

IODP Expedition 317
 SEDIMENT SMEAR SLIDE
 & THIN SECTION WORKSHEET

| Expedition | Site | Hole | Core | Type | Sec | Interval (cm) | |
|------------|------|------|------|------|-----|---------------|--------|
| | | | | | | Top | Bottom |
| 317 | 1553 | C | 46 | R | 2 | 50 | - |

| | | | |
|----------------------|------------------------|----------|--------------|
| Sediment / Rock Name | <i>sandy marlstone</i> | Observer | <i>Here.</i> |
|----------------------|------------------------|----------|--------------|

| Smear Slide | Thin Section |
|-------------------------------------|--------------------------|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> |

| Dominant Lithology | Minor Lithology |
|-------------------------------------|--------------------------|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> |

| Percent Terrigenous Texture | | |
|-----------------------------|------|------|
| Sand | Silt | Clay |
| 25 | 35 | 10 |

Comments:

paler layer - large traces.

| Percent | Component |
|--------------------------------------|--|
| SILICICLASTIC GRAINS/MINERALS | |
| | Framework minerals |
| 25 | Quartz |
| 20 | Feldspar (undifferentiated) |
| | K-feldspar (Orthoclase, Microcline...) |
| | Plagioclase |
| 2 | Rock fragments |
| | Volcanic glass |
| | Accessory/trace minerals |
| | Micas |
| 2 | Biotite |
| 4 | Muscovite |
| 2 | Chlorite |
| 10 | Clay sized fraction |
| | Glauconite |
| 2 | Ferromagnesian minerals |
| 2 | Other dense minerals |
| | Authigenic minerals |
| | Zeolite |
| 3 | Pyrite |
| 2 | Opaque minerals (undifferentiated) |
| | Fe-oxide |
| 5 | Carbonates |
| 9 | Micrite |
| | Others |

| Percent | Component |
|------------------------|---|
| BIOGENIC GRAINS | |
| | Calcareous |
| 2 | Foraminifera |
| - | Nannofossils <i>recrystallized?</i> |
| | Pteropods |
| | Ostracods |
| | Echinoderm |
| | Bivalves |
| | Bryozoans |
| | Corals |
| | Sponge spicules |
| | Other spicules |
| 15 | Bioclast (undifferentiated) <i>pellets?</i> |
| | Siliceous |
| | Radiolarians |
| | Diatoms |
| | Silicoflagellates |
| | Sponge spicules |
| | Siliceous debris (undifferentiated) |
| | Others |
| | Dinoflagellates |
| | Pollen |
| | Organic debris |
| | Plant debris |
| | Fish remains (teeth, bones, scales) |
| | Others |

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| Expedition | Site | Hole | Core | Type | Sec | Interval (cm) | |
|------------|------|------|------|------|-----|---------------|--------|
| | | | | | | Top | Bottom |
| 317 | 1352 | C | 47 | R | 2 | 101 | |

| | | | |
|----------------------|-----------------|----------|--------|
| Sediment / Rock Name | sandy mudstone. | Observer | Lower. |
|----------------------|-----------------|----------|--------|

| Smear Slide | Thin Section |
|-------------|--------------|
| ✓ | |

| Dominant Lithology | Minor Lithology |
|--------------------|-----------------|
| ✓ | |

| Percent Terrigenous Texture | | |
|-----------------------------|------|------|
| Sand | Silt | Clay |
| 30 | 35 | 5 |

Comments:

To be entered.

| Percent | Component |
|--------------------------------------|--|
| SILICICLASTIC GRAINS/MINERALS | |
| Framework minerals | |
| 25 | Quartz |
| 20 | Feldspar (undifferentiated) |
| | K-feldspar (Orthoclase, Microcline...) |
| | Plagioclase |
| 4 | Rock fragments |
| | Volcanic glass |
| Accessory/trace minerals | |
| Micas | |
| 2 | Biotite |
| 6 | Muscovite |
| 4 | Chlorite |
| 5 | Clay sized fraction |
| | Glaucinite |
| 1 | Ferromagnesian minerals |
| 2 | Other dense minerals |
| Authigenic minerals | |
| | Zeolite |
| 1 | Pyrite |
| 2 | Opaque minerals (undifferentiated) |
| | Fe-oxide |
| 1 | Carbonates |
| 12 | Micrite |
| | Others |

| Percent | Component |
|------------|-------------------------------------|
| B | |
| Carbonates | |
| 3 | Foraminifera |
| 7 | Nannofossils |
| | Pteropods |
| | Ostracods |
| | Echinoderm |
| | Bivalves |
| | Bryozoans |
| | Corals |
| | Sponge spicules |
| | Other spicules |
| 7 | Bioclast (undifferentiated) |
| Siliceous | |
| | Radiolarians |
| | Diatoms |
| | Silicoflagellates |
| | Sponge spicules |
| | Siliceous debris (undifferentiated) |
| Others | |
| | Dinoflagellates |
| | Pollen |
| | Organic debris |
| | Plant debris |
| | Fish remains (teeth, bones, scales) |
| | Others |

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| Expedition | Site | Hole | Core | Type | Sec | Interval (cm) | |
|------------|------|------|------|------|-----|---------------|--------|
| | | | | | | Top | Bottom |
| 317 | 1352 | C | 45 | R | 3 | | |

| | | | |
|----------------------|-------------------------|----------|--|
| Sediment / Rock Name | <i>Sandy marlstone.</i> | Observer | |
|----------------------|-------------------------|----------|--|

| | |
|-------------------------------------|--------------------------|
| Smear Slide | Thin Section |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> |

| | |
|--------------------|-------------------------------------|
| Dominant Lithology | Minor Lithology |
| | <input checked="" type="checkbox"/> |

| Percent Terrigenous Texture | | |
|-----------------------------|------|------|
| Sand | Silt | Clay |
| 25 | 20 | 5 |

Comments:

paler coloured layer.

| Percent | Component |
|--------------------------------------|--|
| SILICICLASTIC GRAINS/MINERALS | |
| | Framework minerals |
| 18 | Quartz |
| 13 | Feldspar (undifferentiated) |
| | K-feldspar (Orthoclase, Microcline...) |
| | Plagioclase |
| 2 | Rock fragments |
| | Volcanic glass |
| | |
| | Accessory/trace minerals |
| | Micas |
| 1 | Biotite |
| 8 | Muscovite |
| 2 | Chlorite |
| 5 | Clay sized fraction |
| | Glaucanite |
| 1 | Ferromagnesian minerals |
| 1 | Other dense minerals |
| | |
| | Authigenic minerals |
| | Zeolite |
| 2 | Pyrite |
| 1 | Opaque minerals (undifferentiated) |
| | Fe-oxide |
| 8 | Carbonates |
| 16 | Micrite |
| | Others |
| | |
| | |
| | |

| Percent | Component |
|------------------------|-------------------------------------|
| BIOGENIC GRAINS | |
| | Calcareous |
| 4 | Foraminifera |
| 20 | Nannofossils |
| | Pteropods |
| | Ostracods |
| | Echinoderm |
| | Bivalves |
| | Bryozoans |
| | Corals |
| | Sponge spicules |
| | Other spicules |
| 10 | Bioclast (undifferentiated) |
| | |
| | Siliceous |
| | Radiolarians |
| | Diatoms |
| | Silicoflagellates |
| | Sponge spicules |
| | Siliceous debris (undifferentiated) |
| | |
| | Others |
| | Dinoflagellates |
| | Pollen |
| | Organic debris |
| | Plant debris |
| | Fish remains (teeth, bones, scales) |
| | Others |
| | |
| | |
| | |

