

Sediment Smear Slide / Thin Section Description Sheet

Date 12/17/12

Expedition: 338 Observer: KLM

Site: C002 Hole: J Core: 1R Sect.: 1 Interval: 10

Sediment Name: silty chrystone

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment		Chemical Sediment		Percent Texture		
				Siliciclastic	Volcaniclastic	Peragic	Neritic	Sand	Silt	Clay
✓				✓				0	25	75

Select one and check.

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition	Percent	Composition
	Minerals		Calcareous Grain		Gypsiferous Grain		
29	Quartz	25	Nannofossils		Calcareous Grain		
	Feldspars	F	Foraminifers		Sapropelic Grain		
	Micas		Siliceous Grain		Mn Nodules/ Crusts		
	Ferromagnesian Minerals		Diatom		Pyrite Grain		
	Glauconite		Radiolarians		Opaque Grain		
45	Clay Minerals		Silicoflagellates				
	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				
			Others				
	Volcaniclastic Grain		Intraclast				
	Scoria / Pumice		Carbonate Rock Fragment				
	Scoria		Peloid				
	Pumice		Pisolite				
	Volcaniclastic Lithic Grain		Calcareous Grain				
	Pteritic Lithic Grain		Dolomitic Grain				
	Basaltic Lithic Grain		Araginitic Grain				
	Andesitic Lithic Grain		Sideritic Grain				
	Dacitic Lithic Grain						
	Rhyolitic Lithic Grain						
	Crystal Grain						
F	Vitric Grain						

Fill percentage (Total must be 100).

Remarks: does not dissolve except to Sulph

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 chertstone

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment		Chemical Sediment		Percent Texture		
				Siliciclastic	Volcaniclastic	Peragic	Neritic	Sand	Silt	Clay
✓				✓				0	25	75

Select one and check.

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition	Percent	Composition
27	Quartz	15	Calcareous Grain	2	Gypsiferous Grain		
	Feldspars		Nannofossils		Calcareous Grain		
	Micas		Foraminifers				
	Ferromagnesian Minerals		Siliceous Grain				
	Glauconite		Diatom				
	Clay Minerals		Radiolarians				
55	Zeolites	F	Silicoflagellates				
	Heavy Minerals		Sponge Spicule				
	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 Fragment				
	Scoria		Peloid				
	Pumice		Pisolite				
	Volcaniclastic Lithic Grain		Calcareous Grain				
	Pteritic Lithic Grain		Dolomitic Grain				
	Basaltic Lithic Grain		Araginitic Graing				
	Andesitic Lithic Grain		Sideritic Graing				
	Dacitic Lithic Grain						
	Rhyolitic Lithic Grain						
	Crystal Grain						
1	Vitric 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 Fraction	Grain Mount	Granular Sediment		Chemical Sediment		Percent Texture	
				Siliciclastic	Volcaniclastic	Peragic	Neritic	Sand	Silt
✓					✓			95	5

Select one and check.

Select one and check.

Select one and check.

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

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

Sediment Name: Silty claystone

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment		Chemical Sediment		Percent Texture		
				Siliciclastic	Volcaniclastic	Volcaniclastic	Peragic	Sand	Silt	Clay
								1	24	75

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
23	Quartz	30	Nannofossils	5	Calcareous Grain
	Feldspars		Foraminifers		Sapropelic Grain
	Micas		Siliceous Grain	1	Mn Nodules/ Crusts
	Ferromagnesian Minerals		Diatom		Pyrite Grain - <u>crystal</u>
40	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		
	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 Grain		
	Andesitic Lithic Grain		Sideritic Grain		
	Dacitic Lithic Grain				
	Rhyolitic Lithic Grain				
	Crystal Grain				
1	Vitric Grain				

Fill percentage (Total must be 100).

Remarks: dark bed-paral. l.l. 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 Fraction	Grain Mount	Granular Sediment		Chemical Sediment		Percent Texture			
					Siliciclastic	Volcaniclastic	Peragic	Neritic	Sand	Silt	Clay	
	✓				✓					2	23	75

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
25	Quartz	25	Nannofossils	3	Calcareous Grain
	Feldspars		Foraminifers		Sapropelic Grain
	Micas		Siliceous Grain		Mn Nodules/ Crusts
	Ferromagnesian Minerals		Diatom		Pyrite Grain
45	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 Fragment		
	Scoria		Peloid		
	Pumice		Pisolite		
	Volcaniclastic Lithic Grain		Calcareous Grain		
	Pteritic Lithic Grain		Dolomitic Grain		
	Basaltic Lithic Grain		Araginitic Graing		
	Andesitic Lithic Grain		Sideritic Graing		
	Dacitic Lithic Grain				
	Rholitic Lithic Grain				
	Crystal Grain				
2	Vitric 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: ZR Sect.: 1 Interval: 5

Sediment Name: very fine silty sandstone (minor lithol)

Smear Slide	Thin Section	Coarse Fraction	Grain Mount
✓			

Granular Sediment		Chemical Sediment	
Siliciclastic	Volcaniclastic	Peragic	Neritic
✓			

Percent Texture		
Sand	Silt	Clay
60	40	

Select one and check.

Select one and check.

Select one and check.

Percent	Composition
	Siliciclastic Grain
	Minerals
25	Quartz
	Feldspars
	Micas
	Ferromagnesian Minerals
	Glauconite
	Clay Minerals
2	Zeolites
	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
	Pieritic Lithic Grain
	Basaltic Lithic Grain
	Andesitic Lithic Grain
	Dacitic Lithic Grain
	Rhyolitic Lithic Grain
	Crystal Grain
5	Vitric Grain

Percent	Composition
	Pelagic Grain
	Calcareous Grain
	Nannofossils
	Foraminifers
	Siliceous Grain
	Diatom
	Radiolarians
	Silicoflagellates
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
	Aragonitic Grain
	Sideritic Grain

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

Fill percentage (Total must be 100).

Remarks: Some brown glass; also from most clear & unaltered

Sediment Smear Slide / Thin Section Description Sheet

Date 12/19/12

Expedition: 338 Observer: KLM

Site: C0002 Hole: 5 Core: 3R Sect.: 1 Interval: 41

Sediment Name: silly claystone

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

Select one and check.

Select one and check.

Select one and check.

Percent	Composition		Percent	Composition		Percent	Composition	
	Siliciclastic Minerals	Others		Pelagic Grain	Others		Others	Composition
	Quartz			Calcareous Grain			Gypsiferous Grain	
30	Feldspars		10	Nannofossils		5	Calcareous Grain	
	Micas			Foraminifers			Sapropelic Grain	
	Ferromagnesian Minerals			Siliceous Grain			Mn Nodules/ Crusts	
	Glauconite			Diatom			Pyrite Grain	
40	Clay Minerals			Radiolarians			Opaque Grain	
	Zeolites			Silicoflagellates		10	glauconite	
	Heavy Minerals			Sponge Spicule				
	Pyrite							
	Phospholite							
	Aragonite			Netritic 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 Fragment				
	Scoria			Peloid				
	Pumice			Pisolite				
	Volcaniclastic Lithic Grain			Calcareous Grain				
	Pteritic Lithic Grain			Dolomitic Grain				
	Basaltic Lithic Grain			Araginitic Grain				
	Andesitic Lithic Grain			Sideritic Grain				
	Dacitic Lithic Grain							
	Rhyolitic Lithic Grain							
	Crystal Grain							
5	Vitric Grain							

Fill percentage (Total must be 100).

Remarks: from layer w/ obvious glauc. grains

Sediment Smear Slide / Thin Section Description Sheet

Date 12/19/12

Expedition: 338 Observer: KCM

Site: C002 Hole: J Core: 3R Sect.: 6 Interval: 12

Sediment Name: silty claystone (dominant lithol)

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment		Chemical Sediment		Percent Texture		
				Siliciclastic	Volcaniclastic	Siliciclastic	Peragic	Sand	Silt	Clay
✓				✓				0	25	75

Select one and check.

Select one and check.

Select one and check.

Percent	Composition		Percent	Composition		Percent	Composition	
	Siliciclastic Grain	Minerals		Pelagic Grain	Calcareous Grain		Others	Gypsiferous Grain
25		Quartz	5		Nannofossils	2		
		Feldspars			Foraminifers			
		Micas			Siliceous Grain			
		Ferromagnesian Minerals			Diatom			
		Glauconite			Radiolarians			
65		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 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						
		Rhyolitic Lithic Grain						
		Crystal Grain						
3		Yitric 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: 3R Sect.: 4 Interval: 33

Sediment Name: silty claystone

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment		Chemical Sediment		Percent Texture		
				Siliciclastic	Volcaniclastic	Peragic	Neritic	Sand	Silt	Clay
✓				✓				0	30	70

Select one and check.

Select one and check.

Select one and check.

Percent	Siliciclastic Grain	Composition	Percent	Pelagic Grain	Composition	Percent	Others	Composition
	Quartz			Calcareous Grain				Gypsiferous Grain
	Feldspars		15	Nannofossils		10		Calcareous Grain
	Micas		12	Foraminifers				Sapropelic Grain
	Ferromagnesian Minerals			Siliceous Grain				Mn Nodules/ Crusts
	Glauconite		1	Diatom				Pyrite Grain
	Clay Minerals			Radiolarians				Opaque Grain
40	Zeolites			Silicoflagellates				
	Heavy Minerals			Sponge Spicule				
	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				
	Volcaniclastic Grain			Molluscs				
	Scoria / Pumice			Echinoderms				
	Scoria			Others				
	Pumice			Intraclast				
	Volcaniclastic Lithic Grain			Carbonate Rock Fragment				
	Pieritic Lithic Grain			Peloid				
	Basaltic Lithic Grain			Pisolite				
	Andesitic Lithic Grain			Calcareous Grain				
	Dacitic Lithic Grain			Dolomitic Grain				
	Rhyolitic Lithic Grain			Araginitic Graing				
	Crystal Grain			Sideritic Graing				
3	Vitric 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 Fraction	Grain Mount	Granular Sediment		Chemical Sediment		Percent Texture	
				Siliciclastic	Volcaniclastic	Peragic	Neritic	Sand	Silt
✓				✓				35	65

Select one and check.

