

11

323 01341 BH A11
 Site Hole Core Section Top Depth

Expedition 323
 Bering Sea

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Major Lithology	Minor Lithology
1	5y 4/2 5y 4/3 →	D. ooze I 108 129 141 23	✓ S	0 82 Mdt 130	0-60 Sup	0-29 Mot. ✓ 8- F. beam Mot ✓ Lam-136-139; heavy bot. ✓ 139-144-Skol ✓ 136-144	
2	10y 4/1 14-16 23 lam, 15	II 23		131- Peb ✓		90-SS Diatoms silt II - olive grayish green 19-SS, F. beam, rich d. ooze - olive gray	
3	hs-7 ash ✓			149 - green cmc ✓		29-110 cracks ✓	
4		110 silt 121		51-42 Mot. ✓ 110 113 shell frag ✓ 121		8-120-cracks ✓	
5	103 1cm 129 beds ✓ 132-par. lam.	29-6 I 128U		123- 127- Peb 97-105 Peb ✓ 32-36 401, 80-81 5820 ✓ 10-185 CR ✓		23-white ✓ 30-W ✓ 31-84 sl. biot ✓ 98-107 sl.	
6	10y 4/1	II 59		67-76 Mot-lg 53-Peb ✓		80-SS Diatomase I - olive gray 69-79-SI ✓ 14-white! ✓	
ce	S	I 13 ord.		5-Peb ✓			

Observer: _____ Date: _____

I - Di. ooze
 II - D silt
 III - N. rich diatom ooze
 F. beam

IODP Expedition 323
 SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
393	1341	B	1	H.6A	80		

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Sediment/Rock Name	diatom ooze	Observer	AKIRA
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Percent Texture		
Sand	Silt	Clay

Comments:

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
	Framework minerals
	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
4	Pyrite 2
	Magnetite
	Fe-oxide
	Carbonates
	Calcite
	Dolomite
VOLCANICLASTIC GRAINS	
	Crystal grain
21	Vitric grain 5-2
	Lithic grain

Percent	Component
BIOGENIC GRAINS	
	Calcareous
8	Foraminifera ✓ 2
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
	Siliceous
	Radiolarians ✓
	Spumellaria
	Nassellaria
65	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

SM

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	1341	B	1	H	2	19	

Sediment/Rock Name	nanno-rich diatom ooze	Observer	Akora
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Percent Texture		
Sand	Silt	Clay

Comments:

(minor)
green.

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
	Framework minerals
	Quartz
	Feldspar
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
	Accessory/trace minerals
	Micas
	Biotite
	Muscovite
	Clay Minerals <i>ET</i>
	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
11	Foraminifera 3
	Planktonic foraminifera
	Benthic foraminifera
26	Nannofossils 7 7
	Coccoliths
	Discoasters
	Pteropods
	Siliceous
	Radiolarians
	Spumellaria
	Nassellaria
56	Diatoms 15
	Centric
	Pennate
	Chaetoceros Resting Spores
	Silicoflagellates
	Sponge spicules
	Dinoflagellates
	Others
	Pollen
7	Organic debris 2
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

JK

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	1341	B	1	H	2A	90	

Sediment/Rock Name	diatom site	Observer	AKS
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Percent Texture		
Sand	Silt	Clay

Comments:

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

Percent	Component
BIOGENIC GRAINS	
	Calcareous
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths ✓
	Discoasters
	Pteropods
	Siliceous
	Radiolarians
	Spumellaria
	Nassellaria
44	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

Expedition 323
Bering Sea

1341 Site B Hole 2 Core Section Top Depth

Depth (m)	Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Samples	Major Lithology		Minor Lithology	
								Visual Core description			
10		20 #15 70 4/2	bedding								
10-20		10T 4/1									
20-30		10-20 23-35 42-54 130	54 -58 68-77								
30-40		27									
40-50											
50-60		20 60 110	83-140								
60-70		8 89	64 43 73-110								
70-80		8									
80-90		60 110									
90-100		40									
100-110											
110-120											
120-130											
130-140											

103-105 moll ✓
~~40-50~~
 110. red pebble carbonate? ✓
 8.2. ✓
 31-125 ✓
 diatom + ch.
 clayey silty
 40-41 ✓
 40. sponge ✓ silty 40. pebble 9mm
 12-17 moll ark
 66
 13.
 7A-50 ✓
 diatom ooze

5T 4/2 } diatom ooze
 5T 4/3 }
 10T 4/1 }

Observer: _____ Date: _____

X

V
SM

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	U1341	B	2	4	3A	125cm	

Sediment/Rock Name	Diatom-rich clayey silt	Observer	Beth
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B-25
S-70
V-15

2nd

Percent Texture		
Sand	Silt	Clay
10	60	30

Comments:

Major Lithology

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

X IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	U1341	B	2H		7A	50cm	

SKN

Sediment/Rock Name	Diatom ooze	Observer	Beth
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B - 75
S - 20
V - 5

Percent Texture		
Sand	Silt	Clay

Comments:

major

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

Percent	Component
BIOGENIC GRAINS	
	Calcareous
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
	Siliceous
	Radiolarians
	Spumellaria
	Nassellaria
	Diatoms
30	Centric
45	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

1341 B 3
Site Hole Core Section Top Depth

	Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Samples	Major Lithology	Minor Lithology	Visual Core description
1		54 4/3 OLIVE								(Hyaline cracks)
2		54 4/1	90 DARK 101 GRAY				54 4/1 52 4/1			54 4/1 52 4/1
3		54 4/3	20							132.5 - BF 122.5 - BF
		54 4/1	70							faint bedding very thin
4		54 4/2	90cm	20						few fine fossils at 90 cm (BF)
		54 4/1	0 cm	90						42 cm, SS. DIATOM Ooze
5		54 4/2	90cm							134 BF
6		54 4/1								DIATOM SILT
7		54 4/1								50cm SS on shells or hyaline or humbled
CC		54 4/1	22 cm							porphyroblast vitic
		54 4/2								

Observer: _____ Date: _____

IODP Expedition 323
 SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	1341	A	3	H	4	42 cm	

SN

Sediment/Rock Name	Diatom 003C	Observer	G.B.
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Percent Texture		
Sand	Silt	Clay

Comments:

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
	Framework minerals
5	X Quartz
5	X Feldspar
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
	Accessory/trace minerals
	Micas
	Biotite
	Muscovite
5x	X 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
2	X Radiolarians
	Spumellaria
	Nassellaria
80	X Diatoms
	Centric
	Pennate
	<i>Chaetoceros</i> Resting Spores
	Silicoflagellates
3	X 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	1341	A	3	H	6	50 cm	

Sediment/Rock Name	Diatom silt	Observer	G.B.
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Percent Texture		
Sand	Silt	Clay

Comments:

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
	Framework minerals
5	X Quartz
	Feldspar
	K-feldspar (Orthoclase, Microcline...)
5	X Plagioclase
5	X Rock fragments
	Accessory/trace minerals
	Micas
	Biotite
	Muscovite
20	X Clay Minerals
	Chlorite
	Glaucanite
	Chert
	Zircon
10	X Ferromagnesium minerals
	Authigenic minerals
	Barite
	Phosphorite/Apatite
	Zeolite
	Opaque minerals
5	X Pyrite
	Magnetite
10	X 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
35	X Diatoms
	Centric
	Pennate
	Chaetoceros Resting Spores
	Silicoflagellates
5	X Sponge spicules
	Dinoflagellates
	Others
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

75

Expedition 323
Bering Sea

1341 B 4
Site Hole Core Section Top Depth

		Major Lithology	Minor Lithology	
Graphic Representation	Color	Lithology	Bioturbation	
			Structures/Accessories	
			Drilling Dist.	
			Samples	
Visual Core description				
1	10	40 ✓ 79	67 87	68-74 moll ash ✓ 82-85 planolites!
2	20	0		27cm yellow 1cm basalt ✓ 162 pebble 7mm " 93 Granules 2mm
3	30	13#	5	94 moll ash ✓ 24-25 moll ash
4	40	32 ✓ 73 ✓ 76 ✓	22 ✓ 72 ✓ 76 ✓	5T ✓ 5/2 ✓
5	50	16 ✓ 64 ✓	13 ✓ 64 ✓ 102 ✓	9-20 ✓ 34-46 ✓ 75 ✓
6	60	16 ✓ 65 ✓ 80 ✓ 120 ✓	slur ✓ 80 ✓	49-52 moll ash, crud ✓ 4-16 g.b. tilted
7	70	17 ✓ 27 ✓	85 ✓	15-16 yellow 7cm basalt ✓
8	80	36 ✓ 66 ✓	S ✓	128 ✓ 140 ✓
9	90			80 ✓ 15 ✓
10	100			15-23 PAL
11	110			□ 10T 4/1 diatom silt
12	120			▨ 5T 4/2 diatom clay
13	130			
14	140			

1A 120 ss
diatom silt

6A-6c

Observer: _____ Date: _____

SM

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	1341	B	4A	H	C6	60	cm

Sediment/Rock Name	Diatom Clay -	Observer	G.D.
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Percent Texture		
Sand	Silt	Clay

major

Comments:

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
Framework minerals	
8	x Quartz
	Feldspar
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
5	Rock fragments
Accessory/trace minerals	
	Micas
	Biotite
	Muscovite
30	x Clay Minerals
	Chlorite
	Glauconite
	Chert
	Zircon
	Ferromagnesium minerals
Authigenic minerals	
	Barite
	Phosphorite/Apatite
	Zeolite
Opaque minerals	
	Pyrite
	Magnetite
	Fe-oxide
Carbonates	
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	
1	x Radiolarians
	Spumellaria
	Nassellaria
50	x Diatoms
	Centric
	Pennate
	<i>Chaetoceros</i> Resting Spores
1	x 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	U1341	B	4	H	1	120 cm	

SM

Sediment/Rock Name	diatom silt	Observer	G. B
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Percent Texture		
Sand	Silt	Clay

- Second

Comments:

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
	Framework minerals
20	X Quartz
5	X 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
	Pyrite
	Magnetite
15	X 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
3	X Radiolarians
	Spumellaria
	Nassellaria
55	X Diatoms
	Centric
	Pennate
	Chaetoceros Resting Spores
2	X Silicoflagellates
	Sponge spicules
	Dinoflagellates
	Others
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

20 45

Expedition 323
Bering Sea

1341 B 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	104 4/2	53				10		54 5/3 OLIVE
	104 5/2	100						104 4/2 DARK GREENIST GAY
2	4/2	125						104 5/2 GREENIST GAY
	5/2	8 ASst						
3	4/1	90						2.5% B/1
	5/1	140						dark gray
4	4/1							
	54 5/3	130						fine lamination
5		130						
	104 5/1							
6	90	117m						
		140m						
7	4/1							alcid-rite ? disten clay
	5/1	3m						13m, ss from brown lense 15m from darker lithology disten clay

Observer: _____ Date: _____

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IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	U341	B	5	H	7	13 cm	

Sediment/Rock Name	Calcite-rich diatom clay	Observer	G.B.
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Foram-rich diatom ooze laminae.

Percent Texture		
Sand	Silt	Clay

Comments:

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

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

1341 B 6
 Site Hole Core Section Top Depth

Expedition 323
 Bering Sea

Depth (m)	Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Samples	Major Lithology	Minor Lithology
								Visual Core description	
1-10	✓	544/3 544/2						105 thin ash bleed ✓ 43-45 mill ash ✓	
10-20	✓	106 112 118 544/2						92 mill ash ✓	-2A-80 nano-bearing diatom ooze
20-30	✓	117 544/2							-3A-7 nano-rich diatom ooze
30-40	✓	110 544/4							
40-50	✓	45		54				45 speckle volcanics	
50-60	✓	142							
60-70	✓	60 120							
70-80	✓	20 60 70 137							
80-90	✓	40							
90-100	✓	140							
100-110	✓								
110-120									
120-130									
130-140									

28
27
24
26
25
22
23
21
20
30
81
6-13PAL

54 4/2 nano-bearing diatom ooze
 104 4/2 diatom ooze
 54 6/4 nano-rich diatom ooze

Observer: _____ Date: _____

X

SM

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	U1341	B	6	H	2	60 cm	

Sediment/Rock Name	Nannof. with diatom ooze bearing	Observer	G.B.
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Percent Texture		
Sand	Silt	Clay

Comments: Rain lithology -

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
	Framework minerals
	Quartz
	Feldspar
	K-feldspar (Orthoclase, Microcline...)
5	X Plagioclase
5	X Rock fragments
	Accessory/trace minerals
	Micas
	Biotite
	Muscovite
	Clay Minerals
	Chlorite
	Glaucanite
	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
5	X Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
10	X Coccoliths
	Discoasters
	Pteropods
	Siliceous
	Radiolarians
	Spumellaria
	Nassellaria
75	X 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

SM

IODP Expedition 323
 SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	U1341	B	5	H	7	15 cm	-

Sediment/Rock Name	Diatom Clay	Observer	G.B.
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Percent Texture		
Sand	Silt	Clay

Comments: *major lithology*

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
	Framework minerals
10	X Quartz
	Feldspar
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
	Accessory/trace minerals
3	X Micas
	Biotite
	Muscovite
20	X Clay Minerals
	Chlorite
	Glauconite
	Chert
	Zircon
	Ferromagnesium minerals
	Authigenic minerals
	Barite
	Phosphorite/Apatite
	Zeolite
	Opaque minerals
3	X Pyrite
	Magnetite
2	X 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
50	X Diatoms
	Centric
	Pennate
	<i>Chaetoceros</i> Resting Spores
2	X 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

JM

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
	01341	B	5	H	3	7	cm

Sediment/Rock Name	Nannof. rich Diatom ooze	Observer	GB.
--------------------	--------------------------	----------	-----

~~Minor~~ ^{minor} ~~teeth~~ ^{teeth} ideology. light green.

Percent Texture		
Sand	Silt	Clay

Comments: Nannof. obviously reworked.

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

Percent	Component
BIOGENIC GRAINS	
	Calcareous
	Foraminifera
5	X Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	X Coccoliths . Giant coccolith X
5	X Discoasters 1
	Pteropods
	Siliceous
	Radiolarians
	Spumellaria
	Nassellaria
60	X 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

1341 B 7
Site Hole Core Section Top Depth

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Samples	Major Lithology	Minor Lithology
							Visual Core description	
1								
10								
20						20-21 - 1KD, dark subrounded feldite		
2						101 PS BLOWN 149		dark greenish gray 104 4/1
30						151, spicule		dark greenish gray
3								20m ss - 0.1 to 0.02mm 0.02mm
40								
4								104 4/1
50								
5								
60								
6								
70								
7								
80								
8								
90								
9								
100								
10								
110								
120								
130								
140								
								facile bedding 21cm 3cm
								SPICULE 23cm

Observer: _____ Date: _____

IODP Expedition 323
 SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
	1341	B	7		3	70m	

SM

Sediment/Rock Name X-latom 0025

Observer LM

Percent Texture		
Sand	Silt	Clay

Comments:

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
10%	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
2%	Pyrite
	Magnetite
	Fe-oxide
	Carbonates
	Calcite
	Dolomite
VOLCANICLASTIC GRAINS	
	Crystal grain
5%	Vitric grain
	Lithic grain

Percent	Component
BIOGENIC GRAINS	
	Calcareous
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
X	Coccoliths
	Discoasters
	Pteropods
	Siliceous
X	Radiolarians
	Spumellaria
	Nassellaria
10%	Diatoms
60%	Centric
20%	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

1341 B 8
 Site Hole Core Section Top Depth

Expedition 323
 Bering Sea

Major Lithology _____ Minor Lithology _____

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Samples	Visual Core description
1	104 4/1						stank 70 cm
2	54 4/1	27 cm					foram-bearing COCCO-wdr dissem core
	104 4/1	90 cm					
3	104 5/2	60 cm					68 cm, 55 104 4/2
	104 4/1	78 cm					
4	104 4/2						107, grain clott
5	54 5/2	0 cm					yellow 4 54 5/3
	54 4/1	30 cm					
	54 4/1	82 cm					
		120 cm					
6	58 5/2	4/2					
		110 cm					
7	54 4/1	150 cm					
CC		7 cm					

Observer: _____ Date: _____

IODP Expedition 323
 SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	U1341	B	8H	34	68cm		

SM

Sediment/Rock Name	F-bearing Coccolith-nau Niatona ooze	Observer	Ben
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B-45
 S-53
 V-2

Percent Texture		
Sand	Silt	Clay

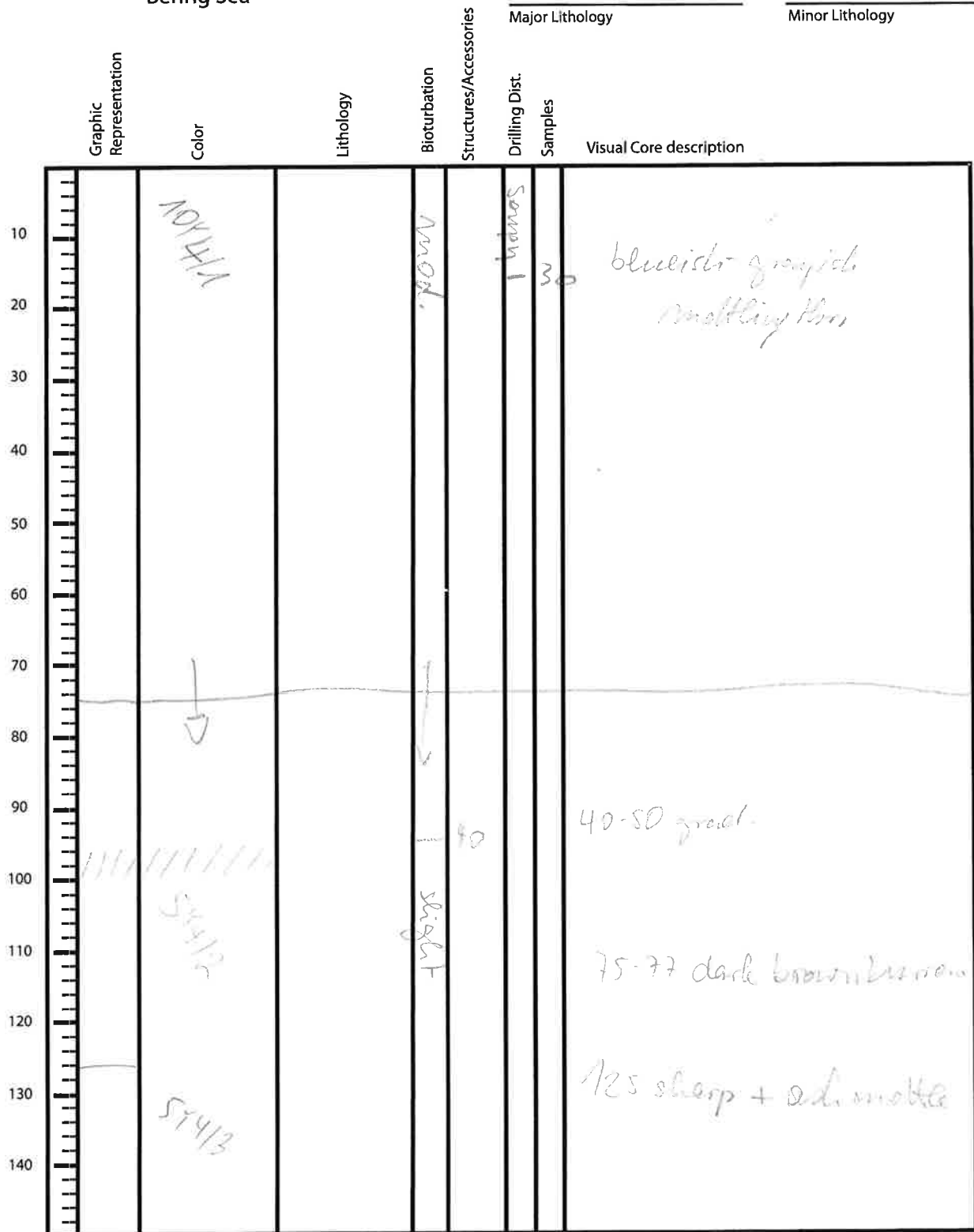
Comments:

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

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

Expedition 323
Bering Sea

1341 B 94 12
Site Hole Core Section Top Depth



Observer: _____ Date: _____

Expedition 323
Bering Sea

1341 B 9H 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	
	5Y4/3		stick x					15 white dot 65-75 grad.
	5Y4/2							
	↓							50-52 dark red patches 83 white dot

Observer: _____ Date: _____

Expedition 323
Bering Sea

1341 Site B Hole 9H Core 5+6 Section _____ Top Depth

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist. Samples	Major Lithology	Minor Lithology
						Visual Core description	
10-20 	5Y4/2 						
20-30	10Y4/1 						
30-40							
40-50							
50-60							
60-70	5Y4/2 						
70-80							
80-90							
90-100							
100-110							
110-120	10Y4/1 						
120-130							
130-140							

5-15 grad.
black mottles thin.
blueish-greyish mottles thin
95-97 inter-mixed ash
123 slump
128-130 adv. mottles
40-70 grad.
122 white dot

Observer: _____ Date: _____

1341 3 9H 7+cc
Site Hole Core Section Top Depth

Expedition 323
Bering Sea

	Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Samples	Visual Core description	Major Lithology	Minor Lithology
10		1044/1								
20										
30										
40		↓					77			
50							78			
60		PAL					78			
70										
80										
90										
100										
110										
120										
130										
140										

Observer: _____ Date: _____

✓SM

IODP Expedition 323
 SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	V1341	B	9	H	1	110	110

Sediment/Rock Name	Sponge - spicule - bearing diatom silt	Observer	Kelsie
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Percent Texture		
Sand	Silt	Clay

Comments: Main lithology - grey section

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

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

✓SM

IODP Expedition 323
 SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	V1341	E	9	H	3	90	90

Sediment/Rock Name	Diatom ooze	Observer	Kelsie
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Percent Texture		
Sand	Silt	Clay

Comments: Main lithology = greenish.

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
	Framework minerals
10	Quartz
5	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
1	Pyrite
	Magnetite
	Fe-oxide
	Carbonates
	Calcite
	Dolomite
VOLCANICLASTIC GRAINS	
	Crystal grain
5	Vitric grain
	Lithic grain

Percent	Component
BIOGENIC GRAINS	
	Calcareous
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
	Siliceous
	Radiolarians
	Spumellaria
	Nassellaria
	Diatoms
50	Centric
30	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

✓ SM

IODP Expedition 323
 SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	U1341	B	9	H	5	93	

Sediment/Rock Name	Diatom silt	Observer	Kelsie
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Percent Texture		
Sand	Silt	Clay

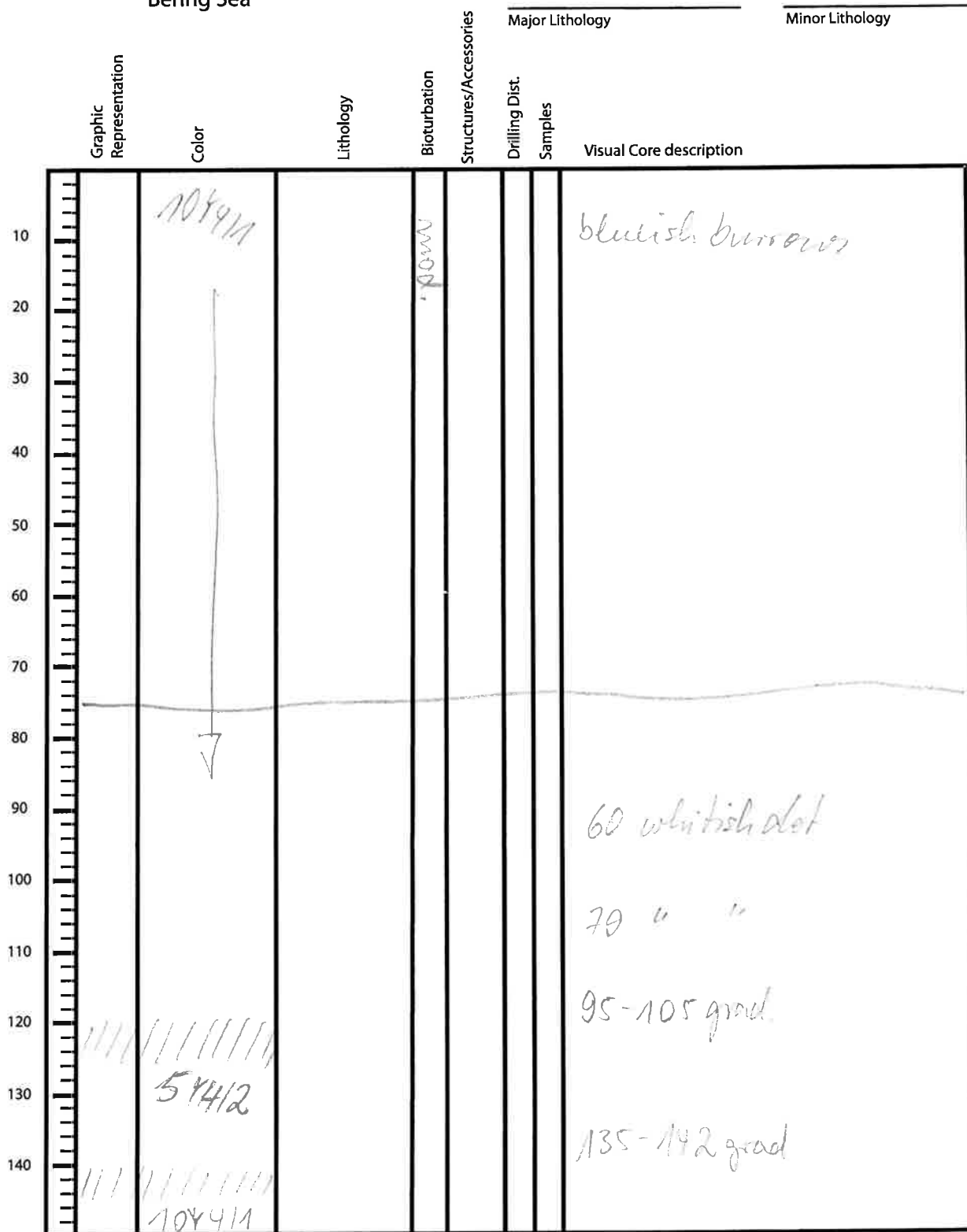
Comments: Greyish lithology - main lithology

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

Percent	Component
BIOGENIC GRAINS	
	Calcareous
1	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
	Siliceous
	Radiolarians
	Spumellaria
	Nassellaria
	Diatoms
35	Centric
20	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

1341 3 10H 1+2
 Site Hole Core Section Top Depth

Expedition 323
 Bering Sea



Observer: _____ Date: _____

Expedition 323
Bering Sea

1341 Site B Hole 10H Core 3+4 Section _____ Top Depth

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist. Samples	Major Lithology	Minor Lithology
						Visual Core description	
	10Y4/1		mod				33 ash patch
	5Y4/2						68-74 grad.
	10Y4/1						91-95 grad. 90-150 ash nodules
							50-70 grad.
	5Y4/2						73-75 clast, black, 2 cm φ
	10Y4/1						100-110 grad.
							130-150 grad.

