Sediment Smear Slide / Thin Section Description Sheet

Date: 2019-03-27 ~~2019~~

Expedition: 358 Observer: DJ

Site: C0002A Hole: G Core: 1X Section: 6 Interval: 68 - cm

Sediment Name: silty sand

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				~60	~30	~10

Select one and check.

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

Percent	Composition
	Pelagic Grains
	Calcareous
R	Nannofossils
	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	Sillicoflagellate
	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)
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: silt & sand sized angular to sub-rounded grains. chert, lithics and/or aggregates of clay.

* 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: 2019-03-27 ~~2019~~

Expedition: 358 Observer: DJ

Site: C0002 4 Hole: G Core: 2 X Section: 4 Interval: 126 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
✓				~60	~40	<1

Select one and check.

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

Percent	Composition
	Pelagic Grains
	Calcareous
	Nannofossils
	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	Sillicoflagellate
	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
A	Dense minerals[1]
F	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: angular to slightly rounded silty sand relatively high chert content. some polycrystalline grains may also be metamorphic lithics. many grains covered in opaque layer (Mn/Fe oxide?); high HM content (amphibole, rutile, px, few zircon grains observed)

* 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: 2019-03-27 ~~2019~~

Expedition: 358 Observer: DJ

Site: C0002 4 Hole: G Core: 3X Section: 4 Interval: 110 cm

Sediment Name: silty sand

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				~60	~35	~5

Select one and check.

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

Percent	Composition
	Pelagic Grains
	Calcareous
	Nannofossils
	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	Sillicoflagellate
	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]
F	Micas (biotite, musc, chl)[1]
F	Glauconite
	Phosphate (bones, teeth, etc)
A	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: angular to subrounded silty sand with some clay-sized grains; many grains coated by opaque material; HM assemblage includes amphibole, px, tourmaline, rutile, apatite, rel. few & small grains of zircon

* 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: 24 March 2019

Expedition: 358 Observer: MH

Site: C0002 4 G Hole: G Core: 4 X Section: 1 A Interval: 13

Sediment Name: Silty Sand with large grains of mica, heavy mineral, glass (Green fine - med. 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
✓				55	25	20

Select one and check.

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

Percent	Composition
	Pelagic Grains
	Calcareous
	Nannofossils
	Foraminifers
	Siliceous
F	Diatom ✓
	Radiolarian
	Sillicoflagellate
	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] ✓
F	Glauconite ✓
	Phosphate (bones, teeth, etc)
C	Opaque Grain ✓
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
	Authigenic components
	Pyrite (framboids)
C	Pyrite (euhedral) ✓
C	Pyrite (grain coating) ✓
R	Calcite
	Dolomite
	Zeolites
R	Fe/Mn oxide ✓
	Other (specify):

[1] List under remarks if possible

Fill percentage (Total must be 100).

Apatite, [] Epidote

~~Spinel (brown)~~

Remarks: Pyx (green), Chlorite, Glauconite, ~~Large grains~~ of mica and glass, and heavy mineral, ★ Pyrite coating on chlorite mica

* 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 %)

High Biref

Sediment Smear Slide / Thin Section Description Sheet

Date: 24 March 2019

Expedition: 358 Observer: M H

Site: C0002 4 Hole: G Core: 4 X Section: 3 A Interval: 53 cm

Sediment Name: Silty sand. (with various heavy mineral grains)

Smear Slide	Thin Section	Coarse Fraction	Grain Mount
✓			

Select one and check.

Granular Sediment			Other material	Percent Texture		
Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
✓				45	35	20

Select one and check.

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

Percent	Composition
	Pelagic Grains
	Calcareous ✓
R	Nannofossils
R	Foraminifers ✓
	Siliceous
	Diatom
	Radiolarian
	Sillicoflagellate
	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)
F	Glauconite
	Phosphate (bones, teeth, etc)
C	Opaque Grain ✓
	Marine organic matter
R	Terrestrial organic matter ✓
	Other (specify):
	Authigenic components
	Pyrite (framboids)
C	Pyrite (euhedral) ✓
C	Pyrite (grain coating) ✓
F	Calcite
C	Dolomite
	Zeolites
	Fe/Mn oxide
	Other (specify):

[1] List under remarks if possible

Fill percentage (Total must be 100).