Select one and check.

Select one and check.

Percent	Composition		Percent	Composition		Percent	Composition	
	Siliclastic Grain	Minerals		Pelagic Grain	Chemical Sediment		Others	Others
				Calcareous Grain				Gypsiferous Grain
29	Quartz		10	Nannofossils		5		Calcareous Grain
	Feldspars			Foraminifers				Sapropelic Grain
	Micas			Siliceous Grain		1		Mn Nodules/ Crusts
	Ferromagnesian Minerals			Diatom				Pyrite Grain
	Glaucanite		1	Radiolarians				Opaque Grain
50	Clay Minerals			Silicoflagellates				
	Zeolites		1	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 Fragment				
	Scoria			Peloid				
	Pumice			Pisolite				
	Volcaniclastic Lithic Grain			Calcareous Grain				
	Pieritic Lithic Grain			Dolomitic Grain				
	Basaltic Lithic Grain			Araginitic Grain				
	Andesitic Lithic Grain			Sideritic Grain				
	Dacitic Lithic Grain							
	Rhyolitic Lithic Grain							
	Crystal Grain							
3	Vitric Grain							

Fill percentage (Total must be 100).

Remarks: notable increasing abundance of biossilicious debris: rather comminuted

Sediment Smear Slide / Thin Section Description Sheet

Date 12/20/12

Expedition: 338

Observer: RUM

Site: C0002 Hole: J

Core: 4R Sect.: 4

Interval: 3

Sediment Name: silty claystone

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment		Chemical Sediment		Percent Texture			
				Siliciclastic	Volcaniclastic	Peragic	Neritic	Sand	Silt	Clay	
										45	55

Select one and check.

Select one and check.

Select one and check.

Percent	Composition		Percent	Composition		Percent	Composition	
	Siliciclastic Grain	Minerals		Pelagic Grain	Calcareous Grain		Others	Gypsiferous Grain
38	Quartz	Feldspars	10	Calcareous Grain		5		
	Micas	Ferromagnesian Minerals		Nannofossils				
40	Glaucinite			Foraminifers				
	Clay Minerals			Siliceous Grain		3		
	Zeolites			Diatom				
	Heavy Minerals			Radiolarians				
	Pyrite			Silicoflagellates				
	Phospholite			Sponge Spicule				
	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				
				Others				
	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 Grain				
	Andesitic Lithic Grain			Sideritic Grain				
	Dacitic Lithic Grain							
	Rhyolitic Lithic Grain							
	Crystal Grain							
2	Vitric Grain							

Fill percentage (Total must be 100).

Remarks: dark fragments - large granules
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: 4R Sect.: 4 Interval: 66

Sediment Name: silty claystone

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

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition	Percent	Composition
	Siliciclastic Grain		Pelagic Grain		Others		Composition
	Minerals		Calcareous Grain		Gypsiferous Grain		
40	Quartz	15	Nannofossils		Calcareous Grain	10	
	Feldspars		Foraminifers				
	Micas		Siliceous Grain		Sapropelic Grain		
	Ferromagnesian Minerals		Diatom		Mn Nodules/ Crusts		
	Glauconite	1	Radiolarians		Pyrite Grain		
35	Clay Minerals		Silicoflagellates		Opaque Grain		
	Zeolites	1	Sponge Spicule				
	Heavy Minerals						
	Pyrite						
	Phospholite		Neritic Grain				
	Aragonite		Ooid				
	Calcite		Spherical Particles				
	Oolites		Elliptical Particles				
	Lithic Grain		Bioclast				
	Sedimentary Lithic Grain		Molluscan				
	Igneous Lithic Grain		Algal				
	Metamorphic Lithic Grain		Pellet				
			Molluscs				
			Echinoderms				
			Others				
	Volcaniclastic Grain		Intraclast				
	Scoria / Pumice		Carbonate Rock Fragment				
	Scoria		Peloid				
	Pumice		Pisolite				
	Volcaniclastic Lithic Grain		Calcareous Grain				
	Pierite Lithic Grain		Dolomitic Grain				
	Basaltic Lithic Grain		Araginitic Grain				
	Andesitic Lithic Grain		Sideritic Grain				
	Dacitic Lithic Grain						
	Rhyolitic Lithic Grain						
	Crystal Grain						
1	Vitric Grain						

Fill percentage (Total must be 100).

Remarks: greenish layer w/ glauc. sd/grades

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 Fraction	Grain Mount	Granular Sediment			Chemical Sediment		Percent Texture		
				Siliciclastic	Volcaniclastic	Peragic	Neritic	Sand	Silt	Clay	
										25	75

Select one and check.

Select one and check.

Select one and check.

Percent	Siliclastic Grain	Composition	Percent	Pelagic Grain	Composition	Percent	Others	Composition
	Quartz			Nannofossils			Calcareous Grain	
	Feldspars			Foraminifers			Sapropelic Grain	
	Micas			Siliceous Grain		5	Mn Nodules/ Crusts	
	Ferromagnesian Minerals			Diatom			Pyrite Grain	
	Glaucinite			Radiolarians			Opaque Grain	
65	Clay Minerals			Silicoflagellates				
	Zeolites			Sponge Spicule				
	Heavy Minerals							
	Pyrite							
	Phospholite			Neritic Grain				
	Aragonite			Ooid				
	Calcite			Spherical Particles				
	Oolites			Elliptical Particles				
	Lithic Grain			Bioclast				
	Sedimentary Lithic Grain			Molluscan				
	Igneous Lithic Grain			Algal				
	Metamorphic Lithic Grain			Pellet				
				Molluscs				
				Echinoderms				
				Others				
	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: 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: epidastic silty claystone

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

Select one and check.

Select one and check.

Select one and check.

Percent	Composition		Percent	Composition		Percent	Composition					
	Siliciclastic Grain	Minerals		Pelagic Grain	Calcareous Grain		Others	Gypsiferous Grain	Calcareous Grain	Sapropelic Grain	Mn Nodules/ Crusts	Pyrite Grain
19	Quartz	Feldspars	10	Calcareous Grain		3						
40	Micas	Ferromagnesian Minerals	4	Siliceous Grain		5						
	Glauconite		3	Diatom								
	Clay Minerals		3	Radiolarians								
	Zeolites			Silicoflagellates								
	Heavy Minerals			Sponge Spicule								
	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 Fragment								
3	Scoria			Peloid								
	Pumice			Pisolite								
	Volcaniclastic Lithic Grain			Calcareous Grain								
	Pieritic Lithic Grain			Dolomitic Grain								
2	Basaltic Lithic Grain			Aragonitic Grain								
	Andesitic Lithic Grain			Sideritic Grain								
	Dacitic Lithic Grain											
	Rhyolitic Lithic Grain											
	Crystal Grain											
5	Vitric Grain											

Fill percentage (Total must be 100).

Remarks: dark lithol - patchy distrib
includes Pumice, brown glass, & micritic 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 thal)

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

Select one and check.

Granular Sediment		Chemical Sediment	
Siliciclastic	Volcaniclastic	Peragic	Neritic
<input checked="" type="checkbox"/>			

Select one and check.

Percent Texture	
Sand	Clay
	<u>25 75</u>

Select one and check.

Percent	Composition
	Siliclastic Grain
	Minerals
<u>15</u>	Quartz
	Feldspars
	Micas
	Ferromagnesian Minerals
<u>55</u>	Glaucanite
	Clay Minerals
	Zeolites
	Heavy Minerals
	Pyrite
	Phosphoite
	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
	Rhyolitic Lithic Grain
	Crystal Grain
<u>10</u>	Vitric Grain

Percent	Composition
	Pelagic Grain
	Calcareous Grain
<u>15</u>	Nannofossils
	Foraminifers
	Siliceous Grain
	Diatom
	Radiolarians
	Silicoflagellates
	Sponge Spicules
	Neritic Grain
	Ooid
	Spherical Particles
	Elliptical Particles
	Bioclast
	Molluscan
	Algal
	Pellet
	Molluscs
	Echinoderms
	Others
	Intraclast
	Carbonate Rock Fragment
	Peloid
	Pisolite
	Calcareous Grain
	Dolomitic Grain
	Aragonitic Grain
	Sideritic Grain

Percent	Composition
	Others
	Gypsiferous Grain
<u>3</u>	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

Observer: KCM

Expedition: 338

Site: C0002 Hole: J Core: SR Sect: 3

Interval: 0

Sediment Name: fine ash

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Percent Texture		
				Siliciclastic	Volcaniclastic	Chemical Sediment	Sand	Silt	Clay
✓				✓			20	80	

Select one and check.

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition	Percent	Composition
50	Minerals		Calcareous Grain		Calcareous Grain		Gypsiferous Grain
	Quartz		Nannofossils		Nannofossils		Calcareous Grain
	Feldspars		Foraminifers		Foraminifers		Sapropelic Grain
	Micas		Siliceous Grain		Siliceous Grain		Mn Nodules/ Crusts
	Ferromagnesian Minerals		Diatom		Diatom		Pyrite Grain
	Glaucanite		Radiolarians		Radiolarians		Opaque Grain
	Clay Minerals		Silicoflagellates		Silicoflagellates		
	Zeolites		Sponge Spicule		Sponge Spicule		
	Heavy Minerals						
	Pyrite		Neritic Grain		Neritic Grain		
	Phospholite		Ooid		Ooid		
	Aragonite		Spherical Particles		Spherical Particles		
	Calcite		Elliptical Particles		Elliptical Particles		
	Oolites		Bioclast		Bioclast		
	Lithic Grain		Molluscan		Molluscan		
	Sedimentary Lithic Grain		Algal		Algal		
	Igneous Lithic Grain		Pellet		Pellet		
	Metamorphic Lithic Grain		Molluscs		Molluscs		
			Echinoderms		Echinoderms		
	Volcaniclastic Grain		Others		Others		
	Scoria / Pumice		Intraclast		Intraclast		
	Scoria		Carbonate Rock Fragment		Carbonate Rock Fragment		
10	Pumice		Peloid		Peloid		
	Volcaniclastic Lithic Grain		Pisolite		Pisolite		
	Picrotic Lithic Grain		Calcareous Grain		Calcareous Grain		
	Basaltic Lithic Grain		Dolomitic Grain		Dolomitic Grain		
	Andesitic Lithic Grain		Aragonitic Grain		Aragonitic Grain		
	Dacitic Lithic Grain		Sideritic Grain		Sideritic Grain		
	Rhyolitic Lithic Grain						
85	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: SR Sect.: 6

Interval: 20

Sediment Name: silty claystone (don't know)

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

Select one and check.

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition		Percent	Composition
			Pelagic Grain	Calcareous Grain		
	Siliclastic Grain					
	Minerals					
20	Quartz	15	Calcareous Grain			
	Feldspars		Nannofossils		5	Calcareous Grain
	Micas		Foraminifers			Sapropelic Grain
	Ferromagnesian Minerals		Siliceous Grain			Mn Nodules/ Crusts
	Glaucanite	3	Diatom			Pyrite Grain
	Clay Minerals		Radiolarians			Opaque Grain
45	Zeolites	2	Silicoflagellates			
	Heavy Minerals		Sponge Spicule			
	Pyrite					
	Phosphoite					
	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 Fragment			
	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					
	Rhyolitic Lithic Grain					
	Crystal Grain					
5	Vitric Grain					

Fill percentage (Total must be 100).

Remarks:

Sediment Smear Slide / Thin Section Description Sheet

Date 12/20/12

Expedition: 338

Observer: KCM

Site: C0002 Hole: J

Core: 5 Sect: 6

Interval: 81

Sediment Name: silty claystone

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

Granular Sediment		Chemical Sediment	
Siliciclastic	Volcaniclastic	Peragic	Neritic
<input checked="" type="checkbox"/>			

Percent Texture	
Sand	Clay
	<u>75</u>

Select one and check.

Select one and check.

Select one and check.

Percent	Composition
	Siliclastic Grain
	Minerals
<u>13</u>	Quartz
	Feldspars
	Micas
	Ferromagnesian Minerals
	Glaucanite
<u>60</u>	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
	Pieritic Lithic Grain
	Basaltic Lithic Grain
	Andesitic Lithic Grain
	Dacitic Lithic Grain
	Rhyolitic Lithic Grain
<u>5</u>	Crystal Grain
	Vitric Grain

Percent	Composition
	Pelagic Grain
	Calcareous Grain
<u>10</u>	Nannofossils
	Foraminifers
	Siliceous Grain
<u>3</u>	Diatom
	Radiolarians
<u>2</u>	Silicoflagellates
	Sponge Spicules
	Neritic Grain
	Ooid
	Spherical Particles
	Elliptical Particles
	Bioclast
	Molluscan
	Algal
	Pellet
	Molluscs
	Echinoderms
	Others
	Intraclast
	Carbonate Rock Fragment
	Peloid
	Pisolite
	Calcareous Grain
	Dolomitic Grain
	Aragonitic Grain
	Sideritic Grain

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

Fill percentage (Total must be 100).

Remarks: gray 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 Fraction	Grain Mount
<input checked="" type="checkbox"/>			

Select one and check.

Granular Sediment	Chemical Sediment	
	Siliciclastic	Volcaniclastic
<input checked="" type="checkbox"/>		

Select one and check.

Percent Texture	Sand	Silt	Clay
	<u>26</u>	<u>80</u>	

Select one and check.

Percent	Composition
	Siliclastic Grain
	Minerals
<u>36</u>	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
<u>5</u>	Pumice
	Volcaniclastic Lithic Grain
	Picrotic Lithic Grain
	Basaltic Lithic Grain
	Andesitic Lithic Grain
	Dacitic Lithic Grain
	Rhyolitic Lithic Grain
	Crystal Grain
<u>90</u>	Vitric Grain

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

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

Fill percentage (Total must be 100).

Remarks: ~1 cm patch w/ pyrite - brown fill?

Sediment Smear Slide / Thin Section Description Sheet

Date 17/20/12

Expedition: 338

Observer: KLM

Site: C0002

Hole: J

Core: SR

Seal: 8

Interval: 70

Sediment Name: sdy silty claystone

Smear Slide <input checked="" type="checkbox"/>	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Percent Texture			
				Siliclastic	Volcaniclastic	Chemical Sediment	Sand	Silt	Clay	
				✓				20	35	45

Select one and check.

Select one and check.

Select one and check.

Percent	Composition		Percent	Composition		Percent	Composition	
	Siliclastic Grain	Minerals		Pelagic Grain	Calcareous Grain		Others	Gypsiferous Grain
		Quartz		Calcareous Grain				
		Feldspars	5	Nannofossils				
		Micas		Foraminifers				
		Ferromagnesian Minerals		Siliceous Grain				
		Glaucanite		Diatom		10		
		Clay Minerals		Radiolarians		10		
35		Zeolites		Silicoflagellates				
		Heavy Minerals		Sponge Spicules				
		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 Fragment				
		Scoria		Peloid				
		Pumice		Pisolite				
		Volcaniclastic Lithic Grain		Calcareous Grain				
		Picrotic Lithic Grain		Dolomitic Grain				
		Basaltic Lithic Grain		Araginitic Grain				
		Andesitic Lithic Grain		Sideritic Grain				
		Dacitic Lithic Grain						
		Rhyolitic Lithic Grain						
		Crystal Grain						
		Vitric Grain						

Fill percentage (Total must be 100).

