

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/26/16

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 2 Sect.: 1

Interval: 11

Sediment Name: clay w/ silt

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				<u>98</u>		<u>2</u>			<u>20</u>	<u>80</u>

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
<u>20</u>	Quartz		Calcareous		Dense minerals <sup>1</sup>
<u>10</u>	Feldspars	<u>2</u>	Nannofossils	<u>1</u>	Micas (biotite, musc, chl)
<u>64</u>	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate	<u>1</u>	Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
	Volcaniclastic Grains		Other bioclast (specify)		Pyrite (grain coating)
	Vitric fragments				Calcite
	Clear glass		Other carbonate allochems		Dolomite
	Colored glass		Peloid		Zeolites
	Pumice		Intraclast		Fe/Mn oxide
	Volcanic lithics				Other (specify):
	Felsitic				
	Microlite				
	Lathwork				
	Altered volcanic (palagonite)				
		<u>2</u>	Silt or sand-size carbonate allochem fragment (unspecified)		
			Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

Remarks: gray mud; some nice OM - some discs w/ the numbers

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

major

### Sediment Smear Slide / Thin Section Description Sheet

Date: 8/26/16

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 2 Sect.: 1

Interval: 20

Sediment Name: clay w/silt

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100					10	90

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks: green mud

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

Minor

### Sediment Smear Slide / Thin Section Description Sheet

Date: 8/26/16

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 2 Sect.: 1

Interval: 39

Sediment Name: silt

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100?				100		

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
66	Quartz		Calcareous	1	Dense minerals <sup>1</sup>
30	Feldspars		Nannofossils	2	Micas (biotite, musc, chl)
	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
1	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer	1	Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microelite				
	Lathwork		Silt or sand-size carbonate allochem fragment (unspecified)		
	Altered volcanic (palagonite)				
		5	Carbonate mud (apart from nannos)		
			silt mono crystals		

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

Fill percentage (Total must be 100).

Remarks: silt

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

minor

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/26/16

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 2 Sect.: 2 Interval: 15

Sediment Name: Silty clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				<u>100</u>				<u>5</u>	<u>20</u>	<u>75</u>

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
<u>25</u>	Quartz		Calcareous		Dense minerals <sup>1</sup>
<u>10</u>	Feldspars		Nannofossils		Micas (biotite, musc, chl)
<u>65</u>	Clay minerals		Foraminifers		Glauconite
	Lithic Grains		Siliceous		Phosphate (bones, teeth, etc)
	Sedimentary Lithics		Diatom		Opaque Grain
	Chert		Radiolarian		Marine organic matter
	Mudstone		Silicoflagellate		Terrestrial organic matter
	Siltstone/sandstone		Sponge Spicule		Other (specify):
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
					Calcite
	Volcaniclastic Grains				Dolomite
	Vitric fragments				Zeolites
	Clear glass		Other carbonate allochems		Fe/Mn oxide
	Colored glass		Peloid		Other (specify):
	Pumice		Intraclast		
	Volcanic lithics				
	Felsitic				
	Microclitic				
	Lathwork		Silt or sand-size carbonate allochem fragment (unspecified)		
	Altered volcanic (palagonite)				
			Carbonate mud (apart from nanos)		

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

Fill percentage (Total must be 100).

Remarks: distinct ~2mm red layer - no clear evidence of color cause - oxidized grain coatings?

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/26/16

Expedition: 362

Observer: KLM

Site: U1480 Hole: G

Core: 3R Sect.: 1

Interval: 26

Sediment Name: silt, clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100				5	25	70

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
30	Quartz		Calcareous		Dense minerals <sup>1</sup>
20	Feldspars		Nannofossils	1	Micas (biotite, musc, chl)
48	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer	1	Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlite				
	Lathwork				
	Altered volcanic (palagonite)				

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

Fill percentage (Total must be 100).

Remarks: gray mud

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/26/16

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 3R Sect.: 2

Interval: 47

Sediment Name: clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100				10	90	

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks: green mud

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

man

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/26/16

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 3R Sect.: 3

Interval: 15

Sediment Name: silty clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				<u>100</u>				<u>5</u>	<u>30</u>	<u>65</u>

Select one and check.

Select one and check.

Percent	Composition
	Major Siliciclastic Grain Types
<u>20</u>	Quartz
<u>15</u>	Feldspars
<u>60</u>	Clay minerals
	Lithic Grains
	Sedimentary Lithics
	Chert
	Mudstone
	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
	Volcaniclastic Grains
	Vitric fragments
	Clear glass
	Colored glass
	Pumice
	Volcanic lithics
	Felsitic
	Microlite
	Lathwork
	Altered volcanic (palagonite)

Percent	Composition
	Pelagic Grains
	Calcareous
	Nannofossils
	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	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)
<u>3</u>	Carbonate mud (apart from nannos)

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

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

Fill percentage (Total must be 100).

Remarks:

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/26/16

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 4R Sect.: 1

Interval: 26

Sediment Name: clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100					10	70

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks: greenish mud

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





# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/26/16

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 4R Sect.: 2

Interval: 4

Sediment Name: clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100					10	90

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks: gray mud

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/26/16

Expedition: 362

Observer: KLM

Site: U1480 Hole: G

Core: 4R Sect.: 3

Interval: 76

Sediment Name: silty sand

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				<u>95</u>		<u>5</u>		<u>60</u>	<u>30</u>	<u>10</u>

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
<u>60</u>	Quartz		Calcareous	<u>1</u>	Dense minerals <sup>1</sup>
<u>25</u>	Feldspars	<u>5</u>	Nannofossils	<u>1</u>	Micas (biotite, musc, chl)
<u>5</u>	Clay minerals		Foraminifers		Glauconite
	Lithic Grains		Siliceous		Phosphate (bones, teeth, etc)
	Sedimentary Lithics		Diatom		Opaque Grain
	Chert		Radiolarian		Marine organic matter
	Mudstone		Silicoflagellate	<u>1</u>	Terrestrial organic matter
	Siltstone/sandstone		Sponge Spicule		Other (specify):
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		<u>1</u> Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlitic		Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic(palagonite)				
		<u>1</u>	Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

Remarks: nannos. w/ discs

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/26/16

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 4R Sect.: 4

Interval: 34

Sediment Name: silty clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100					40	60

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks:

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

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

Date: 8/27/16

Expedition: 362

Observer: Fovid

Site: U1480 Hole: G Core: SR Sect.: 1A Interval: 127

Sediment Name: Silty sand with clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100				20	25	5

Select one and check.

Select one and check.

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

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

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

\* List under remarks if possible

Fill percentage (Total must be 100).

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

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

OW

Sediment Smear Slide / Thin Section Description Sheet

Date: 8/27/16

Expedition: 362

Observer: Farid

Site: U1480 Hole: G Core: 5R Sect.: 2A Interval: 64

Sediment Name: Silt with sand

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
X				100				25	75	

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
52	Quartz		Calcareous	2	Dense minerals <sup>1</sup>
40	Feldspars		Nannofossils	1	Micas (biotite, musc, chl)
	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom	1	Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate	1	Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
3	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)	TR	Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlite				
	Lathwork		Silt or sand-size carbonate allochem fragment (unspecified)		
	Altered volcanic (palagonite)				
		FR	Carbonate mud (apart from nannos)		

Remarks: We need to investigate if all lithic grains are metamorphic or they are partially of plutonic origin.

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/27/16

Expedition: 362

Observer: Fario

Site: U1480 Hole: G Core: 5R Sect.: 3A Interval: 82

Sediment Name: slay with silt

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
X				100				20	80	

Select one and check.

Select one and check.

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

List under remarks if possible

Fill percentage (Total must be 100).

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

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/27/16

Expedition: 362

Observer: Faniel

Site: U1480 Hole: G Core: SR Sect.: 4A

Interval: 28

Sediment Name: Silty fine sand

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
<input checked="" type="checkbox"/>				100				58	30	2

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
80	Quartz		Calcareous	2	Dense minerals <sup>1</sup>
3	Feldspars		Nannofossils		Micas (biotite, musc, chl)
2	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian	2	Marine organic matter
	Chert		Silicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
4	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)	1	Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlite				
	Lathwork				
	Altered volcanic (palagonite)				
		tr	Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

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

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



60

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

Date: 8/27/16

Expedition: 362

Observer: FANIO

Site: U1480 Hole: G Core: 6R Sect.: 1A

Interval: 5J

Sediment Name: SANDY SILT WITH CLAY

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100				40	55	5

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
40	Quartz		Calcareous	4	Dense minerals <sup>1</sup>
35	Feldspars		Nannofossils	3	Micas (biotite, musc, chl)
3	Clay minerals		Foraminifers		Glauconite
	Lithic Grains		Siliceous		Phosphate (bones, teeth, etc)
	Sedimentary Lithics		Diatom		Opaque Grain
	Chert		Radiolarian		Marine organic matter
	Mudstone		Silicoflagellate	1	Terrestrial organic matter
	Siltstone/sandstone		Sponge Spicule		Other (specify):
	Limestone		Other bioclasts		
2	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
	Volcaniclastic Grains		Benthic foraminifer	2	Pyrite (euhedra) ?
	Vitric fragments		Other bioclast (specify)	10	Pyrite (grain coating) ?
	Clear glass		Other carbonate allochems		Calcite
	Colored glass		Peloid		Dolomite
	Pumice		Intraclast		Zeolites
	Volcanic lithics		Silt or sand-size carbonate allochem fragment (unspecified)		Fe/Mn oxide
	Felsitic				Other (specify):
	Microlitic				
	Lathwork				
	Altered volcanic(palagonite)				
		2	Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

Remarks: OR see opaque grains (other minerals)

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

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

Date: **8/27/16**

Expedition: **362**

Observer: **Foxiel**

Site: **U1480** Hole: **G**

Core: **6R** Sect.: **1A**

Interval: **76**

Sediment Name: **clay**

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				<b>100</b>						<b>100</b>

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
<b>8</b>	Quartz		Calcareous	<b>5</b>	Dense minerals <sup>1</sup>
<b>81</b>	Feldspars	<b>12</b>	Nannofossils		Micas (biotite, musc, chl)
	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom	<b>72</b>	Opaque Grain <b>9</b>
	Sedimentary Lithics		Radiolarian	<b>12</b>	Marine organic matter <b>10</b>
	Chert		Silicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlitic		Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic(palagonite)				
		<b>3</b>	Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

Remarks:

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/27/16

Expedition: 362

Observer: Ferid

Site: U1480 Hole: G

Core: 6R Sect.: 3A

Interval: 34

Sediment Name: Silty sand

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100				65	35	

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
60	Quartz		Calcareous	4	Dense minerals <sup>1</sup>
31	Feldspars		Nannofossils		Micas (biotite, musc, chl)
	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate	1	Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
2	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm	1	Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microplitic				
	Lathwork	1	Silt or sand-size carbonate allochem fragment (unspecified)		
	Altered volcanic (palagonite)				
			Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

Remarks:

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/16

Expedition: 362 Observer: FRID

Site: U1480 Hole: G Core: 6R Sect.: CCA Interval: 0-1

Sediment Name: sandy silt

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
X				100				43	50	5

Select one and check. Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
43	Quartz		Calcareous	1	Dense minerals <sup>1</sup>
40	Feldspars		Nannofossils		Micas (biotite, musc, chl)
5	Clay minerals		Foraminifers		Glauconite
	Lithic Grains		Siliceous		Phosphate (bones, teeth, etc)
	Sedimentary Lithics		Diatom		Opaque Grain
	Chert		Radiolarian	1	Marine organic matter
	Mudstone		Silicoflagellate		Terrestrial organic matter ?
	Siltstone/sandstone		Sponge Spicule		Other (specify):
	Limestone		Other bioclasts		
2	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer	42	Pyrite (euhedra) ?
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments		Other carbonate allochems		Dolomite
	Clear glass		Peloid		Zeolites
	Colored glass		Intraclast		Fe/Mn oxide
	Pumice				Other (specify):
	Volcanic lithics				
	Felsitic				
	Microclite				
	Lathwork				
	Altered volcanic(palagonite)				

<sup>1</sup> List under remarks if possible. Fill percentage (Total must be 100).

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

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

# Sediment Smear Slide / Thin Section Description Sheet

*OK*

Date: 8/27/16

Expedition: 362

Observer: Fario

Site: U1480 Hole: G

Core: 8R Sect.: 1A

Interval: 30

Sediment Name: Silty sand

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
<input checked="" type="checkbox"/>				100				60	36	4

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
45	Quartz		Calcareous	5	Dense minerals <sup>1</sup> h6, +r
45	Feldspars		Nannofossils	1	Micas (biotite, musc, chl)
	Clay minerals		Foraminifers		Glauconite
	Lithic Grains		Siliceous		Phosphate (bones, teeth, etc)
	Sedimentary Lithics		Diatom	1	Opaque Grain
	Chert		Radiolarian	1	Marine organic matter
	Mudstone		Silicoflagellate		Terrestrial organic matter
	Siltstone/sandstone		Sponge Spicule		Other (specify):
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlitic	4	Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic (palagonite)		Carbonate mud (apart from nanos)		

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

Fill percentage (Total must be 100).

Remarks:

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/27/16

Expedition: 362

Observer: Foud

Site: U1480 Hole: G

Core: 8R Sect.: 2A

Interval: 60

Sediment Name:

calcareous clay with nannofossils

Smear Slide	Thin Section	Coarse Fraction	Grain Mount

Select one and check.

Granular Sediment			Other material	Percent Texture		
Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
87		3		4	96	

Select one and check.

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

Percent	Composition
	Pelagic Grains
3	Calcareous
	Nannofossils
	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	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)
40	Carbonate mud (apart from nannos)

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

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

Fill percentage (Total must be 100).

Remarks:

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/27/16

Expedition: 362

Observer: *Fornid*

Site: U1480 Hole: G Core: *8R* Sect.: *3A*

Interval: *36*

Sediment Name: *clay*

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
<i>X</i>				<i>100</i>						<i>100</i>

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
<i>2</i>	Quartz		Calcareous	<i>1</i>	Dense minerals <sup>1</sup> <i>+ to nannos</i>
<i>2</i>	Feldspars		Nannofossils	<i>tn</i>	Micas (biotite, musc, chl)
<i>95</i>	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microplitic				
	Lathwork		Silt or sand-size carbonate allochem fragment (unspecified)		
	Altered volcanic (palagonite)				
			Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

Remarks:

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

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Sediment Smear Slide / Thin Section Description Sheet

Date: 8/27/16

Expedition: 362

Observer: FOS 19

Site: U1480 Hole: G Core: 8R Sect.: 4A

Interval: 41

Sediment Name: Silty clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
X				100				25	75	

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
30	Quartz		Calcareous	4	Dense minerals <sup>1</sup>
5	Feldspars		Nannofossils		Micas (biotite, musc, chl)
63	Clay minerals		Foraminifers		Glauconite
	Lithic Grains		Siliceous		Phosphate (bones, teeth, etc)
	Sedimentary Lithics		Diatom		Opaque Grain
	Chert		Radiolarian	!	Marine organic matter
	Mudstone		Silicoflagellate		Terrestrial organic matter
	Siltstone/sandstone		Sponge Spicule		Other (specify):
	Limestone		Other bioclats		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlite				
	Lathwork		Silt or sand-size carbonate allochem fragment (unspecified)		
	Altered volcanic(palagonite)				
			Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

Remarks:

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



# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/27/16

Expedition: 362

Observer: FANLO

Site: U1480 Hole: G Core: QR Sect.: SA

Interval: 102

Sediment Name: clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
X				100				2	98	

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
6	Quartz		Calcareous		Dense minerals <sup>1</sup>
	Feldspars		Nannofossils		Micas (biotite, musc, chl)
81	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom	3	Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Sillicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microclitic				
	Lathwork		Silt or sand-size carbonate allochem fragment (unspecified)		
	Altered volcanic (palagonite)				
		10	Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

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

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/24/16

Expedition: 362

Observer: Faniel

Site: U1480 Hole: G Core: 8R Sect.: 5A Interval: 124

Sediment Name: sandy silt

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
X				100				40	60	

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
47	Quartz		Calcareous	10	Dense minerals hb, rpi, PXPJ
40	Feldspars		Nannofossils		Micas (biotite, musc, chl)
	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
2	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)	ts	Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlite	1	Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic (palagonite)		Carbonate mud (apart from nannos)		

List under remarks if possible

Fill percentage (Total must be 100).

Remarks:

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

VOLCANIClastic?

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/27/16

Expedition: 362

Observer: Foriel

Site: U1480 Hole: G Core: 96 Sect.: 1A Interval: 44

Sediment Name: clay with silt

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100				15	85	

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks:

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

major

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

Date: 8/27/16

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 10 Sect.: CC

Interval: 20

Sediment Name: Sandy silt

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100				100	55	5

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks:

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

minor

### Sediment Smear Slide / Thin Section Description Sheet

Date: 8/27/16

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 10 Sect.: CC Interval: 36

Sediment Name: calcareous clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				60		40		10	90	

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
15	Quartz		Calcareous		Dense minerals <sup>1</sup>
10	Feldspars	40	Nannofossils		Micas (biotite, musc, chl)
25	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microplitic				
	Lathwork		Silt or sand-size carbonate allochem fragment (unspecified)		
	Altered volcanic(palagonite)				
		10	Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

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

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

major

Sediment Smear Slide / Thin Section Description Sheet

Date: 8/27/16

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 11R Sect.: 1 Interval: 25

Sediment Name: clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				99		1		10	90	

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

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

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

major

### Sediment Smear Slide / Thin Section Description Sheet

Date: 8/27/16

Expedition: 362

Observer: KLM

Site: U1480

Hole: G

Core: 11

Sept.: 2

Interval: 19

Sediment Name: Silty clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount

Select one and check.

Granular Sediment			Other material	Percent Texture		
Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
100				30	70	

Select one and check.

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

Percent	Composition
	Pelagic Grains
	Calcareous
dr	Nannofossils
	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	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)
3	Carbonate mud (apart from nannos)

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

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

Fill percentage (Total must be 100).

Remarks:

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/27/16

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 11 Sect.: 3

Interval: 61

Sediment Name: NOT A SEDIMENT

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

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks:

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

collected from drilling disturbance mix below large wood fragment (log!). Crushed OM pieces to look at woody structure

Diagenesis = silicification, ...



# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/27/2016

Expedition: 362

Observer: KLM

Site: U1480

Hole: G

Core: 12

Sect.: 1

Interval: 68

Sediment Name: silty sand (v. fine)

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100				60	35	5

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks:

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/27/2016

Expedition: 362

Observer: KLM

Site: U1480

Hole: G

Core: 12

Sect.: 1

Interval: 89

Sediment Name: silty clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100				5	30	70

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	<b>Major Siliciclastic Grain Types</b>		<b>Pelagic Grains</b>		<b>Minor Grain Types</b>
35	Quartz		Calcareous		Dense minerals <sup>1</sup>
20	Feldspars	tr	Nannofossils <i>ultrascos</i>	1	Micas (biotite, musc, chl)
41	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	<b>Lithic Grains</b>		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian	tr	Marine organic matter
	Chert		Silicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framoids)
			Benthic foraminifer		Pyrite (cuhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	<b>Volcaniclastic Grains</b>				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlitic				
	Lathwork				
	Altered volcanic (palagonite)				
		3	Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

Remarks: clast in debris flow

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/27/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G

Core: 12 Sect.: 1

Interval: 96

Sediment Name: clay w/ silt

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100					15	85

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks: clast in debris flow

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

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

Date: 8/27/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 12R Sect.: 1

Interval: 119

Sediment Name: clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				95		5			10	90

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
15	Quartz		Calcareous		Dense minerals <sup>1</sup>
10	Feldspars	5	Nannofossils	1	Micas (biotite, musc, chl)
68	Clay minerals		Foraminifers		Glauconite
	Lithic Grains		Siliceous		Phosphate (bones, teeth, etc)
	Sedimentary Lithics		Diatom		Opaque Grain
	Chert		Radiolarian		Marine organic matter
	Mudstone		Silicoflagellate		Terrestrial organic matter
	Siltstone/sandstone		Sponge Spicule		Other (specify):
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlite		Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic(palagonite)				
		1	Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

Remarks: clast in debris flow

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/27/2016

Expedition: 362

Observer: KLM

Site: U1480

Hole: G

Core: 12R

Sept.: 1

Interval: 133

Sediment Name: clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100					10	90

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
15	Quartz		Calcareous		Dense minerals <sup>1</sup>
10	Feldspars	40	Nannofossils		Micas (biotite, musc, chl)
71	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer	1	Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains			?	Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlite				
	Lathwork		Silt or sand-size carbonate allochem fragment (unspecified)		
	Altered volcanic (palagonite)				
		3	Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

Remarks: clast in debris-flow

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/27/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 12R Sect.: 1 Interval: 134

Sediment Name: sandy silt w/ clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100				30	55	15

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks: matrix between debris - flour clasts

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/27/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 12R Sect.: 2 Interval: 20

Sediment Name: sandy silt w/ clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100				25	60	15

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks:

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/27/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 12R Sect.: 2

Interval: 42

Sediment Name: clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100						100

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks: gray mud

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



Major

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/27/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 132 Sect.: 1

Interval: 15

Sediment Name: Silty clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				99		1			30	70

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks: green

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

Majol

## Sediment Smear Slide / Thin Section Description Sheet

Date: 8/27/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 13R Sect.: 2

Interval: 57

Sediment Name: Silty clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100				30	70	

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks: green-gray

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

major

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

Date: 8/27/16

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 13R Sect.: 3

Interval: 39

Sediment Name: silty clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100					20	70

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks: brown clay

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

minor

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/27/16

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 13R Sect.: 3

Interval: 44

Sediment Name: silt w/ clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100				85	15	

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks:

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/28/16

Expedition: 362

Observer: *Brid*

Site: U1480 Hole: G Core: *MR* Sect.: *1A* Interval: *13*

Sediment Name: *Clay with silt*

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
<input checked="" type="checkbox"/>				100				10	90	

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks:

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

04

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/28/16

Expedition: 362 Observer: FALD

Site: U1480 Hole: G Core: 14R Sect.: IA Interval: 45

Sediment Name: Silty fine sand

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
X				100				75	25	

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
96	Quartz		Calcareous	10	Dense minerals <sup>1</sup> <u>bone</u> , <u>Px?</u>
40	Feldspars		Nannofossils		Micas (biotite, musc, chl)
	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian	2	Marine organic matter
	Chert		Silicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
3	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
82	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlite	3	Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic(palagonite)		Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

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

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

04

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/28/16

Expedition: 362

Observer: Fazio

Site: U1480 Hole: G Core: 14R Sect.: 2A Interval: 36

Sediment Name: Sandy silt with clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				<u>100</u>				<u>25</u>	<u>65</u>	<u>10</u>

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
<u>44</u>	Major Siliciclastic Grain Types		Pelagic Grains	<u>5</u>	Minor Grain Types
<u>40</u>	Quartz		Calcareous	<u>1</u>	Dense minerals <sup>1</sup>
<u>9</u>	Feldspars		Nannofossils		Micas (biotite, musc, chl)
	Clay minerals		Foraminifers		Glauconite
	Lithic Grains		Siliceous		Phosphate (bones, teeth, etc)
	Sedimentary Lithics		Diatom		Opaque Grain
	Chert		Radiolarian	<u>1</u>	Marine organic matter
	Mudstone		Silicoflagellate		Terrestrial organic matter
	Siltstone/sandstone		Sponge Spicule		Other (specify):
	Limestone		Other bioclasts		
<u>2</u>	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)	<u>2</u>	Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlite				
	Lathwork	<u>20</u>	Silt or sand-size carbonate allochem fragment (unspecified)		
	Altered volcanic (palagonite)				
		<u>1</u>	Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

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

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

04

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/28/16

Expedition: 362

Observer: FAIR

Site: U1480 Hole: G Core: 14R Sect.: 3A

Interval: 115

Sediment Name: silty sand

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
X				100				40	54	6

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
0%	Quartz		Calcareous		Dense minerals <sup>1</sup>
45%	Feldspars		Nannofossils	1	Micas (biotite, musc, chl)
9%	Clay minerals		Foraminifers		Glauconite
	Lithic Grains		Siliceous		Phosphate (bones, teeth, etc)
	Sedimentary Lithics		Diatom		Opaque Grain
	Chert		Radiolarian		Marine organic matter
	Mudstone		Silicoflagellate		Terrestrial organic matter
	Siltstone/sandstone		Sponge Spicule		Other (specify):
	Limestone		Other bioclasts		
3	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
	Volcaniclastic Grains		Benthic foraminifer		Pyrite (euhedra)
	Vitric fragments		Other bioclast (specify)		Pyrite (grain coating)
	Clear glass				Calcite
	Colored glass		Other carbonate allochems		Dolomite
	Pumice		Peloid		Zeolites
	Volcanic lithics		Intraclast		Fe/Mn oxide
	Felsitic				Other (specify):
	Microlite		Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic(palagonite)				
		2	Carbonate mud (apart from nanos)		

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

Fill percentage (Total must be 100).