Remarks: ~~Spinel (brown)~~, Zircon, Rutile (cube)

* 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: 24 March 2019

Expedition: 358 Observer: MH

Site: C0002 4 Hole: G Core: 5X Section: 1A Interval: 27 cm

Sediment Name: silty sand (with abundant glass, mica, heavy mineral...) (Black 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
✓				30	55	15

Select one and check.

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

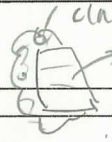
Percent	Composition
	Pelagic Grains
	Calcareous
R	Nannofossils
C	Foraminifers ✓
	Siliceous
	Diatom
	Radiolarian
	Sillicoflagellate
	Sponge Spicule
	Other bioclasts
	Mollusk
	Algae
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify)
	Other carbonate allochems
	Peloid
	Intraclast
	Ooid
	Silt or 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] ✓
F	Glauconite
	Phosphate (bones, teeth, etc)
F	Opaque Grain
	Marine organic matter
R	Terrestrial organic matter ✓
	Other (specify):
	Authigenic components
	Pyrite (framboids)
F	Pyrite (euhedral)
F	Pyrite (grain coating)
	Calcite
F	Dolomite
	Zeolites
	Fe/Mn oxide
	Other (specify):

[1] List under remarks if possible

Fill percentage (Total must be 100).

Remarks: Px, ~~Sphene~~, zircon.



* 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: 24 March 2019

Expedition: 358 Observer: MH

Site: C0002 4 Hole: G Core: 5X Section: 1A Interval: 32 cm

Sediment Name: Calcareous ash (with common wavy mineral: + mica)

Smear Slide	Thin Section	Coarse Fraction	Grain Mount
✓			

Select one and check.

Granular Sediment			Other material	Percent Texture		
Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
	✓			60	20	20

Select one and check.

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

Percent	Composition
	Pelagic Grains
A	Calcareous
	Nannofossils
C	Foraminifers ✓
	Siliceous
R	Diatom
	Radiolarian
	Sillicoflagellate
R	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)
C	Pyrite (euhedral)
	Pyrite (grain coating)
C	Calcite
C	Dolomite
	Zeolites
R	Fe/Mn oxide ✓
	Other (specify):

[1] List under remarks if possible

Fill percentage (Total must be 100).

Remarks: Prx Spinel.
Big grains of wavy mineral, mica, 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 %)

Sediment Smear Slide / Thin Section Description Sheet

Date: 24 March 2019

Expedition: 358 Observer: MH

Site: C0002 4 Hole: G Core: 5X Section: 1A Interval: 58 cm

Sediment Name: silty clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount
V			

Select one and check.

Granular Sediment			Other material	Percent Texture		
Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
✓				15	45	40

Select one and check.

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

Percent	Composition
	Pelagic Grains
	Calcareous
C	Nannofossils
C	Foraminifers ✓
	Siliceous
R	Diatom ✓
	Radiolarian
	Sillicoflagellate
	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)
F	Glauconite ✓
	Phosphate (bones, teeth, etc)
	Opaque Grain
R	Marine organic matter
	Terrestrial organic matter ✓
	Other (specify):
	Authigenic components
	Pyrite (framboids)
C	Pyrite (euhedral)
	Pyrite (grain coating)
F	Calcite
	Dolomite
	Zeolites
R	Fe/Mn oxide ✓
	Other (specify):

[1] List under remarks if possible

Fill percentage (Total must be 100).

Remarks: Prx, diatom pumice

* 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: 24 March 2019

Expedition: 358 Observer: MH

Site: C0002 4 Hole: G Core: 5X Section: CC Interval: 1.5 cm

Sediment Name: Sand - silt - 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
✓				35	30	40

Select one and check.

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

Percent	Composition
	Pelagic Grains
	Calcareous
F	Nannofossils
F	Foraminifers ✓
	Siliceous
R	Diatom
R	Radiolarian
	Sillicoflagellate
	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)
C	Opaque Grain
	Marine organic matter
R	Terrestrial organic matter
	Other (specify):
	Authigenic components
	Pyrite (framboids)
C	Pyrite (euhedral)
	Pyrite (grain coating)
F	Calcite
	Dolomite
	Zeolites
R	Fe/Mn oxide ✓
	Other (specify):

[1] List under remarks if possible

Fill percentage (Total must be 100).

Remarks: Rutile, Pyroxene, apatite, Garnet (?), Tourmaline, Zircon,

Big grains of mica, chert, heavy minerals, lithic 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 %)

lithics show clay fabric (metamorphic lithics?)

Sediment Smear Slide / Thin Section Description Sheet

Date: 29 March 2019

Expedition: 358 Observer: MH

Site: C0002 4 Hole: G Core: 6X Section: 2A Interval: 46

Sediment Name: Siltstone

Smear Slide	Thin Section	Coarse Fraction	Grain Mount
✓			

Select one and check.

Granular Sediment			Other material	Percent Texture		
Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
✓				5	70	25

Select one and check.

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

Percent	Composition
	Pelagic Grains
	Calcareous
F	Nannofossils
F	Foraminifers ✓
	Siliceous
A	Diatom ✓
	Radiolarian
	Sillicoflagellate
R	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]
F	Glauconite ✓
	Phosphate (bones, teeth, etc)
	Opaque Grain ✓
C	Marine organic matter ✓
	Terrestrial organic matter
	Other (specify):
	Authigenic components
	Pyrite (framboids)
C	Pyrite (euhedral)
	Pyrite (grain coating)
	Calcite
F	Dolomite
	Zeolites
R	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: 27 March 2019

Expedition: 358 Observer: MH

Site: C0002 Hole: G Core: 6X Section: 4A Interval: 34

Sediment Name: Very fine to fine sand (silty)

Smear Slide	Thin Section	Coarse Fraction	Grain Mount
✓			

Select one and check.

Granular Sediment			Other material	Percent Texture		
Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
✓				45	40	15

Select one and check.

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

Percent	Composition
	Pelagic Grains
F-C	Calcareous
F-C	Nannofossils
C	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	Sillicoflagellate
	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]
	Micas (biotite, musc, chl)[1]
F	Glauconite ✓
	Phosphate (bones, teeth, etc)
C	Opaque Grain
	Marine organic matter
F	Terrestrial organic matter
	Other (specify):
	Authigenic components
	Pyrite (framboids)
C	Pyrite (euhedral)
	Pyrite (grain coating)
C	Calcite
C	Dolomite ← clear crystal
	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: 2019-03-27 2019

Expedition: 358 Observer: DJ

Site: C0002 4 Hole: G Core: 7X Section: 5 Interval: 20

Sediment Name: silty sand

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				~60	~40	

Select one and check.

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

Percent	Composition
	Pelagic Grains
	Calcareous
	Nannofossils
	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	Sillicoflagellate
	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
A	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: angular to subrounded silt & sand grains; abundant lithic fragments, probably metamorphic, possibly also some chert. HM mostly amphibole, px, rutile, tourmaline, some zircon

* 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: 2019-03-27 ~~2019~~

Expedition: 358 Observer: DT

Site: C0002 4 Hole: G Core: 7X Section: 5 Interval: 73 cm

Sediment Name: 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			40	60	

Select one and check.

Percent	Composition
	Major Siliciclastic Grain Types
C	Quartz
C	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
	Microlitc
	Lathwork
	Altered volcanic(palagonite)

Percent	Composition
	Pelagic Grains
	Calcareous
	Nannofossils
	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	Sillicoflagellate
	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: mostly silt to sand sized clear glass shards, mixed with siliciclastic material (qz, felsp, ∅ HMs: ± tourmaline, px, apatite) some vesicular glass shards

* 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: 27 March 2019

Expedition: 358 Observer: MH

Site: C0002 a Hole: G Core: 8X Section: 6A Interval: 75 cm

Sediment Name: Very fine sand (rich in organic material + opaque grains (grain coated)

Smear Slide	Thin Section	Coarse Fraction	Grain Mount
✓			

Select one and check.

Granular Sediment			Other material	Percent Texture		
Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
✓				45	40	15

Select one and check.

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

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

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

[1] List under remarks if possible

Fill percentage (Total must be 100).

Remarks: Big grains of mica, OM,

* 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: 25 March 2019

Expedition: 358 Observer: MH

Site: C0002 4 Hole: G Core: 10X Section: 2A Interval: 104 cm

Sediment Name: Silty 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
✓				5	30	65

Select one and check.

