

Sediment Smear Slide / Thin Section Description Sheet

Date: March 13 2019

Expedition: 358

Observer: MH

Site: C0024

Hole: B

Core: 1 H

Section: 1A

Interval: 2.5-2.6 cm

Sediment Name: (Calcareous / siliceous) clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount
✓			

Select one and check.

Granular Sediment			Other material	Percent Texture		
Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
✓				11	20	69

Select one and check.

Percent	Composition
Major Siliciclastic Grain Types	
E	Quartz ✓
E	Feldspars ✓
A	Clay minerals
Lithic Grains	
Sedimentary Lithics	
	Chert
C	Mudstone ✓
F	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
Volcaniclastic Grains	
Vitric fragments	
F	Clear glass ✓
	Colored glass
R	Pumice ✓
Volcanic lithics	
	Felsitic
R	Microlite
	Lathwork
	Altered volcanic (palagonite)

Percent	Composition
Pelagic Grains	
L	Calcareous
C	Nannofossils
F	Foraminifers
Siliceous	
C	Diatom ✓
R	Radiolarian ✓
C	Silicoflagellate ✓
F	Sponge Spicule ✓
Other bioclasts	
	Mollusk
	Algae
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify)
Other carbonate allochems	
	Peloid
	Intraclast
	Ooid
	Silt or sand-size carbonate allochem fragment (unspecified)
F	Carbonate mud (apart from nannos)

Percent	Composition
Minor Grain Types	
R	Dense minerals ¹
C	Micas (biotite, musc, chl) ¹
R	Glauconite
	Phosphate (bones, teeth, etc)
F	Opaque Grain ✓
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
Authigenic components	
	Pyrite (framboids)
F	Pyrite (euhedral)
	Pyrite (grain coating)
F	Calcite
F	Dolomite
	Zeolites
	Fe/Mn oxide
	Other (specify):

¹ List under remarks if possible

Fill percentage (Total must be 100).

Remarks:

* This form is not designed for shallow water (neritic) carbonate sediments

D: dominant (>50%), A: abundant (>10-50%), C: common (>1-10%), F: few (0.1-1%), R: rare (<0.1%)

Sediment Smear Slide / Thin Section Description Sheet

Date: March 13 2019

Expedition: 358

Observer: MH

Site: C0024 Hole: B Core: 1H Section: 1A Interval: 28 cm

Sediment Name: Nannofossil-rich silty clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
✓				✓				10	40	50

Select one and check.

Select one and check.

Percent	Composition
Major Siliciclastic Grain Types	
C	Quartz
C	Feldspars
D	Clay minerals 50
Lithic Grains	
Sedimentary Lithics	
	Chert
C	Mudstone
	Siltstone/sandstone
	Limestone
R	Metamorphic lithic
	Plutonic lithic
Volcaniclastic Grains	
Vitric fragments	
F	Clear glass ✓
	Colored glass
	Pumice
Volcanic lithics	
	Felsitic
R.	Microlitic ✓
	Lathwork
	Altered volcanic (palagonite)

Percent	Composition
Pelagic Grains	
	Calcareous
D	Nannofossils 10
F	Foraminifers ✓
	Siliceous
C	Diatom ✓ 5
	Radiolarian
C	Silicoflagellate ✓
F	Sponge Spicule ✓
Other bioclasts	
	Mollusk
	Algae
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify)
Other carbonate allochems	
	Peloid
	Intraclast
	Ooid
	Silt or sand-size carbonate allochem fragment (unspecified)
C	Carbonate mud (apart from nannos)

Percent	Composition
Minor Grain Types	
R	Dense minerals ¹
C	Micas (biotite, musc. chl) ¹ 3
R	Glauconite
	Phosphate (bones, teeth, etc)
F	Opaque Grain ✓
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
Authigenic components	
R.	Pyrite (framboids)
	Pyrite (euhedral)
	Pyrite (grain coating)
	Calcite
	Dolomite
	Zeolites
	Fe/Mn oxide
	Other (specify):

¹ List under remarks if possible

Fill percentage (Total must be 100).

Remarks:

* This form is not designed for shallow water (neritic) carbonate sediments

D: dominant (>50%), A: abundant (>10-50%), C: common (>1-10%), F: few (0.1-1%), R: rare (<0.1%)

Sediment Smear Slide / Thin Section Description Sheet

Date: March 13 2019

Expedition: 358

Observer: MH

Site: C0024

Hole: B

Core: 1H

Section: 1A

Interval: 44.0-44.1 cm

Sediment Name: Silty sand

Smear Slide	Thin Section	Coarse Fraction	Grain Mount
✓			

Select one and check.

