IODP Expedition 323

Site U1339

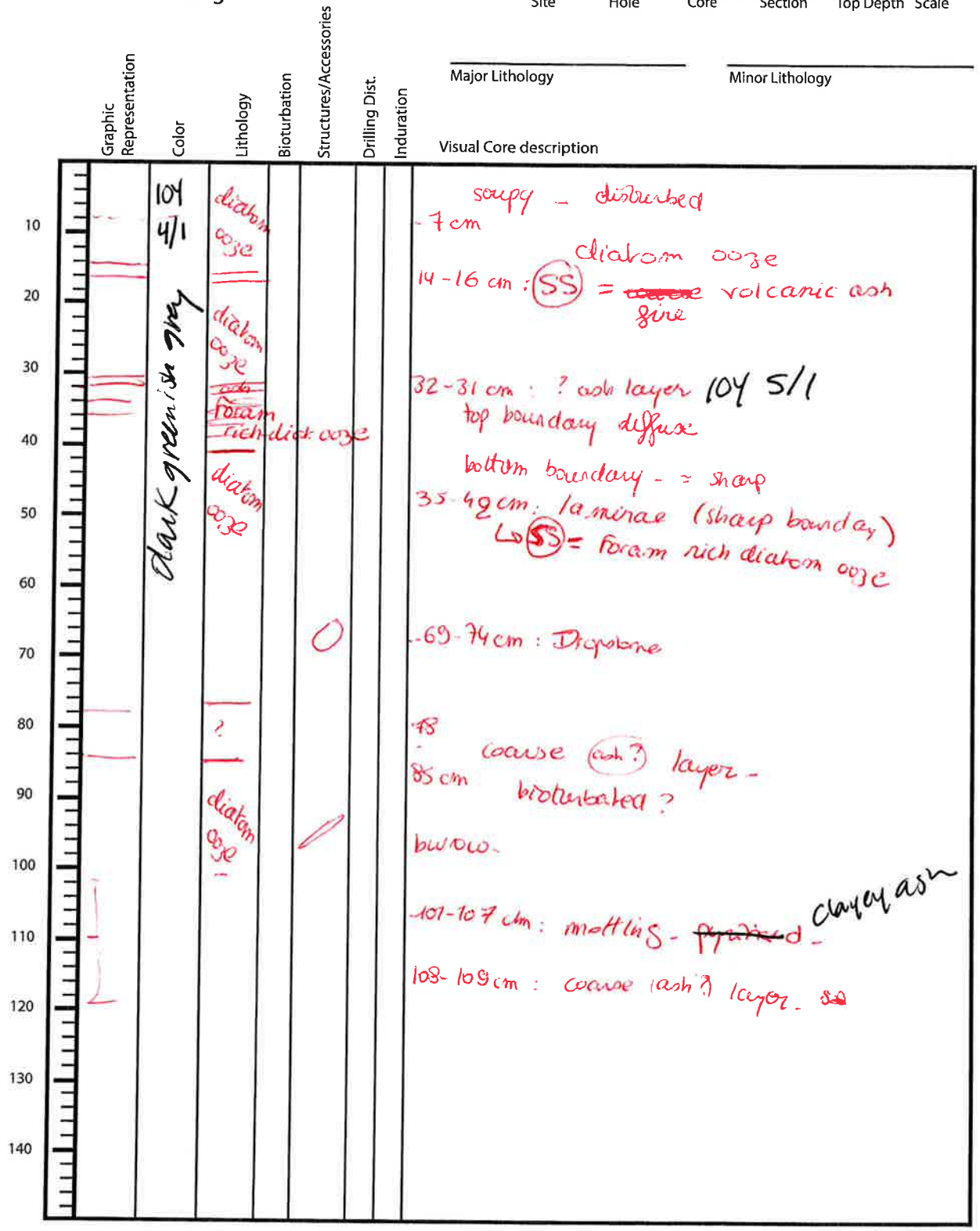
Hole B

Expedition 323
Bering Sea

Site	Hole	Core	Section	Top Depth	Scale
1339	B	5H	1	0	

Major Lithology

Minor Lithology

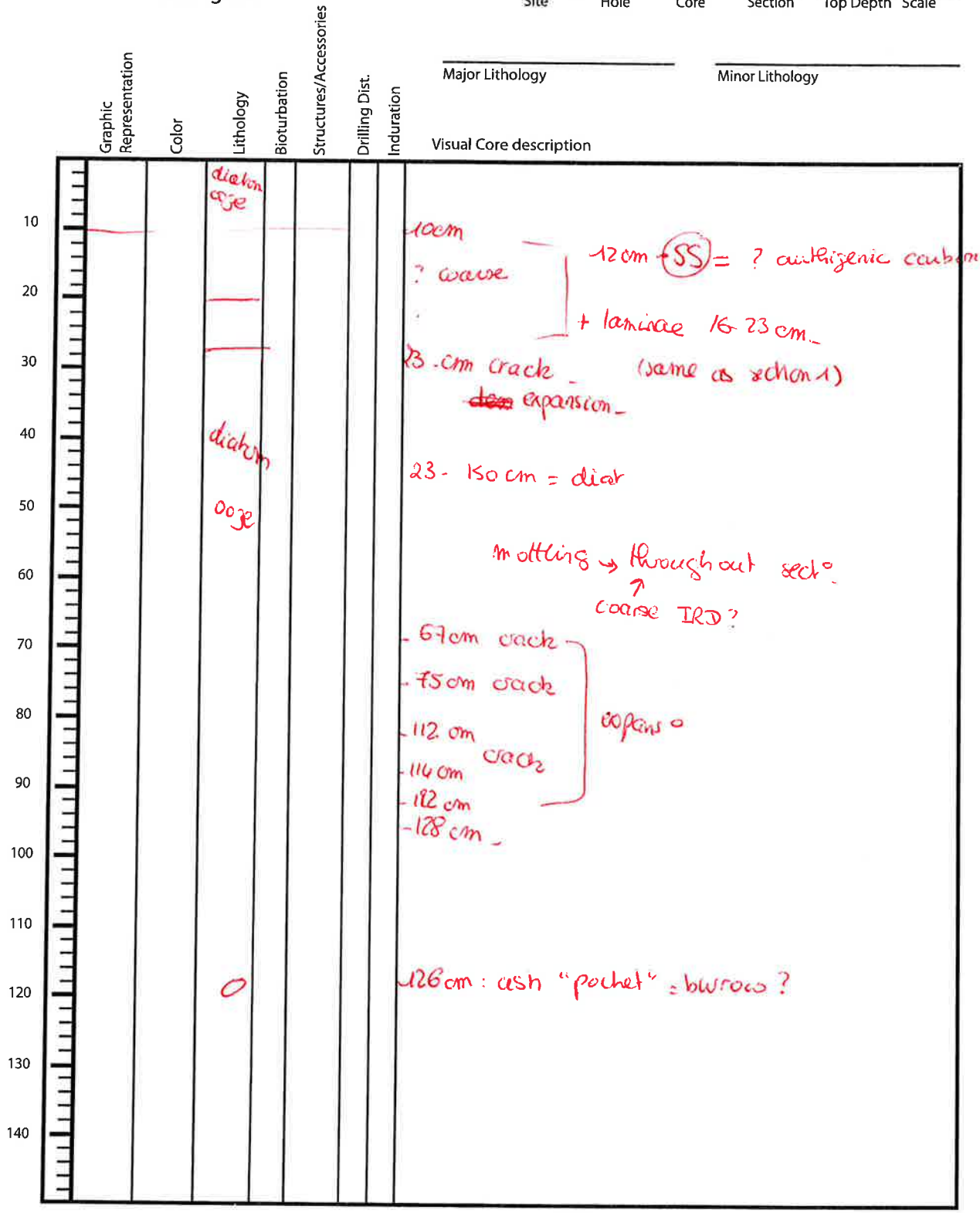


Observer: GB Date:

Expedition 323
Bering Sea

1339 | B | 5H | 2 | | |
Site | Hole | Core | Section | Top Depth | Scale

Major Lithology | Minor Lithology

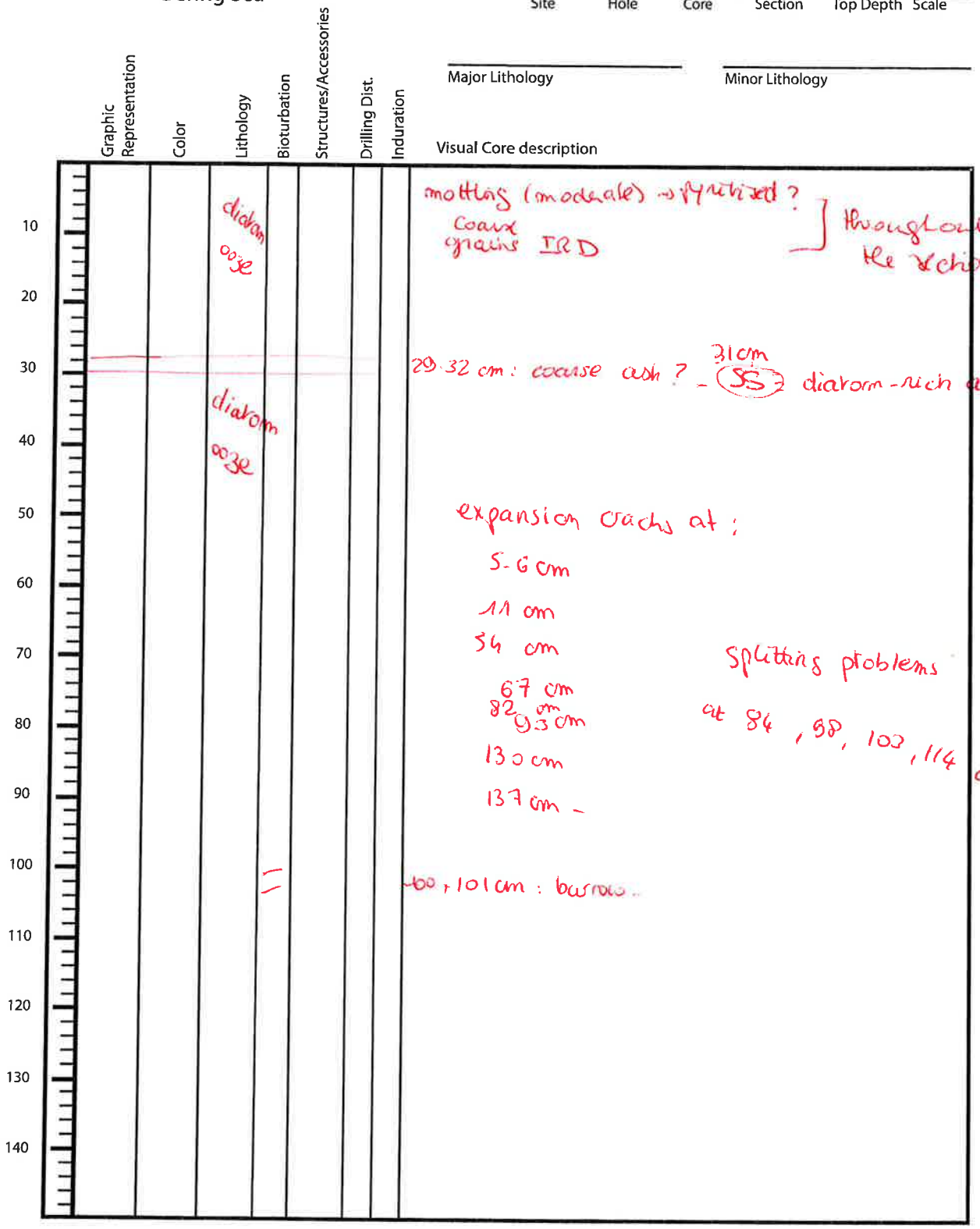


Observer: _____ Date: _____

Expedition 323
Bering Sea

1339 | B | 5H | 3 | | |
Site | Hole | Core | Section | Top Depth | Scale

Major Lithology | Minor Lithology



Observer: _____ Date: _____

Expedition 323
Bering Sea

1339 (Site) | B (Hole) | 5H (Core) | 4 (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

Main lithology = diatom ooze

-8cm = SS = Quartz rich

expansion cracks at 23+25 cm
50 cm
69 cm

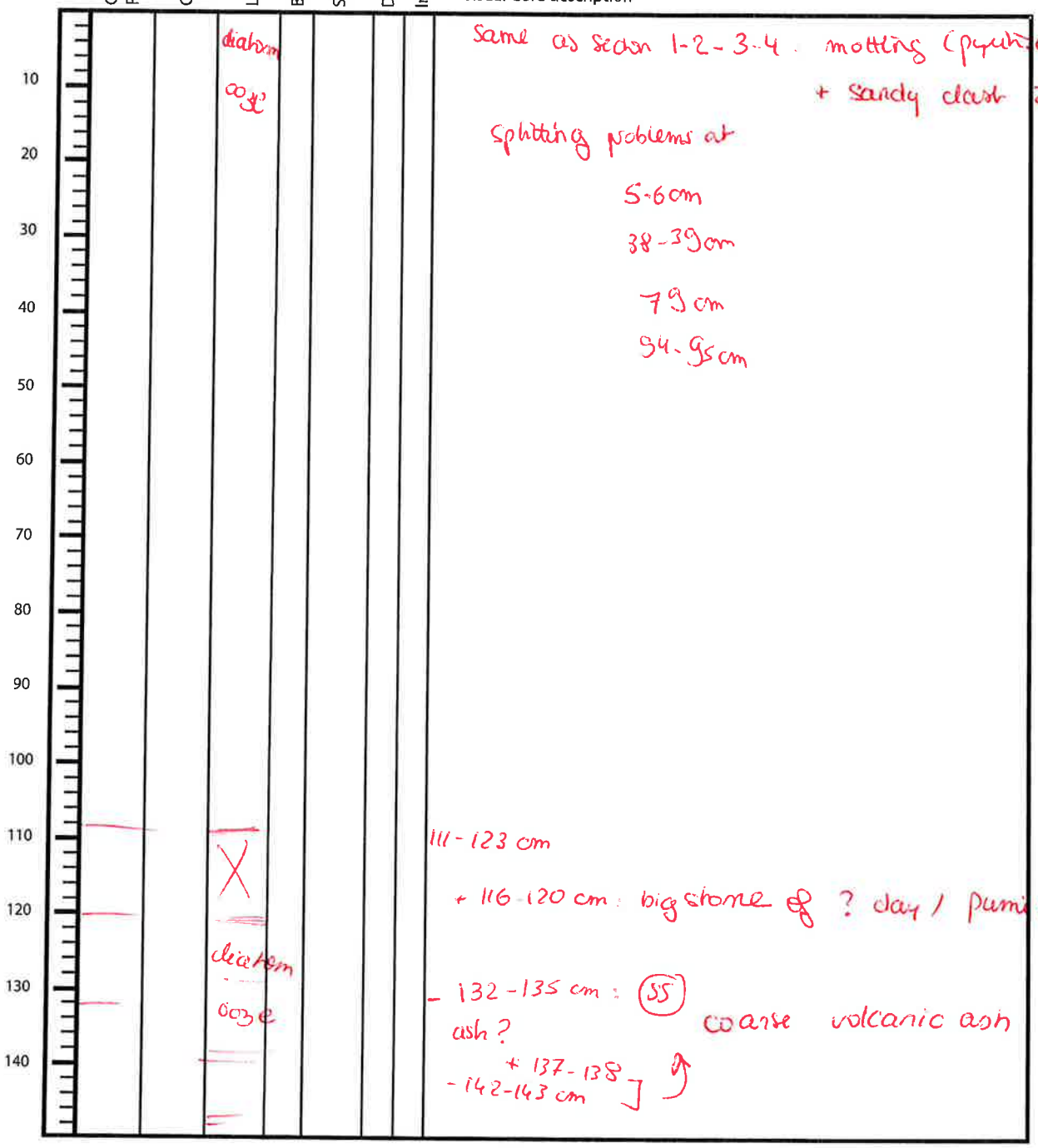
(Same as previous sections)

Observer: _____ Date: _____

Expedition 323
Bering Sea

1339 (Site) | B (Hole) | 54 (Core) | 5 (Section) | (Top Depth) | (Scale)

Major Lithology | Minor Lithology

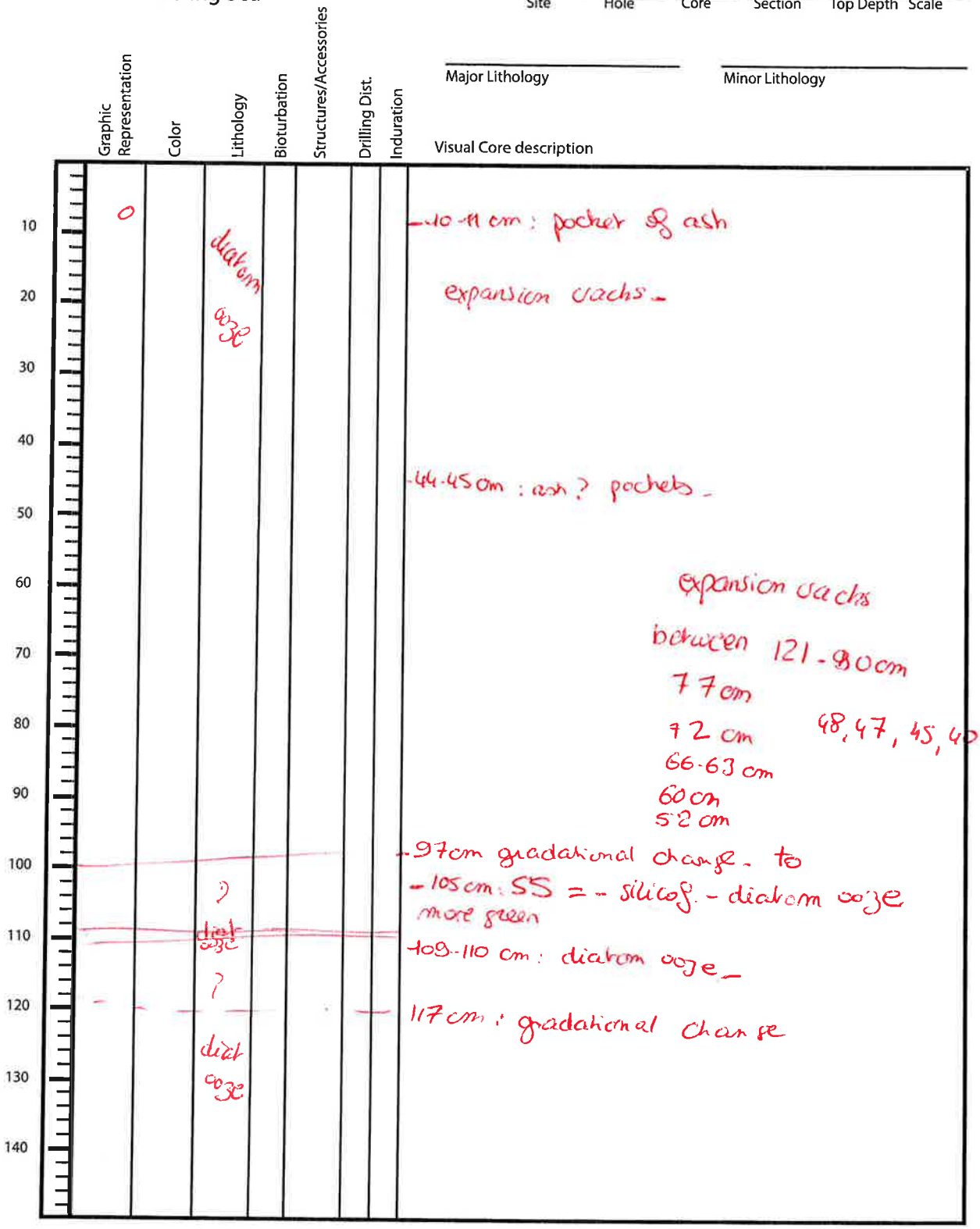


Observer: _____ Date: _____

Expedition 323
Bering Sea

1339 (Site) B (Hole) 54 (Core) 6 (Section) ____ (Top Depth) ____ (Scale)

Major Lithology ____ Minor Lithology ____

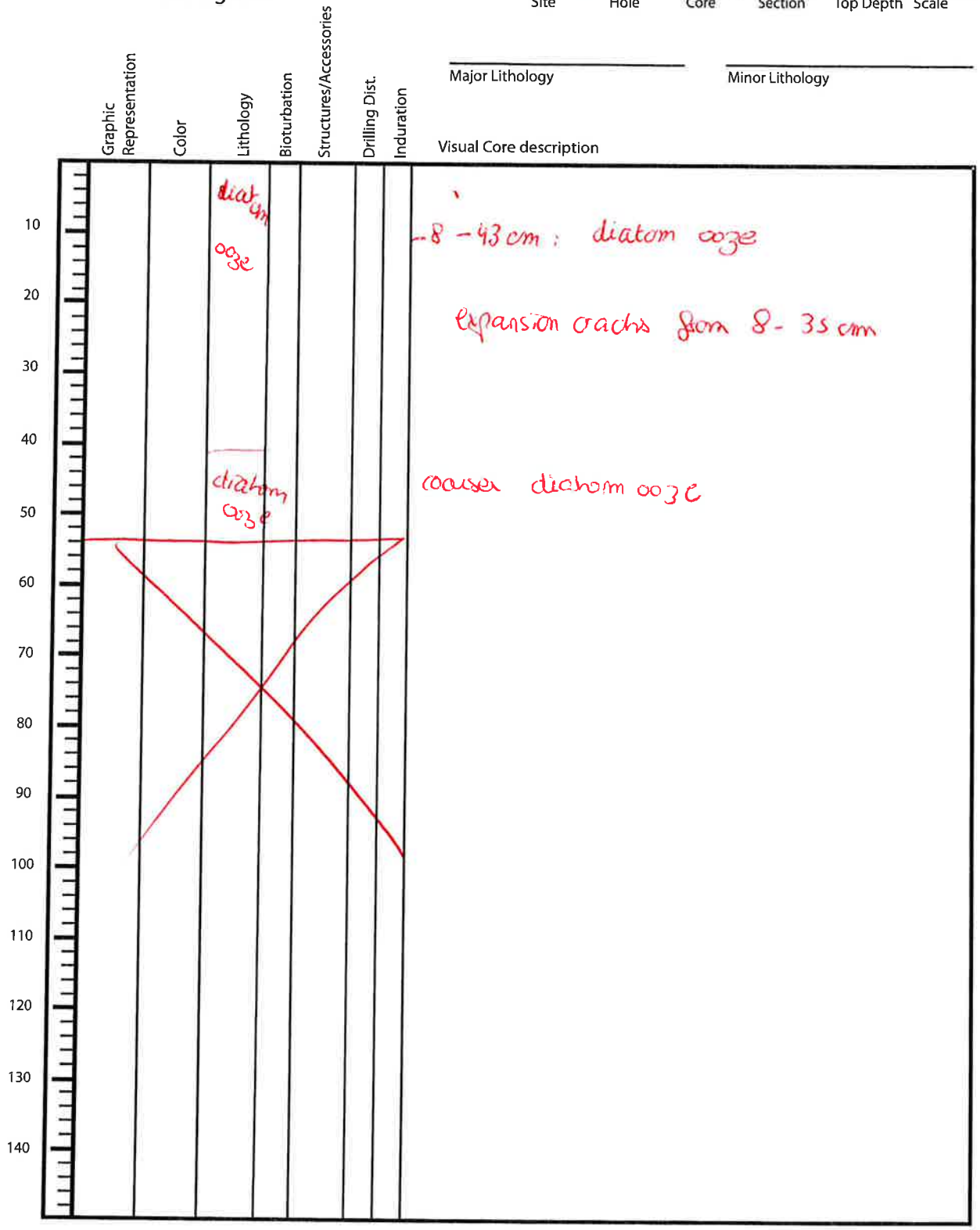


Observer: ____ Date: ____

Expedition 323
Bering Sea

1339 | B | 5H | 7 | | |
Site | Hole | Core | Section | Top Depth | Scale

Major Lithology | Minor Lithology

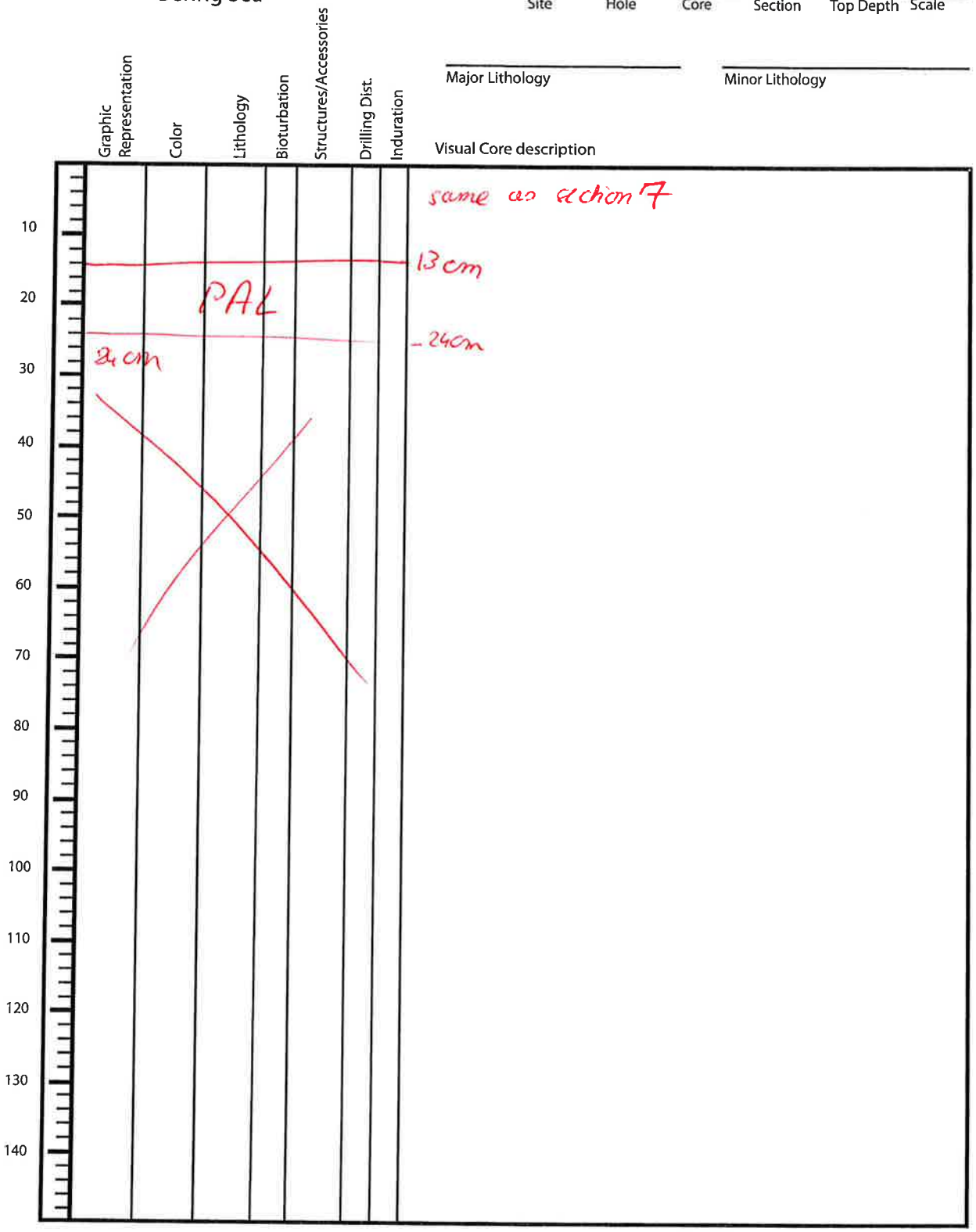


Observer: _____ Date: _____

Expedition 323
Bering Sea

1339 | B | 5H | CC | | |
Site | Hole | Core | Section | Top Depth | Scale

Major Lithology | Minor Lithology



Observer: _____ Date: _____

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Bottom
323	1339	B	5H	[illegible]	1	17cm	

Sediment/Rock Name	~~coarse~~ fine ash

Observer	GD.

10 = 29

90 div. = 58 μm.

Percent Texture		
Sand	Silt	Clay

Comments:

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

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

35

85

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Bottom
323	1339	B	5H	A	1	39 cm	

Sediment/Rock Name	Foram-rich diatom ooze	Observer	GB.

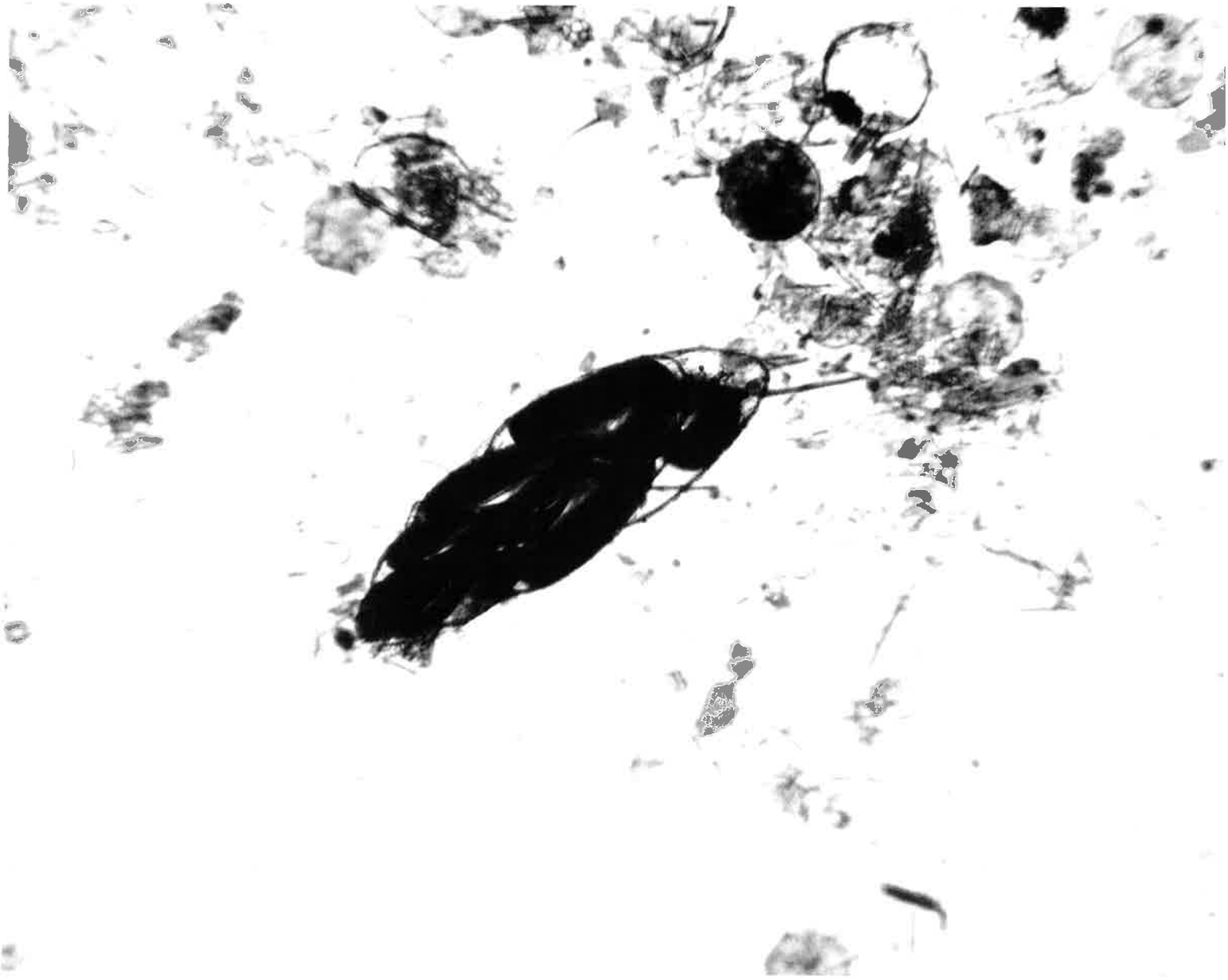
Percent Texture		
Sand	Silt	Clay

Comments: rich in Bulimina → dark brown lamina. (current sorted? low O_2?)

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

Percent	Component
	BIOGENIC GRAINS
	Calcareous
X	Foraminifera broken
8 X	Planktonic foraminifera
8 X	Benthic foraminifera ~~Cassidulina?~~ Bulimina
	Nannofossils
X	Coccoliths Rabdolith
	Discoasters
	Pteropods
	Siliceous
	Radiolarians
	Spumellaria
	Nassellaria
~~80~~	Diatoms
= 50	Centric ✓
30	Pennate ✓
	Chaetoceros Resting Spores
X	Silicoflagellates
	Sponge spicules
	Dinoflagellates
	Others
X	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

323 1339B - 54 - 1 - 39 cm. Benthic foram. Bulimina sp.



IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cr Top E
323	1339	B	5	H	3	31 cm

Sediment/Rock Name	Diatom ~~rich ash~~ Diatom rich fine ash

Observer	G.B.

Percent Texture		
Sand	Silt	Clay

Comments:

Percent	Component
	SILICICLASTIC GRAINS/MINERAL
	Framework minerals
30	x 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
45	x Vitric grain
	Lithic grain

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

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Bottom
323	1339	B	5	H	4	8 cm	

Sediment/Rock Name	~~Quartz rich~~ diatom ~~ooze~~ silt	Observer	G.B.

Percent Texture		
Sand	Silt	Clay

Comments:
clay

Percent	Component
	SILICICLASTIC GRAINS/MINERAL
	Framework minerals
30 x	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 x
	Lithic grain

Percent	Component
	BIOGENIC GRAINS
	Calcareous
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
	Siliceous
	Radiolarians
	Spumellaria
	Nassellaria
30	x Diatoms
	x 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	Interval (cm) Bottom
323	1339	B	5	H	5	134 cm	

Sediment/Rock Name	Coarse ~~volcanic~~ ash

Observer	G.B.

Percent Texture		
Sand	Silt	Clay

Comments:

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

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

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Bottom
323	1339	B	5	H	6	105cm	

Sediment/Rock Name	silicoß. diatom ooze

Observer	GB.

Percent Texture		
Sand	Silt	Clay

Comments:

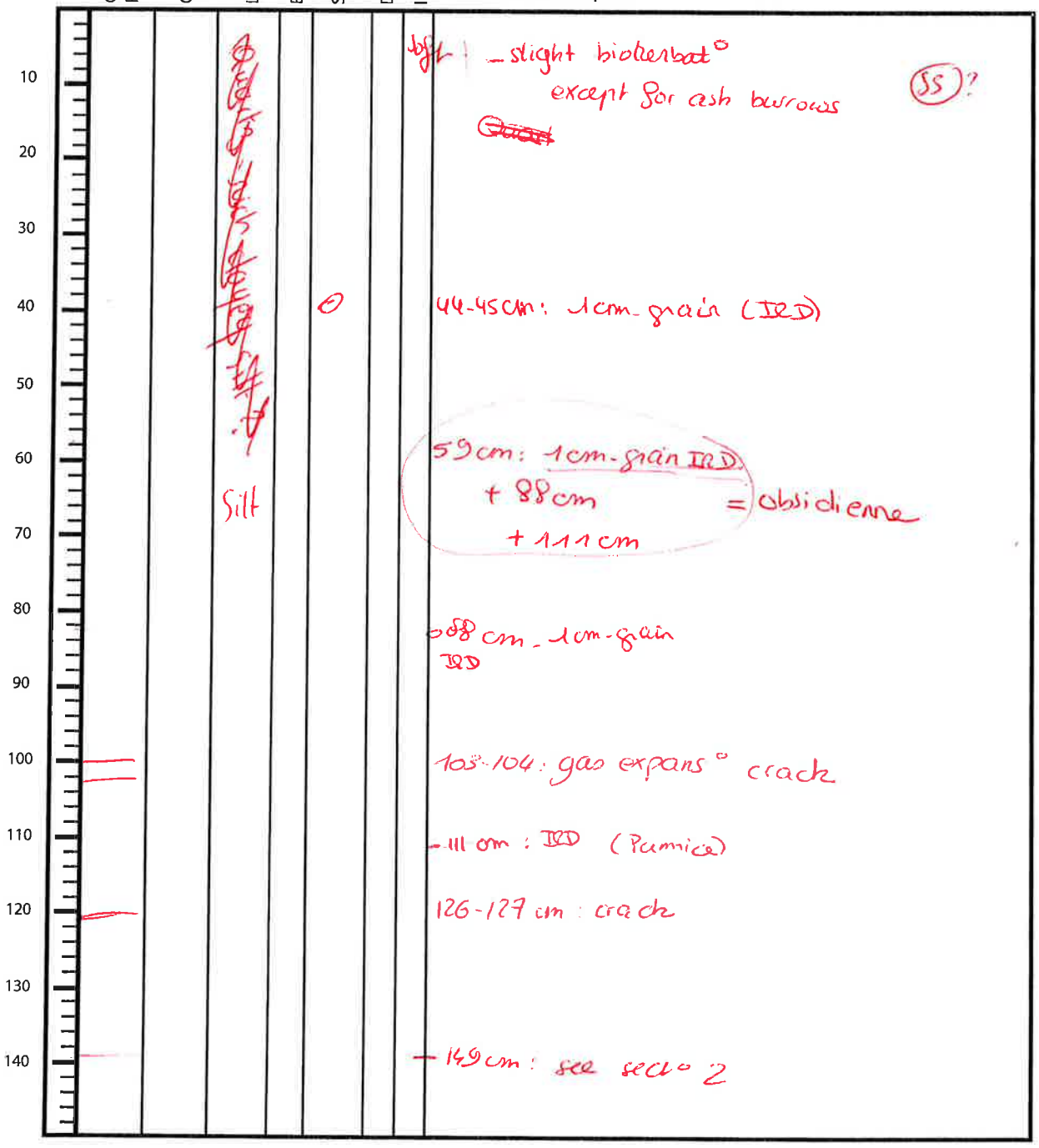
Percent	Component
	SILICICLASTIC GRAINS/MINERAL
	Framework minerals
5	Quartz
	Feldspar
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
	Accessory/trace minerals
	Micas
	Biotite
	Muscovite
	Clay Minerals
	Chlorite
	Glauconite
	Chert
	Zircon
	Ferromagnesium minerals
	Authigenic minerals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

Percent	Component
	BIOGENIC GRAINS
	Calcareous
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
	Siliceous
	Radiolarians
	Spumellaria
	Nassellaria
55 X	Diatoms
	Centric
	Pennate
	Chaetoceros Resting Spores
45 X	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 | B | 6H | -1- | | |
Site | Hole | Core | Section | Top Depth | Scale

Major Lithology | Minor Lithology

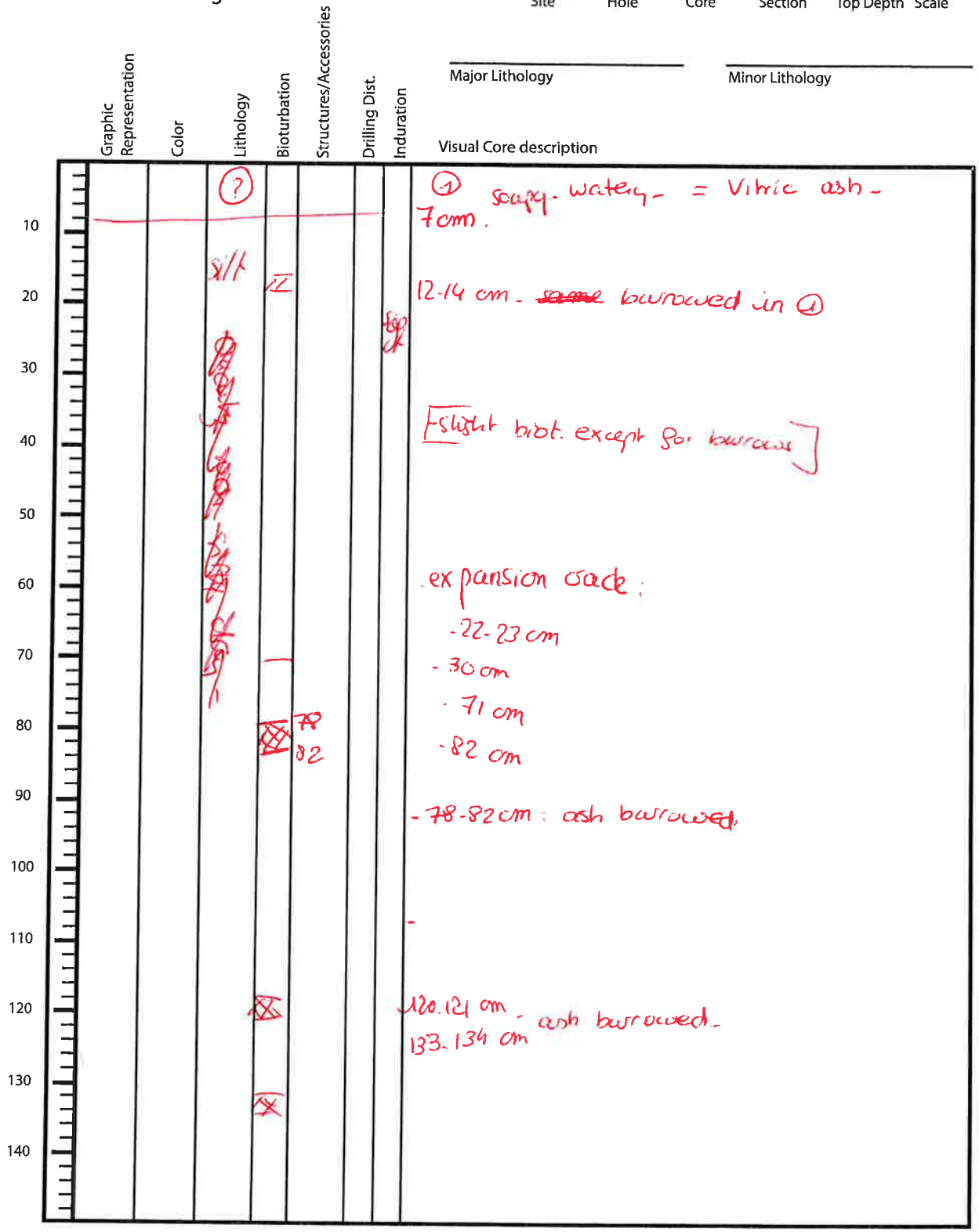


Observer: GB Date:

Expedition 323
Bering Sea

1339 Site | B Hole | 6H Core | 2 Section | _____ Top Depth | _____ Scale

Major Lithology _____ Minor Lithology _____

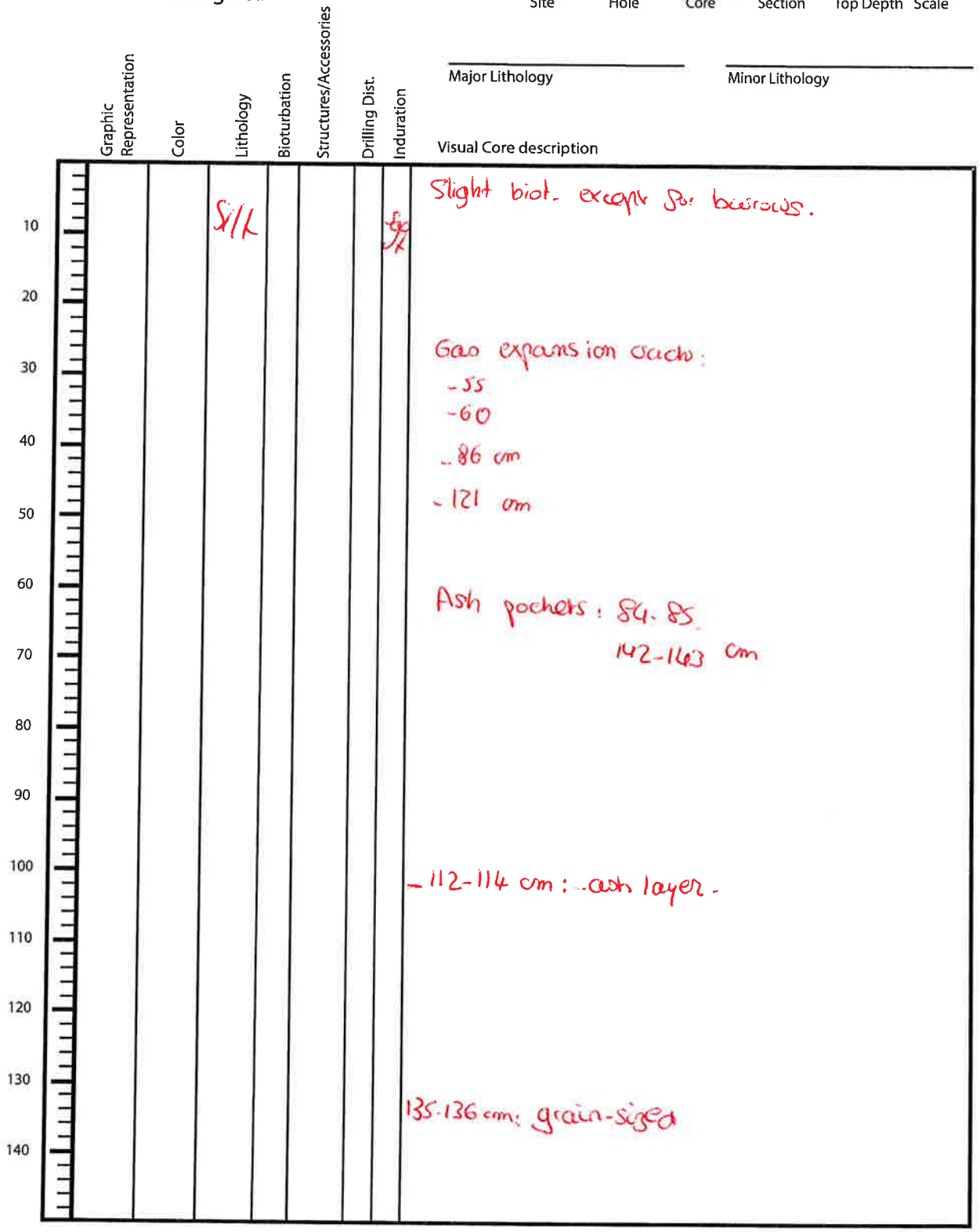


Observer: _____ Date: _____

Expedition 323
Bering Sea

1339 (Site) B (Hole) 6H (Core) 3 (Section) ____ (Top Depth) ____ (Scale)

Major Lithology ____ Minor Lithology ____

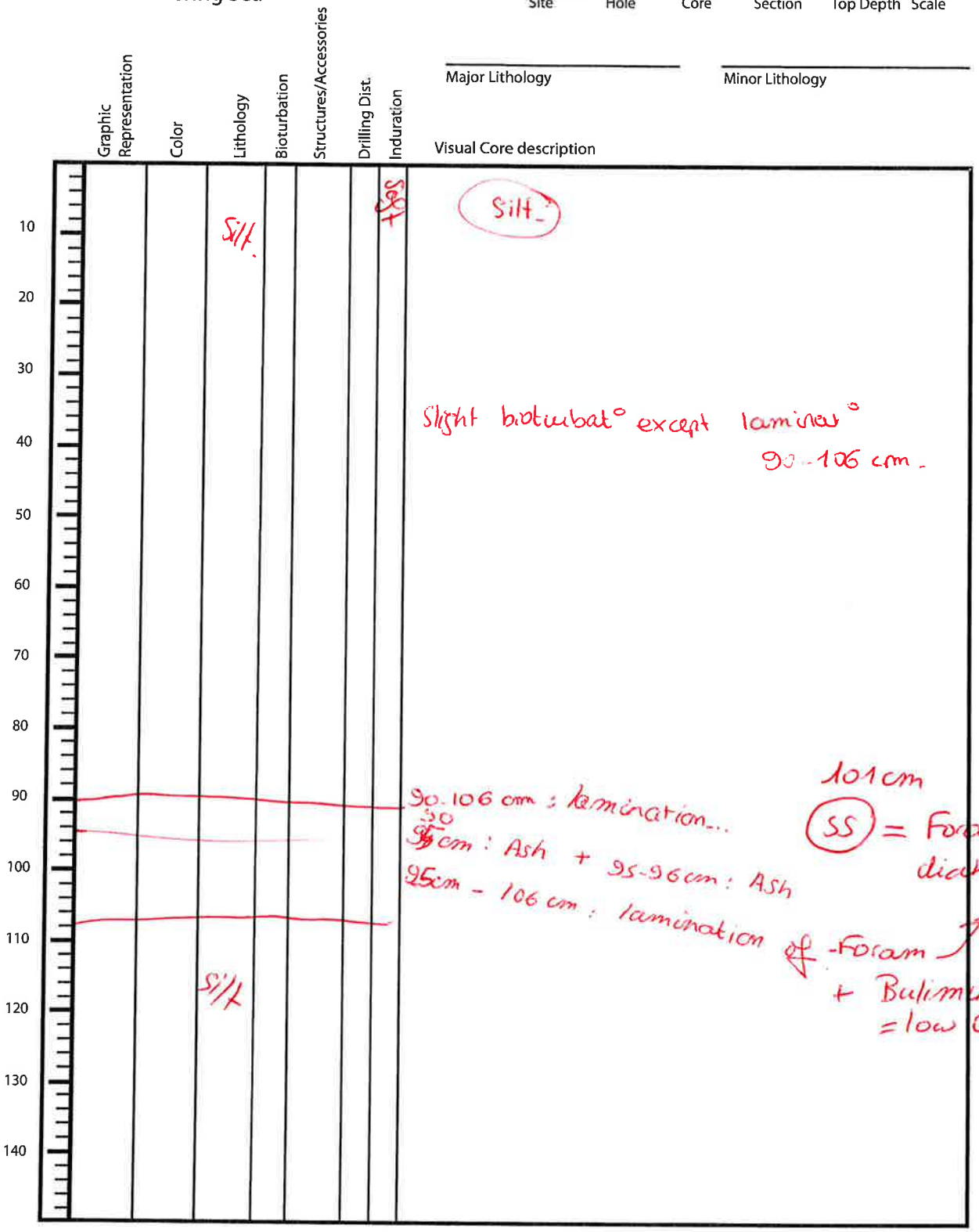


Observer: ____ Date: ____

Expedition 323
Bering Sea

1339 | B | 6H | 4 | | |
Site | Hole | Core | Section | Top Depth | Scale

Major Lithology | Minor Lithology



Observer: _____ Date: _____

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Interval (cm) Bottom
323	1339	B	6	H	3A	70	70

Sediment/Rock Name	~~Quartz rich Clayey~~ silt

Diatom-bearing clayey silt

Observer	Rebecca

Percent Texture		
Sand	Silt	Clay
	70	30
0	10	5

Comments:

Percent	Component	
SILICICLASTIC GRAINS/MINERAL		
	Framework minerals	
35%	✓ Quartz	10
20%	✓ Feldspar	5
	K-feldspar (Orthoclase, Microcline...)	
	✓ Plagioclase	
	✓ Rock fragments	5
	Accessory/trace minerals	
	Micas	
	Biotite	
	Muscovite	
	Clay Minerals	
	Chlorite	
	Glauconite	
	Chert	
	Zircon	
8	✓ Ferromagnesium minerals	2
	Authigenic minerals	
	Barite	
	Phosphorite/Apatite	
	✓ Zeolite	
	Opaque minerals	
4%	✓ Pyrite	1
	Magnetite	
	Fe-oxide	
	Carbonates	
	Calcite	
	Dolomite	
VOLCANICLASTIC GRAINS		
	Crystal grain	
4%	✓ Vitric grain	1
	Lithic grain	

Percent	Component	
BIOGENIC GRAINS		
	Calcareous	
	Foraminifera	
	Planktonic foraminifera	
	Benthic foraminifera	
	Nannofossils	
	Coccoliths	
	Discoasters	
	Pteropods	
	Siliceous	
	Radiolarians	
	Spumellaria	
	Nassellaria	
8%	✓ Diatoms	2
	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	B	6	H	4	101	cm

Sediment/Rock Name	Foram.-rich diatom ooze	Observer	GB

Percent Texture		
Sand	Silt	Clay

Comments: laminae.

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
10x	Pyrited Forams
	Magnetite
	Fe-oxide
	Carbonates
	Calcite
	Dolomite
	VOLCANICLASTIC GRAINS
	Crystal grain
	Vitric grain
	Lithic grain

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

X

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Interval (cm) Bottom
323	1339	B	6	H	5A	145	145

Sediment/Rock Name	Fine ~~Vitric~~ ash	Observer	Okina

almost glass

Percent Texture		
Sand	Silt	Clay

Comments:

Percent	Component
	SILICICLASTIC GRAINS/MINERAL
	Framework minerals
2 r	Quartz
2 r	Feldspar
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
	Accessory/trace minerals
	Micas
	Biotite
	Muscovite
V	Clay Minerals (phillipsite)
	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
96	Vitric grain
	Lithic grain

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

✓

X

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Bottom
323	U1339	B	6	H	6A	30.5	50.5

Sediment/Rock Name	Diatom-rich site

Observer	akorin

Percent Texture		
Sand	Silt	Clay
0	90	10

Comments:

Percent	Component
	SILICICLASTIC GRAINS/MINERAL
	Framework minerals
45	✓ Quartz 10
22	✓ Feldspar 5
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	✓ Rock fragments
	Accessory/trace minerals
	Micas
	Biotite
	Muscovite
	Clay Minerals
	Chlorite
	Glauconite
	Chert
	Zircon
9	Ferromagnesium minerals 2
	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
22	Diatoms 5
	Centric
	Pennate
	Chaetoceros Resting Spores
	Silicoflagellates
	✓ Sponge spicules
	Dinoflagellates
	Others
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

✓

X

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Interval (cm) Bottom
323	U1339	B	6	H	6A	76	76

Sediment/Rock Name	Observer
Silicoflagellate-rich ~~Silt~~ Diatom Silt. Silicoflagellate-rich diatom silt	Alexia.

Percent Texture		
Sand	Silt	Clay
0.	90	10

Comments:

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

Percent	Component
	BIOGENIC GRAINS
	Calcareous
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
	Siliceous
	Radiolarians
	Spumellaria
	Nassellaria
55	Diatoms 10.
✓	Centric 7
✓	Pennate 3
	Chaetoceros Resting Spores
11. ✓	Silicoflagellates
	Sponge spicules 2
	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	Interval (cm) Bottom
323	1339	B	6	H	7	10	10

Sediment/Rock Name	Diatom ~~site~~ ooze	Observer	

Percent Texture		
Sand	Silt	Clay
0.		

Comments:

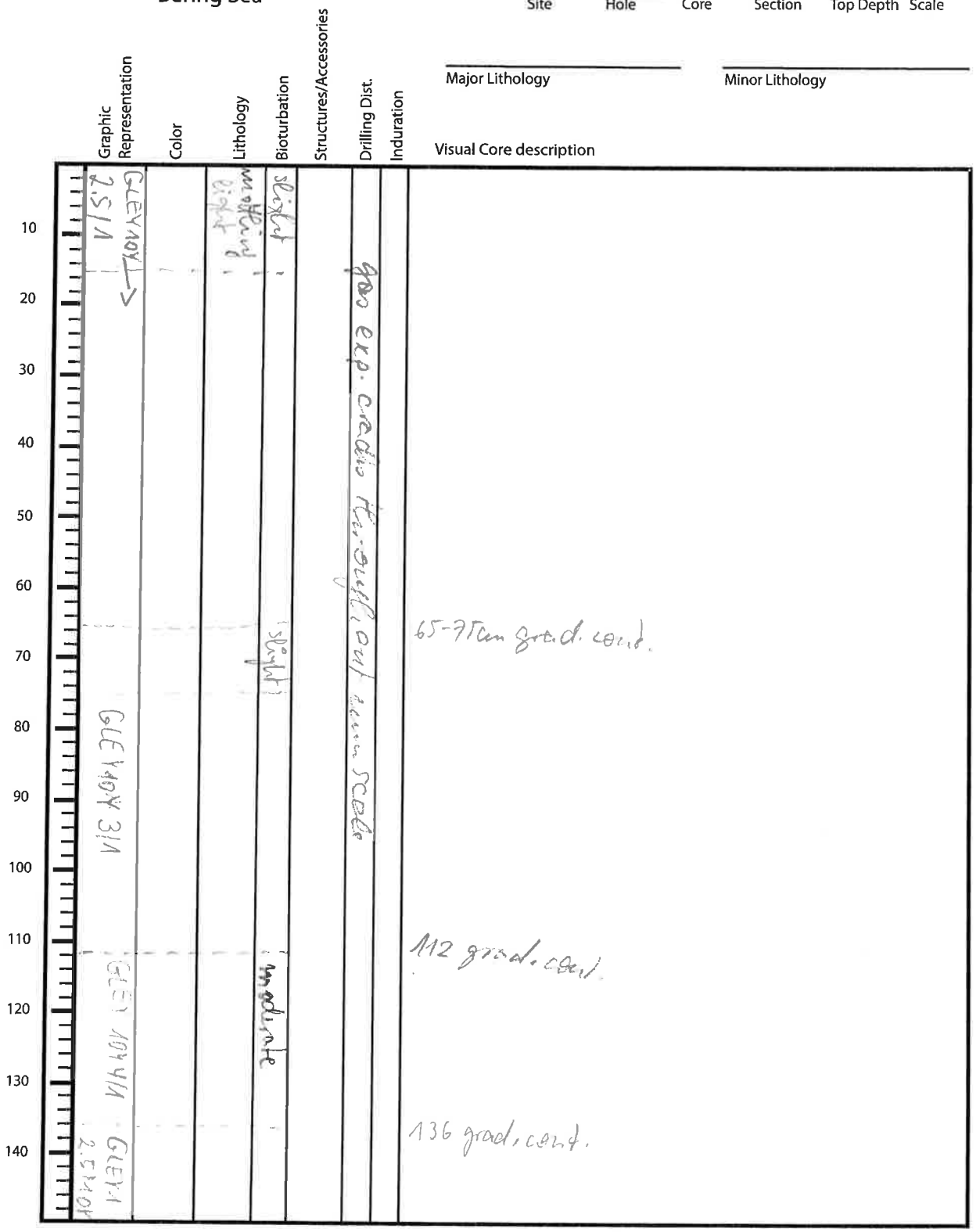
Percent	Component
	SILICICLASTIC GRAINS/MINERAL
V	Framework minerals
8	Quartz 2.
4	Feldspar 1
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
	Accessory/trace minerals
	Micas
	Biotite
	Muscovite
	Clay Minerals
	Chlorite
	Glauconite
	Chert
	Zircon
	Ferromagnesium minerals
20	phillipsite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

