE ZOOLOGY



USNM 82649

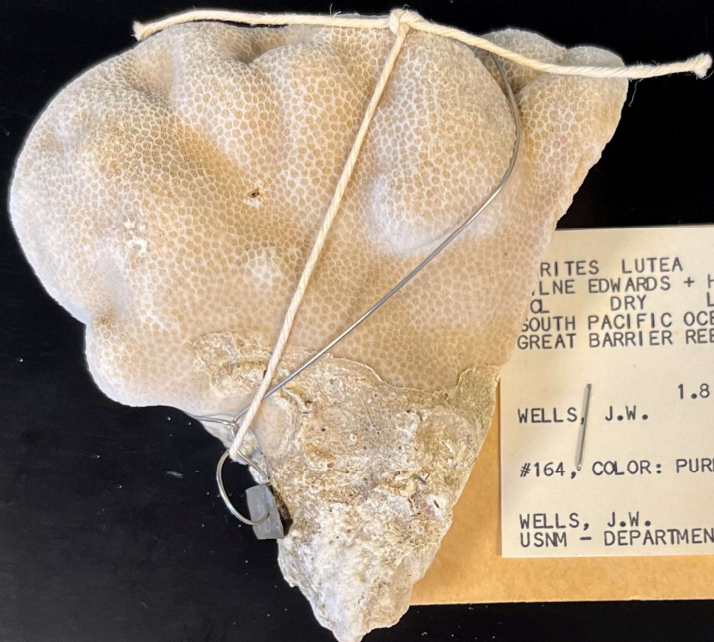
Porites lutea
Great Barrier Reef
Piper Islands,
Moat Behind the Trickle
Zone, weather side



USNM 82670

Porites lutea

Great Barrier Reef,
Australia, Wharton
Reef, lagoon

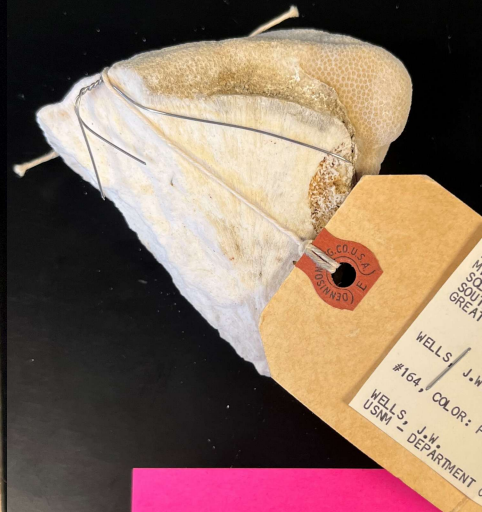


82670
1
PORITES LUTEA
J. L. EDWARDS + HAIME
Q. DRY LARGE
SOUTH PACIFIC OCEAN; AUSTRALIA; QUEENSLAND;
GREAT BARRIER REEF, WHARTON REEF; LAGOON

