

Sediment Smear Slide / Thin Section Description Sheet

Date 11/05/12

Expedition: 315

Observer: KLM

Site: C0002 Hole: B Core: 49R Sect.: 4

Interval: 22

Sediment Name: Silty claystone

Smear Slide	Thin Section	Coarse Fraction	Grain Mount
✓			

Select one and check.

Granular Sediment		Chemical Sediment	
Siliciclastic	Volcaniclastic	Peragic	Neritic

Select one and check.

Percent Texture		
Sand	Silt	Clay
	35	65

Select one and check.

Percent	Composition
	Siliclastic Grain
	Minerals
18	Quartz
17	Feldspars
	Micas
	Ferromagnesian Minerals
	Glauconite
30	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
2	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
25	Nannofossils
	Foraminifers
	Siliceous Grain
Few	Diatom
	Radiolarians
Few	Silicoflagellates
	Sponge Spicule
	Neritic Grain
	Ooid
	Spherical Particles
	Elliptical Particles
	Bioclast
	Molluscan
	Algal
	Pellet
	Molluscs
	Echinoderms
	Others
	Intraclast
	Carbonate Rock Fragme
	Peloid
	Pisolite
	Calcareous Grain
	Dolomitic Grain
	Araginitic Graing
	Sideritic Graing

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

Fill percentage (Total must be 100).

Remarks: sample just above possible unit III/IV unconf.

Sediment Smear Slide / Thin Section Description Sheet

Date 12/05/12

Expedition: 315

Observer: KLM

Site: C0002 Hole: B Core: 49R Sect.: 4

Interval: 25

Sediment Name: silty claystone

Smear Slide	Thin Section	Coarse Feaction	Grain Mount
✓			

Select one and check.

Granular Sediment		Chemical Sediment	
Siliciclastic	Volcaniclastic	Peragic	Neritic

Select one and check.

Percent Texture		
Sand	Silt	Clay
1	29	70

Select one and check.

Percent	Composition
	Siliclastic Grain
	Minerals
20	Quartz
20	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
Few	Vitric Grain

Percent	Composition
	Pelagic Grain
10	Calcareous Grain
	Nannofossils
	Foraminifers
	Siliceous Grain
	Diatom
	Radiolarians
	Silicoflagellates
Few	Sponge Spicule
	Neritic Grain
	Ooid
	Spherical Particles
	Elliptical Particles
	Bioclast
	Molluscan
	Algal
	Pellet
	Molluscs
	Echinoderms
	Others
	Intraclast
	Carbonate Rock Fragme
	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:

just below possible unit III/IV unconf.

Sediment Smear Slide / Thin Section Description Sheet

Date 11/05/12

Expedition: 315 Observer: _____

Site: C0002 Hole: B Core: 56R Sect.: 1 Interval: 50

Sediment Name: Silty sand

Smear Slide	Thin Section	Coarse Fraction	Grain Mount
✓			

Select one and check.

Granular Sediment		Chemical Sediment	
Siliciclastic	Volcaniclastic	Peragic	Neritic

Select one and check.

Percent Texture		
Sand	Silt	Clay
50	35	15

Select one and check.

Percent	Composition
	Siliclastic Grain
	Minerals
35	Quartz
40	Feldspars
	Micas
	Ferromagnesian Minerals
	Glauconite
10	Clay Minerals
	Zeolites
2	Heavy Minerals
	Pyrite
	Phospholite
	Aragonite
	Calcite
	Oolites
	Lithic Grain
3	Sedimentary Lithic Grain
	Igneous Lithic Grain
2	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
	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 Fragments
	Peloid
	Pisolite
	Calcareous Grain
	Dolomitic Grain
	Araginitic Grain
	Sideritic Grain

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

Fill percentage (Total must be 100).

Remarks: _____

Sediment Smear Slide / Thin Section Description Sheet

Date 12/05/12

Expedition: 315

Observer: KLM

Site: C0002 Hole: B Core: 59R Sect.: 1

Interval: 46

Sediment Name: Calcareous claystone - ? nannofossil ooze?

Smear Slide	Thin Section	Coarse Fraction	Grain Mount
✓			

Select one and check.

Granular Sediment		Chemical Sediment	
Siliciclastic	Volcaniclastic	Peragic	Neritic

Select one and check.

Percent Texture		
Sand	Silt	Clay
	5	95

Select one and check.

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

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

Percent	Composition
	Others
	Gypsiferous Grain
	Calcareous Grain
	Sapropelic Grain
	Mn Nodules/ Crusts
	Pyrite Grain
	Opaque Grain
80	microcrystalline calcite?

Fill percentage (Total must be 100).

Remarks: uncertain - recrystallized ooze?

Sediment Smear Slide / Thin Section Description Sheet

Date: 12/05/12

Expedition: 315 Observer: KLM

Site: C0002 Hole: B Core: 59R Sect.: 3 Interval: 88

Sediment Name: sandy silt

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

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

Percent	Composition	Percent	Composition	Percent	Composition
	Siliclastic Grain		Pelagic Grain		Others
	Minerals		Calcareous Grain		Gypsiferous Grain
40	Quartz		Nannofossils		Calcareous Grain
45	Feldspars		Foraminifers		Sapropelic Grain
	Micas		Siliceous Grain		Mn Nodules/ Crusts
	Ferromagnesian Minerals		Diatom		Pyrite Grain
	Glauconite		Radiolarians		Opaque Grain
	Clay Minerals		Sillicoflagellates		
	Zeolites		Sponge Spicule		
	Heavy Minerals				
	Pyrite				
	Phospholite				
	Aragonite		Neritic Grain		
	Calcite		Ooid		
	Oolites		Spherical Particles		
	Lithic Grain		Elliptical Particles		
10	Sedimentary Lithic Grain		Bioclast		
	Igneous Lithic Grain		Molluscan		
5	Metamorphic Lithic Grain		Algal		
			Pellet		
			Molluscs		
			Echinoderms		
	Volcaniclastic Grain		Others		
	Scoria / Pumice		Intraclast		
	Scoria		Carbonate Rock Fragme		
	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: very angular grains

Sediment Smear Slide / Thin Section Description Sheet

Date 12/05/12

Expedition: 315

Observer: KLM

Site: C0002 Hole: B Core: 60R Sect.: 2

Interval: 75

Sediment Name: clayey siltstone

Smear Slide	Thin Section	Coarse Feaction	Grain Mount
✓			

Select one and check.

Granular Sediment		Chemical Sediment	
Siliciclastic	Volcaniclastic	Peragic	Neritic

Select one and check.

Percent Texture		
Sand	Silt	Clay
5	50	45

Select one and check.

Percent	Composition
	Siliclastic Grain
	Minerals
30	Quartz
30	Feldspars
	Micas
	Ferromagnesian Minerals
	Glaucinite
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
5	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 Fragme
	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: 12/05/12

Expedition: 315

Observer: KLM

Site: C0002 Hole: B Core: 61R Sect.: 4 Interval: 30

Sediment Name: silty claystone

Smear Slide	Thin Section	Coarse Feaction	Grain Mount
✓			

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
20	Quartz
20	Feldspars
	Micas
	Ferromagnesian Minerals
	Glaucinite
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
	Vitric Grain

Percent	Composition
	Pelagic Grain
5	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 Fragme
	Peloid
	Pisolite
	Calcareous Grain
	Dolomitic Grain
	Araginitic Graing
	Sideritic Graing

Percent	Composition
	Others
5	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 12/65/12

Expedition: 315

Observer: RLM

Site: C0002 Hole: B Core: 61R Sect.: 5

Interval: 40

Sediment Name: Sandy silt

Smear Slide	Thin Section	Coarse Feaction	Grain Mount
✓			

Select one and check.

Granular Sediment		Chemical Sediment	
Siliciclastic	Volcaniclastic	Peragic	Neritic

Select one and check.

Percent Texture		
Sand	Silt	Clay
20	70	

Select one and check.

Percent	Composition
	Siliclastic Grain
	Minerals
35	Quartz
40	Feldspars
	Micas
	Ferromagnesian Minerals
	Glauconite
	Clay Minerals
	Zeolites
	Heavy Minerals
	Pyrite
	Phospholite
	Aragonite
	Calcite
	Oolites
	Lithic Grain
20	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
	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 Fragme
	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: 12/05/12

Expedition: 315

Observer: KLM

Site: C0002 Hole: B Core: 65R Sect.: 2

Interval: 42

Sediment Name: Sandy silt / fine ash

Smear Slide	Thin Section	Coarse Feaction	Grain Mount
✓			

Select one and check.

Granular Sediment		Chemical Sediment	
Siliciclastic	Volcaniclastic	Peragic	Neritic

Select one and check.

Percent Texture		
Sand	Silt	Clay
25	70	5

Select one and check.

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

Percent	Composition
	Pelagic Grain
5	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 Fragme
	Peloid
	Pisolite
	Calcareous Grain
	Dolomitic Grain
	Araginitic Graing
	Sideritic Graing

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

Fill percentage (Total must be 100).

Remarks: