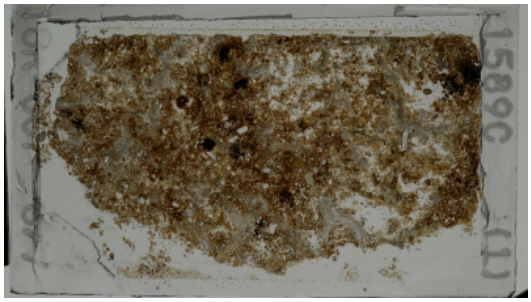
THIN SECTION LABEL ID: **398-U1589C-10R-CC-W 3/7-TSB-TS 1** Thin section no.: 1

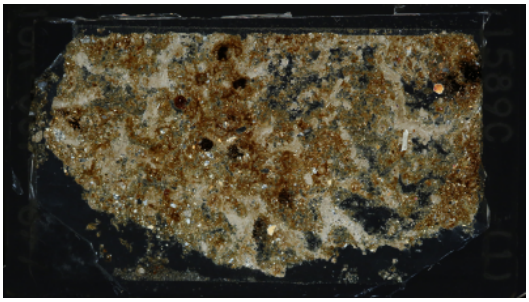
Observer: Unit/subunit:

Thin section summary: Matrix supported immature sandstone with metamorphic quartz, feldspar (e.g. microcline), and minor metamorphic rock fragments (quartz-muscovite schist). Cement (matrix) is highly altered and consists of calcite and Fe-oxides/hydroxide.

Plane-polarized: 67465171



Cross-polarized: 67465191



## Sediments and Sedimentary Rock

**Lithology:** matrix supported clastic sediment

**Grains:** lithic,crystal or crystals

| | | | |
|---|---|---|---|
| **Sorting:** | moderately sorted | **Grading type:** | no grading |
| **Ave grain size (mm):** | fine sand | **Max. grain size (mm):** | coarse sand |

| | | | | | |
|---|---|---|---|---|---|
| **Lithic class:** | metamorphic | **Lithic roundness:** | angular | **Lithic abundance:** | C |
| **Vitric clast type:** | | **Vitric clast roundness:** | | **Vitric abundance** | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Crystal names:** | feldspar,calcite,quartz | **Crystal shape:** | subhedral | **Crystal abundance:** | A | **Crystal features:** | |

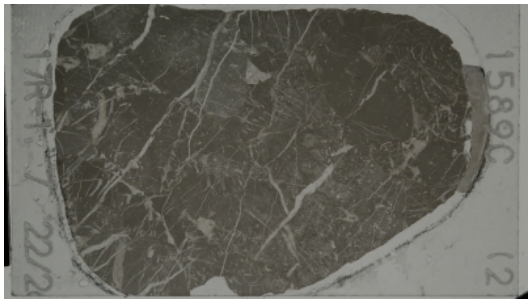
| | | | |
|---|---|---|---|
| **Degree of alteration:** | high alteration | **Alteration feature:** | calcite,iron oxide |

THIN SECTION LABEL ID: **398-U1589C-17R-1-W 22/26-TSB-TS 2** Thin section no.: 2

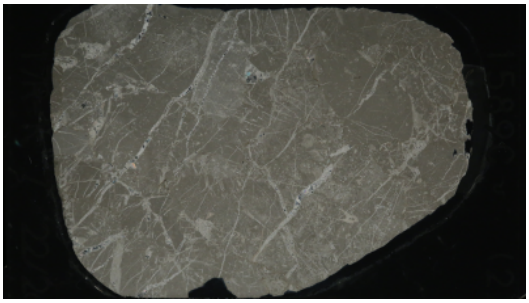
Observer: RG Unit/subunit:

Thin section summary: Micritic limestone with bioclasts (foraminifera, algae and other bioclasts) and ooids.

