

IODP Expedition 317
 SEDIMENT SMEAR SLIDE
 & THIN SECTION WORKSHEET

| Expedition | Site | Hole | Core | Type | Sec | Interval (cm) | |
|------------|-------|------|------|------|-----|---------------|--------|
| | | | | | | Top | Bottom |
| 317 | U1352 | B | M | H | 2 | 41 | |

| | | | |
|----------------------|----------------|----------|----|
| Sediment / Rock Name | Calcareous mud | Observer | KM |
|----------------------|----------------|----------|----|

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

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

| Percent Terrigenous Texture | | |
|-----------------------------|------|------|
| Sand | Silt | Clay |
| 5 | 65 | 30 |

Comments:

7%

| Percent | Component |
|--------------------------------------|--|
| SILICICLASTIC GRAINS/MINERALS | |
| | Framework minerals |
| 25 | Quartz |
| 20 | Feldspar (undifferentiated) |
| | K-feldspar (Orthoclase, Microcline...) |
| | Plagioclase |
| | Rock fragments |
| | Volcanic glass |
| | Accessory/trace minerals |
| | Micas |
| | Biotite |
| 2 | Muscovite |
| 3 | Chlorite |
| 30 | Clay sized fraction |
| | Glauconite |
| 2 | Ferromagnesian minerals |
| 5 | Other dense minerals |
| | <i>very dissolvable</i> |
| | Authigenic minerals |
| | Zeolite |
| tr | Pyrite |
| | Opaque minerals (undifferentiated) |
| | Fe-oxide |
| | Carbonates |
| | Micrite |
| | Others |

| Percent | Component |
|------------------------|-------------------------------------|
| BIOGENIC GRAINS | |
| 2 | Calcareous |
| | Foraminifera |
| 3 | Nannofossils |
| | Pteropods |
| | Ostracods |
| | Echinoderm |
| | Bivalves |
| | Bryozoans |
| | Corals |
| 1 | Sponge spicules |
| 1 | Other spicules |
| 5 | Bioclast (undifferentiated) |
| | Siliceous |
| | Radiolarians |
| tr | Diatoms |
| | Silicoflagellates |
| 1 | Sponge spicules |
| | Siliceous debris (undifferentiated) |
| | Others |
| | Dinoflagellates |
| | Pollen |
| tr | Organic debris |
| | Plant debris |
| | Fish remains (teeth, bones, scales) |
| | Others |

IODP Expedition 317
 SEDIMENT SMEAR SLIDE
 & THIN SECTION WORKSHEET

| Expedition | Site | Hole | Core | Type | Sec | Interval (cm) | |
|------------|-------|------|------|------|-----|---------------|--------|
| | | | | | | Top | Bottom |
| 317 | U1352 | B | 17 | H | 4 | 39 | |

| | | | |
|----------------------|-----|----------|-----|
| Sediment / Rock Name | Mud | Observer | KMM |
|----------------------|-----|----------|-----|

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

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

| Percent Terrigenous Texture | | |
|-----------------------------|------|------|
| Sand | Silt | Clay |
| 5 | 65 | 30 |

Comments:

1%

| Percent | Component |
|--------------------------------------|--|
| SILICICLASTIC GRAINS/MINERALS | |
| | Framework minerals |
| 25 | Quartz |
| 25 | Feldspar (undifferentiated) |
| | K-feldspar (Orthoclase, Microcline...) |
| | Plagioclase |
| tr | Rock fragments |
| | Volcanic glass |
| | Accessory/trace minerals |
| | Micas |
| | Biotite |
| tr | Muscovite |
| 2 | Chlorite |
| 30 | Clay sized fraction |
| | Glauconite |
| | Ferromagnesian minerals |
| 15 | Other dense minerals |
| | Authigenic minerals |
| | Zeolite |
| tr | Pyrite |
| | Opaque minerals (undifferentiated) |
| | Fe-oxide |
| | Carbonates |
| | Micrite |
| | Others |