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

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



04

Sediment Smear Slide / Thin Section Description Sheet

Date: 8/ /16

Expedition: 362 Observer: \_\_\_\_\_

Site: U1480 Hole: G Core: ISP Sect.: 1A Interval: 68

Sediment Name: Sand with silt

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
X				100				80	20	

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
50	Quartz		Calcareous	3	Dense minerals
40	Feldspars		Nannofossils	70	Micas (biotite, musc, chl)
	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate	1	Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
1	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)	1	Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlitic				
	Lathwork		Silt or sand-size carbonate allochem fragment (unspecified)		
	Altered volcanic (palagonite)				
			Carbonate mud (apart from nannos)		

hb, ap,

List under remarks if possible

Fill percentage (Total must be 100).

Remarks: Presence of wood fragments.

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

04

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

Date: 8/29/16

Expedition: 362

Observer: Fariq

Site: U1480 Hole: G

Core: 15

Sect.: 2A

Interval: 45

Sediment Name: clay

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

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
<u>10</u>	Quartz		Calcareous		Dense minerals <sup>1</sup>
	Feldspars	<u>TR</u>	Nannofossils		Micas (biotite, musc, chl)
<u>90</u>	Clay minerals	<u>TR</u>	Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlite		Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic(palagonite)		Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

Remarks:

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

# Sediment Smear Slide / Thin Section Description Sheet

04

Date: 8/28/16

Expedition: 362

Observer: Fouid

Site: U1480

Hole: G

Core: 15

Sect.: 2A

Interval: 21

Sediment Name: Silty clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
X				100				25	25	

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks:

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/28/16

Expedition: 362

Observer: Fario

Site: U1480 Hole: FG Core: 16R Sect.: 1A

Interval: 22

Sediment Name: clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
<input checked="" type="checkbox"/>				100						100

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks:

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/27/16

Expedition: 362

Observer: *Rayo*

Site: U1480

Hole: *FG*

Core: *16R*

Sect.: *1A*

Interval: *23*

Sediment Name: *Silt*

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
<i>X</i>				<i>100</i>					<i>100</i>	

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
<i>60</i>	Quartz		Calcareous		Dense minerals <sup>1</sup>
<i>25</i>	Feldspars		Nannofossils	<i>2</i>	Micas (biotite, musc, chl)
	Clay minerals		Foraminifers	<i>4</i>	Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Sillicoflagellate	<i>1</i>	Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlitic		Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic(palagonite)				
		<i>2</i>	Carbonate mud (apart from nanos)		

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

Fill percentage (Total must be 100).

Remarks:

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/28/16

Expedition: 362

Observer: Fazio

Site: U1480 Hole: \*G Core: 16R Sect.: 1A Interval: S9

Sediment Name: Sand with silt

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
<input checked="" type="checkbox"/>				<u>100</u>				<u>90</u>	<u>10</u>	

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
<u>35</u>	Quartz		Calcareous	<u>4</u>	Dense minerals <sup>1</sup>
<u>39</u>	Feldspars		Nannofossils	<u>1</u>	Micas (biotite, musc, chl)
	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
<u>1</u>	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlite				
	Lathwork		Silt or sand-size carbonate allochem fragment (unspecified)		
	Altered volcanic (palagonite)				
			Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

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

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

DW

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

Date: 8/28/16

Expedition: 362

Observer: FALD

Site: U1480 Hole: FG Core: 16R Sect.: 2A

Interval: 33 (2 SURPLS)

Sediment Name: Silty sand with wood fragments

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

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
30	Quartz		Calcareous	3	Dense minerals <sup>1</sup>
34	Feldspars		Nannofossils		Micas (biotite, musc, chl)
	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate	10	Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)	4	Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
1	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microclite	1	Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic (palagonite)		Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

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

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

# Sediment Smear Slide / Thin Section Description Sheet

*OLY*

Date: 8/28/16

Expedition: 362

Observer: Ferd

Site: U1480 Hole: FG Core: 16R Sect.: 2A Interval: 35

Sediment Name: Silty sand

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
<u>X</u>				<u>X</u>				<u>63</u>	<u>35</u>	<u>2</u>

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
<u>97</u>	Quartz		Calcareous	<u>2</u>	Dense minerals <sup>1</sup>
<u>45</u>	Feldspars		Nannofossils		Micas (biotite, musc, chl) <sup>1</sup>
	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
<u>2</u>	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate	<u>1</u>	Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
<u>1</u>	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlitic				
	Lathwork		Silt or sand-size carbonate allochem fragment (unspecified)		
	Altered volcanic(palagonite)				
		<u>2</u>	Carbonate mud (apart from nannos)		

<sup>1</sup> List under remarks if possible. Fill percentage (Total must be 100).

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

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



OK

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/26 /16

Expedition: 362

Observer: Fazio

Site: U1480 Hole: FG Core: 17R Sect.: 1A Interval: 5

Sediment Name: calcareous fine sand

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
X				100				55	45	

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
60	Quartz		Calcareous		Dense minerals <sup>1</sup>
10	Feldspars		Nannofossils		Micas (biotite, musc, chl)
	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlitic	30	Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic (palagonite)		Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

Remarks:

Recrystallized carbonate materials

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

04

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

Date: 8/28/16

Expedition: 362

Observer: Farid

Site: U1480 Hole: FG Core: HR Sect.: 1A

Interval: 21

Sediment Name: Sand with silt

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
X				100				80	20	

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
92	Quartz		Calcareous	37	Dense minerals
42	Feldspars		Nannofossils		Micas (biotite, musc, chl)
	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlitic	2	Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic (palagonite)		Carbonate mud (apart from nanos)		

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

Fill percentage (Total must be 100).

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

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

05

Sediment Smear Slide / Thin Section Description Sheet

Date: 8/18/16

Expedition: 362

Observer: Farid

Site: U1480 Hole: FG Core: 17R Sect.: 1A Interval: 45

Sediment Name: clay with silt

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.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
20	Quartz		Calcareous	2	Dense minerals <sup>1</sup>
14	Feldspars		Nannofossils		Micas (biotite, musc, chl)
62	Clay minerals		Foraminifers		Glauconite
	Lithic Grains		Siliceous		Phosphate (bones, teeth, etc)
	Sedimentary Lithics		Diatom		Opaque Grain
	Chert		Radiolarian	1	Marine organic matter
	Mudstone		Sillicoflagellate		Terrestrial organic matter
	Siltstone/sandstone		Sponge Spicule		Other (specify):
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
	Volcaniclastic Grains		Other bioclast (specify)		Pyrite (grain coating)
	Vitric fragments				Calcite
	Clear glass		Other carbonate allochems		Dolomite
	Colored glass		Peloid		Zeolites
	Pumice		Intraclast		Fe/Mn oxide
	Volcanic lithics				Other (specify):
	Felsitic				
	Microplitic				
	Lathwork		Silt or sand-size carbonate allochem fragment (unspecified)		
	Altered volcanic (palagonite)				
		1	Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

Remarks:

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

206

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/26/16

Expedition: 362

Observer: Ferrel

Site: U1480 Hole: #6 Core: 17R Sect.: 2A Interval: R6

Sediment Name: sandy silty

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100				25	75	

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
60	Quartz		Calcareous	2	Dense minerals <sup>1</sup>
36	Feldspars		Nannofossils		Micas (biotite, musc, chl)
	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom	7	Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		fa Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlite	1	Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic (palagonite)		Carbonate mud (apart from nanos)		

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

Fill percentage (Total must be 100).

Remarks:

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

Sediment Smear Slide / Thin Section Description Sheet

Date: 8/28/16

Expedition: 362

Observer: FANIO

Site: U1480 Hole: #6 Core: 17R Sect.: 3A Interval: 51

Sediment Name: clay with silt

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
X				100				10	90	

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks:

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

OK

Sediment Smear Slide / Thin Section Description Sheet

Date: 8/28/16

Expedition: 362

Observer: Fend

Site: U1480 Hole: F6 Core: 17R Sect.: 4A Interval: 6

Sediment Name: Calcareous clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
X				100						100

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks: recrystallized microm. fossils

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

OR calcareous mud.

OK

### Sediment Smear Slide / Thin Section Description Sheet

Date: 8/28/16

Expedition: 362

Observer: FACED

Site: U1480

Hole: FG

Core: 17R

Section: 4A

Interval: 86

Sediment Name: Clay with silt

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
<u>X</u>				<u>100</u>				<u>5</u>	<u>95</u>	

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
<u>20</u>	Quartz		Calcareous		Dense minerals <sup>1</sup>
<u>13</u>	Feldspars	<u>FR</u>	Nannofossils		Micas (biotite, musc, chl)
<u>65</u>	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlite		Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic (palagonite)				
		<u>2</u>	Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

Remarks:

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

*WV*

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/ /16

Expedition: 362

Observer: foriel

Site: U1480 Hole: PG Core: 17R Sect.: 4A Interval: 93

Sediment Name: clay with silt

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
X				100				10	90	

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
10	Quartz		Calcareous		Dense minerals <sup>1</sup>
85	Feldspars	82	Nannofossils		Micas (biotite, musc, chl)
	Clay minerals		Foraminifers		Glaucinite
	Lithic Grains		Siliceous		Phosphate (bones, teeth, etc)
	Sedimentary Lithics		Diatom		Opaque Grain
	Chert		Radiolarian		Marine organic matter
	Mudstone		Sillicoflagellate		Terrestrial organic matter
	Siltstone/sandstone		Sponge Spicule		Other (specify):
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microclite				
	Lathwork		Silt or sand-size carbonate allochem fragment (unspecified)		
	Altered volcanic(palagonite)				
			Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

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

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



OK

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

Date: 8/28/16

Expedition: 362

Observer: Faircl

Site: U1480 Hole: FG Core: 18R Sect.: 1A Interval: 75

Sediment Name: clay with silt

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100					10	90

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

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

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/2/16

Expedition: 362

Observer: FAND

Site: U1480 Hole: #6 Core: 18R Sect.: 1A Interval: 115

Sediment Name: calcareous ooze

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				2		98				100

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
1	Quartz		Calcareous		Dense minerals <sup>1</sup>
1	Feldspars	98	Nannofossils ?		Micas (biotite, musc, chl)
	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlite		Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic(palagonite)		Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

Remarks:

We found some preserved microfossils. However, mostly all are grey stuff - zed.

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

AM

Sediment Smear Slide / Thin Section Description Sheet

Date: 8/28/16

Expedition: 362

Observer: Ferrel

Site: U1480 Hole: FG Core: 18R Sect.: 3A Interval: 36

Sediment Name: clayed silt

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100				30	70	

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
20	Quartz		Calcareous	20	Dense minerals <sup>1</sup>
16	Feldspars		Nannofossils		Micas (biotite, musc, chl) <sup>1</sup>
60	Clay minerals		Foraminifers		Glauconite
	Lithic Grains		Siliceous		Phosphate (bones, teeth, etc)
	Sedimentary Lithics		Diatom		Opaque Grain
	Chert		Radiolarian		Marine organic matter
	Mudstone		Silicoflagellate		Terrestrial organic matter
	Siltstone/sandstone		Sponge Spicule		Other (specify):
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
	Volcaniclastic Grains		Other bioclast (specify)	1	Pyrite (grain coating)
	Vitric fragments				Calcite
	Clear glass		Other carbonate allochems		Dolomite
25	Colored glass ?		Peloid		Zeolites
	Pumice		Intraclast		Fe/Mn oxide
	Volcanic lithics				Other (specify):
	Felsitic				
	Microlite	1	Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic (palagonite)		Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

Remarks:

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/28/16

Expedition: 362

Observer: Fouiel

Site: U1480 Hole: FG Core: 18R Sect.: 4A

Interval: 3

Sediment Name: Very fine sand with silt

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.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
45	Quartz		Calcareous	3	Dense minerals <sup>1</sup>
40	Feldspars		Nannofossils	tr	Micas (biotite, musc, chl)
	Clay minerals		Foraminifers		Glaucinite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate	tr	Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)	tr	Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
tr	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microfite	2	Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic (palagonite)		Carbonate mud (apart from nannos)		

GARNET?  
Hornbl.

<sup>1</sup> List under remarks if possible Fill percentage (Total must be 100).

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

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/28/16

Expedition: 362

Observer: Fauquier

Site: U1480 Hole: KG Core: 18R Sect.: 4A Interval: S3

Sediment Name: clayed silt

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
X				100				10	65	30

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
40	Quartz	FR	Calcareous	4	Dense minerals
24	Feldspars		Nannofossils		Micas (biotite, musc, chl)
30	Clay minerals		Foraminifers		Glaucinite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom	1	Opaque Grain
	Sedimentary Lithics		Radiolarian	1	Marine organic matter
	Chert		Silicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlite		Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic (palagonite)		Carbonate mud (apart from nannos)		

\* List under remarks if possible

Fill percentage (Total must be 100).

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

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

04

Sediment Smear Slide / Thin Section Description Sheet

Date: 8/28/16

Expedition: 362

Observer: KLM

Site: U1480 Hole: BG Core: 19 Sect.: 1

Interval: 65

Sediment Name: clay w/silt

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100%		2		20		80

Select one and check.

Select one and check.

20  
10  
65

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
	Quartz		Calcareous	tr	Dense minerals <sup>1</sup>
	Feldspars	2	Nannofossils	tr	Micas (biotite, musc, chl)
	Clay minerals		Foraminifers		Glauconite
	Lithic Grains		Siliceous		Phosphate (bones, teeth, etc)
	Sedimentary Lithics		Diatom		Opaque Grain
	Chert		Radiolarian		Marine organic matter
	Mudstone		Silicoflagellate		Terrestrial organic matter
	Siltstone/sandstone		Sponge Spicule		Other (specify):
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlitic				
	Lathwork		Silt or sand-size carbonate allochem fragment (unspecified)		
	Altered volcanic (palagonite)				
		3	Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

Remarks: green mud

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/28/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 19 Sect.: 2

Interval: 100

Sediment Name: sand

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100				100		

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
50	Quartz		Calcareous		Dense minerals <sup>1</sup>
20	Feldspars		Nannofossils		Micas (biotite, musc, chl)
	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains			~30	Calcite
	Vitric fragments			?	Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlitic		Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic (palagonite)		Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

Remarks:

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

Q4

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/28/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 20 Sect.: 1

Interval: 37

Sediment Name: Sandy silt w/clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100				40	50	10

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
47	Quartz		Calcareous	1	Dense minerals <sup>1</sup>
35	Feldspars		Nannofossils	2	Micas (biotite, musc, chl)
10	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom	1	Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)	1	Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlite		Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic (palagonite)				
		3	Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

Remarks:

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



OK

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

Date: 8/28/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 20 Sect.: 1

Interval: 54

Sediment Name: silt

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100					100	

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks:

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

Sediment Smear Slide / Thin Section Description Sheet

Date: 8/28/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 20 Sect.: 1

Interval: 93

Sediment Name: clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100					10	90

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks: dark mud

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

# Sediment Smear Slide / Thin Section Description Sheet

OW

Date: 8/28/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 20 Sect.: 3

Interval: 66

Sediment Name: Sand-silt clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100				205	4035	40

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	<b>Major Siliciclastic Grain Types</b>		<b>Pelagic Grains</b>		<b>Minor Grain Types</b>
35	Quartz		Calcareous	1	Dense minerals <sup>1</sup>
25	Feldspars		Nannofossils	2	Micas (biotite, musc, chl)
39/40	Clay minerals		Foraminifers		Glauconite
	Lithic Grains		Siliceous		Phosphate (bones, teeth, etc)
	<b>Sedimentary Lithics</b>		Diatom		Opaque Grain
	Chert		Radiolarian		Marine organic matter
	Mudstone		Silicoflagellate		Terrestrial organic matter
	Siltstone/sandstone		Sponge Spicule		Other (specify):
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		1 Pyrite (grain coating)
	<b>Volcaniclastic Grains</b>				Calcite
	Vitric fragments				Dolomite
	Clear glass		<b>Other carbonate allochems</b>		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlitic		Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic (palagonite)				
		2	Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

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

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/28/2016

*OK*

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 20 Sect.: 3

Interval: 94

Sediment Name: silty clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100					25	75

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks: dark mud

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

mgj01

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/28/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 21 Sect.: 1

Interval: 12

Sediment Name: Silty clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100				30	70	

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks: gray clay, botrychoidal

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/28/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G

Core: 21 Sect.: 1

Interval: 28

Sediment Name: silty clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100				40	60	

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
30	Quartz		Calcareous		Dense minerals <sup>1</sup>
20	Feldspars		Nannofossils	1	Micas (biotite, musc, chl)
33	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate	1	Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer	5	Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
5	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlite		Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic (palagonite)				
		5	Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

Remarks: dark silt

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

# Sediment Smear Slide / Thin Section Description Sheet

04

Date: 8/28/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 21R Sect.: 2

Interval: 1/2

Sediment Name: Clayey silt

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100				5	80	15

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
51	Quartz		Calcareous		Dense minerals <sup>1</sup>
25	Feldspars		Nannofossils	2	Micas (biotite, musc, chl)
16	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)	1	Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
1	Clear glass		Other carbonate allochems		Zeolites
tr	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlitic		Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic (palagonite)				
		5	Carbonate mud (apart from nanos)		
			silt microcryst		

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

Fill percentage (Total must be 100).

Remarks: Micas, impregnated pyrite-coated

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

major

OW

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/28/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G

Core: 21R Sect.: 3

Interval: 52

Sediment Name: clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100					15	85

Select one and check.

Select one and check.

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

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

Percent	Composition
	Minor Grain Types
	Dense minerals <sup>1</sup>
	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)
1	Pyrite (euhedra)
	Pyrite (grain coating)
	Calcite
	Dolomite
	Zeolites
	Fe/Mn oxide
	Other (specify):

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

Fill percentage (Total must be 100).

Remarks: green mud

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



# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/28/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G

Core: 21R Sect.: 1

Interval: 145

Sediment Name: clay w/silt

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100					20	80

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks: laminar mud

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/28/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 22R Sect.: 1

Interval: 20

Sediment Name: Silty clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100				30	70	

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks: green mud

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

major

OW

### Sediment Smear Slide / Thin Section Description Sheet

Date: 8/28/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 22R Sect.: 3

Interval: 80

Sediment Name: clay w/ silt

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100				15	85	

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks: dark mud

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

minor

OK

### Sediment Smear Slide / Thin Section Description Sheet

Date: 8/28/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 21R Sect.: 4

Interval: 35

Sediment Name: Sand-silt-clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100				25	45	35

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks:

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

04

Sediment Smear Slide / Thin Section Description Sheet

Date: 8/28/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 22R Sect.: 3

Interval: 80

Sediment Name: clay w/silt

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100				20	80	

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks:

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/28/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G

Core: 22R Sect.: 4

Interval: 105

Sediment Name: Silt

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100				10	80	10

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
60	Quartz		Calcareous		Dense minerals <sup>1</sup>
25	Feldspars		Nannofossils	1	Micas (biotite, musc, chl)
10	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)	2	Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlitic		Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic(palagonite)				
		2	Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

Remarks:

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

gls

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/28/16

Expedition: 362

Observer: FANIP

Site: U1480 Hole: G

Core: 23R Sect.: 1A

Interval: 36

Sediment Name: Silty sand

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100				60	40	

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
55	Quartz		Calcareous	2	Dense minerals <sup>1</sup>
36	Feldspars		Nannofossils	1	Micas (biotite, musc, chl)
	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlitic	2	Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic (palagonite)	1	Carbonate mud (apart from nanos)		

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

Fill percentage (Total must be 100).

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

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

04

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/29/16

Expedition: 362

Observer: Farid

Site: U1480 Hole: G

Core: 23R Sect.: 1A

Interval: 72

Sediment Name:

clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100				5	95	

Select one and check.

Select one and check.

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

claystone

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

Fill percentage (Total must be 100).

Remarks:

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



DMK

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

Date: 8/19/16

Expedition: 362

Observer: Fouid

Site: U1480 Hole: G Core: 23R Sect.: 4A Interval: SS

Sediment Name: calcareous (nannofossil) ooze  
OR calcareous clay?

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				<u>90</u>		<u>10</u>				<u>100</u>

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
	Quartz		Calcareous		Dense minerals <sup>1</sup>
	Feldspars	<u>10</u>	Nannofossils		Micas (biotite, musc, chl)
<u>30</u>	Clay minerals		Foraminifers		Glauconite
	Lithic Grains		Siliceous		Phosphate (bones, teeth, etc)
	Sedimentary Lithics		Diatom		Opaque Grain
	Chert		Radiolarian		Marine organic matter
	Mudstone		Silicoflagellate		Terrestrial organic matter
	Siltstone/sandstone		Sponge Spicule		Other (specify):
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlitic		Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic(palagonite)				
		<u>80</u>	Carbonate mud (apart from nanos)		

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

Fill percentage (Total must be 100).

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

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

016

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/10/16

Expedition: 362

Observer: David

Site: U1480 Hole: G Core: 236 Sect.: 6A Interval: 20

Sediment Name: clay with fgnite

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
									10	80

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
	Quartz		Calcareous		Dense minerals
	Feldspars		Nannofossils		Micas (biotite, musc, chl)
80	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer	13	Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlite		Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic(palagonite)		Carbonate mud (apart from nanos)		

List under remarks if possible

Fill percentage (Total must be 100).