Remarks: did not dig quite well - possibly more glauconite

Sediment Smear Slide / Thin Section Description Sheet

Date 12/20/12

Expedition: 338 Observer: KLM

Site: 0002 Hole: J Core: SR Sect.: 8 Interval: 106

Sediment Name: silty claystone

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment		Chemical Sediment		Percent Texture		
				Siliciclastic	Volcaniclastic	Peragic	Neritic	Sand	Silt	Clay
✓				✓				2	25	73

Select one and check.

Select one and check.

Select one and check.

Percent	Composition		Percent	Composition		Percent	Composition	
	Siliciclastic Grain	Minerals		Pelagic Grain	Calcareous Grain		Others	Calcareous Grain
30	Quartz	Feldspars	3	Calcareous Grain		1	Calcareous Grain	
65	Micas	Ferromagnesian Minerals		Nannofossils			Sapropelic Grain	
72	Glauconite	Clay Minerals		Foraminifers		1	Mn Nodules/ Crusts	
	Zeolites	Heavy Minerals		Siliceous Grain			Pyrite Grain	
	Pyrite			Diatom			Opaque Grain	
	Phospholite			Radiolarians				
	Aragonite			Silicoflagellates		F		
	Calcite			Sponge Spicule				
	Oolites							
	Lithic Grain			Neritic Grain				
	Sedimentary Lithic Grain			Ooid				
	Igneous Lithic Grain			Spherical Particles				
	Metamorphic Lithic Grain			Elliptical Particles				
				Bioclast				
				Molluscan				
				Algal				
				Pellet				
				Molluscs				
				Echinoderms				
				Others				
	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			Aragonitic Grain				
	Andesitic Lithic Grain			Sideritic Grain				
	Dacitic Lithic Grain							
	Rhyolitic Lithic Grain							
	Crystal Grain							
	Vitric Grain							

Fill percentage (Total must be 100).

Remarks: 1st clay ab distinctly lower carb. no glau. little glass

Sediment Smear Slide / Thin Section Description Sheet

Date 12/20/12

Expedition: 338 Observer: KUM

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

Sediment Name: silty sandstone

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment		Chemical Sediment		Percent Texture		
				Siliciclastic	Volcaniclastic	Peragic	Neritic	Sand	Silt	Clay
✓				✓				70	20	10

Select one and check.

Select one and check.

Select one and check.

Percent	Siliciclastic Grain	Composition	Percent	Pelagic Grain	Composition	Percent	Others	Composition
	Quartz			Calcareous Grain			Gypsiferous Grain	
	Feldspars			Nannofossils			Calcareous Grain	
	Micas			Foraminifers			Sapropelic Grain	
	Ferromagnesian Minerals			Siliceous Grain			Mn Nodules/ Crusts	
	Glauconite			Diatom			Pyrite Grain	
10	Clay Minerals			Radiolarians			Opaque Grain	
	Zeolites			Silicoflagellates				
	Heavy Minerals			Sponge Spicule				
	Pyrite							
	Phospholite			Neritic Grain				
	Aragonite			Ooid				
	Calcite			Spherical Particles				
	Oolites			Elliptical Particles				
	Lithic Grain			Bioclast				
	Sedimentary Lithic Grain			Molluscan				
10	Igneous Lithic Grain			Algal				
	Metamorphic Lithic Grain			Pellet				
				Molluscs				
				Echinoderms				
				Others				
	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: admired claystone pieces?

Sediment Smear Slide / Thin Section Description Sheet

Date 12/20/12

Expedition: 338 Observer: KLM

Site: C0002 Hole: J Core: SR Sect.: 8 Interval: 124

Sediment Name: Clay silty sandstone

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment		Chemical Sediment		Percent Texture		
				Siliciclastic	Volcaniclastic	Peragic	Neritic	Sand	Silt	Clay
✓				✓				50	30	20

Select one and check. Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition
	Siliciclastic Grain		Pelagic Grain		Others
	Minerals		Calcareous Grain		Gypsiferous Grain
60	Quartz		Nannofossils		Calcareous Grain
	Feldspars		Foraminifers		Sapropelic Grain
1	Micas		Siliceous Grain	1	Mn Nodules/ Crusts
	Ferromagnesian Minerals		Diatom		Pyrite Grain
	Glaucconite		Radiolarians		Opaque Grain
20	Clay Minerals	F	Silicoflagellates		
	Zeolites		Sponge Spicule		
2	Heavy Minerals				
	Pyrite				
	Phospholite		Neritic Grain		
	Aragonite		Ooid		
	Calcite		Spherical Particles		
	Oolites		Elliptical Particles		
	Lithic Grain		Bioclast		
	Sedimentary Lithic Grain		Molluscan		
15	Igneous Lithic Grain		Algal		
	Metamorphic Lithic Grain		Pellet		
			Molluscs		
			Echinoderms		
			Others		
	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				
F	Yitric Grain				

Fill percentage (Total must be 100).

Remarks: v. diverse dense min. assemblage - blue area!