Plane-polarized: 67464081



Cross-polarized: 67464101



## Sediments and Sedimentary Rock

**Lithology:** micrite

**Grains:** biogenic

**Sorting:** well sorted **Grading type:** no grading

**Ave grain size (mm):** **Max. grain size (mm):**

| | | | |
|---|---|---|---|
| **Biogenic clasts:** | benthic foraminifer,bioclast,algal | **Bioclasts abundance range:** | Tr |

| | | | |
|---|---|---|---|
| **Degree of alteration:** | fresh | **Alteration feature:** | |

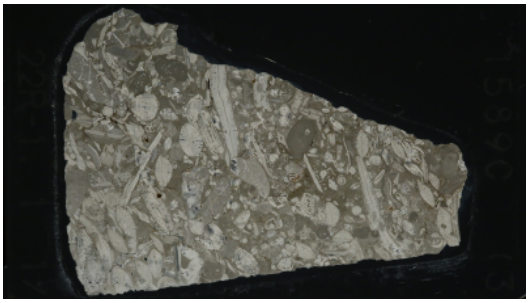
THIN SECTION LABEL ID: **398-U1589C-22R-1-W 0/3-TSB-TS 3** Thin section no.: 3

Observer: Unit/subunit:

Thin section summary: Matrix supported biogenic limestone containing large and smaller benthic foraminifera, planktonic foraminifera, algae and other bioclasts.

Plane-polarized: 67464121


Cross-polarized: 67464141



## Sediments and Sedimentary Rock

**Lithology:** matrix supported packstone

**Grains:** biogenic

**Sorting:** poorly sorted **Grading type:** no grading

**Ave grain size (mm):** **Max. grain size (mm):**

| Crystal names: | | Crystal shape: | | Crystal abundance: | A | Crystal features: | |
|---|---|---|---|---|---|---|---|

| Biogenic clasts: | benthic foraminifer,planktonic foraminifer,shell,algal | Bioclasts abundance range: | D |
|---|---|---|---|

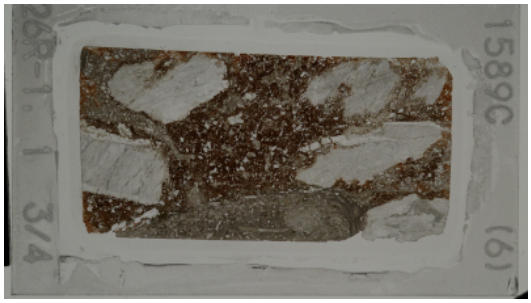
| Degree of alteration: | high alteration | Alteration feature: | calcite,iron oxide |
|---|---|---|---|

THIN SECTION LABEL ID: **398-U1589C-26R-1-W 1/4-TSB-TS 6** Thin section no.: 6

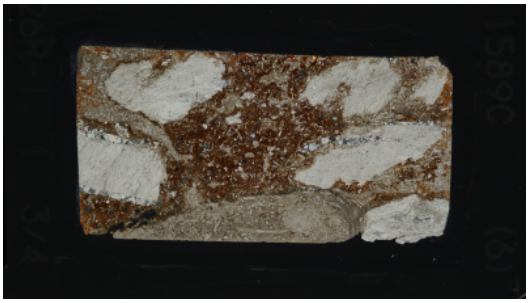
Observer: Unit/subunit:

Thin section summary: Carbonate/limestone breccia with carbonate-rich and Fe-oxide-rich cement (matrix). Clasts are fine-grained monomineralic (calcite) limestone. There is some evidence of shearing and recrystallization of clasts. Cement (matrix) is highly altered and consists of calcite and Fe-oxides/hydroxides and rounded features filled with sparite.

Plane-polarized: 67464161



Cross-polarized: 67464181



## Sediments and Sedimentary Rock

**Lithology:** matrix supported limestone breccia

**Grains:** lithic

| | | | |
|---|---|---|---|
| **Sorting:** | very poorly sorted | **Grading type:** | no grading |
| **Ave grain size (mm):** | granule | **Max. grain size (mm):** | granule |

| | | | | | |
|---|---|---|---|---|---|
| **Lithic class:** | carbonate | **Lithic roundness:** | subangular | **Lithic abundance:** | D |
| **Vitric clast type:** | | **Vitric clast roundness:** | | **Vitric abundance** | |

