

II. SHORE-LABORATORY REPORT ON MESOZOIC FORAMINIFERIDA, LEG 32

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The following lists represent the Foraminiferida found at Sites 305, 310, and 313 from DSDP Leg 32 in the northwest Pacific.

305-16-1, 130-132 cm

Abathomphalus mayaroensis (Bolli)
Abathomphalus intermedius (Bolli)
Globotruncanella havanensis (Voorwijk)
Globotruncanella convexa Longoria and Gamper
Globotruncana aegyptiaca Nakkady
Globotruncana arca (Cushman)
Globotruncana contusa (Cushman)
Globotruncanita stuarti (de Lapparent)
Globotruncanita conica White
Globotruncanita elevata (Brotzen)
Globotruncana cf. *G. arabica* El Naggat
Rugoglobigerina rugosa (Plummer)
Heterohelix globulosus (Ehrenberg)
Heterohelix striatus (Ehrenberg)
Pseudotextularia elegans (Rzehak)
Pseudotextularia sp.
Racemiguembelina fructicosa (Egger)
Pseudoguembelina kempensis Esker
Pseudoguembelina excolata (Cushman)
Pseudoguembelina costulata (Cushman)
Ventilabrella multicamerata de Klasz
Gublerina robusta de Klasz

Biostratigraphic determination: *Abathomphalus mayaroensis* Zone, late Maestrichtian.

305-16-2, 130-132 cm

Abathomphalus mayaroensis (Bolli)
Abathomphalus intermedius (Bolli)
Globotruncanella havanensis (Voorwijk)
Globotruncanella petalloidea (Gandolfi)
Globotruncanella convexa Longoria and Gamper
Globotruncanella manmouthensis (Olsson)
Globotruncana arca (Cushman)
Globotruncana aegyptiaca Nakkady
Globotruncana contusa (Cushman)
Globotruncana duwi Nakkady
Globotruncana patelliformis Gandolfi
Globotruncana cf. *G. plummerae* Gandolfi
Globotruncana leupoldi Bolli
Globotruncana nothi (Brönnimann and Brown)
Archaeoglobigerina cretacea (d'Orbigny)
Globotruncanita stuarti (de Lapparent)
Globotruncanita elevata (Brotzen)
Globotruncanita stuartiformis (Dalbiez)
Globotruncanita ganseri (Bolli)
Globotruncana cf. *R. ellisi* Brönnimann and Brown
Globigerinelloides volutus (White)
Globigerinelloides subcarinatus (Brönnimann)
Globigerinelloides multispinatus (Lalicker)

Heterohelix globulosus (Ehrenberg)
Ventilabrella multicamerata de Klasz
Pseudoguembelina kempensis Esker
Pseudoguembelina excolata (Cushman)
Pseudoguembelina costulata (Cushman)
Racemiguembelina fructicosa (Egger)
Racemiguembelina powelli Smith and Pessagno
Pseudotextularia elegans (Rzehak)
Pseudotextularia intermedia (Kikoine)

Biostratigraphic determination: Same as above.

305-16-3, 130-139 cm

Same faunal assemblage as above.

Biostratigraphic determination: Same as above.

305-16-4, 130-132 cm

Same faunal assemblage as above.

Biostratigraphic determination: Same as 305-16-2.

305-16-5, 130-135 cm

Same faunal assemblage as 305-16-2.

Biostratigraphic determination: Same as 305-16-2.

305-17-1, 130-132 cm

Same faunal assemblage as 305-16-2.

Biostratigraphic determination: Same as 305-16-2.

305-17-2, 129-131 cm

Same faunal assemblage as 305-16-2.

Biostratigraphic determination: Same as 305-16-2.

305-17-3, 128-130 cm

Same faunal assemblage as 305-16-2.

Biostratigraphic determination: Same as 305-16-2.

305-17-4, 128-130 cm

Abathomphalus intermedius (Bolli)
Globotruncanella havanensis (Voorwijk)
Globotruncana arca (Cushman)
Globotruncana rosetta (Carsey)
Globotruncanita elevata (Brotzen)
Globotruncanita stuartiformis (Dalbiez)
Rugoglobigerina rugosa (Plummer)
Loeblichella cf. *L. hessi* Pessagno
Heterohelix globulosus (Ehrenberg)

Biostratigraphic determination: *Globotruncanita ganseri* Zone, late Maestrichtian.

305-17-5, 128-120 cm

Globotruncana arca (Cushman)
Globotruncana contusa (Cushman)
Globotruncana sp. cf. *pessagnoii* Longoria
Globotruncanella havanensis (Voorwijk)
Globotruncanella convexa Longoria and Gamper
Globotruncana rosetta (Carsey)
Rugoglobigerina rugosa (Plummer)
Rugoglobigerina hexacamerata Brönnimann

Globigerinelloides volutus (White)
Ventilabrella multicamerata de Klasz
Heterohelix globulosus (Ehrenberg)

Biostratigraphic determination: *Globotruncanita gansseri* Zone, late Maestrichtian.