| Percent | Component |
|------------------------|---|
| BIOGENIC GRAINS | |
| | Calcareous |
| | Foraminifera |
| 1 | Nannofossils |
| | Pteropods |
| | Ostracods |
| | Echinoderm |
| | Bivalves |
| | Bryozoans |
| | Corals |
| | Sponge spicules |
| | Other spicules |
| 3 | Bioclast (undifferentiated) <i>- fragments of shells!</i> |
| | Siliceous |
| | Radiolarians |
| tr | Diatoms |
| | Silicoflagellates |
| | Sponge spicules |
| | Siliceous debris (undifferentiated) |
| | Others |
| | Dinoflagellates |
| | Pollen |
| | Organic debris |
| | Plant debris |
| | Fish remains (teeth, bones, scales) |
| | Others |

IODP Expedition 317
 SEDIMENT SMEAR SLIDE
 & THIN SECTION WORKSHEET

| Expedition | Site | Hole | Core | Type | Sec | Interval (cm) | |
|------------|-------|------|------|------|-----|---------------|--------|
| | | | | | | Top | Bottom |
| 317 | 41352 | B | 19 | H | 1 | 74 | |

| | | | |
|----------------------|-----|----------|-----|
| Sediment / Rock Name | Mud | Observer | KMM |
|----------------------|-----|----------|-----|

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

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

| Percent Terrigenous Texture | | |
|-----------------------------|------|------|
| Sand | Silt | Clay |
| | 50 | 50 |

Comments:

← same in 219 H

1%

| Percent | Component |
|--------------------------------------|--|
| SILICICLASTIC GRAINS/MINERALS | |
| | Framework minerals |
| 10 | Quartz |
| 10 | Feldspar (undifferentiated) |
| | K-feldspar (Orthoclase, Microcline...) |
| | Plagioclase |
| | Rock fragments |
| | Volcanic glass |
| | Accessory/trace minerals |
| | Micas |
| tr | Biotite |
| 10 | Muscovite |
| 10 | Chlorite |
| 50 | Clay sized fraction |
| | Glauconite |
| | Ferromagnesian minerals |
| 8 | Other dense minerals |
| | Authigenic minerals |
| | Zeolite |
| | Pyrite |
| | Opaque minerals (undifferentiated) |
| | Fe-oxide |
| | Carbonates |
| | Micrite |
| | Others |

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

IODP Expedition 317
 SEDIMENT SMEAR SLIDE
 & THIN SECTION WORKSHEET

| Expedition | Site | Hole | Core | Type | Sec | Interval (cm) | |
|------------|-------|------|------|------|-----|---------------|--------|
| | | | | | | Top | Bottom |
| 317 | 41352 | B | 18 | H | 3 | 13 | |

| | | | |
|----------------------|-------------------|----------|------------|
| Sediment / Rock Name | <i>Sandy Mair</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>35</i> | <i>45</i> | <i>20</i> |

Comments:

AM

| Percent | Component |
|--------------------------------------|--|
| SILICICLASTIC GRAINS/MINERALS | |
| | Framework minerals |
| <i>20</i> | Quartz |
| <i>10</i> | Feldspar (undifferentiated) |
| | K-feldspar (Orthoclase, Microcline...) |
| | Plagioclase |
| <i>tr</i> | Rock fragments |
| | Volcanic glass |
| | Accessory/trace minerals |
| | Micas |
| <i>1</i> | Biotite |
| | Muscovite |
| | Chlorite |
| <i>5</i> | Clay sized fraction |
| <i>tr</i> | Glauconite |
| | Ferromagnesian minerals |
| <i>8</i> | Other dense minerals |
| | <i>clinoptilolite</i> |
| | Authigenic minerals |
| | Zeolite |
| <i>tr</i> | Pyrite |
| | Opaque minerals (undifferentiated) |
| | Fe-oxide |
| | Carbonates |
| <i>10</i> | Micrite |
| | Others |

| Percent | Component |
|------------------------|-------------------------------------|
| BIOGENIC GRAINS | |
| | Calcareous |
| <i>3</i> | Foraminifera |
| <i>10</i> | Nannofossils |
| | Pteropods |
| | Ostracods |
| | Echinoderm |
| | Bivalves |
| | Bryozoans |
| | Corals |
| | Sponge spicules |
| | Other spicules |
| <i>30</i> | Bioclast (undifferentiated) |
| | Siliceous |
| | Radiolarians |
| | Diatoms |
| | Silicoflagellates |
| <i>2</i> | Sponge spicules |
| | Siliceous debris (undifferentiated) |
| | Others |
| | Dinoflagellates |
| | Pollen |
| | Organic debris |
| | Plant debris |
| | Fish remains (teeth, bones, scales) |
| | Others |

Sand

IODP Expedition 317
 SEDIMENT SMEAR SLIDE
 & THIN SECTION WORKSHEET

| Expedition | Site | Hole | Core | Type | Sec | Interval (cm) | |
|------------|-------|------|------|------|-----|---------------|--------|
| | | | | | | Top | Bottom |
| 317 | U1352 | B | 18 | H | 3 | 26 | |

| | | | |
|----------------------|------------|----------|------------|
| Sediment / Rock Name | <i>Mud</i> | Observer | <i>KMM</i> |
|----------------------|------------|----------|------------|

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

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

| Percent Terrigenous Texture | | |
|-----------------------------|-----------|-----------|
| Sand | Silt | Clay |
| <i>75</i> | <i>50</i> | <i>40</i> |

Comments:

| Percent | Component |
|--------------------------------------|--|
| SILICICLASTIC GRAINS/MINERALS | |
| | Framework minerals |
| <i>23</i> | Quartz |
| <i>23</i> | Feldspar (undifferentiated) |
| | K-feldspar (Orthoclase, Microcline...) |
| | Plagioclase |
| | Rock fragments |
| | Volcanic glass |
| | Accessory/trace minerals |
| | Micas |
| | Biotite |
| <i>5</i> | Muscovite |
| <i>2</i> | Chlorite |
| <i>40</i> | Clay sized fraction |
| | Glaucinite |
| | Ferromagnesian minerals |
| <i>3</i> | Other dense minerals |
| | <i>zoisite</i> |
| | Authigenic minerals |
| | Zeolite |
| | Pyrite |
| | Opaque minerals (undifferentiated) |
| | Fe-oxide |
| | Carbonates |
| <i>2</i> | Micrite |
| | Others |

| Percent | Component |
|------------------------|-------------------------------------|
| BIOGENIC GRAINS | |
| | Calcareous |
| <i>1</i> | Foraminifera |
| <i>1</i> | 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 |
| | Organic debris |
| | Plant debris |
| | Fish remains (teeth, bones, scales) |
| | Others |

Org

IODP Expedition 317
 SEDIMENT SMEAR SLIDE
 & THIN SECTION WORKSHEET

| Expedition | Site | Hole | Core | Type | Sec | Interval (cm) | |
|------------|-------|------|------|------|-----|---------------|--------|
| | | | | | | Top | Bottom |
| 317 | U1352 | B | 18 | H | 3 | 33 | |

| | | | |
|----------------------|------------|----------|-----|
| Sediment / Rock Name | Calcareous | Observer | Kmm |
|----------------------|------------|----------|-----|

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

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

| Percent Terrigenous Texture | | |
|-----------------------------|------|------|
| Sand | Silt | Clay |
| 5 | 55 | 40 |
| 10 | 40 | 50 |

Comments:

~~18.3~~ 9.3%

| Percent | Component |
|--------------------------------------|--|
| SILICICLASTIC GRAINS/MINERALS | |
| | Framework minerals |
| 10 | Quartz |
| 10 | Feldspar (undifferentiated) |
| | K-feldspar (Orthoclase, Microcline...) |
| | Plagioclase |
| tr | Rock fragments |
| | Volcanic glass |
| | Accessory/trace minerals |
| | Micas |
| | Biotite |
| 5 | Muscovite |
| 5 | Chlorite |
| 30 | Clay sized fraction |
| | Glaucanite |
| tr | Ferromagnesian minerals |
| 5 | Other dense minerals |
| | Authigenic minerals |
| | Zeolite |
| 3 | Pyrite |
| | Opaque minerals (undifferentiated) |
| | Fe-oxide |
| | Carbonates |
| 8 | Micrite (bioclast? + Authigen?) |
| | Others |

| Percent | Component |
|------------------------|-------------------------------------|
| BIOGENIC GRAINS | |
| | Calcareous |
| 1 | Foraminifera |
| 3 | Nannofossils |
| | Pteropods |
| | Ostracods |
| | Echinoderm |
| | Bivalves |
| | Bryozoans |
| | Corals |
| | Sponge spicules |
| 1 | Other spicules |
| 1 | Bioclast (undifferentiated) |
| | Siliceous |
| | Radiolarians |
| | Diatoms |
| | Silicoflagellates |
| | Sponge spicules |
| | Siliceous debris (undifferentiated) |
| | Others |
| | Dinoflagellates |
| | Pollen |
| | Organic debris |
| tr | Plant debris |
| | Fish remains (teeth, bones, scales) |
| | Others |

Green

IODP Expedition 317
 SEDIMENT SMEAR SLIDE
 & THIN SECTION WORKSHEET

| Expedition | Site | Hole | Core | Type | Sec | Interval (cm) | |
|------------|-------|------|------|------|-----|---------------|--------|
| | | | | | | Top | Bottom |
| 317 | U1352 | B | 20 | H | 1 | 40 | |

| | | | |
|----------------------|------------|----------|------------|
| Sediment / Rock Name | <i>mud</i> | Observer | <i>KMM</i> |
|----------------------|------------|----------|------------|

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

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

| Percent Terrigenous Texture | | |
|-----------------------------|------|------|
| Sand | Silt | Clay |
| 5 | 75 | 20 |

Comments:

lighter gray lam.

See 79H for down litho.

1.8%

| Percent | Component |
|--------------------------------------|--|
| SILICICLASTIC GRAINS/MINERALS | |
| | Framework minerals |
| 35 | Quartz |
| 30 | Feldspar (undifferentiated) |
| | K-feldspar (Orthoclase, Microcline...) |
| | Plagioclase |
| | Rock fragments |
| | Volcanic glass |
| | Accessory/trace minerals |
| | Micas |
| | Biotite |
| | Muscovite |
| 5 | Chlorite |
| 20 | Clay sized fraction |
| tr | Glauconite |
| | Ferromagnesian minerals |
| 10 | Other dense minerals |
| | Authigenic minerals |
| | Zeolite |
| | Pyrite |
| tr | Opaque minerals (undifferentiated) |
| | Fe-oxide |
| | Carbonates |
| tr | Micrite |
| | Others |

| Percent | Component |
|------------------------|-------------------------------------|
| BIOGENIC GRAINS | |
| | Calcareous |
| | Foraminifera |
| tr | 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 |
| | Organic debris |
| | Plant debris |
| | Fish remains (teeth, bones, scales) |
| | Others |

IODP Expedition 317
 SEDIMENT SMEAR SLIDE
 & THIN SECTION WORKSHEET

| Expedition | Site | Hole | Core | Type | Sec | Interval (cm) | |
|------------|-------|------|------|------|-----|---------------|--------|
| | | | | | | Top | Bottom |
| 317 | 41352 | B | 21 | H | 3 | 60 | 60 |

| | | | |
|----------------------|------------------------------|----------|------------|
| Sediment / Rock Name | <i>Calcareous Sandy Silt</i> | Observer | <i>KMM</i> |
|----------------------|------------------------------|----------|------------|

| | |
|-------------------------------------|--------------------------|
| 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 |
| <i>25</i> | <i>60</i> | <i>15</i> |

Comments:

Green

18%

| Percent | Component |
|--------------------------------------|---|
| SILICICLASTIC GRAINS/MINERALS | |
| | Framework minerals |
| <i>20</i> | Quartz |
| <i>20</i> | Feldspar (undifferentiated) |
| | K-feldspar (Orthoclase, Microcline...) |
| | Plagioclase <i>trace</i> |
| <i>5</i> | Rock fragments |
| | Volcanic glass |
| | Accessory/trace minerals |
| | Micas |
| <i>tr</i> | Biotite |
| <i>1</i> | Muscovite |
| <i>3</i> | Chlorite |
| <i>10</i> | Clay sized fraction |
| | Glaucinite |
| <i>tr</i> | Ferromagnesian minerals |
| <i>10</i> | Other dense minerals |
| | <i>Clinozoisite</i> |
| | Authigenic minerals |
| | Zeolite |
| <i>2-3</i> | Pyrite |
| | Opaque minerals (undifferentiated) |
| | Fe-oxide |
| | Carbonates |
| | 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 |
| <i>1</i> | Diatoms |
| <i>tr</i> | Silicoflagellates |
| <i>1</i> | Sponge spicules |
| | Siliceous debris (undifferentiated) |
| | Others |
| | Dinoflagellates |
| | Pollen |
| <i>tr</i> | Organic debris |
| | Plant debris |
| | Fish remains (teeth, bones, scales) |
| | Others |

IODP Expedition 317
 SEDIMENT SMEAR SLIDE
 & THIN SECTION WORKSHEET

| Expedition | Site | Hole | Core | Type | Sec | Interval (cm) | |
|------------|-------|------|------|------|-----|---------------|--------|
| | | | | | | Top | Bottom |
| 317 | U1352 | B | 21 | H | 6 | 66 | |

| | | | |
|----------------------|-----|----------|-----|
| Sediment / Rock Name | Mud | Observer | KMM |
|----------------------|-----|----------|-----|

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

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

| Percent Terrigenous Texture | | |
|-----------------------------|------|------|
| Sand | Silt | Clay |
| | 50 | 50 |

Comments:

Gray

3%

| Percent | Component |
|--------------------------------------|--|
| SILICICLASTIC GRAINS/MINERALS | |
| | Framework minerals |
| 140 | Quartz |
| 10 | Feldspar (undifferentiated) |
| | K-feldspar (Orthoclase, Microcline...) |
| | Plagioclase |
| | Rock fragments |
| | Volcanic glass |
| | Accessory/trace minerals |
| | Micas |
| | Biotite |
| 10 | Muscovite |
| 3 | Chlorite |
| 50 | Clay sized fraction |
| | Glauconite |
| tr | Ferromagnesian minerals |
| 5 | Other dense minerals |
| | Sphere |
| | Authigenic minerals |
| | Zeolite |
| 1 | Pyrite |
| | Opaque minerals (undifferentiated) |
| | Fe-oxide |
| | Carbonates |
| | Micrite |
| | Others |

| Percent | Component |
|------------------------|-------------------------------------|
| BIOGENIC GRAINS | |
| | Calcareous |
| | Foraminifera |
| 5 | Nannofossils |
| | Pteropods |
| | Ostracods |
| | Echinoderm |
| | Bivalves |
| | Bryozoans |
| | Corals |
| | Sponge spicules |
| | Other spicules |
| | Bioclast (undifferentiated) |
| | Siliceous |
| | Radiolarians |
| 1 | Diatoms |
| | Silicoflagellates |
| 1 | Sponge spicules |
| | Siliceous debris (undifferentiated) |
| | Others |
| | Dinoflagellates |
| | Pollen |
| | Organic debris |
| | Plant debris |
| | Fish remains (teeth, bones, scales) |
| | Others |