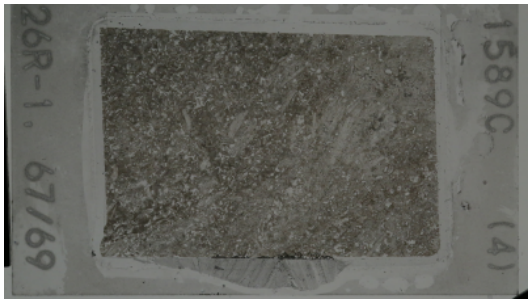
| | | | |
|---|---|---|---|
| **Degree of alteration:** | moderate alteration | **Alteration feature:** | calcite,iron oxide |

THIN SECTION LABEL ID: **398-U1589C-26R-1-W 67/70-TSB-TS 4** Thin section no.: 4

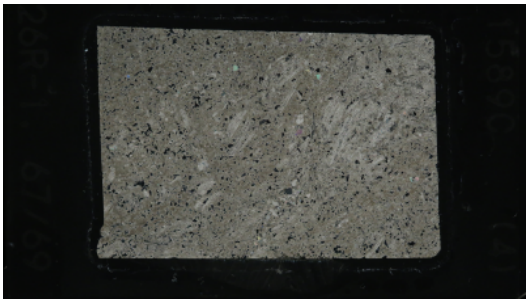
Observer: Unit/subunit:

Thin section summary: Fine-grained limestone with some carbonate clasts, some of these showing slight foliation. No fossils.

Plane-polarized: 67464951




Cross-polarized: 67464971



## Sediments and Sedimentary Rock

**Lithology:** limestone

**Grains:** lithic

**Sorting:** well sorted **Grading type:** no grading

**Ave grain size (mm):** **Max. grain size (mm):**

| | | | | | |
|---|---|---|---|---|---|
| **Lithic class:** | carbonate | **Lithic roundness:** | angular | **Lithic abundance:** | C |
| **Vitric clast type:** | | **Vitric clast roundness:** | | **Vitric abundance** | |

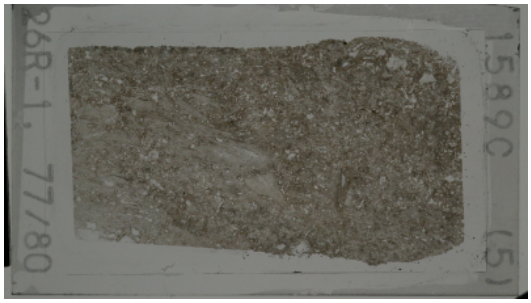
| | | | |
|---|---|---|---|
| **Degree of alteration:** | fresh | **Alteration feature:** | |

THIN SECTION LABEL ID: **398-U1589C-26R-1-W 77/80-TSB-TS 5** Thin section no.: 5

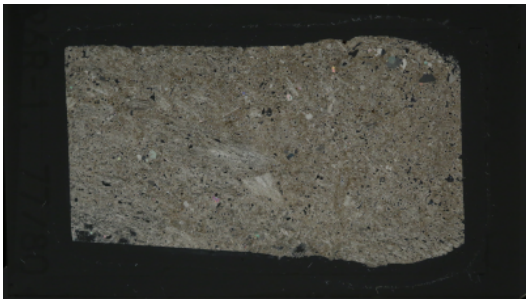
Observer: Unit/subunit:

Thin section summary: Fine-grained limestone with some carbonate clasts, some of these showing slight foliation. No fossils.

Plane-polarized: 67464991




Cross-polarized: 67465011



## Sediments and Sedimentary Rock

**Lithology:** limestone

**Grains:** lithic

**Sorting:** well sorted **Grading type:** no grading

**Ave grain size (mm):** **Max. grain size (mm):**

| | | | | | |
|---|---|---|---|---|---|
| **Lithic class:** | carbonate | **Lithic roundness:** | angular | **Lithic abundance:** | C |
| **Vitric clast type:** | | **Vitric clast roundness:** | | **Vitric abundance** | |

| | | | |
|---|---|---|---|
| **Degree of alteration:** | slight alteration | **Alteration feature:** | iron oxide |