

IODP Expedition 317
 SEDIMENT SMEAR SLIDE
 & THIN SECTION WORKSHEET

Expedition	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
317	41352	C	40	R	3	1	

Sediment / Rock Name	<i>Sandy Chalk Marlstone</i>	Observer	<i>Kumar</i>
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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

Comments:

Very light colored.....

Percent	Component
SILICICLASTIC GRAINS/MINERALS	
	Framework minerals
<i>5 no</i>	Quartz
<i>5</i>	Feldspar (undifferentiated)
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
	Volcanic glass
	Accessory/trace minerals
	Micas
	Biotite
<i>5 no</i>	Muscovite
<i>5 no</i>	Chlorite <i>-opaque -rich</i>
<i>5</i>	Clay sized fraction
	Glauconite
	Ferromagnesian minerals
<i>1</i>	Other dense minerals
	Authigenic minerals
	Zeolite
	Pyrite
	Opaque minerals (undifferentiated)
	Fe-oxide
	Carbonates
<i>5</i>	Micrite
	Others

Percent	Component
BIOGENIC GRAINS	
	Calcareous
<i>5</i>	Foraminifera
<i>59</i>	Nannofossils
	Pteropods
	Ostracods
	Echinoderms
	Bivalves
	Bryozoans
	Corals
	Sponges
	Other biogenic
<i>5</i>	Bioclasts
	Siliceous
	Radiolarians
	Diatoms
	Silicoflagellates
	Sponges
	Siliceous sponges
	Others
	Dinoflagellates
<i>tr</i>	Pollen
	Organic debris
	Plant debris
	Fish remains (teeth, bones, scales)
	Others

Char...
nan...

IODP Expedition 317
 SEDIMENT SMEAR SLIDE
 & THIN SECTION WORKSHEET

Expedition	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
317	U1352	C	40	R	3	99	

Sediment / Rock Name	<i>Sandy marlstone</i>	Observer	<i>KMM</i>
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Smear Slide	Thin Section
<input checked="" type="checkbox"/>	

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

Percent Terrigenous Texture		
Sand	Silt	Clay
<i>30</i>	<i>60</i>	<i>10</i>

Comments:

34%

Percent	Component
	SILICICLASTIC GRAINS/MINERALS
	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
	Biotite
<i>10</i>	Muscovite
<i>10</i>	Chlorite
<i>5</i>	Clay sized fraction
	Glauconite
<i>tr</i>	Ferromagnesian minerals
<i>5</i>	Other dense minerals <i>epidote</i> <i>chlorite</i>
	Authigenic minerals
	Zeolite
	Pyrite
	Opaque minerals (undifferentiated)
	Fe-oxide
	Carbonates
<i>5</i>	Micrite
	Others

Percent	Component
	BIOGENIC GRAINS
	Calcareous
	Foraminifera
<i>25</i>	<i>30</i> Nannofossils
	Pteropods
	Ostracods
	Echinoderm
	Bivalves
	Bryozoans
	Corals
	Sponge spicules
	Other spicules
<i>20</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	U1352	C	41	R	2	118	

Sediment / Rock Name	<i>Sandy Marlstone</i>	Observer	<i>JCM</i>
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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	55	20
25	55	

Comments:

42%

Percent	Component
	SILICICLASTIC GRAINS/MINERALS
	Framework minerals
<i>10</i>	Quartz
<i>5</i>	Feldspar (undifferentiated)
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
<i>3</i>	Rock fragments
	Volcanic glass
	Accessory/trace minerals
	Micas
	Biotite
	Muscovite
<i>10</i>	Chlorite
<i>5</i>	Clay sized fraction
<i>tr</i>	Glauconite
<i>1</i>	Ferromagnesian minerals
<i>8</i>	Other dense minerals
	Authigenic minerals
	Zeolite
<i>3</i>	Pyrite
	Opaque minerals (undifferentiated)
	Fe-oxide
	Carbonates
<i>20</i>	Micrite
	Others

