

# Sediment Smear Slide / Thin Section Description Sheet

Date: 4/3/18

Expedition: 375

Observer: OLIV/NODA

Site: U1520

Hole: C

Core: 2B

Seal: 1A

Interval: 8

Sediment Name: Calcareous mudstone → marl

Smear Slide	Thin Section	Coarse Fraction	Grain Mount
<u>V</u>			

Select one and check.

Granular Sediment			Other material	Percent Texture		
Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				<u>1</u>	<u>1</u>	<u>98</u>

Select one and check.

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

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

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

<sup>1</sup> List under remarks if possible

Fill percentage (Total must be 100).

Remarks: Apatite, names are recrystallized

# 375 Methods-C-F7

## Sediment Smear Slide / Thin Section Description Sheet

Date: 3. Apr. 2018

Expedition: 375

Observer: NO DA/0114k

Site: U1520 Hole: C Core: 2R Sect.: 1A Interval: 49cm

Sediment Name: marl with volcanoclastic

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcanoclastic	Pelagic		Sand	Silt	Clay
<u>X</u>								<u>1</u>	<u>70</u>	<u>29</u>

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition
<b>Major Siliciclastic Grain Types</b>	
<u>R</u>	Quartz
<u>R</u>	Feldspars
	Clay minerals
<b>Lithic Grains</b>	
<b>Sedimentary Lithics</b>	
	Chert
	Mudstone
	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
<b>Volcanoclastic Grains</b>	
<u>A</u>	Transparent glass
<u>A</u>	Colored glass
	Volcanic lithics
	Altered volcanic (e.g. palagonite)
<b>Authigenic components</b>	
	Pyrite
<u>D</u>	Calcite
	Dolomite
	Zeolites
	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
<b>Pelagic Grains</b>	
	Calcareous
	Nannofossils
<u>T</u>	Foraminifers
	Siliceous
<u>T</u>	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
<b>Other bioclasts</b>	
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify):
<b>Minor Other Grain Types</b>	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
<b>Other carbonate allochems</b>	
	Peloid
	Intraclast

T/R/P/C/A/D/M	Composition
<b>Minor Mineral Grain Types</b>	
	Olivine
	Pyroxene
	Amphibole
	Micas
	Chlorite
	Zircon
	Apatite
<u>R</u>	Opaque Grain
	Glauconite
	Other (specify):

<sup>1</sup> List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks: \_\_\_\_\_

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

# 375 Methods-C-F7

## Sediment Smear Slide / Thin Section Description Sheet

Date: 3, Apr. 2018

Expedition: 375

Observer: NODA/OLIV/L

Site: 1520 Hole: C Core: 2R Sect.: 1A

Interval: 80cm

Sediment Name: Tuff (calcareous mud)  
Authigenic

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
				20	60	20

Select one and check.

T/R/P/C/A/D/M	Composition
<b>Major Siliciclastic Grain Types</b>	
T	Quartz
R	Feldspars
	Clay minerals
<b>Lithic Grains</b>	
<b>Sedimentary Lithics</b>	
	Chert
	Mudstone
R	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
<b>Volcaniclastic Grains</b>	
D	Transparent glass
	Colored glass
	Volcanic lithics
	Altered volcanic (e.g. palagonite)
<b>Authigenic components</b>	
	Pyrite
A	Calcite
	Dolomite
	Zeolites
	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
<b>Pelagic Grains</b>	
	Calcareous
	Nannofossils
C	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
<b>Other bioclasts</b>	
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify)
<b>Minor Other Grain Types</b>	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
<b>Other carbonate allochems</b>	
	Peloid
	Intraclast

T/R/P/C/A/D/M	Composition
<b>Minor Mineral Grain Types</b>	
	Olivine
T	Pyroxene
R	Amphibole
	Micas
	Chlorite
	Zircon
	Apatite
R	Opaque Grain
	Glaucanite
	Other (specify):

<sup>1</sup>List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks: \_\_\_\_\_

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

# 375 Methods-C-F7

## Sediment Smear Slide / Thin Section Description Sheet

Date: 4.4.19

Expedition: 375

Observer: Ka

Site: U7500 Hole: C Core: 2R Sect.: 1

Interval: 104

Sediment Name: Tuff (with calcareous mud)

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
								<u>20</u>	<u>80</u>	<u>0</u>

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition
<b>Major Siliciclastic Grain Types</b>	
<u>T</u>	Quartz
<u>R</u>	Feldspars
	Clay minerals
<b>Lithic Grains</b>	
<b>Sedimentary Lithics</b>	
	Chert
	Mudstone
<u>R</u>	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
<b>Volcaniclastic Grains</b>	
<u>D</u>	Transparent glass
<u>R</u>	Colored glass
	Volcanic lithics
	Altered volcanic (e.g. palagonite)
<b>Authigenic components</b>	
<u>A</u>	Pyrite
	Calcite
	Dolomite
	Zeolites
	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
<b>Pelagic Grains</b>	
	Calcareous
<u>R</u>	Nannofossils
	Foraminifers
	<b>Siliceous</b>
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
<b>Other bioclasts</b>	
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify):
<b>Minor Other Grain Types</b>	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
<b>Other carbonate allochems</b>	
	Peloid
	Intraclast

T/R/P/C/A/D/M	Composition
<b>Minor Mineral Grain Types</b>	
<u>T</u>	Olivine
<u>R</u>	Pyroxene
	Amphibole
	Micas
	Chlorite
	Zircon
	Apatite
	Opaque Grain
	Glauconite
	Other (specify):

<sup>1</sup> List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks: \_\_\_\_\_

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

# 375 Methods-C-F7

## Sediment Smear Slide / Thin Section Description Sheet

Date: 4.4.18

Expedition: 375 Observer: Ra

Site: 1520 Hole: C Core: 2R Sect.: 2 Interval: 33

Sediment Name: tuff

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
								<u>50</u>	<u>50</u>	<u>20</u>

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition
<b>Major Siliciclastic Grain Types</b>	
<u>T</u>	Quartz
<u>R</u>	Feldspars
<u>A</u>	Clay minerals
<b>Lithic Grains</b>	
<b>Sedimentary Lithics</b>	
	Chert
	Mudstone
<u>R</u>	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
<b>Volcaniclastic Grains</b>	
<u>D</u>	Transparent glass
<u>T</u>	Colored glass
	Volcanic lithics
	Altered volcanic(e.g. palagonite)
<b>Authigenic components</b>	
	Pyrite
<u>C</u>	Calcite
	Dolomite
	Zeolites
	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
<b>Pelagic Grains</b>	
	Calcareous
<u>C</u>	Nannofossils
<u>T</u>	Foraminifers
<b>Siliceous</b>	
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
<b>Other bioclasts</b>	
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify)
<b>Minor Other Grain Types</b>	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
<b>Other carbonate allochems</b>	
	Peloid
	Intraclast

T/R/P/C/A/D/M	Composition
<b>Minor Mineral Grain Types</b>	
	Olivine
	Pyroxene
	Amphibole
	Micas
	Chlorite
	Zircon
	Apatite
	Opaque Grain
	Glauconite
	Other (specify):

<sup>1</sup> List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks: \_\_\_\_\_

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



# 375 Methods-C-F7

## Sediment Smear Slide / Thin Section Description Sheet

Date: 4.4.18

Expedition: 375

Observer: lm

Site: 11520 Hole: C Core: 3R Sect.: 1

Interval: 32

Sediment Name: Tuff

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

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition
<b>Major Siliciclastic Grain Types</b>	
R	Quartz
T	Feldspars
C	Clay minerals
<b>Lithic Grains</b>	
<b>Sedimentary Lithics</b>	
	Chert
R	Mudstone
	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
<b>Volcaniclastic Grains</b>	
D	Transparent glass
T	Colored glass
	Volcanic lithics
	Altered volcanic (e.g. palagonite)
<b>Authigenic components</b>	
	Pyrite
A	Calcite
	Dolomite
	Zeolites
T	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
<b>Pelagic Grains</b>	
	Calcareous
T	Nannofossils
T	Foraminifers
<b>Siliceous</b>	
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
<b>Other bioclasts</b>	
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify)
<b>Minor Other Grain Types</b>	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
<b>Other carbonate allochems</b>	
	Peloid
	Intraclast

T/R/P/C/A/D/M	Composition
<b>Minor Mineral Grain Types</b>	
	Olivine
	Pyroxene
	Amphibole
	Micas
	Chlorite
	Zircon
	Apatite
T	Opaque Grain
	Glauconite
	Other (specify):

<sup>1</sup> List under remarks if possible

Abundances like in: 375 Methods-C-Table 2

Remarks: \_\_\_\_\_

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

# 375 Methods-C-F7

## Sediment Smear Slide / Thin Section Description Sheet

Date: 4.4.18

Expedition: 375

Observer: lu

Site: 1520 Hole: C Core: 3 Sect.: 1 Interval: 36

Sediment Name: calcareous mud - marl

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
								<u>70</u>	<u>50</u>	<u>40</u>

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition
Major Siliciclastic Grain Types	
<u>R</u>	Quartz
<u>R</u>	Feldspars
<u>C</u>	Clay minerals
Lithic Grains	
Sedimentary Lithics	
	Chert
	Mudstone
<u>R</u>	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
Volcaniclastic Grains	
<u>C</u>	Transparent glass
	Colored glass
	Volcanic lithics
	Altered volcanic (e.g. palagonite)
Authigenic components	
	Pyrite
<u>D</u>	Calcite
	Dolomite
	Zeolites
<u>T</u>	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
Pelagic Grains	
	Calcareous
<u>P</u>	Nannofossils
<u>T</u>	Foraminifers
Siliceous	
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
Other bioclasts	
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify)
Minor Other Grain Types	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
Other carbonate allochems	
	Peloid
	Intraclast

T/R/P/C/A/D/M	Composition
Minor Mineral Grain Types	
	Olivine
<u>T</u>	Pyroxene
	Amphibole
	Micas
	Chlorite
	Zircon
	Apatite
	Opaque Grain
	Glauconite
	Other (specify):

<sup>1</sup> List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks: Recrystallized nannos

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



375 Methods-C-F7

Sediment Smear Slide / Thin Section Description Sheet

Date: 4.4.18

Expedition: 375

Observer: Rm

Site: 07520

Hole: C

Core: 2R

Sect.: 1

Interval: 80

Sediment Name: clayey siltstone - marl

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

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition
Major Siliciclastic Grain Types	
P	Quartz
P	Feldspars
A	Clay minerals
Lithic Grains	
Sedimentary Lithics	
T	Chert
	Mudstone
L	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
Volcaniclastic Grains	
L	Transparent glass
C	Colored glass
R	Volcanic lithics
R	Altered volcanic (e.g. palagonite)
Authigenic components	
R	Pyrite
L	Calcite
	Dolomite
	Zeolites
P	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
Pelagic Grains	
	Calcareous
T	Nannofossils
	Foraminifers
Siliceous	
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
Other bioclasts	
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify)
Minor Other Grain Types	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
Other carbonate allochems	
	Peloid
	Intraclast

T/R/P/C/A/D/M	Composition
Minor Mineral Grain Types	
	Olivine
R	Pyroxene
	Amphibole
	Micas
	Chlorite
	Zircon
I	Apatite
E	Opaque Grain
	Glauconite
	Other (specify):

<sup>1</sup> List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks:

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

375 Methods-C-F7

Sediment Smear Slide / Thin Section Description Sheet

Date: 4.4.18

Expedition: 375

Observer: Nun

Site: 7500

Hole: C

Core: 3R

Sect.: 2

Interval: 179

Sediment Name: Tuff with calcareous mud

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

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition
Major Siliciclastic Grain Types	
<u>F</u>	Quartz
<u>F</u>	Feldspars
<u>C</u>	Clay minerals
Lithic Grains	
Sedimentary Lithics	
	Chert
	Mudstone
<u>R</u>	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
Volcaniclastic Grains	
<u>A</u>	Transparent glass
	Colored glass
	Volcanic lithics
	Altered volcanic(e.g. palagonite)
Authigenic components	
<u>T</u>	Pyrite
<u>C</u>	Calcite
	Dolomite
	Zeolites
	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
Pelagic Grains	
	Calcareous
<u>A</u>	Nannofossils
<u>F</u>	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
Other bioclasts	
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify):
Minor Other Grain Types	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
Other carbonate allochems	
	Peloid
	Intraclast

T/R/P/C/A/D/M	Composition
Minor Mineral Grain Types	
	Olivine
	Pyroxene
	Amphibole
	Micas
	Chlorite
	Zircon
	Apatite
	Opaque Grain
	Glauconite
	Other (specify):

<sup>1</sup> List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks: \_\_\_\_\_

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

# 375 Methods-C-F7

## Sediment Smear Slide / Thin Section Description Sheet

Date: S.Y.

Expedition: 375

Observer: Ku

Site: 1520 Hole: 4520C Core: 4 Sect.: 1

Interval: 1

Sediment Name: Tuff

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
<u>V</u>								<u>10</u>	<u>60</u>	<u>20</u>

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition
<b>Major Siliciclastic Grain Types</b>	
<u>R</u>	Quartz
<u>R</u>	Feldspars
	Clay minerals
<b>Lithic Grains</b>	
<b>Sedimentary Lithics</b>	
	Chert
	Mudstone
<u>R</u>	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
<b>Volcaniclastic Grains</b>	
<u>D</u>	Transparent glass
<u>T</u>	Colored glass
	Volcanic lithics
<u>T</u>	Altered volcanic (e.g. palagonite)
<b>Authigenic components</b>	
<u>TK</u>	Pyrite
<u>C</u>	Calcite
	Dolomite
	Zeolites
<u>T</u>	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
<b>Pelagic Grains</b>	
	Calcareous
<u>C</u>	Nannofossils
<u>R</u>	Foraminifers
<b>Siliceous</b>	
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
<b>Other bioclasts</b>	
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify):
<b>Minor Other Grain Types</b>	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
<b>Other carbonate allochems</b>	
	Peloid
	Intraclast

T/R/P/C/A/D/M	Composition
<b>Minor Mineral Grain Types</b>	
	Olivine
	Pyroxene
<u>R</u>	Amphibole
	Micas
	Chlorite
	Zircon
	Apatite
<u>P</u>	Opaque Grain
<u>T</u>	Glauconite
	Other (specify):

<sup>1</sup> List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks:

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

# 375 Methods-C-F7

## Sediment Smear Slide / Thin Section Description Sheet

Date: 4 Apr. 2018

Expedition: 375

Observer: Nodca

Site: 1520 Hole: C Core: 4R Sect.: 1A Interval: 24

Sediment Name: calcareous mudstone with volcanoclastics  
marl

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcanoclastic	Pelagic		Sand	Silt	Clay
<u>2</u>								<u>5</u>	<u>20</u>	<u>75</u>

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition
Major Siliciclastic Grain Types	
	Quartz
	Feldspars
<u>C</u>	Clay minerals
Lithic Grains	
Sedimentary Lithics	
	Chert
	Mudstone
<u>T</u>	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
Volcanoclastic Grains	
<u>C</u>	Transparent glass
<u>P</u>	Colored glass
	Volcanic lithics
<u>T</u>	Altered volcanic (e.g. palagonite)
Authigenic components	
	Pyrite
<u>D</u>	Calcite
	Dolomite
	Zeolites
<u>T</u>	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
Pelagic Grains	
	Calcareous
<u>C</u>	Nannofossils
	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
Other bioclasts	
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify):
Minor Other Grain Types	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
Other carbonate allochems	
	Peloid
	Intraclast

T/R/P/C/A/D/M	Composition
Minor Mineral Grain Types	
	Olivine
<u>T</u>	Pyroxene
	Amphibole
	Micas
	Chlorite
	Zircon
	Apatite
<u>R</u>	Opaque Grain
	Glauconite
	Other (specify):

<sup>1</sup> List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks:

# 375 Methods-C-F7

## Sediment Smear Slide / Thin Section Description Sheet

Date: 4.4.18

Expedition: 375 Observer: Ru

Site: 1520 Hole: C Core: 4R Sect.: 1 Interval: 55

Sediment Name: Tuff

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
								20	60	20

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition
Major Siliciclastic Grain Types	
T	Quartz
	Feldspars
	Clay minerals
Lithic Grains	
Sedimentary Lithics	
	Chert
	Mudstone
R	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
Volcaniclastic Grains	
D	Transparent glass
T	Colored glass
	Volcanic lithics
	Altered volcanic (e.g. palagonite)
Authigenic components	
T	Pyrite
	Calcite
A	Dolomite
	Zeolites
T	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
Pelagic Grains	
	Calcareous
R	Nannofossils
	Foraminifers
Siliceous	
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
Other bioclasts	
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify):
Minor Other Grain Types	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
Other carbonate allochems	
	Peloid
	Intraclast

T/R/P/C/A/D/M	Composition
Minor Mineral Grain Types	
	Olivine
T	Pyroxene
	Amphibole
	Micas
	Chlorite
	Zircon
	Apatite
R	Opaque Grain
	Glauconite
	Other (specify):

<sup>1</sup> List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks:

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

# 375 Methods-C-F7

## Sediment Smear Slide / Thin Section Description Sheet

Date: 4.6.12

Expedition: 375

Observer: Ra

Site: 1520 Hole: C Core: GR Sect.: 2

Interval: 66

Sediment Name: Tuff

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
								10	70	20

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition
Major Siliciclastic Grain Types	
R	Quartz
R	Feldspars
	Clay minerals
Lithic Grains	
Sedimentary Lithics	
	Chert
	Mudstone
R	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
Volcaniclastic Grains	
M	Transparent glass
	Colored glass
	Volcanic lithics
	Altered volcanic(e.g. palagonite)
Authigenic components	
	Pyrite
R	Calcite
	Dolomite
	Zeolites
T	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
Pelagic Grains	
	Calcareous
P	Nannofossils
	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
Other bioclasts	
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify):
Minor Other Grain Types	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
Other carbonate allochems	
	Peloid
	Intraclast

T/R/P/C/A/D/M	Composition
Minor Mineral Grain Types	
	Olivine
	Pyroxene
R	Amphibole
R	Micas
	Chlorite
	Zircon
	Apatite
P	Opaque Grain
	Glaucanite
	Other (specify):

<sup>1</sup> List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks: \_\_\_\_\_