Observer: _____ Date: _____

1341 3 10H 5+6
 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	
	545/12		slight					
	1044/11						97-104 grad.	
	544/12						25-35 grad.	
							93-96 clst, subrounded, 3cm φ, black	
						100		

Observer: _____ Date: _____

134A B 10H 7+cc
 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	
	5Y4/2						
	7.0Y4/1						
	5Y4/2						20-35 grad.
							75

Observer: _____ Date: _____

Expedition 323
Bering Sea

1341 B MH 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	
	5Y5/2		slight					0-36 undulated thin bedding
	10Y4/1							32-42 grad 118-150 sh. nodules
	5Y5/2							0-48 patchy thin bedding
	10Y4/1		mod.					48 sh. comp 52 whitish spot 48-150 blueish burrens

Observer: _____ Date: _____

Expedition 323
Bering Sea

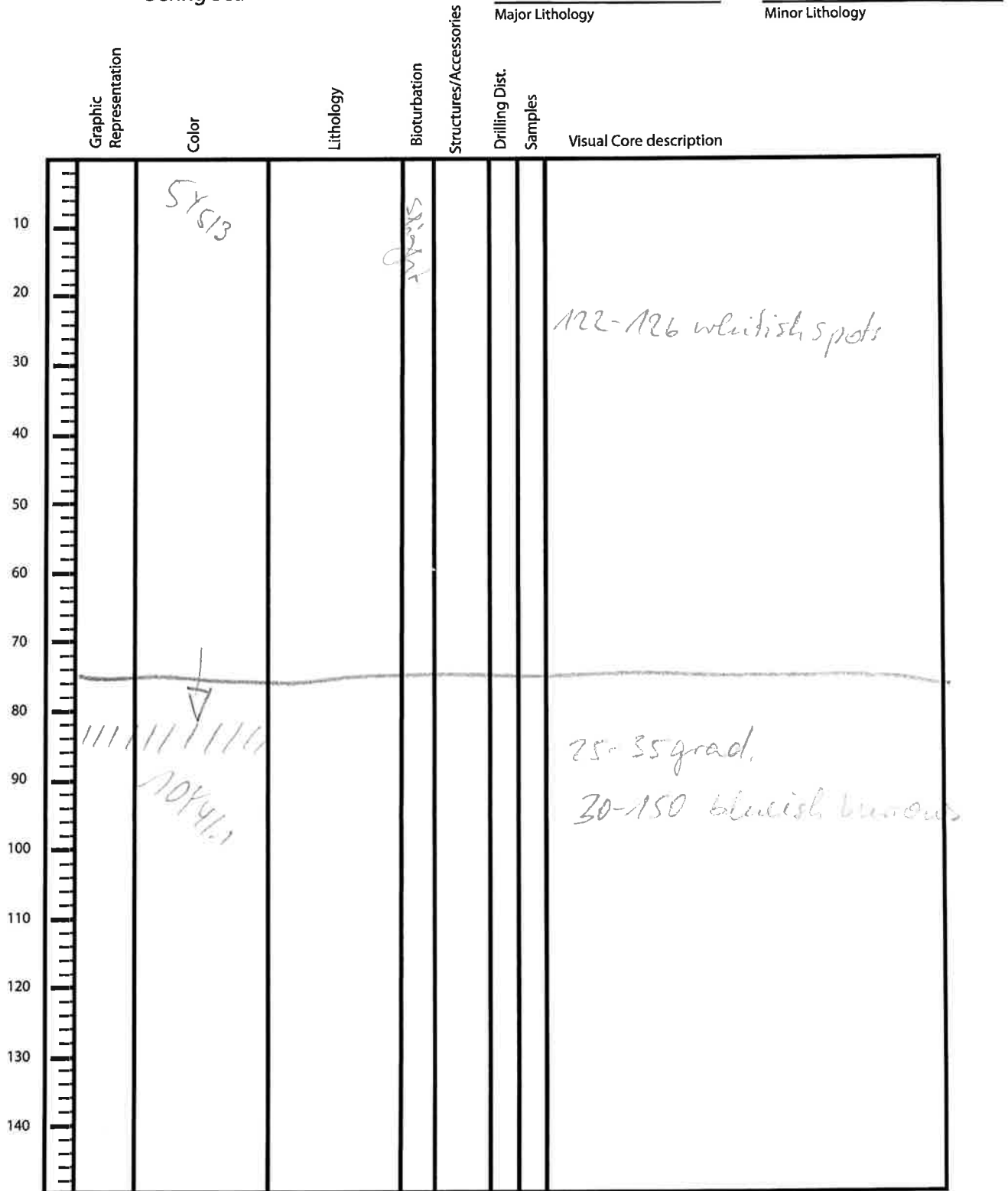
1341 B MH 3+4
 Site Hole Core Section Top Depth

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist. Samples	Major Lithology	Minor Lithology
						Visual Core description	
10 11 12 13 14 15 16 17 18 19 20	10Y5/1 10Y4/1		mark 30 30			blueish burrows 15-20 grad. 15-58 light gray burrows	
30 31 32 33 34 35 36 37 38 39 40						44-48 green mottling	
40 41 42 43 44 45 46 47 48 49 50						134 ash layer 95-115	
50 51 52 53 54 55 56 57 58 59 60	5Y4/2						
60 61 62 63 64 65 66 67 68 69 70							
70 71 72 73 74 75 76 77 78 79 80							
80 81 82 83 84 85 86 87 88 89 90	5Y5/3					2-8 grad.	
90 91 92 93 94 95 96 97 98 99 100							
100 101 102 103 104 105 106 107 108 109 110							
110 111 112 113 114 115 116 117 118 119 120							
120 121 122 123 124 125 126 127 128 129 130							
130 131 132 133 134 135 136 137 138 139 140							

Observer: _____ Date: _____

Expedition 323
Bering Sea

1341 B MH 5-16
Site Hole Core Section Top Depth



Observer: _____ Date: _____

1341 B 11H 7+cc
 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	
	10Y4/1		light				
	5Y4/2						30-50 grad
	↓						85
	PAL						

Observer: _____ Date: _____

Expedition 323
Bering Sea

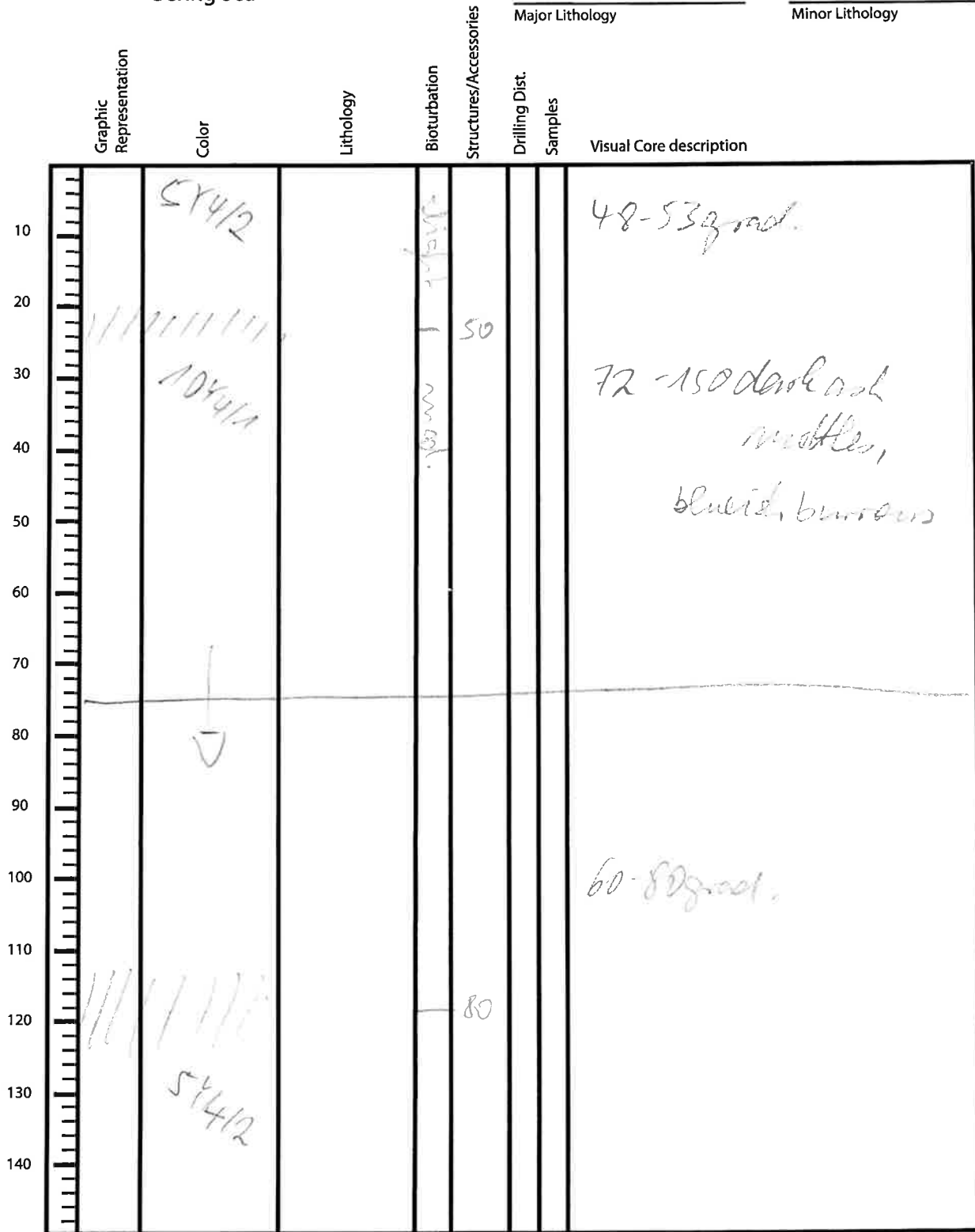
1341 3 12H 1+2 _____
Site Hole Core Section Top Depth

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Samples	Major Lithology	Minor Lithology
							Visual Core description	
	10Y4/1 5Y4/2		typical				8-13 grad.	
	10Y4/1 5Y4/2						105-110 110-40 (sect. 3) thin bedding, part clay 130-135 grad.	
	5Y4/2						23 whitish spot 26", 90"	

Observer: _____ Date: _____

Expedition 323
Bering Sea

1341 3 12H 314
Site Hole Core Section Top Depth



Observer: _____ Date: _____

1341 B 12H 5+6
 Site Hole Core Section Top Depth

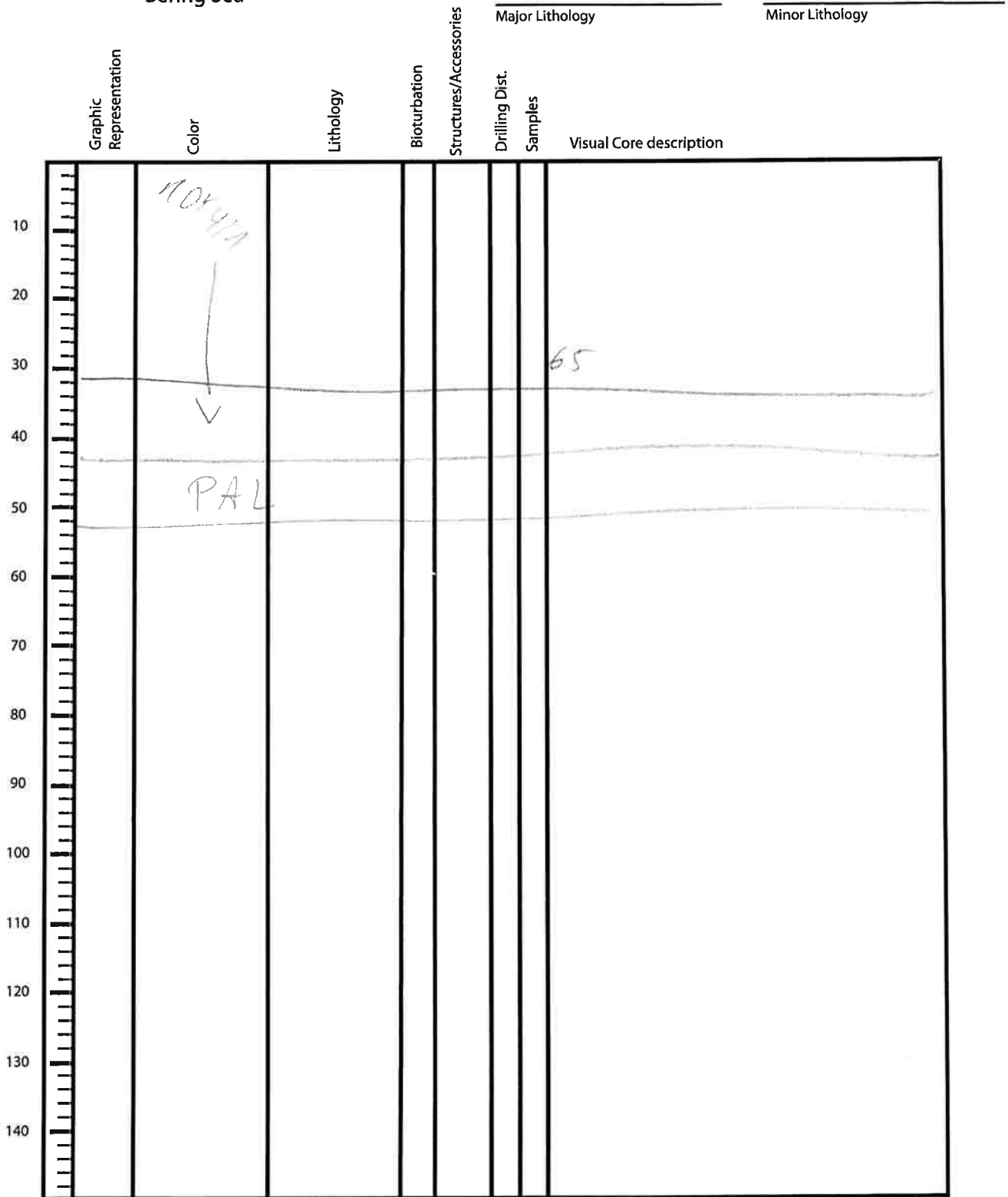
Expedition 323
 Bering Sea

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist. Samples	Major Lithology	Minor Lithology
						Visual Core description	
	5Y4/2						15-30 grad.
	10Y4/1						60-70 grad.
	5Y4/2						117-125 grad.
	10Y4/1						
	5Y4/2						72-80 grad.
	10Y4/1						95-100 grad.

Observer: _____ Date: _____

1341 B 12H 7+cc
Site Hole Core Section Top Depth

Expedition 323
Bering Sea



Observer: _____ Date: _____

1341 B 13H 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	
	5Y4/2		slight				33-37 whitish spots
	5Y4/2						70-75 grad.
	5Y4/2						90-93 grad.
	5Y4/2						99-102 grad.
	5Y4/2						108-112 filled sharp
	5Y4/2						30-50 grad.
	5Y4/2						5? clast, fine pebble, subrounded, black
	5Y4/2						

Observer: _____ Date: _____

Expedition 323
Bering Sea

1341 Site B Hole 13H Core 3+4 Section _____ Top Depth

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist. Samples	Major Lithology	Minor Lithology
						Visual Core description	
	5Y 5/3 		st. mod.	15			0-13 light mottling 14-18 grad.
	10Y 4/1 						
	5Y 5/3 			125			124-125
	10Y 4/1 						21-27 grad.

Observer: _____ Date: _____

1341 B 13H 5+6
Site Hole Core Section Top Depth

Expedition 323
Bering Sea

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Samples	Major Lithology	Minor Lithology
	SY4/2		up					
	10Y4/1		med		107			
								107 sherp 107-150 ash nodules

Observer: _____ Date: _____

1341 B 13H 7+cc
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
10		10W4M		Diapir					
20									
30									72
40									
50		PAL							33
60									
70									
80									
90									
100									
110									
120									
130									
140									

Observer: _____ Date: _____

✓ SM

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	1341	AB	B ¹³⁴		4	10	10

Sediment/Rock Name	Diatom Ooze	Observer	Hin A
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Percent Texture		
Sand	Silt	Clay

Comments: yellow - Greenish pa Litho

Percent	Component
	SILICICLASTIC GRAINS/MINERAL 4%
	Framework minerals
4%	Quartz 210.5
	Feldspar
	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
	Pyrite
	Magnetite
	Fe-oxide
	Carbonates
	Calcite
	Dolomite
	VOLCANICLASTIC GRAINS
	Crystal grain
	Vitric grain
	Lithic grain

Percent	Component
	BIOGENIC GRAINS 96%
	Calcareous
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
	Siliceous
	Radiolarians
	Spumellaria
	Nassellaria
	Diatoms
55%	Centric 7
38%	Pennate 5
	Chaetoceros Resting Spores
2%	Silicoflagellates ← 250.25
	Sponge spicules
	Dinoflagellates
	Others
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

1841 B 14H 142
 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	
	10Y4/1		10Y4/5				
							65-70 tilted
	5Y4/2						90-95 grad.
	↓						122 whitish spot
	10Y4/1						47-53 grad.

Observer: _____ Date: _____

Expedition 323
Bering Sea

1341 Site B Hole 14H Core 3+4 Section _____ Top Depth

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist. Samples	Major Lithology		Minor Lithology	
						Visual Core description			
	5 Y4/2		Wavy						
	15 Y4/1 28 10 Y4/1								28 sharp 28-110 ash nodules

Observer: _____ Date: _____

Expedition 323
Bering Sea

1341 B 14H 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	
	54412						
	↓						
	54411						30-50 grad.
.....							118-137 clasts, up to fine pebbles, often subangular

10
20
30
40
50
60
70
80
90
100
110
120
130
140

Observer: _____ Date: _____

Expedition 323
Bering Sea

1341 B 14H 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	
	15Y9/1						
	5Y4/2						22-30 sharp tilted
	↓						89
	PAL						

Observer: _____ Date: _____

Expedition 323
Bering Sea

1341 Site 13 Hole ~~1341~~ 154 Core 1-4 Section Top Depth

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist. Samples	Major Lithology	Minor Lithology
						Visual Core description	
	5Y 4/2					00 - sec. 3, 29 5Y 4/2 grad 20 - 38	
	5Y 4/2					same 0 29-31 pinkish ash mottled 2.5TR 7/1	
	5Y 4/2					0 29-30 10Y 4/1 grad 88 - 98	
	10Y 4/1					0 80 - sec. 4, 26 5Y 4/2	
	5Y 4/2					0 26 - 46 Thin Bedded 5Y 4/2 50% 10Y 4/1 50%] ab 8.7	
SS ←	10Y 4/1	clayey		AB			
SS ←	10Y 4/1	silt		MOD		0 46 - 60 70 5Y 4/1 grad 50 - 62	
						0 62 - 67 5Y 4/2 ← 67 nearly to sharp	
						0 69 - 73 5Y 5/2	
						0 73 - 92 5Y 4/2 MOD	
						0 92 - 119 Mottled (5Y 7/2) B.T 10Y 4/1 clayey & mottled	
						0 119 - 150 10Y 4/1 silt	

Observer: H. S.

Date:

92 - Sharp

Expedition 323
Bering Sea

1341 / 13 / 151 / 5-CC / _____
Site Hole Core Section Top Depth

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist. Samples	Major Lithology	Minor Lithology	
						Visual Core description		
10 20 30 40 50 60 70 80 90 100 110 120 130 140							0 0 - sec. 7 10Y 4/1 46 silty ← 45 ash patch N/4 5 sil. B.T. ash patch N/4 73 - 150 spec. b. 40-45 60 - 100 6 pebble @ 94 subangular pumise 96 " grad. 43-48 " 46 - Bottom 5T 4/2 ⚡	
		5Y 4/2					CC 0-10 Biscuit? 5T 4/2 ash patch @ 12	

Observer: H. V. D. Date: _____

Expedition 323
Bering Sea

134/ Site B Hole 1617 Core 1-4 Section Top Depth

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Samples	Major Lithology	Minor Lithology
							Visual Core description	
							0-55 4-42 ashly Patch	
	10Y 3/1						60- ash	
							100-115 10Y 4/1	
							grad 110-120	
	10Y 4/1						0115-128 10Y 4/1	
	5Y 5/2						0128-132 2.5YR 8/1	
							greyish	
	10Y 4/1						0132- sec. 2, 10	
							Mod. B.T. Mottled	
							60/10Y 4/1	
							40/5Y 7/1	
								Diatom fine ash
	5Y 5/2							dolomite
	5Y 4/3						sec. 2	contains dolomite
							010-50 34 10Y 4/1	
							sd B.T.	
	10Y 4/1						034-96 5Y 5/2	
							096-150 10Y 4/1	
							sec. 3	
							90-37 5Y 5/2	
							037-50 5Y 4/3	
							050- sec. 4, 1203 146 10Y 4/1	
								50-100 10Y 4/1
								100-110 grad
								100-120 5Y 4/3
								120- sec. 8, 146 10Y 4/1
	10Y 4/1						sec. 4	
							0146- sec. 5, 10 5Y 5/2	
	5Y 5/2							

Observer: Hino

Date: _____

Expedition 323
Bering Sea

1341 Site B Hole 16H Core 5-cc Section Top Depth

Graphic Representation	Color	Lithology	Bioturbation Structures/Accessories	Drilling Dist. Samples	Major Lithology		Minor Lithology		
					Visual Core description				
10	5Y 3/2 10Y 4/1					a 10-145 10Y 4/1			
						o 145 - Bottom 5Y 4/3			
20						5 Sec 140-150 Mottling Mod. B.T			
30						ashy patch			
40					6	Sec. 6 33-35 Mott			
50						Sec. 5 133-135 Mott			
60						Sec. 4 42, 50			
70									
80						7			
90									
100						cc			
110									
120									
130									
140									

Sec 4
140 ~
Sec. 5
20
5 Mod
B.T
Mottling

Observer: H.W. Date: _____

✓SM

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	01341	B	16	H	1	130	130

Sediment/Rock Name	Fine ash	Observer	Kelcie
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Percent Texture		
Sand	Silt	Clay

Comments:

V fine.

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
	Framework minerals
15	Quartz
5	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
	Pyrite
	Magnetite
	Fe-oxide
	Carbonates
	Calcite
	Dolomite
VOLCANICLASTIC GRAINS	
	Crystal grain
75	Vitric grain
	Lithic grain

Percent	Component
BIOGENIC GRAINS	
	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

✓ SM

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	U1341	B	16	H	1	140	140

Sediment/Rock Name	Diatom fine ash (dolomite-altered)	Observer	Kelsie
--------------------	------------------------------------	----------	--------

Percent Texture		
Sand	Silt	Clay

Comments: Light green spot / burrow

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
	Pyrite
	Magnetite
	Fe-oxide
	Carbonates
	Calcite ?
20	Dolomite ?
VOLCANICLASTIC GRAINS	
	Crystal grain
40	Vitric grain Kelsie bw
	Lithic grain

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

✓ SM

IODP Expedition 323
 SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	U1341	B	16	H	1	141	141

Sediment/Rock Name	Foram-b, sponge-bearing diatom silt	Observer	Kelsie
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Percent Texture		
Sand	Silt	Clay

Comments: Outside light green spots in main lithology

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
	Framework minerals
20	Quartz
10	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
2	Pyrite
	Magnetite
	Fe-oxide
	Carbonates
	Calcite
	Dolomite
VOLCANICLASTIC GRAINS	
	Crystal grain
10	Vitric grain
	Lithic grain

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

Expedition 323
Bering Sea

1341 B 17H 112
Site Hole Core Section Top Depth







Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist. Samples	Major Lithology	Minor Lithology
	5Y4/2				slumps 119		
		73				73-84 soft sed. def.	
	5Y4/1 + 5Y4/2					73-148 thin bedding of 5Y4/1 and 5Y4/2 (80%) (20%)	
			high			90, 118-120, 131-133 whitish laminae, sharp conts.	
	5Y4/2					144-148 sharp tilted	
						90 sharp	
	5Y4/1				115	115-133 ash mottles	
			low			133-136 grad.	
						135-150 mottling of 5Y5/1 and 5/2,	
						partly stiff, semi lith.	
						auth. carb. prec.	

Observer: _____

Date: _____

1341 B 17H 3+4
 Site Hole Core Section Top Depth

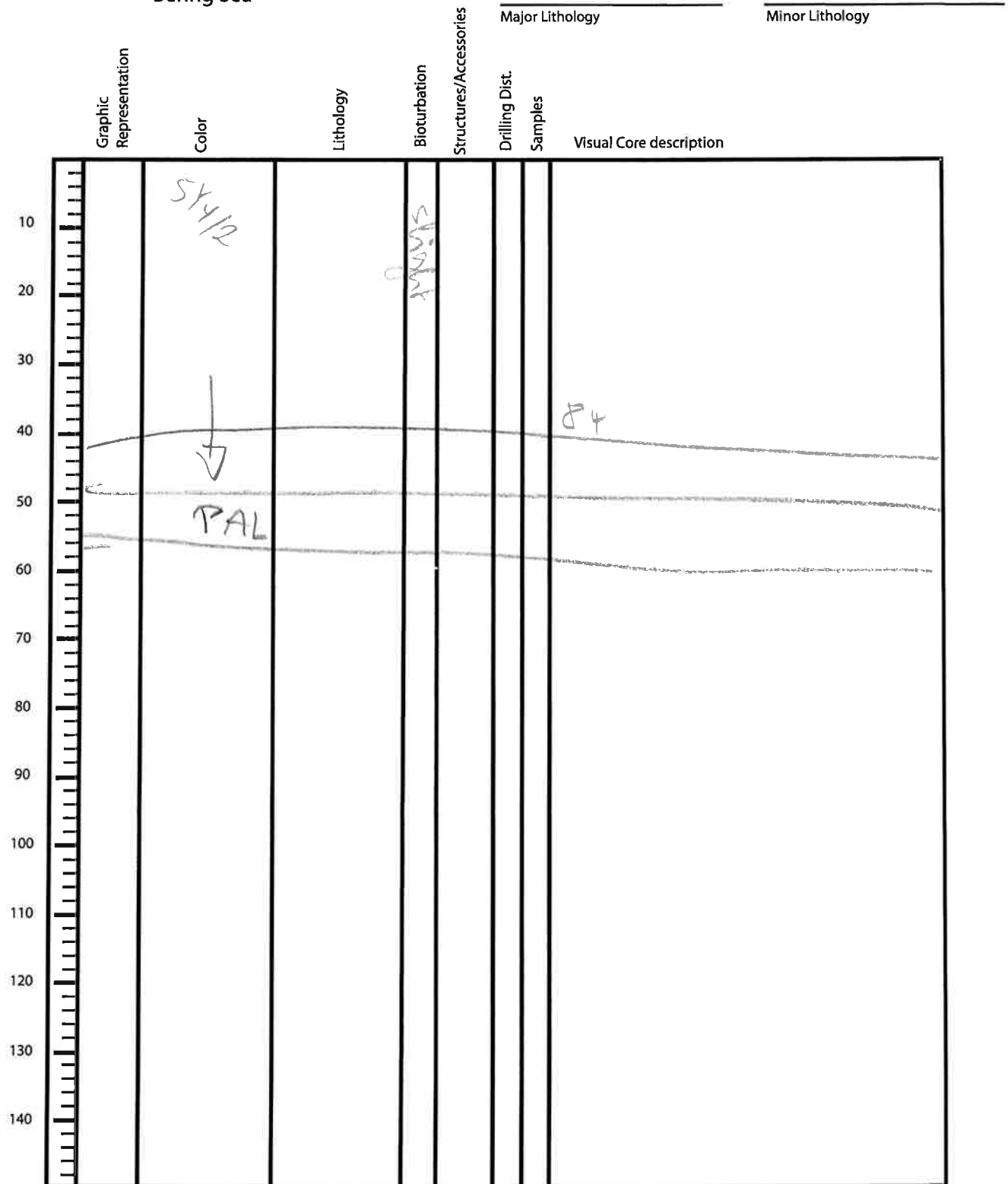
Expedition 323
 Bering Sea

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist. Samples	Major Lithology	Minor Lithology
						Visual Core description	
	SYB/2+5M						0-10 anth. carb. prec.
	10Y4/1		slight				10-12 grad.
							10-95 ash mottles
							100-120 grad
	SY4/2						
							

Observer: _____ Date: _____

Expedition 323
Bering Sea

1341 P 17H S+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	1341	B	17H		1A	119	119

SM

Sediment/Rock Name	fine ash	Observer	H:A
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Percent Texture		
Sand	Silt	Clay
	100	

Comments:

dolomite? white layer ✓

Percent	Component
SILICICLASTIC GRAINS/MINERAL 75 5	
	Framework minerals
5	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
	Pyrite
	Magnetite
	Fe-oxide
	Carbonates
	Calcite
	Dolomite
VOLCANICLASTIC GRAINS 100 95	
	Crystal grain
95 100	Vitric grain
	Lithic grain

Percent	Component
BIOGENIC GRAINS	
	Calcareous
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
	Siliceous
	Radiolarians
	Spumellaria
	Nassellaria
	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

SM

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	1341	B	17H		2A	140	140

Sediment/Rock Name	diatom bearing clay (Authigenic Carbonate)	Observer	Hiro A
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Percent Texture		
Sand	Silt	Clay
25	35	40

Comments:

dolomite

Percent	Component	92
SILICICLASTIC GRAINS/MINERAL 90%		
Framework minerals		
1%	Quartz 0.25	
	Feldspar	
	K-feldspar (Orthoclase, Microcline...)	
	Plagioclase	
2%	Rock fragments 0.5	
Accessory/trace minerals		
	Micas	
	Biotite	
	Muscovite	
	Clay Minerals	
	Chlorite	
	Glauconite	
	Chert	
	Zircon	
	Ferromagnesium minerals	
Authigenic minerals		
	Barite	
	Phosphorite/Apatite	
	Zeolite	
Opaque minerals		
	Pyrite	
	Magnetite	
	Fe-oxide	
Carbonates		
	Calcite	
8%	Dolomite 2%	
VOLCANICLASTIC GRAINS		
	Crystal grain	
	Vitric grain	
	Lithic grain	

Percent	Component	8
BIOGENIC GRAINS 8		
Calcareous		
	Foraminifera	
	Planktonic foraminifera	
	Benthic foraminifera	
	Nannofossils	
	Coccoliths	
	Discoasters	
	Pteropods	
Siliceous		
	Radiolarians	
	Spumellaria	
	Nassellaria	
	Diatoms	
5%	Centric 2	
1%	Pennate 0.5	
6	Chaetoceros Resting Spores	
	Silicoflagellates	
2%	Sponge spicules 1	
	Dinoflagellates	
Others		
	Pollen	
	Organic debris	
	Plant debris	
	Ebridians	
	Echinoderm	
	Fish remains (teeth, bones, scales)	
	Bryozoans	
	Bivalves	
	Others	

1341 B 18H 1+2
Site Hole Core Section Top Depth

Expedition 323
Bering Sea

		Major Lithology		Minor Lithology		
Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist. Samples	Visual Core description
10 20 30 40 50 60 70 80 90 100 110 120 130 140	544/2					
	↓		14 days			
	1044/1					130-140 grad.

