

IODP Expedition 317  
 SEDIMENT SMEAR SLIDE  
 & THIN SECTION WORKSHEET

Expedition	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
317	U1352	C	20 23	R	2	26	

Sediment / Rock Name	<i>Calcareous Sandy mudstone</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>40</i>	<i>40</i>	<i>20</i>

Comments:

*13%*

Percent	Component
<b>SILICICLASTIC GRAINS/MINERALS</b>	
	Framework minerals
<i>20</i>	Quartz
<i>20</i>	Feldspar (undifferentiated)
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
<i>5</i>	Rock fragments <i>Schist + argillite?</i>
	Volcanic glass
	Accessory/trace minerals
	Micas
<i>tr</i>	Biotite
<i>30</i>	Muscovite
<i>10</i>	Chlorite <i>alt to pyrite</i>
<i>12</i>	Clay sized fraction
	Glauconite
<i>1</i>	Ferromagnesian minerals
<i>5</i>	Other dense minerals <i>Chiniform</i>
	Authigenic minerals
	Zeolite
<i>1</i>	Pyrite
	Opaque minerals (undifferentiated)
	Fe-oxide
	Carbonates
<i>7</i>	Micrite
	Others

Percent	Component
<b>BIOGENIC GRAINS</b>	
	Calcareous
<i>5</i>	Foraminifera <i>pyrite fill</i>
	Nannofossils
	Pteropods
	Ostracods
	Echinoderm
	Bivalves
	Bryozoans
	Corals
	Sponge spicules
<i>10</i>	Other spicules
	Bioclast (undifferentiated)
	Siliceous
	Radiolarians
	Diatoms
	Silicoflagellates
	Sponge spicules
	Siliceous debris (undifferentiated)
	Others
	Dinoflagellates
	Pollen
	Organic debris
<i>1</i>	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	C	23	R	CC	12	

Sediment / Rock Name	<i>Calcareous Sandy mudstone</i>	Observer	<i>kmn</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
<i>30</i>	<i>50</i>	<i>20</i>

Comments:

*26%*

Percent	Component
<b>SILICICLASTIC GRAINS/MINERALS</b>	
	Framework minerals
<i>10</i>	Quartz
<i>10</i>	Feldspar (undifferentiated)
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
	Volcanic glass
	Accessory/trace minerals
	Micas
<i>tr</i>	Biotite
<i>10</i>	Muscovite
<i>10</i>	Chlorite
<i>18</i>	Clay sized fraction
	Glauconite
<i>1</i>	Ferromagnesian minerals
<i>5</i>	Other dense minerals
	Authigenic minerals
	Zeolite
	Pyrite
	Opaque minerals (undifferentiated)
	Fe-oxide
	Carbonates
<i>15</i>	Micrite
	Others

Percent	Component
<b>BIOGENIC GRAINS</b>	
	Calcareous
<i>1</i>	Foraminifera
<i>7</i>	Nannofossils
	Pteropods
	Ostracods
	Echinoderm
	Bivalves
	Bryozoans
	Corals
	Sponge spicules
<i>5</i>	Other spicules
	Bioclast (undifferentiated)
	Siliceous
	Radiolarians
	Diatoms
	Silicoflagellates
	Sponge spicules
	Siliceous debris (undifferentiated)
	Others
	Dinoflagellates
<i>tr</i>	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	U1352	C	24	R	2	75	

Sediment / Rock Name	<i>Sandy Mair Stone</i>	Observer	X
----------------------	-------------------------	----------	---

Smear Slide	Thin Section
X	

Dominant Lithology	Minor Lithology
X	

Percent Terrigenous Texture		
Sand	Silt	Clay
<del>25</del>	<del>0</del>	20

Comments:

*35 4/5*

*36*

Percent	Component
<b>SILICICLASTIC GRAINS/MINERALS</b>	
	Framework minerals
<i>20</i>	Quartz
<i>10</i>	Feldspar (undifferentiated)
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
<i>3</i>	Rock fragments
	Volcanic glass
	Accessory/trace minerals
	Micas
<i>tr</i>	Biotite
<i>1</i>	Muscovite
<i>3</i>	Chlorite <i>alt to pyrite</i>
<i>5</i>	Clay sized fraction
	Glaucinite
<i>1</i>	Ferromagnesian minerals
<i>3</i>	Other dense minerals
	Authigenic minerals
	Zeolite
	Pyrite
	Opaque minerals (undifferentiated)
	Fe-oxide
	Carbonates
<i>50</i>	Micrite
	Others

Percent	Component
<b>BIOGENIC GRAINS</b>	
	Calcareous
<i>tr</i>	Foraminifera <i>pyrite filler</i>
<i>? 4</i>	Nannofossils <i>?</i>
	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	U1352	C	25	R	2	46	

Sediment / Rock Name	<i>Sandy Marl Stone</i>	Observer	<i>KM</i>
----------------------	-------------------------	----------	-----------

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

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

Percent Terrigenous Texture		
Sand	Silt	Clay
30	45	25

Comments:

38%

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

Percent	Component
<b>BIOGENIC GRAINS</b>	
	Calcareous
5	Foraminifera
	Nannofossils ??
	Pteropods
	Ostracods
	Echinoderm
	Bivalves
	Bryozoans
	Corals
	Sponge spicules
20	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	U1352C		26	R	2	39	

Sediment / Rock Name	<i>Sandy Mudsstone</i>	Observer	<i>KMM</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

Comments:

*too little*

*41%*

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

Percent	Component
<b>BIOGENIC GRAINS</b>	
	Calcareous
<i>5</i>	Foraminifera <i>- altered</i>
<i>45</i>	Nannofossils ?
	Pteropods
	Ostracods
	Echinoderm
	Bivalves
	Bryozoans
	Corals
	Sponge spicules
	Other spicules <i>- to other alt. ? for.</i>
<i>27</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

IODP Expedition 317  
 SEDIMENT SMEAR SLIDE  
 & THIN SECTION WORKSHEET

Expedition	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
317	41352	C	27	R	1	81	

Sediment / Rock Name	<i>Sandy Marlstone</i>	Observer	<i>Kuno</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

Comments:

*too little*

*42%*

Percent	Component
<b>SILICICLASTIC GRAINS/MINERALS</b>	
	Framework minerals
<i>10</i>	Quartz
<i>5</i>	Feldspar (undifferentiated)
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
	Volcanic glass
	Accessory/trace minerals
	Micas
<i>1</i>	Biotite
<i>3</i>	Muscovite
<i>10</i>	Chlorite
<i>5</i>	Clay sized fraction
	Glaucanite
<i>1</i>	Ferromagnesian minerals
<i>2</i>	Other dense minerals
	Authigenic minerals
	Zeolite
<i>2</i>	Pyrite
	Opaque minerals (undifferentiated)
	Fe-oxide
	Carbonates
<i>300</i>	Micrite
	Others

Percent	Component
<b>BIOGENIC GRAINS</b>	
	Calcareous
<i>5</i>	Foraminifera <i>- unhappy!</i>
	Nannofossils
	Pteropods
	Ostracods
	Echinoderm
	Bivalves
	Bryozoans
	Corals
	Sponge spicules
	Other spicules
<i>25</i>	Bioclast (undifferentiated) <i>- or block of matrix?</i>
	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	C	28	R	2	83	

Sediment / Rock Name	<i>Sandy Marlstone</i>	Observer	<i>km</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:

*28%*

*difficult to estimate %*

Percent	Component
<b>SILICICLASTIC GRAINS/MINERALS</b>	
	Framework minerals
<i>10</i>	Quartz
<i>10</i>	Feldspar (undifferentiated)
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
<i>tr</i>	Rock fragments
	Volcanic glass
	Accessory/trace minerals
	Micas
<i>tr</i>	Biotite
<i>8 tr</i>	Muscovite
<i>10</i>	Chlorite
<i>10</i>	Clay sized fraction
	Glauconite
	Ferromagnesian minerals
<i>5</i>	Other dense minerals
	Authigenic minerals
	Zeolite
<i>2</i>	Pyrite
	Opaque minerals (undifferentiated)
	Fe-oxide
	Carbonates
<i>5 tr</i>	Micrite
	Others

Percent	Component
<b>BIOGENIC GRAINS</b>	
	Calcareous
<i>10</i>	Foraminifera ? <i>Act.</i>
<i>20</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
<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	U135a	C	29	R	3	29	

Sediment / Rock Name	<i>Sandy Marlstone</i>	Observer	<i>Kimm</i>
----------------------	------------------------	----------	-------------

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

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

Percent Terrigenous Texture		
Sand	Silt	Clay
<i>40</i>	<i>40</i>	<i>20</i>

Comments:

*31%*

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

Percent	Component
<b>BIOGENIC GRAINS</b>	
	Calcareous
<i>15 <del>15</del></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



IODP Expedition 317  
 SEDIMENT SMEAR SLIDE  
 & THIN SECTION WORKSHEET

Expedition	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
317	011352C		30	RR	1	34	

Sediment / Rock Name	Sandy Mudsstone	Observer	Kam
----------------------	-----------------	----------	-----

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
30	40	30

Comments:

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

Percent	Component
<b>BIOGENIC GRAINS</b>	
	Calcareous
5	Foraminifera <i>Althosid</i>
1.5	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

IODP Expedition 317  
 SEDIMENT SMEAR SLIDE  
 & THIN SECTION WORKSHEET

Expedition	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
317	1352	C	31	R	2	60	

Sediment / Rock Name	<i>Sandy marl</i>	Observer	<i>Lawer.</i>
----------------------	-------------------	----------	---------------

Smear Slide	Thin Section
✓	

Dominant Lithology	Minor Lithology
✓	

Percent Terrigenous Texture		
Sand	Silt	Clay
25	30	10

Comments:

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

Percent	Component
<b>BIOGENIC GRAINS</b>	
	Calcareous
4	Foraminifera
17	Nannofossils
	Pteropods
	Ostracods
	Echinoderm
	Bivalves
	Bryozoans
	Corals
	Sponge spicules
	Other spicules
6	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	1352	C	32	R	2	60	

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

Smear Slide	Thin Section
✓	

Dominant Lithology	Minor Lithology
✓	

Percent Terrigenous Texture		
Sand	Silt	Clay
40	20	10

Comments:

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

Percent	Component
<b>BIOGENIC GRAINS</b>	
	Calcareous
3	Foraminifera
8	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



IODP Expedition 317  
 SEDIMENT SMEAR SLIDE  
 & THIN SECTION WORKSHEET

Expedition	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
317	1352	C	33	R	4	60	

Sediment / Rock Name	<i>Sandy mudstone.</i>	Observer	<i>hove</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
17	35	15

Comments:

*v.f.  
 mica flakes.*

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

Percent	Component
<b>BIOGENIC GRAINS</b>	
	Calcareous
1	Foraminifera
9	Nannofossils
	Pteropods
	Ostracods
	Echinoderm
	Bivalves
	Bryozoans
	Corals
	Sponge spicules
	Other spicules
4	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	1352	C	34	R	3	62	

Sediment / Rock Name	sandy marl.	Observer	
----------------------	-------------	----------	--

Smear Slide	Thin Section
✓	

Dominant Lithology	Minor Lithology
✓	

Percent Terrigenous Texture		
Sand	Silt	Clay
30	30	5

Comments:

poor preservation / recrystallization of bioclasts.

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

Percent	Component
<b>BIOGENIC GRAINS</b>	
	Calcareous
3	Foraminifera
8	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



IODP Expedition 317  
 SEDIMENT SMEAR SLIDE  
 & THIN SECTION WORKSHEET

Expedition	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
317	1352	C	33	R	2	60	

Sediment / Rock Name	sandy marl.	Observer	hove
----------------------	-------------	----------	------

Smear Slide	Thin Section
✓	

Dominant Lithology	Minor Lithology
✓	

Percent Terrigenous Texture		
Sand	Silt	Clay
15	40	15

Comments:

*vfd. cemented*

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

Percent	Component
<b>BIOGENIC GRAINS</b>	
	Calcareous
	Foraminifera
12	Nannofossils
	Pteropods
	Ostracods
	Echinoderm
	Bivalves
	Bryozoans
	Corals
	Sponge spicules
	Other spicules
6	Bioclast (undifferentiated)
	Siliceous
	Radiolarians
	Diatoms
	Silicoflagellates
	Sponge spicules
	Siliceous debris (undifferentiated)
	Others
	Dinoflagellates
	Pollen
1	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	1352	C	36	R	1	63	

Sediment / Rock Name	<i>Sandy marl stu.</i>	Observer	<i>Lene</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
30	25	15

Comments:

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

Percent	Component
<b>BIOGENIC GRAINS</b>	
	Calcareous
5	Foraminifera
8	Nannofossils
	Pteropods
	Ostracods
	Echinoderm
	Bivalves
	Bryozoans
	Corals
	Sponge spicules
	Other spicules
6	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	1352	C	37	R	3	83	

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

Smear Slide	Thin Section
✓	

Dominant Lithology	Minor Lithology
✓	

Percent Terrigenous Texture		
Sand	Silt	Clay
20	40	10

Comments:

Percent	Component
<b>SILICICLASTIC GRAINS/MINERALS</b>	
	Framework minerals
25	Quartz
20	Feldspar (undifferentiated)
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
3	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
1	Pyrite
3	Opaque minerals (undifferentiated)
	Fe-oxide
4	Carbonates
10	Micrite
	Others

Percent	Component
<b>BIOGENIC GRAINS</b>	
	Calcareous
3	Foraminifera
8	Nannofossils
	Pteropods
	Ostracods
	Echinoderm
	Bivalves
	Bryozoans
	Corals
	Sponge spicules
	Other spicules
5	Bioclast (undifferentiated)
	Siliceous
	Radiolarians
	Diatoms
	Silicoflagellates
	Sponge spicules
1	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	1352	C	42	R	3	71	

Sediment / Rock Name	<i>Sandy marlstone.</i>	Observer	<i>Lawer.</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
20	75	5

Comments:

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

Percent	Component
<b>BIOGENIC GRAINS</b>	
	Calcareous
2	Foraminifera
5	Nannofossils
	Pteropods
	Ostracods
	Echinoderm
	Bivalves
	Bryozoans
	Corals
	Sponge spicules
	Other spicules
4	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	1352	C	43	R	2	52	

Sediment / Rock Name	sandy marlstone.	Observer	
----------------------	------------------	----------	--

Smear Slide	Thin Section
✓	

Dominant Lithology	Minor Lithology
✓	

Percent Terrigenous Texture		
Sand	Silt	Clay
20	35	15

Comments:

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

Percent	Component
<b>BIOGENIC GRAINS</b>	
	Calcareous
4	Foraminifera
2	Nannofossils
	Pteropods
	Ostracods
	Echinoderm
	Bivalves
	Bryozoans
	Corals
	Sponge spicules
	Other spicules
7	Bioclast (undifferentiated) <small>pellet?</small>
	Siliceous
	Radiolarians
	Diatoms
	Silicoflagellates
	Sponge spicules
1	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	1352	C	44	R	1	120	

Sediment / Rock Name	<i>sandy marlstone</i>	Observer	<i>Kever</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	10

Comments:

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

Percent	Component
<b>BIOGENIC GRAINS</b>	
	Calcareous
2	Foraminifera
5	Nannofossils <i>partially reworked</i>
	Pteropods
	Ostracods
	Echinoderm
	Bivalves
	Bryozoans
	Corals
	Sponge spicules
	Other spicules
8	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	135Z	C	44	R	3	20	

Sediment / Rock Name	<i>Sandy chalk</i>	Observer	<i>hove</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>17</i>	<i>13</i>	<i>5</i>

Comments:

*poor colored layers.*

Percent	Component
<b>SILICICLASTIC GRAINS/MINERALS</b>	
	Framework minerals
<i>12</i>	Quartz
<i>8</i>	Feldspar (undifferentiated)
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
<i>1</i>	Rock fragments
	Volcanic glass
	Accessory/trace minerals
	Micas
<i>1</i>	Biotite
<i>4</i>	Muscovite
<i>1</i>	Chlorite
<i>—</i>	Clay sized fraction
	Glauconite
<i>1</i>	Ferromagnesian minerals
<i>2</i>	Other dense minerals
	Authigenic minerals
	Zeolite
<i>1</i>	Pyrite
<i>1</i>	Opaque minerals (undifferentiated)
	Fe-oxide
<i>15</i>	Carbonates
<i>45</i>	Micrite
	Others

Percent	Component
<b>BIOGENIC GRAINS</b>	
	Calcareous
<i>3</i>	Foraminifera
<i>—</i>	Nannofossils <i>altered</i>
	Pteropods
	Ostracods
	Echinoderm
	Bivalves
	Bryozoans
	Corals
	Sponge spicules
	Other spicules
<i>7</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

✓

IODP Expedition 317  
 SEDIMENT SMEAR SLIDE  
 & THIN SECTION WORKSHEET

Expedition	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
317	1352	C	47	R	S	23	

Sediment / Rock Name	<i>Sandy chalk.</i>	Observer	<i>hero.</i>
----------------------	---------------------	----------	--------------

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

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

Percent Terrigenous Texture		
Sand	Silt	Clay
20	10	

Comments:

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

Percent	Component
<b>BIOGENIC GRAINS</b>	
	Calcareous
7	Foraminifera
10	Nannofossils
	Pteropods
	Ostracods
	Echinoderm
	Bivalves
	Bryozoans
	Corals
	Sponge spicules
	Other spicules
13	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	1352	C	44	R	6	90	

Sediment / Rock Name	<i>sandy mudstone</i>	Observer	<i>hane</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:

*fine sandstone*

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

Percent	Component
<b>BIOGENIC GRAINS</b>	
	Calcareous
2	Foraminifera
6	Nannofossils
	Pteropods
	Ostracods
	Echinoderm
	Bivalves
	Bryozoans
	Corals
	Sponge spicules
	Other spicules
8	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	1352	C	45	R	1	100	

Sediment / Rock Name	sandy marlstone	Observer	hane
----------------------	-----------------	----------	------

Smear Slide	Thin Section
✓	

Dominant Lithology	Minor Lithology
✓	

Percent Terrigenous Texture		
Sand	Silt	Clay
17	35	15

Comments:

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

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

✓