

Sediment Smear Slide / Thin Section Description Sheet

Date 15/05/12

Expedition: 343

Observer: Monica

Site: 20019 Hole: E Core: 1R Sect.: 01 Interval: 110 cm

Sediment Name: Ash

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

Select one and check.

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Siliclastic Grain		Pelagic Grain		Others
	Minerals		Calcareous Grain		Gypsiferous Grain
	Quartz		Nannofossils		Calcareous Grain
	Feldspars		Foraminifers		Sapropelic Grain
	Micas	3%	Siliceous Grain		Mn Nodules/ Crusts
	Ferromagnesian Minerals		Diatom		Pyrite Grain
	Glauconite		Radiolarians		Opaque Grain
	Clay Minerals		Silicoflagellates		
	Zeolites		Sponge Spicule		
	Heavy Minerals				
	Pyrite				
	Phospholite				
	Aragonite		Neritic Grain		
	Calcite		Ooid		
	Oolites		Spherical Particles		
	Lithic Grain		Elliptical Particles		
	Sedimentary Lithic Grain		Bioclast		
	Igneous Lithic Grain		Molluscan		
	Metamorphic Lithic Grain		Algal		
			Pellet		
			Molluscs		
			Echinoderms		
			Others		
97%	Volcaniclastic Grain		Intraclast		
	Scoria / Pumice		Carbonate Rock Fragment		
	Scoria		Peloid		
	Pumice		Pisolite		
	Volcaniclastic Lithic Grain		Calcareous Grain		
	Pieritic Lithic Grain		Dolomitic Grain		
	Basaltic Lithic Grain		Araginitic Graing		
	Andesitic Lithic Grain		Sideritic Graing		
	Dacitic Lithic Grain				
	Rholitic Lithic Grain				
	Crystal Grain				
	Vitric Grain				

Fill percentage (Total must be 100).

Remarks: from ash layer in section 1

Gray ~~gray~~

Sediment Smear Slide / Thin Section Description Sheet

Date _____

Expedition: 343

Observer: Monica

Site: COO19 Hole: E Core: 02R Sect.: 01

Interval: 49

Sediment Name: ashy mudstone

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

Select one and check.

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
<u>50%</u>	Siliclastic Grain		Pelagic Grain		Others
	Minerals		Calcareous Grain		Gypsiferous Grain
	Quartz		Nannofossils		Calcareous Grain
	Feldspars		Foraminifers		Sapropelic Grain
	Micas	<u>10%</u>	Siliceous Grain		Mn Nodules/ Crusts
	Ferromagnesian Minerals		Diatom		Pyrite Grain
	Glauconite		Radiolarians		Opaque Grain
	Clay Minerals		Silicoflagellates		
	Zeolites		Sponge Spicule		
	Heavy Minerals				
	Pyrite				
	Phospholite				
	Aragonite		Neritic Grain		
	Calcite		Ooid		
	Oolites		Spherical Particles		
	Lithic Grain		Elliptical Particles		
	Sedimentary Lithic Grain		Bioclast		
	Igneous Lithic Grain		Molluscan		
	Metamorphic Lithic Grain		Algal		
			Pellet		
			Molluscs		
			Echinoderms		
<u>40%</u>	Volcaniclastic Grain		Others		
	Scoria / Pumice		Intraclast		
	Scoria		Carbonate Rock Fragm		
	Pumice		Peloid		
	Volcaniclastic Lithic Grain		Pisolite		
	Picritic Lithic Grain		Calcareous Grain		
	Basaltic Lithic Grain		Dolomitic Grain		
	Andesitic Lithic Grain		Araginitic Grain		
	Dacitic Lithic Grain		Sideritic Grain		
	Rholitic Lithic Grain				
	Crystal Grain				
	Vitric Grain				

Fill percentage (Total must be 100).

Remarks: lots of altered feldspar (photo micro at 2.5X - low mag)

brown ~~chunk~~ chunk

Sediment Smear Slide / Thin Section Description Sheet

Date 5-17-12

Expedition: 343

Observer: C Moore

Site: C0019 Hole: E Core: 2R Sect.: 1

Interval: 49.4 + 49.5

Sediment Name: Mudstone

104, 104.5

Smear Slide	Thin Section	Coarse Feaction	Grain Mounrt	Granular Sediment	Chemical Sediment	Percent Texture	
				Siliciclastic	Volcaniclastic	Peragic	Neritic

Select one and check.

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
70	Siliclastic Grain		Pelagic Grain		Others
	Minerals		Calcareous Grain		Gypsiferous Grain
	Quartz		Nannofossils		Calcareous Grain
	Feldspars		Foraminifers		Sapropelic Grain
	Micas	2	Siliceous Grain		Mn Nodules/ Crusts
	Ferromagnesian Mineral		Diatom		Pyrite Grain
	Glauconite		Radiolarians		Opaque Grain
	Clay Minerals		Silicoflagellates		
	Zeolites		Sponge Spicule		
	Heavy Minerals				
	Pyrite				
	Phospholite				
	Aragonite		Neritic Grain		
	Calcite		Ooid		
	Oolites		Spherical Particles		
	Lithic Grain		Elliptical Particles		
	Sedimentary Lithic Grain		Bioclast		
	Igneous Lithic Grain		Molluscan		
	Metamorphic Lithic Grain		Algal		
			Pellet		
			Molluscs		
			Echinoderms		
28	Volcaniclastic Grain		Others		
	Scoria / Pumice		Intraclast		
	Scoria		Carbonate Rock Fragm		
	Pumice		Peloid		
	Volcaniclastic Lithic Grain		Pisolite		
	Pieritic Lithic Grain		Calcareous Grain		
	Basaltic Lithic Grain		Dolomitic Grain		
	Andesitic Lithic Grain		Araginitic Graing		
	Dacitic Lithic Grain		Sideritic Graing		
	Rholitic Lithic Grain				
	Crystal Grain				
	Vitric Grain				

Fill percentage (Total must be 100).

Remarks: Lots of terrigenous silt (photo micro at 10x)
2nd slide made because first was so sparse.

Sediment Smear Slide / Thin Section Description Sheet

Date 5-17-12

Expedition: 343

Observer: Kameda

Site: C0019 Hole: E Core: 3 Sect.: 1

Interval: 130.1

Sediment Name: mudstone

Smear Slide	Thin Section	Coarse Fraction	Grain Mount

Select one and check.

Granular Sediment		Chemical Sediment	
Siliciclastic	Volcaniclastic	Peragic	Neritic

Select one and check.

Percent Texture		
Sand	Silt	Clay

Select one and check.

Percent	Composition
<u>63</u>	Siliclastic Grain
	Minerals
	Quartz
	Feldspars
	Micas
	Ferromagnesian Minerals
	Glauconite
	Clay Minerals
	Zeolites
	Heavy Minerals
	Pyrite
	Phospholite
	Aragonite
	Calcite
	Oolites
	Lithic Grain
	Sedimentary Lithic Grain
	Igneous Lithic Grain
	Metamorphic Lithic Grain
	Volcaniclastic Grain
	Scoria / Pumice
	Scoria
	Pumice
<u>2</u>	Volcaniclastic Lithic Grain
	Picritic Lithic Grain
	Basaltic Lithic Grain
	Andesitic Lithic Grain
	Dacitic Lithic Grain
	Rholitic Lithic Grain
	Crystal Grain
	Vitric Grain

Percent	Composition
	Pelagic Grain
	Calcareous Grain
	Nannofossils
	Foraminifers
<u>35</u>	Siliceous Grain
	Diatom
	Radiolarians
	Silicoflagellates
	Sponge Spicule
	Neritic Grain
	Ooid
	Spherical Particles
	Elliptical Particles
	Bioclast
	Molluscan
	Algal
	Pellet
	Molluscs
	Echinoderms
	Others
	Intraclast
	Carbonate Rock Fragm
	Peloid
	Pisolite
	Calcareous Grain
	Dolomitic Grain
	Araginitic Grain
	Sideritic Grain

Percent	Composition
	Others
	Gypsiferous Grain
	Calcareous Grain
	Sapropelic Grain
	Mn Nodules/ Crusts
	Pyrite Grain
	Opaque Grain

Fill percentage (Total must be 100).

Remarks: From fragment in drilling brocia

Sediment Smear Slide / Thin Section Description Sheet

Date 5-17-12

Expedition: 343 Observer: lcameda

Site: C0019 Hole: E Core: 3 Sect.: 1 Interval: 130.3

Sediment Name: ashy mudstone

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment		Chemical Sediment		Percent Texture		
				Siliciclastic	Volcaniclastic	Peragic	Neritic	Sand	Silt	Clay

Select one and check. Select one and check. Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
50	Siliclastic Grain		Pelagic Grain		Others
	Minerals		Calcareous Grain		Gypsiferous Grain
	Quartz		Nannofossils		Calcareous Grain
	Feldspars		Foraminifers		Sapropelic Grain
	Micas	15	Siliceous Grain		Mn Nodules/ Crusts
	Ferromagnesian Minerals		Diatom		Pyrite Grain
	Glaucinite		Radiolarians		Opaque Grain
	Clay Minerals		Silicoflagellates		
	Zeolites		Sponge Spicule		
	Heavy Minerals				
	Pyrite				
	Phospholite				
	Aragonite		Neritic Grain		
	Calcite		Ooid		
	Oolites		Spherical Particles		
	Lithic Grain		Elliptical Particles		
	Sedimentary Lithic Grain		Bioclast		
	Igneous Lithic Grain		Molluscan		
	Metamorphic Lithic Grain		Algal		
			Pellet		
			Molluscs		
			Echinoderms		
35	Volcaniclastic Grain		Others		
	Scoria / Pumice		Intraclast		
	Scoria		Carbonate Rock Fragm		
	Pumice		Peloid		
	Volcaniclastic Lithic Grain		Pisolite		
	Pieritic Lithic Grain		Calcareous Grain		
	Basaltic Lithic Grain		Dolomitic Grain		
	Andesitic Lithic Grain		Araginitic Graing		
	Dacitic Lithic Grain		Sideritic Graing		
	Rholitic Lithic Grain				
	Crystal Grain				
	Vitric Grain				

Fill percentage (Total must be 100).

Remarks: from fragment in drilling breccia

Sediment Smear Slide / Thin Section Description Sheet

Date _____

Expedition: 343 Observer: _____

Site: C0019 Hole: E Core: 4 Sect.: 1 Interval: 1-0

Sediment Name: Claystone

Smear Slide	Thin Section	Coarse Feaction	Grain Mounrt	Granular Sediment	Chemical Sediment	Percent Texture			
				Siliciclastic	Volcaniclastic	Peragic	Neritic	Sand	Silt
<input checked="" type="checkbox"/>									

Select one and check. Select one and check. Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
<u>90</u>	Siliclastic Grain		Pelagic Grain		Others
	Minerals		Calcareous Grain		Gypsiferous Grain
	Quartz		Nannofossils		Calcareous Grain
	Feldspars		Foraminifers		Sapropelic Grain
	Micas	<u>10</u>	Siliceous Grain		Mn Nodules/ Crusts
	Ferromagnesian Minera		Diatom		Pyrite Grain
	Glauconite		Radiolarians		Opaque Grain
	Clay Minerals		Silicoflagellates		
	Zeolites		Sponge Spicule		
	Heavy Minerals				
	Pyrite				
	Phospholite				
	Aragonite		Neritic Grain		
	Calcite		Ooid		
	Oolites		Spherical Particles		
	Lithic Grain		Elliptical Particles		
	Sedimentary Lithic Gra		Bioclast		
	Igneous Lithic Grain		Molluscan		
	Metamorphic Lithic Gra		Algal		
			Pellet		
			Molluscs		
			Echinoderms		
			Others		
<u>42</u>	Volcaniclastic Grain		Intraclast		
	Scoria / Pumice		Carbonate Rock Fragr		
	Scoria		Peloid		
	Pumice		Pisolite		
	Volcaniclastic Lithic Grain		Calcareous Grain		
	Picritic Lithic Grain		Dolomitic Grain		
	Basaltic Lithic Grain		Araginitic Graing		
	Andesitic Lithic Grain		Sideritic Graing		
	Dacitic Lithic Grain				
	Rholitic Lithic Grain				
	Crystal Grain				
	Vitric Grain				

Fill percentage (Total must be 100).

Remarks: Mostly clay size material
- siliceous fossils or parts apparent
rare volcanic detritus. - some silt but < 15%

Sediment Smear Slide / Thin Section Description Sheet

Date 5-18-12

Expedition: 343

Observer: CM Moore

Site: C0019 Hole: E Core: 4 Sect.: 1

Interval: 91

Sediment Name: Claystone

Smear Slide	Thin Section	Coarse Feaction	Grain Mounrt	Granular Sediment	Chemical Sediment	Percent Texture						
				Siliciclastic	Volcaniclastic	Peragic	Neritic	Sand	Silt	Clay		
<input checked="" type="checkbox"/>												77.5%

Select one and check. Select one and check. Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
90	Siliclastic Grain		Pelagic Grain		Others
	Minerals		Calcareous Grain		Gypsiferous Grain
	Quartz		Nannofossils		Calcareous Grain
	Feldspars		Foraminifers		Sapropelic Grain
	Micas	5	Siliceous Grain		Mn Nodules/ Crusts
	Ferromagnesian Minera		Diatom		Pyrite Grain
	Glauconite		Radiolarians		Opaque Grain
	Clay Minerals		Silicoflagellates		
	Zeolites		Sponge Spicule		
	Heavy Minerals				
	Pyrite				
	Phospholite				
	Aragonite		Neritic Grain		
	Calcite		Ooid		
	Oolites		Spherical Particles		
	Lithic Grain		Elliptical Particles		
	Sedimentary Lithic Gra		Bioclast		
	Igneous Lithic Grain		Molluscan		
	Metamorphic Lithic Gra		Algal		
			Pellet		
			Molluscs		
			Echinoderms		
5	Volcaniclastic Grain		Others		
	Scoria / Pumice		Intraclast		
	Scoria		Carbonate Rock Fragr		
	Pumice		Peloid		
	Volcaniclastic Lithic Grain		Pisolite		
	Picritic Lithic Grain		Calcareous Grain		
	Basaltic Lithic Grain		Dolomitic Grain		
	Andesitic Lithic Grain		Araginitic Graing		
	Dacitic Lithic Grain		Sideritic Graing		
	Rholitic Lithic Grain				
	Crystal Grain				
	Vitric Grain				

Fill percentage (Total must be 100).

Remarks: Gray layer at base of core Mostly clay - sized material
- v. fine grained material in background
+ in clumps interpreted as clay

Sediment Smear Slide / Thin Section Description Sheet

Date 5-18-12

Expedition: 343

Casey plz check

Observer: C Moore + Monica + Elvish

Site: C0019 Hole: E Core: 5R Sect.: 1 Interval: 30

Sediment Name: Mudstone
clayey Ashy

Smear Slide	Thin Section	Coarse Fraction	Grain Mount
<input checked="" type="checkbox"/>			

Select one and check.

Granular Sediment		Chemical Sediment	
Siliciclastic	Volcaniclastic	Peragic	Neritic

Select one and check.

Percent Texture		
Sand	Silt	Clay

Select one and check.

45

Percent	Composition
<u>95</u>	Siliciclastic Grain
	Minerals
	Quartz
	Feldspars
	Micas
	Ferromagnesian Mineral
	Glauconite
	Clay Minerals
	Zeolites
	Heavy Minerals
	Pyrite
	Phospholite
	Aragonite
	Calcite
	Oolites
	Lithic Grain
	Sedimentary Lithic Grain
	Igneous Lithic Grain
	Metamorphic Lithic Grain
<u>75</u> <u>15</u>	Volcaniclastic Grain
	Scoria / Pumice
	Scoria
	Pumice
	Volcaniclastic Lithic Grain
	Picritic Lithic Grain
	Basaltic Lithic Grain
	Andesitic Lithic Grain
	Dacitic Lithic Grain
	Rholitic Lithic Grain
	Crystal Grain
	Vitric Grain

TV

Percent	Composition
	Pelagic Grain
	Calcareous Grain
	Nannofossils
	Foraminifers
	Siliceous Grain
	Diatom
	Radiolarians
	Silicoflagellates
	Sponge Spicule
	Neritic Grain
	Ooid
	Spherical Particles
	Elliptical Particles
	Bioclast
	Molluscan
	Algal
	Pellet
	Molluscs
	Echinoderms
	Others
	Intraclast
	Carbonate Rock Fragment
	Peloid
	Pisolite
	Calcareous Grain
	Dolomitic Grain
	Araginitic Grain
	Sideritic Grain

Percent	Composition
	Others
	Gypsiferous Grain
	Calcareous Grain
	Sapropelic Grain
	Mn Nodules/ Crusts
	Pyrite Grain
	Opaque Grain

Fill percentage (Total must be 100).

Remarks: 725% silt - some ash, but also
gitter on tooth rather than lots of quartz feldspathic silt
+ ash

Sediment Smear Slide / Thin Section Description Sheet

Date 5/19/12

Expedition: 343

Observer: Jamie Manica

Site: 19 Hole: E Core: 6R Sect.: 1

Interval: 13.9

Sediment Name: MUDSTONE (clayey)

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment		Chemical Sediment		Percent Texture		
				Siliciclastic	Volcaniclastic	Peragic	Neritic	Sand	Silt	Clay
✓				80%	15%	5%			35%	68%

Select one and check.

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
80%	Siliclastic Grain		Pelagic Grain		Others
	Minerals		Calcareous Grain		Gypsiferous Grain
	Quartz		Nannofossils		Calcareous Grain
	Feldspars		Foraminifers		Sapropelic Grain
	Micas	5%	Siliceous Grain		Mn Nodules/ Crusts
	Ferromagnesian Mineral		Diatom		Pyrite Grain
	Glauconite		Radiolarians		Opaque Grain
	Clay Minerals		Silicoflagellates		
	Zeolites		Sponge Spicule		
	Heavy Minerals				
	Pyrite				
	Phospholite				
	Aragonite		Neritic Grain		
	Calcite		Ooid		
	Oolites		Spherical Particles		
	Lithic Grain		Elliptical Particles		
	Sedimentary Lithic Grain		Bioclast		
	Igneous Lithic Grain		Molluscan		
	Metamorphic Lithic Grain		Algal		
			Pellet		
			Molluscs		
			Echinoderms		
			Others		
15%	Volcaniclastic Grain		Intraclast		
	Scoria / Pumice		Carbonate Rock Fragment		
	Scoria		Peloid		
	Pumice		Pisolite		
	Volcaniclastic Lithic Grain		Calcareous Grain		
	Picritic Lithic Grain		Dolomitic Grain		
	Basaltic Lithic Grain		Araginitic Grain		
	Andesitic Lithic Grain		Sideritic Grain		
	Dacitic Lithic Grain				
	Rholitic Lithic Grain				
	Crystal Grain				
	Vitric Grain				

Fill percentage (Total must be 100).

Remarks: taken from very dark gray to black mottle inclusion, to see if possibly biogenic

* 26.35 } glass fragment
66 } label towards clamp

Sediment Smear Slide / Thin Section Description Sheet

Date 5/19/12

Expedition: 343 Observer: CM004

Site: C0019 Hole: E Core: 7 Sect.: 1 Interval: 8

Sediment Name: Mudstone.

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment		Chemical Sediment		Percent Texture		
				Siliciclastic	Volcaniclastic	Peragic	Neritic	Sand	Silt	Clay
									33	66

Select one and check.

Select one and check.

Select one and check.

nw
60

Percent	Composition	Percent	Composition	Percent	Composition
60	Siliciclastic Grain		Pelagic Grain		Others
	Minerals		Calcareous Grain		Gypsiferous Grain
	Quartz		Nannofossils		Calcareous Grain
	Feldspars		Foraminifers		Sapropelic Grain
	Micas	TA	Siliceous Grain		Mn Nodules/ Crusts
	Ferromagnesian Mineral		Diatom		Pyrite Grain
	Glaucanite		Radiolarians		Opaque Grain
	Clay Minerals		Silicoflagellates		
	Zeolites		Sponge Spicule		
	Heavy Minerals				
	Pyrite				
	Phospholite				
	Aragonite		Neritic Grain		
	Calcite		Ooid		
	Oolites		Spherical Particles		
	Lithic Grain		Elliptical Particles		
	Sedimentary Lithic Grain		Bioclast		
	Igneous Lithic Grain		Molluscan		
	Metamorphic Lithic Grain		Algal		
			Pellet		
			Molluscs		
			Echinoderms		
39	Volcaniclastic Grain		Others		
	Scoria / Pumice		Intraclast		
	Scoria		Carbonate Rock Fragm		
	Pumice		Peloid		
	Volcaniclastic Lithic Grain		Pisolite		
	Picritic Lithic Grain		Calcareous Grain		
	Basaltic Lithic Grain		Dolomitic Grain		
	Andesitic Lithic Grain		Araginitic Grain		
	Dacitic Lithic Grain		Sideritic Grain		
	Rholitic Lithic Grain				
	Crystal Grain				
	Vitric Grain				

Fill percentage (Total must be 100).

Remarks: Clay most of Siliciclastic w/ minor qtz + feld silt -

Sediment Smear Slide / Thin Section Description Sheet

Date ~~5/19/12~~ 5/19/12

Expedition: 343

Observer: C Moore

Site: C0019 Hole: E Core: 8 Sect.: 1

Interval: 3.0

Sediment Name: Mudstone

Smear Slide	Thin Section	Coarse Feaction	Grain Mount	Granular Sediment		Chemical Sediment		Percent Texture			
				Siliciclastic	Volcaniclastic	Peragic	Neritic	Sand	Silt	Clay	
										30	70

Select one and check.

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
90	Siliclastic Grain		Pelagic Grain		Others
	Minerals		Calcareous Grain		Gypsiferous Grain
✓	Quartz		Nannofossils		Calcareous Grain
✓	Feldspars		Foraminifers		Sapropelic Grain
	Micas	Tr	Siliceous Grain		Mn Nodules/ Crusts
	Ferromagnesian Mineral		Diatom		Pyrite Grain
	Glauconite		Radiolarians		Opaque Grain
	Clay Minerals		Silicoflagellates		
	Zeolites		Sponge Spicule		
	Heavy Minerals				
	Pyrite				
	Phospholite				
	Aragonite		Neritic Grain		
	Calcite		Ooid		
	Oolites		Spherical Particles		
	Lithic Grain		Elliptical Particles		
	Sedimentary Lithic Grain		Bioclast		
	Igneous Lithic Grain		Molluscan		
	Metamorphic Lithic Grain		Algal		
			Pellet		
			Molluscs		
			Echinoderms		
10	Volcaniclastic Grain		Others		
	Scoria / Pumice		Intraclast		
	Scoria		Carbonate Rock Fragm		
	Pumice		Peloid		
	Volcaniclastic Lithic Grain		Pisolite		
	Picritic Lithic Grain		Calcareous Grain		
	Basaltic Lithic Grain		Dolomitic Grain		
	Andesitic Lithic Grain		Araginitic Graing		
	Dacitic Lithic Grain		Sideritic Graing		
	Rholitic Lithic Grain				
	Crystal Grain				
	Vitric Grain				

Fill percentage (Total must be 100).