WELLS, J.W. 1.8 - 3.6 MS 20 JUN 1954

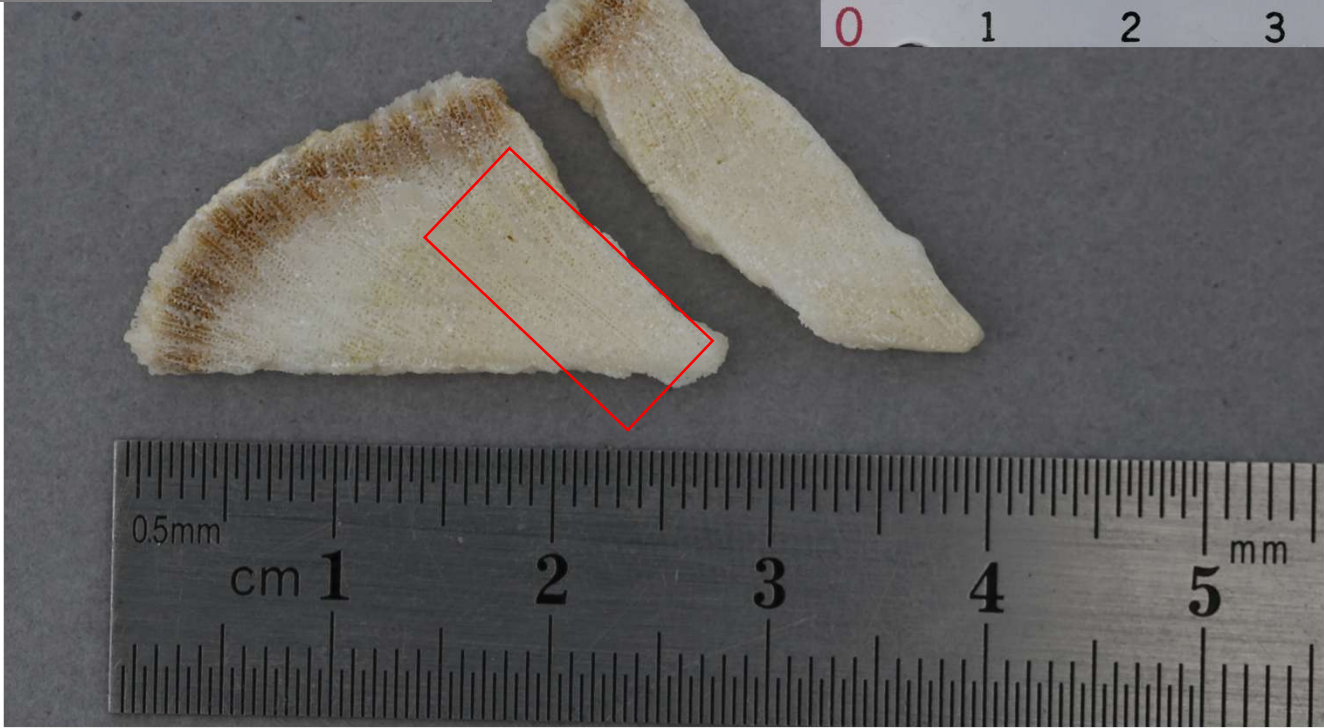
#164, COLOR: PURPLE, MICROATOLL TYPE

WELLS, J.W. 373757
USNM - DEPARTMENT OF INVERTEBRATE ZOOLOGY



USNM 82685

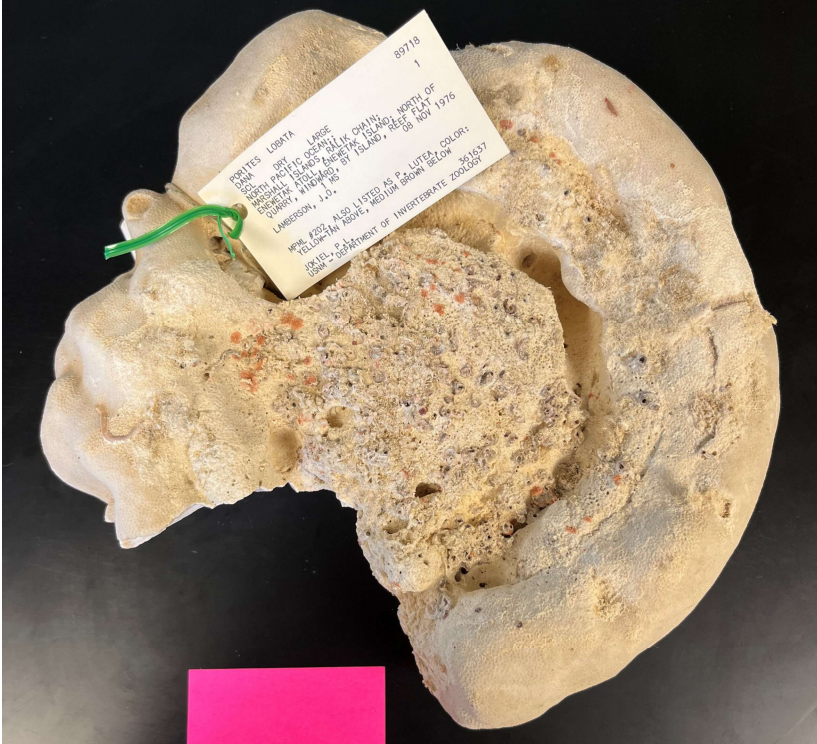
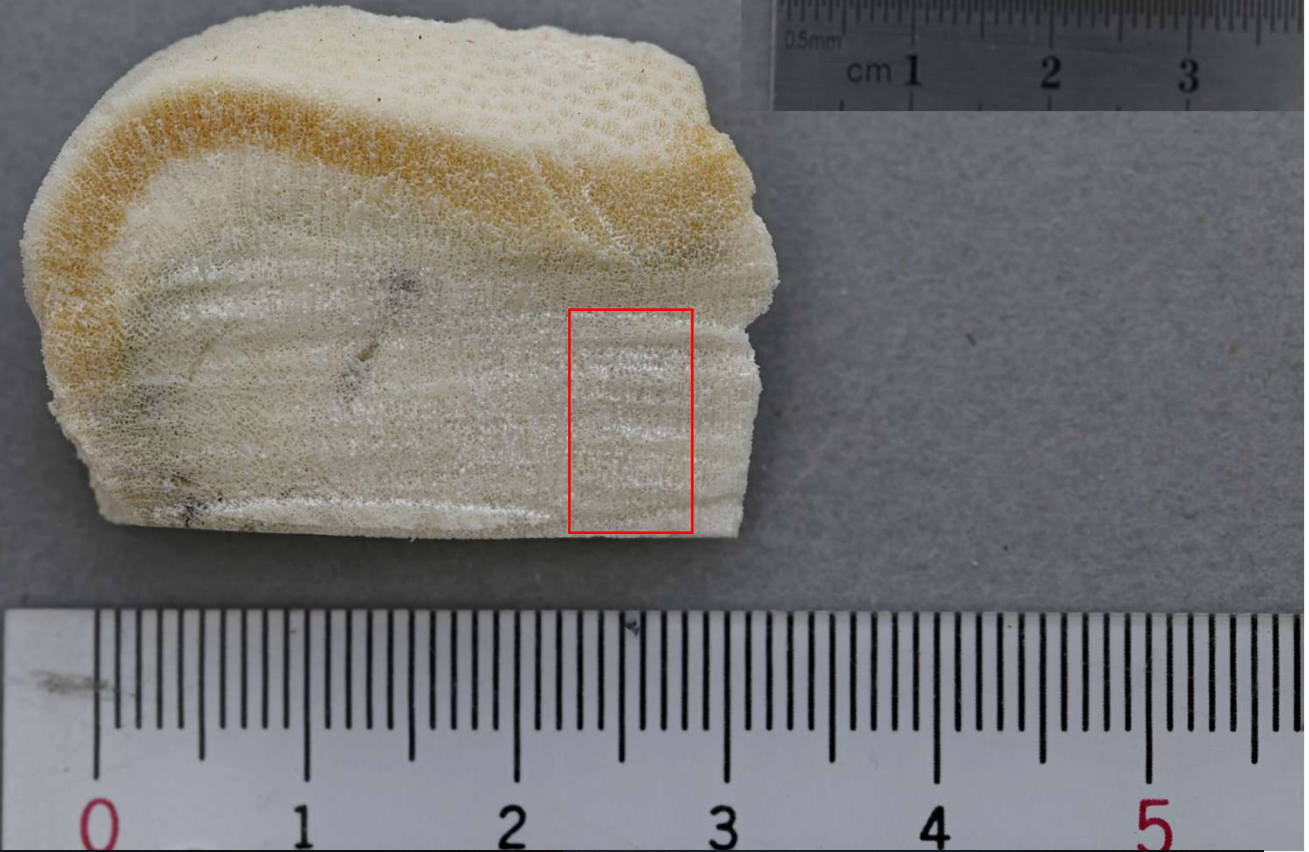
USNM 82685
Porites lobata
Marshall Islands
Enewetak Atoll