Remarks:

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

*U 1480*

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/29/16

Expedition: 362

Observer: Fauld

Site: U1480 Hole: G Core: 23R Sect.: 6A Interval: 60

Sediment Name: Silt with clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100				85	15	

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
60	Quartz		Calcareous		Dense minerals <sup>1</sup>
19	Feldspars		Nannofossils	1	Micas (biotite, musc, chl) <i>chlorite</i>
15	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom	82	Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlite	3	Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic (palagonite)		Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

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

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

04

### Sediment Smear Slide / Thin Section Description Sheet

Date: 8/23/16

Expedition: 362

Observer: Paul

Site: U1480 Hole: G Core: 298 Sect.: 1A

Interval: 60

Sediment Name: clay with silt

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
X				100				15	85	

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks:

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

04

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/20/16

Expedition: 362

Observer: Ford

Site: U1480 Hole: G Core: 24R Sect.: 2A Interval: 43

Sediment Name: clay with silt

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
<input checked="" type="checkbox"/>				100					20	80

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
28	Quartz		Calcareous	1	Dense minerals <sup>1</sup>
	Feldspars		Nannofossils	1	Micas (biotite, musc, chl)
72	Clay minerals		Foraminifers		Glauconite
	Lithic Grains		Siliceous		Phosphate (bones, teeth, etc)
	Sedimentary Lithics		Diatom	10	Opaque Grain
	Chert		Radiolarian		Marine organic matter
	Mudstone		Silicoflagellate		Terrestrial organic matter
	Siltstone/sandstone		Sponge Spicule		Other (specify):
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microclite				
	Lathwork		Silt or sand-size carbonate allochem fragment (unspecified)		
	Altered volcanic (palagonite)				
		12	Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

Remarks:

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/28/16

Expedition: 362

Observer: Fossil

Site: U1480 Hole: G

Core: 24 R Sect.: 3A

Interval: 25

Sediment Name: clayey silt

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
X				100					70	30

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
58	Quartz	To	Calcareous	4	Dense minerals <sup>1</sup>
10	Feldspars		Nannofossils		Micas (biotite, musc, chl)
30	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate	fn	Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlite				
	Lathwork		Silt or sand-size carbonate allochem fragment (unspecified)		
	Altered volcanic (palagonite)				
			Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

Remarks: Nannofossil occurrence

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/28/16

Expedition: 362

Observer: Ronnie

Site: U1480 Hole: G Core: ZSR Sect.: 2A

Interval: 3 + 1

Sediment Name: silt with sand

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
X				100				20	75	

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
50	Quartz		Calcareous	3	Dense minerals <sup>1</sup>
43	Feldspars		Nannofossils	1	Micas (biotite, musc, chl)
	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer	to	Pyrite (euhedra)
			Other bioclast (specify)	2	Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
to	Colored glass		Peloid		Fe/Mn oxide
to	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlite	1	Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic (palagonite)		Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

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

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

DR

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/23/16

Expedition: 362

Observer: FAYO

Site: U1480 Hole: G Core: 25R Sect.: 2A Interval: 93

Sediment Name: clay under silt

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
<input checked="" type="checkbox"/>				100				15	85	

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
15	Quartz		Calcareous	40	Dense minerals <sup>1</sup>
25	Feldspars		Nannofossils		Micas (biotite, musc, chl)
40	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlite		Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic (palagonite)				
			Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

Remarks:

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



# Sediment Smear Slide / Thin Section Description Sheet

*OK*

Date: 8/19/16

Expedition: 362

Observer: Ferid

Site: U1480 Hole: G Core: 2SR Sect.: 4A

Interval: 28

Sediment Name: Silty sand

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				<u>100</u>				<u>65</u>	<u>30</u>	<u>5</u>

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
<u>93</u>	Quartz		Calcareous	<u>4</u>	Dense minerals <sup>1</sup>
<u>40</u>	Feldspars		Nannofossils	<u>2</u>	Micas (biotite, musc, chl)
<u>5</u>	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian	<u>2</u>	Marine organic matter
	Chert		Silicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer	<u>2</u>	Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
<u>1</u>	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic	<u>2</u>			
	Microclite		Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic(palagonite)		Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

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

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/29/16

Expedition: 362

Observer: FAZLO

Site: U1480 Hole: G Core: ZSR Sect.: 4A

Interval: 88

Sediment Name: clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
<input checked="" type="checkbox"/>				<u>100</u>					<u>5</u>	<u>95</u>

Select one and check. Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
<u>5</u>	Quartz		Calcareous		Dense minerals <sup>1</sup>
<u>91</u>	Feldspars		Nannofossils		Micas (biotite, musc, chl)
	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom	<u>1/4</u>	Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer	<u>tu</u>	Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlite				
	Lathwork		Silt or sand-size carbonate allochem fragment (unspecified)		
	Altered volcanic(palagonite)	<u>3</u>	Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

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

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/28/16

Expedition: 362

Observer: Faircl

Site: U1480

Hole: G

Core: 26R

Section: 1A

Interval: 59

Sediment Name: clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
X				X					7	93

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
8	Quartz		Calcareous		Dense minerals <sup>1</sup>
2	Feldspars		Nannofossils		Micas (biotite, musc, chl)
2	Clay minerals		Foraminifers		Glauconite
	Lithic Grains		Siliceous		Phosphate (bones, teeth, etc)
	Sedimentary Lithics		Diatom	50	Opaque Grain
	Chert		Radiolarian		Marine organic matter
	Mudstone		Silicoflagellate		Terrestrial organic matter
	Siltstone/sandstone		Sponge Spicule		Other (specify):
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)	1	Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlite				
	Lathwork		Silt or sand-size carbonate allochem fragment (unspecified)		
	Altered volcanic (palagonite)	1	Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

Remarks:

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

04

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

Date: 8/19/16

Expedition: 362

Observer: Fauid

Site: U1480 Hole: G Core: 269 Sect.: 1A Interval: 122

Sediment Name: Calcareous clay

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

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
20	Quartz	10	Calcareous		Dense minerals <sup>1</sup>
	Feldspars		Nannofossils		Micas (biotite, musc, chl)
30	Clay minerals		Foraminifers		Glauconite
	Lithic Grains		Siliceous		Phosphate (bones, teeth, etc)
	Sedimentary Lithics		Diatom		Opaque Grain
	Chert		Radiolarian		Marine organic matter
	Mudstone		Silicoflagellate		Terrestrial organic matter
	Siltstone/sandstone		Sponge Spicule		Other (specify):
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlite				
	Lathwork		Silt or sand-size carbonate allochem fragment (unspecified)		
	Altered volcanic(palagonite)				
		40	Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

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

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

04

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/29/16

Expedition: 362

Observer: Fluid

Site: U1480 Hole: G

Core: 26R Sect.: 2A

Interval: 86

Sediment Name: Clay with silt

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
X				100				15	85	

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks:

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

majes ✓

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/29/16

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 27R Sect.: 1

Interval: 24

Sediment Name: silty clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100				40	60	

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks: gray-green mud

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/29/16

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 27R Sect.: 2 Interval: 74

Sediment Name: clay w/ silt

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100				20	80	

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks: gray-green mud

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/29/16

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 27R Sect.: 3

Interval: 16

Sediment Name: silty sand

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				<u>100</u>				<u>50</u>	<u>40</u>	<u>10</u>

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
<u>58</u>	Quartz		Calcareous	<u>1</u>	Dense minerals <sup>1</sup>
<u>35</u>	Feldspars		Nannofossils	<u>1</u>	Micas (biotite, musc, chl)
	Clay minerals		Foraminifers		Glauconite
	Lithic Grains		Siliceous		Phosphate (bones, teeth, etc)
	Sedimentary Lithics		Diatom		Opaque Grain
	Chert		Radiolarian		Marine organic matter
	Mudstone		Silicoflagellate		Terrestrial organic matter
	Siltstone/sandstone		Sponge Spicule		Other (specify):
	Limestone		Other bioclasts		
<u>5</u>	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
<u>4</u>	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlite				
	Lathwork		Silt or sand-size carbonate allochem fragment (unspecified)		
	Altered volcanic(palagonite)				
			Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

Remarks: ugly sand w/ OM; micas very large

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

sand-size non-cryst cal cement  
nice for photos of MRFS



# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/29/16

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 27R Sect.: 3

Interval: 79

Sediment Name: clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				99		1			10	90

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
15	Quartz		Calcareous		Dense minerals <sup>1</sup>
10	Feldspars	1	Nannofossils		Micas (biotite, musc, chl)
69	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate	71	Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer	1	Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains			75	Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlitic				
	Lathwork		Silt or sand-size carbonate allochem fragment (unspecified)		
	Altered volcanic(palagonite)				
			Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

Remarks: Shear band in poss. mud clast in ugly (clayey) sd

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

carb has interlocking  
auth?

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/29/16

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 27R Sect.: 3

Interval: 82

Sediment Name: clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100				10	90	

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
15	Quartz		Calcareous		Dense minerals <sup>1</sup>
10	Feldspars		Nannofossils		Micas (biotite, musc, chl)
65	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains			10	Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlite		Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic (palagonite)		Carbonate mud (apart from nanos)		

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

Fill percentage (Total must be 100).

Remarks: mud below ~~flow~~ shear band in possible clast in gely sand

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

minor ✓

# Sediment Smear Slide / Thin Section Description Sheet

Date: <sup>29</sup> 8/28/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 28R Sect.: 1 Interval: 24

Sediment Name: sandy silt

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100				25	75	5

Select one and check.

Select one and check.

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

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

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

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

Fill percentage (Total must be 100).

Remarks: thin smud

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

Minor ✓

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/29/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G

Core: 28

Sect.: 1

Interval: 58

Sediment Name:

clay (carbonate concretions)

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100				10	90	

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
10	Quartz		Calcareous		Dense minerals <sup>1</sup>
5	Feldspars		Nannofossils		Micas (biotite, musc, chl) <sup>1</sup>
50	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains			35	Calcite ? or other carb
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlitic		Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic (palagonite)		Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

Remarks:

from calcite - ductile soft sed. defm.

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

major ✓

# Sediment Smear Slide / Thin Section Description Sheet

Date: <sup>29</sup> 8/28/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 28R Sect.: 1

Interval: 100

Sediment Name: silty clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				60				30	70	

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks: dark mud

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

minor ✓

# Sediment Smear Slide / Thin Section Description Sheet

Date: <sup>29</sup> 8/28/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 29R Sect.: 1

Interval: 30

Sediment Name: sandy silt

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100				20	75	5

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks: clayey silt

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

Minor ✓

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/28/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 29R Sect.: 1

Interval: 53

Sediment Name: Silt

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100				100		

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
60	Quartz		Calcareous	1	Dense minerals <sup>1</sup>
31	Feldspars		Nannofossils	2	Micas (biotite, musc, chl)
	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer	1	Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlitic		Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic (palagonite)				
		5	Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

Remarks: thin silt

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

Major ✓

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/29/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 29R Sect.: 1

Interval: 69

Sediment Name: Clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount

Select one and check.

Granular Sediment			Other material	Percent Texture		
Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
<u>100</u>					<u>10</u>	<u>90</u>

Select one and check.

Percent	Composition
	Major Siliciclastic Grain Types
<u>12</u>	Quartz
<u>8</u>	Feldspars
<u>80</u>	Clay minerals
	Lithic Grains
	Sedimentary Lithics
	Chert
	Mudstone
	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
	Volcaniclastic Grains
	Vitric fragments
	Clear glass
	Colored glass
	Pumice
	Volcanic lithics
	Felsitic
	Microclite
	Lathwork
	Altered volcanic(palagonite)

Percent	Composition
	Pelagic Grains
	Calcareous
	Nannofossils
	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	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
	Dense minerals <sup>1</sup>
	Micas (biotite, musc, chl)
	Glauconite
	Phosphate (bones, teeth, etc)
	Opaque Grain
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
	Authigenic components
	Pyrite (framboids)
	Pyrite (euhedra)
	Pyrite (grain coating)
	Calcite
	Dolomite
	Zeolites
	Fe/Mn oxide
	Other (specify):

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

Fill percentage (Total must be 100).

Remarks: dark mud

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



major ✓

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

Date: 8/29/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 30R Sect.: 1

Interval: 62

Sediment Name: Silty clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100				30	70	

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks: green mud

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

m. h. e. r

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/29/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 30 R Sect.: 2

Interval: 24

Sediment Name: clay w/ silt

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100				20	80	

Select one and check.

Select one and check.

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

List under remarks if possible

Fill percentage (Total must be 100).

Remarks: thin, dark mud

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

major ✓

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/29/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 30R Sect.: 2

Interval: 30

Sediment Name: silty clay

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.

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

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

Fill percentage (Total must be 100).

Remarks:

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/29/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 31 Sect.: 1

Interval: 40

Sediment Name: sandw/ silt

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100				80	15	5

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
55	Quartz		Calcareous	1	Dense minerals <sup>1</sup>
30	Feldspars		Nannofossils	2	Micas (biotite, musc, chl)
5	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
5	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
1	monocryst. carb		Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)	1	Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlitic		Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic (palagonite)		Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

Remarks: from clayey sand interval

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

great MRFs for photos, huge Micas

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/29/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G

Core: 31 Sect.: 2

Interval: 16

Sediment Name: Clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				98		2			10	90

Select one and check.

Select one and check.

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

Percent	Composition
	Pelagic Grains
	Calcareous
2	Nannofossils
	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	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)
5	Carbonate mud (apart from nannos)

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

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

Fill percentage (Total must be 100).

Remarks: carb may include recryst nannos

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

minor



Sediment Smear Slide / Thin Section Description Sheet

Date: 8/29/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 31 Sect.: 2

Interval: 40

Sediment Name: sandy silt

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100				30	55	15

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks:

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

minor ✓

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

Date: 8/29/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 31 Sect.: 3

Interval: 51

Sediment Name: cal. clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				70		30			10	90

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
10	Quartz		Calcareous		Dense minerals <sup>1</sup>
5	Feldspars	30	Nannofossils + discos		Micas (biotite, musc, chl)
55	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlitic				
	Lathwork				
	Altered volcanic (palagonite)				
		3	Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

Remarks: Coccos dismembered - discos also broken

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/29/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 31 Sect.: 4

Interval: 54

Sediment Name: silty clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100					25	75

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks: brown mud

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



Major ✓

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/29/16

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 31 Sect.: 5

Interval: 27

Sediment Name: Silty clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100				30	70	

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks: gray-green mud - no carb.

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/29/16

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 31 Sect.: 5

Interval: 109

Sediment Name: silty clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100				25	75	

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks: brown mud -

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/30/16

Expedition: 362

Observer: Fahid

Site: U1480 Hole: G

Core: 32R Sect.: 1A

Interval: 26

Sediment Name: Silty fine sand

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
<u>X</u>				<u>100</u>				<u>70</u>	<u>25</u>	<u>5</u>

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
<u>40</u>	Quartz		Calcareous	<u>3</u>	Dense minerals <sup>1</sup>
<u>45</u>	Feldspars		Nannofossils	<u>1</u>	Micas (biotite, musc, chl)
<u>3</u>	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)	<u>1</u>	Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
<u>1</u>	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlite		Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic(palagonite)		Carbonate mud (apart from nanos)		

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

Fill percentage (Total must be 100).

Remarks:

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/ /16

Expedition: 362

Observer:

Site: U1480 Hole: G

Core: 32 Sect.: 1A

Interval: 104

Sediment Name:

silty clay with carbonate

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

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks:

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/ /16

Expedition: 362

Observer: \_\_\_\_\_

Site: U1480 Hole: G

Core: 32R Sect.: 1A

Interval: 124

Sediment Name: clay with silt

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
<u>X</u>				<u>100</u>				<u>15</u>	<u>85</u>	

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
<u>20</u>	Quartz		Calcareous	<u>1</u>	Dense minerals <sup>1</sup>
<u>10</u>	Feldspars		Nannofossils	<u>42</u>	Micas (biotite, musc, chl)
<u>68</u>	Clay minerals		Foraminifers		Glauconite
	Lithic Grains		Siliceous		Phosphate (bones, teeth, etc)
	Sedimentary Lithics		Diatom		Opaque Grain
	Chert		Radiolarian		Marine organic matter
	Mudstone		Silicoflagellate		Terrestrial organic matter
	Siltstone/sandstone		Sponge Spicule		Other (specify):
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer	<u>1</u>	Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic		Silt or sand-size carbonate allochem fragment (unspecified)		
	Microlitic				
	Lathwork		Carbonate mud (apart from nanos)		
	Altered volcanic(palagonite)				

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

Fill percentage (Total must be 100).

Remarks:

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/ /16

Expedition: 362

Observer: Ferd

Site: U1480 Hole: G

Core: 3CR Sect.: 2A

Interval: SS

Sediment Name: clay with silt

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.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
20	Quartz		Calcareous	2	Dense minerals <sup>1</sup>
38	Feldspars		Nannofossils	1	Micas (biotite, musc, chl)
62	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom	1	Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer	1	Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
1	Clear glass ?		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlite		Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic (palagonite)		Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

Remarks:

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/30/16

Expedition: 362

Observer: Fazio

Site: U1480 Hole: G Core: 3:2 Sect.: 6A Interval: 22

Sediment Name: clayey silt-

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
<input checked="" type="checkbox"/>				100				5	75	20

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
<u>83</u>	Quartz		Calcareous	<u>LR</u>	Dense minerals <sup>1</sup>
<u>10</u>	Feldspars		Nannofossils	<u>TR</u>	Micas (biotite, musc, chl)
<u>25</u>	Clay minerals		Foraminifers		Glauconite
	Lithic Grains		Siliceous		Phosphate (bones, teeth, etc)
	Sedimentary Lithics		Diatom	<u>1</u>	Opaque Grain
	Chert		Radiolarian	<u>1</u>	Marine organic matter
	Mudstone		Silicoflagellate		Terrestrial organic matter
	Siltstone/sandstone		Sponge Spicule		Other (specify):
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framoids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlitic	<u>5</u>	Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic (palagonite)		Carbonate mud (apart from nanos)		

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

Fill percentage (Total must be 100).

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

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/30/16

Expedition: 362

Observer: Fouid

Site: U1480 Hole: G

Core: 33R Sect.: 1A

Interval: 8

Sediment Name: Sandy silt with clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
<input checked="" type="checkbox"/>				100				25	70	5

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
60	Quartz		Calcareous	1	Dense minerals <sup>1</sup>
20	Feldspars		Nannofossils		Micas (biotite, musc, chl)
3	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom	2	Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)	2	Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
1	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlite	3	Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic (palagonite)		Carbonate mud (apart from nanos)		

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

Fill percentage (Total must be 100).

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

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



# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/30/16

Expedition: 362

Observer: Perid

Site: U1480 Hole: G

Core: 34 Sect.: 1A

Interval: 39

Sediment Name: fine sand

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

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
<u>35</u>	Quartz		Calcareous	<u>3</u>	Dense minerals
<u>95</u>	Feldspars		Nannofossils	<u>ER</u>	Micas (biotite, musc, chl)
	Clay minerals		Foraminifers		Glauconite
	Lithic Grains		Siliceous		Phosphate (bones, teeth, etc)
	Sedimentary Lithics		Diatom		Opaque Grain
	Chert		Radiolarian	<u>3</u>	Marine organic matter
	Mudstone		Silicoflagellate		Terrestrial organic matter
	Siltstone/sandstone		Sponge Spicule		Other (specify):
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm	<u>3</u>	Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
<u>7</u>	Colored glass		Peloid		Fe/Mn oxide
<u>ER</u>	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlitic	<u>10</u>	Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic (palagonite)		Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

Remarks:

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/30/16

Expedition: 362

Observer: Fried

Site: U1480 Hole: G Core: 34 Sect.: 1A Interval: 2D

Sediment Name: Clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100				5	95	

Select one and check.

Select one and check.

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

1 List under remarks if possible

Fill percentage (Total must be 100).

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

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/ /16

Expedition: 362

Observer:

Site: U1480 Hole: G Core: 39 Sect.: 1A

Interval: 81

Sediment Name: clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				<u>95</u>		<u>5</u>				<u>100</u>

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
<u>7</u>	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
	Quartz		Calcareous		Dense minerals <sup>1</sup>
	Feldspars	<u>5</u>	Nannofossils <u>7</u>		Micas (biotite, musc, chl) <sup>1</sup>
<u>98</u>	Clay minerals		Foraminifers		Glauconite
	Lithic Grains		Siliceous		Phosphate (bones, teeth, etc)
	Sedimentary Lithics		Diatom		Opaque Grain
	Chert		Radiolarian		Marine organic matter
	Mudstone		Silicoflagellate		Terrestrial organic matter
	Siltstone/sandstone		Sponge Spicule		Other (specify):
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlite		Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic(palagonite)				
		<u>7</u>	Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

Remarks:

very dark clay layer  
(mud)

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/30/16

Expedition: 362

Observer: FANU

Site: U1480 Hole: G

Core: ~~36~~ Sect.: 1A

Interval: 36

Sediment Name: "SANDY"

Silty with calcareous

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
X				100				22	80	8

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
90	Quartz		Calcareous		Dense minerals <sup>1</sup>
29	Feldspars		Nannofossils		Micas (biotite, musc, chl)
3	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlitic	15	Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic (palagonite)	3	Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

Remarks:

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/30/16

Expedition: 362

Observer: Fariel

Site: U1480 Hole: G

Core: 35R Sect.: 1A

Interval: 6B

Sediment Name: Clay with silt / calcareous

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>35</u>	<u>65</u>

Select one and check.

Percent	Composition
	Major Siliciclastic Grain Types
<u>20</u>	Quartz
<u>12</u>	Feldspars
<u>61</u>	Clay minerals
	Lithic Grains
	Sedimentary Lithics
	Chert
	Mudstone
	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
	Volcaniclastic Grains
	Vitric fragments
	Clear glass
	Colored glass
	Pumice
	Volcanic lithics
	Felsitic
	Microlitic
	Lathwork
	Altered volcanic (palagonite)

Percent	Composition
	Pelagic Grains
	Calcareous
	Nannofossils
	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
	Other bioclasts
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify)
	Other carbonate allochems
	Peloid
	Intraclast
<u>3</u>	Silt or sand-size carbonate allochem fragment (unspecified)
<u>4</u>	Carbonate mud (apart from nannos)

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

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

Fill percentage (Total must be 100).

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

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/30/16

Expedition: 362

Observer: Fazio

Site: U1480 Hole: G

Core: 35R Sect.: 1A

Interval: 81

Sediment Name: Silt with calcareous

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>S</u>

Select one and check.

Percent	Composition
	Major Siliciclastic Grain Types
<u>40</u>	Quartz
<u>38</u>	Feldspars
<u>2</u>	Clay minerals
	Lithic Grains
	Sedimentary Lithics
	Chert
	Mudstone
	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
	Volcaniclastic Grains
	Vitric fragments
	Clear glass
	Colored glass
	Pumice
	Volcanic lithics
	Felsitic
	Microlitic
	Lathwork
	Altered volcanic (palagonite)

Percent	Composition
	Pelagic Grains
	Calcareous
	Nannofossils
	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
	Other bioclasts
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify)
	Other carbonate allochems
	Peloid
	Intraclast
<u>17</u>	Silt or sand-size carbonate allochem fragment (unspecified)
<u>3</u>	Carbonate mud (apart from nannos)

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

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

Fill percentage (Total must be 100).

