Sediment Smear Slide / Thin Section Description Sheet

Date 12/19/12

Expedition: 338 Observer: KLM

Site: C0002 Hole: J Core: 1R Sect.: 1 Interval: 10

Sediment Name: silty claystone

Smear Slide	Thin Section	Coarse Feaction	Grain Mounrt
✓			

Select one and check.

Granular Sediment		Chemical Sediment	
Siliciclastic	Volcaniclastic	Peragic	Neritic
✓			

Select one and check.

Percent Texture		
Sand	Silt	Clay
0	25	75

Select one and check.

Percent	Composition
	Siliclastic Grain
	Minerals
29	Quartz
	Feldspars
	Micas
	Ferromagnesian Minerals
	Glauconite
45	Clay Minerals
	Zeolites
F	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
F	Vitric Grain

Percent	Composition
	Pelagic Grain
	Calcareous Grain
25	Nannofossils
F	Foraminifers
	Siliceous Grain
	Diatom
	Radiolarians
	Sillicoflagellates
F	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 Graing
	Sideritic Graing

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

Fill percentage (Total must be 100).

Remarks: does not disaggregate fully

Sediment Smear Slide / Thin Section Description Sheet

Date 12/19/12

Expedition: 338 Observer: KLM

Site: C0002 Hole: J Core: 1R Sect.: 1 Interval: 19

Sediment Name: silty claystone

Smear Slide	Thin Section	Coarse Feaction	Grain Mounrt
✓			

Select one and check.

Granular Sediment		Chemical Sediment	
Siliciclastic	Volcaniclastic	Peragic	Neritic
✓			

Select one and check.

Percent Texture		
Sand	Silt	Clay
0	25	75

Select one and check.

Percent	Composition
	Siliclastic Grain
	Minerals
27	Quartz
	Feldspars
	Micas
	Ferromagnesian Minerals
	Glauconite
55	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
1	Vitric Grain

Percent	Composition
	Pelagic Grain
	Calcareous Grain
15	Nannofossils
	Foraminifers
	Siliceous Grain
	Diatom
	Radiolarians
	Sillicoflagellates
F	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 Graing
	Sideritic Graing

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

Fill percentage (Total must be 100).

Remarks: dark bed-parallel lamina - uncertain: bed vs. shear band

Sediment Smear Slide / Thin Section Description Sheet

Date 12/19/12

Expedition: 338 Observer: KCM

Site: C0002 Hole: J Core: 1R Sect.: 1 Interval: 56

Sediment Name: fine ash

Smear Slide	Thin Section	Coarse Feaction	Grain Mounrt
✓			

Select one and check.

Granular Sediment		Chemical Sediment	
Siliciclastic	Volcaniclastic	Peragic	Neritic
	✓		

Select one and check.

Percent Texture		
Sand	Silt	Clay
	95	5

Select one and check.

Percent	Composition
	Siliclastic Grain
	Minerals
2	Quartz
2	Feldspars
	Micas
	Ferromagnesian Minerals
	Glauconite
1	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
5	Pumice
	Volcaniclastic Lithic Grain
	Picritic Lithic Grain
	Basaltic Lithic Grain
	Andesitic Lithic Grain
	Dacitic Lithic Grain
	Rholitic Lithic Grain
	Crystal Grain
90	Vitric Grain

Percent	Composition
	Pelagic Grain
	Calcareous Grain
	Nannofossils
	Foraminifers
	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 Graing
	Sideritic Graing

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

Fill percentage (Total must be 100).

Remarks: Colorless & unaltered glass

Sediment Smear Slide / Thin Section Description Sheet

Date 12/19/12

Expedition: 338 Observer: Kum

Site: C0002 Hole: J Core: 1R Sect.: 4 Interval: 9

Sediment Name: silty claystone

Smear Slide	Thin Section	Coarse Feaction	Grain Mounrt

Select one and check.

Granular Sediment		Chemical Sediment	
Siliciclastic	Volcaniclastic	Peragic	Neritic

Select one and check.

Percent Texture		
Sand	Silt	Clay
1	24	75

Select one and check.

Percent	Composition
	Siliclastic Grain
	Minerals
23	Quartz
	Feldspars
	Micas
	Ferromagnesian Minerals
	Glauconite
40	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
1	Vitric Grain

Percent	Composition
	Pelagic Grain
	Calcareous Grain
30	Nannofossils
	Foraminifers
	Siliceous Grain
	Diatom
	Radiolarians
	Sillicoflagellates
F	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 Graing
	Sideritic Graing

Percent	Composition
	Others
	Gypsiferous Grain
5	Calcareous Grain
	Sapropelic Grain
	Mn Nodules/ Crusts
1	Pyrite ~~Grain~~ crystal
	Opaque Grain

Fill percentage (Total must be 100).

Remarks: dark bed-parallel band → depositional or defm?

Sediment Smear Slide / Thin Section Description Sheet

Date 12/19/12

Expedition: 338 Observer: KLM

Site: C0002 Hole: J Core: 1R Sect.: 7 Interval: 95

Sediment Name: silty claystone

Smear Slide	Thin Section	Coarse Feaction	Grain Mounrt
✓			

Select one and check.

Granular Sediment		Chemical Sediment	
Siliciclastic	Volcaniclastic	Peragic	Neritic
✓			

Select one and check.

Percent Texture		
Sand	Silt	Clay
2	23	75

Select one and check.

Percent	Composition
	Siliclastic Grain
	Minerals
25	Quartz
	Feldspars
	Micas
	Ferromagnesian Minerals
	Glauconite
45	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
2	Vitric Grain

Percent	Composition
	Pelagic Grain
	Calcareous Grain
25	Nannofossils
	Foraminifers
	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 Graing
	Sideritic Graing

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

Fill percentage (Total must be 100).

Remarks:

Sediment Smear Slide / Thin Section Description Sheet

Date 12/19/12

Expedition: 338 Observer: KLM

Site: C0002 Hole: J Core: 2R Sect.: 1 Interval: 5

Sediment Name: very fine silty sandstone (minor lithal)

Smear Slide	Thin Section	Coarse Feaction	Grain Mounrt
✓			

Select one and check.

Granular Sediment		Chemical Sediment	
Siliciclastic	Volcaniclastic	Peragic	Neritic
✓			

Select one and check.

Percent Texture		
Sand	Silt	Clay
60	40	

Select one and check.

Percent	Composition
	Siliclastic Grain
	Minerals
75	Quartz
	Feldspars
1	Micas
	Ferromagnesian Minerals
	Glauconite
	Clay Minerals
	Zeolites
2	Heavy Minerals
	Pyrite
	Phospholite
	Aragonite
	Calcite
	Oolites
	Lithic Grain
5	Sedimentary Lithic Grain
	Igneous Lithic Grain
5	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
5	Vitric Grain

Percent	Composition
	Pelagic Grain
	Calcareous Grain
	Nannofossils
	Foraminifers
	Siliceous Grain
	Diatom
	Radiolarians
	Sillicoflagellates
1	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 Graing
	Sideritic Graing

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

Fill percentage (Total must be 100).

Remarks: Some brown glass; also green most clear + unaltered

Sediment Smear Slide / Thin Section Description Sheet

Date 3/12/19/12

Expedition: 338 Observer: KLM

Site: C0002 Hole: J Core: 2R Sect.: 1 Interval: 55

Sediment Name: silty claystone (dominant lithal)

Smear Slide	Thin Section	Coarse Feaction	Grain Mounrt
✓			

Select one and check.

Granular Sediment		Chemical Sediment	
Siliciclastic	Volcaniclastic	Peragic	Neritic
✓			

Select one and check.

Percent Texture		
Sand	Silt	Clay
	25	75

Select one and check.

Percent	Composition
	Siliclastic Grain
	Minerals
20	Quartz
20	Feldspars
	Micas
	Ferromagnesian Minerals
	Glauconite
50	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
5	Vitric Grain

Percent	Composition
	Pelagic Grain
	Calcareous Grain
20	Nannofossils
	Foraminifers
	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 Graing
	Sideritic Graing

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

Fill percentage (Total must be 100).

Remarks:

Sediment Smear Slide / Thin Section Description Sheet

Date 12/12/12

Expedition: 338 Observer: KUM

Site: C0002 Hole: J Core: 3R Sect.: 1 Interval: 7

Sediment Name: silty claystone

Smear Slide	Thin Section	Coarse Feaction	Grain Mounrt
✓			

Select one and check.

Granular Sediment		Chemical Sediment	
Siliciclastic	Volcaniclastic	Peragic	Neritic
✓			

Select one and check.

Percent Texture		
Sand	Silt	Clay
5	35	60

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Siliclastic Grain		Pelagic Grain		Others
	Minerals		Calcareous Grain		Gypsiferous Grain
35	Quartz	20	Nannofossils	5	Calcareous Grain
	Feldspars	F	Foraminifers		Sapropelic Grain
	Micas		Siliceous Grain		Mn Nodules/ Crusts
	Ferromagnesian Minerals		Diatom		Pyrite Grain
	Glauconite	F	Radiolarians		Opaque Grain
35	Clay Minerals		Sillicoflagellates		
	Zeolites	F	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 Fragment		
	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				
5	Vitric Grain				

Fill percentage (Total must be 100).

