

Distribution Chart of Benthic Foraminifera (Genus)

| Transitional | Inner Neritic | Middle Neritic | Outer Neritic | Upper Bathyal | Lower Bathyal | Sample Code | <i>Adelosina</i> | <i>Alveolinella</i> | <i>Ammobaculites</i> | <i>Ammonia</i> | <i>Amphicoryna</i> | <i>Amplistegina</i> | <i>Anomalina</i> | <i>Astacolus</i> | <i>Asterorotalia</i> | <i>Baculogypsinioides</i> | <i>Baggina</i> | <i>Bigenerina</i> | <i>Bolivina</i> | <i>Bolivinita</i> | <i>Bombulina</i> | <i>Brizalina</i> | <i>Bulinina</i> | <i>Calcarina</i> | <i>Cancris</i> | <i>Cassidulina</i> | <i>Cellanthus</i> | <i>Ceratobulimina</i> | <i>Ceratocancris</i> | <i>Cibicides</i> | <i>Dentalina</i> | <i>Discorbina</i> |
|--------------|---------------|----------------|---------------|---------------|---------------|----------------|------------------|---------------------|----------------------|----------------|--------------------|---------------------|------------------|------------------|----------------------|---------------------------|----------------|-------------------|-----------------|-------------------|------------------|------------------|-----------------|------------------|----------------|--------------------|-------------------|-----------------------|----------------------|------------------|------------------|-------------------|
| | | | | | | P.Bembang | | | | 346 | | 38 | | | 8 | | | | | | | | | 46 | | | 18 | | | | | |
| | | | | | | P. Parangireng | | | | 304 | | 4979 | | | | | | | | | | | | 272 | | | 48 | | | | | |
| | | | | | | SSTH1 | 214 | | | 23615 | | 214 | | | 8896 | | 107 | | | | | | | | | | 107 | | | 855 | | |
| | | | | | | SSTH2 | | | 994 | 12157 | | 117 | 409 | | | | | | | | | 351 | 117 | | | | | | | 526 | | |
| | | | | | | sem-A9 | | | | 355 | | | 4 | | 8 | | | | | 4 | | 45 | 23 | | | 8 | | | | 30 | | |
| | | | | | | sem-A21 | | | | 820 | | | | | | | | | | | | 518 | 15 | | | 15 | | | | 85 | | |
| | | | | | | sem-A11 | | | 69 | 1300 | | | 10 | | 49 | | | | | | | 108 | 25 | | | | | | | | | |
| | | | | | | sem-A6 | | | 41 | 5084 | | | | | 984 | | | | 41 | | | 1353 | 328 | | | | | | | 533 | | |
| | | | | | | sem-A5 | | | 41 | 3747 | | | 41 | | 559 | | | | | | | 704 | 104 | | | | | | | | | |
| | | | | | | SSTH8 | 13 | | 32 | 233 | | 19 | | | 39 | | | | | | | 161 | 6 | 6 | 6 | | 6 | | | 362 | | |
| | | | | | | IKN 01 | | | | 5 | | | | | | | | | | | 1 | 3 | | | 1 | | | | | 24 | | |
| | | | | | | SS10 | | | | 16 | | | 2 | | 3 | | | | | | 1 | 16 | | | 2 | | | | | 7 | | |
| | | | | | | SS09 | 1 | | | 62 | | 2 | 1 | | 3 | | 2 | | | | | 41 | 1 | | | | | | | 63 | | |
| | | | | | | IKN 03 | | 1 | 1 | 3 | | 28 | 1 | 1 | | 1 | | | 1 | | | 38 | 1 | 1 | | 1 | | | | 34 | | |
| | | | | | | CLP 03 | | | | 29 | 3 | 5 | 5 | | | | | | | | | 60 | 10 | | | | | | | 96 | | |
| | | | | | | GC05 | | | | 540 | 13 | | 13 | | | | | | | | | 2221 | | | | 63 | | | | 100 | | |
| | | | | | | CLP 05 | | | | 196 | 65 | 11 | 11 | | | | | | | | | 498 | 76 | | | 11 | | | | 109 | 11 | |
| | | | | | | CLP 06 | | | | 1 | 1 | 3 | | | | | | | | | | 27 | 7 | | | | | | | 7 | | |
| | | | | | | CLP 07 | | | | 2 | 1 | 1 | | | | | | | | | | 7 | 1 | | | 1 | | | | 1 | | |
| | | | | | | IKN 04 | | | | 239 | | 9088 | | | | | | | 1196 | | | 53571 | | 478 | | 478 | 478 | | | 8610 | | |
| | | | | | | IKN 05 | | | | 1 | 1 | 1 | | | | | | | | | | 2 | 1 | | | 1 | | | | 8 | 1 | |
| | | | | | | Sim ST-14 | | | 1537 | | | | 512 | | | | | | | | | 12804 | 1024 | | | 1024 | | | | 2049 | 2049 | 512 |
| | | | | | | Sum ST-09 | | | | 1025 | | | 513 | 513 | | | 513 | 513 | 3075 | | | 18447 | 4100 | | | 2050 | | | | 1538 | 513 | |
| | | | | | | Sum ST-01 | | | 512 | 2048 | | | 1536 | | | | 512 | | | 2048 | | 4609 | 4609 | | | 512 | | | | 1024 | 1024 | |
| | | | | | | Sum ST-12 | | | | 64 | | | 128 | | | | | | | | 128 | | 192 | | | | | | | | | |
| | | | | | | Sum ST-06 | | | | | | 512 | | | | 256 | | | | 1281 | | 2305 | 1281 | | | | 1281 | | | 1793 | 768 | |
| | | | | | | OS1 | | | | | 3591 | | 3078 | | | | | | | | 2565 | 3078 | 2565 | | | | | | | 3073 | 1026 | |
| | | | | | | Sum ST-13 | | | | | | 1024 | | | | | | | | | 1280 | 512 | 256 | | | | | 768 | | 768 | 256 | |
| | | | | | | Sum ST-03 | | | | | | | 16 | | | | | | | | | 32 | 144 | | | | | | 8 | | | |
| | | | | | | Sum ST-11 | | | | | 1024 | | 512 | 512 | | | | | | | | 2048 | 1536 | | 1024 | | | | | 3073 | 3073 | |
| | | | | | | OS10 | | | | | | 512 | | | | | | | | | | 512 | 512 | | | | | | | 512 | | |
| | | | | | | Sim ST-02 | | | | | | | 2 | | | | | | | | | | | | | | | | | | 2 | |
| | | | | | | Sim ST-08 | | | | | | | | | | | | | | | | | 80 | | | | | | | | | |
| | | | | | | Sum ST-08 | | | | | | | | | | | | | | | | | 14 | | | | | | | 4 | 1 | |
| | | | | | | OS7 | | | | | | | | | | | | | | | | | | | | | | | | 8 | | |
| | | | | | | | 228 | 1 | 3227 | 52191 | 4698 | 14504 | 8842 | 1025 | 10549 | 1 | 877 | 513 | 1750 | 10381 | 2 | 104071 | 17029 | 804 | 1033 | 4164 | 658 | 2049 | 8 | 25293 | 8724 | 512 |

| Transitional | Inner Neritic | Middle Neritic | Outer Neritic | Upper Bathyal | Lower Bathyal | Sample Code | <i>Discorbis</i> | <i>Edentostomina</i> | <i>Eggerella</i> | <i>Elphidium</i> | <i>Eponides</i> | <i>Fissurina</i> | <i>Florilus</i> | <i>Glandulina</i> | <i>Globobulimina</i> | <i>Globocassidulina</i> | <i>Guttulina</i> | <i>Gyroldina</i> | <i>Haplophragmoides</i> | <i>Hemirobulina</i> | <i>Heterolepa</i> | <i>Hoeglundina</i> | <i>Hyalinea</i> | <i>Lagena</i> | <i>Laticarinina</i> | <i>Lenticulina</i> | <i>Lingulina</i> | <i>Marginulina</i> | <i>Martinottiella</i> | <i>Massilia</i> | <i>Miliolinella</i> | <i>Neovigierina</i> | <i>Nodosaria</i> | <i>Nonion</i> | <i>Nonionella</i> | <i>Oolina</i> | | | | | | | |
|--------------|---------------|----------------|---------------|---------------|---------------|----------------|------------------|----------------------|------------------|------------------|-----------------|------------------|-----------------|-------------------|----------------------|-------------------------|------------------|------------------|-------------------------|---------------------|-------------------|--------------------|-----------------|---------------|---------------------|--------------------|------------------|--------------------|-----------------------|-----------------|---------------------|---------------------|------------------|---------------|-------------------|---------------|----|------|------|------|----|----|------|
| | | | | | | P.Bembang | | | | 138 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | P. Parangireng | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | SSTH1 | | | | 5236 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | SSTH2 | | 117 | | 1227 | | 234 | 58 | | | | | | | | | | 526 | | | | | | | | | | | | | 409 | | | | | 58 | | |
| | | | | | | sem-A9 | | 4 | | 72 | | 4 | | | | | | | | | | | | | | | | 8 | 4 | | | | | | | | | | 19 | | | | |
| | | | | | | sem-A21 | | | | 31 | | | | | | | | | | | | | | | | | | | | | | | | | | | | 39 | | | | | |
| | | | | | | sem-A11 | | | | 129 | | | 35 | | | | | | | | | | | 15 | | | | | | | | | | | | | | | 5 | | | | |
| | | | | | | sem-A6 | | | | 2419 | | | 861 | | | | | | | | | | | 82 | | | | | | | | | | | | | | | | | 41 | | |
| | | | | | | sem-A5 | | | | 559 | | 62 | 1263 | | | | | | | | | | | 124 | | | | | 41 | | | | | | | | | | | | | 21 | |
| | | | | | | SSTH8 | 6 | | | 103 | | 13 | 26 | | | | | | | | | | | | | | | | 19 | | | | | | | | 19 | 32 | 78 | | 13 | | |
| | | | | | | IKN 01 | | | | 2 | | 1 | | | | | | | | | | | | | | 9 | | | | 1 | | | | | | | 1 | | 1 | 1 | 1 | | |
| | | | | | | SS10 | | | | 2 | | 1 | | | | | | | | | | | | | | | | | | 2 | | | | | | | 6 | 2 | 12 | 1 | 2 | | |
| | | | | | | SS09 | | | | 1 | | 9 | | | | | | | | | | | | | | | | | | 10 | | | | | | | | 2 | 9 | | | | |
| | | | | | | IKN 03 | | | | 6 | | | | | 1 | | | | | | | | | 1 | | | 26 | | | 1 | 1 | | 2 | | | | | 4 | 1 | | | | |
| | | | | | | CLP 03 | | 3 | | | | 5 | | | | | | | | | | | 3 | 23 | | | | | 3 | 13 | | 16 | | | | | 3 | 18 | 5 | | | | |
| | | | | | | GC05 | | | | | | | | | | | | | | | | | | | | | | | | 25 | | 50 | | | | | | 1029 | | 13 | | | |
| | | | | | | CLP 05 | | | | | 22 | 11 | | | | | | | | | | | | 22 | | 22 | 33 | | | 54 | | 43 | | | | | | 22 | 65 | 43 | | | |
| | | | | | | CLP 06 | | | | | | 1 | | | | | | | | | | | | 2 | | | | | | 1 | | 7 | | | | | | 1 | 2 | 2 | | | |
| | | | | | | CLP 07 | | | | | | | | | | | | | | | | | | 1 | | | | | | 1 | | 3 | | | | | | 1 | 2 | 1 | | | |
| | | | | | | IKN 04 | | | | | | | | | | | | | | | | | | 5740 | | | 478 | | | | | 478 | | | | 239 | | 1913 | | 239 | | | |
| | | | | | | IKN 05 | | | | | | | 1 | 1 | | | | | | | | | | 1 | | | | | | | | 2 | 1 | | | | | | 1 | 1 | | | |
| | | | | | | Sim ST-14 | | | | | | 1537 | | | | | | | | | | 512 | | 1024 | | 512 | 2049 | 3585 | | | | 6659 | | | | | | 3073 | 1024 | | | | |
| | | | | | | Sum ST-09 | | | | | | 513 | | 513 | | | | | | | | 1025 | | 1025 | | | 513 | | | | 1538 | | 2050 | | | | | | | | | | 513 |
| | | | | | | Sum ST-01 | | | | | | | 512 | | | | | | | | 1024 | | | 1024 | | | | | 1536 | 1024 | | | 512 | | | | | | | | | | 1024 |
| | | | | | | Sum ST-12 | | | | | | | | | | | | | | | | | | | | | 128 | | | | | | 128 | | | | | | | | | | 64 |
| | | | | | | Sum ST-06 | | | | | | | | | | | | | | | 512 | | | | | | | | | | | | 1281 | | | | | | 256 | 256 | | | 768 |
| | | | | | | OS1 | | | | | | 513 | | | | | | | | | 1539 | 1026 | | | | | 513 | 513 | | 513 | | 4617 | | 513 | | | | | | | | | |
| | | | | | | Sum ST-13 | | | | | | | | | | | | | | | 768 | | | | | | | | 1024 | 512 | | | 512 | | | | | | | | | | |
| | | | | | | Sum ST-03 | | | | | | | | | | | | | | | 24 | | | | | | | | 24 | | | | 16 | | | 8 | | | 8 | | | | 16 |
| | | | | | | Sum ST-11 | | | | | | | | | | | | | | | | 512 | | | | 2048 | 1536 | | | | | 3073 | | | 512 | | | | | 1024 | | | |
| | | | | | | OS10 | | | | | | | | | | | | | | | | | | | | | | | | | 1024 | | | | | | | | | 512 | | | |
| | | | | | | Sim ST-02 | | | | | | | | | | | | 2 | | | | | | 2 | | | 6 | | | | 2 | | | | | | | | | 10 | | | |
| Sim ST-08 | | | | | | | | | | | | | | | | | | | | | | | | 16 | | | | | | | | | | | | | | | | | | | |
| Sum ST-08 | | | | | | | | | | | | 1 | | | 11 | 1 | | 5 | | | | | 18 | | 2 | | | | | | | | | | | | | | | | | | |
| OS7 | | | | | | | 17 | 1 | | | | | | | 4 | | | | | | | | | 8 | | | | | | | | | | | | | 29 | | | | | | |
| | | | | | | | 9 | 121 | 513 | 10458 | 2084 | 842 | 2243 | 1 | 3882 | 3077 | 3 | 8870 | 747 | 512 | 5793 | 8270 | 5005 | 2252 | 1024 | 19449 | 1 | 513 | 520 | 239 | 409 | 6337 | 3015 | 402 | 2 | 2550 | | | | | | | |

| Transitional | Inner Neritic | Middle Neritic | Outer Neritic | Upper Bathyal | Lower Bathyal | Sample Code | <i>Oolina</i> | <i>Operculina</i> | <i>Oridorsalis</i> | <i>Peneroplis</i> | <i>Planorbulinella</i> | <i>Planularia</i> | <i>Planulina</i> | <i>Pseudorotalia</i> | <i>Pullenia</i> | <i>Pyrgo</i> | <i>Quinqueloculina</i> | <i>Rectobolivina</i> | <i>Reussella</i> | <i>Saracenaria</i> | <i>Sigmolopsis</i> | <i>Siphogenerina</i> | <i>Siphonaptera</i> | <i>Siphonina</i> | <i>Sphaeroidina</i> | <i>Sphaerogypsina</i> | <i>Spiraloculina</i> | <i>Textularia</i> | <i>Trifarina</i> | <i>Triloculina</i> | <i>Uvigerina</i> | <i>Vaginulina</i> | <i>Virgulina</i> | <i>Vulvulina</i> | <i>Ammonia supera</i> | | | | | | | |
|--------------|---------------|----------------|---------------|---------------|---------------|----------------|---------------|-------------------|--------------------|-------------------|------------------------|-------------------|------------------|----------------------|-----------------|--------------|------------------------|----------------------|------------------|--------------------|--------------------|----------------------|---------------------|------------------|---------------------|-----------------------|----------------------|-------------------|------------------|--------------------|------------------|-------------------|------------------|------------------|-----------------------|------|-------|-----|-----|------|------|--|
| | | | | | | P.Bembang | | | | 14 | | | | 2 | | | | | 4 | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | P. Parangireng | | | | | | | | | | | | | 54 | | | | | | | | | | | 16426 | | | | | | | | | | | | |
| | | | | | | SSTH1 | | 534 | | 534 | | | | | 641 | | | | 534 | | | | | | | | | | | | | 214 | | | | 214 | | | | | | |
| | | | | | | SSTH2 | 58 | 117 | | 117 | | | | | | | | | 175 | | | 58 | | 58 | | | | | | | | 175 | | | 58 | | | | | | | |
| | | | | | | sem-A9 | | 11 | 8 | | | | | | | | | | | | | 8 | | | | | 4 | | 11 | 4 | | 38 | | | 11 | | | | | | | |
| | | | | | | sem-A21 | | | | | | | | | | | | | | | | 46 | | | | | | | | | | | 62 | | | | | | | | | |
| | | | | | | sem-A11 | | | | | | | | | | | | | | | | 5 | | | | | | | | | | | 10 | | | 5 | | | | | | |
| | | | | | | sem-A6 | 41 | | | | | | | | | | | | | | | 41 | | 164 | | | | | | | | | 123 | | 41 | | | | | | | |
| | | | | | | sem-A5 | 21 | | | | | | | | | | | | 104 | | | 21 | | 21 | | | | | | | | | | | | | | | | | | |
| | | | | | | SSTH8 | 13 | 381 | | | | | | | | | | | 601 | | | 13 | | | | | | 13 | | | | | 78 | 26 | | 78 | | | | | | |
| | | | | | | IKN 01 | 1 | 4 | | | | | | | | | | | 50 | | | 50 | | | | | | | | 1 | | | 2 | 3 | | 3 | | | | | | |
| | | | | | | SS10 | 2 | | | | | | | | | | | | 19 | | | 167 | | 1 | | | | | | | | | 2 | 1 | | 2 | | | | | | |
| | | | | | | SS09 | | 4 | | | | | | | | | | | 3 | | | 27 | | | | | | | | | | | 2 | 1 | | 4 | | | | | | |
| | | | | | | IKN 03 | | 16 | | | | 1 | | | | | | | 1 | | 1 | 16 | | | | | | | 1 | | | | 2 | 1 | | 1 | | | | | | |
| | | | | | | CLP 03 | | | | | | | | | | | 3 | | | 3 | | 3 | 85 | | | 3 | | 3 | | | 5 | | 10 | 8 | | | | | | 8 | | |
| | | | | | | GC05 | | | | | | | | | | | | | | 176 | | | 25 | | | | | | | | | | | | | | | | 38 | | | |
| | | | | | | CLP 05 | | | | | | | | | | | 11 | | | | | | 11 | | | | | | | | | | 33 | 33 | 11 | 33 | | | | | | |
| | | | | | | CLP 06 | | 1 | | | | | | | | | 1 | | 1 | | | | 4 | | | 1 | | | | | | | 1 | | | 3 | | | 1 | 1 | | |
| | | | | | | CLP 07 | | 1 | | | | | | | | | | | | | | | 3 | | | | | 1 | | | | 1 | 1 | | 1 | 2 | 1 | | | | | |
| | | | | | | IKN 04 | | 239 | | | | | | | | | | | 717 | | | 239 | | 1435 | | | | | | 478 | | | 239 | 957 | | 478 | 478 | | | | | |
| | | | | | | IKN 05 | | 2 | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | | 1 | | | | 1 | | | | | 1 | 1 | | 2 | | | | | |
| | | | | | | Sim ST-14 | | | | | | | | | | | 512 | | | | | 1537 | 512 | | 512 | 512 | 1024 | 2561 | | 512 | | | 512 | 512 | | 1024 | 10757 | | | | | |
| | | | | | | Sum ST-09 | | 513 | | | | | | | | | 513 | | | | | | 513 | 1538 | 513 | 513 | 513 | 513 | | | | | | 1025 | | | 9738 | | | | | |
| | | | | | | Sum ST-01 | 1024 | | 1536 | | | | | | | | 512 | | 512 | 1024 | 2048 | | 512 | | | | | | | | | | 512 | | | 1536 | 6145 | | | 512 | 2048 | |
| | | | | | | Sum ST-12 | 64 | | | | | | | | | | | 64 | | | | | | | | | | | | | | | | | | | | 128 | | 128 | 64 | |
| | | | | | | Sum ST-06 | 768 | | | | | | | | | | | 256 | | | 256 | | 512 | | | | | | | | 1024 | | | 512 | | | 1537 | | | | | |
| | | | | | | OS1 | | | 1026 | | | | | | | | | 2052 | | | | | 513 | | | | | 1026 | | | 513 | | 513 | | | | 11286 | | | | | |
| | | | | | | Sum ST-13 | | | | | | | | | | | | 256 | | | 256 | | | | | | | | | | | | 512 | | | | 768 | | | | | |
| | | | | | | Sum ST-03 | 16 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 24 | | | | | |
| | | | | | | Sum ST-11 | | | | | | | | | | | 512 | | | | | | | | | | | | | | | | | | | | 4609 | | | 1024 | | |
| | | | | | | OS10 | | | 512 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 512 | 512 | | | |
| | | | | | | Sim ST-02 | | | 6 | | | | | | | | | 12 | | 8 | | | | | | | | | | | | | | | | | | | | | | |
| Sim ST-08 | | | | | | | | | | | | 32 | | 16 | 16 | | | | | | | | | | | | | | | | 224 | | | | | | | | | | | |
| Sum ST-08 | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| OS7 | | 29 | | 4 | | | | | | | | 8 | | | 4 | 4 | 12 | | | | | | | | 4 | | | | | | | 12 | | 4 | | | | | | | | |
| | | 2550 | 1309 | 3092 | 665 | 1 | 1551 | 3193 | 2494 | 1053 | 4123 | 2446 | 3076 | 2708 | 1029 | 1537 | 4108 | 13 | 1004 | 1552 | 16426 | 2844 | 3275 | 12 | 3487 | 46228 | 514 | 42 | 1672 | 2113 | | | | | | | | | | | | |

IndVal Calculation

N_{ij} =average number of individuals of species/genus i in all samples in environment j

N_i = total average number of individuals of species/genus I in the whole environment

M_{ij} = number of samples in environment j containing genus i species

M_i = total sampel on environment j

1 *Adelosina*

| Environment | N_{ij} | N_i | A_{ij} | M_{ij} | M_i | B_{ij} | IV ij |
|---------------------------|----------|-------|----------|----------|-------|----------|-----------|
| Transitional | 0 | 38 | 0.000000 | 0 | 2 | 0.000000 | 0.000000 |
| Inner Neritic (Fine Sand) | 36 | 38 | 0.939204 | 1 | 1 | 1.000000 | 93.920430 |
| Inner Neritic (Silt) | 0 | 38 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Middle Neritic | 2 | 38 | 0.060796 | 2 | 6 | 0.333333 | 2.026523 |
| Outer Neritic | 0 | 38 | 0.000000 | 0 | 5 | 0.000000 | 0.000000 |
| Upper Bathyal | 0 | 38 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Lower Bathyal | 0 | 38 | 0.000000 | 0 | 9 | 0.000000 | 0.000000 |

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2 *Alveolinella*

| Environment | N_{ij} | N_i | A_{ij} | M_{ij} | M_i | B_{ij} | IV ij |
|---------------------------|------------|------------|----------|----------|-------|----------|-----------|
| Transitional | 0 | 0.11466667 | 0.000000 | 0 | 2 | 0.000000 | 0.000000 |
| Inner Neritic (Fine Sand) | 0 | 0.11466667 | 0.000000 | 0 | 1 | 0.000000 | 0.000000 |
| Inner Neritic (Silt) | 0 | 0.11466667 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Middle Neritic | 0.11466667 | 0.11466667 | 1.000000 | 1 | 6 | 0.166667 | 16.666667 |
| Outer Neritic | 0 | 0.11466667 | 0.000000 | 0 | 5 | 0.000000 | 0.000000 |
| Upper Bathyal | 0 | 0.11466667 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Lower Bathyal | 0 | 0.11466667 | 0.000000 | 0 | 9 | 0.000000 | 0.000000 |

0.11466667

3 *Ammobaculites*

| Environment | N_{ij} | N_i | A_{ij} | M_{ij} | M_i | B_{ij} | IV ij |
|---------------------------|------------|------------|----------|----------|-------|----------|-----------|
| Transitional | 0 | 537.818133 | 0.000000 | 0 | 2 | 0.000000 | 0.000000 |
| Inner Neritic (Fine Sand) | 0 | 537.818133 | 0.000000 | 0 | 1 | 0.000000 | 0.000000 |
| Inner Neritic (Silt) | 190.864 | 537.818133 | 0.354886 | 4 | 6 | 0.666667 | 23.659051 |
| Middle Neritic | 5.50133333 | 537.818133 | 0.010229 | 2 | 6 | 0.333333 | 0.340966 |
| Outer Neritic | 0 | 537.818133 | 0.000000 | 0 | 5 | 0.000000 | 0.000000 |
| Upper Bathyal | 341.4528 | 537.818133 | 0.634885 | 2 | 6 | 0.333333 | 21.162842 |
| Lower Bathyal | 0 | 537.818133 | 0.000000 | 0 | 9 | 0.000000 | 0.000000 |

537.818133

4 *Ammonia*

| Environment | N_{ij} | N_i | A_{ij} | M_{ij} | M_i | B_{ij} | IV ij |
|---------------------------|------------|------------|----------|----------|-------|----------|-----------|
| Transitional | 325.0938 | 16819.4049 | 0.019328 | 2 | 2 | 1.000000 | 1.932850 |
| Inner Neritic (Fine Sand) | 11807.4112 | 16819.4049 | 0.702011 | 1 | 1 | 1.000000 | 70.201124 |
| Inner Neritic (Silt) | 3910.46187 | 16819.4049 | 0.232497 | 6 | 6 | 1.000000 | 23.249704 |
| Middle Neritic | 57.9355333 | 16819.4049 | 0.003445 | 6 | 6 | 1.000000 | 0.344457 |
| Outer Neritic | 195.41312 | 16819.4049 | 0.011618 | 5 | 5 | 1.000000 | 1.161831 |
| Upper Bathyal | 523.089333 | 16819.4049 | 0.031100 | 4 | 6 | 0.666667 | 2.073356 |
| Lower Bathyal | 0 | 16819.4049 | 0.000000 | 0 | 9 | 0.000000 | 0.000000 |

16819.4049

5 *Amphicoryna*

| Environment | N_{ij} | N_i | A_{ij} | M_{ij} | M_i | B_{ij} | IV ij |
|---------------------------|------------|------------|----------|----------|-------|----------|-----------|
| Transitional | 0 | 529.297973 | 0.000000 | 0 | 2 | 0.000000 | 0.000000 |
| Inner Neritic (Fine Sand) | 0 | 529.297973 | 0.000000 | 0 | 1 | 0.000000 | 0.000000 |
| Inner Neritic (Silt) | 0 | 529.297973 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Middle Neritic | 0.43466667 | 529.297973 | 0.000821 | 1 | 6 | 0.166667 | 0.013687 |
| Outer Neritic | 15.87744 | 529.297973 | 0.029997 | 4 | 5 | 0.800000 | 2.399773 |
| Upper Bathyal | 0.16666667 | 529.297973 | 0.000315 | 1 | 6 | 0.166667 | 0.005248 |
| Lower Bathyal | 512.8192 | 529.297973 | 0.968867 | 2 | 9 | 0.222222 | 21.530372 |

529.297973

6 *Amphistegina*

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|------------|------------|----------|-----|----|----------|-----------|
| Transitional | 2508.5194 | 4571.18421 | 0.548768 | 2 | 2 | 1.000000 | 54.876795 |
| Inner Neritic (Fine Sand) | 213.7088 | 4571.18421 | 0.046751 | 1 | 1 | 1.000000 | 4.675130 |
| Inner Neritic (Silt) | 19.4816 | 4571.18421 | 0.004262 | 1 | 6 | 0.166667 | 0.071030 |
| Middle Neritic | 8.98986667 | 4571.18421 | 0.001967 | 4 | 6 | 0.666667 | 0.131109 |
| Outer Neritic | 1820.31788 | 4571.18421 | 0.398216 | 4 | 5 | 0.800000 | 31.857266 |
| Upper Bathyal | 0.16666667 | 4571.18421 | 0.000036 | 1 | 6 | 0.166667 | 0.000608 |
| Lower Bathyal | 0 | 4571.18421 | 0.000000 | 0 | 9 | 0.000000 | 0.000000 |