Remarks: Light Brown interval at top of core.
No reaction to HCL

Sediment Smear Slide / Thin Section Description Sheet

Date: _____

Expedition: 343 Observer: _____

Site: C0019 Hole: E Core: 8 Sect.: 1 Interval: 41

Sediment Name: Mudstone

Smear Slide	Thin Section	Coarse Fraction	Grain Mount

Select one and check.

Granular Sediment		Chemical Sediment	
Siliciclastic	Volcaniclastic	Peragic	Neritic

Select one and check.

Percent Texture		
Sand	Silt	Clay
	<u>30</u>	<u>70</u>

Select one and check.

Percent	Composition
<u>95</u>	Siliclastic Grain
	Minerals
	Quartz
	Feldspars
	Micas
	Ferromagnesian Mineral
	Glauconite
	Clay Minerals
	Zeolites
	Heavy Minerals
	Pyrite
	Phospholite
	Aragonite
	Calcite
	Oolites
	Lithic Grain
	Sedimentary Lithic Grain
	Igneous Lithic Grain
	Metamorphic Lithic Grain
<u>5</u>	Volcaniclastic Grain
	Scoria / Pumice
	Scoria
	Pumice
	Volcaniclastic Lithic Grain
	Picritic Lithic Grain
	Basaltic Lithic Grain
	Andesitic Lithic Grain
	Dacitic Lithic Grain
	Rholitic Lithic Grain
	Crystal Grain
	Vitric Grain

Percent	Composition
	Pelagic Grain
	Calcareous Grain
	Nannofossils
	Foraminifers
<u>Tr</u>	Siliceous Grain
	Diatom
	Radiolarians
	Silicoflagellates
	Sponge Spicule
	Neritic Grain
	Ooid
	Spherical Particles
	Elliptical Particles
	Bioclast
	Molluscan
	Algal
	Pellet
	Molluscs
	Echinoderms
	Others
	Intraclast
	Carbonate Rock Fragment
	Peloid
	Pisolite
	Calcareous Grain
	Dolomitic Grain
	Araginitic Grain
	Sideritic Grain

Percent	Composition
	Others
	Gypsiferous Grain
	Calcareous Grain
	Sapropelic Grain
	Mn Nodules/ Crusts
	Pyrite Grain
	Opaque Grain

Fill percentage (Total must be 100).

Remarks: Background gray mudstone

Sediment Smear Slide / Thin Section Description Sheet

Date _____

Expedition: 343 Observer: CMoore

Site: C0019 Hole: E Core: 8 Sect.: 3 Interval: 64

Sediment Name: Mudstone (but w/ significant silt component)

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment		Chemical Sediment		Percent Texture		
				Siliciclastic	Volcaniclastic	Peragic	Neritic	Sand	Silt	Clay
								3	57	40

Select one and check. Select one and check. Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
80	Siliclastic Grain		Pelagic Grain		Others
	Minerals		Calcareous Grain		Gypsiferous Grain
	Quartz		Nannofossils		Calcareous Grain
	Feldspars		Foraminifers		Sapropelic Grain
	Micas	5	Siliceous Grain		Mn Nodules/ Crusts
	Ferromagnesian Mineral		Diatom		Pyrite Grain
	Glaucinite		Broken parts Radiolarians		Opaque Grain
	Clay Minerals		Silicoflagellates		
	Zeolites		Sponge Spicule		
	Heavy Minerals				
	Pyrite				
	Phospholite				
	Aragonite		Neritic Grain		
	Calcite		Ooid		
	Oolites		Spherical Particles		
	Lithic Grain		Elliptical Particles		
	Sedimentary Lithic Grain		Bioclast		
	Igneous Lithic Grain		Molluscan		
	Metamorphic Lithic Grain		Algal		
			Pellet		
			Molluscs		
			Echinoderms		
15	Volcaniclastic Grain		Others		
	Scoria / Pumice		Intraclast		
	Scoria		Carbonate Rock Fragm		
	Pumice		Peloid		
	Volcaniclastic Lithic Grain		Pisolite		
	Picritic Lithic Grain		Calcareous Grain		
	Basaltic Lithic Grain		Dolomitic Grain		
	Andesitic Lithic Grain		Araginitic Grain		
	Dacitic Lithic Grain		Sideritic Grain		
	Rholitic Lithic Grain				
	Crystal Grain				
	Vitric Grain				

Fill percentage (Total must be 100).

Remarks: Silty interval in gray background sediment
conspicuous qtz + feldspar

Sediment Smear Slide / Thin Section Description Sheet

Date 5/19/12

Expedition: 343

Observer: more

Site: C0019 Hole: E Core: 8 Sect.: 3 Interval: 87

Sediment Name: Mudstone

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment		Chemical Sediment		Percent Texture			
				Siliciclastic	Volcaniclastic	Peragic	Neritic	Sand	Silt	Clay	
										30	70

Select one and check.

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
85	Siliciclastic Grain		Pelagic Grain		Others
	Minerals		Calcareous Grain		Gypsiferous Grain
	Quartz		Nannofossils		Calcareous Grain
	Feldspars		Foraminifers		Sapropelic Grain
	Micas	15	Siliceous Grain		Mn Nodules/ Crusts
	Ferromagnesian Mineral		Diatom		Pyrite Grain
	Glauconite		✓ Radiolarians		Opaque Grain
	Clay Minerals		Silicoflagellates		
	Zeolites		✓ Sponge Spicule		
	Heavy Minerals				
	Pyrite				
	Phospholite				
	Aragonite		Neritic Grain		
	Calcite		Ooid		
	Oolites		Spherical Particles		
	Lithic Grain		Elliptical Particles		
	Sedimentary Lithic Grain		Bioclast		
	Igneous Lithic Grain		Molluscan		
	Metamorphic Lithic Grain		Algal		
			Pellet		
			Molluscs		
	Volcaniclastic Grain		Echinoderms		
	Scoria / Pumice		Others		
	Scoria		Intraclast		
	Pumice		Carbonate Rock Fragm		
	Volcaniclastic Lithic Grain		Peloid		
	Picritic Lithic Grain		Pisolite		
	Basaltic Lithic Grain		Calcareous Grain		
	Andesitic Lithic Grain		Dolomitic Grain		
	Dacitic Lithic Grain		Araginitic Grain		
	Rholitic Lithic Grain		Sideritic Grain		
	Crystal Grain				
	Vitric Grain				

Fill percentage (Total must be 100).

Remarks: Background grey sediment
Fragments of siliceous microfossils

Sediment Smear Slide / Thin Section Description Sheet

Date 5-19-12

Expedition: 343

Observer: CMUou

Site: C0019 Hole: E Core: 9 Sect.: 1

Interval: 26

Sediment Name: Mudstone.

Smear Slide	Thin Section	Coarse Fraction	Grain Mount

Select one and check.

Granular Sediment		Chemical Sediment	
Siliciclastic	Volcaniclastic	Peragic	Neritic

Select one and check.

Percent Texture		
Sand	Silt	Clay
<u>10</u>	<u>50</u>	<u>40</u>

Select one and check.

Percent	Composition
<u>70</u>	Siliciclastic Grain
	Minerals
	Quartz
	Feldspars
	Micas
	Ferromagnesian Mineral
	Glauconite
	Clay Minerals
	Zeolites
	Heavy Minerals
	Pyrite
	Phospholite
	Aragonite
	Calcite
	Oolites
	Lithic Grain
	Sedimentary Lithic Grain
	Igneous Lithic Grain
	Metamorphic Lithic Grain
<u>25</u>	Volcaniclastic Grain
	Scoria / Pumice
	Scoria
	Pumice
	Volcaniclastic Lithic Grain
	Picritic Lithic Grain
	Basaltic Lithic Grain
	Andesitic Lithic Grain
	Dacitic Lithic Grain
	Rholitic Lithic Grain
	Crystal Grain
	Vitric Grain

Percent	Composition
	Pelagic Grain
	Calcareous Grain
	Nannofossils
	Foraminifers
<u>5</u>	Siliceous Grain
	Diatom
	Radiolarians
	Silicoflagellates
	Sponge Spicule
	Neritic Grain
	Ooid
	Spherical Particles
	Elliptical Particles
	Bioclast
	Molluscan
	Algal
	Pellet
	Molluscs
	Echinoderms
	Others
	Intraclast
	Carbonate Rock Fragment
	Peloid
	Pisolite
	Calcareous Grain
	Dolomitic Grain
	Araginitic Grain
	Sideritic Grain

Percent	Composition
	Others
	Gypsiferous Grain
	Calcareous Grain
	Sapropelic Grain
	Mn Nodules/ Crusts
	Pyrite Grain
	Opaque Grain

Fill percentage (Total must be 100).

Remarks: Background gray lithology - slightly "silty" layer as seen in core

Sediment Smear Slide / Thin Section Description Sheet

Date 5/20/12

Expedition: 343

Observer: Monica

Site: C0019 Hole: E Core: 10 Sect.: 4 Interval: 13.5

Sediment Name: Mudstone

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment		Chemical Sediment		Percent Texture		
				Siliciclastic	Volcaniclastic	Peragic	Neritic	Sand	Silt	Clay
<input checked="" type="checkbox"/>								5%	55%	40%

Select one and check. Select one and check. Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
98%	Siliclastic Grain		Pelagic Grain		Others
	Minerals		Calcareous Grain		Gypsiferous Grain
	Quartz		Nannofossils		Calcareous Grain
	Feldspars		Foraminifers		Sapropelic Grain
	Micas	Tr	Siliceous Grain		Mn Nodules/ Crusts
	Ferromagnesian Mineral		Diatom		Pyrite Grain
	Glauconite		Radiolarians		Opaque Grain
	Clay Minerals		Sillicoflagellates		
	Zeolites		Sponge Spicule		
	Heavy Minerals				
	Pyrite				
	Phospholite				
	Aragonite		Neritic Grain		
	Calcite		Ooid		
	Oolites		Spherical Particles		
	Lithic Grain		Elliptical Particles		
	Sedimentary Lithic Grain		Bioclast		
	Igneous Lithic Grain		Molluscan		
	Metamorphic Lithic Grain		Algal		
			Pellet		
			Molluscs		
			Echinoderms		
Tr	Volcaniclastic Grain		Others		
	Scoria / Pumice		Intraclast		
	Scoria		Carbonate Rock Fragm		
	Pumice		Peloid		
	Volcaniclastic Lithic Grain		Pisolite		
	Picritic Lithic Grain		Calcareous Grain		
	Basaltic Lithic Grain		Dolomitic Grain		
	Andesitic Lithic Grain		Araginitic Grain		
	Dacitic Lithic Grain		Sideritic Grain		
	Rholitic Lithic Grain				
	Crystal Grain				
	Vitric Grain				

Fill percentage (Total must be 100).