Observer: _____ Date: _____

Expedition 323
Bering Sea

1341 B 18H 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	
	10Y4/1		mod.				
	 5Y4/2						20-40 grad. 33 whitish spot 136 whitish spot

Observer: _____ Date: _____

Expedition 323
Bering Sea

1341 B 18H 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	
	SY412						
	SY512					65-70 grad.	
			disturb			84-88 grad.	
	10Y4/1					125-135 grad.	
	SY412					145-150 intermixed dark ash	
	▽						
						64, 65 dark ash layers, sharp bases, fining up	
						130	
						95-96 ash part	

Observer: _____ Date: _____

1341 B 18H 7+cc
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
	SY4/2 ↓ PAL							76

Observer: _____ Date: _____

Expedition 323
Bering Sea

1341 Site § Hole 13H Core 1+2 Section _____ Top Depth

Major Lithology _____
Minor Lithology _____

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist. Samples	Visual Core description
	5Y4/1					0-18
	5Y4/2					18 sharp
			sharp			90-100 grad.
	5Y4/1					115-120 grad.
	5Y4/2					
	▽					35-45 grad.
	5Y4/1					64 sharp
	5Y4/2					130-135 grad
	5Y4/1					145 sharp
	5Y4/2					

Observer: _____ Date: _____

Expedition 323
Bering Sea

1341 Site B Hole 19H Core 3+4 Section _____ Top Depth

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist. Samples	Major Lithology	Minor Lithology
						Visual Core description	
	SY412						
							89-92 intermixed ash
							128-138 grad
	 SY411						146-149 grad
	 SY412						
	▽						
							49 ash layer

Observer: _____ Date: _____

Expedition 323
Bering Sea

134.1 3 19H 5+6
Site Hole Core Section Top Depth

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist. Samples	Visual Core description	Major Lithology	Minor Lithology
	SY412					Ab elast, black, angular		

Observer: _____ Date: _____

Expedition 323
Bering Sea

1341 B 19H 7+CC
Site Hole Core Section Top Depth

Major Lithology _____
Minor Lithology _____

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist. Samples	Visual Core description
	SY412					16-52 disc, lam.
	↓					66
	73AL					

Observer: _____ Date: _____

✓ 5M

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	1341	#1	19H		5	60	60

Sediment/Rock Name	diatom clayey silt	Observer	Hin.
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Percent Texture		
Sand	Silt	Clay
10	60	30

Comments:

Major

B-7.5
60

1 10 5

Percent	Component
SILICICLASTIC GRAINS/MINERAL 55%	
Framework minerals	
43%	Quartz 3 10
7%	Feldspar 7 2
	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	
2%	Pyrite 0.5
	Magnetite
	Fe-oxide
Carbonates	
	Calcite
	Dolomite
VOLCANICLASTIC GRAINS 3%	
	Crystal grain
34%	Vitric grain 1
	Lithic grain

Percent	Component
 BIOGENIC GRAINS 43%	
Calcareous	
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
Siliceous	
	Radiolarians
	Spumellaria
	Nassellaria
	Diatoms
3%	Centric 1
13%	Pennate 3
	Chaetoceros Resting Spores
	Silicoflagellates
	Sponge spicules
	Dinoflagellates
Others	
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

1341 B 20H 1+2
 Site Hole Core Section Top Depth

1341 B

Expedition 323
 Bering Sea

Major Lithology _____
 Minor Lithology _____

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist. Samples	Visual Core description
	SY413					
	SY411					74-78 grad.
	SY412					90-95 grad.
	▽					28 ash patch
	SY411					80-100 grad. whitish spot

Observer: _____ Date: _____

1341 B 20H 3+cc
Site Hole Core Section Top Depth

Expedition 323
Bering Sea

Major Lithology _____
Minor Lithology _____

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist. Samples	Visual Core description
	POY4/1 SY4/1 ↓ DAL					10-30 grad B2

Observer: _____ Date: _____

Expedition 323
Bering Sea

323 U1341 B 21H A11
Site Hole Core Section Top Depth Scale

Diatom ooze

Major Lithology

Minor Lithology

	Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Visual Core description
1				55 10	4-10 11-14 M&A			All Diatom ooze
2				90 128 M	18-W 125-135 L.M.A.			
3		54R 0/1		81 88	36 5-37 L.M.A. 11-W			Pink Ash - gray
4		59 4/2		19 81 124	26-27 L.M.A. 62-70 M&A			
5		109 4/1		10 81 134	84-85 86 87 88			SS-80 - more pyrite.
6				10 146	30-W 42-W			
7				14 19				SS-50
cc						M		

Observer: [Signature] Date: _____

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	134	B	21	H5A	80		

SM

Sediment/Rock Name	diatom ooze	Observer	
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Percent Texture		
Sand	Silt	Clay

Comments:

major

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
Framework minerals	
9	Quartz
	Feldspar
	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
Carbonates	
	Calcite
	Dolomite
VOLCANICLASTIC GRAINS	
3	Crystal grain 1
16	Vitric grain 5
	Lithic grain

Percent	Component
BIOGENIC GRAINS	
Calcareous	
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
Siliceous	
	Radiolarians
	Spumellaria
	Nassellaria
62	Diatoms 20
	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	1341	B	21	H	7	50	

574

Sediment/Rock Name	diatom ooze	Observer	AKOIA
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Percent Texture		
Sand	Silt	Clay

Comments: Major.

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
	Framework minerals
	Quartz
	Feldspar
	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
4	Pyrite 1
8	Magnetite
	Fe-oxide
	Carbonates
	Calcite
	Dolomite
VOLCANICLASTIC GRAINS	
	Crystal grain
13	Vitric grain 3
	Lithic grain

Percent	Component
BIOGENIC GRAINS	
	Calcareous
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
	Siliceous
	Radiolarians
	Spumellaria
	Nassellaria
	Diatoms 20
62	15 Centric
20	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

1341 B 22
 Site Hole Core Section Top Depth

Expedition 323
 Bering Sea

Depth (m)	Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist. Samples	Major Lithology	Minor Lithology	Visual Core description
10		3/1							14 cm, Ash 0.5 m thick
13		↓	130 cm						50 cm, osh dark.
20		4/2							30 cm, diatom ooze
27		↓	142 cm						
37		3/1							80 cm diatom - rich silt
42		4/2	148						54 3/1 very dark grey
47		4/2	42 cm						
52		3/1	115 cm						
57		4/2	12 cm						54 4/2 olive grey
62		3/1-4/2	55 cm						
67		4/2	135						
72		3/1	143						
77		4/2	70						
82		3/1	140						
97		4/2							
107		12 cm							

1341 B

Observer: _____ Date: _____

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
232	1341	B	22	H	4A	60	

SM

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

Comments: major

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

Percent	Component
BIOGENIC GRAINS	
Calcareous	
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
Siliceous	
	Radiolarians
	Spumellaria
	Nassellaria
24	Diatoms 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	134/B		22	H	2	30	

SM

Sediment/Rock Name	diatom rich ooze	Observer	Alvira
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Percent Texture		
Sand	Silt	Clay

Comments:

Major

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
Framework minerals	
3	Quartz 1
	Feldspar
	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	
3	Pyrite 1
	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
86	Diatoms 25
	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

1341 B 23
Site Hole Core Section Top Depth

Depth (m)	Graphic Representation	Color	Lithology	Bioturbation Structures/Accessories	Drilling Dist. Samples	Visual Core description	Major Lithology	Minor Lithology
10	20 42	5Y 4/1				101-105 mott		
20	106 113	5Y 6/2				137-139 mott white dolomite		
30						101 mott ash. 12-13 mott ash		2A 1000 dolomite pod diatom ooze
40				5		23) "		
50	V					80 granules 2 black volcan		4A 50 diatom ooze
60								
70								
80	V	83		V 99		163 167 111 125 135 ash pod.		
90	V	5Y 4/1		2		4-8 ash 5Y 6/1 (5Y 7 5/2)		6A 130 Spongespicule diatom clayey silt
100	V	5Y 4/2				15, 17. porous white clayey		
110						78		
120						21		
130						21-31 PAL		
140								

Observer: _____ Date: _____

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	U1341	B	23	H	6A	130cm	

SM

Sediment/Rock Name	Sponge Spicule Diatom Clayey silt	Observer	Btm
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B - 45

S - 50

Comments:

V - 5

(2nd)

Percent Texture		
Sand	Silt	Clay
	70	30

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

Percent	Component
BIOGENIC GRAINS	
Calcareous	
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
Siliceous	
	Radiolarians
	Spumellaria
	Nassellaria
	Diatoms
15	Centric
10	Pennate
	<i>Chaetoceros</i> Resting Spores
	Silicoflagellates
20	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	U1341	B	23	A	4A	40cm	

Sediment/Rock Name	Diatom ooze	Observer	BCR
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Percent Texture		
Sand	Silt	Clay

Comments:

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

Percent	Component
BIOGENIC GRAINS	
	Calcareous
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
	Siliceous
	Radiolarians
	Spumellaria
	Nassellaria
	Diatoms
32	Centric
20	Pennate
	Chaetoceros Resting Spores
	Silicoflagellates
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	01341	B	23	H	2A	108cm	

SM

Sediment/Rock Name	Dolomitized Diatom ooze	Observer	Behm
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Percent Texture		
Sand	Silt	Clay

Comments:

White Layer - Accessory

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
	Framework minerals
	Quartz
	Feldspar
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
	Accessory/trace minerals
	Micas
	Biotite
	Muscovite
	Clay Minerals
	Chlorite
	Glaucinite
	Chert
	Zircon
	Ferromagnesium minerals
	Authigenic minerals
	Barite
	Phosphorite/Apatite
	Zeolite
	Opaque minerals
	Pyrite
	Magnetite
	Fe-oxide
	Carbonates
	Calcite
50	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
45	Centric
	Pennate
	Chaetoceros Resting Spores
	Silicoflagellates
5	Sponge spicules
	Dinoflagellates
	Others
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

Expedition 323
Bering Sea

U1341 Site B Hole 24H Core ALL Section Top Depth

1
2
3
4
5
6
7
8

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Samples	Visual Core description
	5y 4/2 olive gray		85-135 H	47-74 lam			thinly to thickly lam ✓ heavily bot. ✓ cm 108-110 ✓
	1x olive gray 5y 6/2	Dolomite 129	114-115 H	111-60m Blocky			Grad XRD! stiff Mod. 139-143 Grad 3-9 Alt. Halo elsewhere
		12	15 Sl				
			142 ↓				
			144 Sl.				121-Pan-orange - Mod Bot. ✓ 126-144 bot. ✓
			110 ↓				
			117-118 Mud	69- H. lam thick			71-98 Scan
			49-62 Sl.				
			113-134 Sl.				
			131-126 Sl.				127-Mod ✓ 82-Lam ✓
		68-G	91. ↓				
	2.5y sl/3 light olive brown		119 Mud	10m heavy bot.			
			10 ↓				

1341B
24H

Observer: Beth Date: _____

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	U1341	B	24	4	7	28 cm	

SM

Sediment/Rock Name	Diatom ooze (Main lithol)	Observer	G.B.
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Percent Texture		
Sand	Silt	Clay

Comments:

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
	Framework minerals
5	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
	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
85 X	Diatoms
	Centric
	Pennate
	Chaetoceros Resting Spores
	Silicoflagellates
10 X	Sponge spicules
	Dinoflagellates
	Others
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

SM

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
303	01341	B	26	H	4	40 cm	

Sediment/Rock Name	Diatom ooze (Main lithol)	Observer	G.B.
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Percent Texture		
Sand	Silt	Clay

Comments:

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
Framework minerals	
5	Quartz
	Feldspar
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
Accessory/trace minerals	
	Micas
	Biotite
	Muscovite
10	Clay Minerals
	Chlorite
	Glaucanite
	Chert
	Zircon
	Ferromagnesium minerals
Authigenic minerals	
	Barite
	Phosphorite/Apatite
	Zeolite
Opaque minerals	
x	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
85 X	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

SM

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	U1341	B	25	H	3A	145cm	

Sediment/Rock Name	Fine Ash	Observer	Beth
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Percent Texture		
Sand	Silt	Clay

Comments:

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
	Framework minerals
	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
	Pyrite
	Magnetite
	Fe-oxide
	Carbonates
	Calcite
	Dolomite
VOLCANICLASTIC GRAINS	
	Crystal grain
	Vitric grain
150	Lithic grain

Percent	Component
BIOGENIC GRAINS	
	Calcareous
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
	Siliceous
	Radiolarians
	Spumellaria
	Nassellaria
	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	0134	B	25	H	1A	53cm	

SRV

Sediment/Rock Name	Spicule-diatom ooze	Observer	Beh
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Percent Texture		
Sand	Silt	Clay

Comments:

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
Framework minerals	
	Quartz
5	Feldspar
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
Accessory/trace minerals	
	Micas
	Biotite
	Muscovite
10	Clay Minerals
	Chlorite
	Glaucanite
	Chert
	Zircon
	Ferromagnesium minerals
Authigenic minerals	
	Barite
	Phosphorite/Apatite
	Zeolite
Opaque minerals	
10	Pyrite
	Magnetite
	Fe-oxide
Carbonates	
	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
	Diatoms
24	Centric
20	Pennate
10	Chaetoceros Resting Spores
	Silicoflagellates
20	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

SM

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	01341	B	24	H	3	121 cm	

Sediment/Rock Name	spicule-bearing, silicof.-rich diatom ooze	Observer	G.B.
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Percent Texture		
Sand	Silt	Clay

Comments: laminae (reddish)

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
Framework minerals	
5	Quartz
X	Feldspar
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
Accessory/trace minerals	
	Micas
	Biotite
	Muscovite
	Clay Minerals
	Chlorite
	Glaucinite
	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
70	X Diatoms
	Centric
	Pennate
	Chaetoceros Resting Spores
15	X Silicoflagellates
10	X Sponge spicules
	Dinoflagellates
Others	
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

Expedition 323
Bering Sea

01341 Site B Hole 25H Core AU Section Top Depth

Depth (cm)	Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist. Samples	Major Lithology	Minor Lithology
							Visual Core description	
1-10	Blue						37-39 ash white 32-53 ash? thin	1A-53m Spicula-diatom ooze
10-20							53-56 black layer 139-140 ash layer	
20-30							67 ash layer ✓	
30-40	✓ 140							
40-50	30						143-147 bioturbated ash	3/15 fine ash
50-60	✓ 18 40			S			36 shell grading thin layer	4A-100 diatom ooze
60-70	✓ 136							
70-80	✓ 80							
80-90	✓ 4 69						72 pebble volcano?	
90-100	✓ 11						58 shell?	
100-110							63 CC 10 10-79 PAL	

1361A

Observer: _____ Date: _____

Expedition 323
Bering Sea

323 Site
B Hole
26 Core
Section
Top Depth

Depth (m)	Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist. Samples	Major Lithology	Minor Lithology
							Visual Core description	
10	✓	5792					139-141 ash	1/4 70 diatom org
20	✓	16741 35-2549/2					125-126 volcaniclastic fine lam. 5.16-35 tuffaceous bedding 21-25 ash 35-38 ash 96-100 moll ash	2A-3 diatom fine ash.
40	✓	74					107-110 white moll ash	
60	✓						9-10 moll ash 5-6 10 white lam	
80	✓	67 81 142						
100	✓	43					77 16-16-25 PAL	7A-10 diatom bins side

Observer: _____ Date: _____

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	U13M	B	26	H	7A	100cm	

SM

Sediment/Rock Name	Diatom rich silt	Observer	Beth
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Percent Texture		
Sand	Silt	Clay
	85	15

Comments: B-17
S-18
V-5 2nd

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

Percent	Component
BIOGENIC GRAINS	
	Calcareous
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
	Siliceous
	Radiolarians
	Spumellaria
	Nassellaria
	Diatoms
10	Centric
7	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	U1341	B	26	H	1A	70cm	

SM

Sediment/Rock Name	diatom ooze	Observer	BETH
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Percent Texture		
Sand	Silt	Clay

Comments: Major

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
Framework minerals	
	Quartz
3	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	
7	Pyrite
	Magnetite
	Fe-oxide
Carbonates	
	Calcite
2	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
40 ✓	Centric
30 ✓	Pennate
	Chaetoceros Resting Spores
	Silicoflagellates
3 ✓	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	U1341	B	26	H	2A	30cm	

SM

Sediment/Rock Name	Diatom fine ash	Observer	Beth
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Percent Texture		
Sand	Silt	Clay

Comments: *Minor lith. very ash rich*

*B
S
V*

*disc grayish brown
clean layer*

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

Percent	Component
BIOGENIC GRAINS	
Calcareous	
Foraminifera	
	Planktonic foraminifera
	Benthic foraminifera
Nannofossils	
	Coccoliths
	Discoasters
	Pteropods
Siliceous	
	Radiolarians
	Spumellaria
	Nassellaria
	Diatoms
30	Centric
20	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

SM

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	1341	B	27	H	4A	50	

Sediment/Rock Name	diatom ooze	Observer	Akira
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major

Percent Texture		
Sand	Silt	Clay

Comments:

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
Framework minerals	
10	Quartz 2
	Feldspar
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
Accessory/trace minerals	
	Micas
	Biotite
	Muscovite
Clay Minerals	
	Chlorite
	Glaucinite
	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
90	✓ Diatoms
60	Centric
70	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

323 Site 11341B Core 27H All Section Top Depth

Major Lithology Minor Lithology

Depth (cm)	Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist. Samples	Visual Core description
10-20			I	70-76 SL ✓	78-81 Lam ✓ 140-143 Lam ✓	54 ✓ 14 ✓ 39 ✓	95-97 Clast, Arg, Slate, Peb. ✓ Can't quite tell if this is laminated or just horizontally bioturbated. Lots of discontinuous parallel "layers"
20-40		5Y 4/2 olive gray		60-150 SL ✓	10-10 Faint Lam ✓ 10m ✓ 60-70 phot ✓	14 ✓ 39 ✓	I. faintly lam qtz + pyrite indarker
40-60					10-90 Faint Lam thin ✓ 134 ✓		II Diatom ooze
60-80		5Y 5/3 olive		132 ✓	132 Lam thin ✓	SS 50 ✓ SS 150 ✓	
80-90				14 ✓	68 Lam thin ✓		W-8r
90-100							
100-120							
120-140						SL	

Observer: _____ Date: _____

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	1341B		27	H	4A	150	

SM

Sediment/Rock Name	diatom ooze.	Observer	Akireu
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(site rich!)

Percent Texture		
Sand	Silt	Clay

Comments:

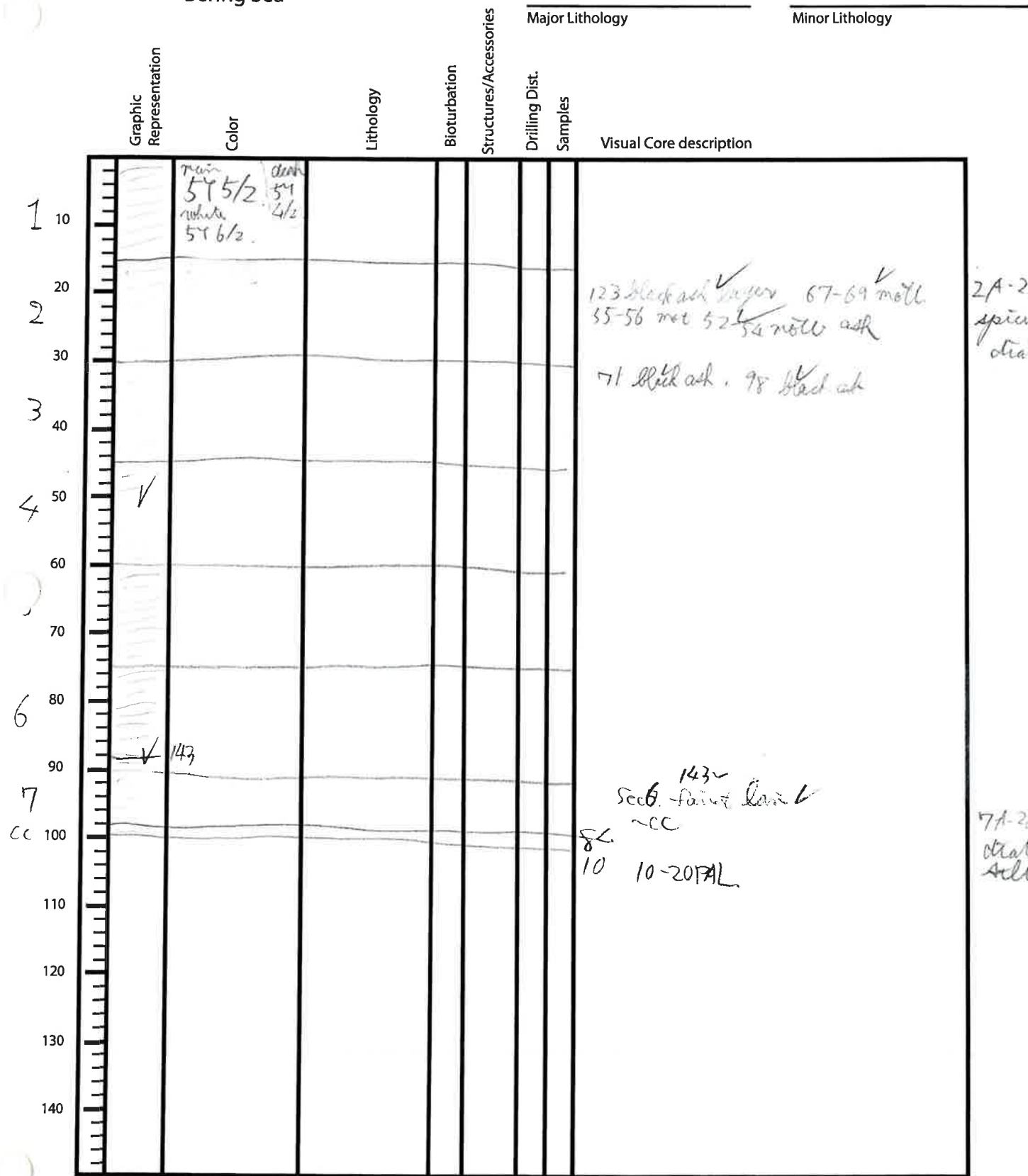
(none)

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
	Framework minerals
30	Quartz 15
	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
4	Pyrite 9
	Magnetite
	Fe-oxide
	Carbonates
	Calcite
	Dolomite
VOLCANICLASTIC GRAINS	
1.5	Crystal grain 0.5
4	Vitric grain 2
	Lithic grain

Percent	Component
BIOGENIC GRAINS	
	Calcareous
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
	Siliceous
	Radiolarians
	Spumellaria
	Nassellaria
60	Diatoms 25-30
	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

1341 B 28.
Site Hole Core Section Top Depth



Observer: _____ Date: _____

1341 B 28

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	U1341B		28	H7A		20cm	

501

Sediment/Rock Name	Diatom silt	Observer	BETH
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Percent Texture		
Sand	Silt	Clay
	80	20

Comments:

secondary.

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

Percent	Component
BIOGENIC GRAINS	
Calcareous	
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
Siliceous	
	Radiolarians
	Spumellaria
	Nassellaria
	Diatoms
30	Centric
10	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	V1341	B	28	H	2A	20cm	

SM

Sediment/Rock Name	Spicule-bearing diatom ooze	Observer	BETH
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Percent Texture		
Sand	Silt	Clay

Comments: major

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

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

Expedition 323
Bering Sea

1341 Site B Hole 29 Core Section Top Depth

Major Lithology Minor Lithology

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist. Samples	Visual Core description
1	5Y4/2		S			
2			S			
3	28 5Y5/3					0-43 faint lam ✓ 78-79 moll ash ✓
4	10Y4/1					
5	35		35			
6	5Y4/2		m			sec 35 ~ sec 7, 35 faint laminae
7	20		m			
8	5Y5/3		m			
9	35		m			
10	5Y4/2		m			52 18-19 shell ✓ 10 31 moll ash ✓ 35-52 fractured 22-23 moll gray ash



44-20
diatom
clay
silt

61-80
diatom
ooze

- /// 5Y4/2 diatom ooze
- x 5Y5/3 diatom ooze
- 10Y diatom clayey silt ✓

Observer: _____ Date: _____

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	U1341	B	291	H	2A	130	

in SM

Sediment/Rock Name	Diatom ooze	Observer	Beth
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Percent Texture		
Sand	Silt	Clay

Comments:

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
Framework minerals	
	Quartz
3	Feldspar
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
Accessory/trace minerals	
	Micas
	Biotite
	Muscovite
7	Clay Minerals
	Chlorite
	Glauconite
	Chert
	Zircon
	Ferromagnesium minerals
Authigenic minerals	
	Barite
	Phosphorite/Apatite
	Zeolite
Opaque minerals	
3	Pyrite
	Magnetite
	Fe-oxide
Carbonates	
	Calcite
2	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
43	Centric
40	Pennate
	Chaetoceros Resting Spores
	Silicoflagellates
2	Sponge spicules
	Dinoflagellates
Others	
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

X

in SM

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	U1341	B	29	H	4A	20cm	

Sediment/Rock Name	Diatom clayey silt	Observer	Beth
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B-43
S-52
V-5

Percent Texture		
Sand	Silt	Clay
	70	30

Comments:

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
Framework minerals	
7	Quartz
10	Feldspar
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
5	Rock fragments
Accessory/trace minerals	
	Micas
	Biotite
	Muscovite
20	Clay Minerals
	Chlorite
	Glauconite
	Chert
	Zircon
	Ferromagnesium minerals
Authigenic minerals	
	Barite
	Phosphorite/Apatite
	Zeolite
Opaque minerals	
10	Pyrite
	Magnetite
	Fe-oxide
Carbonates	
	Calcite
	Dolomite
VOLCANICLASTIC GRAINS	
	Crystal grain
5	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
20	Pennate
3	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	U1341	B	29	H	6A	80cm	

173
54

Sediment/Rock Name	Diatom ooze	Observer	Behr
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Percent Texture		
Sand	Silt	Clay

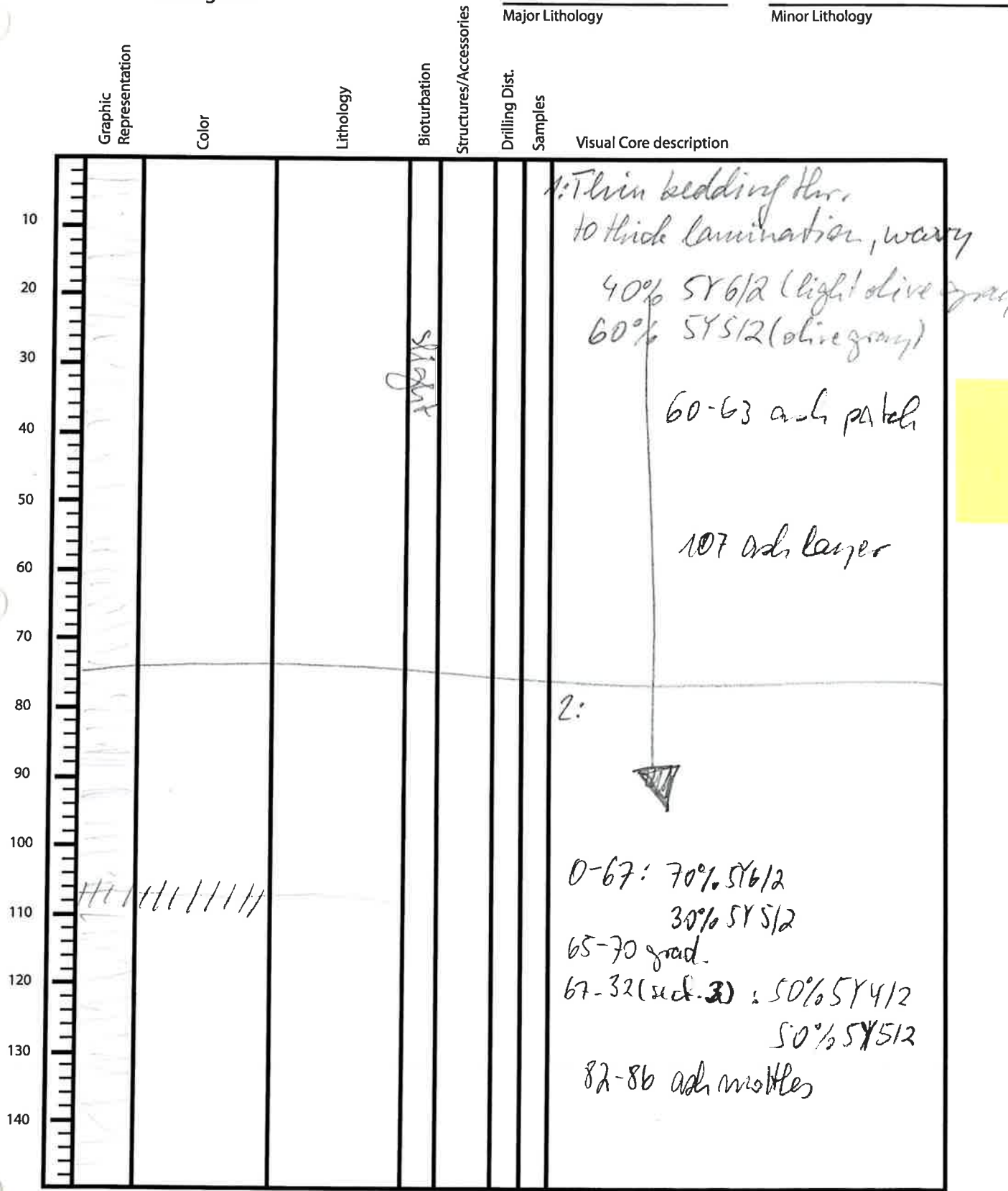
Comments:

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

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

Expedition 323
Bering Sea

134A Site B Hole 30H Core 1+2 Section _____ Top Depth



U13416
30H

Observer: _____ Date: _____

Expedition 323
Bering Sea

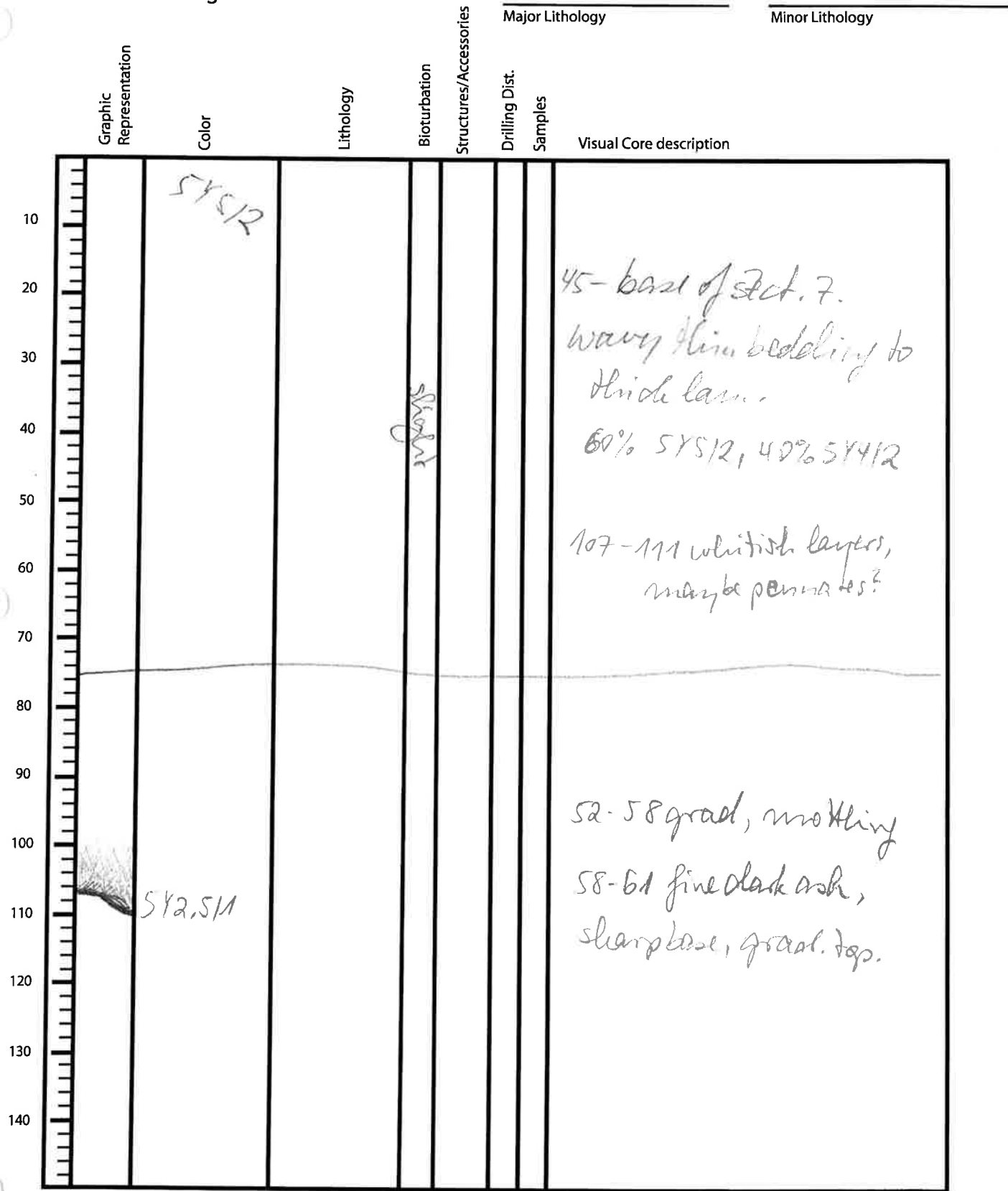
1741 Site B Hole 30H Core 7+4 Section _____ Top Depth