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

# 375 Methods-C-F7

## Sediment Smear Slide / Thin Section Description Sheet

Date: 4.9.11

Expedition: 375

Observer: nut

Site: 7520 Hole: C Core: 4 Sect.: 5 Interval: 53

Sediment Name: Tuff

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
								30	50	20

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition
<b>Major Siliciclastic Grain Types</b>	
T	Quartz
P	Feldspars
	Clay minerals
<b>Lithic Grains</b>	
<b>Sedimentary Lithics</b>	
	Chert
	Mudstone
T	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
<b>Volcaniclastic Grains</b>	
M	Transparent glass
T	Colored glass
	Volcanic lithics
	Altered volcanic(e.g. palagonite)
<b>Authigenic components</b>	
T	Pyrite
C	Calcite
	Dolomite
	Zeolites
	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
<b>Pelagic Grains</b>	
	Calcareous
C	Nannofossils
	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
<b>Other bioclasts</b>	
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify):
<b>Minor Other Grain Types</b>	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
<b>Other carbonate allochems</b>	
	Peloid
	Intraclast

T/R/P/C/A/D/M	Composition
<b>Minor Mineral Grain Types</b>	
	Olivine
R	Pyroxene
R	Amphibole
P	Micas
	Chlorite
	Zircon
T	Apatite
P	Opaque Grain
	Glaucanite
	Other (specify):

<sup>1</sup> List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks:

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

375 Methods-C-F7

Sediment Smear Slide / Thin Section Description Sheet

Date: 4.4.18

Expedition: 375

Observer: RCH

Site: 1520 Hole: C Core: 4 Sect.: 5

Interval: 109

Sediment Name: Tuff

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
								20	70	10

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition
Major Siliciclastic Grain Types	
T	Quartz
P	Feldspars
	Clay minerals
Lithic Grains	
Sedimentary Lithics	
	Chert
	Mudstone
P	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
Volcaniclastic Grains	
C	Transparent glass
P	Colored glass
	Volcanic lithics
C	Altered volcanic (e.g. palagonite)
Authigenic components	
R	Pyrite
P	Calcite
	Dolomite
	Zeolites
C	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
Pelagic Grains	
	Calcareous
C	Nannofossils
	Foraminifers
Siliceous	
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
Other bioclasts	
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify):
Minor Other Grain Types	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
Other carbonate allochems	
	Peloid
	Intraclast

T/R/P/C/A/D/M	Composition
Minor Mineral Grain Types	
	Olivine
P	Pyroxene
	Amphibole
	Micas
	Chlorite
	Zircon
T	Apatite
P	Opaque Grain
	Glauconite
	Other (specify):

<sup>1</sup> List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks:

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



# 375 Methods-C-F7

## Sediment Smear Slide / Thin Section Description Sheet

Date: 4.9.18

Expedition: 375

Observer: KCH

Site: 1520 Hole: C Core: 4 Sect.: CC

Interval: 19

Sediment Name: Tuff

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
								10	70	20

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition
<b>Major Siliciclastic Grain Types</b>	
<u>T</u>	Quartz
<u>R</u>	Feldspars
	Clay minerals
<b>Lithic Grains</b>	
<b>Sedimentary Lithics</b>	
	Chert
	Mudstone
<u>T</u>	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
<b>Volcaniclastic Grains</b>	
<u>M</u>	Transparent glass
	Colored glass
	Volcanic lithics
	Altered volcanic (e.g. palagonite)
<b>Authigenic components</b>	
<u>T</u>	Pyrite
<u>C</u>	Calcite
	Dolomite
	Zeolites
<u>T</u>	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
<b>Pelagic Grains</b>	
	Calcareous
<u>S</u>	Nannofossils
<u>F</u>	Foraminifers
	Siliceous
	Diatom
<u>T</u>	Radiolarian
	Silicoflagellate
	Sponge Spicule
<b>Other bioclasts</b>	
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify):
<b>Minor Other Grain Types</b>	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
<b>Other carbonate allochems</b>	
	Peloid
	Intraclast

T/R/P/C/A/D/M	Composition
<b>Minor Mineral Grain Types</b>	
	Olivine
<u>F</u>	Pyroxene
<u>F</u>	Amphibole
	Micas
	Chlorite
	Zircon
	Apatite
<u>P</u>	Opaque Grain
	Glauconite
	Other (specify):

<sup>1</sup> List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks:

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

# 375 Methods-C-F7

## Sediment Smear Slide / Thin Section Description Sheet

Date: 4.9.18

Expedition: 375

Observer: He

Site: 1520 Hole: C Core: 5 Sect.: 1

Interval: 63

Sediment Name: calcareous mudstone (mat 1) with udcrinid debris

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
								10	70	20

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition
<b>Major Siliciclastic Grain Types</b>	
R	Quartz
R	Feldspars
C	Clay minerals
<b>Lithic Grains</b>	
<b>Sedimentary Lithics</b>	
	Chert
	Mudstone
P	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
<b>Volcaniclastic Grains</b>	
A	Transparent glass
	Colored glass
	Volcanic lithics
	Altered volcanic (e.g. palagonite)
<b>Authigenic components</b>	
P	Pyrite
D	Calcite
	Dolomite
	Zeolites
T	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
<b>Pelagic Grains</b>	
	Calcareous
A	Nannofossils
P	Foraminifers
<b>Siliceous</b>	
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
<b>Other bioclasts</b>	
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify):
<b>Minor Other Grain Types</b>	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
<b>Other carbonate allochems</b>	
	Peloid
	Intraclast

T/R/P/C/A/D/M	Composition
<b>Minor Mineral Grain Types</b>	
	Olivine
	Pyroxene
	Amphibole
	Micas
	Chlorite
	Zircon
	Apatite
	Opaque Grain
	Glauconite
	Other (specify):

<sup>1</sup> List under remarks if possible

Abundances like in: 375 Methods-C-Table 2

Remarks:

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

# 375 Methods-C-F7

## Sediment Smear Slide / Thin Section Description Sheet

Date: 4 Apr. 2018

Expedition: 375

Observer: Noda / K

Site: 1520 Hole: C Core: 5R Sect.: 1A

Interval: 89.

Sediment Name: clayey siltstone - mud volcaniclastic

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
<u>1</u>								<u>3</u>	<u>70</u>	<u>27</u>

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition
<b>Major Siliciclastic Grain Types</b>	
<u>P</u>	Quartz
<u>P</u>	Feldspars
<u>C</u>	Clay minerals
<b>Lithic Grains</b>	
<b>Sedimentary Lithics</b>	
<u>T</u>	Chert
	Mudstone
<u>P</u>	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
<b>Volcaniclastic Grains</b>	
<u>C</u>	Transparent glass
<u>C</u>	Colored glass
<u>C</u>	Volcanic lithics
<u>P</u>	Altered volcanic(e.g. palagonite)
<b>Authigenic components</b>	
<u>T</u>	Pyrite
<u>R</u>	Calcite
	Dolomite
	Zeolites
	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
<b>Pelagic Grains</b>	
	Calcareous
<u>P</u>	Nannofossils
	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
<b>Other bioclasts</b>	
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify):
<b>Minor Other Grain Types</b>	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
<b>Other carbonate allochems</b>	
	Peloid
	Intraclast

T/R/P/C/A/D/M	Composition
<b>Minor Mineral Grain Types</b>	
	Olivine
	Pyroxene
	Amphibole
<u>T</u>	Micas
	Chlorite
	Zircon
	Apatite
<u>T</u>	Opaque Grain
	Glaucanite
	Other (specify):

<sup>1</sup> List under remarks if possible

Abundances like in: 375 Methods-C-Table 2

Remarks:

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

# 375 Methods-C-F7

## Sediment Smear Slide / Thin Section Description Sheet

Date: 4.9.

Expedition: 375 Observer: KG

Site: 020 Hole: C Core: 5 Sect.: 2 Interval: 121

Sediment Name: Tuff

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
								60	30	10

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition
Major Siliciclastic Grain Types	
T	Quartz
R	Feldspars
	Clay minerals
Lithic Grains	
Sedimentary Lithics	
	Chert
	Mudstone
T	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
Volcaniclastic Grains	
D	Transparent glass
T	Colored glass
	Volcanic lithics
T	Altered volcanic (e.g. palagonite)
Authigenic components	
	Pyrite
A	Calcite
	Dolomite
	Zeolites
	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
Pelagic Grains	
Calcareous	
S	Nannofossils
T	Foraminifers
Siliceous	
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
Other bioclasts	
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify)
Minor Other Grain Types	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
Other carbonate allochems	
	Peloid
	Intraclast

T/R/P/C/A/D/M	Composition
Minor Mineral Grain Types	
	Olivine
	Pyroxene
T	Amphibole
	Micas
	Chlorite
	Zircon
	Apatite
R	Opaque Grain
	Glauconite
	Other (specify):

<sup>1</sup> List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks: \_\_\_\_\_

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

# 375 Methods-C-F7

## Sediment Smear Slide / Thin Section Description Sheet

Date: 4 Apr. 2018

Expedition: 375

Observer: Noda / km

Site: 1520

Hole: C

Core: 5R

Sect.: 4A

Interval: 84

Sediment Name: calcareous mudstone with volcanoclastics  
marl

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
									30	70

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition
Major Siliciclastic Grain Types	
<u>T</u>	Quartz
<u>T</u>	Feldspars
<u>C</u>	Clay minerals
Lithic Grains	
Sedimentary Lithics	
	Chert
	Mudstone
	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
Volcaniclastic Grains	
<u>C</u>	Transparent glass
<u>T</u>	Colored glass
	Volcanic lithics
<u>T</u>	Altered volcanic (e.g. palagonite)
Authigenic components	
	Pyrite
<u>D</u>	Calcite
	Dolomite
	Zeolites
<u>T</u>	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
Pelagic Grains	
	Calcareous
<u>P</u>	Nannofossils
<u>R</u>	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
Other bioclasts	
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify)
Minor Other Grain Types	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
Other carbonate allochems	
	Peloid
	Intraclast

T/R/P/C/A/D/M	Composition
Minor Mineral Grain Types	
	Olivine
<u>T</u>	Pyroxene
	Amphibole
	Micas
	Chlorite
	Zircon
	Apatite
<u>T</u>	Opaque Grain
	Glauconite
	Other (specify):

List under remarks if possible

Abundances like in: 375 Methods-C-Table 2

Remarks:

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

# 375 Methods-C-F7

## Sediment Smear Slide / Thin Section Description Sheet

Date: 4 Apr. 2018

Expedition: 375

Observer: Noda / K

Site: 1520 Hole: C Core: 5R Sect.: 4A Interval: 89

Sediment Name: Calcareous mudstone  
maul

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
<u>X</u>								<u>0</u>	<u>20</u>	<u>80</u>

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition
<b>Major Siliciclastic Grain Types</b>	
<u>T</u>	Quartz
<u>T</u>	Feldspars
<u>C</u>	Clay minerals
<b>Lithic Grains</b>	
<b>Sedimentary Lithics</b>	
	Chert
	Mudstone
	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
<b>Volcaniclastic Grains</b>	
<u>P</u>	Transparent glass
<u>T</u>	Colored glass
	Volcanic lithics
<u>T</u>	Altered volcanic (e.g. palagonite)
<b>Authigenic components</b>	
	Pyrite
<u>D</u>	Calcite
	Dolomite
<u>T</u>	Zeolites
	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
<b>Pelagic Grains</b>	
<b>Calcareous</b>	
<u>C</u>	Nannofossils
<u>R</u>	Foraminifers
<b>Siliceous</b>	
	Diatom
	Radiolarian
	Silicoflagellate
<u>T</u>	Sponge Spicule
<b>Other bioclasts</b>	
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify)
<b>Minor Other Grain Types</b>	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
<b>Other carbonate allochems</b>	
	Peloid
	Intraclast

T/R/P/C/A/D/M	Composition
<b>Minor Mineral Grain Types</b>	
	Olivine
<u>T</u>	Pyroxene
	Amphibole
	Micas
	Chlorite
	Zircon
	Apatite
<u>T</u>	Opaque Grain
	Glauconite
	Other (specify):

<sup>1</sup> List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks:

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

375 Methods-C-F7

Sediment Smear Slide / Thin Section Description Sheet

Date: 4/4/18

Expedition: 375

Observer: Olin Kn

Site: 01510 Hole: C Core: 6R Sect.: 1A Interval: 20

Sediment Name: Mudstone with nannofossils  
marl

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
V								2.5	7.5	90

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition
Major Siliciclastic Grain Types	
B	Quartz
T	Feldspars
C	Clay minerals
Lithic Grains	
Sedimentary Lithics	
	Chert
	Mudstone
T	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
Volcaniclastic Grains	
C	Transparent glass
T	Colored glass
T	Volcanic lithics
	Altered volcanic(e.g. palagonite)
Authigenic components	
	Pyrite
C	Calcite
	Dolomite
	Zeolites
	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
Pelagic Grains	
	Calcareous
C	Nannofossils
	Foraminifers
Siliceous	
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
Other bioclasts	
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify)
Minor Other Grain Types	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
Other carbonate allochems	
	Peloid
	Intraclast

T/R/P/C/A/D/M	Composition
Minor Mineral Grain Types	
	Olivine
	Pyroxene
T	Amphibole
	Micas
	Chlorite
	Zircon
	Apatite
	Opaque Grain
	Glaucanite
	Other (specify):

List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks: hornblende

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

# 375 Methods-C-F7

## Sediment Smear Slide / Thin Section Description Sheet

Date: 4/4/18

Expedition: 375

Observer: OLIV/K

Site: U1520 Hole: C Core: 6B Sect.: 2A Interval: 114

Sediment Name: Mudstone - Marl  
volcaniclastic

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
V								5	15	80

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition
<b>Major Siliciclastic Grain Types</b>	
P	Quartz
P	Feldspars
P	Clay minerals
<b>Lithic Grains</b>	
<b>Sedimentary Lithics</b>	
	Chert
	Mudstone
T	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
<b>Volcaniclastic Grains</b>	
P	Transparent glass
C	Colored glass
C	Volcanic lithics
P	Altered volcanic (e.g. palagonite)
<b>Authigenic components</b>	
	Pyrite
P	Calcite
	Dolomite
	Zeolites
B	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
<b>Pelagic Grains</b>	
	Calcareous
C	Nannofossils
B	Foraminifers
<b>Siliceous</b>	
	Diatom
	Radiolarian
	Silicoflagellate
T	Sponge Spicule
<b>Other bioclasts</b>	
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify)
<b>Minor Other Grain Types</b>	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
<b>Other carbonate allochems</b>	
	Peloid
	Intraclast

T/R/P/C/A/D/M	Composition
<b>Minor Mineral Grain Types</b>	
	Olivine
P	Pyroxene
	Amphibole
	Micas
	Chlorite
	Zircon
	Apatite
T	Opaque Grain
	Glaucanite
	Other (specify):

List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks: argirine - argite

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



# 375 Methods-C-F7

## Sediment Smear Slide / Thin Section Description Sheet

Date: 9/4/18

Expedition: 375

Observer: OLIV / K

Site: U1520 Hole: C Core: 6B Sect.: 4A Interval: 75

Sediment Name: smear  
volcaniclastic

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
<u>V</u>								<u>5</u>	<u>20</u>	<u>75</u>

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition
<b>Major Siliciclastic Grain Types</b>	
<u>C</u>	Quartz
<u>C</u>	Feldspars
<u>P</u>	Clay minerals
<b>Lithic Grains</b>	
<b>Sedimentary Lithics</b>	
	Chert
	Mudstone
<u>P</u>	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
<b>Volcaniclastic Grains</b>	
<u>P</u>	Transparent glass
<u>C</u>	Colored glass
<u>C</u>	Volcanic lithics
<u>C</u>	Altered volcanic (e.g. palagonite)
<b>Authigenic components</b>	
<u>P</u>	Pyrite
	Calcite
	Dolomite
	Zeolites
<u>P</u>	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
<b>Pelagic Grains</b>	
	Calcareous
<u>C</u>	Nannofossils
	Foraminifers
	<b>Siliceous</b>
	Diatom
<u>T</u>	Radiolarian
	Silicoflagellate
<u>T</u>	Sponge Spicule
<b>Other bioclasts</b>	
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify)
<b>Minor Other Grain Types</b>	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
<b>Other carbonate allochems</b>	
	Peloid
	Intraclast

T/R/P/C/A/D/M	Composition
<b>Minor Mineral Grain Types</b>	
	Olivine
<u>R</u>	Pyroxene
<u>T</u>	Amphibole
	Micas
	Chlorite
	Zircon
	Apatite
<u>P</u>	Opaque Grain
<u>T</u>	Glauconite
	Other (specify):

<sup>1</sup> List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks: hornblende

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

# 375 Methods-C-F7

## Sediment Smear Slide / Thin Section Description Sheet

Date: 4/4/18

Expedition: 375

Observer: OCV/K

Site: 01520

Hole: C

Core: 6R

Sect.: 4A

Interval: 130

Sediment Name: Mudstone with volcanoclastic marl

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcanoclastic	Pelagic		Sand	Silt	Clay
V								/	20	80

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition
<b>Major Siliciclastic Grain Types</b>	
P	Quartz
R	Feldspars
	Clay minerals
<b>Lithic Grains</b>	
<b>Sedimentary Lithics</b>	
	Chert
	Mudstone
T	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
<b>Volcanoclastic Grains</b>	
P	Transparent glass
C	Colored glass
P	Volcanic lithics
P	Altered volcanic (e.g. palagonite)
<b>Authigenic components</b>	
T	Pyrite
R	Calcite
	Dolomite
R?	Zeolites ?
T	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
<b>Pelagic Grains</b>	
	Calcareous
C	Nannofossils
T	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
<b>Other bioclasts</b>	
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify):
<b>Minor Other Grain Types</b>	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
<b>Other carbonate allochems</b>	
	Peloid
	Intraclast

T/R/P/C/A/D/M	Composition
<b>Minor Mineral Grain Types</b>	
	Olivine
T	Pyroxene
	Amphibole
	Micas
	Chlorite
	Zircon
T	Apatite
R	Opaque Grain
	Glauconite
	Other (specify):

List under remarks if possible

Abundances like in: 375 Methods-C-Table 2

Remarks:

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

375 Methods-C-F7

Sediment Smear Slide / Thin Section Description Sheet

Date: 4.4.18

Expedition: 375

Observer: Rn

Site: 1520 Hole: C Core: 7R Sect.: 1

Interval: 40

Sediment Name: Tuff

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
								30	10	

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition
Major Siliciclastic Grain Types	
T	Quartz
P	Feldspars
C	Clay minerals
Lithic Grains	
Sedimentary Lithics	
	Chert
	Mudstone
T	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
Volcaniclastic Grains	
M	Transparent glass
T	Colored glass
	Volcanic lithics
T	Altered volcanic (e.g. palagonite)
Authigenic components	
T	Pyrite
R	Calcite
	Dolomite
	Zeolites
T	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
Pelagic Grains	
	Calcareous
C	Nannofossils
	Foraminifers
Siliceous	
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
Other bioclasts	
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify)
Minor Other Grain Types	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
Other carbonate allochems	
	Peloid
	Intraclast

T/R/P/C/A/D/M	Composition
Minor Mineral Grain Types	
	Olivine
	Pyroxene
R	Amphibole
F	Micas
	Chlorite
	Zircon
	Apatite
R	Opaque Grain
	Glaucanite
	Other (specify):

<sup>1</sup> List under remarks if possible

Abundances like in: 375 Methods-C-Table 2

Remarks:

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

# 375 Methods-C-F7

## Sediment Smear Slide / Thin Section Description Sheet

Date: 4 Apr. 2018

Expedition: 375

Observer: NODA/KL

Site: 1520 Hole: C Core: 7R Sect.: 1A Interval: 113

Sediment Name: volcaniclastic clayey siltstone with nanofossils  
marl (mudstone)

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
V								75	25	

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition
<b>Major Siliciclastic Grain Types</b>	
	Quartz
P	Feldspars
C	Clay minerals
<b>Lithic Grains</b>	
<b>Sedimentary Lithics</b>	
	Chert
	Mudstone
T	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
<b>Volcaniclastic Grains</b>	
C	Transparent glass
P	Colored glass
	Volcanic lithics
C	Altered volcanic (e.g. palagonite)
	<i>phases</i>
<b>Authigenic components</b>	
	Pyrite
C	Calcite
	Dolomite
	Zeolites
R	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
<b>Pelagic Grains</b>	
	Calcareous
C	Nannofossils
	Foraminifers
<b>Siliceous</b>	
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
<b>Other bioclasts</b>	
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify)
<b>Minor Other Grain Types</b>	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
<b>Other carbonate allochems</b>	
	Peloid
	Intraclast

T/R/P/C/A/D/M	Composition
<b>Minor Mineral Grain Types</b>	
	Olivine
R	Pyroxene
	Amphibole
	Micas
	Chlorite
	Zircon
	Apatite
T	Opaque Grain
	Glauconite
	Other (specify):

<sup>1</sup> List under remarks if possible

Abundances like in: 375 Methods-C-Table 2

Remarks:

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

# 375 Methods-C-F7

## Sediment Smear Slide / Thin Section Description Sheet

Date: 4 Apr. 2018

Expedition: 375

Observer: NODA / K

Site: 1520 Hole: C

Core: 7R Sect.: 2A

Interval: 80

Sediment Name: nannofossil mudstone  
(calcareous mudstone)

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
									15	85

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition
Major Siliciclastic Grain Types	
	Quartz
	Feldspars
C	Clay minerals
Lithic Grains	
Sedimentary Lithics	
	Chert
	Mudstone
	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
Volcaniclastic Grains	
	Transparent glass
	Colored glass
	Volcanic lithics
	Altered volcanic (e.g. palagonite)
Authigenic components	
	Pyrite
Q	Calcite
	Dolomite
	Zeolites
T	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
Pelagic Grains	
	Calcareous
A	Nannofossils
	Foraminifers
Siliceous	
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
Other bioclasts	
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify)
Minor Other Grain Types	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
Other carbonate allochems	
	Peloid
	Intraclast

T/R/P/C/A/D/M	Composition
Minor Mineral Grain Types	
	Olivine
	Pyroxene
	Amphibole
	Micas
	Chlorite
	Zircon
	Apatite
T	Opaque Grain
	Glauconite
	Other (specify):

<sup>1</sup> List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks:

# 375 Methods-C-F7

## Sediment Smear Slide / Thin Section Description Sheet

Date: 06/18/18

Expedition: 375

Observer: 4/4/18

Site: V1520

Hole: C

Core: 8B

Sect.: 1A

Interval: 90

Sediment Name: Calcareous mudstone / marl

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
<input checked="" type="checkbox"/>								/	1	99

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition
Major Siliciclastic Grain Types	
	Quartz
<u>R</u>	Feldspars
	Clay minerals
Lithic Grains	
Sedimentary Lithics	
	Chert
	Mudstone
<u>T</u>	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
Volcaniclastic Grains	
<u>R</u>	Transparent glass
	Colored glass
	Volcanic lithics
<u>T</u>	Altered volcanic (e.g. palagonite)
Authigenic components	
	Pyrite
<u>A</u>	Calcite
	Dolomite
	Zeolites
<u>T</u>	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
Pelagic Grains	
	Calcareous
<u>D</u>	Nannofossils
<u>T</u>	Foraminifers
Siliceous	
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
Other bioclasts	
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify)
Minor Other Grain Types	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
Other carbonate allochems	
	Peloid
	Intraclast

T/R/P/C/A/D/M	Composition
Minor Mineral Grain Types	
	Olivine
	Pyroxene
	Amphibole
	Micas
	Chlorite
	Zircon
	Apatite
<u>T</u>	Opaque Grain
	Glauconite
	Other (specify):

<sup>1</sup> List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks:

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

375 Methods-C-F7

Sediment Smear Slide / Thin Section Description Sheet

Date: 5.4.18

Expedition: 375

Observer: RKH

Site: 1820 Hole: C Core: PR Sect.: 5 Interval: 23

Sediment Name: mud-rich top with nanofossils

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
								50	50	20

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition
Major Siliciclastic Grain Types	
T	Quartz
P	Feldspars
	Clay minerals
Lithic Grains	
Sedimentary Lithics	
	Chert
	Mudstone
	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
Volcaniclastic Grains	
D	Transparent glass
A	Colored glass
R	Volcanic lithics
P	Altered volcanic (e.g. palagonite)
Authigenic components	
I	Pyrite
P	Calcite
	Dolomite
	Zeolites
T	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
Pelagic Grains	
	Calcareous
C	Nannofossils
	Foraminifers
Siliceous	
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
Other bioclasts	
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify)
Minor Other Grain Types	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
Other carbonate allochems	
	Peloid
	Intraclast

T/R/P/C/A/D/M	Composition
Minor Mineral Grain Types	
	Olivine
R	Pyroxene
R	Amphibole
	Micas
	Chlorite
	Zircon
	Apatite
R	Opaque Grain
	Glauconite
	Other (specify):

<sup>1</sup> List under remarks if possible

Abundances like in: 375 Methods-C-Table 2

Remarks:

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

# 375 Methods-C-F7

## Sediment Smear Slide / Thin Section Description Sheet

Date: 4.9.18

Expedition: 375

Observer: 164

Site: 1520 Hole: C

Core: 9 Sect.: 2

Interval: 16

Sediment Name: Tuff

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
								10	70	20

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition
<b>Major Siliciclastic Grain Types</b>	
	Quartz
R	Feldspars
	Clay minerals
<b>Lithic Grains</b>	
<b>Sedimentary Lithics</b>	
	Chert
	Mudstone
T	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
<b>Volcaniclastic Grains</b>	
D	Transparent glass
	Colored glass
	Volcanic lithics
	Altered volcanic (e.g. palagonite)
<b>Authigenic components</b>	
	Pyrite
C	Calcite
	Dolomite
	Zeolites
T	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
<b>Pelagic Grains</b>	
	Calcareous
E	Nannofossils
R	Foraminifers
<b>Siliceous</b>	
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
<b>Other bioclasts</b>	
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify)
<b>Minor Other Grain Types</b>	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
<b>Other carbonate allochems</b>	
	Peloid
	Intraclast

T/R/P/C/A/D/M	Composition
<b>Minor Mineral Grain Types</b>	
	Olivine
R	Pyroxene
T	Amphibole
	Micas
	Chlorite
T	Zircon
	Apatite
T	Opaque Grain
T	Glauconite
	Other (specify):

<sup>1</sup> List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks: \_\_\_\_\_

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



# 375 Methods-C-F7

## Sediment Smear Slide / Thin Section Description Sheet

Date: 5.4.18

Expedition: 375

Observer: Ru

Site: 1520 Hole: C Core: 9R Sect.: 2 Interval: 80

Sediment Name: calcareous mudstone / marl

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
									10	90

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition
<b>Major Siliciclastic Grain Types</b>	
	Quartz
<u>T</u>	Feldspars
<u>A</u>	Clay minerals
<b>Lithic Grains</b>	
<b>Sedimentary Lithics</b>	
	Chert
	Mudstone
	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
<b>Volcaniclastic Grains</b>	
<u>P</u>	Transparent glass
	Colored glass
	Volcanic lithics
	Altered volcanic (e.g. palagonite)
<b>Authigenic components</b>	
<u>R</u>	Pyrite
<u>D</u>	Calcite
	Dolomite
	Zeolites
	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
<b>Pelagic Grains</b>	
	Calcareous
<u>C</u>	Nannofossils
	Foraminifers
<b>Siliceous</b>	
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
<b>Other bioclasts</b>	
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify)
<b>Minor Other Grain Types</b>	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
<b>Other carbonate allochems</b>	
	Peloid
	Intraclast

T/R/P/C/A/D/M	Composition
<b>Minor Mineral Grain Types</b>	
	Olivine
	Pyroxene
	Amphibole
	Micas
	Chlorite
	Zircon
	Apatite
	Opaque Grain
	Glauconite
	Other (specify):

<sup>1</sup> List under remarks if possible

Abundances like in: 375 Methods-C-Table 2

Remarks: Recrystallized marl?

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

# 375 Methods-C-F7

## Sediment Smear Slide / Thin Section Description Sheet

Date: 5.9.18

Expedition: 315

Observer: Per

Site: 1520 Hole: C Core: GR Sect.: 2

Interval: 106

Sediment Name: Tuff

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
								90	10	

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition
<b>Major Siliciclastic Grain Types</b>	
T	Quartz
P	Feldspars
C	Clay minerals
<b>Lithic Grains</b>	
<b>Sedimentary Lithics</b>	
	Chert
	Mudstone
T	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
<b>Volcaniclastic Grains</b>	
D	Transparent glass
R	Colored glass
	Volcanic lithics
T	Altered volcanic(e.g. palagonite)
<b>Authigenic components</b>	
	Pyrite
C	Calcite
	Dolomite
	Zeolites
P	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
<b>Pelagic Grains</b>	
	Calcareous
P	Nannofossils
R	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
<b>Other bioclasts</b>	
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify):
<b>Minor Other Grain Types</b>	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
<b>Other carbonate allochems</b>	
	Peloid
	Intraclast

T/R/P/C/A/D/M	Composition
<b>Minor Mineral Grain Types</b>	
	Olivine
P	Pyroxene
	Amphibole
	Micas
	Chlorite
	Zircon
	Apatite
T	Opaque Grain
	Glaucanite
	Other (specify):

<sup>1</sup> List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks: \_\_\_\_\_

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

# 375 Methods-C-F7

## Sediment Smear Slide / Thin Section Description Sheet

Date: 5.4.78

Expedition: 375

Observer: RA

Site: 7520 Hole: C Core: GR Sect.: 4 Interval: 62

Sediment Name: dc vitrified tuff? → see thin section

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

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition
<b>Major Siliciclastic Grain Types</b>	
	Quartz
R	Feldspars
	Clay minerals
<b>Lithic Grains</b>	
<b>Sedimentary Lithics</b>	
	Chert
	Mudstone
	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
<b>Volcaniclastic Grains</b>	
R	Transparent glass
	Colored glass
	Volcanic lithics
	Altered volcanic (e.g. palagonite)
<b>Authigenic components</b>	
	Pyrite
	Calcite
	Dolomite
ca	Zeolites <u>etc</u>
1	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
<b>Pelagic Grains</b>	
	Calcareous
P	Nannofossils
C	Foraminifers
<b>Siliceous</b>	
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
<b>Other bioclasts</b>	
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify)
<b>Minor Other Grain Types</b>	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
<b>Other carbonate allochems</b>	
	Peloid
	Intraclast

T/R/P/C/A/D/M	Composition
<b>Minor Mineral Grain Types</b>	
	Olivine
	Pyroxene
T	Amphibole
P	Micas
	Chlorite
	Zircon
	Apatite
R	Opaque Grain
	Glauconite
	Other (specify):

List under remarks if possible

Abundances like in: 375 Methods-C-Table 2

Remarks: (M) = ab initio glass? brown translucent?  
Mineral assemblage A magmatic

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

375 Methods-C-F7

Sediment Smear Slide / Thin Section Description Sheet

Date: 5.4.78

Expedition: 375

Observer: Per

Site: 1550

Hole: C

Core: GR

Sect.: 4

Interval: 70

Sediment Name: devoid of red tuff? - 2 Sep thin section

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
								40	50	20

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition
Major Siliciclastic Grain Types	
	Quartz
P	Feldspars
	Clay minerals
Lithic Grains	
Sedimentary Lithics	
	Chert
	Mudstone
	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
Volcaniclastic Grains	
R	Transparent glass
	Colored glass
	Volcanic lithics
C	Altered volcanic (e.g. palagonite)
Authigenic components	
	Pyrite
	Calcite
	Dolomite
	Zeolites
T	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
Pelagic Grains	
	Calcareous
P	Nannofossils
C	Foraminifers
Siliceous	
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
Other bioclasts	
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify)
Minor Other Grain Types	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
Other carbonate allochems	
	Peloid
	Intraclast

T/R/P/C/A/D/M	Composition
Minor Mineral Grain Types	
	Olivine
T	Pyroxene
R	Amphibole
C	Micas
	Chlorite
	Zircon
	Apatite
R	Opaque Grain
	Glauconite
	Other (specify):

<sup>1</sup> List under remarks if possible

Abundances like in: 375 Methods-C-Table 2

Remarks: M = devoid of red glass

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

375 Methods-C-F7

Sediment Smear Slide / Thin Section Description Sheet

Date: 5.4.18

Expedition: 375

Observer: 124

Site: 1520

Hole: C

Core: 70R Sect.: 1

Interval: 35

Sediment Name: calcareous mudstone with hard mud

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

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition
Major Siliciclastic Grain Types	
F	Quartz
F	Feldspars
C	Clay minerals
Lithic Grains	
Sedimentary Lithics	
	Chert
	Mudstone
T	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
Volcaniclastic Grains	
P	Transparent glass
	Colored glass
	Volcanic lithics
	Altered volcanic(e.g. palagonite)
Authigenic components	
	Pyrite
D	Calcite
	Dolomite
	Zeolites
	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
Pelagic Grains	
	Calcareous
C	Nannofossils
R	Foraminifers
Siliceous	
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
Other bioclasts	
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify)
Minor Other Grain Types	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
Other carbonate allochems	
	Peloid
	Intraclast

T/R/P/C/A/D/M	Composition
Minor Mineral Grain Types	
	Olivine
	Pyroxene
	Amphibole
	Micas
	Chlorite
	Zircon
	Apatite
T	Opaque Grain
	Glauconite
	Other (specify):

List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks: Ac-cig still not known

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

375 Methods-C-F7

Sediment Smear Slide / Thin Section Description Sheet

Date: 5.4.18

Expedition: 375

Observer: R4

Site: 1520 Hole: C Core: 10R Sect.: 4 Interval: 9

Sediment Name: calcareous mudstone with hard

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
								15	85	

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition
<b>Major Siliciclastic Grain Types</b>	
F	Quartz
T	Feldspars
A	Clay minerals
<b>Lithic Grains</b>	
<b>Sedimentary Lithics</b>	
	Chert
	Mudstone
T	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
<b>Volcaniclastic Grains</b>	
R	Transparent glass
P	Colored glass
	Volcanic lithics
T	Altered volcanic (e.g. palagonite)
<b>Authigenic components</b>	
J	Pyrite
D	Calcite
	Dolomite
	Zeolites
T	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
<b>Pelagic Grains</b>	
	Calcareous
P	Nannofossils
P	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
<b>Other bioclasts</b>	
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify):
<b>Minor Other Grain Types</b>	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
<b>Other carbonate allochems</b>	
	Peloid
	Intraclast

T/R/P/C/A/D/M	Composition
<b>Minor Mineral Grain Types</b>	
	Olivine
	Pyroxene
	Amphibole
	Micas
	Chlorite
	Zircon
	Apatite
	Opaque Grain
	Glauconite
	Other (specify):

<sup>1</sup> List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks:

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

375 Methods-C-F7

Sediment Smear Slide / Thin Section Description Sheet

Date: 5.9.11

Expedition: 375

Observer: Ra

Site: 1520 Hole: C Core: 10P2 Sect.: 6 Interval: 39

Sediment Name: calcareous mudstone (with horro)

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
								5	25	70

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition
Major Siliciclastic Grain Types	
T	Quartz
E	Feldspars
E	Clay minerals
Lithic Grains	
Sedimentary Lithics	
	Chert
	Mudstone
P	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
Volcaniclastic Grains	
T	Transparent glass
P	Colored glass
	Volcanic lithics
	Altered volcanic (e.g. palagonite)
Authigenic components	
T	Pyrite
A	Calcite
	Dolomite
	Zeolites
T	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
Pelagic Grains	
	Calcareous
R	Nannofossils
	Foraminifers
Siliceous	
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
Other bioclasts	
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify)
Minor Other Grain Types	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
Other carbonate allochems	
	Peloid
	Intraclast

T/R/P/C/A/D/M	Composition
Minor Mineral Grain Types	
	Olivine
	Pyroxene
	Amphibole
T	Micas
	Chlorite
	Zircon
	Apatite
T	Opaque Grain
	Glauconite
	Other (specify):

List under remarks if possible

Abundances like in: 375 Methods-C-Table 2

Remarks: de (crystallized horro)

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

# 375 Methods-C-F7

## Sediment Smear Slide / Thin Section Description Sheet

Date: 5. 4. 78

Expedition: 275

Observer: RCM

Site: 7520

Hole: C

Core: MR

Sect.: 2

Interval: 70

Sediment Name: Foraminifer. chalk

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
								30	50	20

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition
<b>Major Siliciclastic Grain Types</b>	
<u>Tr</u>	Quartz
<u>T</u>	Feldspars
<u>C</u>	Clay minerals
<b>Lithic Grains</b>	
<b>Sedimentary Lithics</b>	
	Chert
	Mudstone
	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
<b>Volcaniclastic Grains</b>	
<u>T</u>	Transparent glass
	Colored glass
	Volcanic lithics
<u>T</u>	Altered volcanic (e.g. palagonite)
<b>Authigenic components</b>	
	Pyrite
<u>A</u>	Calcite
	Dolomite
	Zeolites
	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
<b>Pelagic Grains</b>	
	Calcareous
<u>C</u>	Nannofossils
<u>A</u>	Foraminifers
<b>Siliceous</b>	
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
<b>Other bioclasts</b>	
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify)
<b>Minor Other Grain Types</b>	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
<b>Other carbonate allochems</b>	
	Peloid
	Intraclast

T/R/P/C/A/D/M	Composition
<b>Minor Mineral Grain Types</b>	
	Olivine
	Pyroxene
	Amphibole
	Micas
	Chlorite
	Zircon
	Apatite
<u>Tr</u>	Opaque Grain
	Glauconite
	Other (specify):

<sup>1</sup> List under remarks if possible

Abundances like in: 375 Methods-C-Table 2

Remarks:

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



375 Methods-C-F7

Sediment Smear Slide / Thin Section Description Sheet

Date: 5.4.78

Expedition: 375

Observer: RU

Site: 1500

Hole: C

Core: MR

Sect.: 2

Interval: 105

Sediment Name: calcareous mudstone - ~~fine~~

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
									30	70

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition
<b>Major Siliciclastic Grain Types</b>	
T	Quartz
J	Feldspars
A	Clay minerals
<b>Lithic Grains</b>	
<b>Sedimentary Lithics</b>	
	Chert
	Mudstone
R	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
<b>Volcaniclastic Grains</b>	
R	Transparent glass
	Colored glass
	Volcanic lithics
T	Altered volcanic (e.g. palagonite)
<b>Authigenic components</b>	
J	Pyrite
D	Calcite
	Dolomite
	Zeolites
T	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
<b>Pelagic Grains</b>	
	Calcareous
P	Nannofossils
	Foraminifers
<b>Siliceous</b>	
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
<b>Other bioclasts</b>	
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify)
<b>Minor Other Grain Types</b>	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
<b>Other carbonate allochems</b>	
	Peloid
	Intraclast

T/R/P/C/A/D/M	Composition
<b>Minor Mineral Grain Types</b>	
	Olivine
	Pyroxene
	Amphibole
	Micas
	Chlorite
	Zircon
	Apatite
	Opaque Grain
	Glauconite
	Other (specify):

List under remarks if possible

Abundances like in: 375 Methods-C-Table 2

Remarks:

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

# 375 Methods-C-F7

## Sediment Smear Slide / Thin Section Description Sheet

Date: 5. Apr. 2018

Expedition: 375

Observer: Noda

Site: 1520 Hole: C Core: 11R Sect.: 4A

Interval: 80

Sediment Name: calcareous mudstone. (with nannofossils)

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

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition	T/R/P/C/A/D/M	Composition	T/R/P/C/A/D/M	Composition
Major Siliciclastic Grain Types		Pelagic Grains		Minor Mineral Grain Types	
	Quartz		Calcareous		Olivine
<u>R</u>	Feldspars	<u>A</u>	Nannofossils	<u>T</u>	Pyroxene
<u>C</u>	Clay minerals	<u>P</u>	Foraminifers		Amphibole
			Siliceous		Micas
	Lithic Grains		Diatom		Chlorite
	Sedimentary Lithics		Radiolarian		Zircon
	Chert	<u>T</u>	Silicoflagellate		Apatite
	Mudstone		Sponge Spicule	<u>R</u>	Opaque Grain
	Siltstone/sandstone				Glaucinite
	Limestone		Other bioclasts		Opaque Grain
	Metamorphic lithic		Mollusk		Other (specify):
	Plutonic lithic		Echinoderm		
			Benthic foraminifer		
	Volcaniclastic Grains		Other bioclast (specify)		
<u>T</u>	Transparent glass				
<u>R</u>	Colored glass		Minor Other Grain Types		
	Volcanic lithics		Phosphate (bones, teeth, etc)		
<u>T</u>	Altered volcanic (e.g. palagonite)		Marine organic matter		
			Terrestrial organic matter		
	Authigenic components		Other (specify):		
	Pyrite				
<u>C</u>	Calcite		Other carbonate allochems		
	Dolomite		Peloid		
	Zeolites		Intraclast		
<u>R</u>	Fe/Mn oxide				
	Other (specify):				

<sup>1</sup> List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks:

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

375 Methods-C-F7

Sediment Smear Slide / Thin Section Description Sheet

Date: 5. Apr. 2018

Expedition: 375

Observer: Noda

Site: 1520 Hole: C Core: 11R Sect.: 5A Interval: 63

Sediment Name: devitrified tuff

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
X								5	70	25

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition	T/R/P/C/A/D/M	Composition	T/R/P/C/A/D/M	Composition
<b>Major Siliciclastic Grain Types</b>		<b>Pelagic Grains</b>		<b>Minor Mineral Grain Types</b>	
P	Quartz		Calcareous		Olivine
C	Feldspars	C	Nannofossils	T	Pyroxene
C	Clay minerals	P	Foraminifers	T	Amphibole
			Siliceous	R	Micas Bt.
	<b>Lithic Grains</b>		Diatom		Chlorite
	<b>Sedimentary Lithics</b>		Radiolarian	T	Zircon
	Chert		Silicoflagellate	T	Apatite
	Mudstone		Sponge Spicule	P	Opaque Grain
	Siltstone/sandstone				Glaucanite
	Limestone		<b>Other bioclasts</b>	P	Opaque Grain
	Metamorphic lithic		Mollusk		Other (specify):
	Plutonic lithic		Echinoderm		
			Benthic foraminifer		
	<b>Volcaniclastic Grains</b>		Other bioclast (specify)		
P	Transparent glass				
	Colored glass		<b>Minor Other Grain Types</b>		
	Volcanic lithics		Phosphate (bones, teeth, etc)		
A	Altered volcanic (e.g. palagonite) glass replaced with clay		Marine organic matter		
			Terrestrial organic matter		
	<b>Authigenic components</b>		Other (specify):		
	Pyrite				
P	Calcite		<b>Other carbonate allochems</b>		
	Dolomite		Peloid		
	Zeolites		Intraclast		
R	Fe/Mn oxide				
	Other (specify):				

1 List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks:

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

# 375 Methods-C-F7

## Sediment Smear Slide / Thin Section Description Sheet

Date: 5 Apr. 2018

Expedition: 375

Observer: Noda/ky

Site: 1520 Hole: C Core: 11R Sect.: 5A

Interval: 66

Sediment Name: foraminifera chalk

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
								5	70	25

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition	T/R/P/C/A/D/M	Composition	T/R/P/C/A/D/M	Composition
Major Siliciclastic Grain Types		Pelagic Grains		Minor Mineral Grain Types	
T	Quartz		Calcareous		Olivine
P	Feldspars	P	Nannofossils		Pyroxene
C	Clay minerals	A	Foraminifers		Amphibole
			Siliceous		Micas
	Lithic Grains		Diatom		Chlorite
	Sedimentary Lithics		Radiolarian	T	Zircon
	Chert		Silicoflagellate		Apatite
	Mudstone	T	Sponge Spicule	T	Opaque Grain
	Siltstone/sandstone				Glauconite
	Limestone		Other bioclasts		Opaque Grain
	Metamorphic lithic		Mollusk		Other (specify):
	Plutonic lithic		Echinoderm		
			Benthic foraminifer		
	Volcaniclastic Grains		Other bioclast (specify)		
	Transparent glass				
T	Colored glass		Minor Other Grain Types		
	Volcanic lithics		Phosphate (bones, teeth, etc)		
	Altered volcanic (e.g. palagonite)		Marine organic matter		
			Terrestrial organic matter		
	Authigenic components		Other (specify):		
	Pyrite				
D	Calcite		Other carbonate allochems		
	Dolomite		Peloid		
	Zeolites		Intraclast		
	Fe/Mn oxide				
	Other (specify):				

<sup>1</sup> List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks: \_\_\_\_\_

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

# 375 Methods-C-F7

## Sediment Smear Slide / Thin Section Description Sheet

Date: 5. Apr. 2018

Expedition: 375

Observer: Noda

Site: 1520 Hole: C Core: 11R Sect.: 7A Interval: 25

Sediment Name: calcareous mudstone (marl)

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
								1	29	70

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition
Major Siliciclastic Grain Types	
	Quartz
T	Feldspars
C	Clay minerals
Lithic Grains	
Sedimentary Lithics	
	Chert
	Mudstone
	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
Volcaniclastic Grains	
T	Transparent glass
	Colored glass
	Volcanic lithics
T	Altered volcanic (e.g. palagonite)
Authigenic components	
T	Pyrite
C	Calcite
	Dolomite
	Zeolites
R	Fe/Mn oxide
	Other (specify):

<sup>1</sup> List under remarks if possible

T/R/P/C/A/D/M	Composition
Pelagic Grains	
	Calcareous
A	Nannofossils
P	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
Other bioclasts	
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify)
Minor Other Grain Types	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
Other carbonate allochems	
	Peloid
	Intraclast

Abundances like in 375 Methods-C-Table 2

T/R/P/C/A/D/M	Composition
Minor Mineral Grain Types	
	Olivine
	Pyroxene
	Amphibole
	Micas
	Chlorite
	Zircon
	Apatite
R	Opaque Grain
T	Glauconite
	Opaque Grain
	Other (specify):

Remarks:

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

# 375 Methods-C-F7

## Sediment Smear Slide / Thin Section Description Sheet

Date: 4/5/18

Expedition: 375

Observer: OLIV / JL

Site: U1520

Hole: C

Core: 2P

Sect.: 1A

Interval: 50

Sediment Name:

Calcareous mudstone - Chalk  
brown

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
<u>V</u>								<u>/</u>	<u>1</u>	<u>99</u>

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition
Major Siliciclastic Grain Types	
<u>B</u>	Quartz
<u>T</u>	Feldspars
<u>A</u>	Clay minerals
Lithic Grains	
Sedimentary Lithics	
	Chert
	Mudstone
<u>R</u>	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
Volcaniclastic Grains	
<u>B</u>	Transparent glass
<u>T</u>	Colored glass
<u>R</u>	Volcanic lithics
<u>T</u>	Altered volcanic(e.g. palagonite)
Authigenic components	
	Pyrite
<u>C</u>	Calcite
	Dolomite
	Zeolites
<u>T</u>	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
Pelagic Grains	
	Calcareous
<u>C</u>	Nannofossils
	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	Silicoflagellate
<u>T</u>	Sponge Spicule
Other bioclasts	
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify)
Minor Other Grain Types	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
Other carbonate allochems	
	Peloid
	Intraclast

T/R/P/C/A/D/M	Composition
Minor Mineral Grain Types	
	Olivine
	Pyroxene
	Amphibole
	Micas
<u>T</u>	Chlorite
	Zircon
<u>T</u>	Apatite
	Opaque Grain
	Glauconite
	Opaque Grain
	Other (specify):

<sup>1</sup> List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks:

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

# 375 Methods-C-F7

## Sediment Smear Slide / Thin Section Description Sheet

Date: 4/5/18

Expedition: 375

Observer: OLIV/MG

Site: U1520 Hole: C1 Core: 12R Sect.: 4A Interval: 62

Sediment Name: calcareous mudstone with volcanoclastic Marl

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
				1	15	85

Select one and check.

T/R/P/C/A/D/M	Composition
Major Siliciclastic Grain Types	
T	Quartz
R	Feldspars
C	Clay minerals
Lithic Grains	
Sedimentary Lithics	
	Chert
	Mudstone
R	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
Volcaniclastic Grains	
P	Transparent glass
P	Colored glass
P	Volcanic lithics
P	Altered volcanic (e.g. palagonite)
Authigenic components	
T	Pyrite
R	Calcite
	Dolomite
	Zeolites
P	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
Pelagic Grains	
	Calcareous
A	Nannofossils
	Foraminifers
Siliceous	
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
Other bioclasts	
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify):
Minor Other Grain Types	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
Other carbonate allochems	
	Peloid
	Intraclast

T/R/P/C/A/D/M	Composition
Minor Mineral Grain Types	
	Olivine
	Pyroxene
	Amphibole
	Micas
T	Chlorite
	Zircon
	Apatite
	Opaque Grain
	Glauconite
P	Opaque Grain
	Other (specify):

<sup>1</sup> List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks:

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

# 375 Methods-C-F7

## Sediment Smear Slide / Thin Section Description Sheet

Date: 4/5/98

Expedition: 375

Observer: OLIV

Site: V1520 Hole: C

Core: 12R Sect.: 5A

Interval: 50

Sediment Name: calcareous green marl

Smear Slide	Thin Section	Coarse Fraction	Grain Mount
<u>✓</u>			

Select one and check.

Granular Sediment			Other material	Percent Texture		
Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				<u>1</u>	<u>1</u>	<u>99</u>

Select one and check.

T/R/P/C/A/D/M	Composition
Major Siliciclastic Grain Types	
	Quartz
	Feldspars
<u>C</u>	Clay minerals
Lithic Grains	
Sedimentary Lithics	
	Chert
	Mudstone
<u>R</u>	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
Volcaniclastic Grains	
<u>T</u>	Transparent glass
	Colored glass
<u>T</u>	Volcanic lithics
	Altered volcanic (e.g. palagonite)
Authigenic components	
	Pyrite
<u>A</u>	Calcite
	Dolomite
	Zeolites
	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
Pelagic Grains	
	Calcareous
<u>A</u>	Nannofossils
	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
Other bioclasts	
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify)
Minor Other Grain Types	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
Other carbonate allochems	
	Peloid
	Intraclast

T/R/P/C/A/D/M	Composition
Minor Mineral Grain Types	
	Olivine
	Pyroxene
	Amphibole
	Micas
	Chlorite
	Zircon
	Apatite
	Opaque Grain
	Glauconite
<u>T</u>	Opaque Grain
	Other (specify):

<sup>1</sup> List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks:

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



# 375 Methods-C-F7

## Sediment Smear Slide / Thin Section Description Sheet

Date: 4/5/98

Expedition: 375

Observer: OLIV M

Site: U1520

Hole: C

Core: 13R

Sect.: 2A

Interval: 60

Sediment Name: Calcareous mudstone - marl green

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
V								/	1	99

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition
Major Siliciclastic Grain Types	
	Quartz
A	Feldspars
	Clay minerals
Lithic Grains	
Sedimentary Lithics	
	Chert
	Mudstone
	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
Volcaniclastic Grains	
T	Transparent glass
T	Colored glass
	Volcanic lithics
	Altered volcanic (e.g. palagonite)
Authigenic components	
	Pyrite
C	Calcite
	Dolomite
	Zeolites
T	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
Pelagic Grains	
	Calcareous
D	Nannofossils
	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
Other bioclasts	
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify):
Minor Other Grain Types	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
Other carbonate allochems	
	Peloid
	Intraclast

T/R/P/C/A/D/M	Composition
Minor Mineral Grain Types	
	Olivine
	Pyroxene
	Amphibole
	Micas
	Chlorite
	Zircon
	Apatite
T	Opaque Grain
	Glauconite
	Opaque Grain
	Other (specify):

<sup>1</sup> List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks:

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

# 375 Methods-C-F7

## Sediment Smear Slide / Thin Section Description Sheet

Date: 4/15/18

Expedition: 375

Observer: OCIV

Site: U1520 Hole: C

Core: 13R Sect.: 3A

Interval: 78

Sediment Name: de-vitrified tuff with biomas

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
				10	60	30

Select one and check.

T/R/P/C/A/D/M	Composition
Major Siliciclastic Grain Types	
T	Quartz
P	Feldspars
	Clay minerals
Lithic Grains	
Sedimentary Lithics	
	Chert
	Mudstone
T	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
Volcaniclastic Grains	
R	Transparent glass (D)
P	Colored glass
R	Volcanic lithics
T	Altered volcanic (e.g. palagonite)
Authigenic components	
	Pyrite
T	Calcite
	Dolomite
	Zeolites
T	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
Pelagic Grains	
	Calcareous
C	Nannofossils
T	Foraminifers
	Siliceous
T	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
Other bioclasts	
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify):
Minor Other Grain Types	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
Other carbonate allochems	
	Peloid
	Intraclast

T/R/P/C/A/D/M	Composition
Minor Mineral Grain Types	
	Olivine
	Pyroxene
T	Amphibole
P	Micas <u>biotite + chlorite + muscovite</u>
	Chlorite
T	Zircon
T	Apatite
	Opaque Grain
	Glauconite
P	Opaque Grain
	Other (specify):

<sup>1</sup> List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks: transparent glass shards are devitrified

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

nanofly

# 375 Methods-C-F7

## Sediment Smear Slide / Thin Section Description Sheet

Date: 5 Apr. 2018

Expedition: 375

Observer: Noda/K

Site: 1520 Hole: C Core: 14R Sect.: 1A

Interval: 70

Sediment Name: marl

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
<input checked="" type="checkbox"/>								1	20	79

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition
Major Siliciclastic Grain Types	
	Quartz
<u>I</u>	Feldspars
<u>C</u>	Clay minerals
Lithic Grains	
Sedimentary Lithics	
	Chert
	Mudstone
<u>T</u>	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
Volcaniclastic Grains	
<u>R</u>	Transparent glass
<u>T</u>	Colored glass
<u>T</u>	Volcanic lithics
	Altered volcanic (e.g. palagonite)
Authigenic components	
	Pyrite
<u>A</u>	Calcite
	Dolomite
	Zeolites
<u>T</u>	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
Pelagic Grains	
	Calcareous
<u>A</u>	Nannofossils
<u>R</u>	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	Silicoflagellate
<u>T</u>	Sponge Spicule
Other bioclasts	
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify):
Minor Other Grain Types	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
Other carbonate allochems	
	Peloid
	Intraclast

T/R/P/C/A/D/M	Composition
Minor Mineral Grain Types	
	Olivine
	Pyroxene
	Amphibole
<u>T</u>	Micas <u>BT</u>
<u>T</u>	Chlorite
	Zircon
	Apatite
	Opaque Grain
	Glauconite
<u>T</u>	Opaque Grain
	Other (specify):

<sup>1</sup> List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks:

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

# 375 Methods-C-F7

## Sediment Smear Slide / Thin Section Description Sheet

Date: 5 Apr. 2018

Expedition: 375

Observer: Nodo Lin

Site: 1520 Hole: C Core: 14R Sect.: 3A

Interval: 54

Sediment Name: foamifera chalk.

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
<u>X</u>								<u>15</u>	<u>65</u>	<u>20</u>

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition
	Major Siliciclastic Grain Types
	Quartz
	Feldspars
<u>c</u>	Clay minerals
	Lithic Grains
	Sedimentary Lithics
	Chert
	Mudstone
	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
	Volcaniclastic Grains
	Transparent glass
	Colored glass
<u>R</u>	Volcanic lithics
	Altered volcanic (e.g. palagonite)
	Authigenic components
	Pyrite
<u>A</u>	Calcite
	Dolomite
	Zeolites
<u>R</u>	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
	Pelagic Grains
	Calcareous
	Nannofossils
<u>A</u>	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
	Other bioclasts
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify):
	Minor Other Grain Types
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
	Other carbonate allochems
	Peloid
	Intraclast

T/R/P/C/A/D/M	Composition
	Minor Mineral Grain Types
	Olivine
	Pyroxene
<u>T</u>	Amphibole
	Micas
	Chlorite
	Zircon
	Apatite
	Opaque Grain
	Glaucinite
<u>T</u>	Opaque Grain
	Other (specify):

<sup>1</sup> List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks:

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

# 375 Methods-C-F7

## Sediment Smear Slide / Thin Section Description Sheet

Date: 5. Apr. 2018

Expedition: 375

Observer: Noda/K

Site: 1520 Hole: C Core: 14R Sect.: 7A

Interval: 50

Sediment Name: chalk

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
				3	25	72

Select one and check.

T/R/P/C/A/D/M	Composition
Major Siliciclastic Grain Types	
	Quartz
R	Feldspars
C	Clay minerals
Lithic Grains	
Sedimentary Lithics	
	Chert
	Mudstone
	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
Volcaniclastic Grains	
	Transparent glass
	Colored glass
	Volcanic lithics
T	Altered volcanic (e.g. palagonite)
Authigenic components	
	Pyrite
A	Calcite
	Dolomite
	Zeolites
	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
Pelagic Grains	
	Calcareous
A	Nannofossils
C	Foraminifers
Siliceous	
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
Other bioclasts	
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify)
Minor Other Grain Types	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
Other carbonate allochems	
	Peloid
	Intraclast

T/R/P/C/A/D/M	Composition
Minor Mineral Grain Types	
	Olivine
	Pyroxene
	Amphibole
	Micas
	Chlorite
	Zircon
	Apatite
T	Opaque Grain
	Glauconite
	Opaque Grain
	Other (specify):

<sup>1</sup> List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks:

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

375 Methods-C-F7

Sediment Smear Slide / Thin Section Description Sheet

Date: 8.4.18

Expedition: 278 Observer: RL

Site: 7520 Hole: C Core: 75R Sect.: 5 Interval: 119

Sediment Name: chalk

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
								5	25	70

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition
Major Siliciclastic Grain Types	
F	Quartz
F	Feldspars
	Clay minerals
Lithic Grains	
Sedimentary Lithics	
	Chert
	Mudstone
	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
Volcaniclastic Grains	
	Transparent glass
Tr	Colored glass
	Volcanic lithics
T	Altered volcanic (e.g. palagonite)
Authigenic components	
	Pyrite
A	Calcite
	Dolomite
	Zeolites
Tr	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
Pelagic Grains	
	Calcareous
D	Nannofossils
P	Foraminifers
Siliceous	
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
Other bioclasts	
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify)
Minor Other Grain Types	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
Other carbonate allochems	
	Peloid
	Intraclast

T/R/P/C/A/D/M	Composition
Minor Mineral Grain Types	
	Olivine
	Pyroxene
	Amphibole
	Micas
	Chlorite
	Zircon
	Apatite
	Opaque Grain
	Glauconite
R	Opaque Grain
	Other (specify):

<sup>1</sup> List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks:

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

375 Methods-C-F7

Sediment Smear Slide / Thin Section Description Sheet

Date: 6.4.18

Expedition: 375

Observer: M

Site: 1520 Hole: C Core: 15R Sect.: 7

Interval: 103

Sediment Name: chalk with mud

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
								5	95	

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition
Major Siliciclastic Grain Types	
	Quartz
T	Feldspars
	Clay minerals
Lithic Grains	
Sedimentary Lithics	
	Chert
	Mudstone
T	Siltstone/sandstone
	Limestone
	Metamorphic lithic
T	Plutonic lithic
Volcaniclastic Grains	
	Transparent glass
	Colored glass
T	Volcanic lithics
	Altered volcanic (e.g. palagonite)
Authigenic components	
	Pyrite
C	Calcite
	Dolomite
	Zeolites
	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
Pelagic Grains	
	Calcareous
D	Nannofossils
R	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
Other bioclasts	
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify)
Minor Other Grain Types	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
Other carbonate allochems	
	Peloid
	Intraclast

T/R/P/C/A/D/M	Composition
Minor Mineral Grain Types	
	Olivine
	Pyroxene
	Amphibole
	Micas
	Chlorite
	Zircon
	Apatite
T	Opaque Grain
	Glauconite
	Opaque Grain
	Other (specify):

<sup>1</sup> List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks:

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

375 Methods-C-F7

Sediment Smear Slide / Thin Section Description Sheet

Date: 6.4.

Expedition: 378

Observer: ku

Site: 7520 Hole: C Core: 11R Sect.: 6

Interval: 51

Sediment Name: Chalk with mud.

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
								5	95	

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition
Major Siliciclastic Grain Types	
<u>T</u>	Quartz
<u>P</u>	Feldspars
	Clay minerals
Lithic Grains	
Sedimentary Lithics	
	Chert
	Mudstone
<u>T</u>	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
Volcaniclastic Grains	
	Transparent glass
	Colored glass
<u>T</u>	Volcanic lithics
<u>T</u>	Altered volcanic (e.g. palagonite)
Authigenic components	
	Pyrite
<u>C</u>	Calcite
	Dolomite
	Zeolites
<u>R</u>	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
Pelagic Grains	
	Calcareous
<u>D</u>	Nannofossils
<u>R</u>	Foraminifers
Siliceous	
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
Other bioclasts	
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify)
Minor Other Grain Types	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
Other carbonate allochems	
	Peloid
	Intraclast

T/R/P/C/A/D/M	Composition
Minor Mineral Grain Types	
	Olivine
	Pyroxene
	Amphibole
	Micas
	Chlorite
	Zircon
	Apatite
<u>T</u>	Opaque Grain
	Glauconite
	Opaque Grain
	Other (specify):

<sup>1</sup> List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks: zeolitized grains?

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



375 Methods-C-F7

Sediment Smear Slide / Thin Section Description Sheet

Date: 6.4.17

Expedition: 375

Observer: Rn

Site: 1500 Hole: C Core: 16R Sect.: 6 Interval: 66

Sediment Name: volcanogenic sandstone (thin section needed)

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
								60	50	10

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition
Major Siliciclastic Grain Types	
	Quartz
C	Feldspars
	Clay minerals
Lithic Grains	
Sedimentary Lithics	
T	Chert
	Mudstone
(R)	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
Volcaniclastic Grains	
	Transparent glass
C	Colored glass
C	Volcanic lithics
A	Altered volcanic (e.g. palagonite)
Authigenic components	
	Pyrite
R	Calcite
	Dolomite
R	Zeolites
P	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
Pelagic Grains	
	Calcareous
R	Nannofossils
P	Foraminifers
Siliceous	
	Diatom
	Radiolarian
	Silicoflagellate
T	Sponge Spicule
Other bioclasts	
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify):
Minor Other Grain Types	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
Other carbonate allochems	
	Peloid
	Intraclast

T/R/P/C/A/D/M	Composition
Minor Mineral Grain Types	
	Olivine
T	Pyroxene
	Amphibole
	Micas
	Chlorite
	Zircon
π	Apatite
	Opaque Grain
	Glauconite
P	Opaque Grain
	Other (specify):

<sup>1</sup> List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks:

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

# 375 Methods-C-F7

## Sediment Smear Slide / Thin Section Description Sheet

Date: 6. Apr. 2018

Expedition: 375

Observer: Noda /h

Site: 1520 Hole: C Core: 18R Sect.: 4A

Interval: 45

Sediment Name: muddy chalk

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

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition
Major Siliciclastic Grain Types	
	Quartz
<u>T</u>	Feldspars
<u>C</u>	Clay minerals
Lithic Grains	
Sedimentary Lithics	
	Chert
	Mudstone
<u>T</u>	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
Volcaniclastic Grains	
<u>T</u>	Transparent glass
	Colored glass
	Volcanic lithics
<u>R</u>	Altered volcanic (e.g. palagonite)
Authigenic components	
	Pyrite
<u>A</u>	Calcite
	Dolomite
	Zeolites
	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
Pelagic Grains	
	Calcareous
<u>C</u>	Nannofossils
<u>P</u>	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
Other bioclasts	
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify)
Minor Other Grain Types	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
Other carbonate allochems	
	Peloid
	Intraclast

T/R/P/C/A/D/M	Composition
Minor Mineral Grain Types	
	Olivine
	Pyroxene
	Amphibole
	Micas
	Chlorite
	Zircon
<u>T</u>	Apatite
	Opaque Grain
	Glauconite
	Opaque Grain
	Other (specify):

<sup>1</sup> List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks:

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

375 Methods-C-F7

Sediment Smear Slide / Thin Section Description Sheet

Date: 6 Apr 2018

Expedition: 375

Observer: Noda M

Site: 1520 Hole: C Core: 1PR Sect.: 5A

Interval: 86

Sediment Name: muddy chalk

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
A								10	90	

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition	T/R/P/C/A/D/M	Composition	T/R/P/C/A/D/M	Composition
Major Siliciclastic Grain Types		Pelagic Grains		Minor Mineral Grain Types	
	Quartz		Calcareous		Olivine
	Feldspars	C	Nannofossils		Pyroxene
C	Clay minerals	P	Foraminifers		Amphibole
			Siliceous		Micas
	Lithic Grains		Diatom		Chlorite
	Sedimentary Lithics		Radiolarian		Zircon
	Chert		Silicoflagellate	T	Apatite
	Mudstone		Sponge Spicule		Opaque Grain
	Siltstone/sandstone				Glauconite
	Limestone		Other bioclasts		Opaque Grain
	Metamorphic lithic		Mollusk		Other (specify):
	Plutonic lithic		Echinoderm		
			Benthic foraminifer		
	Volcaniclastic Grains		Other bioclast (specify)		
R	Transparent glass				
	Colored glass		Minor Other Grain Types		
	Volcanic lithics		Phosphate (bones, teeth, etc)		
	Altered volcanic (e.g. palagonite)		Marine organic matter		
			Terrestrial organic matter		
	Authigenic components		Other (specify):		
	Pyrite				
A	Calcite		Other carbonate allochems		
	Dolomite		Peloid		
	Zeolites		Intraclast		
	Fe/Mn oxide				
	Other (specify):				

<sup>1</sup> List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks:

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

# 375 Methods-C-F7

## Sediment Smear Slide / Thin Section Description Sheet

Date: 6 Apr. 2018

Expedition: 375

Observer: NODA

Site: 1520 Hole: C Core: 19R Sect.: 2A

Interval: 28

Sediment Name: Foraminiferous chalk

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
<u>X</u>									<u>25</u>	<u>75</u>

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition
Major Siliciclastic Grain Types	
<u>T</u>	Quartz
<u>T</u>	Feldspars
<u>C</u>	Clay minerals
Lithic Grains	
Sedimentary Lithics	
	Chert
	Mudstone
	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
Volcaniclastic Grains	
	Transparent glass
	Colored glass
	Volcanic lithics
<u>R</u>	Altered volcanic (e.g. palagonite)
Authigenic components	
	Pyrite
<u>A</u>	Calcite
	Dolomite
	Zeolites
<u>T</u>	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
Pelagic Grains	
	Calcareous
<u>A</u>	Nannofossils
<u>A</u>	Foraminifers
Siliceous	
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
Other bioclasts	
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify)
Minor Other Grain Types	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
Other carbonate allochems	
	Peloid
	Intraclast

T/R/P/C/A/D/M	Composition
Minor Mineral Grain Types	
	Olivine
	Pyroxene
	Amphibole
	Micas
	Chlorite
	Zircon
	Apatite
	Opaque Grain
	Glaucanite
<u>T</u>	Opaque Grain
	Other (specify):

<sup>1</sup> List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks: Toothpick

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

# 375 Methods-C-F7

## Sediment Smear Slide / Thin Section Description Sheet

Date: 6 Apr

Expedition: 375

Observer: NODA/ML

Site: 1520 Hole: C Core: 19R Sect.: 3A

Interval: 37

Sediment Name: muddy chalk

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
									10	90

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition	T/R/P/C/A/D/M	Composition	T/R/P/C/A/D/M	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Mineral Grain Types
	Quartz		Calcareous		Olivine
	Feldspars	P	Nannofossils		Pyroxene
C	Clay minerals	P	Foraminifers		Amphibole
			Siliceous		Micas
	Lithic Grains		Diatom		Chlorite
	Sedimentary Lithics		Radiolarian		Zircon
	Chert		Silicoflagellate		Apatite
	Mudstone		Sponge Spicule	T	Opaque Grain
	Siltstone/sandstone				Glauconite
	Limestone		Other bioclasts		Opaque Grain
	Metamorphic lithic		Mollusk		Other (specify):
	Plutonic lithic		Echinoderm		
			Benthic foraminifer		
	Volcaniclastic Grains		Other bioclast (specify)		
T	Transparent glass				
	Colored glass		Minor Other Grain Types		
	Volcanic lithics		Phosphate (bones, teeth, etc)		
	Altered volcanic (e.g. palagonite)		Marine organic matter		
			Terrestrial organic matter		
	Authigenic components		Other (specify):		
	Pyrite				
A	Calcite		Other carbonate allochems		
	Dolomite		Peloid		
	Zeolites		Intraclast		
T	Fe/Mn oxide				
	Other (specify):				

List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks: Toothpick

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

# 375 Methods-C-F7

## Sediment Smear Slide / Thin Section Description Sheet

Date: 6. Apr. 2018

Expedition: 375

Observer: NODA

Site: 1520 Hole: C Core: 19R Sect.: 3A

Interval: 113 cm

Sediment Name: chalk

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
								0	10	90

Select one and check.

Select one and check.

T/R/P/C/I/A/D/M	Composition	T/R/P/C/I/A/D/M	Composition	T/R/P/C/I/A/D/M	Composition
Major Siliciclastic Grain Types		Pelagic Grains		Minor Mineral Grain Types	
	Quartz		Calcareous		Olivine
T	Feldspars	A	Nannofossils		Pyroxene
C	Clay minerals	P	Foraminifers		Amphibole
			Siliceous		Micas
	Lithic Grains		Diatom		Chlorite
	Sedimentary Lithics		Radiolarian		Zircon
	Chert		Silicoflagellate	T	Apatite
	Mudstone		Sponge Spicule		Opaque Grain
	Siltstone/sandstone		Other bioclasts		Glauconite
	Limestone		Mollusk		Opaque Grain
	Metamorphic lithic		Echinoderm		Other (specify):
	Plutonic lithic		Benthic foraminifer		
	Volcaniclastic Grains		Other bioclast (specify)		
	Transparent glass		Minor Other Grain Types		
	Colored glass		Phosphate (bones, teeth, etc)		
	Volcanic lithics		Marine organic matter		
	Altered volcanic (e.g. palagonite)		Terrestrial organic matter		
	Authigenic components		Other (specify):		
	Pyrite		Other carbonate allochems		
A	Calcite		Peloid		
	Dolomite		Intraclast		
	Zeolites				
	Fe/Mn oxide				
	Other (specify):				

<sup>1</sup> List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks: Toothpick, better preservation of nanno

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

375 Methods-C-F7

Sediment Smear Slide / Thin Section Description Sheet

Date: 4/6/98

Expedition: 375

Observer: OLIV / L

Site: U1520 Hole: C

Core: 20R Sect.: 2A

Interval: 20

Sediment Name: volcaniclastic sand - 2 grains are broken by smear slide preparation

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
V								40	40	20

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition	T/R/P/C/A/D/M	Composition	T/R/P/C/A/D/M	Composition
Major Siliciclastic Grain Types		Pelagic Grains		Minor Mineral Grain Types	
T	Quartz		Calcareous		Olivine
P	Feldspars	P	Nannofossils		Pyroxene
C	Clay minerals	C	Foraminifers		Amphibole
			Siliceous	P	Micas <u>st</u>
Lithic Grains			Diatom		Chlorite
Sedimentary Lithics			Radiolarian	T	Zircon
T	Chert		Silicoflagellate		Apatite
	Mudstone	P	Sponge Spicule	P	Opaque Grain
C	Siltstone/sandstone				Glauconite
	Limestone		Other bioclasts		Opaque Grain
	Metamorphic lithic	R	Mollusk		Other (specify):
	Plutonic lithic		Echinoderm		
Volcaniclastic Grains			Benthic foraminifer		
	Transparent glass		Other bioclast (specify)		
	Colored glass	(P)	brachiopods		? 2 clasts with palagonite and 3rd clast of altered basalt glass
F	Volcanic lithics	Minor Other Grain Types			
D	Altered volcanic (e.g. palagonite)		Phosphate (bones, teeth, etc)		
			Marine organic matter		
			Terrestrial organic matter		
			Other (specify):		
Authigenic components			Other carbonate allochems		
P	Pyrite		Peloid		
	Calcite	P	Intraclast		
	Dolomite				
P	Zeolites				
P	Fe/Mn oxide				
	Other (specify):				

List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks: algae (?) - P / coarse grains are sand

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

# 375 Methods-C-F7

## Sediment Smear Slide / Thin Section Description Sheet

Date: 4/6/18

Expedition: 375

Observer: OLIV

Site: V1520 Hole: C

Core: 20R

Sept.: 3A

Interval: 70

Sediment Name: muddy chalk

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
<u>V</u>								<u>1</u>	<u>4</u>	<u>95</u>

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition
Major Siliciclastic Grain Types	
	Quartz
<u>T</u>	Feldspars
<u>C</u>	Clay minerals
Lithic Grains	
Sedimentary Lithics	
	Chert
	Mudstone
<u>T</u>	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
Volcaniclastic Grains	
	Transparent glass
<u>A</u>	Colored glass
	Volcanic lithics
<u>B</u>	Altered volcanic (e.g. palagonite)
Authigenic components	
<u>T</u>	Pyrite
<u>C</u>	Calcite
	Dolomite
	Zeolites
<u>P</u>	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
Pelagic Grains	
	Calcareous
<u>P</u>	Nannofossils
<u>P</u>	Foraminifers
Siliceous	
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
Other bioclasts	
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify):
Minor Other Grain Types	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
Other carbonate allochems	
	Peloid
	Intraclast

T/R/P/C/A/D/M	Composition
Minor Mineral Grain Types	
	Olivine
	Pyroxene
	Amphibole
<u>T</u>	Micas <u>BT</u>
	Chlorite
	Zircon
	Apatite
<u>T</u>	Opaque Grain
	Glauconite
	Opaque Grain
	Other (specify):

<sup>1</sup> List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks: \_\_\_\_\_

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



# 375 Methods-C-F7

## Sediment Smear Slide / Thin Section Description Sheet

Date: 4/6/18

Expedition: 375

Observer: OLIV/R

Site: U1520 Hole: C

Core: 21B Sect.: 1A

Interval: 75

Sediment Name: chalk

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
<u>✓</u>								<u>/</u>	<u>1</u>	<u>99</u>

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition
Major Siliciclastic Grain Types	
	Quartz
	Feldspars
<u>P</u>	Clay minerals
Lithic Grains	
Sedimentary Lithics	
	Chert
	Mudstone
	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
Volcaniclastic Grains	
<u>T</u>	Transparent glass
	Colored glass
	Volcanic lithics
<u>T</u>	Altered volcanic (e.g. palagonite)
Authigenic components	
	Pyrite
<u>A</u>	Calcite
	Dolomite
<u>T</u>	Zeolites
	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
Pelagic Grains	
	Calcareous
<u>D</u>	Nannofossils
<u>A</u>	Foraminifers
Siliceous	
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
Other bioclasts	
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify):
Minor Other Grain Types	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
Other carbonate allochems	
	Peloid
	Intraclast

T/R/P/C/A/D/M	Composition
Minor Mineral Grain Types	
	Olivine
	Pyroxene
	Amphibole
	Micas
<u>T</u>	Chlorite
	Zircon
	Apatite
<u>T</u>	Opaque Grain
	Glauconite
	Opaque Grain
	Other (specify):

<sup>1</sup> List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks: \_\_\_\_\_

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

375 Methods-C-F7

Sediment Smear Slide / Thin Section Description Sheet

Date: 6, Apr, 2018

Expedition: 375

Observer: Noda/k

Site: 1520 Hole: C Core: 22R Sect.: 5A Interval: 100

Sediment Name: foraminiferous chalk

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
X								3	70	27

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition
Major Siliciclastic Grain Types	
	Quartz
P	Feldspars
C	Clay minerals
Lithic Grains	
Sedimentary Lithics	
	Chert
	Mudstone
	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
Volcaniclastic Grains	
	Transparent glass
	Colored glass
	Volcanic lithics
	Altered volcanic (e.g. palagonite)
Authigenic components	
	Pyrite
C	Calcite
	Dolomite
	Zeolites
	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
Pelagic Grains	
	Calcareous
P	Nannofossils
D	Foraminifers
Siliceous	
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
Other bioclasts	
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify)
Minor Other Grain Types	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
Other carbonate allochems	
	Peloid
	Intraclast

T/R/P/C/A/D/M	Composition
Minor Mineral Grain Types	
	Olivine
	Pyroxene
	Amphibole
	Micas
	Chlorite
	Zircon
	Apatite
	Opaque Grain
	Glauconite
	Opaque Grain
	Other (specify):

<sup>1</sup> List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks:

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

375 Methods-C-F7

Sediment Smear Slide / Thin Section Description Sheet

Date: 6 Apr. 2018

Expedition: 375

Observer: Nodalk

Site: 1520 Hole: C Core: 22R Sect.: 6A

Interval: 43

Sediment Name: muddy chalk  
foraminifer

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

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition
Major Siliciclastic Grain Types	
	Quartz
C	Feldspars
	Clay minerals
Lithic Grains	
Sedimentary Lithics	
	Chert
	Mudstone
	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
Volcaniclastic Grains	
	Transparent glass
	Colored glass
	Volcanic lithics
	Altered volcanic (e.g. palagonite)
Authigenic components	
	Pyrite
C	Calcite
	Dolomite
	Zeolites
7	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
Pelagic Grains	
	Calcareous
SA	Nannofossils
	Foraminifers
Siliceous	
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
Other bioclasts	
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify)
Minor Other Grain Types	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
Other carbonate allochems	
	Peloid
	Intraclast

T/R/P/C/A/D/M	Composition
Minor Mineral Grain Types	
	Olivine
	Pyroxene
	Amphibole
	Micas
	Chlorite
	Zircon
	Apatite
	Opaque Grain
	Glauconite
T	Opaque Grain
	Other (specify):

<sup>1</sup> List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks:

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

375 Methods-C-F7

Sediment Smear Slide / Thin Section Description Sheet

Date: 2.9.

Expedition: 375 Observer: 16

Site: 7520 Hole: C Core: 23R Sect.: 5 Interval: 79

Sediment Name: de vitrified tuff?

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
									10	90

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition
Major Siliciclastic Grain Types	
	Quartz
<u>R</u>	Feldspars
<u>A</u>	Clay minerals
Lithic Grains	
Sedimentary Lithics	
	Chert
	Mudstone
<u>T</u>	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
Volcaniclastic Grains	
<u>R</u>	Transparent glass <u>D</u>
<u>R</u>	Colored glass
<u>T</u>	Volcanic lithics
<u>R</u>	Altered volcanic (e.g. palagonite)
Authigenic components	
	Pyrite
<u>T</u>	Calcite
	Dolomite
<u>E</u>	Zeolites
<u>R</u>	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
Pelagic Grains	
	Calcareous
	Nannofossils
	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
Other bioclasts	
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify)
Minor Other Grain Types	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
Other carbonate allochems	
	Peloid
	Intraclast

T/R/P/C/A/D/M	Composition
Minor Mineral Grain Types	
	Olivine
	Pyroxene
<u>T</u>	Amphibole
	Micas
	Chlorite
<u>T</u>	Zircon
<u>P</u>	Apatite
	Opaque Grain
	Glauconite
<u>P</u>	Opaque Grain
	Other (specify):

<sup>1</sup> List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks: D = Dominant de vitrified glass

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

375 Methods-C-F7

Sediment Smear Slide / Thin Section Description Sheet

Date: 6.9

Expedition: 375 Observer: Ku

Site: 1520 Hole: C Core: QR Sect.: 5 Interval: 99

Sediment Name: volcaniclastic silty clay (dehydrated tuff?)

Smear Slide	Thin Section	Coarse Fraction	Grain Mount

Select one and check.

Granular Sediment			Other material	Percent Texture		
Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				<u>5</u>	<u>15</u>	<u>80</u>

Select one and check.

T/R/P/C/A/D/M	Composition
Major Siliciclastic Grain Types	
<u>T</u>	Quartz
<u>A</u>	Feldspars
<u>A</u>	Clay minerals
Lithic Grains	
Sedimentary Lithics	
	Chert
<u>C</u>	Mudstone
	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
Volcaniclastic Grains	
<u>(A)</u>	Transparent glass <u>dehydrated</u>
<u>P</u>	Colored glass
<u>P</u>	Volcanic lithics
<u>C</u>	Altered volcanic (e.g. palagonite)
Authigenic components	
<u>R</u>	Pyrite
	Calcite
	Dolomite
<u>P</u>	Zeolites
<u>R</u>	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
Pelagic Grains	
	Calcareous
<u>R</u>	Nannofossils
<u>R</u>	Foraminifers
Siliceous	
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
Other bioclasts	
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify):
Minor Other Grain Types	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
Other carbonate allochems	
	Peloid
	Intraclast

T/R/P/C/A/D/M	Composition
Minor Mineral Grain Types	
	Olivine
	Pyroxene
<u>P</u>	Amphibole
	Micas
	Chlorite
	Zircon
<u>C</u>	Apatite
<u>P</u>	Opaque Grain
	Glauconite
	Opaque Grain
	Other (specify):

<sup>1</sup> List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks: \_\_\_\_\_

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

375 Methods-C-F7

Sediment Smear Slide / Thin Section Description Sheet

Date: 7.4.18

Expedition: 375

Observer: *en*

Site: 1520 Hole: C Core: 23R Sect.: 6 Interval: 12

Sediment Name: devitrified tuff

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
								5	70	25

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition
Major Siliciclastic Grain Types	
	Quartz
<i>R</i>	Feldspars
<i>A</i>	Clay minerals
Lithic Grains	
Sedimentary Lithics	
	Chert
	Mudstone
	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
Volcaniclastic Grains	
	Transparent glass
<i>T</i>	Colored glass
	Volcanic lithics
	Altered volcanic (e.g. palagonite)
Authigenic components	
<i>P</i>	Pyrite
	Calcite
	Dolomite
<i>C</i>	Zeolites
<i>C</i>	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
Pelagic Grains	
	Calcareous
<i>T</i>	Nannofossils
	Foraminifers
Siliceous	
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
Other bioclasts	
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify)
Minor Other Grain Types	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
Other carbonate allochems	
	Peloid
	Intraclast

T/R/P/C/A/D/M	Composition
Minor Mineral Grain Types	
	Olivine
	Pyroxene
<i>T</i>	Amphibole
	Micas
	Chlorite
	Zircon
<i>P</i>	Apatite
	Opaque Grain
	Glauconite
<i>P</i>	Opaque Grain
	Other (specify):

*P*  
*T*  
*C*  
devitrified glass (translucent)

<sup>1</sup> List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks: *Dominant to major devitrified glass shards*

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

375 Methods-C-F7

Sediment Smear Slide / Thin Section Description Sheet

Date: 7.4.

Expedition: 375 Observer: RM  
 Site: 1520 Hole: C Core: 23R Sect.: B Interval: 45  
 Sediment Name: volcaniclastic sand

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
								<u>60</u>	<u>30</u>	<u>10</u>

Select one and check.

Select one and check.

T/R/P/C/I/A/D/M	Composition
Major Siliciclastic Grain Types	
	Quartz
<u>T</u>	Feldspars
	Clay minerals
Lithic Grains	
Sedimentary Lithics	
<u>P</u>	Chert <u>1 (altered?)</u>
	Mudstone
	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
Volcaniclastic Grains	
	Transparent glass
<u>R</u>	Colored glass
<u>R</u>	Volcanic lithics
<u>D</u>	Altered volcanic (e.g. palagonite)
Authigenic components	
	Pyrite
	Calcite
	Dolomite
<u>E</u>	Zeolites
	Fe/Mn oxide
	Other (specify):

T/R/P/C/I/A/D/M	Composition
Pelagic Grains	
	Calcareous
	Nannofossils
	Foraminifers
Siliceous	
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
Other bioclasts	
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify)
Minor Other Grain Types	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
Other carbonate allochems	
	Peloid
	Intraclast

T/R/P/C/I/A/D/M	Composition
Minor Mineral Grain Types	
	Olivine
<u>T</u>	Pyroxene
	Amphibole
	Micas
	Chlorite
	Zircon
<u>C</u>	Apatite
<u>R</u>	Opaque Grain
	Glauconite
	Opaque Grain
	Other (specify):

<sup>1</sup> List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks: \_\_\_\_\_

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

375 Methods-C-F7

Sediment Smear Slide / Thin Section Description Sheet

Date: 74

Expedition: 375

Observer: Ru

Site: 1520 Hole: C Core: 24 R Sect.: 1

Interval: 90

Sediment Name: volcaniclastic silty dgs

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
								10	30	60

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition
Major Siliciclastic Grain Types	
	Quartz
R	Feldspars
A	Clay minerals
Lithic Grains	
Sedimentary Lithics	
	Chert
	Mudstone
T	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
Volcaniclastic Grains	
R	Transparent glass
R	Colored glass
T	Volcanic lithics
A	Altered volcanic (e.g. palagonite)
Authigenic components	
	Pyrite
	Calcite
	Dolomite
Sp	Zeolites
	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
Pelagic Grains	
	Calcareous
	Nannofossils
	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
Other bioclasts	
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify)
Minor Other Grain Types	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
Other carbonate allochems	
	Peloid
	Intraclast

T/R/P/C/A/D/M	Composition
Minor Mineral Grain Types	
	Olivine
	Pyroxene
	Amphibole
	Micas
	Chlorite
	Zircon
R	Apatite
C	Opaque Grain
	Glaucanite
	Opaque Grain
	Other (specify):

<sup>1</sup> List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks:

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



# 375 Methods-C-F7

## Sediment Smear Slide / Thin Section Description Sheet

Date: \_\_\_\_\_

Expedition: 375 Observer: RM

Site: 7520 Hole: C Core: 24R Sect.: 3 Interval: 84

Sediment Name: volcanic date silt

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
								10	70	20

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition
Major Siliciclastic Grain Types	
	Quartz
P	Feldspars
C	Clay minerals
Lithic Grains	
Sedimentary Lithics	
P	Chert
T	Mudstone
	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
Volcaniclastic Grains	
	Transparent glass
R	Colored glass
R	Volcanic lithics
D	Altered volcanic (e.g. palagonite)
Authigenic components	
T	Pyrite
	Calcite
	Dolomite
C	Zeolites
P	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
Pelagic Grains	
	Calcareous
	Nannofossils
	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
Other bioclasts	
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify)
Minor Other Grain Types	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
Other carbonate allochems	
	Peloid
	Intraclast

T/R/P/C/A/D/M	Composition
Minor Mineral Grain Types	
	Olivine
	Pyroxene
	Amphibole
	Micas
	Chlorite
	Zircon
R	Apatite
P	Opaque Grain
	Glaucanite
	Opaque Grain
	Other (specify):

<sup>1</sup> List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks: \_\_\_\_\_

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

375 Methods-C-F7

Sediment Smear Slide / Thin Section Description Sheet

Date: 7.4.

Expedition: 375

Observer: RM

Site: 1520 Hole: C Core: 25R Sect.: 2 Interval: 122

Sediment Name: volcaniclastic sandy silt => all carfull non " sand the matrix

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

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition
Major Siliciclastic Grain Types	
	Quartz
<u>P</u>	Feldspars
	Clay minerals
Lithic Grains	
Sedimentary Lithics	
<u>T</u>	Chert
	Mudstone
	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
Volcaniclastic Grains	
	Transparent glass
<u>P</u>	Colored glass
<u>P</u>	Volcanic lithics
<u>D</u>	Altered volcanic(e.g. palagonite)
Authigenic components	
<u>T</u>	Pyrite
	Calcite
	Dolomite
<u>C</u>	Zeolites
<u>P</u>	Fe/Mn oxide
	Other (specify):

<sup>1</sup> List under remarks if possible

T/R/P/C/A/D/M	Composition
Pelagic Grains	
	Calcareous
	Nannofossils
	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
Other bioclasts	
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify)
Minor Other Grain Types	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
Other carbonate allochems	
	Peloid
	Intraclast

Abundances like in 375 Methods-C-Table 2

T/R/P/C/A/D/M	Composition
Minor Mineral Grain Types	
	Olivine
	Pyroxene
	Amphibole
	Micas
	Chlorite
	Zircon
<u>R</u>	Apatite
<u>C</u>	Opaque Grain
	Glaucanite
	Opaque Grain
	Other (specify):

Remarks:

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

# 375 Methods-C-F7

## Sediment Smear Slide / Thin Section Description Sheet

Date: 4/7/18

Expedition: 375

Observer: OLIV

Site: U1520

Hole: C

Core: 28B

Sect.: 2A

Interval: 122

Sediment Name:

volcaniclastic sandstone with bioclastic

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

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition
Major Siliciclastic Grain Types	
	Quartz
	Feldspars
	Clay minerals
Lithic Grains	
Sedimentary Lithics	
P	Chert
	Mudstone
	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
Volcaniclastic Grains	
	Transparent glass
P	Colored glass
P	Volcanic lithics
A	Altered volcanic (e.g. palagonite)
Authigenic components	
	Pyrite
C	Calcite
P	Dolomite
	Zeolites
P	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
Pelagic Grains	
	Calcareous
	Nannofossils
R	Foraminifers
Siliceous	
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
Other bioclasts	
C	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify)
Minor Other Grain Types	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
Other carbonate allochems	
R	Peloid
	Intraclast
T	Algal
C	Oolites and coeils

T/R/P/C/A/D/M	Composition
Minor Mineral Grain Types	
	Olivine
	Pyroxene
	Amphibole
	Micas
	Chlorite
	Zircon
R	Apatite
	Opaque Grain
	Glauconite
P	Opaque Grain
	Other (specify):
T	epidote

List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks:

Foraminifers are very altered  
oolites infilled by silica  
and bioclastic

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



# 375 Methods-C-F7

## Sediment Smear Slide / Thin Section Description Sheet

Date: OLIV 8

Expedition: 375

Observer: 4/7/18

Site: U1520C Hole: C

Core: 29B Sect.: 4A

Interval: 69

Sediment Name: volcaniclastic coarse sandstone

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

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition
Major Siliciclastic Grain Types	
	Quartz
	Feldspars
<u>B</u>	Clay minerals
Lithic Grains	
Sedimentary Lithics	
	Chert
	Mudstone
	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
Volcaniclastic Grains	
	Transparent glass
<u>P</u>	Colored glass
<u>P</u>	Volcanic lithics
<u>C</u>	Altered volcanic (e.g. palagonite)
Authigenic components	
<u>B</u>	Pyrite
<u>A</u>	Calcite
	Dolomite
<u>A</u>	Zeolites
<u>P</u>	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
Pelagic Grains	
	Calcareous
	Nannofossils
<u>T</u>	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
Other bioclasts	
<u>P</u>	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify):
Minor Other Grain Types	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
Other carbonate allochems	
	Peloid
	Intraclast
<u>P</u>	<u>voids</u>

T/R/P/C/A/D/M	Composition
Minor Mineral Grain Types	
	Olivine
	Pyroxene
	Amphibole
	Micas
	Chlorite
	Zircon
<u>T</u>	Apatite
<u>P</u>	Opaque Grain
	Glauconite
	Opaque Grain
	Other (specify):

<sup>1</sup> List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks: bioclasts infilled by silica

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

*[Handwritten signature]*

375 Methods-C-F7

Sediment Smear Slide / Thin Section Description Sheet

Date: 4/7/18

Expedition: 375

Observer: OLIV

Site: U1520

Hole: C

Core: 31B

Sect.: 1A

Interval: 58

Sediment Name: volcanoclastic coarse sandstone  
dark/brown

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
V								30	50	20

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition
Major Siliciclastic Grain Types	
	Quartz
	Feldspars
	Clay minerals
Lithic Grains	
Sedimentary Lithics	
P	Chert
	Mudstone
	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
Volcaniclastic Grains	
	Transparent glass
P	Colored glass
B	Volcanic lithics
A	Altered volcanic (e.g. palagonite)
Authigenic components	
	Pyrite
A	Calcite
	Dolomite
C	Zeolites
T	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
Pelagic Grains	
	Calcareous
	Nannofossils
	Foraminifers
Siliceous	
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
Other bioclasts	
T	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify)
Minor Other Grain Types	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
Other carbonate allochems	
	Peloid
	Intraclast
B	oolites

T/R/P/C/A/D/M	Composition
Minor Mineral Grain Types	
	Olivine
	Pyroxene
	Amphibole
	Micas
	Chlorite
T	Zircon
B	Apatite
P	Opaque Grain
	Glauconite
	Opaque Grain
	Other (specify):

<sup>1</sup> List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks:

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

375 Methods-C-F7

Sediment Smear Slide / Thin Section Description Sheet

Date: 7 Apr. 2018

Expedition: 375

Observer: Noda

Site: 1520 Hole: C Core: 32R Sect.: 1A

Interval: 40

Sediment Name: volcanoclastic coarse sand

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcanoclastic	Pelagic		Sand	Silt	Clay
X								20	60	20

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition
Major Siliciclastic Grain Types	
	Quartz
A	Feldspars
	Clay minerals
Lithic Grains	
Sedimentary Lithics	
	Chert
	Mudstone
	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
Volcanoclastic Grains	
R	Transparent glass
	Colored glass
	Volcanic lithics
A	Altered volcanic (e.g. palagonite)
Authigenic components	
	Pyrite
R	Calcite
R	Dolomite
P	Zeolites
R	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
Pelagic Grains	
	Calcareous
	Nannofossils
	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
Other bioclasts	
P	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify)
Minor Other Grain Types	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
Other carbonate allochems	
	Peloid
	Intraclast
P	oolites

T/R/P/C/A/D/M	Composition
Minor Mineral Grain Types	
	Olivine
	Pyroxene
	Amphibole
	Micas
	Chlorite
	Zircon
	Apatite
	Opaque Grain
	Glaucconite
P	Opaque Grain
	Other (specify):

<sup>1</sup> List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks:

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

375 Methods-C-F7

Sediment Smear Slide / Thin Section Description Sheet

Date: 8.9.18

Expedition: 375

Observer: Rn

Site: 1520

Hole: C

Core: 34

Sect.: 3

Interval: 64

Sediment Name: Marl with foraminifera

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	30	60

Select one and check.

T/R/P/C/A/D/M	Composition
Major Siliciclastic Grain Types	
T	Quartz
P	Feldspars
D	Clay minerals
Lithic Grains	
Sedimentary Lithics	
T	Chert
	Mudstone
P	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
Volcaniclastic Grains	
	Transparent glass
P	Colored glass
	Volcanic lithics
E	Altered volcanic (e.g. palagonite)
Authigenic components	
	Pyrite
A	Calcite
	Dolomite
R	Zeolites
R	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
Pelagic Grains	
	Calcareous
T	Nannofossils
A	Foraminifers
Siliceous	
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
Other bioclasts	
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify):
Minor Other Grain Types	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
Other carbonate allochems	
	Peloid
	Intraclast

T/R/P/C/A/D/M	Composition
Minor Mineral Grain Types	
	Olivine
	Pyroxene
	Amphibole
	Micas
	Chlorite
	Zircon
T	Apatite
	Opaque Grain
	Glauconite
P	Opaque Grain
	Other (specify):

<sup>1</sup> List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks:

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

375 Methods-C-F7

Sediment Smear Slide / Thin Section Description Sheet

Date: 8.4.18

Expedition: 375

Observer: 1400

Site: 1520 Hole: C Core: 34 Sect.: 5

Interval: 70

Sediment Name: Marl

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

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition
Major Siliciclastic Grain Types	
	Quartz
<u>R</u>	Feldspars
<u>D</u>	Clay minerals
Lithic Grains	
Sedimentary Lithics	
<u>P</u>	Chert ( <u>Chalcedony</u> )
	Mudstone
<u>T</u>	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
Volcaniclastic Grains	
	Transparent glass
	Colored glass
<u>F</u>	Volcanic lithics
<u>P</u>	Altered volcanic (e.g. palagonite)
Authigenic components	
	Pyrite
<u>C</u>	Calcite
	Dolomite
<u>T</u>	Zeolites
<u>C</u>	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
Pelagic Grains	
	Calcareous
<u>R</u>	Nannofossils
<u>P</u>	Foraminifers
Siliceous	
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
Other bioclasts	
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify)
Minor Other Grain Types	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
Other carbonate allochems	
	Peloid
	Intraclast

T/R/P/C/A/D/M	Composition
Minor Mineral Grain Types	
	Olivine
	Pyroxene
	Amphibole
	Micas
	Chlorite
	Zircon
<u>T</u>	Apatite
<u>P</u>	Opaque Grain
	Glauconite
	Opaque Grain
	Other (specify):

<sup>1</sup> List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks: \_\_\_\_\_

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



# 375 Methods-C-F7

## Sediment Smear Slide / Thin Section Description Sheet

Date: 8. Apr. 2018

Expedition: 375

Observer: Noda K

Site: 1520 Hole: C Core: 41R Sect.: 1A

Interval: 56

Sediment Name: volcaniclastic calcarenite

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
V								5	75	20

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition
Major Siliciclastic Grain Types	
T	Quartz
P	Feldspars
P	Clay minerals
Lithic Grains	
Sedimentary Lithics	
R	Chert
	Mudstone
	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
Volcaniclastic Grains	
	Transparent glass
P	Colored glass
C	Volcanic lithics
A	Altered volcanic (e.g. palagonite)
Authigenic components	
R	Pyrite
C	Calcite
	Dolomite
	Zeolites
R	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
Pelagic Grains	
	Calcareous
R	Nannofossils
	Foraminifers
Siliceous	
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
Other bioclasts	
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify)
Minor Other Grain Types	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
Other carbonate allochems	
	Peloid
	Intraclast
R	oooids

T/R/P/C/A/D/M	Composition
Minor Mineral Grain Types	
	Olivine
	Pyroxene
	Amphibole
	Micas
R	Chlorite
	Zircon
	Apatite
	Opaque Grain
	Glauconite
R	Opaque Grain
	Other (specify):

<sup>1</sup> List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks:

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

375 Methods-C-F7

Sediment Smear Slide / Thin Section Description Sheet

Date: 8. Apr. 2018

Expedition: 375

Observer: Noda/K

Site: 1520 Hole: C

Core: 41R Sect.: 1A

Interval: 116

Sediment Name: volcanoclastic siltstone

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcanoclastic	Pelagic		Sand	Silt	Clay
X								5	70	25

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition
Major Siliciclastic Grain Types	
	Quartz
R	Feldspars
C	Clay minerals
Lithic Grains	
Sedimentary Lithics	
	Chert
	Mudstone
	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
Volcanoclastic Grains	
	Transparent glass
	Colored glass
	Volcanic lithics
D	Altered volcanic (e.g. palagonite)
Authigenic components	
	Pyrite
P	Calcite
	Dolomite
C	Zeolites
	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
Pelagic Grains	
	Calcareous
R	Nannofossils
	Foraminifers
Siliceous	
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
Other bioclasts	
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify)
Minor Other Grain Types	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
Other carbonate allochems	
	Peloid
	Intraclast

T/R/P/C/A/D/M	Composition
Minor Mineral Grain Types	
	Olivine
	Pyroxene
	Amphibole
R	Micas Bt
	Chlorite
	Zircon
T	Apatite
	Opaque Grain
	Glauconite
P	Opaque Grain
	Other (specify):

<sup>1</sup> List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks:

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

# 375 Methods-C-F7

## Sediment Smear Slide / Thin Section Description Sheet

Date: 8. Apr. 2018

Expedition: 375

Observer: Noda

Site: 1520 Hole: C Core: 41R Sect.: 2A

Interval: 67

Sediment Name: volcaniclastic sandy siltstone

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
<input checked="" type="checkbox"/>								30	60	10

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition	T/R/P/C/A/D/M	Composition	T/R/P/C/A/D/M	Composition
Major Siliciclastic Grain Types		Pelagic Grains		Minor Mineral Grain Types	
T	Quartz		Calcareous		Olivine
P	Feldspars		Nannofossils		Pyroxene
A	Clay minerals	T	Foraminifers		Amphibole
			Siliceous		Micas <u>R</u>
	Lithic Grains		Diatom		Chlorite
	Sedimentary Lithics		Radiolarian		Zircon
	Chert		Silicoflagellate		Apatite
	Mudstone		Sponge Spicule		Opaque Grain
	Siltstone/sandstone			P	Glauconite <u>20% (4/10) to 50%</u>
	Limestone		Other bioclasts		Opaque Grain
	Metamorphic lithic		Mollusk		Other (specify):
	Plutonic lithic		Echinoderm		
			Benthic foraminifer		
	Volcaniclastic Grains		Other bioclast (specify)		
	Transparent glass				
	Colored glass		Minor Other Grain Types		
P	Volcanic lithics		Phosphate (bones, teeth, etc)		
A	Altered volcanic (e.g. palagonite)		Marine organic matter		
D	<u>deutified</u>		Terrestrial organic matter		
	Authigenic components		Other (specify):		
	Pyrite				
R	Calcite		Other carbonate allochems		
T	Dolomite		Peloid		
	Zeolites		Intraclast		
P	Fe/Mn oxide				
	Other (specify):				

<sup>1</sup> List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks:

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

# 375 Methods-C-F7

## Sediment Smear Slide / Thin Section Description Sheet

Date: 4/8/18

Expedition: 375

Observer: OCIV

Site: U1520 Hole: C Core: 42R Sect.: 1A Interval: 124

Sediment Name: Volcaniclastic coarse sandstone

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
V								30	50	20

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition
Major Siliciclastic Grain Types	
	Quartz
R	Feldspars
C	Clay minerals
Lithic Grains	
Sedimentary Lithics	
	Chert
	Mudstone
	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
Volcaniclastic Grains	
	Transparent glass
P	Colored glass
R	Volcanic lithics
A	Altered volcanic (e.g. palagonite)
Authigenic components	
	Pyrite
A	Calcite
	Dolomite
P	Zeolites
P	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
Pelagic Grains	
	Calcareous
	Nannofossils
	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
P	Other bioclasts
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify)
Minor Other Grain Types	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
Other carbonate allochems	
	Peloid
	Intraclast
P	oolites

T/R/P/C/A/D/M	Composition
Minor Mineral Grain Types	
	Olivine
	Pyroxene
	Amphibole
	Micas
T	Chlorite
	Zircon
T	Apatite
	Opaque Grain
	Glauconite
P	Opaque Grain
	Other (specify):

List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks: bioclast are recrystallized  
oolites are altered with silica rim

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

**375 Methods-C-F7**

**Sediment Smear Slide / Thin Section Description Sheet**

Date: 4/8/18

Expedition: 375

Observer: OLIV JK

Site: 01520

Hole: C

Core: 42R

Sect.: 4A

Interval: 104

Sediment Name: silty claystone

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
				1	9	90

Select one and check.

T/R/P/C/A/D/M	Composition
Major Siliciclastic Grain Types	
	Quartz
	Feldspars
A	Clay minerals
Lithic Grains	
Sedimentary Lithics	
P	Chert
	Mudstone
	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
Volcaniclastic Grains	
	Transparent glass
R	Colored glass
	Volcanic lithics
C	Altered volcanic (e.g. palagonite)
Authigenic components	
	Pyrite
C	Calcite
	Dolomite
C	Zeolites
P	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
Pelagic Grains	
	Calcareous
R	Nannofossils
	Foraminifers
Siliceous	
	Diatom
	Radiolarian
	Silicoflagellate
T	Sponge Spicule
Other bioclasts	
	Mollusk
	Echinoderm
	Benthic foraminifer
R	Other bioclast (specify)
Minor Other Grain Types	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
Other carbonate allochems	
	Peloid
	Intraclast

T/R/P/C/A/D/M	Composition
Minor Mineral Grain Types	
	Olivine
	Pyroxene
	Amphibole
	Micas
T	Chlorite
	Zircon
T	Apatite
P	Opaque Grain
	Glauconite
	Opaque Grain
	Other (specify):

<sup>1</sup> List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks: grains and bioclasts recrystallized

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

# 375 Methods-C-F7

## Sediment Smear Slide / Thin Section Description Sheet

Date: 4/8/18

Expedition: 375

Observer: OLN

Site: V1520 Hole: C Core: 43R Sect.: 2A

Interval: 34

Sediment Name: Silty claystone

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
<u>V</u>								<u>2</u>	<u>23</u>	<u>75</u>

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition	T/R/P/C/A/D/M	Composition	T/R/P/C/A/D/M	Composition
<b>Major Siliciclastic Grain Types</b>		<b>Pelagic Grains</b>		<b>Minor Mineral Grain Types</b>	
	Quartz		Calcareous		Olivine
<u>P</u>	Feldspars		Nannofossils		Pyroxene
<u>C</u>	Clay minerals		Foraminifers		Amphibole
			Siliceous		Micas
	<b>Lithic Grains</b>		Diatom	<u>T</u>	Chlorite
	<b>Sedimentary Lithics</b>		Radiolarian		Zircon
<u>R</u>	Chert		Silicoflagellate	<u>T</u>	Apatite
	Mudstone		Sponge Spicule	<u>C</u>	Opaque Grain
<u>C</u>	Siltstone/sandstone				Glaucanite
	Limestone		<b>Other bioclasts</b>		Opaque Grain
	Metamorphic lithic		Mollusk		Other (specify):
	Plutonic lithic		Echinoderm		
			Benthic foraminifer		
	<b>Volcaniclastic Grains</b>		Other bioclast (specify)		
	Transparent glass				
<u>T</u>	Colored glass		<b>Minor Other Grain Types</b>		
<u>P</u>	Volcanic lithics		Phosphate (bones, teeth, etc)		
<u>C</u>	Altered volcanic(e.g. palagonite)		Marine organic matter		
			Terrestrial organic matter		
	<b>Authigenic components</b>		Other (specify):		
<u>T</u>	Pyrite				
<u>P</u>	Calcite		<b>Other carbonate allochems</b>		
<u>P</u>	Dolomite		Peloid		
<u>P</u>	Zeolites		Intraclast		
<u>P</u>	Fe/Mn oxide				
	Other (specify):				

<sup>1</sup> List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks: \_\_\_\_\_

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



# 375 Methods-C-F7

## Sediment Smear Slide / Thin Section Description Sheet

Date: 4/8/18

Expedition: 375 Observer: OLIV

Site: V1520 Hole: C Core: 43R Sect.: 3A Interval: 68

Sediment Name: coarse sandstone

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
V								30	50	20

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition
Major Siliciclastic Grain Types	
B	Quartz
T	Feldspars
A	Clay minerals
Lithic Grains	
Sedimentary Lithics	
P	Chert
	Mudstone
	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
Volcaniclastic Grains	
	Transparent glass
	Colored glass
	Volcanic lithics
C	Altered volcanic (e.g. palagonite)
Authigenic components	
	Pyrite
C	Calcite
T	Dolomite
	Zeolites
	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
Pelagic Grains	
	Calcareous
	Nannofossils
T	Foraminifers
Siliceous	
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
Other bioclasts	
B	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify)
Minor Other Grain Types	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
Other carbonate allochems	
	Peloid
	Intraclast

T/R/P/C/A/D/M	Composition
Minor Mineral Grain Types	
	Olivine
	Pyroxene
	Amphibole
	Micas
	Chlorite
	Zircon
	Apatite
	Opaque Grain
P	Glaucanite
	Opaque Grain
	Other (specify):

<sup>1</sup> List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks: \_\_\_\_\_

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

# 375 Methods-C-F7

## Sediment Smear Slide / Thin Section Description Sheet

Date: \_\_\_\_\_

Expedition: 375 Observer: OLIV

Site: U1520 Hole: C Core: 43B Sect.: CCA Interval: 31

Sediment Name: limestone

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
V								/	10	90

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition	T/R/P/C/A/D/M	Composition	T/R/P/C/A/D/M	Composition
Major Siliciclastic Grain Types		Pelagic Grains		Minor Mineral Grain Types	
	Quartz		Calcareous		Olivine
	Feldspars		Nannofossils		Pyroxene
	Clay minerals		Foraminifers		Amphibole
			Siliceous		Micas
	Lithic Grains		Diatom	T	Chlorite
	Sedimentary Lithics		Radiolarian		Zircon
	Chert		Silicoflagellate		Apatite
	Mudstone		Sponge Spicule	T	Opaque Grain
	Siltstone/sandstone				Glauconite
	Limestone		Other bioclasts		Opaque Grain
	Metamorphic lithic		Mollusk		Other (specify):
	Plutonic lithic		Echinoderm		
			Benthic foraminifer		
	Volcaniclastic Grains		Other bioclast (specify)		
	Transparent glass				
	Colored glass		Minor Other Grain Types		
	Volcanic lithics		Phosphate (bones, teeth, etc)		
	Altered volcanic (e.g. palagonite)		Marine organic matter		
			Terrestrial organic matter		
	Authigenic components		Other (specify):		
B	Pyrite				
M	Calcite		Other carbonate allochems		
	Dolomite		Peloid		
	Zeolites		Intraclast		
	Fe/Mn oxide				
	Other (specify):				

<sup>1</sup> List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks: \_\_\_\_\_

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



# 375 Methods-C-F7

## Sediment Smear Slide / Thin Section Description Sheet

Date: 4/9/18

Expedition: 375

Observer: OLIV

Site: V1520

Hole: C

Core: 2R

Sect.: 1

Interval: 23-25

Sediment Name: marl

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
	N							1	1	99

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition
Major Siliciclastic Grain Types	
	Quartz
T	Feldspars
	Clay minerals
Lithic Grains	
Sedimentary Lithics	
R	Chert
	Mudstone
	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
Volcaniclastic Grains	
	Transparent glass
T	Colored glass
	Volcanic lithics
A	Altered volcanic (e.g. palagonite)
Authigenic components	
	Pyrite
D	Calcite + micrite
	Dolomite
	Zeolites
	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
Pelagic Grains	
	Calcareous
	Nannofossils
P	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
C	Other bioclasts
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify)
Minor Other Grain Types	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
Other carbonate allochems	
	Peloid
	Intraclast
P	oolites

T/R/P/C/A/D/M	Composition
Minor Mineral Grain Types	
	Olivine
	Pyroxene
	Amphibole
	Micas
T	Chlorite
	Zircon
	Apatite
	Opaque Grain
T	Glauconite
R	Opaque Grain
	Other (specify):
T	Dense minerals

<sup>1</sup> List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks: some lithoclasts have calcite rim and micrite core  
oolites are micritized

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

375 Methods-C-F7

Sediment Smear Slide / Thin Section Description Sheet

Date: 4/10/18

Expedition: 375

Observer: OLIV

Site: U1520

Hole: C

Core: 6B

Sect.: 2

Interval: 11-14

Sediment Name:

smear

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
				1	1	98

Select one and check.

T/R/P/C/A/D/M	Composition
Major Siliciclastic Grain Types	
	Quartz
R	Feldspars
C	Clay minerals
Lithic Grains	
Sedimentary Lithics	
	Chert
	Mudstone
	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
Volcaniclastic Grains	
C	Transparent glass
	Colored glass
	Volcanic lithics
	Altered volcanic (e.g. palagonite)
Authigenic components	
	Pyrite
A	Calcite + micrite
	Dolomite
	Zeolites
C	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
Pelagic Grains	
	Calcareous
	Nannofossils
	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
P	Other bioclasts
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify)
Minor Other Grain Types	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
Other carbonate allochems	
T	Peloid
	Intraclast
R	oolites

T/R/P/C/A/D/M	Composition
Minor Mineral Grain Types	
	Olivine
	Pyroxene
	Amphibole
	Micas
T	Chlorite
	Zircon
	Apatite
P	Opaque Grain
	Glauconite
	Opaque Grain
	Other (specify):
R	dense minerals

List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks:

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

Is authigenic feldspar?

# 375 Methods-C-F7

## Sediment Smear Slide / Thin Section Description Sheet

Date: 4/9/18

Expedition: 375 Observer: OLIV

Site: U1510 Hole: C Core: 6B Sect.: CC Interval: 9-12

Sediment Name: marl

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
	<u>V</u>							<u>1</u>	<u>9</u>	<u>90</u>

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition
Major Siliciclastic Grain Types	
	Quartz
<u>T</u>	Feldspars
	Clay minerals
Lithic Grains	
Sedimentary Lithics	
<u>A</u>	Chert
	Mudstone
	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
Volcaniclastic Grains	
	Transparent glass
	Colored glass
	Volcanic lithics
<u>P</u>	Altered volcanic (e.g. palagonite)
Authigenic components	
	Pyrite
<u>D</u>	Calcite + micrite
	Dolomite
	Zeolites
	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
Pelagic Grains	
	Calcareous
<u>P</u>	Nannofossils
	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
<u>C</u>	Other bioclasts
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify)
Minor Other Grain Types	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
Other carbonate allochems	
	Peloid
	Intraclast
<u>B</u>	<u>ooids</u>

T/R/P/C/A/D/M	Composition
Minor Mineral Grain Types	
	Olivine
	Pyroxene
	Amphibole
	Micas
	Chlorite
	Zircon
	Apatite
	Opaque Grain
<u>T</u>	Glauconite
<u>B</u>	Opaque Grain
<u>T</u>	Other (specify): <u>dense mineral</u>

<sup>1</sup> List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks: \_\_\_\_\_

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

# 375 Methods-C-F7

## Sediment Smear Slide / Thin Section Description Sheet

Date: 16. Apr. 2018

Expedition: 375

Observer: Noda

Site: 1520 Hole: C Core: 15R Sect.: 6

Interval: 26-27

Sediment Name: chalk

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
	X							5	50	45

Select one and check. Select one and check.

T/R/P/C/A/D/M	Composition
Major Siliciclastic Grain Types	
	Quartz
	Feldspars
	Clay minerals
Lithic Grains	
Sedimentary Lithics	
	Chert
	Mudstone
	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
Volcaniclastic Grains	
	Transparent glass
	Colored glass
	Volcanic lithics
	Altered volcanic(e.g. palagonite)
Authigenic components	
R	Pyrite
	Calcite
	Dolomite
	Zeolites
	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
Pelagic Grains	
	Calcareous
	Nannofossils
C	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
Other bioclasts	
	Mollusk
	Echinoderm
	Benthic foraminifer
P	Other bioclast (specify)
	<u>unspecified</u>
Minor Other Grain Types	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
Other carbonate allochems	
	Peloid
	Intraclast
D	<u>carbonate mud</u>

T/R/P/C/A/D/M	Composition
Minor Mineral Grain Types	
	Olivine
	Pyroxene
	Amphibole
	Micas
	Chlorite
	Zircon
	Apatite
	Opaque Grain
	Glaucconite
	Opaque Grain
	Other (specify):

List under remarks if possible Abundances like in 375 Methods-C-Table 2

Remarks: foram-rich lamina

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

375 Methods-C-F7

Sediment Smear Slide / Thin Section Description Sheet

Date: 16, Apr. 2018

Expedition: 375

Observer: Noda

Site: 1520 Hole: C Core: 25R Sect.: 1W

Interval: 53-56

Sediment Name: Volcaniclastic conglomerate

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
				100		

Select one and check.

T/R/P/C/A/D/M	Composition
Major Siliciclastic Grain Types	
	Quartz
	Feldspars
	Clay minerals
Lithic Grains	
Sedimentary Lithics	
	Chert
	Mudstone
R	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
Volcaniclastic Grains	
	Transparent glass
	Colored glass
	Volcanic lithics
M	Altered volcanic(e.g. palagonite)
Authigenic components	
	Pyrite
	Calcite
	Dolomite
C	Zeolites
	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
Pelagic Grains	
	Calcareous
	Nannofossils
	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
Other bioclasts	
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify)
Minor Other Grain Types	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
Other carbonate allochems	
	Peloid
	Intraclast

T/R/P/C/A/D/M	Composition
Minor Mineral Grain Types	
	Olivine
	Pyroxene
	Amphibole
	Micas
	Chlorite
	Zircon
	Apatite
	Opaque Grain
	Glaucanite
	Opaque Grain
	Other (specify):

List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks: basalt clasts surrounded by palagonite rim.  
zeolite matrix

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

# 375 Methods-C-F7

## Sediment Smear Slide / Thin Section Description Sheet

Date: 16/06/18

Expedition: 375

Observer: TENE

Site: U1520 Hole: C Core: 26R Sect.: 1

Interval: 60-62 cm

Sediment Name: volcaniclastic conglomerate

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.

T/R/P/C/A/D/M	Composition
Major Siliciclastic Grain Types	
	Quartz
P	Feldspars
	Clay minerals
Lithic Grains	
Sedimentary Lithics	
	Chert
	Mudstone
	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
Volcaniclastic Grains	
	Transparent glass
	Colored glass
	Volcanic lithics
C	Altered volcanic(e.g. palagonite)
Authigenic components	
C	Pyrite
C	Calcite
	Dolomite
C	Zeolites
	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
Pelagic Grains	
	Calcareous
	Nannofossils
	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
Other bioclasts	
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify)
Minor Other Grain Types	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
Other carbonate allochems	
	Peloid
	Intraclast

T/R/P/C/A/D/M	Composition
Minor Mineral Grain Types	
	Olivine
	Pyroxene
	Amphibole
	Micas
P	Chlorite
	Zircon
	Apatite
P	Opaque Grain
	Glauconite
	Opaque Grain
	Other (specify):

<sup>1</sup> List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks: \_\_\_\_\_

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

# 375 Methods-C-F7

## Sediment Smear Slide / Thin Section Description Sheet

Date: 16, Apr. 2018

Expedition: 375

Observer: Noda

Site: 1520c Hole: C Core: 34R Sect.: 4.W

Interval: 10-12

Sediment Name: chalk (Packstone)

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
	X							40	30	30

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition	T/R/P/C/A/D/M	Composition	T/R/P/C/A/D/M	Composition
Major Siliciclastic Grain Types		Pelagic Grains		Minor Mineral Grain Types	
	Quartz		Calcareous		Olivine
	Feldspars		Nannofossils		Pyroxene
	Clay minerals	P	Foraminifers		Amphibole
			Siliceous		Micas
	Lithic Grains		Diatom		Chlorite
	Sedimentary Lithics		Radiolarian		Zircon
	Chert		Silicoflagellate		Apatite
	Mudstone		Sponge Spicule	R	Opaque Grain
	Siltstone/sandstone				Glaucinite
	Limestone		Other bioclasts		Opaque Grain
	Metamorphic lithic	P	Mollusk		Other (specify):
	Plutonic lithic		Echinoderm		
			Benthic foraminifer		
	Volcaniclastic Grains	D	Other bioclast (specify)		
	Transparent glass		<i>undetermined</i>		
	Colored glass		Minor Other Grain Types		
	Volcanic lithics		Phosphate (bones, teeth, etc)		
P	Altered volcanic (e.g. palagonite)		Marine organic matter		
			Terrestrial organic matter		
	Authigenic components		Other (specify):		
R	Pyrite		Other carbonate allochems		
	Calcite		Peloid		
	Dolomite		Intraclast		
	Zeolites				
P	Fe/Mn oxide	C	<i>carbonate mud</i>		
	Other (specify):				

<sup>1</sup> List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks: sand-sized brownish altered glass and basalt

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

NOT FINISHED!

375 Methods-C-F7

Sediment Smear Slide / Thin Section Description Sheet

Date: 14/09/18

Expedition: 375

Observer: JENE

Site: U1520 Hole: C Core: 40R Sect.: 2

Interval: 49-51

Sediment Name: \_\_\_\_\_

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

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition
Major Siliciclastic Grain Types	
	Quartz
	Feldspars
	Clay minerals
Lithic Grains	
Sedimentary Lithics	
	Chert
	Mudstone
	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
Volcaniclastic Grains	
	Transparent glass
	Colored glass
	Volcanic lithics
A	Altered volcanic (e.g. palagonite)
Authigenic components	
	Pyrite
P	Calcite
	Dolomite
C	Zeolites
	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
Pelagic Grains	
	Calcareous
	Nannofossils
	Foraminifers
Siliceous	
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
Other bioclasts	
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify)
Minor Other Grain Types	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
Other carbonate allochems	
	Peloid
	Intraclast

T/R/P/C/A/D/M	Composition
Minor Mineral Grain Types	
	Olivine
	Pyroxene
	Amphibole
	Micas
	Chlorite
	Zircon
	Apatite
	Opaque Grain
	Glaucinite
	Opaque Grain
	Other (specify):

<sup>1</sup> List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks: \_\_\_\_\_

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



# 375 Methods-C-F7

## Sediment Smear Slide / Thin Section Description Sheet

Date: 14. Apr. 2018

Expedition: 375

Observer: Noda

Site: 1520 Hole: C Core: 41R Sect.: 1A

Interval: 47-49

Sediment Name: volcaniclastic conglomerate

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

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition	T/R/P/C/A/D/M	Composition	T/R/P/C/A/D/M	Composition
Major Siliciclastic Grain Types		Pelagic Grains		Minor Mineral Grain Types	
	Quartz		Calcareous		Olivine
	Feldspars		Nannofossils		Pyroxene
	Clay minerals		Foraminifers		Amphibole
			Siliceous		Micas
	Lithic Grains		Diatom		Chlorite
	Sedimentary Lithics		Radiolarian		Zircon
	Chert		Silicoflagellate		Apatite
	Mudstone		Sponge Spicule		Opaque Grain
	Siltstone/sandstone				Glauconite
	Limestone		Other bioclasts		Opaque Grain
	Metamorphic lithic		Mollusk		Other (specify):
	Plutonic lithic		Echinoderm		
			Benthic foraminifer		
	Volcaniclastic Grains		Other bioclast (specify)		
	Transparent glass				
	Colored glass		Minor Other Grain Types		
	Volcanic lithics		Phosphate (bones, teeth, etc)		
D	Altered volcanic (e.g. palagonite)		Marine organic matter		
			Terrestrial organic matter		
	Authigenic components		Other (specify):		
	Pyrite				
C	Calcite		Other carbonate allochems		
	Dolomite		Peloid		
	Zeolites		Intraclast		
	Fe/Mn oxide				
	Other (specify):				

<sup>1</sup> List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks: All clasts are amygdaloidal basalt filled by calcite or chlorite  
~~basalt is microcrystalline plagioclase basalt showing trachytic texture.~~  
calcite cementation

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

# 375 Methods-C-F7

## Sediment Smear Slide / Thin Section Description Sheet

Date: 14 Apr. 2018

Expedition: 375

Observer: NO DA

Site: 1520 Hole: C Core: 42R Sect.: 3A

Interval: 137-139

Sediment Name: clayey siltstone

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

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition	T/R/P/C/A/D/M	Composition	T/R/P/C/A/D/M	Composition
Major Siliciclastic Grain Types		Pelagic Grains		Minor Mineral Grain Types	
P	Quartz		Calcareous		Olivine
P	Feldspars		Nannofossils		Pyroxene
A	Clay minerals		Foraminifers		Amphibole
			Siliceous	T	Micas
Lithic Grains			Diatom		Chlorite
Sedimentary Lithics		P	Radiolarian		Zircon
	Chert		Silicoflagellate		Apatite
	Mudstone		Sponge Spicule	R	Opaque Grain
	Siltstone/sandstone				Glauconite
	Limestone		Other bioclasts		Opaque Grain
	Metamorphic lithic		Mollusk		Other (specify):
	Plutonic lithic		Echinoderm		
Volcaniclastic Grains			Benthic foraminifer		
	Transparent glass		Other bioclast (specify)		
	Colored glass				
	Volcanic lithics		Minor Other Grain Types		
C	Altered volcanic (e.g. palagonite)		Phosphate (bones, teeth, etc)		
			Marine organic matter		
		P	Terrestrial organic matter		
			Other (specify):		
Authigenic components					
	Pyrite		Other carbonate allochems		
	Calcite		Peloid		
	Dolomite		Intraclast		
	Zeolites				
R	Fe/Mn oxide				
	Other (specify):				

<sup>1</sup> List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks: greenish altered glasses may be fillers of vesicles in basalt  
ghost of microfossils (radiolaria?)

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

375 Methods-C-F7

Sediment Smear Slide / Thin Section Description Sheet

Date: 17 Apr. 2018

Expedition: 375

Observer: NODA

Site: 1520 Hole: C Core: 43R Sect.: 2A

Interval: 86-89

Sediment Name: volcaniclastic 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
				20	60	20

Select one and check.

T/R/P/C/A/D/M	Composition
Major Siliciclastic Grain Types	
	Quartz
	Feldspars
C	Clay minerals
Lithic Grains	
Sedimentary Lithics	
	Chert
	Mudstone
	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
Volcaniclastic Grains	
	Transparent glass
	Colored glass
	Volcanic lithics
D	Altered volcanic (e.g. palagonite)
	Basalt, glass
Authigenic components	
C	Pyrite
	Calcite
	Dolomite
P	Zeolites
R	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
Pelagic Grains	
	Calcareous
	Nannofossils
R	Foraminifers
	Siliceous
	Diatom
P	Radiolarian (not same)
	Silicoflagellate
	Sponge Spicule
Other bioclasts	
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify)
Minor Other Grain Types	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
Other carbonate allochems	
	Peloid
	Intraclast

T/R/P/C/A/D/M	Composition
Minor Mineral Grain Types	
	Olivine
T	Pyroxene
	Amphibole
	Micas
	Chlorite
	Zircon
	Apatite
	Opaque Grain
	Glauconite
E	Opaque Grain
	Other (specify):

List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks: Greenish and transparent spherical grains are amyglades liberated from basalt. Replaced with zeolite or clay

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

angular basalt.

# 375 Methods-C-F7

## Sediment Smear Slide / Thin Section Description Sheet

Date: 14 Apr 2018

Expedition: 375

Observer: NDA

Site: 1520 Hole: C Core: 43R Sect.: CC

Interval: 22-25

Sediment Name: Limestone

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

Select one and check.

Select one and check.

T/R/P/C/A/D/M	Composition
Major Siliciclastic Grain Types	
	Quartz
	Feldspars
C	Clay minerals
Lithic Grains	
Sedimentary Lithics	
	Chert
	Mudstone
	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
Volcaniclastic Grains	
	Transparent glass
	Colored glass
	Volcanic lithics
R	Altered volcanic (e.g. palagonite)
Authigenic components	
R	Pyrite
M	Calcite
R	Dolomite
	Zeolites
T	Fe/Mn oxide
	Other (specify):

T/R/P/C/A/D/M	Composition
Pelagic Grains	
	Calcareous
	Nannofossils
C	Foraminifers
Siliceous	
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
Other bioclasts	
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify)
Minor Other Grain Types	
	Phosphate (bones, teeth, etc)
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
Other carbonate allochems	
	Peloid
	Intraclast

T/R/P/C/A/D/M	Composition
Minor Mineral Grain Types	
	Olivine
	Pyroxene
	Amphibole
	Micas
	Chlorite
	Zircon
	Apatite
	Opaque Grain
	Glauconite
	Opaque Grain
	Other (specify):

List under remarks if possible

Abundances like in 375 Methods-C-Table 2

Remarks: Forams are recrystallised  
greenish spherical grains ← filler of vesicles of basalt?  
(chrolite)

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