4571.18421

7 *Anomalina*

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|------------|------------|----------|-----|----|----------|-----------|
| Transitional | 0 | 1188.67368 | 0.000000 | 0 | 2 | 0.000000 | 0.000000 |
| Inner Neritic (Fine Sand) | 0 | 1188.67368 | 0.000000 | 0 | 1 | 0.000000 | 0.000000 |
| Inner Neritic (Silt) | 77.3648 | 1188.67368 | 0.065085 | 4 | 6 | 0.666667 | 4.338999 |
| Middle Neritic | 1.44393333 | 1188.67368 | 0.001215 | 4 | 6 | 0.666667 | 0.080983 |
| Outer Neritic | 4.68352 | 1188.67368 | 0.003940 | 2 | 5 | 0.400000 | 0.157605 |
| Upper Bathyal | 533.572267 | 1188.67368 | 0.448880 | 5 | 6 | 0.833333 | 37.406697 |
| Lower Bathyal | 571.609156 | 1188.67368 | 0.480880 | 6 | 9 | 0.666667 | 32.058653 |

1188.67368

8 *Astacolus*

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|------------|----------|----------|-----|----|----------|----------|
| Transitional | 0 | 142.4336 | 0.000000 | 0 | 2 | 0.000000 | 0.000000 |
| Inner Neritic (Fine Sand) | 0 | 142.4336 | 0.000000 | 0 | 1 | 0.000000 | 0.000000 |
| Inner Neritic (Silt) | 0 | 142.4336 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Middle Neritic | 0.11466667 | 142.4336 | 0.000805 | 1 | 6 | 0.166667 | 0.013418 |
| Outer Neritic | 0 | 142.4336 | 0.000000 | 0 | 5 | 0.000000 | 0.000000 |
| Upper Bathyal | 85.4186667 | 142.4336 | 0.599709 | 1 | 6 | 0.166667 | 9.995145 |
| Lower Bathyal | 56.9002667 | 142.4336 | 0.399486 | 1 | 9 | 0.111111 | 4.438736 |

142.4336

9 *Asterorotalia*

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|------------|------------|----------|-----|----|----------|-----------|
| Transitional | 4.0056 | 9174.15307 | 0.000437 | 1 | 2 | 0.500000 | 0.021831 |
| Inner Neritic (Fine Sand) | 8896 | 9174.15307 | 0.969681 | 1 | 1 | 1.000000 | 96.968079 |
| Inner Neritic (Silt) | 266.661333 | 9174.15307 | 0.029067 | 4 | 6 | 0.666667 | 1.937773 |
| Middle Neritic | 7.48613333 | 9174.15307 | 0.000816 | 3 | 6 | 0.500000 | 0.040800 |
| Outer Neritic | 0 | 9174.15307 | 0.000000 | 0 | 5 | 0.000000 | 0.000000 |
| Upper Bathyal | 0 | 9174.15307 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Lower Bathyal | 0 | 9174.15307 | 0.000000 | 0 | 9 | 0.000000 | 0.000000 |

9174.15307

10 *Baculogypsinoides*

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|------------|------------|----------|-----|----|----------|-----------|
| Transitional | 0 | 0.11466667 | 0.000000 | 0 | 2 | 0.000000 | 0.000000 |
| Inner Neritic (Fine Sand) | 0 | 0.11466667 | 0.000000 | 0 | 1 | 0.000000 | 0.000000 |
| Inner Neritic (Silt) | 0 | 0.11466667 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Middle Neritic | 0.11466667 | 0.11466667 | 1.000000 | 1 | 6 | 0.166667 | 16.666667 |
| Outer Neritic | 0 | 0.11466667 | 0.000000 | 0 | 5 | 0.000000 | 0.000000 |
| Upper Bathyal | 0 | 0.11466667 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Lower Bathyal | 0 | 0.11466667 | 0.000000 | 0 | 9 | 0.000000 | 0.000000 |

0.11466667

11 *Baggina*

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|------------|----------|----------|-----|----|----------|-----------|
| Transitional | 0 | 235.1904 | 0.000000 | 0 | 2 | 0.000000 | 0.000000 |
| Inner Neritic (Fine Sand) | 106.8544 | 235.1904 | 0.454331 | 1 | 1 | 1.000000 | 45.433147 |
| Inner Neritic (Silt) | 0 | 235.1904 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Middle Neritic | 0.30186667 | 235.1904 | 0.001283 | 1 | 6 | 0.166667 | 0.021392 |
| Outer Neritic | 0 | 235.1904 | 0.000000 | 0 | 5 | 0.000000 | 0.000000 |
| Upper Bathyal | 128.034133 | 235.1904 | 0.544385 | 2 | 6 | 0.333333 | 18.146168 |
| Lower Bathyal | 0 | 235.1904 | 0.000000 | 0 | 9 | 0.000000 | 0.000000 |

235.1904

12 *Bigenerina*

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|------------|------------|----------|-----|----|----------|-----------|
| Transitional | 0 | 85.4186667 | 0.000000 | 0 | 2 | 0.000000 | 0.000000 |
| Inner Neritic (Fine Sand) | 0 | 85.4186667 | 0.000000 | 0 | 1 | 0.000000 | 0.000000 |
| Inner Neritic (Silt) | 0 | 85.4186667 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Middle Neritic | 0 | 85.4186667 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Outer Neritic | 0 | 85.4186667 | 0.000000 | 0 | 5 | 0.000000 | 0.000000 |
| Upper Bathyal | 85.4186667 | 85.4186667 | 1.000000 | 1 | 6 | 0.166667 | 16.666667 |
| Lower Bathyal | 0 | 85.4186667 | 0.000000 | 0 | 9 | 0.000000 | 0.000000 |

85.4186667

13 *Bolivina*

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|------------|----------|----------|-----|----|----------|-----------|
| Transitional | 0 | 331.5664 | 0.000000 | 0 | 2 | 0.000000 | 0.000000 |
| Inner Neritic (Fine Sand) | 0 | 331.5664 | 0.000000 | 0 | 1 | 0.000000 | 0.000000 |
| Inner Neritic (Silt) | 6.83306667 | 331.5664 | 0.020608 | 1 | 6 | 0.166667 | 0.343474 |
| Middle Neritic | 0.11466667 | 331.5664 | 0.000346 | 1 | 6 | 0.166667 | 0.005764 |
| Outer Neritic | 239.2 | 331.5664 | 0.721424 | 1 | 5 | 0.200000 | 14.428483 |
| Upper Bathyal | 85.4186667 | 331.5664 | 0.257622 | 1 | 6 | 0.166667 | 4.293693 |
| Lower Bathyal | 0 | 331.5664 | 0.000000 | 0 | 9 | 0.000000 | 0.000000 |

331.5664

14 *Bolivinita*

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|------------|------------|----------|-----|----|----------|-----------|
| Transitional | 0 | 1516.56516 | 0.000000 | 0 | 2 | 0.000000 | 0.000000 |
| Inner Neritic (Fine Sand) | 0 | 1516.56516 | 0.000000 | 0 | 1 | 0.000000 | 0.000000 |
| Inner Neritic (Silt) | 0.62986667 | 1516.56516 | 0.000415 | 1 | 6 | 0.166667 | 0.006922 |
| Middle Neritic | 0 | 1516.56516 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Outer Neritic | 0 | 1516.56516 | 0.000000 | 0 | 5 | 0.000000 | 0.000000 |
| Upper Bathyal | 1088.69973 | 1516.56516 | 0.717872 | 4 | 6 | 0.666667 | 47.858136 |
| Lower Bathyal | 427.235556 | 1516.56516 | 0.281713 | 2 | 9 | 0.222222 | 6.260281 |

1516.56516

15 *Bombulina*

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|------------|------------|----------|-----|----|----------|-----------|
| Transitional | 0 | 0.33333333 | 0.000000 | 0 | 2 | 0.000000 | 0.000000 |
| Inner Neritic (Fine Sand) | 0 | 0.33333333 | 0.000000 | 0 | 1 | 0.000000 | 0.000000 |
| Inner Neritic (Silt) | 0 | 0.33333333 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Middle Neritic | 0.33333333 | 0.33333333 | 1.000000 | 2 | 6 | 0.333333 | 33.333333 |
| Outer Neritic | 0 | 0.33333333 | 0.000000 | 0 | 5 | 0.000000 | 0.000000 |
| Upper Bathyal | 0 | 0.33333333 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Lower Bathyal | 0 | 0.33333333 | 0.000000 | 0 | 9 | 0.000000 | 0.000000 |

0.33333333

16 *Brizalina*

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|------------|------------|----------|-----|----|----------|-----------|
| Transitional | 0 | 18879.1213 | 0.000000 | 0 | 2 | 0.000000 | 0.000000 |
| Inner Neritic (Fine Sand) | 0 | 18879.1213 | 0.000000 | 0 | 1 | 0.000000 | 0.000000 |
| Inner Neritic (Silt) | 513.1008 | 18879.1213 | 0.027178 | 6 | 6 | 1.000000 | 2.717821 |
| Middle Neritic | 53.1666667 | 18879.1213 | 0.002816 | 6 | 6 | 1.000000 | 0.281616 |
| Outer Neritic | 11264.8 | 18879.1213 | 0.596680 | 5 | 5 | 1.000000 | 59.668031 |
| Upper Bathyal | 6361.06287 | 18879.1213 | 0.336936 | 5 | 6 | 0.833333 | 28.078032 |
| Lower Bathyal | 686.990933 | 18879.1213 | 0.036389 | 5 | 9 | 0.555556 | 2.021607 |

18879.1213

17 *Bulimina*

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|------------|------------|----------|-----|----|----------|-----------|
| Transitional | 0 | 2557.20504 | 0.000000 | 0 | 2 | 0.000000 | 0.000000 |
| Inner Neritic (Fine Sand) | 0 | 2557.20504 | 0.000000 | 0 | 1 | 0.000000 | 0.000000 |
| Inner Neritic (Silt) | 101.8752 | 2557.20504 | 0.039838 | 6 | 6 | 1.000000 | 3.983849 |
| Middle Neritic | 3.0816 | 2557.20504 | 0.001205 | 4 | 6 | 0.666667 | 0.080338 |
| Outer Neritic | 16.87604 | 2557.20504 | 0.006599 | 3 | 5 | 0.600000 | 0.395964 |
| Upper Bathyal | 1867.79673 | 2557.20504 | 0.730406 | 5 | 6 | 0.833333 | 60.867129 |
| Lower Bathyal | 567.575467 | 2557.20504 | 0.221951 | 7 | 9 | 0.777778 | 17.262894 |

2557.20504

18 *Calcarina*

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|----------|-----------|----------|-----|----|----------|-----------|
| Transitional | 159.1138 | 255.96788 | 0.621616 | 2 | 2 | 1.000000 | 62.161627 |
| Inner Neritic (Fine Sand) | 0 | 255.96788 | 0.000000 | 0 | 1 | 0.000000 | 0.000000 |
| Inner Neritic (Silt) | 0 | 255.96788 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Middle Neritic | 1.192 | 255.96788 | 0.004657 | 2 | 6 | 0.333333 | 0.155228 |
| Outer Neritic | 95.66208 | 255.96788 | 0.373727 | 1 | 5 | 0.200000 | 7.474538 |
| Upper Bathyal | 0 | 255.96788 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Lower Bathyal | 0 | 255.96788 | 0.000000 | 0 | 9 | 0.000000 | 0.000000 |

255.96788

19 *Cancris*

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|------------|----------|----------|-----|----|----------|-----------|
| Transitional | 0 | 115.3292 | 0.000000 | 0 | 2 | 0.000000 | 0.000000 |
| Inner Neritic (Fine Sand) | 0 | 115.3292 | 0.000000 | 0 | 1 | 0.000000 | 0.000000 |
| Inner Neritic (Silt) | 0 | 115.3292 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Middle Neritic | 1.52866667 | 115.3292 | 0.013255 | 3 | 6 | 0.500000 | 0.662741 |
| Outer Neritic | 0 | 115.3292 | 0.000000 | 0 | 5 | 0.000000 | 0.000000 |
| Upper Bathyal | 0 | 115.3292 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Lower Bathyal | 113.800533 | 115.3292 | 0.986745 | 1 | 9 | 0.111111 | 10.963835 |

115.3292

20 *Cassidulina*

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|------------|-----------|----------|-----|----|----------|-----------|
| Transitional | 0 | 712.46352 | 0.000000 | 0 | 2 | 0.000000 | 0.000000 |
| Inner Neritic (Fine Sand) | 0 | 712.46352 | 0.000000 | 0 | 1 | 0.000000 | 0.000000 |
| Inner Neritic (Silt) | 3.83626667 | 712.46352 | 0.005385 | 2 | 6 | 0.333333 | 0.179484 |
| Middle Neritic | 0.11466667 | 712.46352 | 0.000161 | 1 | 6 | 0.166667 | 0.002682 |
| Outer Neritic | 110.58592 | 712.46352 | 0.155216 | 4 | 5 | 0.800000 | 12.417300 |
| Upper Bathyal | 597.926667 | 712.46352 | 0.839238 | 4 | 6 | 0.666667 | 55.949219 |
| Lower Bathyal | 0 | 712.46352 | 0.000000 | 0 | 9 | 0.000000 | 0.000000 |

712.46352

21 *Cellanthus*

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|------------|------------|----------|-----|----|----------|-----------|
| Transitional | 33.027 | 236.620813 | 0.139578 | 2 | 2 | 1.000000 | 13.957775 |
| Inner Neritic (Fine Sand) | 106.8544 | 236.620813 | 0.451585 | 1 | 1 | 1.000000 | 45.158496 |
| Inner Neritic (Silt) | 0 | 236.620813 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Middle Neritic | 1.07733333 | 236.620813 | 0.004553 | 1 | 6 | 0.166667 | 0.075883 |
| Outer Neritic | 95.66208 | 236.620813 | 0.404284 | 1 | 5 | 0.200000 | 8.085686 |
| Upper Bathyal | 0 | 236.620813 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Lower Bathyal | 0 | 236.620813 | 0.000000 | 0 | 9 | 0.000000 | 0.000000 |

