### Hole 368-U1504A Core 1R, Interval 0.0-0.0 m (CSF-A)

**NO RECOVERY**

<table>
<thead>
<tr>
<th>RGB</th>
<th>Natural gamma radiation (cps)</th>
<th>Magnetic susceptibility (x10^-5 SI)</th>
<th>Disturbance type</th>
<th>Disturbance intensity</th>
<th>Sedimentary structures</th>
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**Site U1504 core descriptions**

**Visual core descriptions**
### Hole 368-U1504A Core 2R, Interval 7.8-7.85 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 Age</th>
<th>RGB</th>
<th>Natural gamma radiation (cps)</th>
<th>Magnetic susceptibility ($\times 10^{-5}$ SI)</th>
<th>Disturbance type</th>
<th>Disturbance intensity</th>
<th>Sedimentary structures</th>
<th>Shipboard samples</th>
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</table>

**Visual core descriptions**

- Oleasterite black Mukangga.
- Micro foraminiferal ooze.
- Diatom radiolarian ooze.
- Diatom radiolarian ooze with foraminiferal crystals.
Dark greenish gray NANNOFOSIL RICH CLAY, with greenish gray CLAY RICH NANNOFOSIL OOZE WITH BIOGENIC SILICA at the base. Bioturbation is heavy.
Hole 368-U1504A Core 4R, Interval 27.2-31.75 m (CSF-A)

Dark greenish gray NANNIFOSSIL RICH CLAY, and greenish gray NANNIFOSSIL OOZE WITH BIOGENIC SILICA and contorted bedding. Bioturbation is moderate to heavy.
Hole 368-U1504A Core 5R, Interval 36.9-38.53 m (CSF-A)

Dark greenish gray NANNOFOSIL RICH CLAY, and greenish gray NANNOFOSIL OOZE, and gray CLAY RICH NANNOFOSIL OOZE. Strata in the middle are contorted. Bioturbation is moderate to heavy.
Pale brown NANNOFOSIL OOZE WITH FORAMINIFERS, to light brown FORAMINIFER-RICH NANNOFOSIL OOZE, with minor dark greenish gray NANNOFOSIL OOZE WITH CLAY at core top. Bioturbation is heavy. Locally contorted strata.
### Hole 368-U1504A Core 7R, Interval 56.1-59.78 m (CSF-A)

Light brown FORMAMINIFER-RICH NANNOFOSSIL OOZE.

| Depth CSF-A (m) | Core length (cm) | Lith. unit | Core image | Graphic lithology | Ash | Age | RGB | Natural gamma radiation (cps) | Magnetic susceptibility ($\times 10^{-5}$ SI) | Sedimentary structures | Bioturbation intensity | Disturbance type | Shipboard samples |
|----------------|------------------|------------|------------|-------------------|-----|-----|-----|-------------------------------|----------------------------------------------|----------------------|---------------------|-------------------|----------------|------------------|
| 57             | 100              | IB         | Light brown | FORMAMINIFER-RICH NANNOFOSSIL OOZE. |     |     |     |                               |                                |                      |                    |                  |                 |                  |

Site U1504 core descriptions

Visual core descriptions
Hole 368-U1504A Core 8R, Interval 65.8-73.56 m (CSF-A)

Greenish gray and light greenish gray NANNOFOSIL OOZE WITH CLAY, transitioning at the base into light gray NANNOFOSIL-RICH FORAMINIFERAL OOZE WITH CLAY, and light brownish gray FORAMINIFER-RICH NANNOFOSIL OOZE. Bioturbation is heavy.
Greenish gray and light greenish gray CLAY-RICH NANNOFOSIL OOZE, intercalated with light brownish gray NANNOFOSIL OOZE WITH FORAMINIFERS. Bioturbation is heavy.
Hole 368-U1504A Core 10R, Interval 85.2-93.96 m (CSF-A)

Light greenish gray, light brownish gray, pale brown, and light gray NANNOFOSIL OOZE WITH CLAY, with rare NANNOFOSIL OOZE WITH FORAMINIFERS. Bioturbation is heavy.
Site U1504 core descriptions

Visual core descriptions

Hole 368-U1504A Core 11R, Interval 95.0-95.0 m (CSF-A)

NO RECOVERY

<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>Age</th>
<th>RGB</th>
<th>Natural gamma radiation (cps)</th>
<th>Magnetic susceptibility (x10^-5 SI)</th>
<th>Bioturbation intensity</th>
<th>Disturbance type</th>
<th>Disturbance intensity</th>
<th>Shipboard samples</th>
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</tbody>
</table>
Light brown NANNFOSSIL OOZE WITH FORAMINIFERS dominates the upper portion (Sections 1 to 3), while yellowish brown NANNFOSSIL OOZE WITH FORAMINIFERS, intercalated with pink FORAMINIFER-RICH NANNFOSSIL OOZE, dominates the lower portion (Sections 4 to bottom). Bioturbation is heavy. In the lower part, large brownish burrows, with two large (1-4 cm) pyrite (?) nodules in Section 5.
Hole 368-U1504A Core 13R, Interval 114.7-114.8 m (CSF-A)

Green fine-grained metamorphic clast with manganese crust and white-brownish veins from 0-2 cm. 2-7 cm pinkish BIOCLAST-RICH LIMESTONE.
Pinkish BIOCLAST-RICH LIMESTONE (0-12 cm) and light brownish gray CLAST-SUPPORTED LIMESTONE. Metamorphic and sedimentary pebble sized clasts (12-24 cm).

