Hole 385-U1546A Core 1H, Interval 0.0-3.82 m (CSF-A)

The core is homogeneous moderate olive brown (SY 4/4) DIATOM CLAY. Few shell fragments are observed at 74-78 cm in section 2.
The core is mainly moderate olive brown (5Y 4/4) to light olive gray (5Y 5/2) DIATOM CLAY. Lamination occurs in sections 2 to CC, alternating between darker and lighter color mm- to cm-thick laminae. Lighter color laminae are composed of CLAY-RICH DIATOM OOZE or NANNOS and CLAY-RICH DIATOM OOZE. Tilted and folded lamination is observed from 125 cm of section 6 to section CC.
The core is a laminated moderate olive brown (5Y 4/4) CLAY-RICH DIATOM Ooze. Finely laminated sediments mostly occur in sections 1 (4 to 102 cm), 2 and 3 (100 to 143 cm), alternating between darker and lighter color mm- to cm-thick laminae. Lighter color laminae are composed of DIATOM Ooze. Sparse shell fragments are present in sections 5 to 7.
The core is a laminated moderate olive brown (5Y 4/4) CLAY-RICH DIATOM OOZE. Finely laminated sediments mostly occur in sections 1 (10 to 50.5 cm), 4, 5 and 6. Alternation between darker color and lighter color mm- to cm-thick laminae is present. Lighter color laminae are composed of DIATOM OOZE. Sparse shell fragments are present in sections 2 and CC. Organic matter debris occurs in sections 2 and 3. Medium gray (N5) patches are present at 65-65.5 cm in section 3 and at 65 cm in section 7. A dark yellowish brown (10YR 4/2) band is present at 19.5-20.7 cm in section 1.
The core is a moderate olive brown (5Y 4/4) CLAY-RICH DIATOM OOZE with faint darker and lighter (5Y 5/2) color mm- to cm-thick lamination. Finely laminated sediments occur in sections 1, 2 (43-50.5 cm and 78 to 98 cm) and 3 (0 to 7 cm). Lighter color laminae are composed of DIATOM OOZE. Sparse shell fragments are present in sections 1 to CC.
Hole 385-U1546A Core 6H, Interval 41.8-51.86 m (CSF-A)

The core is a moderate olive brown (5Y 4/4) CLAY-RICH DIATOM OOZE with faint darker and lighter (5Y 5/2) color mm- to cm-thick lamination. Finely laminated sediments occur in sections 1, 2 (140-145.5 cm), 3 (13-20 cm, 139-143 cm), 7 (7-13.5 cm, 22.5-33 cm, 40.5-78 cm). Lighter color (5Y 7/2) laminae of DIATOM OOZE occur in sections 1, 2, 3, 6 and 7. Black laminae and patches with coarser grains are present in sections 2 (95-96.5 cm, 121-121.5 cm, 134.5 cm) and 4 (31.5-32 cm). A medium grey (N5) lamina also occurs at 40 cm in section 7. Sparse shell fragments are present in sections 1 to 6.
This core consists of laminated olive gray (5Y 3/2) CLAY-RICH DIATOM OOZE. The light olive gray (5Y 7/2) laminae are DIATOM OOZE. Few homogenous intervals occur in most sections. Intact shells are present in section 1 at 63 cm and in section 2 at 35 and 119 cm."
This core consists of an alternation of laminated and homogenous intervals of olive gray (5Y 3/2) CLAY-RICH DIATOM OOZE. A shell fragment is present in section 1 at 63 cm.

<table>
<thead>
<tr>
<th>Age</th>
<th>Core</th>
<th>Lithology</th>
<th>Sedimentary structures</th>
<th>Deformation structures</th>
<th>Drilling disturbance type</th>
<th>Reflectance L* a* b*</th>
<th>NGR (cps)</th>
<th>MS point (10^-5 SI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>1</td>
<td>CLAY-RICH DIATOM OOZE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>200</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>300</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>400</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>500</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>600</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>700</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>800</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>900</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1000</td>
<td>CC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Hole 385-U1546A Core 9H, Interval 70.3-80.18 m (CSF-A)

This core is mainly composed of olive gray (5Y 3/2) CLAY-RICH DIATOM OOZE with few light olive gray (5Y 5/2) layers of DIATOM OOZE. A volcanoclastic SAND is present between 76-77cm in section 2. Darker laminae of volcanoclastic SAND (ASH ?) occur at 48 cm and 95 cm in section 3. The upper part of the core displays laminated intervals alternating with faintly laminated intervals. The lower part of the core (from section 4) is homogenous and consists of olive gray (5Y 3/2) DIATOM CLAY.

Site U1546 core descriptions

Visual core descriptions

<table>
<thead>
<tr>
<th>Depth CSF-A (m)</th>
<th>Core length (cm)</th>
<th>Section</th>
<th>Shipboard samples</th>
<th>Core image</th>
<th>Lithology</th>
<th>Sedimentary structures</th>
<th>Deformation structures</th>
<th>Drilling disturbance type</th>
<th>Reflectance</th>
<th>NGR (cps)</th>
<th>MS point (10^-5 SI)</th>
<th>Lith. unit</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>71.0</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>72.0</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>73.0</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>74.0</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>75.0</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>76.0</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>77.0</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>78.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>79.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>80.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Hole 385-U1546A Core 10H, Interval 79.8-90.08 m (CSF-A)

This core is mainly composed of homogenous olive gray (5Y 3/2) DIATOM CLAY with faint laminae in sections 4 and 6 and distinct lamination in sections 7 and CC. Lighter laminae are DIATOM OOZE. Shell fragments are present in section 1 (68 cm), section 2 (82 cm), section 6 (at 55, 63, 115 cm) and section 7 (80 cm).
Hole 385-U1546A Core 11H, Interval 89.3-99.33 m (CSF-A)

This core consists mainly of olive gray (5Y 3/2) DIATOM CLAY partially laminated in sections 1, 2, 3, 4 and 5. Shell fragments occur at 85 cm in section 3 and at 63 cm in section 7. In section 4, a layer of small shell fragments is present at 90 cm. A thin dark SILT layer (ASH ?) 2 cm thick, occurs at 25 cm in section 6. A thin dark SILT layer is also present at 14 cm in the CC. Tilted lamination is present at the bottom of section 6 (between 138 cm and 146 cm), in section 7 and on top of CC (from 0 to 8 cm). Between 14 to 18 cm in the CC the lamination is parallel.
This core consists mainly of olive gray (5Y 3/2) micrite-bearing DIATOM CLAY with some faint laminae. Very small carbonate concretions are present at 104 cm in section 2, at 100 cm in section 3, at 120 cm in section 6 and at 20 cm in section 7 in intervals of MICRITE-RICH DIATOM Ooze. Lamination in sections 1 and 2 is tilted. A faint lighter lamina on top of section 2 is folded. Thin black laminae (ASH ?) occur in section 5 at 30 and 99 cm.

<table>
<thead>
<tr>
<th>Depth CSF-A (m)</th>
<th>Core length (cm)</th>
<th>Core image</th>
<th>Lithology</th>
<th>Sedimentary structures</th>
<th>Deformation structures</th>
<th>Drilling disturbance type</th>
<th>Reflectance L* a* b*</th>
<th>MS point (10^-5 SI)</th>
<th>Lith. unit</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>99.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>100.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>200</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>101</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>105</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>105.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>106</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>106.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>107</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>107.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>108</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>108.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>109</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Hole 385-U1546A Core 12H, Interval 98.8-108.84 m (CSF-A)
This core consists mainly of olive gray (5Y 3/2) micrite-bearing DIATOM CLAY. Laminae/concretions are present in section 3 between 57 and 74 cm and between 82 and 106 cm. Dark SILT layers are present in section 3 at 15 and 17 cm and in section 5 at 79 cm. Faint tilted lamination occurs between 110 and 133 cm in section 5 and in sections 6 and 7. Lighter indurated laminae are present at 21 cm in section 1 and at 37 cm in section 5. Light olive gray (5Y 5/2), partially indurated MICRITE-RICH DIATOM OOZE occurs between 11 and 14 cm in section 3 and between 44 and 50 cm in section 4.
The core is mainly moderate olive brown (5Y 4/4) to olive gray (5Y 3/2) micrite-bearing DIATOM CLAY with faint darker and lighter (5Y 5/2) color mm- to cm-thick laminations. Finely laminated sediments occur in sections 5 and 6. A yellowish gray (5Y 7/2) layer occurs between 75 and 146 cm in section 1. The yellowish gray (5Y 7/2) layer and laminae are composed of MICRITE-RICH DIATOM OOZE. A pumice clast is found at 12-13.5 cm in section 4. A siliceous concretion is present at 71-75 cm in section 1. Carbonate concretions are also present in sections 1 (84-86 cm, 91-93 cm, 135.5-136.5 cm) and 4 (100-100.7 cm). Black laminae or patches occur in sections 5 (13.5-17 cm, 24 cm, 145 cm to the bottom) and 6 (34.5-35 cm). A very light gray (N8) to medium dark gray (N4) layer is observed between 77 and 81 cm in section 6.
The core is mainly moderate olive brown (5Y 4/4) micrite-bearing DIATOM CLAY with faint darker and lighter (yellowish gray, 5Y 7/2) color mm- to cm-thick lamination. The yellowish gray (5Y 7/2) layers occur between 70 and 93 cm in section 4 as well as between 116 and 127 cm in section 6. Yellowish gray (5Y 7/2) layers as well as laminae and patches are composed of MICRITE-RICH DIATOM OOZE. A carbonate concretion is present in section 4 (72-74 cm). Black laminae occur in sections 2 (81-85 cm) and 6 (128-130 cm). A dark gray (N3) band is present between 44 and 46 cm in section 7.
Hole 385-U1546A Core 16H, Interval 136.8-146.95 m (CSF-A)

The core is mainly moderate olive brown (5Y 4/4) micrite-bearing DIATOM CLAY with faint darker and lighter (yellowish gray, 5Y 7/2) mm- to cm-thick lamination. A medium gray (N5) to black layer occurs at 50-52 cm in section 1. Yellowish gray (5Y 7/2) layers are present at 18-27 cm in section 4 and at 37-44 cm in section 5. Yellowish gray (5Y 7/2) layers and lamination are composed of MICRITE-RICH DIATOM OOZE. Carbonate concretions are observed in section 6 (60-62 cm, 79-81 cm, 84-86 cm). Tilted and folded lamination occurs in sediments from sections 4 to 7.
The core is mainly light olive brown (5Y 5/6) micrite-bearing DIATOM CLAY with faint lamination. Moderate olive brown (5Y 4/4) DIATOM CLAY occurs between 0 and 60 cm in section 1. Two intervals of dusky yellow (5Y 6/4) MICRITE-RICH DIATOM OOZE are present in sections 2 (from 30 to 49 cm) and 6 (from 0 to 20 cm). Lamination displays darker and lighter (yellowish gray, 5Y 7/2) colors. Lighter (5Y 7/2) color laminae are also composed of MICRITE-RICH DIATOM OOZE. Faint tilted lamination occurs in section 5 (from 100 to 132 cm). A 3 mm-thick sand layer is present in section 5 (from 16 to 19 cm). A black to medium gray (NS) layer is present between 122 and 126 cm in section 2. A cm-long carbonate concretion occurs in section 2 (from 16 to 19 cm).
The core is mainly light olive brown (5Y 5/6) to moderate olive brown (5Y 4/4) micrite-bearing DIATOM CLAY. A yellowish gray (5Y 7/2) layer occurs in section 6 (from 68 to 80 cm) that is composed of MICRITE-RICH DIATOM Ooze. Several carbonate concretions are present between 73 and 79 cm in section 6. Laminae display darker and lighter (yellowish grey, 5Y 7/2) colors. Lighter (5Y 7/2) color laminae are MICRITE-RICH DIATOM Ooze. Finely laminated sediments are present in sections 1 to CC except section 2. A medium gray (N5) patch is present at 93.5 cm in section 2.
Hole 385-U1546A Core 19H, Interval 165.3-175.67 m (CSF-A)

This core consists of olive gray (5Y 3/2) to light olive gray MICRITE-RICH DIATOM CLAY with lighter laminae of MICRITE-RICH DIATOM Ooze. Light laminae occur in section 1. Sections 2, 3, 6 and 7 are well laminated. In section 4 (from 84 to 144 cm) and sections 5, 6 and 7, the laminae are tilted. A dark ASH layer occurs in section 7 at 33 cm. In the same section, a thin light felsic ASH at 54 cm and a dark volcaniclastic sand lamina at 100 cm are present.

<table>
<thead>
<tr>
<th>Depth CSF-A (m)</th>
<th>Core length (cm)</th>
<th>Section</th>
<th>Shipboard samples</th>
<th>Core image</th>
<th>Lithology</th>
<th>Sedimentary structures</th>
<th>Deformation structures</th>
<th>Drilling disturbance type</th>
<th>Reflectance L* a* b*</th>
<th>NGR (cps)</th>
<th>MS point (10^-5 SI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td>CC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Visual core descriptions

Site U1546 core descriptions

Drilling disturbance type:
- 0: None
- 1: Normal
- 2: Severe

Sedimentary structures:
- SED: Sedimentary
- PAHS: Paleosol
- HS: Horizonal Stratification
- XRD: X-ray Diffraction
- PMAG: Paleomagnetism
- PAL: Palynology
- RADS: Radiocarbon

Deformation structures:
- DIAT: Diatomaceous
- NANNO: Nannofossil

Reflectance:
- L*: Lightness
- a*: Redness
- b*: Yellowness

NGR (cps):
- 1000
- 800
- 600
- 400
- 200
- 100
- 0

MS point (10^-5 SI):
- 175.0
- 174.0
- 173.0
- 172.0
- 171.0
- 170.0
- 169.0
- 168.0
- 167.0
- 166.0
- 165.0

Age:
- 1000
- 800
- 600
- 400
- 200
- 100
- 0
This core consists of olive gray to light olive gray (5Y 3/2 to 5Y 5/2) CLAY-RICH DIATOM OOZE alternating with lighter layers (5Y 5/2) of MICRITE-RICH DIATOM OOZE. In section 3, the boundary contact between the lighter layer (78-90 cm) and the CLAY-RICH DIATOM OOZE is gradational. Indurated concretions (LIMESTONE/DOLOSTONE) occur at the top of section 2. Section 7 displays very distinct lamination. A dark volcanic SILT layer is present in section 1 at 97 cm. A dark ASH layer occurs at 136-137 cm in section 5. At 3 cm in section 6, a thin light olive gray (5Y 5/2), FORAM-RICH VOLCANIC SAND is present.
Hole 385-U1546A Core 21H, Interval 184.3-194.47 m (CSF-A)

This core consists of olive gray (5Y 3/2) DIATOM CLAY with some laminated intervals. Section 1 contains degraded (dissolved/ altered) shells at 16 and 24 cm and two thin black laminae at 105 and 106 cm (ASH ?). Intervals of moderate olive brown (5Y 4/4) MICRITE-RICH DIATOM CLAY are present in section 2 (138-142 cm), in section 3 (90-20 cm) and in section 7 (82-100 cm). Two grayish black (N2) laminae occur in section 3 at 135 and 137 cm. Section 4 contains degraded shells at 61, 90, 101 cm. Woody debris occurs in section 5 at 13 cm.

<table>
<thead>
<tr>
<th>Depth CSF-A (m)</th>
<th>Core length (cm)</th>
<th>Section</th>
<th>Shipboard samples</th>
<th>Core image</th>
<th>Lithology</th>
<th>Sedimentary structures</th>
<th>Deformation structures</th>
<th>Drilling disturbance type</th>
<th>Reflectance L* a* b*</th>
<th>MS point (10^-5 SI)</th>
<th>NGR (cps)</th>
<th>MS point (10^-5 SI)</th>
<th>NGR (cps)</th>
<th>MS point (10^-5 SI)</th>
<th>NGR (cps)</th>
<th>MS point (10^-5 SI)</th>
</tr>
</thead>
</table>
Hole 385-U1546A Core 22F, Interval 193.8-199.1 m (CSF-A)

This core consists of olive gray (5Y 3/2) CLAY AND MICRITE-RICH DIATOM Ooze. In section 2, an interval of DIATOM-RICH MICRITE is present between 35 and 80 cm. Its color is light olive gray (5Y 5/2) with a gradational contact on top and a contorted boundary at the base. The center of this layer is highly indurated (carbonate concretion). A smaller micritic concretion is also present between 18 and 22 cm in section 4. In the same section a dark SILT layer (ASH or volcanic SILT) is present at 122 cm.
This core consists of olive gray (5Y 3/2) DIATOM CLAY. An ASH layer occurs at 122 cm in section 2. In section 3, there is a change in color from olive gray (5Y 3/2) to black olive (5Y 2/1) and light olive gray (5Y 5/2) possibly related to the former presence of volcanic glass (darker) or to micrite (lighter). A light olive gray (5Y 5/2) well-indurated concretion (LIMESTONE/DOLOSTONE) is present in section 4 (31-34 cm).
The core consists of olive gray (5Y 3/2) DIATOM CLAY with sparse faint lamination and some shell fragments in section 2 (33 and 48 cm) and section 3 (24, 29, 68 and 80 cm).

### Visual core descriptions

#### Hole 385-U1546A Core 24F, Interval 203.2-208.14 m (CSF-A)

<table>
<thead>
<tr>
<th>Depth CSF-A (m)</th>
<th>Core length (cm)</th>
<th>Core image</th>
<th>Lithology</th>
<th>Sedimentary structures</th>
<th>Deformation structures</th>
<th>Drilling disturbance type</th>
<th>Reflectance ( L^* a^* b^* )</th>
<th>NGR (cps)</th>
<th>MS point ((10^{-5} \text{ SI}))</th>
<th>Lith. unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>203.8</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>204.8</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>205.8</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>206.8</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>207.8</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
This core consists of olive gray (5Y 3/2) DIATOM CLAY with a light olive gray (5Y 5/2) indurated concretion (LIMESTONE/DOLOSTONE) between 24 and 28 cm in section 1.
Hole 385-U1546A Core 26X, Interval 208.2-208.7 m (CSF-A)

This core consists of olive gray (5Y 3/2) DIATOM CLAY with an indurated CARBONATE concretion (LIMESTONE/DOLOSTONE) between 0 and 4 cm in section 1.
This core consists of homogenous olive gray (5Y 3/2) CLAY-RICH DIATOM OOZE. Shell fragments are present in section 2 (61, 77, 106 cm) and in section 3 (61 and 128 cm). Section 1 is highly disturbed by drilling between 0 and 33 cm.
Hole 385-U1546A Core 28F, Interval 213.7-218.81 m (CSF-A)

This core consists of homogenous olive gray (5Y 3/2) CLAY-RICH DIATOM OOZE. Shell fragments are present in section 1 (28, 45, and 85 cm), in section 2 (27, 35, 64, 66, and 120 cm), in section 3 (24, 26, 54 and 85 cm) and in section 4 (47 and 50 cm).
Hole 385-U1546A Core 30F, Interval 223.1-223.51 m (CSF-A)

This core consists of homogeneous olive gray (5Y 3/2) CLAY-RICH DIATOM OOZE in section 1. A centimeter-length carbonate concretion is also present at the top of section 1. The top 10 cm of section 1 is highly disturbed by drilling (breccia).
Hole 385-U1546A Core 31X, Interval 223.5-223.74 m (CSF-A)

This core consists of several pieces of light olive gray (5Y 5/2) LIMESTONE/DOLOSTONE.