Depth (cm)	Graphic Representation	Color	Lithology	Bioturbation Structures/Accessories	Drilling Dist. Samples	Major Lithology	Minor Lithology
						Visual Core description	
10		5Y4/2		SWMS			
20							... 32
30							30-35 grad.
40							
50							
60							
70							
80							
90							
100							55-60 grad.
110							60-150 slight bedding, weak color contrast
120							90% 5Y4/2
130							10% 5Y5/2
140							

Observer: _____ Date: _____

Expedition 323
Bering Sea

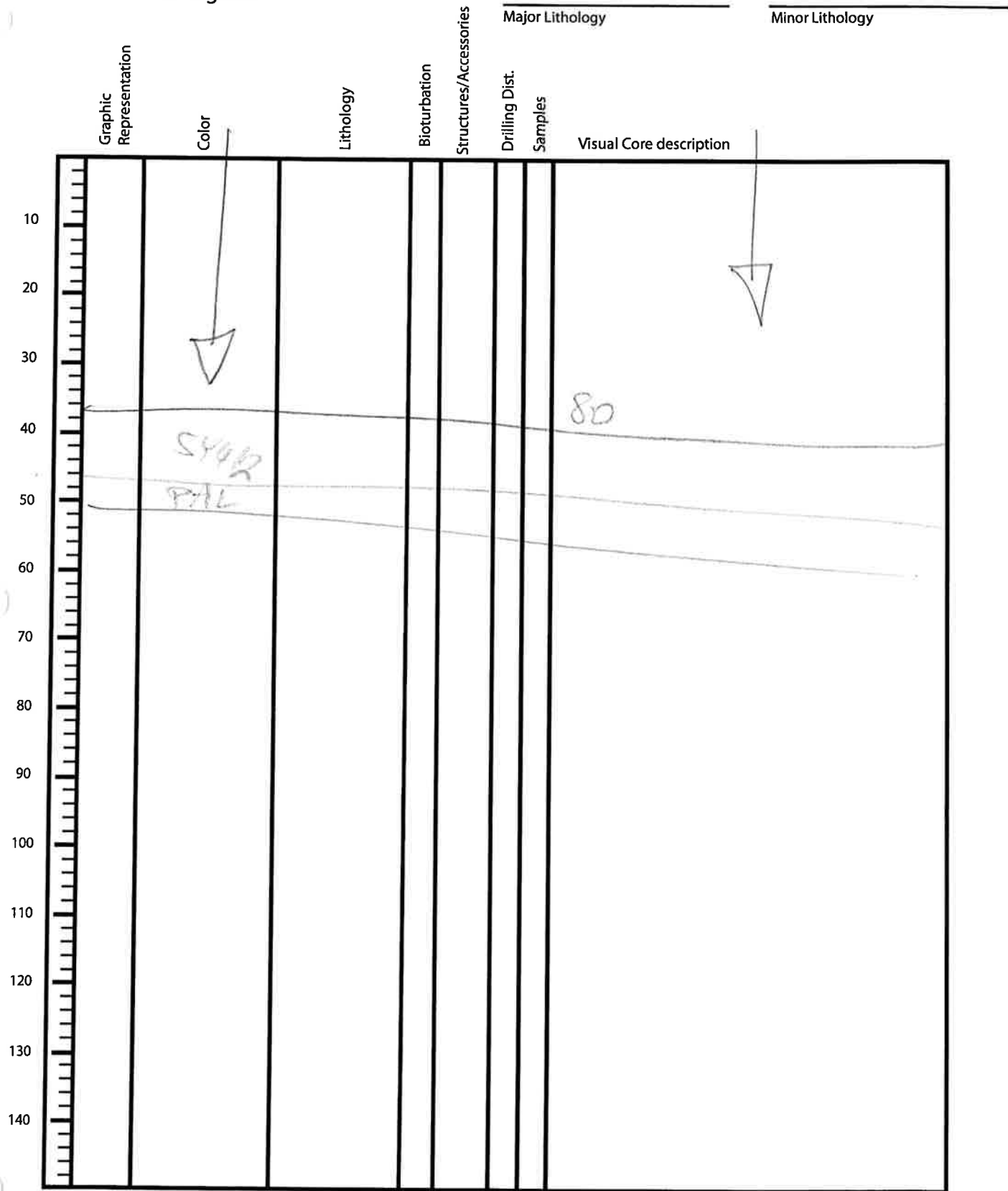
1341 Site B Hole 30H Core 5+6 Section _____ Top Depth



Observer: _____ Date: _____

Expedition 323
Bering Sea

1241 Site B Hole 30H Core 7+cc Section _____ Top Depth



Observer: _____ Date: _____

X

IN
SM

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	U1341	B	30	H	1	26	26

Sediment/Rock Name	Observer
	Kelsie

Percent Texture		
Sand	Silt	Clay

Comments: Green lamination in diatom ooze

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
	Framework minerals
10	Quartz
5	Feldspar
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
2	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
5	Vitric grain
	Lithic grain

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

X

ish

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	U1341	B	30	H	1	27	27

Sediment/Rock Name	Observer
	Kelsie

Percent Texture		
Sand	Silt	Clay

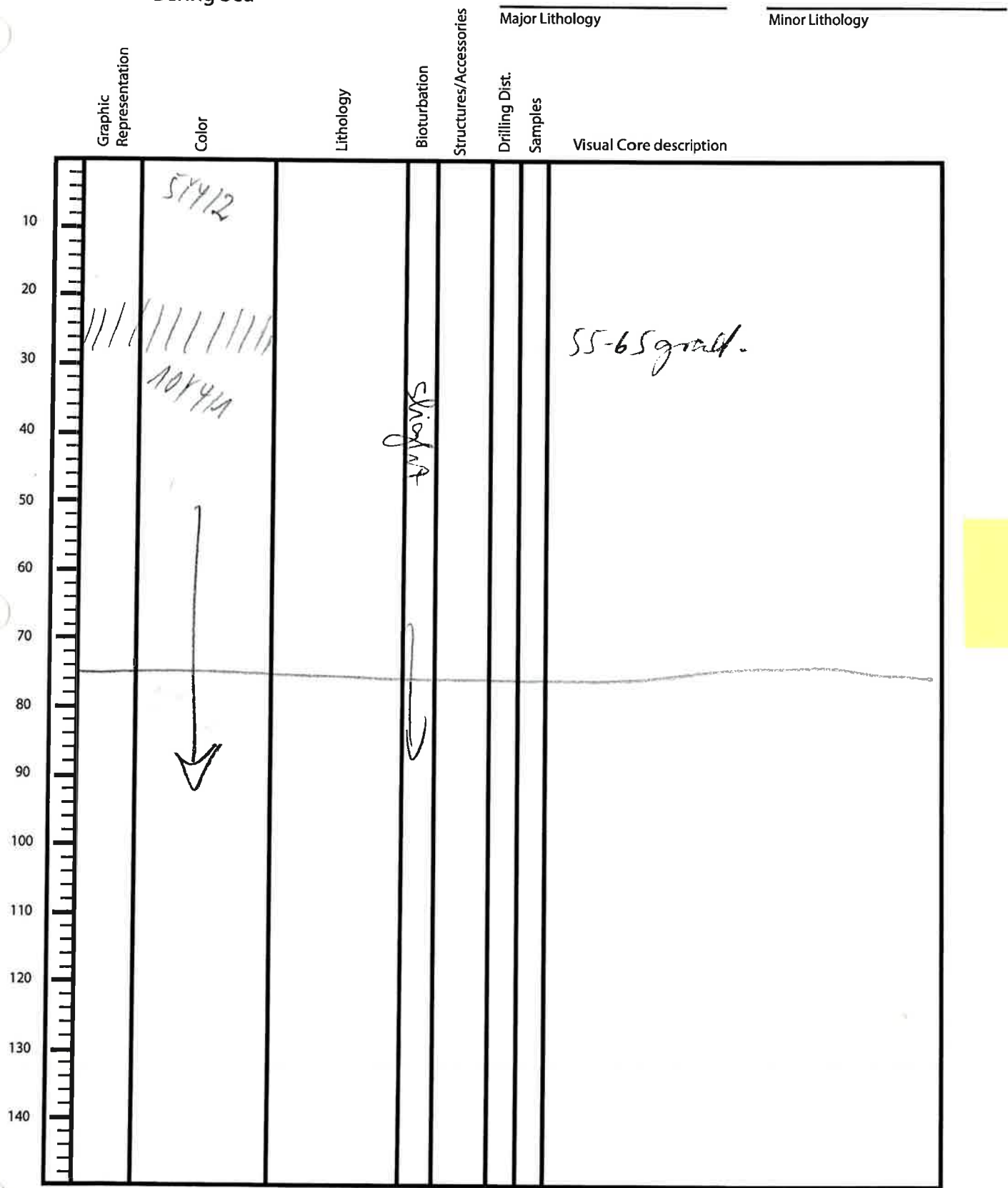
Comments: Light-coloured lamination in diatom ooze

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
Framework minerals	
5	Quartz
5	Feldspar
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
1	Rock fragments
Accessory/trace minerals	
	Micas
	Biotite
	Muscovite
	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	
1	Radiolarians
	Spumellaria
	Nassellaria
	Diatoms
40	Centric
45	Pennate
	Chaetoceros Resting Spores
	Silicoflagellates
3	Sponge spicules
	Dinoflagellates
Others	
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

Expedition 323
Bering Sea

134A Site H Hole 31H Core 1+2 Section _____ Top Depth

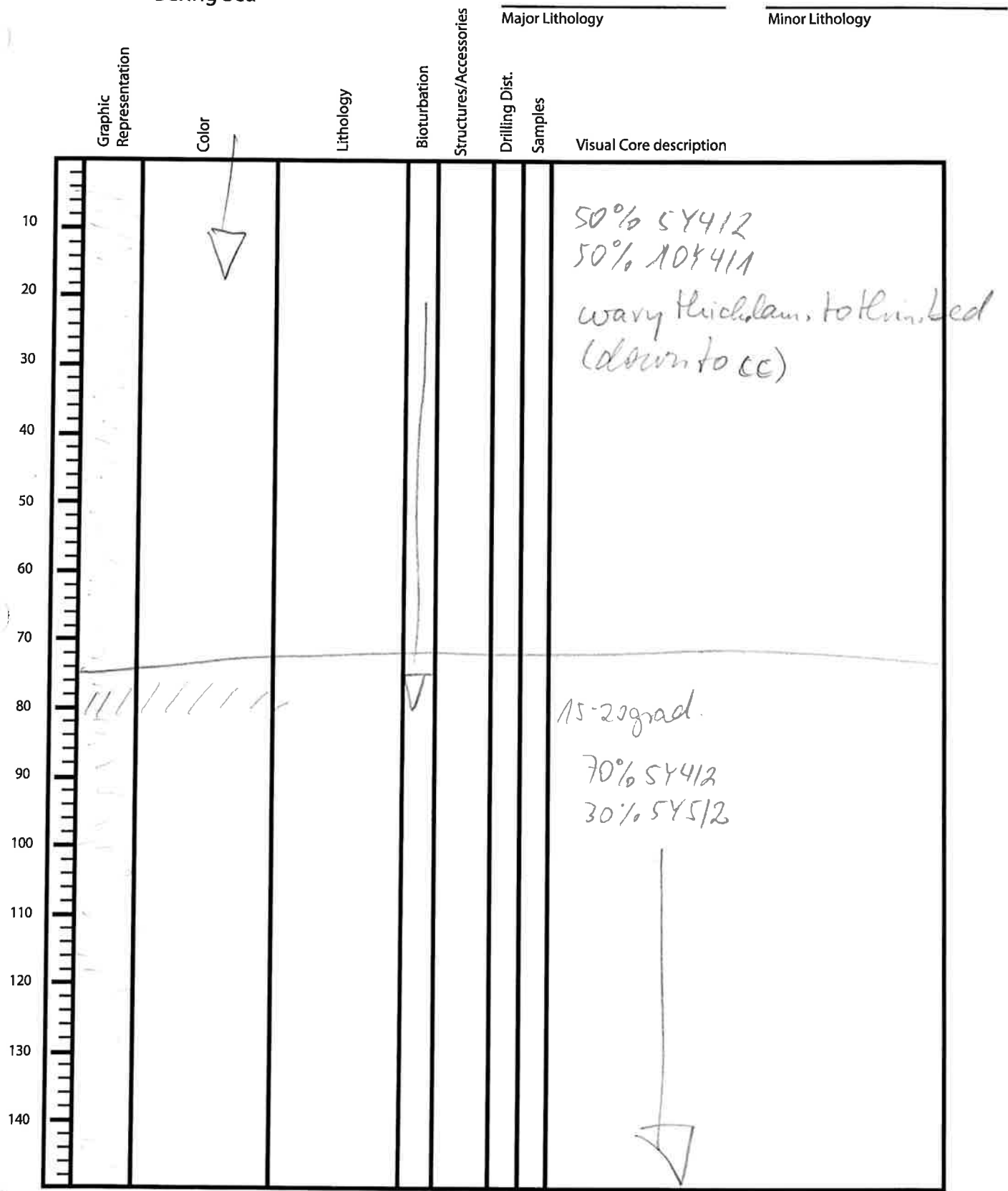


Observer: _____ Date: _____



Expedition 323
Bering Sea

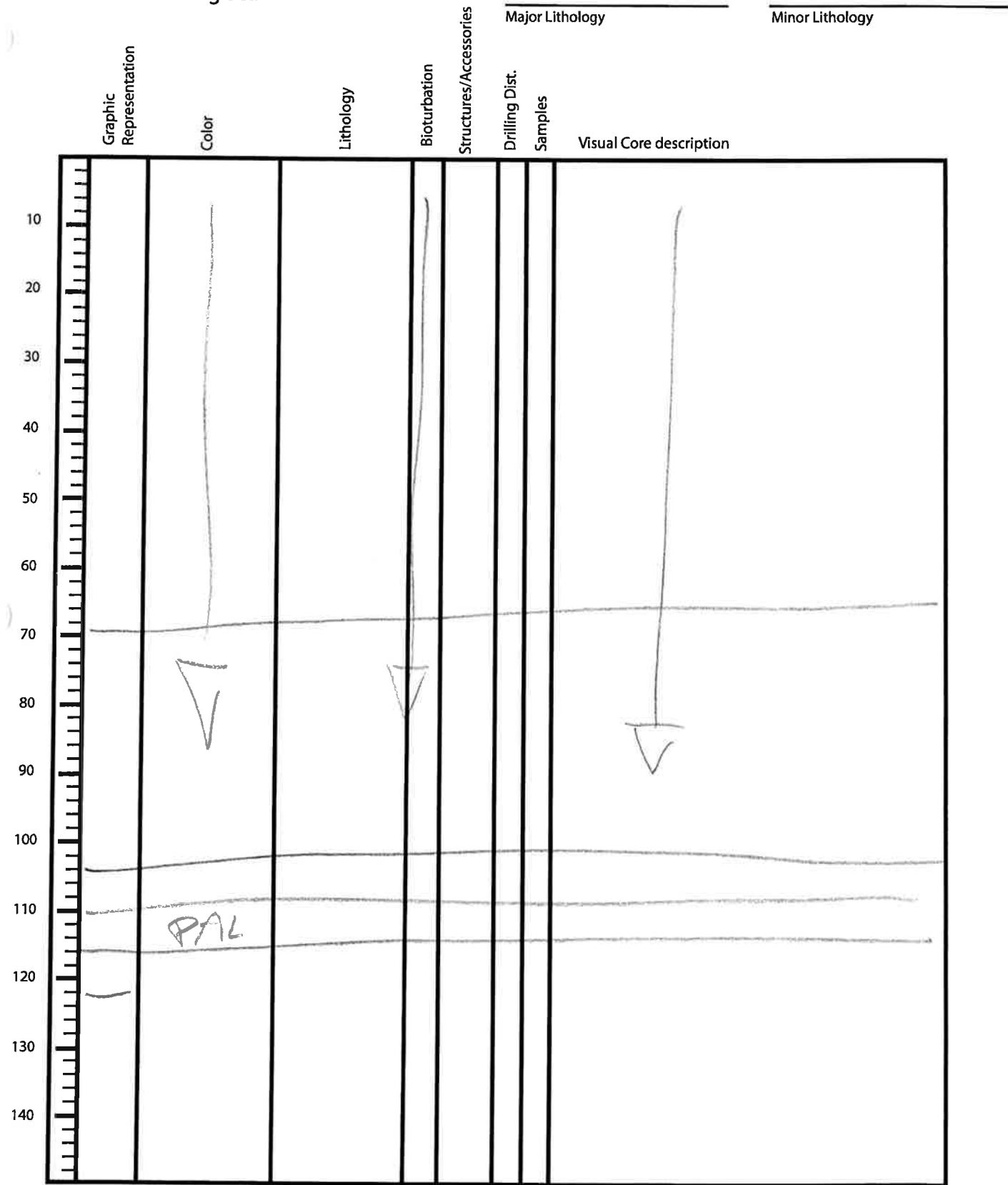
1341 B 31# 3+4
Site Hole Core Section Top Depth



Observer: _____ Date: _____

Expedition 323
Bering Sea

1341 Site 3 Hole 31H Core 56+CC Section Top Depth

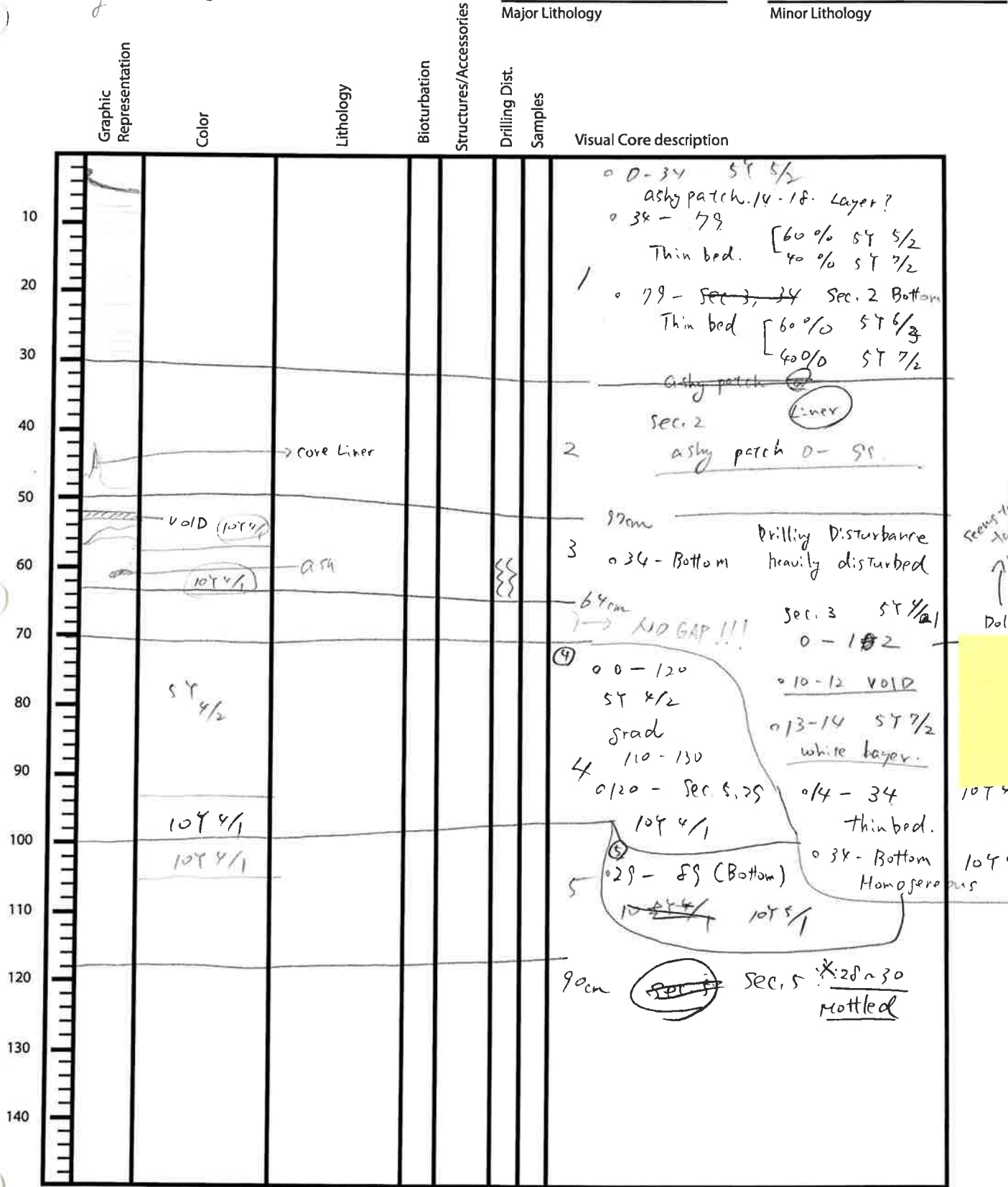


Observer: _____ Date: _____

handwritten

Expedition 323
Bering Sea

1341 Site B Hole 32H Core 1-75 Section Top Depth



Observer: Hin Date: _____

Expedition 323
Bering Sea

1371 Site B Hole 3214 Core 6-CC Section Top Depth

Depth (cm)	Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist. Samples	Major Lithology	Minor Lithology
							Visual Core description	
0-85		5Y 5/2					5Y 6/2 50%	
85-100							thin bed 5Y 5/2 50%	
100-115							ashy thin mottled (15-18)	N 4/
115-130							ashy mottled	
130-140							ashy mottled	
140-150							ashy mottled	
150-160							ashy mottled	
160-170							ashy mottled	
170-180							ashy mottled	
180-190							ashy mottled	
190-200							ashy mottled	
200-210							ashy mottled	
210-220							ashy mottled	
220-230							ashy mottled	
230-240							ashy mottled	
240-250							ashy mottled	
250-260							ashy mottled	
260-270							ashy mottled	
270-280							ashy mottled	
280-290							ashy mottled	
290-300							ashy mottled	
300-310							ashy mottled	
310-320							ashy mottled	
320-330							ashy mottled	
330-340							ashy mottled	
340-350							ashy mottled	
350-360							ashy mottled	
360-370							ashy mottled	
370-380							ashy mottled	
380-390							ashy mottled	
390-400							ashy mottled	
400-410							ashy mottled	
410-420							ashy mottled	
420-430							ashy mottled	
430-440							ashy mottled	
440-450							ashy mottled	
450-460							ashy mottled	
460-470							ashy mottled	
470-480							ashy mottled	
480-490							ashy mottled	
490-500							ashy mottled	
500-510							ashy mottled	
510-520							ashy mottled	
520-530							ashy mottled	
530-540							ashy mottled	
540-550							ashy mottled	
550-560							ashy mottled	
560-570							ashy mottled	
570-580							ashy mottled	
580-590							ashy mottled	
590-600							ashy mottled	
600-610							ashy mottled	
610-620							ashy mottled	
620-630							ashy mottled	
630-640							ashy mottled	
640-650							ashy mottled	
650-660							ashy mottled	
660-670							ashy mottled	
670-680							ashy mottled	
680-690							ashy mottled	
690-700							ashy mottled	
700-710							ashy mottled	
710-720							ashy mottled	
720-730							ashy mottled	
730-740							ashy mottled	
740-750							ashy mottled	
750-760							ashy mottled	
760-770							ashy mottled	
770-780							ashy mottled	
780-790							ashy mottled	
790-800							ashy mottled	
800-810							ashy mottled	
810-820							ashy mottled	
820-830							ashy mottled	
830-840							ashy mottled	
840-850							ashy mottled	
850-860							ashy mottled	
860-870							ashy mottled	
870-880							ashy mottled	
880-890							ashy mottled	
890-900							ashy mottled	
900-910							ashy mottled	
910-920							ashy mottled	
920-930							ashy mottled	
930-940							ashy mottled	
940-950							ashy mottled	
950-960							ashy mottled	
960-970							ashy mottled	
970-980							ashy mottled	
980-990							ashy mottled	
990-1000							ashy mottled	

Observer: Hiro Date: _____

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	1341	B	32	#	5	100	100

MS

Sediment/Rock Name	Diatom ooze	Observer	Kelsie
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Percent Texture		
Sand	Silt	Clay

Comments: Main lithology

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
Framework minerals	
2	Quartz
3	Feldspar
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
1	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
	Diatoms
60	Centric
40	Pennate
	<i>Chaetoceros</i> Resting Spores
1	Silicoflagellates
	Sponge spicules
	Dinoflagellates
Others	
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

Expedition 323
Bering Sea

1341 Site B Hole 33H Core 1-8 Section Top Depth

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist. Samples	Major Lithology	Minor Lithology
						Visual Core description	
	5 #4 4 7/2					0 - Sec. 10 100 104 1/2 - 57 1/2 thin bed ser. 2 46-100 ← 57 1/2 57 1/2	gshy mottled
	57 1/2					100-110 sand 100-180 107 1/2	
	107 1/2					2	
						0 - 100 70 57 1/2 thin bed ashy patch 0-110	
						3 x106 pebble angular block 70 - sec 100 100 57 1/2 thin bed	N/2.5
						6 100-120 57 1/2 ashy mottled 135 - sec. 4, 5 cm 57 1/2 thin bed.	
						4 5 ser. 6, 26 2 - 5 5, 0 ash layer 57 1/2 thin bed	66-67 N 4
						57 1/2 40 57 1/2 60	

with dolomite (0.5 cm subay.)
0-2 drilling dist. (sl. etc)

112412

Observer: Mott 85-88 ash Date:

H.W. A

Expedition 323
Bering Sea

Site 1341 Hole B Core 2314 Section S-CC Top Depth _____

Depth (cm)	Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist. Samples	Major Lithology	Minor Lithology
							Visual Core description	
0-12								ashy mottled Mod B.T.
5								
26								cc bottom
54 1/2								ashy mottled
6								25-27
7								
90								cc
100								
110								
120								
130								
140								

Observer: H. K. Date: _____

Slide Samp 33

in SM

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	1341	B	32	H	1	60	60

Sediment/Rock Name	Diatom ooze	Observer	Kelsie
--------------------	-------------	----------	--------

Percent Texture		
Sand	Silt	Clay

Comments: Main lithology

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
	Framework minerals
3	Quartz
2	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
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
1	Radiolarians
	Spumellaria
	Nassellaria
95	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

1341 Site 13 Hole 344 Core 1-4 Section Top Depth

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist. Samples	Major Lithology	Minor Lithology	Visual Core description
	5T 4/3 ↓ 5T 7/1							0-2 sl. D. D Dolomite 15 crack slight 0-138 thin bed 5T 4/3 (20%)
	5T 5/2 ↓ 5T 7/1							sec 2 40-42 54cm } redish ash 82-87 (82-87) 83-87 (83-87)
	ash							138-sec. 2 thin bed 5T 7/1 (20%) 5T 5/2 (20%) 5T 7/1 (20%) Diatomace Mod B. 7
								147-150 10T 4/1
	10T 4/1							ash (a) 50-54cm 60 110-112cm
								(N 2.5/1) (N 2.5/1) (N 4/1)
	5T 6/2							0-19 thin bed 5T 4/2 50% 5T 7/2 50% 19-24 dolostone (ben) 5T 7/2 24-135 thin bed
								10T 7/2 5T 4/2 5T 7/2 (50 & 60) Semi lithified

Observer: L. K.