<table>
<thead>
<tr>
<th>Depth CSF-A (m)</th>
<th>Core length (cm)</th>
<th>Lith. unit</th>
<th>Section</th>
<th>Core image</th>
<th>Graphic lithology</th>
<th>A ash</th>
<th>RGB</th>
<th>Natural gamma radiation (cps)</th>
<th>Magnetic susceptibility (x10^-5 SI)</th>
<th>Disturbance type</th>
<th>Disturbance intensity</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>II</td>
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<td></td>
<td>9.5</td>
<td>18</td>
<td>5</td>
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</table>
Light brownish gray CLAST-SUPPORTED LIMESTONE with benthic foraminifers.
**Lithology:** Epidote-chlorite schist

**Color:** Greenish gray

**Deformation:** Strong

**Texture:** Foliated medium-grained mylonite

**Mineralogy:** Quartz, chlorite, epidote

**Metamorphic Condition:** Greenschist facies

**Clast:** Angular, heavily veined fine-grained clasts

---

**Site U1504 core descriptions**

**Hole 368-U1504A-16R Section 1, Top of Section: 138.4 m (CSF-A)**

- **Unit:** 1
- **Lithology:** Epidote-chlorite schist
- **Color:** Greenish gray
- **Deformation:** Strong
- **Texture:** Foliated medium-grained mylonite
- **Mineralogy:** Quartz, chlorite, epidote
- **Metamorphic Condition:** Greenschist facies
- **Clast:** Angular, heavily veined fine-grained clasts
Hole 398-U1504A-17R Section 2, Top of Section: 145.26 m (CSF-A)

| Depth (m) | Piece number | Core length (cm) | Orientation (°) | Magnetic susceptibility (x10^-5 SI) | Shear zone type | Deformation intensity | Vein texture | Vein connectivity | Dip angle | Strike (°) | Vein connectivity
<table>
<thead>
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<td>145.4</td>
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<td>1</td>
<td>medium-grained</td>
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<td>03</td>
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<td>55</td>
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</tbody>
</table>

**Description:**
- **LITHOLOGY:** Epidote-chlorite schist
- **COLOR:** Greenish gray
- **TEXTURE:** Foliated medium-grained mylonite
- **MINERALOGY:** Quartz, chlorite, epidote
- **METAMORPHIC CONDITION:** Greenschist facies
- **CLAST:** None
Site U1504 core descriptions

Description:

UNIT: 1
LITHOLOGY: epidote-chlorite schist
COLOR: greenish gray
DEFORMATION: strong
TEXTURE: foliated medium-grained mylonite
MINERALOGY: quartz, chlorite, epidote
METAMORPHIC CONDITION: greenschist facies
CLAST: subangular, fine-grained, cm-sized, heavily veined

Epidote-chlorite schist

Description

Grain-size
Vein morphology
Structure
Lithology name
Graphic lithology
Scanned image
Shipboard samples
Orientation
Piece number
Core length (cm)
Depth CSF-A (m)
Dip angle
Strike
Vein connectivity
Magnetic susceptibility (x10^-5 SI)

Visual core descriptions
**Hole 368-U1504A-19R Section 1, Top of Section: 152.6 m (CSF-A)**

UNIT: 1
LITHOLOGY: epidote-chlorite schist
COLOR: greenish gray
DEFORMATION: strong
TEXTURE: foliated medium-grained mylonite
MINERALOGY: quartz, chlorite, epidote
METAMORPHIC CONDITION: greenschist facies
CLAST: subangular, fine-grained, cm sized, heavily veined

**Visual Core Descriptions**

**Description**

- **Lithology**: Epidote-chlorite schist
- **Color**: Greenish gray
- **Deformation**: Strong
- **Texture**: Foliated medium-grained mylonite
- **Mineralogy**: Quartz, chlorite, epidote
- **Metamorphic Condition**: Greenschist facies
- **Clast**: Subangular, fine-grained, cm sized, heavily veined
Site U1504 core descriptions

**Hole 368-U1504A-20R Section 1, Top of Section: 158.3 m (CSF-A)**

- **UNIT:** 1
- **LITHOLOGY:** epidote-chlorite schist
- **COLOR:** greenish gray
- **DEFORMATION:** strong
- **TEXTURE:** foliated medium-grained mylonite
- **MINERALOGY:** quartz, chlorite, epidote
- **METAMORPHIC CONDITION:** greenschist facies

**CLAST:** subangular, fine-grained, cm-sized, heavily veined; coarse-grained clast (?) at 68-74 cm with quartz and epidote

---

**Visual core descriptions**
**Site U1504 core descriptions**

**Visual core descriptions**

### Hole 368-U1504A-21R Section 1, Top of Section: 163.3 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 name</th>
<th>Graphic lithology</th>
<th>Core length (cm)</th>
<th>Lithology unit</th>
<th>Dip angle</th>
<th>Strike</th>
<th>Vein connectivity</th>
<th>Deformation intensity</th>
</tr>
</thead>
<tbody>
<tr>
<td>163.3</td>
<td>0</td>
<td>01</td>
<td></td>
<td></td>
<td></td>
<td>Epidote-chlorite</td>
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</table>