Granular Sediment			Other material	Percent Texture		
Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
✓				40	35	25

Select one and check.

Percent	Composition
Major Siliciclastic Grain Types	
C	Quartz ✓
C	Feldspars ✓
C	Clay minerals
Lithic Grains	
Sedimentary Lithics	
	Chert
	Mudstone
C	Siltstone/sandstone ✓
	Limestone
C	Metamorphic lithic ✓
	Plutonic lithic
Volcaniclastic Grains	
Vitric fragments	
C	Clear glass ✓
	Colored glass
	Pumice
	Volcanic lithics ✓
	Felsitic
C	Microlite ✓
	Lathwork
	Altered volcanic (palagonite)

Percent	Composition
Pelagic Grains	
	Calcareous
F	Nannofossils ✓
F	Foraminifers ✓
	Siliceous
C	Diatom ✓
F	Radiolarian ✓
	Silicoflagellate
	Sponge Spicule
Other bioclasts	
	Mollusk
	Algae
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify)
Other carbonate allochems	
	Peloid
	Intraclast
	Ooid
	Silt or sand-size carbonate allochem fragment (unspecified)
	Carbonate mud (apart from nannos)

Percent	Composition
Minor Grain Types	
R	Dense minerals ¹ ✓
C	Micas (biotite, musc, chl) ¹ ✓
	Glauconite
	Phosphate (bones, teeth, etc)
C	Opaque Grain ✓
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
Authigenic components	
	Pyrite (framboids)
F	Pyrite (euhedral) ✓
	Pyrite (grain coating)
F	Calcite ✓
	Dolomite
	Zeolites
	Fe/Mn oxide
	Other (specify):

¹ List under remarks if possible

Fill percentage (Total must be 100).

Remarks: Altered feldspar

* This form is not designed for shallow water (neritic) carbonate sediments

D: dominant (>50%), A: abundant (>10-50%), C: common (>1-10%), F: few (0.1-1%), R: rare (<0.1%)

Sediment Smear Slide / Thin Section Description Sheet

Date: March 13 2019

Expedition: 358

Observer: MH

Site: C0024

Hole: B

Core: 1H

Section: 1A

Interval: 45-45.1 cm

Sediment Name: Ash with abundant glass and microlitics

Smear Slide	Thin Section	Coarse Fraction	Grain Mount
✓			

Select one and check.

Granular Sediment			Other material	Percent Texture		
Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
	✓			50	30	20

Select one and check.

Percent	Composition
Major Siliciclastic Grain Types	
C	Quartz ✓
C	Feldspars ✓
C	Clay minerals ✓
Lithic Grains	
Sedimentary Lithics	
	Chert
C	Mudstone ✓
	Siltstone/sandstone
	Limestone
C	Metamorphic lithic ✓
	Plutonic lithic
Volcaniclastic Grains	
Vitric fragments	
(A)	Clear glass ✓
	Colored glass
C	Pumice ✓
Volcanic lithics	
(A)	Felsitic
(A)	Microlitic ✓
	Lathwork
	Altered volcanic (palagonite)

Percent	Composition
Pelagic Grains	
	Calcareous
C	Nannofossils ✓
C	Foraminifers ✓
	Siliceous
C	Diatom ✓
C	Radiolarian ✓
C	Silicoflagellate ✓
C	Sponge Spicule ✓
Other bioclasts	
	Mollusk
	Algae
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify)
Other carbonate allochems	
	Peloid
	Intraclast
	Ooid
	Silt or sand-size carbonate allochem fragment (unspecified)
	Carbonate mud (apart from nannos)

Percent	Composition
Minor Grain Types	
F	Dense minerals ¹ ✓
C	Micas (biotite, musc, chl) ¹ ✓
	Glauconite
	Phosphate (bones, teeth, etc)
C	Opaque Grain ✓
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
Authigenic components	
	Pyrite (framboids)
	Pyrite (euhedral)
	Pyrite (grain coating)
	Calcite
	Dolomite
	Zeolites
	Fe/Mn oxide
	Other (specify):

¹ List under remarks if possible

Fill percentage (Total must be 100).