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

Percent	Composition
	Pelagic Grains
	Calcareous
F	Nannofossils
F	Foraminifers ✓
	Siliceous
	Diatom
	Radiolarian
F	Sillicoflagellate
	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
F	Terrestrial organic matter ✓
	Other (specify):
	Authigenic components
	Pyrite (framboids)
C, V	Pyrite (euhedral) ✓
	Pyrite (grain coating)
F	Calcite
	Dolomite
	Zeolites
F	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: 25 March 2019

Expedition: 358 Observer:

Site: C0002 4 Hole: G Core: 10 + Section: 6A Interval: 11cm

Sediment Name: very fine sand. (silty)

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	40	10

Select one and check.

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

Percent	Composition
	Pelagic Grains
	Calcareous ✓
F	Nannofossils ✓
F	Foraminifers ✓
	Siliceous
	Diatom
	Radiolarian
	Sillicoflagellate
	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) ✓
F	Glauconite
	Phosphate (bones, teeth, etc)
C	Opaque Grain
	Marine organic matter
F	Terrestrial organic matter ✓
	Other (specify):
	Authigenic components
	Pyrite (framboids)
C	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: Common chert lithics.

* 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 %)

photo not yet

Sediment Smear Slide / Thin Section Description Sheet

Date: 25 March 2019

Expedition: 358 Observer: MH

Site: C0002 Hole: G Core: 11X Section: CC Interval: 12-15 cm

Sediment Name: Sandy silt (silt to very fine sand) slightly (lighter gray in color)

Smear Slide	Thin Section	Coarse Fraction	Grain Mount
✓			

Select one and check.

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

Select one and check.

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

Percent	Composition
	Pelagic Grains
	Calcareous
F	Nannofossils
F	Foraminifers ✓
	Siliceous
	Diatom
	Radiolarian
	Sillicoflagellate
	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
F	Terrestrial organic matter ✓
	Other (specify):
	Authigenic components
	Pyrite (framboids)
	Pyrite (euhedral)
F	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 %)

Photo not yet.

Sediment Smear Slide / Thin Section Description Sheet

Date: 25 March 2019

Expedition: 358 Observer: MH

Site: C0002 Hole: G Core: 12X Section: 1W Interval: 68 cm

Sediment Name: Siltstone

Smear Slide	Thin Section	Coarse Fraction	Grain Mount
✓			

Select one and check.

Granular Sediment			Other material	Percent Texture		
Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
✓				20	65	15

Select one and check.

Percent	Composition
	Major Siliciclastic Grain Types
C	Quartz
C	Feldspars
C	Clay minerals
	Lithic Grains
	Sedimentary Lithics
C	Chert ✓
C	Mudstone ✓
	Siltstone/sandstone
F	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
R	Nannofossils
	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	Sillicoflagellate
	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] ✓
R	Glauconite
	Phosphate (bones, teeth, etc)
	Opaque Grain
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
	Authigenic components
	Pyrite (framboids)
C	Pyrite (euhedral)
C	Pyrite (grain coating)
F	Calcite
V	Dolomite
	Zeolites
	Fe/Mn oxide
	Other (specify):

[1] List under remarks if possible

Fill percentage (Total must be 100).

Remarks: Various types of lithics

* 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 %)

Photo not yet

Sediment Smear Slide / Thin Section Description Sheet

Date: 25 March 2019

Expedition: 358 Observer: MH

Site: C0002 4 Hole: G Core: 13X Section: 4A Interval: 68 cm

Sediment Name: fine to very fine sand

Smear Slide	Thin Section	Coarse Fraction	Grain Mount
✓			

Select one and check.

Granular Sediment			Other material
Siliciclastic	Volcaniclastic	Pelagic	
✓			

Select one and check.

Percent Texture		
Sand	Silt	Clay
65	20	15

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

Percent	Composition
	Pelagic Grains
	Calcareous
F	Nannofossils
F	Foraminifers ✓
	Siliceous
	Diatom
	Radiolarian
	Sillicoflagellate
	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]
F	Glauconite
	Phosphate (bones, teeth, etc)
C	Opaque Grain
	Marine organic matter
F	Terrestrial organic matter
	Other (specify):
	Authigenic components
	Pyrite (framboids)
C	Pyrite (euhedral)
C	Pyrite (grain coating)
	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: 25 March 2019

Expedition: 358 Observer: MH

Site: C0002 A Hole: G Core: 14X Section: CC Interval: 28cm

Sediment Name: Silt to very fine 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	50	10

Select one and check.

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

Percent	Composition
	Pelagic Grains
	Calcareous
F	Nannofossils ✓
F	Foraminifers ✓
	Siliceous
	Diatom
	Radiolarian
	Sillicoflagellate
	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)
F	Calcite
	Dolomite
	Zeolites
	Fe/Mn oxide
	Other (specify):

[1] List under remarks if possible

Fill percentage (Total must be 100).

Remarks: Rutile, zircon

* 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: 2019-03-27 2019

Expedition: 358 Observer: DJ

Site: C0002 4 Hole: G Core: 15X Section: 6 Interval: 27 cm

Sediment Name: silty sand

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				~60	~40	?

Select one and check.

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

Percent	Composition
	Pelagic Grains
	Calcareous
	Nannofossils
	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	Sillicoflagellate
	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
A	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: silt - to sand sized grains, angular to subangular
mostly qz, felsp, lithics (metamorphic?); biotite & chlorite; opaque grains

HMs: px, apatite, zircon, tourmaline

* 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: 2019-03-27 2019

Expedition: 358 Observer: DJ

Site: C0002 H Hole: G Core: 16X Section: 9 Interval: 8 cm

Sediment Name: clayey siltstone

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				5	70	25

Select one and check.

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

Percent	Composition
	Pelagic Grains
	Calcareous
R	Nannofossils
	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	Sillicoflagellate
	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:

* 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: 26 March 2019

Expedition: 358 Observer: MH

Site: C0002 4 Hole: G Core: 17 X Section: 1A Interval: 9 cm

Sediment Name: Organic-rich (fine - very fine grained) fragment (wood?)

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	40	10

Select one and check.

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

Percent	Composition
	Pelagic Grains
	Calcareous
C	Nannofossils
C	Foraminifers ✓
	Siliceous
	Diatom
	Radiolarian
	Sillicoflagellate
R	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)
F	Glauconite ✓
	Phosphate (bones, teeth, etc)
C	Opaque Grain
	Marine organic matter
A	Terrestrial organic matter ✓
	Other (specify):
	Authigenic components
	Pyrite (framboids)
C	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: Mica-rich, various lithics

* 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: 26 March 2019

Expedition: 358 Observer: MH

Site: C0002A Hole: G Core: 19X Section: 1 Interval: 128cm

Sediment Name: Volcanic ash with abundant glass + nannos

Smear Slide	Thin Section	Coarse Fraction	Grain Mount
✓			

Select one and check.

Granular Sediment			Other material	Percent Texture		
Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
	✓			80	20	

Select one and check.

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

Percent	Composition
	Pelagic Grains
	Calcareous
A	Nannofossils ✓
C	Foraminifers ✓
	Siliceous
	Diatom
	Radiolarian
	Sillicoflagellate
	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]
F	Glauconite
	Phosphate (bones, teeth, etc)
	Opaque Grain
	Marine organic matter
F	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: Microlitics are often brown + tanned

* 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: 26 March 2019

Expedition: 358 Observer: MH

Site: C0002 4 Hole: G Core: 17X Section: 4A Interval: 46 cm

Sediment Name: Calcareous nanno-fossil-rich clay (Lithified than other sediment) in core

Smear Slide	Thin Section	Coarse Fraction	Grain Mount
✓			

Select one and check.

Granular Sediment			Other material	Percent Texture		
Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
		✓		10	10	80

Select one and check.

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

Percent	Composition
	Pelagic Grains
	Calcareous
D	Nannofossils
	Foraminifers ✓
	Siliceous
R	Diatom ✓
	Radiolarian
	Sillicoflagellate
R	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)
	Opaque Grain
	Marine organic matter
F	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: 26 March 2019

Expedition: 358 Observer: MH

Site: C0002 Hole: G Core: 18X Section: 5A Interval: 4cm

Sediment Name: Medium sand (fine-med.) Med-coarse 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
✓				75	20	5

Select one and check.

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

Percent	Composition
	Pelagic Grains
	Calcareous
F	Nannofossils
C	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	Sillicoflagellate
	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
F C	Terrestrial organic matter ✓
	Other (specify):
	Authigenic components
	Pyrite (framboids)
C	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: Rutile, Amphibole, Pyroxene, etc. + Various lithics
Big grains of foram

* 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: 27 March 2019

Expedition: 358 Observer: M.H

Site: C0002 G Hole: G Core: 18X Section: 5A Interval: 67

Sediment Name: Fine to 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
✓				60	15	25

Select one and check.

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

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

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

[1] List under remarks if possible

Fill percentage (Total must be 100).

Remarks: Zircon

* 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: 2 2019

Expedition: 358 Observer: MH

Site: C0002 4 Hole: G Core: 19X Section: 2A Interval: 11cm

Sediment Name: Nannofossil-dominant 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
F	Quartz
F	Feldspars
	Clay minerals
	Lithic Grains
	Sedimentary Lithics
	Chert
C	Mudstone
	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
	Volcaniclastic Grains
	Vitric fragments
C	Clear glass ✓
	Colored glass
C	Pumice
	Volcanic lithics
	Felsitic
C	Microlitc ✓
	Lathwork
	Altered volcanic(palagonite)

Percent	Composition
	Pelagic Grains
	Calcareous
A	Nannofossils ✓
	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	Sillicoflagellate
	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)
	Opaque Grain
	Marine organic matter
F	Terrestrial organic matter
	Other (specify):
	Authigenic components
	Pyrite (framboids)
C	Pyrite (euhedral)
C	Pyrite (grain coating)
	Calcite
	Dolomite
	Zeolites
	Fe/Mn oxide
	Other (specify):

[1] List under remarks if possible

Fill percentage (Total must be 100).

Remarks: Nannofossils are more dominant than ash

* 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: 27 March 2019

Expedition: 358 Observer: MH

Site: C0002 4 Hole: G Core: 19X Section: 4A Interval: 15 cm

Sediment Name: Calcareous nannofossil rich silty 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
✓		✓		5	25	70

Select one and check.

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

Percent	Composition
	Pelagic Grains
	Calcareous
D	Nannofossils
E	Foraminifers
	Siliceous
R	Diatom
	Radiolarian
	Sillicoflagellate
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)
	Carbonate mud (apart from nannos)

Percent	Composition
	Minor Grain Types
F	Dense minerals[1]
C	Micas (biotite, musc, chl)[1]
F	Glauconite
	Phosphate (bones, teeth, etc)
	Opaque Grain
	Marine organic matter
F	Terrestrial organic matter
	Other (specify):
	Authigenic components
	Pyrite (framboids)
C	Pyrite (euhedral)
	Pyrite (grain coating)
	Calcite
C	Dolomite
	Zeolites
F	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: 27 March 2019

Expedition: 358 Observer: MH

Site: C0002F Hole: G Core: 19X Section: 7A Interval: 31 cm

Sediment Name: very fine to Fine 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
✓				50	35	15

Select one and check.

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

Percent	Composition
	Pelagic Grains
	Calcareous
F	Nannofossils
	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	Sillicoflagellate
	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]
F	Glauconite ✓
	Phosphate (bones, teeth, etc)
C	Opaque Grain
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
	Authigenic components
	Pyrite (framboids)
C	Pyrite (euhedral)
	Pyrite (grain coating)
	Calcite
R	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: 27/March 2019

Expedition: 358 Observer:

Site: C0002 4 Hole: G Core: 20 X Section: 4 A Interval: 115 cm

Sediment Name: Very fine sand (to fine 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
✓				60	30	10

Select one and check.

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

Percent	Composition
	Pelagic Grains
	Calcareous
F	Nannofossils
C	Foraminifers ✓
	Siliceous
	Diatom
	Radiolarian
	Sillicoflagellate
	Sponge Spicule
	Other bioclasts
	Mollusk
	Algae
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify)
	Other carbonate allochems
	Peloid
	Intraclast
	Ooid
C	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]
F	Glauconite
	Phosphate (bones, teeth, etc)
A-C	Opaque Grain
	Marine organic matter
F	Terrestrial organic matter
	Other (specify):
	Authigenic components
	Pyrite (framboids)
C-A	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: Grain coating on mica. (clay, pyrite)

* 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: 29 March 2019

Expedition: 358 Observer: MH

Site: C0002G Hole: G Core: 22X Section: 2A Interval: 33

Sediment Name: Clay (nanno-fossil rich) (Dark olive gray silty 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
✓				5	15	80

Select one and check.

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

Percent	Composition
	Pelagic Grains
	Calcareous
A	Nannofossils
C	Foraminifers
	Siliceous
F	Diatom
	Radiolarian
	Sillicoflagellate
	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
F	Dense minerals[1]
C	Micas (biotite, musc, chl)[1]
	Glauconite
	Phosphate (bones, teeth, etc)
	Opaque Grain
	Marine organic matter
C	Terrestrial organic matter
	Other (specify):
	Authigenic components
	Pyrite (framboids)
C	Pyrite (euhedral)
	Pyrite (grain coating)
	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: 29 March 2019

Expedition: 358 Observer: MH

Site: C0002 4 Hole: G Core: 23 X Section: 4 A Interval: 56 cm

Sediment Name: Silt to 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
✓				55	40	5

Select one and check.

Percent	Composition
	Major Siliciclastic Grain Types
A	Quartz
C	Feldspars
C	Clay minerals
	Lithic Grains
	Sedimentary Lithics
C	Chert ✓
C	Mudstone ✓
	Siltstone/sandstone
	Limestone
F	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
C	Nannofossils
C-F	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	Sillicoflagellate
	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]
F	Glauconite ✓
	Phosphate (bones, teeth, etc)
C	Opaque Grain
	Marine organic matter
F	Terrestrial organic matter
	Other (specify):
	Authigenic components
	Pyrite (framboids)
C	Pyrite (euhedral)
	Pyrite (grain coating)
C	Calcite
	Dolomite
	Zeolites
F	Fe/Mn oxide
	Other (specify):

[1] List under remarks if possible

Fill percentage (Total must be 100).

Remarks: Zircon
Big grains of HM, mica,

* 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: 27 March 2019

Expedition: 358 Observer: MH

Site: C0002 Q Hole: G Core: 23X Section: 5A Interval: 120.cm

Sediment Name: Siltstone

Smear Slide	Thin Section	Coarse Fraction	Grain Mount
V			

Select one and check.

Granular Sediment			Other material	Percent Texture		
Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
V				10	70	20

Select one and check.

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

Percent	Composition
	Pelagic Grains
	Calcareous
A-C	Nannofossils
C	Foraminifers ✓
	Siliceous
R	Diatom ✓
	Radiolarian
	Sillicoflagellate
	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
F	Dense minerals[1]
C	Micas (biotite, musc, chl)[1]
	Glauconite
	Phosphate (bones, teeth, etc)
	Opaque Grain
C	Marine organic matter
C	Terrestrial organic matter
	Other (specify):
	Authigenic components
	Pyrite (framboids)
C	Pyrite (euhedral)
	Pyrite (grain coating)
C	Calcite
	Dolomite
	Zeolites
R	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: 27 March 2019

Expedition: 358 Observer: MH

Site: C0002A Hole: G Core: 24X Section: 1A Interval: 20

Sediment Name: silt to very fine 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
A	Clay minerals
	Lithic Grains
	Sedimentary Lithics
C	Chert ✓
C	Mudstone ✓
	Siltstone/sandstone
	Limestone
C	Metamorphic lithic ✓
	Plutonic lithic
	Volcaniclastic Grains
	Vitric fragments
C	Clear glass
	Colored glass
	Pumice
	Volcanic lithics
	Felsitic
C	Microlitc ✓
	Lathwork
	Altered volcanic(palagonite)

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

Percent	Composition
	Minor Grain Types
E	Dense minerals[1] ✓
C	Micas (biotite, musc, chl)[1]
	Glauconite
	Phosphate (bones, teeth, etc)
C	Opaque Grain
F	Marine organic matter
	Terrestrial organic matter
	Other (specify):
	Authigenic components
	Pyrite (framboids)
C	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 %)