236.620813

22 *Ceratobulimina*

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|------------|------------|----------|-----|----|----------|-----------|
| Transitional | 0 | 298.769067 | 0.000000 | 0 | 2 | 0.000000 | 0.000000 |
| Inner Neritic (Fine Sand) | 0 | 298.769067 | 0.000000 | 0 | 1 | 0.000000 | 0.000000 |
| Inner Neritic (Silt) | 0 | 298.769067 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Middle Neritic | 0 | 298.769067 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Outer Neritic | 0 | 298.769067 | 0.000000 | 0 | 5 | 0.000000 | 0.000000 |
| Upper Bathyal | 213.418667 | 298.769067 | 0.714327 | 1 | 6 | 0.166667 | 11.905442 |
| Lower Bathyal | 85.3504 | 298.769067 | 0.285673 | 1 | 9 | 0.111111 | 3.174150 |

298.769067

23 *Ceratocancris*

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|------------|------------|----------|-----|----|----------|-----------|
| Transitional | 0 | 0.89048889 | 0.000000 | 0 | 2 | 0.000000 | 0.000000 |
| Inner Neritic (Fine Sand) | 0 | 0.89048889 | 0.000000 | 0 | 1 | 0.000000 | 0.000000 |
| Inner Neritic (Silt) | 0 | 0.89048889 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Middle Neritic | 0 | 0.89048889 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Outer Neritic | 0 | 0.89048889 | 0.000000 | 0 | 5 | 0.000000 | 0.000000 |
| Upper Bathyal | 0 | 0.89048889 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Lower Bathyal | 0.89048889 | 0.89048889 | 1.000000 | 1 | 9 | 0.111111 | 11.111111 |

0.89048889

24 *Cibicides*

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|------------|------------|----------|-----|----|----------|-----------|
| Transitional | 0 | 4808.90808 | 0.000000 | 0 | 2 | 0.000000 | 0.000000 |
| Inner Neritic (Fine Sand) | 854.8352 | 4808.90808 | 0.177761 | 1 | 1 | 1.000000 | 17.776077 |
| Inner Neritic (Silt) | 195.706933 | 4808.90808 | 0.040697 | 4 | 6 | 0.666667 | 2.713117 |
| Middle Neritic | 97.8381667 | 4808.90808 | 0.020345 | 6 | 6 | 1.000000 | 2.034519 |
| Outer Neritic | 1765.392 | 4808.90808 | 0.367109 | 5 | 5 | 1.000000 | 36.710870 |
| Upper Bathyal | 1068.70867 | 4808.90808 | 0.222235 | 4 | 6 | 0.666667 | 14.815680 |
| Lower Bathyal | 826.427111 | 4808.90808 | 0.171853 | 6 | 9 | 0.666667 | 11.456892 |

4808.90808

25 *Dentalina*

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|------------|------------|----------|-----|----|----------|-----------|
| Transitional | 0 | 1212.19202 | 0.000000 | 0 | 2 | 0.000000 | 0.000000 |
| Inner Neritic (Fine Sand) | 0 | 1212.19202 | 0.000000 | 0 | 1 | 0.000000 | 0.000000 |
| Inner Neritic (Silt) | 0 | 1212.19202 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Middle Neritic | 0 | 1212.19202 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Outer Neritic | 2.17344 | 1212.19202 | 0.001793 | 1 | 5 | 0.200000 | 0.035860 |
| Upper Bathyal | 725.8072 | 1212.19202 | 0.598756 | 5 | 6 | 0.833333 | 49.896330 |
| Lower Bathyal | 484.211378 | 1212.19202 | 0.399451 | 5 | 9 | 0.555556 | 22.191725 |

1212.19202

26 *Discorbina*

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|------------|------------|----------|-----|----|----------|-----------|
| Transitional | 0 | 85.3674667 | 0.000000 | 0 | 2 | 0.000000 | 0.000000 |
| Inner Neritic (Fine Sand) | 0 | 85.3674667 | 0.000000 | 0 | 1 | 0.000000 | 0.000000 |
| Inner Neritic (Silt) | 0 | 85.3674667 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Middle Neritic | 0 | 85.3674667 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Outer Neritic | 0 | 85.3674667 | 0.000000 | 0 | 5 | 0.000000 | 0.000000 |
| Upper Bathyal | 85.3674667 | 85.3674667 | 1.000000 | 1 | 6 | 0.166667 | 16.666667 |
| Lower Bathyal | 0 | 85.3674667 | 0.000000 | 0 | 9 | 0.000000 | 0.000000 |

85.3674667

27 *Discorbis*

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|------------|------------|----------|-----|----|----------|-----------|
| Transitional | 0 | 1.57733333 | 0.000000 | 0 | 2 | 0.000000 | 0.000000 |
| Inner Neritic (Fine Sand) | 0 | 1.57733333 | 0.000000 | 0 | 1 | 0.000000 | 0.000000 |
| Inner Neritic (Silt) | 0 | 1.57733333 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Middle Neritic | 1.57733333 | 1.57733333 | 1.000000 | 2 | 6 | 0.333333 | 33.333333 |
| Outer Neritic | 0 | 1.57733333 | 0.000000 | 0 | 5 | 0.000000 | 0.000000 |
| Upper Bathyal | 0 | 1.57733333 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Lower Bathyal | 0 | 1.57733333 | 0.000000 | 0 | 9 | 0.000000 | 0.000000 |

1.57733333

28 *Edentostomina*

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|------------|------------|----------|-----|----|----------|-----------|
| Transitional | 0 | 20.1114667 | 0.000000 | 0 | 2 | 0.000000 | 0.000000 |
| Inner Neritic (Fine Sand) | 0 | 20.1114667 | 0.000000 | 0 | 1 | 0.000000 | 0.000000 |
| Inner Neritic (Silt) | 20.1114667 | 20.1114667 | 1.000000 | 2 | 6 | 0.333333 | 33.333333 |
| Middle Neritic | 0 | 20.1114667 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Outer Neritic | 0 | 20.1114667 | 0.000000 | 0 | 5 | 0.000000 | 0.000000 |
| Upper Bathyal | 0 | 20.1114667 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Lower Bathyal | 0 | 20.1114667 | 0.000000 | 0 | 9 | 0.000000 | 0.000000 |

20.1114667

29 *Eggerella*

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|------------|------------|----------|-----|----|----------|-----------|
| Transitional | 0 | 57.0026667 | 0.000000 | 0 | 2 | 0.000000 | 0.000000 |
| Inner Neritic (Fine Sand) | 0 | 57.0026667 | 0.000000 | 0 | 1 | 0.000000 | 0.000000 |
| Inner Neritic (Silt) | 0 | 57.0026667 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Middle Neritic | 0 | 57.0026667 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Outer Neritic | 0 | 57.0026667 | 0.000000 | 0 | 5 | 0.000000 | 0.000000 |
| Upper Bathyal | 0 | 57.0026667 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Lower Bathyal | 57.0026667 | 57.0026667 | 1.000000 | 1 | 9 | 0.111111 | 11.111111 |

57.0026667

30 *Elphidium*

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|------------|------------|----------|-----|----|----------|-----------|
| Transitional | 69.0966 | 6153.07161 | 0.011230 | 1 | 2 | 0.500000 | 0.561481 |
| Inner Neritic (Fine Sand) | 5235.8656 | 6153.07161 | 0.850935 | 1 | 1 | 1.000000 | 85.093526 |
| Inner Neritic (Silt) | 739.420267 | 6153.07161 | 0.120171 | 6 | 6 | 1.000000 | 12.017092 |
| Middle Neritic | 18.9236 | 6153.07161 | 0.003075 | 5 | 6 | 0.833333 | 0.256289 |
| Outer Neritic | 4.34688 | 6153.07161 | 0.000706 | 1 | 5 | 0.200000 | 0.014129 |
| Upper Bathyal | 85.4186667 | 6153.07161 | 0.013882 | 1 | 6 | 0.166667 | 0.231371 |
| Lower Bathyal | 0 | 6153.07161 | 0.000000 | 0 | 9 | 0.000000 | 0.000000 |

6153.07161

31 *Eponides*

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|------------|------------|----------|-----|----|----------|-----------|
| Transitional | 0 | 346.756747 | 0.000000 | 0 | 2 | 0.000000 | 0.000000 |
| Inner Neritic (Fine Sand) | 0 | 346.756747 | 0.000000 | 0 | 1 | 0.000000 | 0.000000 |
| Inner Neritic (Silt) | 0 | 346.756747 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Middle Neritic | 0.86933333 | 346.756747 | 0.002507 | 1 | 6 | 0.166667 | 0.041784 |
| Outer Neritic | 2.42688 | 346.756747 | 0.006999 | 2 | 5 | 0.400000 | 0.279952 |
| Upper Bathyal | 341.619467 | 346.756747 | 0.985185 | 3 | 6 | 0.500000 | 49.259239 |
| Lower Bathyal | 1.84106667 | 346.756747 | 0.005309 | 1 | 9 | 0.111111 | 0.058993 |

346.756747

32 *Fissurina*

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|------------|------------|----------|-----|----|----------|-----------|
| Transitional | 0 | 140.039989 | 0.000000 | 0 | 2 | 0.000000 | 0.000000 |
| Inner Neritic (Fine Sand) | 0 | 140.039989 | 0.000000 | 0 | 1 | 0.000000 | 0.000000 |
| Inner Neritic (Silt) | 49.9450667 | 140.039989 | 0.356649 | 3 | 6 | 0.500000 | 17.832430 |
| Middle Neritic | 4.04416667 | 140.039989 | 0.028879 | 4 | 6 | 0.666667 | 1.925244 |
| Outer Neritic | 0 | 140.039989 | 0.000000 | 0 | 5 | 0.000000 | 0.000000 |
| Upper Bathyal | 85.5853333 | 140.039989 | 0.611149 | 2 | 6 | 0.333333 | 20.371641 |
| Lower Bathyal | 0.46542222 | 140.039989 | 0.003323 | 3 | 9 | 0.333333 | 0.110783 |

140.039989

33 *Florilus*

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|------------|----------|----------|-----|----|----------|-----------|
| Transitional | 0 | 373.8032 | 0.000000 | 0 | 2 | 0.000000 | 0.000000 |
| Inner Neritic (Fine Sand) | 0 | 373.8032 | 0.000000 | 0 | 1 | 0.000000 | 0.000000 |
| Inner Neritic (Silt) | 369.493867 | 373.8032 | 0.988472 | 4 | 6 | 0.666667 | 65.898110 |
| Middle Neritic | 4.30933333 | 373.8032 | 0.011528 | 1 | 6 | 0.166667 | 0.192139 |
| Outer Neritic | 0 | 373.8032 | 0.000000 | 0 | 5 | 0.000000 | 0.000000 |
| Upper Bathyal | 0 | 373.8032 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Lower Bathyal | 0 | 373.8032 | 0.000000 | 0 | 9 | 0.000000 | 0.000000 |

373.8032

34 *Glandulina*

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|------------|------------|----------|-----|----|----------|-----------|
| Transitional | 0 | 0.11466667 | 0.000000 | 0 | 2 | 0.000000 | 0.000000 |
| Inner Neritic (Fine Sand) | 0 | 0.11466667 | 0.000000 | 0 | 1 | 0.000000 | 0.000000 |
| Inner Neritic (Silt) | 0 | 0.11466667 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Middle Neritic | 0.11466667 | 0.11466667 | 1.000000 | 1 | 6 | 0.166667 | 16.666667 |
| Outer Neritic | 0 | 0.11466667 | 0.000000 | 0 | 5 | 0.000000 | 0.000000 |
| Upper Bathyal | 0 | 0.11466667 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Lower Bathyal | 0 | 0.11466667 | 0.000000 | 0 | 9 | 0.000000 | 0.000000 |

0.11466667

35 *Globobulimina*

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|------------|----------|----------|-----|----|----------|-----------|
| Transitional | 0 | 516.7448 | 0.000000 | 0 | 2 | 0.000000 | 0.000000 |
| Inner Neritic (Fine Sand) | 0 | 516.7448 | 0.000000 | 0 | 1 | 0.000000 | 0.000000 |
| Inner Neritic (Silt) | 0 | 516.7448 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Middle Neritic | 0 | 516.7448 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Outer Neritic | 0 | 516.7448 | 0.000000 | 0 | 5 | 0.000000 | 0.000000 |
| Upper Bathyal | 256.068267 | 516.7448 | 0.495541 | 2 | 6 | 0.333333 | 16.518035 |
| Lower Bathyal | 260.676533 | 516.7448 | 0.504459 | 5 | 9 | 0.555556 | 28.025497 |

516.7448

36 Globocassidulina

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|------------|------------|----------|-----|----|----------|-----------|
| Transitional | 0 | 427.242222 | 0.000000 | 0 | 2 | 0.000000 | 0.000000 |
| Inner Neritic (Fine Sand) | 0 | 427.242222 | 0.000000 | 0 | 1 | 0.000000 | 0.000000 |
| Inner Neritic (Silt) | 0 | 427.242222 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Middle Neritic | 0 | 427.242222 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Outer Neritic | 0 | 427.242222 | 0.000000 | 0 | 5 | 0.000000 | 0.000000 |
| Upper Bathyal | 256.2048 | 427.242222 | 0.599671 | 2 | 6 | 0.333333 | 19.989036 |
| Lower Bathyal | 171.037422 | 427.242222 | 0.400329 | 3 | 9 | 0.333333 | 13.344298 |

427.242222

37 Guttulina

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|------------|------------|----------|-----|----|----------|-----------|
| Transitional | 0 | 0.43466667 | 0.000000 | 0 | 2 | 0.000000 | 0.000000 |
| Inner Neritic (Fine Sand) | 0 | 0.43466667 | 0.000000 | 0 | 1 | 0.000000 | 0.000000 |
| Inner Neritic (Silt) | 0 | 0.43466667 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Middle Neritic | 0.43466667 | 0.43466667 | 1.000000 | 1 | 6 | 0.166667 | 16.666667 |
| Outer Neritic | 0 | 0.43466667 | 0.000000 | 0 | 5 | 0.000000 | 0.000000 |
| Upper Bathyal | 0 | 0.43466667 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Lower Bathyal | 0 | 0.43466667 | 0.000000 | 0 | 9 | 0.000000 | 0.000000 |

