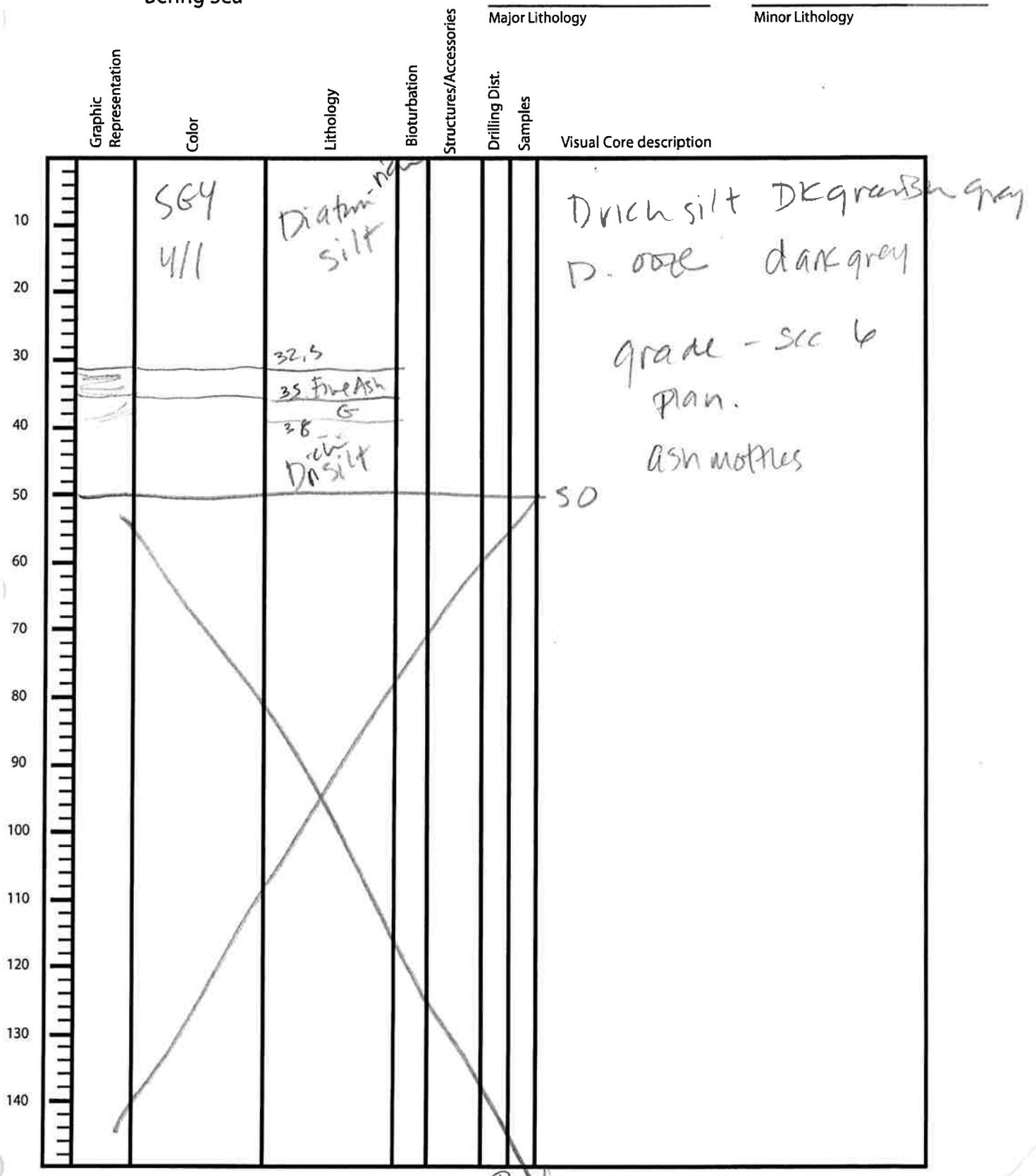


X

Site UB339 Hole C Core 10A Section 1 Top Depth _____

Expedition 323 Bering Sea



Observer: Ben Date: _____

X

U1339 C 10H 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	
	SBY 4/11							
				37- 40 Mot. DK Ash CUMM				
			82 83 P					
		G 98-120		(125)				Pebble Diatom silt
	104 4/11 Yellow	120-126 G				(85-111)		
	SBY 4/11	all same to sec b		140.5 crack				

Observer: _____ Date: _____

+

11339 C 10 3
Site Hole Core Section Top Depth

Expedition 323
Bering Sea

3

Graphic Representation	Color	Lithology	Bioturbation Structures/Accessories	Drilling Dist.	Samples	Major Lithology	Minor Lithology
						Visual Core description	
	<p>56M 411</p>		<p>33- 35 DK Coars Asp Mot</p> <p>69- 71 Mot</p> <p>99-100 LAM</p> <p>108- 110 DAM</p>			69-75 GASEX p - S1	
						Sandy to Pebbly layer	

Observer: _____ Date: _____

Expedition 323
Bering Sea

U1339 Site C Hole 10 Core 4 Section _____ Top Depth

7
4

Graphic Representation	Color	Lithology	Bioturbation Structures/Accessories	Major Lithology		Minor Lithology
				Drilling Dist.	Samples	Visual Core description
	564 411		6-7 DAM	X	X	
			Silt.			

Observer: _____ Date: _____

f

U1339 C 10 6
Site Hole Core Section Top Depth

Expedition 323
Bering Sea

Graphic Representation	Color	Lithology	Bioturbation Structures/Accessories	Major Lithology		Minor Lithology
				Drilling Dist.	Samples	Visual Core description
	50M 4/11					
		80	68- 69 LAM	79		Peb
	5Y 4/1	Grad Beddy				
		140 Mac grad	127- 131 DAM	145 148		Green ash nodules

Observer: _____ Date: _____

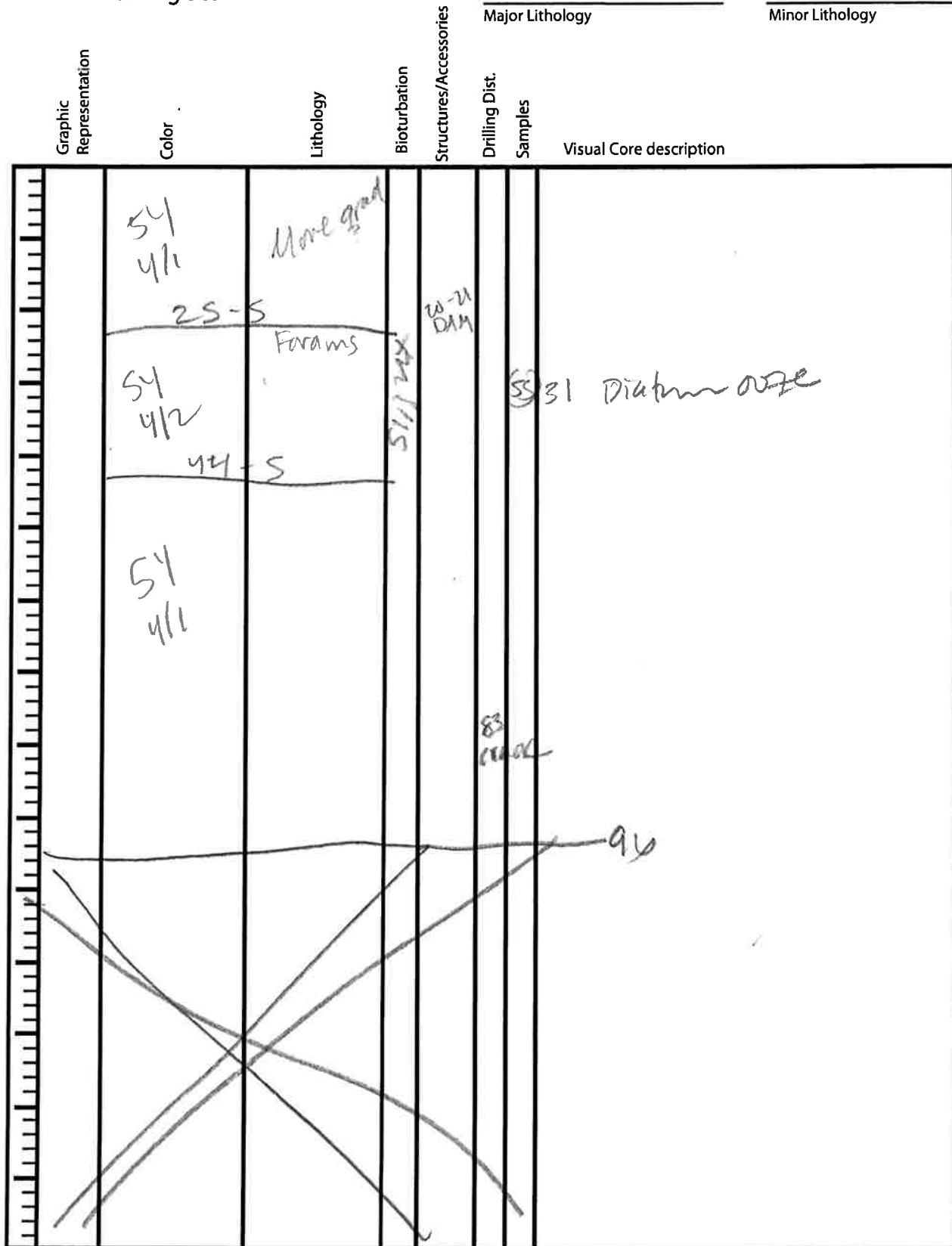
+

01339 Site C Hole 10 Core 7 Section 3 Top Depth

Expedition 323
Bering Sea

Major Lithology

Minor Lithology

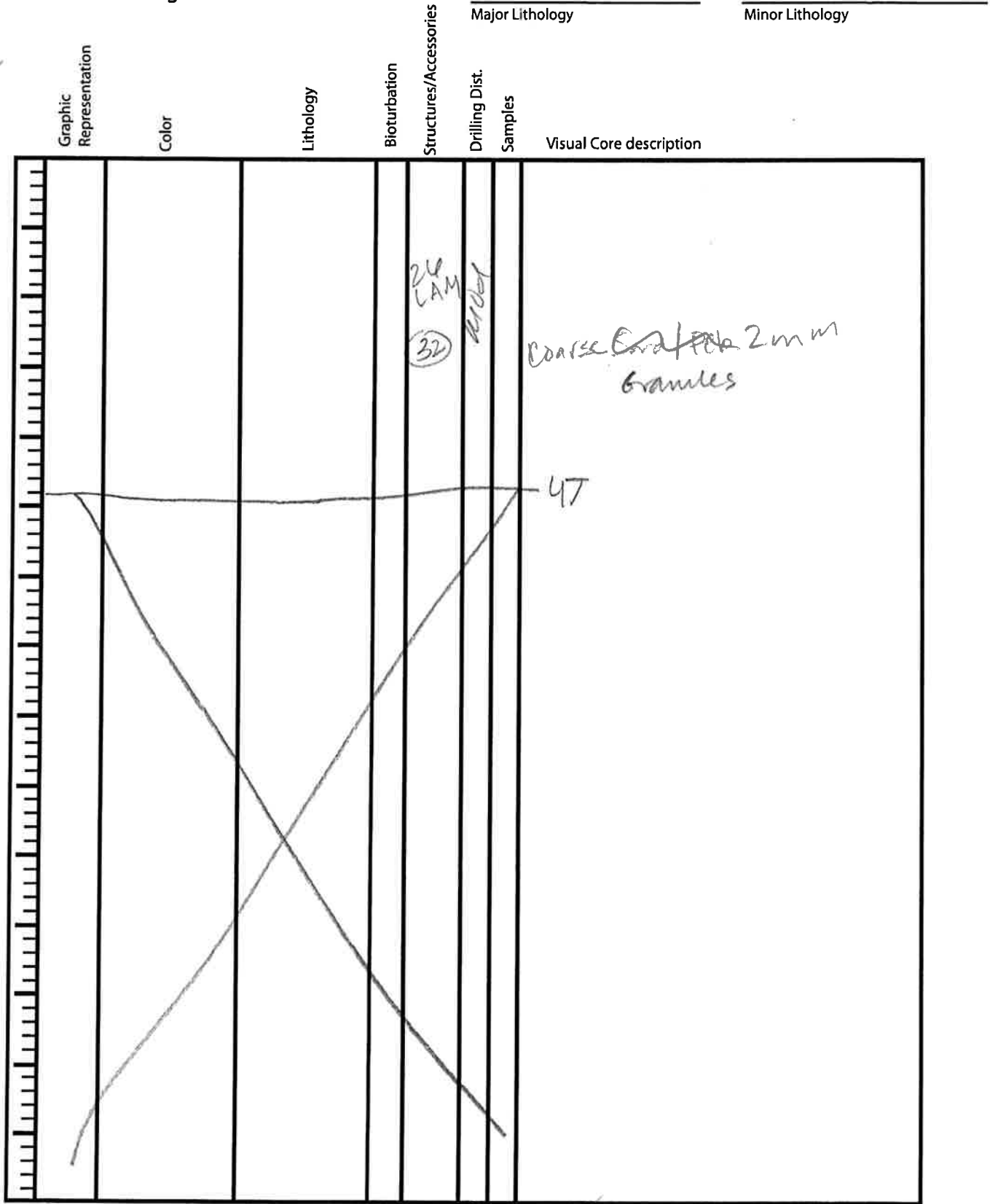


Observer: _____ Date: _____

U1339 IC 10 CC
Site Hole Core Section Top Depth

Expedition 323
Bering Sea

CC



Observer: Bow Date: _____

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	1339	C	10	H	2	111	

Sediment/Rock Name	Diatom site	Observer	akira
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Percent Texture		
Sand	Silt	Clay
0	90	10

Comments:

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
Framework minerals	
7	✓ Quartz 3
23	✓ Feldspar 10
	K-feldspar (Orthoclase, Microcline...)
	✓ Plagioclase
7	✓ Rock fragments 3
Accessory/trace minerals	
	Micas
	Biotite
	Muscovite
	Clay Minerals
	Chlorite
	Glauconite
	Chert
	Zircon
2	✓ Ferromagnesium minerals 1
Authigenic minerals	
	Barite
	Phosphorite/Apatite
	Zeolite
Opaque minerals	
	Pyrite
	Magnetite
	Fe-oxide
Carbonates	
	Calcite
	Dolomite
VOLCANICLASTIC GRAINS	
12	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
48	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	1339	C	10	H	4	69	

Sediment/Rock Name	diatom rich silt	Observer	A. K. ...
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Percent Texture		
Sand	Silt	Clay
0	90	10

Comments:

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

Percent	Component
BIOGENIC GRAINS	
Calcareous	
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
Siliceous	
	Radiolarians
	Spumellaria
	Nassellaria
40	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	1339	C	10	H	7	31	

Sediment/Rock Name	diatom ooze	Observer	Akima
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Percent Texture		
Sand	Silt	Clay
0	95	5

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
95	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

U1339 C 11 1
Site Hole Core Section Top Depth

Expedition 323
Bering Sea

	Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Samples	Major Lithology	Minor Lithology
10									
20									
30									
40		SY 91A	Diatom ooze	stair		mod.			0-15
50									75-85 grad. cont.
60						single			
70									
80									
90		SY 91A							115-120 grad. cont.
100									
110									
120									
130		SY 91R							135-142 intermixed clastic ash
140									

Observer: Plare Date: 7/21

U1333 C M 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	
	<p>5Y4/2</p>		<p>slight</p>		<p>slight</p>			
							<p>50-60 grad. cont.</p>	
							<p>60-63 intermixed dark ash</p>	
	<p>5Y4/1</p>						<p>81-89 fragments of clasts, angular, light, up to 4cm Ø, dolomite?</p>	
							<p>96-100 cracks</p>	
							<p>105-145 blue-grey nodules</p>	

Observer: _____ Date: 7/21

U1333 C M 3
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								0-10 grad cont		
20		RY41A								
30										
40				shif						
50										
60								78-84 isolated clasts, mm to cm scale, light, subangular		
70										
80										
90										
100										
110										
120										
130										
140										

Observer: _____ Date: 7/21

CN339 C 11 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	
	5Y 4/2		slight					
	5Y 3/2		1 mod		slight		50-53 grad. cont.	
			1 mod				59-62 dark ash filled burrows	
	5Y 4/2	Diatom ooze	slight				65-75 grad. cont.	
							120-130 intermixed dark ash	

Observer: _____ Date: 7/21

U1833 C M S
 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	
	SY 412						
	SY 314		shagrit				16 isolated clast 9.5cm, sh bangular
	SY 412						23 sharp cont., tilted
							39-40 " " "
					shagrit		65-75 grad. cont.
	SY 413						112-116 intermixed clastic ash
							134-136 clastic ash layers, grad. cont
							141 crack

Observer: _____ Date: 7/21

Expedition 323
 Bering Sea

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Samples	Major Lithology	Minor Lithology
							Visual Core description	
	<p>SY 4/12</p> <p>SY 4/11</p>	<p>Foram-rich diatom ooze</p> <p>Diatom ooz</p>	<p>spider</p>	<p>crater</p>			<p>2, 4 are dark ash layers</p> <p>12-14 dark ash layers, grad. top. sharp base</p> <p>24 dark ash layer</p> <p>27-28 grad. cont.</p> <p>36, 38, 88, 108, 128 coarse</p> <p>50-53 intermixed dark ash</p> <p>38-104 intermixed brown ash</p> <p>0-17 thin-bedded, 17-27 thickly laminated whitish-green with dark ashes</p>	

Observer: _____

Date: 7/21

U1333 C M 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	
	5-10 cm P72		Shift		M.S.D.			

Observer: _____

Date: 7/21

✓ SM

IODP Expedition 323
 SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	U1339	C	11	H	1	42	42

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

Comments:

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
	Framework minerals
15	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
	Radiolarians
	Spumellaria
	Nassellaria
	Diatoms
50	Centric
25	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

✓ SM

IODP Expedition 323
 SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	U1339	C	11	H	4	90	90

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

Comments:

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

✓ SM

IODP Expedition 323
 SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	1339	C	11	H	6	19	19

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

Comments:

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
Framework minerals	
2	Quartz
1	Feldspar
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
2	Rock fragments <i>metam.</i>
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	
20	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
Siliceous	
	Radiolarians
	Spumellaria
	Nassellaria
	Diatoms
40	Centric
35	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	V1339	C	11	H	6	23	23

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

Comments:

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

Percent	Component
BIOGENIC GRAINS	
	Calcareous
3	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
	Siliceous
	Radiolarians
	Spumellaria
1	Nassellaria
	Diatoms
40	Centric
35	Pennate
	<i>Chaetoceros</i> Resting Spores
5	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	1339	C	11	H	6	140	140

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

Comments:

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
Framework minerals	
30	Quartz
10	Feldspar
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
3	Rock fragments
Accessory/trace minerals	
	Micas
	Biotite
	Muscovite
	Clay Minerals
	Chlorite
	Glaucanite
	Chert
	Zircon
2	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
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

Expedition 323
Bering Sea

UM339 C 12 1
Site Hole Core Section Top Depth

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist. Samples	Major Lithology	Minor Lithology
						Visual Core description	
	SYH19				mod.		
			shaded				blueish-greyish mottled str.
							118-125 grad. cont.
							125-128 dark red layer.
							128-130 grad. cont.
	SYH12						147-148 isol. clast, light, well-sorted, flat

Observer: _____ Date: _____

U135B C 12 2
 Site Hole Core Section Top Depth

Expedition 323
 Bering Sea

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Major Lithology		Drilling Dist. Samples	Visual Core description
					Major Lithology	Minor Lithology		
	54912 							5-10 grad. cont.
	54911 							5-150 brownish ash mottles, blueish-greyish mottles
		Foram-rich diatom zone	slight					55-60 grad. cont. 66-70 " "
	54912 							68-81 isolated clasts, subangular, light
	54911 							58-62
								106-115

Observer: _____ Date: _____

U1383 C 12 3
 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>5441</p>	<p>Diatom ooze</p>	<p>slight</p>	<p>slight</p>	<p>slight</p>	<p>bluish... flr.</p> <p>isolated greyish laminae at 39, 81, 103 cm</p> <p>130-135 grad. sand.</p>	
	<p>5442</p>						

Observer: _____ Date: _____

U133B C 12 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	
	5Y6/2						
	5Y4/1						
			slight		slight		
						0-10 concretion, hard, yellowish, int. bioturb., partly fractured to rubble. 10-8 slump cont. dark + brownish ash patches throughout	

Observer: _____ Date: _____

U-1339 C 12 5
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
	SY411				slight mod. slight			bluish... thr. brownish ash patches, thr. -52-76

Observer: _____ Date: _____

U1939 C 12 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			
	54411	Diatom silt	traces		54412	7-15 intermixed brownish ash 46-48 isolated clast, subrounded, 3 ϕ , grey			

Observer: _____ Date: _____

U-1833 C 12 7
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	
	5 11/14/5	Diatom silt	SP-11		SP-11			ash patches thr.

Observer: _____ Date: _____

U/1333 C 12 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	
	Gray		shale		120-130			
	PAL							
								ash patches thr.

Observer: _____ Date: _____

✓ SM

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	V1339	C	12	H	2	64	64

Sediment/Rock Name	Foram-rich diatom ooze	Observer	Kelsie
--------------------	------------------------	----------	--------

Percent Texture		
Sand	Silt	Clay

Comments:

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
Framework minerals	
8	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
10	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	
? 15	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
Siliceous	
	Radiolarians
	Spumellaria
	Nassellaria
	Diatoms
40	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

✓ Sm

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	U1339	C	12	H	3	110	110

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

Percent Texture		
Sand	Silt	Clay

Comments:

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
2	Ferromagnesium minerals
Authigenic minerals	
	Barite
	Phosphorite/Apatite
	Zeolite
Opaque minerals	
	Pyrite
	Magnetite
	Fe-oxide
Carbonates	
	Calcite
	Dolomite
VOLCANICLASTIC GRAINS	
	Crystal grain
5	Vitric grain
	Lithic grain

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

41339 C 13 1
 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	
	5Y 9/14	Diatom silt			204		
					37-41		80, 103, 110 wavy laminae, blue-green 0.5 cm thick dark and intermixed x or burrow

Observer: _____ Date: _____

1133B

C

13

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
	5Y 4/1		slight	slight				<p>15 wavy laminae/burrows blue-grey, 0.5 cm thick</p> <p>27-37 intermixed dark ash</p> <p>118-119 isolated clast, subrounded, 2 cm ϕ</p>

Observer: _____ Date: _____

119335 0 13 3
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	
	grey		small	small		ash patches, thin	
						80-90 grad. tan.	
						89-92 brownish ash layer, sharp base, grad. top.	

Observer: _____ Date: _____

U1338 C 13 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
	549/2	diatom ooze						
	549/1	diatom silt	Shrink					70-100 grad, sand

Observer: _____ Date: _____

U.1338 C 13 5
 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	
	54 4/2	diatom ooze					
	54 3/1	fine ash		shards			ash patches thr.
	54 3/4			shards			57-87 light ash layer, upper part slightly bit. sharp conts., 79-86 fall-in!
	54 3/4			shards			102-105 dark ash patch, shell frags.
	54 4/2	diatom ooze		Mod. 97-131			grad. cont 120-130

Observer: _____ Date: _____

U1323 C 13 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
10									
20									
30									
40									
50									
60									
70									
80									
90									
100									
110									
120									
130									
140									

SK 511

Quartz silt

SK 511

SK 511

Observer: _____ Date: _____

U1338 C 13 7
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	
	gray		small		small			
								50-53 shell frags 53-56 intermixed clastic sh

Observer: _____ Date: _____

U1339 C 13 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	
	<p>5-14/16</p>	<p>diatom core</p>	<p>light</p>		<p>NA SPT.</p>		<p>0-2 cm light ash patch</p>	
							<p>PAL</p>	

Observer: _____ Date: _____

✓ SM

IODP Expedition 323
 SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	1339	C	13	H	1	81	81

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

Percent Texture		
Sand	Silt	Clay
	✓	

Comments:

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

SM

IODP Expedition 323
 SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	41339	2	13	H	1	110	110

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

Percent Texture		
Sand	Silt	Clay
	✓	

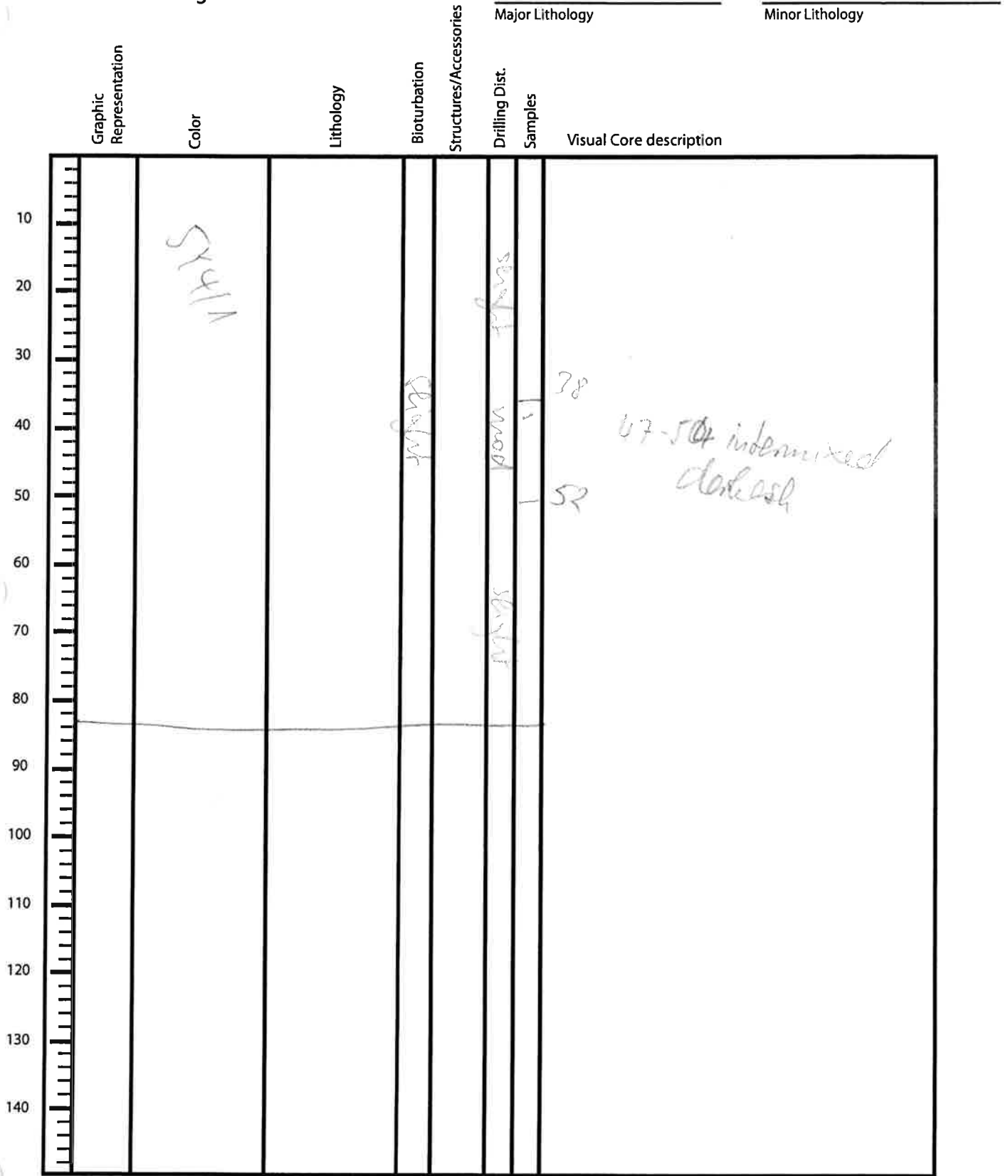
Comments:

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
Framework minerals	
25	Quartz
20	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
5	Vitric grain
	Lithic grain

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

U1839 C 14 1
Site Hole Core Section Top Depth

Expedition 323
Bering Sea



Observer: _____ Date: _____

Expedition 323
Bering Sea

11335 C 14 2
 Site Hole Core Section Top Depth

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist. Samples	Major Lithology	Minor Lithology
						Visual Core description	
	<p>SY411</p>		<p>slight</p>		<p>slight</p>		<p>Cracks at 90, 102, 124, 126, 140-142 cm</p> <p>100-140 reddish-greyish burrows</p> <p>127-130 brownish, pale</p>

Observer: _____ Date: _____

U1339 C 14 3
 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	
	VLP 25		slight		slight		0-14 vert. burrow Skolithos
					32		blueish-and reddish greyish burrows throughout
					100		
					140		

Observer: _____ Date: _____

U-339

C

14

4

Top Depth



Expedition 323
Bering Sea

						Major Lithology	Minor Lithology
Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist. Samples	Visual Core description	
	<p>1/14/75</p>				<p>1878</p> <p>1900</p> <p>1920</p>	<p>reddish and blue grey burrows thin.</p>	

Observer: _____ Date: _____

41539 C 14 5
 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	
	574/1							40-20 grad. cont.
	574/2		mod.		slight			20-145 more green-reddish burrows Cracks at 70, 100-102
	574/1							143-145 grad. cont.

Observer: _____ Date: _____

U.1329 C 14 6
 Site Hole Core Section Top Depth

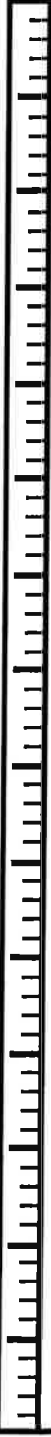
Expedition 323
 Bering Sea

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Samples	Major Lithology	Minor Lithology
							Visual Core description	
	<p>5491A</p> <p>5491B</p>		<p>slight</p>		<p>slight</p>		<p>8-11 grad. cont.</p> <p>14-16 dark ash layer, bioturb. conts.</p> <p>16-25 dark ash patches</p> <p>44-46 grad.</p> <p>46-48 dark ash layer, sharp base</p> <p>60-63 ash patch</p> <p>Coar. at 74-75</p> <p>ash patches thr.</p>	

Observer: _____ Date: _____

4433 C 14 7
Site Hole Core Section Top Depth

Expedition 323
Bering Sea

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Samples	Visual Core description
	5Y4/1		8 Pigeon		145-150		Ash patches thr.

Observer: _____ Date: _____

U-1338 C 14 8
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
	5Y4/2	diatom ooze	slight		slight				

Observer: _____ Date: _____

U1335 C 14 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		

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

SY 4/2
PAL
P
RQWV

Observer: _____ Date: _____

U1233 Site C 15 1 Section Top Depth

Expedition 323
Bering Sea

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Samples	Major Lithology	Minor Lithology
							Visual Core description	
	54311							3-4 dark ash layer, sharp base, grad. top
	54412							
		diatom ooze	Structure					58-60 grad. out.
	54511							25-85 dark grey burrows, brown burrows
								80-85 grad cont.
								85-150 ash patches, greyish mottle
	54411	diatom silt	Structure					

Observer: _____ Date: _____

U1539 C 15 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	
	5Y 4/2						
							2-5 brown-bluish burrows deep
							60-62 brownish ash layer, sharp base, grad. top
		fine ash	shag				70-75 intermixed dark ash
							75 sharp cont.

Observer: _____ Date: _____

U-1339 C 15 3
Site Hole Core Section Top Depth

Expedition 323
Bering Sea

	Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist. Samples	Major Lithology	Minor Lithology
10								
20		SY 4/2						ash patches 0-55
30								
40								
50				shaly		shaly		
60		SY 4/10						
70		SY 4/11						134-135 shaly frags.
80								
90								
100								
110								
120								
130								
140								

Observer: _____ Date: _____

U1339 C 15 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	
	SY412	Diatom ooze	Shrimp	Shrimp			107 crabs	5-150 reddish-greyish burrows

Observer: _____ Date: _____

U1339 C 15 5
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
	5Y 4/12							122-124 grad. cont.
								123-124 light ash layer
								113-150 Skolithos up to 3 cm ϕ ; continues into next section!
	5Y 4/11							

Observer: _____ Date: _____

U1339 C 15 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	
			100mm				0-5 grad. cont	
	5Y 4/2						0-21 Sclerites burrows up to 2cm φ	
							75-78 dark ash + brown ash intermixed	
							80-90 grad. cont	
	5Y 4/1							

Observer: _____ Date: _____

U1339 C 15 7
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	
	5Y 4/1		slight				bluish... thin

Observer: _____ Date: _____

U1333 C 15 CC
 Site Hole Core Section Top Depth

Expedition 323
 Bering Sea

Depth (cm)	Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Samples	Major Lithology	Minor Lithology
								Visual Core description	
10		54411							
15		54612							
20		54411							
30		54411							
35		54812							
40		54411							
50		54411							
60		PAL							
70									
80									
90									
100									
110									
120									
130									
140									

12-17 yellowish layer with ^{large} concretions, band, dolomite?

34-42 yellowish layer, small clasts up to 0.5cm, dolomite?

Observer: _____ Date: _____

✓ SM

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	1339	C	15	H	1	62.5	62.5

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

Comments:

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	
2	Pyrite
	Magnetite
1	Fe-oxide
Carbonates	
	Calcite
	Dolomite
VOLCANICLASTIC GRAINS	
Crystal grain	
5	Vitric grain
	Lithic grain

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

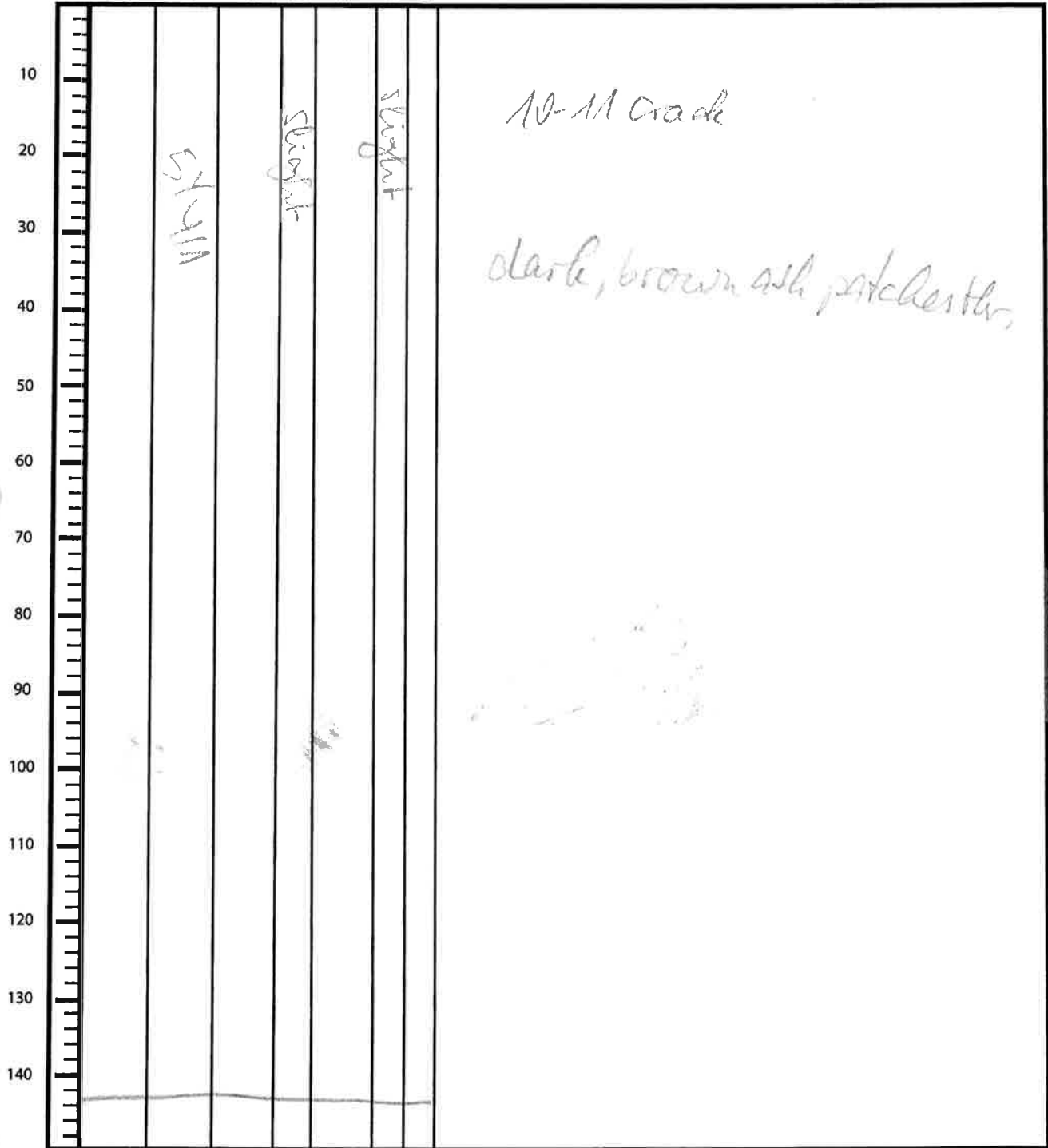
U1339 C 161
Site Hole Core Section Top Depth Scale

Graphic Representation
Color
Lithology
Bioturbation
Structures/Accessories
Drilling Dist.
Induration

Major Lithology

Minor Lithology

Visual Core description



Observer: _____ Date: _____

Expedition 323
Bering Sea

U1338 C 16 2
 Site Hole Core Section Top Depth Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
	1/1		slight		slight			
					mod.			50-88 mod.
					slight			132-140 bioturb. light color layer

Observer: _____ Date: _____

Expedition 323
Bering Sea

U1338 C 16 3
Site Hole Core Section Top Depth Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
	16/15		slight		MAF - slight			

Observer: _____ Date: _____

Expedition 323
Bering Sea

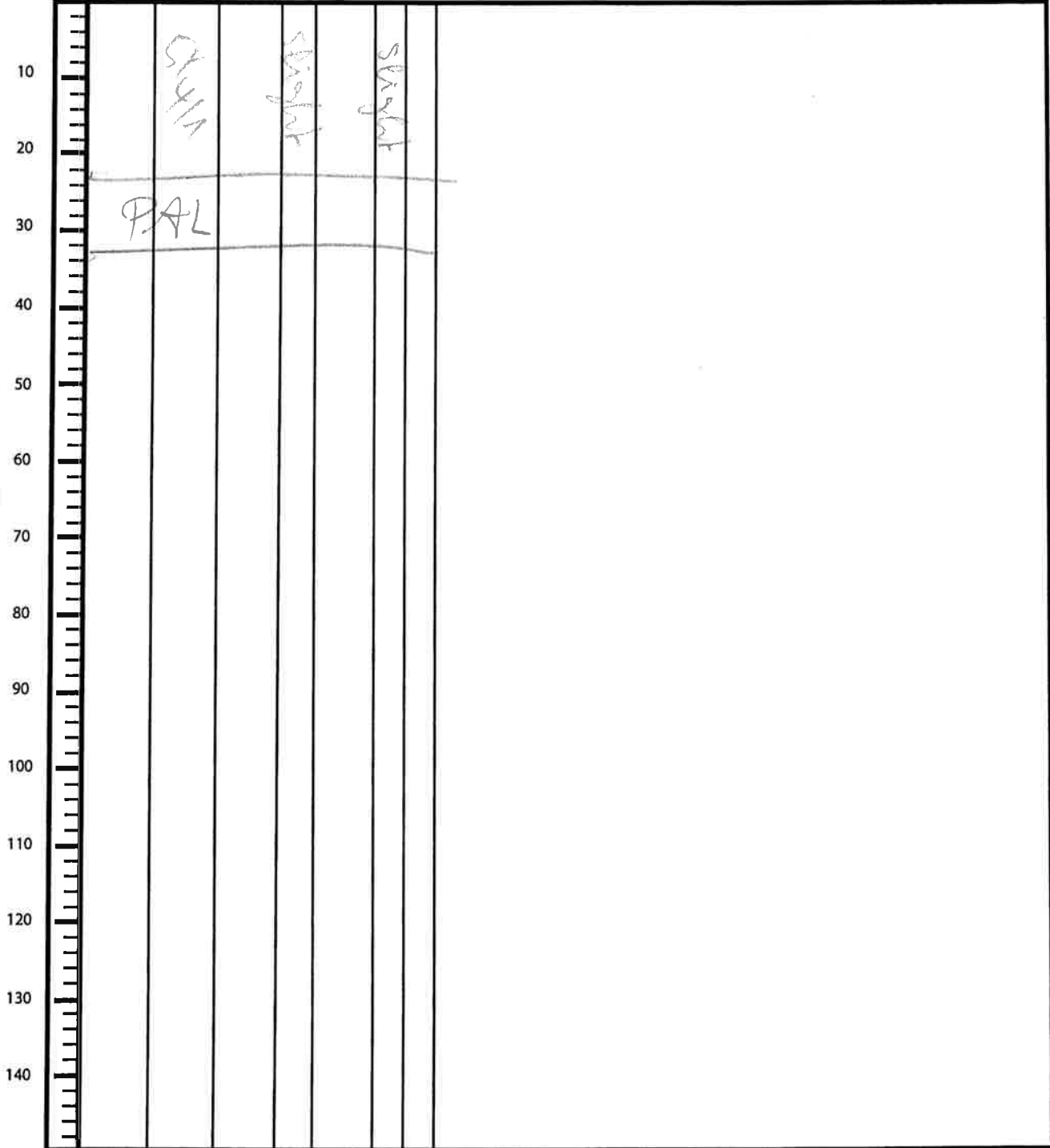
U1339 C 16 CC
Site Hole Core Section Top Depth Scale

Graphic Representation
Color
Lithology
Bioturbation
Structures/Accessories
Drilling Dist.
Induration

Major Lithology

Minor Lithology

Visual Core description



Observer: _____ Date: _____

IODP Expedition 323
 SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	U1339	C	16	H	2	60	60

Sediment/Rock Name	Foram-bearing diatom silt	Observer	Kelsie
--------------------	---------------------------	----------	--------

Percent Texture		
Sand	Silt	Clay

Comments: Area with white dots on core

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
1	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
10	Vitric grain
	Lithic grain

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

✓ SM

IODP Expedition 323
 SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	1339	C	17	H	1	72	72

Sediment/Rock Name	Foram-bearing diatom ooze	Observer	Kelsie
--------------------	---------------------------	----------	--------

Percent Texture		
Sand	Silt	Clay

Comments:

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

Percent	Component
BIOGENIC GRAINS	
Calcareous	
5	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
Siliceous	
	Radiolarians
	Spumellaria
	Nassellaria
	Diatoms
40	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

✓ SM

IODP Expedition 323
 SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	1839	C	17	H	5	101	101

Sediment/Rock Name	Diatom core (spicule-bearing?)	Observer	Kelsie
--------------------	--------------------------------	----------	--------

Percent Texture		
Sand	Silt	Clay

Comments:

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
Framework minerals	
10	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	
8	Vitric grain
	Lithic grain

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

Expedition 323
Bering Sea

21733 C 17 A
Site Hole Core Section Top Depth Scale

Graphic Representation

Color

Lithology

Bioturbation

Structures/Accessories

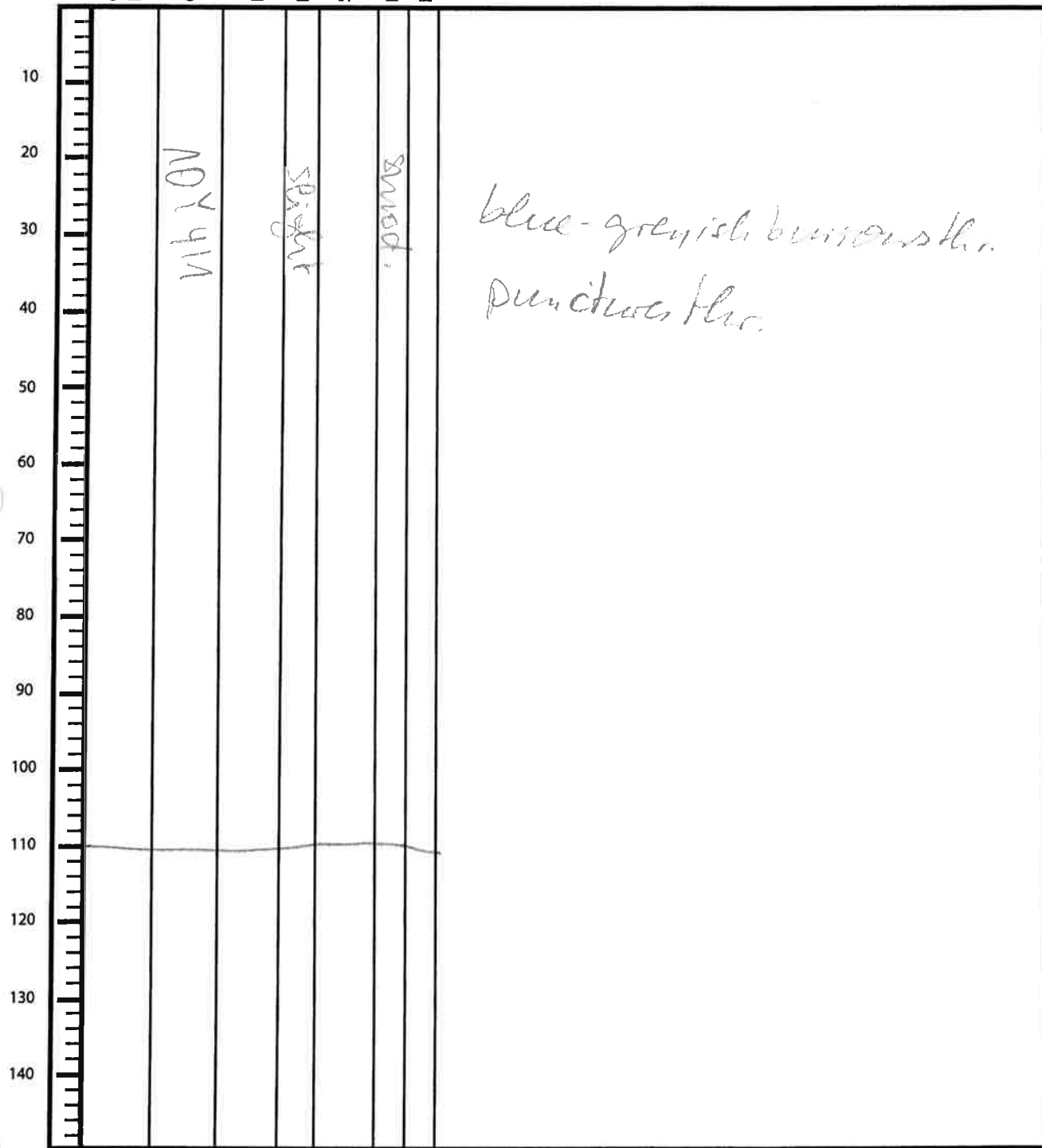
Drilling Dist.

Induration

Major Lithology

Minor Lithology

Visual Core description



Observer: _____ Date: _____

Expedition 323
Bering Sea

U1338 C 17 2
Site Hole Core Section Top Depth Scale

Graphic Representation

Color

Lithology

Bioturbation

Structures/Accessories

Drilling Dist.

Induration

Major Lithology

Minor Lithology

Visual Core description

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

VTXOV

slight

Dissect

greyish burrows thin

ash patches thin

68-75 light ash layer, fining upward, grad. top, sharp base

57
6/1

Observer: _____ Date: _____

Expedition 323
Bering Sea

U1339 C 17 3
Site Hole Core Section Top Depth Scale

	Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
10									
20									
30									
40	⊙	10/10/0							0-20 ash, rubble, num. ocean scale
50									40 ash-filled burrows
60									
70									115-125
80									
90									
100									
110									
120									
130									
140		71615	Red mottled						

Observer: _____ Date: _____

Expedition 323
Bering Sea

U1338 - C 17 4
Site Hole Core Section Top Depth Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
		54412 dirt from core	slight		slight	mod		
							5-6 intermixed dark sh	
							48 isolated red clast, subrounded, 1cm ϕ	
							76-80 gap	
							125 isolated clast, dark, subrounded, 0.5cm	

Observer: _____ Date: _____

Expedition 323
Bering Sea

U1393 C 17 5
Site Hole Core Section Top Depth Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
	SY 412		SY 412		SY 412			
							38-44 intermixed dark ash	
							96-98 grad. cont.	
		chert core						
	SY 312							

Observer: _____ Date: _____

Expedition 323
Bering Sea

U1339 C 17 6
 Site Hole Core Section Top Depth Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
	SY 312	diatom ooze					60-66 grad. cont	
							69-71 intermixed dark ash	
			Slight		Slight		71-82 dark ash mottles	
	SY 41A	diatom silt					82-150 blueish-grey silty	

Observer: _____ Date: _____

Expedition 323
Bering Sea

U1339 C 17 7
Site Hole Core Section Top Depth Scale

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

VIK XS

VIK XS

0-35 dark s.s. patches some to core

47-57 tilted sharp cont.

Observer: _____ Date: _____

Expedition 323
Bering Sea

U1339 C 17 8
Site Hole Core Section Top Depth Scale

Graphic Representation

Color

Lithology

Bioturbation

Structures/Accessories

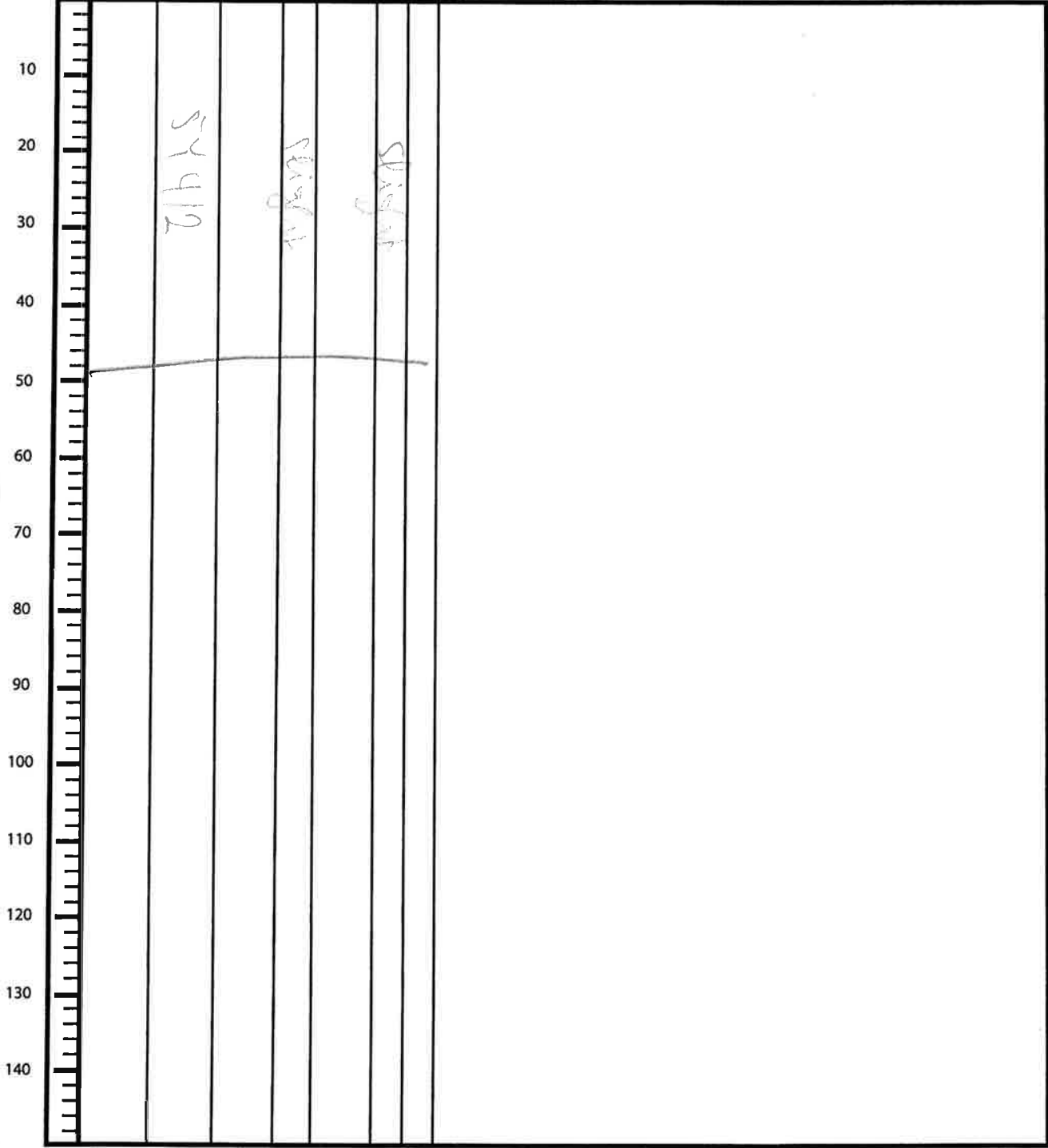
Drilling Dist.

Induration

Major Lithology

Minor Lithology

Visual Core description



Observer: _____ Date: _____

Expedition 323
Bering Sea

U1339 C 17 CC
Site Hole Core Section Top Depth Scale

Graphic Representation

Color

Lithology

Bioturbation

Structures/Accessories

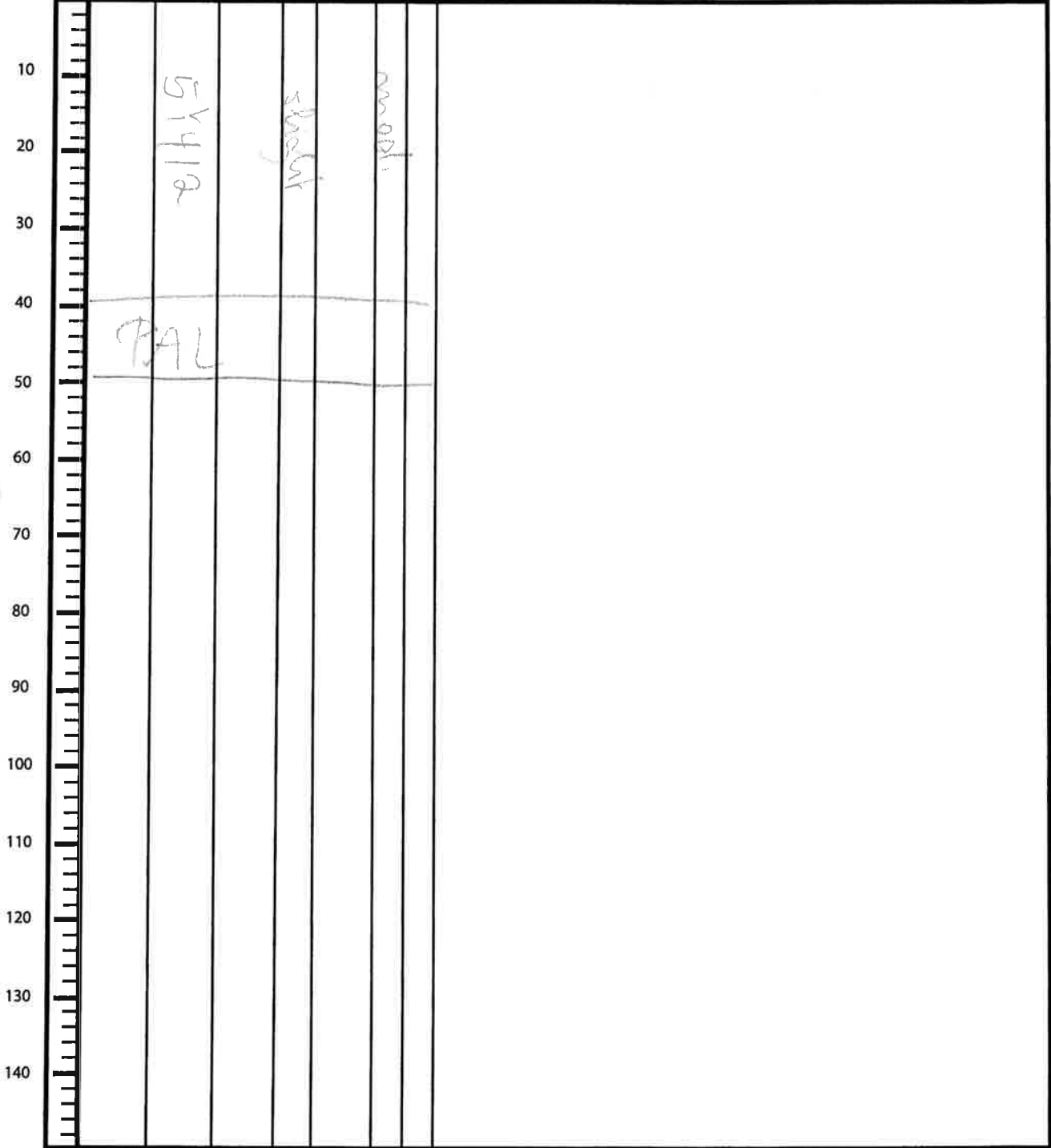
Drilling Dist.

Induration

Major Lithology

Minor Lithology

Visual Core description



Observer: _____ Date: _____

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	V1339	C	18	H	4	49	49

✓ SM

Sediment/Rock Name	Dolomite	Observer	Kelsie
--------------------	----------	----------	--------

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
	Clay Minerals
	Chlorite
	Glauconite
	Chert
	Zircon
	Ferromagnesium minerals
Authigenic minerals	
	Barite
	Phosphorite/Apatite
	Zeolite
Opaque minerals	
	Pyrite
	Magnetite
	Fe-oxide
Carbonates	
	Calcite
60	Dolomite
VOLCANICLASTIC GRAINS	
	Crystal grain
10	Vitric grain
	Lithic grain

Percent	Component
BIOGENIC GRAINS	
Calcareous	
3	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
Siliceous	
	Radiolarians
	Spumellaria
	Nassellaria
	Diatoms
10	Centric
10	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	U1339	C	18	H	5	58	58

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

Thalassiothrix
 SS vix



Percent Texture		
Sand	Silt	Clay

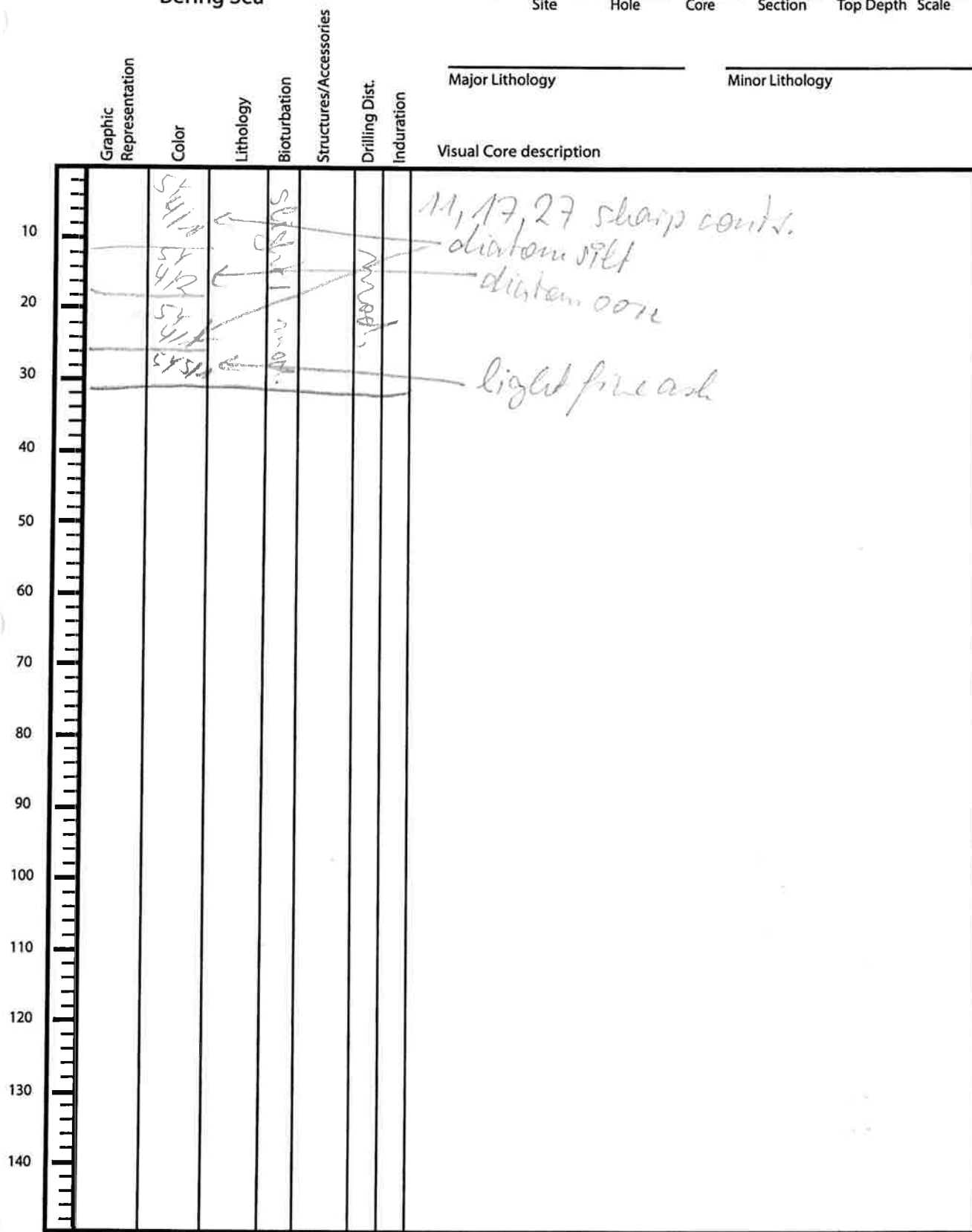
Comments:

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	
2	Pyrite
	Magnetite
	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	
1	Radiolarians
	Spumellaria
	Nassellaria
	Diatoms
20	Centric
60	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

U1333 C 18 A
 Site Hole Core Section Top Depth Scale



Observer: _____ Date: _____

Expedition 323
Bering Sea

U1339

C

18

2

Site

Hole

Core

Section

Top Depth

Scale

Graphic Representation

Color

Lithology

Bioturbation

Structures/Accessories

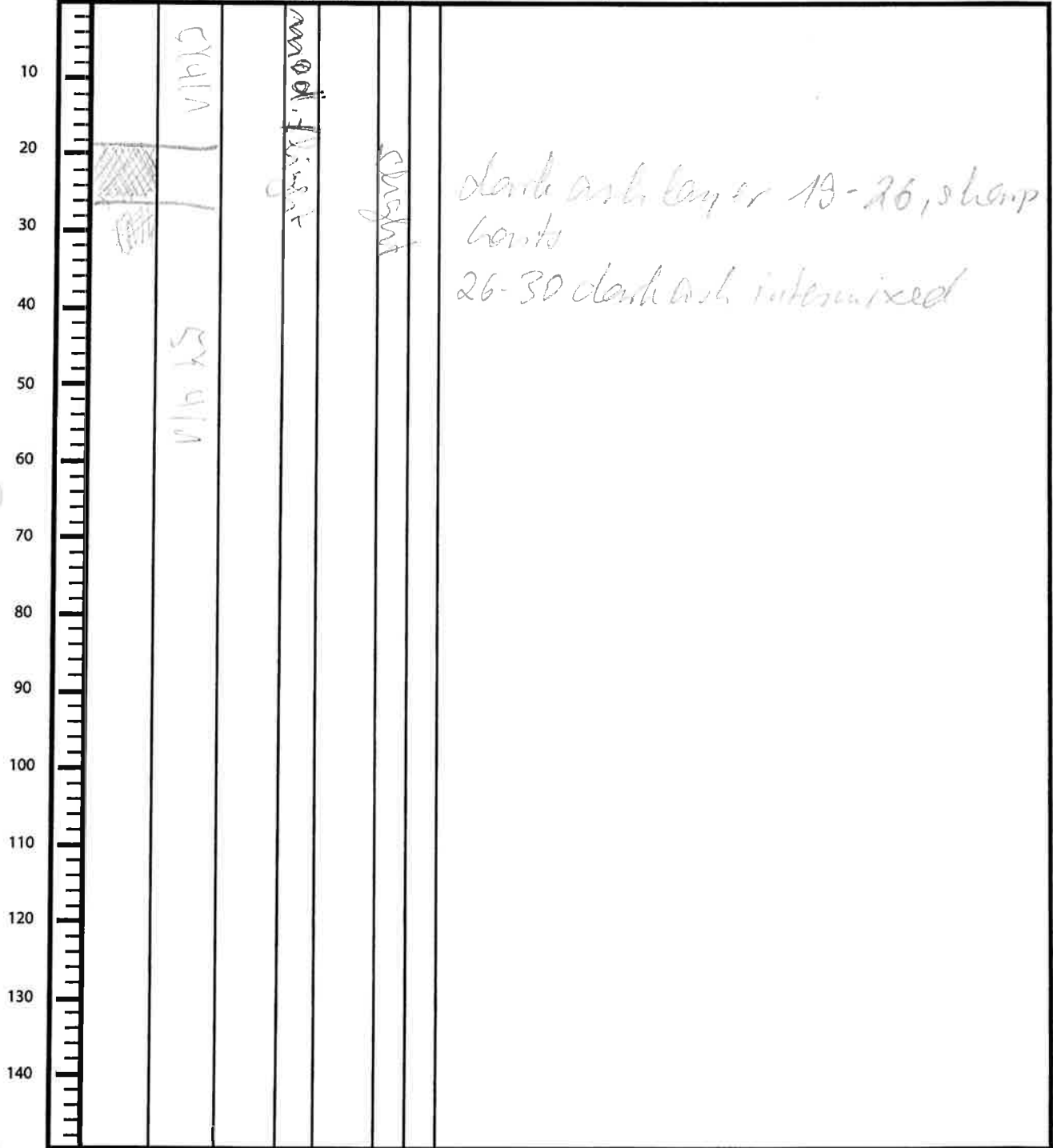
Drilling Dist.

Induration

Major Lithology

Minor Lithology

Visual Core description



Observer: _____ Date: _____

Expedition 323
Bering Sea

U1339 C 18 3
 Site Hole Core Section Top Depth Scale

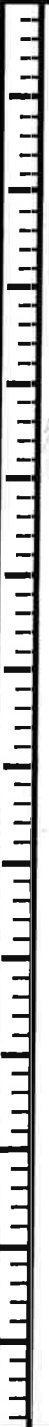
Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
	7/17/15		slight		slight			
	5/13						106-117 light yellowish layer, grad., maybe calcinite?	
							117-130 dark ash patches	

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

Observer: _____ Date: _____

Expedition 323
Bering Sea

U1339 C 18 4
Site Hole Core Section Top Depth Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
	Vhls						43-53 yellowish granular layer, grad, maybe dolomite?	
	Vhls						86	
					mod.		105	

Observer: _____ Date: _____

Expedition 323
Bering Sea

U1333 C 18 5
Site Hole Core Section Top Depth Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
	5141A							
	5141A						40-50 grad. cont.	
	5141A						52-76 bedding with slight colour changes, cu. scale	
	5151A							
	5141A						110-115 grad. cont.	
	5141A						115-132 light burrows mm scale	

Observer: _____ Date: _____

Expedition 323
Bering Sea

U1339 C 18 6
 Site Hole Core Section Top Depth Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
	51412						50-55 grad. cont.	
	51512		cracks		cracks		Cracks at 36-37, 62-63, 70-71, 82 cm.	
	51412						110-116 grad. cont.	

Observer: _____ Date: _____

Expedition 323
Bering Sea

U1338
Site

C
Hole

16
Core

7
Section

Top Depth

Scale

Graphic Representation

Color

Lithology

Bioturbation

Structures/Accessories

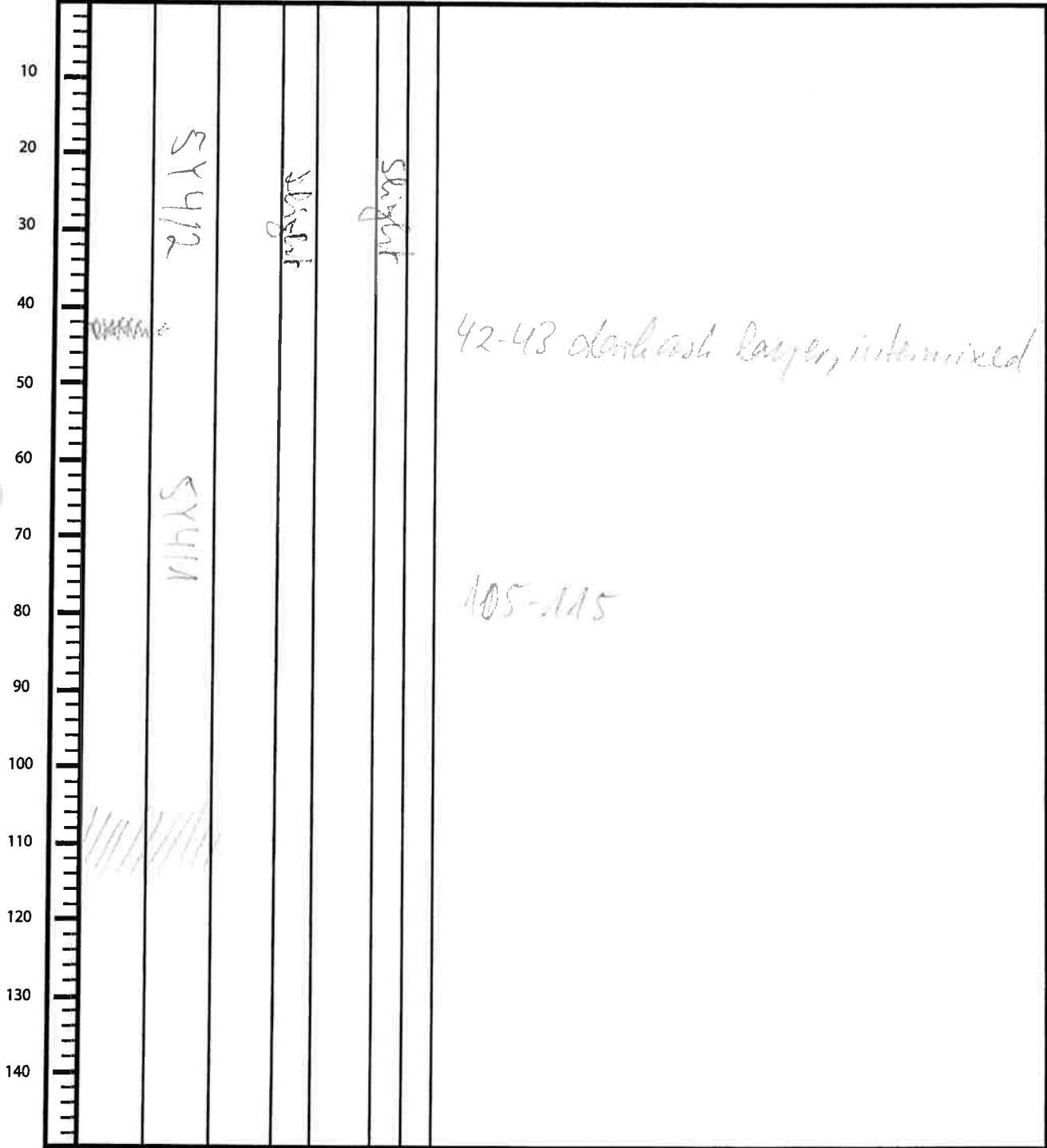
Drilling Dist.

Induration

Major Lithology

Minor Lithology

Visual Core description



Observer: _____ Date: _____

U1330 C 18 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
5748	PAL		SMALL		SMALL		
10							
20							
30							
40							
50							
60							
70							
80							
90							
100							
110							
120							
130							
140							

Observer: _____ Date: _____

Expedition 323
Bering Sea

1339 C 21 1
Site Hole Core Section Top Depth Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
		5YR 2.5/1 ash ✓					0-8 fractured ✓	
							9-12 ash	
							36cm. 7mm pebble ✓	
		5S 6G						
		10Y 4/1						
							107-188.	
							brown colored mottling 7-2 m patch	
							120-122 cracks	
							135-145	
							several cracks ✓	

Observer: _____ Date: _____

Expedition 323
Bering Sea

1339 C 21 2
Site Hole Core Section Top Depth Scale

Graphical Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
	7cm light grey						2-10 cm detritus light grey layer with dark mottling 5Y 4/3 10Y 4/1	
	19cm grey			D.S.				
							95-96. white pebbles	
							105 5mm pebbles	
							146 barometer	

Observer: _____ Date: _____

Expedition 323
Bering Sea

1339 C 21 3
Site Hole Core Section Top Depth Scale

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

10. narrow? spherulites
2-145

120-127. ash cream

Observer: _____ Date: _____

Expedition 323
Bering Sea

1339 Site C Hole 21 Core 4 Section _____ Top Depth _____ Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
10								
20								
30								
40								
50				○			49-50. pebble black ✓	
60	blue	D.S						
70			J					
80								
90								
100								
110								
120								
130								
140				○			135-136 pebble, white Kamin? ✓	

Observer: _____ Date: _____

Expedition 323
Bering Sea

1339 C 21 5
Site Hole Core Section Top Depth Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
	↕	DS						
	h&e	S					105-106 core ✓	
							113-115 core ✓	

Observer: _____ Date: _____

Expedition 323
Bering Sea

1339

C

21

6

Site

Hole

Core

Section

Top Depth

Scale

						Major Lithology	Minor Lithology
Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Visual Core description
10							
20							
30							
40							
50							
60							<p>* graduation change to diatom ooze. boundary not clear</p>
70							
80							
90							
100							
110							crack, 109-110
120							110- EC B. gradual boundary
130							
140							

Observer: _____ Date: _____

Expedition 323
Bering Sea

1339
Site

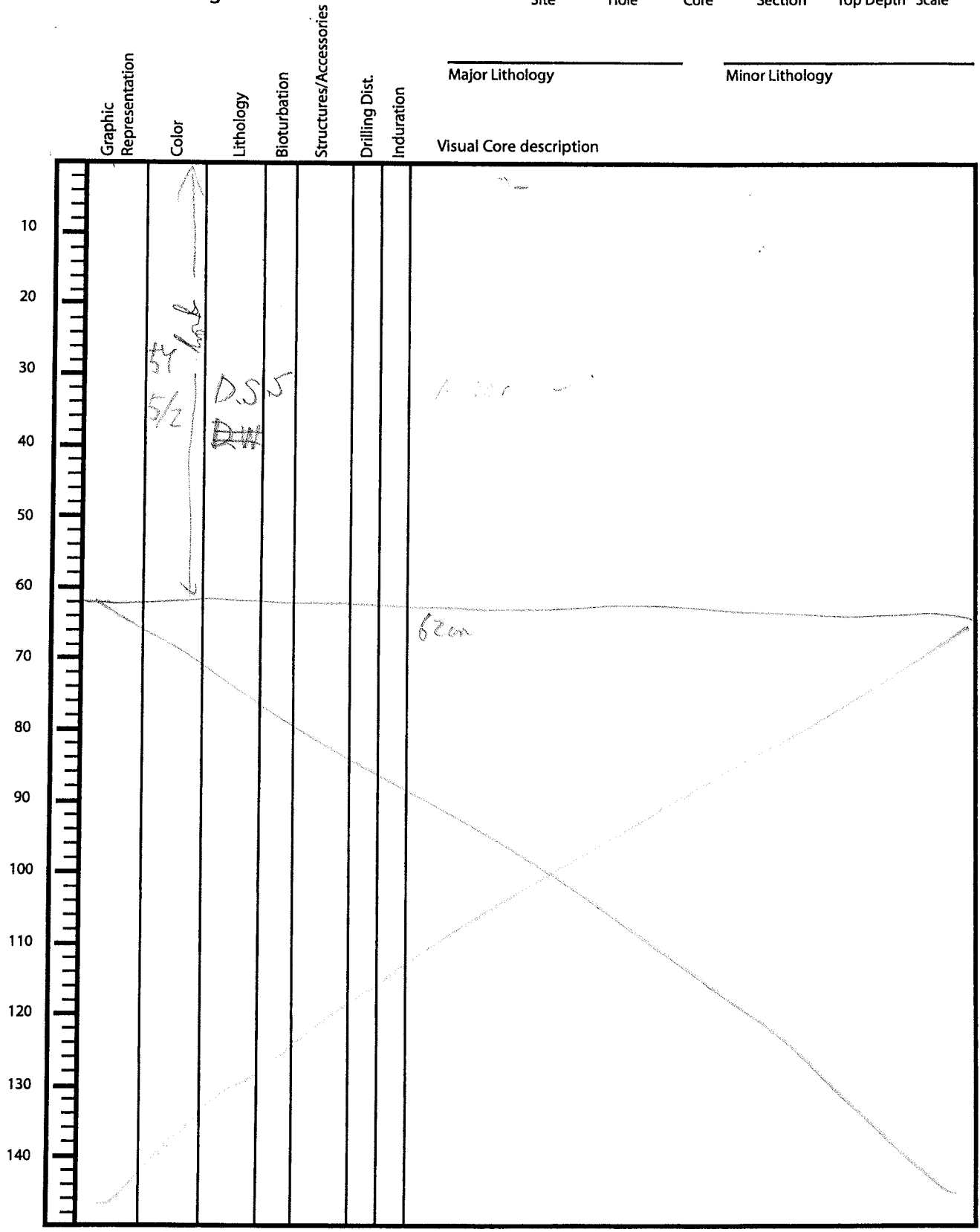
C
Hole

21
Core

7
Section

Top Depth

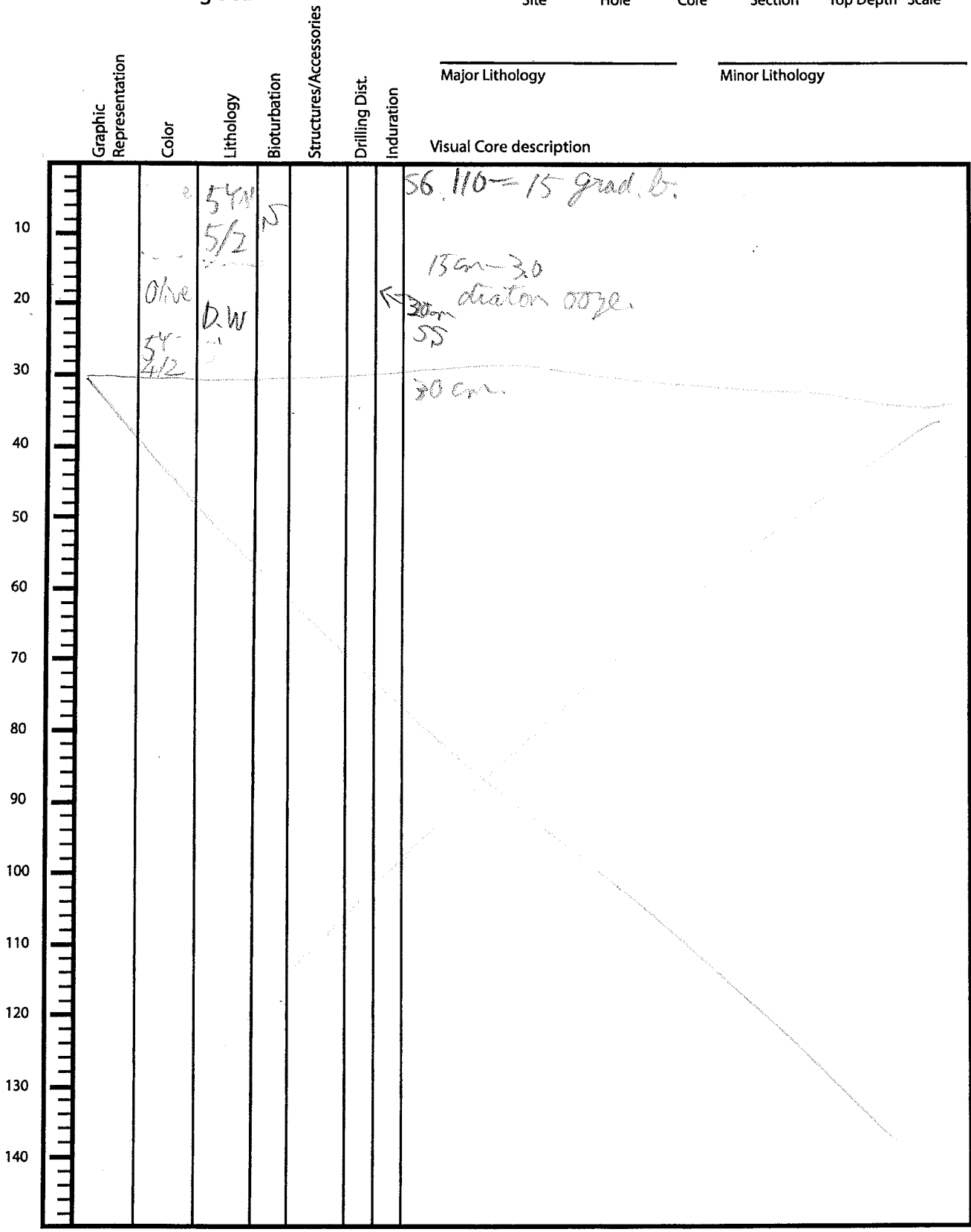
Scale



Observer: _____ Date: _____

Expedition 323
Bering Sea

1339 C 21 CC
 Site Hole Core Section Top Depth Scale



Observer: _____ Date: _____

not inputted!

X

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	V1339	D	1	H	4A	100cm	

Sediment/Rock Name	Diatom clay	Observer	Beth
--------------------	-------------	----------	------

B-52
S-43
V-5

Percent Texture		
Sand	Silt	Clay
	20	80

Comments:

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
	Framework minerals
5	Quartz
5	Feldspar
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
	Accessory/trace minerals
	Micas
	Biotite
	Muscovite
30	Clay Minerals <i>lots in fecal pellets</i>
	Chlorite
	Glauconite
	Chert
	Zircon
	Ferromagnesium minerals
	Authigenic minerals
	Barite
	Phosphorite/Apatite
	Zeolite
	Opaque minerals
3	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
40	Centric
10	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

X IODP Expedition 323
 SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	U1339	D	1	N	1	80 cm	

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

B-88
 S-7
 V-S

Comments:

Percent Texture		
Sand	Silt	Clay

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
	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
	Coccoliths
	Discoasters
	Pteropods
	Siliceous
	Radiolarians
	Spumellaria
	Nassellaria
	Diatoms
50	Centric <i>C. oculis-indis</i>
20	Pennate
15	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	0339 D		1	4	3	12	cm

Sediment/Rock Name	Diatom Foraminifera ooze	Observer	Jeta
--------------------	--------------------------	----------	------

B-67
S-23

(laminar)

Comments:

V-b!

Percent Texture		
Sand	Silt	Clay

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

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

Expedition 323
Bering Sea

1339 Site D Hole 1 Core 1 Section _____ Top Depth _____ Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
10								
20								
30	olive	bl						
40								
50								
60	5Y		a					
70	4/2							
80							-ss diatom ooze	
90								
100								
110								
120							120-122 crack ✓	
130								
140								

Observer: _____ Date: _____

Expedition 323
Bering Sea

1339 D 1 2
 Site Hole Core Section Top Depth Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
	01-c							
	5Y 7/2	DW						
	5Y 2.5/1						81-90 gra ash	
	5Y 4/2						112-113 nothing	

Observer: _____ Date: _____

Expedition 323
Bering Sea

1339 Site D Hole 1 Core 3 Section _____ Top Depth _____ Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
10	Olive						4-19. laminae ✓ 5Y 5/3 and 5Y 4/2	
15	Olive and grey		g				12cm S Diatom foraminifera zone	
20	5Y 4/2						19-32	
30	2.5/1						34-36 molls. with shell ✓	
40								
50								
60	grey						gradational boundary ✓	
70	5Y 5/2	D.A	✓				32 ~ 100.	
80								
90								
100								
110								
120	10Y 4/1							
130								
140								

Observer: _____ Date: _____

Expedition 323
Bering Sea

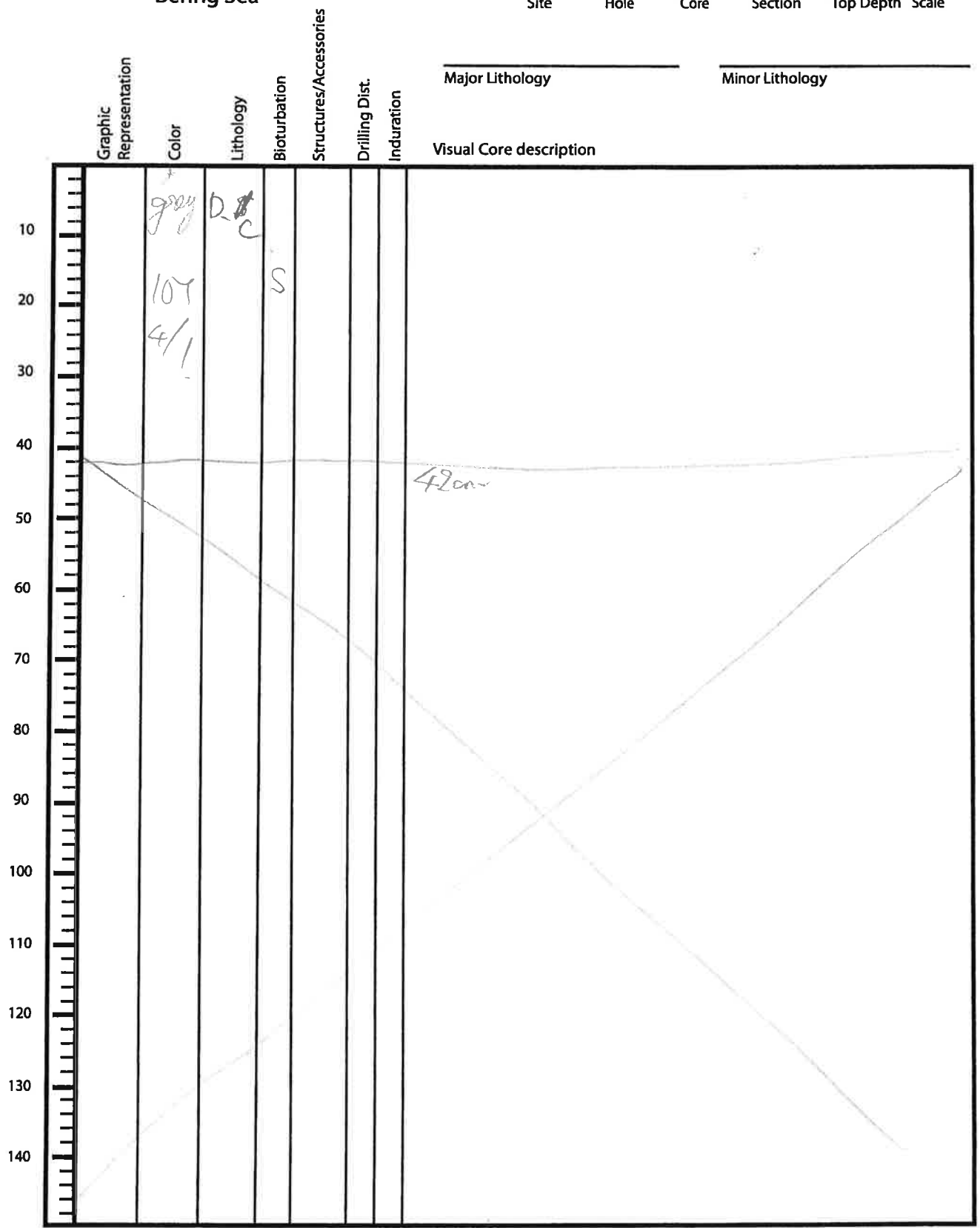
1339 Site D Hole 1 Core S Section _____ Top Depth _____ Scale

Graphical Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
	↑			○			17 cm 2-3m clast ✓	
	grey	R.C					through the section 1-2m. clast scattered.	
	10Y 4/1							
							89-93 mottling with ash ✓	
							-100 cm SS diatom clay ✓	

Observer: _____ Date: _____

Expedition 323
Bering Sea

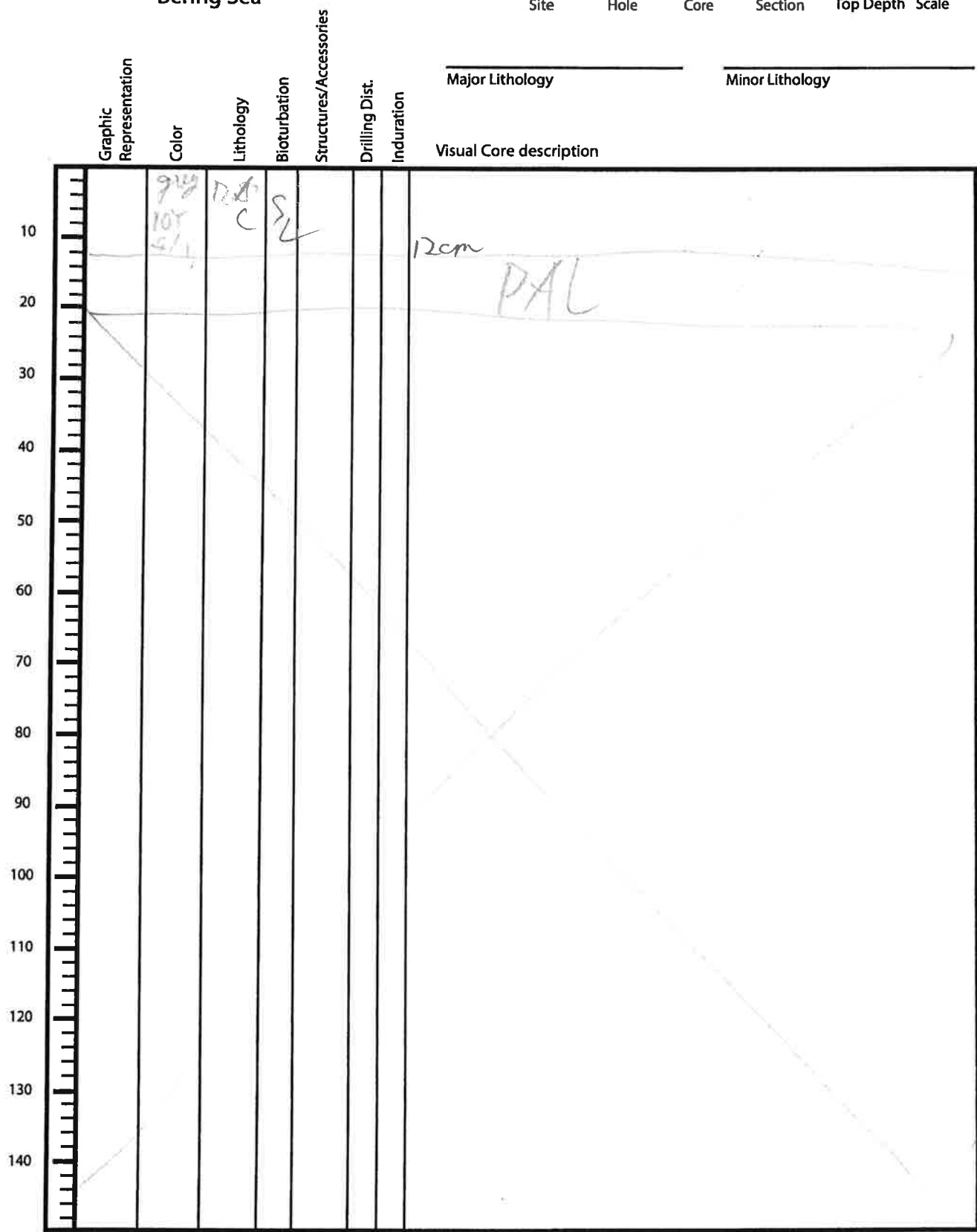
1339 D 1 5
Site Hole Core Section Top Depth Scale



Observer: _____ Date: _____

Expedition 323
Bering Sea

1339 D 1 CC
 Site Hole Core Section Top Depth Scale



Observer: _____ Date: _____

Expedition 323
Bering Sea

V1339 D 2H All
Site Hole Core Section Top Depth Scale

LITHOLOGY ONLY

Major Lithology

Minor Lithology

Visual Core description

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Visual Core description
10	SY 4/1	I					Diatom silt I - SY 4/1 II - 10Y 4/1
20							
30							
40							
50							33-36 Diatom silt 74-76
60	10Y 4/1 40 50	I II					delete banding! (inside burrow = Diatom rich fine assy silt)
70	SY 4/1 10Y 4/1	I II					
80		I					
90	10Y 3/1 10Y 4/1	89 92					80-92 Ash 80-89 & 92-101 G
100	SY 3/1						47-51.5 Ash G 42-47 und. sils
110							Diatom silt Forams 5-80 to 6-85
120							
130	5Y 4/1	I					DK gray - DK greenish gray
140							Ash v. dark greenish gray v. dark gray

Observer: _____ Date: _____

Expedition 323
Bering Sea

U339 D 24 1
Site Hole Core Section Top Depth Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology	Visual Core description
			M22- M23						
			A11 J1112X						
			P 105 106						
				MS					Grannle

Observer: _____ Date: _____

7- X

Expedition 323
Bering Sea

U1339 D 2#2
Site Hole Core Section Top Depth Scale

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

Observer: _____ Date: _____

+

U1339 Site D Hole 2H 3 Section Top Depth

Expedition 323 Bering Sea

9

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Major Lithology		Minor Lithology		Visual Core description
					Drilling Dist.	Samples			
			23 DC 20						
				23 25 Feb					
			71 84 P111						
			All S13M						

Observer: _____ Date: _____

U X

Expedition 323
Bering Sea

V1339 Site D Hole 2H Core 4 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									

38-47 Burden

35-40

Many pebbles

52-73

Med. Dark

79-95

cream matrix
distinctive of coarse

98-107
Com

110-119

Many pebbles

Observer: _____ Date: _____

5
X

Expedition 323
Bering Sea

U1339 D 2H 5
Site Hole Core Section Top Depth

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist. Samples	Major Lithology	Minor Lithology
						Visual Core description	
				26-35 mot			Forams throughout
				52-55		Peb.	
				65-67		Green mot.	
				80-90		Granules & pebbles	
				93-124		Forams - yes	
				136		Peb.	

Observer: _____ Date: _____

10 X

Expedition 323
Bering Sea

U1339 D 2H 6
Site Hole Core Section Top Depth Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
				16 shell				
				39- 40			Pcb	
							Ash fines ↑	
								Forams throughout
				71-81 Not 69-70 Plan dash				
				82			Pcb	
				87 bot.				
				91			Pcb	

Observer: _____ Date: _____

7 X

Expedition 323
Bering Sea

U1339 D 2A 7
Site Hole Core Section Top Depth Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology	
							Visual Core description		
				13				Rumice pb	
				37-40				P/b,	

Observer: _____ Date: _____

11

Expedition 323
Bering Sea

01339 D 241 CC
Site Hole Core Section Top Depth Scale

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

Observer: _____ Date: _____

INSM

X

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	1339	D	2	H	A	55	

Sediment/Rock Name	diatom silt	Observer	Akira
--------------------	-------------	----------	-------

Percent Texture		
Sand	Silt	Clay

Comments:

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
Framework minerals	
	Quartz 5
3/4	Feldspar 15
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
Accessory/trace minerals	
	Micas
	Biotite
	Muscovite
	Clay Minerals
	Chlorite
	Glauconite
	Chert
	Zircon
4	Ferromagnesium minerals 2
Authigenic minerals	
	Barite
	Phosphorite/Apatite
	Zeolite
Opaque minerals	
4	Pyrite 2
	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
42	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

INSM

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	1339	D	2	H	3A	43 in	

Sediment/Rock Name	diatom rich silt	Observer	akira
--------------------	------------------	----------	-------

fine ash.

Percent Texture		
Sand	Silt	Clay
	90	10

Comments:

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
Framework minerals	
11	Quartz 3 large
25	Feldspar 7
	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
25	Vitric grain 7
	Lithic grain

Percent	Component
BIOGENIC GRAINS	
Calcareous	
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
Siliceous	
	Radiolarians
	Spumellaria
	Nassellaria
35	Diatoms 10
	Centric
	Pennate
	Chaetoceros Resting Spores
	Silicoflagellates
34	Sponge spicules 1
	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
323	1339	D	2	H	3A	43 out	

Sediment/Rock Name	diatom silt	Observer	Akora
--------------------	-------------	----------	-------

Percent Texture		
Sand	Silt	Clay
	90	10

Comments:

20+20 23

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
	Framework minerals
9	Quartz 3
31	Feldspar 10
	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
3	Pyrite 1
	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
47	Diatoms 20/5
	Centric
	Pennate
	Chaetoceros Resting Spores
	✓ Silicoflagellates
	Sponge spicules
	Dinoflagellates
	Others
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

X

insm

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	1339	D	2 8	H	6	60	

Sediment/Rock Name	diatom silt	Observer	akira
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Percent Texture		
Sand	Silt	Clay
	80	20

Comments:

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

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

1339 Site Hole Core Section Top Depth Scale

Depth (cm)	Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
								Visual Core description	
0-10		gray	DFA						
10-15		10Y							
15-20		4/1							
20-25		5Y	AS						
25-30		2.5/2							
30-35		10Y							
35-40		4/1	DFA						
40-45		gray							
45-50		4/1							
50-55		5Y	AS						
55-60		2.5/4							
60-65		5Y							
65-70		gray							
70-75									
75-80		5Y							
80-85		2.5/1							
85-90			DFA						
90-100									
100-110									
110-120									
120-130									
130-140									

19-29
ask comment:
forem tests deep trend
thru core

GRAY MOTTLES

S.

SECTION 2

Observer: _____ Date: _____

SAME AS SECTION 1 80 - 150 cm
SS in STATE 2 AT 80cm

Expedition 323
Bering Sea

1339 Site Hole Core Section Top Depth Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
	<p>gray-green</p> <hr/> <p>gray</p>	<p>gray</p>	<p>17 hole</p>	<p>DEAN</p>	<p>77</p>	<p>77</p>	<p>HOFTLES JUNO 26</p>	<p>50 cm SS. diatom fine ash.</p>

Observer: _____ Date: _____

Expedition 323
Bering Sea

1339 C 3 3
 Site Hole Core Section Top Depth Scale

	Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
10									
20		grey							
30		10Y 4/1							
40									
50				S					
60			DFA						
70									
80								76-80 Crak.	
90									
100									
110									
120									
130									
140				M					
								139 f 45 bioturbation	

Observer: _____ Date: _____

Expedition 323
Bering Sea

1330 Site D Hole 3 Core 4 Section _____ Top Depth _____ Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology	
	<p>10-15: \emptyset \emptyset</p> <p>20-30: 10Y 4/1</p> <p>30-40: \emptyset</p> <p>40-50: \emptyset</p> <p>50-60: \emptyset</p> <p>60-70: \emptyset</p> <p>70-80: \emptyset</p> <p>80-90: \emptyset</p> <p>90-100: \emptyset</p> <p>100-110: 10Y 4/1</p> <p>110-120: \emptyset</p> <p>120-130: \emptyset</p> <p>130-140: 5Y 3/2</p>	<p>10-15: \emptyset \emptyset</p> <p>20-30: 10Y 4/1</p> <p>30-40: \emptyset</p> <p>40-50: \emptyset</p> <p>50-60: \emptyset</p> <p>60-70: \emptyset</p> <p>70-80: \emptyset</p> <p>80-90: \emptyset</p> <p>90-100: \emptyset</p> <p>100-110: 10Y 4/1</p> <p>110-120: \emptyset</p> <p>120-130: \emptyset</p> <p>130-140: 5Y 3/2</p>	<p>10-15: \emptyset \emptyset</p> <p>20-30: 10Y 4/1</p> <p>30-40: \emptyset</p> <p>40-50: \emptyset</p> <p>50-60: \emptyset</p> <p>60-70: \emptyset</p> <p>70-80: \emptyset</p> <p>80-90: \emptyset</p> <p>90-100: \emptyset</p> <p>100-110: 10Y 4/1</p> <p>110-120: \emptyset</p> <p>120-130: \emptyset</p> <p>130-140: 5Y 3/2</p>	<p>10-15: \emptyset \emptyset</p> <p>20-30: 10Y 4/1</p> <p>30-40: \emptyset</p> <p>40-50: \emptyset</p> <p>50-60: \emptyset</p> <p>60-70: \emptyset</p> <p>70-80: \emptyset</p> <p>80-90: \emptyset</p> <p>90-100: \emptyset</p> <p>100-110: 10Y 4/1</p> <p>110-120: \emptyset</p> <p>120-130: \emptyset</p> <p>130-140: 5Y 3/2</p>	<p>10-15: \emptyset \emptyset</p> <p>20-30: 10Y 4/1</p> <p>30-40: \emptyset</p> <p>40-50: \emptyset</p> <p>50-60: \emptyset</p> <p>60-70: \emptyset</p> <p>70-80: \emptyset</p> <p>80-90: \emptyset</p> <p>90-100: \emptyset</p> <p>100-110: 10Y 4/1</p> <p>110-120: \emptyset</p> <p>120-130: \emptyset</p> <p>130-140: 5Y 3/2</p>	<p>10-15: \emptyset \emptyset</p> <p>20-30: 10Y 4/1</p> <p>30-40: \emptyset</p> <p>40-50: \emptyset</p> <p>50-60: \emptyset</p> <p>60-70: \emptyset</p> <p>70-80: \emptyset</p> <p>80-90: \emptyset</p> <p>90-100: \emptyset</p> <p>100-110: 10Y 4/1</p> <p>110-120: \emptyset</p> <p>120-130: \emptyset</p> <p>130-140: 5Y 3/2</p>	<p>10-15: \emptyset \emptyset</p> <p>20-30: 10Y 4/1</p> <p>30-40: \emptyset</p> <p>40-50: \emptyset</p> <p>50-60: \emptyset</p> <p>60-70: \emptyset</p> <p>70-80: \emptyset</p> <p>80-90: \emptyset</p> <p>90-100: \emptyset</p> <p>100-110: 10Y 4/1</p> <p>110-120: \emptyset</p> <p>120-130: \emptyset</p> <p>130-140: 5Y 3/2</p>	<p>10-15: \emptyset \emptyset</p> <p>20-30: 10Y 4/1</p> <p>30-40: \emptyset</p> <p>40-50: \emptyset</p> <p>50-60: \emptyset</p> <p>60-70: \emptyset</p> <p>70-80: \emptyset</p> <p>80-90: \emptyset</p> <p>90-100: \emptyset</p> <p>100-110: 10Y 4/1</p> <p>110-120: \emptyset</p> <p>120-130: \emptyset</p> <p>130-140: 5Y 3/2</p>	<p>10-15: \emptyset \emptyset</p> <p>20-30: 10Y 4/1</p> <p>30-40: \emptyset</p> <p>40-50: \emptyset</p> <p>50-60: \emptyset</p> <p>60-70: \emptyset</p> <p>70-80: \emptyset</p> <p>80-90: \emptyset</p> <p>90-100: \emptyset</p> <p>100-110: 10Y 4/1</p> <p>110-120: \emptyset</p> <p>120-130: \emptyset</p> <p>130-140: 5Y 3/2</p>
<p>Visual Core description</p> <p>8-12, 13 mottling</p> <p>40, 47, 53 pebble 2-5mm</p> <p>100-108 gradual boundary to diatom ooze</p> <p>134</p> <p>Abouites @ 122 on 120-121</p>									

bracts
pebbles

Observer: _____ Date: _____

Expedition 323
Bering Sea

1339 D 3 5 30cm
Site Hole Core Section Top Depth Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
	olive	RO					30 cm ss diatom ooze	
	5Y 4/2							
							50-60 gra. boundary to silt	
		D.S						
	grey						60-120 several cracks	
	10Y 4/2							
							109-112 ash 10Y 2.5/1	
		D.S						
							120-grad boundary C.	
	olive							
	5Y 4/2							

cores

Observer: _____ Date: _____

Expedition 323
Bering Sea

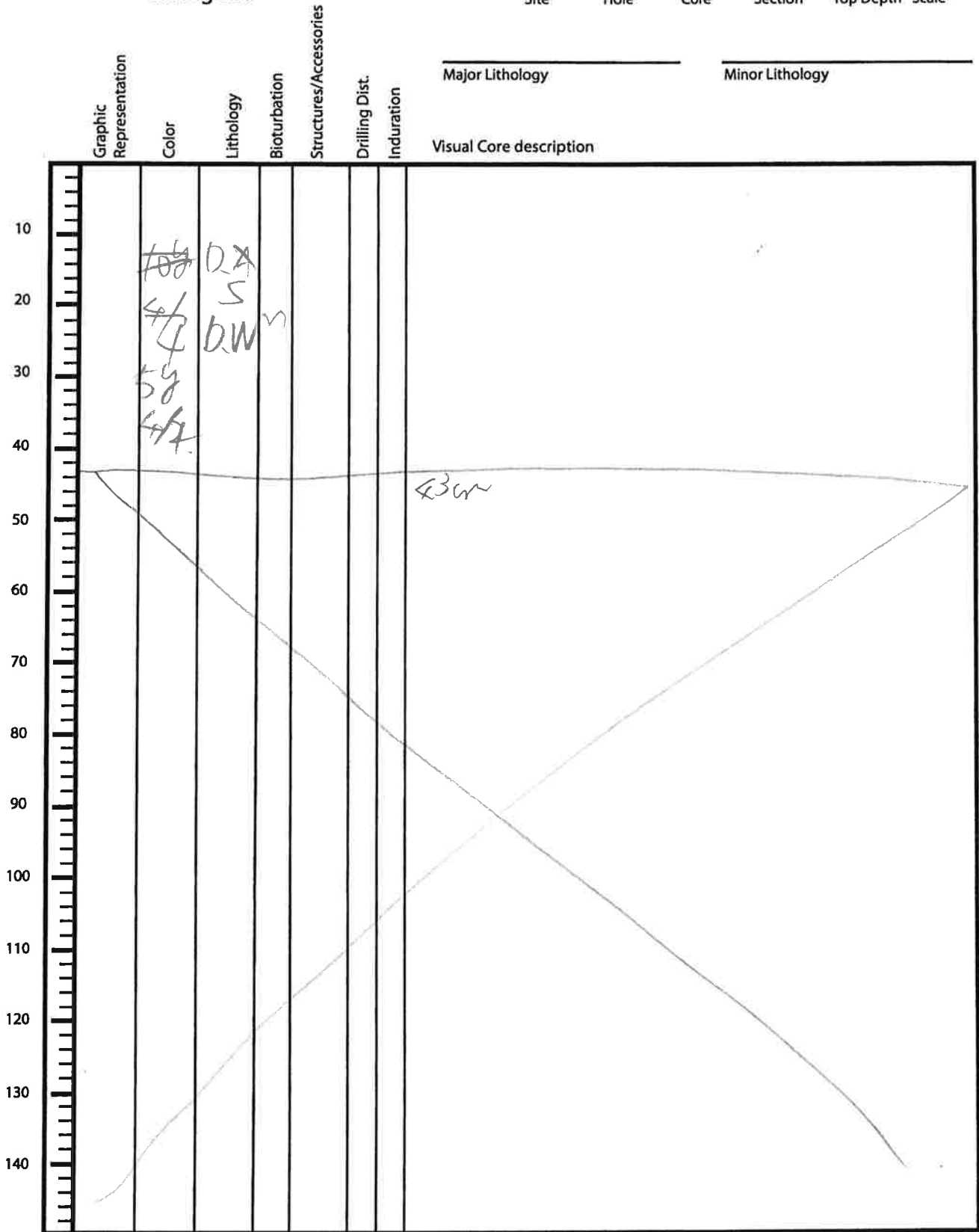
1339 Site D Hole 34 Core 6 Section _____ Top Depth _____ Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
Visual Core description								
10	↑	olive D.W						
20		SP						
30		4/2						
40								
50							50-100 Gravel	
60								
70								
80		D.W					60-130 several cracks	
90								
100								
110								
120		D.W						
130								
140								

Observer: _____ Date: _____

Expedition 323
Bering Sea

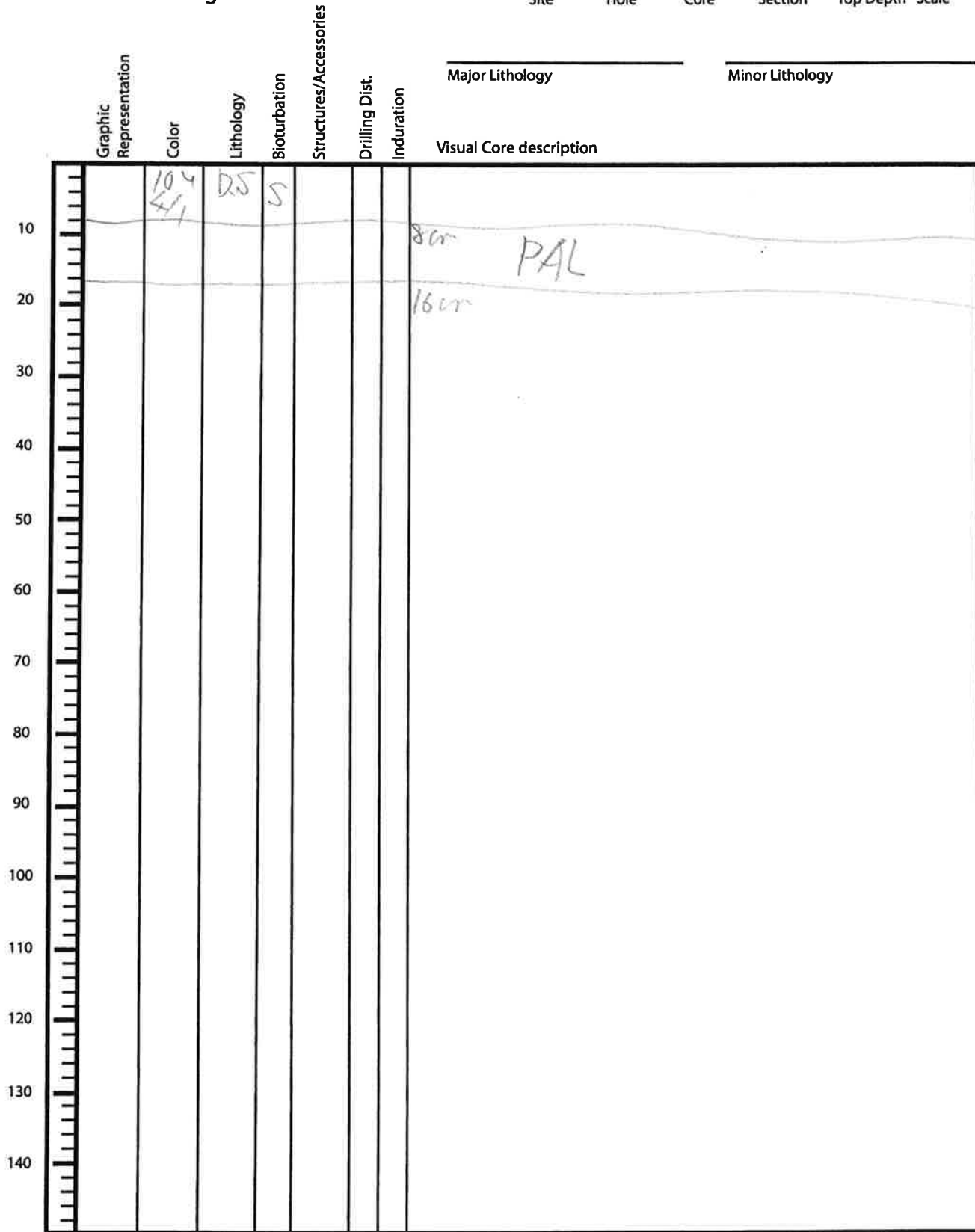
Site 1339 Hole D Core 3 Section 7 Top Depth _____ Scale _____



Observer: _____ Date: _____

Expedition 323
Bering Sea

1339 Site D Hole 3 Core CC Section _____ Top Depth _____ Scale



Observer: _____ Date: _____

INSM

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
	133p	D	3		2	Soan	

Sediment/Rock Name	Duron Fine ASH	Observer	
--------------------	----------------	----------	--

Percent Texture		
Sand	Silt	Clay

Comments:

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

X

MSM

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
	1330D		3		5	30	cm

Sediment/Rock Name	SLATON 0025		Observer	
--------------------	-------------	--	----------	--

Bottoms 50%
 SILICICLASTIC 20%
 OTHER 30%

Comments:

Percent Texture		
Sand	Silt	Clay

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

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

U1339 D 4H AL
Site Hole Core Section Top Depth Scale

LITHOLOGY

Graphic Representation



Lithology

Bioturbation

Structures/Accessories

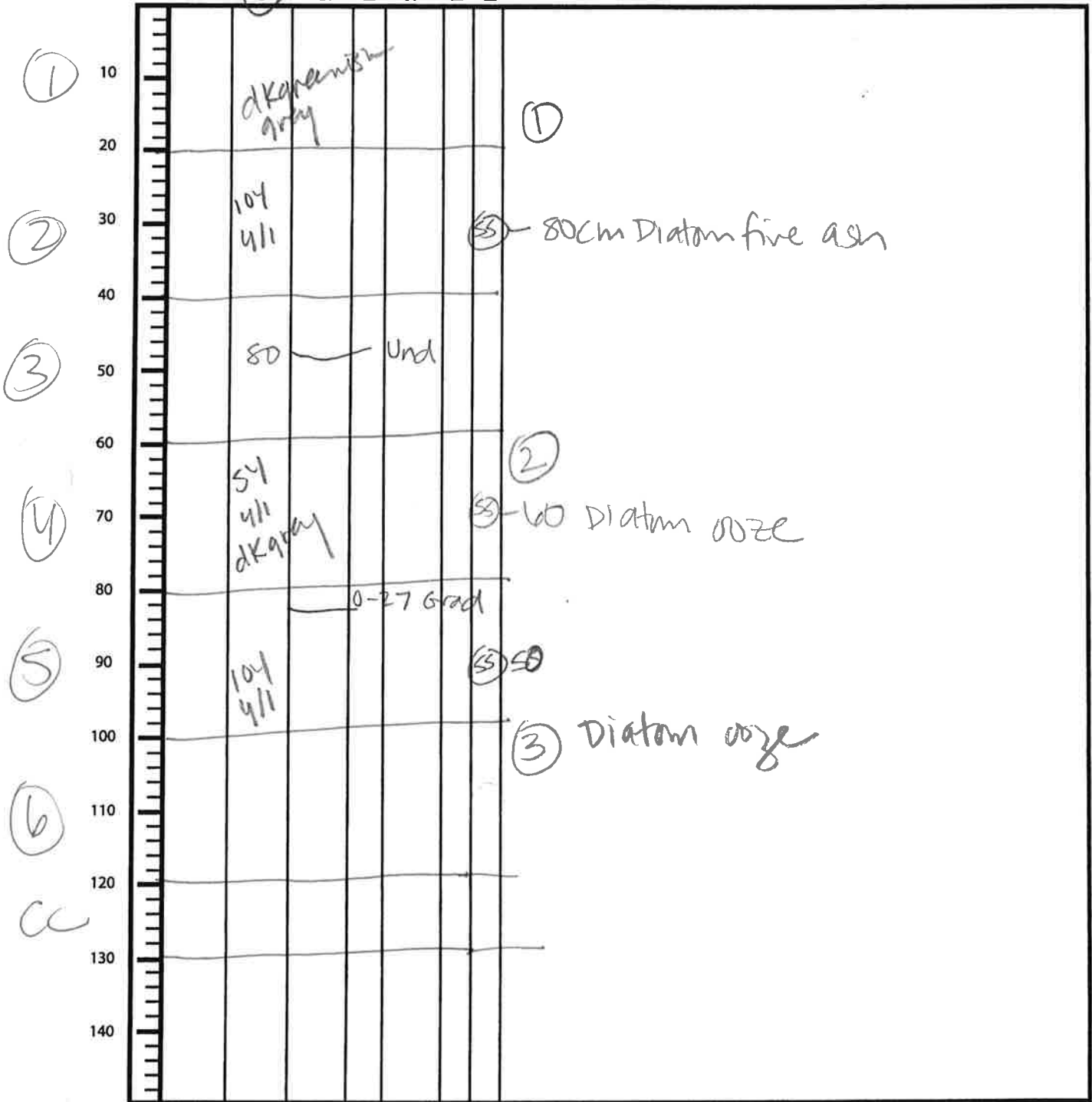
Drilling Dist.

Induration

Major Lithology

Minor Lithology

Visual Core description



Observer: _____ Date: _____

+

Expedition 323
Bering Sea

U1339 D 4H 1
 Site Hole Core Section Top Depth Scale

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

145-150 Not Green
 40-107 M₁ + faint
 Si. bio-turb to 2-147

55-103 Gas Cap MM
 SURF-51 25

Observer: Bahr Date: _____

X

Expedition 323
Bering Sea


VB339
Site

D
Hole

4H
Core

2
Section

Top Depth Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
				2.5 shell				
				130-142 SKO	147			132.5-134 with crack

Mud
BTD

Observer: _____ Date: _____

X

Expedition 323
Bering Sea

11339 D 44 3
Site Hole Core Section Top Depth Scale

Major Lithology	Minor Lithology	Visual Core description	Induration	Drilling Dist.	Structures/Accessories	Bioturbation	Lithology	Color	Graphic Representation
		Mottled - dk fine ash ✓							
		crack ✓							
		48-4-132 ✓							
		79-und bedding ✓							
		void ✓							
		crack ✓							
		crack ✓							
		crack ✓							

Observer: _____ Date: _____

Expedition 323
Bering Sea

VB39
Site

D
Hole

4H
Core

4
Section

Top Depth Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
				(6) Peb				
							10-13 void ✓	
							44-50 cracks ✓	
							72-94 cracks ✓	
							116-132 cracks ✓	
				(100) Peb ✓				

Observer: _____ Date: _____

Expedition 323
Bering Sea

UR39 D 4H 5
Site Hole Core Section Top Depth Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
10			4 Mot				all mottles dark ash	
20			22 Mot					
30								
40								
50								
60								
70								
80								
90				80-Mot				
100								
110								
120								
130								
140								

Observer: Beth Date: _____

X

Expedition 323
Bering Sea

UB39 Site D Hole 4H Core 16 Section _____ Top Depth _____ Scale _____

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
				(15)	FA			
				30				
				38				
				Mat				
				DK				
				F. AS				
					20-48 cracks			gas exp mod.

Observer: _____ Date: _____

Expedition 323
Bering Sea

U1339 D 4H CC
Site Hole Core Section Top Depth Scale

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

Observer: Bdm Date: _____

INSM

X

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
	1339	D	4		2	80cm	

Sediment/Rock Name	DIATOM FINE ASH	Observer	ILWA
--------------------	-----------------	----------	------

Percent Texture		
Sand	Silt	Clay

Comments:

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

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

INSM

X

IODP Expedition 323
 SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
	133P	D	4		4	60	

Sediment/Rock Name	DIATOM OOZE	Observer	CWA
--------------------	-------------	----------	-----

Percent Texture		
Sand	Silt	Clay

Comments:

Percent	Component
	SILICICLASTIC GRAINS/MINERAL
	Framework minerals
67	Quartz
57	Feldspar
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
	Accessory/trace minerals
4%	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
75%	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

INSM

IODP Expedition 323
 SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
		D	4		5	50cm	

Sediment/Rock Name	DIATOM ooze	Observer	lwa
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Percent Texture		
Sand	Silt	Clay

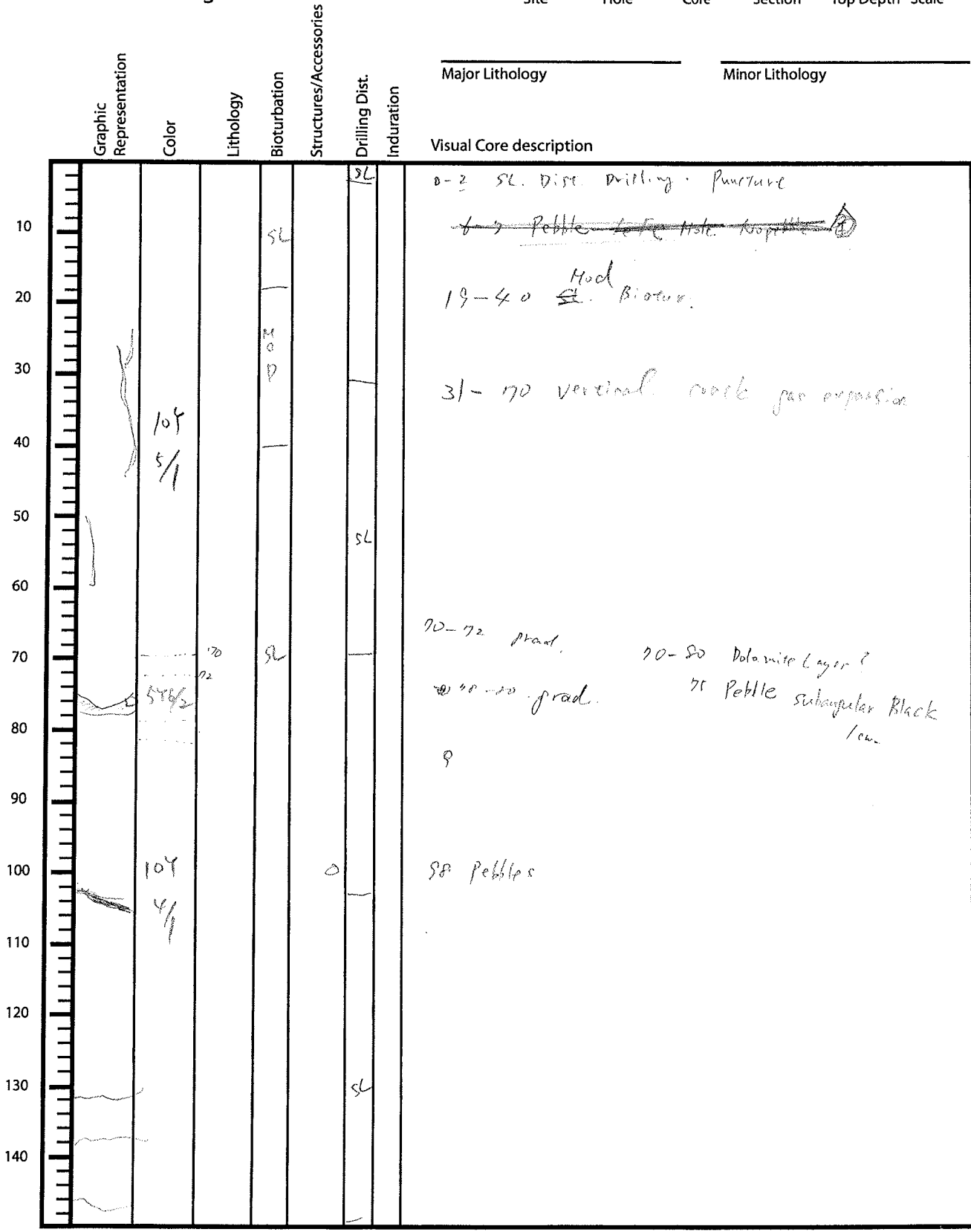
Comments:

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
20%	Vitric grain
	Lithic grain

Percent	Component
BIOGENIC GRAINS	
	Calcareous
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
	Siliceous
	Radiolarians
	Spumellaria
	Nassellaria
75%	Diatoms
	Centric
	Pennate
5%	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

1358 D 5 1
Site Hole Core Section Top Depth Scale



Observer: H. A. Date: _____

Expedition 323
 Bering Sea

1339 Site D Hole 5 Core 2 Section Top Depth Scale

Depth (cm)	Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
								Visual Core description	
10									
20									
30									
40									
48-51		201							6-9 Pebble Hole?
50-52		94							ash for perch
50-52									48-51
50-52									50-52 puncture
43-51									43-51
44-52									44-52 gas exp.
54-150			P. 00						54-150 "
70-75									
76-98			Ash						76-98 Ashy Patch. Med Bio.
76-98									
100-105			P. 00						
100-105									
110-115									
124									124 p.
130-135									
140-145									

Observer: H. A. Date: _____

Expedition 323
Bering Sea

1338 Site D Hole 54 Core 3 Section _____ Top Depth _____ Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
10								0-150 same litho. gas exp SL
20								0-2 ash patch
30								
40								43-45 gas exp
50								
60								
70	105							
80	41	105 P. side	SL			SL		
90								
100								
110								
120								
130								
140								

Observer: H.A. Date: _____

Expedition 323
Bering Sea

1339 Site D Hole 34 Core 4 Section _____ Top Depth _____ Scale _____

Graphic Representation

Color

Lithology

Bioturbation

Structures/Accessories

Drilling Dist.

Induration

Major Lithology _____ Minor Lithology _____

Visual Core description

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

								<p>107-109 lacks 2cm lacks like pumise</p>
--	--	--	--	--	--	--	--	---

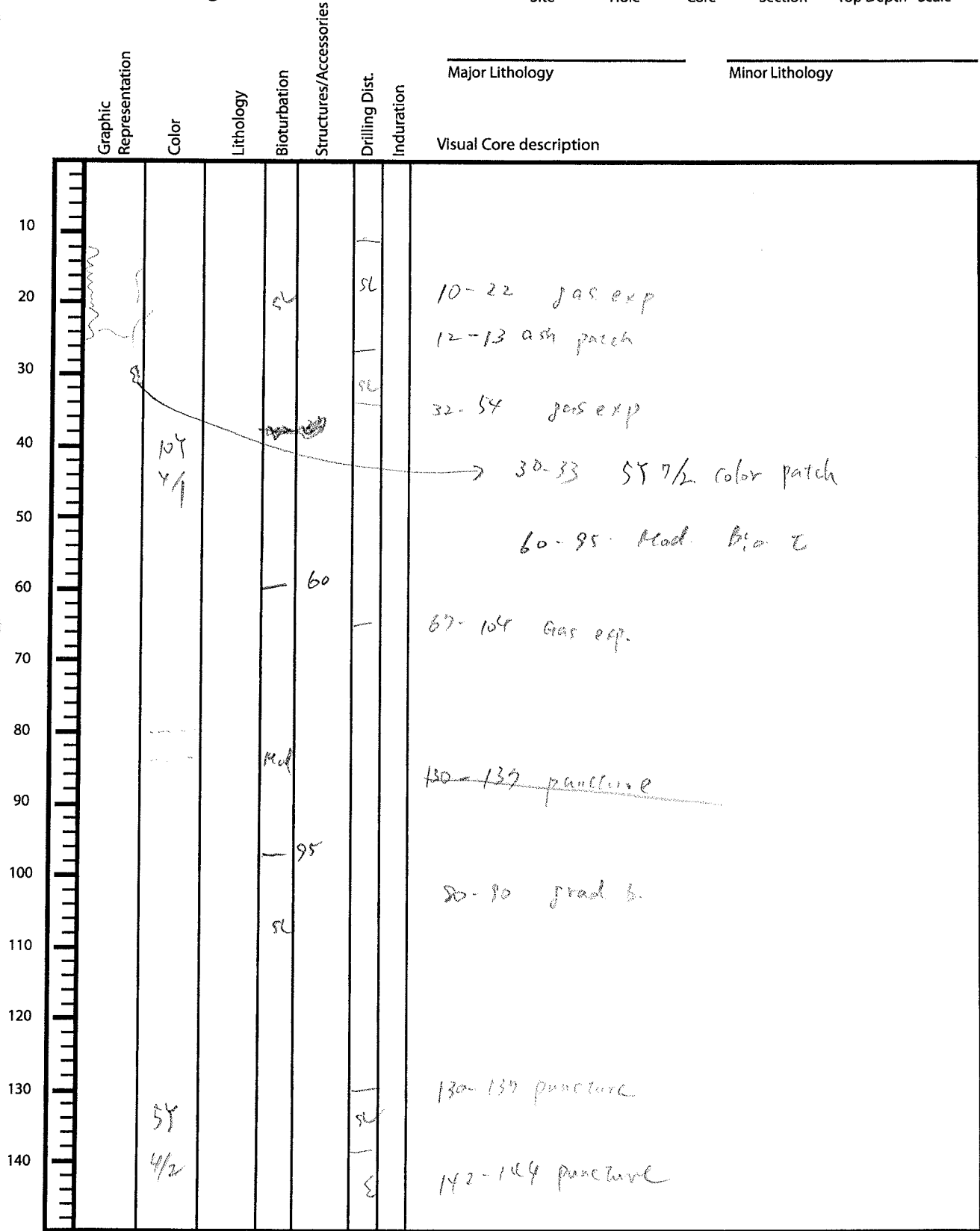
108
109
110
111
112
113
114
115
116
117
118
119
120
121
122
123
124
125
126
127
128
129
130
131
132
133
134
135
136
137
138
139
140

SL
SL
SL

Observer: Hiro A Date: _____

Expedition 323
Bering Sea

1339 Site D Hole 517 Core 5 Section _____ Top Depth _____ Scale



Observer: Hiro A Date: _____

Expedition 323
Bering Sea

1338 D 54 6
Site Hole Core Section Top Depth Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
	54 4/2							Sec. 5 125 w 67 sec. 6 7 grad Band
								7-10. grad. Band.
						34		34 - 144. gas exp. SL
	54 4/1							
								103 w/20 grad. com.
		Dark						
						SL		
	54 4/2							

Observer: _____ Date: _____

Expedition 323
Bering Sea

1335 D 54 7
Site Hole Core Section Top Depth Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
	54 4/2		52					
	54 3/4		Mod				28-34 Mod. Bioturbation ashy peck	
	54 4/2		52					

Observer: _____ Date: _____

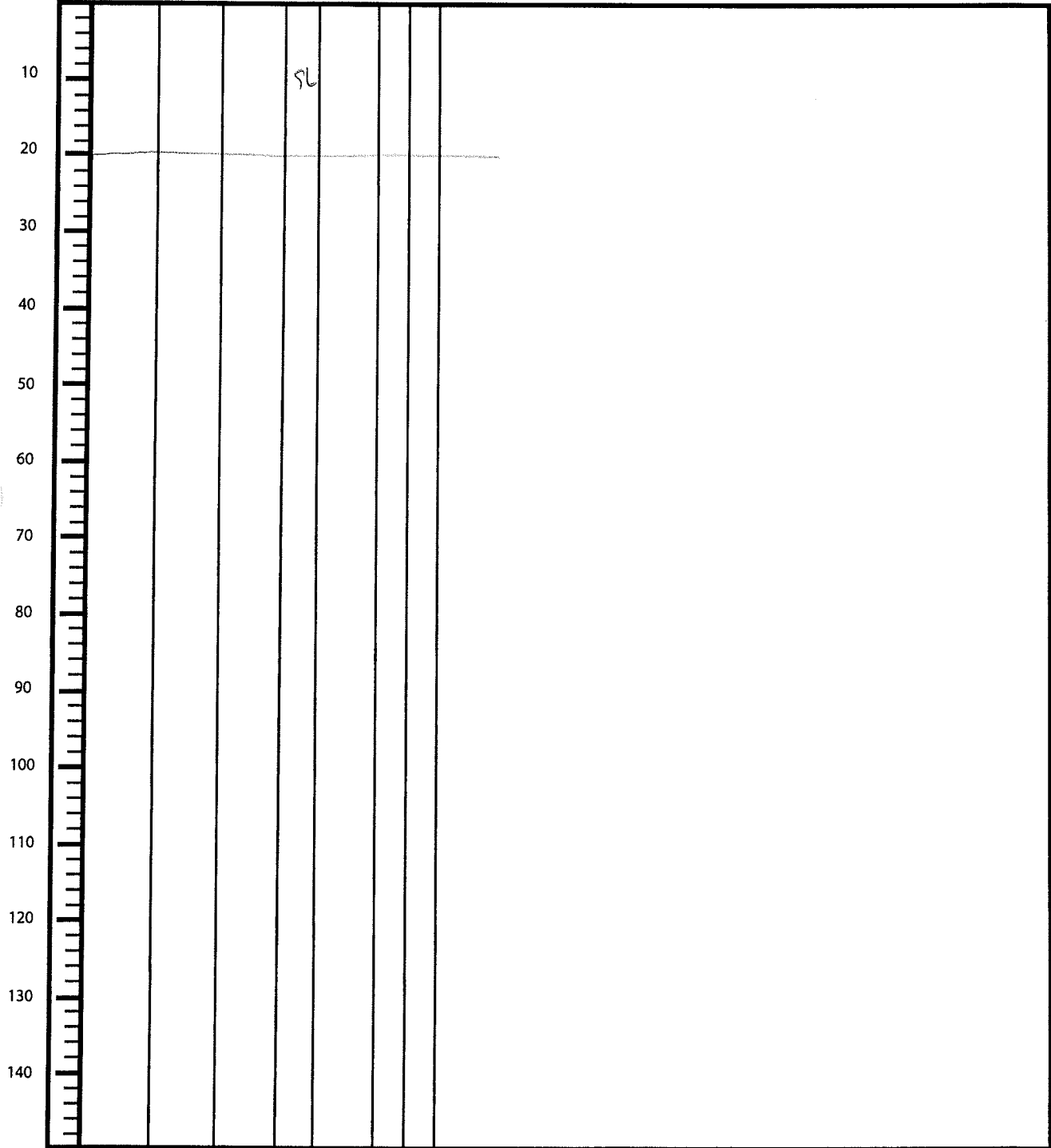
Expedition 323
Bering Sea

Site _____ Hole _____ Core _____ Section 10 Top Depth _____ Scale _____

Graphic Representation
Color
Lithology
Bioturbation
Structures/Accessories
Drilling Dist.
Induration

Major Lithology _____ Minor Lithology _____

Visual Core description



Observer: _____ Date: _____

✓ SM

IODP Expedition 323
 SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	V1339	D	5	H	3	80	80

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

Percent Texture		
Sand	Silt	Clay
	✓	

Comments:

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
Framework minerals	
30	Quartz
10	Feldspar
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
2	Rock fragments
Accessory/trace minerals	
1	Micas
	Biotite
	Muscovite
	Clay Minerals
1	Chlorite
	Glaucinite
	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	
1	Planktonic foraminifera
1	Benthic foraminifera
Nannofossils	
	Coccoliths
	Discoasters
	Pteropods
Siliceous	
Radiolarians	
	Spumellaria
1	Nassellaria
Diatoms	
30	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	

Expedition 323
Bering Sea

11339 D 6 1
Site Hole Core Section Top Depth Scale

	Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology	Visual Core description
10										
20										
30		V1615		WGS						punctures + cracks etc.
40										
50										
60							lumpy			
70										
80										
90										
100										
110										
120										
130										
140										Gap 135-150

Observer: _____ Date: _____

Expedition 323
Bering Sea

V1339 D 6 2
Site Hole Core Section Top Depth Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
	V1339		shale		poor		punctures the clay lines	
10								
20								
30								
40								
50								
60								
70								
80								
90								
100								
110								
120								
130								
140								

Observer: _____ Date: _____

Expedition 323
Bering Sea

U1339
Site

D
Hole

6
Core

3
Section

Top Depth

Scale

Graphic Representation

Color

Lithology

Bioturbation

Structures/Accessories

Drilling Dist.

Induration

Major Lithology

Minor Lithology

Visual Core description

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

VLX5

slight

mod.

mostly punctures

Observer: _____

Date: _____

Expedition 323
Bering Sea

V1339 D 6 4
Site Hole Core Section Top Depth Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
							punctures at 8-10, 46-50, 63-65	
							60-70 grad. cont.	
							93-102 Skolithos 2cm φ	
							102-110 dolostone, concretion, hard, int. bioturb.	
							113-120 gap, heavy concretion	
							109-131 fine ash	
							127-131 sharp cont. base of ash	

Observer: _____ Date: _____

Expedition 323
Bering Sea

01339 D 6 5
Site Hole Core Section Top Depth Scale

10 20 30 40 50 60 70 80 90 100 110 120 130 140	Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
			2/4/12	diatom ooze	slight		mod.	slight	

Visual Core description

cracks thr.

ash patches thr.

Observer: _____ Date: _____

Expedition 323
Bering Sea

V1339 D 6 6
 Site Hole Core Section Top Depth Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
	5Y 2/1 5Y 3/1 5Y 4/1	Disturbed fine ash Disturbed DPEL					25-27 intermixed dark ash 21-25 grad. cont., 27-30 grad. cont. 35-36 slump cont. 30-36 dark ash layer 36-150 ash patches thin	

Observer: _____ Date: _____

Expedition 323
Bering Sea

01339 D 57
Site Hole Core Section Top Depth Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
	V16KS		shaly		mod.		0-30 blueish-greyish brown 34-38 intermixed light ash	

Observer: _____ Date: _____

Expedition 323
Bering Sea

V1339 Site D Hole 6 Core CC Section _____ Top Depth _____ Scale

Depth (cm)	Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
								Visual Core description	
0-10		SY 4/11	Oligocene 5186	20-30 cm		None			
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									

Observer: _____ Date: _____

✓ SM

IODP Expedition 323
 SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	U1339	D	6	H	5	81	81

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

Comments:

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
	Framework minerals
25	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
1	Pyrite
	Magnetite
	Fe-oxide
	Carbonates
	Calcite
	Dolomite
VOLCANICLASTIC GRAINS	
	Crystal grain
5	Vitric grain
	Lithic grain

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

U1338 D 7 2
Site Hole Core Section Top Depth Scale

Graphic Representation

Color

Lithology

Bioturbation

Structures/Accessories

Drilling Dist.

Induration

Major Lithology

Minor Lithology

Visual Core description

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

grey

fine

light

light

Visual Core description

Observer: _____ Date: _____

Expedition 323
Bering Sea

U1338 D 7 3
 Site Hole Core Section Top Depth Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
	5Y 4/2	cl. sand	cl. sand				Cracks at 20, 26, 33, 39, 94, 101	
							40-50 grad. cont.	
							50-150 ^{dark} wash patches	
	5Y 4/1	cl. silt						

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

Observer: _____ Date: _____

Expedition 323
Bering Sea

U1339

D

7

4

Site

Hole

Core

Section

Top Depth

Scale

Graphic
Representation

Color

Lithology

Bioturbation

Structures/Accessories

Drilling Dist.

Induration

Major Lithology

Minor Lithology

Visual Core description

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

V16 101^{1/2}

V16 102

por

light grey burrows 40-86

50-60 grad. cent.

bluish burrows 86-100

dark ash patches thru

117-120 ash patch

Observer: _____ Date: _____

Expedition 323
Bering Sea

U133A

D

7

5

Site

Hole

Core

Section

Top Depth

Scale

Major Lithology	Minor Lithology	Visual Core description	Induration	Drilling Dist.	Structures/Accessories	Bioturbation	Lithology	Color	Graphic Representation
		10-15 grad. cont.					d. silt	10/4 1/2	
		20-28 fine ash					d. ash	5/4 1/2	
		26-28 sharp. cont.					d. silt	5/4 1/2	
		30-36 ash patch					d. ash	5/4 1/2	
		50-55 grad. cont.					d. silt	5/4 1/2	
		121-133 intermixed dense ash					d. silt	5/4 1/2	
		125-130 grad. cont.					d. ash	5/4 1/2	
							d. silt	5/4 1/2	

Observer: _____

Date: _____

Expedition 323
Bering Sea

U1339
Site

D
Hole

7
Core

6
Section

Top Depth

Scale

Major Lithology	Minor Lithology	Visual Core description	Induration	Drilling Dist.	Structures/Accessories	Bioturbation	Lithology	Color	Graphic Representation
		10-15 grad. cont.						5 11/12	
		ash mottles thr.		5-10				5 11/12	
		85-150 mod.		100					

Observer: _____ Date: _____

Expedition 323
Bering Sea

V1339

D

7

7

Site

Hole

Core

Section

Top Depth

Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
	V1339		100ms		100m			

Observer: _____ Date: _____

Expedition 323
Bering Sea

U1339

D

7

CC

Site

Hole

Core

Section

Top Depth

Scale

Graphic Representation

Color

Lithology

Bioturbation

Structures/Accessories

Drilling Dist.

Induration

Visual Core description

Major Lithology

Minor Lithology

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

11/25

PAL

11/25

Observer: _____ Date: _____

✓ SM

IODP Expedition 323
 SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	01339	D	7	H	5	38	38

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

Percent Texture		
Sand	Silt	Clay
	60	40

Comments:

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
	Framework minerals
10	Quartz
5	Feldspar
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	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
1	Pyrite
	Magnetite
	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
30	Centric
10	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

U1339 3 8 1
 Site Hole Core Section Top Depth Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
	Sy 12		mod.		Sy 12		28-72 grad. cont.	
	Sy 11						49-51 grad. cont.	
	fine ash	Sy 11					56-58 shaly cont.	
							58-71 light ash middle	
							70-83 green	
							82-100 dark shaly mixed	
							95-100 grad. cont.	
	Sy 11						100-110 greenish burrows	
							128-132 grad. cont.	
							132-150 greyish burrows	

Observer: _____ Date: _____

U1339

Site

D

Hole

8

Core

2

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	SY 4/11/11							
20								
30								
40								
50								
60								
70								
80								
90								
100								
110								
120								
130								
140								

light

73-81 ash patch

dark ash particles and blue-grey mottled thin.

Observer: _____

Date: _____

Expedition 323
Bering Sea

U1339

D

8

P

Site


Hole

Core

Section

Top Depth

Scale

	Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology	Visual Core description
10										
20										
30										
40										
50										
60										
70										
80										
90										
100										
110										
120										
130										
140		SY R.5/11								

137-140 grad. cont.
140-149 dark ss, grad. top, sharp base

Observer: _____ Date: _____

Expedition 323
Bering Sea

U1338
 Site Hole Core Section Top Depth Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
10	10							light granular layer
20	20							
30	30							gs-110 dark + brownish ad patches
40	40							
50	50							
60	60							
70	70							
80	80							
90	90							
100	100							
110	110							
120	120							
130	130							
140	140							

104
4/11

Observer: _____ Date: _____

Expedition 323
Bering Sea

U1339 Site D Hole 8 Core 6 Section 6 Top Depth Scale

Depth (cm)	Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
								Visual Core description	
10									
20		5/2							
30									
40									Red patches here.
50									
60									
70									
80									
90									
100									
110									
120									
130									
140									

Observer: _____ Date: _____

Expedition 323
Bering Sea

U1333 D 8 7
Site Hole Core Section Top Depth Scale

Graphic Representation

Color

Lithology

Bioturbation

Structures/Accessories

Drilling Dist.

Induration

Major Lithology

Minor Lithology

Visual Core description

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

70%
42

25%

15%

Visual Core description area with a horizontal line drawn across at approximately 52 cm depth.

Observer: _____ Date: _____

Expedition 323
Bering Sea

V1338

D

8

CC

Site

Hole

Core

Section

Top Depth

Scale

Graphic Representation

Color

Lithology

Bioturbation

Structures/Accessories

Drilling Dist.

Induration

Major Lithology

Minor Lithology

Visual Core description

10		104 10/10						
20			28-32			28-32		
30								
40		PXL						
50								
60								
70								
80								
90								
100								
110								
120								
130								
140								

Observer: _____ Date: _____

IODP Expedition 323
 SEDIMENT SMEAR SLIDE WORKSHEET

✓ SM

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	U1339	D	8	H	5	4	4

Sediment/Rock Name	Fine ash	Observer	Kelsie
--------------------	----------	----------	--------

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	
5	Crystal grain
	Quartz
	Feld.
95	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
	<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	U1339	D	8	H	6	102	102

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

Percent Texture		
Sand	Silt	Clay
	85	15

Comments:

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
	Framework minerals
20	Quartz
10	Feldspar
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
	Accessory/trace minerals
	Micas
	Biotite
	Muscovite
10	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
1	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
	Siliceous
	Radiolarians
	Spumellaria
1	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

Expedition 323
 Bering Sea

UK38 Site D Hole 9 Core 1 Section _____ Top Depth _____ Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
							<p>dark ash patches thr.</p> <p>69 isolated lamina</p>	

Observer: _____ Date: _____

Expedition 323
Bering Sea

U1338

D

9

2

Site

Hole

Core

Section

Top Depth

Scale

Graphic Representation

Color

Lithology

Bioturbation

Structures/Accessories

Drilling Dist.

Induration

Major Lithology

Minor Lithology

Visual Core description

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

104
114

104
114

104
114

104
114

48-48 bioturb. light ash layers

109-110 skull frag.

130-145 intermixed dark ash

Observer: _____

Date: _____

Expedition 323
Bering Sea

U1339

D

9

3

Site

Hole

Core

Section

Top Depth

Scale

10 20 30 40 50 60 70 80 90 100 110 120 130 140	Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology	Visual Core description
		S1412								
				Slight		Slight				35-40 grad. cont.
		S10911								90-94 intermixed light ash
										126-136 greenish
		S1412								
		S10911								

Observer: _____

Date: _____

Expedition 323
Bering Sea

U1339 0 9 4
Site Hole Core Section Top Depth Scale

	Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
10		not on							
20									
30					slight		slight		
40									
50									
60									
70									
80									
90									
100									
110									
120									
130									
140									
								bluish-greyish patches etc.	

Observer: _____ Date: _____

Expedition 323
Bering Sea

U1339

J

9

5

Site

Hole

Core

Section

Top Depth

Scale

Major Lithology	Minor Lithology	Visual Core description	Induration	Drilling Dist.	Structures/Accessories	Bioturbation	Lithology	Color	Graphic Representation
								10Y 4/1	
		blueish - thin						2.5Y 6/1	
		⁵¹ / ₇₄ light ash layer, sharp base (casts), grad. top						10Y 4/1	

Observer: _____ Date: _____

Expedition 323
Bering Sea

U1339

Site

①

Hole

9

Core

6

Section

Top Depth

Scale

	Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology	Visual Core description
10										
20										
30										bluish... etc.
40										
50										
60										
70										
80										90-95
90										
100										
110										
120										
130										
140										

Observer: _____ Date: _____

Expedition 323
Bering Sea

U1333

D

9

CC

Site

Hole

Core

Section

Top Depth

Scale

Graphic Representation

Color

Lithology

Bioturbation

Structures/Accessories

Drilling Dist.

Induration

Major Lithology

Minor Lithology

Visual Core description

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

10-20

pink

PAL

fine

fine

intermixed dark red

Observer: _____

Date: _____

Expedition 323
Bering Sea

U1339 D 10 1
 Site Hole Core Section Top Depth Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
	V1K20V		sp. dist.		sp. dist.			
10								
20								
30								green-blueish burrows etc.
40								
50								
60								100-120 grad. cont.
70								63 isolated clast, 1 cm φ, dark subang.
80								
90								
100								
110								
120								
130								
140								

Observer: _____ Date: _____

Expedition 323
Bering Sea

U1339 ① 10 2
Site Hole Core Section Top Depth Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
	grey	ss	slight	slight				
								44-50 intermixed ash

Observer: _____ Date: _____

Expedition 323
Bering Sea

U1380 D 10 3
 Site Hole Core Section Top Depth Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
	light		shaght					
					shaght		25-42 yellowish light green barrows, up to 2cm ϕ , subvertical	
			mod.				44-45 dark ash bed	
							60-75 light gray barrows, up to 2cm ϕ , subvertical	
							113-115	
	dark		shaght					
	dark							

Observer: _____ Date: _____

Expedition 323
Bering Sea

U-1233 D 10 4
 Site Hole Core Section Top Depth Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
10	10Y 4/1							
20	2.5Y 7/1						14-16 brownish ash patch	
30	10Y 4/1						48-26 whitish ash layer, bioturb. top, sharp base	
40								
50								
60								
70								
80	2.5Y 7/2						82-90 brownish ash layer, sharp top + base	
90								
100								
110	10Y 4/1						115-121 dark ash intermixed	
120							bluish-greyish nodules hor.	
130								
140								

Observer: _____ Date: _____

Expedition 323
 Bering Sea

U1838D
 Site Hole

AD
 Core

165
 Section

Top Depth Scale

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

Handwritten notes in the form:

- Color:* 21-24
- Bioturbation:* 30-35
- Drilling Dist.:* 30-40, 105, 118, 135, 145-146
- Major Lithology:* 21-24 intermixed dark shale
- Minor Lithology:* heavy (void) heavy
- Visual Core description:* Crack at 145-146

Observer: _____ Date: _____

Expedition 323
Bering Sea

U1338 D 10 7416
 Site Hole Core Section Top Depth Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
	10Y 4/1		shallow		shaly			
							37-45 intermixed ash	
							72-73 bioturb. light ash layer	
							81-84 dark ash layer	
							84-90 dark ash nodules	

Observer: _____ Date: _____

Expedition 323
Bering Sea

M1339 J 10 CF
 Site Hole Core Section Top Depth Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
	white		light		light		8-10 bioturb. ash layers	

Observer: _____ Date: _____

Expedition 323
Bering Sea

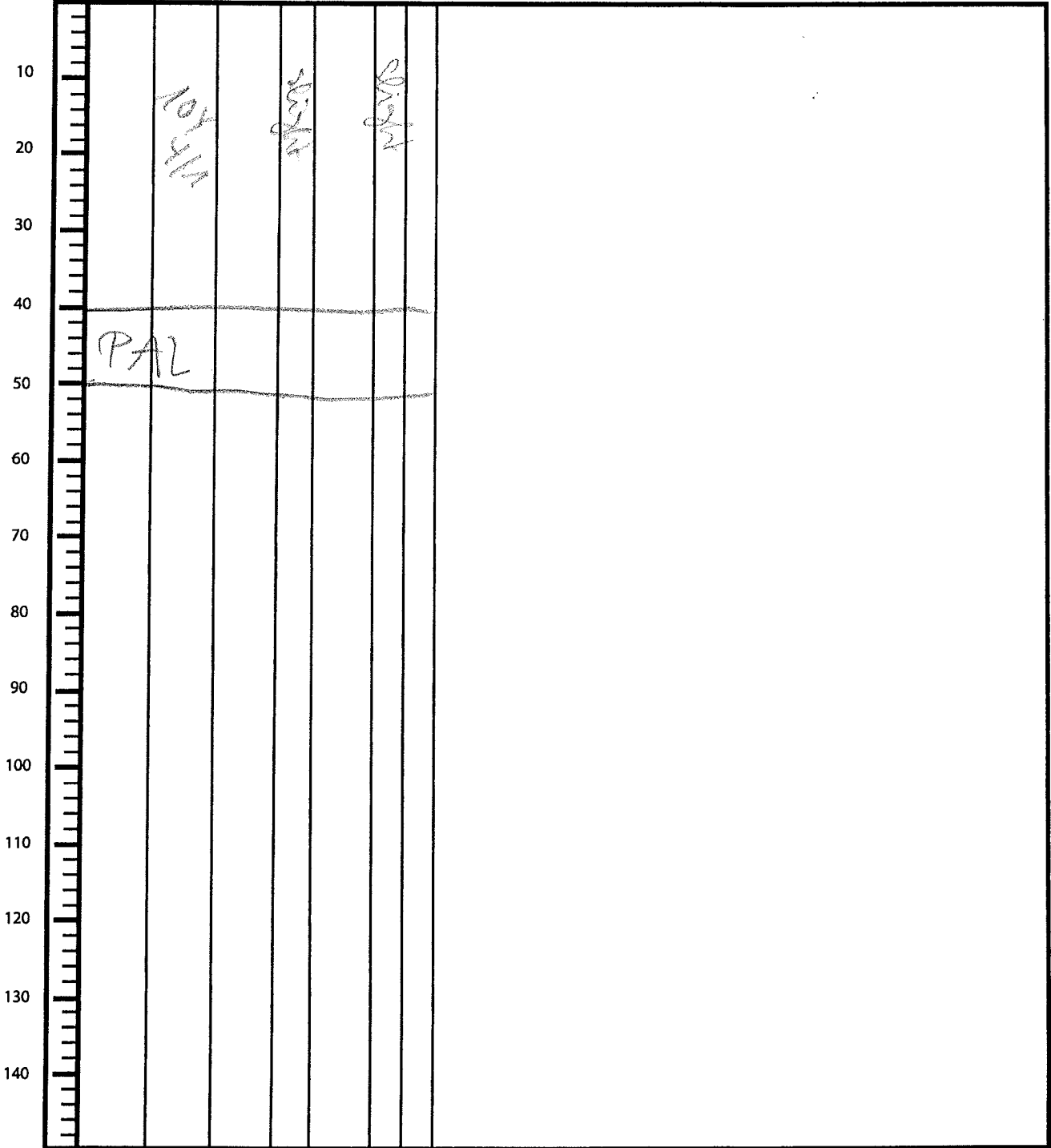
U1333 D 110 CC
Site Hole Core Section Top Depth Scale

Graphic Representation
Color
Lithology
Bioturbation
Structures/Accessories
Drilling Dist.
Induration

Major Lithology

Minor Lithology

Visual Core description



Observer: _____ Date: _____

Expedition 323
Bering Sea

U1335 D M A
Site Hole Core Section Top Depth Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
	NOYQ1A		tr. s.s.		10-15m			bluish-grey
10								
20								
30								
40								
50								
60								
70								
80								
90								
100								
110								
120								
130								
140								

Observer: _____ Date: _____

Expedition 323
Bering Sea

U1339
Site

D
Hole

M
Core

2
Section

Top Depth Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
	blueish greenish		poor				blueish-greenish ...	
							107-115 intermixed dark ash	
							Crinoid 0-9, 29-30 cm	

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

Observer: _____ Date: _____

Expedition 323
Bering Sea

U1339 D M 3
Site Hole Core Section Top Depth Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
	NOY M		pan		sharp		60-65 intermixed ash	
							83 isolated small pebble	
							97 "	

Observer: _____ Date: _____

Expedition 323
Bering Sea

U1339 ① M 4
 Site Hole Core Section Top Depth Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
	NOYAN							
			slight				32 shell frags.	
	SKYLS				slight		30-40 grad. cont.	
	NOYAN				slight		87-90 grad. cont.	
					slight		106-116	

Observer: _____ Date: _____

Expedition 323
Bering Sea

U1335 3 11 5
 Site Hole Core Section Top Depth Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
	10-42 4/1						10-42 intermixed ash patches	
			slight		slight		70-106 gaps at 79-80, 84-87, 100-103 cm	
							65-70 grad cont.	
	57-62 1/2-5				na. 0/1			
					slight		141-148 intermixed dark ash	

Observer: _____ Date: _____

Expedition 323
Bering Sea

41339 D M 6
Site Hole Core Section Top Depth Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
	5x 1/2		light					
			- in shale		light		35-45 grad. cont.	
							75-80 grad.	
	5x 1/2						98-105 intermixed dark ash	
							112 isolated clast 1cm ϕ , elongated, dark	

Observer: _____ Date: _____

Expedition 323
Bering Sea

U1339 5 11 7
 Site Hole Core Section Top Depth Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
		5745/2						
		20-30 grad.			20-30 grad.			
		mod.			20-27			
					35-43 gap			
					48-49 gap			
					60-61 gap			
					90-100 grad.			

Observer: _____ Date: _____

Expedition 323
Bering Sea

U1338

Site

D

Hole

11

Core

8

Section

Top Depth

Scale

Major Lithology	Minor Lithology	Visual Core description	Drilling Dist.	Induration	Structures/Accessories	Bioturbation	Lithology	Color	Graphic Representation
						24 38 43			shale

Observer: _____ Date: _____

Expedition 323
 Bering Sea

U1338 D M CC
 Site Hole Core Section Top Depth Scale

	Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
10		5/12/2		5/12/2		5/12/2			
20									
30									
40		PAL							
50									
60									
70									
80									
90									
100									
110									
120									
130									
140									

Observer: _____ Date: _____

Expedition 323
Bering Sea

U1339
Site

D
Hole

12
Core

1
Section

Top Depth

Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
10	V14K5		slight		mmf.		0-1 dark ash comp.	
20							1-3 dark ash intermixed	
30							35 isolated clast, 1 cm φ,	
40							subrounded	
50								
60								
70								
80								
90								
100								
110								
120								
130								
140								

Observer: _____ Date: _____

Expedition 323
Bering Sea

U1339 J 12 2
 Site Hole Core Section Top Depth Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
	5Y 4/2							
	5Y 3/1		mod		shale		0-55: dark grey burrows	
	5Y 4/2		60				24-25 dark red patch	
							55-68	
	5Y 4/3						100-110 gravel	

Observer: _____ Date: _____

Expedition 323
Bering Sea

41335
Site

D
Hole

12
Core

3
Section

Top Depth

Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
	6/1/15							
			slight			slight		
							37-38 intermixed dark ash layer	
							54, 56, 65-68, 80 dark ash layers	
							65-68 sharp base, grad. top	
			obscure				68-70 burrows filled with dark ash	
							85 sharp cont.	
	2/14/10						54-85 laminated interval (dark ash, chertom ooze, foram. rich detrital ooze)	
						mod.	uniform scale	
							cracks at 95, 106, 112, 124-125, 132, 136, 142 cm; gap 148-150	
							85-150 ash mottles	

Observer: _____ Date: _____

Expedition 323
Bering Sea

U1379
Site

D
Hole

12
Core

4
Section

Top Depth Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
	NOX10		slight		slight			ash nodules thr.
						SS		
						mod.		
						r		
						slight		

Observer: _____ Date: _____

Expedition 323
Bering Sea

U1339 J 12 5
Site Hole Core Section Top Depth Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology	Visual Core description
	white		slight			mod.			ash mottled str.

Observer: _____ Date: _____

Expedition 323
Bering Sea

U1339

D

12

6

Site

Hole

Core

Section

Top Depth

Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
	NOYAL							
			slight		slight		65-78 intermixed dark ash	
							75-80 grad.	
							90-93 grad.	
							98 clast, dark, subang., 1cm φ	
	NOYAL 4/2						136 clast, light, ang., 0.5cm	

Observer: _____ Date: _____

Expedition 323
Bering Sea

U1338 J 12 7
 Site Hole Core Section Top Depth Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
	NOY 412				slight			
						70 mod.		60 clast, light, rounded, 2 cm
						86		
						110 slight		
						mod.		

Observer: _____ Date: _____

Expedition 323
Bering Sea

U-1339 ① 12 8
 Site Hole Core Section Top Depth Scale

Graphic Representation

Color

Lithology

Bioturbation

Structures/Accessories

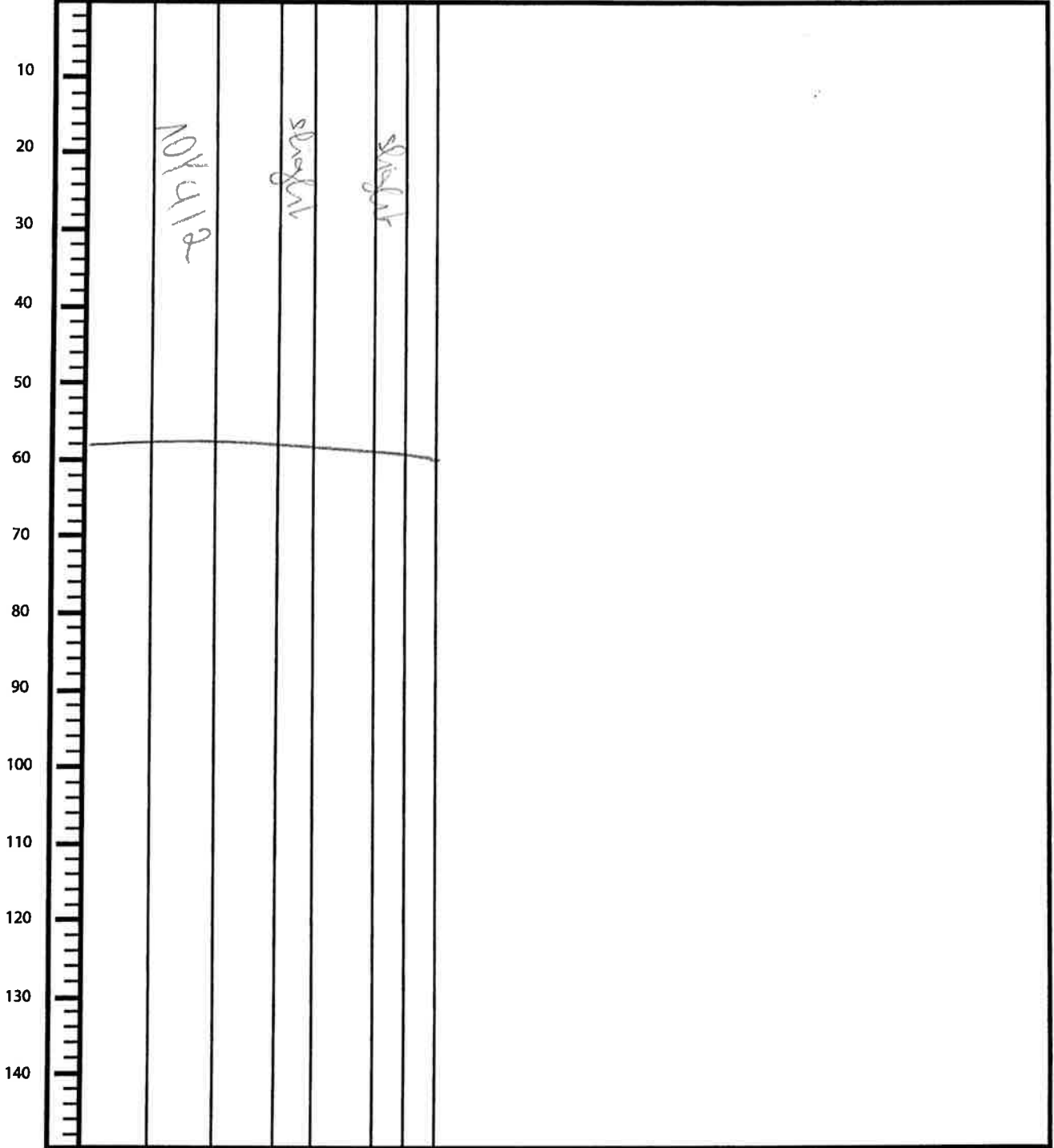
Drilling Dist.

Induration

Major Lithology

Minor Lithology

Visual Core description



Observer: _____ Date: _____

Expedition 323
Bering Sea

M-1339

D

12

CC

Site

Hole

Core

Section

Top Depth

Scale

Graphic Representation

Color

Lithology

Bioturbation

Structures/Accessories

Drilling Dist.

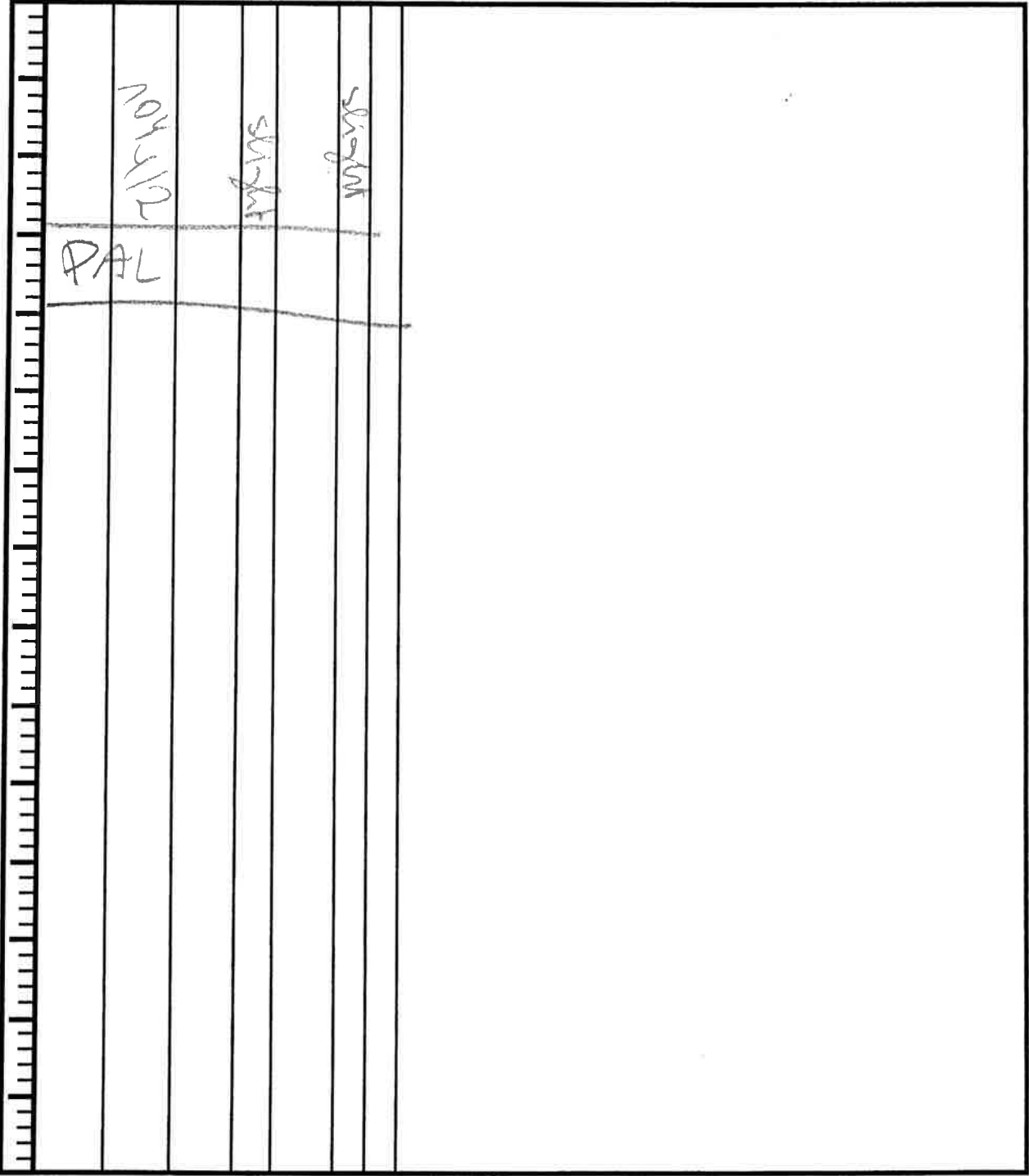
Induration

Major Lithology

Minor Lithology

Visual Core description

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



Observer: _____ Date: _____

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	U1339	D	12	H	3	74	74

Sediment/Rock Name	Foram-rich diatom ooze
--------------------	------------------------

Observer	Kelsie
----------	--------

Percent Texture		
Sand	Silt	Clay

Comments:

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

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

Expedition 323
Bering Sea

U1338 D 13 1
 Site Hole Core Section Top Depth Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
	light		light		light			
								Asl. patches, thin
								35-37 puncture 51 puncture

Observer: _____ Date: _____

Expedition 323
Bering Sea

U1338 D 13 2
Site Hole Core Section Top Depth Scale

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

light

light

light

14-20 ash patches

Observer: _____ Date: _____

Expedition 323
Bering Sea

U1338
 Site Hole Core Section Top Depth Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
	10x10		mod.		soft	52	10-11 clast, 2cm ϕ , reddish, subangular	
							96-136 large bluish-green, sh. burrows 2cm ϕ	
							120-142 light grey mudstone	
					mod.	115		
					soft			

Observer: _____ Date: _____

Expedition 323
Bering Sea

U1339 13 4
 Site Hole Core Section Top Depth Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
		NOY 912						
					slight		45-47 intermixed brown ash	
							69-103	
							123-125 dark ash patch	
							127-135 dark small burrows	
						69		
						mod		
						103		
						slight		

Observer: _____ Date: _____

Expedition 323
Bering Sea

U1339
Site

0
Hole

13
Core

5
Section

Top Depth

Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
	gray				shaly / mott	shaly		
							Shell frags.	
							53-108 dark ash mottled	

Observer: _____ Date: _____

Expedition 323
Bering Sea

U1339 D 13 6
Site Hole Core Section Top Depth Scale

		Major Lithology	Minor Lithology
Graphic Representation	Color	Lithology	Bioturbation
		Structures/Accessories	Drilling Dist.
		Induration	Visual Core description
10			
20	TINXON		
30			
40			
50			
60			
70			
80			
90			
100			
110			
120			
130			
140			
			192-195 dark and lumpy

Observer: _____ Date: _____

Expedition 323
Bering Sea

U1335 D 13 7
Site Hole Core Section Top Depth Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology	Visual Core description
	NOY 5/10		Slight		Streak	mod.			
									A42-145 dense mod. clay

Observer: _____ Date: _____

Expedition 323
Bering Sea

U1535 J 13 8
Site Hole Core Section Top Depth Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
	10Y 2/6		light		100-110 cm			

Observer: _____ Date: _____

Expedition 323
Bering Sea

U1339 D 13 CC
Site Hole Core Section Top Depth Scale

	Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology	Visual Core description
10		104								
20		4/12		slightly						
30				substr						
40										
50		PAL								
60										
70										
80										
90										
100										
110										
120										
130										
140										

Observer: _____ Date: _____

Expedition 323
Bering Sea

U1339 Site D Hole 14 Core 1 Section _____ Top Depth _____ Scale

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

Observer: _____ Date: _____

Expedition 323
Bering Sea

U1339 0 14 2
 Site Hole Core Section Top Depth Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
	<p>10-12 10-10</p>						<p>0-4 light ash patches</p> <p>20-24 grad.</p> <p>24-26 dark ash layer</p> <p>26 sharp cont.</p> <p>66-68 dark ash patch</p>	
	<p>10-10</p>		<p>slight</p>		<p>slight</p>			
						<p>mod.</p>		

Observer: _____ Date: _____

Expedition 323
Bering Sea

U1339 J 14 3
Site Hole Core Section Top Depth Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
	<p>104 4/2</p>		<p>slight</p>		<p>slight</p>	<p>mod</p>	<p>25 blueish-greyish. Hom.</p> <p>78-84 dark ash patch</p> <p>85-91 light ash patch</p> <p>98-125</p>	

Observer: _____ Date: _____

Expedition 323
Bering Sea

V1339

10

14

5

Site

Hole

Core

Section

Top Depth

Scale

Graphic Representation

Color

Lithology

Bioturbation

Structures/Accessories

Drilling Dist.

Induration

Major Lithology

Minor Lithology

Visual Core description

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

104
112

slight

slight

35-43 intermixed dark ash

94-105 large Skolithos,
blueish

Observer: _____

Date: _____

Expedition 323
Bering Sea

U1338
Site

D
Hole

14
Core

6
Section

Top Depth

Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
	White							
			slight		slight			
					80			
					105			
						slight		
								30-34 bioturb. ash lenses brownish

Observer: _____ Date: _____

Expedition 323
Bering Sea

U1335 D 14 7
Site Hole Core Section Top Depth Scale

							Major Lithology	Minor Lithology
Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Visual Core description	
	10 20 30 40 50 60 70 80 90 100 110 120 130 140						25-125 bluish-greyish burrows/cl...	

Observer: _____ Date: _____

Expedition 323
Bering Sea

U1338 D 14 8
Site Hole Core Section Top Depth Scale

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

Observer: _____ Date: _____

Expedition 323
Bering Sea

U1335 3 14 CC
Site Hole Core Section Top Depth Scale

	Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
10		White		Small					
20		White		Small					
30		White		Small					
40		White		Small					
50		White		Small					
60		White		Small					
70		White		Small					
80		White		Small					
90		White		Small					
100		White		Small					
110		White		Small					
120		White		Small					
130		White		Small					
140		White		Small					

Observer: _____ Date: _____

Expedition 323
Bering Sea

1339 D 154 1
Site Hole Core Section Top Depth Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
		D.S					0-2 dolomite ✓ 2-9 dolomite ✓	
							28. nodule moved to top ✓	
	104 4/1	D.S m					47-49 m. barite ✓ 52-56. barite ✓	
		67						
		52						
							124-128 shale ✓	
							145- ash ✓	

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

ash
254
25

Observer: _____ Date: _____

Expedition 323
Bering Sea

1339 D 15 2
Site Hole Core Section Top Depth Scale

	Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
10									
20									
30									
40		54 3/2							
50			D.W						
60									
70		25Y 25M							
80									
90									
100		10Y 4/1	DS						
110									
120									
130									
140									
								→ 2. Crack sharp ✓	
								55-40cm diatom ooze.	
								67-74 ash ✓	
								95-97 crack ✓	84-127 several cracks ✓

Observer: _____ Date: _____

Expedition 323
Bering Sea

1339 D 157 3
Site Hole Core Section Top Depth Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
	105-106 4/1 105-106		5					
							105-106 crack ✓	
							128-129 ^{milling} barrow ✓	
							136-138 barrow ✓	
							143/45 ash 2.5x 5/2 145 sec. 4m bioturbation	

dark grey
50441

Observer: _____ Date: _____

Expedition 323
Bering Sea

1339 Site D Hole 1511 Core 4 Section _____ Top Depth _____ Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
	504/11 ✓		m ✓				-4cm. bioturbation with ash ✓	
	104 4/11 ✓	DS					32cm shell ✓	
							34-50 g. b to diatom edge ✓	
	Olive	D.W ✓	S ✓				178-83 gas expansion ✓	
	54 4/12						115-120 crad ✓	
							125-127 crad ✓	
							144-147 crad ✓	
							147 g. b ✓	

104
4/11

Observer: _____ Date: _____

Expedition 323
Bering Sea

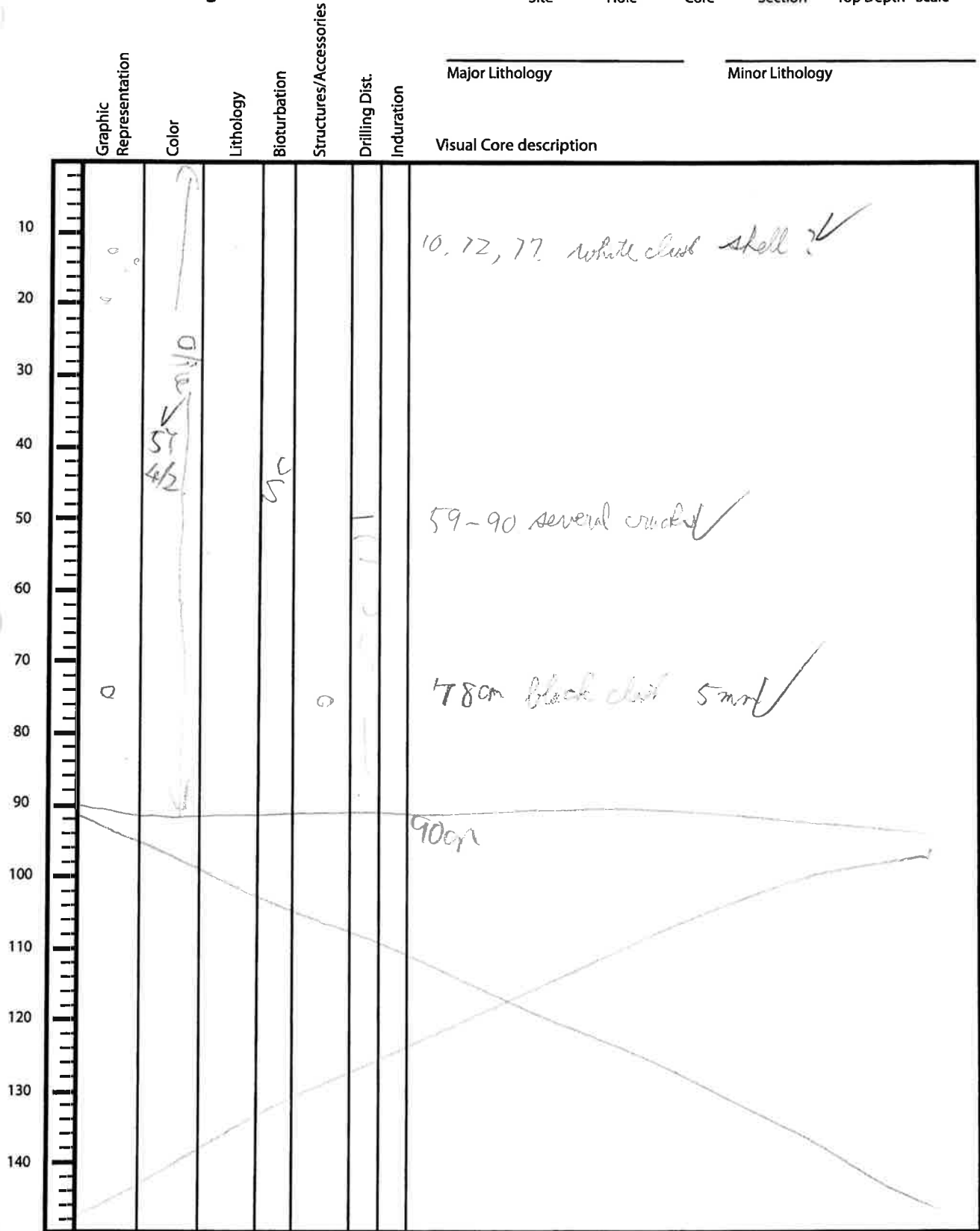
1339 Site D 154 Core 5
Top Depth _____ Scale _____

	Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology	Visual Core description
10										
20		dark								16cm mottling with ash ✓
30		10Y ✓ 4/1		5						27cm clean black 3m ✓
40				2						33cm shell fragment 1m ✓
50										
60										63. ✓ 50-77 several cracks ✓
70										
80		off								87cm mottling with ash ✓
90										89 ✓
100		5Y ✓ 4/2								98-99 ✓
110										
120										
130										
140										

Observer: _____ Date: _____

Expedition 323
Bering Sea

1339 D 1541 6
Site Hole Core Section Top Depth Scale



Observer: _____ Date: _____

Expedition 323
Bering Sea

1339 Site D Hole 15H CC Core Section Top Depth Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
	5Y 4M -2		S				fractured 20cm - 30cm	
							32cm	PAL
							38cm	

Observer: _____ Date: _____

IODP Expedition 323
 SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	V1339	DIS	H	2A	40cm		

Sediment/Rock Name	diatom ooze	Observer	Beth
--------------------	-------------	----------	------

B 65
 S-23
 V-12

Percent Texture		
Sand	Silt	Clay

Comments:

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
2	Clay Minerals
2	Chlorite
	Glaucinite
	Chert
	Zircon
	Ferromagnesium minerals
	Authigenic minerals
	Barite
	Phosphorite/Apatite
	Zeolite
	Opaque minerals
2	Pyrite
	Magnetite
	Fe-oxide
	Carbonates
	Calcite
	Dolomite
VOLCANICLASTIC GRAINS	
	Crystal grain
12	Vitric grain
	Lithic grain

Percent	Component
BIOGENIC GRAINS	
	Calcareous
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
	Siliceous
	Radiolarians
	Spumellaria
2	Nassellaria
	Diatoms
40	Centric
26	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

UThology

Expedition 323
Bering Sea

U1339 D 16H A11
 Site Hole Core Section Top Depth Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
10Y 4/1							77-80 grad	I
10Y 4/1			77				85-90 Diatom silt	II
			108				108 sharp	I
							Forams scattered ^{all} msc	
5Y 7/1			8-11				Fine Ash	I
5Y 7/1			41-45				SS-70. Diatom 00-20	I
5Y 10/3			106-112				Diatom 112-115 Paleolive	I
5Y 10/1			117-125					I
			131.5-135				Coarse Ash grey	I
5Y 4/1			65-71				104.5-65.5-grad dk grey	I
								I
								I
5Y 7/1			27				Fine Ash ^{TOP} grad 27-28	I
			30				B = sharp. light grey	I
								I

dark granish grey

High grey ash

A I
 I Same
 I F. ash g
 I above
 I
 I
 I

1
 2
 3
 4
 5
 6
 CC

Observer: Beth Date: _____

1 X

Expedition 323
Bering Sea

U1339 D 16H 1
Site Hole Core Section Top Depth Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
				1-7 Mot				
			Silt + Top 10					
			3-25		58-110 Mud Gas Exp			
					58		crack	
					62		crack	
					70		crack	
					94			
					99.5		crack	
					100.5			
			107-124 Plan		102.5		crack	
					106			
					133			
					134		puhc.	

Observer: Beth Date: _____

27

Expedition 323
Bering Sea

U1339 D 16H 2
Site Hole Core Section Top Depth Scale

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

Observer: Beth Date: _____

Expedition 323
Bering Sea

UB339 D 16H 3
Site Hole Core Section Top Depth Scale

Graphic Representation

Color

Lithology

Bioturbation

Structures/Accessories

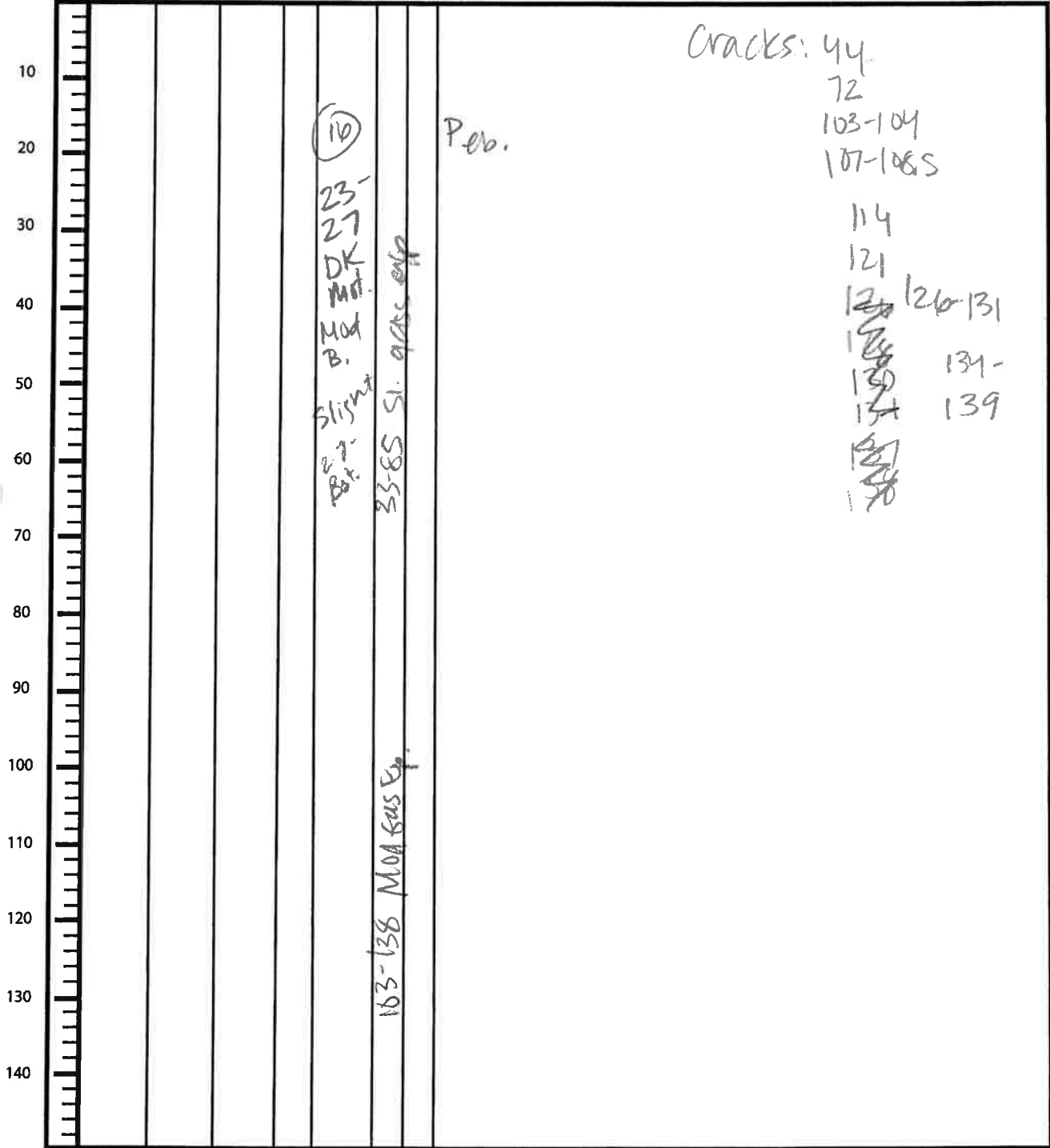
Drilling Dist.

Induration

Major Lithology

Minor Lithology

Visual Core description



Observer: Beth

Date: _____

X
4

Expedition 323
Bering Sea

U1339 D 16H 4
Site Hole Core Section Top Depth Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
					65-10-62 s. 137-146 M. s.			
				119-126				void-115-17
				140				DK Mat.
				144				140-143- Peb.

Observer: Beth Date: _____

Expedition 323
Bering Sea

U1339 D 16H 5
Site Hole Core Section Top Depth Scale

Graphic Representation

Color

Lithology

Bioturbation

Structures/Accessories

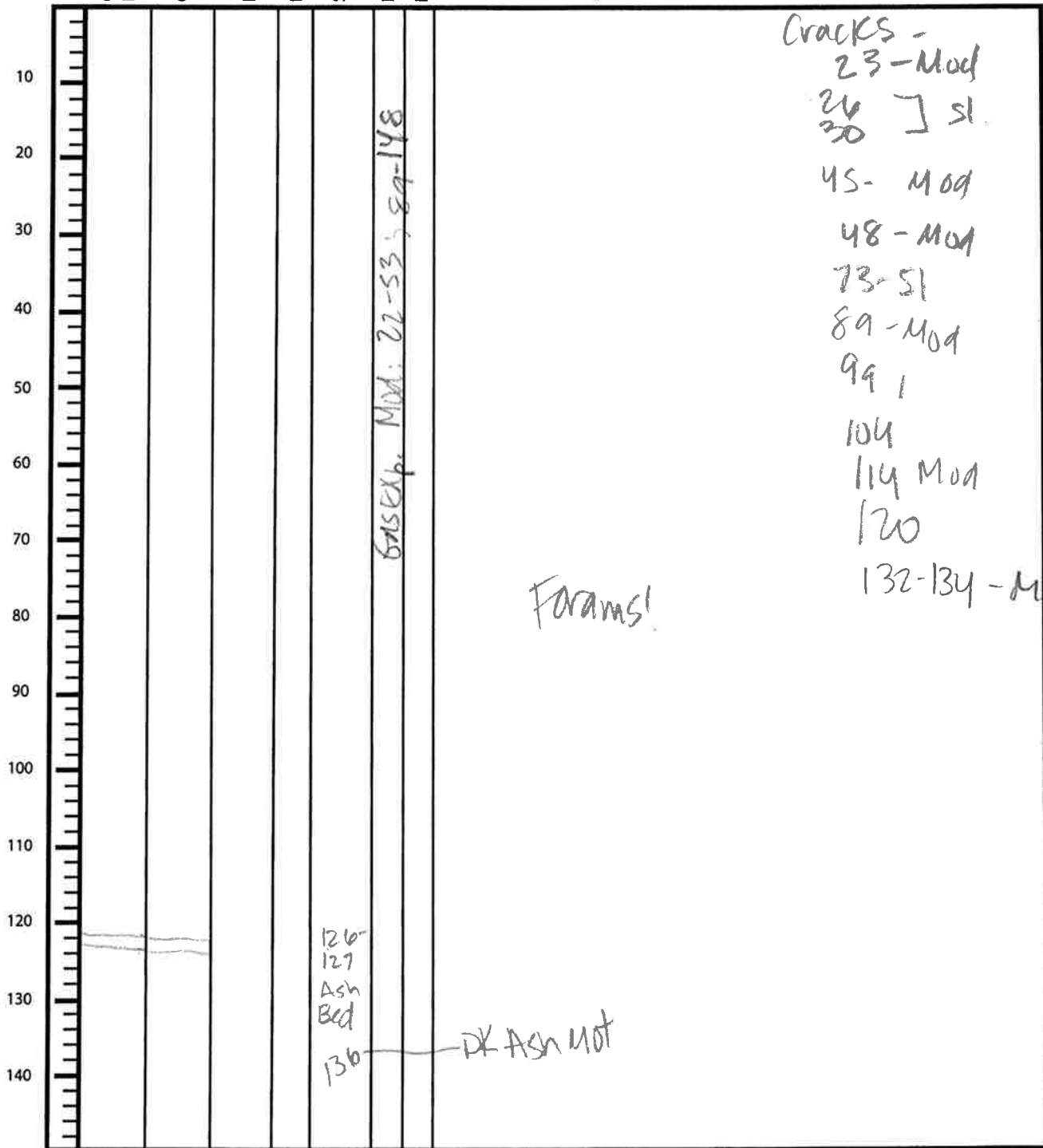
Drilling Dist.

Induration

Major Lithology

Minor Lithology

Visual Core description



Observer: Beth Date: _____

X
6

Expedition 323
Bering Sea

V1339 D 16H 4
Site Hole Core Section Top Depth Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
				95-30			Fines	
				21-60			DK Mot	
				(60)			Peb	
				99-96			DK Coarse Ash Mot	

Cracks 24-25 - Med.
80-109 - Med.

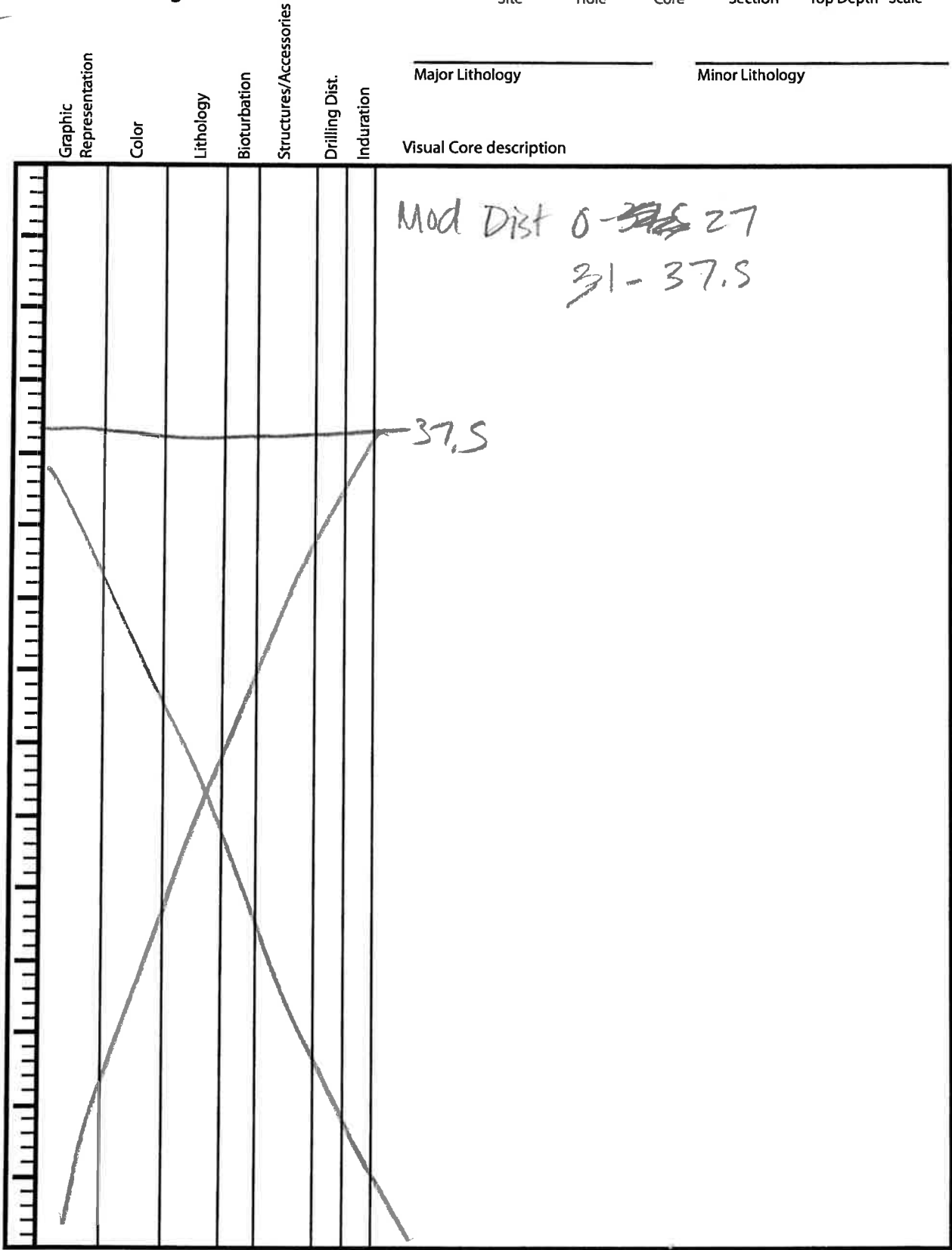
10
20
30
40
50
60
70
80
90
100
110
120
130
140

Observer: Bth Date: _____

X
C

Expedition 323
Bering Sea

U1339 D 16A CC
Site Hole Core Section Top Depth Scale



Observer: Beth Date: _____

X

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	1339	D	16	H	1	90	

Sediment/Rock Name	diatom silt	Observer	OKIWA
--------------------	-------------	----------	-------

Percent Texture		
Sand	Silt	Clay
3	87	10

Comments:

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
	Framework minerals
6	Quartz 5
11	Feldspar 10
	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
3	Pyrite 3
	Magnetite
	Fe-oxide
	Carbonates
	Calcite
	Dolomite
VOLCANICLASTIC GRAINS	
6	Crystal grain 5 15
17	Vitric grain 20 15
	Lithic grain

Percent	Component
BIOGENIC GRAINS	
	Calcareous
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
	Siliceous
	Radiolarians
	Spumellaria
	Nassellaria
57 58	Diatoms 50
	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	B39D	D	16	H	4	70	

Sediment/Rock Name	diatom ooze	Observer	Akiva
--------------------	-------------	----------	-------

Percent Texture		
Sand	Silt	Clay
0	90	10

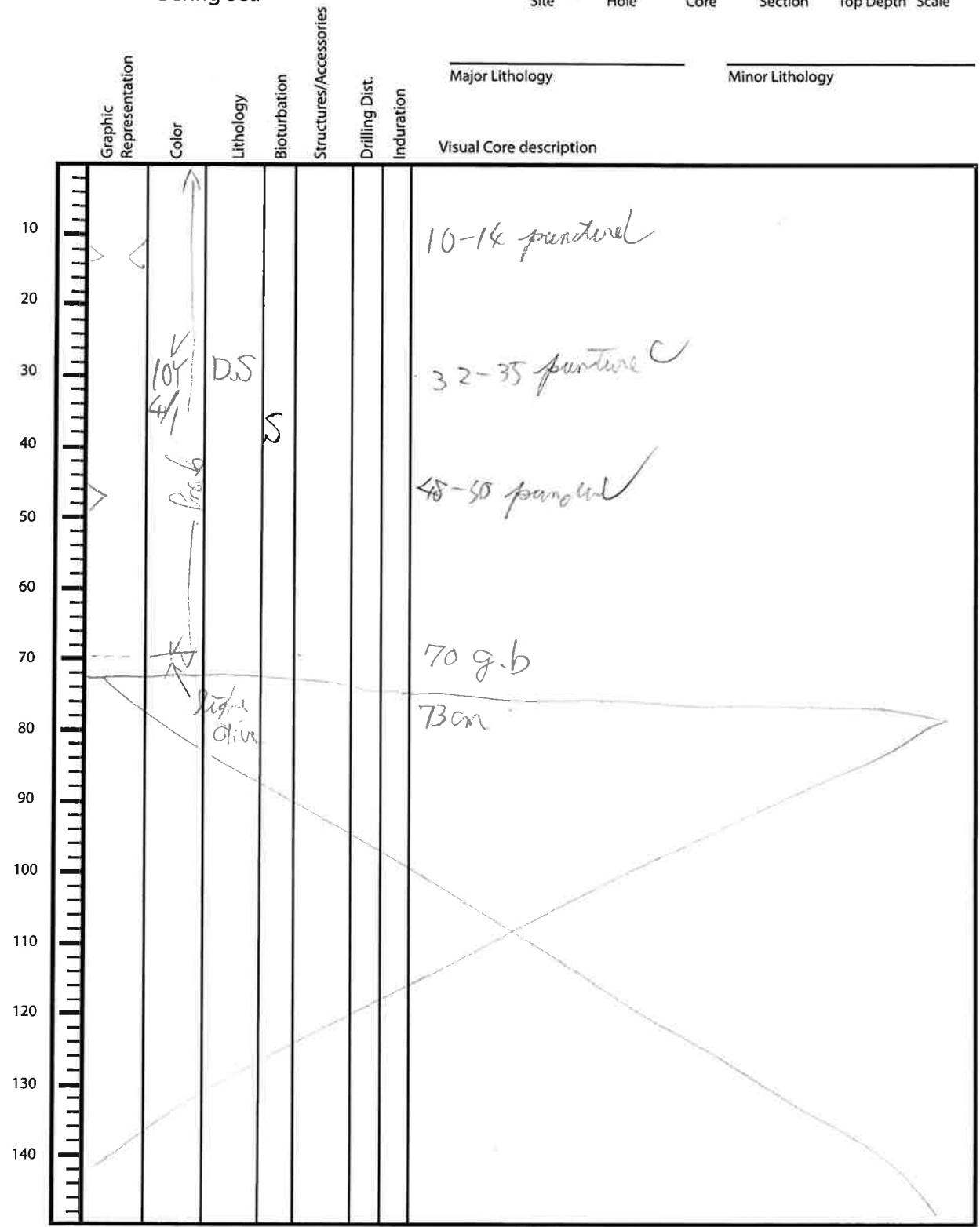
Comments:

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
	Framework minerals
11 5	Quartz 7
11 5	Feldspar 7
	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
2 10	Pyrite 1
	Magnetite
	Fe-oxide
	Carbonates
	Calcite
	Dolomite
VOLCANICLASTIC GRAINS	
5	Crystal grain 3
7 5	Vitric grain 7.3
	Lithic grain

Percent	Component
BIOGENIC GRAINS	
	Calcareous
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
	Siliceous
	Radiolarians
	Spumellaria
	Nassellaria
65 75	Diatoms 40.50 50 50
	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

1339 D 77 1
 Site Hole Core Section Top Depth Scale



31-35 / tab
 37-39 / tab
 39-40 / tab
 40-42 / tab

Observer: _____ Date: _____

Expedition 323
Bering Sea

1339 D 17 2
 Site Hole Core Section Top Depth Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology	Visual Core description
	<p>← light grey</p> <p>58 4/2</p>	?	5						<p>ash layer 24-25. bioturbated</p> <p>76cm 1cm pebble black ✓</p> <p>100-104 Gas expansion ✓</p>

Observer: _____ Date: _____


Expedition 323
Bering Sea

1339 D 17 3 _____
 Site Hole Core Section Top Depth Scale

	Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
								Visual Core description	
10									
20									
30									
40									
50		SY 4/2							
60									
70									
80									
90									
100									90cm g.b
110									98-100
120									5 pebbles, light brown ✓
130									75cm ca. 7cm.
140									SS diatom ooze.

Observer: _____ Date: _____

Expedition 323
Bering Sea

1339 D 17 
 Site Hole Core Section Top Depth Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
	dark olive						30cm SS	
	grey						43-46 white pebbles 2-3mm ✓	
68	grey	g.v. ash					68-75 highly bioturbated ash 2.5x 2.5/1 ✓	
75							88-90 crack ✓	
	grey						101-103. crack ✓	
							133-136 >2cm pebbles ✓	

Observer: _____ Date: _____

Expedition 323
Bering Sea

1339 D 17 5
Site Hole Core Section Top Depth Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
5-7			0 m ✓				B-7 mottling with ast. ✓	
	50-51 52-59 54 hard		5				50-54 dolomite filling 52-59 nodule. ✓	
							109-110 barrow schistose? ✓	

Observer: _____ Date: _____

Expedition 323
Bering Sea

1339 D 17 6
Site Hole Core Section Top Depth Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
	104 4/1 bwb	D.S						
	73 g	S					73. g. b	
	0/nc bw							

Observer: _____ Date: _____

Expedition 323
Bering Sea

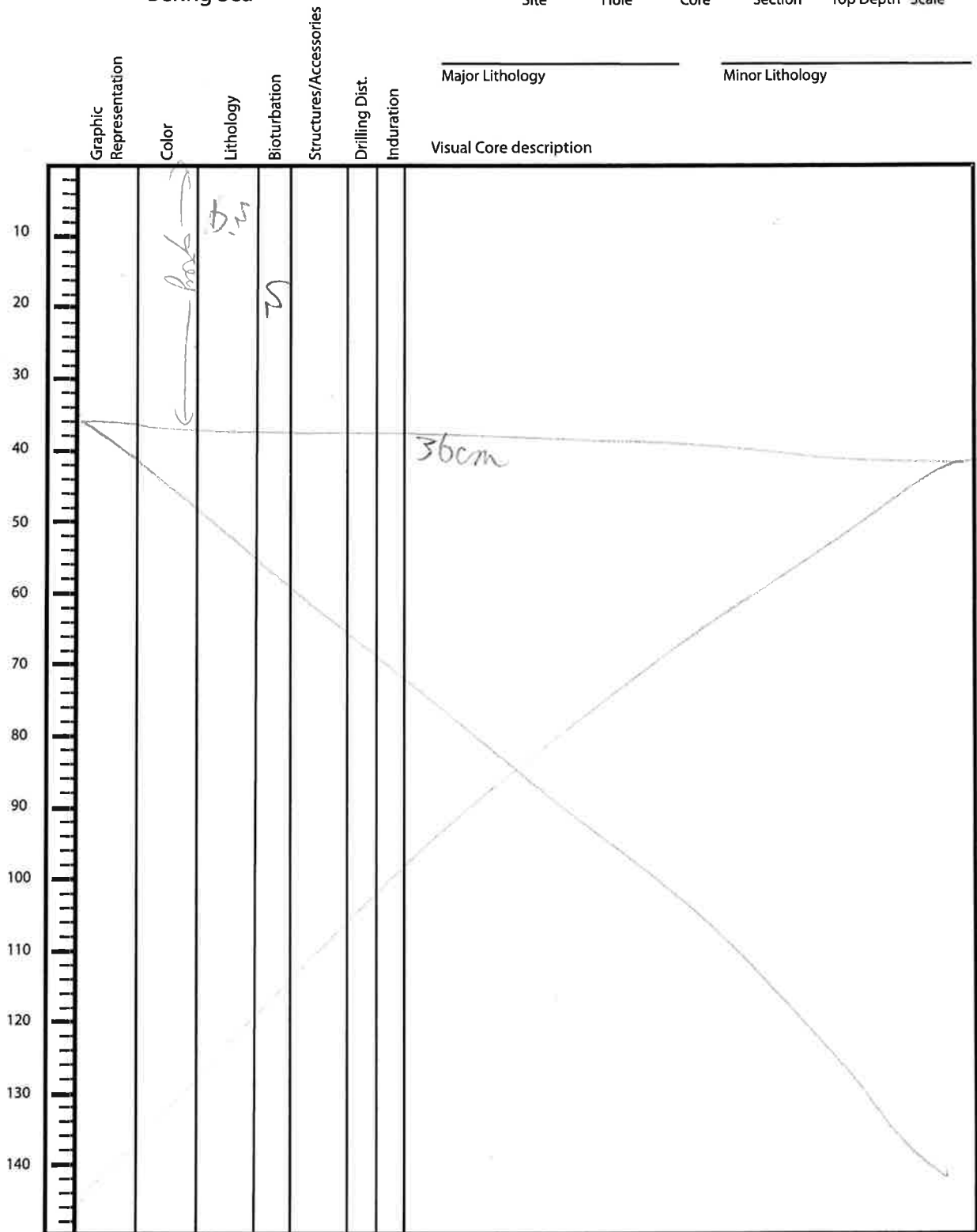
1339 D 17 7
Site Hole Core Section Top Depth Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
	5Y 3/2						12-130 ⁺ 2 white pebbles 3-7mm ✓	
		D.W						
							40-42 ash layer (mottled) 2.5Y 2.5/1 bioturbation ✓	
	olive						53 g.b	
	grey						59-83 ash	
		ash					76-83 laminated ✓	
		5Y 5/1						
		ash					115-116 1.5 on black pebble ✓	
		10Y 4/1					116-123 ash ✓	
		7.5						
		ash						
		7.5						
		10Y 4/1						
		12.5						

Observer: _____ Date: _____

Expedition 323
Bering Sea

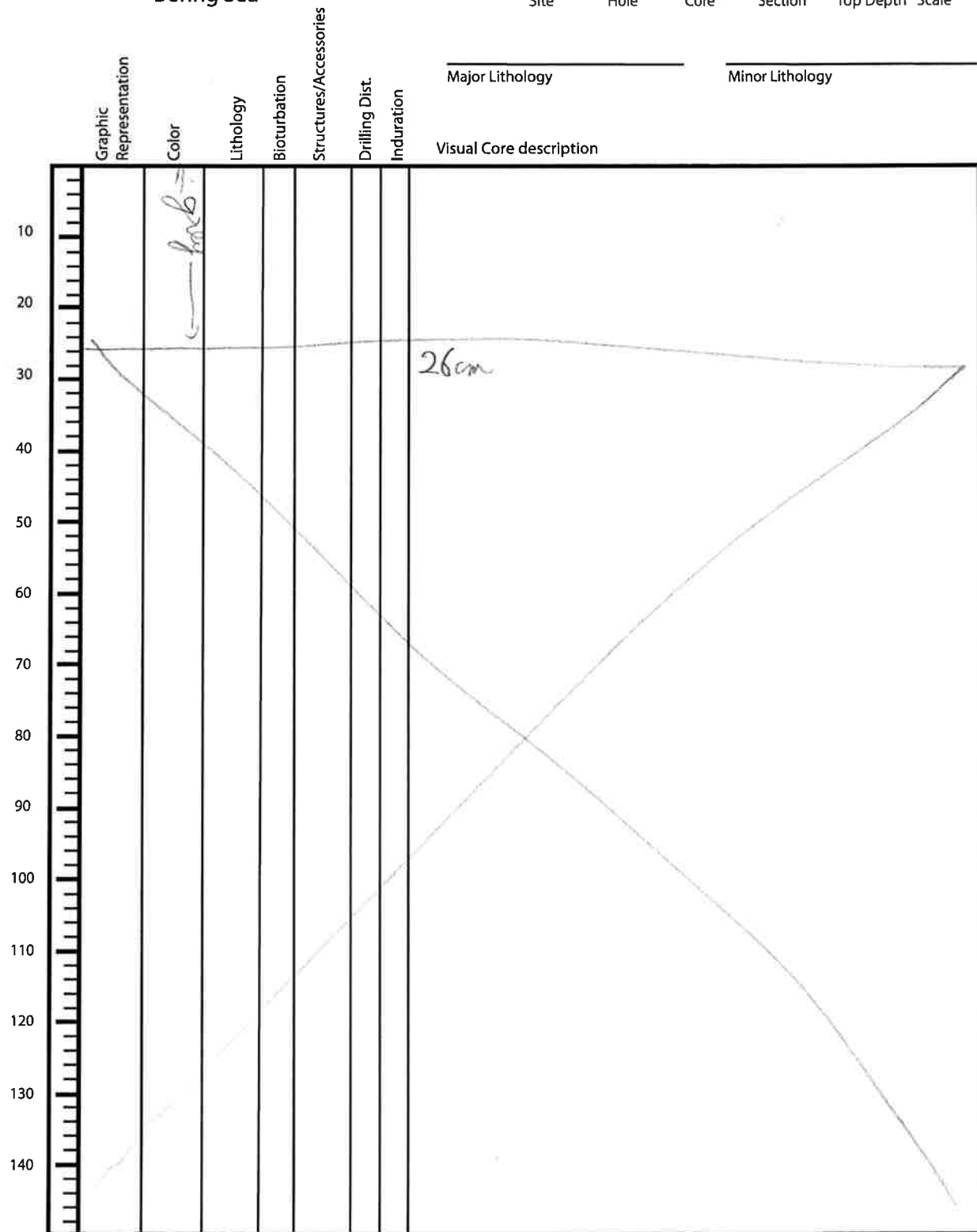
1339 D 17 8
Site Hole Core Section Top Depth Scale



Observer: _____ Date: _____

Expedition 323
Bering Sea

1339 D 17 CC
Site Hole Core Section Top Depth Scale



Observer: _____ Date: _____

X

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	U1339	D	17	H	4A	30cm	

Sediment/Rock Name	Diatom ooze	Observer	B. Chen
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B 64
S 31
V-S

Percent Texture		
Sand	Silt	Clay
	90	10

Comments:

More silic than other SS

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

X

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	U1339	D	17	4	3	105	

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

Percent Texture		
Sand	Silt	Clay

Comments: B-77
S-18
V-5

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

Expedition 323
Bering Sea

V1339 Site D Hole 18 Core XII Section _____ Top Depth _____ Scale

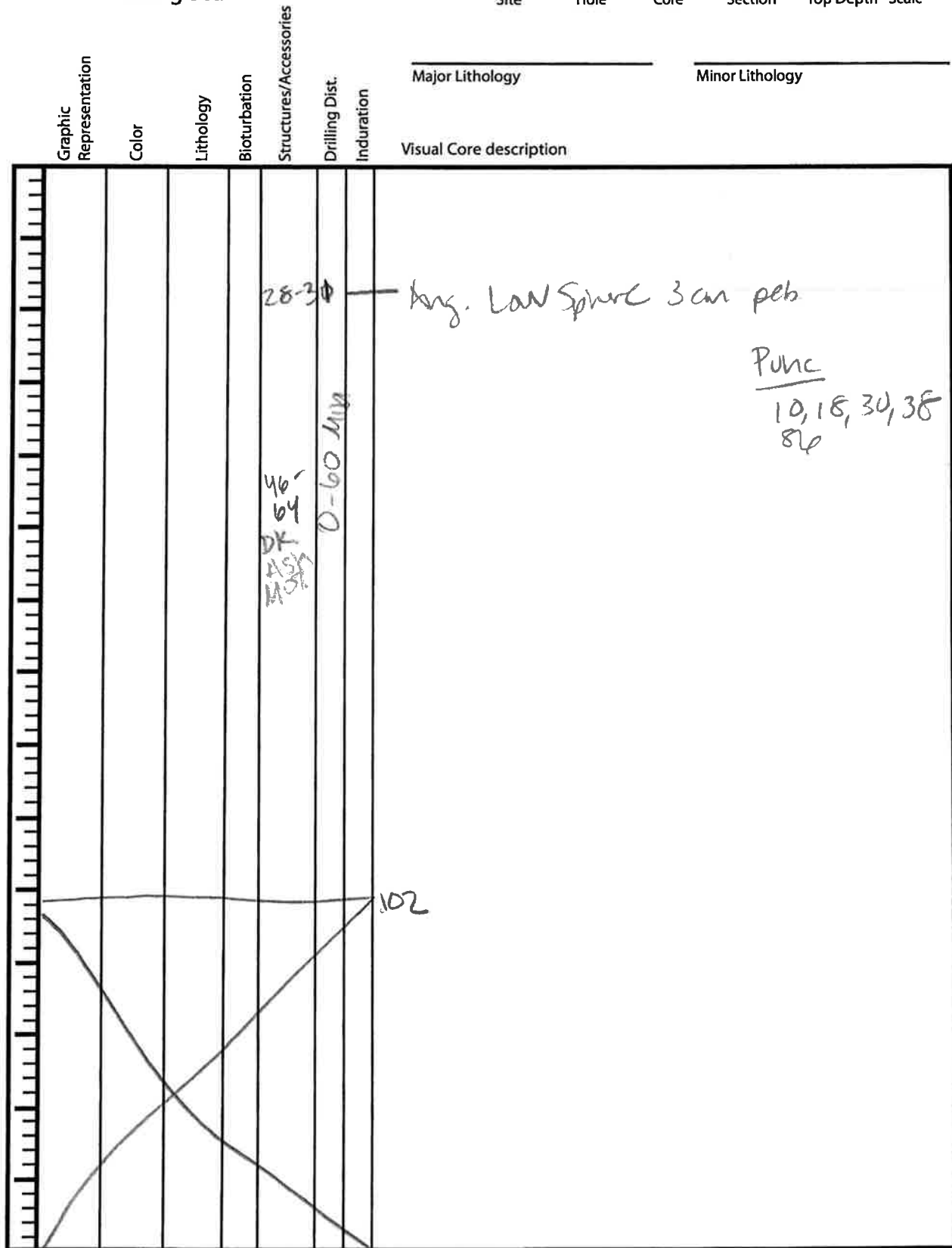
Sect.

Depth (cm)	Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
								Visual Core description	Lithology
0-10	104 4/1						I		
10-20	104/1	1-5 5-5					D	early dolomite s/s?	
20-30	57/13	30-31 G 34-36 G					S		
30-40							I		
40-50	54/12	31 75					II SS G	Diatom ooze	
50-60							I		
60-70		31					I G		Ash - black
70-80		140					II G		Dolomite - pale olive
80-90							I		
90-100									
100-110	54/13	10 14 16 70 82 84					A S I grad A	grad s/s SS-40 Diatom ooze	
110-120							I		ash = black
120-130		14 G					I S		
130-140	104 4/1						III	SS	D-rich silt

Observer: Beth Date: _____

Expedition 323
Bering Sea

U1339 D 18 1
 Site Hole Core Section Top Depth Scale



Observer: Beth Date: _____

X
2

Expedition 323
Bering Sea

01339 Site D 18 Core 2 Section
Top Depth Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
				(25) gran		17-39 gran exp 51		Cratics 73 96 105 107 111 127
				(54) gran		70-140 gran OL		
				(W)		granular		

Observer: Behr Date: _____

3 X

Expedition 323
Bering Sea

V1339 Site D Hole B Core 3 Section _____ Top Depth _____ Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
Visual Core description							Crack 17	
							30	
							34	
							46	
							55-55.5	
							60 96	
							74 100	
							82.5 103	
							88	
							Void 55-55.5	
							67-68.5	
							110-111	
							113.5-114.5	
							115 - P/B	

St. biot ALL

96-110 base exp. - 9

Observer: Beth Date: _____

+

Expedition 323
Bering Sea

U1339 Site D Hole 18 Core 4 Section
Top Depth Scale

Graphic Representation

Color

Lithology

Bioturbation

Structures/Accessories

Drilling Dist.

Induration

Major Lithology

Minor Lithology

Visual Core description

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

22
60m

10-115 Gas Pyl. MCA

val 84-855
Crack 18
26
30
51
63-80
89
91
100
112
120
123
127
133

Observer: Behn Date: _____

4
5

Expedition 323
Bering Sea

V1339

Site

D

Hole

18

Core

5

Section

Top Depth

Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
10								
20								
30								
40								
42-43							black pumice!	F. Ash Layer
50							fine	
60								
70								
80								
90								
100								
110								
120								
130								
140								

Observer: _____ Date: _____

57

Expedition 323
Bering Sea

U1339 D 18 6
Site Hole Core Section Top Depth Scale

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

70-125 fast exp.

98-102

POOS

6-136-7-10 med. lignite

Observer: _____ Date: _____

X

Expedition 323
Bering Sea

V1339
Site

D
Hole

18
Core

7
Section

Top Depth

Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
					19			Cracks
								123
								108 S
								102
								7
								57
								76
								Cracks
								58-64 Mo
								22-53 S1
								70-140 S1

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

19
10-136 S1
105
100

F. an
1+ gray Mot.

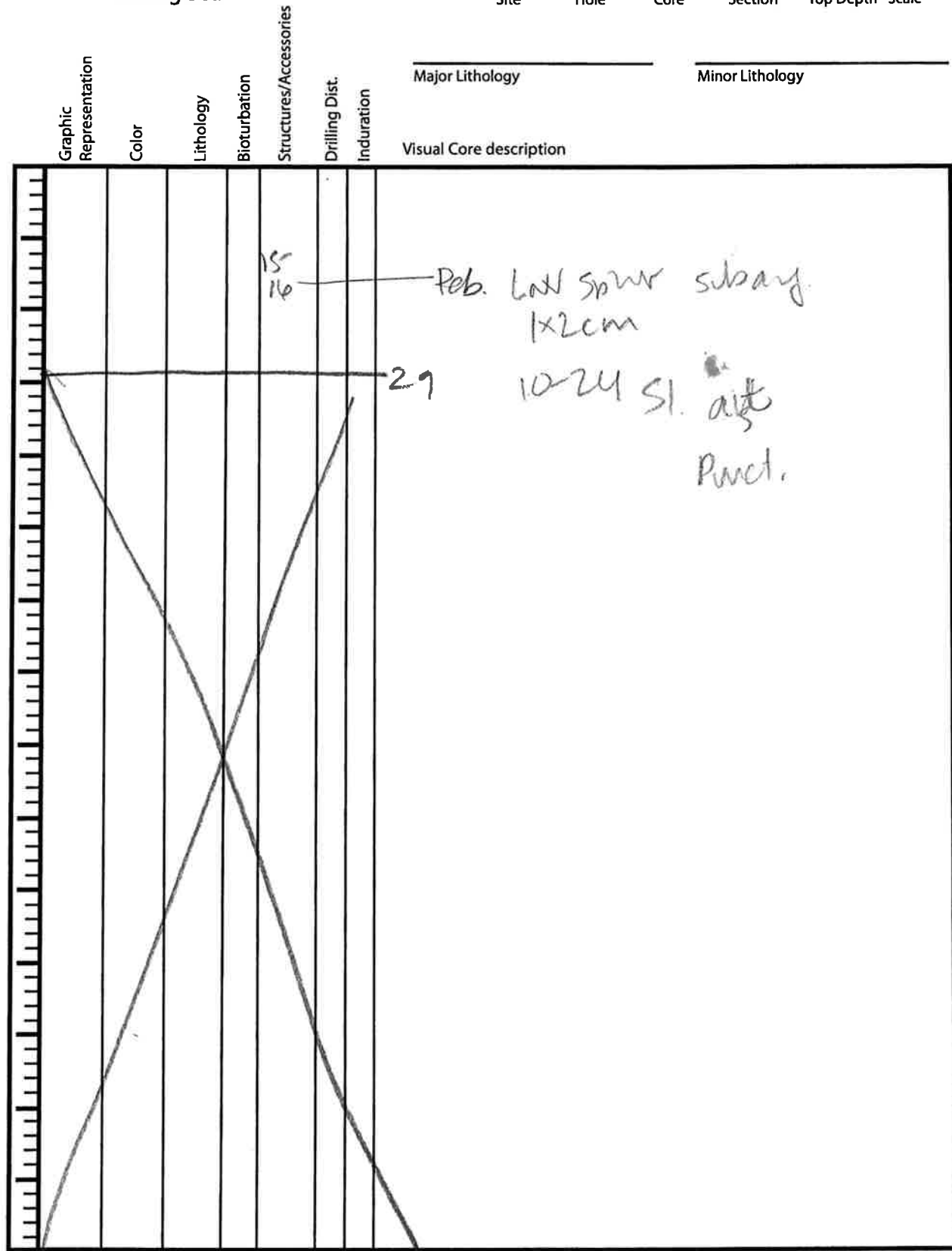
1+ gray f. sh mot

Cracks
123
108 S
102
7
57
76
Cracks
58-64 Mo
22-53 S1
70-140 S1

Observer: _____ Date: _____

Expedition 323
Bering Sea

U1339 D 18 CC
Site Hole Core Section Top Depth Scale



Observer: _____ Date: _____

✓ SM

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	U1339	D	18	A	6A	40cm	

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

B 75
S 18
V 7

Comments:

Percent Texture		
Sand	Silt	Clay

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
	Glaucinite
	Chert
	Zircon
	Ferromagnesium minerals
	Authigenic minerals
	Barite
	Phosphorite/Apatite
	Zeolite
	Opaque minerals
	Pyrite
	Magnetite
3	Fe-oxide
	Carbonates
	Calcite
	Dolomite
VOLCANICLASTIC GRAINS	
	Crystal grain
7	Vitric grain
	Lithic grain

Percent	Component
BIOGENIC GRAINS	
	Calcareous
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
	Siliceous
	Radiolarians
	Spumellaria
	Nassellaria
70	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

✓ SM

IODP Expedition 323
 SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	V1339	D	18	H	CC	10	

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

B-15
 S-75

Percent Texture		
Sand	Silt	Clay
	80	20

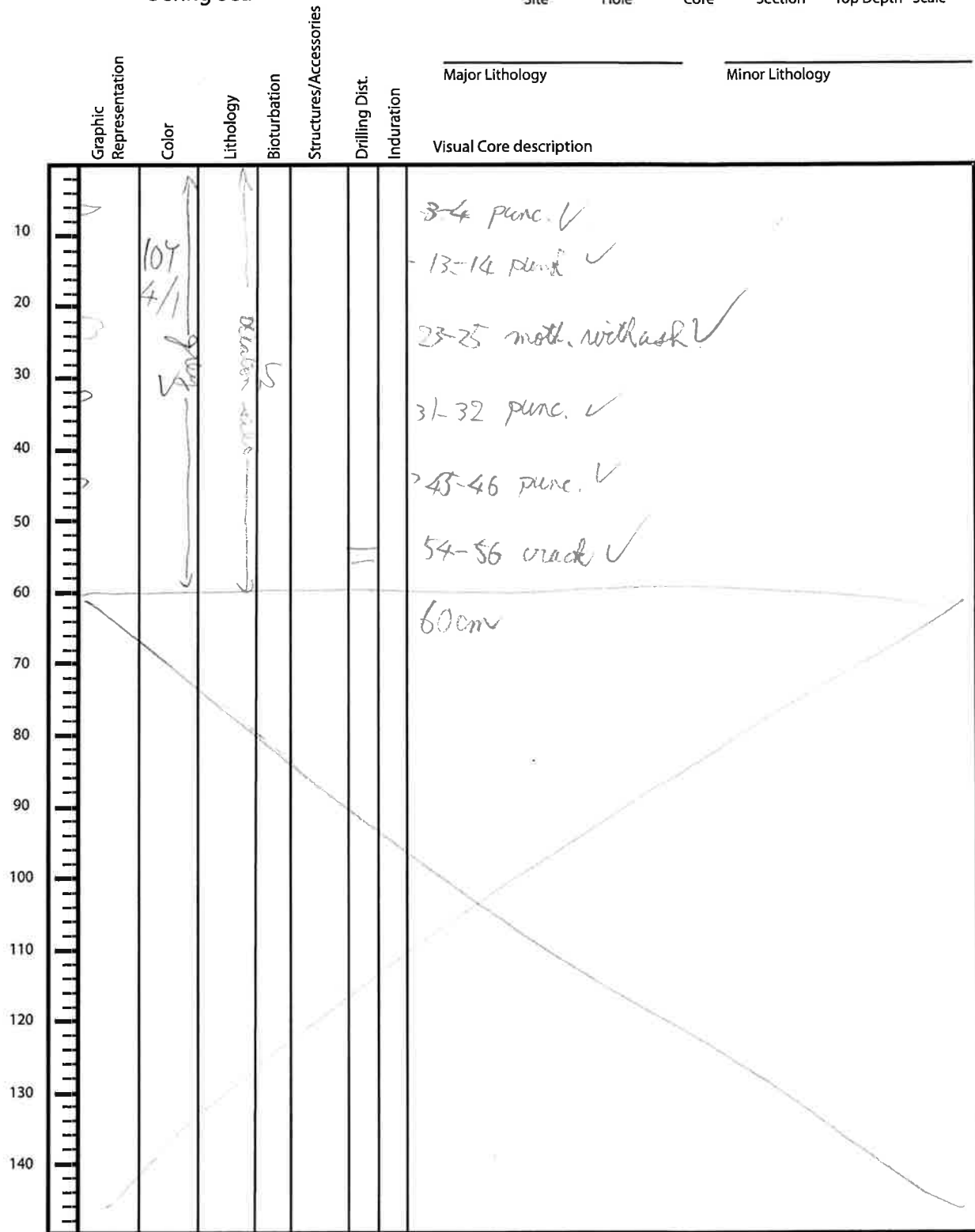
Comments: V-10

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

1339 Site D Hole 19 Core 1 Section _____ Top Depth _____ Scale



L&C.
59-3'
M6.5
2-6
B&F
6-8'
A
8-10
J&D
10-12
Core.

Observer: _____ Date: _____

Expedition 323
Bering Sea

1339 D 79 2
Site Hole Core Section Top Depth Scale

	Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
10									
20		10Y 4/1							
30									
40									
50								44cm ss. diatom. silt	
60									
70									
80		VOID						75 83	
90								84, 86 2 cracks	
100									
110									
120									
130									
140									

Observer: _____ Date: _____

Expedition 323
Bering Sea

1339 Site D Hole 19 Core 3 Section _____ Top Depth _____ Scale

	Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology	Visual Core description
10										
20	○									21-22. mottling with ash ✓
30										
40										
50										
60	⊙	grey 104 4/1		5						57-60. pebbles. white 1mm - 7mm
70										
80										
90	⊙									93-95. mott. with cream ash ✓
100										
110										105-119 several cracks ✓
120										
130										
140										

Observer: _____ Date: _____

Expedition 323
Bering Sea

1339 Site D Hole 19 Core 4 Section _____ Top Depth _____ Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
0	↑	↑	↑					
10								
20								
30								
40	↓	↓	↓					
50	4/4							
60	4/1							
70								
80								
90								
100	↓	↓	↓				97cm g.b.	
110							105-106 crack.	101-115 several cracks.
120	0/mc	P.W	↓					
130	5/4							
140	↓	↓	↓					

Observer: _____ Date: _____

Expedition 323
Bering Sea

1339 Site D Hole 19 Core 5 Section _____ Top Depth _____ Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
	olive 5Y 4/2		54					
							73-76 sampling	
							102-103 core	
							12	
			170					
	5Y 3A		70					139-142 mottling with ash ✓

Observer: _____ Date: _____

Expedition 323
Bering Sea

1339 Site D Hole 19 Core 6 Section _____ Top Depth _____ Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
0	01:10 5Y 3/2		m ✓				12 path ✓	
0	3/2		5 ✓				30cm mottling with ash ✓	
8 ✓ 15 ✓	3/4 4/1 ash						50cm pure ✓ 55-60 ash ✓	
	5Y 4/2							
						C	114 pure	

Observer: _____ Date: _____

Expedition 323
Bering Sea

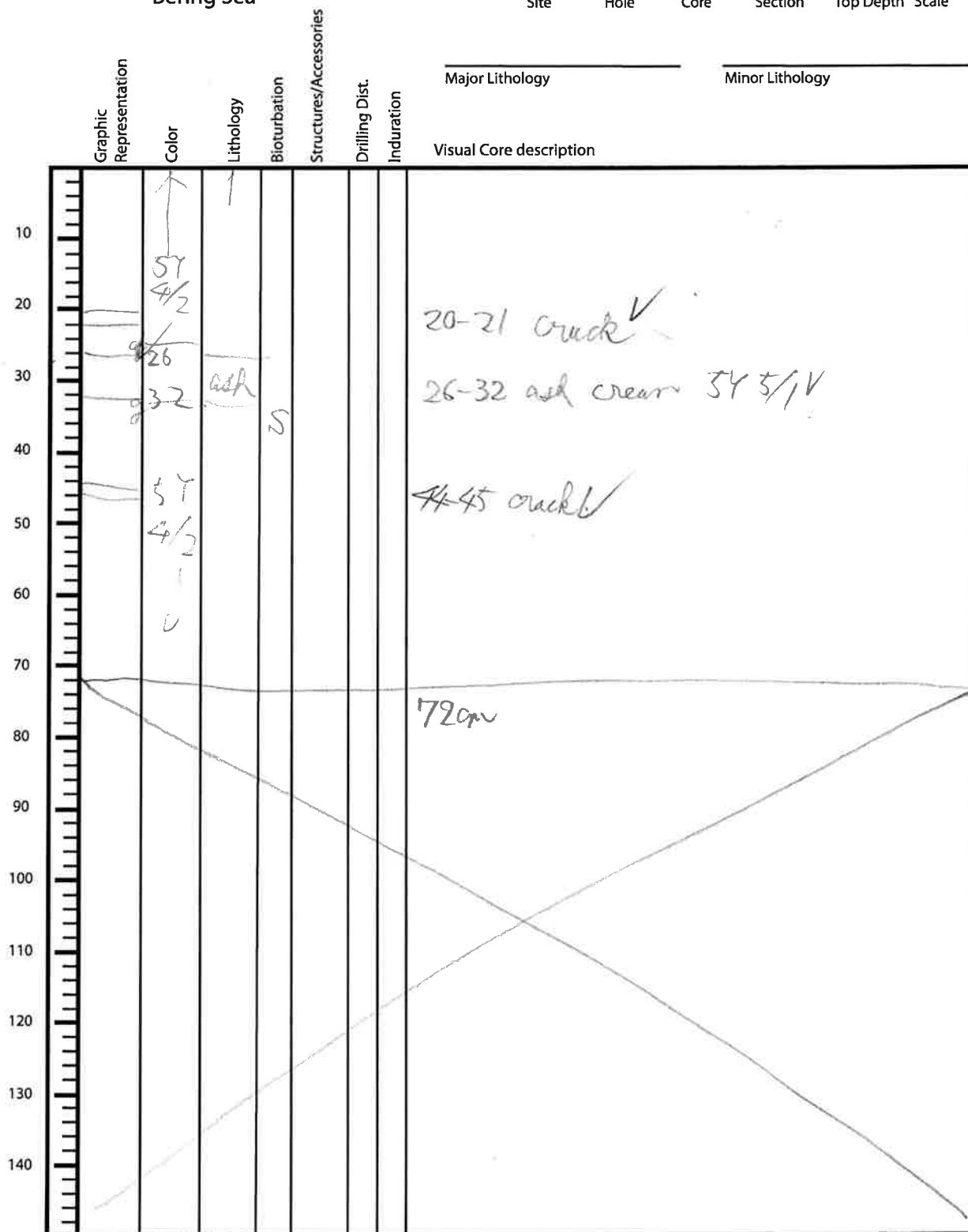
1339 Site D Hole 19 Core 7 Section _____ Top Depth _____ Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
	olive 5Y 4/2	RW-						
	olive 5Y 4/3	S					26 g	
	olive 5Y 4/2						60cm ss diatom ooze (dolomite filling) 70 g.	
							95cm	

Observer: _____ Date: _____

Expedition 323
Bering Sea

1339 D 19 8
Site Hole Core Section Top Depth Scale



Observer: _____ Date: _____

Expedition 323
Bering Sea

1339 Site D Hole 19 Core CC Section _____ Top Depth _____ Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
	Olive	D.W						
	5Y 4/2		5				27-28 coral ✓	
							34 cm fractured ✓	
							50 cm	PAL
							60 cm	

Observer: _____ Date: _____

✓ SM

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	1339	D	79	H	2	44	

Sediment/Rock Name	diatom silt	Observer	akira
--------------------	-------------	----------	-------

Percent Texture		
Sand	Silt	Clay
12	76	12
3	20	3

Comments:

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
Framework minerals	
22	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	
9	Pyrite 2
	Magnetite
	Fe-oxide
Carbonates	
	Calcite
	Dolomite
VOLCANICLASTIC GRAINS	
9	Crystal grain 2
14	Vitric grain 3
	Lithic grain

Percent	Component
BIOGENIC GRAINS	
Calcareous	
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
Siliceous	
	Radiolarians
	Spumellaria
	Nassellaria
5	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

✓ SM

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
393	1339	D	19	H	7	60.	

Sediment/Rock Name	diatom ooze. (dolomite rich)	Observer	Akira
--------------------	------------------------------	----------	-------

Percent Texture		
Sand	Silt	Clay
	80	20

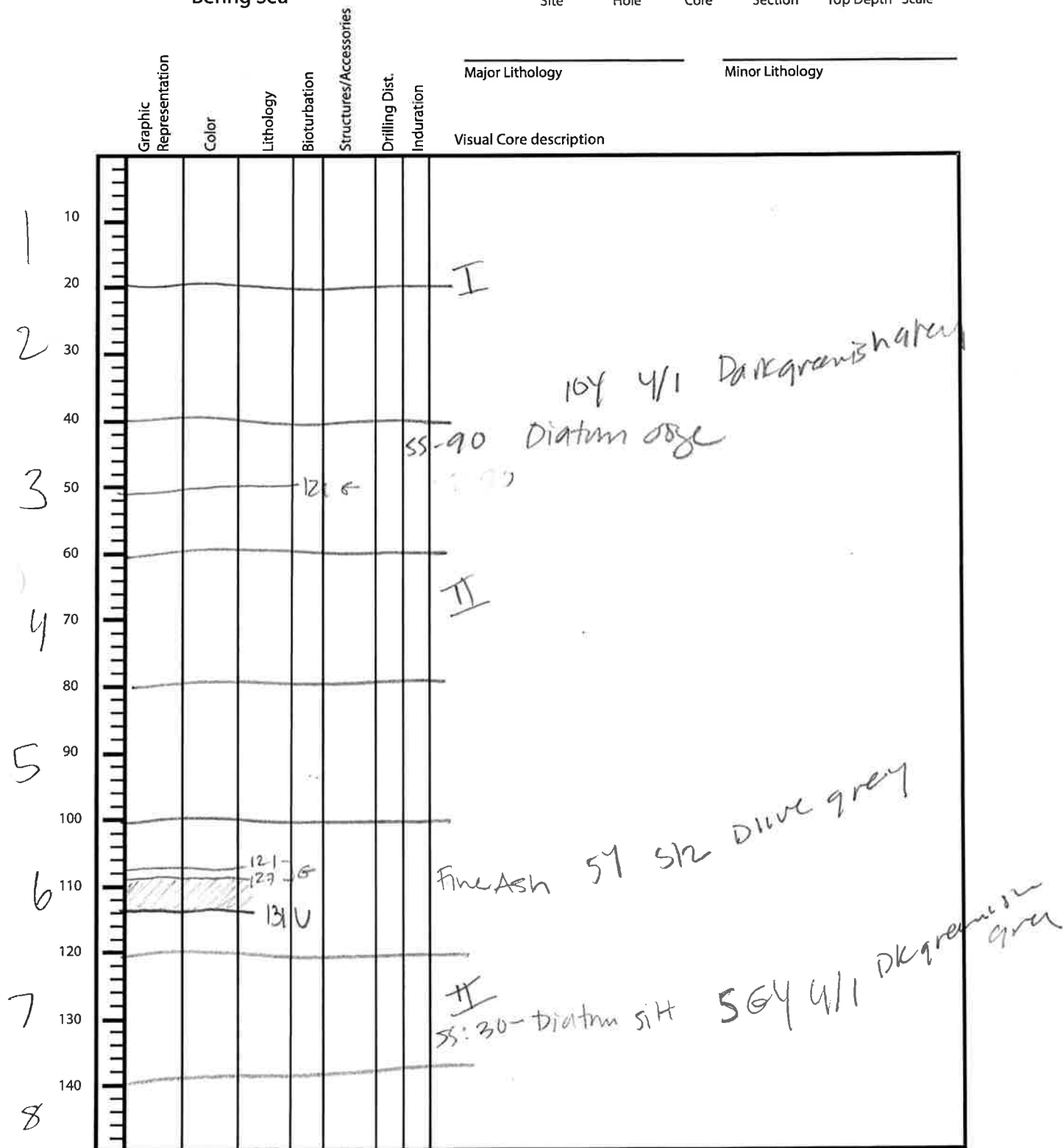
Comments:

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
Framework minerals	
6	Quartz 1
12	Feldspar 2
	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
18	Dolomite 3
VOLCANICLASTIC GRAINS	
	Crystal grain
6	Vitric grain 1
	Lithic grain

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

Expedition 323
Bering Sea

323 V1339 20H A11
Site Hole Core Section Top Depth Scale



Observer: _____ Date: _____

X

Expedition 323
Bering Sea

323 01339 20H 1
Site Hole Core Section Top Depth Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
				9 DK F. DG Mod.	19-21			
				40	25-28			
				58-52 PVC				

Observer: _____ Date: _____

Expedition 323
Bering Sea

323 UB39 20H 2
 Site Hole Core Section Top Depth Scale

X

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology	Visual Core description
				1-8 DK FASH Mot.					
				35-40					Grey C. ash Mot.
						108-60			gys exp. Mot
				113 FOL GRAM					Fi sp. subang.
						140			Crack

Observer: _____ Date: _____

Expedition 323
Bering Sea

VB39 Site D Hole 20A Core 3 Section _____ Top Depth _____ Scale

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

Observer: Behr Date: _____

W = White silt sized clumps

110-128 Gas Exp S1
128-138 Gas Exp S1
138-148 Gas Exp S1
79-116 G.E. Mud
20-75 Gas Exp S1

Expedition 323
Bering Sea

323 UB39 D 20# 4
 Site Hole Core Section Top Depth Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
				4-W 12-W 19-23 dk Mst				
				27 45				Med - Mkt & bot.
				37- 40				Ash mat dk. agn.
				58- 61				Peb round 10 sphere

Observer: Pet Date: _____

Expedition 323
Bering Sea

U1339 D 20H 5
Site Hole Core Section Top Depth Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
Visual Core description								
10								
20				27-36				Frams!
30								
40								
50								
60				58-63				Mot. DK
70								
80								
90								
100								
110								
120								
130								
140								

Observer: Beth Date: _____

+

Expedition 323
Bering Sea

U1339 D 20H 6
Site Hole Core Section Top Depth Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
				24 Gran		88-110 Mudst		
							80-81.5 Vol 19	
							VI- 80 Gran.	
							Asht	

Observer: Boh Date: _____

A

Expedition 323
Bering Sea

UB39 D 20A 7
Site Hole Core Section Top Depth Scale

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

Void - 43-44
62.5-63
72.5-74

Mod SE 43-93

Observer: Beth Date: _____

Expedition 323
Bering Sea

01339
Site

D
Hole

20A
Core

8
Section

Top Depth

Scale

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

Observer: Beh Date: _____

Expedition 323
Bering Sea

V1339
Site

D
Hole

20H CC
Core

Section

Top Depth

Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
Visual Core description								
10							<p><u>Mod dist</u> <u>all</u></p>	
20								
30								
40								
50								
60								
70								
80								
90								
100								
110								
120								
130								
140								

Observer: Behr Date: _____

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

✓ SM

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	1339	D	20	H/3A	90		

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

Comments:

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

Percent	Component
BIOGENIC GRAINS	
	Calcareous
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
	Siliceous
	✓ Radiolarians
	Spumellaria
	Nassellaria
71	Diatoms 15
	Centric 10
	Pennate 5
	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

white spot ✓ 5m

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	1339	D	20	H	3A	120	

Sediment/Rock Name	<i>Sponge spicular ooze.</i>	Observer	<i>AKJ</i>
--------------------	------------------------------	----------	------------

Percent Texture		
Sand	Silt	Clay

Comments:

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
	Framework minerals
<i>20</i>	Quartz <i>5</i>
	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
	<input checked="" type="checkbox"/> 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
<i>20</i>	Diatoms <i>5</i>
	Centric
	Pennate
	<i>Chaetoceros</i> Resting Spores
	Silicoflagellates
<i>60</i>	Sponge spicules <i>15</i>
	Dinoflagellates
	Others
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

IODP Expedition 323
 SEDIMENT SMEAR SLIDE WORKSHEET

white spot ✓ SM

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323	1339	D	20	H	3A	128.	

Sediment/Rock Name	Sponge spicule ooze
--------------------	---------------------

Observer	akira
----------	-------

Percent Texture		
Sand	Silt	Clay

Comments:

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
	Framework minerals
8	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
	✓ 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
40	Diatoms 5
	Centric
	Pennate
	Chaetoceros Resting Spores
	Silicoflagellates
50	Sponge spicules 7
	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
393	1339	D	20	H	7A	30	

Sediment/Rock Name: *diatom silt*

Observer: *Albin*

Percent Texture		
Sand	Silt	Clay
	<i>5</i>	<i>20</i>

Comments:

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

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

Expedition 323
Bering Sea

1339 Site D Hole 21 Core 1 Section _____ Top Depth _____ Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
Visual Core description								
10							11cm crack ✓	
20								
30								
40								
50								
60								
70								
80								
90							crack ✓	
100								
110							crack ✓	
120								
130								
140							131-132 ash lens ✓	

Observer: _____ Date: _____

Expedition 323
Bering Sea

1339 D 21 2
Site Hole Core Section Top Depth Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
	light grey						0 g-b	
	10Y 5/1						-30 grade b. v	
		b-w					43 crack ✓	
	olive						-55cm diatom rich diatom rich clay silo	
	5Y 5/1		S				80-89 several cracks ✓	
							90- g/b	
	grey						125-134 several pebbles \checkmark mm-1.5cm igneous rock?	
	10Y 5/1						135 crack ✓	

Observer: _____ Date: _____

Expedition 323
Bering Sea

1339 D 21 3
Site Hole Core Section Top Depth Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
10	grey							
20	10Y 4/1 ✓							
30	0						31cm black pebble ✓	
40								
50	2 ✓						50 g. b ✓	
60								
70	Olive ✓						50-89 several cracks ✓	
80	5Y 4/1 ✓						75-80 crack - fractured	
90	2 ✓						90 g. b ✓	
100								
110	10Y 4/1							
120	grey							
130								
140								

3
5

Observer: _____ Date: _____

Expedition 323
Bering Sea

1339 Site D Hole 21 Core 4 Section _____ Top Depth _____ Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
0	gray						26-29. pebble	
10								
20								
30								
40	10x 4/1						50-54 mott. ✓	
50							60-62 crack ✓	
60								
70								
80							79-83 crack fractured	
90	5 234 57/14						84 white ash i	
100							90	
110							96 mott ash ✓	
120	gray 10x 4/1						105-106 ash line ✓	
130							131 spot ✓	
140							146 spot ✓	
							145 spot ✓	

Observer: _____ Date: _____

Expedition 323
Bering Sea

1339 D 21 5
Site Hole Core Section Top Depth Scale

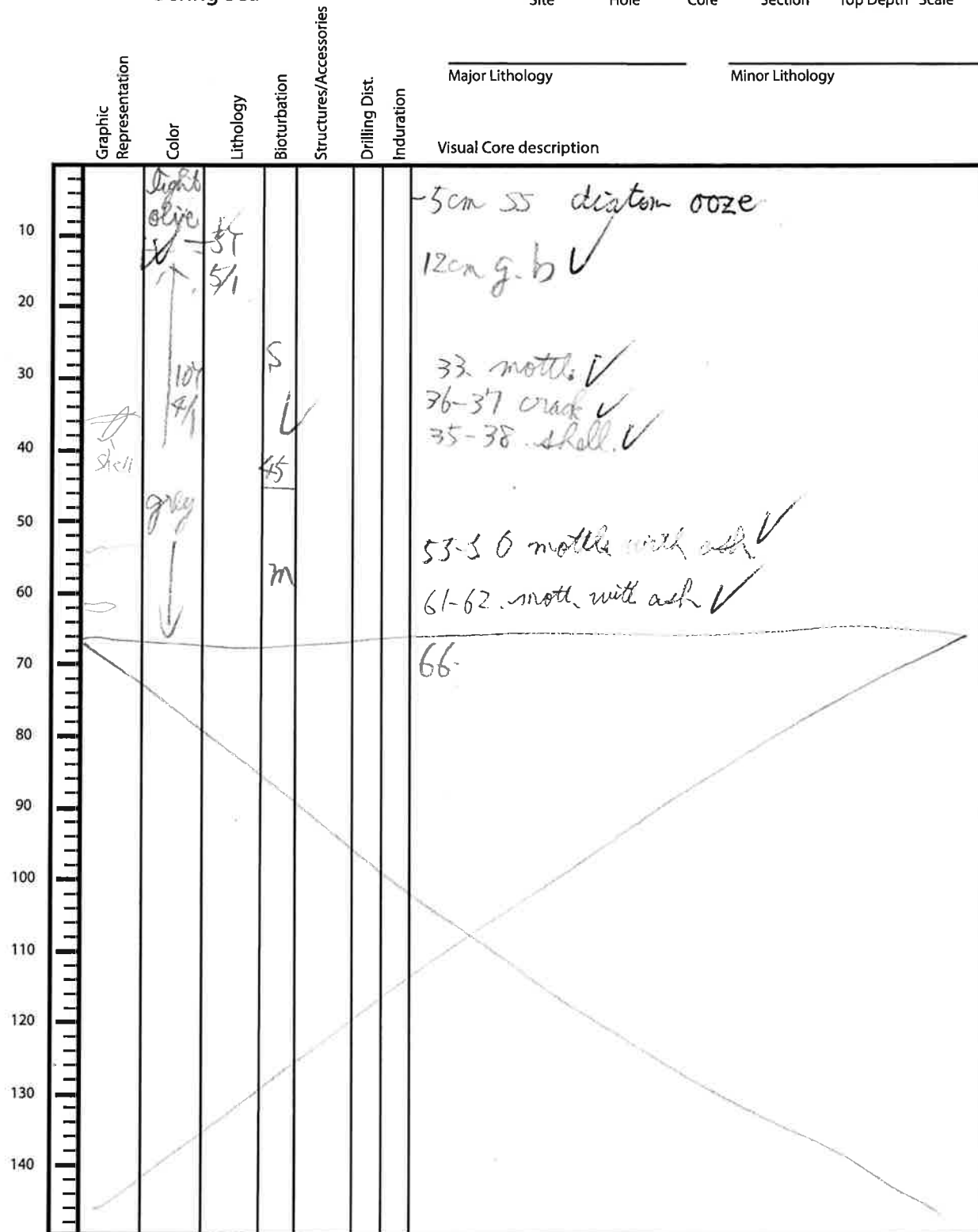
Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
	grey						29-30 crack ✓	
							34-36 crack ✓	
	lot 4/1						40cm white pebble 5 mm ✓	
							55-50cm diatom ooze ✓	
							71 crack	
							74-75. crack ✓	
	84							
	255							
	61							
	73							
	grey							
	lot 4/1							
	140							
	light							
	dark							
							140 gb ✓	

57
5/1

Observer: _____ Date: _____

Expedition 323
Bering Sea

1339 D 21 6
 Site Hole Core Section Top Depth Scale



Observer: _____ Date: _____

Expedition 323
Bering Sea

1339 Site D Hole 21 Core CC Section _____ Top Depth _____ Scale

Depth (cm)	Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
								Visual Core description	
0									
10									
20		grey						2-3 pure. ✓	
30		10x 4/1						13~ fractured ✓	
40									
50								48 47-48 ash?	
60		54	23/1					PAL	
70								58	
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	U1339	D	21	H	2A	55cm	

Sediment/Rock Name: Diatom rich clayey silt

Observer: *Beta*
 HIR A

Percent Texture		
Sand	Silt	Clay
	40	60

Comments:

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
Framework minerals	
15%	Quartz 10
15%	Feldspar 10
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
20%	Rock fragments 1 39
Accessory/trace minerals	
	Micas
	Biotite
	Muscovite
26%	Clay Minerals 15
	Chlorite
	Glaucanite
	Chert
	Zircon
	Ferromagnesium minerals
Authigenic minerals	
	Barite
	Phosphorite/Apatite
	Zeolite
Opaque minerals	
9%	Pyrite 5 5
	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
29%	Centric 15 17
40%	Pennate 2
	Chaetoceros Resting Spores
	Silicoflagellates
	Sponge spicules
	Dinoflagellates
Others	
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

67

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IODP Expedition 323
 SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
323 1339	1339	D	21H		5	50	50

Sediment/Rock Name: Diatom ooze

Observer: Hiro A

Percent Texture		
Sand	Silt	Clay

Comments:

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
Framework minerals	
7	Quartz 7
10 3	Feldspar 3
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
Accessory/trace minerals	
	Micas
	Biotite
	Muscovite
" 1	Clay Minerals /
	Chlorite
	Glaucanite
	Chert
	Zircon
	Ferromagnesium minerals
Authigenic minerals	
	Barite
	Phosphorite/Apatite
	Zeolite
Opaque minerals	
12 7	Pyrite /
	Magnetite
	Fe-oxide
Carbonates	
	Calcite
	Dolomite
VOLCANICLASTIC GRAINS	
	Crystal grain
15 3	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 /
15	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	1339	D	214		6A	5	5

Sediment/Rock Name: Diatom Ooze

Observer: H.W.A

Percent Texture		
Sand	Silt	Clay

Comments:

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
	Framework minerals
16%	Quartz 5
30%	Feldspar 1 6
	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
8%	Diatoms
78%	Centric 25 32
3%	Pennate 1
	Chaetoceros Resting Spores
	Silicoflagellates
	Sponge spicules
	Dinoflagellates
	Others
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

28

26

Expedition 323
Bering Sea

U1338 0 22 1
 Site Hole Core Section Top Depth Scale

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
							Visual Core description	
	SY412	diston core			mod.		0-87 mod. dist.	
							0-18 sandy	18-87 gas exp.
	NOX412	diston silt					114-118 grad. cont	
							118-119 clark ash layer	sharp base
							132-135 tilted sharp cont.	

Observer: _____ Date: _____

Expedition 323
Bering Sea

U1833 ① 22 2
Site Hole Core Section Top Depth Scale

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

NOX 4/2

stone

stone

ash patches floor

Observer: _____ Date: _____

Expedition 323
Bering Sea

U1338 D 22 3
Site Hole Core Section Top Depth Scale

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

NOTE

slight

slight

38 isolated clast, Acum ϕ ,
subang., dark
50-53 intermixed dark ash.

Observer: _____ Date: _____

Expedition 323
Bering Sea

U1389 D 22 4
Site Hole Core Section Top Depth Scale

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

Observer: _____ Date: _____

Expedition 323
Bering Sea

U1335 D 22 CC
 Site Hole Core Section Top Depth Scale

	Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Major Lithology	Minor Lithology
10									
20		2/14/15	fine sand	shrink			mod.		
30									
40		PAL							
50									
60									
70									
80									
90									
100									
110									
120									
130									
140									

Observer: _____ Date: _____