Date: 1-16

Grad 40-60
60-150 141.00
thin bed
10T 7/2 70% N 6/1 50%
5T 7/2 30 90



Expedition 323
Bering Sea

1341 / B / 52H / 5-CC / _____
Site / Hole / Core / Section / Top Depth

Major Lithology _____
Minor Lithology _____

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist. Samples	Visual Core description
						5
						6
						7
						CC

Observer: Hiv. Date: _____

Expedition 323
Bering Sea

1341 B 3SH 1-4
Site Hole Core Section Top Depth

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist. Samples	Major Lithology	Minor Lithology
						Visual Core description	
	10Y 4/1				SR	0 - 133 10Y 4/1 -x Drilling Disturbance 0-10. w/ Dolomite	
	10Y 4/1					109-111 Pumice Black 133-150 grad 2cm	
	5Y 5/3					Sec. 1 133-90 5Y 5/3 grad 80-100 100-120	
	5Y 5/3					90-110 5Y 5/3 thin bed 5Y 5/3 20% 5Y 6/2 20%	
	10Y 4/1					110-143 10Y 4/1 143-sharp	
	5Y 5/3					143-sec. 3, 5Y 5/3 9. thin bed.	5Y 5/3 20 5Y 7/2 20
	10Y 4/1					Sec. 3, 10 - #8 10Y 4/1 grad 8-12 sec. 5, 18	
	10Y 4/1					white sponge spicule spot (A) 133. 129, 79, 55	

Observer: Hino Date: _____

U1341B

Expedition 323
Bering Sea

1341 Site B Hole #3514 Core 5-CC Section _____ Top Depth

Depth (m)	Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist. Samples	Major Lithology	Minor Lithology
							Visual Core description	
0-10		5Y 7/1						
10-20								
20-30								
30-40								
40-50								
50-60								
60-70								
70-80								
80-90								
90-100								
100-110								
110-120								
120-130								
130-140								

~ 18
 18 - 23 24 → Clase
 Mottling. Dolomite 5Y 8/1 ↓
 5 21-23 ash 5Y 7/1 Black
 23 - sec. 6. 205. → ash?
 10Y 4/1 Clase
 5 5 - 56 10Y 5/1 5Y 6/1
 thin bedded 5Y 7/1 mottled?
 6 - 26
 sec. 70 - 50 Same
 50 - 66 10Y 4/1
 (Bottom)
 7
 CC
 0-70 mottled
 CC 10Y 5/1 50%
 ↓
 10Y 4/1 50%

Observer: H. W. Date: _____

Expedition 323
Bering Sea

134/B 36H 1-4
Site Hole Core Section Top Depth

34-35
Fluorog

Major Lithology	Minor Lithology	Visual Core description	Drilling Dist. Samples	Structures/Accessories	Bioturbation	Lithology	Color	Graphic Representation
		0 0 - 120 SY 5/2 0-18 P. Disc LR Dolomite 23. crack 1 0 30 - 116 MOD B-T Mottled. 120-150 10Y 5/1					SY 5/2	
		0 0 - 80. SY 5/2 30-55 sand. 2 80-102 [0 10Y 4/1 60% 10Y 2 0 SY 5/2 40%						
		Thickly laminated 0 102 - 107 10Y 4/1 Sec. 3, 107 3 Mottled ash Sec. 2, 130 - Sec. 3, 51 Mottled Sec. 3, 60-80 → MOD B-T.					10Y 4/1	
		0 107 - Sec. 4, 60 4/5 Thin bed. 4 SY 5/2 0 45-60 SY 5/3 0 60-64 ash SY 7/1 tilted 0 65-150. Thin bed SY 6/2						

Observer: Hino Date: _____



Expedition 323
Bering Sea

Site 1741 Hole B Core 2617 Section 5-C Top Depth _____

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist. Samples	Major Lithology	Minor Lithology
						Visual Core description	
10							
20							
30							
40							
50							
60							
70							
80							
90							
100							
110							
120							
130							
140							

0-150
5Y 6/3
← white ashy layer
④ 31.
0-150 5Y 6/3
Black ash ④ 8-10
Hot/lod
6
cc 5Y 6/3 brown

Observer: _____ Date: _____

Expedition 323
Bering Sea

Site: 1341 B Hole: 37H Core: 1-4 Top Depth: _____

54 6/3

01341B

Major Lithology: diatom ooze
Minor Lithology: diatom silt

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Samples	Visual Core description
	10Y 4/1						0-27 slugs slight crack
	10Y 4/1						100 - sec. 2 170 150 120 148 10Y 4/1 diatom silt
	10Y 4/1						0 1x6 - sec. 3, 50 10Y 4/1 2 white spot 53-113
	10Y 4/1						50 - 100 10Y 5/1 50 - 80 → Bioturb Mod. 100 Bottom 10Y 5/1 3 thin bed 0 80 - 100 10Y 4/1
	10Y 4/1						0 0 - 100 10Y 6/1 B.T. 0 - 80 + mod. sl Mottled 0 100 - 110 thin bed 10Y 6/1
							sec 110 - sec. 6

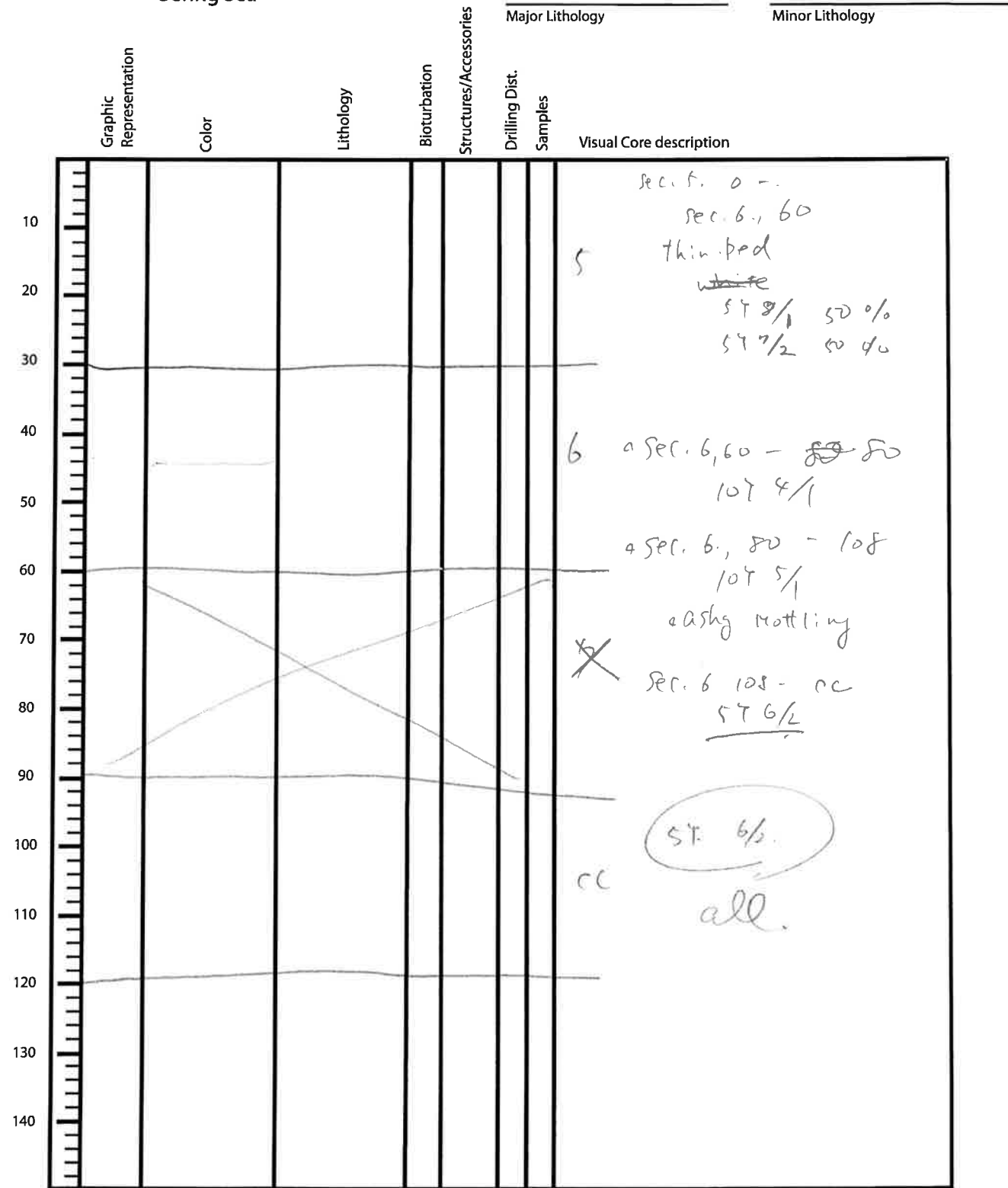
→ darker part
diatom silt

sec. 3
0 - 50
10Y 4/1
50 - 80 B.T.
Mottling 10Y 4/1
0 80 - 100 10Y 4/1
sec. 4 110
0 - 100 10Y 6/1
B.T.
0 - 80
B.T. sl
Mottled
100 - 110
thin bed

Observer: Flw Date: _____

Expedition 323
Bering Sea

Site: 1341 Hole: B Core: 37H Section: 5-6, CC Top Depth:



Observer: _____ Date: _____

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	U1341	B	37	H	2	78	78

in SM

Sediment/Rock Name	Diatom silt	Observer	Kelsie
--------------------	-------------	----------	--------

Percent Texture		
Sand	Silt	Clay

Comments: Minor lithology

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

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

Expedition 323
Bering Sea

1341 B 38H 1-4
Site Hole Core Section Top Depth



1
2
3
4

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist. Samples	Visual Core description
				✓ 57-61m	0-4	102-W many white spots esp.
			M	88-89	50-51	sec. 5
				127-128.5		1
				130-131	Round	
	5y	D. ooze		51-57	35-W ✓	
	S/2			138-141	101-W ✓	
				118-119m	2	
	26?			15	113-122 Mot. ✓	
	10y 4/1	D. silt	S	Lam Faint ✓	3	
				26	55-120 - D. ooze	
				29	88-140cm. chon ✓	
				73	3	
				85m	4	
				99-115		
				141		

Observer: Behn Date: _____

1341 B 384 J-CC

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	
			35-70 Mot. ✓ 145 PAIC ✓ 51 85 dk Mot. ✓ 94-103 Mot. ✓		3 crack ✓	112-114 Mt - white ✓ 143-145 Mot. ✓	N-40-142 ✓
						5	
						55-30 9 Ann - gray ash ✓ W-80-91 ✓	
						6	
						4-6 W ✓	
						7	
						6-7 pb - saw ✓ arg. lsnd. ✓	

Observer: Beth Date: _____

X

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	1341	B	38	H	6A	60	

in SM

Sediment/Rock Name	dinton site	Observer	akira
--------------------	-------------	----------	-------

B - 49
S - 43
V - 8

Percent Texture		
Sand	Silt	Clay

Comments:

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

Percent	Component
BIOGENIC GRAINS	
Calcareous	
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
Siliceous	
	Radiolarians
	Spumellaria
	Nassellaria
45	Diatoms 10
	Centric
	Pennate
	Chaetoceros Resting Spores
	Silicoflagellates
4	Sponge spicules 1
	Dinoflagellates
Others	
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

X

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

MSM

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	1341	B	38	H	3A	120	

Sediment/Rock Name	diatom ooze	Observer	Alora
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Percent Texture		
Sand	Silt	Clay

Comments:

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
Framework minerals	
	Quartz
	Feldspar
	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	
6	Pyrite 2
	Magnetite
	Fe-oxide
Carbonates	
	Calcite
	Dolomite
VOLCANICLASTIC GRAINS	
	Crystal grain ✓
9	Vitric grain 3
	Lithic grain

Percent	Component
BIOGENIC GRAINS	
Calcareous	
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
Siliceous	
	Radiolarians
	Spumellaria
	Nassellaria
71	Diatoms 25
	Centric
	Pennate
	Chaetoceros Resting Spores
	Silicoflagellates
8	Sponge spicules 3
	Dinoflagellates
Others	
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

Expedition 323
Bering Sea

1341 B 39 H
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	
0-10		10Y 4/1		S			0-2 pure 10-15 yr 11A40 diat silty clay
10-20	V						
20-30	V						
30-40	V	5Y 5/3		6 M			56, 108, 128 core Sec 3.6 - Sec 4
40-50	V	5Y 4/3		3 S			3-10 5Y 6/4 dolomite? 35 ctad
50-60	V	5Y 5/3		20 M			4A60 dolomitized diatom rich clay
60-70	V						Sec 3 6-cc faint lam with 5Y 6/2 58/3
70-80	V						0-3 grad
80-90	V						0-3 grad
90-100	V						48 21
100-110	V						7A40 diatom clay light dark diatom ooze
110-120	V						
120-130	V						
130-140	V						

Observer: _____ Date: _____

X

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

MSM

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
	1341	B	39		1A	40a	

Sediment/Rock Name	Diatom SILTY CLAY	Observer	
--------------------	-------------------	----------	--

Percent Texture		
Sand	Silt	Clay

Comments: 2nd.

100% 75
20% 13

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
	Framework minerals → 21%
	Quartz →
8% 5	Feldspar
13% 10	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
	Accessory/trace minerals
	Micas
	Biotite
	Muscovite
26% 20	Clay Minerals
	Chlorite
	Glaucanite
	Chert
	Zircon
	Ferromagnesium minerals
	Authigenic minerals
	Barite
	Phosphorite/Apatite
	Zeolite
	Opaque minerals
8% 5	Pyrite
	Magnetite
	Fe-oxide
	Carbonates
	Calcite
	Dolomite
VOLCANICLASTIC GRAINS	
	Crystal grain
6% 5	Vitric grain
	Lithic grain

Percent	Component
BIOGENIC GRAINS	
	Calcareous
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
	Siliceous
	Radiolarians
	Spumellaria
	Nassellaria
	Diatoms → 39%
26% 20	Centric
13% 10	Pennate
	Chaetoceros Resting Spores
	Silicoflagellates
	Sponge spicules
	Dinoflagellates
	Others
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

insm

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
	1341	B	39		4	6 cm	

Sediment/Rock Name	DOLOMITIZED BOTTOM-RICH CLAY	Observer	IWA
--------------------	------------------------------	----------	-----

Percent Texture		
Sand	Silt	Clay

Comments: minor

10% / 80
2/11

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
	Framework minerals
	Quartz
	Feldspar
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
	Accessory/trace minerals
	Micas
	Biotite
	Muscovite
25/30	Clay Minerals
	Chlorite
	Glauconite
	Chert
	Zircon
	Ferromagnesium minerals
	Authigenic minerals
	Barite
	Phosphorite/Apatite
	Zeolite
	Opaque minerals
	Pyrite
	Magnetite
	Fe-oxide
	Carbonates
	Calcite
40/30	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
25/20	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

X

INSM

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
	1341	B	39		7	63cm	

Sediment/Rock Name	XGATION 0070	Observer	
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Percent Texture		
Sand	Silt	Clay

Comments: Major. (dark lam)

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
Framework minerals	
8 1/2 %	Quartz
4 1/2 %	Feldspar
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
Accessory/trace minerals	
	Micas
	Biotite
	Muscovite
8 %	Clay Minerals
	Chlorite
	Glauconite
	Chert
	Zircon
	Ferromagnesium minerals
Authigenic minerals	
	Barite
	Phosphorite/Apatite
	Zeolite
Opaque minerals	
2 %	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
80 %	Diatoms
10	Centric
30	Pennate
	Chaetoceros Resting Spores
	Silicoflagellates
	Sponge spicules
	Dinoflagellates
Others	
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

X

MSM

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
	1341	B	39	7A		10m	

Sediment/Rock Name	Diatom clay	Observer	MSM
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Percent Texture		
Sand	Silt	Clay

Comments: From LIGHTER colored LAYER Major (light lam.)

100%
87.1%

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
	Framework minerals ~7
3%	2 Quartz
7%	5 Feldspar
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
	Accessory/trace minerals
	Micas
	Biotite
3%	2 Muscovite
30%	20 Clay Minerals
	Chlorite
	Glauconite
	Chert
	Zircon
	Ferromagnesium minerals
	Authigenic minerals
	Barite
	Phosphorite/Apatite
	Zeolite
	Opaque minerals
	2 Pyrite
	Magnetite
	Fe-oxide
	Carbonates
	Calcite
	Dolomite
VOLCANICLASTIC GRAINS	
	Crystal grain
7%	5 Vitric grain
	Lithic grain

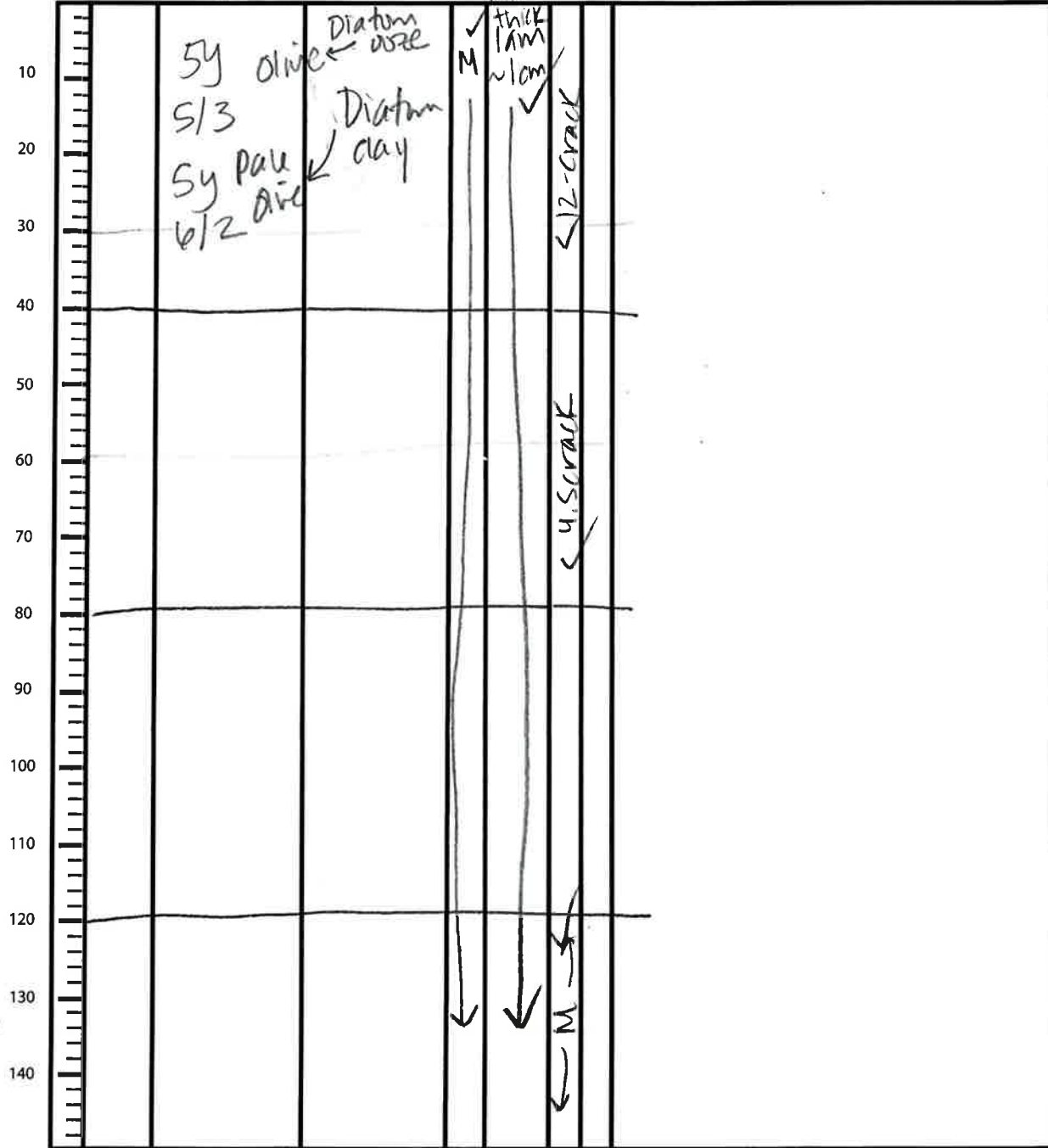
Percent	Component
BIOGENIC GRAINS	
	Calcareous
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
	Siliceous
	Radiolarians
	Spumellaria
	Nassellaria
50%	Diatoms
30%	20 Centric
20%	10 Pennate
	Chaetoceros Resting Spores
	Silicoflagellates
	Sponge spicules
	Dinoflagellates
	Others
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

01341 Site B Hole 40 Core 1-3 CC Top Depth

Expedition 323
Bering Sea

Major Lithology _____
Minor Lithology _____

Graphic Representation
Color
Lithology
Bioturbation
Structures/Accessories
Drilling Dist.
Samples
Visual Core description

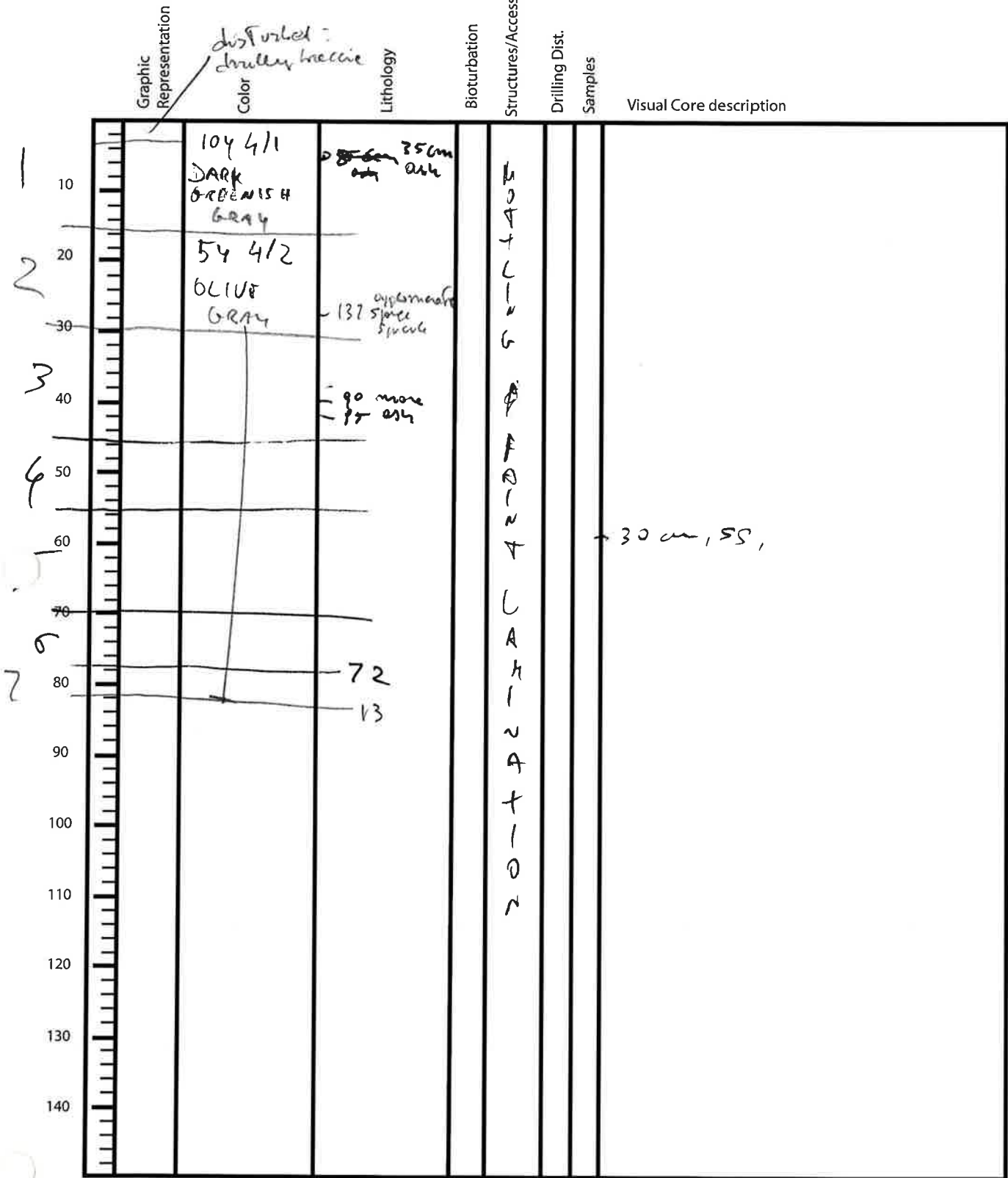


11/21/11

Observer: _____ Date: _____

Expedition 323
 Bering Sea

Major Lithology _____
 Minor Lithology _____



Observer: _____ Date: _____

X

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	U1341	B	41	X	A	40 cm	

Sediment/Rock Name	Diatom ooze	Observer	G.B.
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Percent Texture		
Sand	Silt	Clay

Comments: Major lithology -

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
	Framework minerals
5	x Quartz
	Feldspar
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
	Accessory/trace minerals
	Micas
	Biotite
	Muscovite
	Clay Minerals
	Chlorite
	Glauconite
	Chert
	Zircon
5	Ferromagnesium minerals
	Authigenic minerals
	Barite
	Phosphorite/Apatite
	Zeolite
	Opaque minerals
	Pyrite
	Magnetite
8	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
70	x Centric
20	x Pennate
	Chaetoceros Resting Spores
	Silicoflagellates
	Sponge spicules
	Dinoflagellates
	Others
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others



in SM

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	U1341	B	41	X	5	30 cm	

Sediment/Rock Name	Diatom ooze	Observer	G.B.
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lamination

Comments:

Neodenticulites?

Percent Texture		
Sand	Silt	Clay

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
	Framework minerals
2	Quartz
	Feldspar
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
	Accessory/trace minerals
	Micas
	Biotite
	Muscovite
5	X Clay Minerals
	Chlorite
	Glauconite
	Chert
	Zircon
	Ferromagnesium minerals
	Authigenic minerals
	Barite
	Phosphorite/Apatite
	Zeolite
	Opaque minerals
5	X 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
	X Diatoms
20	Centric
65	Pennate
	Chaetoceros Resting Spores
18	X Silicoflagellates
2	X Sponge spicules
	Dinoflagellates
	Others
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

+

in SM

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	U1341	B	41	H	3	60cm	

Sediment/Rock Name	Diatom clay	Observer	G.B.
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Percent Texture		
Sand	Silt	Clay

(major lithol) light colored layer

Comments:

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
	Framework minerals
5	Quartz
	Feldspar
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
	Accessory/trace minerals
	Micas
	Biotite
	Muscovite
45	x Clay Minerals
	Chlorite
	Glauconite
	Chert
	Zircon
2	x 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
55	x Diatoms
	Centric
	Pennate
	Chaetoceros Resting Spores
3	x Silicoflagellates
5	y Sponge spicules
	Dinoflagellates
	Others
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

X

in SM

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	01341	B	41	4	3	106	

Sediment/Rock Name	Diatom Clay Dolomite	Observer	G.B.
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Clayey -

Percent Texture		
Sand	Silt	Clay

Comments: { authigenic - carbo. - rich clay ? }

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
	Framework minerals
4	Quartz
	Feldspar
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
	Accessory/trace minerals
	Micas
	Biotite
	Muscovite
10	x Clay Minerals
	Chlorite
	Glauconite
	Chert
	Zircon
4	Ferromagnesium minerals
	Authigenic minerals
	Barite
	Phosphorite/Apatite
	Zeolite
	Opaque minerals
	Pyrite
	Magnetite
	Fe-oxide
	Carbonates
	Calcite
90	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
4	Diatoms
	Centric
	Pennate
	Chaetoceros Resting Spores
3	Silicoflagellates
4	Sponge spicules
	Dinoflagellates
	Others
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

Expedition 323
 Bering Sea

Depth (cm)	Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Samples	Major Lithology	Minor Lithology
								Visual Core description	
10	✓	19 5Y 4/2		SD					
10-20		102							
20-30									
30-40		100 109 145	5Y 7/3						
40-50									
50-60		83							
60-70									
70-80									
80-90									
90-100									
100-110									
110-120									
120-130									
130-140									
140-150									

soapy
 - 19 dolomite pebbles ← drilling dist
 22, 24-25 chalk
 98 mollusk
 Sec 1, 102 ~ Sec 3 145 faint lam
 130 faint black layer 1.5 cm
 28 ash black faint
 100-109 dolomitic lam
 102-106 nodule structure
 74-77 white ash layer 1 cm bioturbated
 sec 4 B ~ faint lam
 CC
 63
 18-18-27 PAL

11-50
 clay rich
 diatom
 ooze
 3A-
 dia
 clay

IODP Expedition 323
 SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	01341	B	42	H	1	80cm	

in SM

Sediment/Rock Name	clay Diatom ooze	Observer	G. B
--------------------	-----------------------------	----------	------

Percent Texture		
Sand	Silt	Clay

Thin lithol.

Comments:

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
	Framework minerals
5 x	Quartz
	Feldspar
	K-feldspar (Orthoclase, Microcline...)
3 x	Plagioclase
	Rock fragments
	Accessory/trace minerals
	Micas
	Biotite
	Muscovite
20 x	Clay Minerals
	Chlorite
	Glauconite
	Chert
	Zircon
	Ferromagnesium minerals
	Authigenic minerals
	Barite
	Phosphorite/Apatite
	Zeolite
	Opaque minerals
2 x	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
60 x	Diatoms
	Centric
	Pennate
	Chaetoceros Resting Spores
5 x	Silicoflagellates
5 x	Sponge spicules
	Dinoflagellates
	Others
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

Expedition 323
Bering Sea

1341 Site B Hole ~~43~~ Core Section Top Depth

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Samples	Major Lithology	Minor Lithology
							Visual Core description	
1								
10	43	single white laminae						7cm - dirt used
2								
20	148	bluish ash white laminae						white laminae are ferric-oxide mottled orange
3								
30								
4								
40	47 51	32 36 38 pe laminae						large flat silt pebble
5								
50								98 cm, ss, laminae (white)
6								
60		6 laminae						
7								
70		7 " "						
8								
80		10 dark 12 ash						
9								
90								63 cm, ss Diatom clay
CC								
100								
110								
120								
130								
140								

Observer: _____ Date: _____



in 91

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	U134-1	B	43	H	5	98 cm	

Sediment/Rock Name	Diatom ooze	Observer	G.B.
--------------------	-------------	----------	------

Quasi-mono-specific - pennate diatom
(lamina, white)

Percent Texture		
Sand	Silt	Clay

Comments:

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
	Framework minerals
	Quartz
	Feldspar
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
	Accessory/trace minerals
	Micas
	Biotite
	Muscovite
10	X 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	Centric
85	X Pennate
	Chaetoceros Resting Spores
	Silicoflagellates
	Sponge spicules
	Dinoflagellates
	Others
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

1341 B 44
 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	5T4/2V							
2								
3								
4								
5	60							
6	20 10T 4/1	20						
7								
8								
9								
10								
11								
12								
13								
14								

~11 b.d. Sec 1 11~ Sec 5. 60'
 705-707 mott black ash 730 mott b. ash 741A-60.

30
 83-86 white lam < 3m

47-50 mott ?
 13 white lam

56
 16 16-27 PAL

✓ faint lam

447
 Coarse

6A-90
 diatom clay

Observer: _____ Date: _____

X

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

IN SM

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	01341	B	44	H	A	60 cm	

Sediment/Rock Name	Diatom clay	Observer	G.B.
--------------------	-------------	----------	------

Percent Texture		
Sand	Silt	Clay

Comments: Major lithology

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
	Framework minerals
10 x	Quartz
	Feldspar
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
	Accessory/trace minerals
	Micas
	Biotite
	Muscovite
40 x	Clay Minerals
	Chlorite
	Glauconite
	Chert
	Zircon
	Ferromagnesium minerals
	Authigenic minerals
	Barite
	Phosphorite/Apatite
	Zeolite
	Opaque minerals
5 x	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
45 x	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

in SM

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	0341	B	44	H	5	47cm	

Sediment/Rock Name	Ash <i>Coarx</i>	Observer	G.B.
--------------------	------------------	----------	------

Ash?