Remarks: Microlitics contain opaque grains

* This form is not designed for shallow water (neritic) carbonate sediments

D: dominant (>50%), A: abundant (>10-50%), C: common (>1-10%), F: few (0.1-1%), R: rare (<0.1%)

Sediment Smear Slide / Thin Section Description Sheet

Date: 2019-03-13 2019

Expedition: 358

Observer: *Poni*

Site: *C0024* Hole: *B* Core: *1H* Section: *1A* Interval: *105 cm*

Sediment Name: *Sand lamina*

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
<i>X</i>				<i>X</i>				<i>~60</i>	<i>~20</i>	<i>~20</i>

Select one and check

Select one and check

Percent	Composition	Percent	Composition	Percent	Composition
Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types	
<i>D</i>	Quartz		Calcareous	<i>F</i>	Dense minerals ¹
<i>A</i>	Feldspars		Nannofossils	<i>C</i>	Micas (biotite, musc, chl) ¹
<i>A</i>	Clay minerals		Foraminifers		Glauconite
Lithic Grains			Siliceous		Phosphate (bones, teeth, etc)
	Sedimentary Lithics	<i>R</i>	Diatom	<i>F</i>	Opaque Grain
	Chert		Radiolarian		Marine organic matter
<i>A</i>	Mudstone		Silicoflagellate		Terrestrial organic matter
	Siltstone/sandstone	<i>F</i>	Sponge Spicule		Other (specify):
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Algae		Pyrite (framboids)
			Echinoderm		Pyrite (euhedral)
	Volcaniclastic Grains		Benthic foraminifer		Pyrite (grain coating)
	Vitric fragments		Other bioclast (specify)		Calcite
	Clear glass		Other carbonate allochems		Dolomite
	Colored glass		Peloid		Zeolites
	Pumice		Intraclast		Fe/Mn oxide
	Volcanic lithics		Ooid		Other (specify):
	Felsitic		Silt or sand-size carbonate allochem fragment (unspecified)		
	Microlite		Carbonate mud (apart from nannos)		
	Lathwork				
	Altered volcanic (palagonite)				

¹ List under remarks if possible

Fill percentage (Total must be 100).

Remarks: *clayey-silty sand; Qz dominant, abundant feldspar & clay numerous clay clumps due to post-deposition aggregation*

* This form is not designed for shallow water (neritic) carbonate sediments

D: dominant (>50%), A: abundant (>10-50%), C: common (>1-10%), F: few (0.1-1%), R: rare (<0.1%)

Sediment Smear Slide / Thin Section Description Sheet

Date: 2019-03-13 2019

Expedition: 358

Observer: *Domi*

Site: *CG024*

Hole: *B*

Core: *1H*

Section: *1A*

Interval: *120 cm*

Sediment Name: ~~*silty clay*~~ *clayey silt*

Smear Slide	Thin Section	Coarse Fraction	Grain Mount
<i>X</i>			

Select one and check.

Granular Sediment			Other material	Percent Texture		
Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
<i>X</i>				<i><1</i>	<i>~40</i>	<i>60</i>

Select one and check.

Percent	Composition
Major Siliciclastic Grain Types	
<i>D</i>	Quartz
<i>F</i>	Feldspars
<i>A</i>	Clay minerals
Lithic Grains	
Sedimentary Lithics	
	Chert
	Mudstone
	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
Volcaniclastic Grains	
Vitric fragments	
<i>F</i>	Clear glass
	Colored glass
	Pumice
Volcanic lithics	
	Felsitic
	Microlitic
	Lathwork
	Altered volcanic (palagonite)

Percent	Composition
Pelagic Grains	
	Calcareous
<i>R</i>	Nannofossils
	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	Silicoflagellate
<i>C</i>	Sponge Spicule
Other bioclasts	
	Mollusk
	Algae
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify)
Other carbonate allochems	
	Peloid
	Intraclast
	Ooid
	Silt or sand-size carbonate allochem fragment (unspecified)
	Carbonate mud (apart from nannos)

Percent	Composition
Minor Grain Types	
<i>F</i>	Dense minerals ¹
<i>C</i>	Micas (biotite, musc, chl) ¹
	Glauconite
	Phosphate (bones, teeth, etc)
<i>F</i>	Opaque Grain
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
Authigenic components	
	Pyrite (framboids)
	Pyrite (euhedral)
	Pyrite (grain coating)
<i>R</i>	Calcite
	Dolomite
	Zeolites
	Fe/Mn oxide
	Other (specify):

¹ List under remarks if possible

Fill percentage (Total must be 100).

Remarks: *silty clay, very few sand grains; clumps of clay (poorly disaggregated); few pieces of glass; many indulatory quartz grains (some very strongly)*

* This form is not designed for shallow water (neritic) carbonate sediments

D: dominant (>50%), A: abundant (>10-50%), C: common (>1-10%), F: few (0.1-1%), R: rare (<0.1%)

Sediment Smear Slide / Thin Section Description Sheet

Date: 2019-03-13 ~~2019~~

Expedition: 358

Observer: *Dami*

Site: *C0024*

Hole: *B*

Core: *1H*

Section: *3*

Interval: *124*

Sediment Name: *Greenish mud clast*

Smear Slide	Thin Section	Coarse Fraction	Grain Mount
<i>X</i>			

Select one and check.

Granular Sediment			Other material	Percent Texture		
Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
<i>X</i>					<i>30</i>	<i>70</i>

Select one and check.

Percent	Composition
Major Siliciclastic Grain Types	
<i>A</i>	Quartz
	Feldspars
<i>D</i>	Clay minerals
Lithic Grains	
Sedimentary Lithics	
	Chert
	Mudstone
	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
Volcaniclastic Grains	
	Vitric fragments
<i>C</i>	Clear glass
	Colored glass
	Pumice
	Volcanic lithics
	Felsitic
	Microlitic
	Lathwork
	Altered volcanic (palagonite)

Percent	Composition
Pelagic Grains	
	Calcareous
	Nannofossils
	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
Other bioclasts	
	Mollusk
	Algae
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify)
Other carbonate allochems	
	Peloid
	Intraclast
	Ooid
	Silt or sand-size carbonate allochem fragment (unspecified)
	Carbonate mud (apart from nannos)

Percent	Composition
Minor Grain Types	
<i>F</i>	Dense minerals ¹
<i>F</i>	Micas (biotite, musc, chl) ¹
	Glauconite
	Phosphate (bones, teeth, etc)
	Opaque Grain
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
Authigenic components	
	Pyrite (framboids)
	Pyrite (euhedral)
	Pyrite (grain coating)
	Calcite
	Dolomite
	Zeolites
	Fe/Mn oxide
	Other (specify):

¹ List under remarks if possible

Fill percentage (Total must be 100).

Remarks: *silty clay; many poorly disaggregated mud clumps; some grains obscured by clay sticking to surface; common glass shards; few grains of amphibole*

* This form is not designed for shallow water (neritic) carbonate sediments

D: dominant (>50%), A: abundant (>10-50%), C: common (>1-10%), F: few (0.1-1%), R: rare (<0.1%)

Sediment Smear Slide / Thin Section Description Sheet

Date: 12/03/ 2019

Expedition: 358

Observer: Pauline

Site: C0024 Hole: B Core: 1-H Section: 3A Interval: 138cm

Sediment Name: Greenish black ash

Smear Slide	Thin Section	Coarse Fraction	Grain Mount
✓			

Select one and check.

Granular Sediment			Other material	Percent Texture		
Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay

Select one and check.

Percent	Composition
Major Siliciclastic Grain Types	
A	Quartz
A	Feldspars
F	Clay minerals
Lithic Grains	
Sedimentary Lithics	
	Chert
F	Mudstone
	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
Volcaniclastic Grains	
	Vitric fragments
C	Clear glass
	Colored glass
	Pumice
	Volcanic lithics
	Felsitic
	Microplitic
	Lathwork
	Altered volcanic (palagonite)

Percent	Composition
Pelagic Grains	
	Calcareous
	Nannofossils
	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
Other bioclasts	
	Mollusk
	Algae
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify)
Other carbonate allochems	
	Peloid
	Intraclast
	Ooid
	Silt or sand-size carbonate allochem fragment (unspecified)
	Carbonate mud (apart from nannos)

Percent	Composition
Minor Grain Types	
	Dense minerals ¹
	Micas (biotite, musc, chl) ¹
	Glauconite
	Phosphate (bones, teeth, etc)
	Opaque Grain
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
Authigenic components	
	Pyrite (framboids)
	Pyrite (euhedral)
	Pyrite (grain coating)
	Calcite
	Dolomite
	Zeolites
	Fe/Mn oxide
	Other (specify):

¹ List under remarks if possible. Fill percentage (Total must be 100).

Remarks: _____

* This form is not designed for shallow water (neritic) carbonate sediments
 D: dominant (>50%), A: abundant (>10-50%), C: common (>1-10%), F: few (0.1-1%), R: rare (<0.1%)

Sediment Smear Slide / Thin Section Description Sheet

Date: March 14 2019

Expedition: 358

Observer: MH

Site: C00240 Hole: B Core: 14 Section: 4A Interval: 4-5 cm

Sediment Name: silty clay ("greenish clay" in VCP) ...

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
✓				✓				5	35	60

Select one and check

Select one and check

Percent	Composition
Major Siliciclastic Grain Types	
C	Quartz ✓
C	Feldspars ✓
A	Clay minerals ✓
Lithic Grains	
Sedimentary Lithics	
	Chert
C	Mudstone ✓
	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
Volcaniclastic Grains	
Vitric fragments	
C	Clear glass ✓
R	Colored glass ✓
F	Pumice ✓
Volcanic lithics	
	Felsitic
F	Microclite ✓
	Lathwork
R	Altered volcanic (palagonite) ✓ (tan-colored)

Percent	Composition
Pelagic Grains	
	Calcareous
C	Nannofossils ✓
F	Foraminifers ✓
	Siliceous
C	Diatom ✓
	Radiolarian
	Silicoflagellate
	Sponge Spicule
Other bioclasts	
	Mollusk
	Algae
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify)
Other carbonate allochems	
	Peloid
	Intraclast
	Ooid
	Silt or sand-size carbonate allochem fragment (unspecified)
	Carbonate mud (apart from nannos)

Percent	Composition
Minor Grain Types	
R	Dense minerals ¹ ✓
C	Micas (biotite, musc, chl) ¹ ✓
R	Glauconite ✓
	Phosphate (bones, teeth, etc)
F	Opaque Grain ✓
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
Authigenic components	
	Pyrite (framboids) ✓
F	Pyrite (euhedral)
	Pyrite (grain coating)
	Calcite
	Dolomite
	Zeolites
	Fe/Mn oxide
	Other (specify):

¹ List under remarks if possible

Fill percentage (Total must be 100).

Remarks:

* This form is not designed for shallow water (neritic) carbonate sediments

D: dominant (>50%), A: abundant (>10-50%), C: common (>1-10%), F: few (0.1-1%), R: rare (<0.1%)

Sediment Smear Slide / Thin Section Description Sheet

Date: 2015-03-15 2015

Expedition: 358

Observer: PJ

Site: C0024

Hole: B

Core: 1H

Section: 4A

Interval: 122

Sediment Name: brownish black ash

Smear Slide	Thin Section	Coarse Fraction	Grain Mount
X			

Select one and check.

Granular Sediment			Other material	Percent Texture		
Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
X				30	70	

Select one and check.

Percent	Composition
Major Siliciclastic Grain Types	
A	Quartz
F	Feldspars
	Clay minerals
Lithic Grains	
Sedimentary Lithics	
	Chert
	Mudstone
	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
Volcaniclastic Grains	
Vitric fragments	
	Clear glass
	Colored glass
	Pumice
Volcanic lithics	
	Felsitic
	Microlitic
	Lathwork
	Altered volcanic (palagonite)

Percent	Composition
Pelagic Grains	
	Calcareous
	Nannofossils
	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge spicule
Other bioclasts	
	Mollusk
	Algae
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify)
Other carbonate allochems	
	Peloid
	Intraclast
	Ooid
	Silt or sand-size carbonate allochem fragment (unspecified)
	Carbonate mud (apart from nannos)

Percent	Composition
Minor Grain Types	
C	Dense minerals ¹
C	Micas (biotite, musc, chl) ¹
	Glauconite
	Phosphate (bones, teeth, etc)
	Opaque Grain
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
Authigenic components	
	Pyrite (framboids)
	Pyrite (euhedral)
	Pyrite (grain coating)
	Calcite
	Dolomite
	Zeolites
	Fe/Mn oxide
	Other (specify):

¹ List under remarks if possible

Fill percentage (Total must be 100).

Remarks:

poor slide quality, not much to see.