Remarks: mostly clear glass, some brown

Sediment Smear Slide / Thin Section Description Sheet

Date 12/19/12

Expedition: 338

Observer: KLM

Site: C0002 Hole: J Core: 3R Sect.: 1 Interval: 41

Sediment Name: silty claystone

Smear Slide	Thin Section	Coarse Feaction	Grain Mounrt
✓			

Select one and check.

Granular Sediment		Chemical Sediment	
Siliciclastic	Volcaniclastic	Peragic	Neritic
✓			

Select one and check.

Percent Texture		
Sand	Silt	Clay
10	35	55

Select one and check.

Percent	Composition
	Siliclastic Grain
	Minerals
30 (	Quartz
	Feldspars
	Micas
	Ferromagnesian Minerals
	Glauconite
40	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
5	Vitric Grain

Percent	Composition
	Pelagic Grain
	Calcareous Grain
10	Nannofossils
	Foraminifers
	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 Graing
	Sideritic Graing

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

Fill percentage (Total must be 100).

Remarks: from layer w/ obvious glauc. grains

Sediment Smear Slide / Thin Section Description Sheet

Date 12/9/12

Expedition: 338

Observer: KCM

Site: C0002 Hole: J Core: 3R Sect.: 6 Interval: 12

Sediment Name: silty claystone (dominant lithol)

Smear Slide	Thin Section	Coarse Feaction	Grain Mounrt
✓			

Select one and check.

Granular Sediment		Chemical Sediment	
Siliciclastic	Volcaniclastic	Peragic	Neritic
✓			

Select one and check.

Percent Texture		
Sand	Silt	Clay
0	25	75

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Siliclastic Grain		Pelagic Grain		Others
	Minerals		Calcareous Grain		Gypsiferous Grain
25	Quartz	5	Nannofossils	2	Calcareous Grain
	Feldspars		Foraminifers		Sapropelic Grain
	Micas		Siliceous Grain		Mn Nodules/ Crusts
	Ferromagnesian Minerals		Diatom		Pyrite Grain
	Glauconite		Radiolarians		Opaque Grain
65	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 Fragment		
	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				
3	Vitric Grain				

Fill percentage (Total must be 100).

Remarks:

Sediment Smear Slide / Thin Section Description Sheet

Date 12/19/12

Expedition: 338 Observer: Kum

Site: C0002 Hole: J Core: 3R Sect.: 6 Interval: 33

Sediment Name: silty claystone

Smear Slide	Thin Section	Coarse Feaction	Grain Mounrt
✓			

Select one and check.

Granular Sediment			Chemical Sediment	
Siliciclastic	Volcaniclastic		Peragic	Neritic
✓				

Select one and check.

Percent Texture		
Sand	Silt	Clay
0	30	70

Select one and check.

Percent	Composition
	Siliclastic Grain
	Minerals
30	Quartz
	Feldspars
	Micas
	Ferromagnesian Minerals
	Glauconite
40	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
3	Vitric Grain

Percent	Composition
	Pelagic Grain
	Calcareous Grain
15	Nannofossils
R	Foraminifers
	Siliceous Grain
	Diatom
1	Radiolarians
	Sillicoflagellates
1	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 Graing
	Sideritic Graing

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

Fill percentage (Total must be 100).

Remarks: greenish band

Sediment Smear Slide / Thin Section Description Sheet

Date 12/20/12

Expedition: 338 Observer: KLM

Site: C0002 Hole: J Core: 4R Sect.: 3 Interval: 5

Sediment Name: silty claystone (dominant lithol)

Smear Slide	Thin Section	Coarse Feaction	Grain Mounrt
✓			

Select one and check.

Granular Sediment		Chemical Sediment	
Siliciclastic	Volcaniclastic	Peragic	Neritic
✓			

Select one and check.

Percent Texture		
Sand	Silt	Clay
	35	65

Select one and check.

Percent	Composition
	Siliclastic Grain
	Minerals
29	Quartz
29	Feldspars
	Micas
	Ferromagnesian Minerals
	Glauconite
50	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
3	Vitric Grain

Percent	Composition
	Pelagic Grain
	Calcareous Grain
10	Nannofossils
	Foraminifers
	Siliceous Grain
	Diatom
1	Radiolarians
	Sillicoflagellates
1	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 Graing
	Sideritic Graing

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

Fill percentage (Total must be 100).

Remarks: notable increasing abundance of biosiliceous debris; rather comminuted

Sediment Smear Slide / Thin Section Description Sheet

Date 12/20/12

Expedition: 338 Observer: KLM

Site: C0002 Hole: J Core: 4R Sect.: 4 Interval: 3

Sediment Name: silty claystone

Smear Slide	Thin Section	Coarse Feaction	Grain Mounrt

Select one and check.

