This core consists of olive gray (5Y 3/2) NANNOFOSIL-BEARING CLAY-RICH DIATOM OOZE. The first 35 cm of section 1 are soupy. An intact shell is present at 60 cm in section 1. Fragmented shells occur in section 2 at 50 cm and in section 3 at 78 cm. Faint lamination is present between 63 and 68 cm in section 4 and in the CC.
**Hole 385-U1547A Core 2H, Interval 5.3-15.17 m (CSF-A)**

This core consists of olive gray (5Y 3/2) CLAY-RICH DIATOM OOZE. Lamination occurs in sections 3, 4, 5, 6 and 7. Open burrows are present in sections 1, 2 and 3. In section 4, fish remains are present at 24 cm and a small phosphate concretion with fish remains and phosphate minerals are present at 71 cm. A terrigenous SILT lamina is present in the same section at 46 cm.
This core consists of olive gray (5Y 3/2) CLAY-RICH DIATOM OOZE. Lamination occurs in all sections and alternates with homogenous intervals. A lighter lamina of FORAMINIFERA OOZE is present in section 1 at 116 cm. A layer of DIATOM-RICH SILTY CLAY is present in section 6 between 64 and 84 cm.
This core consists of olive gray (5Y 3/2) CLAY-RICH DIATOM OOZE. Laminated intervals alternate with homogenous intervals in sections 1, 2, 3, 5, 7 and CC. Diatom mats constitute some laminae. Contorted laminae are present in section 3 between 54 and 67 cm and at 140 cm. Homogenous gray layers of DIATOM SILTY CLAY occur between 88 and 92 cm in section 3 and between 103-107 cm in section 6. Shell fragments are present from sections 2 to 6.
Hole 385-U1547A Core 5H, Interval 33.8-43.78 m (CSF-A)

This core consists of olive gray (5Y 3/2) CLAY-RICH DIATOM OOZE. Laminated intervals are present in sections 1, 2, 3 (top) and 6. Deformed laminae are present in section 1 between 22 and 42 cm and a truncated erosional contact with thin laminae occurs at 100 cm in section 1. Layers of SILTY DIATOM CLAY occur in section 2 between 88 and 93 cm and at the bottom of section 4 (148 cm) and top of section 5. Moderate olive brown (5Y 4/4) carbonate concretions are present in section 5 as a thin layer at 76 cm, in section 6 at 98 cm, in section 7 at 22 cm and in the CC as a spherical concretion at 7 cm.
Hole 385-U1547A Core 6H, Interval 43.3-53.42 m (CSF-A)

This core consists of mainly olive gray (5Y 3/2) MICRITE-BEARING DIATOM CLAY. Light olive gray (5Y 5/2) layers are present in sections 1 (59-65.5 cm), 3 (20.5-27 cm) and 6 (0-21 cm) which are composed of DIATOM OOZE. Yellowish gray (5Y 7/2) layers are also present in sections 2 (57-74 cm), 5 (107-115 cm) and 7 (25-40 cm) which are composed of DIATOM-RICH MICRITE. Laminae with an alternation of darker and lighter (5Y 7/2) colors mostly occur in sections 1 to 7. Tilted laminae are present from the bottom (118 cm) of section 5 to the bottom of section 7. Black laminae with coarse grains composed of SILTY SAND are present in sections 1 (63-65.5 cm) and 3 (14-17 cm). Several light gray (N7) to medium gray (N5) layers are present in sections 1 (101-101.5 cm), 2 (76.5 cm), 3 (27-27.5 cm, 37.5-38.5 cm, 54-89 cm), 4 (13-20 cm), 5 (147.5-149 cm) and 6 (33-36 cm).
This core consists of mainly olive gray (5Y 3/2) MICRITE-BEARING CLAY-RICH DIATOM OOZE. Yellowish gray (5Y 7/2) DIATOM-RICH MICRITE layers, most containing several carbonate concretions, are present in sections 1 (34-43 cm), 2 (37-46.5 cm, 100-106.5 cm), 5 (125-130 cm) and 6 (114-124 cm). LIMESTONE/DOLOSTONE is present at 0-6 cm in section 1 and at 36-47 cm in section 4. Laminae with an alternation of darker and lighter (5Y 7/2) colors occur in sections 1 to 7. Several light gray (N7) to dark gray (N3) DIATOM-RICH SILTY CLAY layers are present in sections 4 (93-103 cm), 5 (10-17.5 cm) and 7 (5.5-18 cm).
This core consists of mainly olive gray (5Y 3/2) MICRITE-BEARING CLAY-RICH DIATOM OOZE. Dark yellowish brown (10YR 4/2) intervals composing of DIATOM CLAY are present in sections 4 (88-150 cm), 5 (0-42 cm), 7 (54-88 cm) and CC (0-12 cm). Yellowish gray (5Y 7/2) LIMESTONE/DOLOSTONE is present at 79-86 cm in section 5 and at 92-98 cm in section 6. Yellowish gray (5Y 7/2) layers of DIATOM-RICH MICRITE, most containing several carbonate concretions, are present in sections 2 (129-145 cm), 3 (48-51 cm, 111-121 cm), 4 (30-33 cm, 38-41 cm, 43-61 cm), 5 (147-150 cm) and 6 (0-13 cm, 80-92 cm, 104-106 cm, 120-125 cm). Other carbonate concretions are present in sections 1 (0-12.5 cm) and 2 (112.5-113 cm, 115-117 cm). Laminae with an alternation of darker and lighter (5Y 7/2) colors occur in sections 1 to 7. Tilted laminae occur at 61-66 cm in section 4. Several very light gray (N8) CLAY-RICH DIATOM OOZE layers are present in sections 4 (78-88 cm) and 7 (49.5-54 cm). A shell fragment is present at 106.5-107 cm in section 1.
Hole 385-U1547A Core 9H, Interval 71.8-81.77 m (CSF-A)

This core is mainly composed of an alternation between olive gray (5Y 3/2) MICRITE-BEARING CLAY-RICH DIATOM OOZE and dark yellowish brown (10YR 4/2) DIATOM-RICH MICRITE. LIMESTONE/DOLOSTONE is present at 31-35 cm in section 3. Slightly tilted laminae with dark volcanic SAND/SILT and brown CLAY are present at 66-72 cm in section 1 and at 15-21 cm in section 3. Sulfide patches (pyrite) are present at 10-12 cm and 33-35 cm in section 6. Sediments are mottled in sections 6 and 7.
This core is mainly composed of an alternation between olive gray (5Y 3/2) CLAY-RICH DIATOM OOZE and dark yellowish brown (10YR 4/2) DIATOM-RICH SILTY CLAY. Pale yellowish brown (10YR 4/2) DIATOM-RICH MICRITE layers are present in sections 1 (0-62 cm), 4 (97-106 cm), 5 (0-34 cm) and 6 (77-90 cm). Carbonate concretions occur in section 1 (0-3 cm (fall-in?), 48-55 cm). A shell fragment is present at 108-109 cm in section 3. A dark gray (N3) lamina is present in section 5 (132 cm). Sediments are mottled in sections 2 to 4 and 6.
This core is mainly composed of olive gray (5Y 3/2) to dark yellowish brown (10YR 4/2) CLAY-RICH DIATOM Ooze. Medium gray (N5) layers or patches of DIATOM-RICH SILTY CLAY are present in sections 2 (33-37 cm) and 4 (70-72 cm, 79-84 cm). Sediments are mottled at the bottom (14-37 cm) of section 2 and throughout the section 4. Sediments in sections 1 and at the bottom of section 4 are highly disturbed by drilling (breccia). Filled burrows are present in section 3.
Site U1547 core descriptions

Visual core descriptions

<table>
<thead>
<tr>
<th>Hole 385-U1547A Core 12X, Interval 92.1-92.1 m (CSF-A)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO RECOVERY 92.1-95.6 m</td>
</tr>
</tbody>
</table>

<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>92.1</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>92.2</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>92.3</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>92.4</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>92.5</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>92.6</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>92.7</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>92.8</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>92.9</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>93.0</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>
</tr>
<tr>
<td>93.1</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>93.2</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>93.3</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>93.4</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>93.5</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>93.6</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>93.7</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>93.8</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>93.9</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>94.0</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>
</tr>
<tr>
<td>94.1</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>94.2</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>94.3</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>94.4</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>94.5</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>94.6</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>94.7</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>94.8</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>94.9</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>95.0</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>
</tr>
<tr>
<td>95.1</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>95.2</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>95.3</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>95.4</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>95.5</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>95.6</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>95.7</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>95.8</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>95.9</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>

NO RECOVERY 92.1-95.6 m
Hole 385-U1547A Core 13F, Interval 95.6-100.28 m (CSF-A)

This core is mainly composed of homogeneous olive gray (5Y 3/2) to dark yellowish brown (10YR 4/2) CLAY-RICH DIATOM OOZE. Faint laminae are present in section 1 (27-57 cm, 98-99 cm). Medium gray (N5) patches are present in section 1 (27-28 cm). Sediments are mottled in section 1.
Hole 385-U1547A Core 14X, Interval 96.8-97.93 m (CSF-A)

This core consists of homogenous olive gray (5Y 3/2) CLAY-RICH DIATOM OOZE with a light olive gray (5Y 5/2) LIMESTONE/DOLOSTONE layer on top of section 1 (from 0 to 12 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>97.7</td>
<td>0</td>
<td>1</td>
<td>CC</td>
<td></td>
<td>CLAY-RICH DIATOM OOZE</td>
<td>Light olive gray (5Y 5/2) LIMESTONE/DOLOSTONE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Visual core descriptions
Hole 385-U1547A Core 15F, Interval 98.4-101.6 m (CSF-A)

This core consists of homogenous olive gray (SY 3/2) CLAY-RICH DIATOM OOZE with lamination in section 1 between 105 and 139 cm and SILTY SAND laminae from 65 to 72 cm in section 1. The top of section 1 and the other sections are highly disturbed by drilling (flow in).
Hole 385-U1547A Core 16X, Interval 99.7-101.69 m (CSF-A)

This core consists of homogenous olive gray (5Y 3/2) CLAY-RICH DIATOM OOZE. A SILT lamina is present in section 1 at 55 cm.
This core consists of homogenous olive gray (5Y 3/2) CLAY-RICH DIATOM OOZE with faintly laminated intervals in sections 1 and 2. A layer of MICRITE-RICH DIATOM OOZE is present between 94 and 105 cm in section 2 which contains a carbonate concretion. Section 3 is highly disturbed by drilling.
This core consists of homogenous olive gray (SY 3/2) CLAY-RICH DIATOM OOZE with a LIMESTONE/DOLOSTONE layer (from 0 to 17 cm) in section 1. A gray layer between 83 and 87 cm in section 1 is DIATOM-RICH SILTY CLAY. Lamination occurs in section 1 between 50 to 54 cm and in the CC between 11 and 20 cm.
This core consists of homogenous olive gray (5Y 3/2) CLAY-RICH DIATOM OOZE with SAND layers in sections 2 (patches and SAND lamina from 25 to 32 cm, layer with sharp boundaries from 79 to 83 cm) and 3 (two SAND layers with sharp basal contacts and gradational upper contacts at 9-12 and 33-39 cm). The core is affected by drilling disturbance (flow in) from 50 cm to the base of section 3 and in the CC.
### Hole 385-U1547A Core 20X, Interval 108.1-108.27 m (CSF-A)

This core consists of light olive gray (5Y5/2) 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</th>
<th>NGR (10^8 SI)</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>CC</td>
<td></td>
<td></td>
<td>Light olive gray (5Y5/2) LIMESTONE/DOLOSTONE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
This core is composed of olive gray (5Y 3/2) CLAY-RICH DIATOM OOZE with an intercalated SAND layer that extends from section 1 at 130 cm down to 7 cm in section 2. This SAND layer displays a sharp contact at its base and a gradational contact on top. In section 2, four thin SAND layers are present at 67, 85, 92 and 101 cm. Section 3 contains three SAND layers: 19-22 cm, 82-84 cm and 104-11 cm.
Hole 385-U1547A Core 22F, Interval 113.8-118.63 m (CSF-A)

This core consists of homogenous olive gray (5Y 4/2) DIATOM-RICH CLAYEY SILT. Note that this lithology is also present in the CC of Core 21F and in section 1 of Core 23F suggesting that this core is part of an almost 11-m-thick bed.
Hole 385-U1547A Core 23F, Interval 118.5-123.48 m (CSF-A)

This core consists of mainly olive gray (5Y 3/2) CLAY-RICH DIATOM OOZE with medium gray (N3) SAND intervals with tilted and scoured contacts in sections 1 and 2. A small carbonate concretion is present in section 1 at 125 cm. Laminated intervals are present in section 3.
This core consists of olive gray (5Y 3/2) DIATOM-RICH CLAYEY SILT with intervals of medium gray (N3) SAND in sections 1 (45-53 cm), 2 (36-37 cm; fine lamina at 120 and 128 cm), 3 (0 to 9 cm) and 4 (grades from granule to sand between 0 to 5 cm). Carbonate concretions are present at 44 cm in section 3 and at 18 cm in section 4.
This core is mainly composed of an alternation between olive gray (5Y 3/2) DIATOM-RICH SILTY CLAY and light olive gray (5Y 5/2) DIATOM-RICH MICRITE. LIMESTONE/DOLOSTONE is present at 67-74 cm in section 2. Carbonate concretions are also present in sections 1 (10.5-14 cm), 2 (60-67 cm, 74-77 cm, 111-117 cm) and 3 (83-86 cm). Dark gray (N3) SAND layers are present in sections 1 (7-10.5 cm, 92-96.5 cm), 2 (3-6 cm, 55-59 cm, 77-79 cm) and 3 (76-80 cm, 117-124 cm). Most sediments are highly disturbed by drilling (breccia, biscuits).
This core is composed of olive gray (5Y 3/2) DIATOM-RICH SILTY CLAY. Most sediments are highly disturbed by drilling (breccia, biscuits).

### Site U1547 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>
<th>Lith. unit</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>131.6</td>
<td>0</td>
<td>1</td>
<td>MAD</td>
<td></td>
<td>DIATOM-RICH SILTY CLAY</td>
<td></td>
<td>deformation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>132.6</td>
<td>100</td>
<td>2</td>
<td></td>
<td></td>
<td>Olive gray</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Hole 385-U1547A-26X Section 2, Top of Section: 132.75 m (CSF-A)

**LITHOLOGY:** basalt

**DESCRIPTION:** Sill

**COLOR:** bluish gray

**TEXTURE:** aphanitic

**PHENOCRYSTS:** absent

**GROUNDMASS:** microcline

**VESICLES:** highly vesicular

**UPPER CONTACT:** chilled margin/glassy margin

**ALTERATION:** moderately altered

**VEINS:** absent

Visual core descriptions
Hole 385-U1547A Core 27X, Interval 136.3-137.5 m (CSF-A)

This core is mainly composed of olive gray (5Y 3/2) DIATOM-RICH SILTY CLAY. Grayish black to black SAND layers are present in sections 2 (16-22 cm) and CC (2-5 cm, 15.5-18 cm). Dark gray (N3) pieces of BASALT are present in section 2 (43-53 cm, 54-58 cm). Most sediments are highly disturbed by drilling (breccia, biscuits).

<table>
<thead>
<tr>
<th>Depth CSFA (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</th>
<th>NGR (cps)</th>
<th>MS point (10^-5 SI)</th>
<th>Lith. unit</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>136.3</td>
<td>0</td>
<td>1</td>
<td>NANNO</td>
<td>DIAT</td>
<td>HS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>137.3</td>
<td>100</td>
<td>2</td>
<td>HS</td>
<td>DIAT</td>
<td>NANNO</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Visual core descriptions**

Site U1547 core descriptions
Hole 385-U1547A-27X Section 1, Top of Section: 136.3 m (CSF-A)

UNIT: 1
LITHOLOGY: basalt
DESCRIPTION: Sill
COLOR: bluish gray
TEXTURE: aphanitic
PHENOCRYSTS: absent
GROUNDMASS: microcline
VESICLES: highly vesicular
UPPER CONTACT:
LOWER CONTACT:
ALTERATION: moderately altered, pyrite crystals are present on the altered surface
VEINS: absent
COMMENT: a small piece of sedimentary rock observed from 22–27 cm, probably by drilling disturbance
**Hole 385-U1547A-27X Section 2, Top of Section: 136.6 m (CSF-A)**

<table>
<thead>
<tr>
<th>Depth (m)</th>
<th>Core length (cm)</th>
<th>Sample number</th>
<th>Lithology</th>
<th>Grain size distribution</th>
<th>Veins</th>
<th>Vein type</th>
<th>Vein connectivity</th>
<th>Vein texture</th>
<th>Magnetic susceptibility (10^-5 SI)</th>
<th>Reflectance</th>
</tr>
</thead>
<tbody>
<tr>
<td>136.6</td>
<td></td>
<td></td>
<td>basalt</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>136.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>136.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>136.9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>137.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>137.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>137.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**DESCRIPTION:** Sill

**COLOR:** gray

**TEXTURE:** aphanitic and aphyric

**PHENOCRYSTS:** none

**GROUNDMASS:** equigranular felty matrix

**VESICLES:** sparsely

**UPPER CONTACT:**

**LOWER CONTACT:**

**ALTERATION:** moderately altered

**VEINS:**

**SITE U1547 core descriptions**

**Visual core descriptions**

**Depth (m) | Core length (cm) | Sample number | Lithology | Grain size distribution | Veins | Vein type | Vein connectivity | Vein texture | Magnetic susceptibility (10^-5 SI) | Reflectance**

385-U1547A-27X-2-A, 42-63 cm

UNIT 1

LITHOLOGY: basalt

DESCRIPTION: Sill

COLOR: gray

TEXTURE: aphanitic and aphyric

PHENOCRYSTS: none

GROUNDMASS: equigranular felty matrix

VESICLES: sparsely

UPPER CONTACT:

LOWER CONTACT:

ALTERATION: moderately altered

VEINS:

**Magnetic susceptibility**

**Reflectance**

**100**

**80**

**60**

**40**

**20**

**10**

**0**

**-10**

**-20**

**-30**

**-40**

**-50**

**-60**

**-70**

**-80**

**-90**

**-100**
This core consists of olive gray (5Y 3/2) CLAY-RICH DIATOM OOZE. The first 40 cm of section 1 are soupy. Lamination is present at 77-104 cm in section 4 and throughout the section CC. Open burrows occur in sections 4 and 5.
Hole 385-U1547B Core 2H, Interval 6.2-16.09 m (CSF-A)

This core consists of olive gray (5Y 3/2) CLAY-RICH DIATOM Ooze. Lamination occurs in sections 1, 2, 4, 5, 6 and 7. Laminae display darker and lighter (moderate olive brown, 5Y 4/4; light olive gray, 5Y 5/2) colors. Light olive gray (5Y 5/2) band occurs at 85-119 cm in section 1 and is composed of DIATOM-RICH SILTY CLAY. Open burrows are present in sections 1 to 5. A terrigenous SILT lamina is present in section 1 at 85 cm. Shell fragments occur in sections 1 and 2.

Visual core descriptions

Site U1547 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</th>
<th>MS point (10^-5 SI)</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></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>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></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></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></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></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 U1547 core descriptions

Visual core descriptions

32
This core consists of olive gray (5Y 3/2) CLAY-RICH DIATOM OOZE. Lamination occurs in sections 1 to 7 and alternates with homogenous intervals. A light olive gray (5Y 5/2) layer occurs at 93-102 cm in section 5 and is composed of DIATOM-RICH SILTY CLAY. Open burrows occur in sections 1 and 5. Shell fragments occur in sections 6 and 3.
This core consists of olive gray (5Y 3/2) CLAY-RICH DIATOM OOZE. Laminated intervals alternate with homogenous intervals in sections 1 to 7. Shell fragments are present in sections 1, 2 and 4. Open burrows occur in section 1.
This core consists of olive gray (5Y 3/2) CLAY-RICH DIATOM OOZE. Laminated intervals are present in sections 1 and 2 as well as in sections 4 to CC. Relatively indurated yellowish gray (5Y 7/2) DIATOM-RICH MICRITE layers are present in sections 4 (93-106 cm), 6 (131-137 cm) and 7 (63-73 cm). A yellowish gray carbonate concretion is present in section 7 at 67-70 cm. Medium gray (N5) to dark gray (N3) layers and patches are present in sections 4 (112-116 cm), 5 (119-120.5 cm, 143-144 cm) and CC (9-11 cm). Open burrows occur in section 1. Shell fragments are present in sections 1, 2 and 4.

---

<table>
<thead>
<tr>
<th>Hole 385-U1547B Core 5H, Interval 34.7-44.66 m (CSF-A)</th>
</tr>
</thead>
<tbody>
<tr>
<td>This core consists of olive gray (5Y 3/2) CLAY-RICH DIATOM OOZE. Laminated intervals are present in sections 1 and 2 as well as in sections 4 to CC. Relatively indurated yellowish gray (5Y 7/2) DIATOM-RICH MICRITE layers are present in sections 4 (93-106 cm), 6 (131-137 cm) and 7 (63-73 cm). A yellowish gray carbonate concretion is present in section 7 at 67-70 cm. Medium gray (N5) to dark gray (N3) layers and patches are present in sections 4 (112-116 cm), 5 (119-120.5 cm, 143-144 cm) and CC (9-11 cm). Open burrows occur in section 1. Shell fragments are present in sections 1, 2 and 4.</td>
</tr>
</tbody>
</table>

---

<table>
<thead>
<tr>
<th>Core length (cm)</th>
<th>Depth 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 L* a* b*</th>
<th>MS point (10^5 SI)</th>
<th>NGR (cps)</th>
<th>Lith. unit</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>1</td>
<td>MAQ</td>
<td>HS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>RMS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<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></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></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></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></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></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 olive gray (5Y 3/2) CLAY-RICH DIATOM OOZE. Lamination is present in sections 1, 2, 6 and 7. Light olive gray intervals of MICRITE-RICH DIATOM OOZE are present in sections 1 (103 to 123 cm), 2 (from 72 to 86 cm), 5 (from 59 to 74 cm) and 7 (from 34 to 42 cm). In the two latter intervals, carbonate concretions are also present. A SAND layer occurs between 16 to 27 cm in section 6. The basal contact is scoured and the top consists of alternating SAND and DIATOM OOZE laminae.
This core consists of olive gray (5Y 3/2) CLAY-RICH DIATOM Ooze with light olive gray intervals of MICRITE-RICH DIATOM Ooze in sections 1 (27 to 35 cm), 5 (0 to 12 cm and 125 to 135 cm) and 6 (106 to 118 cm). Carbonate concretions are present in sections 1, 5 and 6. SILT laminae (ASH?) occur in sections 4 (41 cm) and 6 (22 to 28 cm).
This core consists of olive gray (5Y 3/2) MICRITE-BEARING CLAY-RICH DIATOM OOZE with lighter intervals of MICRITE-RICH DIATOM OOZE in sections 1, 2, 4, 6 and 7. Carbonate concretions are present in some of these intervals at 6 cm in section 1, at 56 cm in section 2, at 32 and 66 cm in section 4 and at 132 cm in section 6. The MICRITE-BEARING CLAY-RICH DIATOM OOZE is partially laminated in sections 1 and 2.

<table>
<thead>
<tr>
<th>Section</th>
<th>Core image</th>
<th>Depth CSF-A (m)</th>
<th>Core length (cm)</th>
<th>Lithology</th>
<th>Sedimentary structures</th>
<th>Drilling disturbance type</th>
<th>Reflectance</th>
<th>MS point (10^-5 SI)</th>
<th>NGR (cps)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>0</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td>73.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>2</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td>72.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>4</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td>71.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>6</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td>70.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>8</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td>69.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>10</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td>68.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td>12</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td>67.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Site U1547 core descriptions

Hole 385-U1547B Core 9H, Interval 72.7-82.62 m (CSF-A)

This core consists of homogenous olive gray (5Y 3/2) CLAY-RICH DIATOM Ooze with moderate olive gray (5Y 4/2) intervals of MICRIT-RICH DIATOM Ooze in section 1 between 114 and 134 cm and in section 4 between 51 to 68 cm. These two intervals contain carbonate concretions. In section 5, a darker interval occurs between 86 and 99 cm with a SAND to SILT laminae at its base. These laminae and sparse light laminae in sections 6 and 7 are tilted.
This core consists of homogenous olive gray (5Y 3/2) CLAY-RICH DIATOM OOZE with a dark yellowish brown MICRITE-RICH DIATOM OOZE encasing a carbonate concretion at the top of section 1 (0 to 20 cm). A small indurated layer of LIMESTONE/DOLomite is also present in section 2 at 46 cm. Sparse laminae are slightly tilted. Dark SILT laminae are present in section 1 at 138 cm and at 76 cm in section 4. In section 5, starting at 131 cm, a SAND layer fines upward into alternating SILT and MUD laminae. This 5-cm interval with SAND and SILT laminae is overlain by a finer-grained darker olive gray interval forming a ~1 m-thick depositional unit/bed.
Hole 385-U1547B Core 11X, Interval 90.5-90.56 m (CSF-A)

This consists of fragments of moderate olive brown (5Y4/4) 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>90.5</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>
<td></td>
</tr>
</tbody>
</table>
This core consists of homogenous olive gray (5Y 3/2) CLAY-RICH DIATOM OOZE with a silty interval in section 1 (at 92 cm) overlain by alternation of silty and clay-rich laminae. A MICRITE-RICH interval of DIATOM OOZE is present in section 3 at 104-106 cm.
This core consists of fragments of moderate olive brown (5Y4/4) LIMESTONE/DOLOSTONE.
This core consists of olive gray (5Y 3/2) CLAY-RICH DIATOM OOZE with a yellowish gray (5Y 7/2) LIMESTONE/DOLOSTONE layer at 63-68 cm in section 1. Lamination occurs in sections 1 (63-68 cm), 3 (62-97 cm), 4 (0-64 cm) and CC (0-17 cm). Filled burrows are present at 130-132 cm in section 1. Sediments in section 1 (0-43 cm) are highly disturbed by drilling (breccia).
This core consists of pale yellowish brown (10YR 6/2) pieces of LIMESTONE/DOLOSTONE. All sediments in section CC are highly disturbed by drilling (breccia).

<table>
<thead>
<tr>
<th>Hole 385-U1547B Core 15X, Interval 101.1-101.38 m (CSF-A)</th>
</tr>
</thead>
<tbody>
<tr>
<td>This core consists of pale yellowish brown (10YR 6/2) pieces of LIMESTONE/DOLOSTONE. All sediments in section CC are highly disturbed by drilling (breccia).</td>
</tr>
</tbody>
</table>

<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>101.1-101.38</td>
<td></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>

<table>
<thead>
<tr>
<th>Site U1547 core descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visual core descriptions</td>
</tr>
</tbody>
</table>

45
This core consists of olive gray (5Y 3/2) CLAY-RICH DIATOM Ooze with pale yellowish brown (10YR 6/2) LIMESTONE/DOLomite and DIATOM-RICH MICRITE layers at 0-23 cm in section 1 and at 17-24 cm in section CC. Shell fragments occur at 0-4 cm in section 1. Most sediments in section 1 are highly disturbed by drilling (breccia).
Hole 385-U1547B Core 17X, Interval 103.9-103.97 m (CSF-A)

This core consists of olive gray (5Y 3/2) CLAY-RICH DIATOM OOZE. All sediments in section CC are highly disturbed by drilling (breccia).

<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 SI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>103.9</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Hole 385-U1547B Core 18F, Interval 105.6-110.34 m (CSF-A)

This core consists of olive gray (5Y 3/2) to dark yellowish brown (10YR 4/2) CLAY-RICH DIATOM OOZE with medium gray (N5) DIATOM-RICH SILTY CLAY layers and laminae in sections 1 and 2. Normal fault occurs at 14-18 cm in section 2. Shell fragments occur at 33 cm in section 1 and at 26 cm in section 2. The top 48 cm of section 1 are highly disturbed by drilling (breccia).
Hole 385-U1547B Core 19F, Interval 110.3-115.1 m (CSF-A)

This core consists of homogenous dark yellowish brown (10YR 4/2) to dusky yellowish brown (10YR 2/2) CLAY-RICH DIATOM OOZE. Open burrows occur at 25-30 cm in section 2.

<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 SI)</th>
<th>Lith. unit</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>111.0</td>
<td>110</td>
<td><img src="1" alt="Core Image" /></td>
<td>CLAY-RICH DIATOM OOZE</td>
<td>Homogenous dark yellowish brown (10YR 4/2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>112.0</td>
<td>100</td>
<td><img src="2" alt="Core Image" /></td>
<td>CLAY-RICH DIATOM OOZE</td>
<td>Open burrows</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>113.0</td>
<td>90</td>
<td><img src="3" alt="Core Image" /></td>
<td>CLAY-RICH DIATOM OOZE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>114.0</td>
<td>80</td>
<td><img src="4" alt="Core Image" /></td>
<td>CLAY-RICH DIATOM OOZE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>115.0</td>
<td>70</td>
<td><img src="5" alt="Core Image" /></td>
<td>CLAY-RICH DIATOM OOZE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Hole 385-U1547B Core 20X, Interval 114.0-114.13 m (CSF-A)

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

<table>
<thead>
<tr>
<th>Depth CSFA (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>114.0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>96</td>
<td>2.92</td>
<td>1.5</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>
This core is composed of olive gray (6Y 3/2) CLAY-RICH DIATOM OOZE with medium gray (N5) to dark gray (N3) SAND layer intercalations in sections 1 (64-100 cm, 134-150 cm), 2 (30-45 cm, 59-98 cm) and 3 (8-15 cm). In sections 4 and CC, lamination is disturbed either by drilling or by soft sediment deformation. Two fragments of LIMESTONE/DOLOSTONE are present at 50-58 cm in section 1. The top 60 cm of section 1 are highly disturbed by drilling (breccia).
### Site U1547 core descriptions

#### Visual core descriptions

**Hole 385-U1547B Core 22F, Interval 119.3-120.64 m (CSF-A)**

This core consists of olive gray (5Y 3/2) DIATOM-RICH CLAYEY SILT with medium dark gray (N4) to dark gray (3) SAND intervals in section 1. Laminated intervals are present in section 1. The top 51 cm of section 1 and section CC are highly disturbed by drilling (breccia, suck-in).

<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>Li6.7 unit</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>120.2</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></td>
</tr>
</tbody>
</table>

**Visual Core Description**

- **Lithology:** Olive gray (5Y 3/2) DIATOM-RICH CLAYEY SILT with medium dark gray (N4) to dark gray (3) SAND intervals in section 1. Laminated intervals are present in section 1. The top 51 cm of section 1 and section CC are highly disturbed by drilling (breccia, suck-in).
Hole 385-U1547B Core 23X, Interval 119.8-120.49 m (CSF-A)

This core is composed of olive gray (5Y 3/2) CLAY-RICH DIATOM OOZE. Sediments of this core are highly disturbed by drilling (fall-in).

<table>
<thead>
<tr>
<th>Age (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>119.8</td>
<td>0</td>
<td>2</td>
<td></td>
<td></td>
<td>CLAY-RICH DIATOM OOZE</td>
<td></td>
<td></td>
<td></td>
<td>10</td>
<td>80</td>
<td>60</td>
<td>40</td>
<td></td>
</tr>
</tbody>
</table>

Drilling disturbance type:
- MS point (10^-5 SI)
- NGR (cps)
- Reflectance L* a* b*

Core image and visual core descriptions.
<table>
<thead>
<tr>
<th>Depth (CSF-A, cm)</th>
<th>Core length (cm)</th>
<th>Orientation</th>
<th>Piece number</th>
<th>Lithology</th>
<th>Lithology</th>
<th>Phanocrysts</th>
<th>Vein type</th>
<th>Sedimentary intermingled</th>
<th>Structure</th>
<th>Phenocrystal abundance (%)</th>
<th>Reflectance L* a* b*</th>
<th>Magnetic susceptibility (10^-5 SI)</th>
<th>VESICLES</th>
<th>ALTERATION</th>
<th>VEINS</th>
</tr>
</thead>
<tbody>
<tr>
<td>120.0</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>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>120.1</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>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>120.2</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>120.3</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>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>120.4</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>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>120.5</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>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Description**

385-U1547B-23X-2-A, 0-22 cm

UNIT: 1

LITHOLOGY: basalt

COLOR: light gray

TEXTURE: aphanitic and aphyric

PHENOCRYSTES: none

GROUNDMASS: equigranular felty matrix

VESICLES: moderate vesicular

UPPER CONTACT: absent

LOWER CONTACT: moderatey altered

VEINS: absent

385-U1547B-23X-2-A, 26-60 cm

UNIT: 1

LITHOLOGY: basalt

COLOR: light gray

TEXTURE: aphanitic and aphyric

PHENOCRYSTES: none

GROUNDMASS: equigranular felty matrix

VESICLES: moderate vesicular

UPPER CONTACT: absent

LOWER CONTACT: moderatey altered

VEINS: absent
This core consists of olive gray (5Y 3/2) DIATOM-RICH CLAYEY SILT. Sediments of this core are highly disturbed by drilling (fall-in, suck-in).
This core is mainly composed of olive gray (5Y 3/2) DIATOM-RICH SILTY CLAY. Sediments of this core are highly disturbed by drilling (suck-in).
This core is highly disturbed by drilling, consisting of a brecciated olive gray (5Y3/2) DIATOM-RICH SILTY 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>134.8</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>135.5</td>
<td>135.5</td>
<td>135.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>135.8</td>
<td>100</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>137.5</td>
<td>137.5</td>
<td>137.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>136.8</td>
<td>200</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>139.5</td>
<td>139.5</td>
<td>139.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>137.8</td>
<td>300</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>141.5</td>
<td>141.5</td>
<td>141.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>138.8</td>
<td>400</td>
<td>CC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>143.5</td>
<td>143.5</td>
<td>143.5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
This core is mainly composed of olive gray (5Y 3/2) DIATOM-RICH SILTY CLAY. Dark gray (N3) pieces of BASALT are present in section CC. Sediments of this core are highly disturbed by drilling (breccia).

<table>
<thead>
<tr>
<th>Depth CSFA (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>139.5</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>1D</td>
</tr>
</tbody>
</table>
Hole 385-U1547B Core 28F, Interval 144.2-147.7 m (CSF-A)

This core is mainly composed of olive gray (5Y 3/2) DIATOM-RICH SILTY CLAY. Sediments of this core are highly disturbed by drilling (breccia).
Hole 385-U1547B Core 29F, Interval 148.9-152.43 m (CSF-A)

This core consists of drilling brecciated grayish brown (5YR 3/2) and dark yellowish brown (10YR 4/2) SILICEOUS CLAYSTONE. In the upper part of section 1, the grayish brown CLAYSTONE breccia is mixed with gravel of different types suggesting “Fall in” disturbance. In the CC, pieces of BASALT are mixed with a soupy mud.
385-U1547B-30X-1-A, 0-63.5 cm

UNIT: 1

LITHOLOGY: basalt

DESCRIPTION: Sill

COLOR: dark gray

TEXTURE: aphanitic

PHENOCRYSTS: absent

GROUNDMASS: microcline

VESICLES: highly vesicular

UPPER CONTACT: 

LOWER CONTACT: 

ALTERATION: moderately altered

VEINS: absent
**Hole 385-U1547B-31X Section 1, Top of Section: 154.6 m (CSF-A)**

<table>
<thead>
<tr>
<th>Depth (m)</th>
<th>Core length (cm)</th>
<th>Orientation</th>
<th>Piece number</th>
<th>Core length</th>
<th>Scanned image</th>
</tr>
</thead>
<tbody>
<tr>
<td>154.6</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>154.7</td>
<td>10</td>
<td></td>
<td>03</td>
<td></td>
<td></td>
</tr>
<tr>
<td>154.9</td>
<td>20</td>
<td></td>
<td>06</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**LITHOLOGY:** basalt

**DESCRIPTION:** Sill

**COLOR:** dark gray

**TEXTURE:** aphanitic

**PHENOCRYSTS:** absent

**GROUNDMASS:** microcline

**VESICLES:** highly vesicular

**UPPER CONTACT:**

**LOWER CONTACT:**

**ALTERATION:** moderately altered

**VEINS:** absent

**Visual core descriptions**

385-U1547B-31X-1-A, 0.24 cm

**LITHOLOGY:** basalt

**DESCRIPTION:** Sill

**COLOR:** dark gray

**TEXTURE:** aphanitic

**PHENOCRYSTS:** absent

**GROUNDMASS:** microcline

**VESICLES:** highly vesicular

**UPPER CONTACT:**

**LOWER CONTACT:**

**ALTERATION:** moderately altered

**VEINS:** absent
Hole 385-U1547B-32F Section CC, Top of Section: 157.3 m (CSF-A)

<table>
<thead>
<tr>
<th>Depth/FL (m)</th>
<th>Core length (cm)</th>
<th>Core orientation</th>
<th>Scattered image</th>
<th>Lithology</th>
<th>Glass</th>
<th>Phosphate</th>
<th>Vein type</th>
<th>Vein connectivity</th>
<th>Vesicularity</th>
<th>Gypsum</th>
<th>Reflectance</th>
<th>Magnetic susceptibility</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>157.3</td>
<td>0</td>
<td></td>
<td></td>
<td>basalt</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>157.4</td>
<td>10</td>
<td></td>
<td></td>
<td>basalt</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>157.5</td>
<td>20</td>
<td></td>
<td></td>
<td>basalt</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

UNIT: 1
LITHOLOGY: basalt
DESCRIPTION: Sill, lots of small rock pieces, most is basalt. A few sedimentary rocks
COLOR: dark gray
TEXTURE: aphanitic and aphyric
PHENOCRYSTs: none
GROUNDMASS: equigranular felty matrix
VESICLES: highly vesicular
UPPER CONTACT: 
LOWER CONTACT: 
ALTERATION: slightly altered
VEINS:

385-U1547B-32F, CC-A, 0-24 cm
UNIT: 1
LITHOLOGY: basalt
DESCRIPTION: Sill, lots of small rock pieces, most is basalt. A few sedimentary rocks
COLOR: dark gray
TEXTURE: aphanitic and aphyric
PHENOCRYSTs: none
GROUNDMASS: equigranular felty matrix
VESICLES: highly vesicular
UPPER CONTACT: 
LOWER CONTACT: 
ALTERATION: slightly altered
VEINS:
**Description**

- **Unit**: 1
- **Lithology**: basalt
- **Description**: Sill
- **Color**: dark gray
- **Texture**: aphanitic
- **Phenocrysts**: absent
- **Groundmass**: microcline
- **Vesicles**: highly vesicular
- **Upper Contact**: 
- **Lower Contact**: 
- **Alteration**: moderately altered
- **Veins**: calcite vein (between 20-30cm)

**Site U1547 core descriptions**

<table>
<thead>
<tr>
<th>Depth (m)</th>
<th>Core length (cm)</th>
<th>Orientation</th>
<th>Core number</th>
<th>Sampled flag</th>
<th>Lithology</th>
<th>Visual core descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>158.8</td>
<td>0</td>
<td></td>
<td>01</td>
<td></td>
<td>basalt</td>
<td></td>
</tr>
<tr>
<td>158.9</td>
<td>10</td>
<td></td>
<td>02</td>
<td></td>
<td>basalt</td>
<td></td>
</tr>
<tr>
<td>159.0</td>
<td>20</td>
<td></td>
<td>03</td>
<td></td>
<td>basalt</td>
<td></td>
</tr>
<tr>
<td>159.1</td>
<td>30</td>
<td></td>
<td>04</td>
<td></td>
<td>basalt</td>
<td></td>
</tr>
<tr>
<td>159.2</td>
<td>40</td>
<td></td>
<td>05</td>
<td></td>
<td>basalt</td>
<td></td>
</tr>
</tbody>
</table>

**Visual core descriptions**

- **Hole 385-U1547B-33X Section 1, Top of Section: 158.8 m (CSF-A)**

  - **Lithology**: basalt
  - **Description**: Sill
  - **Texture**: aphanitic
  - **Vesicles**: highly vesicular
  - **Veins**: calcite vein (between 20-30cm)
  - **Alteration**: moderately altered

**Additional Data**

- **Lithology**: basalt
- **Color**: dark gray
- **Texture**: aphanitic
- **Phenocrysts**: absent
- **Groundmass**: microcline
- **Vesicles**: highly vesicular
- **Veins**: calcite vein (between 20-30cm)
- **Alteration**: moderately altered
385-U1547B-34X-1-A, 0-82 cm
UNIT: 1
LITHOLOGY: basalt
DESCRIPTION: Sill
COLOR: bluish gray
TEXTURE: aphanitic
PHENOCRYSTS: absent
GROUNDMASS: microcline
VESICLES: highly vesicular
UPPER CONTACT: 
LOWER CONTACT: 
ALTERATION: highly altered, pyrite crystals are present in the vesicles with calcite
VEINS: absent
Hole 385-U1547B-35X Section 1, Top of Section: 166.0 m (CSF-A)

385-U1547B-35X-1-A, 0-125 cm

UNIT: 1
LITHOLOGY: basalt
DESCRIPTION: Sill
COLOR: bluish gray
TEXTURE: aphanitic
PHENOCRYSTS: absent
GROUNDMASS: microcline
VESICLES: highly vesicular
UPPER CONTACT: 
LOWER CONTACT: 
ALTERATION: highly altered, pyrite crystals are present in the vesicles with calcite
VEINS: absent
385-U1547B-36X Section 1, Top of Section: 169.0 m (CSF-A)

UNIT: 1
LITHOLOGY: basalt
DESCRIPTION: Sill
COLOR: bluish gray
TEXTURE: aphanitic
PHENOCRYSTS: absent
GROUNDMASS: microcline
VESICLES: highly vesicular
ALTERATION: highly altered, pyrite crystals are present in the vesicles with calcite
VEINS: dendritic (71-80 cm)

Hole 385-U1547B-36X-1-A, 0-91 cm

UNIT: 1
LITHOLOGY: basalt
DESCRIPTION: Sill
COLOR: bluish gray
TEXTURE: aphanitic
PHENOCRYSTS: absent
GROUNDMASS: microcline
VESICLES: highly vesicular
ALTERATION: highly altered, pyrite crystals are present in the vesicles with calcite
VEINS: dendritic (71-80 cm)
385-U1547B-37X-1-A, 0-129 cm

UNIT: 1
LITHOLOGY: basalt
DESCRIPTION: Sill
COLOR: dark gray
TEXTURE: aphanitic
PHENOCRYSTS: absent
GROUNDMASS: microcline
VESICLES: highly vesicular
UPPER CONTACT:
LOWER CONTACT:
ALTERATION: moderately altered
VEINS: present (0-12 cm)
**Hole 385-U1547B-38X Section 1, Top of Section: 175.0 m (CSF-A)**

<table>
<thead>
<tr>
<th>Depth (m)</th>
<th>Core length (cm)</th>
<th>Orientation</th>
<th>Lithology</th>
<th>Lithology unit</th>
<th>Lithostatigraphic unit</th>
<th>Sediment intermingled</th>
<th>Vein connectivity</th>
<th>Vein texture</th>
<th>Phenocrysts abundance (%)</th>
<th>Grain size distribution</th>
<th>Vesicularity (mm)</th>
<th>Upper contact</th>
<th>Lower contact</th>
<th>Alteration</th>
<th>Veins</th>
</tr>
</thead>
<tbody>
<tr>
<td>175.0</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>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>175.1</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>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>175.2</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>175.3</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>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>175.4</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>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>175.5</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>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>175.6</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>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Description**: Sill