Percent	Component
	BIOGENIC GRAINS
	Calcareous
<i>10</i>	Foraminifera <i>ugly!</i>
<i>20</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
<i>tr</i>	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	48	R	2	33	

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

close to muddy Limestone

Na

Percent	Component
SILICICLASTIC GRAINS/MINERALS	
	Framework minerals
<i>5</i>	Quartz
<i>5</i>	Feldspar (undifferentiated)
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
<i>1</i>	Rock fragments
	Volcanic glass
	Accessory/trace minerals
	Micas
<i>tr</i>	Biotite
<i>2</i>	Muscovite
<i>2</i>	Chlorite
<i>20</i>	Clay sized fraction
	Glauconite
<i>tr</i>	Ferromagnesian minerals
<i>3</i>	Other dense minerals
	Authigenic minerals
	Zeolite
	Pyrite
	Opaque minerals (undifferentiated)
	Fe-oxide
	Carbonates
<i>40</i>	Micrite
	Others

Percent	Component
BIOGENIC GRAINS	
	Calcareous
<i>5</i>	Foraminifera
	Nannofossils
	Pteropods
	Ostracods
	Echinoderm
	Bivalves
	Bryozoans
	Corals
	Sponge spicules
	Other spicules
<i>15</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	U1352	C	49	R	1	107	

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

10%

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

Percent	Component
	BIOGENIC GRAINS
	Calcareous
	Foraminifera <i>unhappy</i>
<i>10</i>	Nannofossils <i>?</i>
<i>?</i>	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
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 & THIN SECTION WORKSHEET

Expedition	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
317	41352 C		50	R	S	82	

Sediment / Rock Name	<i>Sandy Marlstone</i>	Observer	<i>KMA</i>
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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>30</i>	<i>30</i>

Comments:

Percent	Component
SILICICLASTIC GRAINS/MINERALS	
	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>1</i>	Biotite
<i>10</i>	Muscovite
<i>10</i>	Chlorite
<i>10</i>	Clay sized fraction ?
	Glaucanite
	Ferromagnesian minerals
<i>5</i>	Other dense minerals
	Authigenic minerals
	Zeolite
<i>1</i>	Pyrite
	Opaque minerals (undifferentiated)
	Fe-oxide
	Carbonates
<i>8</i>	Micrite
	Others

Percent	Component
BIOGENIC GRAINS	
	Calcareous
<i>5</i>	Foraminifera
<i>5</i>	Nannofossils
	Pteropods
	Ostracods
	Echinoderm
	Bivalves
	Bryozoans
	Corals
	Sponge spicules
	Other spicules
<i>25</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	U1352	C	51	R	3	15	

Sediment / Rock Name	<i>Sandy Marlstone</i>	Observer	<i>KMN</i>
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Smear Slide	Thin Section
<input checked="" type="checkbox"/>	

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

Percent Terrigenous Texture		
Sand	Silt	Clay
<i>25</i>	<i>69.5</i>	<i>20</i>

Comments:

more cemented

Percent	Component
SILICICLASTIC GRAINS/MINERALS	
Framework minerals	
<i>15</i>	Quartz
<i>10</i>	Feldspar (undifferentiated)
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
<i>5</i>	Rock fragments
	Volcanic glass
Accessory/trace minerals	
	Micas
<i>tr</i>	Biotite
<i>5</i>	Muscovite
<i>10</i>	Chlorite
<i>10</i>	Clay sized fraction
<i>tr</i>	Glauconite
<i>2</i>	Ferromagnesian minerals
<i>8</i>	Other dense minerals
Authigenic minerals	
	Zeolite
	Pyrite
	Opaque minerals (undifferentiated)
	Fe-oxide
	Carbonates
<i>15</i>	Micrite
	Others

Percent	Component
BIOGENIC GRAINS	
	Calcareous
<i>5</i>	Foraminifera
	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	U1352	C	52	R	2	64	

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

less consolidated (cont.)

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

Percent	Component
BIOGENIC GRAINS	
	Calcareous
5	Foraminifera
5	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	41352	C	53	R	1	57	

Sediment / Rock Name	<i>Calcareous Silty Sand</i>	Observer	<i>Kmm</i>
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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>40</i>	<i>30</i>	<i>10</i>

Comments:

Laminated Sandy Bed

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

Percent	Component
BIOGENIC GRAINS	
	Calcareous
<i>3</i>	Foraminifera
	Nannofossils
	Pteropods
	Ostracods
	Echinoderm
	Bivalves
	Bryozoans
	Corals
	Sponge spicules
	Other spicules
<i>15</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	U1352	C	54	R	3	112	

Sediment / Rock Name	Red Sandy Marlstone	Observer	KMM
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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:

bonelaj
 w/ Limestone?

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

Percent	Component
BIOGENIC GRAINS	
	Calcareous
10	Foraminifera
	Nannofossils
	Pteropods
	Ostracods
	Echinoderm
	Bivalves
	Bryozoans
	Corals
	Sponge spicules
	Other spicules
10	Bioclast (undifferentiated)
	Siliceous
tr	Radiolarians ? or CF
	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	1352	C	55	R	1	72	

Sediment / Rock Name	<i>Sandy marls</i>	Observer	<i>Leven</i>
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Smear Slide	Thin Section
✓	

Dominant Lithology	Minor Lithology
✓	

Percent Terrigenous Texture		
Sand	Silt	Clay
35	25	10

Comments:

pellets?

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

Percent	Component
BIOGENIC GRAINS	
	Calcareous
3	Foraminifera
7	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	135C	C	55	R	4	16	

Sediment / Rock Name	sandy chalk (limestone)	Observer	Lewis
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Smear Slide	Thin Section
✓	

Dominant Lithology	Minor Lithology
	✓

Percent Terrigenous Texture		
Sand	Silt	Clay
20	10	2

Comments:

pellets?

Photo

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

Percent	Component
BIOGENIC GRAINS	
	Calcareous
3	Foraminifera recrystallized
	Nannofossils none
	Pteropods
	Ostracods
	Echinoderm
	Bivalves
	Bryozoans
	Corals
	Sponge spicules
	Other spicules
10	Bioclast (undifferentiated) recrystallized
	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	56	R	1	7	

Sediment / Rock Name	<i>sandy lsst.</i>	Observer	<i>hener.</i>
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Smear Slide	Thin Section
✓	

Dominant Lithology	Minor Lithology
	✓

Percent Terrigenous Texture		
Sand	Silt	Clay
15	15	

Comments:

amended below

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
1	Biotite
7	Muscovite
1	Chlorite
	Clay sized fraction
2	Glauconite <i>altered chlorite</i>
	Ferromagnesian minerals
2	Other dense minerals
	Authigenic minerals
	Zeolite
1	Pyrite
1	Opaque minerals (undifferentiated)
	Fe-oxide
25	Carbonates
30	Micrite
	Others

Percent	Component
BIOGENIC GRAINS	
	Calcareous
1	Foraminifera
	Nannofossils
	Pteropods
	Ostracods
	Echinoderm
	Bivalves
	Bryozoans
	Corals
	Sponge spicules
	Other spicules
15	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	56	R	3	23	

Sediment / Rock Name	<i>sandy glauconitic marlstone</i>	Observer	<i>Leaver</i>
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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
20	20	

Comments:

*glauconitic x
 shaly layers
 pellets?*

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

Percent	Component
BIOGENIC GRAINS	
	Calcareous
2	Foraminifera
	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
	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	56	R	4	32	

Sediment / Rock Name	Sandy marlstone	Observer	Lewis
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Smear Slide	Thin Section
✓	

Dominant Lithology	Minor Lithology
✓	

Percent Terrigenous Texture		
Sand	Silt	Clay
20	35	5?

