

June 1, 1988

Report on Samples Submitted by Jim Hein for Calcareous Nannofossil Age Determinations
F7-87-SC

D7-1: Barren

D7-2A: Barren

D7-2B: Barren

D9-1A: Barren

D11-1: Probably Miocene; sparse flora; poorly preserved (EDAX shows that nannos are probably replaced by apatite).

Species present:

Cyclargolithus floridanus
Dictyococcites scrippae ??
Discoaster spp.
Helicosphaera scissura
Reticulofenestra sp.
Sphenolithus sp.

D14-2G: Barren

D17-3B: Very questionably Miocene. Nannos are sparse and very poorly preserved.
Species present:

Discoaster sp. aff. *D. kugleri*
D. sp.

D17-5B: Barren.

D29-1: Late Pleistocene or younger (CN15=NN21). Nannos are abundant but poorly preserved.

Species present:

Ceratolithus cristatus
C. simplex
C. teleimus
Coccolithus pelagicus
Calcidiscus leptoporus
Emiliania huxleyi
Gephyrocapsa spp.
Helicosphaera hyalina ??
Rhabdosphaera sp. aff. *R. claviger*

F6-87-NC

D8-8: Barren.

F7-86-HW

CD1-8: Indeterminate; there are questionable early Tertiary species (*Zygrhablithus* ?? and *Fasciculithus* ?? present) and also a Pleistocene species (*Ceratolithus cristatus*). I don't know if the sample is Pleistocene with reworked early Tertiary nannos, or early Tertiary with Pleistocene (surficial) contamination.

CD1-9 (limestone): Indeterminate, but very questionably early Tertiary based on the questionable presence of *Fasciculithus* sp. and *Cyclicargolithus abiseptus*.

CD1-9 (soft brown mud; a minor constituent coating rock and filling voids): Nannos of mixed ages are present.

Species include:

Ceratolithus cristatus, *C. simplex*, *C. telesmus* (Pleistocene)

Gephyrocapsa spp. (late Pliocene to present).

Discoaster spp. (pre-Pleistocene)

Coccolithus copelagicus ?? (Eocene-Oligocene)

Cyclicargolithus abiseptus (Oligocene)

Dictyococcites biseptus (Eocene-Oligocene)

Fasciculithus sp. (Paleocene)

Helicosphaera sp.

Rhabdosphaera sp.

CD1-10B: Questionably Eocene.

Fasciculithus sp.

Sphenolithus sp. aff. *S. pseudoradians*

Zygrhablithus sp.

CD1-12: Barren.

CD2-30: Questionably Paleogene; nannos probably replaced with apatite;

Species present:

Chiasmolithus sp.

Coccolithus pelagicus group

Sphenolithus sp.

CD5-18: Indeterminate.

CD5-14: Probably Eocene; some nannos appear to be partially replaced by another mineral.

Species present:

Chiasmolithus sp.?

Coccolithus (eo?)*pelagicus*

Fasciculithus sp.

Sphenolithus obtusus

CD6-12B: Barren.

CD6-26: Barren.

CD18-3: Barren.

CD18-18C: Indeterminate.

CD15-1D: Barren.

CD15-2E: Indeterminate.

CD19-1: Indeterminate; a few very poorly preserved placoliths replaced by a mineral (apatite?).

CD19-3: Questionably Oligocene; sparse, poorly preserved flora; replaced with apatite?
Species present:

Sphenolithus tribulosus? *Zygribolithus bijugatus*

CD29-3: Probably Miocene with minor latest Pliocene to recent contamination; or late Pliocene to recent with considerable Miocene and Pliocene contamination.
Species present:

Discoaster sp. aff. *D. brouweri*

D. sp. aff. *D. exilis*

D. sp. aff. *D. variabilis*

D. spp.

Gephyrocapsa sp.

Reticulofenestra sp.

CD90-2: Probably early Miocene to mid Pliocene; most of the sample (based on smear slide) is made up of non-birefringent hexagonal crystals (apatite?).
Species present:

Discoaster sp. aff. *D. exilis*

D. variabilis

D. spp.

TT192

D58-1: Quaternary.

Species present:

Ceratolithus cristatus

C. simplex

C. sp. aff. *C. telesmus*

Coccolithus pelagicus

Calcidiscus leptoporus

Gephyrocapsa sp. aff. *G. oceanica*

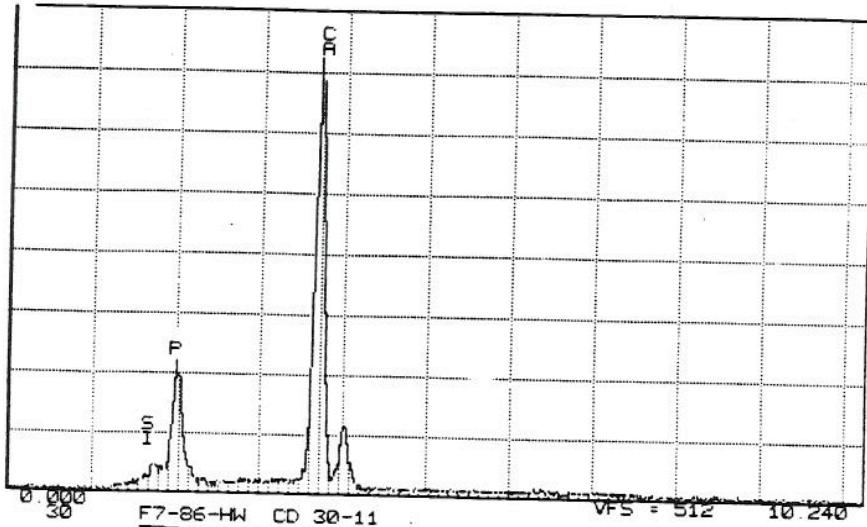
Helicosphaera sp. aff. *H. wallichii*

D71-4: Barren.

Paula Quinterno

U. S. GEOLOGICAL SURVEY, MENLO PARK
Cursor: 0.000keV = 0

TUE 31-MAY-88 09:39



One placcolith analyzed.

F7-86-HW

CD 30-11

Did an EDAX of
matrix (groundmass).
It was very similar
to the above graph.