**Color**: gray

**Texture**: aphanitic and aphyric

**Phenocrysts**: none

**Groundmass**: equigranular felty matrix

**Vesicles**: Sparsely

**Alteration**: moderately altered

**Veins**: None

**Site U1547 core descriptions**

**Visual core descriptions**
385-U1547B-39X Section 1, Top of Section: 179.7 m (CSF-A)

UNIT: 1
LITHOLOGY: basalt
DESCRIPTION: Sill
COLOR: bluish gray
TEXTURE: aphanitic and aphyric
PHENOCRYSTS: none
GROUNDMASS: equigranular felty matrix
VESICLES: highly vesicular
UPPER CONTACT:
LOWER CONTACT:
ALTERATION: moderately altered
VEINS:

Site U1547 core descriptions
Visual core descriptions
Hole 385-U1547B-39X Section 2, Top of Section: 181.15 m (CSF-A)

UNIT: 1  
LITHOLOGY: basalt  
DESCRIPTION: Sill  
COLOR: dark gray  
TEXTURE: aphanitic  
PHENOCRYSTS: absent  
GROUNDMASS: microcline  
VESICLES: highly vesicular  
UPPER CONTACT:  
LOWER CONTACT:  
ALTERATION: moderately altered  
VEINS: present (21-27 cm)
### Lithology: Basalt

**Description:** Sill

**Color:** bluish gray

**Texture:** aphanitic

**Phenocrysts:** absent

**Groundmass:** microcline

**Vesicles:** highly vesicular

**Upper Contact:**

**Lower Contact:**

**Alteration:** highly altered, pyrite crystals are present in the vesicles with calcite

**Veins:** present (51-61 cm; 105-115 cm; 123-129 cm)

---

**Site U1547 core descriptions**

**Visual core descriptions**

---

**Hole 385-U1547B-40X Section 1, Top of Section: 183.7 m (CSF-A)**

**Depth from CSF-A (m):**

- **Core length (cm):**

- **Core number:**

- **Orientation:**

- **Core number:**

- **Sample number:**

- **Lithology:**

- **Lithology:**

- **Scanned image:**

- **Lithology:**

- **Glass:**

- **Phenocrysts:**

- **Vein texture:**

- **Vein connectivity:**

- **Dip angle:**

- **Sediment intermingled:**

- **Vein connectivity:**

- **Vein texture:**

- **Phenocrysts:**

- **Plagioclase, olivine, clinopyroxene abundance:**

- **Bimodal:**

- **Inequigranular:**

- **Equigranular:**

---

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

- **MS Point:**

- **Reflectance:**

- **L* a* b*:**

- **L* a* b*:**

- **Reflectance:**

- **L* a* b*:**

---

**Site U1547 core descriptions**

**Visual core descriptions**

---

385-U1547B-40X-1-A, 0-140 cm

**Unit 1:**

**Lithology:** basalt

**Color:** bluish gray

**Texture:** aphanitic

**Phenocrysts:** absent

**Groundmass:** microcline

**Vesicles:** highly vesicular

**Upper Contact:**

**Lower Contact:**

**Alteration:** highly altered, pyrite crystals are present in the vesicles with calcite

**Veins:** present (51-61 cm; 105-115 cm; 123-129 cm)
Hole 385-U1547B-40X Section 2, Top of Section: 185.1 m (CSF-A)

UNIT: 1
LITHOLOGY: basalt
DESCRIPTION: Sill
COLOR: dark gray
TEXTURE: aphanitic
PHENOCRYSTS: absent
GROUNDMASS: microcline
VESICLES: highly vesicular
UPPER CONTACT:
LOWER CONTACT:
ALTERATION: moderately altered
VEINS: present (0-11 cm)

Site U1547 core descriptions
Visual core descriptions
Hole 385-U1547B-41X Section 1, Top of Section: 189.1 m (CSF-A)

- **Unit:** 1
- **Lithology:** Basalt
- **Description:** Sill
- **Color:** Light gray
- **Texture:** Aphanitic and aphyric
- **Phenocrysts:** None
- **Groundmass:** Equigranular felty matrix
- **Vesicles:** Moderate vesicular
- **Upper Contact:**
- **Lower Contact:**
- **Alteration:** Moderately altered
- **Veins:** Two veins

**Visual Core Descriptions**

- **Depth:** 189.1 m
- **Core length:** 10 cm
- **Piece number:** 01
- **Orientation:**
- **Site:** U1547

**Magnetic Susceptibility**

**Reflectance**

**Phenocrysts Abundance**

**Reflectance**

**Grain Size Distribution**

**Vesicularity**

**Vein Connectivity**

**Vein Texture**

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

**Core Length (cm)**

**Depth CSF-A (m)**

**Visual Core Descriptions**

- **385-U1547B-41X-1-A, 0-189 cm**
- **Unit:** 1
- **Lithology:** Basalt
- **Description:** Sill
- **Color:** Light gray
- **Texture:** Aphanitic and aphyric
- **Phenocrysts:** None
- **Groundmass:** Equigranular felty matrix
- **Vesicles:** Moderate vesicular
- **Upper Contact:**
- **Lower Contact:**
- **Alteration:** Moderately altered
- **Veins:** Two veins
**SITE U1547:**

**HOLE 385-U1547B-41X Section 2, Top of Section: 190.49 m (CSF-A)**

**UNIT:** 1

**LITHOLOGY:** basalt

**DESCRIPTION:** Sill

**COLOR:** light gray

**TEXTURE:** aphanitic and aphyric

**PHENOCRYSTS:** none

**GROUNDMASS:** equigranular felty matrix

**VESICLES:** moderate vesicular

**UPPER CONTACT:**

**LOWER CONTACT:**

**ALTERATION:** moderate altered

**VEINS:**

---

### Visual Core Descriptions

- **Magnetic susceptibility (10^-5 SI):**
  - MS Point 1500
  - MS Point 1000
  - MS Point 500
  - MS Point 0

- **Reflectance ($L^* a^* b^*$):**
  - 84
  - 64
  - 44
  - 24
  - 3.8
  - 2.8
  - 1.8
  - 0.8
  - -0.4
  - -2.4
  - -4.4
  - -6.4
  - -8.4

- **Phenocrysts:**
  - PLAG, OL, Cpx

- **Phenocrysts abundance (%):**
  - 20
  - 15
  - 10
  - 5
  - 0

- **Grain size distribution:**

- **Vesicularity:**

- **Vein type:**

- **Structure:**

- **Lith. unit:**

- **Lithology:**

- **Scanned image:**

- **Shipboard samples:**

- **Orientation:**

- **Core length (cm):**

- **Depth CSF-A (m):**

---

**385-U1547B-41X-2-A, 0-81 cm**

**UNIT:** 1

**LITHOLOGY:** basalt

**COLOR:** light gray

**TEXTURE:** aphanitic and aphyric

**PHENOCRYSTS:** none

**GROUNDMASS:** equigranular felty matrix

**VESICLES:** moderate vesicular

**UPPER CONTACT:**

**LOWER CONTACT:**

**ALTERATION:** moderate altered

**VEINS:**

---

**Visual core descriptions**

---

**75**
385-U1547B-42X-1-A, 0-144 cm

UNIT: 1

LITHOLOGY: basalt

DESCRIPTION: Sill

COLOR: light gray

TEXTURE: aphanitic and aphyric

PHENOCRYSTs: none

GROUNDMASS: equigranular felty matrix

VESICLES: moderate vesicular

UPPER CONTACT:

LOWER CONTACT:

ALTERATION: moderately altered

VEINS: one vein

Hole 385-U1547B-42X Section 1, Top of Section: 192.4 m (CSF-A)

Site U1547 core descriptions

Visual core descriptions

Depth CSF-A (m) 
Core length (cm)
Piece number
Orientation
Shipboard sample
Scanned image
Lithology
Glass
Lith. unit
Structure
Vein type
Vein texture
Vein connectivity
Dip angle (°)
Sediment intermingled
Vesicularity

Reflectance
L* a* b*

Magnetic susceptibility (10^-5 SI)
MS WR
MS Point

Phenocrysts

PLAG, OL, CPX

abundance (%)

20
15
10
5
0

Bimodal
Inequigranular
Eqigranular

Site U1547 core descriptions

Visual core descriptions
LITHOLOGY: basalt
DESCRIPTION: Sill
COLOR: light gray
TEXTURE: aphanitic and aphyric
PHENOCRYSTS: none
GROUNDMASS: equigranular felty matrix
VESICLES: moderate vesicular
UPPER CONTACT: 
LOWER CONTACT: 
ALTERATION: moderately altered
VEINS: 

385-U1547B-42X-2-A

Hole 385-U1547B-42X Section 2, Top of Section: 193.84 m (CSF-A)

UNIT: 1
LITHOLOGY: basalt
DESCRIPTION: Sill
COLOR: light gray
TEXTURE: aphanitic and aphyric
PHENOCRYSTS: none
GROUNDMASS: equigranular felty matrix
VESICLES: moderate vesicular
UPPER CONTACT: 
LOWER CONTACT: 
ALTERATION: moderately altered
VEINS: 

Site U1547 core descriptions
Visual core descriptions

Depth (CSF-A m)
Core length (cm)
Core number
Orientation
Sampled length
Scanned image
Lithology
Glass
Ash, vet
Rocks
Bimodal
Inequigranular
Equigranular

Phenocrystals
abundance (%)
10
20
30
40
50
60
70
80
90
100

Reflectance
L* a* b*
L* a* b*
L* a* b*
L* a* b*

Magnetic susceptibility
(10-5 SI)
100
75
50
30
80
130

Phenocrysts
PLAG, OL, CPX
abundance (%)
20
15
10
5
0

Bimodal
Inequigranular
Equigranular


d Description

385-U1547B-42X-2-A 385-U1547B-42X-1-A, 0-32 cm
UNIT: 1
LITHOLOGY: basalt
DESCRIPTION: Sill
COLOR: light gray
TEXTURE: aphanitic and aphyric
PHENOCRYSTS: none
GROUNDMASS: equigranular felty matrix
VESICLES: moderate vesicular
UPPER CONTACT: 
LOWER CONTACT: 
ALTERATION: moderately altered
VEINS: 
UNIT: 1
LITHOLOGY: basalt
DESCRIPTION: Sill
COLOR: light gray
TEXTURE: aphanitic and aphyric
PHENOCRYSTS: none
GROUNDMASS: equigranular felty matrix
VESICLES: moderate vesicular
UPPER CONTACT:
LOWER CONTACT:
ALTERATION: moderately altered
VEINS: several veins

Site U1547 core descriptions

Visual core descriptions

385-U1547B-43X-1-A, 0-145 cm
LITHOLOGY: basalt
DESCRIPTION: Sill
COLOR: light gray
TEXTURE: aphanitic and aphyric
PHENOCRYSTS: none
GROUNDMASS: equigranular felty matrix
VESICLES: moderate vesicular
UPPER CONTACT:
LOWER CONTACT:
ALTERATION: moderately altered
VEINS: several veins
Hole 385-U1547B-43X Section 2, Top of Section: 200.05 m (CSF-A)

**Lithology**: Basalt

**Description**: Sill

**Color**: Gray

**Texture**: Aphanitic and aphyric

**Phenocrysts**: None

**Groundmass**: Equigranular felty matrix

**Vesicles**: Moderate vesicular

**Upper Contact**:

**Lower Contact**:

**Alteration**: Moderately altered

**Veins**:

**ID**

<table>
<thead>
<tr>
<th>Piece number</th>
<th>Orientation</th>
<th>Core length (cm)</th>
<th>Depth CSF-A (m)</th>
<th>Lithology</th>
<th>Lith. unit</th>
<th>Scanned image</th>
<th>Glass</th>
<th>Phenocrysts</th>
<th>Vesicularity</th>
<th>Vein type</th>
<th>Structure</th>
<th>VESICLES</th>
<th>Alteration</th>
<th>Vein connectivity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td>200.05</td>
<td>Basalt</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>01</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>
<td></td>
<td></td>
</tr>
<tr>
<td>02</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>
<td></td>
<td></td>
</tr>
<tr>
<td>03</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>
<td></td>
<td></td>
</tr>
<tr>
<td>04</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>
<td></td>
<td></td>
</tr>
<tr>
<td>05</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>
<td></td>
<td></td>
</tr>
<tr>
<td>06</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>
<td></td>
<td></td>
</tr>
<tr>
<td>07</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>
<td></td>
<td></td>
</tr>
<tr>
<td>08</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>
<td></td>
<td></td>
</tr>
</tbody>
</table>

385-U1547B-43X-2-A, 0-15 cm

**UNIT**: 1

**DESCRIPTION**: Sill

**COLOR**: Gray

**TEXTURE**: Aphanitic and aphyric

**PHENOCRYSTS**: None

**GROUNDMASS**: Equigranular felty matrix

**VESICLES**: Moderately vesicular

**UPPER CONTACT**: None

**LOWER CONTACT**: None

**ALTERATION**: Moderately altered

**VEINS**: None
Hole 385-U1547B-44X Section 1, Top of Section: 203.1 m (CSF-A)

**Description**
- **Lithology**: basalt
- **Color**: dark gray
- **Texture**: porphyritic
- **Phenocrysts**: plagioclase
- **Groundmass**: microcline
- **Vesicles**: moderately vesicular
- **Upper Contact**: 
- **Lower Contact**: 
- **Alteration**: moderately altered
- **Veins**: sedimentary vein that has nannofossils (29-50 cm)

**Visual core descriptions**

385-U1547B-44X-1-A, 0-89 cm
- **Unit**: 1
- **Lithology**: basalt
- **Description**: Sill
- **Texture**: porphyritic
- **Phenocrysts**: plagioclase
- **Groundmass**: microcline
- **Vesicles**: moderately vesicular
- **Upper Contact**: 
- **Lower Contact**: 
- **Alteration**: moderately altered
- **Veins**: sedimentary vein that has nannofossils (29-50 cm)
**LITHOLOGY:** basalt

**DESCRIPTION:** Sill

**COLOR:** gray

**TEXTURE:** aphanitic and aphyric

**PHENOCRYSTS:** none

**GROUNDMASS:** equigranular felty matrix

**VESICLES:** none

**UPPER CONTACT:**

**LOWER CONTACT:**

**ALTERATION:** highly altered

**VEINS:** branched vein

---

### Site U1547 core descriptions

**385-U1547B-45X-1-A, 0-55 cm**

**UNIT:** 1

**DESCRIPTION:** Sill

**TEXTURE:** aphanitic and aphyric

**VESICLES:** none

**UPPER CONTACT:**

**LOWER CONTACT:**

**ALTERATION:** highly altered

**VEINS:** branched vein

---

### Visual core descriptions

**385-U1547B-45X-1-A, 0-55 cm**

**UNIT:** 1

**DESCRIPTION:** Sill

**TEXTURE:** aphanitic and aphyric

**VESICLES:** none

**UPPER CONTACT:**

**LOWER CONTACT:**

**ALTERATION:** highly altered

**VEINS:** branched vein
**Hole 385-U1547B-46X Section 1, Top of Section: 205.6 m (CSF-A)**

- **LITHOLOGY:** basalt
- **DESCRIPTION:** Sill
- **COLOR:** dark gray
- **TEXTURE:** aphanitic and aphyric
- **PHENOCRYSTS:** none
- **GROUNDMASS:** equigranular felty matrix
- **VESICLES:** none
- **ALTERATION:** highly altered
- **VEINS:** branched vein

**Site U1547 core descriptions**

<table>
<thead>
<tr>
<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>ALTERATION</th>
<th>VEINS</th>
</tr>
</thead>
<tbody>
<tr>
<td>205.6</td>
<td>basalt</td>
<td>Sill</td>
<td>dark gray</td>
<td>aphanitic and aphyric</td>
<td>none</td>
<td>equigranular felty matrix</td>
<td>none</td>
<td>highly altered</td>
<td>branched vein</td>
</tr>
</tbody>
</table>

**Visual core descriptions**

- **Orientation:** sample orientation
- **Lithology:** visual core descriptions
- **Core length (cm):** 20 cm
- **Scanned image:** hole 385-U1547B-46X-1-A, 0-22 cm
### Site U1547 core descriptions

#### Visual core descriptions

**Hole 385-U1547B-47X Section 1, Top of Section: 206.0 m (CSF-A)**

<table>
<thead>
<tr>
<th>Depth (CSF-A) (m)</th>
<th>Core length (cm)</th>
<th>Orientation</th>
<th>Piece number</th>
<th>Scanned image</th>
<th>Lithology</th>
<th>Glass</th>
<th>Phenocryst</th>
<th>Vein type</th>
<th>Vein texture</th>
<th>Vein connectivity</th>
<th>Op. angle (°)</th>
<th>Sediment intermingled</th>
<th>Magnetic susceptibility (10^-5 SI)</th>
<th>Reflectance L* a* b*</th>
<th>Phenocryst abundance (%)</th>
<th>Grain size distribution</th>
<th>Vesicularity</th>
<th>Grain size (µm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>206.0</td>
<td>0</td>
<td></td>
<td>01</td>
<td></td>
<td>basalt</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>206.1</td>
<td>10</td>
<td></td>
<td>02</td>
<td></td>
<td>basalt</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>206.2</td>
<td>20</td>
<td></td>
<td>03</td>
<td></td>
<td>basalt</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>206.3</td>
<td>30</td>
<td></td>
<td>04</td>
<td></td>
<td>basalt</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>206.4</td>
<td>40</td>
<td></td>
<td>05</td>
<td></td>
<td>basalt</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>206.5</td>
<td>50</td>
<td></td>
<td>06</td>
<td></td>
<td>basalt</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>

385-U1547B-47X-1-A, 0-43 cm
- **UNIT**: 1
- **LITHOLOGY**: basalt
- **DESCRIPTION**: Sill
- **COLOR**: gray
- **TEXTURE**: aphanitic and aphyric
- **PHENOCRYSTS**: none
- **GROUNDMASS**: equigranular felty matrix
- **VESICLES**: none
- **UPPER CONTACT**: moderate alteration
- **LOWER CONTACT**: moderate alteration
- **VEINS**: several veins

385-U1547B-47X-1-A, 43-63 cm
- **UNIT**: 1
- **LITHOLOGY**: basalt
- **DESCRIPTION**: Sill
- **COLOR**: gray
- **TEXTURE**: aphanitic and aphyric
- **PHENOCRYSTS**: none
- **GROUNDMASS**: equigranular felty matrix
- **VESICLES**: highly vesicular
- **UPPER CONTACT**: moderate alteration
- **LOWER CONTACT**: moderate alteration
- **VEINS**: several veins
Hole 385-U1547B-48X Section 1, Top of Section: 207.1 m (CSF-A)

- **LITHOLOGY:** basalt
- **DESCRIPTION:** Sill
- **COLOR:** dark gray
- **TEXTURE:** aphanitic
- **PHENOCRYSTS:** absent
- **GROUNDMASS:** microcline
- **VESICLES:** highly vesicular
- **UPPER CONTACT:**
- **LOWER CONTACT:**
- **ALTERATION:** moderately altered
- **VEINS:** absent

**Site U1547 core descriptions**

**Visual core descriptions**
**Description**

- ** lithology:** basalt
- ** description:** Sill
- ** color:** dark gray
- ** texture:** aphanitic
- ** phenocrysts:** 2% pyroxene
- ** groundmass:** microcline
- ** vesicles:** non vesicular
- ** upper contact:**
- ** lower contact:**
- ** alteration:** moderately altered
- ** veins:** present (0-10 cm; 24-30 cm; 37-41 cm)

**Table**

<table>
<thead>
<tr>
<th>Description</th>
<th>Grain size distribution</th>
<th>Vesicularity</th>
<th>Vein type</th>
<th>Structure</th>
<th>Lith. unit</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>HOLE 385-U1547B-49X Section 1, Top of Section: 208.6 m (CSF-A)</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></td>
<td></td>
</tr>
</tbody>
</table>
### Hole 385-U1547B-50X Section 1, Top of Section: 209.2 m (CSF-A)

- **Unit:** 1
- **Lithology:** basalt
- **Description:** Sill
- **Color:** dark gray
- **Texture:** aphanitic
- **Phenocrysts:** 2% pyroxene
- **Groundmass:** microcline
- **Vesicles:** non-vesicular
- **Upper Contact:**
- **Lower Contact:**
- **Alteration:** moderately altered
- **Veins:** present (50-52 cm)

---

<table>
<thead>
<tr>
<th>Core number</th>
<th>Core length (cm)</th>
<th>Orientation</th>
<th>Piece number</th>
<th>Core length (cm)</th>
<th>Depth CSF-A (m)</th>
<th>Lithology</th>
<th>Color</th>
<th>Texture</th>
<th>Veins</th>
<th>Alteration</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</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>02</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>03</td>
<td>20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>04</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>05</td>
<td>40</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>06</td>
<td>50</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>07</td>
<td>60</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>08</td>
<td>70</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 U1547 core descriptions**
### Hole 385-U1547C Core 11, Interval 0.0-0.0 m (CSF-A)

**DRILLED INTERVAL 0.0-81.3 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>
This core consists of olive gray (5Y 5/2) LIMESTONE/DOLOSTONE with laminae and burrows on top of the section CC and olive gray (5Y 3/2) MICRITE-BEARING DIATOM Ooze.
This core consists of intensely fractured and biscuited olive gray (5Y 3/2) DIATOM SILTY CLAY.
Hole 385-U1547C Core 4R, Interval 100.8-100.98 m (CSF-A)

This core consists of olive gray (5Y 4/1) 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 (10^6 Si)</th>
<th>Lith. unit</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>100.8</td>
<td></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>

Site U1547 core descriptions

Visual core descriptions
This core consists of olive gray (5Y 4/1) 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>110.5</td>
<td></td>
<td>C0</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-U1547C Core 5R, Interval 110.5-110.68 m (CSF-A)
This core consists of intensely fractured and biscuited olive gray (5Y 3/2) NANOFOSSIL-RICH DIATOM CLAY, and light olive gray (5Y 5/2) LIMESTONE/DOLOSTONE.
385-U1547C-7R-1-A, 0-11 cm
UNIT: 1
LITHOLOGY: limestone/dolostone
DESCRIPTION: COLOR: yellowish gray

385-U1547C-7R-1-A, 11-150 cm
UNIT: 1
LITHOLOGY: basalt
DESCRIPTION: Sill
COLOR: gray
TEXTURE: aphyric
GROUNDMASS: felty
VESICLES: sparsely vesicular
UPPER CONTACT: 
LOWER CONTACT: 
ALTERATION: moderately to highly altered
VEINS: Y

Comments: peperite and brecciated basalt intervals appear with glass margin. Description of intervals subjected to microbiology sampling were based on fragments that remained from sample processing, pertaining to offset from 72 to 78 cm.
385-U1547C-7R-2-A, 0-6 cm
UNIT: 1
LITHOLOGY: basalt
DESCRIPTION: Sill
COLOR: gray
TEXTURE: aphanitic and aphyric
PHENOCRYSTS: none
GROUNDMASS: equigranular felty matrix
VESICLES: non vesicular
UPPER CONTACT:
LOWER CONTACT:
ALTERATION: moderately altered
VEINS: absent

385-U1547C-7R-2-A, 6-37 cm
UNIT: 1
LITHOLOGY: basalt
DESCRIPTION: Sill
COLOR: gray
TEXTURE: aphanitic and aphyric
PHENOCRYSTS: none
GROUNDMASS: equigranular felty matrix
VESICLES: sparsely vesicular
UPPER CONTACT:
LOWER CONTACT:
ALTERATION: moderately altered
VEINS: absent

385-U1547C-7R-2-A, 59-76 cm
UNIT: 1
LITHOLOGY: basalt
DESCRIPTION: Sill
COLOR: gray
TEXTURE: aphanitic and aphyric
PHENOCRYSTS: none
GROUNDMASS: equigranular felty matrix
VESICLES: highly vesicular
UPPER CONTACT:
LOWER CONTACT:
ALTERATION: moderately altered
VEINS: absent

385-U1547C-7R-2-A, 76-92 cm
UNIT: 1
LITHOLOGY: basalt
DESCRIPTION: Sill
COLOR: gray
TEXTURE: aphanitic and aphyric
PHENOCRYSTS: none
GROUNDMASS: equigranular felty matrix
VESICLES: non vesicular
UPPER CONTACT:
LOWER CONTACT:
ALTERATION: slightly altered
VEINS: absent
**Hole 385-U1547C-8R Section 2, Top of Section: 141.2 m (CSF-A)**

**UNIT: 1**

**LITHOLOGY:** basalt

**DESCRIPTION:** Sill

**COLOR:** light gray

**TEXTURE:** aphyric

**GROUNDMASS:** felty

**VESICLES:** sparsely vesicular, highly vesicular at the lowest part.

**UPPER CONTACT:**

**LOWER CONTACT:**

**ALTERATION:** moderately altered

**VEINS:** Y

Comments: at the bottom (bin 16), basalt associated with micritic limestone. Authigenic calcite and pyrite filling vesicles and coating the sediment surface.
Site U1547 core descriptions

Hole 385-U1547C-8R Section 3, Top of Section: 142.38 m (CSF-A)

385-U1547C-8R-3-A, 0-123 cm
UNIT: 1
LITHOLOGY: basalt
DESCRIPTION: Sill
COLOR: light gray
TEXTURE: aphanitic
PHENOCRYSTS: Absent
GROUNDMASS: microcline
VESICLES: hiughly vesicular
UPPER CONTACT:
LOWER CONTACT:
ALTERATION: highly altered
VEINS: absent

Visual core descriptions

97
**Site U1547 core descriptions**

**Visual core descriptions**

**Hole 385-U1547C-9R Section 1, Top of Section: 149.5 m (CSF-A)**

<table>
<thead>
<tr>
<th>Depth (m)</th>
<th>Core length (cm)</th>
<th>Piece number</th>
<th>Orientation</th>
<th>Lithology</th>
<th>Grained phenocrysts</th>
<th>Vesicularity</th>
<th>Vein type</th>
<th>Structure</th>
<th>Lith. unit</th>
<th>Sediment intermingled</th>
<th>Vein connectivity</th>
<th>Dip angle (°)</th>
<th>Phenocrysts abundance (%)</th>
<th>Reflectance L* a* b*</th>
<th>Magnetic susceptibility (10^-5 SI)</th>
<th>Grain size distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>149.5</td>
<td>0</td>
<td>01</td>
<td>North</td>
<td>Basalt</td>
<td>Absent</td>
<td>Absent</td>
<td>Absent</td>
<td>Absent</td>
<td>Absent</td>
<td>Absent</td>
<td>Absent</td>
<td>Absent</td>
<td>Absent</td>
<td>Absent</td>
<td>Absent</td>
<td>Absent</td>
</tr>
</tbody>
</table>

**Description**

- **LITHOLOGY:** Basalt
- **DESCRIPTION:** Sill
- **TEXTURE:** Aphanitic
- **PHENOCRYSTS:** Absent
- **GROUNDMASS:** Microcline
- **VESICLES:** Moderately vesicular
- **UPPER CONTACT:**
- **LOWER CONTACT:**
- **ALTERATION:** Moderately altered
- **VEINS:** Absent

**Visual core descriptions**

- **385-U1547C-9R-1-A, 0-150 cm**
- **UNIT: 1**
- **LITHOLOGY:** Basalt
- **DESCRIPTION:** Sill
- **TEXTURE:** Aphanitic
- **PHENOCRYSTS:** Absent
- **GROUNDMASS:** Microcline
- **VESICLES:** Moderately vesicular
- **UPPER CONTACT:**
- **LOWER CONTACT:**
- **ALTERATION:** Moderately altered
- **VEINS:** Absent
Hole 385-U1547C-9R Section 2, Top of Section: 151.0 m (CSF-A-A)

385-U1547C-9R-2-A, 0-93 cm
UNIT: 1
LITHOLOGY: basalt
DESCRIPTION: Sill
COLOR: light gray
TEXTURE: aphyric
GROUNDMASS: felty
VESICLES: sparsely vesicular
UPPER CONTACT:
LOWER CONTACT:
ALTERATION: highly altered
VEINS: n

385-U1547C-9R-2-A, 93-116 cm
UNIT: 1
LITHOLOGY: basalt
DESCRIPTION: Sill
COLOR: gray
TEXTURE: aphyric
GROUNDMASS: felty
VESICLES: moderately vesicular
UPPER CONTACT:
LOWER CONTACT:
ALTERATION: moderately altered
VEINS: n
<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 SI)</th>
<th>Lith. unit</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<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>
</tr>
</tbody>
</table>

Hole 385-U1547D Core 11, Interval 0.0-0.0 m (CSF-A)

DRILLED INTERVAL 0.0-81.3 m

Site U1547 core descriptions

Visual core descriptions
Hole 385-U1547D Core 2R, Interval 81.3-81.33 m (CSF-A)

This core consists of light olive gray (5Y5/2) broken pieces of DOLOMITE.

<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>81.3</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Hole 385-U1547D Core 3R, Interval 91.1-91.26 m (CSF-A)

This core consists of light olive gray (5Y 5/2) broken pieces of DOLOMITE with lamination.

<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^-SI)</th>
<th>Lith. unit</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<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>
</tr>
</tbody>
</table>
The section 1 consists of brecciated olive gray (5Y 3/2) SILT-RICH SILICEOUS CLAYSTONE. The bottom section is BASALT.
Site U1547 core descriptions

<table>
<thead>
<tr>
<th>Hole 385-U1547D-4R Section 2, Top of Section: 101.41 m (CSF-A)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>385-U1547D-4R-2-A, 0-38 cm</td>
</tr>
<tr>
<td>UNIT: 1</td>
</tr>
<tr>
<td>LITHOLOGY: basalt</td>
</tr>
<tr>
<td>COLOR: gray</td>
</tr>
<tr>
<td>TEXTURE: aphyric</td>
</tr>
<tr>
<td>GROUNDMASS: equigranular felty matrix</td>
</tr>
<tr>
<td>VESICLES: moderately vesicular</td>
</tr>
<tr>
<td>ALTERATION: moderately altered</td>
</tr>
<tr>
<td>VEINS: present</td>
</tr>
</tbody>
</table>

<p>| 385-U1547D-4R-2-A, 38-96 cm                                  |
| UNIT: 1                                                       |
| LITHOLOGY: basalt                                            |
| COLOR: gray                                                   |
| TEXTURE: aphyric                                             |
| GROUNDMASS: equigranular felty matrix                        |
| VESICLES: moderately vesicular                               |
| ALTERATION: moderately altered                                |
| VEINS: absent                                                |</p>
<table>
<thead>
<tr>
<th>Depth (m)</th>
<th>Core length (cm)</th>
<th>Core length (cm)</th>
<th>Orientation</th>
<th>Core length (cm)</th>
<th>Orientation</th>
<th>Core length (cm)</th>
<th>Orientation</th>
<th>Core length (cm)</th>
<th>Orientation</th>
</tr>
</thead>
<tbody>
<tr>
<td>111.5</td>
<td>0</td>
<td>0</td>
<td></td>
<td>0</td>
<td></td>
<td>0</td>
<td></td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>111.6</td>
<td>10</td>
<td>0</td>
<td></td>
<td>0</td>
<td></td>
<td>0</td>
<td></td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>111.7</td>
<td>20</td>
<td>0</td>
<td></td>
<td>0</td>
<td></td>
<td>0</td>
<td></td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>111.8</td>
<td>30</td>
<td>0</td>
<td></td>
<td>0</td>
<td></td>
<td>0</td>
<td></td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>111.9</td>
<td>40</td>
<td>0</td>
<td></td>
<td>0</td>
<td></td>
<td>0</td>
<td></td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>111.1</td>
<td>50</td>
<td>0</td>
<td></td>
<td>0</td>
<td></td>
<td>0</td>
<td></td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>111.2</td>
<td>60</td>
<td>0</td>
<td></td>
<td>0</td>
<td></td>
<td>0</td>
<td></td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>111.3</td>
<td>70</td>
<td>0</td>
<td></td>
<td>0</td>
<td></td>
<td>0</td>
<td></td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>111.4</td>
<td>80</td>
<td>0</td>
<td></td>
<td>0</td>
<td></td>
<td>0</td>
<td></td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>111.5</td>
<td>90</td>
<td>0</td>
<td></td>
<td>0</td>
<td></td>
<td>0</td>
<td></td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>111.6</td>
<td>100</td>
<td>0</td>
<td></td>
<td>0</td>
<td></td>
<td>0</td>
<td></td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

**Hole 385-U1547D-5R Section 1, Top of Section: 110.5 m (CSF-A)**

**Description**
- **UNIT:** 1
- **LITHOLOGY:** Basalt
- **DESCRIPTION:** Sill
- **COLOR:** Gray
- **TEXTURE:** Aphyric
- **GROUNDMASS:** Equigranular felty matrix
- **VESICLES:** Moderately vesicular
- **ALTERATION:** Moderately altered
- **VEINS:** Absent

**Site U1547 core descriptions**

**Visual core descriptions**
UNIT: 1
LITHOLOGY: basalt
DESCRIPTION: Sill
COLOR: gray
TEXTURE: aphyric
GROUNDMASS: equigranular felty matrix
VESICLES: moderately vesicular, carbonate filling
ALTERATION: moderately altered, greenish gray patchy
VEINS: present, very small (0.5mm width)
Hole 385-U1547D-6R Section 1, Top of Section: 115.2 m (CSF-A)

- **Layer 1 (385-U1547D-6R-1-A, 0-66 cm)**
  - **Unit:** 1
  - **Lithology:** Basalt
  - **Description:** Sill
  - **Color:** Dark gray
  - **Texture:** Aphyric
  - **Phenocrysts:** None
  - **Groundmass:** Equigranular felty matrix
  - **Vesicles:** Moderately vesicular
  - **Alteration:** Moderately altered
  - **Veins:** Absent

- **Layer 2 (385-U1547D-6R-1-A, 66-85 cm)**
  - **Unit:** 1
  - **Lithology:** Basalt
  - **Description:** Sill
  - **Color:** Dark gray
  - **Texture:** Aphyric
  - **Phenocrysts:** None
  - **Groundmass:** Equigranular felty matrix
  - **Vesicles:** Non vesicular
  - **Alteration:** Moderately altered
  - **Veins:** Absent

- **Layer 3 (385-U1547D-6R-1-A, 85-110 cm)**
  - **Unit:** 1
  - **Lithology:** Basalt
  - **Description:** Sill
  - **Color:** Dark gray
  - **Texture:** Aphyric
  - **Phenocrysts:** None
  - **Groundmass:** Equigranular felty matrix
  - **Vesicles:** Moderately vesicular
  - **Alteration:** Moderately altered
  - **Veins:** Absent

- **Layer 4 (385-U1547D-6R-1-A, 110-122 cm)**
  - **Unit:** 1
  - **Lithology:** Basalt
  - **Description:** Sill
  - **Color:** Dark gray
  - **Texture:** Aphyric
  - **Phenocrysts:** None
  - **Groundmass:** Equigranular felty matrix
  - **Vesicles:** Highly vesicular
  - **Alteration:** Moderately altered
  - **Veins:** Vuggy and dendritic (110-122 cm)
385-U1547D-6R-2-A, 0–52 cm
UNIT: 1
LITHOLOGY: basalt
DESCRIPTION: Sill
COLOR: gray
TEXTURE: aphyric
GROUNDMASS: equigranular felty matrix
VESICLES: sparsely vesicular
ALTERATION: moderately altered
VEINS: massive carbonate vein from 0–10 cm

385-U1547D-6R-2-A, 52–116.5 cm
UNIT: 1
LITHOLOGY: basalt
DESCRIPTION: Sill
COLOR: gray
TEXTURE: aphyric
GROUNDMASS: equigranular felty matrix
VESICLES: highly vesicular
ALTERATION: moderately altered
VEINS: absent
### Hole 385-U1547D-7R Section 1, Top of Section: 120.2 m (CSF-A)

**Lithology: Basalt**

**Description:** Sill

**Color:** Gray

**Texture:** Aphyric

**Groundmass:** Equigranular felty matrix

**Vesicles:** Sparsely to moderately vesicular

**Alteration:** Moderately altered

**Veins:** Sediment vein from 9–15 cm

**Comments:** Two small pieces maybe fall-in rocks from the upper part.

---

**Visual Core Descriptions**


385-U1547D-7R-1-A, 0–22, 52.5–56.5, 81.5–100.5, 104.5–107.5 cm

UNIT: 1

LITHOLOGY: Basalt

DESCRIPTION: Sill

COLOR: Gray

TEXTURE: Aphyric

GROUNDMASS: Equigranular felty matrix

VESICLES: Sparsely to moderately vesicular

ALTERATION: Moderately altered

VEINS: Sediment vein from 9–15 cm

Comments: Two small pieces maybe fall-in rocks from the upper part.
**Hole 385-U1547D-7R Section 2, Top of Section: 121.37 m (CSF-A)**

**LITHOLOGY:** basalt

**DESCRIPTION:** Sill

**COLOR:** dark gray

**TEXTURE:** aphyric

**GROUNDMASS:** equigranular felty matrix

**VESICLES:** highly vesicular

**ALTERATION:** moderately altered

**VEINS:** absent

---

### Visual Core Descriptions

**Site U1547 core descriptions**

**385-U1547D-7R-2-A, 0-89 cm**

**UNIT:** 1

**LITHOLOGY:** basalt

**DESCRIPTION:** Sill

**COLOR:** dark gray

**TEXTURE:** aphyric

**GROUNDMASS:** equigranular felty matrix

**VESICLES:** highly vesicular

**ALTERATION:** moderately altered

**VEINS:** absent

---

### Core Log

| Depth (m) | Core length (cm) | Orientation | Lithology | Grains | Glass | Phases | Core image | Vesicles | Vein connectivity | Vein texture | Structure | Alteration | VEINS
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>121.37</td>
<td>89</td>
<td></td>
<td>basalt</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

### Table

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit</td>
<td>1</td>
</tr>
<tr>
<td>Lithology</td>
<td>basalt</td>
</tr>
<tr>
<td>Description</td>
<td>Sill</td>
</tr>
<tr>
<td>Color</td>
<td>dark gray</td>
</tr>
<tr>
<td>Texture</td>
<td>aphyric</td>
</tr>
<tr>
<td>Groundmass</td>
<td>equigranular felty matrix</td>
</tr>
<tr>
<td>Vesicles</td>
<td>highly vesicular</td>
</tr>
<tr>
<td>Alteration</td>
<td>moderately altered</td>
</tr>
<tr>
<td>Veins</td>
<td>absent</td>
</tr>
</tbody>
</table>

---

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

<table>
<thead>
<tr>
<th>Point</th>
<th>MS</th>
<th>MS WR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Point 1</td>
<td>1600</td>
<td></td>
</tr>
<tr>
<td>Point 2</td>
<td>1100</td>
<td></td>
</tr>
<tr>
<td>Point 3</td>
<td>600</td>
<td></td>
</tr>
<tr>
<td>Point 4</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Point 5</td>
<td>2100</td>
<td></td>
</tr>
<tr>
<td>Point 6</td>
<td>1600</td>
<td></td>
</tr>
<tr>
<td>Point 7</td>
<td>1100</td>
<td></td>
</tr>
<tr>
<td>Point 8</td>
<td>600</td>
<td></td>
</tr>
<tr>
<td>Point 9</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

---

**Phenocrysts abundance (%)**

<table>
<thead>
<tr>
<th>Type</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLAG, OL, CPX</td>
<td>20</td>
<td>15</td>
<td>10</td>
<td>5</td>
<td>0</td>
<td>Bimodal</td>
<td>Inequigranular</td>
<td>Equigranular</td>
</tr>
</tbody>
</table>

---

**Grain size distribution**

- Class: A
- VES: Vesicularity
- GMA: Groundmass

---

**Reflectance (L*, a*, b*)**

- L*: 85, 60, 35
- a*: 3.8, 2.8, 1.8, 0.8, -1.2, -3.2, -5.2, -7.2, -9.2
- b*: 85, 60, 35, 3.8, 2.8, 1.8, 0.8, -1.2, -3.2, -5.2, -7.2, -9.2

---

**Other Parameters**

- Depth CSF-A (m): 121.37
- Core length (cm): 89
- Orientation: 01, 02, 03, 04, 05, 06, 07

---

**Site U1547 core descriptions**

**Visual core descriptions**

385-U1547D-7R-2-A, 0-89 cm
385-U1547D-8R-1-A, 11-19, 29-43.5 cm
UNIT: 1
LITHOLOGY: basalt
DESCRIPTION: Sill
COLOR: dark gray
TEXTURE: aphyric
GROUNDMASS: equigranular felty matrix, many fine pyrites
VESICLES: moderately vesicular
ALTERATION:
VEINS: one short vein filled with pyrites

385-U1547D-8R-1-A, 43.5–140 cm
UNIT: 1
LITHOLOGY: basalt
DESCRIPTION: Sill
COLOR: gray
TEXTURE: aphyric
GROUNDMASS: equigranular felty matrix
VESICLES: moderately vesicular
ALTERATION: VEINS: one short vein filled with pyrites

Comments: MBIO sampled
UNIT: 1
LITHOLOGY: basalt
DESCRIPTION: Sill
COLOR: dark gray
TEXTURE: aphyric
GROUNDMASS: equigranular felty matrix, few fine pyrites
VESICLES: moderately vesicular
ALTERATION:
VEINS: one vein or fracture
Comments: sediment injection along the fracture or vein
### Hole 385-U1547D-9R Section 1, Top of Section: 130.0 m (CSF-A)

<table>
<thead>
<tr>
<th>Depth/CSF (m)</th>
<th>Core length (cm)</th>
<th>Piece number</th>
<th>Orientation</th>
<th>Visual core descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>130.0</td>
<td>104</td>
<td>01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>130.1</td>
<td>104</td>
<td>02</td>
<td></td>
<td></td>
</tr>
<tr>
<td>130.2</td>
<td>25</td>
<td>04</td>
<td></td>
<td></td>
</tr>
<tr>
<td>130.3</td>
<td>30</td>
<td>05</td>
<td></td>
<td></td>
</tr>
<tr>
<td>130.4</td>
<td>40</td>
<td>06</td>
<td></td>
<td></td>
</tr>
<tr>
<td>130.5</td>
<td>50</td>
<td>08</td>
<td></td>
<td></td>
</tr>
<tr>
<td>130.6</td>
<td>60</td>
<td>09</td>
<td></td>
<td></td>
</tr>
<tr>
<td>130.7</td>
<td>70</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>130.8</td>
<td>80</td>
<td>11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>130.9</td>
<td>90</td>
<td>12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>131.0</td>
<td>100</td>
<td>13</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**385-U1547D-9R-1-A, 0-35 cm**
- **UNIT:** 1
- **LITHOLOGY:** basalt
- **DESCRIPTION:** Sill
- **COLOR:** gray
- **TEXTURE:** aphyric
- **GROUNDMASS:** equigranular felty matrix, few fine pyrites
- **VESICLES:** moderately vesicular
- **ALTERATION:** moderately altered
- **VEINS:** one vein or fracture
- **Comments:** a fracture margin with pyrites

**385-U1547D-9R-1-A, 35-109 cm**
- **UNIT:** 1
- **LITHOLOGY:** basalt
- **DESCRIPTION:** Sill
- **COLOR:** dark gray
- **TEXTURE:** aphyric
- **GROUNDMASS:** equigranular felty matrix, few fine pyrites
- **VESICLES:** moderately vesicular
- **ALTERATION:** moderately altered
- **VEINS:** one vein or fracture
- **Comments:** a thin carbonate vein and a fracture margin with some sediments
Site U1547 core descriptions

Hole 385-U1547D-9R Section 2, Top of Section: 131.09 m (CSF-A)

<table>
<thead>
<tr>
<th>Depth (m)</th>
<th>Core length (cm)</th>
<th>Core length (mm)</th>
<th>Orientation</th>
<th>Piece number</th>
<th>Core description</th>
</tr>
</thead>
<tbody>
<tr>
<td>131.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>131.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>131.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>131.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>131.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>131.6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>131.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>131.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>131.9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Description**

- **LITHOLOGY**: basalt
- **DESCRIPTION**: Sill
- **COLOR**: dark gray
- **TEXTURE**: aphyric
- **GROUNDMASS**: equigranular felty matrix
- **VESICLES**: highly vesicular
- **ALTERATION**: highly altered
- **VEINS**: absent

**Visual core descriptions**

- **385-U1547D-9R-2-A, 0-112 cm**
  - UNIT: 1
  - LITHOLOGY: basalt
  - DESCRIPTION: Sill
  - COLOR: dark gray
  - TEXTURE: aphyric
  - GROUNDMASS: equigranular felty matrix
  - VESICLES: highly vesicular
  - ALTERATION: highly altered
  - VEINS: absent
385-U1547D-10R-1-A, 0-7 cm
UNIT: 1
LITHOLOGY: basalt
DESCRIPTION: Sill
COLOR: dark gray
TEXTURE: aphyric
GROUNDMASS: equigranular felty matrix
VESICLES: highly vesicular
ALTERATION: sightly altered
VEINS: absent

385-U1547D-10R-1-A, 7-137 cm
UNIT: 1
LITHOLOGY: basalt
DESCRIPTION: Sill
COLOR: gray
TEXTURE: aphyric
GROUNDMASS: equigranular felty matrix
VESICLES: highly to sparsely vesicular
ALTERATION: moderately altered, fracture controlled
VEINS: one vein, carbonates and micrite sediments injection.
<table>
<thead>
<tr>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lithology: basalt</td>
</tr>
<tr>
<td>Color: gray</td>
</tr>
<tr>
<td>Texture: aphyric</td>
</tr>
<tr>
<td>Groundmass: equigranular felty matrix</td>
</tr>
<tr>
<td>Vesicles: sparse to highly vesicular, patchy distribution</td>
</tr>
<tr>
<td>Alteration: moderately altered</td>
</tr>
<tr>
<td>Veins: seven veins with different width</td>
</tr>
</tbody>
</table>

**Visual core descriptions**

Site U1547 core descriptions

Hole 385-U1547D-10R Section 2, Top of Section: 136.17 m (CSF-A)

385-U1547D-10R-2-A, 0-121 cm

UNIT: 1
DESCRIPTION: Sill
COLOR: gray
TEXTURE: aphyric
GROUNDMASS: equigranular felty matrix
VESICLES: sparse to highly vesicular, patchy distribution
ALTERATION: moderately altered
VEINS: seven veins with different width
UNIT: 1
LITHOLOGY: basalt
DESCRIPTION: Sill
COLOR: dark gray
TEXTURE: aphyric
GROUNDMASS: felty, many fine sulfides
VESICLES: sparsely vesicular
UPPER CONTACT: fracture contact
LOWER CONTACT: fracture contact
ALTERATION: moderately altered
VEINS: Y
Comments: sediments mingling along the veins at the bottom and the fracture contact.
**Site U1547 core descriptions**

**Hole 385-U1547D-11R Section 1, Top of Section: 139.8 m (CSF-A)**

**LITHOLOGY**: basalt

**DESCRIPTION**: Sill

**COLOR**: dark gray

**TEXTURE**: aphyric

**GROUNDMASS**: equigranular felty matrix

**VESICLES**: highly vesicular, most is fine vesicles

**ALTERATION**: moderately altered

**VEINS**: five veins

**Comments**: at 43-50 cm, here are several big vesicles filled with carbonates.
Site U1547 core descriptions

Hole 385-U1547D-11R Section 2, Top of Section: 141.21 m (CSF-A)

UNIT: 1
LITHOLOGY: basalt
DESCRIPTION: Sill
COLOR: gray
TEXTURE: aphyric
GROUNDMASS: equigranular felty matrix
VESICLES: sparsey vesicular, patchy distribution
ALTERATION: slighty altered
VEINS: two small veins

Visual core descriptions

385-U1547D-11R-2-A, 0-55 cm
UNIT: 1
LITHOLOGY: basalt
DESCRIPTION: Sill
COLOR: gray
TEXTURE: aphyric
GROUNDMASS: equigranular felty matrix
VESICLES: sparsey vesicular, patchy distribution
ALTERATION: slighty altered
VEINS: two small veins
<table>
<thead>
<tr>
<th>Depth (CSF-A, m)</th>
<th>Core length (cm)</th>
<th>Hole number</th>
<th>Orientation</th>
<th>Piece number</th>
<th>Lithology</th>
<th>Lithology Description</th>
<th>Color</th>
<th>Texture</th>
<th>Groundmass</th>
<th>Vesicles</th>
<th>Alteration</th>
<th>Veins</th>
<th>Visual core descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>144.5 – 144.6</td>
<td>0 – 10</td>
<td>01</td>
<td>NS</td>
<td>01</td>
<td>Basalt</td>
<td>Sill</td>
<td>Gray</td>
<td>Aphyric</td>
<td>Equigranular felty matrix</td>
<td>Non vesicular</td>
<td>Moderately altered</td>
<td>Absent</td>
<td>Site U1547 core descriptions</td>
</tr>
<tr>
<td>144.6 – 144.7</td>
<td>10 – 20</td>
<td>02</td>
<td>NS</td>
<td>02</td>
<td>Basalt</td>
<td>Sill</td>
<td>Gray</td>
<td>Aphyric</td>
<td>Equigranular felty matrix</td>
<td>Non vesicular</td>
<td>Moderately altered</td>
<td>Absent</td>
<td>Visual core descriptions</td>
</tr>
<tr>
<td>144.7 – 144.8</td>
<td>20 – 30</td>
<td>03</td>
<td>NS</td>
<td>03</td>
<td>Basalt</td>
<td>Sill</td>
<td>Gray</td>
<td>Aphyric</td>
<td>Equigranular felty matrix</td>
<td>Sparsely vesicular</td>
<td>Moderately altered</td>
<td>Absent</td>
<td>Site U1547 core descriptions</td>
</tr>
<tr>
<td>144.8 – 144.9</td>
<td>30 – 40</td>
<td>04</td>
<td>NS</td>
<td>04</td>
<td>Basalt</td>
<td>Sill</td>
<td>Gray</td>
<td>Aphyric</td>
<td>Equigranular felty matrix</td>
<td>Sparsely vesicular</td>
<td>Moderately altered</td>
<td>Absent</td>
<td>Visual core descriptions</td>
</tr>
<tr>
<td>144.9 – 145.0</td>
<td>40 – 50</td>
<td>05</td>
<td>NS</td>
<td>05</td>
<td>Basalt</td>
<td>Sill</td>
<td>Gray</td>
<td>Aphyric</td>
<td>Equigranular felty matrix</td>
<td>Sparsely vesicular</td>
<td>Moderately altered</td>
<td>Absent</td>
<td>Site U1547 core descriptions</td>
</tr>
<tr>
<td>145.0 – 145.1</td>
<td>50 – 60</td>
<td>06</td>
<td>NS</td>
<td>06</td>
<td>Basalt</td>
<td>Sill</td>
<td>Gray</td>
<td>Aphyric</td>
<td>Equigranular felty matrix</td>
<td>Sparsely vesicular</td>
<td>Moderately altered</td>
<td>Absent</td>
<td>Visual core descriptions</td>
</tr>
<tr>
<td>145.1 – 145.2</td>
<td>60 – 70</td>
<td>07</td>
<td>NS</td>
<td>07</td>
<td>Basalt</td>
<td>Sill</td>
<td>Gray</td>
<td>Aphyric</td>
<td>Equigranular felty matrix</td>
<td>Sparsely vesicular</td>
<td>Moderately altered</td>
<td>Absent</td>
<td>Site U1547 core descriptions</td>
</tr>
<tr>
<td>145.2 – 145.3</td>
<td>70 – 80</td>
<td>08</td>
<td>NS</td>
<td>08</td>
<td>Basalt</td>
<td>Sill</td>
<td>Gray</td>
<td>Aphyric</td>
<td>Equigranular felty matrix</td>
<td>Sparsely vesicular</td>
<td>Moderately altered</td>
<td>Absent</td>
<td>Visual core descriptions</td>
</tr>
<tr>
<td>145.3 – 145.4</td>
<td>80 – 90</td>
<td>09</td>
<td>NS</td>
<td>09</td>
<td>Basalt</td>
<td>Sill</td>
<td>Gray</td>
<td>Aphyric</td>
<td>Equigranular felty matrix</td>
<td>Sparsely vesicular</td>
<td>Moderately altered</td>
<td>Absent</td>
<td>Site U1547 core descriptions</td>
</tr>
<tr>
<td>145.4 – 145.5</td>
<td>90 – 100</td>
<td>10</td>
<td>NS</td>
<td>10</td>
<td>Basalt</td>
<td>Sill</td>
<td>Gray</td>
<td>Aphyric</td>
<td>Equigranular felty matrix</td>
<td>Sparsely vesicular</td>
<td>Moderately altered</td>
<td>Absent</td>
<td>Visual core descriptions</td>
</tr>
<tr>
<td>145.5 – 145.6</td>
<td>100 – 110</td>
<td>11</td>
<td>NS</td>
<td>11</td>
<td>Basalt</td>
<td>Sill</td>
<td>Gray</td>
<td>Aphyric</td>
<td>Equigranular felty matrix</td>
<td>Sparsely vesicular</td>
<td>Moderately altered</td>
<td>Absent</td>
<td>Site U1547 core descriptions</td>
</tr>
<tr>
<td>145.6 – 145.7</td>
<td>110 – 120</td>
<td>12</td>
<td>NS</td>
<td>12</td>
<td>Basalt</td>
<td>Sill</td>
<td>Gray</td>
<td>Aphyric</td>
<td>Equigranular felty matrix</td>
<td>Sparsely vesicular</td>
<td>Moderately altered</td>
<td>Absent</td>
<td>Visual core descriptions</td>
</tr>
<tr>
<td>145.7 – 145.8</td>
<td>120 – 130</td>
<td>13</td>
<td>NS</td>
<td>13</td>
<td>Basalt</td>
<td>Sill</td>
<td>Gray</td>
<td>Aphyric</td>
<td>Equigranular felty matrix</td>
<td>Sparsely vesicular</td>
<td>Moderately altered</td>
<td>Absent</td>
<td>Site U1547 core descriptions</td>
</tr>
<tr>
<td>145.8 – 145.9</td>
<td>130 – 140</td>
<td>14</td>
<td>NS</td>
<td>14</td>
<td>Basalt</td>
<td>Sill</td>
<td>Gray</td>
<td>Aphyric</td>
<td>Equigranular felty matrix</td>
<td>Sparsely vesicular</td>
<td>Moderately altered</td>
<td>Absent</td>
<td>Visual core descriptions</td>
</tr>
<tr>
<td>145.9 – 146.0</td>
<td>140 – 150</td>
<td>15</td>
<td>NS</td>
<td>15</td>
<td>Basalt</td>
<td>Sill</td>
<td>Gray</td>
<td>Aphyric</td>
<td>Equigranular felty matrix</td>
<td>Sparsely vesicular</td>
<td>Moderately altered</td>
<td>Absent</td>
<td>Site U1547 core descriptions</td>
</tr>
<tr>
<td>146.0 – 146.1</td>
<td>150 – 160</td>
<td>16</td>
<td>NS</td>
<td>16</td>
<td>Basalt</td>
<td>Sill</td>
<td>Gray</td>
<td>Aphyric</td>
<td>Equigranular felty matrix</td>
<td>Sparsely vesicular</td>
<td>Moderately altered</td>
<td>Absent</td>
<td>Visual core descriptions</td>
</tr>
<tr>
<td>146.1 – 146.2</td>
<td>160 – 170</td>
<td>17</td>
<td>NS</td>
<td>17</td>
<td>Basalt</td>
<td>Sill</td>
<td>Gray</td>
<td>Aphyric</td>
<td>Equigranular felty matrix</td>
<td>Sparsely vesicular</td>
<td>Moderately altered</td>
<td>Absent</td>
<td>Site U1547 core descriptions</td>
</tr>
</tbody>
</table>
Site U1547 core descriptions

Visual core descriptions

Hole 385-U1547D-12R Section 2, Top of Section: 145.89 m (CSF-A)

385-U1547D-12R-2-A, 0-20 cm
UNIT: 1
LITHOLOGY: basalt
DESCRIPTION: Sill
COLOR: gray
TEXTURE: aphyric
GROUNDMASS: equigranular felty matrix
VESICLES: sparsey vesicular
ALTERATION: moderately altered
VEINS:

385-U1547D-12R-2-A, 20-40 cm
UNIT: 1
LITHOLOGY: basalt
DESCRIPTION: Sill
COLOR: gray
TEXTURE: aphyric
GROUNDMASS: equigranular felty matrix
VESICLES: sparsey vesicular
ALTERATION: moderately altered
VEINS: three veins
**Description**

385-U1547D-13R-1-A, 0-146 cm

**UNIT:** 1

**LITHOLOGY:** basalt

**DESCRIPTION:** Sill

**COLOR:** gray

**TEXTURE:** aphyric

**GROUNDMASS:** equigranular felty matrix

**VESICLES:** through the whole section, most is highly vesicular. Just one position (24-31 cm) show sparsely vesicular.

**ALTERATION:** moderately altered

**VEINS:** three veins;

**Comments:** at the top, 5 thick light gray basalt.
**385-U1547D-11R-1-A, 0-90 cm**

**UNIT: 1**

**LITHOLOGY:** basalt

**DESCRIPTION:** Sill

**COLOR:** gray

**TEXTURE:** aphyric

**GROUNDMASS:** equigranular felty matrix

**VESICLES:** moderately vesicular. 0-7 cm and 14-21 cm, highly vesicular.

**ALTERATION:** moderately altered

**VEINS:**

Comments: dark gray color with more vesicles, and gray color with less vesicles.

---

**Site U1547 core descriptions**

**Visual core descriptions**
### Site U1547 Core Descriptions

#### Hole 385-U1547D-14R Section 2, Top of Section: 155.7 m (CSF-A)

<table>
<thead>
<tr>
<th>Core length (cm)</th>
<th>Piece number</th>
<th>Orientation</th>
<th>Lithology</th>
<th>Lithology unit</th>
<th>Lithology type</th>
<th>LITHOLOGY</th>
<th>COLOR</th>
<th>TEXTURE</th>
<th>GROUNDMASS</th>
<th>VESICLES</th>
<th>ALTERATION</th>
<th>VEINS</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>01</td>
<td></td>
<td>basalt</td>
<td>Sill</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**COLOR:** dark gray, gray color at 24-59 cm.

**TEXTURE:** aphyric

**GROUNDMASS:** felty, many fine sulfides

**VESICLES:** moderately vesicular

**ALTERATION:** moderately altered

**VEINS:**

---

### Visual Core Descriptions

**Description:**

385-U1547D-11R-1-A, 0-95 cm

- **UNIT:** 1
- **LITHOLOGY:** basalt
- **COLOR:** dark gray, gray color at 24-59 cm.
- **TEXTURE:** aphyric
- **GROUNDMASS:** felty, many fine sulfides
- **VESICLES:** moderately vesicular
- **ALTERATION:** moderately altered
- **VEINS:**
385-U1547D-15R-1-A, 0–141 cm
UNIT: 1
LITHOLOGY: basalt
DESCRIPTION: Sill
COLOR: gray
TEXTURE: aphyric
GROUNDMASS: felty
VESICLES: moderately vesicular
UPPER CONTACT: 
LOWER CONTACT: 
ALTERATION: moderately altered
VEINS: Y
Comments: at 42-47.5 cm, a dark gray basalt interval appears.
Hole 385-U1547D-15R-2-A, 0-56 cm
UNIT: 1
LITHOLOGY: basalt
DESCRIPTION: Sill
COLOR: gray
TEXTURE: aphyric
GROUNDMASS: equigranular felty matrix
VESICLES: moderately vesicular
ALTERATION: highly altered, alteration halos are present between 7-9 cm; 20-37 cm
VEINS: present (between 0-6 cm)
<table>
<thead>
<tr>
<th>Sample</th>
<th>Color</th>
<th>Texture</th>
<th>Groundmass</th>
<th>Vesicles</th>
<th>Alteration</th>
<th>Veins</th>
</tr>
</thead>
<tbody>
<tr>
<td>385-U1547D-16R-1-A, 0-43 cm</td>
<td>gray</td>
<td>aphyric</td>
<td>equigranular felty matrix</td>
<td>moderately vesicular, filled with carbonate and sulfide</td>
<td>moderately altered</td>
<td>absent</td>
</tr>
<tr>
<td>385-U1547D-16R-1-A, 43–121 cm</td>
<td>gray</td>
<td>aphyric</td>
<td>equigranular felty matrix</td>
<td>moderately vesicular, filled with carbonate and sulfide</td>
<td>moderately altered</td>
<td>absent</td>
</tr>
</tbody>
</table>
### Hole 385-U1547D-17R Section 1, Top of Section: 168.9 m (CSF-A)

<table>
<thead>
<tr>
<th>Depth (m)</th>
<th>Core length (cm)</th>
<th>Piece number</th>
<th>Orientation</th>
<th>Lithology</th>
<th>Glass</th>
<th>Phenocrysts</th>
<th>Vesicularity</th>
<th>Vein type</th>
<th>Structure</th>
<th>LITHOLOGY</th>
<th>DESCRIPTION:</th>
<th>COLOR:</th>
<th>TEXTURE:</th>
<th>GROUNDMASS:</th>
<th>Upper Contact</th>
<th>Lower Contact</th>
<th>ALTERATION:</th>
<th>VESICLES:</th>
<th>VEINS:</th>
<th>comments:</th>
</tr>
</thead>
<tbody>
<tr>
<td>168.9</td>
<td></td>
<td></td>
<td></td>
<td>basalt</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>basalt</td>
<td>dark gray</td>
<td></td>
<td>aphyric</td>
<td>felty, many fine pyrites</td>
<td></td>
<td></td>
<td>moderately altered</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>168.0</td>
<td></td>
<td></td>
<td></td>
<td>basalt</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>basalt</td>
<td>dark gray</td>
<td></td>
<td>aphyric</td>
<td>felty, many fine pyrites</td>
<td></td>
<td></td>
<td>moderately altered</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Visual core descriptions**

385-U1547D-17R-1-A, 0-39 cm
- **LITHOLOGY**: basalt
- **DESCRIPTION**: dolerite
- **COLOR**: gray
- **TEXTURE**: aphyric
- **GROUNDMASS**: felty, many fine pyrites
- **VESICLES**: moderately vesicular
- **UPPER CONTACT**: unknown
- **LOWER CONTACT**: unknown
- **ALTERATION**: moderately altered
- **VESICLES**: 
  - Yellow
- **VEINS**: Y
- **Comments**: Vesicles is big. Most is filled with carbonates. Some is elongate.

385-U1547D-17R-1-A, 39-124 cm
- **LITHOLOGY**: basalt
- **DESCRIPTION**: dolerite
- **COLOR**: dark gray
- **TEXTURE**: aphyric
- **GROUNDMASS**: felty, many fine pyrites
- **VESICLES**: moderately vesicular
- **UPPER CONTACT**: unknown
- **LOWER CONTACT**: unknown
- **ALTERATION**: moderately altered
- **VESICLES**: Yellow
- **VEINS**: Y
- **Comments**: Vesicles is small. Half is filled with carbonates. Half is open or partially filled with sulfides and blue minerals. Most of sample for microbiologists.
**Hole 385-U1547D-17R Section 2, Top of Section: 170.14 m (CSF-A)**

<table>
<thead>
<tr>
<th>Depth (cm)</th>
<th>Core length (cm)</th>
<th>Orientation</th>
<th>Shipboard samples</th>
<th>Natural Erosion</th>
<th>Core number</th>
<th>Glass</th>
<th>Phenocrysts</th>
<th>Phases</th>
<th>Vein</th>
<th>Vein connectivity</th>
<th>Op. angle</th>
<th>Sediment intermingled</th>
<th>Vein texture</th>
<th>Vein connectivity</th>
<th>Vein type</th>
<th>Structure</th>
</tr>
</thead>
<tbody>
<tr>
<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>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>170.2</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>170.3</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>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>170.4</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>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>170.5</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>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>170.6</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>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>170.7</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>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>170.8</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>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>170.9</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>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>171.0</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>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>171.1</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>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>171.2</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>171.3</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>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>171.4</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>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>171.5</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>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>171.6</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>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>171.7</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>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>171.8</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>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>171.9</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>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>172.0</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>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>172.1</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>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>172.2</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>172.3</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>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**385-U1547D-17R-2-A, 0-116 cm**

**UNIT:** 1  
**LITHOLOGY:** basalt  
**DESCRIPTION:** Sill  
**COLOR:** gray  
**TEXTURE:** aphyric  
**GROUNDMASS:** equigranular felty matrix  
**VESICLES:** moderately vesicular  
**ALTERATION:** highly altered, alteration halos is present between 26-53 cm  
**VEINS:** present (between 56-68 cm)
### Hole 385-U1547D-18R Section 1, Top of Section: 173.6 m (CSF-A)

<table>
<thead>
<tr>
<th>Depth/CSF-A (m)</th>
<th>Core length (cm)</th>
<th>Core number</th>
<th>Orientation</th>
<th>Piece number</th>
<th>Lithology</th>
<th>Lithology description</th>
<th>Color</th>
<th>Texture</th>
<th>Groundmass</th>
<th>Vesicles</th>
<th>Alteration</th>
<th>Veins</th>
<th>Reflectance</th>
<th>Magnetic susceptibility (10^-5 SI)</th>
<th>Measurement</th>
<th>Phenocrysts abundance (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>173.6</td>
<td>0</td>
<td>01</td>
<td>0</td>
<td>01</td>
<td>basalt</td>
<td>Sill</td>
<td>gray</td>
<td>aphyric</td>
<td>equigranular felty matrix</td>
<td>moderately vesicular, filled with carbonate and sulfides</td>
<td>moderately altered</td>
<td>present</td>
<td>96</td>
<td>76</td>
<td>56</td>
<td>36</td>
</tr>
<tr>
<td>173.7</td>
<td>10</td>
<td>02</td>
<td>1</td>
<td>02</td>
<td>basalt</td>
<td>Sill</td>
<td>gray</td>
<td>aphyric</td>
<td>equigranular felty matrix</td>
<td>moderately vesicular, filled with carbonate and sulfides</td>
<td>moderately altered</td>
<td>present</td>
<td>95</td>
<td>75</td>
<td>55</td>
<td>35</td>
</tr>
<tr>
<td>173.8</td>
<td>20</td>
<td>03</td>
<td>2</td>
<td>03</td>
<td>basalt</td>
<td>Sill</td>
<td>gray</td>
<td>aphyric</td>
<td>equigranular felty matrix</td>
<td>moderately vesicular, filled with carbonate and sulfides</td>
<td>moderately altered</td>
<td>present</td>
<td>94</td>
<td>74</td>
<td>54</td>
<td>34</td>
</tr>
<tr>
<td>173.9</td>
<td>30</td>
<td>04</td>
<td>3</td>
<td>04</td>
<td>basalt</td>
<td>Sill</td>
<td>gray</td>
<td>aphyric</td>
<td>equigranular felty matrix</td>
<td>moderately vesicular, filled with carbonate and sulfides</td>
<td>moderately altered</td>
<td>present</td>
<td>93</td>
<td>73</td>
<td>53</td>
<td>33</td>
</tr>
<tr>
<td>174.0</td>
<td>40</td>
<td>05</td>
<td>4</td>
<td>05</td>
<td>basalt</td>
<td>Sill</td>
<td>gray</td>
<td>aphyric</td>
<td>equigranular felty matrix</td>
<td>moderately vesicular, filled with carbonate and sulfides</td>
<td>moderately altered</td>
<td>present</td>
<td>92</td>
<td>72</td>
<td>52</td>
<td>32</td>
</tr>
<tr>
<td>174.1</td>
<td>50</td>
<td>06</td>
<td>5</td>
<td>06</td>
<td>basalt</td>
<td>Sill</td>
<td>gray</td>
<td>aphyric</td>
<td>equigranular felty matrix</td>
<td>moderately vesicular, filled with carbonate and sulfides</td>
<td>moderately altered</td>
<td>present</td>
<td>91</td>
<td>71</td>
<td>51</td>
<td>31</td>
</tr>
<tr>
<td>174.2</td>
<td>60</td>
<td>07</td>
<td>6</td>
<td>07</td>
<td>basalt</td>
<td>Sill</td>
<td>gray</td>
<td>aphyric</td>
<td>equigranular felty matrix</td>
<td>moderately vesicular, filled with carbonate and sulfides</td>
<td>moderately altered</td>
<td>present</td>
<td>90</td>
<td>70</td>
<td>50</td>
<td>30</td>
</tr>
<tr>
<td>174.3</td>
<td>70</td>
<td>08</td>
<td>7</td>
<td>08</td>
<td>basalt</td>
<td>Sill</td>
<td>gray</td>
<td>aphyric</td>
<td>equigranular felty matrix</td>
<td>moderately vesicular, filled with carbonate and sulfides</td>
<td>moderately altered</td>
<td>present</td>
<td>89</td>
<td>69</td>
<td>49</td>
<td>29</td>
</tr>
<tr>
<td>174.4</td>
<td>80</td>
<td>09</td>
<td>8</td>
<td>09</td>
<td>basalt</td>
<td>Sill</td>
<td>gray</td>
<td>aphyric</td>
<td>equigranular felty matrix</td>
<td>moderately vesicular, filled with carbonate and sulfides</td>
<td>moderately altered</td>
<td>present</td>
<td>88</td>
<td>68</td>
<td>48</td>
<td>28</td>
</tr>
<tr>
<td>174.5</td>
<td>90</td>
<td>10</td>
<td>9</td>
<td>10</td>
<td>basalt</td>
<td>Sill</td>
<td>gray</td>
<td>aphyric</td>
<td>equigranular felty matrix</td>
<td>moderately vesicular, filled with carbonate and sulfides</td>
<td>moderately altered</td>
<td>present</td>
<td>87</td>
<td>67</td>
<td>47</td>
<td>27</td>
</tr>
<tr>
<td>174.6</td>
<td>100</td>
<td>11</td>
<td>10</td>
<td>11</td>
<td>basalt</td>
<td>Sill</td>
<td>gray</td>
<td>aphyric</td>
<td>equigranular felty matrix</td>
<td>moderately vesicular, filled with carbonate and sulfides</td>
<td>moderately altered</td>
<td>present</td>
<td>86</td>
<td>66</td>
<td>46</td>
<td>26</td>
</tr>
<tr>
<td>174.7</td>
<td>106</td>
<td>12</td>
<td>11</td>
<td>12</td>
<td>basalt</td>
<td>Sill</td>
<td>gray</td>
<td>aphyric</td>
<td>equigranular felty matrix</td>
<td>moderately vesicular, filled with carbonate and sulfides</td>
<td>moderately altered</td>
<td>present</td>
<td>85</td>
<td>65</td>
<td>45</td>
<td>25</td>
</tr>
<tr>
<td>174.8</td>
<td>116</td>
<td>13</td>
<td>12</td>
<td>13</td>
<td>basalt</td>
<td>Sill</td>
<td>gray</td>
<td>aphyric</td>
<td>equigranular felty matrix</td>
<td>moderately vesicular, filled with carbonate and sulfides</td>
<td>moderately altered</td>
<td>present</td>
<td>84</td>
<td>64</td>
<td>44</td>
<td>24</td>
</tr>
<tr>
<td>174.9</td>
<td>122</td>
<td>14</td>
<td>13</td>
<td>14</td>
<td>basalt</td>
<td>Sill</td>
<td>gray</td>
<td>aphyric</td>
<td>equigranular felty matrix</td>
<td>moderately vesicular, filled with carbonate and sulfides</td>
<td>moderately altered</td>
<td>present</td>
<td>83</td>
<td>63</td>
<td>43</td>
<td>23</td>
</tr>
<tr>
<td>175.0</td>
<td>132</td>
<td>15</td>
<td>14</td>
<td>15</td>
<td>basalt</td>
<td>Sill</td>
<td>gray</td>
<td>aphyric</td>
<td>equigranular felty matrix</td>
<td>moderately vesicular, filled with carbonate and sulfides</td>
<td>moderately altered</td>
<td>present</td>
<td>82</td>
<td>62</td>
<td>42</td>
<td>22</td>
</tr>
<tr>
<td>175.1</td>
<td>150</td>
<td>16</td>
<td>15</td>
<td>16</td>
<td>basalt</td>
<td>Sill</td>
<td>gray</td>
<td>aphyric</td>
<td>equigranular felty matrix</td>
<td>moderately vesicular, filled with carbonate and sulfides</td>
<td>moderately altered</td>
<td>present</td>
<td>81</td>
<td>61</td>
<td>41</td>
<td>21</td>
</tr>
</tbody>
</table>
385-U1547D-19R-1-A, 0-140 cm

UNIT: 1

LITHOLOGY: basalt

DESCRIPTION: Sill

COLOR: gray

TEXTURE: aphyric

GROUNDMASS: equigranular felty matrix

VESICLES: moderately vesicular, some are angular and some are rounded

ALTERATION: moderately altered, greenish gray patchy

VEINS: cross-cutting. This core section is extensively veined.

Site U1547 core descriptions

Visual core descriptions
**Lithology:** basalt

**Description:** Sill

**Color:** gray

**Texture:** aphyric

**Groundmass:** felty, many fine sulfides

**Vesicles:** moderately vesicular

**Upper Contact:**

**Lower Contact:** fracture contact

**Alteration:** moderately altered

**Veins:** Y, a big haloed vein

### Table: Visual Core Descriptions

<table>
<thead>
<tr>
<th>Core length (cm)</th>
<th>Piece number</th>
<th>Orientation</th>
<th>Lithology</th>
<th>Lith. unit</th>
<th>Structure</th>
<th>Vein type</th>
<th>Vein texture</th>
<th>Vein connectivity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Glass</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Lith. unit</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Debris</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Core Orientation

- **Site U1547 core descriptions**
- **Visual core descriptions**
Hole 385-U1547D-19R Section 3, Top of Section: 180.91 m (CSF-A)

385-U1547D-19R-3-A, 0-78 cm
UNIT: 1
LITHOLOGY: basalt
DESCRIPTION: Sill
COLOR: gray
TEXTURE: aphyric
GROUNDMASS: equigranular felty matrix
VESICLES: moderately vesicular
ALTERATION: moderately altered, alteration halos is present
VEINS: present, polycrystalline

385-U1547D-19R-3-A, 78-116 cm
UNIT: 1
LITHOLOGY: basalt
DESCRIPTION: Sill
COLOR: gray
TEXTURE: aphyric
GROUNDMASS: equigranular felty matrix
VESICLES: moderately vesicular
ALTERATION: moderately altered
VEINS: absent

385-U1547D-19R-3-A, 116-138 cm
UNIT: 1
LITHOLOGY: basalt
DESCRIPTION: Sill
COLOR: gray
TEXTURE: aphyric
GROUNDMASS: equigranular felty matrix
VESICLES: moderately vesicular
ALTERATION: moderately altered, alteration halos is present between 116-138 cm
VEINS: absent
385-U1547D-20R-1-A, 0-52 cm
UNIT: 1
LITHOLOGY: basalt
DESCRIPTION: Sill
COLOR: gray
TEXTURE: aphyric
GROUNDMASS: equigranular felty matrix
VESICLES: moderately vesicular, pyrite and calcite present
ALTERATION: highly altered
VEINS: dendritic and small

385-U1547D-20R-1-A, 52–138.5 cm
UNIT: 1
LITHOLOGY: basalt
DESCRIPTION: Sill
COLOR: gray
TEXTURE: aphyric
GROUNDMASS: equigranular felty matrix
VESICLES: highly vesicular, different sizes, partially filled by calcite
ALTERATION: moderately altered
VEINS: many, cross-cutting and up to ~10mm width
### Site U1547 Core Descriptions

#### Visual Core Descriptions

<table>
<thead>
<tr>
<th>Depth (cm)</th>
<th>CSF-A (m)</th>
<th>Core length (cm)</th>
<th>Piece number</th>
<th>Lithology</th>
<th>Glass</th>
<th>Phenocryst</th>
<th>Vein type</th>
<th>Sediment intermingled</th>
<th>Vein connectivity</th>
<th>Vein texture</th>
<th>Dip angle (°)</th>
<th>Phenocryst</th>
<th>Plagioclase, olivine, clinopyroxene</th>
<th>Reflectance</th>
<th>Magnetic susceptibility (10^-5 SI)</th>
<th>Grain size distribution (%)</th>
<th>Vesicularity</th>
<th>Alteration</th>
<th>Veins</th>
</tr>
</thead>
<tbody>
<tr>
<td>184.7</td>
<td></td>
<td>0.0</td>
<td>01</td>
<td>Basalt</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></td>
<td></td>
</tr>
<tr>
<td>184.8</td>
<td></td>
<td>0.1</td>
<td>02</td>
<td>Basalt</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></td>
<td></td>
</tr>
<tr>
<td>184.9</td>
<td></td>
<td>0.2</td>
<td>03</td>
<td>Basalt</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></td>
<td></td>
</tr>
<tr>
<td>185.0</td>
<td></td>
<td>0.3</td>
<td>04</td>
<td>Basalt</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></td>
<td></td>
</tr>
<tr>
<td>185.1</td>
<td></td>
<td>0.4</td>
<td>05</td>
<td>Basalt</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></td>
<td></td>
</tr>
<tr>
<td>185.2</td>
<td></td>
<td>0.5</td>
<td>06</td>
<td>Basalt</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></td>
<td></td>
</tr>
<tr>
<td>185.3</td>
<td></td>
<td>0.6</td>
<td>07</td>
<td>Basalt</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></td>
<td></td>
</tr>
<tr>
<td>185.4</td>
<td></td>
<td>0.7</td>
<td>08</td>
<td>Basalt</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></td>
<td></td>
</tr>
<tr>
<td>185.5</td>
<td></td>
<td>0.8</td>
<td>09</td>
<td>Basalt</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></td>
<td></td>
</tr>
<tr>
<td>185.6</td>
<td></td>
<td>0.9</td>
<td>10</td>
<td>Basalt</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></td>
<td></td>
</tr>
<tr>
<td>185.7</td>
<td></td>
<td>1.0</td>
<td>11</td>
<td>Basalt</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></td>
<td></td>
</tr>
<tr>
<td>185.8</td>
<td></td>
<td>1.1</td>
<td>12</td>
<td>Basalt</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></td>
<td></td>
</tr>
<tr>
<td>185.9</td>
<td></td>
<td>1.2</td>
<td>13</td>
<td>Basalt</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></td>
<td></td>
</tr>
<tr>
<td>186.0</td>
<td></td>
<td>1.3</td>
<td>14</td>
<td>Basalt</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></td>
<td></td>
</tr>
<tr>
<td>186.1</td>
<td></td>
<td>1.4</td>
<td>15</td>
<td>Basalt</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></td>
<td></td>
</tr>
<tr>
<td>186.2</td>
<td></td>
<td>1.5</td>
<td>16</td>
<td>Basalt</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></td>
<td></td>
</tr>
<tr>
<td>186.3</td>
<td></td>
<td>1.6</td>
<td>17</td>
<td>Basalt</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></td>
<td></td>
</tr>
<tr>
<td>186.4</td>
<td></td>
<td>1.7</td>
<td>18</td>
<td>Basalt</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></td>
<td></td>
</tr>
<tr>
<td>186.5</td>
<td></td>
<td>1.8</td>
<td>19</td>
<td>Basalt</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></td>
<td></td>
</tr>
<tr>
<td>186.6</td>
<td></td>
<td>1.9</td>
<td>20</td>
<td>Basalt</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></td>
<td></td>
</tr>
</tbody>
</table>

**Hole 385-U1547D-20R Section 2, Top of Section: 184.685 m (CSF-A)**

- **Material:** Basalt
- **Color:** Gray
- **Texture:** Aphyric
- **Groundmass:** Equigranular felty matrix
- **Vesicles:** Moderately vesicular
- **Alteration:** Moderately altered
- **Veins:** Present

**Visual Core Descriptions**

- **Lithology:** Basalt
- **Color:** Gray
- **Texture:** Aphyric
- **Groundmass:** Equigranular felty matrix
- **Vesicles:** Moderately vesicular
- **Alteration:** Moderately altered
- **Veins:** Present
385-U1547D-20R-3-A, 0-120.5 cm
UNIT: 1
LITHOLOGY: basalt
DESCRIPTION: Sill
COLOR: gray
TEXTURE: aphyric
GROUNDMASS: felty, many fine sulfides
VESICLES: moderately vesicular
ALTERATION: moderately altered
VEINS: Y

Comments: Half is filled with white carbonates, half is open.
Patchy alteration at the upper part (0-47 cm).

<table>
<thead>
<tr>
<th>Depth (CSF-A) (m)</th>
<th>Core length (cm)</th>
<th>Piece number</th>
<th>Orientation</th>
<th>Lithology</th>
<th>Glass</th>
<th>Pegmatite</th>
<th>Vein connectivity</th>
<th>Vein texture</th>
<th>Sediment intermingled</th>
<th>Reflectance L* a* b*</th>
<th>Green size distribution</th>
<th>Magnetic susceptibility (10^-5 SI)</th>
<th>Phenocrysts</th>
</tr>
</thead>
<tbody>
<tr>
<td>186.155</td>
<td>120</td>
<td>01</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>
</tbody>
</table>

385-U1547D-20R-3-A, 0-120.5 cm
UNIT: 1
LITHOLOGY: basalt
DESCRIPTION: Sill
COLOR: gray
TEXTURE: aphyric
GROUNDMASS: felty, many fine sulfides
VESICLES: moderately vesicular
ALTERATION: moderately altered
VEINS: Y

Comments: Half is filled with white carbonates, half is open.
Patchy alteration at the upper part (0-47 cm).
UNIT: 1
LITHOLOGY: basalt
DESCRIPTION: Sill
COLOR: gray
TEXTURE: aphyric
GROUNDMASS: felty, many fine pyrites
VESICLES: sparsely vesicular
UPPER CONTACT:
LOWER CONTACT:
ALTERATION: moderately altered
VEINS: Y
Comments: most is open at the upper part, most is filled with carbonates at the lower part.
Hole 385-U1547D-21R Section 2, Top of Section: 189.07 m (CSF-A)

385-U1547D-21R-2-A, 0-139 cm

UNIT: 1
LITHOLOGY: basalt
DESCRIPTION: Sill
COLOR: gray
TEXTURE: aphyric
GROUNDMASS: felty
VESICLES: moderately vesicular
UPPER CONTACT:
LOWER CONTACT:
ALTERATION: moderately altered
VEINS: Y

Site U1547 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>
<th>Lith. unit</th>
<th>Age</th>
</tr>
</thead>
</table>

Hole 385-U1547E Core 11, Interval 0.0-0.0 m (CSF-A)
Hole 385-U1547E Core 2R, Interval 61.8-61.85 m (CSF-A)

This core consists of small fragment of indurated pale yellowish brown DIATOM MICRITE.

<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>61.8</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>61.85</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

middle to late Pleistocene
Hole 385-U1547E Core 3R, Interval 71.3-71.45 m (CSF-A)

This core consists of 3 indurated pieces of pale to dark yellowish brown (10YR 6/2 and 4/2) DIATOM MICRITE.

<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>
<th>Lith. unit</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>71.3</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>100</td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
This core consists of olive gray CLAY-RICH DIATOM MICRITE and indurated DIATOM MICRITE.
LITHOLOGY: plagioclase phyric basalt
DESCRIPTION: Sill
COLOR: gray
TEXTURE: porphyritic
GROUNDMASS: felty, many fine pyrites
VESICLES: moderately to nonvesicular
UPPER CONTACT:
LOWER CONTACT:
ALTERATION: moderately to highly altered
VEINS: Y
**Hole 385-U1547E-4R Section 3, Top of Section: 82.97 m (CSF-A)**

<table>
<thead>
<tr>
<th>Depth (m)</th>
<th>Lithology</th>
<th>Description</th>
<th>Veins</th>
<th>Alteration</th>
</tr>
</thead>
<tbody>
<tr>
<td>82.97</td>
<td>Plagioclase phyric basalt</td>
<td>Sill</td>
<td>Gray</td>
<td>Moderately altered</td>
</tr>
</tbody>
</table>

**Visual Core Descriptions**

385-U1547E-4R-3-A, 0-49 cm

- **Unit:** 1
- **Lithology:** Plagioclase phyric basalt
- **Description:** Sill
- **Color:** Gray
- **Texture:** Porphyritic
- **Groundmass:** Felty, many fine pyrites
- **Vesicles:** Sparse
- **Upper Contact:**
- **Lower Contact:**
- **Alteration:** Moderately altered
- **Veins:** Y

**Shipboard Samples**

<table>
<thead>
<tr>
<th>Core Length (cm)</th>
<th>Orientation</th>
<th>Site U1547 Core Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>60</td>
<td></td>
<td></td>
</tr>
<tr>
<td>70</td>
<td></td>
<td></td>
</tr>
<tr>
<td>80</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Scanned Images**

- [Scanned Image 1](#)
- [Scanned Image 2](#)
- [Scanned Image 3](#)
- [Scanned Image 4](#)
- [Scanned Image 5](#)
- [Scanned Image 6](#)
- [Scanned Image 7](#)
- [Scanned Image 8](#)
Hole 385-U1547E-5R Section 1, Top of Section: 91.0 m (CSF-A)

<table>
<thead>
<tr>
<th>Depth (m)</th>
<th>Core length (cm)</th>
<th>Piece number</th>
<th>Orientation</th>
<th>Lithology</th>
<th>Glass</th>
<th>Vein type</th>
<th>Structure</th>
<th>Vesicularity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>91.0</td>
<td></td>
<td>01</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>91.1</td>
<td></td>
<td>02</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>91.2</td>
<td></td>
<td>03</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>91.3</td>
<td></td>
<td>04</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>91.4</td>
<td></td>
<td>05</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>91.5</td>
<td></td>
<td>06</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>91.6</td>
<td></td>
<td>07</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>91.7</td>
<td></td>
<td>08</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>91.8</td>
<td></td>
<td>09</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>91.9</td>
<td></td>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>92.0</td>
<td></td>
<td>11</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>92.1</td>
<td></td>
<td>12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>92.2</td>
<td></td>
<td>13</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>92.3</td>
<td></td>
<td>14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>92.4</td>
<td></td>
<td>15</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

UNIT: 1
LITHOLOGY: plagioclase phryic basalt
DESCRIPTION: Sill
COLOR: gray
TEXTURE: porphyritic
GROUNDMASS: felty, many fine pyrites
VESICLES: sparsely vesicular
UPPER CONTACT:
LOWER CONTACT:
ALTERATION: moderately altered
VEINS: Y Comments: basalt with some glassy margin, conglomerate, hydrothermal concretion and sediment injection along veins
**LITHOLOGY:** plagioclase phyric basalt  
**DESCRIPTION:** Sill  
**COLOR:** gray  
**TEXTURE:** porphyritic  
**GROUNDMASS:** felty, no pyrite to many fine pyrites  
**VESICLES:** moderately to sparsely vesicular  
**UPPER CONTACT:**  
**LOWER CONTACT:**  
**ALTERATION:** slightly altered  
**VEINS:** Y  
**Comments:** at 41-109 cm, many haloed fractures
**Hole 385-U1547E-6R Section 1, Top of Section: 100.8 m (CSF-A)**

<table>
<thead>
<tr>
<th>Depth (CSF-A, m)</th>
<th>Core length (cm)</th>
<th>Number</th>
<th>Orientation</th>
<th>Scanned image</th>
<th>Lithology</th>
<th>Glass</th>
<th>Phanocryst</th>
<th>Vesicularity</th>
<th>Vein connectivity</th>
<th>Alteration</th>
<th>Veins</th>
<th>Sediment intermingled</th>
<th>Vein texture</th>
</tr>
</thead>
<tbody>
<tr>
<td>100.8</td>
<td></td>
<td>01</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>02</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>03</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>04</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>05</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>06</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>07</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>08</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>09</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>10</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>11</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>12</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 U1547 core descriptions**

**Visual core descriptions**

385-U1547E-6R-1A, 17-83 cm

**UNIT: 1**

**LITHOLOGY:** aphyric basalt

**DESCRIPTION:** sill

**COLOR:** gray

**TEXTURE:** aphyric, phaneritic

**GROUNDMASS:** felty equigranular

**VESICLES:** moderately vesicular

**ALTERATION:** moderately altered, patchy

**VEINS:** absent
385-U1547E-6R-2-A, 0-101.63 cm
UNIT: 1
LITHOLOGY: plagioclase phyric basalt
DESCRIPTION: Sill
COLOR: gray
TEXTURE: porphyritic
GROUNDMASS: felty, sulfide-bearing
VESICLES: moderately vesicular
UPPER CONTACT: Y
LOWER CONTACT: Y
ALTERATION: moderately altered
VEINS: Y

Comments: at 0-20 cm, most is open or partially filled with pyrite; at 20-45 cm, most is bigger and fully filled with carbonates; at 45-89 cm, part is fully filled with carbonates, part is open with blue fine minerals coating the margin; at 89-101.63 cm, most is fully filled with carbonates.
Hole 385-U1547E-7R Section 1, Top of Section: 110.5 m (CSF-A)

385-U1547E-7R-1-A, 0-6.5 cm
UNIT: 1
LITHOLOGY: aphyric basalt
DESCRIPTION: sill
COLOR: gray
TEXTURE: aphyric, glassy margin (between 0-6 cm)
GROUNDMASS: felty pebbles
VESICLES: moderately vesicular
ALTERATION: moderately altered
VEINS: absent

385-U1547E-7R-1-A, 6.5-15 cm
UNIT: 1
LITHOLOGY: aphyric basalt
DESCRIPTION: sill
COLOR: gray
TEXTURE: aphyric,
GROUNDMASS: felty pebbles
VESICLES: moderately vesicular
ALTERATION: slightly altered
VEINS: absent

385-U1547E-7R-1-A, 15-110 cm
UNIT: 1
LITHOLOGY: aphyric basalt
DESCRIPTION: sill
COLOR: dark gray
TEXTURE: phaneritic
GROUNDMASS: felty equigranular
VESICLES: highly vesicular
ALTERATION: moderately altered, halos present
VEINS: present, calcite vein
## Site U1547 core descriptions

### Visual core descriptions

<table>
<thead>
<tr>
<th>Depth (m)</th>
<th>Lithology</th>
<th>Description</th>
<th>Color</th>
<th>Texture</th>
<th>Groundmass</th>
<th>Alteration</th>
<th>Veins</th>
<th>Vesicularity</th>
<th>Veins</th>
<th>Phenocrysts</th>
<th>Magnetism</th>
<th>Reflectance</th>
</tr>
</thead>
<tbody>
<tr>
<td>120.3</td>
<td>conglomerate</td>
<td>0-4 cm</td>
<td>gray, greenish gray</td>
<td>hydrothermal concretion (carbonates, green minerals)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0</td>
<td>0 9 8 7 6 5 4 3 2 1 0</td>
</tr>
</tbody>
</table>
Hole 385-U1547E-9R Section 2, Top of Section: 126.5 m (CSF-A)

UNIT: 1
LITHOLOGY: aphyric basalt
DESCRIPTION: sill
COLOR: gray
TEXTURE: aphyric and aphanitic
GROUNDMASS: felty, pyrite-bearing
VESICLES: Non-vesicular
ALTERATION: moderately altered, patchy
VEINS: calcite vein (1mm), just below glassy rind (interval 0-11cm)
UNIT: 1
LITHOLOGY: aphyric basalt
DESCRIPTION: Sill
COLOR: gray
TEXTURE: aphyric
GROUNDMASS: felty, pyrite-bearing, one small piece have glass margin.
VESICLES: non vesicular
UPPER CONTACT:
LOWER CONTACT:
ALTERATION: highly to moderately altered
VEINS: y
Comments: sediment injection with ~2 cm wide. The description just base on the small pieces return from
385-U1547E-10R-2-A, 0-35 cm
UNIT: 1
LITHOLOGY: basalt
DESCRIPTION: sill
COLOR: light gray
TEXTURE: subophitic
PHENOCRYSTS: none
GROUNDMASS: felty, equigranular
VESICLES: sparsely vesicular
UPPER CONTACT:
LOWER CONTACT:
ALTERATION: moderately altered
VEINS: y
Comments: sediment injection.

385-U1547E-10R-2-A, 35-139 cm
UNIT: 1
LITHOLOGY: aphyric basalt
DESCRIPTION: Sill
COLOR: gray
TEXTURE: aphyric
GROUNDMASS: felty, pyrite-bearing
VESICLES: sparsely vesicular
UPPER CONTACT:
LOWER CONTACT:
ALTERATION: highly to moderately altered
VEINS: y
Comments: sediment injection.
<table>
<thead>
<tr>
<th>Depth (cm)</th>
<th>Lithology</th>
<th>Description</th>
<th>Color</th>
<th>Texture</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>Hole 385-U1547E-10R Section 3, Top of Section: 132.84 m (CSF-A)</td>
<td>aphyric basalt</td>
<td>Sill</td>
<td>light gray</td>
<td>aphyric</td>
<td>felty</td>
<td>moderately vesicular</td>
<td></td>
<td></td>
<td>moderately altered</td>
<td>n</td>
</tr>
</tbody>
</table>

### Visual Core Descriptions

- **LITHOLOGY:** aphyric basalt
- **DESCRIPTION:** Sill
- **COLOR:** light gray
- **TEXTURE:** aphyric
- **GROUNDMASS:** felty
- **VESICLES:** moderately vesicular
- **UPPER CONTACT:**
- **LOWER CONTACT:**
- **ALTERATION:** moderately altered
- **VEINS:** n
**UNIT: 1**

**LITHOLOGY:** aphyric basalt

**DESCRIPTION:** sill

**COLOR:** gray

**TEXTURE:** aphyric and phaneritic

**GROUNDMASS:** felty and equigranular

**VESICLES:** highly vesicular, calcite amygdales

**ALTERATION:** slightly altered, patchy

**VEINS:** small calcite veins present
385-U1547E-11R-2-A, 0-88 cm
UNIT: 1
LITHOLOGY: aphyric basalt
DESCRIPTION: Sill
COLOR: gray
TEXTURE: aphyric
GROUNDMASS: felty, pyrite-bearing
VESICLES: moderately vesicular
UPPER CONTACT:
LOWER CONTACT:
ALTERATION: slightly altered
VEINS: Y

385-U1547E-11R-2-A, 88-144 cm
UNIT: 1
LITHOLOGY: aphyric basalt
DESCRIPTION: Sill
COLOR: gray
TEXTURE: aphyric
GROUNDMASS: felty, pyrite-bearing
VESICLES: sparsely vesicular
UPPER CONTACT:
LOWER CONTACT:
ALTERATION: moderately altered
VEINS: Y
### Site U1547 Core Descriptions

**Hole 385-U1547E-11R, Section 3, Top of Section: 137.26 m (CSF-A)**

<table>
<thead>
<tr>
<th>Depth (CSF-A, m)</th>
<th>Core length (cm)</th>
<th>Piece number</th>
<th>Orientation</th>
<th>Scanned image</th>
<th>Lithology</th>
<th>Glass</th>
<th>Phenocryst</th>
<th>Vein</th>
<th>Veneer</th>
<th>Vesicularity</th>
<th>Structure</th>
<th>Lith. unit</th>
<th>Lithology</th>
<th>Depth CSF-A (m)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>137.3</td>
<td>0</td>
<td>01</td>
<td></td>
<td></td>
<td>plagioclase phyric basalt</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0-24 cm</td>
</tr>
<tr>
<td></td>
<td>10.2</td>
<td>02</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>137.4</td>
<td>20.4</td>
<td>03</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></td>
<td>30.5</td>
<td>04</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>137.5</td>
<td>40.6</td>
<td>05</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>137.6</td>
<td>50.7</td>
<td>06</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-U1547E-11R, Section 3, 24-51 cm (CSF-A)**

<table>
<thead>
<tr>
<th>Depth (CSF-A, m)</th>
<th>Core length (cm)</th>
<th>Piece number</th>
<th>Orientation</th>
<th>Scanned image</th>
<th>Lithology</th>
<th>Glass</th>
<th>Phenocryst</th>
<th>Vein</th>
<th>Veneer</th>
<th>Vesicularity</th>
<th>Structure</th>
<th>Lith. unit</th>
<th>Lithology</th>
<th>Depth CSF-A (m)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>137.3</td>
<td>0</td>
<td>01</td>
<td></td>
<td></td>
<td>plagioclase phyric basalt</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0-24 cm</td>
</tr>
<tr>
<td></td>
<td>10.2</td>
<td>02</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>137.4</td>
<td>20.4</td>
<td>03</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></td>
<td>30.5</td>
<td>04</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>137.5</td>
<td>40.6</td>
<td>05</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>137.6</td>
<td>50.7</td>
<td>06</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>
385-U1547E-12R Section 1, Top of Section: 139.8 m (CSF-A)

**Unit 1**
- **Lithology**: aphyric basalt
- **Description**: Sill
- **Color**: gray
- **Texture**: aphyric
- **Groundmass**: felty, pyrite-bearing
- **Vesicles**: sparsely to moderately vesicular
- **Upper Contact**: top chilled contact
- **Lower Contact**: top chilled contact
- **Alteration**: moderately altered
- **Veins**: Y

**Comments**: Sediment injection at 81-97 cm, glass margin.
**Lithology:** aphyric basalt

**Description:** Sill

**Color:** gray, greenish gray

**Texture:** aphyric

**Groundmass:** felty

**Vesicles:** moderately to sparsely vesicular

**Upper Contact:**

**Lower Contact:**

**Alteration:** moderately to slightly altered

**Veins:** none

**Comments:** one piece is light gray basalt with glass margin, one piece is dark gray moderately vesicular basalt. The other pieces is greenish gray.
Hole 385-U1547E-13R-2, Top of Section: 145.185 m (CSF-A)

UNIT: 1
LITHOLOGY: aphyric basalt
DESCRIPTION: Sill
COLOR: gray
TEXTURE: aphyric
GROUNDMASS: felty, pyrite-bearing
VESICLES: highly (at 0-60 cm) to moderately (at 60-149 cm) vesicular
UPPER CONTACT: 
LOWER CONTACT: 
ALTERATION: moderately altered
VEINS: y
Comments: sediment injection.

Site U1547 core descriptions
Visual core descriptions

Site U1547 core descriptions
Visual core descriptions
### Hole 385-U1547E-13R Section 3, Top of Section: 146.675 m (CSF-A)

**Lithology:** aphyric basalt  
**DESCRIPTION:** sill  
**COLOR:** dark gray  
**TEXTURE:** phaneritic  
**GROUNDMASS:** felty, equigranular  
**VESICLES:** slightly vesicular  
**ALTERATION:** slightly altered  
**VEINS:** present, calcite veins

---

**Site U1547 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 number</th>
<th>Visual core descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>146.8</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>146.9</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>147.0</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Site U1547 core descriptions**

**Visual core descriptions**

---

**Lithology:** aphyric basalt  
**DESCRIPTION:** sill  
**COLOR:** dark gray  
**TEXTURE:** phaneritic  
**GROUNDMASS:** felty, equigranular  
**VESICLES:** slightly vesicular  
**ALTERATION:** slightly altered  
**VEINS:** present, calcite veins
Hole 385-U1547E-14R Section 1, Top of Section: 149.5 m (CSF-A)

UNIT: 1
LITHOLOGY: aphyric basalt
DESCRIPTION: Sill
COLOR: gray
TEXTURE: aphyric
GROUNDMASS: felty, pyrite-bearing
VESICLES: moderately vesicular
UPPER CONTACT:
LOWER CONTACT:
ALTERATION: moderately altered
VEINS: Y
Comments: sediment injection along a big vein (sediment, yellow to white carbonates). A long cm-wide vein through the hard work at 0-100 cm, and at 100-139 cm, intensive vein filled with yellow to white carbonates.
385-U1547E-14R-2-A, 0-131 cm

UNIT: 1
LITHOLOGY: aphyric basalt
DESCRIPTION: sill
COLOR: dark gray
TEXTURE: phaneritic
GROUNDMASS: felty, equigranular
VESICLES: slightly vesicular
ALTERATION: slightly altered
VEINS: present, calcite+pyrite veins

Site U1547 core descriptions
Visual core descriptions
385-U1547E-15R-1-A, 0-144.5 cm

UNIT: 1

LITHOLOGY: aphyric basalt

DESCRIPTION: sill

COLOR: dark gray

TEXTURE: phaneritic

GROUNDMASS: felty, equigranular

VESICLES: slightly vesicular

ALTERATION: slightly altered

VEINS: present, calcite+pyrite veins
Site U1547 core descriptions

385-U1547E-15R-2-A, 0-136 cm
UNIT: 1
LITHOLOGY: aphyric basalt
DESCRIPTION: sill
COLOR: dark gray
TEXTURE: phaneritic
GROUNDMASS: felty, equigranular
VESICLES: slightly vesicular, very small size
ALTERATION: slightly altered
VEINS: present,
**Site U1547 core descriptions**

**Visual core descriptions**

Hole 385-U1547E-15R Section 3, Top of Section: 157.005 m (CSF-A)

**Lithology:** aphyric basalt

**Description:**
- Unit: 1
- Lithology: aphyric basalt
- Color: dark gray
- Texture: phaneritic
- Groundmass: felty, equigranular
- Vesicles: slightly vesicular, very small size
- Alteration: slightly altered
- Veins: present, calcite+pyrite veins at different intervals

**Visual core descriptions**

**Description**
- PMAG: 158.2
- Reflectance: 0.8
- Magnetic susceptibility: 1000
- Grain size distribution:
  - 0.5
  - -2
  - -4.5
  - -7
  - -9.5
- Bimodal: 0
- Inequigranular: 0
- Equigranular: 0
- Phenocrysts: PLAG, OL, Cpx
- Abundance (%): 20, 15, 10, 5, 0
- Sediment intermingled: 0
- Vein connectivity: 0
- Vein texture: 0
- Dip angle (°): 0
- Sediment intermingled: 0
- Vein connectivity: 0
- Vein texture: 0
- Glass: 0
- Vein connectivity: 0
- Vein texture: 0
- Dip angle (°): 0
- Sediment intermingled: 0
- Vein connectivity: 0
- Vein texture: 0
- Glass: 0
- Vein connectivity: 0
- Vein texture: 0
- Dip angle (°): 0
- Sediment intermingled: 0
- Vein connectivity: 0
- Vein texture: 0
- Glass: 0
- Vein connectivity: 0
- Vein texture: 0
- Dip angle (°): 0
- Sediment intermingled: 0
- Vein connectivity: 0
- Vein texture: 0
- Glass: 0
- Vein connectivity: 0
- Vein texture: 0
- Dip angle (°): 0
- Sediment intermingled: 0
- Vein connectivity: 0
- Vein texture: 0
- Glass: 0
- Vein connectivity: 0
- Vein texture: 0
- Dip angle (°): 0
- Sediment intermingled: 0
- Vein connectivity: 0
- Vein texture: 0
- Glass: 0
- Vein connectivity: 0
- Vein texture: 0
- Dip angle (°): 0
- Sediment intermingled: 0
- Vein connectivity: 0
- Vein texture: 0
- Glass: 0
- Vein connectivity: 0
- Vein texture: 0
- Dip angle (°): 0
- Sediment intermingled: 0
- Vein connectivity: 0
- Vein texture: 0
- Glass: 0
- Vein connectivity: 0
- Vein texture: 0
- Dip angle (°): 0
- Sediment intermingled: 0
- Vein connectivity: 0
- Vein texture: 0
- Glass: 0
- Vein connectivity: 0
- Vein texture: 0
- Dip angle (°): 0
- Sediment intermingled: 0
- Vein connectivity: 0
- Vein texture: 0
- Glass: 0
- Vein connectivity: 0
- Vein texture: 0
- Dip angle (°): 0
- Sediment intermingled: 0
- Vein connectivity: 0
- Vein texture: 0
- Glass: 0
- Vein connectivity: 0
- Vein texture: 0
- Dip angle (°): 0
- Sediment intermingled: 0
- Vein connectivity: 0
- Vein texture: 0
- Glass: 0
- Vein connectivity: 0
- Vein texture: 0
- Dip angle (°): 0
- Sediment intermingled: 0
- Vein connectivity: 0
- Vein texture: 0
- Glass: 0
- Vein connectivity: 0
- Vein texture: 0
- Dip angle (°): 0
- Sediment intermingled: 0
- Vein connectivity: 0
- Vein texture: 0
- Glass: 0
- Vein connectivity: 0
- Vein texture: 0
- Dip angle (°): 0
- Sediment intermingled: 0
- Vein connectivity: 0
- Vein texture: 0
- Glass: 0
- Vein connectivity: 0
- Vein texture: 0
- Dip angle (°): 0
- Sediment intermingled: 0
- Vein connectivity: 0
- Vein texture: 0
- Glass: 0
- Vein connectivity: 0
- Vein texture: 0
- Dip angle (°): 0
- Sediment intermingled: 0
- Vein connectivity: 0
- Vein texture: 0
- Glass: 0
- Vein connectivity: 0
- Vein texture: 0
- Dip angle (°): 0
- Sediment intermingled: 0
- Vein connectivity: 0
- Vein texture: 0
- Glass: 0
- Vein connectivity: 0
- Vein texture: 0
- Dip angle (°): 0
- Sediment intermingled: 0
- Vein connectivity: 0
- Vein texture: 0
- Glass: 0
- Vein connectivity: 0
- Vein texture: 0
- Dip angle (°): 0
- Sediment intermingled: 0
- Vein connectivity: 0
- Vein texture: 0
- Glass: 0
- Vein connectivity: 0
- Vein texture: 0
- Dip angle (°): 0
- Sediment intermingled: 0
- Vein connectivity: 0
- Vein texture: 0
- Glass: 0
- Vein connectivity: 0
- Vein texture: 0
- Dip angle (°): 0
- Sediment intermingled: 0
- Vein connectivity: 0
- Vein texture: 0
- Glass: 0
- Vein connectivity: 0
- Vein texture: 0
- Dip angle (°): 0
- Sediment intermingled: 0
- Vein connectivity: 0
- Vein texture: 0
- Glass: 0
- Vein connectivity: 0
- Vein texture: 0
- Dip angle (°): 0
- Sediment intermingled: 0
- Vein connectivity: 0
- Vein texture: 0
- Glass: 0
- Vein connectivity: 0
- Vein texture: 0
- Dip angle (°): 0
- Sediment intermingled: 0
- Vein connectivity: 0
- Vein texture: 0
- Glass: 0
- Vein connectivity: 0
- Vein texture: 0
- Dip angle (°): 0
- Sediment intermingled: 0
- Vein connectivity: 0
- Vein texture: 0
- Glass: 0
- Vein connectivity: 0
- Vein texture: 0
- Dip angle (°): 0
- Sediment intermingled: 0
- Vein connectivity: 0
- Vein texture: 0
- Glass: 0
- Vein connectivity: 0
- Vein texture: 0
- Dip angle (°): 0
- Sediment intermingled: 0
- Vein connectivity: 0
- Vein texture: 0
- Glass: 0
- Vein connectivity: 0
- Vein texture: 0
- Dip angle (°): 0
- Sediment intermingled: 0
- Vein connectivity: 0
- Vein texture: 0
- Glass: 0
- Vein connectivity: 0
- Vein texture: 0
- Dip angle (°): 0
- Sediment intermingled: 0
- Vein connectivity: 0
- Vein texture: 0
- Glass: 0
- Vein connectivity: 0
- Vein texture: 0
- Dip angle (°): 0
- Sediment intermingled: 0
- Vein connectivity: 0
- Vein texture: 0
- Glass: 0
- Vein connectivity: 0
- Vein texture: 0
- Dip angle (°): 0
- Sediment intermingled: 0
- Vein connectivity: 0
- Vein texture: 0
- Glass: 0
- Vein connectivity: 0
- Vein texture: 0
- Dip angle (°): 0
- Sediment intermingled: 0
- Vein connectiv...
UNIT: 1

LITHOLOGY: aphyric basalt

DESCRIPTION: sill

COLOR: dark gray

TEXTURE: phaneritic

GROUNDMASS: felty, equigranular

VESICLES: moderately vesicular, very small size

ALTERATION: slightly altered

VEINS: present, calcite vein, calcite+pyrite veins at different intervals
**385-U1547E-16R-2-A, 0-62 cm**

**UNIT: 1**

**LITHOLOGY:** aphyric basalt

**DESCRIPTION:** sill

**COLOR:** dark gray

**TEXTURE:** phaneritic

**GROUNDMASS:** felty, equigranular

**VESICLES:** moderately vesicular, pyrite present

**ALTERATION:** slightly altered, chlorite present at vein boundary

**VEINS:** calcite vein at different intervals (1-2mm thick)

---

### Site U1547 core descriptions

<table>
<thead>
<tr>
<th>Description</th>
<th>Grain size distribution</th>
<th>Vesicularity</th>
<th>Vein type</th>
<th>Structure</th>
<th>Lith. unit</th>
<th>Lithology</th>
<th>Scanned image</th>
<th>Shipboard samples</th>
<th>Orientation</th>
<th>Piece number</th>
<th>Core length (cm)</th>
<th>Depth CSF-A (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HS</td>
<td>HS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>160.63 m</td>
<td>160.63 m</td>
</tr>
</tbody>
</table>

**HS:** Hole Section 2, Top of Section: 160.63 m (CSF-A)

**LITHOLOGY:** aphyric basalt

**DESCRIPTION:** sill

**COLOR:** dark gray

**TEXTURE:** phaneritic

**GROUNDMASS:** felty, equigranular

**VESICLES:** moderately vesicular, pyrite present

**ALTERATION:** slightly altered, chlorite present at vein boundary

**VEINS:** calcite vein at different intervals (1-2mm thick)
Hole 385-U1547E-17R Section 1, Top of Section: 163.9 m (CSF-A)

385-U1547E-17R-1-A, 0-36 cm
UNIT: 1
LITHOLOGY: aphyric basalt
DESCRIPTION: sill
COLOR: gray
TEXTURE: phaneritic
GROUNDMASS: felty, equigranular
VESICLES: moderately vesicular
ALTERATION: slightly altered, alteration halos present around vesicles
VEINS: small calcite/pyrite vein (20-35 cm)

385-U1547E-17R-1-A, 36-85 cm
UNIT: 1
LITHOLOGY: aphyric basalt
DESCRIPTION: sill
COLOR: gray
TEXTURE: phaneritic
GROUNDMASS: felty, equigranular
VESICLES: sparsely vesicular
ALTERATION: slightly altered, alteration halos present around vesicles
VEINS: Large vein, carbonate/pyrite (17mm), at interval 46-60 cm.

385-U1547E-17R-1-A, 85-140 cm
UNIT: 1
LITHOLOGY: aphyric basalt
DESCRIPTION: sill
COLOR: gray
TEXTURE: phaneritic
GROUNDMASS: felty, equigranular
VESICLES: absent
ALTERATION: slightly altered, alteration halos present around vesicles
VEINS: absent
Hole 385-U1547E-17R Section 2, Top of Section: 165.3 m (CSF-A)

UNIT: 1
LITHOLOGY: aphyric basalt
DESCRIPTION: sill
COLOR: dark gray
TEXTURE: phaneritic
GROUNDMASS: felty, equigranular
VESICLES: moderately vesicular
ALTERATION: slightly altered
VEINS: present, carbonate/pyrite vein (10mm thick) at interval 0-7cm
**LITHOLOGY:** aphyric basalt

**DESCRIPTION:** sill

**COLOR:** gray

**TEXTURE:** aphyric, phaneritic

**GROUNDMASS:** felty equigranular

**VESICLES:** moderately vesicular

**ALTERATION:** slightly altered, patchy

**VEINS:** present

---

**Site U1547 core descriptions**

**Hole 385-U1547E-17R Section 3, Top of Section: 166.345 m (CSF-A)**

<table>
<thead>
<tr>
<th>Description</th>
<th>Glass</th>
<th>Phenocrysts</th>
<th>Dip angle (°)</th>
<th>Sediment intermingled</th>
<th>Vein connectivity</th>
<th>Vein texture</th>
<th>Vein connectivity</th>
<th>Vein texture</th>
<th>Vein connectivity</th>
<th>Vein texture</th>
<th>Vein connectivity</th>
<th>Vein texture</th>
<th>Vein connectivity</th>
<th>Vein texture</th>
<th>Vein connectivity</th>
<th>Vein texture</th>
<th>Vein connectivity</th>
<th>Vein texture</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>UNIT:</strong> 1</td>
<td>LITHOLOGY: aphyric basalt</td>
<td><strong>DESCRIPTION:</strong> aphyric basalt</td>
<td><strong>COLOR:</strong> gray</td>
<td><strong>TEXTURE:</strong> aphyric, phaneritic</td>
<td><strong>GROUNDMASS:</strong> felty equigranular</td>
<td><strong>VESICLES:</strong> moderately vesicular</td>
<td><strong>ALTERATION:</strong> slightly altered, patchy</td>
<td><strong>VEINS:</strong> present</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 U1547 core descriptions

LITHOLOGY: aphyric basalt
DESCRIPTION: sill
COLOR: gray
TEXTURE: phaneritic
GROUNDMASS: felty, equigranular
VESICLES: moderately vesicular
ALTERATION: slightly altered
VEINS: absent

Hole 385-U1547E-17R Section 4, Top of Section: 167.095 m (CSF-A)

385-U1547E-17R-4-A, 0-79 cm
UNIT: 1
LITHOLOGY: aphyric basalt
DESCRIPTION: sill
COLOR: grey
TEXTURE: phaneritic
GROUNDMASS: felty, equigranular
VESICLES: moderately vesicular
ALTERATION: slightly altered
VEINS: absent
Portions of the document are in natural reading order and include the following information:

**Lithology:**
- **aphyric basalt**
- **pyroxene phyric dolerite**

**Description:**
- Sill

**Color:**
- Gray
- Greenish gray

**Texture:**
- Phaneritic
- Subophitic

**Groundmass:**
- Felty, equigranular

**Vesicles:**
- Sparsely vesicular
- Moderately vesicular

**Alteration:**
- Slightly altered

**Veins:**
- Present, carbonate, (between 10-14 cm), 10mm thick
- Calcite veins at multiple intervals, single and dendritic

**Core Descriptions:**
- Site U1547 core descriptions
- Visual core descriptions

- **Core length (cm):** 0-30 cm, 30-134 cm
- **Lithology:** aphyric basalt, pyroxene phyric dolerite
- **Description:** sill
- **Color:** gray, greenish gray
- **Texture:** phaneritic, subophitic
- **Groundmass:** felty, equigranular
- **Vesicles:** sparsely vesicular, moderately vesicular
- **Alteration:** slightly altered
- **Veins:** present, carbonate, calcite
  - (between 10-14 cm), 10mm thick
  - At multiple intervals, single and dendritic
**Lithology:** clinopyroxene phyric dolerite sill

**Description:** sill

**Color:** greenish gray

**Texture:** subophitic, porphyritic

**Phenocrysts:** 20% clinopyroxene

**Groundmass:** felty, equigranular

**Vesicles:** sparsely vesicular

**Upper Contact:**

**Lower Contact:**

**Alteration:** slightly altered

**Veins:** y
Hole 385-U1547E-18R Section 3, Top of Section: 171.61 m (CSF-A)

LITHOLOGY: clinopyroxene phyric dolerite sill
DESCRIPTION: sill
COLOR: greenish gray
TEXTURE: subophitic, porphyritic
PHENOCRYSTS: 20% clinopyroxene
GROUNDMASS: felty, equigranular
VESICLES: sparsely vesicular
ALTERATION: slightly altered

Site U1547 core descriptions
UNIT: 1
LITHOLOGY: clinopyroxene plagioclase phyric dolerite sill
DESCRIPTION: sill
COLOR: greenish gray
TEXTURE: subophitic, porphyritic
PHENOCRYSTS: 20% clinopyroxene + 3% plagioclase
GROUNDMASS: felty, equigranular
VESICLES: sparsely vesicular
UPPER CONTACT:
LOWER CONTACT:
ALTERATION: slightly altered
VEINS: y
### Site U1547 core descriptions

**Hole 385-U1547E-19R Section 2, Top of Section: 174.1 m (CSF-A)**

<table>
<thead>
<tr>
<th>Depth (CSF-A, m)</th>
<th>LITHOLOGY: pyroxene phyric dolerite sill</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core length (cm)</td>
<td>DESCRIPTION: sill</td>
</tr>
<tr>
<td>Scanned image</td>
<td>COLOR: dark greenish gray</td>
</tr>
<tr>
<td>Lithology</td>
<td>TEXTURE: porphyritic</td>
</tr>
<tr>
<td>Glass</td>
<td>GROUNDMASS: felty and fine grained</td>
</tr>
<tr>
<td>Phacochrome</td>
<td>ALTERATION: slightly altered</td>
</tr>
<tr>
<td>Rheozone</td>
<td>VEINS: absent</td>
</tr>
</tbody>
</table>

**Visual core descriptions**

- Depth: 174.1 m
- Core number: 2-A
- Orientation: D
- Piece number: 0
- Core length: 40 cm
- Scanned image: Available
- Lithology: pyroxene phyric dolerite sill
- Description: Sill
- Color: Dark greenish gray
- Text: Porphyritic
- Groundmass: Felty and fine grained
- Alteration: Slightly altered
- Veins: Absent
**Site U1547 core descriptions**

**Visual core descriptions**

<table>
<thead>
<tr>
<th>Depth (m)</th>
<th>Core length (cm)</th>
<th>Orientation</th>
<th>Grain size distribution</th>
<th>Vesicularity</th>
<th>Vein texture</th>
<th>Vein connectivity</th>
<th>Sediment intermingled</th>
<th>Vesicles</th>
<th>Alteration</th>
<th>Veins</th>
<th>Reflection L* a* b*</th>
<th>Magnetic susceptibility (10^-5 SI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>174.7</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>

**Hole 385-U1547E-19R Section 3, Top of Section: 174.72 m (CSF-A)**

- **UNIT:** 1
- **LITHOLOGY:** pyroxene phyric dolerite sill
- **DESCRIPTION:** sill
- **COLOR:** dark greenish gray
- **TEXTURE:** porphyritic
- **GROUNDMASS:** felty and fine grained
- **VESICLES:** non-vesicular
- **ALTERATION:** slightly altered
- **VEINS:** absent

**Phenocrysts abundance (%)**
- PLAG: 20%
- OL: 15%
- CPX: 10%
- Bimodal: 5%
- Inequigranular: 0%
- Equigranular: 0%

**Reflectance L* a* b* (10^-5 SI)**
- L*: 96
- a*: 76
- b*: 56
- Reflectance: 3.8

**Magnetic susceptibility (10^-5 SI)**
- MS WR: 560
- MS Point: 1170
UNIT: 1
LITHOLOGY: clinopyroxene plagioclase phyric dolerite sill
DESCRIPTION: sill
COLOR: greenish gray
TEXTURE: subophitic, porphyritic
PHENOCRYSTS: 20% clinopyroxene + 5% plagioclase
GROUNDMASS: felty, equigranular
VESICLES: very sparsely vesicular
UPPER CONTACT: 
LOWER CONTACT: 
ALTERATION: slightly altered
VEINS: y

385-U1547E-20R-1-A, 0-127 cm
UNIT: 1
LITHOLOGY: clinopyroxene plagioclase phyric dolerite sill
DESCRIPTION: sill
COLOR: greenish gray
TEXTURE: subophitic, porphyritic
PHENOCRYSTS: 20% clinopyroxene + 5% plagioclase
GROUNDMASS: felty, equigranular
VESICLES: very sparsely vesicular
UPPER CONTACT: 
LOWER CONTACT: 
ALTERATION: slightly altered
VEINS: y
Hole 385-U1547E-20R Section 2, Top of Section: 175.87 m (CSF-A)

UNIT: 1
LITHOLOGY: clinopyroxene plagioclase phyric dolerite sill
DESCRIPTION: sill
COLOR: greenish gray
TEXTURE: subophitic, porphyritic
PHENOCRYSTS: 20% clinopyroxene + 5% plagioclase
GROUNDMASS: felty, equigranular
VESICLES: very sparsely vesicular
UPPER CONTACT: 
LOWER CONTACT: 
ALTERATION: slightly altered
VEINS: y
Hole 385-U1547E-21R Section 1, Top of Section: 177.3 m (CSF-A)

385-U1547E-21R-1-A, 0-40 cm
UNIT: 1
LITHOLOGY: clinopyroxene plagioclase phyric dolerite sill
DESCRIPTION: sill
COLOR: greenish gray
TEXTURE: subophitic, porphyritic
PHENOCRYSTS: 20% clinopyroxene + 3% plagioclase
GROUNDMASS: felty, equigranular
VESICLES: nonvesicular
UPPER CONTACT:
LOWER CONTACT:
ALTERATION: slightly altered
VEINS: yes, sediment injection along the veins

385-U1547E-21R-1-A, 40-143 cm
UNIT: 1
LITHOLOGY: clinopyroxene plagioclase phyric dolerite sill
DESCRIPTION: sill
COLOR: greenish gray
TEXTURE: subophitic, porphyritic
PHENOCRYSTS: 20% clinopyroxene + 3% plagioclase
GROUNDMASS: felty, equigranular
VESICLES: nonvesicular
UPPER CONTACT:
LOWER CONTACT:
ALTERATION: slightly altered
VEINS: yes, sediment injection along the veins
<table>
<thead>
<tr>
<th>Depth/CSF-A (m)</th>
<th>Core length (cm)</th>
<th>Orientation</th>
<th>Lithology</th>
<th>Glass</th>
<th>Phenocrysts</th>
<th>Vesicularity</th>
<th>Vein connectivity</th>
<th>Vein texture</th>
<th>Vein porosity</th>
<th>Vein connectivity</th>
<th>Core description</th>
</tr>
</thead>
<tbody>
<tr>
<td>179.73</td>
<td></td>
<td></td>
<td>pyroxene phyric dolerite sill</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Sill</td>
</tr>
</tbody>
</table>

**DESCRIPTION:**
- **COLOR:** dark gray
- **TEXTURE:** porphyritic
- **PHENOCRYST:** pyroxene (20%)
- **GROUNDMASS:** fine grained
- **VESICLES:** moderately vesicular
- **ALTERATION:** slightly altered
- **VEINS:** calcite vein (54-60cm)
### Lithology: Pyroxene Phric Dolerite Sill

**Description:** Sill

- **Color:** Dark gray
- **Texture:** Porphyritic
- **Groundmass:** Pyroxene phenocrysts (20%; 2-3 mm size)
- **Vesicles:** Slightly vesicular
- **Alteration:** Slightly altered
- **Veins:** Absent

**Visual Core Descriptions:**

<table>
<thead>
<tr>
<th>Core length (cm)</th>
<th>Core length number</th>
<th>Orientation</th>
<th>Site U1547 core descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>180.3</td>
<td>01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>180.4</td>
<td>02</td>
<td></td>
<td></td>
</tr>
<tr>
<td>180.5</td>
<td>03</td>
<td></td>
<td></td>
</tr>
<tr>
<td>180.6</td>
<td>04</td>
<td></td>
<td></td>
</tr>
<tr>
<td>180.7</td>
<td>05</td>
<td></td>
<td></td>
</tr>
<tr>
<td>180.8</td>
<td>06</td>
<td></td>
<td></td>
</tr>
<tr>
<td>180.9</td>
<td>07</td>
<td></td>
<td></td>
</tr>
<tr>
<td>181.0</td>
<td>08</td>
<td></td>
<td></td>
</tr>
<tr>
<td>180.17 m CSF-A</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Comments:**

- **Unit:** 1
- **Lithology:** Pyroxene phric dolerite sill
- **Description:** Sill
- **Color:** Dark gray
- **Texture:** Porphyritic
- **Groundmass:** Pyroxene phenocrysts (20%; 2-3 mm size)
- **Vesicles:** Slightly vesicular
- **Alteration:** Slightly altered
- **Veins:** Absent
UNIT: 1
LITHOLOGY: pyroxene phyric dolerite sill
DESCRIPTION: Sill
COLOR: dark gray
TEXTURE: porphyritic
PHENOCRYSTS: pyroxene (15%)
GROUNDMASS: fine grained
VESICLES: non-vesicular
ALTERATION: slightly altered
VEINS: polycrystalline vein (13-61 cm); (calcite vein (68-139 cm)
UNIT: 1
LITHOLOGY: clinopyroxene plagioclase phyric dolerite sill
DESCRIPTION: sill
COLOR: greenish gray
TEXTURE: subophitic, porphyritic
PHENOCRYSTSS: 5% clinopyroxene + 3% plagioclase
GROUNDMASS: felty, equigranular
VESICLES: sparsely vesicular
UPPER CONTACT:
LOWER CONTACT:
ALTERATION: slightly altered
VEINS: y
**LITHOLOGY: clinopyroxene plagioclase phyric dolerite sill**

**DESCRIPTION:** sill

**COLOR:** greenish gray

**TEXTURE:** subophitic, porphyritic

**PHENOCRYSTS:** 5% clinopyroxene + 5% plagioclase

**GROUNDMASS:** felty, equigranular

**VESICLES:** sparsely vesicular

**UPPER CONTACT:**

**LOWER CONTACT:**

**ALTERATION:** slightly altered

**VEINS:** y
LITHOLOGY: clinopyroxene plagioclase phyric dolerite sill
DESCRIPTION: sill
COLOR: greenish gray
TEXTURE: subophitic, porphyritic
PHENOCRYSTS: 10% clinopyroxene + 5% plagioclase
GROUNDMASS: felty, equigranular
VESICLES: sparsely vesicular
UPPER CONTACT:
LOWER CONTACT:
ALTERATION: slightly altered
VEINS: y

PMAG

Reflectance
L* a* b*

Hole 385-U1547E-23R Section 2, Top of Section: 186.47 m (CSF-A)

385-U1547E-23R Section 2, Top of Section: 186.47 m (CSF-A)
UNIT: 1
LITHOLOGY: clinopyroxene plagioclase phyric dolerite sill
DESCRIPTION: sill
COLOR: greenish gray
TEXTURE: subophitic, porphyritic
PHENOCRYSTS: 10% clinopyroxene + 5% plagioclase
GROUNDMASS: felty, equigranular
VESICLES: sparsely vesicular
UPPER CONTACT:
LOWER CONTACT:
ALTERATION: slightly altered
VEINS: y
385-U1547E-24R-1-A, 0-135 cm
UNIT: 1
LITHOLOGY: clinopyroxene plagioclase phyric dolerite sill
DESCRIPTION: sill
COLOR: greenish gray
TEXTURE: subophitic, porphyritic
PHENOCRYSTS: 10% clinopyroxene + 5% plagioclase
GROUNDMASS: felty, equigranular
VESICLES: no vesicular
UPPER CONTACT: 
LOWER CONTACT: 
ALTERATION: slightly altered
VEINS: y
**Hole 385-U1547E-24R Section 2, Top of Section: 189.05 m (CSF-A)**

**Lithology:** pyroxene phyric dolerite sill

**Description:** Sill

**Color:** dark gray

**Texture:** porphyritic

**Phenocrysts:** pyroxene (15%)

**Groundmass:** fine grained

**Vesicles:** non-vesicular

**Alteration:** slightly altered

**Veins:** calcite vein (63-65 cm); 7 mm thick

---

<table>
<thead>
<tr>
<th>Depth/CSF-A (m)</th>
<th>Core length (cm)</th>
<th>Orientation</th>
<th>Piece number</th>
<th>Core number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>189.1</td>
<td>0</td>
<td></td>
<td>01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>189.2</td>
<td>10</td>
<td></td>
<td>02</td>
<td></td>
<td></td>
</tr>
<tr>
<td>189.3</td>
<td>20</td>
<td></td>
<td>03</td>
<td></td>
<td></td>
</tr>
<tr>
<td>189.4</td>
<td>30</td>
<td></td>
<td>04</td>
<td></td>
<td></td>
</tr>
<tr>
<td>189.5</td>
<td>40</td>
<td></td>
<td>05</td>
<td></td>
<td></td>
</tr>
<tr>
<td>189.6</td>
<td>50</td>
<td></td>
<td>06</td>
<td></td>
<td></td>
</tr>
<tr>
<td>189.7</td>
<td>60</td>
<td></td>
<td>07</td>
<td></td>
<td></td>
</tr>
<tr>
<td>189.8</td>
<td>70</td>
<td></td>
<td>08</td>
<td></td>
<td></td>
</tr>
<tr>
<td>189.9</td>
<td>80</td>
<td></td>
<td>09</td>
<td></td>
<td></td>
</tr>
<tr>
<td>190.0</td>
<td>90</td>
<td></td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>190.1</td>
<td>100</td>
<td></td>
<td>11</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Site U1547 core descriptions**

**Visual core descriptions**

---

**385-U1547E-22R-1-A, 0-108 cm**

**UNIT:** 1

**LITHOLOGY:** pyroxene phyric dolerite sill

**DESCRIPTION:** Sill

**COLOR:** dark gray

**TEXTURE:** porphyritic

**PHENOCRYSTS:** pyroxene (15%)

**GROUNDMASS:** fine grained

**VESICLES:** non-vesicular

**ALTERATION:** slightly altered

**VEINS:** calcite vein (63-65 cm); 7 mm thick
**Hole 385-U1547E-24R Section 3, Top of Section: 190.13 m (CSF-A)**

**Description**
- **UNIT:** 1
- **LITHOLOGY:** clinopyroxene phyric dolerite sill
- **DESCRIPTION:** Sill
- **COLOR:** dark gray
- **TEXTURE:** porphyritic
- **PHENOCRYSTS:** pyroxene (15%)
- **GROUNDMASS:** fine grained,
- **VESICLES:** non-vesicular
- **ALTERATION:** slightly altered
- **VEINS:** calcite vein (46-57 cm); 3 mm wide

### Visual Core Descriptions

<table>
<thead>
<tr>
<th>Depth (CSF-A, m)</th>
<th>Core length (cm)</th>
<th>Plate number</th>
<th>Orientation of Hole</th>
<th>Scanned image</th>
<th>Lithology</th>
<th>Lithology</th>
<th>Glass</th>
<th>Phenocrysts</th>
<th>Vesicularity</th>
<th>Vein connectivity</th>
<th>Core length (cm)</th>
<th>Lithology</th>
<th>Glass</th>
<th>Phenocrysts</th>
<th>Vesicularity</th>
<th>Vein connectivity</th>
<th>Magnetic susceptibility (10^-5 SI)</th>
<th>Reflectance ( L^* ) ( a^* ) ( b^* )</th>
</tr>
</thead>
<tbody>
<tr>
<td>190.2</td>
<td>10</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></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>190.3</td>
<td>20</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></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>190.4</td>
<td>30</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></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>190.5</td>
<td>40</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></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>190.6</td>
<td>50</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></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>190.7</td>
<td>60</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></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>190.8</td>
<td>70</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></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>190.9</td>
<td>80</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></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>191.0</td>
<td>90</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></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>191.1</td>
<td>100</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></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>191.2</td>
<td>110</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></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Site U1547 core descriptions**

**385-U1547E-24R-3-A, 0-111 cm**
- **UNIT:** 1
- **LITHOLOGY:** clinopyroxene phyric dolerite sill
- **DESCRIPTION:** Sill
- **COLOR:** dark gray
- **TEXTURE:** porphyritic
- **PHENOCRYSTS:** pyroxene (15%)
- **GROUNDMASS:** fine grained
- **VESICLES:** non-vesicular
- **ALTERATION:** slightly altered
- **VEINS:** calcite vein (46-57 cm); 3 mm wide