0.43466667

38 Gyroidina

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|------------|------------|----------|-----|----|----------|-----------|
| Transitional | 0 | 1670.14298 | 0.000000 | 0 | 2 | 0.000000 | 0.000000 |
| Inner Neritic (Fine Sand) | 0 | 1670.14298 | 0.000000 | 0 | 1 | 0.000000 | 0.000000 |
| Inner Neritic (Silt) | 0 | 1670.14298 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Middle Neritic | 4.14133333 | 1670.14298 | 0.002480 | 2 | 6 | 0.333333 | 0.082654 |
| Outer Neritic | 1152.872 | 1670.14298 | 0.690283 | 4 | 5 | 0.800000 | 55.222673 |
| Upper Bathyal | 512.379867 | 1670.14298 | 0.306788 | 3 | 6 | 0.500000 | 15.339401 |
| Lower Bathyal | 0.74977778 | 1670.14298 | 0.000449 | 2 | 9 | 0.222222 | 0.009976 |

1670.14298

39 Haplophragmoides

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|------------|------------|----------|-----|----|----------|-----------|
| Transitional | 0 | 124.509333 | 0.000000 | 0 | 2 | 0.000000 | 0.000000 |
| Inner Neritic (Fine Sand) | 0 | 124.509333 | 0.000000 | 0 | 1 | 0.000000 | 0.000000 |
| Inner Neritic (Silt) | 124.509333 | 124.509333 | 1.000000 | 4 | 6 | 0.666667 | 66.666667 |
| Middle Neritic | 0 | 124.509333 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Outer Neritic | 0 | 124.509333 | 0.000000 | 0 | 5 | 0.000000 | 0.000000 |
| Upper Bathyal | 0 | 124.509333 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Lower Bathyal | 0 | 124.509333 | 0.000000 | 0 | 9 | 0.000000 | 0.000000 |

124.509333

40 Hemirobulina

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|------------|------------|----------|-----|----|----------|-----------|
| Transitional | 0 | 85.3674667 | 0.000000 | 0 | 2 | 0.000000 | 0.000000 |
| Inner Neritic (Fine Sand) | 0 | 85.3674667 | 0.000000 | 0 | 1 | 0.000000 | 0.000000 |
| Inner Neritic (Silt) | 0 | 85.3674667 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Middle Neritic | 0 | 85.3674667 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Outer Neritic | 0 | 85.3674667 | 0.000000 | 0 | 5 | 0.000000 | 0.000000 |
| Upper Bathyal | 85.3674667 | 85.3674667 | 1.000000 | 1 | 6 | 0.166667 | 16.666667 |
| Lower Bathyal | 0 | 85.3674667 | 0.000000 | 0 | 9 | 0.000000 | 0.000000 |

85.3674667

41 *Heterolepa*

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|------------|------------|----------|-----|----|----------|-----------|
| Transitional | 0 | 839.593493 | 0.000000 | 0 | 2 | 0.000000 | 0.000000 |
| Inner Neritic (Fine Sand) | 0 | 839.593493 | 0.000000 | 0 | 1 | 0.000000 | 0.000000 |
| Inner Neritic (Silt) | 0 | 839.593493 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Middle Neritic | 5.85733333 | 839.593493 | 0.006976 | 2 | 6 | 0.333333 | 0.232546 |
| Outer Neritic | 100.20896 | 839.593493 | 0.119354 | 3 | 5 | 0.600000 | 7.161248 |
| Upper Bathyal | 448.256 | 839.593493 | 0.533896 | 3 | 6 | 0.500000 | 26.694823 |
| Lower Bathyal | 285.2712 | 839.593493 | 0.339773 | 3 | 9 | 0.333333 | 11.325767 |

839.593493

42 *Hoeglundina*

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|------------|------------|----------|-----|----|----------|-----------|
| Transitional | 0 | 1206.29659 | 0.000000 | 0 | 2 | 0.000000 | 0.000000 |
| Inner Neritic (Fine Sand) | 0 | 1206.29659 | 0.000000 | 0 | 1 | 0.000000 | 0.000000 |
| Inner Neritic (Silt) | 0 | 1206.29659 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Middle Neritic | 0 | 1206.29659 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Outer Neritic | 6.52032 | 1206.29659 | 0.005405 | 1 | 5 | 0.200000 | 0.108105 |
| Upper Bathyal | 853.623467 | 1206.29659 | 0.707640 | 2 | 6 | 0.333333 | 23.587993 |
| Lower Bathyal | 346.1528 | 1206.29659 | 0.286955 | 5 | 9 | 0.555556 | 15.941943 |

1206.29659

43 *Hyalinea*

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|------------|------------|----------|-----|----|----------|-----------|
| Transitional | 0 | 805.717333 | 0.000000 | 0 | 2 | 0.000000 | 0.000000 |
| Inner Neritic (Fine Sand) | 0 | 805.717333 | 0.000000 | 0 | 1 | 0.000000 | 0.000000 |
| Inner Neritic (Silt) | 1.25973333 | 805.717333 | 0.001563 | 1 | 6 | 0.166667 | 0.026058 |
| Middle Neritic | 0.54933333 | 805.717333 | 0.000682 | 2 | 6 | 0.333333 | 0.022726 |
| Outer Neritic | 0 | 805.717333 | 0.000000 | 0 | 5 | 0.000000 | 0.000000 |
| Upper Bathyal | 747.008 | 805.717333 | 0.927134 | 3 | 6 | 0.500000 | 46.356704 |
| Lower Bathyal | 56.9002667 | 805.717333 | 0.070621 | 1 | 9 | 0.111111 | 0.784674 |

805.717333

44 *Lagena*

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|------------|------------|----------|-----|----|----------|-----------|
| Transitional | 0 | 347.870436 | 0.000000 | 0 | 2 | 0.000000 | 0.000000 |
| Inner Neritic (Fine Sand) | 0 | 347.870436 | 0.000000 | 0 | 1 | 0.000000 | 0.000000 |
| Inner Neritic (Silt) | 7.5312 | 347.870436 | 0.021649 | 2 | 6 | 0.333333 | 0.721648 |
| Middle Neritic | 7.68026667 | 347.870436 | 0.022078 | 6 | 6 | 1.000000 | 2.207795 |
| Outer Neritic | 16.21408 | 347.870436 | 0.046610 | 4 | 5 | 0.800000 | 3.728763 |
| Upper Bathyal | 256.256 | 347.870436 | 0.736642 | 1 | 6 | 0.166667 | 12.277368 |
| Lower Bathyal | 60.1888889 | 347.870436 | 0.173021 | 5 | 9 | 0.555556 | 9.612277 |

347.870436

45 *Laticarinina*

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|------------|------------|----------|-----|----|----------|-----------|
| Transitional | 0 | 113.823289 | 0.000000 | 0 | 2 | 0.000000 | 0.000000 |
| Inner Neritic (Fine Sand) | 0 | 113.823289 | 0.000000 | 0 | 1 | 0.000000 | 0.000000 |
| Inner Neritic (Silt) | 0 | 113.823289 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Middle Neritic | 0 | 113.823289 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Outer Neritic | 0 | 113.823289 | 0.000000 | 0 | 5 | 0.000000 | 0.000000 |
| Upper Bathyal | 0 | 113.823289 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Lower Bathyal | 113.823289 | 113.823289 | 1.000000 | 1 | 9 | 0.111111 | 11.111111 |

113.823289

46 *Lenticulina*

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|------------|------------|----------|-----|----|----------|-----------|
| Transitional | 0 | 2804.31066 | 0.000000 | 0 | 2 | 0.000000 | 0.000000 |
| Inner Neritic (Fine Sand) | 0 | 2804.31066 | 0.000000 | 0 | 1 | 0.000000 | 0.000000 |
| Inner Neritic (Silt) | 0 | 2804.31066 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Middle Neritic | 2.952 | 2804.31066 | 0.001053 | 2 | 6 | 0.333333 | 0.035089 |
| Outer Neritic | 116.39008 | 2804.31066 | 0.041504 | 5 | 5 | 1.000000 | 4.150399 |
| Upper Bathyal | 1771.86173 | 2804.31066 | 0.631835 | 5 | 6 | 0.833333 | 52.652920 |
| Lower Bathyal | 913.106844 | 2804.31066 | 0.325608 | 4 | 9 | 0.444444 | 14.471480 |

2804.31066

47 *Lingulina*

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|------------|------------|----------|-----|----|----------|-----------|
| Transitional | 0 | 0.16666667 | 0.000000 | 0 | 2 | 0.000000 | 0.000000 |
| Inner Neritic (Fine Sand) | 0 | 0.16666667 | 0.000000 | 0 | 1 | 0.000000 | 0.000000 |
| Inner Neritic (Silt) | 0 | 0.16666667 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Middle Neritic | 0 | 0.16666667 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Outer Neritic | 0 | 0.16666667 | 0.000000 | 0 | 5 | 0.000000 | 0.000000 |
| Upper Bathyal | 0.16666667 | 0.16666667 | 1.000000 | 1 | 6 | 0.166667 | 16.666667 |
| Lower Bathyal | 0 | 0.16666667 | 0.000000 | 0 | 9 | 0.000000 | 0.000000 |

0.16666667

48 *Marginulina*

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|------------|------------|----------|-----|----|----------|-----------|
| Transitional | 0 | 57.0026667 | 0.000000 | 0 | 2 | 0.000000 | 0.000000 |
| Inner Neritic (Fine Sand) | 0 | 57.0026667 | 0.000000 | 0 | 1 | 0.000000 | 0.000000 |
| Inner Neritic (Silt) | 0 | 57.0026667 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Middle Neritic | 0 | 57.0026667 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Outer Neritic | 0 | 57.0026667 | 0.000000 | 0 | 5 | 0.000000 | 0.000000 |
| Upper Bathyal | 0 | 57.0026667 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Lower Bathyal | 57.0026667 | 57.0026667 | 1.000000 | 1 | 9 | 0.111111 | 11.111111 |

57.0026667

49 *Martinotiella*

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|------------|------------|----------|-----|----|----------|-----------|
| Transitional | 0 | 57.7907556 | 0.000000 | 0 | 2 | 0.000000 | 0.000000 |
| Inner Neritic (Fine Sand) | 0 | 57.7907556 | 0.000000 | 0 | 1 | 0.000000 | 0.000000 |
| Inner Neritic (Silt) | 0 | 57.7907556 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Middle Neritic | 0 | 57.7907556 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Outer Neritic | 0 | 57.7907556 | 0.000000 | 0 | 5 | 0.000000 | 0.000000 |
| Upper Bathyal | 0 | 57.7907556 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Lower Bathyal | 57.7907556 | 57.7907556 | 1.000000 | 2 | 9 | 0.222222 | 22.222222 |

57.7907556

50 *Massilina*

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|----------|----------|----------|-----|----|----------|-----------|
| Transitional | 0 | 47.83104 | 0.000000 | 0 | 2 | 0.000000 | 0.000000 |
| Inner Neritic (Fine Sand) | 0 | 47.83104 | 0.000000 | 0 | 1 | 0.000000 | 0.000000 |
| Inner Neritic (Silt) | 0 | 47.83104 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Middle Neritic | 0 | 47.83104 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Outer Neritic | 47.83104 | 47.83104 | 1.000000 | 1 | 5 | 0.200000 | 20.000000 |
| Upper Bathyal | 0 | 47.83104 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Lower Bathyal | 0 | 47.83104 | 0.000000 | 0 | 9 | 0.000000 | 0.000000 |

47.83104

51 *Miliolinella*

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|---------|---------|----------|-----|----|----------|-----------|
| Transitional | 0 | 68.1856 | 0.000000 | 0 | 2 | 0.000000 | 0.000000 |
| Inner Neritic (Fine Sand) | 0 | 68.1856 | 0.000000 | 0 | 1 | 0.000000 | 0.000000 |
| Inner Neritic (Silt) | 68.1856 | 68.1856 | 1.000000 | 1 | 6 | 0.166667 | 16.666667 |
| Middle Neritic | 0 | 68.1856 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Outer Neritic | 0 | 68.1856 | 0.000000 | 0 | 5 | 0.000000 | 0.000000 |
| Upper Bathyal | 0 | 68.1856 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Lower Bathyal | 0 | 68.1856 | 0.000000 | 0 | 9 | 0.000000 | 0.000000 |

68.1856

52 *Neouvigerina*

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|------------|------------|----------|-----|----|----------|-----------|
| Transitional | 0 | 1154.62904 | 0.000000 | 0 | 2 | 0.000000 | 0.000000 |
| Inner Neritic (Fine Sand) | 0 | 1154.62904 | 0.000000 | 0 | 1 | 0.000000 | 0.000000 |
| Inner Neritic (Silt) | 0 | 1154.62904 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Middle Neritic | 5.40403333 | 1154.62904 | 0.004680 | 5 | 6 | 0.833333 | 0.390027 |
| Outer Neritic | 593.27932 | 1154.62904 | 0.513827 | 5 | 5 | 1.000000 | 51.382678 |
| Upper Bathyal | 555.0552 | 1154.62904 | 0.480722 | 2 | 6 | 0.333333 | 16.024056 |
| Lower Bathyal | 0.89048889 | 1154.62904 | 0.000771 | 1 | 9 | 0.111111 | 0.008569 |

1154.62904

53 *Nodosaria*

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|------------|------------|----------|-----|----|----------|-----------|
| Transitional | 0 | 418.889289 | 0.000000 | 0 | 2 | 0.000000 | 0.000000 |
| Inner Neritic (Fine Sand) | 0 | 418.889289 | 0.000000 | 0 | 1 | 0.000000 | 0.000000 |
| Inner Neritic (Silt) | 10.4146667 | 418.889289 | 0.024863 | 3 | 6 | 0.500000 | 1.243129 |
| Middle Neritic | 9.2452 | 418.889289 | 0.022071 | 5 | 6 | 0.833333 | 1.839229 |
| Outer Neritic | 13.8208 | 418.889289 | 0.032994 | 3 | 5 | 0.600000 | 1.979635 |
| Upper Bathyal | 213.585333 | 418.889289 | 0.509885 | 3 | 6 | 0.500000 | 25.494246 |
| Lower Bathyal | 171.823289 | 418.889289 | 0.410188 | 3 | 9 | 0.333333 | 13.672928 |

418.889289

54 *Nonion*

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|------------|------------|----------|-----|----|----------|-----------|
| Transitional | 0 | 77.0017733 | 0.000000 | 0 | 2 | 0.000000 | 0.000000 |
| Inner Neritic (Fine Sand) | 0 | 77.0017733 | 0.000000 | 0 | 1 | 0.000000 | 0.000000 |
| Inner Neritic (Silt) | 0 | 77.0017733 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Middle Neritic | 17.4733333 | 77.0017733 | 0.226921 | 5 | 6 | 0.833333 | 18.910098 |
| Outer Neritic | 59.52844 | 77.0017733 | 0.773079 | 5 | 5 | 1.000000 | 77.307882 |
| Upper Bathyal | 0 | 77.0017733 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Lower Bathyal | 0 | 77.0017733 | 0.000000 | 0 | 9 | 0.000000 | 0.000000 |

77.0017733

55 *Nonionella*

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|------------|------------|----------|-----|----|----------|-----------|
| Transitional | 0 | 0.33333333 | 0.000000 | 0 | 2 | 0.000000 | 0.000000 |
| Inner Neritic (Fine Sand) | 0 | 0.33333333 | 0.000000 | 0 | 1 | 0.000000 | 0.000000 |
| Inner Neritic (Silt) | 0 | 0.33333333 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Middle Neritic | 0.33333333 | 0.33333333 | 1.000000 | 2 | 6 | 0.333333 | 33.333333 |
| Outer Neritic | 0 | 0.33333333 | 0.000000 | 0 | 5 | 0.000000 | 0.000000 |
| Upper Bathyal | 0 | 0.33333333 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Lower Bathyal | 0 | 0.33333333 | 0.000000 | 0 | 9 | 0.000000 | 0.000000 |

0.33333333

56 *Oolina*

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|------------|------------|----------|-----|----|----------|-----------|
| Transitional | 0 | 422.487778 | 0.000000 | 0 | 2 | 0.000000 | 0.000000 |
| Inner Neritic (Fine Sand) | 0 | 422.487778 | 0.000000 | 0 | 1 | 0.000000 | 0.000000 |
| Inner Neritic (Silt) | 20.0245333 | 422.487778 | 0.047397 | 3 | 6 | 0.500000 | 2.369836 |
| Middle Neritic | 2.606 | 422.487778 | 0.006168 | 3 | 6 | 0.500000 | 0.308411 |
| Outer Neritic | 0 | 422.487778 | 0.000000 | 0 | 5 | 0.000000 | 0.000000 |
| Upper Bathyal | 394.8544 | 422.487778 | 0.934594 | 4 | 6 | 0.666667 | 62.306244 |
| Lower Bathyal | 5.00284444 | 422.487778 | 0.011841 | 2 | 9 | 0.222222 | 0.263142 |

422.487778

57 *Operculina*

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|------------|------------|----------|-----|----|----------|-----------|
| Transitional | 0 | 671.479453 | 0.000000 | 0 | 2 | 0.000000 | 0.000000 |
| Inner Neritic (Fine Sand) | 534.272 | 671.479453 | 0.795664 | 1 | 1 | 1.000000 | 79.566396 |
| Inner Neritic (Silt) | 21.3712 | 671.479453 | 0.031827 | 2 | 6 | 0.333333 | 1.060901 |
| Middle Neritic | 67.4247333 | 671.479453 | 0.100412 | 4 | 6 | 0.666667 | 6.694147 |
| Outer Neritic | 48.12672 | 671.479453 | 0.071673 | 3 | 5 | 0.600000 | 4.300360 |
| Upper Bathyal | 0.2848 | 671.479453 | 0.000424 | 1 | 6 | 0.166667 | 0.007069 |
| Lower Bathyal | 0 | 671.479453 | 0.000000 | 0 | 9 | 0.000000 | 0.000000 |

671.479453

58 *Oridorsalis*

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|------------|------------|----------|-----|----|----------|-----------|
| Transitional | 0 | 429.355644 | 0.000000 | 0 | 2 | 0.000000 | 0.000000 |
| Inner Neritic (Fine Sand) | 0 | 429.355644 | 0.000000 | 0 | 1 | 0.000000 | 0.000000 |
| Inner Neritic (Silt) | 1.25973333 | 429.355644 | 0.002934 | 1 | 6 | 0.166667 | 0.048900 |
| Middle Neritic | 0 | 429.355644 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Outer Neritic | 0 | 429.355644 | 0.000000 | 0 | 5 | 0.000000 | 0.000000 |
| Upper Bathyal | 256.0512 | 429.355644 | 0.596362 | 1 | 6 | 0.166667 | 9.939359 |
| Lower Bathyal | 172.044711 | 429.355644 | 0.400704 | 4 | 9 | 0.444444 | 17.809086 |

429.355644

59 *Peneroplis*

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|---------|----------|----------|-----|----|----------|-----------|
| Transitional | 7.0098 | 560.7634 | 0.012500 | 1 | 2 | 0.500000 | 0.625023 |
| Inner Neritic (Fine Sand) | 534.272 | 560.7634 | 0.952758 | 1 | 1 | 1.000000 | 95.275833 |
| Inner Neritic (Silt) | 19.4816 | 560.7634 | 0.034741 | 1 | 6 | 0.166667 | 0.579020 |
| Middle Neritic | 0 | 560.7634 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Outer Neritic | 0 | 560.7634 | 0.000000 | 0 | 5 | 0.000000 | 0.000000 |
| Upper Bathyal | 0 | 560.7634 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Lower Bathyal | 0 | 560.7634 | 0.000000 | 0 | 9 | 0.000000 | 0.000000 |

560.7634

60 *Planorbulinella*

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|------------|------------|----------|-----|----|----------|-----------|
| Transitional | 0 | 0.11466667 | 0.000000 | 0 | 2 | 0.000000 | 0.000000 |
| Inner Neritic (Fine Sand) | 0 | 0.11466667 | 0.000000 | 0 | 1 | 0.000000 | 0.000000 |
| Inner Neritic (Silt) | 0 | 0.11466667 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Middle Neritic | 0.11466667 | 0.11466667 | 1.000000 | 1 | 6 | 0.166667 | 16.666667 |
| Outer Neritic | 0 | 0.11466667 | 0.000000 | 0 | 5 | 0.000000 | 0.000000 |
| Upper Bathyal | 0 | 0.11466667 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Lower Bathyal | 0 | 0.11466667 | 0.000000 | 0 | 9 | 0.000000 | 0.000000 |

0.11466667

61 *Planularia*

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|------------|------------|----------|-----|----|----------|-----------|
| Transitional | 0 | 230.421227 | 0.000000 | 0 | 2 | 0.000000 | 0.000000 |
| Inner Neritic (Fine Sand) | 0 | 230.421227 | 0.000000 | 0 | 1 | 0.000000 | 0.000000 |
| Inner Neritic (Silt) | 0 | 230.421227 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Middle Neritic | 0.43466667 | 230.421227 | 0.001886 | 1 | 6 | 0.166667 | 0.031440 |
| Outer Neritic | 2.30016 | 230.421227 | 0.009982 | 2 | 5 | 0.400000 | 0.399297 |
| Upper Bathyal | 170.786133 | 230.421227 | 0.741191 | 2 | 6 | 0.333333 | 24.706366 |
| Lower Bathyal | 56.9002667 | 230.421227 | 0.246940 | 1 | 9 | 0.111111 | 2.743780 |

230.421227

62 *Planulina*

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|------------|------------|----------|-----|----|----------|-----------|
| Transitional | 0 | 400.992444 | 0.000000 | 0 | 2 | 0.000000 | 0.000000 |
| Inner Neritic (Fine Sand) | 0 | 400.992444 | 0.000000 | 0 | 1 | 0.000000 | 0.000000 |
| Inner Neritic (Silt) | 0 | 400.992444 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Middle Neritic | 0 | 400.992444 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Outer Neritic | 0 | 400.992444 | 0.000000 | 0 | 5 | 0.000000 | 0.000000 |
| Upper Bathyal | 138.717867 | 400.992444 | 0.345936 | 3 | 6 | 0.500000 | 17.296818 |
| Lower Bathyal | 262.274578 | 400.992444 | 0.654064 | 5 | 9 | 0.555556 | 36.336869 |

400.992444

63 *Pseudorotalia*

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|------------|------------|----------|-----|----|----------|-----------|
| Transitional | 1.0014 | 980.386727 | 0.001021 | 1 | 2 | 0.500000 | 0.051072 |
| Inner Neritic (Fine Sand) | 641.1264 | 980.386727 | 0.653953 | 1 | 1 | 1.000000 | 65.395255 |
| Inner Neritic (Silt) | 46.4757333 | 980.386727 | 0.047406 | 2 | 6 | 0.333333 | 1.580184 |
| Middle Neritic | 112.821967 | 980.386727 | 0.115079 | 6 | 6 | 1.000000 | 11.507904 |
| Outer Neritic | 178.79456 | 980.386727 | 0.182371 | 3 | 5 | 0.600000 | 10.942288 |
| Upper Bathyal | 0.16666667 | 980.386727 | 0.000170 | 1 | 6 | 0.166667 | 0.002833 |
| Lower Bathyal | 0 | 980.386727 | 0.000000 | 0 | 9 | 0.000000 | 0.000000 |

980.386727

64 *Pullenia*

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|------------|------------|----------|-----|----|----------|-----------|
| Transitional | 0 | 173.997244 | 0.000000 | 0 | 2 | 0.000000 | 0.000000 |
| Inner Neritic (Fine Sand) | 0 | 173.997244 | 0.000000 | 0 | 1 | 0.000000 | 0.000000 |
| Inner Neritic (Silt) | 0 | 173.997244 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Middle Neritic | 0 | 173.997244 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Outer Neritic | 0 | 173.997244 | 0.000000 | 0 | 5 | 0.000000 | 0.000000 |
| Upper Bathyal | 170.867467 | 173.997244 | 0.982012 | 1 | 6 | 0.166667 | 16.366875 |
| Lower Bathyal | 3.12977778 | 173.997244 | 0.017988 | 3 | 9 | 0.333333 | 0.599584 |

173.997244

65 *Pyrgo*

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|------------|------------|----------|-----|----|----------|-----------|
| Transitional | 0 | 671.725511 | 0.000000 | 0 | 2 | 0.000000 | 0.000000 |
| Inner Neritic (Fine Sand) | 0 | 671.725511 | 0.000000 | 0 | 1 | 0.000000 | 0.000000 |
| Inner Neritic (Silt) | 0 | 671.725511 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Middle Neritic | 0.54933333 | 671.725511 | 0.000818 | 2 | 6 | 0.333333 | 0.027260 |
| Outer Neritic | 0 | 671.725511 | 0.000000 | 0 | 5 | 0.000000 | 0.000000 |
| Upper Bathyal | 640.3544 | 671.725511 | 0.953298 | 4 | 6 | 0.666667 | 63.553182 |
| Lower Bathyal | 30.8217778 | 671.725511 | 0.045884 | 4 | 9 | 0.444444 | 2.039310 |

671.725511

66 *Quinqueloculina*

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|------------|------------|----------|-----|----|----------|-----------|
| Transitional | 27 | 879.368093 | 0.030704 | 1 | 2 | 0.500000 | 1.535193 |
| Inner Neritic (Fine Sand) | 534 | 879.368093 | 0.607254 | 1 | 1 | 1.000000 | 60.725424 |
| Inner Neritic (Silt) | 29.8962667 | 879.368093 | 0.033997 | 6 | 6 | 1.000000 | 3.399744 |
| Middle Neritic | 59.6946667 | 879.368093 | 0.067884 | 6 | 6 | 1.000000 | 6.788359 |
| Outer Neritic | 56.39636 | 879.368093 | 0.064133 | 5 | 5 | 1.000000 | 6.413282 |
| Upper Bathyal | 171 | 879.368093 | 0.194458 | 2 | 6 | 0.333333 | 6.481927 |
| Lower Bathyal | 1.3808 | 879.368093 | 0.001570 | 1 | 9 | 0.111111 | 0.017447 |

879.368093

67 *Rectobolivina*

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|------------|----------|----------|-----|----|----------|-----------|
| Transitional | 0 | 484.1432 | 0.000000 | 0 | 2 | 0.000000 | 0.000000 |
| Inner Neritic (Fine Sand) | 0 | 484.1432 | 0.000000 | 0 | 1 | 0.000000 | 0.000000 |
| Inner Neritic (Silt) | 0 | 484.1432 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Middle Neritic | 0 | 484.1432 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Outer Neritic | 0 | 484.1432 | 0.000000 | 0 | 5 | 0.000000 | 0.000000 |
| Upper Bathyal | 427.140533 | 484.1432 | 0.882261 | 3 | 6 | 0.500000 | 44.113037 |
| Lower Bathyal | 57.0026667 | 484.1432 | 0.117739 | 1 | 9 | 0.111111 | 1.308214 |

484.1432

68 *Reussella*

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|------------|-----------|----------|-----|----|----------|-----------|
| Transitional | 2.0028 | 500.44124 | 0.004002 | 1 | 2 | 0.500000 | 0.200103 |
| Inner Neritic (Fine Sand) | 0 | 500.44124 | 0.000000 | 0 | 1 | 0.000000 | 0.000000 |
| Inner Neritic (Silt) | 40.5237333 | 500.44124 | 0.080976 | 3 | 6 | 0.500000 | 4.048800 |
| Middle Neritic | 0.14233333 | 500.44124 | 0.000284 | 1 | 6 | 0.166667 | 0.004740 |
| Outer Neritic | 286.98624 | 500.44124 | 0.573466 | 1 | 5 | 0.200000 | 11.469328 |
| Upper Bathyal | 170.786133 | 500.44124 | 0.341271 | 2 | 6 | 0.333333 | 11.375703 |
| Lower Bathyal | 0 | 500.44124 | 0.000000 | 0 | 9 | 0.000000 | 0.000000 |

500.44124

69 *Saracenaria*

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|------------|------------|----------|-----|----|----------|-----------|
| Transitional | 0 | 171.514187 | 0.000000 | 0 | 2 | 0.000000 | 0.000000 |
| Inner Neritic (Fine Sand) | 0 | 171.514187 | 0.000000 | 0 | 1 | 0.000000 | 0.000000 |
| Inner Neritic (Silt) | 0 | 171.514187 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Middle Neritic | 0.43466667 | 171.514187 | 0.002534 | 1 | 6 | 0.166667 | 0.042238 |
| Outer Neritic | 0.12672 | 171.514187 | 0.000739 | 1 | 5 | 0.200000 | 0.014777 |
| Upper Bathyal | 170.9528 | 171.514187 | 0.996727 | 3 | 6 | 0.500000 | 49.836344 |
| Lower Bathyal | 0 | 171.514187 | 0.000000 | 0 | 9 | 0.000000 | 0.000000 |

171.514187

70 *Sigmoilopsis*

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|----------|----------|----------|-----|----|----------|-----------|
| Transitional | 0 | 256.1536 | 0.000000 | 0 | 2 | 0.000000 | 0.000000 |
| Inner Neritic (Fine Sand) | 0 | 256.1536 | 0.000000 | 0 | 1 | 0.000000 | 0.000000 |
| Inner Neritic (Silt) | 0 | 256.1536 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Middle Neritic | 0 | 256.1536 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Outer Neritic | 0 | 256.1536 | 0.000000 | 0 | 5 | 0.000000 | 0.000000 |
| Upper Bathyal | 256.1536 | 256.1536 | 1.000000 | 2 | 6 | 0.333333 | 33.333333 |
| Lower Bathyal | 0 | 256.1536 | 0.000000 | 0 | 9 | 0.000000 | 0.000000 |

256.1536

71 *Siphogenerina*

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|------------|------------|----------|-----|----|----------|-----------|
| Transitional | 0 | 627.692533 | 0.000000 | 0 | 2 | 0.000000 | 0.000000 |
| Inner Neritic (Fine Sand) | 0 | 627.692533 | 0.000000 | 0 | 1 | 0.000000 | 0.000000 |
| Inner Neritic (Silt) | 0.62986667 | 627.692533 | 0.001003 | 1 | 6 | 0.166667 | 0.016724 |
| Middle Neritic | 0.43466667 | 627.692533 | 0.000692 | 1 | 6 | 0.166667 | 0.011541 |
| Outer Neritic | 0.2 | 627.692533 | 0.000319 | 1 | 5 | 0.200000 | 0.006373 |
| Upper Bathyal | 512.422667 | 627.692533 | 0.816359 | 3 | 6 | 0.500000 | 40.817967 |
| Lower Bathyal | 114.005333 | 627.692533 | 0.181626 | 1 | 9 | 0.111111 | 2.018068 |

627.692533

72 *Siphonaperta*

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|------------|------------|----------|-----|----|----------|-----------|
| Transitional | 0 | 2.15466667 | 0.000000 | 0 | 2 | 0.000000 | 0.000000 |
| Inner Neritic (Fine Sand) | 0 | 2.15466667 | 0.000000 | 0 | 1 | 0.000000 | 0.000000 |
| Inner Neritic (Silt) | 0 | 2.15466667 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Middle Neritic | 2.15466667 | 2.15466667 | 1.000000 | 1 | 6 | 0.166667 | 16.666667 |
| Outer Neritic | 0 | 2.15466667 | 0.000000 | 0 | 5 | 0.000000 | 0.000000 |
| Upper Bathyal | 0 | 2.15466667 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Lower Bathyal | 0 | 2.15466667 | 0.000000 | 0 | 9 | 0.000000 | 0.000000 |

2.15466667

73 *Siphonina*

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|------------|-----------|----------|-----|----|----------|-----------|
| Transitional | 0 | 183.20048 | 0.000000 | 0 | 2 | 0.000000 | 0.000000 |
| Inner Neritic (Fine Sand) | 0 | 183.20048 | 0.000000 | 0 | 1 | 0.000000 | 0.000000 |
| Inner Neritic (Silt) | 1.8896 | 183.20048 | 0.010314 | 1 | 6 | 0.166667 | 0.171906 |
| Middle Neritic | 0.11466667 | 183.20048 | 0.000626 | 1 | 6 | 0.166667 | 0.010432 |
| Outer Neritic | 95.66208 | 183.20048 | 0.522172 | 1 | 5 | 0.200000 | 10.443431 |
| Upper Bathyal | 85.5341333 | 183.20048 | 0.466888 | 1 | 6 | 0.166667 | 7.781469 |
| Lower Bathyal | 0 | 183.20048 | 0.000000 | 0 | 9 | 0.000000 | 0.000000 |

183.20048

74 *Sphaeroidina*

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|------------|------------|----------|-----|----|----------|-----------|
| Transitional | 0 | 229.863733 | 0.000000 | 0 | 2 | 0.000000 | 0.000000 |
| Inner Neritic (Fine Sand) | 0 | 229.863733 | 0.000000 | 0 | 1 | 0.000000 | 0.000000 |
| Inner Neritic (Silt) | 0.62986667 | 229.863733 | 0.002740 | 1 | 6 | 0.166667 | 0.045670 |
| Middle Neritic | 1.036 | 229.863733 | 0.004507 | 2 | 6 | 0.333333 | 0.150234 |
| Outer Neritic | 0 | 229.863733 | 0.000000 | 0 | 5 | 0.000000 | 0.000000 |
| Upper Bathyal | 170.734933 | 229.863733 | 0.742766 | 1 | 6 | 0.166667 | 12.379431 |
| Lower Bathyal | 57.4629333 | 229.863733 | 0.249987 | 2 | 9 | 0.222222 | 5.555266 |

229.863733

75 *Sphaerogypsina*

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|-----------|-----------|----------|-----|----|----------|-----------|
| Transitional | 8212.9248 | 8212.9248 | 1.000000 | 1 | 2 | 0.500000 | 50.000000 |
| Inner Neritic (Fine Sand) | 0 | 8212.9248 | 0.000000 | 0 | 1 | 0.000000 | 0.000000 |
| Inner Neritic (Silt) | 0 | 8212.9248 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Middle Neritic | 0 | 8212.9248 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Outer Neritic | 0 | 8212.9248 | 0.000000 | 0 | 5 | 0.000000 | 0.000000 |
| Upper Bathyal | 0 | 8212.9248 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Lower Bathyal | 0 | 8212.9248 | 0.000000 | 0 | 9 | 0.000000 | 0.000000 |

8212.9248

76 *Spiroloculina*

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|------------|------------|----------|-----|----|----------|-----------|
| Transitional | 0 | 604.279333 | 0.000000 | 0 | 2 | 0.000000 | 0.000000 |
| Inner Neritic (Fine Sand) | 213.7088 | 604.279333 | 0.353659 | 1 | 1 | 1.000000 | 35.365896 |
| Inner Neritic (Silt) | 35.5210667 | 604.279333 | 0.058783 | 2 | 6 | 0.333333 | 1.959418 |
| Middle Neritic | 15.6265333 | 604.279333 | 0.025860 | 5 | 6 | 0.833333 | 2.154982 |
| Outer Neritic | 54.8048 | 604.279333 | 0.090694 | 4 | 5 | 0.800000 | 7.255558 |
| Upper Bathyal | 170.717867 | 604.279333 | 0.282515 | 2 | 6 | 0.333333 | 9.417161 |
| Lower Bathyal | 113.900267 | 604.279333 | 0.188489 | 2 | 9 | 0.222222 | 4.188654 |

604.279333

77 *Textularia*

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|------------|------------|----------|-----|----|----------|-----------|
| Transitional | 0 | 578.852413 | 0.000000 | 0 | 2 | 0.000000 | 0.000000 |
| Inner Neritic (Fine Sand) | 0 | 578.852413 | 0.000000 | 0 | 1 | 0.000000 | 0.000000 |
| Inner Neritic (Silt) | 32.4533333 | 578.852413 | 0.056065 | 3 | 6 | 0.500000 | 2.803248 |
| Middle Neritic | 6.61566667 | 578.852413 | 0.011429 | 6 | 6 | 1.000000 | 1.142894 |
| Outer Neritic | 198.04448 | 578.852413 | 0.342133 | 3 | 5 | 0.600000 | 20.527977 |
| Upper Bathyal | 341.738933 | 578.852413 | 0.590373 | 3 | 6 | 0.500000 | 29.518658 |
| Lower Bathyal | 0 | 578.852413 | 0.000000 | 0 | 9 | 0.000000 | 0.000000 |

578.852413

78 *Trifarina*

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|------------|------------|----------|-----|----|----------|-----------|
| Transitional | 0 | 2.34010667 | 0.000000 | 0 | 2 | 0.000000 | 0.000000 |
| Inner Neritic (Fine Sand) | 0 | 2.34010667 | 0.000000 | 0 | 1 | 0.000000 | 0.000000 |
| Inner Neritic (Silt) | 0 | 2.34010667 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Middle Neritic | 0 | 2.34010667 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Outer Neritic | 2.17344 | 2.34010667 | 0.928778 | 1 | 5 | 0.200000 | 18.575564 |
| Upper Bathyal | 0.16666667 | 2.34010667 | 0.071222 | 0 | 6 | 0.000000 | 0.000000 |
| Lower Bathyal | 0 | 2.34010667 | 0.000000 | 0 | 9 | 0.000000 | 0.000000 |

2.34010667

79 *Triloculina*

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|------------|------------|----------|-----|----|----------|-----------|
| Transitional | 0 | 776.358347 | 0.000000 | 0 | 2 | 0.000000 | 0.000000 |
| Inner Neritic (Fine Sand) | 213.7088 | 776.358347 | 0.275271 | 1 | 1 | 1.000000 | 27.527082 |
| Inner Neritic (Silt) | 18.4634667 | 776.358347 | 0.023782 | 3 | 6 | 0.500000 | 1.189107 |
| Middle Neritic | 14.5106667 | 776.358347 | 0.018691 | 5 | 6 | 0.833333 | 1.557557 |
| Outer Neritic | 102.88928 | 776.358347 | 0.132528 | 4 | 5 | 0.800000 | 10.602246 |
| Upper Bathyal | 426.786133 | 776.358347 | 0.549728 | 2 | 6 | 0.333333 | 18.324276 |
| Lower Bathyal | 0 | 776.358347 | 0.000000 | 0 | 9 | 0.000000 | 0.000000 |

776.358347

80 *Uvigerina*

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|------------|------------|----------|-----|----|----------|-----------|
| Transitional | 0 | 6751.98608 | 0.000000 | 0 | 2 | 0.000000 | 0.000000 |
| Inner Neritic (Fine Sand) | 0 | 6751.98608 | 0.000000 | 0 | 1 | 0.000000 | 0.000000 |
| Inner Neritic (Silt) | 0.824 | 6751.98608 | 0.000122 | 1 | 6 | 0.166667 | 0.002034 |
| Middle Neritic | 0 | 6751.98608 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Outer Neritic | 96.06208 | 6751.98608 | 0.014227 | 2 | 5 | 0.400000 | 0.569089 |
| Upper Bathyal | 4717.78107 | 6751.98608 | 0.698725 | 6 | 6 | 1.000000 | 69.872494 |
| Lower Bathyal | 1937.31893 | 6751.98608 | 0.286926 | 7 | 9 | 0.777778 | 22.316450 |

6751.98608

81 *Vaginulina*

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|------------|------------|----------|-----|----|----------|-----------|
| Transitional | 0 | 57.2383644 | 0.000000 | 0 | 2 | 0.000000 | 0.000000 |
| Inner Neritic (Fine Sand) | 0 | 57.2383644 | 0.000000 | 0 | 1 | 0.000000 | 0.000000 |
| Inner Neritic (Silt) | 0 | 57.2383644 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Middle Neritic | 0 | 57.2383644 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Outer Neritic | 0.32672 | 57.2383644 | 0.005708 | 2 | 5 | 0.400000 | 0.228322 |
| Upper Bathyal | 0 | 57.2383644 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Lower Bathyal | 56.9116444 | 57.2383644 | 0.994292 | 1 | 9 | 0.111111 | 11.047688 |

57.2383644

82 *Virgulina*

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|------------|------------|----------|-----|----|----------|-----------|
| Transitional | 0 | 8.10140444 | 0.000000 | 0 | 2 | 0.000000 | 0.000000 |
| Inner Neritic (Fine Sand) | 0 | 8.10140444 | 0.000000 | 0 | 1 | 0.000000 | 0.000000 |
| Inner Neritic (Silt) | 0 | 8.10140444 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Middle Neritic | 0 | 8.10140444 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Outer Neritic | 7.65696 | 8.10140444 | 0.945140 | 2 | 5 | 0.400000 | 37.805593 |
| Upper Bathyal | 0 | 8.10140444 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Lower Bathyal | 0.44444444 | 8.10140444 | 0.054860 | 1 | 9 | 0.111111 | 0.609557 |

8.10140444

83 *Vulvulina*

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|------------|----------|----------|-----|----|----------|-----------|
| Transitional | 0 | 221.8224 | 0.000000 | 0 | 2 | 0.000000 | 0.000000 |
| Inner Neritic (Fine Sand) | 0 | 221.8224 | 0.000000 | 0 | 1 | 0.000000 | 0.000000 |
| Inner Neritic (Silt) | 0 | 221.8224 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Middle Neritic | 1.304 | 221.8224 | 0.005879 | 1 | 6 | 0.166667 | 0.097976 |
| Outer Neritic | 0 | 221.8224 | 0.000000 | 0 | 5 | 0.000000 | 0.000000 |
| Upper Bathyal | 106.717867 | 221.8224 | 0.481096 | 2 | 6 | 0.333333 | 16.036533 |
| Lower Bathyal | 113.800533 | 221.8224 | 0.513025 | 1 | 9 | 0.111111 | 5.700283 |

221.8224

84 *Ammonia supera*

| Environment | Nij | Ni | Aij | Mij | Mi | Bij | IV ij |
|---------------------------|------------|------------|----------|-----|----|----------|-----------|
| Transitional | 0 | 352.085333 | 0.000000 | 0 | 2 | 0.000000 | 0.000000 |
| Inner Neritic (Fine Sand) | 0 | 352.085333 | 0.000000 | 0 | 1 | 0.000000 | 0.000000 |
| Inner Neritic (Silt) | 0 | 352.085333 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Middle Neritic | 0 | 352.085333 | 0.000000 | 0 | 6 | 0.000000 | 0.000000 |
| Outer Neritic | 0 | 352.085333 | 0.000000 | 0 | 5 | 0.000000 | 0.000000 |
| Upper Bathyal | 352.085333 | 352.085333 | 1.000000 | 2 | 6 | 0.333333 | 33.333333 |
| Lower Bathyal | 0 | 352.085333 | 0.000000 | 0 | 9 | 0.000000 | 0.000000 |