Remarks:

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/30/16

Expedition: 362

Observer: Fujid

Site: U1480

Hole: G

Core: 36R

Section: 1A

Interval: 61

Sediment Name: Silt sand with silt

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
X				100				77	20	3

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
43	Quartz		Calcareous	1	Dense minerals
41	Feldspars		Nannofossils	1	Micas (biotite, musc, chl)
	Clay minerals		Foraminifers		Glaucinite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate	2	Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)	3	Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
L	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlitic	6	Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic (palagonite)		Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

Remarks:

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/ /16

Expedition: 362

Observer: Foidl

Site: U1480 Hole: G

Core: 36R Sect.: 2A

Interval: 108

Sediment Name:

*Silty clay*

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100				45	55	

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
35	Quartz		Calcareous	1	Dense minerals <sup>1</sup>
15	Feldspars		Nannofossils	1	Micas (biotite, musc, chl)
45	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom	3	Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlite	2	Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic(palagonite)		Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

Remarks:

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



# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/30/16

Expedition: 362

Observer: Ford

Site: U1480 Hole: G

Core: 36R Sect.: 2A

Interval: 128

Sediment Name:

silt with clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
X				100				70	30	

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
40	Quartz		Calcareous		Dense minerals <sup>1</sup>
20	Feldspars		Nannofossils		Micas (biotite, musc, chl)
30	Clay minerals		Foraminifers		Glauconite
	Lithic Grains		Siliceous		Phosphate (bones, teeth, etc)
	Sedimentary Lithics		Diatom		Opaque Grain
	Chert		Radiolarian	1	Marine organic matter
	Mudstone		Silicoflagellate		Terrestrial organic matter
	Siltstone/sandstone		Sponge Spicule		Other (specify):
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)	2	Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlite	7	Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic (palagonite)		Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

Remarks:

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/ 16

Expedition: 362 Observer:

Site: U1480 Hole: G Core: 37 Sect: 1A Interval: 24

Sediment Name: silt with sand

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100				10	90	

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
45	Quartz		Calcareous	1	Dense minerals
40	Feldspars		Nannofossils	2	Micas (biotite, musc, chl)
	Clay minerals		Foraminifers		Glaucinite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom	2	Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer	10	Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microplitic				
	Lathwork	10	Silt or sand-size carbonate allochem fragment (unspecified)		
	Altered volcanic (palagonite)				
			Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

Remarks:

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/ /16

Expedition: 362

Observer:

Site: U1480 Hole: G

Core: 37 Sect.: 1A

Interval: S1

Sediment Name: sand with silt

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
								65	35	

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
65	Quartz		Calcareous	1	Dense minerals <sup>1</sup>
35	Feldspars		Nannofossils	1	Micas (biotite, musc, chl)
	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom	1	Opaque Grain
	Sedimentary Lithics		Radiolarian	1	Marine organic matter
	Chert		Silicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)	1	Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
1	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic	7	Silt or sand-size carbonate allochem fragment (unspecified)		
	Microlite				
	Lathwork		Carbonate mud (apart from nannos)		
	Altered volcanic (palagonite)				

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

Fill percentage (Total must be 100).

Remarks:

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/ /16

Expedition: 362 Observer: \_\_\_\_\_

Site: U1480 Hole: G Core: 32 Sect.: 1A Interval: 2-3

Sediment Name: Sand with silt

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

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	<b>Major Siliciclastic Grain Types</b>		<b>Pelagic Grains</b>		<b>Minor Grain Types</b>
30	Quartz		Calcareous	1	Dense minerals <sup>1</sup>
50	Feldspars		Nannofossils		Micas (biotite, musc, chl) <sup>1</sup>
2	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom	1	Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate	10	Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
2	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	<b>Volcaniclastic Grains</b>				Calcite
	Vitric fragments				Dolomite
	Clear glass		<b>Other carbonate allochems</b>		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlitic	4	Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic(palagonite)	3	Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

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

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/29/16

Expedition: 362

Observer: FAG

Site: U1480 Hole: G Core: 37R Sect.: 1A Interval: 64

Sediment Name: clay

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

Select one and check.

Granular Sediment			Other material	Percent Texture		
Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
<u>100</u>					<u>5</u>	<u>95</u>

Select one and check.

Percent	Composition
	Major Siliciclastic Grain Types
<u>10</u>	Quartz
<u>4</u>	Feldspars
<u>80</u>	Clay minerals
	Lithic Grains
	Sedimentary Lithics
	Chert
	Mudstone
	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
	Volcaniclastic Grains
	Vitric fragments
	Clear glass
	Colored glass
	Pumice
	Volcanic lithics
	Felsitic
	Microlitic
	Lathwork
	Altered volcanic (palagonite)

Percent	Composition
	Pelagic Grains
	Calcareous
	Nannofossils
	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
	Other bioclasts
	Mollusk
	Echinoderm
	Benthic foraminifer
	Other bioclast (specify)
	Other carbonate allochems
	Peloid
	Intraclast
<u>1</u>	Silt or sand-size carbonate allochem fragment (unspecified)
<u>4</u>	Carbonate mud (apart from nannos)

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

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

Fill percentage (Total must be 100).

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

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/30/16

Expedition: 362

Observer: FANW

Site: U1480 Hole: G Core: 37 Sect.: 2A Interval: 50

Sediment Name: clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
<input checked="" type="checkbox"/>				100					5	95

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
8	Quartz		Calcareous		Dense minerals <sup>1</sup>
	Feldspars		Nannofossils	80	Micas (biotite, musc, chl)
91	Clay minerals		Foraminifers		Glaucinite
	Lithic Grains		Siliceous		Phosphate (bones, teeth, etc)
	Sedimentary Lithics		Diatom	1	Opaque Grain
	Chert		Radiolarian		Marine organic matter
	Mudstone		Silicoflagellate		Terrestrial organic matter
	Siltstone/sandstone		Sponge Spicule		Other (specify):
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer	0	Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
100	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlitic				
	Lathwork		Silt or sand-size carbonate allochem fragment (unspecified)		
	Altered volcanic (palagonite)				
			Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

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

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

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

Date: 8/30/16

Expedition: 362

Observer: FARIS

Site: U1480 Hole: G Core: 37R Sect.: 3A Interval: 63

Sediment Name: fine sands

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				100	1	

Select one and check.

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

Percent	Composition
	Pelagic Grains
	Calcareous
	Nannofossils
	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
	Other bioclasts
	Mollusk
	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
	Dense minerals <sup>1</sup>
	Micas (biotite, musc, chl)
	Glauconite
	Phosphate (bones, teeth, etc)
	Opaque Grain
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
	Authigenic components
	Pyrite (framboids)
	Pyrite (euhedra)
	Pyrite (grain coating)
	Calcite
	Dolomite
	Zeolites
	Fe/Mn oxide
	Other (specify):

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

Fill percentage (Total must be 100).

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

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/30/16

Expedition: 362

Observer: FA 10

Site: U1480 Hole: G

Core: 37 Sect.: 3A

Interval: 24

Sediment Name: clay

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

Select one and check.

Granular Sediment			Other material	Percent Texture		
Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
<u>100</u>					<u>100</u>	

Select one and check.

Percent	Composition
	Major Siliciclastic Grain Types
<u>10</u>	Quartz
	Feldspars
<u>89</u>	Clay minerals
	Lithic Grains
	Sedimentary Lithics
	Chert
	Mudstone
	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
	Volcaniclastic Grains
	Vitric fragments
	Clear glass
	Colored glass
	Pumice
	Volcanic lithics
	Felsitic
	Microlite
	Lathwork
	Altered volcanic (palagonite)

Percent	Composition
	Pelagic Grains
	Calcareous
	Nannofossils
	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	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)
<u>1</u>	Carbonate mud (apart from nannos)

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

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

Fill percentage (Total must be 100).

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

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



# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/30/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 38 Sect.: 1

Interval: 35

Sediment Name: Sandy silt w/ clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100				30	60	10

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
50	Quartz		Calcareous	1	Dense minerals <sup>1</sup>
30	Feldspars		Nannofossils	2	Micas (biotite, musc, chl)
10	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate	2	Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
2	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
1	<u>carb monocryst</u>		Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)	2	Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microplitic		Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic (palagonite)		Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

Remarks: huge micas coated w/ py (chl + biot.)

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/30/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 38 Sect.: 1 Interval: 59

Sediment Name: clayey silt

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100				70	30	

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks: in zone of high magnetic susceptibility or just above

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/30/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 38 Sect.: 1 Interval: 61

Sediment Name: clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100					10	90

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
12	Quartz		Calcareous		Dense minerals
8	Feldspars		Nannofossils		Micas (biotite, musc, chl)
80	Clay minerals		Foraminifers		Glaucinite
	Lithic Grains		Siliceous		Phosphate (bones, teeth, etc)
	Sedimentary Lithics		Diatom		Opaque Grain
	Chert		Radiolarian		Marine organic matter
	Mudstone		Silicoflagellate		Terrestrial organic matter
	Siltstone/sandstone		Sponge Spicule		Other (specify):
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating) <u>?</u>
	Volcaniclastic Grains			1	Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microclite				
	Lathwork				
	Altered volcanic (palagonite)				

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

Fill percentage (Total must be 100).

Remarks: in zone of high magnetic susce.

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

newly devoid of silt-size

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/30/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 38 Sect.: 1

Interval: 92

Sediment Name: Silty clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100				40	60	

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks: in zone of high magnetic suscp or just above

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: **8/30/2016**

Expedition: **362**

Observer: **KLM**

Site: **U1480** Hole: **G** Core: **38** Sect.: **1**

Interval: **93**

Sediment Name: **clay**

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100				10	90	

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks: **in zone of high magnetic susceptibility**

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/30/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G

Core: 38 Sect.: 2

Interval: 10

Sediment Name: clay w/ silt

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100					15	85

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks: dense Nereites zone

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/30/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 38 Sect.: 3

Interval: 46

Sediment Name: clay w/silt

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100				20	80	

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks: structureless mud

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/30/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 38 Sect.: 5

Interval: 16

Sediment Name: silty clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				97		3			30	70

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
35	Quartz		Calcareous		Dense minerals <sup>1</sup>
20	Feldspars	3	Nannofossils		Micas (biotite, musc, chl) <sup>1</sup>
37	Clay minerals		Foraminifers		Glaucinite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)	1	Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlite		Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic(palagonite)				
		4	Carbonate mud (apart from nanos)		

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

Fill percentage (Total must be 100).

Remarks: greenish bentonitic zone

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



# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/30/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 39 Sect.: 2

Interval: 2

Sediment Name: silty clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				99		1		30	70	

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks: gray mud

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/30/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 39 Sect.: 3

Interval: 55

Sediment Name: sandy silt

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100				40	50	10

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks:

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

# ✓ Sediment Smear Slide / Thin Section Description Sheet

Date: 8/30/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 40 Sect.: 1

Interval: 40

Sediment Name: silt

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100				5	85	10

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks:

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/30/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 40 Sect.: 1

Interval: 42

Sediment Name: Clay w/ silt

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				99		1			20	80

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks: gray mud

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/30/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 42 Sect.: 2A Interval: 53

Sediment Name: silty sand

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
								<u>70</u>	<u>29</u>	<u>5</u>

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
<u>70</u>	Quartz		Calcareous		Dense minerals <sup>1</sup>
<u>21</u>	Feldspars		Nannofossils		Micas (biotite, musc, chl)
<u>9</u>	Clay minerals		Foraminifers		Glauconite
	Lithic Grains		Siliceous		Phosphate (bones, teeth, etc)
	Sedimentary Lithics		Diatom		Opaque Grain
	Chert		Radiolarian		Marine organic matter
	Mudstone		Silicoflagellate		Terrestrial organic matter
	Siltstone/sandstone		Sponge Spicule		Other (specify):
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlite	<u>3</u>	Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic (palagonite)	<u>1</u>	Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

Remarks:

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 31  
8/30/2016

Expedition: 362

Observer: KLM-FR 110

Site: U1480 Hole: G Core: 42 Sect.: 2A Interval: 84

Sediment Name: clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
X				100						100

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks:

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/30/2016

Expedition: 362

Observer: KLM *FALD*

Site: U1480 Hole: G Core: 42 Sect.: 3A

Interval: 40

Sediment Name: *Silty SAND*

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
<i>X</i>				<i>100</i>				<i>70</i>	<i>25</i>	<i>5</i>

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
<i>50</i>	Quartz		Calcareous	<i>2</i>	Dense minerals <sup>1</sup>
<i>38</i>	Feldspars		Nannofossils	<i>1</i>	Micas (biotite, musc, chl)
<i>5</i>	Clay minerals		Foraminifers		Glauconite
	Lithic Grains		Siliceous		Phosphate (bones, teeth, etc)
	Sedimentary Lithics		Diatom		Opaque Grain
	Chert		Radiolarian		Marine organic matter
	Mudstone		Silicoflagellate		Terrestrial organic matter
	Siltstone/sandstone		Sponge Spicule		Other (specify):
	Limestone		Other bioclasts		
<i>1</i>	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic	<i>3</i>	Silt or sand-size carbonate allochem fragment (unspecified)		
	Microplitic				
	Lathwork		Carbonate mud (apart from nannos)		
	Altered volcanic (palagonite)				

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

Fill percentage (Total must be 100).

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

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/30/2016

Expedition: 362

Observer: FX 010  
KLM

Site: U1480 Hole: G Core: 42 Sect.: 3D

Interval: 62

Sediment Name: Silty clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
X				100				45	55	

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
45	Quartz		Calcareous	45	Dense minerals <sup>1</sup>
7	Feldspars		Nannofossils	55	Micas (biotite, musc, chl) <sup>1</sup>
95	Clay minerals		Foraminifers		Glauconite
	Lithic Grains		Siliceous		Phosphate (bones, teeth, etc)
	Sedimentary Lithics		Diatom	55	Opaque Grain
	Chert		Radiolarian		Marine organic matter
	Mudstone		Silicoflagellate		Terrestrial organic matter
	Siltstone/sandstone		Sponge Spicule		Other (specify):
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlite	2	Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic (palagonite)	1	Carbonate mud (apart from nanos)		

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

Fill percentage (Total must be 100).

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

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



# Sediment Smear Slide / Thin Section Description Sheet

Date: 31  
8/30/2016

Expedition: 362

Observer: KLM-FALU

Site: U1480 Hole: G Core: 43 Sect.: 2A Interval: 92

Sediment Name: calcareous ooze

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				<u>5</u>		<u>95</u>				<u>100</u>

Select one and check. Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
<u>2</u>	Quartz		Calcareous		Dense minerals <sup>1</sup>
	Feldspars	<u>80</u>	Nannofossils		Micas (biotite, musc, chl)
<u>3</u>	Clay minerals	<u>20</u>	Foraminifers ?		Glauconite
	Lithic Grains		Siliceous		Phosphate (bones, teeth, etc)
	Sedimentary Lithics		Diatom		Opaque Grain
	Chert		Radiolarian		Marine organic matter
	Mudstone		Silicoflagellate		Terrestrial organic matter
	Siltstone/sandstone		Sponge Spicule		Other (specify):
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlite		Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic(palagonite)		Carbonate mud (apart from nannos)		

<sup>1</sup> List under remarks if possible Fill percentage (Total must be 100).

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

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: <sup>31</sup> 8/30/2016

Expedition: 362

Observer: KLM *Fairid*

Site: U1480 Hole: G Core: *43* Sect.: *3A* Interval: *9*

Sediment Name: *calcareous silt clay*

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				<i>85</i>		<i>35</i>			<i>50</i>	<i>50</i>

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
<i>24</i>	Quartz		Calcareous		Dense minerals <sup>1</sup>
<i>5</i>	Feldspars	<i>05</i>	Nannofossils		Micas (biotite, musc, chl)
<i>30</i>	Clay minerals	<i>30</i>	Foraminifers		Glauconite
	Lithic Grains		Siliceous		Phosphate (bones, teeth, etc)
	Sedimentary Lithics		Diatom	<i>1</i>	Opaque Grain
	Chert		Radiolarian		Marine organic matter
	Mudstone		Silicoflagellate		Terrestrial organic matter
	Siltstone/sandstone		Sponge Spicule		Other (specify):
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlitic				
	Lathwork		Silt or sand-size carbonate allochem fragment (unspecified)		
	Altered volcanic (palagonite)				
		<i>5</i>	Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

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

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 31 8/30/2016

Expedition: 362

Observer: KLM Feld

Site: U1480 Hole: G Core: 43 Sect.: 3A Interval: 50

Sediment Name: Clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				<u>100</u>				<u>5</u>	<u>95</u>	

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
<u>10</u>	Quartz		Calcareous		Dense minerals <sup>1</sup>
	Feldspars		Nannofossils	<u>1</u>	Micas (biotite, musc, chl)
<u>87</u>	Clay minerals		Foraminifers		Glauconite
	Lithic Grains		Siliceous		Phosphate (bones, teeth, etc)
	Sedimentary Lithics		Diatom	<u>+</u>	Opaque Grain
	Chert		Radiolarian		Marine organic matter
	Mudstone		Silicoflagellate		Terrestrial organic matter
	Siltstone/sandstone		Sponge Spicule		Other (specify):
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
<u>47</u>	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlite		Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic (palagonite)				
		<u>2</u>	Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

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

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/30/2016

Expedition: 362

Observer: KLM FAJL

Site: U1480 Hole: G

Core: 43 Sect.: 3A

Interval: 109

Sediment Name: clay.

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
										100

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
	Quartz		Calcareous		Dense minerals <sup>1</sup>
	Feldspars		Nannofossils		Micas (biotite, musc, chl)
97	Clay minerals		Foraminifers		Glauconite
	Lithic Grains		Siliceous		Phosphate (bones, teeth, etc)
	Sedimentary Lithics		Diatom	3	Opaque Grain (MAGNETITE?)
	Chert		Radiolarian		Marine organic matter
	Mudstone		Silicoflagellate		Terrestrial organic matter
	Siltstone/sandstone		Sponge Spicule		Other (specify):
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlite		Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic (palagonite)				
		67	Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

Remarks:

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/30/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 44e Sect.: 1A Interval: 12

Sediment Name: sand-silt-clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
X				100				20	30	50

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
20	Quartz		Calcareous	2	Dense minerals <sup>1</sup>
28	Feldspars		Nannofossils		Micas (biotite, musc, chl)
49	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom	1	Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlite	3	Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic (palagonite)	1	Carbonate mud (apart from nanos)		

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

Fill percentage (Total must be 100).

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

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/30/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G

Core: 44R Sect.: 1A

Interval: 66

Sediment Name: Clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
									8	98

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
10	Quartz		Calcareous	te	Dense minerals <sup>1</sup>
4	Feldspars		Nannofossils	fs	Micas (biotite, musc, chl)
83	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlitic	2	Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic (palagonite)	1	Carbonate mud (apart from nanos)		

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

Fill percentage (Total must be 100).

Remarks:

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 31 8/30/2016

Expedition: 362

Observer: KLM Faniel

Site: U1480 Hole: G

Core: 44R Sect.: 2A

Interval: 32

Sediment Name: Clay with silt

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100				10	30	

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks:

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

Sediment Smear Slide / Thin Section Description Sheet

Date: 31 8/30/2016

Expedition: 362

Observer: KLM FANID

Site: U1480 Hole: G Core: 44R Sect.: 2A

Interval: 33

Sediment Name: clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
X				100						100

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks:

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



# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/30/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 44R Sect.: 2A Interval: 71

Sediment Name: paper silt clay

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

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
	Quartz		Calcareous		Dense minerals <sup>1</sup>
	Feldspars		Nannofossils		Micas (biotite, musc, chl)
<u>40</u>	Clay minerals		Foraminifers		Glauconite
	Lithic Grains		Siliceous		Phosphate (bones, teeth, etc)
	Sedimentary Lithics		Diatom	<u>50</u>	Opaque Grain
	Chert		Radiolarian		Marine organic matter
	Mudstone		Silicoflagellate		Terrestrial organic matter
	Siltstone/sandstone		Sponge Spicule		Other (specify):
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlitic				
	Lathwork				
	Altered volcanic (palagonite)				
		<u>1</u>	Silt or sand-size carbonate allochem fragment (unspecified)		
			Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

Remarks:

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/30/2016

Expedition: 362

Observer: KLM Foidel

Site: U1480 Hole: G Core: 45R Sect.: 1A

Interval: 78

Sediment Name: clay

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

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
<u>3</u>	Quartz		Calcareous		Dense minerals <sup>1</sup>
	Feldspars		Nannofossils		Micas (biotite, musc, chl)
<u>31</u>	Clay minerals		Foraminifers		Glauconite
	Lithic Grains		Siliceous		Phosphate (bones, teeth, etc)
	Sedimentary Lithics		Diatom		Opaque Grain
	Chert		Radiolarian		Marine organic matter
	Mudstone		Silicoflagellate		Terrestrial organic matter
	Siltstone/sandstone		Sponge Spicule		Other (specify):
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlite	<u>1</u>	Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic (palagonite)	<u>3</u>	Carbonate mud (apart from nanos)		

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

Fill percentage (Total must be 100).

Remarks:

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: <sup>31</sup> 8/30/2016

Expedition: 362

Observer: KLM <sup>ES110</sup>

Site: U1480 Hole: G Core: <sup>US</sup> Sect.: <sup>ZA</sup> Interval: <sup>90</sup>

Sediment Name: <sup>sandy silt</sup>

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
<input checked="" type="checkbox"/>				100				40	60	

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
99	Quartz		Calcareous	9	Dense minerals <sup>1</sup>
50	Feldspars		Nannofossils	1	Micas (biotite, musc, chl)
	Clay minerals		Foraminifers		Glauconite
	Lithic Grains		Siliceous		Phosphate (bones, teeth, etc)
	Sedimentary Lithics		Diatom		Opaque Grain
	Chert		Radiolarian		Marine organic matter
	Mudstone		Silicoflagellate	1	Terrestrial organic matter <sup>?</sup>
	Siltstone/sandstone		Sponge Spicule		Other (specify):
	Limestone		Other bioclasts		
1	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlitic	2	Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic (palagonite)		Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

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

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 31  
8/30/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 47 Sect.: 1

Interval: 8

Sediment Name: clay w/ silt

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				98		2			15	85

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
15	Quartz		Calcareous		Dense minerals <sup>1</sup>
10	Feldspars	2	Nannofossils		Micas (biotite, musc, chl)
70	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlite		Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic(palagonite)				
		3	Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

Remarks:

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: <sup>31</sup> 8/30/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 47 Sect.: 1 Interval: 62

Sediment Name: Sandy silt

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100				40	60	5

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
57	Quartz		Calcareous	1	Dense minerals <sup>1</sup>
30	Feldspars		Nannofossils	2	Micas (biotite, musc, chl)
5	Clay minerals		Foraminifers		Glaucinite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
5	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlitic		Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic (palagonite)		Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

Remarks: usual mica / MRF assemblage

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/30/2016

Expedition: 362 Observer: KLM

Site: U1480 Hole: G Core: 47 Sect.: 2 Interval: 32

Sediment Name: clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100				10	90	

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

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

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: <sup>31</sup> 8/30/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 47 Sect.: 2

Interval: 59

Sediment Name: silty clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100				40	60	

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks:

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



# Sediment Smear Slide / Thin Section Description Sheet

Date: <sup>31</sup>8/30/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 488 Sect.: 1

Interval: 22

Sediment Name: silty clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				99		1			30	70

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks:

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



# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/30/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 48 Sect.: 1

Interval: 45

Sediment Name: clay w/ silt

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100				15	85	

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
12/18	Quartz		Calcareous		Dense minerals <sup>1</sup>
8	Feldspars		Nannofossils	3	Micas (biotite, musc, chl)
7.78	Clay minerals		Foraminifers		Glauconite
	Lithic Grains		Siliceous		Phosphate (bones, teeth, etc)
	Sedimentary Lithics		Diatom		Opaque Grain
	Chert		Radiolarian		Marine organic matter
	Mudstone		Silicoflagellate		Terrestrial organic matter
	Siltstone/sandstone		Sponge Spicule		Other (specify):
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlitic				
	Lathwork		Silt or sand-size carbonate allochem fragment (unspecified)		
	Altered volcanic (palagonite)				
		3	Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

Remarks:

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: <sup>31</sup> 8/30/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 48 Sect.: 2

Interval: 44

Sediment Name: clay w/ silt

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100				15	85	

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks:

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



# Sediment Smear Slide / Thin Section Description Sheet

Date: <sup>31</sup>8/30/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 49 Sect.: 1

Interval: 47

Sediment Name: clay w/ silt

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100					15	85

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks: dark mud

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



# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/30/2016

Expedition: 362 Observer: KLM

Site: U1480 Hole: G Core: 49 Sect.: 2 Interval: 19

Sediment Name: Sandy silt

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100				30	60	10

Select one and check.

Select one and check.

