Core 1 mostly consists of gray (10YR 5/1) CLAY. The first section contains foraminifers. The bottom of the core contains more silt. Drilling disturbance is slight to moderate with a soupy aspect.
### Hole 396-U1569A Core 2R, Interval 9.8-9.88 m (CSF-A)

<table>
<thead>
<tr>
<th>Depth CSF-A (m)</th>
<th>Core length (cm)</th>
<th>Lith. unit</th>
<th>Core image</th>
<th>Graphic lithology</th>
<th>Ash</th>
<th>RGB</th>
<th>Natural gamma radiation (cps)</th>
<th>Magnetic susceptibility ($\times 10^{-5}$ SI)</th>
<th>Grain size</th>
<th>Bioturbation intensity</th>
<th>Sed. structures</th>
<th>Shipboard samples</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
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<td>0</td>
</tr>
</tbody>
</table>

**Note:**
- **RGB:** Colors ranging from blue (0) to red (1).
- **Natural gamma radiation:** Levels from 0 to 1.
- **Magnetic susceptibility:** Values from 0 to 1.
- **Grain size:** Scale from 0 to 1.
- **Bioturbation intensity:** From 0 to 1.
- **Sed. structures:** Representations of sedimentary structures from 0 to 1.
Hole 396-U1569A Core 3R, Interval 19.5-24.97 m (CSF-A)

Drilling disturbance is moderate to high with up-arching. Core 3 consists of gray (10YR 5/1) CLAY with silt. Coal and organic matter are observed.
Site U1569 core descriptions

Hole 396-U1569A Core 4R, Interval 29.2-29.22 m (CSF-A)

<table>
<thead>
<tr>
<th>Depth CSF-A (m)</th>
<th>Core length (cm)</th>
<th>Lith. unit</th>
<th>Core image</th>
<th>Graphic lithology</th>
<th>Ash</th>
<th>Disturbance type</th>
<th>Disturbance intensity</th>
<th>Shipboard samples</th>
</tr>
</thead>
<tbody>
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</table>

All TO PAL
Hole 396-U1569A Core 5R, Interval 38.9-44.12 m (CSF-A)

Drilling disturbance is moderate to high with slurry. Core 5 consists of gray (10YR 5/1) to very dark gray (10YR 3/1) CLAY with silt. Presence of dropstone locally.

Visual core descriptions
### Hole 396-U1569A Core 6R, Interval 48.6-48.64 m (CSF-A)

**ALL TO PAL**

<table>
<thead>
<tr>
<th>Depth CSF-A (m)</th>
<th>Core length (cm)</th>
<th>Lith. unit</th>
<th>Core image</th>
<th>Graphic lithology</th>
<th>Ash</th>
<th>Natural gamma radiation (cps)</th>
<th>Magnetic susceptibility (x10^-5 SI)</th>
<th>Grain size</th>
<th>Bioturbation intensity</th>
<th>Sed. structures</th>
<th>Lithology color</th>
<th>Disturbance type</th>
<th>Disturbance intensity</th>
<th>Shipboard samples</th>
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<td></td>
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</table>

**Visual core descriptions**

- RGB
- Lithology color
- Sed. structures
- Disturbance type
- Shipboard samples
Core 7 consists of dark gray (2.5Y 4/1) CLAY with silt and dropstone.
Hole 396-U1569A Core 8R, Interval 68.0-71.07 m (CSF-A)

Core 8 consists of dark grayish brown (2.5Y 4/2) CLAY with silt.
Core 9 consists of dark greenish gray (GLEY 1 4/5GY) CLAY with (micas rich) silt overlaid by a 11 cm thick layer of grayish brown (2.5Y 5/2) CLAY with silt.
Core 10 consists of very dark greenish gray (GLEY 1 3/10Y) CLAY with silt.
Core 11 consists of very dark greenish gray (GLEY 1 3/10Y) CLAY with silt. In section 3, a 8cm thick greenish gray (GLEY 1 5/10GY) layer show sharp horizontal top contact and a gradational horizontal bottom contact.
Core 12 consists of greenish gray (GLEY 1 5/10GY) to very dark greenish gray (GLEY 1 3/10Y) CLAY with silt, and slight bioturbation.
Core 13 mostly consists of dark greenish gray (GLEY 1 4/5GY) to dark reddish brown (2.5YR 3/3) CLAY with silt, and slight bioturbation.
Core 14 is composed of olive gray (5Y 4/2) CLAY with silt and dark greenish gray (GLEY 1 4/10GY) sand rich CLAY. The core was moderately fractured during drilling.
Core 15 shows an alternation of grayish brown (10YR 5/2) CLAY, with dark gray (10YR 4/1) SAND with clay and greenish gray (GLEY 1 5/10Y) sand rich CLAY. The section 2 contains multi-centimeter scale high density concentric nodules. The core was moderately fractured during drilling.
Core 16 consists of very dark gray (5Y 3/1) CLAY with silt and moderate bioturbation. The core was moderately to highly fractured during drilling.