USNM 89718

Ponites lobata

Marshall Islands
Ralik Chain



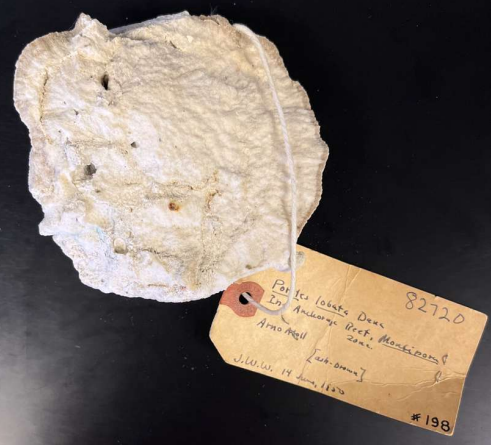
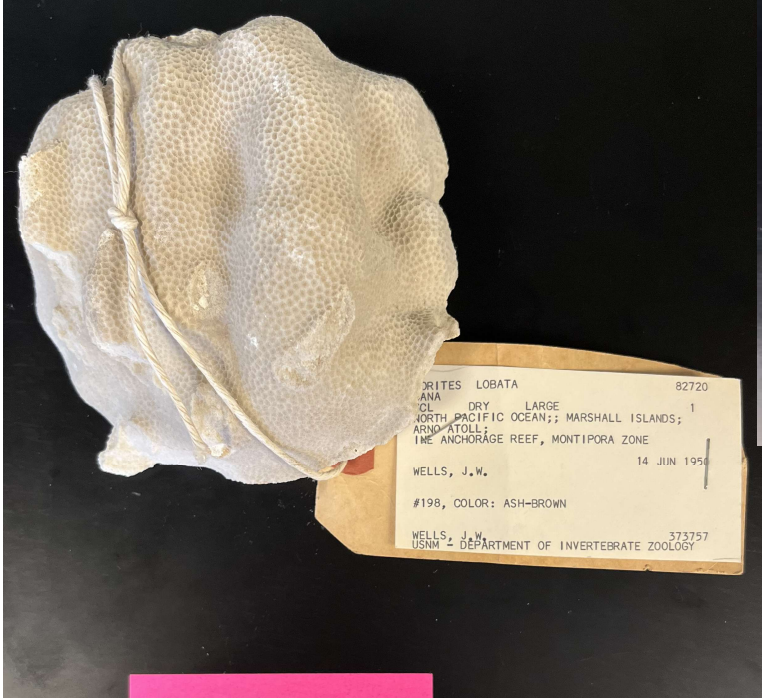
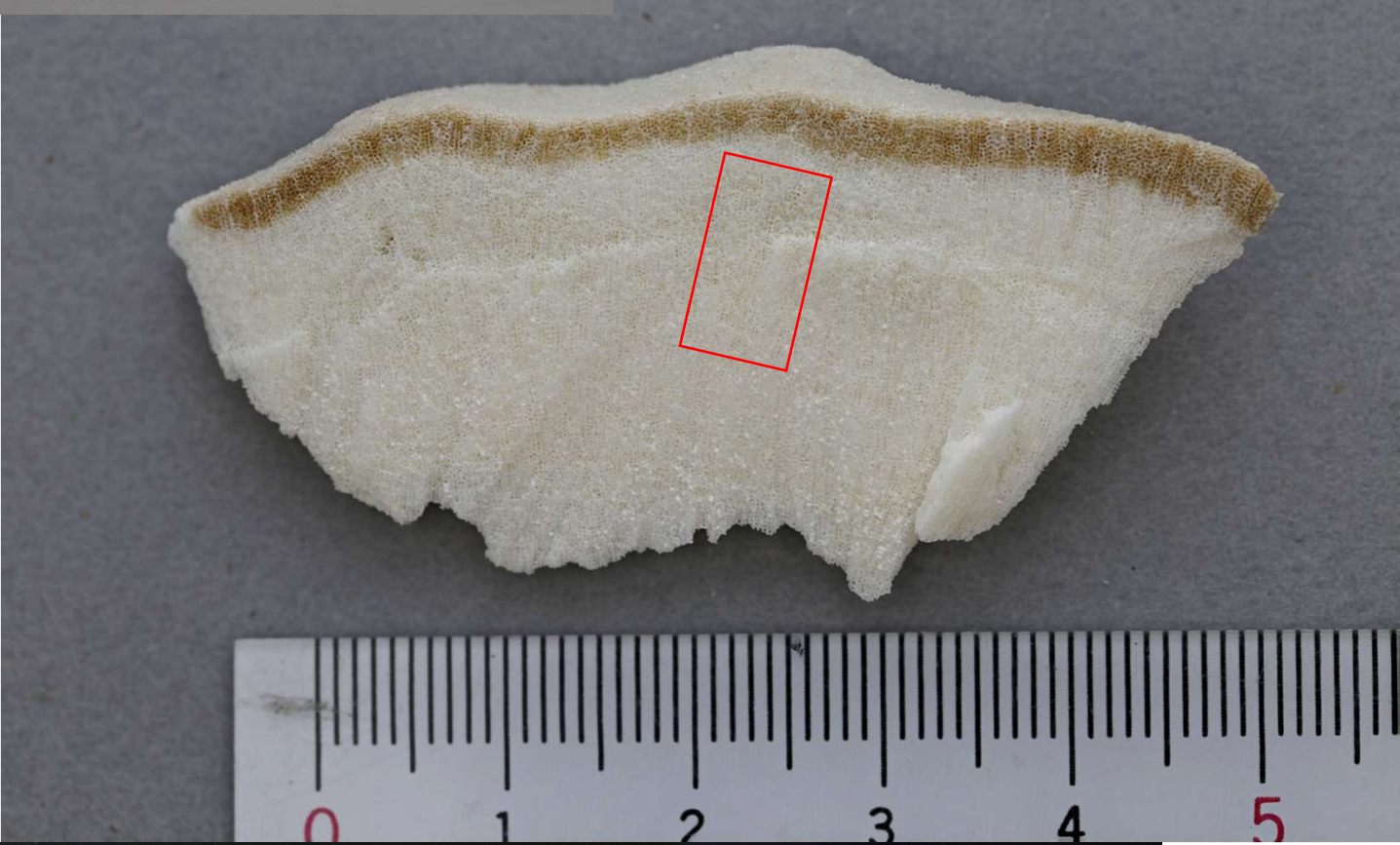
USNM 82720