305-17-6, 118-120 cm

Globotruncanita gansseri (Bolli)
Globotruncanita elevata (Brotzen)
Globotruncanita stuarti (de Lapparent)
Globotruncana arca (Cushman)
Globotruncana aegyptiaca Nakkady
Globotruncana rosetta (Carsey)
Globotruncana ventricosa White
Globotruncana linneiana (d'Orbigny)
Globotruncana sp. cf. *G. arabica* El Naggar
Rugoglobigerina rugosa (Plummer)
Rugotruncana subcircumnodifer (Gandolfi)
Heterohelix globulosus (Ehrenberg)
Heterohelix striatus (Ehrenberg)
Heterohelix sp.
Pseudoguembelina excolata (Cushman)
Pseudoguembelina costulata (Cushman)
Pseudoguembelina kempensis Esker

Biostratigraphic determination: *Globotruncanita gansseri* Zone, late Maestrichtian, with reworked late Campanian fauna.

305-18-1, 138-140 cm

Globotruncana arca (Cushman)
Globotruncana bulloides Vogler
Globotruncana trinidadensis Gandolfi
Globotruncana contusa (Cushman)
Globotruncanella havanensis (Voorwijk)
Globotruncanita elevata (Brotzen)
Globotruncanita stuartiformis (Dalbiez)
Globigerinelloides yaucoensis (Pessagno)
Rugotruncana subcircumnodifer (Gandolfi)
Rugoglobigerina rugosa (Plummer)

Biostratigraphic determination: *Globotruncanita calcarata* Zone, late Maestrichtian.

305-18-2, 5-8 cm

Globotruncana contusa (Cushman) s.l.
Globotruncana morozovae Vassilenko
Globotruncana arca (Cushman)
Globotruncana hilli Pessagno
Globotruncana fornicata Plummer
Globotruncana plummerae Gandolfi
Globotruncana trinidadensis Gandolfi
Globotruncana pessagno Longoria
Globotruncana leupoldi Bolli
Globotruncanita elevata (Brotzen)
Globotruncanita stuartiformis (Dalbiez)
Globotruncanella havanensis (Voorwijk)
Rugotruncana subcircumnodifer (Gandolfi)
Globigerinelloides yaucoensis (Pessagno)
Globigerinelloides subcarinatus (Brönnimann)
Globigerinelloides volutus (White)
Pseudoguembelina excolata (Cushman)
Pseudoguembelina costulata (Cushman)
Heterohelix globulosus (Ehrenberg)
Ventilabrella riograndensis Martin.

Biostratigraphic determination: *Rugotruncana subcircumnodifer* Zone, early Maestrichtian.

305-18-3, 5-7 cm

Same faunal assemblage as above.

Biostratigraphic determination: *Rugotruncana subcircumnodifer* Zone, early Maestrichtian.

305-18-4, 9-10 cm

Dicarinella concavata (Brotzen)
Globotruncanella havanensis (Voorwijk)
Globotruncana arca (Cushman)
Globotruncana fornicata Plummer
Globotruncana plummerae Gandolfi
Globotruncana rosetta (Carsey)
Globotruncana hilli Pessagno
Globotruncanita elevata (Brotzen)
Rugotruncana subcircumnodifer (Gandolfi)
Heterohelix globulosus (Ehrenberg)
Heterohelix striatus (Ehrenberg)
Heterohelix sp.
Globigerinelloides yaucoensis (Pessagno)
Globigerinelloides multispinus (Lalicker)
Globigerinelloides volutus (White)
Globigerinelloides subcarinatus (Brönnimann)
Globigerinelloides prairehillensis Pessagno
Pseudotextularia elegans (Rzehak)
Ventilabrella riograndensis Martin

Biostratigraphic determination: *Rugotruncana subcircumnodifer* Zone, early Maestrichtian, with reworked early Santonian fauna.

305-18-5, 11-13 cm

Dicarinella indica (Jacob and Sastry)
Dicarinella concavata (Brotzen)
Marginotruncana sinuosa Porthault
Marginotruncana angusticarenata (Gandolfi)
Globotruncana arca (Cushman)
Globotruncana linneiana (d'Orbigny)
Globotruncana hilli Pessagno
Globotruncana rosetta (Carsey)
Globotruncana fornicata Plummer
Globotruncanita elevata (Brotzen)
Gublerina sp. cf. *G. robusta* de Klasz
Globigerinelloides prairehillensis Pessagno
Globigerinelloides yaucoensis (Pessagno)
Globigerinelloides subcarinatus (Brönnimann)
Rugotruncana subcircumnodifer (Gandolfi)
Rugoglobigerina rugosa (Plummer)
Globotruncanella havanensis (Voorwijk)

Biostratigraphic determination: *Rugotruncana subcircumnodifer* Zone, early Maestrichtian, with reworked early Santonian fauna.

305-19-1, 10-12 cm

Same faunal assemblage as above.

Biostratigraphic determinations: Same as above.