Remarks: Taken near top of 10R in dark gray mud, finer grained mudstone than at bottom of core 10

Sediment Smear Slide / Thin Section Description Sheet

Date 5/20/12

Expedition: 343

Observer: Monica

Site: C0019 Hole: E Core: 10R Sect.: 1

Interval: 42

Sediment Name: Clay Pyrite Nodule

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment		Chemical Sediment		Percent Texture			
				Siliciclastic	Volcaniclastic	Peragic	Neritic	Sand	Silt	Clay	
									40%	60%	

Select one and check.

Select one and check.

Select one and check.

Percent	Composition
97%	Siliclastic Grain
	Minerals
	Quartz
	Feldspars
	Micas
	Ferromagnesian Mineral
	Glauconite
	Clay Minerals
	Zeolites
	Heavy Minerals
98%	Pyrite
	Phospholite
	Aragonite
	Calcite
	Oolites
	Lithic Grain
	Sedimentary Lithic Grain
	Igneous Lithic Grain
	Metamorphic Lithic Grain
Tr	Volcaniclastic Grain
	Scoria / Pumice
	Scoria
	Pumice
	Volcaniclastic Lithic Grain
	Picritic Lithic Grain
	Basaltic Lithic Grain
	Andesitic Lithic Grain
	Dacitic Lithic Grain
	Rholitic Lithic Grain
	Crystal Grain
	Vitric Grain

Percent	Composition
	Pelagic Grain
	Calcareous Grain
	Nannofossils
	Foraminifers
2%	Siliceous Grain
	Diatom
	Radiolarians
	Silicoflagellates
	Sponge Spicule
	Neritic Grain
	Ooid
	Spherical Particles
	Elliptical Particles
	Bioclast
	Molluscan
	Algal
	Pellet
	Molluscs
	Echinoderms
	Others
	Intraclast
	Carbonate Rock Fragment
	Peloid
	Pisolite
	Calcareous Grain
	Dolomitic Grain
	Araginitic Grain
	Sideritic Grain

Percent	Composition
	Others
	Gypsiferous Grain
	Calcareous Grain
	Sapropelic Grain
	Mn Nodules/ Crusts
	Pyrite Grain
	Opaque Grain

Fill percentage (Total must be 100).

Remarks: sampled from pyrite-nodule encased in thin dark layer (worm poop altered to pyrite?) predominantly pyrite (clay -> silt sized bramboids)

Sediment Smear Slide / Thin Section Description Sheet

Date 5/20/12

Expedition: 343

Observer: Cowley

Site: C0019 Hole: E Core: 11 Sect.: CC

Interval: Piece 1 at 1 cm

Sediment Name: Mudstone

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment		Chemical Sediment		Percent Texture		
				Siliciclastic	Volcaniclastic	Peragic	Neritic	Sand	Silt	Clay

Select one and check. Select one and check. Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
70	Siliciclastic Grain		Pelagic Grain		Others
	Minerals		Calcareous Grain		Gypsiferous Grain
	Quartz		Nannofossils		Calcareous Grain
	Feldspars		Foraminifers		Sapropelic Grain
	Micas	20	Siliceous Grain		Mn Nodules/ Crusts
	Ferromagnesian Mineral		Diatom		Pyrite Grain
	Glaucinite		Radiolarians		Opaque Grain
	Clay Minerals		Silicoflagellates		
	Zeolites		Sponge Spicule		
	Heavy Minerals				
	Pyrite				
	Phospholite				
	Aragonite		Neritic Grain		
	Calcite		Ooid		
	Oolites		Spherical Particles		
	Lithic Grain		Elliptical Particles		
	Sedimentary Lithic Grain		Bioclast		
	Igneous Lithic Grain		Molluscan		
	Metamorphic Lithic Grain		Algal		
			Pellet		
			Molluscs		
			Echinoderms		
10	Volcaniclastic Grain		Others		
	Scoria / Pumice		Intraclast		
	Scoria		Carbonate Rock Fragm		
	Pumice		Peloid		
	Volcaniclastic Lithic Grain		Pisolite		
	Picritic Lithic Grain		Calcareous Grain		
	Basaltic Lithic Grain		Dolomitic Grain		
	Andesitic Lithic Grain		Araginitic Grain		
	Dacitic Lithic Grain		Sideritic Grain		
	Rholitic Lithic Grain				
	Crystal Grain				
	Vitric Grain				

Fill percentage (Total must be 100).

Remarks: Significant Siliceous Microfossils / composed of Rads + diatoms + plus sponge spicules

Sediment Smear Slide / Thin Section Description Sheet

Date: 5/20/12

Expedition: 343

Observer: C. Moore / Monica

Site: C0019 Hole: E Core: 11R Sect.: 1

Interval: Piece #

Sediment Name: Mudstone 2 from WH at 6cm

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment		Chemical Sediment		Percent Texture			
				Siliciclastic	Volcaniclastic	Peragic	Neritic	Sand	Silt	Clay	
										30	70

Select one and check. Select one and check. Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
77	Siliciclastic Grain		Pelagic Grain		Others
	Minerals		Calcareous Grain		Gypsiferous Grain
	Quartz		Nannofossils		Calcareous Grain
	Feldspars		Foraminifers		Sapropelic Grain
	Micas	8	Siliceous Grain		Mn Nodules/ Crusts
	Ferromagnesian Mineral		Diatom		Pyrite Grain
	Glaucinite		Radiolarians		Opaque Grain
	Clay Minerals		Silicoflagellates		
	Zeolites		Sponge Spicule		
	Heavy Minerals				
	Pyrite				
	Phospholite				
	Aragonite		Neritic Grain		
	Calcite		Ooid		
	Oolites		Spherical Particles		
	Lithic Grain		Elliptical Particles		
	Sedimentary Lithic Grain		Bioclast		
	Igneous Lithic Grain		Molluscan		
	Metamorphic Lithic Grain		Algal		
			Pellet		
			Molluscs		
			Echinoderms		
15	Volcaniclastic Grain		Others		
	Scoria / Pumice		Intraclast		
	Scoria		Carbonate Rock Fragm		
	Pumice		Peloid		
	Volcaniclastic Lithic Grain		Pisolite		
	Picritic Lithic Grain		Calcareous Grain		
	Basaltic Lithic Grain		Dolomitic Grain		
	Andesitic Lithic Grain		Araginitic Grain		
	Dacitic Lithic Grain		Sideritic Grain		
	Rholitic Lithic Grain				
	Crystal Grain				
	Vitric Grain				

Fill percentage (Total must be 100).

Remarks: Piece #2 from WH - Note b/c for increased in siliceous ~~and~~ microfossils.

Sediment Smear Slide / Thin Section Description Sheet

Date 5/20/12

Expedition: 343

Observer: at 12

Site: C0019 Hole: E Core: 911 Sect.: CC

Interval: Piece # 3

Sediment Name: Siliceous Mudstone

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment		Chemical Sediment		Percent Texture			
				Siliciclastic	Volcaniclastic	Peragic	Neritic	Sand	Silt	Clay	
										30	70

Select one and check.

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
57	Siliclastic Grain		Pelagic Grain		Others
	Minerals		Calcareous Grain		Gypsiferous Grain
	Quartz		Nannofossils		Calcareous Grain
	Feldspars		Foraminifers		Sapropelic Grain
	Micas	33	Siliceous Grain		Mn Nodules/ Crusts
	Ferromagnesian Mineral		Diatom		Pyrite Grain
	Glauconite		Radiolarians		Opaque Grain
	Clay Minerals		Silicoflagellates		
	Zeolites		Sponge Spicule		
	Heavy Minerals				
	Pyrite				
	Phospholite				
	Aragonite		Neritic Grain		
	Calcite		Ooid		
	Oolites		Spherical Particles		
	Lithic Grain		Elliptical Particles		
	Sedimentary Lithic Grain		Bioclast		
	Igneous Lithic Grain		Molluscan		
	Metamorphic Lithic Grain		Algal		
			Pellet		
			Molluscs		
			Echinoderms		
10	Volcaniclastic Grain		Others		
	Scoria / Pumice		Intraclast		
	Scoria		Carbonate Rock Fragm		
	Pumice		Peloid		
	Volcaniclastic Lithic Grain		Pisolite		
	Picritic Lithic Grain		Calcareous Grain		
	Basaltic Lithic Grain		Dolomitic Grain		
	Andesitic Lithic Grain		Araginitic Grain		
	Dacitic Lithic Grain		Sideritic Grain		
	Rholitic Lithic Grain				
	Crystal Grain				
	Vitric Grain				

Fill percentage (Total must be 100).

Remarks: one of three pieces for ss - all w/ significantly more siliceous micro fossils than cores 911 & 10

Sediment Smear Slide / Thin Section Description Sheet

Date 5/24/12

Expedition: 331

Observer: CMOOD

Site: C0019 Hole: E Core: 12 Sect.: 1

Interval: 17

Sediment Name: Mudstone

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment		Chemical Sediment		Percent Texture		
				Siliciclastic	Volcaniclastic	Peragic	Neritic	Sand	Silt	Clay
<input checked="" type="checkbox"/>								3	37	60

Select one and check.

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
95	Siliciclastic Grain		Pelagic Grain		Others
	Minerals		Calcareous Grain		Gypsiferous Grain
	Quartz		Nannofossils		Calcareous Grain
	Feldspars		Foraminifers		Sapropelic Grain
	Micas	4	Siliceous Grain		Mn Nodules/ Crusts
	Ferromagnesian Mineral		Diatom		Pyrite Grain
	Glauconite		Radiolarians		Opaque Grain
	Clay Minerals		Silicoflagellates		
	Zeolites		Sponge Spicule		
	Heavy Minerals				
	Pyrite		Neritic Grain		
	Phospholite		Ooid		
	Aragonite		Spherical Particles		
	Calcite		Elliptical Particles		
	Oolites		Bioclast		
	Lithic Grain		Molluscan		
	Sedimentary Lithic Grain		Algal		
	Igneous Lithic Grain		Pellet		
	Metamorphic Lithic Grain		Molluscs		
			Echinoderms		
1	Volcaniclastic Grain		Others		
	Scoria / Pumice		Intraclast		
	Scoria		Carbonate Rock Fragm		
	Pumice		Peloid		
	Volcaniclastic Lithic Grain		Pisolite		
	Picritic Lithic Grain		Calcareous Grain		
	Basaltic Lithic Grain		Dolomitic Grain		
	Andesitic Lithic Grain		Araginitic Grain		
	Dacitic Lithic Grain		Sideritic Grain		
	Rholitic Lithic Grain				
	Crystal Grain				
	Vitric Grain				

Fill percentage (Total must be 100).

Remarks: Background gray sediment

Sediment Smear Slide / Thin Section Description Sheet

Date 5/2/12

Expedition: 343 Observer: Monica

Site: C0019 Hole: E Core: 13R Sect.: 1 Interval: 3.2

Sediment Name: Madstone (boundary of a shaly mudstone -> mudstone)

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment		Chemical Sediment		Percent Texture		
				Siliciclastic	Volcaniclastic	Pelagic	Neritic	Sand	Silt	Clay
<input checked="" type="checkbox"/>								3%	55%	42%

Select one and check. Select one and check. Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
60%	Siliciclastic Grain		Pelagic Grain		Others
	Minerals		Calcareous Grain		Gypsiferous Grain
	Quartz		Nannofossils		Calcareous Grain
	Feldspars		Foraminifers		Sapropelic Grain
	Micas	10%	Siliceous Grain		Mn Nodules/ Crusts
	Ferromagnesian Mineral		Diatom		Pyrite Grain
	Glaucinite		Radiolarians		Opaque Grain
	Clay Minerals		Silicoflagellates		
	Zeolites		Sponge Spicule		
	Heavy Minerals				
	Pyrite				
	Phospholite				
	Aragonite		Neritic Grain		
	Calcite		Ooid		
	Oolites		Spherical Particles		
	Lithic Grain		Elliptical Particles		
	Sedimentary Lithic Grain		Bioclast		
	Igneous Lithic Grain		Molluscan		
	Metamorphic Lithic Grain		Algal		
			Pellet		
			Molluscs		
			Echinoderms		
30%	Volcaniclastic Grain		Others		
	Scoria / Pumice		Intraclast		
	Scoria		Carbonate Rock Fragm		
	Pumice		Peloid		
	Volcaniclastic Lithic Grain		Pisolite		
	Picritic Lithic Grain		Calcareous Grain		
	Basaltic Lithic Grain		Dolomitic Grain		
	Andesitic Lithic Grain		Araginitic Grain		
	Dacitic Lithic Grain		Sideritic Grain		
	Rholitic Lithic Grain				
	Crystal Grain				
	Vitric Grain				

Fill percentage (Total must be 100).

Remarks: Sampled from dark gray matrix material at top of core above the dark shear band that has lighter gray inclusions
↳ (6.5-8cm)

Lots of spicule, diatom, rad frags visible at 10x & 20x

Sediment Smear Slide / Thin Section Description Sheet

Date 5/21/12

Expedition: 343 Observer: Monica

Site: C0019 Hole: E Core: 13 Sect.: 1 Interval: 13.5

Sediment Name: Mudstone

Smear Slide	Thin Section	Coarse Feaction	Grain Mount	Granular Sediment		Chemical Sediment		Percent Texture		
				Siliciclastic	Volcaniclastic	Peragic	Neritic	Sand	Silt	Clay
✓								10%	55%	35%

Select one and check.

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
75%	Siliclastic Grain		Pelagic Grain		Others
	Minerals		Calcareous Grain		Gypsiferous Grain
	Quartz		Nannofossils		Calcareous Grain
	Feldspars		Foraminifers		Sapropelic Grain
	Micas	10%	Siliceous Grain		Mn Nodules/ Crusts
	Ferromagnesian Mineral		Diatom		Pyrite Grain
	Glauconite		Radiolarians		Opaque Grain
	Clay Minerals		Sillicoflagellates		
	Zeolites		Sponge Spicule		
	Heavy Minerals				
	Pyrite				
	Phospholite				
	Aragonite		Neritic Grain		
	Calcite		Ooid		
	Oolites		Spherical Particles		
	Lithic Grain		Elliptical Particles		
	Sedimentary Lithic Grain		Bioclast		
	Igneous Lithic Grain		Molluscan		
	Metamorphic Lithic Grain		Algal		
			Pellet		
			Molluscs		
			Echinoderms		
15%	Volcaniclastic Grain		Others		
	Scoria / Pumice		Intraclast		
	Scoria		Carbonate Rock Fragm		
	Pumice		Peloid		
	Volcaniclastic Lithic Grain		Pisolite		
	Picritic Lithic Grain		Calcareous Grain		
	Basaltic Lithic Grain		Dolomitic Grain		
	Andesitic Lithic Grain		Araginitic Graing		
	Dacitic Lithic Grain		Sideritic Graing		
	Rholitic Lithic Grain				
	Crystal Grain				
	Vitric Grain				

Fill percentage (Total must be 100).

Remarks: coarser sed layer near top of core, bounded by finer
muddy sed ~~at top~~ bottom, sampled from rotated biscuit

Sediment Smear Slide / Thin Section Description Sheet

Date 5/21/12

Expedition: 343

Observer: Monica

Site: C0019E Hole: E Core: 13R Sect.: 1 Interval: 50

Sediment Name: Mudstone

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment		Chemical Sediment		Percent Texture				
				Siliciclastic	Volcaniclastic	Peragic	Neritic	Sand	Silt	Clay		
<input checked="" type="checkbox"/>										5%	65%	30%

Select one and check.

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
65%	Siliciclastic Grain		Pelagic Grain		Others
	Minerals		Calcareous Grain		Gypsiferous Grain
	Quartz		Nannofossils		Calcareous Grain
	Feldspars		Foraminifers		Sapropelic Grain
	Micas	10%	Siliceous Grain		Mn Nodules/ Crusts
	Ferromagnesian Mineral		Diatom		Pyrite Grain
	Glauconite		Radiolarians		Opaque Grain
	Clay Minerals		Silicoflagellates		
	Zeolites		Sponge Spicule		
	Heavy Minerals				
	Pyrite				
	Phospholite				
	Aragonite		Neritic Grain		
	Calcite		Ooid		
	Oolites		Spherical Particles		
	Lithic Grain		Elliptical Particles		
	Sedimentary Lithic Grain		Bioclast		
	Igneous Lithic Grain		Molluscan		
	Metamorphic Lithic Grain		Algal		
			Pellet		
			Molluscs		
			Echinoderms		
25%	Volcaniclastic Grain		Others		
	Scoria / Pumice		Intraclast		
	Scoria		Carbonate Rock Fragment		
	Pumice		Peloid		
	Volcaniclastic Lithic Grain		Pisolite		
	Picritic Lithic Grain		Calcareous Grain		
	Basaltic Lithic Grain		Dolomitic Grain		
	Andesitic Lithic Grain		Araginitic Grain		
	Dacitic Lithic Grain		Sideritic Grain		
	Rholitic Lithic Grain				
	Crystal Grain				
	Vitric Grain				

Fill percentage (Total must be 100).

Remarks: Sampled from coarsest sed layer at bottom of sec. 1, before whole round. Taken from bottom edge of overturned biscuit

Sediment Smear Slide / Thin Section Description Sheet

Date 5/21/12

Expedition: 343

Observer: Monica

Site: C0019 Hole: E Core: 13R Sect.: 2

Interval: 40

Sediment Name: Mudstone

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment		Chemical Sediment		Percent Texture				
				Siliciclastic	Volcaniclastic	Peragic	Neritic	Sand	Silt	Clay		
<input checked="" type="checkbox"/>										1%	64%	35%

Select one and check.

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
88%	Siliclastic Grain		Pelagic Grain		Others
	Minerals		Calcareous Grain		Gypsiferous Grain
	Quartz		Nannofossils		Calcareous Grain
	Feldspars		Foraminifers		Sapropelic Grain
	Micas	10%	Siliceous Grain		Mn Nodules/ Crusts
	Ferromagnesian Mineral		Diatom		Pyrite Grain
	Glauconite		Radiolarians		Opaque Grain
	Clay Minerals		Silicoflagellates		
	Zeolites		Sponge Spicule		
	Heavy Minerals				
2%	Pyrite				
	Phospholite				
	Aragonite		Neritic Grain		
	Calcite		Ooid		
	Oolites		Spherical Particles		
	Lithic Grain		Elliptical Particles		
	Sedimentary Lithic Grain		Bioclast		
	Igneous Lithic Grain		Molluscan		
	Metamorphic Lithic Grain		Algal		
			Pellet		
			Molluscs		
			Echinoderms		
12%	Volcaniclastic Grain		Others		
	Scoria / Pumice		Intraclast		
	Scoria		Carbonate Rock Fragment		
	Pumice		Peloid		
	Volcaniclastic Lithic Grain		Pisolite		
	Picritic Lithic Grain		Calcareous Grain		
	Basaltic Lithic Grain		Dolomitic Grain		
	Andesitic Lithic Grain		Araginitic Grain		
	Dacitic Lithic Grain		Sideritic Grain		
	Rholitic Lithic Grain				
	Crystal Grain				
	Vitric Grain				

Fill percentage (Total must be 100).

Remarks: Sampled from dark gray muddy sands at bottom of section 2, last section before core catcher

10% pyrite

Sediment Smear Slide / Thin Section Description Sheet

Date 5/21/12

Expedition: 343 Observer: _____

Site: C0019 Hole: E Core: 14 Sect.: 1 Interval: 10

Sediment Name: Mudstone

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment		Chemical Sediment		Percent Texture		
				Siliciclastic	Volcaniclastic	Peragic	Neritic	Sand	Silt	Clay
								3	33	64

Select one and check.

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
94	Siliclastic Grain		Pelagic Grain		Others
	Minerals		Calcareous Grain		Gypsiferous Grain
	Quartz		Nannofossils		Calcareous Grain
	Feldspars		Foraminifers		Sapropelic Grain
	Micas	4	Siliceous Grain		Mn Nodules/ Crusts
	Ferromagnesian Mineral		Diatom		Pyrite Grain
	Glauconite		Radiolarians		Opaque Grain
	Clay Minerals		Silicoflagellates		
	Zeolites		Sponge Spicule		
	Heavy Minerals				
	Pyrite				
	Phospholite				
	Aragonite		Neritic Grain		
	Calcite		Ooid		
	Oolites		Spherical Particles		
	Lithic Grain		Elliptical Particles		
	Sedimentary Lithic Grain		Bioclast		
	Igneous Lithic Grain		Molluscan		
	Metamorphic Lithic Grain		Algal		
			Pellet		
			Molluscs		
			Echinoderms		
2	Volcaniclastic Grain		Others		
	Scoria / Pumice		Intraclast		
	Scoria		Carbonate Rock Fragm		
	Pumice		Peloid		
	Volcaniclastic Lithic Grain		Pisolite		
	Picritic Lithic Grain		Calcareous Grain		
	Basaltic Lithic Grain		Dolomitic Grain		
	Andesitic Lithic Grain		Araginitic Grain		
	Dacitic Lithic Grain		Sideritic Grain		
	Rholitic Lithic Grain				
	Crystal Grain				
	Vitric Grain				

Fill percentage (Total must be 100).

Remarks: Background gray mudstone for core 14

Sediment Smear Slide / Thin Section Description Sheet

Date 5/24/12

Expedition: 343

Observer: Monica

Site: C0019 Hole: E Core: 17 Sect.: ~~T35~~ 1 Interval: 73.5

Sediment Name: Manganese Nodules

For siliclastic only

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment		Chemical Sediment		Percent Texture			
				Siliclastic	Volcaniclastic	Peragic	Neritic	Sand	Silt	Clay	
<input checked="" type="checkbox"/>										40	60

Select one and check.

Select one and check.

Select one and check.

other

Percent	Composition	Percent	Composition	Percent	Composition
40	Siliclastic Grain		Pelagic Grain	85	Others
	Minerals		Calcareous Grain		Gypsiferous Grain
	Quartz		Nannofossils		Calcareous Grain
	Feldspars		Foraminifers		Sapropelic Grain
	Micas	0	Siliceous Grain	65%	Mn Nodules/ Crusts
	Ferromagnesian Mineral		Diatom		Pyrite Grain
	Glauconite		Radiolarians		Opaque Grain
	Clay Minerals		Silicoflagellates		
	Zeolites		Sponge Spicule		
	Heavy Minerals				
	Pyrite				
	Phospholite				
	Aragonite		Neritic Grain		
	Calcite		Ooid		
	Oolites		Spherical Particles		
	Lithic Grain		Elliptical Particles		
	Sedimentary Lithic Grain		Bioclast		
	Igneous Lithic Grain		Molluscan		
	Metamorphic Lithic Grain		Algal		
			Pellet		
			Molluscs		
			Echinoderms		
5	Volcaniclastic Grain		Others		
	Scoria / Pumice		Intraclast		
	Scoria		Carbonate Rock Fragm		
	Pumice		Peloid		
	Volcaniclastic Lithic Grain		Pisolite		
	Picritic Lithic Grain		Calcareous Grain		
	Basaltic Lithic Grain		Dolomitic Grain		
	Andesitic Lithic Grain		Araginitic Grain		
	Dacitic Lithic Grain		Sideritic Grain		
	Rholitic Lithic Grain				
	Crystal Grain				
	Vitric Grain				

Fill percentage (Total must be 100).

Remarks: Sample of hard black nodule in brown clay layers. Very hard, did not break up or smear well. Possible manganese nodule

Sediment Smear Slide / Thin Section Description Sheet

Date 5/24/12

Expedition: 343

Observer: Monica

Site: C0019 Hole: E

Core: 17

Section: 1

Interval: 78

Sediment Name: Claystone

Smear Slide	Thin Section	Coarse Fraction	Grain Mount

Select one and check.

Granular Sediment		Chemical Sediment	
Siliciclastic	Volcaniclastic	Peragic	Neritic

Select one and check.

Percent Texture		
Sand	Silt	Clay
	<u>3%</u>	<u>97%</u>

Select one and check.

Percent	Composition
<u>99%</u>	Siliclastic Grain
	Minerals
	Quartz
	Feldspars
	Micas
	Ferromagnesian Mineral
	Glauconite
	Clay Minerals
	Zeolites
	Heavy Minerals
	Pyrite
	Phospholite
	Aragonite
	Calcite
	Oolites
	Lithic Grain
	Sedimentary Lithic Grain
	Igneous Lithic Grain
	Metamorphic Lithic Grain
<u>TC</u>	Volcaniclastic Grain
	Scoria / Pumice
	Scoria
	Pumice
	Volcaniclastic Lithic Grain
	Picritic Lithic Grain
	Basaltic Lithic Grain
	Andesitic Lithic Grain
	Dacitic Lithic Grain
	Rholitic Lithic Grain
	Crystal Grain
	Vitric Grain

Percent	Composition
<u>0</u>	Pelagic Grain
	Calcareous Grain
	Nannofossils
	Foraminifers
	Siliceous Grain
	Diatom
	Radiolarians
	Silicoflagellates
	Sponge Spicule
	Neritic Grain
	Ooid
	Spherical Particles
	Elliptical Particles
	Bioclast
	Molluscan
	Algal
	Pellet
	Molluscs
	Echinoderms
	Others
	Intraclast
	Carbonate Rock Fragment
	Peloid
	Pisolite
	Calcareous Grain
	Dolomitic Grain
	Araginitic Grain
	Sideritic Grain

Percent	Composition
	Others
	Gypsiferous Grain
	Calcareous Grain
	Sapropelic Grain
	Mn Nodules/ Crusts
	Pyrite Grain
	Opaque Grain

Fill percentage (Total must be 100).

Remarks: Dark brown clay inclusion in brown clay interval
↳ to black
Dark amber clay grains

Sediment Smear Slide / Thin Section Description Sheet

Date 5/24/12

Expedition: 343 Observer: Monica

Site: C0019 Hole: E Core: 17 Sect.: 1 Interval: 79

Sediment Name: Red Clay

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment		Chemical Sediment		Percent Texture		
				Siliciclastic	Volcaniclastic	Peragic	Neritic	Sand	Silt	Clay
								0	10	90

Select one and check.

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
95	Siliclastic Grain		Pelagic Grain		Others
	Minerals		Calcareous Grain		Gypsiferous Grain
	Quartz		Nannofossils		Calcareous Grain
	Feldspars		Foraminifers		Sapropelic Grain
	Micas	0	Siliceous Grain		Mn Nodules/ Crusts
	Ferromagnesian Mineral		Diatom		Pyrite Grain
	Glauconite		Radiolarians		Opaque Grain
	Clay Minerals		Silicoflagellates		
	Zeolites		Sponge Spicule		
	Heavy Minerals				
	Pyrite				
	Phospholite				
	Aragonite		Neritic Grain		
	Calcite		Ooid		
	Oolites		Spherical Particles		
	Lithic Grain		Elliptical Particles		
	Sedimentary Lithic Grain		Bioclast		
	Igneous Lithic Grain		Molluscan		
	Metamorphic Lithic Grain		Algal		
			Pellet		
			Molluscs		
			Echinoderms		
5	Volcaniclastic Grain		Others		
	Scoria / Pumice		Intraclast		
	Scoria		Carbonate Rock Fragment		
	Pumice		Peloid		
	Volcaniclastic Lithic Grain		Pisolite		
	Picritic Lithic Grain		Calcareous Grain		
	Basaltic Lithic Grain		Dolomitic Grain		
	Andesitic Lithic Grain		Araginitic Grain		
	Dacitic Lithic Grain		Sideritic Grain		
	Rholitic Lithic Grain				
	Crystal Grain				
	Vitric Grain				

Fill percentage (Total must be 100).

Remarks: Soft reddish brown clay inclusion in dark brown clay interval
lots of Iron oxides

Sediment Smear Slide / Thin Section Description Sheet

Date 5/24/12

Expedition: 343

Observer: C. Rowe

Site: C0019 Hole: E Core: 17 Sect.: 1

Interval: middle of...

Sediment Name: Brown Clay

shiny, black
679

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment		Chemical Sediment		Percent Texture		
				Siliciclastic	Volcaniclastic	Peragic	Neritic	Sand	Silt	Clay
<input checked="" type="checkbox"/>								0	1%	99%

Select one and check. Select one and check. Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Siliciclastic Grain		Pelagic Grain		Others
	Minerals		Calcareous Grain		Gypsiferous Grain
	Quartz		Nannofossils		Calcareous Grain
	Feldspars		Foraminifers		Sapropelic Grain
	Micas	1%	Siliceous Grain	✓	Mn Nodules/ Crusts
	Ferromagnesian Mineral		Diatom		Pyrite Grain
	Glaucanite		Radiolarians		Opaque Grain
99%	Clay Minerals		Silicoflagellates		
	Zeolites		Sponge Spicule		
	Heavy Minerals				
	Pyrite				
	Phospholite				
	Aragonite		Neritic Grain		
	Calcite		Ooid		
	Oolites		Spherical Particles		
	Lithic Grain		Elliptical Particles		
	Sedimentary Lithic Grain		Bioclast		
	Igneous Lithic Grain		Molluscan		
	Metamorphic Lithic Grain		Algal		
			Pellet		
			Molluscs		
			Echinoderm		
1%	Volcaniclastic Grain		Others		
	Scoria / Pumice		Intraclast		
	Scoria		Carbonate R		
	Pumice		Peloid		
	Volcaniclastic Lithic Grain		Pisolite		
	Picritic Lithic Grain		Calcareous Grain		
	Basaltic Lithic Grain		Dolomitic Grain		
	Andesitic Lithic Grain		Araginitic Grain		
	Dacitic Lithic Grain		Sideritic Grain		
	Rholitic Lithic Grain				
	Crystal Grain				
	Vitric Grain				

343-C0019E-C0017R-01-WK (89)
 - Sponge spicules 1%
 - Ash (glass; fresh) 1%
 - Silt (Qtz or felds) 1%
 - Opal/chalcedony cement forms colloidal fibres and rims (10%)
 87% Dark brown micro-crystalline clay + Fe + Mn oxides/hydroxides

Fill percentage (Total must be 100).

Remarks: Dark brown microcrystalline clay w/ Fe + Mn oxides/hydroxides
Opal/chalcedony cement forms colloidal fibres + rims (10%)

Sediment Smear Slide / Thin Section Description Sheet

Date 5-23-12

Expedition: 343

Observer: CMUou

Site: C0019 Hole: E Core: 17 Sect.: 1

Interval: 98

Sediment Name: Clay

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

Select one and check.

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
99	Siliciclastic Grain		Pelagic Grain		Others
	Minerals		Calcareous Grain		Gypsiferous Grain
	Quartz		Nannofossils		Calcareous Grain
	<input checked="" type="checkbox"/> Feldspars		Foraminifers		Sapropelic Grain
	Micas	2	Siliceous Grain		Mn Nodules/ Crusts
	Ferromagnesian Mineral		Diatom		Pyrite Grain
	Glauconite		Radiolarians		Opaque Grain
	Clay Minerals		Silicoflagellates		
	Zeolites		Sponge Spicule		
	Heavy Minerals				
	Pyrite				
	Phospholite				
	Aragonite		Neritic Grain		
	Calcite		Ooid		
	Oolites		Spherical Particles		
	Lithic Grain		Elliptical Particles		
	Sedimentary Lithic Grain		Bioclast		
	Igneous Lithic Grain		Molluscan		
	Metamorphic Lithic Grain		Algal		
			Pellet		
			Molluscs		
			Echinoderms		
1	Volcaniclastic Grain		Others		
	Scoria / Pumice		Intraclast		
	Scoria		Carbonate Rock Fragm		
	Pumice		Peloid		
	Volcaniclastic Lithic Grain		Pisolite		
	Picritic Lithic Grain		Calcareous Grain		
	Basaltic Lithic Grain		Dolomitic Grain		
	Andesitic Lithic Grain		Araginitic Graing		
	Dacitic Lithic Grain		Sideritic Graing		
	Rholitic Lithic Grain				
	Crystal Grain				
	Vitric Grain				

Fill percentage (Total must be 100).

Remarks: Darker "Black" clay from Fault core. teeth.
Considered altered fault zone no obvious biogenic content.
part of

Sediment Smear Slide / Thin Section Description Sheet

Date 5-23-12

Expedition: 343

Observer: _____

Site: C0019 Hole: E Core: 17 Sect.: 1

Interval: 99

Sediment Name: Claystone

Smear Slide	Thin Section	Coarse Fraction	Grain Mount
<input checked="" type="checkbox"/>			

Select one and check.

Granular Sediment		Chemical Sediment	
Siliciclastic	Volcaniclastic	Peragic	Neritic

Select one and check.

Percent Texture		
Sand	Silt	Clay
	<u>3</u>	<u>97</u>

Select one and check.

Percent	Composition
<u>98</u>	Siliciclastic Grain
	Minerals
	Quartz
	Feldspars
	Micas
	Ferromagnesian Mineral
	Glauconite
	Clay Minerals
	Zeolites
	Heavy Minerals
	Pyrite
	Phospholite
	Aragonite
	Calcite
	Oolites
	Lithic Grain
	Sedimentary Lithic Grain
	Igneous Lithic Grain
	Metamorphic Lithic Grain
	Volcaniclastic Grain
	Scoria / Pumice
	Scoria
	Pumice
	Volcaniclastic Lithic Grain
	Picritic Lithic Grain
	Basaltic Lithic Grain
	Andesitic Lithic Grain
	Dacitic Lithic Grain
	Rholitic Lithic Grain
	Crystal Grain
	Vitric Grain

Percent	Composition
	Pelagic Grain
	Calcareous Grain
	Nannofossils
	Foraminifers
	Siliceous Grain
	Diatom
	Radiolarians
	Silicoflagellates
	Sponge Spicule
	Neritic Grain
	Ooid
	Spherical Particles
	Elliptical Particles
	Bioclast
	Molluscan
	Algal
	Pellet
	Molluscs
	Echinoderms
	Others
	Intraclast
	Carbonate Rock Fragm
	Peloid
	Pisolite
	Calcareous Grain
	Dolomitic Grain
	Araginitic Graing
	Sideritic Graing

Percent	Composition
	Others
	Gypsiferous Grain
	Calcareous Grain
	Sapropelic Grain
	Mn Nodules/ Crusts
	Pyrite Grain
	Opaque Grain
	<u>Authigenic minerals</u>
	<u>clinoptilolite</u>
	<u>- prismatic</u>
	<u>Opagues could be Mn or Fe</u>

Fill percentage (Total must be 100).

Remarks: Very little silt

Sediment Smear Slide / Thin Section Description Sheet

Date 5/22/12

Expedition: 343

Observer: cmw

Site: C0019 Hole: E Core: 19 Sect.: 1 Interval: 8

Sediment Name: Mudstone

Smear Slide	Thin Section	Coarse Feaction	Grain Mount	Granular Sediment	Chemical Sediment		Percent Texture					
				Siliciclastic	Volcaniclastic	Peragic	Neritic	Sand	Silt	Clay		
<input checked="" type="checkbox"/>										2	30	60

Select one and check. Select one and check. Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
94	Siliclastic Grain		Pelagic Grain		Others
	Minerals		Calcareous Grain		Gypsiferous Grain
	Quartz		Nannofossils		Calcareous Grain
	Feldspars		Foraminifers		Sapropelic Grain
	Micas		2 Siliceous Grain		Mn Nodules/ Crusts
	Ferromagnesian Mineral			Diatom	
	Glauconite		Radiolarians		Opaque Grain
	Clay Minerals		Silicoflagellates		
	Zeolites		Sponge Spicule		
	Heavy Minerals				
	Pyrite				
	Phospholite				
	Aragonite		Neritic Grain		
	Calcite		Ooid		
	Oolites		Spherical Particles		
	Lithic Grain		Elliptical Particles		
	Sedimentary Lithic Grain		Bioclast		
Igneous Lithic Grain		Molluscan			
Metamorphic Lithic Grain		Algal			
		Pellet			
		Molluscs			
		Echinoderms			
4	Volcaniclastic Grain		Others		
	Scoria / Pumice		Intraclast		
	Scoria		Carbonate Rock Fragm		
	Pumice		Peloid		
	Volcaniclastic Lithic Grain		Pisolite		
	Picritic Lithic Grain		Calcareous Grain		
	Basaltic Lithic Grain		Dolomitic Grain		
	Andesitic Lithic Grain		Araginitic Graing		
	Dacitic Lithic Grain		Sideritic Graing		
	Rholitic Lithic Grain				
	Crystal Grain				
	Vitric Grain				

Fill percentage (Total must be 100).

Remarks: Yellow Brown background lithology at top, with black discontinuous bands

Sediment Smear Slide / Thin Section Description Sheet

Date: 5/22/12

Expedition: 343

Observer: Monica

Site: C0019 Hole: E Core: 19 Sect.: 1 Interval: 12

Sediment Name: Mudstone

Smear Slide	Thin Section	Coarse Feaction	Grain Mounrt	Granular Sediment		Chemical Sediment		Percent Texture		
				Siliciclastic	Volcaniclastic	Peragic	Neritic	Sand	Silt	Clay
✓								3	32	65
Select one and check.				Select one and check.				Select one and check.		

Percent	Composition	Percent	Composition	Percent	Composition
92	Siliclastic Grain		Pelagic Grain		Others
	Minerals		Calcareous Grain		Gypsiferous Grain
	Quartz		Nannofossils		Calcareous Grain
	Feldspars		Foraminifers		Sapropelic Grain
	Micas	3	Siliceous Grain		Mn Nodules/ Crusts
	Ferromagnesian Mineral		Diatom		Pyrite Grain
	Glauconite		Radiolarians		Opaque Grain
	Clay Minerals		Sillicoflagellates		
	Zeolites		Sponge Spicule		
	Heavy Minerals				
	Pyrite				
	Phospholite				
	Aragonite				
	Calcite		Neritic Grain		
	Oolites		Ooid		
	Lithic Grain		Spherical Particles		
	Sedimentary Lithic Grain		Elliptical Particles		
	Igneous Lithic Grain		Bioclast		
	Metamorphic Lithic Grain		Molluscan		
			Algal		
			Pellet		
			Molluscs		
			Echinoderms		
5	Volcaniclastic Grain		Others		
	Scoria / Pumice		Intraclast		
	Scoria		Carbonate Rock Fragn		
	Pumice		Peloid		
	Volcaniclastic Lithic Grain		Pisolite		
	Picritic Lithic Grain		Calcareous Grain		
	Basaltic Lithic Grain		Dolomitic Grain		
	Andesitic Lithic Grain		Araginitic Graing		
	Dacitic Lithic Grain		Sideritic Graing		
	Rholitic Lithic Grain				
	Crystal Grain				
	Vitric Grain				

Fill percentage (Total must be 100).

Remarks: Near top of core, in yellowish brown clay layer with NO blackish inclusions by burrows?

Sediment Smear Slide / Thin Section Description Sheet

Date 5-22-12

Expedition: 343

Observer: CMore

Site: C0019 Hole: E Core: 19 Sect.: 2

Interval: 59

Sediment Name: Mudstone

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment		Chemical Sediment		Percent Texture		
				Siliciclastic	Volcaniclastic	Peragic	Neritic	Sand	Silt	Clay
								10	40	50

Select one and check.

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
<u>72</u>	Siliclastic Grain		Pelagic Grain		Others
	Minerals		Calcareous Grain		Gypsiferous Grain
	Quartz		Nannofossils		Calcareous Grain
	Feldspars		Foraminifers		Sapropelic Grain
	Micas	<u>8</u>	Siliceous Grain		Mn Nodules/ Crusts
	Ferromagnesian Mineral		Diatom	<u>15</u>	Pyrite Grain
	Glauconite		Radiolarians		Opaque Grain
	Clay Minerals		Sillicoflagellates		<u>Manganese</u>
	Zeolites		Sponge Spicule		<u>Maybe containing other minerals</u>
	Heavy Minerals				
	Pyrite				
	Phospholite				
	Aragonite		Neritic Grain		
	Calcite		Ooid		
	Oolites		Spherical Particles		
	Lithic Grain		Elliptical Particles		
	Sedimentary Lithic Grain		Bioclast		
	Igneous Lithic Grain		Molluscan		
	Metamorphic Lithic Grain		Algal		
			Pellet		
			Molluscs		
			Echinoderms		
<u>3</u>	Volcaniclastic Grain		Others		
	Scoria / Pumice		Intraclast		
	Scoria		Carbonate Rock Fragm		
	Pumice		Peloid		
	Volcaniclastic Lithic Grain		Pisolite		
	Picritic Lithic Grain		Calcareous Grain		
	Basaltic Lithic Grain		Dolomitic Grain		
	Andesitic Lithic Grain		Araginitic Grain		
	Dacitic Lithic Grain		Sideritic Grain		
	Rholitic Lithic Grain				
	Crystal Grain				
	Vitric Grain				

Fill percentage (Total must be 100).

Black ~~sed~~ blebs - in background lith.

Remarks:

2 Photo micro Rads - diatoms ~ 40PM
- 1st mis-scaled.

Sediment Smear Slide / Thin Section Description Sheet

Date 5-23-12

Expedition: 343

Observer: Cuean

Site: C0019

Hole: E

Core: 19

Sept.: 2

Interval: 82.5

Sediment Name: Claystone

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment	Chemical Sediment	Percent Texture				
✓				Siliciclastic	Volcaniclastic	Pelagic	Neritic	Sand	Silt	Clay
Select one and check.				Select one and check.				20	80	
				Select one and check.				Select one and check.		

Percent	Composition	Percent	Composition	Percent	Composition
95	Siliclastic Grain		Pelagic Grain		Others
	Minerals		Calcareous Grain		Gypsiferous Grain
	Quartz		Nannofossils		Calcareous Grain
	Feldspars		Foraminifers		Sapropelic Grain
	Micas		Siliceous Grain		Mn Nodules/ Crusts
	Ferromagnesian Mineral		Diatom		Pyrite Grain
	Glaucanite		Radiolarians		Opaque Grain
	Clay Minerals		Silicoflagellates		
	Zeolites		Sponge Spicule		
	Heavy Minerals				
	Pyrite				
	Phospholite				
	Aragonite		Neritic Grain		
	Calcite		Ooid		
	Oolites		Spherical Particles		
	Lithic Grain		Elliptical Particles		
	Sedimentary Lithic Grain		Bioclast		
	Igneous Lithic Grain		Molluscan		
	Metamorphic Lithic Grain		Algal		
			Pellet		
			Molluscs		
			Echinoderms		
			Others		
	Volcaniclastic Grain		Intraclast		
	Scoria / Pumice		Carbonate Rock Fragm		
	Scoria		Peloid		
	Pumice		Pisolite		
	Volcaniclastic Lithic Grain		Calcareous Grain		
	Picritic Lithic Grain		Dolomitic Grain		
	Basaltic Lithic Grain		Araginitic Grain		
	Andesitic Lithic Grain		Sideritic Grain		
	Dacitic Lithic Grain				
	Rholitic Lithic Grain				
	Crystal Grain				
	Vitric Grain				

Fill percentage (Total must be 100).

Remarks: ~~they~~ gritty when chewed but optical view shows small % silt. Very dark layer in core.

Sediment Smear Slide / Thin Section Description Sheet

Date 5/22/12

Expedition: 343

Observer: Monica

Site: C00190 Hole: E Core: 19 Sect.: 3

Interval: 48

Sediment Name: Mudstone

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment		Chemical Sediment		Percent Texture		
				Siliciclastic	Volcaniclastic	Peragic	Neritic	Sand	Silt	Clay
								<u>3</u>	<u>45</u>	<u>52</u>

Select one and check.

Select one and check.

Select one and check.

Percent	Composition
<u>45%</u>	Siliciclastic Grain
	Minerals
	Quartz
	Feldspars
	Micas
	Ferromagnesian Mineral
	Glauconite
	Clay Minerals
	Zeolites
	Heavy Minerals
	Pyrite
	Phospholite
	Aragonite
	Calcite
	Oolites
	Lithic Grain
	Sedimentary Lithic Grain
	Igneous Lithic Grain
	Metamorphic Lithic Grain
<u>10</u>	Volcaniclastic Grain
	Scoria / Pumice
	Scoria
	Pumice
	Volcaniclastic Lithic Grain
	Picritic Lithic Grain
	Basaltic Lithic Grain
	Andesitic Lithic Grain
	Dacitic Lithic Grain
	Rholitic Lithic Grain
	Crystal Grain
	Vitric Grain

Percent	Composition
	Pelagic Grain
	Calcareous Grain
	Nannofossils
	Foraminifers
<u>5</u>	Siliceous Grain
	Diatom
	Radiolarians
	Sillicoflagellates
	Sponge Spicule
	Neritic Grain
	Ooid
	Spherical Particles
	Elliptical Particles
	Bioclast
	Molluscan
	Algal
	Pellet
	Molluscs
	Echinoderms
	Others
	Intraclast
	Carbonate Rock Fragment
	Peloid
	Pisolite
	Calcareous Grain
	Dolomitic Grain
	Araginitic Grain
	Sideritic Grain

Percent	Composition
	Others
	Gypsiferous Grain
	Calcareous Grain
	Sapropelic Grain
	Mn Nodules/ Crusts
	Pyrite Grain
	Opaque Grain

Fill percentage (Total must be 100).

Remarks: Bottom of core; in yellowish gray clay w/ no burrows evident.
Less reddish than sample at SS_TS_DescriptionSheet-BrankOriginal110118.xls
see 2 int. 12

Sediment Smear Slide / Thin Section Description Sheet

Date 5/23/12

Expedition: 343

Observer: Monica

Site: C0019 Hole: E Core: 20 Sect.: 1 Interval: 25

Sediment Name: Mudstone (clay-rich)

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment		Chemical Sediment		Percent Texture		
				Siliciclastic	Volcaniclastic	Peragic	Neritic	Sand	Silt	Clay
								Tr	35	65

Select one and check. Select one and check. Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
97	Siliciclastic Grain		Pelagic Grain		Others
	Minerals		Calcareous Grain		Gypsiferous Grain
	Quartz		Nannofossils		Calcareous Grain
	Feldspars		Foraminifers		Sapropelic Grain
	Micas	2	Siliceous Grain		Mn Nodules/ Crusts
	Ferromagnesian Mineral		Diatom		Pyrite Grain
	Glaucinite		Radiolarians		Opaque Grain
	Clay Minerals		Silicoflagellates		
	Zeolites		Sponge Spicule		
	Heavy Minerals				
	Pyrite				
	Phospholite				
	Aragonite		Neritic Grain		
	Calcite		Ooid		
	Oolites		Spherical Particles		
	Lithic Grain		Elliptical Particles		
	Sedimentary Lithic Grain		Bioclast		
	Igneous Lithic Grain		Molluscan		
	Metamorphic Lithic Grain		Algal		
			Pellet		
			Molluscs		
			Echinoderms		
-1	Volcaniclastic Grain		Others		
	Scoria / Pumice		Intraclast		
	Scoria		Carbonate Rock Fragm		
	Pumice		Peloid		
	Volcaniclastic Lithic Grain		Pisolite		
	Picritic Lithic Grain		Calcareous Grain		
	Basaltic Lithic Grain		Dolomitic Grain		
	Andesitic Lithic Grain		Araginitic Grain		
	Dacitic Lithic Grain		Sideritic Grain		
	Rholitic Lithic Grain				
	Crystal Grain				
	Vitric Grain				

Fill percentage (Total must be 100).

Remarks: Solid greenish gray sediment at top of core

Sediment Smear Slide / Thin Section Description Sheet

Date _____

Expedition: 343 Observer: _____

Site: C0019 Hole: E Core: 20 Sect.: 1 Interval: 120

Sediment Name: Mudstone

Smear Slide	Thin Section	Coarse Feaction	Grain Mount	Granular Sediment	Chemical Sediment	Percent Texture				
				Siliciclastic	Volcaniclastic	Peragic	Neritic	Sand	Silt	Clay
✓									30	70

Select one and check.

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
75	Siliclastic Grain		Pelagic Grain		Others
	Minerals		Calcareous Grain		Gypsiferous Grain
	Quartz		Nannofossils		Calcareous Grain
	Feldspars		Foraminifers		Sapropelic Grain
	Micas	15	Siliceous Grain		Mn Nodules/ Crusts
	Ferromagnesian Mineral		Diatom		Pyrite Grain
	Glauconite		Radiolarians		Opaque Grain
	Clay Minerals		Sillicoflagellates		
	Zeolites		Sponge Spicule		
	Heavy Minerals				
	Pyrite				
	Phospholite				
	Aragonite		Neritic Grain		
	Calcite		Ooid		
	Oolites		Spherical Particles		
	Lithic Grain		Elliptical Particles		
	Sedimentary Lithic Grain		Bioclast		
	Igneous Lithic Grain		Molluscan		
	Metamorphic Lithic Grain		Algal		
			Pellet		
			Molluscs		
			Echinoderms		
10	Volcaniclastic Grain		Others		
	Scoria / Pumice		Intraclast		
	Scoria		Carbonate Rock Fragm		
	Pumice		Peloid		
	Volcaniclastic Lithic Grain		Pisolite		
	Picritic Lithic Grain		Calcareous Grain		
	Basaltic Lithic Grain		Dolomitic Grain		
	Andesitic Lithic Grain		Araginitic Graing		
	Dacitic Lithic Grain		Sideritic Graing		
	Rholitic Lithic Grain				
	Crystal Grain				
	Vitric Grain				

Fill percentage (Total must be 100).

Remarks: Gray Mudstone back ground lithology.

Sediment Smear Slide / Thin Section Description Sheet

Date 5/23/12

Expedition: 343

Observer: Monica

Site: C0019 Hole: E Core: 120 Sect.: 2

Interval: 57.5

Sediment Name: Claystone - Mudstone

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment		Chemical Sediment		Percent Texture		
				Siliciclastic	Volcaniclastic	Peragic	Neritic	Sand	Silt	Clay
								Tr	30	70

Select one and check.

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
75	Siliciclastic Grain	0	Pelagic Grain	15	Others
	Minerals		Calcareous Grain		Gypsiferous Grain
	Quartz		Nannofossils		Calcareous Grain
	Feldspars		Foraminifers		Sapropelic Grain
	Micas		Siliceous Grain		Mn Nodules/ Crusts
	Ferromagnesian Mineral		Diatom		Pyrite Grain
	Glauconite		Radiolarians		Opaque Grain
	Clay Minerals		Silicoflagellates		
	Zeolites		Sponge Spicule		
	Heavy Minerals				
	Pyrite		Neritic Grain		
	Phospholite		Ooid		
	Aragonite		Spherical Particles		
	Calcite		Elliptical Particles		
	Oolites		Bioclast		
	Lithic Grain		Molluscan		
	Sedimentary Lithic Grain		Algal		
	Igneous Lithic Grain		Pellet		
	Metamorphic Lithic Grain		Molluscs		
			Echinoderms		
Tr	Volcaniclastic Grain		Others		
	Scoria / Pumice		Intraclast		
	Scoria		Carbonate Rock Fragm		
	Pumice		Peloid		
	Volcaniclastic Lithic Grain		Pisolite		
	Picritic Lithic Grain		Calcareous Grain		
	Basaltic Lithic Grain		Dolomitic Grain		
	Andesitic Lithic Grain		Araginitic Graing		
	Dacitic Lithic Grain		Sideritic Graing		
	Rholitic Lithic Grain				
	Crystal Grain				
	Vitric Grain				

Fill percentage (Total must be 100).

Remarks: in pinkish brown clay layer ~ 1.5 cm wide close to being a claystone

Sediment Smear Slide / Thin Section Description Sheet

Date 5/23/12

Expedition:

Observer: Monica

Site: C0019 Hole: E Core: 20 Sect.: 2 Interval: 58.5

Sediment Name: Claystone

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment		Chemical Sediment		Percent Texture		
				Siliciclastic	Volcaniclastic	Peragic	Neritic	Sand	Silt	Clay
								Tr	15	85

Select one and check.

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
<u>80</u>	Siliclastic Grain	<u>0</u>	Pelagic Grain	<u>10</u>	Others
	Minerals		Calcareous Grain		Gypsiferous Grain
	Quartz		Nannofossils		Calcareous Grain
	Feldspars		Foraminifers		Sapropelic Grain
	Micas		Siliceous Grain		Mn Nodules/ Crusts
	Ferromagnesian Mineral		Diatom		Pyrite Grain
	Glauconite		Radiolarians		Opaque Grain
	Clay Minerals		Silicoflagellates		
	Zeolites		Sponge Spicule		
	Heavy Minerals				
	Pyrite				
	Phospholite				
	Aragonite		Neritic Grain		
	Calcite		Ooid		
	Oolites		Spherical Particles		
	Lithic Grain		Elliptical Particles		
	Sedimentary Lithic Grain		Bioclast		
	Igneous Lithic Grain		Molluscan		
	Metamorphic Lithic Grain		Algal		
			Pellet		
			Molluscs		
			Echinoderms		
<u>10</u>	Volcaniclastic Grain		Others		
	Scoria / Pumice		Intraclast		
	Scoria		Carbonate Rock Fragm		
	Pumice		Peloid		
	Volcaniclastic Lithic Grain		Pisolite		
	Picritic Lithic Grain		Calcareous Grain		
	Basaltic Lithic Grain		Dolomitic Grain		
	Andesitic Lithic Grain		Araginitic Graing		
	Dacitic Lithic Grain		Sideritic Graing		
	Rholitic Lithic Grain				
	Crystal Grain				
	Vitric Grain				

Fill percentage (Total must be 100).

Remarks: rich brown clay layer banding the pinkish brown layer, softer than pink layer
Not gritty at all when tasted

Sediment Smear Slide / Thin Section Description Sheet

Date 5/27/12

Expedition: 343 Observer: CUU000

Site: C0019 Hole: E Core: 20 Sect.: 2 Interval: 108

Sediment Name: Claystone

Smear Slide	Thin Section	Coarse Feaction	Grain Mount	Granular Sediment		Chemical Sediment		Percent Texture			
				Siliciclastic	Volcaniclastic	Peragic	Neritic	Sand	Silt	Clay	
<input checked="" type="checkbox"/>										10	90

Select one and check. Select one and check. Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
90	Siliclastic Grain		Pelagic Grain		Others
	Minerals		Calcareous Grain		Gypsiferous Grain
	Quartz		Nannofossils		Calcareous Grain
	Feldspars		Foraminifers		Sapropelic Grain
	Micas	?	Siliceous Grain		Mn Nodules/ Crusts
	Ferromagnesian Mineral		Diatom		Pyrite Grain
	Glauconite		Radiolarians		Opaque Grain
	Clay Minerals		Sillicoflagellates		
?	Zeolites		Sponge Spicule		
	Heavy Minerals				
	Pyrite				
	Phospholite				
	Aragonite		Neritic Grain		
	Calcite		Ooid		
	Oolites		Spherical Particles		
	Lithic Grain		Elliptical Particles		
	Sedimentary Lithic Grain		Bioclast		
	Igneous Lithic Grain		Molluscan		
	Metamorphic Lithic Grain		Algal		
			Pellet		
			Molluscs		
			Echinoderms		
?	Volcaniclastic Grain		Others		
	Scoria / Pumice		Intraclast		
	Scoria		Carbonate Rock Fragm		
	Pumice		Peloid		
	Volcaniclastic Lithic Grain		Pisolite		
	Picritic Lithic Grain		Calcareous Grain		
	Basaltic Lithic Grain		Dolomitic Grain		
	Andesitic Lithic Grain		Araginitic Graing		
	Dacitic Lithic Grain		Sideritic Graing		
	Rholitic Lithic Grain				
	Crystal Grain				
	Vitric Grain				

Fill percentage (Total must be 100). - low relief / birefringence minerals - zeolite?

Remarks: light green clay - not gritty on teeth