* This form is not designed for shallow water (neritic) carbonate sediments

D: dominant (>50%), A: abundant (>10-50%), C: common (>1-10%), F: few (0.1-1%), R: rare (<0.1%)

Sediment Smear Slide / Thin Section Description Sheet

Date: 2019-03-13 2019

Expedition: 358

Observer: Dani/MH

Site: C0024 Hole: B Core: 1H Section: 4A

Interval: 122

Sediment Name: brownish-black ash

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types	
	Quartz ✓		Calcareous		Dense minerals ¹ ✓
	Feldspars ✓		Nannofossils ✓		Micas (biotite, musc. chl) ¹
	Clay minerals ✓		Foraminifers		Glauconite ✓
Lithic Grains			Siliceous		Phosphate (bones, teeth, etc)
	Sedimentary Lithics		Diatom ✓		Opaque Grain ✓
	Chert		Radiolarian		Marine organic matter
	Mudstone ✓		Silicoflagellate		Terrestrial organic matter
	Siltstone/sandstone		Sponge Spicule		Other (specify):
	Limestone	Other bioclasts			
	Metamorphic lithic		Mollusk	Authigenic components	
	Plutonic lithic		Algae		Pyrite (framboids)
Volcaniclastic Grains			Echinoderm		Pyrite (euhedral) ✓
	Vitric fragments		Benthic foraminifer		Pyrite (grain coating)
	Clear glass ✓		Other bioclast (specify)		Calcite
	Colored glass ✓ (green)	Other carbonate allochems			Dolomite
	Pumice		Peloid		Zeolites
	Volcanic lithics		Intraclast		Fe/Mn oxide
	Felsitic		Ooid		Other (specify):
	Microcline ✓		Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork		Carbonate mud (apart from nannos)		
	Altered volcanic (palagonite)				

¹ List under remarks if possible

Fill percentage (Total must be 100).

Remarks: Altered feldspar,

* This form is not designed for shallow water (neritic) carbonate sediments

D: dominant (>50%), A: abundant (>10-50%), C: common (>1-10%), F: few (0.1-1%), R: rare (<0.1%)

Sediment Smear Slide / Thin Section Description Sheet

Date: 14/03/ 2019

Expedition: 358

Observer:

Site: COOZY Hole: R Core: 1H Section: 5 Interval: 48 cm

Sediment Name: Silico-volcanic sediment

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types	
A	Quartz		Calcareous		Dense minerals ¹
A	Feldspars		Nannofossils		Micas (biotite, musc, chl) ¹
	Clay minerals		Foraminifers		Glauconite
Lithic Grains			Siliceous		Phosphate (bones, teeth, etc)
	Sedimentary Lithics		Diatom		Opaque Grain
	Chert		Radiolarian		Marine organic matter
A	Mudstone		Silicoflagellate		Terrestrial organic matter
	Siltstone/sandstone		Sponge Spicule		Other (specify):
	Limestone	Other bioclasts			
	Metamorphic lithic		Mollusk	Authigenic components	
	Plutonic lithic		Algae		Pyrite (framboids)
Volcaniclastic Grains			Echinoderm		Pyrite (euhedral)
	Vitric fragments		Benthic foraminifer		Pyrite (grain coating)
D	Clear glass		Other bioclast (specify)		Calcite
	Colored glass	Other carbonate allochems			Dolomite
	Pumice		Peloid		Zeolites
	Volcanic lithics		Intraclast		Fe/Mn oxide
	Felsitic		Ooid		Other (specify):
	Microlite		Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork		Carbonate mud (apart from nannos)		
	Altered volcanic(palagonite)				

¹ List under remarks if possible

Fill percentage (Total must be 100).

Remarks:

* This form is not designed for shallow water (neritic) carbonate sediments
 D: dominant (>50%), A: abundant (>10-50%), C: common (>1-10%), F: few (0.1-1%), R: rare (<0.1%)

Sediment Smear Slide / Thin Section Description Sheet

Date: 14/03 2019

Expedition: 358

Observer: _____

Site: C0024 Hole: B Core: 1H Section: 5 Interval: 54 cm

Sediment Name: Volcaniclastic sediment

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					

Select one and check

Select one and check

Percent	Composition
Major Siliciclastic Grain Types	
<u>A</u>	Quartz
<u>C</u>	Feldspars
<u>C</u>	Clay minerals
Lithic Grains	
Sedimentary Lithics	
	Chert
<u>C</u>	Mudstone
	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
Volcaniclastic Grains	
<u>D</u>	Vitric fragments
	Clear glass
	Colored glass
	Pumice
	Volcanic lithics
	Felsitic
	Microlite
	Lathwork
	Altered volcanic (palagonite)