305-19-2, 5-7 cm

Globotruncana arca (Cushman)
Globotruncana fornicata Plummer
Globotruncana plummerae Gandolfi
Globotruncana linneiana (d'Orbigny)
Globotruncana rosetta (Carsey)

- Globotruncana hilli* Pessagno
Globotruncana ventricosa White
Globotruncanella havanensis (Voorwijk)
Globigerinelloides subcarinatus (Brönnimann)
Globigerinelloides yaucoensis (Pessagno)
Globigerinelloides prairehillensis Pessagno
Pseudogeumbelina costulata (Cushman)
Pseudogeumbelina excolata (Cushman)
Ventilabrella riograndensis Martin
Ventilabrella glabrata (Cushman)
Ventilabrella manuelensis Martin
Heterohelix globulosus (Ehrenberg)
Heterohelix striatus (Ehrenberg)
Pseudotextularia elegans (Rzehak)
Archaeoglobigerina blowi Pessagno
Biostratigraphic determination: *Globotruncanita calcarata* Zone, late Campanian.
- 305-19-3, 5-7 cm
 Same faunal assemblage as above.
Biostratigraphic determination: Same as above.
- 305-19-4, 5-7 cm
 Same faunal assemblage as above.
Biostratigraphic determination: Same as 305-19-2.
- 305-20-1, 5-8 cm
 Same faunal assemblage as above.
Biostratigraphic determination: Same as 305-19-2.
- 305-21-1, 72-74 to 305-25-6, 6-8 cm
Globotruncana ventricosa White
Globotruncana arca (Cushman)
Globotruncana plummerae Gandolfi
Globotruncana rosetta (Carsey)
Globotruncana linneiana (d'Orbigny)
Globotruncanita calcarata (Cushman)
Globotruncanita elevata (Brotzen)
Globotruncanita subspinosa (Pessagno)
Globigerinelloides volutus (White)
Globigerinelloides subcarinatus (Brönnimann)
Rugoglobigerina rugosa (Plummer)
Rugoglobigerina sp.
Heterohelix globulosus (Ehrenberg)
Heterohelix striatus (Ehrenberg)
Biostratigraphic determination: *Globotruncanita calcarata* Zone, late Campanian.
- 305-27-1, 19-21 cm.
Globotruncana linneiana (d'Orbigny)
Globotruncana arca (Cushman)
Globotruncana fornicata Plummer
Globotruncanita elevata (Brotzen)
Globigerinelloides yaucoensis (Pessagno)
Globigerinelloides volutus (White)
Heterohelix globulosus (Ehrenberg)
Biostratigraphic determination: *Globotruncanita elevata* Zone, late Campanian.
- 305-27-2, 5-7 cm.
 Same faunal assemblage as above.
Biostratigraphic determination: Same as above.
- 305-28-2, 30-32 cm.
Globotruncana arca (Cushman)
- Globotruncana fornicata* Plummer
Globotruncana lapparenti Brotzen
Globigerinelloides watersi (Cushman)
Globigerinelloides prairehillensis Pessagno
Schackoina multispinata (Cushman & Wickenden)
Heterohelix pulchrus (Brotzen)
Heterohelix globulosus (Ehrenberg)
Ventilabrella glabrata Cushman
Biostratigraphic determination: Lowermost *Globotruncanita stuartiformis* Zone, early Campanian.
- 310-12-2, 9-12 cm
Globotruncana arca (Cushman)
Biostratigraphic determination: *Rugotruncana subcircumnodifer* Zone, early Maestrichtian, to *Globotruncanita gansseri* Zone.
- 310-12-3, 10-12 cm
Globotruncana arca (Cushman)
Globotruncana trinidadensis Gandolfi.
Biostratigraphic determination: Same as above.
- 310-12-4, 8-10 cm
Globotruncana arca (Cushman)
Biostratigraphic determination: Same as 310-12-2.
- 310-12-5, 7-9 cm
 Barren
- 310-13-1, 6-8 cm
 Barren
- 310-13-2, 6-8 cm
 Barren of planktonic foraminifera, some unidentified benthonic foraminifera.
- 310-13-3, 6-8 cm
 Same as above.
- 310-13-4, 6-8 cm
 Barren.
- 310-13-5, 6-8 cm
Globotruncanella havanensis (Voorwijk)
Globotruncana plummerae Gandolfi
Biostratigraphic determination: *Rugotruncana subcircumnodifer* Zone to *Globotruncanita gansseri* Zone, early Maestrichtian.
- 310-13-6, 6-8 cm
 Barren.
- 310-14-1, 5-7 cm
 Barren.
- 310-14-2, 5-7 cm
Globotruncana sp.
- 310-14-3, 5-7 cm
 Barren.
- 310-14-4, 5-7 cm
 Barren.
- 310-14-5, 5-8 cm
 Barren.
- 310-14-6, 6-8 cm
 Barren.

310-15-2, 5-8 cm
Barren.

310-16-2, 6-9 cm
Schackoina sp.
Globigerinelloides subcarinatus (Brönnimann)
Globotruncanita stuartiformis (Dalbiez)

Biostratigraphic determination: *Globotruncanita calcarata* Zone, late Campanian, to *Rugotruncana subcircumnodifer* Zone, early Maestrichtian.

