IODP Expedition 317
SEDIMENT SMEAR SLIDE
&THIN SECTION WORKSHEET

Expedition	Site	Hole	Core	Type	Sec	Interval (cm) Top	Interval (cm) Bottom
317	1352	C	59	R	1	100	

Sediment / Rock Name	sandy marlstone	Observer	Heuer

Smear Slide	Thin Section
✓	

Dominant Lithology	Minor Lithology
✓	

Percent Terrigenous Texture		
Sand	Silt	Clay
15	40	10

Comments:

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

Percent	Component
	BIOGENIC GRAINS
	Calcareous
3	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
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	Interval (cm) Bottom
317	1352	C	59	R	7	51	51

Sediment / Rock Name	sandy mudstone.	Observer	Lanes.

Smear Slide	Thin Section
✓	

Dominant Lithology	Minor Lithology
✓	

Percent Terrigenous Texture		
Sand	Silt	Clay
25	15	15

Comments:

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

Percent	Component
	BIOGENIC GRAINS
	Calcareous
4	Foraminifera
15	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	U1352	C	60	R	2	90	

Sediment / Rock Name	Sandy Marlstone	Observer	Kim

Smear Slide	Thin Section
✓	

Dominant Lithology	Minor Lithology
✓	

Percent Terrigenous Texture		
Sand	Silt	Clay
30	40	30

Comments:
Single dark laminae
48%

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

Percent	Component
	BIOGENIC GRAINS
	Calcareous
10	Foraminifera
20 ~~15 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

IODP Expedition 317
SEDIMENT SMEAR SLIDE
&THIN SECTION WORKSHEET

Expedition	Site	Hole	Core	Type	Sec	Interval (cm) Top	Bottom
317	U1351	C	62	R	4	134	

Sediment / Rock Name	Calcareous Sandy Mudstone	Observer	Kim M

Smear Slide	Thin Section
X	•

Dominant Lithology	Minor Lithology
X	

Percent Terrigenous Texture		
Sand	Silt	Clay
30	45	25

Comments:

½ Slightly darker ~ lighter = marlstone

20%

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

Percent	Component
	BIOGENIC GRAINS
	Calcareous
2	Foraminifera
20	Nannofossils
	Pteropods
	Ostracods
	Echinoderm
	Bivalves
	Bryozoans
	Corals
	Sponge spicules
	Other spicules
tr	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

IODP Expedition 317
SEDIMENT SMEAR SLIDE
&THIN SECTION WORKSHEET

Expedition	Site	Hole	Core	Type	Sec	Interval (cm) Top	Interval (cm) Bottom
317	U1352	C	61	R	1	29	

Sediment / Rock Name	Silty Sandstone	Observer	Kimm

Smear Slide	Thin Section
✓	

Dominant Lithology	Minor Lithology
	✓

Percent Terrigenous Texture		
Sand	Silt	Clay
40	40	20

Comments:

at 98cm = 6%

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
25	Muscovite
5	Chlorite
10	Clay sized fraction
tr	Glauconite
tr	Ferromagnesian minerals
	Other dense minerals
	Authigenic minerals
	Zeolite
2	Pyrite
	Opaque minerals (undifferentiated)
	Fe-oxide
	Carbonates
5	Micrite
	Others

Percent	Component
	BIOGENIC GRAINS
	Calcareous
10	Foraminifera
3	Nannofossils
	Pteropods
	Ostracods
	Echinoderm
	Bivalves
	Bryozoans
	Corals
	Sponge spicules
	Other spicules
20	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

IODP Expedition 317
SEDIMENT SMEAR SLIDE
&THIN SECTION WORKSHEET

Expedition	Site	Hole	Core	Type	Sec	Interval (cm) Top	Bottom
317	U1352	C	61	R	1	44	

Sediment / Rock Name	Mudstone	Observer	Kmm

Smear Slide	Thin Section
✓	

Dominant Lithology	Minor Lithology
	✓

Percent Terrigenous Texture		
Sand	Silt	Clay
5	40	55

Comments:

dark lam

at 98 = 6%

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

Percent	Component
	BIOGENIC GRAINS
	Calcareous
tr	Foraminifera
2	Nannofossils
	Pteropods
	Ostracods
	Echinoderm
	Bivalves
	Bryozoans
	Corals
	Sponge spicules
	Other spicules
tr	Bioclast (undifferentiated)
	Siliceous
	Radiolarians
	Diatoms
	Silicoflagellates
	Sponge spicules
	Siliceous debris (undifferentiated)
	Others
	Dinoflagellates
	Pollen
	Organic debris
1	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	61	R	1	100	

Sediment / Rock Name	Sandy Mud Stone	Observer	

Smear Slide	Thin Section
✓	

Dominant Lithology	Minor Lithology
	✓

Percent Terrigenous Texture		
Sand	Silt	Clay
25	35	40

Comments:

laminated interval.....

6%

Percent	Component
	SILICICLASTIC GRAINS/MINERALS
	Framework minerals
5 ~~10~~	Quartz
5	Feldspar (undifferentiated)
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
2	Rock fragments Schist
	Volcanic glass
	Accessory/trace minerals
	Micas
	Biotite
25	Muscovite
10	Chlorite
41 ~~45~~	Clay sized fraction
	Glauconite
tr	Ferromagnesian minerals
5	Other dense minerals
	Authigenic minerals
	Zeolite
	Pyrite
1 ~~10~~	Opaque minerals (undifferentiated)
	Fe-oxide
	Carbonates
3	Micrite
	Others

Percent	Component
	BIOGENIC GRAINS
	Calcareous
1	Foraminifera
2	Nannofossils
	Pteropods
	Ostracods
	Echinoderm
	Bivalves
	Bryozoans
	Corals
	Sponge spicules
	Other spicules
tr	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	Interval (cm) Bottom
317	U1352	C	63	R	CC	18	

Sediment / Rock Name	Sandy Mudstone	Observer	Kann

Smear Slide	Thin Section
✓	

Dominant Lithology	Minor Lithology
✓	

Percent Terrigenous Texture		
Sand	Silt	Clay
30	50	20

Comments:

29%

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

Percent	Component
	BIOGENIC GRAINS
	Calcareous
3	Foraminifera
10	Nannofossils
	Pteropods
	Ostracods
	Echinoderm
	Bivalves
	Bryozoans
	Corals
	Sponge spicules
	Other spicules
5	Bioclast (undifferentiated)
	Siliceous
	Radiolarians
	Diatoms
	Silicoflagellates
tr	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	Interval (cm) Bottom
317	U1352	C	65	R	1	31	

Sediment / Rock Name	Marlstone	Observer	Kmm

Smear Slide	Thin Section
✓	

Dominant Lithology	Minor Lithology
	✓

Percent Terrigenous Texture		
Sand	Silt	Clay
2		

Comments:

NA

61%

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

Percent	Component
	BIOGENIC GRAINS
	Calcareous
2	Foraminifera
60	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	Interval (cm) Bottom
317	U1352	C	66	R	CC	5	

Sediment / Rock Name		Observer	
	Sandy Mudstone		Kmm

Smear Slide	Thin Section
✓	

Dominant Lithology	Minor Lithology
✓	

Percent Terrigenous Texture		
Sand	Silt	Clay
30	40	30

Comments:

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

Percent	Component
	BIOGENIC GRAINS
	Calcareous
8 ~~10~~	Foraminifera
30	Nannofossils
	Pteropods
	Ostracods
	Echinoderm
	Bivalves
	Bryozoans
	Corals
	Sponge spicules
	Other spicules
8 ~~10~~	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	Interval (cm) Bottom
317	U1352	C	67	R	CC	2	

Sediment / Rock Name	Sandy Mudstone	Observer	Kinn

Smear Slide	Thin Section
✓	

Dominant Lithology	Minor Lithology
✓	

Percent Terrigenous Texture		
Sand	Silt	Clay

Comments:

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

Percent	Component
	BIOGENIC GRAINS
	Calcareous
5	Foraminifera
45	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	Interval (cm) Bottom
317	U1352	C	70	R	1	110	

Sediment / Rock Name	Marlstone	Observer	KM

Smear Slide	Thin Section
✓	

Dominant Lithology	Minor Lithology
✓	

Percent Terrigenous Texture		
Sand	Silt	Clay
5	30	55

Comments:

43%

at 112 cm

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

Percent	Component
	BIOGENIC GRAINS
	Calcareous
1	Foraminifera
25	Nannofossils
	Pteropods
	Ostracods
	Echinoderm
	Bivalves
	Bryozoans
	Corals
	Sponge spicules
	Other spicules
1	Bioclast (undifferentiated)
	Siliceous
	Radiolarians
	Diatoms
	Silicoflagellates
tr	Sponge spicules
	Siliceous debris (undifferentiated)
	Others
	Dinoflagellates
	Pollen
	Organic debris
tr	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	Interval (cm) Bottom
317	U1352	C	70	R	4	44	

Sediment / Rock Name	Observer
~~Calcareous Blue Sandy Mudstone~~	Karen

Smear Slide	Thin Section
✓	

Dominant Lithology	Minor Lithology
✓	

Percent Terrigenous Texture		
Sand	Silt	Clay
30	~~40~~	30

Comments:

Sandy Marlstone

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
	Biotite
20	Muscovite
5 @	Chlorite
15 ~~AND~~	Clay sized fraction
	Glauconite
tr	Ferromagnesian minerals
5	Other dense minerals
	Authigenic minerals
	Zeolite
2	Pyrite
	Opaque minerals (undifferentiated)
	Fe-oxide
	Carbonates
4	Micrite
	Others

Percent	Component
	BIOGENIC GRAINS
	Calcareous
2	Foraminifera
~~28~~	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

IODP Expedition 317
SEDIMENT SMEAR SLIDE
&THIN SECTION WORKSHEET

Expedition	Site	Hole	Core	Type	Sec	Interval (cm) Top	Bottom
317	U1352	C	70	R	4	122	

Sediment / Rock Name	Sandy Marlstone	Observer	kmm

Smear Slide	Thin Section
V	

Dominant Lithology	Minor Lithology
	✓

Percent Terrigenous Texture		
Sand	Silt	Clay
20	40	30

Comments:

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

Percent	Component
	BIOGENIC GRAINS
	Calcareous
1	Foraminifera
10	Nannofossils
	Pteropods
	Ostracods
	Echinoderm
	Bivalves
	Bryozoans
	Corals
	Sponge spicules
	Other spicules
8-10	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	71	R	1	140	

Sediment / Rock Name	sandy marlstone	Observer	haver

Smear Slide	Thin Section
✓	

Dominant Lithology	Minor Lithology
✓	

Percent Terrigenous Texture		
Sand	Silt	Clay
15	30	10

Comments:

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

Percent	Component
BIOGENIC GRAINS	
	Calcareous
3	Foraminifera
15	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

✓

IODP Expedition 317
SEDIMENT SMEAR SLIDE
&THIN SECTION WORKSHEET

Expedition	Site	Hole	Core	Type	Sec	Interval (cm) Top	Bottom
317	1352	C	71	R	5	49	

Sediment / Rock Name	Sandy mudstone.	Observer	Heuer.

Smear Slide	Thin Section
✓	

Dominant Lithology	Minor Lithology
	✓

Percent Terrigenous Texture		
Sand	Silt	Clay
20	30	10

Comments:

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

Percent	Component
	BIOGENIC GRAINS
	Calcareous
5	Foraminifera
12	Nannofossils small to large.
	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

IODP Expedition 317
SEDIMENT SMEAR SLIDE
&THIN SECTION WORKSHEET

Expedition	Site	Hole	Core	Type	Sec	Interval (cm) Top	Interval (cm) Bottom
317	1352	C	72	R	1	16	

Sediment / Rock Name	sandy mudstone.	Observer	Lene.

Smear Slide	Thin Section
✓	

Dominant Lithology	Minor Lithology
✓	

Percent Terrigenous Texture		
Sand	Silt	Clay
10	30	15

Comments:

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
	Biotite
3	Muscovite
2	Chlorite
15	Clay sized fraction
	Glauconite
	Ferromagnesian minerals
3	Other dense minerals
	Authigenic minerals
	Zeolite
1	Pyrite
3	Opaque minerals (undifferentiated)
	Fe-oxide
5	Carbonates
15	Micrite
	Others

Percent	Component
	BIOGENIC GRAINS
	Calcareous
2	Foraminifera
7	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	Interval (cm) Bottom
317	1352	C	73	R	2	40	

Sediment / Rock Name	Sandy marlstone.	Observer	Lowe

Smear Slide	Thin Section
✓	

Dominant Lithology	Minor Lithology
	✓

Percent Terrigenous Texture		
Sand	Silt	Clay
10	20	10

Comments:

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

Percent	Component
	BIOGENIC GRAINS
	Calcareous
2	Foraminifera
6	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	Interval (cm) Bottom
317	1352	C	73	R	2	30	

Sediment / Rock Name	sandy marlstone.	Observer	hever.

Smear Slide	Thin Section
✓	

Dominant Lithology	Minor Lithology
✓	

Percent Terrigenous Texture		
Sand	Silt	Clay
15	30	5

Comments:

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

Percent	Component
	BIOGENIC GRAINS
	Calcareous
2	Foraminifera
15	Nannofossils unhappy
	Pteropods
	Ostracods
	Echinoderm
	Bivalves
	Bryozoans
	Corals
	Sponge spicules
	Other spicules
12	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

IODP Expedition 317
SEDIMENT SMEAR SLIDE
&THIN SECTION WORKSHEET

Expedition	Site	Hole	Core	Type	Sec	Interval (cm) Top	Interval (cm) Bottom
317	1352	C	73	R	4	10	

Sediment / Rock Name	Sandy mudstone.	Observer	Lena

Smear Slide	Thin Section
✓	

Dominant Lithology	Minor Lithology
	✓

Percent Terrigenous Texture		
Sand	Silt	Clay
15	15	10

Comments:

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

Percent	Component
	BIOGENIC GRAINS
	Calcareous
2	Foraminifera
6	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	Interval (cm) Bottom
317	1352	C	73	R	4	30	

Sediment / Rock Name	calcareous rich mudstone	Observer	Lauer.

Smear Slide	Thin Section
✓	

Dominant Lithology	Minor Lithology
✓	

Percent Terrigenous Texture		
Sand	Silt	Clay
20	30	30

Comments:

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
3	Chlorite
30	Clay sized fraction
	Glauconite
	Ferromagnesian minerals
6	Other dense minerals
	Authigenic minerals
	Zeolite
3	Pyrite
4	Opaque minerals (undifferentiated)
	Fe-oxide
	Carbonates
5	Micrite
	Others

Percent	Component
	BIOGENIC GRAINS
	Calcareous
3	Foraminifera
8	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	Interval (cm) Bottom
317	1352	C	85	R	5	85	

Sediment / Rock Name	calcareous silty mud.	Observer	Dave.

Smear Slide	Thin Section
✓	

Dominant Lithology	Minor Lithology
	✓

Percent Terrigenous Texture		
Sand	Silt	Clay
25	40	15

Comments: dark layer.

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
	Biotite
7	Muscovite
2	Chlorite
15	Clay sized fraction
	Glauconite
	Ferromagnesian minerals
3	Other dense minerals
	Authigenic minerals
	Zeolite
2	Pyrite
3	Opaque minerals (undifferentiated)
	Fe-oxide
	Carbonates
3	Micrite
	Others

Percent	Component
	BIOGENIC GRAINS
	Calcareous
2	Foraminifera
10	Nannofossils v. clear
	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	76	R	1	40	

Sediment / Rock Name	sandy mudstone.	Observer	Lever.

Smear Slide	Thin Section
✓	

Dominant Lithology	Minor Lithology
✓	

Percent Terrigenous Texture		
Sand	Silt	Clay
15	30	25

Comments:

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

Percent	Component
	BIOGENIC GRAINS
	Calcareous
	Foraminifera
12	Nannofossils
	Pteropods
	Ostracods
	Echinoderm
	Bivalves
	Bryozoans
	Corals
	Sponge spicules
2	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