**Description:**
- **UNIT:** 1
- **LITHOLOGY:** epidote-chlorite schist
- **COLOR:** greenish gray
- **DEFORMATION:** strong
- **TEXTURE:** foliated medium-grained mylonite
- **MINERALOGY:** quartz, chlorite, epidote
- **METAMORPHIC CONDITION:** greenschist facies
- **CLAST:** coarse-grained epidote-chlorite gneiss fragment at 25-29 cm; a coarse-grained epidote-quartz rich vein (?) at 30-34 cm
<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>Age</th>
<th>Ash</th>
<th>RGB</th>
<th>Natural gamma radiation (cps)</th>
<th>Magnetic susceptibility (x10^-5 SI)</th>
<th>Disturbance type</th>
<th>Disturbance intensity</th>
<th>Shipboard samples</th>
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</table>

Hole 368-U1504B Core 11, Interval 0.0-0.0 m (CSF-A)
Hole 368-U1504B Core 2R, Interval 88.2-92.37 m (CSF-A)

Pink to pinkish gray FORAMINIFER-RICH NANNOFOSIL OOZE. Pyritized burrows are common. Sediment moderately consolidated. Bioturbation is heavy.

<table>
<thead>
<tr>
<th>Graphical representation</th>
<th>RGB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural gamma radiation (cps)</td>
<td>Magnetic susceptibility (x10^{-5} SI)</td>
</tr>
<tr>
<td>Sedimentary structures</td>
<td>Bioturbation intensity</td>
</tr>
<tr>
<td>Disturbance type</td>
<td>Disturbance intensity</td>
</tr>
</tbody>
</table>

- **Core Image**: Lithology of the core.
- **Natural gamma radiation (cps)**: Values range from 29 to 148.
- **Magnetic susceptibility (x10^{-5} SI)**: Values range from 8 to 148.
- **Sedimentary structures**: Indicated with intensity levels.
- **Bioturbation intensity**: Levels 0 to 5.
- **Disturbance type**: Levels 1 to 5.
- **Shipboard samples**: Likely mapping of other samples or data.
Hole 368-U1504B Core 3R, Interval 97.9-98.06 m (CSF-A)

Pink CLAST-SUPPORTED LIMESTONE. Pebble-sized coral fragments are common.

<table>
<thead>
<tr>
<th>Depth CSF-A (m)</th>
<th>Core length (cm)</th>
<th>Section</th>
<th>Lith. unit</th>
<th>Graphic lithology</th>
<th>Age</th>
<th>Natural gamma radiation (cps)</th>
<th>Magnetic susceptibility (x10^-5 SI)</th>
<th>Disturbance type</th>
<th>Disturbance intensity</th>
<th>Sedimentary structures</th>
<th>Bioturbation intensity</th>
<th>Shipboard samples</th>
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<td>CLAST-SUPPORTED</td>
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<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
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</table>

RGB image of the core.
Hole 368-U1504B Core 4R, Interval 107.6-107.91 m (CSF-A)

Pink to pinkish white CLAST-SUPPORTED LIMESTONE. Pebble-sized coral fragments and coated grains are common.

<table>
<thead>
<tr>
<th>Depth CSF-A (m)</th>
<th>Core length (cm)</th>
<th>Section</th>
<th>Lith. unit</th>
<th>Graphic lithology</th>
<th>Age</th>
<th>RGB</th>
<th>Natural gamma radiation (cps)</th>
<th>Magnetic susceptibility (x10^{-5} SI)</th>
<th>Disturbance type</th>
<th>Disturbance intensity</th>
<th>Shipboard samples</th>
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<tr>
<td>107.6-107.91 m</td>
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<td>176</td>
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<td>107.6-107.91 m</td>
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<td>176</td>
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<td>107.6-107.91 m</td>
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<td>176</td>
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<td>107.6-107.91 m</td>
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<tr>
<td>107.6-107.91 m</td>
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<td>107.6-107.91 m</td>
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<tr>
<td>Depth (cm)</td>
<td>Core length (cm)</td>
<td>Orientation</td>
<td>Shipboard samples</td>
<td>Graphic lithology</td>
<td>Scanned image</td>
<td>Description</td>
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<tr>
<td>0-30 cm</td>
<td>368-U1504B-5R-2A</td>
<td>UNIT: 1a</td>
<td>LITHOLOGY: epidote-chlorite breccia with granofels clasts</td>
<td>COLOR: greenish gray</td>
<td>DEFORMATION: strong</td>
<td>TEXTURE: veined clasts embedded in foliated fine- to medium-grained schist</td>
<td>MINERALOGY: quartz, chlorite, epidote, feldspar (albite?)</td>
<td>METAMORPHIC CONDITION: greenschist facies</td>
<td>CLAST: subangular, microcrystalline to fine-grained, cm-sized, veined</td>
<td></td>
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</tr>
<tr>
<td>30-47 cm</td>
<td>368-U1504B-5R-2A</td>
<td>UNIT: 1a</td>
<td>LITHOLOGY: epidote-chlorite schist with granofels clasts</td>
<td>COLOR: greenish gray</td>
<td>DEFORMATION: strong</td>
<td>TEXTURE: foliated fine- to medium-grained mylonite</td>
<td>MINERALOGY: quartz, chlorite, epidote, feldspar (albite?)</td>
<td>METAMORPHIC CONDITION: greenschist facies</td>
<td>CLAST: subangular, microcrystalline to fine-grained, cm-sized, veined</td>
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<tr>
<td>47-63 cm</td>
<td>368-U1504B-5R-2A</td>
<td>UNIT: 1a</td>
<td>LITHOLOGY: epidote-chlorite breccia with granofels clasts</td>
<td>COLOR: greenish gray</td>
<td>DEFORMATION: strong</td>
<td>TEXTURE: veined clasts embedded in foliated fine- to medium-grained schist</td>
<td>MINERALOGY: quartz, chlorite, epidote, feldspar (albite?)</td>
<td>METAMORPHIC CONDITION: greenschist facies</td>
<td>CLAST: subangular, microcrystalline to fine-grained, cm-sized, veined</td>
<td></td>
<td></td>
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</tbody>
</table>
368-U1504B-6R-1A, 0-19 cm
UNIT: 1a
LITHOLOGY: epidote-chlorite granofels to schist
COLOR: greenish gray
DEFORMATION: moderate
TEXTURE: microcrystalline - to fine-grained with slight foliation
MINERALOGY: quartz, chlorite, epidote, feldspar (albite?)
METAMORPHIC CONDITION: greenschist facies
COMMENT: similar to granofels clasts embedded in epidote-chlorite schist and breccia

368-U1504B-6R-1A, 19-89 cm
UNIT: 1a
LITHOLOGY: epidote-chlorite schist with granofels clasts
COLOR: greenish gray
DEFORMATION: strong
TEXTURE: foliated fine- to medium-grained mylonite
MINERALOGY: quartz, chlorite, epidote, feldspar (albite?)
METAMORPHIC CONDITION: greenschist facies
CLAST: subangular, microcrystalline to fine-grained, cm-sized, veined
368-U1504B-7R-1A, 0-50 cm
UNIT: 1a
LITHOLOGY: epidote-chlorite schist with granofels clasts
COLOR: greenish gray
DEFORMATION: strong
TEXTURE: foliated fine- to medium-grained mylonite
MINERALOGY: quartz, chlorite, epidote, feldspar (albite?)
METAMORPHIC CONDITION: greenschist facies
CLAST: subangular, microcrystalline to fine-grained, cm-sized, veined

368-U1504B-7R-1A, 50-56 cm
UNIT: 1a
LITHOLOGY: epidote-chlorite granofels
COLOR: greenish gray
DEFORMATION: moderate
TEXTURE: microcrystalline with slight foliation
MINERALOGY: quartz, chlorite, epidote, feldspar (albite?)
METAMORPHIC CONDITION: greenschist facies
COMMENT: similar to granofels clasts embedded in epidote-chlorite schist and breccia

368-U1504B-7R-1A, 56-67 cm
UNIT: 1a
LITHOLOGY: epidote-chlorite schist with granofels clasts
COLOR: greenish gray
DEFORMATION: strong
TEXTURE: microcrystalline with slight foliation
MINERALOGY: quartz, chlorite, epidote, feldspar (albite?)
METAMORPHIC CONDITION: greenschist facies
CLAST: subrounded; microcrystalline to fine-grained, cm-sized, veined

368-U1504B-7R-1A, 67-74 cm
UNIT: 1a
LITHOLOGY: epidote-chlorite granofels
COLOR: greenish gray
DEFORMATION: moderate
TEXTURE: microcrystalline with slight foliation
MINERALOGY: quartz, chlorite, epidote, feldspar (albite?)
METAMORPHIC CONDITION: greenschist facies
COMMENT: similar to granofels clasts embedded in epidote-chlorite schist and breccia

368-U1504B-7R-1A, 74-150 cm
UNIT: 1a
LITHOLOGY: epidote-chlorite schist with granofels clasts
COLOR: greenish gray
DEFORMATION: strong
TEXTURE: microcrystalline with slight foliation
MINERALOGY: quartz, chlorite, epidote, feldspar (albite?)
METAMORPHIC CONDITION: greenschist facies
CLAST: subrounded, microcrystalline to fine-grained, cm-sized, veined
COMMENT: local reddish alteration
### Hole 368-U1504B-7R Section 2, Top of Section: 128.6 m (CSF-A)

<table>
<thead>
<tr>
<th>Depth CSF-A (m)</th>
<th>Core length (cm)</th>
<th>Orientation</th>
<th>Metamorphic unit</th>
<th>Lithology</th>
<th>Color</th>
<th>Deformation</th>
<th>Texture</th>
<th>Mineralogy</th>
<th>Metamorphic condition</th>
<th>Clast</th>
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</thead>
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<td>1a</td>
<td>epidote-chlorite schist with granofels clasts</td>
<td>greenish gray</td>
<td>strong</td>
<td>foliated coarse-grained mylonite</td>
<td>quartz, chlorite, epidote, feldspar (albite?)</td>
<td>greenschist facies</td>
<td>subrounded, microcrystalline to fine-grained</td>
<td>local reddish alteration</td>
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<tr>
<td>128.7</td>
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<td>epidote-chlorite granofels</td>
<td>greenish gray</td>
<td>moderate</td>
<td>microcrystalline with slight foliation</td>
<td>quartz, chlorite, epidote, feldspar (albite?)</td>
<td>greenschist facies</td>
<td>similar to granofels clasts embedded into epidote-chlorite schist and breccia, with local reddish alteration</td>
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<tr>
<td>128.8</td>
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<td>1a</td>
<td>epidote-chlorite schist with granofels clasts</td>
<td>greenish gray</td>
<td>strong</td>
<td>foliated coarse-grained mylonite</td>
<td>quartz, chlorite, epidote, feldspar (albite?)</td>
<td>greenschist facies</td>
<td>subrounded, microcrystalline to fine-grained, cm-sized, veined</td>
<td>local reddish alteration</td>
</tr>
</tbody>
</table>
**Description:**
- **UNIT:** 1a
- **LITHOLOGY:** epidote-chlorite schist with granofels clasts
- **COLOR:** greenish gray
- **DEFORMATION:** strong
- **TEXTURE:** medium-grained moderately foliated
- **MINERALOGY:** quartz, chlorite, epidote, feldspar (albite?)
- **METAMORPHIC CONDITION:** greenschist facies