<table>
<thead>
<tr>
<th>Depth CSF-A (m)</th>
<th>Core length (cm)</th>
<th>Section</th>
<th>Lith. unit</th>
<th>Core image</th>
<th>Graphic lithology</th>
<th>Grain size (μm)</th>
<th>Sed. structures</th>
<th>Disturbance intensity</th>
<th>Disturbance type</th>
<th>Shipboard samples</th>
</tr>
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<td>III</td>
<td>Orange</td>
<td>220 - 210</td>
<td>1 - 7</td>
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<td></td>
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<td>220 - 210</td>
<td>1 - 7</td>
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<td>III</td>
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<td>220 - 210</td>
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<td>III</td>
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<tr>
<td>152.5</td>
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<td>III</td>
<td>Orange</td>
<td>220 - 210</td>
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<td>Orange</td>
<td>220 - 210</td>
<td>1 - 7</td>
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<td>III</td>
<td>Orange</td>
<td>220 - 210</td>
<td>1 - 7</td>
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<tr>
<td>155.5</td>
<td></td>
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<td>I</td>
<td>III</td>
<td>Orange</td>
<td>220 - 210</td>
<td>1 - 7</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

**Lithology color**
- 0: 5Y 3/1 (very dark gray)
- 1: 5Y 3/1 (very dark gray)
- 2: 5Y 3/1 (very dark gray)
- 3: 5Y 3/1 (very dark gray)
- 4: 5Y 3/1 (very dark gray)
- 5: 5Y 3/1 (very dark gray)
- 6: 5Y 3/1 (very dark gray)
- 7: 5Y 3/1 (very dark gray)

**Magnetic susceptibility (x10^-5 SI)**
- 0: 160
- 1: 110
- 2: 60
- 3: 10

**Natural gamma radiation (cps)**
- 0: 52
- 1: 42
- 2: 32
- 3: 22
- 4: 12

**Site U1569 core descriptions**

**Visual core descriptions**

**Shipboard samples**
Core 17 consists of very dark gray (5Y 3/1) CLAY with silt and moderate bioturbation. The core was moderately fractured to slightly fragmented during drilling.
Core 18 mostly consists of very dark gray (5Y 3/1) CLAY with silt. A 3 cm thick layer of very dark gray (GLEY 1 3/N) SAND with clay is observed in section 4. The core was moderately fractured to slightly fragmented during drilling.
The top of core 19 consists of very dark grayish brown (2.5Y 3/2) CLAY with silt and moderate bioturbations. At the bottom of section 2, a concretion of glendonite presenting well developed crystal faces is observed. Light gray (GLEY 1 7/N) LIMESTONE was found in the core catcher. The core was fragmented during drilling.
Core 20 mostly consists of very dark gray (2.5Y 3/1) CLAYSTONE with silt, with a layer of light gray (GLEY 1 7/N) LIMESTONE in section 1. The core was moderately bisected during drilling.
Core 21 mostly consists of very dark gray (2.5Y 3/1) CLAYSTONE with silt presenting parallel lamination and dewatering structures, with centimeter scale layers of very dark gray (GLEY 1 3/N) ASH with clay. Gray (GLEY 1 6/N) LIMESTONE was found in the core catcher. The core was slightly fragmented during drilling.
Core 22 consists of layers of very dark gray (2.5Y 3/1) CLAYSTONE with silt, presenting parallel lamination and dewatering structures, and layers of very dark gray (GLEY 1 3/N) ASH with clay.
Core 23 consists of a thin alternation of very dark gray (2.5Y 3/1) CLAYSTONE with silt presenting parallel lamination and very dark gray (GLEY 1 3/N) ASH with clay fining upward. The core was moderately fractured during drilling.
Core 24 consists of a thin alternation of CLAYSTONE with silt presenting parallel lamination, and very dark gray (GLEY 1 3/N) ASH with clay fining upward. The color of the CLAYSTONE with silt changes progressively from very dark gray (2.5Y 3/1) to greenish black (GLEY 1 2.5/10GY). The core was moderately fractured during drilling.
Core 25 consists of a thin alternation of greenish black (GLEY 1 2.5/10GY) CLAYSTONE with silt, with slight bioturbation, locally presenting parallel lamination, and very dark gray (GLEY 1 3/N) ASH with clay. The core was moderately fractured during drilling.
Core 26 consists of a single 11 cm long piece of light gray (GLEY 1 7/N) LIMESTONE.

