

Expedition 323
Bering Sea

1345 E 7
Site Hole Core Section Top Depth

Depth (m)	Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Samples	Major Lithology	Minor Lithology
								Visual Core description	
1	✓								
10	✓	27 10Y 3/1		21				27-60 mott pyrite concentrate	
20	✓	60		74				70-147 speck pyrite	2A-80 silt
30	✓					C		15-16 mott sand, 12-17 speck pyrite	
40						190			
50	✓	60 5Y 7/1 - silty sand						100-150 mott sand	
60	✓					50		106 sandy layer 5 m	
70		20						148 mott sand	
80	g-b ✓	123						38-45 mott sand	
90									
100	CC	3/1					38	38-42 PAL	7A-28 Sandy silt
110									
120									
130									
140									

Observer: _____ Date: _____

IODP Expedition 323
 SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
	1345	E	7		2	80cm	

Sediment/Rock Name	SILT	Observer	WA
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Percent Texture		
Sand	Silt	Clay
20	60	20

Comments: MAW LITHOLOGY

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
20	Framework minerals
38%	15 Quartz
21%	8 Feldspar
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
18%	7 Rock fragments
	Accessory/trace minerals
	Micas
	Biotite
3%	1 Muscovite
12%	7 Clay Minerals
	Chlorite
	Glauconite
	Chert
	Zircon
	Ferromagnesium minerals
	Authigenic minerals
	Barite
	Phosphorite/Apatite
	Zeolite
	Opaque minerals
	Pyrite
	Magnetite
	Fe-oxide
	Carbonates
	Calcite
	Dolomite
VOLCANICLASTIC GRAINS	
	Crystal grain
	Vitric grain
	Lithic grain

Percent	Component
BIOGENIC GRAINS	
	Calcareous
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
	Siliceous
	Radiolarians
	Spumellaria
	Nassellaria
	Diatoms
5%	1 Centric
	Pennate
	<i>Chaetoceros</i> Resting Spores
	Silicoflagellates
	Sponge spicules
	Dinoflagellates
	Others
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

1365 E 8
 Site Hole Core Section Top Depth

Expedition 323
 Bering Sea

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Samples	Major Lithology	Minor Lithology
							Visual Core description	
1	S/N 29	SANDY ul	S		P		S BUNYON ● Hubble	P PUNCTURES
2		D. RICH SILTY CLAY						
3	128 131 104 5/1	SS 38 D. RICH CLAYEY SILT ● 2-4 cm						30cm, SS FAINT LAMINATION, AUTHIGENIC CARBONATE CARBONATE DIATOM-RICH CLAYEY SILT AUTHIGENIC INTERNAL, PARTIALLY INDURATED
4	S/N		101 149					80cm, SS DIATOM-RICH SILTY CLAY PYRITE SPECKLES
5								
6	20 50 104 3/1							
7								80cm, SS DIATOM-RICH CLAYEY SILT
CC 37m								

Observer: _____ Date: _____

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	138	F	8	H	3A	38	

Sediment/Rock Name	diatom-rich clayey site.	Observer	Akeia
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authigenic carbonate

Percent Texture		
Sand	Silt	Clay

Comments:

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
	Framework minerals
6	Quartz 2
	Feldspar
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
14	Rock fragments 5
	Accessory/trace minerals
	Micas
	Biotite
	Muscovite
9	Clay Minerals 3
	Chlorite
	Glauconite
	Chert
	Zircon
	Ferromagnesium minerals
	Authigenic minerals
	Barite
	Phosphorite/Apatite
	Zeolite
	Opaque minerals
6	Pyrite 2
	Magnetite
	Fe-oxide
59	Carbonates 20 <i>aragonite</i>
	Calcite
	Dolomite
VOLCANICLASTIC GRAINS	
	Crystal grain
	Vitric grain
	Lithic grain

Percent	Component
BIOGENIC GRAINS	
	Calcareous
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
	Siliceous
	Radiolarians
	Spumellaria
	Nassellaria
9	Diatoms 3
	Centric
	Pennate
	<i>Chaetoceros</i> Resting Spores
	Silicoflagellates
	Sponge spicules ✓
	Dinoflagellates
	Others
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

IODP Expedition 323
 SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	1345 E	8	8	H	4	80	

Sediment/Rock Name	diatom-rich silty clay	Observer	akira
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Sand	Percent Texture	
	Silt	Clay
20	40	40

Comments:

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
	Framework minerals
16	Quartz 3
7	Feldspar 2
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
17	Rock fragments 5
	Accessory/trace minerals
	Micas
	Biotite
	Muscovite
34	Clay Minerals 10
	Chlorite
	Glauconite
	Chert
	Zircon
	Ferromagnesium minerals
	Authigenic minerals
	Barite
	Phosphorite/Apatite
	Zeolite
	Opaque minerals
7	Pyrite 2
	Magnetite
	Fe-oxide
2	Carbonates 0.5
	Calcite
	Dolomite
VOLCANICLASTIC GRAINS	
	Crystal grain
	Vitric grain
	Lithic grain

Percent	Component
BIOGENIC GRAINS	
	Calcareous
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
	Siliceous
	Radiolarians
	Spumellaria
	Nassellaria
24	Diatoms 7
	Centric
	Pennate
	Chaetoceros Resting Spores
	Silicoflagellates
	Sponge spicules
	Dinoflagellates
	Others
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

IODP Expedition 323
 SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	BK5E	8		H	7A	60	

Sediment/Rock Name	diatom-rich clayey silt	Observer	C. Kora
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Percent Texture		
Sand	Silt	Clay

Comments:

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
Framework minerals	
21	Quartz 5
9	Feldspar 2
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
9	Rock fragments 2
Accessory/trace minerals	
	Micas
	Biotite
	Muscovite
21	Clay Minerals 5
	Chlorite
	Glaucanite
	Chert
	Zircon
	Ferromagnesium minerals
Authigenic minerals	
	Barite
	Phosphorite/Apatite
	Zeolite
Opaque minerals	
9	Pyrite 2
	Magnetite
2	Fe-oxide 0.5
Carbonates	
	Calcite
	Dolomite
VOLCANICLASTIC GRAINS	
	Crystal grain
	Vitric grain
	Lithic grain

Percent	Component
BIOGENIC GRAINS	
Calcareous	
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
Siliceous	
	Radiolarians
	Spumellaria
	Nassellaria
30	Diatoms 7
	Centric
	Pennate
	<i>Chaetoceros</i> Resting Spores
	Silicoflagellates
	Sponge spicules
	Dinoflagellates
Others	
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

3-100
4-32
7-110

Expedition 323
Bering Sea

1345 E 9 1-5
Site Hole Core Section Top Depth

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Samples	Major Lithology	Minor Lithology
							Visual Core description	
1								
							175	
							52-90 lam. with	5Y 3/2 5Y 4/2 4/N
2								
							52-53 mott sand	
							57-58	
							82-88 speck pyrite	
3							13-43 lam	5Y 3/2 5Y 4/2 10Y 5/1 4/N
							108-109 sandy silt	
4								
							90-95 mott sand	
							114 shell fragments	
5								
							140	

3A-100
diatom-bearing
clayey silt

4A-32
clayey silt
(dark lam.)