Sediment Smear Slide / Thin Section Description Sheet

Date 12/20/12

Expedition: 338

Observer: KCM

Site: C0002 Hole: J Core: SR Sect.: 1, CC

Interval: 2

Sediment Name: Sandstone (made 2 slides)

Smear Slide	Thin Section	Coarse Fraction	Grain Mount
✓			

Select one and check.

Granular Sediment		Chemical Sediment		Percent Texture	
Siliciclastic	Volcaniclastic	Peragic	Neritic	Sand	Clay
✓				100	

Select one and check.

Percent	Composition
	Siliclastic Grain
	Minerals
	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
	Pieritic Lithic Grain
	Basaltic Lithic Grain
	Andesitic Lithic Grain
	Dacitic Lithic Grain
	Rhyolitic Lithic Grain
	Crystal Grain
	Vitric Grain

Percent	Composition	Percent	Composition
	Pelagic Grain		Others
	Calcareous Grain		Gypsiferous Grain
	Nannofossils		Calcareous Grain
	Foraminifers		Sapropelic Grain
	Siliceous Grain		Mn Nodules/ Crusts
	Diatom		Pyrite Grain
	Radiolarians	3	Opaque Grain
	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		
	Aragonitic Grain		
	Sideritic 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

Sept.: 1

Interval: 20

Sediment Name: Sandy claystone (micrite)

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

Granular Sediment		Chemical Sediment	
Siliciclastic	Volcaniclastic	Peragic	Neritic
			<input checked="" type="checkbox"/>

Percent Texture		
Sand	Silt	Clay
<u>30</u>	<u>0</u>	<u>70</u>

Select one and check.

Select one and check.

Select one and check.

Percent	Composition
	Siliclastic Grain
	Minerals
<u>30</u>	Quartz
	Feldspars
	Micas
	Ferromagnesian Minerals
	Glaucanite
	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
	Pteritic Lithic Grain
	Basaltic Lithic Grain
	Andesitic Lithic Grain
	Dacitic Lithic Grain
	Rhyolitic 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 Fragment
	Peloid
	Pisolite
	Calcareous Grain
	Dolomitic Grain
	Aragonitic Grain
	Sideritic Grain

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

Fill percentage (Total must be 100).

Remarks: many indistinct chucks of micrite 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: Silly sandstone

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Chemical Sediment		Percent Texture		
				Siliciclastic	Volcaniclastic	Peragic	Peragic	Neritic	Sand	Silt	Clay
✓				✓					75	20	5

Select one and check.

Select one and check.

Percent	Composition		Percent	Composition		Percent	Composition	
	Siliciclastic Grain	Minerals		Pelagic Grain	Calcareous Grain		Others	Gypsiferous Grain
		Quartz		Calcareous Grain				
		Feldspars		Nannofossils				
		Micas		Foraminifers				
		Ferromagnesian Minerals		Siliceous Grain				
		Glaucanite		Diatom				
		Clay Minerals		Radiolarians				
		Zeolites		Silicoflagellates				
		Heavy Minerals		Sponge Spicule				
		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 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: 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 Fraction	Grain Mount	Granular Sediment			Percent Texture	
				Siliciclastic	Volcaniclastic	Chemical Sediment	Sand	Silt
✓				✓			70	30

Select one and check.

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition	Percent	Composition
70	Minerals		Calcareous Grain		Calcareous Grain		Gypsiferous Grain
	Quartz		Nannofossils		Nannofossils		Calcareous Grain
	Feldspars		Foraminifers		Foraminifers		Sapropelic Grain
	Micas		Siliceous Grain		Siliceous Grain	2	Mn Nodules/ Crusts
	Ferromagnesian Minerals		Diatom		Diatom		Pyrite Grain
	Glaucinite		Radiolarians		Radiolarians		Opaque Grain
	Clay Minerals		Silicoflagellates		Silicoflagellates		
	Zeolites		Sponge Spicules		Sponge Spicules		
3	Heavy Minerals						
	Pyrite		Neritic Grain		Neritic Grain		
	Phospholite		Ooid		Ooid		
	Aragonite		Spherical Particles		Spherical Particles		
	Calcite		Elliptical Particles		Elliptical Particles		
	Oolites		Bioclast		Bioclast		
	Lithic Grain		Molluscan		Molluscan		
	Sedimentary Lithic Grain		Algal		Algal		
25	Igneous Lithic Grain		Pellet		Pellet		
	Metamorphic Lithic Grain		Molluscs		Molluscs		
			Echinoderms		Echinoderms		
			Others		Others		
	Volcaniclastic Grain		Intraclast		Intraclast		
	Scoria / Pumice		Carbonate Rock Fragment		Carbonate Rock Fragment		
	Scoria		Peloid		Peloid		
	Pumice		Pisolite		Pisolite		
	Volcaniclastic Lithic Grain		Calcareous Grain		Calcareous Grain		
	Pteritic Lithic Grain		Dolomitic Grain		Dolomitic Grain		
	Basaltic Lithic Grain		Araginitic Graing		Araginitic Graing		
	Andesitic Lithic Grain		Sideritic Graing		Sideritic Graing		
	Dacitic Lithic Grain						
	Rhyolitic 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: C002

Hole: J

Core: 7R

Interval: 26

Sediment Name: clayey siltstone
volcaniclastic

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

Select one and check.