<table>
<thead>
<tr>
<th>Depth CSF-A (m)</th>
<th>Core length (cm)</th>
<th>Lith. unit</th>
<th>Graphic lithology</th>
<th>Grain size</th>
<th>Bioturbation intensity</th>
<th>Disturbance type</th>
<th>Disturbance intensity</th>
<th>Shipboard samples</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
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<td>11</td>
<td>Light gray</td>
<td>10</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

RGB

Natural gamma radiation (cps)
Magnetic susceptibility (x10^-5 SI)
Lithology color
Sed. structures

Site U1569 core descriptions

Visual core descriptions
Core 27 consists of a thin alternation of very dark gray (2.5Y 3/1) CLAYSTONE with silt presenting parallel lamination, slight bioturbation and dewatering structures, and very dark gray (GLEY 1 3/N) ASH with clay fining upward. The core was moderately fractured during drilling.
Core 28 consists of a thin alternation of very dark gray (2.5Y 3/1) CLAYSTONE with silt presenting parallel lamination, slight bioturbation and dewatering structures, and very dark gray (GLEY 1 3/N) ASH with clay. The core was moderately fractured during drilling.
Core 29 consists of a thin alternation of very dark gray (2.5Y 3/1) CLAYSTONE with silt presenting slight bioturbation and dewatering structures, and very dark gray (GLEY 1 3/N) ASH with clay. The core was moderately fractured during drilling.
Core 30 consists of a thin alternation of very dark gray (2.5Y 3/1) CLAYSTONE with silt presenting slight bioturbation and dewatering structures, and very dark gray (GLEY 1 3/N) ASH with clay. The core was moderately fractured during drilling.
Core 31 mostly consists of a thin alternation of very dark gray (2.5Y 3/1) CLAYSTONE with silt presenting slight bioturbation and parallel lamination, and very dark gray (GLEY 1 3/N) ASH with clay. The top of the core (R-1A, 0-35cm) is more lithified and contains a 15cm thick layer of dark gray (2.5Y 4/1) LIMESTONE. The core was moderately fractured during drilling.
Core 32 consists of a thin alternation of very dark gray (2.5Y 3/1) CLAYSTONE with silt presenting parallel lamination and very dark gray (GLEY 1 3/N) ASH with clay fining upward. The core was moderately fractured during drilling.
Core 33 consists of a thin alternation of very dark gray (2.5Y 3/1) CLAYSTONE with ash presenting wavy lamination and gray (GLEY 1 5/N) ASH with clay fining upward. The core was moderately fractured during drilling.
Core 34 consists of a thin alternation of very dark gray (2.5Y 3/1) CLAYSTONE with ash, locally presenting wavy or parallel lamination and dewatering structures, and gray (GLEY 1 5/N) ASH with clay fining upward, containing pyrite. The core was moderately fractured during drilling.
Core 35 consists of a thin alternation of very dark gray (2.5Y 3/1) CLAYSTONE with ash, presenting wavy or parallel lamination, slight bioturbation and, locally, dewatering structures, and ASH with clay fining upward. The color of the ASH changes downhole from gray (GLEY 1 5/N) to dark bluish gray (GLEY 2 4/10B). Bleb of pyrite is observed in the CLAYSTONE, as well as some pyritization of organic matter in the top of section 2. Pyrite sand is also observed in the ash layers. The core-catcher also contain a piece of totally decomposed garnet gneiss. The core was moderately fractured during drilling.
Core 36 consists of an alternation of very dark gray (2.5Y 3/1) CLAYSTONE with ash, presenting parallel lamination, and gray (GLEY 1 6/N) ASH with clay. Bleb of pyrite and pyrite sand are observed. The core was moderately fractured during drilling.
Core 37 consists of an alternation of very dark gray (2.5Y 3/1) CLAYSTONE with silt and blebs of pyrite, and gray (GLEY 1 6/N) ASH with clay. The core was moderately fractured during drilling.
Core 38 is mostly composed of dark greenish gray (GLEY 1 4/10Y) CLAYSTONE with silt that contains pyrite, with dark gray (GLEY 1 4/N) sand rich CLAY. The core was moderately fractured during drilling.
Core 39 is mostly composed of dark greenish gray (GLEY 1 4/10Y) CLAYSTONE with silt and clasts. The silt contains pyrite. The core was moderately fractured during drilling.
Core 40 consists of a 8 cm thick layer of bluish gray (GLEY 2 6/5PB) gravel. The core was moderately fractured during drilling. The core was moderately fractured during drilling.