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

Expedition 323
Bering Sea

323 | B | 7 | 1 | 0 |
Site | Hole | Core | Section | Top Depth | Scale

Major Lithology | Minor Lithology

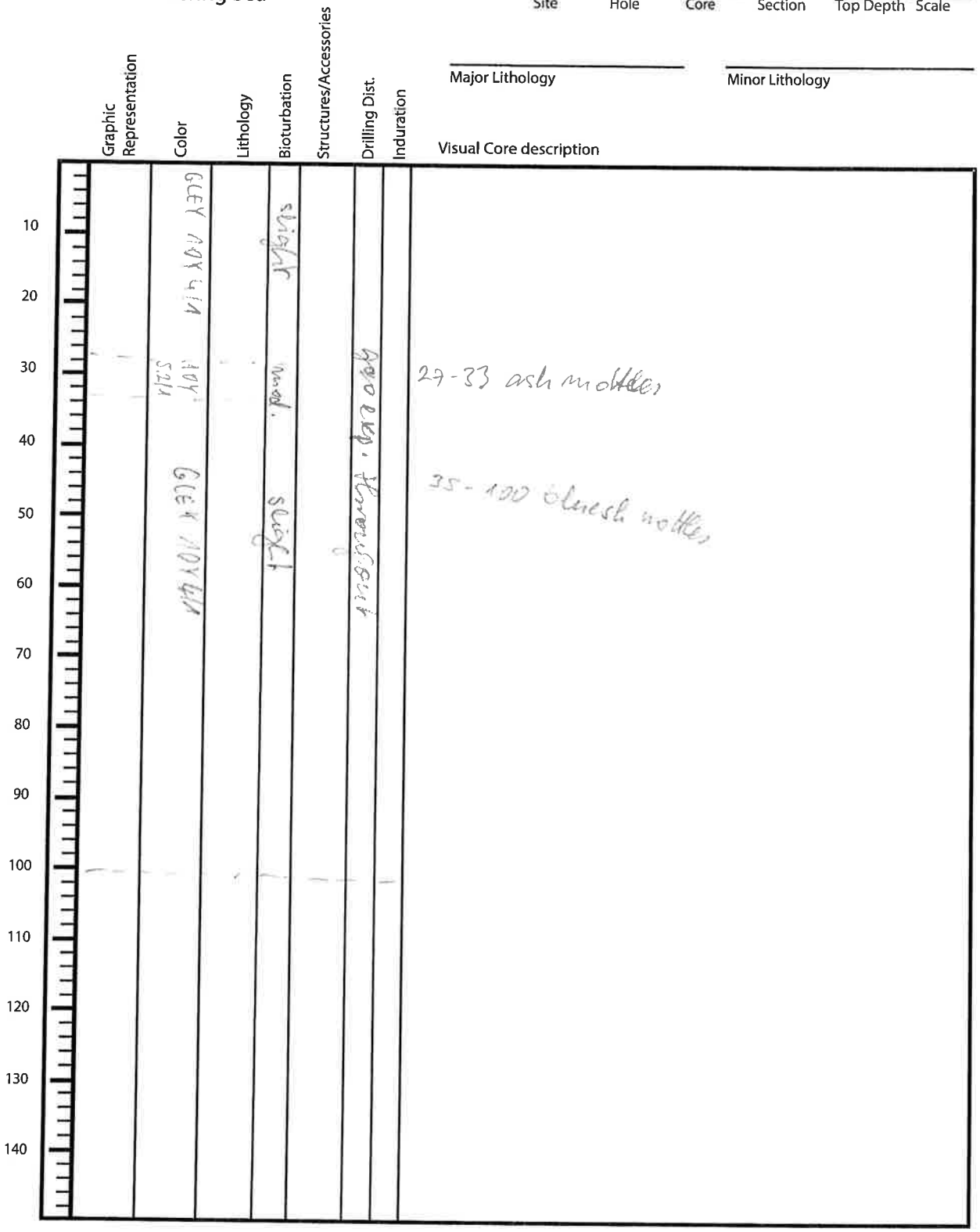


Observer: Mün Date: 7/19

Expedition 323
Bering Sea

323 Site | B Hole | 7 Core | 2 Section | 1.50 Top Depth | Scale

Major Lithology | Minor Lithology

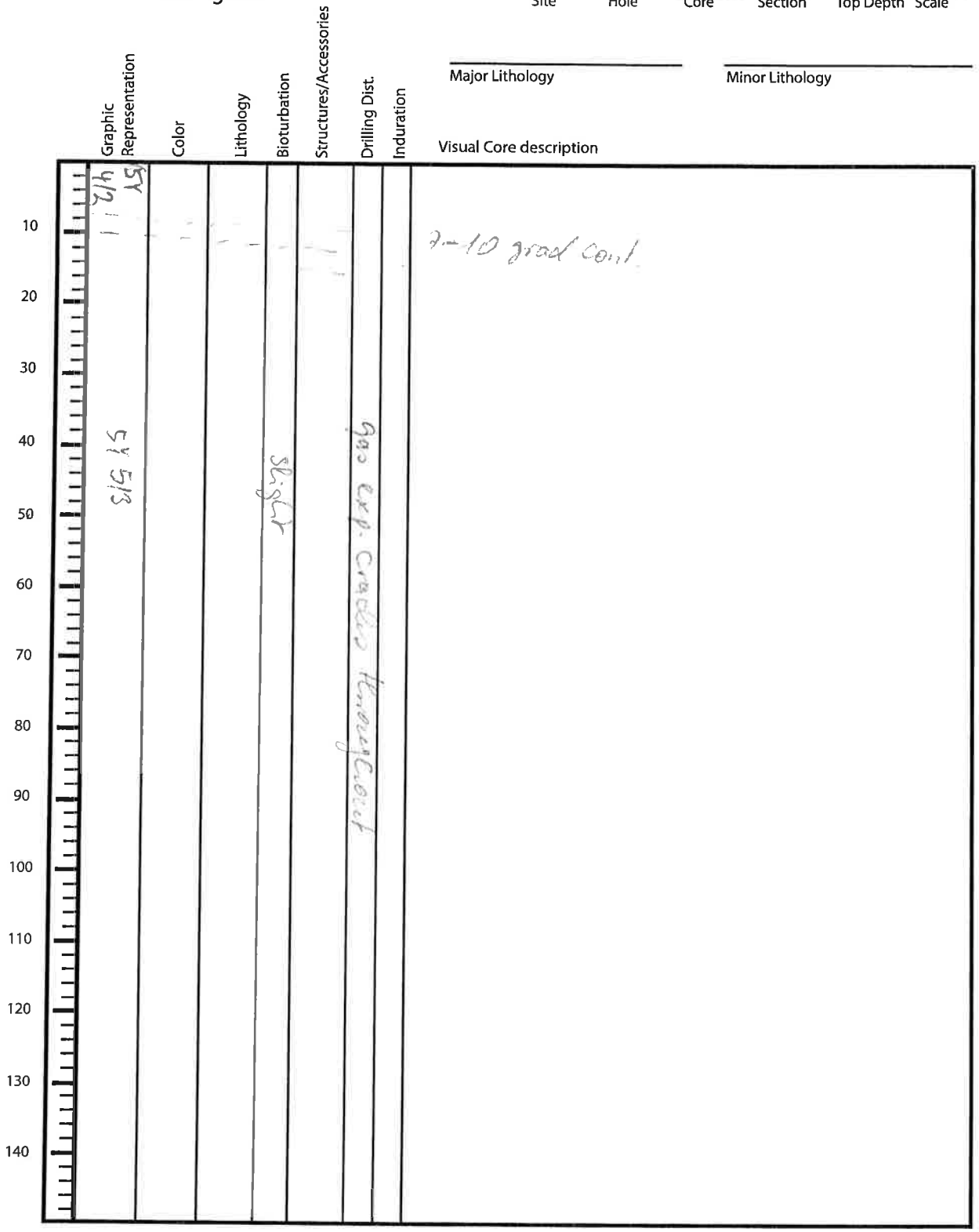


Observer: Mary Date: 7/19

Expedition 323
Bering Sea

323 | B | 7 | 3 | 3.00 | _____
Site | Hole | Core | Section | Top Depth | Scale

Major Lithology _____ Minor Lithology _____



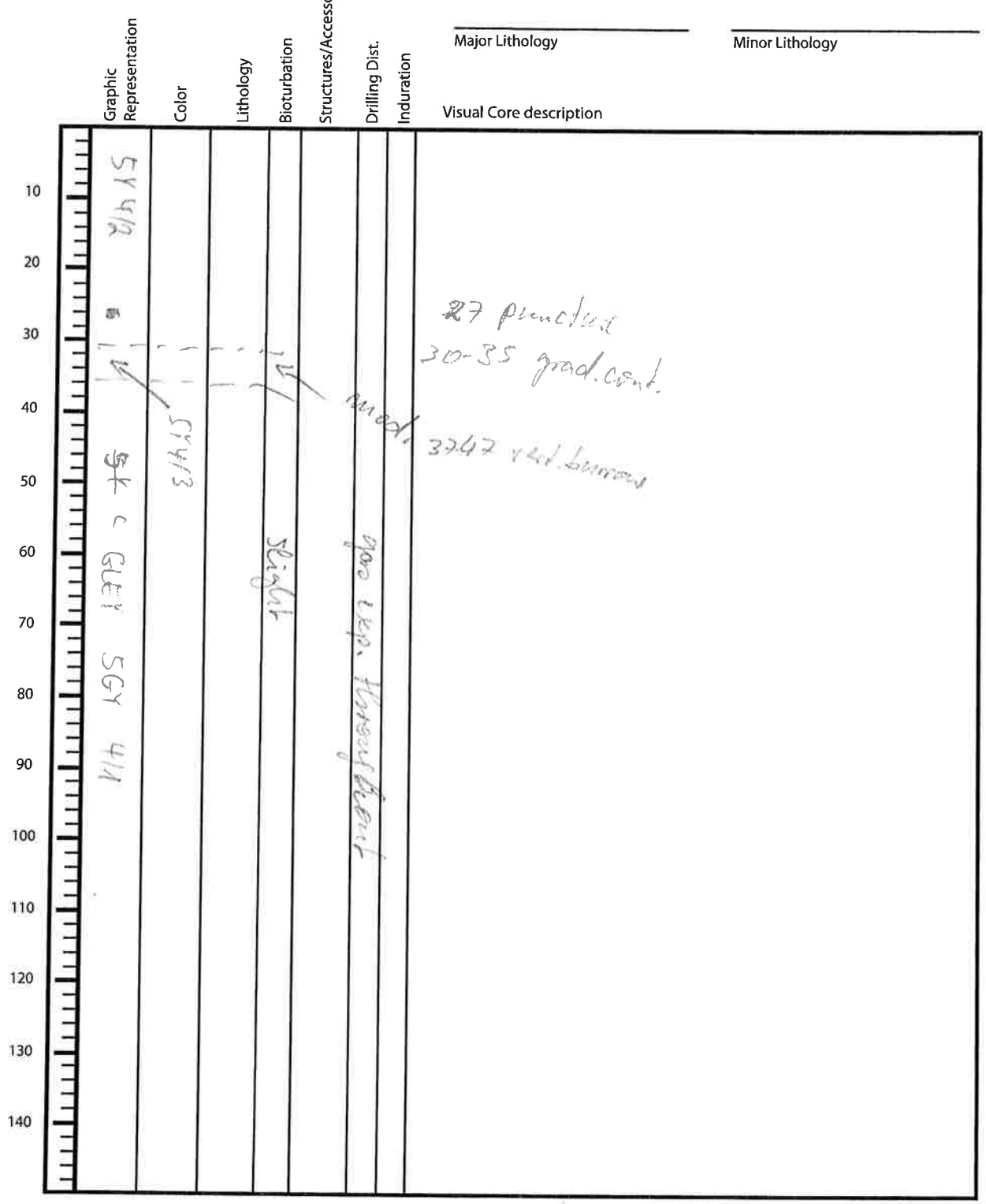
Observer: _____ Date: 7/19

Expedition 323
Bering Sea

323	B	7	4	4.5	
Site	Hole	Core	Section	Top Depth	Scale

Major Lithology

Minor Lithology



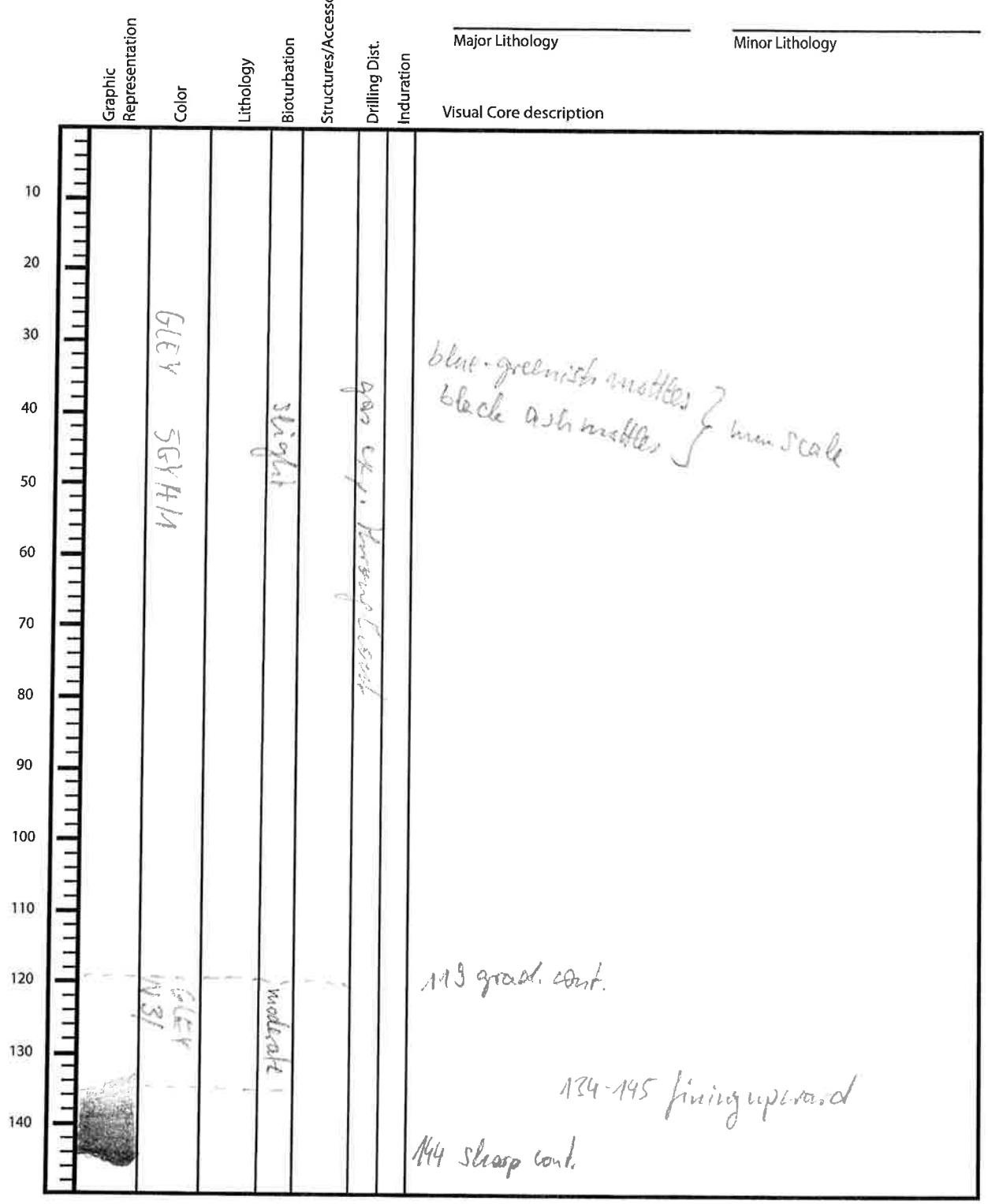
Observer: Mari

Date: 7/19

Expedition 323
Bering Sea

323 | B | 7 | 5 | 6.00 | _____
Site | Hole | Core | Section | Top Depth | Scale

Major Lithology _____ Minor Lithology _____



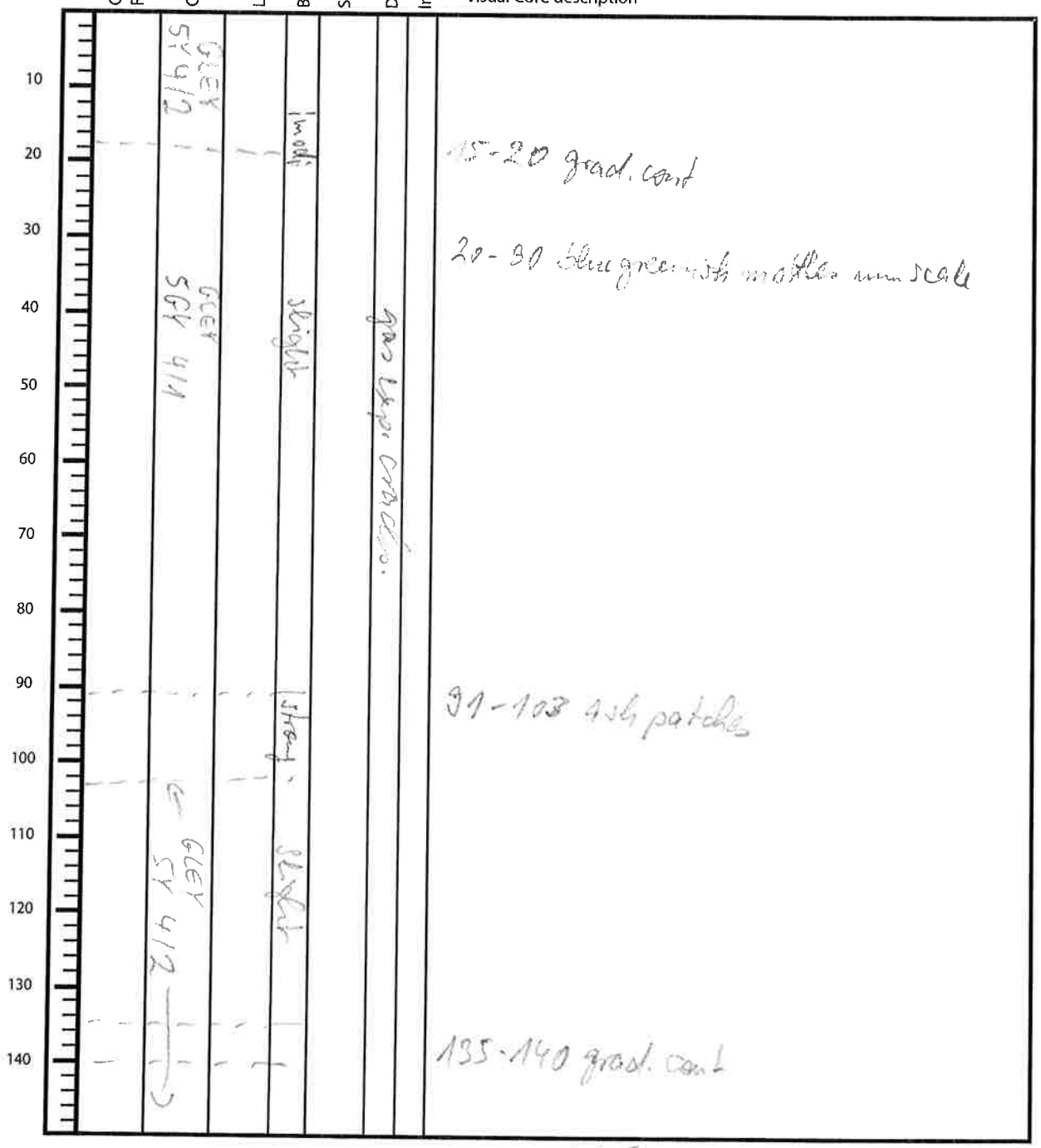
Observer: Mara Date: 7/19

Expedition 323
Bering Sea

Site	Hole	Core	Section	Top Depth	Scale
323	B	7	6	75	

Major Lithology

Minor Lithology



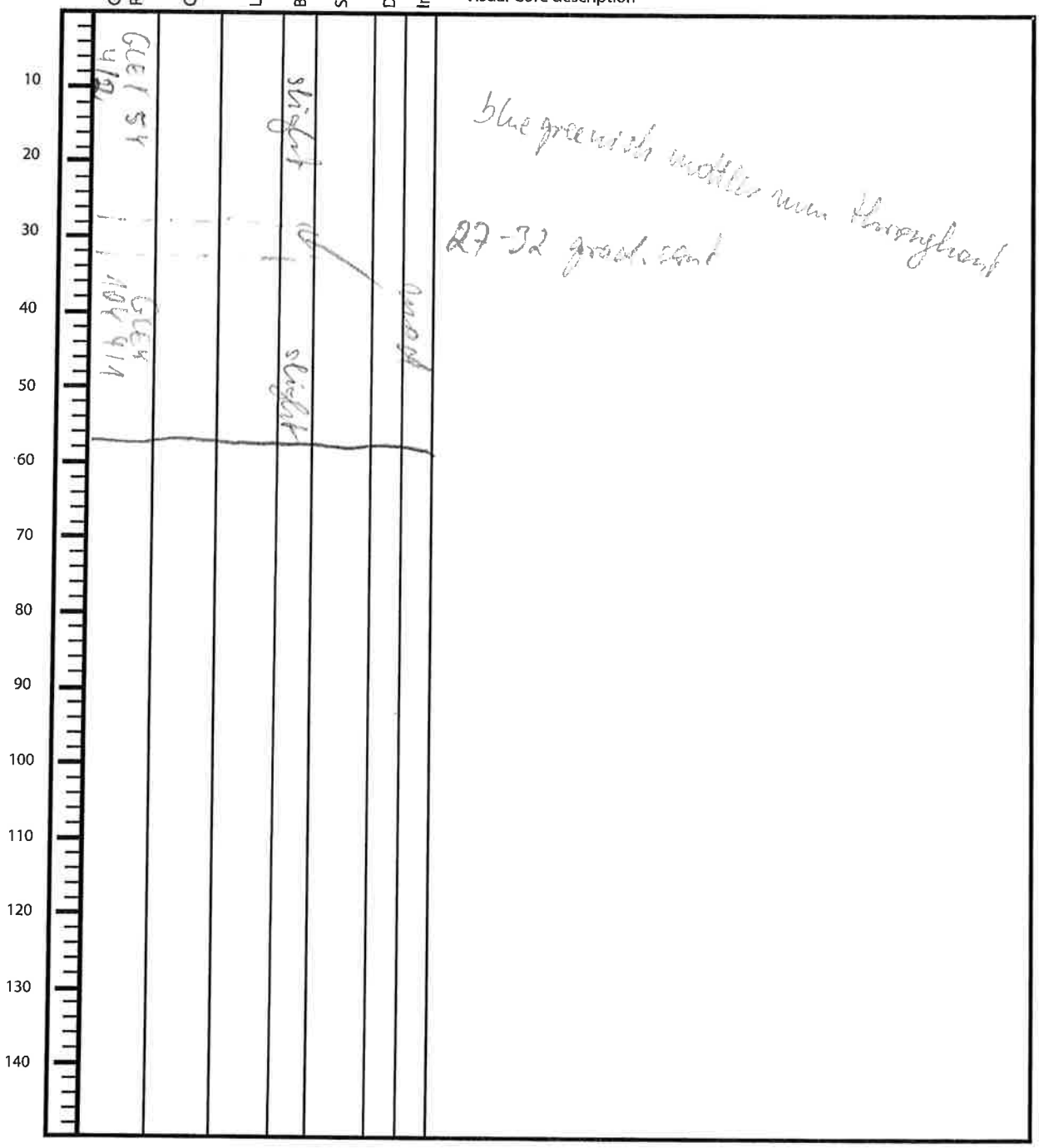
Observer: Mâr

Date: 7/19

Expedition 323
Bering Sea

323 | B | 7 | 7 | 9.90 |
Site | Hole | Core | Section | Top Depth | Scale

Major Lithology | Minor Lithology

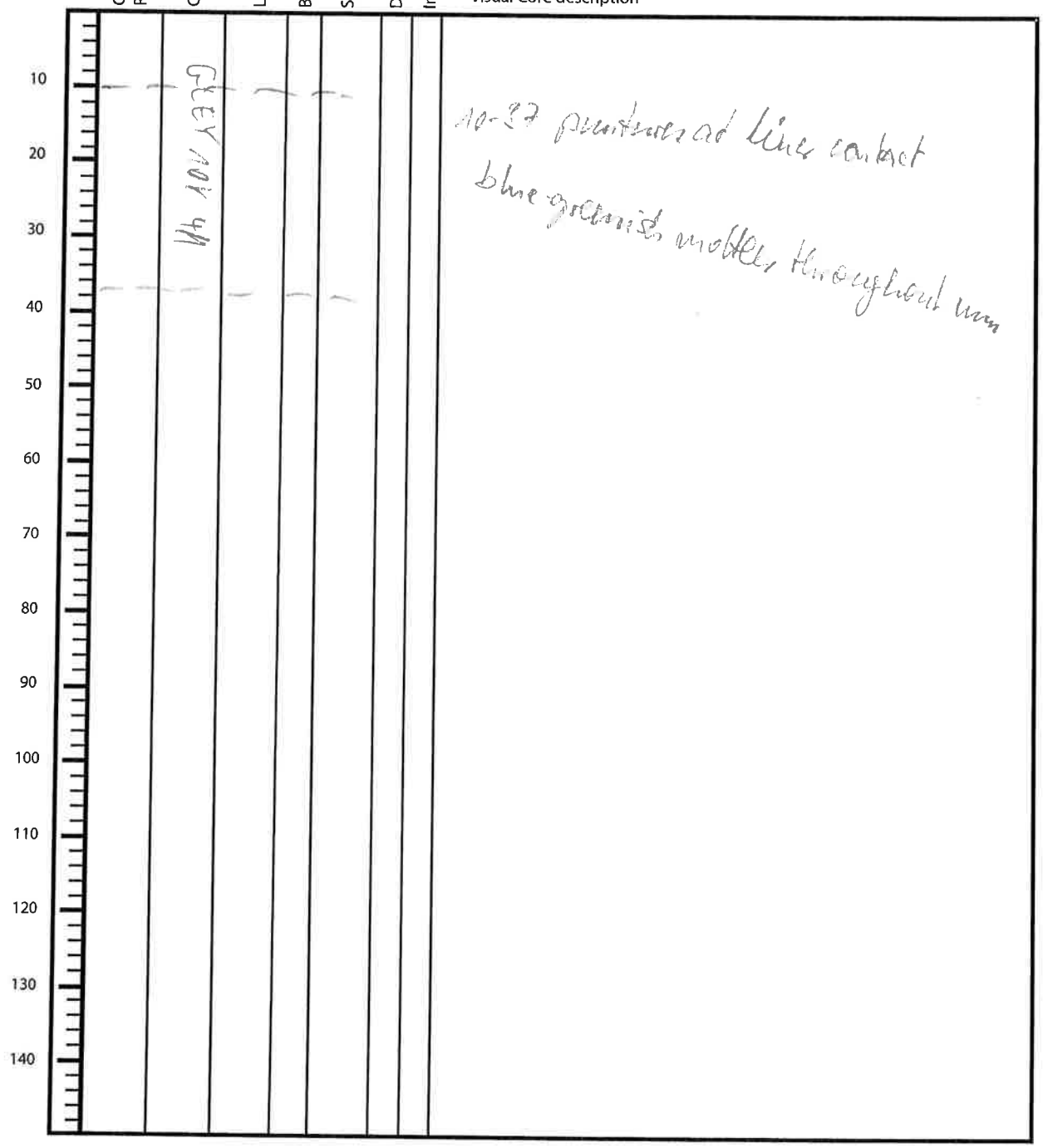


Observer: _____ Date: _____

Expedition 323
Bering Sea

323 | B | 7 | CC | 9.57 |
Site | Hole | Core | Section | Top Depth | Scale

Major Lithology | Minor Lithology



Observer: Mara | Date: 7/19

SM

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Interval (cm) Bottom
323	U1339	B	7	H	1	40	40

Sediment/Rock Name	~~Fine ash rich~~ diatom ooze	Observer	Kelsie

	Percent Texture		
	Sand	Silt	Clay
Glass		90	10
Silic.		90	10

Comments:

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

✓

SM

X

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Interval (cm) Bottom
323	U1339	B	7	H	1	143	143

Sediment/Rock Name	~~Silt rich fine ash and diatom ooze~~ Diatom fine ash

Observer	Kelsie

	Percent Texture		
	Sand	Silt	Clay
V		80	20
S		80	20

Comments:

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

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

✓

SM

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Interval (cm) Bottom
323	U1339	B	7	2	H	110	110

Sediment/Rock Name	~~Fine-grained rock~~ diatom ooze	Observer	Kelsie

Percent Texture		
Sand	Silt	Clay
	90	10
5	85	10

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

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

X

SM

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Interval (cm) Bottom
323	U1339	B	7	H	3	100	100

Sediment/Rock Name	~~Fine ash and silt bearing~~ diatom ooze	Observer	Kelsie

	Percent Texture		
	Sand	Silt	Clay
V		90	10
S		80	20

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
5	Ferromagnesium minerals
	Authigenic minerals
	Barite
	Phosphorite/Apatite
	Zeolite
	Opaque minerals
3	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
50	Centric
20	Pennate
	Chaetoceros Resting Spores
	Silicoflagellates
	Sponge spicules
	Dinoflagellates
	Others
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

✓

X

SM

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Interval (cm) Bottom
323	U1339	B	7	H	4	120	120

Sediment/Rock Name	~~Fine-grained bearing~~ diatom-rich silt

Observer	Kelsie

V
S

Percent Texture		
Sand	Silt	Clay
	80	20
	90	10

Comments:

Percent	Component
	SILICICLASTIC GRAINS/MINERAL
	Framework minerals
40	Quartz
20	Feldspar
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
10	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
1	Pyrite
	Magnetite
1	Fe-oxide
	Carbonates
	Calcite
	Dolomite
	VOLCANICLASTIC GRAINS
	Crystal grain
10	Vitric grain
	Lithic grain

Percent	Component
	BIOGENIC GRAINS
	Calcareous
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
	Siliceous
	Radiolarians
	Spumellaria
	Nassellaria
	Diatoms
10	Centric
5	Pennate
	Chaetoceros Resting Spores
1	Silicoflagellates
	Sponge spicules
1	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	Interval (cm) Bottom
323	U1339	B	7	H	5	140	140

Sediment/Rock Name	Fine ash

Observer	Kelsie

Comments:

	Percent Texture		
	Sand	Silt	Clay
V	10	80	10
S			

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

Percent	Component
	BIOGENIC GRAINS
	Calcareous
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
	Siliceous
	Radiolarians
	Spumellaria
	Nassellaria
	Diatoms
2	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	Interval (cm) Bottom
323	1339	B	7	H	6	10	10

Sediment/Rock Name	~~F.Ast~~ diatom ooze	Observer	Kelsie.

	Percent Texture		
	Sand	Silt	Clay
V		80	20
S		90	10

Comments:

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

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

SM

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Interval (cm) Bottom
323	1339	B	7	H	7	50	50

Sediment/Rock Name	~~F.Ash-bearing silt-rich~~ diatom ooze	Observer	Kelsie

	Percent Texture		
	Sand	Silt	Clay
V		80	20
S		90	10

Comments:

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

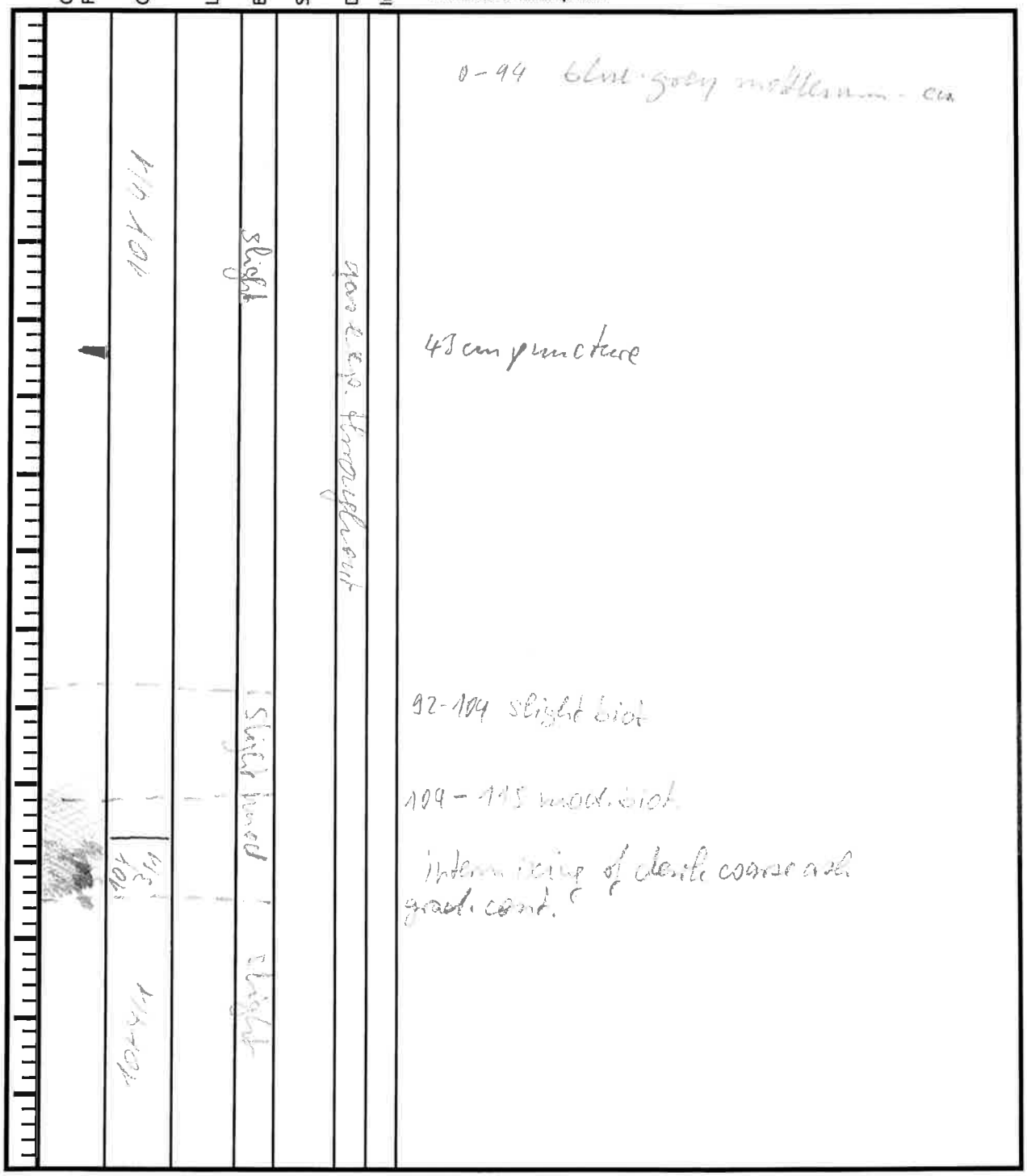
Percent	Component
	BIOGENIC GRAINS
	Calcareous
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
	Siliceous
1	Radiolarians
	Spumellaria
	Nassellaria
	Diatoms
40	Centric
20	Pennate
	Chaetoceros Resting Spores
1	Silicoflagellates
	Sponge spicules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

✓

Expedition 323
Bering Sea

323 | B | 8 | 1 | 0 | _____
Site | Hole | Core | Section | Top Depth | Scale

Major Lithology _____ Minor Lithology _____



Observer: Morse Date: 7/19

Expedition 323
Bering Sea

323 | B | 8 | 2 | 1.5 |
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

7-12 grad. cont.

7-25 blue gray mottles cm scale

26 crack

34-45 grad. cont. ; 37-41 ash patch (burrow)

green-brown mottles, black elaborate

45-80 grad cont.

80-98 white gray ash,

85-92 puncture, mod. disturbance (soupy)

96-97 crack

100-101 crack

102-119 grayish with gray burrows

119-124 grad. cont.

124-150 grayish with green burrows

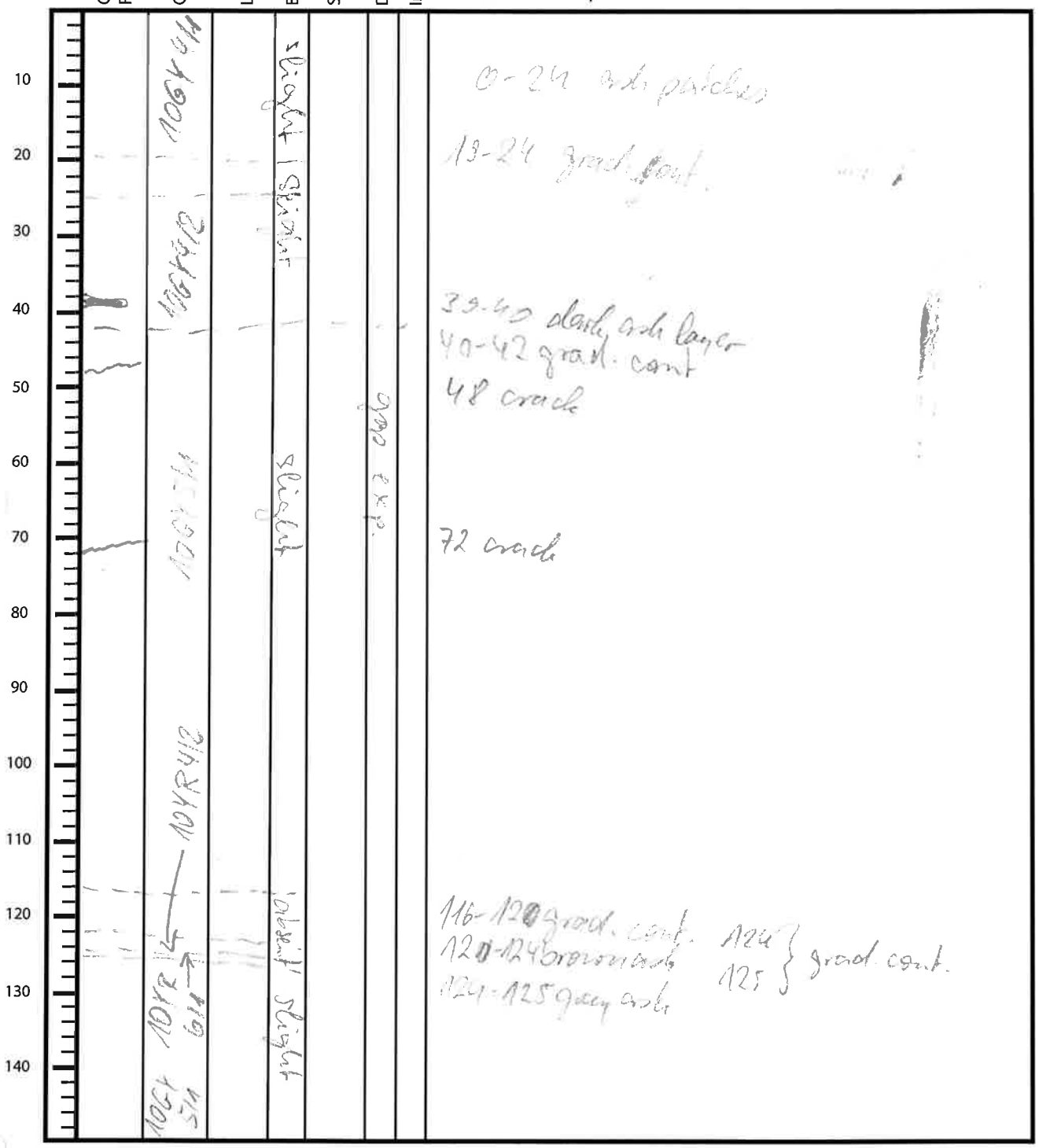
130 white shell fragments 2 cm

Observer: Mare Date: 7/13

Expedition 323
Bering Sea

323 | B | 8 | 8 | 3.0 | _____
Site | Hole | Core | Section | Top Depth | Scale

Major Lithology _____ Minor Lithology _____



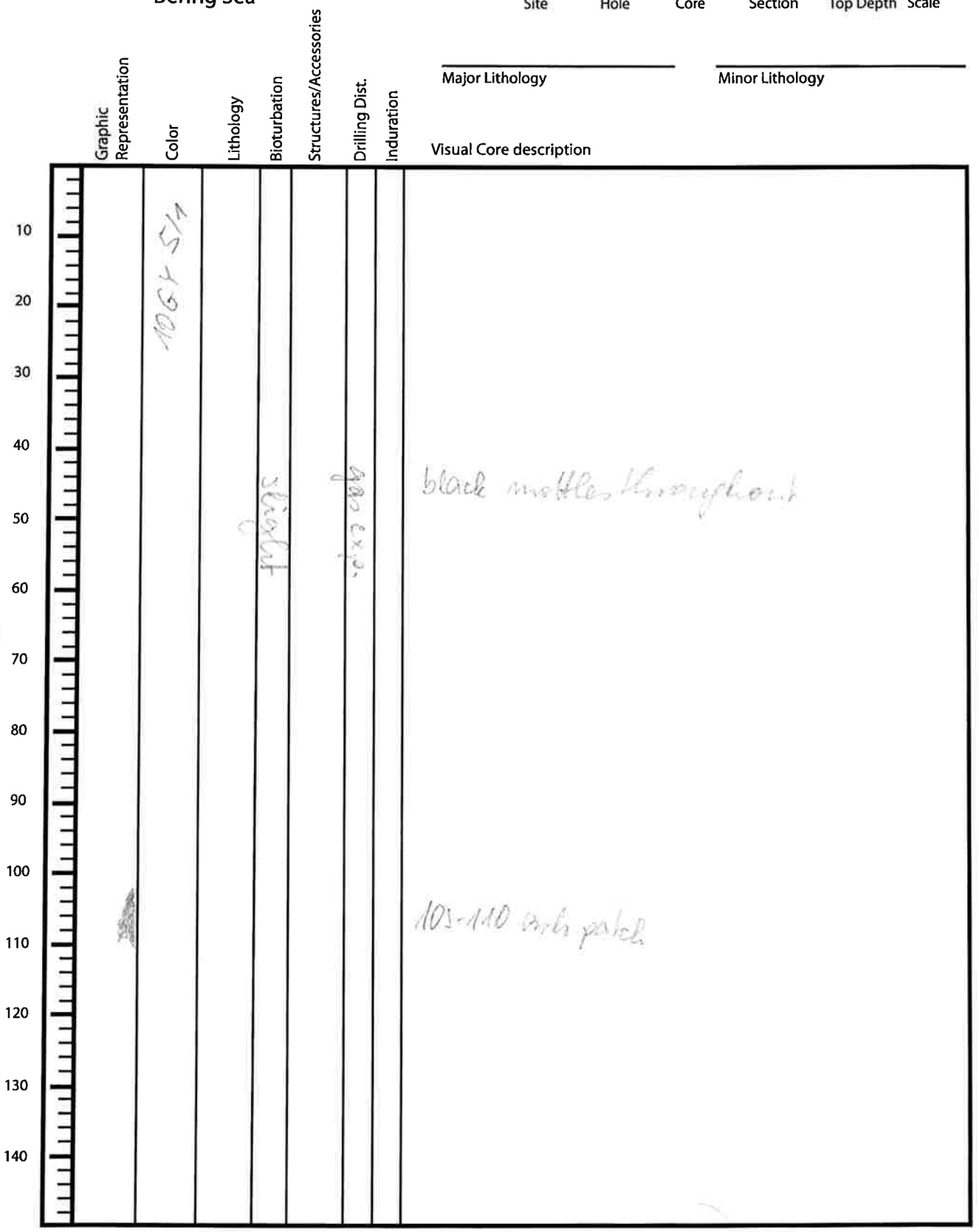
Observer: Mari Date: 7/19

Expedition 323
Bering Sea

323	B	8	4	4.5	
Site	Hole	Core	Section	Top Depth	Scale

Major Lithology

Minor Lithology



Observer: Klare

Date: 7/16

Expedition 323
Bering Sea

323 | B | 8 | 5 | 6.0 | 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

10GY 5/1

2.5Y 2/1

10GY 5/1

slight

mod

slight

10X9 cm

50-54 grad. sand., biot.
54-57 ~~grada~~ fining upward

70-150 black clots

Observer: Mara

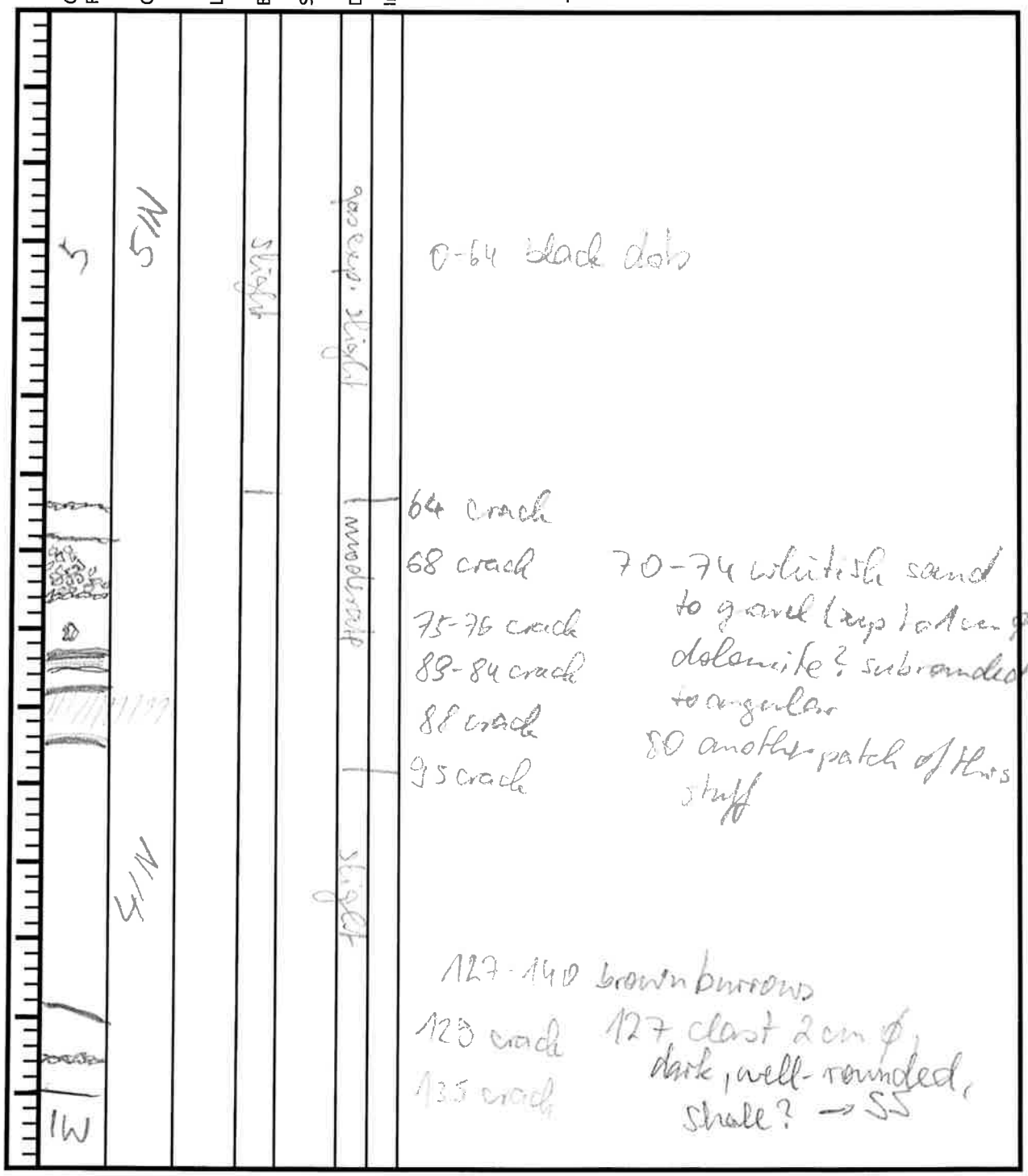
Date: 7/13

Expedition 323
Bering Sea

323	B	8	6	7.5	
Site	Hole	Core	Section	Top Depth	Scale

Major Lithology

Minor Lithology



Observer: Mari

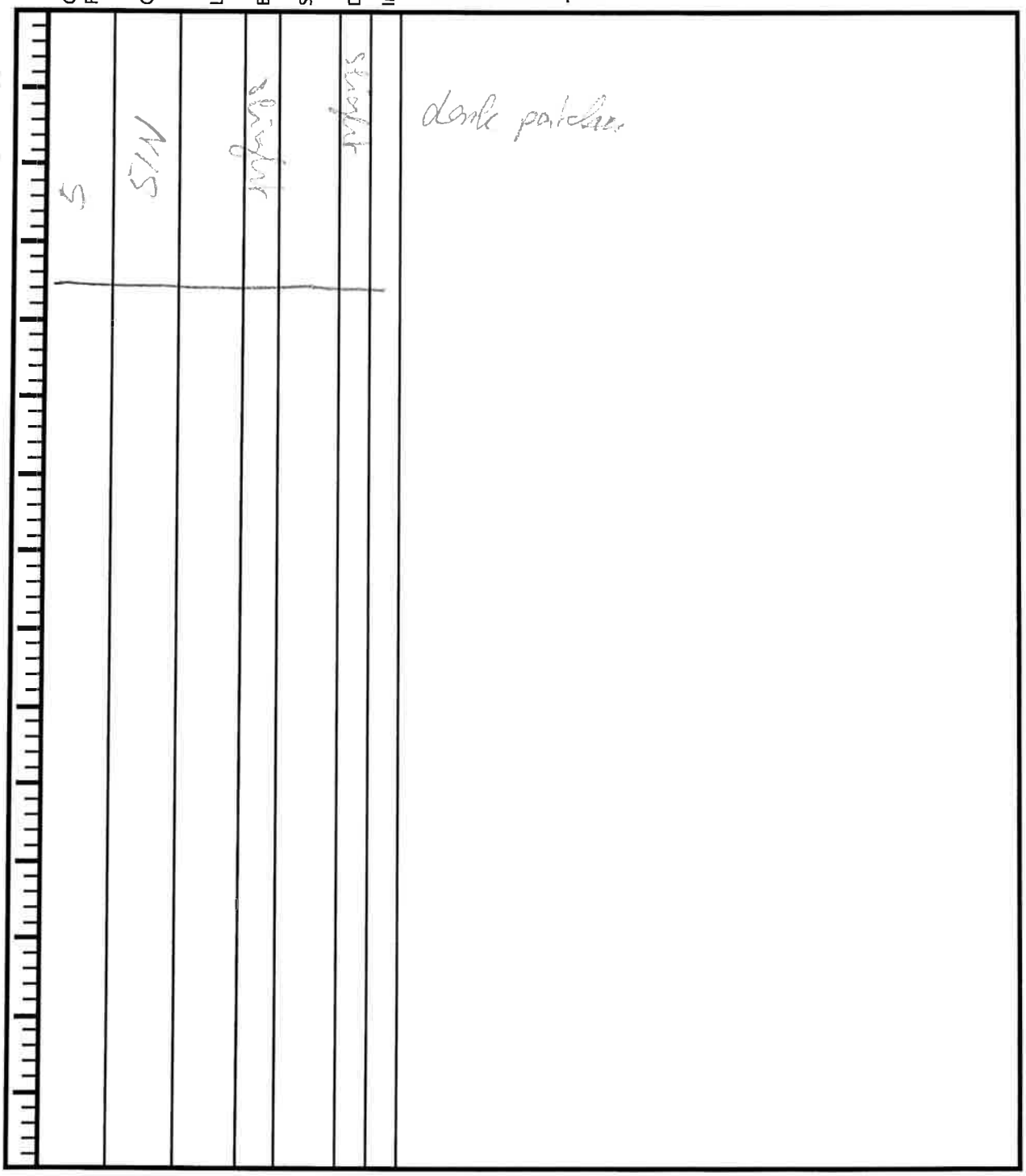
Date: 7/13

Expedition 323
Bering Sea

323 | B | 8 | 7 | 9.0 |
Site | Hole | Core | Section | Top Depth | Scale

Major Lithology | Minor Lithology

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

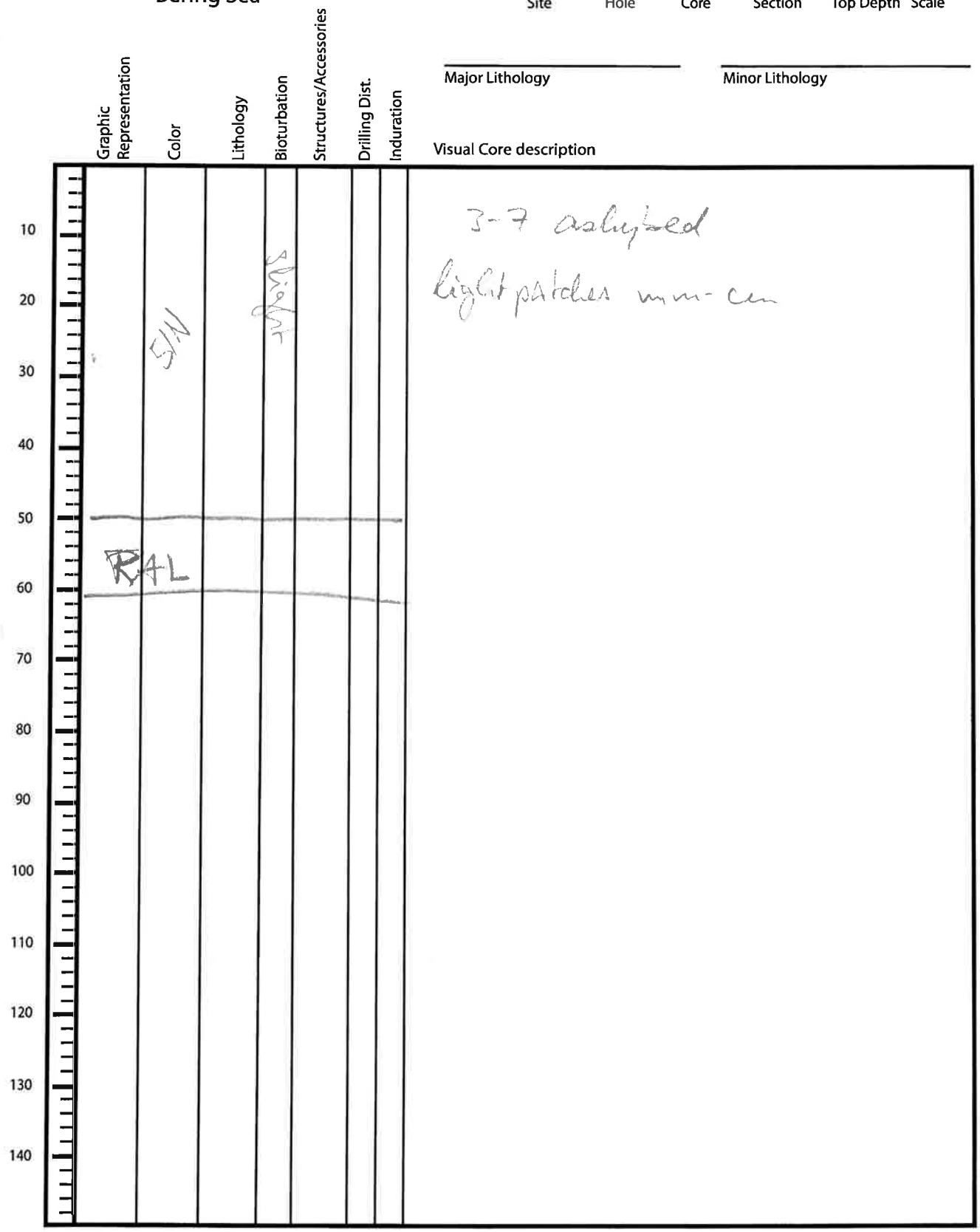


Observer: Mia | Date: 7/15

Expedition 323
Bering Sea

323 | B | 8 | CC | | |
Site | Hole | Core | Section | Top Depth | Scale

Major Lithology | Minor Lithology



Observer: Mar Date: 7/15

SM

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Interval (cm) Bottom
323	U1339	B	8	H	2	70	70

Sediment/Rock Name	Fine ash rich diatom silt

Observer	Kelsie

Diatom-rich fine-ashy silt

	Percent Texture		
	Sand	Silt	Clay
V		90	10
S		90	10

Comments: Main lithology

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
	Pyrite
	Magnetite
	Fe-oxide
	Carbonates
	Calcite
	Dolomite
	VOLCANICLASTIC GRAINS
	Crystal grain
25	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
5	Pennate
	Chaetoceros Resting Spores
	Silicoflagellates
	Sponge spicules
	Dinoflagellates
	Others
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

✓

SM

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Interval (cm) Bottom
323	U1339	B	8	H	2	93	93

Sediment/Rock Name	Fine ~~crystal vitric~~ ash

Observer	Kelsie

V

Percent Texture		
Sand	Silt	Clay
30	60	10

Comments: Light - col ash pad

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	
20	Crystal grain
70	Vitric grain
10	Lithic grain

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

✓

SM

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Interval (cm) Bottom
323	U1339	B	8	H	3	122	122

Sediment/Rock Name	Fine ~~crystal vitric~~ ash	Observer	Kelsie

V

Percent Texture		
Sand	Silt	Clay
5	90	5

Comments: Grey-brown ash layer

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	
15	Crystal grain
85	Vitric grain
	Lithic grain

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

✓

5m

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Interval (cm) Bottom
323	U1339	B	8	H	4	140	140

Sediment/Rock Name	~~Silt rich~~ diatom ooze	Observer	Kelsie

	Percent Texture Sand	Silt	Clay
V	5	85	10
S	5	75	20

Comments: Main lithology

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

Percent	Component
	BIOGENIC GRAINS
	Calcareous
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
	Siliceous
	Radiolarians
	Spumellaria
	Nassellaria
	Diatoms
30	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	Interval (cm) Bottom
323	U1339	B	8	H	6	30	30

Sediment/Rock Name	~~Silt rich~~ diatom ooze	Observer	Kelsie

S

Percent Texture		
Sand	Silt	Clay
	90	10

Comments: Main lithology

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

Percent	Component
	BIOGENIC GRAINS
	Calcareous
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
	Siliceous
1	Radiolarians
	Spumellaria
	Nassellaria
	Diatoms
35	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	Interval (cm) Bottom
323	U1339	B	8	H	6	73	73

Sediment/Rock Name	Observer
~~Diatom-bearing silt-rich fine ash~~ Diatom-rich silty fine ash	Kelsie

Comments: Coarse white layer / rods

	Percent Texture Sand	Silt	Clay
V	10	80	10
S		90	10

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
2	Ferromagnesium minerals
	Authigenic minerals
	Barite
	Phosphorite/Apatite
	Zeolite
	Opaque minerals
1	Pyrite
	Magnetite
	Fe-oxide
	Carbonates
	Calcite
	Dolomite
	VOLCANICLASTIC GRAINS
	Crystal grain
60	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
	Pennate
	Chaetoceros Resting Spores
	Silicoflagellates
	Sponge spicules
	Dinoflagellates
	Others
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

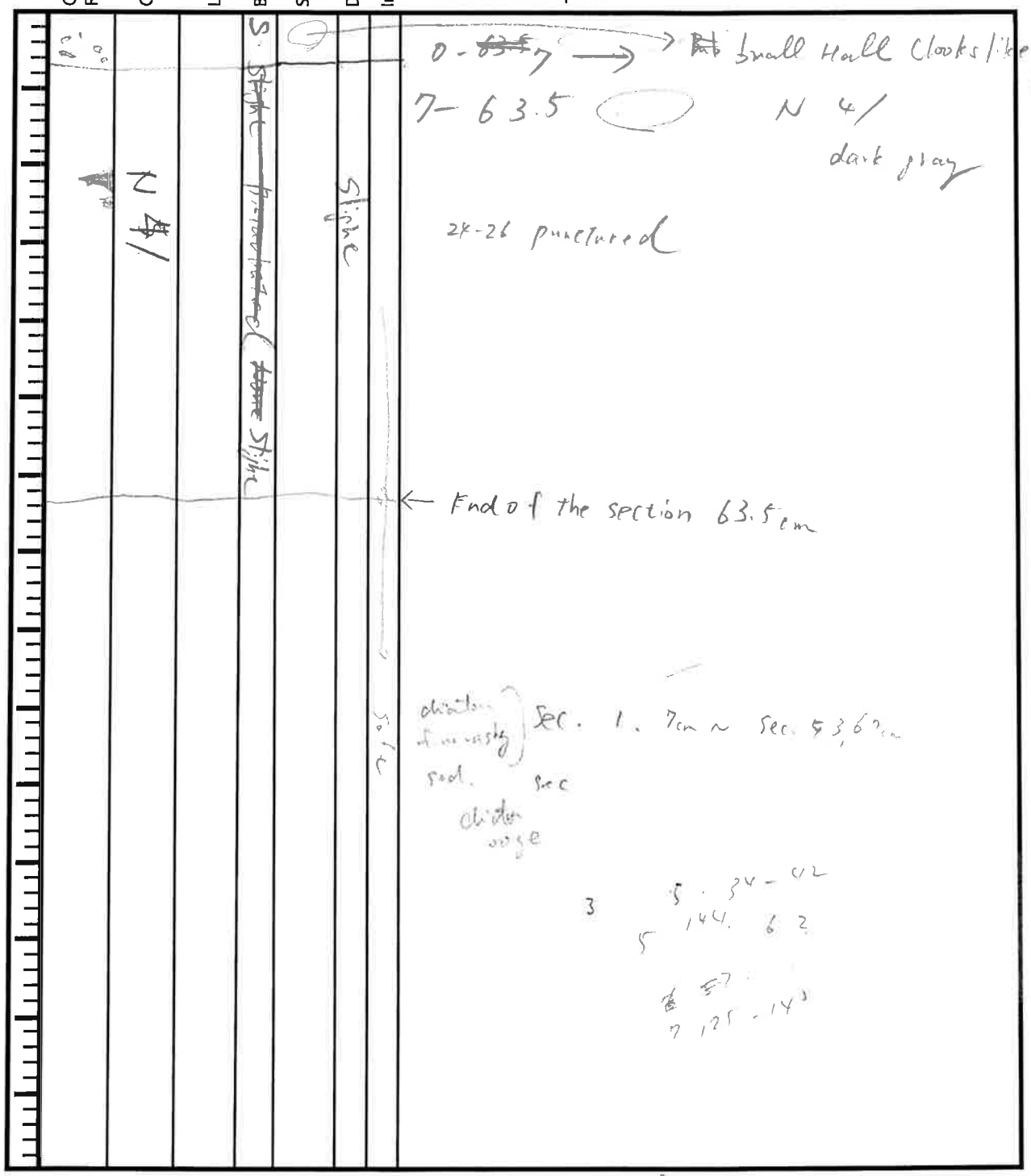
✓

Expedition 323
Bering Sea

323 | 5 | 9 | 1 | 0 |
Site | Hole | Core | Section | Top Depth | Scale

Major Lithology | Minor Lithology

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



Observer: H. Ito A | Date: 7/19

Expedition 323
Bering Sea

Site	Hole	Core	Section	Top Depth	Scale
323	B?	9	2	1.5	

Major Lithology:

Minor Lithology:

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration
	N 4/		slight		slight	soft

Visual Core description

0 - 150 N 4/ dark gray

10 crack (horizontal)

14-15 crack (horizontal)

23-24 crack

33-34 punctured

36-37 crack

48-49 punctured

51-52 crack

58-59 ?

63-64 & 67-68 punctured

68-69 crack

84-85 crack

92 crack

93-94 punctured

118-119 ash ~~[struck-through word]~~ Mottled

122-123 crack

139-140 crack

← 147.0 End

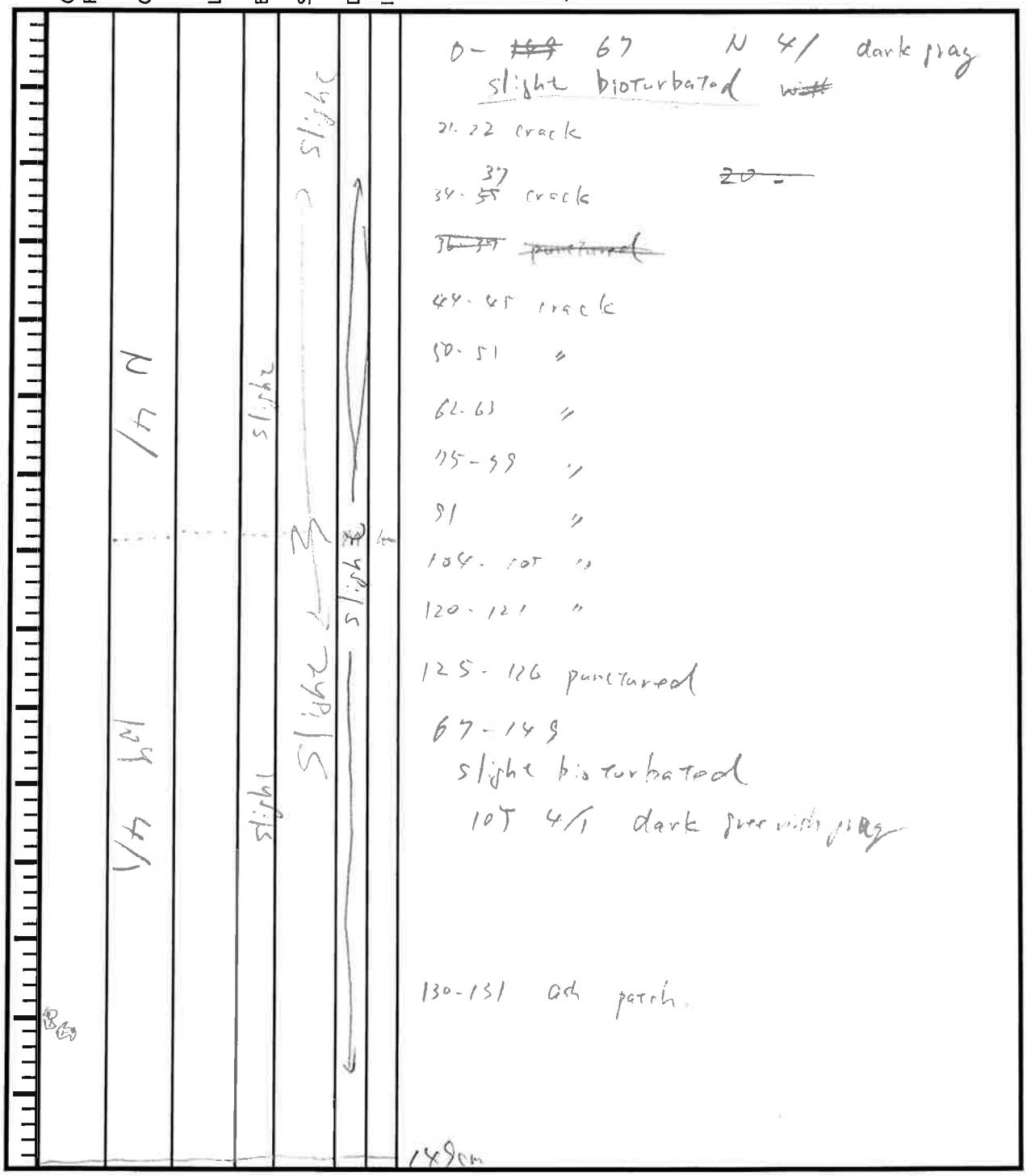
Observer: [illegible]

Date: 7/15?

Expedition 323
Bering Sea

323 | B | 9 | 3 | 3.0 | Site | Hole | Core | Section | Top Depth | Scale

Major Lithology | Minor Lithology



Observer: Mia Date: 7/19

Expedition 323
Bering Sea

323	B	9	4	4.5	
Site	Hole	Core	Section	Top Depth	Scale

Major Lithology

Minor Lithology

Mottling

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration
	10Y 4/1		Slight Mod			
			slight			
			slight Mod			
	5YR 8/1		slight Mod			
	10Y 4/1				slight	
	10Y 4/1		slight			

Visual Core description

0 – 57 10Y 4/1 dark greenish gray
cracks

22-23	90-91
30-31	92
37-39	94
43-44	102-103
45-49	108-110
70-71	116
74-75	132-139
82	
87-89	

57 – ~~65~~ 62
ash layer → 5YR 8/1 white
62 sharp boundary
62 - 65
Slight Bioturbated ash + silt
5YR 8/1 white

65 - ~~80~~ 86 10Y 4/1 dark greenish gray

86 - 150 10Y 4/1 dark greenish gray

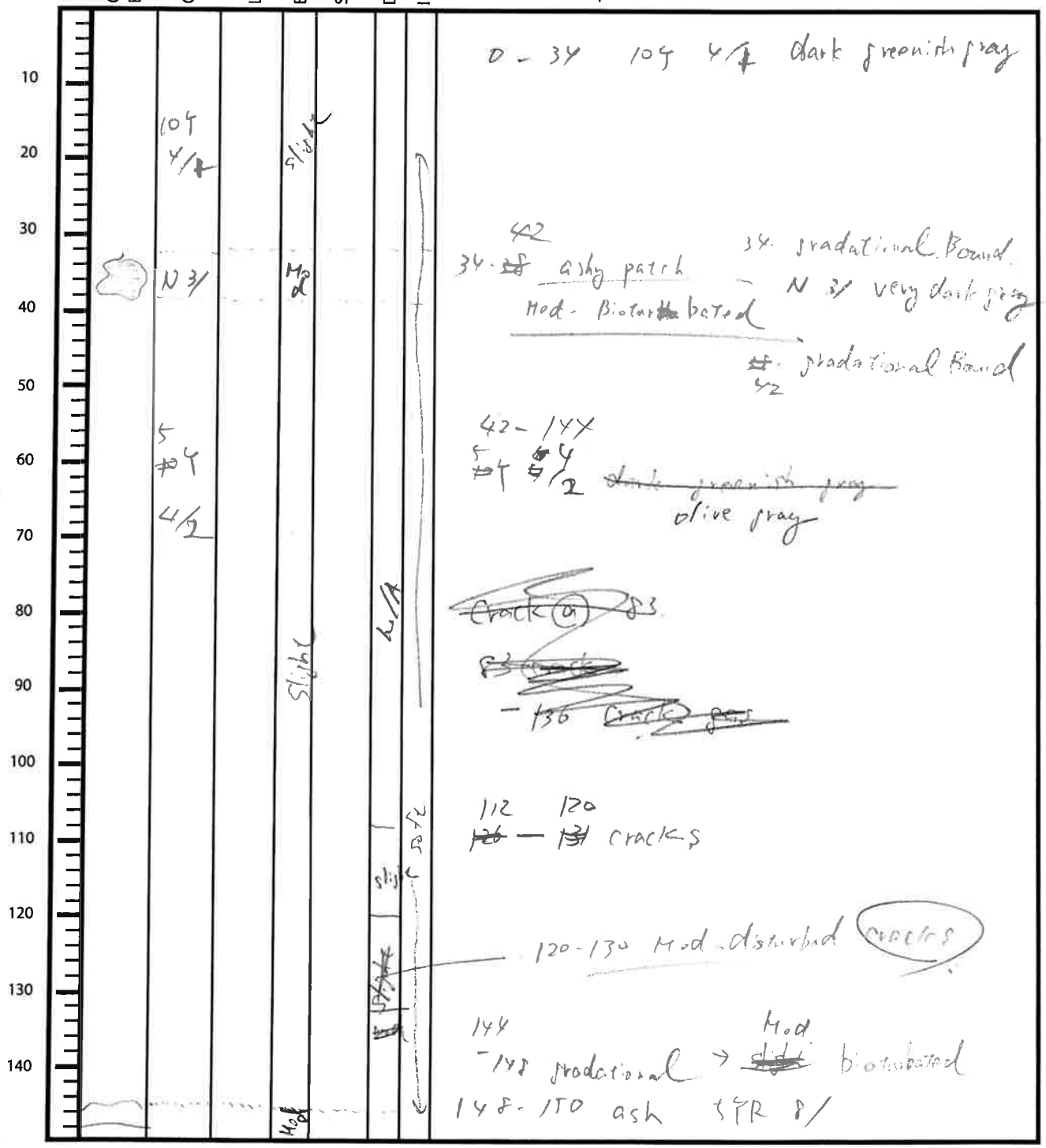
~~86~~ gradational boundary

Observer: Mari Date: 7/1/13

Expedition 323
Bering Sea

323 | B | 9 | 5 | 6.0 | Site | Hole | Core | Section | Top Depth | Scale

Major Lithology | Minor Lithology



Observer: Mao Date: 7/18

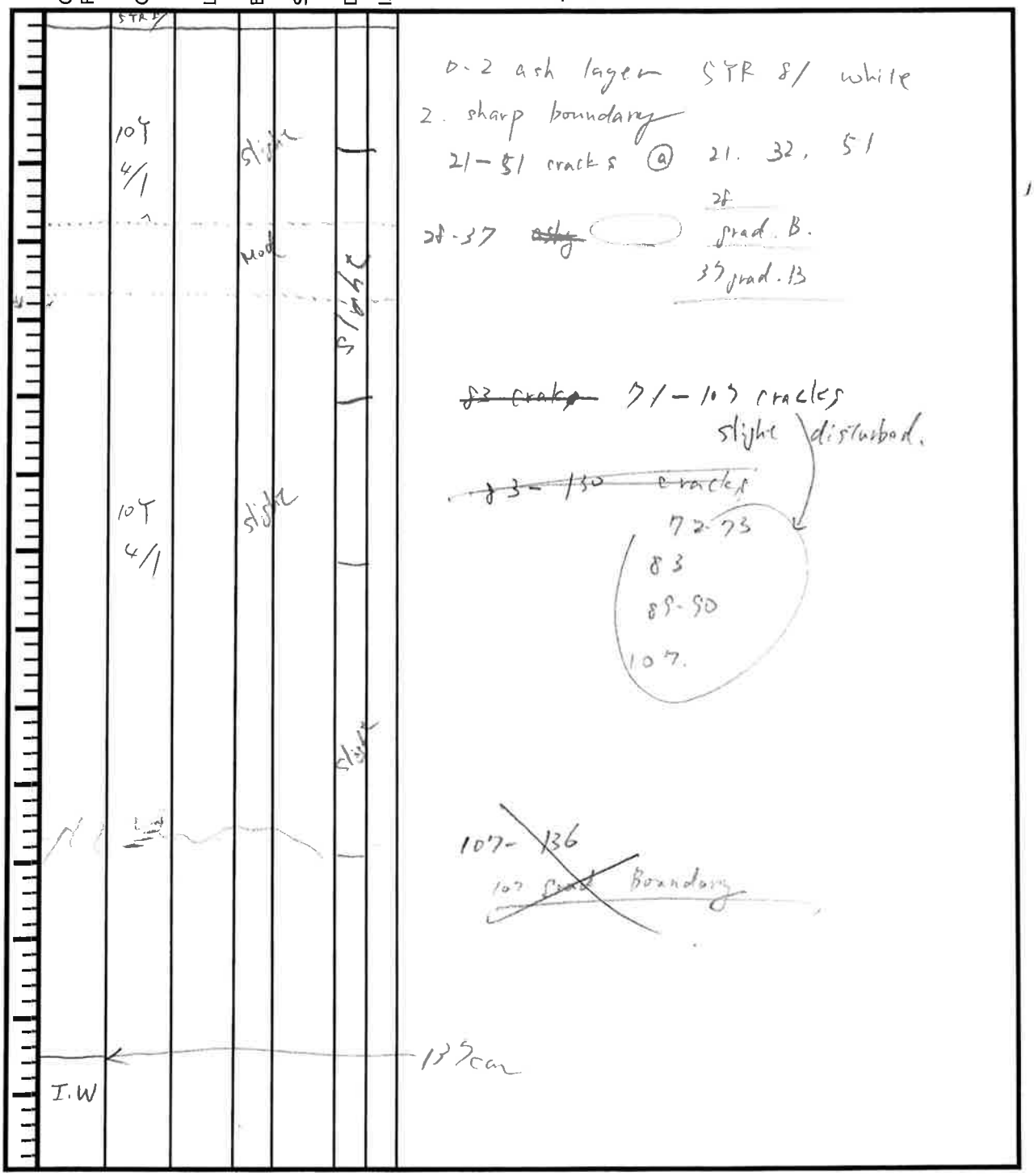
Expedition 323
Bering Sea

323 | B | 3 | 6 | 7.5 |
Site | Hole | Core | Section | Top Depth | Scale

Major Lithology | Minor Lithology

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

Visual Core description



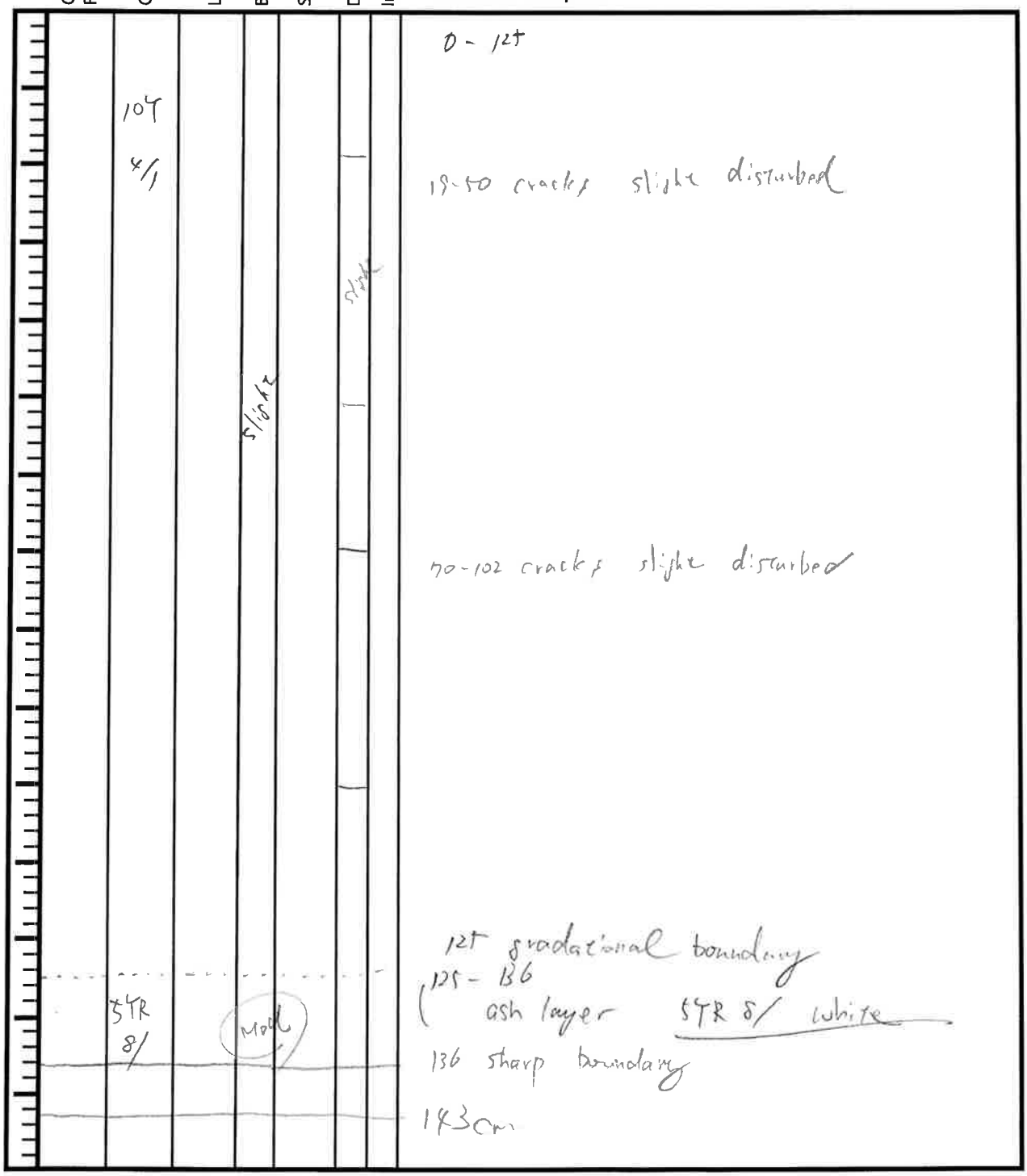
Observer: Hove Date: 7/19

Expedition 323
Bering Sea

323	B	9	7	9.0	
Site	Hole	Core	Section	Top Depth	Scale

Major Lithology

Minor Lithology



Observer: Mare

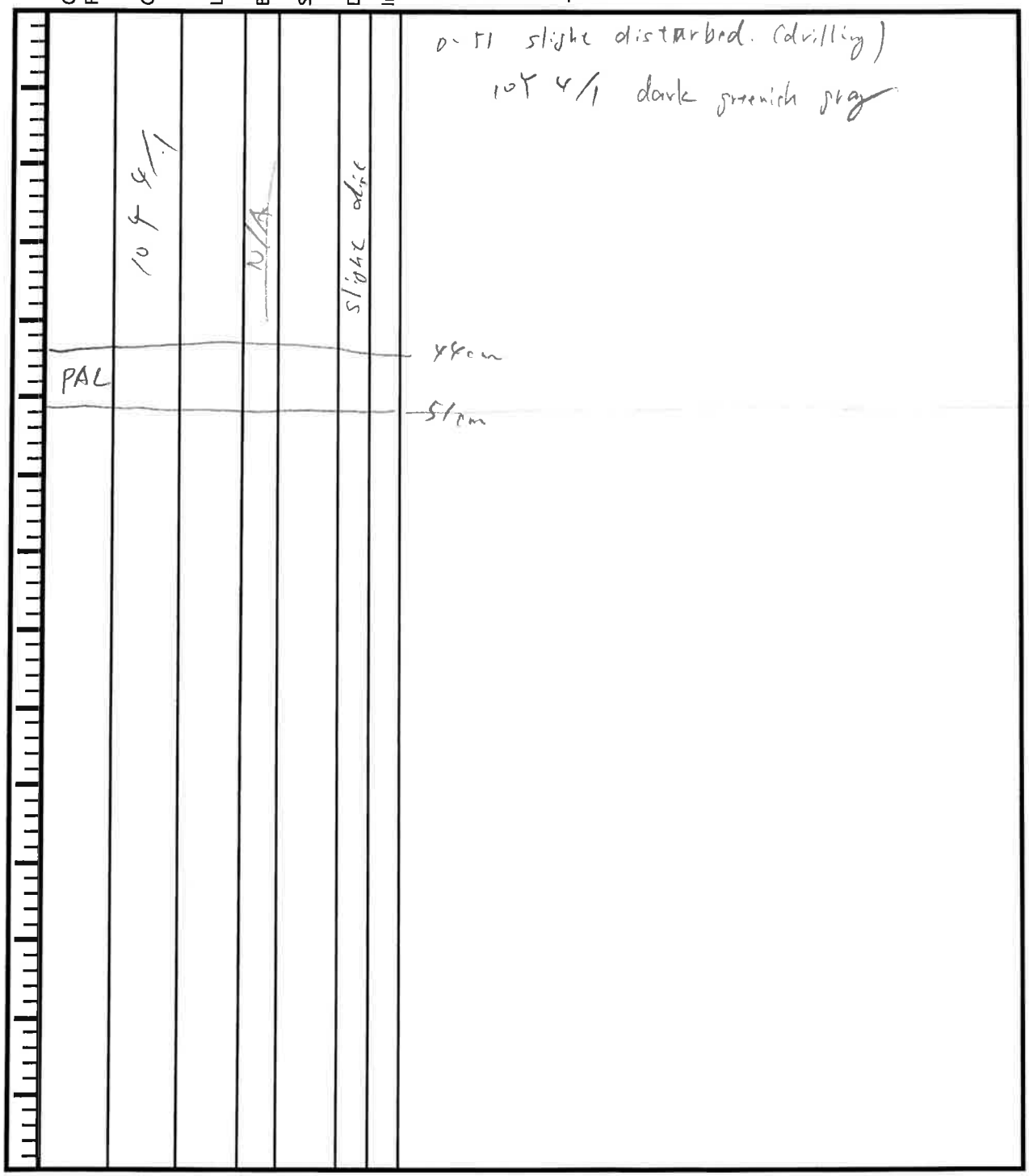
Date: 2/19

Expedition 323
Bering Sea

Site	Hole	Core	Section	Top Depth	Scale
323	B	9	CC		

Major Lithology

Minor Lithology



Observer: Mara

Date: 7/15

SM

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Interval (cm) Bottom
323	U1339	B	9	H	2	50	50