- **Clast:** subrounded, microcrystalline to fine-grained, cm-sized, sometimes veined
- **COMMENT:** quartz-rich piece with straight (undeformed) epidote veins at 44-47 cm
**Site U1504 core descriptions**

**Visual core descriptions**

### Hole 368-U1504B-10R Section 1, Top of Section: 141.6 m (CSF-A)

<table>
<thead>
<tr>
<th>Depth (m)</th>
<th>Core length (cm)</th>
<th>Orientation</th>
<th>Scanned image</th>
<th>Lithology name</th>
<th>Graphic lithology</th>
<th>Shipboard samples</th>
<th>Orientation</th>
<th>Depth CSF-A (m)</th>
<th>Core number</th>
<th>Magnetic susceptibility (x10^-5 SI)</th>
<th>Vein connectivity</th>
<th>Deformation intensity</th>
<th>Metamorphic lith. unit</th>
<th>Site U1504 core descriptions</th>
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**368-U1504B-10R-1A, 0-22 cm**

- **UNIT**: 1a
- **LITHOLOGY**: epidote-chlorite schist with granofels clasts
- **COLOR**: greenish gray
- **TEXTURE**: medium-grained moderately foliated
- **MINERALOGY**: quartz, chlorite, epidote, feldspar
- **METAMORPHIC CONDITION**: greenschist facies
- **CLAST**: subrounded, microcrystalline to fine-grained, cm-sized, sometimes veined

**368-U1504B-10R-1B, 22-55 cm**

- **UNIT**: 1b
- **LITHOLOGY**: calc-silicate schist with granofels clasts and possibly plagioclase-phyric clasts
- **COLOR**: greenish gray
- **TEXTURE**: fine- to medium-grained strongly foliated mylonite
- **MINERALOGY**: epidote, chlorite, calcite, brown (potentially carbonate) mineral = dat
- **METAMORPHIC CONDITION**: greenschist facies
- **CLAST**: subrounded, microcrystalline to fine-grained, cm-sized, sometimes veined, sometimes (plagioclase) phyric + alteration minerals
368-U1504B-11R-1A, 0-18 cm
UNIT: 1b
LITHOLOGY: epidote schist
COLOR: greenish gray
DEFORMATION: strong
TEXTURE: fine- to medium-grained moderately foliated
MINERALOGY: epidote, chlorite, quartz?
METAMORPHIC CONDITION: greenschist facies

368-U1504B-11R-1A, 18-22 cm
UNIT: 1b
LITHOLOGY: calc-silicate schist
COLOR: greenish gray
DEFORMATION: strong
TEXTURE: fine- to medium-grained strongly foliated mylonite
MINERALOGY: epidote, chlorite, calcite, brown (potentially carbonate) mineral +-qtz?
METAMORPHIC CONDITION: greenschist facies

368-U1504B-11R-1A, 22-58 cm
UNIT: 1b
LITHOLOGY: marble
COLOR: greenish gray
DEFORMATION: strong
TEXTURE: fine- to medium-grained strongly foliated mylonitic marble
MINERALOGY: calcite, brown mineral, epidote?
METAMORPHIC CONDITION: potentially greenschist facies

368-U1504B-11R-1A, 58-67 cm
UNIT: 1b
LITHOLOGY: calc-silicate schist with granofels clasts
COLOR: greenish gray
DEFORMATION: strong
TEXTURE: fine- to medium-grained strongly foliated mylonite
MINERALOGY: epidote, chlorite, calcite, brown (potentially carbonate) mineral +-qtz?
METAMORPHIC CONDITION: greenschist facies
CLAST: subrounded, microcrystalline to fine-grained, cm-sized, sometimes veined

368-U1504B-11R-1A, 67-85 cm
UNIT: 1b
LITHOLOGY: epidote-chlorite schist with granofels clasts
COLOR: greenish gray
DEFORMATION: strong
TEXTURE: medium-grained moderately foliated
MINERALOGY: quartz, chlorite, epidote, feldspar
METAMORPHIC CONDITION: greenschist facies
CLAST: subrounded, microcrystalline to fine-grained, cm-sized, sometimes veined
Site U1504 core descriptions

Hole 368-U1504B-12R Section 1, Top of Section: 151.2 m (CSF-A)