310-16-3, 3-6 cm

Globotruncana hilli Pessagno
Globotruncana pessagnoii Longoria
Globotruncana trinidadensis Gandolfi
Globotruncana fornicata Plummer
Globotruncana contusa (Cushman) s.l.
Globotruncanita elevata (Brotzen)
Globotruncanita stuartiformis (Dalbiez)
Globotruncana linneiana (d'Orbigny)
Globotruncana arca (Cushman)
Archaeoglobigerina cretacea (d'Orbigny)
Pseudotextularia elegans (Rzehak)
Pseudoguembelina costulata (Cushman)

Biostratigraphic determination: *Globotruncanita calcarata* Zone, late Campanian, to *Rugotruncana subcircumnodifer* Zone, early Maestrichtian.

310-17-1, 7-10 cm
Barren.

310-17-2, 6-8 cm
Globotruncana sp.
Pseudoguembelina costulata (Cushman)
Heterohelix sp. cf. *H. globulosus* (Ehrenberg)

Biostratigraphic determination: Same as above.

310-17-3, 5-8 cm

Schackoina multispinata (Cushman and Wickenden)
Globotruncana pessagnoii Longoria
Globotruncana fornicata Plummer
Globigerinelloides volutus (White)
Heterohelix sp.

Biostratigraphic determination: *Globotruncanita calcarata* Zone, late Campanian, to *Rugotruncana subcircumnodifer* Zone early Maestrichtian.

310-17-5, 5-8 cm

Globotruncana linneiana (d'Orbigny)
Globigerinelloides yaucoensis (Pessagno)
Globigerinelloides volutus (White)

Biostratigraphic determination: Same as above.

310-17-4, 5-8 cm
Barren.

310-17-6, 5-8 cm

Globotruncana arca (Cushman)
Globotruncana leupoldi Bolli
Globotruncana fornicata Plummer
Globotruncana bulloides Vogler
Globigerinelloides yaucoensis (Pessagno)
Schackoina multispinata (Cushman and Wickenden)

Biostratigraphic determination: *Globotruncanita calcarata* Zone, late Campanian, to *Rugotruncana subcircumnodifer* Zone, early Maestrichtian.

310-18-2, 9-12 cm

Globotruncana arca (Cushman)
Globotruncana linneiana (d'Orbigny)
Globotruncana fornicata Plummer
Globotruncana bulloides Vogler
Schackoina multispinata (Cushman and Wickenden)
Globigerinelloides subcarinatus (Brönnimann)
Globigerinelloides yaucoensis (Pessagno)
Gublerina robusta de Klasz
Pseudoguembelina kempensis Esker

Biostratigraphic determination: Same as above.

310-18-3, 5-8 cm

Globotruncana hilli Pessagno
Globotruncana arca (Cushman)
Globotruncana linneiana (d'Orbigny)
Globotruncana fornicata Plummer
Globotruncanita elevata (Brotzen)
Globigerinelloides volutus (White)
Globigerinelloides subcarinatus (Brönnimann)
Schackoina multispinata (Cushman and Wickenden)
Heterohelix globulosus (Ehrenberg)
Pseudoguembelina kempensis Esker

Biostratigraphic determination: Same as 310-17-4.

310-18-4, 5-8 cm

Globotruncana hilli Pessagno
Globotruncana arca (Cushman)
Globotruncana linneiana (d'Orbigny)
Globotruncana fornicata Plummer
Globotruncana bulloides Vogler
Archaeoglobigerina cretacea (d'Orbigny)
Globigerinelloides yaucoensis (Pessagno)
Globigerinelloides volutus (White)
Globigerinelloides subcarinatus (Brönnimann)
Heterohelix globulosus (Ehrenberg)
Heterohelix striatus (Ehrenberg)
Pseudotextularia elegans (Rzehak)

Biostratigraphic determination: *Globotruncanita calcarata* Zone, late Campanian, to *Rugotruncana subcircumnodifer* Zone, early Maestrichtian.

310-20-2, 4-7 cm

Same faunal assemblage as above.

Biostratigraphic determination: Same as 313-20-1.

310-20-3, 5-8 cm

Same faunal assemblage as 313-20-1.

Biostratigraphic determination: Same as 313-20-1.

Biostratigraphic determination: Lowermost *Globotruncanita stuartiformis* Zone, early Campanian.

310A-1-1, 9-12 cm

Globotruncanita gansseri (Bolli)
Globotruncanita elevata (Brotzen)
Globotruncana aegyptiaca Nakkady
Globotruncana plummerae Gandolfi
Globotruncana trinidadensis Gandolfi
Globotruncanella havanensis (Voorwijk)
Ventilabrella eggeri Cushman
Ventilabrella multicamerata de Klasz
Globigerinelloides subcarinatus (Brönnimann)
Heterohelix globulosus (Ehrenberg)
Pseudoguembelina costulata (Cushman)

Pseudoguembelina excolata (Cushman)
Pseudotextularia elegans (Rzehak)
Biostratigraphic determination: *Globotruncanita gansseri*
 Zone, late Maestrichtian.

310A-1-2, 8-10 cm
 Barren of planktonic foraminifera.

310A-1-3, 8-10 cm
Globotruncanita elevata (Brotzen)
Globotruncanella havanensis (Voorwijk)
Globotruncana aegyptiaca Nakkady
Globotruncanita stuartiformis (Dalbiez)

Biostratigraphic determination: Same as above.

310A-1-4, 8-10 cm
Globotruncanella havanensis (Voorwijk)

Biostratigraphic determination: Same as 310A-1-1.

310A-1-5, 8-10 cm
 Barren.

310A-2-1, 5-7 cm
 Barren.

310A-2-2, 5-7 cm
 Barren of planktonic foraminifera.

310A-2-3, 5-7 cm
 Barren of planktonic foraminifera.

310A-2-4, 5-7 cm
 Barren.

310A-2-5, 5-7 cm
 Barren.

310A-2-6, 7-9 cm
 Barren of planktonic foraminifera.

310A-3-1, 75-77 cm
 Barren.

310-4-1, 72-73 cm
 Barren.

310A-4-2, 10-12 cm
Globotruncanita gansseri (Bolli)
Globotruncanita elevata (Brotzen)
Globotruncana contusa (Cushman)
Globotruncana aegyptiaca Nakkady
Globotruncana sp. cf. *G. trinidadensis* Gandolfi
Rugotruncana subcircummodifer Gandolfi
Ventilabrella sp.
Heterohelix globulosus (Ehrenberg)
Heterohelix striatus (Ehrenberg)
Pseudotextularia elegans (Rzehak)

Biostratigraphic determination: *Globotruncanita gansseri*
 Zone, late Maestrichtian.

310A-4-3, 8-10 cm
 Barren.

310A-14-1, 112-114 cm
Marginotruncana renzi (Gandolfi)
Marginotruncana sigali (Reichel)
Helvetoglobotruncana archaeocretacea (Pessagno)
Heterohelix sp. cf. *H. reussi* (Cushman)
Hedbergella planispira (Tappan)

Hedbergella amabilis Loeblich & Tappan
Hedbergella brittonensis Loeblich and Tappan
Hedbergella infracretacea (Glaessner)

313-15-1, 78-80 cm

Abathomphalus intermedius (Bolli)
Globotruncana aegyptiaca Nakkady
Globotruncana trinidadensis Gandolfi
Globotruncanita elevata (Brotzen)
Globotruncanita stuartiformis (Dalbiez)
Heterohelix striatus (Ehrenberg)
Heterohelix globulosus (Ehrenberg)
Pseudoguembelina excolata (Cushman)
Pseudoguembelina costulata (Cushman)
Pseudoguembelina kempenia Esker
Pseudotextularia intermedia de Klasz
Rugoglobigerina rugosa (Plummer)

Biostratigraphic determination: *Globotruncanita gansseri*
 Zone, late Maestrichtian.

313-15-2, 5-7 cm

Globotruncanita gansseri (Bolli)
Abathomphalus intermedius (Bolli)
Globotruncana aegyptiaca Nakkady
Rugoglobigerina rugosa (Plummer)
Rugoglobigerina cf. *R. pennyi* Brönnimann.
Pseudoguembelina costulata (Cushman)
Pseudoguembelina costulata (Cushman)

Biostratigraphic determination: *Globotruncanita gansseri*
 Zone, late Maestrichtian.

313-15-3, 5-7 cm

Abathomphalus mayaroensis (Bolli)
Globotruncana trinidadensis Gandolfi
Gublerina robusta de Klasz

Biostratigraphic determination: Same as above.

313-15-4, 5-7 cm

Same faunal assemblage as 313-15-1.

Biostratigraphic determination: Same as 313-15-1.

313-16-1, 91-93 cm

Same faunal assemblage as 313-15-1.

Biostratigraphic determination: Same as 313-15-1.

313-16-3, 78-90 cm

Same faunal assemblage as 313-15-2.

Biostratigraphic determination: Same as 313-15-2.

313-16-5, 56-68 cm

Same faunal assemblage as 313-15-2.

Biostratigraphic determination: Same as 313-15-2.

313-17-1, 110-112 cm

Abathomphalus intermedius (Bolli)
Globotruncanita gansseri (Bolli)
Globotruncanita elevata (Brotzen)
Globigerinelloides subcarinatus (Brönnimann)
Pseudoguembelina kempensis Esker
Pseudoguembelina excolata (Cushman)
Pseudoguembelina costulata (Cushman)
Heterohelix globulosus (Ehrenberg)
Heterohelix sp.
Globotruncanella havanensis (Voorwijk)

Biostratigraphic determination: *Globotruncanita gansseri*
 Zone, late Maestrichtian.

313-17-2, 6-8 cm

Same faunal assemblage as 313-17-1

Biostratigraphic determination: Same as 313-17-1

313-17-3, 26-28 cm

Globostruncanella havanensis (Voorwijk)

Globostruncana aegyptiaca Nakkady

Heterohelix globulosus (Ehrenberg)

Heterohelix striatus (Ehrenberg)

Pseudoguembelina costulata (Cushman)

Pseudoguembelina excolata (Cushman)

Biostratigraphic determination: *Globostruncanita gansseri* Zone, late Maestrichtian.

313-17-4, 18-20 cm

Globostruncanita gansseri (Bolli)

Globostruncanita elevata (Brotzen)

Globostruncanita stuartiformis (Dalbiez)

Rugotruncana subcircumnodifer (Gandolfi)

Rugotruncana subpennyi (Brönnimann and Brown)

Rugoglobigerina rugosa (Plummer)

Rugoglobigerina macrocephala (Brönnimann)

Trinitella scotti (Brönnimann)

Globostruncana contusa (Cushman)

Globostruncana aegyptiaca Nakkady

Globostruncana duwi Nakkady

Gublerina robusta de Klasz.

Biostratigraphic determination: *Globostruncanita gansseri* Zone, late Maestrichtian.

313-17-5, 40-42 cm

Same faunal assemblage as above.

Biostratigraphic determination: Same as 313-17-4.

313-18-1, 25-35 cm

Globostruncana aegyptiaca Nakkady

Globostruncana duwi Nakkady

Globostruncana arca (Cushman)

Globostruncana leupoldi Bolli

Globostruncana hilli Pessagno

Globostruncana linneiana (d'Orbigny)

Globostruncana austinensis Gandolfi

Globostruncana plummerae Gandolfi

Globostruncana trinidadensis Gandolfi

Globostruncanita elevata (Brotzen)

Globostruncanita stuartiformis (Dalbiez)

Rugotruncana subcircumnodifer (Gandolfi)

Rugotruncana sp. cf. *R. subpennyi* Brönnimann and Brown

Archaeoglobigerina cretacea (d'Orbigny)

Globigerinelloides yaucoensis Pessagno

Globigerinelloides volutus (White)

Pseudoguembelina excolata (Cushman)

Pseudoguembelina costulata (Cushman)

Biostratigraphic determination: *Rugotruncana subcircumnodifer* Zone, early Maestrichtian.

313-18-3, 121-123 cm

Same faunal assemblage as 313-18-1.

Biostratigraphic determination: Same as 313-18-1.

313-18-4, 6-8 cm

Same faunal assemblage as 313-18-1.

Biostratigraphic determination: Same as 313-18-1.

313-18-5, 7-9 cm

Same faunal assemblage as 313-18-1.

Biostratigraphic determination: Same as 313-18-1.

313-19-1, 11-13 cm

Same faunal assemblage as 313-18-1.

Biostratigraphic determination: Same as 313-18-1.

313-19-2, 6-8 cm

Same faunal assemblage as 313-18-1

Biostratigraphic determination: Same as 313-18-1.

313-19-3, 5-7 cm

Same faunal assemblage as 313-18-1.

Biostratigraphic determination: Same as 313-18-1.

313-19-4, 5-8 cm

Same faunal assemblage as 313-18-1.

Biostratigraphic determination: Same as 313-18-1.

313-19-5, 5-8 cm

Same faunal assemblage as 313-18-1.

Biostratigraphic determination: Same as 313-18-1.

313-19-6, 5-8 cm

Same faunal assemblage as 313-18-1.

Biostratigraphic determination: Same as 313-18-1.

313-20-1, 90-93 cm

Rugotruncana subcircumnodifer (Gandolfi)

Globostruncana hilli Pessagno

Globostruncana pessagno Longoria

Globostruncana rosetta (Carsey)

Globostruncanita elevata (Brotzen)

Globostruncanita stuartiformis (Dalbiez)

Globostruncanella havanensis (Voorwijk)

Globostruncana linneiana (d'Orbigny)

Rugoglobigerina rugosa (Plummer)

Rugoglobigerina macrocephala Brönnimann

Heterohelix striatus (Ehrenberg)

Heterohelix globulosus (Ehrenberg)

Pseudoguembelina costulata (Cushman)

Pseudoguembelina excolata (Cushman)

Biostratigraphic determination: *Rugotruncana subcircumnodifer* Zone, early Maestrichtian.

313-20-2, 5-8 cm

Rugotruncana subcircumnodifer (Gandolfi)

Globostruncana hilli Pessagno

Globostruncana pessagno Longoria

Globostruncana rosetta (Carsey)

Globostruncana linneiana (d'Orbigny)

Globostruncana lapparenti Vogler

Globostruncanita elevata (Brotzen)

Globostruncanita stuartiformis (Dalbiez)

Globostruncanella havanensis (Voorwijk)

Pseudoguembelina costulata (Cushman)

Pseudoguembelina excolata (Cushman)

Heterohelix globulosus (Ehrenberg)

Heterohelix striatus (Ehrenberg)

Rugoglobigerina rugosa (Plummer)

Rugoglobigerina macrocephala Brönnimann.

Biostratigraphic determination: Same as above.

313-20-3, 5-8 cm

Same faunal assemblage as 313-20-2.

Biostratigraphic determination: Same as 313-30-2.

313-20-3, 5-8 cm

Same faunal assemblage as 313-20-2.

Biostratigraphic determination: Same as 313-20-2.

313-21-5, 5-8 cm

Same faunal assemblage as 313-20-2, poorly preserved.

Biostratigraphic determination: Same as 313-20-2.

313-22-1, 608 cm

Same faunal assemblage as 313-20-2.

Biostratigraphic determination: Same as 313-20-2.

313-22-2, 10-13 cm

Globotruncana ventricosa White

Globotruncana pessagnoii Longoria

Globotruncana sp.

Globotruncanella elevata (Brotzen)

Globigerinelloides prairehillensis Pessagno

Heterohelix globulosus (Ehrenberg)

Heterohelix sp.

Gublerina robusta de Klasz.

Biostratigraphic determination: *Globotruncanella calcarata* Zone, late Campanian.

313-24-1, 5-8 cm

Barren.

313-24-2, 37-38 cm

Globotruncana leupoldi (Bolli)

Globigerinelloides prairehillensis Pessagno

Heterohelix globulosus (Ehrenberg)

Heterohelix striatus (Ehrenberg)

Biostratigraphic determination: *Globotruncanella calcarata* Zone, late Campanian.

313-24-3, 36-38 cm

Poorly preserved fauna, the following species were identified.

Globotruncana arca (Cushman)

Globotruncana leupoldi Bolli

Globotruncanella stuartiformis (Dalbiez)

Pseudoguembelina excolata (Cushman)

Pseudoguembelina costulata (Cushman)

Biostratigraphic determination: *Globotruncanella calcarata* Zone, late Campanian.

313-24-4, 8-10 cm

Globotruncana linneiana (d'Orbigny)

Globotruncana fornicata Plummer

Globotruncanella havanensis (Voorwijk)

Globotruncanella stuartiformis (Dalbiez)

Archaeoglobigerina cretacea (d'Orbigny)

Rugoglobigerina rugosa (Plummer)

Rugoglobigerina sp.

Heterohelix globulosus (Ehrenberg)

Heterohelix striatus (Ehrenberg)

Heterohelix sp.

Biostratigraphic determination: *Globotruncanella calcarata* Zone, late Campanian.

313-24-5, 7-9 cm

Globotruncanella calcarata (Cushman)

Globotruncanella elevata (Brotzen)

Globotruncanella stuartiformis (Dalbiez)

Globotruncanella havanensis (Voorwijk)

Globotruncana pessagnoii Longoria

Globotruncana fornicata Plummer

Globotruncana linneiana (d'Orbigny)

Globotruncana bulloides Vogler

Globotruncana rosetta (Carsey)

Archaeoglobigerina cretacea (d'Orbigny)

Rugoglobigerina rugosa Plummer

Heterohelix globulosus (Ehrenberg)

Heterohelix striatus (Ehrenberg)

Pseudoguembelina costulata (Cushman)

Pseudotextularia elegans (Rzehak)

Biostratigraphic determination: *Globotruncanella calcarata* Zone, late Campanian.

313-25-2, 6-8 cm

Globotruncanella calcarata (Cushman)

Globotruncanella elevata (Brotzen)

Globotruncanella stuartiformis (Dalbiez)

Globotruncana arca (Cushman)

Globotruncana fornicata Plummer

Globigerinelloides subcarinatus Brönnimann

Heterohelix globulosus (Ehrenberg)

Heterohelix sp.

Biostratigraphic determination: *Globotruncanella calcarata* Zone, late Campanian.

313-25-3, 21-23 cm

Globotruncanella calcarata (Cushman)

Globotruncanella subspinosa (Pessagno)

Globotruncanella elevata (Brotzen)

Globotruncanella stuartiformis (Dalbiez)

Globotruncana arca (Cushman)

Globotruncana linneiana (d'Orbigny)

Globotruncana rosetta (Carsey)

Globotruncana fornicata Plummer

Globigerinelloides yaucoensis (Pessagno)

Globigerinelloides volutus (White)

Archaeoglobigerina cretacea (d'Orbigny)

Heterohelix globulosus (Ehrenberg)

Heterohelix pulchrus (Brotzen)

Pseudotextularia elegans (Rzehak)

Biostratigraphic determination: *Globotruncanella calcarata* Zone, late Campanian.

313-25-4, 7-8 cm

Same faunal assemblage as 313-25-3.

Biostratigraphic determination: Same as 313-25-3.

313-26-2, 25-30 cm

Globotruncanella calcarata (Cushman)

Globotruncanella elevata (Brotzen)

Globotruncana arca (Cushman)

Globotruncana fornicata Plummer

Heterohelix globulosus (Ehrenberg)

Heterohelix sp.

Marginotruncana renzi (Gandolfi)

Dicarinella concavata (Brotzen)

Helvetoglobotruncana helvetica (Bolli)

Helvetoglobotruncana inornata (Bolli)

Helvetoglobotruncana archaeocretacea (Pessagno)

Pseudotiticinella convexa Longoria

Globigerinelloides yaucoensis (Pessagno)

Globigerinelloides volutus (White)

Biostratigraphic determination: *Globotruncana calcarata* Zone, late Campanian, with reworked Turonian-Santonian fauna.

313-27-1, 24-25 cm

Same faunal assemblage as 313-26-2.

Biostratigraphic determination: *Globotruncanita calcarata* Zone, late Campanian.

313-28-1, 90-93 cm

Globotruncana ventricosa White
Globotruncana fornicata Plummer
Globotruncana arca (Cushman)
Globotruncana rosetta (Carsey)
Globotruncana sp.

Globotruncanita elevata (Brotzen)
Globotruncanita subspinosa (Pessagno)
Pseudoguembelina costulata (Cushman)
Archaeoglobigerina cretacea (d'Orbigny)
Archaeoglobigerina blowi Pessagno
Pseudotextularia elegans (Rzehak)

Biostratigraphic determination: *Globotruncanita calcarata* Zone, late Campanian.

313-28-2, 12-19 cm

Same faunal assemblage as 313-28-1.

Biostratigraphic determination: Same as above.

313-28-3, 20-23 cm

Same faunal assemblage as 313-28-1.

Biostratigraphic determination: Same as above.

313-28-4, 75-80 cm

Globotruncanita calcarata (Cushman)
Globotruncanita elevata (Brotzen)
Globotruncanita subspinosa (Pessagno)
Globotruncana fornicata Plummer
Globotruncana arca (Cushman)
Globotruncana rosetta (Carsey)
Globotruncana lapparenti Brotzen
Archaeoglobigerina cretacea (d'Orbigny)
Archaeoglobigerina blowi Pessagno
Heterohelix globulosus (Ehrenberg)
Heterohelix pulchrus (Brotzen)
Pseudoguembelina costulata (Cushman)
Pseudotextularia elegans (Rzehak)

Biostratigraphic determination: *Globotruncanita calcarata* Zone, late Campanian.

313-29-2, 18-20 cm

Globotruncana arca (Cushman)
Globotruncanita elevata (Brotzen)
Globotruncanita subspinosa (Pessagno)
Globotruncana fornicata Plummer
Globotruncana lapparenti Brotzen
Globotruncana linneiana (d'Orbigny)

Biostratigraphic determination: *Globotruncanita calcarata* Zone, late Campanian.

313-29-3, 6-8 cm

Globotruncana elevata (Brotzen)
Globotruncana hilli Pessagno
Globigerinelloides prairehillensis Pessagno
Heterohelix sp. cf. *H. globulosus* (Ehrenberg)

Biostratigraphic determination: *Globotruncanita calcarata* Zone, late Campanian.

313-29-4, 0-1 cm

Globotruncanita calcarata (Cushman)
Globotruncanita elevata (Brotzen)
Globotruncana ventricosa White
Globotruncana plummerae Gandolfi
Globotruncana fornicata Plummer
Globotruncana linneiana (d'Orbigny)
Globotruncana rosetta (Carsey)
Globotruncana leupoldi Bolli
Pseudoguembelina costulata (Cushman)
Heterohelix globulosus (Ehrenberg)
Heterohelix striatus (Ehrenberg)

Biostratigraphic determination: *Globotruncanita calcarata* Zone, late Campanian.

313-31-2, 9-11 cm

Poorly preserved fauna, the following species were identified:

Globotruncanita elevata (Brotzen)
Globotruncanita stuartiformis (Dalbiez)
Globotruncana arca (Cushman)
Globotruncana fornicata Plummer

Biostratigraphic determination: *Globotruncanita elevata* Zone, late Campanian to *Globotruncanita calcarata* Zone, late Campanian.

Biostratigraphic determination: Same as 313-31-1.

313-31-3, 5-7 cm

Same faunal assemblage as 313-31-1.

Biostratigraphic determination: Same as 313-31-1.

313-31-5, 22-24 cm

Same faunal assemblage as 313-31-1.

Biostratigraphic determination: Same as 313-31-1.

313-32-3, 125-127 cm

Globotruncana fornicata Plummer
Globotruncana arca (Cushman)
Globotruncanita elevata (Brotzen)
Rugoglobigerina sp.
Heterohelix sp.
Heterohelix globulosus (Ehrenberg)

Biostratigraphic determination: *Globotruncanita elevata* Zone, late Campanian.

313-33-1, 49-50 cm

Rare and poorly preserved specimens of the following species:

Globotruncanita stuartiformis (Dalbiez)
Globotruncana arca (Cushman)
Globotruncana fornicata Plummer

Biostratigraphic determination: *Globotruncanita stuartiformis* Zone, early Campanian to *Globotruncanita elevata* Zone, lower late Campanian.

313-33-2, 9-11 cm

Same faunal assemblage as 313-33-1.

Biostratigraphic determination: Same as above.

313-34-2, 11-13 cm

Only a few specimens of the following species were found:

Globotruncana arca (Cushman)
Globotruncanita stuartiformis (Dalbiez)
Rugoglobigerina sp.

- Pseudoguembelina costulata* (Cushman)
Biostratigraphic determination: *Globotruncanita stuartiformis* Zone, early Campanian to *Globotruncanita elevata* Zone, lower late Campanian.
- 313-34-4, 14-15 cm
 Same faunal assemblage as above.
Biostratigraphic determination: Same as above.
- 313-40-2, 20-22 cm
 Barren.
- 313-40-3, 10-12 cm
 Barren.
- 313-41-4, 2-4 cm
 Barren.
- 313-41-4, 2-4 cm
 Barren.
- 313-42-3, 130-132 cm
 Barren.