Percent Texture		
Sand	Silt	Clay

Comments:

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

Percent	Component
BIOGENIC GRAINS	
	Calcareous
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
	Siliceous
	Radiolarians
	Spumellaria
	Nassellaria
13	X 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	U1341	B	44	H	6	90 cm	

in
SM

Sediment/Rock Name	Diatom clay ooze	Observer	G.B.
--------------------	------------------	----------	------

Percent Texture		
Sand	Silt	Clay

Comments:

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
	Framework minerals
	Quartz
	Feldspar
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
	Accessory/trace minerals
	Micas
	Biotite
	Muscovite
25	X 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
60	X Diatoms
	Centric
10	X Pennate
	Chaetoceros Resting Spores
	Silicoflagellates
5	X Sponge spicules
	Dinoflagellates
	Others
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

1341 B 15
 Site Hole Core Section Top Depth

Expedition 323
 Bering Sea

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist. Samples	Major Lithology	Minor Lithology
1 10	54						
2 20	3/1	13 bluish or 1/2 layer					
3 30							
4 40							
5 50							
60	54 5/2	60 61					
70							
CG 80							
CG 90							
100							
110							
120							
130							
140							

54 3/1

30 cm SS - DIATOM SILTY clay

elongated
 - 60-61 diam pebble, black
 - 115-118 very large

20 cm SS - DIATOM-RICH
 sections 6 & 11
 first lamination

Observer: _____ Date: _____

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	7341	B	45	H	4A	30	

in
SH

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

Comments:

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

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

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

134#

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	1341	B	323 45	H	6	20	

M
SM

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

Comments:

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
Framework minerals	
6	Quartz 3
	Feldspar
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
Accessory/trace minerals	
	Micas
	Biotite
	Muscovite
30	Clay Minerals 10-15
	Chlorite
	Glauconite
	Chert
	Zircon
	Ferromagnesium minerals
Authigenic minerals	
	Barite
	Phosphorite/Apatite
	Zeolite
Opaque minerals	
2	Pyrite 1
	Magnetite
	Fe-oxide
Carbonates	
	Calcite
	Dolomite
VOLCANICLASTIC GRAINS	
2	Crystal grain 1
10	Vitric grain 5
	Lithic grain

Percent	Component
BIOGENIC GRAINS	
Calcareous	
Foraminifera	
	Planktonic foraminifera
	Benthic foraminifera
Nannofossils	
	Coccoliths
	Discoasters
	Pteropods
Siliceous	
	Radiolarians
	Spumellaria
	Nassellaria
40	Diatoms 20
	Centric
	Pennate
	Chaetoceros Resting Spores
	Silicoflagellates
5	Sponge spicules 3
	Dinoflagellates
Others	
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

Expedition 323
Bering Sea

1341 B 66
Site Hole Core Section Top Depth

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist. Samples	Major Lithology	Minor Lithology
						Visual Core description	
1	fine ash 10r						107 4/1 dark greenish gray
2							
3							
4	53 53	white shale fragments patch					70 cm, SS 52 cm, SS
5	85 87			ABH Clyca			54 2.5/2 black
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
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121							
122							
123							
124							
125							
126							
127							
128							
129							
130							
131							
132							
133							
134							
135							
136							
137							
138							
139							
140							

Observer: _____ Date: _____

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	134	B	46	H	2	13	

Sediment/Rock Name	spiculate diatom-clay spiculate-bec	Observer	Akira
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Percent Texture		
Sand	Silt	Clay

Comments: major

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

Percent	Component
BIOGENIC GRAINS	
	Calcareous
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
	Siliceous
2	Radiolarians /
	Spumellaria
	Nassellaria
43	Diatoms 10-15 20
	Centric
	Pennate
	Chaetoceros Resting Spores
	Silicoflagellates
2	Sponge spicules /
	Dinoflagellates
	Others
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

X

IODP Expedition 323
 SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	1341	B	46	H.	4A	52	

Sediment/Rock Name	Shell fragment	Observer	Akura
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Percent Texture		
Sand	Silt	Clay

Comments:

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
	Framework minerals
	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
	Pyrite
	Magnetite
	Fe-oxide
	Carbonates
95%	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
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

323 01341B 47 H 1, CC
Site Hole Core Section Top Depth

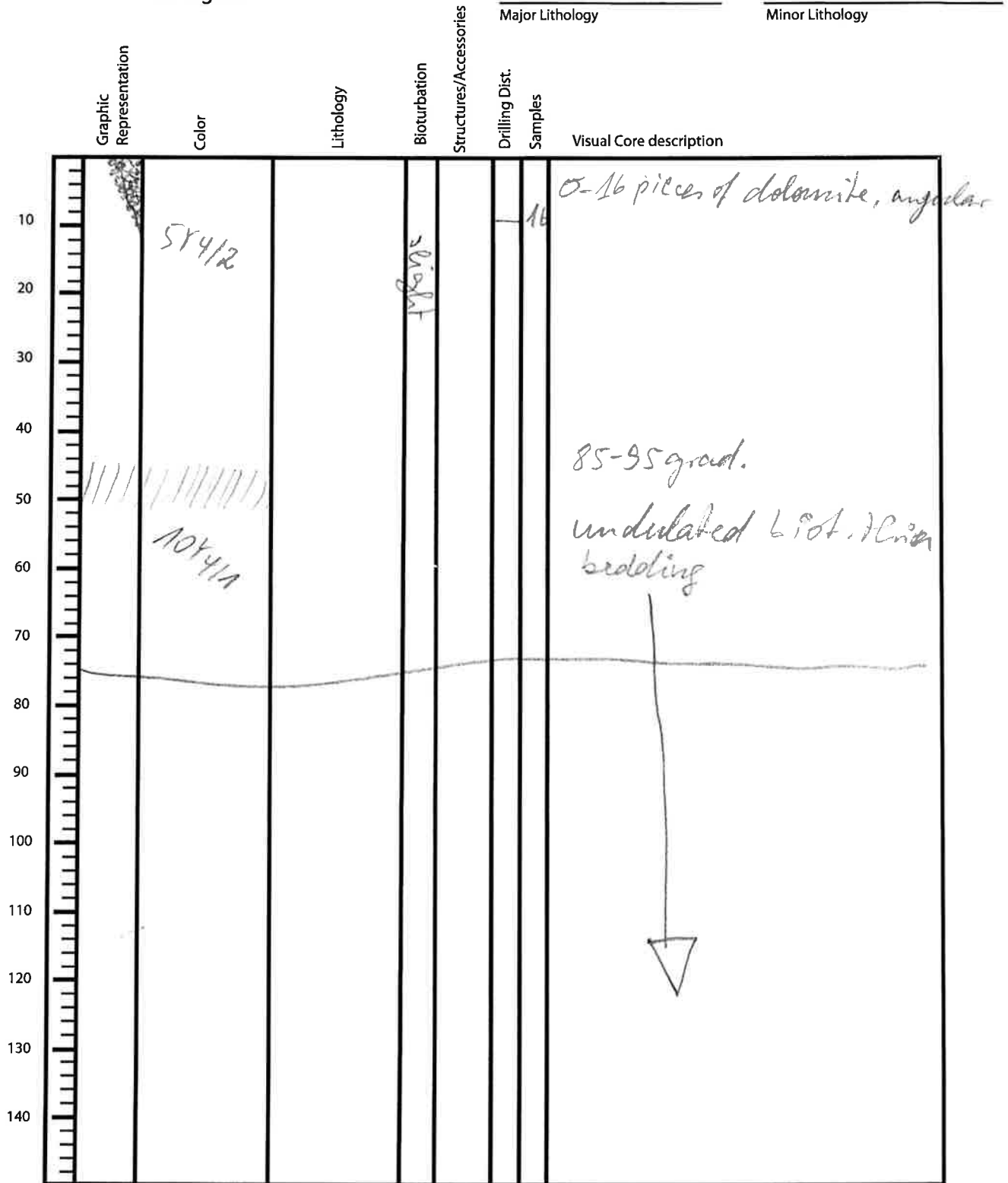
Expedition 323
Bering Sea

	Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Samples	Major Lithology	Minor Lithology	Visual Core description
10										
20		104 4/1	Diatom clay		Diatom Lam.					
30		dark greenish gray								
40										
50										
60										
70										
80										
90										
100										96 end 1
110										
120										
130										
140										

Observer: _____ Date: _____

Expedition 323
Bering Sea

1341 B 48H 12
Site Hole Core Section Top Depth



Observer: _____ Date: _____

1341 B 48H 3+4
Site Hole Core Section Top Depth

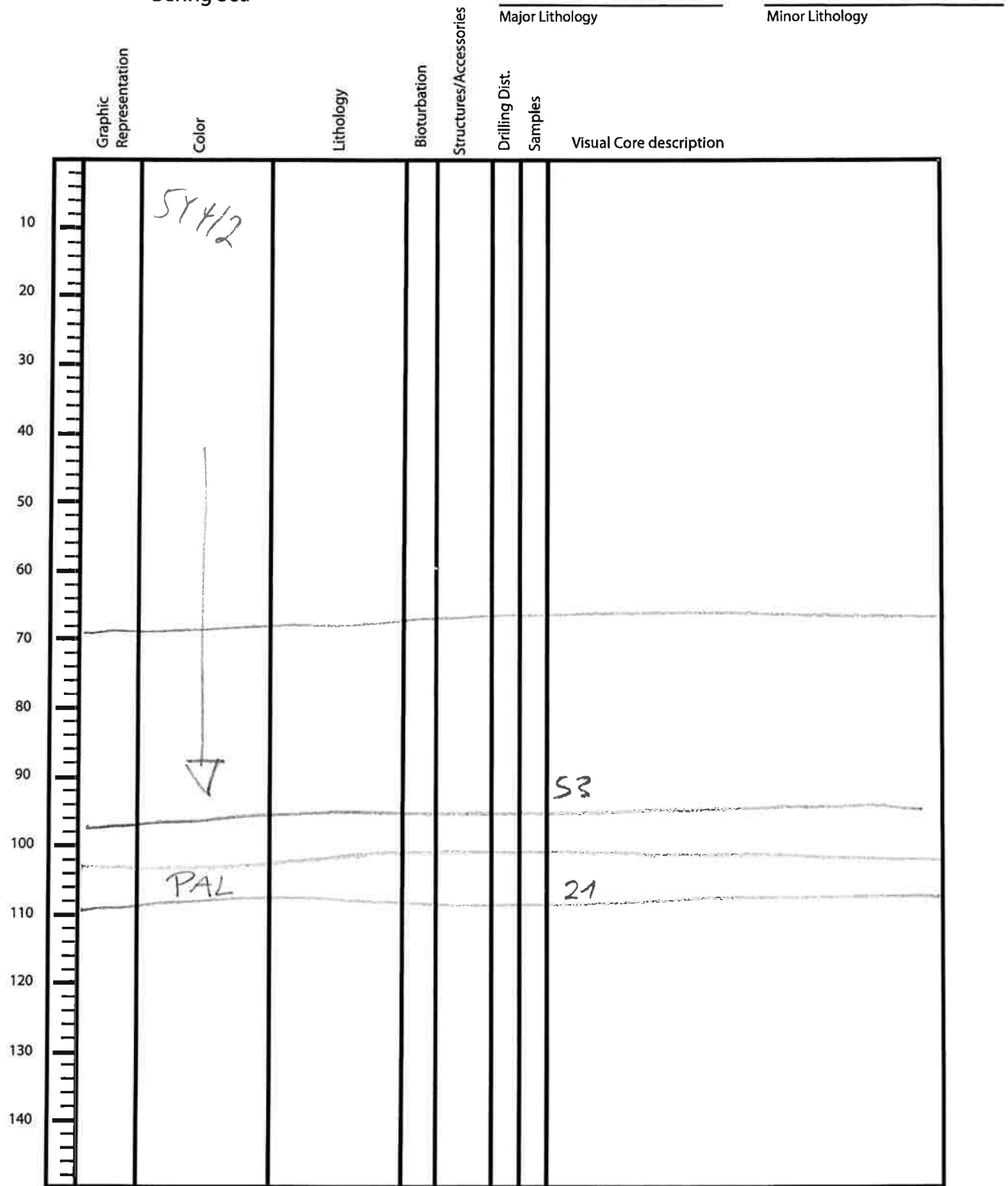
Expedition 323
Bering Sea

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist. Samples	Major Lithology	Minor Lithology	Visual Core description
	10Y4/1							undulated biot. thin bedding
								120-140 grad.
	5Y4/2							

Observer: _____ Date: _____

Expedition 323
Bering Sea


1341 B 48H S+6+CC
Site Hole Core Section Top Depth



Observer: _____ Date: _____

Expedition 323
Bering Sea


1341 B 49H 1+CC
 Site Hole Core Section Top Depth

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist. Samples	Major Lithology	Minor Lithology
						Visual Core description	
	S/Y 1/2				←	mod., clolo. + basalt gravel fallen into hole	
					32	20-32 void	
	PAL				18		

Observer: _____ Date: _____

1341 3 504 142 _____
 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	
							0-20 carb + basalt gravel	
	5Y4/2		shale		20		116, 118, 127, 140 →	whitish spots
	↓							23 whitish spot

Observer: _____ Date: _____

Expedition 323
Bering Sea

1341 B 50H 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	
	SY4/2 SY 5/2 + SY4/2 						6, 19, 82, 115 whitish spots 20-40 grad. 40-CC thin undulated, patchy bedding, disturbed by biot. (50% of each color)

Observer: _____ Date: _____

Expedition 323
Bering Sea

1341 B 50H S+6+cc
 Site Hole Core Section Top Depth

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist. Samples	Major Lithology	Minor Lithology
						Visual Core description	
							23, 68, whitish spots
					120		24, 31 whitish spots
					40		
		PAL				20	

Observer: _____ Date: _____

Expedition 323
Bering Sea

1341 B 514 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	
	5 Y 5/2 		obs. slight 20 57 obs. 109 slight		0-20 thin lam.	
					57-109 thin lam. *109-110 (sect. 3) thin bedded, uncalculated / patchy color changes *isolated light lam. at 126, 141, 145 ↓ ... 29, 30	

Observer: _____ Date: _____

Expedition 323
Bering Sea

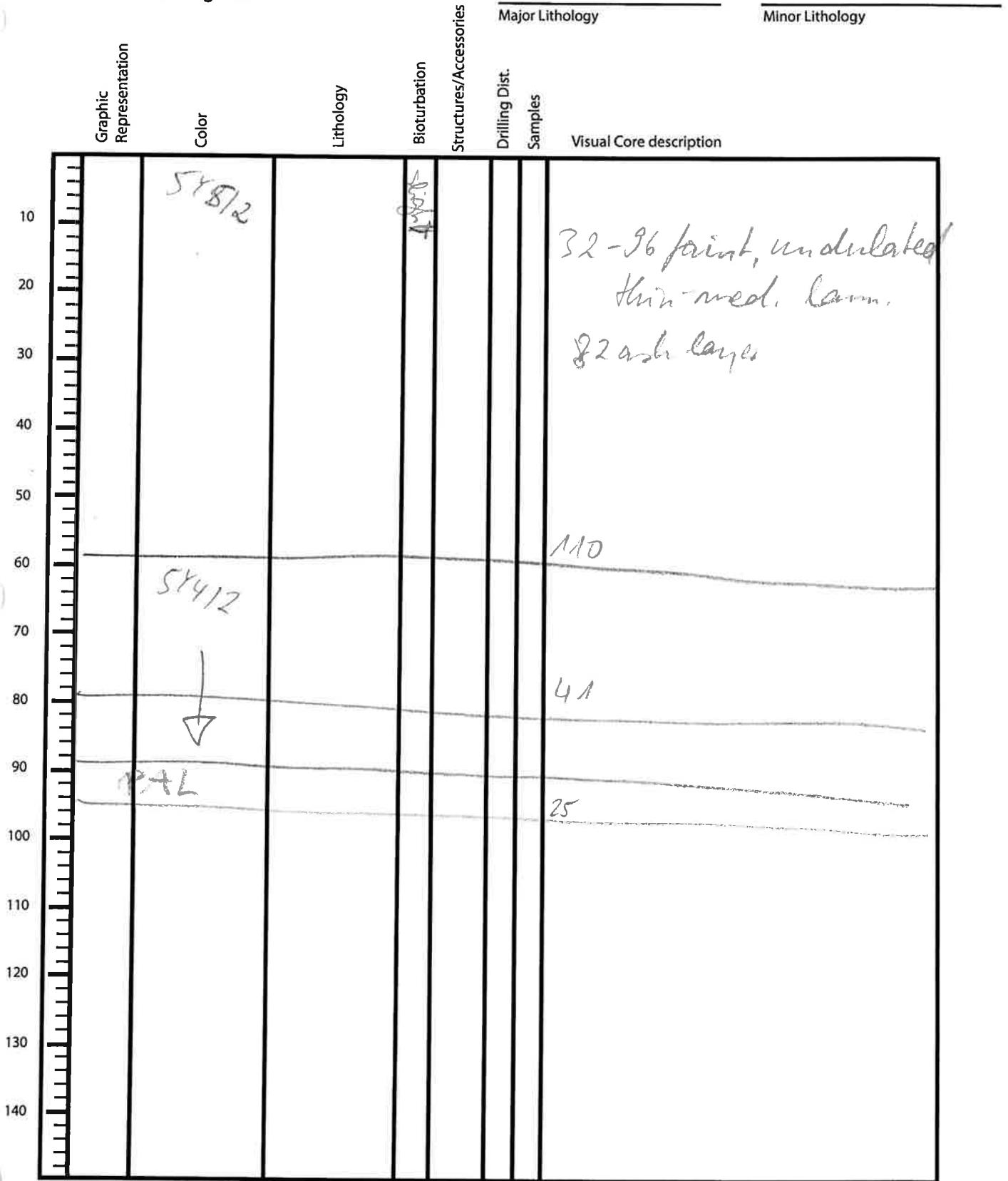
1341 B 51H 3+4
Site Hole Core Section Top Depth

		Major Lithology		Minor Lithology	
Graphic Representation	Color	Lithology	Bioturbation Structures/Accessories	Drilling Dist. Samples	Visual Core description
	5Y5/2				mottled ferr.
	5Y6/2		57	57	... 57 57-64 brown-yellowish 5Y6/2 patch and layer
	5Y5/2				81-87 reddish hard dolo. nodule, int. biot., dist. sharp conts.
	5Y7/2				
	5Y4/2				88-92 patch of 5Y6/2

Observer: _____ Date: _____

Expedition 323
Bering Sea

1341 B 51H 5+6+CC
Site Hole Core Section Top Depth



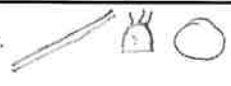
Observer: _____ Date: _____

SM

IODP Expedition 323
 SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	1341	B	51	H	1	15	15

Sediment/Rock Name	Diatom ooze	Observer	Kelsie
--------------------	-------------	----------	--------

Contains 3 main diatom types: 

Percent Texture		
Sand	Silt	Clay

Comments: white lamination

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
Framework minerals	
3	Quartz
2	Feldspar
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
Accessory/trace minerals	
	Micas
1	Biotite
	Muscovite
	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
95	Diatoms
50	Centric
45	Pennate
	Chaetoceros Resting Spores
	Silicoflagellates
1	Sponge spicules
	Dinoflagellates
Others	
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

✓ SM

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	1341	B	51	H	1	90	90

Sediment/Rock Name	Diatom-rich fine ash	Observer	Kelsie
--------------------	----------------------	----------	--------

Percent Texture		
Sand	Silt	Clay
	✓	

Comments: Thin white ash? layer

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

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

✓ SM

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	1341	B	51	H	2	30	30

Sediment/Rock Name	Diatom ooze	Observer	Kelsie
--------------------	-------------	----------	--------

Percent Texture		
Sand	Silt	Clay

Comments: White lamination - same as at 51H-1A-15cm

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
	Framework minerals
3	Quartz
2	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
	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
	55 Centric
	40 Pennate
	Chaetoceros Resting Spores
	Silicoflagellates
	1 Sponge spicules
	Dinoflagellates
	Others
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

134A B 52H 142
 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	
10	5Y4/2							0-2 gravel blueish burrows etc.
20			1/2 in					
30								
40								
50								
60								
70								
80	5Y5/2 + 5Y4/2							25, 37, 39, intermixed with 0-93 thin bedding, undulated, biot.
90								
100								
110								
120								90-100 grad.
130	5Y4/2							
140								

Observer: _____ Date: _____

1341 B 52H 3+4
Site Hole Core Section Top Depth

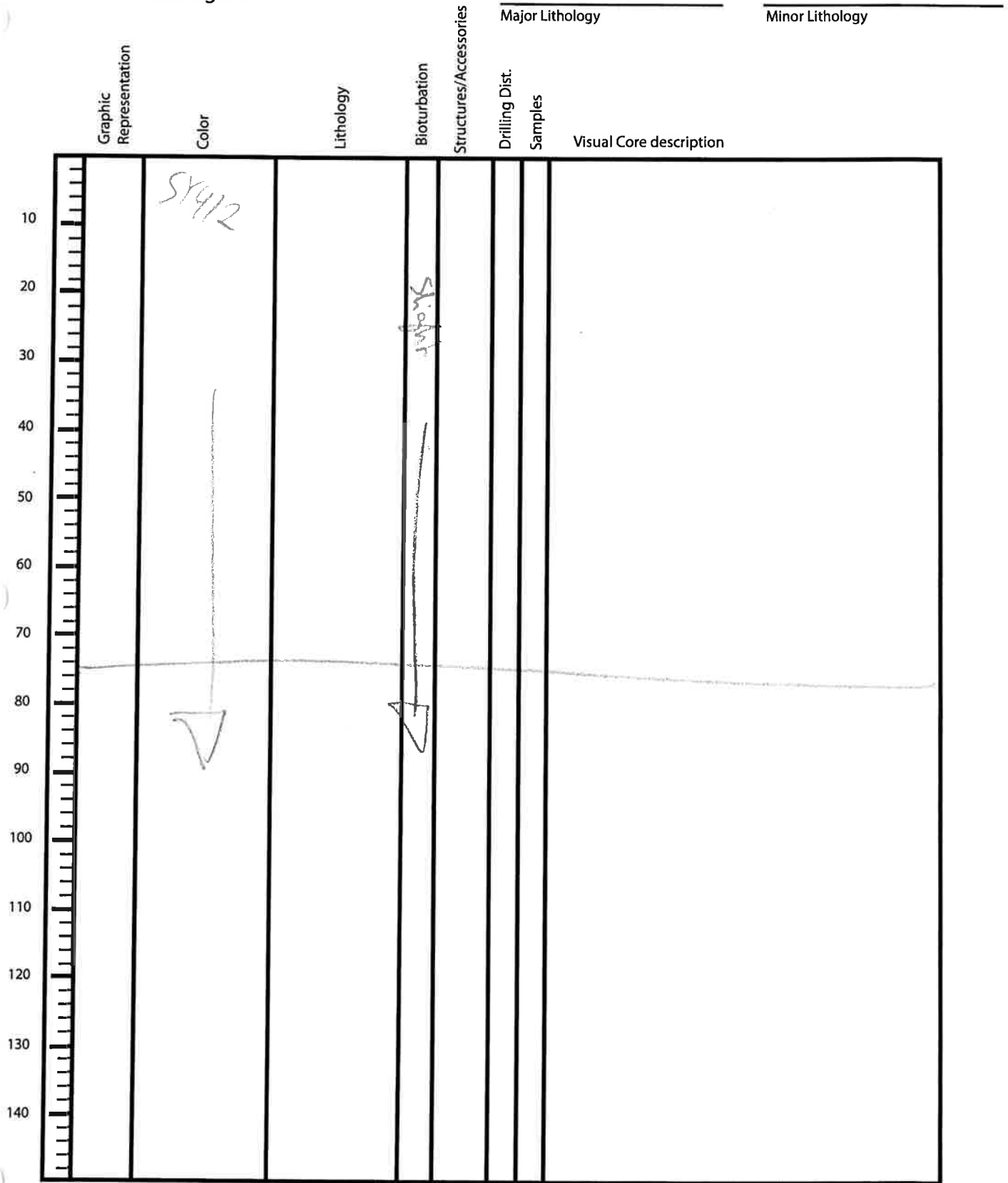
Expedition 323
Bering Sea

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Samples	Major Lithology	Minor Lithology
							Visual Core description	
	SNR		slight					
								thin undul. bedding the bluish burrows the
								80-100 ish nodules

Observer: _____ Date: _____

1841 B 52H 5+6
Site Hole Core Section Top Depth

Expedition 323
Bering Sea



Observer: _____ Date: _____

1841 JB 52H 7+CC _____
Site Hole Core Section Top Depth

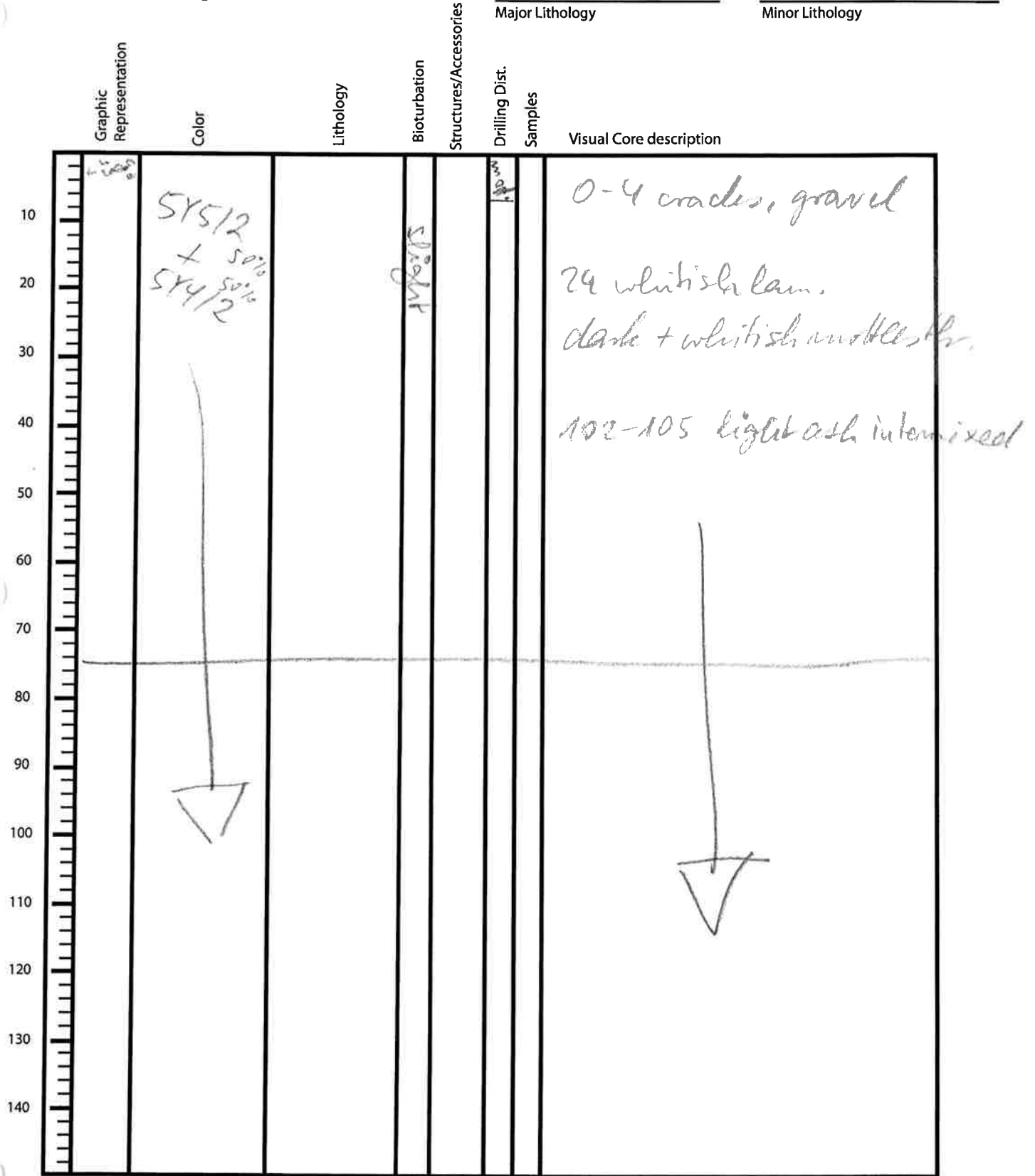
Expedition 323 Bering Sea

							Major Lithology	Minor Lithology
Graphic Representation	Color	Lithology	Bioturbation Structures/Accessories	Drilling Dist.	Samples	Visual Core description		
	SY4/2							
10							60	
20								
30								
40	PAL						29	
50								
60								
70								
80								
90								
100								
110								
120								
130								
140								

Observer: _____ Date: _____

1341 B 53H 1+2
 Site Hole Core Section Top Depth

Expedition 323
 Bering Sea



Observer: _____ Date: _____

1341 B 53H 3+4
 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	
	54512 x 50% 54412 50%		sl.					
								3 cracks
								4-8 intermixed ash dark + white nodules, etc.
								122-127 isolated lam.
			sl.					cracks