<table>
<thead>
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<th>Depth (m)</th>
<th>Core length (cm)</th>
<th>Orientation</th>
<th>Scanned image</th>
<th>Lithology name</th>
<th>Grain-size</th>
<th>Vein morphology</th>
<th>Dip angle</th>
<th>Strike</th>
<th>Vein texture</th>
<th>Shear zone type</th>
<th>Deformation intensity</th>
<th>Metamorphic lith. unit</th>
<th>Mineralogy</th>
<th>Metamorphic condition</th>
<th>Description</th>
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<td>fine-grained</td>
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<td>0</td>
<td>1</td>
<td>fine-grained</td>
<td>subangular, microcrystalline to fine-grained, cm-sized, heterolithic</td>
<td>strong</td>
<td>greenschist facies</td>
<td>quartz, chlorite, epidote, feldspar (albite?), carbonate</td>
<td>greenschist facies</td>
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<td>fine-grained</td>
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<td>strong</td>
<td>greenschist facies</td>
<td>quartz, chlorite, epidote</td>
<td>greenschist facies</td>
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<tr>
<td>151.4</td>
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<td>subangular, microcrystalline to fine-grained, cm-sized, heterolithic</td>
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<td>deformed, elongated, microcrystalline to fine-grained, cm-sized, heterolithic</td>
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<td>fine-grained</td>
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<td>deformed, elongated, microcrystalline to fine-grained, cm-sized, heterolithic</td>
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<td>greenschist facies</td>
<td>quartz, chlorite, epidote, feldspar (albite?), carbonate</td>
<td>greenschist facies</td>
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</tr>
</tbody>
</table>
UNIT: 1b
LITHOLOGY: calc-silicate schist with granofels clasts
COLOR: greenish-brownish gray
DEFORMATION: strong
TEXTURE: medium-grained, strongly foliated
MINERALOGY: quartz, chlorite, epidote, feldspar (albite?), carbonate
METAMORPHIC CONDITION: greenschist facies
CLAST: deformed, elongated, microcrystalline to fine-grained, cm-sized, heterolithic
Table 368-U1504B-13R-1A, 0-46 cm
UNIT: 1b
LITHOLOGY: calc-silicate schist with granofels clasts
COLOR: greenish-brownish gray
DEFORMATION: strong
TEXTURE: medium-grained, strongly foliated
MINERALOGY: quartz, chlorite, epidote, feldspar (albite?), carbonate
METAMORPHIC CONDITION: greenschist facies
CLAST: deformed, elongated, microcrystalline to fine-grained, cm-sized, heterolithic.

Table 368-U1504B-13R-1A, 46-55 cm
UNIT: 1b
LITHOLOGY: epidote-chlorite granofels
COLOR: greenish-brownish gray
DEFORMATION: strong
TEXTURE: porphyritic
MINERALOGY: quartz, chlorite, epidote, carbonate; feldspar? pyroxene? phenocrysts
METAMORPHIC CONDITION: greenschist facies

Table 368-U1504B-13R-1A, 55-64 cm
UNIT: 1b
LITHOLOGY: epidote-chlorite granofels
COLOR: greenish-brownish gray
DEFORMATION: strong
TEXTURE: brecciated
MINERALOGY: quartz, chlorite, epidote, carbonate
METAMORPHIC CONDITION: greenschist facies

Table 368-U1504B-13R-1A, 64-73 cm
UNIT: 1b
LITHOLOGY: epidote-chlorite granofels
COLOR: greenish-brownish gray
DEFORMATION: strong
TEXTURE: microcrystalline with quartzite veins
MINERALOGY: quartz, chlorite, epidote, carbonate
METAMORPHIC CONDITION: greenschist facies

Table 368-U1504B-13R-1A, 73-80 cm
UNIT: 1b
LITHOLOGY: epidote-chlorite granofels
COLOR: greenish-brownish gray
DEFORMATION: strong
TEXTURE: sparsely porphyritic
MINERALOGY: quartz, chlorite, epidote, carbonate; feldspar? pyroxene? phenocrysts
METAMORPHIC CONDITION: greenschist facies

Table 368-U1504B-13R-1A, 80-145 cm
UNIT: 1b
LITHOLOGY: calc-silicate schist with granofels clasts
COLOR: greenish-brownish gray
DEFORMATION: strong
TEXTURE: medium-grained, strongly foliated
MINERALOGY: quartz, chlorite, epidote, feldspar (albite?), carbonate
METAMORPHIC CONDITION: greenschist facies
CLAST: deformed, elongated, microcrystalline to fine-grained, cm-sized, heterolithic.
Hole 368-U1504B-14R Section 1, Top of Section: 161.0 m (CSF-A)

**Description:**
- **UNIT:** 1b
- **LITHOLOGY:** calc-silicate schist with granofels clasts
- **COLOR:** greenish-brownish gray
- **DEFORMATION:** strong
- **TEXTURE:** medium-grained, strongly foliated
- **MINERALOGY:** quartz, chlorite, epidote, feldspar (albite?), carbonate
- **METAMORPHIC CONDITION:** greenschist facies
- **CLAST:** deformed, elongated, microcrystalline to fine-grained, cm-sized, heterolithic

---

**Description:**
- **UNIT:** 1b
- **LITHOLOGY:** epidote-chlorite granofels
- **COLOR:** greenish-brownish gray
- **DEFORMATION:** strong
- **TEXTURE:** microcrystalline to fine-grained with calcite-quartz veins
- **MINERALOGY:** quartz, chlorite, epidote, carbonate
- **METAMORPHIC CONDITION:** greenschist facies

---

**Diagram:**
- **Core length (cm):**
- **Orientation:**
- **Core number:**
- **Scanned image:**
- **Graphic lithology:**
- **Orientation:**
- **Piece number:**
- **Core length (cm):**
- **Depth CSF-A (m):**
- **Magnetic susceptibility (x10^-5 SI):**
- **Dip angle:**
- **Strike:**
- **Vein connectivity:**
- **Vein texture:**
- **Shear zone type:**
- **Deformation intensity:**
- **Metamorphic lith. unit:**
- **Site U1504 core descriptions:**
- **Visual core descriptions:**
### Site U1504 core descriptions