✓

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| Expedition | Site | Hole | Core | Type | Sec | Interval (cm) | |
|------------|------|------|------|------|-----|---------------|--------|
| | | | | | | Top | Bottom |
| 317 | 1352 | C | 46 | R | 2 | 70 | |

| | | | |
|----------------------|------------------------|----------|--------------|
| Sediment / Rock Name | <i>Sandy marlstone</i> | Observer | <i>hewer</i> |
|----------------------|------------------------|----------|--------------|

| | |
|-------------------------------------|--------------------------|
| Smear Slide | Thin Section |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> |

| | |
|-------------------------------------|--------------------------|
| Dominant Lithology | Minor Lithology |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> |

| Percent Terrigenous Texture | | |
|-----------------------------|------|------|
| Sand | Silt | Clay |
| 25 | 30 | 3 |

Comments:

other lgr, small traces.

extensive recrystallization

| Percent | Component |
|--------------------------------------|--|
| SILICICLASTIC GRAINS/MINERALS | |
| | Framework minerals |
| 23 | Quartz |
| 20 | Feldspar (undifferentiated) |
| | K-feldspar (Orthoclase, Microcline...) |
| | Plagioclase |
| 2 | Rock fragments |
| | Volcanic glass |
| | Accessory/trace minerals |
| | Micas |
| 1 | Biotite |
| 5 | Muscovite |
| 2 | Chlorite |
| 3 | Clay sized fraction |
| | Glauconite |
| 1 | Ferromagnesian minerals |
| 2 | Other dense minerals |
| | Authigenic minerals |
| | Zeolite |
| 2 | Pyrite |
| 2 | Opaque minerals (undifferentiated) |
| | Fe-oxide |
| 5 | Carbonates |
| 20 | Micrite |
| | Others |

| Percent | Component |
|------------------------|-------------------------------------|
| BIOGENIC GRAINS | |
| | Calcareous |
| 2 | Foraminifera |
| 2 | Nannofossils |
| | Pteropods |
| | Ostracods |
| | Echinoderm |
| | Bivalves |
| | Bryozoans |
| | Corals |
| | Sponge spicules |
| | Other spicules |
| 12 | Bioclast (undifferentiated) |
| | Siliceous |
| | Radiolarians |
| | Diatoms |
| | Silicoflagellates |
| | Sponge spicules |
| | Siliceous debris (undifferentiated) |
| | Others |
| | Dinoflagellates |
| | Pollen |
| | Organic debris |
| | Plant debris |
| | Fish remains (teeth, bones, scales) |
| | Others |



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| Expedition | Site | Hole | Core | Type | Sec | Interval (cm) | |
|------------|-------|------|------|------|-----|---------------|--------|
| | | | | | | Top | Bottom |
| 317 | 41352 | C | 38 | R | S | 143 | |

| | | | |
|----------------------|-----------------------|----------|--------------|
| Sediment / Rock Name | <i>Sandy Mudstone</i> | Observer | <i>Kumar</i> |
|----------------------|-----------------------|----------|--------------|

| | |
|-------------------------------------|--------------|
| Smear Slide | Thin Section |
| <input checked="" type="checkbox"/> | |

| | |
|-------------------------------------|-----------------|
| Dominant Lithology | Minor Lithology |
| <input checked="" type="checkbox"/> | |

| Percent Terrigenous Texture | | |
|-----------------------------|------|------|
| Sand | Silt | Clay |
| 30 | 40 | 30 |

Comments:

| Percent | Component |
|---|--|
| SILICICLASTIC GRAINS/MINERALS | |
| | Framework minerals |
| | Quartz |
| 70 ¹⁰ 70 | Feldspar (undifferentiated) |
| | K-feldspar (Orthoclase, Microcline...) |
| | Plagioclase |
| | Rock fragments |
| | Volcanic glass |
| | Accessory/trace minerals |
| | Micas |
| | Biotite |
| | Muscovite |
| 20 ⁵ 20 | Chlorite |
| 15 ⁵ 15 | Clay sized fraction |
| | Glauconite |
| | Ferromagnesian minerals |
| ¹ 2 | Other dense minerals |
| | Authigenic minerals |
| | Zeolite |
| | Pyrite |
| | Opaque minerals (undifferentiated) |
| | Fe-oxide |
| | Carbonates |
| ²⁰ | Micrite |
| | Others |

| Percent | Component |
|---|-------------------------------------|
| BIOGENIC GRAINS | |
| | Calcareous |
| | Foraminifera |
| 15 ¹⁰ 15 | Nannofossils |
| | Pteropods |
| | Ostracods |
| | Echinoderm |
| | Bivalves |
| | Bryozoans |
| | Corals |
| | Sponge spicules |
| | Other spicules |
| | Bioclast (undifferentiated) |
| | Siliceous |
| | Radiolarians |
| | Diatoms |
| | Silicoflagellates |
| | Sponge spicules |
| | Siliceous debris (undifferentiated) |
| | Others |
| | Dinoflagellates |
| | Pollen |
| ^{tr} | Organic debris |
| | Plant debris |
| | Fish remains (teeth, bones, scales) |
| | Others |

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 SEDIMENT SMEAR SLIDE
 & THIN SECTION WORKSHEET

| Expedition | Site | Hole | Core | Type | Sec | Interval (cm) | |
|------------|-------|------|------|------|-----|---------------|--------|
| | | | | | | Top | Bottom |
| 317 | U1352 | C | 39 | R | 4 | 128 | |

| | | | |
|----------------------|------------------------|----------|------------|
| Sediment / Rock Name | <i>Sandy Marlstone</i> | Observer | <i>kmm</i> |
|----------------------|------------------------|----------|------------|

| | |
|-------------------------------------|--------------|
| Smear Slide | Thin Section |
| <input checked="" type="checkbox"/> | |

| | |
|-------------------------------------|-----------------|
| Dominant Lithology | Minor Lithology |
| <input checked="" type="checkbox"/> | |

| Percent Terrigenous Texture | | |
|-----------------------------|-----------|-----------|
| Sand | Silt | Clay |
| <i>20</i> | <i>60</i> | <i>20</i> |

Comments:

38%

| Percent | Component |
|--------------------------------------|--|
| SILICICLASTIC GRAINS/MINERALS | |
| | Framework minerals |
| <i>18</i> | Quartz |
| <i>10</i> | Feldspar (undifferentiated) |
| | K-feldspar (Orthoclase, Microcline...) |
| | Plagioclase |
| <i>2</i> | Rock fragments |
| | Volcanic glass |
| | Accessory/trace minerals |
| | Micas |
| | Biotite |
| <i>3</i> | Muscovite |
| <i>10</i> | Chlorite |
| <i>10</i> | Clay sized fraction |
| | Glaucinite |
| <i>2</i> | Ferromagnesian minerals |
| <i>3</i> | Other dense minerals |
| | Authigenic minerals |
| | Zeolite |
| | Pyrite |
| | Opaque minerals (undifferentiated) |
| | Fe-oxide |
| | Carbonates |
| <i>20</i> | Micrite |
| | Others |

| Percent | Component |
|------------------------|-------------------------------------|
| BIOGENIC GRAINS | |
| | Calcareous |
| <i>2</i> | Foraminifera |
| <i>10</i> | Nannofossils |
| | Pteropods |
| | Ostracods |
| | Echinoderm |
| | Bivalves |
| | Bryozoans |
| | Corals |
| | Sponge spicules |
| | Other spicules |
| <i>10</i> | Bioclast (undifferentiated) |
| | Siliceous |
| | Radiolarians |
| | Diatoms |
| | Silicoflagellates |
| | Sponge spicules |
| | Siliceous debris (undifferentiated) |
| | Others |
| | Dinoflagellates |
| | Pollen |
| | Organic debris |
| | Plant debris |
| | Fish remains (teeth, bones, scales) |
| | Others |