### Site U1569 core descriptions

| Depth CSF-A (m) | Core length (cm) | Section | Lith. unit | Core image | Graphic lithology | Ash | 7% | 11% | 15% | 19% | 17% | 15% | 13% | 11% | 9% | 7% | 5% | 3% | 1% | 0% | Disturbance type | Disturbance intensity | Shipboard samples |
|----------------|------------------|---------|------------|------------|-------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----------------|--------------------|-------------------|
| 0.1           |                  | LIII    |            |            |                   |     |     |     |     |     |     |     |     |     |     |     |     |     |                 |                    |                   |
| 0.2           |                  |         |            |            |                   |     |     |     |     |     |     |     |     |     |     |     |     |     |                 |                    |                   |
| 0.3           |                  |         |            |            |                   |     |     |     |     |     |     |     |     |     |     |     |     |     |                 |                    |                   |
| 0.4           |                  |         |            |            |                   |     |     |     |     |     |     |     |     |     |     |     |     |     |                 |                    |                   |
| 0.5           |                  |         |            |            |                   |     |     |     |     |     |     |     |     |     |     |     |     |     |                 |                    |                   |
| 0.6           |                  |         |            |            |                   |     |     |     |     |     |     |     |     |     |     |     |     |     |                 |                    |                   |

- **RGB**: Colors indicating the bluish gray color.
- **Lithology color**: 0 2 4 6 8 10 (bluish gray).
- **Natural gamma radiation** (cps): 0.5, 0.25, 0, -0.25, -0.5.
- **Magnetic susceptibility** ($\times 10^{-5}$ SI): 0.75, 0.5, 0.25, 0, -0.25, -0.5.
- **Grain size**: 112, 92, 72, 52, 32, 12, 8, 6, 4, 2, 0.
- **Lithology**: Multicolored layers with varying grain sizes.
Core 41 consists of very dark greenish gray (GLEY 1 3/5GY) CLAYSTONE with silt, presenting moderate bioturbation intensity.

<table>
<thead>
<tr>
<th>Depth CSF-A (m)</th>
<th>Core length (cm)</th>
<th>Lith. unit</th>
<th>Core image</th>
<th>Graphic lithology</th>
<th>Ash</th>
<th>RGB</th>
<th>Natural gamma radiation (cps)</th>
<th>Magnetic susceptibility (x10^-5 SI)</th>
<th>Lithology color</th>
<th>Grain size</th>
<th>Sed. structures</th>
<th>Disturbance type</th>
<th>Disturbance intensity</th>
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<td>3 4 5 6 7 8 9 1 1 1 1 1 1 1 1 1</td>
<td>GLEY 1 3/5GY</td>
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<td>3 4 5 6 7 8 9 1 1 1 1 1 1 1 1 1</td>
<td>GLEY 1 3/5GY</td>
<td>0 2 4 6 8 10</td>
<td>0 1 2 3 4 5</td>
<td>0 1 2 3 4 5</td>
<td>0 1 2 3 4 5</td>
<td></td>
</tr>
</tbody>
</table>
Core 42 mostly consists of very dark gray (5Y 3/1) CLAYSTONE with silt, presenting moderate bioturbation intensity. Locally, the presence of nodules is noted. The core was moderately fractured during drilling.
Core 43 consists of very dark gray (5Y 3/1) CLAYSTONE with silt or gravel. Section 43R-1 also present a 9 cm thick layer of light brownish gray (2.5Y 6/2) clay rich SILTSTONE fining upward. The core was moderately fractured during drilling.
Core 44 consists of very dark gray (5Y 3/1) CLAYSTONE with silt with light brownish gray (2.5Y 6/2) layers of CLAYSTONE with silt CLAYSTONE with gravel. Most of the core show moderate bioturbation. The core was moderately to highly fractured during drilling.