**Hole 368-U1504B-15R Section 1, Top of Section: 168.0 m (CSF-A)**

<table>
<thead>
<tr>
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<th>Orientation</th>
<th>Graphic lithology</th>
<th>Metagreywacke unit</th>
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<th>Color</th>
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</tr>
</tbody>
</table>

**UNIT: 1b**

**LITHOLOGY:** epidote-chlorite granofels

**COLOR:** greenish-brownish gray

**DEFORMATION:** strong

**TEXTURE:** microcrystalline to fine-grained with calcite-quartz veins

**MINERALOGY:** quartz, chlorite, epidote, carbonate

**METAMORPHIC CONDITION:** greenschist facies

---

**368-U1504B-15R-1A, 21-30 cm**

**UNIT: 1b**

**LITHOLOGY:** calc-silicate schist with granofels clasts

**COLOR:** greenish-brownish gray

**DEFORMATION:** strong

**TEXTURE:** medium-grained, strongly foliated

**MINERALOGY:** quartz, chlorite, epidote, feldspar (albite?), carbonate

**METAMORPHIC CONDITION:** greenschist facies

**CLAST:** deformed, elongated, medium-grained, cm-sized

---

**368-U1504B-15R-1A, 44-150 cm**

**UNIT: 1b**

**LITHOLOGY:** calc-silicate schist with granofels clasts

**COLOR:** greenish-brownish gray

**DEFORMATION:** strong

**TEXTURE:** medium-grained, strongly foliated

**MINERALOGY:** quartz, chlorite, epidote, feldspar (albite?), carbonate

**METAMORPHIC CONDITION:** greenschist facies

**CLAST:** heterolithic, deformed, elongated and angular, medium-grained, with phenocrysts and possibly vesicles
**Site U1504 core descriptions**

**Hole 368-U1504B-15R Section 2, Top of Section: 167.5 m (CSF-A)**

- **Unit**: 1b
- **Lithology**: calc-silicate schist with granofels clasts
- **Color**: greenish-brownish gray
- **Deformation**: strong
- **Texture**: medium-grained, strongly foliated
- **Mineralogy**: quartz, chlorite, epidote, feldspar (albite?), carbonate
- **Metamorphic Condition**: greenschist facies
- **Clast**: heterolithic, deformed, elongated and angular, medium-grained, with phenocrysts and possibly vesicles

**Description**

- **368-U1504B-15R-2A, 0-66 cm**
  - **Unit**: 1b
  - **Lithology**: calc-silicate schist with granofels clasts
  - **Color**: greenish-brownish gray
  - **Deformation**: strong
  - **Texture**: medium-grained, strongly foliated
  - **Mineralogy**: quartz, chlorite, epidote, feldspar (albite?), carbonate
  - **Metamorphic Condition**: greenschist facies
  - **Clast**: heterolithic, deformed, elongated and angular, medium-grained, with phenocrysts and possibly vesicles

**368-U1504B-15R-2A, 66-75 cm**

- **Unit**: 1b
- **Lithology**: epidote-chlorite granofels
- **Color**: greenish-brownish gray
- **Deformation**: strong
- **Texture**: brecciated, medium-grained with calcite-quartz veins
- **Mineralogy**: quartz, chlorite, epidote, carbonate
- **Metamorphic Condition**: greenschist facies

**Graphic lithology**

- **Scanned image**
- **Shipboard samples**
- **Orientation**
- **Piece number**
- **Core length (cm)**
- **Depth CSF-A (m)**
- **Dip angle**
- **Strike**
- **Vein connectivity**
- **Magnetic susceptibility (x10^-5 SI)**
- **Vein texture**
- **Shear zone type**
- **Deformation intensity**
- **Vein morphology**
- **Lithology name**
- **Structure**
- **Magnetic susceptibility**
- **Vein connectivity**
- **Lithology name**
- **Structure**
**Hole 368-U1504B-16R Section 1, Top of Section: 169.8 m (CSF-A)**

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<th>Core Length (cm)</th>
<th>Depth CSF-A (m)</th>
<th>Orientation</th>
<th>Color</th>
<th>Deformation</th>
<th>Texture</th>
<th>Lithology with granofels clasts</th>
<th>Mineralogy</th>
<th>Metamorphic condition</th>
<th>CLAST</th>
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<td>0</td>
<td>169.8</td>
<td>01</td>
<td>greenish-brownish gray</td>
<td>strong</td>
<td>medium-grained, foliated with local crenulation</td>
<td>quartz, chlorite, epidote, feldspar (albite?), carbonate</td>
<td>greenschist facies</td>
<td>heterolithic, deformed, elongated and angular, medium-grained, with phenocrysts and possibly vesicles</td>
<td></td>
</tr>
</tbody>
</table>
Site U1504 core descriptions

368-U1504B-17R-1A, 0-38 cm

UNIT: 1b
LITHOLOGY: calc-silicate schist with granofels clasts
COLOR: greenish-brownish gray
DEFORMATION: strong
TEXTURE: medium-grained, foliated
MINERALOGY: quartz, chlorite, epidote, feldspar (albite?), carbonate
METAMORPHIC CONDITION: greenschist facies
CLAST: heterolithic, deformed, elongated and angular, medium-grained, with phenocrysts and possibly vesicles