Observer: _____ Date: _____

1341 B 53H 5+6
Site Hole Core Section Top Depth

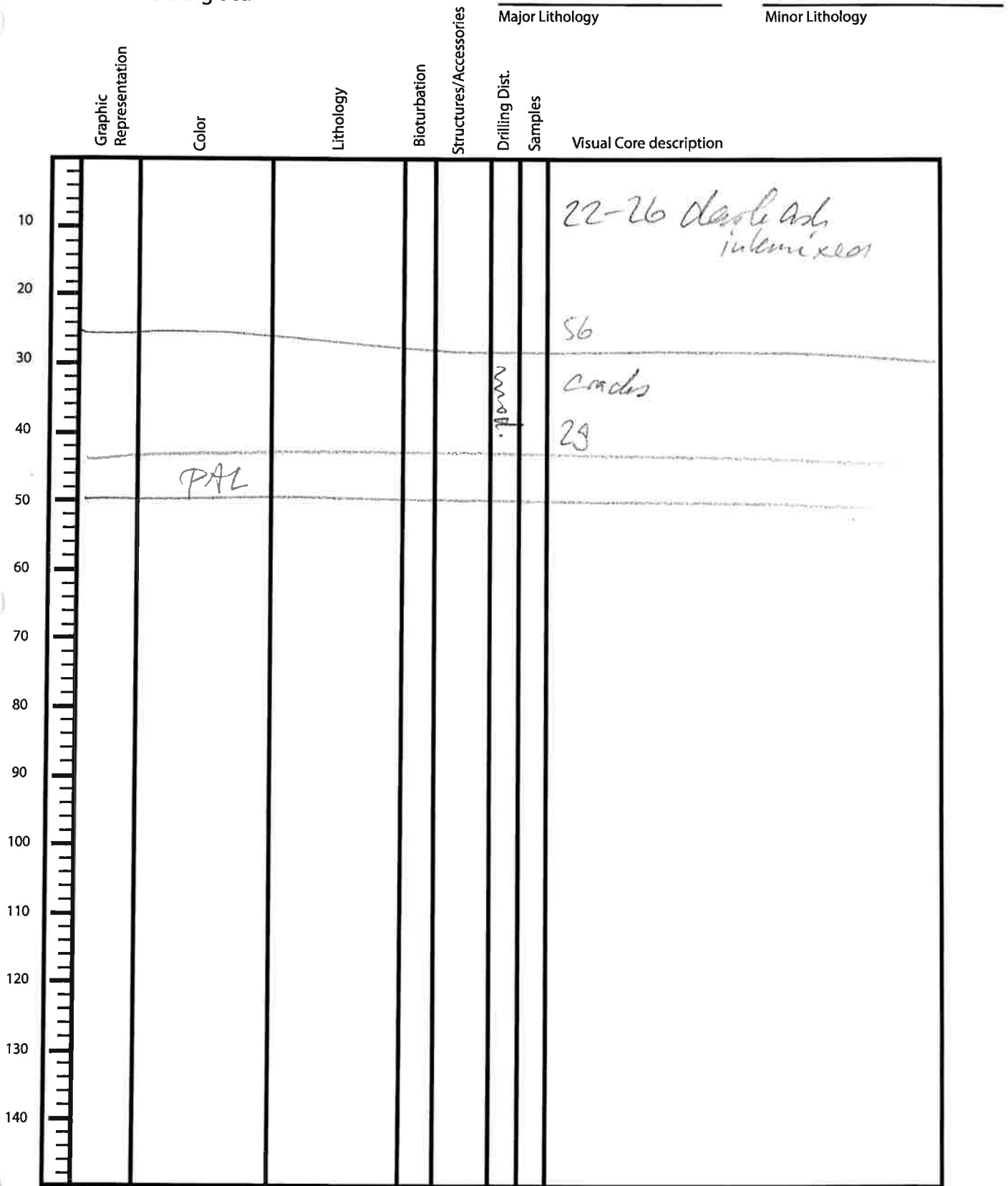
Expedition 323
Bering Sea

	Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist. Samples	Major Lithology	Minor Lithology	Visual Core description
10		SY4/2				5			4 cracks
20									blueish burrows H.c.
30									
40									
50									
60									
70									
80									
90									
100									
110									88
120									
130									
140									

Observer: _____ Date: _____

1341 B 53H 7+CC
Site Hole Core Section Top Depth

Expedition 323
Bering Sea



Observer: _____ Date: _____

Expedition 323
Bering Sea

Site 1341 Hole B Core SY Section ① Top Depth _____

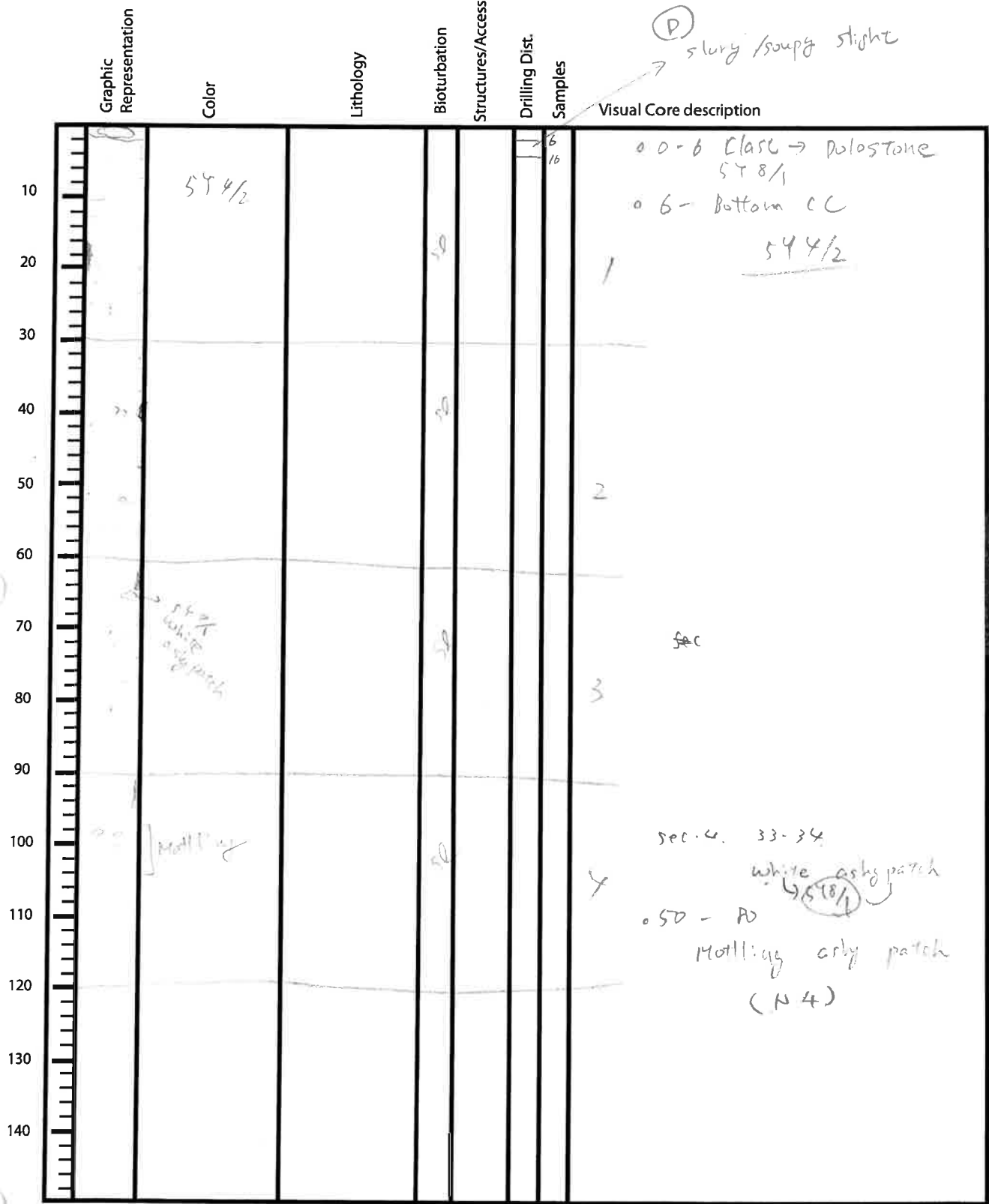
Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Samples	Major Lithology	Minor Lithology
							Visual Core description	
	SY 4/2	→ clasts → diatom ooze	SA	pieces	fall in		0-6 gravel pieces 6-10 semi lith: frag dolomite 10-35 SY 4/2 Black ash 0-30 drilling disturbance fall in	

Observer: Hiro A Date: _____

Expedition 323
Bering Sea

1341 Site B Hole 57X Core 1-4 Section _____ Top Depth

Sponge Spicule Bearing dolomite
Major Lithology Minor Lithology



Observer: _____ Date: _____

✓ SM

IODP Expedition 323
 SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	1341	B	57	X	2	103	103

Sediment/Rock Name	Sponge - spicule bearing diatom ooze	Observer	Kelsie
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Percent Texture		
Sand	Silt	Clay

Comments: Main lithology

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
Framework minerals	
10	Quartz
3	Feldspar
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
1	Rock fragments
Accessory/trace minerals	
	Micas
	Biotite
	Muscovite
	Clay Minerals
	Chlorite
	Glauconite
	Chert
	Zircon
1	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
1	Nassellaria
	Diatoms
50	Centric
20	Pennate
	Chaetoceros Resting Spores
	Silicoflagellates
15	Sponge spicules
	Dinoflagellates
Others	
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

✓ SM

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	1341	B	57	X	4	82	82

Sediment/Rock Name	Diatom ooze	Observer	Kelsie
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Percent Texture		
Sand	Silt	Clay

Comments: Reddish thin bed.

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
	Framework minerals
10	Quartz
5	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
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
1	Nassellaria
	Diatoms
60	Centric
20	Pennate
	Chaetoceros Resting Spores
	Silicoflagellates
2	Sponge spicules
	Dinoflagellates
	Others
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

134 / B 58x / /
 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	
	<p>5T 5 4/3</p>					<p>00-150 5T 4/3</p> <p>Pebbles • 40-150 → dolomite angular-subangular</p> <p>Drilling Disturbance Soggy throughout the sec.</p> <p>• 0-70 soft or soggy 70-150 trans. st. if?</p>	

Observer: Hind Date: _____

Expedition 323
Bering Sea

Site _____ Hole _____ Core _____ Section 2 Top Depth _____

	Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Samples	Major Lithology	Minor Lithology	Visual Core description
10										
20		5Y								
30		5/3								
40										
50										
60										
70										
80										
90										
100										
110										
120										
130										
140										

~ 150 soft?

5Y
5/3

pebbles

pebbles

125
] pieces
150

Observer: _____ Date: _____

Expedition 323
Bering Sea

Site _____ Hole _____ Core _____ Section 3 Top Depth _____

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Samples	Major Lithology	Minor Lithology
							Visual Core description	
								0-108 soft
	5T 5/3							
	Pebble							
	5T 7/1						062 - 73 dolostone	
							5T 7/1	
		5T 8/2					073-75 dolostone se	
	Pebble	73					dolomite sediments	
		75-130					5T 8/2	
	5T 5/3	<u>Pebbles</u>					075- sec. f. 2-4 cm 150cm	
							5T 5/3 2	
					100			
								Sample
					150			

Observer: _____ Date: _____

Expedition 323
Bering Sea

Site _____ Hole _____ Core _____ Section 4 Top Depth _____

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist. Samples	Major Lithology	Minor Lithology
						Visual Core description	
	5Y 5/2						0-100 5Y 5/2 70-130 Pebbles Drilling disc 80- 100 100 sample / slurry Induration soft
	↑ 5Y 5/2 (Pebble)			↑ (P)	70 130		

Observer: _____ Date: _____

Expedition 323
Bering Sea

Site _____ Hole _____ Core 58 Section 5 Top Depth _____

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Samples	Major Lithology	Minor Lithology
							Visual Core description	
	5Y 5/4							
				Pebble				<p>0-20 soft 5Y 5/4</p> <p>20 grad</p> <p>20- bottom 10Y 4/1 * stiff</p> <p>Induration</p> <p>0-20 soft</p> <p>20- hard</p> <p>Drilling disc.</p> <p>* 0-20 sample</p>
		12Y						
		13G						
	10Y 4/1							
	12Y							

Observer: _____ Date: _____

Expedition 323
Bering Sea

Site _____ Hole _____ Core _____ Section 6 Top Depth _____

	Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist. Samples	Major Lithology	Minor Lithology	Visual Core description
10									
20		104							
30		4/1							
40									
50									
60						(P)			
70									070-128
80									empty
90									
100									
110									
120									
130									128
140									

Observer: _____ Date: _____

Expedition 323
Bering Sea

Site _____ Hole _____ Core _____ Section CC Top Depth _____

	Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Samples	Major Lithology	Minor Lithology	Visual Core description
10		10Y 4/1								
20		17cm								no drilling dist - 00-17 10Y 4/1
30										
40										
50										
60										
70										
80										
90										
100										
110										
120										
130										
140										

Observer: _____ Date: _____

✓ SM

IODP Expedition 323
 SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
			58X	5	5A	110.0	110.0

Sediment/Rock Name	diatom rich silty clay	Observer	Hir
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Percent Texture		
Sand	Silt	Clay
10	20	60

Comments: Major: 57 4/2

Percent	Component
SILICICLASTIC GRAINS/MINERAL 66%	
Framework minerals	
21%	Quartz 7
15%	Feldspar 5
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
Accessory/trace minerals	
	Micas
	Biotite
	Muscovite
30%	Clay Minerals 10
	Chlorite
	Glauconite
	Chert
	Zircon
	Ferromagnesium minerals
Authigenic minerals	
	Barite
	Phosphorite/Apatite
	Zeolite
Opaque minerals	
	Pyrite
	Magnetite
	Fe-oxide
Carbonates	
	Calcite
	Dolomite
VOLCANICLASTIC GRAINS 4%	
	Crystal grain
3 1/2%	Vitric grain 1
	Lithic grain

Percent	Component
BIOGENIC GRAINS 30%	
Calcareous	
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
Siliceous	
1%	Radiolarians
	Spumellaria
	Nassellaria
	Diatoms
15%	5 Centric
6%	2 Pennate
15%	Chaetoceros Resting Spores
	Silicoflagellates
3%	3 Sponge spicules
	Dinoflagellates
Others	
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

✓ SM

IODP Expedition 323
 SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	1341	B	5fx		6	90.0	90.0

Sediment/Rock Name	Diatom 903e	Observer	Hiro
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Percent Texture		
Sand	Silt	Clay

Comments: Major 10% 4/1

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
	Framework minerals
5%	Quartz
	Feldspar
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
	Accessory/trace minerals
	Micas
	Biotite
	Muscovite
5%	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

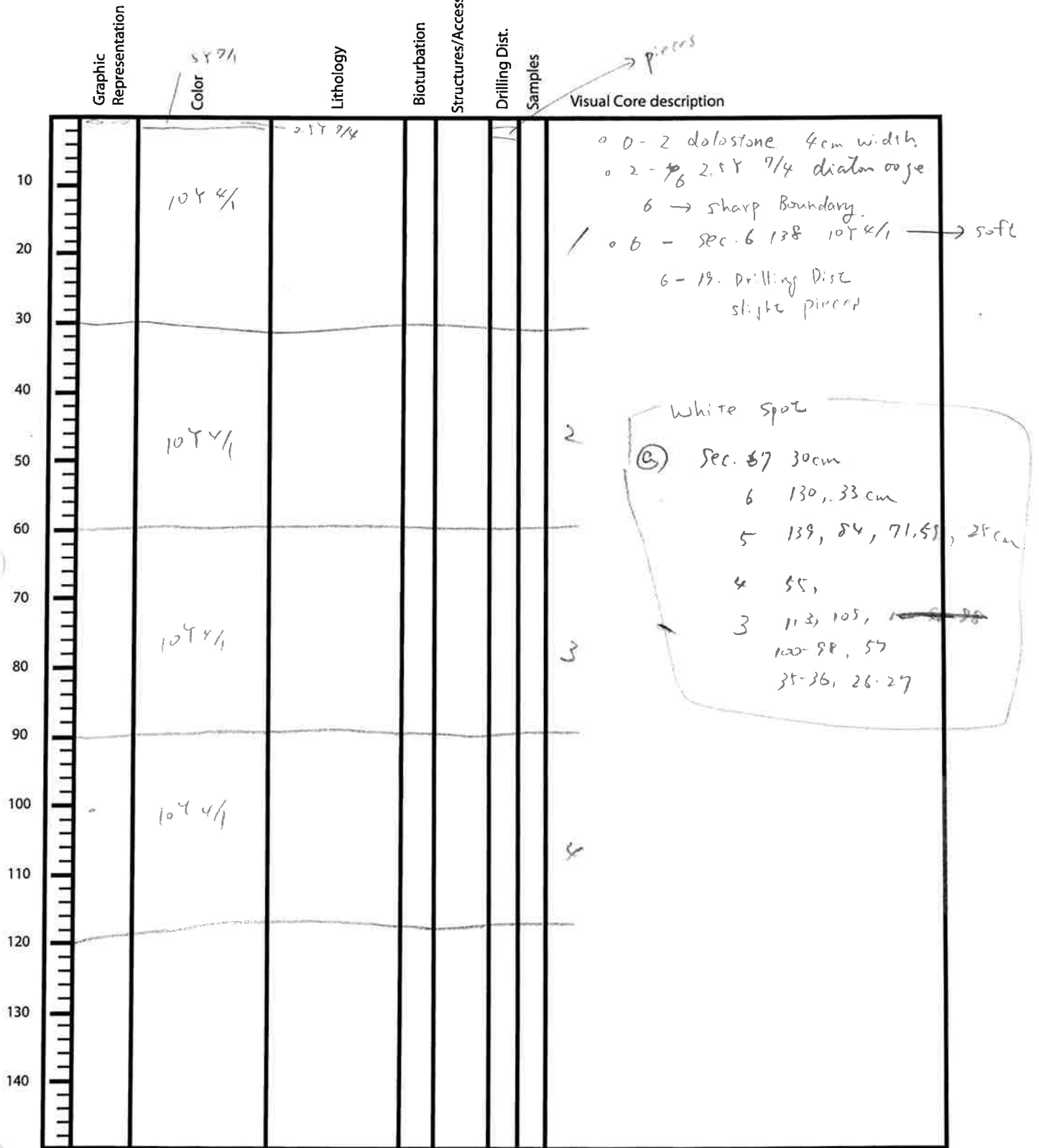
Percent	Component
BIOGENIC GRAINS	
	Calcareous
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
	Siliceous
	Radiolarians
	Spumellaria
	Nassellaria
	Diatoms
7%	Centric
20%	Pennate
	<i>Chaetoceros</i> Resting Spores
	Silicoflagellates
	Sponge spicules
	Dinoflagellates
	Others
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

Expedition 323
Bering Sea

1341 Site B Hole 59X Core 1-4 Section Top Depth

Sponge Spirule Bearing diatom ooze

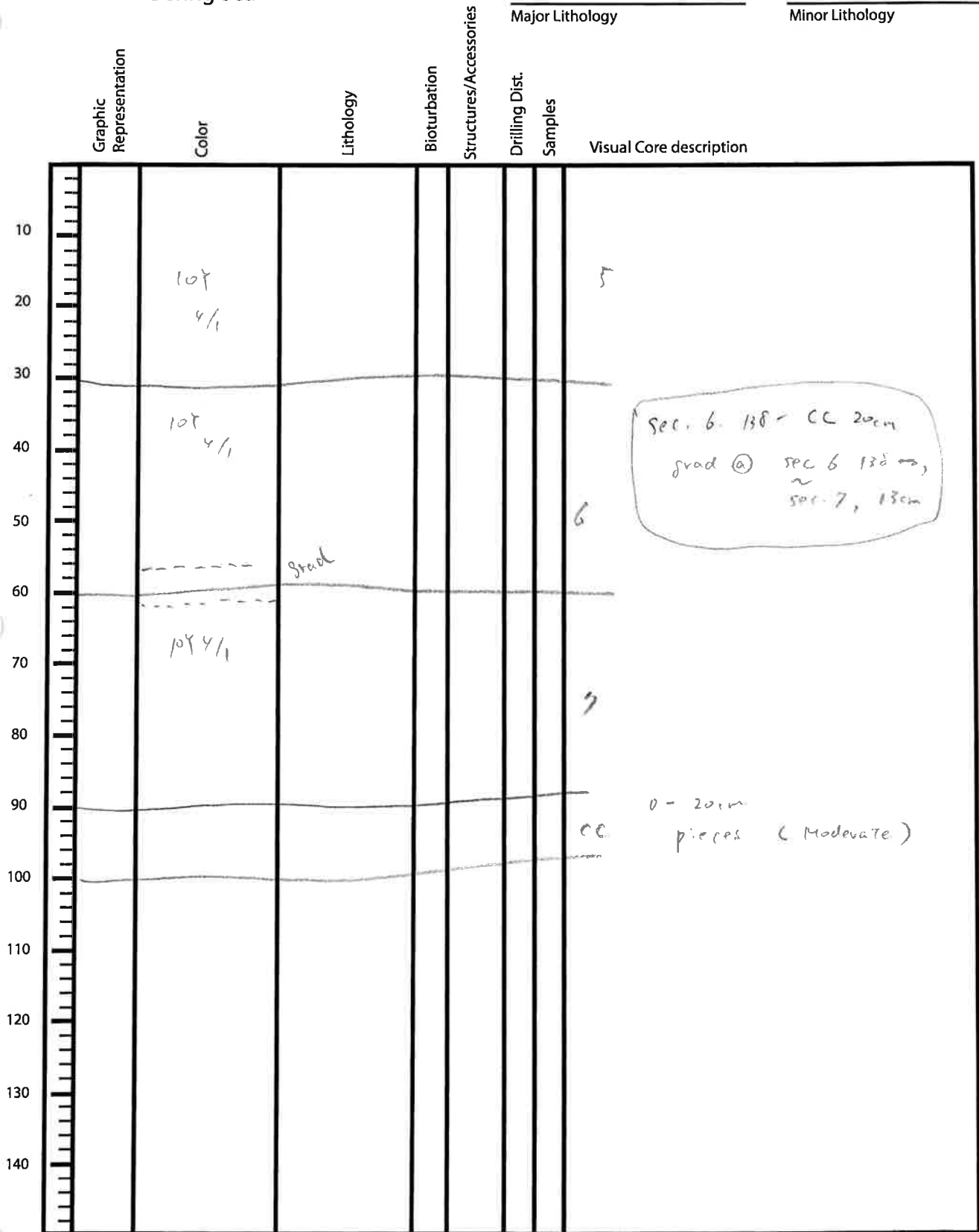
Major Lithology Minor Lithology



Observer: _____ Date: _____

Expedition 323
Bering Sea

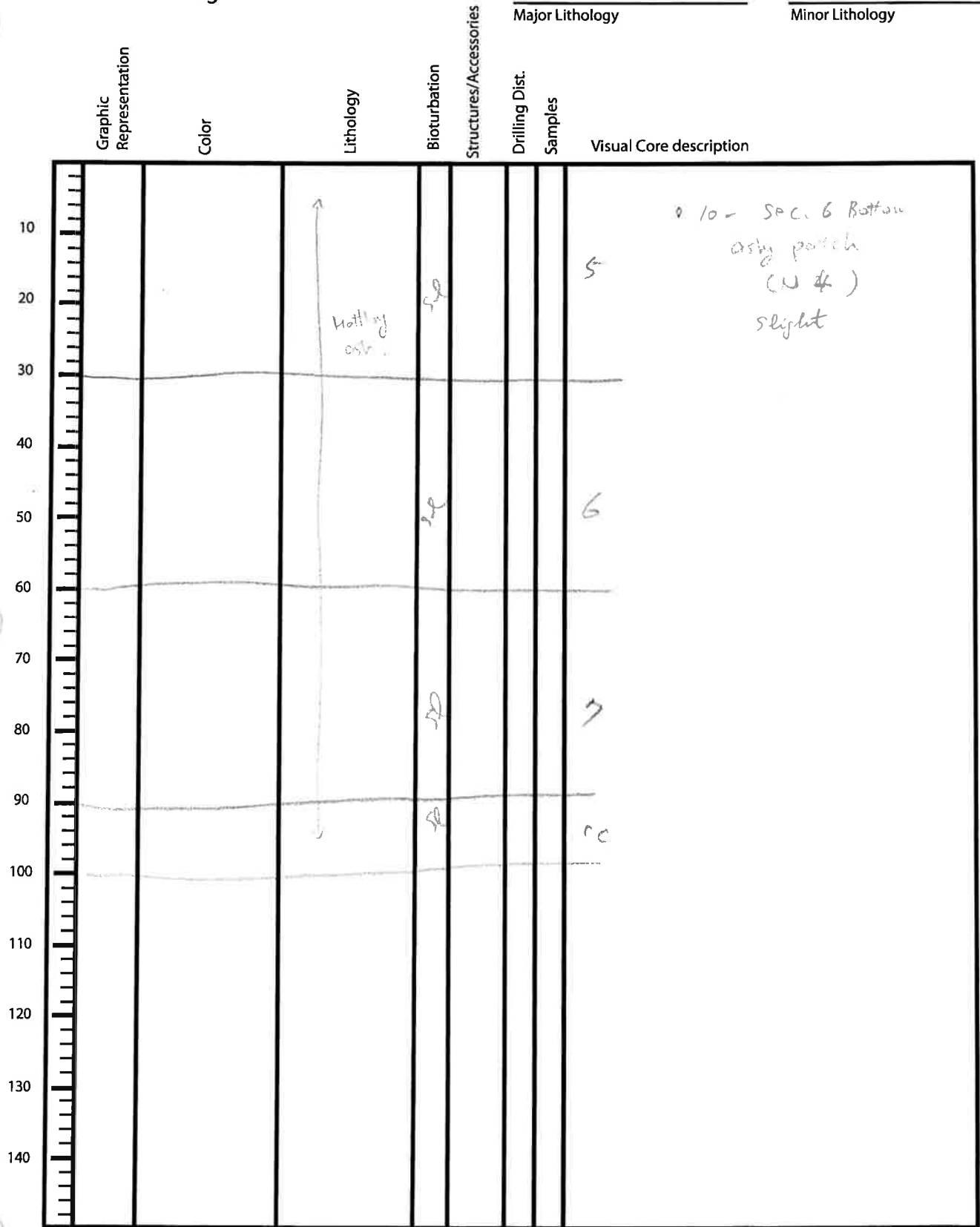
Site _____ Hole _____ Core _____ Section _____ Top Depth _____



Observer: _____ Date: _____

1341 B 59X 5-CC
 Site Hole Core Section Top Depth

Expedition 323
 Bering Sea



Observer: H. rd Date: _____

VSM

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	1341	B	59	X	1	6	6

Sediment/Rock Name	Diatom ooze - lots of large centric ones	Observer	Kelsie
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Percent Texture		
Sand	Silt	Clay

Comments: Reddish coloured - bed

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
Framework minerals	
10	Quartz
2	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	
2	Pyrite
	Magnetite
	Fe-oxide
Carbonates	
	Calcite
	Dolomite
VOLCANICLASTIC GRAINS	
	Crystal grain
1	Vitric grain
	Lithic grain

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

✓ SM

IODP Expedition 323
 SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	1341	B	59	X	2	22	22

Sediment/Rock Name	Diatom ^{sponge-bearing} ooze	Observer	Kelsie
--------------------	---------------------------------------	----------	--------

Percent Texture		
Sand	Silt	Clay

Comments: Main lithology

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
Framework minerals	
10	Quartz
5	Feldspar
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
2	Rock fragments
Accessory/trace minerals	
	Micas
	Biotite
	Muscovite
	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
10	Vitric grain
	Lithic grain

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

Expedition 323
Bering Sea

1341 Site B Hole 60x Core 1-CC Section Top Depth

Diatom ooze Major Lithology Minor Lithology

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Samples	Visual Core description
					↑		0 - Bottom Sec. 7, 10
							5Y 5/3
							Sec. 1-6 ash mottling
						2	Sec. 2 104-105
							Sec. 3 26-27
						3	Sec. 5 46-47
	5Y 5/3						192-193
							Sec. 6 74-75
							White spot
							Sec. 4, 20
							5Y 23, 142-143
							6. 51, 62, 93, 82
							Sec. 3. N/A
							2 N/A
							Sec. 7
							grad 8-10cm
							95
							Sec 7 10 - Bottom
	5Y 4/2						5Y 4/2
		2.5Y 8/1 dolomite					85-86 Dolomite mottling
		(SS)					96-CC Bottom 5Y 4/2
							5Y 8/1
							Drilling Dist.
							Sec. 1 ~ Sec. 6 Bottom
							Soupy
							Induration
							Sec. 1 ~ Sec. 2 Bottom
							Soft
							Sec. 3 ~ stiff

Observer: Hino A Date:

✓SM

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	1341	B	60	X	7	73	73

Diatom-rich

Sediment/Rock Name	Sponge-spicule silt
--------------------	---------------------

Observer	Kelsie
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Percent Texture		
Sand	Silt	Clay

Comments:

White spot

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
Framework minerals	
25	Quartz
25	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	
	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
20	Diatoms
	Centric
	Pennate
	Chaetoceros Resting Spores
	Silicoflagellates
30	Sponge spicules
	Dinoflagellates
Others	
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

✓ SM

IODP Expedition 323
 SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	1341	B	60	X	7	80	80

Sediment/Rock Name	Diatom ooze	Observer	Kelsie
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Percent Texture		
Sand	Silt	Clay

Comments: Main lithology

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

Percent	Component
BIOGENIC GRAINS	
	Calcareous
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
	Siliceous
1	Radiolarians
	Spumellaria ✓
	Nassellaria
	Diatoms
60	Centric
10	Pennate
	Chaetoceros Resting Spores
	Silicoflagellates
2	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	1341	B	60	X	7	96	96

✓ SM

Sediment/Rock Name	Diatom ooze (dolomite)	Observer	Kelce
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Percent Texture		
Sand	Silt	Clay

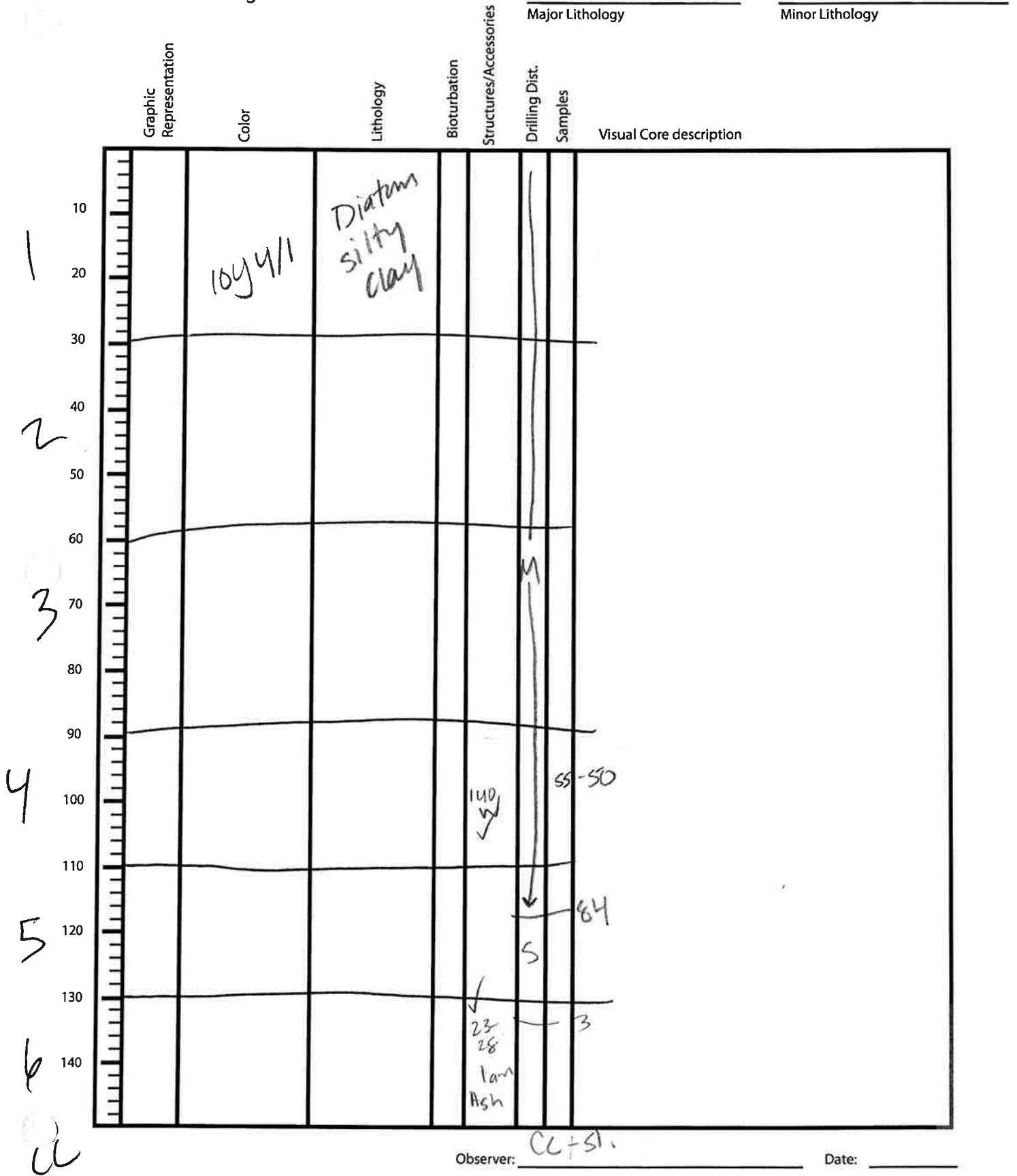
Comments: Lighter - col. bed.