<table>
<thead>
<tr>
<th>Depth CSF-A (m)</th>
<th>Core length (cm)</th>
<th>Section</th>
<th>Shipboard samples</th>
<th>Core image</th>
<th>Lithology</th>
<th>Sedimentary structures</th>
<th>Deformation structures</th>
<th>Drilling disturbance type</th>
<th>Reflectance L* a* b*</th>
<th>NGR (cps)</th>
<th>MS point (10^-5 SI)</th>
<th>Lith. unit</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>223.5</td>
<td>0</td>
<td>CC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>IC</td>
</tr>
</tbody>
</table>
This core consists of homogenous olive gray (5Y 3/2) CLAY-RICH DIATOM OOZE. Section 1 is highly disturbed by drilling (breccia) between 0 and 22 cm. A few darker and lighter (5Y 5/2) color laminae are present in section 1 (79 cm, 138-142 cm). All sediments exhibit mottling.

<table>
<thead>
<tr>
<th>Core length (cm)</th>
<th>CSF-A (m)</th>
<th>Core image</th>
<th>Lithology</th>
<th>Sedimentary structures</th>
<th>Deformation structures</th>
<th>Drilling disturbance type</th>
<th>Reflectance</th>
<th>MS point (10^-5 SI)</th>
<th>NGR (cps)</th>
<th>Lith. unit</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>224.5</td>
<td>[Image]</td>
<td>CLAY-RICH DIATOM OOZE</td>
<td>Homogenous olive gray (5Y 3/2)</td>
<td>Highly disturbed by drilling (breccia)</td>
<td>0-22 cm</td>
<td>[Graph]</td>
<td>228.4</td>
<td>227.4</td>
<td>226.4</td>
<td>225.4</td>
</tr>
<tr>
<td>1</td>
<td>100</td>
<td>[Image]</td>
<td>CLAY-RICH DIATOM OOZE</td>
<td>Homogenous olive gray (5Y 3/2)</td>
<td>Highly disturbed by drilling (breccia)</td>
<td>0-22 cm</td>
<td>[Graph]</td>
<td>228.4</td>
<td>227.4</td>
<td>226.4</td>
<td>225.4</td>
</tr>
<tr>
<td>2</td>
<td>200</td>
<td>[Image]</td>
<td>CLAY-RICH DIATOM OOZE</td>
<td>Homogenous olive gray (5Y 3/2)</td>
<td>Highly disturbed by drilling (breccia)</td>
<td>0-22 cm</td>
<td>[Graph]</td>
<td>228.4</td>
<td>227.4</td>
<td>226.4</td>
<td>225.4</td>
</tr>
<tr>
<td>3</td>
<td>300</td>
<td>[Image]</td>
<td>CLAY-RICH DIATOM OOZE</td>
<td>Homogenous olive gray (5Y 3/2)</td>
<td>Highly disturbed by drilling (breccia)</td>
<td>0-22 cm</td>
<td>[Graph]</td>
<td>228.4</td>
<td>227.4</td>
<td>226.4</td>
<td>225.4</td>
</tr>
<tr>
<td>4</td>
<td>400</td>
<td>[Image]</td>
<td>CLAY-RICH DIATOM OOZE</td>
<td>Homogenous olive gray (5Y 3/2)</td>
<td>Highly disturbed by drilling (breccia)</td>
<td>0-22 cm</td>
<td>[Graph]</td>
<td>228.4</td>
<td>227.4</td>
<td>226.4</td>
<td>225.4</td>
</tr>
</tbody>
</table>
This core consists of mainly homogenous olive gray (5Y 3/2) CLAY-RICH DIATOM OOZE. Section 1 is highly disturbed by drilling (breccia) between 0 and 10 cm. A few darker and lighter (5Y 5/2) color laminated intervals are present in sections 2 (41-59 cm) and 3 (71-76 cm). Lamination in section 2 is cross-cut by a micro-fault. All sediments are thoroughly mottled. Black vitreous clasts (obsidian?) are found in sections 3 (22-24 cm) and 4 (43-44 cm).
Hole 385-U1546A Core 34X, Interval 233.2-233.38 m (CSF-A)

This core consists of several pieces of pale olive (10Y 6/2) LIMESTONE/DOLOSTONE.

<table>
<thead>
<tr>
<th>Depth CSF-A (m)</th>
<th>Core length (cm)</th>
<th>Section</th>
<th>Shipboard samples</th>
<th>Core image</th>
<th>Lithology</th>
<th>Sedimentary structures</th>
<th>Deformation structures</th>
<th>Drilling disturbance type</th>
<th>NGR (cps)</th>
<th>MS point (10^-5 SI)</th>
<th>Lith. unit</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0</td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Hole 385-U1546A Core 35F, Interval 234.2-239.24 m (CSF-A)

This core consists of mainly homogenous olive gray (5Y 3/2) MICRITE-BEARING CLAY-RICH DIATOM OOZE. Section 1 is highly disturbed by drilling (breccia) between 0 and 29 cm. Faint laminae are only observed between 24 and 26 cm in section CC.
This core consists of mainly homogenous olive gray (5Y 3/2) MICRITE-BEARING CLAY-RICH DIATOM OOZE. A dusky yellow (17-44 cm) layer occurs in section 1 that is composed of MICRITE-RICH DIATOM OOZE. LIMESTONE/DOLOSTONE is observed in this layer (18-24 cm, 41-43 cm). From 44 cm of section 1 to section CC, the sediments are highly disturbed by drilling (breccia).
This core consists of homogenous olive gray (5Y 3/2) MICRITE-BEARING CLAY-RICH DIATOM OOZE. LIMESTONE/DOLOSTONE is observed between 4 and 5 cm in section 1. All sediments are highly disturbed by drilling (breccia).

<table>
<thead>
<tr>
<th>Depth CSF-A (m)</th>
<th>Core length (cm)</th>
<th>Section</th>
<th>Shipboard samples</th>
<th>Core image</th>
<th>Lithology</th>
<th>Sedimentary structures</th>
<th>Deformation structures</th>
<th>Drilling disturbance type</th>
<th>Reflectance L* a* b*</th>
<th>NGR (cps)</th>
<th>MS point (10^5 SI)</th>
<th>Lith. unit</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>239.3</td>
<td>240.3</td>
<td>0</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
This core consists of homogenous olive gray (5Y 3/2) DIATOM CLAY. Several fragments of LIMESTONE/DOLOSTONE are present between 0 and 32 cm in section 1. Faint lamination is observed in section 3 from 0 to 41 cm and from 64 to 127 cm. Lamination is slightly tilted between 41 and 64 cm in section 3. Sediments in the top 32 cm of the section 1 and in the section CC are moderately to highly disturbed by drilling (breccia).
Hole 385-U1546A Core 39F, Interval 245.0-250.03 m (CSF-A)

This core consists of mainly homogeneous olive gray (5Y 3/2) DIATOM CLAY. Sediments are mottled from sections 1 to 3. Lamination is present between 28 and 31 cm in section 4. Sparse shell fragments occur in sections 1, 2 and 3. Sediments in the top 3 cm of section 1 and in the top 16 cm of section CC are highly disturbed by drilling (breccia).
Hole 385-U1546A Core 40F, Interval 249.7-253.73 m (CSF-A)

This core consists of mainly homogeneous olive gray (5Y 3/2) DIATOM CLAY. Lamination is present in sections 1 (61-65 cm) and 2 (47-64 cm). A dark volcanic SAND layer is present at 130-131 cm in section 1. Sediments in section CC are highly disturbed by drilling (breccia). Sediments are mottled in the whole section 2. LIMESTONE/DOLOSTONE is present in the working half of section CC.
Hole 385-U1546A Core 41X, Interval 252.7-252.9 m (CSF-A)

This core consists of mainly homogeneous olive gray (5Y 3/2) DIATOM CLAY. Fragments of LIMESTONE/DOLOSTONE are observed between 16 and the bottom in section CC. Sediments of section CC are highly disturbed by drilling (breccia).

<table>
<thead>
<tr>
<th>Depth (m)</th>
<th>Core length (cm)</th>
<th>Core image</th>
<th>Lithology</th>
<th>Sedimentary structures</th>
<th>Deformation structures</th>
<th>Drilling disturbance type</th>
<th>Reflectance L* a* b*</th>
<th>NGR (cps)</th>
<th>MS point (10^-5 SI)</th>
<th>Lith. unit</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>CC</td>
<td>WRNDB</td>
<td>DIATOM CLAY</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: The table includes additional columns for core image, lithology, sedimentary structures, deformation structures, drilling disturbance type, reflectance, NGR, and MS point, but the visual core descriptions are not fully visible in the image.
Hole 385-U1546A Core 42F, Interval 253.7-258.8 m (CSF-A)

This core consists of a mainly homogeneous olive gray (SY 3/2) MICRITE-RICH DIATOM OOZE. A siltier layer occurs between 16 and 18 cm in section 1. Darker lamination is present in section 2 (22-24 cm, 36-38 cm, 74-76 cm). Sediments from the top 14 cm of section 1 and from section CC are highly disturbed by drilling (breccia).

<table>
<thead>
<tr>
<th>Depth CSF-A (m)</th>
<th>Core length (cm)</th>
<th>Section</th>
<th>Shipboard samples</th>
<th>Core image</th>
<th>Lithology</th>
<th>Sedimentary structures</th>
<th>Deformation structures</th>
<th>Drilling disturbance type</th>
<th>Reflectance</th>
<th>NGR (cps)</th>
<th>MS point (10^-5 SI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>CC</td>
<td>SEDIMENTARY</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>254.6</td>
<td>100</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>255.6</td>
<td>200</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>256.6</td>
<td>300</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>257.6</td>
<td>400</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>258.6</td>
<td>500</td>
<td>CC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
This core consists of mainly homogeneous olive gray (5Y 3/2) MICRITE-RICH DIATOM OOZE. Darker lamination is present in section 2 (72-75 cm). A shell fragment occurs at 30-32 cm in section 2 and at 12 cm in section 4.
Hole 385-U1546A Core 44F, Interval 263.1-266.76 m (CSF-A)

This core consists of homogenous olive gray (5Y 3/2) DIATOM CLAY with faint lamination in section 2 (0-5 cm and 38-56 cm) with intercalated intervals of light olive gray (5Y 5/2) DIATOM-RICH MICRITE between 110 and 146 cm in section 2 which also contains carbonate concretions. Spots of MICRITE are present in section 3 which mainly consists of MICRITE-RICH DIATOM CLAY.

<table>
<thead>
<tr>
<th>Depth CSF-A (m)</th>
<th>Core length (cm)</th>
<th>Section</th>
<th>Shipboard samples</th>
<th>Core image</th>
<th>Lithology</th>
<th>Sedimentary structures</th>
<th>Deformation structures</th>
<th>Drilling disturbance type</th>
<th>Reflectance L<em>a</em>b*</th>
<th>NGR (cps)</th>
<th>MS point (10^-5 SI)</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>100</td>
<td></td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>200</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>300</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Visual core descriptions

Site U1546 core descriptions

44
LIMESTONE (or DOLOSTONE) occurs at the top of section 1 of this core (between 0 to 20 cm). The rock is laminated between 21 and 22 cm. The bottom part of this section and the CC are highly disturbed (drilling breccia) of olive gray (5Y 3/2) DIATOM CLAY fragments.

### Site U1546 core descriptions

<table>
<thead>
<tr>
<th>Depth CSF-A (m)</th>
<th>Core length (cm)</th>
<th>Section</th>
<th>Shipboard samples</th>
<th>Core image</th>
<th>Lithology</th>
<th>Sedimentary structures</th>
<th>Deformation structures</th>
<th>Drilling disturbance type</th>
<th>Reflectance</th>
<th>NGR (cps)</th>
<th>MS point (10^5 SI)</th>
<th>Lith. unit</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>266.4</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td>LIMESTONE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>SEDIM.</td>
<td></td>
</tr>
</tbody>
</table>

**Visual core descriptions**

*Figures and tables showing core descriptions and visual observations.*
Hole 385-U1546A Core 46F, Interval 266.4-271.25 m (CSF-A)

This core is mainly composed of olive gray (5Y 3/2) DIATOM CLAY. An interval of light olive gray (5Y 5/2) DIATOM-RICH MICRITE occurs in section 2 between 15 and 43 cm. Concretions are present at 35 cm. The transition between the two lithologies is gradational. In section 3, patches of MICRITE are locally present at 25-28 cm and at 106-108 cm.
This core consists of light olive gray (5Y 5/2) DIATOM-RICH MICRITE with carbonate concretions and olive gray (5Y 3/2) DIATOM CLAY.
This core is mainly composed of homogenous olive gray (SY 3/2) NANOFOSSIL-BEARING DIATOM CLAY. Light olive gray (SY 5/2) DIATOM-RICH MICRITE with pieces of LIMESTONE/DOLOSTONE occur at the top of section 1. A thin lamina of volcanic SILT is present at 43 cm in section 3.
This core is mainly composed of homogenous olive gray (5Y 3/2) NANOFOSSIL-BEARING DIATOM CLAY.
This core consists of homogenous olive gray (5Y 3/2) NANOFOSSIL-BEARING DIATOM CLAY. Shell fragments (decomposed) occur in section 3 at 12, 95 and 114 cm.
Hole 385-U1546A Core 51F, Interval 283.0-287.8 m (CSF-A)

This core consists of homogenous olive gray (5Y 3/2) NANOFOSSIL-BEARING DIATOM CLAY. Shell fragments are present in section 2 at 25 and 62 cm. Laminated intervals occur in section 3 and these alternate with homogenous intervals.
Hole 385-U1546A Core 52F, Interval 287.7-288.75 m (CSF-A)

This core consists of olive gray (5Y 3/2) CLAY-RICH DIATOM OOZE, highly biscuited and brecciated by drilling.

<table>
<thead>
<tr>
<th>Depth CSF-A (m)</th>
<th>Core length (cm)</th>
<th>Section</th>
<th>Shipboard samples</th>
<th>Core image</th>
<th>Lithology</th>
<th>Sedimentary structures</th>
<th>Deformation structures</th>
<th>Drilling disturbance type</th>
<th>Reflectance</th>
<th>NGR (cps)</th>
<th>MS point (10⁻⁵ SI)</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>287.7</td>
<td>0</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>288.7</td>
<td>100</td>
<td>CC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
This core contains light olive gray LIMESTONE/DOLOSTONE at the top of section 1 (0-17 cm) and olive gray (5Y 3/2) CLAY-RICH DIATOM OOZE from 17 to 75 cm.
**Hole 385-U1546A Core 54F, Interval 289.7-294.79 m (CSF-A)**

This core is mainly composed of olive gray (5Y 3/2) CLAY-RICH DIATOM OOZE with moderate olive brown MICRITE-RICH DIATOM OOZE (with concretions) in section 2 between 33 and 45 cm. The contact between the two lithologies is gradational. A lamina of light olive gray DIATOM OOZE is present in section 1 at 144 cm.

<table>
<thead>
<tr>
<th>Depth CSF-A (m)</th>
<th>Core length (cm)</th>
<th>Section</th>
<th>Shipboard samples</th>
<th>Core image</th>
<th>Lithology</th>
<th>Sedimentary structures</th>
<th>Deformation structures</th>
<th>Drilling disturbance type</th>
<th>Reflectance L* a* b*</th>
<th>NGR (cps)</th>
<th>MS point (10^-5 SI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>289.7</td>
<td>0</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>290.6</td>
<td>100</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>290.6</td>
<td>200</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>290.6</td>
<td>300</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>294.6</td>
<td>500</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Site U1546 core descriptions**

### Visual core descriptions

**Hole 385-U1546A Core 55X, Interval 294.4-294.83 m (CSF-A)**

This core consists of olive gray (5Y 3/2) CLAY-RICH DIATOM OOZE (0-28 cm, CC) overlying dark yellowish brown (10YR 4/2) MICRITE-RICH DIATOM OOZE with carbonate concretions from 28 to 42 cm.

<table>
<thead>
<tr>
<th>Depth CSF-A (m)</th>
<th>Core length (cm)</th>
<th>Section</th>
<th>Shipboard samples</th>
<th>Core image</th>
<th>Lithology</th>
<th>Sedimentary structures</th>
<th>Deformation structures</th>
<th>Drilling disturbance type</th>
<th>Reflectance</th>
<th>NGR (cps)</th>
<th>MS point (10^5 Si)</th>
<th>Lith. unit</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>CC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>L*</th>
<th>a*</th>
<th>b*</th>
</tr>
</thead>
<tbody>
<tr>
<td>84</td>
<td>64</td>
<td>44</td>
</tr>
</tbody>
</table>

**Lithology:**

- Sedimentary structures
- Deformation structures
- Drilling disturbance type

**Reflectance:**

- L* a* b*

**NGR (cps):**

- 2.1
- 2.6
- 3.1
- 3.6
- 4.1

**MS point (10^5 Si):**

- 12

**Lith. unit:**

- IC

**Age:**

- Middle Pleistocene
Hole 385-U1546A Core 56X, Interval 301.6-307.7 m (CSF-A)

This core consists of homogenous dark yellowish brown (10YR 4/2) CLAY-RICH DIATOM OOZE in sections 1 to 4 and at the top of section CC. Sections 1 to 4 were cut with a wire whereas the CC was cut with a saw. Drilling biscuits are visible in the CC. The bottom of the CC contains LIMESTONE/DOLOSTONE that has undergone high temperature alteration during drilling.