□ 4/N diatom-bearing
clayey silt

▨ 10Y 4/1 laminated diatom clayey silt

▩ 10Y 5/1 diatom-rich clayey silt

Observer: _____ Date: _____

Expedition 323
Bering Sea

1345 E 9 6-CC
Site Hole Core Section Top Depth

Depth (cm)	Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Samples	Major Lithology	Minor Lithology
								Visual Core description	
10	✓								
15-20	✓	74 90 10Y 4/1		S				58 3/2 58 4/2 4/N	
30	✓								
35-40	✓	50 10Y 5/1		S				2-6 mott pyrite burrow ✓	
45-50	✓	10Y 4/1							
55-60	✓			S				130	
65-70	✓			S				44	44-33 PAL
70-140									

- diatom to
right
Clayey silt

Observer: _____ Date: _____

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
	1345E	9		H	3	100m	

Sediment/Rock Name	DATOM-BEARING CLAY SILT	Observer	IWA
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Percent Texture		
Sand	Silt	Clay
10	50	40

Comments:

46

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
	Framework minerals
12%	5 Quartz
17%	7 Feldspar
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
17%	7 Rock fragments
	Accessory/trace minerals
	Micas
	Biotite
	Muscovite
36%	15 Clay Minerals
	Chlorite
	Glauconite
	Chert
	Zircon
	Ferromagnesium minerals
	Authigenic minerals
	Barite
	Phosphorite/Apatite
	Zeolite
	Opaque minerals
2%	1 Pyrite
	Magnetite
	Fe-oxide
	Carbonates
2	Calcite
	Dolomite
VOLCANICLASTIC GRAINS	
	Crystal grain
	Vitric grain
	Lithic grain

Percent	Component
BIOGENIC GRAINS	
	Calcareous
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
	Siliceous
	Radiolarians
	Spumellaria
	Nassellaria
12%	12 Diatoms
7%	3 Centric
5%	2 Pennate
	Chaetoceros Resting Spores
	Silicoflagellates
	Sponge spicules
	Dinoflagellates
	Others
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
	1345	E	P		4	32cm	

Sediment/Rock Name	C-AYOY SILT	Observer	LW
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Percent Texture		
Sand	Silt	Clay
5	60	35

Comments: gray layer (low)

50

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
	Framework minerals
23	10 Quartz
15	7 Feldspar
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
11	5 Rock fragments
	Accessory/trace minerals
	Micas
	Biotite
	Muscovite
34	15 Clay Minerals
	Chlorite
	Glauconite
	Chert
	Zircon
	Ferromagnesium minerals
	Authigenic minerals
	Barite
	Phosphorite/Apatite
	Zeolite
	Opaque minerals
2	1 Pyrite
	Magnetite
	Fe-oxide
	Carbonates
2	1 Calcite
	Dolomite
VOLCANICLASTIC GRAINS	
	Crystal grain
	Vitric grain
	Lithic grain

Percent	Component
BIOGENIC GRAINS	
	Calcareous
21	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
	Siliceous
	Radiolarians
	Spumellaria
	Nassellaria
8%	Diatoms
7	3 Centric
1	1 Pennate
	Chaetoceros Resting Spores
	Silicoflagellates
	Sponge spicules
	Dinoflagellates
	Others
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
	1345	C	9	H	7	110 cm	

Sediment/Rock Name	DIATOM - BEAVER CLAYEY SILT	Observer	WAT
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RICH

Percent Texture		
Sand	Silt	Clay

Comments:

46

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
	Framework minerals
31%	10 Quartz
6%	2 Feldspar
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
9%	3 Rock fragments
	Accessory/trace minerals
	Micas
	Biotite
	Muscovite
31%	10 Clay Minerals
	Chlorite
	Glauconite
	Chert
	Zircon
	Ferromagnesium minerals
	Authigenic minerals
	Barite
	Phosphorite/Apatite
	Zeolite
	Opaque minerals
3%	1 Pyrite
	Magnetite
	Fe-oxide
	Carbonates
3%	1 Calcite
	Dolomite
VOLCANICLASTIC GRAINS	
	Crystal grain
	Vitric grain
	Lithic grain

Percent	Component
BIOGENIC GRAINS	
	Calcareous
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
	Siliceous
	Radiolarians
	Spumellaria
	Nassellaria
15%	5 Diatoms
9%	3 Centric
6%	2 Pennate
	Chaetoceros Resting Spores
	Silicoflagellates
	Sponge spicules
	Dinoflagellates
	Others
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

Expedition 323
Bering Sea

1345 E 10 ALL
Site Hole Core Section Top Depth

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Samples	Major Lithology	Minor Lithology
							Visual Core description	
1	60	10Y 3/1 D. BEARING SAND				P		
2	110	3/N D. RICH CLAYEY SILT				P		
3	58 95	10Y 3/1 D. BEARING SAND D. RICH CLAYEY SILT				P		
4	19 130	10Y 3/1 D. BEARING SANDY SILT				P		
5		IP PO						
6	15	3/N D. RICH CLAYEY SILT						
7								
CC								
32cm								

Observer: _____ Date: _____

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	B45	E	10	H1	2A	40	

Sediment/Rock Name	diatom-rich clayey silt.	Observer	AK-11
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Percent Texture		
Sand	Silt	Clay

Comments:

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
Framework minerals	
24	Quartz 5
10	Feldspar 2
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
Accessory/trace minerals	
	Micas
	Biotite
	Muscovite
24	Clay Minerals 5
	Chlorite
	Glaucinite
	Chert
	Zircon
2	Ferromagnesium minerals 0.5
Authigenic minerals	
	Barite
	Phosphorite/Apatite
	Zeolite
Opaque minerals	
10	Pyrite 2
	Magnetite
	Fe-oxide
Carbonates	
5	Calcite 1
	Dolomite
VOLCANICLASTIC GRAINS	
	Crystal grain
	Vitric grain
	Lithic grain

Percent	Component
BIOGENIC GRAINS	
Calcareous	
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
Siliceous	
	Radiolarians
	Spumellaria
	Nassellaria
24	Diatoms 5
	Centric
	Pennate
	Chaetoceros Resting Spores
	Silicoflagellates
	Sponge spicules
	Dinoflagellates
Others	
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

IODP Expedition 323
 SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
B23	B35	E	10	H	3A	20	

Sediment/Rock Name	diatom-bearing sand	Observer	Alvin
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Percent Texture		
Sand	Silt	Clay
80	20	5

Comments:

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
	Framework minerals
40	Quartz
	Feldspar
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
52	Rock fragments
	Accessory/trace minerals
	Micas
	Biotite
	Muscovite
	Clay Minerals
	Chlorite
	Glauconite
	Chert
	Zircon
	Ferromagnesium minerals
	Authigenic minerals
	Barite
	Phosphorite/Apatite
	Zeolite
	Opaque minerals
1	Pyrite
	Magnetite
	Fe-oxide
	Carbonates
	Calcite
	Dolomite
VOLCANICLASTIC GRAINS	
	Crystal grain
	Vitric grain
	Lithic grain

Percent	Component
BIOGENIC GRAINS	
	Calcareous
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
	Siliceous
	Radiolarians
	Spumellaria
	Nassellaria
7	Diatoms
	Centric
	Pennate
	<i>Chaetoceros</i> Resting Spores
	Silicoflagellates
	Sponge spicules
	Dinoflagellates
	Others
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

IODP Expedition 323
 SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	1345	E	10	H	4	98	

Sediment/Rock Name	diatom-bearing sandy silt	Observer	Adriana
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Percent Texture		
Sand	Silt	Clay

Comments:

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
Framework minerals	
19	Quartz 5
7	Feldspar 2
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
26	Rock fragments 7
Accessory/trace minerals	
	Micas
	Biotite
	Muscovite
11	Clay Minerals 3
	Chlorite
	Glauconite
	Chert
7	Zircon
	Ferromagnesium minerals 2
Authigenic minerals	
	Barite
	Phosphorite/Apatite
	Zeolite
Opaque minerals	
7	Pyrite 2
	Magnetite
	Fe-oxide
Carbonates	
	Calcite
	Dolomite
VOLCANICLASTIC GRAINS	
Crystal grain	
7	Vitric grain 2
	Lithic grain

Percent	Component
BIOGENIC GRAINS	
Calcareous	
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
Siliceous	
	Radiolarians
	Spumellaria
	Nassellaria
11	Diatoms 3
	Centric
	Pennate
	<i>Chaetoceros</i> Resting Spores
	Silicoflagellates
4	Sponge spicules 1
	Dinoflagellates
Others	
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

IODP Expedition 323
 SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	1345	E	10	H	5	20	

Sediment/Rock Name	authigenic-rich diatom rich site and trace	Observer	Okita
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Percent Texture		
Sand	Silt	Clay

Comments:

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
Framework minerals	
15	Quartz 5
9	Feldspar 3
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
Accessory/trace minerals	
	Micas
	Biotite
	Muscovite
	Clay Minerals
	Chlorite
	Glaucanite
	Chert
	Zircon
	Ferromagnesium minerals
Authigenic minerals	
	Barite
	Phosphorite/Apatite
	Zeolite
Opaque minerals	
9	Pyrite 3
	Magnetite
	Fe-oxide
29	Carbonates 10 aragonite
	Calcite
	Dolomite
VOLCANICLASTIC GRAINS	
3	Crystal grain /
	Vitric grain
	Lithic grain

Percent	Component
BIOGENIC GRAINS	
Calcareous	
15	Foraminifera 5 fragments
3	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
4	Coccoliths /
	Discoasters
	Pteropods
Siliceous	
	Radiolarians
	Spumellaria
	Nassellaria
15	Diatoms 5
	Centric
	Pennate
	Chaetoceros Resting Spores
	Silicoflagellates
	Sponge spicules
	Dinoflagellates
Others	
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

Expedition 323
Bering Sea

1345 F 11
Site Hole Core Section Top Depth

Depth (m)	Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Samples	Major Lithology	Minor Lithology
								Visual Core description	
1-10	V ✓ 48 62			↑ 5				48-62 authigenic 116-145 weak pyrite	1A-55 ✓ authigenic carbon -rich diatom site
2-30	V ✓								
3-40	V ✓ 110 120							49-50 pebble sub-angular 110-120	
4-50	V ✓ 53 62							53-60 lam. 116-117 authigenic	
5-60	V ✓ 110 119							68-74 authigenic mott	
6-70	V ✓ 132							132-5 lam. 85 shell 5 m 87-103 lam	
7-80	V ✓ 105							87-103 lam	6A-90 ✓ diatom-rich clayey silt
7-90	V ✓ 40							87-49-CC-10 lam	7A-20 diatom-bearing silty clay
CC-100	V ✓ 10							43	
110-120								□ 4/N	
130-140								□ 10Y 5/1 laminated with 5Y 3/2 5Y 3/1	
								□ 10Y 5/1 authigenic	

Observer: _____ Date: _____

IODP Expedition 323
 SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	U1345	E	11	H	1A	SScm	

Sediment/Rock Name	Authigenic carbonate rich diatom silt	Observer	Beth
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Percent Texture		
Sand	Silt	Clay

Comments:

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
	Framework minerals
10	Quartz
	Feldspar
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
	Accessory/trace minerals
	Micas
	Biotite
	Muscovite
	Clay Minerals
	Chlorite
	Glauconite
	Chert
	Zircon
	Ferromagnesium minerals
	Authigenic minerals
	Barite
	Phosphorite/Apatite
	Zeolite
	Opaque minerals
5	Pyrite
	Magnetite
	Fe-oxide
	Carbonates
68	Calcite "needles"
7	Dolomite
VOLCANICLASTIC GRAINS	
	Crystal grain
	Vitric grain
	Lithic grain

Percent	Component
BIOGENIC GRAINS	
	Calcareous
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
	Siliceous
	Radiolarians
	Spumellaria
	Nassellaria
10	Diatoms
	Centric
	Pennate
	Chaetoceros Resting Spores
	Silicoflagellates
	Sponge spicules
	Dinoflagellates
	Others
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	U1345	E	11	H	6A	90cm	

Sediment/Rock Name	Diatom-rich clayey silt	Observer	Beth
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Percent Texture		
Sand	Silt	Clay
10	50	40

Comments:

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
Framework minerals	
15	Quartz
3	Feldspar
	K-feldspar (Orthoclase, Microcline...)
4	Plagioclase
3	Rock fragments
Accessory/trace minerals	
5	Micas
	Biotite
	Muscovite
20	Clay Minerals
	Chlorite
	Glauconite
	Chert
	Zircon
	Ferromagnesium minerals
Authigenic minerals	
	Barite
	Phosphorite/Apatite
	Zeolite
Opaque minerals	
5	Pyrite
	Magnetite
	Fe-oxide
Carbonates	
	Calcite
5	Dolomite
VOLCANICLASTIC GRAINS	
	Crystal grain
15	Vitric grain
	Lithic grain

Percent	Component
BIOGENIC GRAINS	
Calcareous	
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
Siliceous	
	Radiolarians
	Spumellaria
	Nassellaria
	Diatoms
20	Centric
5	Pennate
	Chaetoceros Resting Spores
	Silicoflagellates
	Sponge spicules
	Dinoflagellates
Others	
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

IODP Expedition 323
 SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	V1345	E	11	#	7A	20cm	

Sediment/Rock Name	Diatom-bearing silty clay	Observer	Beth
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Percent Texture		
Sand	Silt	Clay

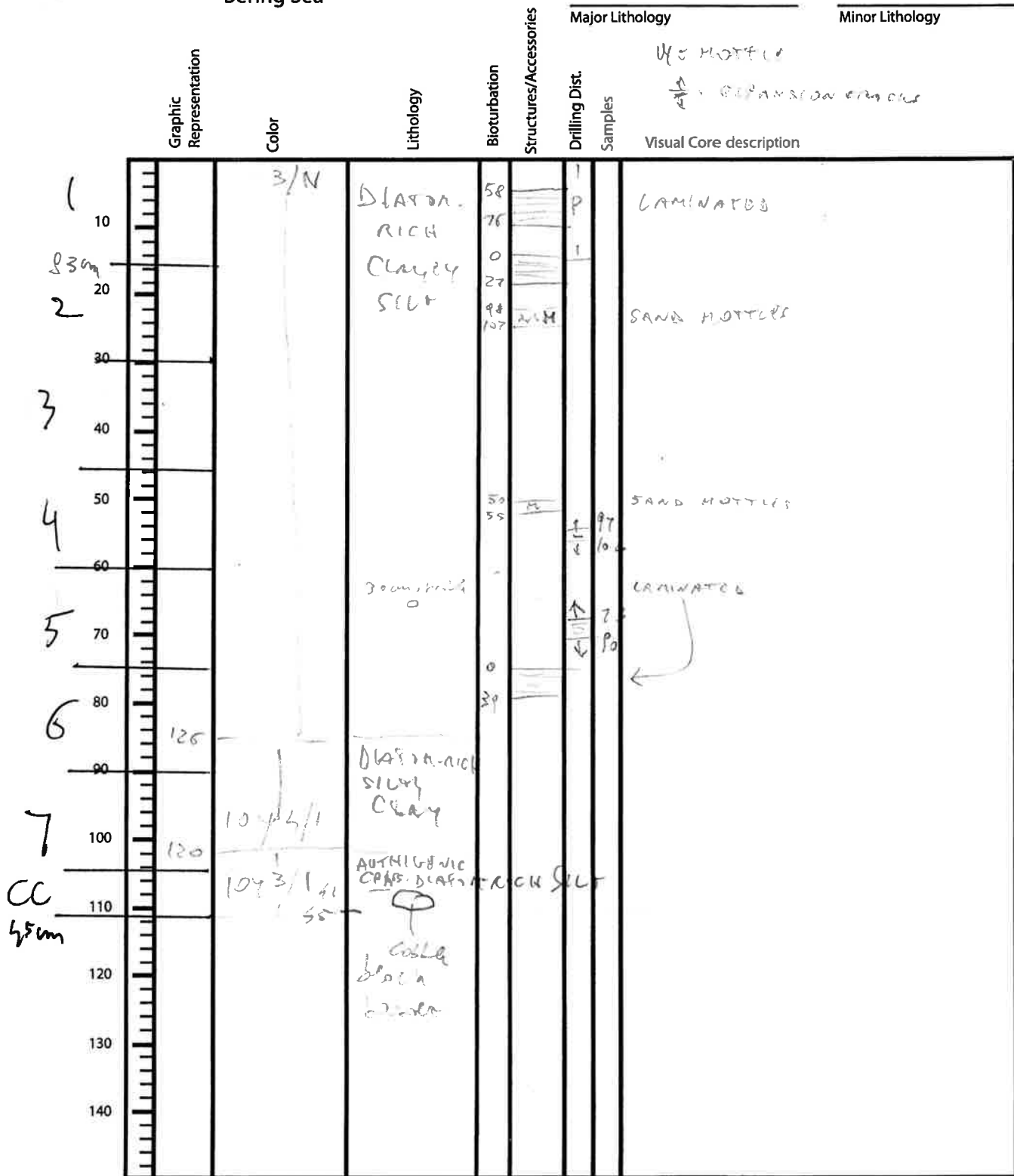
Comments:

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
	Framework minerals
20	Quartz
	Feldspar
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
10	Rock fragments
	Accessory/trace minerals
40	Micas
	Biotite
	Muscovite
	Clay Minerals
	Chlorite
	Glauconite
	Chert
	Zircon
5	Ferromagnesium minerals
	Authigenic minerals
	Barite
	Phosphorite/Apatite
10	Zeolite
	Opaque minerals
5	Pyrite
	Magnetite
	Fe-oxide
	Carbonates
	Calcite
	Dolomite
VOLCANICLASTIC GRAINS	
	Crystal grain
	Vitric grain
	Lithic grain

Percent	Component
BIOGENIC GRAINS	
	Calcareous
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
	Siliceous
	Radiolarians
	Spumellaria
	Nassellaria
15	Diatoms
	Centric
	Pennate
	Chaetoceros Resting Spores
	Silicoflagellates
	Sponge spicules
	Dinoflagellates
	Others
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

Expedition 323
Bering Sea

1345 Site 5 Hole 12 Core ALL Section Top Depth



Observer: _____ Date: _____

IODP Expedition 323
 SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	1385E	12	H	6A	25		

Sediment/Rock Name	diatom-rich clayey silt	Observer	Alford
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Percent Texture		
Sand	Silt	Clay

Comments:

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
Framework minerals	
17	Quartz 5
3	Feldspar 1
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
7	Rock fragments 2
Accessory/trace minerals	
	Micas
	Biotite
	Muscovite
17	Clay Minerals 5
	Chlorite
	Glauconite
	Chert
	Zircon
	Ferromagnesium minerals
Authigenic minerals	
	Barite
	Phosphorite/Apatite
	Zeolite
Opaque minerals	
10	Pyrite 3
	Magnetite
	Fe-oxide
Carbonates	
10	Calcite 3 (foram?)
	Dolomite
VOLCANICLASTIC GRAINS	
	Crystal grain
3	Vitric grain 1
	Lithic grain

Percent	Component
BIOGENIC GRAINS	
Calcareous	
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
Siliceous	
	Radiolarians
	Spumellaria
	Nassellaria
33	Diatoms 10
	Centric
	Pennate
	<i>Chaetoceros</i> Resting Spores
	Silicoflagellates
	Sponge spicules
	Dinoflagellates
Others	
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

IODP Expedition 323
 SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	1345	E	12	H	7A	25	

Sediment/Rock Name	diatom-rich silty clay	Observer	Akiva
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Percent Texture		
Sand	Silt	Clay

Comments:

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
	Framework minerals
8	Quartz 3
5	Feldspar 2
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
8	Rock fragments 3
	Accessory/trace minerals
	Micas
	Biotite
	Muscovite
25	Clay Minerals 10
	Chlorite
	Glaucinite
	Chert
1	Zircon
	Ferromagnesium minerals 0.5
	Authigenic minerals
	Barite
	Phosphorite/Apatite
	Zeolite
	Opaque minerals
5	Pyrite 2
	Magnetite
	Fe-oxide
	Carbonates
5	Calcite 2
	Dolomite
VOLCANICLASTIC GRAINS	
5	Crystal grain 2
	Vitric grain
	Lithic grain

Percent	Component
BIOGENIC GRAINS	
	Calcareous
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
	Siliceous
	Radiolarians
	Spumellaria
	Nassellaria
37	Diatoms 15
	Centric
	Pennate
	Chaetoceros Resting Spores
	Silicoflagellates
	Sponge spicules
	Dinoflagellates
	Others
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	1345	E	12	H1C		25	

Sediment/Rock Name	authigenic carbonate-rich diatom-rich site	Observer	Okawa
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Percent Texture		
Sand	Silt	Clay
30	50	20

Comments:

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
	Framework minerals
17	Quartz 5
	Feldspar
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
17	Rock fragments 5
	Accessory/trace minerals
	Micas
	Biotite
	Muscovite
	Clay Minerals
	Chlorite
	Glaucanite
	Chert
	Zircon
	Ferromagnesium minerals
	Authigenic minerals
	Barite
	Phosphorite/Apatite
	Zeolite
	Opaque minerals
7	Pyrite 2
	Magnetite
	Fe-oxide
24	Carbonates 7 aragonite
	Calcite
	Dolomite
VOLCANICLASTIC GRAINS	
	Crystal grain
10	Vitric grain 3
	Lithic grain

Percent	Component
BIOGENIC GRAINS	
	Calcareous
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
	Siliceous
	Radiolarians
	Spumellaria
	Nassellaria
24	Diatoms 7
	Centric
	Pennate
	Chaetoceros Resting Spores
	Silicoflagellates
	Sponge spicules
	Dinoflagellates
	Others
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

Expedition 323
Bering Sea

1345 E 14
Site Hole Core Section Top Depth

Depth (m)	Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Samples	Major Lithology	Minor Lithology
								Visual Core description	
1								60	Sec 1.53-5021 mottl sand
10									
2		143						104-106	pebbles rounded
20								125-126	mottl
3		52						78-79	shell
30								106-108	sponge 111-112 shell
4		57						37-38	pebble 57-90 lam
40		76						103	sand mottl
50									
5									
60		136							Sec 5.136-5025.6 lam
70		6							
6		109						Sec 6	Sec 7 109-28 lam
80		28							
90								101	
8								59	
100								24	24-33 PAL
110									
120									
130									
140									

7A-60cm clayey site

- 4/N clayey site.
- 10Y 3/1 sandy site
- 10Y 4/1 diatom-rich clayey site (dark lamina) with 5Y 3/2, 5Y 3/1

Observer: _____ Date: _____

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
	1345	E	14		7	60cm	

Sediment/Rock Name	silty clayey silt	Observer	IWA
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Percent Texture		
Sand	Silt	Clay



Comments:

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
Framework minerals	
29% - 5%	7 Quartz
13% - 2%	2 Feldspar
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
13% - 3%	3 Rock fragments
Accessory/trace minerals	
	Micas
	Biotite
	Muscovite
40% - 10%	10 Clay Minerals
	Chlorite
	Glauconite
	Chert
	Zircon
	Ferromagnesium minerals
Authigenic minerals	
	Barite
	Phosphorite/Apatite
	Zeolite
Opaque minerals	
4 - 1%	1 Pyrite
	Magnetite
	Fe-oxide
Carbonates	
	Calcite
	Dolomite
VOLCANICLASTIC GRAINS	
	Crystal grain
	Vitric grain
	Lithic grain

Percent	Component
BIOGENIC GRAINS	
Calcareous	
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
Siliceous	
	Radiolarians
	Spumellaria
	Nassellaria
2%	Diatoms
	Centric
	Pennate
	Chaetoceros Resting Spores
	Silicoflagellates
	Sponge spicules
	Dinoflagellates
Others	
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

1345 E 15H 1+2
 Site Hole Core Section Top Depth

Expedition 323
 Bering Sea

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist. Samples	Major Lithology	Minor Lithology
						Visual Core description	
	4/N						
				mod.	97 104	soft hard soft	<p>22-26 auth. carb. patch soft, light colour</p> <p>116-120 " " " 1 " " " 4 1</p>
	4/N+ 104411 (80/20)		lab sent				<p>108-28 (sect. 2) med. parallel lam.</p>

Observer: _____ Date: _____

Expedition 323
Bering Sea

1345 ~~E~~ 15H 3+4
 Site Hole Core Section Top Depth

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Samples	Major Lithology	Minor Lithology
							Visual Core description	
	28		2p					57-64 med. parallel laminae
	4/N							
	4/N (08120)	57						
	4/N	64						

Expedition 323
Bering Sea

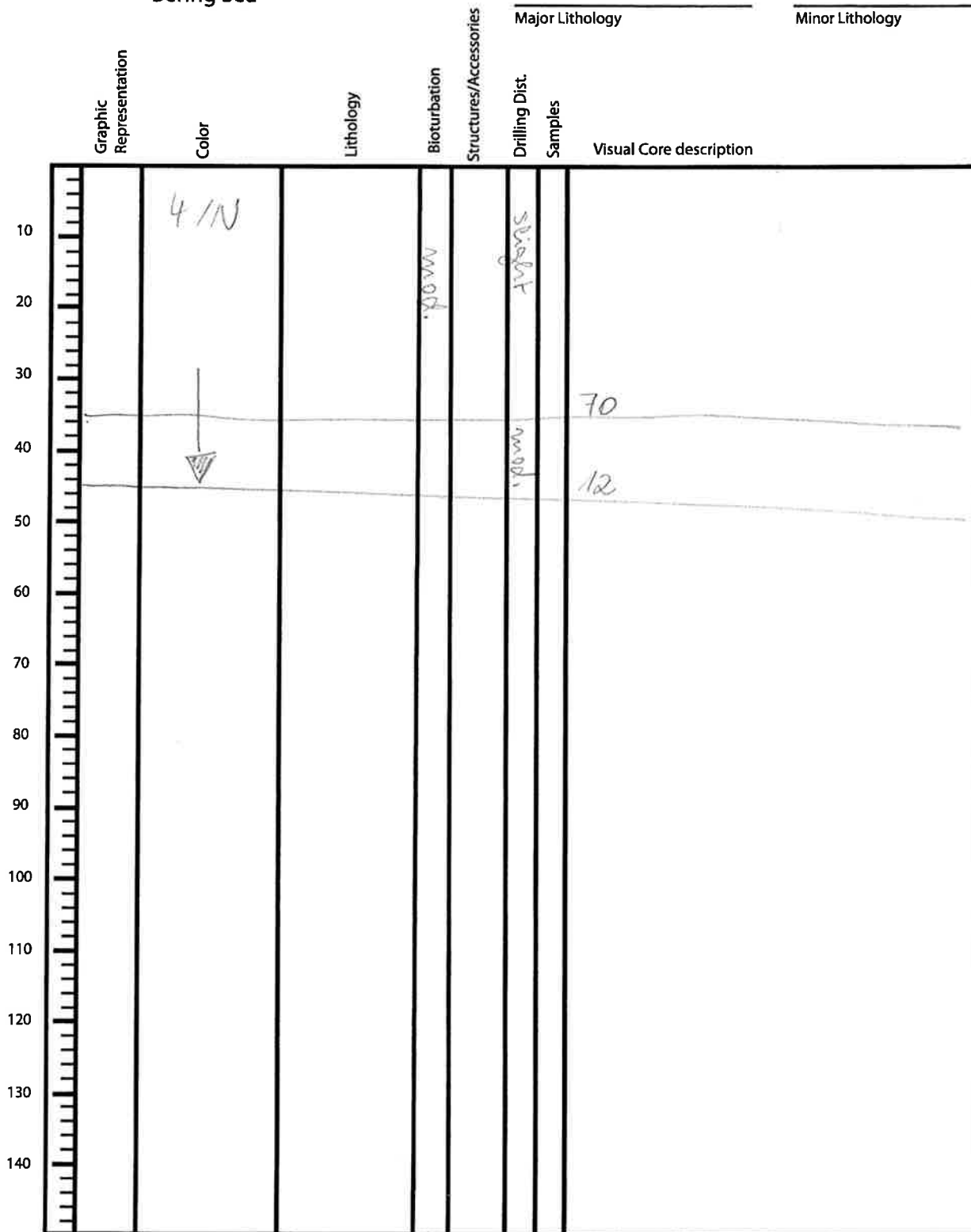
1345 E 15H 576
 Site Hole Core Section Top Depth

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist. Samples	Major Lithology	Minor Lithology
						Visual Core description	
	41N				42		
			mod.	slight mod.	41		
							sandy mottled, hrs.

Observer: _____ Date: _____

Expedition 323
Bering Sea

1345 E 15H 7+CC
 Site Hole Core Section Top Depth



Observer: _____ Date: _____

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	1345	E	15H		1A	75	

15
3
can
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light
Gr...

Sediment/Rock Name	silty clay
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Observer	Hiro
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Percent Texture		
Sand	Silt	Clay

Comments:

Percent	Component
SILICICLASTIC GRAINS/MINERAL 97	
Framework minerals	
55	Quartz
	Feldspar
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
6	Rock fragments 1
Accessory/trace minerals	
	Micas
	Biotite
	Muscovite
18	Clay Minerals
	Chlorite
	Glauconite
	Chert
	Zircon
12	Ferromagnesium minerals 2
Authigenic minerals	
	Barite
	Phosphorite/Apatite
	Zeolite
Opaque minerals	
6	Pyrite 1
	Magnetite
	Fe-oxide
Carbonates	
	Calcite
	Dolomite
VOLCANICLASTIC GRAINS	
	Crystal grain
	Vitric grain
	Lithic grain

Percent	Component
BIOGENIC GRAINS 3	
Calcareous	
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
Siliceous	
	Radiolarians
	Spumellaria
	Nassellaria
3	Diatoms
	Centric
	Pennate
	Chaetoceros Resting Spores
	Silicoflagellates
	Sponge spicules
	Dinoflagellates
Others	
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

IODP Expedition 323
 SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	13A	E	15H		2A	99	

Sediment/Rock Name	Diatom - rich clayey silt	Observer	Hiro
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Percent Texture		
Sand	Silt	Clay

Comments:

Percent	Component
SILICICLASTIC GRAINS/MINERAL 33.86	
Framework minerals	
33.75	Quartz 2
10.13	Feldspar 9.2
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
Accessory/trace minerals	
	Micas
	Biotite
	Muscovite
33.47	Clay Minerals 7
	Chlorite
	Glaucanite
	Chert
	Zircon
	Ferromagnesium minerals
Authigenic minerals	
	Barite
	Phosphorite/Apatite
	Zeolite
Opaque minerals	
10.13	Pyrite 2
	Magnetite
	Fe-oxide
Carbonates	
	Calcite
	Dolomite
VOLCANICLASTIC GRAINS	
	Crystal grain
	Vitric grain
	Lithic grain

Percent	Component
BIOGENIC GRAINS 17.14	
Calcareous	
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
Siliceous	
	Radiolarians
	Spumellaria
	Nassellaria
17.14	3 Diatoms
17.14	Centric
	Pennate
	Chaetoceros Resting Spores
	Silicoflagellates
	Sponge spicules
	Dinoflagellates
Others	
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

IODP Expedition 323
 SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	1345	5	15H		3A	6cm	

Sediment/Rock Name	Diatom-rich clay (Pyrite)	Observer	Hiro
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Percent Texture		
Sand	Silt	Clay

Comments:

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
	Framework minerals
11 B	Quartz /
	Feldspar
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
	Accessory/trace minerals
	Micas
	Biotite
	Muscovite
11	Clay Minerals /
	Chlorite
	Glauconite
	Chert
	Zircon
	Ferromagnesium minerals
	Authigenic minerals
	Barite
	Phosphorite/Apatite
	Zeolite
	Opaque minerals
44 SD	Pyrite 4
	Magnetite
	Fe-oxide
	Carbonates
	Calcite
	Dolomite
VOLCANICLASTIC GRAINS	
	Crystal grain
	Vitric grain
	Lithic grain

Percent	Component
BIOGENIC GRAINS	
	Calcareous
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
	Siliceous
	Radiolarians
	Spumellaria
	Nassellaria
33 SD	3 Diatoms
	Centric
	Pennate
	Chaetoceros Resting Spores
	Silicoflagellates
	Sponge spicules
	Dinoflagellates
	Others
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

IODP Expedition 323
 SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	1345	E	15H		5A	70	

Sediment/Rock Name	Diatom-bearing silt	Observer	Hiro
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Percent Texture		
Sand	Silt	Clay

Comments:

Percent	Component
SILICICLASTIC GRAINS/MINERAL 93	
Framework minerals	
68	Quartz 40
	Feldspar
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
8	Rock fragments
Accessory/trace minerals	
	Micas
	Biotite
	Muscovite
3	Clay Minerals 2
	Chlorite
	Glauconite
	Chert
	Zircon
17	Ferromagnesium minerals 10
Authigenic minerals	
	Barite
	Phosphorite/Apatite
	Zeolite
Opaque minerals	
5	Pyrite 3
	Magnetite
	Fe-oxide
Carbonates	
	Calcite
	Dolomite
VOLCANICLASTIC GRAINS 2	
	Crystal grain
2	Vitric grain 1
	Lithic grain

Percent	Component
BIOGENIC GRAINS 5	
Calcareous	
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
Siliceous	
	Radiolarians
	Spumellaria
	Nassellaria
5	3 Diatoms
	Centric
	Pennate
	Chaetoceros Resting Spores
	Silicoflagellates
	Sponge spicules
	Dinoflagellates
Others	
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

Expedition 323
Bering Sea

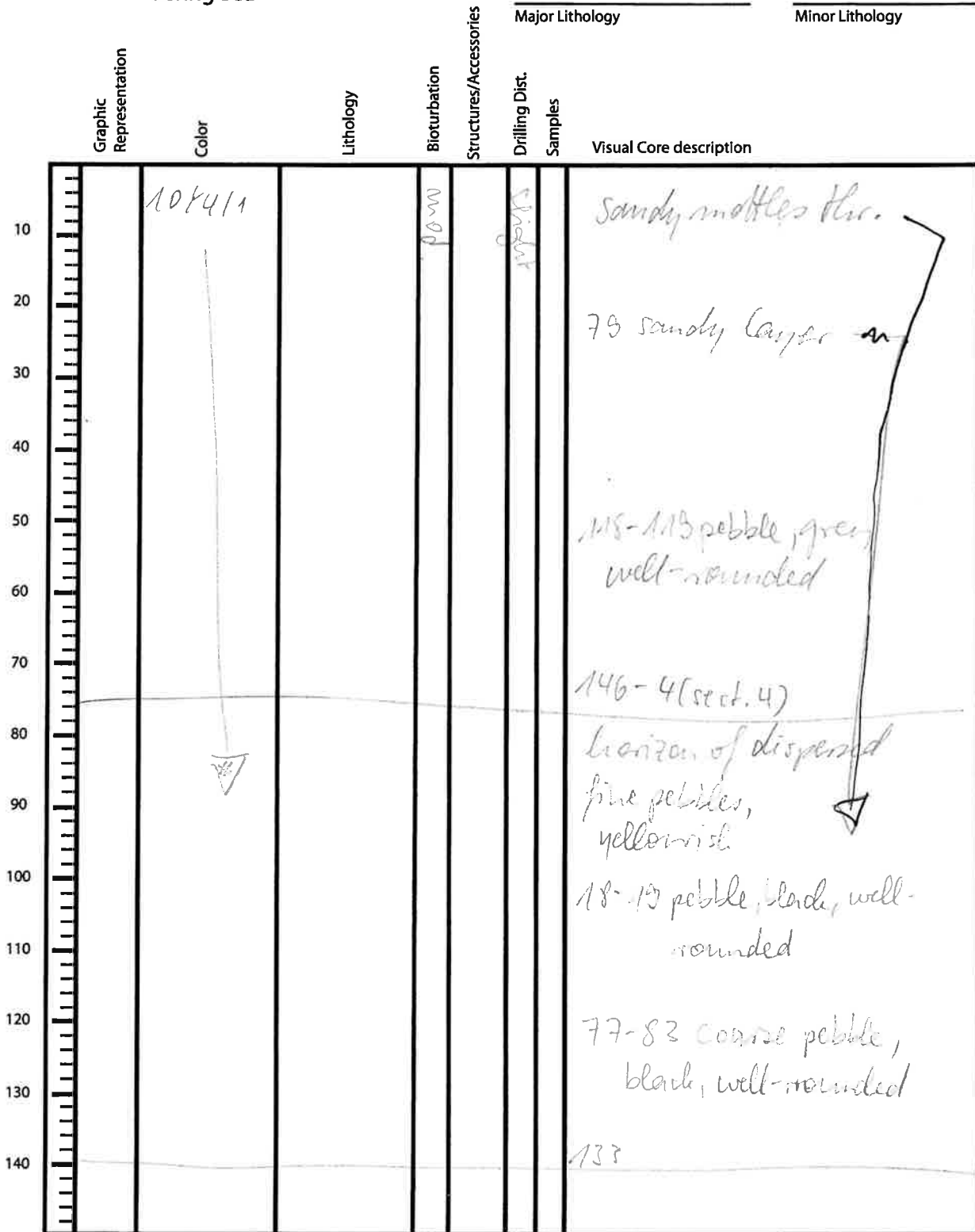
1345 E 16H 1+2
Site Hole Core Section Top Depth

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Samples	Major Lithology	Minor Lithology
							Visual Core description	
10	4/N 10Y4/1 (80/20)		1.50				0-10 parallel med. lam.	
20	4/N						36-122 pyrite nodules	
30	4/N		1.00				75-85 grad.	
40	4/N 2.5Y4/2+ (50/50)							
50	4/N (50/50)							
60								
70								
80	5GY4/1 5GY4/1+						10-15 grad.	
90	4/N (50/50)							
100								
110	10Y4/1			74			55-60 grad.	
120							74-106 crinoids	
130	4/N			106			115-120 grad.	
140							123-144 pyrite nodules	

Observer: _____ Date: _____

Expedition 323
Bering Sea

1345 E 16H 3+4
Site Hole Core Section Top Depth



Observer: _____ Date: _____

Expedition 323
Bering Sea

1345 E 1611 5+6
Site Hole Core Section Top Depth

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist. Samples	Major Lithology	Minor Lithology
						Visual Core description	
	10Y4/1		poor		10Y4/1	Sandy patches + streaks fluv.	
	10Y5/1					102-104 grad. 103-107 light anth. carb. layer	
	10Y4/1					107-108 grad.	
	↓					↓ ... 100	
	10Y5/1					21-23 coarse pebble, grey, sub angular	
	10Y3/1					57-59 grad 59-71 semilit. anth. carb. layer, light	
						70-75 grad. 137 95 shell	

Observer: _____ Date: _____

Expedition 323
Bering Sea

1345 E 16H 7+CC
Site Hole Core Section Top Depth

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Samples	Major Lithology	Minor Lithology
							Visual Core description	
	10Y3M ↓		↓				13 shell 21 shell	Sandy mottles fluc
						46		
						45		

Observer: _____ Date: _____

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	1345	E	16H		75A	6.	6

Sediment/Rock Name	Diatom-rich silt	Observer	Hiro
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clayey

Percent Texture		
Sand	Silt	Clay

Comments:

Lamination

Percent	Component
SILICICLASTIC GRAINS/MINERAL 69	
	Framework minerals
57	Quartz 15
4	Feldspar 1
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
	Accessory/trace minerals
	Micas
	Biotite
	Muscovite
	Clay Minerals
	Chlorite
	Glaucanite
	Chert
	Zircon
4	Ferromagnesium minerals 1
	Authigenic minerals
	Barite
	Phosphorite/Apatite
	Zeolite
	Opaque minerals
4	Pyrite 1
	Magnetite
	Fe-oxide
	Carbonates
	Calcite
	Dolomite
VOLCANICLASTIC GRAINS	
	Crystal grain
	Vitric grain
	Lithic grain

Percent	Component
BIOGENIC GRAINS 31	
	Calcareous
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
	Siliceous
	Radiolarians
	Spumellaria
	Nassellaria
27	7 Diatoms
	Centric
	Pennate
	Chaetoceros Resting Spores
1	0.25 Silicoflagellates
3	4 1 Sponge spicules
	Dinoflagellates
	Others
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	1345	E	16H		3A	50	

Sediment/Rock Name	Diatom-bearing silt	Observer	Hiro
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Percent Texture		
Sand	Silt	Clay

Comments:

Percent	Component
SILICICLASTIC GRAINS/MINERAL 87	
Framework minerals	
75	Quartz 20
	Feldspar
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
4	Rock fragments 1
Accessory/trace minerals	
	Micas
	Biotite
	Muscovite
4	Clay Minerals 1
	Chlorite
	Glaucanite
	Chert
	Zircon
4	Ferromagnesium minerals 1
Authigenic minerals	
	Barite
	Phosphorite/Apatite
	Zeolite
Opaque minerals	
	Pyrite
	Magnetite
	Fe-oxide
Carbonates	
	Calcite
	Dolomite
VOLCANICLASTIC GRAINS 43	
	Crystal grain
3	Vitric grain 1
	Lithic grain

Percent	Component
BIOGENIC GRAINS 10	
Calcareous	
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
Siliceous	
	Radiolarians
	Spumellaria
	Nassellaria
8	2 Diatoms
	Centric
	Pennate
	Chaetoceros Resting Spores
	Silicoflagellates
2	0.5 Sponge spicules
	Dinoflagellates
Others	
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	1345	E	16H		6A	61	

Sediment/Rock Name	Diatom-rich clay clay Auth. Carb. rich	Observer	Hino
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Percent Texture		
Sand	Silt	Clay

Comments:

Percent	Component
SILICICLASTIC GRAINS/MINERAL 21	
Framework minerals	
4	Quartz 2
	Feldspar
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
Accessory/trace minerals	
	Micas
	Biotite
	Muscovite
	Clay Minerals
	Chlorite
	Glauconite
	Chert
	Zircon
2	Ferromagnesium minerals 1
Authigenic minerals	
	Barite
	Phosphorite/Apatite
	Zeolite
Opaque minerals	
	Pyrite
	Magnetite
	Fe-oxide
Carbonates	
75 30	40 Calcite Authigenic Carbonate
	Dolomite
VOLCANICLASTIC GRAINS	
	Crystal grain
	Vitric grain
	Lithic grain

Percent	Component
BIOGENIC GRAINS 19	
Calcareous	
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
Siliceous	
	Radiolarians
	Spumellaria
	Nassellaria
	Diatoms
19	10 Centric
	Pennate
	Chaetoceros Resting Spores
	Silicoflagellates
	Sponge spicules
	Dinoflagellates
Others	
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	1345	E	16H		7A	27	

Sediment/Rock Name	Dic-fem-rich sandy silt	Observer	Hino
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Percent Texture		
Sand	Silt	Clay

Comments:

Percent	Component
SILICICLASTIC GRAINS/MINERAL 77	
	Framework minerals
45	Quartz 10
	Feldspar
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
9	Rock fragments 2
	Accessory/trace minerals
	Micas
	Biotite
	Muscovite
	Clay Minerals
	Chlorite
	Glauconite
	Chert
	Zircon
9	Ferromagnesium minerals 2
	Authigenic minerals
	Barite
	Phosphorite/Apatite
	Zeolite
	Opaque minerals
14	Pyrite 3
	Magnetite
	Fe-oxide
	Carbonates
	Calcite
	Dolomite
VOLCANICLASTIC GRAINS	
	Crystal grain
	Vitric grain
	Lithic grain

Percent	Component
BIOGENIC GRAINS 23	
	Calcareous
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
	Siliceous
	Radiolarians
	Spumellaria
	Nassellaria
23	5 Diatoms
	Centric
	Pennate
	Chaetoceros Resting Spores
	Silicoflagellates
	Sponge spicules
	Dinoflagellates
	Others
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others