Comments:

fn. max background gm sandy

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
3	Chlorite <i>altered</i>
5	Clay sized fraction
	Glauconite
1	Ferromagnesian minerals
33	Other dense minerals
	Authigenic minerals
	Zeolite
1	Pyrite
3	Opaque minerals (undifferentiated)
	Fe-oxide
7	Carbonates
15	Micrite
	Others

Percent	Component
BIOGENIC GRAINS	
	Calcareous
6	Foraminifera
4	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	56	R	5	50	

Sediment / Rock Name	sandy marlstone.	Observer	Lawler
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Smear Slide	Thin Section
✓	

Dominant Lithology	Minor Lithology
✓	

Percent Terrigenous Texture		
Sand	Silt	Clay
20	30	10

Comments:

reliefs?
partly altered.

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

Percent	Component
BIOGENIC GRAINS	
	Calcareous
3	Foraminifera
46	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	57	R	1	48	

Sediment / Rock Name	<i>sandy marl</i>	Observer	<i>Leves</i>
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Smear Slide	Thin Section
<input checked="" type="checkbox"/>	

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

Percent Terrigenous Texture		
Sand	Silt	Clay
20	20	10?

Comments:

pellets?

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

Percent	Component
BIOGENIC GRAINS	
	Calcareous
3	Foraminifera <i>recrystallized</i>
4	Nannofossils <i>re "</i>
	Pteropods
	Ostracods
	Echinoderm
	Bivalves
	Bryozoans
	Corals
1	Sponge spicules
	Other spicules
15	Bioclast (undifferentiated)
	Siliceous
	Radiolarians
	Diatoms
	Silicoflagellates
1	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	57	R	3	80	

Sediment / Rock Name	<i>sandy marlstone.</i>	Observer	<i>hewer</i>
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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	

Comments:

lots of larger ? sparry calcite crystals - very argill.

Photo

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

Percent	Component
BIOGENIC GRAINS	
	Calcareous
2	Foraminifera
	Nannofossils
	Pteropods
	Ostracods
	Echinoderm
	Bivalves
	Bryozoans
	Corals
	Sponge spicules
	Other spicules
5	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	1552	C	57	R	4	60	

Sediment / Rock Name	sandy marlstone.	Observer	hewer
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Smear Slide	Thin Section
✓	

Dominant Lithology	Minor Lithology
✓	

Percent Terrigenous Texture		
Sand	Silt	Clay
10	40	15

Comments:

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

Percent	Component
BIOGENIC GRAINS	
	Calcareous
4	Foraminifera
15	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	58	R	1	82	

Sediment / Rock Name	green sandy mudstone.	Observer	Leve.
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Smear Slide	Thin Section
✓	

Dominant Lithology	Minor Lithology
✓	

Percent Terrigenous Texture		
Sand	Silt	Clay
25	30	15

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

Percent	Component
BIOGENIC GRAINS	
	Calcareous
4	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	Bottom
317	1352	C	58	R	4	90	

Sediment / Rock Name	<i>sandy marlstone</i>	Observer	<i>Levor.</i>
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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
30	20	10

Comments:

cs silt.

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

Percent	Component
BIOGENIC GRAINS	
	Calcareous
4	Foraminifera
6	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
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	58	R	5	67	

Sediment / Rock Name	sandy marlstone.	Observer	haver
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Smear Slide	Thin Section
✓	

Dominant Lithology	Minor Lithology
	✓

Percent Terrigenous Texture		
Sand	Silt	Clay
15	40	15

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

Percent	Component
BIOGENIC GRAINS	
	Calcareous
2	Foraminifera
8	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	1852	C	59	R	1	83	

Sediment / Rock Name	<i>calcareous sandy mudstone</i>	Observer	<i>hane</i>
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Smear Slide	Thin Section
✓	

Dominant Lithology	Minor Lithology
	✓

Percent Terrigenous Texture		
Sand	Silt	Clay
10	30	30

Comments:

in sand max

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

Percent	Component
BIOGENIC GRAINS	
	Calcareous
3	Foraminifera
4	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