Sediment/Rock Name	Silt-rich diatom ooze

Observer	Kelsie

Diatom fine-ashy silt

Percent Texture		
Sand	Silt	Clay

Comments: Main lithology

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

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

✓

SM

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Interval (cm) Bottom
323	U1339	B	9	H	4	62	62

Sediment/Rock Name	Fine ash

Observer	Kelsie

Percent Texture		
Sand	Silt	Clay
40	35	5

Comments: Light-col ash bed

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

Percent	Component
	BIOGENIC GRAINS
	Calcareous
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
	Siliceous
	Radiolarians
	Spumellaria
	Nassellaria
	Diatoms
1	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	Interval (cm) Bottom
323	1339	B	9	H	4	130	130

Sediment/Rock Name	~~Silt-rich~~ diatom ooze	Observer	Kelsie

Percent Texture		
Sand	Silt	Clay
	90	10

5.9

Comments: Main lithology

Percent	Component
	SILICICLASTIC GRAINS/MINERAL
	Framework minerals
20	Quartz
5	Feldspar
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
5	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
10	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
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	Interval (cm) Bottom
323	U1339	B	9	H	5	60	60

Sediment/Rock Name	~~Silt-bearing~~ diatom ooze

Observer	Kelsie

Percent Texture		
Sand	Silt	Clay

Comments: Main lithology - greenish

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

Percent	Component
	BIOGENIC GRAINS
	Calcareous
1	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
	Siliceous
	Radiolarians
	Spumellaria
1	Nassellaria
	Diatoms
60	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	Interval (cm) Bottom
323	U1339	B	9	H	7	50	50

Sediment/Rock Name	~~Siliceous~~ diatom ooze

Observer	Kelsie

Percent Texture		
Sand	Silt	Clay

Comments: Main lithology - grey

Percent	Component
	SILICICLASTIC GRAINS/MINERAL
	Framework minerals
10	Quartz
15	Feldspar
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	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
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
	Siliceous
	Radiolarians
	Spumellaria
	Nassellaria
	Diatoms
45	Centric
25	Pennate
	Chaetoceros Resting Spores
	Silicoflagellates
	Sponge spicules
	Dinoflagellates
	Others
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

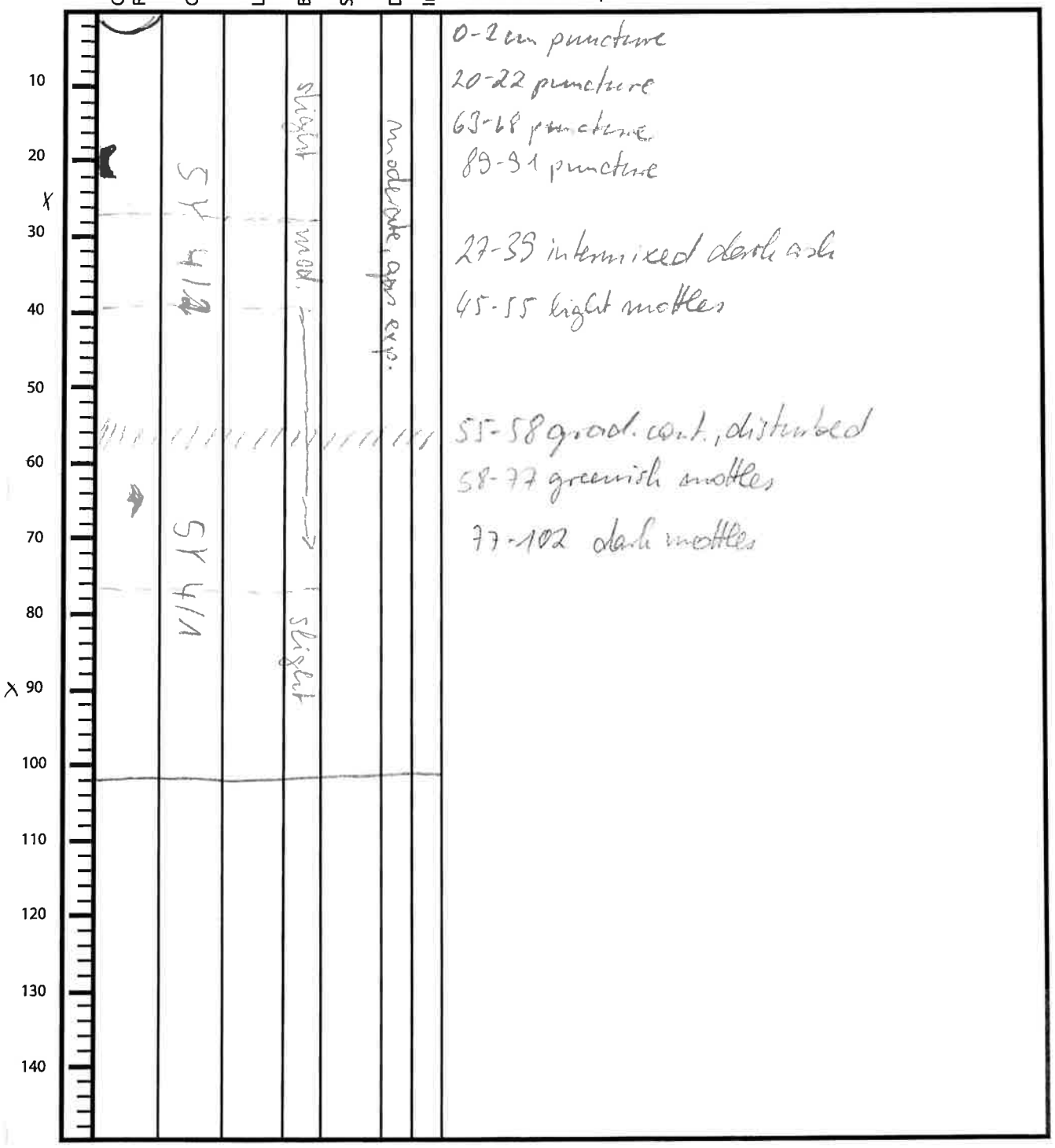
✓

Expedition 323
Bering Sea

323	B	10	1	0	
Site	Hole	Core	Section	Top Depth	Scale

Major Lithology

Minor Lithology



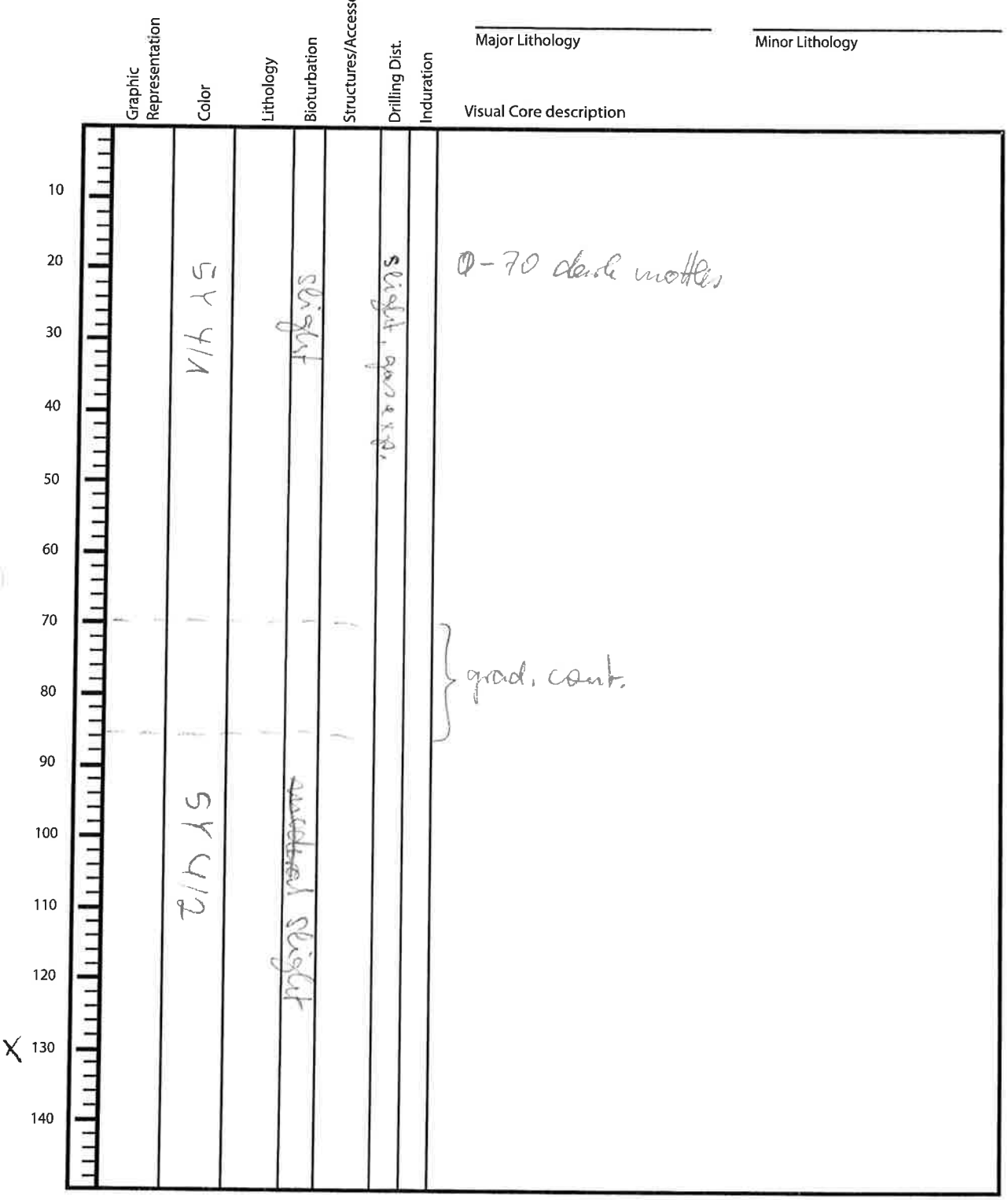
Observer: Mar

Date: 7/12

Expedition 323
Bering Sea

323 Site | B Hole | 10 Core | 2 Section | 1.5 Top Depth | Scale

Major Lithology | Minor Lithology

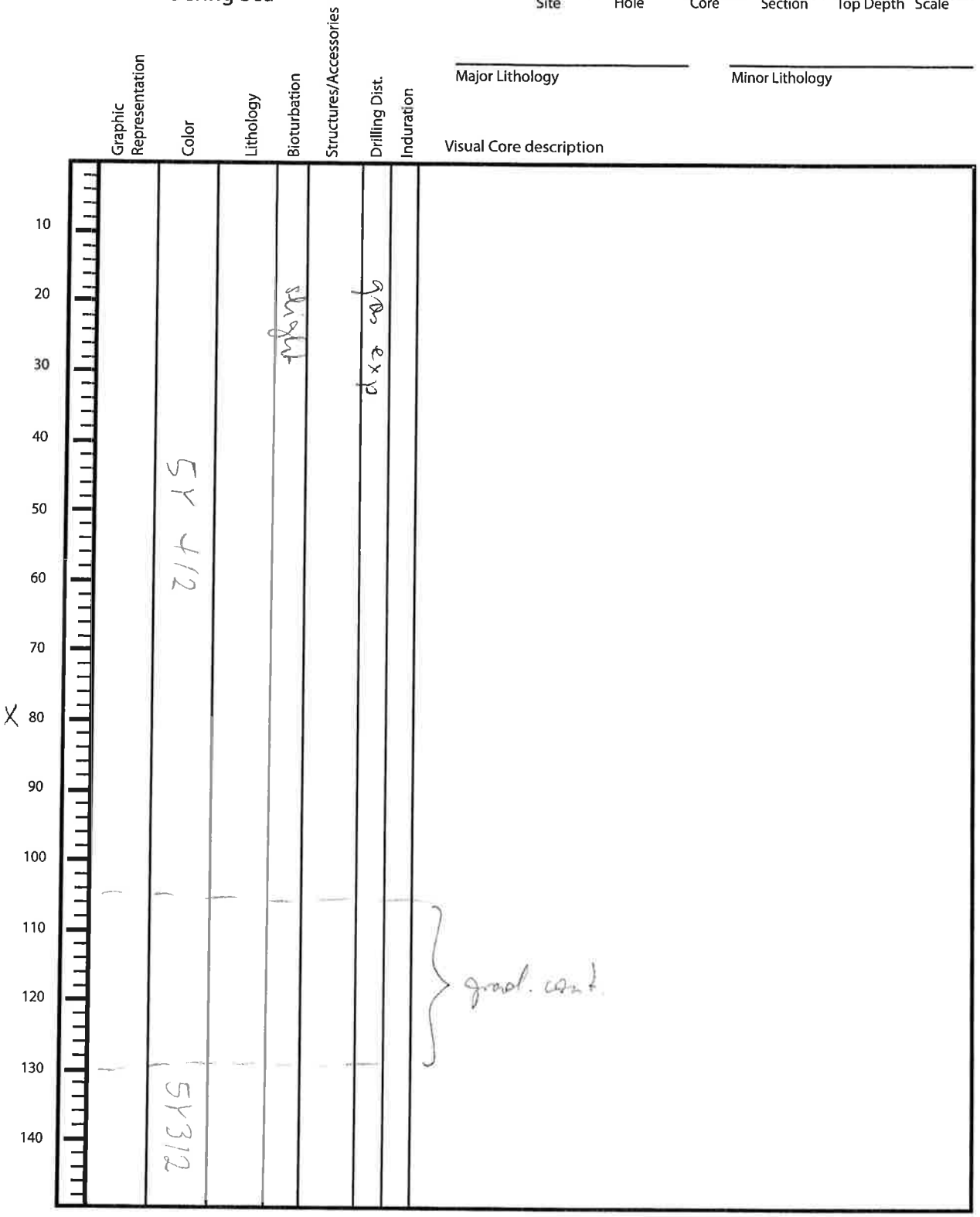


Observer: Mäe Date: 7/19

Expedition 323
Bering Sea

323 (Site) | B (Hole) | 10 (Core) | 3 (Section) | 3.D (Top Depth) | ____ (Scale)

Major Lithology ____ Minor Lithology ____

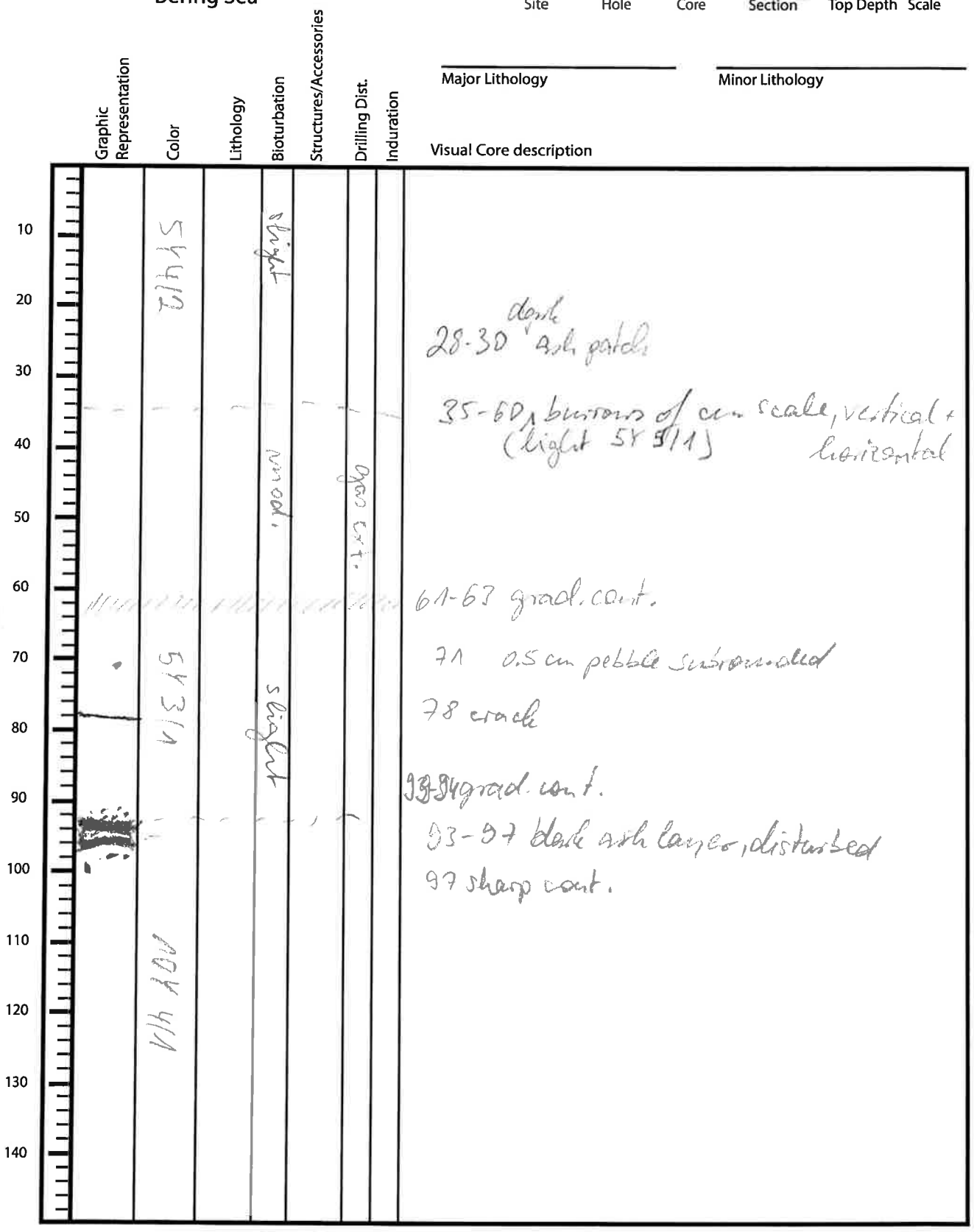


Observer: YBR Date: 7/19

Expedition 323
Bering Sea

323 Site | B Hole | 10 Core | 4 Section | 4.5 Top Depth | Scale

Major Lithology | Minor Lithology

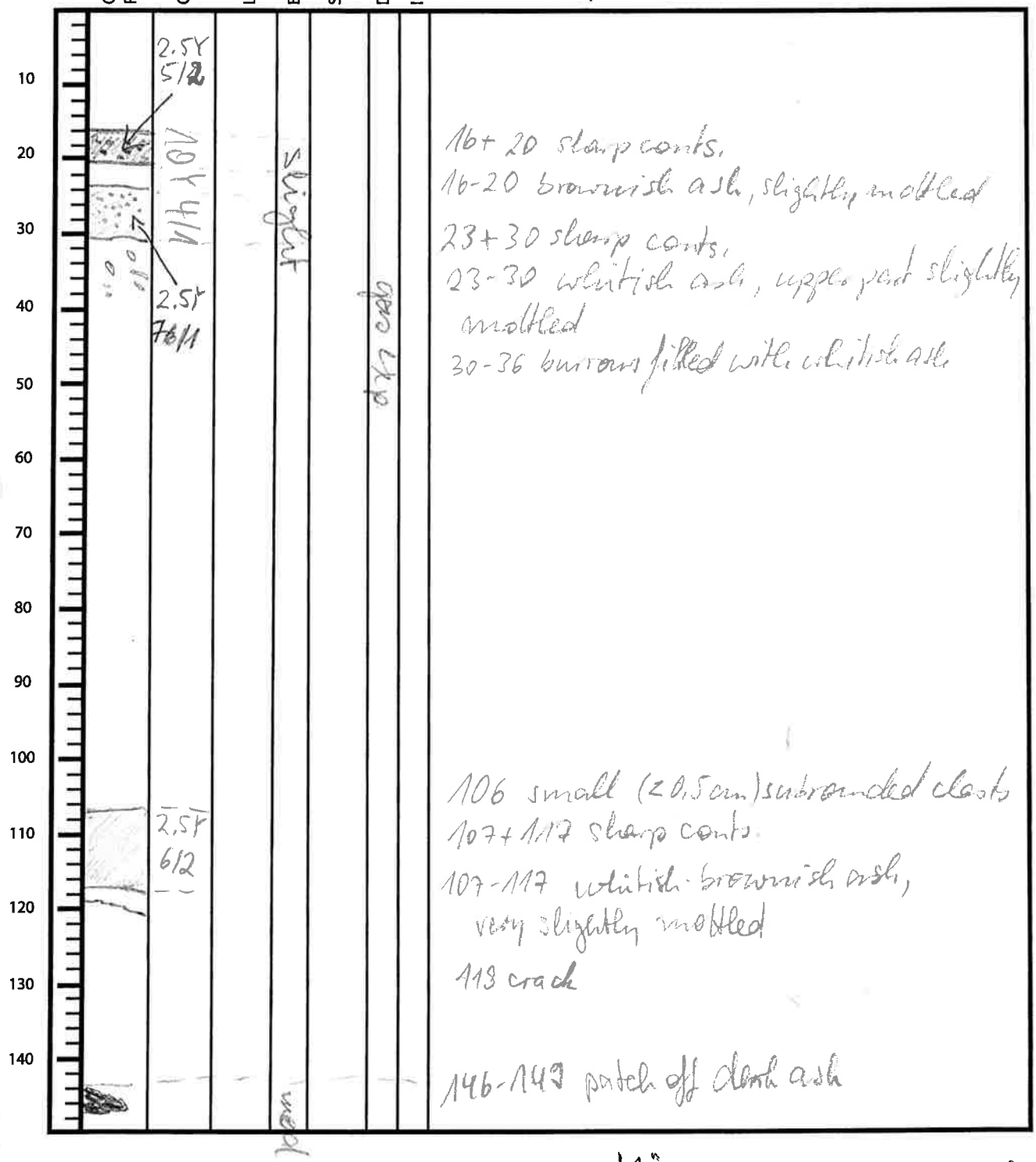


Observer: MEn Date: 2/19

Expedition 323
Bering Sea

323 (Site) B (Hole) 10 (Core) 5 (Section) 6.00 (Top Depth) ____ (Scale)

Major Lithology ____ Minor Lithology ____

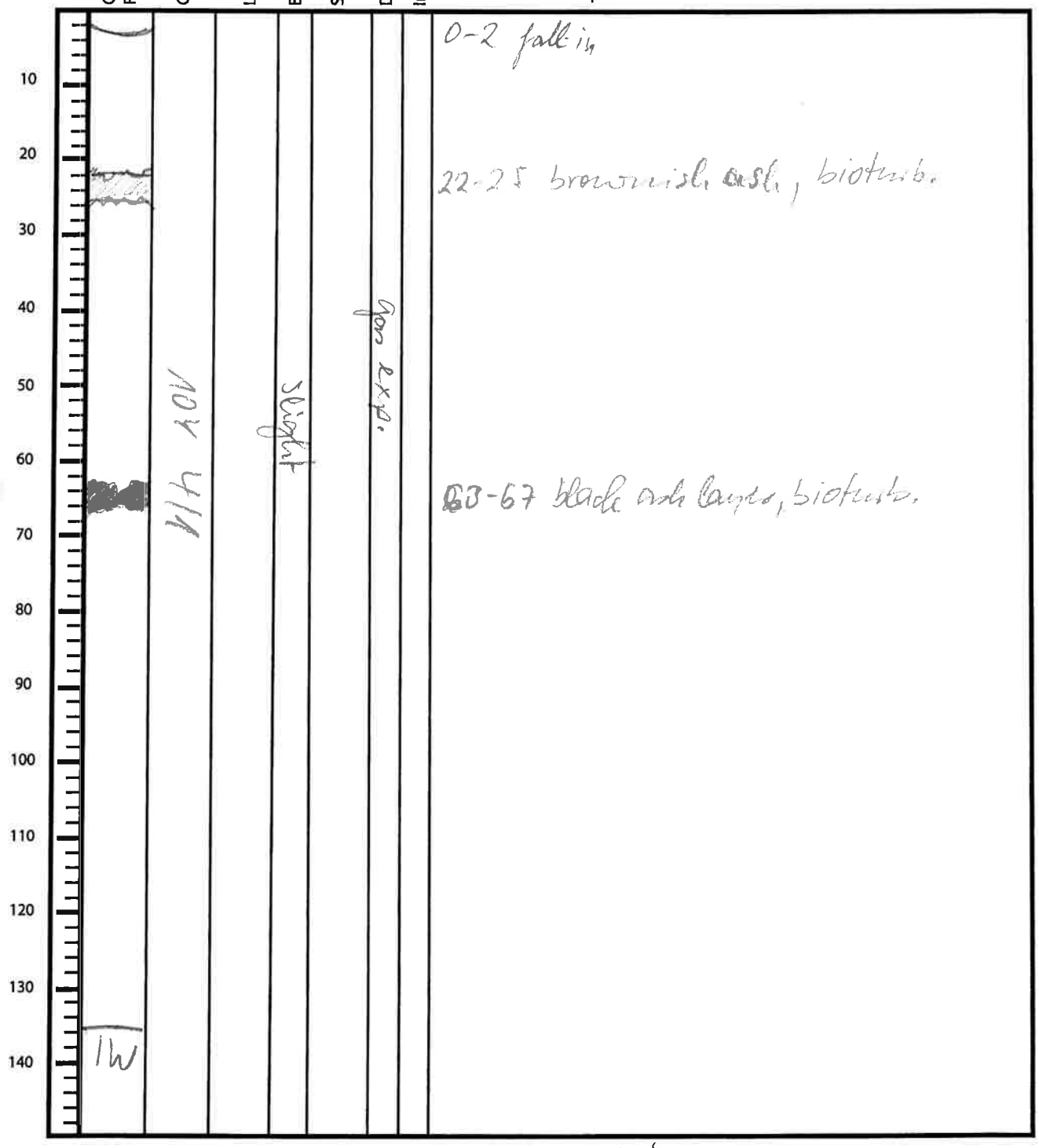


Observer: Mara Date: 7/19

Expedition 323
Bering Sea

323 | B | 10 | 6 | 7.5 |
Site | Hole | Core | Section | Top Depth | Scale

Major Lithology | Minor Lithology

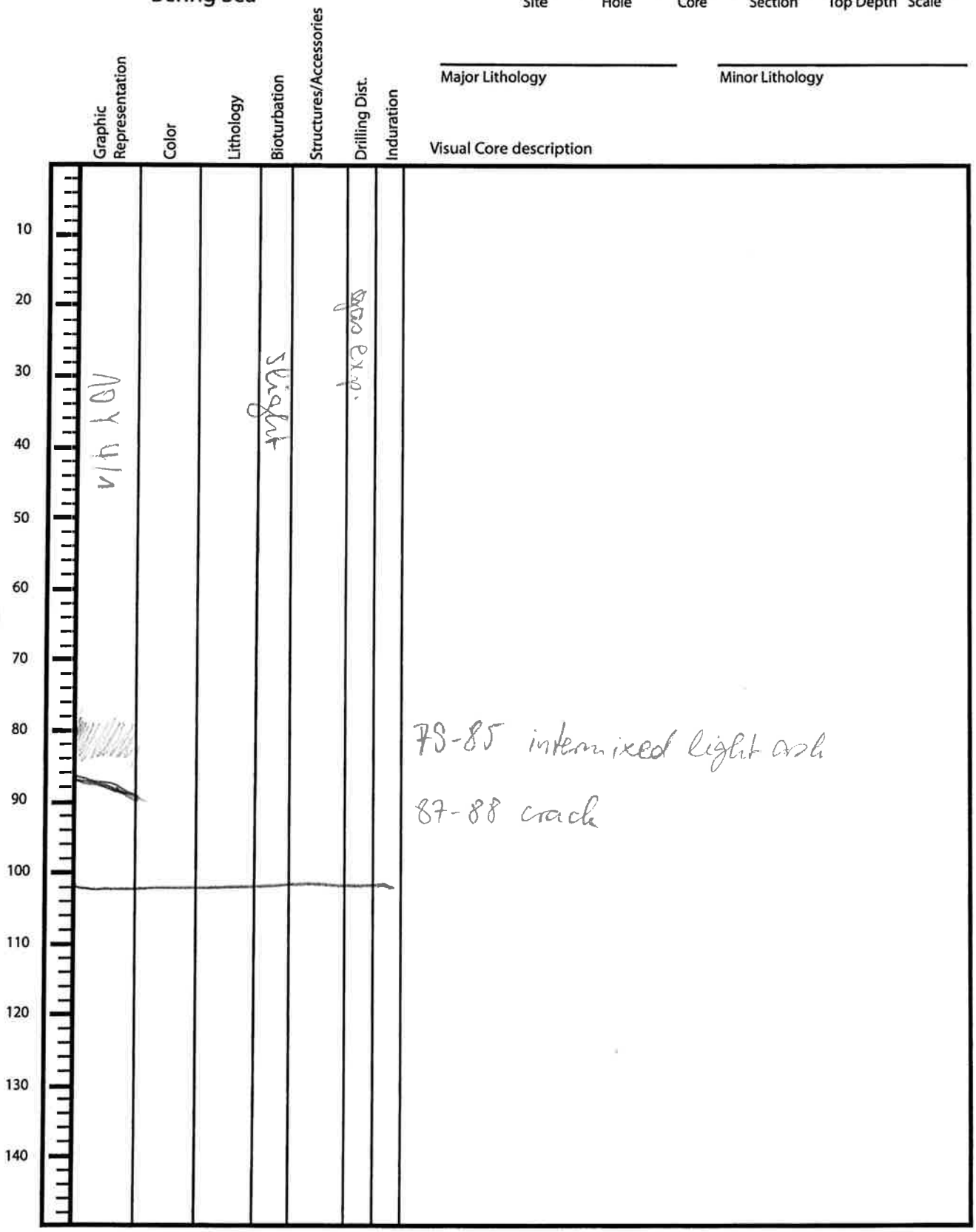


Observer: Mär | Date: 7/19

Expedition 323
Bering Sea

323 | 8 | 10 | 7 | 9.00 |
Site | Hole | Core | Section | Top Depth | Scale

Major Lithology | Minor Lithology



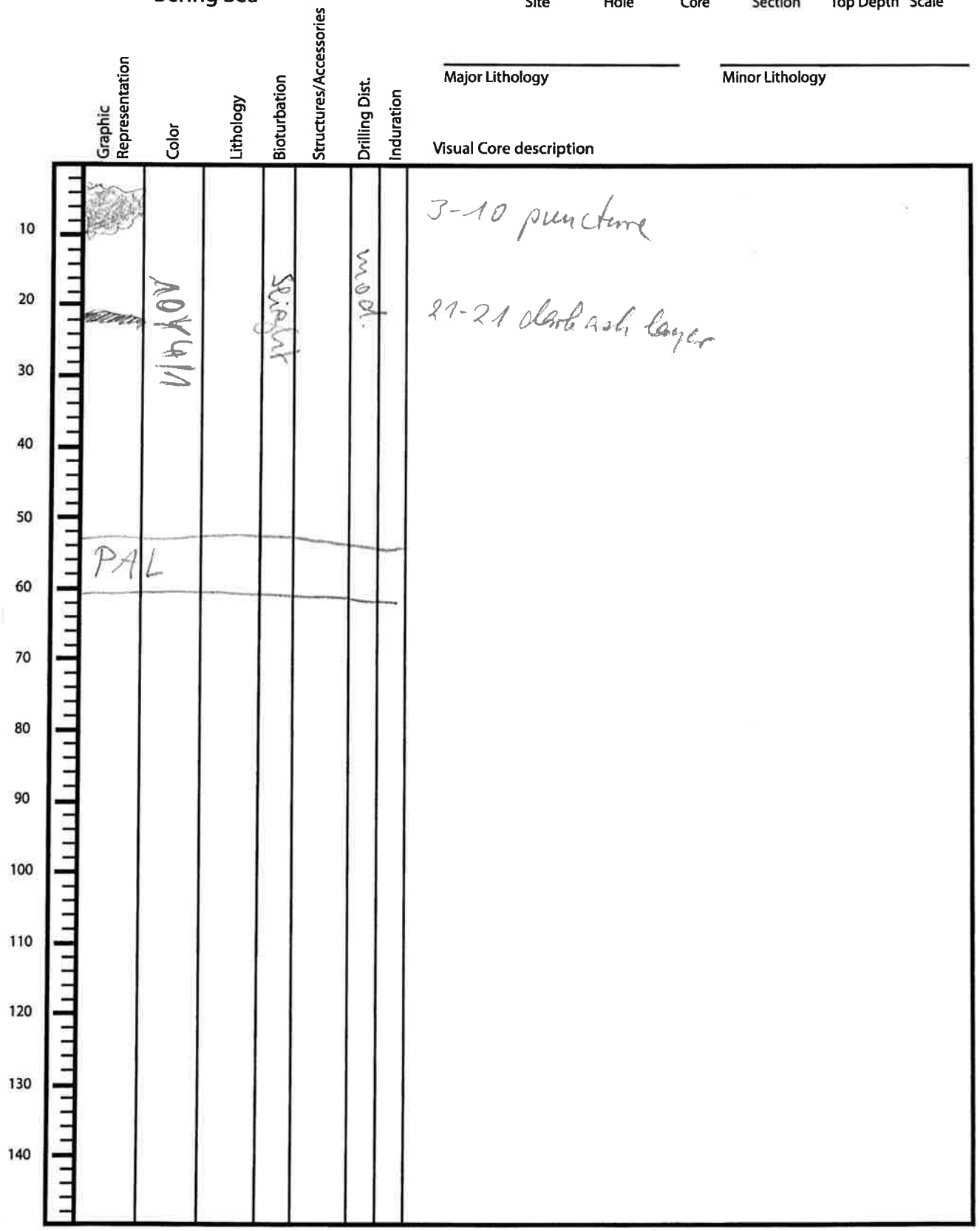
Observer: Mäe

Date: 7/19

Expedition 323
Bering Sea

323 | B | 10 | CC | 10-02 | ____
Site | Hole | Core | Section | Top Depth | Scale

Major Lithology | Minor Lithology



Observer: Mare Date: 7/19

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Interval (cm) Bottom
323	1339	B	10	A	1	26	26

Sediment/Rock Name	Observer
~~Clay rich~~ Diatom Ooze	~~[illegible]~~ Hinds

Percent Texture		
Sand	Silt	Clay
~~[illegible]~~ 10	~~[illegible]~~ 7	~~[illegible]~~ 10

Comments: Main Litho Upper Sec. 1 - (~~[illegible]~~ GReg)

Percent	Component
	SILICICLASTIC GRAINS/MINERAL
	Framework minerals
7.7%	Quartz 3 ~~7.7~~
2.6%	Feldspar 1
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
5.1%	Rock fragments 2
	Accessory/trace minerals
	Micas
	Biotite
	Muscovite
12.8%	Clay Minerals 5
	Chlorite
	Glauconite
	Chert
	Zircon
	Ferromagnesium minerals
	Authigenic minerals
	Barite
	Phosphorite/Apatite
	Zeolite
<1%	Opaque minerals <1
	Pyrite
	Magnetite
	Fe-oxide
	Carbonates
	Calcite
	Dolomite
	VOLCANICLASTIC GRAINS
	Crystal grain
2.6%	Vitric grain <1
	Lithic grain

Percent	Component
	BIOGENIC GRAINS
	Calcareous
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
	Siliceous
<1%	Radiolarians <1
	Spumellaria
	Nassellaria
25 ~~25~~ 64.1%	Diatoms 25
20 (51.3%)	Centric 20
5 (12.8%)	Pennate 5
<1 <1%	*Chaetoceros* Resting Spores <1
	Silicoflagellates
2 5.1%	Sponge spicules 2
	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
			10		3	76	76

Sediment/Rock Name	~~Clay-rich~~ Diatom ooze

Observer	Hino-A

Percent Texture		
Sand	Silt	Clay
~~20%~~ 0	~~70%~~ 30%	~~10%~~ ~~90%~~ 7

26

Comments: Main Litho Greenish Sec. 3

Percent	Component
	SILICICLASTIC GRAINS/MINERAL
	Framework minerals
1.9%	Quartz 0.5
	Feldspar
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
	Accessory/trace minerals
	Micas
	Biotite
	Muscovite
26.9%	Clay Minerals 7
	Chlorite
	Glauconite
	Chert
	Zircon
	Ferromagnesium minerals
	Authigenic minerals
	Barite
	Phosphorite/Apatite
	Zeolite
	Opaque minerals
	Pyrite
	Magnetite
	Fe-oxide
	Carbonates
	Calcite
	Dolomite
	VOLCANICLASTIC GRAINS
	Crystal grain
	Vitric grain
	Lithic grain

Percent	Component
	BIOGENIC GRAINS
	Calcareous
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
	Siliceous
	Radiolarians
	Spumellaria
	Nassellaria
	Diatoms
57.7%	69.2 Centric 15
11.5%	Pennate 3
	Chaetoceros Resting Spores
	Silicoflagellates
2.0%	Sponge spicules 0.5
	Dinoflagellates
	Others
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

✓

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Bottom
			10		4	40	40

Sediment/Rock Name	Diatom-rich ~~clay~~ Silty Clay	Observer	Hiro. A

4.8

0.5 Percent Texture		
Sand	Silt 3	Clay
~~23~~ 4.8	~~23~~	53.8

18

Comments:

Gradational Boundary Between Sec 3 & top of the Sec. 4

3 3 7 66.6

28.6 ~~67~~ %

Percent	Component
	SILICICLASTIC GRAINS/MINERAL
	Framework minerals
16.7%	Quartz ≠ 3
	Feldspar
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
5.6%	~~Gr~~ Andesite 1
	Accessory/trace minerals
	Micas
	Biotite
	Muscovite
35.9%	Clay Minerals 7
	Chlorite
	Glauconite
	Chert
	Zircon
	Ferromagnesium minerals
	Authigenic minerals
	Barite
	Phosphorite/Apatite
	Zeolite
2.8%	Opaque minerals 0.5
	Pyrite ~~0.5~~
	Magnetite
	Fe-oxide
	Carbonates
	Calcite
	Dolomite
	VOLCANICLASTIC GRAINS
	Crystal grain
5.6%	Vitric grain 1
	Lithic grain

Percent	Component
	BIOGENIC GRAINS
	Calcareous
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
	Siliceous
	Radiolarians
	Spumellaria
	Nassellaria
	Diatoms
11.0 ~~#.1~~%	Centric 2
11.0 ~~mod~~ %	Pennate 2
5.6%	*Chaetoceros* Resting Spores 1
~~2.60~~	Silicoflagellates
2.8 ~~2.8~~%	Sponge spicules 0.5
	Dinoflagellates
	Others
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Bottom
			10		5	70	70

Sediment/Rock Name	Diatom rich Clay

Observer	H. w. A.

Percent Texture		
Sand	Silt	Clay
~~20~~ 15	~~20~~ 16.7	~~60~~ ~~83.3~~ 83.3

Comments:

26.5

Main Litho Sec. 5 - CC (Grey)

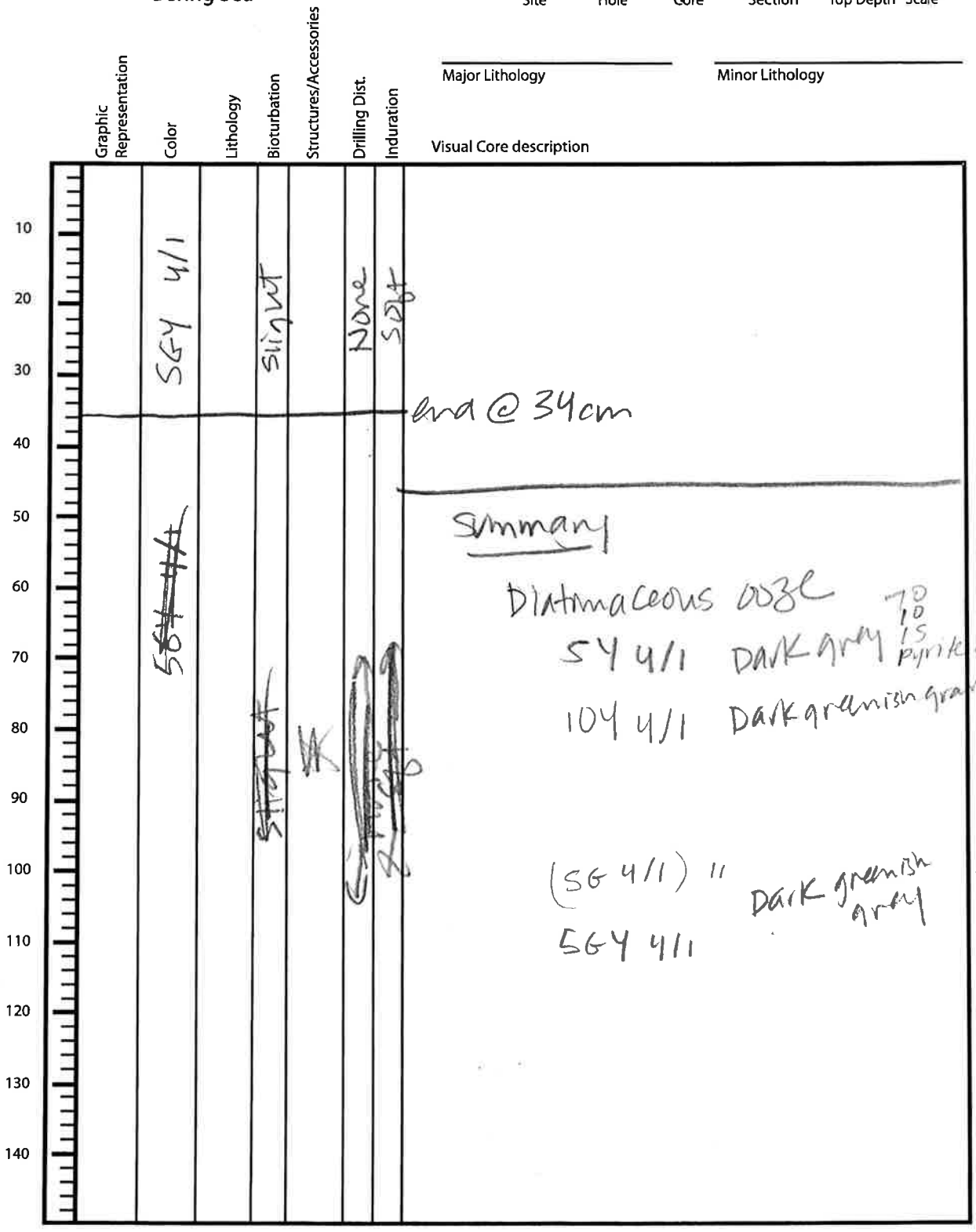
Percent	Component
	SILICICLASTIC GRAINS/MINERAL
	Framework minerals
7.5%	Quartz · 2
—	Feldspar
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
—	Rock fragments
	Accessory/trace minerals
	Micas
	Biotite
	Muscovite
56.6 ~~60~~%	Clay Minerals · 15
	Chlorite
	Glauconite
	Chert
	Zircon
	Ferromagnesium minerals
	Authigenic minerals
	Barite
	Phosphorite/Apatite
	Zeolite
	Opaque minerals
	Pyrite
	Magnetite
	Fe-oxide
	Carbonates
	Calcite
	Dolomite
	VOLCANICLASTIC GRAINS
	Crystal grain
3.8	Vitric grain · 1
	Lithic grain

Percent	Component
	BIOGENIC GRAINS
	Calcareous
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
	Siliceous
	Radiolarians
	Spumellaria
	Nassellaria
	Diatoms
26.4%	Centric · 7
3.8%	Pennate · 1
	Chaetoceros Resting Spores
	Silicoflagellates
1.9%	Sponge spicules 0.5
	Dinoflagellates
	Others
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

Expedition 323
Bering Sea

U1339 B 11H BC
Site Hole Core Section Top Depth Scale

Major Lithology Minor Lithology



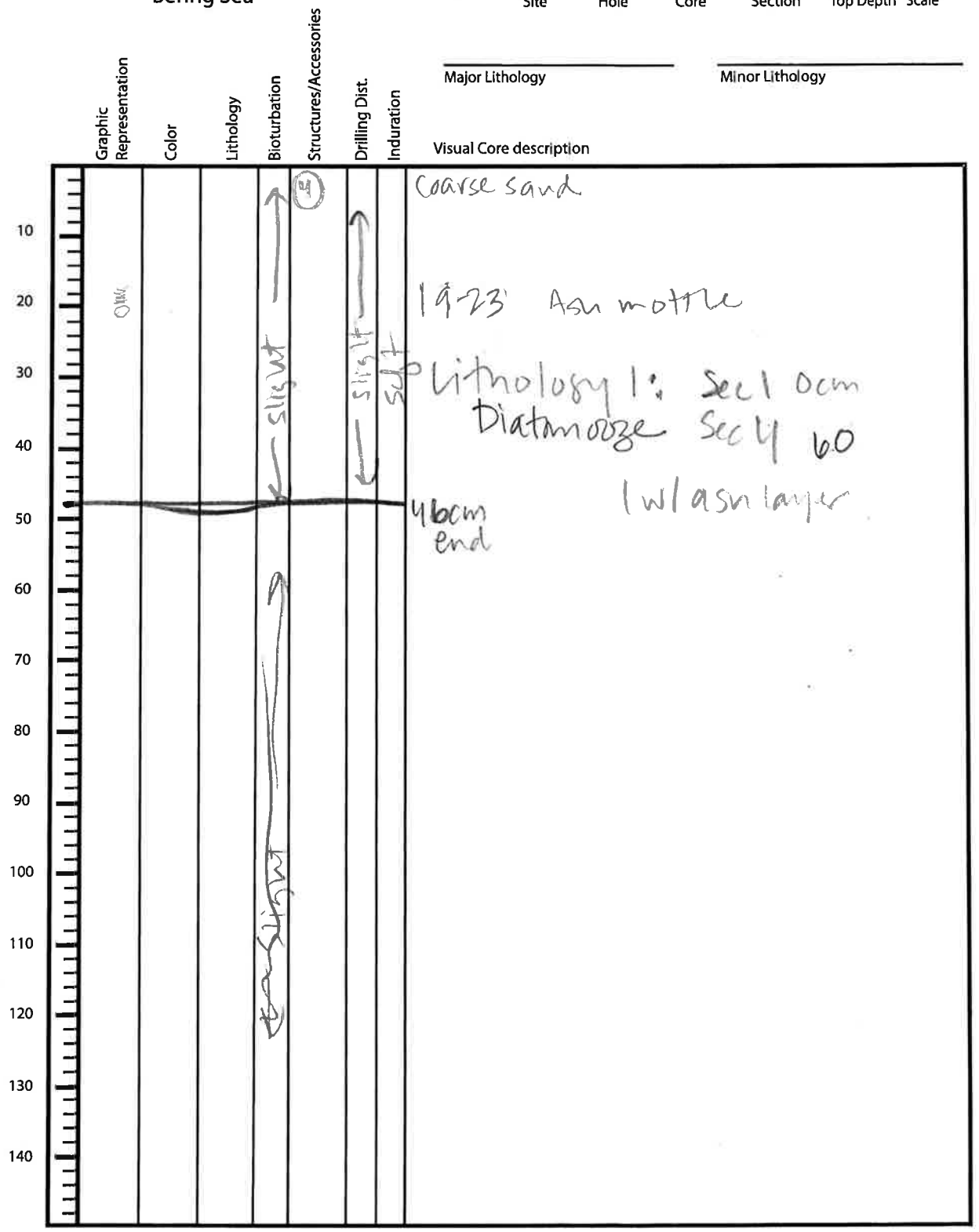
Observer: _____ Date: _____

Expedition 323
Bering Sea

U1339 B 11H 1

Site Hole Core Section Top Depth Scale

Major Lithology Minor Lithology

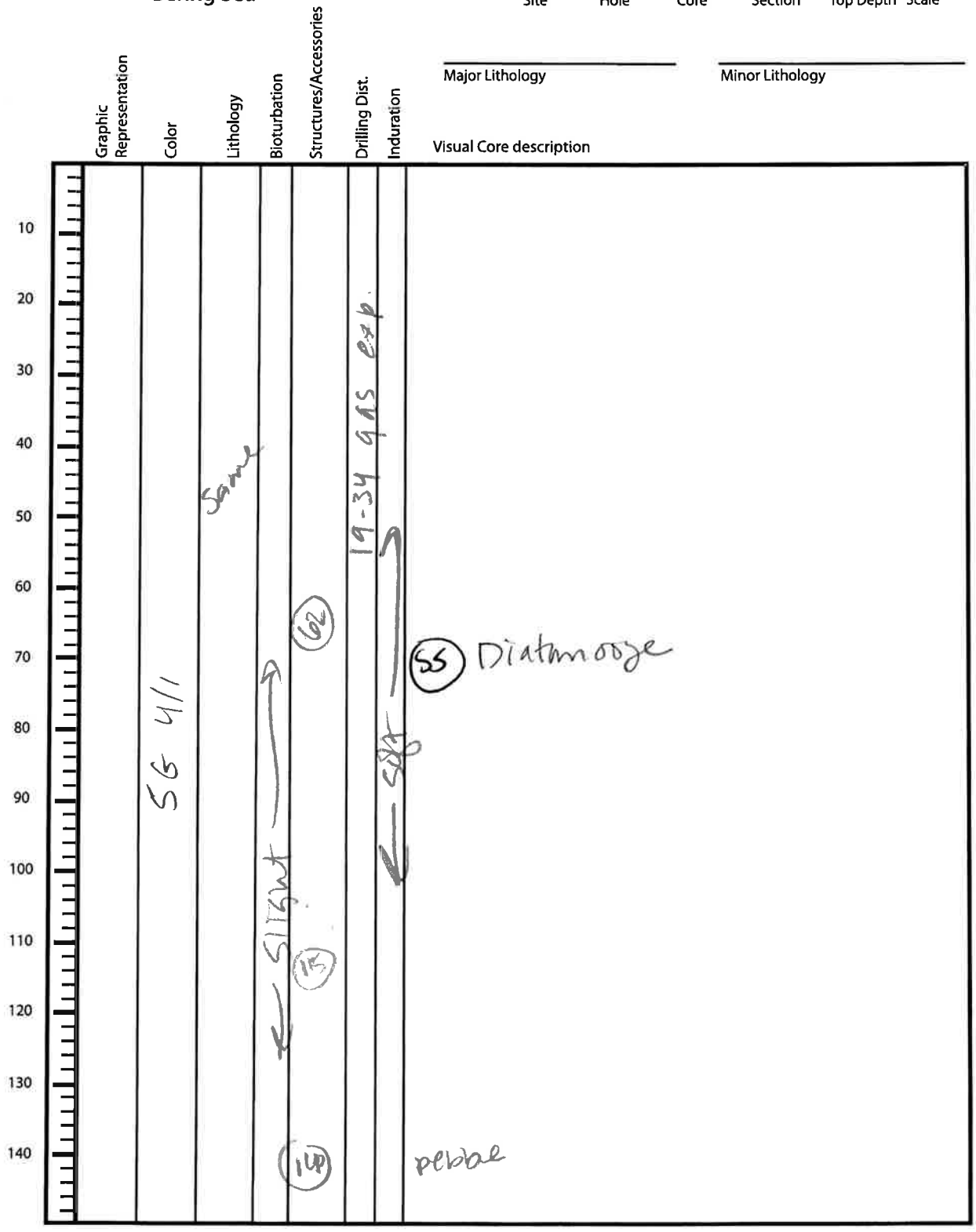


Observer: _____ Date: _____

Expedition 323
Bering Sea

U1339 B 11H 2 ____ ____
Site Hole Core Section Top Depth Scale

Major Lithology ____ Minor Lithology ____



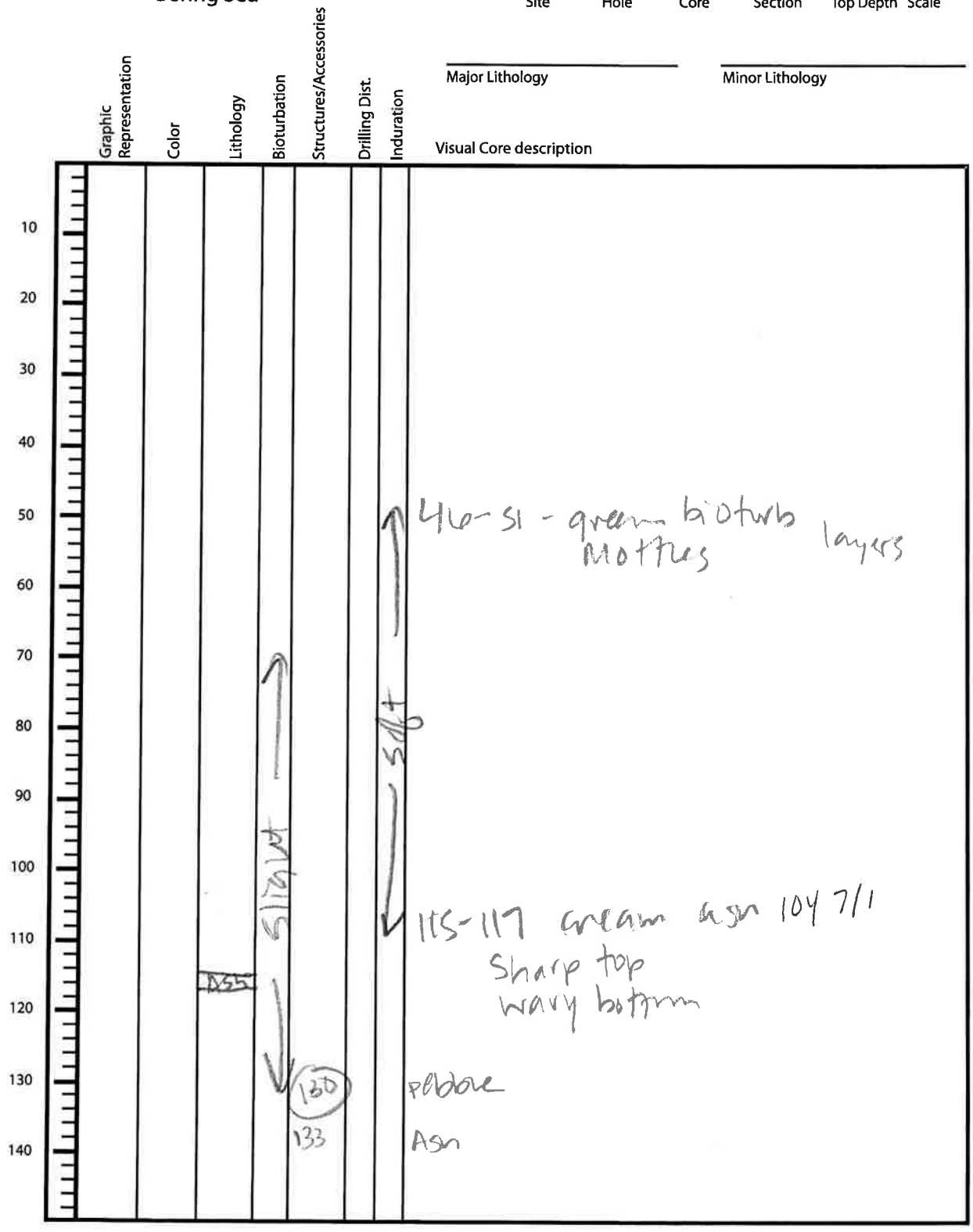
(4) pebble

Observer: ____ Date: ____

Expedition 323
Bering Sea

U1339 (Site) B (Hole) 11H (Core) 3 (Section) ____ (Top Depth) ____ (Scale)

Major Lithology ____ Minor Lithology ____

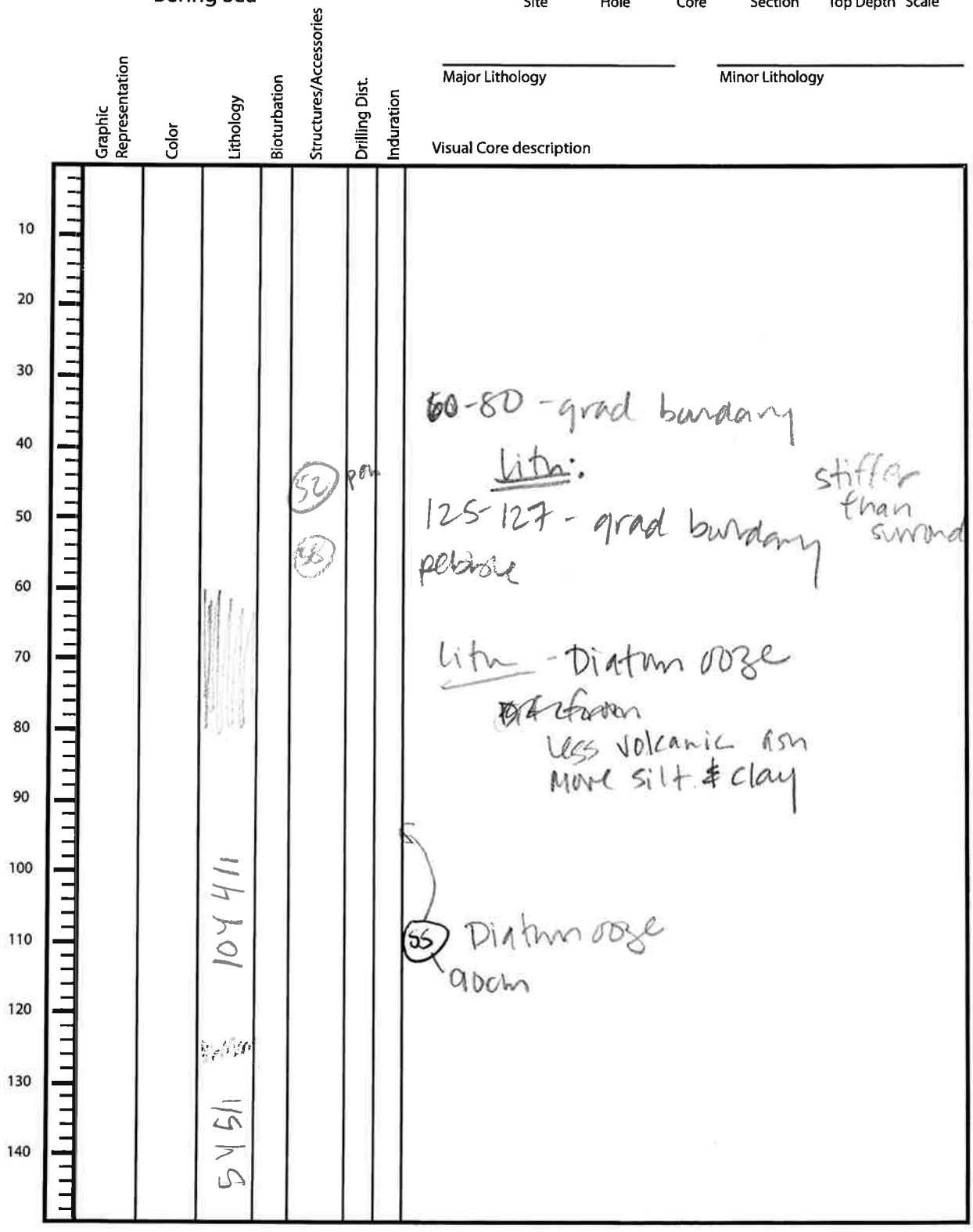


Observer: ____ Date: ____

Expedition 323
Bering Sea

U1339 B 11H 4 L
Site Hole Core Section Top Depth Scale

Major Lithology _____ Minor Lithology _____

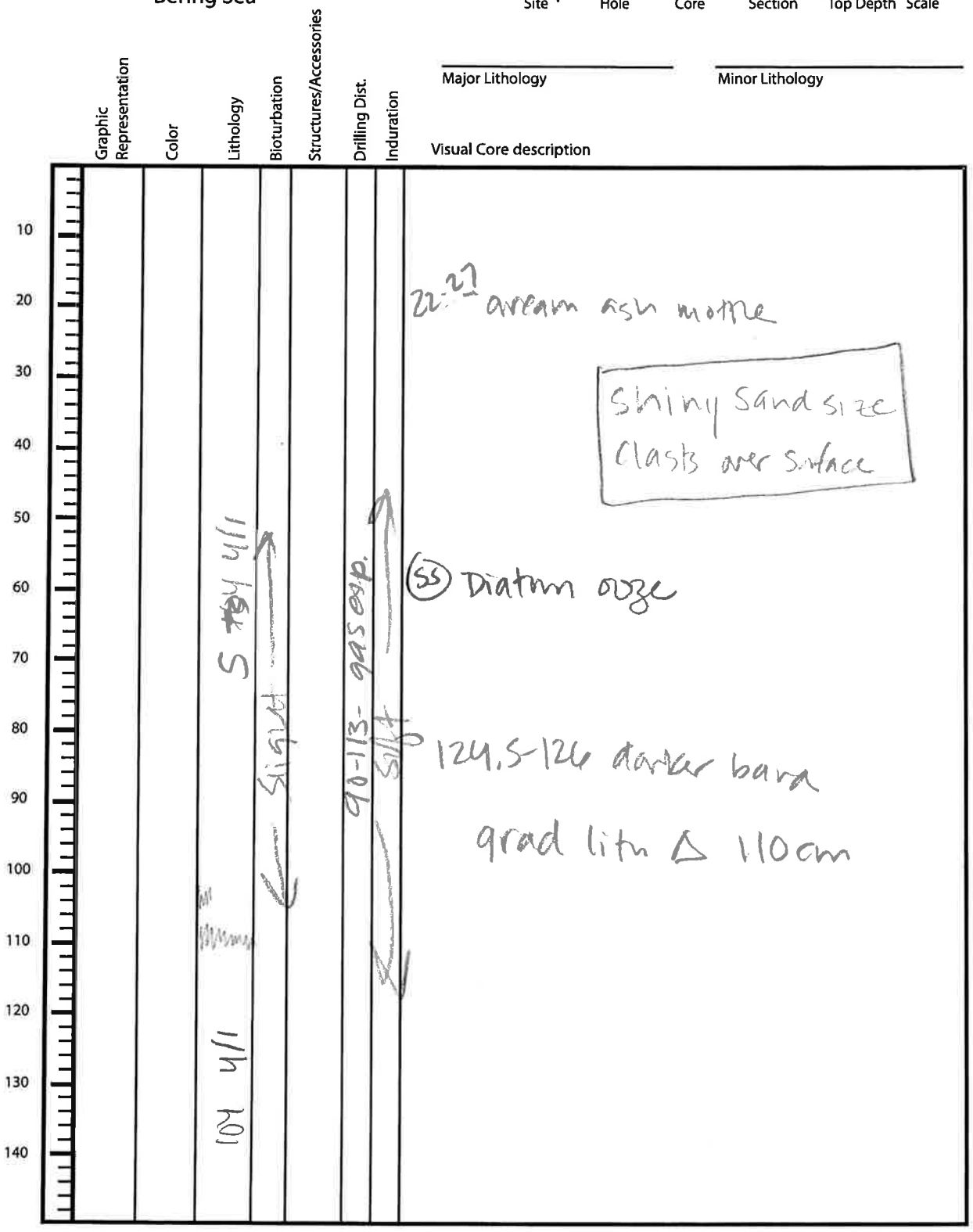


Observer: _____ Date: _____

Expedition 323
Bering Sea

U1339 B NH S
Site Hole Core Section Top Depth Scale

Major Lithology Minor Lithology

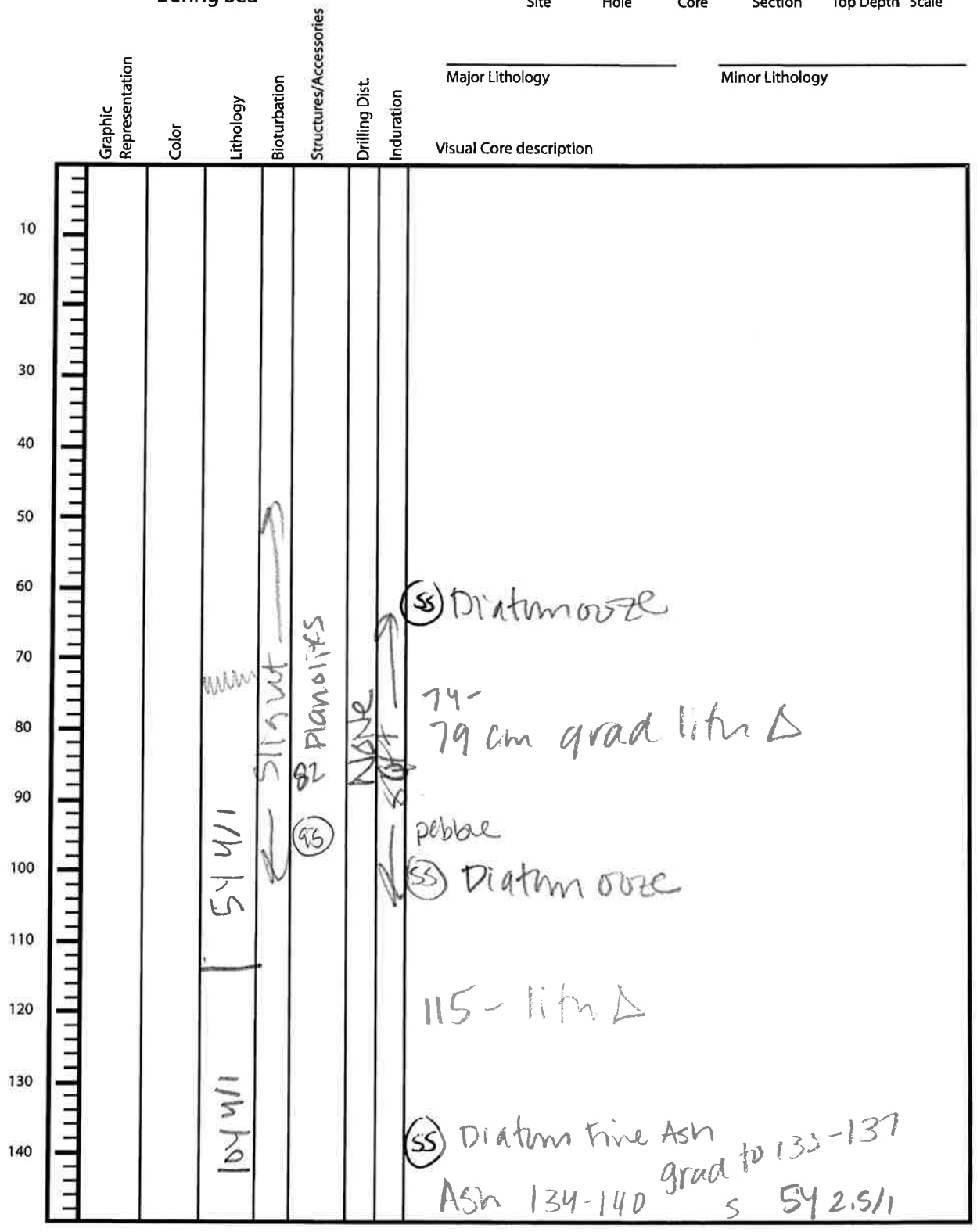


Observer: _____ Date: _____

Expedition 323
Bering Sea

U1334 B 11H 6 _____ _____
Site Hole Core Section Top Depth Scale

Major Lithology _____ Minor Lithology _____

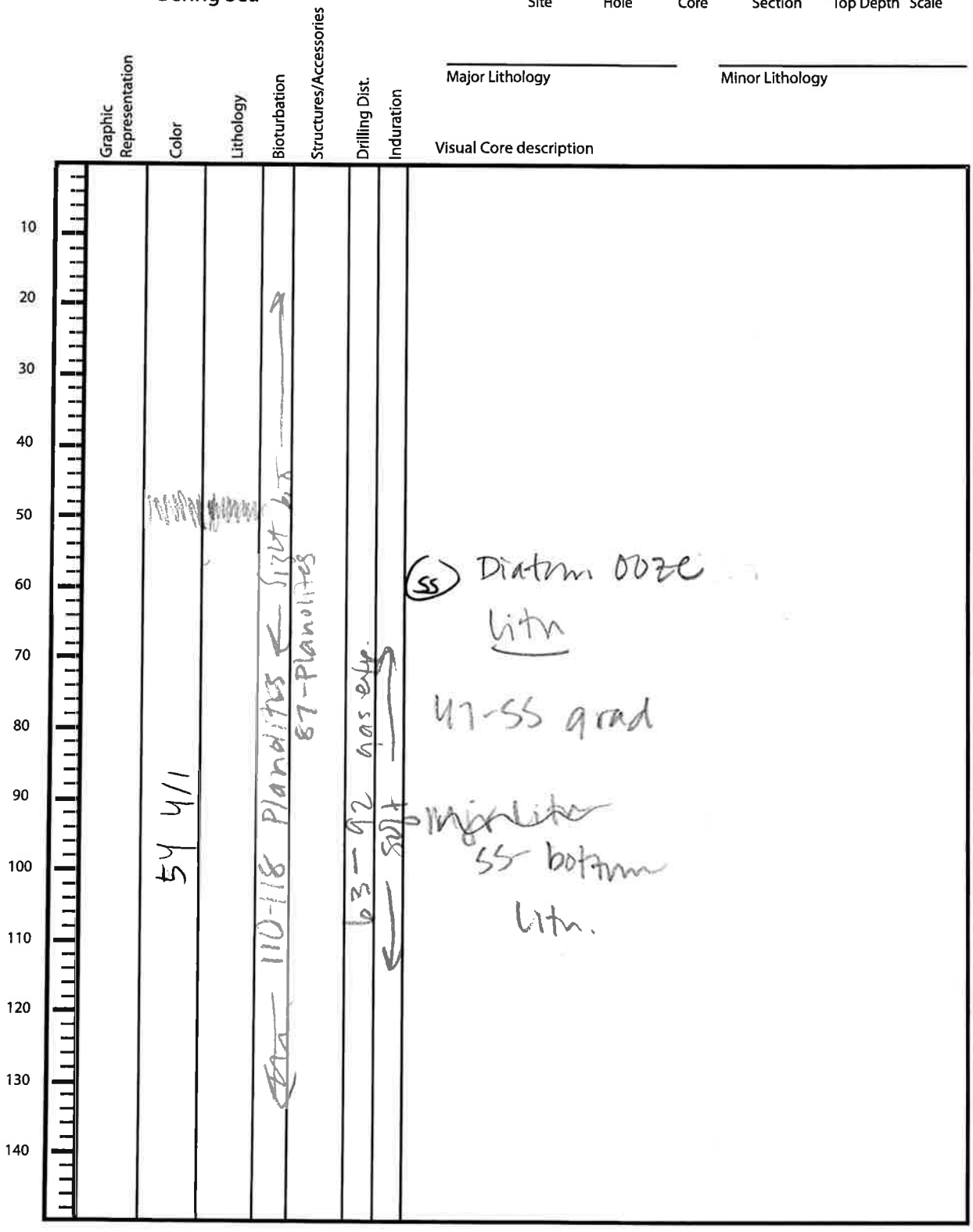


Observer: _____ Date: _____

Expedition 323
Bering Sea

U1339 B 11H 7 ____ ____
Site Hole Core Section Top Depth Scale

Major Lithology ____ Minor Lithology ____



Observer: _____ Date: _____

in S.M

X

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Bottom
	1339	B	11	B	2	78cm	

Sediment/Rock Name	DIATOM OOZE	Observer	

Percent Texture		
Sand	Silt	Clay

Comments:
BIOG = 75%.
SILIC. = 15%.
VOLC. = 10%.

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

Percent	Component
BIOGENIC GRAINS	
	Calcareous
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
	Siliceous
	Radiolarians
	Spumellaria
	Nassellaria
75-80%	Diatoms
10% X	Centric
35% R	Pennate
	Chaetoceros Resting Spores
R	Silicoflagellates
	Sponge spicules
	Dinoflagellates
	Others
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

in S.M.

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Bottom
	1334	B	11	B	4	90 cm	

Sediment/Rock Name	DIATOM OOZE	Observer	IWA

Percent Texture		
Sand	Silt	Clay
	90	10

Comments: SILT 15%. OTHERS 10%. DIATOM 75%.

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

Percent	Component
	BIOGENIC GRAINS
	Calcareous
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
	Siliceous
	Radiolarians
	Spumellaria
	Nassellaria
75%	Diatoms
30% <R	Centric
25% <R	Pennate
	Chaetoceros Resting Spores
	Silicoflagellates
R	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	Interval (cm) Bottom
	1339	B	11		5	57	

Sediment/Rock Name	DIATOM OOZE	Observer	LWA

Percent Texture		
Sand	Silt	Clay

Comments: DIATOM 70%. VOLCANIC 15%. SILIC. 5-10%. PYRITE 5-10%.

Percent	Component
	SILICICLASTIC GRAINS/MINERAL
	Framework minerals
< 10%	X Quartz
	Feldspar
	X K-feldspar (Orthoclase, Microcline...)
	X 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
5-10%	X Pyrite
	Magnetite
	Fe-oxide
	Carbonates
	Calcite
	Dolomite
	VOLCANICLASTIC GRAINS
	Crystal grain
15	X Vitric grain
	Lithic grain

Percent	Component
	BIOGENIC GRAINS
	Calcareous
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
	Siliceous
	Radiolarians
	Spumellaria
	Nassellaria
70	Diatoms
40	X Centric
30	X Pennate
	X *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
	1339	B	11		6	60cm	

Sediment/Rock Name	DIATOM OOZE	Observer	IWA

Percent Texture		
Sand	Silt	Clay

Comments: DIATOM 75%
VOLCANIC 15%
OTHERS 10%

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

Percent	Component
BIOGENIC GRAINS	
	Calcareous
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
	Siliceous
	Radiolarians
	Spumellaria
	Nassellaria
75% R	Diatoms
40 RR	Centric
35 R	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
	1339	B	11		6	99	

Sediment/Rock Name	DIATOM OOZE	Observer	LWA

DIATOM 65%
VOLCANIC 20%.

Comments:

Percent Texture		
Sand	Silt	Clay

Percent	Component
	SILICICLASTIC GRAINS/MINERAL
	Framework minerals
<10% R	Quartz
	Feldspar
R	K-feldspar (Orthoclase, Microcline...)
R	Plagioclase
	Rock fragments
	Accessory/trace minerals
	Micas
R	Biotite
X	Muscovite
R	Clay Minerals
	Chlorite
	Glauconite
	Chert
	Zircon
	Ferromagnesium minerals
	Authigenic minerals
	Barite
	Phosphorite/Apatite
	Zeolite
	Opaque minerals
<10% X	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
65%	Diatoms
25 R	Centric (BROKEN)
40 XR	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	Interval (cm) Bottom
323	1339	B	11	H	6	138	

Sediment/Rock Name	DIATOM FINE ASH	Observer	LUM

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
X	Biotite
X	Muscovite
	Clay Minerals
	Chlorite
	Glauconite
	Chert
	Zircon
	Ferromagnesium minerals
	Authigenic minerals
	Barite
	Phosphorite/Apatite
	Zeolite
	Opaque minerals
5% R	Pyrite
	Magnetite
	Fe-oxide
	Carbonates
	Calcite
	Dolomite
	VOLCANICLASTIC GRAINS
	Crystal grain
20% X	Vitric grain
	Lithic grain

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

X

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Interval (cm) Bottom
	1396	B	11	H	7	59	

Sediment/Rock Name	DIATOM ~~TUFF ASH~~ OOZE

Observer	

Diatom = 50%. Diatom ~~ash~~

Comments: Volcanic = 40%.

Percent Texture		
Sand	Silt	Clay
	80	20

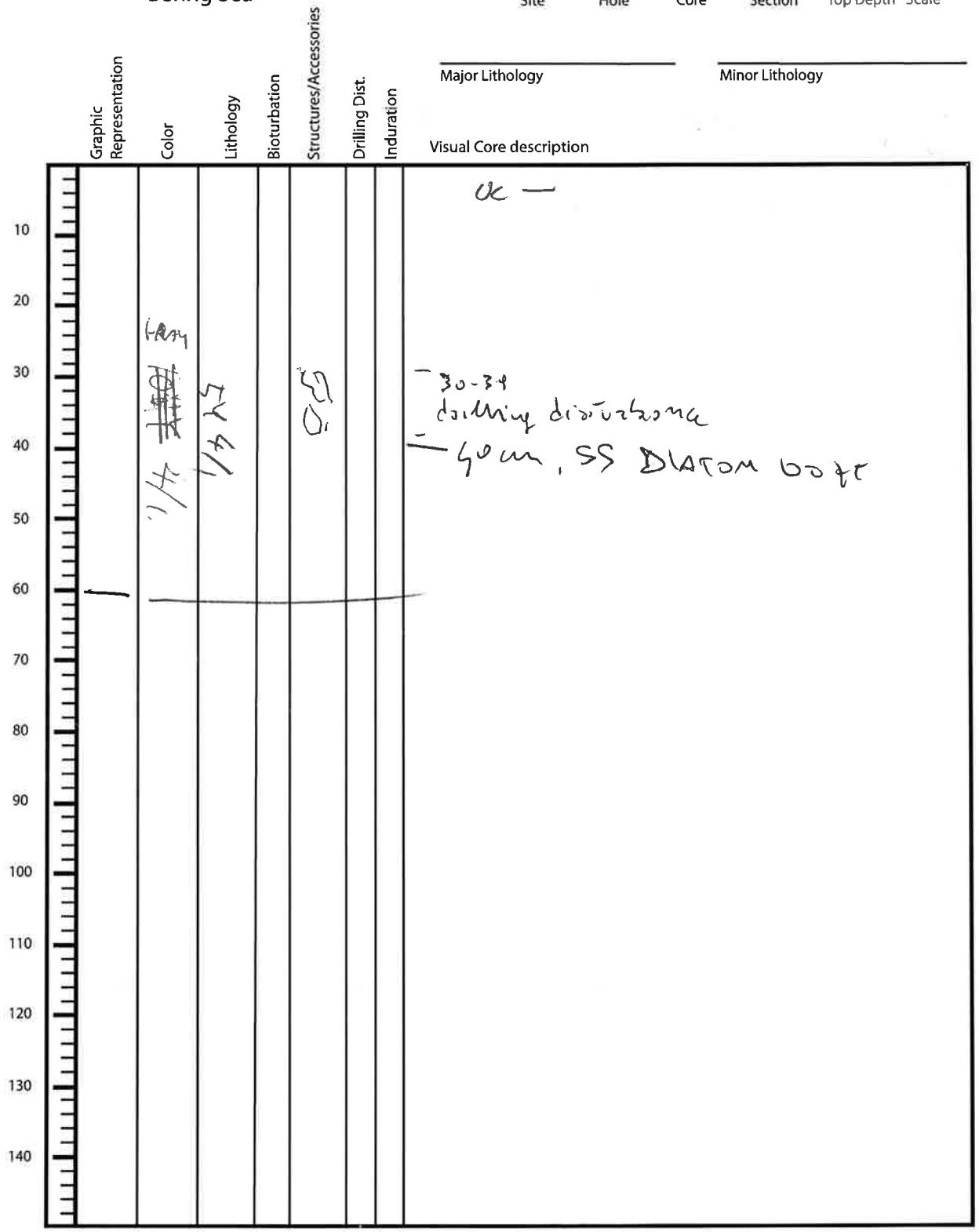
Percent	Component
	SILICICLASTIC GRAINS/MINERAL
	Framework minerals
~~45%~~	Quartz
	Feldspar
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
	Accessory/trace minerals
	Micas
	Biotite
	Muscovite
	Clay Minerals
	Chlorite
	Glauconite
	Chert
	Zircon
	Ferromagnesium minerals
	Authigenic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

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

Expedition 323
Bering Sea

1334 | B | 12 | 1A | | |
Site | Hole | Core | Section | Top Depth | Scale

Major Lithology | Minor Lithology

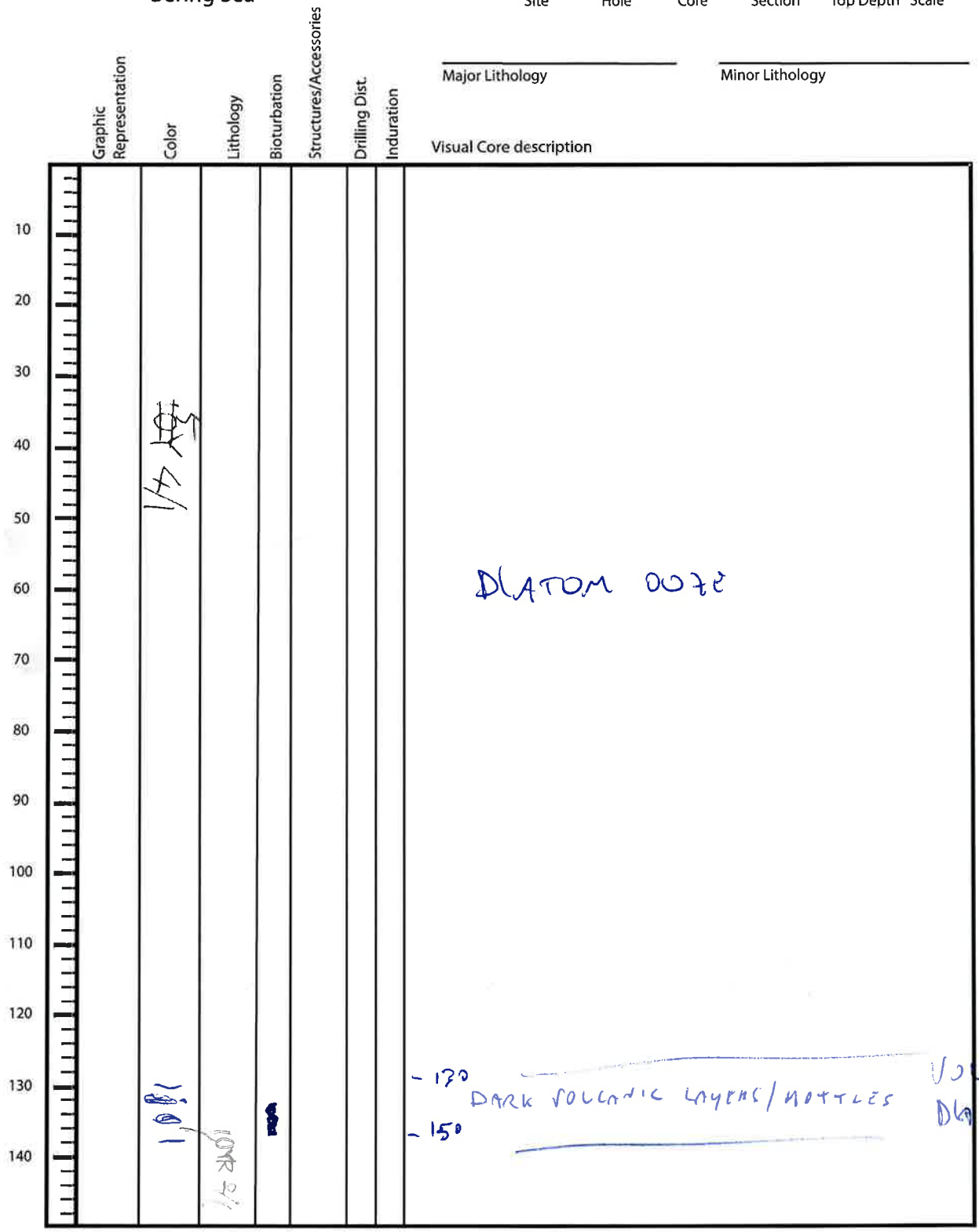


Observer: _____ Date: _____

Expedition 323
Bering Sea

1339 B 12 2 _____ _____
Site Hole Core Section Top Depth Scale

Major Lithology _____ Minor Lithology _____

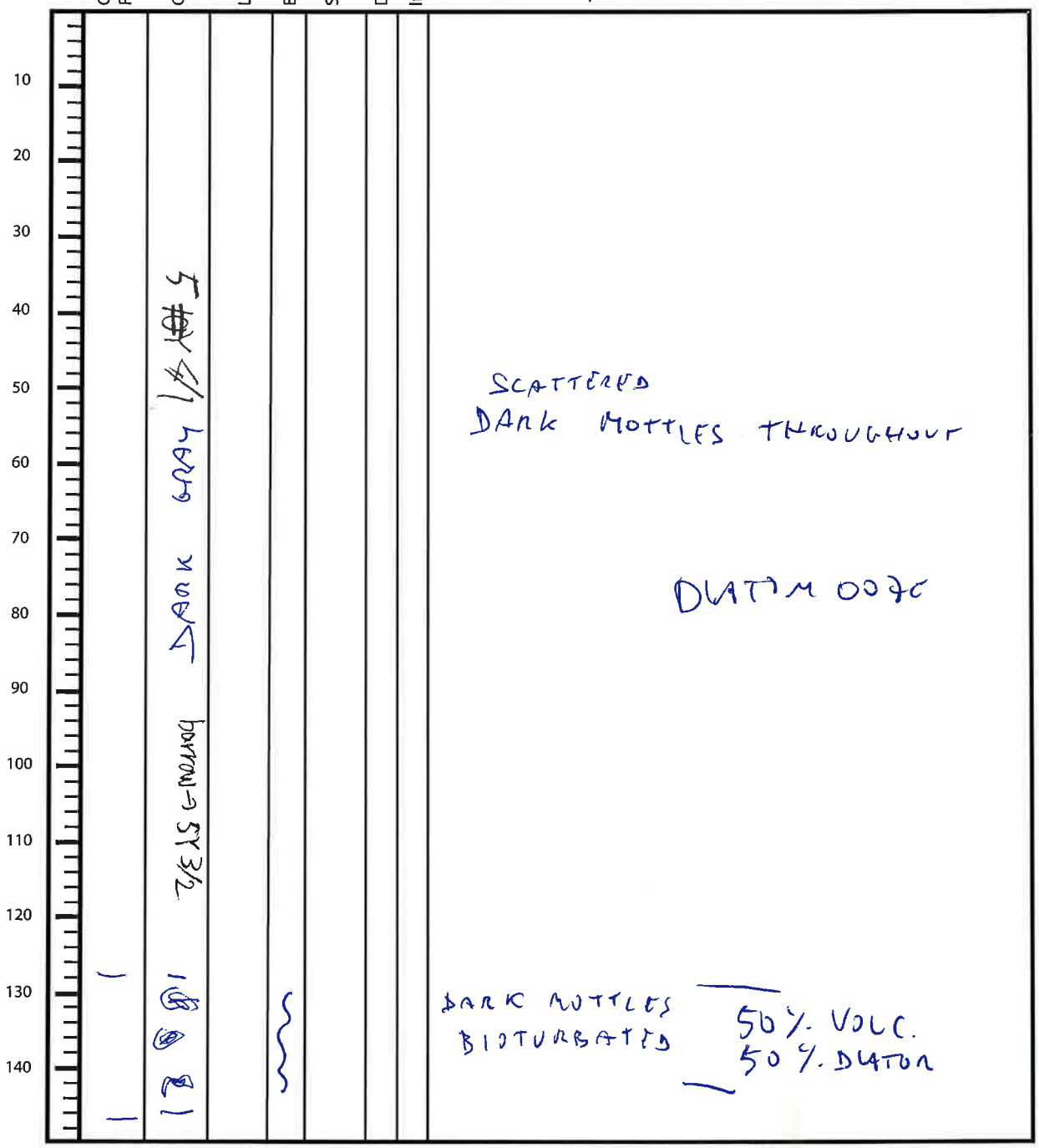


Observer: _____ Date: _____

Expedition 323
Bering Sea

1339 | B | 12 | 3 | | |
Site | Hole | Core | Section | Top Depth | Scale

Major Lithology | Minor Lithology

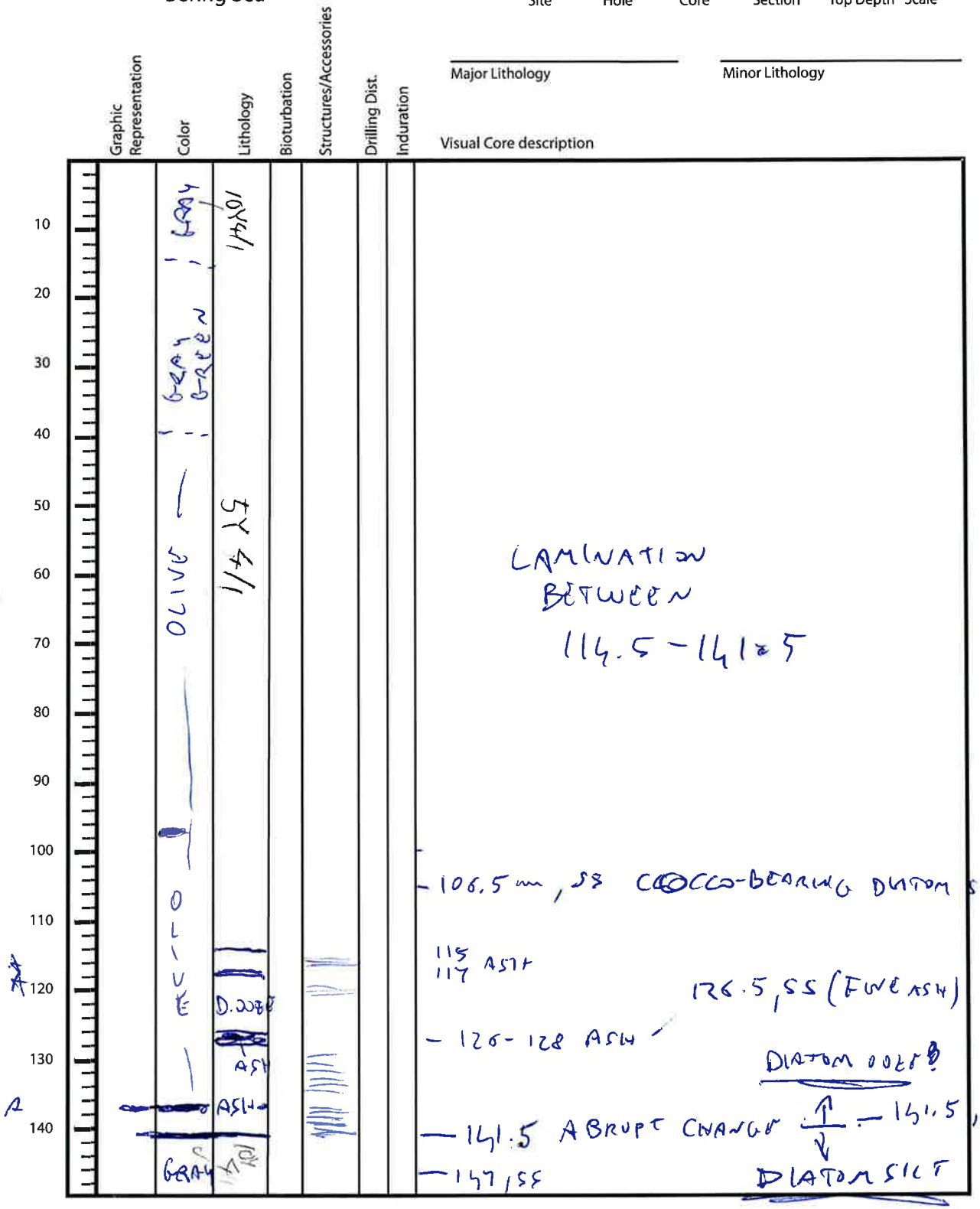


Observer: _____ Date: _____

Expedition 323
Bering Sea

1339 B 12 4
Site Hole Core Section Top Depth Scale

Major Lithology Minor Lithology



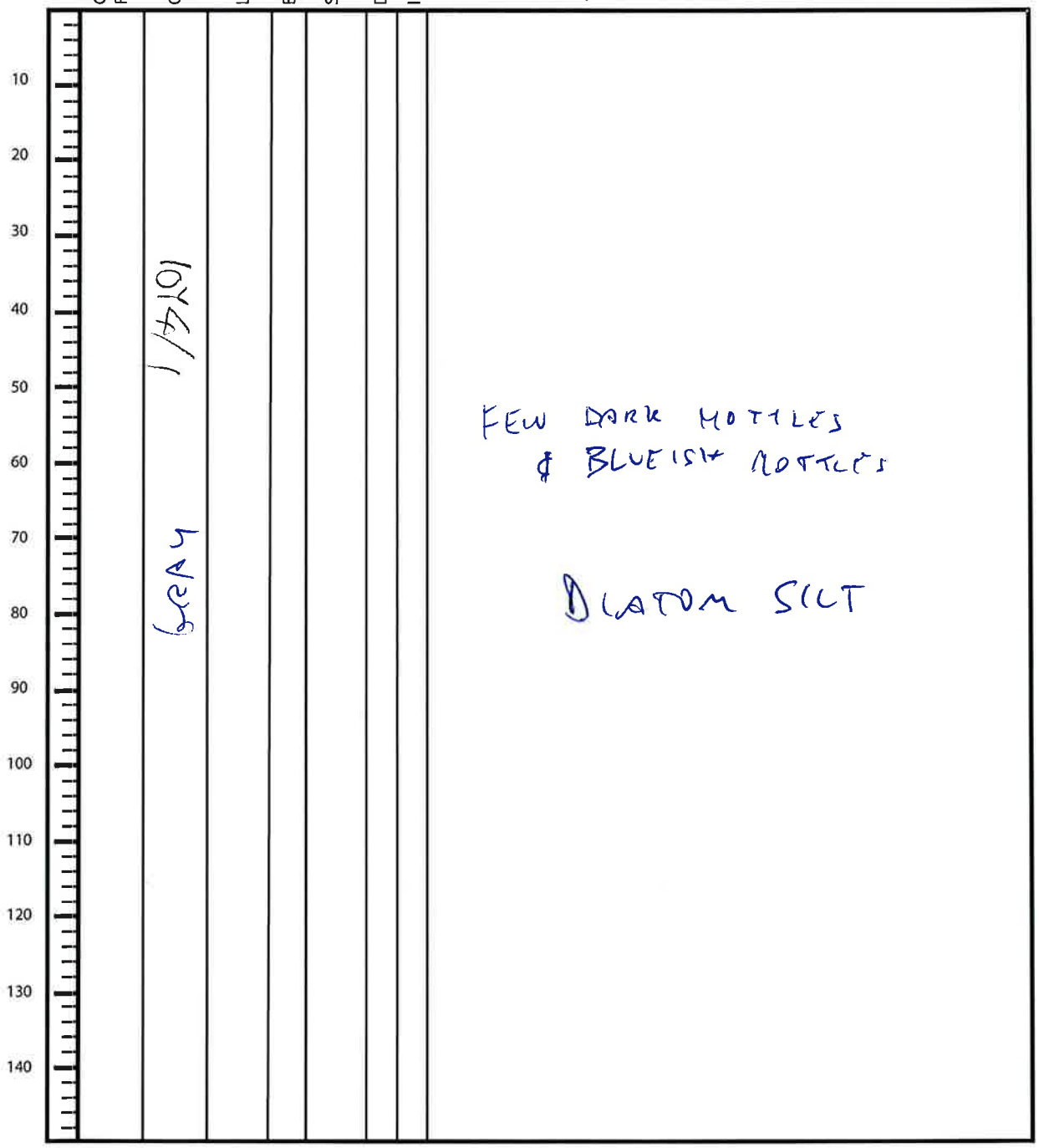
Observer: _____ Date: _____

Expedition 323
Bering Sea

1339 | B | 12 | 5 | | |
Site | Hole | Core | Section | Top Depth | Scale

Major Lithology | Minor Lithology

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

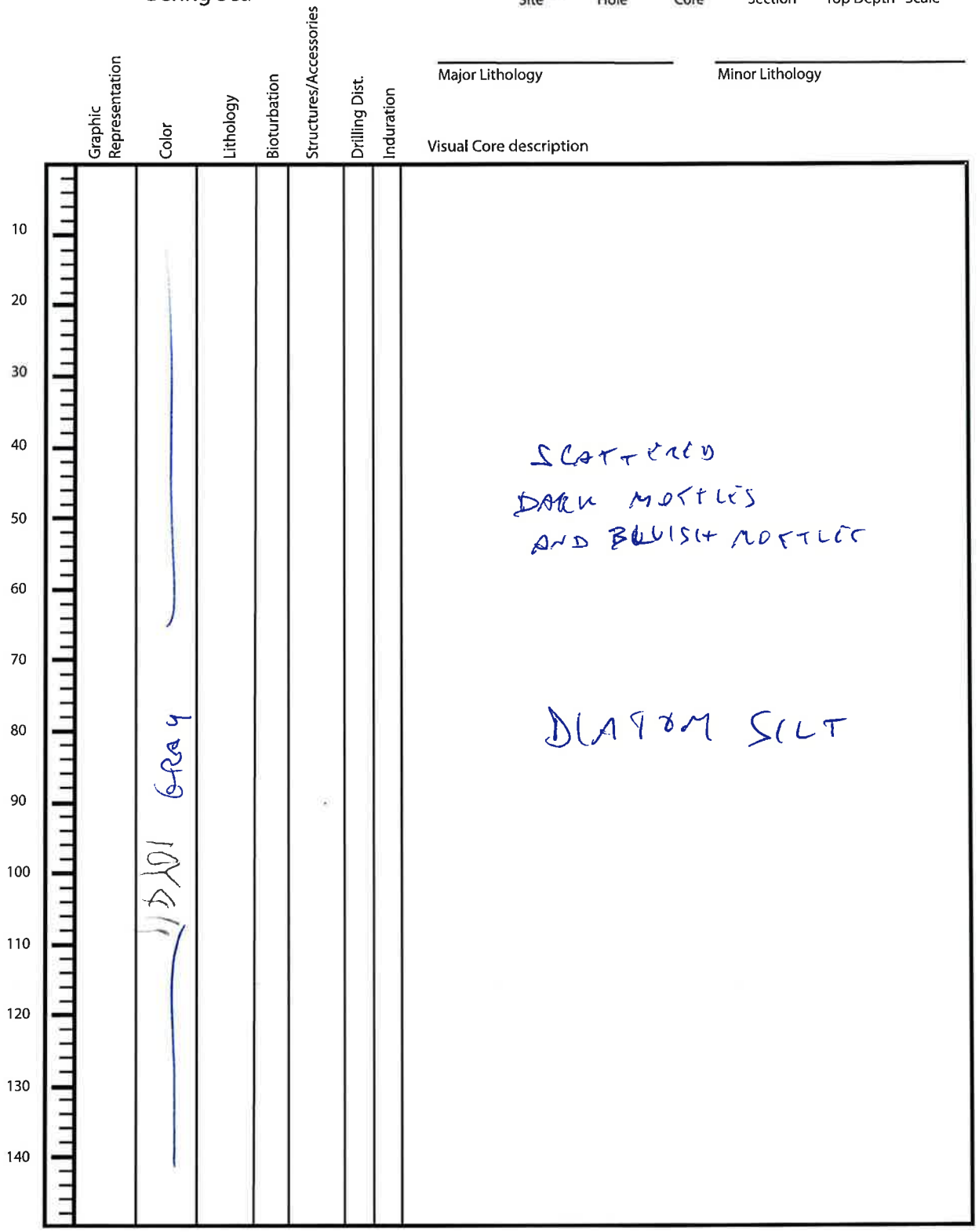


Observer: _____ Date: _____

Expedition 323
Bering Sea

1334 (Site) B (Hole) 12 (Core) 6 (Section) ____ (Top Depth) ____ (Scale)

Major Lithology ____ Minor Lithology ____

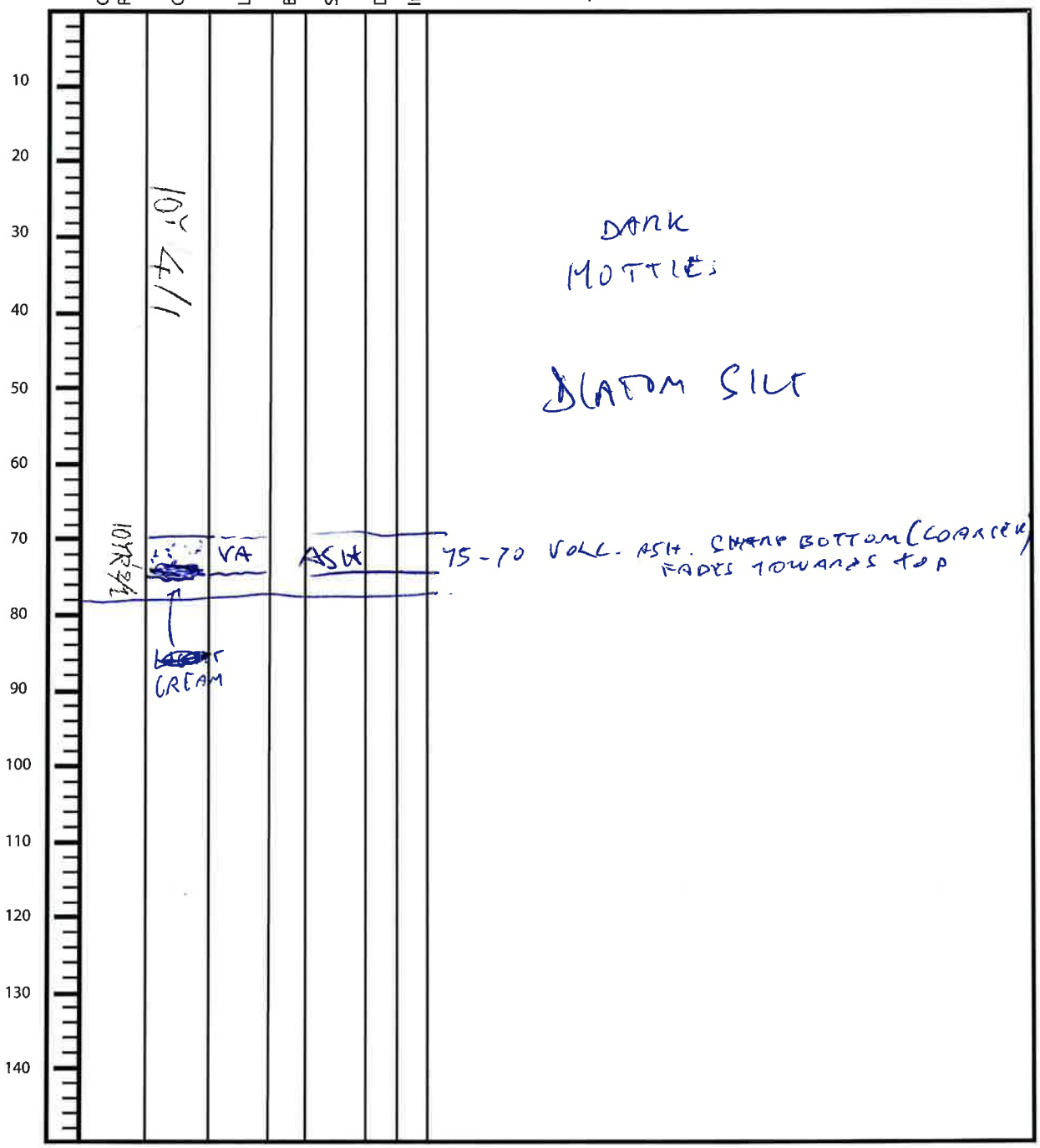


Observer: ____ Date: ____

Expedition 323
Bering Sea

1339 | B | 12 | 7 | | |
Site | Hole | Core | Section | Top Depth | Scale

Major Lithology | Minor Lithology



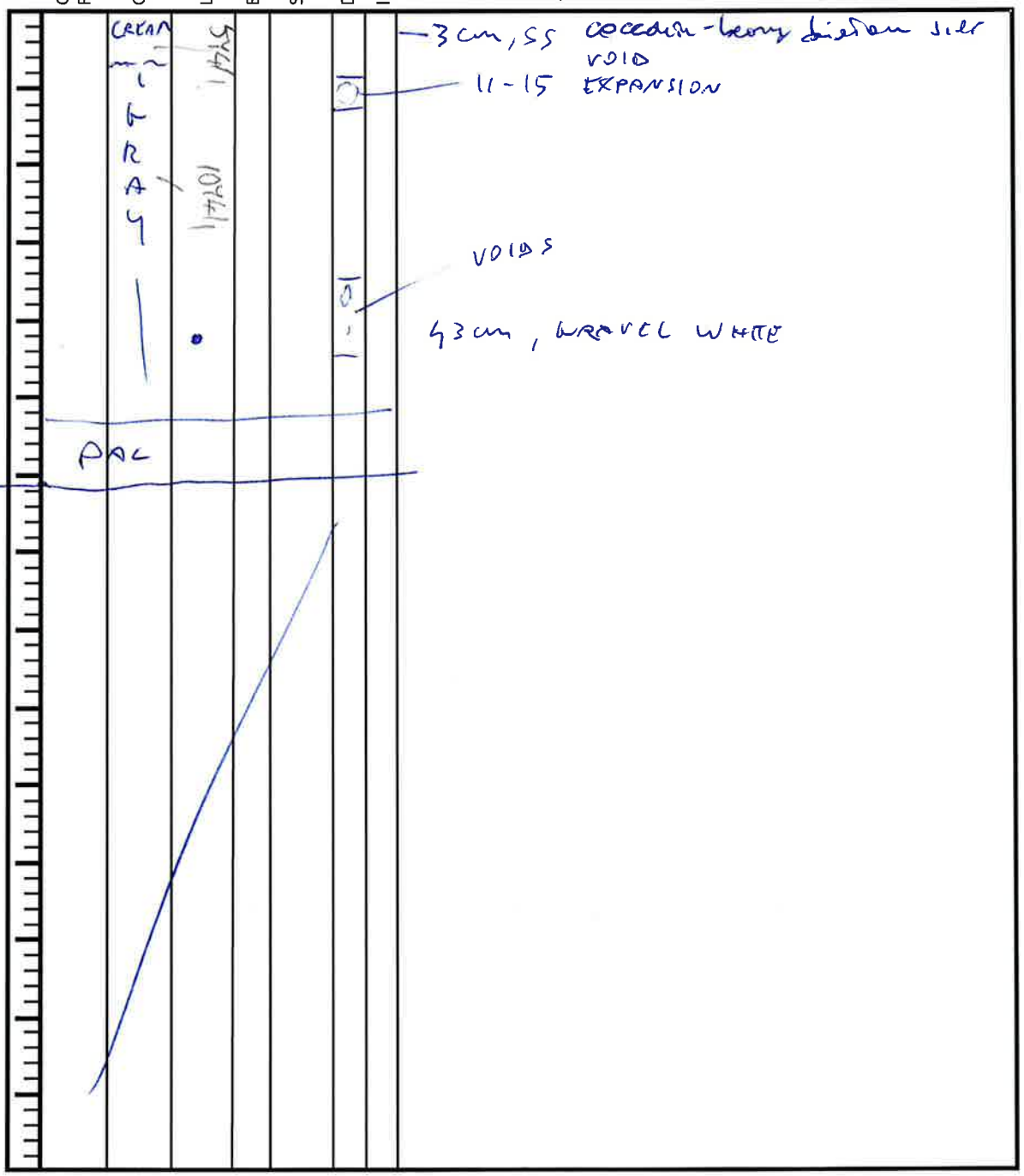
78

Observer: _____ Date: _____

Expedition 323
Bering Sea

1334 | B | 12 | CC | | |
Site | Hole | Core | Section | Top Depth | Scale

Major Lithology | Minor Lithology



Observer: _____ Date: _____

X

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IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Interval (cm) Bottom
323	B39	B	12	H	1A	40cm	

Sediment/Rock Name	Diatom ooze

Observer	

Percent Texture Silt		
Sand	Silt	Clay
	70	30

Comments:

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

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

X

in S.P.

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Bottom
323	1339	B	12	H	4A	106.5	

Sediment/Rock Name	Nannofossil ~~Coccolith~~-bearing Diatom silt

Observer	Beth

B 56
S 24
V 20

Percent Texture		
Sand	Silt	Clay

Comments:

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

Percent	Component
BIOGENIC GRAINS	
	Calcareous
1	Foraminifera fragments
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
7	Coccoliths
	Discoasters
	Pteropods
	Siliceous
	Radiolarians
	Spumellaria
	Nassellaria
	Diatoms
30	Centric
18	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

in S.P.

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Interval (cm) Bottom
323	U1339	B	12	H	4A	126.5	126.5

Sediment/Rock Name	Diatom-rich Fine Ash

Observer	BETH

Percent Texture		
Sand	Silt	Clay

Comments:

Vitric - Fine Ash

Percent	Component
	SILICICLASTIC GRAINS/MINERAL
	Framework minerals
10	Quartz
	Feldspar
3	K-feldspar (Orthoclase, Microcline...)
1	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
70	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
	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 WOW!

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IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Interval (cm) Bottom
323	U1339	B	12	H	4A	141.5	

Sediment/Rock Name	Thalassiothrix longissima diatom ooze

Observer	BETH

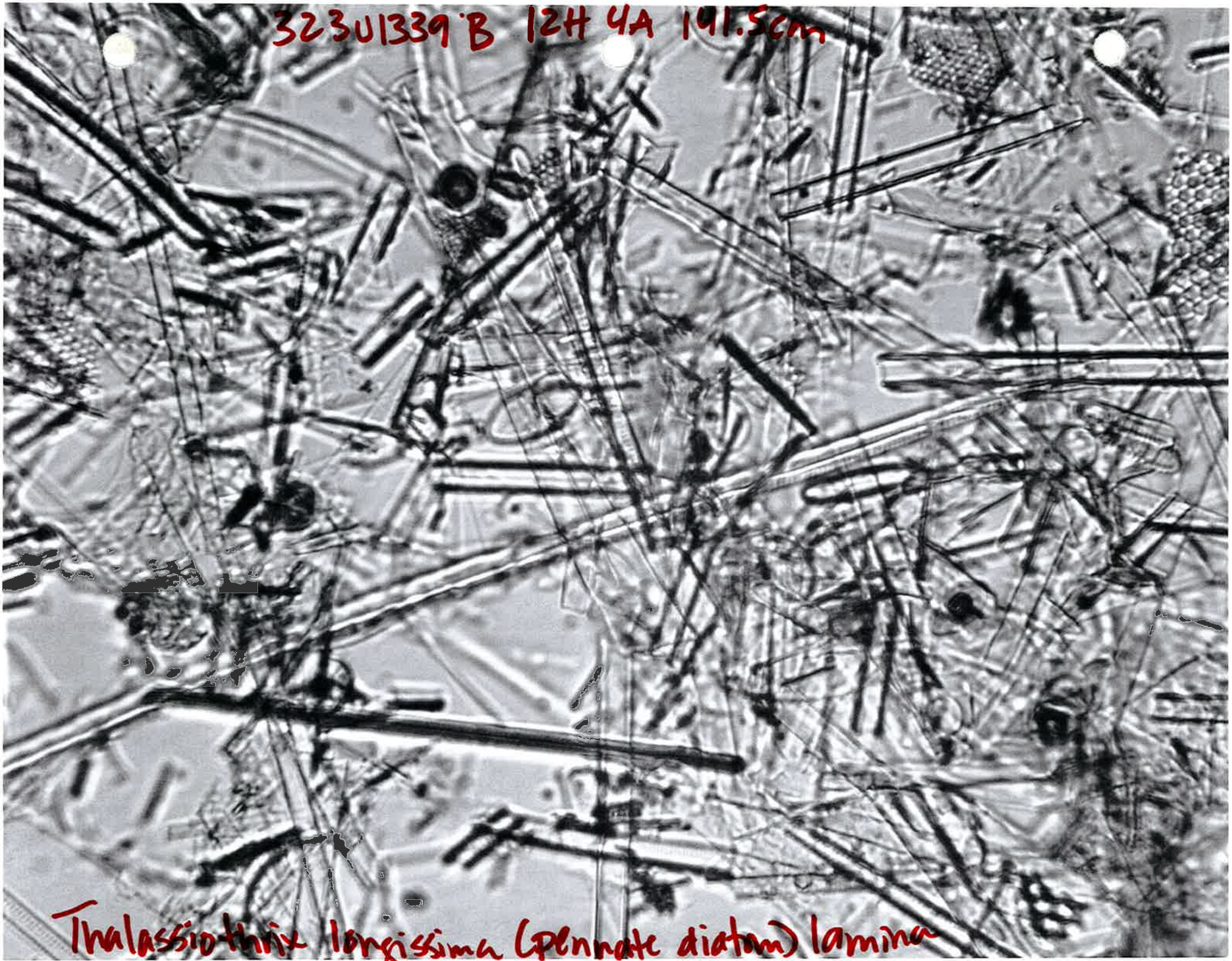
Percent Texture		
Sand	Silt	Clay

Comments:

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

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

✓


323U1339 B 12H 4A 141.5cm
Thalassiothrix longissima (pennate diatom) lamina

X

in S.M.

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Bottom
323	U1339	B	12	H	4A	147cm	

Sediment/Rock Name	Diatom-rich fine-ashy silty clay

Observer	Beth

B-13
S-57
V-30

Comments:

Percent Sand	Percent Silt	Percent Clay
6	60	40

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

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IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

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

Sediment/Rock Name	Coccolith-bearing diatom silt

Observer	Beth

B 58
S 28
✓ 10

Comments:

Percent Texture		
Sand	Silt	Clay
	70	30

Ash - Fine 100%

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

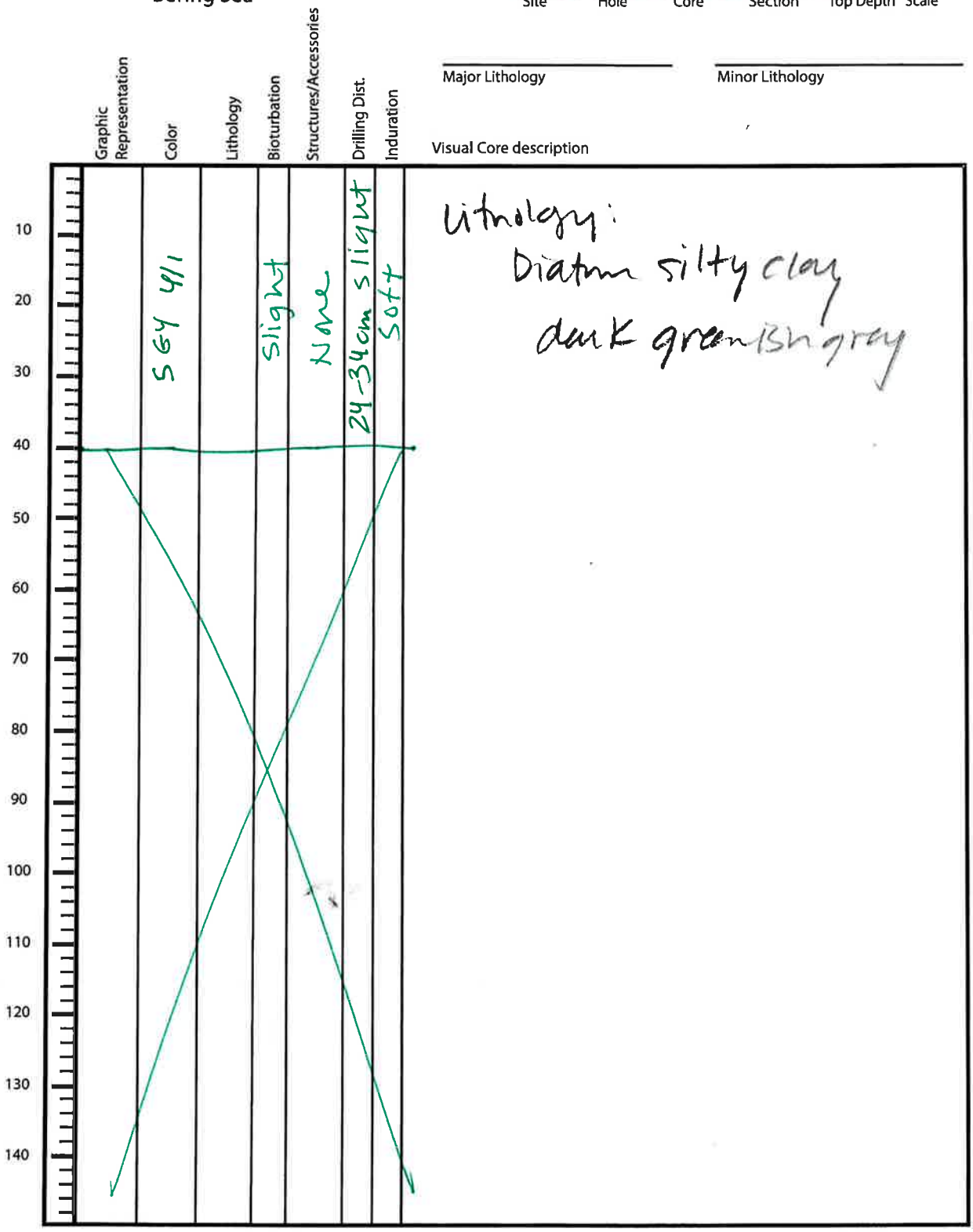
✓

Expedition 323
Bering Sea

323 (Site) U1339 (Hole) B13 (Core) B (Section) CC (Top Depth) 20cm (Scale)

Major Lithology

Minor Lithology



Observer: _____ Date: _____

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Bottom
323	U1339	B	13	H	CC	20cm	

Sediment/Rock Name	Diatom silty clay

Observer	BETH

B 53
S 27
V 20

Percent Texture		
Sand	Silt	Clay
	40	60

Comments: Vitric = fine ash

Percent	Component
	SILICICLASTIC GRAINS/MINERAL
	Framework minerals
5	Quartz
	Feldspar
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
	Accessory/trace minerals
	Micas
	Biotite
	Muscovite
15	Clay Minerals
	Chlorite
	Glauconite
	Chert
	Zircon
	Ferromagnesium minerals
	Authigenic minerals
	Barite
	Phosphorite/Apatite
	Zeolite
	Opaque minerals
	Pyrite
	Magnetite
7	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
2	Radiolarians
	Spumellaria
	Nassellaria
50	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

Expedition 323
Bering Sea

U1339 Site | B Hole | 14 Core | 1 Section | Top Depth | Scale

Major Lithology

Minor Lithology

Scale	Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration
10		10Y 4/1				0-20 cracks	
40–50					35-42 lt. ash mottles		
60				SLIGHT - whole core!		60-65 Puncture	
120–130					126-128 ash mottles		

Visual Core description

Sec 1 0cm - 5 21cm

Lith:

Lithology

1-0cm — Diatom clay v. dark g. gray

4-9cm — Nanno-bearing (lighter) Diatom ooze

4-28cm — Diatom clay

5-21cm — texture Δ

Diatom ooze

5-120 — Fine Ash DK. ✓

5-124

Diatom ooze

7-30 — Fine Ash 5Y 2.5/1 ✓

7-33.5

Diatom ooze

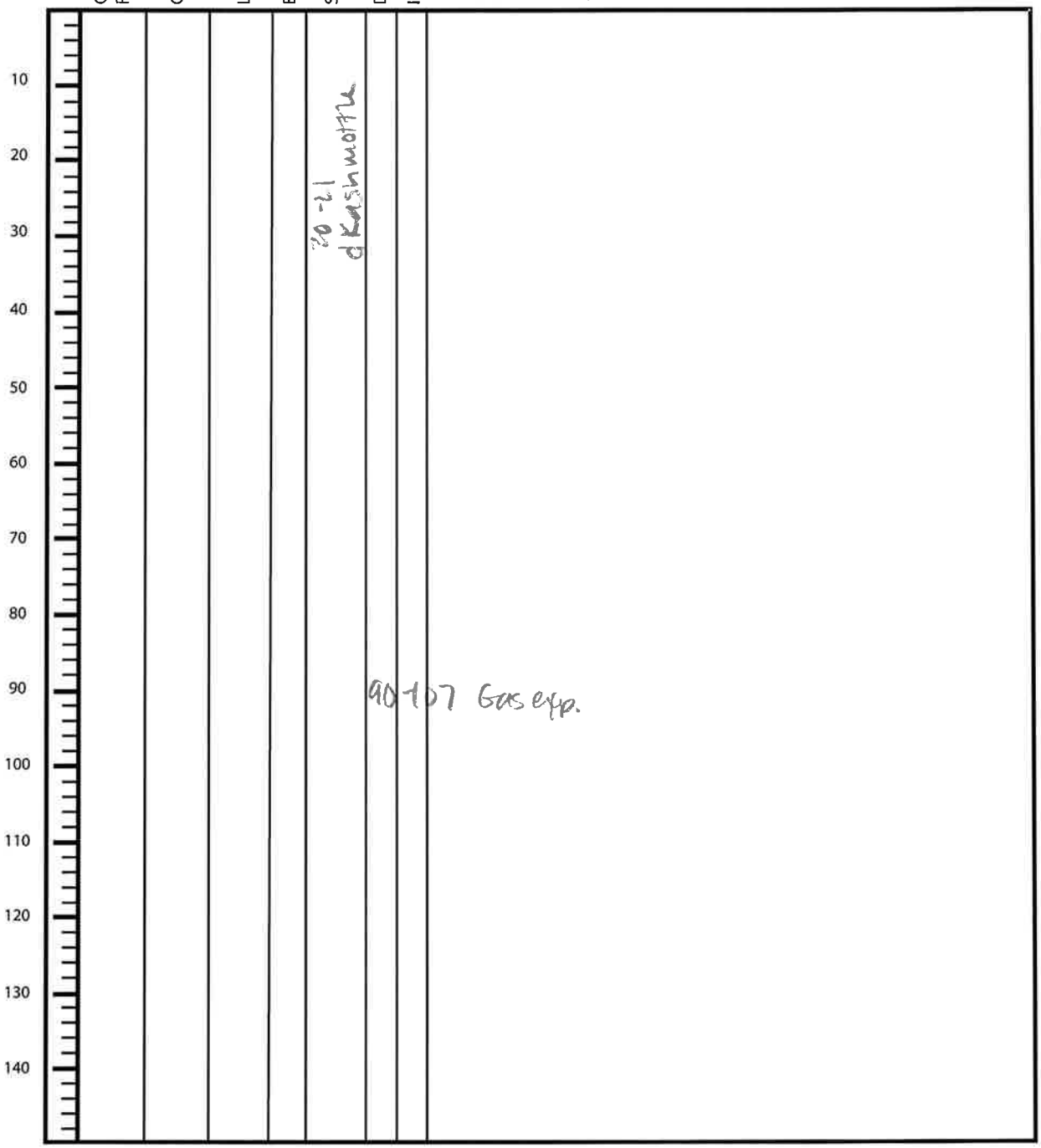
CC-31

Observer: ________ Date: ________

Expedition 323
Bering Sea

U1389 B 14 2 ____ ____
Site Hole Core Section Top Depth Scale

Major Lithology ____ Minor Lithology ____

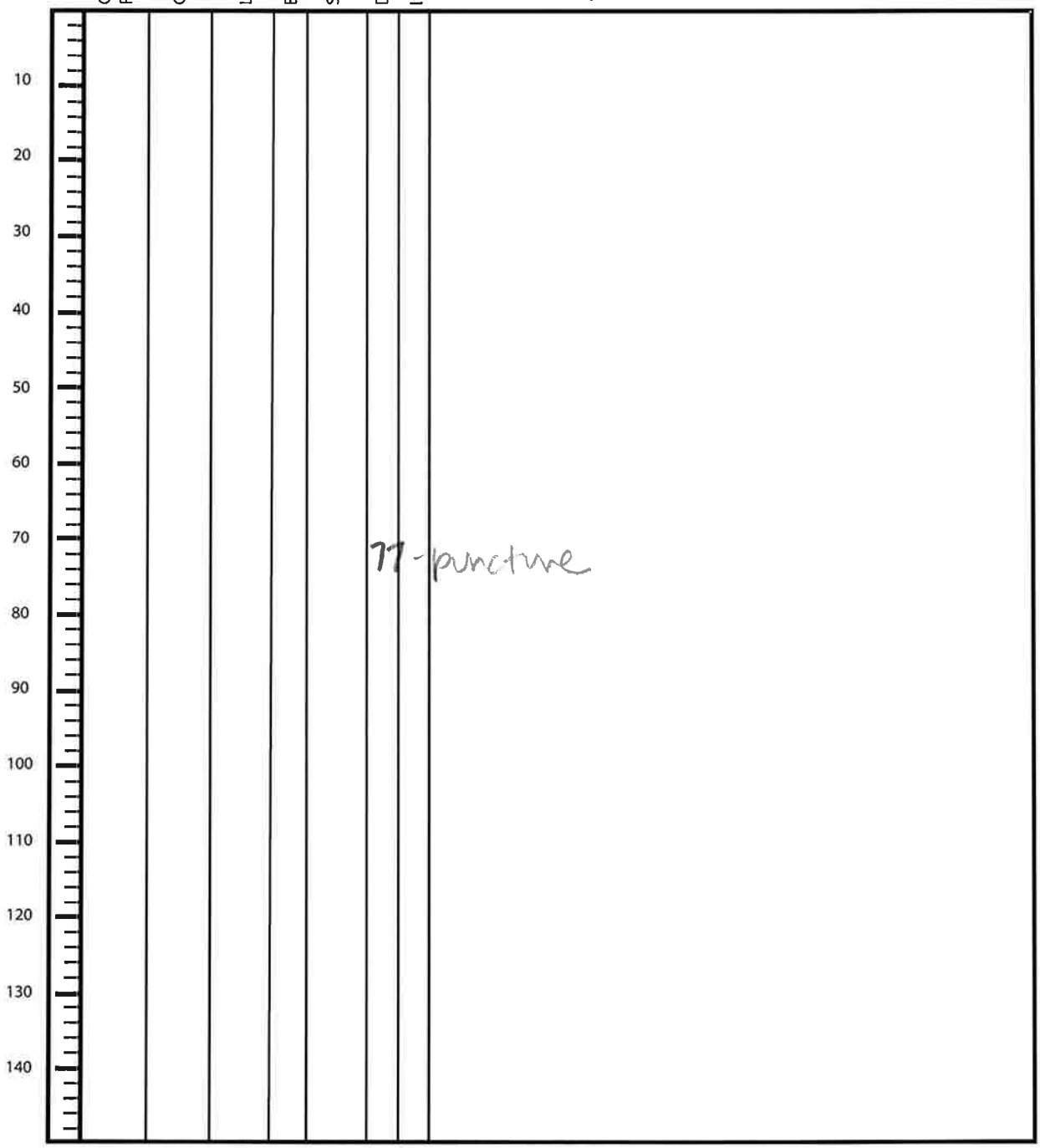


Observer: ____ Date: ____

Expedition 323
Bering Sea

U1339 (Site) B (Hole) 14 (Core) 3 (Section) ____ (Top Depth) ____ (Scale)

Major Lithology ____ Minor Lithology ____

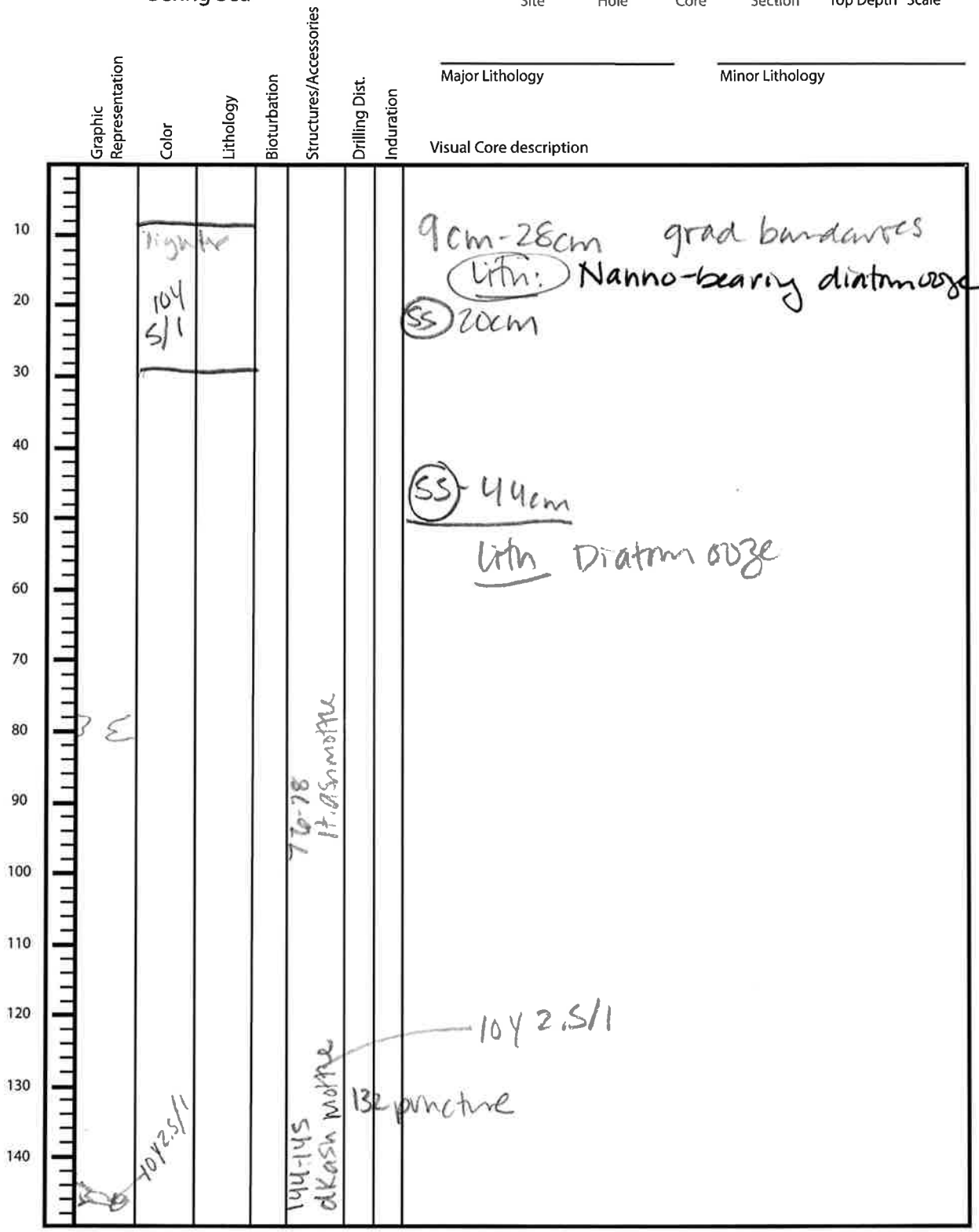


Observer: ____ Date: ____

Expedition 323
Bering Sea

U1339 B 14 4 ____ ____
Site Hole Core Section Top Depth Scale

Major Lithology ____ Minor Lithology ____



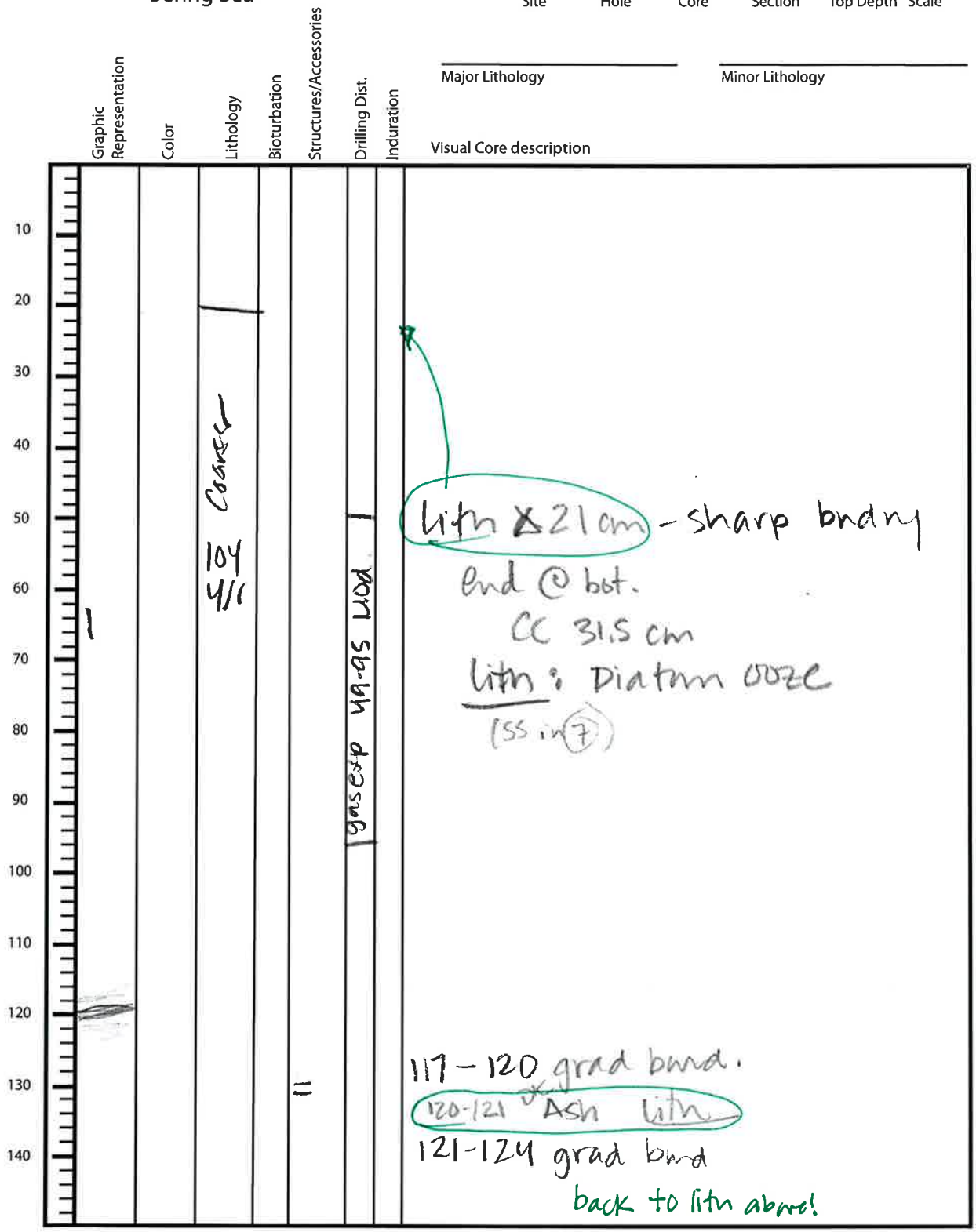
Observer: ____ Date: ____

Expedition 323
Bering Sea

11339	B	14	5		
Site	Hole	Core	Section	Top Depth	Scale

Major Lithology

Minor Lithology

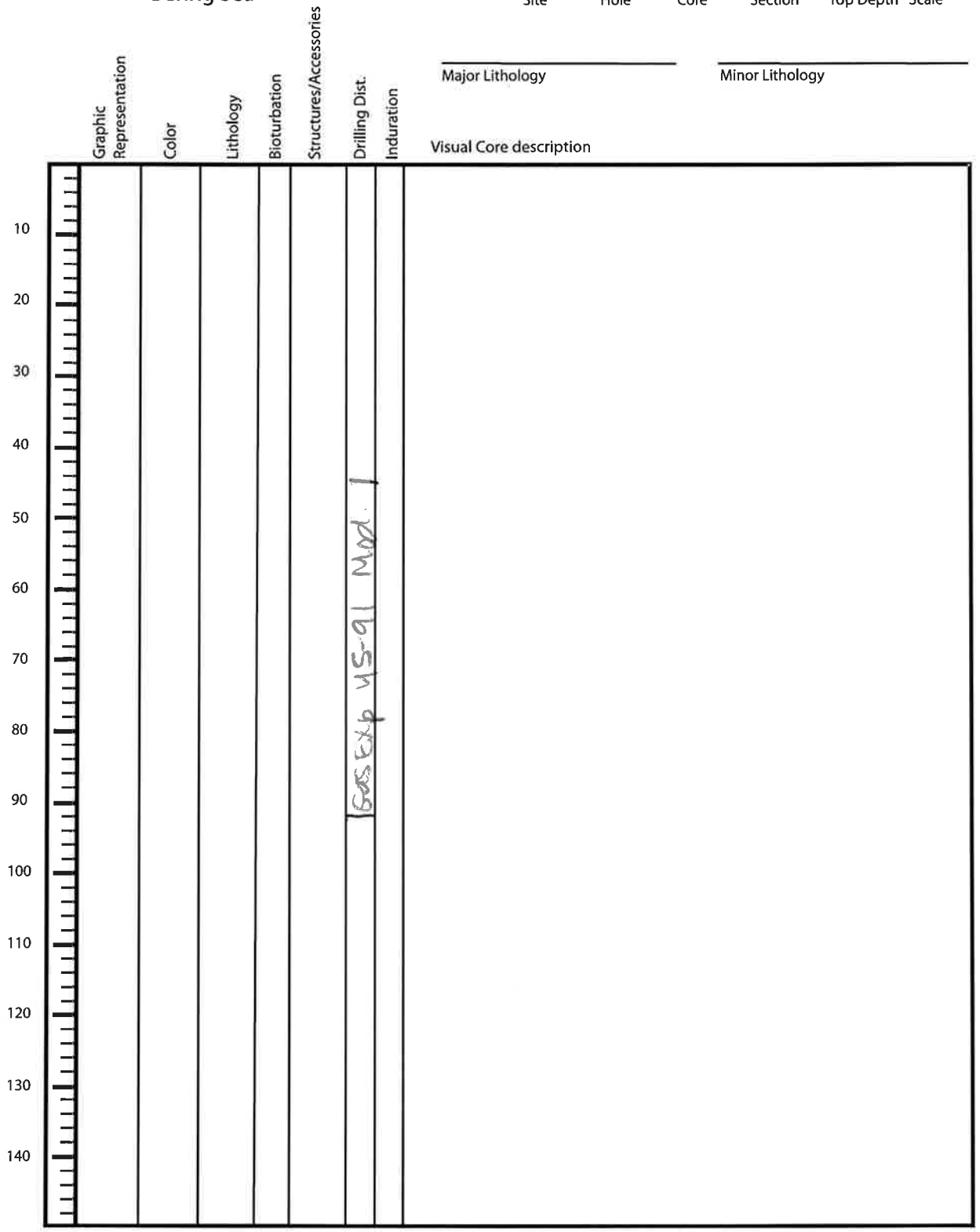


Observer: _____ Date: _____

Expedition 323
Bering Sea

U1339 B 14 6 ____ ____
Site Hole Core Section Top Depth Scale

Major Lithology ____ Minor Lithology ____

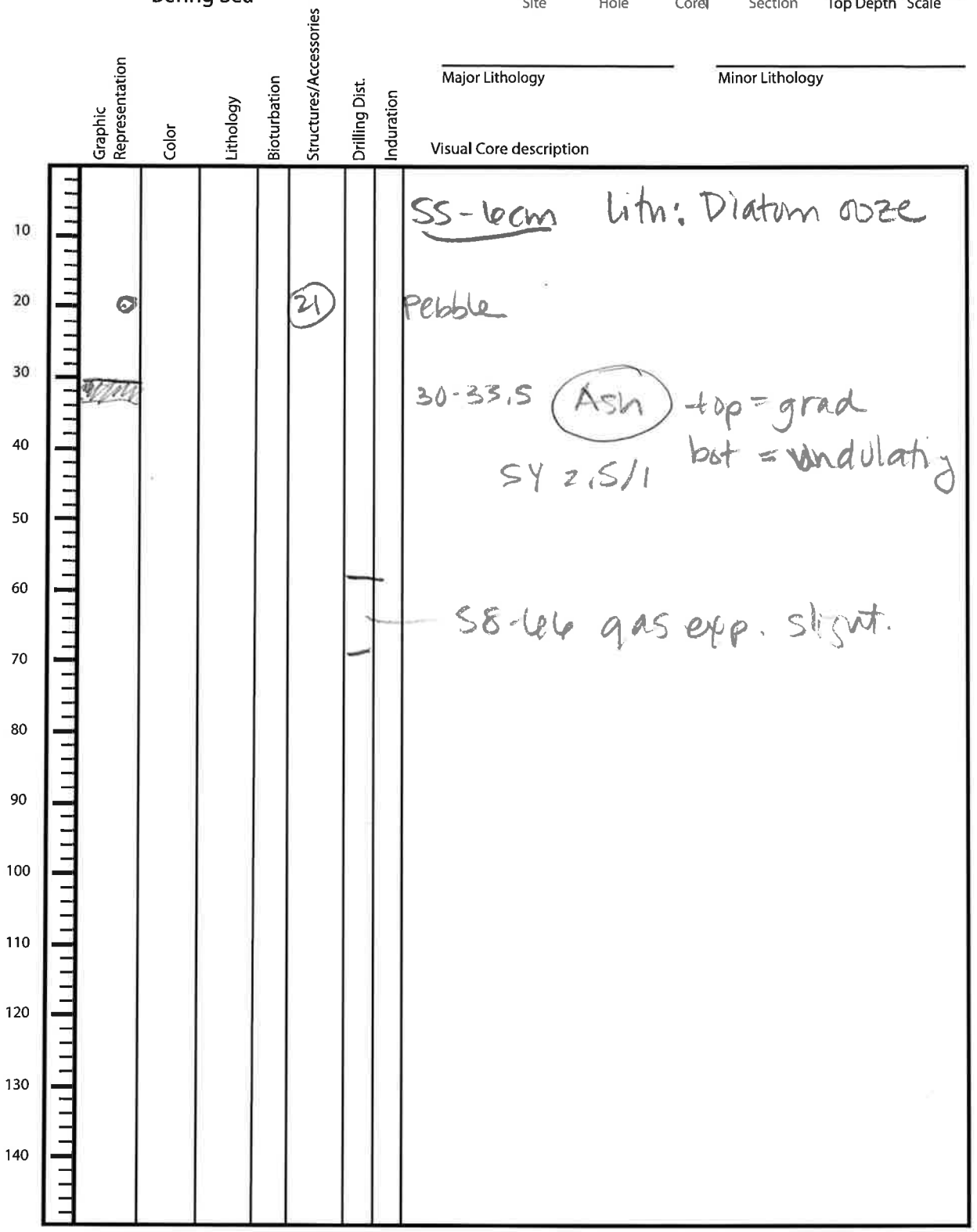


Observer: ____ Date: ____

Expedition 323
Bering Sea

U1339 B 14 7 ____ ____
Site Hole Core Section Top Depth Scale

Major Lithology ____ Minor Lithology ____

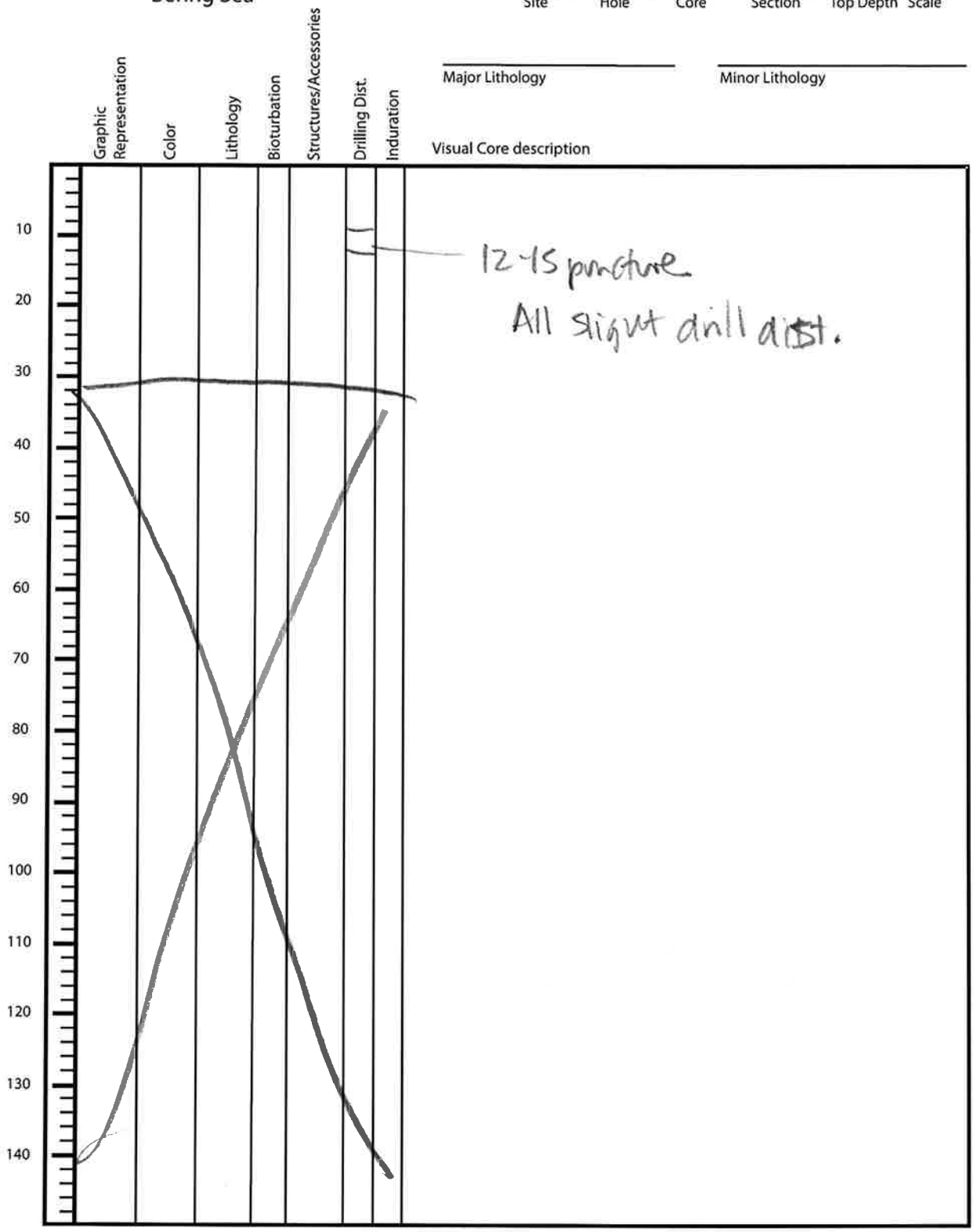


Observer: ____ Date: ____

Expedition 323
Bering Sea

U1339 (Site) B (Hole) 14 (Core) CC (Section) ____ (Top Depth) ____ (Scale)

Major Lithology ____ Minor Lithology ____



Observer: _____ Date: _____

SM

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Bottom
	1339	A	14		4	18	

Sediment/Rock Name	N-bearing DIATOM OOZE	Observer	IWA

Percent Texture		
Sand	Silt	Clay

Comments: DIATOMS 70%.
VOLCANIC 10%.
OTHERS 20%

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

Percent	Component
BIOGENIC GRAINS	
	Calcareous
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
5%	X Nannofossils ←
	Coccoliths
	Discoasters
	Pteropods
	Siliceous
	X Radiolarians
	Spumellaria
	Nassellaria
70%	X Diatoms
	Centric
	Pennate
	Chaetoceros Resting Spores
	Silicoflagellates
	Sponge spicules
	Dinoflagellates
	Others
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

✓

SM

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Bottom
	1334	B	14		4	44 cm	

Sediment/Rock Name	DIATOM CLAY

Observer	IWA

Percent Texture		
Sand	Silt	Clay

Comments: DIATOMS 50%.
CLAY 30%.
OTHERS 20.

Percent	Component
	SILICICLASTIC GRAINS/MINERAL
	Framework minerals
5%	r Quartz
5%	r Feldspar
	r K-feldspar (Orthoclase, Microcline...)
	r Plagioclase
	Rock fragments
	Accessory/trace minerals
	r Micas
	r Biotite
	Muscovite
30	r Clay Minerals
	Chlorite
	Glauconite
	Chert
	Zircon
	Ferromagnesium minerals
	Authigenic minerals
	Barite
	Phosphorite/Apatite
10%	r Zeolite
	Opaque minerals
<5%	r Pyrite
	Magnetite
	Fe-oxide
	Carbonates
	Calcite
	Dolomite
	VOLCANICLASTIC GRAINS
	Crystal grain
5% 100%	r Vitric grain
	Lithic grain

Percent	Component
	BIOGENIC GRAINS
	Calcareous
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
<<5%	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
	Siliceous
	Radiolarians
	Spumellaria
	Nassellaria
50%	Diatoms
	r Centric
	r Pennate
	Chaetoceros Resting Spores
	Silicoflagellates
	r 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
	1339	B	14		7	5 cm	

Sediment/Rock Name	DIATOM OOZE	Observer	WA

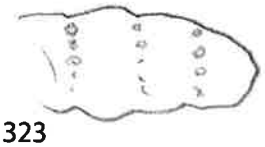
Percent Texture		
Sand	Silt	Clay

Comments: DIATOM 75%.
SILICICLASTIC 15%.

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

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

X



Expedition 323
Bering Sea

323 / 1339B / 15H / 1A / 0. / ____
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

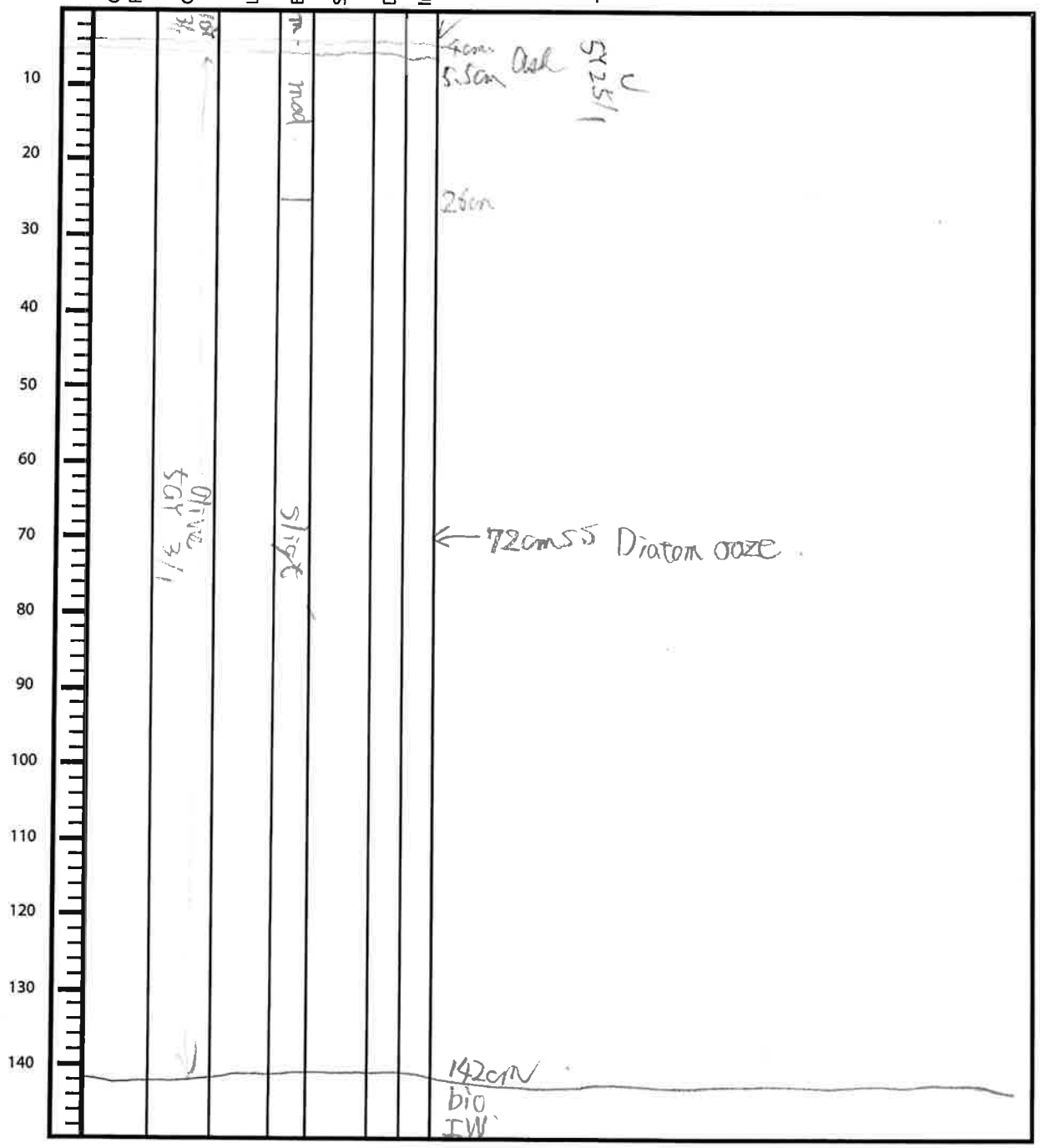
52cm
60cm
76cm
82cm

Observer: _____ Date: _____

Expedition 323
Bering Sea

323 / 1339B / 15H / 2 / 82 / ____
Site / Hole / Core / Section / Top Depth / Scale

Major Lithology ____ Minor Lithology ____

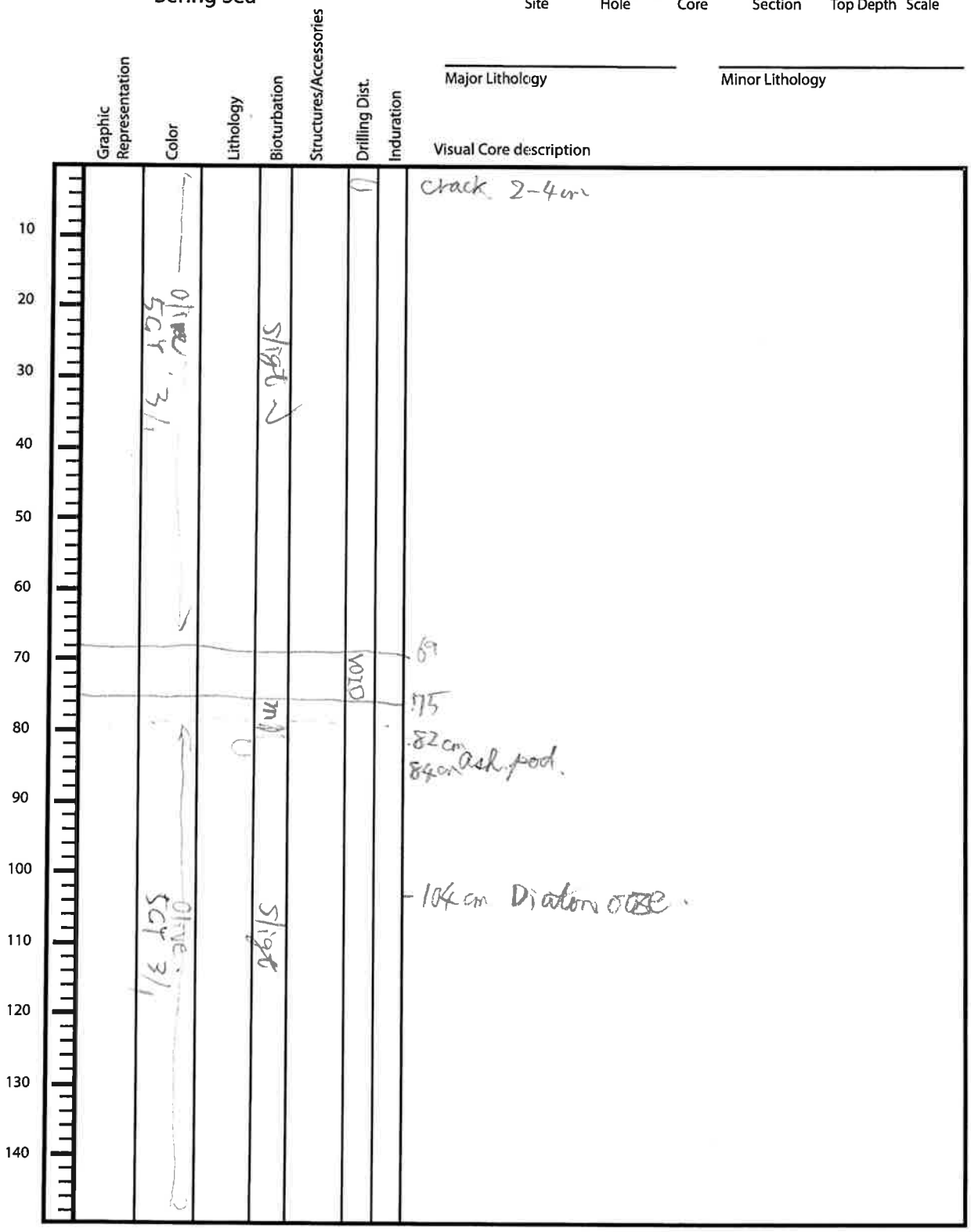


Observer: ____ Date: ____

Expedition 323
Bering Sea

323 / U1343B / 15H / 3 / 232 / ____
Site / Hole / Core / Section / Top Depth / Scale

Major Lithology ____ Minor Lithology ____



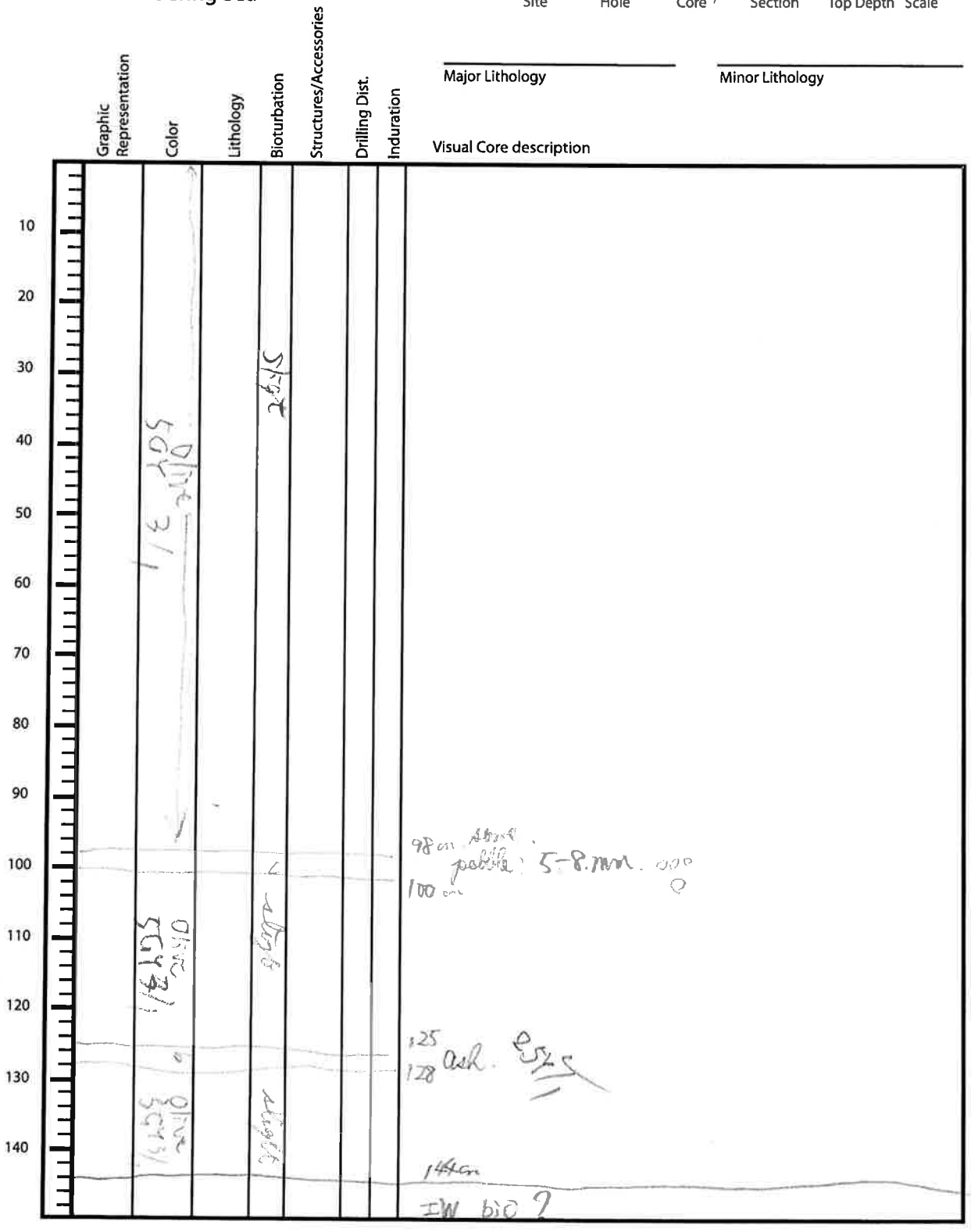
Observer: ____ Date: ____

X

Expedition 323
Bering Sea

1339 B 154 4 382 ___
Site Hole Core Section Top Depth Scale

Major Lithology ___ Minor Lithology ___

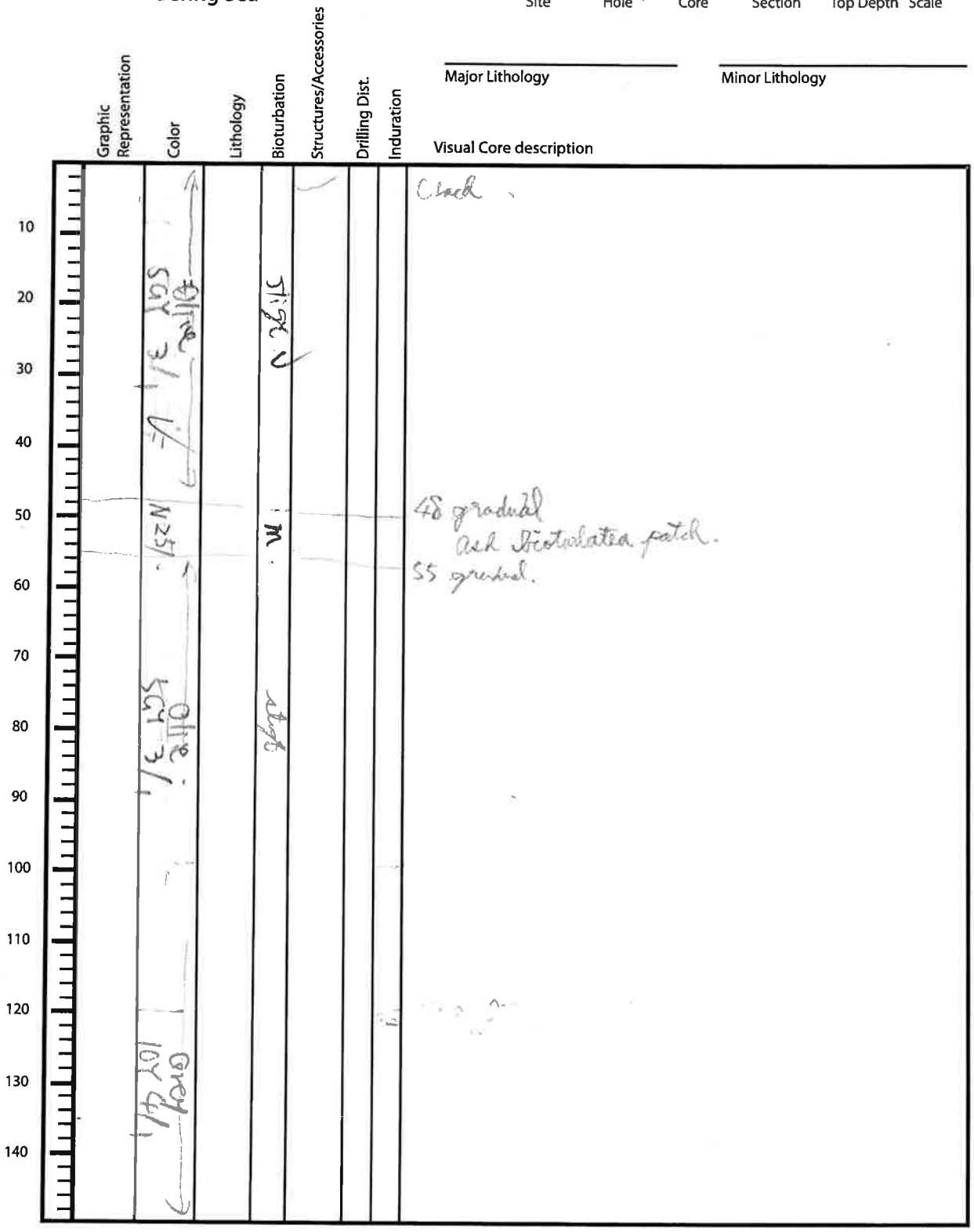


Observer: ___ Date: ___

Expedition 323
Bering Sea

1339 B 15H 5 532 ____
Site Hole Core Section Top Depth Scale

Major Lithology _____ Minor Lithology _____

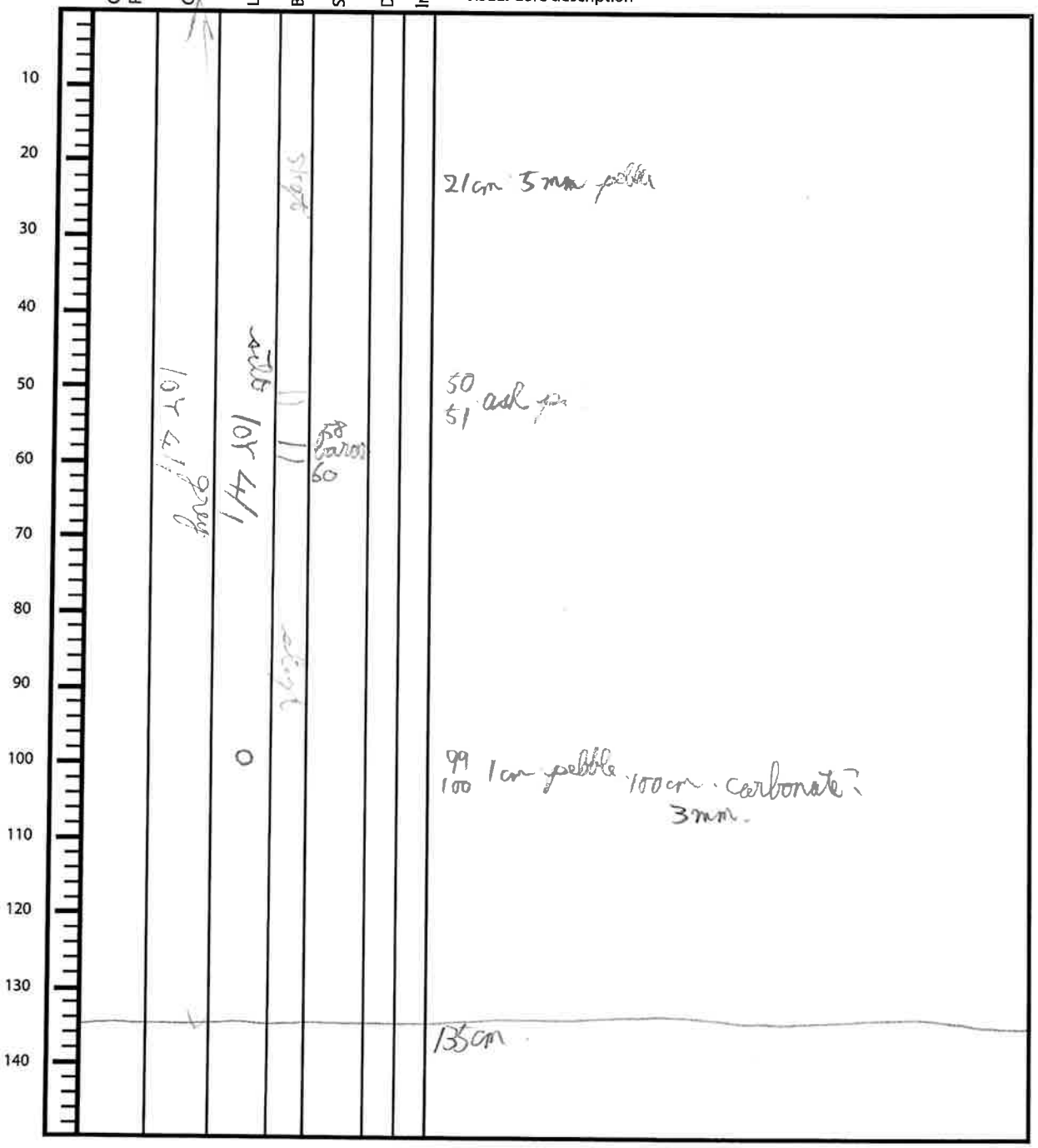


Observer: _____ Date: _____

Expedition 323
Bering Sea

1339 | B | 15 | 6 | 082 | ____
Site | Hole | Core | Section | Top Depth | Scale

Major Lithology ____ Minor Lithology ____

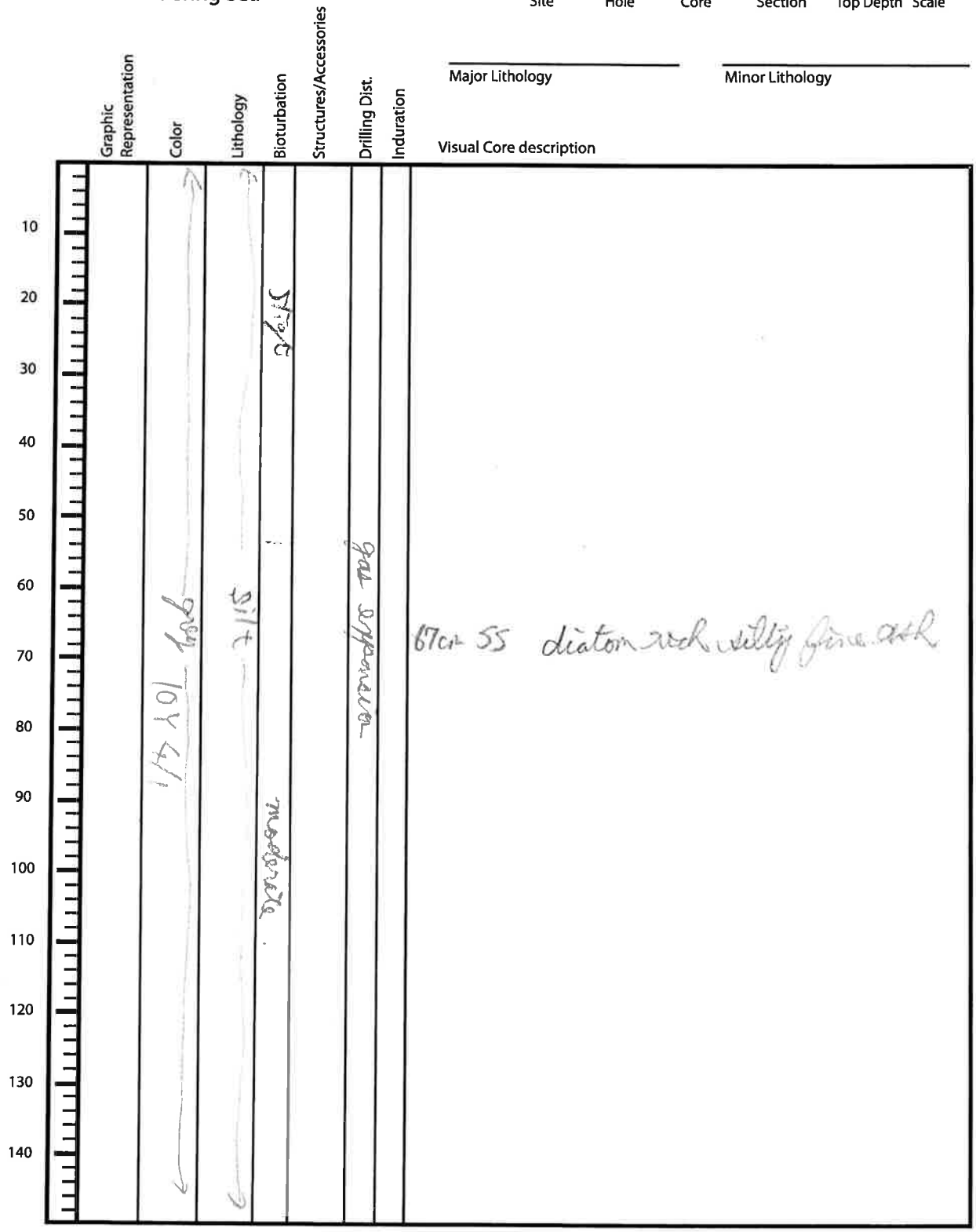


Observer: _____ Date: _____

Expedition 323
Bering Sea

1339 (Site) B (Hole) 15H (Core) 7 (Section) 832 (Top Depth) ____ (Scale)

Major Lithology ____ Minor Lithology ____



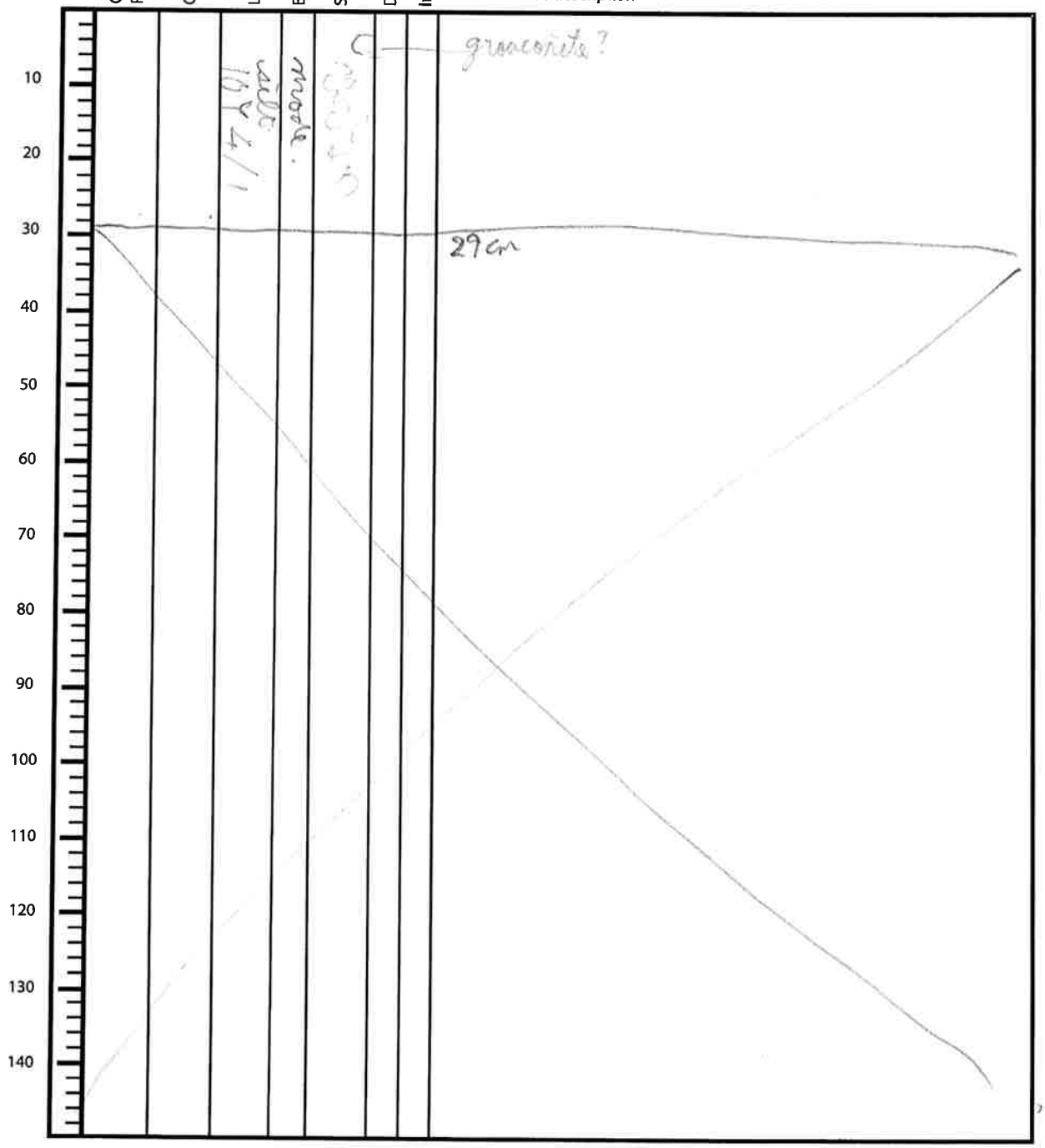
Observer: ____ Date: ____

X

Expedition 323
Bering Sea

1339 Site | B Hole | 34 Core | CC Section | 982 Top Depth | ___ Scale

Major Lithology _____ Minor Lithology _____



Observer: _____ Date: _____

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Bottom
323	U1339	B	15	H	2	72cm	

Sediment/Rock Name	Diatom ooze

Observer	BETH

B 65
S 18
V 18

Comments:

Percent Texture		
Sand	Silt	Clay
	20	80

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

Percent	Component
	BIOGENIC GRAINS
	Calcareous
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
3	Coccoliths
	Discoasters
	Pteropods
	Siliceous
	Radiolarians
	Spumellaria
	Nassellaria
	Diatoms
30	Centric
20	Pennate
10	*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

DMSM

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Interval (cm) Bottom
323	U1339	B	15	H	3A	104	

Sediment/Rock Name	Diatom ooze

Observer	BETH

B 60
S 30
V 10

Percent Texture		
Sand	Silt	Clay
	20	80

Comments: pretty thick slide

Percent	Component
	SILICICLASTIC GRAINS/MINERAL
	Framework minerals
3	Quartz
	Feldspar
	K-feldspar (Orthoclase, Microcline...)
2	Plagioclase
3	Rock fragments
	Accessory/trace minerals
	Micas
1	Biotite
	Muscovite
10	Clay Minerals
1	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
10	Vitric grain
	Lithic grain

Percent	Component
	BIOGENIC GRAINS
	Calcareous
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
	Siliceous
	Radiolarians
	Spumellaria
	Nassellaria
	Diatoms
25	Centric
20	Pennate
05	*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	U1339	B	15	H	6A	67cm	

Sediment/Rock Name	Diatom-rich silty fine ash

Observer	BETH

B: 25
S: 45
V: 30

Percent Texture		
Sand	Silt	Clay
	60	40

Comments: fine ash

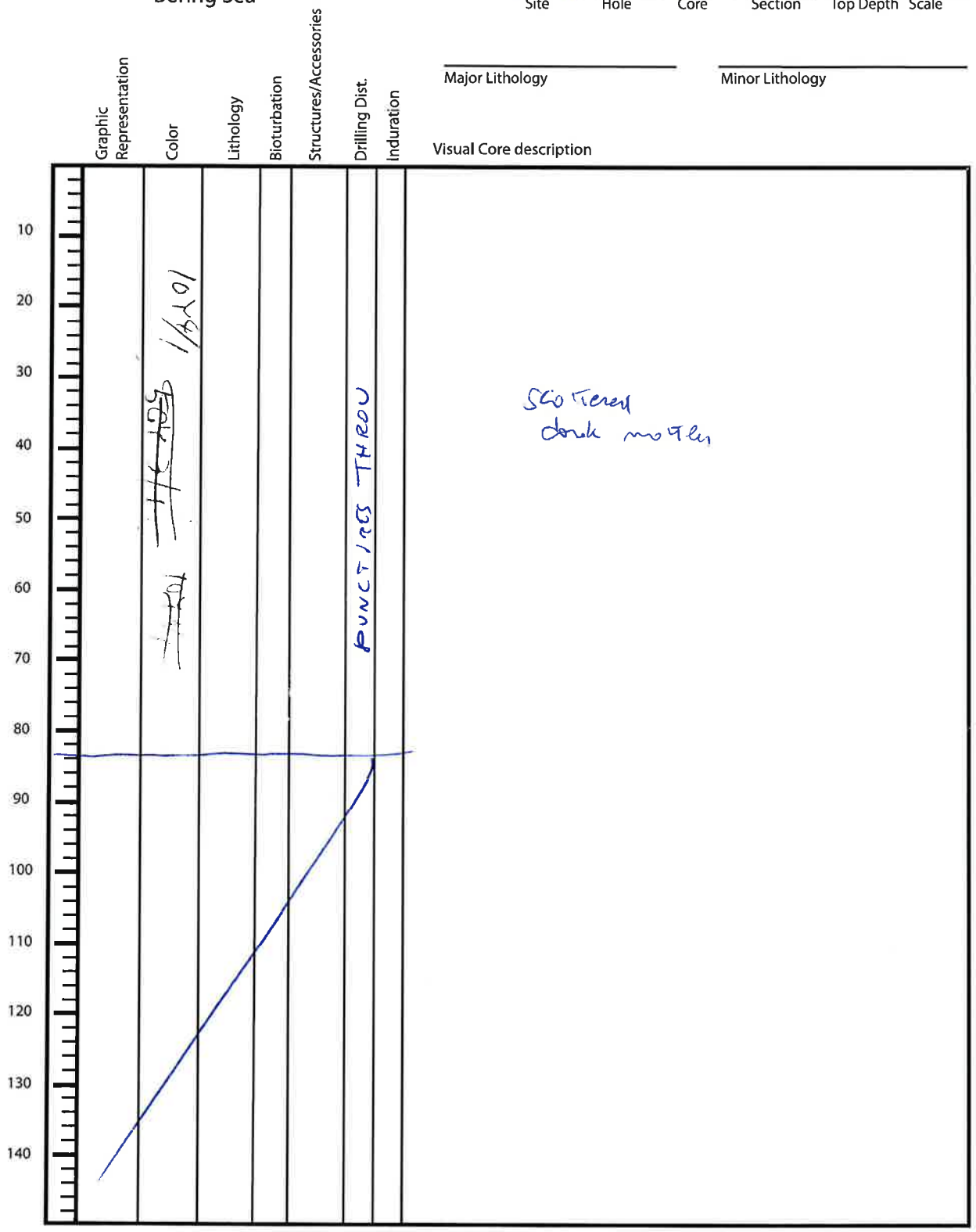
Percent	Component
	SILICICLASTIC GRAINS/MINERAL
	Framework minerals
10	Quartz
	Feldspar
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
10	Rock fragments polycrystaline qtz
	Accessory/trace minerals
	Micas
	Biotite
	Muscovite
	Clay Minerals
	Chlorite
15	Glauconite
	Chert
	Zircon
	Ferromagnesium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

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

Expedition 323
Bering Sea

1339 B 16 1 _____ _____
Site Hole Core Section Top Depth Scale

_____ _____
Major Lithology Minor Lithology



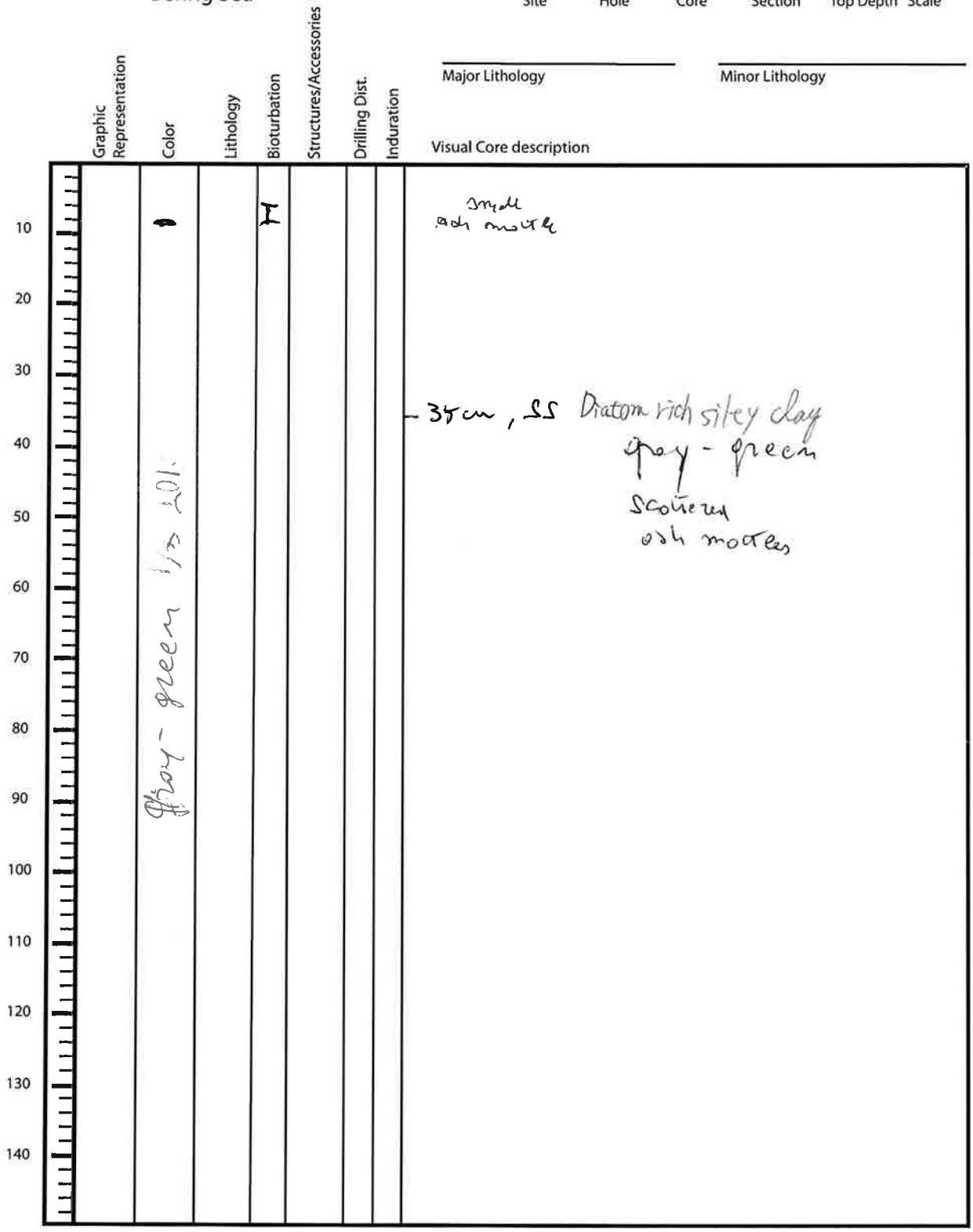
83

Observer: _____ Date: _____

Expedition 323
Bering Sea

Site ____ Hole ____ Core 16 Section 2 Top Depth ____ Scale ____

Major Lithology ____ Minor Lithology ____

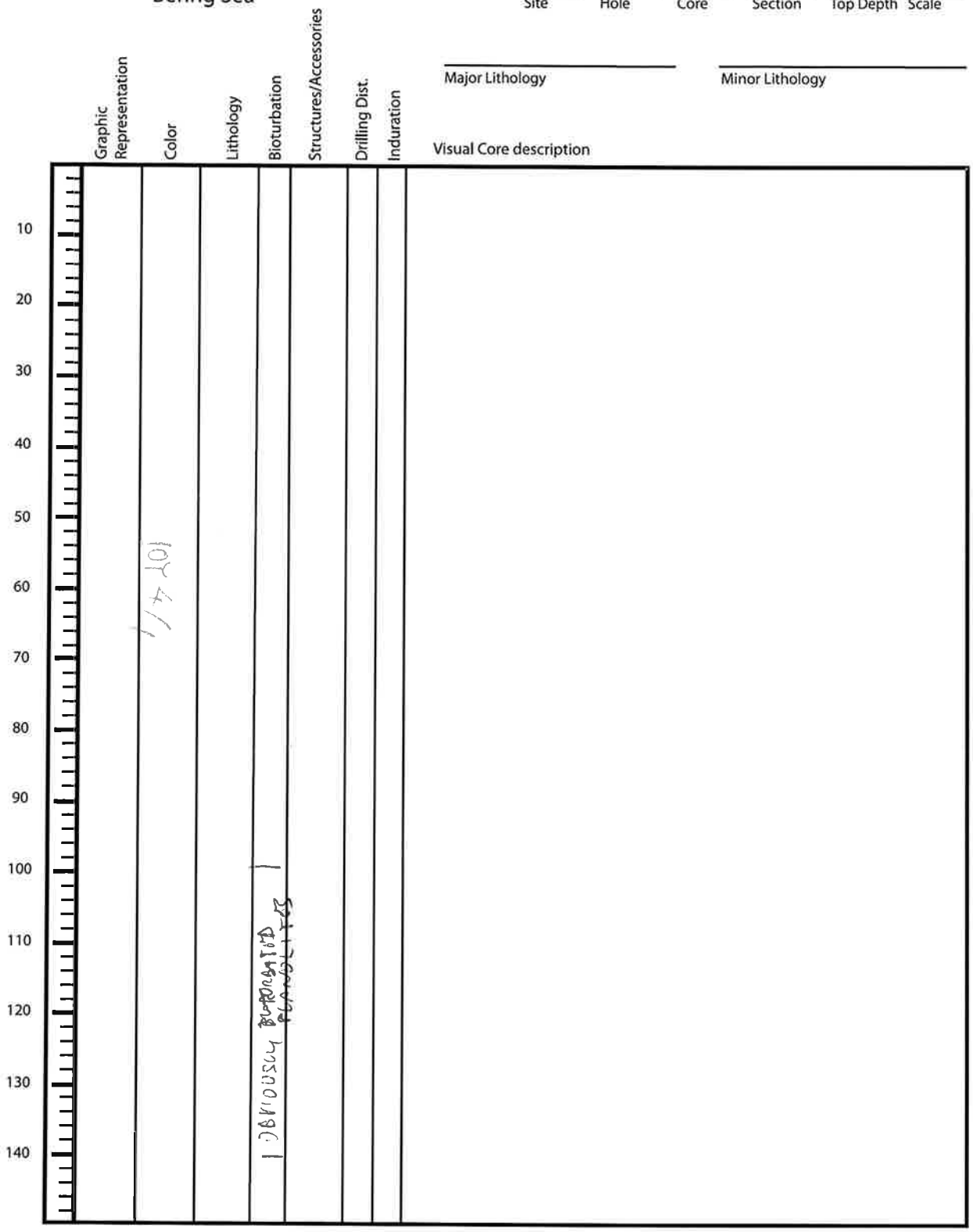


Observer: ____ Date: ____

Expedition 323
Bering Sea

Site ____ Hole ____ Core 16 Section 3 Top Depth ____ Scale ____

Major Lithology ____ Minor Lithology ____

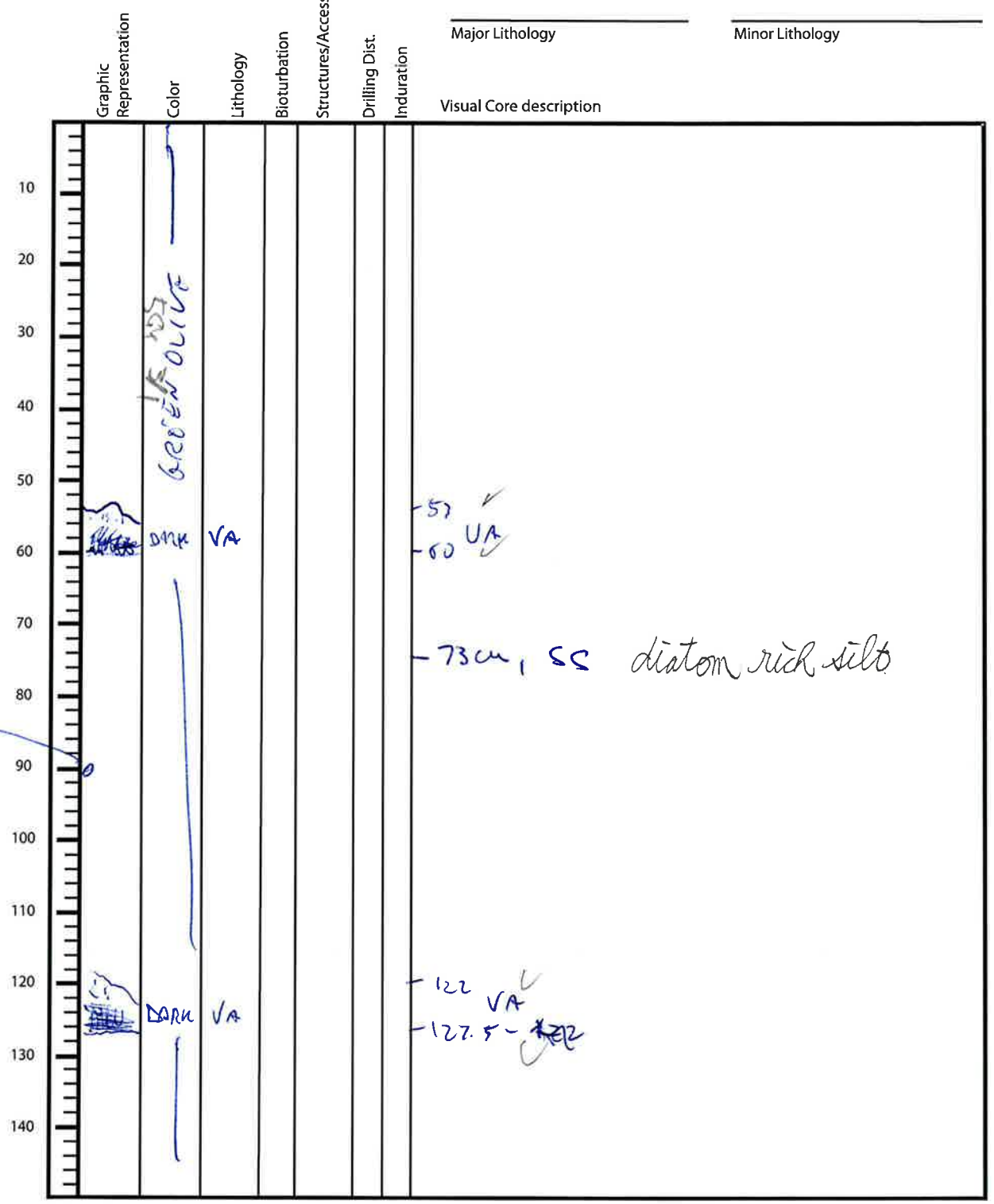


Observer: ____ Date: ____

Expedition 323
Bering Sea

Site | Hole | 16 Core | 5 Section | Top Depth | Scale

Major Lithology | Minor Lithology

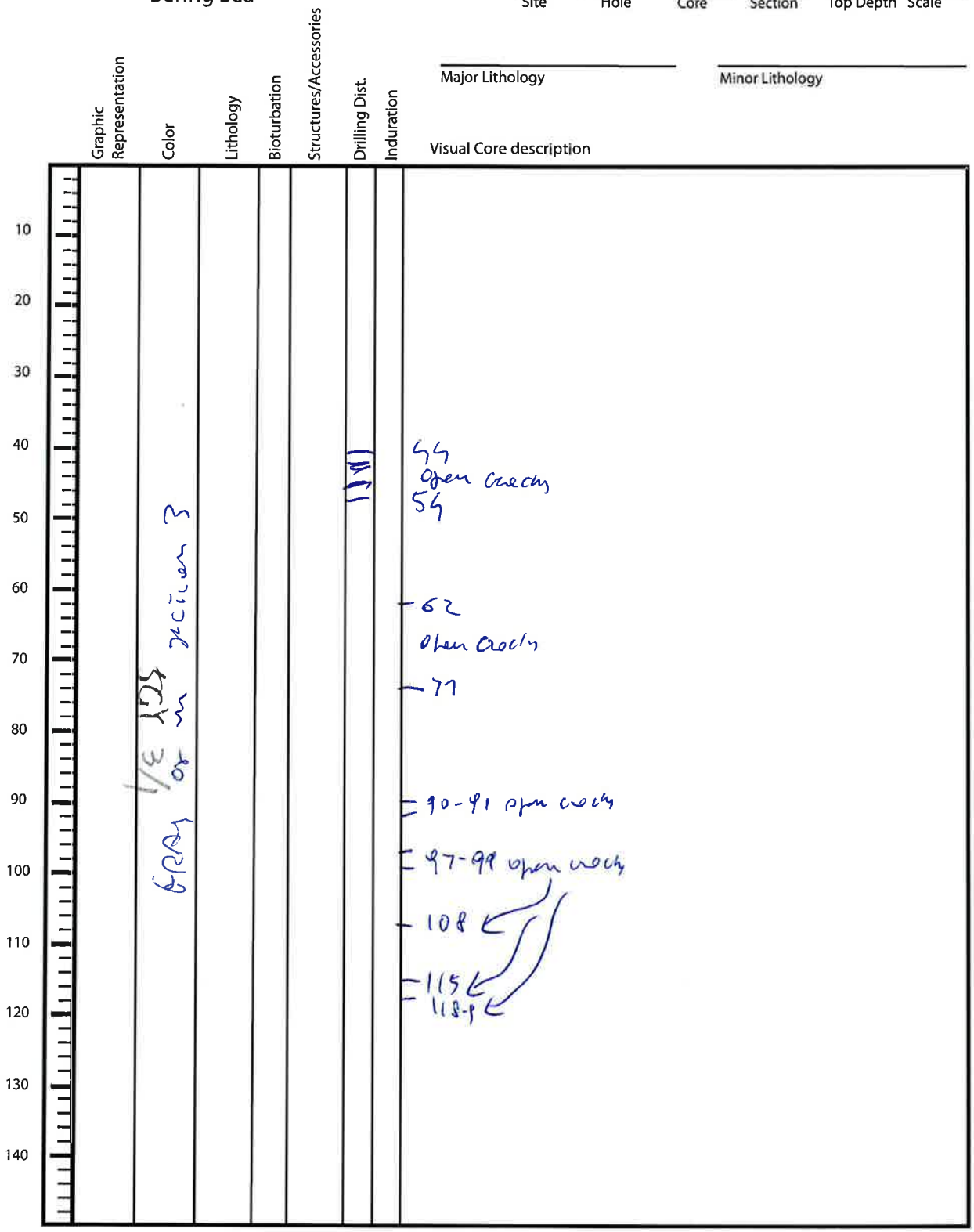


Observer: _____ Date: _____

Expedition 323
Bering Sea

Site ____ Hole ____ Core 16 Section 5 Top Depth ____ Scale ____

Major Lithology ____ Minor Lithology ____

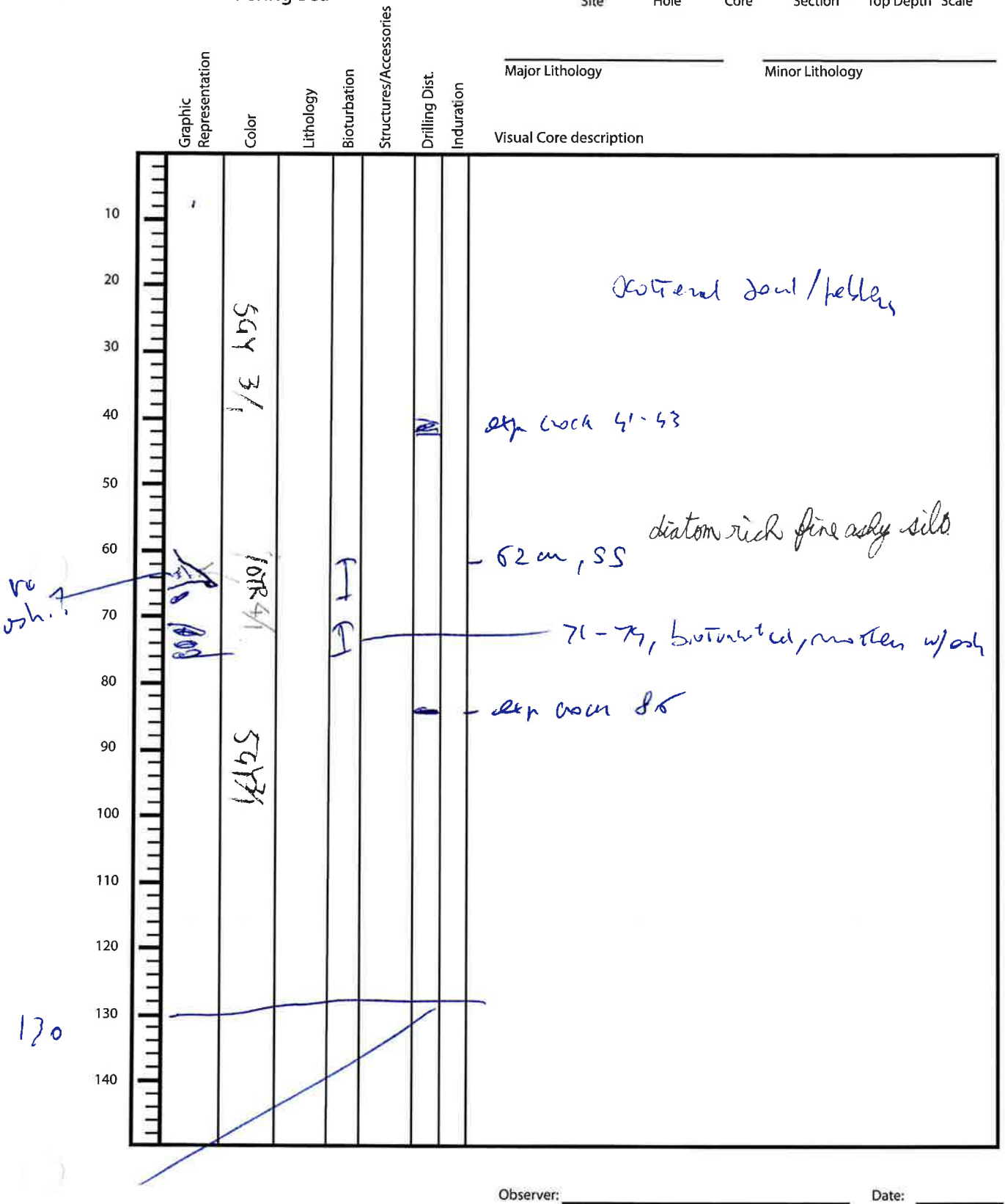


Observer: ____ Date: ____

Expedition 323
Bering Sea

Site ____ Hole ____ Core 16 Section 6 Top Depth ____ Scale ____

Major Lithology ____ Minor Lithology ____

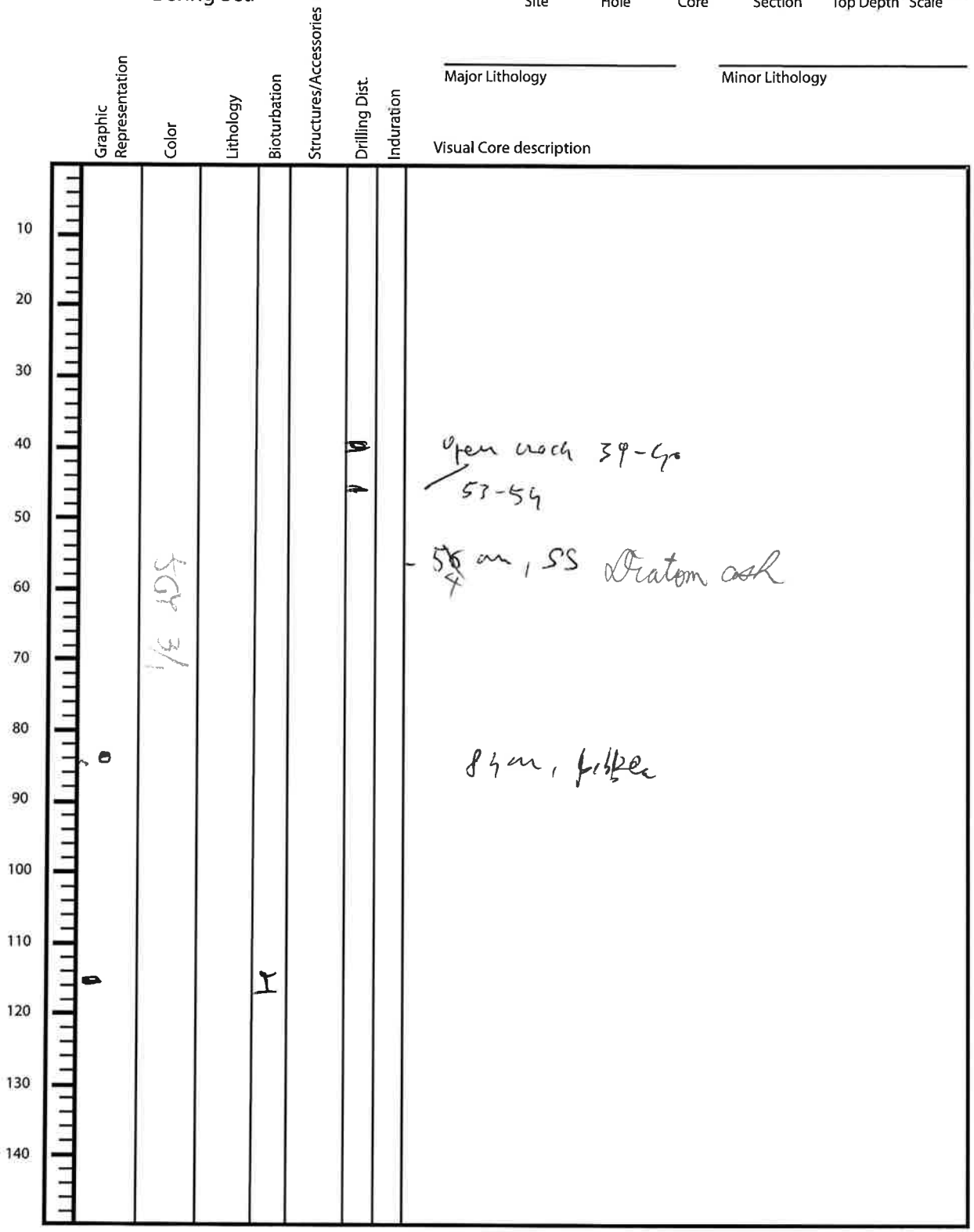


Observer: ____ Date: ____

Expedition 323
Bering Sea

Site ____ Hole ____ Core 16 Section 7 Top Depth ____ Scale ____

Major Lithology ____ Minor Lithology ____

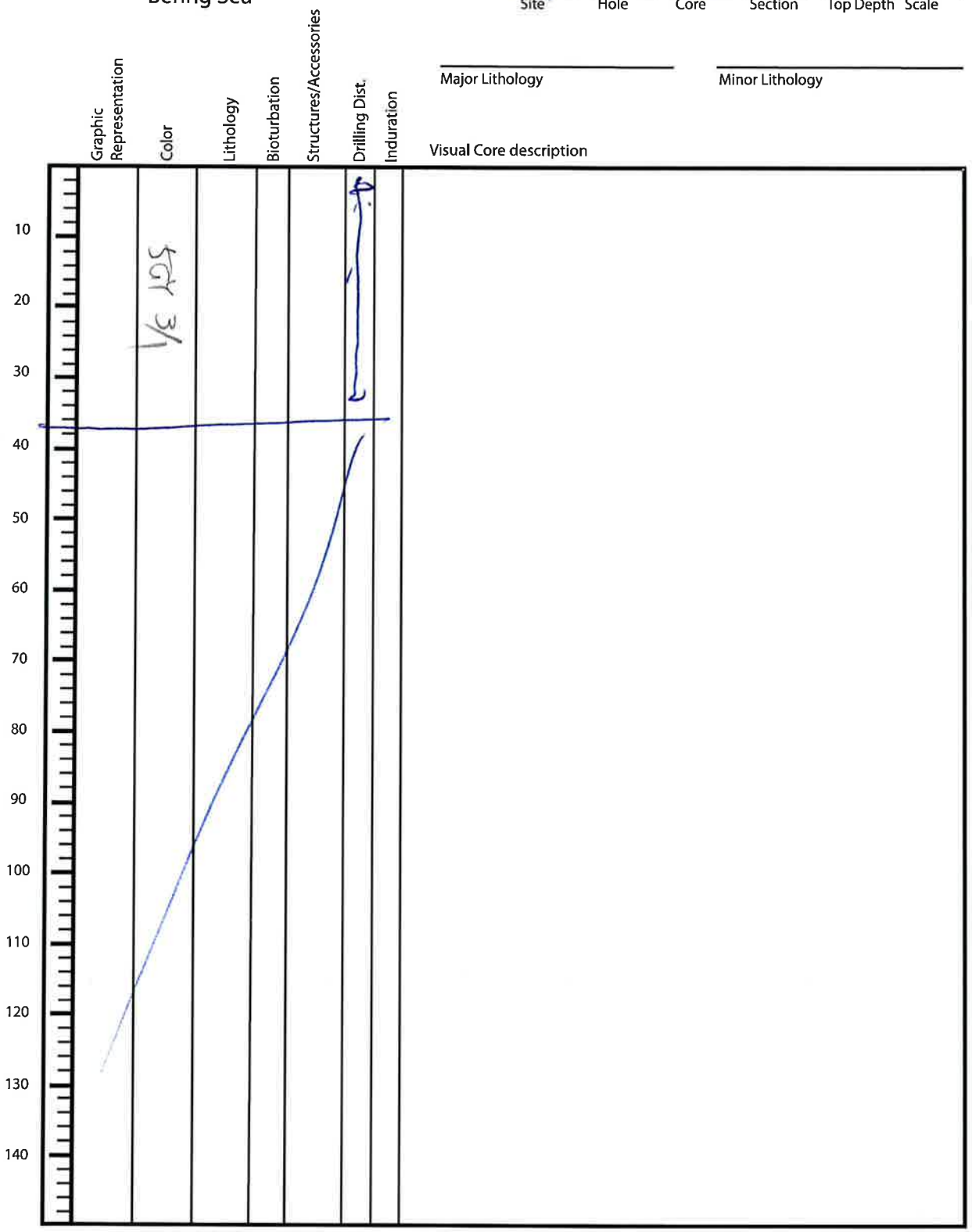


Observer: ____ Date: ____

Expedition 323
Bering Sea

1339 | B | 16 | RC | | |
Site | Hole | Core | Section | Top Depth | Scale

Major Lithology | Minor Lithology



Observer: _____ Date: _____

X

inSM

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Bottom
323	U1339	B	16	H	2A	35cm	

Sediment/Rock Name	Diatom rich silty clay

Observer	Beth

B-30
V-15
S-55

Comments:

Percent Texture		
Sand	Silt	Clay
	60	40

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

Percent	Component
	BIOGENIC GRAINS
	Calcareous
2 A	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
3 A	Coccoliths
	Discoasters
	Pteropods
	Siliceous
	Radiolarians
	Spumellaria
	Nassellaria
A	Diatoms
10	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

X

insM

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Bottom
323	1339	B	16	H	4	73 cm	

Sediment/Rock Name	diatom - rich silt_

Observer	GB

Percent Texture		
Sand	Silt	Clay

Comments:

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

Percent	Component
	BIOGENIC GRAINS
	Calcareous
	Foraminifera
	Planktonic foraminifera
X	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
	Siliceous
X	Radiolarians
	Spumellaria
	Nassellaria
40	X Diatoms
	Centric
	Pennate
	Chaetoceros Resting Spores
	Silicoflagellates
	Sponge spicules
	Dinoflagellates
	Others
X	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	Interval (cm) Bottom
323	1339	B	16	H	6	62 cm	

Sediment/Rock Name	diatom - rich fine ashy silt

Observer	G.B.

Percent Texture		
Sand	Silt	Clay

Comments:

Percent	Component
SILICICLASTIC GRAINS/MINERAL	
	Framework minerals
30	X 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
30	Vitric grain X
	Lithic grain

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

X

inSM

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Interval (cm) Bottom
323	1339	B	16	H	7	56 cm	

Sediment/Rock Name	~~Ash~~ Diatom ash

Observer	GB.

Percent Texture		
Sand	Silt	Clay

Comments:

Percent	Component
	SILICICLASTIC GRAINS/MINERAL
	Framework minerals
X	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
45 X	Vitric grain + Quartz
	Lithic grain

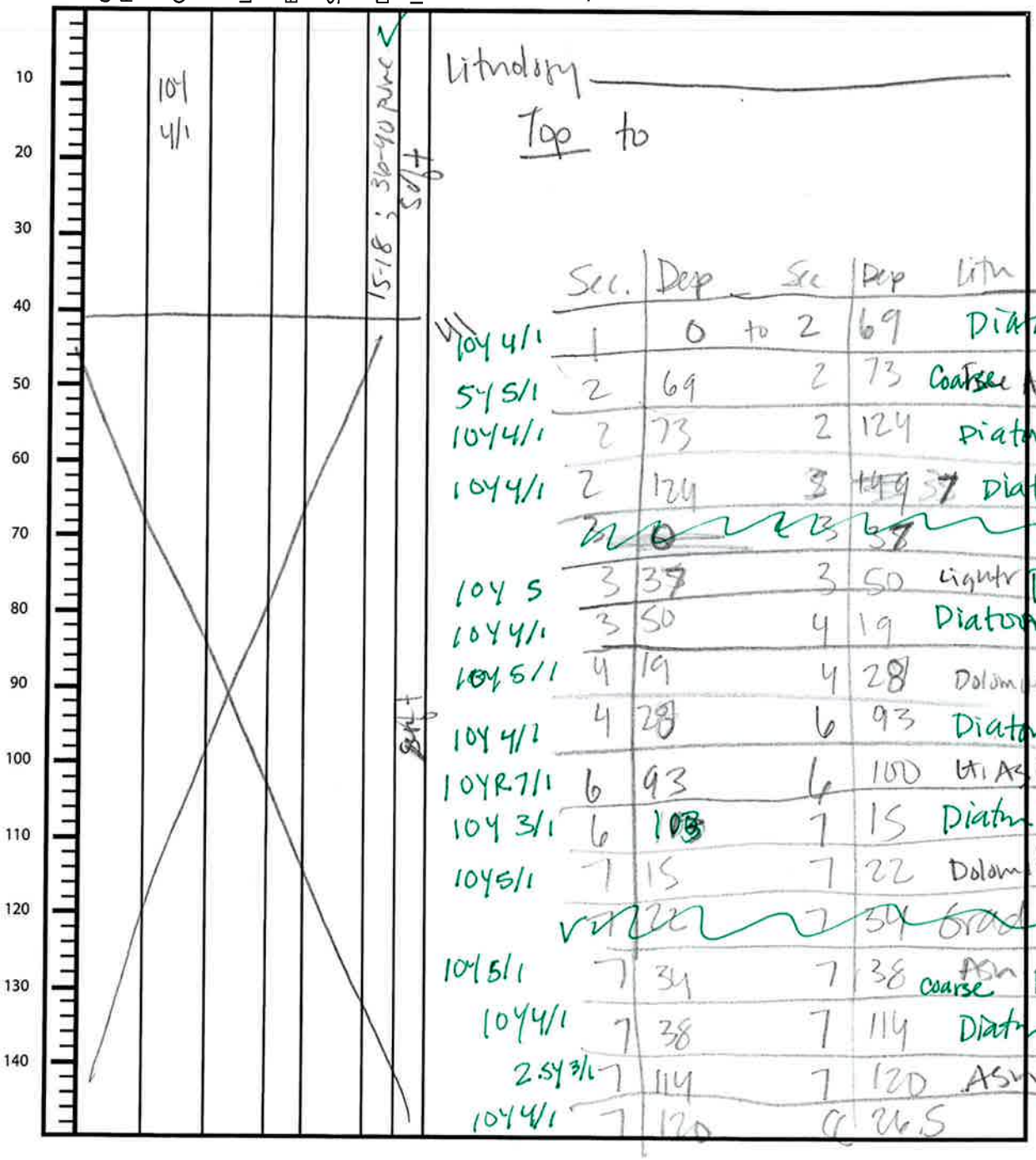
Percent	Component
	BIOGENIC GRAINS
	Calcareous
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
	Siliceous
	Radiolarians
	Spumellaria
	Nassellaria
55	Diatoms
	Centric
	Pennate
	Chaetoceros Resting Spores
	Silicoflagellates
	Sponge spicules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

Expedition 323
Bering Sea

U1339 B 17 1 ____ ____
Site Hole Core Section Top Depth Scale

Major Lithology ____ Minor Lithology ____

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



Lithology

Top to

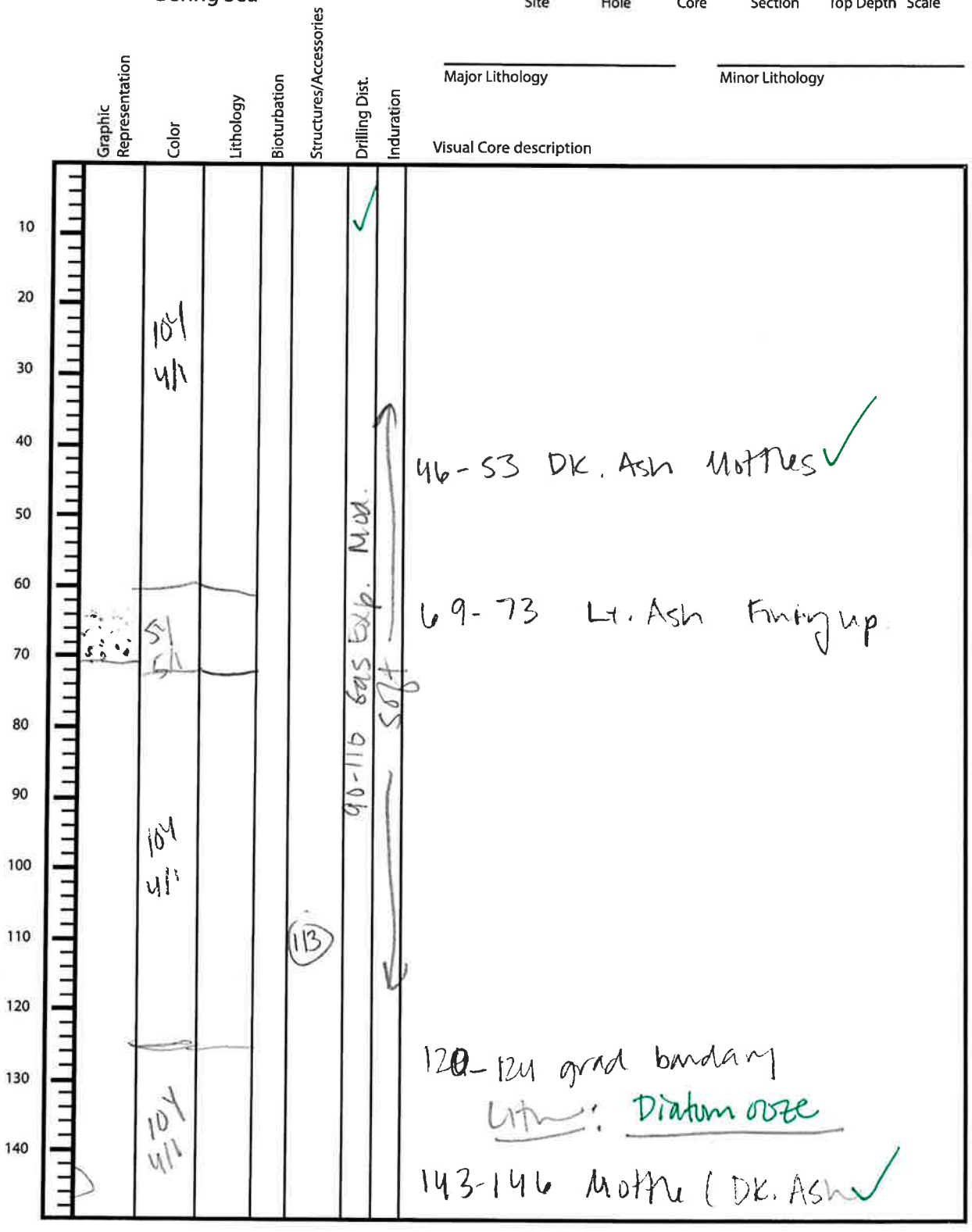
Sec.	Dep	Sec	Dep	Lith
1	0 to 2		69	Diatom ooze
2	69	2	73	Coarse ash lit.
2	73	2	124	Diatom ooze
2	124	3	37	Diatom ooze
3	37	3	50	lighter Diatom ooze
3	50	4	19	Diatom ooze
4	19	4	28	Dolomite
4	28	6	93	Diatom ooze
6	93	6	100	Ash Coarse!
6	103	7	15	Diatom ooze
7	15	7	22	Dolomite
7	34	7	38	coarse ash FP grains
7	38	7	114	Diatom ooze
7	114	7	120	Ash FP
7	120	CC	26	

Observer: ____ Date: ____

Expedition 323
Bering Sea

U1339 (Site) B (Hole) 17 (Core) 2 (Section) ____ (Top Depth) ____ (Scale)

Major Lithology ____ Minor Lithology ____

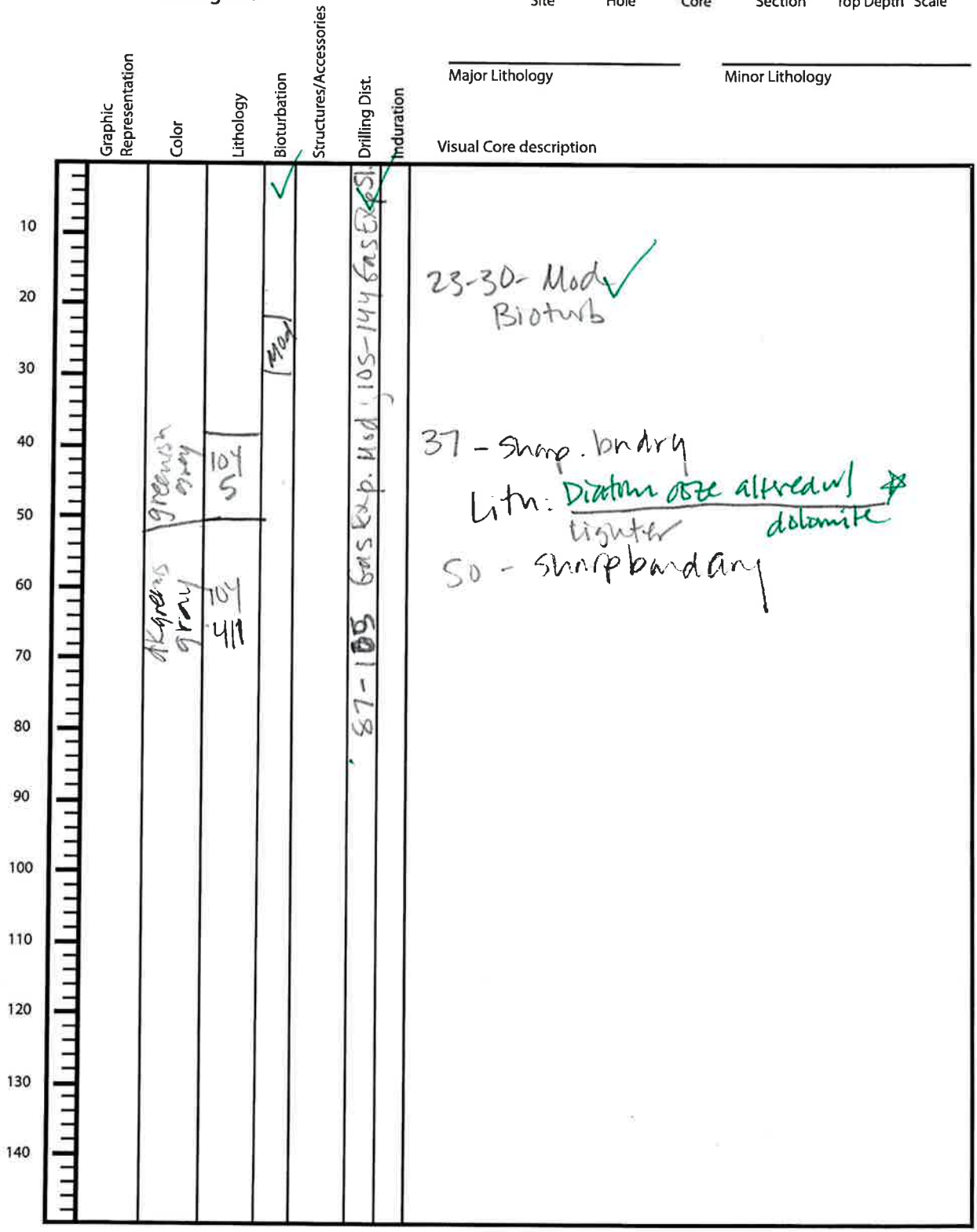


Observer: Beth Date: ____

Expedition 323
Bering Sea

U1339 B 17 3 ____ ____
Site Hole Core Section Top Depth Scale

Major Lithology ____ Minor Lithology ____

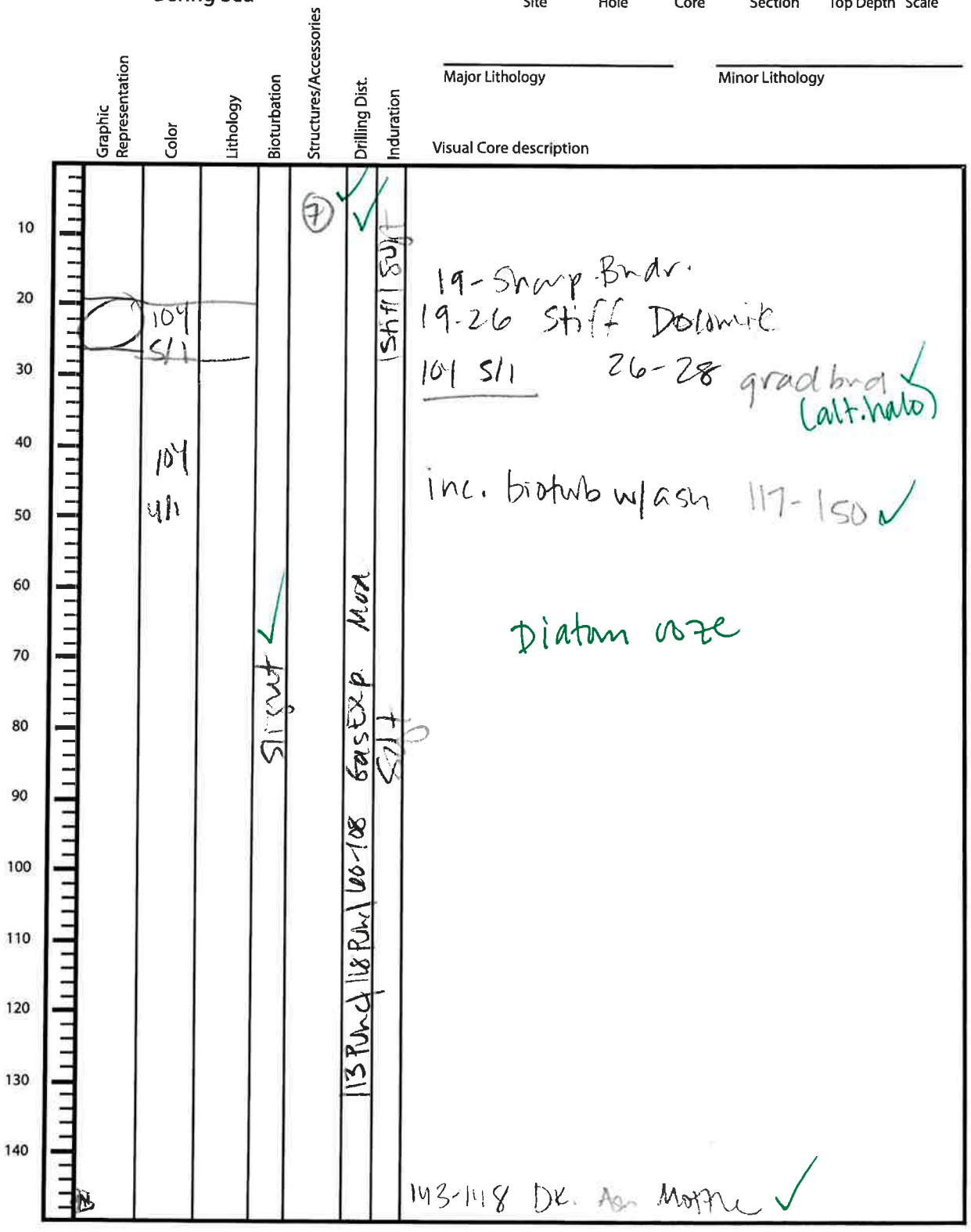


Observer: ____ Date: ____

Expedition 323
Bering Sea

U1339 B 17 4 ____ ____
Site Hole Core Section Top Depth Scale

Major Lithology ____ Minor Lithology ____

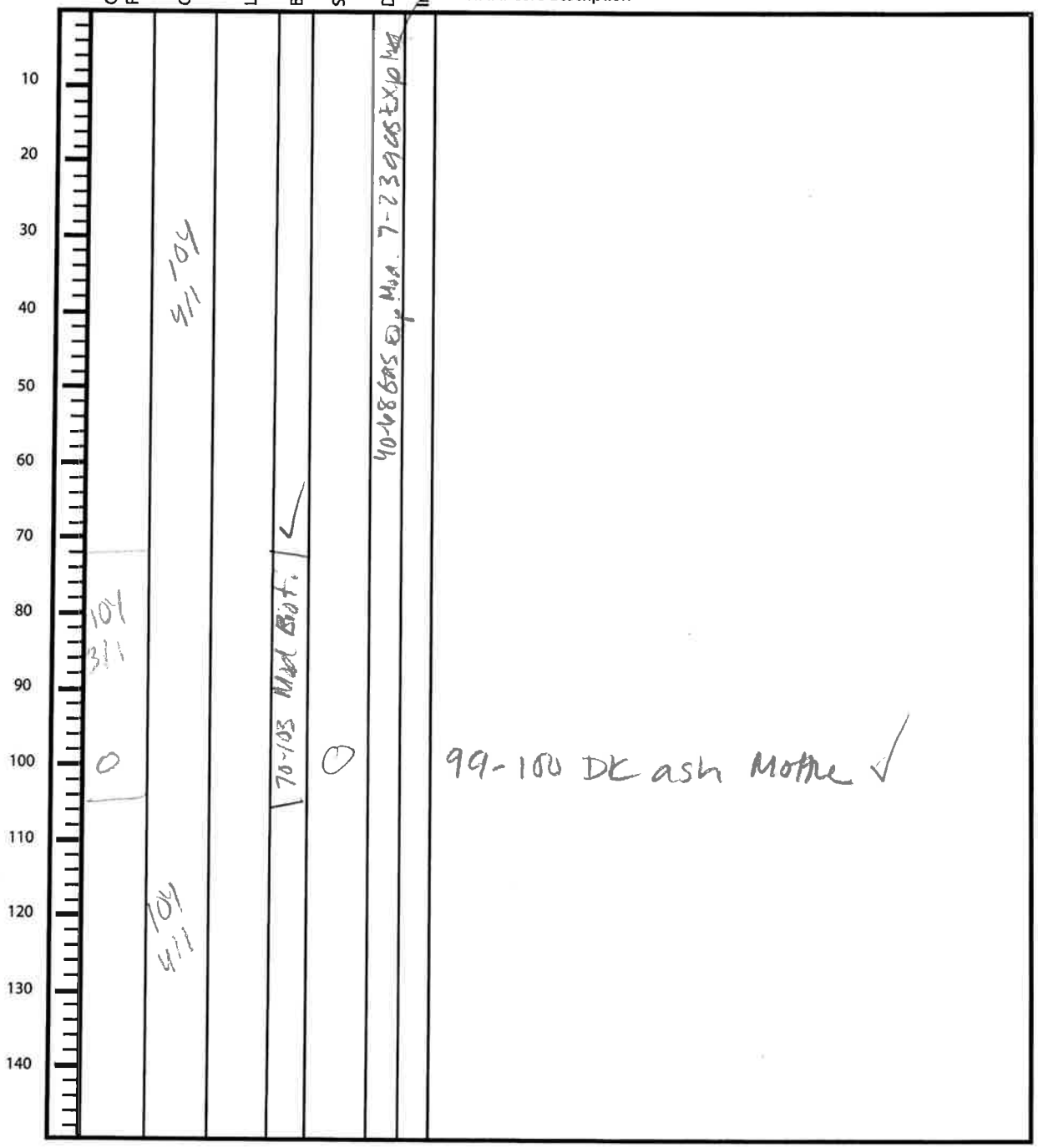


Observer: ____ Date: ____

Expedition 323
Bering Sea

U1339 B 17 5 ____ ____
Site Hole Core Section Top Depth Scale

Major Lithology ____ Minor Lithology ____

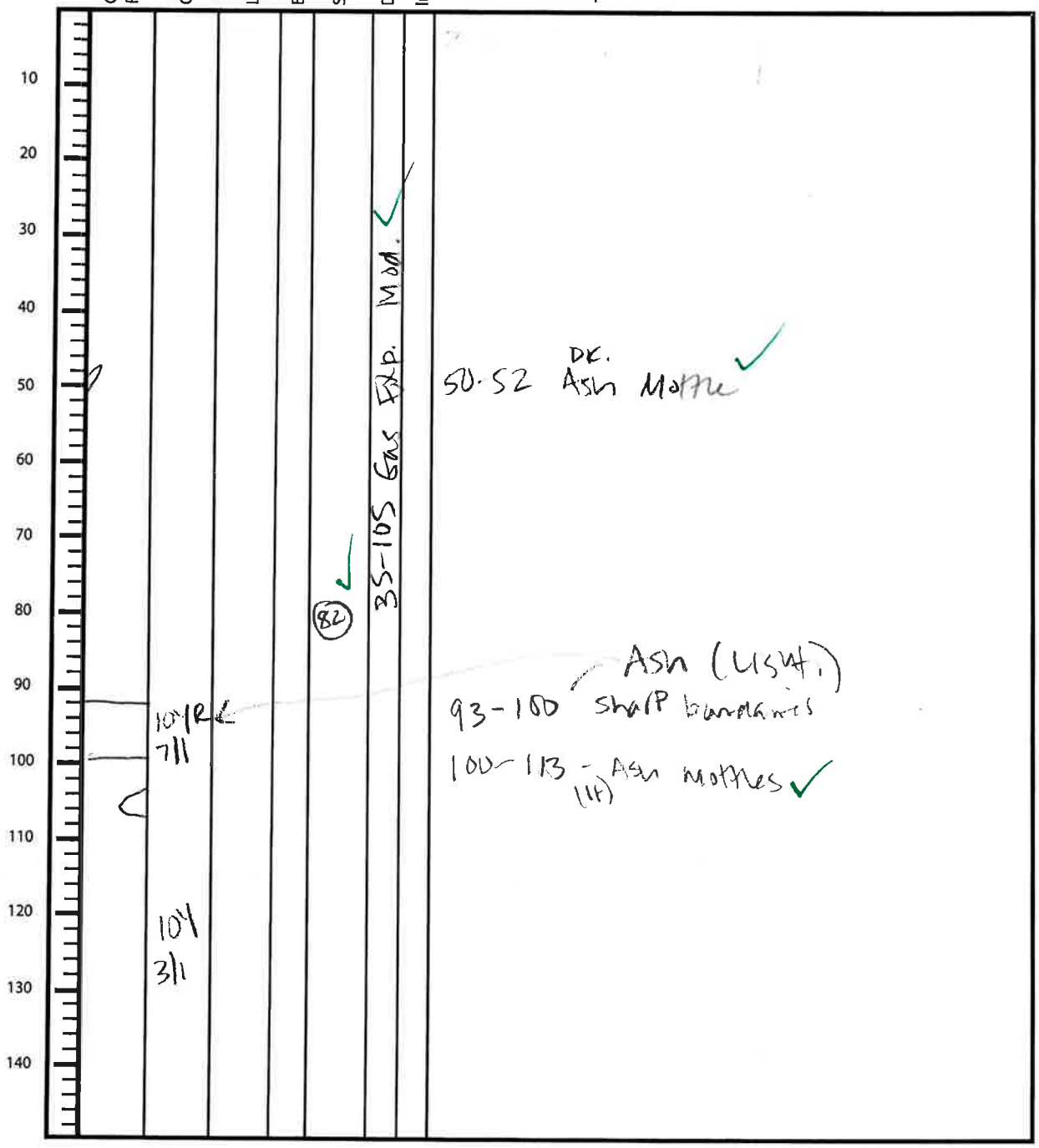


Observer: ____ Date: ____

Expedition 323
Bering Sea

U1339 | B | 17 | 6 | | |
Site | Hole | Core | Section | Top Depth | Scale

Major Lithology | Minor Lithology

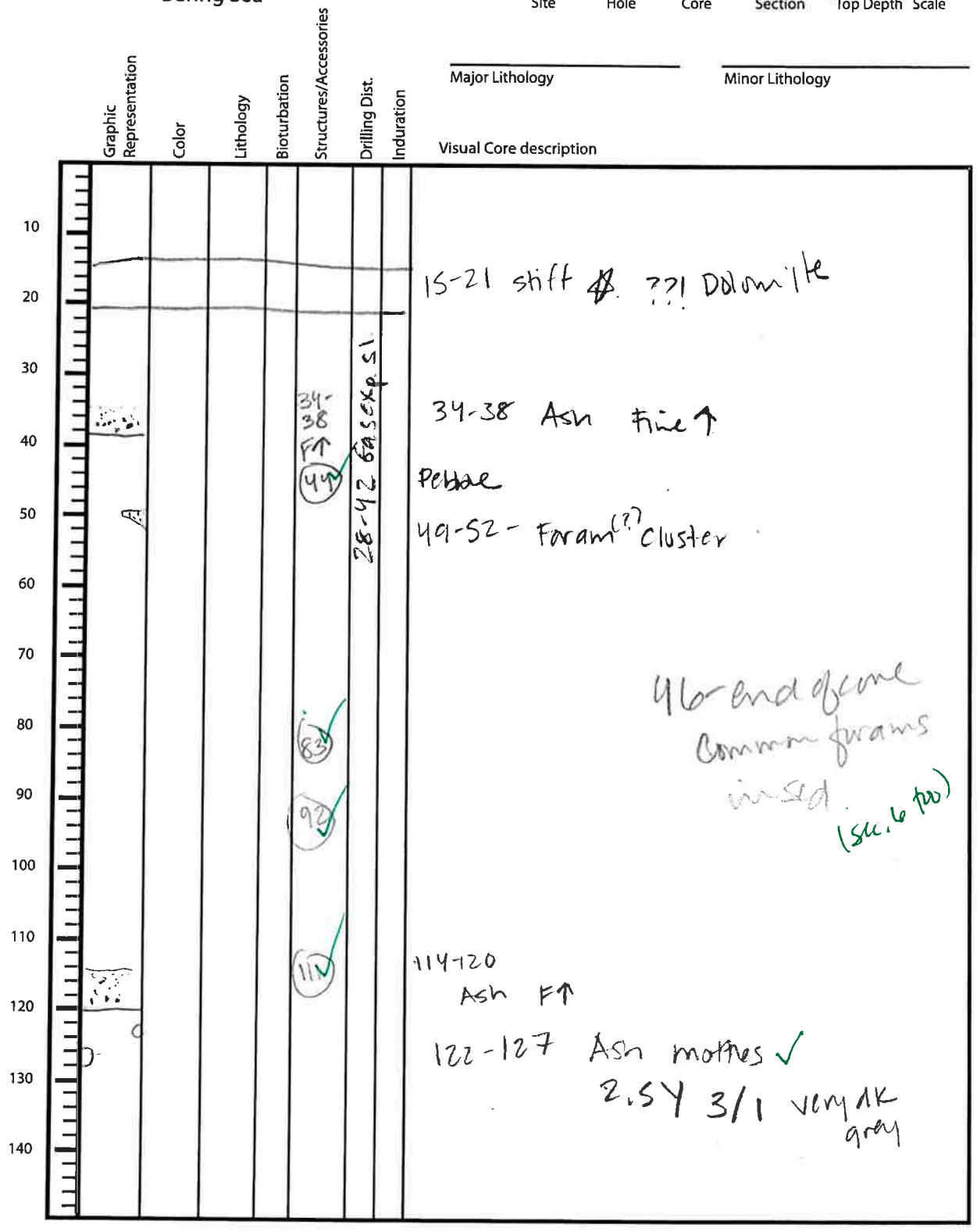


Observer: _____ Date: _____

Expedition 323
Bering Sea

U1339 B 17 7 ____ ____
Site Hole Core Section Top Depth Scale

Major Lithology ____ Minor Lithology ____



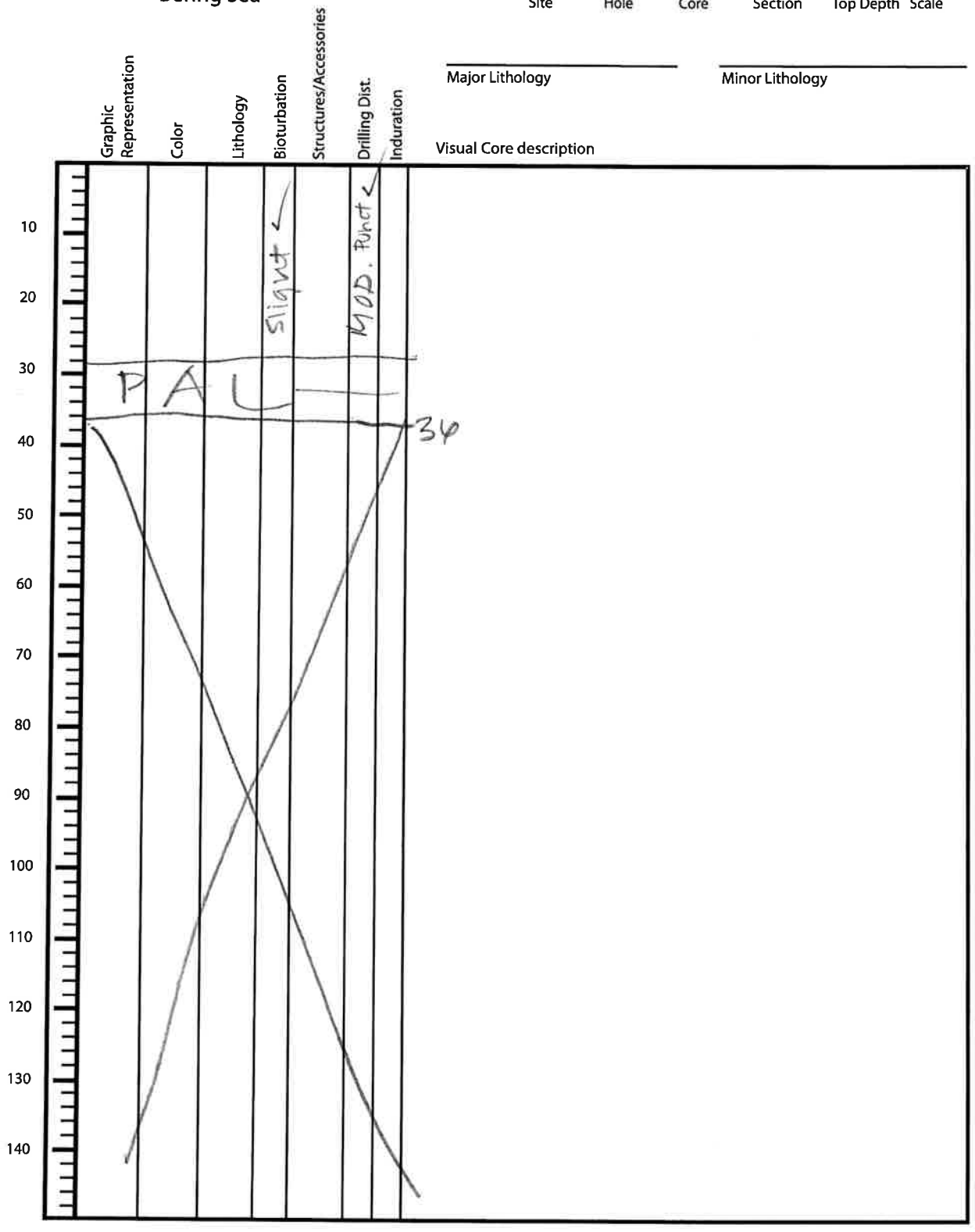
Observer: ____ Date: ____

Expedition 323
Bering Sea

U1339 B 17 CC
Site Hole Core Section Top Depth Scale

Major Lithology

Minor Lithology



Observer: _____ Date: _____

ins.17.

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Interval (cm) Bottom
323	1339	B	17	H	1A	23	23

Sediment/Rock Name	Diatom ooze.	Observer	Akira

Percent Texture		
Sand	Silt	Clay
0	90	10

Comments:

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

Percent	Component	
BIOGENIC GRAINS		
	Calcareous	
	Foraminifera	
	Planktonic foraminifera	
	Benthic foraminifera	
	Nannofossils	
	Coccoliths	
	Discoasters	
	Pteropods	
	Siliceous	
	Radiolarians	
	Spumellaria	
	Nassellaria	
63	✓ 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	

in S.D.

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Bottom
323	U1339	B	17	H	3A	44	

Sediment/Rock Name	Dolomite filling diatom ooze.	Observer	Akira

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 40
	Calcite
57	✓ Dolomite 40
	VOLCANICLASTIC GRAINS
	Crystal grain
	Vitric grain
	Lithic grain

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

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Bottom
323	330	B	17	H	6	95	95

Sediment/Rock Name	Coarse ash

Observer	Akira

Percent Texture		
Sand	Silt	Clay
80	20	

20. 5

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
100.	Vitric grain
	Lithic grain

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

in S.D.

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Interval (cm) Bottom
323	1339	B	17	H	7A	17cm	17cm

Sediment/Rock Name	dolomite	Observer	akira

Percent Texture		
Sand	Silt	Clay
	100	

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
98	✓ Dolomite
	VOLCANICLASTIC GRAINS
	Crystal grain
	Vitric grain
	Lithic grain

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

IN S.17.

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Interval (cm) Bottom
323	1339	B	17	H	7A	30	

Sediment/Rock Name	Diatom fine ash

Observer	Akira

Percent Texture		
Sand	Silt	Clay
5	80	20

Comments:

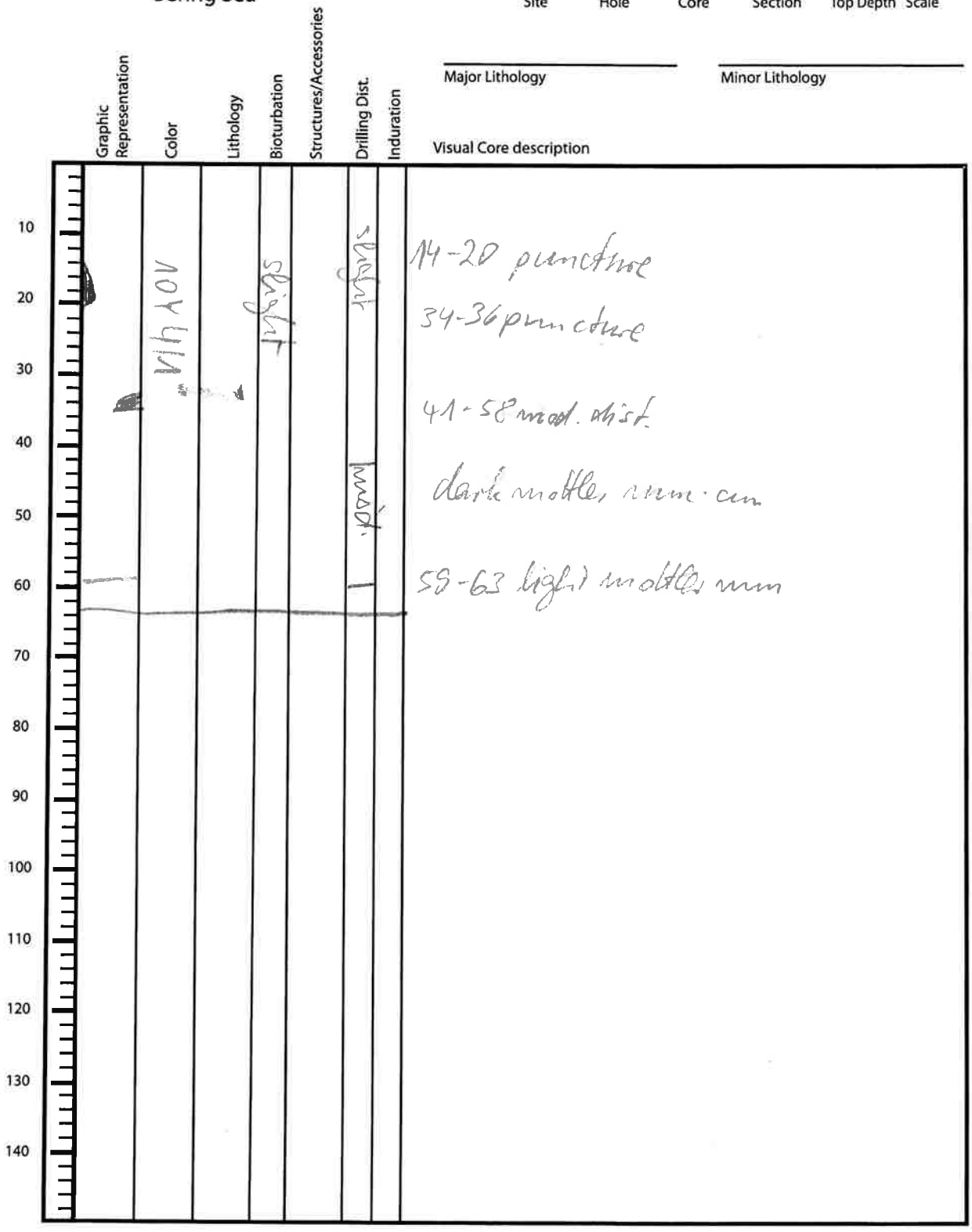
Percent	Component
	SILICICLASTIC GRAINS/MINERAL
	Framework minerals
6	✓ Quartz 3
	Feldspar
	K-feldspar (Orthoclase, Microcline...)
33	✓ Plagioclase 15
	Rock fragments
	Accessory/trace minerals
	Micas
	Biotite
	Muscovite
	Clay Minerals
	Chlorite
	Glauconite
	Chert
	Zircon
2	Ferromagnesium minerals 1
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

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

Expedition 323
Bering Sea

323 | B | 18 | 1 | 0.0 | Site | Hole | Core | Section | Top Depth | Scale

Major Lithology | Minor Lithology

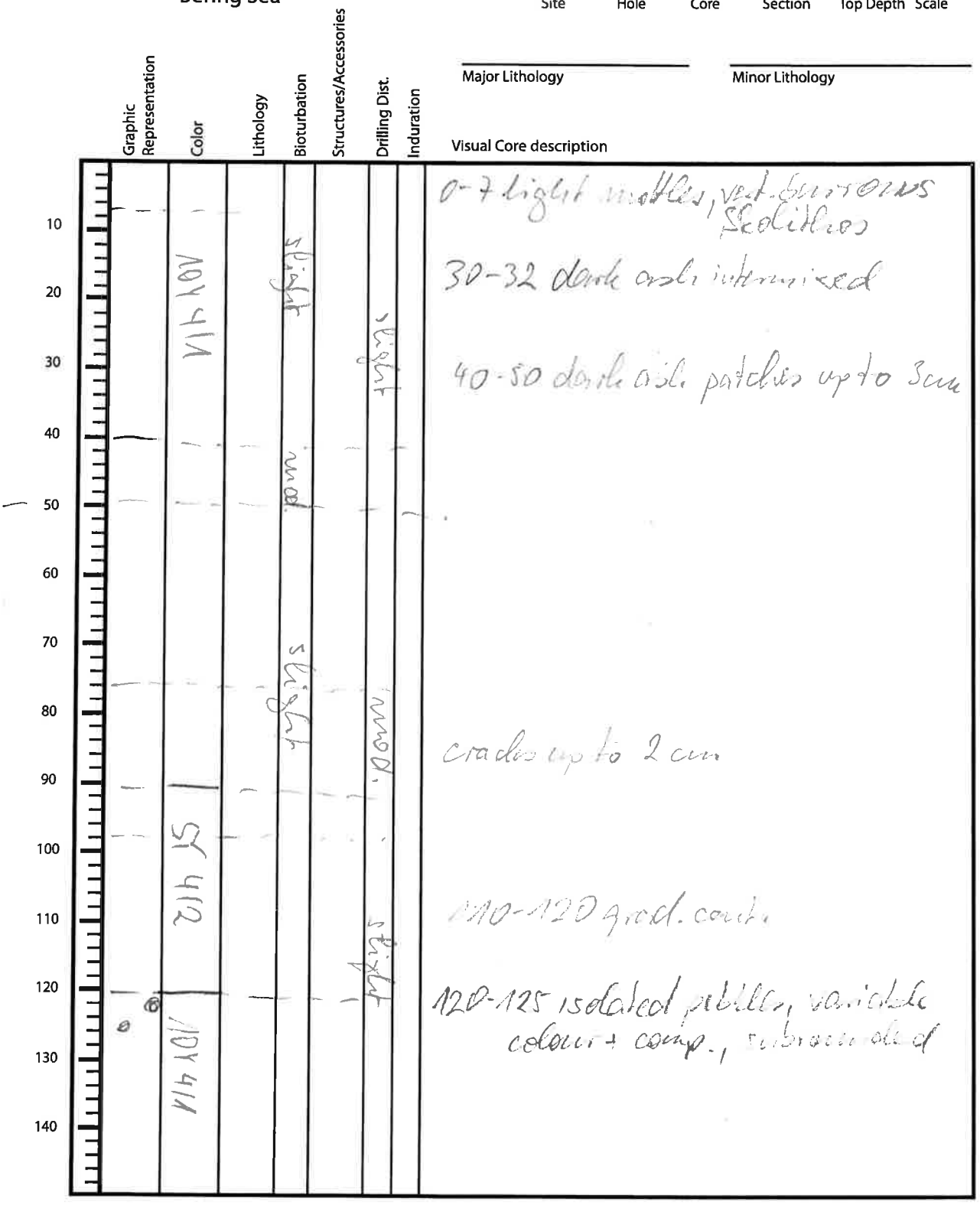


Observer: [illegible] Date: 7/20

Expedition 323
Bering Sea

323 / B / 15 / 2 / 0,64
Site / Hole / Core / Section / Top Depth / Scale

Major Lithology / Minor Lithology

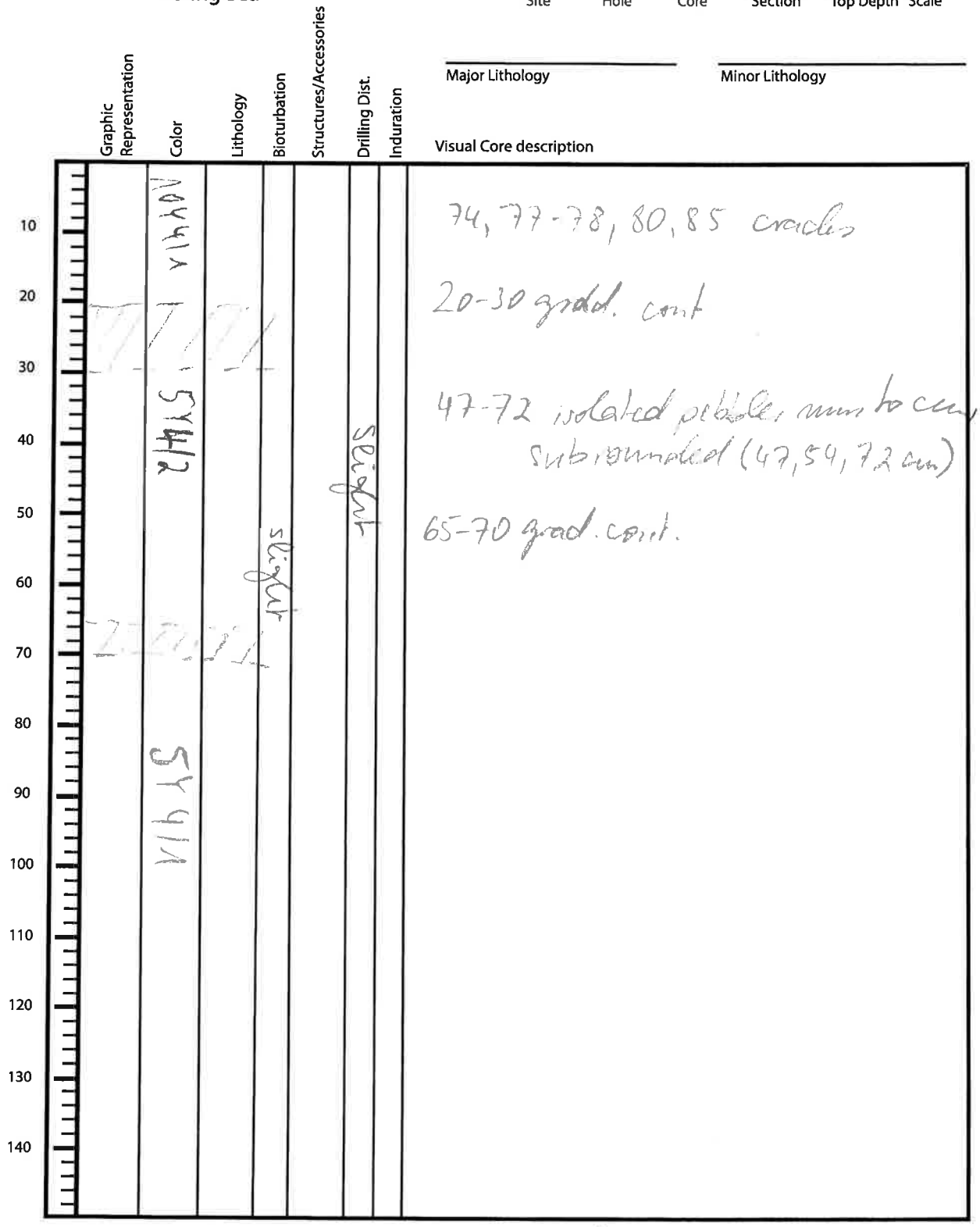


Observer: Hänt Date: 3/20

Expedition 323
Bering Sea

323 | B | 18 | 3 | 2.07 |
Site | Hole | Core | Section | Top Depth | Scale

Major Lithology | Minor Lithology

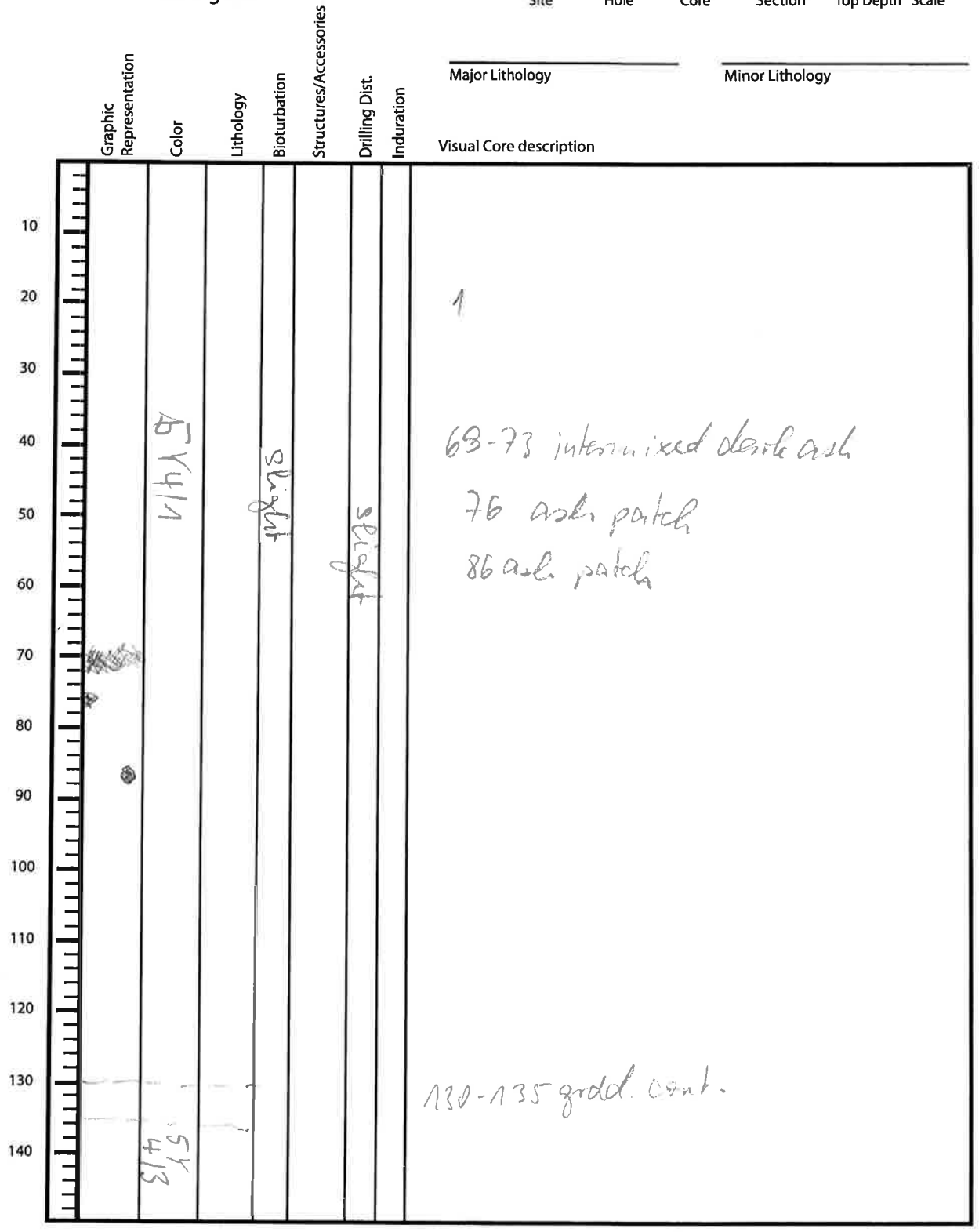


Observer: Mäi | Date: 7/20

Expedition 323
Bering Sea

323 | B | 18 | 4 | 3.52 |
Site | Hole | Core | Section | Top Depth | Scale

Major Lithology | Minor Lithology

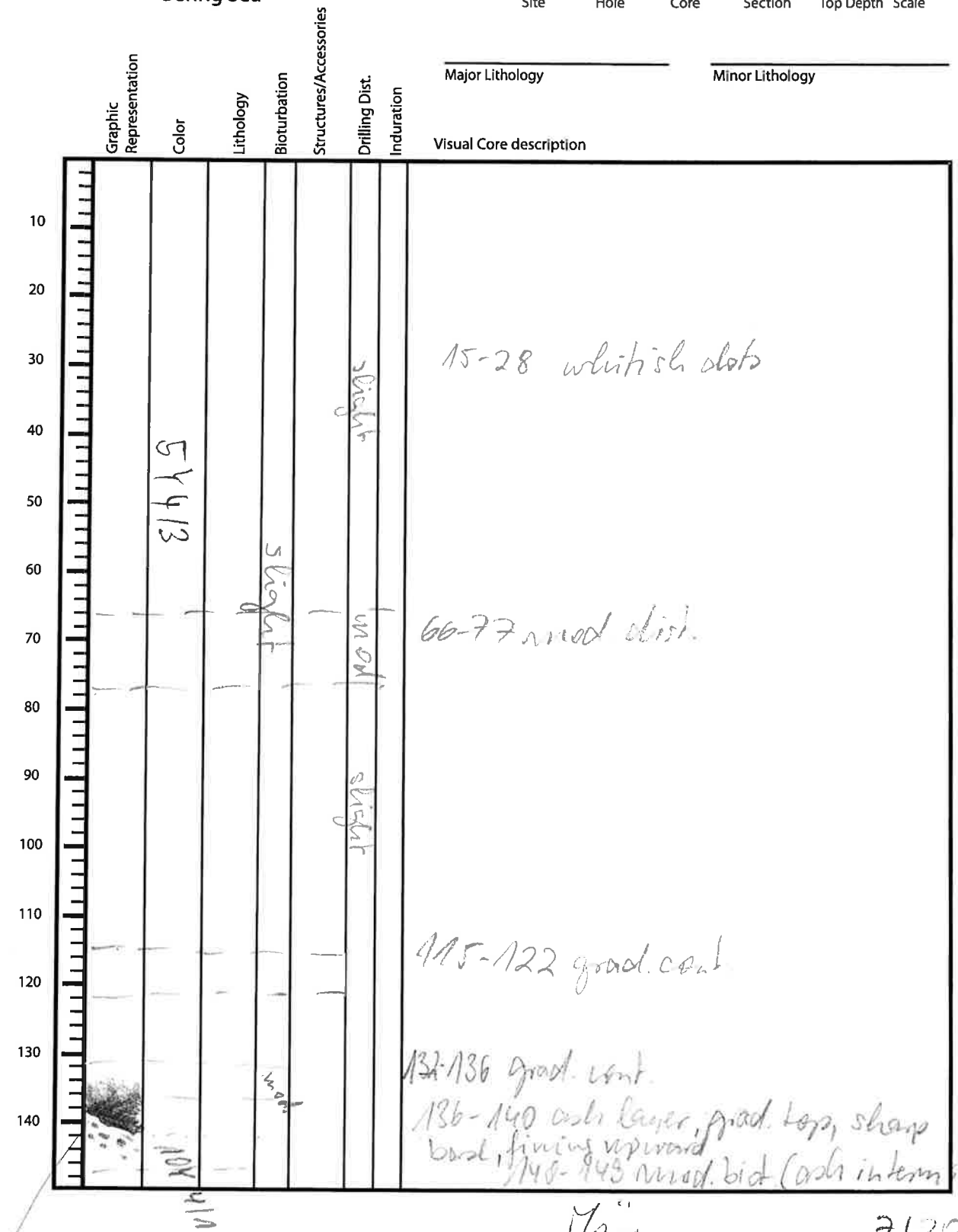


Observer: Klaus Date: 7/20

Expedition 323
Bering Sea

323 | B | 18 | 5 | 4.90 | _____
Site | Hole | Core | Section | Top Depth | Scale

Major Lithology _____ Minor Lithology _____



Observer: _____ Date: 7/20

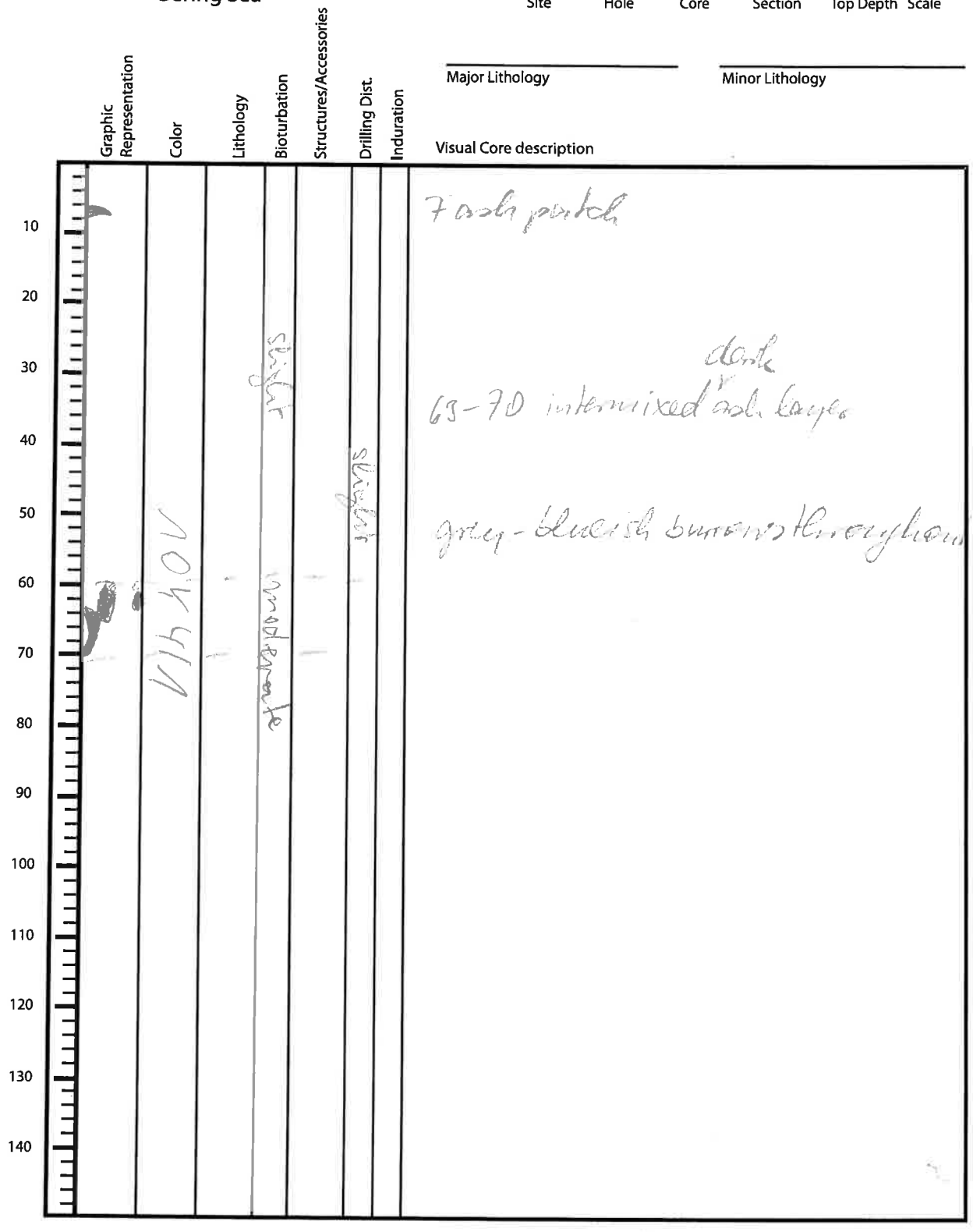
Color 10Y 3/1

Expedition 323
Bering Sea

323	B	18	6	6.40	
Site	Hole	Core	Section	Top Depth	Scale

Major Lithology

Minor Lithology



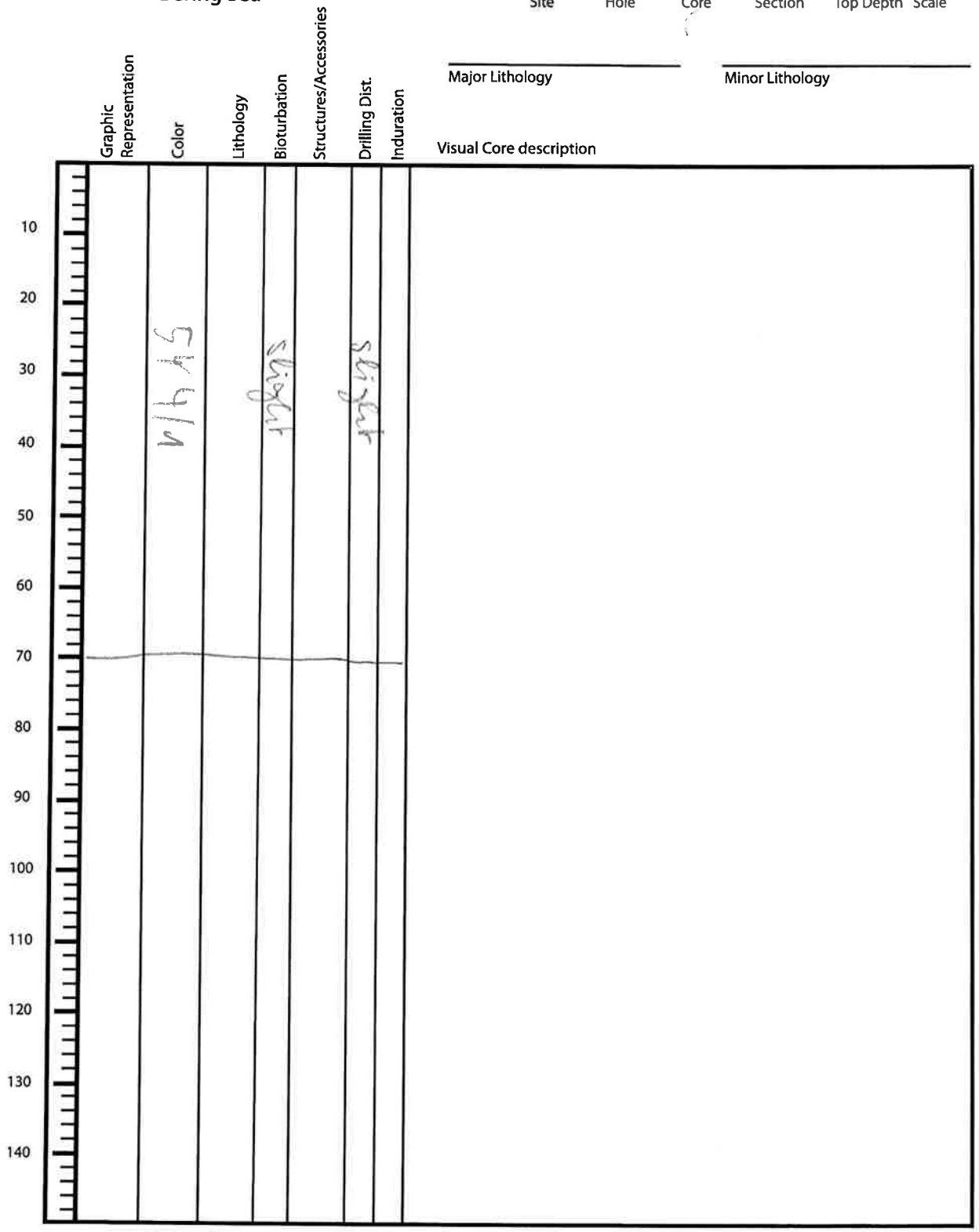
Observer: Claire

Date: 7/20

Expedition 323
Bering Sea

323 | 5 | 18 | 7 | 7.9 | _____
Site | Hole | Core | Section | Top Depth | Scale

Major Lithology _____ Minor Lithology _____

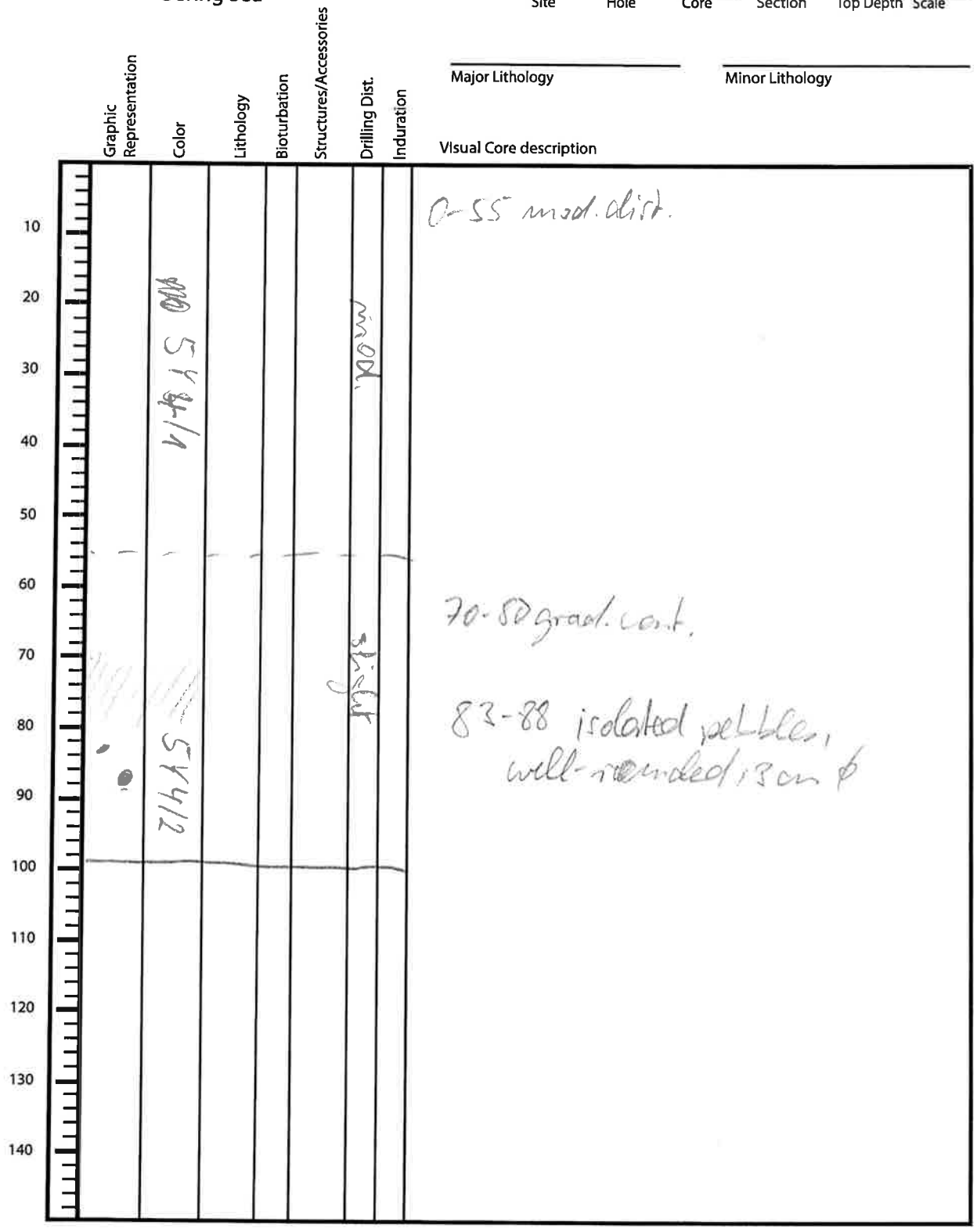


Observer: Mare Date: 7/20

Expedition 323
Bering Sea

323 (Site) B (Hole) 18 (Core) [illegible] (Section) 85 (Top Depth) ____ (Scale)

Major Lithology ____ Minor Lithology ____



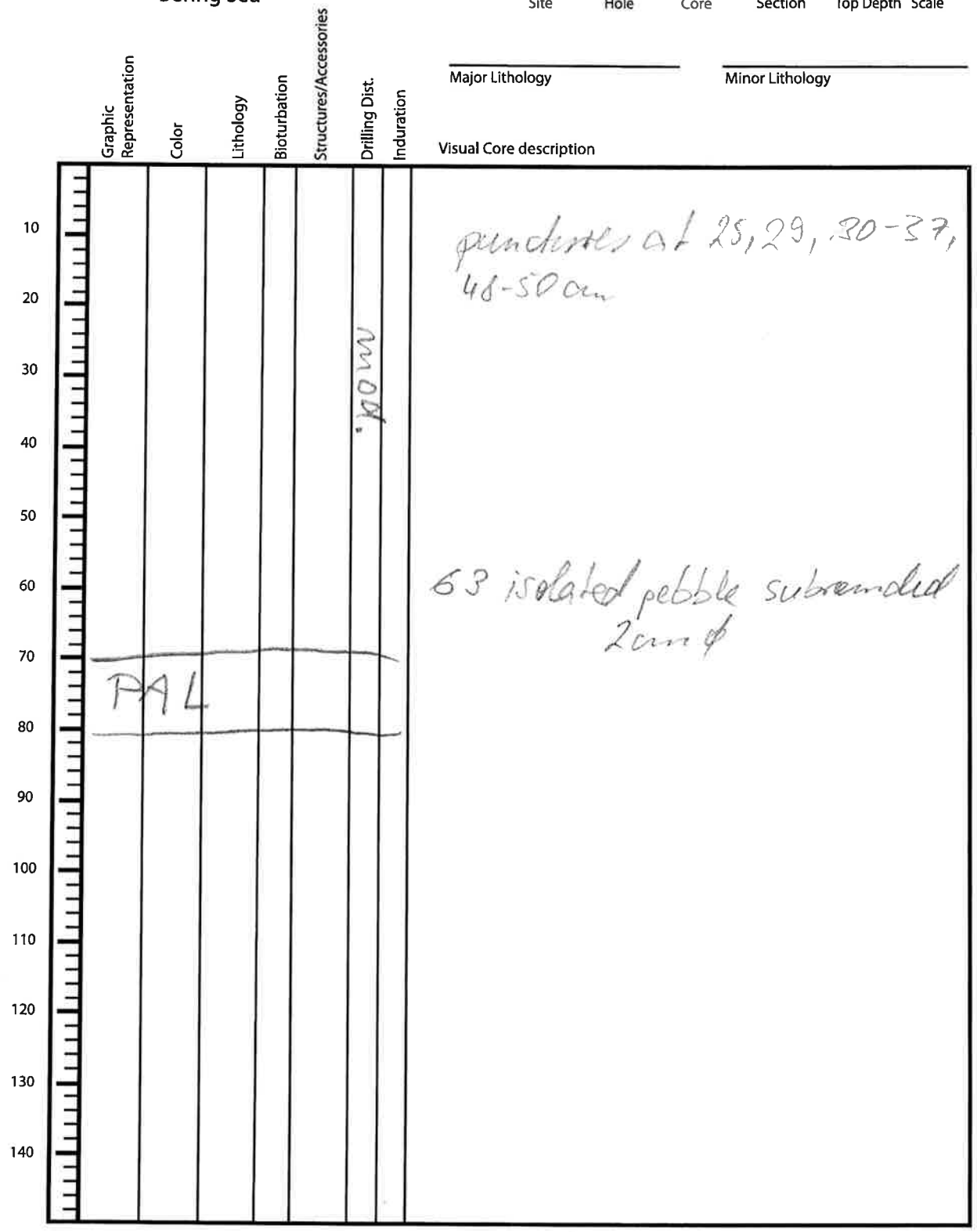
Observer: Mün Date: 7/20

Expedition 323
Bering Sea

323	B	18	CC	9.58	
Site	Hole	Core	Section	Top Depth	Scale

Major Lithology

Minor Lithology



Observer: Mam

Date: 7/20

✓ SM

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Interval (cm) Bottom
323	U1339	B	18	H	[redacted]	~~5~~ 40	40

Sediment/Rock Name	Diatom fine ash	Observer	Kelsie

	Percent Texture		
	Sand	Silt	Clay
V	5	85	10

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
2	Ferromagnesium minerals
	Authigenic minerals
	Barite
	Phosphorite/Apatite
5	Zeolite
	Opaque minerals
2	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
	Diatoms
25	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	Interval (cm) Bottom
323	1339	B	18	H	2	100	100

Sediment/Rock Name	Diatom ooze	Observer	Kelsie

Percent Texture		
Sand	Silt	Clay

Comments:

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

Percent	Component
	BIOGENIC GRAINS
	Calcareous
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
	Siliceous
	Radiolarians
	Spumellaria
	Nassellaria
	Diatoms
70	Centric
30	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	Interval (cm) Bottom
323	1339	B	18	H	3	40	40

Sediment/Rock Name	Diatom ooze

Observer	Kelsie

Percent Texture		
Sand	Silt	Clay

Comments:

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

Percent	Component
	BIOGENIC GRAINS
	Calcareous
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
	Siliceous
	Radiolarians
	Spumellaria
	Nassellaria
	Diatoms
80	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	Interval (cm) Bottom
323	U1339	B	18	H	5	80	80

Sediment/Rock Name	Diatom ooze

Observer	Kelsie

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
	Clay Minerals
	Chlorite
	Glauconite
	Chert
	Zircon
1	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
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
	Siliceous
1	Radiolarians
	Spumellaria
	Nassellaria
	Diatoms
50	Centric
20	Pennate
	Chaetoceros Resting Spores
	Silicoflagellates
	Sponge spicules
	Dinoflagellates
	Others
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

✓SM

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Interval (cm) Bottom
323	1339	B	18	H	6	35	35

Sediment/Rock Name	Diatom ooze

Observer	Kelsie

Percent Texture		
Sand	Silt	Clay

Comments:

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

Percent	Component
BIOGENIC GRAINS	
	Calcareous
1	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
	Siliceous
1	Radiolarians
	Spumellaria
	Nassellaria
	Diatoms
40	Centric
25	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	Interval (cm) Bottom
323	U1339	B	18	H	7	50	50

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
	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

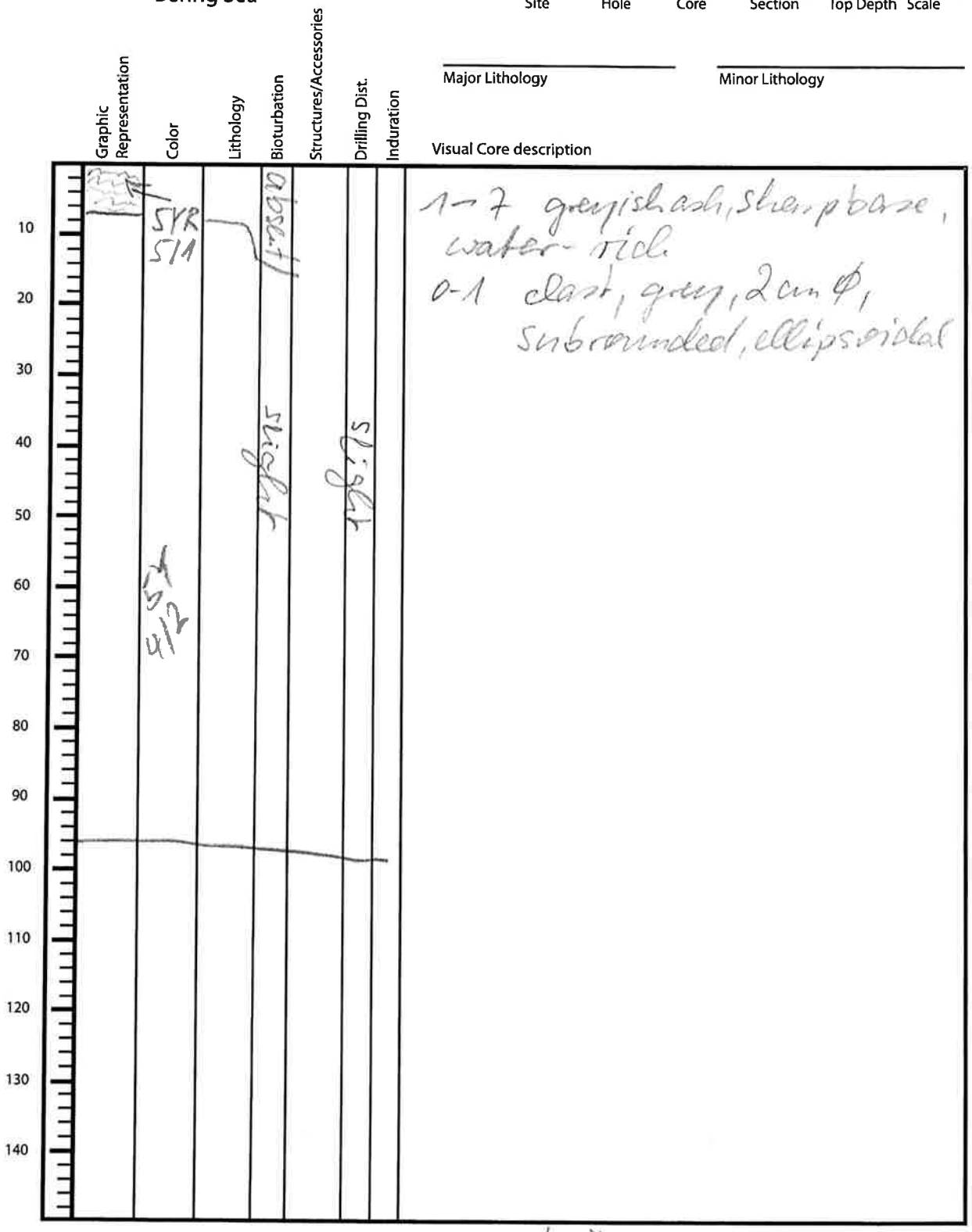
Percent	Component
BIOGENIC GRAINS	
	Calcareous
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
	Siliceous
1	Radiolarians
	Spumellaria
	Nassellaria
	Diatoms
50	Centric
20	Pennate
	Chaetoceros Resting Spores
1	Silicoflagellates
	Sponge spicules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

Expedition 323
Bering Sea

323	B	19	1	0	
Site	Hole	Core	Section	Top Depth	Scale

Major Lithology

Minor Lithology



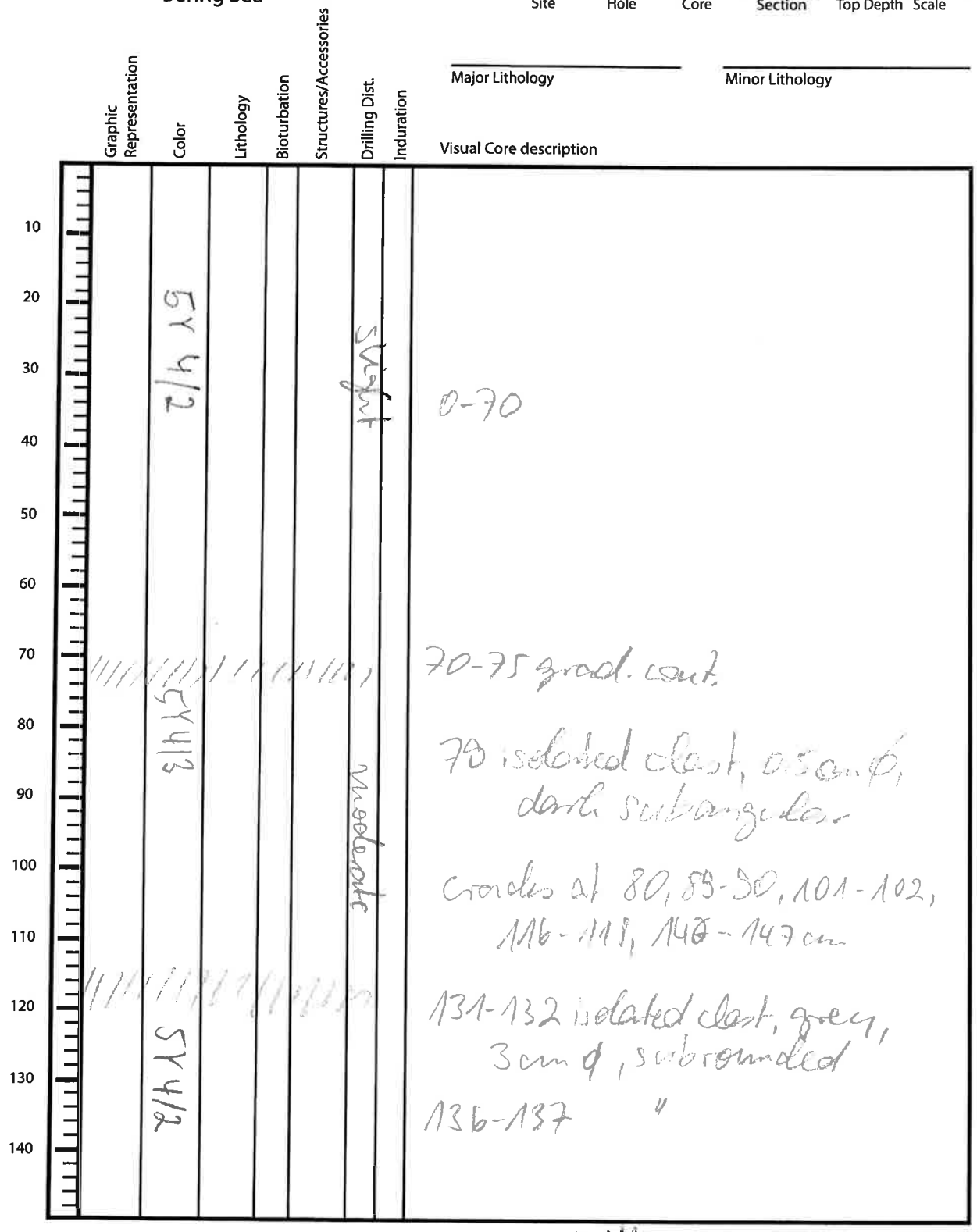
Observer: Mara

Date: 7/20

Expedition 323
Bering Sea

323 | B | 10 | 2 | 0.56 | ____
Site | Hole | Core | Section | Top Depth | Scale

Major Lithology ____ Minor Lithology ____

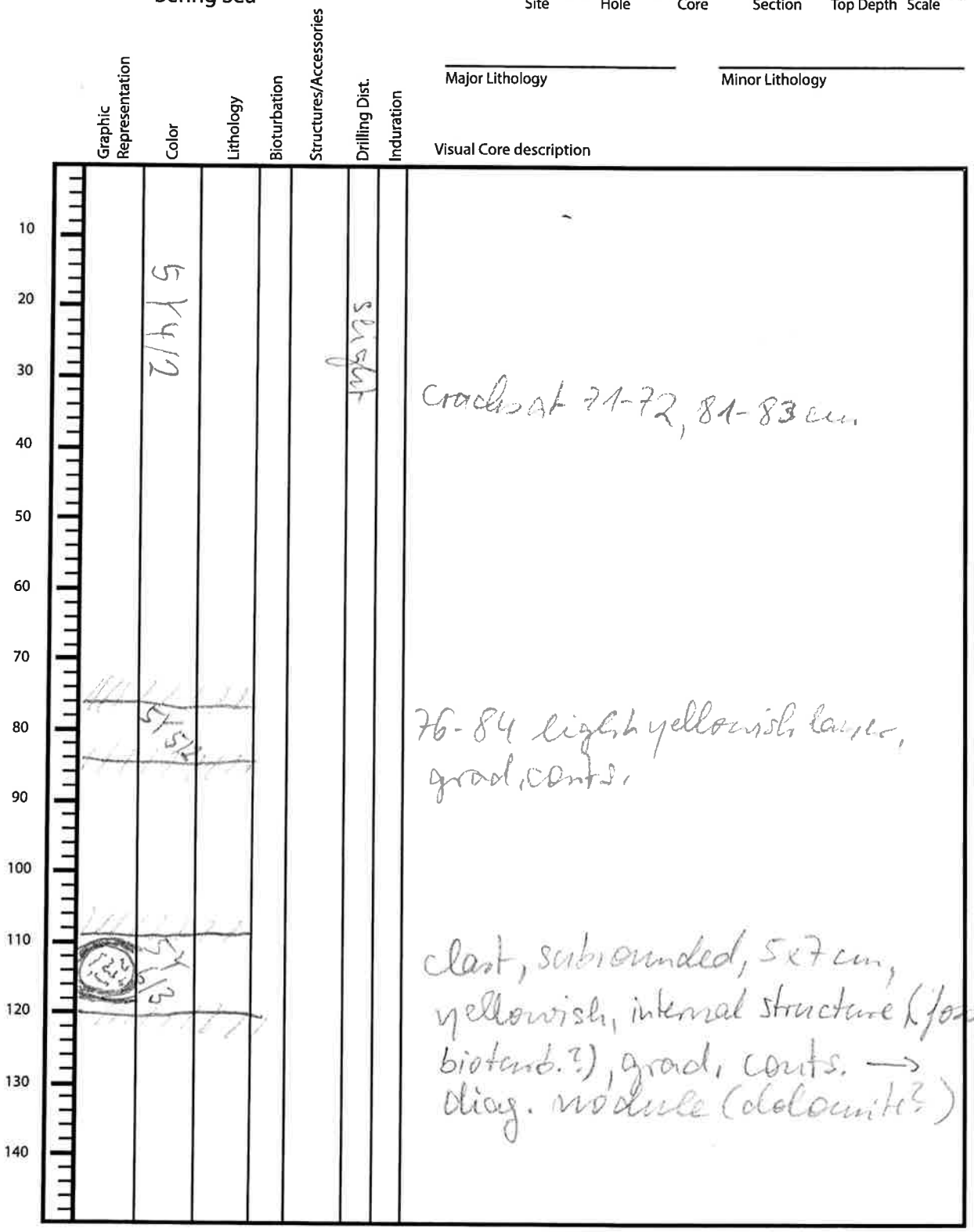


Observer: Max Date: 7/20

Expedition 323
Bering Sea

323 | U | 19 | 3 | 2.46 |
Site | Hole | Core | Section | Top Depth | Scale

Major Lithology | Minor Lithology



Observer: Mam Date: 7/27

3H 105-120
3A 26-41

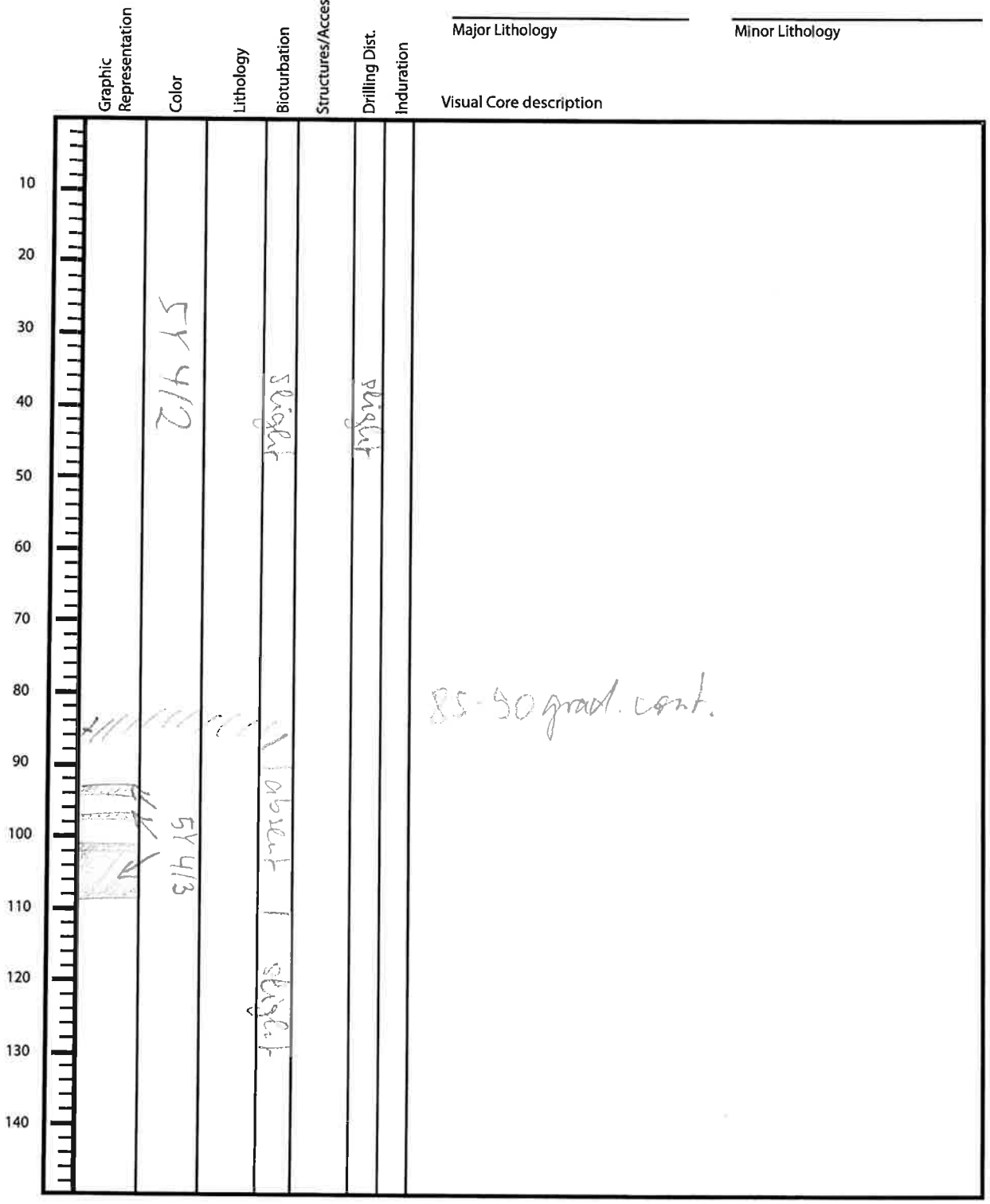
4A 70-95

Expedition 323
Bering Sea

323 | B | 13 | 4 | 3.96 |
Site | Hole | Core | Section | Top Depth | Scale

Major Lithology

Minor Lithology



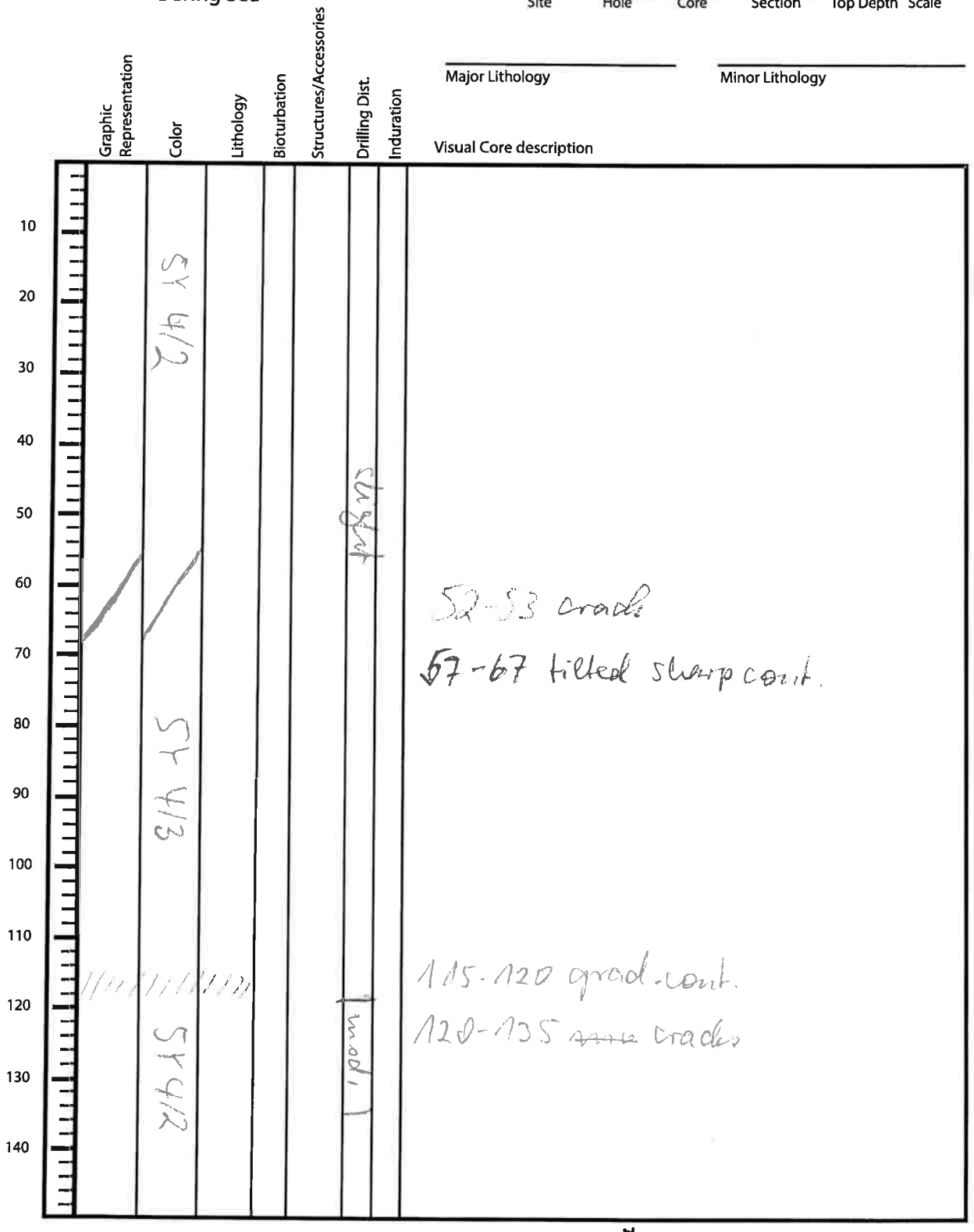
Observer: Mam

Date: 7/20

Expedition 323
Bering Sea

323 Site | B Hole | 19 Core | 5 Section | 5.46 Top Depth | Scale

Major Lithology | Minor Lithology

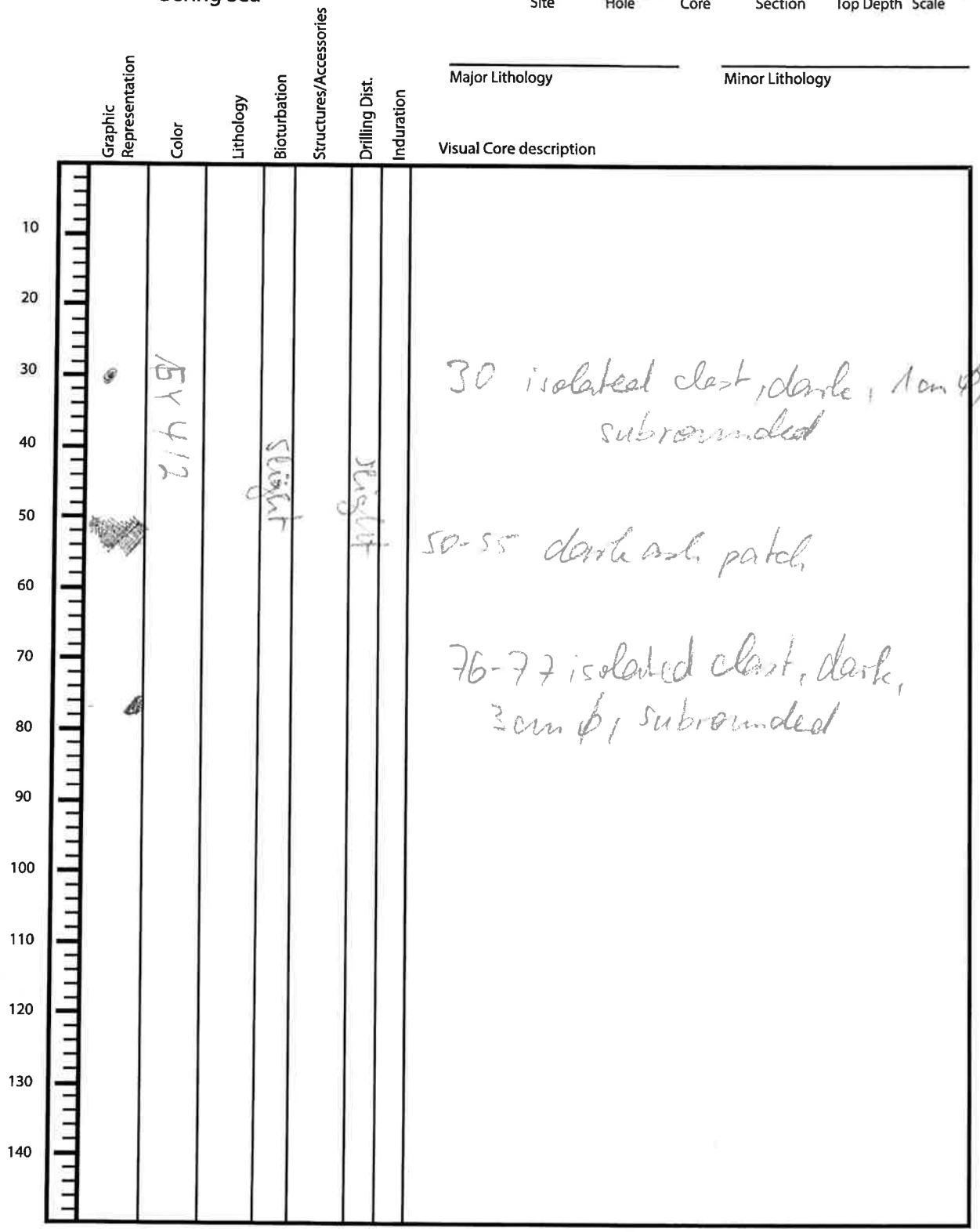


Observer: Mara Date: 7/20

Expedition 323
Bering Sea

323 (Site) B (Hole) 19 (Core) 6 (Section) 6.96 (Top Depth) ____ (Scale)

Major Lithology ____ Minor Lithology ____



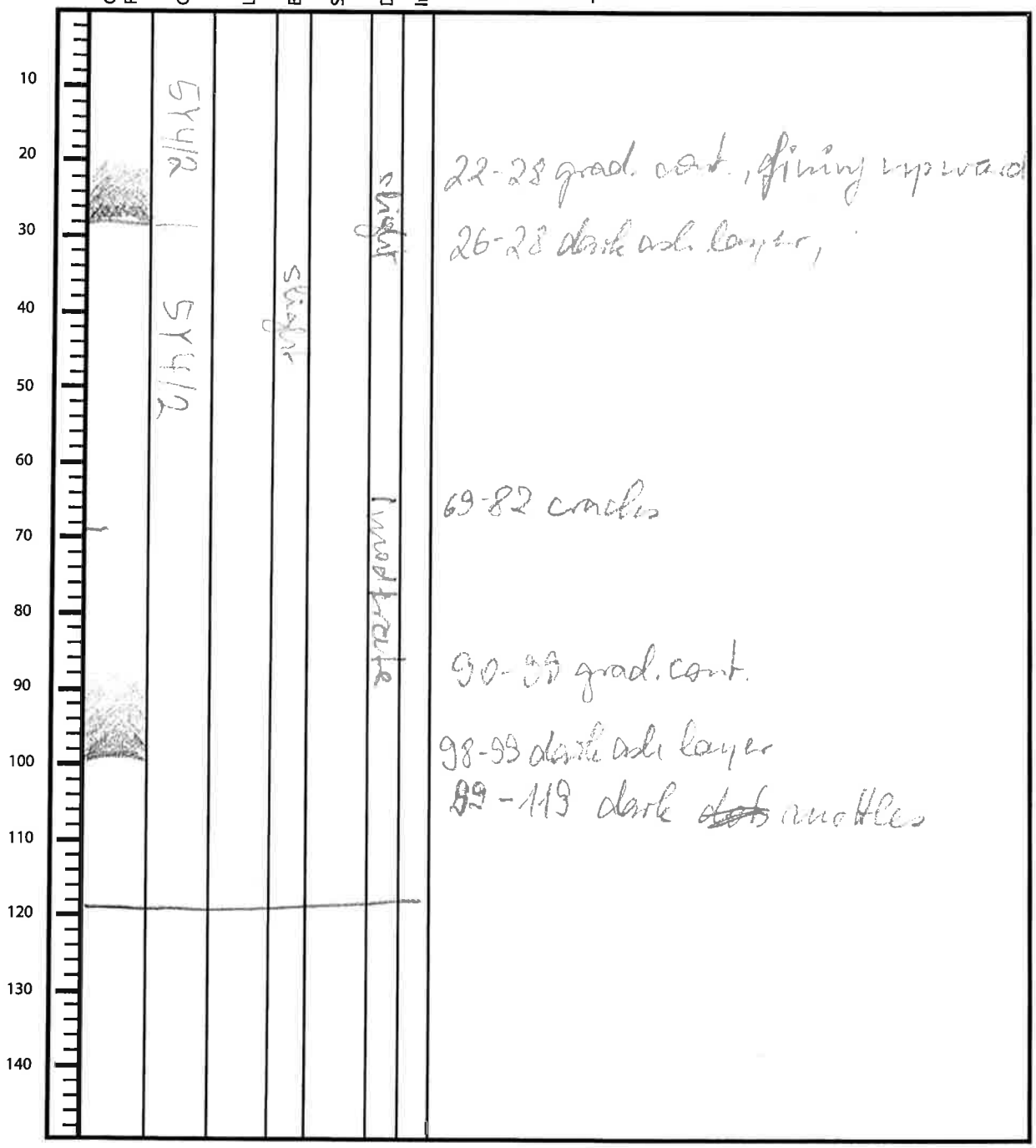
Observer: Mara Date: 7/20

Expedition 323
Bering Sea

323	B	119	7	8.23
Site	Hole	Core	Section	Top Depth	Scale

Major Lithology

Minor Lithology



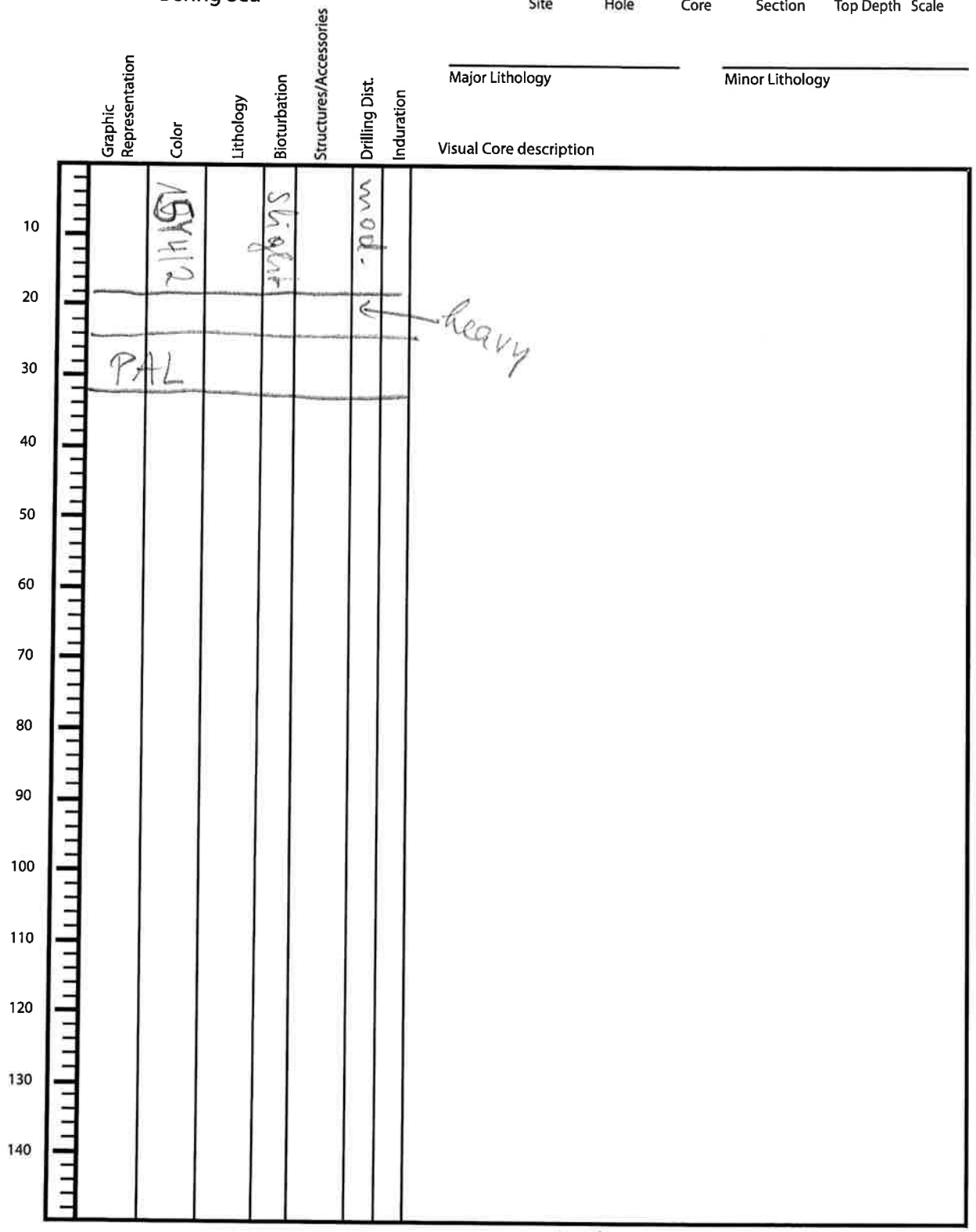
Observer: Mara

Date: 7/20

Expedition 323
Bering Sea

323 | B | 19 | CC | 9.42 | _____
Site | Hole | Core | Section | Top Depth | Scale

Major Lithology _____ Minor Lithology _____



Observer: Marc Date: 7/20

✓ SM

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Interval (cm) Bottom
323	U1339	B	19	H	3	50	50

Sediment/Rock Name	Diatom ooze	Observer	Kelsie

Percent Texture		
Sand	Silt	Clay

Comments: Main lithology

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

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

✓ SM

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Interval (cm) Bottom
323	U1339	B	19	H	3	116	116

Sediment/Rock Name	Dolostone (diatom-rich)

Observer	Kelsie

Percent Texture		
Sand	Silt	Clay

Comments:

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

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

✓ SM

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Interval (cm) Bottom
323	U1339	B	19	H	7	90	90

Sediment/Rock Name	Diatom ooze

Observer	Kelsie

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

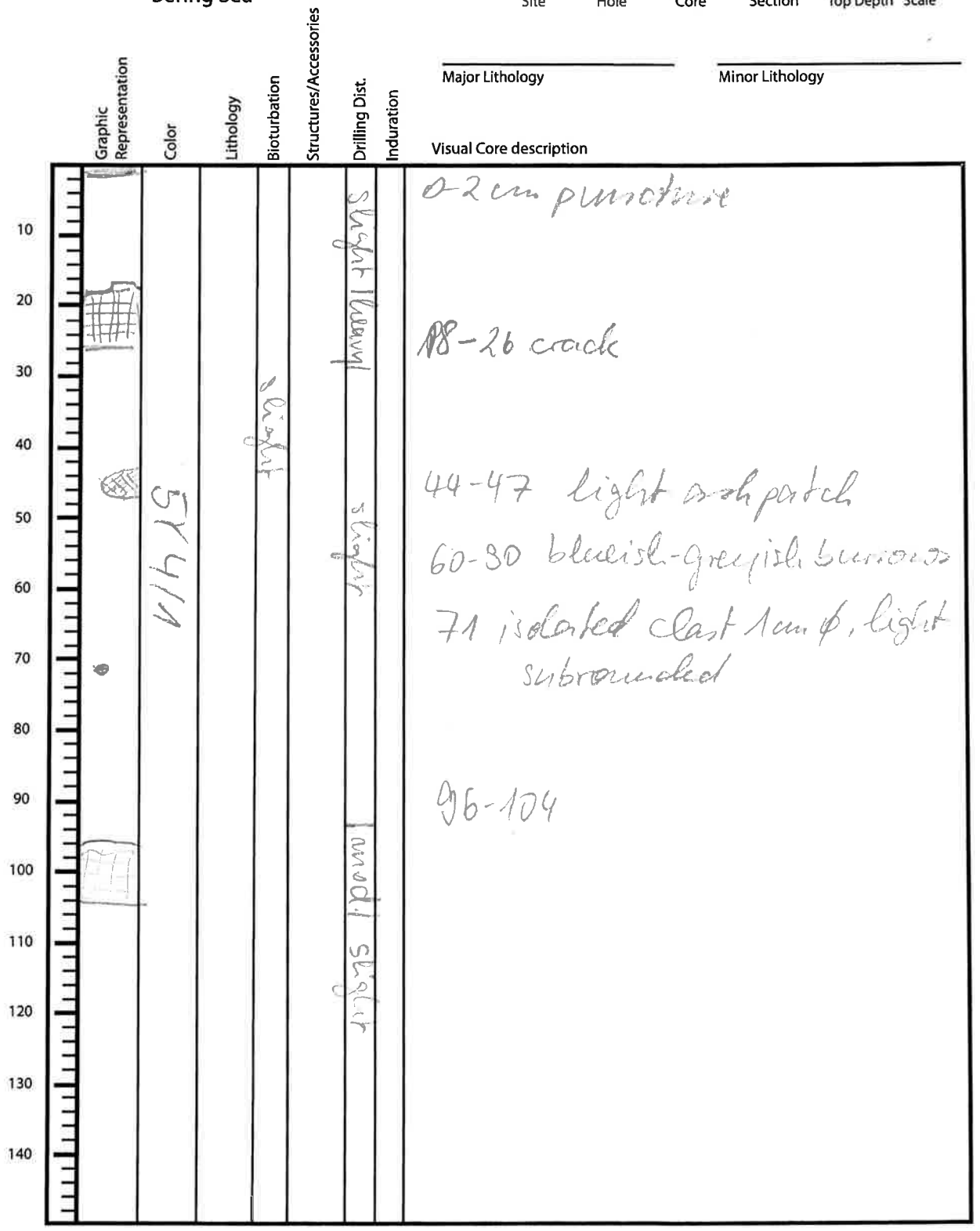
Percent	Component
	BIOGENIC GRAINS
	Calcareous
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
	Siliceous
	Radiolarians
	Spumellaria
	Nassellaria
	Diatoms
45	Centric
30	Pennate
	Chaetoceros Resting Spores
1	Silicoflagellates
1	Sponge spicules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

Expedition 323
Bering Sea

323 B 20 1 0
Site Hole Core Section Top Depth Scale

Major Lithology

Minor Lithology



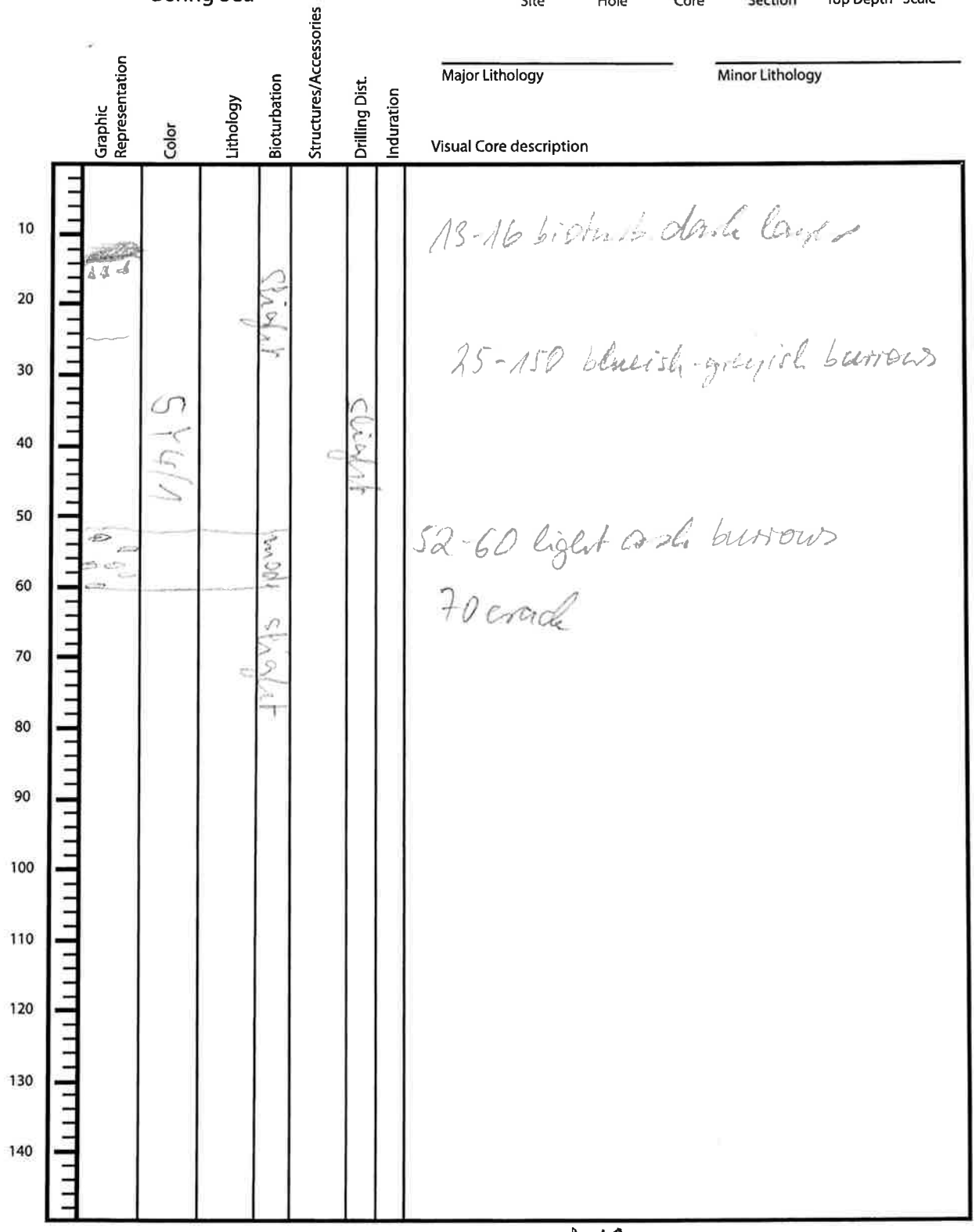
Observer: Mart Date: 7/20

Expedition 323
Bering Sea

323	B	20	2	1.44	
Site	Hole	Core	Section	Top Depth	Scale

Major Lithology

Minor Lithology



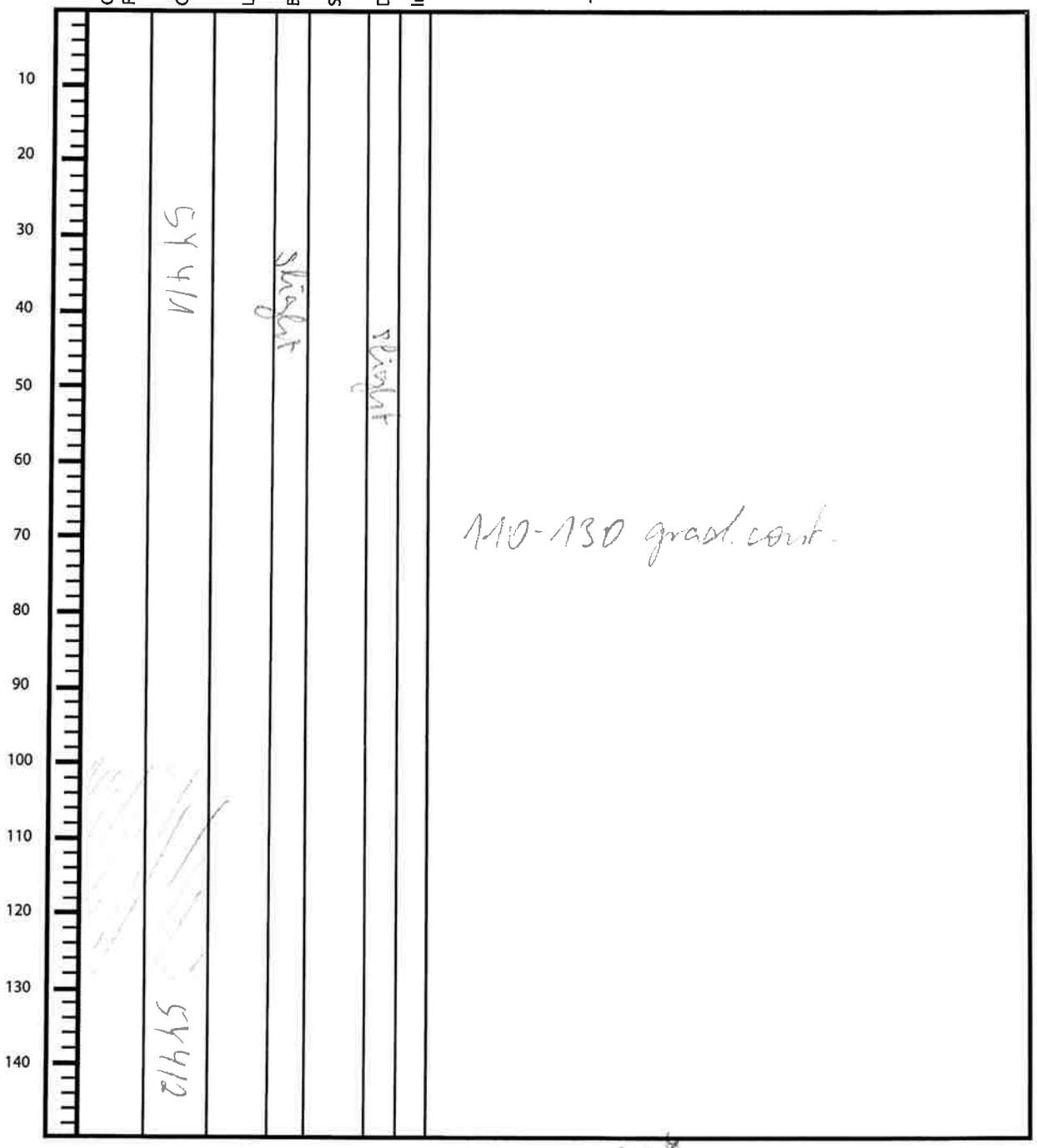
Observer: Mara

Date: 7/20

Expedition 323
Bering Sea

323 / B / 20 / 3 / 2.94 / ____
Site / Hole / Core / Section / Top Depth / Scale

Major Lithology ____ Minor Lithology ____

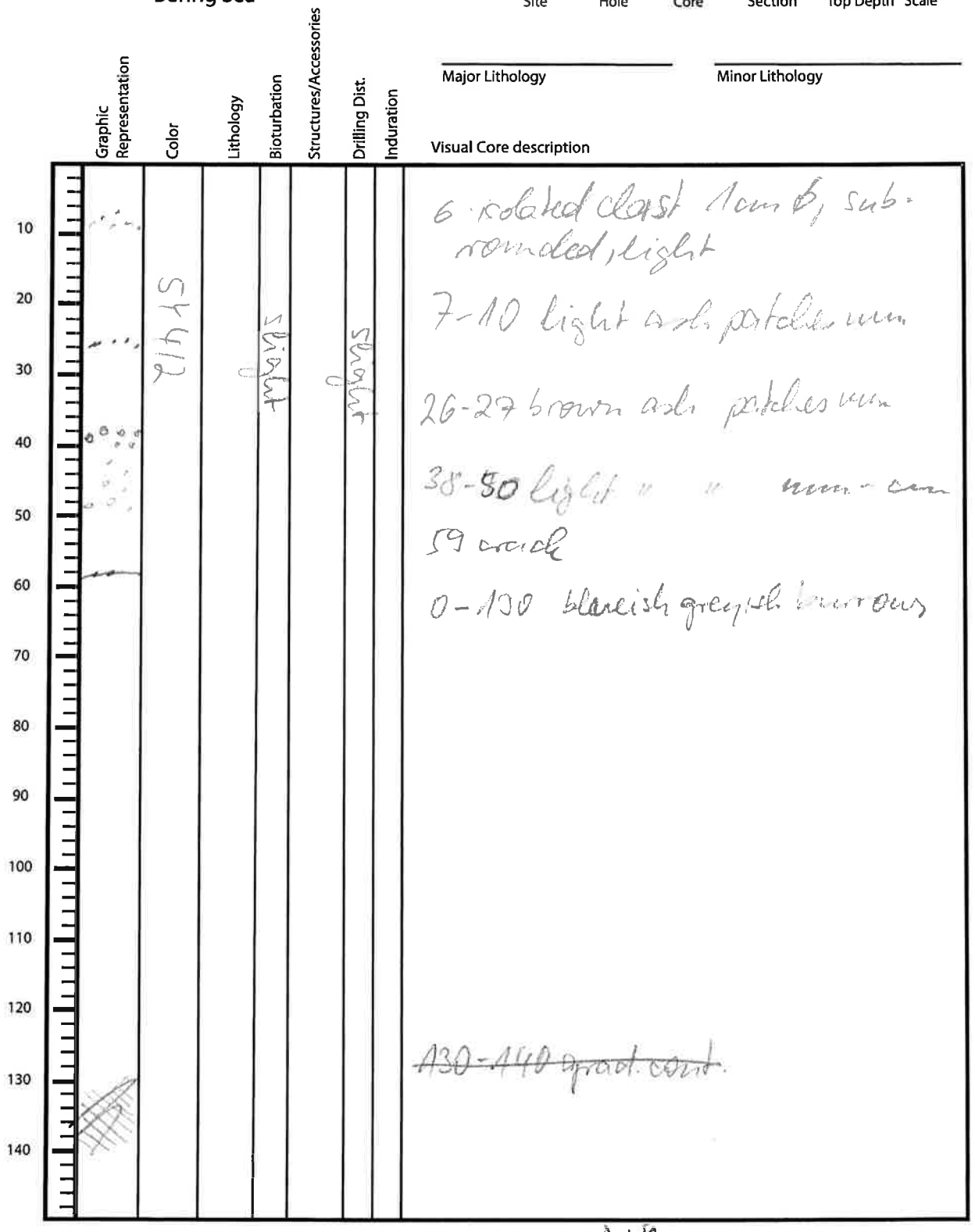


Observer: Mara Date: 7/20

Expedition 323
Bering Sea

323 Site | B Hole | 20 Core | 4 Section | 449 Top Depth | Scale

Major Lithology | Minor Lithology

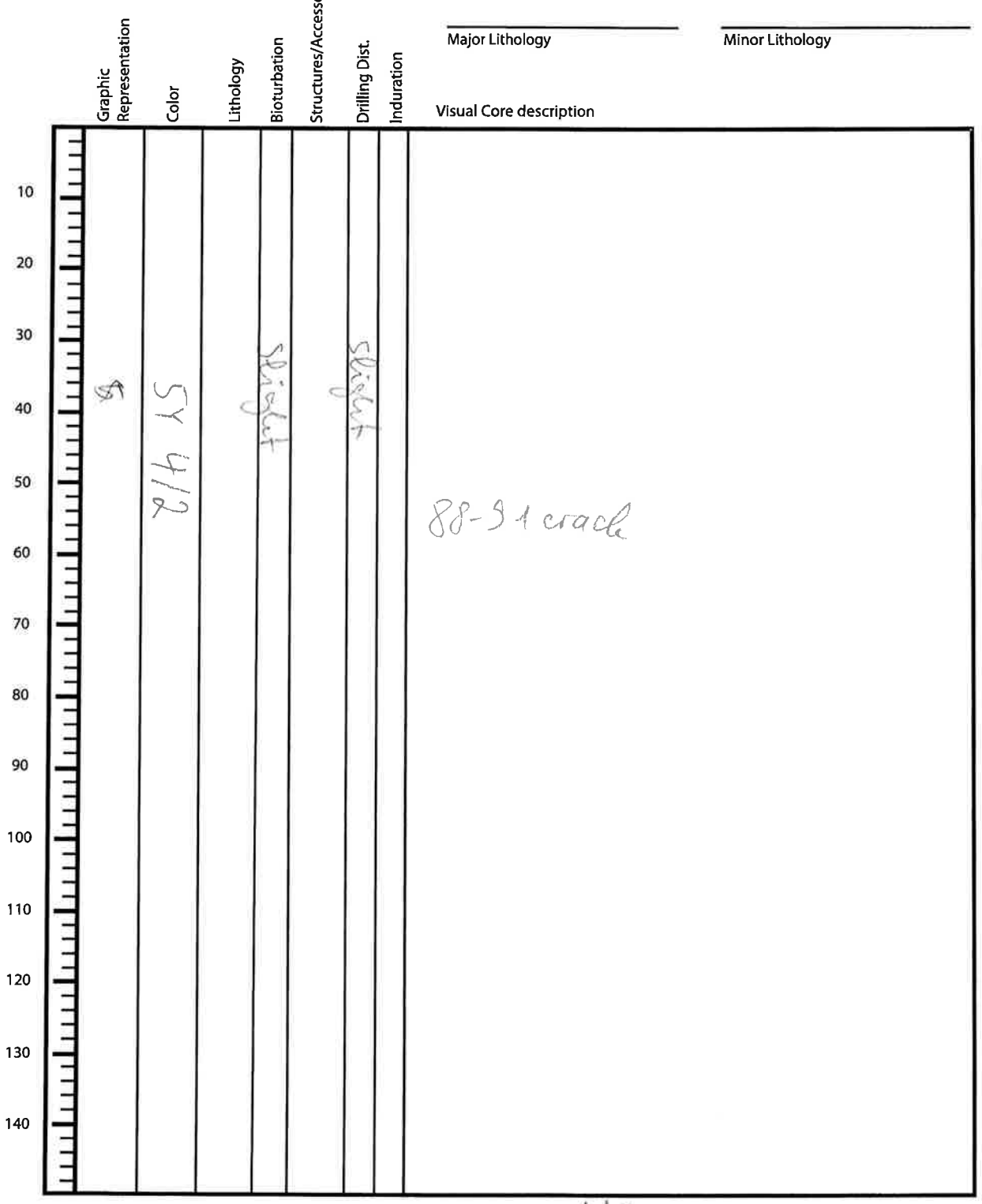


Observer: Mar Date: 7/20

Expedition 323
Bering Sea

323 | B | 20 | 5 | 5.94 |
Site | Hole | Core | Section | Top Depth | Scale

Major Lithology | Minor Lithology

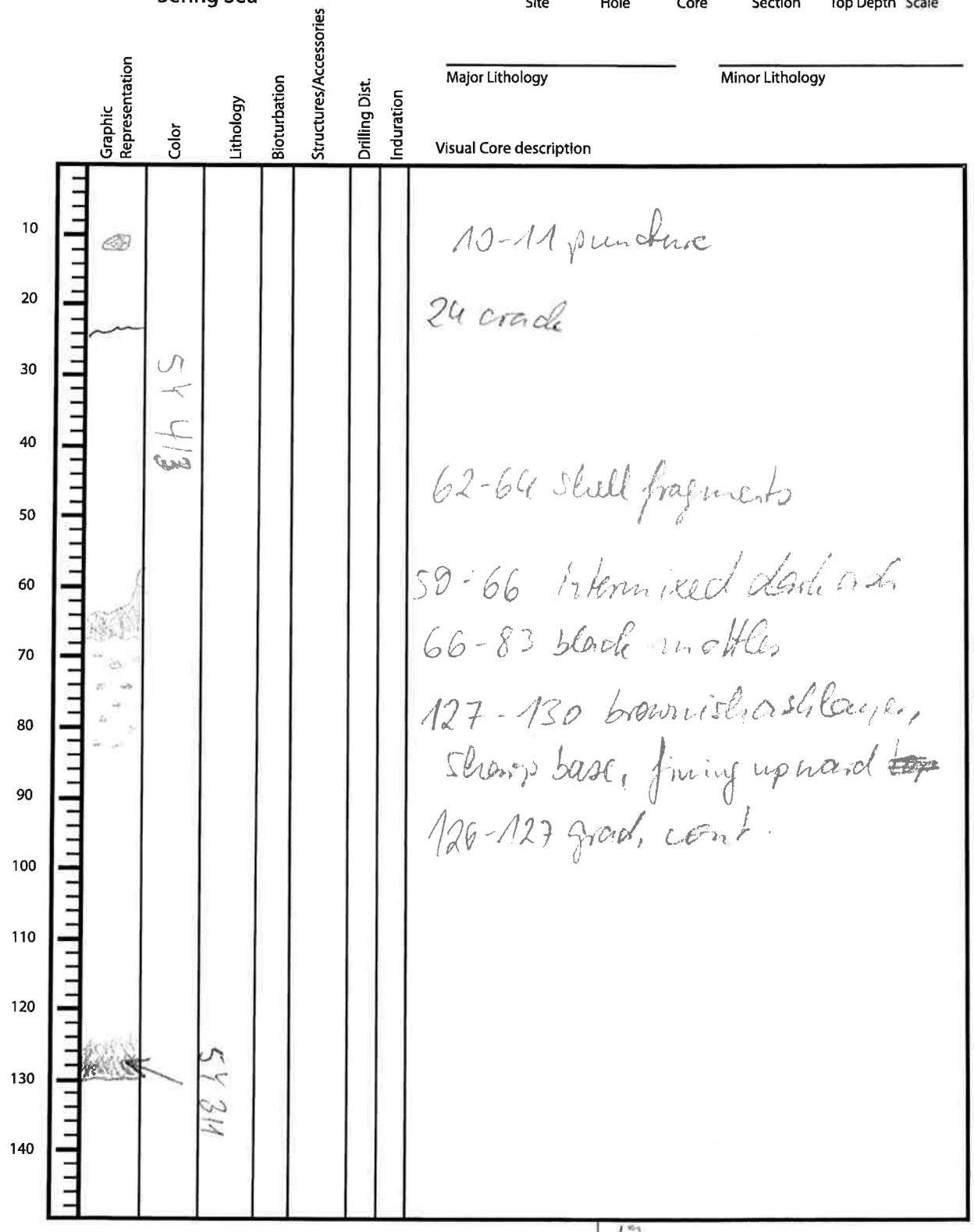


Observer: Mörz | Date: 7/20

Expedition 323
Bering Sea

323 (Site) B (Hole) 20 (Core) 6 (Section) 7.44 (Top Depth) ____ (Scale)

Major Lithology ____ Minor Lithology ____

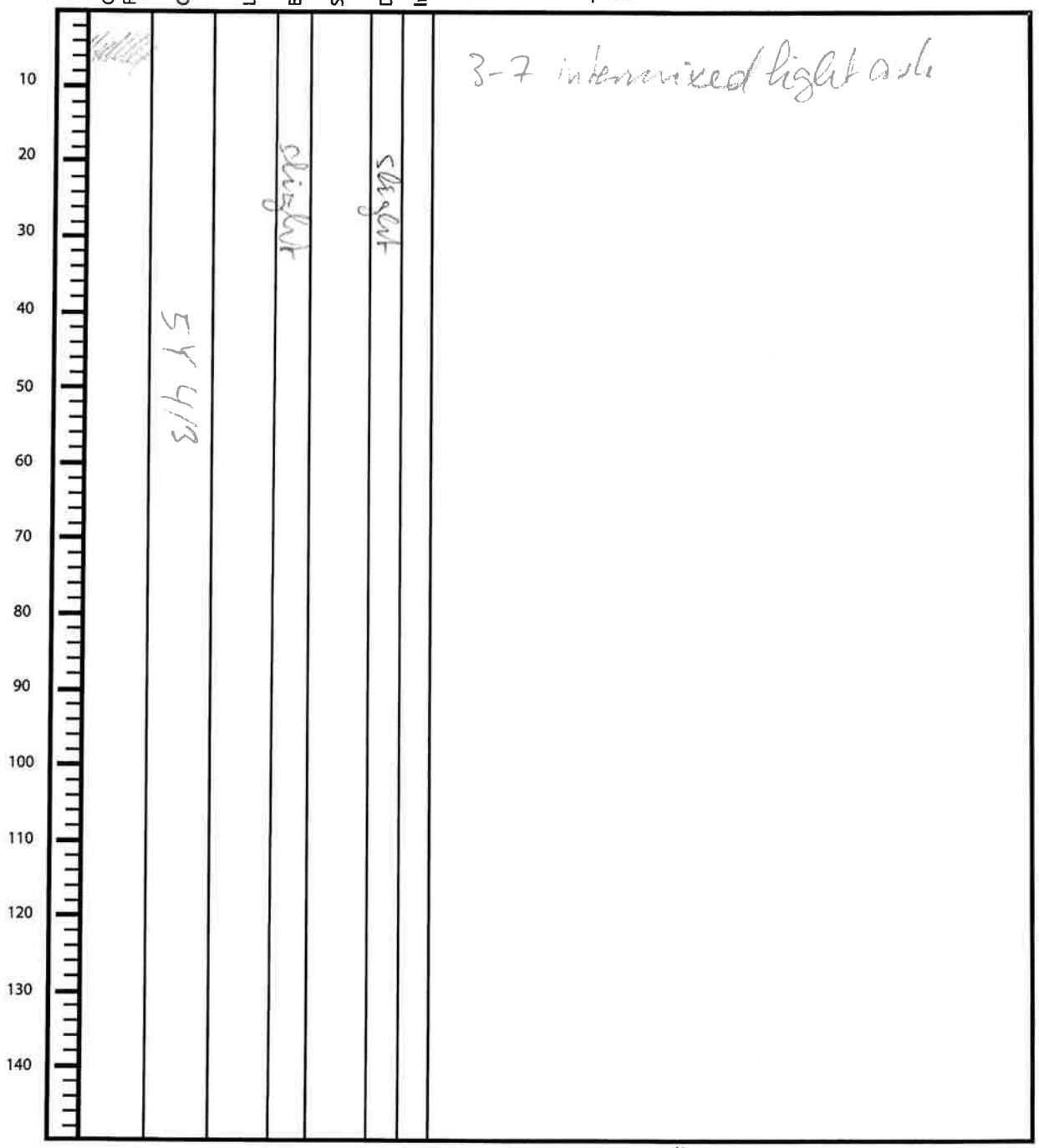


Observer: März Date: 7/29

Expedition 323
Bering Sea

323 | B | 20 | 7 | 8-80
Site | Hole | Core | Section | Top Depth | Scale

Major Lithology | Minor Lithology

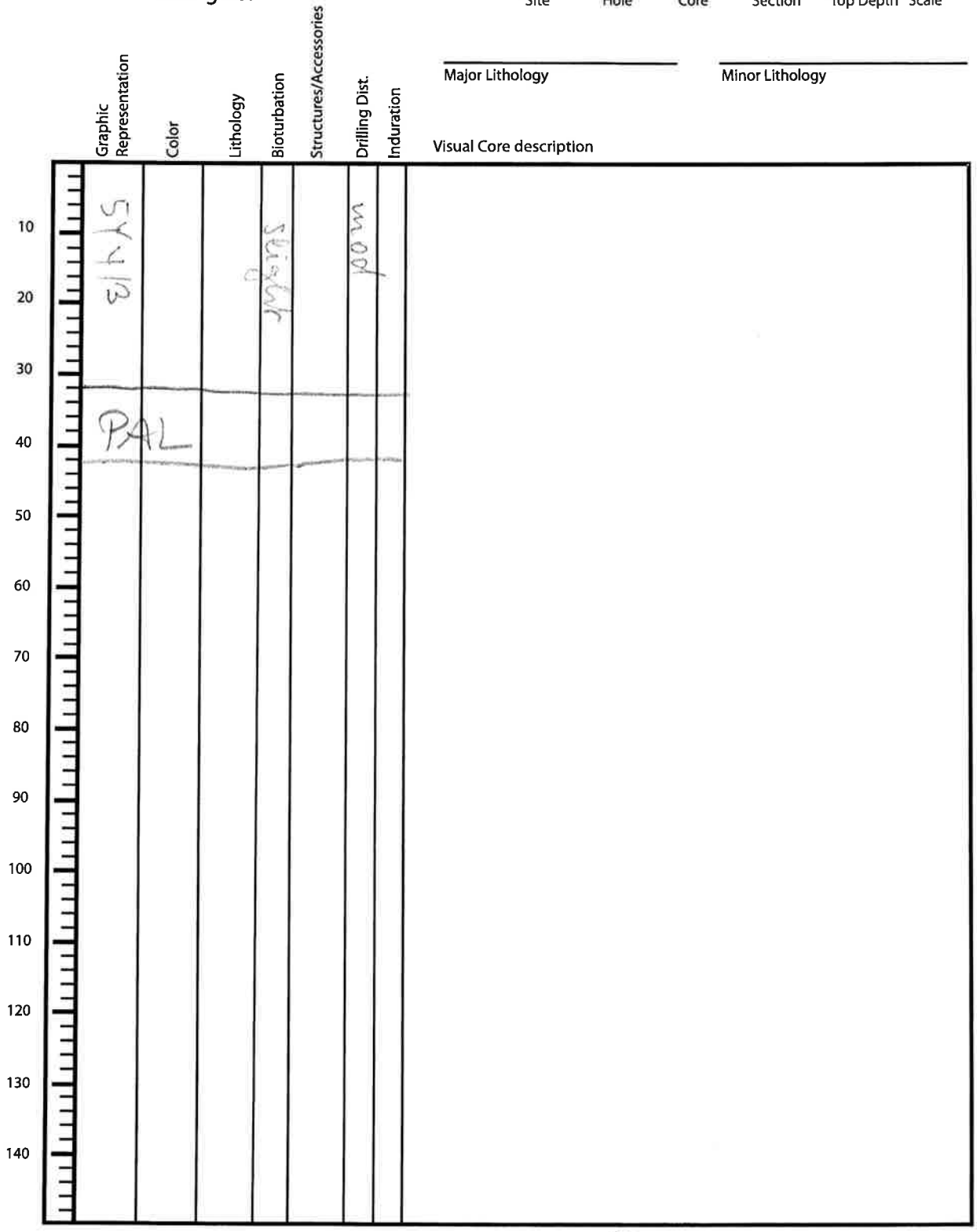


Observer: Man Date: 7/20

Expedition 323
Bering Sea

323 / B / 2D / CC / 9,68 /
Site / Hole / Core / Section / Top Depth / Scale

Major Lithology / Minor Lithology



Observer: Mara Date: 7/20

✓SM

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Interval (cm) Bottom
323	U1339	B	20	H	2	80	80

Sediment/Rock Name	Diatom ooze

Observer	Kelsie

Percent Texture		
Sand	Silt	Clay

Comments:

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

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

Rabdonema

✓ SM

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Interval (cm) Bottom
323	U1339	B	20	H	5	100	100

Sediment/Rock Name	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
1	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
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
	Siliceous
	Radiolarians
	Spumellaria
	Nassellaria
	Diatoms
50	Centric
20	Pennate
	Chaetoceros Resting Spores
	Silicoflagellates
1	Sponge spicules
	Dinoflagellates
	Others
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

✓ SM

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Interval (cm) Bottom
323	U1339	B	20	H	6	128	128

Sediment/Rock Name	Fine ash

Observer	Kelsie

Percent Texture		
Sand	Silt	Clay
20	75	5

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

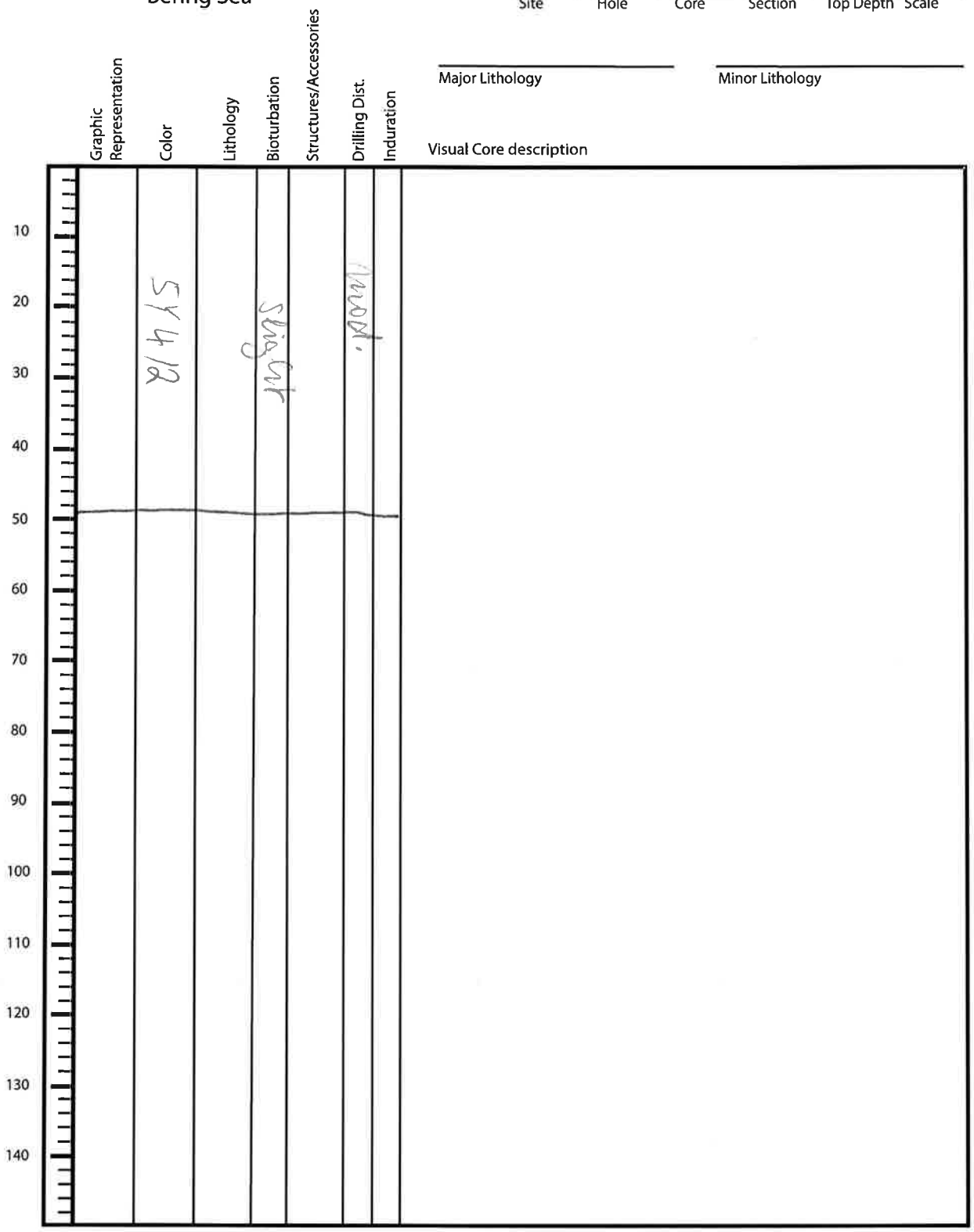
Percent	Component
BIOGENIC GRAINS	
	Calcareous
	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
	Coccoliths
	Discoasters
	Pteropods
	Siliceous
	Radiolarians
	Spumellaria
	Nassellaria
	Diatoms
	Centric
	Pennate
	Chaetoceros Resting Spores
	Silicoflagellates
	Sponge spicules
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

Expedition 323
Bering Sea

U1339
~~323~~ B 21 1
Site Hole Core Section Top Depth Scale

Major Lithology

Minor Lithology



Observer: Mara Date: 7/20

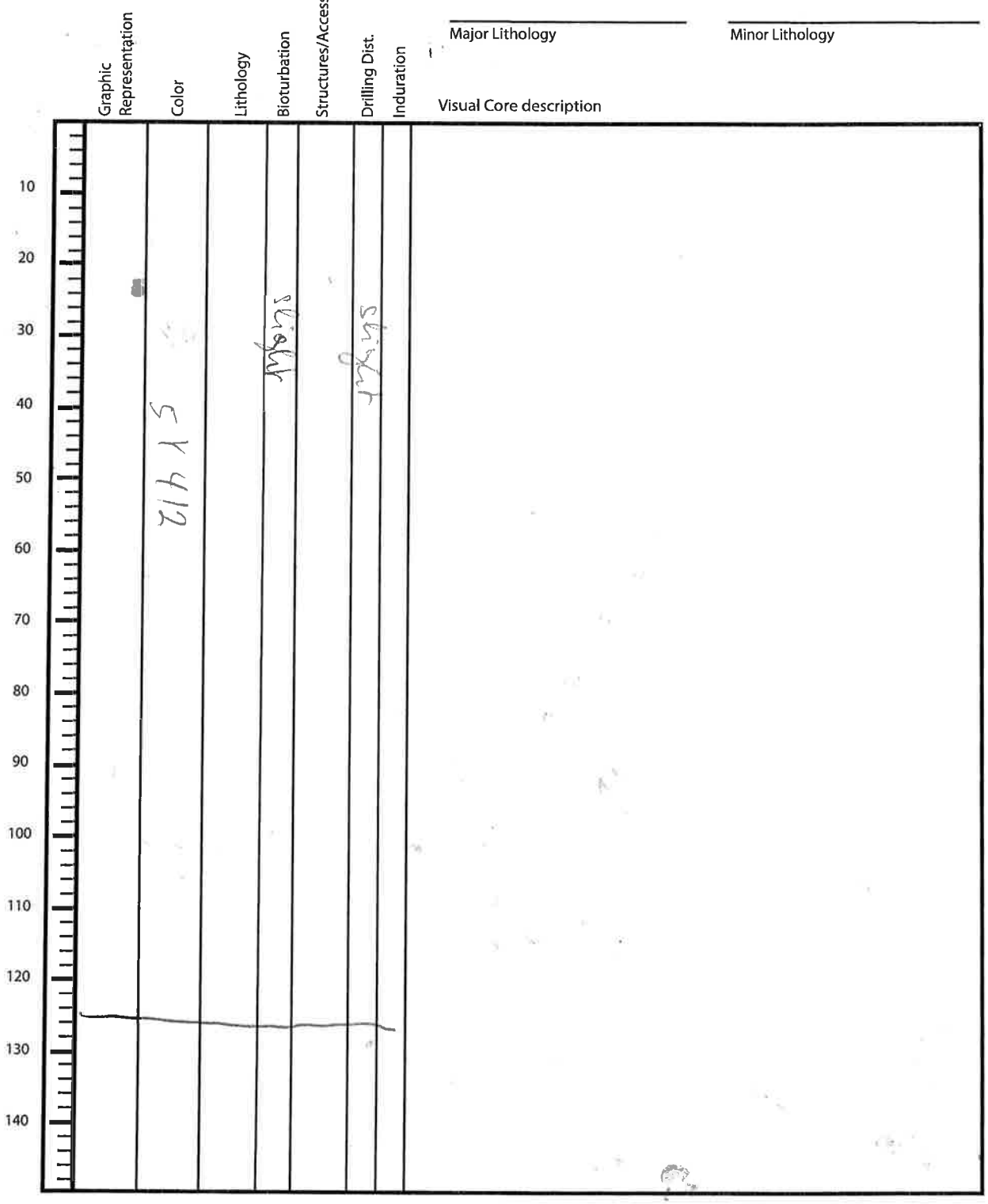
U1339

Expedition 323
Bering Sea

Site	Hole	Core	Section	Top Depth	Scale
~~323~~	B	21	2	0.~~5~~0	

Major Lithology

Minor Lithology



Observer: Mara

Date: 7/20

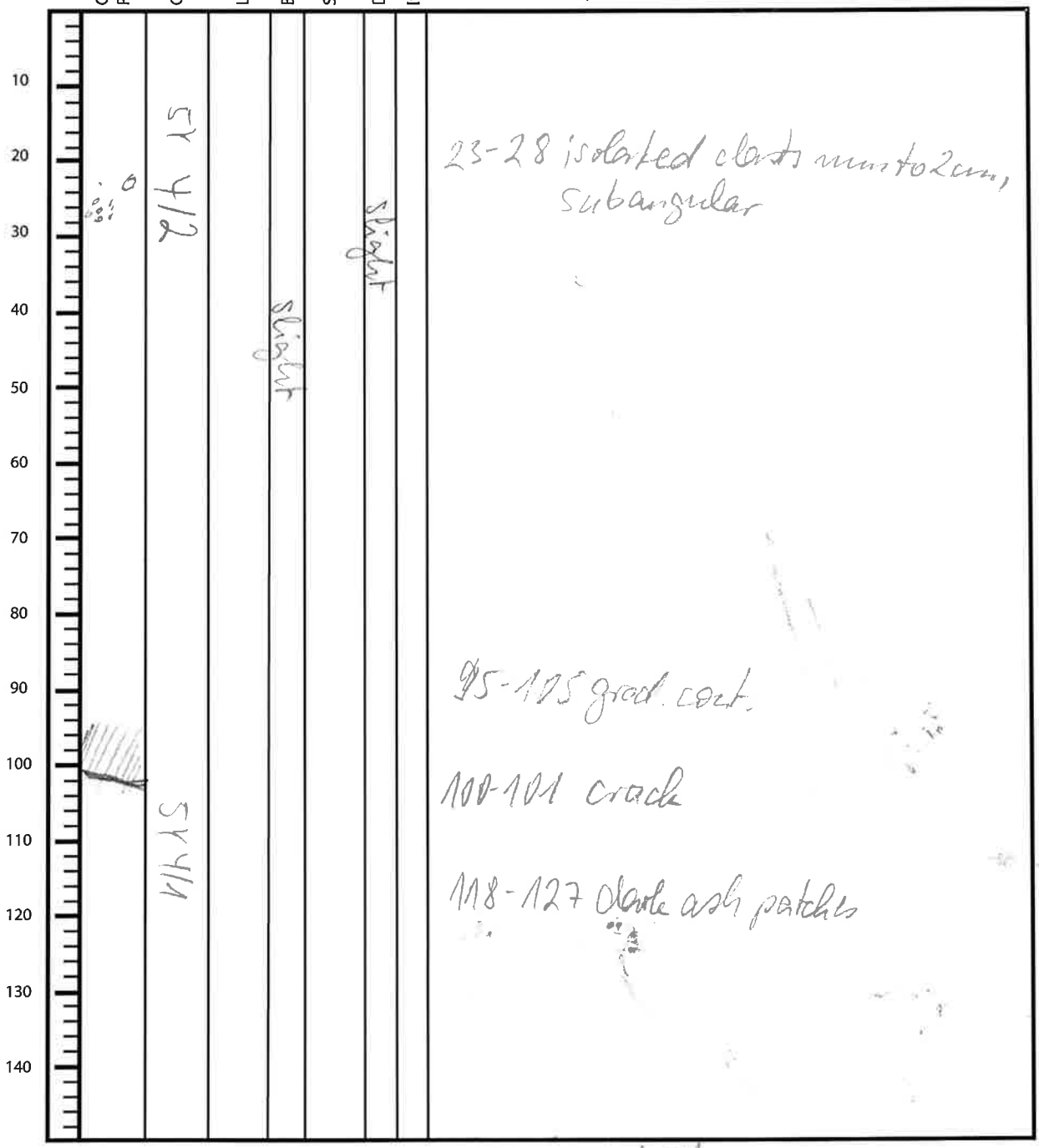
Expedition 323
Bering Sea

U1339

323	B	21	3	1.75	
Site	Hole	Core	Section	Top Depth	Scale

Major Lithology

Minor Lithology



Observer: Mark

Date: 7/20

U1339

Expedition 323
Bering Sea

~~323~~ | B | 21 | 4 | 3.25 |
Site | Hole | Core | Section | Top Depth | Scale

Major Lithology | Minor Lithology

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Visual Core description
	5Y 4/1		slight		slight		10-75 bluish-grayish mottles 62 isolated clast 0.5cm, subrounded 67 " " 0.2cm "

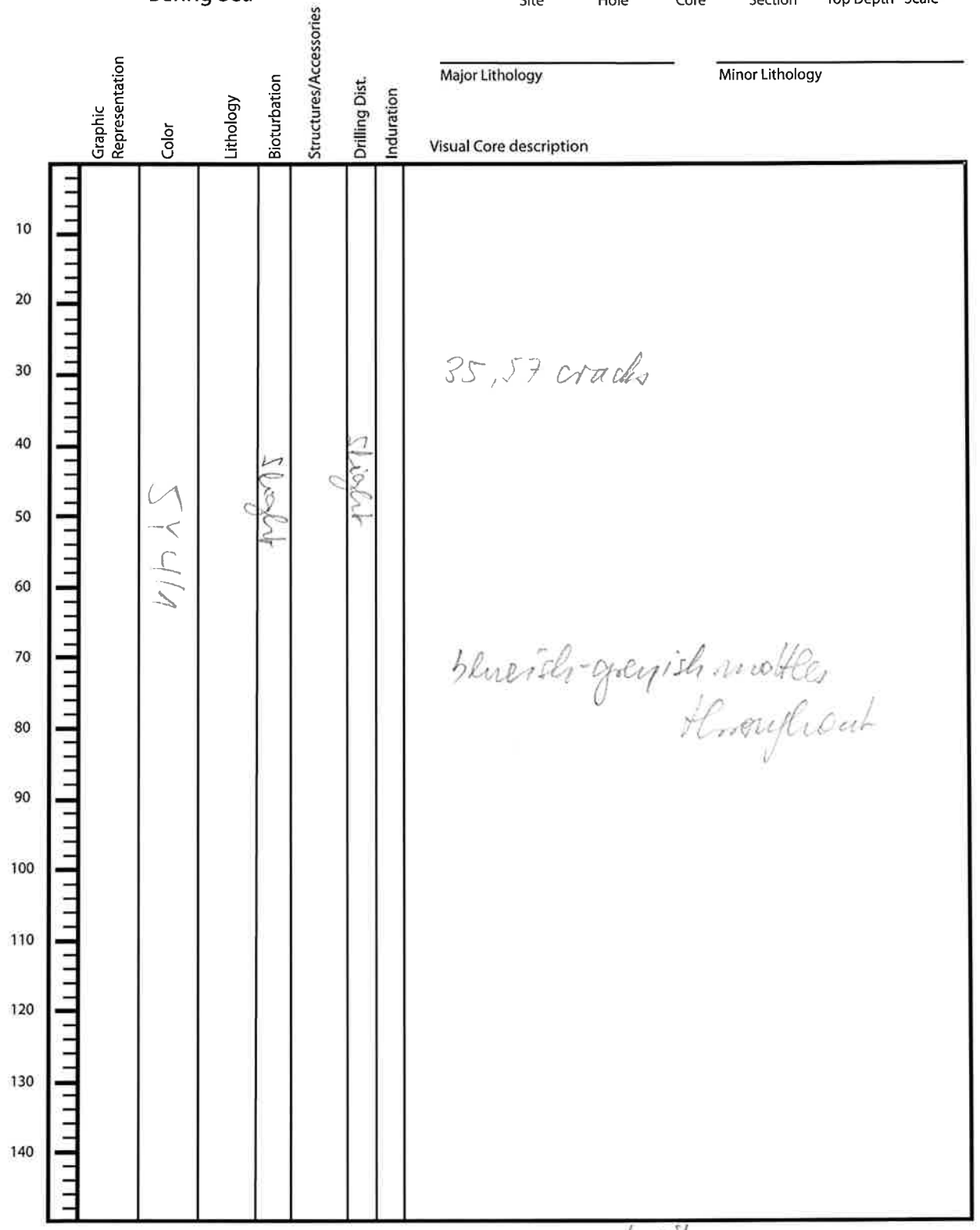
10
20
30
40
50
60
70
80
90
100
110
120
130
140

Observer: Mark | Date: 7/21

Expedition 323
Bering Sea

U1339 — ~~323~~ | B | 21 | 5 | 4.75 | _____
Site | Hole | Core | Section | Top Depth | Scale

Major Lithology _____ Minor Lithology _____

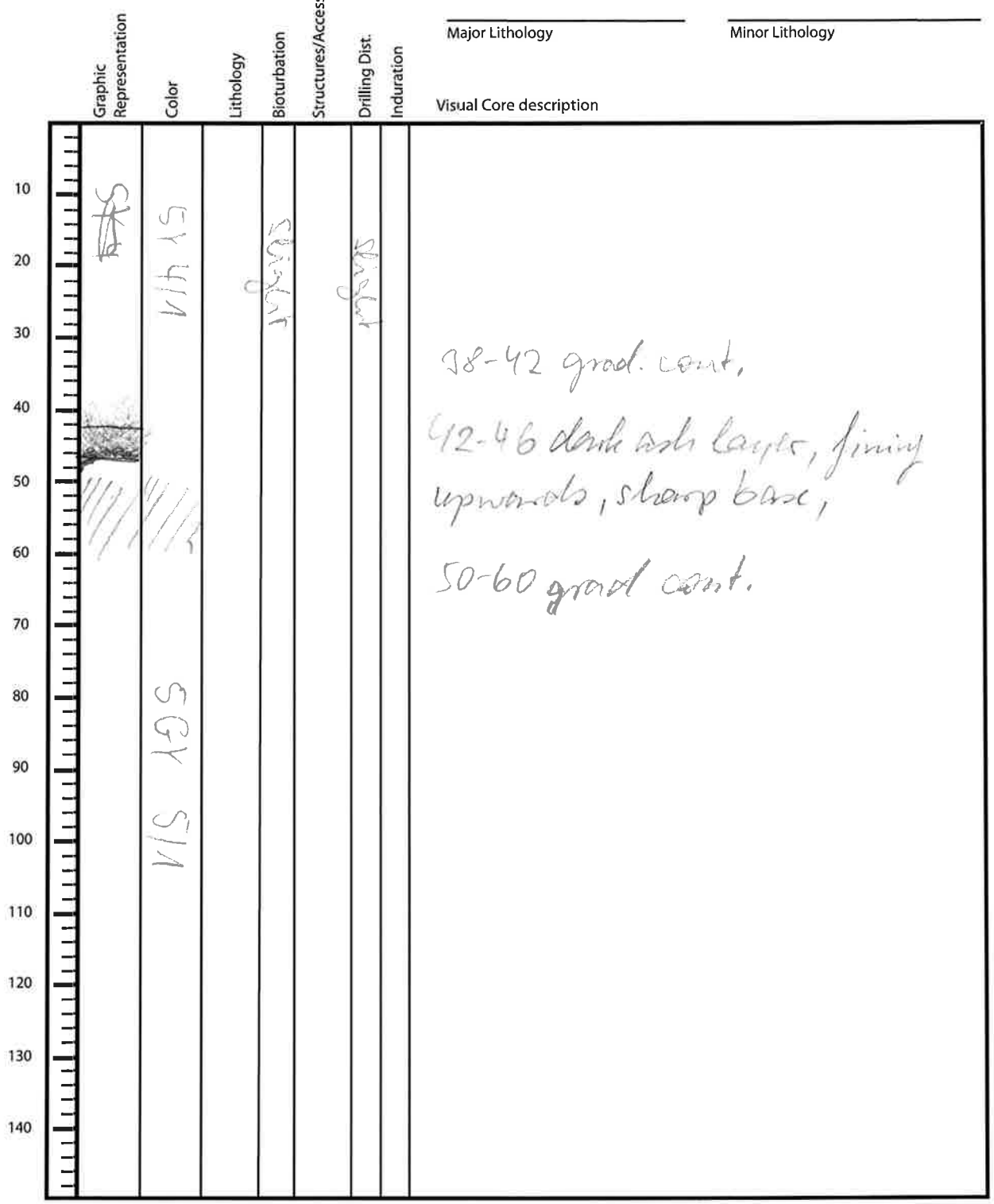


Observer: Mörz Date: 7/20

Expedition 323
Bering Sea

U1338 | 3 | 21 | 6 | 6.25 | _____
Site | Hole | Core | Section | Top Depth | Scale

Major Lithology _____ Minor Lithology _____



Observer: Mäe Date: 7/21

Expedition 323
Bering Sea

U1339 | 8 | 21 | 7 | 7.75 | ____
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

5GY 5/1
N4/5
5GY 5/1

32-41 greenish layer

41-150 bluish-greenish mottles

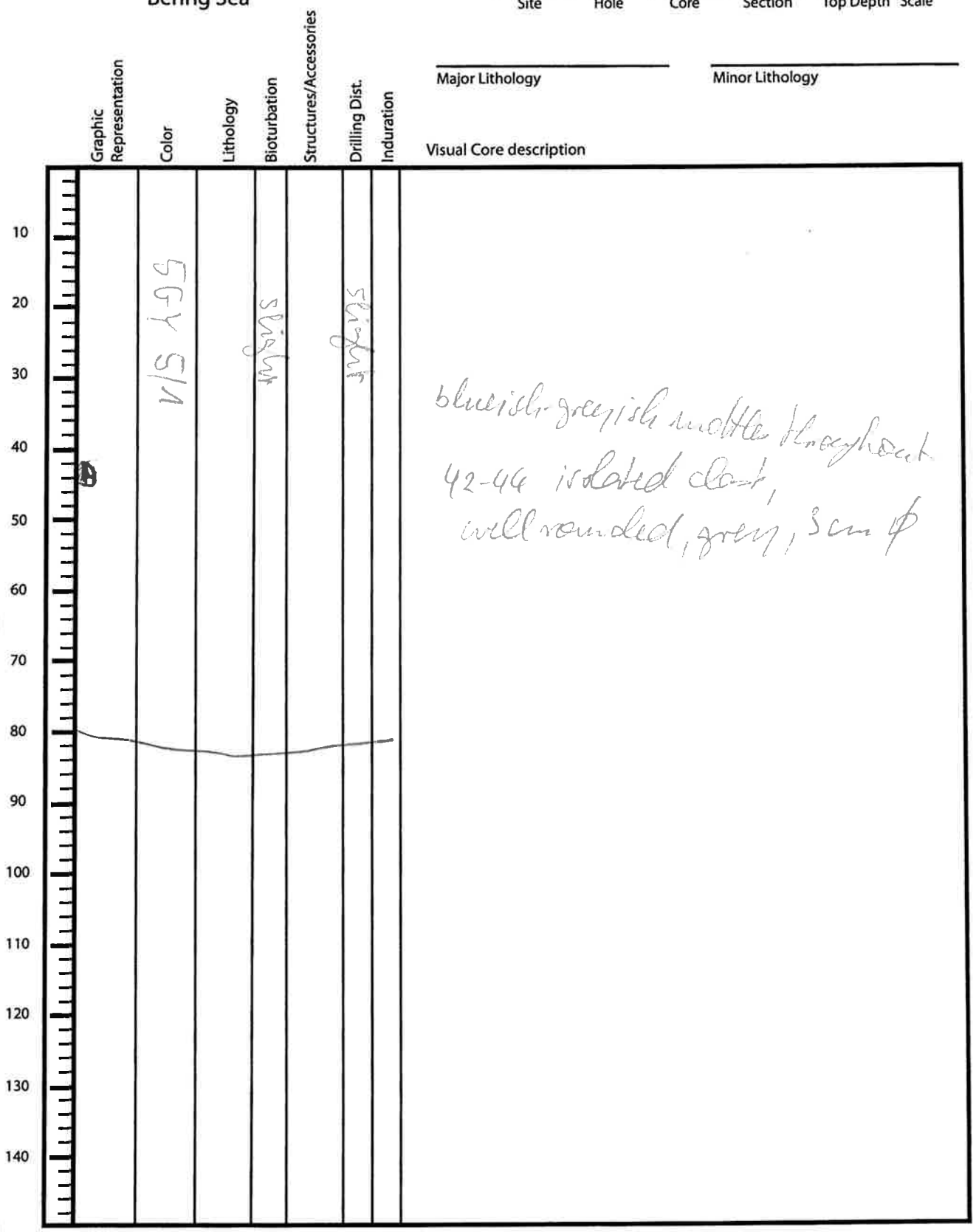
Observer: Marie Date: 7/20

Expedition 323
Bering Sea

U1333 | B | 21 | 8 | 9.25 | ____
Site | Hole | Core | Section | Top Depth | Scale

Major Lithology

Minor Lithology



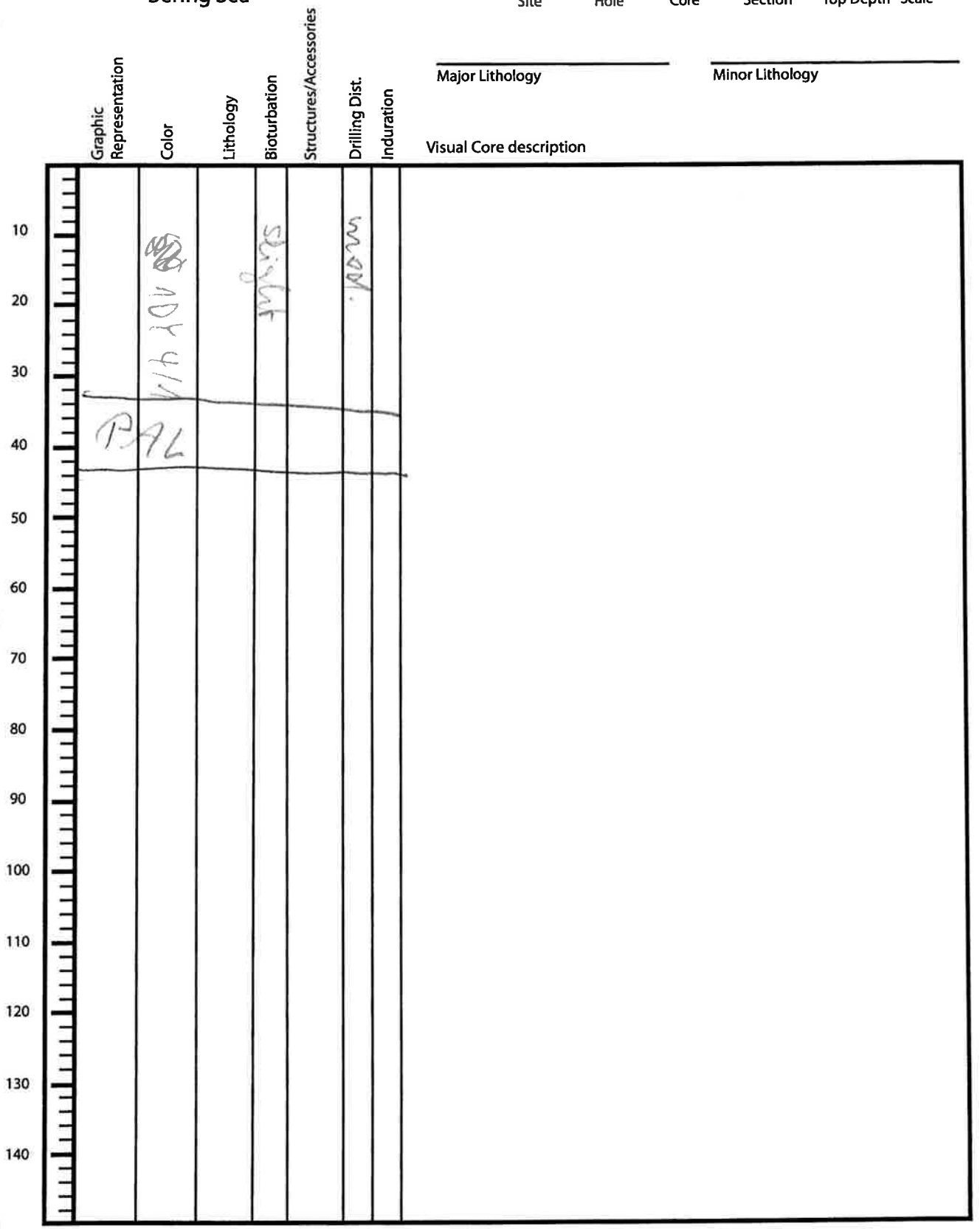
Observer: Maria

Date: 7/20

Expedition 323
Bering Sea

U1333 | B | 21 | CC | 10.05 | _____
Site | Hole | Core | Section | Top Depth | Scale

Major Lithology _____ Minor Lithology _____



Observer: _____ Date: 7/20

/ SM

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Interval (cm) Bottom
323	U1339	B	21	H	2	70	70

Sediment/Rock Name	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
1	Rock fragments
	Accessory/trace minerals
	Micas
	Biotite
	Muscovite
	Clay Minerals
	Chlorite
	Glauconite
	Chert
	Zircon
1	Ferromagnesium minerals
	Authigenic minerals
	Barite
	Phosphorite/Apatite
	Zeolite
	Opaque minerals
1	Pyrite
	Magnetite
	Fe-oxide
	Carbonates
	Calcite
	Dolomite
	VOLCANICLASTIC GRAINS
	Crystal grain
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
70	Centric
30	Pennate
	Chaetoceros Resting Spores
	Silicoflagellates
	Sponge spicules
	Dinoflagellates
	Others
	Pollen
	Organic debris
	Plant debris
	Ebridians
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bryozoans
	Bivalves
	Others

✓ SM

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Interval (cm) Bottom
323	U1339	B	21	H	6	34	34

Sediment/Rock Name	Diatom-rich silt

Observer	Kelsie

	Percent Texture		
	Sand	Silt	Clay
V	3	87	10
S	1	60	40

Comments:

Percent	Component
	SILICICLASTIC GRAINS/MINERAL
	Framework minerals
15	Quartz
15	Feldspar
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
5	Rock fragments
	Accessory/trace minerals
1	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
5	Dolomite
	VOLCANICLASTIC GRAINS
	Crystal grain
25	Vitric grain
	Lithic grain

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

✓SM

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Interval (cm) Bottom
323	1339	B	21	H	6	110	110

Sediment/Rock Name	Diatom-rich silt

Observer	Kelsie

Percent Texture		
Sand	Silt	Clay
	80	20

Comments:

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

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

✓ SM

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Interval (cm) Bottom
323	1339	B	21	H	7	38	38

Sediment/Rock Name	Diatom ooze	Observer	Kelsie

Percent Texture		
Sand	Silt	Clay

Comments:

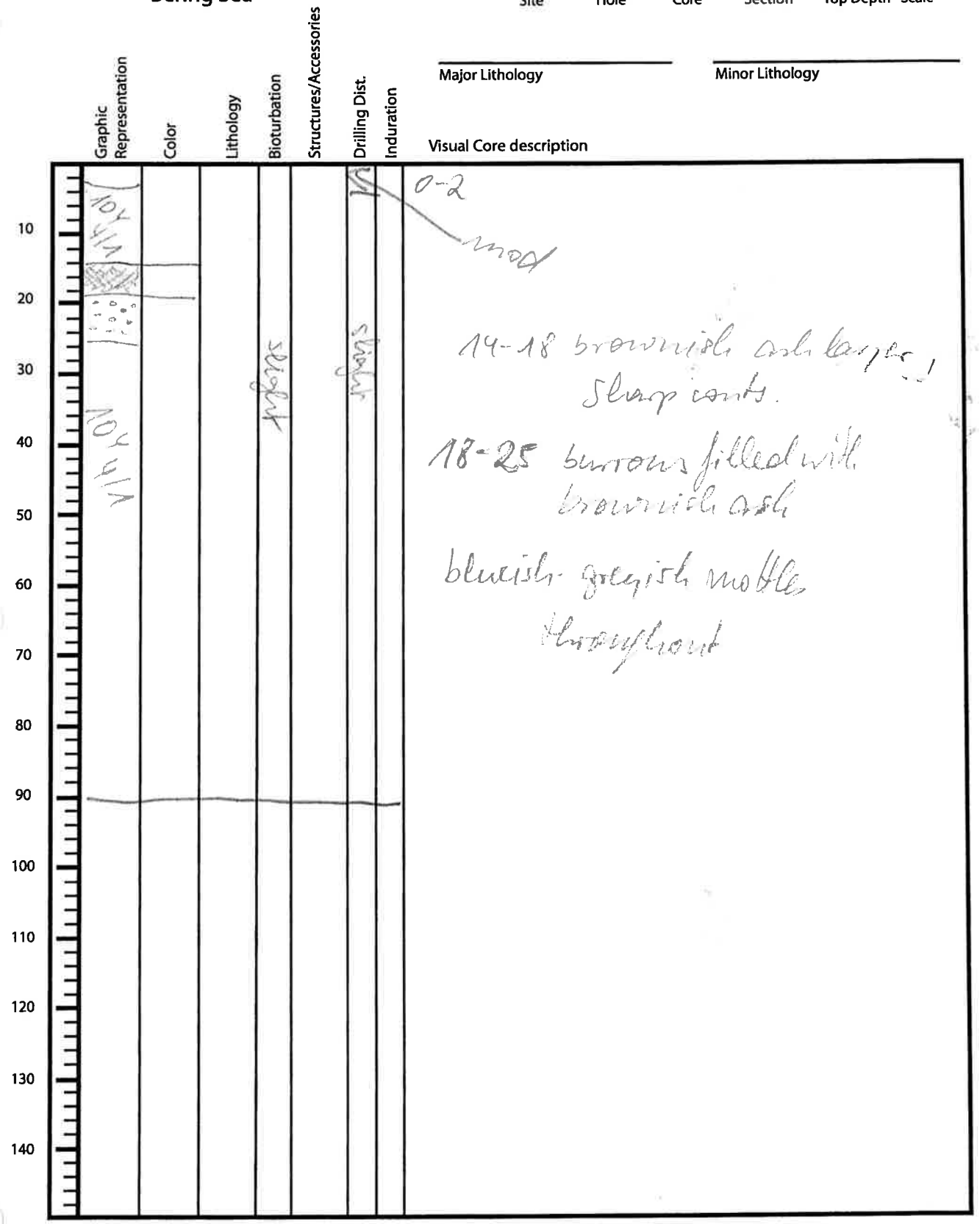
Percent	Component
	SILICICLASTIC GRAINS/MINERAL
	Framework minerals
5	Quartz
5	Feldspar
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
1	Rock fragments
	Accessory/trace minerals
	Micas
	Biotite
	Muscovite
5	Clay Minerals
	Chlorite
	Glauconite
	Chert
	Zircon
	Ferromagnesium minerals
	Authigenic minerals
	Barite
	Phosphorite/Apatite
	Zeolite
	Opaque minerals
2	Pyrite
	Magnetite
	Fe-oxide
	Carbonates
	Calcite
1	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
1	Radiolarians
	Spumellaria
	Nassellaria
	Diatoms
50	Centric
20	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

U1333 B 22 1 ____ ____
Site Hole Core Section Top Depth Scale

Major Lithology ____ Minor Lithology ____

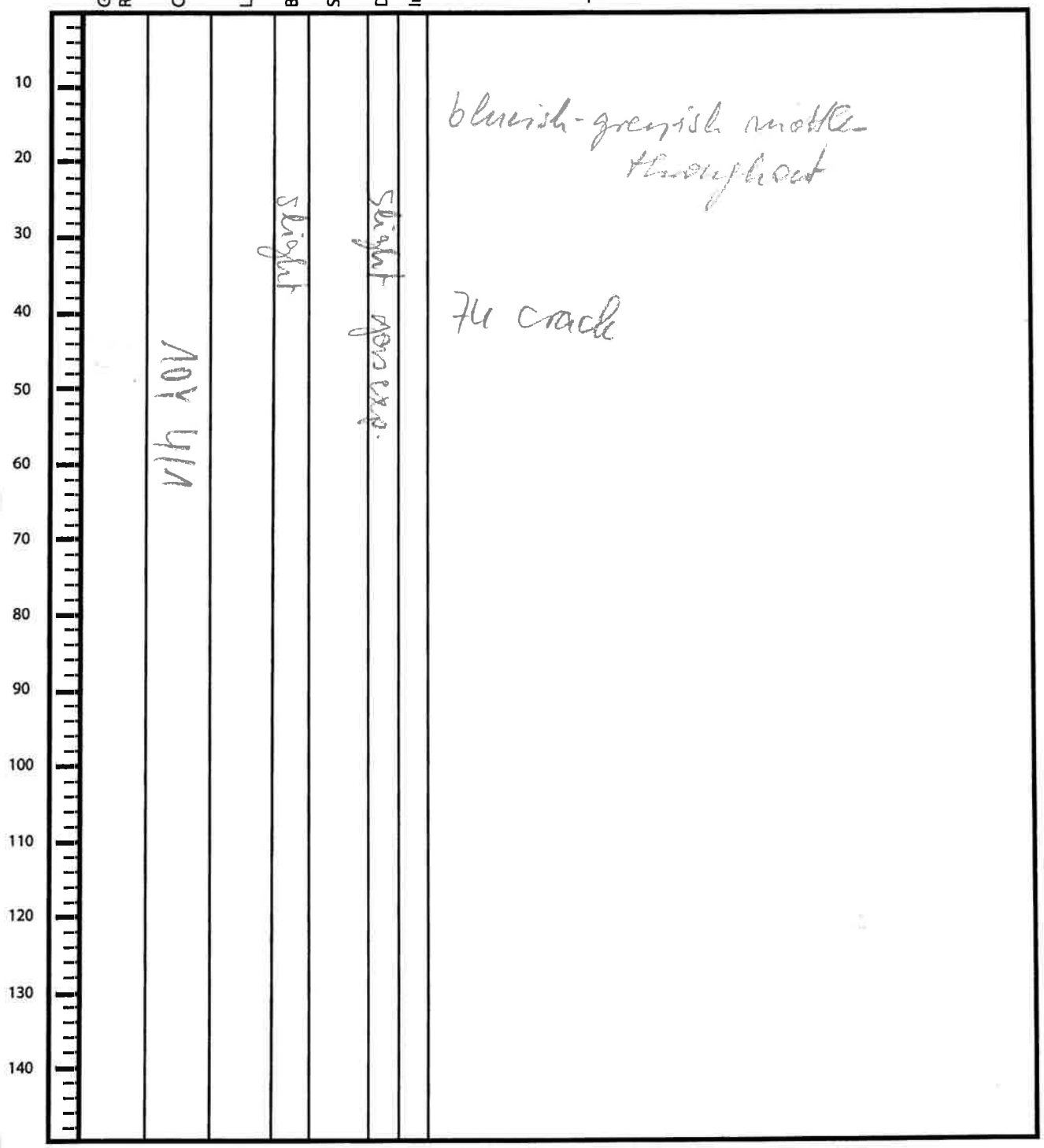


Observer: ____ Date: ____

Expedition 323
Bering Sea

U1339 | B | 22 | 2 | 0.75 | ____
Site | Hole | Core | Section | Top Depth | Scale

Major Lithology ____ Minor Lithology ____



Observer: ____ Date: ____

Expedition 323
Bering Sea

U1333 | 3 | 22 | 3 | 2.05 |
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

10Y 6/1
10Y 5/1
10Y 4/1
slight
moderate
slight
slight
slight

33-34 grad. cont.

43-51 grad. cont.

50-146:
greyish + brownish mottles

130 crack

Observer: _____ Date: _____

Expedition 323
Bering Sea

U1389 | B | 22 | 4 | 3.55 | ____
Site | Hole | Core | Section | Top Depth | Scale

Major Lithology ____ Minor Lithology ____

Graphic Representation	Color	Lithology	Bioturbation	Structures/Accessories	Drilling Dist.	Induration	Visual Core description
	N 4 10Y		slight		slight		bluish-grayish mottled

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

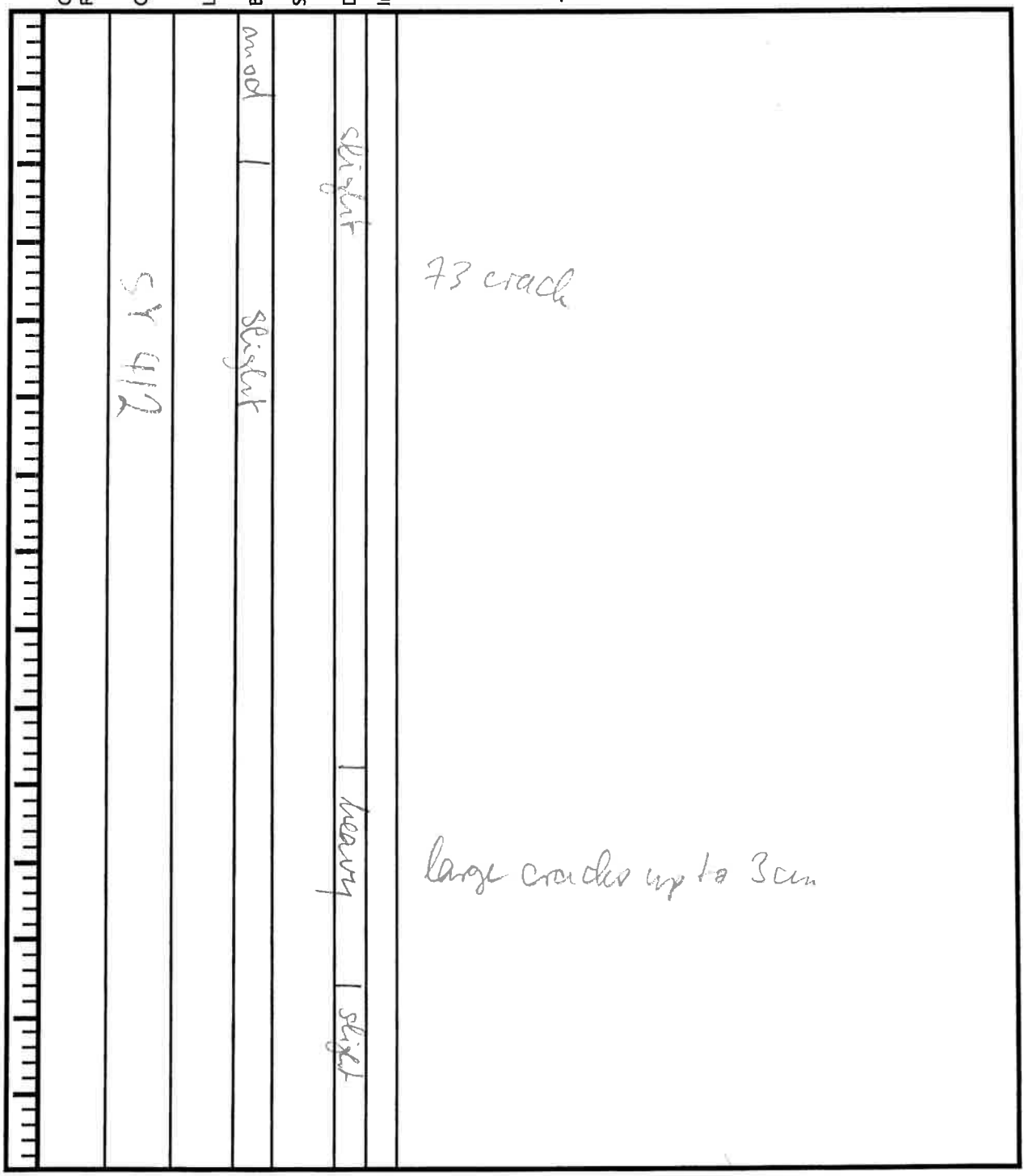
Observer: ____ Date: ____

Expedition 323
Bering Sea

U1339 B 22 5 4.22 ____
Site Hole Core Section Top Depth Scale

Major Lithology ____ Minor Lithology ____

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

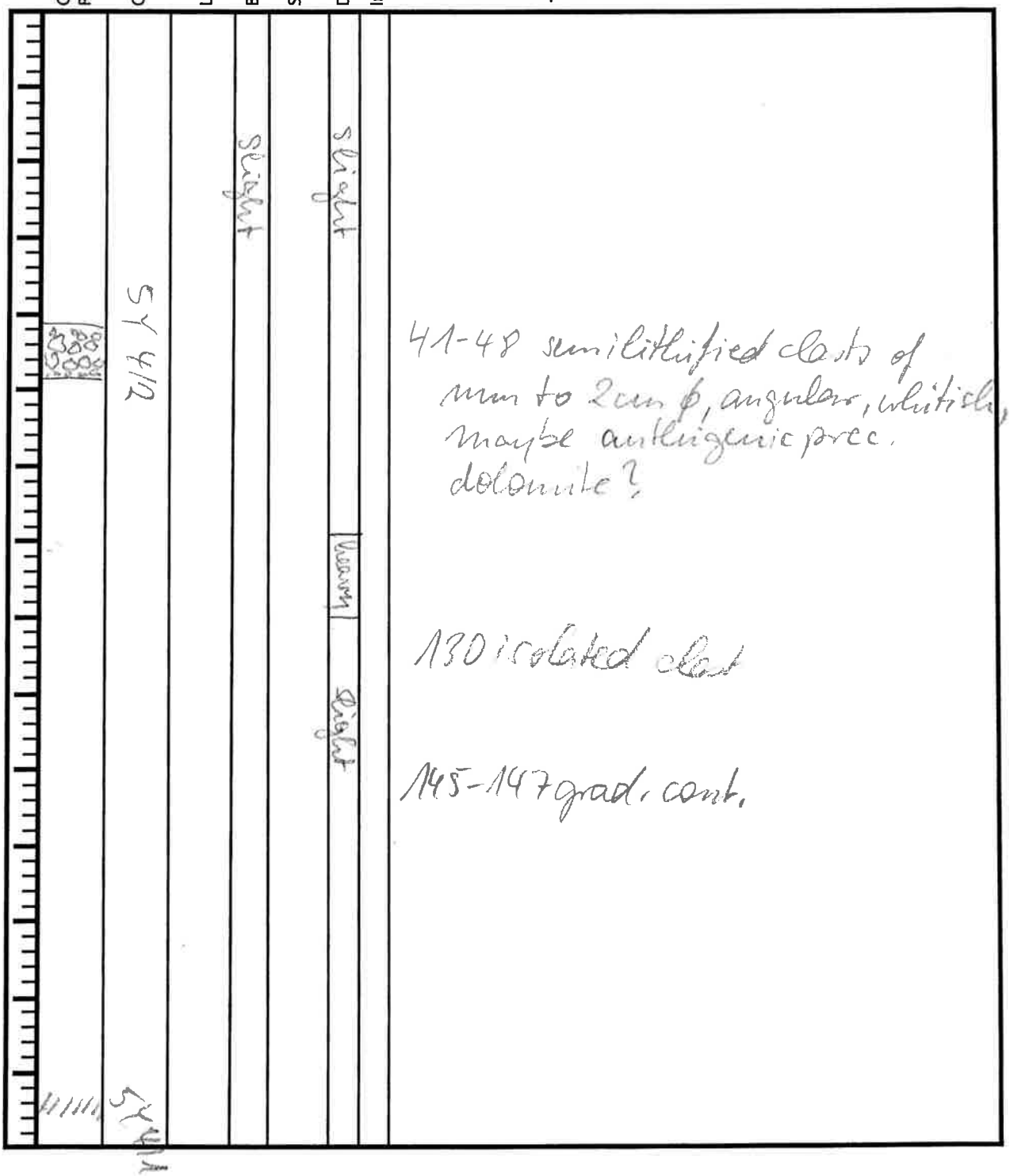


Observer: ____ Date: ____

Expedition 323
Bering Sea

U1333 | B | 22 | 6 | 5.72 | ____
Site | Hole | Core | Section | Top Depth | Scale

Major Lithology ____ Minor Lithology ____



Observer: ____ Date: ____

Expedition 323
Bering Sea

U1339 B 22 B 7.22 ____
Site Hole Core Section Top Depth Scale

Major Lithology ____ Minor Lithology ____

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

sec. 5 0

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

5Y 4/1

86-96 intermixed brownish ash

5Y 3/2

86, 96 grad. contb.

124 – 128 light ash layer, fining upwards, sharp base, grad. top

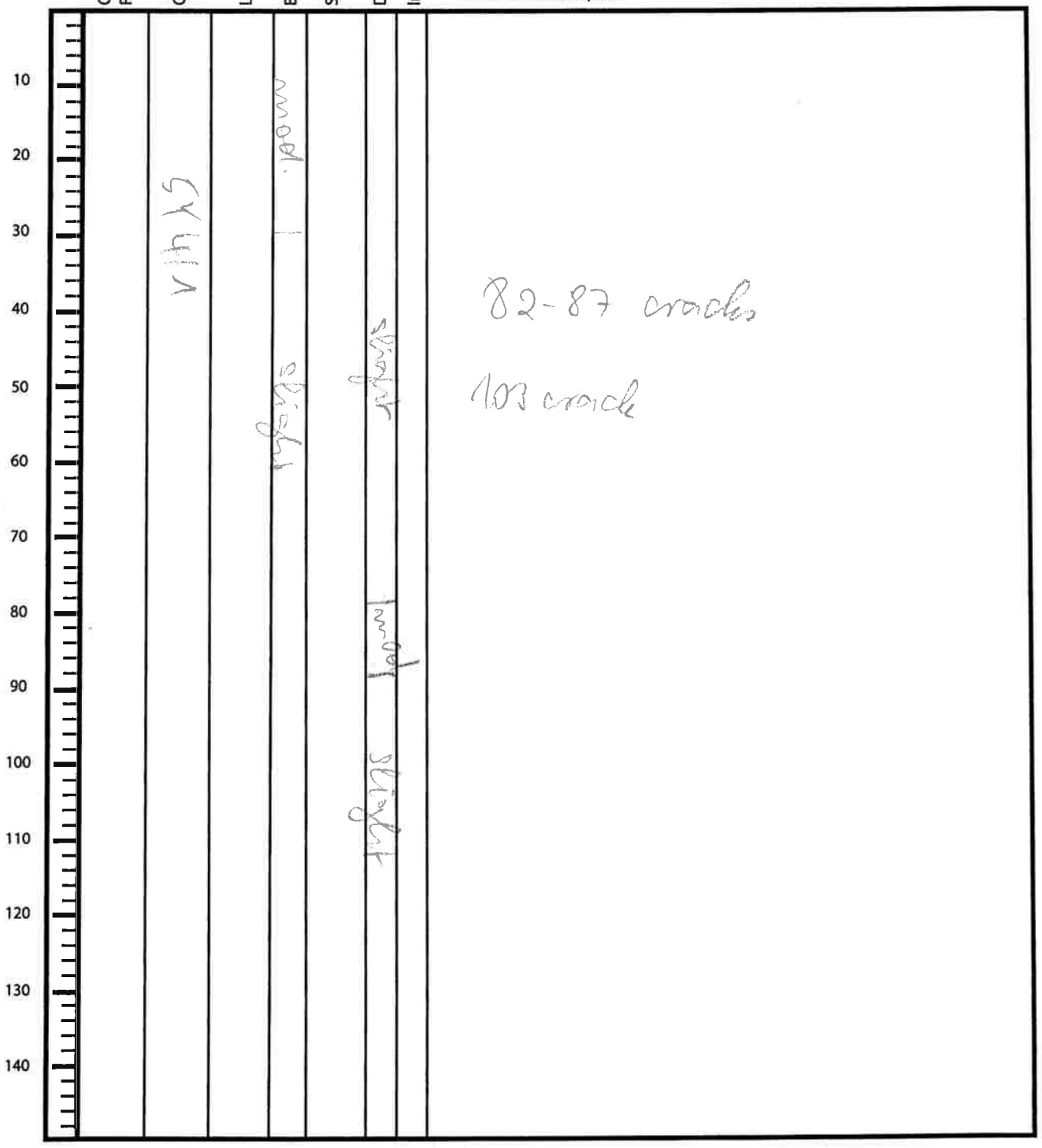
5Y 4/1

Observer: ____ Date: ____

Expedition 323
Bering Sea

U1338 | B | 22 | 8 | 8.57 |
Site | Hole | Core | Section | Top Depth | Scale

Major Lithology | Minor Lithology

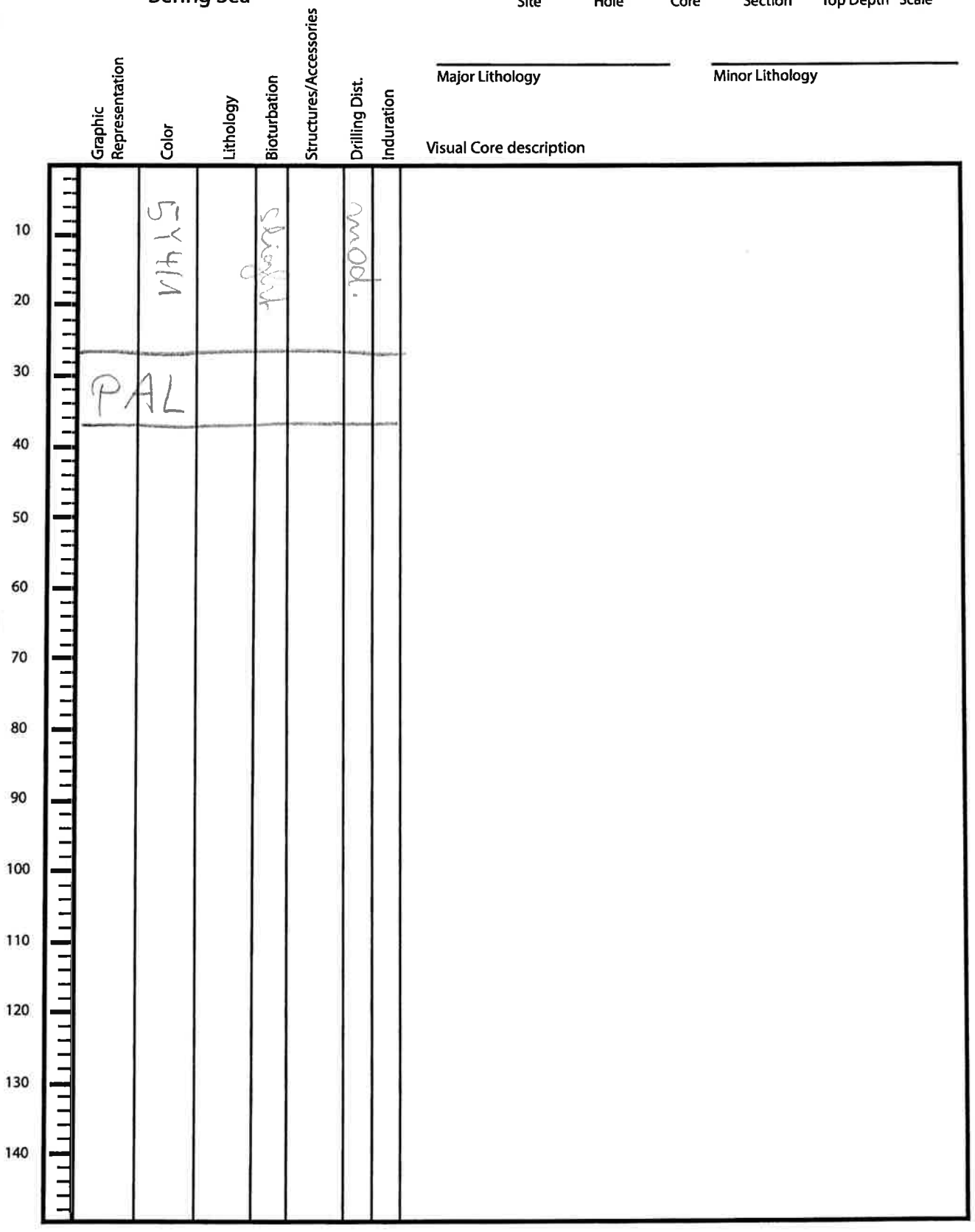


Observer: _____ Date: _____

Expedition 323
Bering Sea

U1339 B 22 CC 9.77 ____
Site Hole Core Section Top Depth Scale

Major Lithology ____ Minor Lithology ____



Observer: ____ Date: ____

✓ SM

IODP Expedition 323
SEDIMENT SMEAR SLIDE WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Interval (cm) Bottom
323	U1339	B	22	H	2	100	100

Sediment/Rock Name	Diatom-rich silty clay

Observer	Kelsie

Percent Texture		
Sand	Silt	Clay
5	40	60

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
35	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
1	Foraminifera
	Planktonic foraminifera
	Benthic foraminifera
	Nannofossils
1	Coccoliths
	Discoasters
	Pteropods
	Siliceous
	Radiolarians
	Spumellaria
	Nassellaria
	Diatoms
25	Centric
10	Pennate
	Chaetoceros Resting Spores
1	Silicoflagellates
	Sponge spicules
1	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	Interval (cm) Bottom
323	1339	B	22	H	6	100	100

Sediment/Rock Name	Diatom ooze	Observer	Kelsie

Percent Texture		
Sand	Silt	Clay

Comments:

Percent	Component
	SILICICLASTIC GRAINS/MINERAL
	Framework minerals
10	Quartz
15	Feldspar
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
	Accessory/trace minerals
	Micas
	Biotite
	Muscovite
	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
1	Nassellaria
	Diatoms
50	Centric
20	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

IODP Expedition 323

Site U1339

Hole C