368-U1504B-17R-1A, 38-92 cm

UNIT: 1b
LITHOLOGY: epidote-chlorite schist with (potentially metabasic) granofels clasts
COLOR: gray
DEFORMATION: moderate to strong
TEXTURE: fine-grained, foliated
MINERALOGY: chlorite, epidote, feldspar (?)
METAMORPHIC CONDITION: greenschist facies

Visual core descriptions
### Hole 368-U1504B-18R Section 1, Top of Section: 180.5 m (CSF-A)

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<th>Depth (m)</th>
<th>Core length (cm)</th>
<th>Orientation</th>
<th>Location</th>
<th>Core number</th>
<th>Core description</th>
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<td>LITHOLOGY: epidote-chlorite gneiss</td>
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<td>COLOR: greenish gray</td>
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<td>180.7</td>
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<td>DEFORMATION: strong</td>
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<tr>
<td>180.8</td>
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<td>4</td>
<td>TEXTURE: banded (gneissose) foliation</td>
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<tr>
<td>180.9</td>
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<td>5</td>
<td>MINERALOGY: chlorite, epidote, quartz and/or plagioclase, brownish altered mineral</td>
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<tr>
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<td>LITHOLOGY: calc-silicate schist with granofels clasts</td>
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<tr>
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<td>TEXTURE: medium-grained, strongly foliated, thick (3 cm) and partly folded calcite veins</td>
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<td>CLAST: large slightly deformed, veined, and possibly vesicular, fine- to medium-grained, cm-sized, heterolithic</td>
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<td>19</td>
<td>TEXTURE: medium-grained, foliated</td>
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<td>MINERALOGY: quartz, chlorite, epidote, feldspar (albite?), carbonate</td>
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<td>22</td>
<td>CLAST: heterolithic, deformed, elongated and angular, medium-grained, with phenocrysts and possibly vesicles</td>
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**Description:**

**Site U1504 core descriptions**

**Visual core descriptions**

**Hole 368-U1504B-18R Section 2, Top of Section: 181.95 m (CSF-A)**

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<th>Core length (cm)</th>
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<th>Fracture</th>
<th>Scarred region</th>
<th>Graphite Breccia</th>
<th>Metamorphic lith. unit</th>
<th>Deformation</th>
<th>Scattered clasts</th>
<th>Deformed matrix</th>
<th>Strike</th>
<th>Dip angle</th>
<th>Vein connectivity</th>
<th>Vein texture</th>
<th>Vein morphology</th>
<th>Vein type</th>
<th>Vein connectivity</th>
<th>Vein type</th>
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</table>

**UNIT 1b**

**LITHOLOGY:** epidote-chlorite schist with granofels clasts
**COLOR:** greenish-brownish gray
**TEXTURE:** medium-grained, strongly foliated
**MINERALOGY:** chlorite, epidote, feldspar (albite?), carbonate
**METAMORPHIC CONDITION:** greenschist facies

**UNIT 1b**

**LITHOLOGY:** epidote-chlorite granofels
**COLOR:** greenish gray
**TEXTURE:** bimodal grain size distribution with microcrystalline to fine-grained matrix and minor (deformed) phyllic crystals; deformed calcite and silica veins
**MINERALOGY:** chlorite, epidote, feldspar
**METAMORPHIC CONDITION:** greenschist facies
368-U1504B-10R-1A, 0-142 cm

UNIT: 1b
LITHOLOGY: calc-silicate schist with granofels clasts
COLOR: greenish-brownish gray
DEFORMATION: strong
TEXTURE: medium-grained, foliated
MINERALOGY: chlorite, epidote, feldspar (albite?), carbonate
METAMORPHIC CONDITION: greenschist facies
CLAST: heterolithic, deformed and sometimes veined (calcite and polymetamorphic epidote + calcite/calcite veins), in places strongly elongated, fine- to medium-grained, partly with large phenocrysts and possible vesicles; clast to matrix boundaries either irregular or diffuse

Site U1504 core descriptions
Visual core descriptions

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**Site U1504 core descriptions**

**Visual core descriptions**

---

**Hole 368-U1504B-19R Section 2, Top of Section: 196.92 m (CSF-A)**

**Description:**

- **UNIT:** 1b
- **LITHOLOGY:** calc-silicate schist with granofels clasts
- **COLOR:** greenish-brownish gray
- **DEFORMATION:** strong
- **TEXTURE:** medium-grained, foliated
- **MINERALOGY:** chlorite, epidote, feldspar (albite?), carbonate
- **METAMORPHIC CONDITION:** greenschist facies
- **CLAST:** heterolithic, deformed and sometimes veined, in places strongly elongated, medium-grained, partly with large phenocrysts and possibly vesicles; clast to matrix boundaries either irregular or diffuse

---

**368-U1504B-19R-2A, 66-123 cm**

- **UNIT:** 1b
- **LITHOLOGY:** epidote-chlorite schist with granofels clasts
- **COLOR:** greenish gray
- **DEFORMATION:** strong
- **TEXTURE:** medium-grained, tight mylonitic foliation with sigma clasts
- **MINERALOGY:** chlorite, epidote, feldspar (albite?), carbonate
- **CLAST:** heterolithic, small (< 2cm) and highly stretched within foliation or forming sigma clasts
- **METAMORPHIC CONDITION:** greenschist facies