USNM 82720

Porites lobata

Marshall Islands

Arno Atoll



USNM 82726

USNM 82726

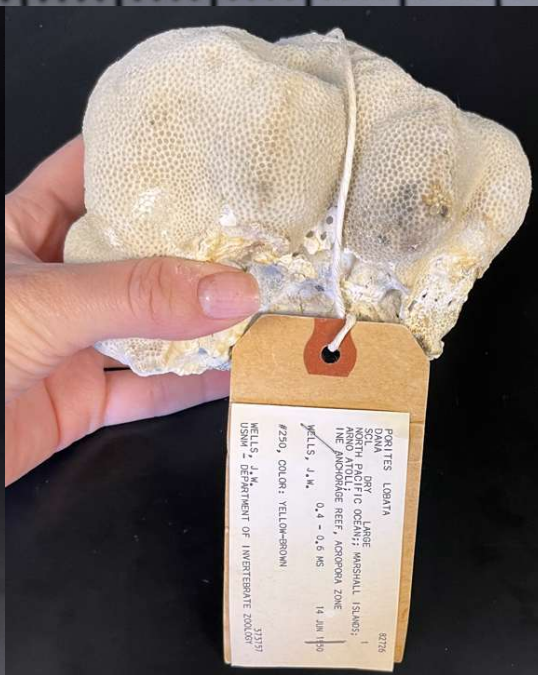
Porites lobata

Marshall Islands

Amo Atoll

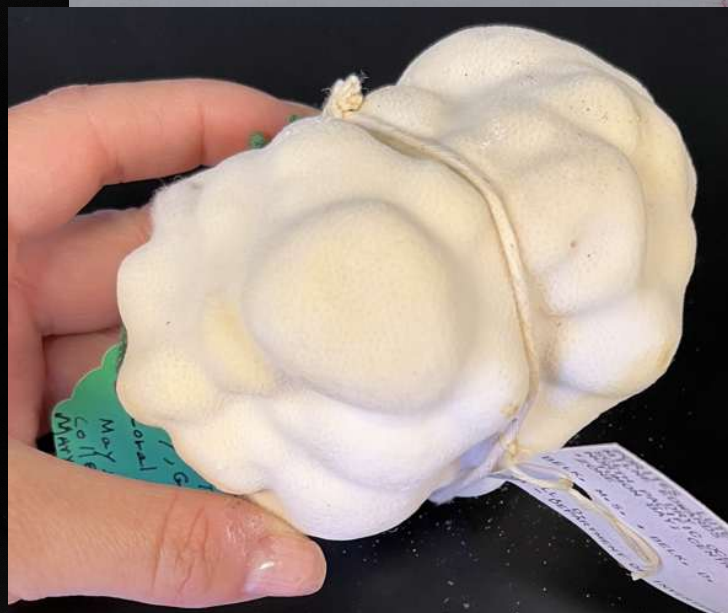
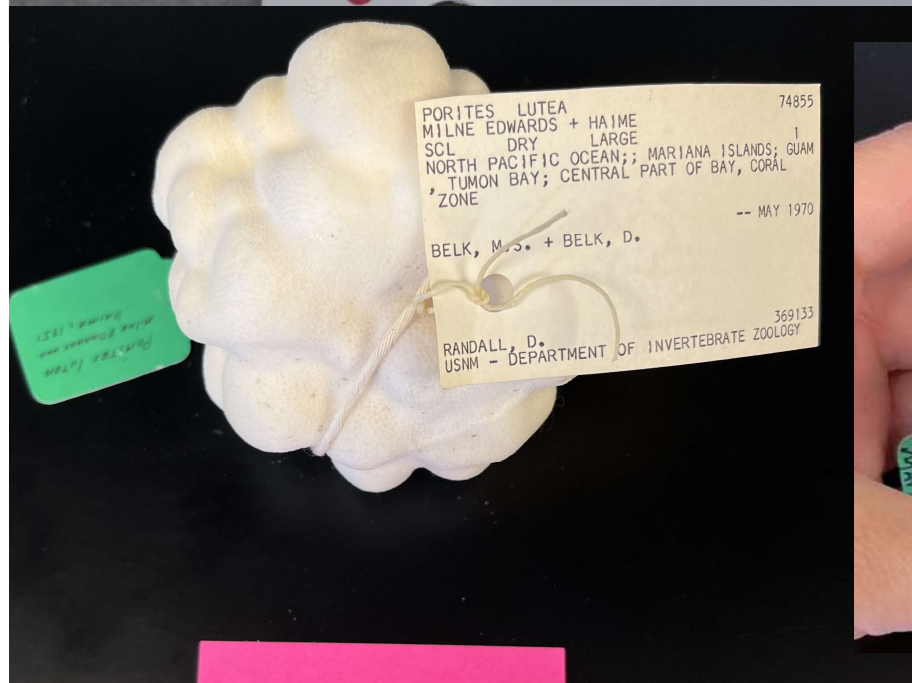
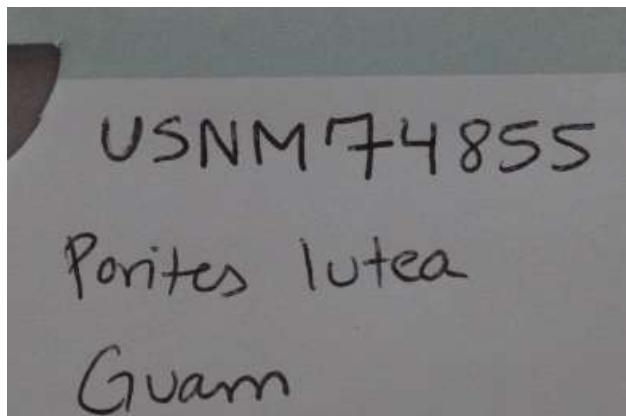