Granular Sediment	Chemical Sediment	
	Siliciclastic	Peragic
<input checked="" type="checkbox"/>		

Select one and check.

Percent Texture	Percent Texture	
	Sand	Clay
	<u>60</u>	<u>40</u>

Select one and check.

Percent	Composition
	Siliclastic Grain
	Minerals
<u>10</u>	Quartz
	Feldspars
	Micas
	Ferromagnesian Minerals
	Glauconite
<u>35</u>	Clay Minerals
	Zeolites
	Heavy Minerals
	Pyrite
	Phosphite
	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
	Rhyolitic Lithic Grain
	Crystal Grain
<u>45</u>	Vitric Grain

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

Percent	Composition
	Others
	Gypsiferous Grain
<u>5</u>	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: KUM

Site: C0002 Hole: J Core: FR Sect.: 1

Interval: 50

Sediment Name: Volcanic Sandstone

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment		Percent Texture	
				Siliciclastic	Chemical Sediment	Sand	Silt Clay
						<u>85</u>	<u>15</u>

Select one and check.

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition	Percent	Composition
	Minerals		Calcareous Grain		Gypsiferous Grain		Calcareous Grain
<u>75</u>	Quartz		Nannofossils				Sapropelic Grain
<u>15</u>	Feldspars		Foraminifers				Mn Nodules/ Crusts
<u>2</u>	Micas		Siliceous Grain			<u>2</u>	Pyrite Grain
	Ferromagnesian Minerals		Diatom				Opaque Grain
	Glauconite		Radiolarians				
	Clay Minerals		Silicoflagellates				
	Zeolites		Sponge Spicules				
<u>1</u>	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				
			Others				
	Volcaniclastic Grain		Intraclast				
	Scoria / Pumice		Carbonate Rock Fragment				
	Scoria		Peloid				
	Pumice		Pisolite				
	Volcaniclastic Lithic Grain		Calcareous Grain				
	Pteritic Lithic Grain		Dolomitic Grain				
	Basaltic Lithic Grain		Araginific Grain				
	Andesitic Lithic Grain		Sideritic Grain				
	Dacitic Lithic Grain						
	Rhyolitic Lithic Grain						
	Crystal Grain						
<u>20</u>	Vitric 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: C002 Hole: J Core: 7R Sect: 1

Interval: 92

Sediment Name: silty claystone

Smear Slide	Thin Section	Coarse Fraction	Grain Mount	Granular Sediment			Chemical Sediment		Percent Texture	
				Siliciclastic	Volcaniclastic	Peragic	Peragic	Neiritic	Sand	Silt
✓				✓					25	75

Select one and check.

Select one and check.

Select one and check.

Percent	Composition	Percent	Composition	Percent	Composition	Percent	Composition	Percent		Composition
								Others	Gypsiferous Grain	
	Siliclastic Grain		Pelagic Grain							
	Minerals		Calcareous Grain							
30	Quartz	10	Nannofossils							
	Feldspars		Foraminifers							
	Micas		Siliceous Grain							
	Ferromagnesian Minerals		Diatom							
	Glaucconite		Radiolarians							
60	Clay Minerals		Silicoflagellates							
	Zeolites		Sponge Spicule							
	Heavy Minerals									
	Pyrite		Neiritic 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							
	Volcaniclastic Grain		Others							
	Scoria / Pumice		Intraclast							
	Scoria		Carbonate Rock Fragment							
	Pumice		Peloid							
	Volcaniclastic Lithic Grain		Pisolite							
	Picrotic Lithic Grain		Calcareous Grain							
	Basaltic Lithic Grain		Dolomitic Grain							
	Andesitic Lithic Grain		Araginitic Graing							
	Dacitic Lithic Grain		Sideritic Graing							
	Rhyolitic 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: C002 Hole: J Core: FR Sect.: 2

Interval: 45

Sediment Name: silty claystone

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

Select one and check.

Select one and check.

Select one and check.

Percent	Composition		Percent	Composition		Percent	Composition	
	Siliciclastic Grain	Minerals		Pelagic Grain	Calcareous Grain		Others	Gypsiferous Grain
90		Quartz		Calcareous Grain				
90		Feldspars		Nannofossils				
		Micas		Foraminifers				
		Ferromagnesian Minerals		Siliceous Grain		2		
		Glauconite		Diatom				
55		Clay Minerals		Radiolarians				
		Zeolites		Silicoflagellates				
		Heavy Minerals		Sponge Spicule				
		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 Fragment				
		Scoria		Peloid				
		Pumice		Pisolite				
		Volcaniclastic Lithic Grain		Calcareous Grain				
		Pteritic Lithic Grain		Dolomitic Grain				
		Basaltic Lithic Grain		Aragonitic Grain				
		Andesitic Lithic Grain		Sideritic Grain				
		Dacitic Lithic Grain						
		Rhyolitic Lithic Grain						
		Crystal Grain						
		Vitric Grain						

Fill percentage (Total must be 100).

Remarks: