

CATEGORY 90

Other Bio-Silica

90I. fauna

- A. sponge spicules
 - a. complete
 - 1. 2 curvilinear edge junctions (formerly 90IE)
 - 2. 1 curvilinear edge junction (formerly 90IF)
 - 3. edge junctions capped with overhanging disks (Roll 49, frame 35; formerly part of 90IV)
 - b. fragmented
 - 1. tip; channel extends to tapered end (formerly 90IA)
 - 2. midsection; not tapered; channel end not enclosed (formerly 90IC)
 - 3. base; channel end enclosed within outer edges
 - 00. rounded end (formerly 90IB)
 - 01. pointed end (formerly 90IG)
 - 02. end with multiple adjoining sections (formerly 90ID)
- B. other fauna, awaiting identification (formerly most of 90IV)

90II. flora

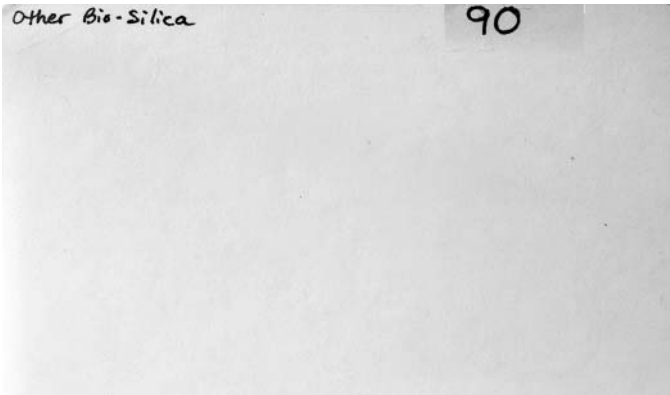
- A. Pollen (may be spherical; often stains yellow or brownish)
 - a. surface clearly spiked; spikes pointed and regular (formerly 90IIA)
 - b. surface smooth or spiked but clearly perforated in regular pattern (formerly 90IIB)
- B. Diatoms (may be bluish or greenish)
 - a. centric (radially symmetrical in valve view; may need to rotate form to see this)
 - 1. disk-shaped; often with double outline
 - 00. surface with evenly spaced perforations (*Coscinodiscus* sp.) (formerly 90IIID) (mostly marine, but a few freshwater) (Vinyard 1979:57)
 - 01. surface without perforations
 - A. entire surface smooth (formerly 90IIIEa)
 - B. radiating lines outside inner circle (*Cyclotella* sp.?) (formerly 90IIIEb) (freshwater) (Vinyard 1979:57)
 - C. radiating lines inside inner circle (formerly 90IIIEc)
 - 2. platelike; surface markings resembling musical notes (formerly 90IIIG) (*Terpsinoe musica*) (mostly marine, but a few freshwater) (Vinyard 1979:72)

*NO card in MU card file

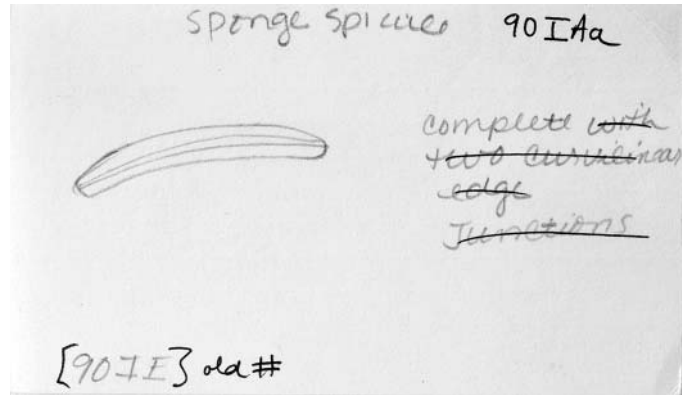
- b. pinnate (bilaterally symmetrical in valve view; MUST rotate form to see this to distinguish from girdle views of centric diatoms)
 - 1. lens-shaped
 - 00. center of body bulging
 - A. short edges rounded (formerly 90III Aa)
 - B. short edges indented (formerly 90III Ae)
 - C. short edges lobed and reflected (formerly 90III Af)
(this may be girdle view of a centric diatom)
 - 01. center of body convex, but not bulging
 - A. no surface markings (formerly 90III Ab)
 - B. surface markings
 - a. dark interior (formerly 90III Ac)
 - b. parallel lines on long axis (formerly 90III Ad)
 - 1. 1 pair of parallel lines (*Nitzschia* sp.?)
(Czarnecki and Blinn 1978:62-69, plate 17)
 - 2. 2 or more pairs of parallel lines
 - c. striated surface; striations on all sections (formerly 90III Ca)
 - d. regular perforations (or are these projections?)
(formerly 90III Ba)
 - e. center is indented; line along central long axis
(formerly 90III Bb)
 - 02. center of body concave; both ends bulging (was 90III Ag)
 - 2. squared-off ends
 - 00. radiating lines on edges (formerly 90III Ah1)
 - 01. symmetrically aligned projections (formerly 90III Ah2)
 - 02. edges with thick striations; center free of striations
(formerly 90III Cb) could be *Diatoma* sp., a high-elevation freshwater species (Vinyard 1979:59)
 - 03. no projections, striations, or radiating lines
- c. filaments and filament fragments
 - 1. cells with intercalary bands; fragments are circular in outline, but flat in side view; not 80IA (formerly 90III Fb)
 - 2. cells without intercalary bands (formerly 90III Fa)
- d. unknown whether centric or pinnate

C. Spores

- a. hollow sphere, often torn, with coarse verrucae that make the body appear to be composed of small nodules. (*Cyatheaceae*, *Cyathea pallescens*. Diagnostic level unknown; formerly 80ICe).



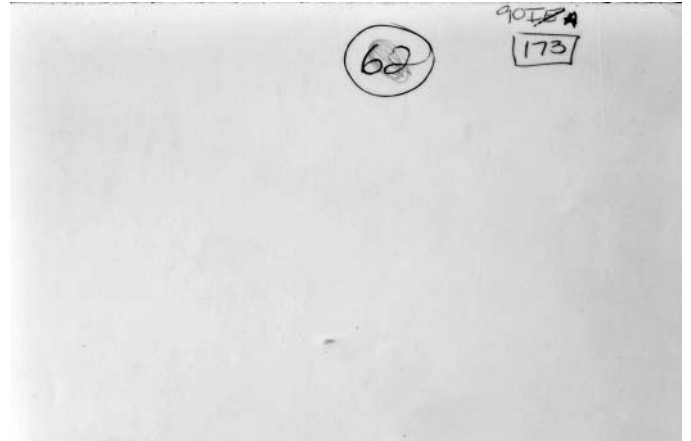
90 card 1.JPG



90IAa card 1.JPG



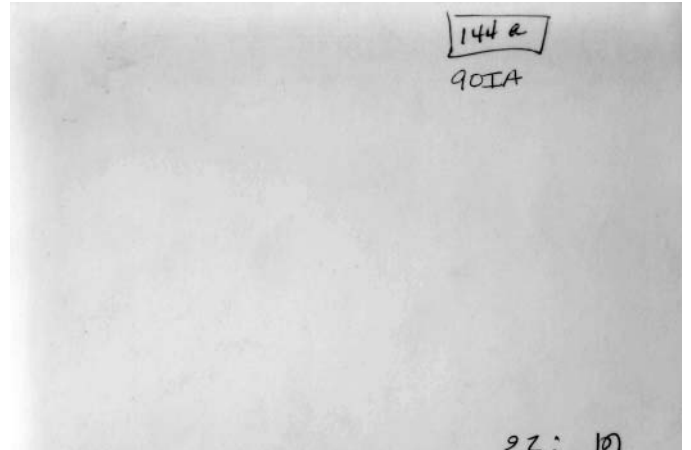
90Aa photo 1f.JPG



90IAa photo 1b.JPG



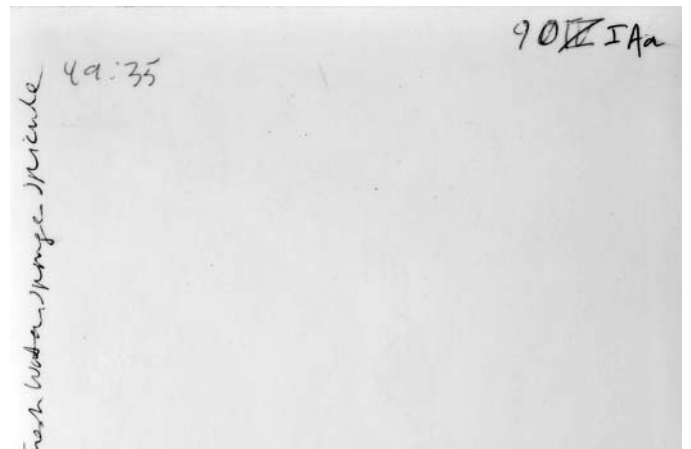
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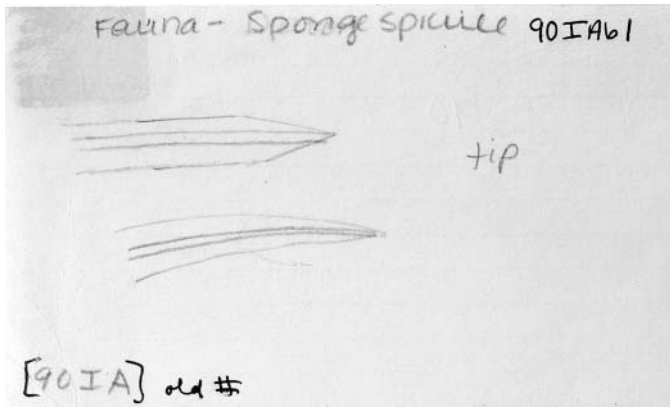
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90IAa photo 3f.JPG



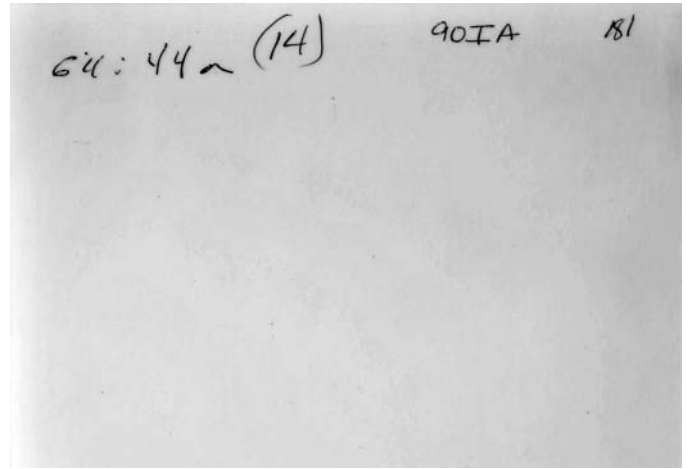
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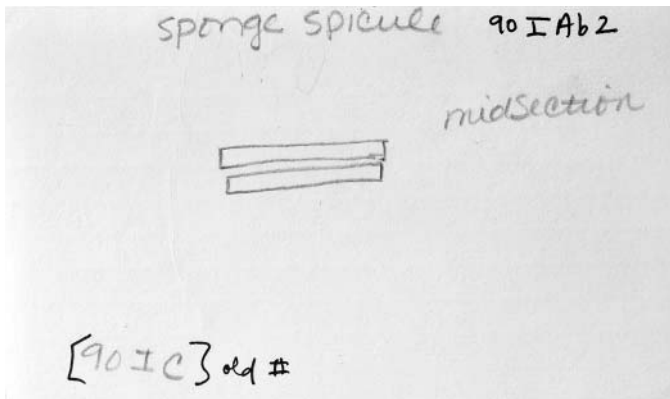
90IAb1 card 1.JPG



90IAb1 photo 1f.JPG



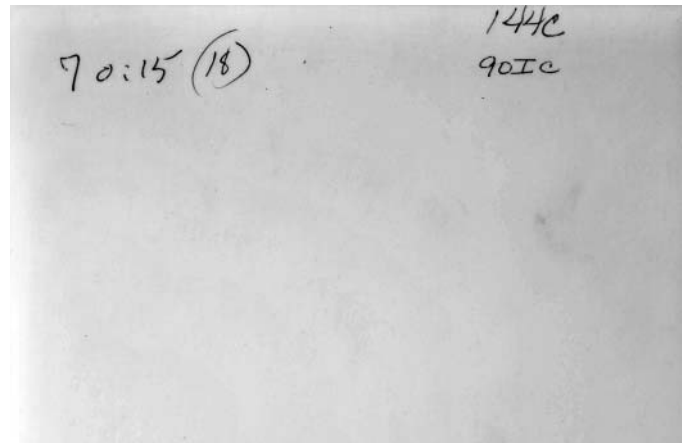
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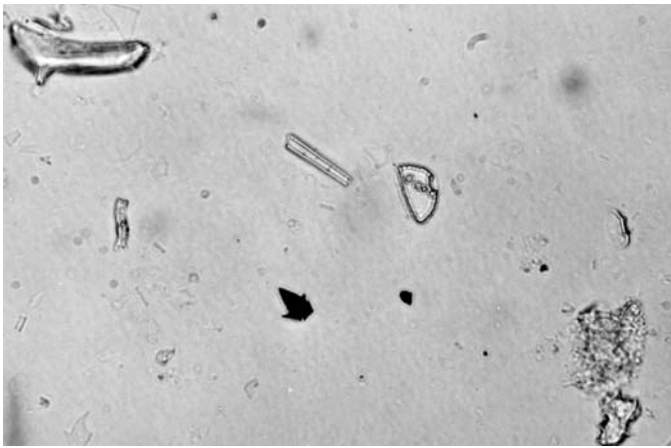
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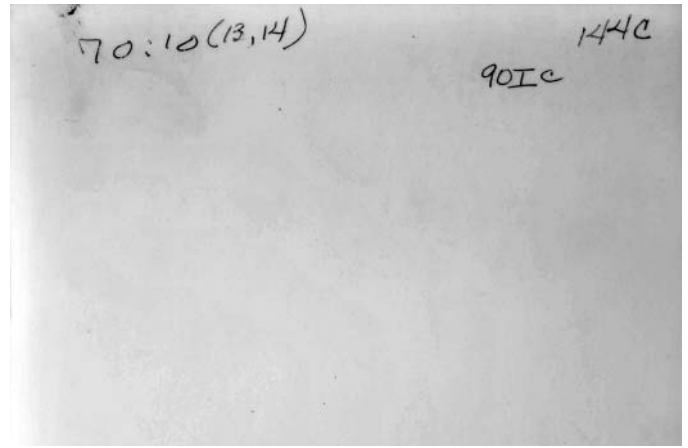
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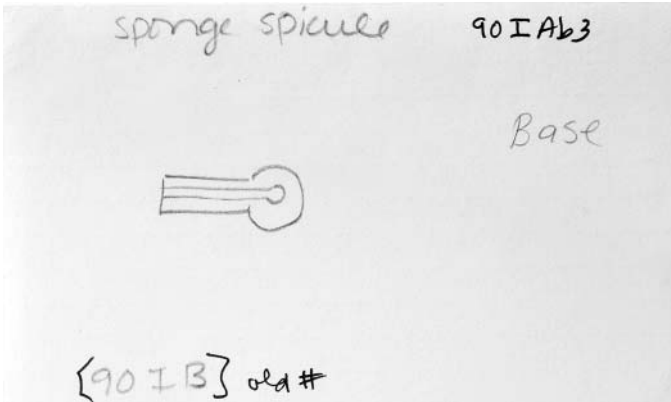
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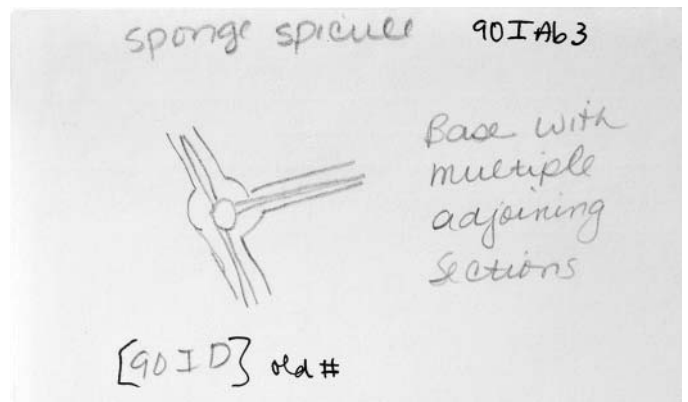
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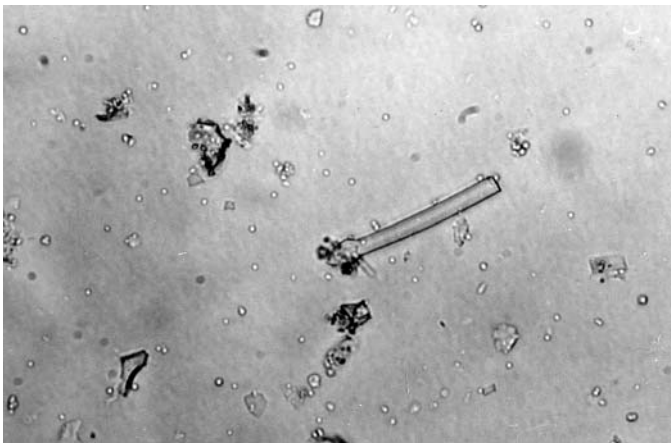
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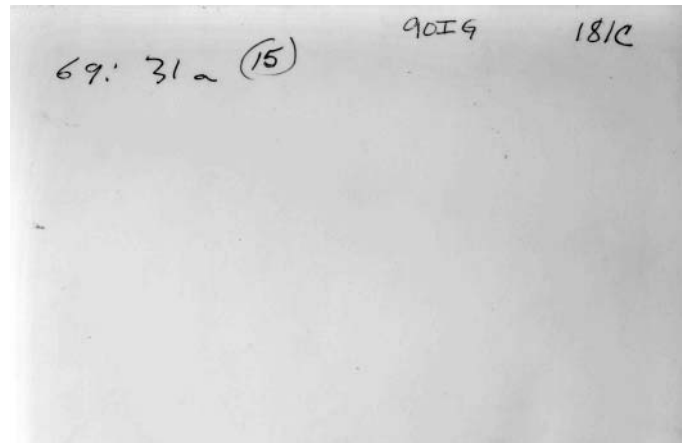
90IAb3 card 1.JPG



90IAb3 card 2.JPG



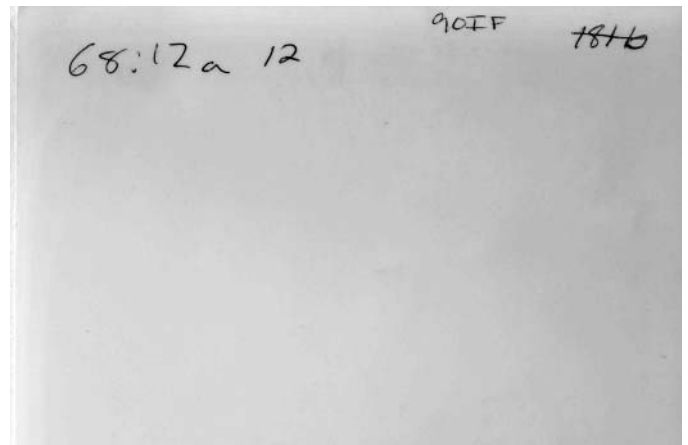
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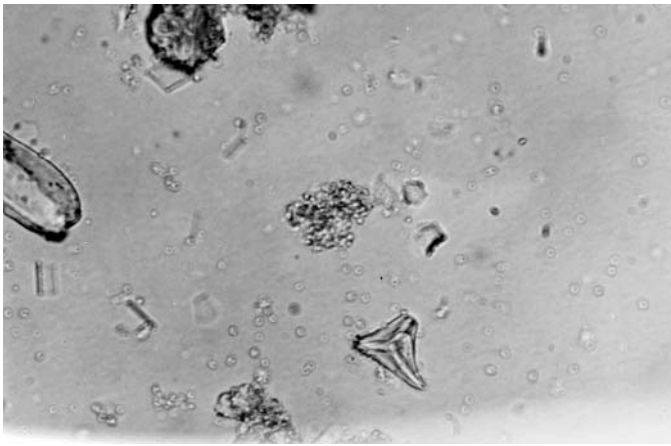
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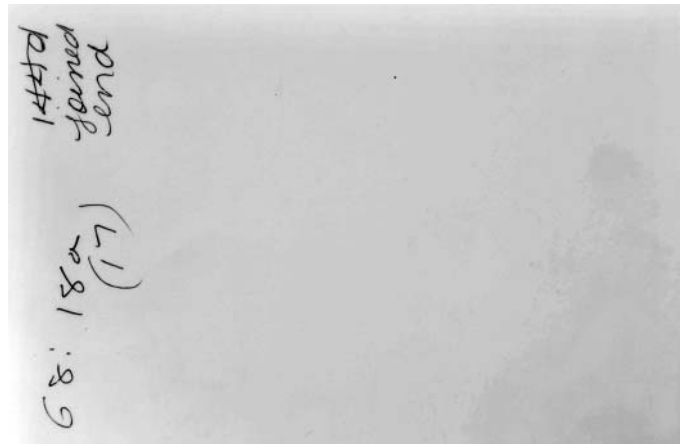
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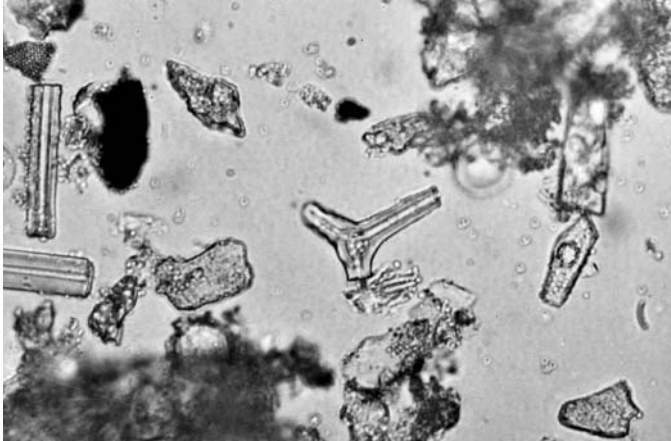
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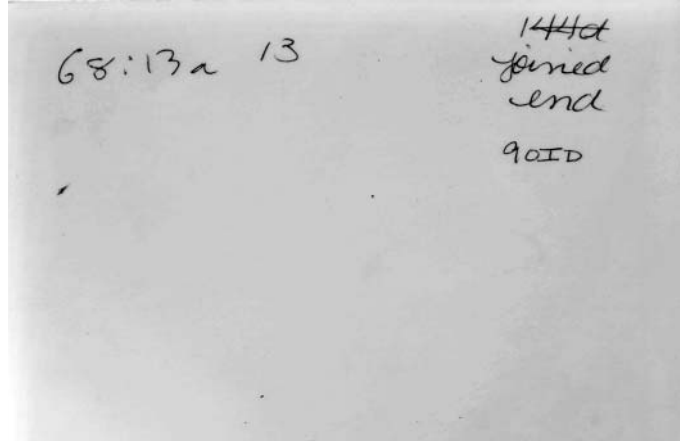
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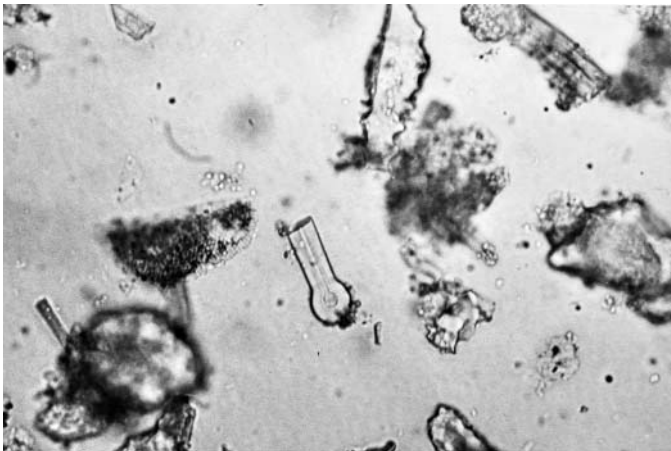
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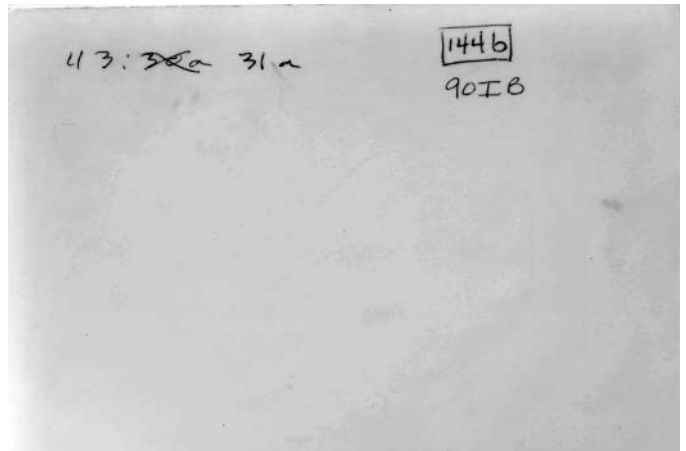
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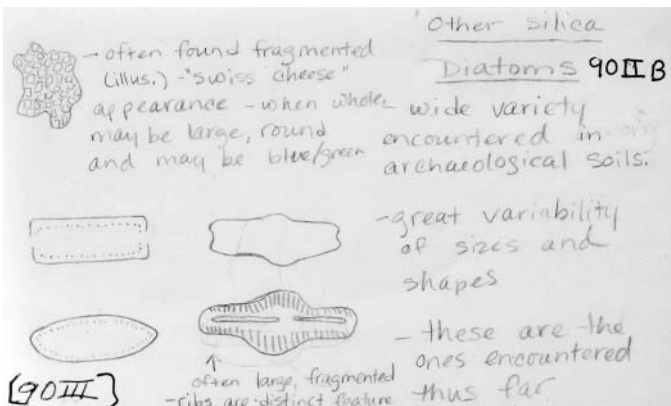
90IAb3 photo 4b.JPG



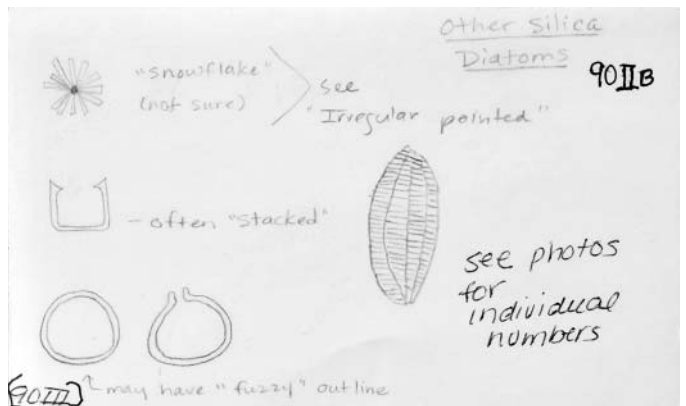
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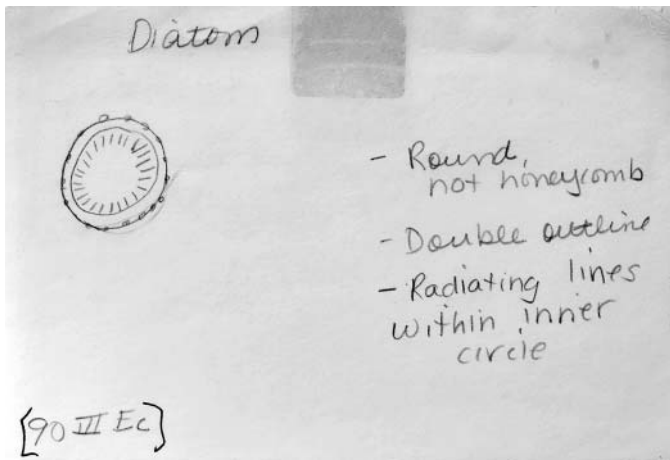
90-IAb3 photo 5b.JPG



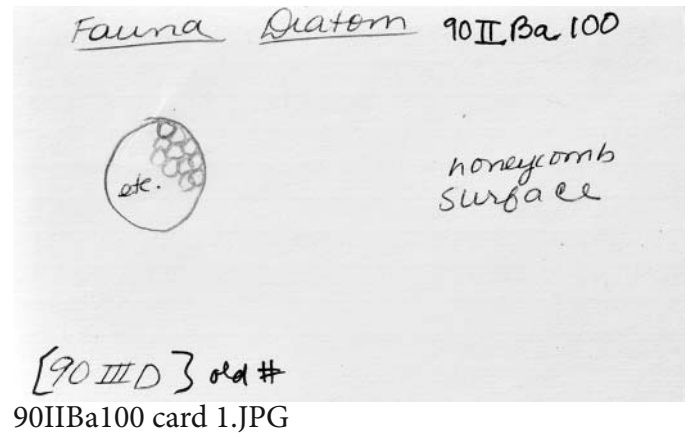
90IIB card 1.JPG



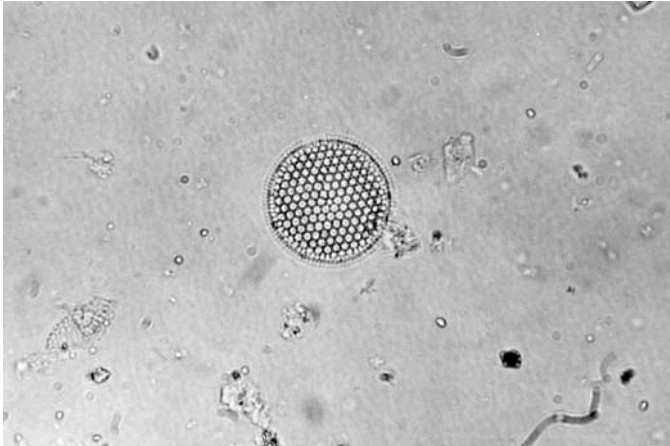
90IIB card 2.JPG



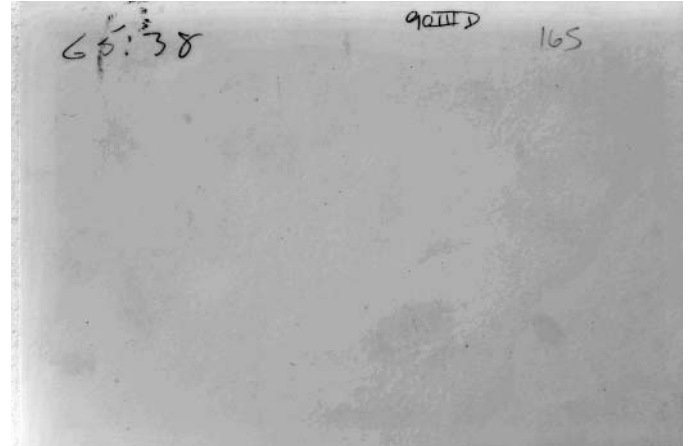
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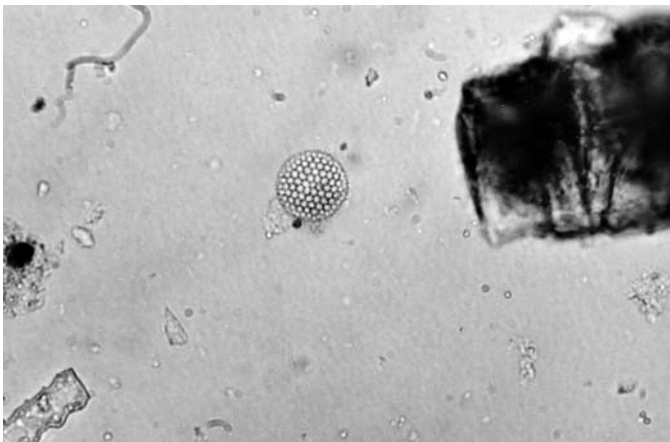
90IIBa100 card 1.JPG



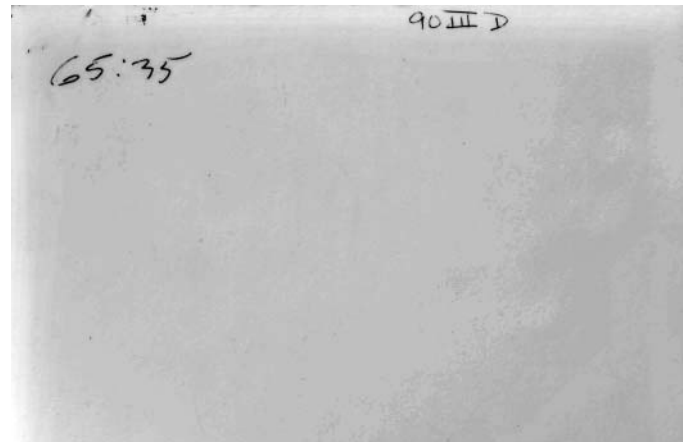
90IIBa100 photo 1f.JPG



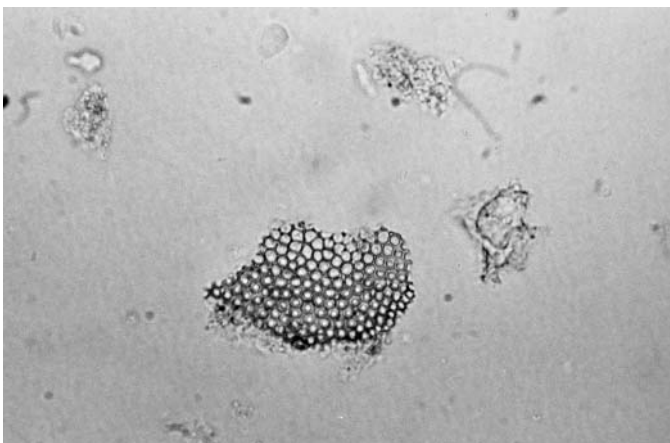
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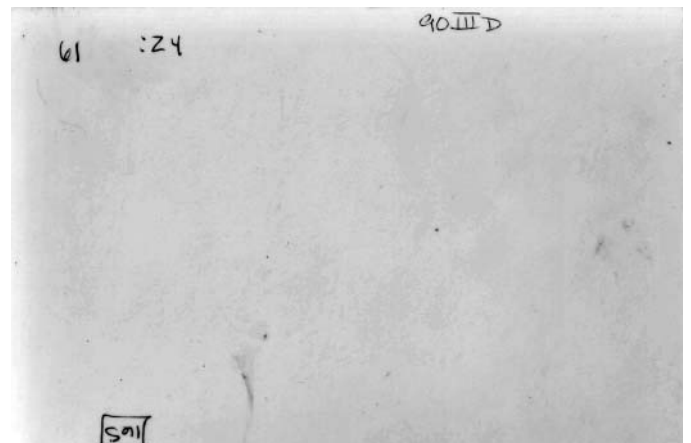
90IIBa100 photo 2f.JPG



90IIBa100 photo 2b.JPG



90IIBa100 photo 3f.JPG



90IIBa100 photo 3b.JPG

Fauna Diatom 90II Ba 101A

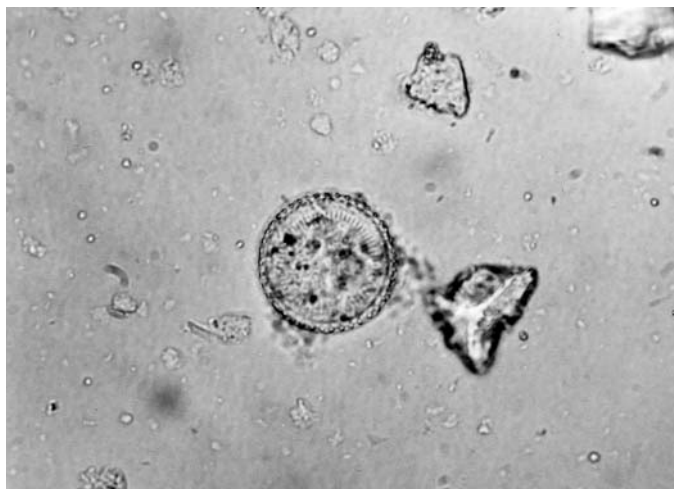


Round,
not honey
comb

Double outline
entire surface
smooth

{90III Ea} rd#
~~90III Ea~~

90IIBa101A card1.JPG

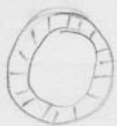


90IIBa101A photo 1f.JPG

64:40a (10) 90 III EC

90IIBa101A photo 1b.JPG

Fauna Diatom 90II Ba 101B



- Round, not
honeycomb
- Double outline
- Radiating
lines between
two outlines

90 III Eb
~~90 III Eb~~

90IIBa101B card 1.JPG



90IIBa101B photo 1f.JPG

67: 16 90 III Eb 129 b

90IIBa1101B photo 1b.JPG

Fauna Diatom 90II Ba 2

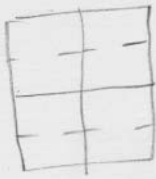
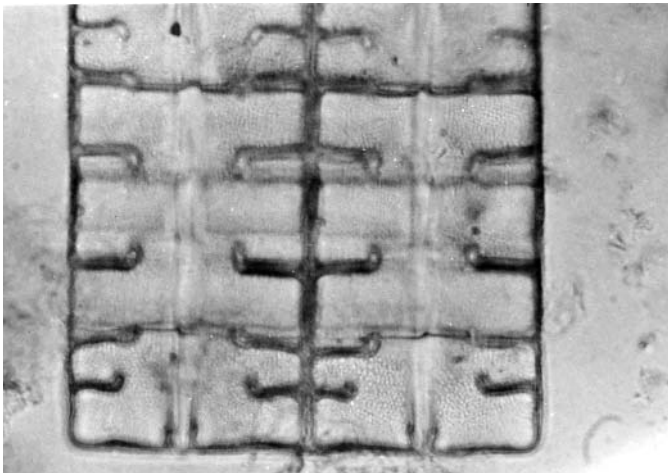


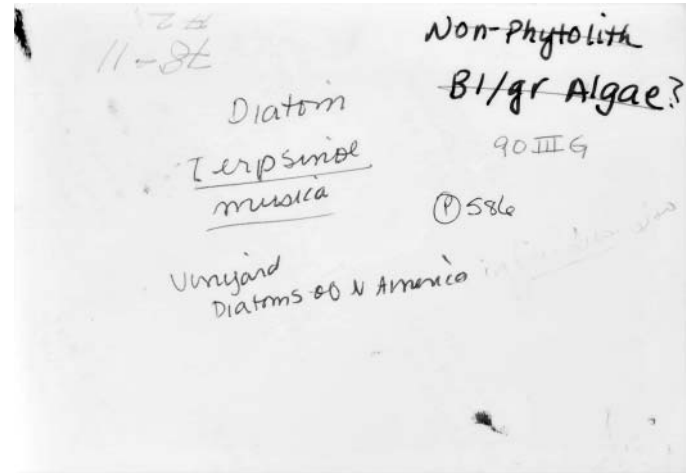
plate-like

[90III G] old #

90IIBa2 card 1.JPG



90IIBa2 photo 1f.JPG



90IIBa2 photo 1b.JPG

Fauna Diatom 90IIBb100A



Valve view
no interior
visible structures
center of
body bulged

[90III Aa] old #

90IIBb100A card 1.JPG

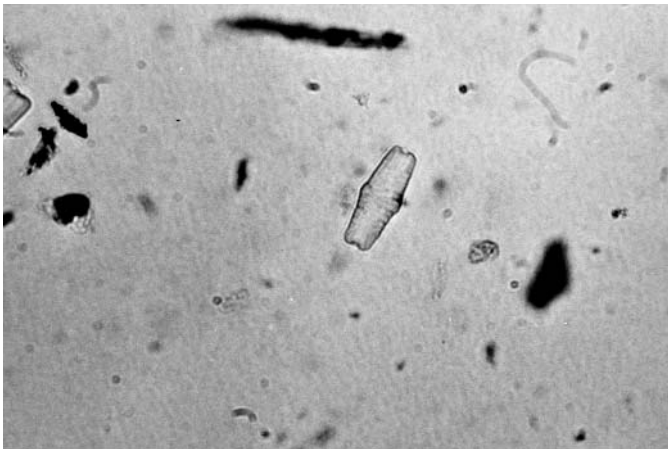
Fauna Diatom 90IIBb100B



Valve view
center of
body bulged
indentations
on short edges

[90III Ae] old #

90IIBb100B card 1.JPG



90IIBb100B photo 1.JPG

Fauna Diatom 90IIBb100C



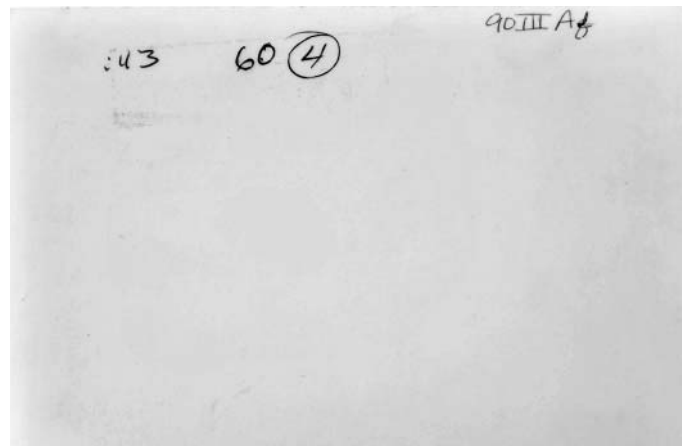
valve view
center of
Body Bulged
Short edges
Fragmented

[90III Af] old #

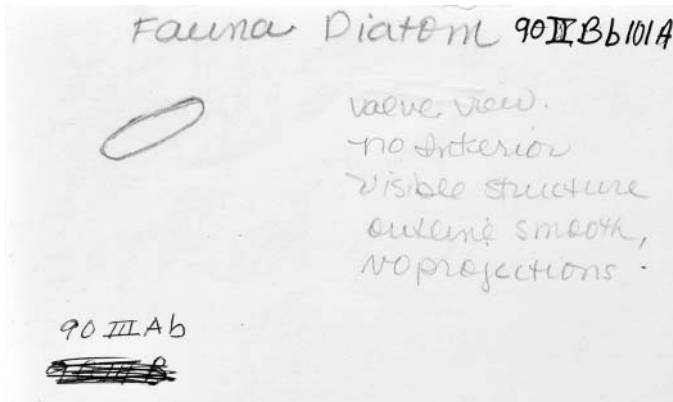
90IIBb100C card 1.JPG



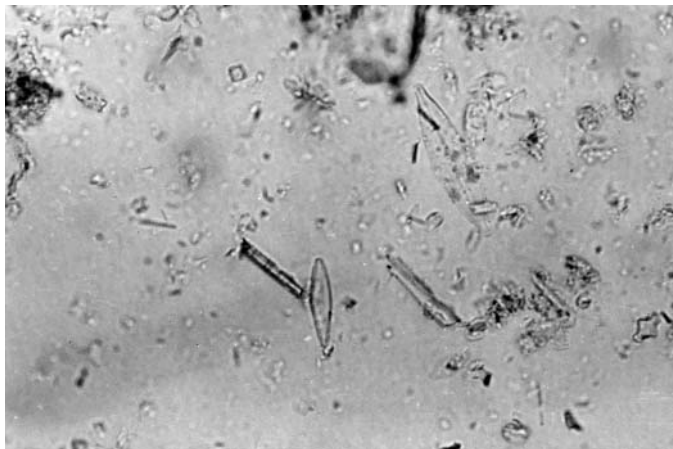
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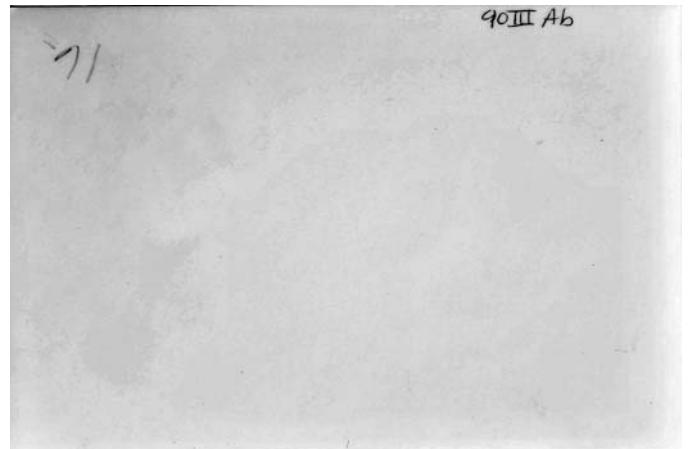
90IIBb100C photo 1b.JPG



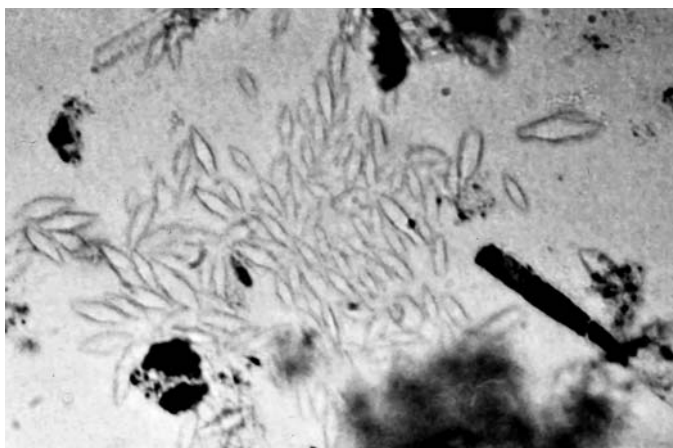
90IIBb101A card 1.JPG



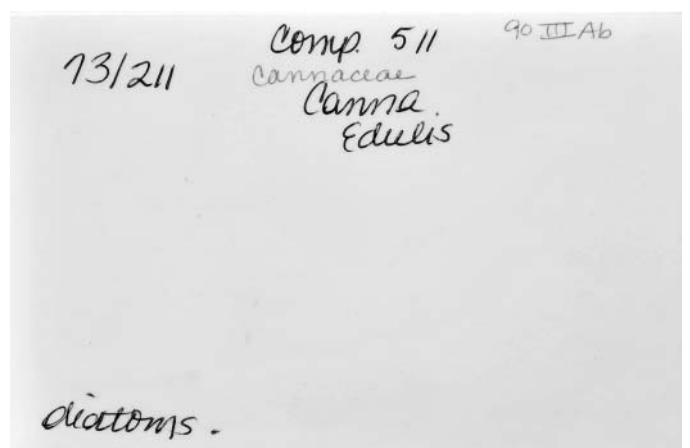
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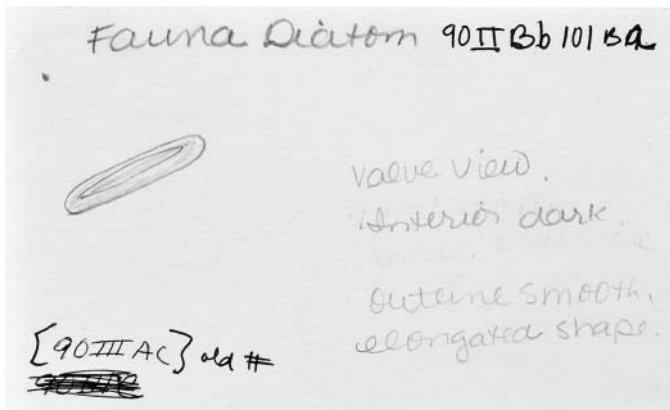
90IIBb101A photo 1b.JPG



90IIBb101A photo 2f.JPG



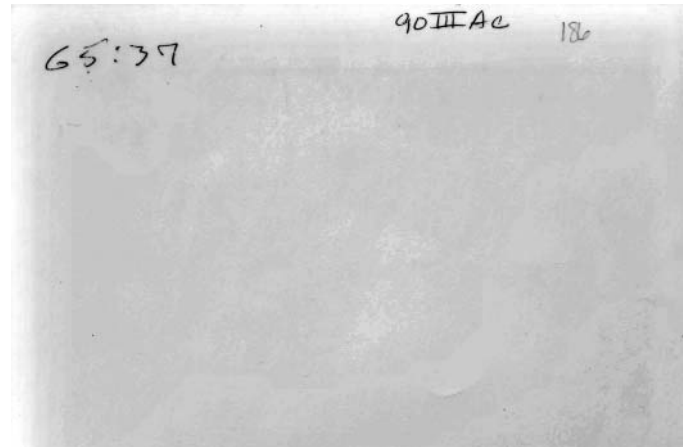
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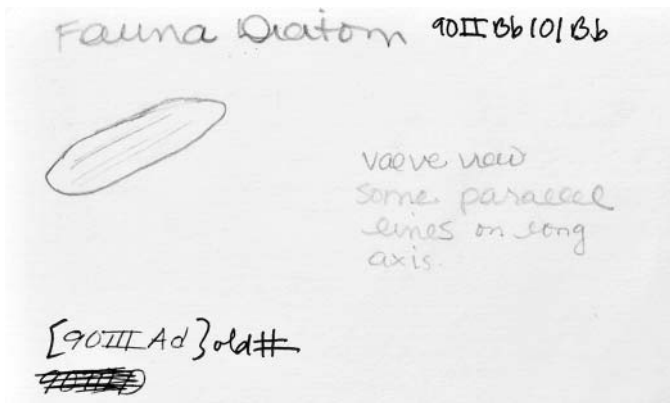
90IIBb101Ba card 1.JPG



90IIBb101Ba photo 1f.JPG



90IIBb101Ba photo 1b.JPG



90IIBb101Bb card 1.JPG



90IIBb101Bb photo 1f.JPG



90IIBb101Bb photo 1b.JPG

Fauna Diatoms 90II Bb 101 Bc



striated
Surface

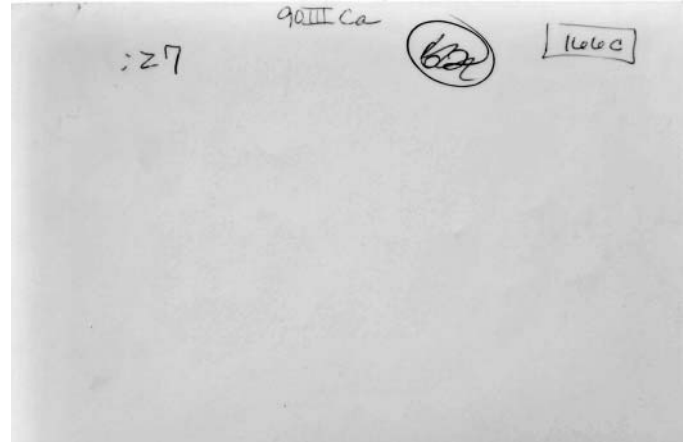
90III Ca



90IIBb101Bc card 1.JPG



90IIBb101Bc photo 1f.JPG



90IIBb101Bc photo 1b.JPG

Fauna Diatom 90II Bb 101 Bd

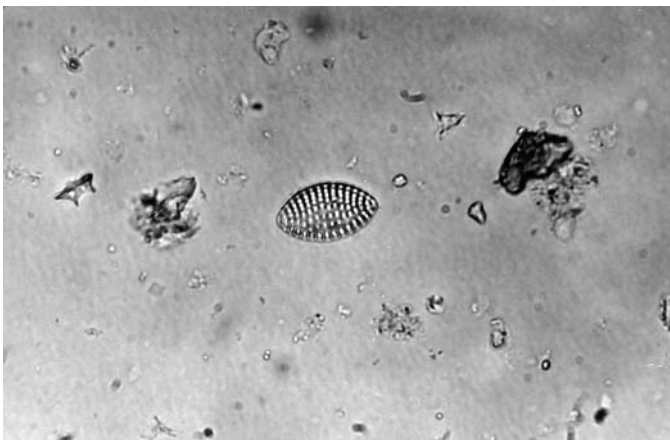


perforated

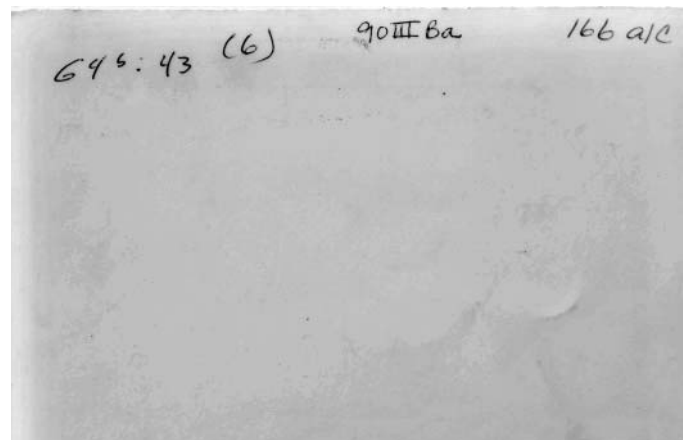
90III Ba



90IIBb101Bd card 1.JPG



90IIBb101Bd photo 1f.JPG



90IIBb101Bd photo 1b.JPG

Fauna Diatom 90II Bb 101Be

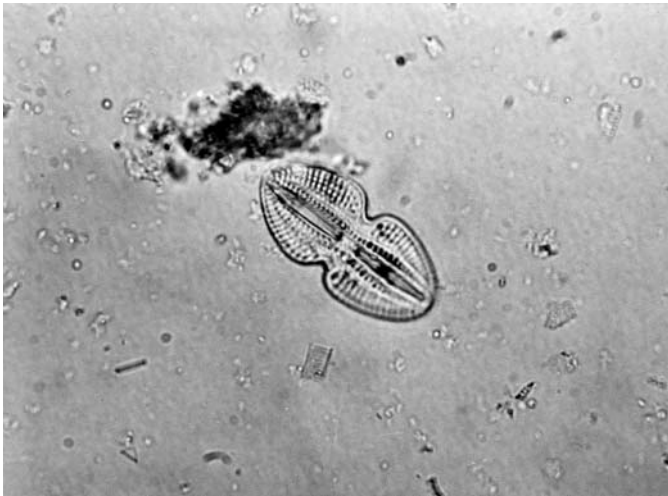


valve view.
Indented in center.
Line in center along
long axis. Anterior
perforations

90 III B b

~~90 III B b~~

90IIBb101Be card 1.JPG



90IIBb101Be photo 1f.JPG

64:41 a(11)

90III Bb

90IIBb101Be photo 1b.JPG

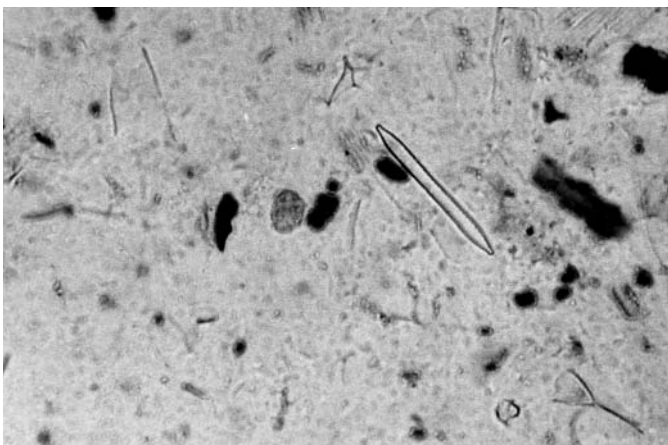
Fauna Diatom 90II Bb 102



valve view
Both ends
Bulged,
center of body
concave

90III Ag

90IIBb102 card 1.JPG



90IIBb102 photo 1f.JPG

Slide E1061 *Souatia Palmaceae*
90III Ag

Scale 1/5

8/2/08-26

90IIBb102 photo 1b.JPG

Fauna Diatom 90II Bb 200



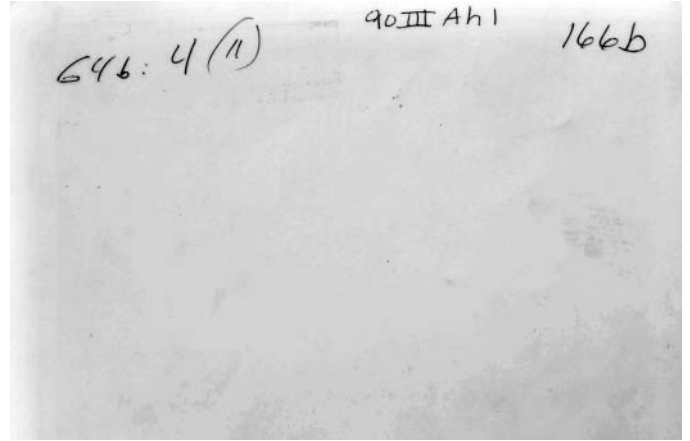
elongate
smooth
valve view
elongate
outline
- radiating
lines between
double outline

{90III Ah1} old #

90IIBb200 card 1.JPG



90IIBb200 photo 1f.JPG



90IIBb200 photo 1b.JPG

646: 4 (11) 90III Ah1 166b

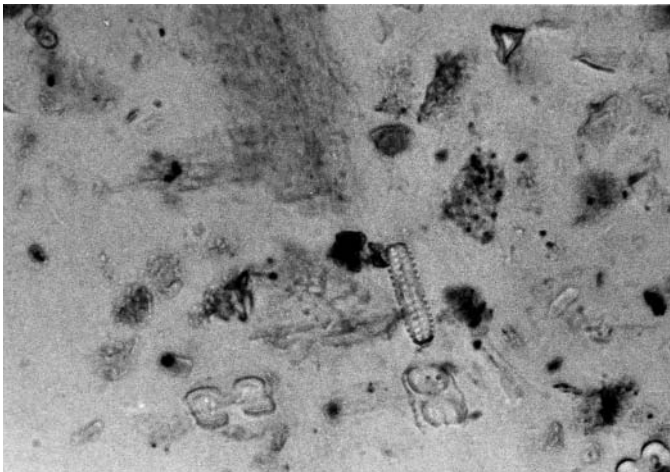
Diatom



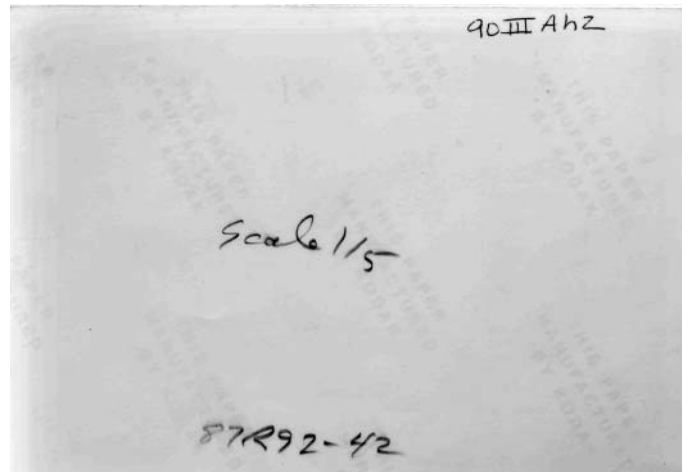
90II Bb 200
valve view
elongate
outline
outward projections
symmetrically
aligned

{90III Ah2} old #

90IIBb201 card 1.JPG



90IIBb201 photo 1f.JPG



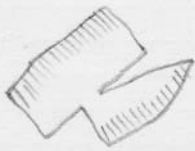
90IIBb201 photo 1b.JPG

90III Ah2

Scale 1/5

87R92-42

Fauna Diatom 90II Bb 202



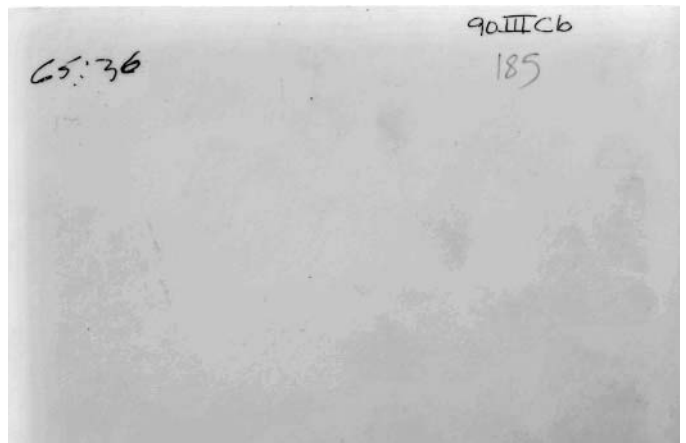
Surface
striated
and
plate like

{90III C6} old #

90IIBb202 card 1.JPG



90IIBb202 photo 1f.JPG



90IIBb202 photo 1b.JPG

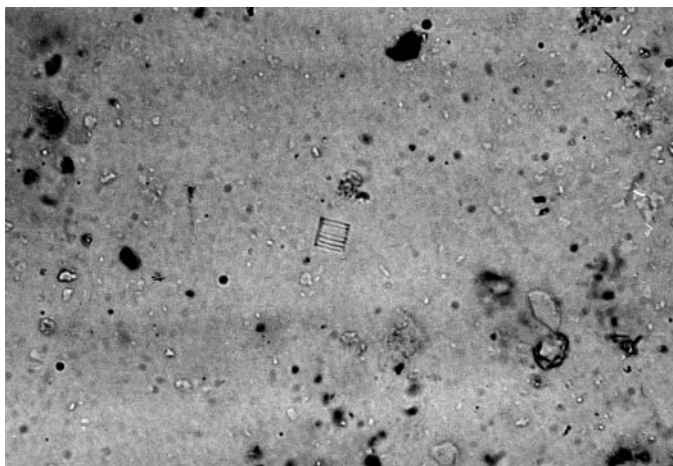
Diatoms 90II Bc 1



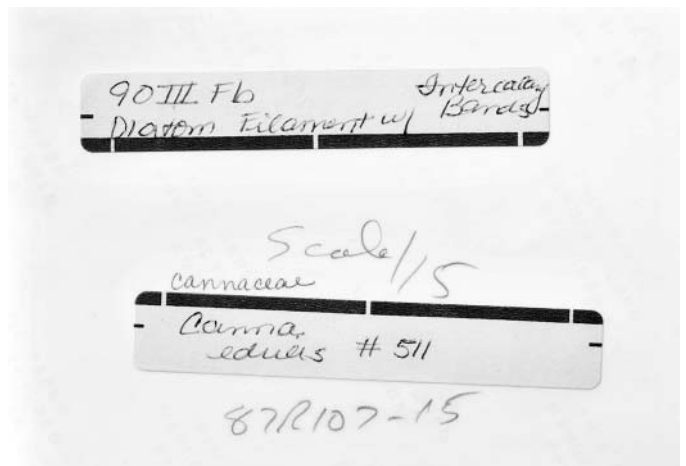
Diatom part of
a filament
with cells with
intercalary
bands

{90III Fb} old #

90IIBc1 card 1.JPG



90IIBc1 photo 1f.JPG



90IIBc1 photo 1b.JPG

90III Fb Intercalary
Diatom Filament w/ Bands

Scale 1/5
Cannaceae
Coenocia
edulis # 511

87R107-15

Diatoms

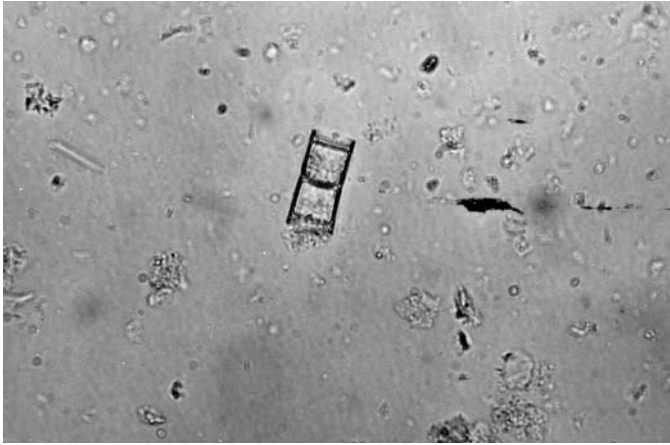
90 II Bc2



Diatom - part
of a filament
with cells in
girdle view

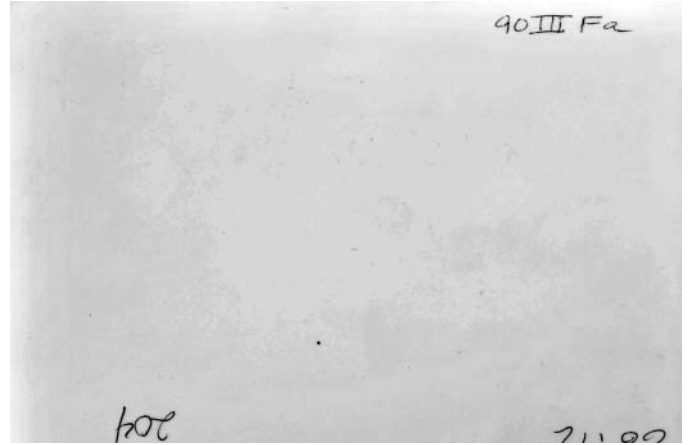
{90 III Fa} old #

90IIBc2 card 1.JPG



90IIBc2 photo 1f.JPG

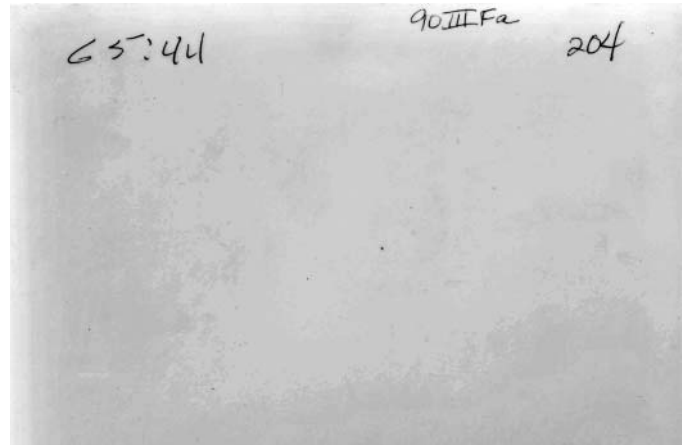
90 III Fa



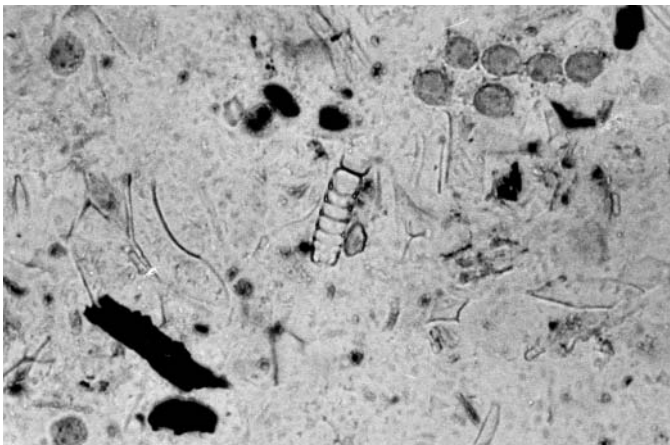
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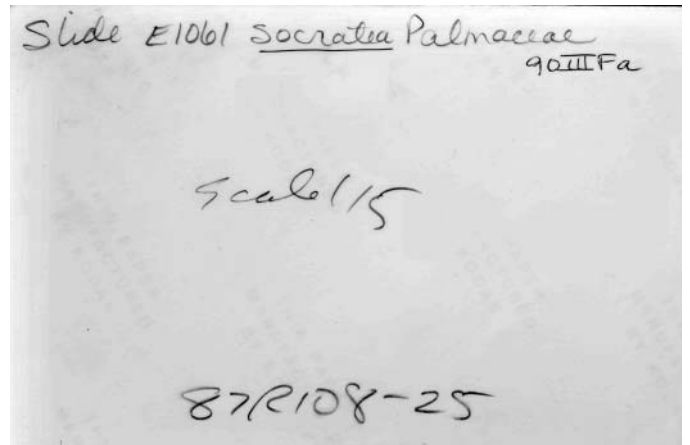
90IIBc2 photo 2f.JPG



90IIBc2 photo 2b.JPG



90IIBc2 photo 3f.JPG



90IIBc2 photo 3b.JPG

Slide E1061 Socratea Palmaceae
90 III Fa

Scale 1/5

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