Granular Sediment		Chemical Sediment	
Siliciclastic	Volcaniclastic	Peragic	Neritic

Select one and check.

Percent Texture		
Sand	Silt	Clay
	45	55

Select one and check.

Percent	Composition
	Siliclastic Grain
	Minerals
38	Quartz
	Feldspars
	Micas
	Ferromagnesian Minerals
	Glauconite
40	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
2	Vitric Grain

Percent	Composition
	Pelagic Grain
	Calcareous Grain
10	Nannofossils
	Foraminifers
	Siliceous Grain
1	Diatom
1	Radiolarians
	Sillicoflagellates
1	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 Graing
	Sideritic Graing

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

Fill percentage (Total must be 100).

Remarks: dark fragments - large grandes

not clear why this lithol. forms fragments - no obvious cement

Sediment Smear Slide / Thin Section Description Sheet

Date 12/20/12

Expedition: 338 Observer: KLM

Site: C0002 Hole: J Core: 4 R Sect.: 4 Interval: 66

Sediment Name: silty claystone

Smear Slide	Thin Section	Coarse Feaction	Grain Mounrt
✓			

Select one and check.

Granular Sediment		Chemical Sediment	
Siliciclastic	Volcaniclastic	Peragic	Neritic
✓			

Select one and check.

Percent Texture		
Sand	Silt	Clay
	35	65

Select one and check.

Percent	Composition
	Siliclastic Grain
	Minerals
40	Quartz
	Feldspars
	Micas
	Ferromagnesian Minerals
	Glauconite
35	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
1	Vitric Grain

Percent	Composition
	Pelagic Grain
	Calcareous Grain
15	Nannofossils
	Foraminifers
	Siliceous Grain
	Diatom
1	Radiolarians
	Sillicoflagellates
1	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 Graing
	Sideritic Graing

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

Fill percentage (Total must be 100).

Remarks: greenish layer w/ glauc. sd/granules

Sediment Smear Slide / Thin Section Description Sheet

Date 12/20/12

Expedition: 338 Observer: KLM

Site: C0002 Hole: J Core: 4R Sect.: 4 Interval: 67

Sediment Name:

Smear Slide	Thin Section	Coarse Feaction	Grain Mounrt

Select one and check.

Granular Sediment		Chemical Sediment	
Siliciclastic	Volcaniclastic	Peragic	Neritic

Select one and check.

Percent Texture		
Sand	Silt	Clay
	25	75

Select one and check.

Percent	Composition
	Siliclastic Grain
	Minerals
25	Quartz
	Feldspars
	Micas
	Ferromagnesian Minerals
	Glauconite
65	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
5	Nannofossils
	Foraminifers
	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 Graing
	Sideritic Graing

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

Fill percentage (Total must be 100).

Remarks: black granule → pale green color suggests a glauconized silty claystone

Sediment Smear Slide / Thin Section Description Sheet

Date: 12/20/12

Expedition: 338

Observer: KLM

Site: C0002 Hole: J Core: 4R Sect.: 5 Interval: 36

Sediment Name: epiclastic silty claystone

Smear Slide	Thin Section	Coarse Feaction	Grain Mounrt

Select one and check.

Granular Sediment		Chemical Sediment	
Siliciclastic	Volcaniclastic	Peragic	Neritic

Select one and check.

Percent Texture		
Sand	Silt	Clay
10	35	55

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Siliclastic Grain		Pelagic Grain		Others
	Minerals		Calcareous Grain		Gypsiferous Grain
19	Quartz	10	Nannofossils	3	Calcareous Grain
	Feldspars		Foraminifers		Sapropelic Grain
	Micas		Siliceous Grain		Mn Nodules/ Crusts
	Ferromagnesian Minerals	4	Diatom	5	Pyrite Grain
	Glauconite	3	Radiolarians		Opaque Grain
40	Clay Minerals		Sillicoflagellates		
	Zeolites	3	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 Fragment		
3	Pumice		Peloid		
	Volcaniclastic Lithic Grain		Pisolite		
	Picritic Lithic Grain		Calcareous Grain		
2	Basaltic Lithic Grain		Dolomitic Grain		
	Andesitic Lithic Grain		Araginitic Graing		
	Dacitic Lithic Grain		Sideritic Graing		
	Rholitic Lithic Grain				
	Crystal Grain				
5	Vitric Grain				

Fill percentage (Total must be 100).

Remarks: dark lithol – patchy distrib
includes pumice, brown glass, + microlitic VRFs

Sediment Smear Slide / Thin Section Description Sheet

Date 12/20/12

Expedition: 338 Observer: KLM

Site: C0002 Hole: J Core: 5R Sect.: 1 Interval: 10

Sediment Name: Silty claystone (dominant lithal)

Smear Slide	Thin Section	Coarse Feaction	Grain Mounrt
✓			

Select one and check.

Granular Sediment		Chemical Sediment	
Siliciclastic	Volcaniclastic	Peragic	Neritic
✓			

Select one and check.

Percent Texture		
Sand	Silt	Clay
	25	75

Select one and check.

Percent	Composition
	Siliclastic Grain
	Minerals
15	Quartz
	Feldspars
	Micas
	Ferromagnesian Minerals
	Glauconite
55	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
10	Vitric Grain

Percent	Composition
	Pelagic Grain
	Calcareous Grain
15	Nannofossils
	Foraminifers
	Siliceous Grain
	Diatom
1	Radiolarians
	Sillicoflagellates
1	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 Graing
	Sideritic Graing

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

Fill percentage (Total must be 100).

Remarks:

Sediment Smear Slide / Thin Section Description Sheet

Date 12/20/12

Expedition: 338 Observer: KLM

Site: C0002 Hole: J Core: 5R Sect.: 3 Interval: 0

Sediment Name: fine ash

Smear Slide	Thin Section	Coarse Feaction	Grain Mounrt
✓			

Select one and check.

Granular Sediment		Chemical Sediment	
Siliciclastic	Volcaniclastic	Peragic	Neritic
✓			

Select one and check.

Percent Texture		
Sand	Silt	Clay
20	80	

Select one and check.

Percent	Composition
	Siliclastic Grain
	Minerals
5	Quartz
5	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
10	Pumice
	Volcaniclastic Lithic Grain
	Picritic Lithic Grain
	Basaltic Lithic Grain
	Andesitic Lithic Grain
	Dacitic Lithic Grain
	Rholitic Lithic Grain
85	Crystal Grain
	Vitric Grain

Percent	Composition
	Pelagic Grain
	Calcareous Grain
	Nannofossils
	Foraminifers
	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 Graing
	Sideritic Graing

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

Fill percentage (Total must be 100).

Remarks:

Sediment Smear Slide / Thin Section Description Sheet

Date 12/20/12

Expedition: 338 Observer: KLM

Site: C0002 Hole: J Core: 5R Sect.: 6 Interval: 20

Sediment Name: silty claystone (don_lithol)

Smear Slide	Thin Section	Coarse Feaction	Grain Mounrt
✓			

Select one and check.

Granular Sediment		Chemical Sediment	
Siliciclastic	Volcaniclastic	Peragic	Neritic
✓			

Select one and check.

Percent Texture		
Sand	Silt	Clay
	35	65

Select one and check.

Percent	Composition
	Siliclastic Grain
	Minerals
25	Quartz
	Feldspars
	Micas
	Ferromagnesian Minerals
	Glauconite
45	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
5	Vitric Grain

Percent	Composition
	Pelagic Grain
	Calcareous Grain
15	Nannofossils
	Foraminifers
	Siliceous Grain
	Diatom
3	Radiolarians
	Sillicoflagellates
2	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 Graing
	Sideritic Graing

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

Fill percentage (Total must be 100).

Remarks:

Sediment Smear Slide / Thin Section Description Sheet

Date 12/20/12

Expedition: 338 Observer: KLM

Site: C0002 Hole: J Core: 5 Sect.: 6 Interval: 81

Sediment Name: silty claystone

Smear Slide	Thin Section	Coarse Feaction	Grain Mounrt
✓			

Select one and check.

Granular Sediment		Chemical Sediment	
Siliciclastic	Volcaniclastic	Peragic	Neritic
✓			

Select one and check.

Percent Texture		
Sand	Silt	Clay
	25	75

Select one and check.

Percent	Composition
	Siliclastic Grain
	Minerals
13	Quartz
	Feldspars
	Micas
	Ferromagnesian Minerals
	Glauconite
60	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
5	Vitric Grain

Percent	Composition
	Pelagic Grain
	Calcareous Grain
10	Nannofossils
	Foraminifers
	Siliceous Grain
	Diatom
3	Radiolarians
	Sillicoflagellates
2	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 Graing
	Sideritic Graing

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

Fill percentage (Total must be 100).

Remarks: wavy clay laminae → microbial mats?

Sediment Smear Slide / Thin Section Description Sheet

Date: 12/20/12

Expedition: 338 Observer: KLM

Site: C0002 Hole: J Core: 5 Sect.: 7 Interval: 21

Sediment Name: fine ash

Smear Slide	Thin Section	Coarse Feaction	Grain Mounrt
✓			

Select one and check.

Granular Sediment		Chemical Sediment	
Siliciclastic	Volcaniclastic	Peragic	Neritic
✓			

Select one and check.

Percent Texture		
Sand	Silt	Clay
20	80	

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Siliclastic Grain		Pelagic Grain		Others
	Minerals		Calcareous Grain		Gypsiferous Grain
3 (	Quartz		Nannofossils		Calcareous Grain
	Feldspars		Foraminifers		Sapropelic Grain
	Micas		Siliceous Grain		Mn Nodules/ Crusts
	Ferromagnesian Minerals		Diatom	2	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 Fragment		
5	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				
90	Vitric Grain				

Fill percentage (Total must be 100).

Remarks: ~1 cm patch w/ py rim - burrow fill ?

Sediment Smear Slide / Thin Section Description Sheet

Date 12/20/12

Expedition: 338 Observer: KLM

Site: C0002 Hole: J Core: 5R Sect.: 8 Interval: 90

Sediment Name: sdy silty claystone

Smear Slide	Thin Section	Coarse Feaction	Grain Mounrt
✓			

Select one and check.

Granular Sediment		Chemical Sediment	
Siliciclastic	Volcaniclastic	Peragic	Neritic
✓			

Select one and check.

Percent Texture		
Sand	Silt	Clay
20	35	45

Select one and check.

Percent	Composition
	Siliclastic Grain
	Minerals
40	Quartz
	Feldspars
	Micas
	Ferromagnesian Minerals
	Glauconite
35	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
5	Nannofossils
	Foraminifers
	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 Graing
	Sideritic Graing

Percent	Composition
	Others
	Gypsiferous Grain
	Calcareous Grain
	Sapropelic Grain
	Mn Nodules/ Crusts
10	Pyrite Grain
10	Opaque Grain ?
F	glauconite

Fill percentage (Total must be 100).

Remarks: did not disaggregate well - possibly more glauconite

Sediment Smear Slide / Thin Section Description Sheet

Date 12/20/12

Expedition: 338

Observer: KLM

Site: 0002 Hole: J Core: 5R Sect.: 8 Interval: TOC

Sediment Name: silty claystone

Smear Slide	Thin Section	Coarse Feaction	Grain Mounrt
✓			

Select one and check.

Granular Sediment		Chemical Sediment	
Siliciclastic	Volcaniclastic	Peragic	Neritic
✓			

Select one and check.

Percent Texture		
Sand	Silt	Clay
2	25	73

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Siliclastic Grain		Pelagic Grain		Others
	Minerals		Calcareous Grain		Gypsiferous Grain
30	Quartz	3	Nannofossils	1	Calcareous Grain
	Feldspars		Foraminifers		Sapropelic Grain
	Micas		Siliceous Grain		Mn Nodules/ Crusts
	Ferromagnesian Minerals		Diatom	1	Pyrite Grain
	Glauconite		Radiolarians		Opaque Grain
65	Clay Minerals		Sillicoflagellates		
	Zeolites		Sponge Spicule	F	red-brown OM
R	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 Fragment		
	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: 1st clay of distinctly lower carb, no glauc., little glass

Sediment Smear Slide / Thin Section Description Sheet

Date 12/20/12

Expedition: 338 Observer: KLM

Site: C0002 Hole: J Core: 5R Sect.: 8 Interval: 110

Sediment Name: silty sandstone

Smear Slide	Thin Section	Coarse Feaction	Grain Mounrt
✓			

Select one and check.

Granular Sediment		Chemical Sediment	
Siliciclastic	Volcaniclastic	Peragic	Neritic
✓			

Select one and check.

Percent Texture		
Sand	Silt	Clay
70	20	10

Select one and check.

Percent	Composition
	Siliclastic Grain
	Minerals
80	Quartz
	Feldspars
	Micas
	Ferromagnesian Minerals
	Glauconite
10	Clay Minerals
	Zeolites
	Heavy Minerals
	Pyrite
	Phospholite
	Aragonite
	Calcite
	Oolites
	Lithic Grain
	Sedimentary Lithic Grain
	Igneous Lithic Grain
10	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
	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 Graing
	Sideritic Graing

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

Fill percentage (Total must be 100).

Remarks: admixed daystone pieces?

Sediment Smear Slide / Thin Section Description Sheet

Date 12/20/12

Expedition: 338 Observer: KLM

Site: C0002 Hole: J Core: 5R Sect.: 8 Interval: 124

Sediment Name: Clayey silty sandstone

Smear Slide	Thin Section	Coarse Feaction	Grain Mounrt
✓			

Select one and check.

Granular Sediment		Chemical Sediment	
Siliciclastic	Volcaniclastic	Peragic	Neritic
✓			

Select one and check.

Percent Texture		
Sand	Silt	Clay
50	30	20

Select one and check.

Percent	Composition
	Siliclastic Grain
	Minerals
60	Quartz
	Feldspars
1	Micas
	Ferromagnesian Minerals
	Glauconite
20	Clay Minerals
	Zeolites
2	Heavy Minerals
	Pyrite
	Phospholite
	Aragonite
	Calcite
	Oolites
	Lithic Grain
	Sedimentary Lithic Grain
	Igneous Lithic Grain
15	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
F	Vitric Grain

Percent	Composition
	Pelagic Grain
	Calcareous Grain
	Nannofossils
	Foraminifers
	Siliceous Grain
	Diatom
	Radiolarians
	Sillicoflagellates
F	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 Graing
	Sideritic Graing

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

Fill percentage (Total must be 100).

Remarks: V. diverse dense min. assemblage — blue ones!

Sediment Smear Slide / Thin Section Description Sheet

Date 12/20/12

Expedition: 338 Observer: KCM

Site: C0002 Hole: J Core: 5R Sect.: 1 CC Interval: 2

Sediment Name: Sandstone (made 2 slides)

Smear Slide	Thin Section	Coarse Feaction	Grain Mounrt
✓			

Select one and check.

Granular Sediment		Chemical Sediment	
Siliciclastic	Volcaniclastic	Peragic	Neritic
✓			

Select one and check.

Percent Texture		
Sand	Silt	Clay
100		

Select one and check.

Percent	Composition
	Siliclastic Grain
	Minerals
65	Quartz
	Feldspars
	Micas
	Ferromagnesian Minerals
	Glauconite
	Clay Minerals
	Zeolites
2	Heavy Minerals
	Pyrite
	Phospholite
	Aragonite
	Calcite
	Oolites
	Lithic Grain
	Sedimentary Lithic Grain
	Igneous Lithic Grain
30	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
	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 Graing
	Sideritic Graing

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

Fill percentage (Total must be 100).

Remarks:

Sediment Smear Slide / Thin Section Description Sheet

Date 12/20/12

Expedition: 338 Observer: KLM

Site: C0002 Hole: J Core: 6R Sect.: 1 Interval: 20

Sediment Name: sandy claystone (micrite)

Smear Slide	Thin Section	Coarse Feaction	Grain Mounrt
✓			

Select one and check.

Granular Sediment		Chemical Sediment	✓
Siliciclastic	Volcaniclastic	Peragic	Neritic

Select one and check.

Percent Texture		
Sand	Silt	Clay
30	c	70

Select one and check.

Percent	Composition
	Siliclastic Grain
	Minerals
30	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
	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
	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 Graing
	Sideritic Graing

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

Fill percentage (Total must be 100).

Remarks: many undisagr. chunks of micritic sandstone

Sediment Smear Slide / Thin Section Description Sheet

Date 12-20-12

Expedition: 338 Observer: KLM

Site: C0002 Hole: J Core: 6 Sect.: 1 Interval: 30

Sediment Name: silty sandstone

Smear Slide	Thin Section	Coarse Feaction	Grain Mounrt
✓			

Select one and check.

Granular Sediment		Chemical Sediment	
Siliciclastic	Volcaniclastic	Peragic	Neritic
✓			

Select one and check.

Percent Texture		
Sand	Silt	Clay
75	20	5

Select one and check.

Percent	Composition
	Siliclastic Grain
	Minerals
87	Quartz
	Feldspars
	Micas
	Ferromagnesian Minerals
	Glauconite
5	Clay Minerals
	Zeolites
1	Heavy Minerals
	Pyrite
	Phospholite
	Aragonite
	Calcite
	Oolites
	Lithic Grain
	Sedimentary Lithic Grain
	Igneous Lithic Grain
10	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
	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 Graing
	Sideritic Graing

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

Fill percentage (Total must be 100).

Remarks: clay admixed by drilling?

Sediment Smear Slide / Thin Section Description Sheet

Date 12/20/12

Expedition: 338

Observer: KUM

Site: C0002 Hole: J Core: 6R Sect.: CC Interval: 6

Sediment Name: Silty Sandstone

Smear Slide	Thin Section	Coarse Feaction	Grain Mounrt
✓			

Select one and check.

Granular Sediment		Chemical Sediment	
Siliciclastic	Volcaniclastic	Peragic	Neritic
✓			

Select one and check.

Percent Texture		
Sand	Silt	Clay
70	30	

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Siliclastic Grain		Pelagic Grain		Others
	Minerals		Calcareous Grain		Gypsiferous Grain
70	Quartz		Nannofossils		Calcareous Grain
	Feldspars		Foraminifers		Sapropelic Grain
	Micas		Siliceous Grain		Mn Nodules/ Crusts
	Ferromagnesian Minerals		Diatom	2	Pyrite Grain
	Glauconite		Radiolarians		Opaque Grain
	Clay Minerals		Sillicoflagellates		
	Zeolites		Sponge Spicule		
3	Heavy Minerals				
	Pyrite				
	Phospholite				
	Aragonite		Neritic Grain		
	Calcite		Ooid		
	Oolites		Spherical Particles		
	Lithic Grain		Elliptical Particles		
	Sedimentary Lithic Grain		Bioclast		
	Igneous Lithic Grain		Molluscan		
25	Metamorphic Lithic Grain		Algal		
			Pellet		
			Molluscs		
			Echinoderms		
	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 Graing		
	Dacitic Lithic Grain		Sideritic Graing		
	Rholitic Lithic Grain				
	Crystal Grain				
	Vitric Grain				

Fill percentage (Total must be 100).

Remarks:

Sediment Smear Slide / Thin Section Description Sheet

Date 12-20-12

Expedition: 338 Observer: KLM

Site: C0002 Hole: J Core: 7R Sect.: 1 Interval: 26

Sediment Name: clayey volcaniclastic siltstone.

Smear Slide	Thin Section	Coarse Feaction	Grain Mounrt
✓			

Select one and check.

Granular Sediment		Chemical Sediment	
Siliciclastic	Volcaniclastic	Peragic	Neritic
✓			

Select one and check.

Percent Texture		
Sand	Silt	Clay
	60	40

Select one and check.

Percent	Composition
	Siliclastic Grain
	Minerals
10	Quartz
10	Feldspars
	Micas
	Ferromagnesian Minerals
	Glauconite
35	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
45	Vitric Grain

Percent	Composition
	Pelagic Grain
	Calcareous Grain
5	Nannofossils
	Foraminifers
	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 Graing
	Sideritic Graing

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

Fill percentage (Total must be 100).

Remarks:

Sediment Smear Slide / Thin Section Description Sheet

Date 12-20-12

Expedition: 338 Observer: Kem

Site: C0002 Hole: J Core: 7R Sect.: 1 Interval: 50

Sediment Name: Volcanicl. Sandstone

Smear Slide	Thin Section	Coarse Feaction	Grain Mounrt

Select one and check.

Granular Sediment		Chemical Sediment	
Siliciclastic	Volcaniclastic	Peragic	Neritic

Select one and check.

Percent Texture		
Sand	Silt	Clay
85	15	

Select one and check.

Percent	Composition
	Siliclastic Grain
	Minerals
75	Quartz
	Feldspars
2	Micas
	Ferromagnesian Minerals
	Glauconite
	Clay Minerals
	Zeolites
1	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
20	Vitric Grain

Percent	Composition
	Pelagic Grain
	Calcareous Grain
	Nannofossils
	Foraminifers
	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 Graing
	Sideritic Graing

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

Fill percentage (Total must be 100).

Remarks: in this sample— granules of extremely bubbly pumice

Sediment Smear Slide / Thin Section Description Sheet

Date 12-20-12

Expedition: 338 Observer: KLM

Site: C0002 Hole: J Core: 7R Sect.: 1 Interval: 92

Sediment Name: silty claystone

Smear Slide	Thin Section	Coarse Feaction	Grain Mounrt
✓			

Select one and check.

Granular Sediment		Chemical Sediment	
Siliciclastic	Volcaniclastic	Peragic	Neritic
✓			

Select one and check.

Percent Texture		
Sand	Silt	Clay
	25	75

Select one and check.

Percent	Composition
	Siliclastic Grain
	Minerals
30	Quartz
	Feldspars
	Micas
	Ferromagnesian Minerals
	Glauconite
60	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
10	Nannofossils
	Foraminifers
	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 Graing
	Sideritic Graing

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

Fill percentage (Total must be 100).

Remarks:

Sediment Smear Slide / Thin Section Description Sheet

Date 12/20/12

Expedition: 338 Observer: KLM

Site: C0002 Hole: J Core: 7R Sect.: 2 Interval: 45

Sediment Name: silty claystone

Smear Slide	Thin Section	Coarse Feaction	Grain Mounrt
✓			

Select one and check.

Granular Sediment		Chemical Sediment	
Siliciclastic	Volcaniclastic	Peragic	Neritic
✓			

Select one and check.

Percent Texture		
Sand	Silt	Clay
	40	60

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Siliclastic Grain		Pelagic Grain		Others
	Minerals		Calcareous Grain		Gypsiferous Grain
38 (	Quartz		Nannofossils		Calcareous Grain
	Feldspars		Foraminifers		Sapropelic Grain
	Micas		Siliceous Grain		Mn Nodules/ Crusts
	Ferromagnesian Minerals		Diatom	2	Pyrite Grain
	Glauconite		Radiolarians		Opaque Grain
55	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 Fragment		
	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				
5	Vitric Grain				

Fill percentage (Total must be 100).

Remarks: