

DEPARTMENT OF THE INTERIOR  
UNITED STATES GEOLOGICAL SURVEY

QUANTITATIVE MICROFOSSIL (FORAMINIFERS AND POLLEN) AND  
SEDIMENTOLOGIC DATA ON CORE S3-15G  
FROM MONTEREY FAN, CENTRAL CALIFORNIA CONTINENTAL MARGIN.

by  
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This report is preliminary and has not been reviewed for conformity with Geological Survey editorial standards and stratigraphic nomenclature. Any use of trade names is for descriptive purposes only and does not imply endorsement by the USGS.

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## INTRODUCTION

Monterey Fan is one of several submarine fans in the northeast Pacific Ocean resulting from the deposition of turbidity current material at the base of one or more submarine canyons (Normark, 1970; Normark and Hess, 1980). Located off central California, this particular fan has been the focus of an ongoing project investigating depositional processes and growth patterns of these deep-sea turbiditic deposits (Normark and Hess, 1980; Normark and others, 1984; EEZ-Scan 84 Scientific Staff, 1986, 1988; Normark and Gutmacher, 1988). The object of this report, core S3-15G, is a 4.72 m gravity core recovered 18 km from the crest of the western levee of the Monterey fan valley (Figure 1; Chase and others, 1981). It was obtained at a depth of 3491 m, approximately 135 km southwest of Santa Cruz (36°23.53' N, 123°20.52' W).

At present, there is little information dating foraminiferal, palynological and sedimentologic trends of Monterey Fan (Brunner and Ledbetter, 1987, in press; Brunner and Normark, 1985; McGann, 1986, 1987; McGann and Brunner, 1987). It is the purpose of this report to present microfossil and sedimentologic data from the hemipelagic and submarine fan overbank deposits of core S3-15G. Interpretations of these data will be forthcoming in other publications.

We would like to thank William Normark of the U.S. Geological Survey for providing the core that became the focus of this investigation, and Christina Gutmacher (U.S.G.S.) for enthusiastically aiding in the core sampling and description. Particular thanks are due Michael Ledbetter of Moss Landing Marine Laboratory for providing the grain size data for core S3-15G, and to William Sliter, David Adam and Paula Quintero (all of the U.S.G.S.) for their careful reviews of this report.

## METHODS

The working half of gravity core S3-15G was sampled at approximately 20 cm intervals for microfossils. To reduce the possibility of contamination, samples were taken no closer than about 0.5 cm from the core liner.

Biostratigraphic data were obtained for benthonic foraminifers, planktonic foraminifers and pollen. In an effort to correlate the marine and terrestrial paleoclimatic records of central California, the pollen samples analyzed were a subset of the benthonic foraminiferal samples. However, because the initial intent of studying the

planktonic foraminifers of core S3-15G differed from that for the benthonic foraminifers and pollen, separate samples were analyzed for this fauna.

The benthonic foraminiferal samples were dried, weighed, and then immersed in a dilute solution of sodium hexametaphosphate and ammonium hydroxide and left overnight. Following disaggregation, the samples were sieved through nested 125  $\mu\text{m}$  and 63  $\mu\text{m}$  screens and then dried. Benthonic foraminifers were extracted exclusively from the coarser ( $>125 \mu\text{m}$ ) fraction. If this residue contained less than 300 benthonic foraminifers, all that were present were picked. Otherwise, the residue was split into an aliquot containing at least 300 benthonic foraminifers using a modified Otto microsplitter. All specimens in the splits were identified to species or genus, or listed as "unknown." Nearly 130 species of benthonic foraminifers were identified in this study. In addition, the planktonic foraminifers found in these samples were counted for abundance only.

The planktonic foraminiferal samples were also dried, weighed, soaked for one day in a solution of sodium hexametaphosphate, sieved through a 63  $\mu\text{m}$  screen, and dried. The dried fraction was then weighed to determine the percent sand. Subsequently, the  $>63 \mu\text{m}$  fraction was picked for planktonic foraminifers. If possible, a minimum of 300 specimens was obtained from the residue, or an appropriate split of the sample. Four species of planktonic foraminifers were identified: *Globigerina bulloides* d'Orbigny, *Globigerina quinqueloba* Natland, *Globigerinita glutinata* (Egger), and left- and right-coiling forms of *Neogloboquadrina pachyderma* (Ehrenberg). All other recognized planktonic foraminiferal species were placed in the category of "others" and the remaining unrecognizable forms were listed as "unidentified."

Total foraminiferal and benthonic foraminiferal numbers were determined by calculating the number of appropriate specimens (benthonic + planktonic and benthonic, respectively) in the  $>125 \mu\text{m}$  fraction/gram of dry sediment (Schott, 1935; Boltovskoy and Wright, 1976). Benthonic foraminiferal faunal diversity was determined by the Fisher alpha diversity index method (Murray, 1968; Douglas, 1979; Olsson and Nyong, 1984). This index of diversity is derived by plotting the number of species against the number of individuals in each sample. Relative benthonic foraminiferal species abundances were computed using a sum of total benthonic foraminifers. The planktonic foraminiferal species counts were similarly converted to frequency data as a percentage of the total planktonic foraminiferal fauna.

Palynomorphs were analyzed from a 1  $\text{cm}^3$  sample. Initially, samples were weighed before and after oven drying to obtain wet and dry sample weights. Subsequently, each sample was spiked with  $22,600 \pm 400$  *Lycopodium* marker grains

in order to determine the absolute pollen concentration (Stockmarr, 1971). The pollen samples were then prepared in the following manner: successive immersion in 10% hydrochloric acid (overnight), warm sodium pyrophosphate (15 minutes; Bates and others, 1978), 52% hydrofluoric acid (overnight), 10% hydrochloric acid (2 minutes), 70% nitric acid (3 minutes), and a modified acetolysis solution of nine parts glacial acetic acid to one part concentrated sulfuric acid (5 minutes). Lastly, the residues were stained with two drops of Safranin-O and mounted in silicone oil (Anderson, 1960, 1965).

At least 350 pollen grains and spores were counted and identified in each sample. Identification of some of the major pollen types, such as Taxodiaceae-Cupressaceae-Taxaceae and Chenopodiaceae-Amaranthaceae, is taxonomically difficult; reliable criteria for their differentiation to the genus or species level are presently lacking (Heusser, 1978; Adam and others, 1981). Consequently, these groups of pollen types were combined under the categories TCT and Cheno-Ams, respectively.

Thirty-five pollen and spore types were identified from core S3-15G. The relative abundances of these palynomorphs were calculated utilizing a sum of total pollen and spores. The abundances of *Pediastrum* colonies, dinoflagellates, and a distinctive fungal spore (type-A) were also noted, as were redeposited grains, detected by their poor preservational state and yellow/brown color due to lack of absorption of the Safranin-O stain (Stanley, 1966). Pollen preservation was determined qualitatively and by the ratio of broken to whole pine grains (Cushing, 1964, 1967; Adam, 1967).

The absolute pollen concentration was determined for each sample according to the following equation:

$$\text{Absolute pollen concentration} = \frac{\text{total number of grains counted} \times \frac{\text{Lycopodium spores added}}{\text{Lycopodium spores counted}}}{\text{dry weight of sample (grams)}}$$

As discussed above, the number of *Lycopodium* spores added per sample as marker grains was assumed to be 22,600.

Descriptions and illustrations of two species of *Pediastrum* (sp. A and sp. B; Table 12 and Figures 3A and 3B) are included in this report to document the presence of forms also noted by Adam (in press) from Clear Lake County, California. As of yet, these species remain unidentified.

Subsets of the planktonic foraminiferal samples were examined for particle-size distribution of the non-carbonate silt fraction (Brunner and Ledbetter, 1987). After drying, these samples were wet sieved into sand, silt and clay fractions and then dried again. The silt fraction was treated with HCl, disaggregated in an ultrasonic cleaner with distilled water, added to sodium azide, and then analyzed on an Elzone particle-size analyzer to an analytical precision of  $\pm 0.03\%$ . A complete description of the methods used is presented in Blaeser and Ledbetter (1982) and Ledbetter (1984).

## DATA

A detailed description and illustration of core S3-15G are presented in Table 1 and Figures 2A-D. Taxonomic lists of benthonic and planktonic foraminifers and pollen are presented in Tables 2, 7 and 9. All of the data are listed in tabular form in Tables 3-6, 8, 10, 11 and 13. These include: (1) raw counts and percentages of the total, pyritized, and displaced benthonic foraminiferal faunas; (2) raw counts and percentages of planktonic foraminifers; (3) raw counts and percentages of palynomorphs; and (4) grain size data for core S3-15G from 150-471 cm.

## REFERENCES

- Adam, D. P., 1967, Late-Pleistocene and recent palynology in the central Sierra Nevada, California, *in* Cushing, E. J., and Wright, H. E., Jr., eds., *Quaternary Paleoecology*: New Haven, Connecticut, Yale University Press, p. 275-301.
- \_\_\_\_\_, in press, Palynology of two upper Quaternary cores from Clear Lake County, California: U.S. Geological Survey Professional Paper 1363.
- Adam, D. P., Byrne, Roger, and Luther, Edgar, 1981, A Late Pleistocene and Holocene pollen record from Laguna de Las Trancas, Northern Coastal Santa Cruz County, California: *Madroño*, v. 28, no. 4, p. 255-272.
- Anderson, S. T., 1960, Silicon oil as a mounting medium for pollen grains: *Danmarks Geologiske Undersøgelse*, ser. 4, v. 4, no. 1, 24 p.
- \_\_\_\_\_, 1965, Mounting media and mounting techniques, *in* Kummel, Bernhard, and Raup, David, eds., *Handbook of Paleontological Techniques*: San Francisco, W. H. Freeman and Co., p. 587-598.
- Bates, C. D., Coxon, P., and Gibbard, P. L., 1978, A new method for the preparation of clay-rich sediment samples for palynological investigation: *New Phytologist*, v. 81, p. 459-463.
- Blaeser, C. R., and Ledbetter, M. T., 1982, Deep-sea bottom-currents differentiated from texture of underlying sediment: *Journal of Sedimentary Petrology*, v. 52, p. 755-768.
- Boltovskoy, Esteban, and Wright, Ramil, 1976, *Recent Foraminifera*: The Hague, Dr. W. Junk, 515 p.
- Brunner, C. A., and Ledbetter, M. T., 1987, Sedimentological and micropaleontological detection of turbidite muds in hemipelagic sequences: an example from the Late Pleistocene levee of Monterey Fan, central California continental margin: *Marine Micropaleontology*, v. 12, p. 223-239.
- \_\_\_\_\_, in press, Late Quaternary quantitative planktonic foraminiferal biostratigraphy in turbidite sequences of central California continental margin: *Micropaleontology*.
- Brunner, C. A., and Normark, W. R., 1985, Biostratigraphic implications for turbidite depositional processes on the Monterey deep-sea fan, central California: *Journal of Sedimentary Petrology*, v. 55, no. 4, p. 495-505.

- Chase, T. E., Wilde, P., Normark, W. R., Miller, C. P., Seekins, B. A., and Young, J. D., 1981, Offshore topography of the Western United States between 32° and 41° North latitudes: U.S. Geological Survey Open-File Report 81-443.
- Cushing, E. J., 1964, Redeposited pollen in Late Wisconsin pollen spectra from east-central Minnesota: *American Journal of Science*, v. 262, p. 1075-1088.
- \_\_\_\_\_, 1967, Evidence for differential pollen preservation in Late Quaternary sediments in Minnesota: *Review of Palaeobotany and Palynology*, v. 4, p. 87-101.
- Douglas, R. G., 1979, Benthic foraminiferal ecology and paleoecology: a review of concepts and methods, *in* Lipps, J. H., Berger, W. H., Buzas, M. A., Douglas, R. G., and Ross, C. A., eds., *Foraminiferal ecology and paleoecology*: Houston, Society of Economic Paleontologists and Mineralogists Short Course No. 6, p. 21-53.
- EEZ-SCAN 84 Scientific Staff, 1986, Atlas of the Exclusive Economic Zone, Western Conterminous United States: U.S. Geological Survey Miscellaneous Investigations Series I-1792, 152 p., scale 1:500,000.
- \_\_\_\_\_, 1988, Physiography of the western United States Exclusive Economic Zone: *Geology*, v. 16, p. 131-134.
- Heusser, Linda, 1978, Spores and pollen in the marine realm, *in* Haq, B. U., and Boersma, Anne, eds., *Introduction to marine micropaleontology*: New York, Elsevier, p. 327-339.
- Ledbetter, M. T., 1984, Bottom-current speed in the Vema Channel recorded by particle size of sediment fine-fraction: *Marine Geology*, v. 58, p. 137-149.
- McGann, Mary, 1986, Single- and multiple-biofacies turbidites in latest Quaternary sediments of Monterey Fan, central California continental margin [abs.]: Abstracts with Programs, 99th Annual Meeting, Geological Society of America, v. 18, no. 6, p. 688-689.
- \_\_\_\_\_, 1987, Correlation of latest Quaternary marine and terrestrial paleoclimates of central California: foraminifers and pollen [abs.]: EOS, American Geophysical Union, v. 68, no. 44, p. 1325.
- McGann, Mary, and Brunner, C. A., 1987, Asynchronicity of latest Quaternary surface- and deep-water foraminiferal assemblage variations, central California continental margin [abs.]: Abstract Volume, Fourth International Congress on Pacific Neogene Stratigraphy, p. 76.
- Murray, J. W., 1968, Living foraminifers of lagoons and estuaries: *Micropaleontology*, v. 14, p. 435-455.
- Normark, W. R., 1970, Growth patterns on deep-sea fans: *American Association of Petroleum Geologists Bulletin*, v. 54, no. 11, p. 2170-2195.



- Normark, W. R., and Gutmacher, C. E., 1988, Sur submarine slide, Monterey Fan, central California: *Sedimentology*, v. 35, p. 629-647.
- Normark, W. R., Gutmacher, C. E., Chase, T. E., and Wilde, Pat, 1984, Monterey Fan: Growth pattern control by basin morphology and changing sea levels: *Geo-Marine Letters*, v. 3, no. 2-4, p. 93-99.
- Normark, W. R., and Hess, G. R., 1980, Quaternary growth patterns of California submarine fans, *in* Field, M. E., Bouma, A. H., Colburn, I. P., Douglas, R. G., and Ingle, J. C., eds., *Proceedings of the Quaternary depositional environments of the Pacific coast*: Los Angeles, Society of Economic Paleontologists and Mineralogists, Pacific Section, Pacific Coast Paleogeography Symposium 4, p. 201-210.
- Olsson, R. K., and Nyong, E. E., 1984, A paleoslope model for Campanian-Lower Maestrichtian foraminifera of New Jersey and Delaware: *Journal of Foraminiferal Research*, V. 14, no. 1, p. 50-68.
- Parra Barrientos, O. O., 1979, Revision der Gattung *Pediastrum* Meyen (Chlorophyta): *Bibliotheca Phycologica*, v. 48, 183 p.
- Schott, W., 1935, Die Foraminiferen in den aquatorealen teil des Atlantischen Ozeans: *Deutsche Sudpolar Expedition*, v. 11, pt. 6, p. 411-616.
- Stanley, E. A., 1966, The problem of reworked pollen and spores in marine sediments: *Marine Geology*, v. 4, p. 397-408.
- Stockmarr, J., 1971, Tablets with spores used in absolute pollen analysis: *Pollen et Spores*, v. 13, p. 615-631.
- Wilson, L. R., and Hoffmeister, W. S., 1953, Four new species of fossil *Pediastrum*: *American Journal of Science*, v. 251, p. 753-760.

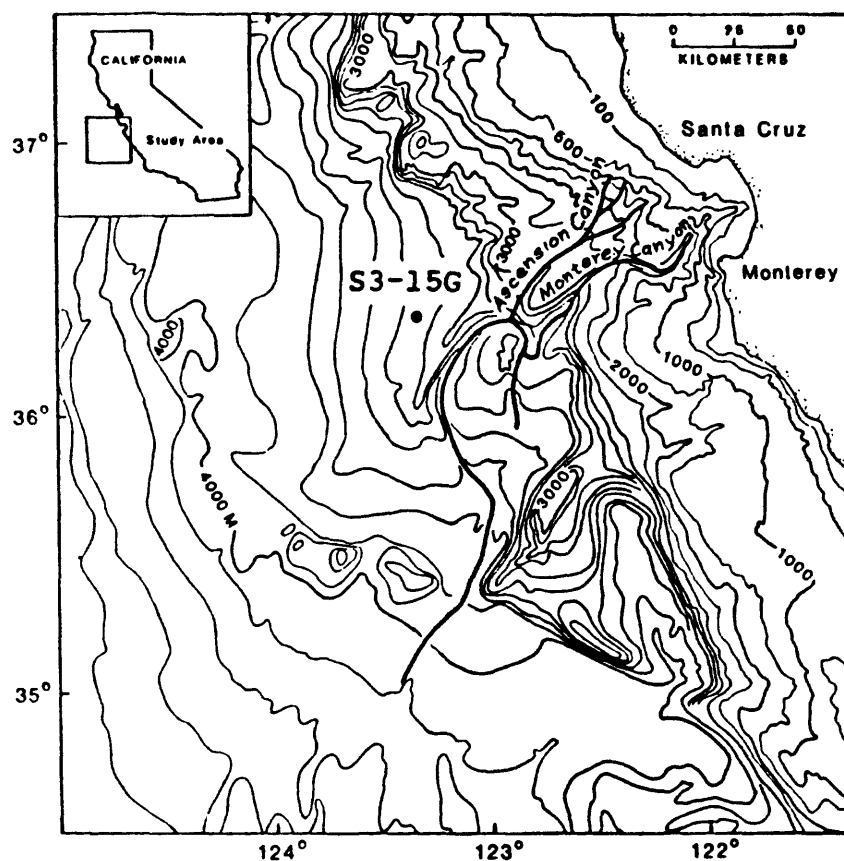


Figure 1. Location map illustrating the present bathymetry (contours in meters) of the central California continental margin off Santa Cruz and the position of the site of core S3-15G (after Chase and others, 1981).

Table 1. Detailed description of core S3-15G.

S3-15G, a 4.72 cm gravity core, contains hemipelagic and overbank sediments from both the Monterey and Ascension canyon systems. The core consists primarily of fine-grained hemipelagic ( $T_{ep}$ ) and turbiditic ( $T_{et}$ ) muds; the muds differ in color and are interbedded throughout the length of the core. The hemipelagic muds are dark olive (5Y4/3), while the turbiditic muds are a darker olive gray (5Y4/2). The presence of an open burrow (114-115.5 cm downcore) and common dark olive (5Y4/3) and olive gray (5Y4/2) mottles suggests that these muds have undergone extensive bioturbation. Abundant turbiditic sand layers, lenses, and stringers are also present. The sands are cross-bedded ( $T_c$ ) or laminated ( $T_d$ ) and most often appear dark olive gray (5Y3/2). Occasionally, however, the sand deposits are olive (5Y4/3), olive brown (2.5Y4/4) or reddish brown (5YR4/4). The sands are fine- to very fine-grained, commonly contain mud interlayers, and contact the adjacent mud deposits sharply, gradationally, or transitionally.

A detailed description and stratigraphic column (Figures 2A to 2D) of core S3-15G are presented below. It should be noted that since the contacts between sedimentologic units commonly are not perpendicular to the long axis of the core, and because the units may be discontinuous, the base of a unit may not lie at the same depth as the top of the underlying unit.

#### 0-37cm

*Hemipelagic mud.* Unconsolidated (gooey) mud from 0-20 cm; transitional contact to consolidated mud below which lies from 20-37 cm; transitional lower contact.

#### 37-46cm

*Turbiditic mud with hemipelagic mud mottles.* Transitional upper contact and gradational lower contact; mottles <1 cm across.

#### 45-48.5cm

*Sand ( $T_d$ ).* Gradational upper contact, transitional lower contact; muddy, structureless fine-grained dark olive gray (5Y3/2) sand.

#### 48-60cm

*Turbiditic mud with hemipelagic mud mottles.* Transitional upper contact and diagonal transitional lower contact from 55-60 cm.

#### 55-68.5cm

*Hemipelagic mud with turbiditic mud mottles.* Transitional upper and lower contacts; structureless except for mottles which are <0.5 cm across.

#### 68-71cm

*Turbiditic mud.* Transitional upper and lower contacts.

#### 71-83.5cm

*Hemipelagic mud with few turbiditic mud mottles.* Transitional upper and lower contacts.

#### 83-95.5cm

*Turbiditic mud with hemipelagic mud mottles.* Transitional upper and lower contacts.

#### 95-96.5cm

*Hemipelagic mud.* Transitional upper and lower contacts.

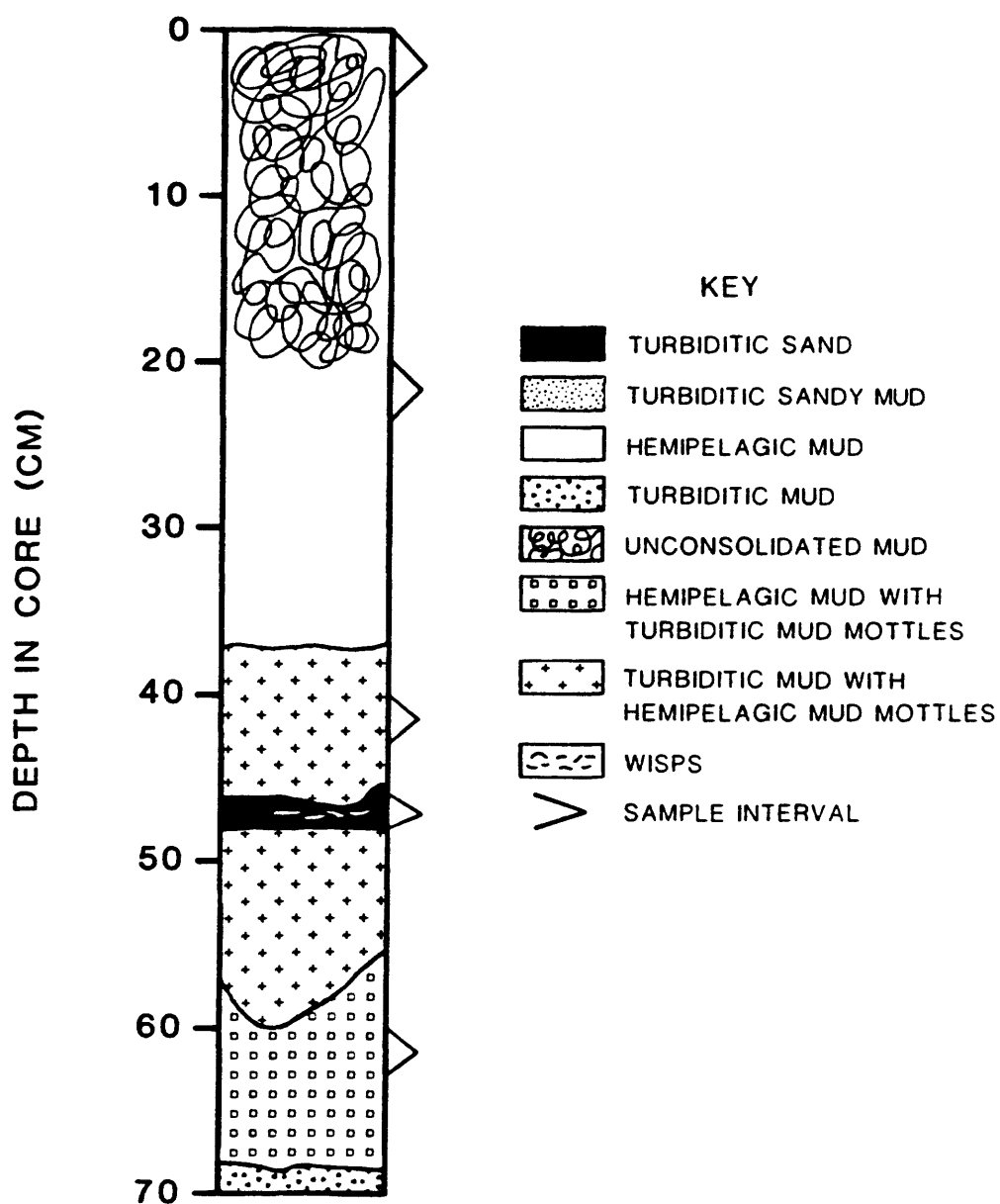


Figure 2A. Lithology of core S3-15G from 0-70 cm.

96-100.5cm

*Turbiditic mud with hemipelagic mud mottles.* Transitional upper and lower contacts.

100-104cm

*Hemipelagic mud.* Transitional upper and lower contacts; dark wisps present.

102-107.5cm

*Turbiditic mud.* Transitional upper contact, distinct color change at lower contact.

107.5-129cm

*Hemipelagic mud.* Distinct upper contact and transitional lower contact; open burrow at 114-115.5 cm, approximately 1 x 1.5 cm; dark wisps present from 122-127 cm; few turbiditic mud mottles from 107.5-110 cm.

129-134.5cm

*Turbiditic mud with hemipelagic mud mottles.* Transitional upper and lower contacts.

133-136.5cm

*Sand (T<sub>d</sub>) with turbiditic mud interlayers.* Transitional upper and sharp lower contact; ungraded fine-grained dark olive gray (5Y3/2) sand with thin mud interlayers.

135-138cm

*Hemipelagic mud.* Sharp upper contact and transitional lower contact.

135-142.5cm

*Turbiditic mud with hemipelagic mud mottles.* Transitional upper and lower contacts.

142-158.5cm

*Hemipelagic mud with sand (T<sub>d</sub>) stringer.* Transitional upper and distinct lower contact; dark wisps from 147-150 cm; fine-grained dark olive gray (5Y3/2) sand stringer from 152-154.5 cm.

156-161.5cm

*Turbiditic mud with hemipelagic mud mottles.* Distinct upper contact and transitional lower contact; lens of fine-grained dark olive gray (5Y3/2) sand on left half of core.

160.5-166.5cm

*Hemipelagic mud.* Transitional upper and lower contacts.

165.5-172cm

*Turbiditic mud with hemipelagic mud mottles.* Transitional upper and lower contacts; mottles <0.5 cm across.

171-174cm

*Sand (T<sub>d</sub>) with mud interlayers.* Transitional upper contact and sharp lower contact; fine-grained dark olive gray (5Y3/2) sand layer with faint mud interlayers.

172.5-179.5cm

*Hemipelagic mud.* Sharp upper contact, transitional lower contact.

179-180.5cm

*Turbiditic mud.* Transitional upper and lower contacts.

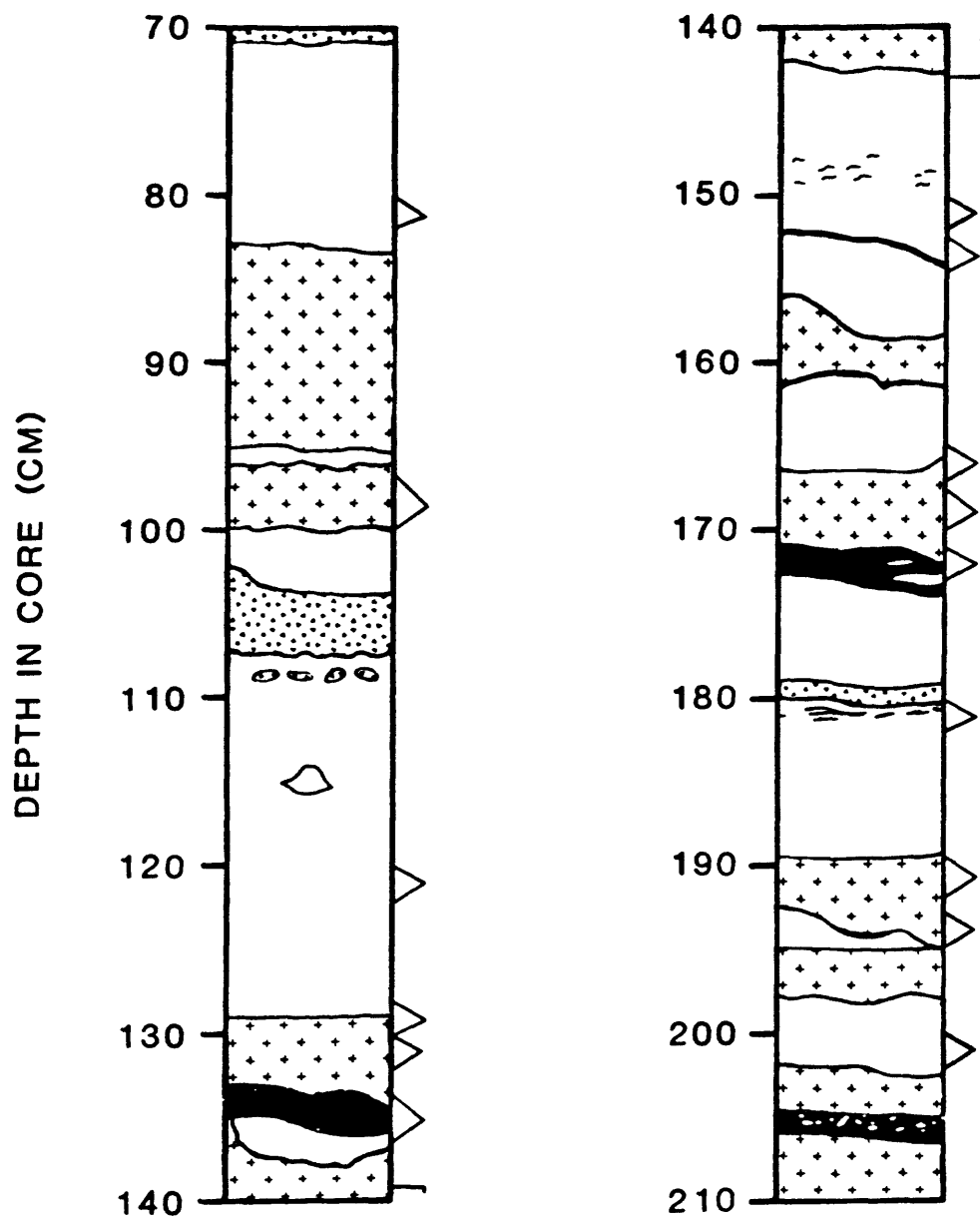


Figure 2B. Lithology of core S3-15G from 70-210 cm.

- 180-182cm  
*Sand (T<sub>d</sub>)*. Transitional upper and lower contacts; fine-grained dark olive gray (5Y3/2) sand wisps and sand stringers.
- 180-189.5cm  
*Hemipelagic mud*. Transitional upper and lower contacts.
- 189.5-195cm  
*Turbiditic mud with hemipelagic mud mottles*. Transitional upper and lower contacts.
- 192.5-195cm  
*Sand (T<sub>d</sub>)*. Transitional upper and lower contacts; fine-grained dark olive gray (5Y3/2) sand stringer.
- 192.5-195cm  
*Hemipelagic mud*. Transitional upper and lower contacts.
- 195-198.5cm  
*Turbiditic mud with hemipelagic mud mottles*. Transitional upper and lower contacts.
- 197.5-202.5cm  
*Hemipelagic mud*. Transitional upper and lower contacts.
- 202-205cm  
*Turbiditic mud with hemipelagic mud mottles*. Transitional upper contact, sharp lower contact; mottles 1 cm across.
- 204.5-206.5cm  
*Sand (T<sub>d</sub>)*. Sharp upper and lower contacts; fine-grained, ungraded dark olive gray (5Y3/2) sand layer with small mud blebs.
- 206-216cm  
*Turbiditic mud with hemipelagic mud mottles*. Sharp upper contact, transitional lower contact; small fine-grained dark olive gray (5Y3/2) sand bleb with transitional contacts from 210.5-211 cm; few small hemipelagic mud mottles from 215-216 cm.
- 215-229.5cm  
*Turbiditic mud*. Transitional upper and lower contacts; few dark wisps from 221-225 cm.
- 227.5-231cm  
*Sand (T<sub>d</sub>)*. Transitional upper contact and sharp lower contact; two fine-grained dark olive gray (5Y3/2) sand layers with a turbiditic mud interbed.
- 229-240.5cm  
*Turbiditic mud*. Sharp upper contact, transitional lower contact; sandy mud layer at 237 cm with transitional contacts; small dark olive gray (5Y3/2) sand patch from 230-231 cm.
- 240-245.5cm  
*Hemipelagic mud*. Transitional upper and lower contacts; very fine-grained diagonal sandy mud layer from 239.5-241.5 cm, transitional upper and lower contacts.

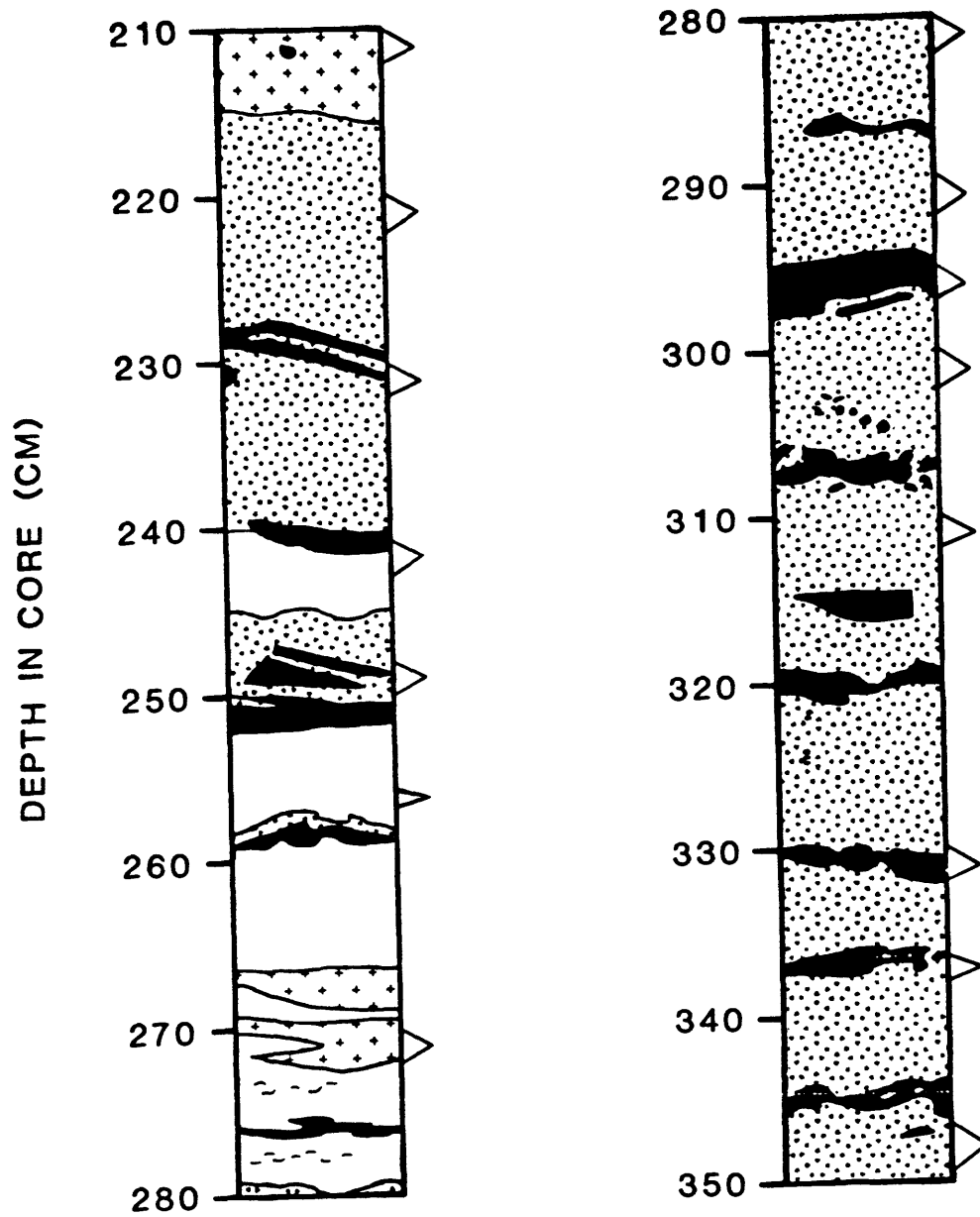


Figure 2C. Lithology of core S3-15G from 210-350 cm.



245-250.5cm

*Turbiditic mud.* Transitional upper and lower contacts.

243-255cm

*Sands ( $T_c$  and  $T_d$ ) with few mud interlayers.* Transitional upper and lower contacts; medium fine-grained dark olive gray (5Y3/2) sand layers: diagonal interval of cross-bedded ( $T_c$ ) sands from 247-249 cm with transitional upper and sharp lower contacts; triangular sand ( $T_d$ ) deposit from 247.5-249.5 cm; sands ( $T_d$ ) from 250-254 cm; four mud stringers between sands ( $T_d$ ) from 252-254 cm.

253-258.5cm

*Hemipelagic mud.* Transitional upper and lower contacts.

257-259cm

*Turbiditic mud.* Transitional upper and lower contacts.

257.5-259.5cm

*Sand ( $T_d$ ).* Transitional upper contact and sharp, but irregular, lower contact; very fine-grained dark olive gray (5Y3/2) sand layer.

258.5-266.5cm

*Hemipelagic mud.* Sharp, irregular upper contact and transitional lower contact.

266.5-269cm

*Turbiditic mud with hemipelagic mud mottles.* Transitional upper and lower contacts.

267.5-269.5cm

*Hemipelagic mud.* Transitional upper and lower contacts.

269.5-272.5cm

*Turbiditic mud with hemipelagic mud mottles.* Transitional upper and lower contacts; dark wisps present.

270.5-276cm

*Hemipelagic mud.* Transitional upper and lower contact; dark wisps present, especially from 272-275 cm.

275.5-276.5cm

*Sand ( $T_d$ ).* Transitional upper contact and irregular, sharp lower contact; very fine-grained dark olive gray (5Y3/2) sand layer.

276-280cm

*Hemipelagic mud.* Sharp upper contact, transitional lower contact; dark wisps present.

279.5-295cm

*Turbiditic mud.* Transitional upper contact and irregular, sharp lower contact; dark wisps present from 282-284 cm; discontinuous sand laminae from 286-287 cm, dark olive gray (5Y3/2) with a touch of olive brown (2.5Y4/4), exhibiting transitional upper and lower contacts.

294-298cm

*Sand ( $T_c$ )*. Irregular, sharp upper contact and sharp lower contact; fine-grained dark olive gray (5Y3/2) sand layer with a few deformed mud interlayers between 294 and 295 cm.

296.5-300cm

*Turbiditic mud*. Sharp upper contact and transitional lower contact.

300cm

*Sand ( $T_d$ )*. Transitional upper contact and core catcher for lower contact; dark olive gray (5Y3/2) sand stringer.

300-307cm

*Turbiditic mud*. Upper contact disturbed due to coring, transitional lower contact; dark wisps and four dark olive gray (5Y3/2) sand patches present from 302.5-305 cm.

305.5-308.5cm

*Sand ( $T_d$ )*. Transitional upper and lower contacts; dark olive gray (5Y3/2) sand patches surrounding a dark olive gray (5Y3/2) graded sand lens which fines upward.

307-320.5cm

*Turbiditic mud*. Transitional upper contact and distinct lower contact; dark wisps present from 310.5-313 cm and 317-319 cm; discontinuous dark olive gray (5Y3/2) sandy mud layer from 314.5-316.5 cm with transitional upper and lower contacts.

319-321.5cm

*Sand ( $T_d$ )*. Distinct upper contact and sharp lower contact; muddy dark olive gray (5Y3/2) sand layer grading upward from fine-grained to very fine-grained.

320-330.5cm

*Turbiditic mud*. Sharp upper contact and transitional lower contact; few dark wisps and small sand patches present.

329.5-332cm

*Sandy mud*. Transitional upper contact and distinct lower contact; very fine-grained dark olive gray (5Y3/2) sandy mud layer.

330.5-337cm

*Turbiditic mud*. Distinct upper contact, transitional lower contact.

336-337.5cm

*Sand ( $T_d$ )*. Transitional upper contact and sharp lower contact; sand layer which grades upward from fine-grained to very fine-grained; upper sand is olive brown (2.5Y4/4), lower sand is dark olive gray (5Y3/2).

337-345cm

*Turbiditic mud*. Sharp upper contact, transitional lower contact.

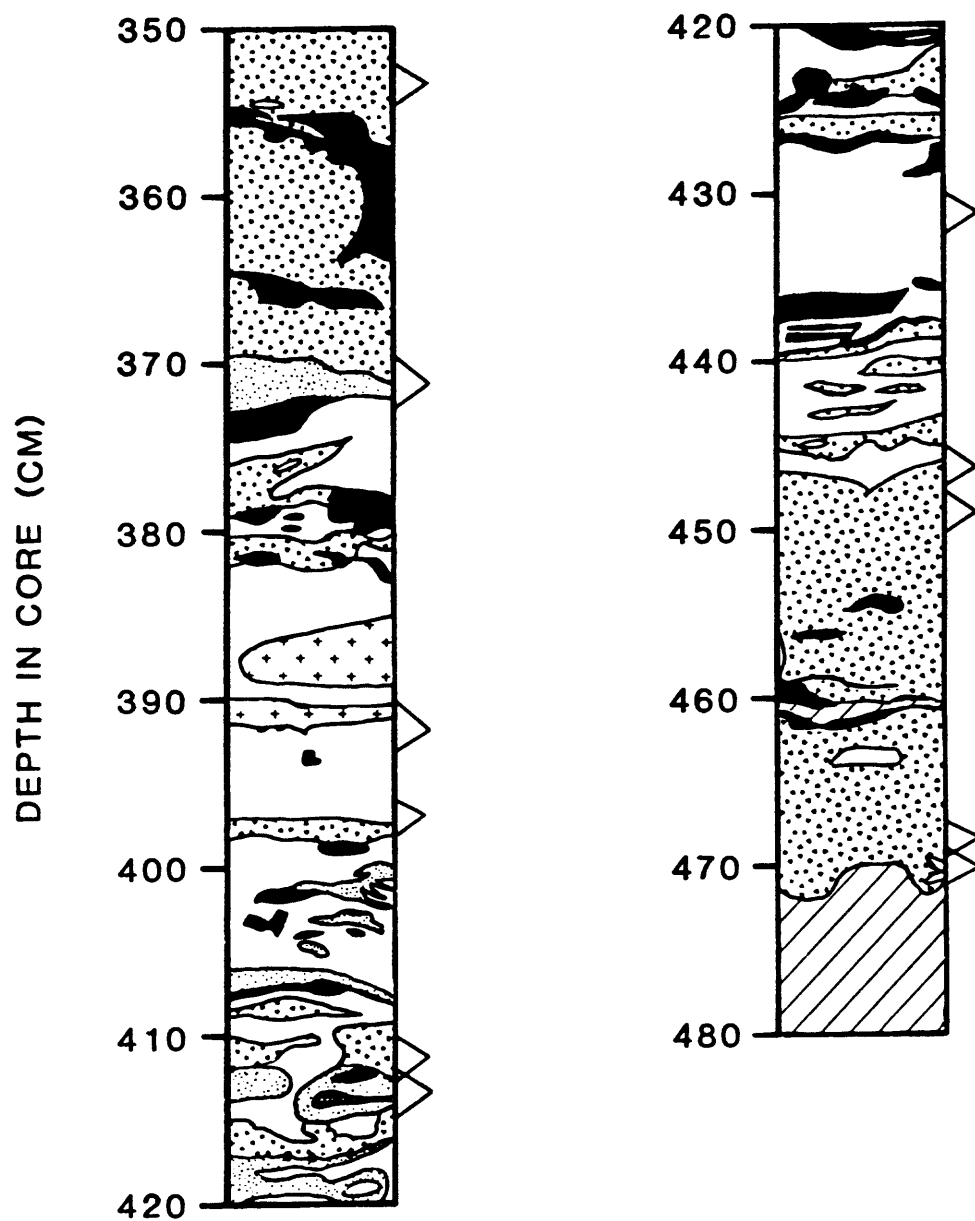


Figure 2D. Lithology of core S3-15G from 350-472 cm.

344-346cm

*Sand (T<sub>d</sub>)*. Transitional upper contact and sharp lower contact; very fine-grained dark olive gray (5Y3/2) sand stringer from 344-345 cm; sandy mud present between 344 and 346 cm with mud interlayers; fine-grained olive brown (2.5Y4/4) sand lens from 345-346 cm.

345-357cm

*Turbiditic mud*. Sharp upper contact and sharp to transitional lower contact; fine-grained dark olive gray (5Y3/2) sand lens, 0.2 x 1.0 cm with transitional contacts at 347 cm; hemipelagic mud bleb at 354.5 cm.

354.5-363.5cm

*Sand (T<sub>d</sub>)*. Upper and lower contacts are irregular and sharp to transitional; deformed fine-grained olive (5Y4/3) sand layer with mud interlayers, some grading seen with fine-grained sands inside to very fine-grained sands outside.

355.5-366cm

*Turbiditic mud*. Sharp to transitional upper contact and transitional lower contact.

364.5-366.5cm

*Sand (T<sub>d</sub>)*. Transitional upper and sharp lower contact; discontinuous sand layer, grading from fine-grained to very fine-grained, lower dark olive gray (5Y3/2) sand grades up into the upper olive brown (2.5Y4/4) sand.

366-371cm

*Turbiditic mud*. Sharp upper contact and transitional lower contact.

369.5-373cm

*Sandy mud*. Transitional upper and lower contacts.

372-374.5cm

*Sand (T<sub>d</sub>)*. Transitional upper and sharp lower contact; fine-grained diagonal sand lens terminating in layered muds, olive brown (2.5Y4/4) with dark olive gray (5Y3/2) around edges.

372-378cm

*Hemipelagic mud*. Sharp to transitional upper contact; transitional lower contact; irregular hemipelagic mud interval.

374.5-378.5cm

*Turbiditic mud*. Transitional upper and lower contacts; irregular turbiditic mud interval; hemipelagic mud bleb from 375.5-376.5 cm.

377.5-380cm

*Sand (T<sub>d</sub>)*. Transitional upper contact and sharp lower contact; discontinuous sand layer, grading upward from fine to very fine-grained sand, left side sand is olive (5Y4/3), right side sand is olive brown (2.5Y4/4) with dark olive gray (5Y3/2) around edges.

378-380.5cm

*Hemipelagic mud*. Transitional to sharp upper contact, transitional lower contact; two sand blebs from 379-380 cm.

380-382cm

*Turbiditic mud.* Transitional upper and lower contacts; two very fine-grained reddish brown (5YR4/4) sand lenses from 381-383 cm, distinct upper and lower contacts.

380.5-390.5cm

*Hemipelagic mud.* Transitional upper and lower contacts; a faint (questionable) discontinuous interval of turbiditic mud with hemipelagic mud mottles appears from 385-389 cm.

390-392cm

*Turbiditic mud with hemipelagic mud mottles.* Transitional upper and lower contacts; few tiny dark olive gray (5Y3/2) sand blebs appear at the left side of the lower contact.

391.5-397.5cm

*Hemipelagic mud.* Transitional upper and lower contacts; hard unidentifiable lump, part of which is reddish brown (5YR4/4), is present from 393-394 cm.

397-398.5cm

*Turbiditic mud.* Transitional upper and lower contacts.

398-408cm

*Hemipelagic mud.* Transitional upper and lower contact; fine-grained olive (5Y4/3) sand patch with transitional contacts from 398.5-399 cm; several sandy mud intervals between 399.5 and 405.5 cm; two fine-grained reddish brown sand lenses with transitional contacts are located at 401-402 cm and 402.5-404 cm; olive (5Y4/3) sand patch present at 402.5 cm.

406-408cm

*Sandy mud.* Transitional upper and lower contacts.

406.5-408cm

*Sand ( $T_d$ ).* Transitional upper contact and distinct lower contact; olive (5Y4/3) sand laminae grading upward from fine-grained to very fine-grained.

407.5-417cm

*Hemipelagic and turbiditic muds combined.* Distinct upper contact and transitional lower contact; hemipelagic mud from 407.5-416.5 cm; turbiditic mud lenses from 407.5-409 cm, 409.5-413 cm, 415-417 cm, all contacts transitional; sandy mud patch from 412-413.5 cm on left side of core; two fine-grained olive (5Y4/3) sand lenses from 412-414 cm on right side of core, surrounded by sandy mud from 412-415 cm.

416-420cm

*Sandy mud.* Transitional upper and lower contacts; four fine-grained olive (5Y4/3) sand blebs from 416.5-417.5 cm; hemipelagic mud bleb from 418.5-419.5 cm.

416-424.5cm

*Hemipelagic mud.* Transitional upper and lower contacts; fine-grained olive brown (2.5Y4/4) sand lens from 420-421.5 cm with transitional contacts and a mud interlayer.

421.5-424.5cm

*Turbiditic mud.* Transitional upper and lower contacts; discontinuous turbiditic mud layer.

422.5-425cm

*Sand (T<sub>d</sub>).* Transitional upper contact and sharp lower contact; discontinuous fine-grained dark olive gray (5Y3/2) sand lens grading to mostly olive brown (2.5Y4/4).

424.5-425.5cm

*Hemipelagic mud.* Transitional upper and lower contacts.

425.5-427cm

*Turbiditic mud.* Transitional upper and lower contacts.

426.5-427.5cm

*Sand (T<sub>d</sub>).* Transitional upper contact and sharp lower contact; fine-grained dark olive gray (5Y3/2) sand laminae.

427-439.5cm

*Hemipelagic mud.* Sharp upper contact and transitional lower contact; fine-grained sand patch from 427-429 cm, grading from olive brown (2.5Y4/4) at the bottom to dark olive gray (5Y3/2) at the top with transitional contacts; fine-grained olive brown (2.5Y4/4) sand bleb with transitional contacts at 435.5-436 cm; fine-grained olive brown (2.5Y4/4) sand lens with sharp upper, side and lower contacts from 435.5-437.5 cm; turbiditic mud interlayers from 438-439 cm.

437.5-439.5cm

*Turbiditic mud.* Transitional upper and lower contacts; turbiditic mud stringer with single fine-grained dark olive gray sand bleb at 439.5 cm.

437.5-444.5cm

*Hemipelagic and turbiditic muds combined.* Transitional upper and lower contacts; inter-fingering of discontinuous hemipelagic and turbiditic mud layers; few dark wisps present.

443.5-446cm

*Turbiditic mud.* Transitional upper and lower contacts; hemipelagic mud bleb at 435 cm.

444.5-447.5cm

*Hemipelagic mud.* Transitional upper and lower contacts.

446-460.5cm

*Turbiditic mud.* Transitional upper and lower contacts; few dark wisps near 451 and 456 cm; fine-grained dark olive gray sand blebs from 454-455 and 456-456.5 cm.

459-462cm

*Sand (T<sub>d</sub>).* Transitional upper and lower contacts; crack and separation of the core partly along a fine-grained olive brown (2.5Y4/4) sand layer; crack continues along the left side of the core from 456-460.5 cm and across the core from 458.5-459.5

cm and 460.5-461.5 cm; fine-grained dark olive gray sand (5Y3/2) surrounds the olive brown from 459-462 cm.

460.5-472cm

*Turbiditic mud.* Transitional upper contact, lower contact is the bottom of the core; possible hemipelagic mud bleb from 463-464 cm; dark wisps present from 466-468 cm; crack along the right side of the core from 469.5-471 cm.

Table 2. Taxonomic list of benthonic foraminifers in core S3-15G.

*Anomalina globulosa* Chapman and Parr  
*Astacolus* sp.  
*Astrononion gallowayi* Loeblich and Tappan  
*Bathysiphon* sp.  
*Bolivina advena striatella* Cushman  
*B. argentea* Cushman  
*B. interjuncta bicostata* Cushman  
*B. pacifica* Cushman and McCulloch  
*B. seminuda* Cushman  
*B. tongi filicostata* Cushman and McCulloch  
*Buccella frigida* (Cushman)  
*B. tenerrima* (Bandy)  
*Bulimina denudata* Cushman and Parker  
*B. pagoda* Cushman  
*B. rostrata* Brady  
*B. striata mexicana* Cushman  
*Buliminella curta* Cushman  
*B. elegantissima* (d'Orbigny)  
*B. tenuata* Cushman  
*Cassidulina cushmani* Stewart and Stewart  
*C. minuta* Cushman  
*C. translucens* Cushman and Hughes  
*C. tumida* Natland  
*C. spp.*  
*Cassidulinoides bradyi* (Norman)  
*Chilostomella oolina* Schwager  
*C. ovoidea* Reuss  
*C. spp.*  
*Chilostomellina fimbriata* Cushman  
*Cibicides lobatulus* (Walker and Jacob)  
*C. mckannai* Galloway and Wissler  
*C. spp.*  
*Cibicidoides kullenbergi* (Parker)  
*Cyclammina* sp.  
*Dentalina californica* Cushman and Gray  
*D. frobisherensis* Loeblich and Tappan  
*D. mucronata* Neugeboren  
*D. pauperata* d'Orbigny  
*D. spp.*  
*Dyocibicides biserialis* Cushman and Valentine  
*D. sp.*  
*Eggerella bradyi* (Cushman)  
*E. spp.*  
*Elphidium excavatum clavata* Cushman  
*E. excavatum lidoensis* Cushman  
*E. excavatum selseyensis* (Heron-Allen and Earland)  
*E. gunteri* Cole  
*E. magellanicum* Heron-Allen and Earland  
*E. spp.*



Table 2. Taxonomic list of benthonic foraminifers in core S3-15G (continued).

*Epistominella bradyana* (Cushman)  
*E. evax* Bandy  
*E. exigua* (Brady)  
*E. pacifica* (Cushman)  
*E. smithi* (Stewart and Stewart)  
*Fissurina lagenoides* (Williamson)  
*F. lucida* (Williamson)  
*F. marginata* (Montagu)  
*F. spp.*  
*Florilus labradoricus* (Dawson)  
*Frondicularia* sp.  
*Fursenkoina cornuta* (Cushman)  
*F. rotundata* (Parr)  
*F. seminuda* (Natland)  
*F. sp.*  
*Globobulimina affinis* (d'Orbigny)  
*G. barbata* (Cushman)  
*G. cf. G. marginospinata* (Cushman and Parker)  
*G. ovula* (d'Orbigny)  
*G. pacifica* Cushman  
*G. spinifera* (Cushman)  
*G. spp.*  
*Globocassidulina subglobosa* (Brady)  
*Gyroidina altiformis* Stewart and Stewart  
*G. gemma* Bandy  
*G. cf. G. planulata* Cushman and Renz  
*G. quinqueloba* Uchio  
*G. tumidulus* (Brady)  
*G. turgida* (Phleger and Parker)  
*G. spp.*  
*Hoeglundina elegans* (d'Orbigny)  
*Jaculella acuta* Brady  
*Karrerella baccata* (Schwager)  
*K. grammostomata* (Galloway and Wissler)  
*K. novangliae* (Cushman)  
*Lagena acuticosta* Reuss  
*L. alcocki* White  
*L. distoma* Parker and Jones  
*L. elongata* (Ehrenberg)  
*L. hispidula* Cushman  
*L. striata* (d'Orbigny)  
*L. sulcata* (Walker and Jacob)  
*L. sulcata laevicostata* Cushman and Gray  
*L. sulcata spicata* Cushman and McCulloch  
*L. spp.*  
*Lenticulina* spp.  
*Loxostomum pseudobeyrichi* (Cushman)  
*Marginulina obesa* Cushman  
*M. spp.*

Table 2. Taxonomic list of benthonic foraminifers in core S3-15G (continued).

*Martinottiella communis* (d'Orbigny)  
*Melonis barleeanus* (Williamson)  
*M. pompilioides* (Fichtel and Moll)  
*Miliolinella californica* Rhumbler  
*Nodosaria* cf. *N. tympanipectiformis* Schwager  
*Nonionella basispinata* (Cushman and Moyer)  
*N. decora* Cushman and McCulloch  
*N. japonica mexicana* Cushman and McCulloch  
*N. miocenica* Cushman  
*N. stella* Cushman and Moyer  
*N. sp.*  
*Oolina catenulata* (Williamson)  
*O. melo* d'Orbigny  
*O. spp.*  
*O. (?) sp.*  
*Oridorsalis umbonatus* (Reuss)  
*Paratissurina fusuliformis* Loeblich and Tappan  
*P. kerguelensis* (Parr)  
*P. cf. P. kerguelensis* (Parr)  
*P. tectulostoma* Loeblich and Tappan  
*P. spp.*  
*Planulina ornata* (d'Orbigny)  
*P. wuellerstorfi* (Schwager)  
*Pullenia bulloides* (d'Orbigny)  
*P. quinqueloba* (Reuss)  
*P. salisburyi* Stewart and Stewart  
*P. sp. A*  
*P. sp. B*  
*P. sp. C*  
*Pyrgo depressa* (d'Orbigny)  
*P. murrhina* (Schwager)  
*Quinqueloculina akneriana* d'Orbigny  
*Q. elongata* Natland  
*Q. spp.*  
*Recurvoides spp.*  
*Reophax communis* Lacroix  
*R. dentaliniformis* Brady  
*R. distans gracilis* Earland  
*R. (?) sp.*  
*Robertina bradyi* Cushman and Parker  
*Rosalina columbiensis* (Cushman)  
*Saccamina spherica* M. Sars  
*Saracenaria sp.*  
*Sigmoilina* cf. *S. tenuis* (Czjzek)  
*S. sp.*  
*Siphotextularia catenata* (Cushman)  
*Stainforthia complanata* (Egger)  
*S. nodosa* (Stewart and Stewart)  
*Stilostomella* cf. *S. lepidula* (Schwager)

Table 2. Taxonomic list of benthonic foraminifers in core S3-15G (continued).

*Stilostomella* sp.  
*Suggrunda eckisi* Natland  
*Trifarina angulosa* (Williamson)  
*T. hughesi* (Galloway and Wissler)  
*T. (?)* sp.  
*Triloculina tricarinata* d'Orbigny  
*T. trigonula* (Lamarck)  
*Trochammina globigeriniformis* (Parker and Jones)  
*T. pacifica simplissima* Cushman and McCulloch  
*Uvigerina hispida* Schwager  
*U. juncea* Cushman and Todd  
*U. peregrina* Cushman  
*U. peregrina dirupta* Todd  
*U. proboscidea* Schwager  
*U. senticosa* Cushman  
*Valvulineria araucana* (d'Orbigny)  
*V. laevigata* Phleger and Parker  
Unknowns

Table 3. Sediment weight of picked samples, sample splits, foraminiferal numbers, relative frequency of displaced and pyritized benthonic foraminifers (determined for samples containing >200 benthonic foraminifers), and Fisher alpha diversity index values (determined for samples containing >100 benthonic foraminifers) in core S3-15G.

Depth in Core (cm)	Picked Sediment Weight (gm)	Sample Split	Total Foram Specimens Counted	Foram Number (Tests/gm)	Benthonic Foram Specimens Counted	Benthonic Foram Number (Tests/gm)	Displaced Benthonic Forams (%)	Pyritized Benthonic Forams (%)	Fisher Alpha Diversity Index
0-4	3.1945	1.000	10	3.1	8	2.5	-	-	-
20-23.5	29.3251	1.000	279	9.5	253	8.6	2.8	0.4	10.5
40-43	30.1471	1.000	136	4.5	106	3.5	-	-	5.5
46-48	5.2785	0.375	426	80.4	368	69.4	81.0	45.1	9.5
60-63	29.4889	1.000	114	3.9	106	3.6	-	-	6.5
80-82	9.2713	1.000	439	47.2	303	32.6	0.7	20.1	6.5
96.5-100	34.7760	1.000	783	22.5	334	9.6	3.6	9.9	7.5
120-122	12.0289	1.000	2151	179.3	329	27.4	5.2	15.2	12.5
128-130	12.7101	1.000	952	75.0	225	17.7	8.4	13.3	12.5
130-132	20.4060	1.000	597	29.3	69	3.4	-	-	-
133.5-136.5	7.6449	0.375	1139	147.9	378	49.1	69.1	62.4	-24.0
139-143	49.2141	1.000	1984	40.3	409	8.3	10.0	11.5	14.5
152.5-154.5	14.4696	1.000	1932	133.2	325	22.4	4.3	20.9	9.5
167.5-170	34.2260	1.000	4896	143.2	606	17.7	7.3	12.1	11.0
171-173	6.2173	0.500	966	155.8	352	56.8	78.4	32.7	-24.0
180-182	16.4008	1.000	3447	210.2	1250	76.2	52.6	35.9	16.5
189.5-192	34.8133	1.000	1171	33.6	224	6.4	12.1	18.3	8.0
210-212	19.5574	1.000	736	37.6	308	15.7	18.8	9.7	11.0
230-232	18.4889	1.000	1364	73.7	785	42.4	63.6	45.6	19.5
248-250	0.7115	0.031	873	1247.1	403	575.7	90.3	45.4	13.0
270-272	18.7843	1.000	702	37.3	392	20.9	16.6	16.6	15.0
289.5-292	41.5427	1.000	528	12.7	457	11.0	14.9	16.6	10.5
310-312	23.7918	1.000	813	34.2	337	14.2	25.2	11.9	6.0
330-332	23.9116	1.000	2257	94.4	332	13.9	26.8	18.4	10.5
336.5-338	9.4572	0.625	966	102.8	375	39.9	85.1	60.8	15.0
346.5-349.5	40.5919	1.000	3130	77.1	544	13.4	19.3	14.9	10.0
369.5-372.5	42.0916	1.000	2707	64.3	343	8.1	26.2	14.3	12.5
390-393	30.4108	1.000	2745	90.3	377	12.4	17.8	17.2	11.5
410-412.5	33.7666	1.000	6253	185.0	490	14.5	38.2	10.6	11.5
412-414.5	3.4822	0.250	2057	587.7	746	213.1	78.8	22.8	18.5
430-432.5	39.0526	1.000	3091	79.1	337	8.6	42.7	8.6	7.5
445-447.5	37.0935	1.000	4168	112.3	387	10.4	10.9	4.4	7.5
467.5-469.5	16.1991	1.000	421	26.0	83	5.1	-	-	-

Table 4. Quantitative distribution (raw count/percentage) of benthonic foraminiferal species in core S3-15G. Abundances recorded as absolute numbers counted and as a percentage of the total benthonic foraminiferal fauna. Fragments of elongate, arenaceous benthonic foraminifers (*Bathysiphon* and some species of *Reophax*) were excluded from the total faunal count (P = presence of these taxa). Percentages were not calculated for these species or for all species in samples containing less than 200 specimens.

Species	Depth in Core (cm)						
	0- 4	20- 23.5	40- 43	46- 48	60- 63	80- 83	96.5- 100
=====							
<i>Anomalina globulosa</i>	-	-	-	-	-	-	-
<i>Astacolus</i> sp.	-	-	-	-	-	-	-
<i>Astrononion gallowayi</i>	-	-	-	-	-	-	-
<i>Bathysiphon</i> sp.	-	P	-	-	-	-	-
<i>Bolivina advena striatella</i>	-	-	-	-	-	-	-
-----							
<i>B. argentea</i>	-	-	-	10/2.7	-	-	-
<i>B. interjuncta bicostata</i>	-	-	-	-	-	-	-
<i>B. pacifica</i>	-	-	-	-	-	-	-
<i>B. seminuda</i>	-	-	-	-	-	-	-
<i>B. longi filicostata</i>	-	-	-	-	-	-	-
-----							
<i>Buccella frigida</i>	-	-	-	-	-	-	-
<i>B. tenerrima</i>	-	-	-	-	-	-	-
<i>Bulimina denudata</i>	-	-	-	-	-	-	-
<i>B. pagoda</i>	-	-	-	-	-	-	-
<i>B. rostrata</i>	-	-	-	2/0.5	-	1/0.3	-
-----							
<i>B. striata mexicana</i>	-	-	-	10/2.7	-	-	-
<i>Buliminella curta</i>	-	-	-	-	-	-	-
<i>B. elegantissima</i>	-	-	-	-	-	-	-
<i>B. tenuata</i>	1/-	1/0.4	1/-	154/41.9	5/-	-	2/0.6
<i>Cassidulina cushmani</i>	-	-	-	1/0.3	-	-	-
-----							
<i>C. minuta</i>	-	2/0.8	-	3/0.8	-	-	6/1.8
<i>C. translucens</i>	-	-	-	-	-	-	-
<i>C. tumida</i>	-	-	-	-	-	-	-
<i>C. spp.</i>	-	-	-	1/0.3	-	-	-
<i>Cassidulinoides bradyi</i>	-	1/0.4	-	8/2.2	-	-	-
-----							
<i>Chilostomella oolina</i>	-	-	1/-	5/1.4	-	-	-
<i>C. ovoidea</i>	-	-	-	-	-	-	-
<i>C. spp.</i>	-	-	-	2/0.5	-	-	-
<i>Chilostomellina fimbriata</i>	-	-	-	-	-	-	-
<i>Cibicides lobatulus</i>	-	2/0.8	-	-	-	-	9/2.7
-----							
<i>C. mckennai</i>	-	-	-	-	-	1/0.3	-
<i>C. spp.</i>	-	-	2/-	1/0.3	1/-	-	1/0.3
<i>Cibicidoides kullenbergi</i>	-	-	-	-	-	-	1/0.3
<i>Cyclammina</i> sp.	-	-	-	-	-	-	-
<i>Dentalina californica</i>	-	-	-	-	-	-	-
-----							
<i>D. frobisherensis</i>	-	-	-	-	-	-	-
<i>D. mucronata</i>	-	-	-	-	-	-	-
<i>D. pauperata</i>	-	-	-	-	-	-	1/0.3
<i>D. spp.</i>	-	-	-	-	-	1/0.3	-
<i>Dyocibicides biserialis</i>	-	-	-	-	-	-	-
-----							
<i>D. sp.</i>	-	-	-	-	-	-	-
<i>Eggerella bradyi</i>	2/-	1/0.4	-	-	1/-	5/1.7	2/0.6
<i>E. spp.</i>	-	-	-	-	-	-	-
<i>Elphidium excavatum clavata</i>	-	-	-	1/0.3	-	-	-
<i>E. excavatum lidoensis</i>	-	-	-	-	-	-	-
-----							
<i>E. excavatum selseyensis</i>	-	-	-	-	-	-	-
<i>E. gunteri</i>	-	-	-	-	-	-	-
<i>E. magellanicum</i>	-	-	-	-	-	-	-
<i>E. spp.</i>	-	-	-	-	-	-	-
<i>Epistominella bradyana</i>	-	-	-	-	-	-	-
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Table 4. Quantitative distribution (raw count/percentage) of benthonic foraminiferal species in core S3-15G (continued).

Species	Depth in Core (cm)						
	0- 4	20- 23.5	40- 43	46- 48	60- 63	80- 83	96.5- 100
<i>Epistominella ovax</i>	-	-	-	-	-	-	-
<i>E. exigua</i>	-	-	-	-	-	-	-
<i>E. pacifica</i>	-	-	-	58/15.8	-	-	-
<i>E. smithi</i>	-	-	-	3/0.8	-	-	-
<i>Fissurina lagenoides</i>	-	-	-	-	-	-	-
<i>F. lucida</i>	-	-	-	-	-	-	-
<i>F. marginata</i>	-	-	-	-	-	-	-
<i>F. spp.</i>	-	1/0.4	-	1/0.3	2/-	5/1.7	1/0.3
<i>Florilus labradoricus</i>	-	-	-	-	-	-	-
<i>Fronicularia</i> sp.	-	-	-	1/0.3	-	-	-
<i>Fursenkoina cornuta</i>	-	-	-	-	-	-	-
<i>F. rotundata</i>	-	-	-	-	-	-	-
<i>F. seminuda</i>	-	-	-	-	-	-	-
<i>F. sp.</i>	-	-	-	1/0.3	-	-	-
<i>Globobulimina affinis</i>	1/-	132/52.2	50/-	15/4.1	23/-	16/5.3	22/6.6
<i>G. barbata</i>	-	-	-	1/0.3	-	-	1/0.3
<i>G. cf. G. marginospinata</i>	-	-	-	-	-	-	-
<i>G. ovula</i>	-	-	-	-	-	-	-
<i>G. pacifica</i>	-	-	-	6/1.6	-	-	-
<i>G. spinifera</i>	-	-	-	-	-	-	-
<i>G. spp.</i>	-	-	1/-	-	-	-	-
<i>Globocassidulina subglobosa</i>	-	1/0.4	1/-	-	-	-	-
<i>Gyroidina altiformis</i>	-	1/0.4	1/-	2/0.5	1/-	3/1.0	5/1.5
<i>G. gemma</i>	-	1/0.4	-	8/1.6	2/-	1/0.3	9/2.7
<i>G. cf. G. planulata</i>	-	8/3.2	3/-	3/0.8	3/-	4/1.3	9/2.7
<i>G. quinqueloba</i>	-	2/0.8	-	-	-	4/1.3	-
<i>G. tumidulus</i>	-	-	-	-	-	-	-
<i>G. turgida</i>	-	-	-	-	-	-	-
<i>G. spp.</i>	-	-	1/-	-	-	-	-
<i>Hoeglundina elegans</i>	-	-	-	-	-	69/22.8	11/3.3
<i>Jaculella acuta</i>	1/-	-	-	-	-	-	-
<i>Karrerella baccata</i>	-	-	-	-	-	-	-
<i>K. grammostomata</i>	-	-	-	-	-	1/0.3	4/1.2
<i>K. novangliae</i>	-	-	-	-	-	-	-
<i>Lagena acuticosta</i>	-	-	1/-	-	1/-	-	-
<i>L. alcocki</i>	-	-	-	-	-	-	-
<i>L. distoma</i>	-	-	-	-	-	-	-
<i>L. elongata</i>	1/-	1/0.4	-	3/0.8	1/-	-	2/0.6
<i>L. hispidula</i>	-	2/0.8	1/-	-	1/-	2/0.7	3/0.9
<i>L. striata</i>	-	1/0.4	2/-	-	-	-	-
<i>L. sulcata</i>	-	-	-	-	-	-	-
<i>L. sulcata laevicostata</i>	-	-	-	-	-	-	-
<i>L. sulcata spicata</i>	-	-	-	-	-	-	-
<i>L. spp.</i>	-	-	-	-	-	-	-
<i>Lenticulina</i> spp.	-	-	-	-	-	-	-
<i>Loxostomum pseudobeyrichi</i>	-	-	-	3/0.8	-	-	-
<i>Marginulina obesa</i>	-	1/0.4	-	-	-	-	-
<i>M. spp.</i>	-	-	-	-	-	-	-
<i>Martinottiella communis</i>	-	-	-	-	-	-	1/0.3
<i>Melonis barleeanus</i>	1/-	1/0.4	-	-	-	10/3.3	-

Table 4. Quantitative distribution (raw count/percentage) of benthonic foraminiferal species in core S3-15G (continued).

Species	Depth in Core (cm)						
	0 - 4	20 - 23.5	40 - 43	48 - 48	60 - 63	80 - 83	96.5 - 100
<i>Melonis pompilioides</i>	-	12/4.7	9/-	7/1.9	10/-	64/21.1	87/26.1
<i>Miliolinella californica</i>	-	-	-	-	-	-	-
<i>Nodosaria tympanipectiformis</i> (?)	-	-	-	-	1/-	-	-
<i>Nonionella basispinata</i>	-	-	-	-	-	-	-
<i>N. decora</i>	-	-	-	-	-	-	-
<i>N. japonica mexicana</i>	-	-	-	-	-	-	-
<i>N. miocenica</i>	-	-	-	-	-	-	-
<i>N. stella</i>	-	-	-	-	-	-	-
<i>N. sp.</i>	-	-	1/-	-	-	-	-
<i>Oolina catenulata</i>	-	-	-	-	-	-	1/0.3
<i>O. melo</i>	-	-	-	-	-	2/0.7	2/0.6
<i>O. spp.</i>	-	-	-	-	-	1/0.3	-
<i>O. (?) sp.</i>	-	-	-	-	-	-	-
<i>Oridorsalis umbonatus</i>	-	-	-	4/1.1	-	3/1.0	2/0.6
<i>Paralissurina fusuliformis</i>	-	-	-	-	-	-	-
<i>P. kerguelensis</i>	-	-	-	-	-	-	-
<i>P. cf. P. kerguelensis</i>	-	-	-	-	-	-	-
<i>P. tectulostoma</i>	-	-	-	-	-	-	-
<i>P. spp.</i>	-	3/1.2	-	-	-	-	-
<i>Planulina ornata</i>	-	-	-	-	-	-	-
<i>P. wuellerstorfi</i>	-	6/2.4	1/-	1/0.3	2/-	1/0.3	7/2.1
<i>Pullenia bulloides</i>	-	-	-	3/0.8	1/-	1/0.3	2/0.6
<i>P. quinqueloba</i>	-	-	-	-	-	1/0.3	-
<i>P. salisburyi</i>	-	-	-	-	-	-	-
<i>P. sp. A</i>	-	-	-	-	-	1/0.3	-
<i>P. sp. B</i>	-	-	-	-	-	-	-
<i>P. sp. C</i>	-	-	-	-	-	-	-
<i>Pyrgo depressa</i>	-	-	-	-	-	-	-
<i>P. murrhina</i>	-	-	-	-	-	2/0.7	3/0.9
<i>Quinqueloculina akneriana</i>	-	-	-	-	-	-	-
<i>Q. elongata</i>	-	-	-	-	-	-	-
<i>Q. spp.</i>	-	-	-	-	-	-	-
<i>Recurvoides spp.</i>	-	3/1.2	-	-	-	-	-
<i>Reophax communis</i>	-	P	-	-	-	-	-
<i>R. dentaliniformis</i>	-	3/1.2	-	-	-	-	-
<i>R. distans gracilis</i>	-	P	-	-	-	-	-
<i>R. (?) sp.</i>	-	-	-	-	1/-	-	-
<i>Robertina bradyi</i>	-	-	-	-	-	-	-
<i>Rosalina columbiensis</i>	-	1/0.4	1/-	-	1/-	-	3/0.9
<i>Saccammina spherica</i>	1/-	-	-	-	1/-	-	1/0.3
<i>Saracenaria sp.</i>	-	-	-	-	-	-	-
<i>Sigmoilina cf. S. tenuis</i>	-	-	-	-	-	-	-
<i>S. sp.</i>	-	-	-	-	-	-	-
<i>Siphonotextularia catenata</i>	-	2/0.8	-	-	-	-	-
<i>Stainforthia complanata</i>	-	-	-	-	-	-	-
<i>S. nodosa</i>	-	-	-	-	-	-	-
<i>Stilostomella cf. S. lepidula</i>	-	-	-	-	-	-	-
<i>S. sp.</i>	-	-	-	-	-	-	-
<i>Suggrunda eckisi</i>	-	-	-	-	-	-	-
<i>Trifarina angulosa</i>	-	-	-	2/0.5	-	-	-

Table 4. Quantitative distribution (raw count/percentage) of benthonic foraminiferal species in core S3-15G (continued).

Species	Depth in Core (cm)						
	0 - 4	20 - 23.5	40 - 43	46 - 48	60 - 63	80 - 83	96.5 - 100
=====							
<i>Tritarina hughesi</i>	-	-	-	-	-	-	-
<i>T. (?) sp.</i>	-	-	-	-	-	-	-
<i>Triloculina tricaninata</i>	-	1/0.4	-	-	-	2/0.7	-
<i>T. trigonula</i>	-	1/0.4	-	-	-	-	-
<i>Trochammina globigeriniformis</i>	-	9/3.6	-	-	-	-	-
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<i>T. pacifica simplissima</i>	-	1/0.4	-	-	-	-	-
<i>Uvigerina hispida</i>	-	-	-	15/4.1	-	-	-
<i>U. juncea</i>	-	-	-	10/2.7	-	-	-
<i>Uvigerina peregrina</i>	-	-	-	7/1.9	-	-	-
<i>U. peregrina dirupta</i>	-	-	-	-	-	-	-
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<i>U. proboscidea</i>	-	-	-	2/0.5	-	-	-
<i>U. senticosa</i>	-	47/18.6	29/-	14/3.6	46/-	100/33.0	132/39.5
<i>Valvulinena araucana</i>	-	-	-	-	-	-	-
<i>V. laevigata</i>	-	1/0.4	-	-	-	-	1/0.3
Unknowns	-	6/2.4	-	2/0.5	2/-	2/0.7	3/0.9
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Total Specimens	8	253	106	368	106	303	334



Table 4. Quantitative distribution (raw count/percentage) of benthonic foraminiferal species in core S3-15G (continued).

Species	Depth in Core (cm)						
	120- 122	128- 130	130- 132	133.5- 136.5	139- 143	152.5- 154.5	167.5- 170
<i>Anomalina globulosa</i>	-	2/0.9	-	-	1/0.2	1/0.3	3/0.5
<i>Astacolus</i> sp.	-	-	-	-	-	-	1/0.2
<i>Astrononion gallowayi</i>	-	-	-	-	-	-	-
<i>Bathysiphon</i> sp.	-	-	-	-	-	-	-
<i>Bolivina advena striatella</i>	-	-	-	-	-	-	-
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<i>B. argentea</i>	-	-	-	15/4.0	-	-	-
<i>B. interjuncta bicostata</i>	-	-	-	1/0.3	-	-	-
<i>B. pacifica</i>	-	-	-	-	1/0.2	-	-
<i>B. seminuda</i>	-	1/0.4	-	7/1.9	-	-	-
<i>B. tongi filicostata</i>	-	-	-	-	-	-	-
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<i>Buccella frigida</i>	-	-	-	-	-	-	-
<i>B. tenerrima</i>	-	-	-	-	-	-	-
<i>Bulimina denudata</i>	-	-	-	-	-	-	-
<i>B. pagoda</i>	-	-	-	2/0.5	-	-	-
<i>B. rostrata</i>	-	1/0.4	-	-	-	1/0.3	2/0.3
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<i>B. striata mexicana</i>	-	-	-	11/2.9	-	-	-
<i>Buliminella curta</i>	-	-	-	-	-	-	-
<i>B. elegantissima</i>	-	-	-	-	-	-	-
<i>B. tenuata</i>	1/0.3	1/0.4	-	19/5.0	4/1.0	-	16/2.6
<i>Cassidulina cushmani</i>	-	-	-	11/2.9	-	-	-
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<i>C. minuta</i>	4/1.2	3/1.3	3/-	20/5.3	13/3.2	4/1.2	10/1.7
<i>C. translucens</i>	-	-	-	2/0.5	-	-	-
<i>C. tumida</i>	-	-	-	-	-	-	-
<i>C. spp.</i>	-	-	-	1/0.3	-	-	-
<i>Cassidulinoides bradyi</i>	-	-	-	-	-	-	1/0.2
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<i>Chilostomella oolina</i>	-	2/0.9	-	5/1.3	-	-	-
<i>C. ovoidea</i>	-	-	-	-	-	-	-
<i>C. spp.</i>	1/0.3	-	-	-	1/0.2	-	-
<i>Chilostomellina fimbriata</i>	-	-	-	-	-	-	-
<i>Cibicides lobatulus</i>	1/0.3	-	1/-	-	-	-	1/0.2
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<i>C. mckennai</i>	1/0.3	-	-	-	-	-	-
<i>C. spp.</i>	-	2/0.9	-	3/0.8	-	-	-
<i>Cibicidoides kullenbergi</i>	3/0.9	1/0.4	-	-	6/1.5	4/1.2	11/1.8
<i>Cyclammina</i> sp.	-	-	-	-	-	-	-
<i>Dentalina californica</i>	-	-	-	1/0.3	-	-	-
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<i>D. frobisherensis</i>	-	-	-	-	1/0.2	-	-
<i>D. mucronata</i>	-	-	-	1/0.3	-	-	-
<i>D. pauperata</i>	-	-	-	-	-	-	1/0.2
<i>D. spp.</i>	-	-	-	2/0.5	-	2/0.6	-
<i>Dyocibicides biserialis</i>	-	-	-	-	-	-	-
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<i>D. sp.</i>	-	-	-	-	-	-	-
<i>Eggerella bradyi</i>	4/1.2	-	-	1/0.3	2/0.5	2/0.6	2/0.3
<i>E. spp.</i>	1/0.3	-	-	-	-	-	-
<i>Elphidium excavatum clavata</i>	1/0.3	-	-	-	-	-	-
<i>E. excavatum lidoensis</i>	-	-	-	-	-	-	-
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<i>E. excavatum selseyensis</i>	-	-	-	14/3.7	-	-	-
<i>E. gunleri</i>	-	-	-	-	-	-	-
<i>E. magellanicum</i>	-	-	-	-	-	-	-
<i>E. spp.</i>	-	-	-	-	-	-	-
<i>Epistominella bradyana</i>	-	-	-	1/0.3	-	-	-

Table 4. Quantitative distribution (raw count/percentage) of benthonic foraminiferal species in core S3-15G (continued).

Species	Depth in Core (cm)						
	120- 122	128- 130	130- 132	133.5- 136.5	139- 143	152.5- 154.5	167.5- 170
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<i>Epistominella ovax</i>	-	-	-	-	-	-	-
<i>E. exigua</i>	-	-	-	2/0.5	-	-	-
<i>E. pacifica</i>	-	-	-	5/1.3	-	-	-
<i>E. smithi</i>	-	-	-	11/2.9	-	-	-
<i>Fissurina lagenoides</i>	-	-	-	1/0.3	-	-	-
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<i>F. lucida</i>	-	-	-	1/0.3	-	3/0.9	3/0.5
<i>F. marginata</i>	-	-	-	-	-	-	-
<i>F. spp.</i>	8/2.4	5/2.2	-	5/1.3	6/1.5	1/0.3	1/0.2
<i>Florilus labradonicus</i>	-	-	-	-	-	-	-
<i>Fronicularia</i> sp.	-	-	-	-	-	-	-
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<i>Fursenkoina cornuta</i>	-	-	-	13/3.4	-	-	-
<i>F. rotundata</i>	-	-	-	5/1.3	-	-	-
<i>F. seminuda</i>	-	-	-	2/0.5	-	-	-
<i>F. sp.</i>	-	-	-	-	-	-	-
<i>Globobulimina affinis</i>	-	26/11.6	7/-	11/2.9	7/1.7	54/16.6	43/7.1
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<i>G. barbata</i>	3/0.9	-	1/-	2/0.5	4/1.0	4/1.2	9/1.5
<i>G. cf. G. marginospinata</i>	-	-	-	3/0.8	-	-	-
<i>G. ovula</i>	-	-	-	-	-	-	-
<i>G. pacifica</i>	2/0.6	-	-	4/1.1	-	-	1/0.2
<i>G. spinifera</i>	-	-	-	-	-	-	-
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<i>G. spp.</i>	4/1.2	1/0.4	1/-	-	-	2/0.6	1/0.2
<i>Globocassidulina subglobosa</i>	-	-	-	3/0.8	2/0.5	-	-
<i>Gyroidina altiformis</i>	11/3.3	7/3.1	1/-	-	9/2.2	7/2.2	10/1.7
<i>G. gemma</i>	5/1.5	3/1.3	-	2/0.5	6/1.5	5/1.5	12/2.0
<i>G. cf. G. planulata</i>	2/0.6	7/3.1	-	2/0.5	26/6.4	19/5.9	35/5.8
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<i>G. quinqueloba</i>	2/0.6	1/0.4	-	-	3/0.7	-	4/0.7
<i>G. tumidulus</i>	3/0.9	-	-	-	1/0.2	-	5/0.8
<i>G. turgida</i>	1/0.3	1/0.4	-	-	1/0.2	2/0.6	-
<i>G. spp.</i>	-	-	-	-	-	-	-
<i>Hoeglundina elegans</i>	6/1.8	2/0.9	-	2/0.5	5/1.2	9/2.8	7/1.2
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<i>Jaculella acuta</i>	-	-	-	-	-	-	-
<i>Karrerella baccata</i>	1/0.3	1/0.4	1/-	1/0.3	1/0.2	1/0.3	1/0.2
<i>K. grammostomata</i>	15/4.6	4/1.8	1/-	2/0.5	4/1.0	6/1.9	5/0.8
<i>K. novangliae</i>	1/0.3	-	-	-	1/0.2	-	2/0.3
<i>Lagena acuticosta</i>	-	-	1/-	1/0.3	1/0.2	-	-
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<i>L. alcocki</i>	-	-	-	1/0.3	-	-	-
<i>L. distoma</i>	-	-	-	3/0.8	1/0.2	-	-
<i>L. elongata</i>	-	-	1/-	-	2/0.5	-	-
<i>L. hispidula</i>	2/0.6	3/1.3	1/-	2/0.5	5/1.2	2/0.6	-
<i>L. striata</i>	2/0.6	-	-	-	2/0.5	-	1/0.2
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<i>L. sulcata</i>	1/0.3	-	-	-	1/0.2	-	1/0.2
<i>L. sulcata laevicostata</i>	-	-	-	-	-	1/0.3	-
<i>L. sulcata spicata</i>	-	-	-	1/0.3	-	-	-
<i>L. spp.</i>	-	-	-	-	-	-	-
<i>Lenticulina</i> spp.	-	-	-	-	2/0.5	-	-
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<i>Loxostomum pseudobeyrichi</i>	-	1/0.4	-	35/9.3	1/0.2	-	-
<i>Margulina obesa</i>	1/0.3	-	-	-	-	-	-
<i>M. spp.</i>	-	1/0.4	-	-	1/0.2	-	1/0.2
<i>Martinottiella communis</i>	1/0.3	-	-	-	1/0.2	-	-
<i>Melonis barleeanus</i>	6/1.8	3/1.3	-	1/0.3	32/7.8	7/2.2	9/1.5

Table 4. Quantitative distribution (raw count/percentage) of benthonic foraminiferal species in core S3-15G (continued).

Species	Depth in Core (cm)						
	120- 122	128- 130	130- 132	133.5- 136.5	139- 143	152.5- 154.5	167.5- 170
<i>Melonis pompilioides</i>	91/27.7	57/25.3	16/-	11/2.9	91/22.3	100/30.8	138/22.8
<i>Miliolinella californica</i>	-	-	-	-	-	-	-
<i>Nodosaria tympanipectiformis</i> (?)	-	-	-	-	-	-	-
<i>Nonionella basispinata</i>	-	-	-	1/0.3	-	-	-
<i>N. decora</i>	-	-	-	-	-	-	-
<i>N. japonica mexicana</i>	-	-	-	2/0.5	-	-	-
<i>N. miocenica</i>	-	-	-	12/3.2	17/0.27	-	-
<i>N. stella</i>	-	-	-	-	-	-	-
<i>N. sp.</i>	-	1/0.4	-	-	-	-	-
<i>Oolina catenulata</i>	1/0.3	2/0.9	1/-	-	3/0.7	2/0.6	-
<i>O. melo</i>	1/0.3	2/0.9	1/-	2/0.5	8/2.0	1/0.3	-
<i>O. spp.</i>	-	-	-	-	1/0.2	-	-
<i>O. (?) sp.</i>	-	-	-	-	-	1/0.3	-
<i>Oridorsalis umbonatus</i>	2/0.6	2/0.9	3/-	-	3/1.0	7/2.2	17/2.8
<i>Paralissurina fusuliformis</i>	2/0.6	-	-	-	-	-	-
<i>P. kerguelensis</i>	-	1/0.4	-	1/0.3	-	-	6/1.0
<i>P. cf. P. kerguelensis</i>	-	-	-	-	-	-	-
<i>P. tectulostoma</i>	-	-	-	-	-	-	4/0.7
<i>P. spp.</i>	1/0.3	-	2/-	6/1.6	2/0.5	1/0.3	2/0.3
<i>Planulina ornata</i>	-	-	-	-	-	-	-
<i>P. wuellerstorfi</i>	13/4.0	9/4.0	2/-	3/0.8	27/6.6	11/3.4	28/4.3
<i>Pullenia bulloides</i>	-	5/2.2	2/-	1/0.3	3/0.7	-	3/0.5
<i>P. quinqueloba</i>	-	-	-	-	-	-	1/0.2
<i>P. salisburyi</i>	5/1.5	2/0.9	-	4/1.1	3/0.7	2/0.6	1/0.2
<i>P. sp. A</i>	-	-	-	-	-	-	-
<i>P. sp. B</i>	1/0.3	-	-	-	-	-	-
<i>P. sp. C</i>	-	-	-	-	-	-	-
<i>Pyrgo depressa</i>	6/1.8	1/0.4	-	1/0.3	1/0.2	-	5/0.8
<i>P. murrhina</i>	10/3.0	2/0.9	-	1/0.3	1/0.2	-	8/1.3
<i>Quinqueloculina akneriana</i>	-	-	-	-	-	-	-
<i>Q. elongata</i>	-	-	-	-	-	-	-
<i>Q. spp.</i>	-	-	-	-	-	-	1/0.2
<i>Recurvoides</i> spp.	-	-	-	-	-	-	-
<i>Reophax communis</i>	-	-	-	-	-	-	-
<i>R. dentaliniformis</i>	-	-	-	-	-	-	-
<i>R. distans gracilis</i>	-	-	-	-	-	-	-
<i>R. (?) sp.</i>	-	-	-	-	-	-	-
<i>Robertina bradyi</i>	-	-	-	-	-	-	-
<i>Rosalina columbiensis</i>	5/1.5	8/2.7	5/-	4/1.1	12/2.9	7/2.2	7/1.2
<i>Saccamina sphenica</i>	-	-	-	-	-	-	-
<i>Saracenaria</i> sp.	-	-	-	-	3/0.7	-	-
<i>Sigmoilina</i> cf. <i>S. tenuis</i>	-	-	-	-	-	-	-
<i>S. sp.</i>	-	-	-	2/0.5	-	-	-
<i>Siphonotextularia catenata</i>	-	-	-	-	-	-	6/1.0
<i>Stainforthia complanata</i>	-	-	-	-	-	-	-
<i>S. nodosa</i>	-	-	-	-	-	-	-
<i>Stilostomella</i> cf. <i>S. lepidula</i>	-	-	-	1/0.3	-	-	-
<i>S. sp.</i>	-	-	-	1/0.3	-	-	-
<i>Suggrunda eckisi</i>	-	-	-	12/3.2	-	-	-
<i>Trifarina angulosa</i>	-	-	-	1/0.3	-	-	-

Table 4. Quantitative distribution (raw count/percentage) of benthonic foraminiferal species in core S3-15G (continued).

Species	Depth in Core (cm)						
	120- 122	128- 130	130- 132	133.5- 136.5	139- 143	152.5- 154.5	167.5- 170
<i>Trifarina hughesi</i>	-	-	-	-	-	-	-
<i>T. (?) sp.</i>	-	-	-	1/0.3	-	-	-
<i>Triloculina tricarinata</i>	-	1/0.4	-	1/0.3	-	1/0.3	-
<i>T. trigonula</i>	-	-	-	-	-	-	-
<i>Trochammina globigeriniformis</i>	-	-	-	-	-	-	-
<i>T. pacifica simplissima</i>	-	-	-	-	-	-	-
<i>Uvigerina hispida</i>	-	-	-	-	-	-	-
<i>U. juncea</i>	-	-	-	10/2.7	-	-	-
<i>U. peregrina</i>	-	-	-	11/2.9	-	-	-
<i>U. peregrina dirupta</i>	-	-	-	-	-	-	-
<i>U. proboscidea</i>	-	-	-	7/1.9	-	1/0.3	-
<i>U. senticosa</i>	97/29.5	55/24.4	17/-	26/6.9	92/22.5	54/6.6	172/28.4
<i>Valvulineria araucana</i>	-	-	-	-	-	-	7/1.2
<i>V. laevigata</i>	-	-	-	7/1.9	1/0.2	-	1/0.2
Unknowns	-	-	1/-	6/1.6	2/0.5	-	-
Total Specimens	329	225	69	378	409	325	606

Table 4. Quantitative distribution (raw count/percentage) of benthonic foraminiferal species in core S3-15G (continued).

	Depth in Core (cm)						
Species	171- 173	180- 182	189.5- 192	210- 212	230- 232	248- 250	270- 272
<i>Anomalina globulosa</i>	-	-	-	-	-	-	-
<i>Astacolus</i> sp.	-	-	-	-	-	-	-
<i>Astrononion gallowayi</i>	-	-	-	-	-	-	-
<i>Bathysiphon</i> sp.	-	-	-	-	-	P	-
<i>Bolivina advena striatella</i>	-	-	-	-	-	15/3.7	-
<i>B. argentea</i>	39/11.1	108/8.6	-	1/0.3	28/3.6	71/17.6	-
<i>B. interjuncta bicostata</i>	3/0.9	5/0.4	-	-	-	3/0.7	-
<i>B. pacifica</i>	6/1.7	-	-	-	-	-	-
<i>B. seminuda</i>	2/0.6	1/0.1	-	-	14/1.8	12/3.0	1/0.3
<i>B. tongi filicostata</i>	1/0.3	1/0.1	-	-	-	-	-
<i>Buccella frigida</i>	2/0.6	2/0.2	-	-	5/0.6	2/0.5	-
<i>B. tenerrima</i>	-	-	-	-	-	3/0.7	-
<i>Bulimina denudata</i>	-	4/0.3	-	-	-	-	-
<i>B. pagoda</i>	2/0.6	4/0.3	-	-	-	-	-
<i>B. rostrata</i>	-	1/0.1	2/0.9	2/0.7	3/0.4	-	1/0.3
<i>B. striata mexicana</i>	2/0.6	29/2.3	-	-	29/3.7	23/5.7	-
<i>Buliminella curta</i>	-	-	-	-	-	-	-
<i>B. elegantissima</i>	-	-	-	-	-	-	-
<i>B. tenuata</i>	39/11.1	139/11.1	1/0.5	4/1.3	48/6.1	16/4.0	5/1.3
<i>Cassidulina cushmani</i>	1/0.3	6/0.5	-	-	20/2.6	8/2.0	-
<i>C. minuta</i>	10/2.8	36/2.9	9/4.0	17/5.5	40/5.1	14/3.5	7/1.8
<i>C. translucens</i>	1/0.3	-	-	-	2/0.3	3/0.7	-
<i>C. tumida</i>	-	-	-	-	-	1/0.3	-
<i>C. spp.</i>	-	-	-	-	-	1/0.3	-
<i>Cassidulinoides bradyi</i>	11/3.1	16/1.3	2/0.9	-	8/1.0	3/0.7	1/0.3
<i>Chilostomella oolina</i>	4/1.1	12/1.0	-	-	1/0.1	-	-
<i>C. ovoidea</i>	1/0.3	-	-	-	-	1/0.3	-
<i>C. spp.</i>	1/0.3	4/0.3	-	-	1/0.1	1/0.3	-
<i>Chilostomellina fimbriata</i>	7/2.0	5/0.4	-	-	1/0.1	3/0.7	-
<i>Cibicides lobatulus</i>	-	-	-	20/6.5	-	1/0.3	2/0.5
<i>C. mckennai</i>	-	-	-	-	-	-	-
<i>C. spp.</i>	2/0.6	-	-	3/1.0	2/0.3	-	1/0.3
<i>Cibicidoides kullenbergi</i>	-	4/0.3	1/0.5	4/1.3	2/0.3	-	3/0.8
<i>Cyclammina</i> sp.	-	-	-	-	-	-	-
<i>Dentalina californica</i>	-	-	-	-	-	-	-
<i>D. frobisherensis</i>	-	-	-	-	-	-	-
<i>D. mucronata</i>	-	-	-	-	-	-	-
<i>D. pauperata</i>	-	-	-	1/0.3	-	-	-
<i>D. spp.</i>	-	-	-	-	-	-	-
<i>Dyocibicides biserialis</i>	-	-	-	-	-	-	-
<i>D. sp.</i>	-	-	-	-	-	-	-
<i>Eggerella bradyi</i>	1/0.3	7/0.6	-	1/0.3	5/0.6	-	3/0.8
<i>E. spp.</i>	-	-	-	1/0.3	1/0.1	-	-
<i>Elphidium excavatum clavata</i>	1/0.3	-	-	-	-	9/2.2	-
<i>E. excavatum lidoensis</i>	-	-	-	-	-	2/0.5	-
<i>E. excavatum selseyensis</i>	4/1.1	5/0.4	-	-	10/1.3	2/0.5	-
<i>E. gunleri</i>	-	1/0.1	-	-	-	-	-
<i>E. magellanicum</i>	3/0.9	3/0.2	-	-	-	-	1/0.3
<i>E. spp.</i>	-	-	-	-	-	1/0.3	-
<i>Epistominella bradyana</i>	-	-	-	-	-	1/0.3	-

Table 4. Quantitative distribution (raw count/percentage) of benthonic foraminiferal species in core S3-15G (continued).

Species	Depth in Core (cm)						
	171- 173	180- 182	189.5- 192	210- 212	230- 232	248- 250	270- 272
<i>Epistominella ovax</i>	-	-	-	-	-	-	-
<i>E. exigua</i>	2/0.6	-	-	-	3/0.4	2/0.5	-
<i>E. pacifica</i>	16/4.6	19/1.5	-	3/1.0	74/9.4	103/25.6	1/0.3
<i>E. smithi</i>	11/3.1	53/4.2	-	-	43/5.5	10/2.5	1/0.3
<i>Fissurina lagenoides</i>	-	-	-	-	-	-	-
<i>F. lucida</i>	2/0.6	2/0.2	1/0.5	4/1.3	1/0.1	-	1/0.3
<i>F. marginata</i>	2/0.6	-	-	-	-	-	-
<i>F. spp.</i>	2/0.6	10/0.8	1/0.5	-	2/0.3	2/0.5	2/0.5
<i>Florilus labradoricus</i>	-	-	-	-	1/0.1	-	-
<i>Frondicularia</i> sp.	-	-	-	-	-	-	-
<i>Fursenkoina cornuta</i>	2/0.6	14/1.1	-	-	2/0.3	-	-
<i>F. rotundata</i>	8/2.3	-	-	-	-	-	-
<i>F. seminuda</i>	3/0.9	-	-	-	-	-	-
<i>F. sp.</i>	-	1/0.1	-	-	1/0.1	-	-
<i>Globobulimina affinis</i>	9/2.6	41/3.3	4/1.8	4/1.3	11/1.4	8/2.0	16/4.6
<i>G. barbata</i>	2/0.6	26/2.1	6/2.7	9/2.9	10/1.3	3/0.7	-
<i>G. cf. G. marginospinata</i>	2/0.6	-	-	-	-	-	-
<i>G. ovula</i>	-	-	-	-	1/0.1	15/3.7	-
<i>G. pacifica</i>	4/1.1	7/0.6	-	2/0.7	-	-	-
<i>G. spinifera</i>	-	-	-	-	-	2/0.5	-
<i>G. spp.</i>	2/0.6	7/0.6	-	-	1/0.1	1/0.3	3/0.8
<i>Globocassidulina subglobosa</i>	6/1.7	-	-	1/0.3	6/0.8	-	-
<i>Gyroidina altiformis</i>	-	18/1.4	8/3.6	9/2.9	1/0.1	-	3/0.8
<i>G. gemma</i>	-	11/0.9	1/0.5	2/0.7	5/0.6	2/0.5	5/1.3
<i>G. cf. G. planulata</i>	6/1.7	126/10.1	29/13.0	69/22.4	10/1.3	2/0.5	17/4.3
<i>G. quinqueloba</i>	-	-	1/0.5	-	3/0.4	-	-
<i>G. tumidulus</i>	-	1/0.1	-	-	2/0.3	-	-
<i>G. turgida</i>	-	1/0.1	-	1/0.3	-	-	1/0.3
<i>G. spp.</i>	1/0.3	-	-	-	2/0.3	-	-
<i>Hoeglundina elegans</i>	3/0.9	8/0.6	7/3.1	15/4.9	5/0.6	1/0.3	20/5.1
<i>Jaculella acuta</i>	-	-	-	-	-	-	-
<i>Karreriella baccata</i>	-	-	-	-	-	-	-
<i>K. grammostomata</i>	5/1.4	11/0.9	1/0.5	1/0.3	1/0.1	-	7/1.8
<i>K. novangliae</i>	-	-	-	-	-	-	-
<i>Lagena aculeicosta</i>	-	1/0.1	-	-	-	-	-
<i>L. alcocki</i>	-	1/0.1	-	-	-	-	-
<i>L. distoma</i>	1/0.3	1/0.1	-	-	-	-	-
<i>L. elongata</i>	2/0.6	2/0.2	-	2/0.7	2/0.3	-	-
<i>L. hispidula</i>	4/1.1	14/1.1	3/1.3	5/1.6	2/0.3	-	3/0.8
<i>L. striata</i>	-	2/0.2	-	-	1/0.1	-	2/0.5
<i>L. sulcata</i>	2/0.6	-	-	-	-	-	-
<i>L. sulcata laevicostata</i>	-	-	-	-	1/0.1	-	1/0.3
<i>L. sulcata spicata</i>	-	-	-	-	-	-	-
<i>L. spp.</i>	1/0.3	-	-	-	-	-	-
<i>Lenticulina</i> spp.	-	-	-	-	-	-	1/0.3
<i>Loxostomum pseudobeyrichi</i>	11/3.1	23/1.8	-	-	4/0.5	3/0.7	1/0.3
<i>Marginulina obesa</i>	-	-	-	-	-	-	-
<i>M. spp.</i>	-	-	-	-	-	-	-
<i>Martinottiella communis</i>	-	-	-	-	-	-	-
<i>Melonis barleeanus</i>	-	19/1.5	19/8.5	7/2.3	2/0.3	-	1/0.3

Table 4. Quantitative distribution (raw count/percentage) of benthonic foraminiferal species in core S3-15G (continued).

Species	Depth in Core (cm)						
	171- 173	180- 182	189.5- 192	210- 212	230- 232	248- 250	270- 272
<i>Melonis pompilioides</i>	6/1.7	129/10.3	69/30.8	34/11.0	33/4.2	2/0.5	5/1.3
<i>Miliolinella californica</i>	-	-	-	-	-	-	-
<i>Nodosaria tympanipectiformis</i> (?)	-	-	-	-	-	-	-
<i>Nonionella basispinata</i>	3/0.9	-	-	-	1/0.1	-	-
<i>N. decora</i>	-	-	-	-	-	-	-
<i>N. japonica mexicana</i>	2/0.6	-	-	-	-	-	-
<i>N. miocenica</i>	38/10.8	8/0.6	-	-	7/0.9	2/0.5	-
<i>N. stella</i>	-	-	-	-	-	-	-
<i>N. sp.</i>	-	2/0.2	-	-	-	-	-
<i>Oolina catenulata</i>	1/0.3	3/0.2	-	-	1/0.1	-	-
<i>O. melo</i>	2/0.6	5/0.4	3/1.3	-	4/0.5	-	1/0.3
<i>O. spp.</i>	-	-	-	-	-	-	-
<i>O. (?) sp.</i>	-	-	-	-	-	-	-
<i>Oridorsalis umbonatus</i>	-	2/0.2	1/0.5	5/1.6	3/0.4	-	17/4.3
<i>Paralissurina fusuliformis</i>	-	-	-	-	-	-	-
<i>P. kerguelensis</i>	-	5/0.4	-	-	2/0.3	-	-
<i>P. cf. P. kerguelensis</i>	-	2/0.2	-	-	-	-	13/3.3
<i>P. lectulostoma</i>	-	-	-	-	-	-	-
<i>P. spp.</i>	1/0.3	8/0.6	1/0.5	-	-	-	-
<i>Pianulina ornata</i>	-	-	-	-	-	-	-
<i>P. wuellerstorfi</i>	-	7/0.6	-	5/1.6	2/0.3	4/1.0	13/3.3
<i>Pullenia bulloides</i>	1/0.3	3/0.2	2/0.9	1/0.3	3/0.4	1/0.3	6/1.5
<i>P. quinqueloba</i>	-	4/0.3	-	-	1/0.1	-	1/0.3
<i>P. salisburyi</i>	2/0.6	7/0.6	-	1/0.3	1/0.1	-	2/0.5
<i>P. sp. A</i>	-	-	-	-	-	-	-
<i>P. sp. B</i>	-	2/0.2	-	-	-	-	1/0.3
<i>P. sp. C</i>	-	-	-	-	-	-	1/0.3
<i>Pyrgo depressa</i>	-	-	1/0.5	-	-	-	-
<i>P. murrhina</i>	-	4/0.3	1/0.5	2/0.7	3/0.4	-	2/0.5
<i>Quinqueloculina akneriana</i>	-	-	-	-	-	-	-
<i>Q. elongata</i>	-	-	-	-	-	-	-
<i>Q. spp.</i>	-	-	-	-	-	-	-
<i>Recurvoides</i> spp.	-	-	-	-	-	-	-
<i>Reophax communis</i>	-	-	-	-	-	-	-
<i>R. dentaliniformis</i>	-	-	-	-	-	-	-
<i>R. distans gracilis</i>	-	-	-	-	-	-	-
<i>R. (?) sp.</i>	-	-	-	-	-	-	-
<i>Robertina bradyi</i>	-	-	-	1/0.3	-	-	-
<i>Rosalina columbiensis</i>	3/0.9	19/1.5	4/1.8	8/2.6	4/0.5	-	3/0.8
<i>Saccamina sphenica</i>	-	-	-	-	-	-	-
<i>Saracenaria</i> sp.	-	-	-	-	-	-	-
<i>Sigmoilina</i> cf. <i>S. tenuis</i>	-	-	-	-	-	-	2/0.5
<i>S. sp.</i>	-	-	-	-	-	-	-
<i>Siphonotextularia catenata</i>	-	-	-	-	1/0.1	-	1/0.3
<i>Stainforthia complanata</i>	1/0.3	-	-	-	-	-	1/0.3
<i>S. nodosa</i>	-	-	-	-	1/0.1	-	-
<i>Stilostomella</i> cf. <i>S. lepidula</i>	-	-	-	-	-	-	-
<i>S. sp.</i>	-	-	-	-	-	-	-
<i>Suggrunda eckisi</i>	3/0.9	1/0.1	-	-	2/0.3	-	2/0.5
<i>Tritarina angulosa</i>	1/0.3	-	-	-	1/0.1	-	-

Table 4. Quantitative distribution (raw count/percentage) of benthonic foraminiferal species in core S3-15G (continued).

Species	Depth in Core (cm)						
	171- 173	180- 182	189.5- 192	210- 212	230- 232	248- 250	270- 272
<i>Trifarina hughesi</i>	3/0.9	-	-	-	-	-	-
<i>T. (?) sp.</i>	-	-	-	-	-	-	-
<i>Triloculina tricarinata</i>	5/1.4	12/1.0	-	1/0.3	2/0.3	1/0.3	-
<i>T. trigonula</i>	-	-	-	-	-	-	-
<i>Trochammina globigeriniformis</i>	-	-	-	-	-	-	-
<i>T. pacifica simplissima</i>	-	-	-	-	-	-	-
<i>Uvigerina hispida</i>	-	-	-	-	1/0.1	-	1/0.3
<i>U. juncea</i>	-	-	-	-	13/1.7	2/0.5	-
<i>U. peregrina</i>	7/2.0	32/2.6	-	-	51/8.5	29/7.2	1/0.3
<i>U. peregrina disrupta</i>	-	-	-	-	1/0.1	-	-
<i>U. proboscidea</i>	5/1.4	47/3.8	-	-	16/2.0	-	-
<i>U. senticosa</i>	5/1.4	90/7.2	32/14.3	39/12.7	152/19.4	8/2.0	169/43.1
<i>Valvulineria araucana</i>	2/0.6	20/1.6	11/4.9	21/6.8	56/7.1	3/0.7	35/8.9
<i>V. laevigata</i>	4/1.1	18/1.4	-	2/0.7	1/0.1	-	1/0.3
Unknowns	2/0.6	8/0.6	3/1.3	-	5/0.6	1/0.3	1/0.3
Total Specimens	352	1250	224	306	785	403	392



Table 4. Quantitative distribution (raw count/percentage) of benthonic foraminiferal species in core S3-15G (continued).

Species	Depth in Core (cm)						
	289.5- 292	310- 312	330- 332	336.5- 338	346.5- 349.5	369.5- 372.5	390- 393
<i>Anomalina globulosa</i>	-	-	-	-	-	-	-
<i>Astacolus</i> sp.	-	-	-	-	-	-	-
<i>Astrononion gallowayi</i>	-	-	-	1/0.3	-	-	-
<i>Bathysiphon</i> sp.	-	-	-	-	-	-	P
<i>Bolivina advena striatella</i>	3/0.7	-	3/0.9	1/0.3	-	-	-
<i>B. argentea</i>	8/1.8	2/0.6	3/0.9	5/1.3	-	1/0.3	2/0.5
<i>B. interjuncta bicostata</i>	1/0.2	-	-	-	-	-	-
<i>B. pacifica</i>	-	-	-	-	2/0.4	2/0.6	1/0.3
<i>B. seminuda</i>	4/0.9	-	-	-	1/0.2	-	-
<i>B. tongi filicostata</i>	-	-	-	-	-	-	-
<i>Buccella frigida</i>	-	-	-	20/5.3	-	3/0.9	-
<i>B. tenerrima</i>	-	-	-	-	-	-	-
<i>Bulimina denudata</i>	-	-	-	-	-	-	-
<i>B. pagoda</i>	-	-	-	-	-	-	-
<i>B. rostrata</i>	1/0.2	-	1/0.3	-	-	-	-
<i>B. striata mexicana</i>	-	-	6/1.8	12/3.2	1/0.2	1/0.3	-
<i>Buliminella curta</i>	-	-	2/0.6	-	-	-	-
<i>B. elegantissima</i>	-	-	-	4/1.1	-	-	-
<i>B. tenuata</i>	2/0.4	-	-	5/1.3	2/0.4	3/0.9	-
<i>Cassidulina cushmani</i>	-	-	1/0.3	1/0.3	-	-	-
<i>C. minuta</i>	7/1.5	29/8.6	16/4.8	79/21.1	50/9.2	34/9.9	32/8.5
<i>C. translucens</i>	-	-	-	2/0.5	-	-	-
<i>C. tumida</i>	-	-	-	-	-	-	-
<i>C. spp.</i>	2/0.4	-	-	-	-	-	-
<i>Cassidulinoides bradyi</i>	1/0.2	8/2.4	7/2.1	13/3.5	7/1.3	5/1.5	-
<i>Chilostomella oolina</i>	-	-	-	-	-	-	-
<i>C. ovoidea</i>	-	-	-	-	-	-	-
<i>C. spp.</i>	-	-	-	-	-	-	-
<i>Chilostomellina fimbriata</i>	-	-	-	-	-	-	-
<i>Cibicides lobatulus</i>	-	-	-	1/0.3	13/2.4	-	4/1.1
<i>C. mckennai</i>	5/1.1	1/0.3	-	-	-	-	-
<i>C. spp.</i>	4/0.9	-	-	-	1/0.2	-	2/0.5
<i>Cibicidoides kullenbergi</i>	-	2/0.6	-	1/0.3	3/0.6	-	3/0.8
<i>Cyclammina</i> sp.	-	-	-	-	-	-	-
<i>Dentalina californica</i>	-	-	-	-	-	-	-
<i>D. frobisherensis</i>	-	-	-	-	-	-	-
<i>D. mucronata</i>	-	-	1/0.3	-	1/0.2	-	-
<i>D. pauperata</i>	-	-	-	-	-	-	1/0.3
<i>D. spp.</i>	-	-	1/0.3	-	-	1/0.3	1/0.3
<i>Dyocibicides biserialis</i>	-	-	-	-	1/0.2	-	-
<i>D. sp.</i>	-	-	-	-	-	-	-
<i>Eggerella bradyi</i>	1/0.2	-	1/0.3	-	1/0.2	-	1/0.3
<i>E. spp.</i>	-	-	-	-	-	-	-
<i>Elphidium excavatum clavata</i>	1/0.2	-	2/0.6	9/2.4	-	4/1.2	-
<i>E. excavatum kidoensis</i>	-	-	-	-	-	-	-
<i>E. excavatum selseyensis</i>	-	-	-	49/13.1	-	6/1.8	-
<i>E. gunteri</i>	-	-	-	-	-	-	-
<i>E. magellanicum</i>	-	2/0.6	1/0.3	19/5.1	-	9/2.6	1/0.3
<i>E. spp.</i>	-	-	-	-	-	-	-
<i>Epistominella bradyana</i>	-	-	-	-	-	-	-

Table 4. Quantitative distribution (raw count/percentage) of benthonic foraminiferal species in core S3-15G (continued).

Species	Depth in Core (cm)						
	289.5- 292	310- 312	330- 332	336.5- 338	346.5- 349.5	369.5- 372.5	390- 393
<i>Epistominella ovax</i>	-	-	-	1/0.3	-	-	-
<i>E. exigua</i>	-	-	-	4/1.1	-	-	-
<i>E. pacifica</i>	8/1.8	6/1.8	11/3.3	35/9.3	4/0.7	6/1.8	1/0.3
<i>E. smithi</i>	-	-	2/0.6	7/1.9	-	-	-
<i>Fissurina lagenoides</i>	-	-	-	-	-	-	-
<i>F. lucida</i>	-	1/0.3	-	-	-	-	-
<i>F. marginata</i>	-	-	-	-	-	-	-
<i>F. spp.</i>	3/0.7	-	-	-	1/0.2	1/0.3	-
<i>Florilus labradoricus</i>	1/0.2	-	-	1/0.3	-	3/0.9	-
<i>Fronicularia</i> sp.	-	-	-	-	-	-	-
<i>Fursenkoina cornuta</i>	-	-	-	-	-	-	-
<i>F. rotundata</i>	-	-	-	-	-	-	-
<i>F. seminuda</i>	-	-	-	-	-	-	-
<i>F. sp.</i>	-	-	-	-	-	-	-
<i>Globobulimina affinis</i>	32/7.0	75/22.3	40/12.1	4/1.1	79/14.5	71/20.7	98/26.0
<i>G. barbata</i>	2/0.4	-	-	-	-	-	-
<i>G. cf. G. marginospinata</i>	-	-	-	-	-	-	-
<i>G. ovula</i>	-	-	-	-	2/0.4	-	-
<i>G. pacifica</i>	-	-	-	-	-	-	1/0.3
<i>G. spinifera</i>	-	-	-	-	-	-	-
<i>G. spp.</i>	1/0.2	5/1.5	-	1/0.3	3/0.6	-	1/0.3
<i>Globocassidulina subglobosa</i>	-	-	2/0.6	-	-	1/0.3	-
<i>Gyroidina altiformis</i>	-	-	8/2.4	3/0.6	16/2.9	5/1.5	1/0.3
<i>G. gemma</i>	1/0.2	5/1.5	5/1.5	-	17/3.1	4/1.2	2/0.5
<i>G. cf. G. planulata</i>	4/0.9	2/0.6	10/3.0	-	10/1.8	2/0.6	14/3.7
<i>G. quinqueloba</i>	-	-	-	-	-	-	-
<i>G. tumidulus</i>	2/0.4	-	-	-	1/0.2	-	1/0.3
<i>G. turgida</i>	-	-	-	-	-	-	-
<i>G. spp.</i>	2/0.4	3/0.9	-	1/0.3	-	-	-
<i>Hoeglundina elegans</i>	-	-	-	-	-	-	-
<i>Jaculella acuta</i>	-	-	-	-	-	-	-
<i>Karreriella baccata</i>	-	-	-	-	-	-	-
<i>K. grammostomata</i>	4/0.9	7/2.1	8/2.4	1/0.3	17/3.1	10/2.9	14/3.7
<i>K. novangliae</i>	-	-	-	1/0.3	-	-	-
<i>Lagena acuticosta</i>	-	-	-	-	-	2/0.6	-
<i>L. alcocki</i>	-	-	-	-	-	-	-
<i>L. distoma</i>	-	-	-	-	-	-	1/0.3
<i>L. elongata</i>	-	-	-	-	-	1/0.3	1/0.3
<i>L. hispidula</i>	-	5/1.5	-	1/0.3	2/0.4	2/0.6	2/0.5
<i>L. striata</i>	1/0.2	2/0.6	-	2/0.5	2/0.4	1/0.3	1/0.3
<i>L. sulcata</i>	-	-	-	-	-	1/0.3	-
<i>L. sulcata laevicostata</i>	-	-	-	-	-	-	-
<i>L. sulcata spicata</i>	-	-	-	-	-	-	-
<i>L. spp.</i>	-	-	-	3/0.8	-	-	-
<i>Lenticulina</i> spp.	-	-	1/0.3	-	3/0.6	-	-
<i>Loxostomum pseudobeyrichi</i>	-	-	-	2/0.5	-	-	-
<i>Margulinina obesa</i>	-	-	-	-	-	-	1/0.3
<i>M. spp.</i>	-	-	1/0.3	-	-	-	-
<i>Martinottiella communis</i>	-	-	-	-	-	-	1/0.3
<i>Melonis barleeanus</i>	1/0.2	-	-	-	-	-	-

Table 4. Quantitative distribution (raw count/percentage) of benthonic foraminiferal species in core S3-15G (continued).

Species	Depth in Core (cm)						
	289.5- 292	310- 312	330- 332	336.5- 338	346.5- 349.5	369.5- 372.5	390- 393
<i>Melonis pompilioides</i>	3/0.7	6/1.8	1/0.3	2/0.5	4/0.7	11/3.2	13/3.5
<i>Miliolinella californica</i>	-	-	-	-	-	-	6/1.6
<i>Nodosaria tympanipectiformis</i> (?)	-	-	-	-	-	-	-
<i>Nonionella basispinata</i>	-	-	-	3/0.8	-	-	-
<i>N. decora</i>	-	-	-	-	-	-	-
<i>N. japonica mexicana</i>	-	-	-	-	-	-	-
<i>N. miocenica</i>	-	-	1/0.3	16/4.3	-	3/0.9	-
<i>N. stella</i>	-	-	-	-	-	-	-
<i>N. sp.</i>	-	-	-	-	-	-	-
<i>Oolina catenulata</i>	-	-	-	-	1/0.2	-	-
<i>O. melo</i>	1/0.2	-	1/0.3	2/0.5	1/0.2	1/0.3	-
<i>O. spp.</i>	-	-	-	-	-	-	-
<i>O. (?) sp.</i>	-	-	-	-	-	-	-
<i>Ondorsalis umbonatus</i>	10/2.2	7/2.1	60/18.1	2/0.5	40/7.4	8/2.3	8/2.1
<i>Parafissurina fusuliformis</i>	-	-	-	-	-	-	-
<i>P. kerguelensis</i>	-	3/0.9	-	-	1/0.2	-	-
<i>P. cf. P. kerguelensis</i>	5/1.1	-	4/1.2	3/0.8	3/0.8	-	-
<i>P. tectulostoma</i>	-	-	-	-	-	-	-
<i>P. spp.</i>	-	-	-	-	-	-	-
<i>Planulina omata</i>	1/0.2	-	-	-	-	-	-
<i>P. wuellerstorfi</i>	24/5.3	7/2.1	9/2.7	-	5/0.9	13/3.8	9/2.4
<i>Pullenia bulloides</i>	1/0.2	8/2.4	1/0.3	-	10/1.8	18/5.3	15/4.0
<i>P. quinqueloba</i>	-	-	-	-	-	-	-
<i>P. salisburyi</i>	1/0.2	5/1.5	-	1/0.3	2/0.4	1/0.3	1/0.3
<i>P. sp. A</i>	-	-	-	-	-	-	-
<i>P. sp. B</i>	-	-	-	-	-	-	-
<i>P. sp. C</i>	-	1/0.3	-	-	-	-	-
<i>Pyrgo depressa</i>	-	-	-	-	-	-	-
<i>P. murrhina</i>	-	-	-	-	-	-	-
<i>Quinqueloculina akneriana</i>	-	-	-	-	-	1/0.3	3/0.8
<i>Q. elongata</i>	-	-	-	-	2/0.4	-	-
<i>Q. spp.</i>	-	-	1/0.3	-	-	1/0.3	-
<i>Recurvoides</i> spp.	-	-	-	-	-	-	-
<i>Reophax communis</i>	-	-	-	-	-	-	-
<i>R. dentaliniformis</i>	-	-	-	-	-	-	-
<i>R. distans gracilis</i>	-	-	-	-	-	-	-
<i>R. (?) sp.</i>	-	-	-	-	-	-	-
<i>Robertina bradyi</i>	-	-	-	-	-	-	-
<i>Rosalina columbiensis</i>	-	5/1.5	-	1/0.3	1/0.2	1/0.3	20/5.3
<i>Saccamina spheca</i>	-	-	-	-	-	-	-
<i>Saracenaria</i> sp.	-	-	-	-	1/0.2	-	-
<i>Sigmolites</i> cf. <i>S. tenuis</i>	-	-	1/0.3	1/0.3	-	-	-
<i>S. sp.</i>	-	-	-	-	-	-	-
<i>Siphonotextularia catenata</i>	-	2/0.8	2/0.6	1/0.3	-	1/0.3	4/1.1
<i>Stainforthia complanata</i>	-	-	-	-	1/0.2	-	1/0.3
<i>S. nodosa</i>	-	3/0.9	-	2/0.5	-	1/0.3	-
<i>Stilosomella</i> cf. <i>S. lepidula</i>	-	-	-	-	-	-	-
<i>S. sp.</i>	-	-	-	-	-	-	-
<i>Suggrunda eckisi</i>	-	-	-	-	-	-	-
<i>Tritarina angulosa</i>	-	-	-	2/0.5	-	-	1/0.3

Table 4. Quantitative distribution (raw count/percentage) of benthonic foraminiferal species in core S3-15G (continued).

Species	Depth in Core (cm)						
	289.5- 292	310- 312	330- 332	336.5- 338	346.5- 349.5	369.5- 372.5	390- 393
<i>Trifarina hughesi</i>	-	-	-	-	-	-	-
<i>T. (?) sp.</i>	-	-	-	-	-	-	-
<i>Triloculina tricarinata</i>	-	-	-	1/0.3	-	2/0.6	2/0.5
<i>T. trigonula</i>	-	-	-	-	-	-	-
<i>Trochammina globigeriniformis</i>	-	-	-	-	-	-	-
<i>T. pacifica simplissima</i>	-	-	-	-	-	-	-
<i>Unigerrina hispida</i>	-	-	-	-	-	-	-
<i>U. juncea</i>	-	-	-	3/0.6	-	-	-
<i>U. peregrina</i>	1/0.2	1/0.3	3/0.9	15/4.0	-	2/0.6	-
<i>U. peregrina dirupta</i>	1/0.2	1/0.3	-	-	-	2/0.6	-
<i>U. proboscidea</i>	-	-	-	-	-	-	-
<i>U. senticosa</i>	283/61.9	110/32.6	81/24.4	22/5.9	199/36.6	94/27.4	102/27.1
<i>Valvulinera araucana</i>	21/4.6	22/6.5	29/8.7	4/1.1	31/5.7	-	4/1.1
<i>V. laevigata</i>	2/0.4	-	1/0.3	2/0.5	-	1/0.3	-
Unknowns	1/0.2	1/0.3	4/1.2	3/0.8	2/0.4	3/0.9	-
Total Specimens	457	337	332	375	544	343	377

Table 4. Quantitative distribution (raw count/percentage) of benthonic foraminiferal species in core S3-15G (continued).

Species	Depth in Core (cm)				
	410- 412.5	412- 414.5	430- 432.5	445- 447.5	467.5 469.5
-----					
<i>Anomalina globulosa</i>	-	-	-	-	-
<i>Astacolus</i> sp.	-	-	-	-	-
<i>Astrononion gallowayi</i>	-	-	-	-	-
<i>Bathysiphon</i> sp.	-	-	-	-	-
<i>Bolivina advena striatella</i>	-	-	-	-	-
-----					
<i>B. argentea</i>	1/0.2	9/1.2	-	-	-
<i>B. interjuncta bicostata</i>	-	-	-	-	-
<i>B. pacifica</i>	2/0.4	13/1.7	2/0.6	-	-
<i>B. seminuda</i>	-	4/0.5	-	-	-
<i>B. tongi filicostata</i>	-	-	-	-	-
-----					
<i>Buccella frigida</i>	-	11/1.5	-	-	-
<i>B. tenerrima</i>	-	6/0.8	-	-	-
<i>Bulimina denudata</i>	-	-	-	-	-
<i>B. pagoda</i>	-	-	-	-	-
<i>B. rostrata</i>	-	-	-	-	-
-----					
<i>B. striata mexicana</i>	1/0.2	3/0.4	-	-	-
<i>Buliminella curta</i>	1/0.2	7/0.9	-	-	-
<i>B. elegantissima</i>	-	5/0.7	-	-	-
<i>B. tenuata</i>	2/0.4	14/1.9	-	-	-
<i>Cassidulina cushmani</i>	-	10/1.3	-	-	-
-----					
<i>C. minuta</i>	119/24.3	186/24.9	119/35.3	34/8.6	6/-
<i>C. translucens</i>	-	3/0.4	-	-	-
<i>C. tumida</i>	-	-	-	-	-
<i>C. spp.</i>	-	1/0.1	-	-	-
<i>Cassidulinoides bradyi</i>	7/1.4	37/5.0	3/0.9	1/0.3	1/-
-----					
<i>Chilostomella oolina</i>	-	7/0.9	-	-	1/-
<i>C. ovoidea</i>	-	-	-	-	-
<i>C. spp.</i>	1/0.2	1/0.1	1/0.3	-	-
<i>Chilostomellina fimbriata</i>	-	4/0.5	-	-	-
<i>Cibicides lobatulus</i>	-	-	5/1.5	1/0.3	-
-----					
<i>C. mckannai</i>	-	-	-	-	-
<i>C. spp.</i>	-	-	-	-	-
<i>Cibicidoides kullenbergi</i>	-	-	1/0.3	-	-
<i>Cyclammina</i> sp.	-	-	-	1/0.3	-
<i>Dentalina californica</i>	-	-	-	-	-
-----					
<i>D. frobisherensis</i>	-	-	-	-	-
<i>D. mucronata</i>	-	-	-	-	-
<i>D. pauperata</i>	-	-	1/0.3	-	-
<i>D. spp.</i>	-	-	-	2/0.5	-
<i>Dyocibicides biserialis</i>	-	-	-	-	-
-----					
<i>D. sp.</i>	-	-	1/0.3	-	-
<i>Eggerella bradyi</i>	-	1/0.1	-	3/0.8	-
<i>E. spp.</i>	1/0.2	-	-	-	-
<i>Elphidium excavatum clavata</i>	-	22/3.0	-	-	-
<i>E. excavatum lidoensis</i>	-	-	-	-	-
-----					
<i>E. excavatum selseyensis</i>	7/1.4	71/9.5	-	-	-
<i>E. gunteri</i>	-	-	-	-	-
<i>E. magellanicum</i>	3/0.6	22/3.0	-	-	-
<i>E. spp.</i>	-	2/0.3	-	-	-
<i>Epistominella bradyana</i>	-	-	-	-	-
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Table 4. Quantitative distribution (raw count/percentage) of benthonic foraminiferal species in core S3-15G (continued).

Species	Depth in Core (cm)				
	410- 412.5	412- 414.5	430- 432.5	445- 447.5	467.5 469.5
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<i>Epistominella ovax</i>	-	-	-	-	-
<i>E. exigua</i>	-	4/0.5	-	-	-
<i>E. pacifica</i>	12/2.5	57/7.6	-	-	-
<i>E. smithi</i>	-	-	-	-	-
<i>Fissurina lagenoides</i>	-	-	-	-	-
<hr/>					
<i>F. lucida</i>	1/0.2	1/0.1	2/0.6	-	-
<i>F. marginata</i>	-	-	-	-	-
<i>F. spp.</i>	1/0.2	1/0.1	-	-	-
<i>Florilus labradoricus</i>	-	2/0.3	-	-	-
<i>Fronicularia</i> sp.	-	-	-	-	-
<hr/>					
<i>Fursenkoina cornuta</i>	-	1/0.1	-	-	-
<i>F. rotundata</i>	1/0.2	3/0.4	-	-	-
<i>F. seminuda</i>	-	2/0.3	-	-	-
<i>F. sp.</i>	-	-	-	-	-
<i>Globobulimina affinis</i>	69/14.1	57/7.6	46/13.7	89/23.0	15/-
<hr/>					
<i>G. barbata</i>	-	-	-	-	-
<i>G. cf. G. marginospinata</i>	-	-	-	-	-
<i>G. ovula</i>	-	3/0.4	1/0.3	-	-
<i>G. pacifica</i>	2/0.4	-	1/0.3	-	-
<i>G. spinifera</i>	-	3/0.4	-	-	-
<hr/>					
<i>G. spp.</i>	12/2.5	1/0.1	10/3.0	6/1.6	-
<i>Globocassidulina subglobosa</i>	1/0.2	-	-	1/0.3	-
<i>Gyroidina altiformis</i>	3/0.6	-	7/2.1	6/1.6	-
<i>G. gemma</i>	5/1.0	2/0.3	2/0.6	-	1/-
<i>G. cf. G. planulata</i>	7/1.4	4/0.5	5/1.5	8/2.1	2/-
<hr/>					
<i>G. quinqueloba</i>	-	-	-	-	-
<i>G. tumidulus</i>	1/0.2	1/0.1	-	1/0.3	-
<i>G. turgida</i>	-	-	-	-	-
<i>G. spp.</i>	-	-	2/0.6	-	-
<i>Hoeglundina elegans</i>	-	-	-	-	-
<hr/>					
<i>Jaculella acuta</i>	-	-	-	-	-
<i>Karrerella baccata</i>	-	-	-	-	-
<i>K. grammostomata</i>	27/5.5	13/1.7	10/3.0	19/4.9	4/-
<i>K. novangliae</i>	-	-	-	1/0.3	-
<i>Lagena acuticosta</i>	3/0.6	1/0.1	-	1/0.3	-
<hr/>					
<i>L. alcocki</i>	-	-	-	-	-
<i>L. distoma</i>	-	-	-	-	-
<i>L. elongata</i>	1/0.2	1/0.1	-	1/0.3	-
<i>L. hispidula</i>	3/0.6	1/0.1	-	27/0.5?	-
<i>L. striata</i>	-	3/0.4	-	-	-
<hr/>					
<i>L. sulcata</i>	-	-	-	-	-
<i>L. sulcata laevicostata</i>	-	-	-	-	-
<i>L. sulcata spicata</i>	-	-	-	-	-
<i>L. spp.</i>	-	-	-	-	-
<i>Lenticulina</i> spp.	-	-	-	-	-
<hr/>					
<i>Loxostomum pseudobeyrichi</i>	1/0.2	8/1.1	-	-	-
<i>Marginulina obesa</i>	-	-	-	-	-
<i>M. spp.</i>	-	-	-	-	-
<i>Martinottiella communis</i>	-	-	-	1/0.3	-
<i>Melonis barleeanus</i>	-	-	-	-	-
<hr/>					

Table 4. Quantitative distribution (raw count/percentage) of benthonic foraminiferal species in core S3-15G (continued).

Species	Depth in Core (cm)				
	410- 412.5	412- 414.5	430- 432.5	445- 447.5	467.5 469.5
<hr/>					
<i>Melonis pompilioides</i>	10/2.0	7/0.9	14/4.2	9/2.3	6/-
<i>Miliolinella californica</i>	1/0.2	1/0.1	-	1/0.3	-
<i>Nodosaria tympanipectiformis</i> (?)	-	-	-	-	-
<i>Nonionella basispinata</i>	1/0.2	1/0.1	-	-	-
<i>N. decora</i>	-	1/0.1	-	-	-
<hr/>					
<i>N. japonica mexicana</i>	-	-	-	-	-
<i>N. miocenica</i>	4/0.8	30/4.0	-	-	-
<i>N. stella</i>	-	4/0.5	-	-	-
<i>N. sp.</i>	-	1/0.1	10/3.0	-	-
<i>Oolina catenulata</i>	-	1/0.1	-	-	-
<hr/>					
<i>O. melo</i>	-	-	-	1/0.3	-
<i>O. spp.</i>	-	-	-	-	-
<i>O. (?) sp.</i>	-	-	-	-	-
<i>Oridorsalis umbonatus</i>	10/2.0	5/0.7	5/1.5	8/2.1	-
<i>Paralissurina fusuliformis</i>	-	-	-	-	-
<hr/>					
<i>P. kerguelensis</i>	2/0.4	-	-	-	-
<i>P. cf. P. kerguelensis</i>	-	2/0.3	-	-	-
<i>P. tectulostoma</i>	-	-	-	-	-
<i>P. spp.</i>	-	-	-	-	-
<i>Planulina ornata</i>	-	-	-	-	-
<hr/>					
<i>P. wuellerstorfi</i>	10/2.0	4/0.5	2/0.6	14/3.6	5/-
<i>Pullenia bulloides</i>	3/0.6	3/0.4	6/1.8	7/1.8	2/-
<i>P. quinqueloba</i>	-	-	-	-	-
<i>P. salisburyi</i>	4/0.8	4/0.5	1/0.3	1/0.3	1/-
<i>P. sp. A</i>	-	-	-	-	-
<hr/>					
<i>P. sp. B</i>	-	-	-	-	-
<i>P. sp. C</i>	-	1/0.1	-	-	-
<i>Pyrgo depressa</i>	-	-	-	-	-
<i>P. murrhina</i>	-	-	-	-	1/-
<i>Quinqueloculina akneriana</i>	2/0.4	1/0.1	-	2/0.5	-
<hr/>					
<i>Q. elongata</i>	-	-	-	-	-
<i>Q. spp.</i>	-	-	-	1/0.3	-
<i>Recurvoides</i> spp.	-	-	-	-	-
<i>Reophax communis</i>	-	-	-	-	-
<i>R. dentaliniformis</i>	-	-	-	-	-
<hr/>					
<i>R. distans gracilis</i>	-	-	-	-	-
<i>R. (?) sp.</i>	-	-	-	-	-
<i>Robertina bradyi</i>	-	-	-	-	-
<i>Rosalina columbiensis</i>	8/1.6	-	3/0.9	3/0.8	4/-
<i>Saccamina spherica</i>	-	-	-	-	-
<hr/>					
<i>Saracenaria</i> sp.	-	-	-	-	-
<i>Sigmoidina</i> cf. <i>S. tenuis</i>	-	-	-	-	-
<i>S. sp.</i>	-	-	-	-	-
<i>Siphonotextularia catenata</i>	4/0.8	1/0.1	3/0.9	5/1.3	-
<i>Stainforthia complanata</i>	3/0.6	1/0.1	-	-	-
<hr/>					
<i>S. nodosa</i>	-	4/0.5	4/1.2	-	2/-
<i>Stilostomella</i> cf. <i>S. lepidula</i>	-	-	-	-	-
<i>S. sp.</i>	-	-	-	-	-
<i>Suggrunda eckisi</i>	-	-	-	-	-
<i>Tritarina angulosa</i>	-	-	-	-	-
<hr/>					

Table 4. Quantitative distribution (raw count/percentage) of benthonic foraminiferal species in core S3-15G (continued).

Species	Depth in Core (cm)				
	410- 412.5	412- 414.5	430- 432.5	445- 447.5	467.5 469.5
<i>Trifarina hughesi</i>	-	-	-	-	-
<i>T. (?) sp.</i>	-	-	-	-	-
<i>Triloculina tricaninata</i>	5/1.0	7/0.9	-	1/0.3	1/-
<i>T. trigonula</i>	-	-	-	-	-
<i>Trochammina globigeriniformis</i>	-	-	-	-	-
<i>T. pacifica simplissima</i>	-	-	-	-	-
<i>Uvigerina hispida</i>	-	-	-	-	-
<i>U. juncea</i>	-	2/0.3	-	-	-
<i>U. peregrina</i>	-	6/0.8	-	-	-
<i>U. peregrina dirupta</i>	-	2/0.3	-	-	-
<i>U. proboscidea</i>	-	-	-	-	-
<i>U. senticosa</i>	117/23.9	39/5.2	69/20.5	156/40.3	29/-
<i>Valvulinena araucana</i>	7/1.4	5/0.7	1/0.3	-	-
<i>V. laevigata</i>	-	-	-	-	-
Unknowns	4/0.8	5/0.7	-	-	2/-
Total Specimens	490	746	337	387	63



Table 5. Quantitative distribution (raw count/percentage) of pyritized benthonic foraminiferal species in core S3-15G. Abundances recorded as absolute numbers of pyritized species counted and as a percentage of the total (pyritized and non-pyritized) number of species recovered in each sample.

Species	Depth in Core (cm)						
	0 - 4	20 - 23.5	40 - 43	46 - 48	60 - 63	80 - 83	96.5 - 100
<i>Anomalina globulosa</i>	-	-	-	-	-	-	-
<i>Astacolus</i> sp.	-	-	-	-	-	-	-
<i>Astrononion gallowayi</i>	-	-	-	-	-	-	-
<i>Bathysiphon</i> sp.	-	-	-	-	-	-	-
<i>Bolivina advena striatella</i>	-	-	-	-	-	-	-
<i>B. argentea</i>	-	-	-	5/50.0	-	-	-
<i>B. interjuncta bicostata</i>	-	-	-	-	-	-	-
<i>B. pacifica</i>	-	-	-	-	-	-	-
<i>B. seminuda</i>	-	-	-	-	-	-	-
<i>B. tongi filicostata</i>	-	-	-	-	-	-	-
<i>Buccella frigida</i>	-	-	-	-	-	-	-
<i>B. tenerrima</i>	-	-	-	-	-	-	-
<i>Bulimina denudata</i>	-	-	-	-	-	-	-
<i>B. pagoda</i>	-	-	-	-	-	-	-
<i>B. rostrata</i>	-	-	-	-	-	-	-
<i>B. striata mexicana</i>	-	-	-	5/50.0	-	-	-
<i>Buliminella curta</i>	-	-	-	-	-	-	-
<i>B. elegantissima</i>	-	-	-	-	-	-	-
<i>B. tenuata</i>	-	-	-	64/41.6	2/40.0	-	-
<i>Cassidulina cushmani</i>	-	-	-	-	-	-	-
<i>C. minuta</i>	-	-	-	-	-	-	-
<i>C. translucens</i>	-	-	-	-	-	-	-
<i>C. tumida</i>	-	-	-	-	-	-	-
<i>C. spp.</i>	-	-	-	1/100.0	-	-	-
<i>Cassidulinoides bradyi</i>	-	-	-	6/75.0	-	-	-
<i>Chilostomella oolina</i>	-	-	-	-	-	-	-
<i>C. ovoidea</i>	-	-	-	-	-	-	-
<i>C. spp.</i>	-	-	-	1/50.0	-	-	-
<i>Chilostomellina fimbriata</i>	-	-	-	-	-	-	-
<i>Cibicides lobatulus</i>	-	-	-	-	-	-	-
<i>C. mckennai</i>	-	-	-	-	-	-	-
<i>C. spp.</i>	-	-	1/50.0	1/100.0	-	-	-
<i>Cibicidoides kullenbergi</i>	-	-	-	-	-	-	1/100.0
<i>Cyclammina</i> sp.	-	-	-	-	-	-	-
<i>Dentalina californica</i>	-	-	-	-	-	-	-
<i>D. frobisherensis</i>	-	-	-	-	-	-	-
<i>D. mucronata</i>	-	-	-	-	-	-	-
<i>D. pauperata</i>	-	-	-	-	-	-	-
<i>D. spp.</i>	-	-	-	-	-	-	-
<i>Dyocibicides biserialis</i>	-	-	-	-	-	-	-
<i>D. sp.</i>	-	-	-	-	-	-	-
<i>Eggerella bradyi</i>	-	-	-	-	-	-	-
<i>E. spp.</i>	-	-	-	-	-	-	-
<i>Elphidium excavatum clavata</i>	-	-	-	1/100.0	-	-	-
<i>E. excavatum lidoensis</i>	-	-	-	-	-	-	-
<i>E. excavatum selseyensis</i>	-	-	-	-	-	-	-
<i>E. gunteri</i>	-	-	-	-	-	-	-
<i>E. magellanicum</i>	-	-	-	-	-	-	-
<i>E. spp.</i>	-	-	-	-	-	-	-
<i>Epistominella bradyana</i>	-	-	-	-	-	-	-

Table 5. Quantitative distribution (raw count/percentage) of pyritized benthonic foraminiferal species in core S3-15G (continued).

Species	Depth in Core (cm)						
	0- 4	20- 23.5	40- 43	46- 48	60- 63	80- 83	96.5- 100
<i>Epistominella evax</i>	-	-	-	-	-	-	-
<i>E. exigua</i>	-	-	-	-	-	-	-
<i>E. pacifica</i>	-	-	-	36/62.1	-	-	-
<i>E. smithi</i>	-	-	-	2/66.7	-	-	-
<i>Fissurina lagenoides</i>	-	-	-	-	-	-	-
<i>F. lucida</i>	-	-	-	-	-	-	-
<i>F. marginata</i>	-	-	-	-	-	-	-
<i>F. spp.</i>	-	-	-	1/100.0	1/50.0	1/20.0	-
<i>Florilus labradoricus</i>	-	-	-	-	-	-	-
<i>Frondicularia</i> sp.	-	-	-	-	-	-	-
<i>Fursenkoina cornuta</i>	-	-	-	-	-	-	-
<i>F. rotundata</i>	-	-	-	-	-	-	-
<i>F. seminuda</i>	-	-	-	-	-	-	-
<i>F. sp.</i>	-	-	-	1/100.0	-	-	-
<i>Globobulimina affinis</i>	-	-	8/16.0	1/6.7	3/13.0	5/31.3	3/13.6
<i>G. barbata</i>	-	-	-	-	-	-	1/100.0
<i>G. cf. G. marginospinata</i>	-	-	-	-	-	-	-
<i>G. ovula</i>	-	-	-	-	-	-	-
<i>G. pacifica</i>	-	-	-	-	-	-	-
<i>G. spinifera</i>	-	-	-	-	-	-	-
<i>G. spp.</i>	-	-	-	-	-	-	-
<i>Globocassidulina subglobosa</i>	-	-	-	-	-	-	-
<i>Gyroidina altiformis</i>	-	-	-	1/50.0	-	-	-
<i>G. gemma</i>	-	-	-	3/50.0	-	-	1/11.1
<i>G. cf. G. planulata</i>	-	-	1/33.3	2/66.7	-	1/25.0	4/44.4
<i>G. quinqueloba</i>	-	-	-	-	-	1/25.0	-
<i>G. tumidulus</i>	-	-	-	-	-	-	-
<i>G. turgida</i>	-	-	-	-	-	-	-
<i>G. spp.</i>	-	-	-	-	-	-	-
<i>Hoeglundina elegans</i>	-	-	-	-	-	38/55.1	-
<i>Jacutella acuta</i>	-	-	-	-	-	-	-
<i>Karreriella baccata</i>	-	-	-	-	-	-	-
<i>K. grammostomata</i>	-	-	-	-	-	-	-
<i>K. novangliae</i>	-	-	-	-	-	-	-
<i>Lagena acuticosta</i>	-	-	-	-	-	-	-
<i>L. alcocki</i>	-	-	-	-	-	-	-
<i>L. distoma</i>	-	-	-	-	-	-	-
<i>L. elongata</i>	-	-	-	2/66.7	-	-	-
<i>L. hispidula</i>	-	-	-	-	-	-	-
<i>L. striata</i>	-	-	-	-	-	-	-
<i>L. sulcata</i>	-	-	-	-	-	-	-
<i>L. sulcata laevicostata</i>	-	-	-	-	-	-	-
<i>L. sulcata spicata</i>	-	-	-	-	-	-	-
<i>L. spp.</i>	-	-	-	-	-	-	-
<i>Lenticulina</i> spp.	-	-	-	-	-	-	-
<i>Loxostomum pseudobeyrichi</i>	-	-	-	-	-	-	-
<i>Marginulina obesa</i>	-	1/100.0	-	-	-	-	-
<i>M. spp.</i>	-	-	-	-	-	-	-
<i>Martinottiella communis</i>	-	-	-	-	-	-	-
<i>Melonis barleeanus</i>	1/100.0	-	-	-	-	1/10.0	-

Table 5. Quantitative distribution (raw count/percentage) of pyritized benthonic foraminiferal species in core S3-15G (continued).

Species	Depth in Core (cm)						
	0 - 4	20 - 23.5	40 - 43	46 - 48	60 - 63	80 - 83	96.5 - 100
<i>Melonis pompilioides</i>	-	-	2/22.2	5/71.4	3/30.0	7/10.9	16/18.4
<i>Miliolinella californica</i>	-	-	-	-	-	-	-
<i>Nodosaria tympanipectiliformis</i> (?)	-	-	-	-	-	-	-
<i>Nonionella basispinata</i>	-	-	-	-	-	-	-
<i>N. decora</i>	-	-	-	-	-	-	-
<i>N. japonica mexicana</i>	-	-	-	-	-	-	-
<i>N. miocenica</i>	-	-	-	-	-	-	-
<i>N. stella</i>	-	-	-	-	-	-	-
<i>N. sp.</i>	-	-	1/100.0	-	-	-	-
<i>Oolina catenulata</i>	-	-	-	-	-	-	-
<i>O. melo</i>	-	-	-	-	-	-	-
<i>O. spp.</i>	-	-	-	-	-	-	-
<i>O. (?) sp.</i>	-	-	-	-	-	-	-
<i>Oridosalis umbonatus</i>	-	-	-	3/75.0	-	-	-
<i>Parafissurina fusuliformis</i>	-	-	-	-	-	-	-
<i>P. kerguelensis</i>	-	-	-	-	-	-	-
<i>P. cf. P. kerguelensis</i>	-	-	-	-	-	-	-
<i>P. tectulostoma</i>	-	-	-	-	-	-	-
<i>P. spp.</i>	-	-	-	-	-	-	-
<i>Planulina ornata</i>	-	-	-	-	-	-	-
<i>P. wuellerstorfi</i>	-	-	-	-	-	1/100.0	-
<i>Pullenia bulloides</i>	-	-	-	2/66.7	-	-	-
<i>P. quinqueloba</i>	-	-	-	-	-	-	-
<i>P. salisburyi</i>	-	-	-	-	-	-	-
<i>P. sp. A</i>	-	-	-	-	-	1/100.0	-
<i>P. sp. B</i>	-	-	-	-	-	-	-
<i>P. sp. C</i>	-	-	-	-	-	-	-
<i>Pyrgo depressa</i>	-	-	-	-	-	-	-
<i>P. murrhina</i>	-	-	-	-	-	-	-
<i>Quinqueloculina akneriana</i>	-	-	-	-	-	-	-
<i>Q. elongata</i>	-	-	-	-	-	-	-
<i>Q. spp.</i>	-	-	-	-	-	-	-
<i>Recurvoides spp.</i>	-	-	-	-	-	-	-
<i>Reophax communis</i>	-	-	-	-	-	-	-
<i>R. dentaliniformis</i>	-	-	-	-	-	-	-
<i>R. distans gracilis</i>	-	-	-	-	-	-	-
<i>R. (?) sp.</i>	-	-	-	-	-	-	-
<i>Robertina bradyi</i>	-	-	-	-	-	-	-
<i>Rosalina columbiensis</i>	-	-	-	-	-	-	2/66.7
<i>Saccamina sphenica</i>	-	-	-	-	-	-	-
<i>Saracenaria sp.</i>	-	-	-	-	-	-	-
<i>Sigmoilina cf. S. tenuis</i>	-	-	-	-	-	-	-
<i>S. sp.</i>	-	-	-	-	-	-	-
<i>Siphonotextularia catenata</i>	-	-	-	-	-	-	-
<i>Stainforthia complanata</i>	-	-	-	-	-	-	-
<i>S. nodosa</i>	-	-	-	-	-	-	-
<i>Stilostomella cf. S. lepidula</i>	-	-	-	-	-	-	-
<i>S. sp.</i>	-	-	-	-	-	-	-
<i>Suggrunda eckisi</i>	-	-	-	-	-	-	-
<i>Trifarina angulosa</i>	-	-	-	1/50.0	-	-	-

Table 5. Quantitative distribution (raw count/percentage) of pyritized benthonic foraminiferal species in core S3-15G (continued).

Species	Depth in Core (cm)						
	0 - 4	20 - 23.5	40 - 43	46 - 48	60 - 63	80 - 83	96.5 - 100
<i>Trifarina hughesi</i>	-	-	-	-	-	-	-
<i>T. (?) sp.</i>	-	-	-	-	-	-	-
<i>Triloculina tricarinata</i>	-	-	-	-	-	-	-
<i>T. trigonula</i>	-	-	-	-	-	-	-
<i>Trochammina globigeriniformis</i>	-	-	-	-	-	-	-
<i>T. pacifica simplissima</i>	-	-	-	-	-	-	-
<i>Uvigerina hispida</i>	-	-	-	6/40.0	-	-	-
<i>U. juncea</i>	-	-	-	4/40.0	-	-	-
<i>Uvigerina peregrina</i>	-	-	-	6/85.7	-	-	-
<i>U. peregrina disrupta</i>	-	-	-	-	-	-	-
<i>U. proboscidea</i>	-	-	-	2/100.0	-	-	-
<i>U. senticosa</i>	-	-	1/3.5	3/21.4	4/8.7	5/5.0	4/3.0
<i>Valvulineria araucana</i>	-	-	-	-	-	-	-
<i>V. laevigata</i>	-	-	-	-	-	-	-
Unknowns	-	-	-	1/50.0	-	-	1/33.3
Total Pyritized Specimens	1	1	14	166	13	61	33
Total Specimens	8	253	106	368	106	303	334
% Pyritized Specimens	12.5	0.4	13.2	45.1	12.3	20.1	9.9

Table 5. Quantitative distribution (raw count/percentage) of pyritized benthonic foraminiferal species in core S3-15G (continued).

Species	Depth in Core (cm)						
	120- 122	128- 130	130- 132	133.5- 136.5	139- 143	152.5- 154.5	167.5- 170
<i>Anomalina globulosa</i>	-	-	-	-	-	-	-
<i>Astelcolus</i> sp.	-	-	-	-	-	-	-
<i>Astrononion gallowayi</i>	-	-	-	-	-	-	-
<i>Bathysiphon</i> sp.	-	-	-	-	-	-	-
<i>Botivina advena striatella</i>	-	-	-	-	-	-	-
<hr/>							
<i>B. argentea</i>	-	-	-	13/86.7	-	-	-
<i>B. interjuncta bicostata</i>	-	-	-	1/100.0	-	-	-
<i>B. pacifica</i>	-	-	-	-	-	-	-
<i>B. seminuda</i>	-	-	-	5/71.4	-	-	-
<i>B. tongi filicostata</i>	-	-	-	-	-	-	-
<hr/>							
<i>Buccella frigida</i>	-	-	-	-	-	-	-
<i>B. tenerrima</i>	-	-	-	-	-	-	-
<i>Bulimina denudata</i>	-	-	-	-	-	-	-
<i>B. pagoda</i>	-	-	-	1/50.0	-	-	-
<i>B. rostrata</i>	-	1/100.0	-	-	-	-	1/50.0
<hr/>							
<i>B. striata mexicana</i>	-	-	-	6/54.6	-	-	-
<i>Buliminella curta</i>	-	-	-	-	-	-	-
<i>B. elegantissima</i>	-	-	-	-	-	-	-
<i>B. tenuata</i>	1/100.0	1/100.0	-	16/84.2	-	-	3/31.3
<i>Cassidulina cushmani</i>	-	-	-	8/72.7	-	-	-
<hr/>							
<i>C. minuta</i>	-	-	-	10/50.0	2/15.4	1/25.0	2/20.0
<i>C. translucens</i>	-	-	-	-	-	-	-
<i>C. tumida</i>	-	-	-	-	-	-	-
<i>C. spp.</i>	-	-	-	-	-	-	-
<i>Cassidulinoides bradyi</i>	-	-	-	-	-	-	-
<hr/>							
<i>Chilostomella oolina</i>	-	1/50.0	-	4/80.0	-	-	-
<i>C. ovoidea</i>	-	-	-	-	-	-	-
<i>C. spp.</i>	-	-	-	-	-	-	-
<i>Chilostomellina fimbriata</i>	-	-	-	-	-	-	-
<i>Cibicides lobatulus</i>	-	-	-	-	-	-	-
<hr/>							
<i>C. mckennai</i>	-	-	-	-	-	-	-
<i>C. spp.</i>	-	-	-	2/66.7	-	-	-
<i>Cibicidoides kullenbergi</i>	-	-	-	-	-	2/50.0	2/18.2
<i>Cyclammina</i> sp.	-	-	-	-	-	-	-
<i>Dentalina californica</i>	-	-	-	1/100.0	-	-	-
<hr/>							
<i>D. frobisherensis</i>	-	-	-	-	-	-	-
<i>D. mucronata</i>	-	-	-	1/100.0	-	-	-
<i>D. pauperata</i>	-	-	-	-	-	-	-
<i>D. spp.</i>	-	-	-	2/100.0	-	-	-
<i>Dyocibicides biserialis</i>	-	-	-	-	-	-	-
<hr/>							
<i>D. sp.</i>	-	-	-	-	-	-	-
<i>Eggerella bradyi</i>	-	-	-	-	-	-	-
<i>E. spp.</i>	-	-	-	-	-	-	-
<i>Elphidium excavatum clavata</i>	-	-	-	-	-	-	-
<i>E. excavatum lidoensis</i>	-	-	-	-	-	-	-
<hr/>							
<i>E. excavatum selseyensis</i>	-	-	-	11/78.6	-	-	-
<i>E. gunteri</i>	-	-	-	-	-	-	-
<i>E. magellanicum</i>	-	-	-	-	-	-	-
<i>E. spp.</i>	-	-	-	-	-	-	-
<i>Epistominella bradyana</i>	-	-	-	1/100.0	-	-	-

Table 5. Quantitative distribution (raw count/percentage) of pyritized benthonic foraminiferal species in core S3-15G (continued).

Species	Depth in Core (cm)						
	120- 122	128- 130	130- 132	133.5- 136.5	139- 143	152.5- 154.5	167.5- 170
<i>Epistominella ovax</i>	-	-	-	-	-	-	-
<i>E. exigua</i>	-	-	-	2/100.0	-	-	-
<i>E. pacifica</i>	-	-	-	5/100.0	-	-	-
<i>E. smithi</i>	-	-	-	9/81.8	-	-	-
<i>Fissurina lagenoides</i>	-	-	-	-	-	-	-
<i>F. lucida</i>	-	-	-	-	-	-	-
<i>F. marginata</i>	-	-	-	-	-	-	-
<i>F. spp.</i>	1/12.5	1/20.0	-	-	-	1/100.0	-
<i>Florilus labradoricus</i>	-	-	-	-	-	-	-
<i>Fronicularia</i> sp.	-	-	-	-	-	-	-
<i>Fursenkoina cornuta</i>	-	-	-	11/84.6	-	-	-
<i>F. rotundata</i>	-	-	-	4/80.0	-	-	-
<i>F. seminuda</i>	-	-	-	2/100.0	-	-	-
<i>F. sp.</i>	-	-	-	-	-	-	-
<i>Globobulimina affinis</i>	-	6/23.1	1/14.3	7/63.6	-	8/14.8	12/27.9
<i>G. barbaia</i>	1/33.3	-	-	-	1/25.0	2/50.0	2/22.2
<i>G. cf. G. marginospinata</i>	-	-	-	3/100.0	-	-	-
<i>G. ovula</i>	-	-	-	-	-	-	-
<i>G. pacifica</i>	1/50.0	-	-	1/25.0	-	-	-
<i>G. spinifera</i>	-	-	-	-	-	-	-
<i>G. spp.</i>	1/25.0	-	-	-	-	-	-
<i>Globocassidulina subglobosa</i>	-	-	-	2/66.7	-	-	-
<i>Gyroldina altiformis</i>	2/18.2	2/28.6	-	-	1/11.1	-	2/20.0
<i>G. gemma</i>	1/20.0	-	-	2/100.0	-	1/20.0	-
<i>G. cf. G. planulata</i>	-	-	-	1/50.0	7/26.9	6/31.6	7/20.0
<i>G. quinqueloba</i>	-	-	-	-	-	-	-
<i>G. tumidulus</i>	1/33.3	-	-	-	-	-	4/80.0
<i>G. turgida</i>	-	-	-	-	-	-	-
<i>G. spp.</i>	-	-	-	-	-	-	-
<i>Hoeglundina elegans</i>	-	-	-	-	-	6/66.7	2/28.6
<i>Jaculella acuta</i>	-	-	-	-	-	-	-
<i>Karrerella baccata</i>	-	-	-	-	-	-	-
<i>K. grammostomata</i>	2/13.3	1/25.0	-	-	2/50.0	3/50.0	-
<i>K. novangliae</i>	-	-	-	-	-	-	-
<i>Lagena acuticosta</i>	-	-	-	-	1/100.0	-	-
<i>L. alcocki</i>	-	-	-	1/100.0	-	-	-
<i>L. distoma</i>	-	-	-	2/66.7	-	-	-
<i>L. elongata</i>	-	-	-	-	-	-	-
<i>L. hispidula</i>	-	-	-	-	-	-	-
<i>L. striata</i>	-	-	-	-	-	-	-
<i>L. sulcata</i>	-	-	-	-	-	-	1/100.0
<i>L. sulcata laevicostata</i>	-	-	-	-	-	-	-
<i>L. sulcata spicata</i>	-	-	-	1/100.0	-	-	-
<i>L. spp.</i>	-	-	-	-	-	-	-
<i>Lenticulina</i> spp.	-	-	-	-	-	-	-
<i>Loxostomum pseudobeyrichi</i>	-	-	-	24/68.6	-	-	-
<i>Marginulina obesa</i>	-	-	-	-	-	-	-
<i>M. spp.</i>	-	-	-	-	1/100.0	-	1/100.0
<i>Martinottiella communis</i>	-	-	-	-	-	-	-
<i>Melonis barleeanus</i>	2/33.3	-	-	1/100.0	10/31.3	3/42.9	5/55.6

Table 5. Quantitative distribution (raw count/percentage) of pyritized benthonic foraminiferal species in core S3-15G (continued).

Species	Depth in Core (cm)						
	120- 122	128- 130	130- 132	133.5- 136.5	139- 143	152.5- 154.5	167.5- 170
<i>Melonis pompilioides</i>	25/27.5	12/21.1	2/12.5	5/45.5	16/17.6	25/25.0	8/5.8
<i>Miliolinella californica</i>	-	-	-	-	-	-	-
<i>Nodosaria tympanipectiformis</i> (?)	-	-	-	-	-	-	-
<i>Nonionella basispinata</i>	-	-	-	-	-	-	-
<i>N. decora</i>	-	-	-	-	-	-	-
<i>N. japonica mexicana</i>	-	-	-	2/100.0	-	-	-
<i>N. miocenica</i>	-	-	-	6/50.0	-	-	-
<i>N. stella</i>	-	-	-	-	-	-	-
<i>N. sp.</i>	-	1/100.0	-	-	-	-	-
<i>Oolina catenulata</i>	-	-	-	-	-	-	-
<i>O. melo</i>	-	-	-	1/50.0	-	-	-
<i>O. spp.</i>	-	-	-	-	-	-	-
<i>O. (?) sp.</i>	-	-	-	-	-	1/100.0	-
<i>Oridorsalis umbonatus</i>	-	-	-	-	-	1/14.3	3/17.7
<i>Parafissurina fusuliformis</i>	-	-	-	-	-	-	-
<i>P. kerguelensis</i>	-	-	-	-	-	-	-
<i>P. cf. P. kerguelensis</i>	-	-	-	-	-	-	-
<i>P. tectulostoma</i>	-	-	-	-	-	-	-
<i>P. spp.</i>	-	-	-	3/50.0	1/50.0	-	-
<i>Planulina omata</i>	-	-	-	-	-	-	-
<i>P. wuellerstorfi</i>	2/15.4	1/11.1	-	1/33.3	-	4/36.4	6/23.1
<i>Pullenia bulloides</i>	-	-	-	1/100.0	-	-	2/66.7
<i>P. quinqueloba</i>	-	-	-	-	-	-	-
<i>P. salisburyi</i>	-	-	-	1/25.0	2/66.7	-	1/100.0
<i>P. sp. A</i>	-	-	-	-	-	-	-
<i>P. sp. B</i>	1/100.0	-	-	-	-	-	-
<i>P. sp. C</i>	-	-	-	-	-	-	-
<i>Pyrgo depressa</i>	-	-	-	-	-	-	-
<i>P. murrhina</i>	-	-	-	-	-	-	-
<i>Quinqueloculina akneriana</i>	-	-	-	-	-	-	-
<i>Q. elongata</i>	-	-	-	-	-	-	-
<i>Q. spp.</i>	-	-	-	-	-	-	-
<i>Recurvoides spp.</i>	-	-	-	-	-	-	-
<i>Reophax communis</i>	-	-	-	-	-	-	-
<i>R. dentaliniformis</i>	-	-	-	-	-	-	-
<i>R. distans gracilis</i>	-	-	-	-	-	-	-
<i>R. (?) sp.</i>	-	-	-	-	-	-	-
<i>Robertina bradyi</i>	-	-	-	-	-	-	-
<i>Rosalina columbiensis</i>	-	2/33.3	1/20.0	2/50.0	-	1/14.3	2/28.6
<i>Saccamina sphenica</i>	-	-	-	-	-	-	-
<i>Saracenaria sp.</i>	-	-	-	-	-	-	-
<i>Sigmoilina cf. S. tenuis</i>	-	-	-	-	-	-	-
<i>S. sp.</i>	-	-	-	-	-	-	-
<i>Siphotextularia catenata</i>	-	-	-	-	-	-	-
<i>Stainforthia complanata</i>	-	-	-	-	-	-	-
<i>S. nodosa</i>	-	-	-	-	-	-	-
<i>Stilostomella cf. S. lepidula</i>	-	-	-	1/100.0	-	-	-
<i>S. sp.</i>	-	-	-	-	-	-	-
<i>Suggrunda eckisi</i>	-	-	-	10/83.3	-	-	-
<i>Trifarina angulosa</i>	-	-	-	-	-	-	-

Table 5. Quantitative distribution (raw count/percentage) of pyritized benthonic foraminiferal species in core S3-15G (continued).

Species	Depth in Core (cm)						
	120- 122	128- 130	130- 132	133.5- 136.5	139- 143	152.5- 154.5	167.5- 170
<i>Trifarina hughesi</i>	-	-	-	-	-	-	-
<i>T. (?) sp.</i>	-	-	-	1/100.0	-	-	-
<i>Triloculina tricarinata</i>	-	-	-	1/100.0	-	-	-
<i>T. trigonula</i>	-	-	-	-	-	-	-
<i>Trochammina globigeriniformis</i>	-	-	-	-	-	-	-
<i>T. pacifica simplissima</i>	-	-	-	-	-	-	-
<i>Uvigerina hispida</i>	-	-	-	-	-	-	-
<i>U. juncea</i>	-	-	-	6/80.0	-	-	-
<i>U. peregrina</i>	-	-	-	6/54.6	-	-	-
<i>U. peregrina dirupta</i>	-	-	-	-	-	-	-
<i>U. proboscidea</i>	-	-	-	7/100.0	-	-	-
<i>U. senticosa</i>	9/9.3	1/1.8	-	11/42.3	3/3.3	2/3.7	5/2.9
<i>Valvulineria araucana</i>	-	-	-	-	-	-	2/28.6
<i>V. laevigata</i>	-	-	-	5/71.4	-	-	-
Unknowns	-	-	-	6/100.0	-	-	-
Total Pyritized Specimens	50	30	4	236	47	67	73
Total Specimens	329	225	69	378	409	325	606
% Pyritized Specimens	15.2	13.3	5.8	62.4	11.5	20.6	12.1



Table 5. Quantitative distribution (raw count/percentage) of pyritized benthonic foraminiferal species in core S3-15G (continued).

Species	Depth in Core (cm)						
	171- 173	180- 182	189.5- 192	210- 212	230- 232	248- 250	270- 272
<i>Anomalina globulosa</i>	-	-	-	-	-	-	-
<i>Astacolus</i> sp.	-	-	-	-	-	-	-
<i>Astrononion gallowayi</i>	-	-	-	-	-	-	-
<i>Bathysiphon</i> sp.	-	-	-	-	-	-	-
<i>Bolivina advena striatella</i>	-	-	-	-	-	5/33.3	-
<i>B. argentea</i>	7/18.0	38/35.2	-	-	11/39.3	29/40.9	-
<i>B. interjuncta bicostata</i>	3/100.0	2/40.0	-	-	-	3/100.0	-
<i>B. pacifica</i>	4/66.7	-	-	-	-	-	-
<i>B. seminuda</i>	2/100.0	-	-	-	6/42.9	8/66.7	1/100.0
<i>B. tongi filicostata</i>	-	-	-	-	-	-	-
<i>Buccella frigida</i>	1/50.0	1/50.0	-	-	2/40.0	1/50.0	-
<i>B. tenerrima</i>	-	-	-	-	-	1/33.3	-
<i>Bulimina denudata</i>	-	-	-	-	-	-	-
<i>B. pagoda</i>	-	3/75.0	-	-	-	-	-
<i>B. rostrata</i>	-	-	-	-	2/66.7	-	1/100.0
<i>B. striata mexicana</i>	2/100.0	22/75.9	-	-	19/65.5	13/56.5	-
<i>Buliminella curta</i>	-	-	-	-	-	-	-
<i>B. elegantissima</i>	-	-	-	-	-	-	-
<i>B. tenuata</i>	13/33.3	77/55.4	-	-	36/75.0	8/50.0	3/60.0
<i>Cassidulina cushmani</i>	1/100.0	2/33.3	-	-	16/80.0	5/62.5	-
<i>C. minuta</i>	-	12/33.3	3/33.3	3/17.7	20/50.0	2/14.3	1/14.3
<i>C. translucens</i>	-	-	-	-	-	1/33.3	-
<i>C. tumida</i>	-	-	-	-	-	1/100.0	-
<i>C. spp.</i>	-	-	-	-	-	1/100.0	-
<i>Cassidulinoides bradyi</i>	6/54.6	7/43.8	-	-	7/87.5	2/66.7	1/100.0
<i>Chilostomella oolina</i>	2/50.0	1/8.3	-	-	-	-	-
<i>C. ovoidea</i>	-	-	-	-	-	1/100.0	-
<i>C. spp.</i>	1/100.0	-	-	-	-	1/100.0	-
<i>Chilostomellina fimbriata</i>	4/57.1	3/60.0	-	-	-	1/33.3	-
<i>Cibicides lobatulus</i>	-	-	-	2/10.0	-	-	1/50.0
<i>C. mckennai</i>	-	-	-	-	-	-	-
<i>C. spp.</i>	1/50.0	-	-	1/33.3	-	-	1/100.0
<i>Cibicidoides kullenbergi</i>	-	4/100.0	-	1/25.0	1/50.0	-	-
<i>Cyclammina</i> sp.	-	-	-	-	-	-	-
<i>Dentalina californica</i>	-	-	-	-	-	-	-
<i>D. frobisherensis</i>	-	-	-	-	-	-	-
<i>D. mucronata</i>	-	-	-	-	-	-	-
<i>D. pauperata</i>	-	-	-	-	-	-	-
<i>D. spp.</i>	-	-	-	-	-	-	-
<i>Dyocibicides biserialis</i>	-	-	-	-	-	-	-
<i>D. sp.</i>	-	-	-	-	-	-	-
<i>Eggerella bradyi</i>	-	-	-	-	5/100.0	-	-
<i>E. spp.</i>	-	-	-	-	-	-	-
<i>Elphidium excavatum clavata</i>	-	-	-	-	-	8/88.9	-
<i>E. excavatum lidoensis</i>	-	-	-	-	-	2/100.0	-
<i>E. excavatum seiseyensis</i>	4/100.0	3/60.0	-	-	10/100.0	-	-
<i>E. gunteri</i>	-	-	-	-	-	-	-
<i>E. magellanicum</i>	-	1/33.3	-	-	-	-	1/100.0
<i>E. spp.</i>	-	-	-	-	-	-	-
<i>Epistominella bradyana</i>	-	-	-	-	-	1/100.0	-

Table 5. Quantitative distribution (raw count/percentage) of pyritized benthonic foraminiferal species in core S3-15G (continued).

Species	Depth in Core (cm)						
	171- 173	180- 182	189.5- 192	210- 212	230- 232	248- 250	270- 272
<i>Epistominella ovax</i>	-	-	-	-	-	-	-
<i>E. exigua</i>	1/50.0	-	-	-	2/66.7	-	-
<i>E. pacifica</i>	8/50.0	13/68.4	-	1/33.3	49/66.2	49/47.6	1/100.0
<i>E. smithi</i>	7/63.6	36/67.9	-	-	32/74.4	7/70.0	1/100.0
<i>Fissurina lagenoides</i>	-	-	-	-	-	-	-
<i>F. lucida</i>	-	-	-	1/25.0	-	-	-
<i>F. marginata</i>	-	-	-	-	-	-	-
<i>F. spp.</i>	-	1/10.0	-	-	-	-	-
<i>Florilus labradoricus</i>	-	-	-	-	1/100.0	-	-
<i>Fronicularia</i> sp.	-	-	-	-	-	-	-
<i>Fursenkoina cornuta</i>	1/50.0	8/57.1	-	-	1/50.0	-	-
<i>F. rotundata</i>	3/37.5	-	-	-	-	-	-
<i>F. seminuda</i>	2/66.7	-	-	-	-	-	-
<i>F. sp.</i>	-	-	-	-	-	-	-
<i>Globobulimina affinis</i>	3/33.3	11/26.8	1/25.0	-	2/18.2	-	1/5.6
<i>G. barbata</i>	1/50.0	11/42.3	-	2/22.2	6/60.0	1/33.3	-
<i>G. cf. G. marginospinata</i>	1/50.0	-	-	-	-	-	-
<i>G. ovula</i>	-	-	-	-	1/100.0	3/20.0	-
<i>G. pacifica</i>	1/25.0	-	-	-	-	-	-
<i>G. spinifera</i>	-	-	-	-	-	2/100.0	-
<i>G. spp.</i>	-	2/28.6	-	-	1/100.0	1/100.0	1/33.3
<i>Globocassidulina subglobosa</i>	-	-	-	1/100.0	2/33.3	-	-
<i>Gyroidina altiformis</i>	-	1/5.6	-	1/11.1	-	-	1/33.3
<i>G. gemma</i>	-	3/27.3	-	1/50.0	3/60.0	-	3/60.0
<i>G. cf. G. planulata</i>	2/33.3	43/34.1	4/13.8	11/15.9	3/30.0	1/50.0	8/47.1
<i>G. quinqueloba</i>	-	-	-	-	-	-	-
<i>G. tumidulus</i>	-	1/100.0	-	-	1/50.0	-	-
<i>G. turgida</i>	-	1/100.0	-	-	-	-	-
<i>G. spp.</i>	1/100.0	-	-	-	1/50.0	-	-
<i>Hoeglundina elegans</i>	-	2/25.0	3/42.9	-	-	-	3/15.0
<i>Jaculella acuta</i>	-	-	-	-	-	-	-
<i>Karreriella baccata</i>	-	-	-	-	-	-	-
<i>K. grammostomata</i>	-	3/27.3	1/100.0	-	-	-	-
<i>K. novangliae</i>	-	-	-	-	-	-	-
<i>Lagena acuticosta</i>	-	1/100.0	-	-	-	-	-
<i>L. alcocki</i>	-	-	-	-	-	-	-
<i>L. distoma</i>	-	-	-	-	-	-	-
<i>L. elongata</i>	-	-	-	-	-	-	-
<i>L. hispidula</i>	-	1/7.1	-	-	-	-	-
<i>L. striata</i>	-	-	-	-	1/100.0	-	-
<i>L. sulcata</i>	-	-	-	-	-	-	-
<i>L. sulcata laevicostata</i>	-	-	-	-	-	-	-
<i>L. sulcata spicata</i>	-	-	-	-	-	-	-
<i>L. spp.</i>	-	-	-	-	-	-	-
<i>Lenticulina</i> spp.	-	-	-	-	-	-	1/100.0
<i>Loxostomum pseudobeyrichi</i>	5/45.5	8/34.8	-	-	1/25.0	1/33.3	-
<i>Marginulina obesa</i>	-	-	-	-	-	-	-
<i>M. spp.</i>	-	-	-	-	-	-	-
<i>Martinottiella communis</i>	-	-	-	-	-	-	-
<i>Melonis barleeanus</i>	-	6/31.6	6/31.6	1/14.3	-	-	-

Table 5. Quantitative distribution (raw count/percentage) of pyritized benthonic foraminiferal species in core S3-15G (continued).

Species	Depth in Core (cm)						
	171- 173	180- 182	189.5- 192	210- 212	230- 232	248- 250	270- 272
<i>Melonis pompilioides</i>	1/16.7	25/19.4	20/29.0	1/2.9	12/36.4	2/100.0	1/20.0
<i>Millolinella californica</i>	-	-	-	-	-	-	-
<i>Nodosaria tympanipectiformis</i> (?)	-	-	-	-	-	-	-
<i>Nonionella basispinata</i>	2/66.7	-	-	-	1/100.0	-	-
<i>N. decora</i>	-	-	-	-	-	-	-
<i>N. japonica mexicana</i>	2/100.0	-	-	-	-	-	-
<i>N. miocenica</i>	14/36.8	7/87.5	-	-	4/57.1	2/100.0	-
<i>N. stella</i>	-	-	-	-	-	-	-
<i>N. sp.</i>	-	2/100.0	-	-	-	-	-
<i>Oolina catenulata</i>	-	-	-	-	-	-	-
<i>O. melo</i>	1/50.0	1/20.0	-	-	-	-	-
<i>O. spp.</i>	-	-	-	-	-	-	-
<i>O. (?) sp.</i>	-	-	-	-	-	-	-
<i>Ondorsalis umbonatus</i>	-	-	-	-	1/33.3	-	2/11.8
<i>Parafissurina fusuliformis</i>	-	-	-	-	-	-	-
<i>P. kerguelensis</i>	-	1/20.0	-	-	-	-	-
<i>P. cf. P. kerguelensis</i>	-	-	-	-	-	-	2/15.4
<i>P. tectulostoma</i>	-	-	-	-	-	-	-
<i>P. spp.</i>	-	-	1/100.0	-	-	-	-
<i>Planulina ornata</i>	-	-	-	-	-	-	-
<i>P. wuellerstorfi</i>	-	3/42.9	-	1/20.0	1/50.0	1/25.0	1/7.7
<i>Pullenia bulloides</i>	-	1/33.3	-	-	2/66.7	1/100.0	1/16.7
<i>P. quinqueloba</i>	-	2/50.0	-	-	1/100.0	-	1/100.0
<i>P. salisburyi</i>	2/100.0	1/14.3	-	1/100.0	1/100.0	-	-
<i>P. sp. A</i>	-	-	-	-	-	-	-
<i>P. sp. B</i>	-	-	-	-	-	-	1/100.0
<i>P. sp. C</i>	-	-	-	-	-	-	-
<i>Pyrgo depressa</i>	-	-	-	-	-	-	-
<i>P. murrhina</i>	-	1/25.0	-	-	-	-	1/50.0
<i>Quinqueloculina akneriana</i>	-	-	-	-	-	-	-
<i>Q. elongata</i>	-	-	-	-	-	-	-
<i>Q. spp.</i>	-	-	-	-	-	-	-
<i>Recurvoides spp.</i>	-	-	-	-	-	-	-
<i>Reophax communis</i>	-	-	-	-	-	-	-
<i>R. dentaliniformis</i>	-	-	-	-	-	-	-
<i>R. distans gracilis</i>	-	-	-	-	-	-	-
<i>R. (?) sp.</i>	-	-	-	-	-	-	-
<i>Robertina bradyi</i>	-	-	-	-	-	-	-
<i>Rosalina columbiensis</i>	-	7/36.8	-	-	-	-	-
<i>Saccamina spherica</i>	-	-	-	-	-	-	-
<i>Saracenaria sp.</i>	-	-	-	-	-	-	-
<i>Sigmoilina cf. S. tenuis</i>	-	-	-	-	-	-	-
<i>S. sp.</i>	-	-	-	-	-	-	-
<i>Siphotextularia catenata</i>	-	-	-	-	-	-	-
<i>Stainforthia complanata</i>	1/100.0	-	-	-	-	-	-
<i>S. nodosa</i>	-	-	-	-	1/100.0	-	-
<i>Stikostomella cf. S. lepidula</i>	-	-	-	-	-	-	-
<i>S. sp.</i>	-	-	-	-	-	-	-
<i>Suggrunda eckisi</i>	-	1/100.0	-	-	-	-	1/50.0
<i>Trifarina angulosa</i>	-	-	-	-	1/100.0	-	-

Table 5. Quantitative distribution (raw count/percentage) of pyritized benthonic foraminiferal species in core S3-15G (continued).

Species	Depth in Core (cm)						
	171- 173	180- 182	189.5- 192	210- 212	230- 232	248- 250	270- 272
<i>Trifarina hughesi</i>	-	-	-	-	-	-	-
<i>T. (?) sp.</i>	-	-	-	-	-	-	-
<i>Triloculina tricarinata</i>	-	3/25.0	-	-	-	-	-
<i>T. trigonula</i>	-	-	-	-	-	-	-
<i>Trochammina globigeriniformis</i>	-	-	-	-	-	-	-
<i>T. pacifica simplissima</i>	-	-	-	-	-	-	-
<i>Uvigerina hispida</i>	-	-	-	-	-	-	-
<i>U. juncea</i>	-	-	-	-	10/76.9	-	-
<i>U. peregrina</i>	1/14.3	18/56.3	-	-	28/54.9	13/44.8	-
<i>U. peregrina dirupta</i>	-	-	-	-	-	-	-
<i>U. proboscidea</i>	2/40.0	8/17.0	-	-	4/25.0	-	-
<i>U. senticosa</i>	-	13/14.4	-	-	20/13.2	3/37.5	6/3.6
<i>Valvulineria araucana</i>	-	6/30.0	2/18.2	-	27/48.2	2/66.7	18/51.4
<i>V. laevigata</i>	-	14/77.8	-	1/50.0	-	-	-
Unknowns	2/100.0	4/50.0	-	-	2/40.0	-	-
Total Pyritized Specimens	115	446	41	30	358	183	65
Total Specimens	352	1250	224	308	785	403	392
% Pyritized Specimens	32.7	35.7	18.3	9.7	45.6	45.4	16.6

Table 5. Quantitative distribution (raw count/percentage) of pyritized benthonic foraminiferal species in core S3-15G (continued).

Species	Depth in Core (cm)						
	289.5- 292	310- 312	330- 332	336.5- 338	346.5- 349.5	369.5- 372.5	390- 393
<i>Anomalina globulosa</i>	-	-	-	-	-	-	-
<i>Astacolus</i> sp.	-	-	-	-	-	-	-
<i>Astrononion gallowayi</i>	-	-	-	1/100.0	-	-	-
<i>Bathysiphon</i> sp.	-	-	-	-	-	-	-
<i>Bolivina advena striatella</i>	-	-	3/100.0	1/100.0	-	-	-
<i>B. argentea</i>	6/75.0	2/100.0	2/66.7	2/40.0	-	1/100.0	-
<i>B. interjuncta bicostata</i>	1/100.0	-	-	-	-	-	-
<i>B. pacifica</i>	-	-	-	-	-	1/50.0	-
<i>B. seminuda</i>	2/50.0	-	-	-	1/100.0	-	-
<i>B. longi filicostata</i>	-	-	-	-	-	-	-
<i>Buccella frigida</i>	-	-	-	15/75.0	-	1/33.3	-
<i>B. tenerrima</i>	-	-	-	-	-	-	-
<i>Bulimina denudata</i>	-	-	-	-	-	-	-
<i>B. pagoda</i>	-	-	-	-	-	-	-
<i>B. rostrata</i>	1/100.0	-	1/100.0	-	-	-	-
<i>B. striata mexicana</i>	-	-	2/33.3	8/66.7	1/100.0	-	-
<i>Buliminella curta</i>	-	-	-	-	-	-	-
<i>B. elegantissima</i>	-	-	-	4/100.0	-	-	-
<i>B. tenuata</i>	1/50.0	-	-	4/80.0	-	3/100.0	-
<i>Cassidulina cushmani</i>	-	-	1/100.0	1/100.0	-	-	-
<i>C. minuta</i>	-	9/31.0	3/16.8	50/63.3	4/8.0	6/17.7	9/28.1
<i>C. translucens</i>	-	-	-	2/100.0	-	-	-
<i>C. tumida</i>	-	-	-	-	-	-	-
<i>C. spp.</i>	1/50.0	-	-	-	-	-	-
<i>Cassidulinoides bradyi</i>	1/100.0	2/25.0	1/14.3	13/100.0	2/28.6	2/40.0	-
<i>Chilostomella oolina</i>	-	-	-	-	-	-	-
<i>C. ovoidea</i>	-	-	-	-	-	-	-
<i>C. spp.</i>	-	-	-	-	-	-	-
<i>Chilostomellina fimbriata</i>	-	-	-	-	-	-	-
<i>Cibicides lobatulus</i>	-	-	-	-	3/23.1	-	1/25.0
<i>C. mckennai</i>	3/60.0	-	-	-	-	-	-
<i>C. spp.</i>	2/50.0	-	-	-	-	-	-
<i>Cibicidoides kullenbergi</i>	-	1/50.0	-	1/100.0	1/33.3	-	-
<i>Cyclamina</i> sp.	-	-	-	-	-	-	-
<i>Dentalina californica</i>	-	-	-	-	-	-	-
<i>D. frobisherensis</i>	-	-	-	-	-	-	-
<i>D. mucronata</i>	-	-	1/100.0	-	-	-	-
<i>D. pauperata</i>	-	-	-	-	-	-	-
<i>D. spp.</i>	-	-	-	-	-	-	-
<i>Dyocibicides biserialis</i>	-	-	-	-	1/100.0	-	-
<i>D. sp.</i>	-	-	-	-	-	-	-
<i>Eggerella bradyi</i>	-	-	-	-	-	-	-
<i>E. spp.</i>	-	-	-	-	-	-	-
<i>Ephidium excavatum clavata</i>	-	-	1/50.0	7/77.8	-	3/75.0	-
<i>E. excavatum lidoensis</i>	-	-	-	-	-	-	-
<i>E. excavatum selseyensis</i>	-	-	-	33/67.4	-	2/33.3	-
<i>E. gunteri</i>	-	-	-	-	-	-	-
<i>E. magellanicum</i>	-	-	1/100.0	5/26.3	-	4/44.4	-
<i>E. spp.</i>	-	-	-	-	-	-	-
<i>Epistominella bradyana</i>	-	-	-	-	-	-	-

Table 5. Quantitative distribution (raw count/percentage) of pyritized benthonic foraminiferal species in core S3-15G (continued).

Species	Depth in Core (cm)						
	289.5- 292	310- 312	330- 332	336.5- 338	346.5- 349.5	369.5- 372.5	390- 393
<i>Epistominella ovax</i>	-	-	-	1/100.0	-	-	-
<i>E. exigua</i>	-	-	-	3/75.0	-	-	-
<i>E. pacifica</i>	7/87.5	2/33.3	5/45.5	23/65.7	3/75.0	5/83.3	-
<i>E. smithi</i>	-	-	1/50.0	8/85.7	-	-	-
<i>Fissurina lagenoides</i>	-	-	-	-	-	-	-
<i>F. lucida</i>	-	-	-	-	-	-	-
<i>F. marginata</i>	-	-	-	-	-	-	-
<i>F. spp.</i>	-	-	-	-	-	-	-
<i>Florilus labradonicus</i>	-	-	-	-	-	2/66.7	-
<i>Fronducularia</i> sp.	-	-	-	-	-	-	-
<i>Fursenkoina cornuta</i>	-	-	-	-	-	-	-
<i>F. rotundata</i>	-	-	-	-	-	-	-
<i>F. seminuda</i>	-	-	-	-	-	-	-
<i>F. sp.</i>	-	-	-	-	-	-	-
<i>Globobulimina affinis</i>	7/21.9	2/2.7	4/10.0	2/50.0	10/12.7	-	20/20.4
<i>G. barbata</i>	-	-	-	-	-	-	-
<i>G. cf. G. marginospinata</i>	-	-	-	-	-	-	-
<i>G. ovula</i>	-	-	-	-	1/50.0	-	-
<i>G. pacifica</i>	-	-	-	-	-	-	1/100.0
<i>G. spinifera</i>	-	-	-	-	-	-	-
<i>G. spp.</i>	-	-	-	1/100.0	1/33.3	-	1/100.0
<i>Globocassidulina subglobosa</i>	-	-	-	-	-	-	-
<i>Gyroidina altiformis</i>	-	-	-	-	2/12.5	-	-
<i>G. gemma</i>	-	1/20.0	3/60.0	-	1/5.9	1/25.0	-
<i>G. cf. G. planulata</i>	1/25.0	-	-	-	4/40.0	-	-
<i>G. quinqueloba</i>	-	-	-	-	-	-	-
<i>G. tumidulus</i>	1/50.0	-	-	-	-	-	-
<i>G. turgida</i>	-	-	-	-	-	-	-
<i>G. spp.</i>	-	-	-	-	-	-	-
<i>Hoeglundina elegans</i>	-	-	-	-	-	-	-
<i>Jaculella acuta</i>	-	-	-	-	-	-	-
<i>Karrerella baccata</i>	-	-	-	-	-	-	-
<i>K. grammostomata</i>	1/25.0	-	-	1/100.0	2/11.8	-	1/7.1
<i>K. novangliae</i>	-	-	-	-	-	-	-
<i>Lagena acuticosta</i>	-	-	-	-	-	-	-
<i>L. alcocki</i>	-	-	-	-	-	-	-
<i>L. distoma</i>	-	-	-	-	-	-	-
<i>L. elongata</i>	-	-	-	-	-	-	-
<i>L. hispidula</i>	-	-	-	-	-	-	-
<i>L. striata</i>	-	-	-	-	-	1/100.0	-
<i>L. sulcata</i>	-	-	-	-	-	-	-
<i>L. sulcata laevicostata</i>	-	-	-	-	-	-	-
<i>L. sulcata spicata</i>	-	-	-	-	-	-	-
<i>L. spp.</i>	-	-	-	-	-	-	-
<i>Lenticulina</i> spp.	-	-	-	-	-	-	-
<i>Loxostomum pseudobeyrichi</i>	-	-	-	1/50.0	-	-	-
<i>Marginulina obesa</i>	-	-	-	-	-	-	-
<i>M. spp.</i>	-	-	-	-	-	-	-
<i>Martinottiella communis</i>	-	-	-	-	-	-	-
<i>Melonis barleeanus</i>	1/100.0	-	-	-	-	-	-

Table 5. Quantitative distribution (raw count/percentage) of pyritized benthonic foraminiferal species in core S3-15G (continued).

Species	Depth in Core (cm)						
	289.5- 292	310- 312	330- 332	336.5- 338	346.5- 349.5	369.5- 372.5	390- 393
<i>Melonis pompilioides</i>	-	2/33.3	-	1/50.0	-	3/27.3	1/7.7
<i>Miliolinella californica</i>	-	-	-	-	-	-	3/50.0
<i>Nodosaria tympanipectiformis</i> (?)	-	-	-	-	-	-	-
<i>Nonionella basispinata</i>	-	-	-	3/100.0	-	-	-
<i>N. decora</i>	-	-	-	-	-	-	-
<i>N. japonica mexicana</i>	-	-	-	-	-	-	-
<i>N. miocenica</i>	-	-	-	12/75.0	-	1/33.3	-
<i>N. stelia</i>	-	-	-	-	-	-	-
<i>N. sp.</i>	-	-	-	-	-	-	-
<i>Oolina catenulata</i>	-	-	-	-	-	-	-
<i>O. melo</i>	1/100.0	-	-	-	-	-	-
<i>O. spp.</i>	-	-	-	-	-	-	-
<i>O. (?) sp.</i>	-	-	-	-	-	-	-
<i>Ordosialis umbonatus</i>	2/20.0	2/28.6	7/11.7	-	5/12.5	1/12.5	2/25.0
<i>Parafissurina fusuliformis</i>	-	-	-	-	-	-	-
<i>P. kerguelensis</i>	-	-	-	-	1/100.0	-	-
<i>P. cf. P. kerguelensis</i>	-	-	-	1/33.3	-	-	-
<i>P. tectulostoma</i>	-	-	-	-	-	-	-
<i>P. spp.</i>	-	-	-	-	-	-	-
<i>Planulina ornata</i>	-	-	-	-	-	-	-
<i>P. wuellerstorfi</i>	10/41.7	2/28.6	1/11.1	-	1/20.0	-	-
<i>Pullenia bulboides</i>	-	1/12.5	-	-	-	1/5.6	1/6.7
<i>P. quinqueloba</i>	-	-	-	-	-	-	-
<i>P. salisburyi</i>	-	1/20.0	-	-	1/50.0	1/100.0	-
<i>P. sp. A</i>	-	-	-	-	-	-	-
<i>P. sp. B</i>	-	-	-	-	-	-	-
<i>P. sp. C</i>	-	-	-	-	-	-	-
<i>Pyrgo depressa</i>	-	-	-	-	-	-	-
<i>P. murrhina</i>	-	-	-	-	-	-	-
<i>Quinqueloculina akneriana</i>	-	-	-	-	-	1/100.0	1/33.3
<i>Q. elongata</i>	-	-	-	-	1/50.0	-	-
<i>Q. spp.</i>	-	-	-	-	-	1/100.0	-
<i>Recurvoides spp.</i>	-	-	-	-	-	-	-
<i>Reophax communis</i>	-	-	-	-	-	-	-
<i>R. dentaliiformis</i>	-	-	-	-	-	-	-
<i>R. distans gracilis</i>	-	-	-	-	-	-	-
<i>R. (?) sp.</i>	-	-	-	-	-	-	-
<i>Robertina bradyi</i>	-	-	-	-	-	-	-
<i>Rosalina columbiensis</i>	-	1/20.0	-	1/100.0	-	1/100.0	7/35.0
<i>Saccamina spherica</i>	-	-	-	-	-	-	-
<i>Saracenaria sp.</i>	-	-	-	-	-	-	-
<i>Sigmoilina cf. S. tenuis</i>	-	-	-	1/100.0	-	-	-
<i>S. sp.</i>	-	-	-	-	-	-	-
<i>Siphotextularia catenata</i>	-	-	-	-	-	-	2/50.0
<i>Stainforthia complanata</i>	-	-	-	-	-	-	-
<i>S. nodosa</i>	-	-	-	-	-	-	-
<i>Stilostomella cf. S. lepidula</i>	-	-	-	-	-	-	-
<i>S. sp.</i>	-	-	-	-	-	-	-
<i>Suggrunda eckisi</i>	-	-	-	-	-	-	-
<i>Tritarina angulosa</i>	-	-	-	1/50.0	-	-	-

Table 5. Quantitative distribution (raw count/percentage) of pyritized benthonic foraminiferal species in core S3-15G (continued).

Species	Depth in Core (cm)						
	289.5- 292	310- 312	330- 332	336.5- 338	346.5- 349.5	369.5- 372.5	390- 393
<i>Trifarina hughesi</i>	-	-	-	-	-	-	-
<i>T. (?) sp.</i>	-	-	-	-	-	-	-
<i>Triloculina tricarinata</i>	-	-	-	-	-	1/50.0	-
<i>T. trigonula</i>	-	-	-	-	-	-	-
<i>Trochammina globigeriniformis</i>	-	-	-	-	-	-	-
<i>T. pacifica simplissima</i>	-	-	-	-	-	-	-
<i>Uvigerina hispida</i>	-	-	-	-	-	-	-
<i>U. juncea</i>	-	-	-	2/66.7	-	-	-
<i>U. peregrina</i>	-	1/100.0	1/33.3	7/46.7	-	2/100.0	-
<i>U. peregrina dirupta</i>	-	-	-	-	-	-	-
<i>U. proboscidea</i>	-	-	-	-	-	-	-
<i>U. senticosa</i>	16/5.7	4/3.6	14/17.3	4/18.2	25/12.6	3/3.2	12/11.8
<i>Valvulineria araucana</i>	11/52.4	7/31.8	9/31.0	2/50.0	10/32.3	-	3/75.0
<i>V. laevigata</i>	-	-	-	1/50.0	-	1/100.0	-
Unknowns	-	-	-	3/100.0	-	-	-
Total Pyritized Specimens	76	40	61	224	81	49	65
Total Specimens	457	337	332	375	544	343	377
% Pyritized Specimens	16.6	11.9	18.4	59.7	14.9	14.3	17.2



Table 5. Quantitative distribution (raw count/percentage) of pyritized benthonic foraminiferal species in core S3-15G (continued).

Species	Depth in Core (cm)				
	410- 412.5	412- 414.5	430- 432.5	445- 447.5	467.5 469.5
-----					
<i>Anomalina globulosa</i>	-	-	-	-	-
<i>Astacolus</i> sp.	-	-	-	-	-
<i>Astrononion gallowayi</i>	-	-	-	-	-
<i>Bathysiphon</i> sp.	-	-	-	-	-
<i>Bolivina advena striatella</i>	-	-	-	-	-
-----					
<i>B. argentea</i>	1/100.0	5/55.6	-	-	-
<i>B. interjuncta bicostata</i>	-	-	-	-	-
<i>B. pacifica</i>	-	4/30.8	1/50.0	-	-
<i>B. seminuda</i>	-	2/50.0	-	-	-
<i>B. tongi filicostata</i>	-	-	-	-	-
-----					
<i>Buccella frigida</i>	-	2/18.2	-	-	-
<i>B. tenerrima</i>	-	-	-	-	-
<i>Bulimina denudata</i>	-	-	-	-	-
<i>B. pagoda</i>	-	-	-	-	-
<i>B. rostrata</i>	-	-	-	-	-
-----					
<i>B. striata mexicana</i>	1/100.0	2/66.7	-	-	-
<i>Buliminella curta</i>	-	1/14.3	-	-	-
<i>B. elegantissima</i>	-	2/40.0	-	-	-
<i>B. tenuata</i>	-	5/35.7	-	-	-
<i>Cassidulina cushmani</i>	-	4/40.0	-	-	-
-----					
<i>C. minuta</i>	8/6.7	27/14.5	7/5.9	3/8.8	-
<i>C. translucens</i>	-	-	-	-	-
<i>C. tumida</i>	-	-	-	-	-
<i>C. spp.</i>	-	1/100.0	-	-	-
<i>Cassidulinoides bradyi</i>	1/14.3	10/27.0	-	-	-
-----					
<i>Chilostomella oolina</i>	-	2/28.6	-	-	1/100.0
<i>C. ovoidea</i>	-	-	-	-	-
<i>C. spp.</i>	1/100.0	1/100.0	1/100.0	-	-
<i>Chilostomellina fimbriata</i>	-	1/25.0	-	-	-
<i>Cibicides lobatulus</i>	-	-	-	-	-
-----					
<i>C. mckannai</i>	-	-	-	-	-
<i>C. spp.</i>	-	-	-	-	-
<i>Cibicidoides kullenbergi</i>	-	-	1/100.0	-	-
<i>Cyclammina</i> sp.	-	-	-	1/100.0	-
<i>Dentalina californica</i>	-	-	-	-	-
-----					
<i>D. frobisherensis</i>	-	-	-	-	-
<i>D. mucronata</i>	-	-	-	-	-
<i>D. pauperata</i>	-	-	-	-	-
<i>D. spp.</i>	-	-	-	-	-
<i>Dyocibicides biserialis</i>	-	-	-	-	-
-----					
<i>D. sp.</i>	-	-	-	-	-
<i>Eggerella bradyi</i>	-	-	-	-	-
<i>E. spp.</i>	-	-	-	-	-
<i>Elphidium excavatum clavata</i>	-	5/22.7	-	-	-
<i>E. excavatum lidoensis</i>	-	-	-	-	-
-----					
<i>E. excavatum selseyensis</i>	1/14.3	15/21.1	-	-	-
<i>E. gunteri</i>	-	-	-	-	-
<i>E. magellanicum</i>	-	4/18.2	-	-	-
<i>E. spp.</i>	-	-	-	-	-
<i>Epistominella bradyana</i>	-	-	-	-	-
-----					

Table 5. Quantitative distribution (raw count/percentage) of pyritized benthonic foraminiferal species in core S3-15G (continued).

Species	Depth in Core (cm)				
	410- 412.5	412- 414.5	430- 432.5	445- 447.5	467.5 469.5
=====					
<i>Epistominella ovax</i>	-	-	-	-	-
<i>E. exigua</i>	-	2/50.0	-	-	-
<i>E. pacifica</i>	3/25.0	18/31.6	-	-	-
<i>E. smithi</i>	-	-	-	-	-
<i>Fissurina lagenoides</i>	-	-	-	-	-
-----					
<i>F. lucida</i>	-	-	-	-	-
<i>F. marginata</i>	-	-	-	-	-
<i>F. spp.</i>	-	-	-	-	-
<i>Florilus labradoricus</i>	-	1/50.0	-	-	-
<i>Fronicularia sp.</i>	-	-	-	-	-
-----					
<i>Fursenkoina cornuta</i>	-	-	-	-	-
<i>F. rotundata</i>	1/100.0	1/33.3	-	-	-
<i>F. seminuda</i>	-	-	-	-	-
<i>F. sp.</i>	-	-	-	-	-
<i>Globobulimina affinis</i>	8/11.6	24/42.1	7/15.2	6/6.7	2/13.3
-----					
<i>G. barbata</i>	-	-	-	-	-
<i>G. cf. G. marginospinata</i>	-	-	-	-	-
<i>G. ovula</i>	-	3/100.0	-	-	-
<i>G. pacifica</i>	-	-	1/100.0	-	-
<i>G. spinifera</i>	-	1/33.3	-	-	-
-----					
<i>G. spp.</i>	8/66.7	-	5/50.0	1/16.7	-
<i>Globocassidulina subglobosa</i>	-	-	-	-	-
<i>Gyroldina altiformis</i>	-	-	-	-	-
<i>G. gemma</i>	-	-	-	-	-
<i>G. cf. G. planulata</i>	1/14.3	1/25.0	-	-	-
-----					
<i>G. quinqueloba</i>	-	-	-	-	-
<i>G. tumidulus</i>	1/100.0	-	-	-	-
<i>G. turgida</i>	-	-	-	-	-
<i>G. spp.</i>	-	-	-	-	-
<i>Hoeglundina elegans</i>	-	-	-	-	-
-----					
<i>Jaculella acuta</i>	-	-	-	-	-
<i>Karrerella baccata</i>	-	-	-	-	-
<i>K. grammostomata</i>	1/3.7	3/23.1	-	-	-
<i>K. novangliae</i>	-	-	-	-	-
<i>Lagena acuticosta</i>	-	-	-	-	-
-----					
<i>L. alcocki</i>	-	-	-	-	-
<i>L. distoma</i>	-	-	-	-	-
<i>L. elongata</i>	-	-	-	-	-
<i>L. hispidula</i>	-	-	-	-	-
<i>L. striata</i>	-	-	-	-	-
-----					
<i>L. sulcata</i>	-	-	-	-	-
<i>L. sulcata laevicostata</i>	-	-	-	-	-
<i>L. sulcata spicata</i>	-	-	-	-	-
<i>L. spp.</i>	-	-	-	-	-
<i>Lenticulina spp.</i>	-	-	-	-	-
-----					
<i>Loxostomum pseudobeyrichi</i>	-	1/12.5	-	-	-
<i>Marginulina obesa</i>	-	-	-	-	-
<i>M. spp.</i>	-	-	-	-	-
<i>Martinottiella communis</i>	-	-	-	-	-
<i>Melonis barleeanus</i>	-	-	-	-	-
-----					

Table 5. Quantitative distribution (raw count/percentage) of pyritized benthonic foraminiferal species in core S3-15G (continued).

Species	Depth In Core (cm)				
	410- 412.5	412- 414.5	430- 432.5	445- 447.5	467.5 469.5
=====					
<i>Melonis pompilioides</i>	3/30.0	2/28.6	1/7.1	-	-
<i>Miliolinella californica</i>	-	-	-	-	-
<i>Nodosaria tympanipectiformis</i> (?)	-	-	-	-	-
<i>Nonionella basispinata</i>	1/100.0	-	-	-	-
<i>N. decora</i>	-	-	-	-	-
-----					
<i>N. japonica mexicana</i>	-	-	-	-	-
<i>N. miocenica</i>	1/25.0	8/26.7	-	-	-
<i>N. stella</i>	-	3/75.0	-	-	-
<i>N. sp.</i>	-	1/100.0	4/40.0	-	-
<i>Oolina catenulata</i>	-	-	-	-	-
-----					
<i>O. melo</i>	-	-	-	-	-
<i>O. spp.</i>	-	-	-	-	-
<i>O. (?) sp.</i>	-	-	-	-	-
<i>Oridorsalis umbonatus</i>	1/10.0	-	1/20.0	1/12.5	-
<i>Parafissurina fusuliformis</i>	-	-	-	-	-
-----					
<i>P. kerguelensis</i>	-	-	-	-	-
<i>P. cf. P. kerguelensis</i>	-	-	-	-	-
<i>P. tectulostoma</i>	-	-	-	-	-
<i>P. spp.</i>	-	-	-	-	-
<i>Planulina ornata</i>	-	-	-	-	-
-----					
<i>P. wuellerstorfi</i>	-	-	-	2/14.3	1/20.0
<i>Pullenia bulloides</i>	-	1/33.3	-	-	-
<i>P. quinqueloba</i>	-	-	-	-	-
<i>P. salisburyi</i>	-	2/50.0	-	-	-
<i>P. sp. A</i>	-	-	-	-	-
-----					
<i>P. sp. B</i>	-	-	-	-	-
<i>P. sp. C</i>	-	-	-	-	-
<i>Pyrgo depressa</i>	-	-	-	-	-
<i>P. murrhina</i>	-	-	-	-	-
<i>Quinqueloculina akneriana</i>	-	-	-	-	-
-----					
<i>Q. elongata</i>	-	-	-	-	-
<i>Q. spp.</i>	-	-	-	-	-
<i>Recurvoides spp.</i>	-	-	-	-	-
<i>Reophax communis</i>	-	-	-	-	-
<i>R. dentaliniformis</i>	-	-	-	-	-
-----					
<i>R. distans gracilis</i>	-	-	-	-	-
<i>R. (?) sp.</i>	-	-	-	-	-
<i>Robertina bradyi</i>	-	-	-	-	-
<i>Rosalina columbiensis</i>	-	-	-	-	-
<i>Saccammina spherica</i>	-	-	-	-	-
-----					
<i>Saracenaria sp.</i>	-	-	-	-	-
<i>Sigmoilina cf. S. tenuis</i>	-	-	-	-	-
<i>S. sp.</i>	-	-	-	-	-
<i>Siphonotextularia catenata</i>	-	-	-	-	-
<i>Stainforthia complanata</i>	-	-	-	-	-
-----					
<i>S. nodosa</i>	-	1/25.0	-	-	-
<i>Stilostomella cf. S. lepidula</i>	-	-	-	-	-
<i>S. sp.</i>	-	-	-	-	-
<i>Suggrunda eckisi</i>	-	-	-	-	-
<i>Trifarina angulosa</i>	-	-	-	-	-
-----					

Table 5. Quantitative distribution (raw count/percentage) of pyritized benthonic foraminiferal species in core S3-15G (continued).

Species	Depth in Core (cm)				
	410- 412.5	412- 414.5	430- 432.5	445- 447.5	467.5 469.5
<i>Trifarina hughesi</i>	-	-	-	-	-
<i>T. (?) sp.</i>	-	-	-	-	-
<i>Triloculina tricarinata</i>	-	-	-	-	1/100.0
<i>T. trigonula</i>	-	-	-	-	-
<i>Trochammina globigeriniformis</i>	-	-	-	-	-
<i>T. pacifica simplissima</i>	-	-	-	-	-
<i>Uvigerina hispida</i>	-	-	-	-	-
<i>U. juncea</i>	-	-	-	-	-
<i>U. peregrina</i>	-	-	-	-	-
<i>U. peregrina dirupta</i>	-	-	-	-	-
<i>U. proboscidea</i>	-	-	-	-	-
<i>U. senticosa</i>	4/3.4	-	-	3/1.9	-
<i>Valvulineria araucana</i>	5/71.4	2/40.0	-	-	-
<i>V. laevigata</i>	-	-	-	-	-
Unknowns	1/25.0	2/40.0	-	-	-
Total Pyritized Specimens	52	170	29	17	5
Total Specimens	490	746	337	387	83
% Pyritized Specimens	10.6	22.8	8.6	4.4	6.0

Table 6. (A) Taxonomic list and (B) quantitative distribution (raw count/percentage) of displaced benthonic foraminifers in core S3-15G. Abundances of displaced specimens represent minimum values. Percentages not calculated for samples containing <200 specimens.

(A)	Displaced Benthonic Foraminiferal Species	(B)		
		Depth in Core (cm)	Benthonic Foraminiferal Specimens Counted	Displaced Benthonic Foraminifers (Raw Count/Percentage)
<i>Astronion gallowayi</i>	<i>Fursenkoina seminuda</i>	0-4	8	1/-
<i>Bolivina advena siriatella</i>	<i>F. sp.</i>	20-23.5	253	7/2.8
<i>B. argentea</i>	<i>Globobulimina ovula</i>	40-43	106	6/-
<i>B. interjuncta bicostata</i>	<i>G. spinifera</i>	46-48	368	298/81.0
<i>B. pacifica</i>	<i>Globocassidulina subglobosa</i>	60-63	106	6/-
<i>B. seminuda</i>	<i>Loxostomum pseudobeyrichi</i>			
<i>B. tongi filicostata</i>	<i>Nonionella basispinata</i>	80-82	303	2/0.7
<i>Buccella frigida</i>	<i>N. decora</i>	96.5-100	334	12/3.6
<i>B. tenerima</i>	<i>N. japonica mexicana</i>	120-122	329	17/5.2
<i>Bulimina denudata</i>	<i>N. miocenica</i>	128-130	225	19/8.4
<i>B. pagoda</i>	<i>N. stella</i>	130-132	69	8/-
<i>B. siriatella mexicana</i>	<i>N. sp.</i>			
<i>Buliminella curta</i>	<i>Planulina ornata</i>	133.5-136.5	378	261/69.1
<i>B. elegantissima</i>	<i>Pullenia quinqueloba</i>	139-143	409	41/10.0
<i>B. tenuata</i>	<i>P. salisburyi</i>	152.5-154.5	325	14/4.3
<i>Cassidulina cushmani</i>	<i>Quinqueloculina akneriana</i>	167.5-170	806	44/7.3
<i>C. minuta</i>	<i>Rosalina columbiensis</i>	171-173	352	276/76.4
<i>C. translucens</i>	<i>Saracenaria sp.</i>			
<i>C. tumida</i>	<i>Stainforthia complanata</i>	180-182	1250	657/52.6
<i>Cassidinoides bradyi</i>	<i>S. nodosa</i>	189.5-192	224	27/12.1
<i>Chilostomella oolina</i>	<i>Suggrunda eckisi</i>	210-212	308	58/18.8
<i>C. ovoidea</i>	<i>Trifarina angulosa</i>	230-232	785	499/63.6
<i>Chilostomellina limbriata</i>	<i>T. hughesi</i>	248-250	403	364/90.3
<i>Cibicides mckannai</i>	<i>Uvigerina hispida</i>			
<i>Dentalina californica</i>	<i>U. juncea</i>	270-272	392	65/16.6
<i>Elphidium excavatum clavata</i>	<i>U. peregrina</i>	289.5-292	457	68/14.9
<i>E. excavatum lidoensis</i>	<i>U. peregrina dinupla</i>	310-312	337	85/25.2
<i>E. excavatum selsøyensis</i>	<i>U. proboscidea</i>	330-332	332	69/26.8
<i>E. gunter</i>	<i>Valvulineria araucana</i>	336.5-338	375	319/85.1
<i>E. magellanicum</i>	<i>V. laevigata</i>			
<i>E. spp.</i>		346.5-349.5	544	105/19.3
<i>Epistominella bradyana</i>		369.5-372.5	343	90/26.2
<i>E. evax</i>		390-393	377	67/17.8
<i>E. exigua</i>		410-412.5	490	187/38.2
<i>E. pacifica</i>		412-414.5	746	588/78.8
<i>E. smithi</i>				
<i>Florilus labradoricus</i>		430-432.5	337	144/42.7
<i>Fursenkoina cornuta</i>		445-447.5	387	42/10.9
<i>F. rotundata</i>		467.5-469.5	83	16/-

Table 7. Taxonomic list of planktonic foraminifers in core S3-15G.

*Globigerina bulloides* d'Orbigny  
*G. quinqueloba* Natland\*  
*Globigerinita uvula* (Ehrenberg)\*  
*Neogloboquadrina pachyderma* (Ehrenberg) (left-coiling)\*  
*N. pachyderma* (Ehrenberg) (right-coiling)\*  
 All other planktonic species  
     *Globigerina falconensis* Blow  
     *G. rubescens* Hofker  
     *Globigerinella pseudobesa* (Salvatorini)  
     *Globigerinita humilis* (Brady)  
     *Globigerinoides quadrilobatus* (d'Orbigny)  
     *G. ruber* (d'Orbigny)  
     *Globorotalia inflata* (d'Orbigny)  
     *G. menardii* plexus  
     *G. scitula* (Brady)  
     *Globorotaloides hexagona* (Natland)  
     *Neogloboquadrina dutertrei* (d'Orbigny)  
     *Orbulina universa* d'Orbigny  
     *Tenuitellita iota* (Parker)  
 Unidentified planktonic specimens

\*Taxon is multispecific. Please refer to the taxonomic notes section in Brunner and Ledbetter (in press) for a complete discussion of included taxa. A list of additional trace taxa found in core S3-15G is also presented in the same manuscript.

Table 8. Total sample sediment weight, sample splits, planktonic foraminiferal specimens counted, and quantitative distribution (raw count/percentage) of planktonic foraminiferal species in core S3-15G.

Depth In Core (cm)	Total Sample Sediment Weight (gm)	Sample Split	Planktonic		Globigerina bulloides	Globigerina quinqueloba	Globigerinita uvula	Neoglobobulimina pachyderma (left-colling)	Neoglobobulimina pachyderma (right-colling)	All Other Species	Unidentified Planktonic Specimens
			Foram Specimens Counted	Sample Split							
150-152	7.7421	0.250	379		4/1.1	48/12.7	176/46.4	65/17.2	81/21.4	4/1.1	1/0.3
165-167	8.2900	0.063	448		53/11.8	189/42.2	110/24.6	11/2.5	48/10.7	2/0.5	35/7.8
193-195	10.7080	0.125	350		16/4.6	162/46.3	90/25.7	4/1.1	61/17.4	10/2.9	7/2.0
200-202	10.8015	0.250	703		26/3.7	387/55.1	68/9.7	15/2.1	202/28.7	5/0.7	0/0
210-212	19.6000	0.250	167		12/7.2	72/43.1	10/6.0	5/3.0	59/35.3	2/1.2	7/4.2
-----											
220-222	9.2369	1.000	74		25/33.8	0/0	20/27.0	11/14.9	13/17.6	4/5.4	1/1.4
241-243	7.7759	1.000	224		1/0.5	83/37.1	33/14.7	85/38.0	19/8.5	0/0	3/1.3
256-257	11.7459	0.125	292		2/0.7	33/11.3	158/54.1	50/17.1	46/15.8	2/0.7	1/0.3
270-272	18.8000	1.000	310		18/5.8	82/26.5	30/9.7	73/23.6	98/31.6	5/1.6	4/1.3
280-282	9.7600	1.000	260		6/2.3	97/37.3	87/33.5	31/11.9	17/6.5	6/2.3	16/6.2
-----											
295-297	15.3438	0.063	215		3/1.4	27/12.6	51/23.7	118/54.9	10/4.7	1/0.5	5/2.3
300-302	10.9959	1.000	340		20/5.9	15/4.4	14/4.1	238/70.0	48/14.1	5/1.5	0/0
352-354	7.4725	0.375	287		11/3.8	63/22.0	135/47.0	44/15.3	3/1.1	12/4.2	19/6.6
396-398	11.9703	1.000	1000		0/0	0/0	0/0	1000/100.0	0/0	0/0	0/0
448-450	11.1525	0.156	304		11/3.6	20/6.6	135/44.4	121/39.8	16/5.3	0/0	1/0.3
-----											
469-471	11.4115	1.000	1000		0/0	0/0	0/0	1000/100.0	0/0	0/0	0/0

Table 9. Taxonomic list of palynomorphs in core S3-15G.

## Pollen Grains and Spores

*Abies*  
*Aesculus*  
*Alnus*  
*Artemisia*  
 Caryophyllaceae  
 Chenopodiaceae-Amaranthaceae (Cheno-Ams)  
 Compositae (High-Spine)  
 Compositae (Low-Spine)  
 Ericaceae  
*Eriogonum*  
*Eucalyptus*  
*Galium*  
 Gramineae  
*Juglans*  
 Liguliflorae  
*Lithocarpus*  
 Malvaceae  
*Pinus*  
*Plantago*  
*Polygonum*  
*Quercus*  
 Rhamnaceae  
*Ribes*  
*Rumex*  
*Salix*  
*Salix*-type  
*Salvia*  
*Sambucus*  
 Spores (Monolete)  
 Spores (Trilete)  
 Taxodiaceae-Cupressaceae-Taxaceae (TCT)  
*Tilia*  
*Typha-Sparganium*  
 Umbelliferae  
 Urticaceae

## Others

Dinoflagellates  
 Fungal Spore Type-A  
 Indeterminates  
*Lycopodium* (Controls)  
*Pediastrum*  
 Redeposited Pollen  
 Unknowns



Table 10. Dry sediment weight, palynomorph numbers, absolute pollen concentration, and broken/whole pine grain ratio in core S3-15G. Broken pine grains counted as one-half.

Depth in Core (cm)	Dry Sediment Weight (gm)	Total Pollen Grains and Spores Counted	<i>Lycopodium</i> (Controls) Counted	Absolute Pollen Concentration (Grains/gm)	Pine Grains Counted	Broken/Whole Pine Grain Ratio (%)
0-4	0.48	376	1679	10544	81	80.3
20-22	0.52	414	1872	9612	52.5	67.6
40-42	0.59	416	1101	14473	49	69.4
46-48	0.90	396.5	946	10525	57.5	61.7
60-62	0.52	380	1794	9206	73	90.4
80-82	0.54	371	1767	8787	76	81.6
97.5-99.5	0.62	398	1805	8038	76	69.7
120-122	0.56	393	2616	6063	69	73.9
130-132	0.83	371	875	11545	101	65.4
133.5-136.5	1.23	386	1147	6183	189	65.1
140-142	0.68	381.5	1377	9208	47.5	70.5
152.5-154.5	0.72	383	1918	6268	52	76.9
168-170	0.85	362.5	989	9745	52.5	71.4
171-173	1.07	375.5	1578	5026	83.5	53.3
180-182	0.71	361.5	2084	5522	70.5	77.3
190-192	0.72	365	1035	11070	42	81.0
210-212	0.86	372	1153	8479	71	62.0
230-232	0.76	383.5	1941	5875	116.5	78.5
248-250	1.52	381	2771	2044	102	73.5
270-272	0.75	375.5	1445	7830	131.5	74.9
290-292	0.83	367.5	1119	8942	139.5	71.3
310-312	0.78	369.5	1248	8579	135.5	72.0
330-332	0.87	381.5	1453	6821	148.5	78.5
336.5-338	1.19	368	1971	3546	160	59.4
347-349	0.83	383.5	1358	7689	128.5	76.7
370-372	0.94	365	1225	7164	145	64.8
390-392	0.89	360	1771	5162	173	61.9
410-412	0.90	386	1193	8125	160.5	70.1
412-414.5	1.07	360.5	1365	5578	188	56.9
430-432	0.81	371.5	1113	9313	155.5	68.5
445.5-447.5	0.77	367	1465	7353	163	63.8
467.5-469.5	1.01	380.5	1681	5065	186	71.0

Table 11. Quantitative distribution (raw count/percentage) of palynomorphs in core S3-15G. Abundances recorded as absolute numbers counted and as a percentage of the total palynological flora. Broken *Pinus* and *Abies* grains counted as one-half.

Pollen Type	Depth in Core (cm)						
	0 - 4	20 - 22	40 - 42	46 - 48	60 - 62	80 - 82	97.5 - 99.5
<i>Pinus</i>	81/21.5	52.5/12.7	49/11.8	57.5/14.5	73/19.2	76/20.5	76/19.1
<i>Abies</i>	1/0.3	0.5/0.1	-	-	-	-	-
TCT	87/23.1	78/18.8	107/25.7	91/23.0	92/24.2	77/20.8	89/22.4
<i>Quercus</i>	30/8.0	34/8.2	49/11.8	41/10.3	44/11.6	45/12.1	44/11.1
<i>Juglans</i>	-	-	1/0.2	1/0.3	-	-	-
<i>Aesculus</i>	-	-	-	-	-	-	-
<i>Lithocarpus</i>	9/2.4	6/1.5	9/2.2	13/3.3	8/2.1	7/1.9	1/0.3
Rhamnaceae	7/1.9	8/1.9	14/3.4	9/2.3	13/3.4	5/1.4	6/1.5
<i>Ribes</i>	-	-	-	-	-	-	-
<i>Sambucus</i>	-	-	-	-	-	-	-
<i>Tilia</i>	-	-	-	-	-	-	-
<i>Eucalyptus</i>	-	1/0.2	-	-	-	-	-
<i>Salix</i>	1/0.3	2/0.5	-	2/0.5	-	-	1/0.3
<i>Alnus</i>	7/1.9	3/0.7	1/0.2	3/0.8	3/0.8	3/0.8	5/1.3
<i>Artemisia</i>	10/2.7	9/2.2	8/1.9	10/2.5	6/1.6	10/2.7	8/2.0
Low-Spine Compositae	4/1.1	-	2/0.5	4/1.0	2/0.5	2/0.5	4/1.0
Liguliflorae	1/0.3	2/0.5	-	1/0.3	1/0.3	1/0.3	1/0.3
High-Spine Compositae	49/13.0	115/27.8	73/17.6	65/16.4	47/12.4	45/12.1	69/17.3
Malvaceae	-	-	-	-	-	-	-
Caryophyllaceae	-	1/0.2	-	-	-	-	-
Ericaceae	-	-	-	-	-	-	-
<i>Salvia</i>	-	-	-	-	-	-	-
<i>Galium</i>	1/0.3	-	-	-	-	-	-
<i>Erigeron</i>	1/0.3	3/0.7	3/0.7	2/0.5	6/1.6	2/0.5	4/1.0
<i>Polygonum</i>	-	-	-	-	-	-	-
<i>Rumex</i>	-	-	-	1/0.3	-	-	-
<i>Plantago</i>	-	-	-	3/0.8	-	-	1/0.3
Umbelliferae	-	-	-	-	-	-	-
<i>Salix</i> -type	1/0.3	2/0.5	3/0.7	-	1/0.3	1/0.3	3/0.8
Gramineae	4/1.1	-	2/0.5	-	4/1.1	-	2/0.5
Cheno-Ams	9/2.4	15/3.6	22/5.3	14/3.5	19/5.0	19/5.1	16/4.0
Urticaceae	1/0.3	-	-	1/0.3	-	-	-
<i>Typha-Sparganium</i>	-	-	-	-	-	-	-
Monolete Spores	3/0.8	5/1.2	5/1.2	3/0.8	6/1.6	8/2.2	4/1.0
Trilete Spores	11/2.9	15/3.6	7/1.7	7/1.8	12/3.2	8/2.2	17/4.3
Indeterminates	41/10.9	46/11.1	45/10.8	46/11.6	31/8.2	44/11.9	34/8.5
Unknowns	17/4.5	16/3.9	16/3.9	22/5.6	12/3.2	18/4.9	13/3.3
Total Pollen	376	414	416	396.5	380	371	398
<i>Lycopodium</i> (Controls)	1679	1872	1101	946	1794	1767	1805
<i>Pediastrum</i>	1	-	1	-	-	-	-
Dinoflagellates	23	32	13	11	22	25	23
Fungal Spore Type-A	-	4	-	-	-	1	1
Redeposited Pollen	-	-	-	-	-	-	-

Table 11. Quantitative distribution (raw count/percentage) of palynomorphs in core S3-15G (continued).

Pollen Type	Depth in Core (cm)						
	120- 122	130- 132	133.5- 136.5	140- 142	152.5- 154.5	168- 170	171- 173
<i>Pinus</i>	69/17.6	101/27.2	189/49.0	47.5/12.5	52/13.6	52.5/14.5	83.5/22.2
<i>Abies</i>	1/0.3	1/0.3	-	1/0.3	-	-	-
TCT	78/19.9	61/16.4	43/11.1	69/18.1	100/26.1	87/24.0	74/19.7
<i>Quercus</i>	56/14.3	38/10.2	17/4.4	33/8.7	19/5.0	38/10.5	31/8.3
<i>Juglans</i>	-	-	-	-	-	-	-
<i>Aesculus</i>	-	-	-	-	-	-	-
<i>Lithocarpus</i>	6/1.5	3/0.8	3/0.8	3/0.8	-	4/1.1	3/0.8
Rhamnaceae	2/0.5	2/0.5	-	3/0.8	1/0.3	-	-
<i>Ribes</i>	-	-	-	-	-	-	-
<i>Sambucus</i>	-	-	-	-	-	1/0.3	-
<i>Tilia</i>	1/0.3	-	-	-	-	-	-
<i>Eucalyptus</i>	-	-	-	-	-	-	-
<i>Salix</i>	2/0.5	-	-	-	-	1/0.3	-
<i>Alnus</i>	3/0.8	1/0.3	-	1/0.3	6/1.6	10/2.8	5/1.3
<i>Artemisia</i>	8/2.0	12/3.2	11/2.9	5/1.3	8/2.1	8/2.2	6/1.6
Low-Spine Compositae	1/0.3	2/0.5	-	2/0.5	5/1.3	2/0.6	5/1.3
Liguliflorae	1/0.3	2/0.5	-	3/0.8	-	2/0.6	1/0.3
High-Spine Compositae	58/14.8	47/12.7	44/11.4	127/33.3	95/24.8	73/20.1	67/17.8
Malvaceae	-	-	-	-	-	-	5/1.3
Caryophyllaceae	-	-	-	-	-	-	-
Ericaceae	-	-	-	-	-	-	-
<i>Salvia</i>	-	1/0.3	-	-	1/0.3	-	-
<i>Galium</i>	-	-	-	1/0.3	2/0.5	-	-
<i>Eriogonum</i>	5/1.3	1/0.3	2/0.5	1/0.3	3/0.8	3/0.8	1/0.3
<i>Polygonum</i>	-	-	-	-	-	-	-
<i>Rumex</i>	-	-	-	-	-	-	-
<i>Plantago</i>	-	1/0.3	1/0.3	1/0.3	-	-	1/0.3
Umbelliferae	-	1/0.3	-	-	-	2/0.6	1/0.3
<i>Salix</i> -type	2/0.5	4/1.1	1/0.3	4/1.1	1/0.3	-	-
Gramineae	5/1.3	3/0.8	2/0.5	-	1/0.3	2/0.6	-
Cheno-Ams	8/2.0	18/4.9	10/2.6	17/4.5	9/2.4	6/1.7	12/3.2
Urticaceae	-	-	-	-	-	-	-
<i>Typha-Sparganium</i>	-	-	-	-	-	-	1/0.3
Monolete Spores	9/2.3	-	4/1.0	8/2.1	6/1.6	10/2.8	9/2.4
Trilete Spores	18/4.6	14/3.8	4/1.0	6/1.6	6/1.6	18/5.0	15/4.0
Indeterminates	46/11.7	43/11.6	34/8.8	41/10.8	54/14.1	34/9.4	40/10.7
Unknowns	14/3.6	15/4.0	21/5.4	8/2.1	14/3.7	9/2.5	15/4.0
Total Pollen	393	371	386	381.5	383	362.5	375.5
<i>Lycopodium</i> (Controls)	2616	875	1147	1377	1918	989	1578
<i>Pediastrum</i>	-	-	-	1	1	2	2
Dinoflagellates	38	11	6	24	34	25	11
Fungal Spore Type-A	3	1	-	1	4	3	4
Redeposited Pollen	-	1	-	1	2	1	-

Table 11. Quantitative distribution (raw count/percentage) of palynomorphs in core S3-15G (continued).

Pollen Type	Depth in Core (cm)						
	180- 182	190- 192	210- 212	230- 232	248- 250	270- 272	290- 292
<i>Pinus</i>	70.5/19.5	42/11.5	71/19.1	116.5/30.4	102/26.8	131.5/35.0	139.5/38.0
<i>Abies</i>	1/0.3	-	1/0.3	-	-	1/0.3	-
TCT	64/17.7	93/25.5	64/17.2	40/10.4	53/13.9	39/10.4	34/9.3
<i>Quercus</i>	42/11.6	53/14.5	23/6.2	22/5.7	38/10.0	28/7.5	15/4.1
<i>Juglans</i>	-	1/0.3	-	-	1/0.3	-	-
<i>Aesculus</i>	-	-	-	-	-	-	-
<i>Lithocarpus</i>	4/1.1	6/1.6	9/2.4	3/0.8	-	3/0.8	-
Rhamnaceae	-	1/0.3	2/0.5	2/0.5	-	-	3/0.8
<i>Ribes</i>	-	-	-	-	-	-	-
<i>Sambucus</i>	-	-	-	-	-	-	-
<i>Tilia</i>	-	-	-	-	-	-	-
<i>Eucalyptus</i>	-	-	-	-	-	-	-
<i>Salix</i>	1/0.3	-	-	-	5/1.3	1/0.3	1/0.3
<i>Alnus</i>	5/1.4	4/1.1	9/2.4	7/1.8	3/0.8	2/0.5	2/0.5
<i>Artemisia</i>	10/2.8	4/1.1	10/2.7	9/2.4	39/10.2	23/6.1	25/6.8
Low-Spine Compositae	5/1.4	2/0.6	-	2/0.5	1/0.3	3/0.8	4/1.1
Liguliflorae	-	2/0.6	4/1.1	-	3/0.8	2/0.5	-
High-Spine Compositae	66/18.3	81/22.2	66/17.7	67/17.5	44/11.6	58/15.5	45/12.2
Malvaceae	-	-	-	-	1/0.3	-	1/0.3
Caryophyllaceae	-	-	2/0.5	-	2/0.5	1/0.3	-
Ericaceae	-	-	-	-	-	1/0.3	-
<i>Salvia</i>	-	1/0.3	-	-	-	-	-
<i>Galium</i>	-	-	-	-	-	-	-
<i>Eriogonum</i>	2/0.6	1/0.3	1/0.3	2/0.5	2/0.5	3/0.8	2/0.5
<i>Polygonum</i>	-	-	-	-	-	-	-
<i>Rumex</i>	-	-	-	-	1/0.3	-	-
<i>Plantago</i>	-	-	-	4/1.0	-	-	2/0.5
Umbelliferae	2/0.6	-	-	2/0.5	-	1/0.3	-
<i>Salix</i> -type	1/0.3	-	3/0.8	4/1.0	-	2/0.5	7/1.9
Gramineae	-	3/0.8	1/0.3	6/1.6	7/1.8	2/0.5	5/1.4
Cheno-Ams	11/3.0	6/1.6	5/1.3	14/3.7	11/2.9	10/2.7	5/1.4
Urticaceae	-	-	1/0.3	-	-	-	-
<i>Typha-Sparganium</i>	1/0.3	-	-	-	-	-	-
Monolete Spores	6/1.7	7/1.9	5/1.3	8/2.1	1/0.3	6/1.6	10/2.7
Trilete Spores	29/8.0	8/2.2	29/7.8	12/3.1	8/2.1	6/1.6	5/1.4
Indeterminates	36/10.0	44/12.1	53/14.3	46/12.0	55/14.4	44/11.7	45/12.2
Unknowns	5/1.4	6/1.6	13/3.5	17/4.4	4/1.1	8/2.1	17/4.6
Total Pollen	361.5	365	372	383.5	381	375.5	367.5
<i>Lycopodium</i> (Controls)	2084	1035	1153	1941	2771	1445	1119
<i>Pediastrum</i>	6	1	10	31	6	3	12
Dinoflagellates	29	30	45	8	11	31	6
Fungal Spore Type-A	2	-	3	2	-	1	-
Redeposited Pollen	-	1	-	-	-	-	-

Table 11. Quantitative distribution (raw count/percentage) of palynomorphs in core S3-15G (continued).

Pollen Type	Depth in Core (cm)						
	310- 312	330- 332	336.5- 338	347- 349	370- 372	390- 392	410- 412
<i>Pinus</i>	135.5/36.7	148.5/38.9	160/43.5	128.5/33.5	145/39.7	173/48.1	160.5/41.6
<i>Abies</i>	1/0.3	-	1/0.3	-	1/0.3	3/0.8	2.5/0.7
TCT	27/7.3	20/5.2	10/2.7	25/6.5	10/2.7	14/3.9	8/2.1
<i>Quercus</i>	25/6.8	22/5.8	13/3.5	16/4.2	19/5.2	11/3.1	21/5.4
<i>Juglans</i>	-	-	-	-	-	-	-
<i>Aesculus</i>	-	-	-	-	-	-	-
<i>Lithocarpus</i>	2/0.5	3/0.8	-	1/0.3	1/0.3	-	2/0.5
Rhamnaceae	4/1.1	2/0.5	3/0.8	3/0.8	3/0.8	1/0.3	-
<i>Ribes</i>	-	-	-	-	-	1/0.3	-
<i>Sambucus</i>	-	-	-	-	-	-	-
<i>Tilia</i>	-	-	-	-	-	-	-
<i>Eucalyptus</i>	-	-	-	-	-	-	-
<i>Salix</i>	-	-	3/0.3	1/0.3	-	1/0.3	1/0.3
<i>Alnus</i>	7/1.9	2/0.5	3/0.3	7/1.8	2/0.6	-	-
<i>Artemisia</i>	29/7.9	28/7.3	19/5.2	27/7.0	27/7.4	27/7.5	37/9.6
Low-Spine Compositae	5/1.4	6/1.6	2/0.5	4/1.0	1/0.3	2/0.6	2/0.5
Liguliflorae	-	5/1.3	2/0.5	1/0.3	-	1/0.3	1/0.3
High-Spine Compositae	50/13.5	59/15.5	56/15.2	51/13.3	53/14.5	60/16.7	44/11.4
Malvaceae	-	-	-	1/0.3	-	-	-
Caryophyllaceae	1/0.3	-	1/0.3	4/1.0	1/0.3	-	1/0.3
Ericaceae	-	-	-	-	-	-	-
<i>Salvia</i>	-	-	-	-	-	-	-
<i>Galium</i>	-	-	-	-	-	-	-
<i>Eriogonum</i>	1/0.3	6/1.6	1/0.3	1/0.3	4/1.1	4/1.1	4/1.0
<i>Polygonum</i>	1/0.3	-	-	-	-	-	-
<i>Rumex</i>	-	-	-	1/0.3	-	-	-
<i>Plantago</i>	1/0.3	2/0.5	-	1/0.3	3/0.8	-	2/0.5
Umbelliferae	1/0.3	-	1/0.3	4/1.0	1/0.3	-	-
<i>Salix</i> -type	1/0.3	4/1.1	3/0.8	1/0.3	3/0.8	2/0.6	2/0.5
Gramineae	3/0.8	5/1.3	-	3/0.8	4/1.1	-	3/0.8
Cheno-Ams	13/3.5	6/1.6	4/1.1	8/2.1	14/3.8	5/1.4	12/3.1
Urticaceae	-	-	-	-	-	-	-
<i>Typha-Sparganium</i>	-	-	-	-	-	-	-
Monolete Spores	6/1.6	-	3/0.8	5/1.3	3/0.8	1/0.3	3/0.8
Trilete Spores	4/1.1	3/0.8	8/2.2	6/1.6	7/1.9	7/1.9	2/0.5
Indeterminates	41/11.1	37/9.7	61/16.6	56/14.6	42/11.5	28/7.8	50/13.0
Unknowns	11/3.0	23/6.0	14/3.8	28/7.3	21/5.8	19/5.3	28/7.3
Total Pollen	369.5	381.5	368	383.5	365	360	386
<i>Lycopodium</i> (Controls)	1248	1453	1971	1358	1225	1771	1193
<i>Pediastrum</i>	2	1	-	8	2	1	2
Dinoflagellates	5	4	2	6	2	-	5
Fungal Spore Type-A	1	-	1	-	1	1	-
Redeposited Pollen	-	-	1	-	-	-	1

Table 11. Quantitative distribution (raw count/percentage) of palynomorphs in core S3-15G (continued).

Pollen Type	Depth in Core (cm)			
	412- 414.5	430- 432	445.5- 447.5	467.5- 469.5
<i>Pinus</i>	188/52.2	155.5/41.9	163/44.4	186/48.9
<i>Abies</i>	1.5/0.4	3/0.8	-	0.5/0.1
TCT	6/1.7	4/1.1	3/0.8	14/3.7
<i>Quercus</i>	17/4.7	12/3.2	14/3.8	12/3.2
<i>Juglans</i>	-	-	-	-
<i>Aesculus</i>	-	-	1/0.3	-
<i>Lithocarpus</i>	1/0.3	-	-	3/0.8
Rhamnaceae	-	1/0.3	-	3/0.8
<i>Ribes</i>	-	-	-	-
<i>Sambucus</i>	-	-	-	-
<i>Tilia</i>	-	-	-	-
<i>Eucalyptus</i>	-	-	-	-
<i>Salix</i>	-	1/0.3	-	-
<i>Alnus</i>	-	-	-	2/0.5
<i>Artemisia</i>	16/4.4	42/11.3	21/5.7	26/6.8
Low-Spine Compositae	2/0.6	1/0.3	2/0.5	2/0.5
Liguliflorae	5/1.4	-	1/0.3	4/1.1
High-Spine Compositae	54/15.0	60/16.2	74/20.2	47/12.4
Malvaceae	-	-	-	-
Caryophyllaceae	2/0.6	-	1/0.3	-
Ericaceae	-	-	-	-
<i>Salvia</i>	-	-	-	-
<i>Galium</i>	-	-	-	-
<i>Eriogonum</i>	4/1.1	2/0.5	3/0.8	1/0.3
<i>Polygonum</i>	-	-	-	-
<i>Rumex</i>	-	-	-	-
<i>Plantago</i>	-	2/0.5	1/0.3	3/0.8
Umbelliferae	2/0.6	-	-	-
<i>Salix</i> -type	2/0.6	3/0.8	1/0.3	1/0.3
Gramineae	-	1/0.3	1/0.3	-
Cheno-Ams	11/3.1	9/2.4	12/3.3	5/1.3
Urticaceae	-	-	-	-
<i>Typha-Sparganium</i>	-	-	-	-
Monoletic Spores	1/0.3	-	4/1.1	5/1.3
Trilete Spores	1/0.3	5/1.4	6/1.6	4/1.1
Indeterminates	38/10.5	47/12.7	45/12.3	48/12.6
Unknowns	9/2.5	23/6.2	14/3.8	14/3.7
Total Pollen	360.5	371.5	367	380.5
<i>Lycopodium</i> (Controls)	1365	1113	1465	1681
<i>Pediastrum</i>	1	1	1	1
Dinoflagellates	6	5	2	5
Fungal Spore Type-A	-	2	-	1
Redeposited Pollen	-	1	-	-

Table 12. *Pediastrum* species descriptions.

Two species of *Pediastrum* were recovered in core S3-15G. Species A is characterized by a flat, entire, coenobium comprised of 16 coenocytes arranged in three rings. An aberrant form with only 15 coenocytes is shown in Figure 3A. A central coenocyte is present and the inner coenocytes are commonly 7-sided. The marginal coenocytes differ only in that their outer edges have developed into two horn-like processes that lie within the same plane. This species has been described by Adam (in press) as *Pediastrum* sp. X from Clear Lake County, California, and shows affinities to *P. boryanum* (Turpin) Meneghini, as illustrated by Parra Barrientos (1979).

The flat coenobium of *Pediastrum* sp. B (Figure 3B) is comprised of twice as many coenocytes (32) as that of *Pediastrum* sp. A. The coenocytes are arranged in four rings and are separated primarily by triangular perforations. Unlike species A, the central coenocyte is absent on species B, and the inner and peripheral cells are rectangular (characteristically wider than high). As with species A, each marginal cell possesses two processes that lie in a single plane. However, the species B morphotype is considerably less incised. This species is the equivalent of Adam's (in press) *Pediastrum* sp. O from Clear Lake County and is similar to *Pediastrum delicatites*, first described by Wilson and Hoffmeister (1953) from Paleogene deposits in southern Sumatra.

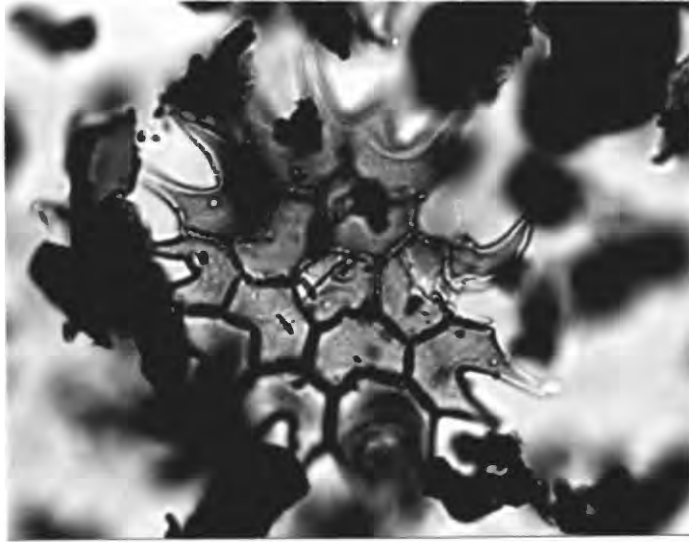


Figure 3A. Photomicrograph of *Pediastrum* sp. A. 30  $\mu\text{m}$  x 42  $\mu\text{m}$ .



Figure 3B. Photomicrograph of *Pediastrum* sp. B. 45  $\mu\text{m}$  x 60  $\mu\text{m}$ .



Table 13. Grain size data for core S3-15G from 150-471 cm.

Depth in Core (cm)	Mean ( $\phi$ )	Sorting ( $\phi$ )	Total Sediment Weight (gm)	Sand Weight (gm)	Sand Weight (%)	Sediment Type
150-152	6.42	0.855	7.7421	0.0318	0.41	Hemipelagic
165-167	6.67	0.759	8.2900	0.0556	0.67	Hemipelagic
193-195	6.63	0.799	10.7080	0.0653	0.61	Hemipelagic
200-202	6.59	0.792	10.8015	0.1175	1.09	Hemipelagic
210-212	6.14	1.010	19.6000	0.1641	0.84	Turbiditic
220-222	6.51	0.798	9.2369	0.0322	0.35	Hemipelagic
231-233	6.23	0.851	12.5915	0.0419	0.33	Turbiditic
241-243	6.33	0.820	7.7759	0.4171	5.36	Hemipelagic
256-257	6.64	0.791	11.7459	0.1502	1.28	Hemipelagic
270-272	6.48	0.875	18.8000	0.1202	0.64	Hemipelagic
280-282	6.60	0.841	9.7600	0.0459	0.47	Hemipelagic
295-297	6.32	0.980	15.3438	10.0345	65.40	Turbiditic
300-302	6.51	0.840	10.9959	0.5890	5.36	Hemipelagic
352-354	6.54	0.751	7.4725	0.0723	0.97	Hemipelagic
396-398	6.41	0.837	11.9703	0.0563	0.47	Hemipelagic
448-450	6.53	0.799	11.1525	0.0400	0.36	Hemipelagic
469-471	6.21	0.945	11.4115	0.6978	6.11	Turbiditic