Tertiary, Upper Cretaceous

Georgia

Pollen

Greg Gohn

Kay Christopher

SHIPMENT NUMBER: EEG-79-3

REGION: Glynn Co.

DATE RECEIVED: 1/2/79

STATUS OF WORK: Complete

DATE REPORTED: 2/2/79

Project 9450-01832

Four cuttings samples were analyzed from the Pan American Union Camp Co. 1 well, GGS-1197, lat. 31 deg. 22 min. 20 sec. N., long. 81 deg. 33 min. 54 sec. W., Glynn County, Georgia. Sample depths are

2840-2850 ft.
3640-3650 ft.
3830-3840 ft.
4180-4190 ft.

Preservation in all samples was downright lousy, and only through my dogged perseverance did I arrive at the age determinations outlined below.

The sample at 2840-2850 ft. contained only Tertiary forms. Sorry, Greg, but even I cannot give you a Cretaceous age for this one.

Samples at 3640-3650 ft. and 3830-3840 ft. both appear to be zone V (Butaw) equivalents. The biostratigraphically significant forms at 3640-3650 are

POROCOLPOPOLLENITES sp.
COMPLEXIOPOLLIS ABDITUS
SANTALACITES MINOR
MINORPOLLIS MINIMA
COMPLEXIOPOLLIS sp. C

At 3830-3840, the significant forms are

COMPLEXIOPOLLIS ABDITUS
MINORPOLLIS MINIMA
POROCOLPOPOLLENITES sp.
MOMIPITES FRAGILIS
COMPLEXIOPOLLIS sp. C

and other zone V forms of COMPLEXIOPOLLIS.

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DATE REPORTED

The sample at 4180-4190 ft. contains an abundance (relatively speaking) of zone V forms, but it does contain 2 specimens of ATLANTOPOLLIS VERRUCOSA. This form is characteristic of zone IV, it does occur in the Turonian of Texas (post zone IV, pre zone V interval), and has never been observed in good zone V material from the outcropping Gulf Coastal Plain. I therefore consider the sample at 4180-4190 ft. to be either zone IV in age (Tuscaloosa equivalent, upper Cenomanian), or from a post zone IV, pre zone V interval not represented in the outcrop section. @

Ray Christopher

U. Cretaceous, Santonian-Maastrichtian

Georgia

Calcareous Nannofossils

Gregory Gohn

Charles C. Smith

SHIPMENT NUMBER: EEG-79-3
REGION: Glynn Co.
DATE RECEIVED: 1/2/79
STATUS OF WORK: Complete
DATE REPORTED: 1/29/79

This report involves the calcareous nannofossil age determinations of ten cuttings samples collected from the Pan American Union Camp No. 1 well, Georgia Geological Survey well No. 1197, lat. 31 deg. 22 min. 20 sec., long. 81 deg. 33 min. 54 sec., Glynn County, Georgia. The uppermost five samples from this well are of Paleocene and early Eocene age, and thus their nannofloras were not examined in detail. If these upper samples are of concern, perhaps Laurel Bybell could provide you with some biostratigraphic assignments. The five Cenozoic samples are as follows:

2190-2200 feet	2450-2460 feet	3070-3080 feet
2330-2340 feet	2730-2740 feet	

Due to problems of down hole contamination in these cuttings, the lowest occurrence surfaces of nannofossil species can not be used reliably in making biostratigraphic determinations. Thus, the ages quoted below for the five Upper Cretaceous samples must be regarded as minimum ages for the samples.

3300-3310 at or below the middle Maastrichtian
3430-3440 at or below the middle Maastrichtian
3640-3650 Campanian or older
3830-3840 Campanian or older
4180-4190 late middle Santonian or older

Sample 3300-3310
Age: middle Maastrichtian
Flora:

CRETARHABDUS CONICUS	M. STRADNERI
C. CRENULATUS	MICULA STAUROPHORA
LITHRAPHIDITES CARNIOLENSIS	TETRALITHUS OBSCURUS
L. QUADRATUS	WATZNAUERIA BARNESAE
LUCIANORHABDUS CAYEUXII	ZYGODISCUS ORIONATUS
MICRORHABDULUS DECORATUS	Z. SPIRALIS
M. ELONGATUS	

Comments: This sample consists of a rare and poorly preserved (extensively etched) nannofossil flora containing common Paleocene &

STRATIGRAPHIC AGE

GENERAL LOCALITY

LATITUDE LONGITUDE

FIELD NO.

COLLECTED BY

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DATE REPORTED

contaminants. The presence of L. QUADRATUS and T. OBSCURUS, and absence of early Maastrichtian species such as TETRALITHUS GOTHICUS and T. TRIFIDUS, indicates this sample is of middle Maastrichtian age. The Cretaceous-Tertiary contact must lie somewhere within the interval between 3080 and 3300 feet.

Sample 3430-3440 feet
Age: middle Maastrichtian
Flora: as above, plus

ARKHANGELSKIELLA CYMBIFORMIS	KAMPTNERIUS PUNCTATUS
CRIBROSPHAERELLA EHRENBERGII	TETRALITHUS ACULEUS

Comments: This sample contains a rare to common, poorly preserved nannoflora as in the sample at 3300-3310 feet.

Sample 3640-3650 feet
Age: Campanian
Flora: as in the two overlying samples, plus

CHIASTOZYGUS CUNEATUS	PARHABDOLITHUS ANGUSTUS
C. PLICATUS	PREDISCOSPHAERA CRETACEA
EIFFELLITHUS EXIMIUS	VAGALAPILLA MATALOSA
E. TURRISEIFFELI	

Comments: This sample contains a very rich and diverse, well preserved flora of which only a few species have been listed above. The presence of EIFFELLITHUS EXIMIUS indicates this sample is at or below the top of the Campanian. Intensive examination of this and the underlying sample failed to document the presence of any species indicative of strata of pre-Campanian age.

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Sample 3830-3840 feet
Age and comments as above.

Sample 4180-4190 feet
Age: late middle Santonian or below
Flora:

AHMUELLERELLA OCTORADIATA
BRAARUDOSPHAERA BIGELOWI
CHIASTOZYGUS CUNEATUS
EIFFELLITHUS EXIMIUS
LITHASTRINUS FLORALIS
L. GRILLII
LITHRAPHIDITES CARNIOLENSIS
LUCIANORHABDUS CAYEUXII
MARTHASTERITES FURCATUS
MICULA STAUROPHORA
PREDISCOSPHAERA CRETACEA
TETRALITHUS OBSCURUS
VAGALAPILLA MATALOSA
WATZNAUERIA BARNESAE

Comments: This sample contains a very rich and diverse calcareous nannofossil flora of which only a few species have been listed here. The presence of L. FLORALIS, L. GRILLII, and M. FURCATUS is indicative of strata of late middle Santonian or earlier age. Although this sample may be older than the middle Santonian, I see no evidence in the form of the presence of an older flora to indicate a pre-middle Santonian age.

Nannofossily yours,

Charles C. Smith

GRAPHIC	Paleogene
LOCALITY	Georgia
QUADRANGLE AREA	
WORK DONE	Calcareous nannofossils
REFERRED	Gregory S. Gohn
REPORT PREPARED	Laurel M. Bybell

SHIPMENT NUMBER	EEG-79-3
REGION	Glynn Co.
DATE RECEIVED	1-9-79
STATUS OF WORK	complete
DATE REPORTED	4-16-79

Project No. 9450-01832

Cuttings from the Pan-American-Union Camp No. 1 well, Georgia Geological Survey well 1197, were examined for calcareous nannofossils. The elevation of the well is 24 feet and the T.D. is 4460 feet.

Sample 100 ft. -- Barren.

Sample 300 ft. -- Barren.

Sample 500 ft. -- unidentifiable fragments.

Sample 700 ft.
Species present: COCCOLITHUS PELAGICUS (Wallich) 1877
Age: Cenozoic.

Sample 980 ft.
Species present: CYCLOCOCCOLITHUS FLORIDANUS (Roth and Hay) 1967
Age: Middle Eocene - Late Oligocene.

Sample 1200 ft.
Species present: COCCOLITHUS PELAGICUS (Wallich) 1877

Sample 1400 ft -- unidentifiable placoliths.

Sample 1600 ft.
Species present: CYCLOCOCCOLITHUS FLORIDANUS (Roth and Hay) 1967
Age: Middle Eocene-Late Oligocene.

Sample 1800 ft.
Species present: COCCOLITHUS PELAGICUS (Wallich) 1877

Sample 2000 ft.
Species present:
COCCOLITHUS EOPELAGICUS (Bramlette and Riedel) 1954
CYCLOCOCCOLITHUS FLORIDANUS (Roth and Hay) 1967
CYCLOCOCCOLITHUS FORMOSUS Kamptner 1963
Age: Middle Eocene - Early Oligocene, probably Eocene.

REPORT ON REFERRED FOSSILS

2 xx

SHIPMENT NUMBER EEG-79-3

REGION

DATE RECEIVED

STATUS OF WORK

DATE REPORTED

Sample 2200 ft.
Species Present:
BLACKITES SPINOSUS (Deflandre and Fert) 1954
BRAARUDOSPHAERA DISCULA Bramlette and Riedel 1954
CAMPYLOSPHAERA DELA (Bramlette and Sullivan) 1961
COCCOLITHUS EOPELAGICUS (Bramlette and Riedel) 1954
COCCOLITHUS PELAGICUS (Wallich) 1877
CYCLOCOCCOLITHUS FLORIDANUS (Roth and Hay) 1967
DISCOASTER BARBADIENSIS Tan Sin Hok 1927
SPHENOLITHUS MORIFORMIS (Bronnimann and Stradner) 1960
SPHENOLITHUS PSEUDORADIANS Bramlette and Wilcoxon 1967
TOWEIUS CRATICULUS Hay and Mohler 1967
ZYGRHABLITHUS BIJUGATUS (Deflandre) 1954
Age: Late Paleocene-Early Eocene, probably Paleocene.

Sample 2730-2740 ft.
Species present:
COCCOLITHUS PELAGICUS (Wallich) 1877
SPHENOLITHUS sp.
TOWEIUS CRATICULUS Hay and Mohler 1967
Age: Late Paleocene-Early Eocene, probably Paleocene. a

Laurel M. Bybell

Tertiary, Upper Cretaceous

Georgia

Rotten

Greg Gohn

Ray Christopher

SHIPMENT NUMBER: EEG-79-3

REGION: Glynn Co.

DATE RECEIVED: 1/2/79

STATUS OF WORK: Complete

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MINORPOLLIS MINIMA
COMPLEXIOPOLLIS sp. D

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MINORPOLLIS MINIMA
POROCOLPOPOLLENITES sp.
CONIPITES FRAGILIS
COMPLEXIOPOLLIS sp. D

and other zone V forms of COMPLEXIOPOLLIS.

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Ray Christopher