Supplementary TABLE 1: Details of published rock samples from the Pantelleria Vecchia Bank discussed in the text

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Structure** | **Sampled object** | **Sample code**  | **General classification**  | **Clasts** | **Cement** | **Remarks** | **Age** | **Reference** |
| Half-ring 1 | Block (3 m long) | Half-ring 1 | Very compact quartz-rich arkose | Quartz, feldspar, A certain amount of fossil material is also present in the sample (foraminifera and gastropods)  | Presence of poikilitic cement composed of rhombohedral calcite crystals | This is the only site in the whole Pantelleria Vecchia Bank where this type of rock has been sampled |  | Lodolo et al. 2024 |
| Half-ring 1 | The top of the semi-circular ridges | 9A | Bioclastic limestone | Clasts & bioclasts: benthic foraminifera, fragments gastropods, corals and molluscs | Cemented |  | Late Miocene (Tortonian) | Lodolo and Ben-Avraham 2015 |
| Half-ring 1 | The top of the semi-circular ridges | 8A | Bioclastic limestone | Clasts & bioclasts: benthic foraminifera, fragments gastropods, corals & molluscs | Cemented |  | Late Miocene (Tortonian)  | Lodolo and Ben-Avraham 2015 |
| Half-ring 1 | The top of the semi-circular ridges | 3A | Bioclastic limestone | Clasts & bioclasts: benthic foraminifera, fragments gastropods, corals & molluscs | Cemented |  | Late Miocene (Tortonian)  | Lodolo and Ben-Avraham 2015 |
| Half-ring 3 | The top of the semi-circular ridges | 5 | Bioclastic limestone | Clasts & bioclasts: benthic foraminifera, fragments gastropods, corals & molluscs | Cemented |  | Late Miocene (Tortonian)  | Lodolo and Ben-Avraham 2015 |
| Half-ring 4 | Steep scarp | Half-ring 1 | Compacted biomicrite | Bioclasts: mainly fusulinids, planktonic & benthic foraminifera remains of bivalves, brachiopods, Green algae echinoderms, gastropods | Micrite between the larger grains |  |  | Lodolo et al. 2024 |
| Ridge 1 | Block | S3\_ATR\_2 | Bioclastic sandstone (calcirudite) | Quartz & rhodolith fragments. Shell fragments of echinoderm spines, foraminifera  | Micrite and fibrous aragonite |   | C14 ages of two samples:36,0 00–45,000 Cal. yr BP | Lodolo and Ben-Avraham 2023 |
| Ridge 1 | Top of the inner ridge  | 7A | Bioclasticcalcirudite | Fragments of shells, red algae and corals, with rare, well rounded lithoclasts  | Thinlayer of calcite |  | Pleistocene  | Lodolo and Ben-Avraham 2015 |
| Ridge 1 | Blocks composing the outer rectilinear ridge | 6A | Bioclasticcalcirudite | Fragments of shells, red algae and corals, with rare, well rounded lithoclasts  | Thinlayer of calcite |  | Pleistocene | Lodolo and Ben-Avraham 2015 |
| Ridge 1 | Blocks composing the outer rectilinear ridge | 4A | Bioclasticcalcirudite | Fragments of shells, red algae and corals, with rare, well rounded lithoclasts | Thinlayer of calcite |  | Pleistocene | Lodolo and Ben-Avraham 2015 |
| Ridge 1 | Blocks composing the outer rectilinear ridge | 1 | Bioclasticcalcirudite | Fragments of shells, red algae and corals, with rare, well rounded lithoclasts | Thinlayer of calcite |  | Pleistocene | Lodolo and Ben-Avraham 2015 |
| Ridge 1 | Blocks composing the outer rectilinear ridge | 2 | Bioclasticcalcirudite | Fragments of shells, red algae and corals, with rare, well rounded lithoclasts | Thinlayer of calcite |  | 43,89 5± 490Cal. yr BP | Lodolo and Ben-Avraham 2015 |
| Ridge 1 | Blocks composing the outer rectilinear ridge | 3 | Bioclasticcalcirudite | Fragments of shells, red algae and corals, with rare, well rounded lithoclasts  | Thinlayer of calcite |  | 36,960 ± 500Cal. yr BP | Lodolo and Ben-Avraham 2015 |
| Ridge 2 | The tip of the seaward end of the ridge | Half-ring 1 | Porous mudstone | Microfossil content: bioclastic (mainly benthic foraminifera) that also contains a siliceous fraction | Lightly cemented  | This lithology is different from the rock samples from some blocks of Ridge 1 | Late Miocene (Tortonian)  | Lodolo and Ben-Avraham 2023 |
| Ridge 2 | Elongated rectangularflat top ridge | 6 | Calcarenite and bioclastic limestone | Rich micro-fauna: benthic foraminifera, ostracods, gastropods |  |  | Late Miocene (Tortonian)  | Lodolo and Ben-Avraham 2015 |
| Monolith | North-East site | 1A | Bioclasticcalcirudite | Fragments of shells, red algae and corals, with rare, well rounded lithoclasts  | Thinlayer of calcite |  | 44,560 ± 1270Cal. yr BP | Lodolo and Ben-Avraham 2015 |
| Monolith | South-West side | 2A | Bioclasticcalcirudite | Fragments of shells, red algae & corals, with rare, well rounded lithoclasts | Thinlayer of calcite |  | Pleistocene | Lodolo and Ben-Avraham 2015 |
| Monolith | Center | 5A | Bioclasticcalcirudite | Fragments of shells, red algae & corals, with rare, well rounded lithoclasts  | Thinlayer of calcite |  | Pleistocene | Lodolo and Ben-Avraham 2015 |