<table>
<thead>
<tr>
<th>Depth CSF-A (m)</th>
<th>Core length (cm)</th>
<th>Section</th>
<th>Shipboard samples</th>
<th>Core image</th>
<th>Lithology</th>
<th>Sedimentary structures</th>
<th>Deformation structures</th>
<th>Drilling disturbance type</th>
<th>Reflectance L* a* b*</th>
<th>NGR (cps)</th>
<th>MS point (10^-5 SI)</th>
<th>Lith. unit</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>301.6</td>
<td>0</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>24.4</td>
<td>1.6</td>
<td>6.8</td>
<td>IC</td>
</tr>
<tr>
<td>302.6</td>
<td>100</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>24.4</td>
<td>1.6</td>
<td>6.8</td>
<td>IC</td>
</tr>
<tr>
<td>303.6</td>
<td>200</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>18.5</td>
<td>1.5</td>
<td>4.8</td>
<td>IC</td>
</tr>
<tr>
<td>304.6</td>
<td>300</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>16.6</td>
<td>1.5</td>
<td>4.8</td>
<td>IC</td>
</tr>
<tr>
<td>305.6</td>
<td>400</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>13.5</td>
<td>1.8</td>
<td>4.8</td>
<td>IC</td>
</tr>
<tr>
<td>306.6</td>
<td>500</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>16.6</td>
<td>1.5</td>
<td>4.8</td>
<td>IC</td>
</tr>
<tr>
<td>307.6</td>
<td>600</td>
<td>CC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>16.6</td>
<td>1.5</td>
<td>4.8</td>
<td>IC</td>
</tr>
</tbody>
</table>
Hole 385-U1546A Core 57X, Interval 311.3-318.17 m (CSF-A)

This core consists of biscuited, dusky yellowish brown (10YR 4/2) CLAY-RICH DIATOM OOZE with lighter laminae in section 2 at 72 and 132 cm, faint laminae between 40 and 53 cm in section 3 and light widespread laminae between 15 and 135 cm in section 4. In the CC section the bottom part contains more indurated sediments.
Hole 385-U1546A Core 58X, Interval 317.5-319.88 m (CSF-A)

This core consists of mainly laminated dark yellowish brown (10YR 4/2) to dusky yellowish brown (10YR 2/2) SILT-BEARING SILICEOUS CLAYSTONE. Darker and lighter (10YR 4/2) lamination is present in sections 1 (42-148 cm) and 2 (0-55 cm). The bottom of the CC contains laminated LIMESTONE / DOLOSTONE.
This core consists of mainly dusky yellowish brown (10YR 2/2) SILICEOUS CLAYSTONE. Laminae are present in sections 2 (139-144 cm) and 3 (4-6 cm, 100-102 cm). Laminated carbonate concretions occur at 13-45 cm in section 1 and at 59-64 cm in section 4. All sediments are highly disturbed by drilling (breccia, biscuits).
This core consists of dark yellowish brown (10YR 4/2) SILICEOUS CLAYSTONE. Laminae are present in sections 2 (30-37 cm, 58-80 cm, 88-142 cm), 5 (23-24 cm, 47-49 cm, 65-66 cm, 105-111 cm), 6 (7-49.5 cm, 68-79 cm, 119-126 cm), 7 (0-12 cm, 13-55 cm) and in the whole section CC. All sediments are highly disturbed by drilling (breccia, biscuits).
Hole 385-U1546A Core 61X, Interval 340.5-349.95 m (CSF-A)

This core consists of dusky yellowish brown (10YR 2/2) to olive black (5Y 2/1) SILICEOUS CLAYSTONE. Faint darker laminae are present from sections 1 to 6. Finely laminated sediments also occur in sections 2, 4 and 5. Lighter color (pale yellowish brown, 10YR 6/2) laminae are present between 31 and 98 cm in section 5. Carbonate concretions occur in the top 21 cm of section 4. All sediments are highly disturbed by drilling (breccia, biscuits).
This core consists of homogeneous olive black (5Y 2/1) SILICEOUS CLAYSTONE. All sediments are highly disturbed by drilling (breccia, biscuits). In the CC, LIMESTONE/DOLOMITE occurs at the top between 0 and 9 cm. Black CLAY with authigenic pyrite is present between 9 and 14 cm and brownish gray (5YR 4/1) CLAYSTONE occurs between 14 and 25 cm above a highly altered subvolcanic rock (from 25 to 43 cm).
385-U1546A-62X-CC-A, 25–43 cm

UNIT: 1
LITHOLOGY: plagioclase phyric basalt
DESCRIPTION: Sill
COLOR: greenish gray
TEXTURE: holocrystalline and phaneritic
PHENOCRYSTS: 20% plagioclase
GROUNDMASS: Bimodal
VESICLES: moderately vesicular
UPPER CONTACT: baked contact
LOWER CONTACT: –
ALTERATION: moderately altered
VEINS: absent
This core, mostly composed of BASALT, contains a "fall in" piece of indurated sediment at the top of section 1.

<table>
<thead>
<tr>
<th>Depth CSF-A (m)</th>
<th>Core length (cm)</th>
<th>Section</th>
<th>Shipboard samples</th>
<th>Core image</th>
<th>Lithology</th>
<th>Sedimentary structures</th>
<th>Deformation structures</th>
<th>Drilling disturbance type</th>
<th>Reflectance L* a* b*</th>
<th>NGR (cps)</th>
<th>MS point (10^-5 SI)</th>
<th>Lith. unit</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>359.2</td>
<td>100</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>100</td>
<td>600</td>
<td>1100</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>
### Hole 385-U1546A-63X Section 1, Top of Section: 358.2 m (CSF-A)

**LITHOLOGY:** Dolerite  
**DESCRIPTION:** Sill  
**COLOR:** Gray  
**TEXTURE:** Vesicular  
**PHENOCRYSTS:** 7% plagioclase  
**GROUNDMASS:** Equigranular felty matrix  
**VESICLES:** Highly vesicular  
**UPPER CONTACT:** –  
**LOWER CONTACT:** –  
**ALTERATION:** Moderately altered  
**VEINS:** Polycrystalline  

**Visual Core Descriptions**

**385-U1546A-63X-1A, 4–103 cm**

**UNIT:** 1  
**LITHOLOGY:** Dolerite  
**DESCRIPTION:** Sill  
**COLOR:** Gray  
**TEXTURE:** Vesicular  
**PHENOCRYSTS:** 7% plagioclase  
**GROUNDMASS:** Equigranular felty matrix  
**VESICLES:** Highly vesicular  
**UPPER CONTACT:** –  
**LOWER CONTACT:** –  
**ALTERATION:** Moderately altered  
**VEINS:** Polycrystalline
LITHOLOGY: dolerite
DESCRIPTION: Sill
COLOR: gray
TEXTURE: porphyritic
PHENOCRYSTS: 10% plagioclase
GROUNDMASS: equigranular felty matrix
VESICLES: sparsely vesicular
UPPER CONTACT: –
LOWER CONTACT: –
ALTERATION: moderately altered
VEINS: polycrystalline
**Hole 385-U1546B Core 1H, Interval 0.0-4.26 m (CSF-A)**

This core consists of olive gray (5Y 3/2) DIATOM CLAY. Section 1 is soupy. Open burrows occur in section 4.
Hole 385-U1546B Core 2H, Interval 4.3-14.26 m (CSF-A)

This core consists of olive gray (5Y 3/2) DIATOM CLAY. Open burrows are present in sections 1, 2 and 5. Sections 3, 4 and 5 are mainly laminated. Thin layers of terrigenous SILT are present at 88-94 cm and 116-118 cm in section 3 and at 58-60 cm in section 6 and in section 5 at 35-37 cm and 97-100 cm. A lighter terrigenous SAND layer is present in section 5 between 128 and 131 cm. Shell fragments are present in section 5 at 97 and 127 cm. At the bottom of section 6 (117 to 150 cm) and the top of section 7 (0-12 cm), there is an intra-formational BRECCIA of laminated clasts.
This core consists of moderate olive gray (5Y 4/4) CLAY-RICH DIATOM OOZE with alternating homogenous and laminated intervals. Section 1 displays a folded and faulted zone between 23 to 69 cm. Contorted laminae occur in section 3 at 34 and 94 cm and in section 6 between 127 and 150 cm. A shell fragment is present at 56 cm in section 4.
This core consists of olive gray (5Y 3/2) CLAY-RICH DIATOM OOZE. Laminated intervals alternate with homogenous intervals. Shell fragments occur in section 2 (43, 49 and 65 cm) and in section 5 at 16 cm.
Hole 385-U1546B Core 5H, Interval 32.8-42.68 m (CSF-A)

This core consists of olive gray (5Y 3/2) CLAY-RICH DIATOM Ooze. Laminated intervals are present in section 1 and in section 2. Shell fragments are sparse in sections 1, 4, 5, 6 and 7.
Hole 385-U1546B Core 6H, Interval 42.3-52.14 m (CSF-A)

This core mainly consists of olive gray (5Y 3/2) homogenous CLAY-RICH DIATOM OOZE. Laminated intervals alternate with homogenous intervals in section 1. Thin laminated intervals are present in section 2, 6 and 7. Shell fragments are sparse in sections 1, 2, 5, 6, and 7.
Hole 385-U1546B Core 7H, Interval 51.8-61.78 m (CSF-A)

This core consists of olive gray (5Y 3/2) CLAY-RICH DIATOM OOZE with faintly laminated intervals. Moderate olive gray (5Y 4/4) laminae of DIATOM OOZE occur in sections 1, 3, 5 and 6.

<table>
<thead>
<tr>
<th>Depth CSF-A (m)</th>
<th>Core length (cm)</th>
<th>Section</th>
<th>Shipboard samples</th>
<th>Core image</th>
<th>Lithology</th>
<th>Sedimentary structures</th>
<th>Deformation structures</th>
<th>Drilling disturbance type</th>
<th>Reflectance L* a* b*</th>
<th>NGR (cps)</th>
<th>MS point (10^-5 SI)</th>
<th>Lith. unit</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>6</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>7</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Age range: middle to late Pleistocene (to Holocene?)
This core consists of olive gray (5Y 3/2) CLAY-RICH DIATOM OOZE with laminated intervals in sections 3, 4 and 5. A shell fragment occurs at 30 cm in section 5.
Hole 385-U1546B Core 9H, Interval 70.8-80.76 m (CSF-A)

This core consists of homogenous olive gray (5Y 3/2) CLAY-RICH DIATOM OOZE in sections 1 and 2 which transitions to homogenous, moderate olive brown (5Y 4/4) micrite-bearing CLAY-RICH DIATOM OOZE in sections 4, 5, 6 and 7.
This core consists of moderate olive brown (5Y 4/4) DIATOM CLAY with laminated intervals in all sections. Laminae display darker and lighter (light olive gray, 5Y 5/2) colors. Lighter (light olive gray, 5Y 5/2) laminae present in section 3 to 6 are composed of DIATOM OOZE. Dispersed shell fragments occur in sections 1 and 3 to 7. Open burrows are present in sections 1 (144-150 cm) and 3 (0-6 cm). Siltier patches with a medium light gray (N6) color are present at 114-118 cm in section 3.
This core consists of moderate olive brown (5Y 4/4) DIATOM CLAY with laminated intervals in all sections. Laminae displays darker and lighter (light olive gray, 5Y 5/2; yellowish gray, 5Y 7/2) colors. Lighter (light olive gray, 5Y 5/2; yellowish gray, 5Y 7/2) color laminae are present in all sections and are composed of DIATOM Ooze. Tilted lamination is present at the bottom of section 6 (143-150 cm), in section 7 and at the bottom of section CC (21-26 cm). Dispersed shell fragments occur in sections 3 to 5. Open burrows are present in section 1 (0-5 cm). Black patches are present at 106-107 cm in section 3.
This core consists of mainly moderate olive brown (5Y 4/4) micrite-bearing DIATOM CLAY with laminated intervals in sections 1 to 7. Laminae display darker and lighter (yellowish gray, SY 7/2) colors. Lighter (yellowish gray, SY 7/2) color laminae present in sections 1 to 7, are composed of DIATOM Ooze. A yellowish gray (5Y 7/2) band at 49-51 cm in section 2 is composed of MICRITE-RICH DIATOM Ooze. Tilted lamination is present in section 1 (5-150 cm). Open burrows are present in section 1 (148-150 cm). Black patches are present at 72-74.5 cm in section 4. A medium dark gray (N4) to black color band is present at 105-107 cm in section 2. A darker yellowish (10YR 4/2) band is also present at 68.5-70 cm in section 7. Small carbonate concretions (MICRITE-RICH DIATOM Ooze) occur in sections 2 (91.5-92 cm), 5 (142-143.5 cm), 6 (119.5-120.5 cm, 130 cm, 142 cm) and 7 (10-12.5 cm, 13.5-15 cm, 17-19 cm).
This core consists mainly of moderate olive brown (5Y 4/4) micrite-bearing DIATOM CLAY. Laminations are present in sections 1, 4, 5, 6 and 7. Faint tilted lamination occurs between 0 and 74 in section 7. A layer of light olive brown (5Y 5/6), partially indurated MICRITE-RICH DIATOM OOZE with carbonate concretions, occurs between 69 and 92 cm in section 2. An ASH layer present at 32-36 cm in section 1 is probably flow-in.
Hole 385-U1546B Core 14H, Interval 118.3-128.39 m (CSF-A)

The core is moderate olive brown (5Y 4/4) micrite-bearing DIATOM CLAY with faint darker and lighter (5Y 5/2, 5Y 7/2) color mm- to cm-thick lamination. Tilted lamination occurs in sections 4 to 7. The light olive gray (5Y 5/2) to yellowish gray (5Y 7/2) layers and laminae are composed of MICRITE-RICH DIATOM Ooze. Black laminae or patches occur in sections 1 (27-30.5 cm, 45-47 cm) and 2 (11-12 cm, 64 cm). Medium dark gray (N4) layers are present at 54-55 cm and 90-93 cm in section 6.
The core is a moderate olive brown (5Y 4/4) to olive gray (5Y 3/2) micrite-bearing DIATOM CLAY with faint darker and lighter (yellowish gray, 5Y 7/2) mm- to cm-thick lamination. The yellowish gray (5Y 7/2) layers occur in sections 1 (115-116 cm) and 4 (15-16 cm). Yellowish gray (5Y 7/2) layers, laminae and patches are composed of MICRITE-RICH DIATOM OOZE. Carbonate concretions are present in section 4 (63-66 cm, 72-81 cm).
The core consists of olive gray (5Y 3/2) micrite-bearing DIATOM CLAY with faint darker and lighter (yellowish gray, 5Y 7/2) color bands in section 1. All sediments are highly disturbed by drilling (breccia).
The core is a mainly olive gray (5Y 3/2) micrite-bearing DIATOM CLAY. Light olive brown (5Y 5/6) MICRITE-RICH DIATOM Ooze layers occur in sections 2 (76-85 cm), 4 (131-144 cm) and 5 (22-23 cm, 131-150 cm). Lamination is present in sections 1, 2, 4 and 5. Carbonate concretions are present in sections 2 (81-82 cm), 4 (139-144 cm), 5 (144-150 cm) and 6 (33-38 cm). Medium dark gray (N4) layer (ASH) is present at 86-90 cm in section 1. Black lamina and patch (volcanic SAND) occur in sections 1 (89-90 cm) and 6 (108 cm), respectively. Shell fragments are present at 143 cm in section 1.
The core is a mainly dusky yellow (5Y 6/4) MICRITE-RICH DIATOM CLAY including more indurated layers in sections 1, 5 and 6. Moderate olive brown (5Y 4/4) to olive gray (5Y 3/2) micrite-bearing DIATOM CLAY also occurs in sections 2, 4 and at the first 90 cm of section 5. Light gray (N7) to medium dark gray (N4) layer is present at 49.5-53 cm in section 1. Lamination is present in sections 2 (90-146 cm), 4 (0-28 cm), 5 (18-27 cm) and 7 (92-116 cm). Carbonate concretions occur in sections 1 (122-124 cm) and 5 (146-147 cm).
Hole 385-U1546B Core 19H, Interval 155.7-165.73 m (CSF-A)

This core consists of olive gray (5Y 3/2) to moderate olive gray (5Y 4/4) MICRITE-RICH DIATOM CLAY. The sections 1, 2 and 4 are homogenous with a lighter intervals of MICRITE-RICH DIATOM OOZE between 90 to 100 cm in section 1 and between 71 to 106 cm in section 2. Sections 5, 6 and 7 are laminated. In sections 6 and 7, the lamination is tilted. A light gray (N7) ASH lamina is present at 127 cm in section 6.
This core consists of moderate olive gray (5Y 4/4) CLAY-RICH DIATOM OOZE with intervals of moderate olive brown (5Y 4/4) MICRIT-RICH DIATOM OOZE in section 1. A CARBONATE concretion occurs at 17 cm in section 1. In section 4, 5, 6 and 7 the olive gray (5Y 3/2) CLAY-RICH DIATOM OOZE is locally laminated. Tilted lamination is present in section 7 between 62 and 100 cm. A dark volcanic SAND (ASH?) lamina occurs at 21 cm in the CC.
Hole 385-U1546B Core 21H, Interval 174.7-184.9 m (CSF-A)

This core consists of olive gray (5Y 3/2) to moderate olive gray (5Y 4/4) CLAY-RICH DIATOM OOZE. The lighter color is related to the abundance of micrite. A dark scoria clast is present in section 1 at 76 cm. A thin layer of fish (?) bone debris occurs in the same section at 107 cm. Shell fragments are present in section 5 at 133 cm and in section 7 at 36 cm. A dark ASH(?) layer occurs in section 7 at 38 cm. Thin dark ASH(?) layers are also present in the same section at 30 and 50 cm. Light gray SILT laminae are present at 29 and 48 cm in section 7. Faint tilted laminae are present in section 8 between 32 and 50 cm.
This core consists of laminated olive gray (5Y 3/2) CLAY-RICH DIATOM OOZE alternating with a few homogenous intervals. Degraded shells are present in section 2 (43 cm) and in section 4 (34 and 77 cm). A gray SILT lamina occurs at 82 cm in a homogenous interval. Dark laminae (A SH ?) are present in section 2 at 102 cm and in section 4 at 62, 64, 118 and 119 cm.
This core consists of homogenous olive gray (5Y 3/2) CLAY-RICH DIATOM OOZE with intervals of moderate olive brown (5Y 4/4) MICRITE-RICH DIATOM OOZE in section 1 between 0 to 28 cm, in section 2 between 84 to 118 cm and in the CC from 30 to 35 cm. The contact between the two lithologies is gradational. Carbonate concretions are present in the MICRITE-RICH DIATOM OOZE interval 9 (0 to 14 cm in section 1 and 94 to 106 cm in section 2). A dark lamina of ASH(?) is present in section 3 at 15 cm, and at 7 cm in section 7. Dark patches and layers are present in section 7.
This core consists of biscuited and brecciated olive gray (5Y 3/2) DIATOM CLAY. Darker intervals (olive black 5Y 2/1) occur in section 2 between 48-50 cm, 81-96 cm, and 98-107 cm. A MICRITE-RICH DIATOM OOZE interval is present at the bottom of the core catcher from 24 to 28 cm.
Hole 385-U1546B Core 25F, Interval 203.5-208.43 m (CSF-A)

This core consists of homogenous olive gray (5Y 3/2) DIATOM CLAY. Shell fragments are sparse in sections 1 and 3.
This core consists of biscuited and brecciated olive gray (5Y 3/2) DIATOM CLAY with a light olive gray (5Y 5/2) MICRITE-RICH DIATOM OOZE interval with carbonate concretions in section 1 from 50 to 60 cm.
This core consists of 2 hard pieces of light olive gray (5Y 5/2) LIMESTONE/DOLOSTONE.

<table>
<thead>
<tr>
<th>Depth CSF-A (m)</th>
<th>Core length (cm)</th>
<th>Section</th>
<th>Shipboard samples</th>
<th>Core image</th>
<th>Lithology</th>
<th>Sedimentary structures</th>
<th>Deformation structures</th>
<th>Drilling disturbance type</th>
<th>NGR (cps)</th>
<th>MS point (10⁻⁵ SI)</th>
<th>Lith. unit</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>208.5</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
This core consists of homogenous olive gray (5Y 3/2) CLAY-RICH DIATOM OOZE with sparse shell fragments in sections 1 and 4.
This core consists of homogenous olive gray (5Y 3/2) CLAY-RICH DIATOM OOZE with sparse shell fragments in sections 1, 3 and 4.
This core consists of homogenous olive gray (5Y 3/2) CLAY-RICH DIATOM OOZE. A light olive gray (5Y 5/2) MICRITE-RICH DIATOM OOZE interval with a carbonate concretion is present in the CC.

<table>
<thead>
<tr>
<th>Depth CSF-A (m)</th>
<th>Core length (cm)</th>
<th>Section</th>
<th>Shipboard samples</th>
<th>Core image</th>
<th>Lithology</th>
<th>Sedimentary structures</th>
<th>Deformation structures</th>
<th>Drilling disturbance type</th>
<th>NGR (cps)</th>
<th>MS point (10^(-5) SI)</th>
<th>Reflectance</th>
</tr>
</thead>
<tbody>
<tr>
<td>219.4</td>
<td>0</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>220.4</td>
<td>100</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>221.4</td>
<td>200</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>222.4</td>
<td>300</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>223.4</td>
<td>400</td>
<td>CC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depth CSF-A (m)</td>
<td>Core length (cm)</td>
<td>Section</td>
<td>Shipboard samples</td>
<td>Core image</td>
<td>Lithology</td>
<td>Sedimentary structures</td>
<td>Deformation structures</td>
<td>Drilling disturbance type</td>
<td>L*</td>
<td>a*</td>
<td>b*</td>
</tr>
<tr>
<td>----------------</td>
<td>------------------</td>
<td>---------</td>
<td>-------------------</td>
<td>------------</td>
<td>-----------</td>
<td>------------------------</td>
<td>-----------------------</td>
<td>-------------------------</td>
<td>-----</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>224.0</td>
<td>0</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This core consists of brecciated (by drilling) homogenous olive gray (5Y 3/2) CLAY-RICH DIATOM OOZE. A light olive gray (5Y 5/2) LIMESTONE/DOLOSTONE layer is present in section 1 between 4 and 33 cm.
Hole 385-U1546B Core 32F, Interval 224.1-228.99 m (CSF-A)

This core consists of homogenous olive gray (5Y 3/2) CLAY-RICH DIATOM OOZE. Lamination is present in section 1 from 45 to 47 cm and from 111 to 112 cm. Sections 3 and 4 display faint burrows (bioturbation).
Hole 385-U1546B Core 33F, Interval 228.8-233.83 m (CSF-A)

This core consists of bioturbated olive gray (5Y 3/2) CLAY-RICH DIATOM OOZE. Darker and lighter (5Y 7/2) color lamination is present in sections 1 to 4. Carbonate concretions are present in sections 1 (15-18 cm) and CC (12-13 cm). A medium dark gray (N4) layer occurs at 69.5-70 cm in section 1.

<table>
<thead>
<tr>
<th>Depth CSF-A (m)</th>
<th>Core length (cm)</th>
<th>Section</th>
<th>Shipboard samples</th>
<th>Core image</th>
<th>Lithology</th>
<th>Sedimentary structures</th>
<th>Deformation structures</th>
<th>Drilling disturbance type</th>
<th>Reflectance L* a* b*</th>
<th>MS point (10^-5 SI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>228.8</td>
<td>0</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>229.8</td>
<td>100</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>230.8</td>
<td>200</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>231.8</td>
<td>300</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>232.8</td>
<td>400</td>
<td>CC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>233.8</td>
<td>500</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Site U1546 core descriptions

Visual core descriptions
This core consists of moderate olive brown (5Y 4/4) LIMESTONE/DOLOSTONE in section 1. Section CC consists of moderate olive brown (5Y 4/4) MICRITE-RICH DIATOM OOZE associated with several laminated carbonate concretions.
This core consists of mainly bioturbated olive gray (5Y 3/2) micrite-bearing CLAY-RICH DIATOM OOZE. Yellowish gray (5Y 7/2) MICRITE-RICH DIATOM OOZE layers occur in section 4 (31.5-37 cm, 51-54 cm). Carbonate concretions are present in sections 1, 3, 4 and CC. Open burrows occur at the bottom of section 1 (145-150 cm) and at the top (0-6 cm) of section 4.
This core consists of mainly bioturbated olive gray (5Y 3/2) micrite-bearing CLAY-RICH DIATOM OOZE. The top (0-23 cm) of section 1 is composed of yellowish gray (5Y 7/2) MICRITE-RICH DIATOM OOZE including several mm- to cm-length carbonate concretions. Sediments are highly disturbed by drilling (breccia).
Hole 385-U1546B Core 37F, Interval 240.4-245.26 m (CSF-A)

This core consists of mainly olive gray (5Y 3/2) micrite bearing CLAY-RICH DIATOM OOZE. Several carbonate concretions are present in the drilling breccia at the top (0-37 cm) of section 1. Lamination with darker and lighter (5Y 5/2) colors is present in section 4 (6.5-8.5 cm, 12.5-13.5 cm). A dark gray (N3) band is present at 93-95 cm in section 3. Sparse shell fragments are present in sections 2 and 3. All sediments are highly bioturbated as shown by the occurrence of burrows throughout the core. Open burrows occur at the bottom (145.5-150 cm) of section 1.

Site U1546 core descriptions

Visual core descriptions

103
This core consists of mainly olive gray (5Y 3/2) DIATOM CLAY. Darker lamination is present in sections 1 (2-7 cm, 111-112 cm) and 2 (36-38 cm, 42-43 cm, 47-49 cm). Shell fragments are present in sections 1, 2 and 3. Most sediments are highly bioturbated.
This core consists of mostly homogenous olive gray (SY 3/2) DIATOM CLAY. Sediments are laminated in few parts of sections 1, 2 and 4. Laminae display darker and lighter (SY 5/2) colors. A mm-thick black lamina occurs at 35 cm of the section 1. Shell fragments are present in sections 1 and 2. Most homogenous sediments are likely highly bioturbated (as there are numerous burrows).
This core consists of olive gray (5Y 3/2) DIATOM CLAY. Lamination is present in section 1 (46-58 cm, 68.5-48 cm, 93-95 cm). Sediments are highly disturbed by drilling (breccia, biscuits). Carbonate concretions are present at the top (4.5-12.5 cm) of section 1.
Hole 385-U1546B Core 41F, Interval 254.5-258.76 m (CSF-A)

This core consists of mainly homogeneous olive gray (5Y 3/2) DIATOM CLAY. Carbonate concretions are present in sections 1 and CC.
This core consists of mainly olive gray (5Y 3/2) MICRITE-RICH DIATOM OOZE. Fragments of laminated LIMESTONE/DOLOSTONE are present at the top (3-27 cm) of section 1. Laminae with a darker and lighter (5Y 7/2) color are present in sections 1 and CC. Most sediments are highly disturbed by drilling (breccia, biscuits).

### Hole 385-U1546B Core 42X, Interval 255.5-256.64 m (CSF-A)

<table>
<thead>
<tr>
<th>Depth CSF-A (m)</th>
<th>Core length (cm)</th>
<th>Section</th>
<th>Shipboard samples</th>
<th>Core image</th>
<th>Lithology</th>
<th>Sedimentary structures</th>
<th>Deformation structures</th>
<th>Drilling disturbance type</th>
<th>Reflectance L<em>a</em>b*</th>
<th>NGR (cps)</th>
<th>MS point (10⁻² SI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>255.5</td>
<td>0</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>256.5</td>
<td>100</td>
<td>CC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
This core consists of mainly homogeneous olive gray (5Y 3/2) MICRITE-RICH DIATOM OOZE. Disrupted/bioturbated lamination is present in section 4 (15-17 cm). A light (N7) to medium gray (N5) layer is present at 60.5-61 cm in section 1. Sediments are mottled throughout section 1.
This core consists of mainly homogeneous olive gray (5Y 3/2) DIATOM CLAY. Lamination is present in sections 2 (40-45 cm), 3 (108-117 cm) and 4 (0-14 cm, 32-55 cm). A shell fragment is present at 116 cm in section 1. Sediments are mottled in sections 1 to 3. Sediments at the top (0-12 cm) of section 1 are highly disturbed by drilling (breccia).
This core consists of mainly olive gray (5Y 3/2) DIATOM CLAY. Sediments are highly disturbed by drilling (breccia).

<table>
<thead>
<tr>
<th>Depth CSF-A (m)</th>
<th>Core length (cm)</th>
<th>Section</th>
<th>Shipboard samples</th>
<th>Core image</th>
<th>Lithology</th>
<th>Sedimentary structures</th>
<th>Deformation structures</th>
<th>Drilling disturbance type</th>
<th>Reflectance (L*, a*, b*)</th>
<th>MS point (10^-5 SI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>265.9</td>
<td>0</td>
<td>F</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **Lithology**: Sedimentary structures
- **Sedimentary Structures**: Deformation structures
- **Drilling disturbance type**: Reflectance
- **MS point (10^-5 SI)**: NGR (cps)
Hole 385-U1546B Core 46X, Interval 266.2-267.65 m (CSF-A)

Moderate olive brown (5Y 4/4) LIMESTONES/DOLOSTONE occurs at the top (0-34 cm) of section 1. The rest of the core consists of olive gray (5Y 3/2) DIATOM CLAY with few faint darker laminae at 47-106 cm of section 1. Most sediments are highly disturbed by drilling (breccia, biscuits).

<table>
<thead>
<tr>
<th>Depth CSF-A (m)</th>
<th>Core length (cm)</th>
<th>Section</th>
<th>Shipboard samples</th>
<th>Core image</th>
<th>Lithology</th>
<th>Sedimentary structures</th>
<th>Deformation structures</th>
<th>Drilling disturbance type</th>
<th>Reflectance L<em>a</em>b*</th>
<th>NGR (cps)</th>
<th>MS point (10^5 SI)</th>
<th>Lith. unit</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>266.2</td>
<td>0</td>
<td>1</td>
<td>CC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>267.2</td>
<td>100</td>
<td>CC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Hole 385-U1546B Core 47F, Interval 267.2-268.62 m (CSF-A)

This core is mainly composed of mainly olive gray (5Y 3/2) DIATOM CLAY. An interval of light olive gray (5Y 5/2) DIATOM-RICH MICRITE occurs in sections 1 (117-122 cm) and CC (0-11 cm). A few intervals are highly disturbed by drilling (breccia, biscuits).

<table>
<thead>
<tr>
<th>Depth CSF-A (m)</th>
<th>Core length (cm)</th>
<th>Section</th>
<th>Shipboard samples</th>
<th>Core image</th>
<th>Lithology</th>
<th>Sedimentary structures</th>
<th>Deformation structures</th>
<th>Drilling disturbance type</th>
<th>Reflectance</th>
<th>NGR (cps)</th>
<th>MS point (10^-5 SI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>267.2</td>
<td>0</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>268.2</td>
<td>100</td>
<td>CC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>L*</th>
<th>a*</th>
<th>b*</th>
<th>L*</th>
<th>a*</th>
<th>b*</th>
</tr>
</thead>
<tbody>
<tr>
<td>88</td>
<td>68</td>
<td>48</td>
<td>28</td>
<td>28</td>
<td>28</td>
</tr>
</tbody>
</table>

Reflectance: 0% to 5%.

NGR (nuclear gamma-ray): 0-100 counts per second (cps).

MS point: 10^-5 SI (fractured).

Site U1546 core descriptions

Visual core descriptions
Hole 385-U1546B Core 48X, Interval 267.9-268.23 m (CSF-A)

This core is mainly composed of olive gray (5Y 3/2) nanofossil-bearing DIATOM CLAY. An interval of light olive gray (5Y 5/2) DIATOM-RICH MICRITE occurs in section CC (20-33 cm). The bottom (20-33 cm) of section CC is highly disturbed by drilling (biscuits).

<table>
<thead>
<tr>
<th>Depth CSF-A (m)</th>
<th>Core length (cm)</th>
<th>Section</th>
<th>Shipboard samples</th>
<th>Core image</th>
<th>Lithology</th>
<th>Sedimentary structures</th>
<th>Deformation structures</th>
<th>Drilling disturbance type</th>
<th>Reflectance L* a* b*</th>
<th>NGR (cps)</th>
<th>MS point (10^-5 SI)</th>
<th>Lith. unit</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>267.9</td>
<td>0</td>
<td>CC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>92</td>
<td>72</td>
<td>52</td>
<td>32</td>
<td>IC</td>
</tr>
</tbody>
</table>

middle to late Pliocene
This core is composed of olive gray (5Y 3/2) nanofossil-bearing DIATOM CLAY. Shell fragments are present in all sections. The top (0-14 cm) of section 1 and the top (0-18 cm) of section CC are highly disturbed by drilling (breccia).
This core consists of moderate olive brown (5Y 4/4) homogenous CLAY-RICH DIATOM OOZE. Sparse shells are present in sections 2 and 3. Faint traces of bioturbation (burrows) occur in section 4 at 14 and 49 cm.
Hole 385-U1546B Core 51F, Interval 279.3-284.06 m (CSF-A)

This core consists of moderate olive brown (5Y 4/4) homogenous CLAY-RICH DIATOM OOZE. Sparse shells are present in sections 1 and 2. Faint traces of bioturbation (burrows) occur in section 3 at 110 cm. Lamination occurs between 146 and 150 cm in section 3.
This core consists of olive gray (5Y 3/2) homogenous CLAY-RICH DIATOM OOZE. Sparse shells are present in section 1. Laminated intervals alternate with homogenous intervals in section 2 from 87 to 150 cm and in sections 3 and 4.
Hole 385-U1546B Core 53X, Interval 287.3-290.23 m (CSF-A)

This core consists of olive gray (5Y 3/2) CLAY-RICH DIATOM OOZE with a slightly lighter interval of more indurated LIMESTONE/DOLOSTONE between 52 to 88 cm in section 1. The core has been biscuited and brecciated by drilling.

<table>
<thead>
<tr>
<th>Core length (cm)</th>
<th>Section</th>
<th>Shipboard samples</th>
<th>Core image</th>
<th>Lithology</th>
<th>Sedimentary structures</th>
<th>Deformation structures</th>
<th>Drilling disturbance type</th>
<th>Reflectance</th>
<th>NGR (cps)</th>
<th>MS point (10^-5 SI)</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td></td>
<td></td>
<td>CLAY-RICH DIATOM OOZE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>200</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>288.2</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>289.2</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>290.2</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Hole 385-U1546B Core 54F, Interval 290.3-294.88 m (CSF-A)

This core consists of olive gray (5Y 3/2) CLAY-RICH DIATOM Ooze in section 1. Sections 4 and CC contain moderate olive brown (5Y 4/4) MICRITE-RICH DIATOM Ooze with an indurated layer in CC. In section 1 the laminated interval between 14 and 24 cm is cross-cut by a normal fault.
Hole 385-U1546B Core 55X, Interval 293.3-302.08 m (CSF-A)

This core consists of biscuited and partially brecciated olive gray (5Y 3/2) CLAY-RICH DIATOM OOZE. Intervals of moderate olive brown (5Y 4/4) LIMESTONE/DOLOSTONE are present in section 1. Faint laminae are present in a few biscuits in sections 2 and 3.

<table>
<thead>
<tr>
<th>Depth CSF-A (m)</th>
<th>Core length (cm)</th>
<th>Section</th>
<th>Shipboard samples</th>
<th>Core image</th>
<th>Lithology</th>
<th>Sedimentary structures</th>
<th>Deformation structures</th>
<th>Drilling disturbance type</th>
<th>Reflectance L* a* b*</th>
<th>NGR (cps)</th>
<th>MS point (10^5 SI)</th>
<th>Lith. unit</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>100</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>200</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>300</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>400</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>500</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>600</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>700</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>800</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>900</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>1000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>1100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>1200</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>1300</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>1400</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>1500</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>1600</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>1700</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>1800</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>1900</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>2000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>2100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>2200</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>2300</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>2400</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>2500</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>2600</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>2700</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>2800</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>2900</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>3000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>3100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>3200</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>33</td>
<td>3300</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>34</td>
<td>3400</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>35</td>
<td>3500</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>36</td>
<td>3600</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>37</td>
<td>3700</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>38</td>
<td>3800</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>39</td>
<td>3900</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>4000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>41</td>
<td>4100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>42</td>
<td>4200</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>43</td>
<td>4300</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>44</td>
<td>4400</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>45</td>
<td>4500</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>46</td>
<td>4600</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>47</td>
<td>4700</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>48</td>
<td>4800</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>49</td>
<td>4900</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50</td>
<td>5000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Site U1546 core descriptions

Visual core descriptions

middle to late Pleistocene (to Holocene?)
This core consists of biscuited olive gray (5Y 3/2) CLAY-RICH DIATOM OOZE with a few laminated intervals in all sections. An interval of moderate olive brown (5Y 4/4) MICRITE-RICH DIATOM OOZE is present in the CC between 16 and 38 cm. A carbonate concretion also occurs in this interval, at 23-27 cm.
This core consist of biscuited dusky yellowish gray (10YR 2/2) CLAY-RICH DIATOM OOZE with sparse laminated intervals in all sections.
Hole 385-U1546B Core 58X, Interval 321.5-331.44 m (CSF-A)

This core consists of biscuited dusky yellowish gray (10YR 2/2) SILICEOUS CLAYSTONE with sparse, thinly laminated intervals in all sections. A dark yellowish brown LIMESTONE/DOLOSTONE layer occurs in section 5 between 0 and 20 cm.

<table>
<thead>
<tr>
<th>Depth CSF-A (m)</th>
<th>Core length (cm)</th>
<th>Section</th>
<th>Shipboard samples</th>
<th>Core image</th>
<th>Lithology</th>
<th>Sedimentary structures</th>
<th>Deformation structures</th>
<th>Drilling disturbance type</th>
<th>Reflectance L* a* b*</th>
<th>NGR (cps)</th>
<th>MS point (10^5 SI)</th>
<th>Lith. unit</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>321.5</td>
<td>0</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>322.5</td>
<td>100</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>323.5</td>
<td>200</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>324.5</td>
<td>300</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>325.5</td>
<td>400</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>326.5</td>
<td>500</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>327.5</td>
<td>600</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

CC
Hole 385-U1546B Core 59X, Interval 331.3-333.22 m (CSF-A)

This core consists of biscuited dusky yellowish gray (10YR 2/2) SILICEOUS CLAYSTONE with thin laminated intervals in sections 2 and CC.
Hole 385-U1546C Core 11, Interval 0.0-0.0 m (CSF-A)

DRILLED INTERVAL 0.0-308.2 m

<table>
<thead>
<tr>
<th>Depth CSF-A (m)</th>
<th>Core length (cm)</th>
<th>Section</th>
<th>Shipboard samples</th>
<th>Core image</th>
<th>Lithology</th>
<th>Sedimentary structures</th>
<th>Deformation structures</th>
<th>Drilling disturbance type</th>
<th>Reflectance L* a* b*</th>
<th>NGR (cps)</th>
<th>MS point (10^5 SI)</th>
<th>Lith. unit</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Visual core descriptions

Site U1546 core descriptions

DRILLED INTERVAL 0.0-308.2 m
Hole 385-U1546C Core 2R, Interval 308.2-310.43 m (CSF-A)

This core is composed of dark yellowish brown (10YR 4/2) CLAY-RICH DIATOM OOZE. Pale yellowish brown (10YR 6/2) laminae are present in sections 1 and 2. Most sediments are highly disturbed by drilling (breccia, biscuits).
Hole 385-U1546C Core 3R, Interval 317.9-320.66 m (CSF-A)

This core is composed of dark yellowish brown (10YR 4/2) to dusky yellowish brown (10YR 2/2) SILICEOUS CLAYSTONE. Fine darker laminae are present in sections 1 to CC. Most sediments are highly disturbed by drilling (breccia, biscuits).

<table>
<thead>
<tr>
<th>Depth CSF-A (m)</th>
<th>Core length (cm)</th>
<th>Core image</th>
<th>Lithology</th>
<th>Sedimentary structures</th>
<th>Deformation structures</th>
<th>Drilling disturbance type</th>
<th>NGR (cps)</th>
<th>MS point (10^-5 SI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>319.8</td>
<td>200</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>15</td>
<td>8.0</td>
</tr>
<tr>
<td>318.8</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>15</td>
<td>5.5</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>15</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Visual core descriptions

Site U1546 core descriptions

Reflectance

L* a* b*  
96 76 56 36 16

MS point (10^-5 SI)  
8 5.5 3 0.5 0
Hole 385-U1546C Core 4R, Interval 327.7-329.33 m (CSF-A)

This core is composed of dark yellowish brown (10YR 4/2) to dusky yellowish brown (10YR 2/2) NANNOFossil-BEARING SILICEOUS CLAYSTONE. Fine darker laminae are present in sections 1 and CC. Most sediments are highly disturbed by drilling (breccia, biscuits).
Hole 385-U1546C Core 5R, Interval 337.5-337.81 m (CSF-A)

This core is composed of dusky yellowish brown (10YR 2/2) DIATOM-RICH CLAYSTONE. Darker and lighter (e.g., dark yellowish brown, 10YR 4/2) laminae are present in section CC. Most sediments are highly disturbed by drilling (breccia, biscuits).

<table>
<thead>
<tr>
<th>Depth CSF-A (m)</th>
<th>Core length (cm)</th>
<th>Section</th>
<th>Core image</th>
<th>Lithology</th>
<th>Sedimentary structures</th>
<th>Deformation structures</th>
<th>Drilling disturbance type</th>
<th>Reflectance</th>
<th>MS point (10^-5 SI)</th>
<th>Lith. unit</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>337.5</td>
<td>0</td>
<td>CC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
This core consists of brownish black (5YR 2/1) CLAYSTONE and brownish gray (5YR 4/1) LIMESTONE/DOLOSTONE overlying less consolidated dark gray (N3) CLAY with authigenic pyrite, in turn underlain by and altered volcanic rock.
LITHOLOGY: Peperite
DESCRIPTION: Sill
COLOR: gray
TEXTURE: poikilitic
PHENOCRYSTS: 5% plagioclase
GROUNDMASS:
VESICLES: sparsely vesicular
UPPER CONTACT: baked sediment & chilled contact
LOWER CONTACT: –
ALTERATION: slightly altered
VEINS: dendritic and vuggy filled with carbonate
Hole 385-U1546C-7R Section 2, Top of Section: 358.4 m (CSF-A)

LITHOLOGY: dolerite
DESCRIPTION: Sill
COLOR: bluish gray
TEXTURE: porphyritic
PHENOCRYSTS: 5% plagioclase
GROUNDMASS: equigranular
VESICLES: sparsely vesicular
UPPER CONTACT: 
LOWER CONTACT: 
ALTERATION: moderately altered
VEINS: absent

Site U1546 core descriptions

385-U1546C-7R-2-A, 0-112 cm
UNIT: 1
LITHOLOGY: dolerite
DESCRIPTION: Sill
COLOR: bluish gray
TEXTURE: porphyritic
PHENOCRYSTS: 5% plagioclase
GROUNDMASS: equigranular
VESICLES: sparsely vesicular
UPPER CONTACT: 
LOWER CONTACT: 
ALTERATION: moderately altered
VEINS: absent
Hole 385-U1546C-8R Section 1, Top of Section: 360.4 m (CSF-A)

**385-U1546C-8R-1-A, 0-8 cm**
- **Unit:** 1
- **Lithology:** basalt, probably fallen from above basalt section
- **Description:** Sill
- **Color:** bluish gray
- **Texture:** aphanitic
- **Phenocrysts:** 2% plagioclase
- **Groundmass:** microcline
- **Vesicles:** sparsely vesicular
- **Upper Contact:** dolerite
- **Lower Contact:** dolerite
- **Alteration:** highly altered
- **Veins:** absent

**385-U1546C-8R-1-A, 8-99.5 cm**
- **Unit:** 1
- **Lithology:** dolerite
- **Description:** Sill
- **Color:** bluish gray
- **Texture:** phaneritic
- **Phenocrysts:** 3% plagioclase
- **Groundmass:** fine grained
- **Vesicles:** sparsely vesicular
- **Upper Contact:** basalt
- **Lower Contact:** dolerite
- **Alteration:** slightly altered
- **Veins:** absent
Site U1546 core descriptions

Hole 385-U1546C-8R Section 3, Top of Section: 362.895 m (CSF-A)

Description

LITHOLOGY: dolerite
COLOR: bluish gray
TEXTURE: porphyritic
PHENOCRYSTS: 5% plagioclase
GROUNDMASS: equigranular
VESICLES: non vesicular
ALTERATION: slightly altered
VEINS: polycrystalline
385-U1546C-8R-4-A, 0-132 cm

UNIT: 1

LITHOLOGY: dolerite

DESCRIPTION: sill

COLOR: bluish gray

TEXTURE: porphyritic

PHENOCRYSTS: 5% plagioclase

GROUNDMASS: equigranular

VESICLES: non vesicular

UPPER CONTACT:

LOWER CONTACT:

ALTERATION: slightly altered

VEINS: 65 to 118 cm
**Lithology:** dolerite  
**Description:** sill  
**Color:** bluish gray  
**Texture:** porphyritic  
**Phenocrysts:** 5% plagioclase  
**Groundmass:** equigranular  
**Vesicles:** non vesicular  
**Upper Contact:**  
**Lower Contact:**  
**Alteration:** slightly altered  
**Veins:** polycrystalline
A piece of SILTY CLAY is present from 0 to 5 cm in section 1. The remainder of the core is volcanic rocks.
385-U1546C-9R-2-A, 5.5-15 cm
UNIT: 1
LITHOLOGY: peperite
DESCRIPTION: sill
COLOR: light gray
TEXTURE: porphyritic
PHENOCRYSTS: 7% plagioclase
GROUNDMASS: equigranular
VESICLES: none
UPPER CONTACT:
LOWER CONTACT:
ALTERATION: slightly altered
VEINS: none

385-U1546C-9R-2-A, 15-141 cm
UNIT: 1
LITHOLOGY: plagioclase phyric dolerite
DESCRIPTION: sill
COLOR: gray
TEXTURE: porphyritic and holocrystalline
PHENOCRYSTS: 15% plagioclase
GROUNDMASS: equigranular
VESICLES: none
UPPER CONTACT:
LOWER CONTACT:
ALTERATION: slightly altered
VEINS: one big vertical vein filled with coarse-grain slightly altered plagioclase and pyroxene in vein.
Site U1546 core descriptions

385-U1546C-9R-2-A, 0-53 cm
UNIT: 1
LITHOLOGY: plagioclase phyric dolerite sill
DESCRIPTION: sill
COLOR: gray
TEXTURE: porphyritic and holocrystalline
PHENOCRYSTS: 15% plagioclase
GROUNDMASS: equigranular
VESICLES: none
UPPER CONTACT: grain size contact
LOWER CONTACT: grain size contact
ALTERATION: slightly altered
VEINS: none

385-U1546C-9R-2-A, 53-70 cm
UNIT: 1
LITHOLOGY: gabbro
DESCRIPTION: sill
COLOR: gray
TEXTURE: equigranular
MINERALS: 60% plagioclase and 40% pyroxene
VESICLES: none
UPPER CONTACT: grain size contact
LOWER CONTACT: grain size contact
ALTERATION: slightly altered
VEINS: none

385-U1546C-9R-2-A, 70-103 cm
UNIT: 1
LITHOLOGY: plagioclase phyric dolerite sill
DESCRIPTION: sill
COLOR: gray
TEXTURE: porphyritic and holocrystalline
PHENOCRYSTS: 15% plagioclase
GROUNDMASS: equigranular
VESICLES: none
UPPER CONTACT: grain size contact
LOWER CONTACT: grain size contact
ALTERATION: slightly altered
VEINS: none

385-U1546C-9R-2-A, 103-140 cm
UNIT: 1
LITHOLOGY: gabbro
DESCRIPTION: sill
COLOR: gray
TEXTURE: equigranular
MINERALS: 70% plagioclase and 30% pyroxene
VESICLES: none
UPPER CONTACT: grain size contact
LOWER CONTACT: grain size contact
ALTERATION: slightly altered
VEINS: none
Site U1546 core descriptions

Hole 385-U1546C-9R Section 3, Top of Section: 369.41 m (CSF-A)

UNIT: 1
LITHOLOGY: gabbro
DESCRIPTION: sill
COLOR:
TEXTURE: equigranular
MINERALS: 60% plagioclase and 40% pyroxene
VESICLES: none
UPPER CONTACT:
LOWER CONTACT:
ALTERATION: slightly altered
VEINS: none

385-U1546C-9R-3-A, 0-104 cm
UNIT: 1
LITHOLOGY: gabbro
DESCRIPTION: sill
COLOR:
TEXTURE: equigranular
MINERALS: 60% plagioclase and 40% pyroxene
UPPER CONTACT:
LOWER CONTACT:
ALTERATION: slightly altered
VEINS: none
### Hole 385-U1546C-9R-4, Top of Section: 370.45 m (CSF-A)

<table>
<thead>
<tr>
<th>Frame</th>
<th>Lithology</th>
<th>Description</th>
<th>Color</th>
<th>Texture</th>
<th>Minerals</th>
<th>Vesicles</th>
<th>Upper Contact</th>
<th>Lower Contact</th>
<th>Alteration</th>
<th>Veins</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-10 cm</td>
<td>gabbro</td>
<td>sill</td>
<td></td>
<td>equigranular</td>
<td>40% plagioclase and 60% pyroxene</td>
<td>none</td>
<td>grain size contact</td>
<td>grain size contact</td>
<td>slightly altered</td>
<td>none</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Frame</th>
<th>Lithology</th>
<th>Description</th>
<th>Color</th>
<th>Texture</th>
<th>Minerals</th>
<th>Vesicles</th>
<th>Upper Contact</th>
<th>Lower Contact</th>
<th>Alteration</th>
<th>Veins</th>
</tr>
</thead>
<tbody>
<tr>
<td>10-138 cm</td>
<td>plagioclase phyric dolerite</td>
<td>sill</td>
<td>gray</td>
<td>porphyritic and holocrystalline</td>
<td>15% plagioclase</td>
<td>none</td>
<td>grain size contact</td>
<td>grain size contact</td>
<td>slightly altered</td>
<td>none</td>
</tr>
</tbody>
</table>

**Visual Core Descriptions**

- **385-U1546C-9R-4-A, 0-10 cm**
  - **UNIT:** 1
  - **LITHOLOGY:** gabbro
  - **DESCRIPTION:** sill
  - **COLOR:**
  - **TEXTURE:** equigranular
  - **MINERALS:** 40% plagioclase and 60% pyroxene
  - **VESICLES:** none
  - **UPPER CONTACT:**
  - **LOWER CONTACT:** grain size contact
  - **ALTERATION:** slightly altered
  - **VEINS:** none

- **385-U1546C-9R-4-A, 10-138 cm**
  - **UNIT:** 1
  - **LITHOLOGY:** plagioclase phyric dolerite
  - **DESCRIPTION:** sill
  - **COLOR:**
  - **TEXTURE:** porphyritic and holocrystalline
  - **PHENOCRYSTS:** 15% plagioclase
  - **GROUNDMASS:** equigranular
  - **VESICLES:** none
  - **UPPER CONTACT:**
  - **LOWER CONTACT:** grain size contact
  - **ALTERATION:** slightly altered
  - **VEINS:** none

---

**Phenocrysts**
- **PLAG, OL, Cpx**
- **abundance (%)**
  - **20**
  - **15**
  - **10**
  - **5**
  - **0**

**Site U1546 core descriptions**

- **Visual core descriptions**
  - **Frame:** 01
  - **Orientation:**
  - **Core number:**
  - **Core length (cm):**
  - **Depth CSF-A (m):**
  - **Graphe:**
  - **Dip angle (°):**
  - **Sediment intermingled:**
  - **Vein connectivity:**
  - **Vein texture:**
  - **Magnetic susceptibility (10^-5 SI):**
  - **MS WR:**
  - **MS Point:**
  - **Reflectance (L* a* b*):**
  - **L*:**
  - **a*:**
  - **b*:**
  - **Phenocrysts:**
    - **PLAG, OL, Cpx**
    - **abundance:**
      - **20**
      - **15**
      - **10**
      - **5**
      - **0**

---

**Diagram**

- **Diagram of lithology and mineral distribution**
  - **Frame:** 01
  - **Orientation:**
  - **Core number:**
  - **Core length (cm):**
  - **Depth CSF-A (m):**
  - **Graphe:**
  - **Dip angle (°):**
  - **Sediment intermingled:**
  - **Vein connectivity:**
  - **Vein texture:**
  - **Magnetic susceptibility (10^-5 SI):**
  - **MS WR:**
  - **MS Point:**
  - **Reflectance (L* a* b*):**
  - **L*:**
  - **a*:**
  - **b*:**
  - **Phenocrysts:**
    - **PLAG, OL, Cpx**
    - **abundance:**
      - **20**
      - **15**
      - **10**
      - **5**
      - **0**

---

**Site U1546 core descriptions**

- **Visual core descriptions**
  - **Frame:** 01
  - **Orientation:**
  - **Core number:**
  - **Core length (cm):**
  - **Depth CSF-A (m):**
  - **Graphe:**
  - **Dip angle (°):**
  - **Sediment intermingled:**
  - **Vein connectivity:**
  - **Vein texture:**
  - **Magnetic susceptibility (10^-5 SI):**
  - **MS WR:**
  - **MS Point:**
  - **Reflectance (L* a* b*):**
  - **L*:**
  - **a*:**
  - **b*:**
  - **Phenocrysts:**
    - **PLAG, OL, Cpx**
    - **abundance:**
      - **20**
      - **15**
      - **10**
      - **5**
      - **0**

---

**Diagram**

- **Diagram of lithology and mineral distribution**
  - **Frame:** 01
  - **Orientation:**
  - **Core number:**
  - **Core length (cm):**
  - **Depth CSF-A (m):**
  - **Graphe:**
  - **Dip angle (°):**
  - **Sediment intermingled:**
  - **Vein connectivity:**
  - **Vein texture:**
  - **Magnetic susceptibility (10^-5 SI):**
  - **MS WR:**
  - **MS Point:**
  - **Reflectance (L* a* b*):**
  - **L*:**
  - **a*:**
  - **b*:**
  - **Phenocrysts:**
    - **PLAG, OL, Cpx**
    - **abundance:**
      - **20**
      - **15**
      - **10**
      - **5**
      - **0**
385-U1546C-9R-6A, 0-122 cm
UNIT: 1
LITHOLOGY: gabbro
DESCRIPTION: sill
COLOR: 
TEXTURE: equigranular
MINERALS: 60% plagioclase and 40% pyroxene
VESICLES: none
UPPER CONTACT: 
LOWER CONTACT: 
ALTERATION: slightly altered
VEINS: none
**Lithology:** gabbro

**Description:** sill

**Color:**

**Texture:** equigranular

**Minerals:** 50% plagioclase and 50% pyroxene

**Vesicles:** none

**Upper Contact:**

**Lower Contact:**

**Alteration:** slightly altered

**Veins:** none

---

### Visual Core Descriptions

**Unit:** 1

**Terrestrial Core:**

**Location:** Site U1546

**Core Number:** 385-U1546C-10R-1A

**Core Length (cm):** 0-150 cm

**Scanned Image:**

**Core Length:** 376.3 m (CSF-A)

**Glass/Phenocrysts:** PLAG, OL, CPX

**Phenocrysts Abundance (%):**

- 20
- 15
- 10
- 5
- 0

**Bimodal:**

**Inequigranular:**

**Equigranular:**
LITHOLOGY: gabbro

DESCRIPTION: sill

COLOR:

TEXTURE: equigranular

MINERALS: 50% plagioclase and 50% pyroxene

VESICLES: none

UPPER CONTACT:

LOWER CONTACT:

ALTERATION: slightly altered

VEINS: none
385-U1546C-10R-3A, 0-135 cm
UNIT: 1
LITHOLOGY: gabbro
DESCRIPTION: sill
COLOR: 
TEXTURE: equigranular
MINERALS: 50% plagioclase and 50% pyroxene
VESICLES: none
UPPER CONTACT:
LOWER CONTACT:
ALTERATION: slightly altered
VEINS: none
385-U1546C-10R A, 0-99 cm
UNIT: 1
LITHOLOGY: gabbro
DESCRIPTION: sill
COLOR:
TEXTURE: equigranular
MINERALS: 50% plagioclase and 50% pyroxene
VESICLES: none
UPPER CONTACT: gradational
LOWER CONTACT: gradational
ALTERATION: slightly altered
VEINS: none

385-U1546C-10R A, 99-147 cm
UNIT: 1
LITHOLOGY: gabbro
DESCRIPTION: sill
COLOR:
TEXTURE: equigranular
MINERALS: 40% plagioclase and 60% pyroxene
VESICLES: none
UPPER CONTACT: gradational
LOWER CONTACT: gradational
ALTERATION: slightly altered
VEINS: none
Hole 385-U1546C-10R Section 5, Top of Section: 381.95 m (CSF-A)

UNIT: 1
LITHOLOGY: plagioclase phyric dolerite
DESCRIPTION: sill
COLOR: gray
TEXTURE: porphyritic and holocrystalline
PHENOCRYSTS: 15% plagioclase
GROUNDMASS: equigranular
VESICLES: none
UPPER CONTACT:
LOWER CONTACT:
ALTERATION: slightly altered
VEINS: none
Hole 385-U1546C-10R Section 6, Top of Section: 382.92 m (CSF-A)

UNIT: 1
LITHOLOGY: plagioclase phyric dolerite
DESCRIPTION: sill
COLOR: gray
TEXTURE: porphyritic and holocrystalline
PHENOCRYSTS: 15% plagioclase
GROUNDMASS: equigranular
VESICLES: none
UPPER CONTACT:
LOWER CONTACT:
ALTERATION: slightly altered
VEINS: none

385-U1546C-10R-6-A, 0-66 cm
LITHOLOGY: plagioclase phyric dolerite
DESCRIPTION: sill
COLOR: gray
TEXTURE: porphyritic and holocrystalline
PHENOCRYSTS: 15% plagioclase
GROUNDMASS: equigranular
VESICLES: none
UPPER CONTACT:
LOWER CONTACT:
ALTERATION: slightly altered
VEINS: none
**UNIT:** 1  
**LITHOLOGY:** plagioclase phyric dolerite  
**DESCRIPTION:** sill  
**COLOR:** gray  
**TEXTURE:** porphyritic and holocrystalline  
**PHENOCRYSTS:** 20% plagioclase  
**GROUNDMASS:** equigranular  
**VESICLES:** none  
**UPPER CONTACT:**  
**LOWER CONTACT:**  
**ALTERATION:** slightly altered  
**VEINS:** none
Hole 385-U1546C-11R Section 2, Top of Section: 387.47 m (CSF-A)

UNIT: 1
LITHOLOGY: plagioclase phyric dolerite
DESCRIPTION: sill
COLOR: gray
TEXTURE: porphyritic and holocrystalline
PHENOCRYSTS: 20% plagioclase
GROUNDMASS: equigranular
VESICLES: none
UPPER CONTACT:
LOWER CONTACT:
ALTERATION: slightly altered
VEINS: none
**LITHOLOGY:** plagioclase phyric dolerite  
**DESCRIPTION:** sill  
**COLOR:** gray  
**TEXTURE:** porphyritic and holocrystalline  
**PHENOCRYSTS:** 20% plagioclase  
**GROUNDMASS:** equigranular  
**VESICLES:**  
**UPPER CONTACT:**  
**LOWER CONTACT:**  
**ALTERATION:** slightly altered  
**VEINS:** one steeply dipping vein
UNIT: 1
LITHOLOGY: plagioclase phyric dolerite
DESCRIPTION: sill
COLOR: gray
TEXTURE: porphyritic and holocrystalline
PHENOCRYSTS: 20% plagioclase
GROUNDMASS: equigranular
VESICLES: none
UPPER CONTACT:
LOWER CONTACT:
ALTERATION: slightly altered
VEINS: none
<table>
<thead>
<tr>
<th>Hole 385-U1546C-12R Section 1, Top of Section: 390.8 m (CSF-A)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depth (m)</td>
</tr>
<tr>
<td>-----------</td>
</tr>
<tr>
<td>390.8</td>
</tr>
<tr>
<td>390.9</td>
</tr>
<tr>
<td>391.0</td>
</tr>
<tr>
<td>391.1</td>
</tr>
<tr>
<td>391.2</td>
</tr>
<tr>
<td>391.3</td>
</tr>
<tr>
<td>391.4</td>
</tr>
<tr>
<td>391.5</td>
</tr>
<tr>
<td>391.6</td>
</tr>
<tr>
<td>391.7</td>
</tr>
<tr>
<td>391.8</td>
</tr>
<tr>
<td>391.9</td>
</tr>
<tr>
<td>392.0</td>
</tr>
<tr>
<td>392.1</td>
</tr>
<tr>
<td>392.2</td>
</tr>
</tbody>
</table>
Hole 385-U1546C-12R Section 3, Top of Section: 393.74 m (CSF-A)

- **LITHOLOGY:** plagioclase phyric dolerite
- **DESCRIPTION:** sill
- **COLOR:** gray
- **TEXTURE:** porphyritic and holocrystalline
- **PHENOCRYSTS:** 20% plagioclase
- **GROUNDMASS:** equigranular
- **VESICLES:**
- **ALTERATION:** slightly altered
- **VEINS:** one vertical vein

**Visual core descriptions**

- **385-U1546C-12R-3-A, 0-141 cm**
  - **UNIT:** 1
  - **LITHOLOGY:** plagioclase phyric dolerite
  - **DESCRIPTION:** sill
  - **COLOR:** gray
  - **TEXTURE:** porphyritic and holocrystalline
  - **PHENOCRYSTS:** 20% plagioclase
  - **GROUNDMASS:** equigranular
  - **VESICLES:**
  - **ALTERATION:** slightly altered
  - **VEINS:** one vertical vein
**Hole 385-U1546C-12R Section 4, Top of Section: 395.15 m (CSF-A)**

**LITHOLOGY**: plagioclase phyric dolerite

**DESCRIPTION**: sill

**COLOR**: gray

**TEXTURE**: porphyritic and holocrystalline

**PHENOCRYST**: 20% plagioclase

**GROUNDMASS**: equigranular

**VESICLES**:

**UPPER CONTACT**:

**LOWER CONTACT**:

**ALTERATION**: slightly altered

**VEINS**: one vertical vein

---

### Visual Core Descriptions

- **Core length (cm)**
- **Core number**
- **Lithology**
- **Glass**
- **Phenocryst**
- **Groundmass**
- **Vesicles**
- **Vein type**
- **Vein connectivity**
- **Dip angle (°)**
- **Core length (cm)**
- **Depth CSF-A (m)**
- **Magnetic susceptibility (10^-5 SI)**
- **Reflectance**
- **L° a° b°**
- **Phenocryst abundance (%)**
- **Site U1546 core descriptions**

**Site U1546 core descriptions**

**Visual core descriptions**

<table>
<thead>
<tr>
<th>Description</th>
<th>Glass</th>
<th>Phenocryst</th>
<th>Groundmass</th>
<th>Vesicles</th>
<th>Vein type</th>
<th>Vein connectivity</th>
<th>Dip angle (°)</th>
<th>Core length (cm)</th>
<th>Depth CSF-A (m)</th>
<th>Magnetic susceptibility (10^-5 SI)</th>
<th>Reflectance</th>
<th>L° a° b°</th>
</tr>
</thead>
</table>
385-U1546C-13R Section 1, Top of Section: 395.8 m (CSF-A)

UNIT: 1
LITHOLOGY: plagioclase phyric dolerite
DESCRIPTION: sill
COLOR: gray
TEXTURE: porphyritic and holocrystalline
PHENOCRYSTS: 20% plagioclase
GROUNDMASS: equigranular
VESICLES:
UPPER CONTACT:
LOWER CONTACT:
ALTERATION: slightly altered
VEINS: none

385-U1546C-13R-1-A, 0-119 cm
UNIT: 1
LITHOLOGY: plagioclase phyric dolerite
DESCRIPTION: sill
COLOR: gray
TEXTURE: porphyritic and holocrystalline
PHENOCRYSTS: 20% plagioclase
GROUNDMASS: equigranular
VESICLES:
UPPER CONTACT:
LOWER CONTACT:
ALTERATION: slightly altered
VEINS: none
385-U1546C-13R-2-A, 0-127 cm
UNIT: 1
LITHOLOGY: plagioclase phyric dolerite
DESCRIPTION: sill
COLOR: gray
TEXTURE: porphyritic and holocrystalline
PHENOCRYSTS: 20% plagioclase
GROUNDMASS: equigranular
VESICLES:
UPPER CONTACT: 
LOWER CONTACT: 
ALTERATION: slightly altered
VEINS: two small veins
UNIT: 1
LITHOLOGY: plagioclase phyric dolerite
DESCRIPTION: sill
COLOR: gray
TEXTURE: porphyritic and holocrystalline
PHENOCRYSTS: 20% plagioclase
GROUNDMASS: equigranular
VESICLES:
UPPER CONTACT:
LOWER CONTACT:
ALTERATION: slightly altered
VEINS: one steeply dipping vein

<table>
<thead>
<tr>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hole 385-U1546C-13R Section 3, Top of Section: 398.26 m (CSF-A)</td>
</tr>
</tbody>
</table>

UNIT: 1
LITHOLOGY: plagioclase phyric dolerite
DESCRIPTION: sill
COLOR: gray
TEXTURE: porphyritic and holocrystalline
PHENOCRYSTS: 20% plagioclase
GROUNDMASS: equigranular
VESICLES:
UPPER CONTACT:
LOWER CONTACT: slightly altered
VEINS: one steeply dipping vein
Sample: 385-U1546C-13R-4-A, 0-137 cm

Unit: 1

Lithology: plagioclase phyric dolerite

Description: sill

Color: gray

Texture: porphyritic and holocrystalline

Phenocrysts: 20% plagioclase

Groundmass: equigranular

Vesicles:

Upper contact:

Lower contact:

Alteration: slightly altered

Veins: three dipping veins
LITHOLOGY: plagioclase phyric dolerite
DESCRIPTION: sill
COLOR: gray
TEXTURE: porphyritic and holocrystalline
PHENOCRYSTs: 20% plagioclase
GROUNDMASS: equigranular
VESICLES:
UPPER CONTACT:
LOWER CONTACT:
ALTERATION: slightly altered
VEINS:
UNIT: 1
LITHOLOGY: plagioclase phyric dolerite
DESCRIPTION: sill
COLOR: gray
TEXTURE: porphyritic and holocrystalline
PHENOCRYSTS: 20% plagioclase
GROUNDMASS: equigranular
VESICLES:
UPPER CONTACT:
LOWER CONTACT:
ALTERATION: slightly altered
VEINS: one vein
**LITHOLOGY:** plagioclase phyric dolerite

**DESCRIPTION:** sill

**COLOR:** gray

**TEXTURE:** porphyritic and holocrystalline

**PHENO CrySTALS:** 20% plagioclase

**GROUNDMASS:** equigranular

**VESICLES:**

**UPPER CONTACT:**

**LOWER CONTACT:**

**ALTERATION:** slightly altered

**VEINS:**

---

**Site U1546 core descriptions**

**Visual core descriptions**

---

**Description**

**Sample**

**Orientation**

**Core length (cm)**

**Depth CSF-A (m)**

**Reflection**

**Lithology**

**Phenocrysts**

**Plagioclase, Olivine, Clinopyroxene**

**abundance (%)**

**Dip angle (°)**

**Sediment intermingled**

**Vein connectivity**

**Vein texture**

**Grain size distribution**

**Magnetic susceptibility (10^-5 SI)**

**Reflectance (L*)**

**L* a* b***

**92**

**72**

**52**

**32**

**L* a* b***

**4**

**3**

**2**

**1**

**-5.6**

**-6.6**

**-7.6**

**-8.6**

**Magnetic suscepti**

**bility (10^-5 SI)**

**MS WR**

**MS Point**

**620**

**520**

**420**

**320**

**1240**

**1040**

**840**
Hole 385-U1546C-15R Section 1, Top of Section: 405.5 m (CSF-A)

- **Lithology:** dolerite
- **Description:** sill
- **Color:** gray
- **Texture:** porphyritic
- **Phenocrysts:** 7% plagioclase
- **Groundmass:** equigranular
- **Vesicles:** non-vesicular
- **Upper Contact:**
- **Lower Contact:**
- **Alteration:** slightly altered
- **Veins:** large, filled with zeolite and sulfide

**Visual Core Descriptions**

- **Depth (m):** 405.5
- **Core Length (cm):** 10
- **Orientation:**
- **Site U1546 Core Descriptions**
- **Visual Core Descriptions**

**Additional Data**

- **Lithology:**
  - **Gray**
  - **Porphyritic**
  - **Vesicular**
  - **Equigranular**
  - **Non-vesicular**

- **Phenocrysts:** 7% plagioclase

- **Vesicles:** non-vesicular

- **Alteration:** slightly altered

- **Veins:** large, filled with zeolite and sulfide
Hole 385-U1546C-15R Section 2, Top of Section: 406.95 m (CSF-A)

LITHOLOGY: dolerite
DESCRIPTION: sill
COLOR: gray
TEXTURE: porphyritic
PHENOCRYSTS: 7% plagioclase
GROUNDMASS: equigranular
VESICLES: nonvesicular
UPPER CONTACT:
LOWER CONTACT:
ALTERATION: slightly altered
VEINS: acicular filled with zeolite

Site U1546 core descriptions

385-U1546C-15R-2-A, 0-64 cm
UNIT: 1
LITHOLOGY: dolerite
DESCRIPTION: sill
COLOR: gray
TEXTURE: porphyritic
PHENOCRYSTS: 7% plagioclase
GROUNDMASS: equigranular
VESICLES: nonvesicular
UPPER CONTACT:
LOWER CONTACT: altered
ALTERATION: slightly altered
VEINS: acicular filled with zeolite
385-U1546C-16R-1-A, 0-103.5 cm
UNIT: 1
LITHOLOGY: dolerite
DESCRIPTION: sill
COLOR: gray
TEXTURE: porphyritic
PHENOCRYSTS: 7% plagioclase
GROUNDMASS: equigranular
VESICLES: nonvesicular
UPPER CONTACT: 
LOWER CONTACT: 
ALTERATION: slightly altered
VEINS: absent

Site U1546 core descriptions
Visual core descriptions
Site U1546 core descriptions

Hole 385-U1546C-16R Section 2, Top of Section: 411.235 m (CSF-A)

UNIT: 1
LITHOLOGY: dolerite
DESCRIPTION: sill
COLOR: gray
TEXTURE: porphyritic
PHENOCRYSTS: 7% plagioclase
GROUNDMASS: equigranular
VESICLES: nonvesicular
UPPER CONTACT:
LOWER CONTACT:
ALTERATION: slightly altered
VEINS: absent

385-U1546C-16R-2-A, 0-146.5 cm
LITHOLOGY: dolerite
DESCRIPTION: sill
COLOR: gray
TEXTURE: porphyritic
PHENOCRYSTS: 7% plagioclase
GROUNDMASS: equigranular
VESICLES: nonvesicular
UPPER CONTACT:
LOWER CONTACT:
ALTERATION: slightly altered
VEINS: absent
385-U1546C-16R-3-A, 0-83.5 cm

UNIT: 1
LITHOLOGY: dolerite
DESCRIPTION: sill
COLOR: gray
TEXTURE: porphyritic
PHENOCRYSTS: 7% plagioclase; 1% pyroxene
GROUNDMASS: equigranular
VESICLES: nonvesicular
UPPER CONTACT: 
LOWER CONTACT: 
ALTERATION: slightly altered
VEINS: absent

Site U1546 core descriptions
Visual core descriptions
385-U1546C-16R-4-A, 0-122 cm
UNIT: 1
LITHOLOGY: dolerite
DESCRIPTION: sill
COLOR: gray
TEXTURE: porphyritic
PHENOCRYSTS: 7% plagioclase; 2% pyroxene
GROUNDMASS: equigranular
VESICLES: nonvesicular
UPPER CONTACT: 
LOWER CONTACT: 
ALTERATION: slightly altered
VEINS: absent

Lithology

Depth (cm)
Core length (cm)
Orientation
Scanned image
Lithology
Glass
Phenocrysts
Vein texture
Vein connectivity
Op. angle
Vein type
Vesicularity
Phenocrysts abundance (%)
Grain size distribution
Magnetic susceptibility (10-5 SI)
Reflectance
L* a* b*
Dip angle (°)
Sediment intermingled
Vein connectivity
Vein texture
Phenocrysts
abundance
(%) 

Site U1546 core descriptions
Visual core descriptions
Description

385-U1546C-16R-5-A, 0-99.5 cm
UNIT: 1
LITHOLOGY: dolerite
DESCRIPTION: sill
COLOR: gray
TEXTURE: phaneritic
PHENOCRYSTS: 7% plagioclase, 1% pyroxene
GROUNDMASS: equigranular
VESICLES: non vesicular
UPPER CONTACT:
LOWER CONTACT:
ALTERATION: slightly altered
VEINS: absent
Site U1546 core descriptions

Visual core descriptions

385-U1546C-17R-1-A, 0-143 cm

UNIT: 1
LITHOLOGY: dolerite
COLOR: gray
TEXTURE: porphyritic
PHENOCRYSTS: 7% plagioclase; 2% pyroxene
GROUNDMASS: equigranular
VESICLES: nonvesicular
UPPER CONTACT:
LOWER CONTACT:
ALTERATION: slightly altered
VEINS: absent
Hole 385-U1546C-17R Section 2, Top of Section: 416.63 m (CSF-A)

Description:

- Lithology: dolerite
- Description: sill
- Color: gray
- Texture: porphyritic
- Phenocrysts: 7% plagioclase; 2% pyroxene
- Groundmass: equigranular
- Vesicles: nonvesicular
- Upper contact:
- Lower contact:
- Alteration: slightly altered
- Veins: absent

PMAG

<table>
<thead>
<tr>
<th>Hole</th>
<th>Depth (m)</th>
<th>Lithology</th>
<th>Description</th>
<th>Color</th>
<th>Texture</th>
<th>Phenocrysts</th>
<th>Groundmass</th>
<th>Vesicles</th>
<th>Upper Contact</th>
<th>Lower Contact</th>
<th>Alteration</th>
<th>Veins</th>
</tr>
</thead>
<tbody>
<tr>
<td>385-U1546C-17R-2-A</td>
<td>0.147 cm</td>
<td>dolerite</td>
<td>sill</td>
<td>gray</td>
<td>porphyritic</td>
<td>7% plagioclase; 2% pyroxene</td>
<td>equigranular</td>
<td>nonvesicular</td>
<td></td>
<td></td>
<td>slightly altered</td>
<td>absent</td>
</tr>
</tbody>
</table>

Site U1546 core descriptions

Visual core descriptions
385-U1546C-17R, 0-148.5 cm

UNIT: 1

LITHOLOGY: dolerite

DESCRIPTION: sill

COLOR: gray

TEXTURE: porphyritic

PHENOCRYSTS: 7% plagioclase; 2% pyroxene

GROUNDMASS: equigranular

VESICLES: nonvesicular

UPPER CONTACT: 

LOWER CONTACT: 

ALTERATION: slightly altered

VEINS: absent
Site U1546 core descriptions

Hole 385-U1546C-18R Section 1, Top of Section: 419.9 m (CSF-A)

LITHOLOGY: dolerite
DESCRIPTION: sill
COLOR: gray
TEXTURE: phaneritic
PHENOCRYSTS: 7% plagioclase, 1% pyroxene
GROUNDMASS: equigranular
VESICLES: non vesicular
UPPER CONTACT:
LOWER CONTACT:
ALTERATION: slightly altered
VEINS: absent

385-U1546C-18R-1-A, 0-138 cm
UNIT: 1
LITHOLOGY: dolerite
DESCRIPTION: sill
COLOR: gray
TEXTURE: phaneritic
PHENOCRYSTS: 7% plagioclase, 1% pyroxene
GROUNDMASS: equigranular
VESICLES: non vesicular
UPPER CONTACT:
LOWER CONTACT:
ALTERATION: slightly altered
VEINS: absent
385-U1546C-18R-2-A, 0-125 cm
UNIT: 1
LITHOLOGY: dolerite
DESCRIPTION: sill
COLOR: gray
TEXTURE: porphyritic
PHENOCRYSTS: 7% plagioclase; 2% pyroxene
GROUNDMASS: equigranular
VESICLES: nonvesicular
UPPER CONTACT:
LOWER CONTACT:
ALTERATION: slightly altered
VEINS: absent
385-U1546C-18R-3-A, 0-150 cm
UNIT: 1
LITHOLOGY: dolerite
DESCRIPTION: sill
COLOR: gray
TEXTURE: porphyritic
PHENOCRYSTS: 7% plagioclase; 2% pyroxene
GROUNDMASS: equigranular
VESICLES: nonvesicular
UPPER CONTACT:
LOWER CONTACT:
ALTERATION: slightly altered
VEINS: absent
385-U1546C-18R-4-A, 0-48 cm

UNIT: 1
LITHOLOGY: dolerite
DESCRIPTION: sill
COLOR: gray
TEXTURE: porphyritic
PHENOCRYSTS: 7% plagioclase; 2% pyroxene
GROUNDMASS: equigranular
VESICLES: nonvesicular
UPPER CONTACT:
LOWER CONTACT:
ALTERATION: slightly altered
VEINS: absent

Site U1546 core descriptions
Visual core descriptions

Hole 385-U1546C-18R Section 4, Top of Section: 424.03 m (CSF-A)
Hole 385-U1546C-19R Section 1, Top of Section: 424.9 m (CSF-A)

LITHOLOGY: dolerite
DESCRIPTION: sill
COLOR: gray
TEXTURE: porphyritic
PHENOCRYSTS: 20% plagioclase; 2% pyroxene
GROUNDMASS: equigranular
VESICLES: nonvesicular

ALTERATION: slightly altered
VEINS: absent
LITHOLOGY: dolerite
DESCRIPTION: sill
COLOR: gray
TEXTURE: porphyritic
PHENOCRYSTS: 20% plagioclase; 2% pyroxene
GROUNDMASS: equigranular
VESICLES: nonvesicular
UPPER CONTACT: 
LOWER CONTACT: 
ALTERATION: slightly altered
VEINS: absent
385-U1546C-19R-3-A, 0-146 cm

UNIT: 1

LITHOLOGY: dolerite

DESCRIPTION: sill

COLOR: gray

TEXTURE: phaneritic

PHENOCRYSTS: 7% plagioclase, 1% pyroxene

GROUNDMASS: equigranular

VESICLES: non vesicular

UPPER CONTACT:

LOWER CONTACT:

ALTERATION: slightly altered

VEINS: absent

Hole 385-U1546C-19R Section 3, Top of Section: 427.08 m (CSF-A)

Site U1546 core descriptions

Visual core descriptions

<table>
<thead>
<tr>
<th>Depth (m)</th>
<th>Core length (cm)</th>
<th>Orientation</th>
<th>Piece number</th>
<th>Core length</th>
<th>Core description</th>
</tr>
</thead>
<tbody>
<tr>
<td>427.1</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>427.2</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>427.3</td>
<td>20</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>427.4</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>427.5</td>
<td>40</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>427.6</td>
<td>50</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>427.7</td>
<td>60</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>427.8</td>
<td>70</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>427.9</td>
<td>80</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>428.0</td>
<td>90</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>428.1</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>428.2</td>
<td>110</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>428.3</td>
<td>120</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>428.4</td>
<td>130</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>428.5</td>
<td>140</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

385-U1546C-19R-3-A, 0-146 cm
UNIT: 1
LITHOLOGY: dolerite
DESCRIPTION: sill
COLOR: gray
TEXTURE: phaneritic
PHENOCRYSTS: 7% plagioclase, 1% pyroxene
GROUNDMASS: equigranular
VESICLES: non vesicular
UPPER CONTACT:
LOWER CONTACT:
ALTERATION: slightly altered
VEINS: absent
<table>
<thead>
<tr>
<th>Depth (cm)</th>
<th>Core number</th>
<th>Orientation</th>
<th>Lithology</th>
<th>Color</th>
<th>Texture</th>
<th>Phenocrysts</th>
<th>Groundmass</th>
<th>Vesicles</th>
<th>Upper Contact</th>
<th>Lower Contact</th>
<th>Alteration</th>
<th>Veins</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-28</td>
<td>1</td>
<td></td>
<td>dolerite</td>
<td>gray</td>
<td>porphyritic</td>
<td>100% plagioclase</td>
<td>equigranular</td>
<td>nonvesicular</td>
<td></td>
<td></td>
<td>slightly altered</td>
<td></td>
</tr>
<tr>
<td>28-65</td>
<td>1</td>
<td></td>
<td>peperite</td>
<td>light gray</td>
<td>porphyritic</td>
<td>5% plagioclase</td>
<td>equigranular</td>
<td>sparsely vesicular</td>
<td></td>
<td>baked contact (Core 21R)</td>
<td>highly altered</td>
<td>three veins</td>
</tr>
</tbody>
</table>

**Site U1546 core descriptions**

**Visual core descriptions**

Hole 385-U1546C-20R Section 1, Top of Section: 429.7 m (CSF-A)
This core consists of light gray (N7) SILTY CLAY (altered sediment ?) with disseminated sulfide crystals. There is a siliceous nodule on top of section 1 (fall in ?). In section 2, gradational color change occurs from medium gray (N5) to dark gray (N3) SILTY CLAY (altered sediments ?) with disseminated sulfide crystals (pyrrhotite?). Subvertical veins filled with calcite occur between 43 and 66 cm and between 93 to 104 cm.
Section 1 of this core consists of black opaque-rich CLAYSTONE (altered sediments?) with disseminated sulfide crystals from 0 to 46 cm, hard siliceous (CHERT?) layers (12-13 cm) and brownish black LIMESTONE/DOLOSTONE (46-62 cm). Brownish black (SYR 2/1), partially laminated SILICEOUS CLAYSTONE occurs at the bottom of section 1 below 62 cm, and throughout sections 2 and CC.
This core consists of brownish black (5YR 2/1) SILICEOUS CLAYSTONE with faint lamination. In the CC, LIMESTONE/DOLOSTONE is present in the breccia.
This core consists of brownish black (5YR 2/1) laminated SILICEOUS CLAYSTONE.
This core is composed of mainly dark yellowish brown (10YR 4/2) to brownish black (5YR 2/1) SILICEOUS CLAYSTONE. A pale yellowish brown (10YR 6/2) layer at 11-25 cm in section 1 is composed of LIMESTONE/DOLOSTONE. Faint darker laminae are present throughout the core. Few lighter (dark yellowish brown (10YR 4/2)) laminae are present at 41-42 cm, 81-81.5 cm and 104-105 cm in section 1. Fine lamination is present in sections 2 and 3. Most rocks are highly fractured by drilling. Drilling breccia is also present in sections 1, 3 and CC.
This core is composed of brownish black (5YR 2/1) NANNO-BEARING SILICEOUS CLAYSTONE. Faint darker laminae are present throughout the core. Foraminifer tests (mainly benthic) are visible on the core surface. Most sediments are highly disturbed forming blocks.
This core is composed of brownish black (5YR 2/1) NANNOBEARING SILICEOUS CLAYSTONE. Well-lamination is present throughout the core. Foraminifer tests are visible at the sediment surface. Most sediments are highly disturbed forming blocks.
This core is composed of brownish black (5YR 2/1) SILICEOUS CLAYSTONE. Fine lamination is present in sections 1 and 2. Foraminifer tests are visible at the surface of all sections. A dark gray (N3) lamina occurs at 38-39 cm in section 2. Most sediments are fractured forming blocks and biscuit structures are observed at 18-34 m in section 3.
This core is composed of mainly brownish black (5YR 2/1) SILICEOUS CLAYSTONE. A pale yellowish brown (10YR 6/2) layer present at 68-78 cm in section 1 is composed of LIMESTONE/DOLOSTONE. Lamination is present in sections 1 and 2. Parts of section 1 and the whole section CC are highly disturbed by drilling (breccia).
Hole 385-U1546C Core 30R, Interval 478.3-478.41 m (CSF-A)

This core consists of brecciated SILICEOUS CLAYSTONE.

<table>
<thead>
<tr>
<th>Depth CSF-A (m)</th>
<th>Core length (cm)</th>
<th>Section</th>
<th>Shipboard samples</th>
<th>Core image</th>
<th>Lithology</th>
<th>Sedimentary structures</th>
<th>Deformation structures</th>
<th>Drilling disturbance type</th>
<th>NGR (cps)</th>
<th>MS point (10^-5 SI)</th>
<th>Lith. unit</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>478.3</td>
<td>1</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>1.2</td>
<td>1.2</td>
</tr>
</tbody>
</table>
**Hole 385-U1546C Core 31R, Interval 483.3-485.77 m (CSF-A)**

This core is composed of mainly brownish black (5YR 2/1) SILICEOUS CLAYSTONE. A pale yellowish brown (10YR 6/2) layer present at 44-48 cm in section 2 is LIMESTONE/DOLOSTONE. Lamination is present in sections 1 and 2. The first 50 cm of section 1 and the top (0-16 cm) of section 2 are highly disturbed by drilling (breccia).
Hole 385-U1546C Core 32R, Interval 487.0-491.85 m (CSF-A)

This core is composed of mainly brownish black (5YR 2/1) SILICEOUS CLAYSTONE. Two pale yellowish brown (10YR 6/2) layers present at 8-12 cm and 20-25 cm in section 2 are composed of LIMESTONE/DOLOSTONE. Lamination is present in sections 1, 2, 4 and 5. The top (0-8 cm) of section 1 and a part (12-25 cm) of section CC are highly disturbed by drilling (breccia).
This core is composed of brownish black (5YR 2/1) SILICEOUS CLAYSTONE. Two pale yellowish brown (10YR 6/2) layers present at 3-11 cm in section 1 and at 49-53 cm in section 2 could be LIMESTONE/DOLOSTONE. Lamination is present in sections 1 and 2. From 11 to 13 cm in section 1, laminated sediment intervals alternate with relatively homogeneous intervals. The top (0-3 cm) of section 1 is highly disturbed by drilling (breccia).
Hole 385-U1546C Core 34R, Interval 497.8-501.66 m (CSF-A)

This core consists of dark yellowish brown (10YR 4/2) laminated SILICEOUS CLAYSTONE. Pale yellowish (10YR 6/2) laminae are DOLOSTONE/LIMESTONE.
This core consists of dark yellowish brown (10YR 4/2) SILICEOUS CLAYSTONE. A complex series of lighter colored beds, including intervals with SAND-RICH CLAYSTONE, occur in section 1 between 70 to 93 cm. These show evidence of deformation, including a reverse fault. Lamination is present in section 1 between 122 and 134 cm and in section 2.
This core consists of dark yellowish brown (10YR 4/2) SILICEOUS CLAYSTONE that is laminated in sections 2 and 3. The lighter intervals in section 1 (94-99 cm) and in section 2 (50-79 cm) are LIMESTONE/DOLOSTONE.
**Hole 385-U1546C Core 37R, Interval 512.5-514.66 m (CSF-A)**

This core consists of dark yellowish brown (10YR 4/2) partially laminated SILICEOUS CLAYSTONE. LIMESTONE/DOLOSTONE occurs in section 1 between 78 and 89 cm.

<table>
<thead>
<tr>
<th>Depth CSF-A (m)</th>
<th>Core length (cm)</th>
<th>Section</th>
<th>Shipboard samples</th>
<th>Core image</th>
<th>Lithology</th>
<th>Sedimentary structures</th>
<th>Drilling disturbance type</th>
<th>Reflectance</th>
<th>NGR (cps)</th>
<th>MS point (10^-5 SI)</th>
<th>Lith. unit</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>512.5</td>
<td>0</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>513.5</td>
<td>100</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>514.5</td>
<td>200</td>
<td>CC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Visual core descriptions**

**Site U1546 core descriptions**
This core consists of dark yellowish brown (10YR 4/2) laminated SILICEOUS CLAYSTONE. LIMESTONE/DOLOSTONE intervals occur in section 1 between 26-29 cm and 130-133 cm.

### Site U1546 core descriptions

#### Visual core descriptions

<table>
<thead>
<tr>
<th>Depth CSF A (m)</th>
<th>Core length (cm)</th>
<th>Section</th>
<th>Shipboard samples</th>
<th>Core image</th>
<th>Lithology</th>
<th>Sedimentary structures</th>
<th>Deformation structures</th>
<th>Drilling disturbance type</th>
<th>Reflectance L* a* b*</th>
<th>NGR (cps)</th>
<th>MS point (10^-5 SI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>517.2</td>
<td>0</td>
<td>1</td>
<td>VAC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>518.2</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>519.2</td>
<td>200</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Hole 385-U1546C Core 39R, Interval 522.3-526.91 m (CSF-A)

This core is composed of brownish black (5YR 2.5/1) SILICEOUS CLAYSTONE. Lamination with darker and lighter (10YR 6/2) colors is present in section 1. A pale yellowish brown (10YR 6/2) layer at 62-72 cm in section 3 is composed of LIMESTONE/DOLOSTONE. A very light gray (N8) layer occurs at 69-71 cm in section 3. Small calcareous fossils (foraminifers?) occur throughout the core.
This core is composed of brownish black (5YR 2/1) SILICEOUS CLAYSTONE. Lamination with darker and lighter (10YR 6/2) colors is present in sections 1 to 4. Intervals of faint darker lamination and very finely lamination occur throughout the core. Two pale yellowish brown (10YR 6/2) layers are present at 75-76 cm in section 1 and at 69.5-74.5 cm in section 2 which are composed of LIMESTONE/DOLOSTONE. Small calcareous fossils (foraminifers?) occur throughout the core. The top (9-14 cm) of section 1, the bottom (103.5-124 cm) of section 3 and the whole section CC are highly disturbed by drilling (breccia).
This core is composed of brownish black (5YR 2/1) SILICEOUS CLAYSTONE. Lamination with darker and lighter (10YR 6/2) colors is present in sections 1 to 3. Two pale yellowish brown (10YR 6/2) layers are present at 7-16 cm and at 68-75 cm in section 2. Most sediments are highly disturbed by drilling (breccia).
Hole 385-U1546C Core 42R, Interval 536.7-540.05 m (CSF-A)

This core is composed of brownish black (5YR 2/1) SILICEOUS CLAYSTONE. Lamination with darker and lighter (10YR 6/2) colors is present in sections 1 and 3. Two pale yellowish brown (10YR 6/2) layers are present at 78-91 cm in section 2 and at 3-13 cm in section 3. Dark gray (N3) laminae and patches with white SAND/SILT occurs in sections 1 and 2. Filled burrows are present in sections 3 and CC. Parts of section 3 are highly disturbed by drilling (breccia).
The core is homogeneous olive gray (5Y 3/2) DIATOM CLAY.

<table>
<thead>
<tr>
<th>Depth CSF-A (m)</th>
<th>Core length (cm)</th>
<th>Shipboard samples</th>
<th>Core image</th>
<th>Lithology</th>
<th>Sedimentary structures</th>
<th>Deformation structures</th>
<th>Drilling disturbance type</th>
<th>Reflectance L<em>a</em>b*</th>
<th>NGR (cps)</th>
<th>MS point (10^-5 SI)</th>
<th>Lith. unit</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0</td>
<td>0</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>84</td>
<td>10.4</td>
<td>3</td>
<td>1</td>
<td>IA</td>
</tr>
<tr>
<td>1.0</td>
<td>100</td>
<td></td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>64</td>
<td>8.4</td>
<td>2</td>
<td>2</td>
<td>IA</td>
</tr>
<tr>
<td>2.0</td>
<td>200</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>44</td>
<td>6.4</td>
<td>1</td>
<td>3</td>
<td>IA</td>
</tr>
<tr>
<td>3.0</td>
<td>300</td>
<td></td>
<td>CC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>24</td>
<td>4.4</td>
<td>1</td>
<td>4</td>
<td>IA</td>
</tr>
</tbody>
</table>

Site U1546 core descriptions
Visual core descriptions

Hole 385-U1546D Core 1H, Interval 0.0-3.94 m (CSF-A)
The core is mainly olive gray (5Y 3/2) DIATOM CLAY. Lamination occurs in sections 2, 3, 6, 7 and CC, alternating between darker and lighter color mm- to cm-thick laminae. Lighter color laminae are composed of CLAY-RICH DIATOM OOZE or NANNO- and CLAY-RICH DIATOM OOZE. Tilted and folded lamination is observed at 103-145 cm in section 7.
Hole 385-U1546D Core 3H, Interval 13.5-23.32 m (CSF-A)

The core is a laminated moderate olive brown (5Y 4/4) CLAY-RICH DIATOM OOZE. Finely laminated sediments mostly occur in sections 1 to 7, alternating between darker and lighter color mm- to cm-thick laminae. Lighter color laminae are composed of DIATOM OOZE. Tilted and folded lamination is present at 10-66 cm in section 2.
Hole 385-U1546D Core 4H, Interval 23.0-32.64 m (CSF-A)

The core is a laminated moderate olive brown (5Y 4/4) CLAY-RICH DIATOM OOZE. Finely laminated sediments mostly occur in sections 1, 2, 3, 4, 5, 6 and CC. Alternations between darker color and lighter color mm- to cm-thick laminae are present. Lighter color laminae are composed of DIATOM OOZE. Shell fragments are present at 18-19 cm in section 6. Organic matter debris occurs at 117-124 cm and at 135 cm in section 2. Tilted and folded lamination is present in sections 1 (21-74 cm) and 2 (4-7 cm).

<table>
<thead>
<tr>
<th>Depth CSF-A (m)</th>
<th>Core length (cm)</th>
<th>Section</th>
<th>Shipboard samples</th>
<th>Core image</th>
<th>Lithology</th>
<th>Sedimentary structures</th>
<th>Deformation structures</th>
<th>Drilling disturbance type</th>
<th>NGR (cps)</th>
<th>MS point (10⁻⁵ Si)</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>23.0</td>
<td>0</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24.0</td>
<td>100</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25.0</td>
<td>200</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26.0</td>
<td>300</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27.0</td>
<td>400</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28.0</td>
<td>500</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29.0</td>
<td>600</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Reflectance L* a* b*
The core is a moderate olive brown (5Y 4/4) CLAY-RICH DIATOM OOZE with faint darker and lighter (5Y 5/2) color mm- to cm-thick lamination. Finely laminated sediments occur in sections 1, 2, 3, 5, 6 and 7. Lighter color laminae are composed of DIATOM OOZE. Sparse shell fragments are present in sections 3 (28-29 cm, 31-32 cm), 5 (21-22 cm), 6 (68-68 cm) and 7 (38-39 cm).
The core is a moderate olive brown (5Y 4/4) CLAY-RICH DIATOM OOZE with faint darker and lighter (5Y 5/2) color mm- to cm-thick lamination. Finely laminated sediments occur in sections 1, 4 and 7. Lighter color (5Y 7/2) laminae are composed of DIATOM OOZE. Shell fragments are present in sections 1, 4, 5, 6 and 7. A wood fragment is present at 47 cm in section 1.
This core consists of laminated olive gray (5Y 3/2) CLAY-RICH DIATOM OOZE. The light olive gray (5Y 7/2) laminae are DIATOM OOZE. Few homogenous intervals occur in most sections. Shell fragments are present in sections 2 (7 cm, 113 cm), 3 (66-67 cm), 4 (23-25 cm), 6 (55-56 cm), 7 (7-10 cm) and CC (9-13 cm).
This core consists of an alternation of laminated and homogeneous intervals of olive gray (5Y 3/2) CLAY-RICH DIATOM OOZE. Shell fragments are present in section 1 at 147-151 cm and in section 6 (46-47 cm).
This core is mainly composed of olive gray (5Y 3/2) CLAY-RICH DIATOM OOZE with few light olive gray (5Y 5/2) layers of DIATOM OOZE. Dark gray (N3) SAND laminae are present at 90.5-92 cm and at 134-135 cm in section 3. The upper part of the core displays laminated intervals alternating with faintly laminated intervals. The lower part of the core (from section 5) is homogenous and consists of olive gray (5Y 3/2) DIATOM CLAY. Shell fragments are present in sections 1, 3, 4, 5 and 6.
This core is mainly composed of olive gray (5Y 3/2) DIATOM CLAY with few laminated intervals (faint laminae) and sparse shell fragments.

Site U1546 core descriptions

<table>
<thead>
<tr>
<th>Core length (cm)</th>
<th>Depth CSF-A (m)</th>
<th>Lithology</th>
<th>Sedimentary structures</th>
<th>Deformation structures</th>
<th>Drilling disturbance type</th>
<th>Reflectance L* a* b*</th>
<th>NGR (cps)</th>
<th>MS point (10^5 SI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>80.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>100</td>
<td>81.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>200</td>
<td>82.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>300</td>
<td>83.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>400</td>
<td>84.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>500</td>
<td>85.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>600</td>
<td>86.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>700</td>
<td>87.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>800</td>
<td>88.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>900</td>
<td>89.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Visual core descriptions

Hole 385-U1546D Core 10H, Interval 80.0-89.74 m (CSF-A)
This core is mainly composed of olive gray (5Y 3/2) DIATOM CLAY with laminated intervals (some with faint laminae) and sparse shell fragments. An ASH layer is present in section 6 at 21 cm.
This core is mainly composed of olive gray (5Y 3/2) DIATOM CLAY with an interval of MICRITE-RICH DIATOM OOZE and a carbonate concretion at the bottom of section 1 (78-113 cm.).
Hole 385-U1546D Core 13X, Interval 100.1-100.1 m (CSF-A)

NO RECOVERY 101.1-102.0 m

<table>
<thead>
<tr>
<th>Depth CSF-A (m)</th>
<th>Core length (cm)</th>
<th>Section</th>
<th>Shipboard samples</th>
<th>Core image</th>
<th>Lithology</th>
<th>Sedimentary structures</th>
<th>Deformation structures</th>
<th>Drilling disturbance type</th>
<th>Reflectance (L^*a^<em>b^</em>)</th>
<th>NGR (cps)</th>
<th>MS point (10^5 SI)</th>
<th>Lith. unit</th>
<th>Age</th>
</tr>
</thead>
</table>

220
Site U1546 core descriptions

Hole 385-U1546D Core 14H, Interval 102.0-111.8 m (CSF-A)

This core consists of alternation of moderate olive gray (5Y 4/4) micrite bearing DIATOM CLAY and olive gray (5Y 3/2) MICRITE-RICH DIATOM CLAY. Small carbonate concretions are present in the micrite-rich intervals.
This core consists of olive gray (5Y 3/2) micrite bearing DIATOM CLAY with intervals of DIATOM MICRITE with carbonate concretions in section 7. Faint tilted lamination is present in sections 4 and 6.
This core consists of olive gray (5Y 3/2) micrite bearing DIATOM CLAY with laminated intervals. Micritic laminae concretions are present in section 7 at 27 and 35 cm. Two ASH layers are present in section 4.
This core consists of olive gray (5Y 3/2) micrite bearing DIATOM CLAY with laminated intervals. Dark SILT (ASH ?) laminae are present in section 1 (35-37 cm) section 5 (42 cm, 60 cm, 120 and 127-129cm) and section 6 (42, 130-132 cm). Carbonate concretions occur in section 1 (139 cm), in section 3 (8-28 cm and 135 cm), and in section 5 (34-41 cm).
This core consists of olive gray (5Y 3/2) micrite-bearing DIATOM CLAY with tilted lamination in sections 1 to 5. Carbonate concretions are present on top of section 1 (5-8 cm and 18-22 cm), in section 4 (90-94 cm), and in section 5 (23 cm, 110-117 cm and 137-139 cm).
This core consists of alternating olive gray (5Y 3/2) micrite bearing DIATOM CLAY with moderate olive gray (5Y 4/4) MICRITE-RICH DIATOM OOZE. Carbonate concretions are present on top of section 1 (between 50 cm and 64 cm) in section 2 (138 cm), in section 4 (137 cm) and in section 5 (137 cm). A grayer layer (more silty) is present at the bottom of section 1 (147-150 cm) and top of section 2 (0-1 cm).
This core consists of olive gray (5Y 3/2) micrite-bearing DIATOM CLAY with MICRITE-RICH intervals and laminae. In sections 3, 4, 5, laminae of MICRITE-RICH DIATOM OOZE are more prominent.
This core consists of olive gray (5Y 3/2) micrite-bearing DIATOM CLAY with MICRTE-RICH intervals. Two distinct ASH layers are present in section 6 at 52 and 145 cm. The latter is coarse SAND sized.
This core consists of olive gray (5Y 3/2) micrite bearing DIATOM CLAY with MICRITE-RICH intervals in section 1 (90-122) and in section 5 (34-44 cm). SILT lamina is present at 30 cm in section 1. ASH laminae occur at 39-44 cm in section 1, at 141 cm in section 4 and 1-2 cm in section 7.
This core consists of olive gray (5Y 3/2) laminated DIATOM CLAY with homogenous intervals. MICRITE-RICH DIATOM OOZE intervals with carbonate concretions occur in section 6 (54-84 cm) and in section CC (0-25 cm). ASH layers are present in section 2 at 54, 55 cm and 117 cm and in section 5 at 74 cm.
The core consists of olive gray (5Y 3/2) DIATOM CLAY with sparse faint lamination and some shell fragments in sections 3, 4 and 7. Slightly tilted laminae are present at 21-24 cm in section 1. Dark gray (N3) SILT layers and laminae are present in sections 2 (10-12 cm) and 5 (0-21 cm, 50-53 cm). Sedimentary BRECCIA is present at 68-102 cm in section 5. A light olive gray (5Y 5/2) MICRITE-RICH DIATOM CLAY with scoured contacts occurs at 120-123 cm in section 2.
This core consists of olive gray (5Y 3/2) DIATOM CLAY with several pieces of light olive gray (5Y 5/2) indurated concretions (LIMESTONE/DOLOSTONE) between 0 and 24 cm in section 1. The whole core is highly disturbed by drilling (soupy, mousse-like, breccia).
This core consists of olive gray (5Y 3/2) DIATOM CLAY with several pieces of light olive gray (5Y 5/2) LIMESTONE/DOLOSTONE between 0 and 16 cm in section 1.

| Depth CSF-A (m) | Core length (cm) | Section | Shipboard samples | Core image | Lithology | Sedimentary structures | Deformation structures | Drilling disturbance type | Reflectance \( L^* a^* b^* \) | NGR (cps) | MS point \( 10^5 \text{ SI} \) | Lith. unit | Age |
|----------------|------------------|---------|-------------------|------------|-----------|------------------------|------------------------|--------------------------|---------------------|---------------------|-------------|------|
| 209.0          | 0                | 1       |                   |            |           |                        |                        |                          |                     |                     |             |      |
| 210.0          | 100              | 2       |                   |            |           |                        |                        |                          |                     |                     |             |      |

Site U1546 core descriptions
Visual core descriptions

233
This core consists of mainly homogenous olive gray (5Y 3/2) CLAY-RICH DIATOM OOZE. Shell fragments are present in sections 1, 4, 5, 6 and 7. Section 1 is highly disturbed by drilling between 0 and 26 cm.
This core consists of homogenous olive gray (5Y 3/2) CLAY-RICH DIATOM OOZE. Shell fragments are present in sections 1 and 2. Few laminae are present in sections 1 and 2. Two light olive gray (5Y 5/2) pieces of LIMESTONE/DOLOSTONE are present at 144-150 cm in section 3.
This core consists of relatively homogenous olive gray (5Y 3/2) CLAY-RICH DIATOM OOZE. Several pieces of light olive gray (5Y 5/2) LIMESTONE/DOLOSTONE are present at 0-20 cm in section 1. The whole core is highly disturbed by drilling (breccia, biscuits).

### Hole 385-U1546D Core 29X, Interval 223.2-224.33 m (CSF-A)

<table>
<thead>
<tr>
<th>Depth CSF-A (m)</th>
<th>Core length (cm)</th>
<th>Section</th>
<th>Shipboard samples</th>
<th>Core image</th>
<th>Lithology</th>
<th>Sedimentary structures</th>
<th>Drilling disturbance type</th>
<th>NGR (cps)</th>
<th>Reflectance L* a* b*</th>
<th>MS point (10^-5 SI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>100</td>
<td>CC</td>
<td></td>
<td></td>
<td>CLAY-RICH DIATOM OOZE</td>
<td></td>
<td></td>
<td>0</td>
<td>14.4</td>
<td>4</td>
</tr>
<tr>
<td>224.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>CLAY-RICH DIATOM OOZE</td>
<td></td>
<td></td>
<td>1</td>
<td>13.4</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>CLAY-RICH DIATOM OOZE</td>
<td></td>
<td></td>
<td>2</td>
<td>12.4</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>CLAY-RICH DIATOM OOZE</td>
<td></td>
<td></td>
<td>3</td>
<td>11.4</td>
<td>-9</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>CLAY-RICH DIATOM OOZE</td>
<td></td>
<td></td>
<td>4</td>
<td>10.4</td>
<td>-8</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>CLAY-RICH DIATOM OOZE</td>
<td></td>
<td></td>
<td>5</td>
<td>9.4</td>
<td>-7</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>CLAY-RICH DIATOM OOZE</td>
<td></td>
<td></td>
<td>6</td>
<td>8.4</td>
<td>-6</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>CLAY-RICH DIATOM OOZE</td>
<td></td>
<td></td>
<td>7</td>
<td>7.4</td>
<td>-5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>CLAY-RICH DIATOM OOZE</td>
<td></td>
<td></td>
<td>8</td>
<td>6.4</td>
<td>-4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>CLAY-RICH DIATOM OOZE</td>
<td></td>
<td></td>
<td>9</td>
<td>5.4</td>
<td>-3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>CLAY-RICH DIATOM OOZE</td>
<td></td>
<td></td>
<td>10</td>
<td>4.4</td>
<td>-2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>CLAY-RICH DIATOM OOZE</td>
<td></td>
<td></td>
<td>11</td>
<td>3.4</td>
<td>-1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>CLAY-RICH DIATOM OOZE</td>
<td></td>
<td></td>
<td>12</td>
<td>2.4</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>CLAY-RICH DIATOM OOZE</td>
<td></td>
<td></td>
<td>13</td>
<td>1.4</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>CLAY-RICH DIATOM OOZE</td>
<td></td>
<td></td>
<td>14</td>
<td>0.4</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>CLAY-RICH DIATOM OOZE</td>
<td></td>
<td></td>
<td>15</td>
<td>-0.4</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>CLAY-RICH DIATOM OOZE</td>
<td></td>
<td></td>
<td>16</td>
<td>-1.4</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>CLAY-RICH DIATOM OOZE</td>
<td></td>
<td></td>
<td>17</td>
<td>-2.4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>CLAY-RICH DIATOM OOZE</td>
<td></td>
<td></td>
<td>18</td>
<td>-3.4</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>CLAY-RICH DIATOM OOZE</td>
<td></td>
<td></td>
<td>19</td>
<td>-4.4</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>CLAY-RICH DIATOM OOZE</td>
<td></td>
<td></td>
<td>20</td>
<td>-5.4</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>CLAY-RICH DIATOM OOZE</td>
<td></td>
<td></td>
<td>21</td>
<td>-6.4</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>CLAY-RICH DIATOM OOZE</td>
<td></td>
<td></td>
<td>22</td>
<td>-7.4</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>CLAY-RICH DIATOM OOZE</td>
<td></td>
<td></td>
<td>23</td>
<td>-8.4</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>CLAY-RICH DIATOM OOZE</td>
<td></td>
<td></td>
<td>24</td>
<td>-9.4</td>
<td>12</td>
</tr>
</tbody>
</table>

Site U1546 core descriptions

Visual core descriptions

236
This core consists of homogeneous olive gray (5Y 3/2) CLAY-RICH DIATOM OOZE. Several carbonate concretions are present at the top 9 cm of section 1. Lamination is present in sections 1, 2, 4, 5 and 7. Tilted laminae are present in sections 5 (89-119 cm), 6 (30-32 cm, 38-41.5 cm, 43-45 cm, 96-98 cm, 109-115 cm), 7 (35-37 cm, 39-42 cm, 46-48 cm) and CC (11-18 cm). A dark gray (N3) SILT layer is present at 91-92 cm in section 5. The top 3-4 cm of sections 1 and CC is highly disturbed by drilling (breccia).

<table>
<thead>
<tr>
<th>Depth CSF-A (m)</th>
<th>Core length (cm)</th>
<th>Section</th>
<th>Shipboard samples</th>
<th>Core image</th>
<th>Lithology</th>
<th>Sedimentary structures</th>
<th>Deformation structures</th>
<th>Drilling disturbance type</th>
<th>Reflectance L* a* b*</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>100</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>225.5</td>
<td>100</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>226.5</td>
<td>100</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>227.5</td>
<td>100</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>228.5</td>
<td>100</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>229.5</td>
<td>100</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>230.5</td>
<td>100</td>
<td>CC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Lamination is present in sections 1, 2, 4, 5 and 7. Tilted laminae are present in sections 5 (89-119 cm), 6 (30-32 cm, 38-41.5 cm, 43-45 cm, 96-98 cm, 109-115 cm), 7 (35-37 cm, 39-42 cm, 46-48 cm) and CC (11-18 cm). A dark gray (N3) SILT layer is present at 91-92 cm in section 5. The top 3-4 cm of sections 1 and CC is highly disturbed by drilling (breccia).
Hole 385-U1546D Core 31X, Interval 233.5-239.82 m (CSF-A)

This core consists of olive gray (5Y 3/2) CLAY-RICH DIATOM OOZE. Several pieces of light olive gray (5Y 5/2) LIMESTONE/DOLOSTONE are present at 45-66 cm in section 4. A few intervals are laminated in sections 2, 3, 4, 5 and CC. Disseminated sulfide precipitates occur in the top 6 cm of section 1. Shell fragments are present in sections 1 and 2.
This core consists of mainly homogenous olive gray (5Y 3/2) CLAY-RICH DIATOM OOZE. Small organic matter fragments are present in section 1 (71-79 cm, 85-86 cm). Several pieces of light olive gray (5Y 5/2) LIMESTONE/DOLOSTONE are present at 39-45 cm in section 4. The top 15 cm of section CC is highly disturbed by drilling (breccia).
The core consists of olive gray (5Y 3/2) DIATOM CLAY with few laminated intervals in sections 4 and CC. LIMESTONE/DOLOSTONE intervals are present in section 1 (0-4 cm and 35-40 cm). The core is biscuited and brecciated and core-liner fragments occur in section 1. A few darker and lighter (5Y 5/2) color laminated intervals are present in sections 2 (41-59 cm) and 3 (71-76 cm). Lamination in section 2 is cross-cut by a micro-fault. All sediments are thoroughly mottled. Black vitreous clasts (obsidian?) are found in sections 3 (22-24 cm) and 4 (43-44 cm).
This core is composed of highly disturbed, brecciated DIATOM CLAY.

<table>
<thead>
<tr>
<th>Depth CSF-A (m)</th>
<th>Core length (cm)</th>
<th>Section</th>
<th>Shipboard samples</th>
<th>Core image</th>
<th>Lithology</th>
<th>Sedimentary structures</th>
<th>Deformation structures</th>
<th>Drilling disturbance type</th>
<th>Reflectance L* a* b*</th>
<th>NGR (cps)</th>
<th>MS point (10^-5 SI)</th>
<th>Lith. unit</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>244.9</td>
<td>0</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>L* 84 a* 64 b*</td>
<td>22.4</td>
<td>4</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>245.9</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>20.4</td>
<td>3.5</td>
<td>3.0</td>
<td></td>
</tr>
</tbody>
</table>
Hole 385-U1546D Core 35F, Interval 249.6-254.56 m (CSF-A)

This core is composed of olive gray DIATOM CLAY with thin laminated intervals in sections 1 and 2 and some bioturbated intervals in sections 2 and 3.
This core is composed of olive gray DIATOM CLAY with small laminated intervals and few bioturbated intervals in sections 1 and 2.
Hole 385-U1546D Core 37F, Interval 259.0-263.46 m (CSF-A)

This core is composed of highly disturbed (brecciated) olive gray (5Y 3/2) DIATOM CLAY.
This core is composed of mostly disturbed olive gray (5Y 3/2) DIATOM CLAY with pieces of core liner in sections 1 and 2, and drilling breccia in sections 4 and CC. The less disturbed section 3 shows intervals of homogenous and laminated DIATOM CLAY.

<table>
<thead>
<tr>
<th>Depth CSF-A (m)</th>
<th>Core length (cm)</th>
<th>Section</th>
<th>Shipboard samples</th>
<th>Core image</th>
<th>Lithology</th>
<th>Sedimentary structures</th>
<th>Deformation structures</th>
<th>Drilling disturbance type</th>
<th>Reflectance L* a* b*</th>
<th>NGR (cps)</th>
<th>MS point (10^-5 SI)</th>
<th>Lith. unit</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>100</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>264.6</td>
<td></td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>265.6</td>
<td>200</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>266.6</td>
<td>300</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>267.6</td>
<td>400</td>
<td>CC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Hole 385-U1546D Core 39X, Interval 266.2-268.89 m (CSF-A)

This core is mostly composed of biscuited olive gray (5Y 3/2) DIATOM CLAY with an interval of LIMESTONE/DOLOSTONE on top of section 1.
Hole 385-U1546D Core 40F, Interval 268.2-273.07 m (CSF-A)

This core is composed of homogenous olive gray (5Y 3/2) DIATOM CLAY with two small laminated intervals, sparse shell fragments. Few distinct burrow horizons.
Hole 385-U1546D Core 41F, Interval 272.9-277.87 m (CSF-A)

This core consists of homogenous DIATOM CLAY with sparse shell fragments and evidence of bioturbation (burrows).
Hole 385-U1546D Core 42F, Interval 277.6-282.53 m (CSF-A)

This core consists of homogenous olive gray (5Y 3/2) DIATOM CLAY with sparse shell fragments and few bioturbated intervals (burrows).

<table>
<thead>
<tr>
<th>Depth CSF-A (m)</th>
<th>Core length (cm)</th>
<th>Section</th>
<th>Shipboard samples</th>
<th>Core image</th>
<th>Lithology</th>
<th>Sedimentary structures</th>
<th>Deformation structures</th>
<th>Drilling disturbance type</th>
<th>NGR (cps)</th>
<th>MS point (10^-5 SI)</th>
<th>Lith. unit</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>277.6</td>
<td>0</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>278.6</td>
<td>100</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>279.6</td>
<td>200</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>280.6</td>
<td>300</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>281.6</td>
<td>400</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

middle to late Pleistocene (to Holocene?)
This core consists of homogenous olive gray (5Y 3/2) DIATOM CLAY with sparse shell fragments.
Hole 385-U1546D Core 44F, Interval 287.0-289.14 m (CSF-A)

This core is composed of alternating laminated and homogenous intervals of olive gray (5Y 3/2) DIATOM CLAY.

<table>
<thead>
<tr>
<th>Depth CSF-A (m)</th>
<th>Core length (cm)</th>
<th>Section</th>
<th>Shipboard samples</th>
<th>Core image</th>
<th>Lithology</th>
<th>Sedimentary structures</th>
<th>Deformation structures</th>
<th>Drilling disturbance type</th>
<th>Reflectance</th>
<th>MS point (10^-5 SI)</th>
<th>NGR (cps)</th>
<th>Lith. unit</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>287.0</td>
<td>0</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>288.0</td>
<td>100</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>289.0</td>
<td>200</td>
<td>CC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Hole 385-U1546D Core 45X, Interval 289.0-291.92 m (CSF-A)

This core is composed of biscuited olive gray (SY 3/2) DIATOM CLAY with a LIMESTONE/DOLOSTONE interval in section 1. Top of section 1 is a drilling breccia (0-33 cm)

<table>
<thead>
<tr>
<th>Depth CSF-A (m)</th>
<th>Core length (cm)</th>
<th>Section</th>
<th>Shipboard samples</th>
<th>Core image</th>
<th>Lithology</th>
<th>Sedimentary structures</th>
<th>Deformation structures</th>
<th>Drilling disturbance type</th>
<th>Reflectance L* a* b*</th>
<th>NGR (cps)</th>
<th>MS point (10^-5 SI)</th>
<th>Lith. unit</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>289.0</td>
<td>0</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>290.0</td>
<td>100</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>291.0</td>
<td>200</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

CC

middle to late Pleistocene (to Holocene?)
This core is composed of biscuited olive gray (SY 3/2) DIATOM CLAY with laminated intervals in section 1. The top of section 1 is a drilling breccia (0-38 cm).
Hole 385-U1546D Core 47F, Interval 295.4-300.43 m (CSF-A)

This core consists mostly of homogenous olive gray (5Y 3/2) DIATOM CLAY with a thin laminated interval in section 3.

### Visual core descriptions

<table>
<thead>
<tr>
<th>Depth CSF-A (m)</th>
<th>Core length (cm)</th>
<th>Section</th>
<th>Shipboard samples</th>
<th>Core image</th>
<th>Lithology</th>
<th>Sedimentary structures</th>
<th>Deformation structures</th>
<th>Drilling disturbance type</th>
<th>Reflectance L* a* b*</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>1</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>296.2</td>
<td>2</td>
<td>200</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>297.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>298.2</td>
<td>3</td>
<td>300</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>299.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>300.2</td>
<td>4</td>
<td>400</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>302.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>