Percent	Composition
	Major Siliciclastic Grain Types
50	Quartz
30	Feldspars
10	Clay minerals
	Lithic Grains
	Sedimentary Lithics
	Chert
	Mudstone
	Siltstone/sandstone
	Limestone
5	Metamorphic lithic
	Plutonic lithic
2	Silt + sd monocrysts <sup>ca</sup>
	Volcaniclastic Grains
	Vitric fragments
	Clear glass
	Colored glass
	Pumice
	Volcanic lithics
	Felsitic
	Microlitic
	Lathwork
	Altered volcanic(palagonite)

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

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

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

Fill percentage (Total must be 100).

Remarks:

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



# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/30/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 49 Sect.: 3

Interval: 55

Sediment Name: Silty sand

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100				60	35	5

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
55 %	Quartz		Calcareous	2	Dense minerals <sup>1</sup>
32 %	Feldspars		Nannofossils	1	Micas (biotite, musc, chl) <sup>1</sup>
5	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
5	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
2	calc monocrystals		Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments		Other carbonate allochems		Dolomite
	Clear glass		Peloid		Zeolites
	Colored glass		Intraclast		Fe/Mn oxide
	Pumice				Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlite		Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic(palagonite)		Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

Remarks:

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 31 / 8/30 / 2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 49 ~~U1480~~ Sect.: 4 Interval: 100

Sediment Name: silty clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				<u>100</u>				<u>5</u>	<u>30</u>	<u>65</u>

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
<u>25</u>	Quartz		Calcareous		Dense minerals <sup>1</sup>
<u>15</u>	Feldspars		Nannofossils	<u>1</u>	Micas (biotite, musc, chl)
<u>100</u>	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
<u>2</u>	<u>Sand monocrystal</u>		Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlitic				
	Lathwork		Silt or sand-size carbonate allochem fragment (unspecified)		
	Altered volcanic (palagonite)				
		<u>2</u>	Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

Remarks:

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: <sup>31</sup> 8/30/2016

Expedition: 362 Observer: KLM

Site: U1480 Hole: G Core: 49 Sect.: 5 Interval: 32

Sediment Name: clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100				10	90	

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks: hosts mineralized plant fragment (pyritized w/ black min halo)

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 31  
8/30/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G

Core: 49

Sept.: 6

Interval: 61

Sediment Name: NOT A LITHOLOGY

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

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks: plant fossil? Chambered OM lined w/ calcite,  
chambers filled w/ silt + clay

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





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

Date: 01 8/30/2016

Expedition: 362

Observer: KLM Fonid

Site: U1480 Hole: G

Core: S16 Sect.: 1A

Interval: 30

Sediment Name: clay with silt

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
<u>X</u>				<u>100</u>					<u>40</u>	<u>50</u>

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	<b>Major Siliciclastic Grain Types</b>		<b>Pelagic Grains</b>		<b>Minor Grain Types</b>
<u>19</u>	Quartz		Calcareous		Dense minerals <sup>1</sup>
	Feldspars		Nannofossils		Micas (biotite, musc, chl) <sup>1</sup>
<u>80</u>	Clay minerals		Foraminifers		Glaucanite
	Lithic Grains		Siliceous		Phosphate (bones, teeth, etc)
	Sedimentary Lithics		Diatom		Opaque Grain
	Chert		Radiolarian		Marine organic matter
	Mudstone		Silicoflagellate		Terrestrial organic matter
	Siltstone/sandstone		Sponge Spicule		Other (specify):
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	<b>Volcaniclastic Grains</b>				Calcite
	Vitric fragments				Dolomite
	Clear glass		<b>Other carbonate allochems</b>		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlite	<u>1</u>	Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic (palagonite)	<u>2</u>	Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

Remarks:

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/30/2016

Expedition: 362

Observer: KLM Ford

Site: U1480 Hole: G

Core: 31R Sect.: 1A

Interval: 76

Sediment Name: Sandy silt

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
X				100				40	58	5

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
45	Quartz		Calcareous		Dense minerals <sup>1</sup>
40	Feldspars		Nannofossils	2	Micas (biotite, musc, chl)
4	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate	3	Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
1	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
1	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microclite	2	Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic (palagonite)	2	Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

Remarks:

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/30/2016

Expedition: 362

Observer: KLM RAO

Site: U1480 Hole: G Core: S2 Sect.: 1A Interval: 13.0

Sediment Name: Clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
										100

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

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

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/30/2016

Expedition: 362

Observer: KLM FAW

Site: U1480 Hole: G Core: S2 Sect.: 2A Interval: SP

Sediment Name: OPAQUE - SILTY SAND

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
X				?	6			60	40	

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
18	Quartz		Calcareous	1	Dense minerals <sup>1</sup>
	Feldspars		Nannofossils		Micas (biotite, musc, chl) <sup>1</sup>
	Clay minerals		Foraminifers		Glaucinite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom	90	Opaque Grain
	Sedimentary Lithics		Radiolarian	1	Marine organic matter
	Chert		Silicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
42	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlite		Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic (palagonite)		Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

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

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/30/2016

Expedition: 362

Observer: KLM found

Site: U1480 Hole: G

Core: S2 Sect.: 2A

Interval: 22

Sediment Name: Sandy silt

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
X				100				25	70	5

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
46	Quartz		Calcareous	1	Dense minerals <sup>1</sup>
40	Feldspars		Nannofossils	1	Micas (biotite, musc, chl) <sup>1</sup>
5	Clay minerals		Foraminifers		Glauconite
	Lithic Grains		Siliceous		Phosphate (bones, teeth, etc)
	Sedimentary Lithics		Diatom	2	Opaque Grain
	Chert		Radiolarian		Marine organic matter
	Mudstone		Silicoflagellate		Terrestrial organic matter
	Siltstone/sandstone		Sponge Spicule		Other (specify):
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
	Volcaniclastic Grains		Other bioclast (specify)		Pyrite (grain coating)
	Vitric fragments				Calcite
	Clear glass		Other carbonate allochems		Dolomite
1	Colored glass		Peloid		Zeolites
	Pumice		Intraclast		Fe/Mn oxide
	Volcanic lithics				Other (specify):
2	Felsitic	2	Silt or sand-size carbonate allochem fragment (unspecified)		
	Microlite				
	Lathwork		Carbonate mud (apart from nannos)		
	Altered volcanic(palagonite)				

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

Fill percentage (Total must be 100).

Remarks:

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



Sediment Smear Slide / Thin Section Description Sheet

Date: 8/30/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: S2 Sect.: 3A Interval: 60

Sediment Name: clay with silt

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
2				100				15	85	

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
15	Quartz		Calcareous		Dense minerals <sup>1</sup>
10	Feldspars		Nannofossils		Micas (biotite, musc, chl) <sup>1</sup>
72	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic	2	Silt or sand-size carbonate allochem fragment (unspecified)		
	Microlitic				
	Lathwork				
	Altered volcanic (palagonite)	1	Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

Remarks:

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/30/2016

Expedition: 362

Observer: KLM FAJID

Site: U1480 Hole: G Core: S2 Sect.: 4A Interval: 70

Sediment Name: Silty sand

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
X				100				50	50	

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
46	Quartz		Calcareous	1	Dense minerals <sup>1</sup>
46	Feldspars		Nannofossils		Micas (biotite, musc, chl) <sup>1</sup>
	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrrite (framboids)
			Benthic foraminifer		Pyrrite (euhedra)
			Other bioclast (specify)	2	Pyrrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
1	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
2	Felsitic	2	Silt or sand-size carbonate allochem fragment (unspecified)		
	Microlitic				
	Lathwork	1	Carbonate mud (apart from nannos)		
	Altered volcanic(palagonite)				

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

Fill percentage (Total must be 100).

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

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 9/11/8/30/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 53 Sect.: 1 Interval: 41

Sediment Name: sdy silt

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100				15	75	10

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks:

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



# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/30/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 53 Sect.: 2

Interval: 59

Sediment Name: Sandy silt

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100				25	75	

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
57	Quartz		Calcareous	1	Dense minerals <sup>1</sup>
30	Feldspars		Nannofossils	1	Micas (biotite, musc, chl)
	Clay minerals		Foraminifers		Glauconite
	Lithic Grains		Siliceous		Phosphate (bones, teeth, etc)
	Sedimentary Lithics		Diatom	2	Opaque Grain
	Chert		Radiolarian		Marine organic matter
	Mudstone		Silicoflagellate		Terrestrial organic matter
	Siltstone/sandstone		Sponge Spicule		Other (specify):
	Limestone		Other bioclasts		
5	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
1	carb monocrystals		Benthic foraminifer		Pyrite (euhedra)
	Volcaniclastic Grains		Other bioclast (specify)	3	Pyrite (grain coating)
	Vitric fragments				Calcite
	Clear glass		Other carbonate allochems		Dolomite
	Colored glass		Peloid		Zeolites
	Pumice		Intraclast		Fe/Mn oxide
	Volcanic lithics				Other (specify):
	Felsitic				
	Microlite		Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic(palagonite)		Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

Remarks: Careful search reveals brown + clear glass

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/30/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 53 Sect.: 3

Interval: 42

Sediment Name: clay w/ silt

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100?				15	85	

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks:

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

major



# Sediment Smear Slide / Thin Section Description Sheet

Date: <sup>9/1</sup>~~8/30~~/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 54 Sect.: 1 Interval: 45

Sediment Name: clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100				15	85	

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks: dark mud

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

mcnd ✓

# Sediment Smear Slide / Thin Section Description Sheet

Date: 9/11  
8/30/2016

Expedition: 362 Observer: KLM

Site: U1480 Hole: G Core: 54 Sect.: 1 Interval: 58

Sediment Name: silt

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				<u>100</u>				<u>0</u>	<u>95</u>	<u>5</u>

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
<u>55</u>	Quartz		Calcareous		Dense minerals <sup>1</sup>
<u>32</u>	Feldspars		Nannofossils	<u>1</u>	Micas (biotite, musc, chl) <sup>1</sup>
<u>5</u>	Clay minerals		Foraminifers		Glauconite
	Lithic Grains		Siliceous		Phosphate (bones, teeth, etc)
	Sedimentary Lithics		Diatom		Opaque Grain
	Chert		Radiolarian		Marine organic matter
	Mudstone		Silicoflagellate		Terrestrial organic matter
	Siltstone/sandstone		Sponge Spicule		Other (specify):
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		<u>1</u> Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlite		Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic (palagonite)				
		<u>5</u>	Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

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

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

Sediment Smear Slide / Thin Section Description Sheet

Date: 9/11 8/30/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 54 Sect.: 4

Interval: 20

Sediment Name: clay w/ silt

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100				20	75	

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
15	Quartz		Calcareous		Dense minerals <sup>1</sup>
10	Feldspars		Nannofossils		Micas (biotite, musc, chl) <sup>1</sup>
DNK 44	Clay minerals		Foraminifers		Glauconite
	Lithic Grains		Siliceous		Phosphate (bones, teeth, etc)
	Sedimentary Lithics		Diatom		Opaque Grain
	Chert		Radiolarian		Marine organic matter
	Mudstone		Silicoflagellate		Terrestrial organic matter
	Siltstone/sandstone		Sponge Spicule		Other (specify):
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
	Volcaniclastic Grains		Other bioclast (specify)		Pyrite (grain coating)
	Vitric fragments				Calcite
1 tr	Clear glass		Other carbonate allochems		Dolomite
tr	Colored glass		Peloid		Zeolites
	Pumice		Intraclast		Fe/Mn oxide
	Volcanic lithics				Other (specify):
	Felsitic				
	Microlite				
	Lathwork		Silt or sand-size carbonate allochem fragment (unspecified)		
	Altered volcanic(palagonite)				
			Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

Remarks: greenish brown mud

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

major ✓

# Sediment Smear Slide / Thin Section Description Sheet

Date: 9/11  
8/30/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 54 Sect.: 3

Interval: 27

Sediment Name: silty clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100				25	75	

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks: burrowed mud

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

Mind

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/30/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 54 Sect.: 5 Interval: 103

Sediment Name: clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100				10	90	

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks: red-brown mud - disaggregates w/ difficulty; evam gtz + feld mostly clay size

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 9/1  
8/30/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 54 Sect.: 5

Interval: 120

Sediment Name: clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100				10	90	

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks: only diff. w/ red mud - py/opaque

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



# Sediment Smear Slide / Thin Section Description Sheet

Date: 9/1  
8/30/2016

Expedition: 362 Observer: KLM

Site: U1480 Hole: G Core: 55 Sect.: 1 Interval: 52

Sediment Name: clay w/silt

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				<u>100</u>				<u>15</u>	<u>85</u>	

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
<u>15</u>	Quartz		Calcareous		Dense minerals <sup>1</sup>
<u>10</u>	Feldspars		Nannofossils	<u>1</u>	Micas (biotite, musc, chl)
<u>73</u>	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate	<u>tr</u>	Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer	<u>1</u>	Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlitic				
	Lathwork		Silt or sand-size carbonate allochem fragment (unspecified)		
	Altered volcanic(palagonite)				
			Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

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

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 9/11  
8/30/2016

Expedition: 362 Observer: KLM

Site: U1480 Hole: G Core: 55 Sect.: 1 Interval: 92

Sediment Name: Silty clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				<u>100</u>				<u>25</u>	<u>75</u>	

Select one and check. Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
<u>20</u>	Quartz		Calcareous		Dense minerals <sup>1</sup>
<u>10</u>	Feldspars		Nannofossils	<u>1</u>	Micas (biotite, musc, chl)
<u>67</u>	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate	<u>1</u>	Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer	<u>1</u>	Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlite				
	Lathwork		Silt or sand-size carbonate allochem fragment (unspecified)		
	Altered volcanic (palagonite)				
			Carbonate mud (apart from nannos)		

*Handwritten notes:*  
Terrestrial organic matter  
5mm

<sup>1</sup> List under remarks if possible Fill percentage (Total must be 100).

Remarks:

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

minor ✓

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

Date: 9/1  
8/30/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 55 Sect.: 2

Interval: 2

Sediment Name: silt

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
									<u>100</u>	

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
<u>60</u>	Quartz		Calcareous		Dense minerals <sup>1</sup>
<u>35</u>	Feldspars		Nannofossils	<u>1</u>	Micas (biotite, musc, chl)
	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
<u>2</u>	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)	<u>1</u>	Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
<u>10</u>	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlite				
	Lathwork		Silt or sand-size carbonate allochem fragment (unspecified)		
	Altered volcanic(palagonite)				
		<u>1</u>	Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

Remarks:

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 9/2/16

Expedition: 362

Observer: Fazio

Site: U1480 Hole: G Core: S6R Sect.: 1A Interval: 48

Sediment Name: clayey silt

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100				75	25	

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
<u>32</u>	Quartz		Calcareous		Dense minerals <sup>1</sup>
<u>35</u>	Feldspars		Nannofossils		Micas (biotite, musc, chl)
<u>25</u>	Clay minerals		Foraminifers		Glaucinite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlitic	<u>1</u>	Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic(palagonite)		Carbonate mud (apart from nanos)		

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

Fill percentage (Total must be 100).

Remarks:

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 9/2/16

Expedition: 362

Observer: Fa 10

Site: U1480 Hole: G

Core: S6R Sect.: 2A

Interval: 6

Sediment Name: clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
<u>X</u>				<u>97</u>		<u>3</u>		<u>10</u>	<u>90</u>	

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
<u>10</u>	Quartz		Calcareous		Dense minerals <sup>1</sup>
<u>12</u>	Feldspars		Nannofossils	<u>fn</u>	Micas (biotite, musc, chl)
<u>75</u>	Clay minerals	<u>3</u>	Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
<u>fn</u>	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlitic	<u>1</u>	Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic (palagonite)		Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

Remarks: GARDSCHE clay

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/ /16

Expedition: 362

Observer:

Site: U1480

Hole: G

Core: S6R

Sept.: 4A

Interval: 60

Sediment Name: clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
<u>X</u>				<u>97</u>		<u>3</u>		<u>5</u>	<u>95</u>	

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
<u>100</u>	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
	Quartz		Calcareous		Dense minerals <sup>1</sup>
	Feldspars		Nannofossils	<u>1</u>	Micas (biotite, musc, chl)
<u>89</u>	Clay minerals	<u>3</u>	Foraminifers		Glauconite
	Lithic Grains		Siliceous		Phosphate (bones, teeth, etc)
	Sedimentary Lithics		Diatom		Opaque Grain
	Chert		Radiolarian		Marine organic matter
	Mudstone		Silicoflagellate		Terrestrial organic matter
	Siltstone/sandstone		Sponge Spicule		Other (specify):
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
<u>10</u>	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlitic		Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic (palagonite)		Carbonate mud (apart from nanos)		

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

Fill percentage (Total must be 100).

Remarks: Greenish clay

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/2/16

Expedition: 362

Observer: FANIO

Site: U1480 Hole: G Core: 56R Sect.: SA Interval: 3P

Sediment Name: calcareous clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
X				100						100

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

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

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 9/12/16  
8/ / 16

Expedition: 362

Observer: Fazio

Site: U1480 Hole: G Core: 56R Sect.: 6A

Interval: 24

Sediment Name: SILT

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
<u>X</u>				<u>100</u>				<u>95</u>	<u>5</u>	

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
<u>40</u>	Quartz		Calcareous	<u>100</u>	Dense minerals
<u>49</u>	Feldspars		Nannofossils		Micas (biotite, musc, chl)
<u>5</u>	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlite				
	Lathwork		Silt or sand-size carbonate allochem fragment (unspecified)		
	Altered volcanic (palagonite)				
			Carbonate mud (apart from nanos)		

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

Fill percentage (Total must be 100).

Remarks: GRAYISH clay

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



# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/2/16

Expedition: 362

Observer: Fair

Site: U1480 Hole: G

Core: 56R Sect.: CC

Interval: 16

Sediment Name:

calcareous clay (mudstone)

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
X				X					2	98

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
6	Quartz		Calcareous		Dense minerals <sup>1</sup>
	Feldspars		Nannofossils		Micas (biotite, musc, chl) <sup>1</sup>
94	Clay minerals		Foraminifers		Glauconite
	Lithic Grains		Siliceous		Phosphate (bones, teeth, etc)
	Sedimentary Lithics		Diatom		Opaque Grain
	Chert		Radiolarian		Marine organic matter
	Mudstone		Silicoflagellate		Terrestrial organic matter
	Siltstone/sandstone		Sponge Spicule		Other (specify):
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microinite	2	Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic (palagonite)	48	Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

Remarks:

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 2/8 /16

Expedition: 362

Observer: FALG

Site: U1480 Hole: G Core: SJ Sect.: 3A Interval: 15

Sediment Name: Clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				<u>100</u>				<u>5</u>	<u>95</u>	

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
<u>12</u>	Quartz		Calcareous		Dense minerals <sup>1</sup>
	Feldspars		Nannofossils	<u>tr</u>	Micas (biotite, musc, chl)
<u>87</u>	Clay minerals	<u>1</u>	Foraminifers		Glauconite
	Lithic Grains		Siliceous		Phosphate (bones, teeth, etc)
	Sedimentary Lithics		Diatom		Opaque Grain
	Chert		Radiolarian		Marine organic matter
	Mudstone		Silicoflagellate		Terrestrial organic matter
	Siltstone/sandstone		Sponge Spicule		Other (specify):
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlite		Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic(palagonite)		Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

Remarks: 69% clay

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/30/2016 <sup>9/2/16</sup>

Expedition: 362

Observer: KLM Fall

Site: U1480 Hole: G Core: STR Sect.: 4A Interval: 81

Sediment Name: Ash layer (?) (pot)

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
								2	98	

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

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

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/2/16  
~~8/30/2016~~

Expedition: 362

Observer: F. KLM

Site: U1480 Hole: G Core: SAR Sect.: 4A Interval: 146

Sediment Name: clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
<u>X</u>				<u>100</u>				<u>10</u>	<u>50</u>	

Select one and check. Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
<u>10</u>	Quartz		Calcareous		Dense minerals <sup>1</sup>
<u>48</u>	Feldspars		Nannofossils		Micas (biotite, musc, chl)
<u>86</u>	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems *		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlite				
	Lathwork		Silt or sand-size carbonate allochem fragment (unspecified)		
	Altered volcanic(palagonite)				
			Carbonate mud (apart from nannos)		

<sup>1</sup> List under remarks if possible Fill percentage (Total must be 100).

Remarks: greenish clay

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 9/ /2016

Expedition: 362

Observer:

Site: U1480 Hole: G

Core: 57 Sect.: 5A

Interval: 134

Sediment Name:

Ach layer?

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
<u>X</u>					<u>100</u>					

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
<u>15</u>	Quartz		Calcareous		Dense minerals <sup>1</sup>
	Feldspars		Nannofossils	<u>1</u>	Micas (biotite, musc, chl)
	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
					Calcite
	Volcaniclastic Grains				Dolomite
	Vitric fragments				Zeolites
	Clear glass		Other carbonate allochems		Fe/Mn oxide
	Colored glass		Peloid		Other (specify):
	Pumice		Intraclast		
	Volcanic lithics				
	Felsitic				
	Microlite				
	Lathwork		Silt or sand-size carbonate allochem fragment (unspecified)		
<u>85</u>	Altered volcanic (palagonite)		Carbonate mud (apart from nannos)		
	<u>to transparent glass destroyed</u>				

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

Fill percentage (Total must be 100).

Remarks:

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 9/ /2016

Expedition: 362

Observer:

Site: U1480

Hole: G

Core: 57

Sect.: 6A

Interval: 23

Sediment Name: Silt with sand

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.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
60	Quartz		Calcareous		Dense minerals <sup>1</sup>
38	Feldspars		Nannofossils		Micas (biotite, musc, chl)
	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Sillicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
					Calcite
	Volcaniclastic Grains				Dolomite
	Vitric fragments				Zeolites
	Clear glass		Other carbonate allochems		Fe/Mn oxide
	Colored glass		Peloid		Other (specify):
	Pumice		Intraclast		
	Volcanic lithics				
	Felsitic				
	Microclite	3	Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic(palagonite)		Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

Remarks:

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 8/30/2016 9/2/16

Expedition: 362

Observer: KLM FAY

Site: U1480 Hole: G Core: SBR Sect.: 1A

Interval: 105

Sediment Name: Ash layer

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
					100					

Select one and check. Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
70	Quartz		Calcareous		Dense minerals <sup>1</sup>
2	Feldspars		Nannofossils	72	Micas (biotite, musc, chl)
	Clay minerals <sup>1</sup>		Foraminifers		Glauconite
	Lithic Grains		Siliceous		Phosphate (bones, teeth, etc)
	Sedimentary Lithics		Diatom		Opaque Grain
	Chert		Radiolarian		Marine organic matter
	Mudstone		Silicoflagellate		Terrestrial organic matter
	Siltstone/sandstone		Sponge Spicule		Other (specify):
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
10	Clear glass		Other carbonate allochems		Zeolites
12	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
30	Volcanic lithics				
	Felsitic				
	Microlite		Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic(palagonite)		Carbonate mud (apart from nannos)		

<sup>1</sup> List under remarks if possible Fill percentage (Total must be 100).

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

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

Sediment Smear Slide / Thin Section Description Sheet

Date: 8/30/2016 01/2/16

Expedition: 362

Observer: F. KLM

Site: U1480 Hole: G Core: SBR Sect.: 2A Interval: 33

Sediment Name: SILT

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

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
<u>48</u>	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
<u>50</u>	Quartz		Calcareous		Dense minerals <sup>1</sup>
	Feldspars		Nannofossils	<u>1</u>	Micas (biotite, musc, chl)
	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom	<u>1</u>	Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microplitic				
	Lathwork		Silt or sand-size carbonate allochem fragment (unspecified)		
	Altered volcanic(palagonite)				
			Carbonate mud (apart from nanos)		

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

Fill percentage (Total must be 100).

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

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



# Sediment Smear Slide / Thin Section Description Sheet

8/2/16

Date: 8/30/2016

Expedition: 362

Observer: KLM Fano

Site: U1480 Hole: G

Core: 98R Sect.: 2A

Interval: 95

Sediment Name: Clay

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

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks:

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 9/2/2016

Expedition: 362

Observer: FALLON

Site: U1480 Hole: G

Core: SR Sect.: 4A

Interval: 11Z

Sediment Name: clayey silt

Smear Slide	Thin Section	Coarse Fraction	Grain Mount
X			

Select one and check.

Granular Sediment		
Siliciclastic	Volcaniclastic	Pelagic
100		

Select one and check.

Other material	Percent Texture	
	Sand	Silt Clay
	70	30

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

Percent	Composition
	Pelagic Grains
	Calcareous
	Nannofossils
	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	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
	Dense minerals <sup>1</sup>
1	Micas (biotite, musc, chl)
	Glaucanite
	Phosphate (bones, teeth, etc)
	Opaque Grain
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
	Authigenic components
	Pyrite (framboids)
	Pyrite (euhedra)
	Pyrite (grain coating)
	Calcite
	Dolomite
	Zeolites
	Fe/Mn oxide
	Other (specify):

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

Fill percentage (Total must be 100).

Remarks:

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

Sediment Smear Slide / Thin Section Description Sheet

Date: 9/ /2016

Expedition: 362

Observer: FAVIO

Site: U1480 Hole: G

Core: SPR Sect.: 1

Interval: 40

Sediment Name: silty clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount
X			

Select one and check.

Granular Sediment		
Siliciclastic	Volcaniclastic	Pelagic
X		

Select one and check.

Other material	Percent Texture	
	Sand	Silt Clay
		40 60

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

Percent	Composition
	Pelagic Grains
	Calcareous
	Nannofossils
	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	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
	Dense minerals
	Micas (biotite, musc, chl)
	Glauconite
	Phosphate (bones, teeth, etc)
	Opaque Grain
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
	Authigenic components
	Pyrite (framboids)
	Pyrite (euhedra)
	Pyrite (grain coating)
	Calcite
	Dolomite
	Zeolites
	Fe/Mn oxide
	Other (specify):

\* List under remarks if possible

Fill percentage (Total must be 100).

Remarks:

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 9/2/2016

Expedition: 362

Observer: Ferid

Site: U1480 Hole: G

Core: 59 Sect.: 1A

Interval: 44

Sediment Name: Silt

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				95	5	

Select one and check.

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

Percent	Composition
	Pelagic Grains
	Calcareous
	Nannofossils
	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
	Other bioclasts
	Mollusk
	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
	Dense minerals <sup>1</sup>
1	Micas (biotite, musc, chl)
	Glauconite
	Phosphate (bones, teeth, etc)
	Opaque Grain
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
	Authigenic components
	Pyrite (framboids)
	Pyrite (euhedra)
1	Pyrite (grain coating)
	Calcite
	Dolomite
	Zeolites
	Fe/Mn oxide
	Other (specify):

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

Fill percentage (Total must be 100).

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

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 9/ /2016

Expedition: 362

Observer: \_\_\_\_\_

Site: U1480

Hole: G

Core: S-9

Section: 1A

Interval: 10.4

Sediment Name: Ash layer

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
					<u>100</u>			<u>100</u>		

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
<u>10</u>	Quartz		Calcareous		Dense minerals <sup>1</sup>
	Feldspars		Nannofossils	<u>fr</u>	Micas (biotite, musc, chl) <sup>1</sup>
	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlitic				
	Lathwork		Silt or sand-size carbonate allochem fragment (unspecified)		
<u>90</u>	Altered volcanic(palagonite)				
			Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

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

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 9/2/2016

Expedition: 362

Observer: F. R. D. I. O.

Site: U1480 Hole: G

Core: SPG Sect.: 1A

Interval: 128

Sediment Name: clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
X						100		5	95	

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks:

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 9/2/2016

Expedition: 362

Observer: Farid

Site: U1480 Hole: G

Core: SSR Sect.: 3A

Interval: 74

Sediment Name:

? Ash layer ?  
tufooids? (clay with biosiliceous debris)

Smear Slide	Thin Section	Coarse Fraction	Grain Mount

Select one and check.

Granular Sediment			Other material	Percent Texture		
Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
	100					

Select one and check.

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

Percent	Composition
	Pelagic Grains
	Calcareous
	Nannofossils
	Foraminifers
	Siliceous
	Diatom
2	Radiolarian
fr	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
	Dense minerals <sup>1</sup>
	Micas (biotite, musc, chl)
	Glauconite
	Phosphate (bones, teeth, etc)
	Opaque Grain
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
	Authigenic components
	Pyrite (framboids)
	Pyrite (euhedra)
	Pyrite (grain coating)
	Calcite
	Dolomite
	Zeolites
	Fe/Mn oxide
	Other (specify):

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

Fill percentage (Total must be 100).

Remarks: abundant biosiliceous debris

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

Major ✓

# Sediment Smear Slide / Thin Section Description Sheet

Date: 9/2/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 6D Sect.: 1

Interval: 6

Sediment Name: clay w/silt

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100				20	80	

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks: gray-brown mud

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



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

Date: **9/ /2016**

Expedition: **362**

Observer:

Site: **U1480** Hole: **G** Core: **60** Sect.: **1**

Interval: **16**

Sediment Name: **silt**

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100				90	10	

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks:

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

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

Date: 9/7/2016

Expedition: 362

Observer: JLM

Site: U1480 Hole: G Core: 60 Sect.: 2

Interval: 68

Sediment Name: silty clay w/ ash

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				96		4			25	75

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
10	Quartz		Calcareous		Dense minerals <sup>1</sup>
5	Feldspars		Nannofossils		Micas (biotite, musc, chl)
70	Clay minerals		Foraminifers		Glauconite
	Lithic Grains		Siliceous		Phosphate (bones, teeth, etc)
	Sedimentary Lithics		Diatom		Opaque Grain
	Chert	4	Radiolarian		Marine organic matter
	Mudstone		Silicoflagellate		Terrestrial organic matter
	Siltstone/sandstone	1	Sponge Spicule		Other (specify):
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
10	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microclite		Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic (palagonite)		Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

Remarks: red mud

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

minor ✓

# Sediment Smear Slide / Thin Section Description Sheet

Date: 9/2/2016

Expedition: 362

Observer: KLM

Site: U1480

Hole: G

Core: 60

Sect.: 2

Interval: 125

Sediment Name: silty clay w/ ash

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				98		2			25	75

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
5	Quartz		Calcareous		Dense minerals
3	Feldspars		Nannofossils		Micas (biotite, musc, chl)
75	Clay minerals		Foraminifers		Glauconite
	Lithic Grains		Siliceous		Phosphate (bones, teeth, etc)
	Sedimentary Lithics	2	Diatom		Opaque Grain
	Chert		Radiolarian		Marine organic matter
	Mudstone		Silicoflagellate		Terrestrial organic matter
	Siltstone/sandstone		Sponge Spicule		Other (specify):
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
15	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microfite				
	Lathwork		Silt or sand-size carbonate allochem fragment (unspecified)		
	Altered volcanic (palagonite)				
			Carbonate mud (apart from nannos)		

List under remarks if possible

Fill percentage (Total must be 100).

Remarks: lighter reddish

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

Minger ✓

# Sediment Smear Slide / Thin Section Description Sheet

Date: 9/2/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 66 Sect.: 3

Interval: 118

Sediment Name: silty clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				95		5			30	70

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
5	Quartz		Calcareous		Dense minerals <sup>1</sup>
	Feldspars		Nannofossils		Micas (biotite, musc, chl)
64	Clay minerals		Foraminifers		Glauconite
	Lithic Grains		Siliceous		Phosphate (bones, teeth, etc)
	Sedimentary Lithics		Diatom		Opaque Grain
	Chert		Radiolarian		Marine organic matter
	Mudstone	20	Silicoflagellate		Terrestrial organic matter
	Siltstone/sandstone		Sponge Spicule		Other (specify):
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments		Other carbonate allochems		Dolomite
10	Clear glass		Peloid		Zeolites
	Colored glass		Intraclast		Fe/Mn oxide
1	Pumice				Other (specify):
	Volcanic lithics				
	Felsitic		Silt or sand-size carbonate allochem fragment (unspecified)		
	Microkite				
	Lathwork		Carbonate mud (apart from nannos)		
	Altered volcanic(palagonite)				

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

Fill percentage (Total must be 100).

Remarks: black stuff

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

Minor ✓

tephra form?

# Sediment Smear Slide / Thin Section Description Sheet

Date: 9/2/2016

Expedition: 362

Observer: KLM

Site: U1480

Hole: G

Core: 60

Section: 4

Interval: 41

Sediment Name:

ash

Smear Slide	Thin Section	Coarse Fraction	Grain Mount

Select one and check.

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

Select one and check.

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

Percent	Composition
	Pelagic Grains
	Calcareous
	Nannofossils
	Foraminifers
	Siliceous
	Diatom
1	Radiolarian
	Silicoflagellate
1	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
	Dense minerals <sup>1</sup>
	Micas (biotite, musc, chl)
	Glauconite
	Phosphate (bones, teeth, etc)
	Opaque Grain
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
	Authigenic components
	Pyrite (framboids)
	Pyrite (euhedra)
	Pyrite (grain coating)
	Calcite
	Dolomite
	Zeolites
	Fe/Mn oxide
	Other (specify):

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

Fill percentage (Total must be 100).

Remarks: thin clastic layer

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

minor ✓

# Sediment Smear Slide / Thin Section Description Sheet

Date: 9/ 2 /2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 60 Sect.: 4

Interval: 56

Sediment Name: tuffaceous silty clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100					30	70

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks: green layer

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

minor ✓

\* need to describe on tephra form

### Sediment Smear Slide / Thin Section Description Sheet

Date: 9/7/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 60 Sect.: 4

Interval: 57

Sediment Name: ashy clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100				70	30	

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks: gray layer

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

major ✓

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

Date: 9/ /2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 60 Sect.: 5

Interval: 24

Sediment Name: tuffaceous silty clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100					30	70

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks: red-tan

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



mineral



tephra form

# Sediment Smear Slide / Thin Section Description Sheet

Date: 9/2/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 60 Sect.: 5 Interval: 44

Sediment Name: ash

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100				60	40	

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks: light layer

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

minor

# Sediment Smear Slide / Thin Section Description Sheet

Date: 9/2/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G

Core: 60

Sect.: 5

Interval: 45

Sediment Name: cal. silty clay w/ash

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				70		~30			25	75

Select one and check.

Select one and check.

38

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
10	Quartz		Calcareous		Dense minerals <sup>1</sup>
5	Feldspars		Nannofossils		Micas (biotite, musc, chl)
5	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics	1	Radiolarian		Marine organic matter
	Chert		Silicoflagellate		Terrestrial organic matter
	Mudstone	1	Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
15%	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microplitic				
	Lathwork		Silt or sand-size carbonate allochem fragment (unspecified)		
	Altered volcanic(palagonite)				
		30	Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

Remarks: green material in chalk

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

major ✓

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

Date: 9/ /2016

Expedition: 362

Observer: KLM

Site: U1480

Hole: G

Core: 60

Sept.: 5

Interval: 53

Sediment Name: c. calc. silty clay nannofossil ooze

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>40</u>		<u>60?</u>			<u>30</u>	<u>70</u>

Select one and check.

Percent	Composition
	Major Siliciclastic Grain Types
<u>5</u>	Quartz
	Feldspars
<u>35</u>	Clay minerals
	Lithic Grains
	Sedimentary Lithics
	Chert
	Mudstone
	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
	Volcaniclastic Grains
	Vitric fragments
<u>tr</u>	Clear glass
	Colored glass
	Pumice
	Volcanic lithics
	Felsitic
	Microlite
	Lathwork
	Altered volcanic (palagonite)

Percent	Composition
	Pelagic Grains
	Calcareous
<u>20</u>	Nannofossils
	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	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)
<u>40</u>	Carbonate mud (apart from nannos)

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

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

Fill percentage (Total must be 100).

Remarks:

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

*minor*  
Sediment Smear Slide / Thin Section Description Sheet

Date: 9/2/2016

Expedition: 362

Observer: Kum

Site: U1480

Hole: G

Core: 60

Sect.: 6

Interval: 64

Sediment Name: ~~loess clayey silt~~ ~~altered w/ sand~~ ash

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture			
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay	
				100				100	15	85	20

Select one and check.

Select one and check.

70

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
10	Quartz		Calcareous		Dense minerals <sup>1</sup>
5	Feldspars		Nannofossils		Micas (biotite, musc, chl)
20	Clay minerals		Foraminifers		Glauconite
	Lithic Grains		Siliceous		Phosphate (bones, teeth, etc)
	Sedimentary Lithics		Diatom		Opaque Grain
	Chert	1	Radiolarian		Marine organic matter
	Mudstone	1	Silicoflagellate		Terrestrial organic matter
	Siltstone/sandstone		Sponge Spicule		Other (specify):
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
63%	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microclite		Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic (palagonite)		Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

Remarks: Sandy clastic layer

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

MINOI  
~~AGJ~~ ✓

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

Date: 9/3/2016

Expedition: 362

Observer: FAND/KLM

Site: U1480 Hole: G

Core: 61R Sect.: 1A

Interval: 30

Sediment Name:

ASH LAYER → buff silty clay w/ carb

Smear Slide	Thin Section	Coarse Fraction	Grain Mount

Select one and check.

Granular Sediment		
Siliciclastic	Volcaniclastic	Pelagic
60	30	10

Select one and check.

Other material	Percent Texture	
	Sand	Silt Clay
		30 70

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

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

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

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

Fill percentage (Total must be 100).

Remarks: this green-brown layer

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

major ✓

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

Date: 9/3/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 61 Sect.: 1

Interval: 33

Sediment Name: cal-ooze w/ clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				40		60			20	80

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
5	Quartz		Calcareous		Dense minerals <sup>1</sup>
	Feldspars	20	Nannofossils		Micas (biotite, musc, chl)
35	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlite				
	Lathwork		Silt or sand-size carbonate allochem fragment (unspecified)		
	Altered volcanic (palagonite)				
		40	Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

Remarks: limestone w/ forams

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

major ✓

# Sediment Smear Slide / Thin Section Description Sheet

Date: 9/3/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G

Core: 61

Sept.: 1

Interval: 42

Sediment Name: tuff silty clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				<u>65</u>	<u>35</u>			<u>5</u>	<u>30</u>	<u>65</u>

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
	Quartz		Calcareous		Dense minerals <sup>1</sup>
	Feldspars		Nannofossils		Micas (biotite, musc, chl) <sup>1</sup>
<u>65</u>	Clay minerals		Foraminifers		Glaucinite
	Lithic Grains		Siliceous		Phosphate (bones, teeth, etc)
	Sedimentary Lithics		Diatom		Opaque Grain
	Chert		Radiolarian		Marine organic matter
	Mudstone	<u>4</u>	Silicoflagellate		Terrestrial organic matter
	Siltstone/sandstone	<u>45</u>	Sponge Spicule		Other (specify):
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
<u>35</u>	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlitic				
	Lathwork		Silt or sand-size carbonate allochem fragment (unspecified)		
	Altered volcanic (palagonite)				
			Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

Remarks: homog orange lithol

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

Major ✓

# Sediment Smear Slide / Thin Section Description Sheet

Date: 9/3/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 61 Sect.: 1 Interval: 76

Sediment Name: tuff. clay w/ silt

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				<u>None</u>	<u>30</u>			<u>20</u>	<u>80</u>	

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
	Quartz		Calcareous		Dense minerals <sup>1</sup>
	Feldspars		Nannofossils		Micas (biotite, musc, chl)
<u>70</u>	Clay minerals		Foraminifers		Glauconite
	Lithic Grains		Siliceous		Phosphate (bones, teeth, etc)
	Sedimentary Lithics		Diatom		Opaque Grain
	Chert		Radiolarian		Marine organic matter
	Mudstone		Silicoflagellate		Terrestrial organic matter
	Siltstone/sandstone		Sponge Spicule		Other (specify):
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
<u>30</u>	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlite				
	Lathwork		Silt or sand-size carbonate allochem fragment (unspecified)		
	Altered volcanic (palagonite)				
			Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

Remarks: tan, mottled

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



Minor ✓

\* tephra form

Sediment Smear Slide / Thin Section Description Sheet

Date: 9/3/2016

Expedition: 362

Observer: Fand

Site: U1480 Hole: G Core: 61R Sect.: 1A

Interval: 30-90 cm

Sediment Name: ACH

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				20	80			10	70	20

Select one and check.

Select one and check.

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

Percent	Composition
	Pelagic Grains
	Calcareous
	Nannofossils
	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	Silicoflagellate
1	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
	Dense minerals <sup>1</sup>
	Micas (biotite, musc, chl)
	Glauconite
	Phosphate (bones, teeth, etc)
	Opaque Grain
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
	Authigenic components
	Pyrite (framboids)
	Pyrite (euhedra)
	Pyrite (grain coating)
	Calcite
	Dolomite
	Zeolites
	Fe/Mn oxide
	Other (specify):

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

Fill percentage (Total must be 100).

Remarks: thin greenish brown layer - thin white layer

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

Minor ✓

# Sediment Smear Slide / Thin Section Description Sheet

Date: 9/3/2016

Expedition: 362

Observer: Farid

Site: U1480 Hole: G

Core: b1R Sect.: 1A

Interval: 125

Sediment Name:

fine-grained silt-clay ✓

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				75	25			30	70	

Select one and check.

Select one and check.

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

Percent	Composition
	Pelagic Grains
	Calcareous
	Nannofossils
	Foraminifers
	Siliceous
	Diatom
3%	Radiolarian
2	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
	Dense minerals
	Micas (biotite, musc, chl)
	Glauconite
	Phosphate (bones, teeth, etc)
	Opaque Grain
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
	Authigenic components
	Pyrite (framboids)
	Pyrite (euhedra)
	Pyrite (grain coating)
	Calcite
	Dolomite
	Zeolites
	Fe/Mn oxide
	Other (specify):

1 List under remarks if possible

Fill percentage (Total must be 100).

Remarks: reddish

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

major ✓

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

Date: 9/3/2016

Expedition: 362 Observer: FANLO

Site: U1480 Hole: G Core: 61R Sect.: 11A Interval: 134

Sediment Name: buffaceous clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				70	30			10	90	

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

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

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 9/3/2016

Expedition: 362

Observer: Fazio

Site: U1480 Hole: G

Core: 61R Sect.: 2A

Interval: 83

Sediment Name: Cal ooze w/ clay calcareous clay (recryst?) cat

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				40		60		30	70	

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
3	Quartz		Calcareous		Dense minerals <sup>1</sup>
	Feldspars	10	Nannofossils		Micas (biotite, musc, chl)
35	Clay minerals		Foraminifers		Glauconite
	Lithic Grains		Siliceous		Phosphate (bones, teeth, etc)
	Sedimentary Lithics		Diatom		Opaque Grain
	Chert		Radiolarian		Marine organic matter
	Mudstone		Silicoflagellate		Terrestrial organic matter
	Siltstone/sandstone		Sponge Spicule		Other (specify):
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microplitic				
	Lathwork				
	Altered volcanic (palagonite)				
		50	Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

Remarks:

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 9/3/2016

Expedition: 362

Observer: Forio

Site: U1480 Hole: G

Core: 61R Sect.: 3A

Interval: 15

Sediment Name: ~~calcareous clay~~ calcareous clay - coarse to fine ash layer

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				25	50	25			40	60

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
	Quartz		Calcareous		Dense minerals <sup>1</sup>
	Feldspars	5	Nannofossils		Micas (biotite, musc, chl)
25	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
50	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlitic		Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic(palagonite)				
		20	Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

Remarks: reddish tan

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

minor

# Sediment Smear Slide / Thin Section Description Sheet

Date: 9/3/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G

Core: 61

Sept.: 3

Interval: 39

Sediment Name:

cal ~~clay~~ clay w/ ash [calcareous clay + ash]

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				70		30			20	80

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
3	Quartz		Calcareous		Dense minerals <sup>1</sup>
	Feldspars	10	Nannofossils		Micas (biotite, musc, chl)
45	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
10-20	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlitic		Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic (palagonite)				
		20	Carbonate mud (apart from nanos)		

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

Fill percentage (Total must be 100).

Remarks:

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

MAJOR ✓

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

Date: 9/3/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 61 Sect.: 3

Interval: 47

Sediment Name: tofc, silty clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				65	35			30	70	

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks: brown w/c

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

minol



# Sediment Smear Slide / Thin Section Description Sheet

Date: 9/3/2016

Expedition: 362

Observer: Fand

Site: U1480 Hole: G Core: 61R Sect.: 3A

Interval: 66

Sediment Name: buff. silty clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount

Granular Sediment			Other material	Percent Texture		
Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
65	30	5		40	60	

Select one and check.

Select one and check.

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

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

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

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

Fill percentage (Total must be 100).

Remarks: brown layer in spotted tan mud

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



Minol



# Sediment Smear Slide / Thin Section Description Sheet

Date: 9/3/2016

Expedition: 362

Observer: Fould

Site: U1480 Hole: G

Core: 61/R Sect.: 2A

Interval: 98 98

Sediment Name:

silty calcareous clay w/silt (~80% carb)

Smear Slide	Thin Section	Coarse Fraction	Grain Mount

Select one and check.

Granular Sediment			Other material	Percent Texture		
Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
85		15		20	80	

Select one and check.

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

Percent	Composition
	Pelagic Grains
	Calcareous
5	Nannofossils
	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	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)
10	Carbonate mud (apart from nannos)

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

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

Fill percentage (Total must be 100).

Remarks: Sand visible in core did not survive in smear

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

forams + lithics

minor ✓

# Sediment Smear Slide / Thin Section Description Sheet

Date: 9/7/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 61R Sect.: 3A Interval: 122

Sediment Name: caliche tuff silty clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				65	30	5		5	30	65

Select one and check.

Select one and check.

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

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

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

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

Fill percentage (Total must be 100).

Remarks: brown layer in ooze

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

minor



# Sediment Smear Slide / Thin Section Description Sheet

Date: 9/3/2016

Expedition: 362

Observer: Fould

Site: U1480 Hole: G

Core: 11R Sect.: 4A

Interval: 52

Sediment Name: calcite - cemented / sandstone

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

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
5	Quartz		Calcareous		Dense minerals <sup>1</sup>
	Feldspars		Nannofossils		Micas (biotite, musc, chl)
5	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains			30	Calcite
	Vitric fragments				Dolomite
20	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlite	10	Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic (palagonite)	30	Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

Remarks: calcite - cemented sandstone

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

minor ✓

# Sediment Smear Slide / Thin Section Description Sheet

Date: 9/ /2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G

Core: 61R Sect.: 4A

Interval: 78

Sediment Name:

conglomerate silty clay w/ ash (mud)

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				60	10	50			30	70

Select one and check.

Select one and check.

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

Percent	Composition
	Pelagic Grains
	Calcareous
10	Nannofossils
	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	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)
40	Carbonate mud (apart from nannos)

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

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

Fill percentage (Total must be 100).

Remarks: white layer in mottled brown grey

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

Major part ✓

4?? ✓

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

Date: 9/3/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G

Core: 61

Sect.: K 1/1

Interval: 108

Sediment Name: tuff. clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount

Select one and check.