Percent	Composition
Pelagic Grains	
	Calcareous
	Nannofossils
	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
Other bioclasts	
	Mollusk
	Algae
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify)
Other carbonate allochems	
	Peloid
	Intraclast
	Ooid
	Silt or sand-size carbonate allochem fragment (unspecified)
	Carbonate mud (apart from nannos)

Percent	Composition
Minor Grain Types	
	Dense minerals ¹
	Micas (biotite, musc, chl) ¹
	Glauconite
	Phosphate (bones, teeth, etc)
	Opaque Grain
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
Authigenic components	
	Pyrite (framboids)
	Pyrite (euhedral)
	Pyrite (grain coating)
	Calcite
	Dolomite
	Zeolites
<u>F</u>	Fe/Mn oxide
	Other (specify):

¹ List under remarks if possible

Fill percentage (Total must be 100).

Remarks: Vitric fragment dominant in the matrix
Few Hematite minerals

* This form is not designed for shallow water (neritic) carbonate sediments
D: dominant (>50%), A: abundant (>10-50%), C: common (>1-10%), F: few (0.1-1%), R: rare (<0.1%)

Sediment Smear Slide / Thin Section Description Sheet

Date: 14/03/ 2019

Expedition: 358

Observer: Pouhwa

Site: COOZY B Hole: B Core: 1H Section: 7 Interval: 63.

Sediment Name: Medium sand

Smear Slide	Thin Section	Coarse Fraction	Grain Mount
✓			

Select one and check.

Granular Sediment			Other material	Percent Texture		
Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay

Select one and check.

Percent	Composition
Major Siliciclastic Grain Types	
D	Quartz
A	Feldspars
A	Clay minerals
Lithic Grains	
Sedimentary Lithics	
	Chert
A	Mudstone
A	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
Volcaniclastic Grains	
F	Vitric fragments
	Clear glass
	Colored glass
	Pumice
	Volcanic lithics
	Felsitic
	Microinite
	Lathwork
	Altered volcanic (palagonite)

Percent	Composition
Pelagic Grains	
	Calcareous
C	Nannofossils
	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
Other bioclasts	
	Mollusk
	Algae
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify)
Other carbonate allochems	
	Peloid
	Intraclast
	Ooid
	Silt or sand-size carbonate allochem fragment (unspecified)
	Carbonate mud (apart from nannos)

Percent	Composition
Minor Grain Types	
	Dense minerals ¹
F	Micas (biotite, musc, chl) ¹
	Glauconite
	Phosphate (bones, teeth, etc)
	Opaque Grain
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
Authigenic components	
	Pyrite (framboids)
	Pyrite (euhedral)
	Pyrite (grain coating)
	Calcite
	Dolomite
	Zeolites
	Fe/Mn oxide
	Other (specify):

¹ List under remarks if possible

Fill percentage (Total must be 100).

Remarks:

* This form is not designed for shallow water (neritic) carbonate sediments

D: dominant (>50%), A: abundant (>10-50%), C: common (>1-10%), F: few (0.1-1%), R: rare (<0.1%)

Sediment Smear Slide / Thin Section Description Sheet

Date: 2019-03-15 2019

Expedition: 358

Observer: PJ

Site: C0024 Hole: B Core: 1 Section: CC Interval: 17

Sediment Name: Gray yellowish brown fine sand

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
X				X	X			~80	~20	

Select one and check.

Select one and check.

Percent	Composition
Major Siliciclastic Grain Types	
C	Quartz
	Feldspars
	Clay minerals
Lithic Grains	
	Sedimentary Lithics
	Chert
	Mudstone
	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
Volcaniclastic Grains	
	Vitric fragments
D	Clear glass
	Colored glass
	Pumice
	Volcanic lithics
	Felsitic
	Microlite
	Lathwork
	Altered volcanic(palagonite)

Percent	Composition
Pelagic Grains	
	Calcareous
	Nannofossils
	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
Other bioclasts	
	Mollusk
	Algae
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify)
Other carbonate allochems	
	Peloid
	Intraclast
	Ooid
	Silt or sand-size carbonate allochem fragment (unspecified)
	Carbonate mud (apart from nannos)

Percent	Composition
Minor Grain Types	
F	Dense minerals ¹
F	Micas (biotite, musc, chl) ¹
	Glauconite
	Phosphate (bones, teeth, etc)
	Opaque Grain
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
Authigenic components	
	Pyrite (framboids)
	Pyrite (euhedral)
	Pyrite (grain coating)
	Calcite
	Dolomite
	Zeolites
	Fe/Mn oxide
	Other (specify):

¹ List under remarks if possible

Fill percentage (Total must be 100).

Remarks: silt to sand sized glass fragments, 92 (some w/ undulatory extinction); few biotites, chlorites, few HM

* This form is not designed for shallow water (neritic) carbonate sediments
 D: dominant (>50%), A: abundant (>10-50%), C: common (>1-10%), F: few (0.1-1%), R: rare (<0.1%)

Sediment Smear Slide / Thin Section Description Sheet

Date: 15/03 / 2019

Expedition: 358

Observer: PC.

Site: C0024 Hole: B Core: 14 Section: CC Interval: 23 cm

Sediment Name: Reddish brown fine sand => Volcaniclastic sediment

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
✓					✓					

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types	
A	Quartz		Calcareous	R.	Dense minerals ¹
	Feldspars		Nannofossils		Micas (biotite, musc, chl) ¹
	Clay minerals		Foraminifers		Glauconite
Lithic Grains			Siliceous		Phosphate (bones, teeth, etc)
	Sedimentary Lithics		Diatom		Opaque Grain
	Chert	R	Radiolarian		Marine organic matter
A	Mudstone		Silicoflagellate		Terrestrial organic matter
	Siltstone/sandstone		Sponge Spicule		Other (specify):
	Limestone	Other bioclasts			
	Metamorphic lithic		Mollusk	Authigenic components	
	Plutonic lithic		Algae		Pyrite (framboids)
			Echinoderm		Pyrite (euhedral)
			Benthic foraminifer		Pyrite (grain coating)
			Other bioclast (specify)		Calcite
					Dolomite
					Zeolites
Volcaniclastic Grains		Other carbonate allochems			Fe/Mn oxide
D	Vitric fragments		Peloid		Other (specify):
	Clear glass		Intraclast		
	Colored glass		Ooid		
	Pumice		Silt or sand-size carbonate allochem fragment (unspecified)		
	Volcanic lithics		Carbonate mud (apart from nanos)		
	Felsitic				
	Microplitic				
	Lathwork				
	Altered volcanic (palagonite)				

¹ List under remarks if possible

Fill percentage (Total must be 100).

Remarks: High content in volcanic glass => clear glass
 => no fossil observed => some qz

* This form is not designed for shallow water (neritic) carbonate sediments
 D: dominant (>50%), A: abundant (>10-50%), C: common (>1-10%), F: few (0.1-1%), R: rare (<0.1%)

↳ Remark of volcanic ash?

Sediment Smear Slide / Thin Section Description Sheet

Date: 15/03/ 2019

Expedition: 358 Greenish grey silty clay. Observer:

Site: C0024 Hole: B Core: 1H Section: CC Interval: 41

Sediment Name:

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
✓										

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types	
<u>A</u>	Quartz		Calcareous	<u>R.</u>	Dense minerals ¹
	Feldspars	<u>C.</u>	Nannofossils	<u>C.</u>	Micas (biotite, musc. chl) ¹
	Clay minerals		Foraminifers		Glauconite
Lithic Grains			Siliceous		Phosphate (bones, teeth, etc)
	Sedimentary Lithics		Diatom		Opaque Grain
	Chert		Radiolarian		Marine organic matter
<u>A</u>	Mudstone		Silicoflagellate		Terrestrial organic matter
	Siltstone/sandstone		Sponge Spicule		Other (specify):
	Limestone	Other bioclasts			
	Metamorphic lithic		Mollusk	Authigenic components	
	Plutonic lithic		Algae		Pyrite (framboids)
Volcaniclastic Grains			Echinoderm		Pyrite (euhedral)
<u>A</u>	Vitric fragments		Benthic foraminifer		Pyrite (grain coating)
	Clear glass		Other bioclast (specify)		Calcite
	Colored glass	Other carbonate allochems			Dolomite
	Pumice		Peloid		Zeolites
	Volcanic lithics		Intraclast		Fe/Mn oxide
	Felsitic		Ooid		Other (specify):
	Microlitic	<u>R.</u>	Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork		Carbonate mud (apart from nannos)		
	Altered volcanic (palagonite)				

¹ List under remarks if possible

Fill percentage (Total must be 100).

Remarks: Silty clay with high content in volcanic glass.

* This form is not designed for shallow water (neritic) carbonate sediments
 D: dominant (>50%), A: abundant (>10-50%), C: common (>1-10%), F: few (0.1-1%), R: rare (<0.1%)