352.085333

IndVal Result (Genus)

| Total sampel | 2 | 1 | 6 | 6 | 5 | 6 | 9 | IndVal Max | IndVal Max (%) |
|--------------------------|----------------------|---------------------------|----------------------|----------------|---------------|---------------|---------------|---------------------------|----------------|
| Environment | Transition al | Inner Neritic (Fine Sand) | Inner Neritic (Silt) | Middle Neritic | Outer Neritic | Upper Bathyal | Lower Bathyal | | |
| Variable | Indicator Value (IV) | | | | | | | | |
| <i>Amphistegina</i> | 54.88 | 4.68 | 0.07 | 0.13 | 31.86 | 0.00 | 0.00 | Transitional | 54.88 |
| <i>Calcarina</i> | 62.16 | 0.00 | 0.00 | 0.16 | 7.47 | 0.00 | 0.00 | Transitional | 62.16 |
| <i>Sphaerogypsina</i> | 50.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | Transitional | 50.00 |
| <i>Asterorotalia</i> | 0.02 | 96.97 | 1.94 | 0.04 | 0.00 | 0.00 | 0.00 | Inner Neritic (Fine Sand) | 96.97 |
| <i>Peneroplis</i> | 0.63 | 95.28 | 0.58 | 0.00 | 0.00 | 0.00 | 0.00 | Inner Neritic (Fine Sand) | 95.28 |
| <i>Adelosina</i> | 0.00 | 93.92 | 0.00 | 2.03 | 0.00 | 0.00 | 0.00 | Inner Neritic (Fine Sand) | 93.92 |
| <i>Elphidium</i> | 0.56 | 85.09 | 12.02 | 0.26 | 0.01 | 0.23 | 0.00 | Inner Neritic (Fine Sand) | 85.09 |
| <i>Operculina</i> | 0.00 | 79.57 | 1.06 | 6.69 | 4.30 | 0.01 | 0.00 | Inner Neritic (Fine Sand) | 79.57 |
| <i>Ammonia</i> | 1.93 | 70.20 | 23.25 | 0.34 | 1.16 | 2.07 | 0.00 | Inner Neritic (Fine Sand) | 70.20 |
| <i>Pseudorotalia</i> | 0.05 | 65.40 | 1.58 | 11.51 | 10.94 | 0.00 | 0.00 | Inner Neritic (Fine Sand) | 65.40 |
| <i>Quinqueloculina</i> | 1.54 | 60.73 | 3.40 | 6.79 | 6.41 | 6.48 | 0.02 | Inner Neritic (Fine Sand) | 60.73 |
| <i>Baggina</i> | 0.00 | 45.43 | 0.00 | 0.02 | 0.00 | 18.15 | 0.00 | Inner Neritic (Fine Sand) | 45.43 |
| <i>Cellanthus</i> | 13.96 | 45.16 | 0.00 | 0.08 | 8.09 | 0.00 | 0.00 | Inner Neritic (Fine Sand) | 45.16 |
| <i>Spiroloculina</i> | 0.00 | 35.37 | 1.96 | 2.15 | 7.26 | 9.42 | 4.19 | Inner Neritic (Fine Sand) | 35.37 |
| <i>Triloculina</i> | 0.00 | 27.53 | 1.19 | 1.56 | 10.60 | 18.32 | 0.00 | Inner Neritic (Fine Sand) | 27.53 |
| <i>Haplophragmoides</i> | 0.00 | 0.00 | 66.67 | 0.00 | 0.00 | 0.00 | 0.00 | Inner Neritic (Silt) | 66.67 |
| <i>Florilus</i> | 0.00 | 0.00 | 65.90 | 0.19 | 0.00 | 0.00 | 0.00 | Inner Neritic (Silt) | 65.90 |
| <i>Edentostomina</i> | 0.00 | 0.00 | 33.33 | 0.00 | 0.00 | 0.00 | 0.00 | Inner Neritic (Silt) | 33.33 |
| <i>Ammobaculites</i> | 0.00 | 0.00 | 23.66 | 0.34 | 0.00 | 21.16 | 0.00 | Inner Neritic (Silt) | 23.66 |
| <i>Miliolinella</i> | 0.00 | 0.00 | 16.67 | 0.00 | 0.00 | 0.00 | 0.00 | Inner Neritic (Silt) | 16.67 |
| <i>Bombulina</i> | 0.00 | 0.00 | 0.00 | 33.33 | 0.00 | 0.00 | 0.00 | Middle Neritic | 33.33 |
| <i>Discorbis</i> | 0.00 | 0.00 | 0.00 | 33.33 | 0.00 | 0.00 | 0.00 | Middle Neritic | 33.33 |
| <i>Nonionella</i> | 0.00 | 0.00 | 0.00 | 33.33 | 0.00 | 0.00 | 0.00 | Middle Neritic | 33.33 |
| <i>Alveolinella</i> | 0.00 | 0.00 | 0.00 | 16.67 | 0.00 | 0.00 | 0.00 | Middle Neritic | 16.67 |
| <i>Guttulina</i> | 0.00 | 0.00 | 0.00 | 16.67 | 0.00 | 0.00 | 0.00 | Middle Neritic | 16.67 |
| <i>Siphonaperta</i> | 0.00 | 0.00 | 0.00 | 16.67 | 0.00 | 0.00 | 0.00 | Middle Neritic | 16.67 |
| <i>Baculogypsinoidea</i> | 0.00 | 0.00 | 0.00 | 16.67 | 0.00 | 0.00 | 0.00 | Middle Neritic | 16.67 |
| <i>Glandulina</i> | 0.00 | 0.00 | 0.00 | 16.67 | 0.00 | 0.00 | 0.00 | Middle Neritic | 16.67 |
| <i>Planorbulinella</i> | 0.00 | 0.00 | 0.00 | 16.67 | 0.00 | 0.00 | 0.00 | Middle Neritic | 16.67 |
| <i>Nonion</i> | 0.00 | 0.00 | 0.00 | 18.91 | 77.31 | 0.00 | 0.00 | Outer Neritic | 77.31 |
| <i>Brizalina</i> | 0.00 | 0.00 | 2.72 | 0.28 | 59.67 | 28.08 | 2.02 | Outer Neritic | 59.67 |
| <i>Gyroidina</i> | 0.00 | 0.00 | 0.00 | 0.08 | 55.22 | 15.34 | 0.01 | Outer Neritic | 55.22 |
| <i>Neouvigerina</i> | 0.00 | 0.00 | 0.00 | 0.39 | 51.38 | 16.02 | 0.01 | Outer Neritic | 51.38 |
| <i>Virgulina</i> | 0.00 | 0.00 | 0.00 | 0.00 | 37.81 | 0.00 | 0.61 | Outer Neritic | 37.81 |
| <i>Cibicides</i> | 0.00 | 17.78 | 2.71 | 2.03 | 36.71 | 14.82 | 11.46 | Outer Neritic | 36.71 |
| <i>Massilina</i> | 0.00 | 0.00 | 0.00 | 0.00 | 20.00 | 0.00 | 0.00 | Outer Neritic | 20.00 |
| <i>Trifarina</i> | 0.00 | 0.00 | 0.00 | 0.00 | 18.58 | 0.00 | 0.00 | Outer Neritic | 18.58 |
| <i>Bolivina</i> | 0.00 | 0.00 | 0.34 | 0.01 | 14.43 | 4.29 | 0.00 | Outer Neritic | 14.43 |
| <i>Reussella</i> | 0.20 | 0.00 | 4.05 | 0.00 | 11.47 | 11.38 | 0.00 | Outer Neritic | 11.47 |
| <i>Siphonina</i> | 0.00 | 0.00 | 0.17 | 0.01 | 10.44 | 7.78 | 0.00 | Outer Neritic | 10.44 |
| <i>Uvigerina</i> | 0.00 | 0.00 | 0.00 | 0.00 | 0.57 | 69.87 | 22.32 | Upper Bathyal | 69.87 |
| <i>Pyrgo</i> | 0.00 | 0.00 | 0.00 | 0.03 | 0.00 | 63.55 | 2.04 | Upper Bathyal | 63.55 |
| <i>Oolina</i> | 0.00 | 0.00 | 2.37 | 0.31 | 0.00 | 62.31 | 0.26 | Upper Bathyal | 62.31 |
| <i>Bulimina</i> | 0.00 | 0.00 | 3.98 | 0.08 | 0.40 | 60.87 | 17.26 | Upper Bathyal | 60.87 |
| <i>Cassidulina</i> | 0.00 | 0.00 | 0.18 | 0.00 | 12.42 | 55.95 | 0.00 | Upper Bathyal | 55.95 |
| <i>Lenticulina</i> | 0.00 | 0.00 | 0.00 | 0.04 | 4.15 | 52.65 | 14.47 | Upper Bathyal | 52.65 |
| <i>Dentalina</i> | 0.00 | 0.00 | 0.00 | 0.00 | 0.04 | 49.90 | 22.19 | Upper Bathyal | 49.90 |
| <i>Saracenaria</i> | 0.00 | 0.00 | 0.00 | 0.04 | 0.01 | 49.84 | 0.00 | Upper Bathyal | 49.84 |
| <i>Eponides</i> | 0.00 | 0.00 | 0.00 | 0.04 | 0.28 | 49.26 | 0.06 | Upper Bathyal | 49.26 |
| <i>Bolivinita</i> | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 47.86 | 6.26 | Upper Bathyal | 47.86 |
| <i>Hyalinea</i> | 0.00 | 0.00 | 0.03 | 0.02 | 0.00 | 46.36 | 0.78 | Upper Bathyal | 46.36 |
| <i>Rectobolivina</i> | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 44.11 | 1.31 | Upper Bathyal | 44.11 |
| <i>Siphogenerina</i> | 0.00 | 0.00 | 0.02 | 0.01 | 0.01 | 40.82 | 2.02 | Upper Bathyal | 40.82 |
| <i>Anomalina</i> | 0.00 | 0.00 | 4.34 | 0.08 | 0.16 | 37.41 | 32.06 | Upper Bathyal | 37.41 |
| <i>Sigmoilopsis</i> | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 33.33 | 0.00 | Upper Bathyal | 33.33 |
| <i>Ammonia supera</i> | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 33.33 | 0.00 | Upper Bathyal | 33.33 |
| <i>Textularia</i> | 0.00 | 0.00 | 2.80 | 1.14 | 20.53 | 29.52 | 0.00 | Upper Bathyal | 29.52 |
| <i>Heterolepa</i> | 0.00 | 0.00 | 0.00 | 0.23 | 7.16 | 26.69 | 11.33 | Upper Bathyal | 26.69 |
| <i>Nodosaria</i> | 0.00 | 0.00 | 1.24 | 1.84 | 1.98 | 25.49 | 13.67 | Upper Bathyal | 25.49 |
| <i>Planularia</i> | 0.00 | 0.00 | 0.00 | 0.03 | 0.40 | 24.71 | 2.74 | Upper Bathyal | 24.71 |
| <i>Hoeglundina</i> | 0.00 | 0.00 | 0.00 | 0.00 | 0.11 | 23.59 | 15.94 | Upper Bathyal | 23.59 |

| Total sampel | 2 | 1 | 6 | 6 | 5 | 6 | 9 | IndVal Max | IndVal Max (%) |
|-------------------------|----------------------|---------------------------|----------------------|----------------|---------------|---------------|---------------|---------------|----------------|
| Environment | Transitional | Inner Neritic (Fine Sand) | Inner Neritic (Silt) | Middle Neritic | Outer Neritic | Upper Bathyal | Lower Bathyal | | |
| Variable | Indicator Value (IV) | | | | | | | | |
| <i>Fissurina</i> | 0.00 | 0.00 | 17.83 | 1.93 | 0.00 | 20.37 | 0.11 | Upper Bathyal | 20.37 |
| <i>Globocassidulina</i> | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 19.99 | 13.34 | Upper Bathyal | 19.99 |
| <i>Discorbina</i> | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 16.67 | 0.00 | Upper Bathyal | 16.67 |
| <i>Bigenerina</i> | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 16.67 | 0.00 | Upper Bathyal | 16.67 |
| <i>Hemirobulina</i> | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 16.67 | 0.00 | Upper Bathyal | 16.67 |
| <i>Lingulina</i> | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 16.67 | 0.00 | Upper Bathyal | 16.67 |
| <i>Pullenia</i> | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 16.37 | 0.60 | Upper Bathyal | 16.37 |
| <i>Vulvulina</i> | 0.00 | 0.00 | 0.00 | 0.10 | 0.00 | 16.04 | 5.70 | Upper Bathyal | 16.04 |
| <i>Sphaeroidina</i> | 0.00 | 0.00 | 0.05 | 0.15 | 0.00 | 12.38 | 5.56 | Upper Bathyal | 12.38 |
| <i>Lagena</i> | 0.00 | 0.00 | 0.72 | 2.21 | 3.73 | 12.28 | 9.61 | Upper Bathyal | 12.28 |
| <i>Ceratobulimina</i> | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 11.91 | 3.17 | Upper Bathyal | 11.91 |
| <i>Astacolus</i> | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 10.00 | 4.44 | Upper Bathyal | 10.00 |
| <i>Planulina</i> | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 17.30 | 36.34 | Lower Bathyal | 36.34 |
| <i>Globobulimina</i> | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 16.52 | 28.03 | Lower Bathyal | 28.03 |
| <i>Martinotiella</i> | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 22.22 | Lower Bathyal | 22.22 |
| <i>Amphicoryna</i> | 0.00 | 0.00 | 0.00 | 0.01 | 2.40 | 0.01 | 21.53 | Lower Bathyal | 21.53 |
| <i>Oridorsalis</i> | 0.00 | 0.00 | 0.05 | 0.00 | 0.00 | 9.94 | 17.81 | Lower Bathyal | 17.81 |
| <i>Ceratocancris</i> | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 11.11 | Lower Bathyal | 11.11 |
| <i>Eggerella</i> | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 11.11 | Lower Bathyal | 11.11 |
| <i>Laticarinina</i> | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 11.11 | Lower Bathyal | 11.11 |
| <i>Marginulina</i> | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 11.11 | Lower Bathyal | 11.11 |
| <i>Vaginulina</i> | 0.00 | 0.00 | 0.00 | 0.00 | 0.23 | 0.00 | 11.05 | Lower Bathyal | 11.05 |
| <i>Cancris</i> | 0.00 | 0.00 | 0.00 | 0.66 | 0.00 | 0.00 | 10.96 | Lower Bathyal | 10.96 |