Granular Sediment			Other material	Percent Texture		
Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
80	20				10	90

Select one and check.

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

Percent	Composition
	Pelagic Grains
	Calcareous
	Nannofossils
	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
	Other bioclasts
	Mollusk
	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
	Dense minerals
	Micas (biotite, musc, chl)
	Glaucinite
	Phosphate (bones, teeth, etc)
	Opaque Grain
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
	Authigenic components
	Pyrite (framboids)
	Pyrite (euhedra)
	Pyrite (grain coating)
	Calcite
	Dolomite
	Zeolites
	Fe/Mn oxide
	Other (specify):

List under remarks if possible

Fill percentage (Total must be 100).

Remarks: brown area "giraffe rock"

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

major part ✓

### Sediment Smear Slide / Thin Section Description Sheet

Date: 9/3/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 61 Sect.: 2/11/4 Interval: 108-111

Sediment Name: tuff clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				80	20			10	90	

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks: light part (? grains?) "giraffe rock"

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

major ✓

Sediment Smear Slide / Thin Section Description Sheet

Date: 9/3/2016

Expedition: 362

Observer: fuid

Site: U1480 Hole: G Core: 61R Sect.: SA

Interval: 78

Sediment Name: turbidaceous clay w/silt ✓

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

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks:

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

Majol ✓

Sediment Smear Slide / Thin Section Description Sheet

Date: 9/ /2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 61 Sect.: 5

Interval: 108

Sediment Name: buff clay w/silt

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

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks:

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



Major



# Sediment Smear Slide / Thin Section Description Sheet

Date: 9/3/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 61 Sect.: 6

Interval: 73

Sediment Name: ash? (palagonized)

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
					<u>100?</u>			<u>10</u>	<u>90?</u>	

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
	Quartz		Calcareous		Dense minerals <sup>1</sup>
	Feldspars		Nannofossils		Micas (biotite, musc, chl)
<u>90</u>	Clay minerals		Foraminifers		Glauconite
	Lithic Grains		Siliceous		Phosphate (bones, teeth, etc)
	Sedimentary Lithics		Diatom		Opaque Grain
	Chert		Radiolarian		Marine organic matter
	Mudstone		Silicoflagellate		Terrestrial organic matter
	Siltstone/sandstone		Sponge Spicule		Other (specify):
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
<u>10</u>	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlite				
	Lathwork		Silt or sand-size carbonate allochem fragment (unspecified)		
<u>90</u>	Altered volcanic(palagonite)		Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

Remarks: mafic?

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 9/3/2016

Expedition: 362

Observer: Fried

Site: U1480 Hole: G

Core: 61R Sect.: 7A

Interval: 34

Sediment Name:

Tuffaceous clay with PALAGONITE (or Goethite?)

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
					100					100

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks:

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

( + oxidation spots )

M9,01 ✓

# Sediment Smear Slide / Thin Section Description Sheet

Date: 9/ /2016

Expedition: 362

Observer:

Site: U1480 Hole: G

Core: 38

Sect.: 2A

Interval: 38

Sediment Name:

PARK LAYER OF PALAGONITE

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
					100					100

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks:

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

Missi/ma, av ✓

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

Date: <sup>3</sup> 9/ /2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: BIR Sect.: 2A

Interval: 57

Sediment Name: calcareous ooze

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				20		80				100

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
	Quartz		Calcareous		Dense minerals <sup>1</sup>
	Feldspars	80	Nannofossils		Micas (biotite, musc, chl)
20	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlite				
	Lathwork		Silt or sand-size carbonate allochem fragment (unspecified)		
	Altered volcanic (palagonite)				
			Carbonate mud (apart from nanos)		

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

Fill percentage (Total must be 100).

Remarks:

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

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

Date: *9/2* 2016

Expedition: 362

Observer: *Ferris*

Site: U1480

Hole: G

Core: *61R*

Section: *7A*

Interval: *69*

Sediment Name:

*Tuffaceous clay (palagonized?)*

Smear Slide	Thin Section	Coarse Fraction	Grain Mount

Select one and check.

Granular Sediment			Other material	Percent Texture		
Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
<i>2</i>	<i>100</i>					

Select one and check.

Percent	Composition
	Major Siliciclastic Grain Types
	Quartz
<i>2</i>	Feldspars
	Clay minerals
	Lithic Grains
	Sedimentary Lithics
	Chert
	Mudstone
	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
	Volcaniclastic Grains
	Vitric fragments
	Clear glass
<i>3</i>	Colored glass
	Pumice
	Volcanic lithics
	Felsitic
	Microplitic
	Lathwork
<i>95</i>	Altered volcanic (palagonite)

Percent	Composition
	Pelagic Grains
	Calcareous
	Nannofossils
	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	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
	Dense minerals <sup>1</sup>
	Micas (biotite, musc, chl)
	Glauconite
	Phosphate (bones, teeth, etc)
	Opaque Grain
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
	Authigenic components
	Pyrite (framboids)
	Pyrite (euhedra)
	Pyrite (grain coating)
	Calcite
	Dolomite
	Zeolites
	Fe/Mn oxide
	Other (specify):

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

Fill percentage (Total must be 100).

Remarks: *not as dark as other 7e-lag. (above) - still glassy?*

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

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

Date: 9/3/2016

Expedition: 362

Observer: *ford*

Site: U1480 Hole: G Core: *81* Sect.: *CC* Interval: *10*

Sediment Name: *calcareous clay*

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				<i>70</i>		<i>30</i>				<i>100</i>

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
	Quartz		Calcareous		Dense minerals <sup>1</sup>
	Feldspars	<i>10</i>	Nannofossils		Micas (biotite, musc, chl) <sup>1</sup>
<i>70</i>	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlite				
	Lathwork		Silt or sand-size carbonate allochem fragment (unspecified)		
	Altered volcanic (palagonite)				
		<i>20</i>	Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

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

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 9/ /2016

Expedition: 362

Observer:

Site: U1480 Hole: G Core: 62R Sect.: 1A

Interval: 8

Sediment Name:

chert (?) vein

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
					<u>180?</u>	<u>10</u>			<u>10</u>	<u>90</u>

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
	Quartz		Calcareous		Dense minerals <sup>1</sup>
<u>90</u>	Feldspars		Nannofossils		Micas (biotite, musc, chl)
	Clay minerals <u>or chert?</u>		Foraminifers		Glauconite
	Lithic Grains		Siliceous		Phosphate (bones, teeth, etc)
	Sedimentary Lithics		Diatom		Opaque Grain
	Chert		Radiolarian		Marine organic matter
	Mudstone		Silicoflagellate		Terrestrial organic matter
	Siltstone/sandstone		Sponge Spicule		Other (specify):
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlite				
	Lathwork				
	Altered volcanic (palagonite)				
		<u>10</u>	Silt or sand-size carbonate allochem fragment (unspecified)		
			Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

Remarks:

Chert vein cutting the basalt

breccia

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 9/1/2016

Expedition: 362

Observer: Fossil

Site: U1480 Hole: G

Core: 62R Sect.: 6A

Interval: 13

Sediment Name: fin/fine silt-clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				<u>70</u>	<u>30</u>				<u>50</u>	<u>50</u>

Select one and check.

Select one and check.

Percent	Composition
	Major Siliciclastic Grain Types
<u>70</u>	Quartz
	Feldspars
<u>80</u>	Clay minerals
	Lithic Grains
	Sedimentary Lithics
	Chert
	Mudstone
	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
	Volcaniclastic Grains
	Vitric fragments
<u>30</u>	Clear glass *
	Colored glass
	Pumice
	Volcanic lithics
	Felsitic
	Microlitic
	Lathwork
	Altered volcanic (palagonite)

Percent	Composition
	Pelagic Grains
	Calcareous
	Nannofossils
	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	Silicoflagellate
	Sponge Spicule
	Other bioclasts
	Mollusk
	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
	Dense minerals <sup>1</sup>
	Micas (biotite, musc, chl)
	Glauconite
	Phosphate (bones, teeth, etc)
	Opaque Grain
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
	Authigenic components
	Pyrite (framboids)
	Pyrite (euhedra)
	Pyrite (grain coating)
	Calcite
	Dolomite
	Zeolites
	Fe/Mn oxide
	Other (specify):

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

Fill percentage (Total must be 100).

Remarks: ALTERED CLEAR GLASS

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



# Sediment Smear Slide / Thin Section Description Sheet

Date: 9/3/2016

Expedition: 362

Observer: KLM FO119

Site: U1480 Hole: G Core: 62R Sect.: 1A Interval: 100

Sediment Name: (Recrystallized ooze silt)  
calcareous silt

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>95</u>	<u>5</u>	

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
<u>15</u>	Quartz		Calcareous		Dense minerals <sup>1</sup>
<u>5</u>	Feldspars	<u>3</u>	Nannofossils		Micas (biotite, musc, chl)
	Clay minerals		Foraminifers		Glauconite
	Lithic Grains		Siliceous		Phosphate (bones, teeth, etc)
	Sedimentary Lithics		Diatom		Opaque Grain
	Chert		Radiolarian		Marine organic matter
	Mudstone		Silicoflagellate		Terrestrial organic matter
	Siltstone/sandstone		Sponge Spicule		Other (specify):
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic	<u>77</u>	Silt or sand-size carbonate allochem fragment (unspecified)		
	Microlite				
	Lathwork		Carbonate mud (apart from nannos)		
	Altered volcanic (palagonite)				

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

Fill percentage (Total must be 100).

Remarks:

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 9/4/2016

Expedition: 362

Observer: F. Forest.

Site: U1480 Hole: G Core: 62R Sect.: 6A Interval: 29

Sediment Name: fuffyish silt-clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
<input checked="" type="checkbox"/>				<u>50</u>	<u>50</u>				<u>50</u>	<u>50</u>

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
	Quartz		Calcareous		Dense minerals <sup>1</sup>
	Feldspars		Nannofossils		Micas (biotite, musc, chl)
<u>50</u>	Clay minerals		Foraminifers		Glauconite
	Lithic Grains		Siliceous		Phosphate (bones, teeth, etc)
	Sedimentary Lithics		Diatom		Opaque Grain
	Chert		Radiolarian		Marine organic matter
	Mudstone		Silicoflagellate		Terrestrial organic matter
	Siltstone/sandstone		Sponge Spicule		Other (specify):
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
<u>50</u>	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microplitic				
	Lathwork		Silt or sand-size carbonate allochem fragment (unspecified)		
	Altered volcanic (palagonite)				
			Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

Remarks: altered clear glass.

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 9/4/2016

Expedition: 362

Observer: Fould

Site: U1480 Hole: G

Core: 62R Sect.: 6A

Interval: 49

Sediment Name: *fulfillish silt clay*

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				0/0	60			60	40	

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks:

*Altered clear glass*

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 9/4/2016

Expedition: 362

Observer: Farid

Site: U1480 Hole: G

Core: 62R Sect.: 6A

Interval: 115

Sediment Name: Ash layer

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

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks:

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 9/1/2016

Expedition: 362

Observer: FORD

Site: U1480 Hole: G

Core: 62R Sect.: 4A

Interval: 129

Sediment Name: tuffaceous sandstone

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
X				40	60			100		

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
30	Quartz (colony?)		Calcareous		Dense minerals <sup>1</sup>
10	Feldspars		Nannofossils		Micas (biotite, musc, chl)
	Clay minerals		Foraminifers		Glauconite
	Lithic Grains		Siliceous		Phosphate (bones, teeth, etc)
	Sedimentary Lithics		Diatom		Opaque Grain
	Chert		Radiolarian		Marine organic matter
	Mudstone		Silicoflagellate		Terrestrial organic matter
	Siltstone/sandstone		Sponge Spicule		Other (specify):
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
30	Clear glass		Other carbonate allochems	30	Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microplitic		Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic (palagonite)		Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

Remarks: Grains of quartz and feldspar may be affected by acidic fluids

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 9/4/2016

Expedition: 362

Observer: FAZID

Site: U1480 Hole: G

Core: 6S

Sect.: 1A

Interval: 4

Sediment Name: DOZE WITH FOAM

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				<u>6S</u>		<u>3S</u>				<u>100</u>

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	<b>Major Siliciclastic Grain Types</b>		<b>Pelagic Grains</b>		<b>Minor Grain Types</b>
<u>5</u>	Quartz		Calcareous		Dense minerals <sup>1</sup>
	Feldspars	<u>25</u>	Nannofossils ?		Micas (biotite, musc, chl)
<u>10</u>	Clay minerals	<u>75</u>	Foraminifers		Glauconite
	Lithic Grains		Siliceous		Phosphate (bones, teeth, etc)
	Sedimentary Lithics		Diatom		Opaque Grain
	Chert		Radiolarian		Marine organic matter
	Mudstone		Silicoflagellate		Terrestrial organic matter
	Siltstone/sandstone		Sponge Spicule		Other (specify):
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	<b>Volcaniclastic Grains</b>				Calcite
	Vitric fragments				Dolomite
	Clear glass		<b>Other carbonate allochems</b>		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlite				
	Lathwork				
	Altered volcanic (palagonite)				
		<u>40</u>	Silt or sand-size carbonate allochem fragment (unspecified)		
			Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

Remarks:

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 9/4/2016

Expedition: 362

Observer: F.M.J.

Site: U1480 Hole: G

Core: 65 Sect.: 1A

Interval: 5

Sediment Name: tuffaceous clay with mollusks

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				<u>85</u>	<u>25</u>	<u>20</u>				<u>100</u>

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
<u>3</u>	Quartz		Calcareous		Dense minerals <sup>1</sup>
<u>3</u>	Feldspars	<u>20</u>	Nannofossils		Micas (biotite, musc, chl) <sup>1</sup>
<u>40</u>	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlite				
<u>25</u>	Lathwork		Silt or sand-size carbonate allochem fragment (unspecified)		
	Altered volcanic (palagonite)				
		<u>10</u>	Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

Remarks:

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 9/4/2016

Expedition: 362 Observer: FATIO

Site: U1480 Hole: G Core: 65R Sect.: 1A Interval: 114

Sediment Name: Calcareous ooze

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
X				30		70				100

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
	Quartz		Calcareous		Dense minerals <sup>1</sup>
	Feldspars	67	Nannofossils		Micas (biotite, musc, chl)
	Clay minerals	3	Foraminifers		Glauconite
	Lithic Grains		Siliceous		Phosphate (bones, teeth, etc)
	Sedimentary Lithics		Diatom		Opaque Grain
	Chert		Radiolarian		Marine organic matter
	Mudstone		Silicoflagellate		Terrestrial organic matter
	Siltstone/sandstone		Sponge Spicule		Other (specify):
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlite				
	Lathwork				
	Altered volcanic(palagonite)				
		30	Silt or sand-size carbonate allochem fragment (unspecified)		
			Carbonate mud (apart from nanos)		

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

Fill percentage (Total must be 100).

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

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



# Sediment Smear Slide / Thin Section Description Sheet

Date: 9/4/2016

Expedition: 362

Observer: FARRIS

Site: U1480 Hole: G Core: 65R Sect.: 1A

Interval: 124

Sediment Name: glistening clay with ash

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

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
	Quartz		Calcareous		Dense minerals <sup>1</sup>
	Feldspars	70	Nannofossils		Micas (biotite, musc, chl)
	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlite				
	Lathwork				
30	Altered volcanic(palagonite)		Silt or sand-size carbonate allochem fragment (unspecified)		
			Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

Remarks:

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 9/4/2016

Expedition: 362

Observer: [Signature]

Site: U1480 Hole: G

Core: 65R Sect.: 2A

Interval: 33

Sediment Name:

calcareous clay with ash

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				SS	15	30			15	85

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
	Quartz		Calcareous		Dense minerals <sup>1</sup>
35	Feldspars	30	Nannofossils		Micas (biotite, musc, chl)
	Clay minerals		Foraminifers		Glauconite
	Lithic Grains		Siliceous		Phosphate (bones, teeth, etc)
	Sedimentary Lithics		Diatom		Opaque Grain
	Chert		Radiolarian		Marine organic matter
	Mudstone		Silicoflagellate		Terrestrial organic matter
	Siltstone/sandstone		Sponge Spicule		Other (specify):
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlitic				
	Lathwork				
15	Altered volcanic (palagonite)	20	Silt or sand-size carbonate allochem fragment (unspecified)		
			Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

Remarks:

dark layered cutting the stratification.

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 9/4/2016

Expedition: 362

Observer: Fairchild

Site: U1480 Hole: G Core: 65A Sect.: 2A Interval: 50

Sediment Name: ooze with forams

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			100	

Select one and check.

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

Percent	Composition
	Pelagic Grains
20	Calcareous
30	Nannofossils
	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	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
	Dense minerals <sup>1</sup>
	Micas (biotite, musc, chl)
	Glauconite
	Phosphate (bones, teeth, etc)
	Opaque Grain
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
	Authigenic components
	Pyrite (framboids)
	Pyrite (euhedra)
	Pyrite (grain coating)
	Calcite
	Dolomite
	Zeolites
	Fe/Mn oxide
	Other (specify):

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

Fill percentage (Total must be 100).

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

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 9/4/2016

Expedition: 362

Observer: FA 710

Site: U1480 Hole: G

Core: 65B Sect.: 3A

Interval: 140

Sediment Name: colloidal with ash

Smear Slide	Thin Section	Coarse Fraction	Grain Mount
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Select one and check.

Granular Sediment			Other material	Percent Texture		
Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
<u>45</u>	<u>40</u>	<u>15</u>			<u>0/60</u>	

Select one and check.

Percent	Composition
	Major Siliciclastic Grain Types
	Quartz
	Feldspars
<u>30</u>	Clay minerals
	Lithic Grains
	Sedimentary Lithics
	Chert
	Mudstone
	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
	Volcaniclastic Grains
	Vitric fragments
	Clear glass
	Colored glass
	Pumice
	Volcanic lithics
	Felsitic
	Microlite
	Lathwork
<u>40</u>	Altered volcanic (palagonite)

Percent	Composition
	Pelagic Grains
	Calcareous
<u>15</u>	Nannofossils
	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	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)
<u>15</u>	Carbonate mud (apart from nannos)

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

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

Fill percentage (Total must be 100).

Remarks:

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 9/ /2016

Expedition: 362

Observer: Faris

Site: U1480 Hole: G Core: 65R Sect.: 6A

Interval: 28

Sediment Name: ooze calcareous recrystallized

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				X		?			100	

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
	Quartz		Calcareous		Dense minerals <sup>1</sup>
	Feldspars		Nannofossils		Micas (biotite, musc, chl)
	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				S IRON Hydroxide
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microplitic	95	Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic(palagonite)		Carbonate mud (apart from nannos)		

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

Fill percentage (Total must be 100).

Remarks:

corals replaced by hydroxide

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 9/4/2016

Expedition: 362

Observer: Farid

Site: U1480 Hole: G

Core: 65R Sect: 4A

Interval: 145

Sediment Name: calcareous clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				100?						100

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks:

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 9/1/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 62 Sect.: 1 Interval: 4

Sediment Name: μ-crystals of carbonate, poss recryst coccolith debris (?)

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

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks: light greenish color of fracture fill

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 9/4/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 62 Sect.: 1 Interval: 6

Sediment Name: *y-crist qtz + chalcedony - 1 slow!*

V fine ~ 1/4 crystals

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

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks: *Zoned green material coating frac in basaltic glass*

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



# Sediment Smear Slide / Thin Section Description Sheet

Date: 9/4/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 62 Sect.: 1

Interval: 9

Sediment Name: Low-bn. material- clay vs. chert - unknown

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

Select one and check.

Select one and check.

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

Percent	Composition
	Pelagic Grains
	Calcareous
	Nannofossils
	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	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
	Dense minerals <sup>1</sup>
	Micas (biotite, musc, chl)
	Glauconite
	Phosphate (bones, teeth, etc)
	Opaque Grain
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
	Authigenic components
	Pyrite (framboids)
	Pyrite (euhedra)
	Pyrite (grain coating)
	Calcite
	Dolomite
	Zeolites
	Fe/Mn oxide
	Other (specify):

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

Fill percentage (Total must be 100).

Remarks: white fracture fill

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 9/4/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 62 Sect.: 1 Interval: 10

Sediment Name: low-br microcrystalline material - clay?

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

Select one and check.

Select one and check.

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

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

Fill percentage (Total must be 100).

Remarks: brown fracture fill in black glass @ top of core

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

# Sediment Smear Slide / Thin Section Description Sheet

Date: 9/ /2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G

Core: 62

Sect.: 1

Interval: 11

Sediment Name:

basaltic glass - partly palagonized

Smear Slide	Thin Section	Coarse Fraction	Grain Mount

Select one and check.

Granular Sediment			Other material	Percent Texture		
Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay

Select one and check.

Percent	Composition
	Major Siliciclastic Grain Types
	Quartz
	Feldspars
	Clay minerals
	Lithic Grains
	Sedimentary Lithics
	Chert
	Mudstone
	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
	Volcaniclastic Grains
	Vitric fragments
75	Clear glass
	Colored glass
	Pumice
	Volcanic lithics
	Felsitic
	Microplitic
	Lathwork
25	Altered volcanic(palagonite)

Percent	Composition
	Pelagic Grains
	Calcareous
	Nannofossils
	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	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
	Dense minerals <sup>1</sup>
	Micas (biotite, musc, chl)
	Glauconite
	Phosphate (bones, teeth, etc)
	Opaque Grain
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
	Authigenic components
	Pyrite (framboids)
	Pyrite (euhedra)
	Pyrite (grain coating)
	Calcite
	Dolomite
	Zeolites
	Fe/Mn oxide
	Other (specify):

<sup>1</sup> List under remarks if possible

Fill percentage (Total must be 100).

Remarks:

fractured obsidian @ top of core

\* This form is not designed for shallow water (neritic) carbonate sediments

# Sediment Smear Slide / Thin Section Description Sheet

Date: 9/4/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G

Core: 66 Sect.: 2

Interval: 119

Sediment Name: \_\_\_\_\_

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
	Quartz		Calcareous		Dense minerals <sup>1</sup>
	Feldspars		Nannofossils		Micas (biotite, musc, chl)
	Clay minerals		Foraminifers		Glauconite
	Lithic Grains		Siliceous		Phosphate (bones, teeth, etc)
	Sedimentary Lithics		Diatom		Opaque Grain
	Chert		Radiolarian		Marine organic matter
	Mudstone		Silicoflagellate		Terrestrial organic matter
	Siltstone/sandstone		Sponge Spicule		Other (specify):
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlitic		Silt or sand-size carbonate allochem fragment (unspecified)		
	Lathwork				
	Altered volcanic (palagonite)		Carbonate mud (apart from nannos)		

<sup>1</sup> List under remarks if possible

Fill percentage (Total must be 100).

Remarks: \_\_\_\_\_

brown vein fill - palagonite + palagonized chalcocony

\* This form is not designed for shallow water (neritic) carbonate sediments

# Sediment Smear Slide / Thin Section Description Sheet

Date: 9/4/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 66 Sect.: 2 Interval: 124

Sediment Name: \_\_\_\_\_

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
	Quartz		Calcareous		Dense minerals <sup>1</sup>
	Feldspars		Nannofossils		Micas (biotite, musc, chl) <sup>1</sup>
	Clay minerals		Foraminifers		Glauconite
	Lithic Grains		Siliceous		Phosphate (bones, teeth, etc)
	Sedimentary Lithics		Diatom		Opaque Grain
	Chert		Radiolarian		Marine organic matter
	Mudstone		Silicoflagellate		Terrestrial organic matter
	Siltstone/sandstone		Sponge Spicule		Other (specify):
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments		Other carbonate allochems		Dolomite
	Clear glass		Peloid		Zeolites
	Colored glass		Intraclast		Fe/Mn oxide
	Pumice				Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlite				
	Lathwork		Silt or sand-size carbonate allochem fragment (unspecified)		
	Altered volcanic (palagonite)		Carbonate mud (apart from nannos)		

<sup>1</sup> List under remarks if possible

Fill percentage (Total must be 100).

Remarks: white vein fill - carbonate

\* This form is not designed for shallow water (neritic) carbonate sediments

# Sediment Smear Slide / Thin Section Description Sheet

Date: 9/4/2016

Expedition: 362 Observer: KLM

Site: U1480 Hole: G Core: 66 Sect.: 3 Interval: 56

Sediment Name: \_\_\_\_\_

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
	Quartz		Calcareous		Dense minerals <sup>1</sup>
	Feldspars		Nannofossils		Micas (biotite, musc, chl)
	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
					Calcite
	Volcaniclastic Grains				Dolomite
	Vitric fragments		Other carbonate allochems		Zeolites
	Clear glass		Peloid		Fe/Mn oxide
	Colored glass		Intraclast		Other (specify):
	Pumice				
	Volcanic lithics				
	Felsitic				
	Microlitic				
	Lathwork				
	Altered volcanic(palagonite)				

<sup>1</sup> List under remarks if possible

Fill percentage (Total must be 100).

Remarks: white vein fill - carbonate

\* This form is not designed for shallow water (neritic) carbonate sediments



# Sediment Smear Slide / Thin Section Description Sheet

Date: 9/4/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 66 Sect.: 4 Interval: 41

Sediment Name: \_\_\_\_\_

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	<b>Major Siliciclastic Grain Types</b>		<b>Pelagic Grains</b>		<b>Minor Grain Types</b>
	Quartz		Calcareous		Dense minerals <sup>1</sup>
	Feldspars		Nannofossils		Micas (biotite, musc, chl)
	Clay minerals		Foraminifers		Glauconite
	Lithic Grains		Siliceous		Phosphate (bones, teeth, etc)
	Sedimentary Lithics		Diatom		Opaque Grain
	Chert		Radiolarian		Marine organic matter
	Mudstone		Silicoflagellate		Terrestrial organic matter
	Siltstone/sandstone		Sponge Spicule		Other (specify):
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	<b>Volcaniclastic Grains</b>				Calcite
	Vitric fragments				Dolomite
	Clear glass		<b>Other carbonate allochems</b>		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlitic				
	Lathwork				
	Altered volcanic (palagonite)				

<sup>1</sup> List under remarks if possible

Fill percentage (Total must be 100).

Remarks: white blob - carbonate

\* This form is not designed for shallow water (neritic) carbonate sediments

# Sediment Smear Slide / Thin Section Description Sheet

Date: 9/4/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 66 Sect.: 5 Interval: 82

Sediment Name: \_\_\_\_\_

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
	Quartz		Calcareous		Dense minerals <sup>1</sup>
	Feldspars		Nannofossils		Micas (biotite, musc, chl) <sup>1</sup>
	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlite				
	Lathwork		Silt or sand-size carbonate allochem fragment (unspecified)		
	Altered volcanic(palagonite)				
			Carbonate mud (apart from nannos)		

<sup>1</sup> List under remarks if possible

Fill percentage (Total must be 100).

Remarks: brown, horiz vein - palagonite + clay + microcrystalline

\* This form is not designed for shallow water (neritic) carbonate sediments

carbonate



Minor ✓

# Sediment Smear Slide / Thin Section Description Sheet

Date: 9/5/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 69 Sect.: 5

Interval: 79

Sediment Name: altered cal. mud - ~50% auth carb.

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
	Quartz		Calcareous		Dense minerals <sup>1</sup>
	Feldspars		Nannofossils		Micas (biotite, musc, chl)
	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
					50 Calcite - silt-size mono ?
	Volcaniclastic Grains				2 Dolomite c'750?
	Vitric fragments				Zeolites
	Clear glass		Other carbonate allochems		Fe/Mn oxide
	Colored glass		Peloid		Other (specify):
	Pumice		Intraclast		
	Volcanic lithics				
	Felsitic				
	Microlite				
	Lathwork		Silt or sand-size carbonate allochem fragment (unspecified)		
	Altered volcanic (palagonite)				
			Carbonate mud (apart from nannos)		

<sup>1</sup> List under remarks if possible

Fill percentage (Total must be 100).

Remarks: baked zone in mud - pinkish, unred below silt

\* This form is not designed for shallow water (neritic) carbonate sediments

silt-size carb + clay ?

minor



**Sediment Smear Slide / Thin Section Description Sheet**

Date: 9/5/2016

Expedition: 362

Observer: KLM

Site: U1480

Hole: G

Core: 69

Sect.: 5

Interval: 81

Sediment Name: \_\_\_\_\_

Smear Slide	Thin Section	Coarse Fraction	Grain Mount

Select one and check.

Granular Sediment			Other material	Percent Texture		
Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay

Select one and check.

Percent	Composition
	Major Siliciclastic Grain Types
	Quartz
	Feldspars
<u>25</u>	Clay minerals
	Lithic Grains
	Sedimentary Lithics
	Chert
	Mudstone
	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
	Volcaniclastic Grains
	Vitric fragments
	Clear glass
	Colored glass
	Pumice
	Volcanic lithics
	Felsitic
	Microlite
	Lathwork
	Altered volcanic(palagonite)

Percent	Composition
	Pelagic Grains
	Calcareous
	Nannofossils
	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	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
	Dense minerals <sup>1</sup>
	Micas (biotite, musc, chl)
	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>50</u>	Calcite <u>?</u>
	Dolomite
	Zeolites
<u>?</u>	Fe/Mn oxide
	Other (specify):

<sup>1</sup> List under remarks if possible

Fill percentage (Total must be 100).

Remarks: baked mud @ silt contact (lower); yellowish

\* This form is not designed for shallow water (neritic) carbonate sediments

Silt-size carb + ? palagonite? + clay

minor

# Sediment Smear Slide / Thin Section Description Sheet

Date: 9/5/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G

Core: 69 Sect.: 5

Interval: 85

Sediment Name: cal ooze w/ clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				30	10	60			15	85

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
	Quartz		Calcareous		Dense minerals <sup>1</sup>
	Feldspars	30	Nannofossils		Micas (biotite, musc, chl) <sup>1</sup>
30	Clay minerals		Foraminifers		Glauconite
	Lithic Grains		Siliceous		Phosphate (bones, teeth, etc)
	Sedimentary Lithics		Diatom		Opaque Grain
	Chert		Radiolarian		Marine organic matter
	Mudstone		Silicoflagellate		Terrestrial organic matter
	Siltstone/sandstone		Sponge Spicule		Other (specify):
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				+r Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		+r Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlitic				
	Lathwork		Silt or sand-size carbonate allochem fragment (unspecified)		
16	Altered volcanic (palagonite)				
		30	Carbonate mud (apart from nannos)		

<sup>1</sup> List under remarks if possible

Fill percentage (Total must be 100).

Remarks: reddish mud (w/ forams + radiol.) below silt

\* This form is not designed for shallow water (neritic) carbonate sediments

major



# Sediment Smear Slide / Thin Section Description Sheet

Date: 9/5/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 69 Sect.: 6

Interval: 16

Sediment Name: clayey cal. ooze

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				<u>35</u>	<u>10</u>	<u>55</u>			<u>15</u>	<u>85</u>

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
	Quartz		Calcareous		Dense minerals <sup>1</sup>
	Feldspars	<u>25</u>	Nannofossils		Micas (biotite, musc, chl)
<u>35</u>	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microclitic				
	Lathwork				
<u>10</u>	Altered volcanic (palagonite)		Silt or sand-size carbonate allochem fragment (unspecified)		
		<u>30</u>	Carbonate mud (apart from nannos)		

<sup>1</sup> List under remarks if possible

Fill percentage (Total must be 100).

Remarks: brown buffered mud

\* This form is not designed for shallow water (neritic) carbonate sediments

Major



# Sediment Smear Slide / Thin Section Description Sheet

Date: 9/5/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 69 Sect.: 6

Interval: 77

Sediment Name: clayey cal ooze

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				35	10	55			15	85

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
	Quartz		Calcareous		Dense minerals <sup>1</sup>
	Feldspars	25	Nannofossils		Micas (biotite, musc, chl)
35	Clay minerals		Foraminifers		Glauconite
	Lithic Grains		Siliceous		Phosphate (bones, teeth, etc)
	Sedimentary Lithics		Diatom		Opaque Grain
	Chert		Radiolarian		Marine organic matter
	Mudstone		Silicoflagellate		Terrestrial organic matter
	Siltstone/sandstone		Sponge Spicule		Other (specify):
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments		Other carbonate allochems		Dolomite
	Clear glass		Peloid		Zeolites
	Colored glass		Intraclast		Fe/Mn oxide
	Pumice				Other (specify):
	Volcanic lithics				
	Felsitic				
	Microplitic				
	Lathwork				
10	Altered volcanic (palagonite)		Silt or sand-size carbonate allochem fragment (unspecified)		
		30	Carbonate mud (apart from nannos)		

<sup>1</sup> List under remarks if possible

Fill percentage (Total must be 100).

Remarks: brown brown mud

\* This form is not designed for shallow water (neritic) carbonate sediments

major ✓

# Sediment Smear Slide / Thin Section Description Sheet

Date: 9/5/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G

Core: 69 Sect.: 7

Interval: 36

Sediment Name: cal. clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount

Select one and check.

Granular Sediment			Other material	Percent Texture		
Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
<u>60</u>	<u>10</u>	<u>30</u>			<u>10</u>	<u>90</u>

Select one and check.

Percent	Composition
	Major Siliciclastic Grain Types
	Quartz
	Feldspars
<u>60</u>	Clay minerals
	Lithic Grains
	Sedimentary Lithics
	Chert
	Mudstone
	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
	Volcaniclastic Grains
	Vitric fragments
	Clear glass
	Colored glass
	Pumice
	Volcanic lithics
	Felsitic
	Microclitic
	Lathwork
<u>10</u>	Altered volcanic (palagonite)

Percent	Composition
	Pelagic Grains
	Calcareous
<u>5</u>	Nannofossils
	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	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)
<u>25</u>	Carbonate mud (apart from nannos)

Percent	Composition
	Minor Grain Types
	Dense minerals <sup>1</sup>
	Micas (biotite, musc, chl)
	Glauconite
	Phosphate (bones, teeth, etc)
	Opaque Grain
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
	Authigenic components
	Pyrite (framboids)
	Pyrite (euhedra)
	Pyrite (grain coating)
	Calcite
	Dolomite
	Zeolites
	Fe/Mn oxide
	Other (specify):

<sup>1</sup> List under remarks if possible

Fill percentage (Total must be 100).

Remarks: darker brown mud between silty burrows

\* This form is not designed for shallow water (neritic) carbonate sediments

majel



**Sediment Smear Slide / Thin Section Description Sheet**

Date: 9/5/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 69 Sect.: 8 Interval: 14

Sediment Name: cal. clay w/ silt

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				65		35			15	85

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
tr	Quartz		Calcareous		Dense minerals <sup>1</sup>
	Feldspars	15	Nannofossils		Micas (biotite, musc, chl)
74	Clay minerals + Fe-ox	1	Foraminifers		Glauconite
	Lithic Grains		Siliceous		Phosphate (bones, teeth, etc)
	Sedimentary Lithics		Diatom		Opaque Grain
	Chert		Radiolarian		Marine organic matter
	Mudstone		Silicoflagellate		Terrestrial organic matter
	Siltstone/sandstone		Sponge Spicule		Other (specify):
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlite				
	Lathwork				
	Altered volcanic(palagonite)				
		10	Carbonate mud (apart from nannos)		

<sup>1</sup> List under remarks if possible

Fill percentage (Total must be 100).

Remarks: very dark mud

\* This form is not designed for shallow water (neritic) carbonate sediments

major



# Sediment Smear Slide / Thin Section Description Sheet

Date: 9/4/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 70 Sect.: 1

Interval: 26

Sediment Name: dark clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount

Select one and check.

Granular Sediment		
Siliciclastic	Volcaniclastic	Pelagic
<u>70</u>		<u>30</u>

Select one and check.

Other material	Percent Texture		
	Sand	Silt	Clay
		<u>10</u>	<u>90</u>

Percent	Composition
	Major Siliciclastic Grain Types
<u>5</u>	Quartz
	Feldspars
<u>65</u>	Clay minerals
	Lithic Grains
	Sedimentary Lithics
	Chert
	Mudstone
	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
	Volcaniclastic Grains
	Vitric fragments
	Clear glass
	Colored glass
	Pumice
	Volcanic lithics
	Felsitic
	Microplitic
	Lathwork
	Altered volcanic(palagonite)

Percent	Composition
	Pelagic Grains
	Calcareous
<u>10</u>	Nannofossils
	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	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)
<u>20</u>	Carbonate mud (apart from nannos)

Percent	Composition
	Minor Grain Types
	Dense minerals <sup>1</sup>
	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)
	Calcite
	Dolomite
	Zeolites
	Fe/Mn oxide
	Other (specify):

<sup>1</sup> List under remarks if possible

Fill percentage (Total must be 100).

Remarks: dark mud

\* This form is not designed for shallow water (neritic) carbonate sediments



*Major* ✓  
**Sediment Smear Slide / Thin Section Description Sheet**

Date: 9/4/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G

Core: 70

Sect.: 2

Interval: 49

Sediment Name: cal ooze w/ clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount

Select one and check.

Granular Sediment			Other material	Percent Texture		
Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
<u>20</u>		<u>80</u>			<u>5</u>	<u>95</u>

Select one and check.

Percent	Composition
	Major Siliciclastic Grain Types
	Quartz
	Feldspars
<u>20</u>	Clay minerals
	Lithic Grains
	Sedimentary Lithics
	Chert
	Mudstone
	Siltstone/sandstone
	Limestone
	Metamorphic lithic
	Plutonic lithic
	Volcaniclastic Grains
	Vitric fragments
	Clear glass
	Colored glass
	Pumice
	Volcanic lithics
	Felsitic
	Microlite
	Lathwork
	Altered volcanic(palagonite)

Percent	Composition
	Pelagic Grains
	Calcareous
<u>30</u>	Nannofossils
	Foraminifers
	Siliceous
	Diatom
	Radiolarian
	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)
<u>50</u>	Carbonate mud (apart from nannos)

Percent	Composition
	Minor Grain Types
	Dense minerals <sup>1</sup>
	Micas (biotite, musc, chl)
	Glauconite
	Phosphate (bones, teeth, etc)
	Opaque Grain
	Marine organic matter
	Terrestrial organic matter
	Other (specify):
	Authigenic components
	Pyrite (framboids)
	Pyrite (euhedra)
	Pyrite (grain coating)
	Calcite
	Dolomite
	Zeolites
	Fe/Mn oxide
	Other (specify):

<sup>1</sup> List under remarks if possible

Fill percentage (Total must be 100).

Remarks: tan mud w/ burrows

\* This form is not designed for shallow water (neritic) carbonate sediments

Minor



**Sediment Smear Slide / Thin Section Description Sheet**

Date: 5  
9/4/2016

Expedition: 362

Observer: KLM

Site: U1480

Hole: G

Core: 70

Sect.: 3

Interval: 33

Sediment Name: cal ooze w/ clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				20	10	70			5	90

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	<b>Major Siliciclastic Grain Types</b>		<b>Pelagic Grains</b>		<b>Minor Grain Types</b>
	Quartz		Calcareous		Dense minerals <sup>1</sup>
	Feldspars	20	Nannofossils		Micas (biotite, musc, chl) <sup>1</sup>
20	Clay minerals		Foraminifers		Glaucinite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	<b>Volcaniclastic Grains</b>				Calcite
	Vitric fragments				Dolomite
	Clear glass		<b>Other carbonate allochems</b>		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microclitic				
	Lathwork				
10	Altered volcanic (palagonite)		Silt or sand-size carbonate allochem fragment (unspecified)		
		50	Carbonate mud (apart from nannos)		

<sup>1</sup> List under remarks if possible

Fill percentage (Total must be 100).

Remarks: zone of dark waxy fabric, dark red/brown 4-crystalline aggregates  
may be palagonite

\* This form is not designed for shallow water (heritic) carbonate sediments

*minor* ✓  
**Sediment Smear Slide / Thin Section Description Sheet**

Date: 9/4/2016

Expedition: 362 Observer: KLM

Site: U1480 Hole: G Core: 70 Sect.: 3 Interval: 95

Sediment Name: cal. ooze

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				<u>10</u>		<u>90</u>				<u>100</u>

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
	Quartz		Calcareous		Dense minerals <sup>1</sup>
	Feldspars	<u>90</u>	Nannofossils		Micas (biotite, musc, chl)
<u>10</u>	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlitic				
	Lathwork				
	Altered volcanic(palagonite)				
			Silt or sand-size carbonate allochem fragment (unspecified)		
			Carbonate mud (apart from nannos)		

<sup>1</sup> List under remarks if possible

Fill percentage (Total must be 100).

Remarks: pinkish blob - poss ash? → no evidence

\* This form is not designed for shallow water (neritic) carbonate sediments

major ✓

# Sediment Smear Slide / Thin Section Description Sheet

Date: 9/4/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 70 Sect.: 5

Interval: 71

Sediment Name: cal. ooze

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				30	10	60			5	95

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
	Quartz		Calcareous		Dense minerals <sup>1</sup>
	Feldspars	30	Nannofossils		Micas (biotite, musc, chl)
30	Clay minerals		Foraminifers		Glauconite
			Siliceous		Phosphate (bones, teeth, etc)
	Lithic Grains		Diatom		Opaque Grain
	Sedimentary Lithics		Radiolarian		Marine organic matter
	Chert		Silicoflagellate		Terrestrial organic matter
	Mudstone		Sponge Spicule		Other (specify):
	Siltstone/sandstone				
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlitic				
	Lathwork				
	Altered volcanic (palagonite)				
10		30	Silt or sand-size carbonate allochem fragment (unspecified)		
			Carbonate mud (apart from nannos)		

<sup>1</sup> List under remarks if possible

Fill percentage (Total must be 100).

Remarks: very dark mud

\* This form is not designed for shallow water (neritic) carbonate sediments

# Sediment Smear Slide / Thin Section Description Sheet

Date: 9/5/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G

Core: 70 Sect.: CC

Interval: 17

Sediment Name: cal. ooze

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				<u>10</u>		<u>90</u>			<u>5</u>	<u>95</u>

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
	Quartz		Calcareous		Dense minerals <sup>1</sup>
	Feldspars	<u>40</u>	Nannofossils		Micas (biotite, musc, chl)
<u>10</u>	Clay minerals		Foraminifers		Glauconite
	Lithic Grains		Siliceous		Phosphate (bones, teeth, etc)
	Sedimentary Lithics		Diatom		Opaque Grain
	Chert		Radiolarian		Marine organic matter
	Mudstone		Silicoflagellate		Terrestrial organic matter
	Siltstone/sandstone		Sponge Spicule		Other (specify):
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlite				
	Lathwork		Silt or sand-size carbonate allochem fragment (unspecified)		
	Altered volcanic(palagonite)				
		<u>50</u>	Carbonate mud (apart from nannos)		

<sup>1</sup> List under remarks if possible

Fill percentage (Total must be 100).

Remarks:

\* This form is not designed for shallow water (neritic) carbonate sediments

*min*

# Sediment Smear Slide / Thin Section Description Sheet

Date: 9/5/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G

Core: 71 Sect.: 4

Interval: 4

Sediment Name: cal. ooze (recrystallized)

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>5</u>	<u>90</u>

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
	Quartz		Calcareous		Dense minerals <sup>1</sup>
	Feldspars		Nannofossils		Micas (biotite, musc, chl)
<u>10</u>	Clay minerals		Foraminifers		Glauconite
	Lithic Grains		Siliceous		Phosphate (bones, teeth, etc)
	Sedimentary Lithics		Diatom		Opaque Grain
	Chert		Radiolarian		Marine organic matter
	Mudstone		Silicoflagellate		Terrestrial organic matter
	Siltstone/sandstone		Sponge Spicule		Other (specify):
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlite				
	Lathwork		Silt or sand-size carbonate allochem fragment (unspecified)		
	Altered volcanic(palagonite)				
		<u>90</u>	Carbonate mud (apart from nannos)		

<sup>1</sup> List under remarks if possible

Fill percentage (Total must be 100).

Remarks: nannos completely recrystallized by silt (?)

\* This form is not designed for shallow water (neritic) carbonate sediments

# Sediment Smear Slide / Thin Section Description Sheet

Date: 9/5/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G

Core: 71 Sect.: 2

Interval: 55

Sediment Name: cal ooze

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				<u>10</u>	<u>10</u>	<u>80</u>				<u>100</u>

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
	Quartz		Calcareous		Dense minerals <sup>1</sup>
	Feldspars	<u>20</u>	Nannofossils		Micas (biotite, musc, chl) <sup>1</sup>
<u>10</u>	Clay minerals		Foraminifers		Glauconite
	Lithic Grains		Siliceous		Phosphate (bones, teeth, etc)
	Sedimentary Lithics		Diatom		Opaque Grain
	Chert		Radiolarian		Marine organic matter
	Mudstone		Silicoflagellate		Terrestrial organic matter
	Siltstone/sandstone		Sponge Spicule		Other (specify):
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlite				
	Lathwork				
<u>10</u>	Altered volcanic (palagonite)				
		<u>60</u>	Carbonate mud (apart from nannos)		

<sup>1</sup> List under remarks if possible

Fill percentage (Total must be 100).

Remarks: darker burrowed mud

\* This form is not designed for shallow water (neritic) carbonate sediments

as 3-5 μm specks - microcrystall aggregates

# Sediment Smear Slide / Thin Section Description Sheet

Date: 9/5/2016

Expedition: 362

Observer: KLM

Site: U1480 Hole: G Core: 71 Sect.: 1

Interval: 34

Sediment Name: cal ooze w/ silt

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Other material	Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic		Sand	Silt	Clay
				18	2	80			15	85

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Major Siliciclastic Grain Types		Pelagic Grains		Minor Grain Types
	Quartz		Calcareous		Dense minerals <sup>1</sup>
	Feldspars	20	Nannofossils		Micas (biotite, musc, chl)
18	Clay minerals		Foraminifers		Glauconite
	Lithic Grains		Siliceous		Phosphate (bones, teeth, etc)
	Sedimentary Lithics		Diatom		Opaque Grain
	Chert		Radiolarian		Marine organic matter
	Mudstone		Silicoflagellate		Terrestrial organic matter
	Siltstone/sandstone		Sponge Spicule		Other (specify):
	Limestone		Other bioclasts		
	Metamorphic lithic		Mollusk		Authigenic components
	Plutonic lithic		Echinoderm		Pyrite (framboids)
			Benthic foraminifer		Pyrite (euhedra)
			Other bioclast (specify)		Pyrite (grain coating)
	Volcaniclastic Grains				Calcite
	Vitric fragments				Dolomite
	Clear glass		Other carbonate allochems		Zeolites
	Colored glass		Peloid		Fe/Mn oxide
	Pumice		Intraclast		Other (specify):
	Volcanic lithics				
	Felsitic				
	Microlite				
	Lathwork				
2	Altered volcanic (palagonite)		Silt or sand-size carbonate allochem fragment (unspecified)		
		60	Carbonate mud (apart from nannos)		

<sup>1</sup> List under remarks if possible

Fill percentage (Total must be 100).

Remarks: specks of red-brown material (~3 um) may be palagonite

\* This form is not designed for shallow water (neritic) carbonate sediments

tan browned mud