DATA
LARGE
ATC OCEANIC MARSHALL ISLANDS
AGE REEF, ACROPORA ZONE
WELLS, J.W. 0.4 - 0.6 MS
#250, COLOR: YELLOW-BROWN
WELLS, J.W.
USNM - DEPARTMENT OF INVERTEBRATE ZOOLOGY
14 JUN 1950
82726
31737



PORITES LOBATA
DATA
LARGE
ATC OCEANIC MARSHALL ISLANDS
AGE REEF, ACROPORA ZONE
WELLS, J.W. 0.4 - 0.6 MS
#250, COLOR: YELLOW-BROWN
WELLS, J.W.
USNM - DEPARTMENT OF INVERTEBRATE ZOOLOGY
14 JUN 1950
82726
31737

USNM 74855



USNM 74856

USNM 74856

Porites lutea

Guam, Tumon Bay



USNM: 74856
Porites lutea Milne Edwards & Haime, 1860
Poritidae Anthozoa Cnidaria
Id. By: Randall, D.
North Pacific Ocean; Guam; Tumon Bay
Date Coll.: Aug 1969; Coll.: M. Belk & D. Belk
Acc: 369133



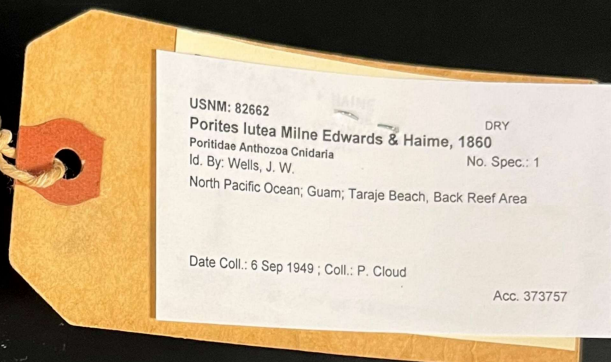
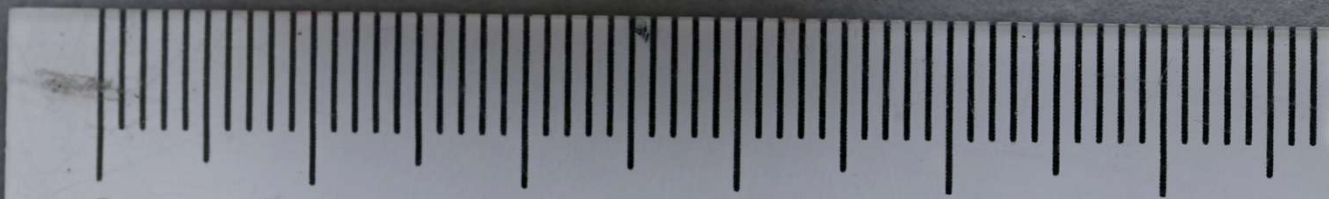
USNM: 74856
Porites lutea Milne Edwards & Haime, 1860
Poritidae Anthozoa Cnidaria
Id. By: Randall, D.
North Pacific Ocean; Guam; Tumon Bay
Date Coll.: Aug 1969; Coll.: M. Belk & D. Belk
Acc: 369133

USNM 82662

USNM 82662

Guam

Porites lutea

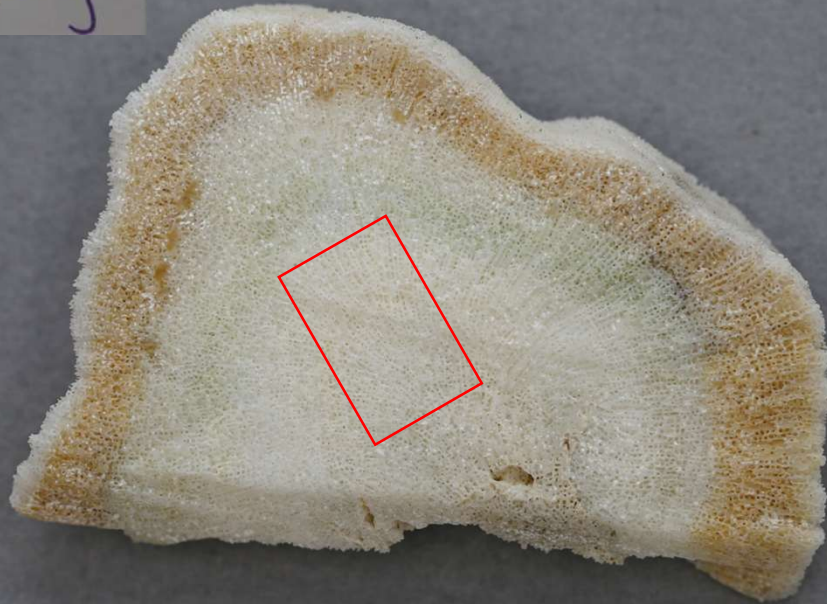


USNM 48215

USNM 48215

Porites sp.

Malaysia, Pulau
Redang



USNM: 48215

Porites sp.

Poritidae Anthozoa Cnidaria

North Pacific Ocean; Malaysia; Pulau P
5 47' N 103° E

Date Coll.: 26 Apr 1977; Coll.: G. Rc

DRY

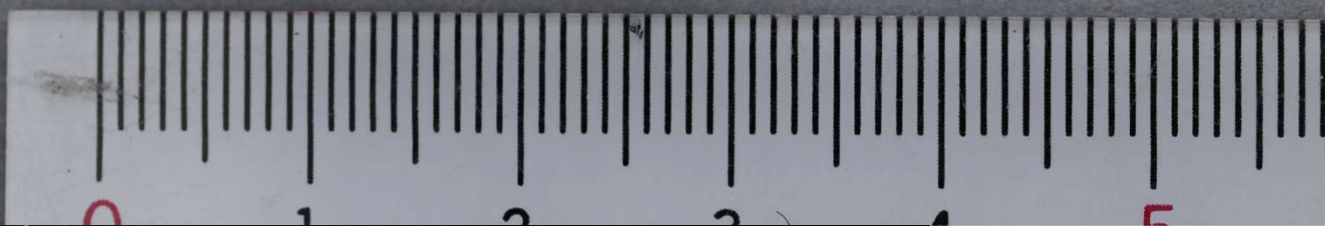


USNM 48250

USNM 48250

Porites sp.

Malaysia, Pulau Redang



USNM: 48250
Porites sp.
Poritidae Anthozoa Cnidaria

DRY

No. Spec.: 1

North Pacific Ocean; Malaysia; Pulau Redang, Pulau Lima
5 47 N 103 E Sta.: 49

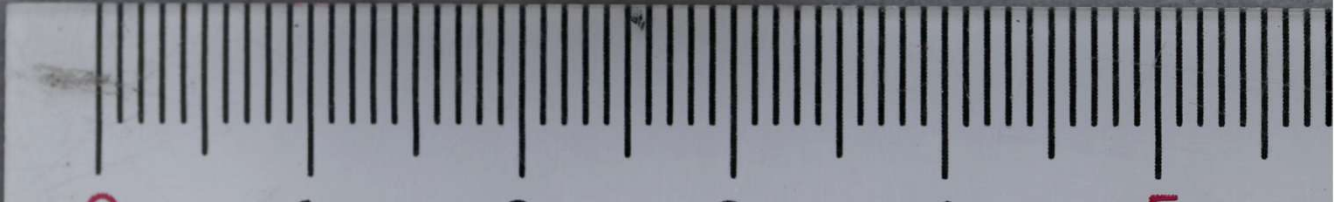
Date Coll.: 26 Apr 1977 ; Coll.: G. Robertson & D. Santavy

Acc. 335226



USNM 95186

USNM 95186
Porites lobata
Panama, Uva Island

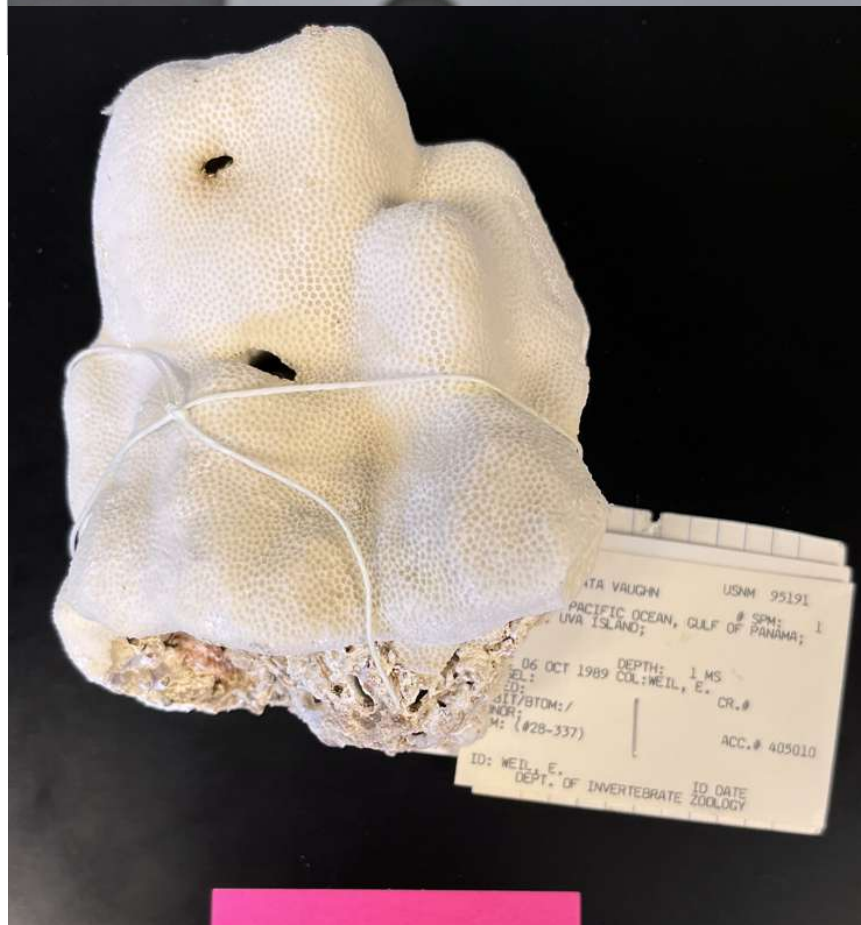


SQL DRY USNM 95186
PORITES LOBATA VAUGHN # SPM: 1
LOC: NORTH PACIFIC OCEAN, GULF OF PANAMA;
PANAMA;; UVA ISLAND;
STA# DEPTH: 1 MS
DATE 05 OCT 1989 COL: WEIL, E. CR.#
VESSEL:
EXPED:
HABIT/BTOM: /
DONOR: ACC.# 405010
REM: (#30-338)
ID: WEIL, E. ID DATE
DEPT. OF INVERTEBRATE ZOOLOGY



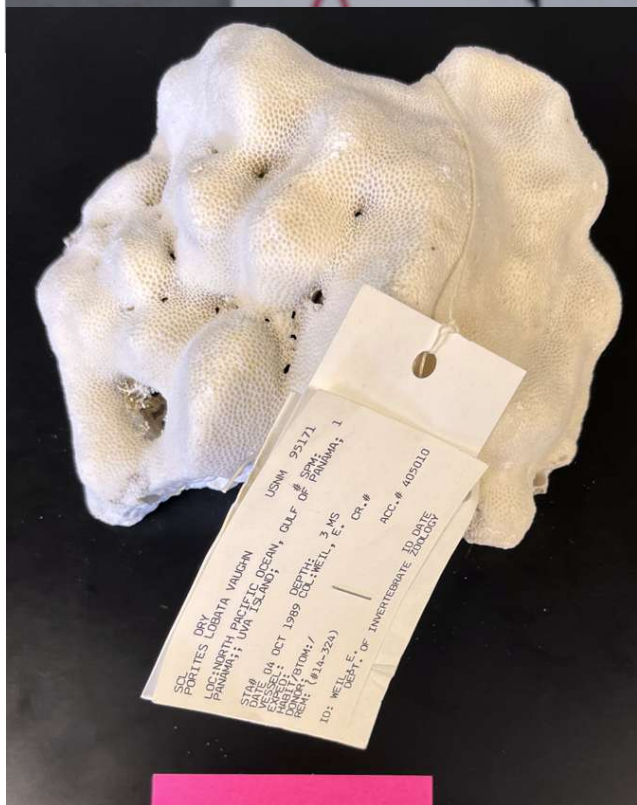
USNM 95191

USNM 95191
Porites lobata
Panama, Contreras
Islands



USNM 95171

USNM 95171
Porites lobata
Panama, Uva Island



USNM 95145

USNM 95145
Porites lobata
Panama, Saboga Island



USNM 95145
SOL DRY
PORITES LOBATA VAUGHN # SPM: 1
LOC: NORTH PACIFIC OCEAN, GULF OF PANAMA;
PANAMA; ; SABOGA ISLAND;
STA#
DATE 14 OCT 1989 DEPTH: 1.5 MS
VESSEL: COL: WEIL, E CR.#
EXPED:
HABIT/BTOM: /
DONOR: (15-295)
ACC.# 405010
ID: WEIL, E. ID DATE
DEPT. OF INVERTEBRATE ZOOLOGY



USNM 95145
SOL DRY
PORITES LOBATA VAUGHN # SPM: 1
LOC: NORTH PACIFIC OCEAN, GULF OF PANAMA;
PANAMA; ; SABOGA ISLAND;
STA#
DATE 14 OCT 1989 DEPTH: 1.5 MS
VESSEL: COL: WEIL, E CR.#
EXPED:
HABIT/BTOM: /
DONOR: (15-295)
ACC.# 405010
ID: WEIL, E. ID DATE
DEPT. OF INVERTEBRATE ZOOLOGY

USNM 95153

USNM 95153
Porites lobata
Panama, Saboga Island

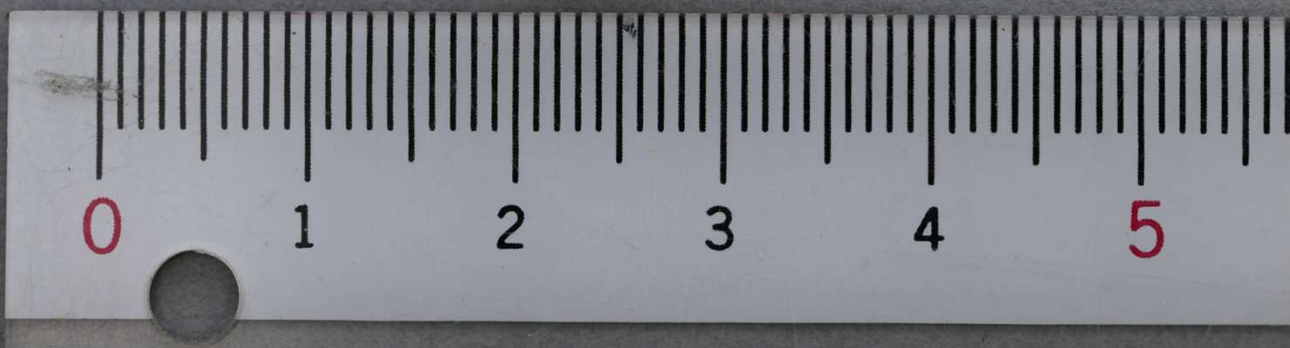


USNM 40659 *not enough powder for LOI

USNM 40659

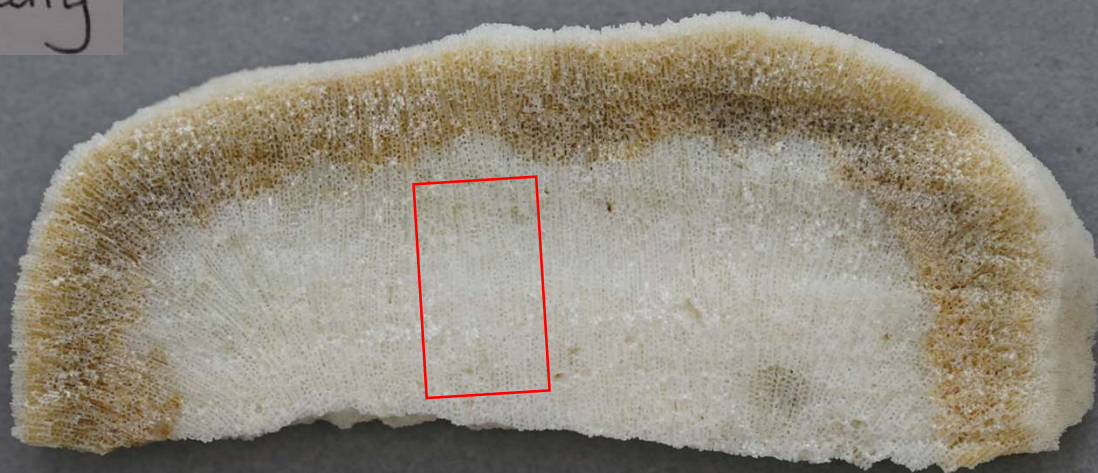
Porites astreoides

Virgin Islands, St Thomas
Island, Water Island
Flamingo Bay



USNM 48219 *not suitable for TEs

USNM 48219
Porites sp.
Malaysia, Pulau
Redang



USNM: 48219

Porites sp.

Poritidae Anthozoa Cnidaria

DRY

No. Spec.: 1

North Pacific Ocean; Malaysia; SW Pulau Redang

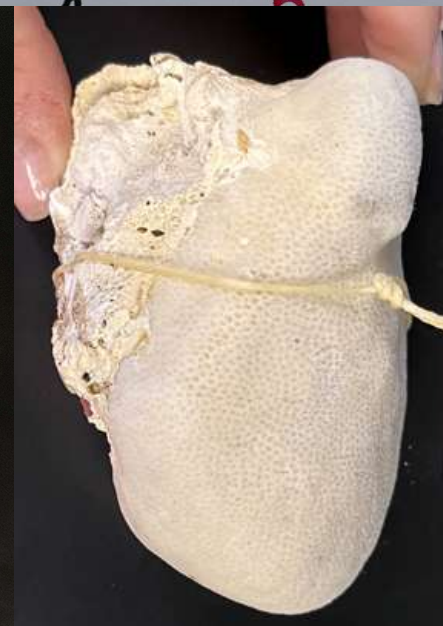
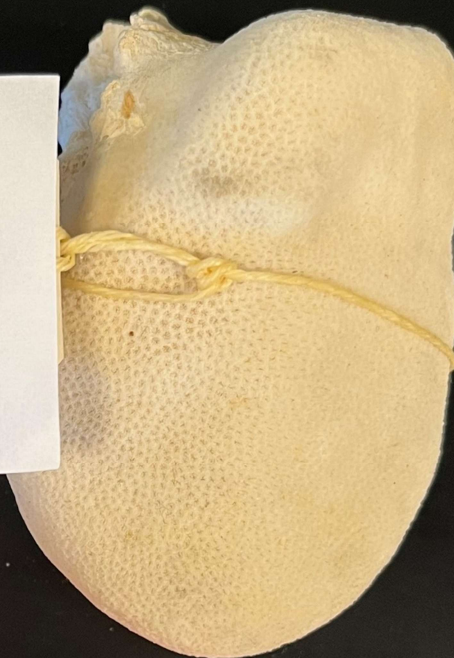
5 47 N 103 E

Depth: 2 - 6 M

Sta.: 197

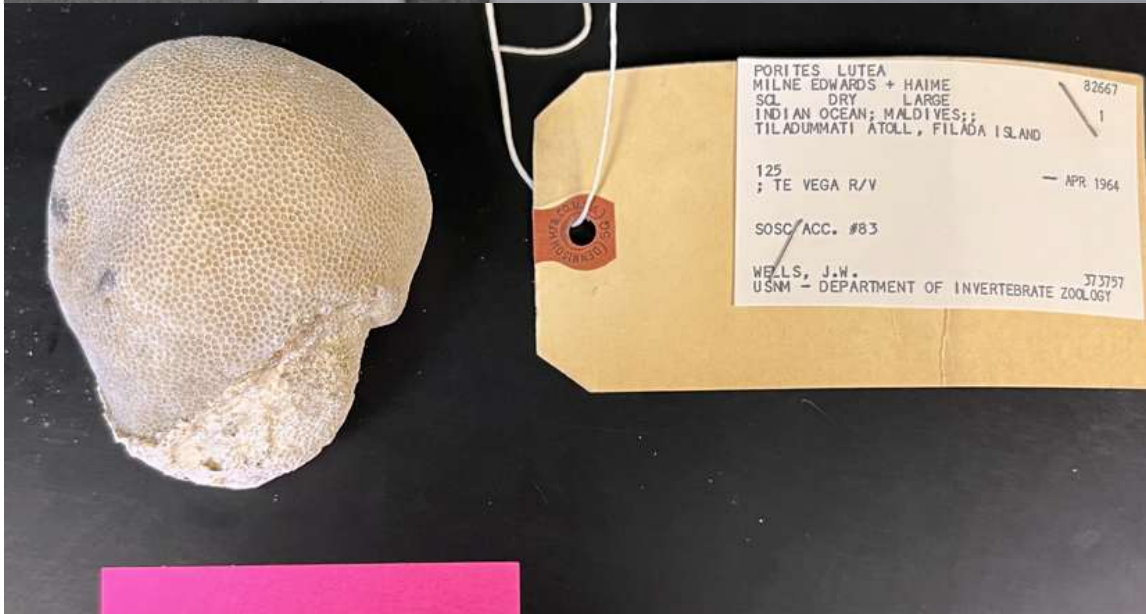
Date Coll.: 13 May 1977 ; Coll.: G. Robertson & D. Santavy

Acc. 335226



Example of rejected sample: USNM 82667– too many bore holes!

USNM 82667
Porites lutea
Maldives, Tiladummati
Atoll, Filada Island



[illegible]