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
	Framework minerals
5	Quartz
5	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
1	Pyrite
	Magnetite
	Fe-oxide
	Carbonates
	Calcite
50	Dolomite
VOLCANICLASTIC GRAINS	
	Crystal grain
	Vitric grain
	Lithic grain

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

323 V1341B 61X ALL
 Site Hole Core Section Top Depth

Expedition 323
 Bering Sea



S.R.

IODP Expedition 323
 SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	1341	B	61	A	4	50	

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

Comments:

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

Percent	Component
BIOGENIC GRAINS	
Calcareous	
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
Siliceous	
	Radiolarians
	Spumellaria
	Nassellaria
52	Diatoms 25
	Centric
	Pennate
	Chaetoceros Resting Spores
	Silicoflagellates
15	Sponge spicules 7
	Dinoflagellates
Others	
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

Expedition 323
 Bering Sea

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist. Samples	Major Lithology	Minor Lithology
						Visual Core description	
				105 Mkt 130 Mkt	0-14 Mkt		145-147 void.
1			S				
2	10g 4/1				S 110		
3				132 M 70 W		M = mudstone	
4	D. ooze		45				partly lit. nodules esp. S/B
5	Dolomitized 2.5y 5/2 D. ooze	stiff		20 M 57 S	20 M 57 S		
6	Dolomitized	soft stiff		92 M.			55-110 Dolomitized spicule-rich diatom ooze Dolomitized diatom ooze
7	D. ooze	soft		4			

Observer: _____ Date: _____

IODP Expedition 323
 SEDIMENT SMEAR SLIDE WORKSHEET

✓ 52.

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
	1341	B	62	2		110cm	

Sediment/Rock Name	<i>ASTOM 0078</i>	Observer	<i>lwg</i>
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Percent Texture		
Sand	Silt	Clay

Comments:

Percent	Component
	SILICICLASTIC GRAINS/MINERAL
	Framework minerals
<i>10%</i>	Quartz
	Feldspar
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
	Accessory/trace minerals
	Micas
	Biotite
	<i>X</i> Muscovite
<i>10%</i>	Clay Minerals
	Chlorite
	Glauconite
	Chert
	Zircon
	Ferromagnesium minerals
	Authigenic minerals
	Barite
	Phosphorite/Apatite
	Zeolite
	Opaque minerals
<i>5%</i>	Pyrite
	Magnetite
	Fe-oxide
	Carbonates
<i>5%</i>	Calcite
	Dolomite
	VOLCANICLASTIC GRAINS
	Crystal grain
<i>2.10%</i>	Vitric grain
	Lithic grain

Percent	Component
	BIOGENIC GRAINS
	Calcareous
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
	Siliceous
	Radiolarians
	Spumellaria
	Nassellaria
<i>70%</i>	Diatoms
<i>40%</i>	Centric
<i>20%</i>	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	1341	B	62	X	6A	11D	

13
SM

Sediment/Rock Name: *dehomatized diatom ooze*

Observer: *Akiva*

Percent Texture		
Sand	Silt	Clay

Comments: *hard part*

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
	Framework minerals
	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
<i>5</i>	Pyrite <i>2</i>
	Magnetite
	Fe-oxide
	Carbonates
<i>36</i>	Calcite
	Dolomite <i>15</i>
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
<i>36</i>	Diatoms <i>15</i>
	Centric
	Pennate
	Chaetoceros Resting Spores
	Silicoflagellates
<i>7</i>	Sponge spicules <i>3</i>
	Dinoflagellates
	Others
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

S.O.

IODP Expedition 323
 SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	1341	B	62	X	6A	110	

Sediment/Rock Name	dolomatized spicule-rich diatom ooze.	Observer	Akira
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Percent Texture		
Sand	Silt	Clay

Comments: soft part

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
	Framework minerals
	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
2	Pyrite
	Magnetite
	Fe-oxide
	Carbonates
	Calcite
35	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
35	Diatoms
	Centric
	Pennate
	Chaetoceros Resting Spores
	Silicoflagellates
12	Sponge spicules
	Dinoflagellates
	Others
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

Expedition 323
Bering Sea

1341 B 631
Site Hole Core Section Top Depth

Major Lithology

Minor Lithology

	Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Visual Core description
1	✓	5Y 4/2				h	~7. d.d. ✓
2	✓	10Y 4/1				m	7-10 mott ash
3	✓	5Y 4/2				h	
4	✓	5Y 4/2				h	4A-90.
5	✓	5Y 4/2				h	5A-100
6	✓	5Y 4/2				h	
7	✓	5Y 4/2				h	4E 2C

Observer: _____ Date: _____

IODP Expedition 323
 SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
	1341	B	03	X	FA	90m	

✓
 m
 SM

Sediment/Rock Name	DOLOMITIZED PLATON OOZE	Observer	CUA
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Percent Texture		
Sand	Silt	Clay

Comments: hard part

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
57%	Framework minerals
2%	Quartz
3%	Feldspar
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
	Accessory/trace minerals
	Micas
	Biotite
	Muscovite
10%	Clay Minerals
X	Chlorite
	Glauconite
	Chert
	Zircon
	Ferromagnesium minerals
	Authigenic minerals
	Barite
	Phosphorite/Apatite
	Zeolite
	Opaque minerals
22%	X Pyrite
	Magnetite
	Fe-oxide
	Carbonates
	Calcite
30%	Dolomite
VOLCANICLASTIC GRAINS	
	Crystal grain
X	Vitric grain
	Lithic grain

Percent	Component
BIOGENIC GRAINS	
	Calcareous
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
	Siliceous
	Radiolarians
	Spumellaria
	Nassellaria
	Diatoms 55%
	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

30%
 25%

repeat.

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
	B41	B	63	X	4	10m	

Sediment/Rock Name	DOLOMITIZED DIATOM Ooze	Observer	lwx
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HAAP

Percent Texture		
Sand	Silt	Clay

Comments:

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
	Framework minerals
3%	Quartz
3%	Feldspar
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
60%	Accessory/trace minerals
	Micas
	Biotite
	X Muscovite
15%	Clay Minerals
	Chlorite
	Glauconite
	Chert
	Zircon
	Ferromagnesium minerals
	Authigenic minerals
	Barite
	Phosphorite/Apatite
	Zeolite
	Opaque minerals
5%	Pyrite
	Magnetite
	Fe-oxide
	Carbonates
	Calcite
30%	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
40%	Diatoms
25%	Centric
15%	Pennate
	Chaetoceros Resting Spores
	Silicoflagellates
	Sponge spicules
	Dinoflagellates
	Others
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

✓ SM

IODP Expedition 323
 SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
	1341	B	63	X	5	100m	

Sediment/Rock Name	DOLOMITIZED DIATOM CLAY	Observer	IWA
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Percent Texture		
Sand	Silt	Clay

Comments: ~~1~~ SOFT

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
	Framework minerals
10% { 5%	Quartz
5%	Feldspar
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
	Accessory/trace minerals
	Micas
	Biotite
	Muscovite
30%	Clay Minerals
	Chlorite
	Glauconite
	Chert
	Zircon
	Ferromagnesium minerals
	Authigenic minerals
	Barite
	Phosphorite/Apatite
	Zeolite
	Opaque minerals
	Pyrite
	Magnetite
	Fe-oxide
	Carbonates
20%	Calcite
	Dolomite (dissolved)
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
40%	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

Duplicate

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
	1241	B	63	x	5A	100m	

Sediment/Rock Name	DOLOMITIZED PLATON SILTY CLAY	Observer	LWA
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Percent Texture		
Sand	Silt	Clay

Comments: safe part

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
	Framework minerals
5%	Quartz
10%	Feldspar
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
	Accessory/trace minerals
	Micas
	Biotite
	Muscovite
20%	Clay Minerals
x	Chlorite
	Glauconite
	Chert
	Zircon
	Ferromagnesium minerals
	Authigenic minerals
	Barite
	Phosphorite/Apatite
	Zeolite
	Opaque minerals
	Pyrite
	Magnetite
	Fe-oxide
	Carbonates
	Calcite
25%	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
50%	Diatoms
10%	Centric
30%	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

SEMI-DURABLE
INTERVALS

Site 1341B Hole 63X Core Section Top Depth

		Major Lithology	Minor Lithology
Graphic Representation	Color	Lithology	Bioturbation Structures/Accessories
			Drilling Dist. Samples
Visual Core description			
1			
2		90 cm 54 5/2 140 m	5 m 140
3			
4		45 cm Spindle	
6			
7			
CC		13 cm Spindle	
			130 cm, SS
			13 cm, SS

light olive gray dolomite

54 5/2 OLIVE
gray
Dolomite
0070

Observer: _____ Date: _____

IODP Expedition 323
 SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	U1341	B	64	X	4A	130cm	

Sediment/Rock Name	Diatom ooze	Observer	BETH
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B 60
 S 30
 V 10

Percent Texture		
Sand	Silt	Clay

Comments:

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

Percent	Component
BIOGENIC GRAINS	
	Calcareous
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
	Siliceous
	Radiolarians
	Spumellaria
	Nassellaria
	Diatoms
50	Centric
10	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	U1341	B	64	X	CG	13cm	

Sediment/Rock Name	Sponge Spicule aggregate	Observer	BeM
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Percent Texture		
Sand	Silt	Clay

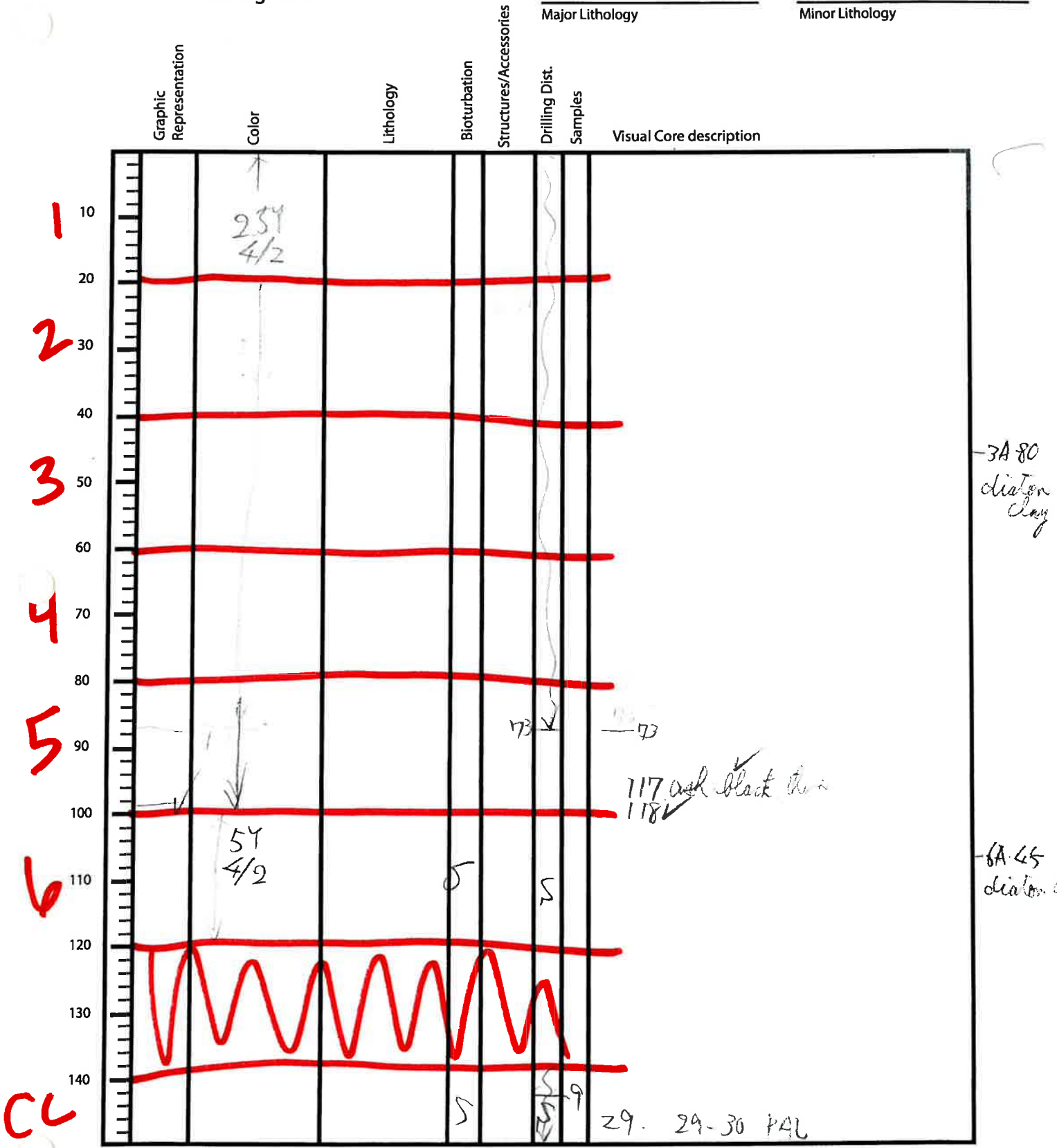
Comments:

white spot

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
	Framework minerals
	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
	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	Centric
	Pennate
	Chaetoceros Resting Spores
	Silicoflagellates
95	Sponge spicules
	Dinoflagellates
	Others
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

Expedition 323
 Bering Sea



Observer: _____ Date: _____

S.P.

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	U1341	B	b5	X	6A	45cm	

Sediment/Rock Name	Diatom ooze	Observer	Beth
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B-65
S-35
V-0

Secondary
lit

Comments:

Percent Texture		
Sand	Silt	Clay

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
	Framework minerals
	Quartz
5	Feldspar
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
	Accessory/trace minerals
	Micas
	Biotite
	Muscovite
10	Clay Minerals
	Chlorite
	Glaucinite
	Chert
	Zircon
3	Ferromagnesium minerals
	Authigenic minerals
	Barite
	Phosphorite/Apatite
2	Zeolite
	Opaque minerals
15	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
38	Centric
20	Pennate
	Chaetoceros Resting Spores
	Silicoflagellates
7	Sponge spicules
	Dinoflagellates
	Others
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

1341 Site B Hole 604 Core Section Top Depth

Expedition 323
Bering Sea

Major Lithology		Minor Lithology			
Graphic Representation	Color	Lithology	Bioturbation Structures/Accessories	Drilling Dist. Samples	Visual Core description
		SSpicule • 48			39 42 fair laminae
		• 44 • 77 • 143			59 4/2 olive gray
		• 52 101			sponge spore laminae
		102			

Observer: _____ Date: _____

S.P.

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	7341	B	66	X		20	20

Sediment/Rock Name: *diatom silty clay*
clayey silt

Observer: *Akira*

Percent Texture		
Sand	Silt	Clay

Comments:

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

Percent	Component
BIOGENIC GRAINS	
Calcareous	
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
Siliceous	
	Radiolarians
	Spumellaria
	Nassellaria
50	✓ Diatoms 15
	Centric
	Pennate
	Chaetoceros Resting Spores
	Silicoflagellates
3	✓ Sponge spicules 1
8	✓ Dinoflagellates
Others	
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

Expedition 323
 Bering Sea

Major Lithology Minor Lithology

Graphic Representation

Color

Lithology

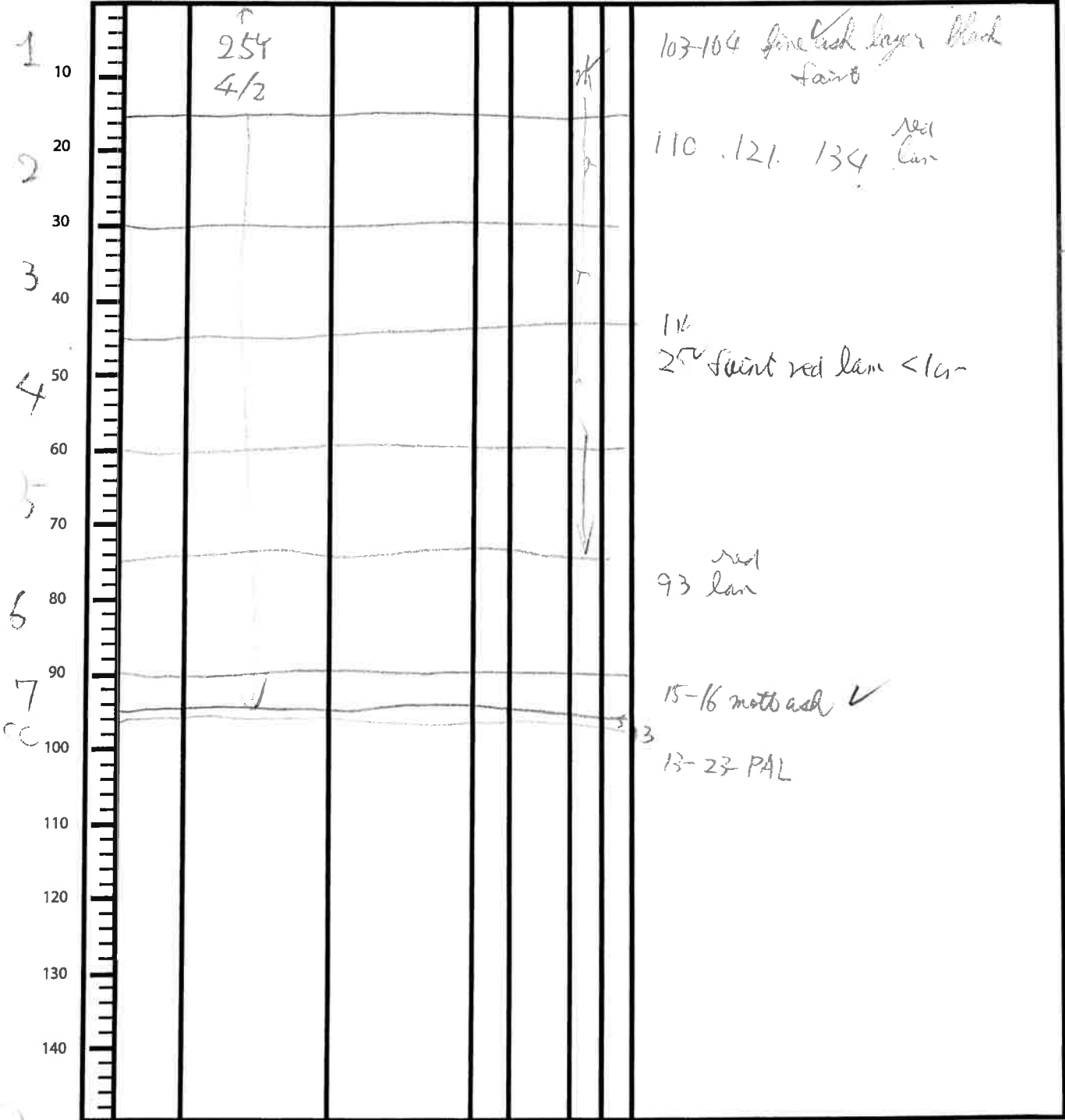
Bioturbation

Structures/Accessories

Drilling Dist.

Samples

Visual Core description



Observer: _____ Date: _____

IODP Expedition 323
 SEDIMENT SMEAR SLIDE WORKSHEET

5M

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
	1331	B	07	X	3	141	

Sediment/Rock Name	Diatom ooze	Observer	
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Percent Texture		
Sand	Silt	Clay

Comments: Major

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
	Framework minerals
	Quartz
	Feldspar
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
	Accessory/trace minerals
	Micas
	Biotite
5%	Muscovite
20%	Clay Minerals
	Chlorite
	Glaucanite
	Chert
	Zircon
	Ferromagnesium minerals
	Authigenic minerals
	Barite
	Phosphorite/Apatite
	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
70%	Diatoms
50%	Centric
20%	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
	1341	B	07	X	4	125	cm

Sediment/Rock Name	DIATOM CLAY	Observer	
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Percent Texture		
Sand	Silt	Clay

Comments:

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
5%	Framework minerals
	Quartz
	Feldspar
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
	Accessory/trace minerals
	Micas
	Biotite
	Muscovite
40%	Clay Minerals
	Chlorite
	Glaucanite
	Chert
	Zircon
	Ferromagnesium minerals
	Authigenic minerals
	Barite
	Phosphorite/Apatite
	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
50%	Diatoms
90%	Centric
10%	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

734 Site B Hole 68X Core Section Top Depth

Depth (m)	Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist. Samples	Major Lithology	Minor Lithology
							Visual Core description	
10								
20		10Y 4/1 ✓						1A 116 diatom ooze
30		45						
40		2.5Y 4/2 ✓					20-23 mottled ash blk ✓	3A 116 diatom clay
50		10 ✓						
60		10Y 4/1 ✓						
70		100. ✓				100 ✓		
80		2.5Y 4/2 ✓						
90		70 ✓		5		5 ✓		
100		10Y 4/1 ✓						
110								
120								
130								
140								

Observer: _____ Date: _____

SM

IODP Expedition 323
 SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
393	1341	B	68	X	1	110	

Sediment/Rock Name	DIXON CLAY	Observer	IWA
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Percent Texture		
Sand	Silt	Clay

Comments:

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
10%	Framework minerals
	Quartz
	Feldspar
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
	Accessory/trace minerals
	Micas
	Biotite
	Muscovite
40%	Clay Minerals
	Chlorite
	Glauconite
	Chert
	Zircon
	Ferromagnesium minerals
	Authigenic minerals
	Barite
	Phosphorite/Apatite
	Zeolite
	Opaque minerals
2%	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
58%	Diatoms
35%	Centric
13%	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

SM

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	1341	B	68	X	3	110	

Sediment/Rock Name	<i>Almond Ooze</i>	Observer	
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Percent Texture		
Sand	Silt	Clay

Comments:

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
57%	Framework minerals
	Quartz
	Feldspar
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
	Accessory/trace minerals
	Micas
	Biotite
	Muscovite
20% (10%)	Clay Minerals
	Chlorite
	Glaucanite
	Chert
	Zircon
	Ferromagnesium minerals
	Authigenic minerals
	Barite
	Phosphorite/Apatite
	Zeolite
	Opaque minerals
2%	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
13% (3%)	Centric
10%	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

Site Hole Core Section Top Depth

1341 B 6PX-1

Major Lithology

Minor Lithology

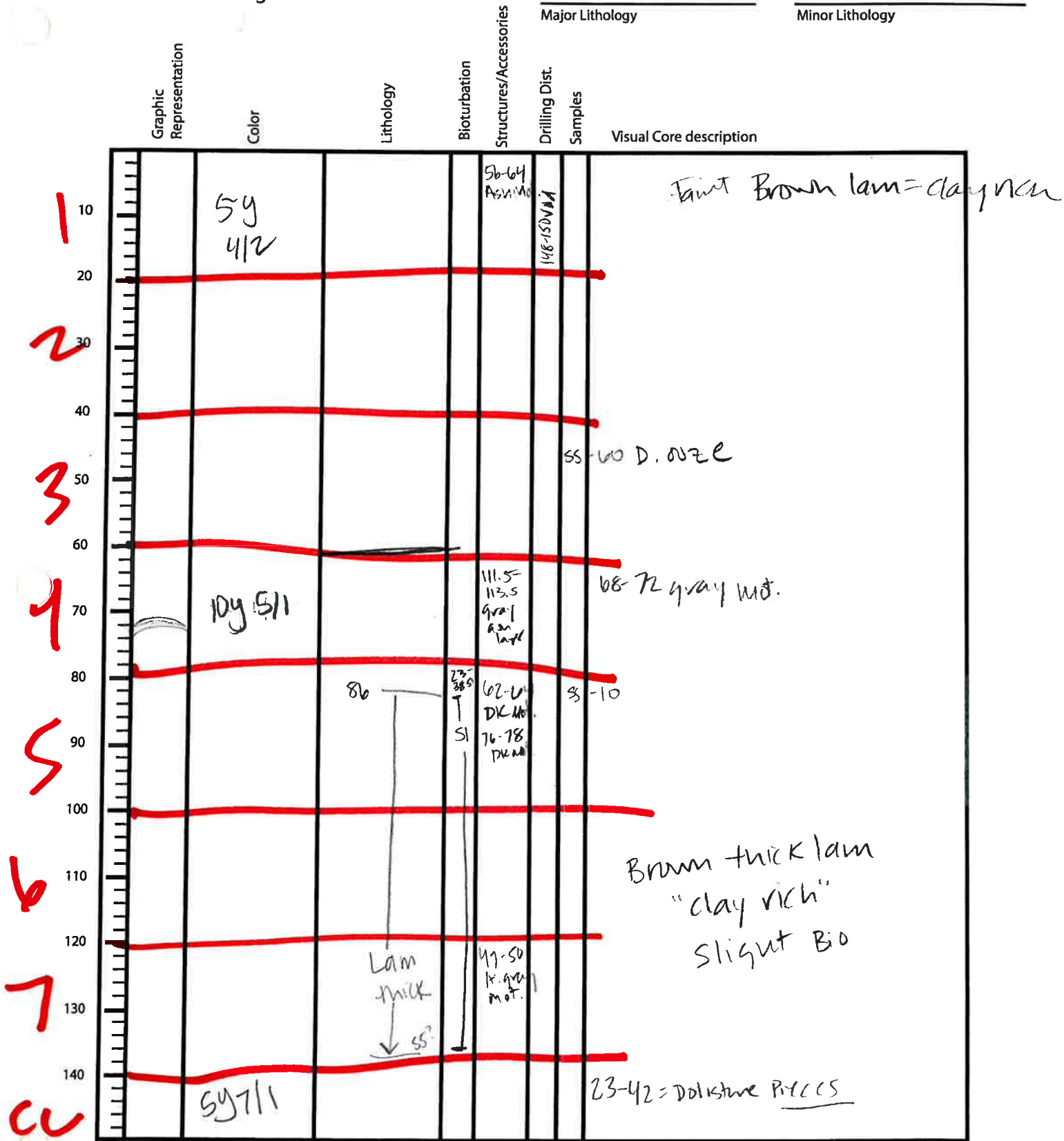
Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Samples	Visual Core description
	7						dolomite 54 7/2 ← 31 ← DARK OLIVE ← 34 ← CLAY MIXED WITH DOLomite FRAGMENTS
	10						
	15						
	20						
	25						
	31						
		MSA					

Observer: _____

Date: _____

Expedition 323
Bering Sea

323 V1341B 70X ALL
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	1341	B	70	8	5A	10	

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

Comments:

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
Framework minerals	
5%	Quartz 3
5%	Feldspar 3
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
Accessory/trace minerals	
	Micas
	Biotite
	Muscovite
34%	Clay Minerals 75-20
	Chlorite
	Glaucinite
	Chert
	Zircon
	Ferromagnesium minerals
Authigenic minerals	
	Barite
	Phosphorite/Apatite
	Zeolite
Opaque minerals	
3%	Pyrite 2
	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
43%	Diatoms 75-20-25
	Centric
	Pennate
	Chaetoceros Resting Spores
	Silicoflagellates
9%	Sponge spicules 5
	Dinoflagellates
Others	
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

Expedition 323
 Bering Sea

Major Lithology Minor Lithology

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Samples	Visual Core description
1	25Y 5/2						
2	✓ 100						
3	✓						
4	25Y 5/2 90						
5	✓						
6	25Y 5/2						
7	80						
CC	← 25Y 4/2						34 miltb? 90 58 18 18-28 PAL

4A-30
 spicule-bearing
 diatom core

IODP Expedition 323
 SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	1341	B	71	X	4	30	30

Sediment/Rock Name: *Sponge spic bearing diatom ooze*

Observer: _____

Percent Texture		
Sand	Silt	Clay

Comments: *Main lithology.*

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

Percent	Component
BIOGENIC GRAINS	
Calcareous	
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
Siliceous	
	Radiolarians
	Spumellaria
	Nassellaria
	Diatoms
30	Centric
20	Pennate
	<i>Chaetoceros</i> Resting Spores
	Silicoflagellates
10	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	1341	B	71	X	5	80	80

Sponge spic bearing

Sediment/Rock Name	Diatom ooze
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Observer	Kelsie
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Percent Texture		
Sand	Silt	Clay

Comments:

Main lith

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

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