Prepared in cooperation with the California Department of Water Resources

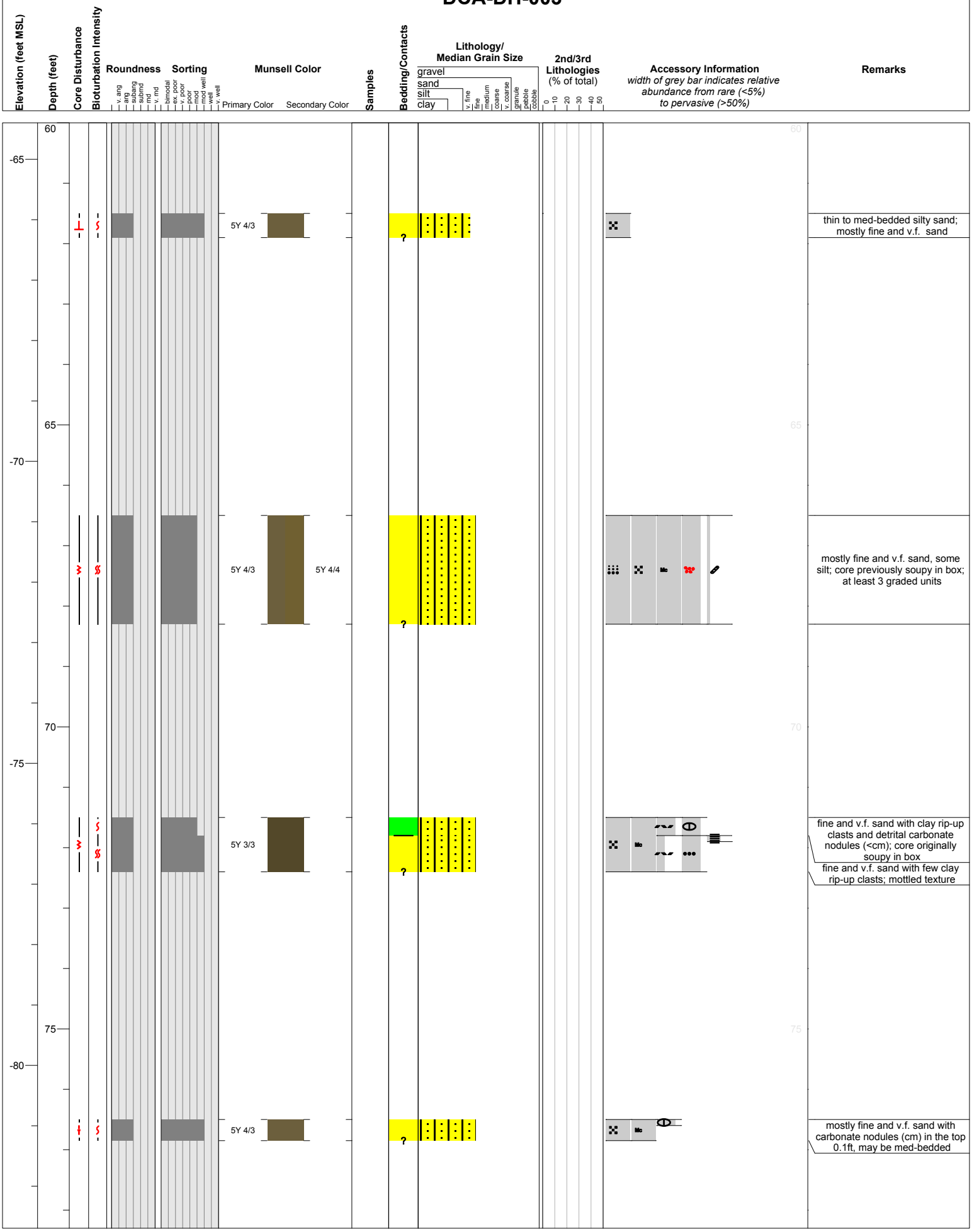
Geologic Logs of Geotechnical Cores From the Subsurface Sacramento-San Joaquin Delta, California – Appendix

By Katherine L. Maier, Daniel J. Ponti, John C. Tinsley, Emma Gatti, and Mark Pagenkopp

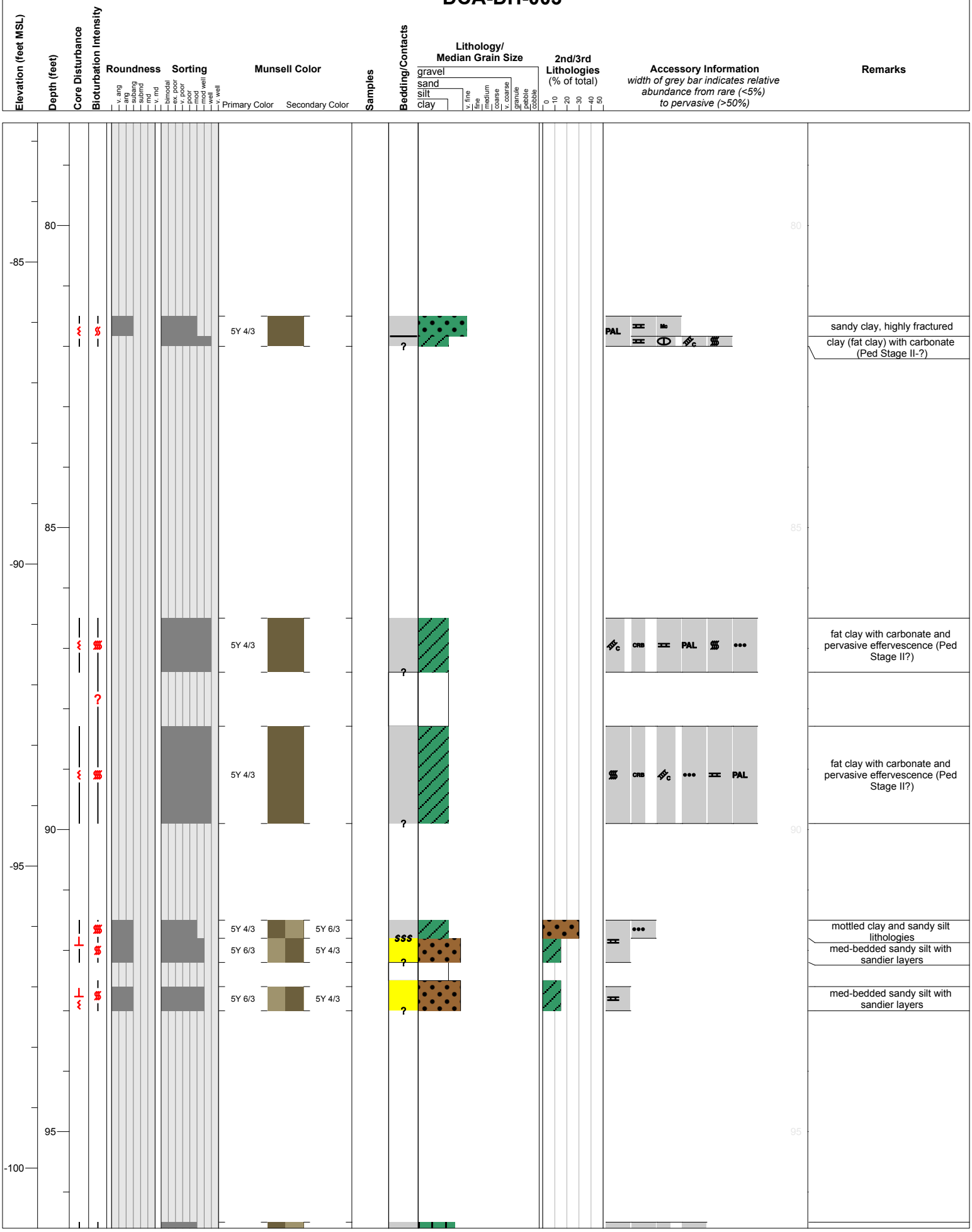
Open-File Report 2014–1127, Appendix

U.S. Department of the Interior
U.S. Geological Survey

DCA-DH-003


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
60
65
70
75
-65
-70
-75
-80
5Y 4/3
5Y 4/3
5Y 4/4
5Y 3/3
5Y 4/3
thin to med-bedded silty sand;
mostly fine and v.f. sand
mostly fine and v.f. sand, some
silt; core previously soupy in box;
at least 3 graded units
fine and v.f. sand with clay rip-up
clasts and detrital carbonate
nodules (<cm); core originally
soupy in box
fine and v.f. sand with few clay
rip-up clasts; mottled texture
mostly fine and v.f. sand with
carbonate nodules (cm) in the top
0.1ft, may be med-bedded

DCA-DH-003


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
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v. poor
poor
mod
mod well
well
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sand
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v. fine
fine
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granule
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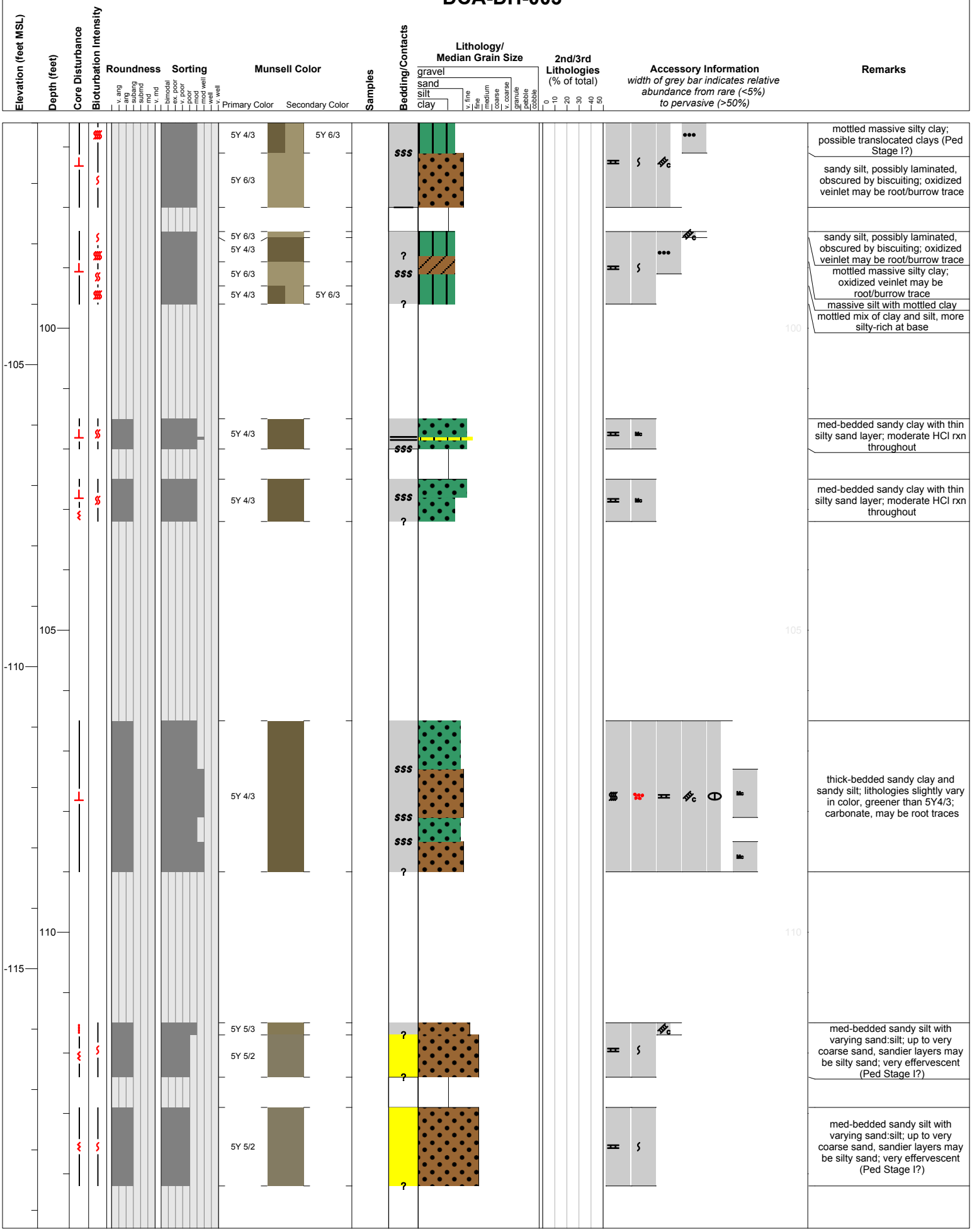
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-85
-90
-95
-100
80
85
90
95
5Y 4/3
5Y 6/3
PAL
Mc
CRB
sandy clay, highly fractured
clay (fat clay) with carbonate
(Ped Stage II-?)
fat clay with carbonate and
pervasive effervescence (Ped
Stage II?)
fat clay with carbonate and
pervasive effervescence (Ped
Stage II?)
mottled clay and sandy silt
lithologies
med-bedded sandy silt with
sandier layers
med-bedded sandy silt with
sandier layers

DCA-DH-003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v. ang
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subang
subrnd
rnd
v. rnd
Sorting
bimodal
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poor
v. poor
poor
mod
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well
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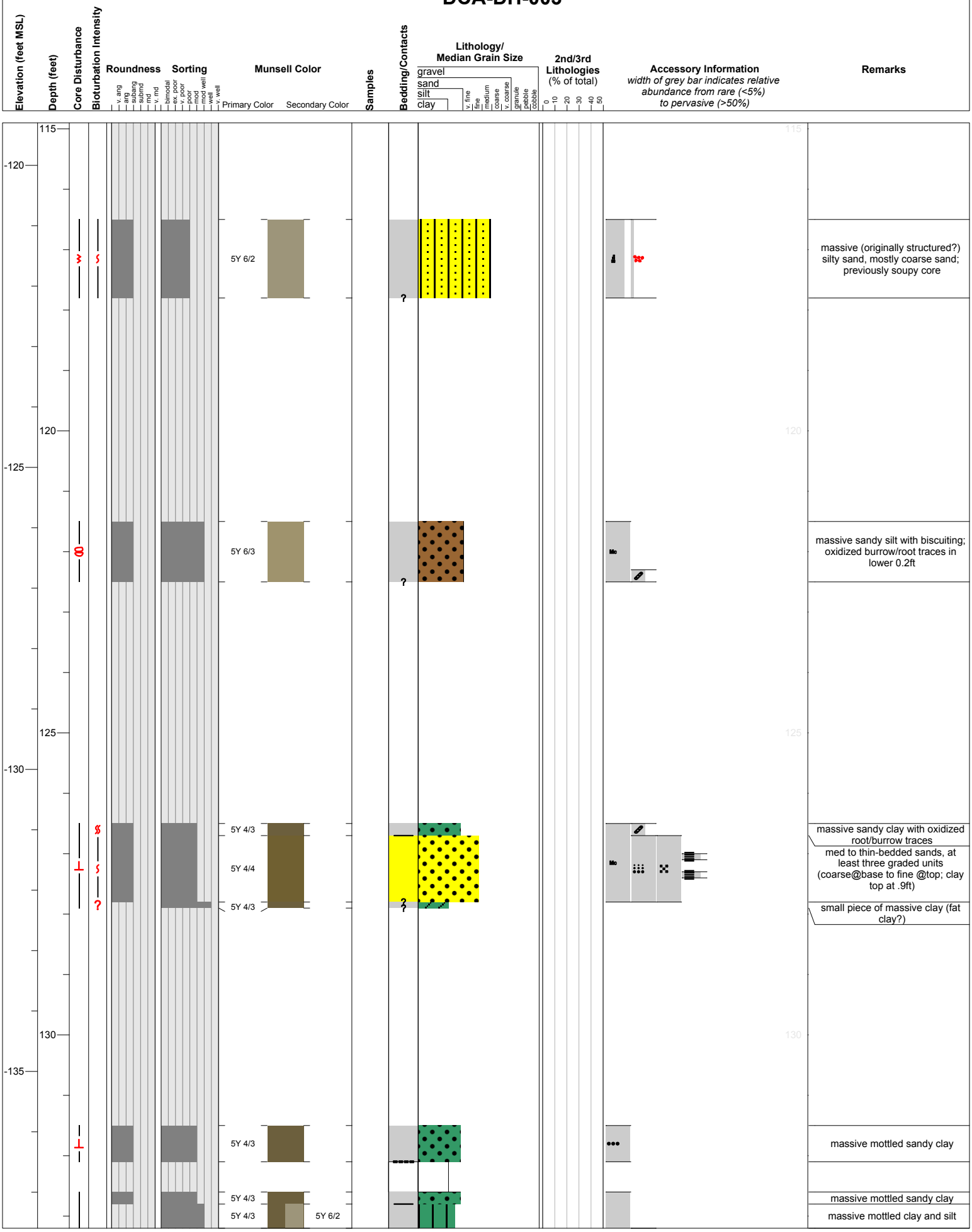
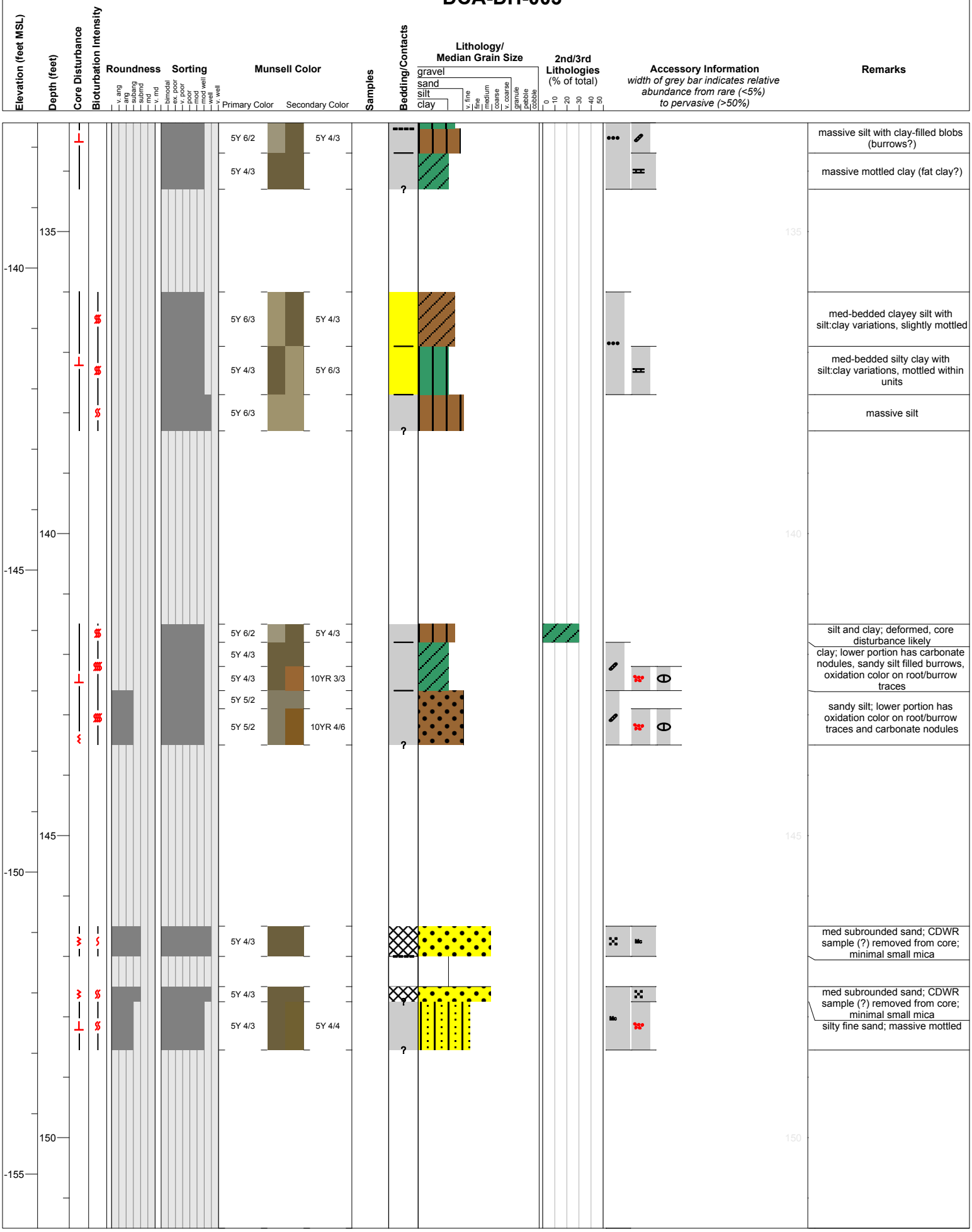
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative abundance from rare (<5%) to pervasive (>50%)
Remarks
-105
-110
-115
100
105
110
5Y 4/3
5Y 6/3
5Y 5/3
5Y 5/2
mottled massive silty clay; possible translocated clays (Ped Stage I?)
sandy silt, possibly laminated, obscured by biscuiting; oxidized veinlet may be root/burrow trace
sandy silt, possibly laminated, obscured by biscuiting; oxidized veinlet may be root/burrow trace
mottled massive silty clay; oxidized veinlet may be root/burrow trace
massive silt with mottled clay
mottled mix of clay and silt, more silty-rich at base
med-bedded sandy clay with thin silty sand layer; moderate HCl rxn throughout
med-bedded sandy clay with thin silty sand layer; moderate HCl rxn throughout
thick-bedded sandy clay and sandy silt; lithologies slightly vary in color, greener than 5Y4/3; carbonate, may be root traces
med-bedded sandy silt with varying sand:silt; up to very coarse sand, sandier layers may be silty sand; very effervescent (Ped Stage I?)
med-bedded sandy silt with varying sand:silt; up to very coarse sand, sandier layers may be silty sand; very effervescent (Ped Stage I?)

DCA-DH-003


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
115
120
125
130
-120
-125
-130
-135
5Y 6/2
5Y 6/3
5Y 4/3
5Y 4/4
5Y 4/3
5Y 4/3
5Y 4/3
5Y 4/3
5Y 6/2
massive (originally structured?) silty sand, mostly coarse sand; previously soupy core
massive sandy silt with biscuiting; oxidized burrow/root traces in lower 0.2ft
massive sandy clay with oxidized root/burrow traces
med to thin-bedded sands, at least three graded units (coarse@base to fine @top; clay top at .9ft)
small piece of massive clay (fat clay?)
massive mottled sandy clay
massive mottled sandy clay
massive mottled clay and silt

DCA-DH-003


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
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subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
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Median Grain Size
gravel
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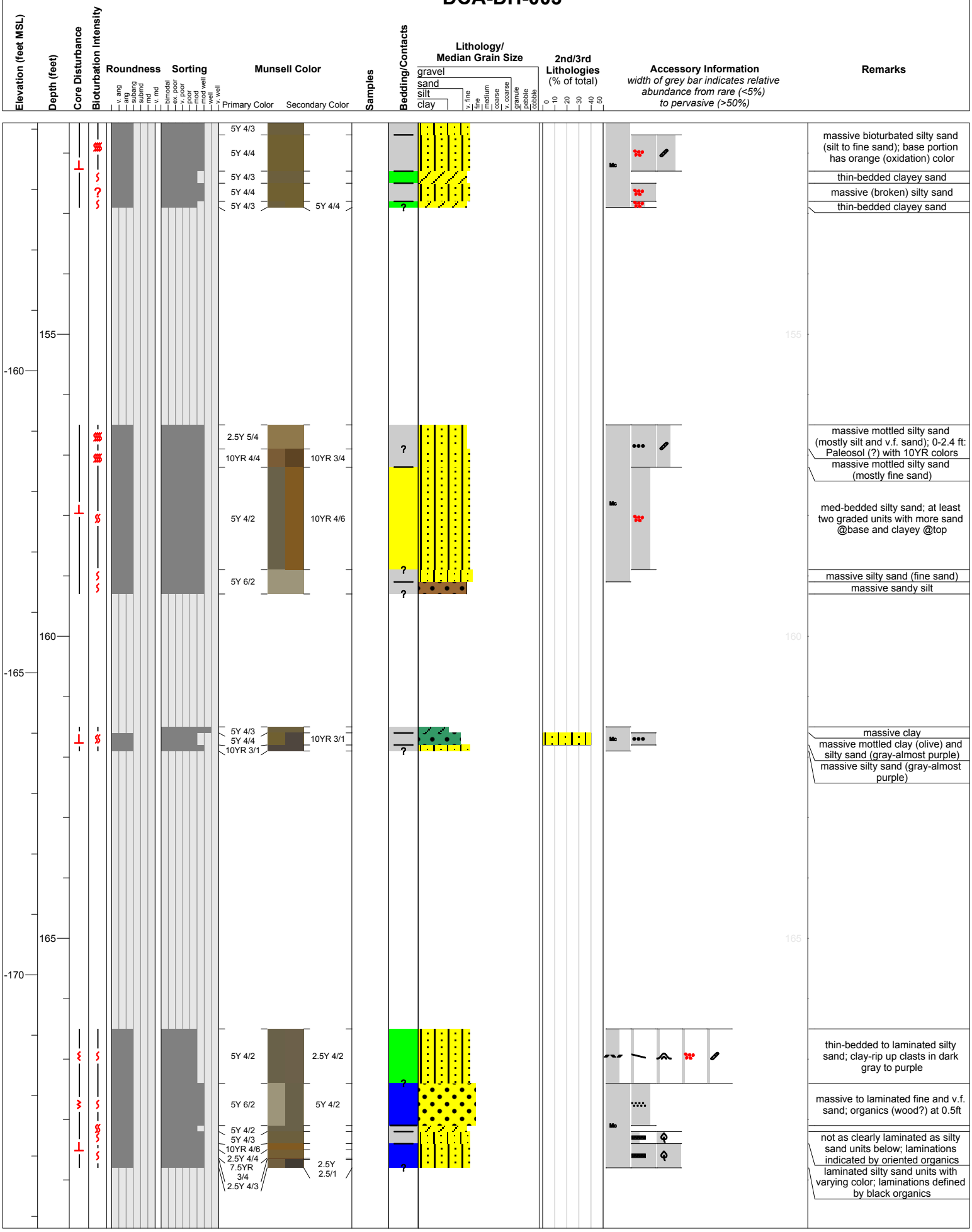
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-140
-145
-150
-155
135
140
145
150
5Y 6/2
5Y 4/3
5Y 4/3
5Y 6/3
5Y 4/3
5Y 6/3
5Y 4/3
5Y 6/3
5Y 6/2
5Y 4/3
5Y 4/3
10YR 3/3
5Y 5/2
5Y 5/2
10YR 4/6
5Y 4/3
5Y 4/3
5Y 4/3
5Y 4/4
Mo
Mo
massive silt with clay-filled blobs (burrows?)
massive mottled clay (fat clay?)
med-bedded clayey silt with silt:clay variations, slightly mottled
med-bedded silty clay with silt:clay variations, mottled within units
massive silt
silt and clay; deformed, core disturbance likely
clay; lower portion has carbonate nodules, sandy silt filled burrows, oxidation color on root/burrow traces
sandy silt; lower portion has oxidation color on root/burrow traces and carbonate nodules
med subrounded sand; CDWR sample (?) removed from core; minimal small mica
med subrounded sand; CDWR sample (?) removed from core; minimal small mica
silty fine sand; massive mottled

DCA-DH-003


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
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Samples
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Median Grain Size
gravel
sand
silt
clay
v. fine
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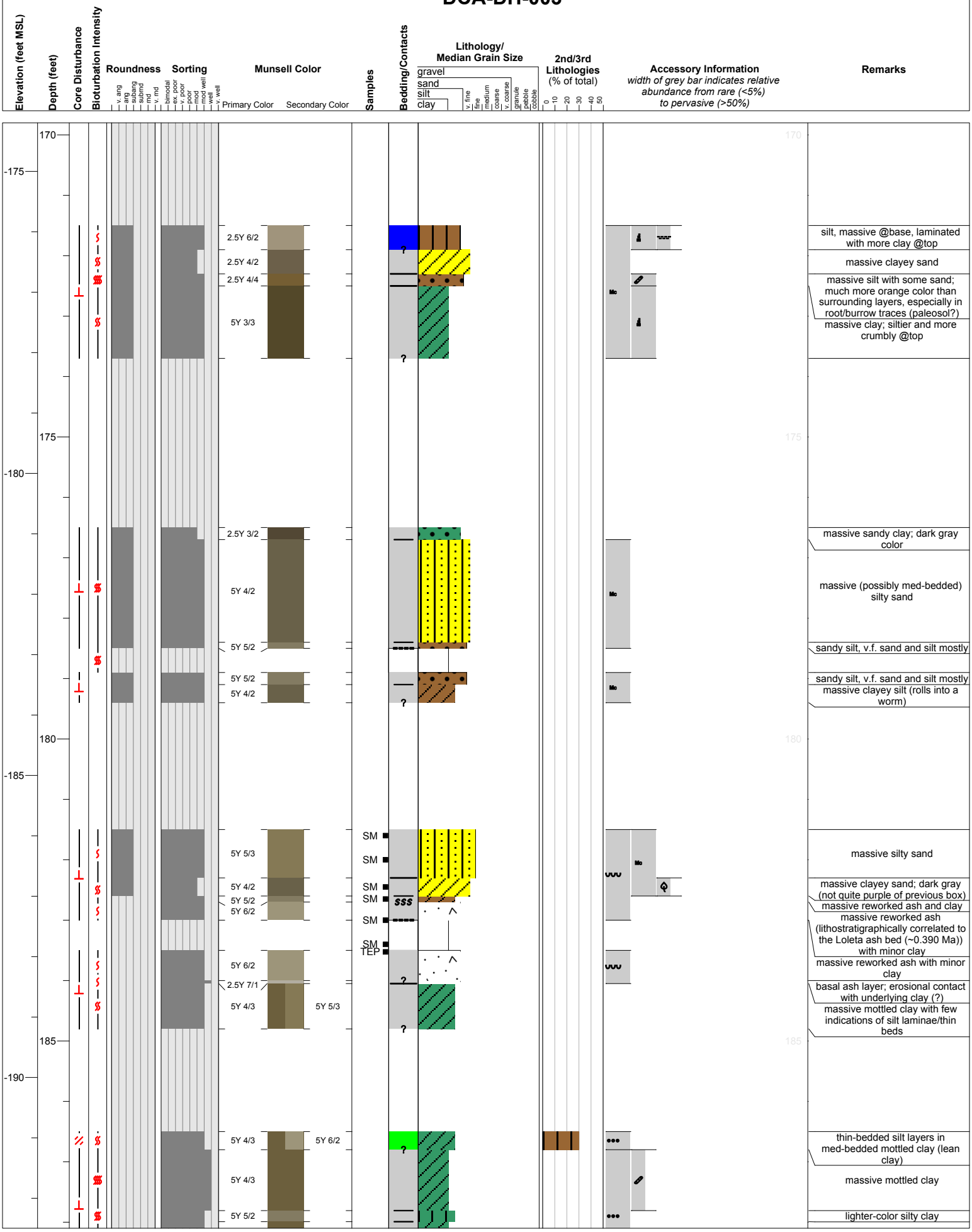
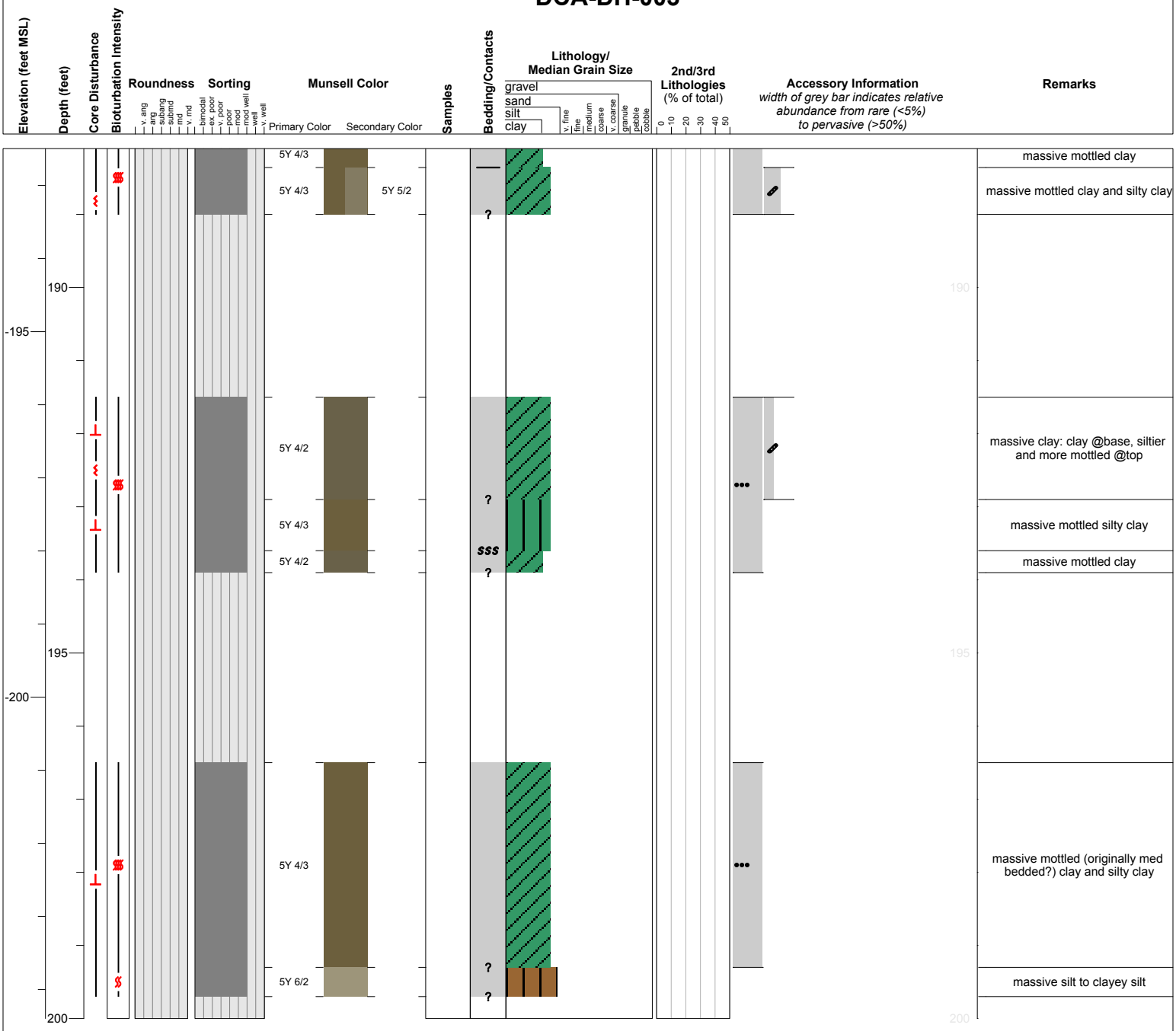
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-160
-165
-170
155
160
165
5Y 4/3
5Y 4/4
5Y 4/3
5Y 4/4
5Y 4/3
5Y 4/4
2.5Y 5/4
10YR 4/4
10YR 3/4
5Y 4/2
10YR 4/6
5Y 6/2
5Y 4/3
5Y 4/4
10YR 3/1
10YR 3/1
5Y 4/2
2.5Y 4/2
5Y 6/2
5Y 4/2
5Y 4/2
5Y 4/3
10YR 4/6
2.5Y 4/4
7.5YR
3/4
2.5Y 4/3
2.5Y
2.5/1
Mc
massive bioturbated silty sand (silt to fine sand); base portion has orange (oxidation) color
thin-bedded clayey sand
massive (broken) silty sand
thin-bedded clayey sand
massive mottled silty sand (mostly silt and v.f. sand); 0-2.4 ft: Paleosol (?) with 10YR colors
massive mottled silty sand (mostly fine sand)
med-bedded silty sand; at least two graded units with more sand @base and clayey @top
massive silty sand (fine sand)
massive sandy silt
massive clay
massive mottled clay (olive) and silty sand (gray-almost purple)
massive silty sand (gray-almost purple)
thin-bedded to laminated silty sand; clay-rip up clasts in dark gray to purple
massive to laminated fine and v.f. sand; organics (wood?) at 0.5ft
not as clearly laminated as silty sand units below; laminations indicated by oriented organics
laminated silty sand units with varying color; laminations defined by black organics

DCA-DH-003


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
v. poor
poor
mod
mod well
well well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative abundance from rare (<5%) to pervasive (>50%)
Remarks
170
175
180
185
-175
-180
-185
-190
2.5Y 6/2
2.5Y 4/2
2.5Y 4/4
5Y 3/3
2.5Y 3/2
5Y 4/2
5Y 5/2
5Y 5/2
5Y 4/2
5Y 5/3
5Y 4/2
5Y 5/2
5Y 6/2
5Y 6/2
2.5Y 7/1
5Y 4/3
5Y 5/3
5Y 4/3
5Y 6/2
5Y 4/3
5Y 5/2
SM
SM
SM
SM
SM
SM
TEP
Mc
silt, massive @base, laminated with more clay @top
massive clayey sand
massive silt with some sand; much more orange color than surrounding layers, especially in root/burrow traces (paleosol?)
massive clay; siltier and more crumbly @top
massive sandy clay; dark gray color
massive (possibly med-bedded) silty sand
sandy silt, v.f. sand and silt mostly
sandy silt, v.f. sand and silt mostly
massive clayey silt (rolls into a worm)
massive silty sand
massive clayey sand; dark gray (not quite purple of previous box)
massive reworked ash and clay
massive reworked ash (lithostratigraphically correlated to the Loleta ash bed (~0.390 Ma)) with minor clay
massive reworked ash with minor clay
basal ash layer; erosional contact with underlying clay (?)
massive mottled clay with few indications of silt laminae/thin beds
thin-bedded silt layers in med-bedded mottled clay (lean clay)
massive mottled clay
lighter-color silty clay

DCA-DH-003


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
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clay
v. fine
fine
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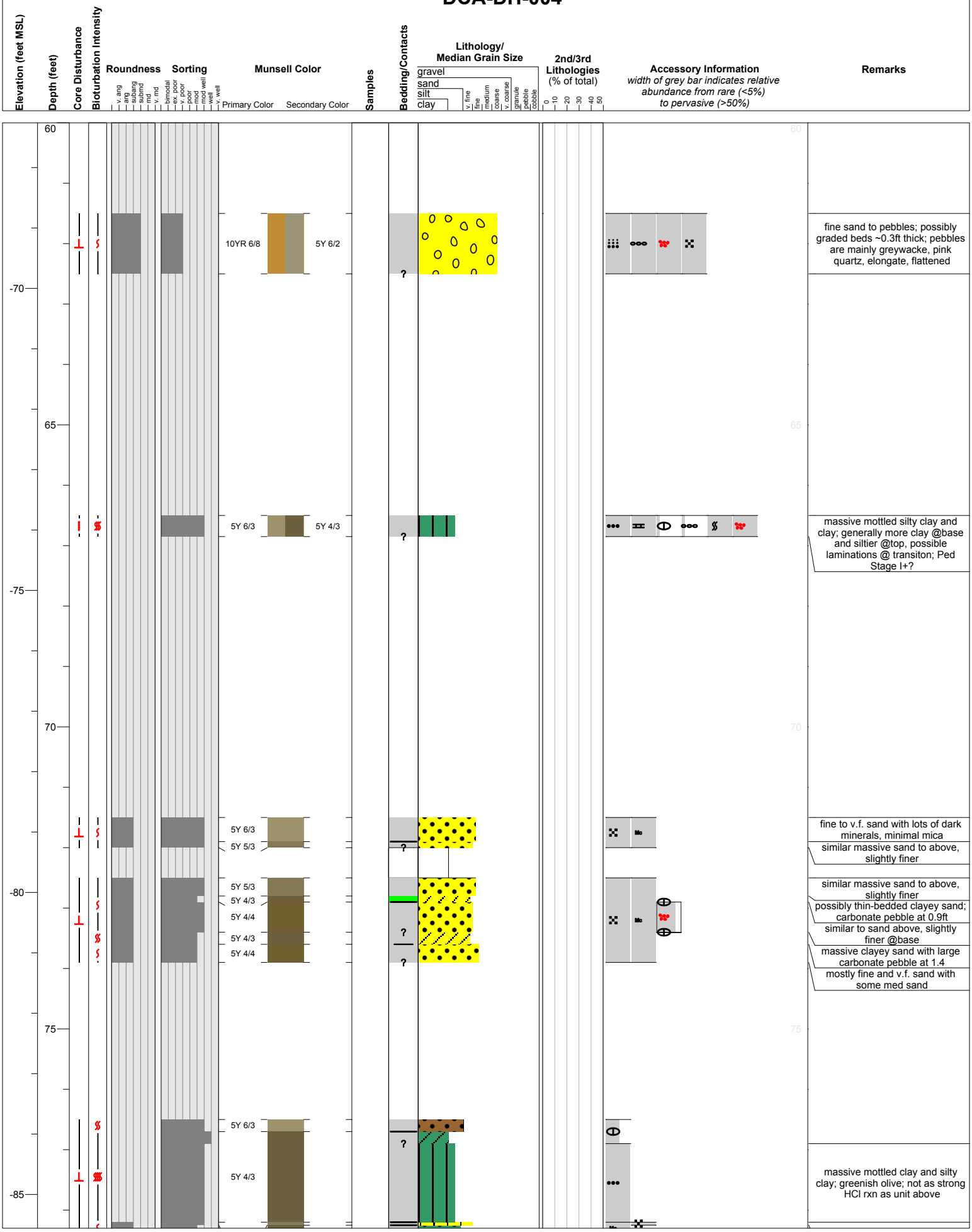
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-195
-200
190
195
200
5Y 4/3
5Y 5/2
5Y 4/2
5Y 6/2
massive mottled clay
massive mottled clay and silty clay
massive clay: clay @base, siltier
and more mottled @top
massive mottled silty clay
massive mottled clay
massive mottled (originally med
bedded?) clay and silty clay
massive silt to clayey silt

DCA-DH-004


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
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Lithologies
(% of total)
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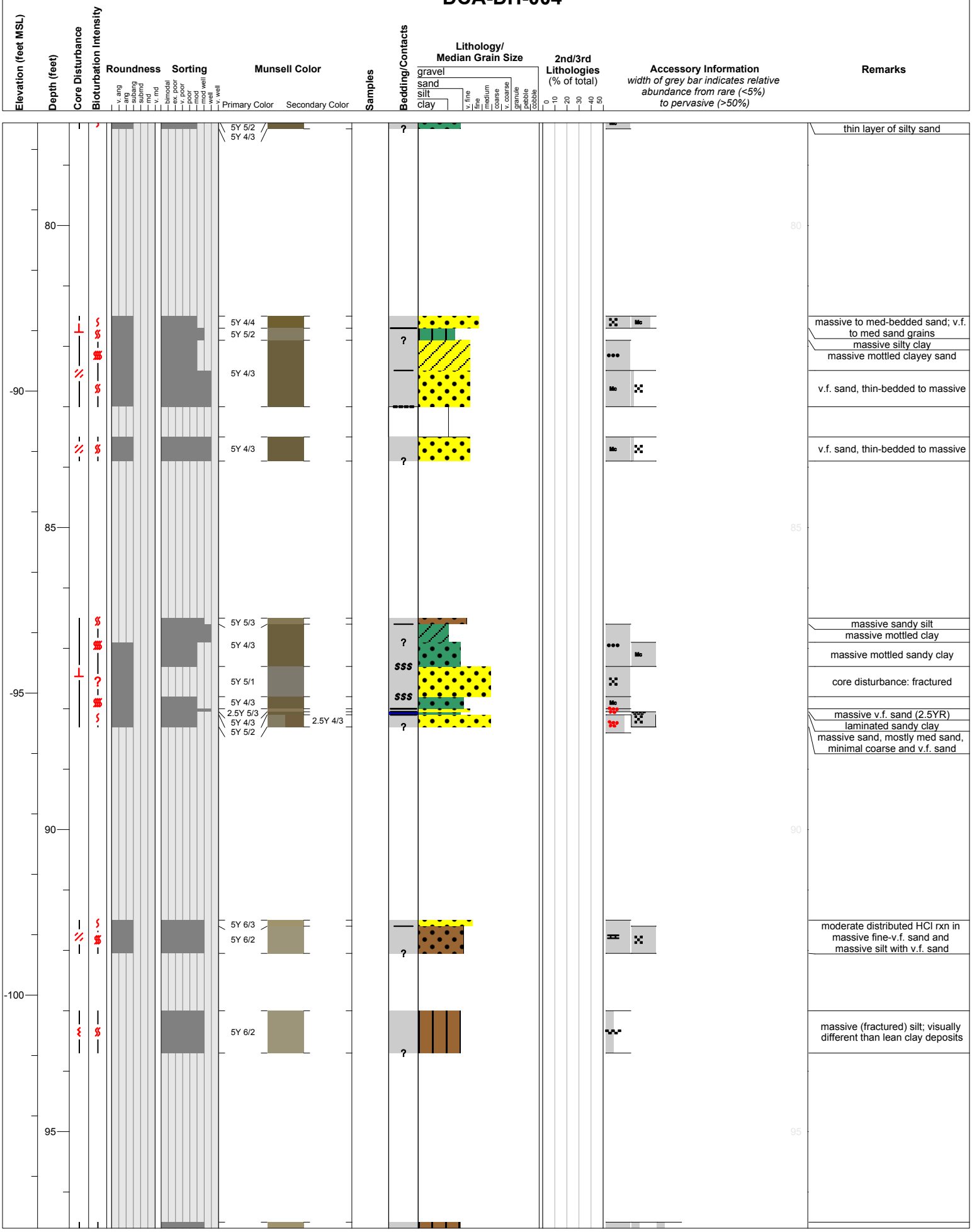
Accessory Information
width of grey bar indicates relative abundance from rare (<5%) to pervasive (>50%)
Remarks
60
65
70
75
-70
-75
-80
-85
10YR 6/8
5Y 6/2
5Y 6/3
5Y 4/3
5Y 6/3
5Y 5/3
5Y 5/3
5Y 4/3
5Y 4/4
5Y 4/3
5Y 4/4
5Y 6/3
5Y 4/3
fine sand to pebbles; possibly graded beds ~0.3ft thick; pebbles are mainly greywacke, pink quartz, elongate, flattened
massive mottled silty clay and clay; generally more clay @base and siltier @top, possible laminations @ transiton; Ped Stage I+?
fine to v.f. sand with lots of dark minerals, minimal mica
similar massive sand to above, slightly finer
similar massive sand to above, slightly finer
possibly thin-bedded clayey sand; carbonate pebble at 0.9ft
similar to sand above, slightly finer @base
massive clayey sand with large carbonate pebble at 1.4
mostly fine and v.f. sand with some med sand
massive mottled clay and silty clay; greenish olive; not as strong HCl rxn as unit above

DCA-DH-004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v. ang
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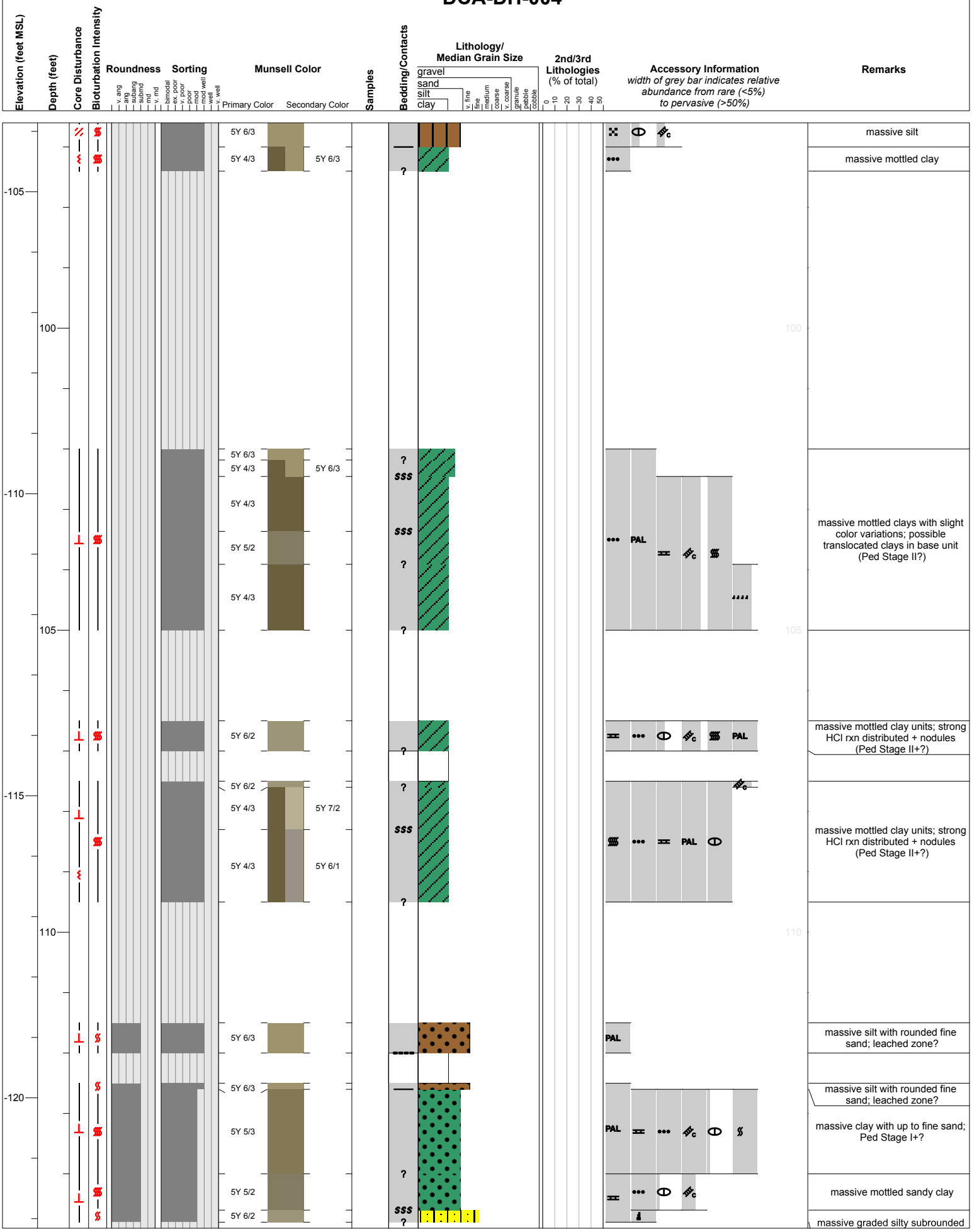
5Y 4/3
5Y 4/3
5Y 5/3
5Y 4/3
5Y 5/1
5Y 4/3
2.5Y 5/3
5Y 4/3
5Y 5/2
2.5Y 4/3
5Y 6/3
5Y 6/2
5Y 6/2
thin layer of silty sand
massive to med-bedded sand; v.f. to med sand grains
massive silty clay
massive mottled clayey sand
v.f. sand, thin-bedded to massive
v.f. sand, thin-bedded to massive
massive sandy silt
massive mottled clay
massive mottled sandy clay
core disturbance: fractured
massive v.f. sand (2.5YR)
laminated sandy clay
massive sand, mostly med sand, minimal coarse and v.f. sand
moderate distributed HCl rxn in massive fine-v.f. sand and massive silt with v.f. sand
massive (fractured) silt; visually different than lean clay deposits

DCA-DH-004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105
-115
110
-120
5Y 6/3
5Y 4/3
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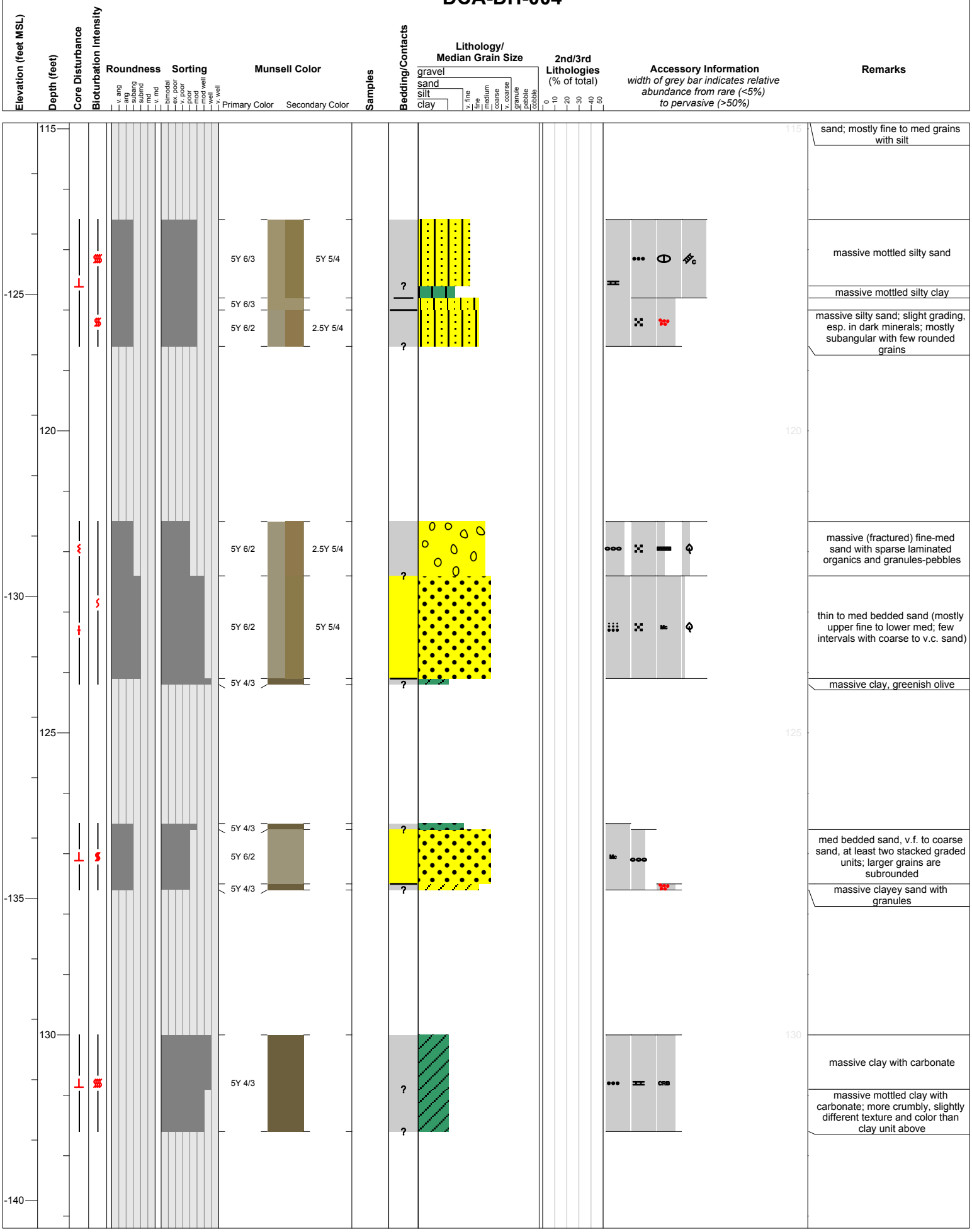
5Y 6/3
5Y 4/3
5Y 6/3
5Y 4/3
5Y 5/2
5Y 4/3
5Y 6/2
5Y 6/2
5Y 4/3
5Y 7/2
5Y 4/3
5Y 6/1
5Y 6/3
5Y 6/3
5Y 5/3
5Y 5/2
5Y 6/2
PAL
massive silt
massive mottled clay
massive mottled clays with slight color variations; possible translocated clays in base unit (Ped Stage II?)
massive mottled clay units; strong HCl rxn distributed + nodules (Ped Stage II+?)
massive mottled clay units; strong HCl rxn distributed + nodules (Ped Stage II+?)
massive silt with rounded fine sand; leached zone?
massive silt with rounded fine sand; leached zone?
massive clay with up to fine sand; Ped Stage I+?
massive mottled sandy clay
massive graded silty subrounded

DCA-DH-004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Bioturbation Intensity
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v. ang
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subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
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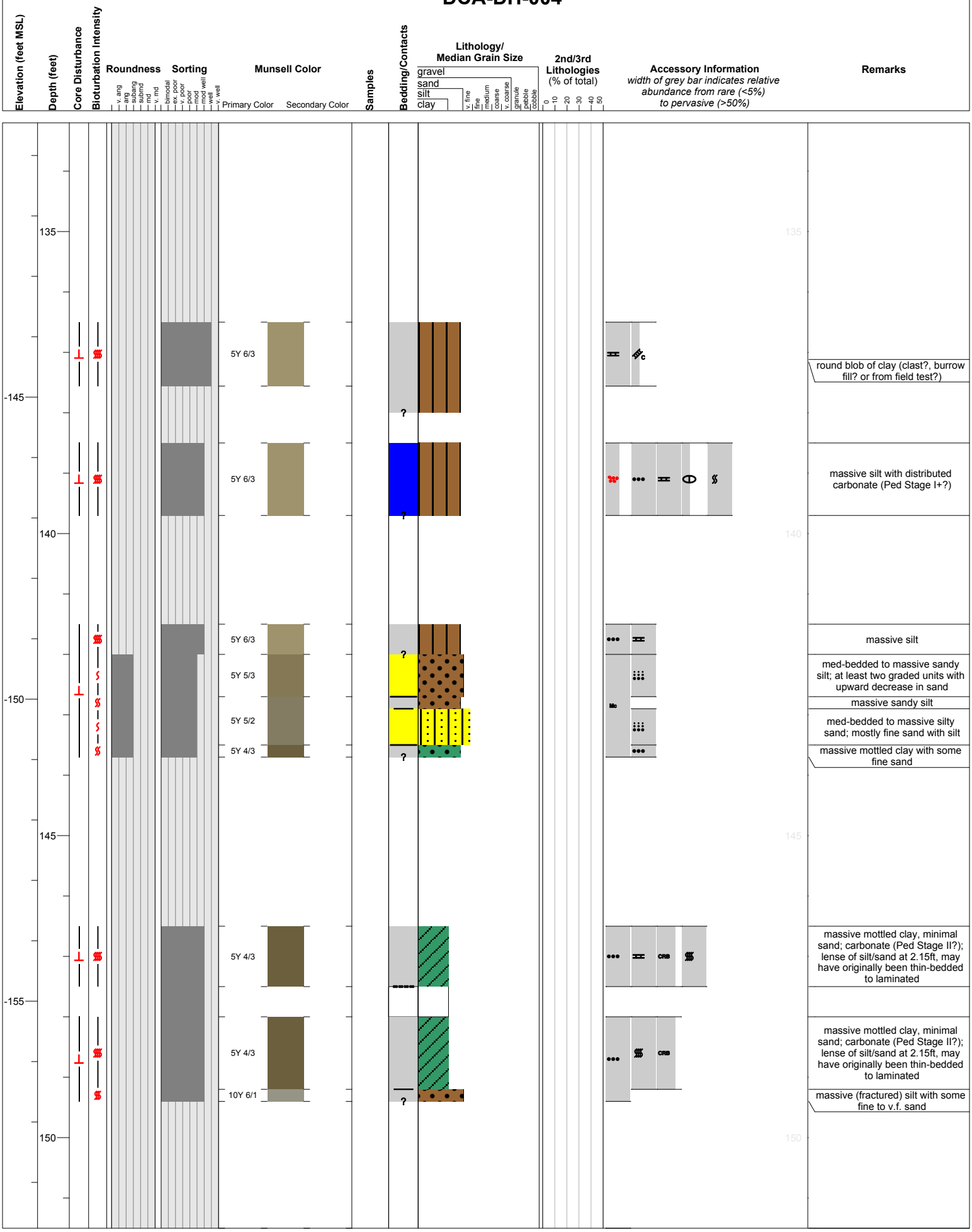
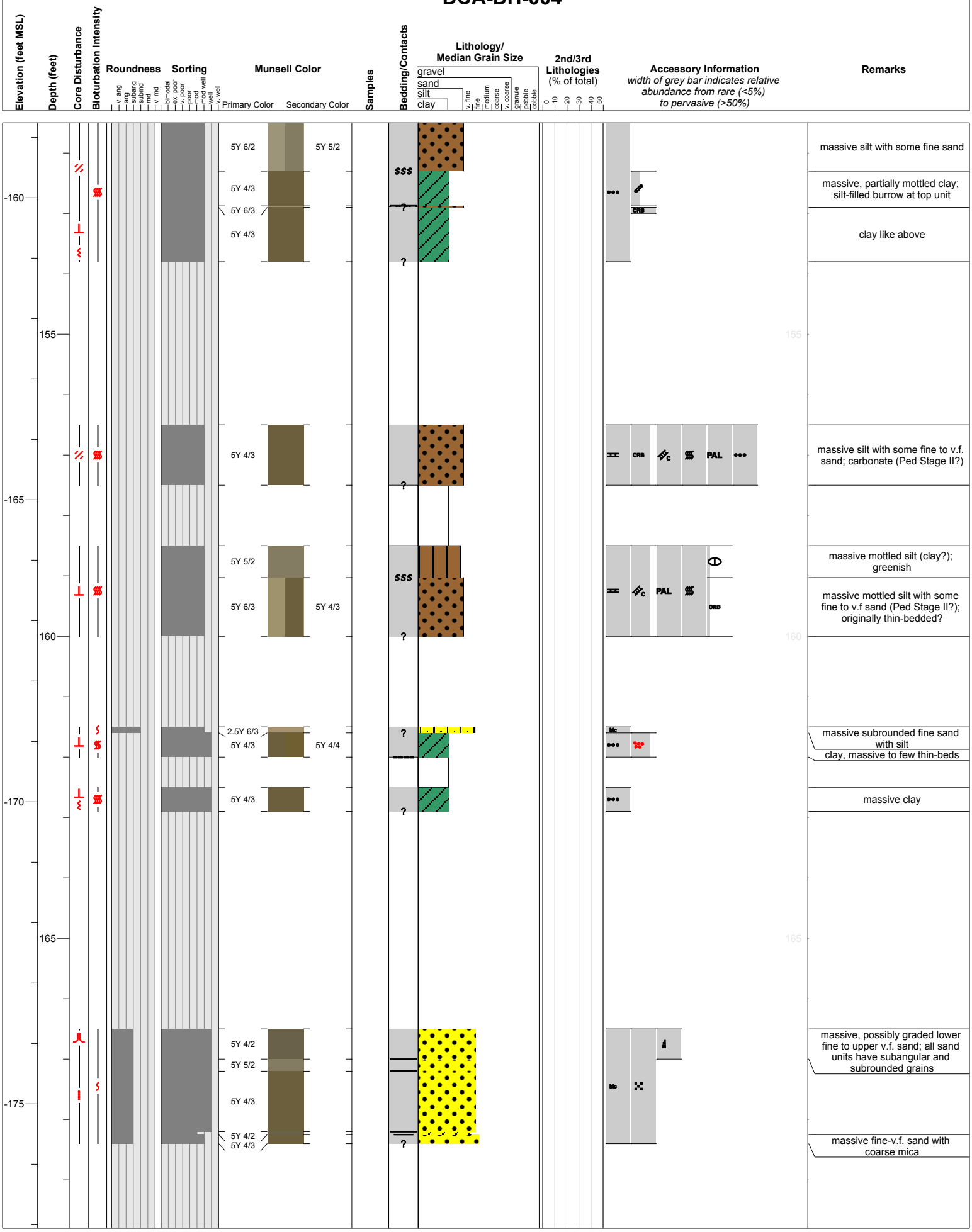
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative abundance from rare (<5%) to pervasive (>50%)
Remarks
115
-125
120
-130
125
-135
130
-140
5Y 6/3
5Y 5/4
5Y 6/3
5Y 6/2
2.5Y 5/4
5Y 6/2
2.5Y 5/4
5Y 6/2
5Y 5/4
5Y 4/3
5Y 4/3
5Y 6/2
5Y 4/3
5Y 4/3
sand; mostly fine to med grains with silt
massive mottled silty sand
massive mottled silty clay
massive silty sand; slight grading, esp. in dark minerals; mostly subangular with few rounded grains
massive (fractured) fine-med sand with sparse laminated organics and granules-pebbles
thin to med bedded sand (mostly upper fine to lower med; few intervals with coarse to v.c. sand)
massive clay, greenish olive
med bedded sand, v.f. to coarse sand, at least two stacked graded units; larger grains are subrounded
massive clayey sand with granules
massive clay with carbonate
massive mottled clay with carbonate; more crumbly, slightly different texture and color than clay unit above

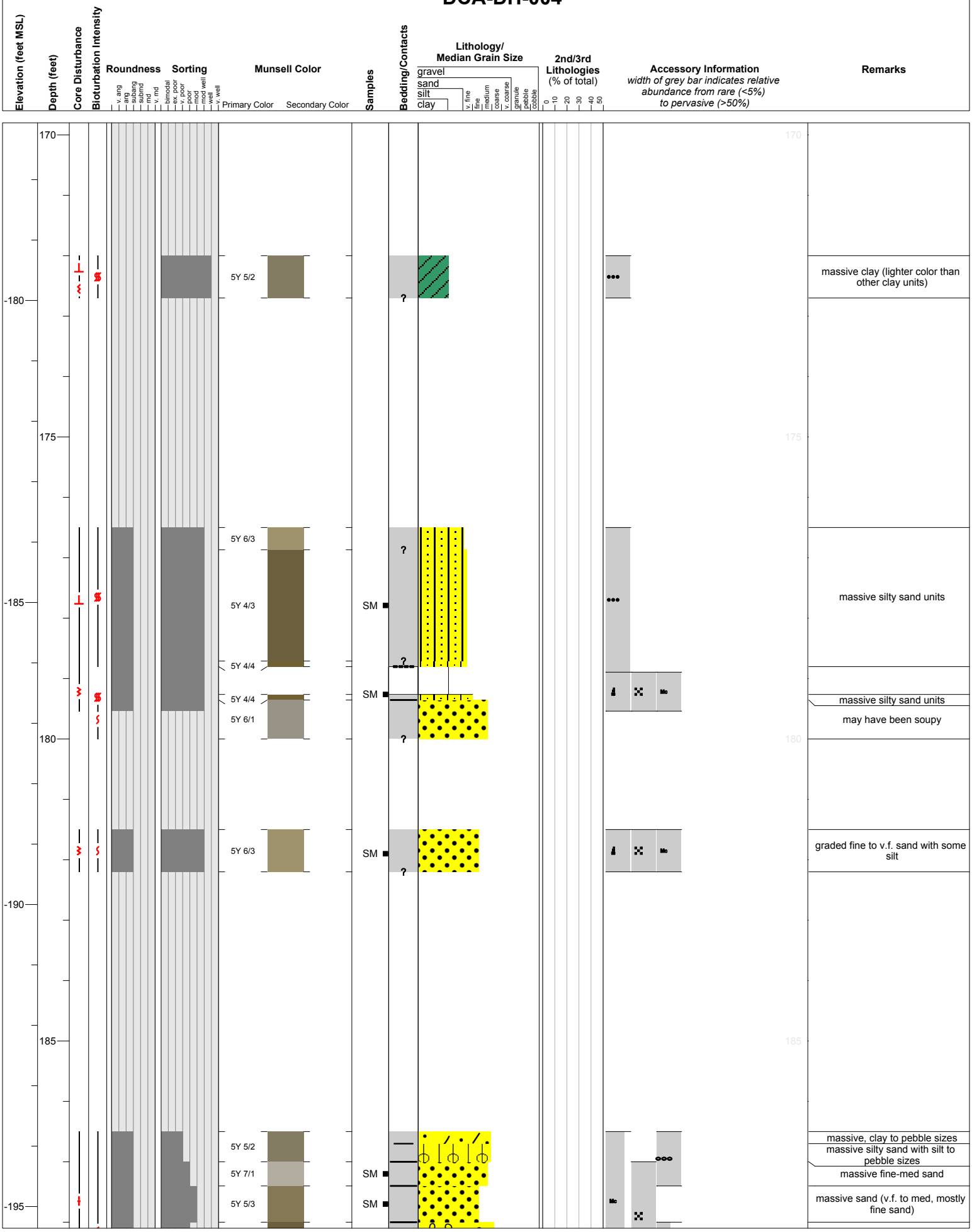
DCA-DH-004


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
135
-145
140
-150
145
-155
150
5Y 6/3
5Y 6/3
5Y 6/3
5Y 5/3
5Y 5/2
5Y 4/3
5Y 4/3
5Y 4/3
10Y 6/1
round blob of clay (clast?, burrow fill? or from field test?)
massive silt with distributed carbonate (Ped Stage I+?)
massive silt
med-bedded to massive sandy silt; at least two graded units with upward decrease in sand
massive sandy silt
med-bedded to massive silty sand; mostly fine sand with silt
massive mottled clay with some fine sand
massive mottled clay, minimal sand; carbonate (Ped Stage II?); lense of silt/sand at 2.15ft, may have originally been thin-bedded to laminated
massive mottled clay, minimal sand; carbonate (Ped Stage II?); lense of silt/sand at 2.15ft, may have originally been thin-bedded to laminated
massive (fractured) silt with some fine to v.f. sand

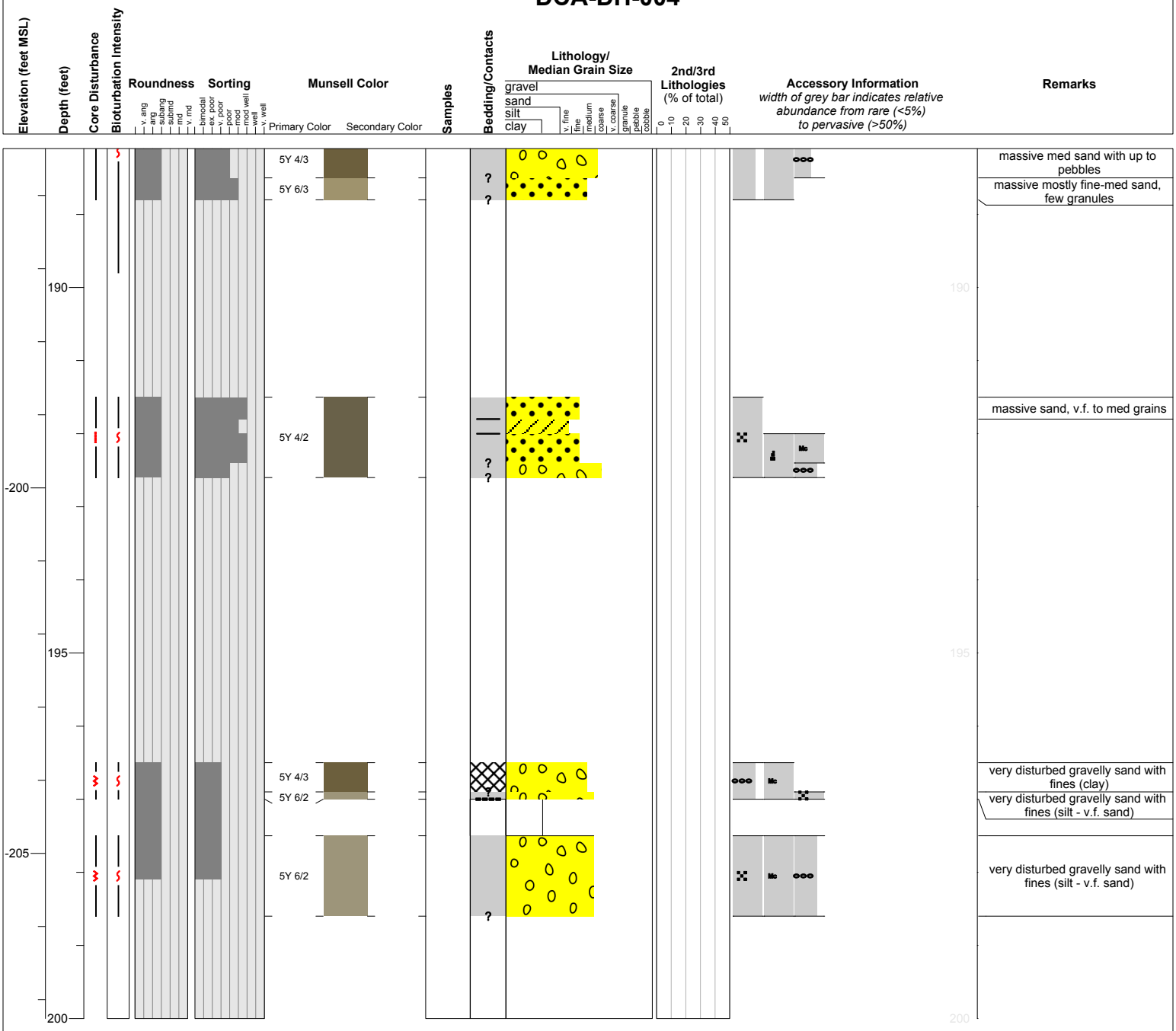
DCA-DH-004


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-160
155
-165
160
-170
165
-175
5Y 6/2
5Y 5/2
5Y 4/3
5Y 6/3
5Y 4/3
5Y 4/3
5Y 5/2
5Y 6/3
5Y 4/3
2.5Y 6/3
5Y 4/3
5Y 4/4
5Y 4/3
5Y 4/2
5Y 5/2
5Y 4/3
5Y 4/2
5Y 4/3
SSS
?
CRB
PAL
Mc
massive silt with some fine sand
massive, partially mottled clay; silt-filled burrow at top unit
clay like above
massive silt with some fine to v.f. sand; carbonate (Ped Stage II?)
massive mottled silt (clay?); greenish
massive mottled silt with some fine to v.f sand (Ped Stage II?); originally thin-bedded?
massive subrounded fine sand with silt
clay, massive to few thin-beds
massive clay
massive, possibly graded lower fine to upper v.f. sand; all sand units have subangular and subrounded grains
massive fine-v.f. sand with coarse mica

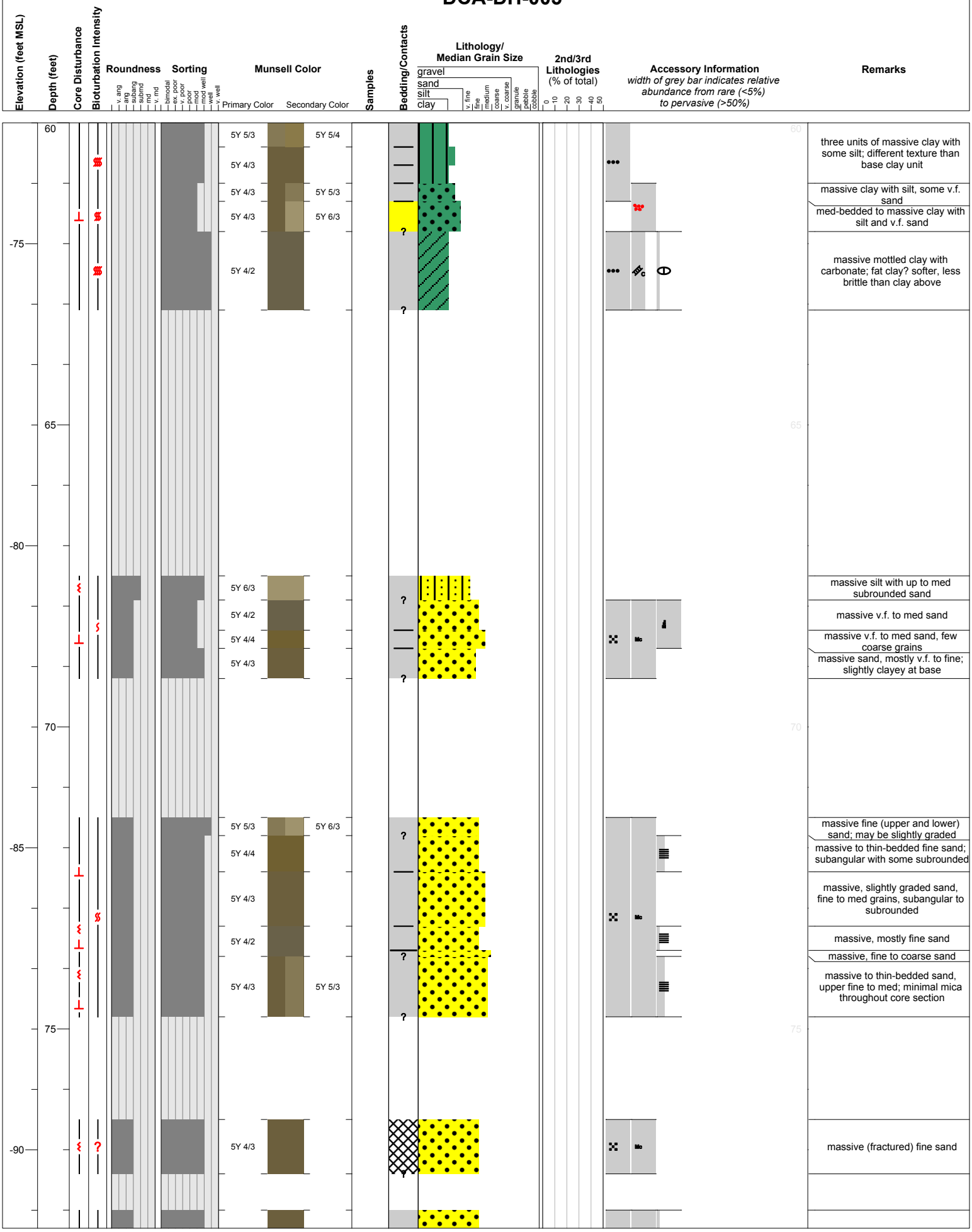
DCA-DH-004


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
170
175
180
185
-180
-185
-190
-195
5Y 5/2
5Y 6/3
5Y 4/3
5Y 4/4
5Y 4/4
5Y 6/1
5Y 6/3
5Y 5/2
5Y 7/1
5Y 5/3
SM
SM
SM
SM
SM
Mc
Mc
massive clay (lighter color than other clay units)
massive silty sand units
massive silty sand units
may have been soupy
graded fine to v.f. sand with some silt
massive, clay to pebble sizes
massive silty sand with silt to pebble sizes
massive fine-med sand
massive sand (v.f. to med, mostly fine sand)

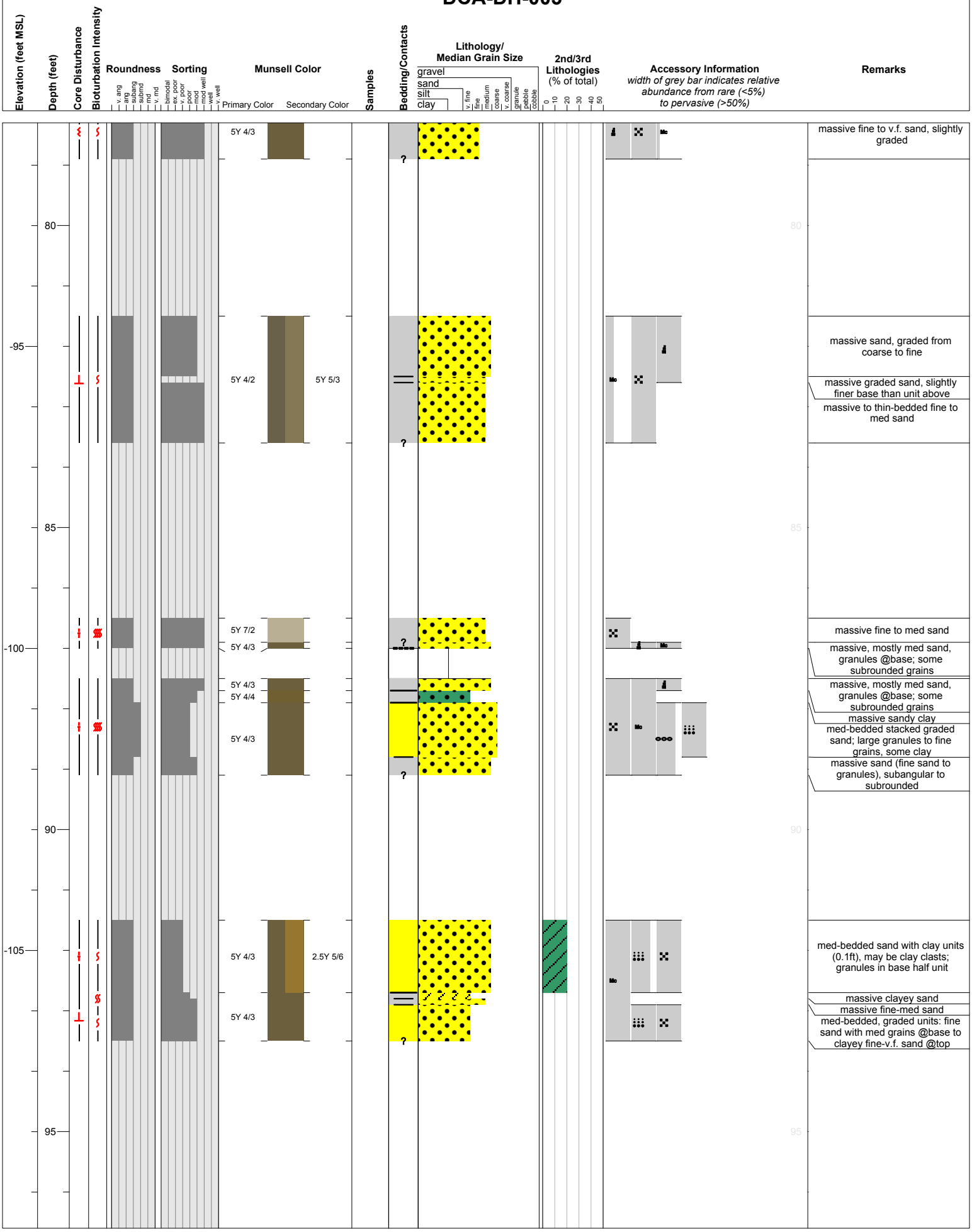
DCA-DH-004


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
190
-200
195
-205
200
5Y 4/3
5Y 6/3
5Y 4/2
5Y 4/3
5Y 6/2
5Y 6/2
massive med sand with up to pebbles
massive mostly fine-med sand, few granules
massive sand, v.f. to med grains
very disturbed gravelly sand with fines (clay)
very disturbed gravelly sand with fines (silt - v.f. sand)
very disturbed gravelly sand with fines (silt - v.f. sand)

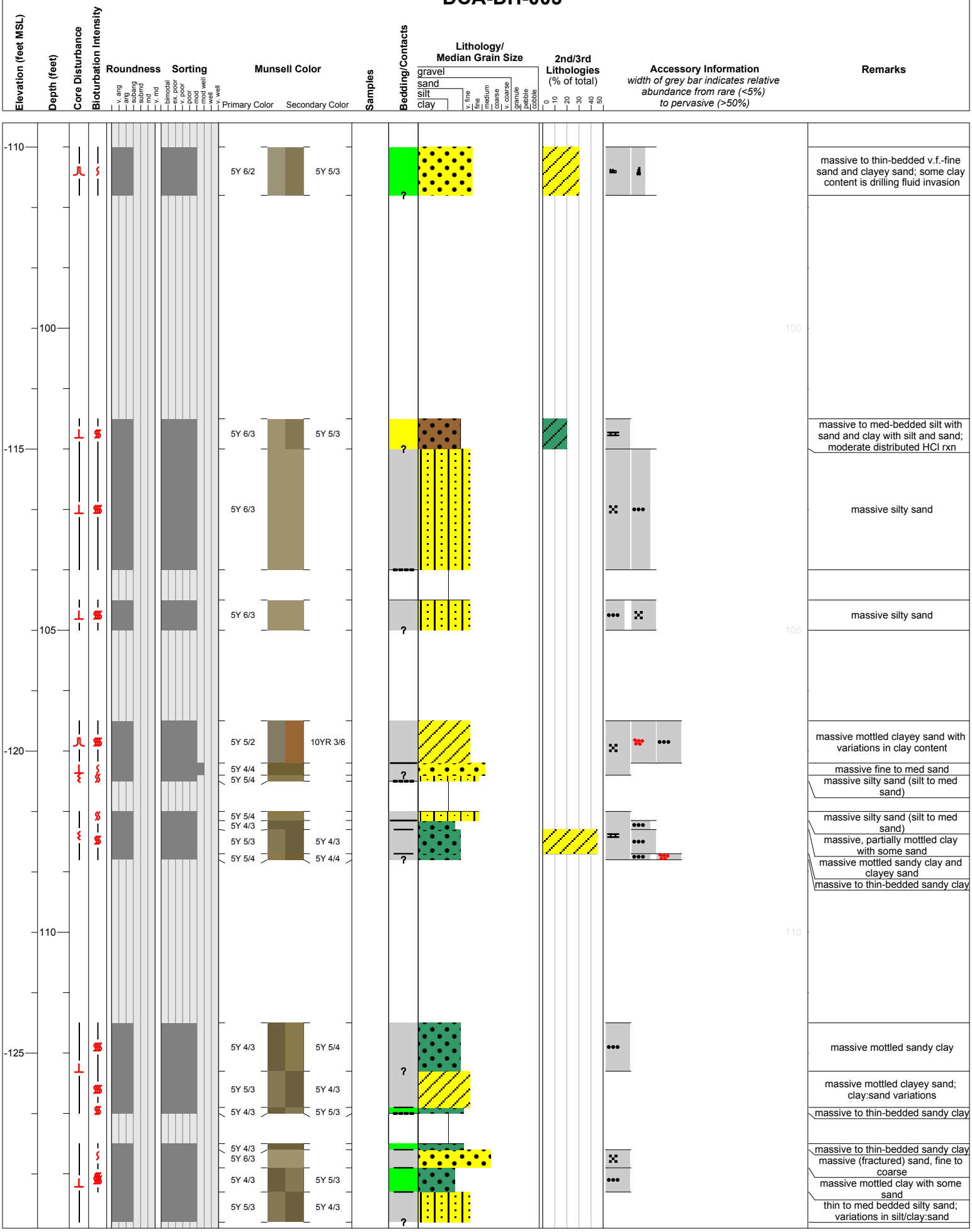
DCA-DH-005


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative abundance from rare (<5%) to pervasive (>50%)
Remarks
60
65
70
75
-75
-80
-85
-90
5Y 5/3
5Y 5/4
5Y 4/3
5Y 4/3
5Y 5/3
5Y 4/3
5Y 6/3
5Y 4/2
5Y 6/3
5Y 4/2
5Y 4/4
5Y 4/3
5Y 5/3
5Y 6/3
5Y 4/4
5Y 4/3
5Y 4/2
5Y 5/3
5Y 4/3
5Y 4/3
three units of massive clay with some silt; different texture than base clay unit
massive clay with silt, some v.f. sand
med-bedded to massive clay with silt and v.f. sand
massive mottled clay with carbonate; fat clay? softer, less brittle than clay above
massive silt with up to med subrounded sand
massive v.f. to med sand
massive v.f. to med sand, few coarse grains
massive sand, mostly v.f. to fine; slightly clayey at base
massive fine (upper and lower) sand; may be slightly graded
massive to thin-bedded fine sand; subangular with some subrounded
massive, slightly graded sand, fine to med grains, subangular to subrounded
massive, mostly fine sand
massive, fine to coarse sand
massive to thin-bedded sand, upper fine to med; minimal mica throughout core section
massive (fractured) fine sand

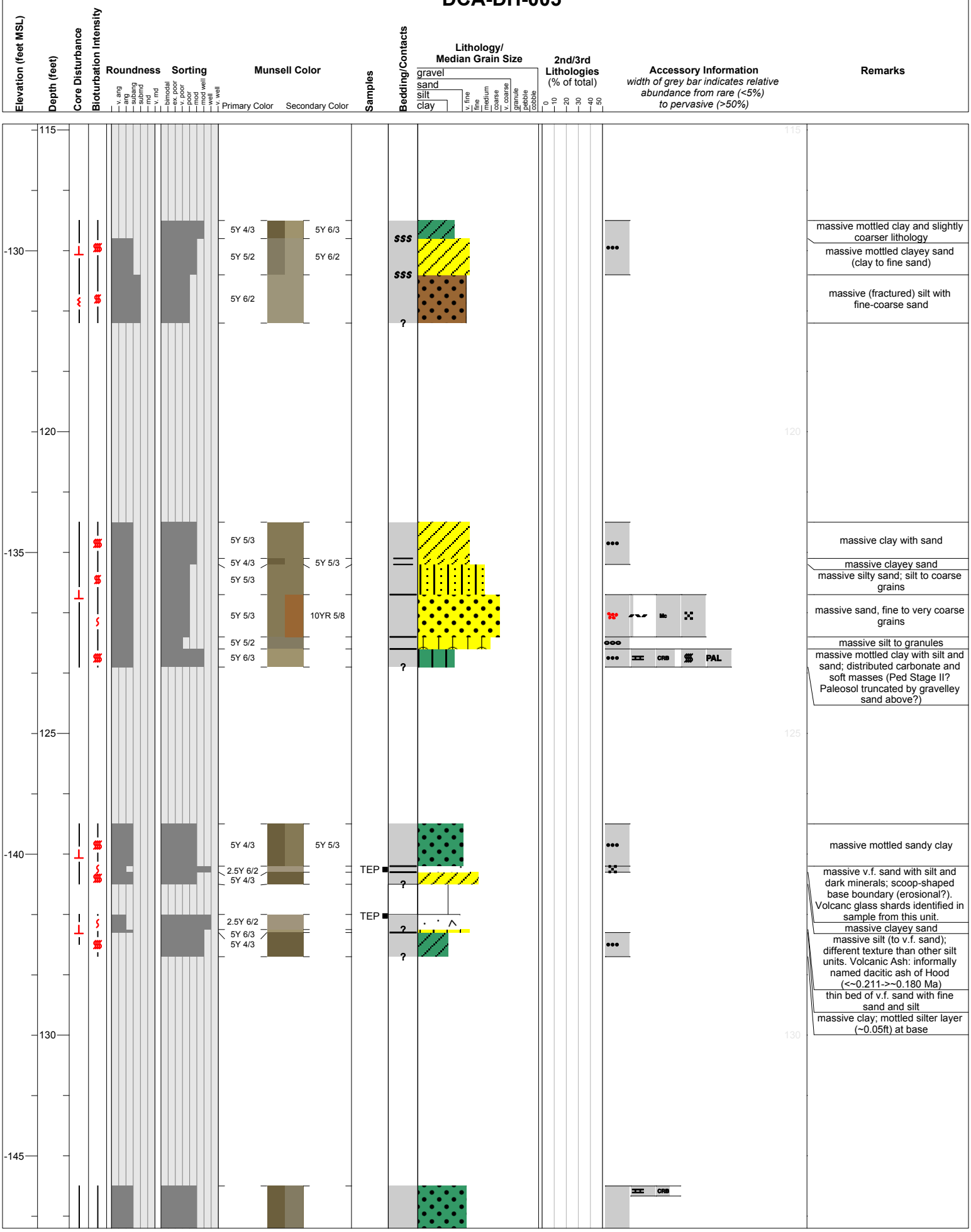
DCA-DH-005


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
80
-95
85
-100
90
-105
95
5Y 4/3
5Y 4/2
5Y 5/3
5Y 7/2
5Y 4/3
5Y 4/3
5Y 4/4
5Y 4/3
5Y 4/3
2.5Y 5/6
5Y 4/3
massive fine to v.f. sand, slightly graded
massive sand, graded from coarse to fine
massive graded sand, slightly finer base than unit above
massive to thin-bedded fine to med sand
massive fine to med sand
massive, mostly med sand, granules @base; some subrounded grains
massive, mostly med sand, granules @base; some subrounded grains
massive sandy clay
med-bedded stacked graded sand; large granules to fine grains, some clay
massive sand (fine sand to granules), subangular to subrounded
med-bedded sand with clay units (0.1ft), may be clay clasts; granules in base half unit
massive clayey sand
massive fine-med sand
med-bedded, graded units: fine sand with med grains @base to clayey fine-v.f. sand @top

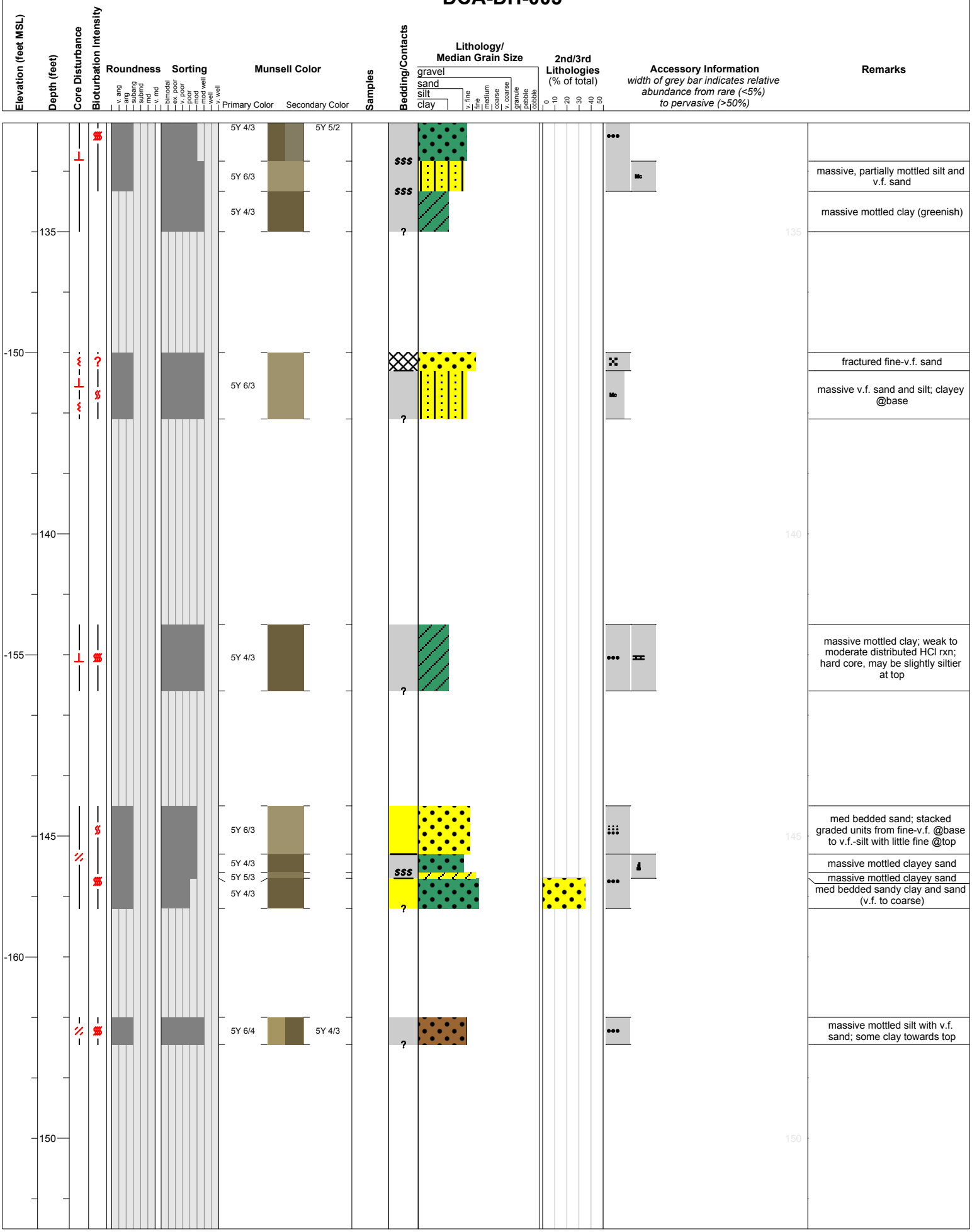
DCA-DH-005


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative abundance from rare (<5%) to pervasive (>50%)
Remarks
-110
100
-115
105
-120
110
-125
5Y 6/2
5Y 5/3
5Y 6/3
5Y 5/3
5Y 6/3
5Y 6/3
5Y 5/2
10YR 3/6
5Y 4/4
5Y 5/4
5Y 5/4
5Y 4/3
5Y 5/3
5Y 4/3
5Y 5/4
5Y 4/4
5Y 4/3
5Y 5/4
5Y 5/3
5Y 4/3
5Y 5/3
5Y 4/3
5Y 6/3
5Y 4/3
5Y 5/3
5Y 5/3
5Y 4/3
massive to thin-bedded v.f.-fine sand and clayey sand; some clay content is drilling fluid invasion
massive to med-bedded silt with sand and clay with silt and sand; moderate distributed HCl rxn
massive silty sand
massive silty sand
massive mottled clayey sand with variations in clay content
massive fine to med sand
massive silty sand (silt to med sand)
massive silty sand (silt to med sand)
massive, partially mottled clay with some sand
massive mottled sandy clay and clayey sand
massive to thin-bedded sandy clay
massive mottled sandy clay
massive mottled clayey sand; clay:sand variations
massive to thin-bedded sandy clay
massive to thin-bedded sandy clay
massive (fractured) sand, fine to coarse
massive mottled clay with some sand
thin to med bedded silty sand; variations in silt/clay:sand

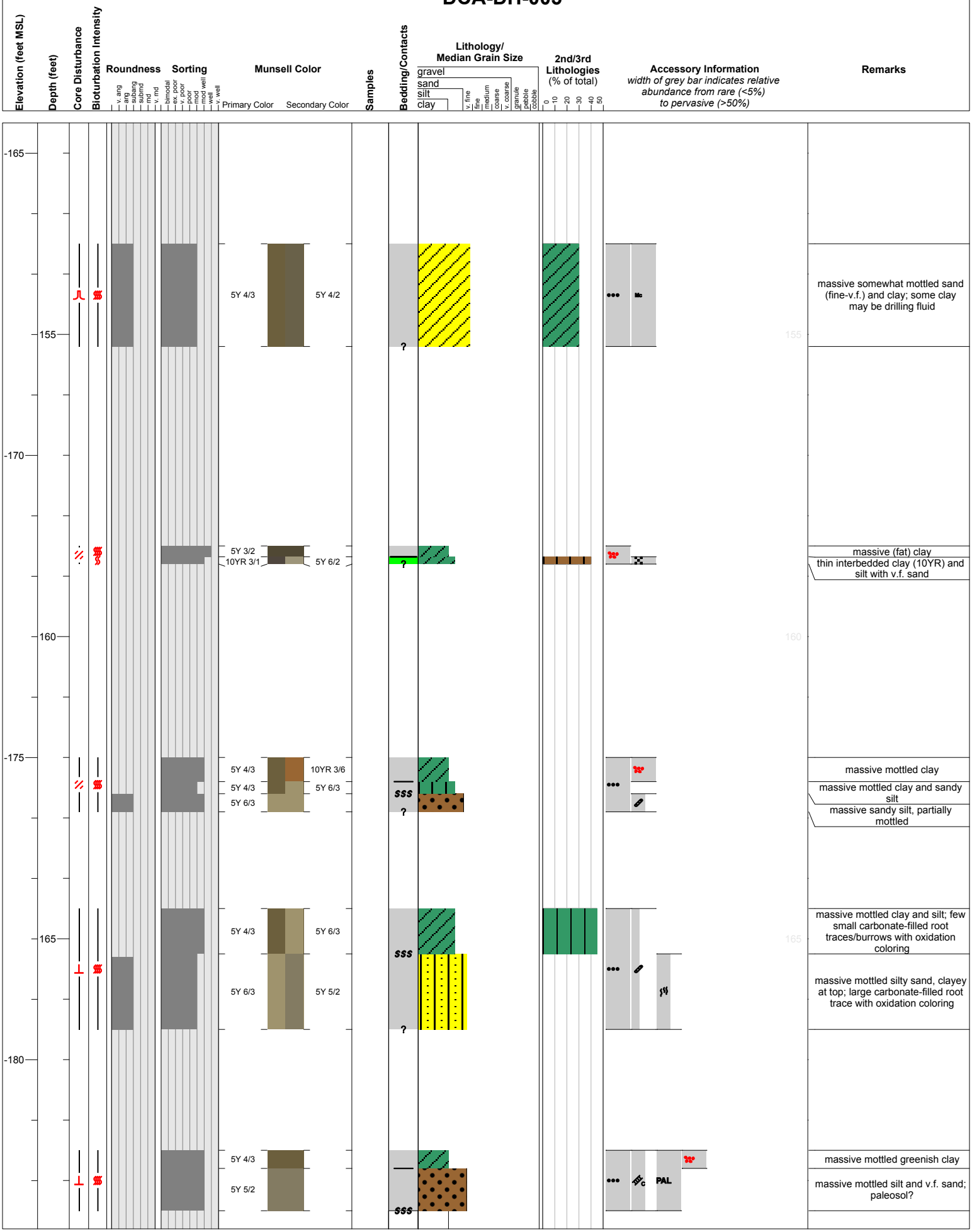
DCA-DH-005


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative abundance from rare (<5%) to pervasive (>50%)
Remarks
115
-130
120
-135
125
-140
130
-145
5Y 4/3
5Y 5/2
5Y 6/2
5Y 6/3
5Y 6/2
SSS
SSS
?
5Y 5/3
5Y 4/3
5Y 5/3
5Y 5/3
5Y 5/3
10YR 5/8
5Y 5/2
5Y 6/3
5Y 5/3
5Y 6/3
5Y 5/3
?
Mc
CRB
PAL
5Y 4/3
5Y 5/3
2.5Y 6/2
5Y 4/3
TEP
?
TEP
2.5Y 6/2
5Y 6/3
5Y 4/3
?
?
CRB
massive mottled clay and slightly coarser lithology
massive mottled clayey sand (clay to fine sand)
massive (fractured) silt with fine-coarse sand
massive clay with sand
massive clayey sand
massive silty sand; silt to coarse grains
massive sand, fine to very coarse grains
massive silt to granules
massive mottled clay with silt and sand; distributed carbonate and soft masses (Ped Stage II? Paleosol truncated by gravelley sand above?)
massive mottled sandy clay
massive v.f. sand with silt and dark minerals; scoop-shaped base boundary (erosional?). Volcanc glass shards identified in sample from this unit.
massive clayey sand
massive silt (to v.f. sand); different texture than other silt units. Volcanic Ash: informally named dacitic ash of Hood (<~0.211->~0.180 Ma)
thin bed of v.f. sand with fine sand and silt
massive clay; mottled silter layer (~0.05ft) at base

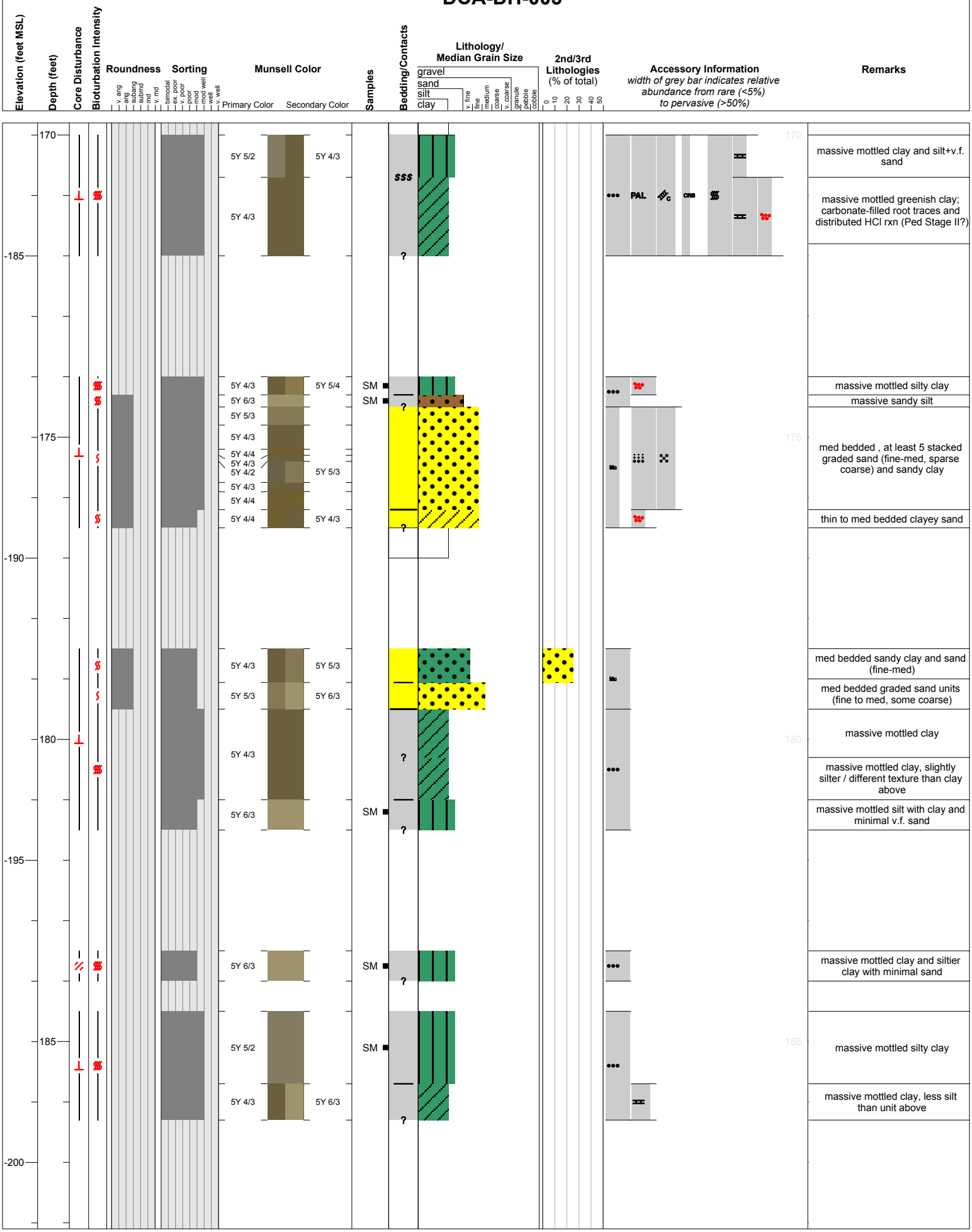
DCA-DH-005


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
135
-150
140
-155
145
-160
150
5Y 4/3
5Y 5/2
5Y 6/3
5Y 4/3
5Y 6/3
5Y 4/3
5Y 6/3
5Y 4/3
5Y 5/3
5Y 4/3
5Y 6/4
5Y 4/3
massive, partially mottled silt and v.f. sand
massive mottled clay (greenish)
fractured fine-v.f. sand
massive v.f. sand and silt; clayey @base
massive mottled clay; weak to moderate distributed HCl rxn; hard core, may be slightly siltier at top
med bedded sand; stacked graded units from fine-v.f. @base to v.f.-silt with little fine @top
massive mottled clayey sand
massive mottled clayey sand
med bedded sandy clay and sand (v.f. to coarse)
massive mottled silt with v.f. sand; some clay towards top

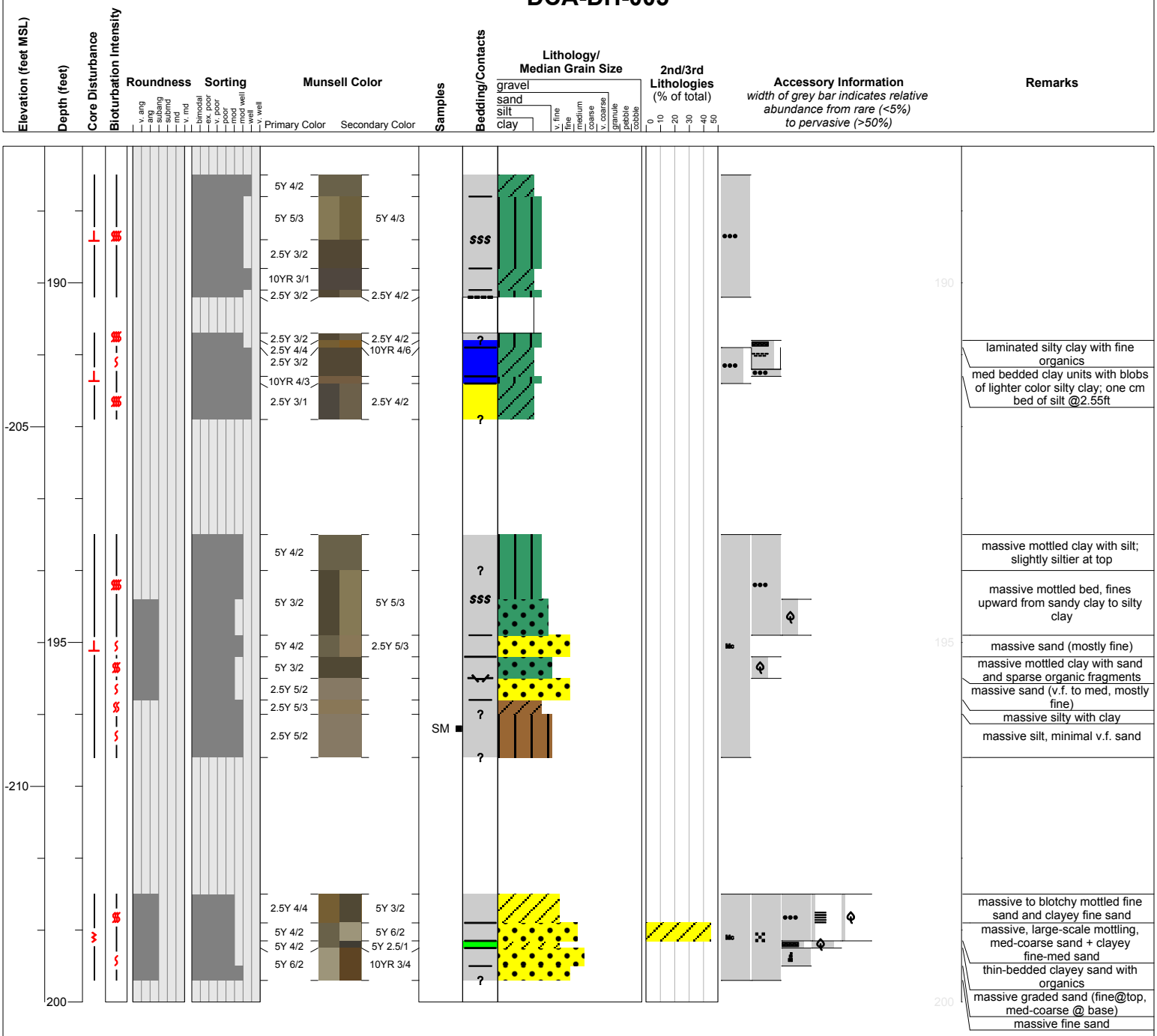
DCA-DH-005


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-165
155
-170
160
-175
165
-180
5Y 4/3
5Y 4/2
5Y 3/2
10YR 3/1
5Y 6/2
10YR 3/6
5Y 6/3
5Y 5/2
PAL
massive somewhat mottled sand (fine-v.f.) and clay; some clay may be drilling fluid
massive (fat) clay
thin interbedded clay (10YR) and silt with v.f. sand
massive mottled clay
massive mottled clay and sandy silt
massive sandy silt, partially mottled
massive mottled clay and silt; few small carbonate-filled root traces/burrows with oxidation coloring
massive mottled silty sand, clayey at top; large carbonate-filled root trace with oxidation coloring
massive mottled greenish clay
massive mottled silt and v.f. sand; paleosol?

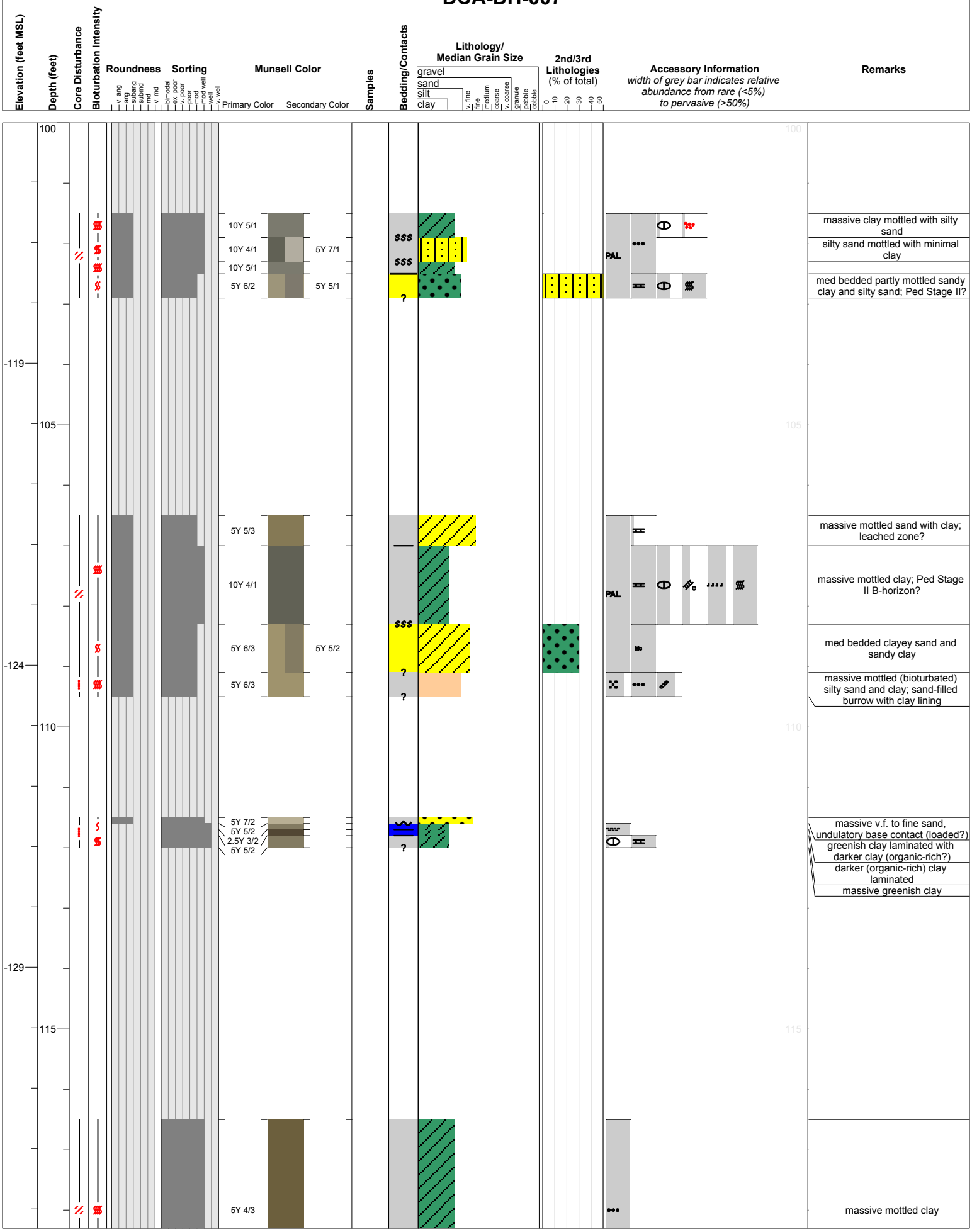
DCA-DH-005


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
v. poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative abundance from rare (<5%) to pervasive (>50%)
Remarks
170
-185
175
-190
180
-195
185
-200
5Y 5/2
5Y 4/3
5Y 4/3
5Y 4/3
5Y 6/3
5Y 5/3
5Y 4/3
5Y 4/4
5Y 4/3
5Y 4/2
5Y 4/3
5Y 4/4
5Y 4/4
5Y 4/3
5Y 5/3
5Y 6/3
5Y 4/3
5Y 5/3
5Y 5/3
5Y 6/3
5Y 4/3
5Y 6/3
5Y 6/3
5Y 5/2
5Y 4/3
5Y 6/3
SM
SM
SM
SM
SM
SSS
PAL
CRB
Mc
Mc
massive mottled clay and silt+v.f. sand
massive mottled greenish clay; carbonate-filled root traces and distributed HCl rxn (Ped Stage II?)
massive mottled silty clay
massive sandy silt
med bedded , at least 5 stacked graded sand (fine-med, sparse coarse) and sandy clay
thin to med bedded clayey sand
med bedded sandy clay and sand (fine-med)
med bedded graded sand units (fine to med, some coarse)
massive mottled clay
massive mottled clay, slightly silter / different texture than clay above
massive mottled silt with clay and minimal v.f. sand
massive mottled clay and siltier clay with minimal sand
massive mottled silty clay
massive mottled clay, less silt than unit above

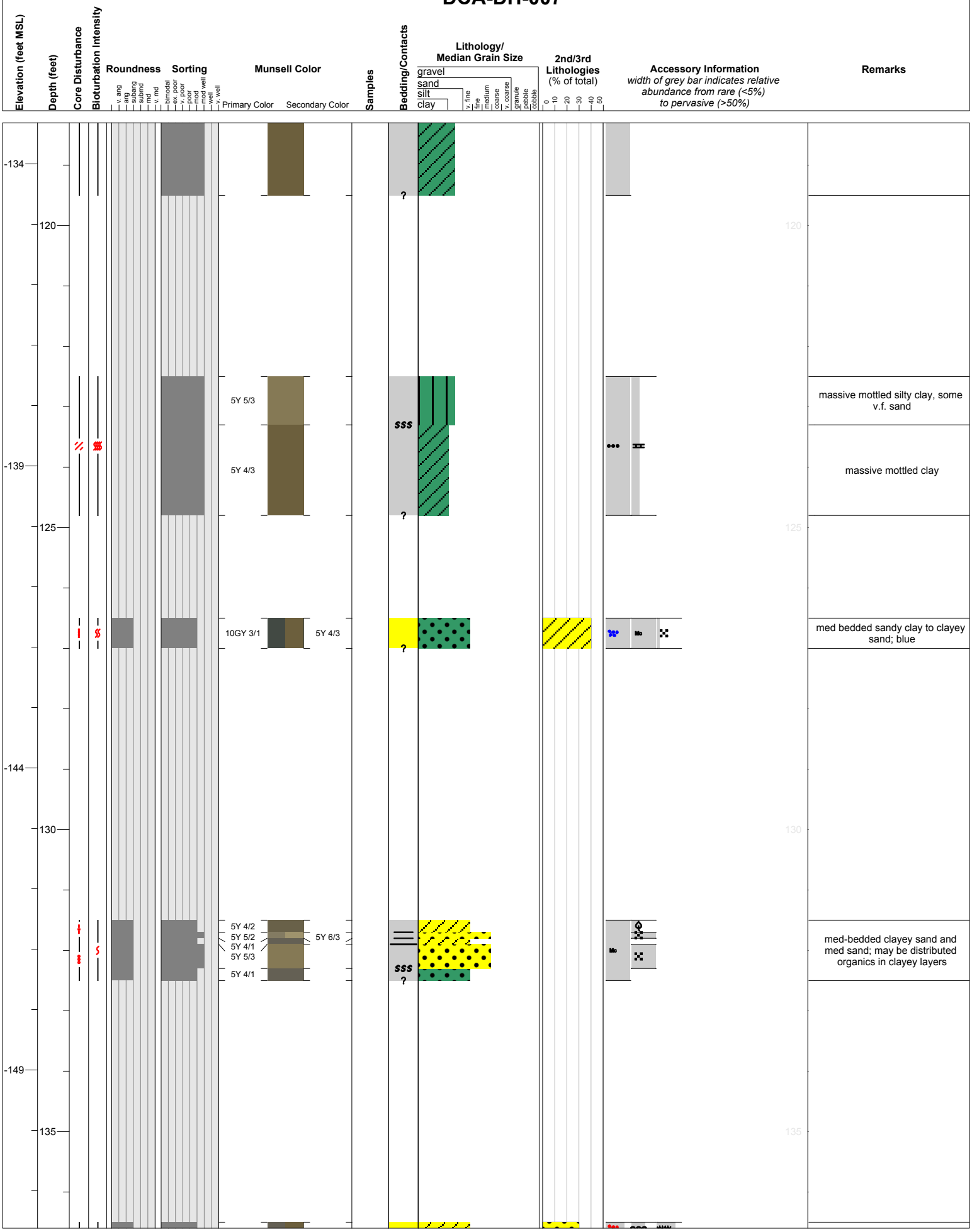
DCA-DH-005


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative abundance from rare (<5%) to pervasive (>50%)
Remarks
190
-205
195
-210
200
5Y 4/2
5Y 5/3
5Y 4/3
2.5Y 3/2
10YR 3/1
2.5Y 3/2
2.5Y 4/2
2.5Y 3/2
2.5Y 4/2
2.5Y 4/4
10YR 4/6
2.5Y 3/2
10YR 4/3
2.5Y 3/1
2.5Y 4/2
5Y 4/2
5Y 3/2
5Y 5/3
5Y 4/2
2.5Y 5/3
5Y 3/2
2.5Y 5/2
2.5Y 5/3
2.5Y 5/2
SM
2.5Y 4/4
5Y 3/2
5Y 4/2
5Y 6/2
5Y 4/2
5Y 2.5/1
5Y 6/2
10YR 3/4
laminated silty clay with fine organics
med bedded clay units with blobs of lighter color silty clay; one cm bed of silt @2.55ft
massive mottled clay with silt; slightly siltier at top
massive mottled bed, fines upward from sandy clay to silty clay
massive sand (mostly fine)
massive mottled clay with sand and sparse organic fragments
massive sand (v.f. to med, mostly fine)
massive silty with clay
massive silt, minimal v.f. sand
massive to blotchy mottled fine sand and clayey fine sand
massive, large-scale mottling, med-coarse sand + clayey fine-med sand
thin-bedded clayey sand with organics
massive graded sand (fine@top, med-coarse @ base)
massive fine sand

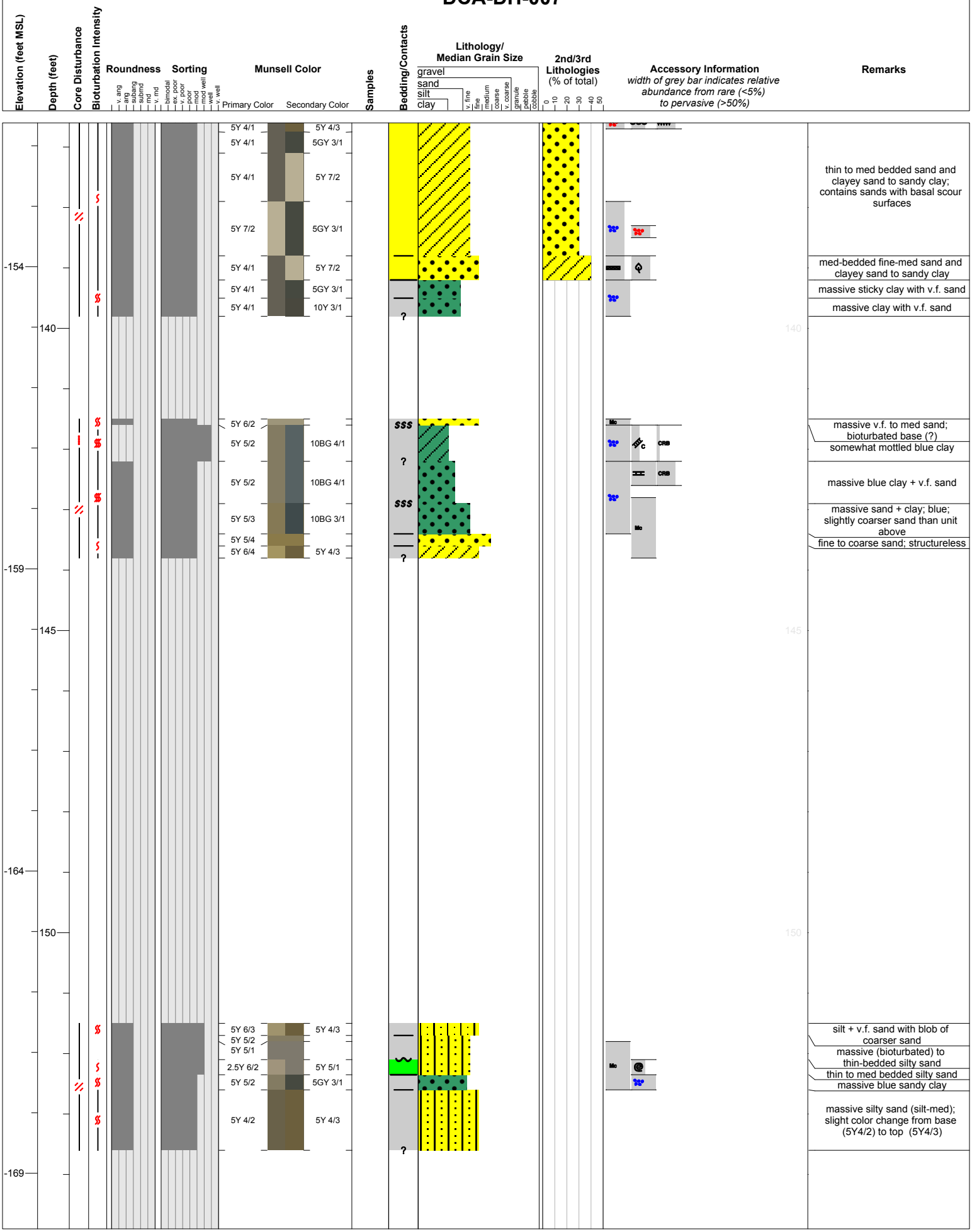
DCA-DH-007


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
very poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
100
105
110
115
-119
-124
-129
10Y 5/1
10Y 4/1
10Y 5/1
5Y 6/2
5Y 7/1
5Y 5/1
5Y 5/3
10Y 4/1
5Y 6/3
5Y 6/3
5Y 5/2
5Y 7/2
5Y 5/2
2.5Y 3/2
5Y 5/2
5Y 4/3
PAL
massive clay mottled with silty sand
silty sand mottled with minimal clay
med bedded partly mottled sandy clay and silty sand; Ped Stage II?
massive mottled sand with clay; leached zone?
massive mottled clay; Ped Stage II B-horizon?
med bedded clayey sand and sandy clay
massive mottled (bioturbated) silty sand and clay; sand-filled burrow with clay lining
massive v.f. to fine sand, undulatory base contact (loaded?)
greenish clay laminated with darker clay (organic-rich?)
darker (organic-rich) clay laminated
massive greenish clay
massive mottled clay

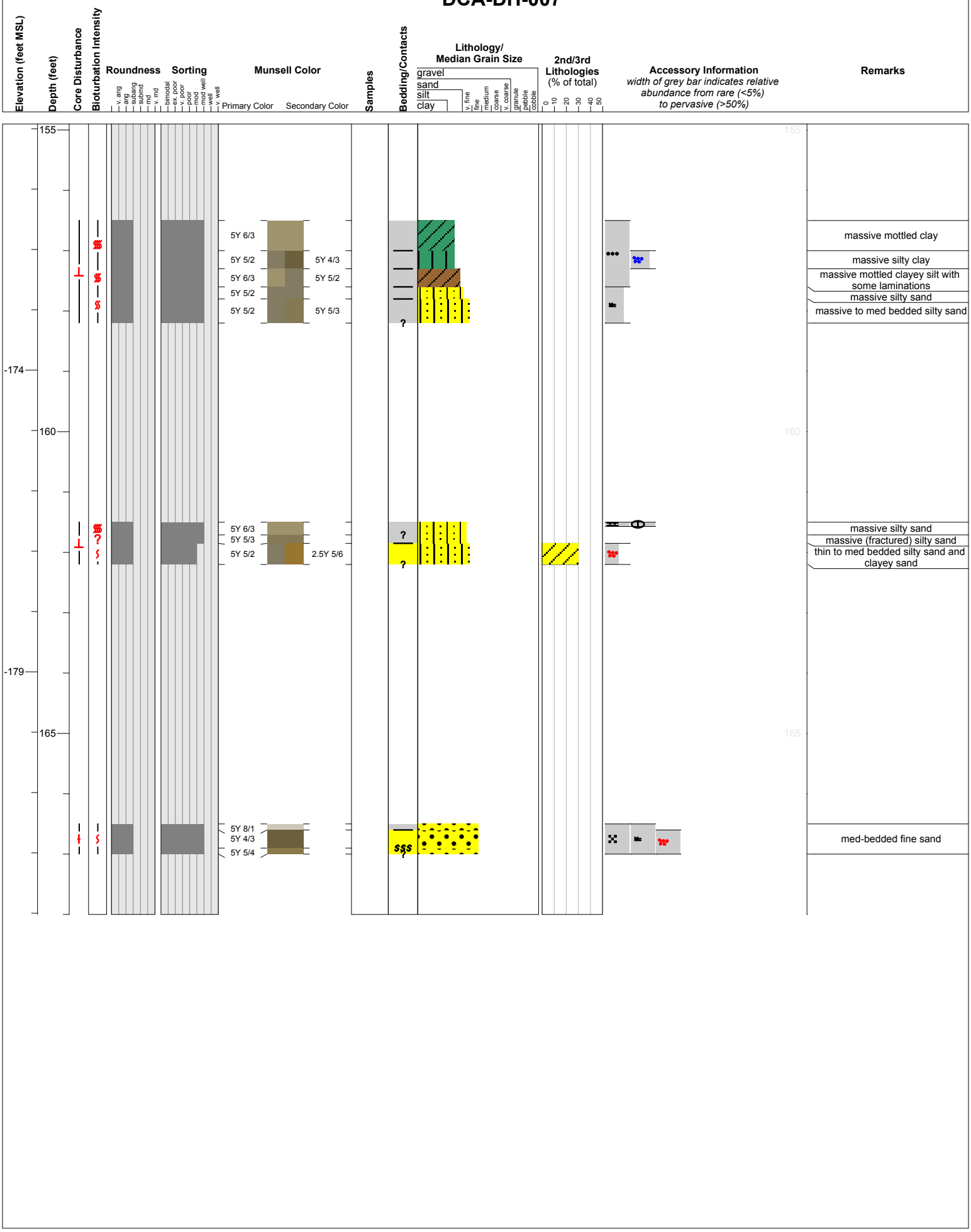
DCA-DH-007


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-134
120
-139
125
-144
130
-149
135
5Y 5/3
5Y 4/3
10GY 3/1
5Y 4/3
5Y 4/2
5Y 5/2
5Y 4/1
5Y 5/3
5Y 4/1
5Y 6/3
SSS
?
Mo
massive mottled silty clay, some v.f. sand
massive mottled clay
med bedded sandy clay to clayey sand; blue
med-bedded clayey sand and med sand; may be distributed organics in clayey layers

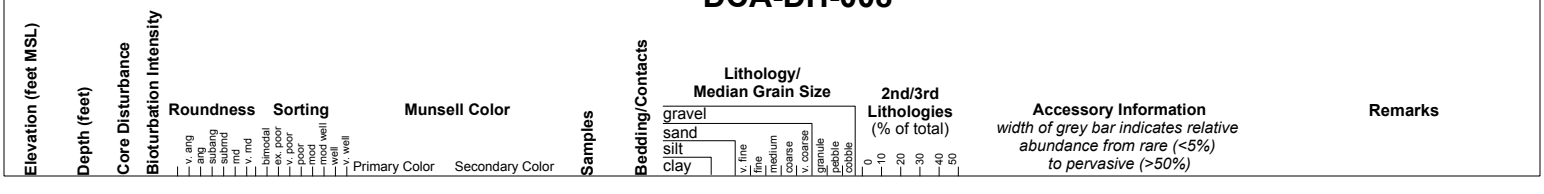
DCA-DH-007


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-154
-159
-164
-169
140
145
150
5Y 4/1
5Y 4/3
5GY 3/1
5Y 7/2
5Y 7/2
5GY 3/1
5Y 4/1
5Y 7/2
5Y 4/1
5GY 3/1
5Y 4/1
10Y 3/1
5Y 6/2
5Y 5/2
10BG 4/1
5Y 5/2
10BG 4/1
5Y 5/3
10BG 3/1
5Y 5/4
5Y 6/4
5Y 4/3
5Y 6/3
5Y 5/2
5Y 5/1
2.5Y 6/2
5Y 5/1
5Y 5/2
5GY 3/1
5Y 4/2
5Y 4/3
thin to med bedded sand and clayey sand to sandy clay; contains sands with basal scour surfaces
med-bedded fine-med sand and clayey sand to sandy clay
massive sticky clay with v.f. sand
massive clay with v.f. sand
massive v.f. to med sand; bioturbated base (?)
somewhat mottled blue clay
massive blue clay + v.f. sand
massive sand + clay; blue; slightly coarser sand than unit above
fine to coarse sand; structureless
silt + v.f. sand with blob of coarser sand
massive (bioturbated) to thin-bedded silty sand
thin to med bedded silty sand
massive blue sandy clay
massive silty sand (silt-med); slight color change from base (5Y4/2) to top (5Y4/3)

DCA-DH-007


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
155
-174
160
-179
165
5Y 6/3
5Y 5/2
5Y 6/3
5Y 5/2
5Y 5/2
5Y 4/3
5Y 5/2
5Y 5/3
massive mottled clay
massive silty clay
massive mottled clayey silt with some laminations
massive silty sand
massive to med bedded silty sand
5Y 6/3
5Y 5/3
5Y 5/2
2.5Y 5/6
massive silty sand
massive (fractured) silty sand
thin to med bedded silty sand and clayey sand
5Y 8/1
5Y 4/3
5Y 5/4
med-bedded fine sand

DCA-DH-008



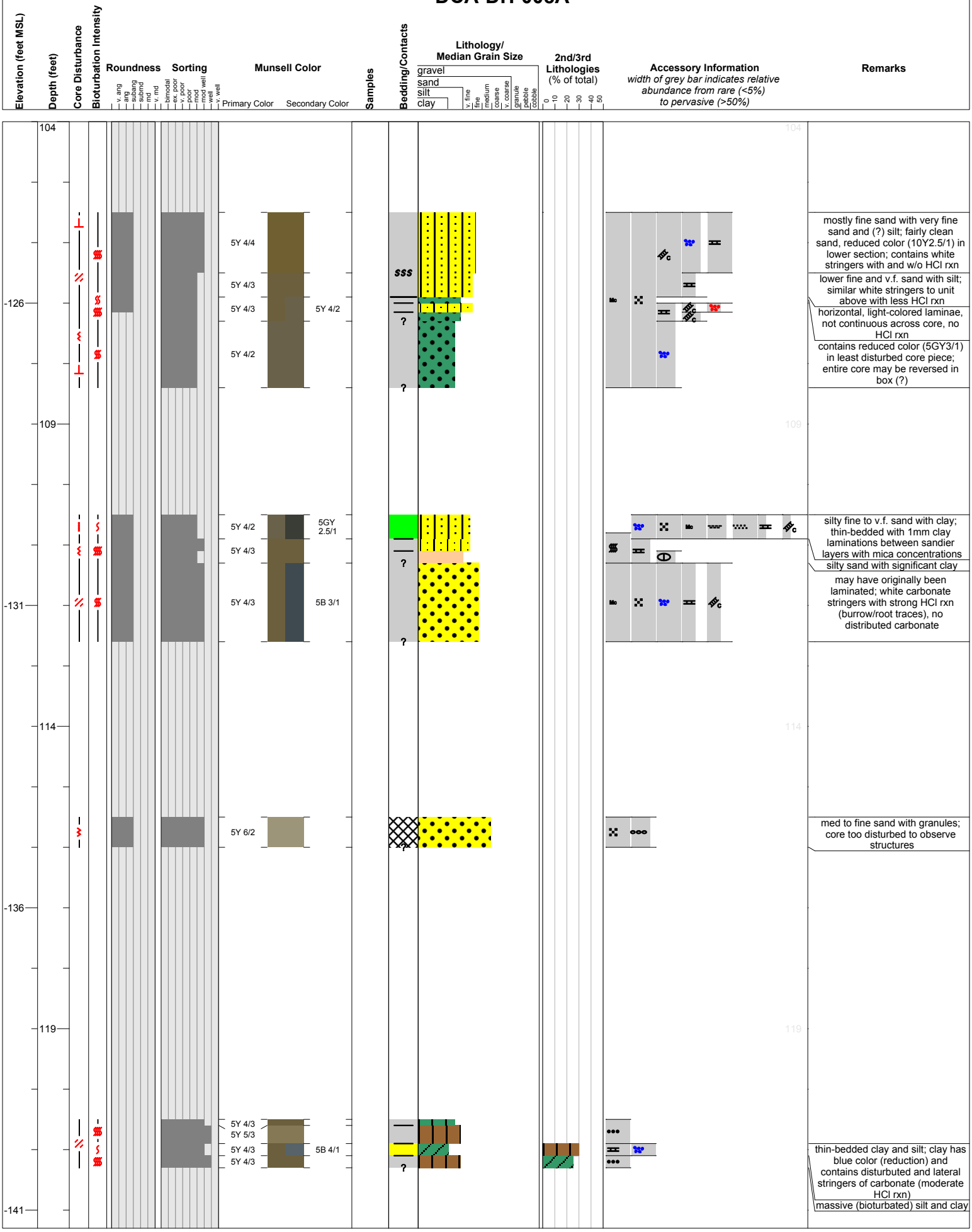
bioturbated mixture of silty sand and sandy clay with upward increase in silt and decrease in clay; 0-0.4 ft: finer than silty sand at base of core (less v.f. sand)

clay-rich unit with silt, v.f. sand, mica; contains patch of whiter silt-rich deposit (may have originally been current structured)

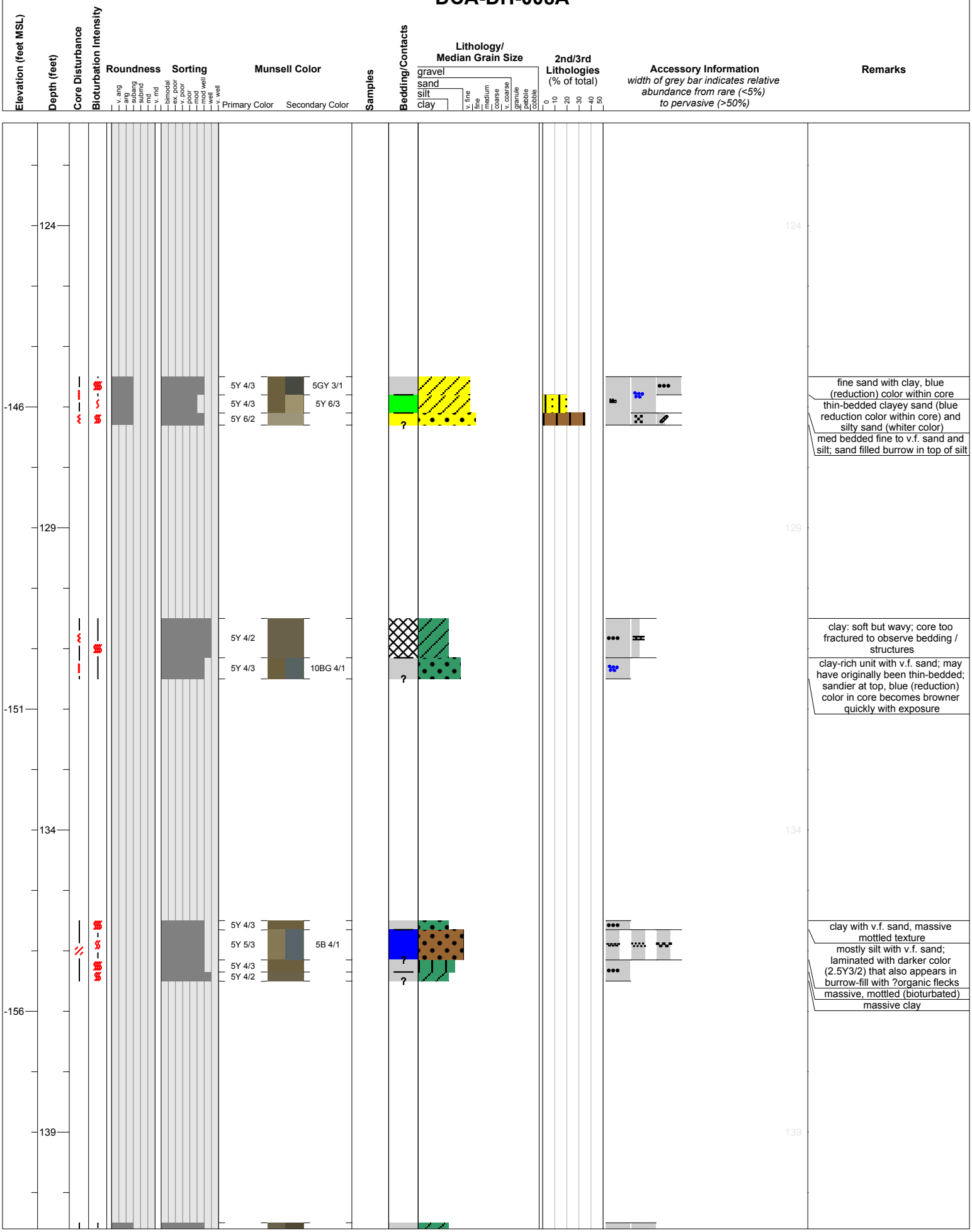
mostly clay, no visible sand, may contain silt/l.v.f. sand; base contact with underlying silty sand is sharp but uneven (bioturbated); potential paleosol (?)

bioturbated silty v.f. sand with v.f. mica throughout; white stringers throughout that look like carbonate veinlets but no HCl rxn (filled root/burrow traces?); potential paleosol (?)

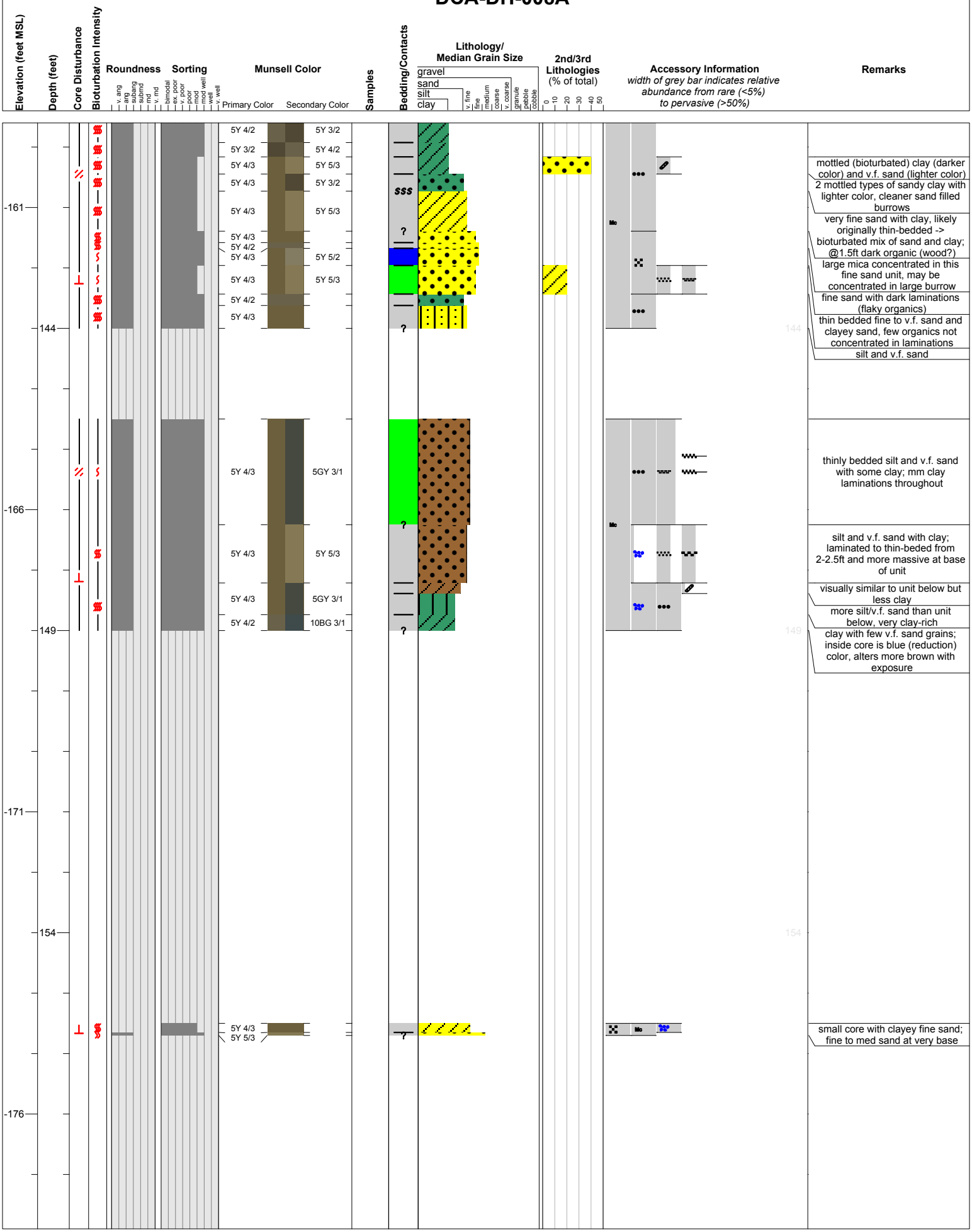
DCA-DH-008A


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative abundance from rare (<5%) to pervasive (>50%)
Remarks
104
109
114
119
-126
-131
-136
-141
5Y 4/4
5Y 4/3
5Y 4/3
5Y 4/2
5Y 4/2
5Y 4/2
5Y 4/3
5Y 4/3
5Y 6/2
5Y 4/3
5Y 5/3
5Y 4/3
5Y 4/3
5Y 4/2
5Y 4/3
5Y 4/3
5GY 2.5/1
5B 3/1
5B 4/1
mostly fine sand with very fine sand and (?) silt; fairly clean sand, reduced color (10Y2.5/1) in lower section; contains white stringers with and w/o HCl rxn
lower fine and v.f. sand with silt; similar white stringers to unit above with less HCl rxn
horizontal, light-colored laminae, not continuous across core, no HCl rxn
contains reduced color (5GY3/1) in least disturbed core piece; entire core may be reversed in box (?)
silty fine to v.f. sand with clay; thin-bedded with 1mm clay laminations between sandier layers with mica concentrations
silty sand with significant clay
may have originally been laminated; white carbonate stringers with strong HCl rxn (burrow/root traces), no distributed carbonate
med to fine sand with granules; core too disturbed to observe structures
thin-bedded clay and silt; clay has blue color (reduction) and contains disturbuted and lateral stringers of carbonate (moderate HCl rxn)
massive (bioturbated) silt and clay

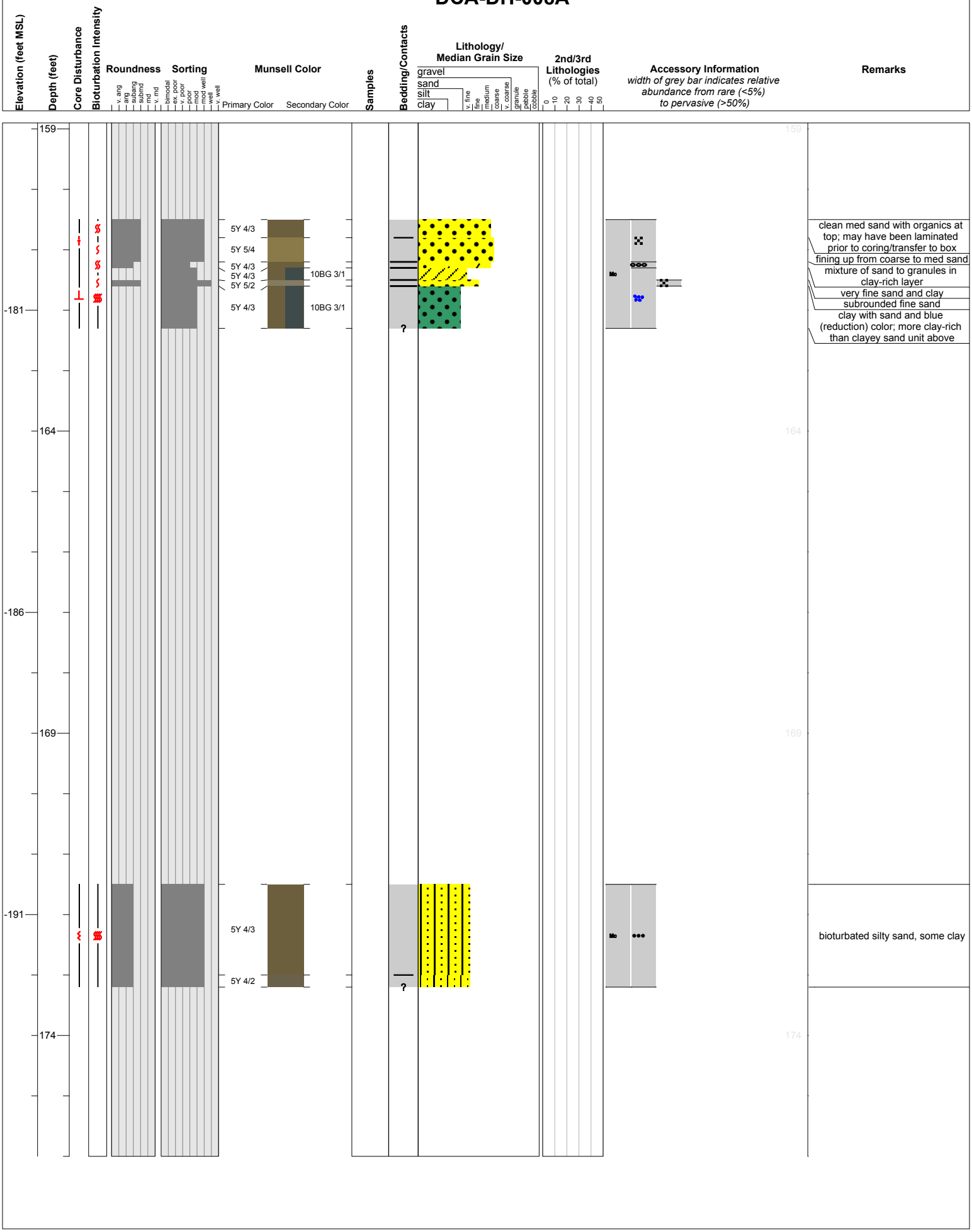
DCA-DH-008A


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
124
-146
129
-151
134
-156
139
5Y 4/3
5Y 4/3
5Y 6/2
5GY 3/1
5Y 6/3
5Y 4/2
5Y 4/3
10BG 4/1
5Y 4/3
5Y 5/3
5Y 4/3
5Y 4/2
5B 4/1
Mc
fine sand with clay, blue (reduction) color within core
thin-bedded clayey sand (blue reduction color within core) and silty sand (whiter color)
med bedded fine to v.f. sand and silt; sand filled burrow in top of silt
clay: soft but wavy; core too fractured to observe bedding / structures
clay-rich unit with v.f. sand; may have originally been thin-bedded; sandier at top, blue (reduction) color in core becomes browner quickly with exposure
clay with v.f. sand, massive mottled texture
mostly silt with v.f. sand; laminated with darker color (2.5Y3/2) that also appears in burrow-fill with ?organic flecks
massive, mottled (bioturbated)
massive clay

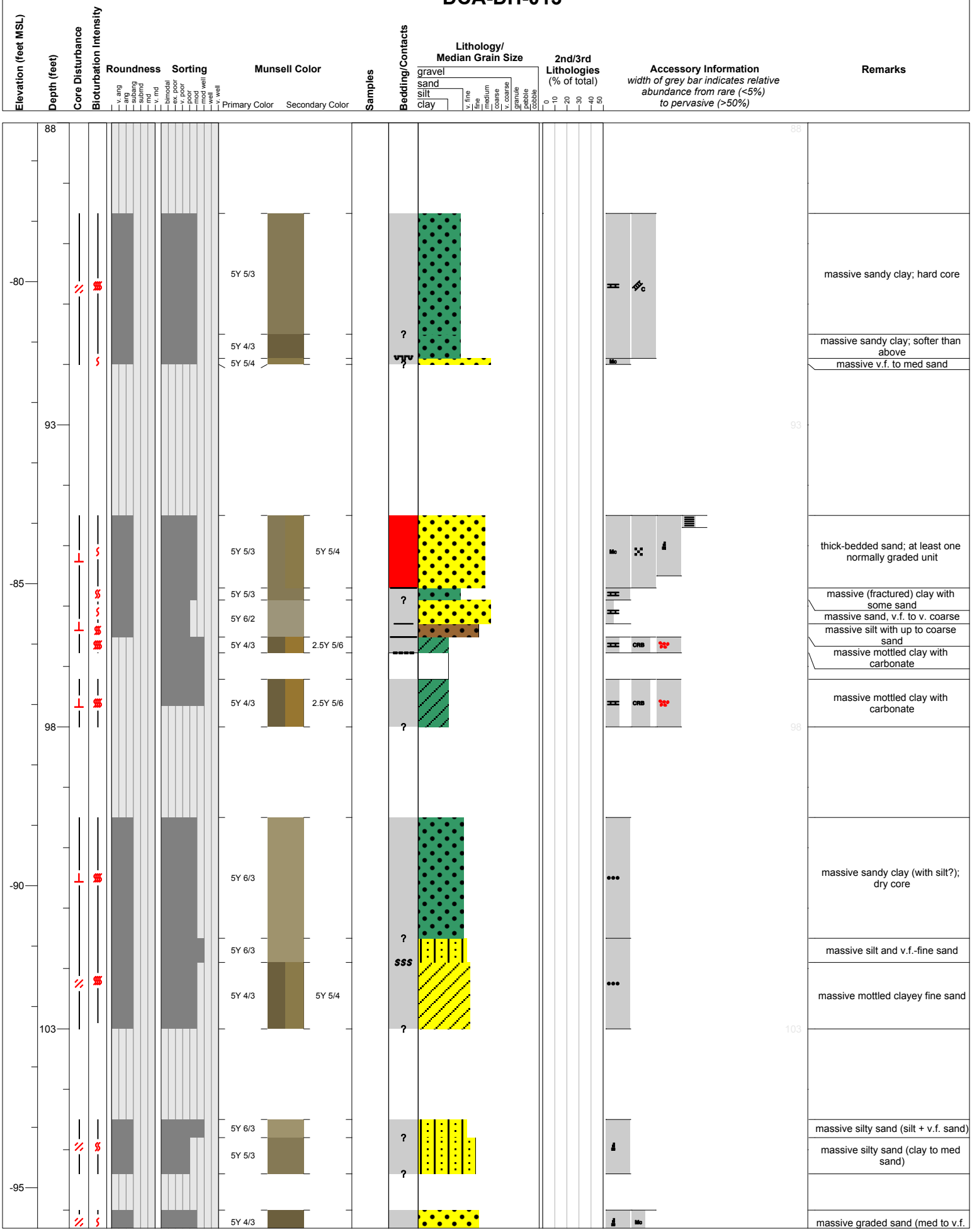
DCA-DH-008A


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative abundance from rare (<5%) to pervasive (>50%)
Remarks
-161
144
-166
149
-171
154
-176
5Y 4/2
5Y 3/2
5Y 3/2
5Y 4/2
5Y 4/3
5Y 5/3
5Y 4/3
5Y 3/2
5Y 4/3
5Y 5/3
5Y 4/3
5Y 4/2
5Y 4/3
5Y 5/2
5Y 4/3
5Y 5/3
5Y 4/2
5Y 4/3
5Y 4/3
5GY 3/1
5Y 4/3
5Y 5/3
5Y 4/3
5GY 3/1
5Y 4/2
10BG 3/1
5Y 4/3
5Y 5/3
SSS
?
Mc
mottled (bioturbated) clay (darker color) and v.f. sand (lighter color)
2 mottled types of sandy clay with lighter color, cleaner sand filled burrows
very fine sand with clay, likely originally thin-bedded -> bioturbated mix of sand and clay; @1.5ft dark organic (wood?)
large mica concentrated in this fine sand unit, may be concentrated in large burrow
fine sand with dark laminations (flaky organics)
thin bedded fine to v.f. sand and clayey sand, few organics not concentrated in laminations
silt and v.f. sand
thinly bedded silt and v.f. sand with some clay; mm clay laminations throughout
silt and v.f. sand with clay; laminated to thin-beded from 2-2.5ft and more massive at base of unit
visually similar to unit below but less clay
more silt/v.f. sand than unit below, very clay-rich
clay with few v.f. sand grains; inside core is blue (reduction) color, alters more brown with exposure
small core with clayey fine sand; fine to med sand at very base

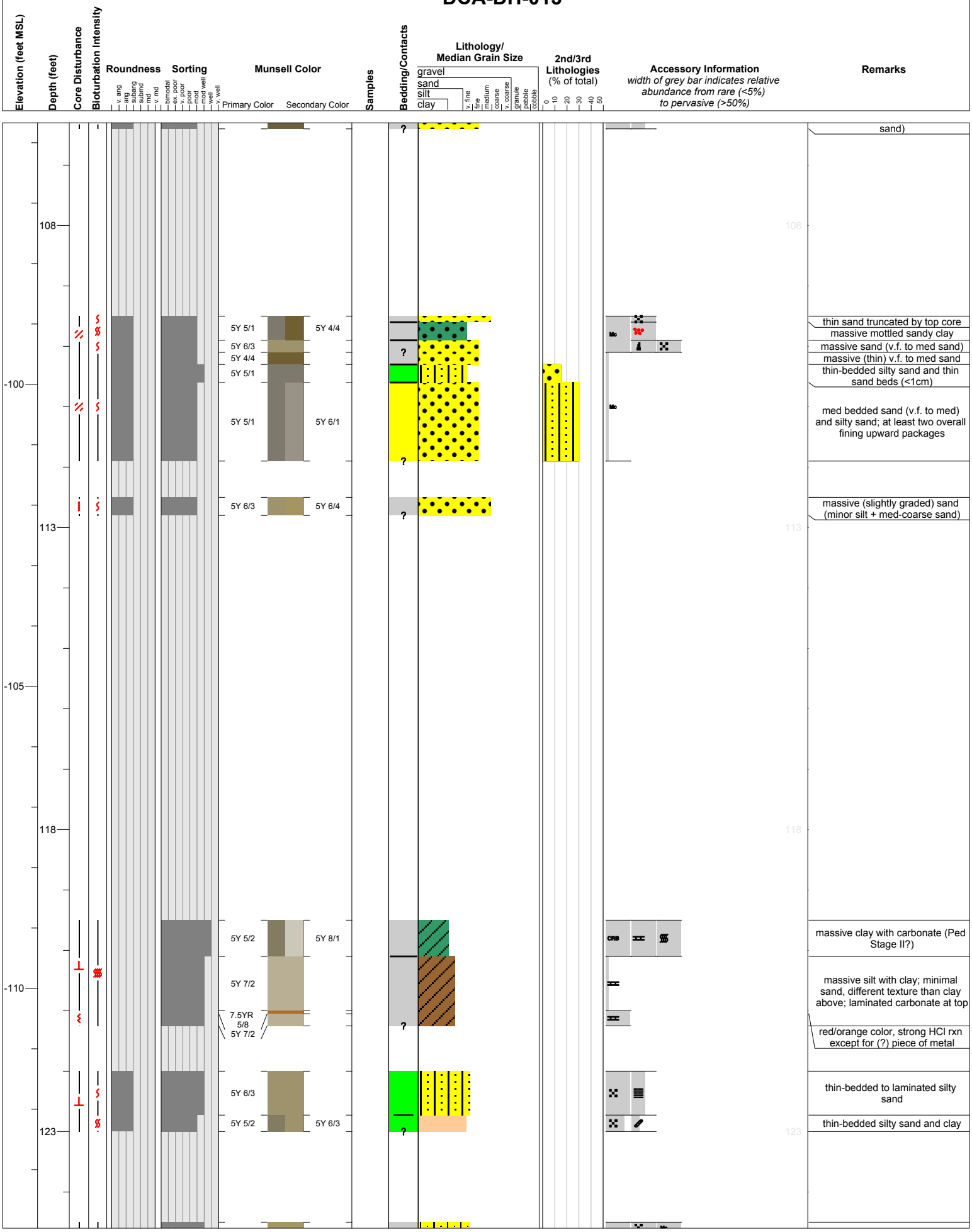
DCA-DH-008A


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
159
-181
164
-186
169
-191
174
5Y 4/3
5Y 5/4
5Y 4/3
5Y 4/3
5Y 5/2
5Y 4/3
10BG 3/1
10BG 3/1
?
Mc
clean med sand with organics at top; may have been laminated prior to coring/transfer to box
fining up from coarse to med sand
mixture of sand to granules in clay-rich layer
very fine sand and clay
subrounded fine sand
clay with sand and blue (reduction) color; more clay-rich than clayey sand unit above
5Y 4/3
5Y 4/2
?
Mc
bioturbated silty sand, some clay

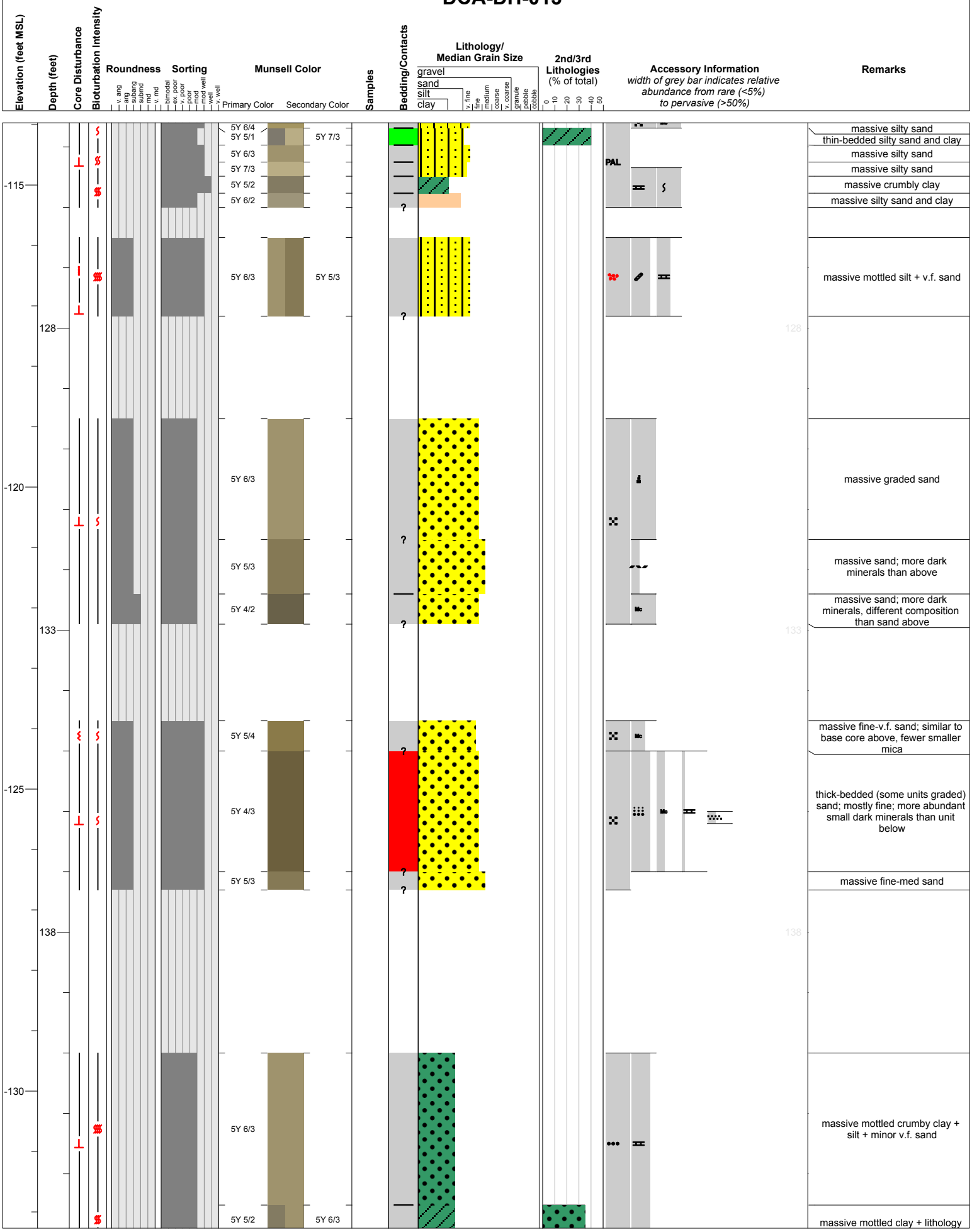
DCA-DH-013


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
88
93
98
103
-80
-85
-90
-95
5Y 5/3
5Y 4/3
5Y 5/4
5Y 5/3
5Y 5/4
5Y 5/3
5Y 6/2
5Y 4/3
2.5Y 5/6
5Y 4/3
2.5Y 5/6
5Y 6/3
5Y 6/3
5Y 4/3
5Y 5/4
5Y 6/3
5Y 5/3
5Y 4/3
Mc
C
CRB
SSS
massive sandy clay; hard core
massive sandy clay; softer than above
massive v.f. to med sand
thick-bedded sand; at least one normally graded unit
massive (fractured) clay with some sand
massive sand, v.f. to v. coarse
massive silt with up to coarse sand
massive mottled clay with carbonate
massive mottled clay with carbonate
massive sandy clay (with silt?); dry core
massive silt and v.f.-fine sand
massive mottled clayey fine sand
massive silty sand (silt + v.f. sand)
massive silty sand (clay to med sand)
massive graded sand (med to v.f.

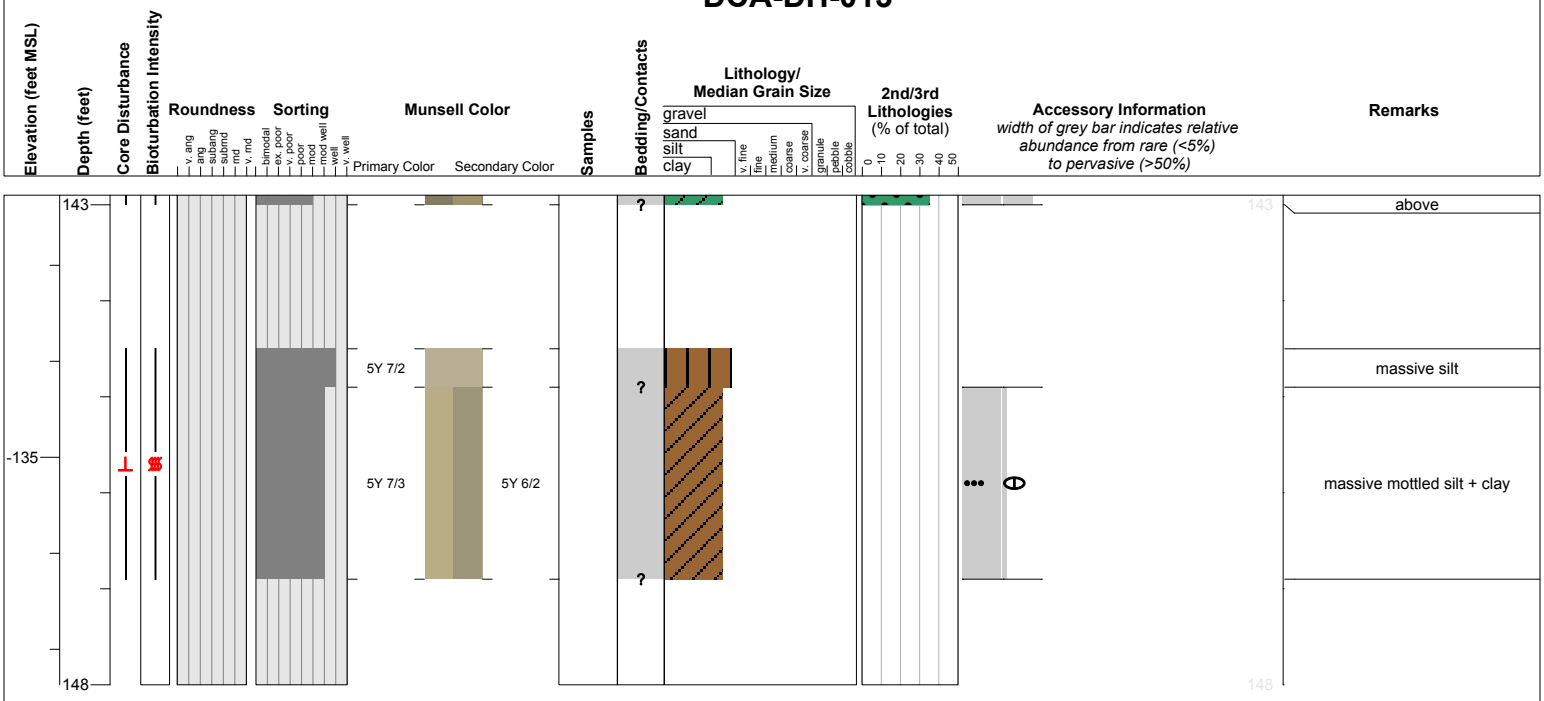
DCA-DH-013


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
108
-100
113
-105
118
-110
123
5Y 5/1
5Y 4/4
5Y 6/3
5Y 4/4
5Y 5/1
5Y 5/1
5Y 6/1
5Y 6/3
5Y 6/4
5Y 5/2
5Y 8/1
5Y 7/2
7.5YR
5/8
5Y 7/2
5Y 6/3
5Y 5/2
5Y 6/3
Mo
CRB
sand)
thin sand truncated by top core
massive mottled sandy clay
massive sand (v.f. to med sand)
massive (thin) v.f. to med sand
thin-bedded silty sand and thin
sand beds (<1cm)
med bedded sand (v.f. to med)
and silty sand; at least two overall
fining upward packages
massive (slightly graded) sand
(minor silt + med-coarse sand)
massive clay with carbonate (Ped
Stage II?)
massive silt with clay; minimal
sand, different texture than clay
above; laminated carbonate at top
red/orange color, strong HCl rxn
except for (?) piece of metal
thin-bedded to laminated silty
sand
thin-bedded silty sand and clay

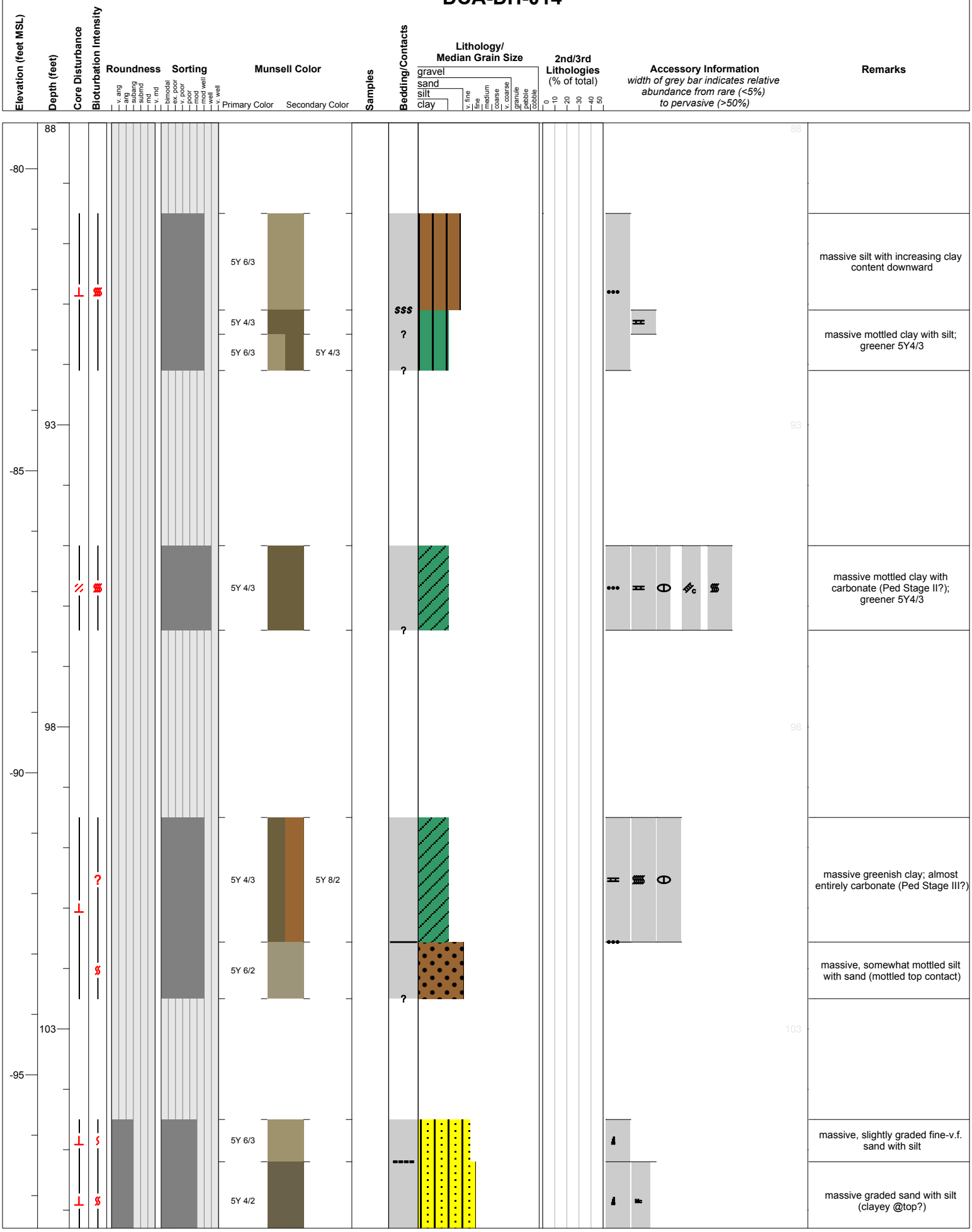
DCA-DH-013


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative abundance from rare (<5%) to pervasive (>50%)
Remarks
-115
-120
-125
-130
128
133
138
5Y 6/4
5Y 5/1
5Y 7/3
5Y 6/3
5Y 7/3
5Y 5/2
5Y 6/2
5Y 6/3
5Y 5/3
5Y 6/3
5Y 5/3
5Y 4/2
5Y 5/4
5Y 4/3
5Y 5/3
5Y 6/3
5Y 5/2
5Y 6/3
PAL
massive silty sand
thin-bedded silty sand and clay
massive silty sand
massive silty sand
massive crumbly clay
massive silty sand and clay
massive mottled silt + v.f. sand
massive graded sand
massive sand; more dark minerals than above
massive sand; more dark minerals, different composition than sand above
massive fine-v.f. sand; similar to base core above, fewer smaller mica
thick-bedded (some units graded) sand; mostly fine; more abundant small dark minerals than unit below
massive fine-med sand
massive mottled crumby clay + silt + minor v.f. sand
massive mottled clay + lithology

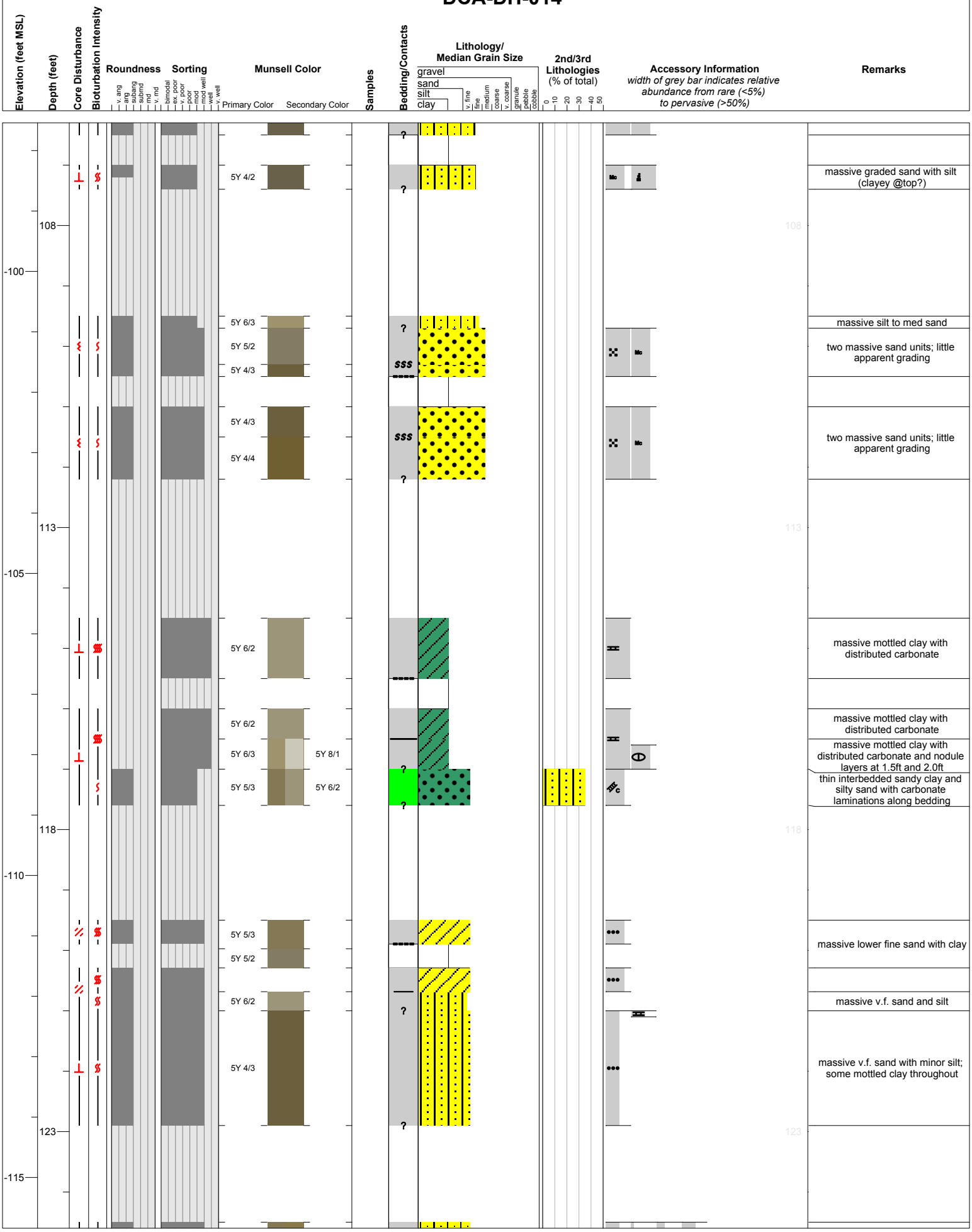
DCA-DH-013


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
143
-135
148
5Y 7/2
5Y 7/3
5Y 6/2
?
?
?
143
above
massive silt
massive mottled silt + clay
148

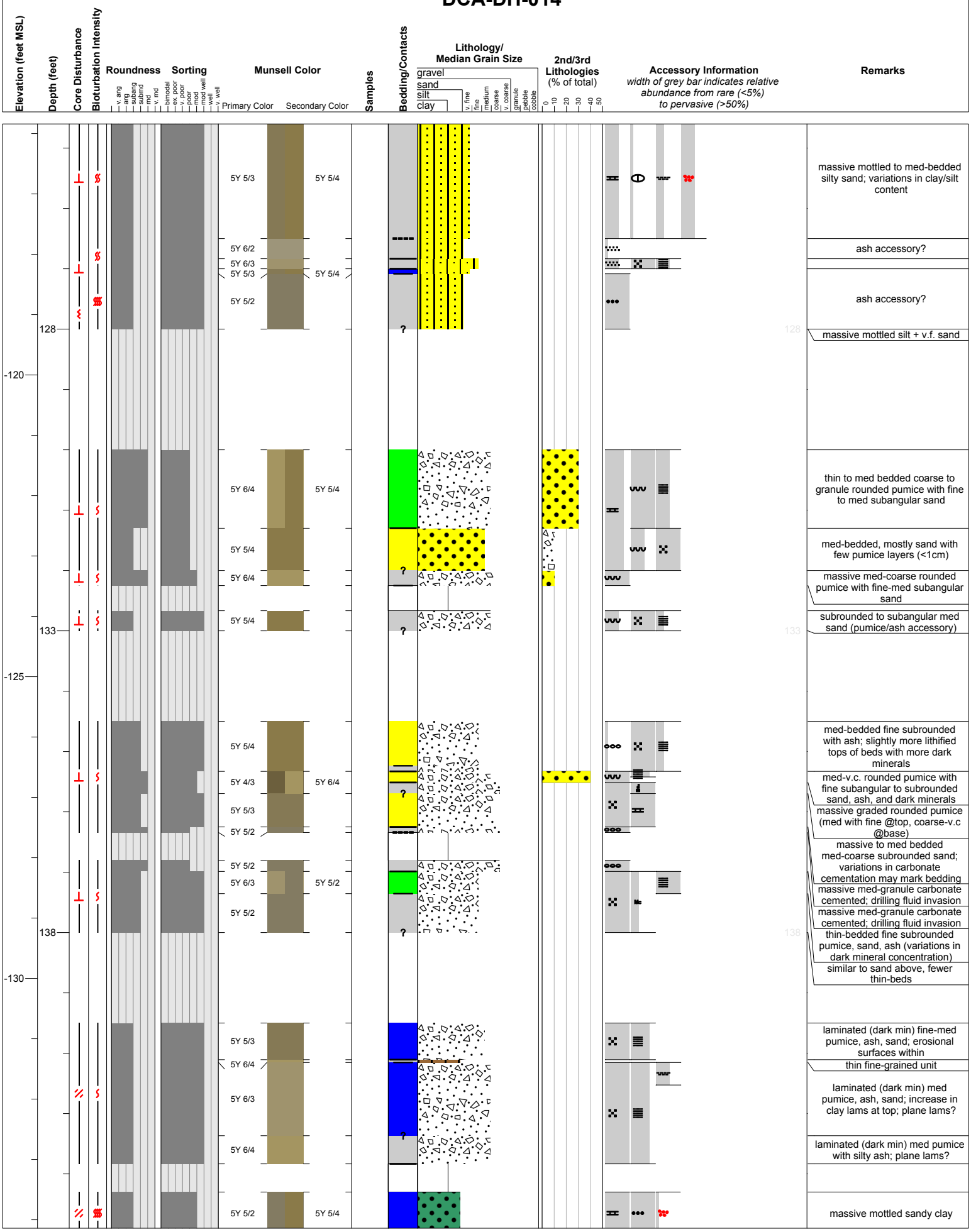
DCA-DH-014


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
88
93
98
103
-80
-85
-90
-95
5Y 6/3
5Y 4/3
5Y 6/3
5Y 4/3
5Y 4/3
5Y 4/3
5Y 8/2
5Y 6/2
5Y 6/3
5Y 4/2
massive silt with increasing clay content downward
massive mottled clay with silt; greener 5Y4/3
massive mottled clay with carbonate (Ped Stage II?); greener 5Y4/3
massive greenish clay; almost entirely carbonate (Ped Stage III?)
massive, somewhat mottled silt with sand (mottled top contact)
massive, slightly graded fine-v.f. sand with silt
massive graded sand with silt (clayey @top?)

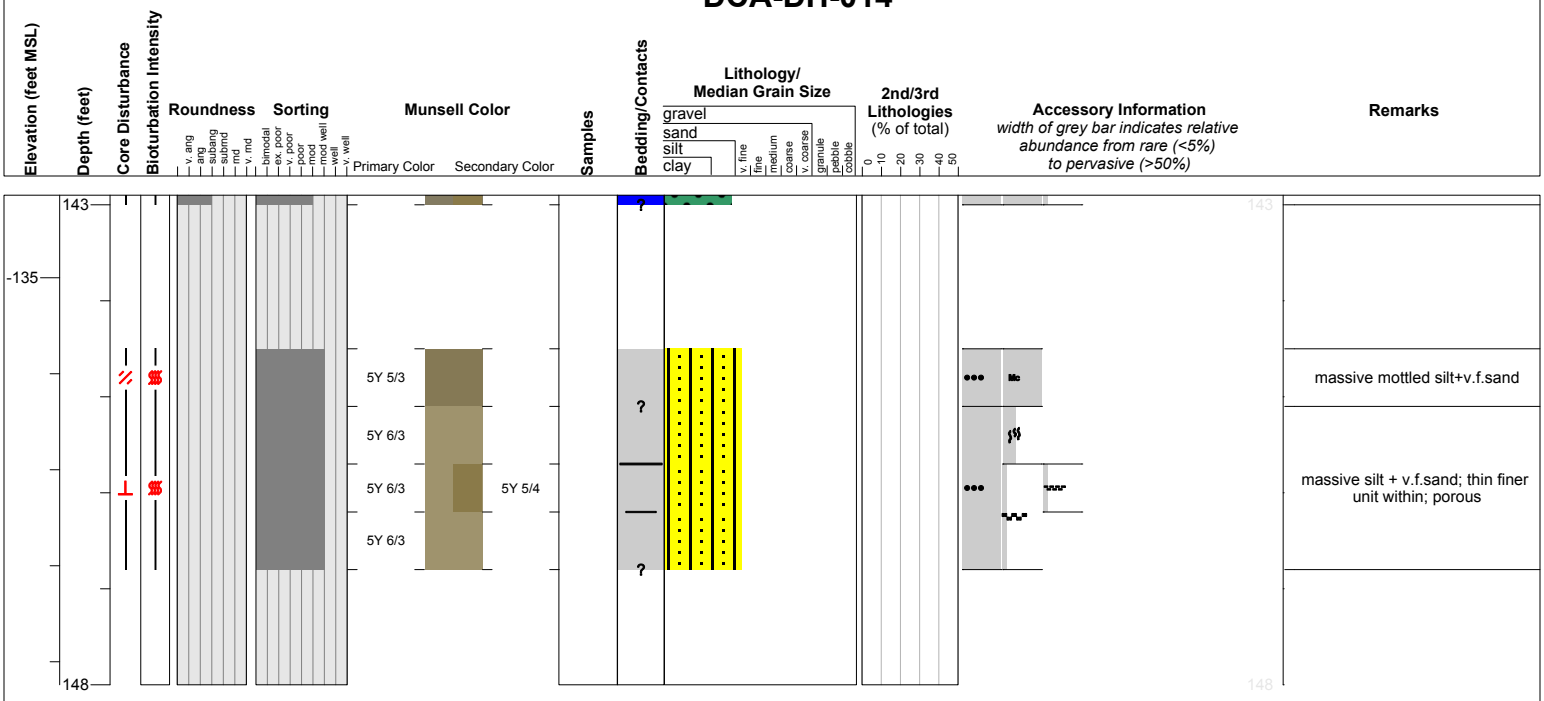
DCA-DH-014


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-100
-105
-110
-115
108
113
118
123
5Y 4/2
5Y 6/3
5Y 5/2
5Y 4/3
5Y 4/3
5Y 4/4
5Y 6/2
5Y 6/2
5Y 6/3
5Y 8/1
5Y 5/3
5Y 6/2
5Y 5/3
5Y 5/2
5Y 6/2
5Y 4/3
massive graded sand with silt
(clayey @top?)
massive silt to med sand
two massive sand units; little
apparent grading
two massive sand units; little
apparent grading
massive mottled clay with
distributed carbonate
massive mottled clay with
distributed carbonate
massive mottled clay with
distributed carbonate and nodule
layers at 1.5ft and 2.0ft
thin interbedded sandy clay and
silty sand with carbonate
laminations along bedding
massive lower fine sand with clay
massive v.f. sand and silt
massive v.f. sand with minor silt;
some mottled clay throughout

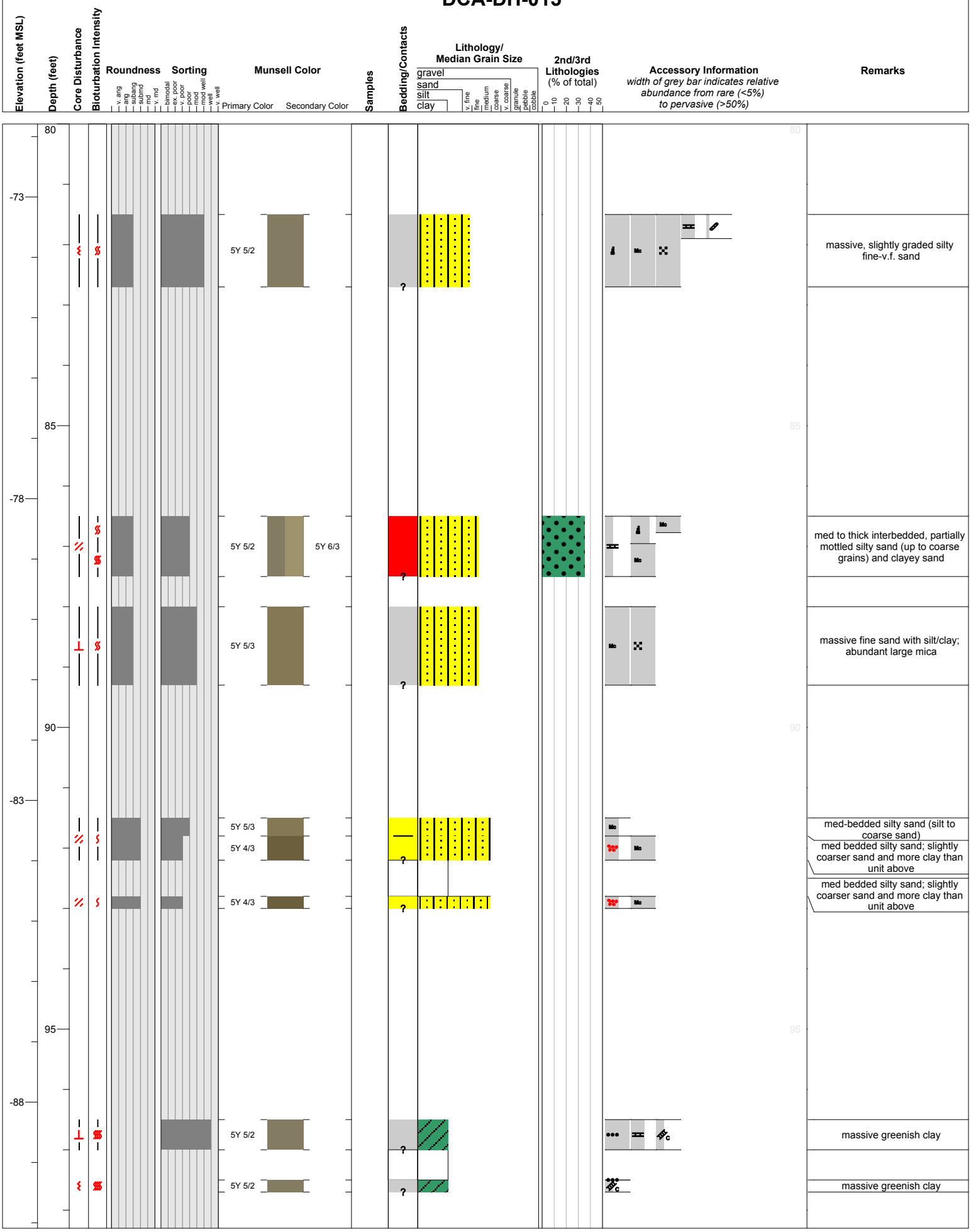
DCA-DH-014


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative abundance from rare (<5%) to pervasive (>50%)
Remarks
-120
-125
-130
128
133
138
5Y 5/3
5Y 5/4
5Y 6/2
5Y 6/3
5Y 5/3
5Y 5/4
5Y 5/2
5Y 6/4
5Y 5/4
5Y 6/4
5Y 5/4
5Y 5/4
5Y 4/3
5Y 6/4
5Y 5/3
5Y 5/2
5Y 5/2
5Y 6/3
5Y 5/2
5Y 5/2
5Y 5/3
5Y 6/4
5Y 6/3
5Y 6/4
5Y 5/2
5Y 5/4
massive mottled to med-bedded silty sand; variations in clay/silt content
ash accessory?
ash accessory?
massive mottled silt + v.f. sand
thin to med bedded coarse to granule rounded pumice with fine to med subangular sand
med-bedded, mostly sand with few pumice layers (<1cm)
massive med-coarse rounded pumice with fine-med subangular sand
subrounded to subangular med sand (pumice/ash accessory)
med-bedded fine subrounded with ash; slightly more lithified tops of beds with more dark minerals
med-v.c. rounded pumice with fine subangular to subrounded sand, ash, and dark minerals
massive graded rounded pumice (med with fine @top, coarse-v.c @base)
massive to med bedded med-coarse subrounded sand; variations in carbonate cementation may mark bedding
massive med-granule carbonate cemented; drilling fluid invasion
massive med-granule carbonate cemented; drilling fluid invasion
thin-bedded fine subrounded pumice, sand, ash (variations in dark mineral concentration)
similar to sand above, fewer thin-beds
laminated (dark min) fine-med pumice, ash, sand; erosional surfaces within
thin fine-grained unit
laminated (dark min) med pumice, ash, sand; increase in clay lams at top; plane lams?
laminated (dark min) med pumice with silty ash; plane lams?
massive mottled sandy clay

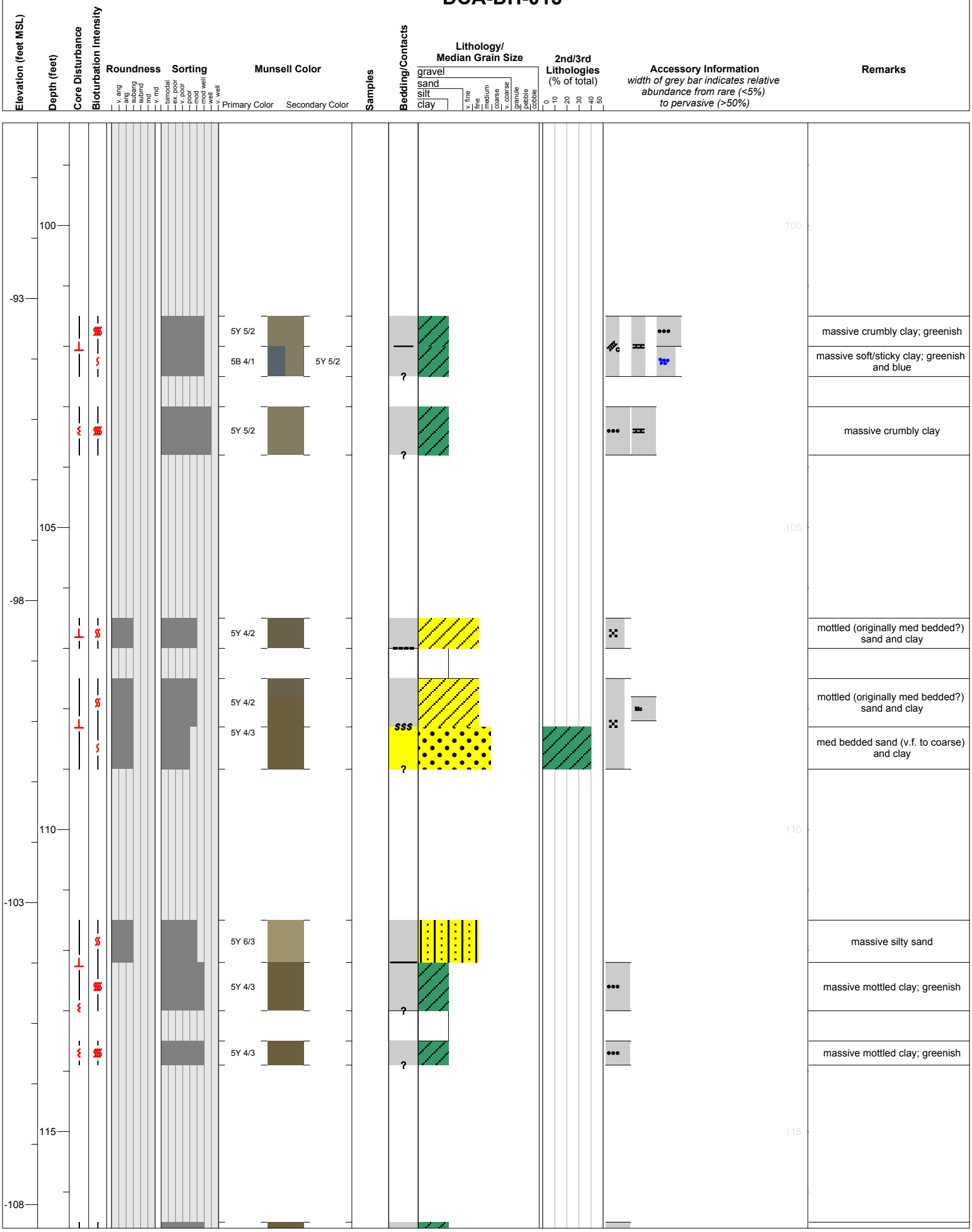
DCA-DH-014


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
143
-135
148
5Y 5/3
5Y 6/3
5Y 6/3
5Y 6/3
5Y 5/4
?
?
?
Mo
massive mottled silt+v.f.sand
massive silt + v.f.sand; thin finer
unit within; porous

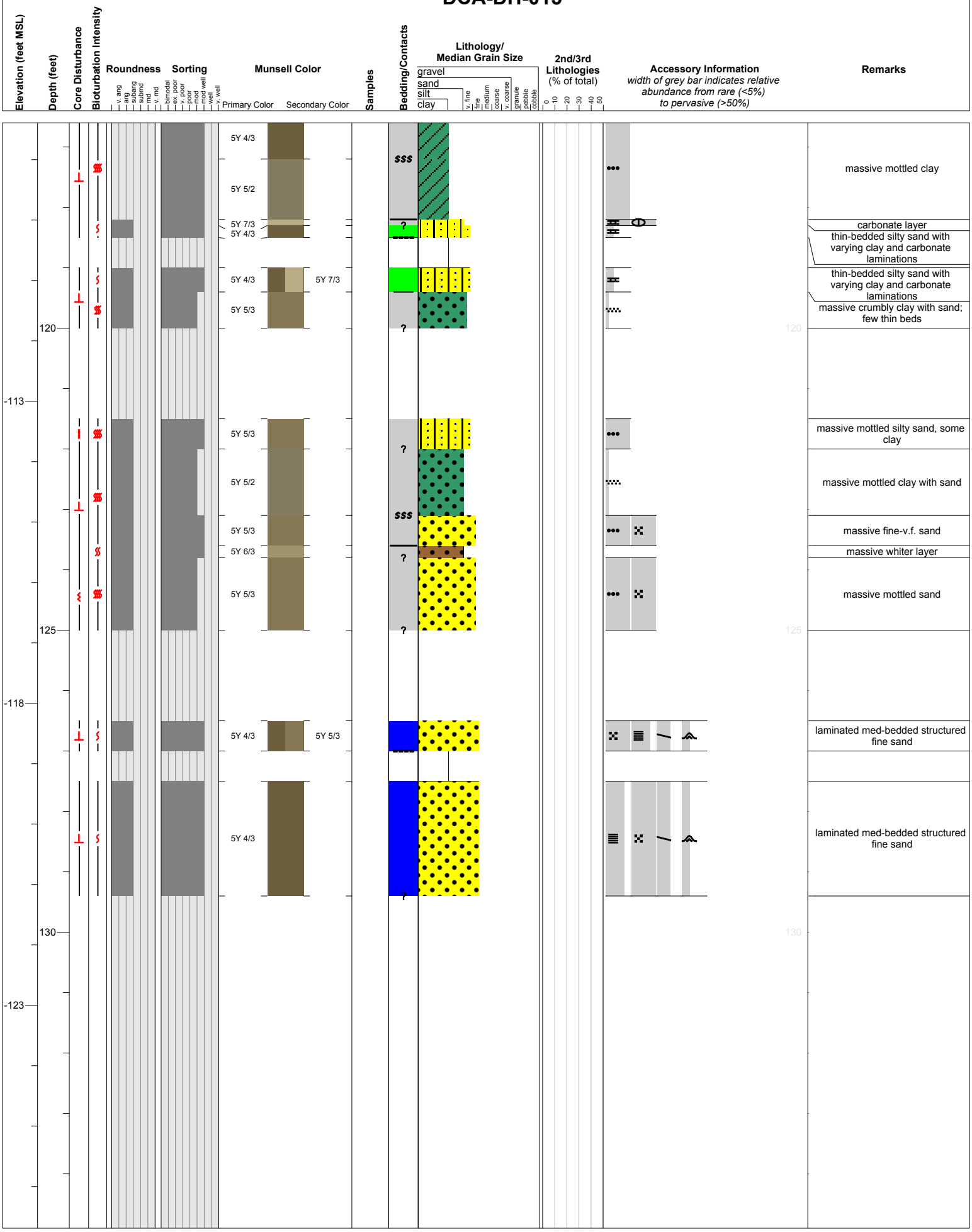
DCA-DH-015


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
80
85
90
95
-73
-78
-83
-88
5Y 5/2
5Y 6/3
5Y 5/3
5Y 4/3
Mc
massive, slightly graded silty fine-v.f. sand
med to thick interbedded, partially mottled silty sand (up to coarse grains) and clayey sand
massive fine sand with silt/clay; abundant large mica
med-bedded silty sand (silt to coarse sand)
med bedded silty sand; slightly coarser sand and more clay than unit above
med bedded silty sand; slightly coarser sand and more clay than unit above
massive greenish clay
massive greenish clay

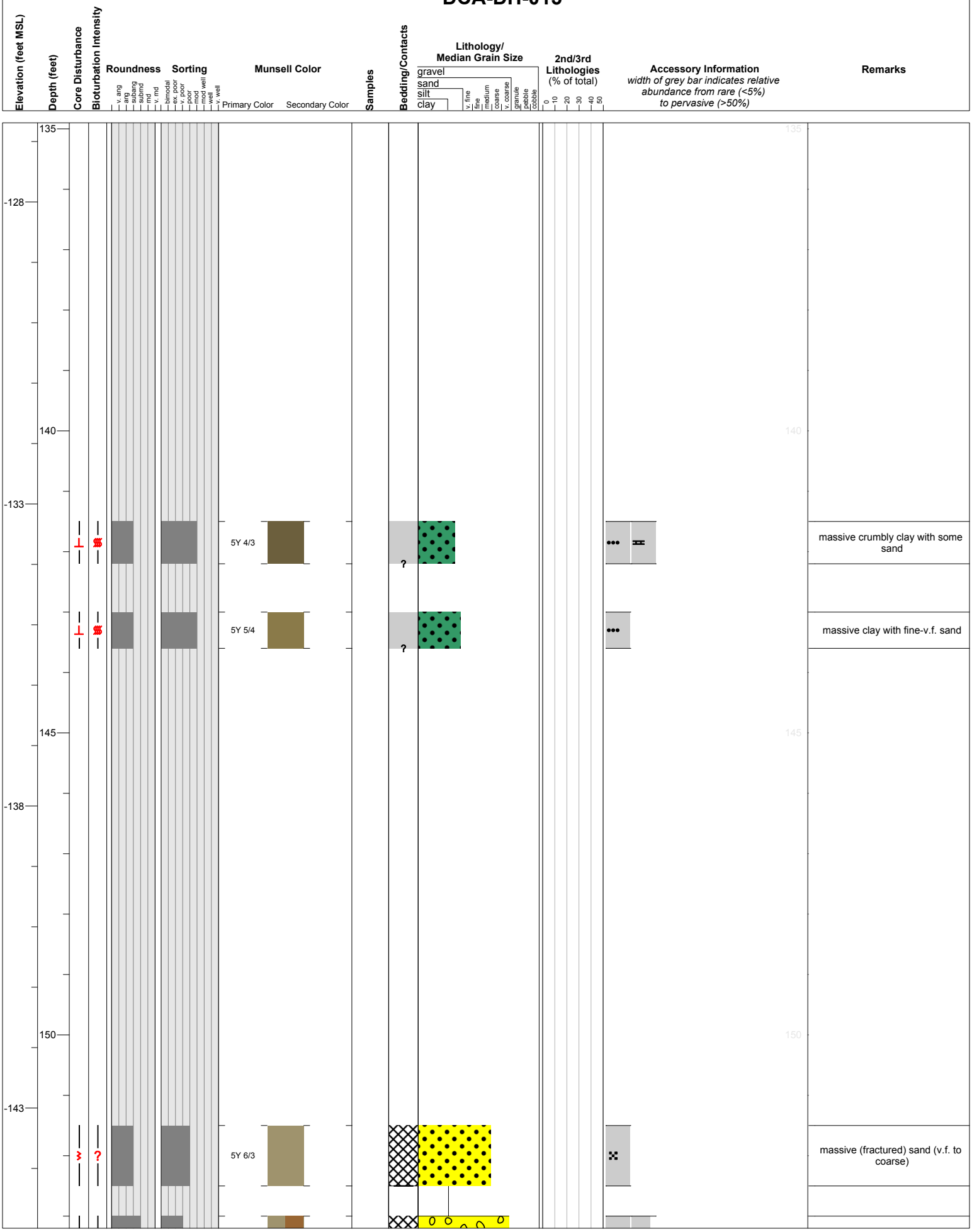
DCA-DH-015


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
100
105
110
115
-93
-98
-103
-108
5Y 5/2
5B 4/1
5Y 5/2
5Y 5/2
5Y 4/2
5Y 4/2
5Y 4/3
5Y 6/3
5Y 4/3
5Y 4/3
massive crumbly clay; greenish
massive soft/sticky clay; greenish and blue
massive crumbly clay
mottled (originally med bedded?) sand and clay
mottled (originally med bedded?) sand and clay
med bedded sand (v.f. to coarse) and clay
massive silty sand
massive mottled clay; greenish
massive mottled clay; greenish

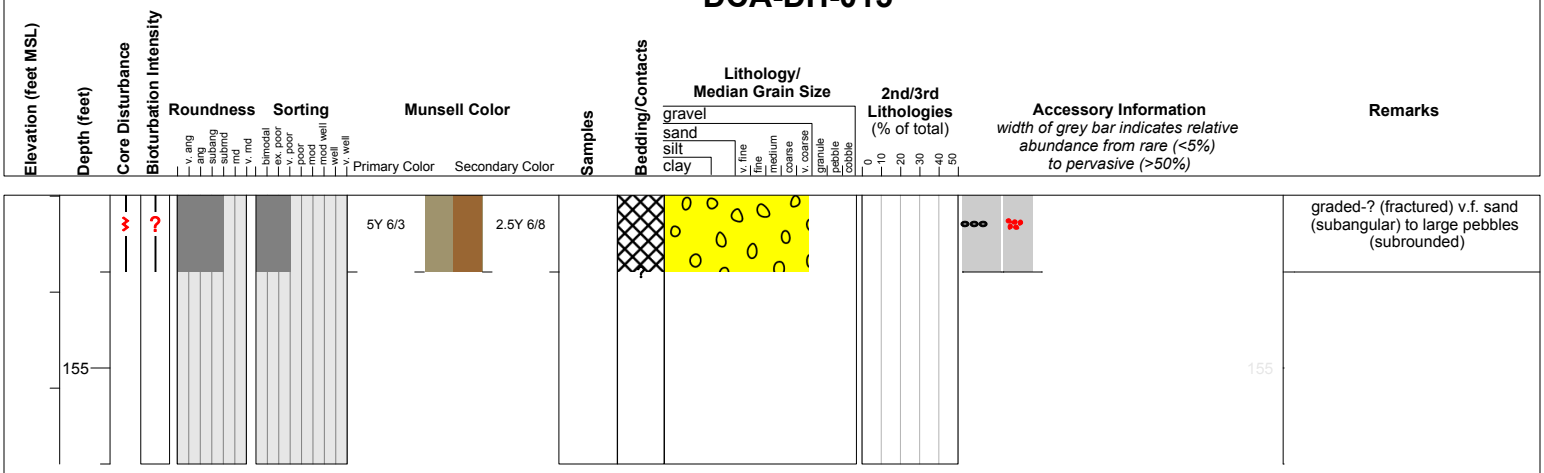
DCA-DH-015


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-113
-118
-123
120
125
130
5Y 4/3
5Y 5/2
5Y 7/3
5Y 4/3
5Y 4/3
5Y 7/3
5Y 5/3
5Y 5/3
5Y 5/2
5Y 5/3
5Y 6/3
5Y 5/3
5Y 4/3
5Y 5/3
5Y 4/3
massive mottled clay
carbonate layer
thin-bedded silty sand with varying clay and carbonate laminations
thin-bedded silty sand with varying clay and carbonate laminations
massive crumbly clay with sand; few thin beds
massive mottled silty sand, some clay
massive mottled clay with sand
massive fine-v.f. sand
massive whiter layer
massive mottled sand
laminated med-bedded structured fine sand
laminated med-bedded structured fine sand

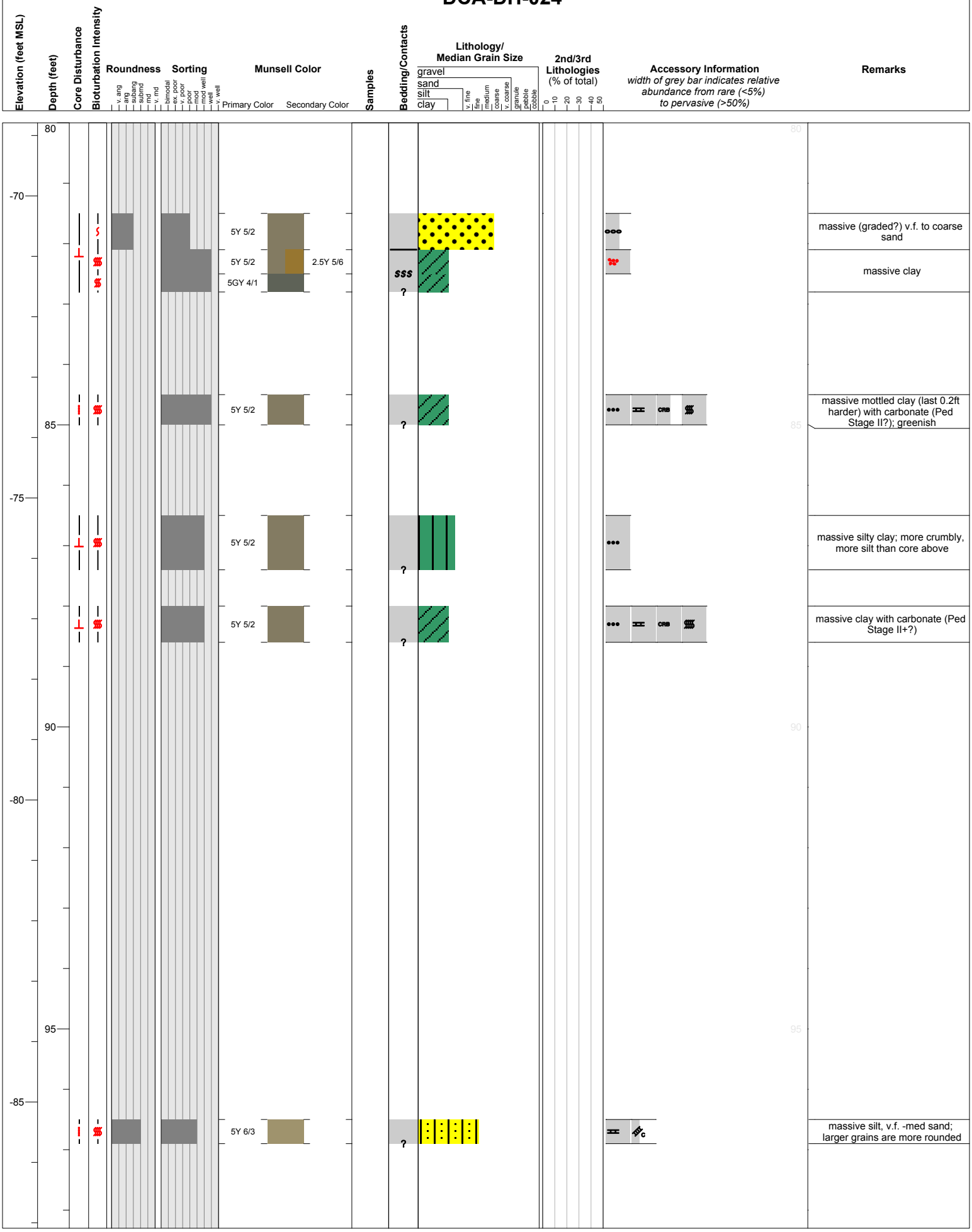
DCA-DH-015


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
135
140
145
150
-128
-133
-138
-143
5Y 4/3
5Y 5/4
5Y 6/3
massive crumbly clay with some sand
massive clay with fine-v.f. sand
massive (fractured) sand (v.f. to coarse)

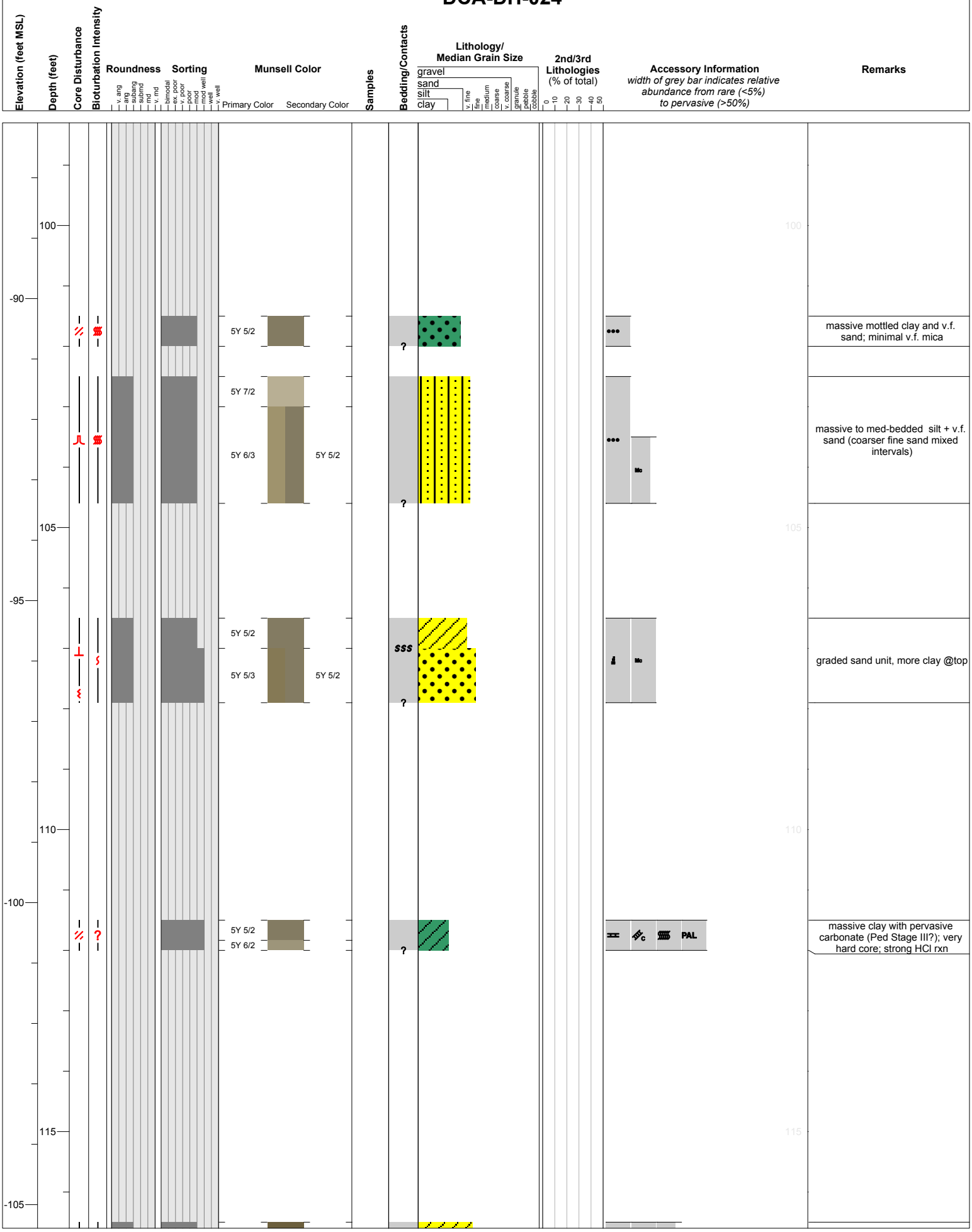
DCA-DH-015


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
5Y 6/3
2.5Y 6/8
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
155
graded-? (fractured) v.f. sand
(subangular) to large pebbles
(subrounded)

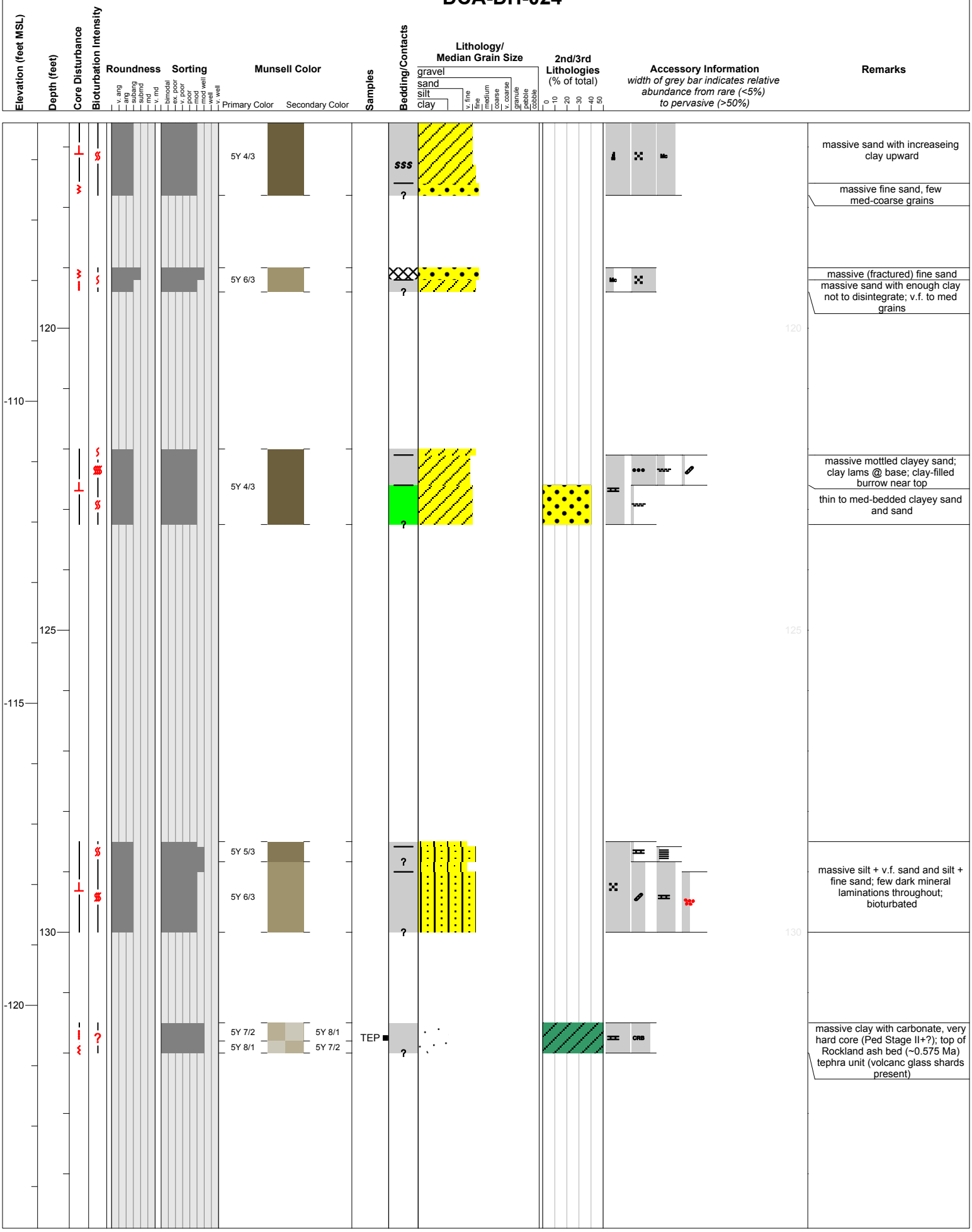
DCA-DH-024


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
80
85
90
95
-70
-75
-80
-85
5Y 5/2
5Y 5/2
2.5Y 5/6
5GY 4/1
5Y 5/2
5Y 5/2
5Y 5/2
5Y 6/3
SSS
?
CRB
massive (graded?) v.f. to coarse sand
massive clay
massive mottled clay (last 0.2ft harder) with carbonate (Ped Stage II?); greenish
massive silty clay; more crumbly, more silt than core above
massive clay with carbonate (Ped Stage II+?)
massive silt, v.f. -med sand; larger grains are more rounded

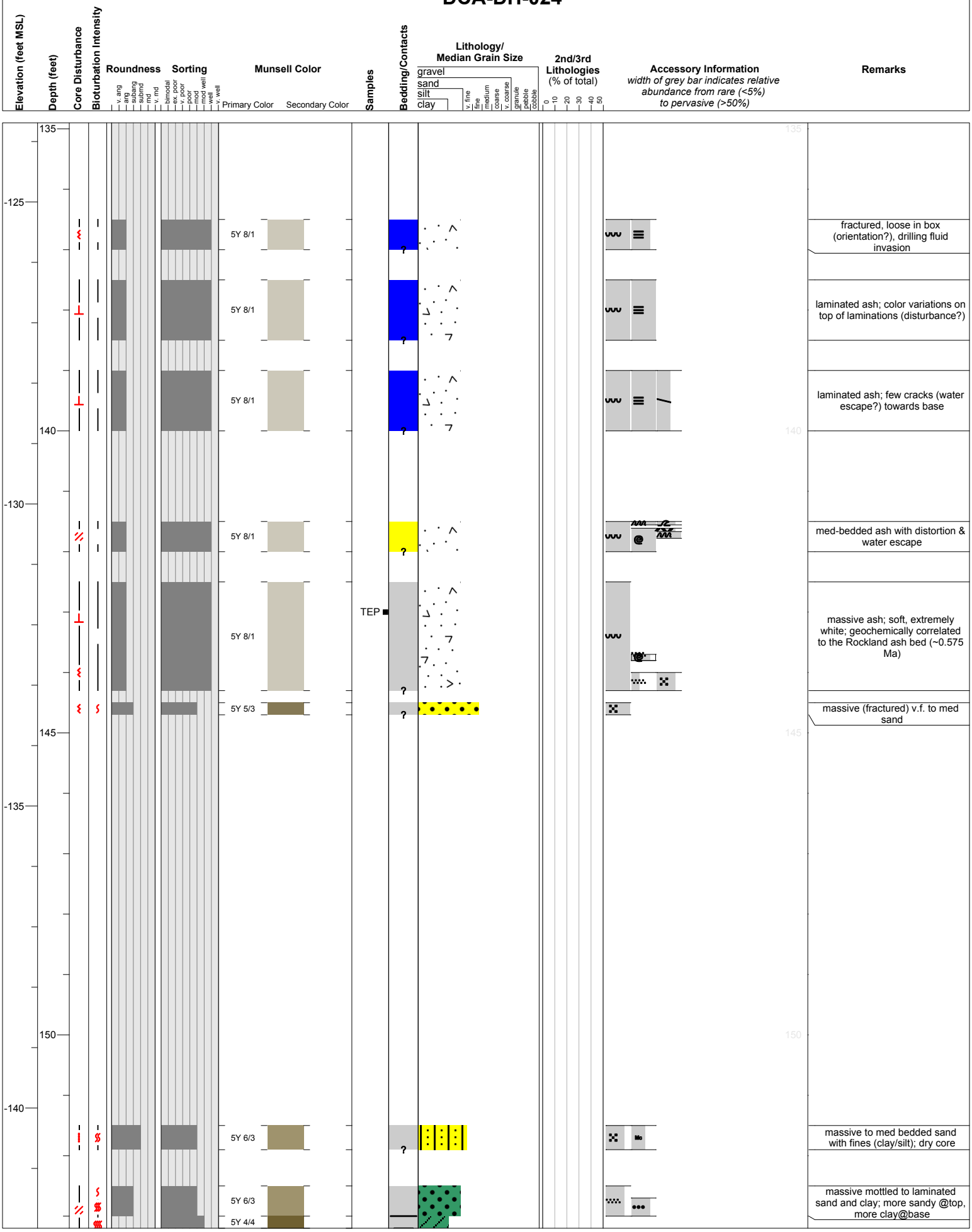
DCA-DH-024


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
100
105
110
115
-90
-95
-100
-105
5Y 5/2
5Y 7/2
5Y 6/3
5Y 5/2
5Y 5/2
5Y 5/3
5Y 5/2
5Y 5/2
5Y 6/2
?
SSS
Mo
PAL
massive mottled clay and v.f. sand; minimal v.f. mica
massive to med-bedded silt + v.f. sand (coarser fine sand mixed intervals)
graded sand unit, more clay @top
massive clay with pervasive carbonate (Ped Stage III?); very hard core; strong HCl rxn

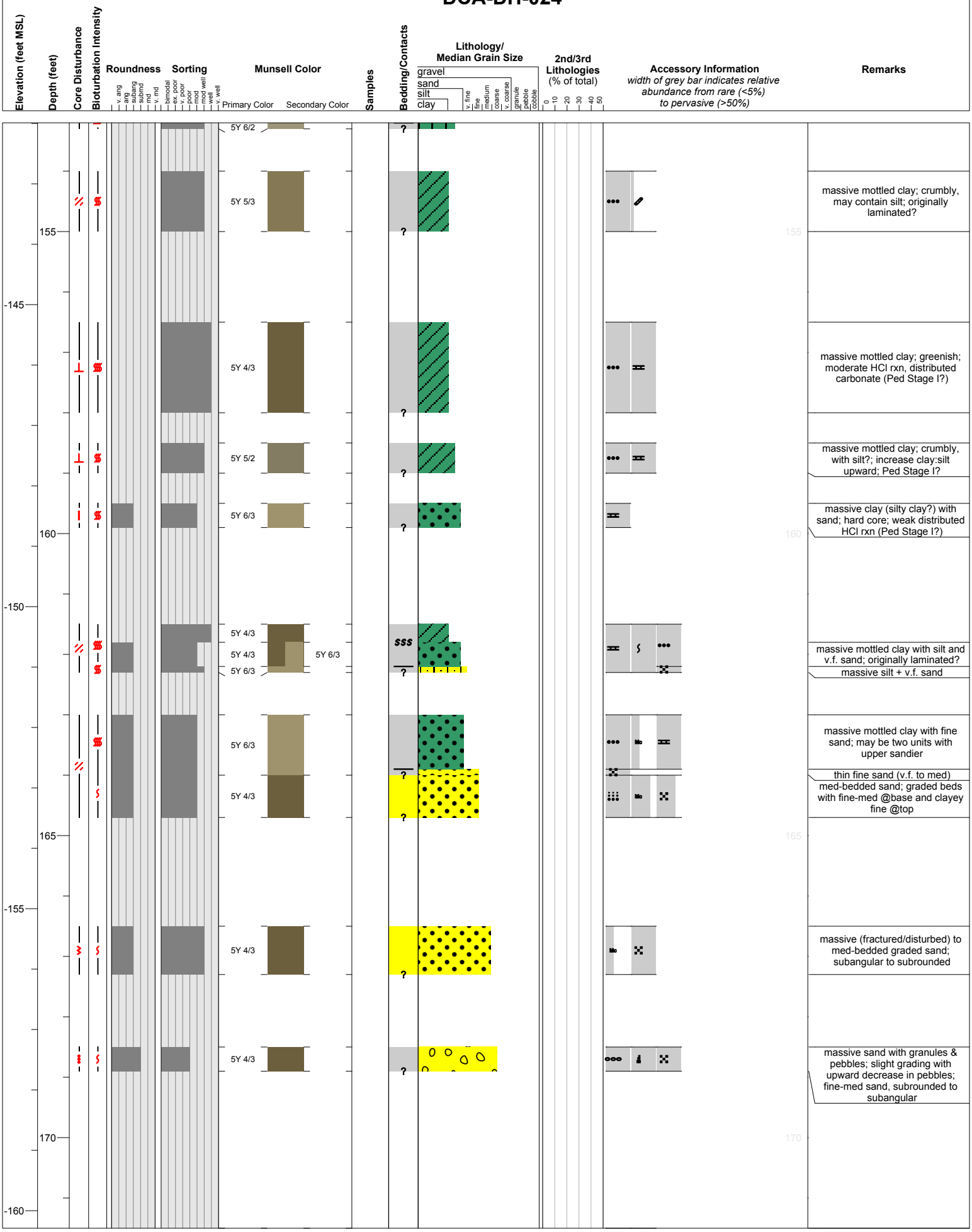
DCA-DH-024


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative abundance from rare (<5%) to pervasive (>50%)
Remarks
-110
-115
-120
120
125
130
5Y 4/3
5Y 6/3
5Y 4/3
5Y 5/3
5Y 6/3
5Y 7/2
5Y 8/1
5Y 8/1
5Y 7/2
TEP
Mc
CRB
massive sand with increaseing clay upward
massive fine sand, few med-coarse grains
massive (fractured) fine sand
massive sand with enough clay not to disintegrate; v.f. to med grains
massive mottled clayey sand; clay lams @ base; clay-filled burrow near top
thin to med-bedded clayey sand and sand
massive silt + v.f. sand and silt + fine sand; few dark mineral laminations throughout; bioturbated
massive clay with carbonate, very hard core (Ped Stage II+?); top of Rockland ash bed (~0.575 Ma) tephra unit (volcanc glass shards present)

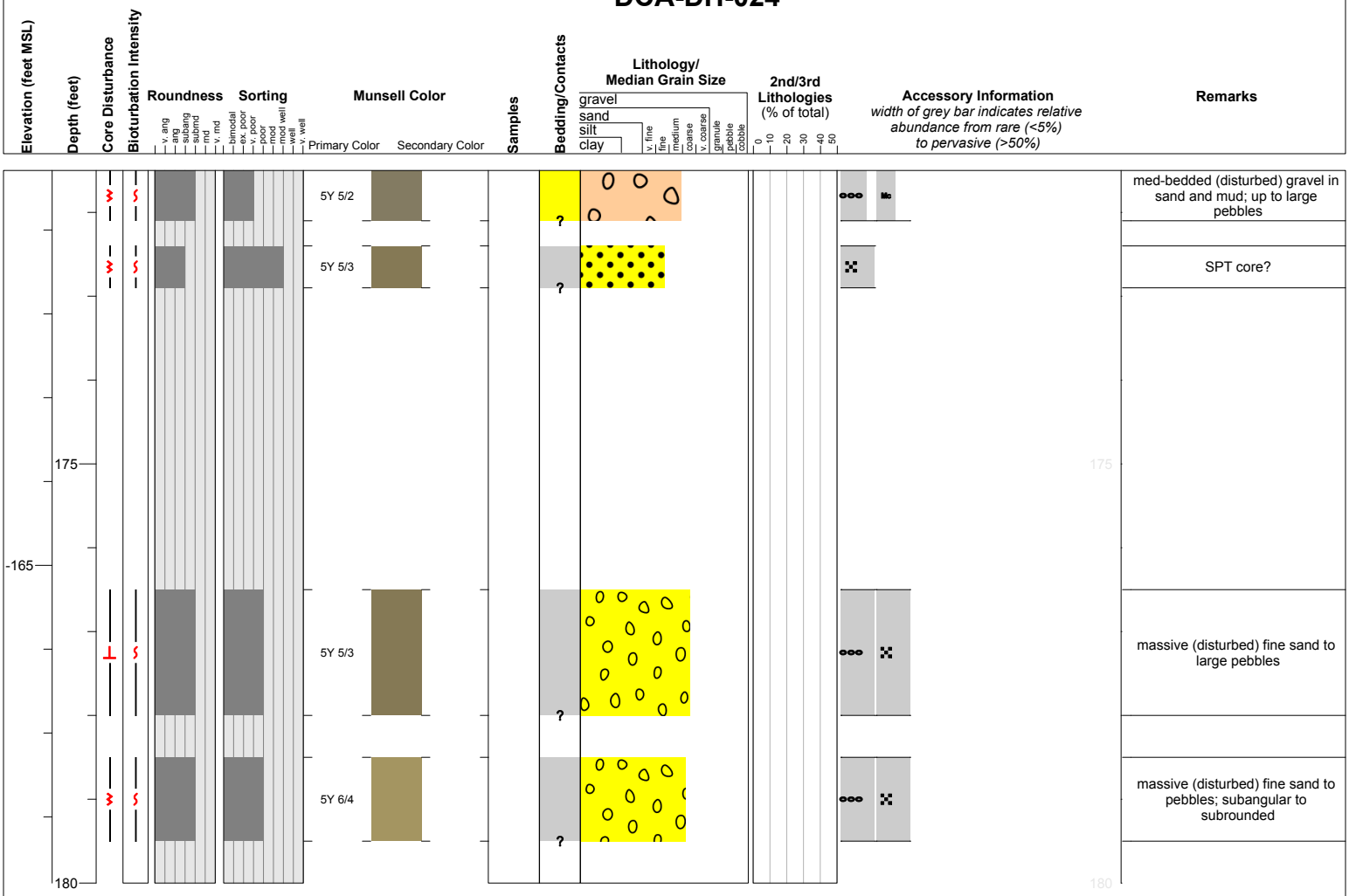
DCA-DH-024


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
135
-125
140
-130
145
-135
150
-140
5Y 8/1
5Y 8/1
5Y 8/1
5Y 8/1
5Y 8/1
5Y 5/3
5Y 6/3
5Y 6/3
5Y 4/4
TEP
fractured, loose in box (orientation?), drilling fluid invasion
laminated ash; color variations on top of laminations (disturbance?)
laminated ash; few cracks (water escape?) towards base
med-bedded ash with distortion & water escape
massive ash; soft, extremely white; geochemically correlated to the Rockland ash bed (~0.575 Ma)
massive (fractured) v.f. to med sand
massive to med bedded sand with fines (clay/silt); dry core
massive mottled to laminated sand and clay; more sandy @top, more clay@base

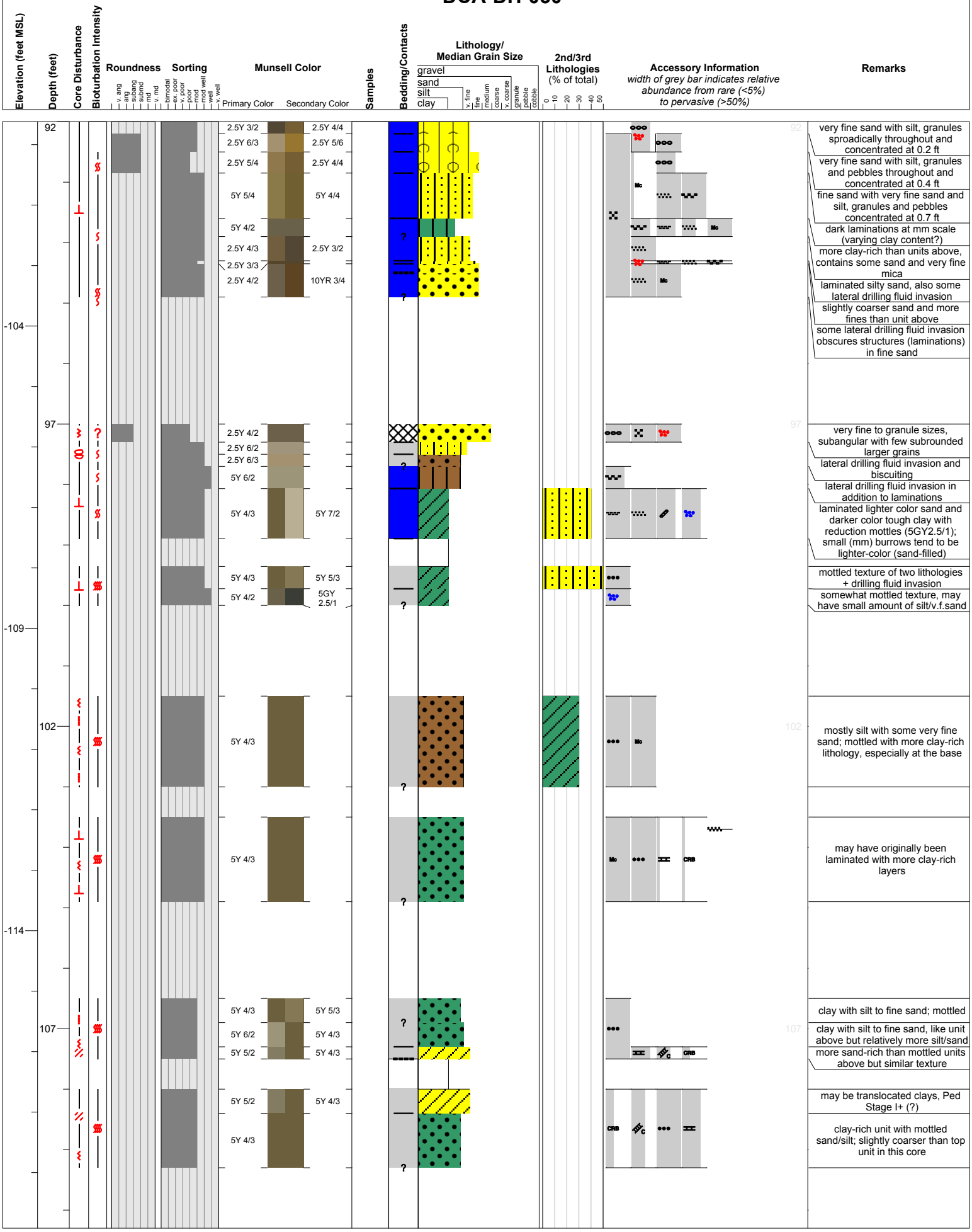
DCA-DH-024


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative abundance from rare (<5%) to pervasive (>50%)
Remarks
155
160
165
170
-145
-150
-155
-160
5Y 6/2
5Y 5/3
5Y 4/3
5Y 5/2
5Y 6/3
5Y 4/3
5Y 4/3
5Y 6/3
5Y 6/3
5Y 4/3
5Y 4/3
5Y 4/3
5Y 4/3
massive mottled clay; crumbly, may contain silt; originally laminated?
massive mottled clay; greenish; moderate HCl rxn, distributed carbonate (Ped Stage I?)
massive mottled clay; crumbly, with silt?; increase clay:silt upward; Ped Stage I?
massive clay (silty clay?) with sand; hard core; weak distributed HCl rxn (Ped Stage I?)
massive mottled clay with silt and v.f. sand; originally laminated?
massive silt + v.f. sand
massive mottled clay with fine sand; may be two units with upper sandier
thin fine sand (v.f. to med)
med-bedded sand; graded beds with fine-med @base and clayey fine @top
massive (fractured/disturbed) to med-bedded graded sand; subangular to subrounded
massive sand with granules & pebbles; slight grading with upward decrease in pebbles; fine-med sand, subrounded to subangular

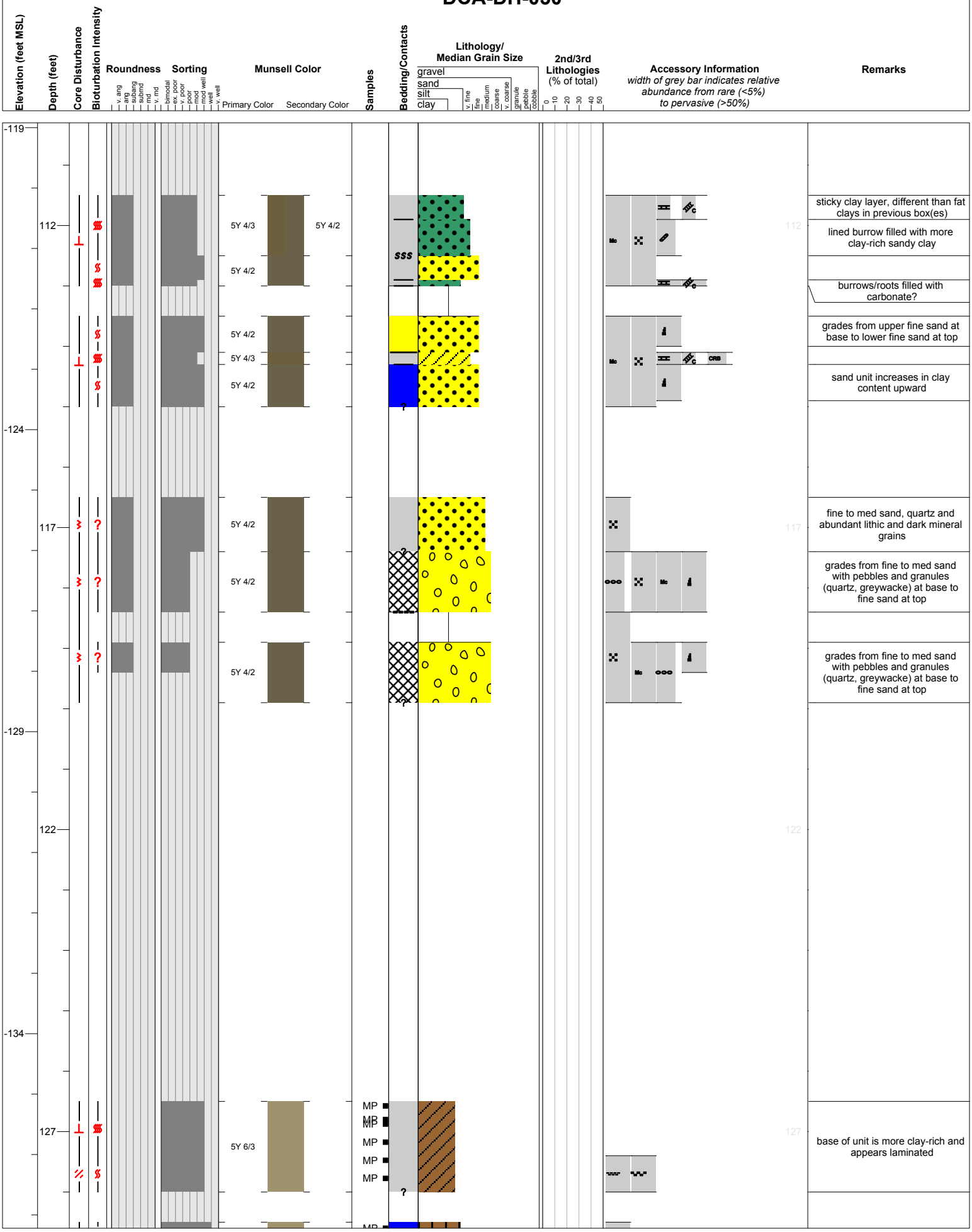
DCA-DH-024


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
175
-165
180
5Y 5/2
5Y 5/3
5Y 5/3
5Y 6/4
?
?
?
?
175
180
med-bedded (disturbed) gravel in sand and mud; up to large pebbles
SPT core?
massive (disturbed) fine sand to large pebbles
massive (disturbed) fine sand to pebbles; subangular to subrounded

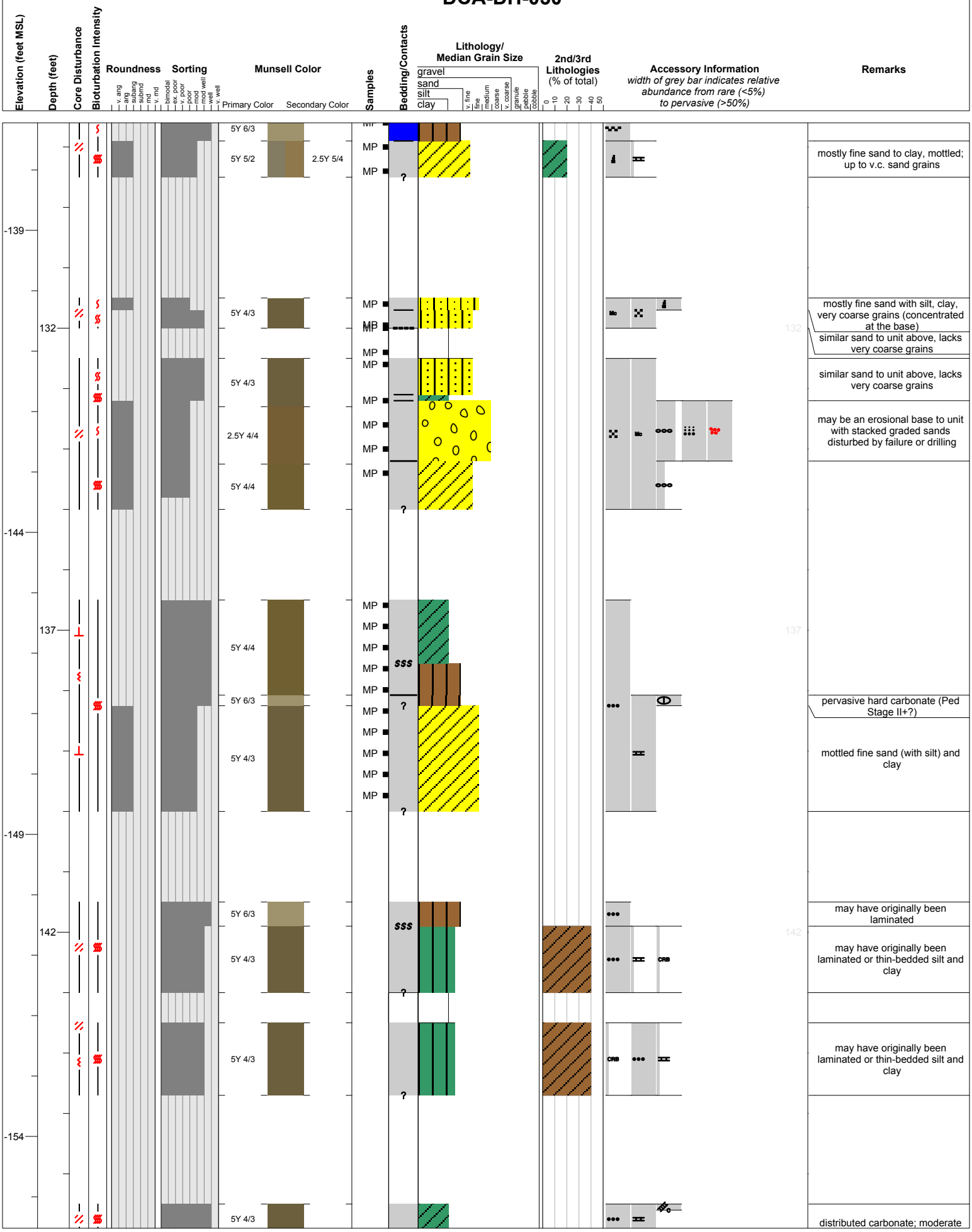
DCA-DH-030


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative abundance from rare (<5%) to pervasive (>50%)
Remarks
92
97
102
107
-104
-109
-114
2.5Y 3/2
2.5Y 6/3
2.5Y 5/4
5Y 5/4
5Y 4/2
2.5Y 4/3
2.5Y 3/3
2.5Y 4/2
2.5Y 4/4
2.5Y 5/6
2.5Y 4/4
5Y 4/4
2.5Y 3/2
10YR 3/4
2.5Y 4/2
2.5Y 6/2
2.5Y 6/3
5Y 6/2
5Y 4/3
5Y 7/2
5Y 4/3
5Y 4/2
5Y 5/3
5GY 2.5/1
5Y 4/3
5Y 4/3
5Y 4/3
5Y 5/3
5Y 6/2
5Y 4/3
5Y 5/2
5Y 4/3
5Y 5/2
5Y 4/3
5Y 4/3
Mo
CRB
very fine sand with silt, granules sproadically throughout and concentrated at 0.2 ft
very fine sand with silt, granules and pebbles throughout and concentrated at 0.4 ft
fine sand with very fine sand and silt, granules and pebbles concentrated at 0.7 ft
dark laminations at mm scale (varying clay content?)
more clay-rich than units above, contains some sand and very fine mica
laminated silty sand, also some lateral drilling fluid invasion
slightly coarser sand and more fines than unit above
some lateral drilling fluid invasion obscures structures (laminations) in fine sand
very fine to granule sizes, subangular with few subrounded larger grains
lateral drilling fluid invasion and biscuiting
lateral drilling fluid invasion in addition to laminations
laminated lighter color sand and darker color tough clay with reduction mottles (5GY2.5/1); small (mm) burrows tend to be lighter-color (sand-filled)
mottled texture of two lithologies + drilling fluid invasion
somewhat mottled texture, may have small amount of silt/v.f.sand
mostly silt with some very fine sand; mottled with more clay-rich lithology, especially at the base
may have originally been laminated with more clay-rich layers
clay with silt to fine sand; mottled
clay with silt to fine sand, like unit above but relatively more silt/sand
more sand-rich than mottled units above but similar texture
may be translocated clays, Ped Stage I+ (?)
clay-rich unit with mottled sand/silt; slightly coarser than top unit in this core

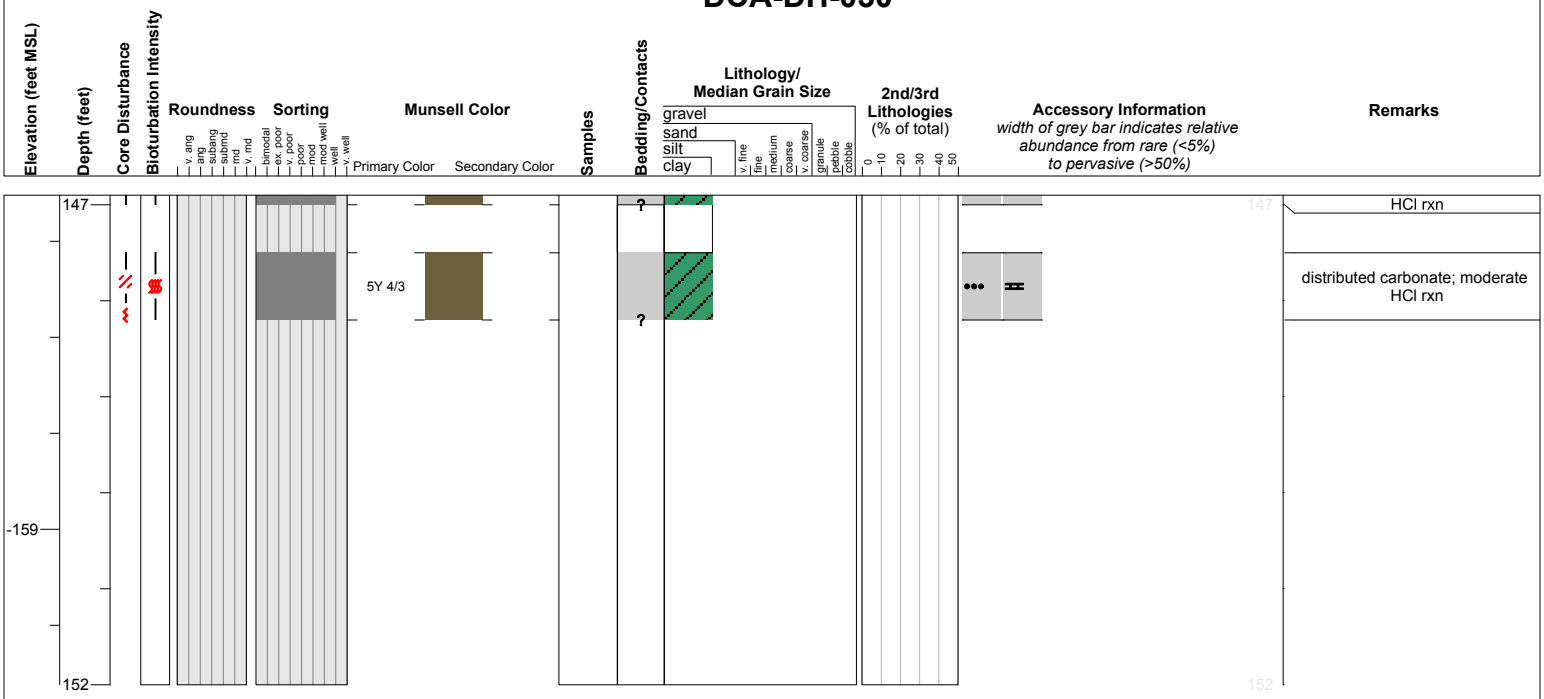
DCA-DH-030


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-119
-124
-129
-134
112
117
122
127
5Y 4/3
5Y 4/2
5Y 6/3
MP
sticky clay layer, different than fat clays in previous box(es)
lined burrow filled with more clay-rich sandy clay
burrows/roots filled with carbonate?
grades from upper fine sand at base to lower fine sand at top
sand unit increases in clay content upward
fine to med sand, quartz and abundant lithic and dark mineral grains
grades from fine to med sand with pebbles and granules (quartz, greywacke) at base to fine sand at top
grades from fine to med sand with pebbles and granules (quartz, greywacke) at base to fine sand at top
base of unit is more clay-rich and appears laminated

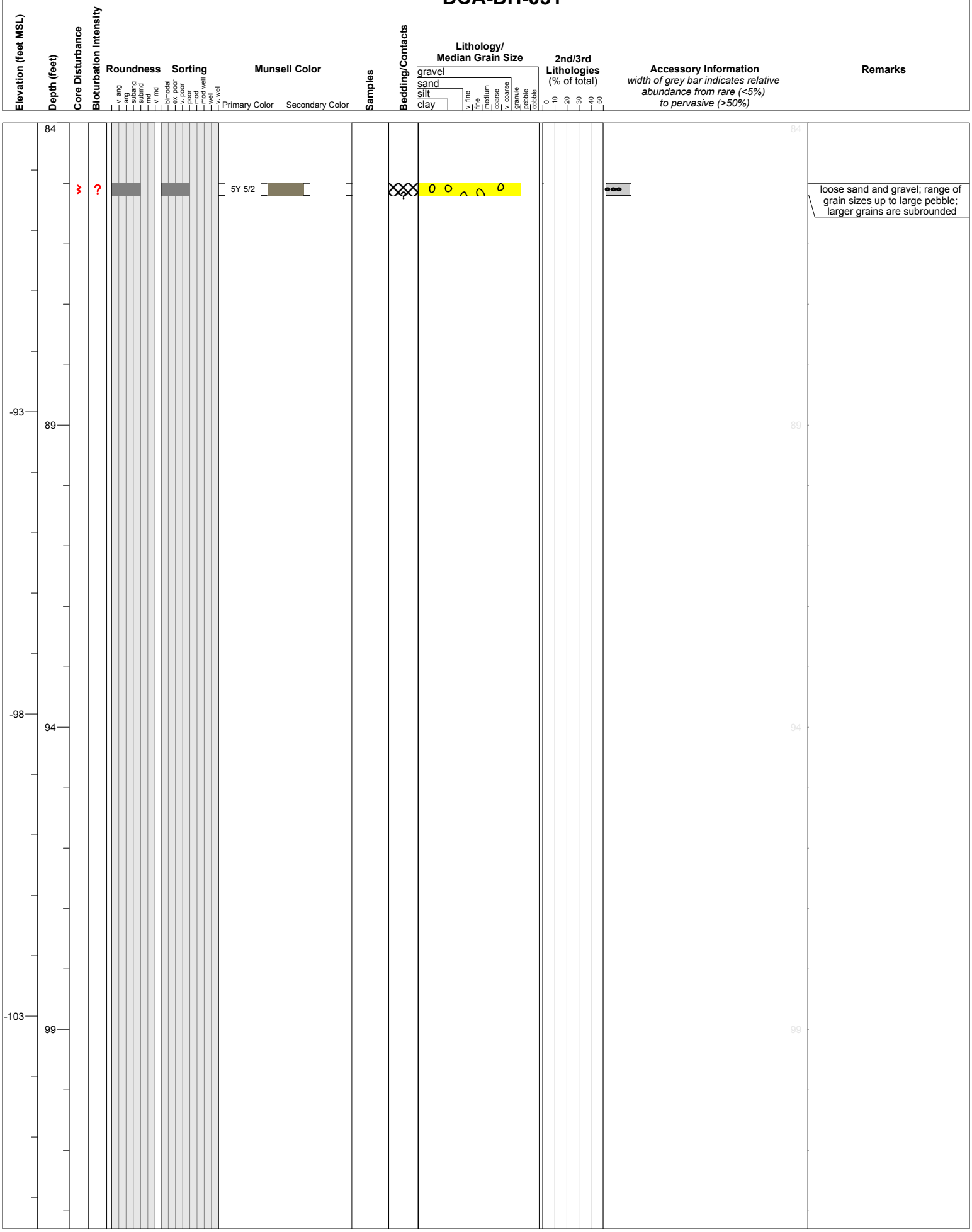
DCA-DH-030


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-139
-144
-149
-154
132
137
142
5Y 6/3
5Y 5/2
2.5Y 5/4
5Y 4/3
2.5Y 4/4
5Y 4/4
MP
SSS
?
Mc
CRB
mostly fine sand to clay, mottled; up to v.c. sand grains
mostly fine sand with silt, clay, very coarse grains (concentrated at the base)
similar sand to unit above, lacks very coarse grains
similar sand to unit above, lacks very coarse grains
may be an erosional base to unit with stacked graded sands disturbed by failure or drilling
pervasive hard carbonate (Ped Stage II+?)
mottled fine sand (with silt) and clay
may have originally been laminated
may have originally been laminated or thin-bedded silt and clay
may have originally been laminated or thin-bedded silt and clay
distributed carbonate; moderate

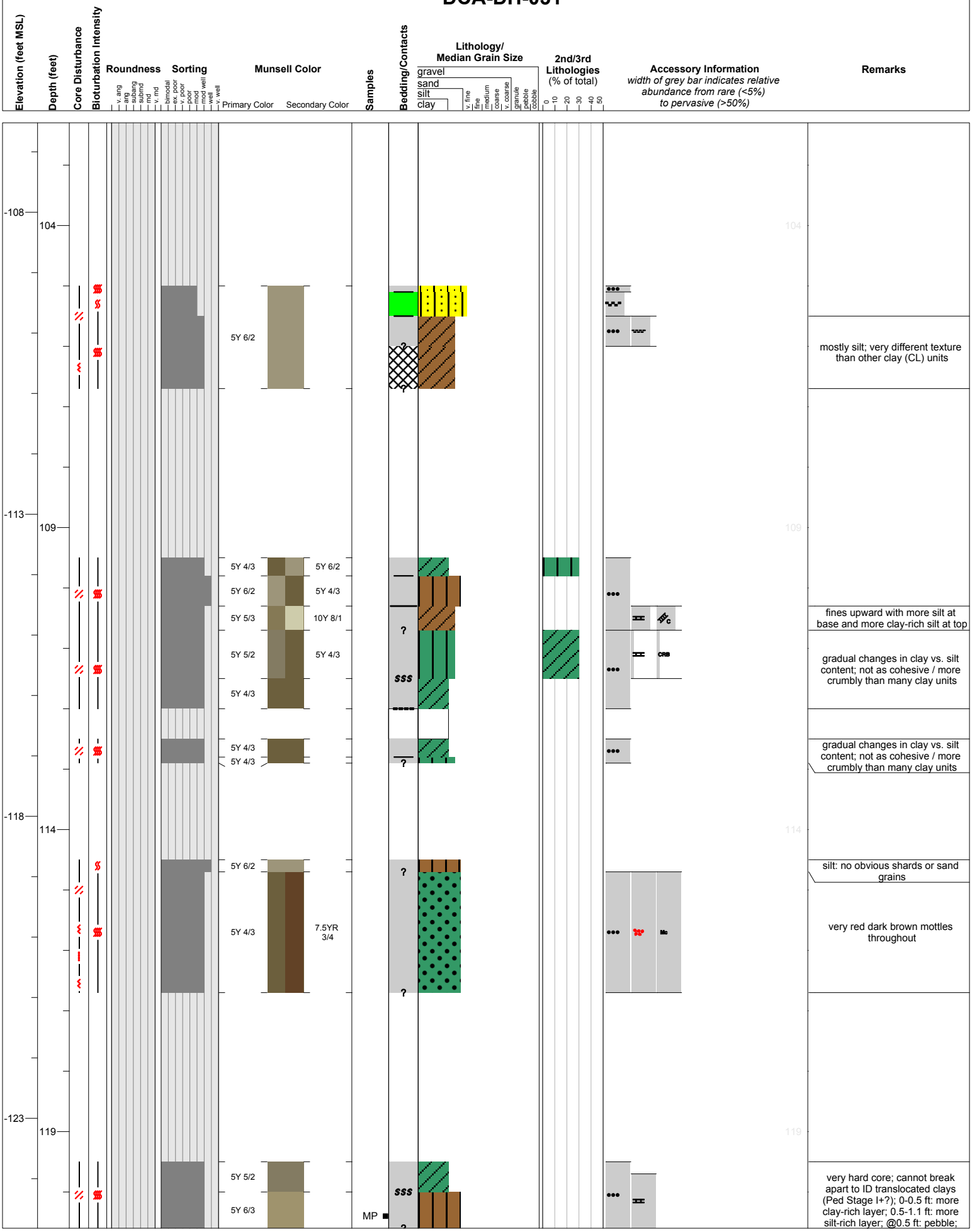
DCA-DH-030


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
5Y 4/3
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
147
-159
152
HCl rxn
distributed carbonate; moderate
HCl rxn

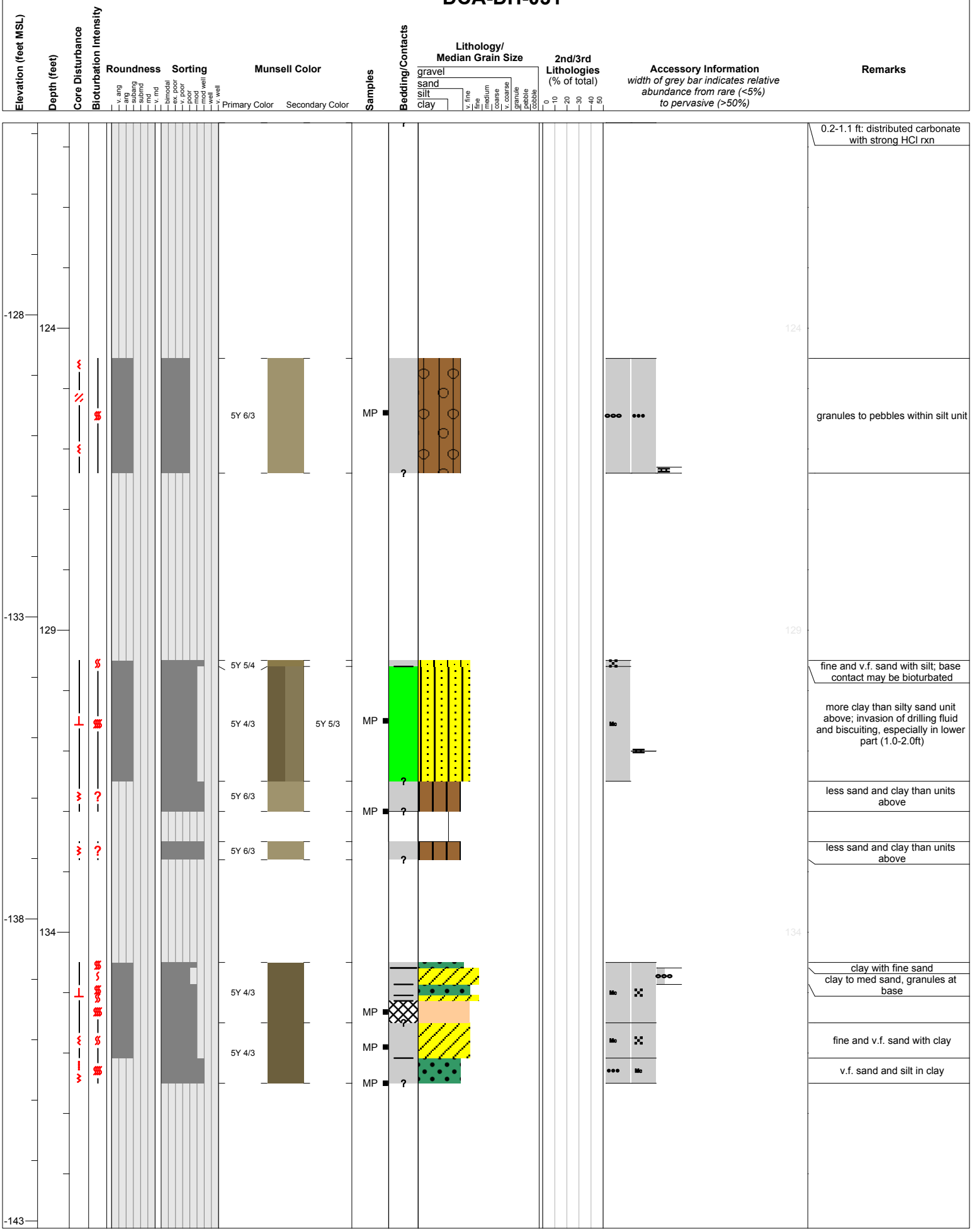
DCA-DH-031


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
84
89
94
99
-93
-98
-103
5Y 5/2
loose sand and gravel; range of
grain sizes up to large pebble;
larger grains are subrounded

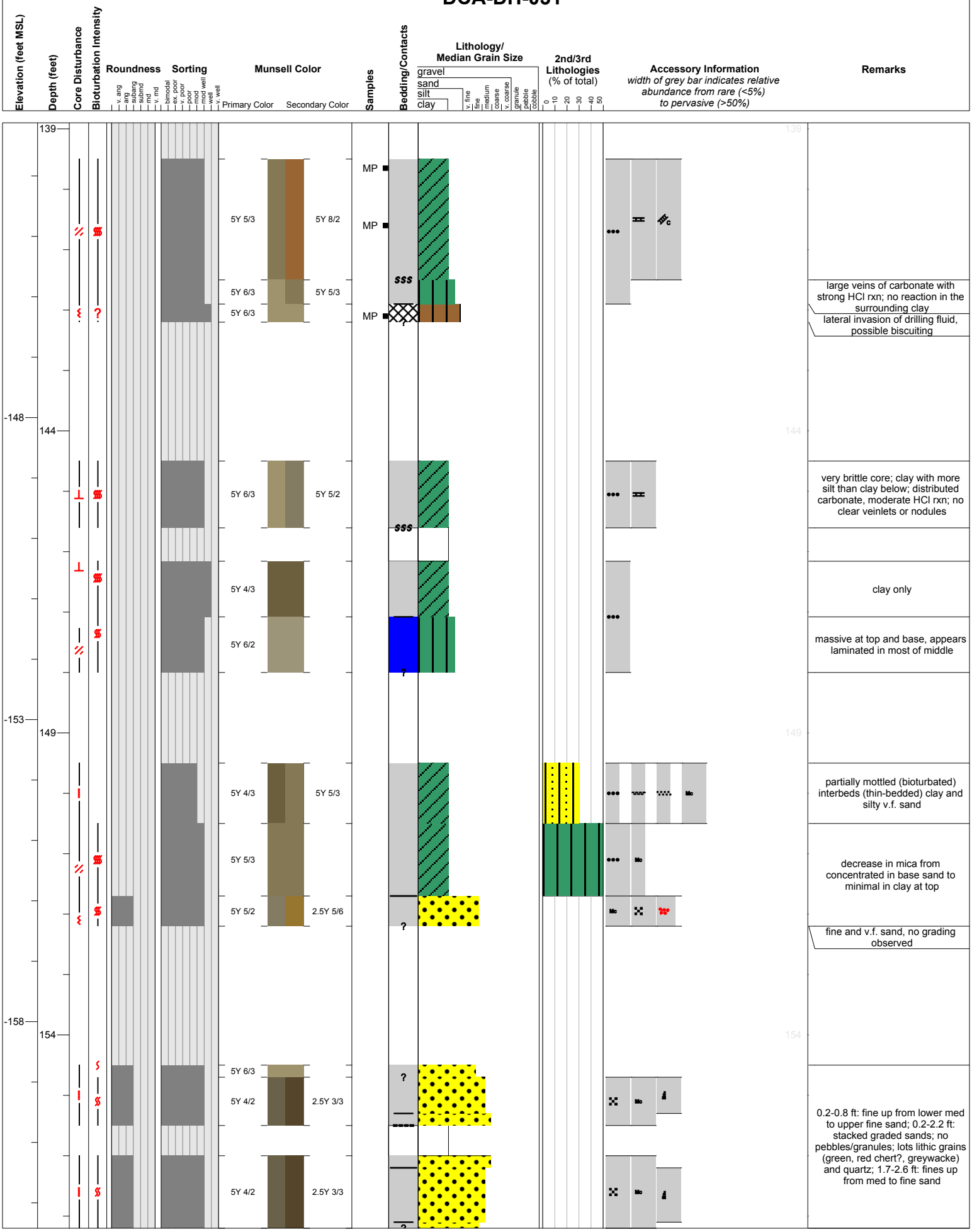
DCA-DH-031


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-108
104
-113
109
-118
114
-123
119
5Y 6/2
5Y 4/3
5Y 6/2
5Y 5/3
10Y 8/1
5Y 5/2
5Y 4/3
5Y 4/3
5Y 4/3
5Y 4/3
5Y 6/2
5Y 4/3
7.5YR
3/4
5Y 5/2
5Y 6/3
MP
SSS
SSS
CRB
Mc
mostly silt; very different texture than other clay (CL) units
fines upward with more silt at base and more clay-rich silt at top
gradual changes in clay vs. silt content; not as cohesive / more crumbly than many clay units
gradual changes in clay vs. silt content; not as cohesive / more crumbly than many clay units
silt: no obvious shards or sand grains
very red dark brown mottles throughout
very hard core; cannot break apart to ID translocated clays (Ped Stage I+?); 0-0.5 ft: more clay-rich layer; 0.5-1.1 ft: more silt-rich layer; @0.5 ft: pebble;

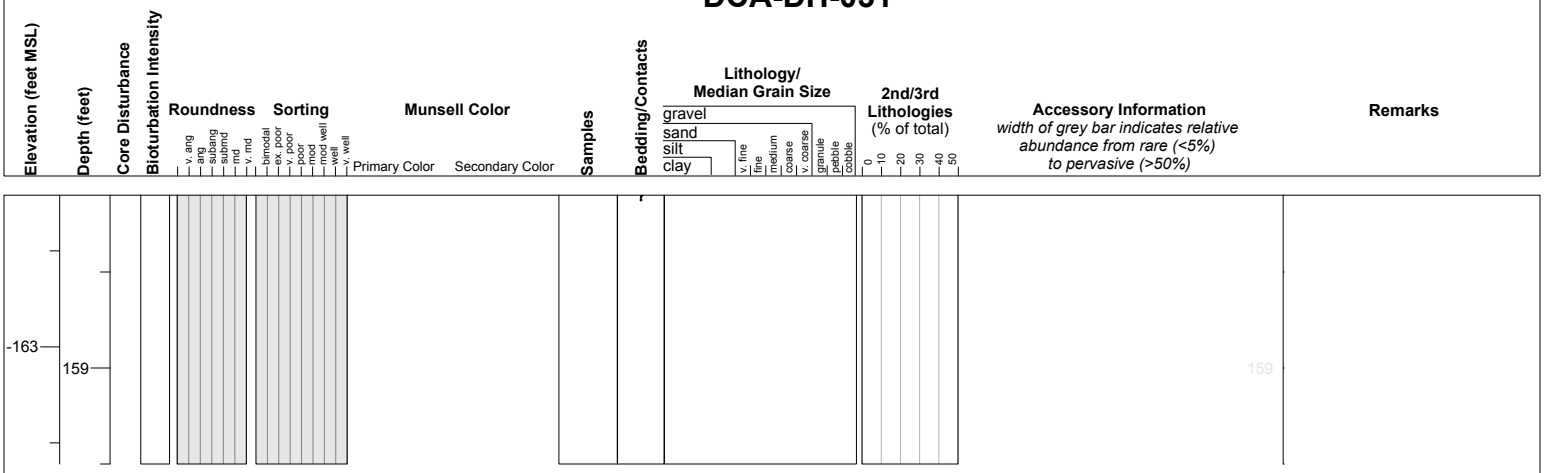
DCA-DH-031


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-128
124
-133
129
-138
134
-143
5Y 6/3
MP
5Y 5/4
5Y 4/3
5Y 5/3
5Y 6/3
5Y 6/3
5Y 4/3
5Y 4/3
0.2-1.1 ft: distributed carbonate
with strong HCl rxn
granules to pebbles within silt unit
fine and v.f. sand with silt; base
contact may be bioturbated
more clay than silty sand unit
above; invasion of drilling fluid
and biscuiting, especially in lower
part (1.0-2.0ft)
less sand and clay than units
above
less sand and clay than units
above
clay with fine sand
clay to med sand, granules at
base
fine and v.f. sand with clay
v.f. sand and silt in clay

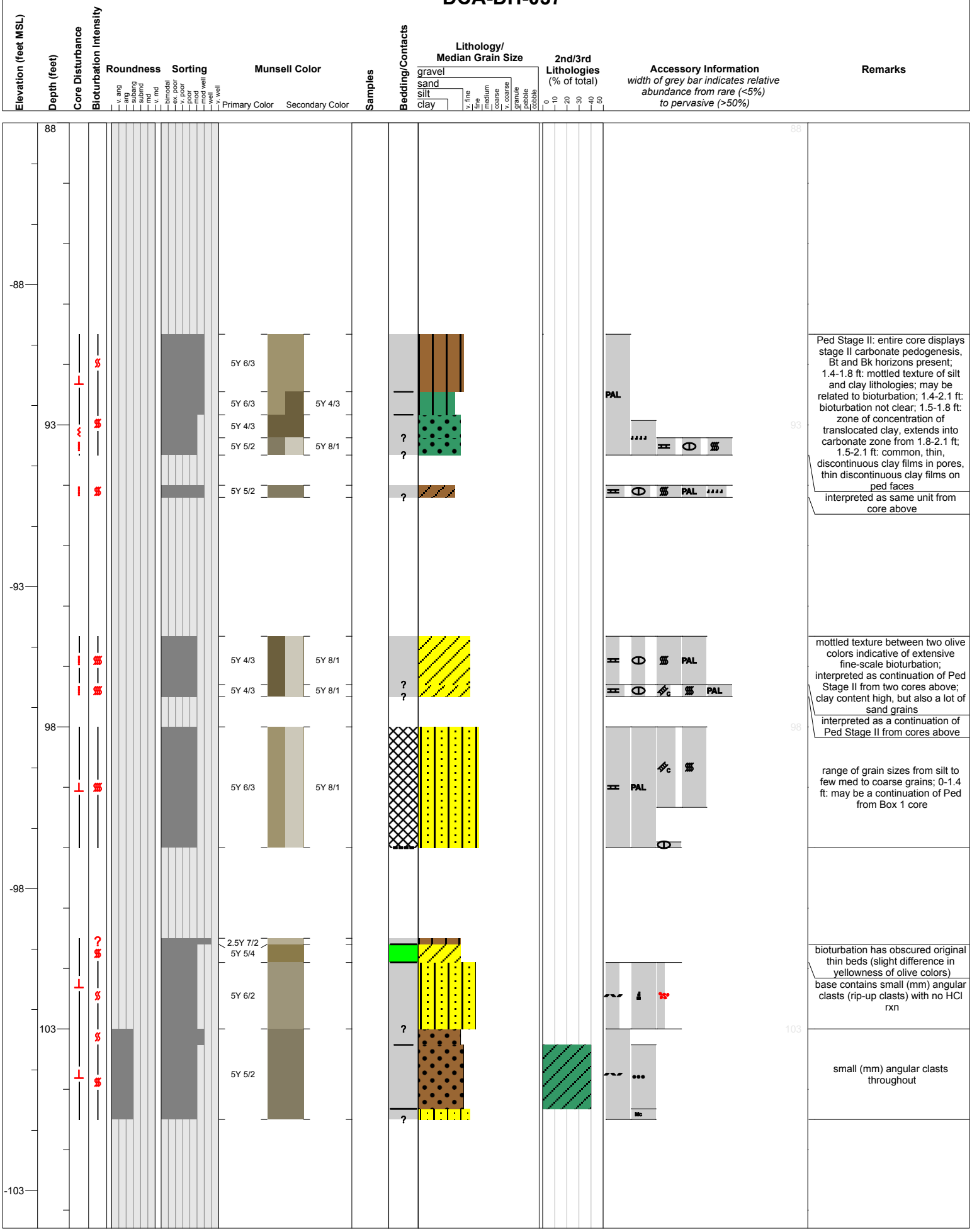
DCA-DH-031


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative abundance from rare (<5%) to pervasive (>50%)
Remarks
139
-148
144
-153
149
-158
154
MP
MP
MP
5Y 5/3
5Y 8/2
5Y 6/3
5Y 5/3
5Y 6/3
5Y 6/3
5Y 5/2
5Y 4/3
5Y 6/2
5Y 4/3
5Y 5/3
5Y 5/3
5Y 5/2
2.5Y 5/6
5Y 6/3
5Y 4/2
2.5Y 3/3
5Y 4/2
2.5Y 3/3
large veins of carbonate with strong HCl rxn; no reaction in the surrounding clay
lateral invasion of drilling fluid, possible biscuiting
very brittle core; clay with more silt than clay below; distributed carbonate, moderate HCl rxn; no clear veinlets or nodules
clay only
massive at top and base, appears laminated in most of middle
partially mottled (bioturbated) interbeds (thin-bedded) clay and silty v.f. sand
decrease in mica from concentrated in base sand to minimal in clay at top
fine and v.f. sand, no grading observed
0.2-0.8 ft: fine up from lower med to upper fine sand; 0.2-2.2 ft: stacked graded sands; no pebbles/granules; lots lithic grains (green, red chert?, greywacke) and quartz; 1.7-2.6 ft: fines up from med to fine sand

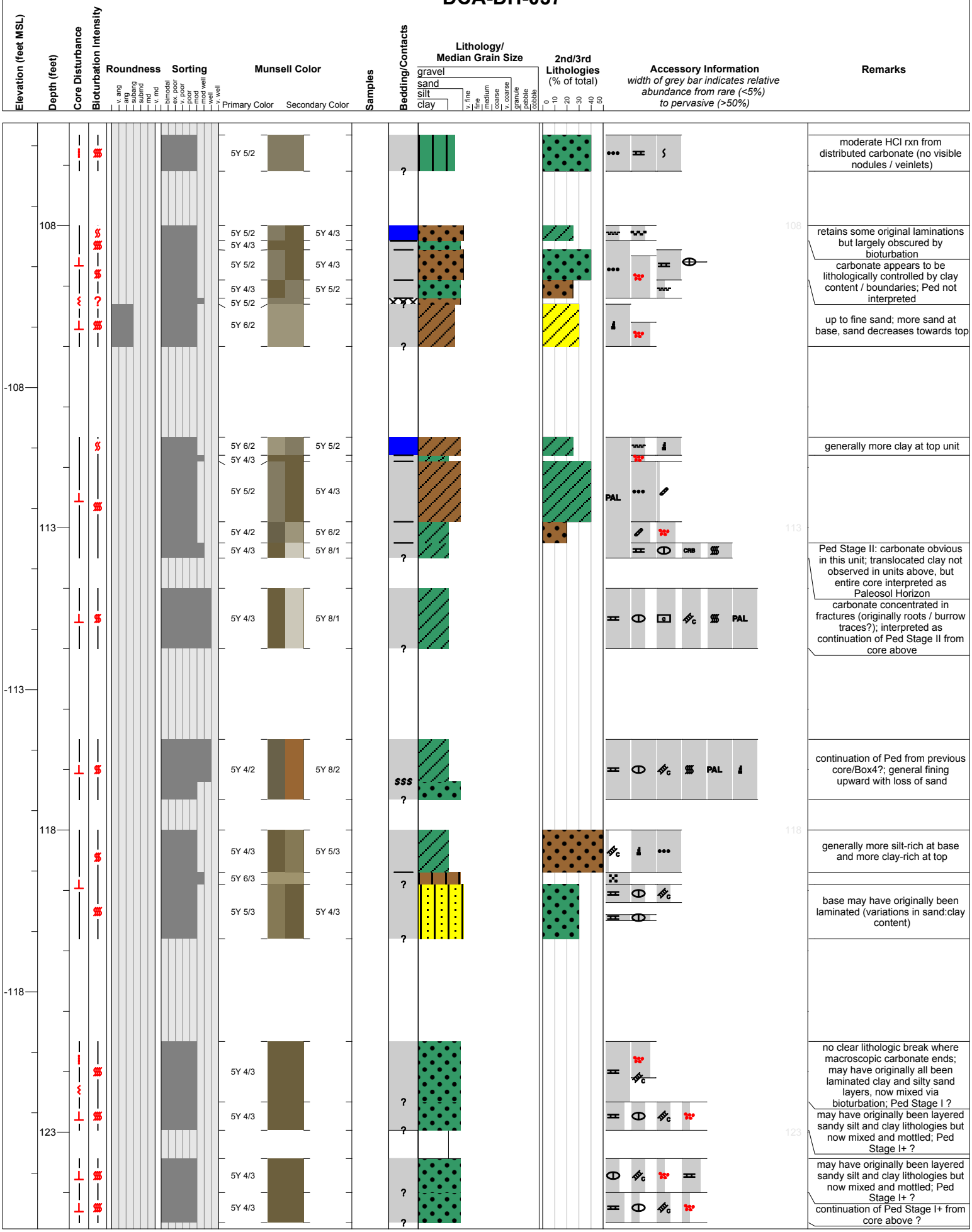
DCA-DH-031


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-163
159
159

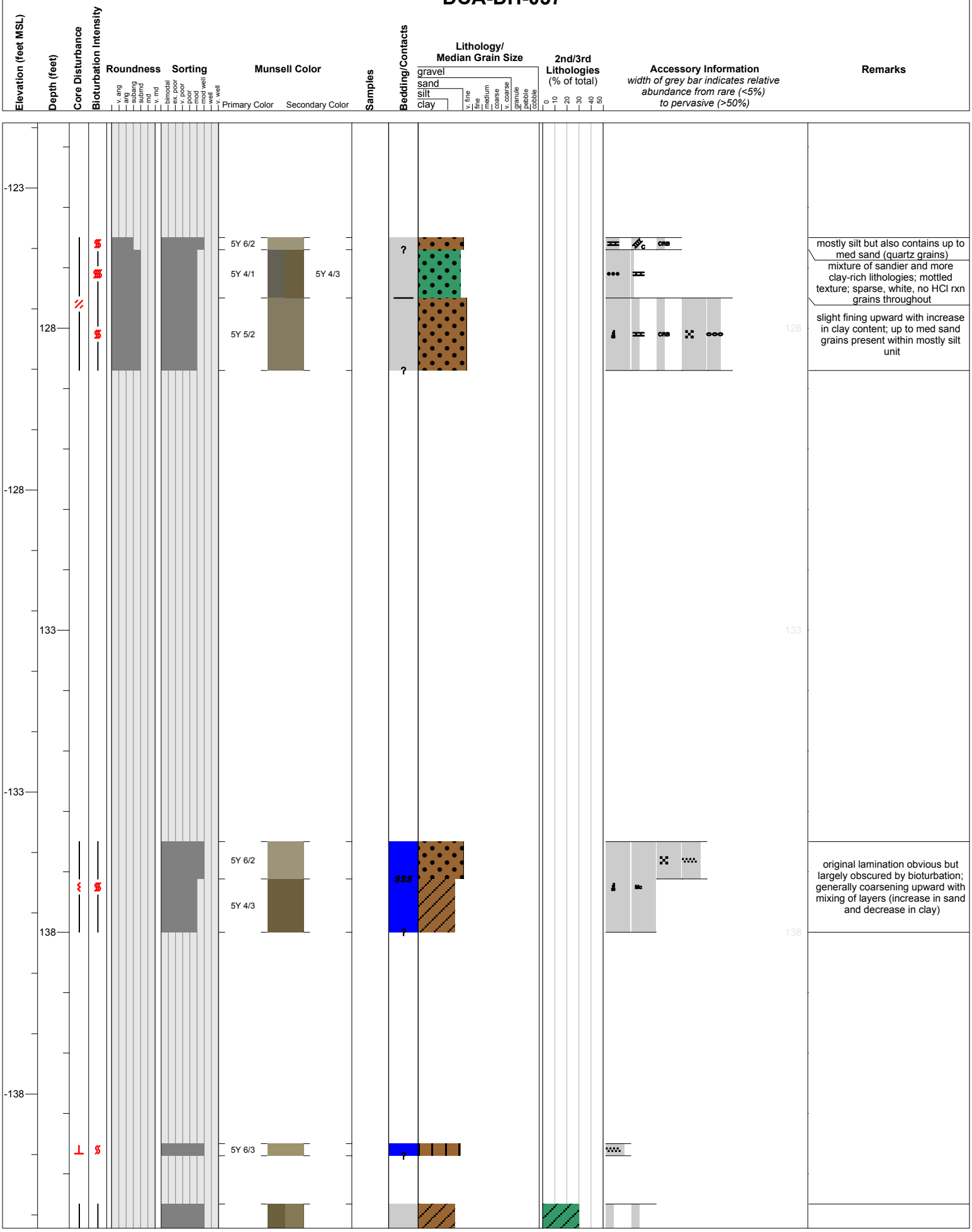
DCA-DH-037


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
88
93
98
103
-88
-93
-98
-103
5Y 6/3
5Y 6/3
5Y 4/3
5Y 4/3
5Y 5/2
5Y 8/1
5Y 5/2
5Y 4/3
5Y 8/1
5Y 4/3
5Y 8/1
5Y 6/3
5Y 8/1
2.5Y 7/2
5Y 5/4
5Y 6/2
5Y 5/2
PAL
PAL
PAL
PAL
PAL
Ped Stage II: entire core displays stage II carbonate pedogenesis, Bt and Bk horizons present; 1.4-1.8 ft: mottled texture of silt and clay lithologies; may be related to bioturbation; 1.4-2.1 ft: bioturbation not clear; 1.5-1.8 ft: zone of concentration of translocated clay, extends into carbonate zone from 1.8-2.1 ft; 1.5-2.1 ft: common, thin, discontinuous clay films in pores, thin discontinuous clay films on ped faces
interpreted as same unit from core above
mottled texture between two olive colors indicative of extensive fine-scale bioturbation; interpreted as continuation of Ped Stage II from two cores above; clay content high, but also a lot of sand grains
interpreted as a continuation of Ped Stage II from cores above
range of grain sizes from silt to few med to coarse grains; 0-1.4 ft: may be a continuation of Ped from Box 1 core
bioturbation has obscured original thin beds (slight difference in yellowness of olive colors)
base contains small (mm) angular clasts (rip-up clasts) with no HCl rxn
small (mm) angular clasts throughout

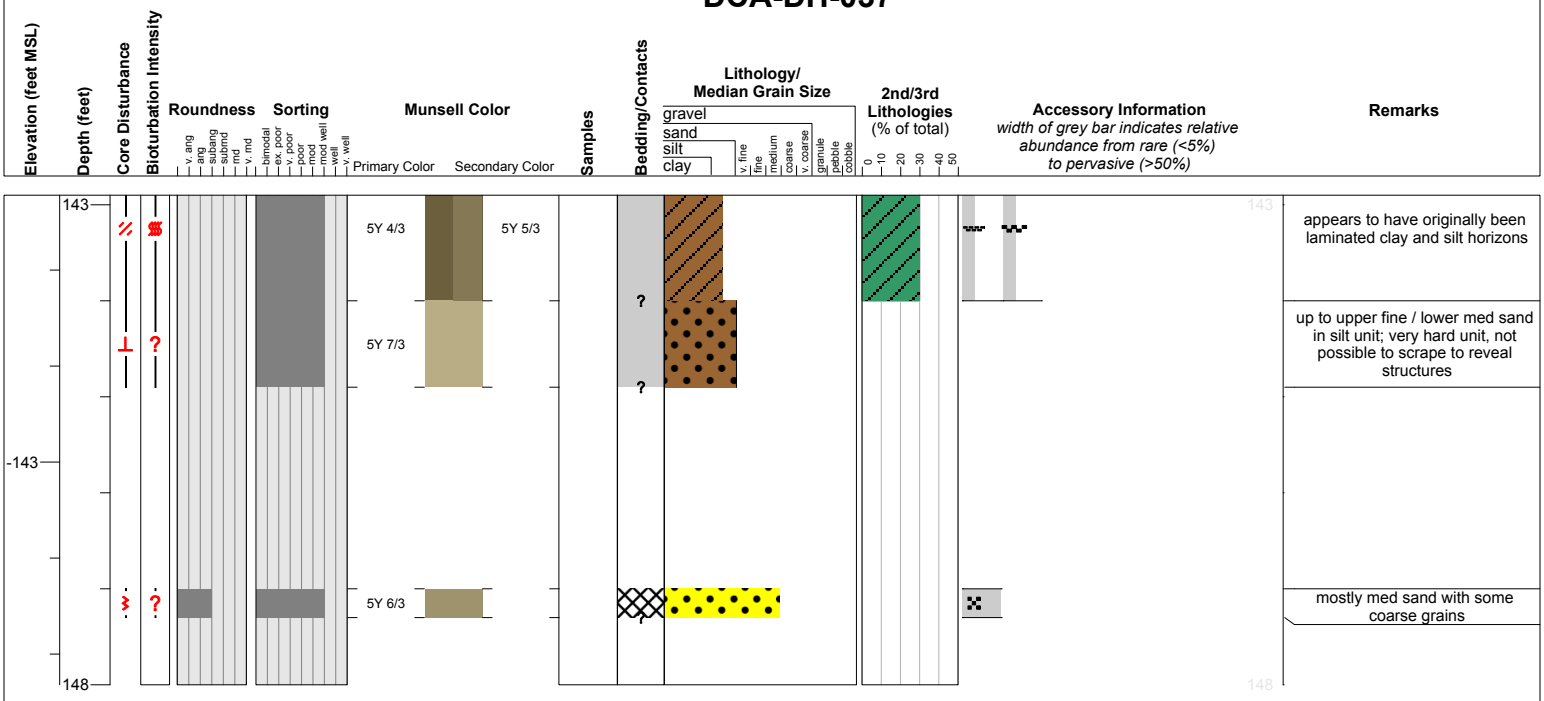
DCA-DH-037


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative abundance from rare (<5%) to pervasive (>50%)
Remarks
moderate HCl rxn from distributed carbonate (no visible nodules / veinlets)
retains some original laminations but largely obscured by bioturbation
carbonate appears to be lithologically controlled by clay content / boundaries; Ped not interpreted
up to fine sand; more sand at base, sand decreases towards top
generally more clay at top unit
Ped Stage II: carbonate obvious in this unit; translocated clay not observed in units above, but entire core interpreted as Paleosol Horizon
carbonate concentrated in fractures (originally roots / burrow traces?); interpreted as continuation of Ped Stage II from core above
continuation of Ped from previous core/Box4?; general fining upward with loss of sand
generally more silt-rich at base and more clay-rich at top
base may have originally been laminated (variations in sand:clay content)
no clear lithologic break where macroscopic carbonate ends; may have originally all been laminated clay and silty sand layers, now mixed via bioturbation; Ped Stage I ?
may have originally been layered sandy silt and clay lithologies but now mixed and mottled; Ped Stage I+ ?
may have originally been layered sandy silt and clay lithologies but now mixed and mottled; Ped Stage I+ ?
continuation of Ped Stage I+ from core above ?
108
113
118
123
-108
-113
-118
5Y 5/2
5Y 4/3
5Y 6/2
5Y 4/2
5Y 8/1
5Y 8/2
5Y 5/3
5Y 6/3
PAL
CRB

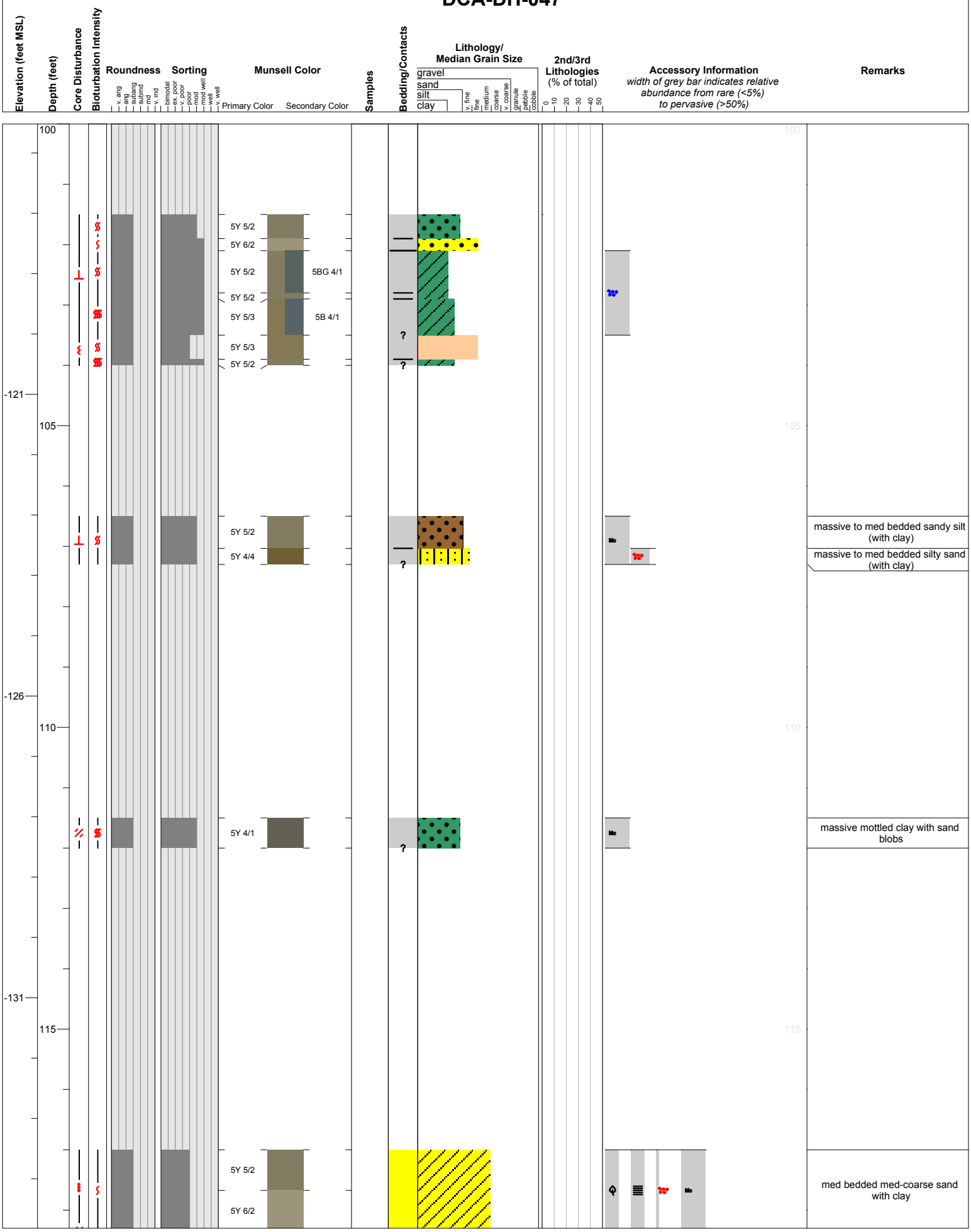
DCA-DH-037


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-123
128
-128
133
-133
138
-138
5Y 6/2
5Y 4/1
5Y 4/3
5Y 5/2
5Y 6/2
5Y 4/3
5Y 6/3
CRB
mostly silt but also contains up to med sand (quartz grains)
mixture of sandier and more clay-rich lithologies; mottled texture; sparse, white, no HCl rxn grains throughout
slight fining upward with increase in clay content; up to med sand grains present within mostly silt unit
original lamination obvious but largely obscured by bioturbation; generally coarsening upward with mixing of layers (increase in sand and decrease in clay)

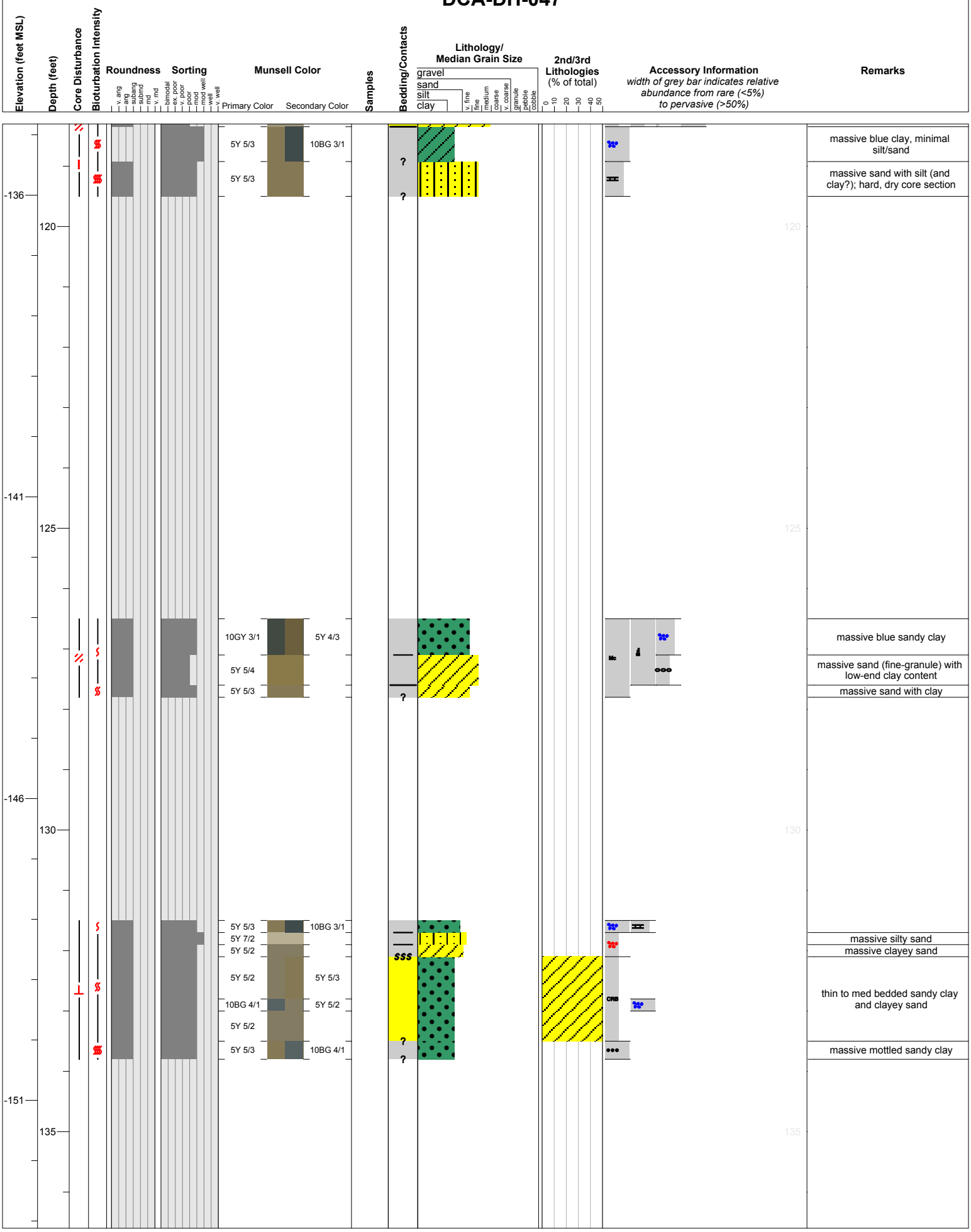
DCA-DH-037


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
143
-143
148
5Y 4/3
5Y 5/3
5Y 7/3
5Y 6/3
appears to have originally been laminated clay and silt horizons
up to upper fine / lower med sand in silt unit; very hard unit, not possible to scrape to reveal structures
mostly med sand with some coarse grains

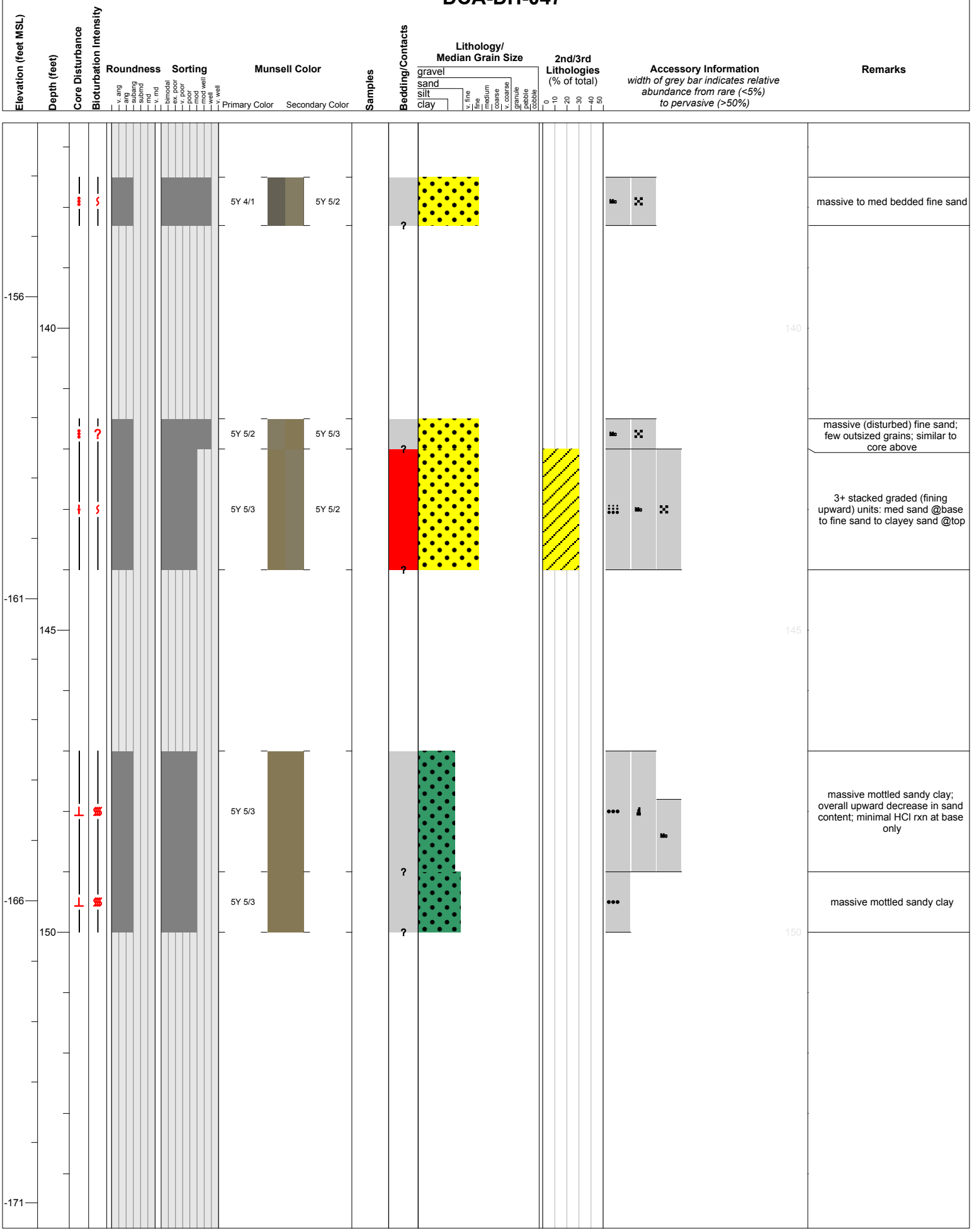
DCA-DH-047


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
100
105
110
115
-121
-126
-131
5Y 5/2
5Y 6/2
5Y 5/2
5BG 4/1
5Y 5/2
5Y 5/3
5B 4/1
5Y 5/3
5Y 5/2
5Y 5/2
5Y 4/4
5Y 4/1
5Y 5/2
5Y 6/2
Mc
massive to med bedded sandy silt (with clay)
massive to med bedded silty sand (with clay)
massive mottled clay with sand blobs
med bedded med-coarse sand with clay

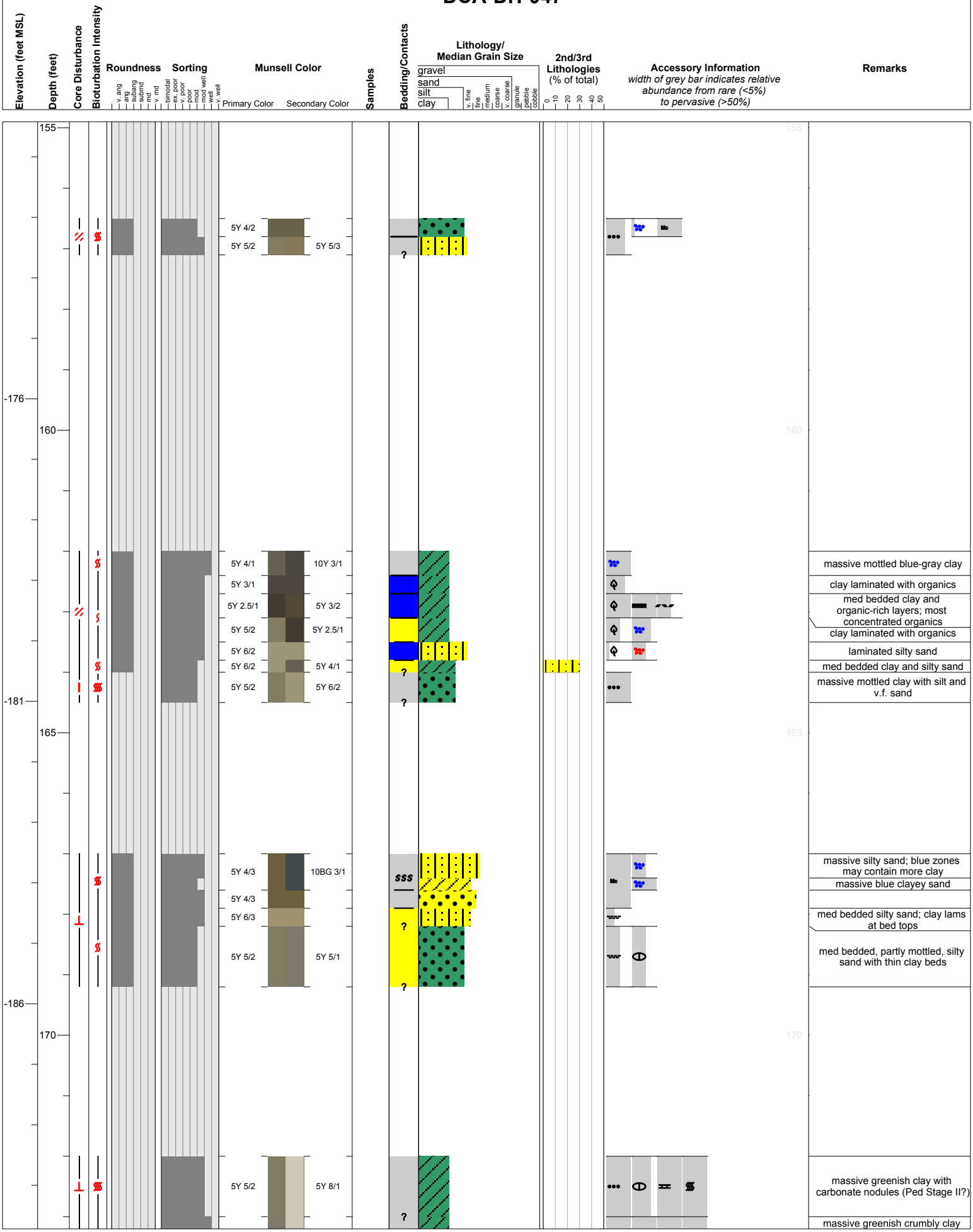
DCA-DH-047


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-136
-141
-146
-151
120
125
130
135
5Y 5/3
10BG 3/1
5Y 5/3
10GY 3/1
5Y 4/3
5Y 5/4
5Y 5/3
5Y 5/3
10BG 3/1
5Y 7/2
5Y 5/2
5Y 5/2
5Y 5/3
10BG 4/1
5Y 5/2
5Y 5/2
5Y 5/3
10BG 4/1
Mc
CRB
massive blue clay, minimal silt/sand
massive sand with silt (and clay?); hard, dry core section
massive blue sandy clay
massive sand (fine-granule) with low-end clay content
massive sand with clay
massive silty sand
massive clayey sand
thin to med bedded sandy clay and clayey sand
massive mottled sandy clay

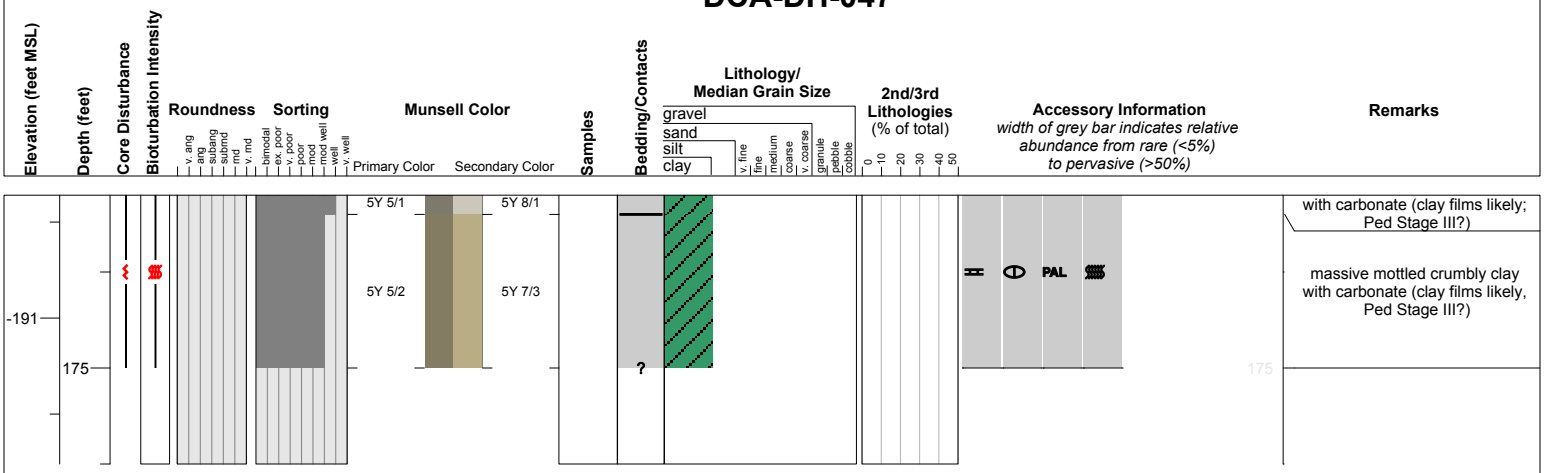
DCA-DH-047


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-156
140
-161
145
-166
150
-171
5Y 4/1
5Y 5/2
5Y 5/2
5Y 5/3
5Y 5/3
5Y 5/2
5Y 5/3
5Y 5/3
massive to med bedded fine sand
massive (disturbed) fine sand;
few outsized grains; similar to
core above
3+ stacked graded (fining
upward) units: med sand @base
to fine sand to clayey sand @top
massive mottled sandy clay;
overall upward decrease in sand
content; minimal HCl rxn at base
only
massive mottled sandy clay

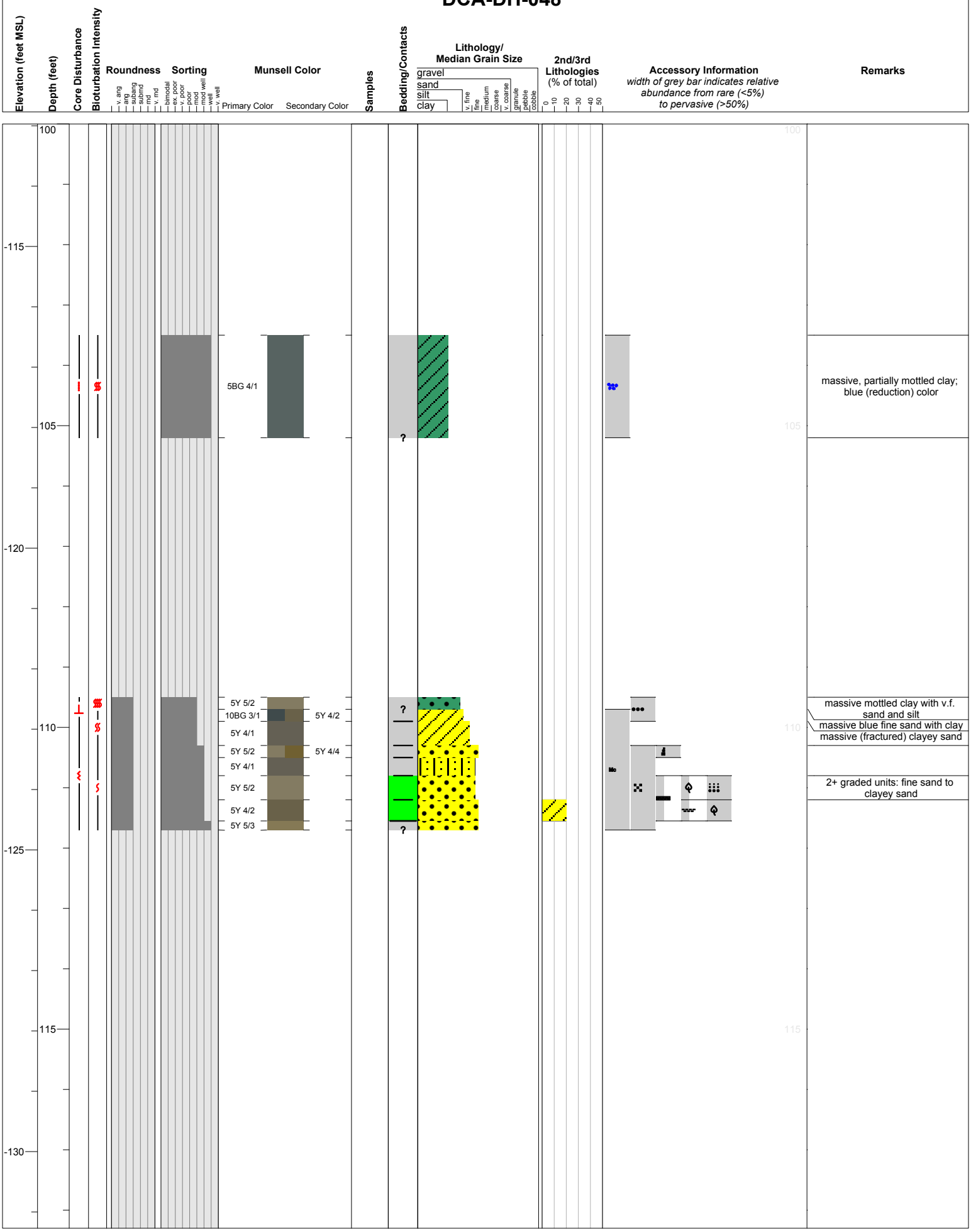
DCA-DH-047


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
155
160
165
170
-176
-181
-186
5Y 4/2
5Y 5/2
5Y 5/3
5Y 4/1
10Y 3/1
5Y 3/1
5Y 2.5/1
5Y 3/2
5Y 5/2
5Y 2.5/1
5Y 6/2
5Y 6/2
5Y 4/1
5Y 5/2
5Y 6/2
5Y 4/3
10BG 3/1
5Y 4/3
5Y 6/3
5Y 5/2
5Y 5/1
5Y 5/2
5Y 8/1
Mc
massive mottled blue-gray clay
clay laminated with organics
med bedded clay and
organic-rich layers; most
concentrated organics
clay laminated with organics
laminated silty sand
med bedded clay and silty sand
massive mottled clay with silt and
v.f. sand
massive silty sand; blue zones
may contain more clay
massive blue clayey sand
med bedded silty sand; clay lams
at bed tops
med bedded, partly mottled, silty
sand with thin clay beds
massive greenish clay with
carbonate nodules (Ped Stage II?)
massive greenish crumbly clay

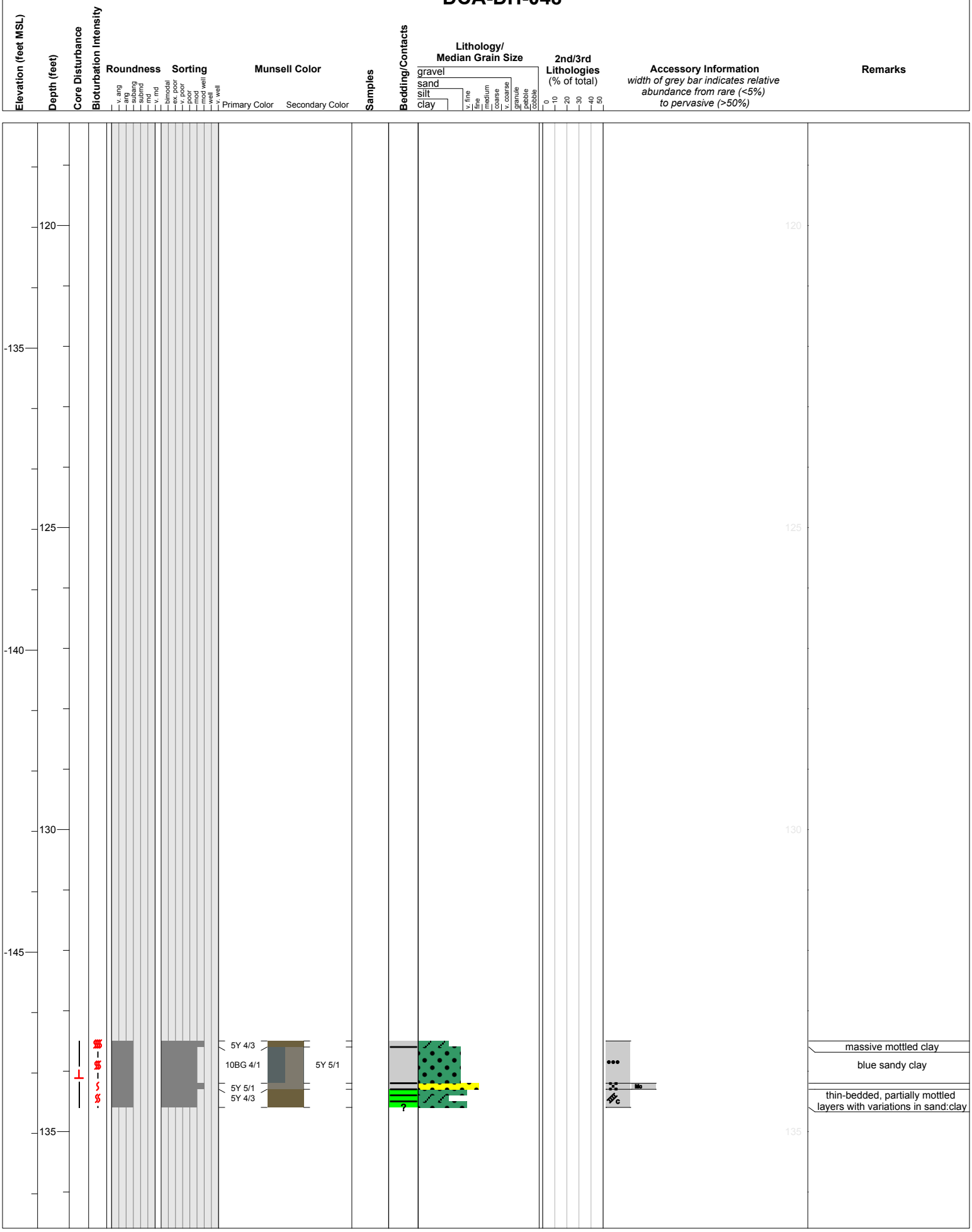
DCA-DH-047


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
5Y 5/1
5Y 5/2
5Y 8/1
5Y 7/3
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
PAL
Remarks
-191
175
?
with carbonate (clay films likely;
Ped Stage III?)
massive mottled crumbly clay
with carbonate (clay films likely,
Ped Stage III?)
175

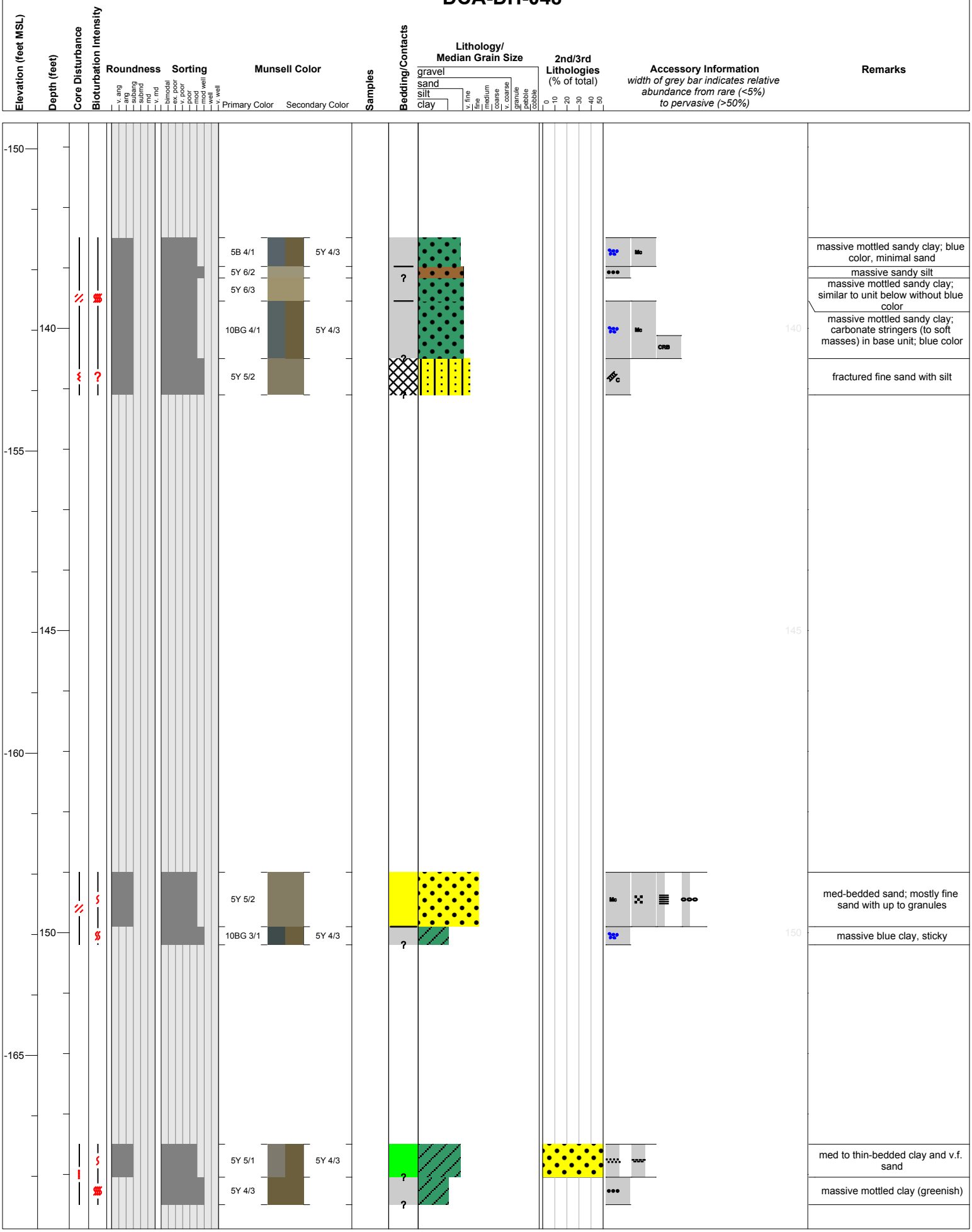
DCA-DH-048


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
100
-115
105
-120
110
-125
115
-130
5BG 4/1
5Y 5/2
10BG 3/1
5Y 4/1
5Y 5/2
5Y 4/1
5Y 5/2
5Y 4/2
5Y 5/3
5Y 4/2
5Y 4/4
?
Mc
massive, partially mottled clay;
blue (reduction) color
massive mottled clay with v.f.
sand and silt
massive blue fine sand with clay
massive (fractured) clayey sand
2+ graded units: fine sand to
clayey sand

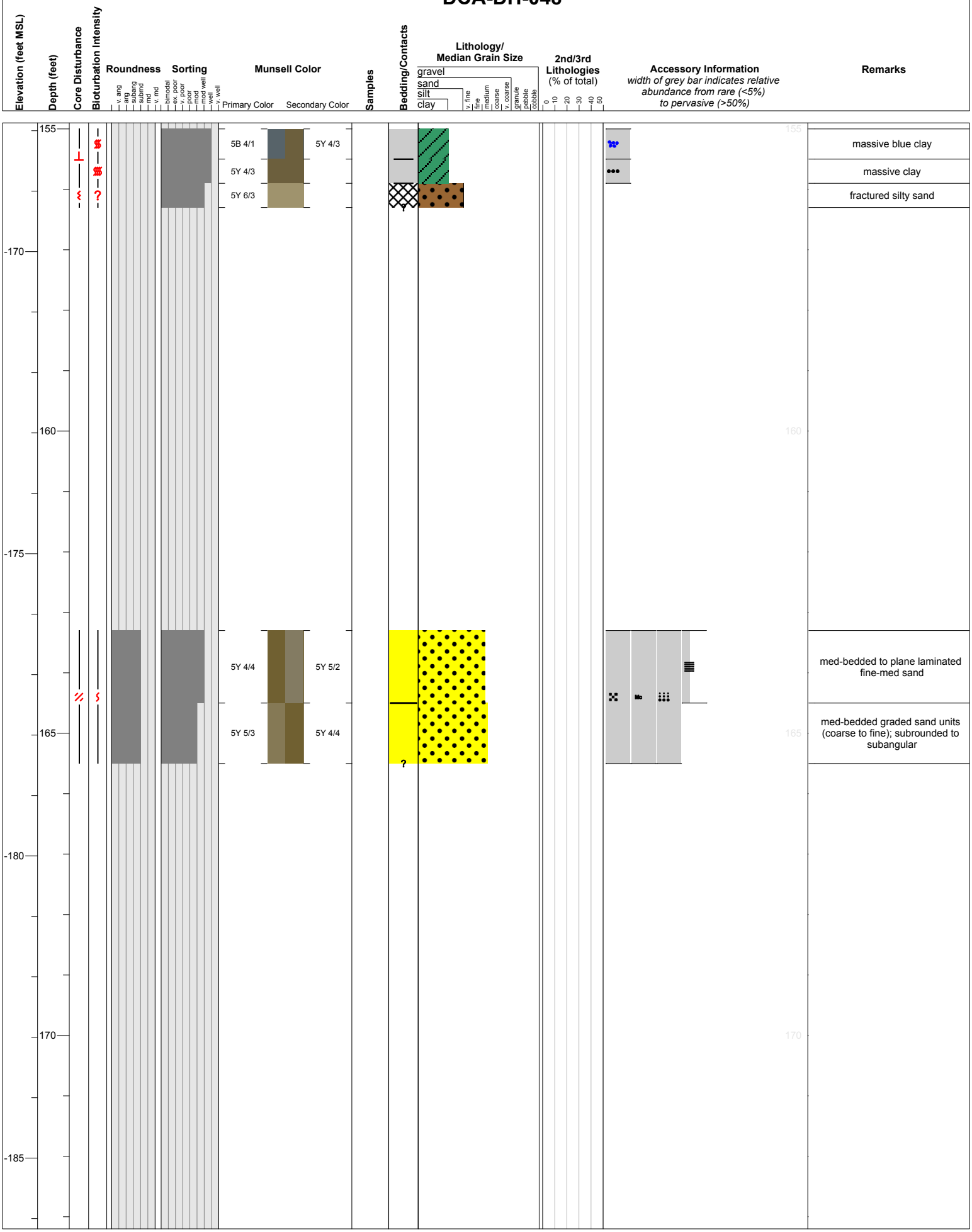
DCA-DH-048


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
120
-135
125
-140
130
-145
135
5Y 4/3
10BG 4/1
5Y 5/1
5Y 5/1
5Y 4/3
Mo
C
massive mottled clay
blue sandy clay
thin-bedded, partially mottled
layers with variations in sand:clay

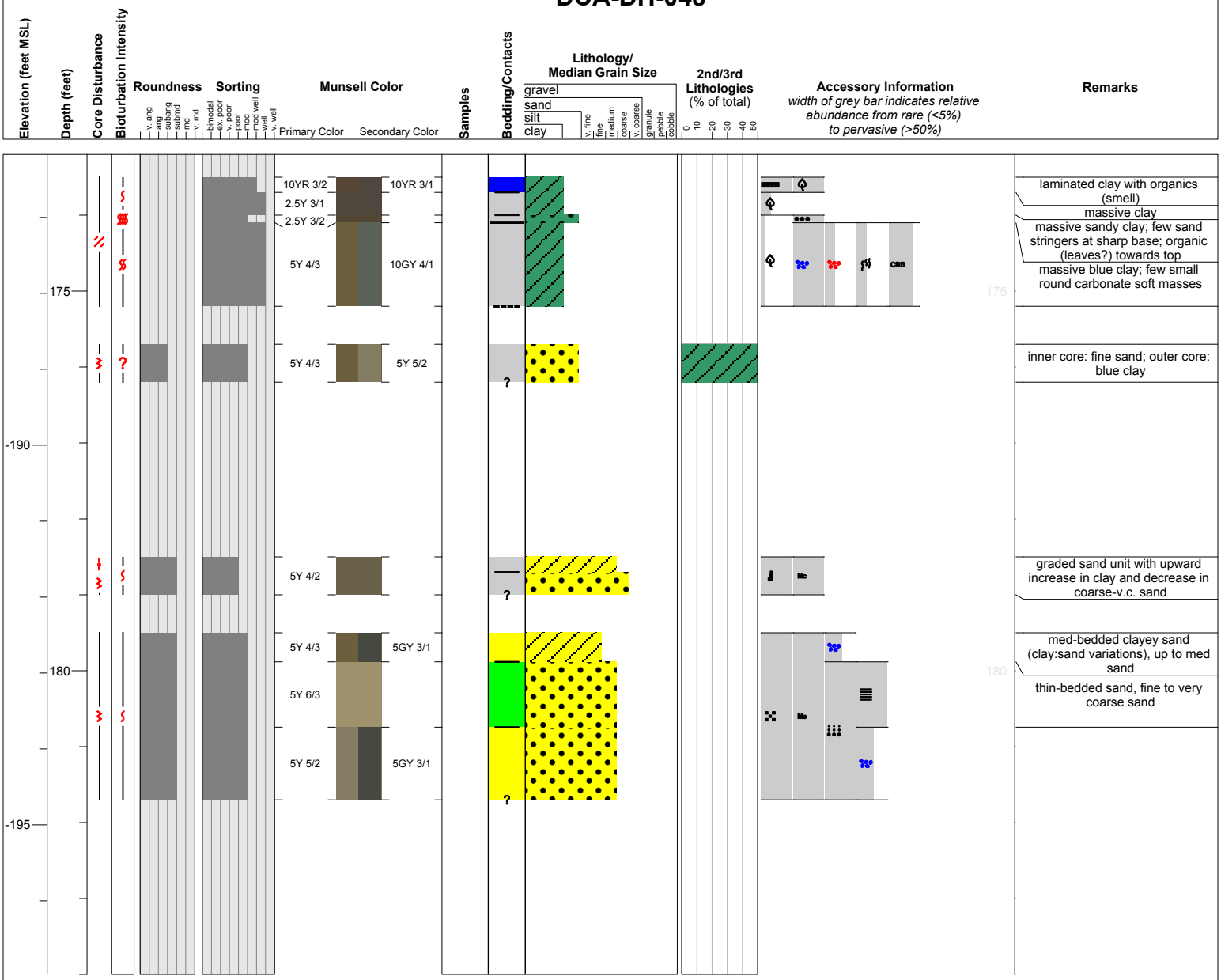
DCA-DH-048


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-150
140
-155
145
-160
150
-165
5B 4/1
5Y 4/3
5Y 6/2
5Y 6/3
10BG 4/1
5Y 4/3
5Y 5/2
5Y 5/2
10BG 3/1
5Y 4/3
5Y 5/1
5Y 4/3
5Y 4/3
Mc
CRB
massive mottled sandy clay; blue color, minimal sand
massive sandy silt
massive mottled sandy clay; similar to unit below without blue color
massive mottled sandy clay; carbonate stringers (to soft masses) in base unit; blue color
fractured fine sand with silt
med-bedded sand; mostly fine sand with up to granules
massive blue clay, sticky
med to thin-bedded clay and v.f. sand
massive mottled clay (greenish)

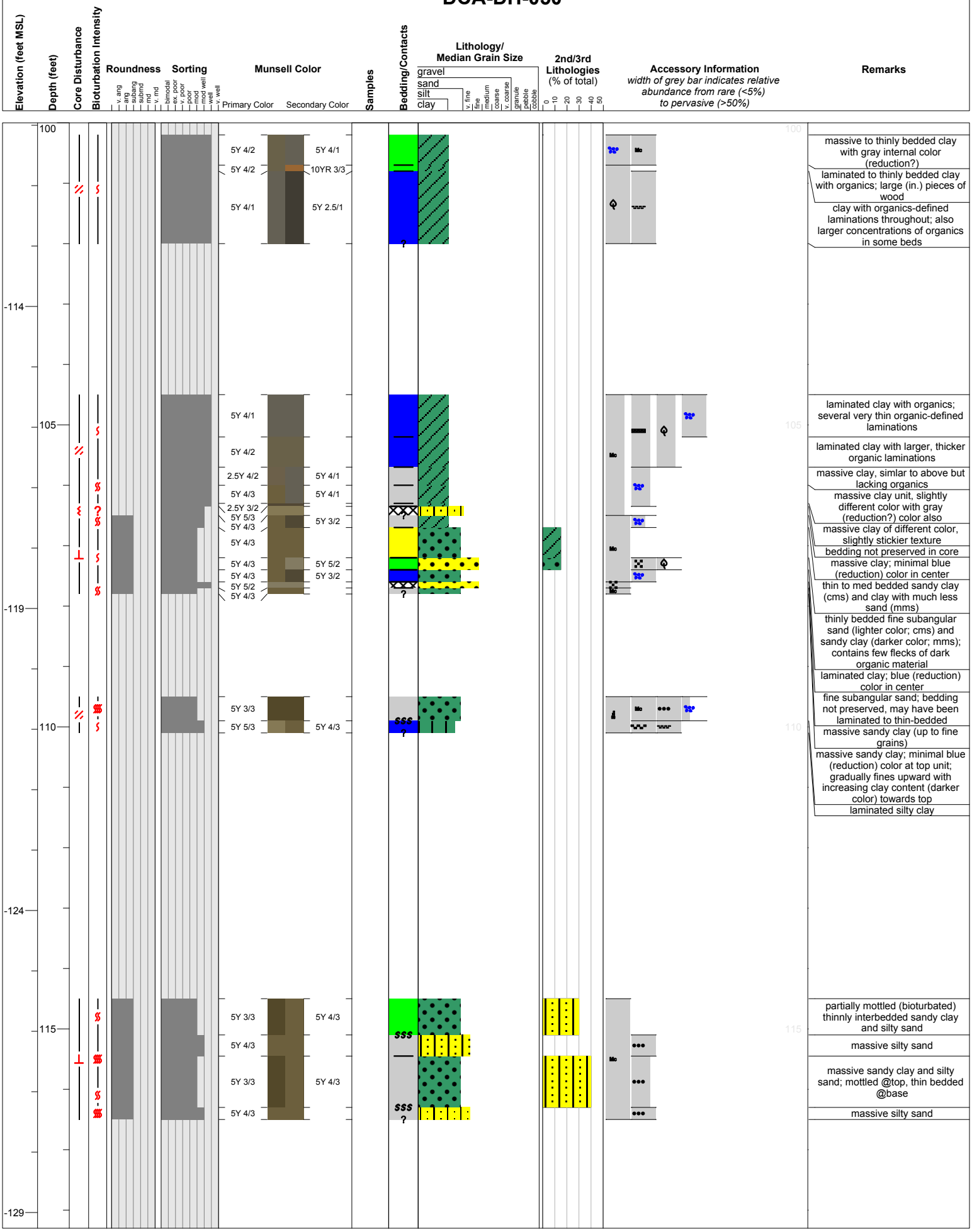
DCA-DH-048


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
155
160
165
170
-170
-175
-180
-185
5B 4/1
5Y 4/3
5Y 4/3
5Y 6/3
5Y 4/4
5Y 5/2
5Y 5/3
5Y 4/4
massive blue clay
massive clay
fractured silty sand
med-bedded to plane laminated
fine-med sand
med-bedded graded sand units
(coarse to fine); subrounded to
subangular

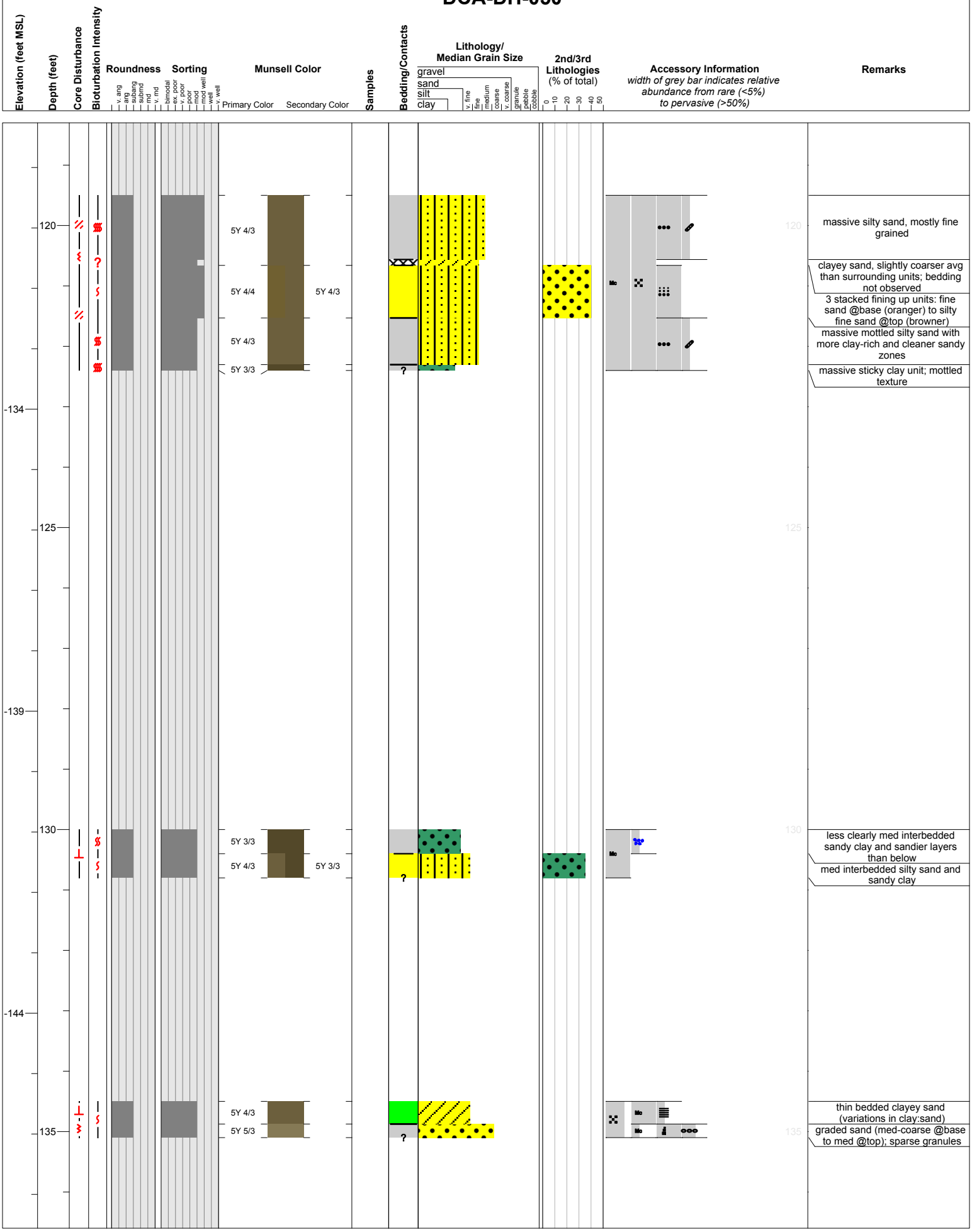
DCA-DH-048


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
10YR 3/2
2.5Y 3/1
2.5Y 3/2
5Y 4/3
10YR 3/1
10GY 4/1
5Y 4/3
5Y 5/2
5Y 4/2
5Y 4/3
5GY 3/1
5Y 6/3
5Y 5/2
5GY 3/1
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Mo
CRB
Remarks
laminated clay with organics (smell)
massive clay
massive sandy clay; few sand stringers at sharp base; organic (leaves?) towards top
massive blue clay; few small round carbonate soft masses
inner core: fine sand; outer core: blue clay
graded sand unit with upward increase in clay and decrease in coarse-v.c. sand
med-bedded clayey sand (clay:sand variations), up to med sand
thin-bedded sand, fine to very coarse sand
175
-190
180
-195

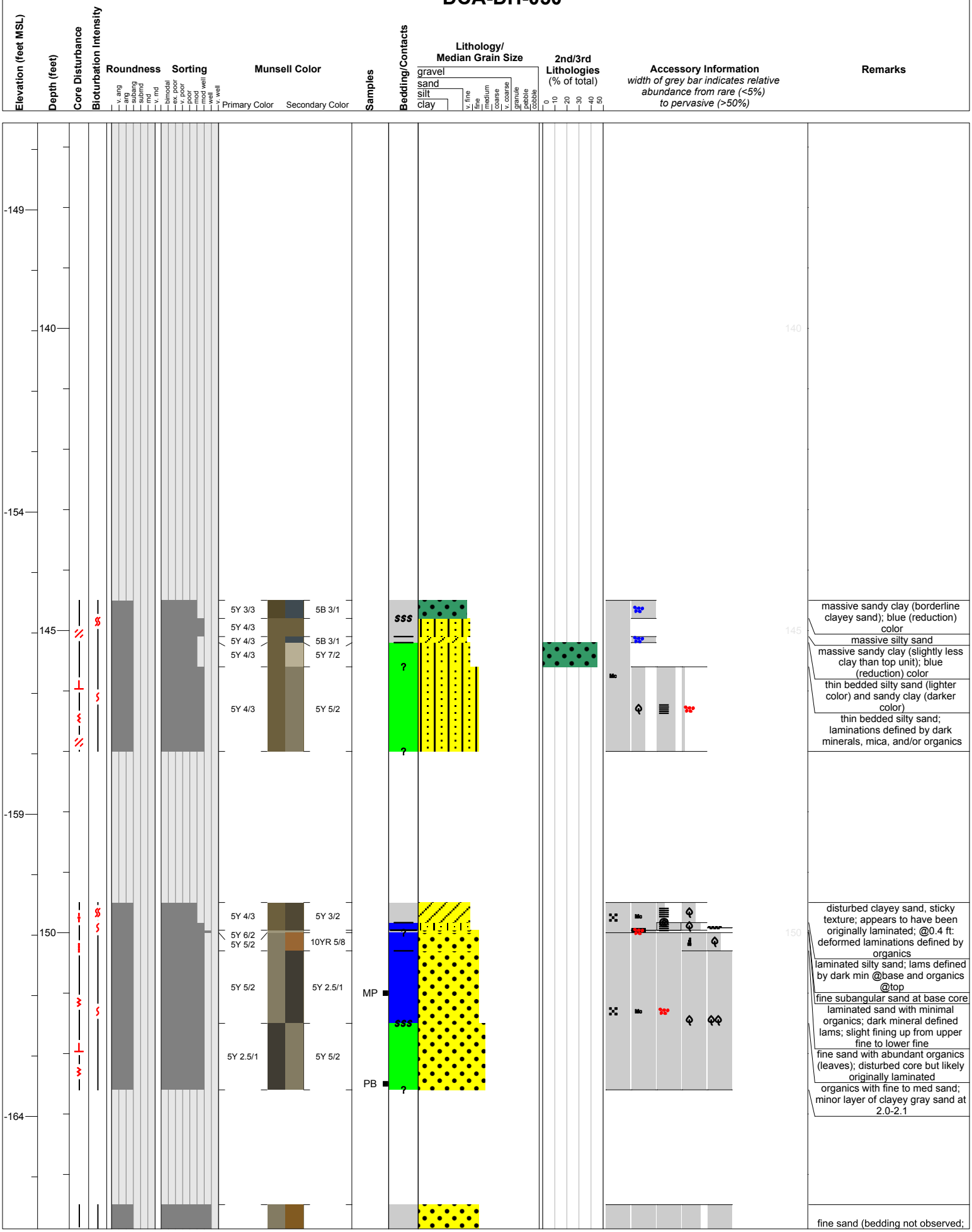
DCA-DH-050


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative abundance from rare (<5%) to pervasive (>50%)
Remarks
100
105
110
115
-114
-119
-124
-129
5Y 4/2
5Y 4/1
10YR 3/3
5Y 2.5/1
2.5Y 4/2
5Y 4/3
2.5Y 3/2
5Y 5/3
5Y 3/2
5Y 5/2
5Y 3/3
massive to thinly bedded clay with gray internal color (reduction?)
laminated to thinly bedded clay with organics; large (in.) pieces of wood
clay with organics-defined laminations throughout; also larger concentrations of organics in some beds
laminated clay with organics; several very thin organic-defined laminations
laminated clay with larger, thicker organic laminations
massive clay, simlar to above but lacking organics
massive clay unit, slightly different color with gray (reduction?) color also
massive clay of different color, slightly stickier texture
bedding not preserved in core
massive clay; minimal blue (reduction) color in center
thin to med bedded sandy clay (cms) and clay with much less sand (mms)
thinly bedded fine subangular sand (lighter color; cms) and sandy clay (darker color; mms); contains few flecks of dark organic material
laminated clay; blue (reduction) color in center
fine subangular sand; bedding not preserved, may have been laminated to thin-bedded
massive sandy clay (up to fine grains)
massive sandy clay; minimal blue (reduction) color at top unit; gradually fines upward with increasing clay content (darker color) towards top
laminated silty clay
partially mottled (bioturbated) thinnly interbedded sandy clay and silty sand
massive silty sand
massive sandy clay and silty sand; mottled @top, thin bedded @base
massive silty sand

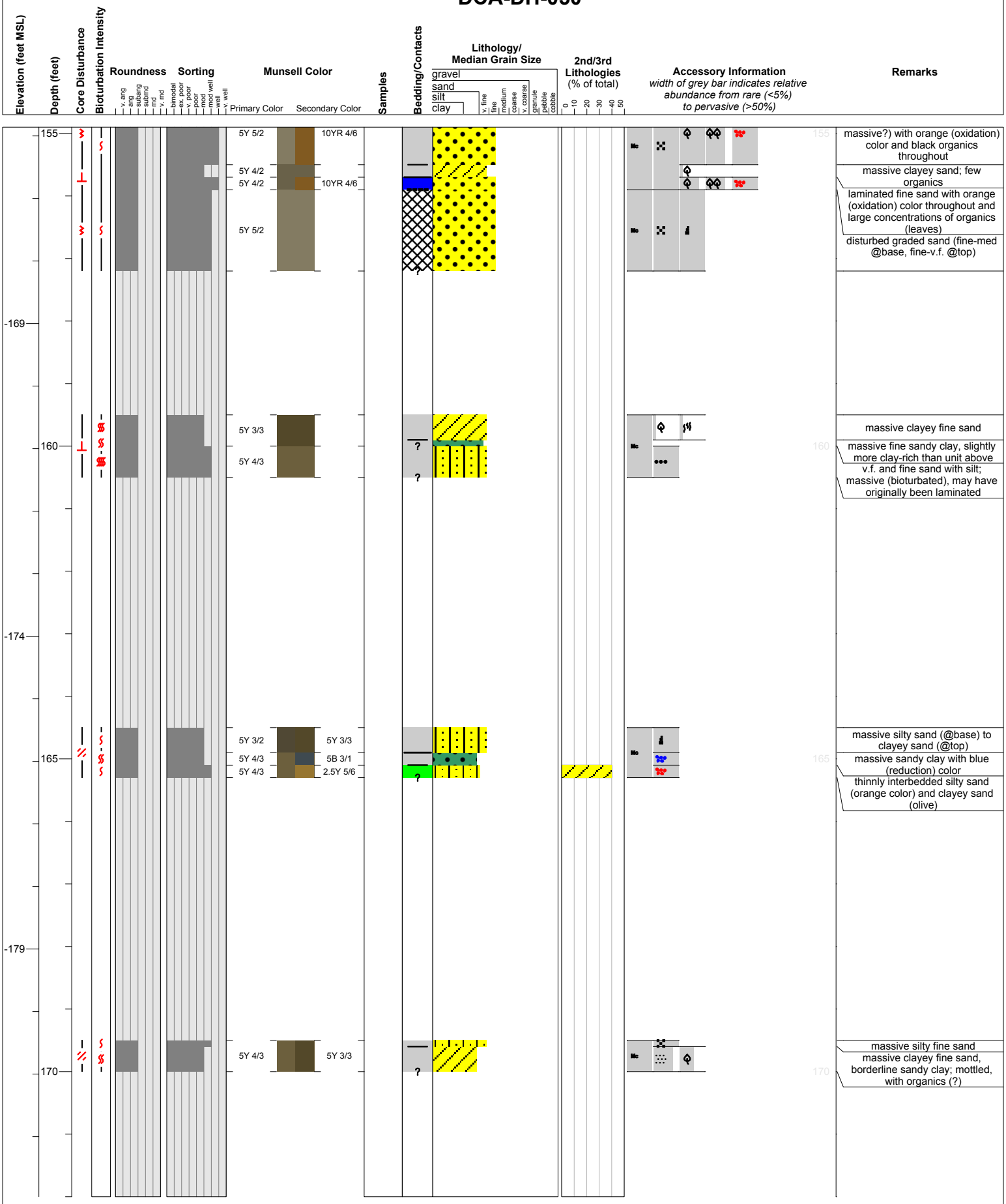
DCA-DH-050


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
120
-134
125
-139
130
-144
135
5Y 4/3
5Y 4/4
5Y 4/3
5Y 4/3
5Y 3/3
5Y 3/3
5Y 4/3
5Y 3/3
5Y 4/3
5Y 5/3
massive silty sand, mostly fine grained
clayey sand, slightly coarser avg than surrounding units; bedding not observed
3 stacked fining up units: fine sand @base (oranger) to silty fine sand @top (browner)
massive mottled silty sand with more clay-rich and cleaner sandy zones
massive sticky clay unit; mottled texture
less clearly med interbedded sandy clay and sandier layers than below
med interbedded silty sand and sandy clay
thin bedded clayey sand (variations in clay:sand)
graded sand (med-coarse @base to med @top); sparse granules

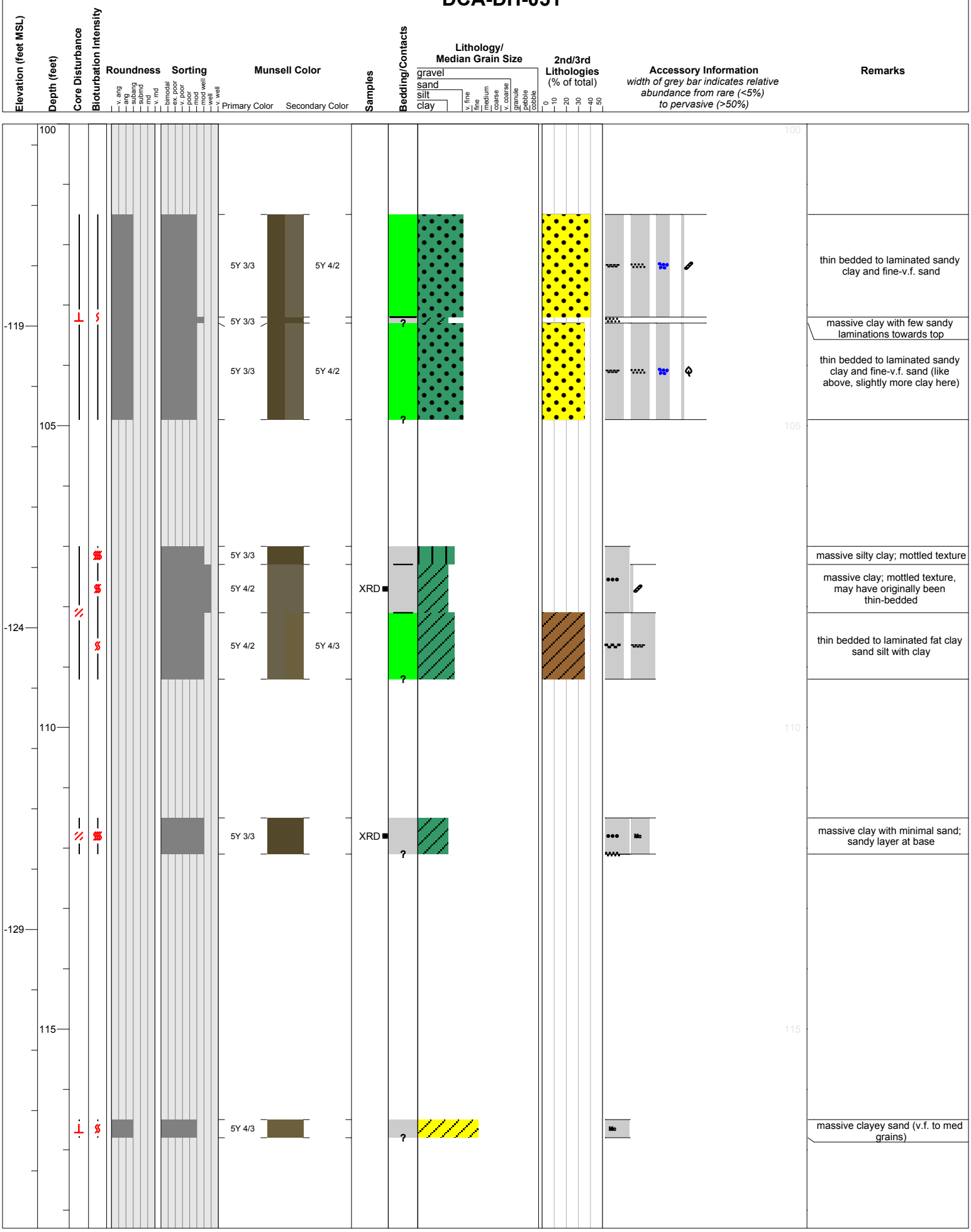
DCA-DH-050


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-149
140
-154
145
-159
150
-164
5Y 3/3
5Y 4/3
5Y 4/3
5Y 4/3
5Y 4/3
5B 3/1
5B 3/1
5Y 7/2
5Y 5/2
5Y 4/3
5Y 3/2
5Y 6/2
5Y 5/2
10YR 5/8
5Y 5/2
5Y 2.5/1
5Y 2.5/1
5Y 5/2
MP
PB
Mc
Mo
massive sandy clay (borderline clayey sand); blue (reduction) color
massive silty sand
massive sandy clay (slightly less clay than top unit); blue (reduction) color
thin bedded silty sand (lighter color) and sandy clay (darker color)
thin bedded silty sand; laminations defined by dark minerals, mica, and/or organics
disturbed clayey sand, sticky texture; appears to have been originally laminated; @0.4 ft: deformed laminations defined by organics
laminated silty sand; lams defined by dark min @base and organics @top
fine subangular sand at base core
laminated sand with minimal organics; dark mineral defined lams; slight fining up from upper fine to lower fine
fine sand with abundant organics (leaves); disturbed core but likely originally laminated
organics with fine to med sand; minor layer of clayey gray sand at 2.0-2.1
fine sand (bedding not observed;

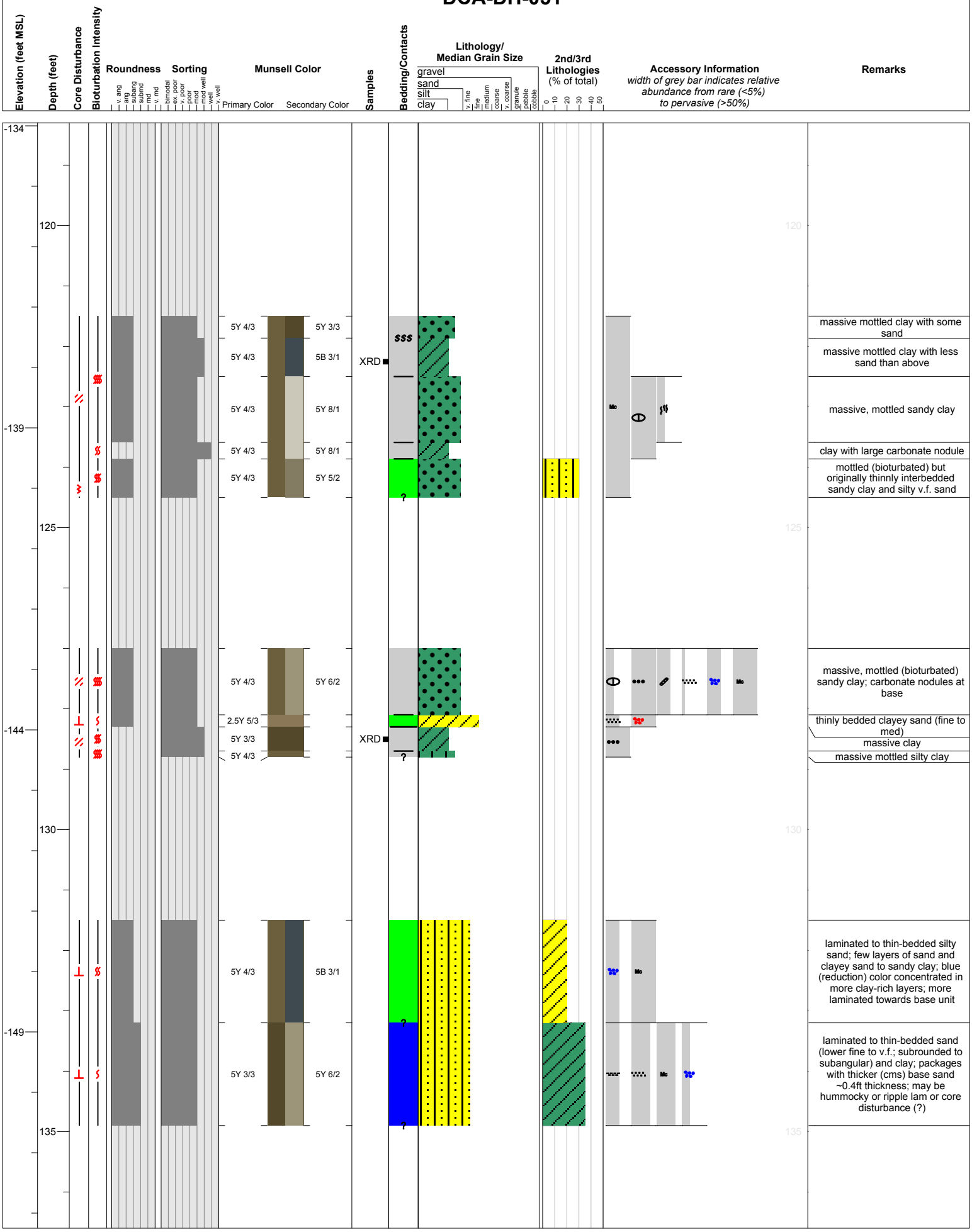
DCA-DH-050


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative abundance from rare (<5%) to pervasive (>50%)
Remarks
155
-169
160
-174
165
-179
170
5Y 5/2
10YR 4/6
5Y 4/2
5Y 4/2
10YR 4/6
5Y 5/2
5Y 3/3
5Y 4/3
5Y 3/2
5Y 3/3
5Y 4/3
5B 3/1
5Y 4/3
2.5Y 5/6
5Y 4/3
5Y 3/3
massive?) with orange (oxidation) color and black organics throughout
massive clayey sand; few organics
laminated fine sand with orange (oxidation) color throughout and large concentrations of organics (leaves)
disturbed graded sand (fine-med @base, fine-v.f. @top)
massive clayey fine sand
massive fine sandy clay, slightly more clay-rich than unit above
v.f. and fine sand with silt; massive (bioturbated), may have originally been laminated
massive silty sand (@base) to clayey sand (@top)
massive sandy clay with blue (reduction) color
thinnly interbedded silty sand (orange color) and clayey sand (olive)
massive silty fine sand
massive clayey fine sand, borderline sandy clay; mottled, with organics (?)

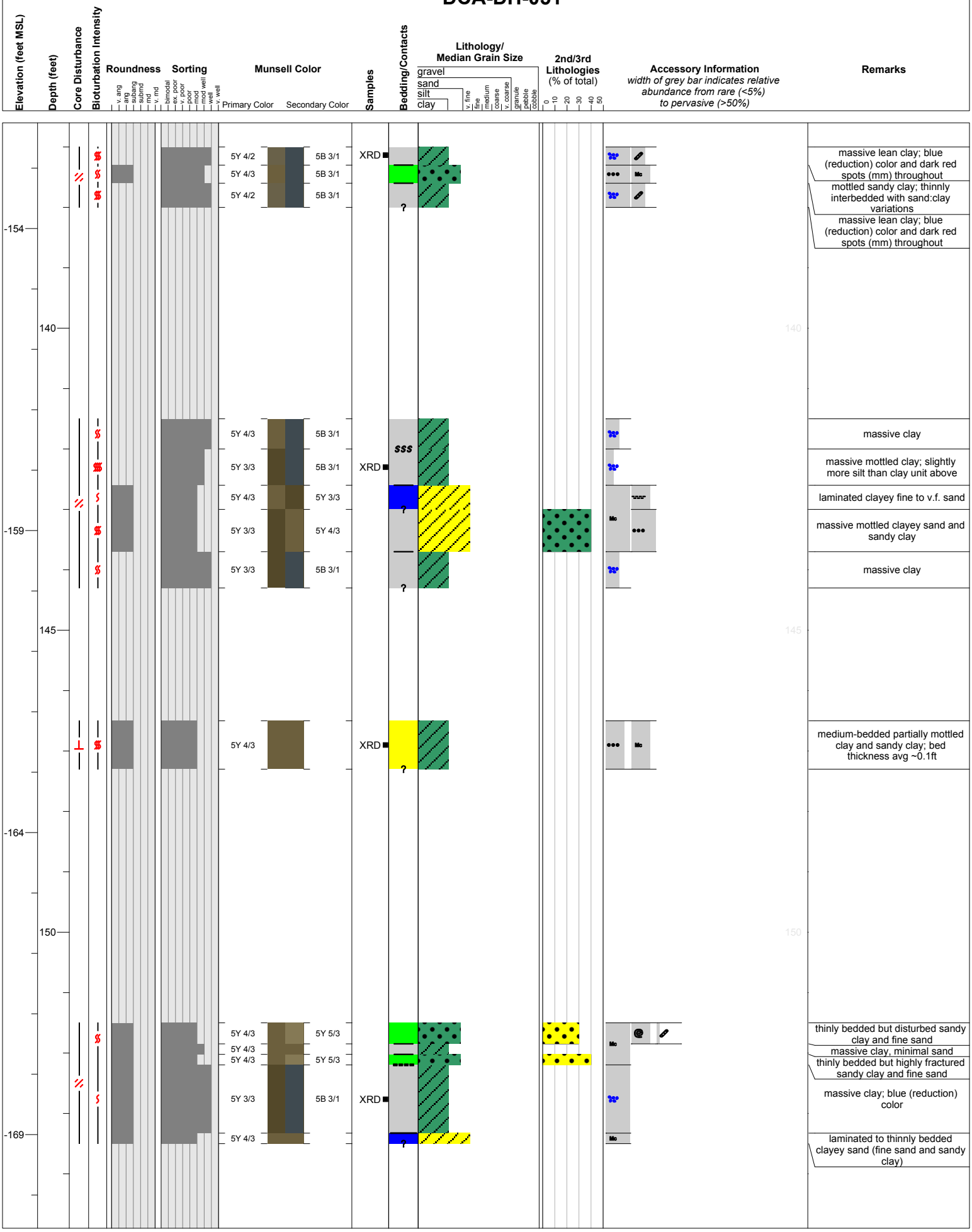
DCA-DH-051


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
100
-119
105
-124
110
-129
115
5Y 3/3
5Y 4/2
5Y 3/3
5Y 3/3
5Y 4/2
5Y 3/3
5Y 4/2
5Y 4/2
5Y 4/3
5Y 3/3
5Y 4/3
XRD
XRD
Mc
Mc
thin bedded to laminated sandy clay and fine-v.f. sand
massive clay with few sandy laminations towards top
thin bedded to laminated sandy clay and fine-v.f. sand (like above, slightly more clay here)
massive silty clay; mottled texture
massive clay; mottled texture, may have originally been thin-bedded
thin bedded to laminated fat clay sand silt with clay
massive clay with minimal sand; sandy layer at base
massive clayey sand (v.f. to med grains)

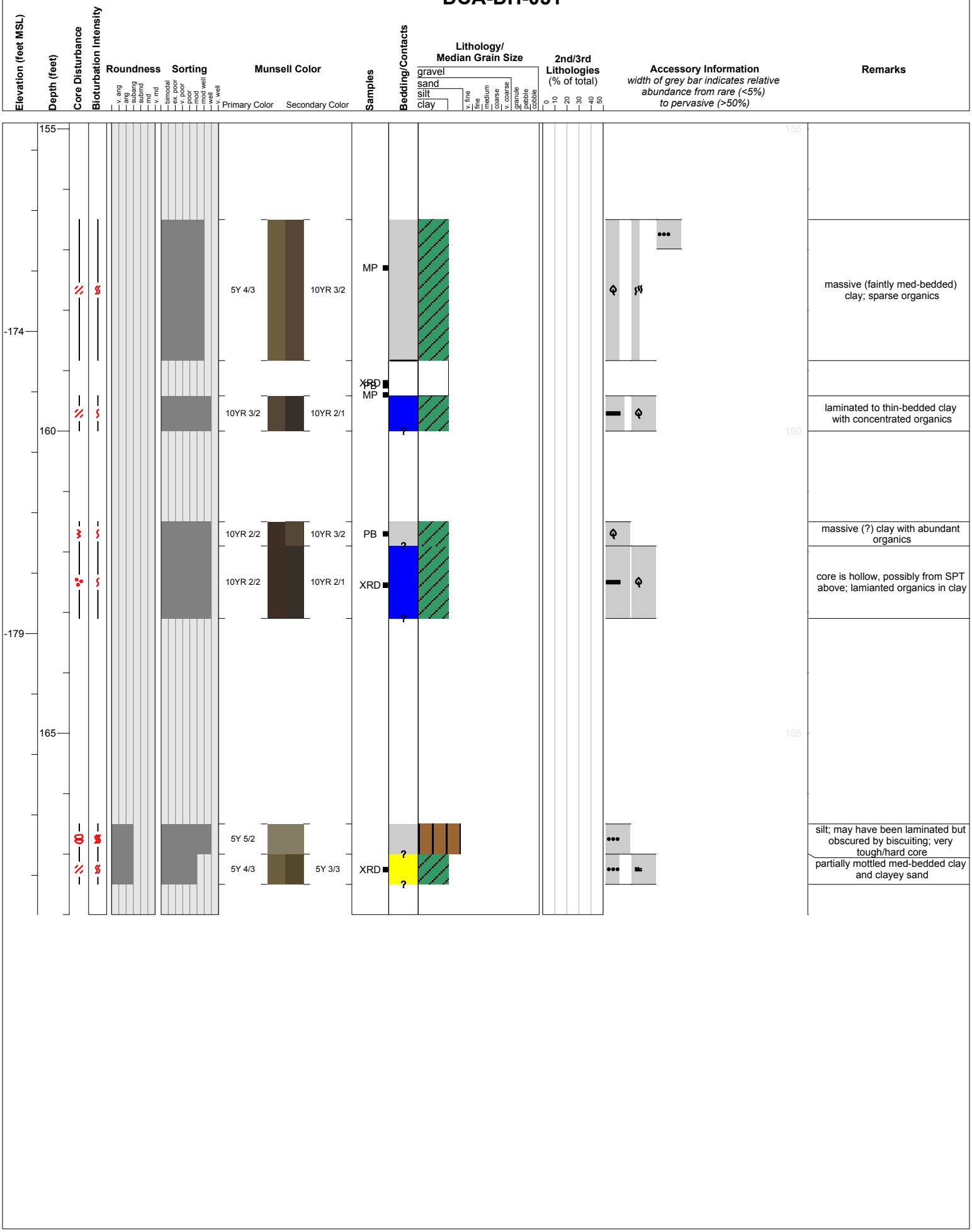
DCA-DH-051


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative abundance from rare (<5%) to pervasive (>50%)
Remarks
-134
120
-139
125
-144
130
-149
135
5Y 4/3
5Y 3/3
5Y 4/3
5B 3/1
5Y 4/3
5Y 8/1
5Y 4/3
5Y 8/1
5Y 4/3
5Y 5/2
XRD
Mo
massive mottled clay with some sand
massive mottled clay with less sand than above
massive, mottled sandy clay
clay with large carbonate nodule
mottled (bioturbated) but originally thinnly interbedded sandy clay and silty v.f. sand
5Y 4/3
5Y 6/2
2.5Y 5/3
5Y 3/3
5Y 4/3
XRD
Mo
massive, mottled (bioturbated) sandy clay; carbonate nodules at base
thinly bedded clayey sand (fine to med)
massive clay
massive mottled silty clay
5Y 4/3
5B 3/1
5Y 3/3
5Y 6/2
Mo
Mo
laminated to thin-bedded silty sand; few layers of sand and clayey sand to sandy clay; blue (reduction) color concentrated in more clay-rich layers; more laminated towards base unit
laminated to thin-bedded sand (lower fine to v.f.; subrounded to subangular) and clay; packages with thicker (cms) base sand ~0.4ft thickness; may be hummocky or ripple lam or core disturbance (?)

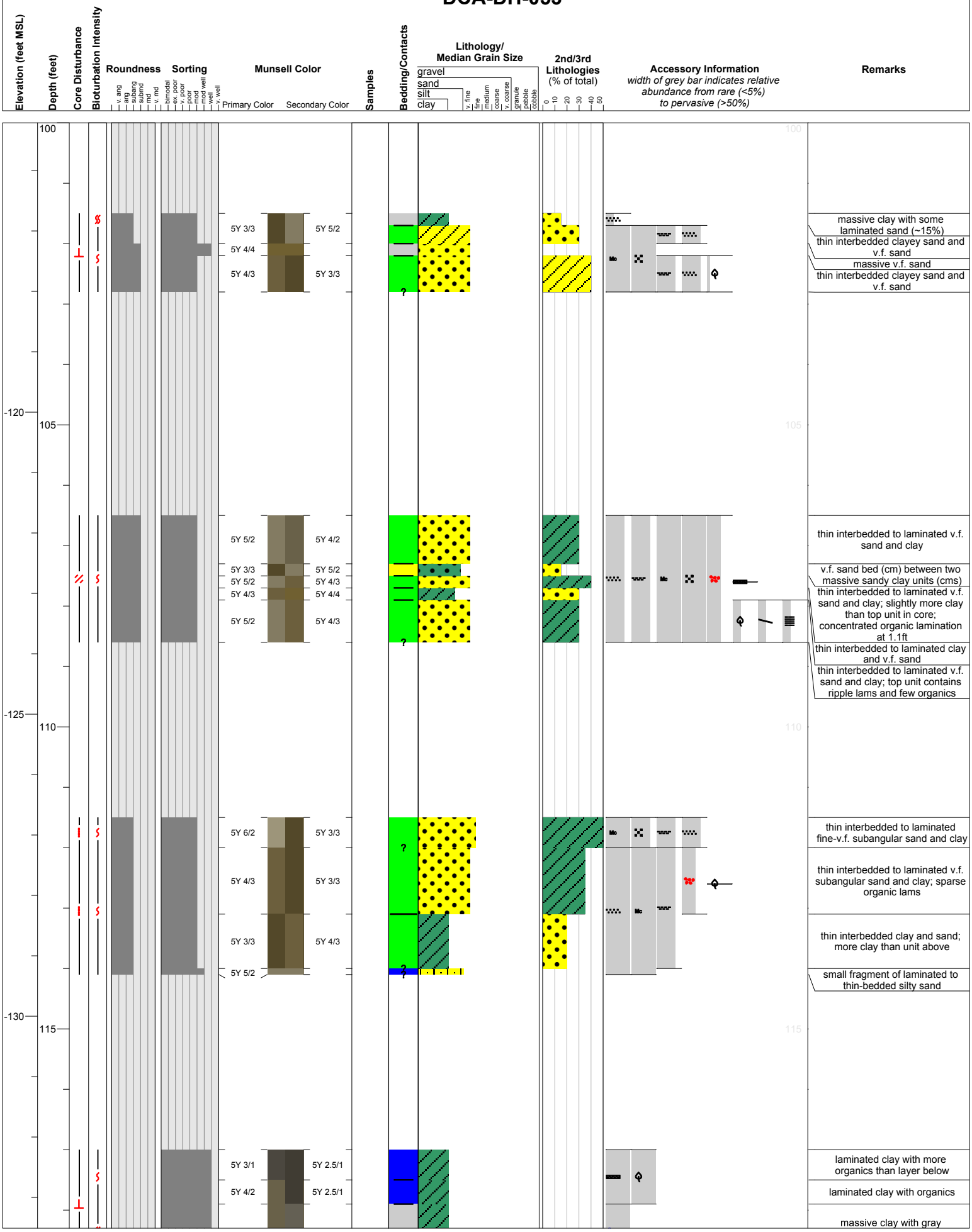
DCA-DH-051


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-154
140
-159
145
-164
150
-169
5Y 4/2
5B 3/1
5Y 4/3
5B 3/1
5Y 4/2
5B 3/1
XRD
massive lean clay; blue (reduction) color and dark red spots (mm) throughout
mottled sandy clay; thinnly interbedded with sand:clay variations
massive lean clay; blue (reduction) color and dark red spots (mm) throughout
5Y 4/3
5B 3/1
5Y 3/3
5B 3/1
XRD
5Y 4/3
5Y 3/3
5Y 3/3
5Y 4/3
5Y 3/3
5B 3/1
massive clay
massive mottled clay; slightly more silt than clay unit above
laminated clayey fine to v.f. sand
massive mottled clayey sand and sandy clay
massive clay
5Y 4/3
XRD
medium-bedded partially mottled clay and sandy clay; bed thickness avg ~0.1ft
5Y 4/3
5Y 5/3
5Y 4/3
5Y 5/3
5Y 4/3
5B 3/1
XRD
5Y 4/3
thinly bedded but disturbed sandy clay and fine sand
massive clay, minimal sand
thinly bedded but highly fractured sandy clay and fine sand
massive clay; blue (reduction) color
laminated to thinnly bedded clayey sand (fine sand and sandy clay)

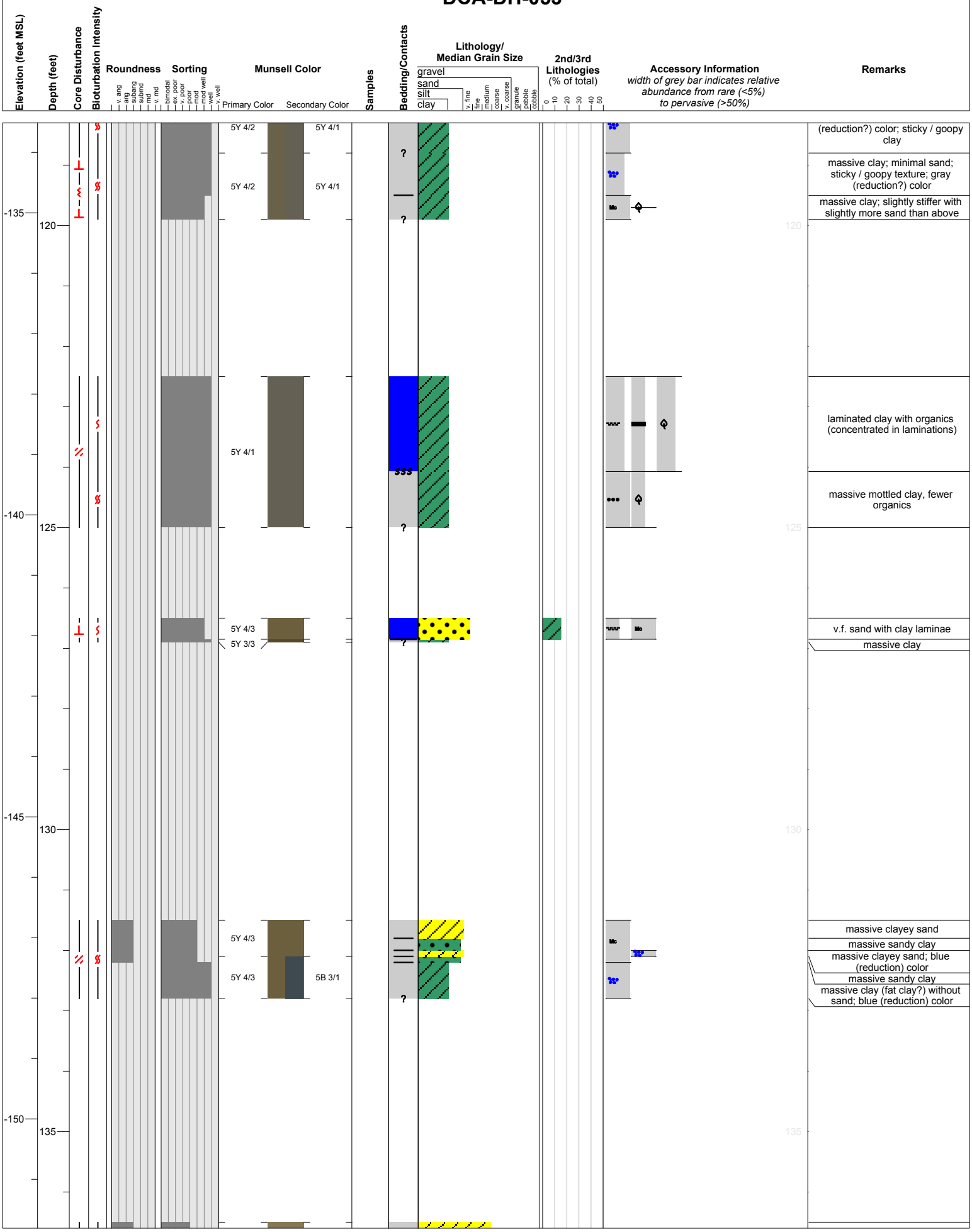
DCA-DH-051


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
155
-174
160
-179
165
5Y 4/3
10YR 3/2
MP
XRD
PB
MP
10YR 3/2
10YR 2/1
10YR 2/2
10YR 3/2
PB
10YR 2/2
10YR 2/1
XRD
5Y 5/2
5Y 4/3
5Y 3/3
XRD
massive (faintly med-bedded) clay; sparse organics
laminated to thin-bedded clay with concentrated organics
massive (?) clay with abundant organics
core is hollow, possibly from SPT above; lamianted organics in clay
silt; may have been laminated but obscured by biscuiting; very tough/hard core
partially mottled med-bedded clay and clayey sand

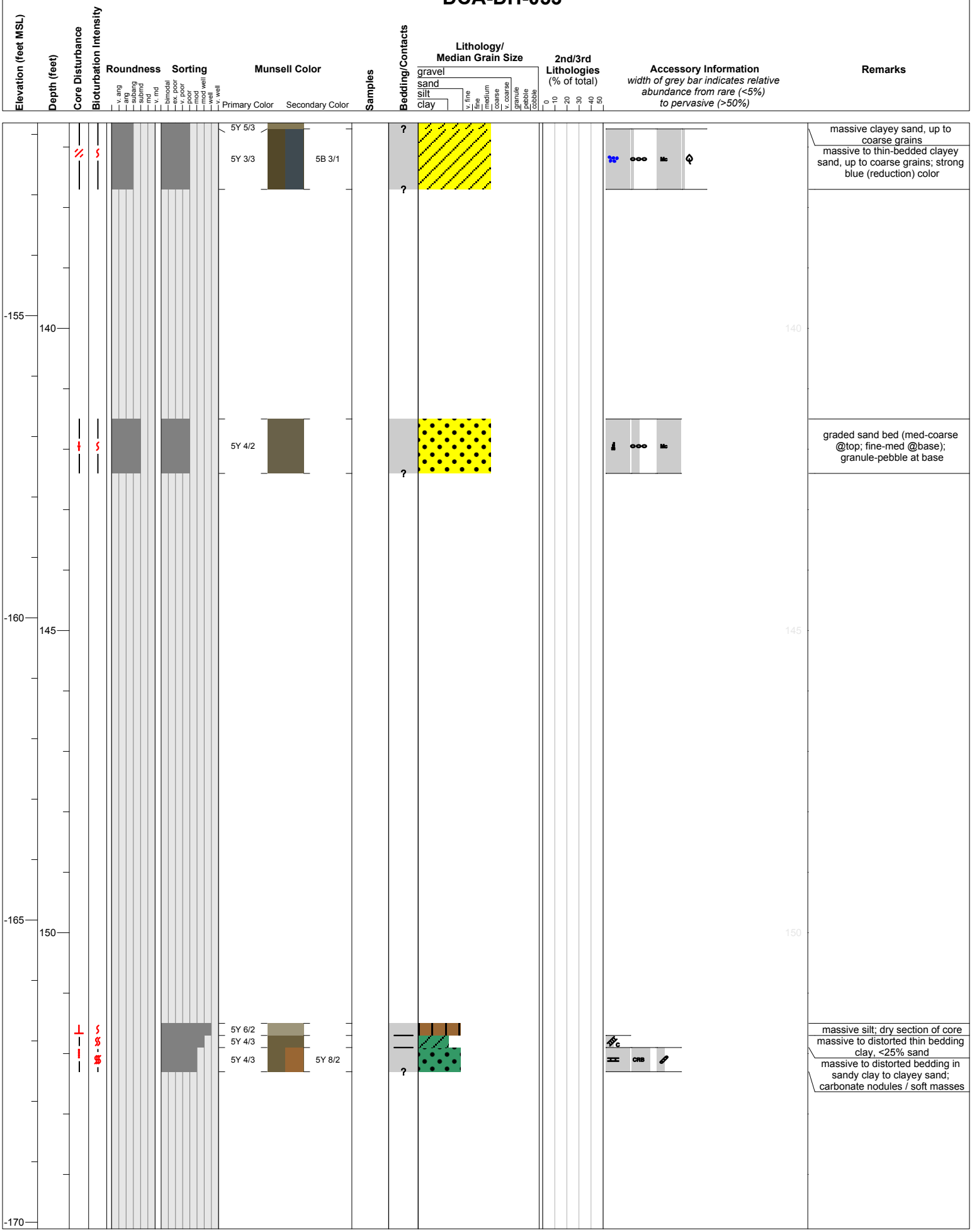
DCA-DH-053


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
100
105
110
115
-120
-125
-130
5Y 3/3
5Y 5/2
5Y 4/4
5Y 4/3
5Y 3/3
5Y 5/2
5Y 4/2
5Y 3/3
5Y 5/2
5Y 5/2
5Y 4/3
5Y 4/4
5Y 5/2
5Y 4/3
5Y 6/2
5Y 3/3
5Y 4/3
5Y 3/3
5Y 3/3
5Y 4/3
5Y 5/2
5Y 3/1
5Y 2.5/1
5Y 4/2
5Y 2.5/1
Mo
massive clay with some laminated sand (~15%)
thin interbedded clayey sand and v.f. sand
massive v.f. sand
thin interbedded clayey sand and v.f. sand
thin interbedded to laminated v.f. sand and clay
v.f. sand bed (cm) between two massive sandy clay units (cms)
thin interbedded to laminated v.f. sand and clay; slightly more clay than top unit in core; concentrated organic lamination at 1.1ft
thin interbedded to laminated clay and v.f. sand
thin interbedded to laminated v.f. sand and clay; top unit contains ripple lams and few organics
thin interbedded to laminated fine-v.f. subangular sand and clay
thin interbedded to laminated v.f. subangular sand and clay; sparse organic lams
thin interbedded clay and sand; more clay than unit above
small fragment of laminated to thin-bedded silty sand
laminated clay with more organics than layer below
laminated clay with organics
massive clay with gray

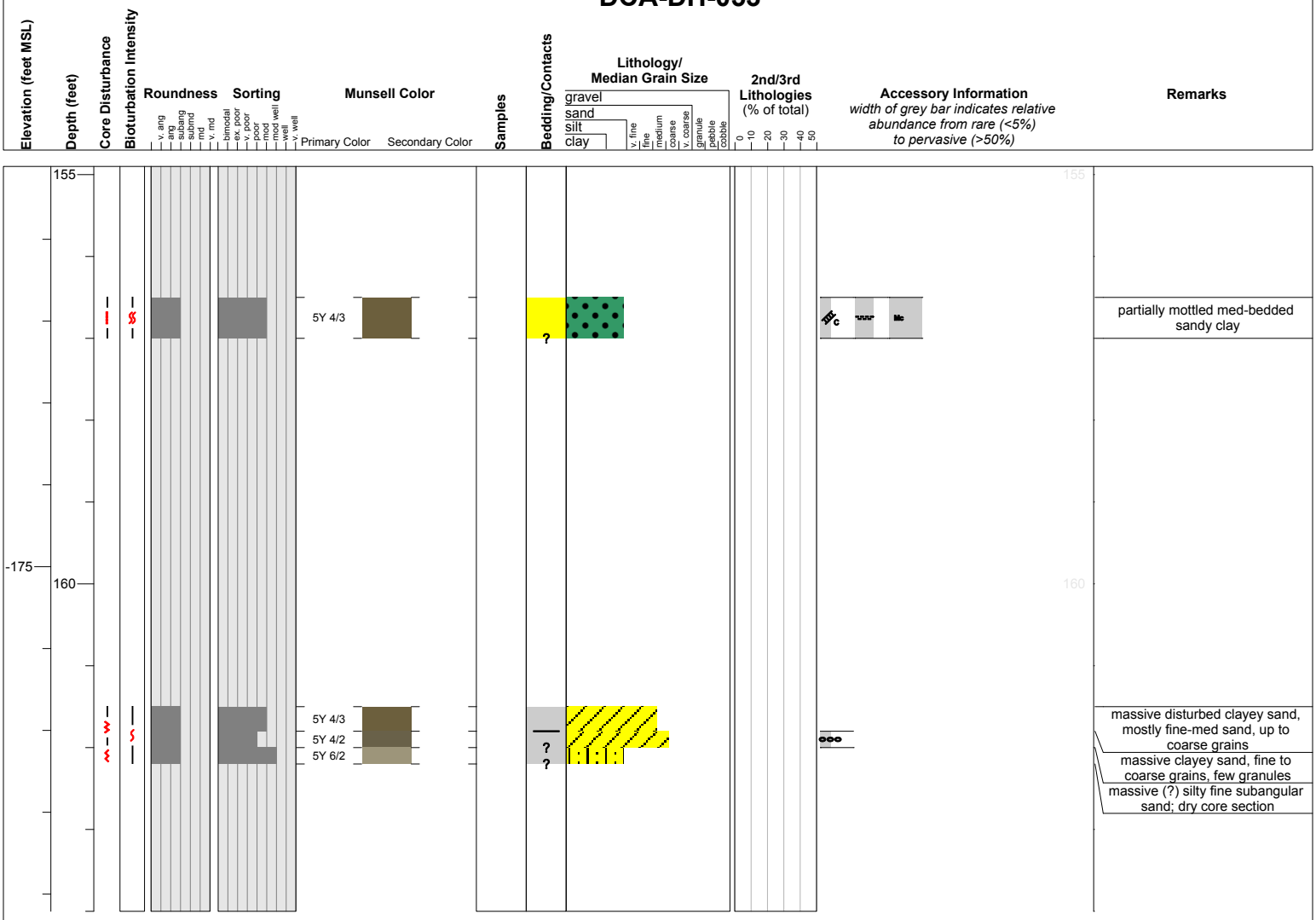
DCA-DH-053


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-135
-140
-145
-150
120
125
130
135
5Y 4/2
5Y 4/1
5Y 4/2
5Y 4/1
5Y 4/1
5Y 4/3
5Y 3/3
5Y 4/3
5Y 4/3
5B 3/1
Mc
Mo
(reduction?) color; sticky / goopy clay
massive clay; minimal sand; sticky / goopy texture; gray (reduction?) color
massive clay; slightly stiffer with slightly more sand than above
laminated clay with organics (concentrated in laminations)
massive mottled clay, fewer organics
v.f. sand with clay laminae
massive clay
massive clayey sand
massive sandy clay
massive clayey sand; blue (reduction) color
massive sandy clay
massive clay (fat clay?) without sand; blue (reduction) color

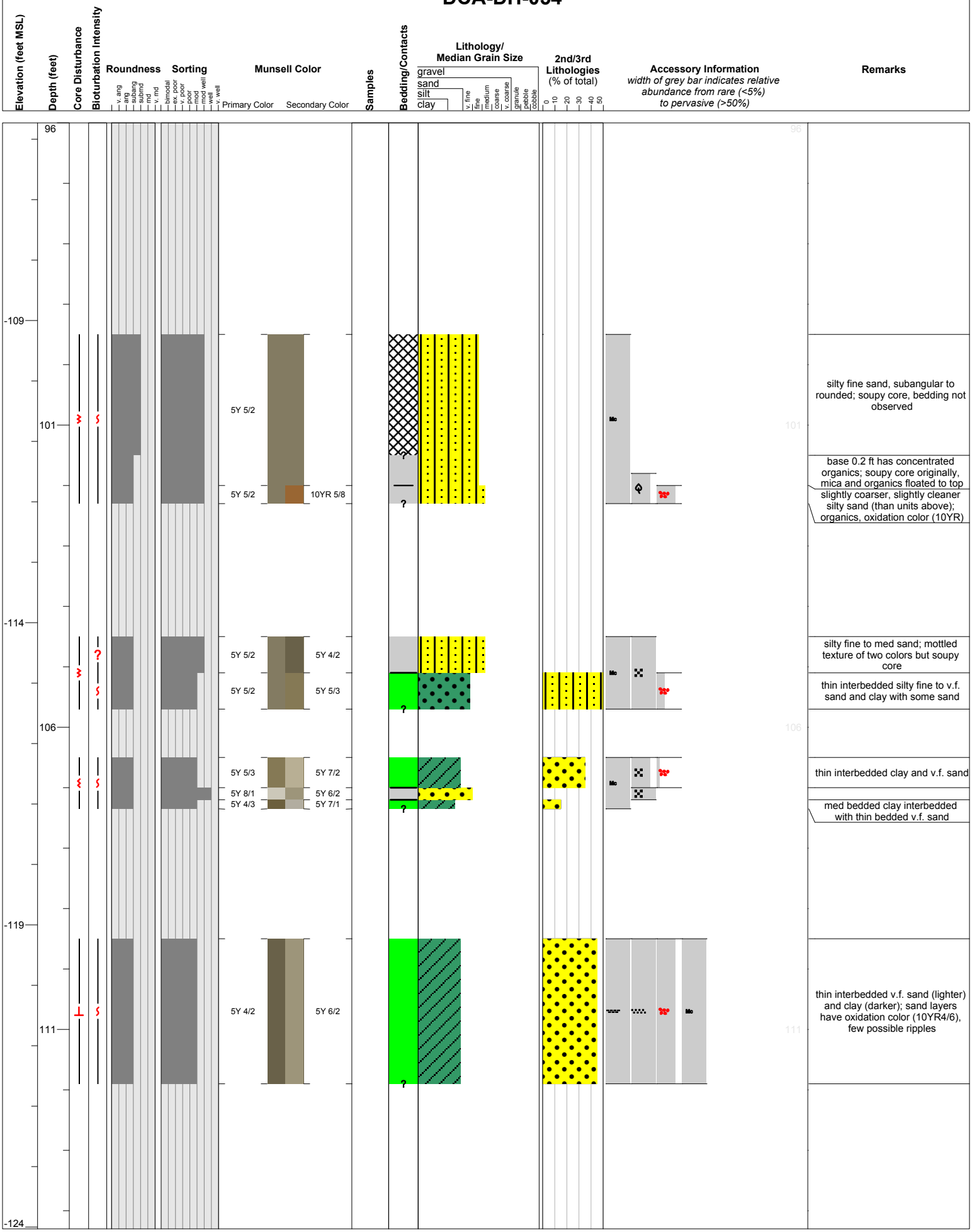
DCA-DH-053


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-155
140
-160
145
-165
150
-170
5Y 5/3
5Y 3/3
5B 3/1
5Y 4/2
5Y 6/2
5Y 4/3
5Y 4/3
5Y 8/2
massive clayey sand, up to coarse grains
massive to thin-bedded clayey sand, up to coarse grains; strong blue (reduction) color
graded sand bed (med-coarse @top; fine-med @base); granule-pebble at base
massive silt; dry section of core
massive to distorted thin bedding clay, <25% sand
massive to distorted bedding in sandy clay to clayey sand; carbonate nodules / soft masses

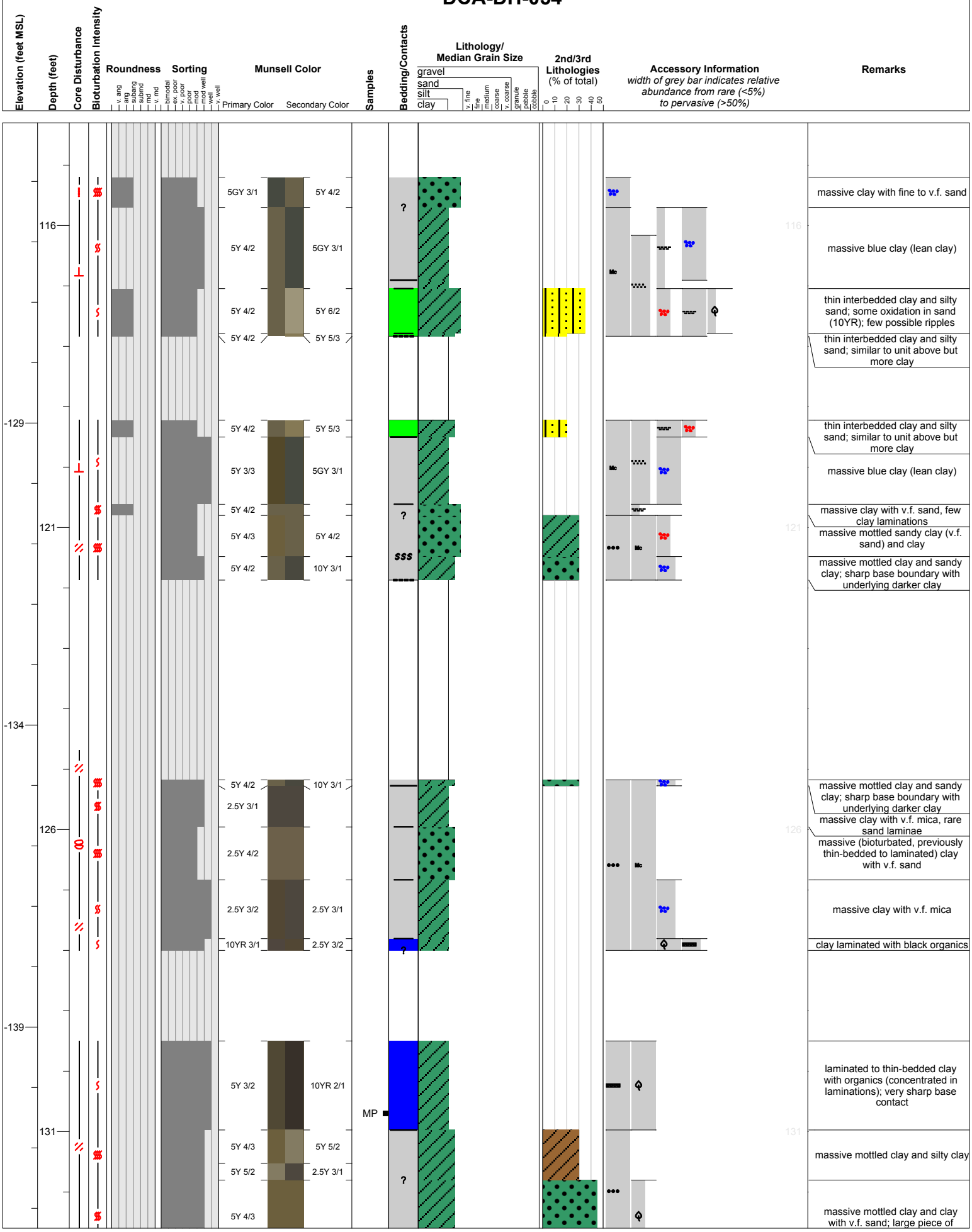
DCA-DH-053


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
155
160
-175
5Y 4/3
5Y 4/3
5Y 4/2
5Y 6/2
partially mottled med-bedded
sandy clay
massive disturbed clayey sand,
mostly fine-med sand, up to
coarse grains
massive clayey sand, fine to
coarse grains, few granules
massive (?) silty fine subangular
sand; dry core section

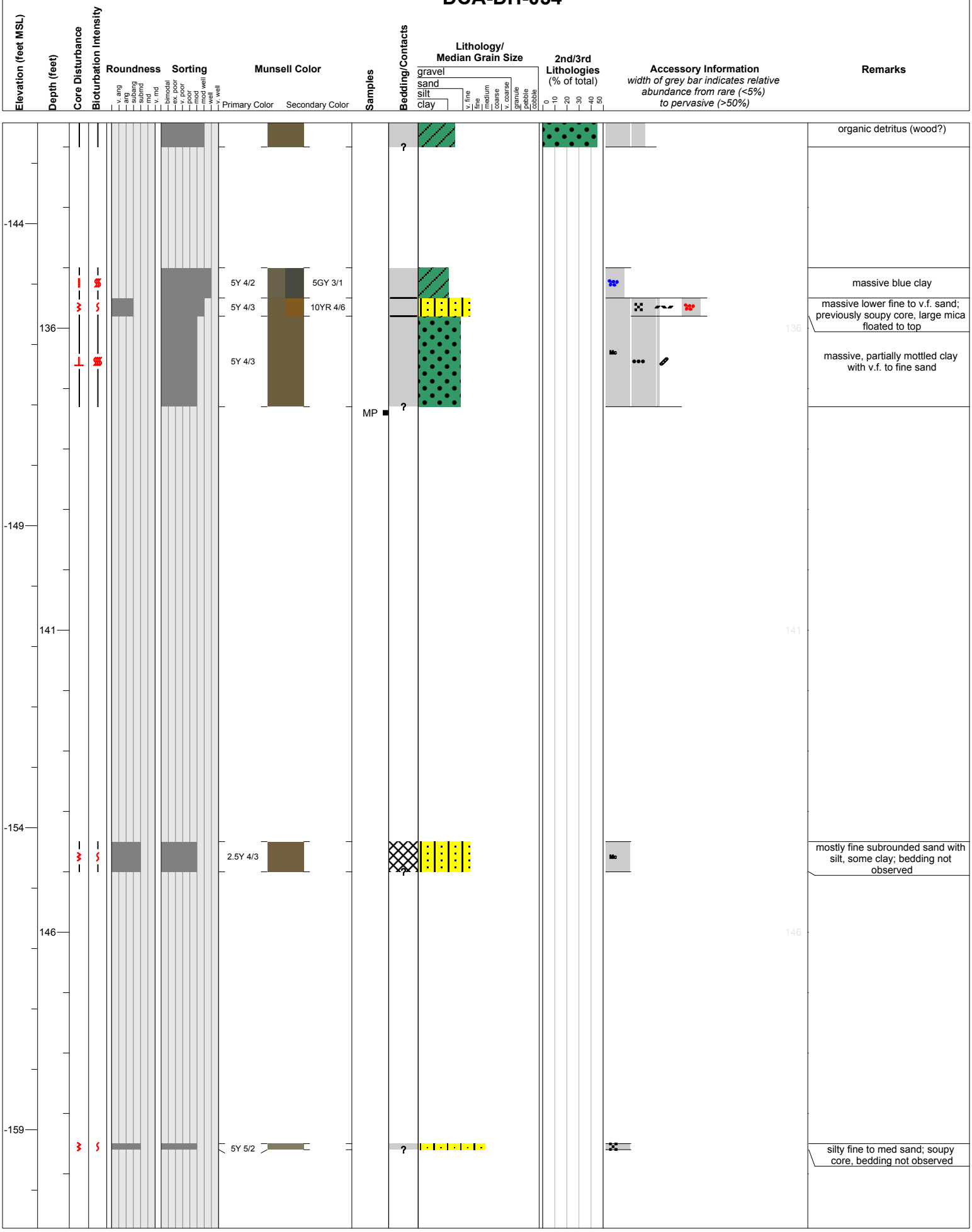
DCA-DH-054


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
96
101
106
111
-109
-114
-119
-124
5Y 5/2
5Y 5/2
10YR 5/8
5Y 5/2
5Y 4/2
5Y 5/2
5Y 5/3
5Y 5/3
5Y 7/2
5Y 8/1
5Y 6/2
5Y 4/3
5Y 7/1
5Y 4/2
5Y 6/2
Mc
silty fine sand, subangular to rounded; soupy core, bedding not observed
base 0.2 ft has concentrated organics; soupy core originally, mica and organics floated to top
slightly coarser, slightly cleaner silty sand (than units above); organics, oxidation color (10YR)
silty fine to med sand; mottled texture of two colors but soupy core
thin interbedded silty fine to v.f. sand and clay with some sand
thin interbedded clay and v.f. sand
med bedded clay interbedded with thin bedded v.f. sand
thin interbedded v.f. sand (lighter) and clay (darker); sand layers have oxidation color (10YR4/6), few possible ripples

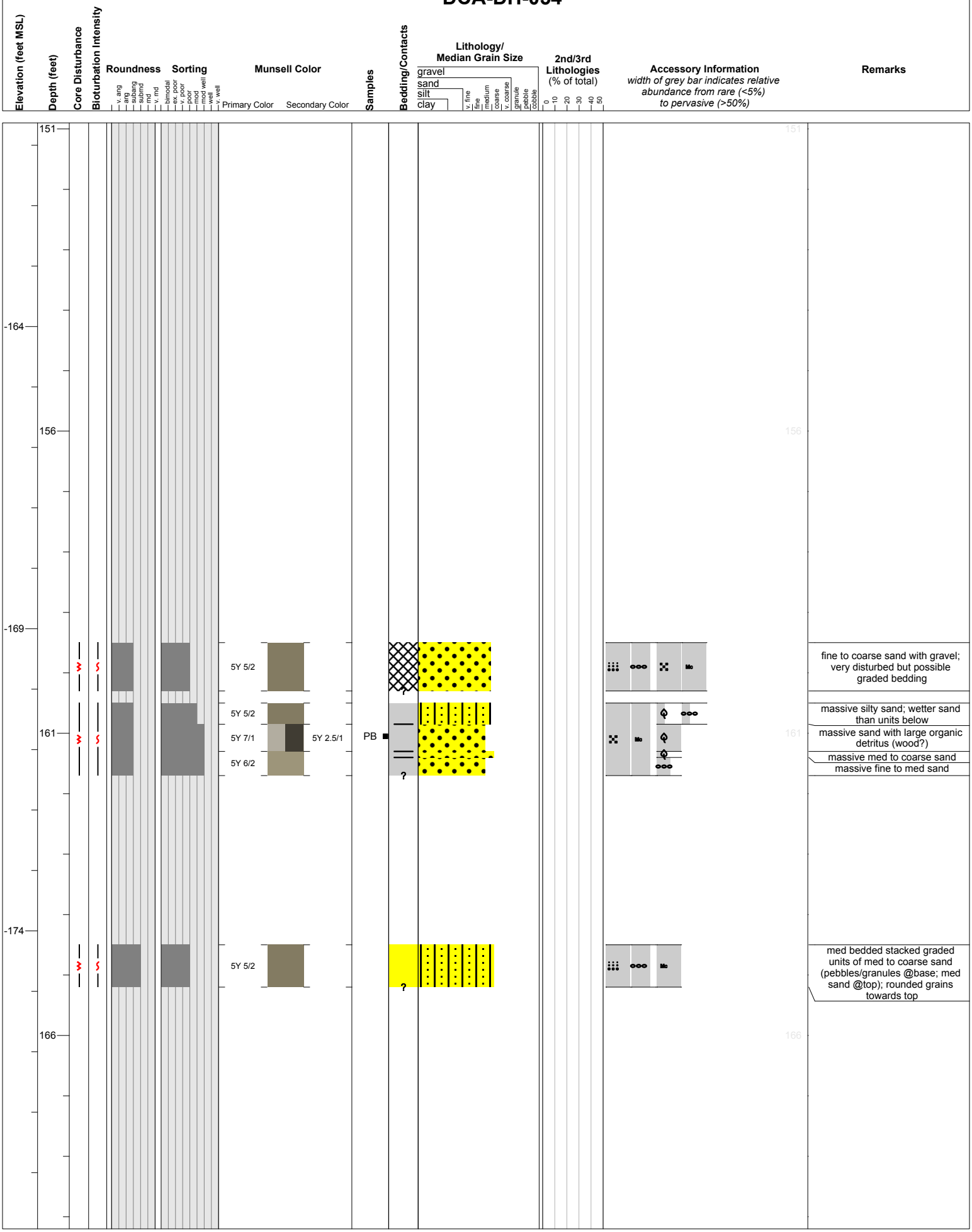
DCA-DH-054


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
very poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative abundance from rare (<5%) to pervasive (>50%)
Remarks
116
-129
121
-134
126
-139
131
5GY 3/1
5Y 4/2
5GY 3/1
5Y 6/2
5Y 5/3
5Y 3/3
10Y 3/1
2.5Y 3/1
2.5Y 4/2
2.5Y 3/2
10YR 3/1
10YR 2/1
5Y 5/2
MP
massive clay with fine to v.f. sand
massive blue clay (lean clay)
thin interbedded clay and silty sand; some oxidation in sand (10YR); few possible ripples
thin interbedded clay and silty sand; similar to unit above but more clay
massive clay with v.f. sand, few clay laminations
massive mottled sandy clay (v.f. sand) and clay
massive mottled clay and sandy clay; sharp base boundary with underlying darker clay
massive clay with v.f. mica, rare sand laminae
massive (bioturbated, previously thin-bedded to laminated) clay with v.f. sand
massive clay with v.f. mica
clay laminated with black organics
laminated to thin-bedded clay with organics (concentrated in laminations); very sharp base contact
massive mottled clay and silty clay
massive mottled clay and clay with v.f. sand; large piece of

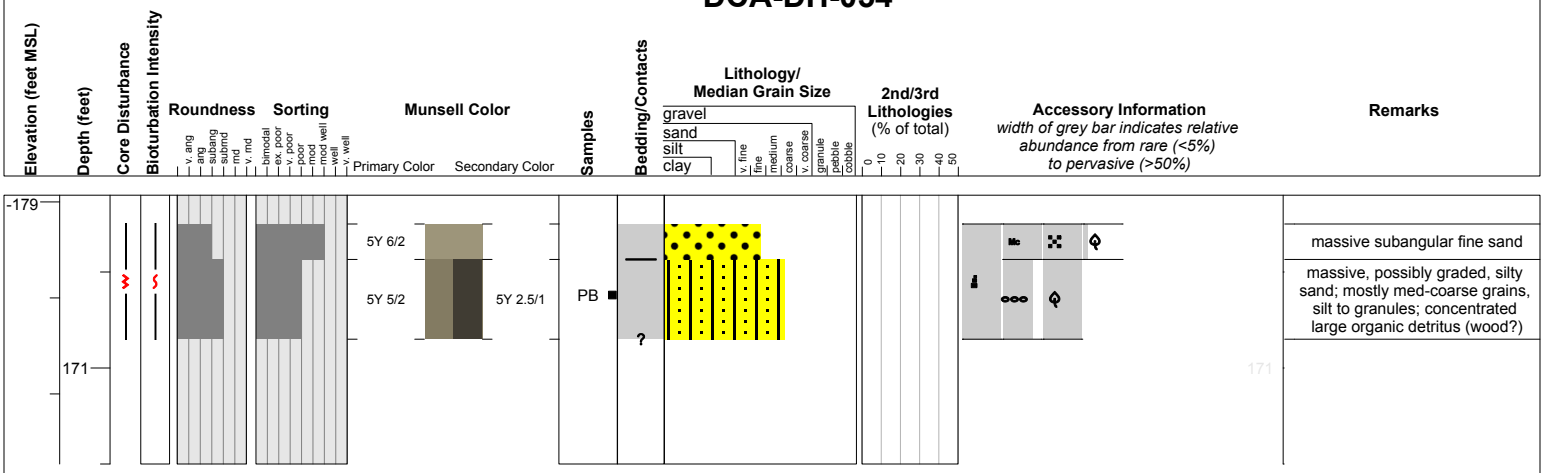
DCA-DH-054


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-144
136
-149
141
-154
146
-159
5Y 4/2
5GY 3/1
5Y 4/3
10YR 4/6
5Y 4/3
MP
2.5Y 4/3
5Y 5/2
organic detritus (wood?)
massive blue clay
massive lower fine to v.f. sand;
previously soupy core, large mica
floated to top
massive, partially mottled clay
with v.f. to fine sand
mostly fine subrounded sand with
silt, some clay; bedding not
observed
silty fine to med sand; soupy
core, bedding not observed

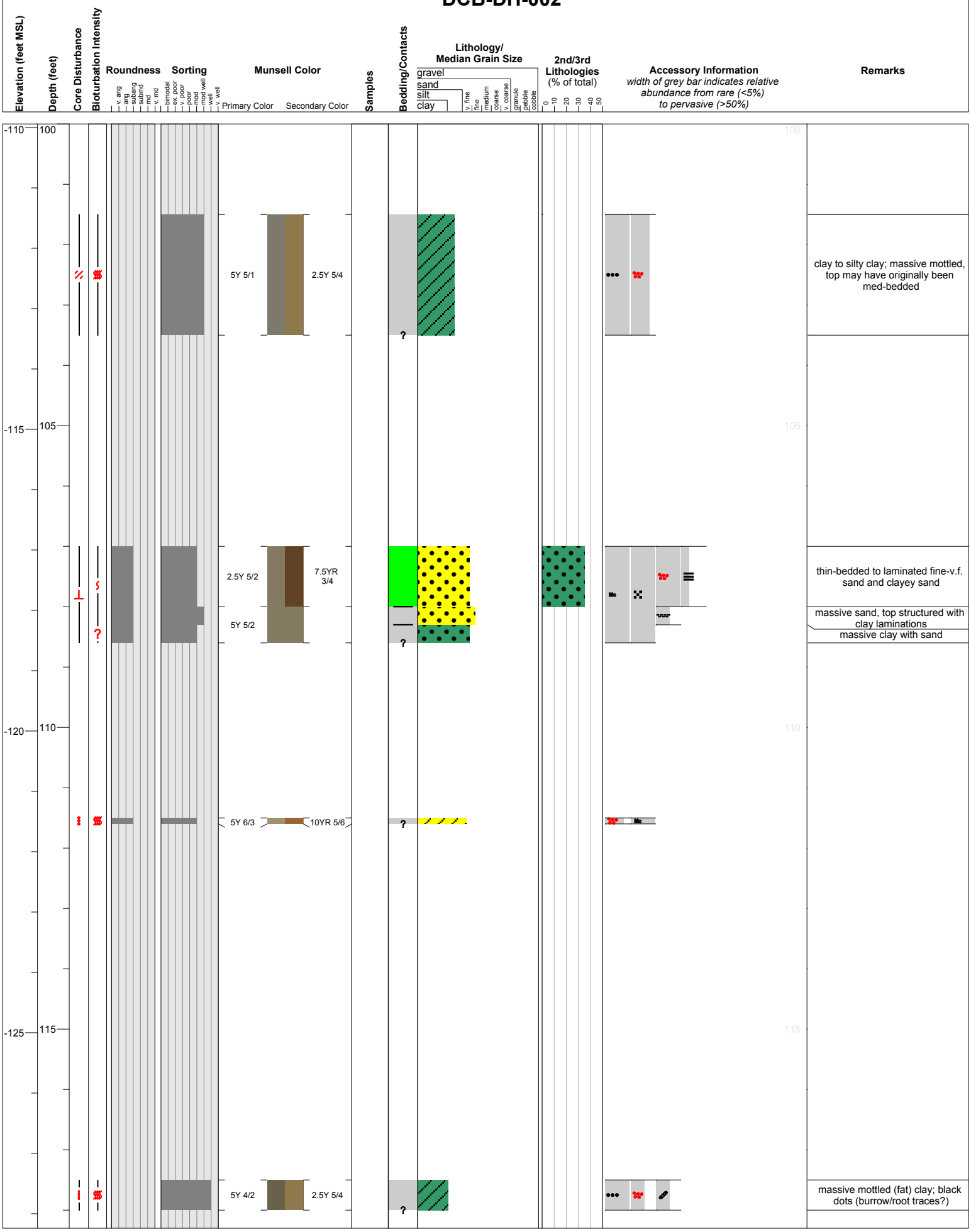
DCA-DH-054


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
151
156
161
166
-164
-169
-174
5Y 5/2
5Y 5/2
5Y 7/1
5Y 6/2
5Y 2.5/1
5Y 5/2
PB
?
?
?
Mo
Mo
Mo
fine to coarse sand with gravel; very disturbed but possible graded bedding
massive silty sand; wetter sand than units below
massive sand with large organic detritus (wood?)
massive med to coarse sand
massive fine to med sand
med bedded stacked graded units of med to coarse sand (pebbles/granules @base; med sand @top); rounded grains towards top

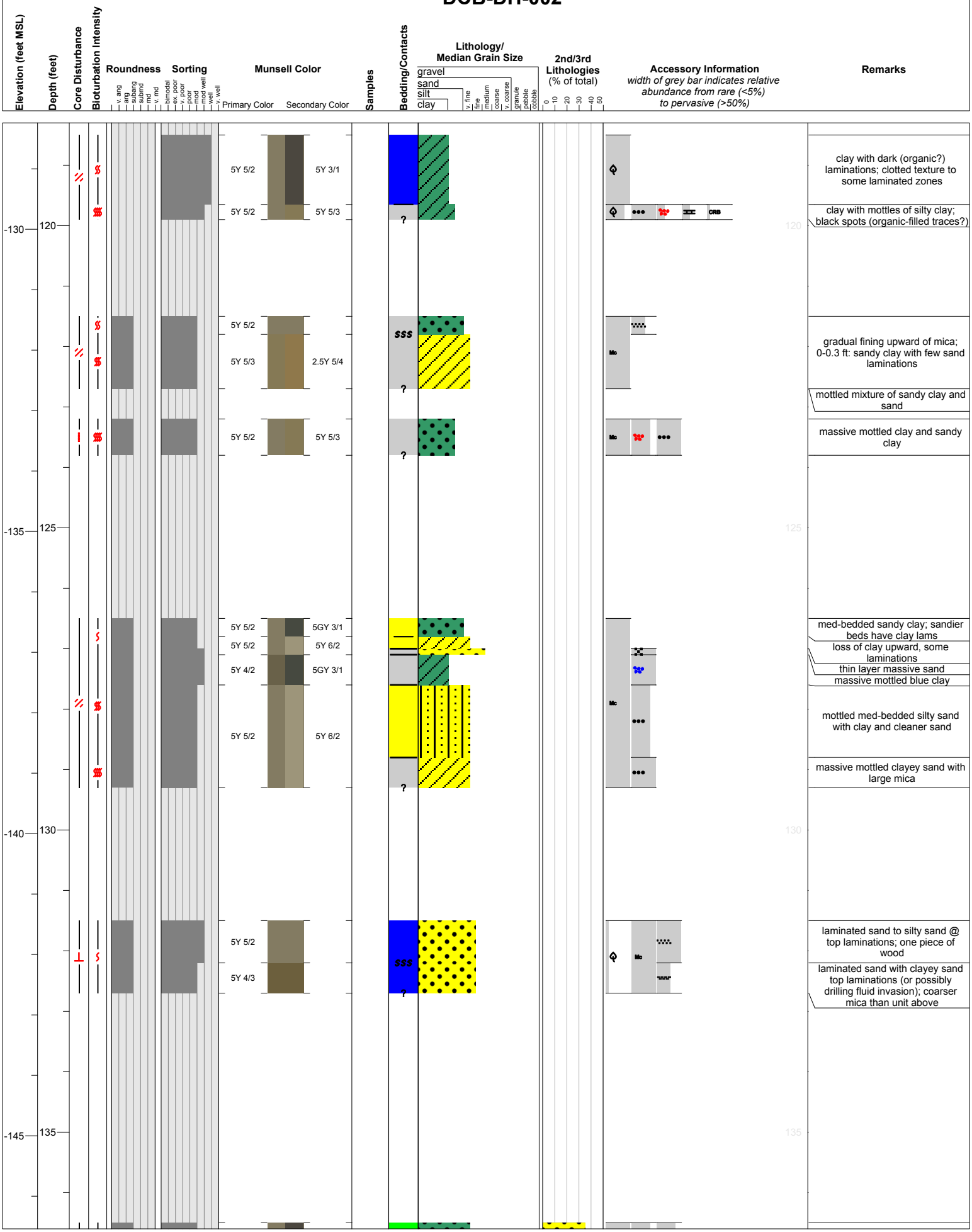
DCA-DH-054


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-179
171
5Y 6/2
5Y 5/2
5Y 2.5/1
PB
?
massive subangular fine sand
massive, possibly graded, silty
sand; mostly med-coarse grains,
silt to granules; concentrated
large organic detritus (wood?)

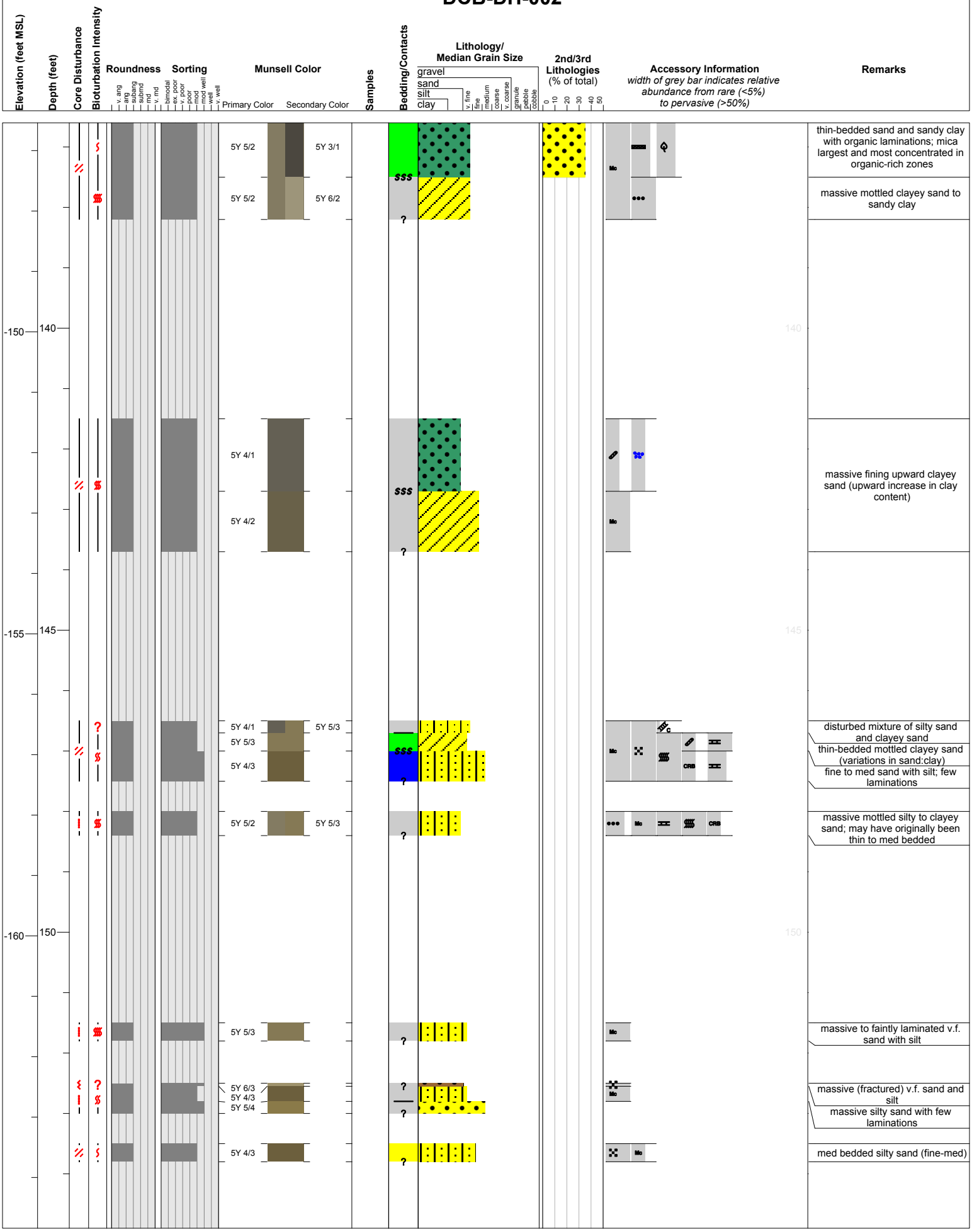
DCB-DH-002


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-110
-115
-120
-125
100
105
110
115
5Y 5/1
2.5Y 5/4
clay to silty clay; massive mottled, top may have originally been med-bedded
2.5Y 5/2
7.5YR 3/4
5Y 5/2
thin-bedded to laminated fine-v.f. sand and clayey sand
massive sand, top structured with clay laminations
massive clay with sand
5Y 6/3
10YR 5/6
5Y 4/2
2.5Y 5/4
massive mottled (fat) clay; black dots (burrow/root traces?)

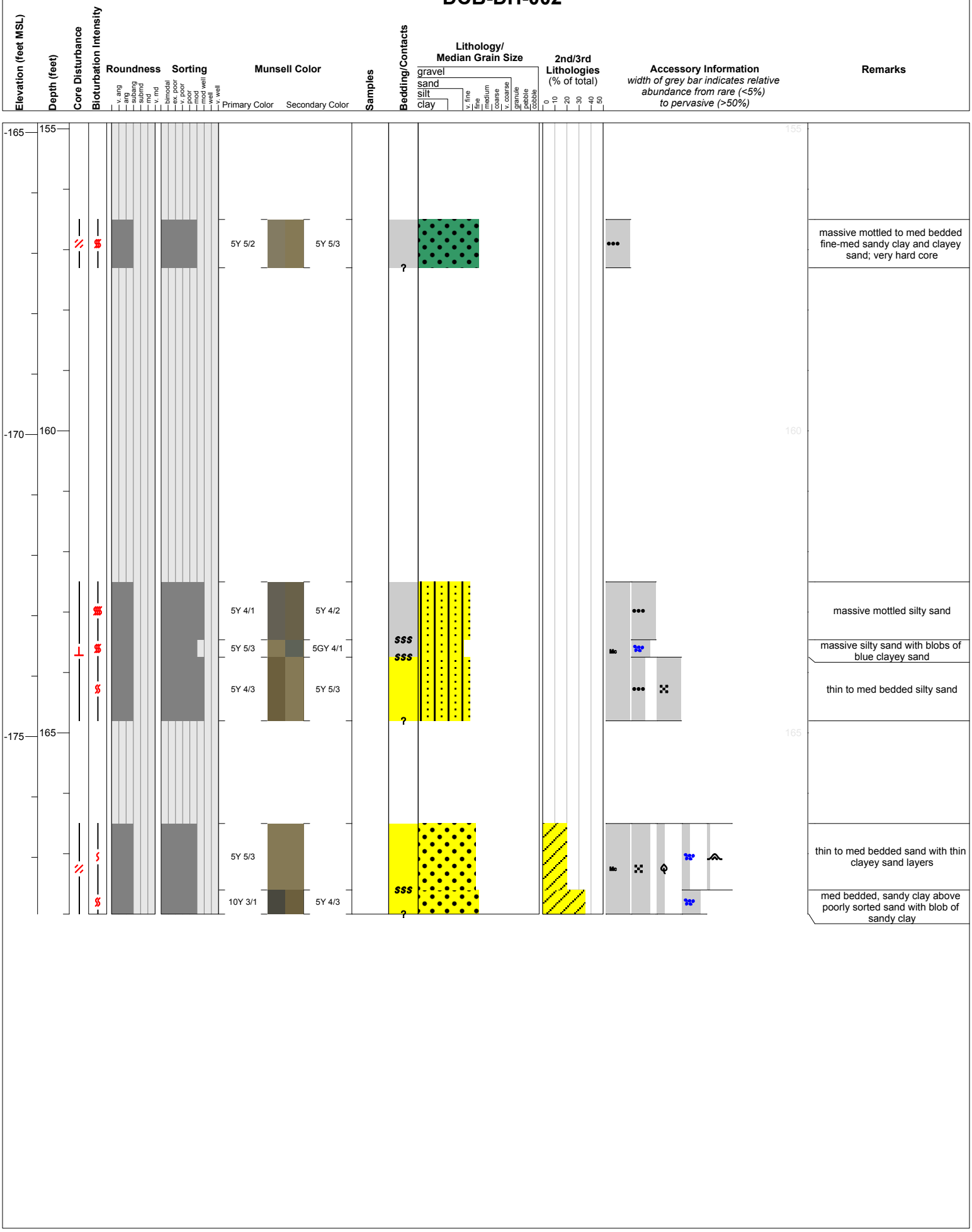
DCB-DH-002


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative abundance from rare (<5%) to pervasive (>50%)
Remarks
-130
-135
-140
-145
120
125
130
135
5Y 5/2
5Y 3/1
5Y 5/2
5Y 5/3
5Y 5/2
5Y 5/3
2.5Y 5/4
5Y 5/2
5Y 5/3
5Y 5/2
5GY 3/1
5Y 5/2
5Y 6/2
5Y 4/2
5GY 3/1
5Y 5/2
5Y 6/2
5Y 5/2
5Y 4/3
SSS
SSS
Mc
Mc
Mc
Mc
CRB
clay with dark (organic?) laminations; clotted texture to some laminated zones
clay with mottles of silty clay; black spots (organic-filled traces?)
gradual fining upward of mica; 0-0.3 ft: sandy clay with few sand laminations
mottled mixture of sandy clay and sand
massive mottled clay and sandy clay
med-bedded sandy clay; sandier beds have clay lams
loss of clay upward, some laminations
thin layer massive sand
massive mottled blue clay
mottled med-bedded silty sand with clay and cleaner sand
massive mottled clayey sand with large mica
laminated sand to silty sand @ top laminations; one piece of wood
laminated sand with clayey sand top laminations (or possibly drilling fluid invasion); coarser mica than unit above

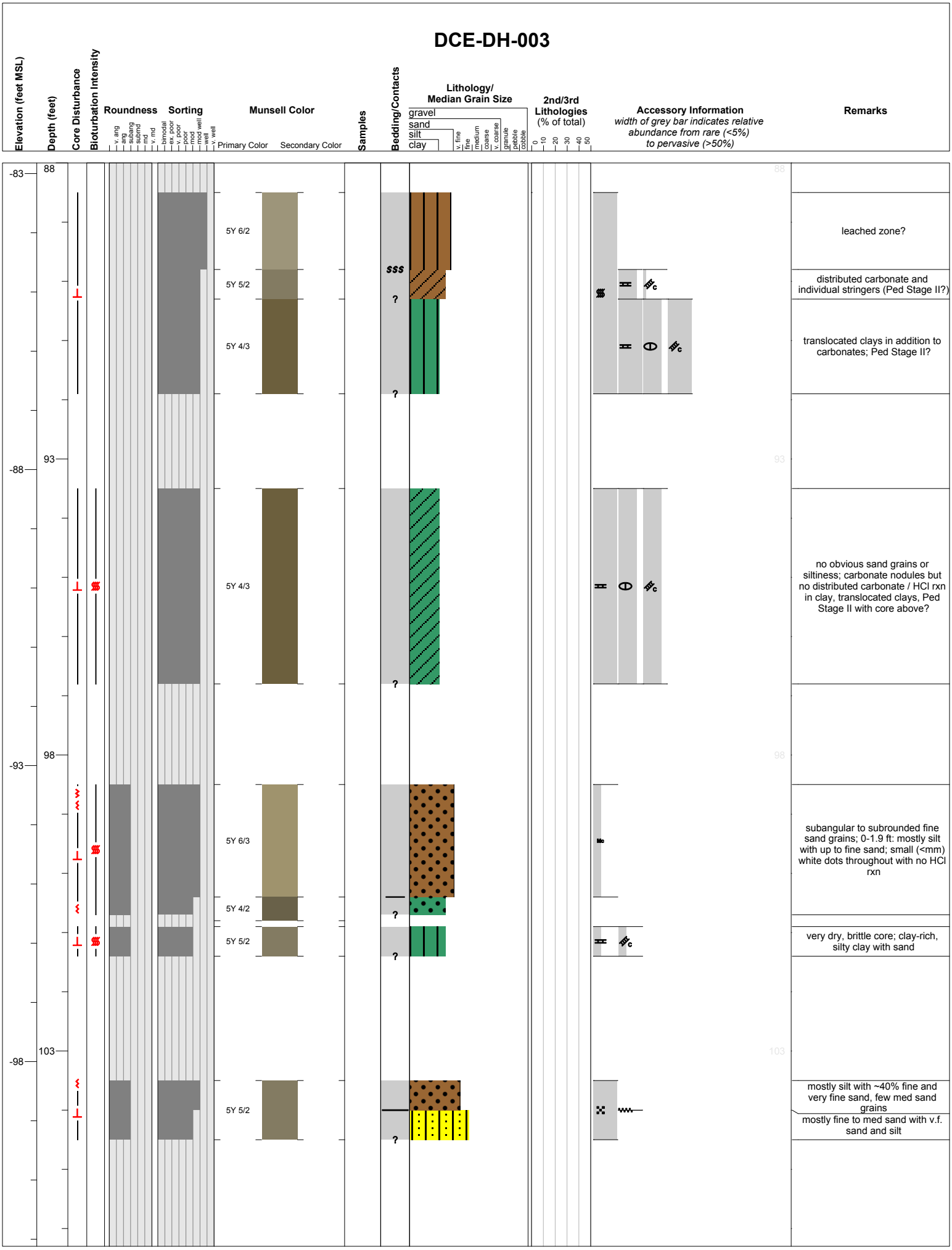
DCB-DH-002


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative abundance from rare (<5%) to pervasive (>50%)
Remarks
-150
140
-155
145
-160
150
5Y 5/2
5Y 3/1
5Y 5/2
5Y 6/2
5Y 4/1
5Y 4/2
5Y 4/1
5Y 5/3
5Y 5/3
5Y 4/3
5Y 5/2
5Y 5/3
5Y 5/3
5Y 6/3
5Y 4/3
5Y 5/4
5Y 4/3
thin-bedded sand and sandy clay with organic laminations; mica largest and most concentrated in organic-rich zones
massive mottled clayey sand to sandy clay
massive fining upward clayey sand (upward increase in clay content)
disturbed mixture of silty sand and clayey sand
thin-bedded mottled clayey sand (variations in sand:clay)
fine to med sand with silt; few laminations
massive mottled silty to clayey sand; may have originally been thin to med bedded
massive to faintly laminated v.f. sand with silt
massive (fractured) v.f. sand and silt
massive silty sand with few laminations
med bedded silty sand (fine-med)

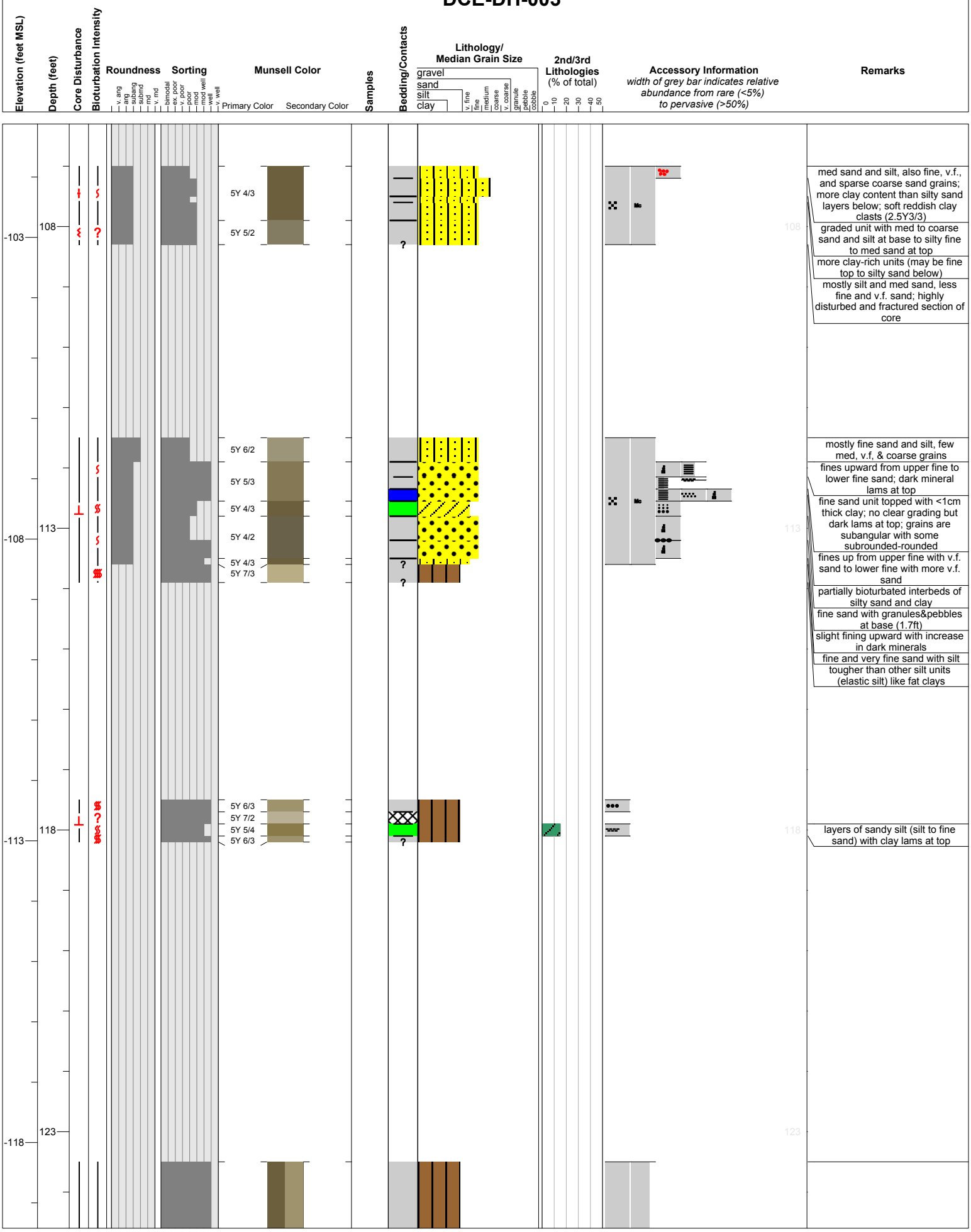
DCB-DH-002


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-165
155
-170
160
-175
165
5Y 5/2
5Y 5/3
massive mottled to med bedded
fine-med sandy clay and clayey
sand; very hard core
5Y 4/1
5Y 4/2
massive mottled silty sand
5Y 5/3
5GY 4/1
massive silty sand with blobs of
blue clayey sand
5Y 4/3
5Y 5/3
thin to med bedded silty sand
5Y 5/3
thin to med bedded sand with thin
clayey sand layers
10Y 3/1
5Y 4/3
med bedded, sandy clay above
poorly sorted sand with blob of
sandy clay

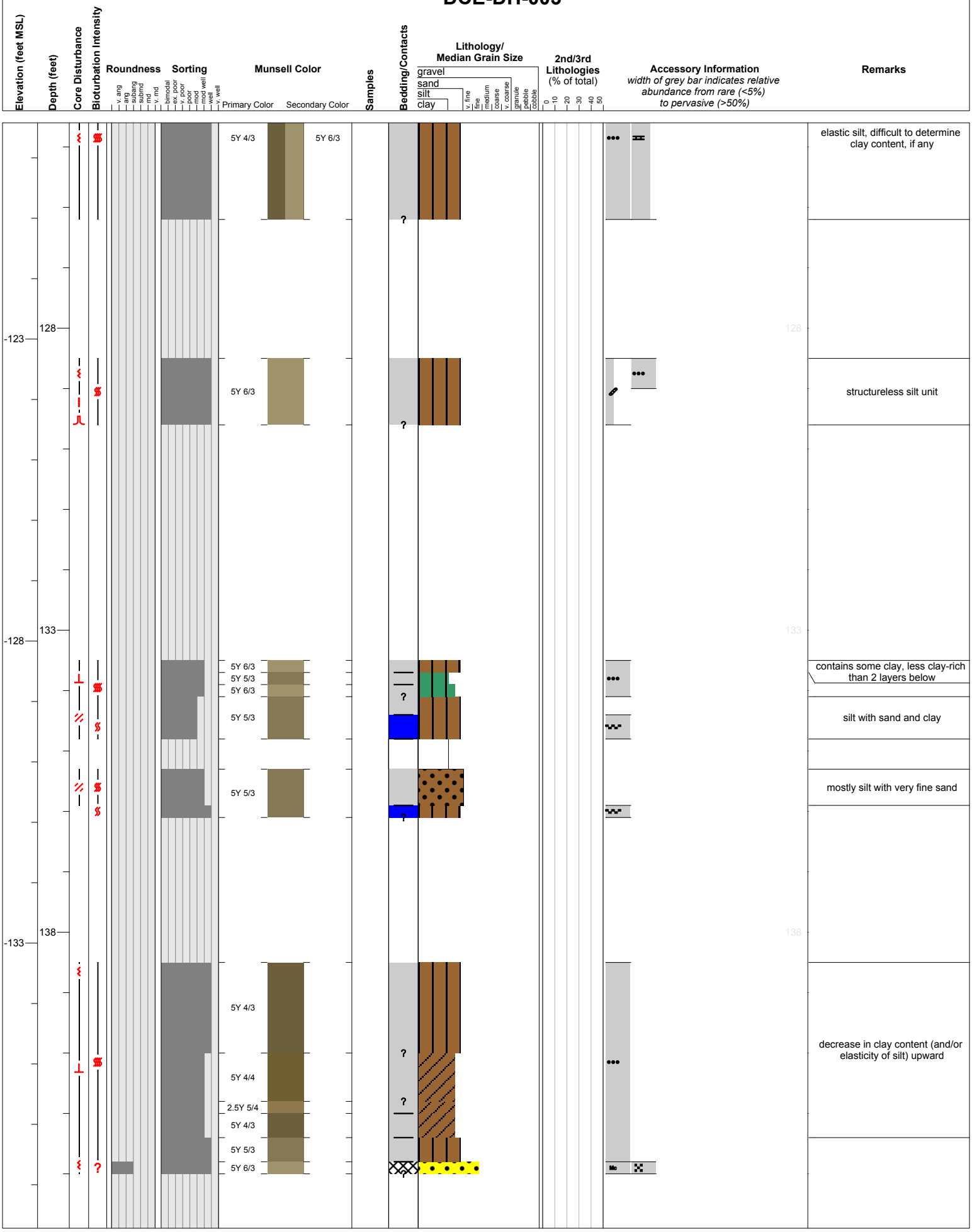
DCE-DH-003


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative abundance from rare (<5%) to pervasive (>50%)
Remarks
-83
-88
-93
-98
88
93
98
103
5Y 6/2
5Y 5/2
5Y 4/3
5Y 4/3
5Y 6/3
5Y 4/2
5Y 5/2
5Y 5/2
leached zone?
distributed carbonate and individual stringers (Ped Stage II?)
translocated clays in addition to carbonates; Ped Stage II?
no obvious sand grains or siltiness; carbonate nodules but no distributed carbonate / HCl rxn in clay, translocated clays, Ped Stage II with core above?
subangular to subrounded fine sand grains; 0-1.9 ft: mostly silt with up to fine sand; small (<mm) white dots throughout with no HCl rxn
very dry, brittle core; clay-rich, silty clay with sand
mostly silt with ~40% fine and very fine sand, few med sand grains
mostly fine to med sand with v.f. sand and silt

DCE-DH-003


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
very poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-103
108
5Y 4/3
5Y 5/2
Mo
med sand and silt, also fine, v.f., and sparse coarse sand grains; more clay content than silty sand layers below; soft reddish clay clasts (2.5Y3/3)
graded unit with med to coarse sand and silt at base to silty fine to med sand at top
more clay-rich units (may be fine top to silty sand below)
mostly silt and med sand, less fine and v.f. sand; highly disturbed and fractured section of core
-108
113
5Y 6/2
5Y 5/3
5Y 4/3
5Y 4/2
5Y 4/3
5Y 7/3
Mo
mostly fine sand and silt, few med, v.f, & coarse grains
fines upward from upper fine to lower fine sand; dark mineral lams at top
fine sand unit topped with <1cm thick clay; no clear grading but dark lams at top; grains are subangular with some subrounded-rounded
fines up from upper fine with v.f. sand to lower fine with more v.f. sand
partially bioturbated interbeds of silty sand and clay
fine sand with granules&pebbles at base (1.7ft)
slight fining upward with increase in dark minerals
fine and very fine sand with silt
tougher than other silt units (elastic silt) like fat clays
-113
118
5Y 6/3
5Y 7/2
5Y 5/4
5Y 6/3
layers of sandy silt (silt to fine sand) with clay lams at top
-118
123

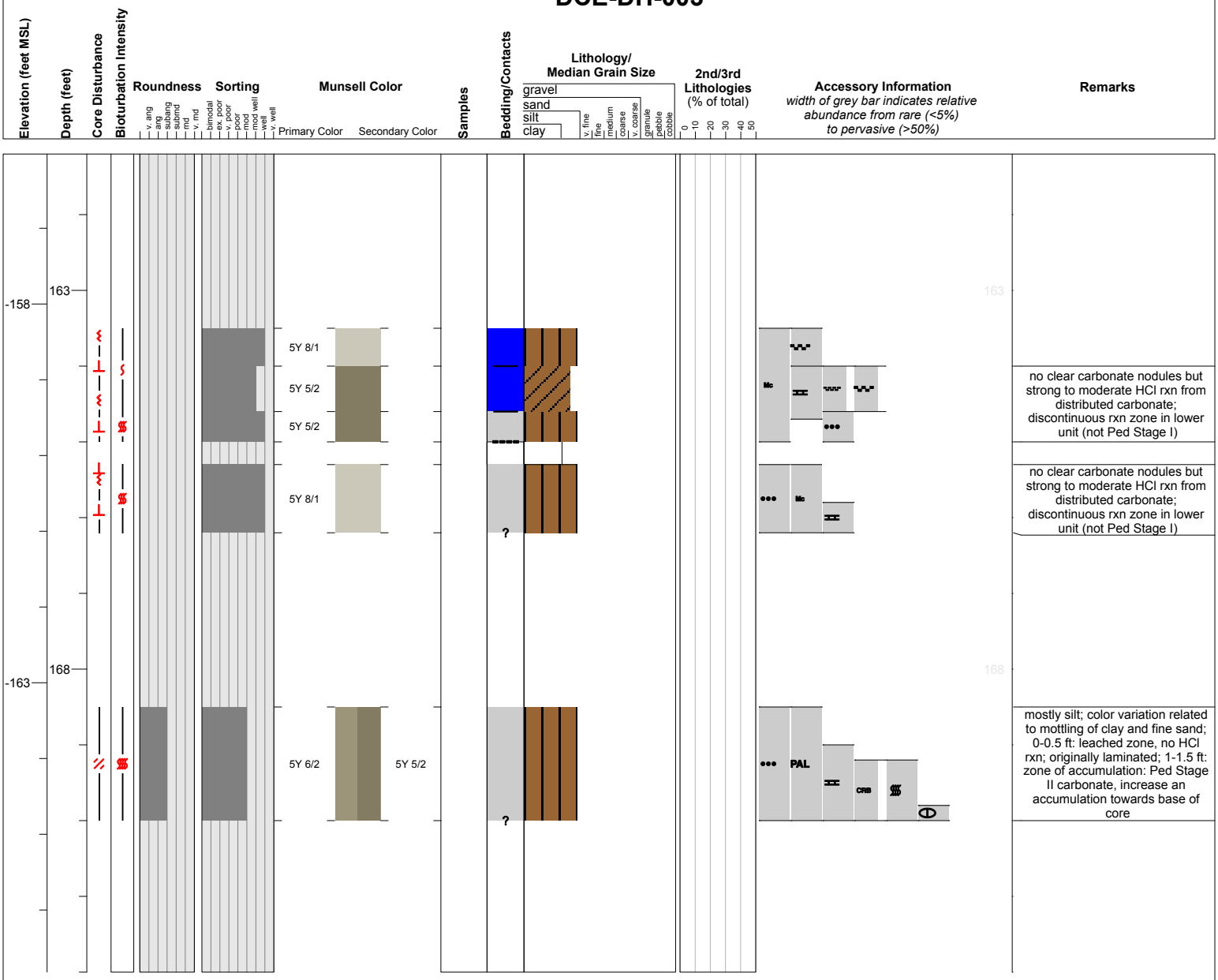
DCE-DH-003


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-123
128
-128
133
-133
138
5Y 4/3
5Y 6/3
5Y 6/3
5Y 6/3
5Y 5/3
5Y 6/3
5Y 5/3
5Y 5/3
5Y 4/3
5Y 4/4
2.5Y 5/4
5Y 4/3
5Y 5/3
5Y 6/3
elastic silt, difficult to determine
clay content, if any
structureless silt unit
contains some clay, less clay-rich
than 2 layers below
silt with sand and clay
mostly silt with very fine sand
decrease in clay content (and/or
elasticity of silt) upward

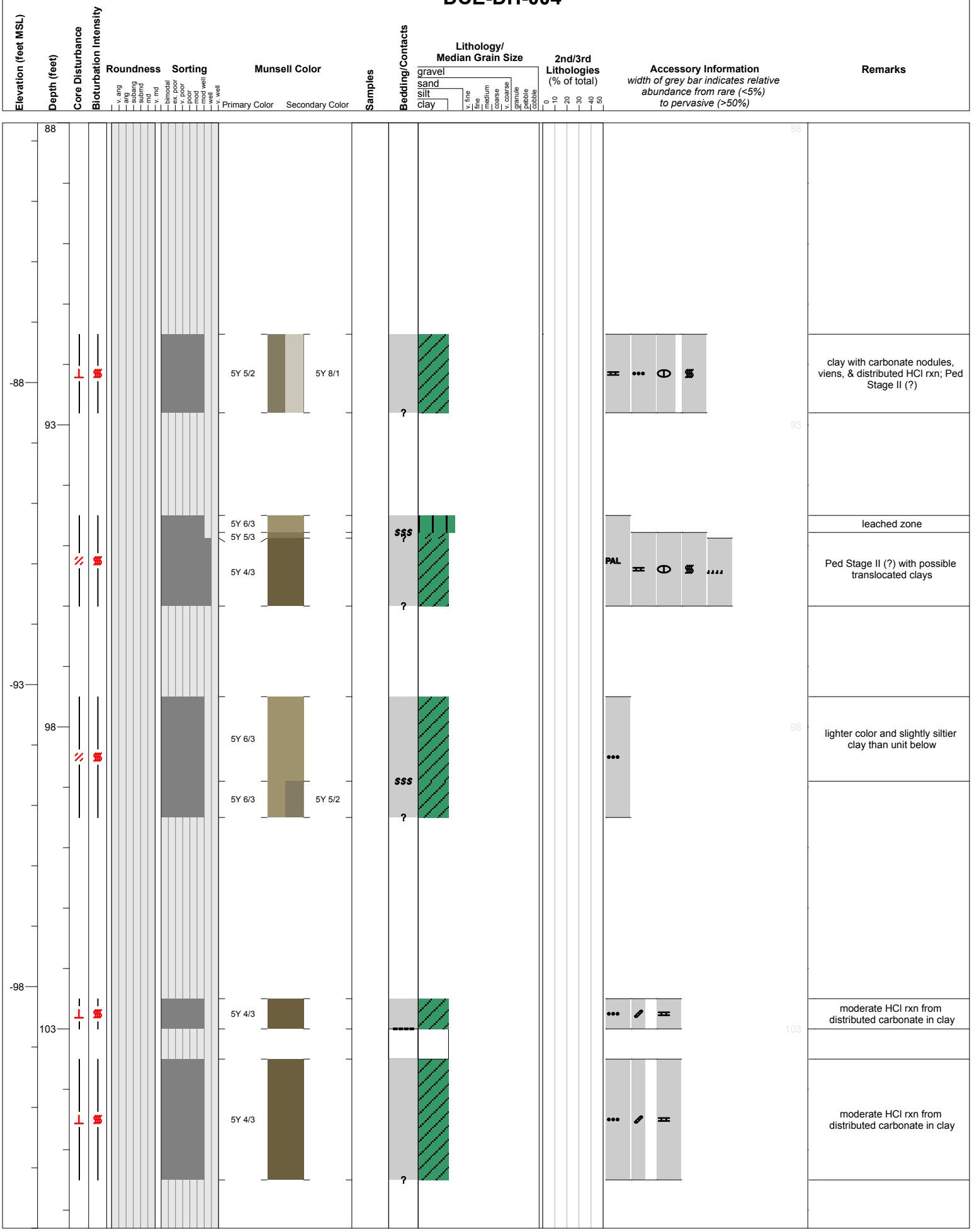
DCE-DH-003

Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative abundance from rare (<5%) to pervasive (>50%)
Remarks
143
148
153
158
-138
-143
-148
-153
5Y 6/2
5Y 5/3
5Y 4/3
5Y 4/3
5Y 5/2
5Y 5/2
5Y 6/3
5Y 6/2
5Y 6/2
5Y 7/2
5Y 6/2
5Y 6/2
5Y 5/6
5Y 6/3
5Y 6/2
5Y 4/3
5Y 4/4
5Y 8/1
5Y 8/1
5Y 5/3
5Y 6/3
5Y 7/2
5Y 7/2
Mc
PAL
CRB
thin-bedded (cms) v.f. sand with interbeds (mms) silt with v.f. sand
silty v.f. sand with some fine sand grains
v.f. to coarse sand, most fine-med grains; larger grains are subrounded; sparse small mica throughout
appears silty in very dry, brittle core (elastic silt)
mostly v.f. sand with silt, some fine sand grains; sparse small mica
mostly v.f. sand with silt, some fine sand grains; sparse small mica
mostly fine sand, some silt and med sand grains; cleaner sand in oxidation color mottles (burrow/root traces?)
cut and fill interbeds of coarse sand and silty fine-grained sand; larger grains are subrounded
silt to coarse sand, mostly fine and med grains
bedding, bioturbation uncertain in fractured core
distributed carbonate, strong HCl rxn; Paleosol with Ped Stage II+ carbonate from .4-.8 ft?; 0-0.4 ft: translocated clays (?); 0-0.8 ft: downward increase in and concentration of carbonate, strong HCl rxn; 0.8-1.1 ft: med to coarse sand with silt; 1.1-1.2 ft: similar to unit above but different color
waxy texture (elastic silt) with distributed v.f. mica

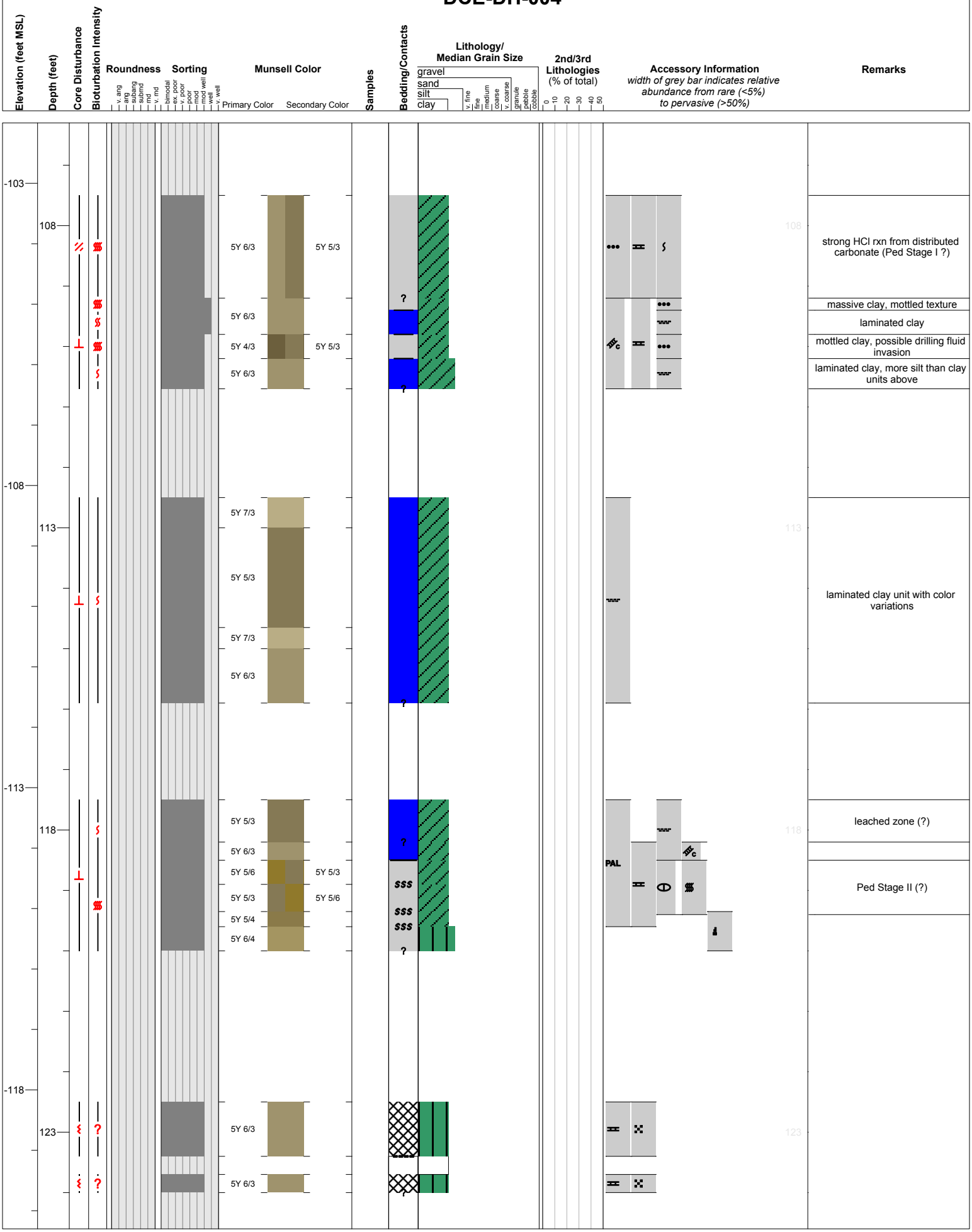
DCE-DH-003


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
163
-158
168
-163
5Y 8/1
5Y 5/2
5Y 5/2
5Y 8/1
5Y 6/2
5Y 5/2
?
?
Mc
Mc
PAL
CRB
no clear carbonate nodules but strong to moderate HCl rxn from distributed carbonate; discontinuous rxn zone in lower unit (not Ped Stage I)
no clear carbonate nodules but strong to moderate HCl rxn from distributed carbonate; discontinuous rxn zone in lower unit (not Ped Stage I)
mostly silt; color variation related to mottling of clay and fine sand; 0-0.5 ft: leached zone, no HCl rxn; originally laminated; 1-1.5 ft: zone of accumulation: Ped Stage II carbonate, increase an accumulation towards base of core

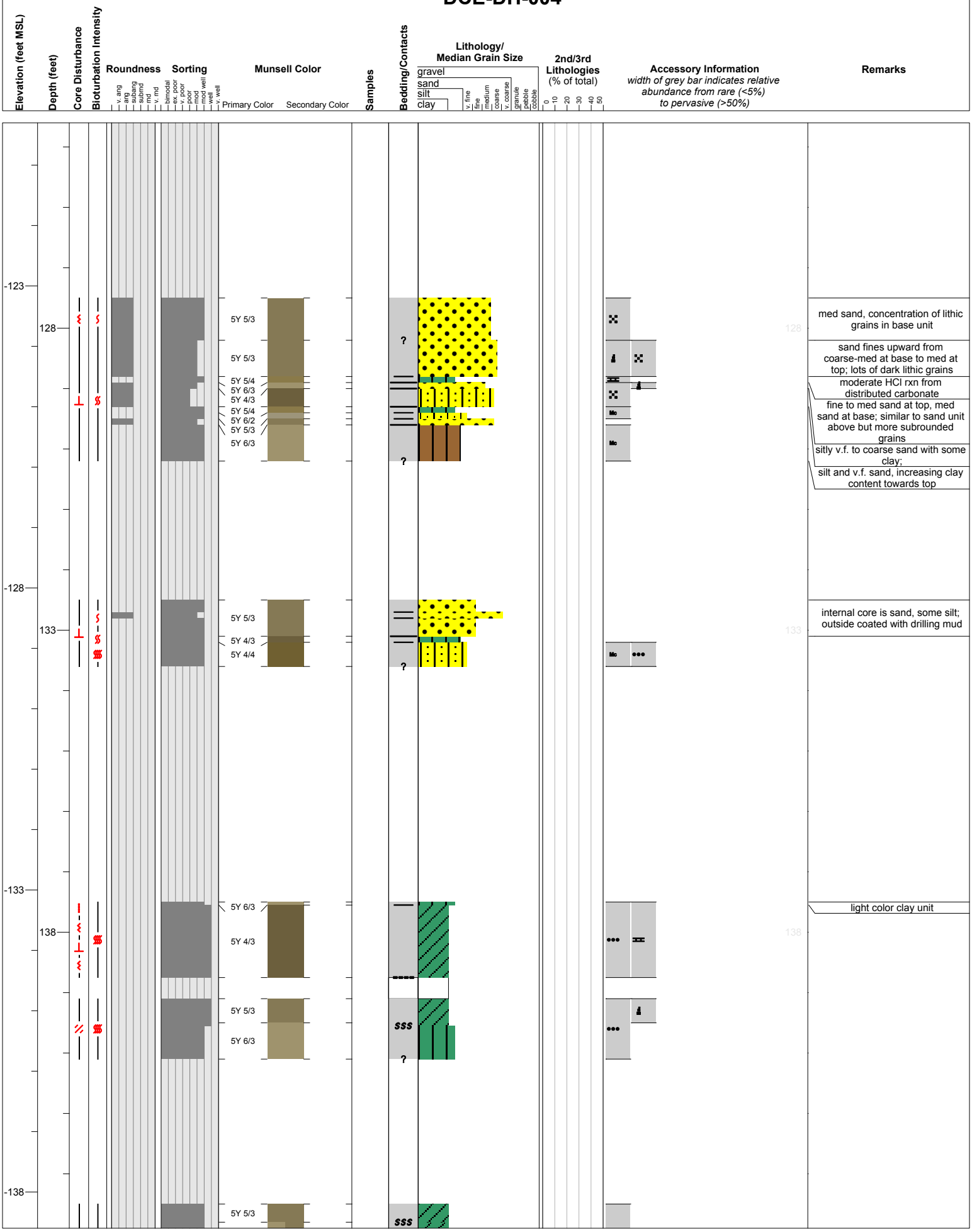
DCE-DH-004


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
88
93
98
103
-88
-93
-98
5Y 5/2
5Y 8/1
5Y 6/3
5Y 5/3
5Y 4/3
5Y 6/3
5Y 6/3
5Y 5/2
5Y 4/3
5Y 4/3
PAL
clay with carbonate nodules, viens, & distributed HCl rxn; Ped Stage II (?)
leached zone
Ped Stage II (?) with possible translocated clays
lighter color and slightly siltier clay than unit below
moderate HCl rxn from distributed carbonate in clay
moderate HCl rxn from distributed carbonate in clay

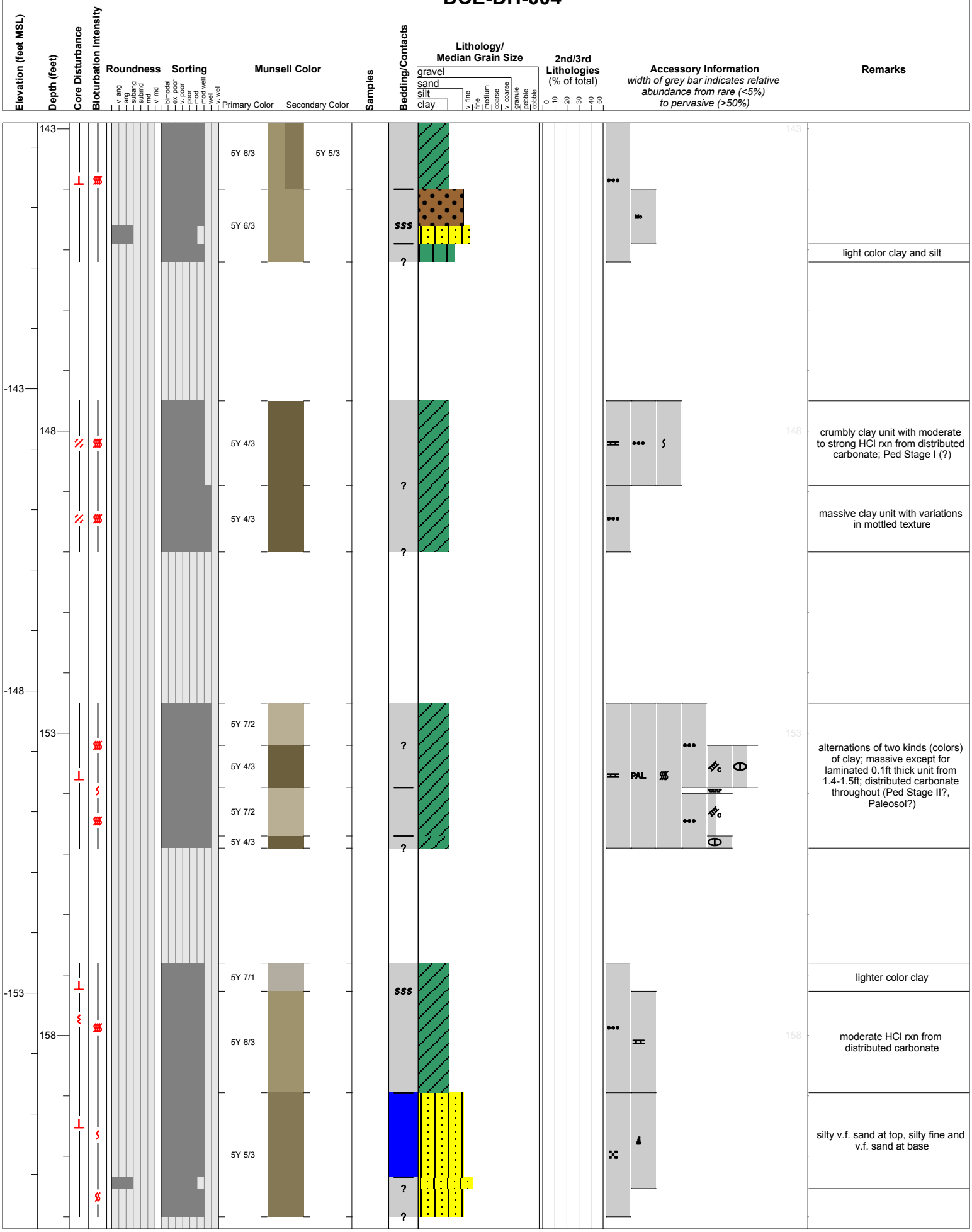
DCE-DH-004


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-103
108
5Y 6/3
5Y 5/3
5Y 6/3
5Y 4/3
5Y 5/3
5Y 6/3
strong HCl rxn from distributed carbonate (Ped Stage I ?)
massive clay, mottled texture
laminated clay
mottled clay, possible drilling fluid invasion
laminated clay, more silt than clay units above
-108
113
5Y 7/3
5Y 5/3
5Y 7/3
5Y 6/3
laminated clay unit with color variations
-113
118
5Y 5/3
5Y 6/3
5Y 5/6
5Y 5/3
5Y 5/3
5Y 5/6
5Y 5/4
5Y 6/4
PAL
leached zone (?)
Ped Stage II (?)
-118
123
5Y 6/3
5Y 6/3

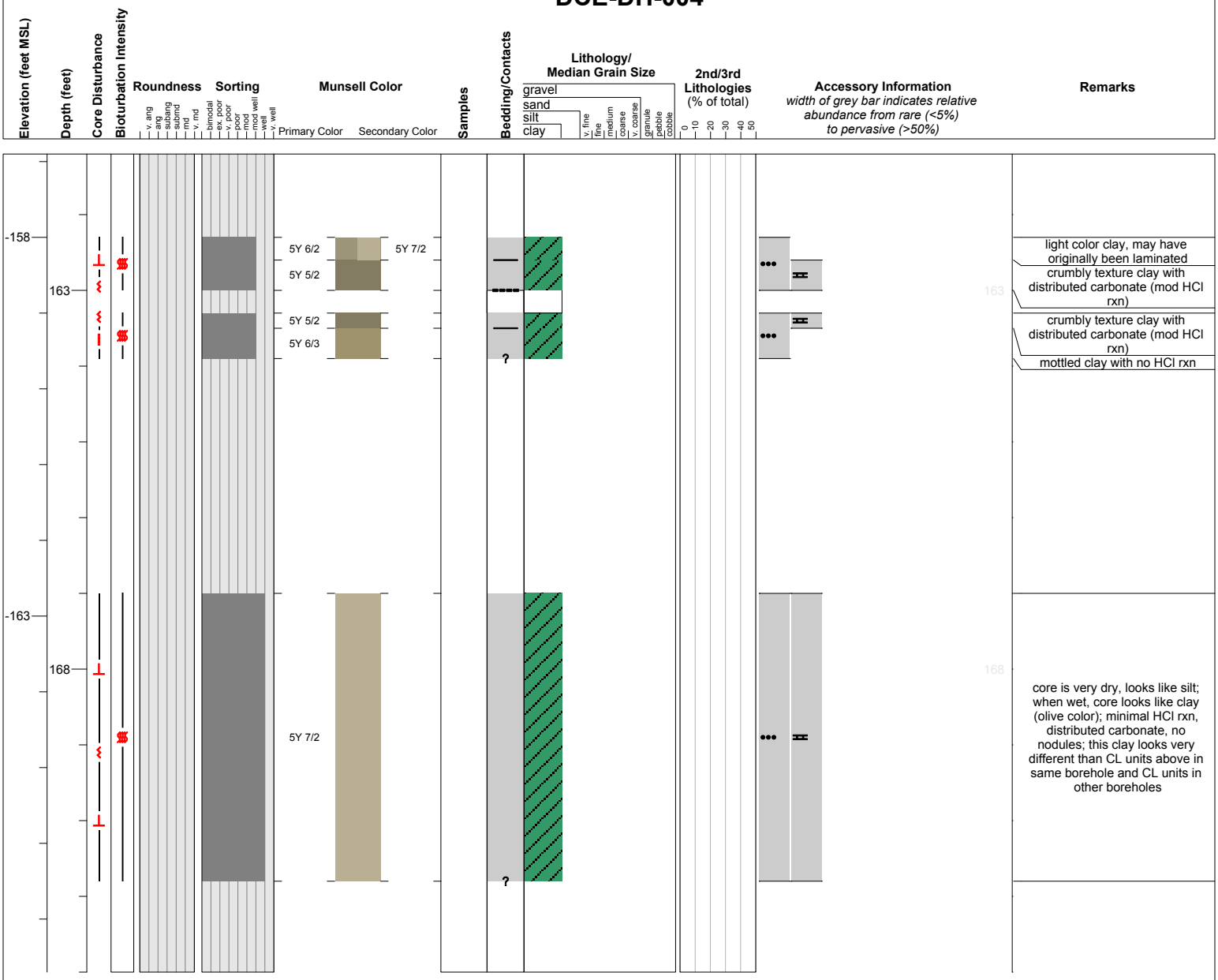
DCE-DH-004


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-123
-128
-133
-138
128
133
138
5Y 5/3
5Y 5/3
5Y 5/4
5Y 6/3
5Y 4/3
5Y 5/4
5Y 6/2
5Y 5/3
5Y 6/3
5Y 5/3
5Y 4/3
5Y 4/4
5Y 6/3
5Y 4/3
5Y 5/3
5Y 6/3
5Y 5/3
?
?
?

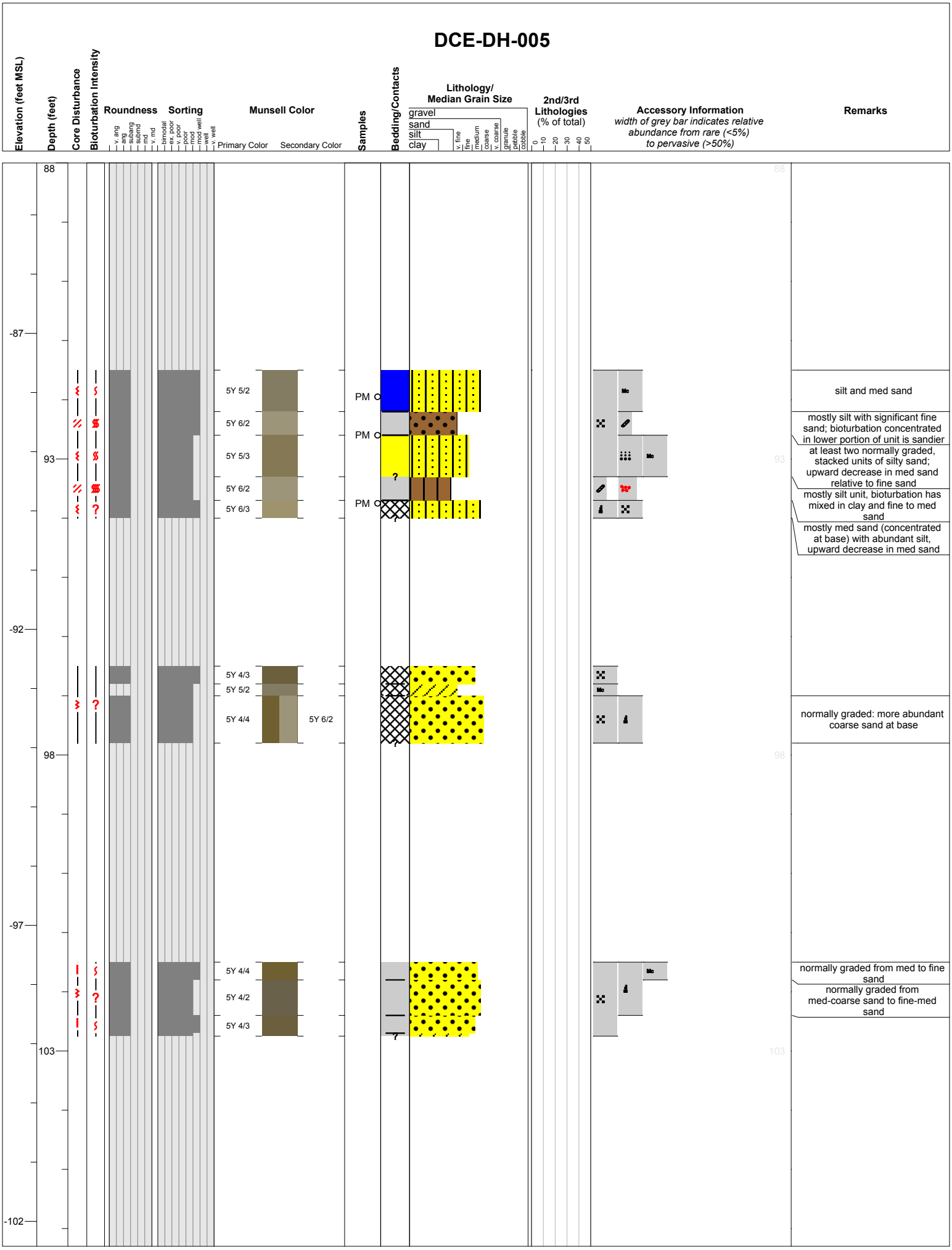
DCE-DH-004


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative abundance from rare (<5%) to pervasive (>50%)
Remarks
143
148
153
158
-143
-148
-153
5Y 6/3
5Y 5/3
5Y 6/3
5Y 4/3
5Y 4/3
5Y 7/2
5Y 4/3
5Y 7/2
5Y 4/3
5Y 7/1
5Y 6/3
5Y 5/3
SSS
?
PAL
light color clay and silt
crumbly clay unit with moderate to strong HCl rxn from distributed carbonate; Ped Stage I (?)
massive clay unit with variations in mottled texture
alternations of two kinds (colors) of clay; massive except for laminated 0.1ft thick unit from 1.4-1.5ft; distributed carbonate throughout (Ped Stage II?, Paleosol?)
lighter color clay
moderate HCl rxn from distributed carbonate
silty v.f. sand at top, silty fine and v.f. sand at base

DCE-DH-004


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-158
163
-163
168
5Y 6/2
5Y 5/2
5Y 7/2
5Y 5/2
5Y 6/3
5Y 7/2
?
?
163
168
light color clay, may have originally been laminated
crumbly texture clay with distributed carbonate (mod HCl rxn)
crumbly texture clay with distributed carbonate (mod HCl rxn)
mottled clay with no HCl rxn
core is very dry, looks like silt; when wet, core looks like clay (olive color); minimal HCl rxn, distributed carbonate, no nodules; this clay looks very different than CL units above in same borehole and CL units in other boreholes

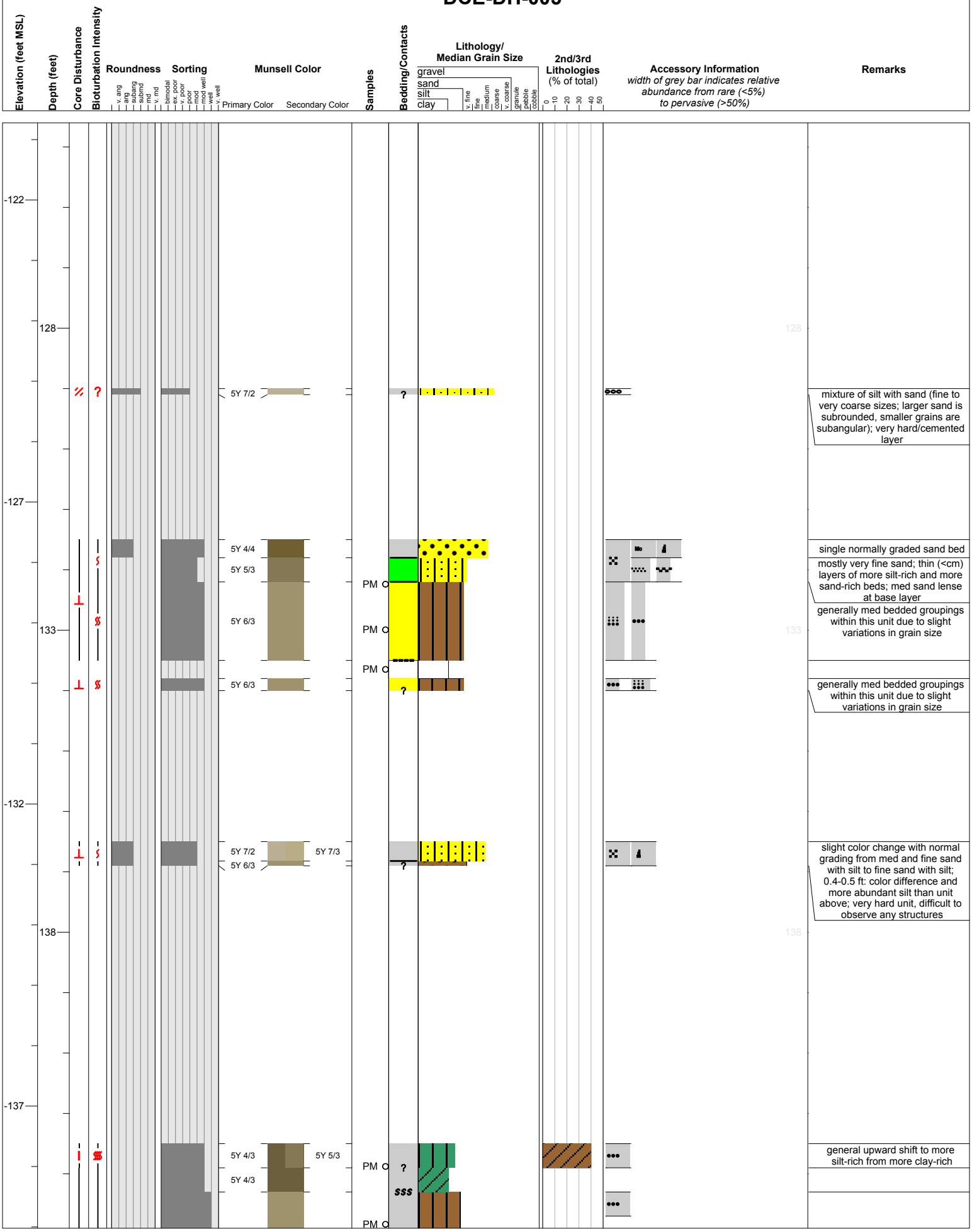
DCE-DH-005


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
88
93
98
103
-87
-92
-97
-102
5Y 5/2
5Y 6/2
5Y 5/3
5Y 6/2
5Y 6/3
PM
PM
PM
5Y 4/3
5Y 5/2
5Y 4/4
5Y 6/2
5Y 4/4
5Y 4/2
5Y 4/3
silt and med sand
mostly silt with significant fine sand; bioturbation concentrated in lower portion of unit is sandier
at least two normally graded, stacked units of silty sand; upward decrease in med sand relative to fine sand
mostly silt unit, bioturbation has mixed in clay and fine to med sand
mostly med sand (concentrated at base) with abundant silt, upward decrease in med sand
normally graded: more abundant coarse sand at base
normally graded from med to fine sand
normally graded from med-coarse sand to fine-med sand

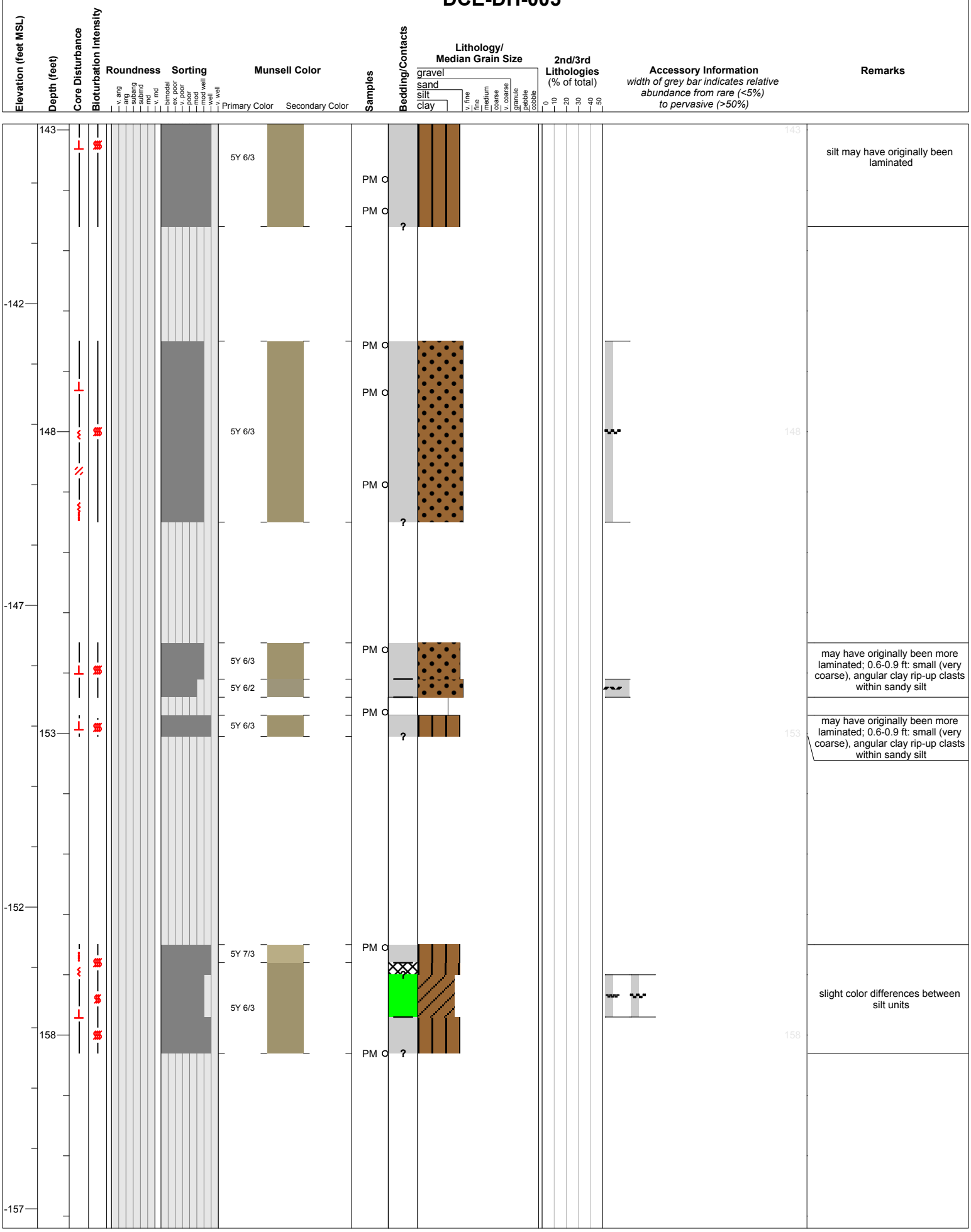
DCE-DH-005

Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-107
-112
-117
108
113
118
123
5Y 4/3
5Y 5/3
5Y 6/3
PM
SSS
?
CRB
gradual transition upward from silt to clay
does not appear to contain ash shards
may have originally been laminated, especially in the middle of the unit
stacked, normally graded beds of med and coarse sand to fine sand with silt; 0-1.4 ft: burrow / root traces filled with finer sand

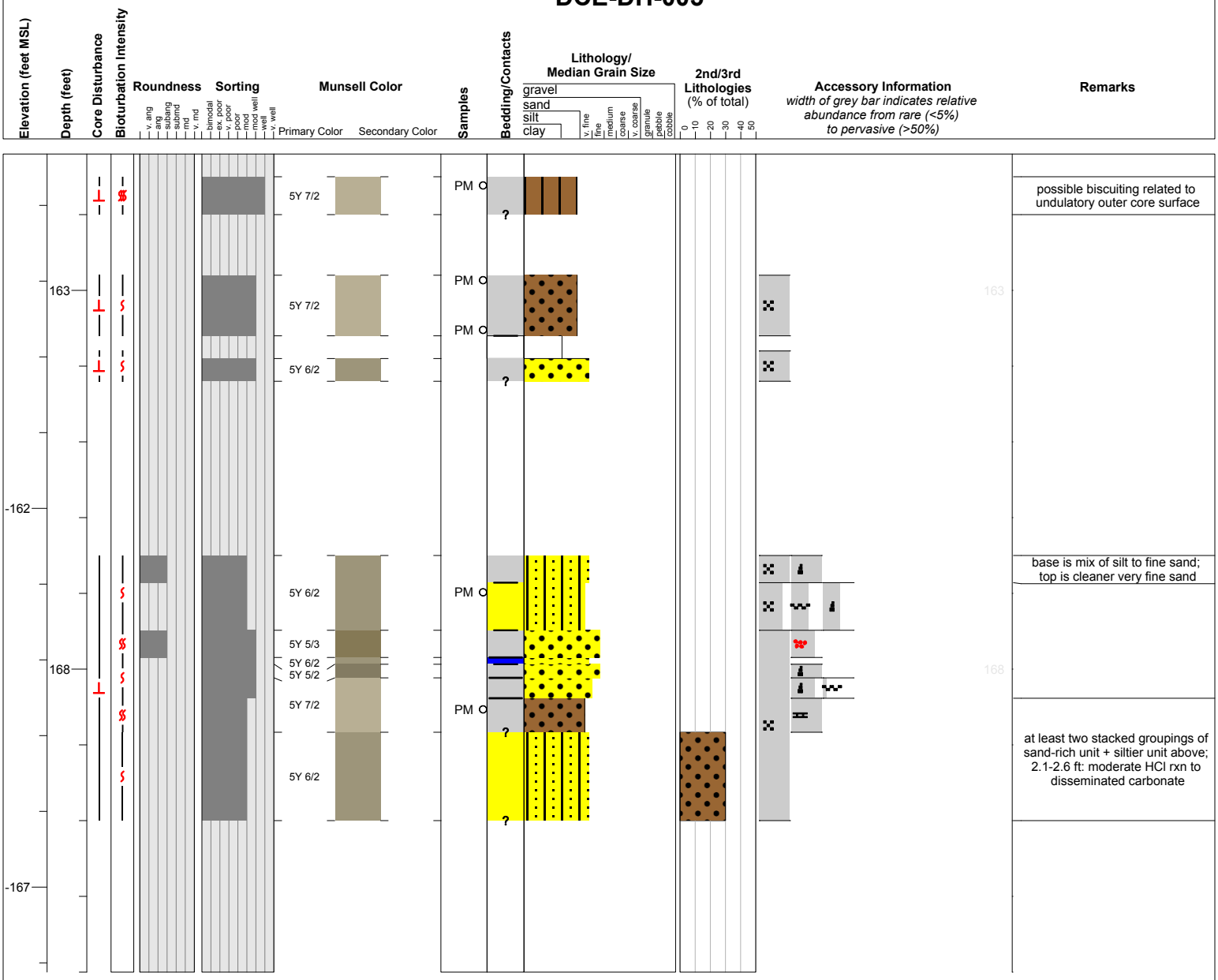
DCE-DH-005


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-122
128
-127
133
-132
138
-137
5Y 7/2
5Y 4/4
5Y 5/3
5Y 6/3
5Y 6/3
5Y 7/2
5Y 6/3
5Y 7/3
5Y 4/3
5Y 4/3
5Y 5/3
PM
PM
PM
PM
PM
mixture of silt with sand (fine to very coarse sizes; larger sand is subrounded, smaller grains are subangular); very hard/cemented layer
single normally graded sand bed
mostly very fine sand; thin (<cm) layers of more silt-rich and more sand-rich beds; med sand lense at base layer
generally med bedded groupings within this unit due to slight variations in grain size
generally med bedded groupings within this unit due to slight variations in grain size
slight color change with normal grading from med and fine sand with silt to fine sand with silt; 0.4-0.5 ft: color difference and more abundant silt than unit above; very hard unit, difficult to observe any structures
general upward shift to more silt-rich from more clay-rich

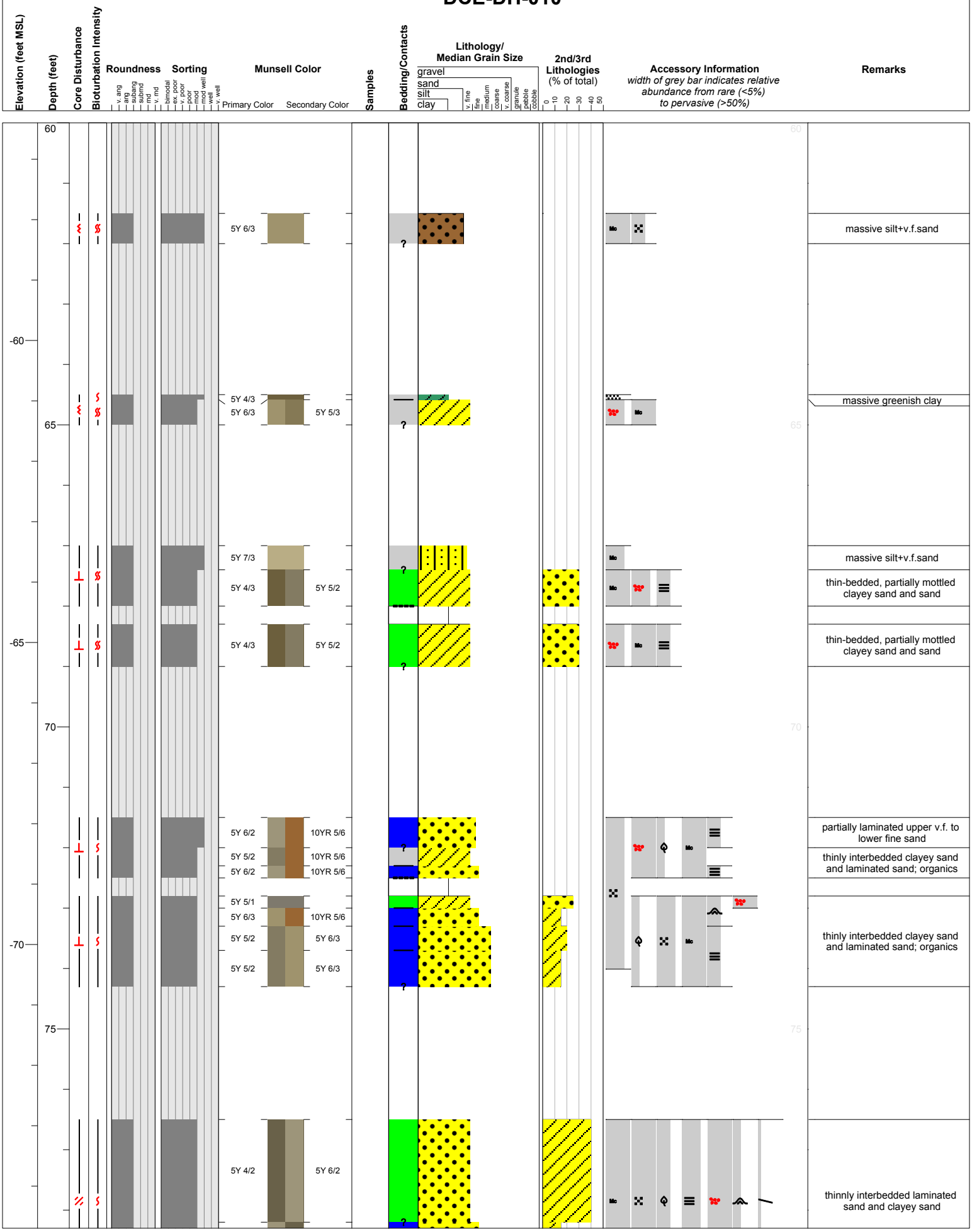
DCE-DH-005


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
143
148
153
158
-142
-147
-152
-157
5Y 6/3
5Y 6/2
5Y 7/3
PM
?
silt may have originally been laminated
may have originally been more laminated; 0.6-0.9 ft: small (very coarse), angular clay rip-up clasts within sandy silt
may have originally been more laminated; 0.6-0.9 ft: small (very coarse), angular clay rip-up clasts within sandy silt
slight color differences between silt units

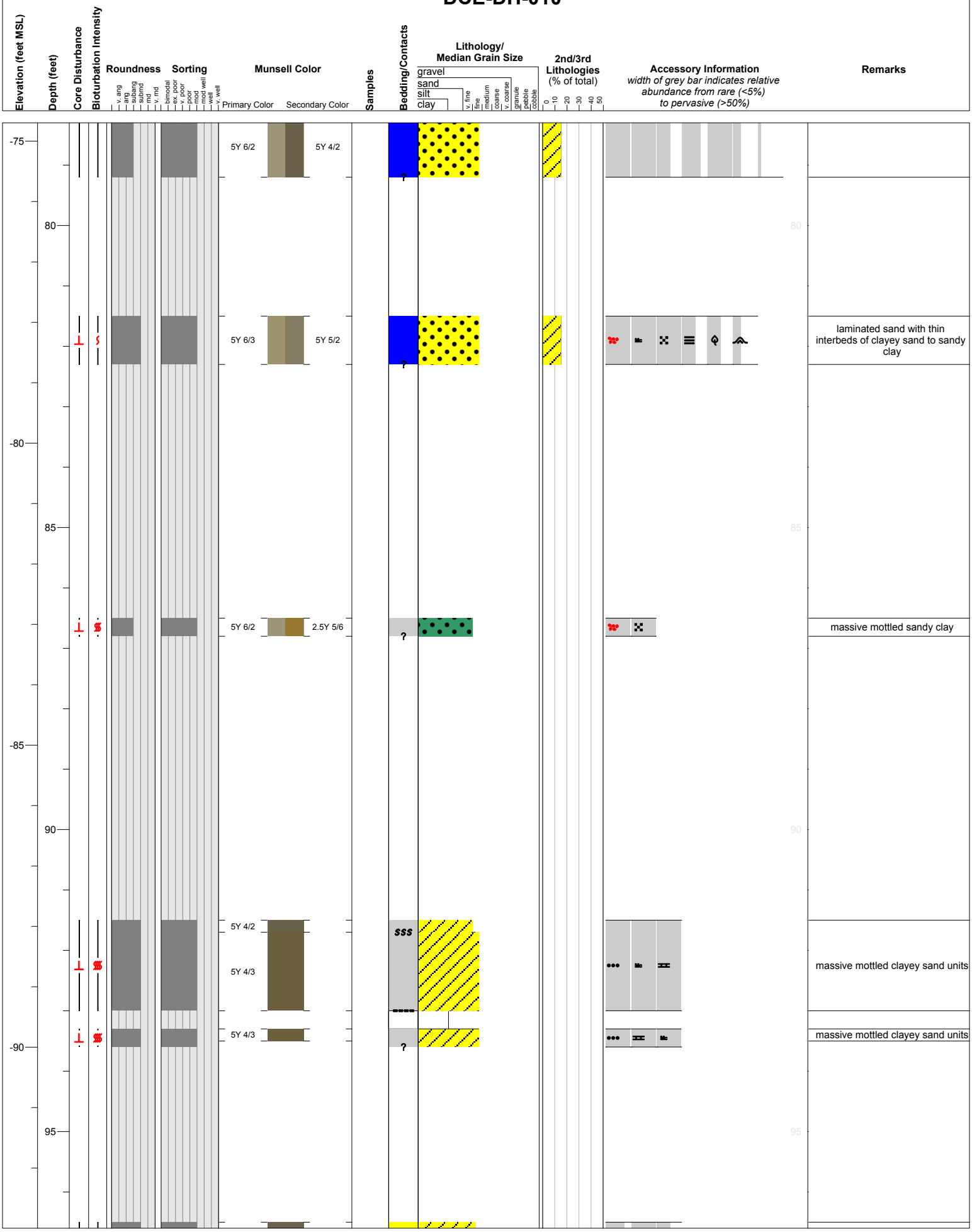
DCE-DH-005


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
163
-162
168
-167
5Y 7/2
5Y 7/2
5Y 6/2
5Y 6/2
5Y 5/3
5Y 6/2
5Y 5/2
5Y 7/2
5Y 6/2
PM
PM
PM
PM
?
?
?
?
possible biscuiting related to
undulatory outer core surface
base is mix of silt to fine sand;
top is cleaner very fine sand
at least two stacked groupings of
sand-rich unit + siltier unit above;
2.1-2.6 ft: moderate HCl rxn to
disseminated carbonate

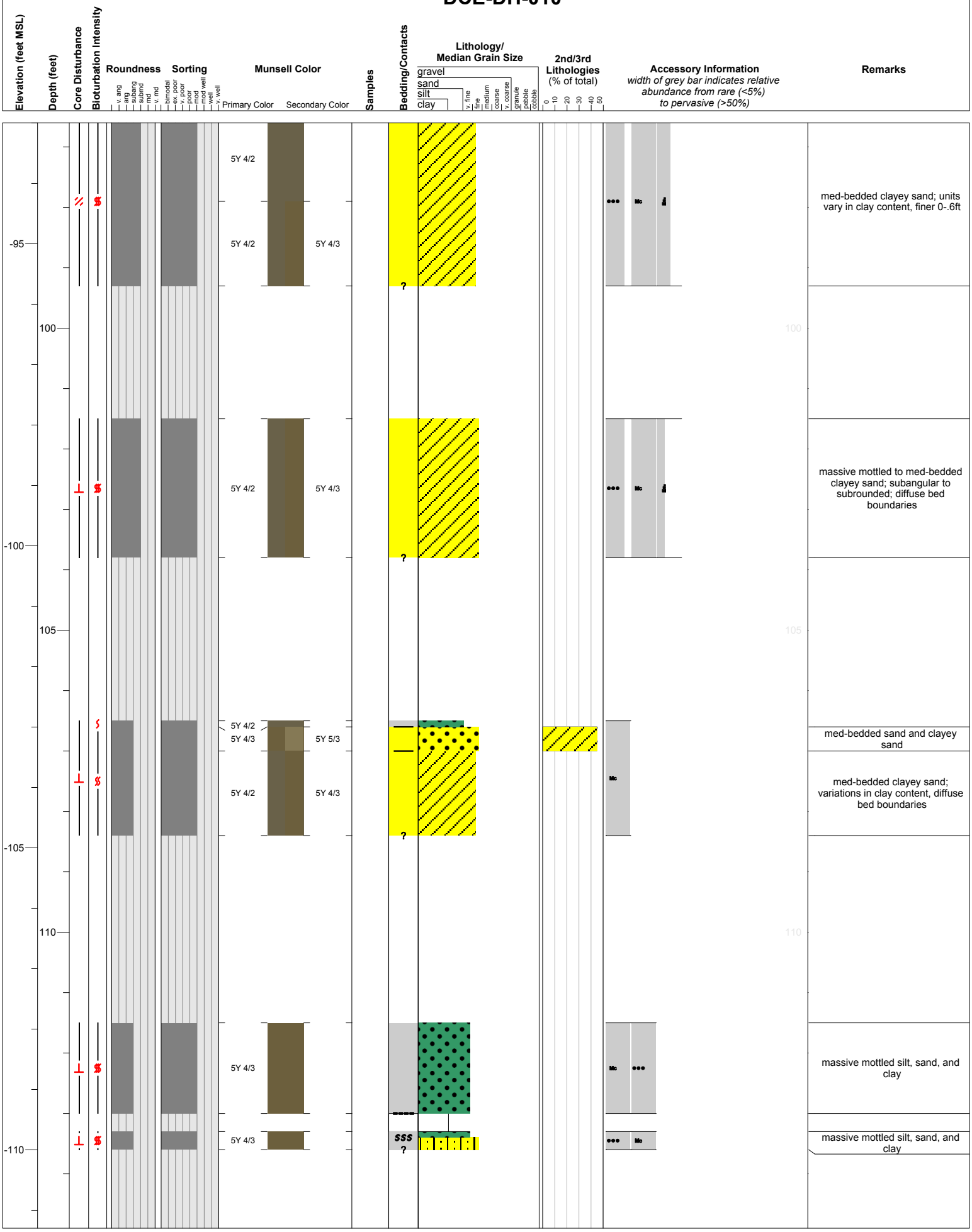
DCE-DH-010


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
60
65
70
75
-60
-65
-70
5Y 6/3
5Y 4/3
5Y 6/3
5Y 5/3
5Y 7/3
5Y 4/3
5Y 5/2
5Y 4/3
5Y 5/2
5Y 6/2
10YR 5/6
5Y 5/2
10YR 5/6
5Y 6/2
10YR 5/6
5Y 5/1
5Y 6/3
10YR 5/6
5Y 5/2
5Y 6/3
5Y 5/2
5Y 6/3
5Y 4/2
5Y 6/2
Mo
massive silt+v.f.sand
massive greenish clay
massive silt+v.f.sand
thin-bedded, partially mottled clayey sand and sand
thin-bedded, partially mottled clayey sand and sand
partially laminated upper v.f. to lower fine sand
thinly interbedded clayey sand and laminated sand; organics
thinly interbedded clayey sand and laminated sand; organics
thinnly interbedded laminated sand and clayey sand

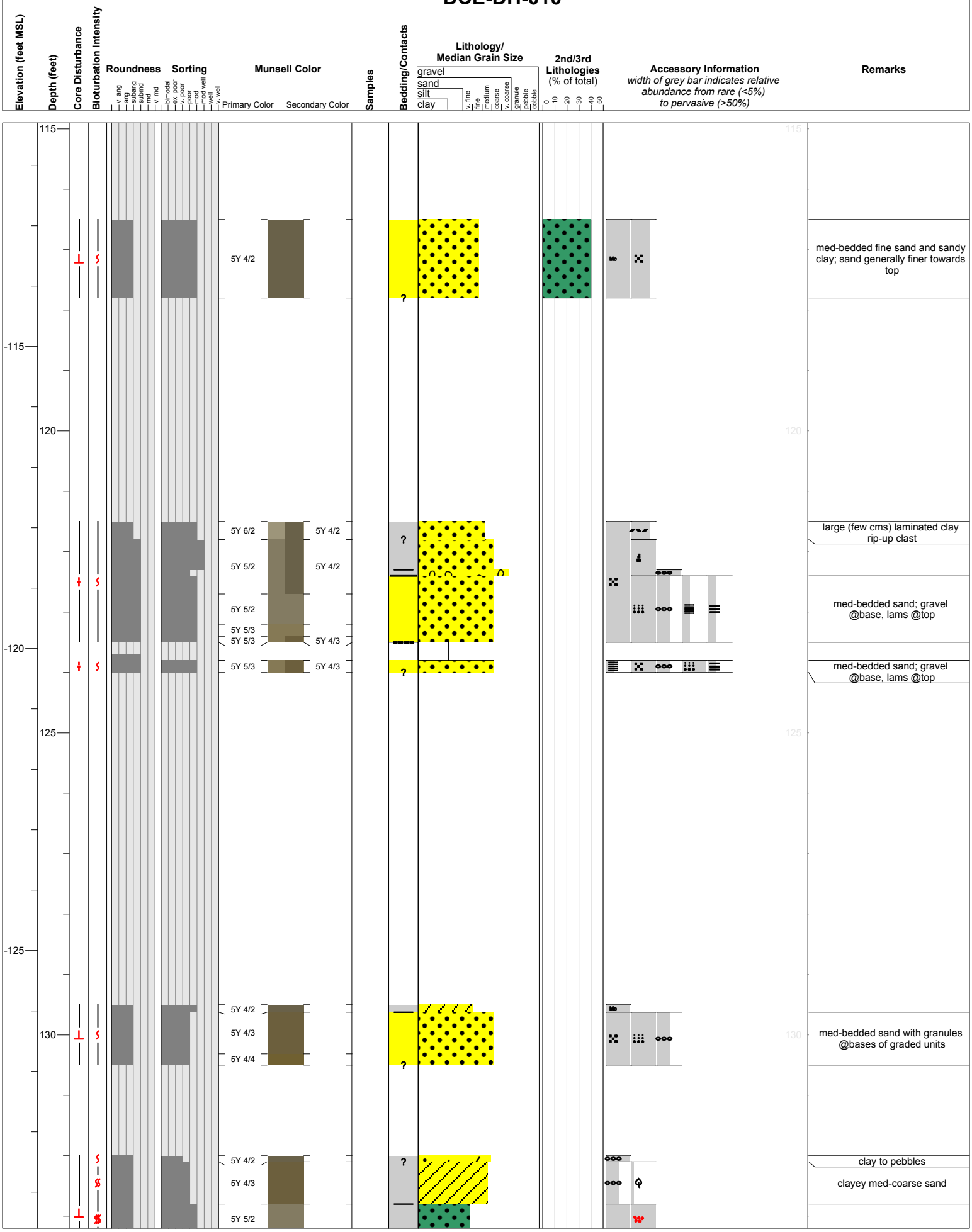
DCE-DH-010


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-75
80
-80
85
-85
90
-90
95
5Y 6/2
5Y 4/2
5Y 6/3
5Y 5/2
5Y 6/2
2.5Y 5/6
5Y 4/2
5Y 4/3
5Y 4/3
laminated sand with thin
interbeds of clayey sand to sandy
clay
massive mottled sandy clay
massive mottled clayey sand units
massive mottled clayey sand units

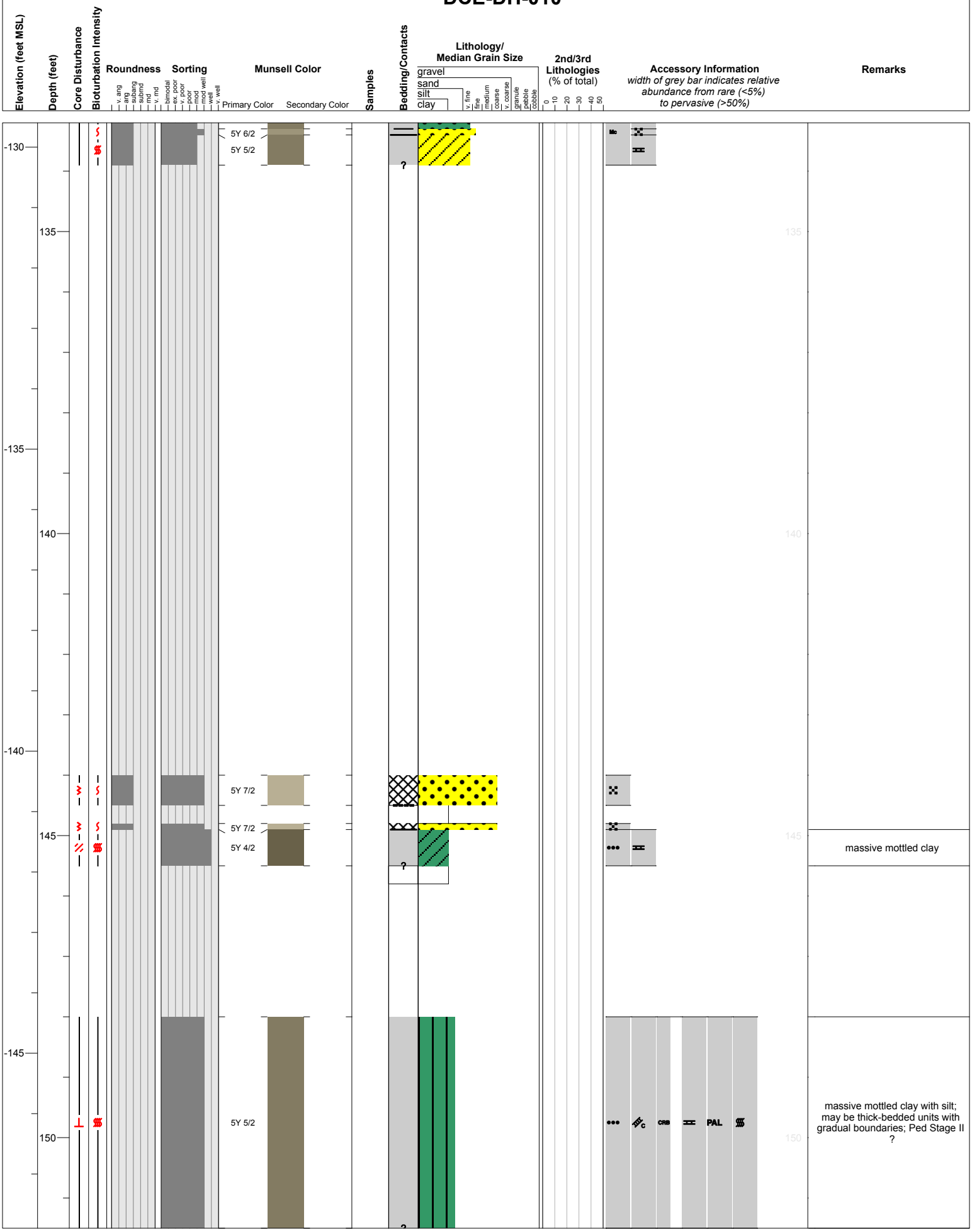
DCE-DH-010


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-95
100
-100
105
-105
110
-110
5Y 4/2
5Y 4/2
5Y 4/3
5Y 4/2
5Y 4/3
5Y 4/2
5Y 4/3
5Y 5/3
5Y 4/2
5Y 4/3
5Y 4/3
5Y 4/3
Mc
SSS
?
med-bedded clayey sand; units vary in clay content, finer 0-.6ft
massive mottled to med-bedded clayey sand; subangular to subrounded; diffuse bed boundaries
med-bedded sand and clayey sand
med-bedded clayey sand; variations in clay content, diffuse bed boundaries
massive mottled silt, sand, and clay
massive mottled silt, sand, and clay

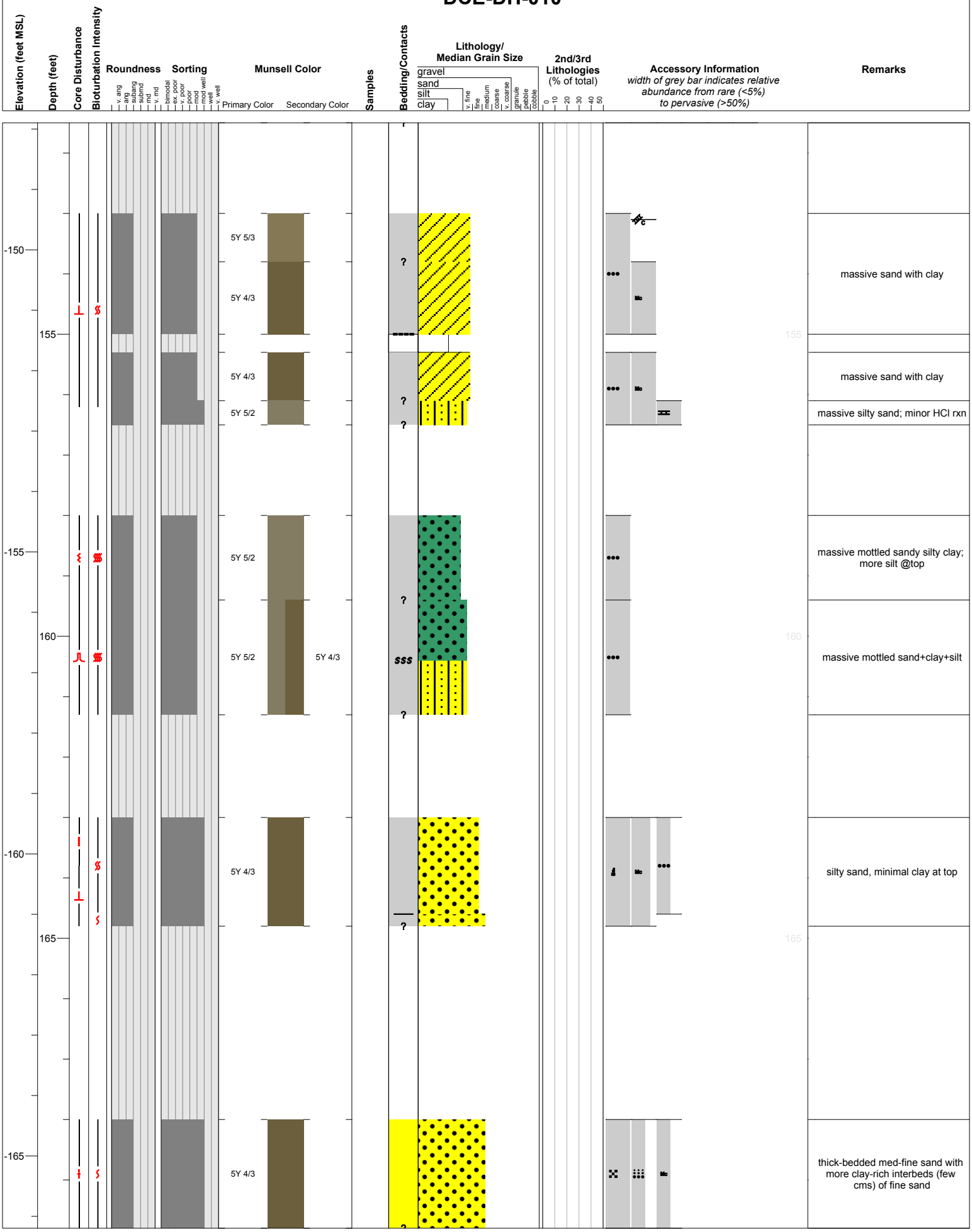
DCE-DH-010


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
115
-115
120
-120
125
-125
130
5Y 4/2
5Y 6/2
5Y 4/2
5Y 5/2
5Y 4/2
5Y 5/2
5Y 5/3
5Y 5/3
5Y 4/3
5Y 5/3
5Y 4/3
5Y 4/2
5Y 4/3
5Y 4/4
5Y 4/2
5Y 4/3
5Y 5/2
Mc
med-bedded fine sand and sandy clay; sand generally finer towards top
large (few cms) laminated clay rip-up clast
med-bedded sand; gravel @base, lams @top
med-bedded sand; gravel @base, lams @top
med-bedded sand with granules @bases of graded units
clay to pebbles
clayey med-coarse sand

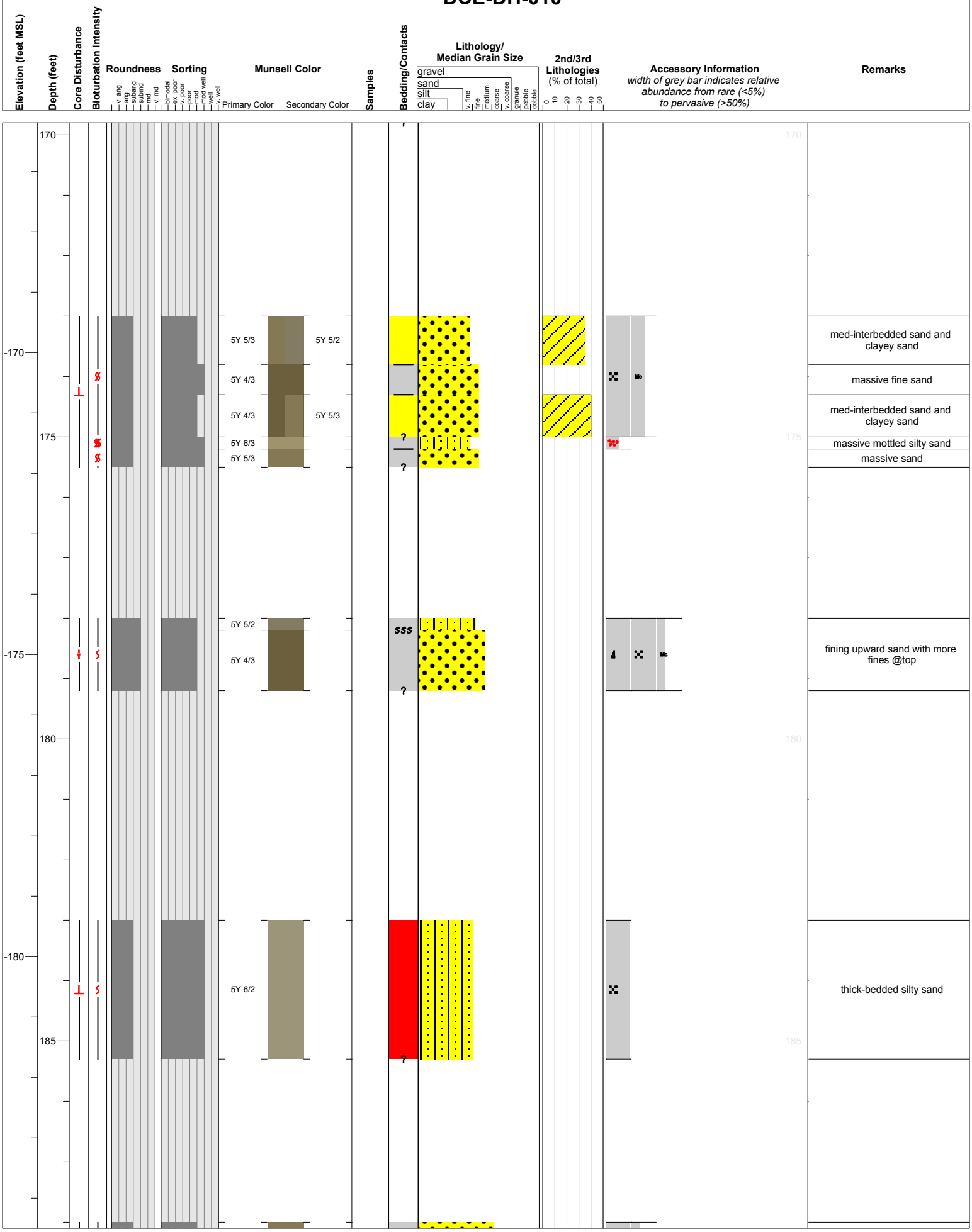
DCE-DH-010


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-130
135
-135
140
-140
145
-145
150
5Y 6/2
5Y 5/2
5Y 7/2
5Y 7/2
5Y 4/2
5Y 5/2
?
C
CRB
PAL
massive mottled clay
massive mottled clay with silt;
may be thick-bedded units with
gradual boundaries; Ped Stage II
?

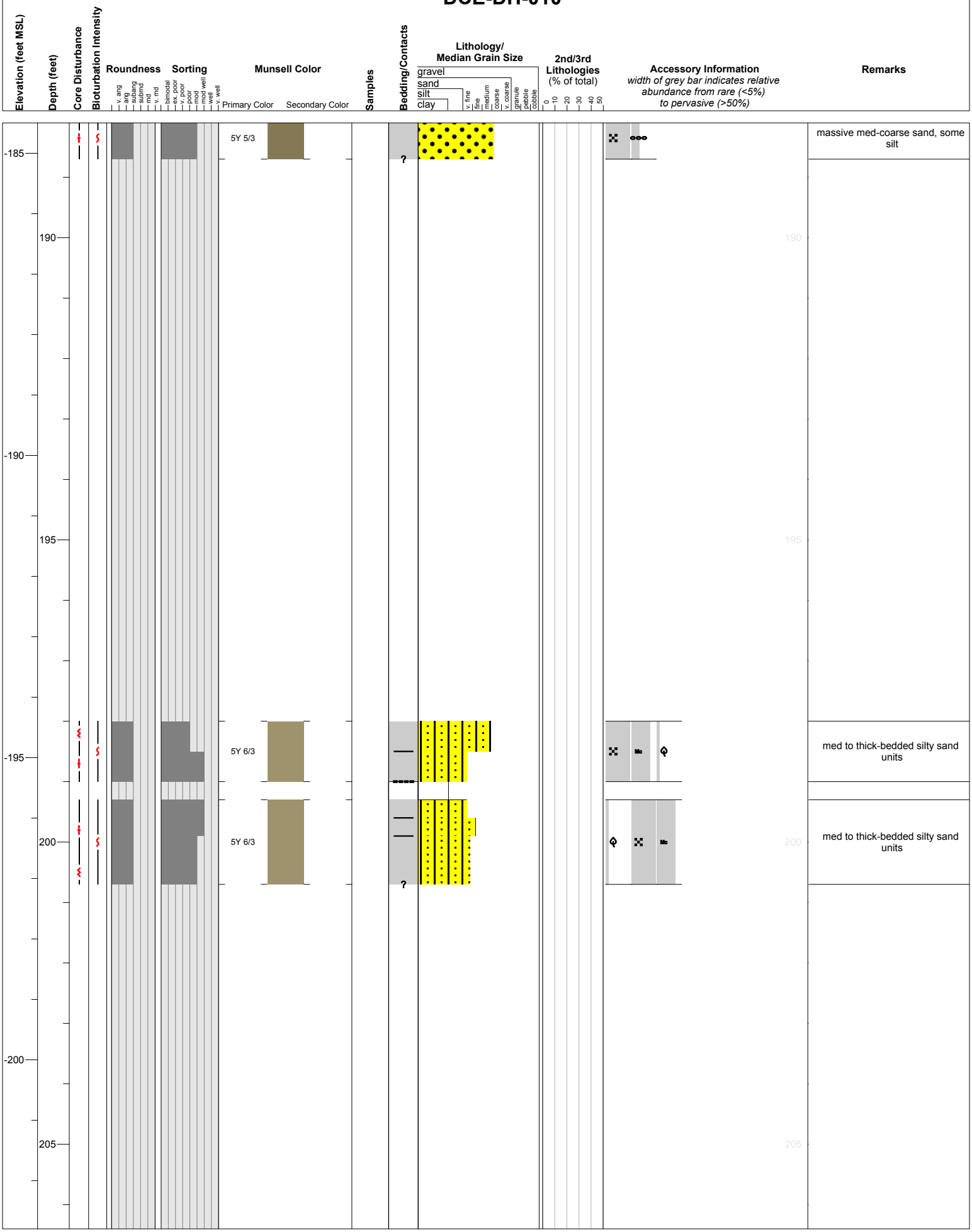
DCE-DH-010


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-150
155
-155
160
-160
165
-165
5Y 5/3
5Y 4/3
5Y 4/3
5Y 5/2
5Y 5/2
5Y 5/2
5Y 4/3
5Y 4/3
5Y 4/3
massive sand with clay
massive sand with clay
massive silty sand; minor HCl rxn
massive mottled sandy silty clay;
more silt @top
massive mottled sand+clay+silt
silty sand, minimal clay at top
thick-bedded med-fine sand with
more clay-rich interbeds (few
cms) of fine sand

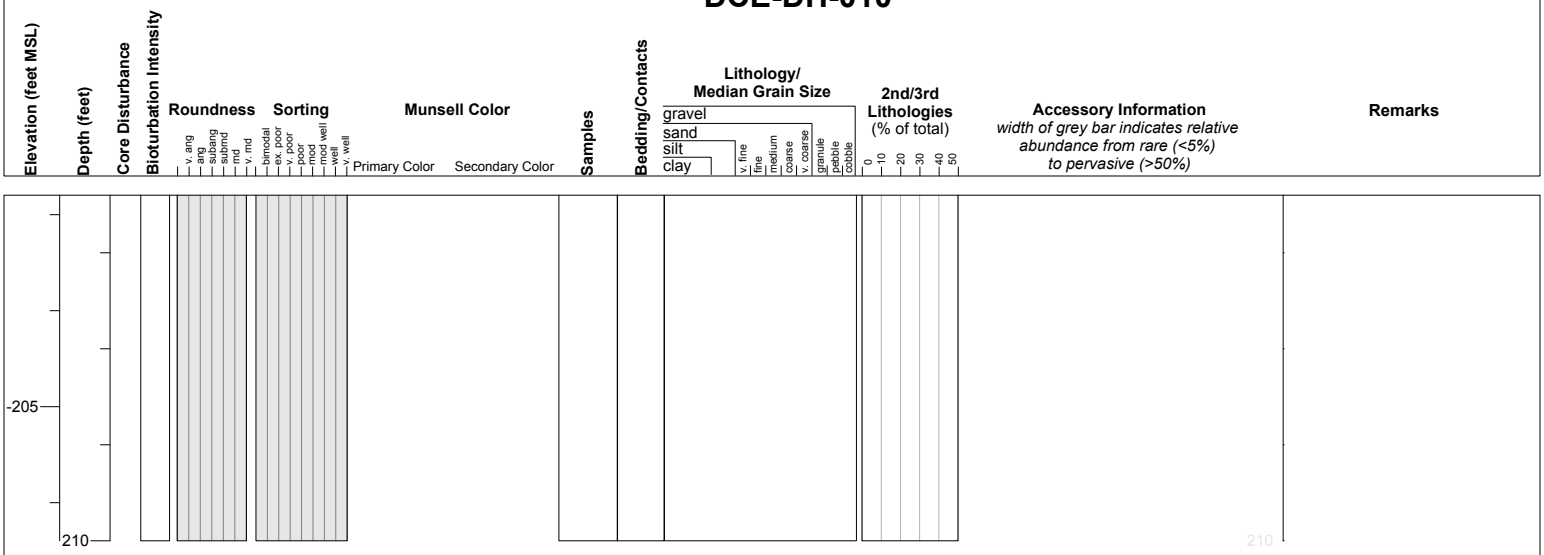
DCE-DH-010


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
170
-170
175
-175
180
-180
185
5Y 5/3
5Y 5/2
5Y 4/3
5Y 4/3
5Y 5/3
5Y 6/3
5Y 5/3
5Y 5/2
5Y 4/3
5Y 6/2
med-interbedded sand and clayey sand
massive fine sand
med-interbedded sand and clayey sand
massive mottled silty sand
massive sand
fining upward sand with more fines @top
thick-bedded silty sand

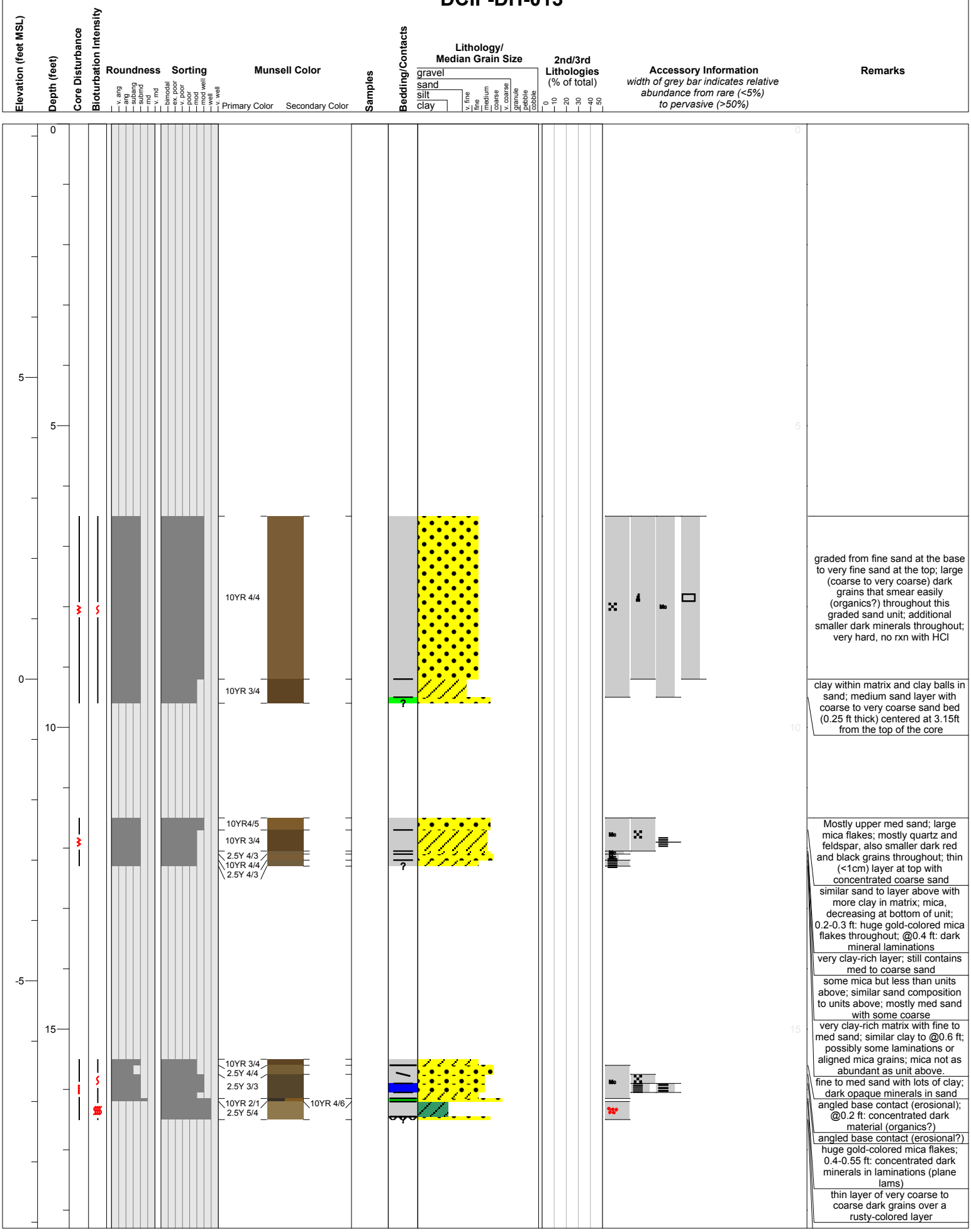
DCE-DH-010


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-185
190
-190
195
-195
200
-200
205
5Y 5/3
5Y 6/3
5Y 6/3
?
?
massive med-coarse sand, some silt
med to thick-bedded silty sand units
med to thick-bedded silty sand units

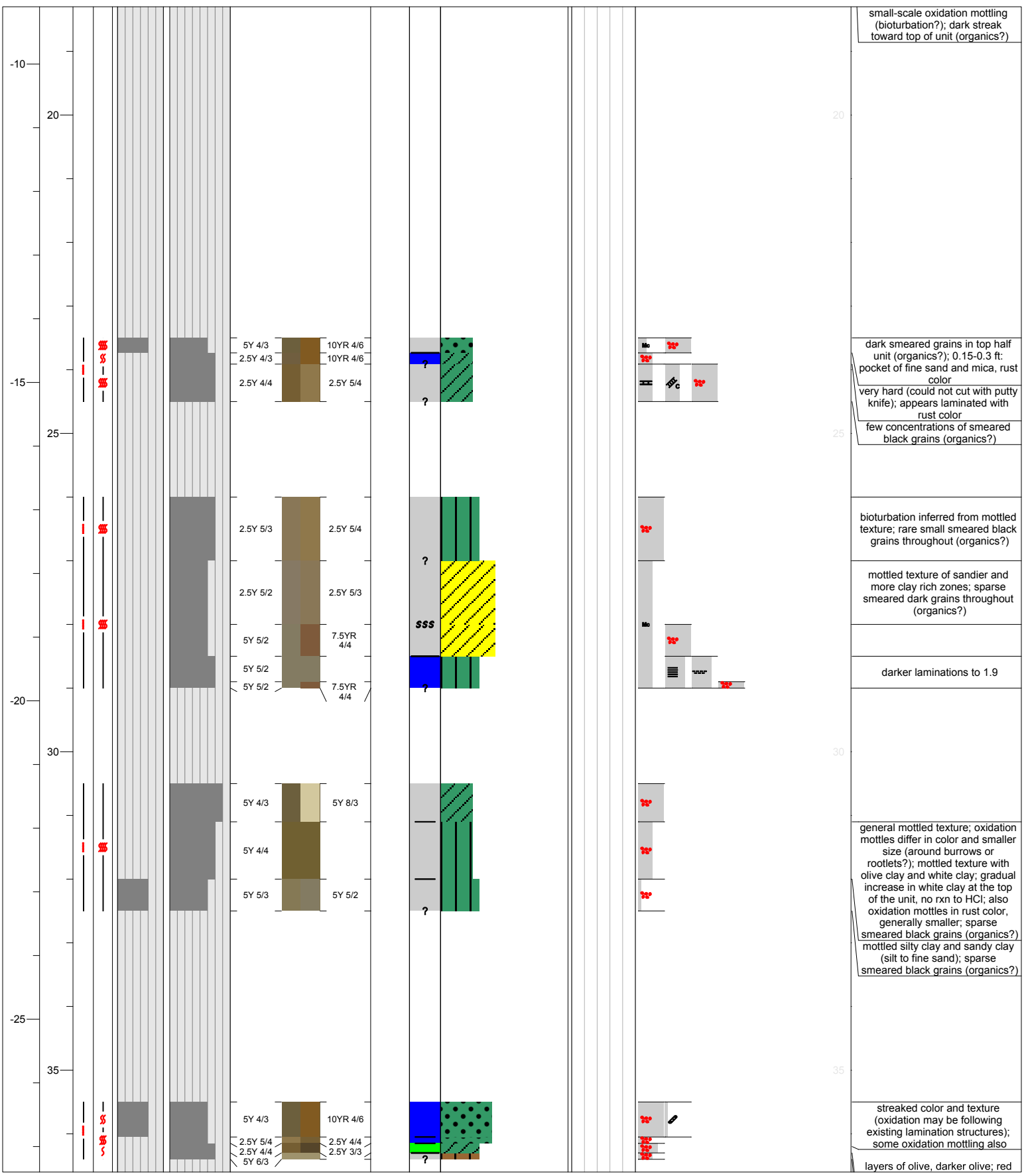
DCE-DH-010


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-205
210
210

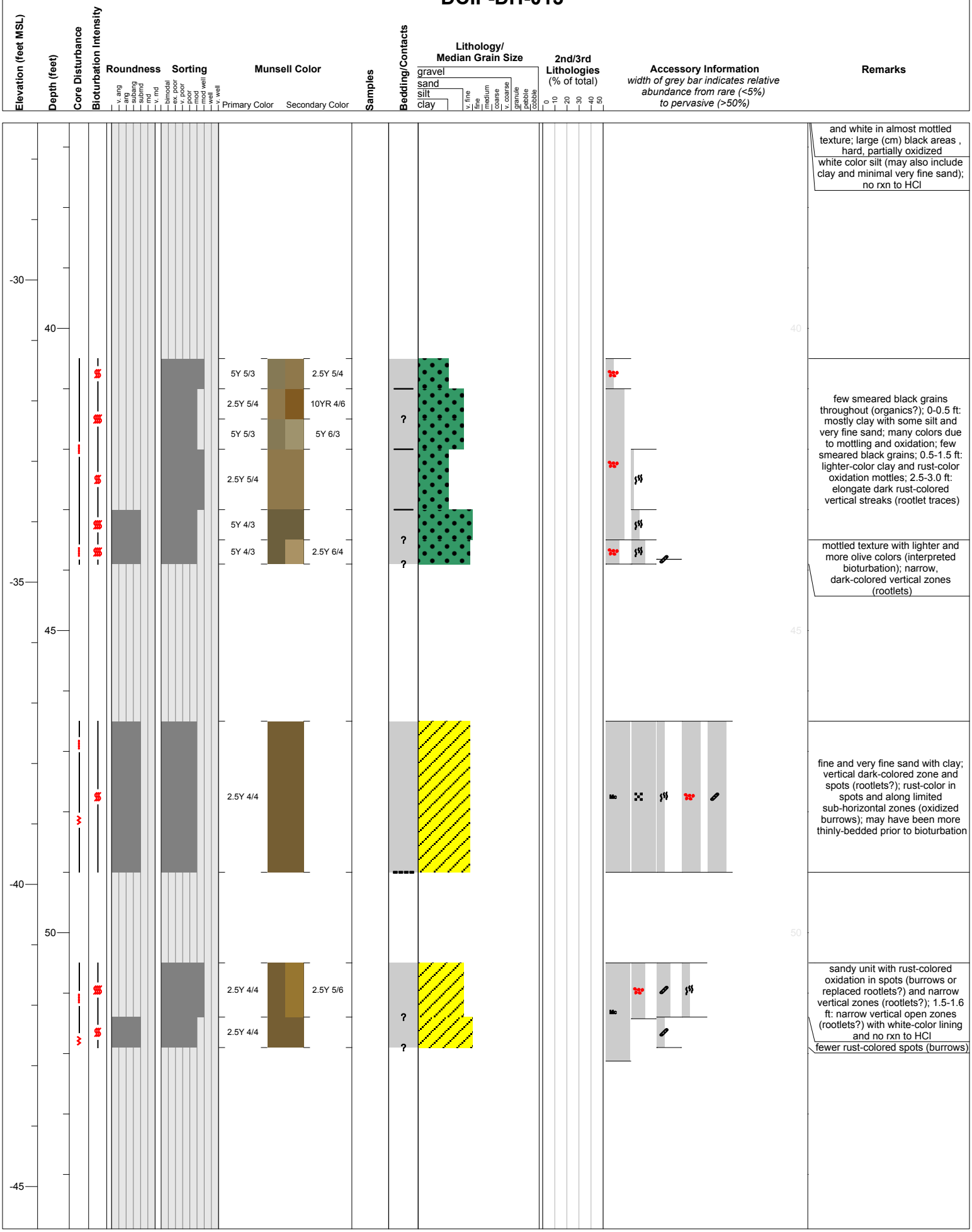
DCIF-DH-013


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
10YR 4/4
10YR 3/4
10YR4/5
10YR 3/4
2.5Y 4/3
10YR 4/4
2.5Y 4/3
10YR 3/4
2.5Y 4/4
2.5Y 3/3
10YR 2/1
2.5Y 5/4
10YR 4/6
Mo
graded from fine sand at the base to very fine sand at the top; large (coarse to very coarse) dark grains that smear easily (organics?) throughout this graded sand unit; additional smaller dark minerals throughout; very hard, no rxn with HCl
clay within matrix and clay balls in sand; medium sand layer with coarse to very coarse sand bed (0.25 ft thick) centered at 3.15ft from the top of the core
Mostly upper med sand; large mica flakes; mostly quartz and feldspar, also smaller dark red and black grains throughout; thin (<1cm) layer at top with concentrated coarse sand
similar sand to layer above with more clay in matrix; mica, decreasing at bottom of unit; 0.2-0.3 ft: huge gold-colored mica flakes throughout; @0.4 ft: dark mineral laminations
very clay-rich layer; still contains med to coarse sand
some mica but less than units above; similar sand composition to units above; mostly med sand with some coarse
very clay-rich matrix with fine to med sand; similar clay to @0.6 ft; possibly some laminations or aligned mica grains; mica not as abundant as unit above.
fine to med sand with lots of clay; dark opaque minerals in sand
angled base contact (erosional); @0.2 ft: concentrated dark material (organics?)
angled base contact (erosional?)
huge gold-colored mica flakes; 0.4-0.55 ft: concentrated dark minerals in laminations (plane lams)
thin layer of very coarse to coarse dark grains over a rusty-colored layer

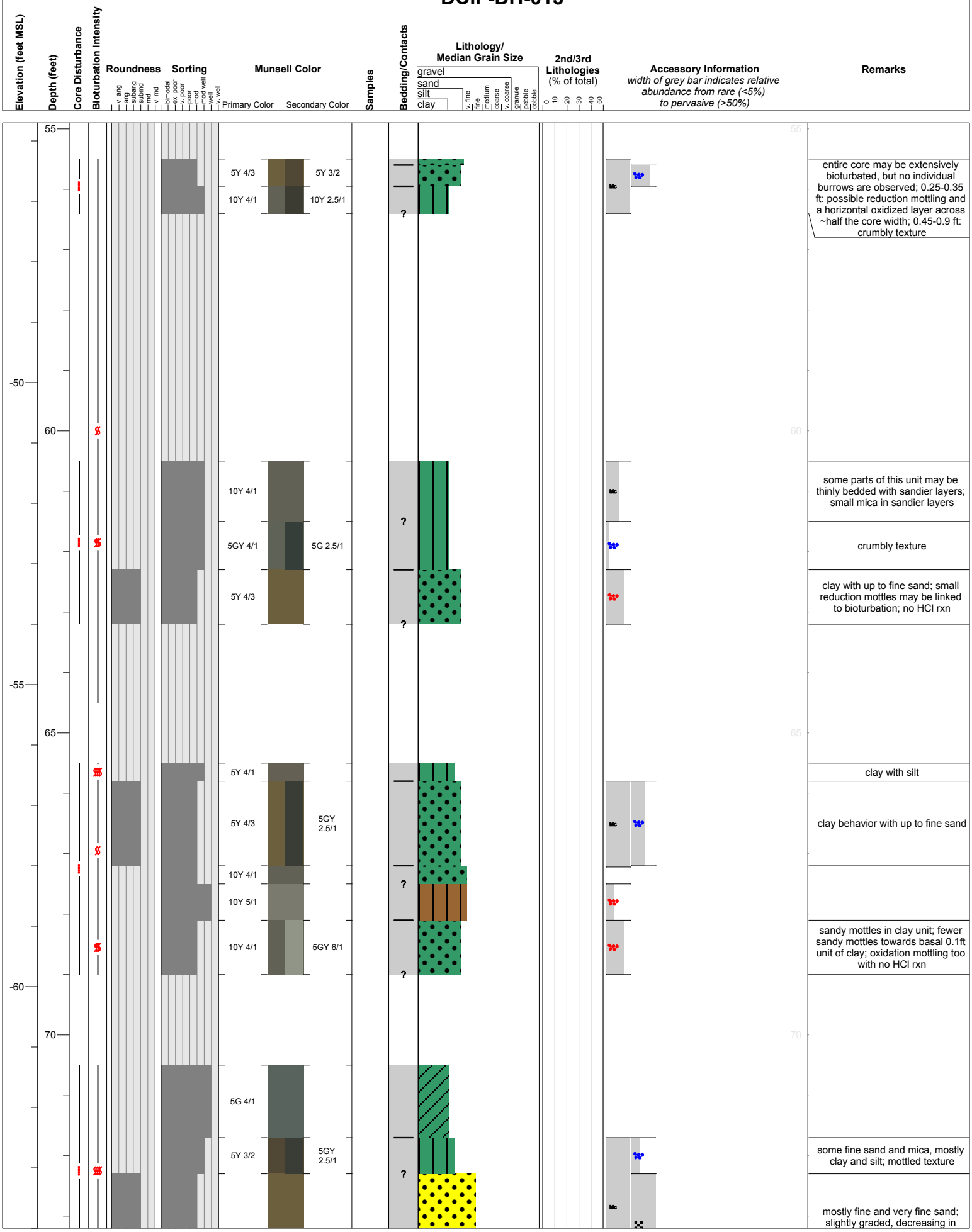
DCIF-DH-013


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-10
-15
-20
-25
20
25
30
35
5Y 4/3
2.5Y 4/3
2.5Y 4/4
10YR 4/6
10YR 4/6
2.5Y 5/4
2.5Y 5/3
2.5Y 5/2
2.5Y 5/4
2.5Y 5/3
5Y 5/2
7.5YR 4/4
5Y 5/2
5Y 5/2
7.5YR 4/4
5Y 4/3
5Y 8/3
5Y 4/4
5Y 5/3
5Y 5/2
5Y 4/3
10YR 4/6
2.5Y 5/4
2.5Y 4/4
5Y 6/3
2.5Y 4/4
2.5Y 3/3
Mic
C
small-scale oxidation mottling (bioturbation?); dark streak toward top of unit (organics?)
dark smeared grains in top half unit (organics?); 0.15-0.3 ft: pocket of fine sand and mica, rust color
very hard (could not cut with putty knife); appears laminated with rust color
few concentrations of smeared black grains (organics?)
bioturbation inferred from mottled texture; rare small smeared black grains throughout (organics?)
mottled texture of sandier and more clay rich zones; sparse smeared dark grains throughout (organics?)
darker laminations to 1.9
general mottled texture; oxidation mottles differ in color and smaller size (around burrows or rootlets?); mottled texture with olive clay and white clay; gradual increase in white clay at the top of the unit, no rxn to HCl; also oxidation mottles in rust color, generally smaller; sparse smeared black grains (organics?)
mottled silty clay and sandy clay (silt to fine sand); sparse smeared black grains (organics?)
streaked color and texture (oxidation may be following existing lamination structures); some oxidation mottling also
layers of olive, darker olive; red

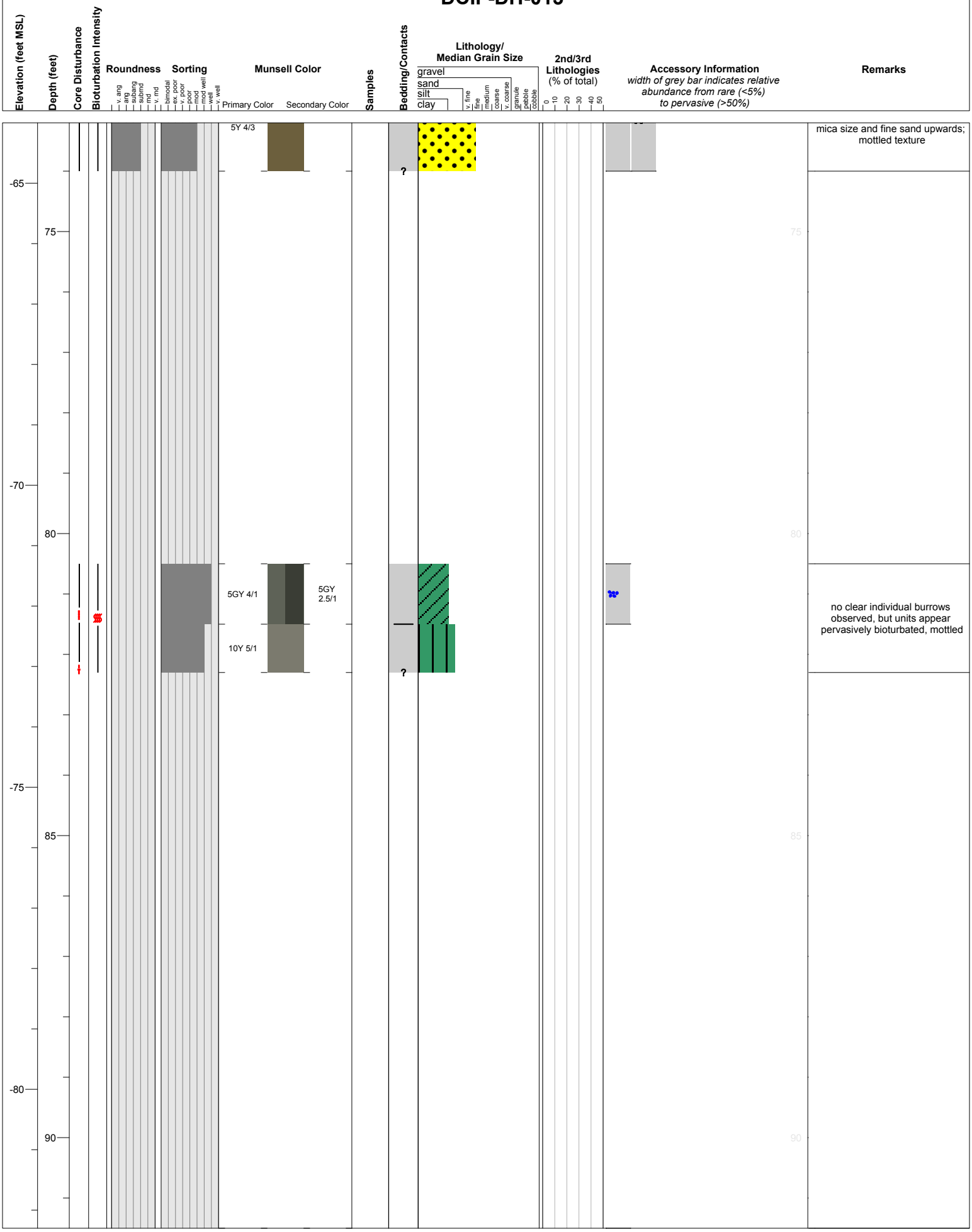
DCIF-DH-013


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-30
40
-35
45
-40
50
-45
5Y 5/3
2.5Y 5/4
2.5Y 5/4
10YR 4/6
5Y 5/3
5Y 6/3
2.5Y 5/4
5Y 4/3
5Y 4/3
2.5Y 6/4
2.5Y 4/4
2.5Y 4/4
2.5Y 5/6
2.5Y 4/4
Mc
Mc
and white in almost mottled texture; large (cm) black areas , hard, partially oxidized
white color silt (may also include clay and minimal very fine sand); no rxn to HCl
few smeared black grains throughout (organics?); 0-0.5 ft: mostly clay with some silt and very fine sand; many colors due to mottling and oxidation; few smeared black grains; 0.5-1.5 ft: lighter-color clay and rust-color oxidation mottles; 2.5-3.0 ft: elongate dark rust-colored vertical streaks (rootlet traces)
mottled texture with lighter and more olive colors (interpreted bioturbation); narrow, dark-colored vertical zones (rootlets)
fine and very fine sand with clay; vertical dark-colored zone and spots (rootlets?); rust-color in spots and along limited sub-horizontal zones (oxidized burrows); may have been more thinly-bedded prior to bioturbation
sandy unit with rust-colored oxidation in spots (burrows or replaced rootlets?) and narrow vertical zones (rootlets?); 1.5-1.6 ft: narrow vertical open zones (rootlets?) with white-color lining and no rxn to HCl
fewer rust-colored spots (burrows)

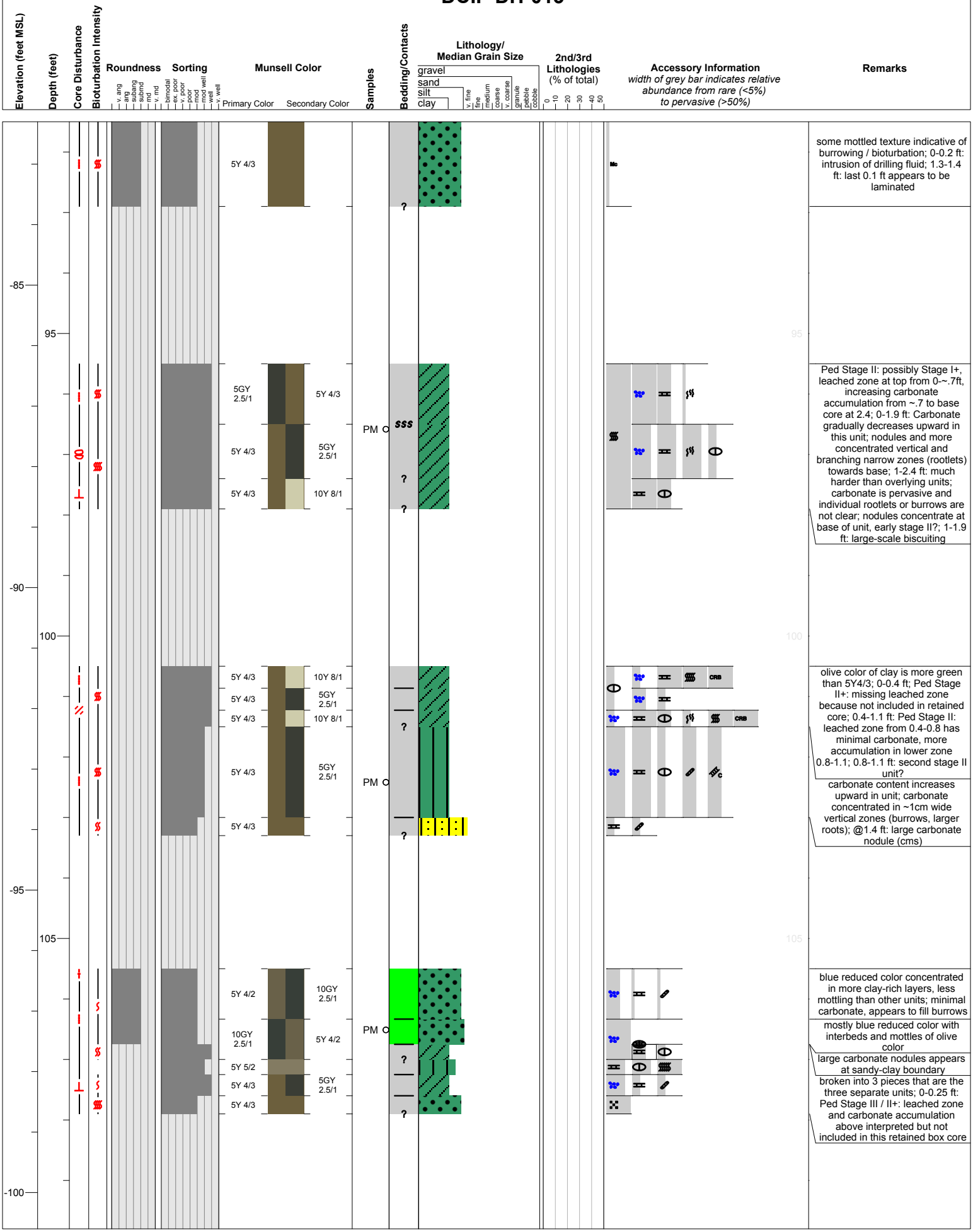
DCIF-DH-013


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
v. poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative abundance from rare (<5%) to pervasive (>50%)
Remarks
55
60
65
70
-50
-55
-60
5Y 4/3
5Y 3/2
10Y 4/1
10Y 2.5/1
10Y 4/1
5GY 4/1
5G 2.5/1
5Y 4/3
5Y 4/1
5Y 4/3
5GY 2.5/1
10Y 4/1
10Y 5/1
10Y 4/1
5GY 6/1
5G 4/1
5Y 3/2
5GY 2.5/1
Mc
entire core may be extensively bioturbated, but no individual burrows are observed; 0.25-0.35 ft: possible reduction mottling and a horizontal oxidized layer across ~half the core width; 0.45-0.9 ft: crumbly texture
some parts of this unit may be thinly bedded with sandier layers; small mica in sandier layers
crumbly texture
clay with up to fine sand; small reduction mottles may be linked to bioturbation; no HCl rxn
clay with silt
clay behavior with up to fine sand
sandy mottles in clay unit; fewer sandy mottles towards basal 0.1ft unit of clay; oxidation mottling too with no HCl rxn
some fine sand and mica, mostly clay and silt; mottled texture
mostly fine and very fine sand; slightly graded, decreasing in

DCIF-DH-013


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-65
-70
-75
-80
75
80
85
90
5Y 4/3
5GY 4/1
5GY
2.5/1
10Y 5/1
?
?
mica size and fine sand upwards;
mottled texture
no clear individual burrows
observed, but units appear
pervasively bioturbated, mottled

DCIF-DH-013


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative abundance from rare (<5%) to pervasive (>50%)
Remarks
-85
95
-90
100
-95
105
-100
5Y 4/3
Mc
some mottled texture indicative of burrowing / bioturbation; 0-0.2 ft: intrusion of drilling fluid; 1.3-1.4 ft: last 0.1 ft appears to be laminated
5GY 2.5/1
5Y 4/3
5Y 4/3
5GY 2.5/1
5Y 4/3
10Y 8/1
PM
SSS
Ped Stage II: possibly Stage I+, leached zone at top from 0-~.7ft, increasing carbonate accumulation from ~.7 to base core at 2.4; 0-1.9 ft: Carbonate gradually decreases upward in this unit; nodules and more concentrated vertical and branching narrow zones (rootlets) towards base; 1-2.4 ft: much harder than overlying units; carbonate is pervasive and individual rootlets or burrows are not clear; nodules concentrate at base of unit, early stage II?; 1-1.9 ft: large-scale biscuiting
5Y 4/3
10Y 8/1
5Y 4/3
5GY 2.5/1
5Y 4/3
10Y 8/1
5Y 4/3
5GY 2.5/1
5Y 4/3
PM
CRB
CRB
olive color of clay is more green than 5Y4/3; 0-0.4 ft; Ped Stage II+: missing leached zone because not included in retained core; 0.4-1.1 ft: Ped Stage II: leached zone from 0.4-0.8 has minimal carbonate, more accumulation in lower zone 0.8-1.1; 0.8-1.1 ft: second stage II unit?
carbonate content increases upward in unit; carbonate concentrated in ~1cm wide vertical zones (burrows, larger roots); @1.4 ft: large carbonate nodule (cms)
5Y 4/2
10GY 2.5/1
10GY 2.5/1
5Y 4/2
5Y 5/2
5Y 4/3
5GY 2.5/1
5Y 4/3
PM
blue reduced color concentrated in more clay-rich layers, less mottling than other units; minimal carbonate, appears to fill burrows
mostly blue reduced color with interbeds and mottles of olive color
large carbonate nodules appears at sandy-clay boundary
broken into 3 pieces that are the three separate units; 0-0.25 ft: Ped Stage III / II+: leached zone and carbonate accumulation above interpreted but not included in this retained box core

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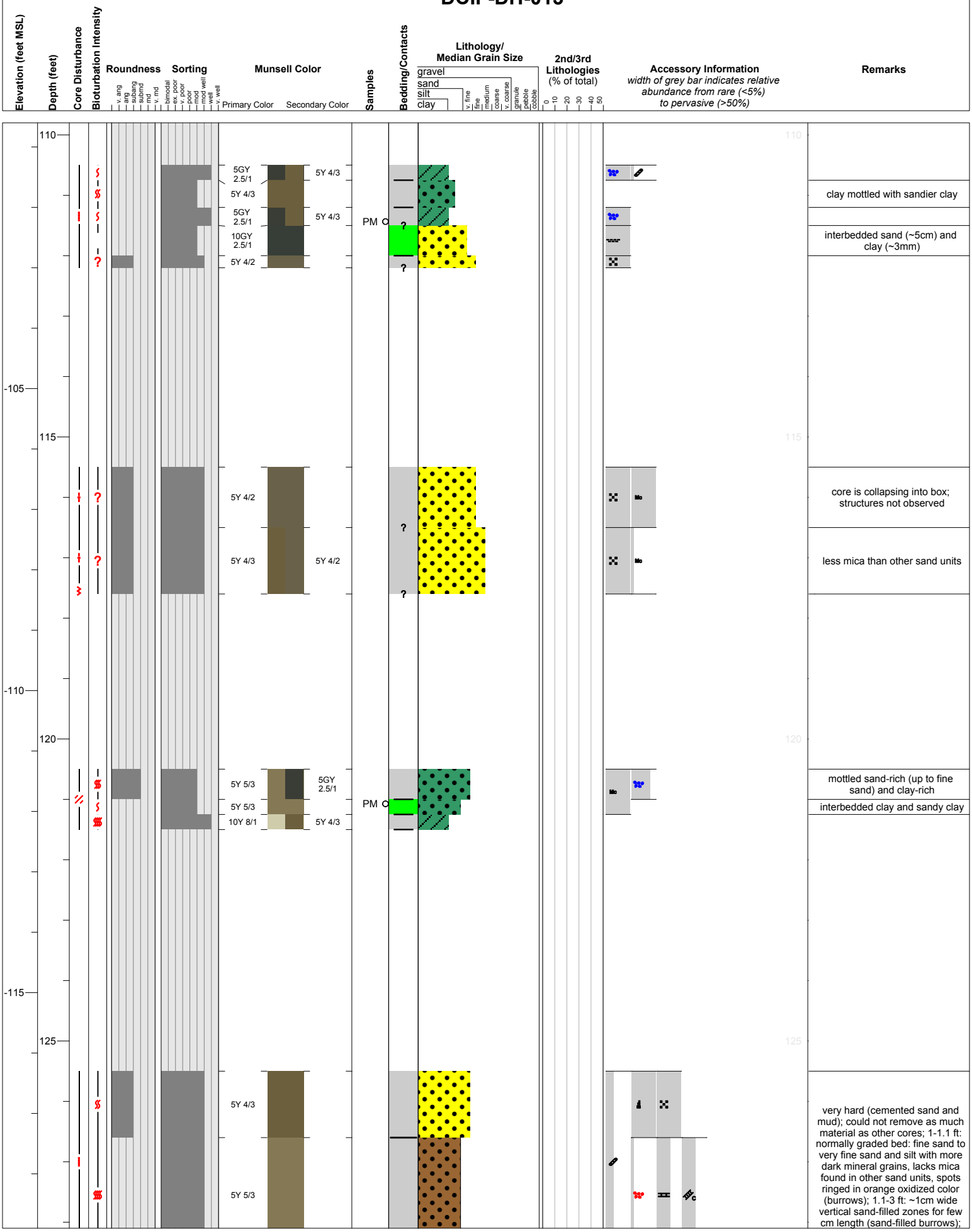
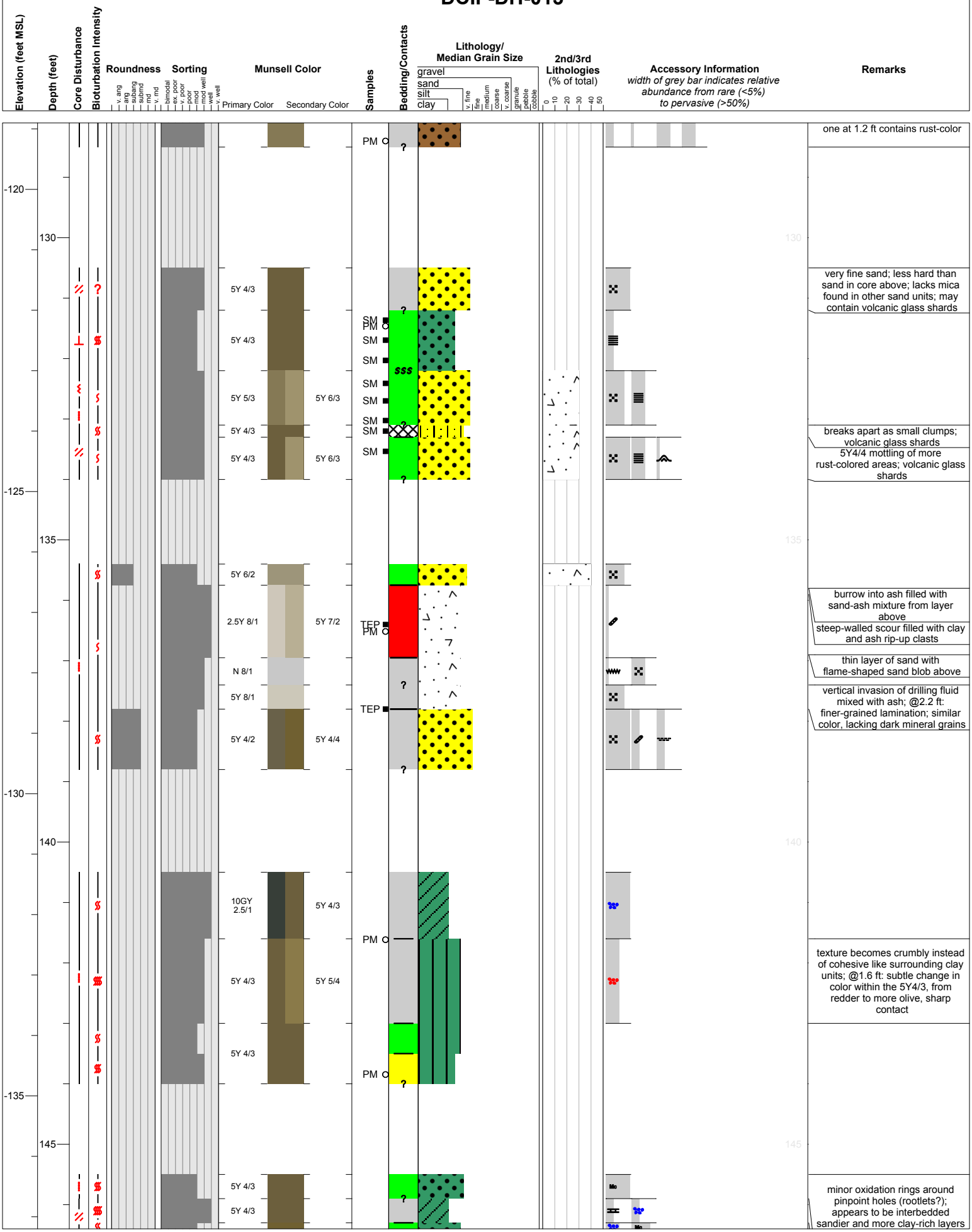
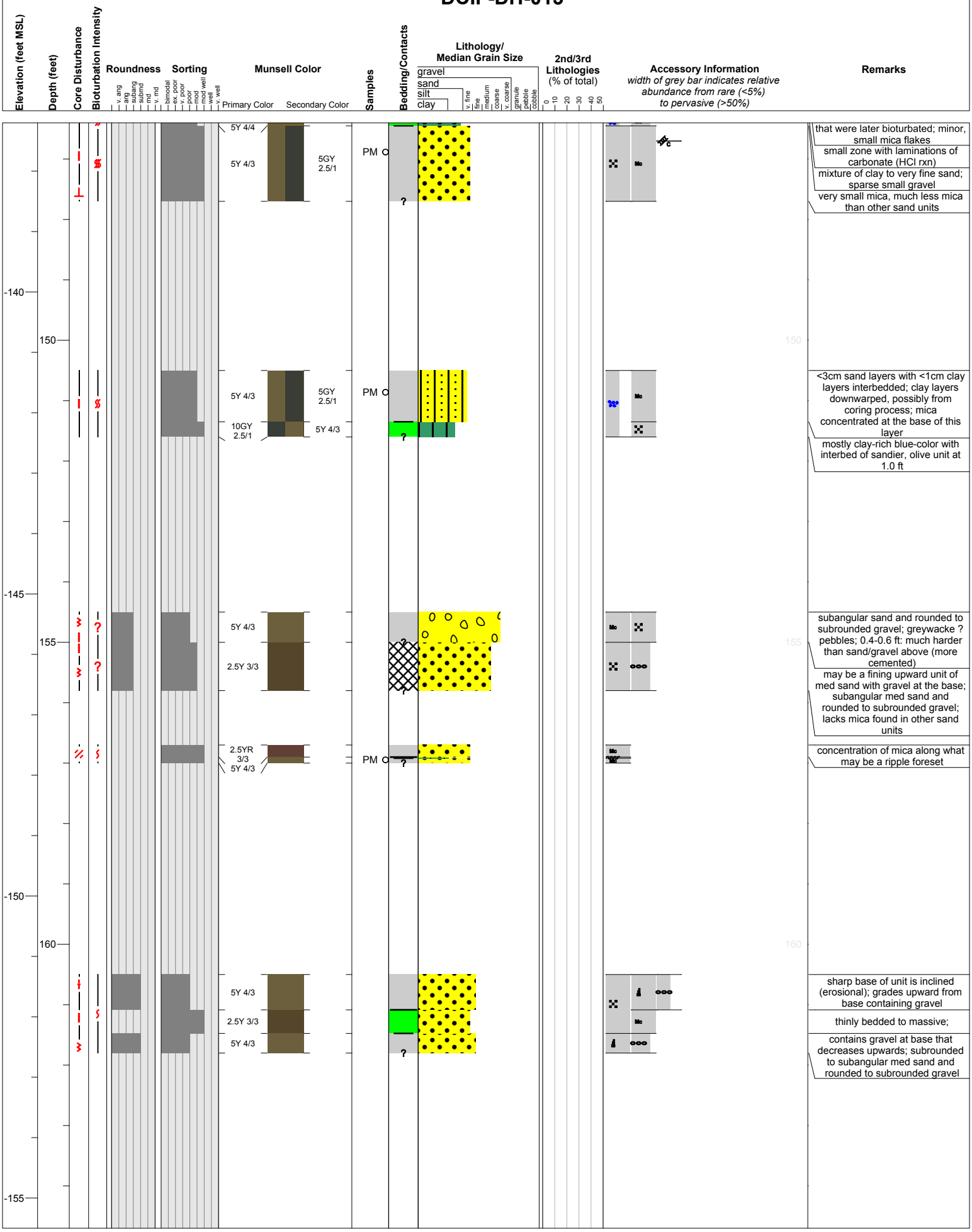

Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
110
115
120
125
-105
-110
-115
5GY 2.5/1
5Y 4/3
5Y 4/3
5GY 2.5/1
5Y 4/3
10GY 2.5/1
5Y 4/2
PM
clay mottled with sandier clay
interbedded sand (~5cm) and clay (~3mm)
5Y 4/2
5Y 4/3
5Y 4/2
core is collapsing into box; structures not observed
less mica than other sand units
5Y 5/3
5GY 2.5/1
5Y 5/3
10Y 8/1
5Y 4/3
PM
mottled sand-rich (up to fine sand) and clay-rich
interbedded clay and sandy clay
5Y 4/3
5Y 5/3
very hard (cemented sand and mud); could not remove as much material as other cores; 1-1.1 ft: normally graded bed: fine sand to very fine sand and silt with more dark mineral grains, lacks mica found in other sand units, spots ringed in orange oxidized color (burrows); 1.1-3 ft: ~1cm wide vertical sand-filled zones for few cm length (sand-filled burrows);

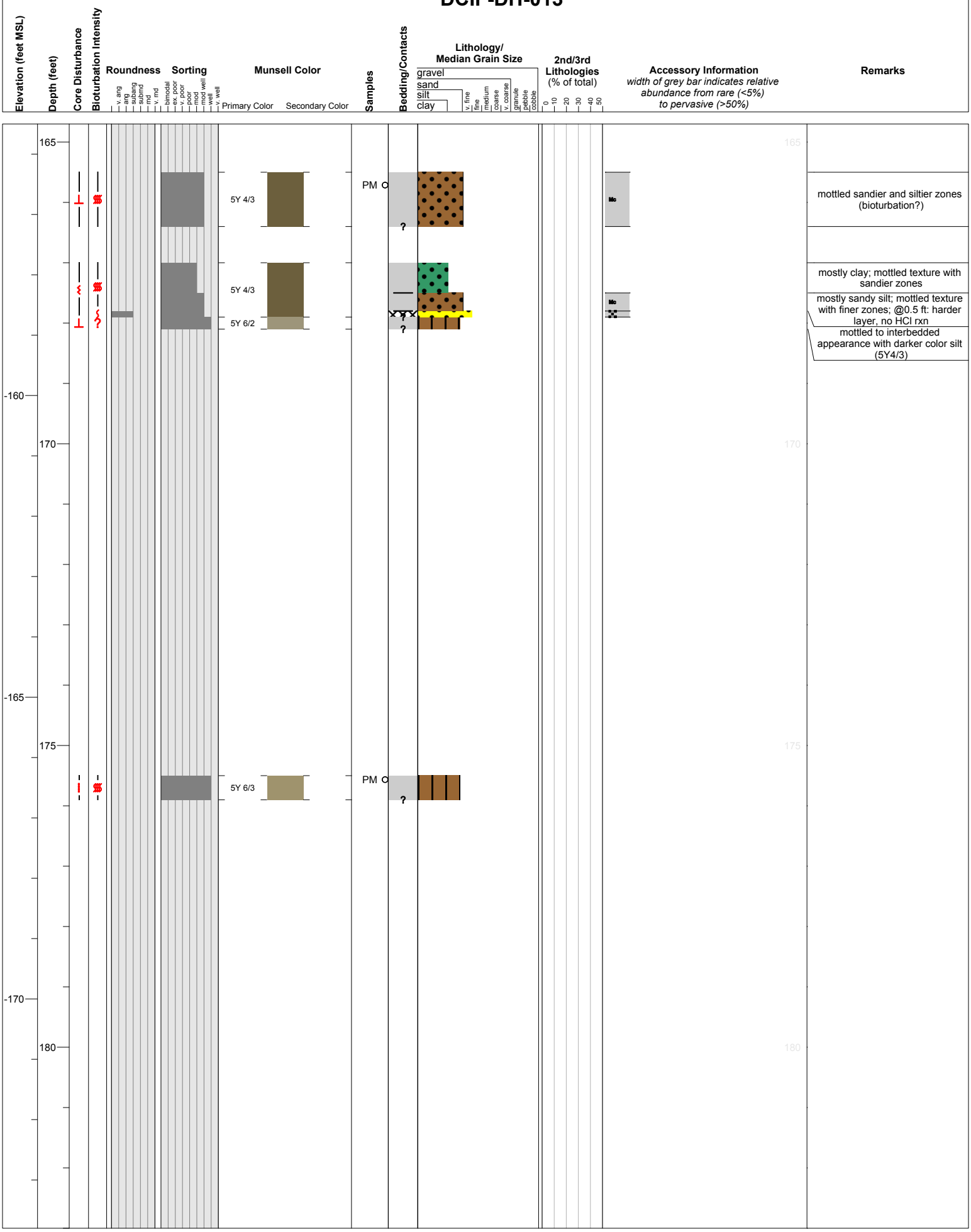
DCIF-DH-013


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-120
-125
-130
-135
130
135
140
145
5Y 4/3
5Y 4/3
5Y 5/3
5Y 6/3
5Y 4/3
5Y 4/3
5Y 6/3
5Y 6/2
2.5Y 8/1
5Y 7/2
N 8/1
5Y 8/1
5Y 4/2
5Y 4/4
10GY
2.5/1
5Y 4/3
5Y 4/3
5Y 5/4
5Y 4/3
5Y 4/3
5Y 4/3
PM
SM
TEP
SSS
one at 1.2 ft contains rust-color
very fine sand; less hard than sand in core above; lacks mica found in other sand units; may contain volcanic glass shards
breaks apart as small clumps; volcanic glass shards
5Y4/4 mottling of more rust-colored areas; volcanic glass shards
burrow into ash filled with sand-ash mixture from layer above
steep-walled scour filled with clay and ash rip-up clasts
thin layer of sand with flame-shaped sand blob above
vertical invasion of drilling fluid mixed with ash; @2.2 ft: finer-grained lamination; similar color, lacking dark mineral grains
texture becomes crumbly instead of cohesive like surrounding clay units; @1.6 ft: subtle change in color within the 5Y4/3, from redder to more olive, sharp contact
minor oxidation rings around pinpoint holes (rootlets?); appears to be interbedded sandier and more clay-rich layers

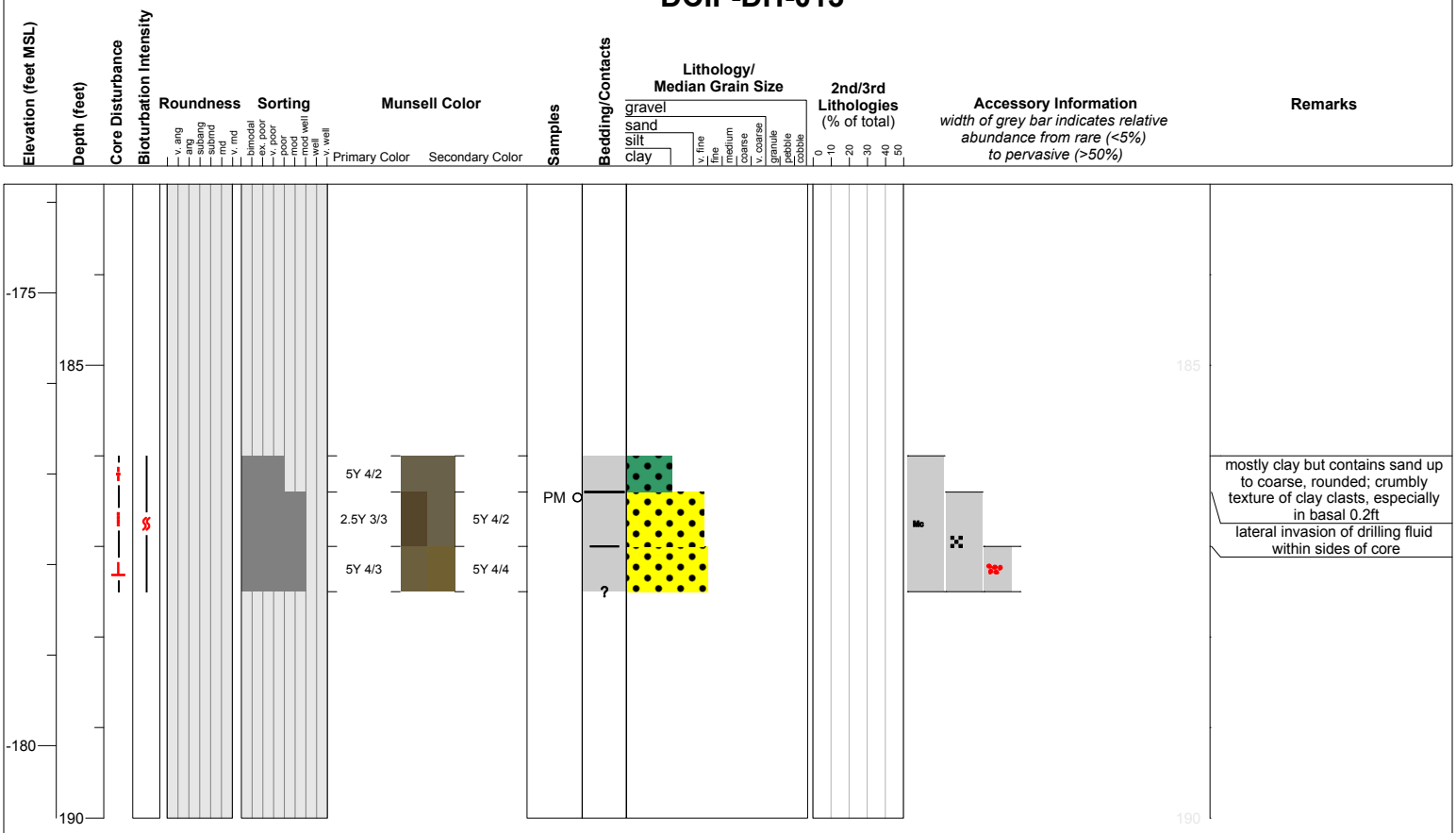
DCIF-DH-013


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-140
150
-145
155
-150
160
-155
5Y 4/4
5Y 4/3
5GY
2.5/1
PM
that were later bioturbated; minor, small mica flakes
small zone with laminations of carbonate (HCl rxn)
mixture of clay to very fine sand; sparse small gravel
very small mica, much less mica than other sand units
5Y 4/3
5GY
2.5/1
10GY
2.5/1
5Y 4/3
PM
<3cm sand layers with <1cm clay layers interbedded; clay layers downwarped, possibly from coring process; mica concentrated at the base of this layer
mostly clay-rich blue-color with interbed of sandier, olive unit at 1.0 ft
5Y 4/3
2.5Y 3/3
subangular sand and rounded to subrounded gravel; greywacke ? pebbles; 0.4-0.6 ft: much harder than sand/gravel above (more cemented)
may be a fining upward unit of med sand with gravel at the base; subangular med sand and rounded to subrounded gravel; lacks mica found in other sand units
2.5YR
3/3
5Y 4/3
PM
concentration of mica along what may be a ripple foreset
5Y 4/3
2.5Y 3/3
5Y 4/3
sharp base of unit is inclined (erosional); grades upward from base containing gravel
thinly bedded to massive;
contains gravel at base that decreases upwards; subrounded to subangular med sand and rounded to subrounded gravel

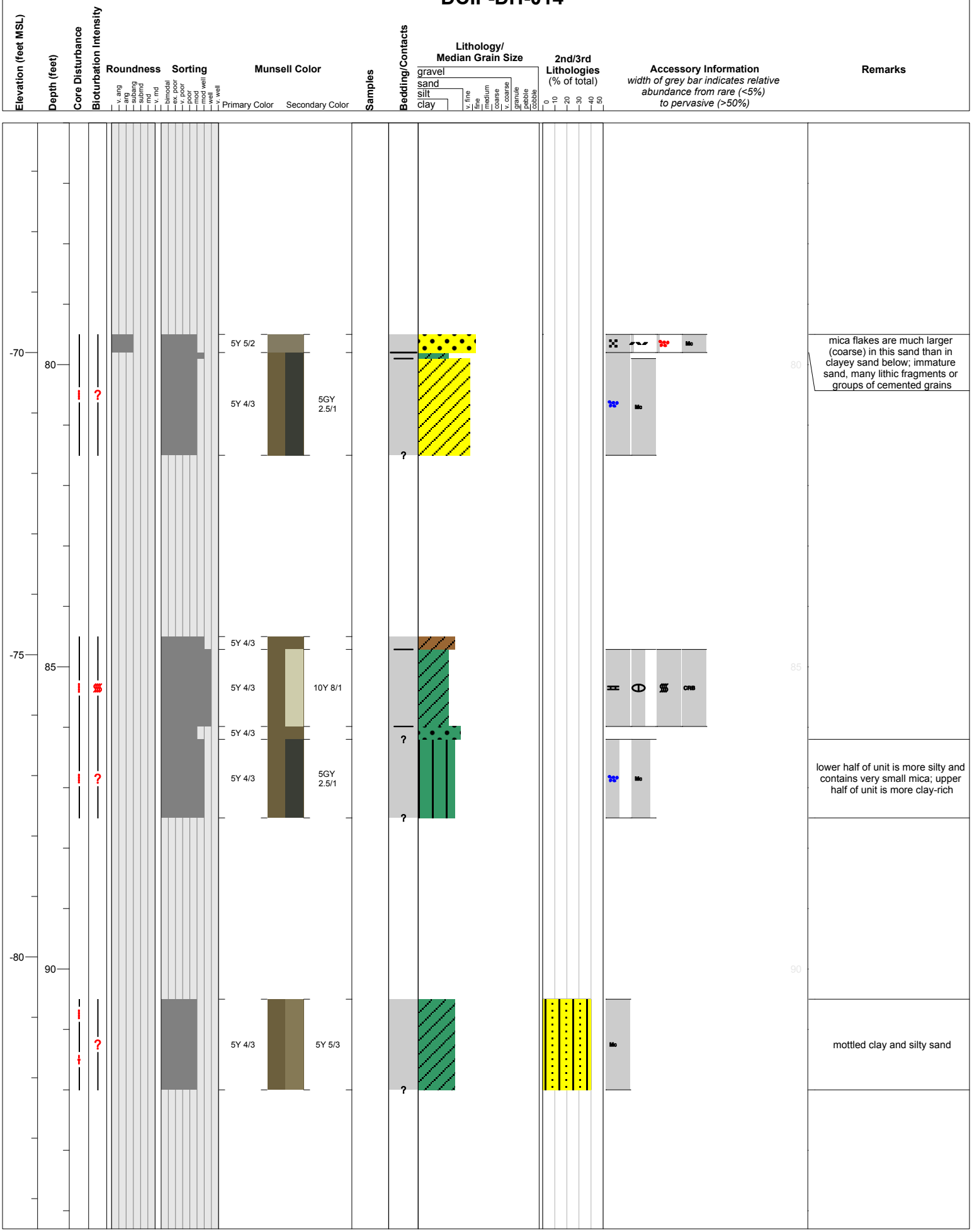
DCIF-DH-013


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
165
170
175
180
-160
-165
-170
5Y 4/3
5Y 4/3
5Y 6/2
5Y 6/3
PM
PM
Mc
Mc
mottled sandier and siltier zones
(bioturbation?)
mostly clay; mottled texture with
sandier zones
mostly sandy silt; mottled texture
with finer zones; @0.5 ft: harder
layer, no HCl rxn
mottled to interbedded
appearance with darker color silt
(5Y4/3)

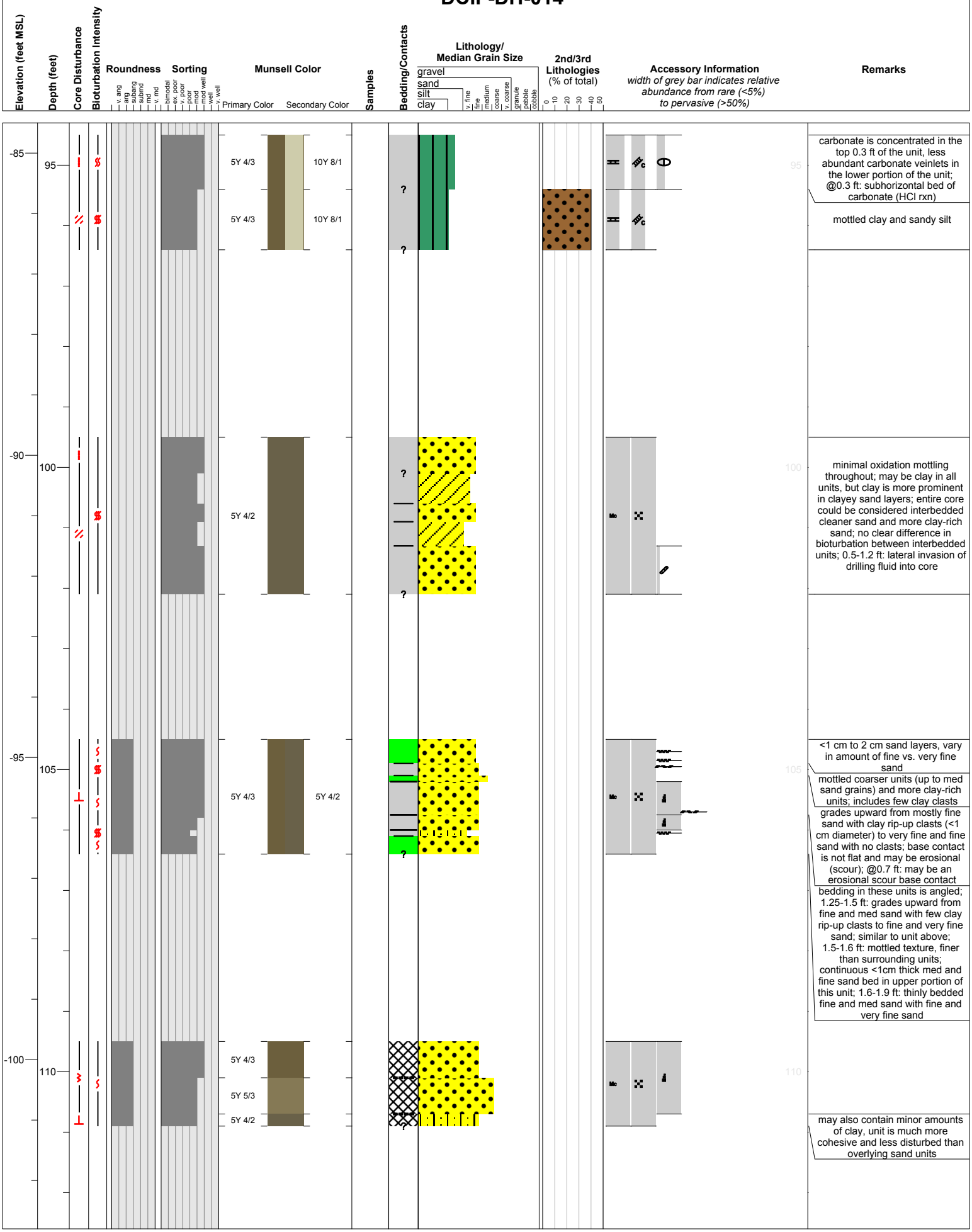
DCIF-DH-013


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-175
185
-180
190
5Y 4/2
2.5Y 3/3
5Y 4/3
5Y 4/2
5Y 4/4
PM
?
Mc
mostly clay but contains sand up
to coarse, rounded; crumbly
texture of clay clasts, especially
in basal 0.2ft
lateral invasion of drilling fluid
within sides of core

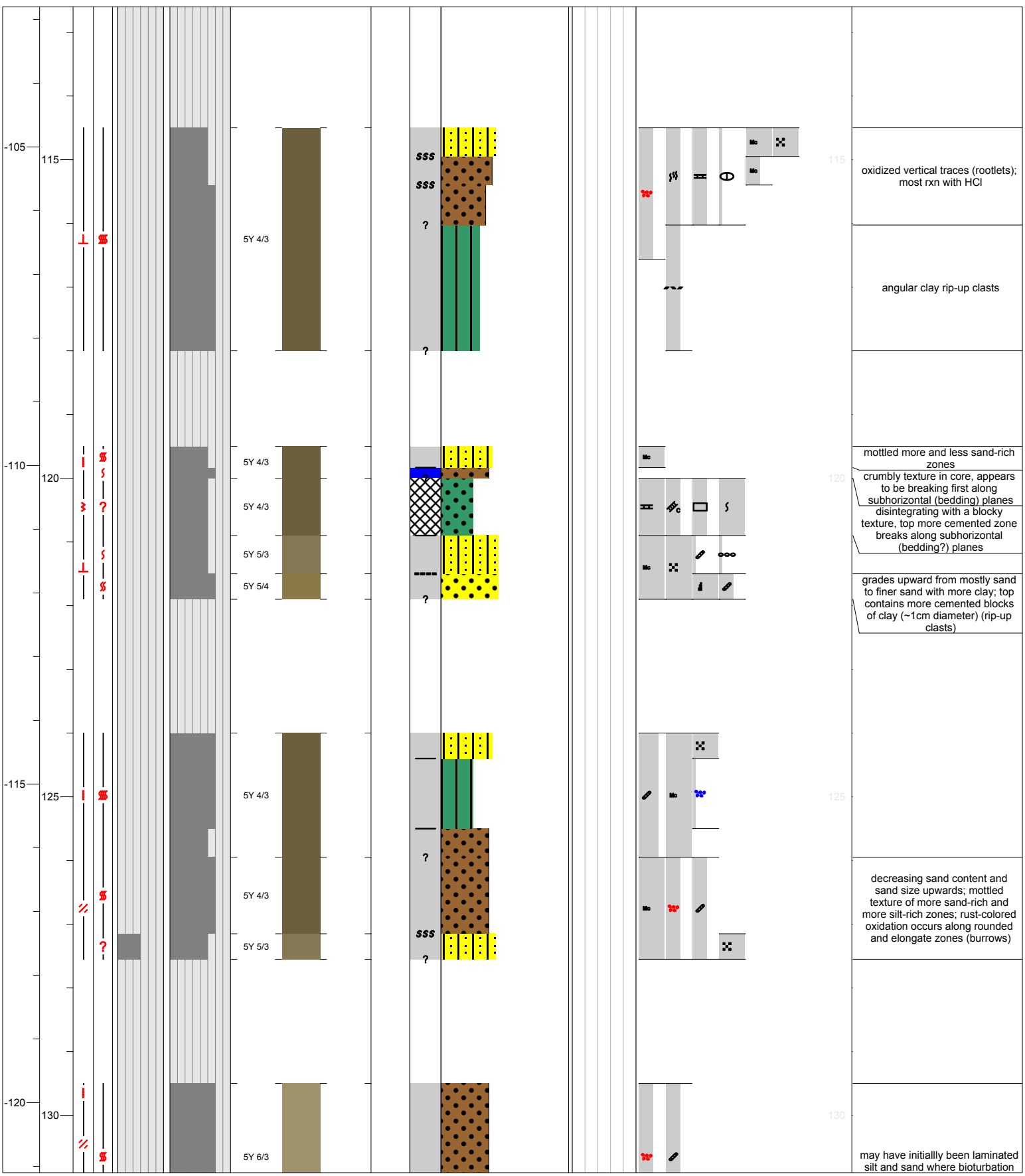
DCIF-DH-014


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-70
80
5Y 5/2
5Y 4/3
5GY
2.5/1
Mc
mica flakes are much larger (coarse) in this sand than in clayey sand below; immature sand, many lithic fragments or groups of cemented grains
-75
85
5Y 4/3
5Y 4/3
10Y 8/1
5Y 4/3
5Y 4/3
5GY
2.5/1
CRB
lower half of unit is more silty and contains very small mica; upper half of unit is more clay-rich
-80
90
5Y 4/3
5Y 5/3
mottled clay and silty sand

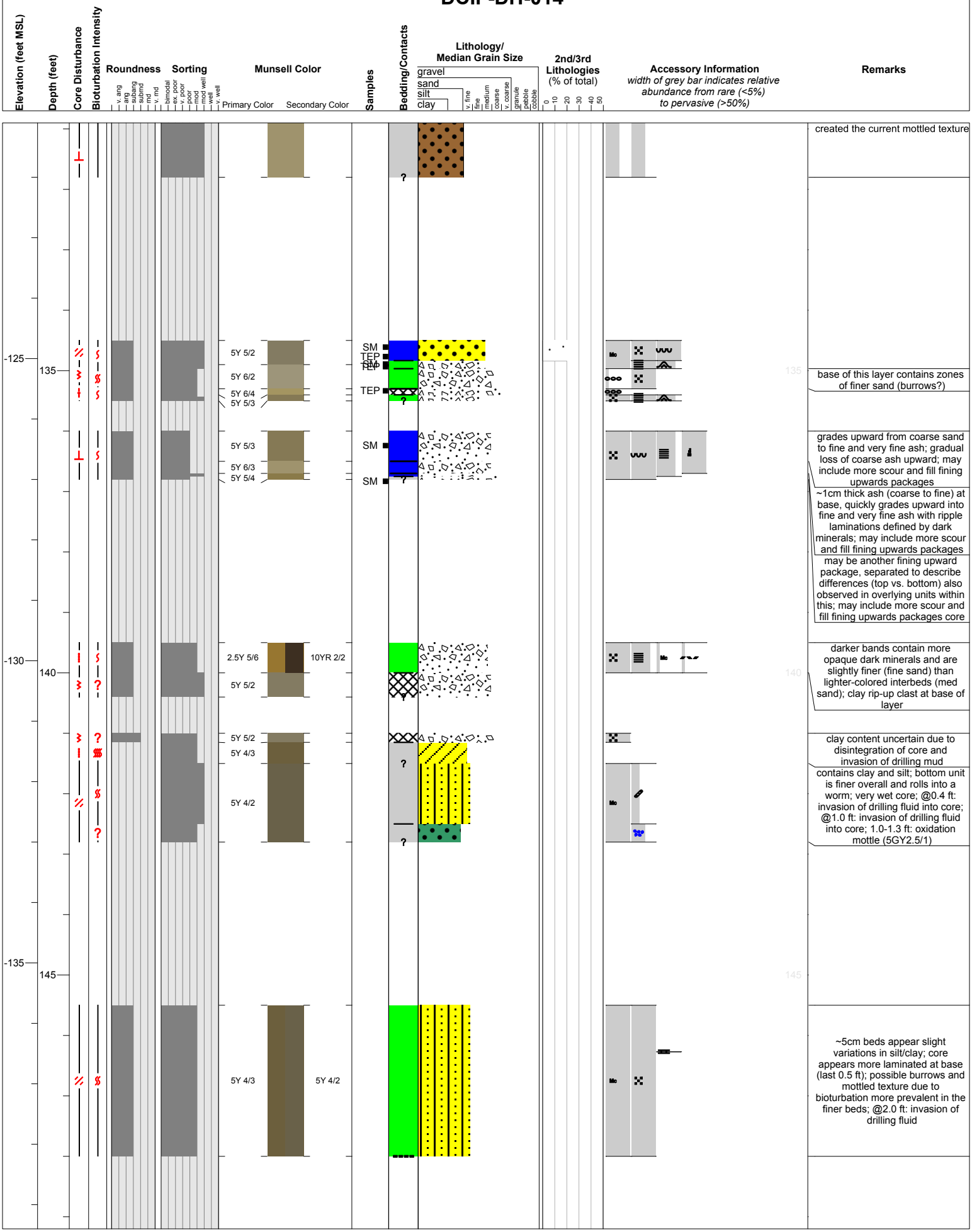
DCIF-DH-014


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative abundance from rare (<5%) to pervasive (>50%)
Remarks
-85
95
5Y 4/3
10Y 8/1
5Y 4/3
10Y 8/1
carbonate is concentrated in the top 0.3 ft of the unit, less abundant carbonate veinlets in the lower portion of the unit; @0.3 ft: subhorizontal bed of carbonate (HCl rxn)
mottled clay and sandy silt
-90
100
5Y 4/2
minimal oxidation mottling throughout; may be clay in all units, but clay is more prominent in clayey sand layers; entire core could be considered interbedded cleaner sand and more clay-rich sand; no clear difference in bioturbation between interbedded units; 0.5-1.2 ft: lateral invasion of drilling fluid into core
-95
105
5Y 4/3
5Y 4/2
<1 cm to 2 cm sand layers, vary in amount of fine vs. very fine sand
mottled coarser units (up to med sand grains) and more clay-rich units; includes few clay clasts
grades upward from mostly fine sand with clay rip-up clasts (<1 cm diameter) to very fine and fine sand with no clasts; base contact is not flat and may be erosional (scour); @0.7 ft: may be an erosional scour base contact
bedding in these units is angled; 1.25-1.5 ft: grades upward from fine and med sand with few clay rip-up clasts to fine and very fine sand; similar to unit above; 1.5-1.6 ft: mottled texture, finer than surrounding units; continuous <1cm thick med and fine sand bed in upper portion of this unit; 1.6-1.9 ft: thinly bedded fine and med sand with fine and very fine sand
-100
110
5Y 4/3
5Y 5/3
5Y 4/2
may also contain minor amounts of clay, unit is much more cohesive and less disturbed than overlying sand units

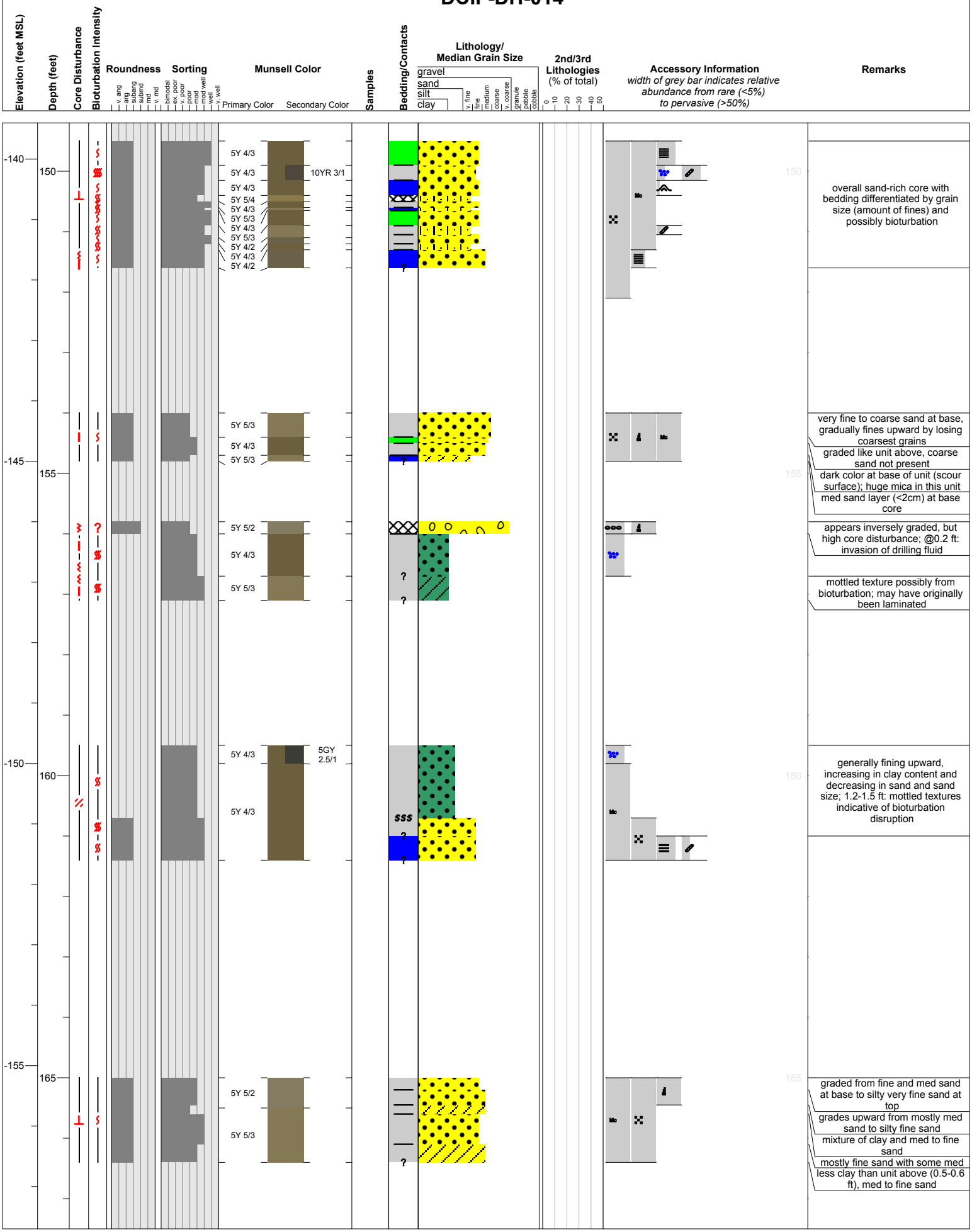
DCIF-DH-014


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative abundance from rare (<5%) to pervasive (>50%)
Remarks
-105
115
-110
120
-115
125
-120
130
5Y 4/3
5Y 4/3
5Y 4/3
5Y 5/3
5Y 5/4
5Y 4/3
5Y 4/3
5Y 5/3
5Y 6/3
Mc
oxidized vertical traces (rootlets); most rxn with HCl
angular clay rip-up clasts
mottled more and less sand-rich zones
crumbly texture in core, appears to be breaking first along subhorizontal (bedding) planes
disintegrating with a blocky texture, top more cemented zone breaks along subhorizontal (bedding?) planes
grades upward from mostly sand to finer sand with more clay; top contains more cemented blocks of clay (~1cm diameter) (rip-up clasts)
decreasing sand content and sand size upwards; mottled texture of more sand-rich and more silt-rich zones; rust-colored oxidation occurs along rounded and elongate zones (burrows)
may have initiallly been laminated silt and sand where bioturbation

DCIF-DH-014


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative abundance from rare (<5%) to pervasive (>50%)
Remarks
created the current mottled texture
-125
135
5Y 5/2
5Y 6/2
5Y 6/4
5Y 5/3
SM
TEP
SM
TEP
TEP
base of this layer contains zones of finer sand (burrows?)
5Y 5/3
5Y 6/3
5Y 5/4
SM
SM
grades upward from coarse sand to fine and very fine ash; gradual loss of coarse ash upward; may include more scour and fill fining upwards packages
~1cm thick ash (coarse to fine) at base, quickly grades upward into fine and very fine ash with ripple laminations defined by dark minerals; may include more scour and fill fining upwards packages
may be another fining upward package, separated to describe differences (top vs. bottom) also observed in overlying units within this; may include more scour and fill fining upwards packages core
-130
140
2.5Y 5/6
10YR 2/2
5Y 5/2
darker bands contain more opaque dark minerals and are slightly finer (fine sand) than lighter-colored interbeds (med sand); clay rip-up clast at base of layer
5Y 5/2
5Y 4/3
5Y 4/2
clay content uncertain due to disintegration of core and invasion of drilling mud
contains clay and silt; bottom unit is finer overall and rolls into a worm; very wet core; @0.4 ft: invasion of drilling fluid into core; @1.0 ft: invasion of drilling fluid into core; 1.0-1.3 ft: oxidation mottle (5GY2.5/1)
-135
145
5Y 4/3
5Y 4/2
~5cm beds appear slight variations in silt/clay; core appears more laminated at base (last 0.5 ft); possible burrows and mottled texture due to bioturbation more prevalent in the finer beds; @2.0 ft: invasion of drilling fluid

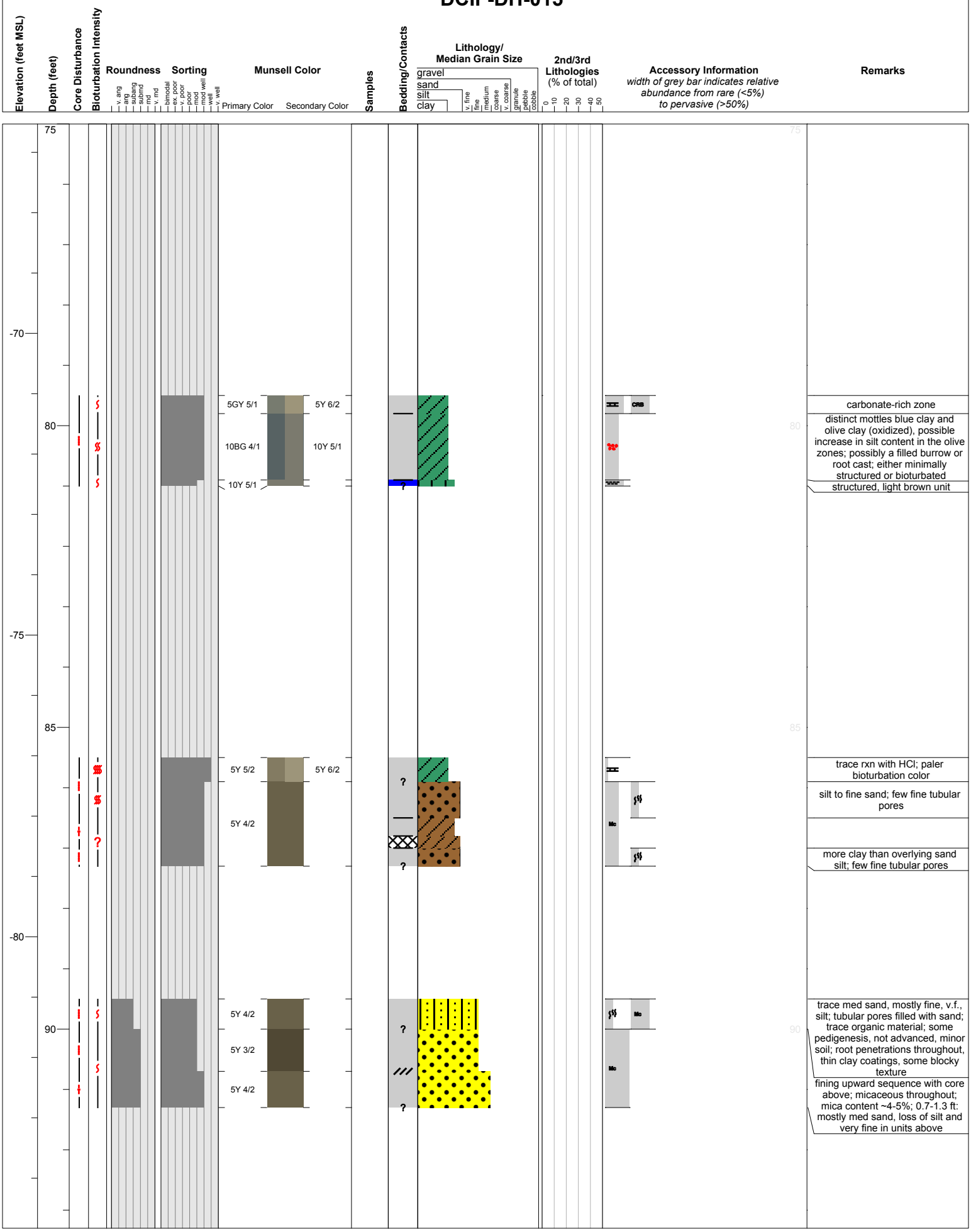
DCIF-DH-014


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative abundance from rare (<5%) to pervasive (>50%)
Remarks
-140
150
5Y 4/3
5Y 4/3
10YR 3/1
5Y 4/3
5Y 5/4
5Y 4/3
5Y 5/3
5Y 4/3
5Y 5/3
5Y 4/2
5Y 4/3
5Y 4/2
overall sand-rich core with bedding differentiated by grain size (amount of fines) and possibly bioturbation
-145
155
5Y 5/3
5Y 4/3
5Y 5/3
very fine to coarse sand at base, gradually fines upward by losing coarsest grains
graded like unit above, coarse sand not present
dark color at base of unit (scour surface); huge mica in this unit
med sand layer (<2cm) at base core
5Y 5/2
5Y 4/3
5Y 5/3
appears inversely graded, but high core disturbance; @0.2 ft: invasion of drilling fluid
mottled texture possibly from bioturbation; may have originally been laminated
-150
160
5Y 4/3
5GY 2.5/1
5Y 4/3
generally fining upward, increasing in clay content and decreasing in sand and sand size; 1.2-1.5 ft: mottled textures indicative of bioturbation disruption
-155
165
5Y 5/2
5Y 5/3
graded from fine and med sand at base to silty very fine sand at top
grades upward from mostly med sand to silty fine sand
mixture of clay and med to fine sand
mostly fine sand with some med
less clay than unit above (0.5-0.6 ft), med to fine sand

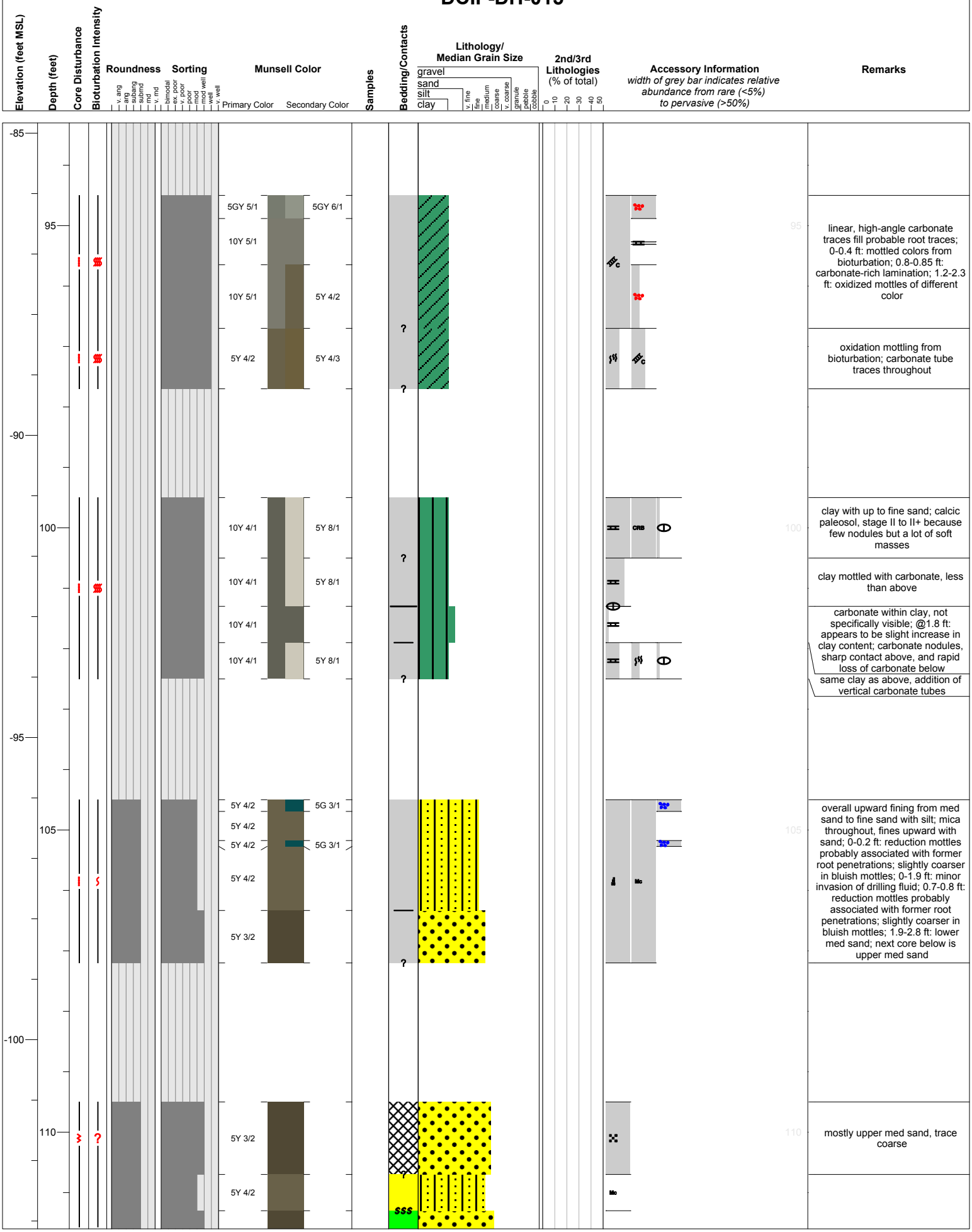
DCIF-DH-014

Elevation (feet MSL)	Depth (feet)	Core Disturbance	Bioturbation Intensity	Roundness	Sorting	Munsell Color	Samples	Bedding/Contacts	Lithology/ Median Grain Size	2nd/3rd Lithologies (% of total)	Accessory Information *width of grey bar indicates relative abundance from rare (<5%) to pervasive (>50%)*	Remarks
				v. ang ang subang subrnd rnd v. rnd	bimodal v. poor v. poor poor mod mod well well v. well	Primary Color Secondary Color			gravel sand silt clay v. fine fine medium coarse v. coarse granule pebble cobble	0 10 20 30 40 50		

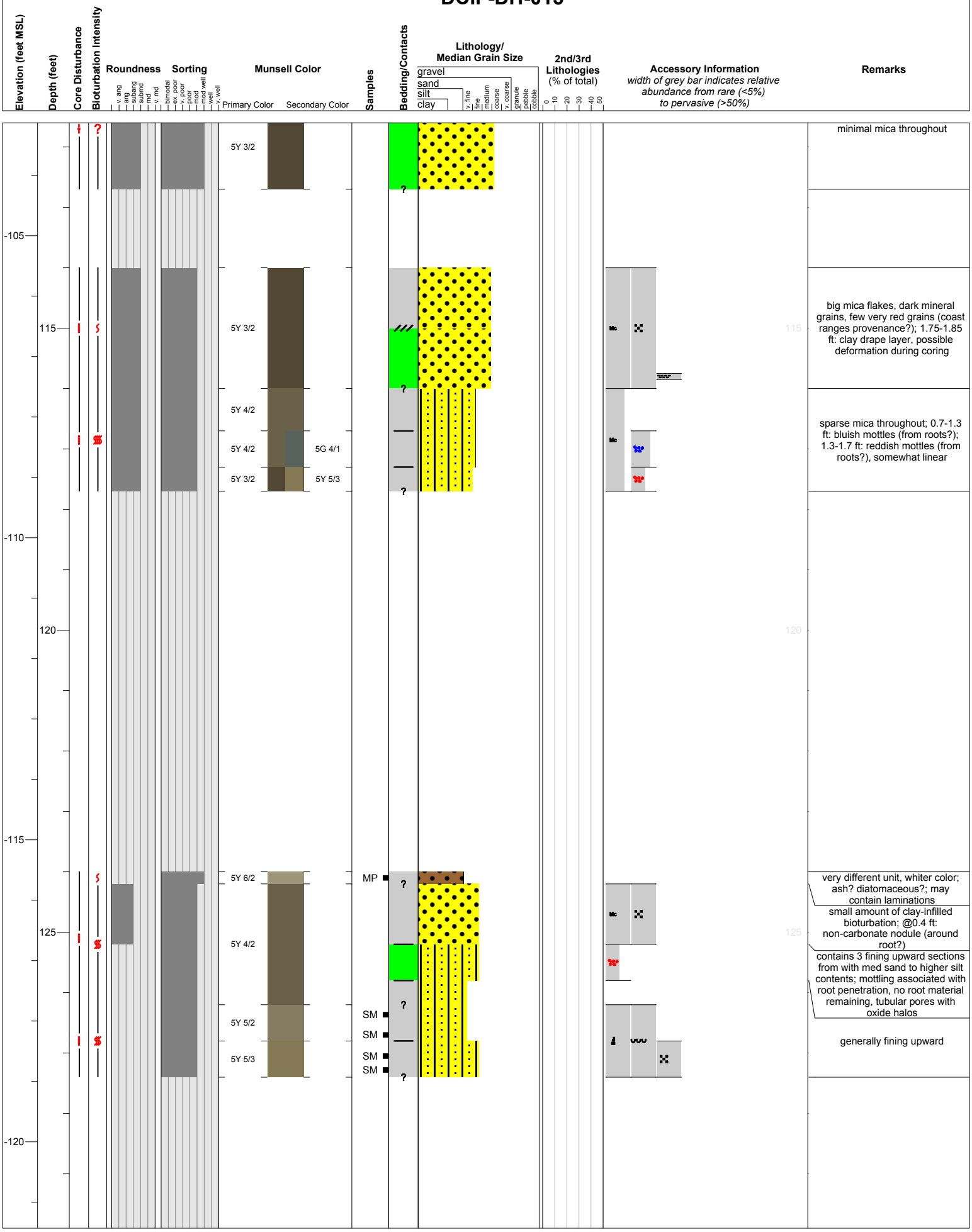
DCIF-DH-015


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
75
80
85
90
-70
-75
-80
5GY 5/1
5Y 6/2
10BG 4/1
10Y 5/1
10Y 5/1
5Y 5/2
5Y 6/2
5Y 4/2
5Y 4/2
5Y 3/2
5Y 4/2
CRB
Mc
carbonate-rich zone
distinct mottles blue clay and olive clay (oxidized), possible increase in silt content in the olive zones; possibly a filled burrow or root cast; either minimally structured or bioturbated
structured, light brown unit
trace rxn with HCl; paler bioturbation color
silt to fine sand; few fine tubular pores
more clay than overlying sand silt; few fine tubular pores
trace med sand, mostly fine, v.f., silt; tubular pores filled with sand; trace organic material; some pedigenesis, not advanced, minor soil; root penetrations throughout, thin clay coatings, some blocky texture
fining upward sequence with core above; micaceous throughout; mica content ~4-5%; 0.7-1.3 ft: mostly med sand, loss of silt and very fine in units above

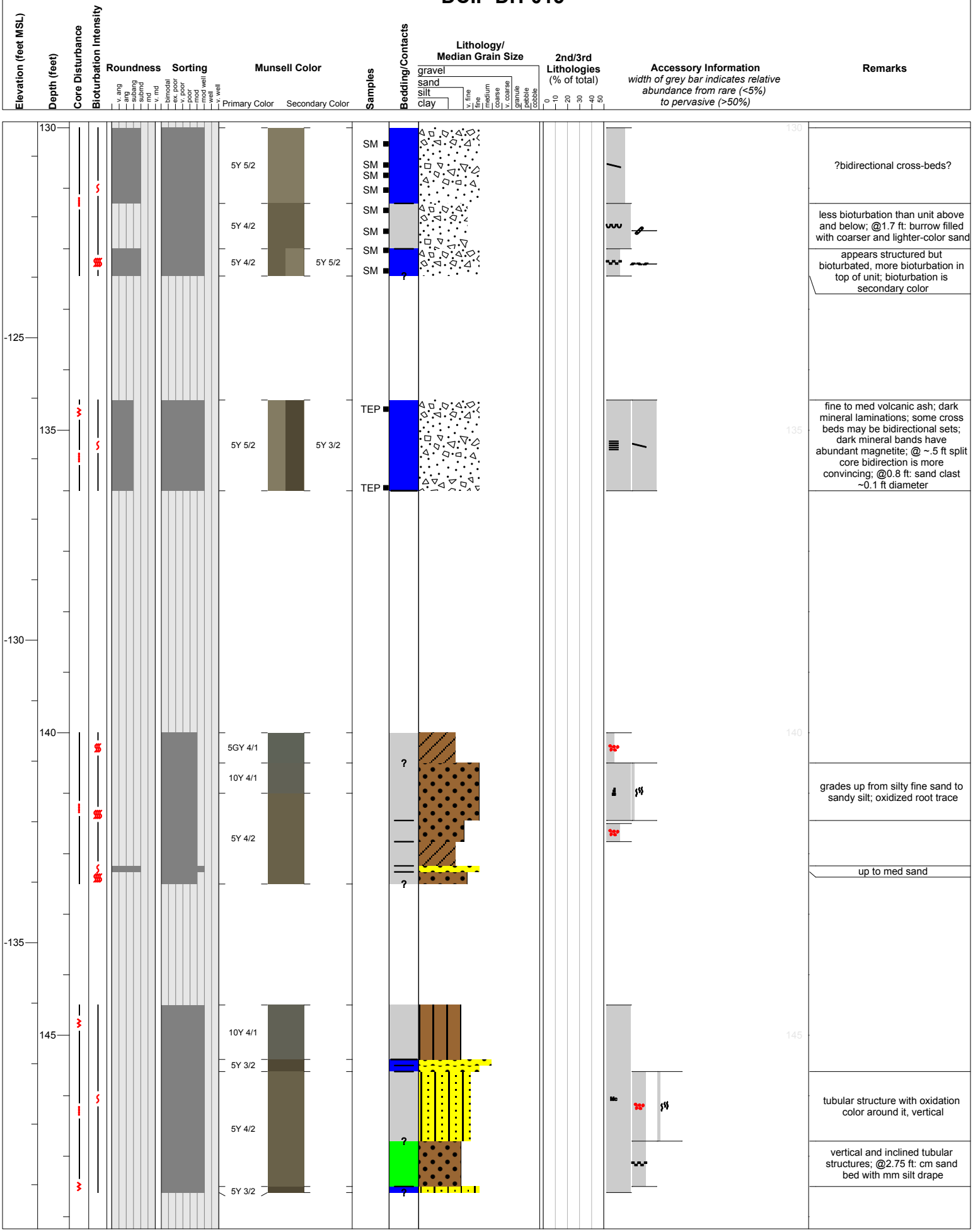
DCIF-DH-015


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative abundance from rare (<5%) to pervasive (>50%)
Remarks
-85
-90
-95
-100
95
100
105
110
5GY 5/1
10Y 5/1
10Y 5/1
5Y 4/2
5GY 6/1
5Y 4/2
5Y 4/3
10Y 4/1
10Y 4/1
10Y 4/1
10Y 4/1
5Y 8/1
5Y 8/1
5Y 8/1
5Y 4/2
5Y 4/2
5Y 4/2
5Y 4/2
5Y 3/2
5G 3/1
5G 3/1
5Y 3/2
5Y 4/2
CRB
Mc
linear, high-angle carbonate traces fill probable root traces; 0-0.4 ft: mottled colors from bioturbation; 0.8-0.85 ft: carbonate-rich lamination; 1.2-2.3 ft: oxidized mottles of different color
oxidation mottling from bioturbation; carbonate tube traces throughout
clay with up to fine sand; calcic paleosol, stage II to II+ because few nodules but a lot of soft masses
clay mottled with carbonate, less than above
carbonate within clay, not specifically visible; @1.8 ft: appears to be slight increase in clay content; carbonate nodules, sharp contact above, and rapid loss of carbonate below
same clay as above, addition of vertical carbonate tubes
overall upward fining from med sand to fine sand with silt; mica throughout, fines upward with sand; 0-0.2 ft: reduction mottles probably associated with former root penetrations; slightly coarser in bluish mottles; 0-1.9 ft: minor invasion of drilling fluid; 0.7-0.8 ft: reduction mottles probably associated with former root penetrations; slightly coarser in bluish mottles; 1.9-2.8 ft: lower med sand; next core below is upper med sand
mostly upper med sand, trace coarse

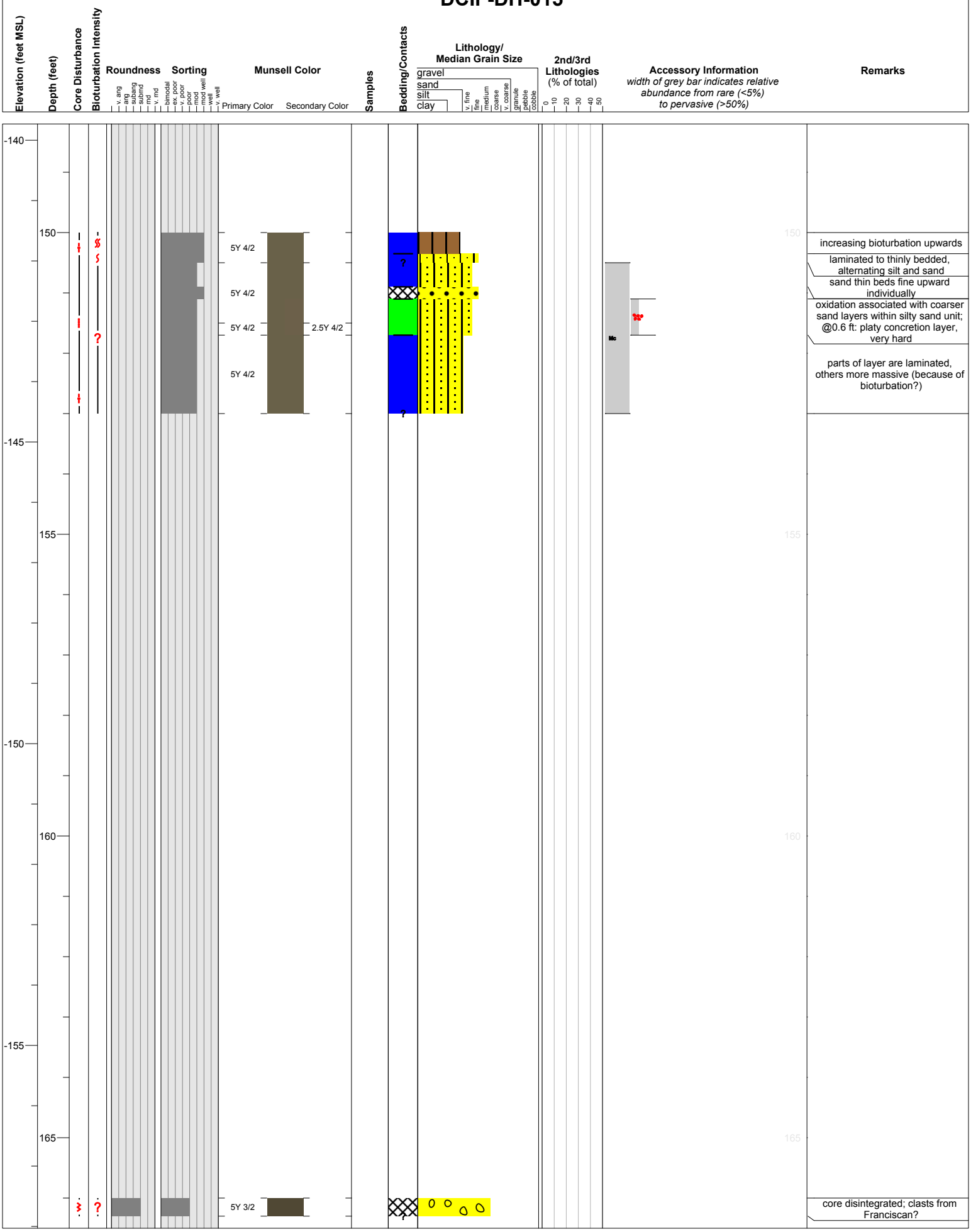
DCIF-DH-015


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-105
115
-110
120
-115
125
-120
5Y 3/2
5Y 3/2
5Y 4/2
5Y 4/2
5G 4/1
5Y 3/2
5Y 5/3
5Y 6/2
5Y 4/2
5Y 5/2
5Y 5/3
MP
SM
SM
SM
SM
Mc
minimal mica throughout
big mica flakes, dark mineral grains, few very red grains (coast ranges provenance?); 1.75-1.85 ft: clay drape layer, possible deformation during coring
sparse mica throughout; 0.7-1.3 ft: bluish mottles (from roots?); 1.3-1.7 ft: reddish mottles (from roots?), somewhat linear
very different unit, whiter color; ash? diatomaceous?; may contain laminations
small amount of clay-infilled bioturbation; @0.4 ft: non-carbonate nodule (around root?)
contains 3 fining upward sections from with med sand to higher silt contents; mottling associated with root penetration, no root material remaining, tubular pores with oxide halos
generally fining upward

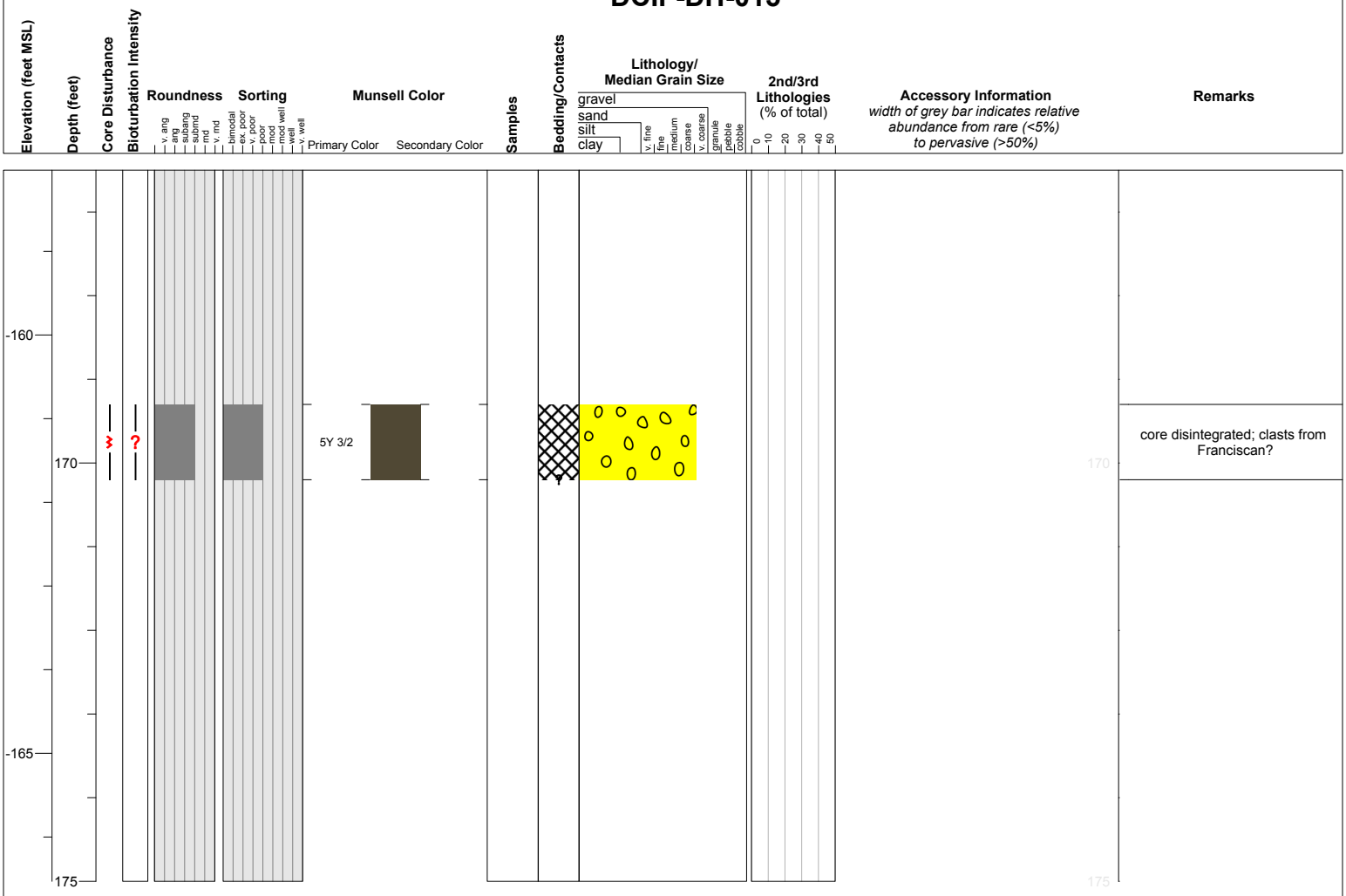
DCIF-DH-015


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative abundance from rare (<5%) to pervasive (>50%)
Remarks
130
135
140
145
-125
-130
-135
5Y 5/2
5Y 4/2
5Y 4/2
5Y 5/2
5Y 3/2
5GY 4/1
10Y 4/1
5Y 4/2
10Y 4/1
5Y 3/2
5Y 4/2
5Y 3/2
SM
TEP
?bidirectional cross-beds?
less bioturbation than unit above and below; @1.7 ft: burrow filled with coarser and lighter-color sand
appears structured but bioturbated, more bioturbation in top of unit; bioturbation is secondary color
fine to med volcanic ash; dark mineral laminations; some cross beds may be bidirectional sets; dark mineral bands have abundant magnetite; @ ~.5 ft split core bidirection is more convincing; @0.8 ft: sand clast ~0.1 ft diameter
grades up from silty fine sand to sandy silt; oxidized root trace
up to med sand
tubular structure with oxidation color around it, vertical
vertical and inclined tubular structures; @2.75 ft: cm sand bed with mm silt drape

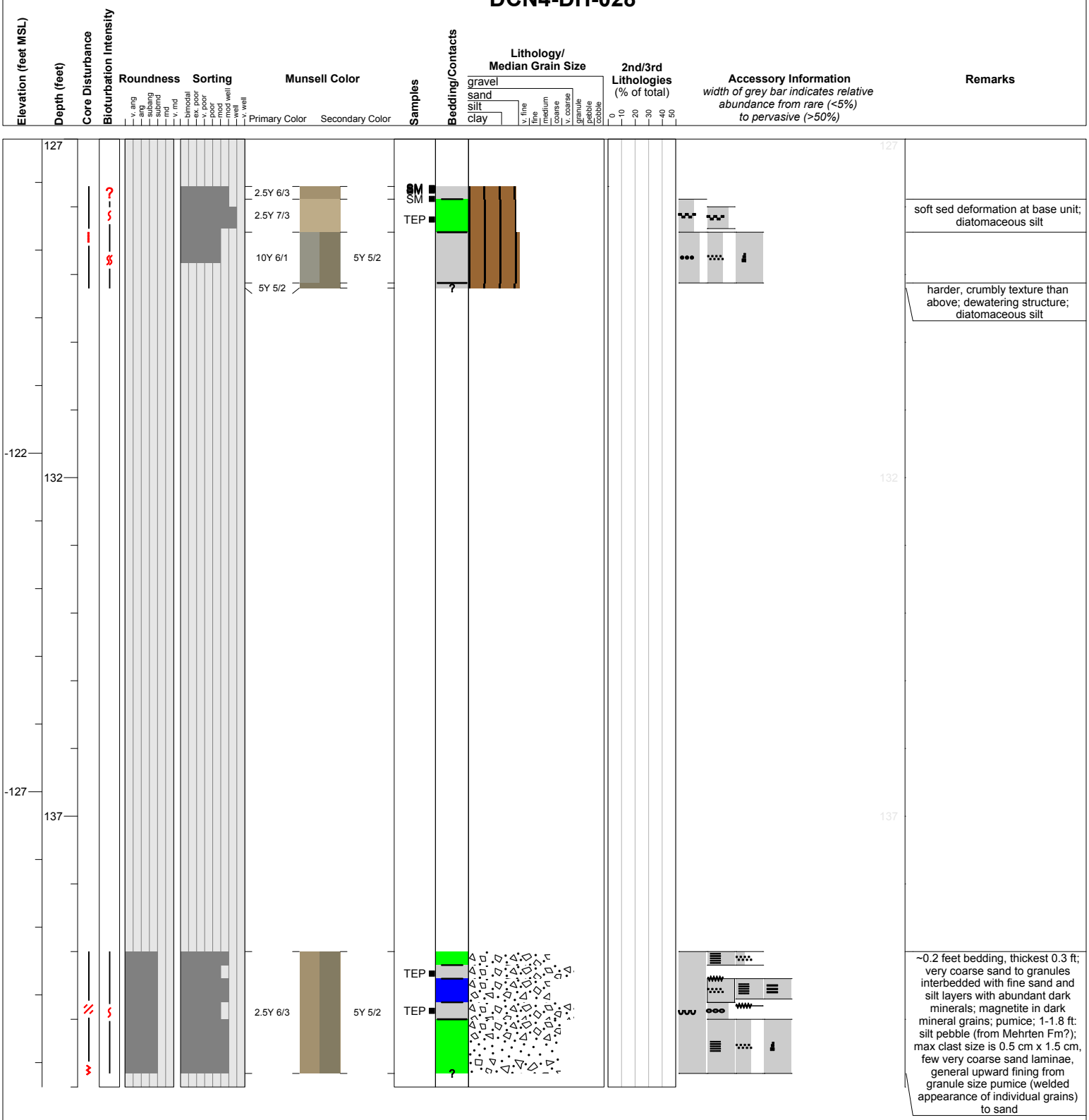
DCIF-DH-015


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-140
150
-145
155
-150
160
-155
165
5Y 4/2
5Y 4/2
5Y 4/2
2.5Y 4/2
5Y 4/2
5Y 3/2
Mc
increasing bioturbation upwards
laminated to thinly bedded, alternating silt and sand
sand thin beds fine upward individually
oxidation associated with coarser sand layers within silty sand unit; @0.6 ft: platy concretion layer, very hard
parts of layer are laminated, others more massive (because of bioturbation?)
core disintegrated; clasts from Franciscan?

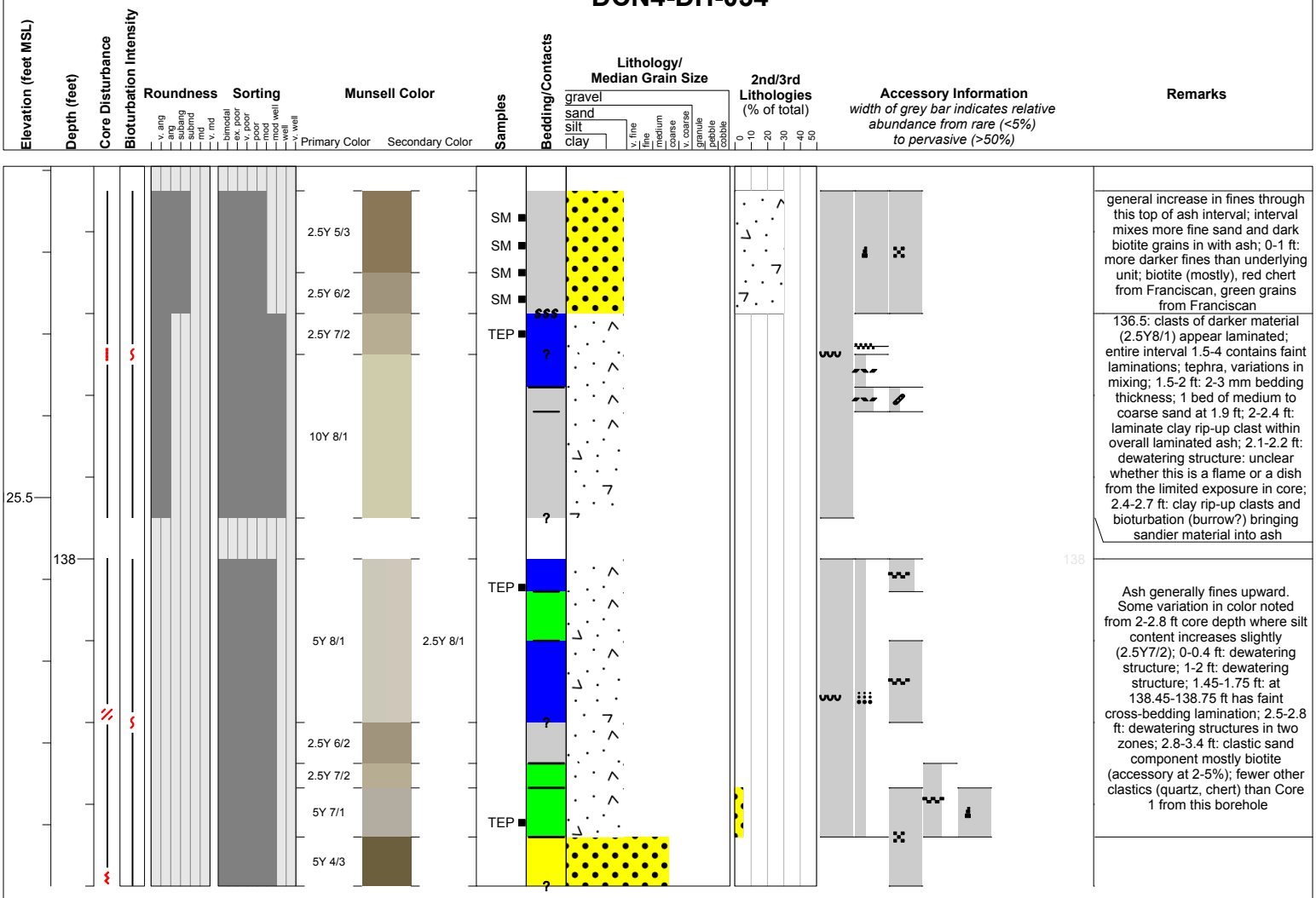
DCIF-DH-015


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-160
-165
170
175
5Y 3/2
core disintegrated; clasts from
Franciscan?

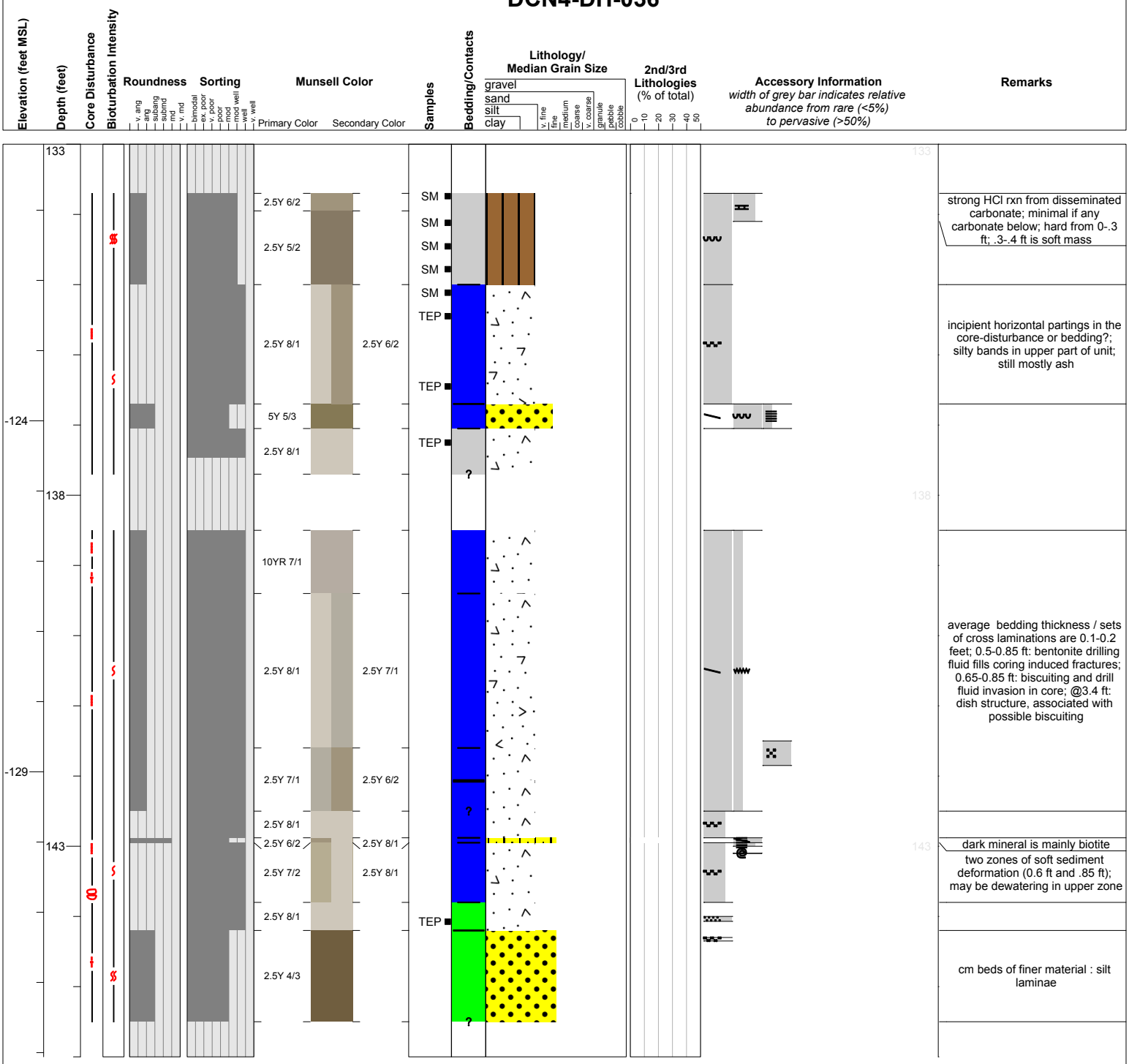
DCN4-DH-028


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative abundance from rare (<5%) to pervasive (>50%)
Remarks
127
132
137
-122
-127
2.5Y 6/3
2.5Y 7/3
10Y 6/1
5Y 5/2
5Y 5/2
SM
SM
SM
TEP
TEP
TEP
2.5Y 6/3
5Y 5/2
soft sed deformation at base unit; diatomaceous silt
harder, crumbly texture than above; dewatering structure; diatomaceous silt
~0.2 feet bedding, thickest 0.3 ft; very coarse sand to granules interbedded with fine sand and silt layers with abundant dark minerals; magnetite in dark mineral grains; pumice; 1-1.8 ft: silt pebble (from Mehrten Fm?); max clast size is 0.5 cm x 1.5 cm, few very coarse sand laminae, general upward fining from granule size pumice (welded appearance of individual grains) to sand

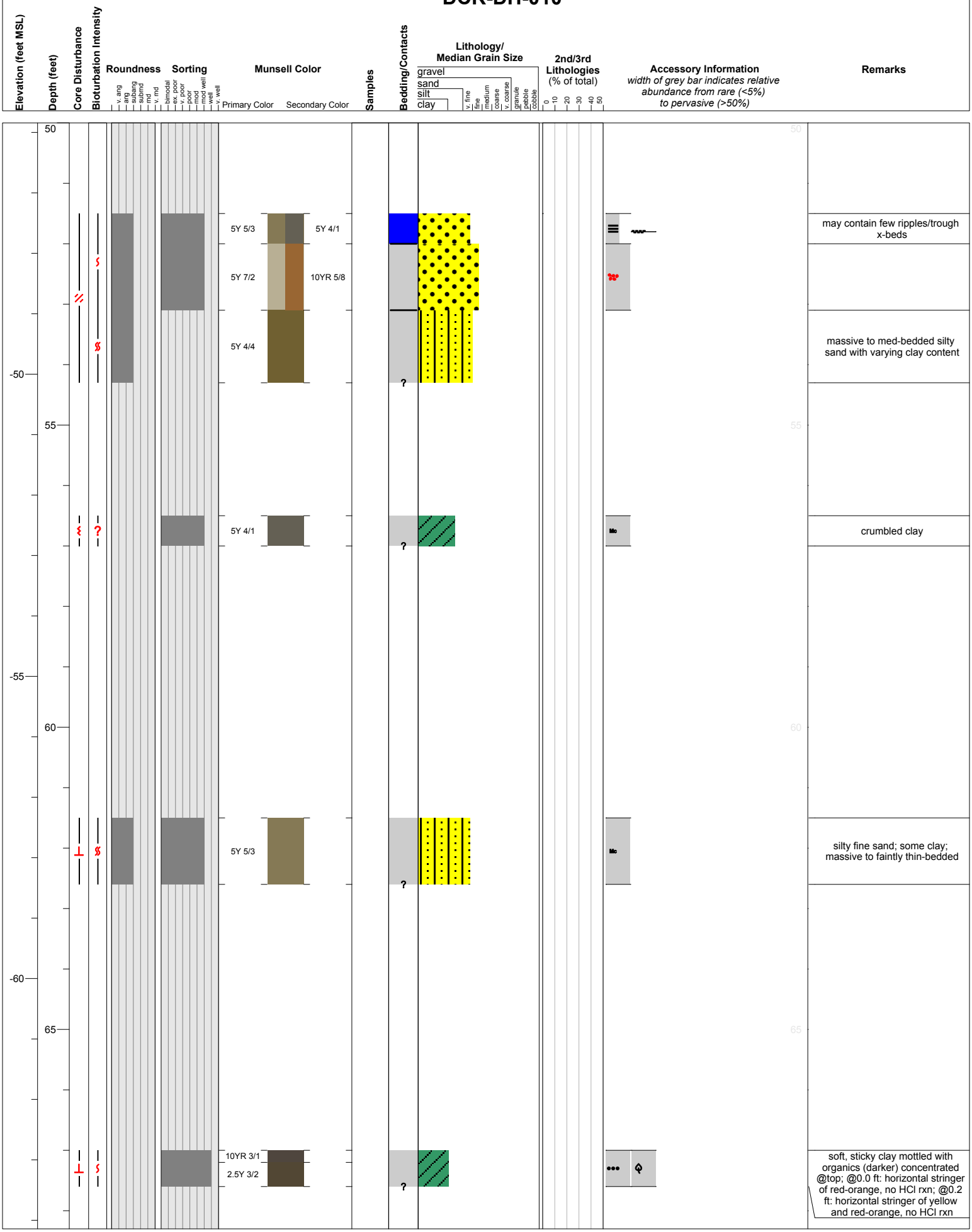
DCN4-DH-034


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
25.5
138
2.5Y 5/3
2.5Y 6/2
2.5Y 7/2
10Y 8/1
5Y 8/1
2.5Y 8/1
2.5Y 6/2
2.5Y 7/2
5Y 7/1
5Y 4/3
SM
SM
SM
SM
TEP
TEP
TEP
?
?
?
?
138
general increase in fines through this top of ash interval; interval mixes more fine sand and dark biotite grains in with ash; 0-1 ft: more darker fines than underlying unit; biotite (mostly), red chert from Franciscan, green grains from Franciscan
136.5: clasts of darker material (2.5Y8/1) appear laminated; entire interval 1.5-4 contains faint laminations; tephra, variations in mixing; 1.5-2 ft: 2-3 mm bedding thickness; 1 bed of medium to coarse sand at 1.9 ft; 2-2.4 ft: laminate clay rip-up clast within overall laminated ash; 2.1-2.2 ft: dewatering structure: unclear whether this is a flame or a dish from the limited exposure in core; 2.4-2.7 ft: clay rip-up clasts and bioturbation (burrow?) bringing sandier material into ash
Ash generally fines upward. Some variation in color noted from 2-2.8 ft core depth where silt content increases slightly (2.5Y7/2); 0-0.4 ft: dewatering structure; 1-2 ft: dewatering structure; 1.45-1.75 ft: at 138.45-138.75 ft has faint cross-bedding lamination; 2.5-2.8 ft: dewatering structures in two zones; 2.8-3.4 ft: clastic sand component mostly biotite (accessory at 2-5%); fewer other clastics (quartz, chert) than Core 1 from this borehole

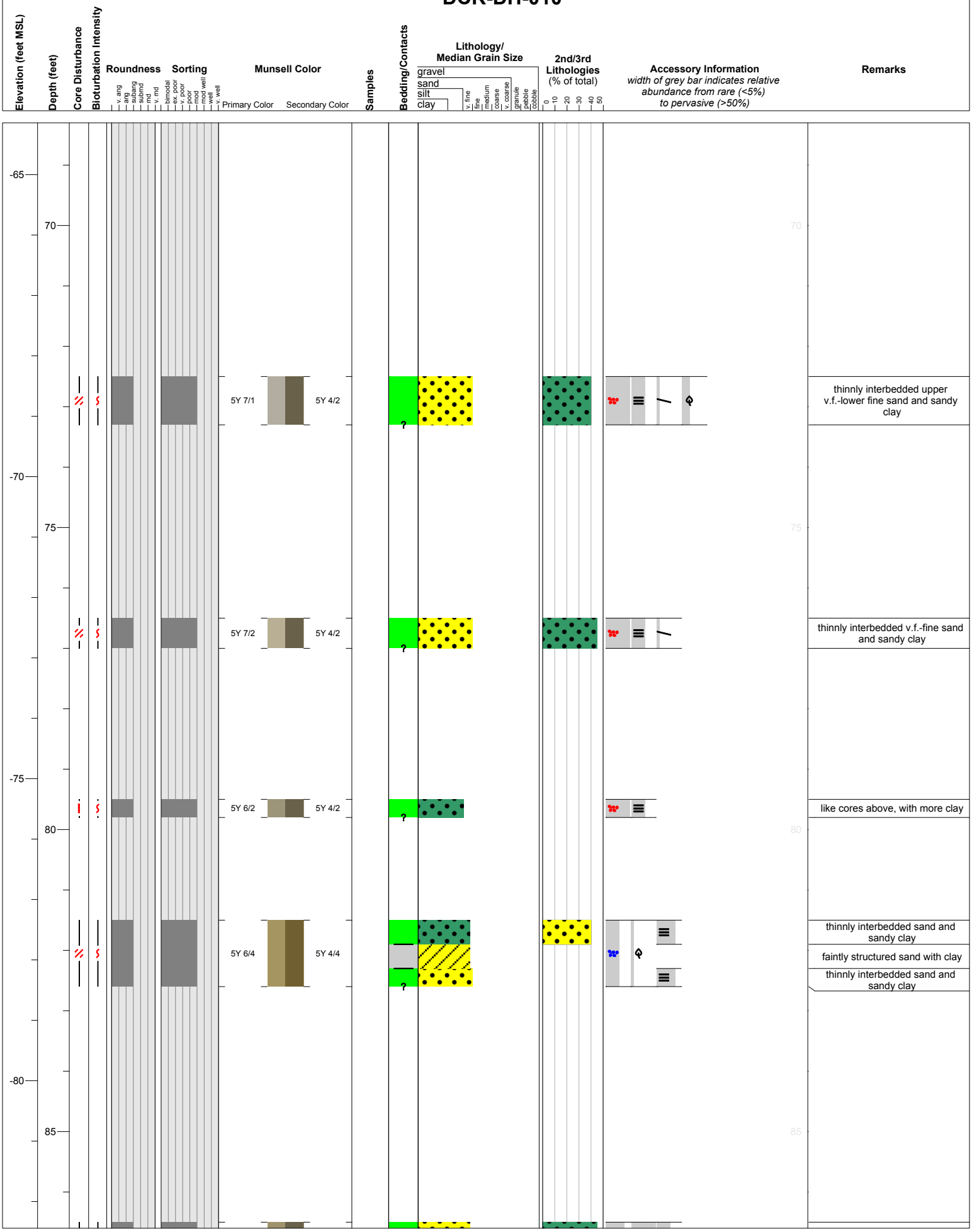
DCN4-DH-036


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative abundance from rare (<5%) to pervasive (>50%)
Remarks
133
-124
138
-129
143
2.5Y 6/2
2.5Y 5/2
2.5Y 8/1
2.5Y 6/2
5Y 5/3
2.5Y 8/1
10YR 7/1
2.5Y 8/1
2.5Y 7/1
2.5Y 7/1
2.5Y 6/2
2.5Y 8/1
2.5Y 6/2
2.5Y 8/1
2.5Y 7/2
2.5Y 8/1
2.5Y 8/1
2.5Y 4/3
SM
SM
SM
SM
SM
TEP
TEP
TEP
TEP
strong HCl rxn from disseminated carbonate; minimal if any carbonate below; hard from 0-.3 ft; .3-.4 ft is soft mass
incipient horizontal partings in the core-disturbance or bedding?; silty bands in upper part of unit; still mostly ash
average bedding thickness / sets of cross laminations are 0.1-0.2 feet; 0.5-0.85 ft: bentonite drilling fluid fills coring induced fractures; 0.65-0.85 ft: biscuiting and drill fluid invasion in core; @3.4 ft: dish structure, associated with possible biscuiting
dark mineral is mainly biotite
two zones of soft sediment deformation (0.6 ft and .85 ft); may be dewatering in upper zone
cm beds of finer material : silt laminae

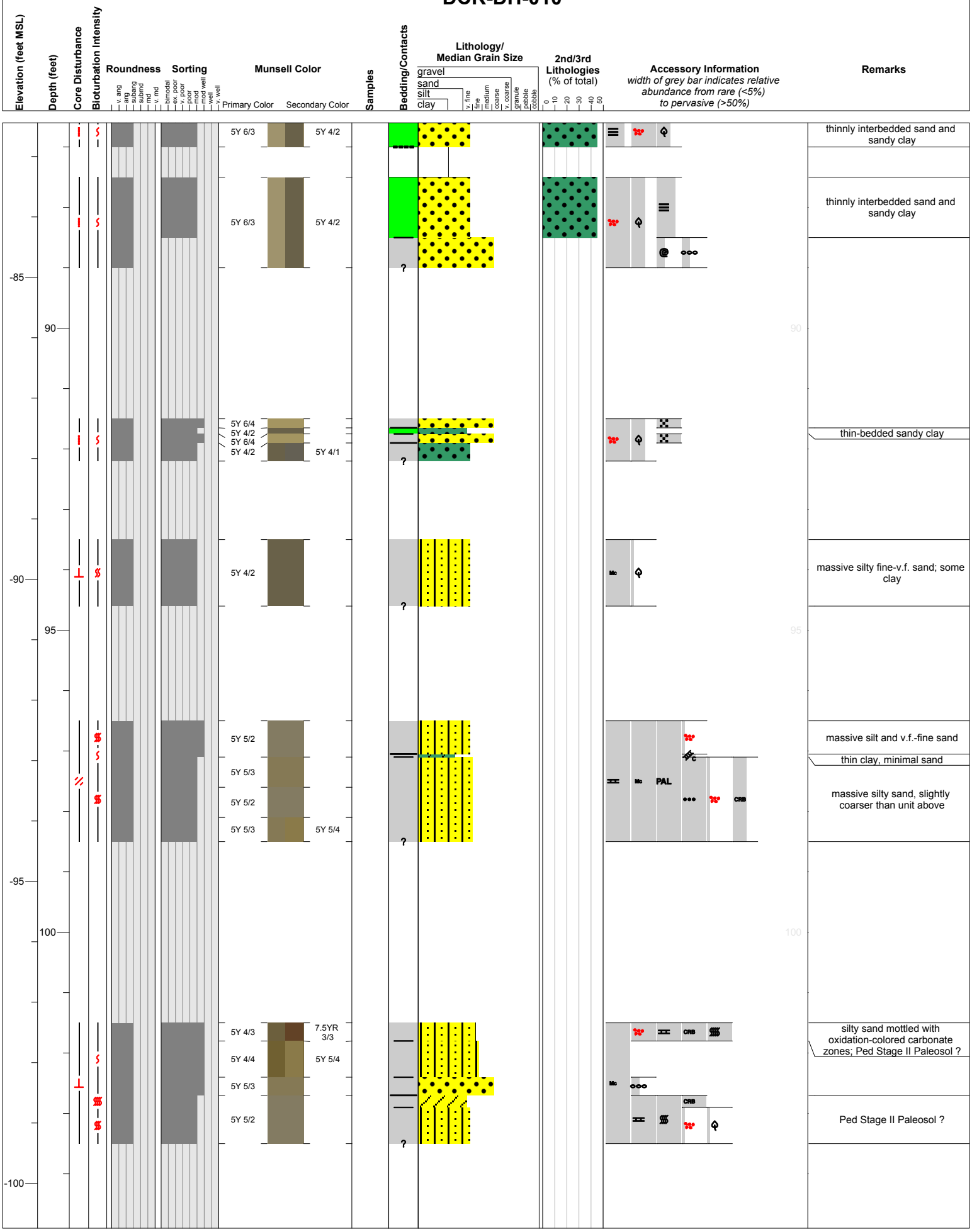
DCR-DH-010


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
50
55
60
65
-50
-55
-60
5Y 5/3
5Y 4/1
5Y 7/2
10YR 5/8
5Y 4/4
5Y 4/1
5Y 5/3
10YR 3/1
2.5Y 3/2
may contain few ripples/trough x-beds
massive to med-bedded silty sand with varying clay content
crumbled clay
silty fine sand; some clay; massive to faintly thin-bedded
soft, sticky clay mottled with organics (darker) concentrated @top; @0.0 ft: horizontal stringer of red-orange, no HCl rxn; @0.2 ft: horizontal stringer of yellow and red-orange, no HCl rxn

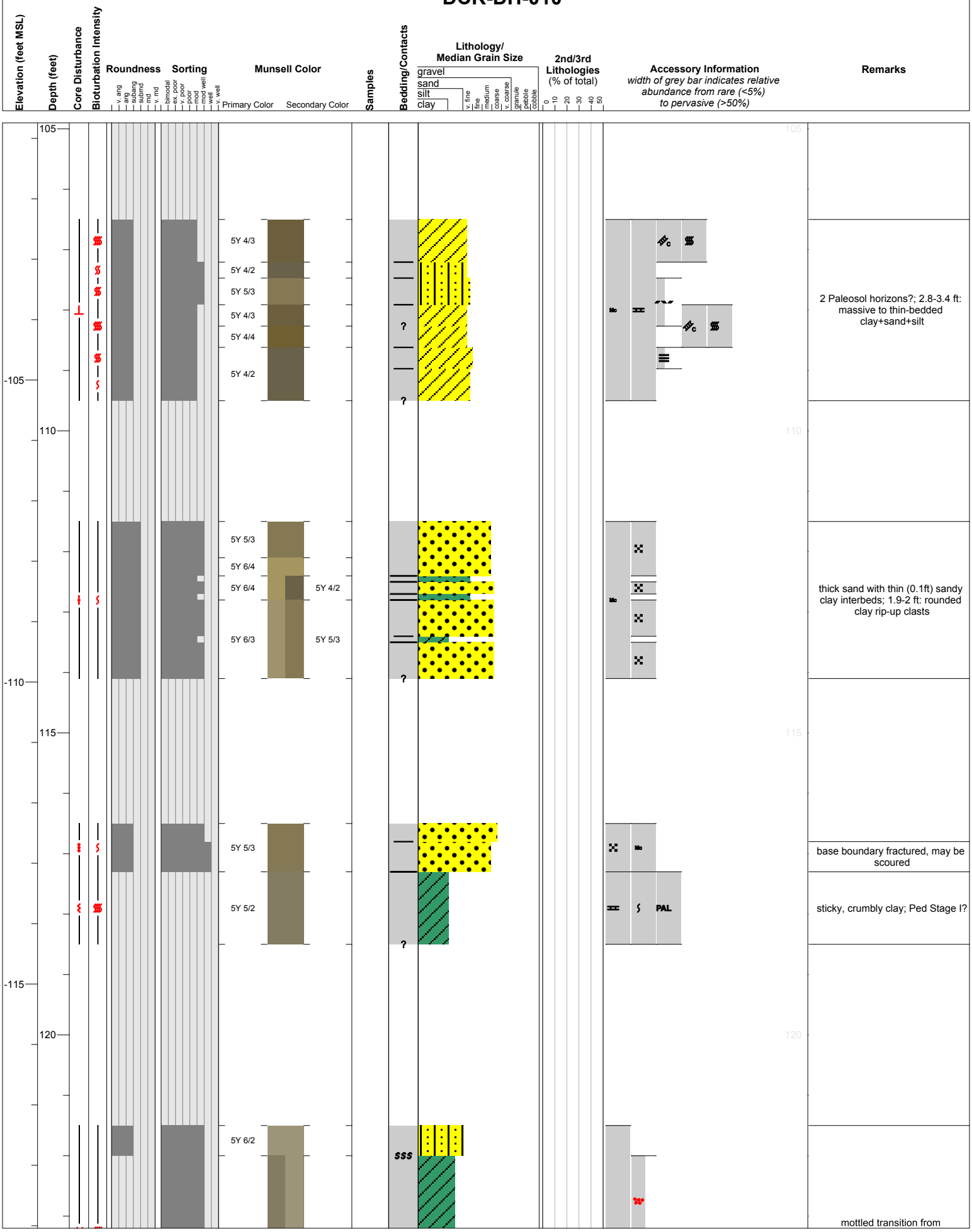
DCR-DH-010


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-65
70
-70
75
-75
80
-80
85
5Y 7/1
5Y 4/2
5Y 7/2
5Y 4/2
5Y 6/2
5Y 4/2
5Y 6/4
5Y 4/4
thinnly interbedded upper v.f.-lower fine sand and sandy clay
thinnly interbedded v.f.-fine sand and sandy clay
like cores above, with more clay
thinnly interbedded sand and sandy clay
faintly structured sand with clay
thinnly interbedded sand and sandy clay

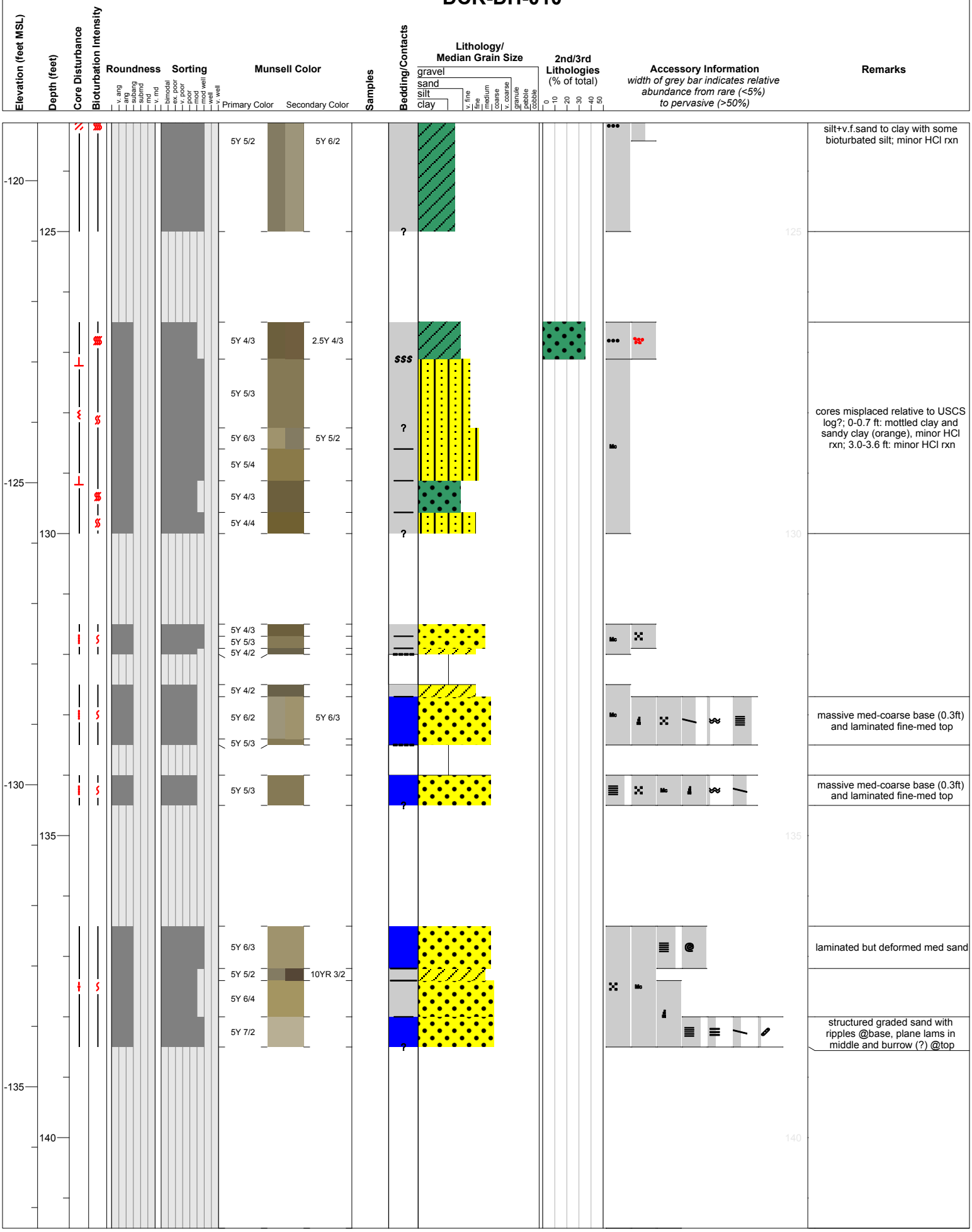
DCR-DH-010


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-85
90
-90
95
-95
100
-100
5Y 6/3
5Y 4/2
5Y 6/3
5Y 4/2
5Y 6/4
5Y 4/2
5Y 6/4
5Y 4/2
5Y 4/1
5Y 4/2
5Y 5/2
5Y 5/3
5Y 5/2
5Y 5/3
5Y 5/4
5Y 4/3
7.5YR 3/3
5Y 4/4
5Y 5/4
5Y 5/3
5Y 5/2
Mo
PAL
CRB
thinnly interbedded sand and sandy clay
thinnly interbedded sand and sandy clay
thin-bedded sandy clay
massive silty fine-v.f. sand; some clay
massive silt and v.f.-fine sand
thin clay, minimal sand
massive silty sand, slightly coarser than unit above
silty sand mottled with oxidation-colored carbonate zones; Ped Stage II Paleosol ?
Ped Stage II Paleosol ?

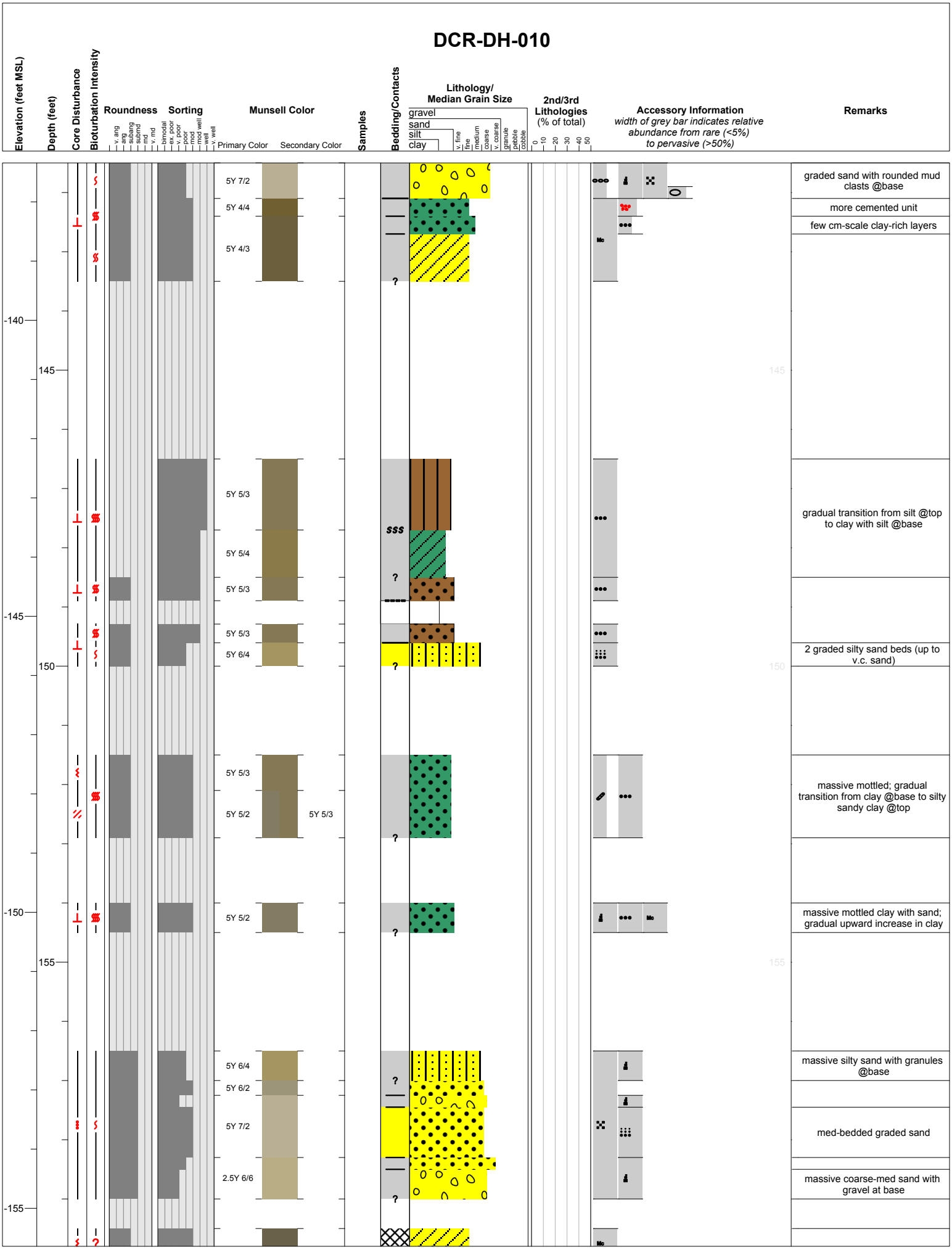
DCR-DH-010


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
105
110
115
120
-105
-110
-115
5Y 4/3
5Y 4/2
5Y 5/3
5Y 4/3
5Y 4/4
5Y 4/2
5Y 5/3
5Y 6/4
5Y 6/4
5Y 4/2
5Y 6/3
5Y 5/3
5Y 5/3
5Y 5/2
5Y 6/2
?
SSS
Mc
PAL
2 Paleosol horizons?; 2.8-3.4 ft: massive to thin-bedded clay+sand+silt
thick sand with thin (0.1ft) sandy clay interbeds; 1.9-2 ft: rounded clay rip-up clasts
base boundary fractured, may be scoured
sticky, crumbly clay; Ped Stage I?
mottled transition from

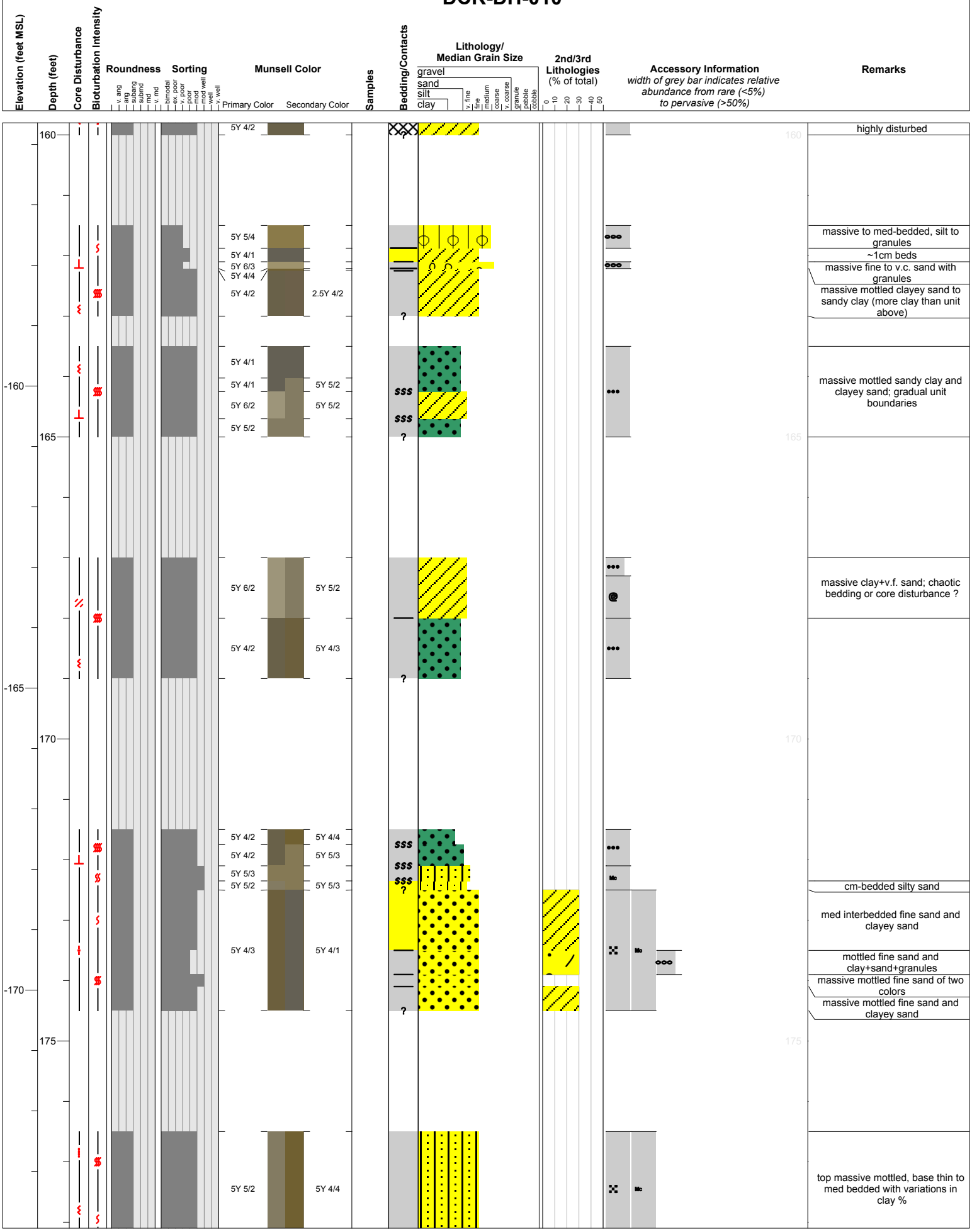
DCR-DH-010


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-120
125
-125
130
-130
135
-135
140
5Y 5/2
5Y 6/2
5Y 4/3
2.5Y 4/3
5Y 5/3
5Y 6/3
5Y 5/2
5Y 5/4
5Y 4/3
5Y 4/4
5Y 4/3
5Y 5/3
5Y 4/2
5Y 4/2
5Y 6/2
5Y 6/3
5Y 5/3
5Y 5/3
5Y 6/3
5Y 5/2
10YR 3/2
5Y 6/4
5Y 7/2
SSS
Mc
silt+v.f.sand to clay with some bioturbated silt; minor HCl rxn
cores misplaced relative to USCS log?; 0-0.7 ft: mottled clay and sandy clay (orange), minor HCl rxn; 3.0-3.6 ft: minor HCl rxn
massive med-coarse base (0.3ft) and laminated fine-med top
massive med-coarse base (0.3ft) and laminated fine-med top
laminated but deformed med sand
structured graded sand with ripples @base, plane lams in middle and burrow (?) @top

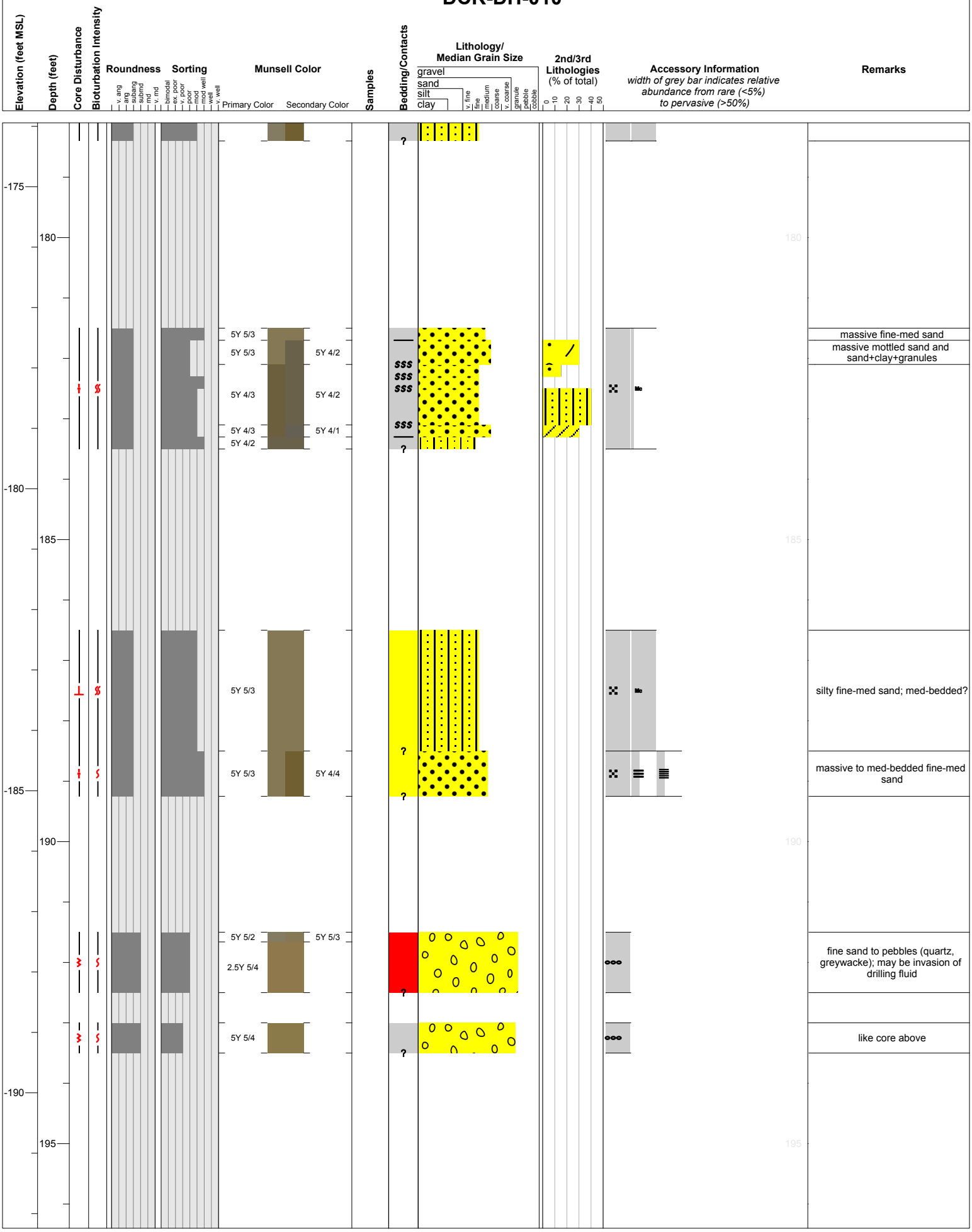
DCR-DH-010


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-140
145
-145
150
-150
155
-155
5Y 7/2
5Y 4/4
5Y 4/3
5Y 5/3
5Y 5/4
5Y 5/3
5Y 5/3
5Y 6/4
5Y 5/3
5Y 5/2
5Y 5/3
5Y 5/2
5Y 6/4
5Y 6/2
5Y 7/2
2.5Y 6/6
graded sand with rounded mud clasts @base
more cemented unit
few cm-scale clay-rich layers
gradual transition from silt @top to clay with silt @base
2 graded silty sand beds (up to v.c. sand)
massive mottled; gradual transition from clay @base to silty sandy clay @top
massive mottled clay with sand; gradual upward increase in clay
massive silty sand with granules @base
med-bedded graded sand
massive coarse-med sand with gravel at base

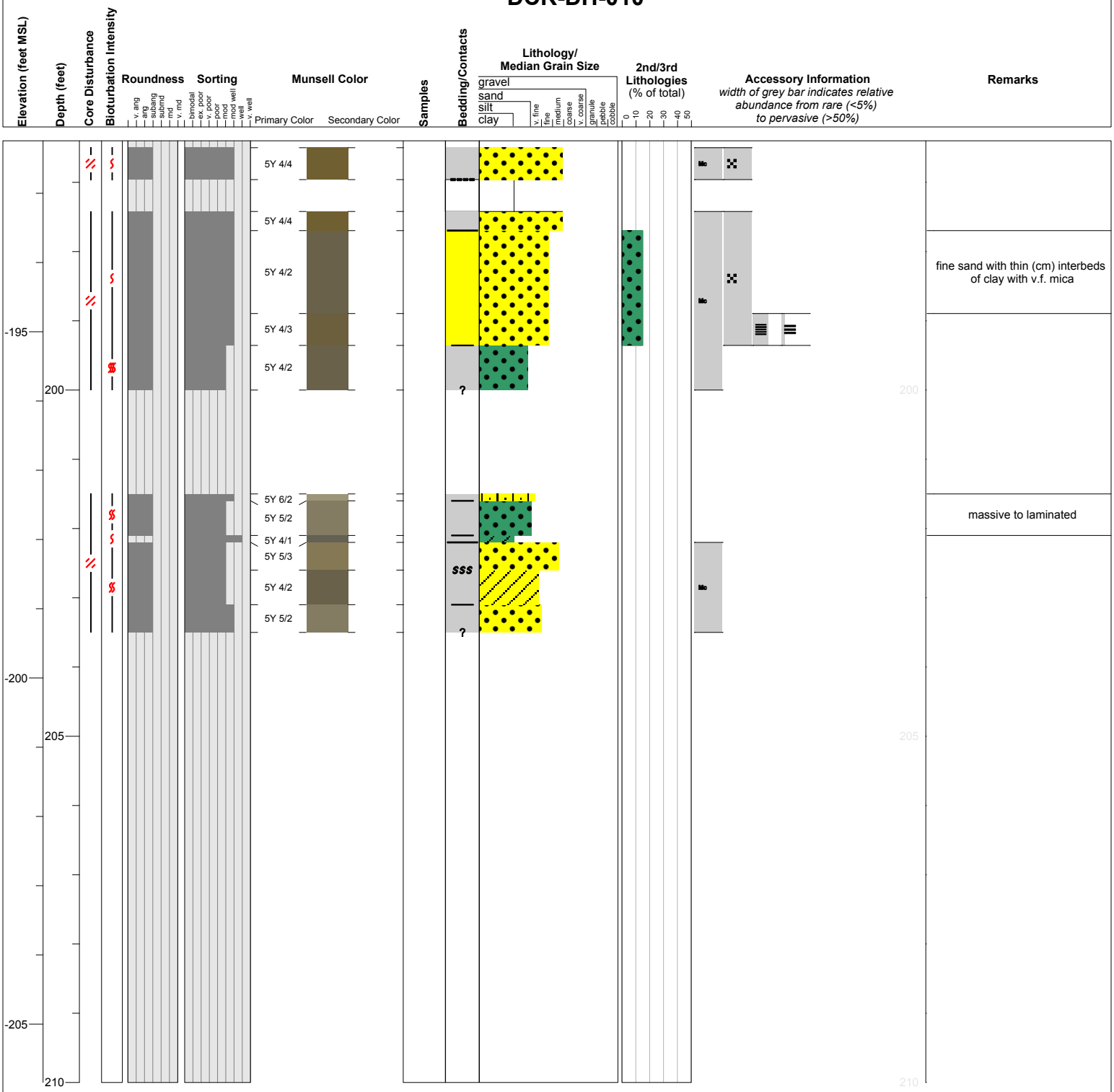
DCR-DH-010


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
160
-160
165
-165
170
-170
175
5Y 4/2
5Y 5/4
5Y 4/1
5Y 6/3
5Y 4/4
5Y 4/2
2.5Y 4/2
5Y 4/1
5Y 4/1
5Y 5/2
5Y 6/2
5Y 5/2
5Y 5/2
5Y 6/2
5Y 5/2
5Y 4/2
5Y 4/3
5Y 4/2
5Y 4/4
5Y 4/2
5Y 5/3
5Y 5/3
5Y 5/2
5Y 5/3
5Y 4/3
5Y 4/1
5Y 5/2
5Y 4/4
highly disturbed
massive to med-bedded, silt to granules
~1cm beds
massive fine to v.c. sand with granules
massive mottled clayey sand to sandy clay (more clay than unit above)
massive mottled sandy clay and clayey sand; gradual unit boundaries
massive clay+v.f. sand; chaotic bedding or core disturbance ?
cm-bedded silty sand
med interbedded fine sand and clayey sand
mottled fine sand and clay+sand+granules
massive mottled fine sand of two colors
massive mottled fine sand and clayey sand
top massive mottled, base thin to med bedded with variations in clay %

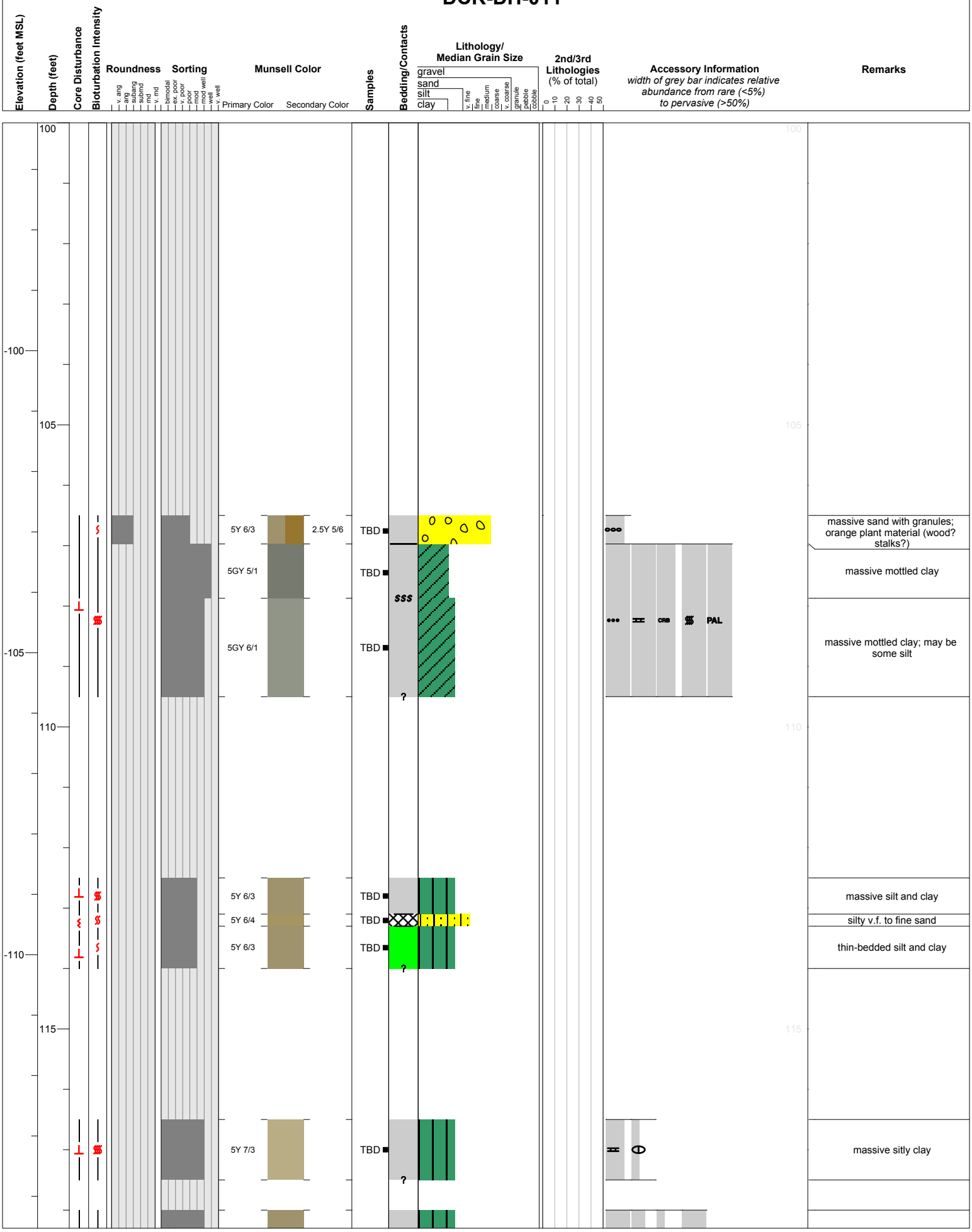
DCR-DH-010


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-175
180
-180
185
-185
190
-190
195
5Y 5/3
5Y 5/3
5Y 4/2
5Y 4/3
5Y 4/2
5Y 4/3
5Y 4/1
5Y 4/2
5Y 5/3
5Y 5/3
5Y 4/4
5Y 5/2
5Y 5/3
2.5Y 5/4
5Y 5/4
massive fine-med sand
massive mottled sand and
sand+clay+granules
silty fine-med sand; med-bedded?
massive to med-bedded fine-med
sand
fine sand to pebbles (quartz,
greywacke); may be invasion of
drilling fluid
like core above

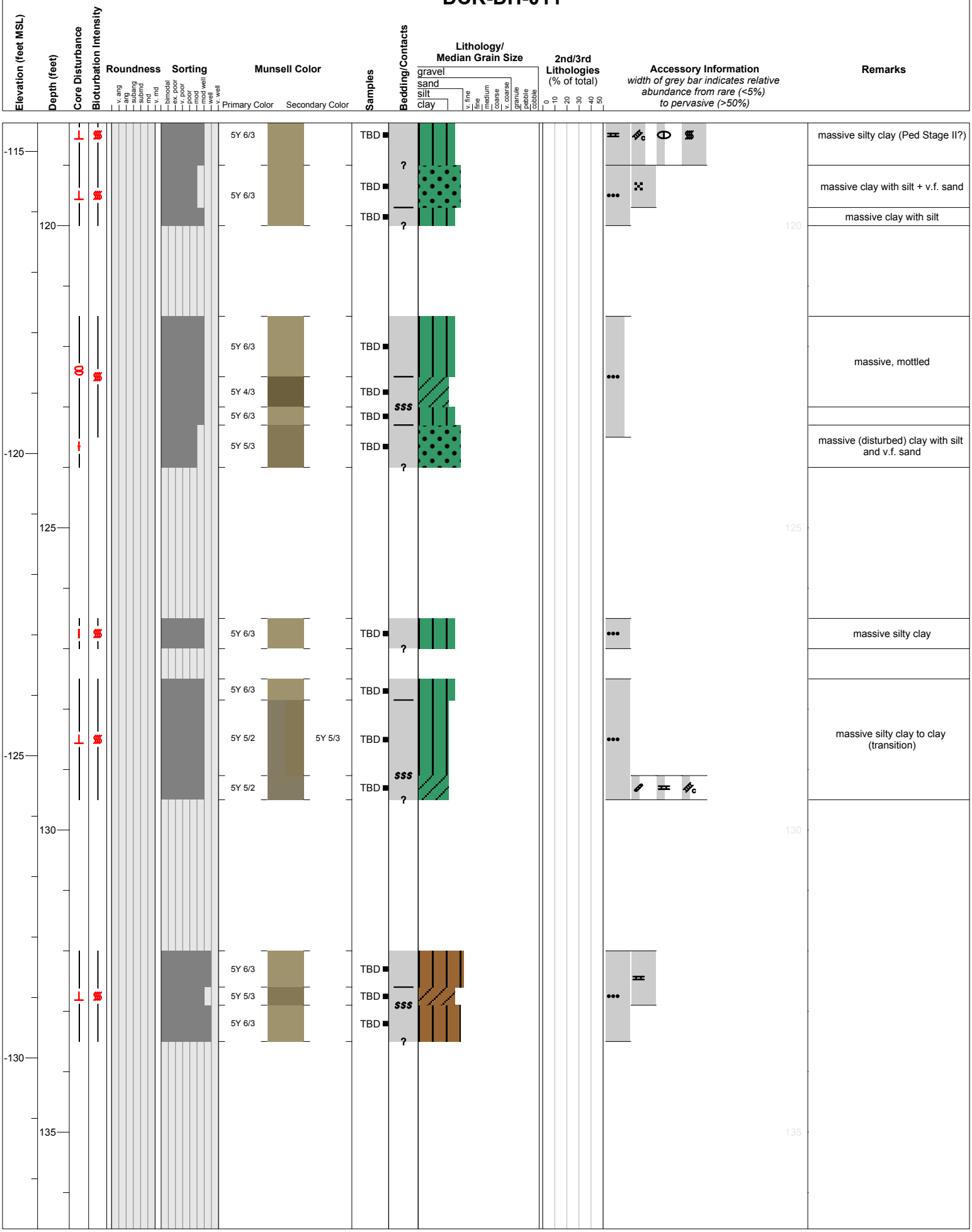
DCR-DH-010


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-195
-200
-205
200
205
210
5Y 4/4
5Y 4/4
5Y 4/2
5Y 4/3
5Y 4/2
5Y 6/2
5Y 5/2
5Y 4/1
5Y 5/3
5Y 4/2
5Y 5/2
?
sss
?
Mc
Mc
Mc
fine sand with thin (cm) interbeds
of clay with v.f. mica
massive to laminated

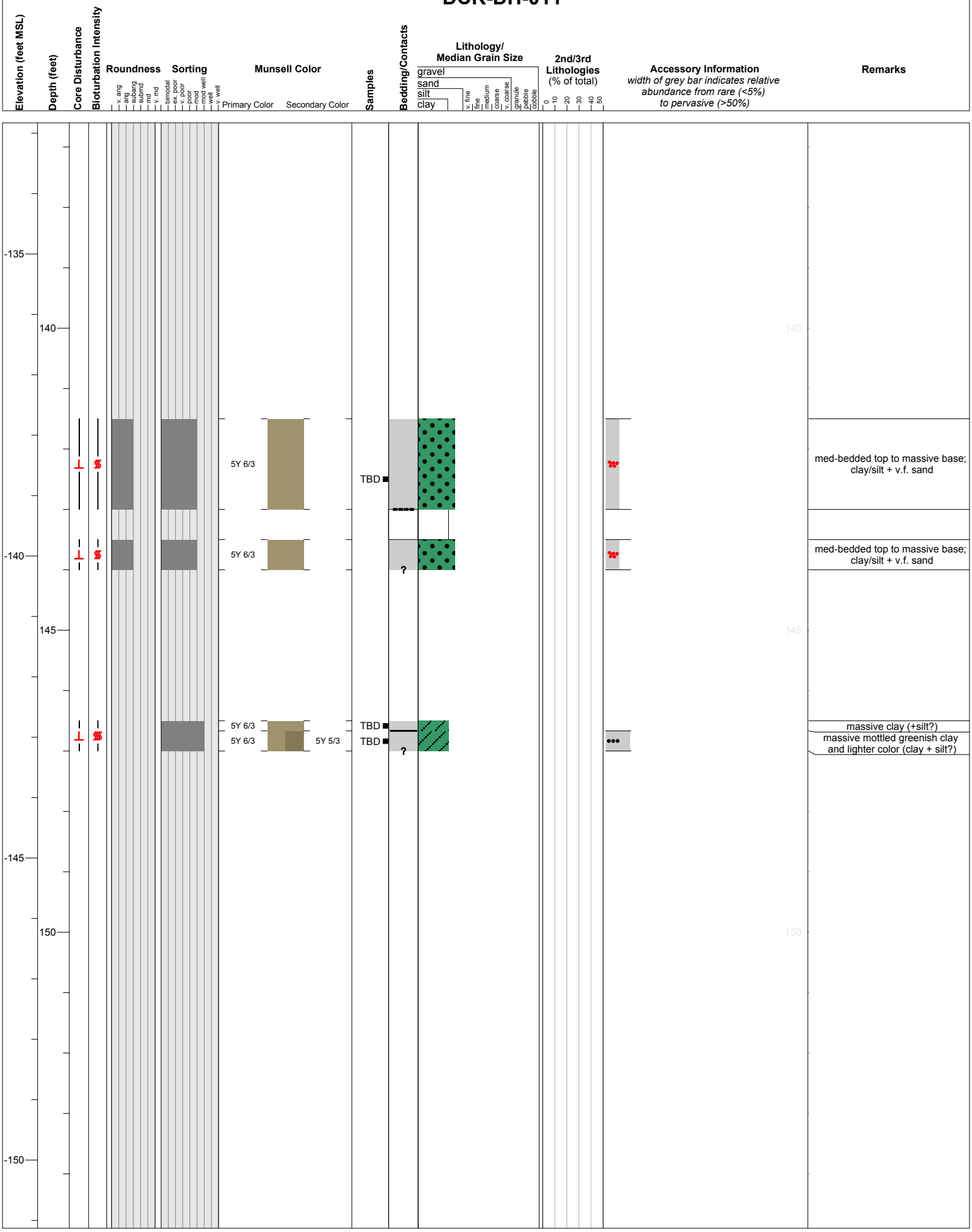
DCR-DH-011


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
100
105
110
115
-100
-105
-110
5Y 6/3
2.5Y 5/6
5GY 5/1
5GY 6/1
5Y 6/3
5Y 6/4
5Y 6/3
5Y 7/3
TBD
SSS
CRB
PAL
massive sand with granules; orange plant material (wood? stalks?)
massive mottled clay
massive mottled clay; may be some silt
massive silt and clay
silty v.f. to fine sand
thin-bedded silt and clay
massive sitly clay

DCR-DH-011

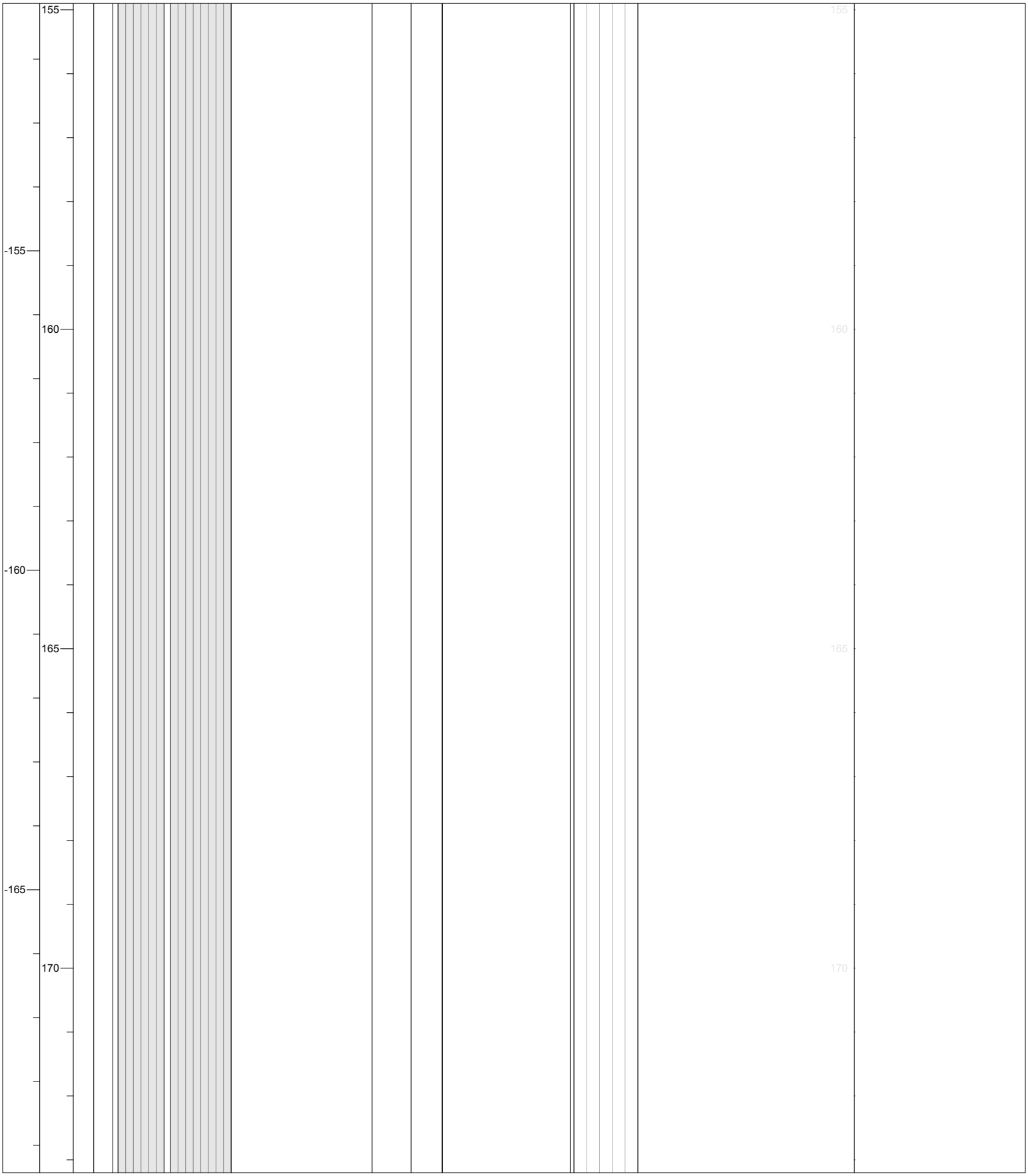

Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-115
120
-120
125
-125
130
-130
135
5Y 6/3
5Y 4/3
5Y 5/3
5Y 5/2
TBD
massive silty clay (Ped Stage II?)
massive clay with silt + v.f. sand
massive clay with silt
massive, mottled
massive (disturbed) clay with silt
and v.f. sand
massive silty clay
massive silty clay to clay
(transition)

DCR-DH-011

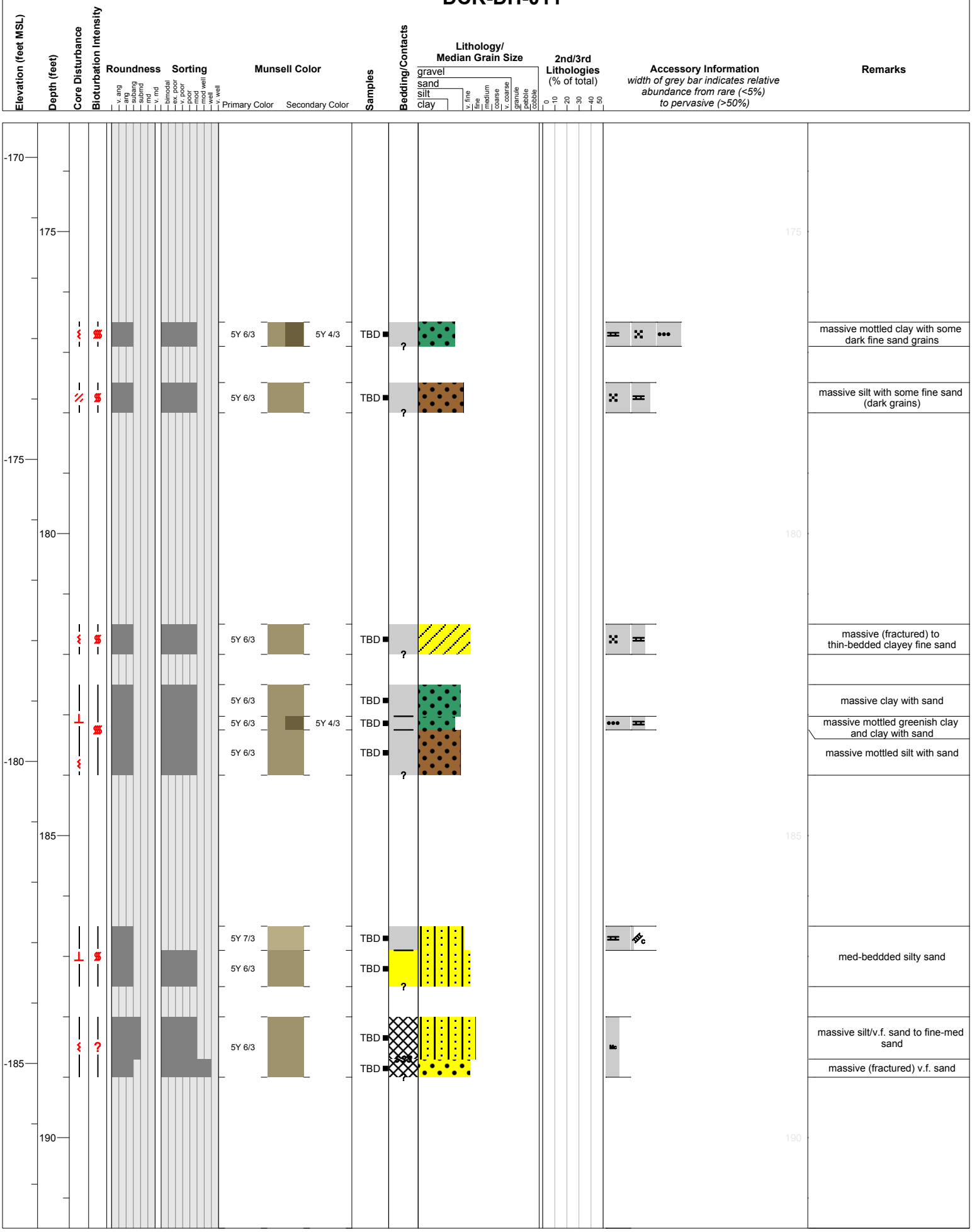

Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-135
140
-140
145
-145
150
-150
5Y 6/3
TBD
5Y 6/3
5Y 6/3
5Y 6/3
5Y 5/3
TBD
TBD
?
?
med-bedded top to massive base;
clay/silt + v.f. sand
med-bedded top to massive base;
clay/silt + v.f. sand
massive clay (+silt?)
massive mottled greenish clay
and lighter color (clay + silt?)

DCR-DH-011

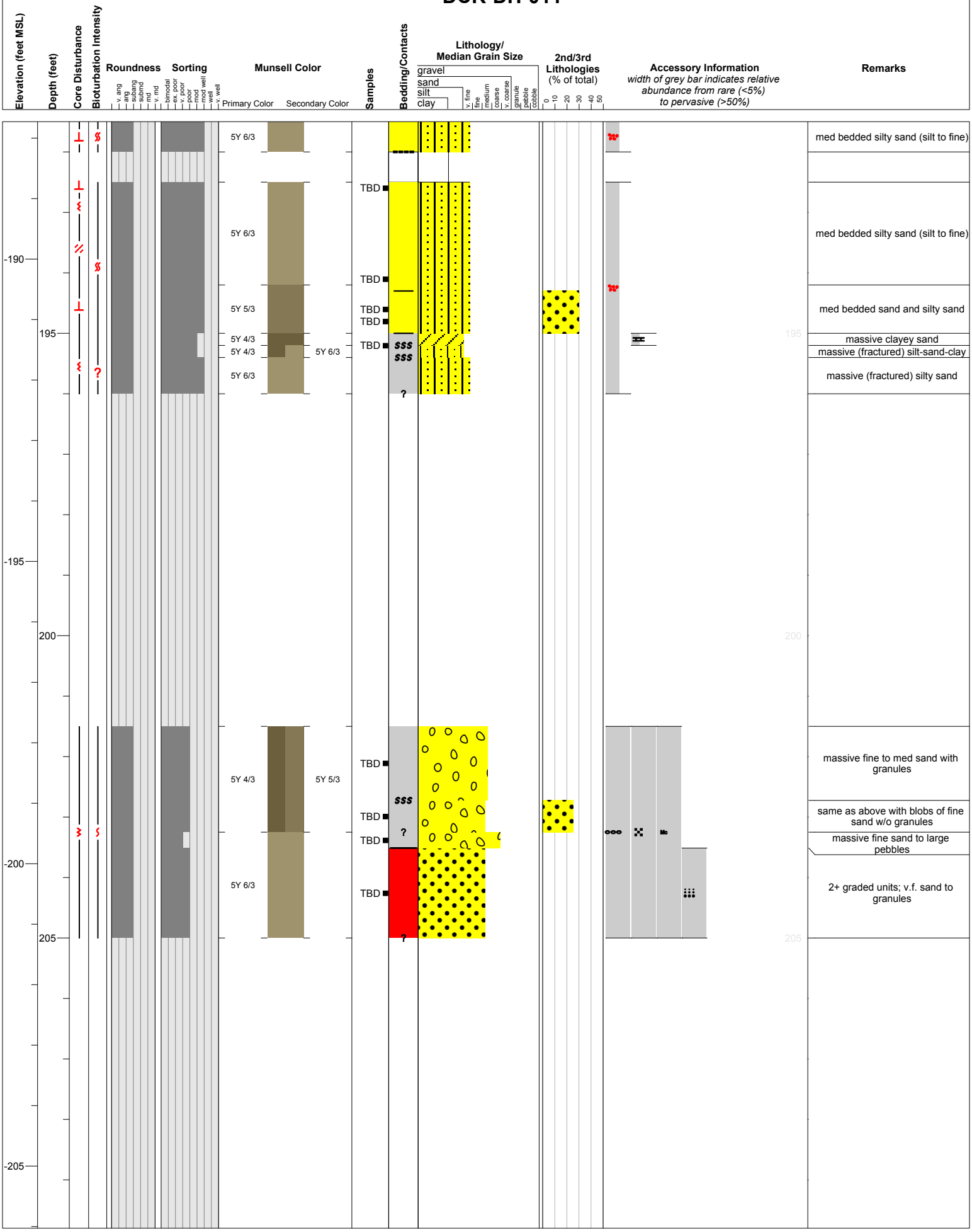
Elevation (feet MSL)	Depth (feet)	Core Disturbance	Bioturbation Intensity	Roundness	Sorting	Munsell Color	Samples	Bedding/Contacts	Lithology/ Median Grain Size	2nd/3rd Lithologies (% of total)	Accessory Information *width of grey bar indicates relative abundance from rare (<5%) to pervasive (>50%)*	Remarks
				v. ang, ang, subang, subrnd, rnd, v. rnd	bimodal, v. poor, v. poor, poor, mod, mod well, well, v. well	Primary Color, Secondary Color			gravel, sand, silt, clay; v. fine, fine, medium, coarse, v. coarse, granule, pebble, cobble	0, 10, 20, 30, 40, 50		



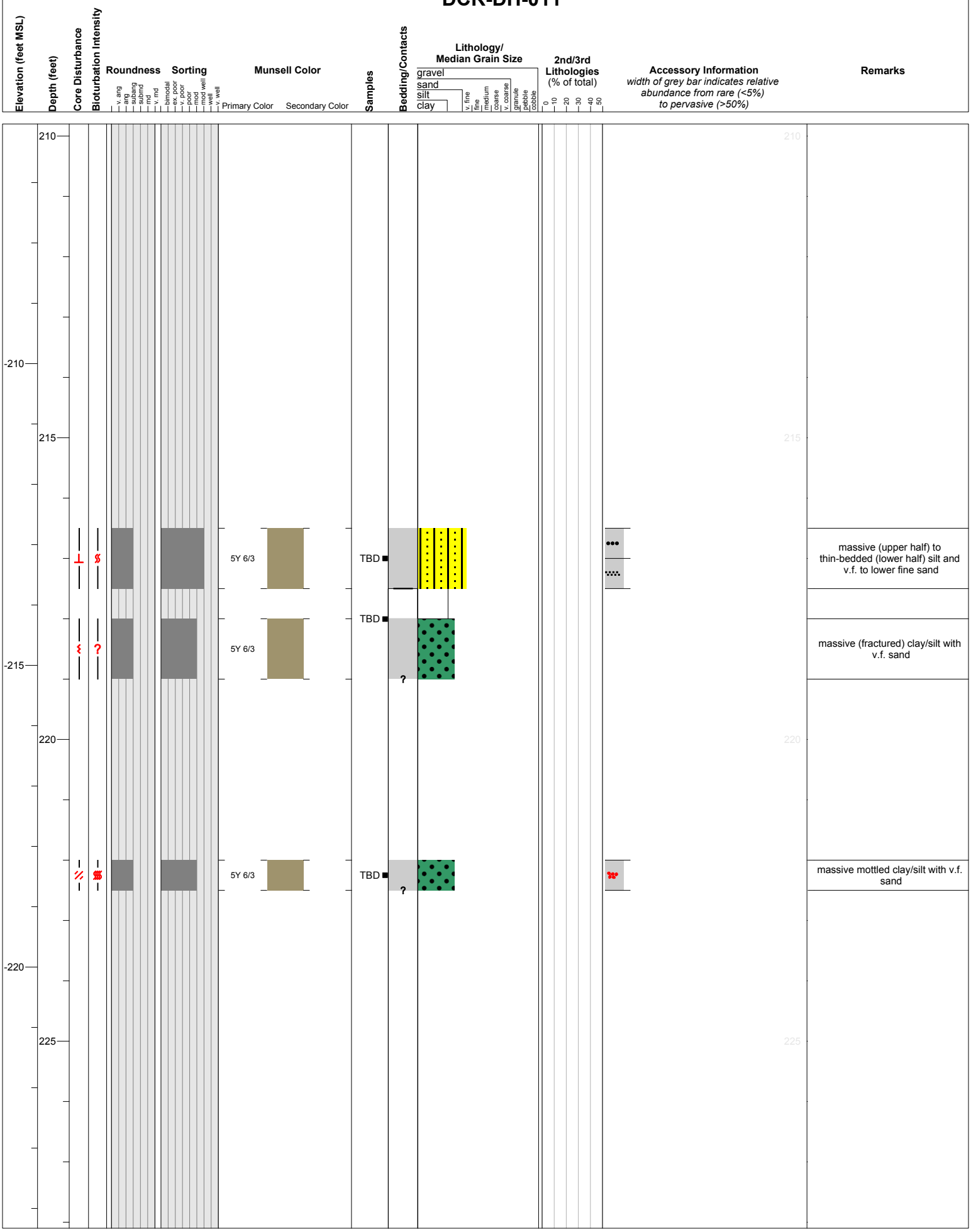
DCR-DH-011


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-170
175
-175
180
-180
185
-185
190
5Y 6/3
5Y 4/3
5Y 7/3
TBD
massive mottled clay with some dark fine sand grains
massive silt with some fine sand (dark grains)
massive (fractured) to thin-bedded clayey fine sand
massive clay with sand
massive mottled greenish clay and clay with sand
massive mottled silt with sand
med-beddded silty sand
massive silt/v.f. sand to fine-med sand
massive (fractured) v.f. sand

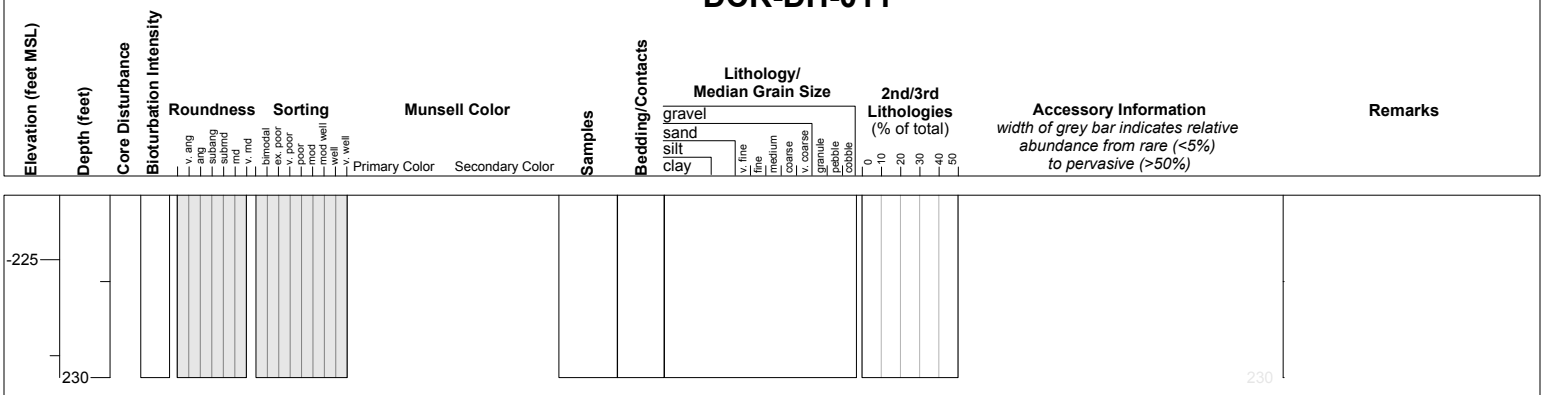
DCR-DH-011


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-190
-195
-200
-205
195
200
205
5Y 6/3
5Y 5/3
5Y 4/3
TBD
SSS
?
Mo
med bedded silty sand (silt to fine)
med bedded silty sand (silt to fine)
med bedded sand and silty sand
massive clayey sand
massive (fractured) silt-sand-clay
massive (fractured) silty sand
massive fine to med sand with granules
same as above with blobs of fine sand w/o granules
massive fine sand to large pebbles
2+ graded units; v.f. sand to granules

DCR-DH-011


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
210
215
220
225
-210
-215
-220
5Y 6/3
TBD
massive (upper half) to
thin-bedded (lower half) silt and
v.f. to lower fine sand
massive (fractured) clay/silt with
v.f. sand
massive mottled clay/silt with v.f.
sand

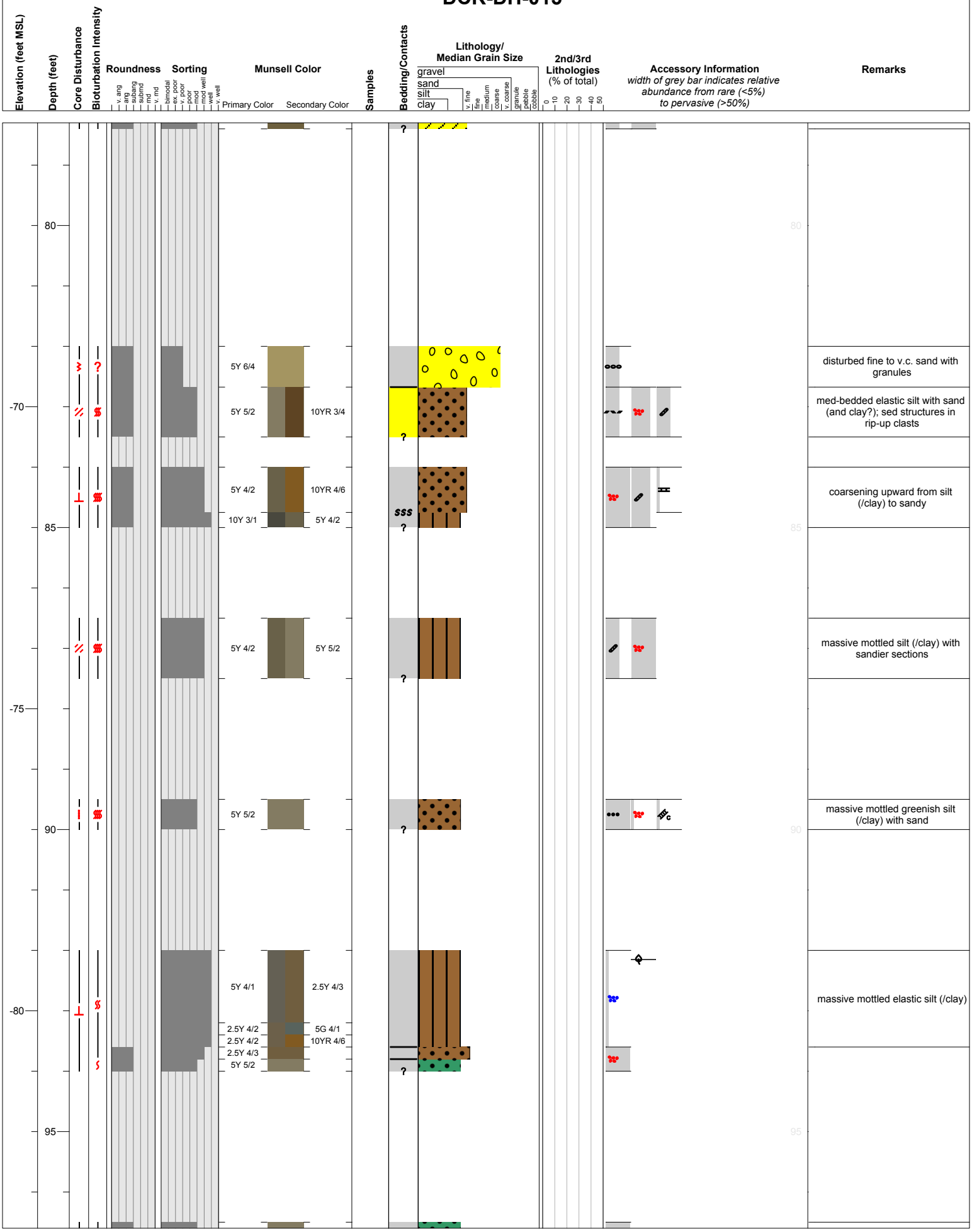
DCR-DH-011


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-225
230
230

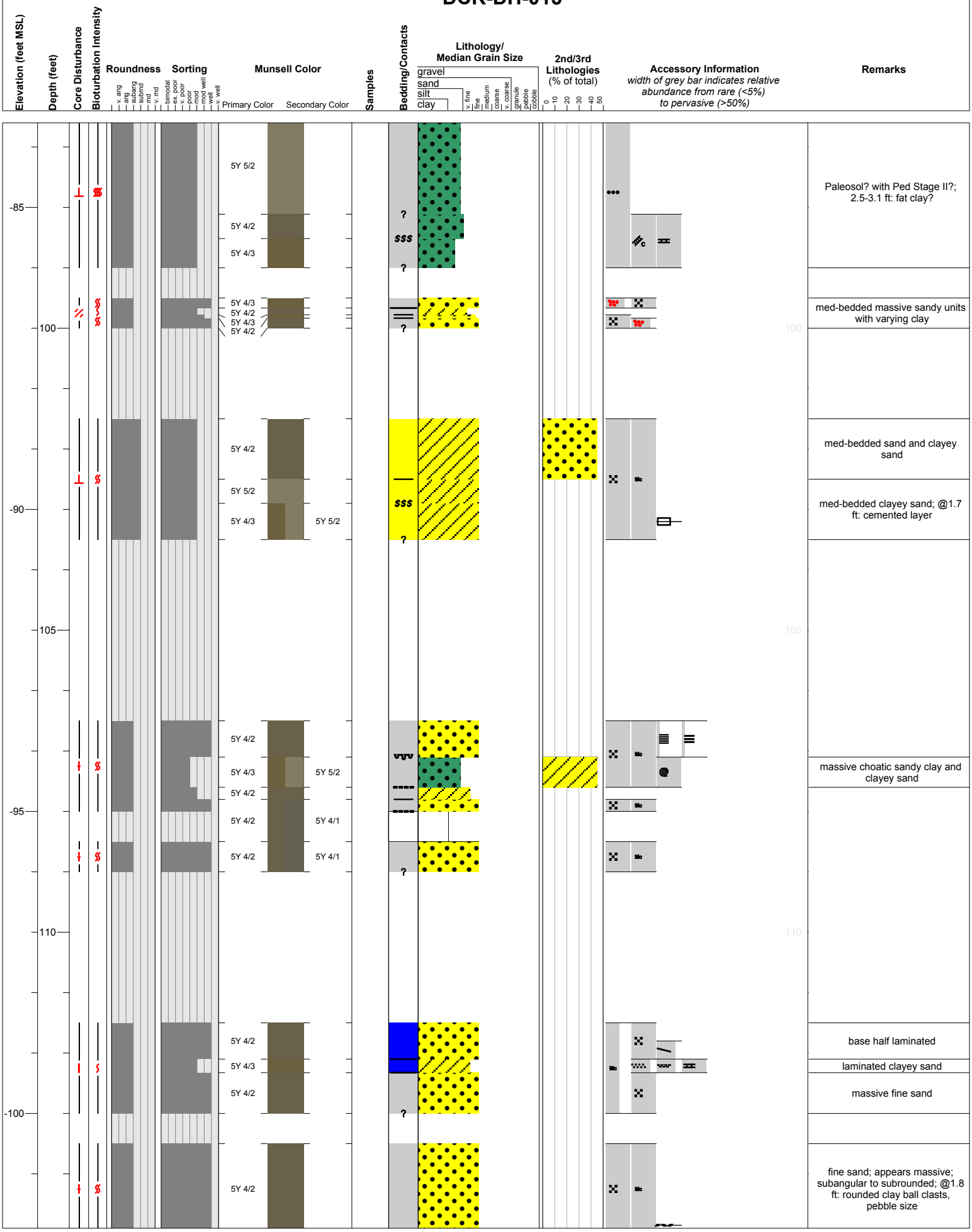
DCR-DH-015

Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
60
65
70
75
-50
-55
-60
-65
5Y 6/3
5Y 5/4
5Y 8/2
5Y 6/4
5Y 6/4
5Y 5/2
5Y 5/2
5Y 5/3
5Y 5/3
5Y 5/2
5Y 5/3
5Y 4/3
5Y 4/3
Mo
med to thick-bedded sand
med to thick-bedded sand
med-bedded clay-rich sand and sandy clay
massive (fractured) v.f. sand and clay
laminated upper v.f. to lower fine sand; lower 0.3ft massive
like core above; partially laminated

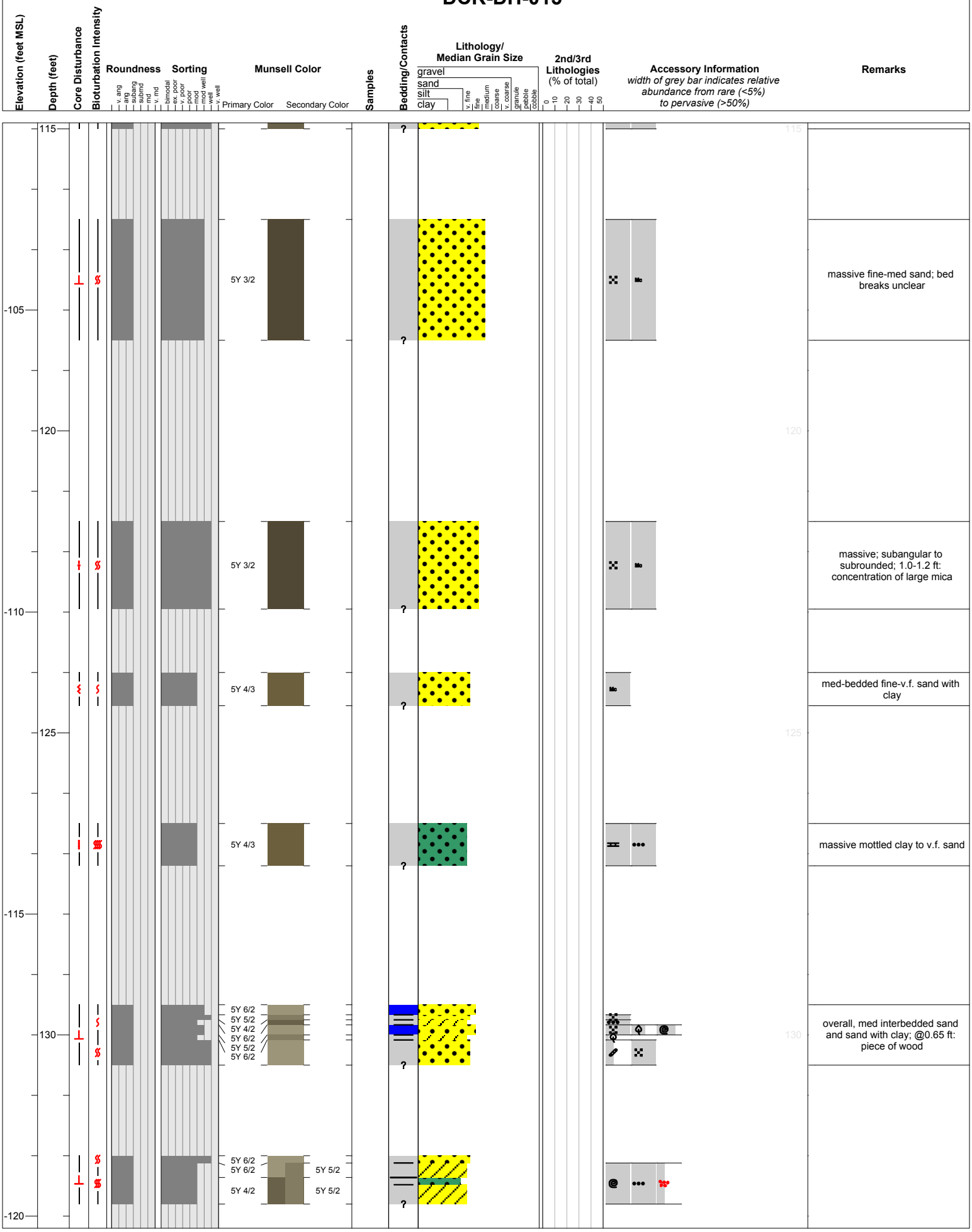
DCR-DH-015


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
80
-70
85
-75
90
-80
95
5Y 6/4
5Y 5/2
10YR 3/4
5Y 4/2
10YR 4/6
10Y 3/1
5Y 4/2
5Y 4/2
5Y 5/2
5Y 5/2
5Y 4/1
2.5Y 4/3
2.5Y 4/2
5G 4/1
2.5Y 4/2
10YR 4/6
2.5Y 4/3
5Y 5/2
disturbed fine to v.c. sand with granules
med-bedded elastic silt with sand (and clay?); sed structures in rip-up clasts
coarsening upward from silt (/clay) to sandy
massive mottled silt (/clay) with sandier sections
massive mottled greenish silt (/clay) with sand
massive mottled elastic silt (/clay)

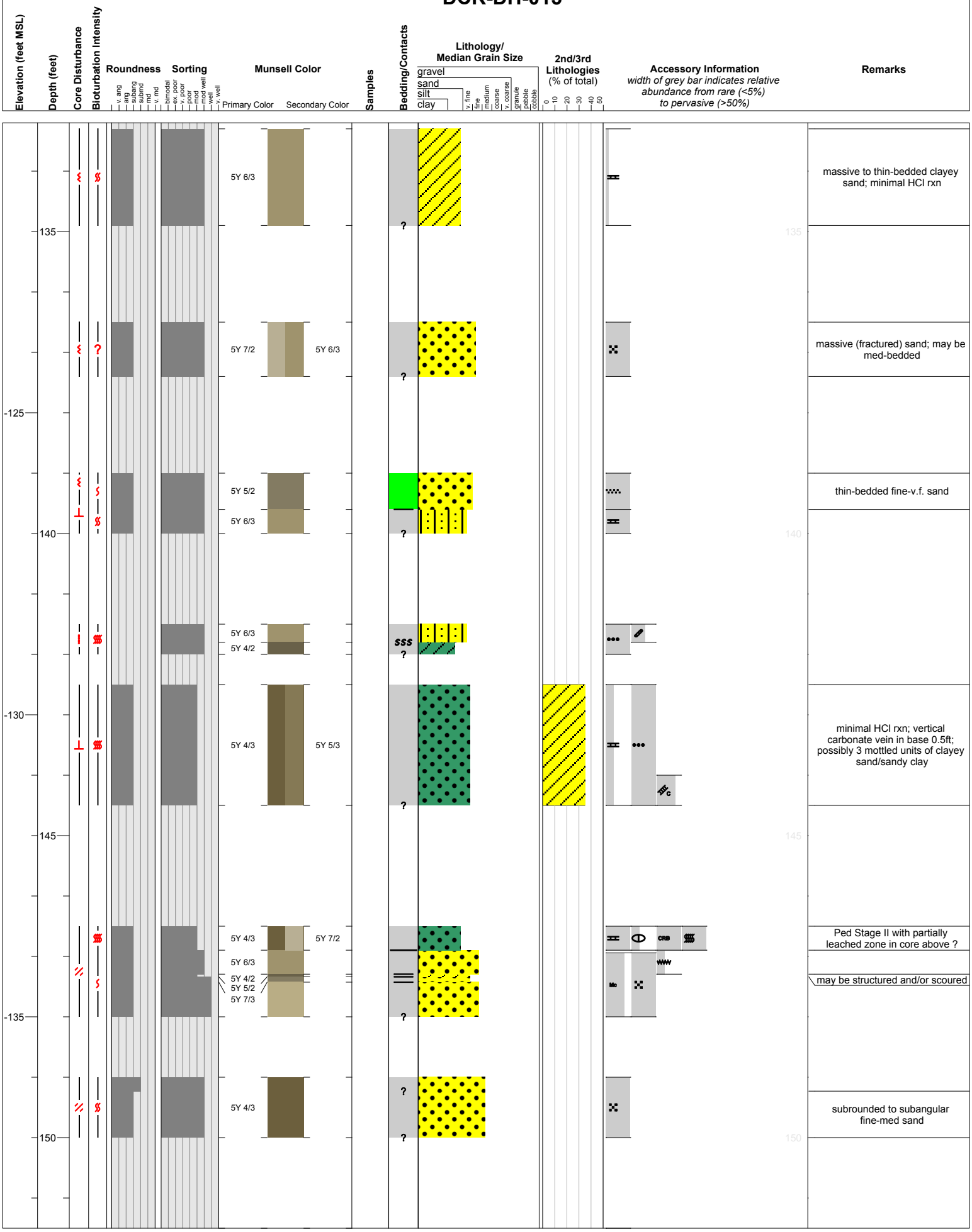
DCR-DH-015


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative abundance from rare (<5%) to pervasive (>50%)
Remarks
-85
100
-90
105
-95
110
-100
5Y 5/2
5Y 4/2
5Y 4/3
5Y 4/1
Paleosol? with Ped Stage II?; 2.5-3.1 ft: fat clay?
med-bedded massive sandy units with varying clay
med-bedded sand and clayey sand
med-bedded clayey sand; @1.7 ft: cemented layer
massive choatic sandy clay and clayey sand
base half laminated
laminated clayey sand
massive fine sand
fine sand; appears massive; subangular to subrounded; @1.8 ft: rounded clay ball clasts, pebble size

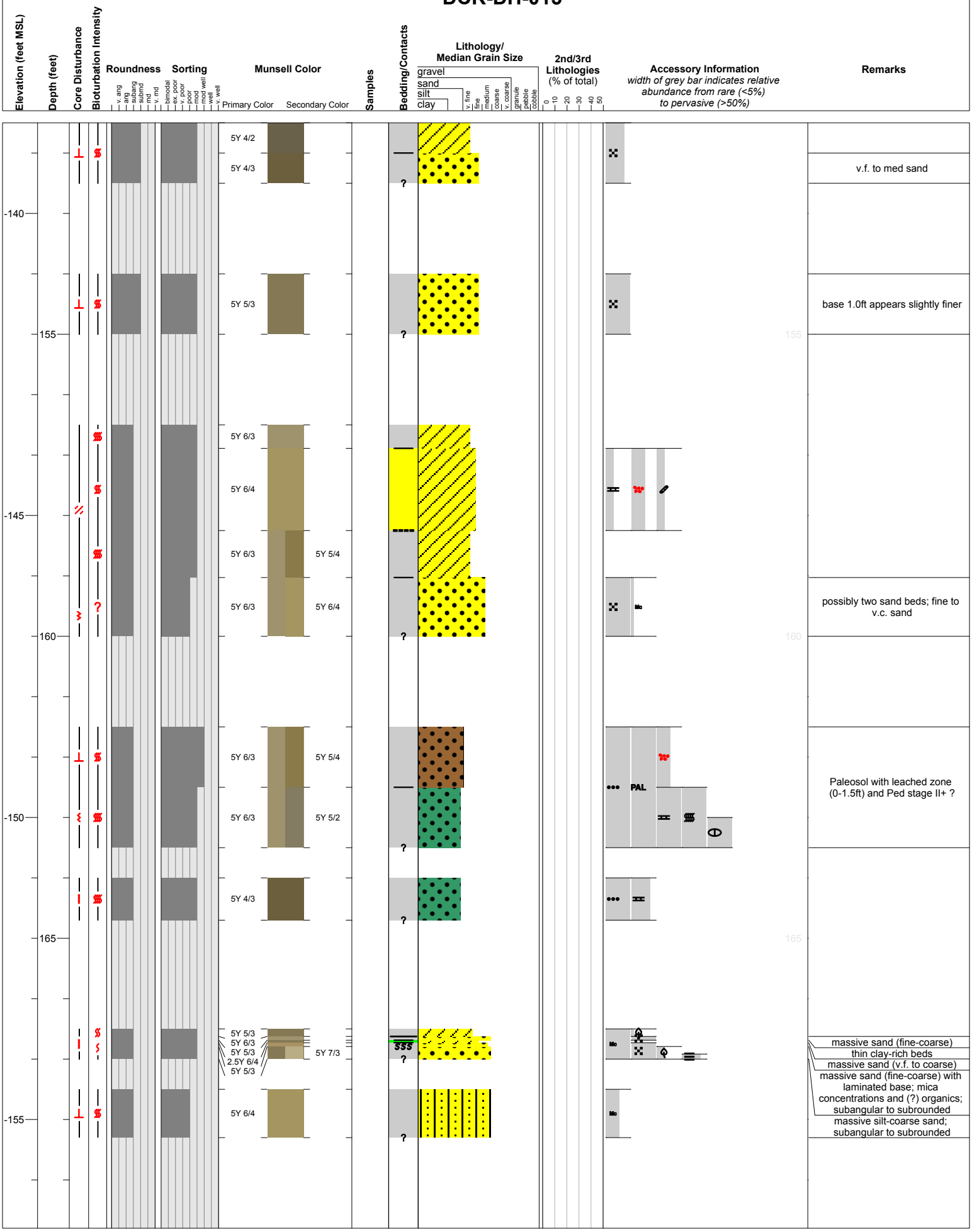
DCR-DH-015


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
115
-105
120
-110
125
-115
130
-120
5Y 3/2
5Y 3/2
5Y 4/3
5Y 4/3
5Y 6/2
5Y 5/2
5Y 4/2
5Y 6/2
5Y 5/2
5Y 6/2
5Y 6/2
5Y 4/2
5Y 5/2
5Y 5/2
Mo
Mo
Mo
massive fine-med sand; bed breaks unclear
massive; subangular to subrounded; 1.0-1.2 ft: concentration of large mica
med-bedded fine-v.f. sand with clay
massive mottled clay to v.f. sand
overall, med interbedded sand and sand with clay; @0.65 ft: piece of wood

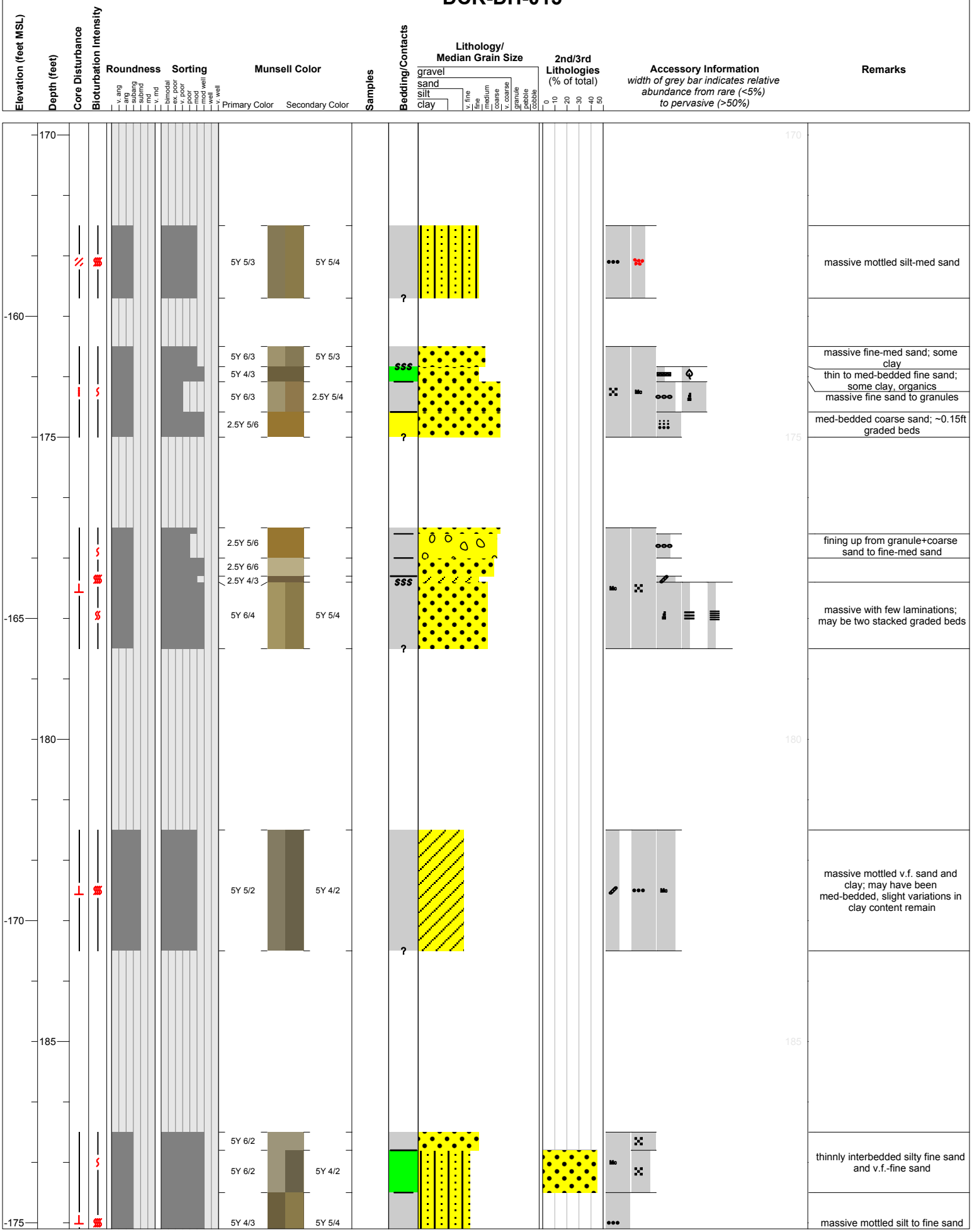
DCR-DH-015


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
135
-125
140
-130
145
-135
150
5Y 6/3
5Y 7/2
5Y 6/3
5Y 5/2
5Y 6/3
5Y 6/3
5Y 4/2
5Y 4/3
5Y 5/3
5Y 4/3
5Y 7/2
5Y 6/3
5Y 4/2
5Y 5/2
5Y 7/3
5Y 4/3
massive to thin-bedded clayey sand; minimal HCl rxn
massive (fractured) sand; may be med-bedded
thin-bedded fine-v.f. sand
minimal HCl rxn; vertical carbonate vein in base 0.5ft; possibly 3 mottled units of clayey sand/sandy clay
Ped Stage II with partially leached zone in core above ?
may be structured and/or scoured
subrounded to subangular fine-med sand

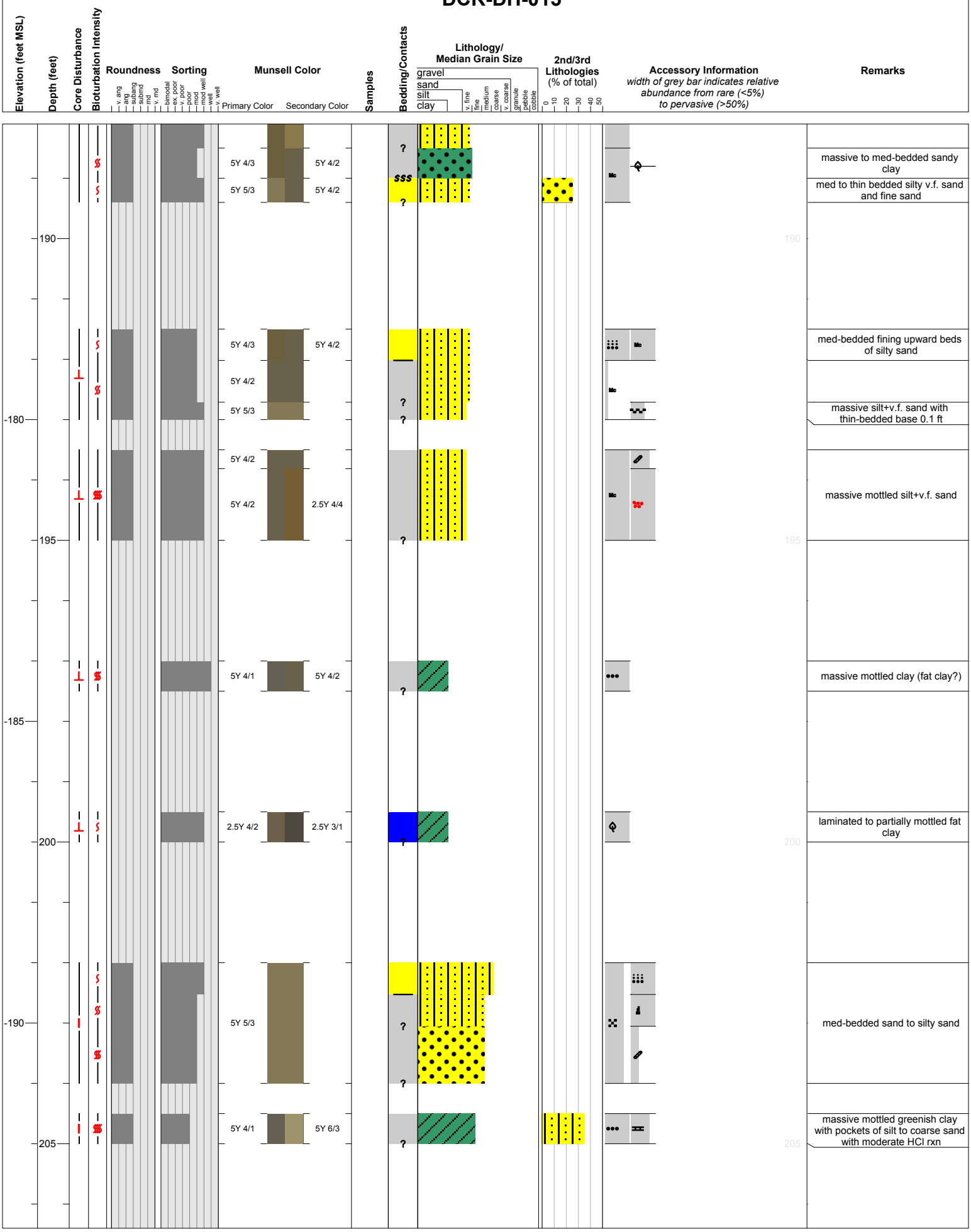
DCR-DH-015


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-140
155
-145
160
-150
165
-155
5Y 4/2
5Y 4/3
5Y 5/3
5Y 6/3
5Y 6/4
5Y 5/4
5Y 5/2
5Y 7/3
2.5Y 6/4
PAL
Mc
v.f. to med sand
base 1.0ft appears slightly finer
possibly two sand beds; fine to v.c. sand
Paleosol with leached zone (0-1.5ft) and Ped stage II+ ?
massive sand (fine-coarse)
thin clay-rich beds
massive sand (v.f. to coarse)
massive sand (fine-coarse) with laminated base; mica concentrations and (?) organics; subangular to subrounded
massive silt-coarse sand; subangular to subrounded

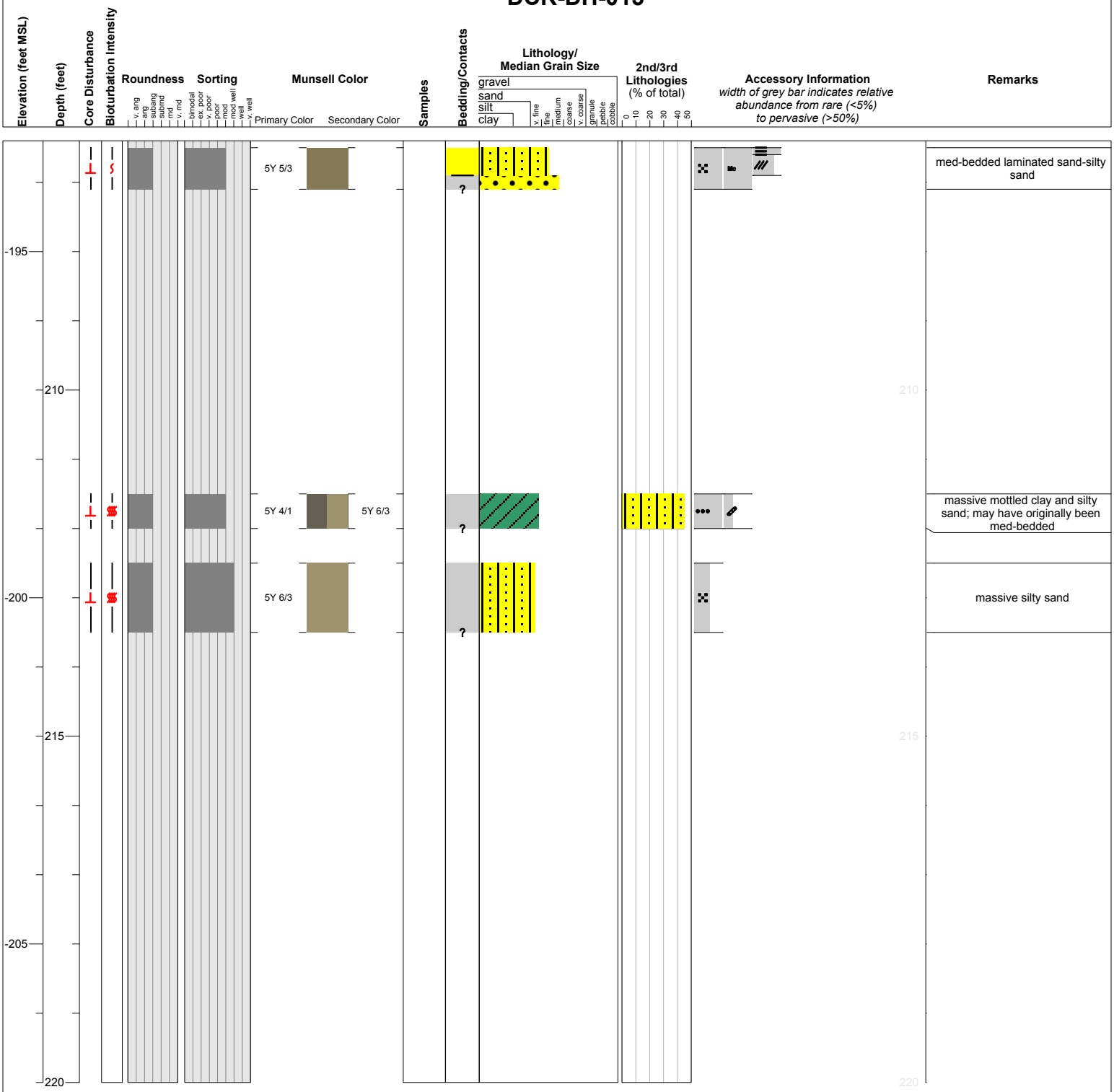
DCR-DH-015


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative abundance from rare (<5%) to pervasive (>50%)
Remarks
170
-160
175
-165
180
-170
185
-175
5Y 5/3
5Y 5/4
massive mottled silt-med sand
5Y 6/3
5Y 5/3
5Y 4/3
5Y 6/3
2.5Y 5/4
2.5Y 5/6
massive fine-med sand; some clay
thin to med-bedded fine sand; some clay, organics
massive fine sand to granules
med-bedded coarse sand; ~0.15ft graded beds
2.5Y 5/6
2.5Y 6/6
2.5Y 4/3
5Y 6/4
5Y 5/4
fining up from granule+coarse sand to fine-med sand
massive with few laminations; may be two stacked graded beds
5Y 5/2
5Y 4/2
massive mottled v.f. sand and clay; may have been med-bedded, slight variations in clay content remain
5Y 6/2
5Y 6/2
5Y 4/2
5Y 4/3
5Y 5/4
thinnly interbedded silty fine sand and v.f.-fine sand
massive mottled silt to fine sand

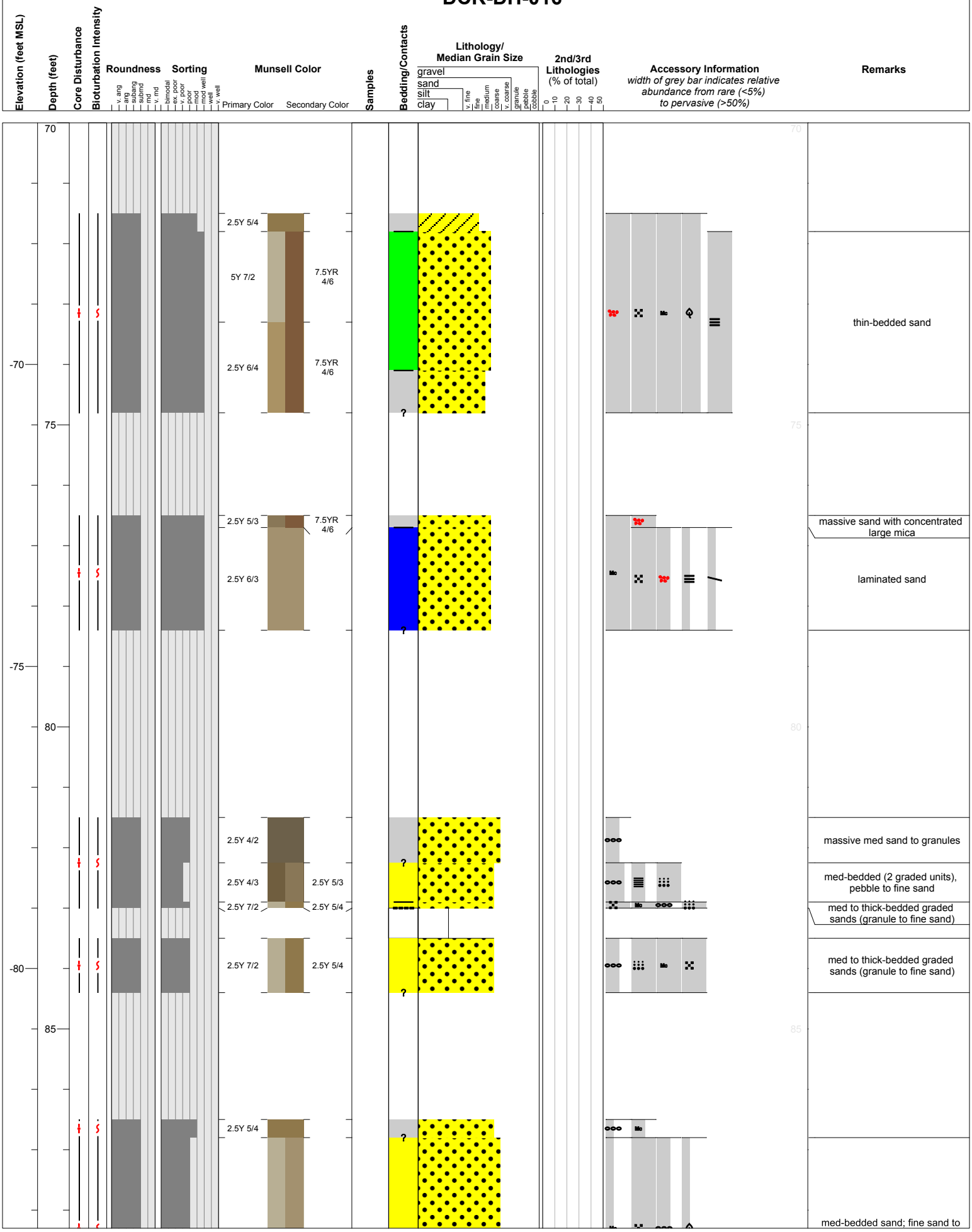
DCR-DH-015


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
190
-180
195
-185
200
-190
205
5Y 4/3
5Y 4/2
5Y 5/3
5Y 4/2
5Y 4/3
5Y 4/2
5Y 4/2
5Y 5/3
5Y 4/2
5Y 4/2
2.5Y 4/4
5Y 4/1
5Y 4/2
2.5Y 4/2
2.5Y 3/1
5Y 5/3
5Y 4/1
5Y 6/3
massive to med-bedded sandy clay
med to thin bedded silty v.f. sand and fine sand
med-bedded fining upward beds of silty sand
massive silt+v.f. sand with thin-bedded base 0.1 ft
massive mottled silt+v.f. sand
massive mottled clay (fat clay?)
laminated to partially mottled fat clay
med-bedded sand to silty sand
massive mottled greenish clay with pockets of silt to coarse sand with moderate HCl rxn

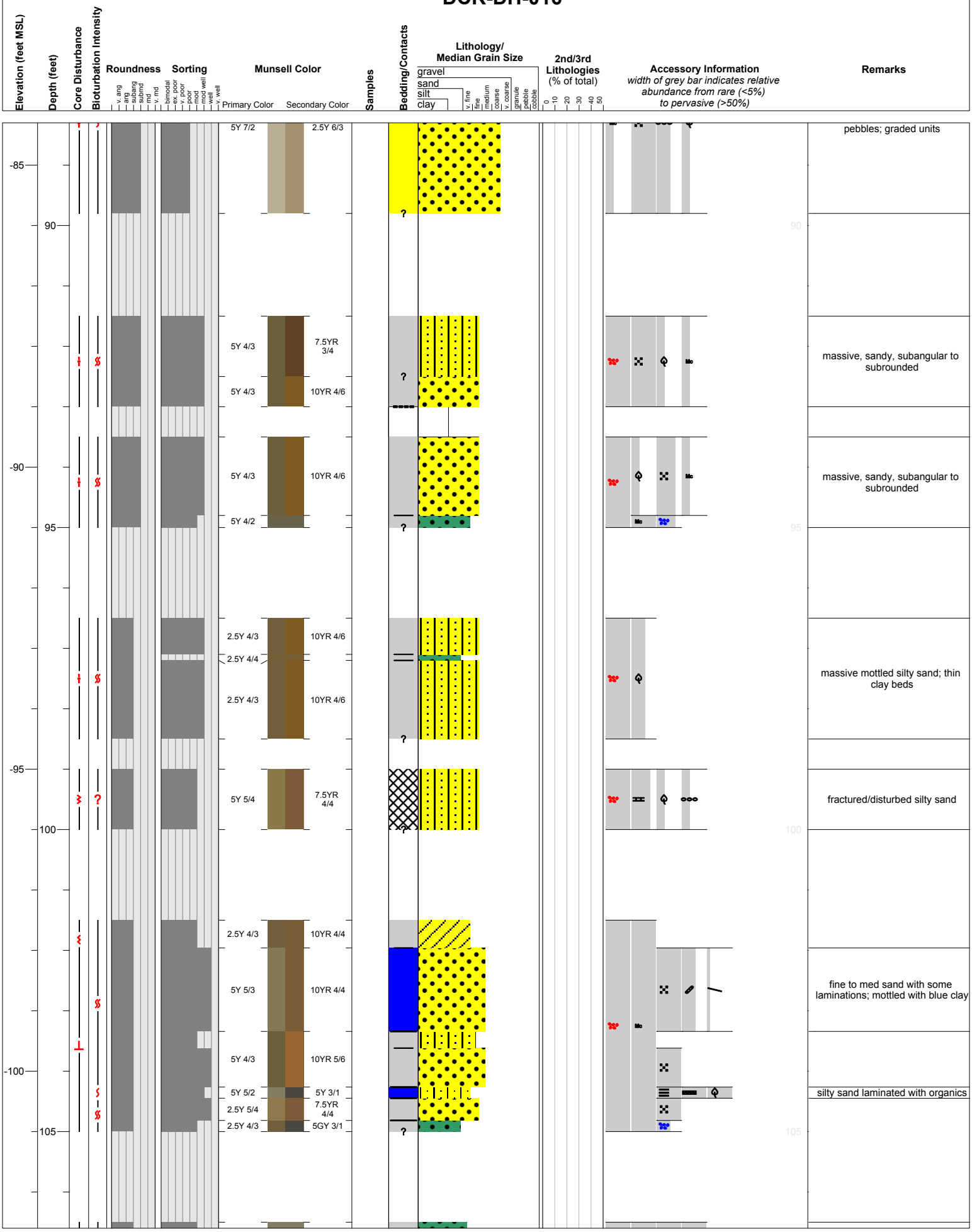
DCR-DH-015


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-195
210
-200
215
-205
220
5Y 5/3
5Y 4/1
5Y 6/3
5Y 6/3
?
?
?
med-bedded laminated sand-silty sand
massive mottled clay and silty sand; may have originally been med-bedded
massive silty sand

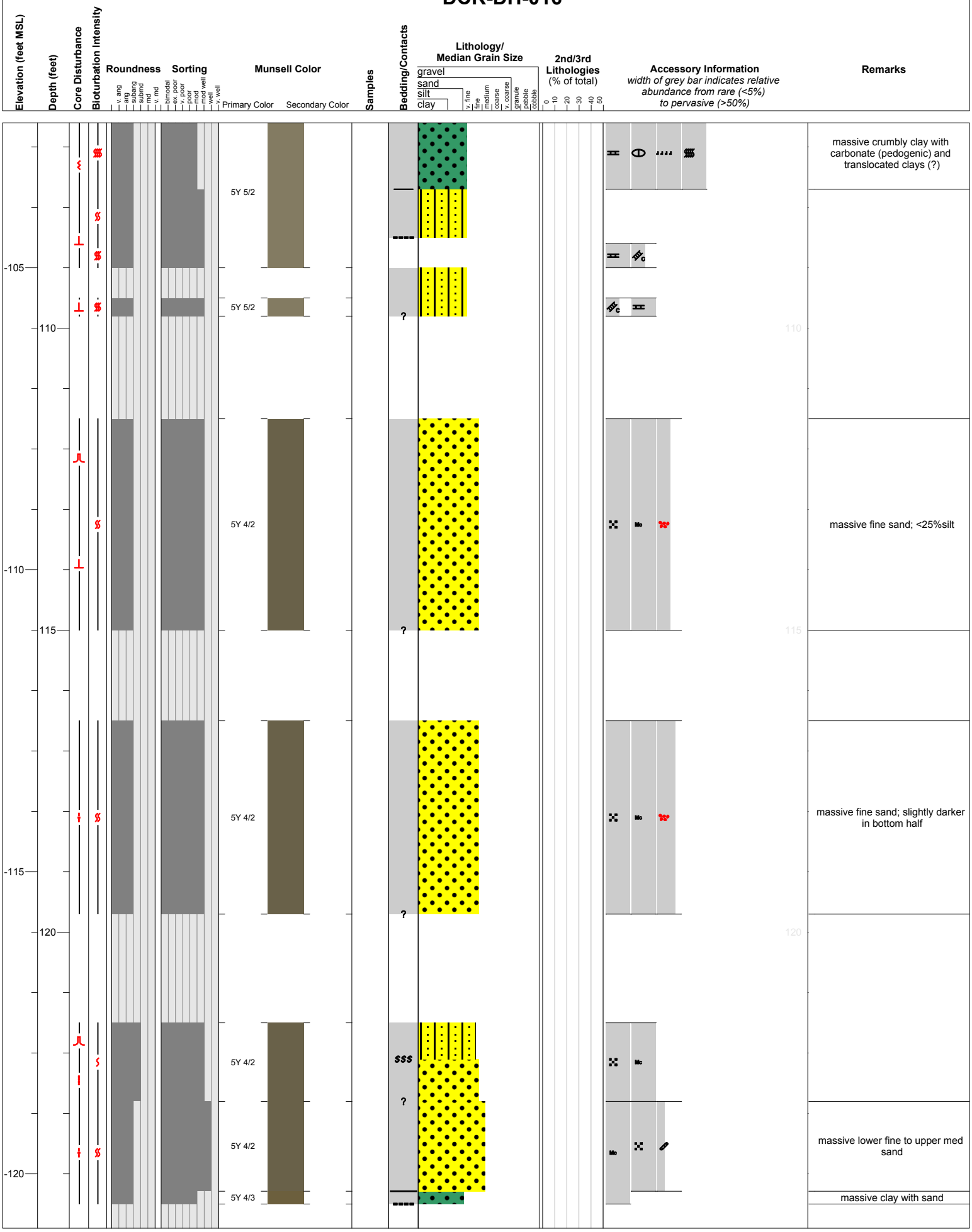
DCR-DH-016


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
70
75
80
85
-70
-75
-80
2.5Y 5/4
5Y 7/2
7.5YR
4/6
2.5Y 6/4
7.5YR
4/6
2.5Y 5/3
7.5YR
4/6
2.5Y 6/3
2.5Y 4/2
2.5Y 4/3
2.5Y 5/3
2.5Y 7/2
2.5Y 5/4
2.5Y 7/2
2.5Y 5/4
2.5Y 5/4
Mo
thin-bedded sand
massive sand with concentrated
large mica
laminated sand
massive med sand to granules
med-bedded (2 graded units),
pebble to fine sand
med to thick-bedded graded
sands (granule to fine sand)
med to thick-bedded graded
sands (granule to fine sand)
med-bedded sand; fine sand to

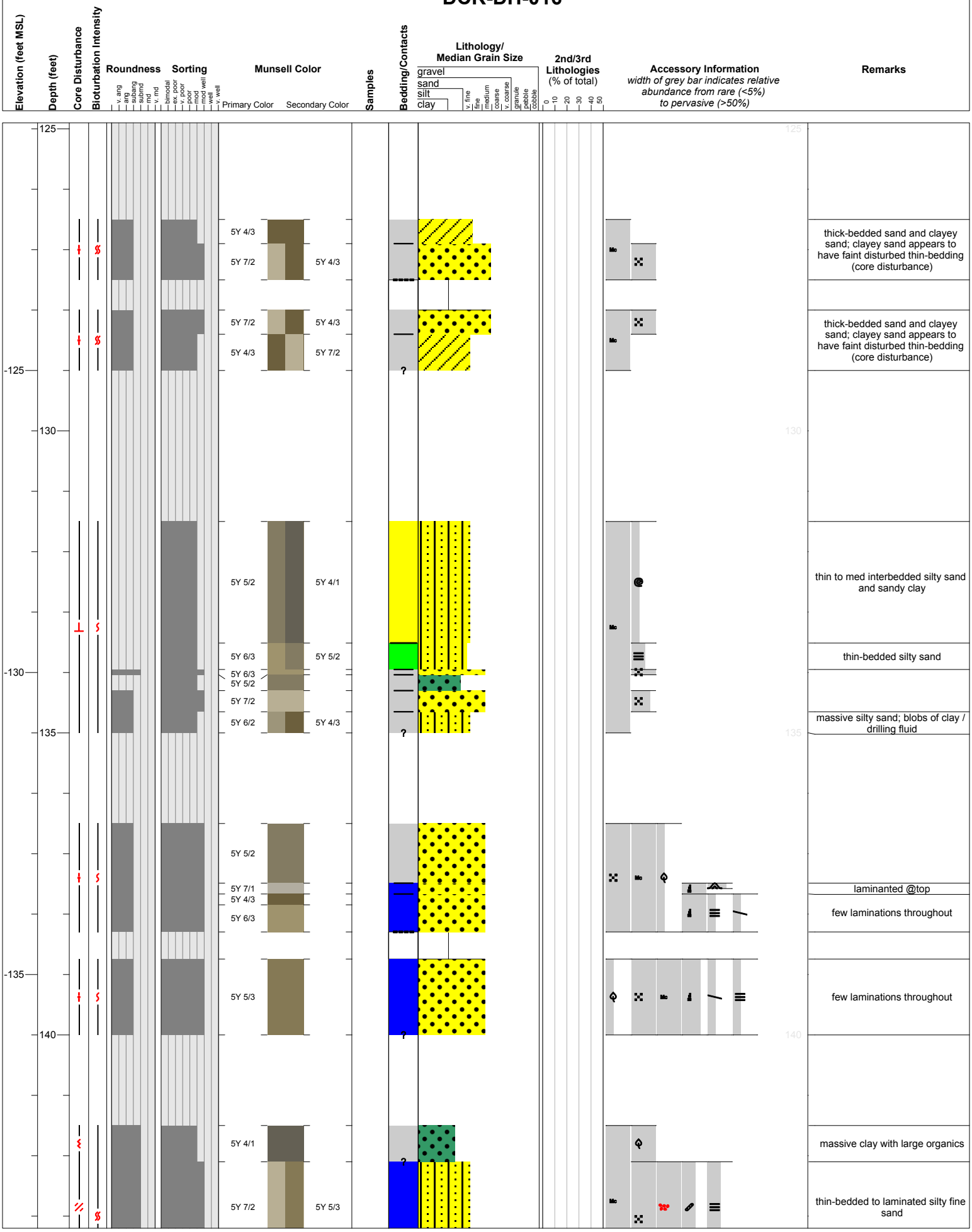
DCR-DH-016


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-85
90
-90
95
-95
100
-100
105
5Y 7/2
2.5Y 6/3
pebbles; graded units
5Y 4/3
7.5YR 3/4
5Y 4/3
10YR 4/6
massive, sandy, subangular to subrounded
5Y 4/3
10YR 4/6
5Y 4/2
massive, sandy, subangular to subrounded
2.5Y 4/3
10YR 4/6
2.5Y 4/4
2.5Y 4/3
10YR 4/6
massive mottled silty sand; thin clay beds
5Y 5/4
7.5YR 4/4
fractured/disturbed silty sand
2.5Y 4/3
10YR 4/4
5Y 5/3
10YR 4/4
fine to med sand with some laminations; mottled with blue clay
5Y 4/3
10YR 5/6
5Y 5/2
5Y 3/1
silty sand laminated with organics
2.5Y 5/4
7.5YR 4/4
2.5Y 4/3
5GY 3/1

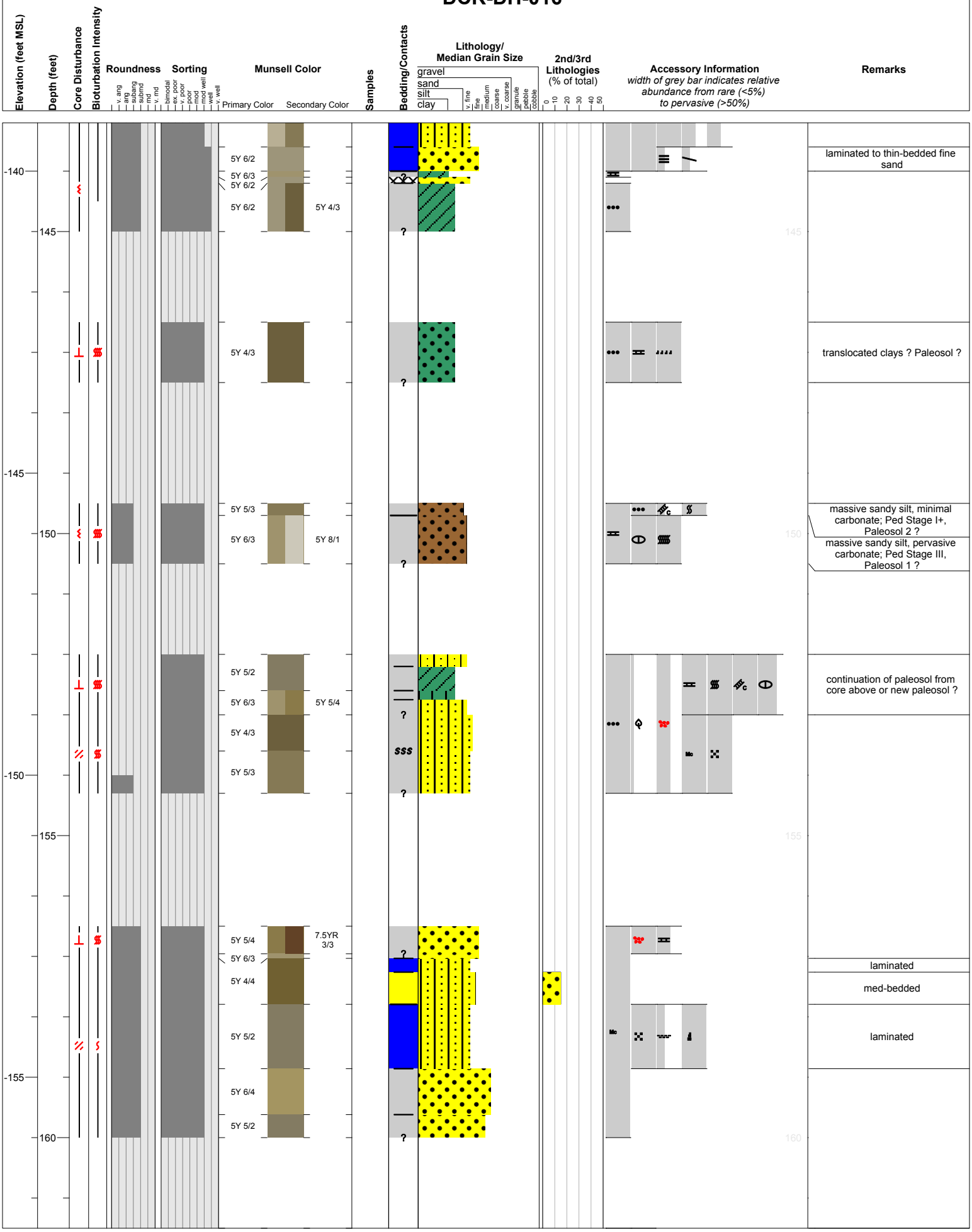
DCR-DH-016


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-105
-110
-115
-120
110
115
120
5Y 5/2
5Y 5/2
5Y 4/2
5Y 4/2
5Y 4/2
5Y 4/2
5Y 4/3
massive crumbly clay with carbonate (pedogenic) and translocated clays (?)
massive fine sand; <25%silt
massive fine sand; slightly darker in bottom half
massive lower fine to upper med sand
massive clay with sand

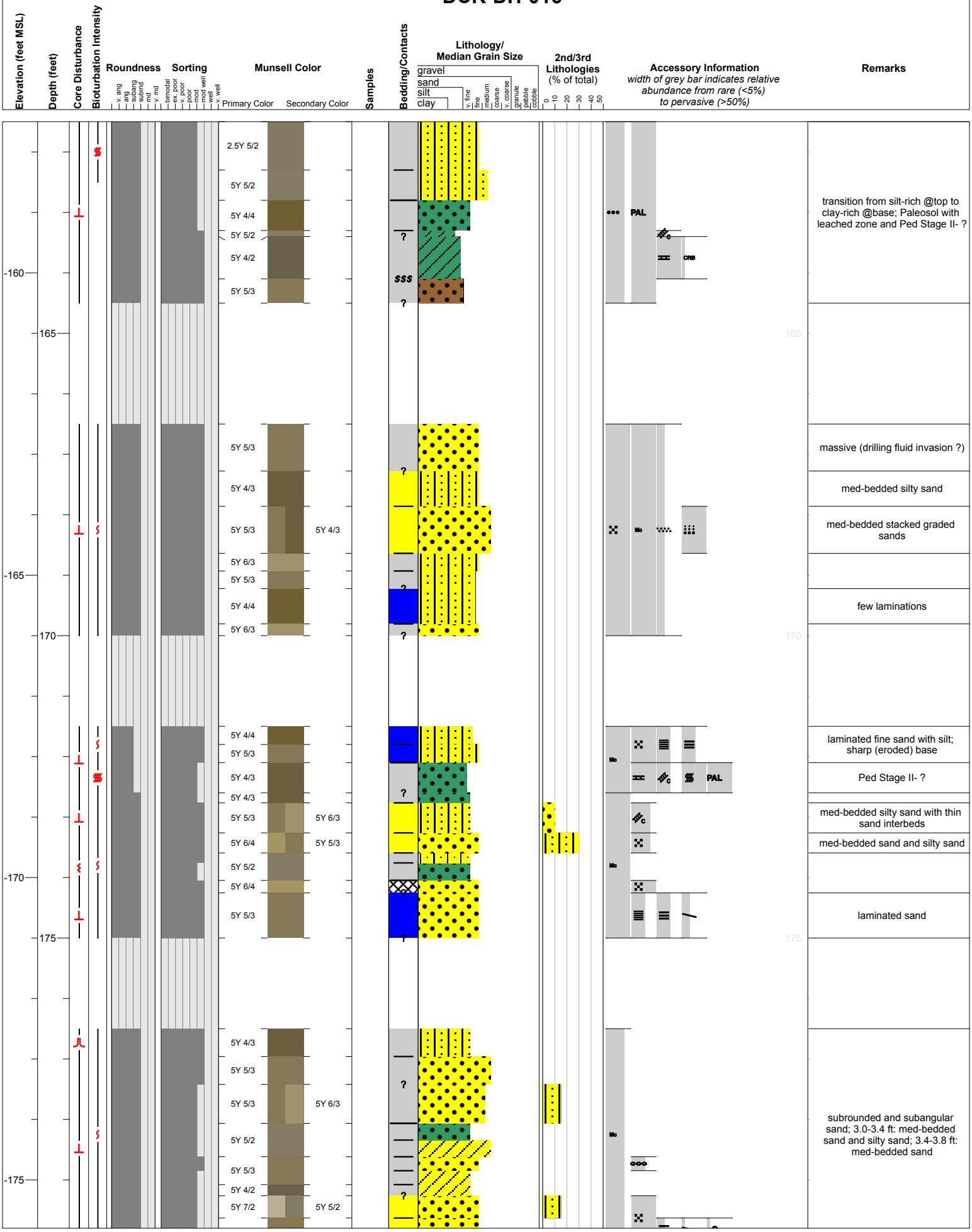
DCR-DH-016


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative abundance from rare (<5%) to pervasive (>50%)
Remarks
125
130
135
140
-125
-130
-135
5Y 4/3
5Y 7/2
5Y 4/3
5Y 7/2
5Y 4/3
5Y 7/2
5Y 4/3
5Y 7/2
5Y 5/2
5Y 4/1
5Y 6/3
5Y 5/2
5Y 6/3
5Y 5/2
5Y 7/2
5Y 6/2
5Y 4/3
5Y 5/2
5Y 7/1
5Y 4/3
5Y 6/3
5Y 5/3
5Y 4/1
5Y 7/2
5Y 5/3
thick-bedded sand and clayey sand; clayey sand appears to have faint disturbed thin-bedding (core disturbance)
thick-bedded sand and clayey sand; clayey sand appears to have faint disturbed thin-bedding (core disturbance)
thin to med interbedded silty sand and sandy clay
thin-bedded silty sand
massive silty sand; blobs of clay / drilling fluid
laminanted @top
few laminations throughout
few laminations throughout
massive clay with large organics
thin-bedded to laminated silty fine sand

DCR-DH-016


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-140
145
-145
150
-150
155
-155
160
5Y 6/2
5Y 6/3
5Y 6/2
5Y 6/2
5Y 4/3
5Y 4/3
5Y 5/3
5Y 6/3
5Y 8/1
5Y 5/2
5Y 6/3
5Y 4/3
5Y 5/3
5Y 5/4
5Y 6/3
5Y 4/4
5Y 5/2
5Y 6/4
5Y 5/2
5Y 5/4
7.5YR
3/3
laminated to thin-bedded fine sand
translocated clays ? Paleosol ?
massive sandy silt, minimal carbonate; Ped Stage I+, Paleosol 2 ?
massive sandy silt, pervasive carbonate; Ped Stage III, Paleosol 1 ?
continuation of paleosol from core above or new paleosol ?
laminated
med-bedded
laminated

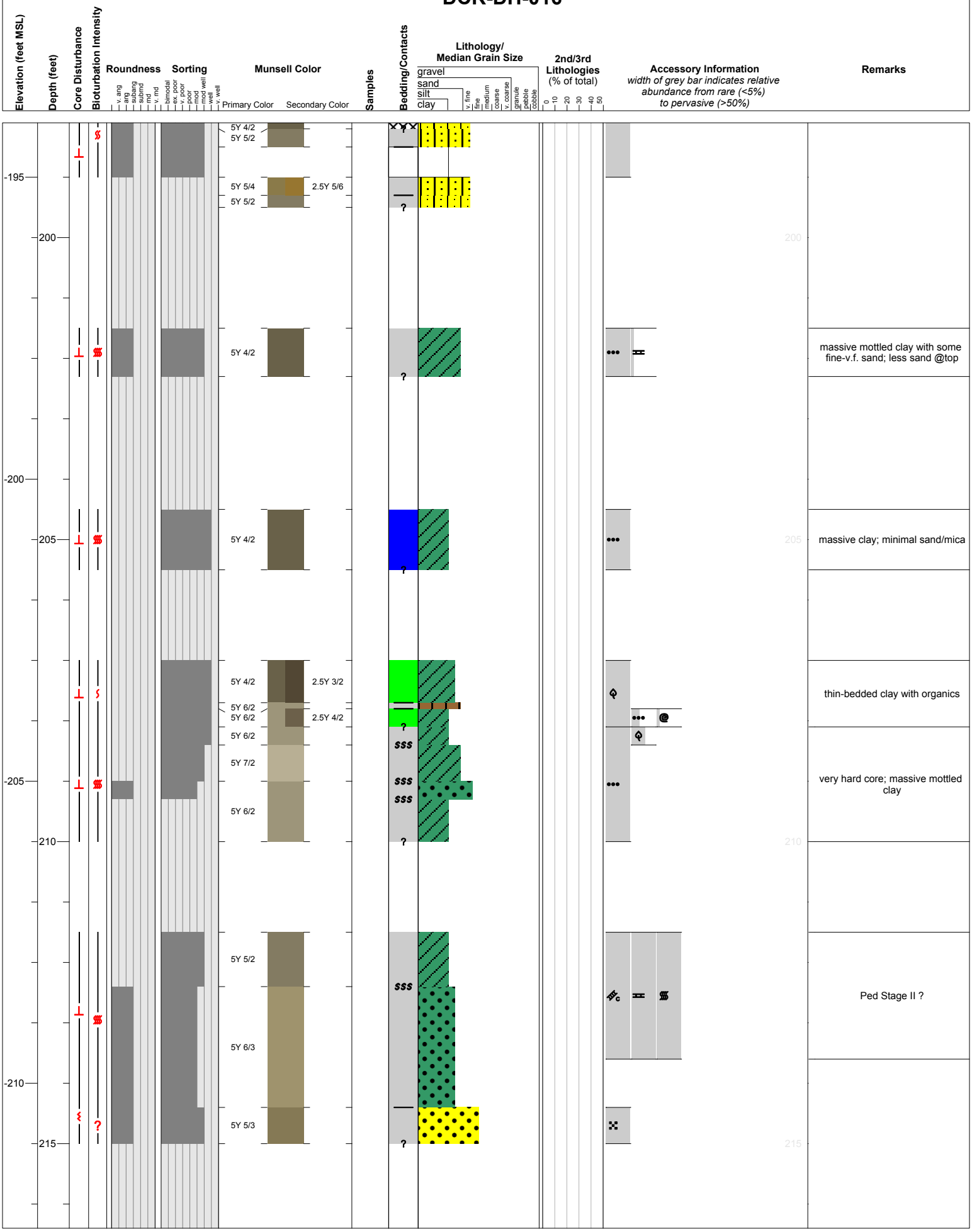
DCR-DH-016


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-160
165
-165
170
-170
175
-175
2.5Y 5/2
5Y 5/2
5Y 4/4
5Y 5/2
5Y 4/2
5Y 5/3
5Y 5/3
5Y 4/3
5Y 5/3
5Y 4/3
5Y 6/3
5Y 5/3
5Y 4/4
5Y 6/3
5Y 4/4
5Y 5/3
5Y 4/3
5Y 4/3
5Y 5/3
5Y 6/3
5Y 6/4
5Y 5/3
5Y 5/2
5Y 6/4
5Y 5/3
5Y 4/3
5Y 5/3
5Y 5/3
5Y 6/3
5Y 5/2
5Y 5/3
5Y 4/2
5Y 7/2
5Y 5/2
SSS
PAL
CRB
Mc
transition from silt-rich @top to clay-rich @base; Paleosol with leached zone and Ped Stage II- ?
massive (drilling fluid invasion ?)
med-bedded silty sand
med-bedded stacked graded sands
few laminations
laminated fine sand with silt; sharp (eroded) base
Ped Stage II- ?
med-bedded silty sand with thin sand interbeds
med-bedded sand and silty sand
laminated sand
subrounded and subangular sand; 3.0-3.4 ft: med-bedded sand and silty sand; 3.4-3.8 ft: med-bedded sand

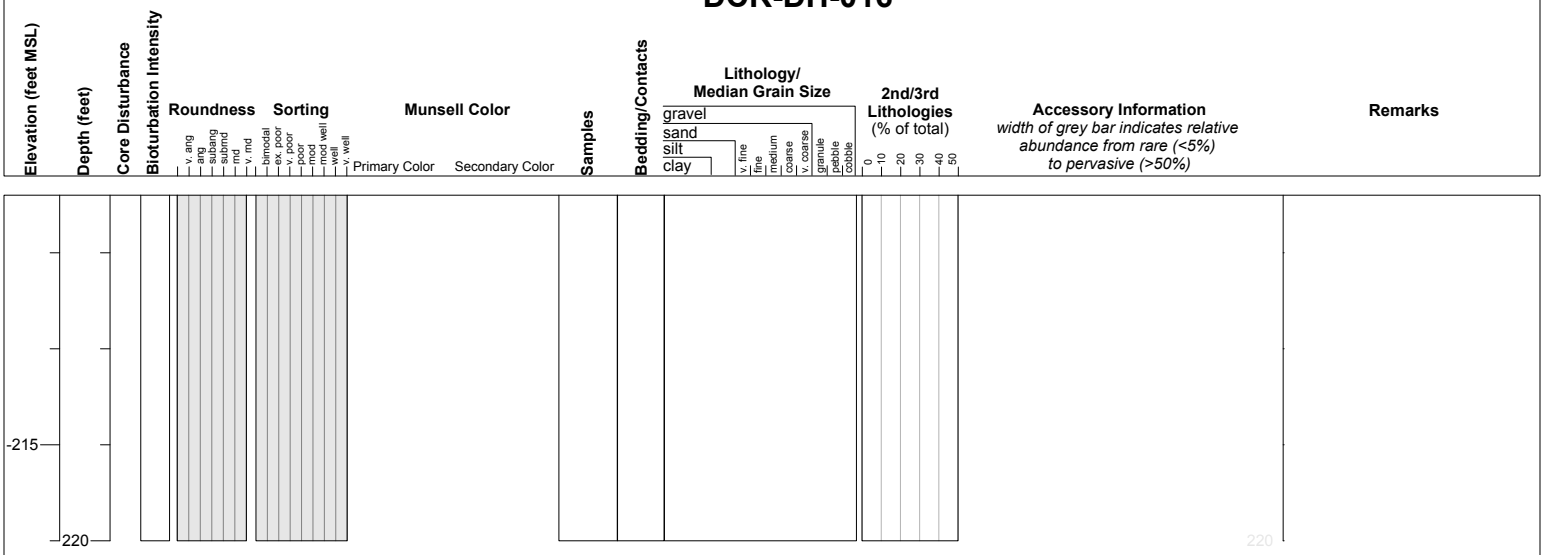
DCR-DH-016

Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
180
185
190
195
-180
-185
-190
5Y 5/3
5Y 5/2
5Y 4/3
5Y 8/1
5Y 6/2
5Y 4/2
2.5Y 5/4
2.5Y 3/2
5Y 6/3
5Y 4/4
5Y 8/1
5Y 6/2
5Y 5/2
Mo
driling fluid invasion ?
massive clay
massive med sand with clay
med interbedded sand and clayey sand
massive sand
sandy clay with sand laminations
laminated sand
med-bedded sand
med-bedded silty sand and sand; concentrated dark minerals @base
med-bedded sand with varying silt content
laminated, thin bedded sandy clay with organics

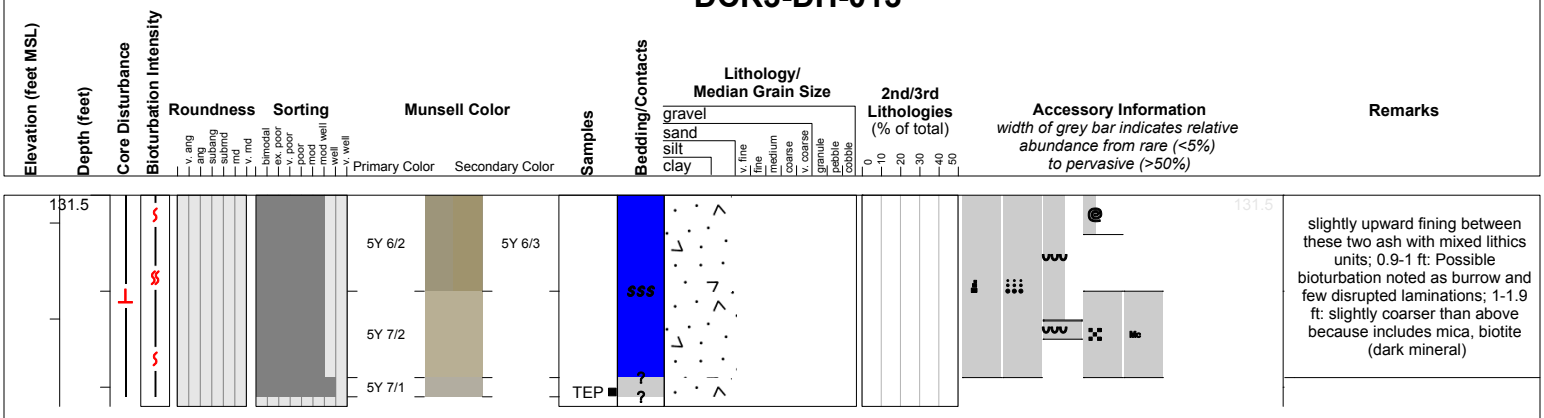
DCR-DH-016


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-195
200
-200
205
-205
210
-210
215
5Y 4/2
5Y 5/2
5Y 5/4
2.5Y 5/6
5Y 5/2
5Y 4/2
5Y 4/2
5Y 4/2
2.5Y 3/2
5Y 6/2
5Y 6/2
2.5Y 4/2
5Y 6/2
5Y 7/2
5Y 6/2
5Y 5/2
5Y 6/3
5Y 5/3
massive mottled clay with some fine-v.f. sand; less sand @top
massive clay; minimal sand/mica
thin-bedded clay with organics
very hard core; massive mottled clay
Ped Stage II ?

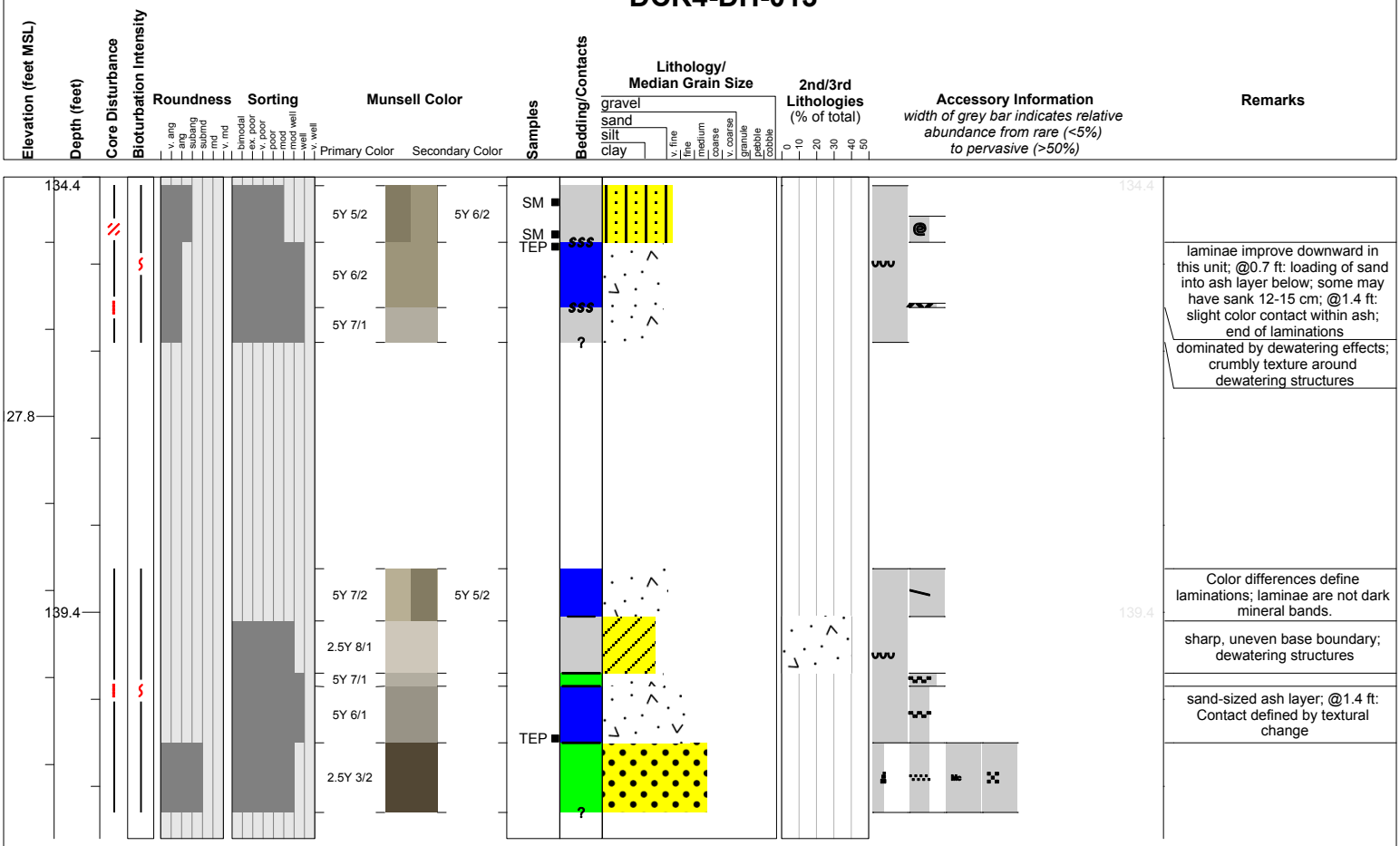
DCR-DH-016


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-215
220
220

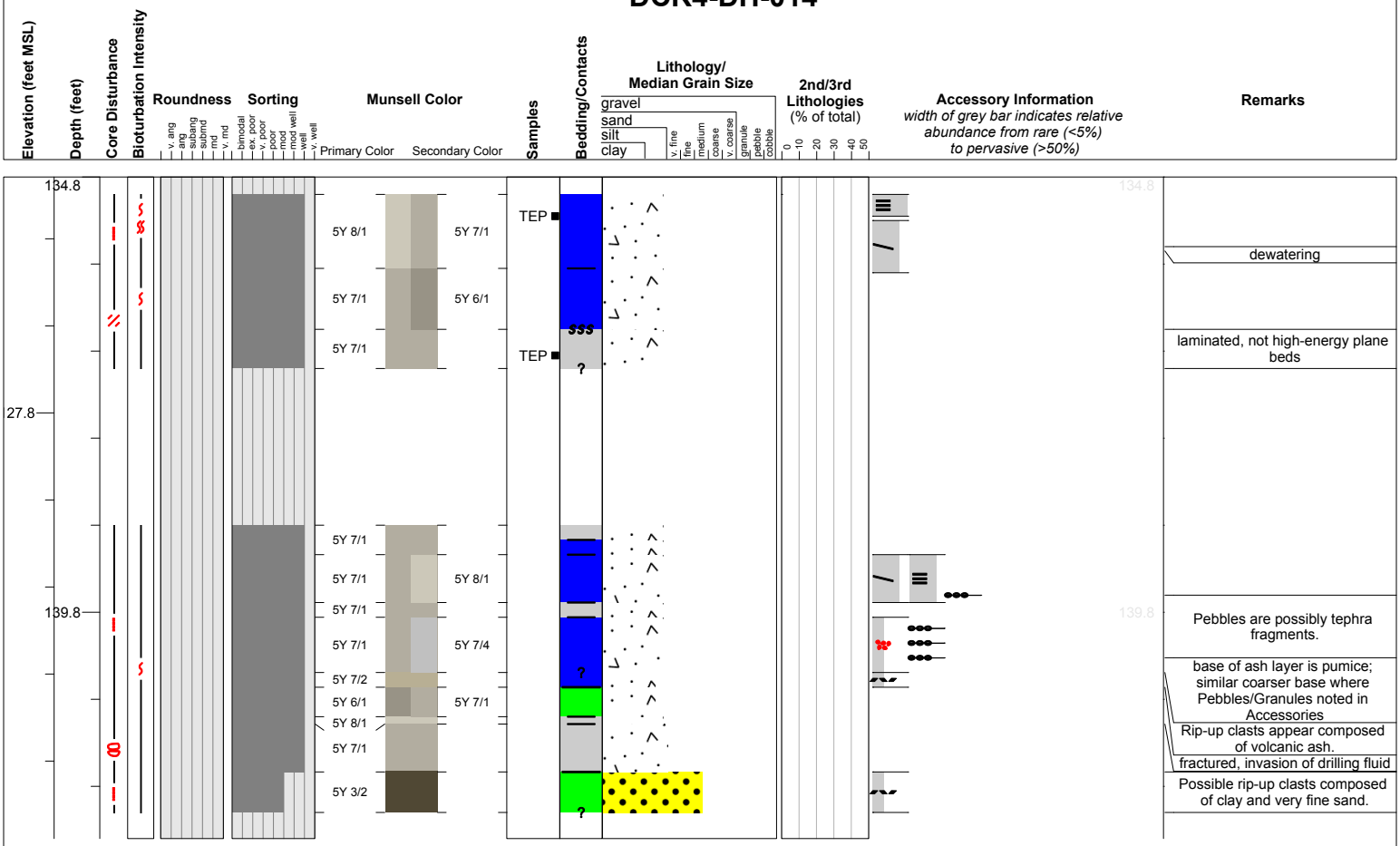
DCR3-DH-013


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
131.5
5Y 6/2
5Y 6/3
5Y 7/2
5Y 7/1
TEP
131.5
slightly upward fining between
these two ash with mixed lithics
units; 0.9-1 ft: Possible
bioturbation noted as burrow and
few disrupted laminations; 1-1.9
ft: slightly coarser than above
because includes mica, biotite
(dark mineral)

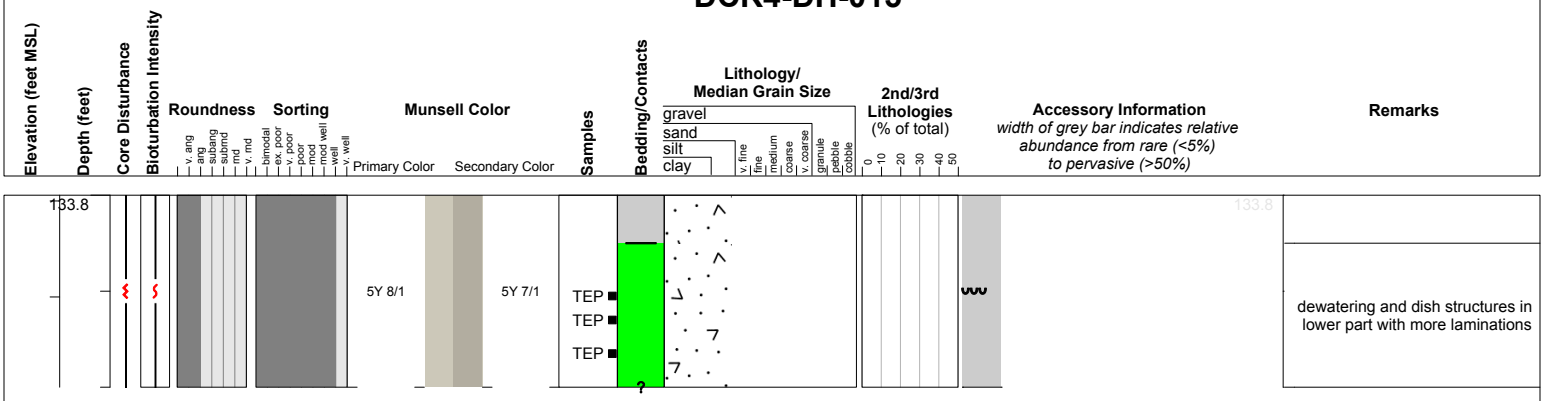
DCR4-DH-013


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
v. poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
134.4
27.8
139.4
5Y 5/2
5Y 6/2
5Y 6/2
5Y 7/1
5Y 7/2
5Y 5/2
2.5Y 8/1
5Y 7/1
5Y 6/1
2.5Y 3/2
SM
SM
TEP
TEP
laminae improve downward in this unit; @0.7 ft: loading of sand into ash layer below; some may have sank 12-15 cm; @1.4 ft: slight color contact within ash; end of laminations
dominated by dewatering effects; crumbly texture around dewatering structures
Color differences define laminations; laminae are not dark mineral bands.
sharp, uneven base boundary; dewatering structures
sand-sized ash layer; @1.4 ft: Contact defined by textural change

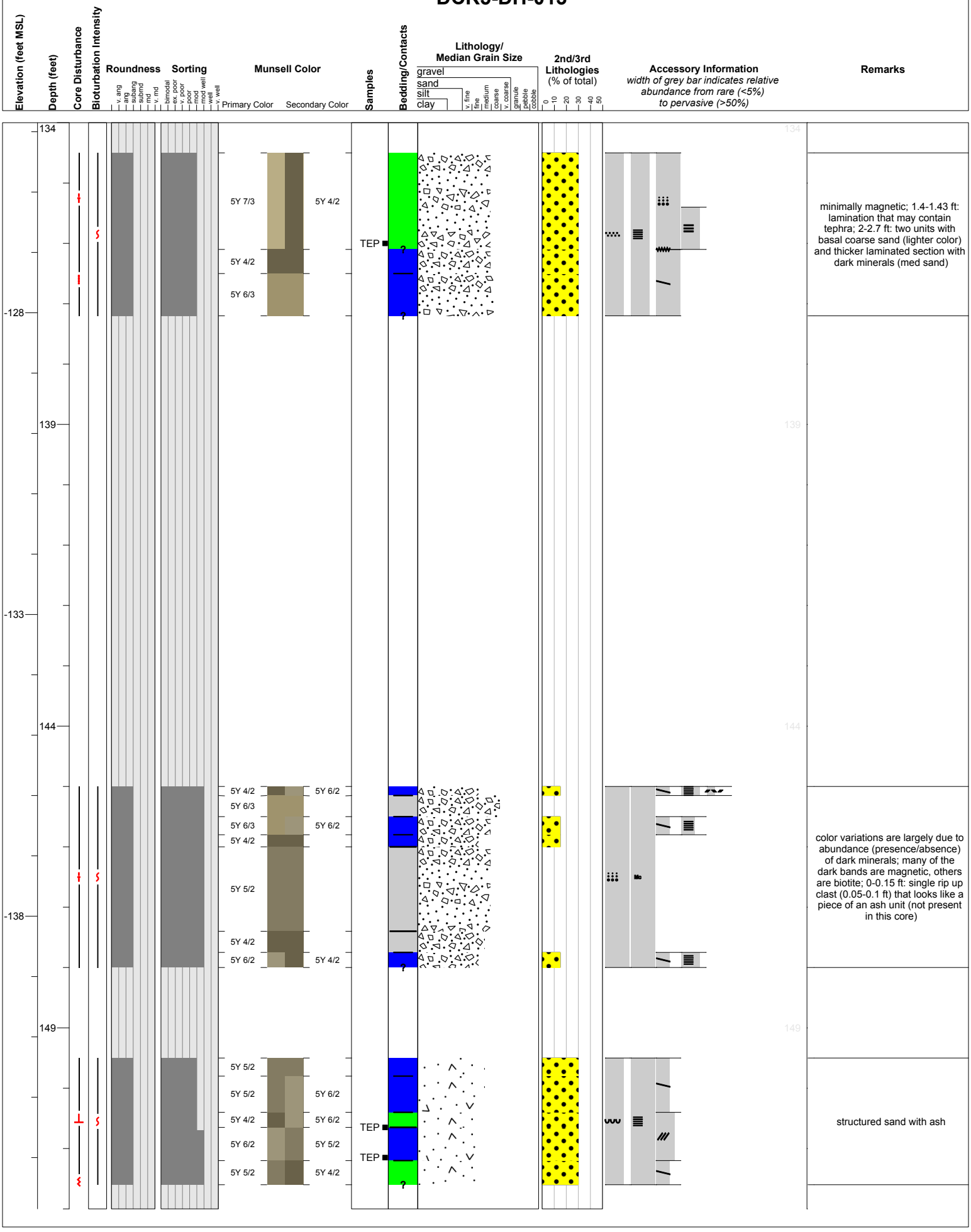
DCR4-DH-014


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
134.8
27.8
139.8
5Y 8/1
5Y 7/1
5Y 7/1
5Y 7/1
5Y 6/1
5Y 7/1
5Y 7/1
5Y 8/1
5Y 7/1
5Y 7/1
5Y 7/4
5Y 7/2
5Y 6/1
5Y 7/1
5Y 8/1
5Y 7/1
5Y 3/2
TEP
TEP
dewatering
laminated, not high-energy plane beds
Pebbles are possibly tephra fragments.
base of ash layer is pumice; similar coarser base where Pebbles/Granules noted in Accessories
Rip-up clasts appear composed of volcanic ash.
fractured, invasion of drilling fluid
Possible rip-up clasts composed of clay and very fine sand.

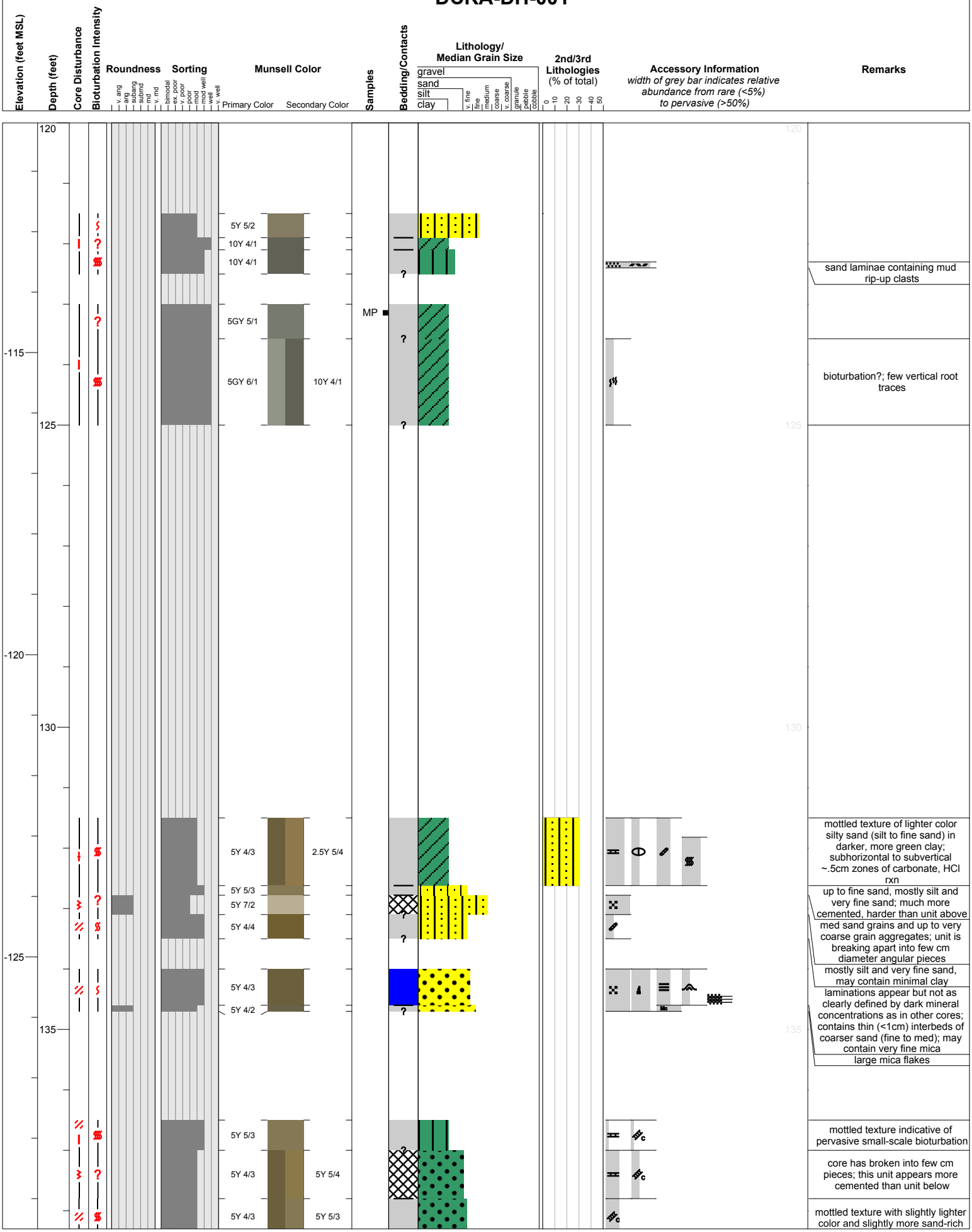
DCR4-DH-015


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
133.8
5Y 8/1
5Y 7/1
TEP
TEP
TEP
133.8
dewatering and dish structures in
lower part with more laminations

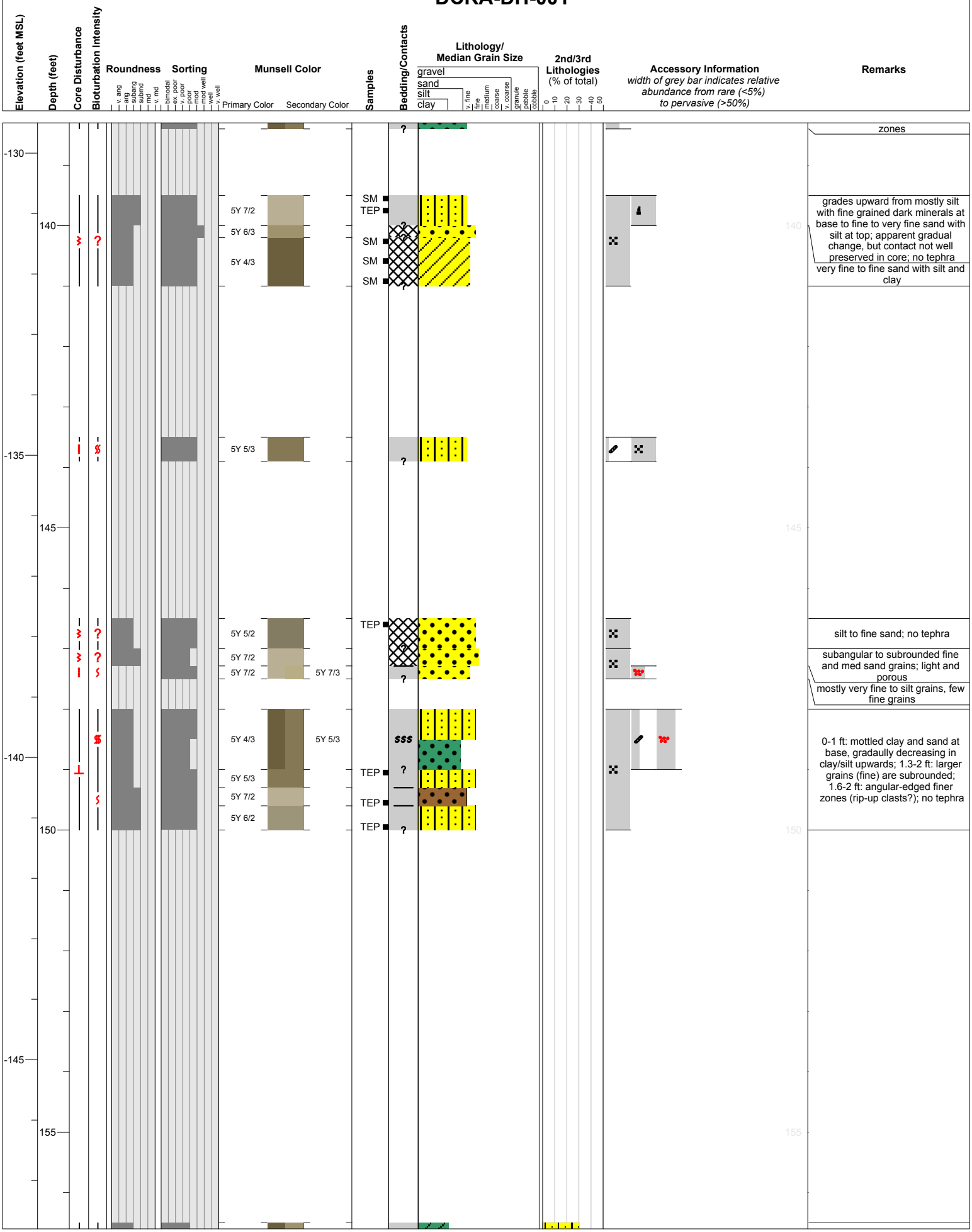
DCR5-DH-013


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
134
-128
139
-133
144
-138
149
5Y 7/3
5Y 4/2
5Y 4/2
5Y 6/3
TEP
minimally magnetic; 1.4-1.43 ft: lamination that may contain tephra; 2-2.7 ft: two units with basal coarse sand (lighter color) and thicker laminated section with dark minerals (med sand)
5Y 4/2
5Y 6/3
5Y 6/3
5Y 4/2
5Y 5/2
5Y 4/2
5Y 6/2
5Y 6/2
5Y 6/2
5Y 4/2
Mo
color variations are largely due to abundance (presence/absence) of dark minerals; many of the dark bands are magnetic, others are biotite; 0-0.15 ft: single rip up clast (0.05-0.1 ft) that looks like a piece of an ash unit (not present in this core)
5Y 5/2
5Y 5/2
5Y 4/2
5Y 6/2
5Y 5/2
5Y 5/2
5Y 6/2
5Y 6/2
5Y 5/2
5Y 4/2
TEP
TEP
structured sand with ash

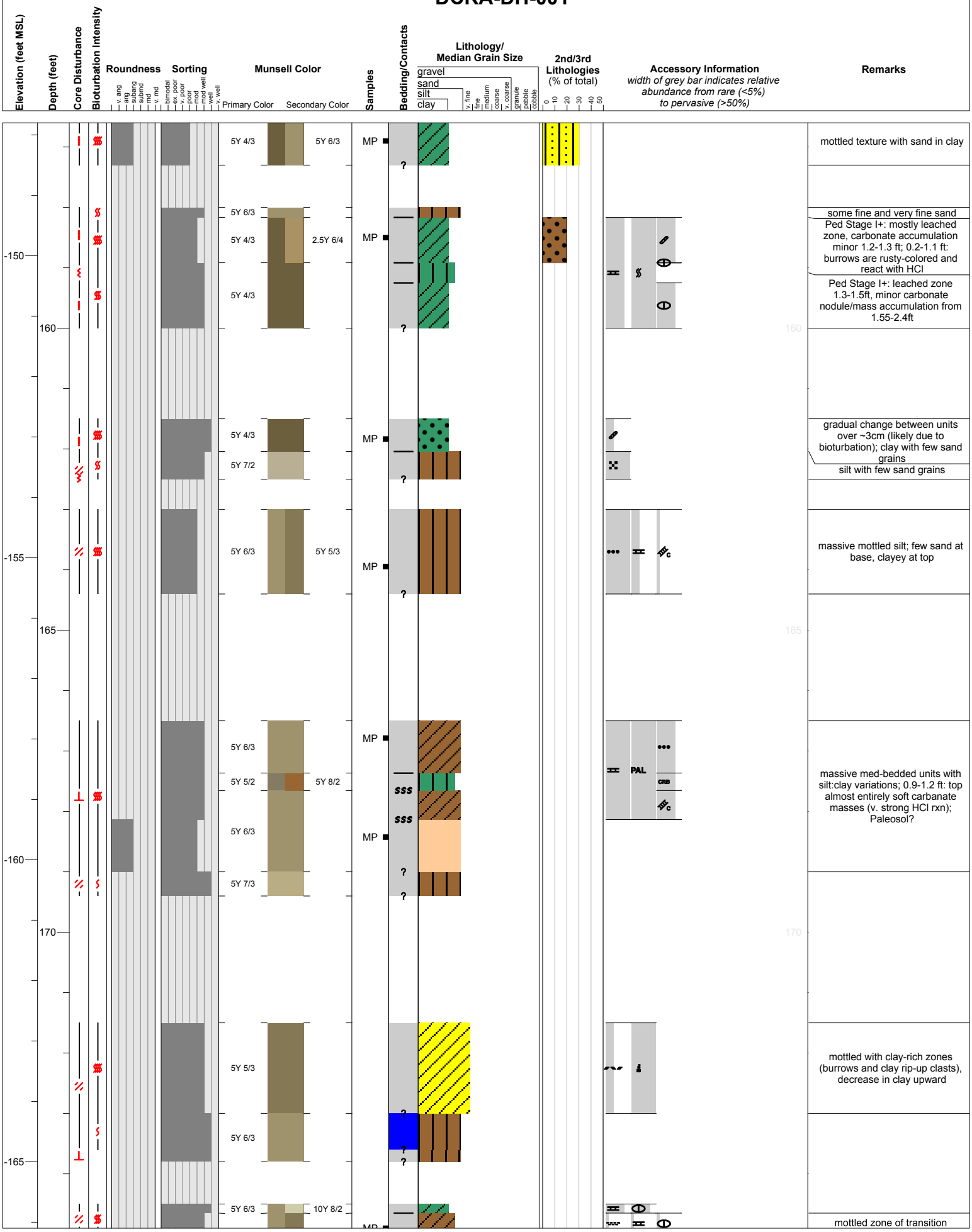
DCRA-DH-001


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative abundance from rare (<5%) to pervasive (>50%)
Remarks
120
-115
125
-120
130
-125
135
5Y 5/2
10Y 4/1
10Y 4/1
5GY 5/1
5GY 6/1
10Y 4/1
MP
5Y 4/3
2.5Y 5/4
5Y 5/3
5Y 7/2
5Y 4/4
5Y 4/3
5Y 4/2
5Y 5/3
5Y 4/3
5Y 5/4
5Y 4/3
5Y 5/3
sand laminae containing mud rip-up clasts
bioturbation?; few vertical root traces
mottled texture of lighter color silty sand (silt to fine sand) in darker, more green clay; subhorizontal to subvertical ~.5cm zones of carbonate, HCl rxn
up to fine sand, mostly silt and very fine sand; much more cemented, harder than unit above
med sand grains and up to very coarse grain aggregates; unit is breaking apart into few cm diameter angular pieces
mostly silt and very fine sand, may contain minimal clay
laminations appear but not as clearly defined by dark mineral concentrations as in other cores; contains thin (<1cm) interbeds of coarser sand (fine to med); may contain very fine mica
large mica flakes
mottled texture indicative of pervasive small-scale bioturbation
core has broken into few cm pieces; this unit appears more cemented than unit below
mottled texture with slightly lighter color and slightly more sand-rich

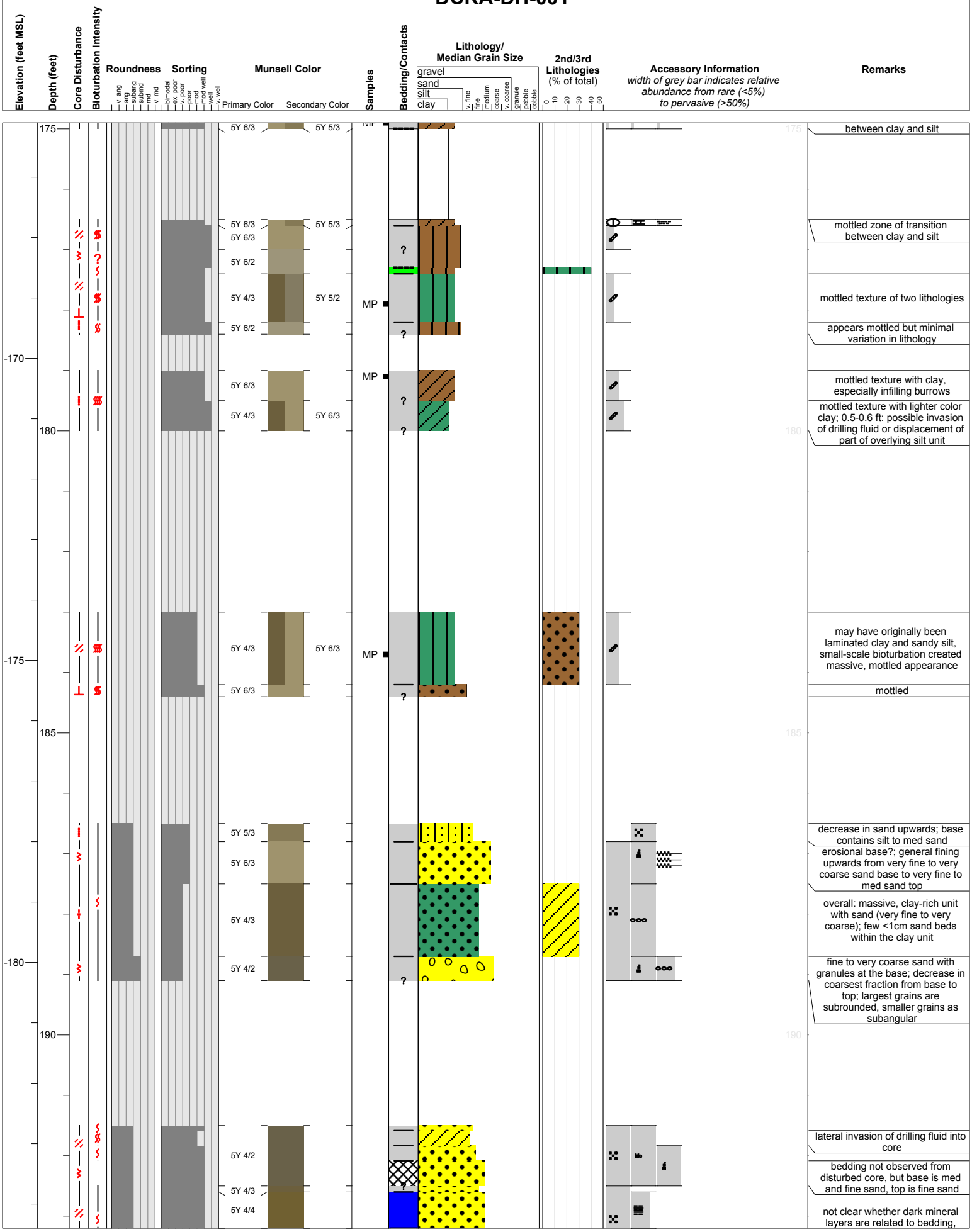
DCRA-DH-001


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-130
140
-135
145
-140
150
-145
155
5Y 7/2
5Y 6/3
5Y 4/3
5Y 5/3
5Y 5/2
5Y 7/2
5Y 7/2
5Y 7/3
5Y 4/3
5Y 5/3
5Y 5/3
5Y 7/2
5Y 6/2
SM
TEP
SM
SM
SM
TEP
TEP
TEP
TEP
zones
grades upward from mostly silt with fine grained dark minerals at base to fine to very fine sand with silt at top; apparent gradual change, but contact not well preserved in core; no tephra
very fine to fine sand with silt and clay
silt to fine sand; no tephra
subangular to subrounded fine and med sand grains; light and porous
mostly very fine to silt grains, few fine grains
0-1 ft: mottled clay and sand at base, gradaully decreasing in clay/silt upwards; 1.3-2 ft: larger grains (fine) are subrounded; 1.6-2 ft: angular-edged finer zones (rip-up clasts?); no tephra

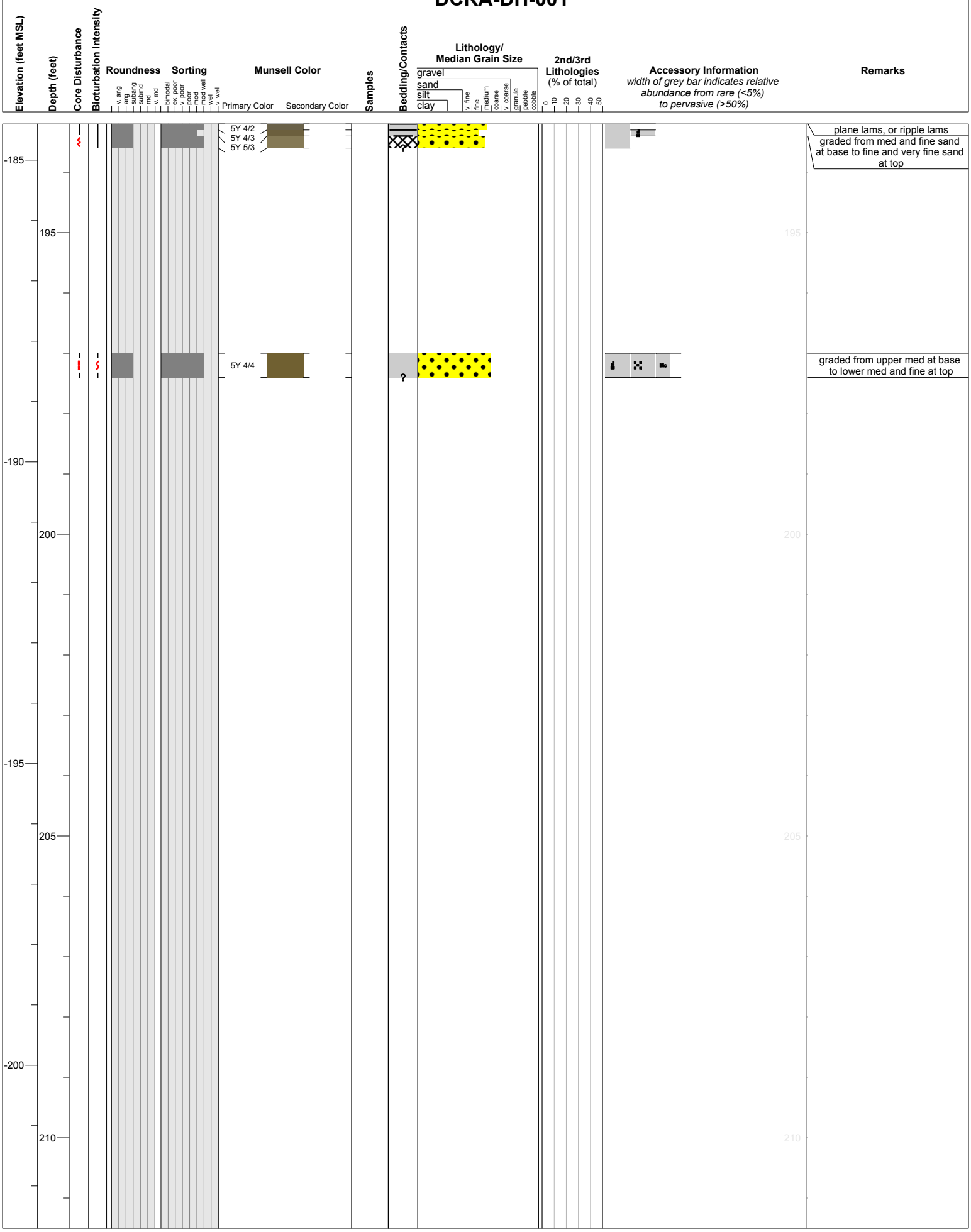
DCRA-DH-001


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative abundance from rare (<5%) to pervasive (>50%)
Remarks
-150
160
-155
165
-160
170
-165
5Y 4/3
5Y 6/3
MP
5Y 6/3
5Y 4/3
2.5Y 6/4
5Y 4/3
5Y 4/3
5Y 7/2
5Y 6/3
5Y 5/3
5Y 6/3
5Y 5/2
5Y 8/2
5Y 6/3
5Y 7/3
SSS
PAL
CRB
5Y 5/3
5Y 6/3
5Y 6/3
10Y 8/2
mottled texture with sand in clay
some fine and very fine sand
Ped Stage I+: mostly leached zone, carbonate accumulation minor 1.2-1.3 ft; 0.2-1.1 ft: burrows are rusty-colored and react with HCl
Ped Stage I+: leached zone 1.3-1.5ft, minor carbonate nodule/mass accumulation from 1.55-2.4ft
gradual change between units over ~3cm (likely due to bioturbation); clay with few sand grains
silt with few sand grains
massive mottled silt; few sand at base, clayey at top
massive med-bedded units with silt:clay variations; 0.9-1.2 ft: top almost entirely soft carbanate masses (v. strong HCl rxn); Paleosol?
mottled with clay-rich zones (burrows and clay rip-up clasts), decrease in clay upward
mottled zone of transition

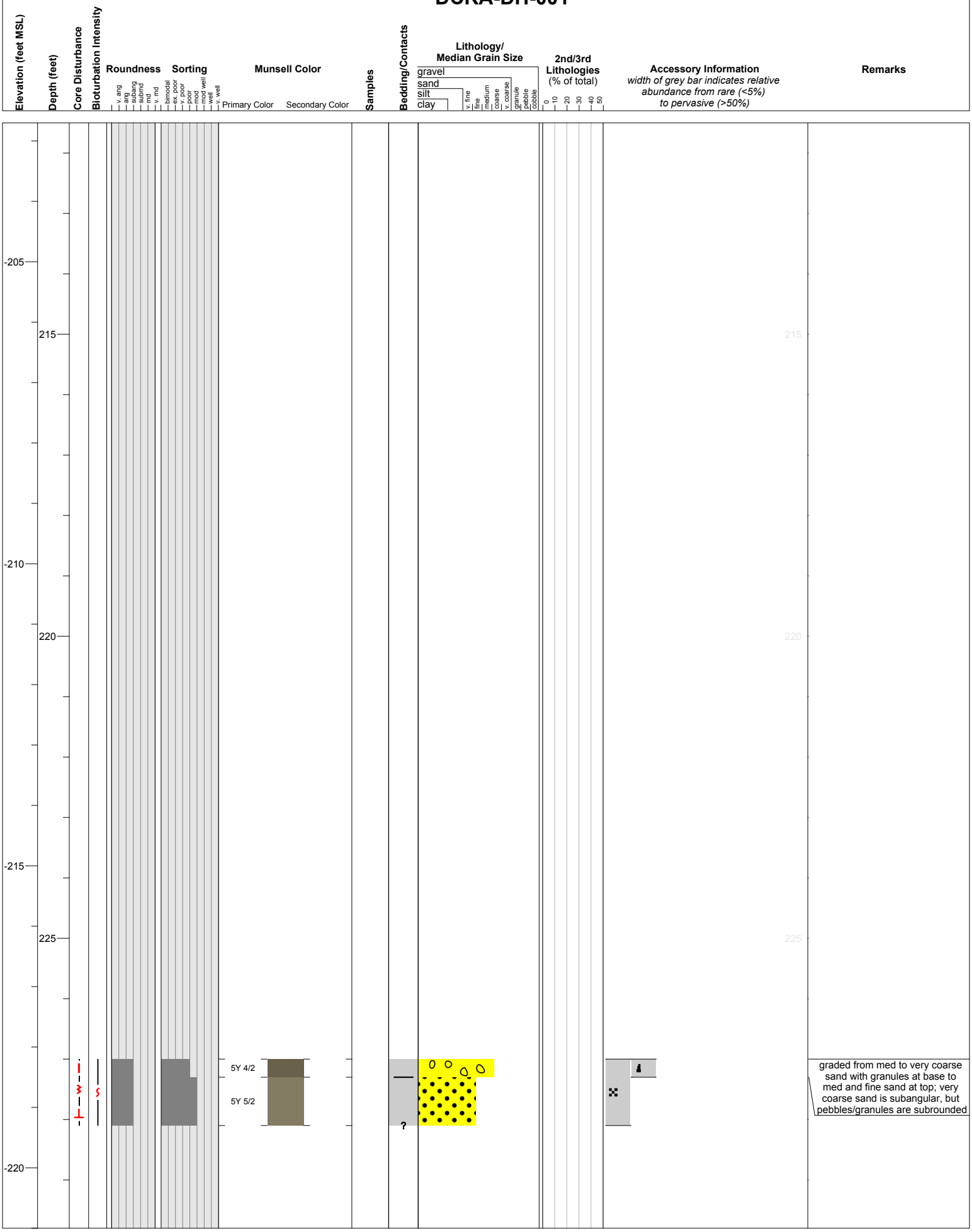
DCRA-DH-001


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative abundance from rare (<5%) to pervasive (>50%)
Remarks
175
-170
180
-175
185
-180
190
5Y 6/3
5Y 5/3
5Y 6/3
5Y 6/2
5Y 4/3
5Y 5/2
5Y 6/2
5Y 6/3
5Y 4/3
5Y 6/3
5Y 4/3
5Y 6/3
5Y 6/3
5Y 5/3
5Y 6/3
5Y 4/3
5Y 4/2
5Y 4/2
5Y 4/3
5Y 4/4
MP
MP
MP
between clay and silt
mottled zone of transition between clay and silt
mottled texture of two lithologies
appears mottled but minimal variation in lithology
mottled texture with clay, especially infilling burrows
mottled texture with lighter color clay; 0.5-0.6 ft: possible invasion of drilling fluid or displacement of part of overlying silt unit
may have originally been laminated clay and sandy silt, small-scale bioturbation created massive, mottled appearance
mottled
decrease in sand upwards; base contains silt to med sand
erosional base?; general fining upwards from very fine to very coarse sand base to very fine to med sand top
overall: massive, clay-rich unit with sand (very fine to very coarse); few <1cm sand beds within the clay unit
fine to very coarse sand with granules at the base; decrease in coarsest fraction from base to top; largest grains are subrounded, smaller grains as subangular
lateral invasion of drilling fluid into core
bedding not observed from disturbed core, but base is med and fine sand, top is fine sand
not clear whether dark mineral layers are related to bedding,

DCRA-DH-001


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
5Y 4/2
5Y 4/3
5Y 5/3
5Y 4/4
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
plane lams, or ripple lams
graded from med and fine sand
at base to fine and very fine sand
at top
graded from upper med at base
to lower med and fine at top
-185
195
-190
200
-195
205
-200
210

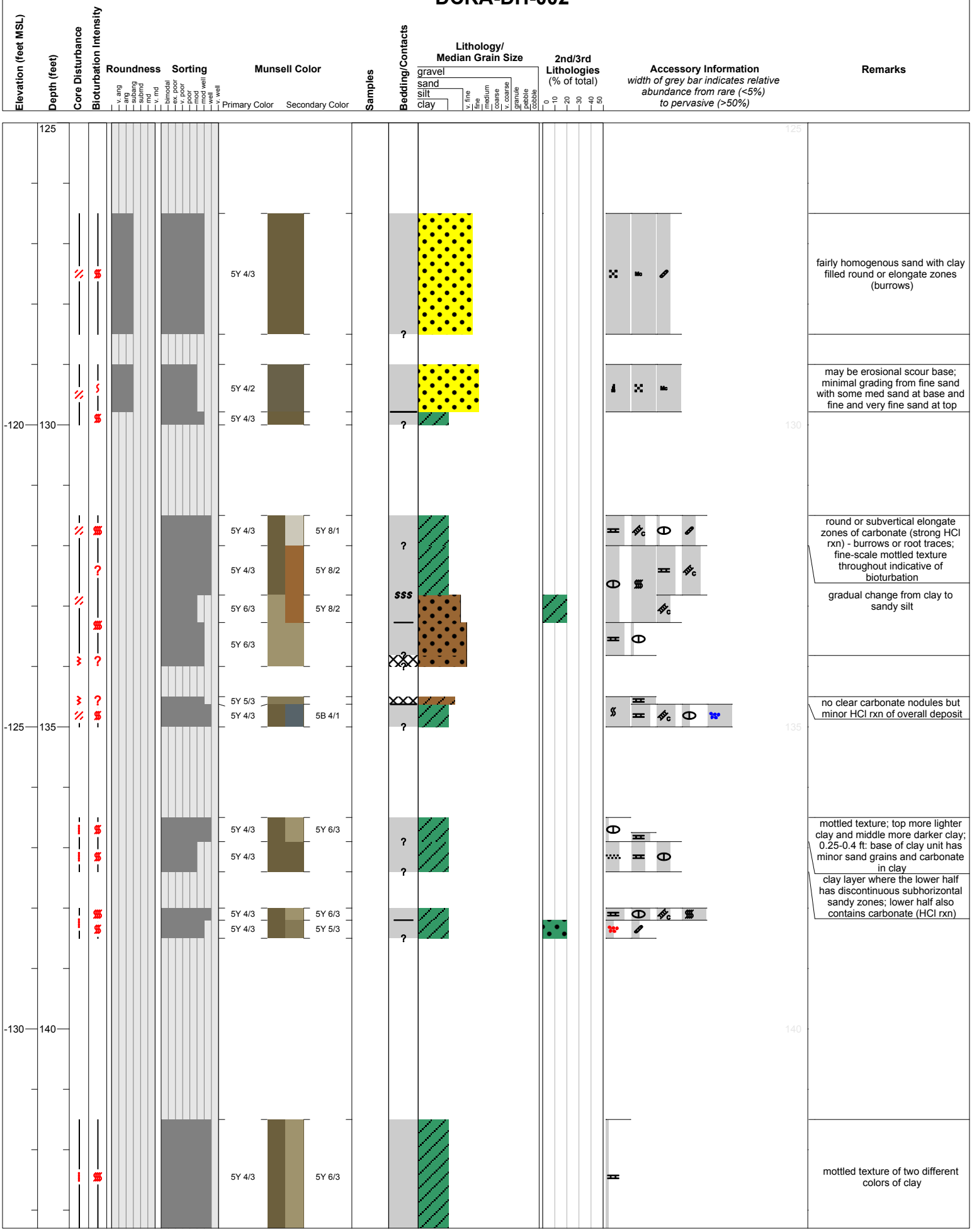
DCRA-DH-001


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-205
-210
-215
-220
215
220
225
5Y 4/2
5Y 5/2
?
graded from med to very coarse
sand with granules at base to
med and fine sand at top; very
coarse sand is subangular, but
pebbles/granules are subrounded

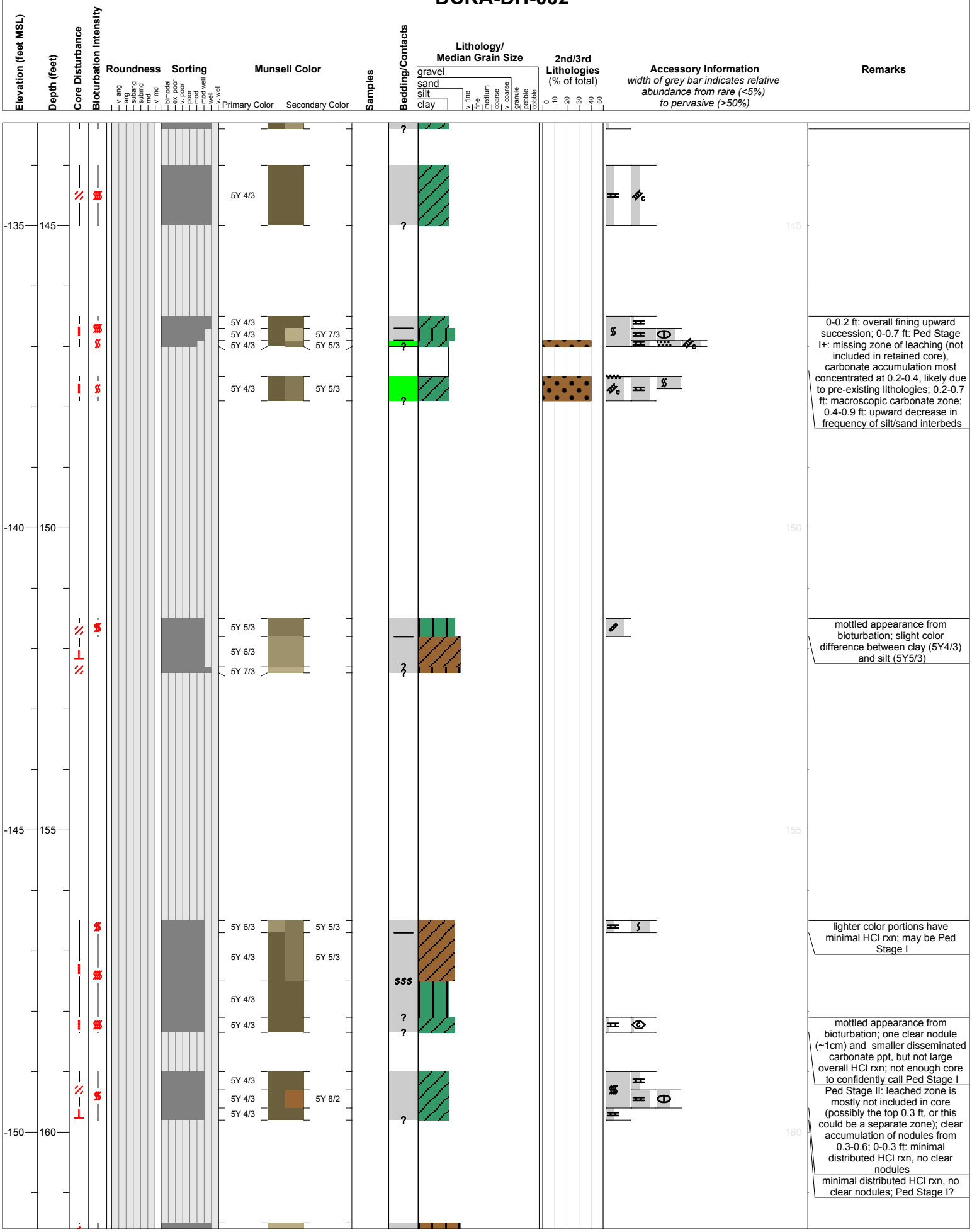
DCRA-DH-001

Elevation (feet MSL)	Depth (feet)	Core Disturbance	Bioturbation Intensity	Roundness (v. ang, ang, subang, subrnd, rnd, v. rnd)	Sorting (bimodal, v. poor, v. poor, poor, mod, mod well, well, v. well)	Munsell Color (Primary Color, Secondary Color)	Samples	Bedding/Contacts	Lithology/ Median Grain Size (gravel, sand, silt, clay; v. fine, fine, medium, coarse, v. coarse, granule, pebble, cobble)	2nd/3rd Lithologies (% of total) (0, 10, 20, 30, 40, 50)	Accessory Information *width of grey bar indicates relative abundance from rare (<5%) to pervasive (>50%)*	Remarks
	230											230

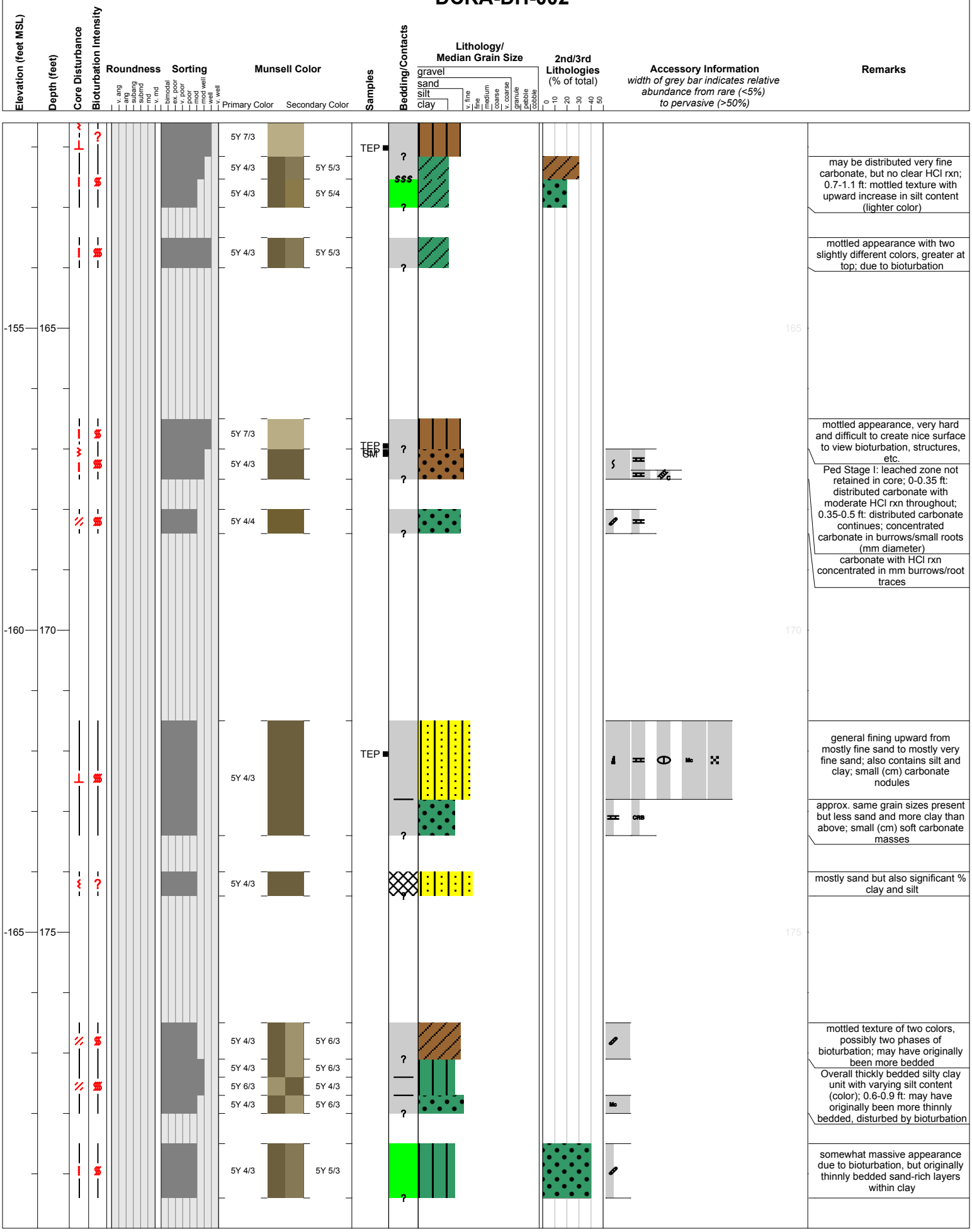
DCRA-DH-002


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
125
-120
130
-125
135
-130
140
5Y 4/3
5Y 4/2
5Y 8/1
5Y 8/2
5Y 6/3
5Y 5/3
5B 4/1
fairly homogenous sand with clay filled round or elongate zones (burrows)
may be erosional scour base; minimal grading from fine sand with some med sand at base and fine and very fine sand at top
round or subvertical elongate zones of carbonate (strong HCl rxn) - burrows or root traces; fine-scale mottled texture throughout indicative of bioturbation
gradual change from clay to sandy silt
no clear carbonate nodules but minor HCl rxn of overall deposit
mottled texture; top more lighter clay and middle more darker clay; 0.25-0.4 ft: base of clay unit has minor sand grains and carbonate in clay
clay layer where the lower half has discontinuous subhorizontal sandy zones; lower half also contains carbonate (HCl rxn)
mottled texture of two different colors of clay

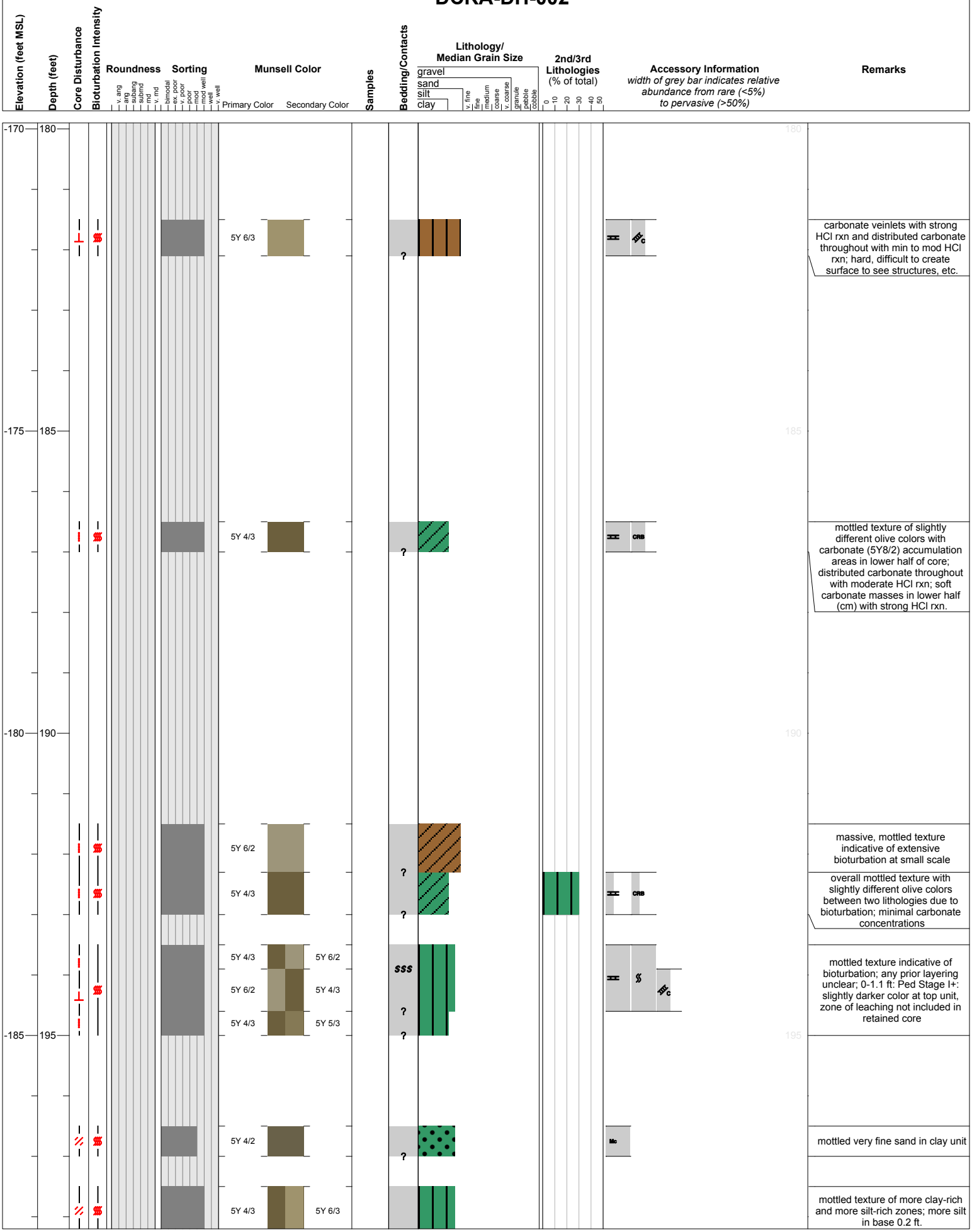
DCRA-DH-002


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative abundance from rare (<5%) to pervasive (>50%)
Remarks
-135
145
-140
150
-145
155
-150
160
5Y 4/3
5Y 7/3
5Y 5/3
5Y 6/3
5Y 8/2
0-0.2 ft: overall fining upward succession; 0-0.7 ft: Ped Stage I+: missing zone of leaching (not included in retained core), carbonate accumulation most concentrated at 0.2-0.4, likely due to pre-existing lithologies; 0.2-0.7 ft: macroscopic carbonate zone; 0.4-0.9 ft: upward decrease in frequency of silt/sand interbeds
mottled appearance from bioturbation; slight color difference between clay (5Y4/3) and silt (5Y5/3)
lighter color portions have minimal HCl rxn; may be Ped Stage I
mottled appearance from bioturbation; one clear nodule (~1cm) and smaller disseminated carbonate ppt, but not large overall HCl rxn; not enough core to confidently call Ped Stage I
Ped Stage II: leached zone is mostly not included in core (possibly the top 0.3 ft, or this could be a separate zone); clear accumulation of nodules from 0.3-0.6; 0-0.3 ft: minimal distributed HCl rxn, no clear nodules
minimal distributed HCl rxn, no clear nodules; Ped Stage I?

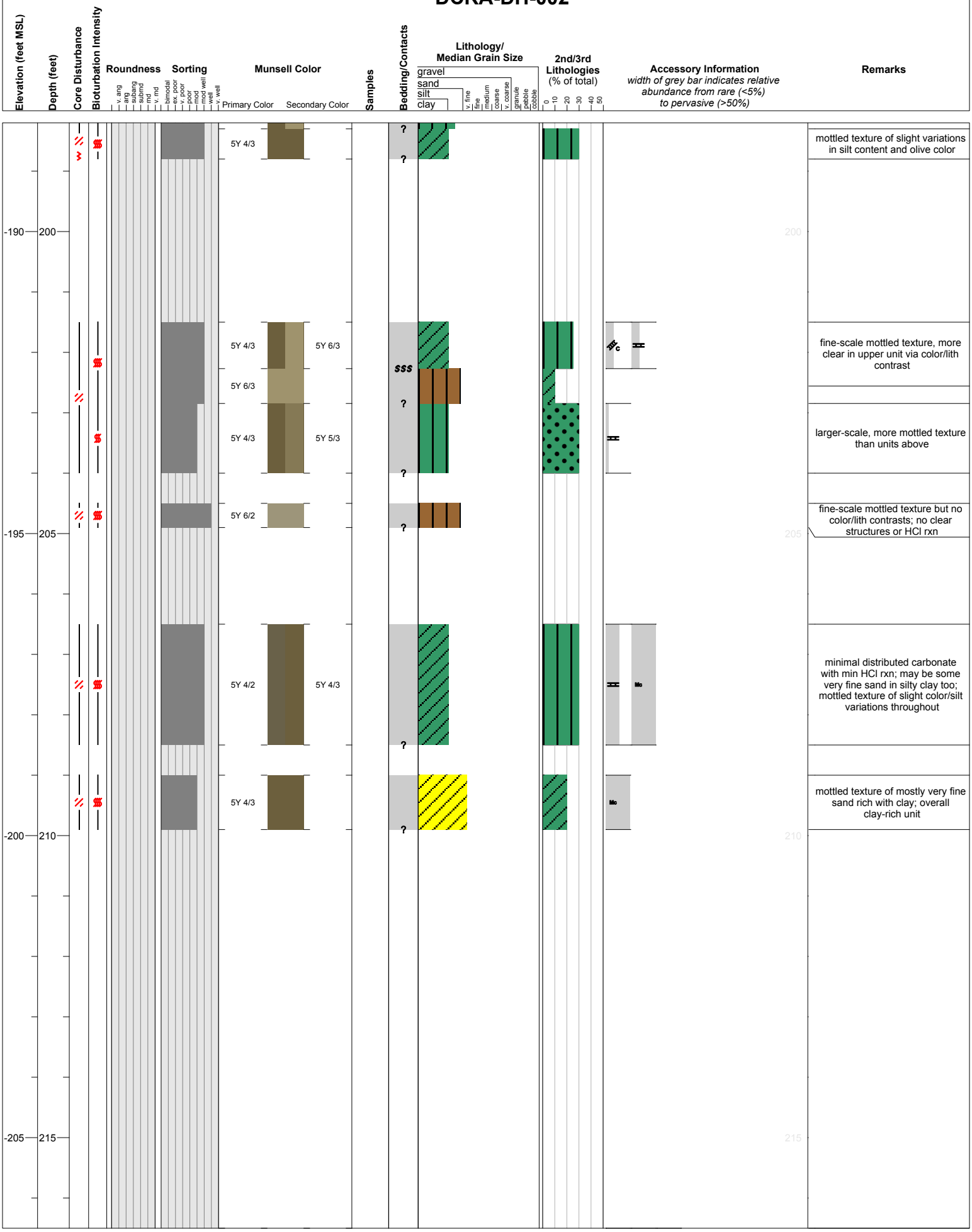
DCRA-DH-002


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative abundance from rare (<5%) to pervasive (>50%)
Remarks
-155
165
-160
170
-165
175
5Y 7/3
5Y 4/3
5Y 5/3
5Y 4/3
5Y 5/4
TEP
may be distributed very fine carbonate, but no clear HCl rxn; 0.7-1.1 ft: mottled texture with upward increase in silt content (lighter color)
5Y 4/3
5Y 5/3
mottled appearance with two slightly different colors, greater at top; due to bioturbation
5Y 7/3
5Y 4/3
TEP
GM
mottled appearance, very hard and difficult to create nice surface to view bioturbation, structures, etc.
Ped Stage I: leached zone not retained in core; 0-0.35 ft: distributed carbonate with moderate HCl rxn throughout; 0.35-0.5 ft: distributed carbonate continues; concentrated carbonate in burrows/small roots (mm diameter)
5Y 4/4
carbonate with HCl rxn concentrated in mm burrows/root traces
TEP
5Y 4/3
Mc
CRB
general fining upward from mostly fine sand to mostly very fine sand; also contains silt and clay; small (cm) carbonate nodules
approx. same grain sizes present but less sand and more clay than above; small (cm) soft carbonate masses
5Y 4/3
mostly sand but also significant % clay and silt
5Y 4/3
5Y 6/3
5Y 4/3
5Y 6/3
5Y 6/3
5Y 4/3
5Y 4/3
5Y 6/3
Mc
mottled texture of two colors, possibly two phases of bioturbation; may have originally been more bedded
Overall thickly bedded silty clay unit with varying silt content (color); 0.6-0.9 ft: may have originally been more thinly bedded, disturbed by bioturbation
5Y 4/3
5Y 5/3
somewhat massive appearance due to bioturbation, but originally thinnly bedded sand-rich layers within clay

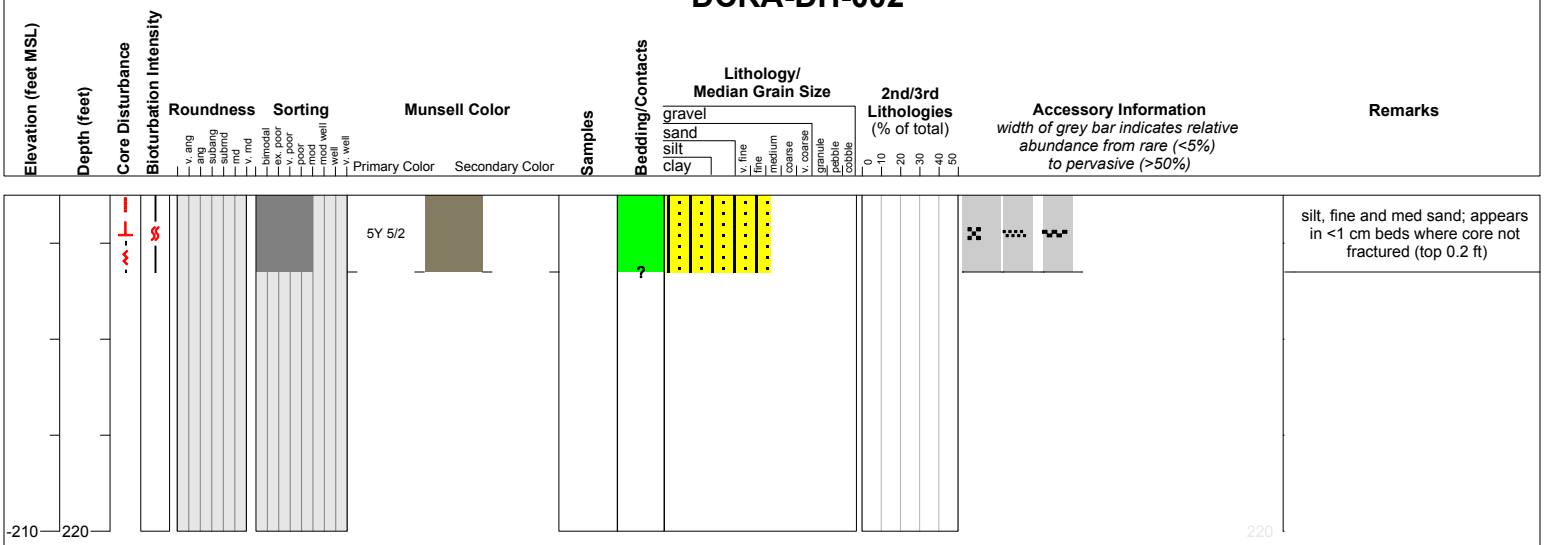
DCRA-DH-002


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-170
180
-175
185
-180
190
-185
195
5Y 6/3
5Y 4/3
5Y 6/2
5Y 4/3
5Y 4/3
5Y 6/2
5Y 6/2
5Y 4/3
5Y 4/3
5Y 5/3
5Y 4/2
5Y 4/3
5Y 6/3
carbonate veinlets with strong HCl rxn and distributed carbonate throughout with min to mod HCl rxn; hard, difficult to create surface to see structures, etc.
mottled texture of slightly different olive colors with carbonate (5Y8/2) accumulation areas in lower half of core; distributed carbonate throughout with moderate HCl rxn; soft carbonate masses in lower half (cm) with strong HCl rxn.
massive, mottled texture indicative of extensive bioturbation at small scale
overall mottled texture with slightly different olive colors between two lithologies due to bioturbation; minimal carbonate concentrations
mottled texture indicative of bioturbation; any prior layering unclear; 0-1.1 ft: Ped Stage I+: slightly darker color at top unit, zone of leaching not included in retained core
mottled very fine sand in clay unit
mottled texture of more clay-rich and more silt-rich zones; more silt in base 0.2 ft.

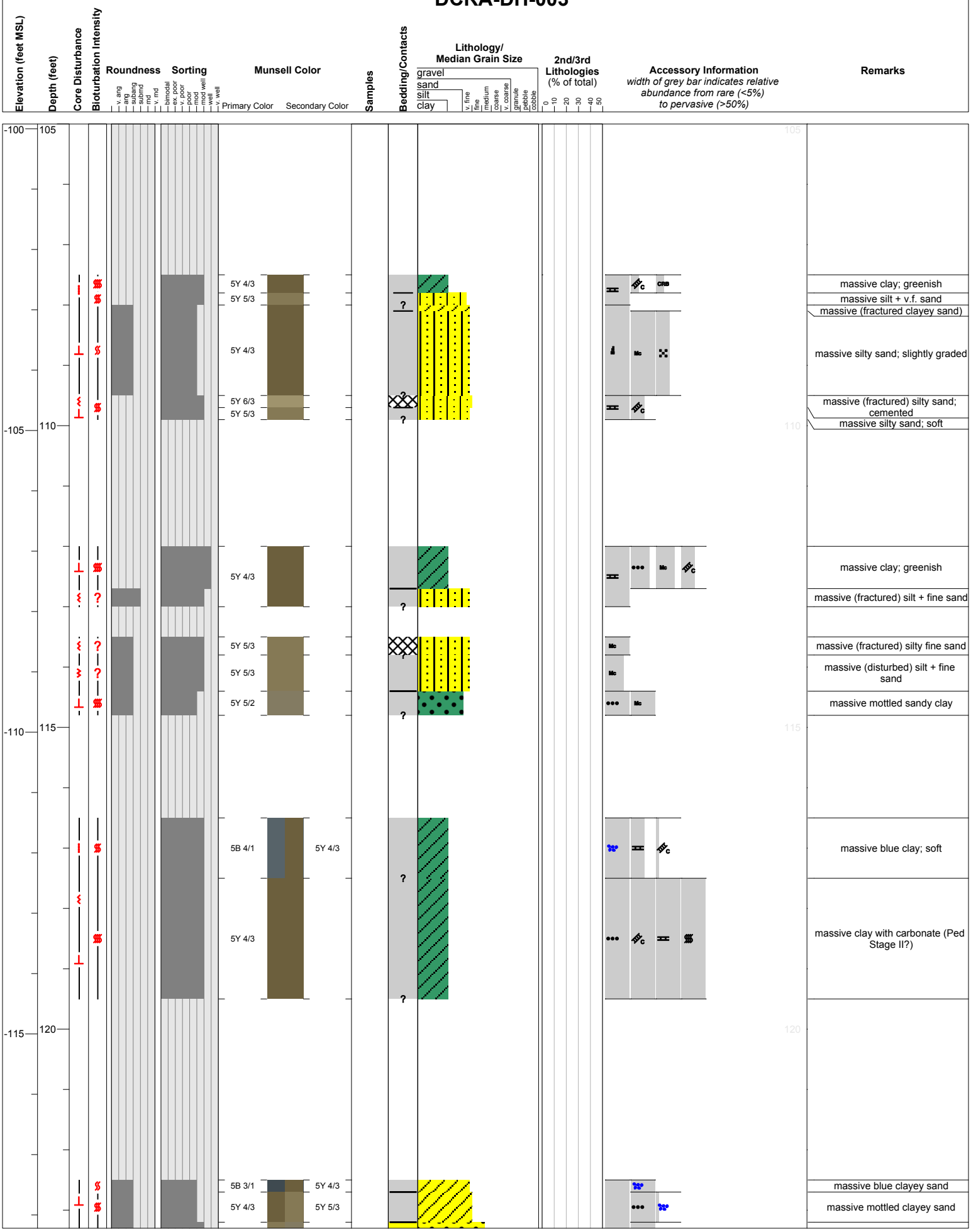
DCRA-DH-002


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
5Y 4/3
5Y 6/3
5Y 6/3
5Y 4/3
5Y 5/3
5Y 6/2
5Y 4/2
5Y 4/3
5Y 4/3
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative abundance from rare (<5%) to pervasive (>50%)
Remarks
-190
200
-195
205
-200
210
-205
215
mottled texture of slight variations in silt content and olive color
fine-scale mottled texture, more clear in upper unit via color/lith contrast
larger-scale, more mottled texture than units above
fine-scale mottled texture but no color/lith contrasts; no clear structures or HCl rxn
minimal distributed carbonate with min HCl rxn; may be some very fine sand in silty clay too; mottled texture of slight color/silt variations throughout
mottled texture of mostly very fine sand rich with clay; overall clay-rich unit

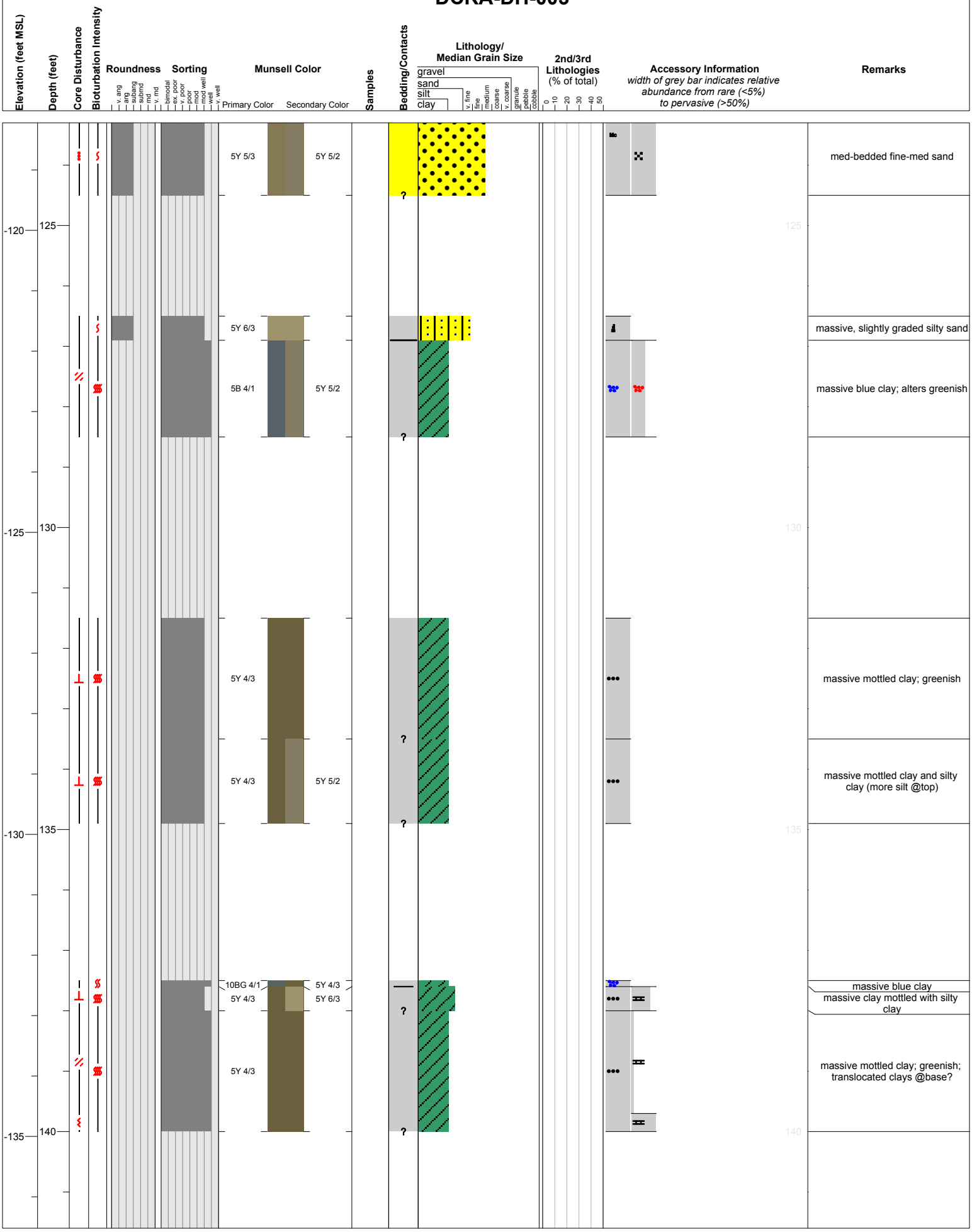
DCRA-DH-002


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
5Y 5/2
Samples
Bedding/Contacts
?
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
silt, fine and med sand; appears
in <1 cm beds where core not
fractured (top 0.2 ft)
-210
220
220

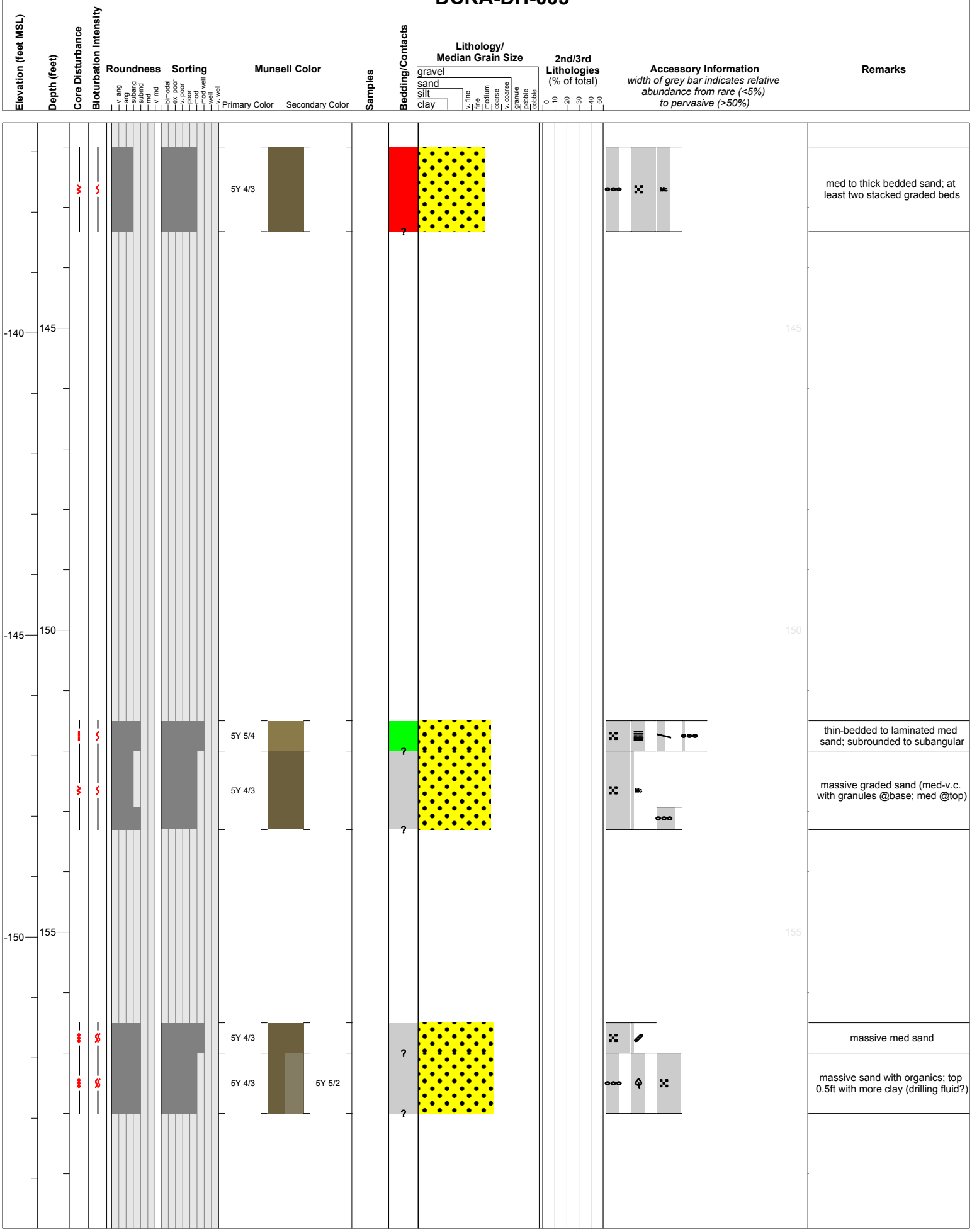
DCRA-DH-003


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative abundance from rare (<5%) to pervasive (>50%)
Remarks
-100
105
-105
110
-110
115
-115
120
5Y 4/3
5Y 5/3
5Y 4/3
5Y 6/3
5Y 5/3
5Y 4/3
5Y 5/3
5Y 5/3
5Y 5/2
5B 4/1
5Y 4/3
5Y 4/3
5B 3/1
5Y 4/3
5Y 4/3
5Y 5/3
CRB
Mc
massive clay; greenish
massive silt + v.f. sand
massive (fractured clayey sand)
massive silty sand; slightly graded
massive (fractured) silty sand; cemented
massive silty sand; soft
massive clay; greenish
massive (fractured) silt + fine sand
massive (fractured) silty fine sand
massive (disturbed) silt + fine sand
massive mottled sandy clay
massive blue clay; soft
massive clay with carbonate (Ped Stage II?)
massive blue clayey sand
massive mottled clayey sand

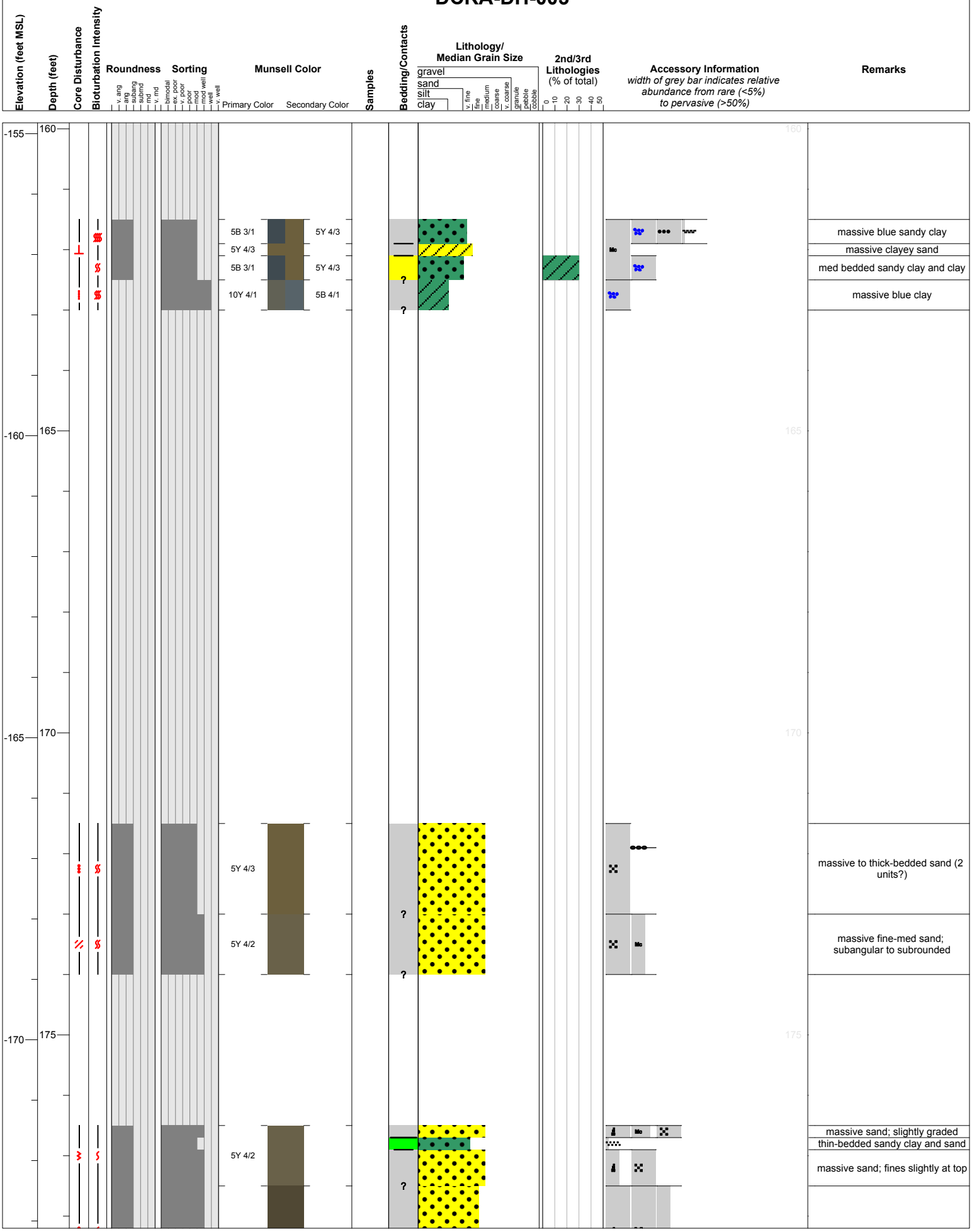
DCRA-DH-003


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-120
-125
-130
-135
125
130
135
140
5Y 5/3
5Y 5/2
5Y 6/3
5B 4/1
5Y 5/2
5Y 4/3
5Y 4/3
5Y 5/2
10BG 4/1
5Y 4/3
5Y 4/3
5Y 6/3
5Y 4/3
med-bedded fine-med sand
massive, slightly graded silty sand
massive blue clay; alters greenish
massive mottled clay; greenish
massive mottled clay and silty clay (more silt @top)
massive blue clay
massive clay mottled with silty clay
massive mottled clay; greenish; translocated clays @base?

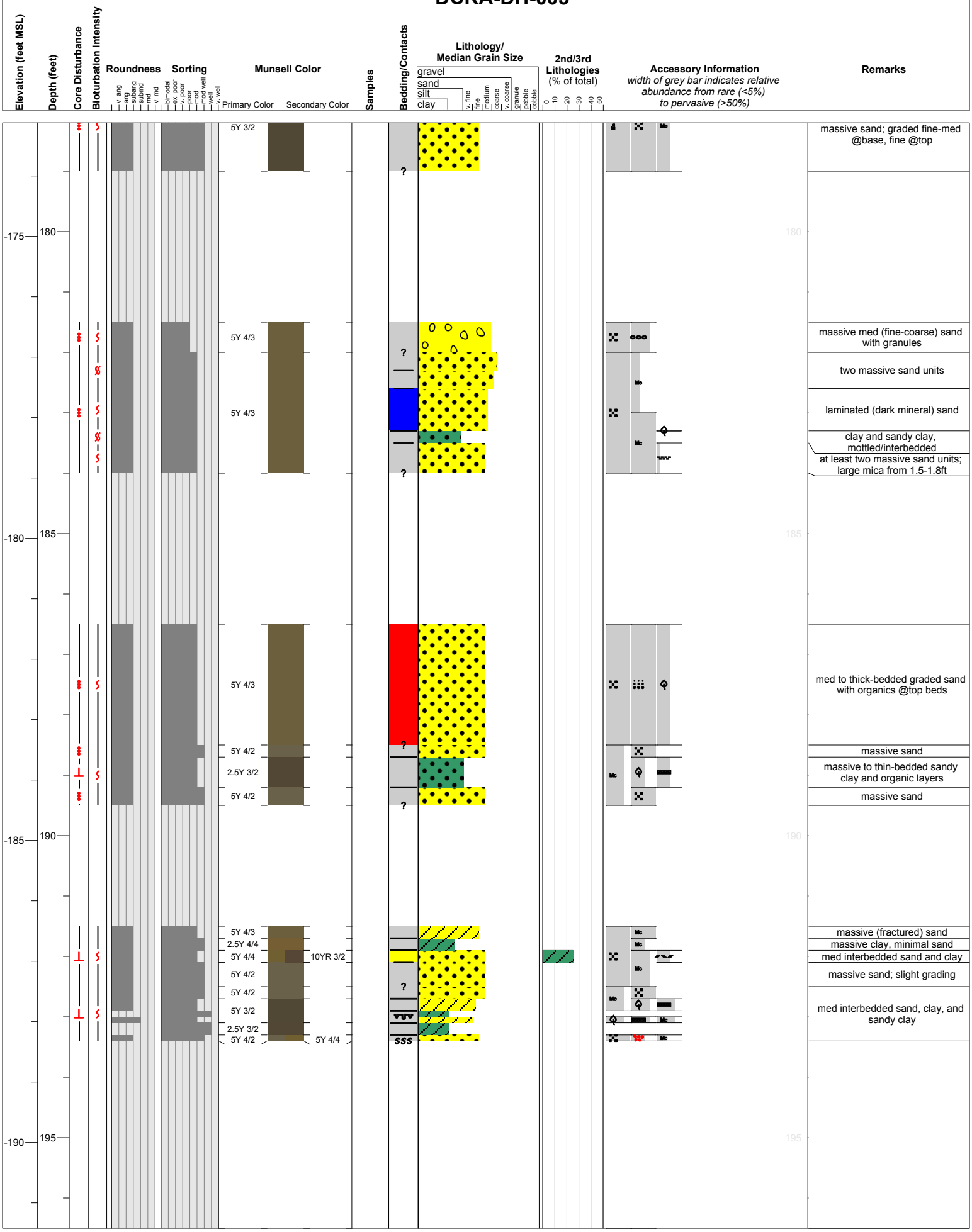
DCRA-DH-003


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-140
-145
-150
145
150
155
5Y 4/3
5Y 5/4
5Y 4/3
5Y 4/3
5Y 4/3
5Y 5/2
med to thick bedded sand; at least two stacked graded beds
thin-bedded to laminated med sand; subrounded to subangular
massive graded sand (med-v.c. with granules @base; med @top)
massive med sand
massive sand with organics; top 0.5ft with more clay (drilling fluid?)

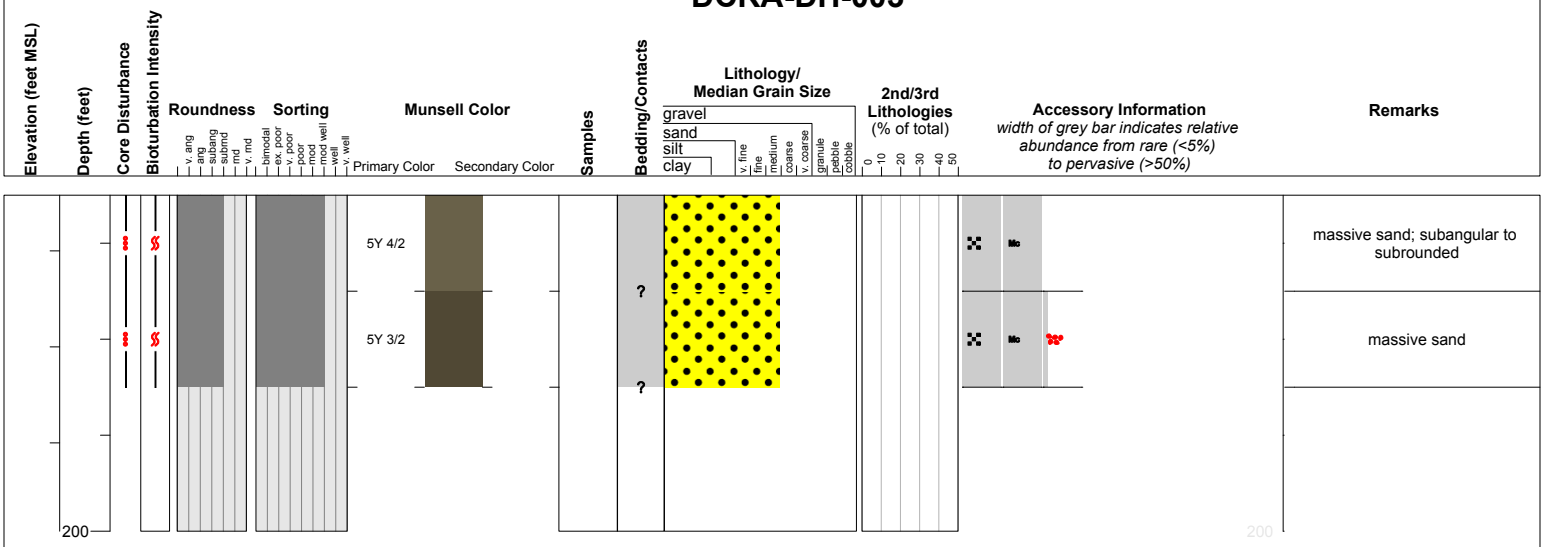
DCRA-DH-003


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-155
-160
-165
-170
160
165
170
175
5B 3/1
5Y 4/3
5B 3/1
10Y 4/1
5Y 4/3
5B 4/1
5Y 4/3
5Y 4/2
5Y 4/2
Mc
massive blue sandy clay
massive clayey sand
med bedded sandy clay and clay
massive blue clay
massive to thick-bedded sand (2 units?)
massive fine-med sand; subangular to subrounded
massive sand; slightly graded
thin-bedded sandy clay and sand
massive sand; fines slightly at top

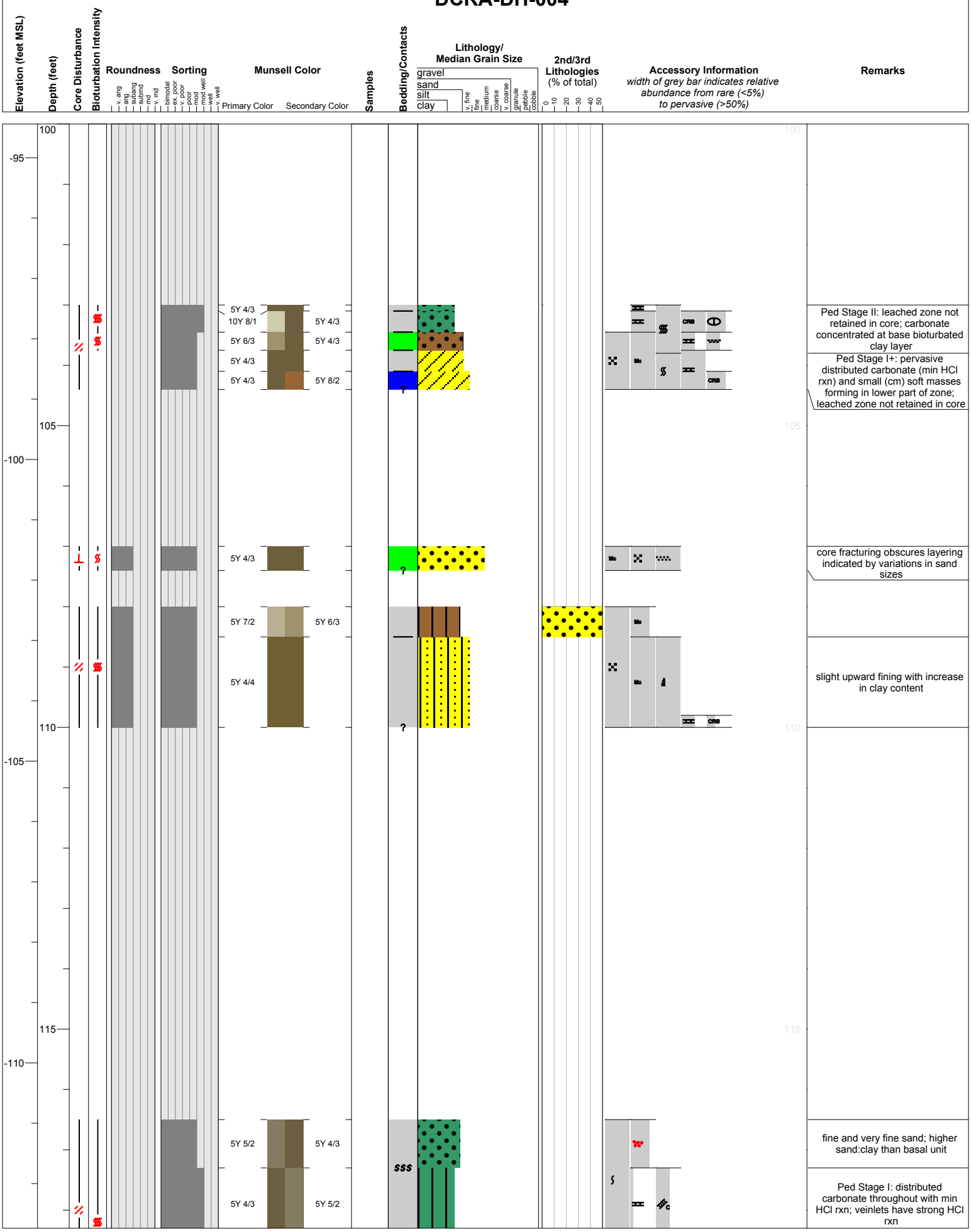
DCRA-DH-003


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-175
-180
-185
-190
180
185
190
195
5Y 3/2
5Y 4/3
5Y 4/3
5Y 4/3
5Y 4/2
2.5Y 3/2
5Y 4/2
5Y 4/3
2.5Y 4/4
5Y 4/4
10YR 3/2
5Y 4/2
5Y 4/2
5Y 3/2
2.5Y 3/2
5Y 4/2
5Y 4/4
massive sand; graded fine-med @base, fine @top
massive med (fine-coarse) sand with granules
two massive sand units
laminated (dark mineral) sand
clay and sandy clay, mottled/interbedded
at least two massive sand units; large mica from 1.5-1.8ft
med to thick-bedded graded sand with organics @top beds
massive sand
massive to thin-bedded sandy clay and organic layers
massive sand
massive (fractured) sand
massive clay, minimal sand
med interbedded sand and clay
massive sand; slight grading
med interbedded sand, clay, and sandy clay

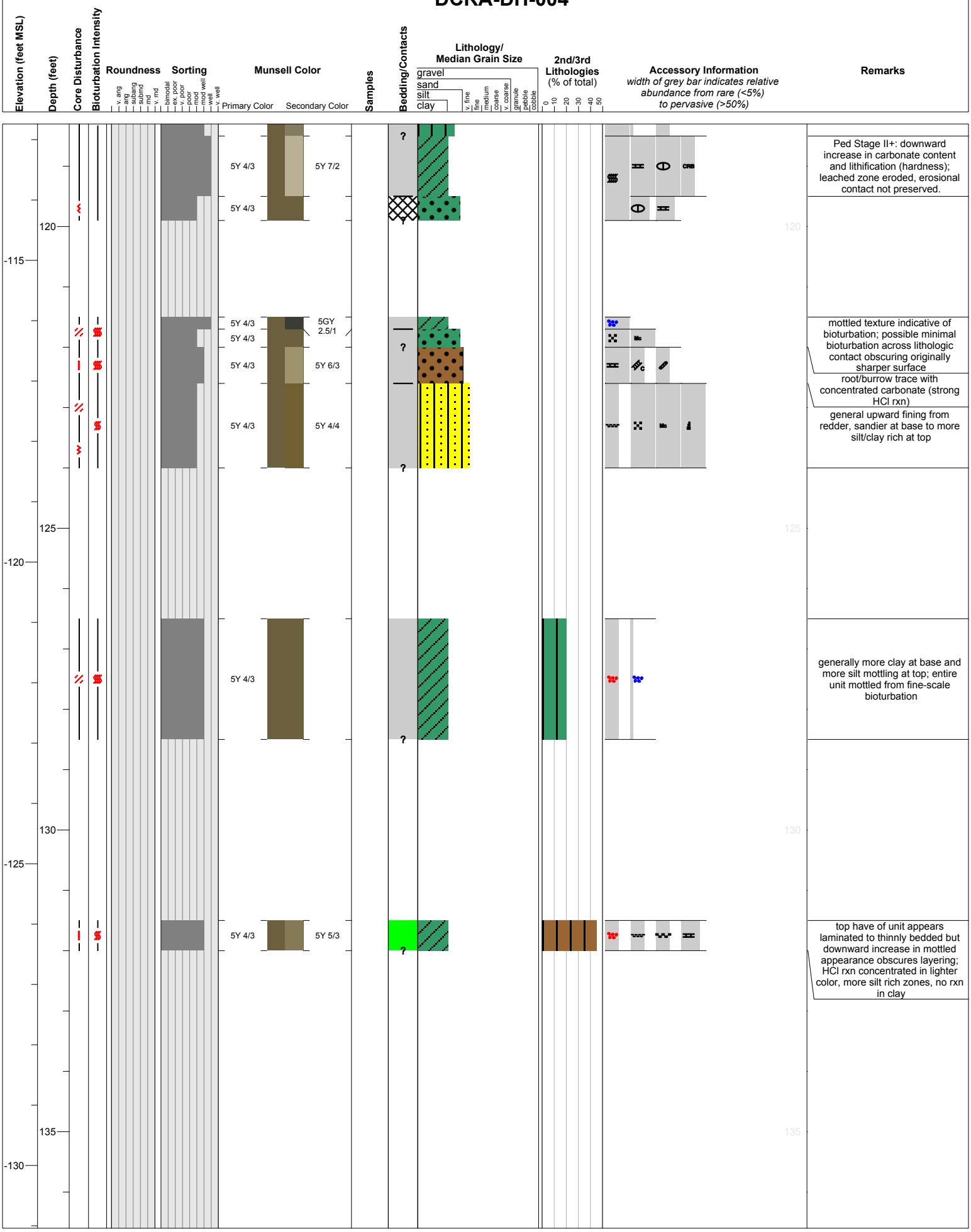
DCRA-DH-003


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
5Y 4/2
5Y 3/2
Samples
Bedding/Contacts
?
?
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Mo
Mo
Remarks
massive sand; subangular to
subrounded
massive sand
200
200

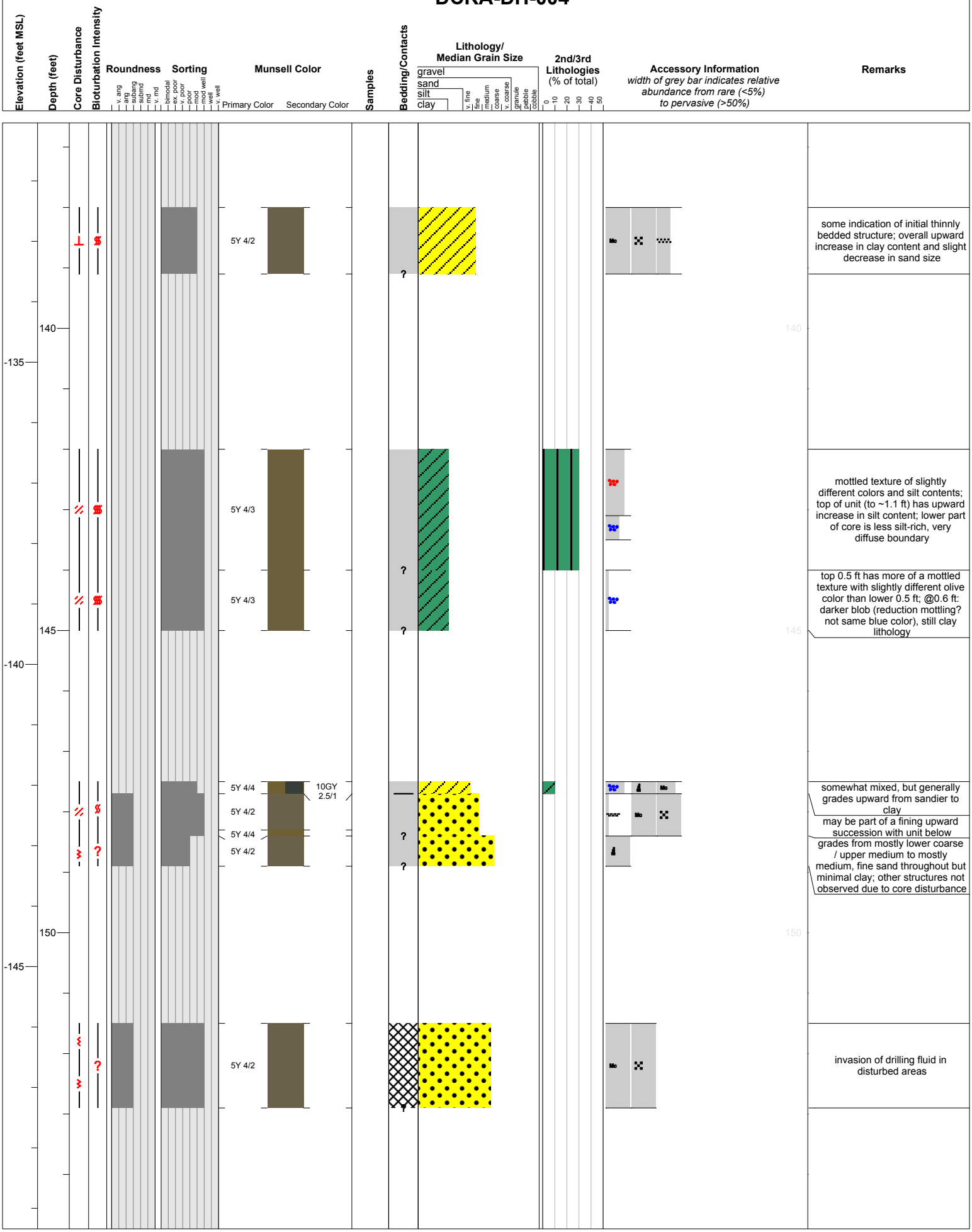
DCRA-DH-004


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative abundance from rare (<5%) to pervasive (>50%)
Remarks
100
105
110
115
-95
-100
-105
-110
5Y 4/3
10Y 8/1
5Y 6/3
5Y 4/3
5Y 4/3
5Y 8/2
5Y 7/2
5Y 6/3
5Y 4/4
5Y 5/2
5Y 4/3
Mo
CRB
Ped Stage II: leached zone not retained in core; carbonate concentrated at base bioturbated clay layer
Ped Stage I+: pervasive distributed carbonate (min HCl rxn) and small (cm) soft masses forming in lower part of zone; leached zone not retained in core
core fracturing obscures layering indicated by variations in sand sizes
slight upward fining with increase in clay content
fine and very fine sand; higher sand:clay than basal unit
Ped Stage I: distributed carbonate throughout with min HCl rxn; veinlets have strong HCl rxn

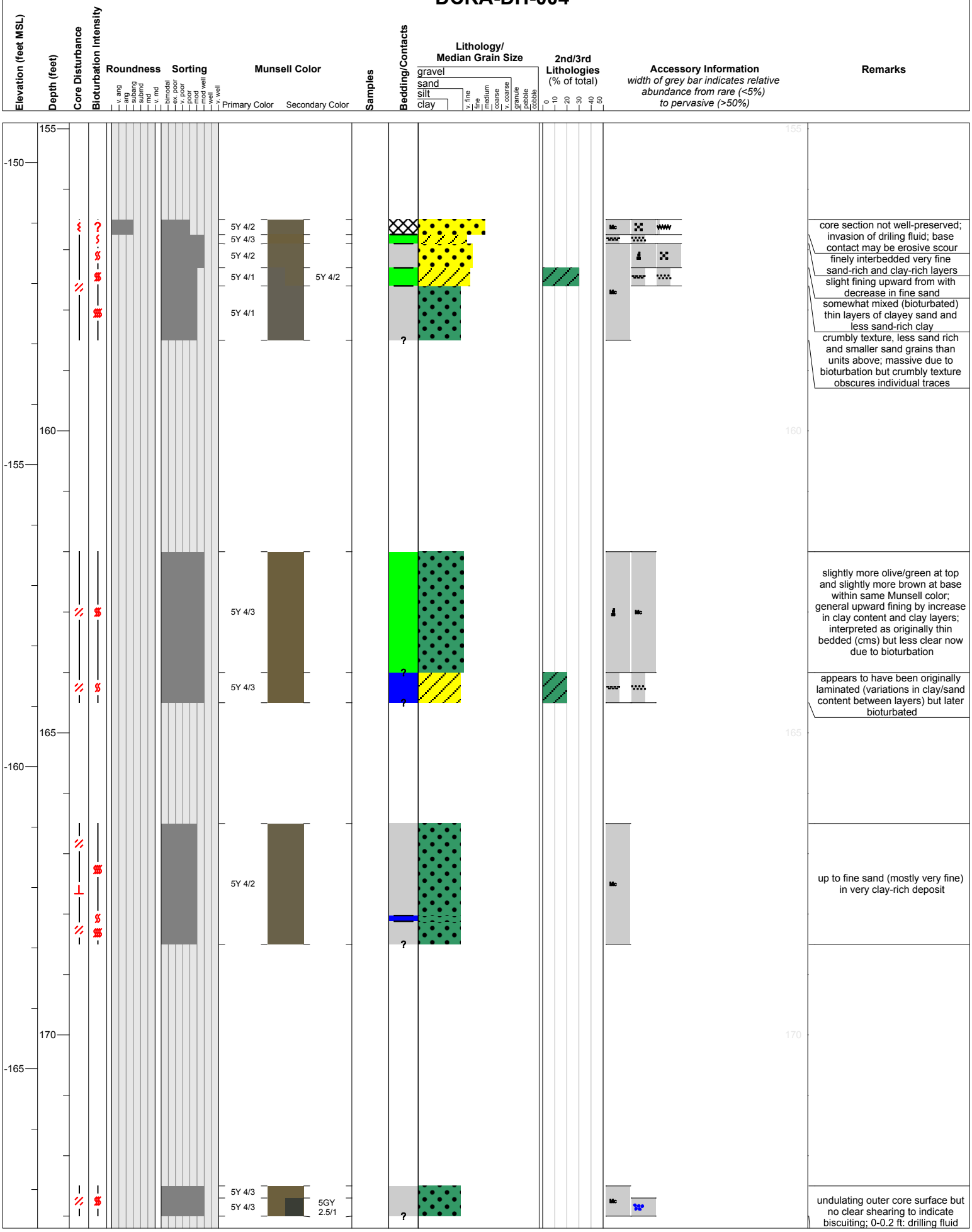
DCRA-DH-004


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative abundance from rare (<5%) to pervasive (>50%)
Remarks
-115
-120
-125
-130
120
125
130
135
5Y 4/3
5Y 7/2
5Y 4/3
5Y 4/3
5GY 2.5/1
5Y 4/3
5Y 6/3
5Y 4/3
5Y 4/4
5Y 4/3
5Y 4/3
5Y 5/3
Mo
C
Mo
CRB
Ped Stage II+: downward increase in carbonate content and lithification (hardness); leached zone eroded, erosional contact not preserved.
mottled texture indicative of bioturbation; possible minimal bioturbation across lithologic contact obscuring originally sharper surface
root/burrow trace with concentrated carbonate (strong HCl rxn)
general upward fining from redder, sandier at base to more silt/clay rich at top
generally more clay at base and more silt mottling at top; entire unit mottled from fine-scale bioturbation
top have of unit appears laminated to thinnly bedded but downward increase in mottled appearance obscures layering; HCl rxn concentrated in lighter color, more silt rich zones, no rxn in clay

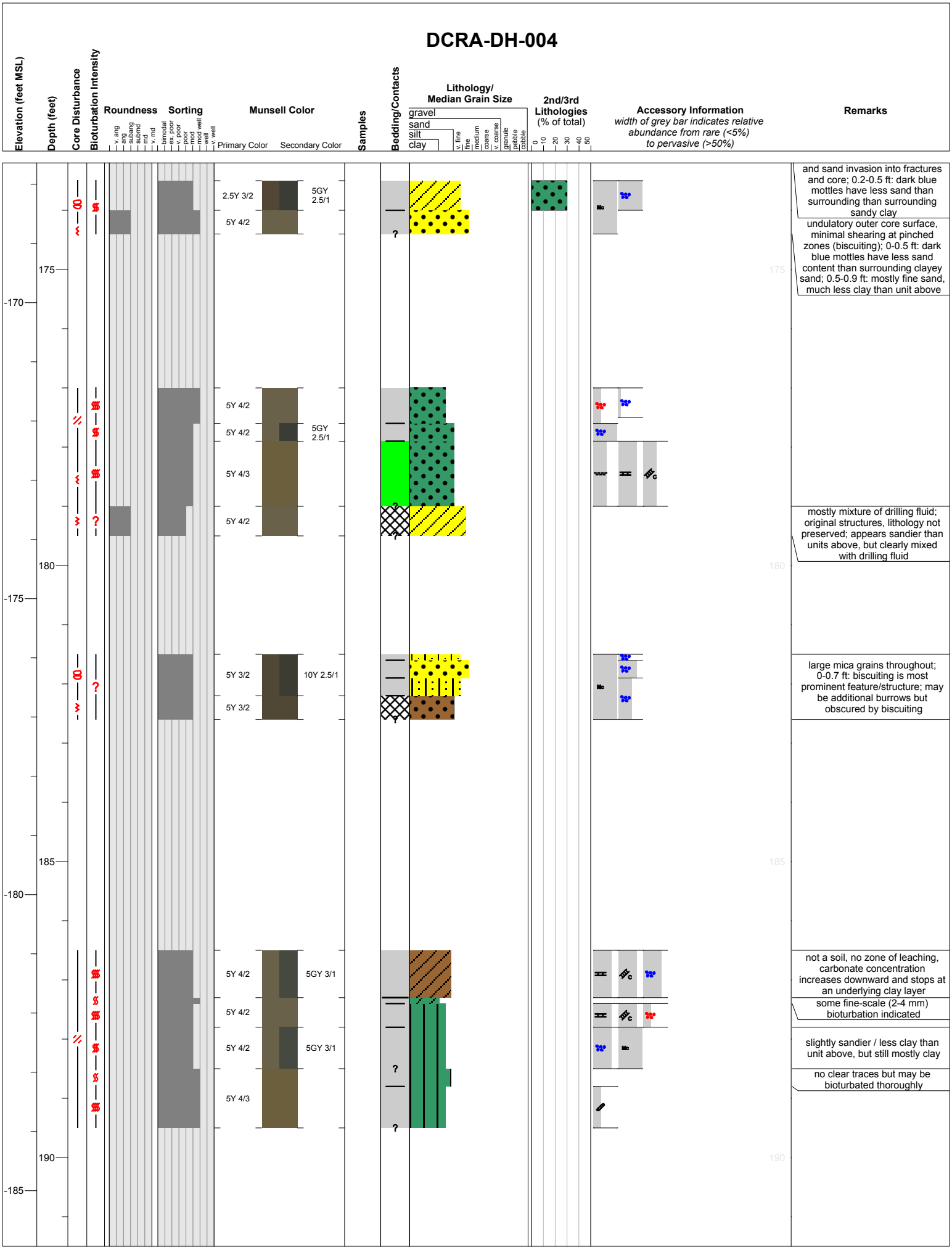
DCRA-DH-004


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
140
145
150
-135
-140
-145
5Y 4/2
5Y 4/3
5Y 4/3
5Y 4/4
5Y 4/2
5Y 4/4
5Y 4/2
10GY
2.5/1
5Y 4/2
Mo
some indication of initial thinnly bedded structure; overall upward increase in clay content and slight decrease in sand size
mottled texture of slightly different colors and silt contents; top of unit (to ~1.1 ft) has upward increase in silt content; lower part of core is less silt-rich, very diffuse boundary
top 0.5 ft has more of a mottled texture with slightly different olive color than lower 0.5 ft; @0.6 ft: darker blob (reduction mottling? not same blue color), still clay lithology
somewhat mixed, but generally grades upward from sandier to clay
may be part of a fining upward succession with unit below
grades from mostly lower coarse / upper medium to mostly medium, fine sand throughout but minimal clay; other structures not observed due to core disturbance
invasion of drilling fluid in disturbed areas

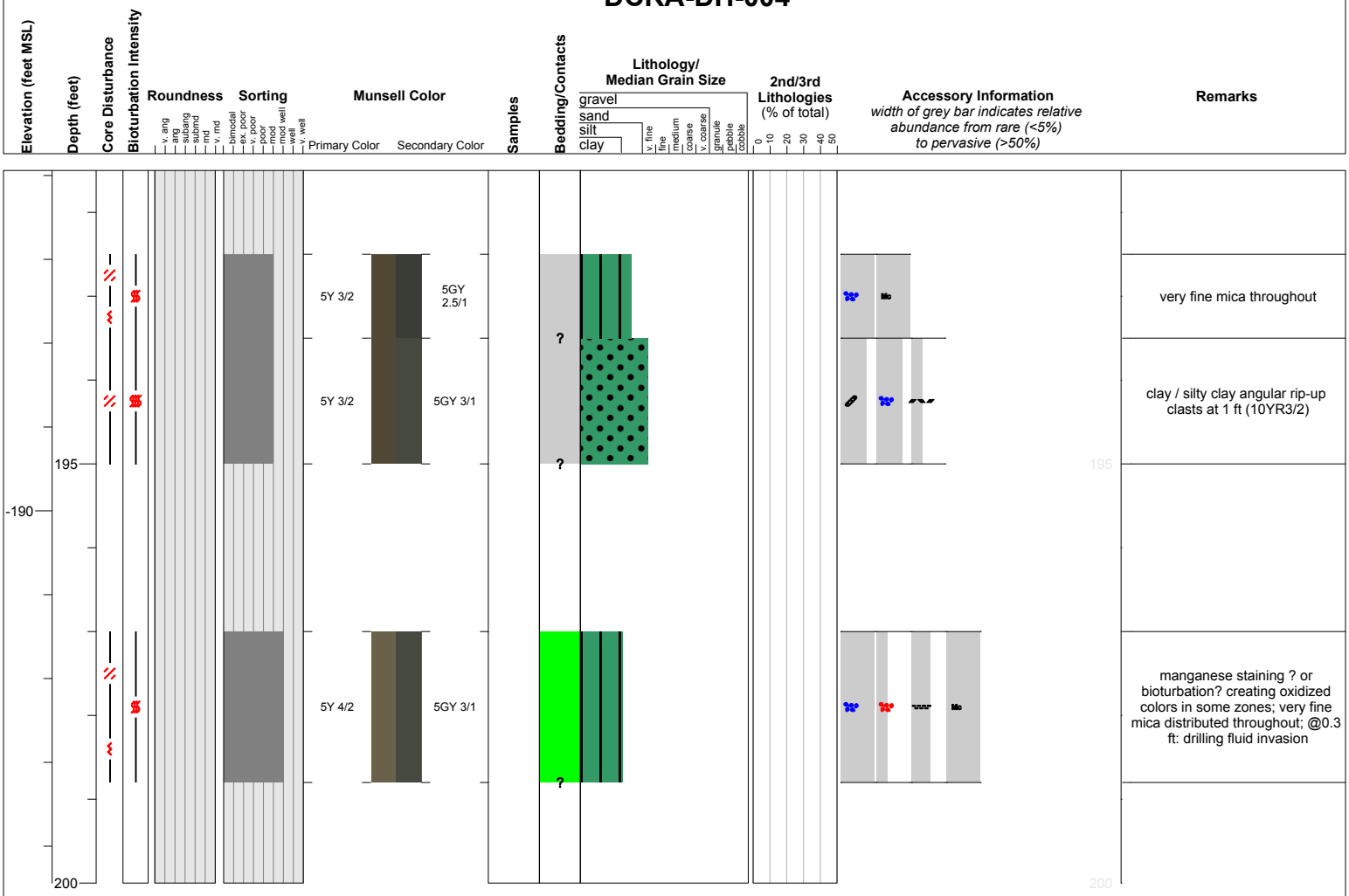
DCRA-DH-004


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative abundance from rare (<5%) to pervasive (>50%)
Remarks
155
160
165
170
-150
-155
-160
-165
5Y 4/2
5Y 4/3
5Y 4/2
5Y 4/1
5Y 4/2
5Y 4/1
5Y 4/3
5Y 4/3
5Y 4/2
5Y 4/3
5Y 4/3
5GY 2.5/1
core section not well-preserved; invasion of driling fluid; base contact may be erosive scour
finely interbedded very fine sand-rich and clay-rich layers
slight fining upward from with decrease in fine sand
somewhat mixed (bioturbated) thin layers of clayey sand and less sand-rich clay
crumbly texture, less sand rich and smaller sand grains than units above; massive due to bioturbation but crumbly texture obscures individual traces
slightly more olive/green at top and slightly more brown at base within same Munsell color; general upward fining by increase in clay content and clay layers; interpreted as originally thin bedded (cms) but less clear now due to bioturbation
appears to have been originally laminated (variations in clay/sand content between layers) but later bioturbated
up to fine sand (mostly very fine) in very clay-rich deposit
undulating outer core surface but no clear shearing to indicate biscuiting; 0-0.2 ft: drilling fluid

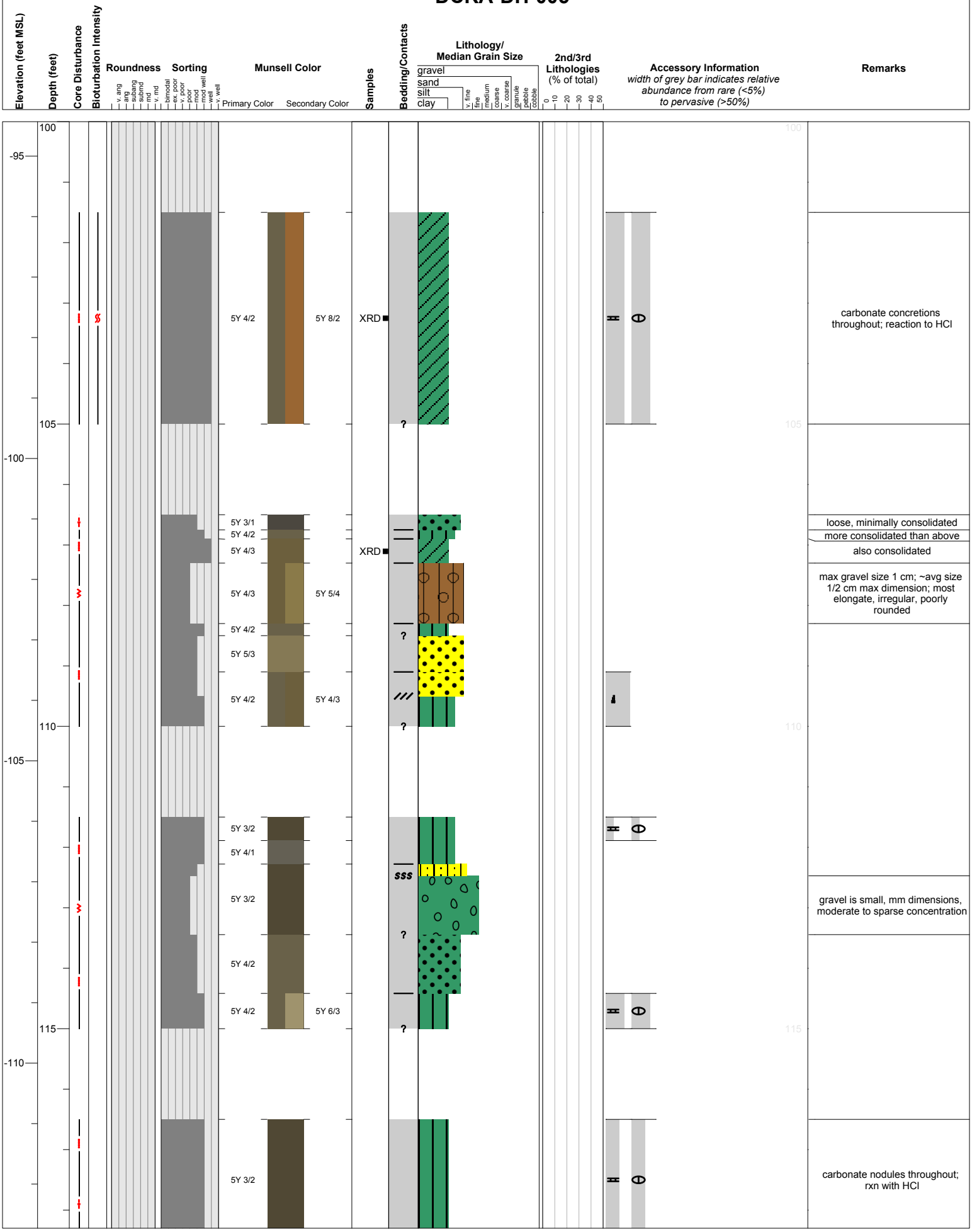
DCRA-DH-004


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative abundance from rare (<5%) to pervasive (>50%)
Remarks
175
180
185
190
-170
-175
-180
-185
2.5Y 3/2
5GY 2.5/1
5Y 4/2
5Y 4/3
5Y 3/2
10Y 2.5/1
5GY 3/1
Mc
and sand invasion into fractures and core; 0.2-0.5 ft: dark blue mottles have less sand than surrounding than surrounding sandy clay
undulatory outer core surface, minimal shearing at pinched zones (biscuiting); 0-0.5 ft: dark blue mottles have less sand content than surrounding clayey sand; 0.5-0.9 ft: mostly fine sand, much less clay than unit above
mostly mixture of drilling fluid; original structures, lithology not preserved; appears sandier than units above, but clearly mixed with drilling fluid
large mica grains throughout; 0-0.7 ft: biscuiting is most prominent feature/structure; may be additional burrows but obscured by biscuiting
not a soil, no zone of leaching, carbonate concentration increases downward and stops at an underlying clay layer
some fine-scale (2-4 mm) bioturbation indicated
slightly sandier / less clay than unit above, but still mostly clay
no clear traces but may be bioturbated thoroughly

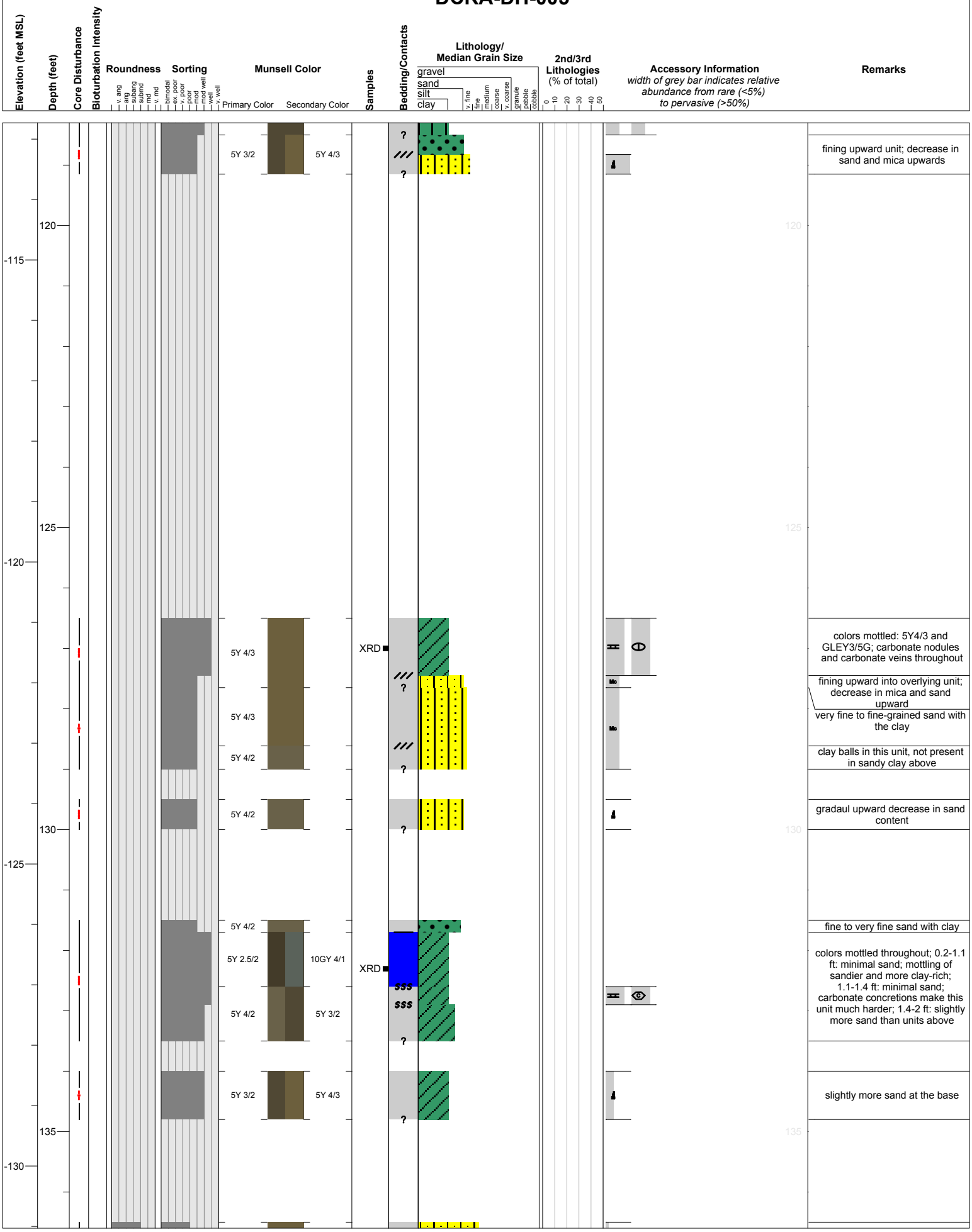
DCRA-DH-004


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
195
-190
200
5Y 3/2
5GY
2.5/1
5Y 3/2
5GY 3/1
5Y 4/2
5GY 3/1
Mo
Mo
very fine mica throughout
clay / silty clay angular rip-up
clasts at 1 ft (10YR3/2)
manganese staining ? or
bioturbation? creating oxidized
colors in some zones; very fine
mica distributed throughout; @0.3
ft: drilling fluid invasion

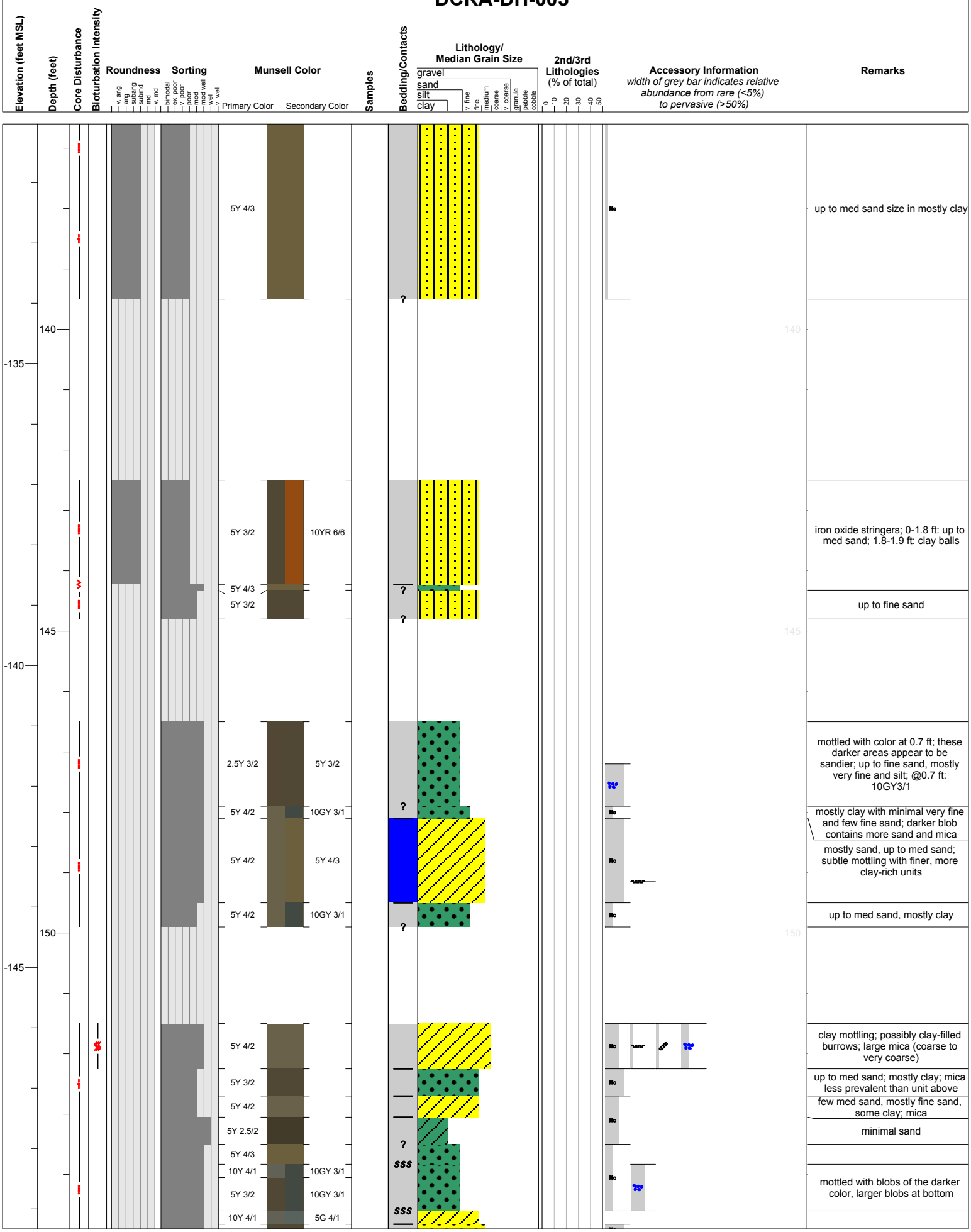
DCRA-DH-005


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative abundance from rare (<5%) to pervasive (>50%)
Remarks
100
-95
105
-100
110
-105
115
-110
5Y 4/2
5Y 8/2
XRD
carbonate concretions throughout; reaction to HCl
5Y 3/1
5Y 4/2
5Y 4/3
5Y 4/3
5Y 5/4
5Y 4/2
5Y 5/3
5Y 4/2
5Y 4/3
loose, minimally consolidated
more consolidated than above
also consolidated
max gravel size 1 cm; ~avg size 1/2 cm max dimension; most elongate, irregular, poorly rounded
5Y 3/2
5Y 4/1
5Y 3/2
5Y 4/2
5Y 4/2
5Y 6/3
SSS
gravel is small, mm dimensions, moderate to sparse concentration
5Y 3/2
carbonate nodules throughout; rxn with HCl

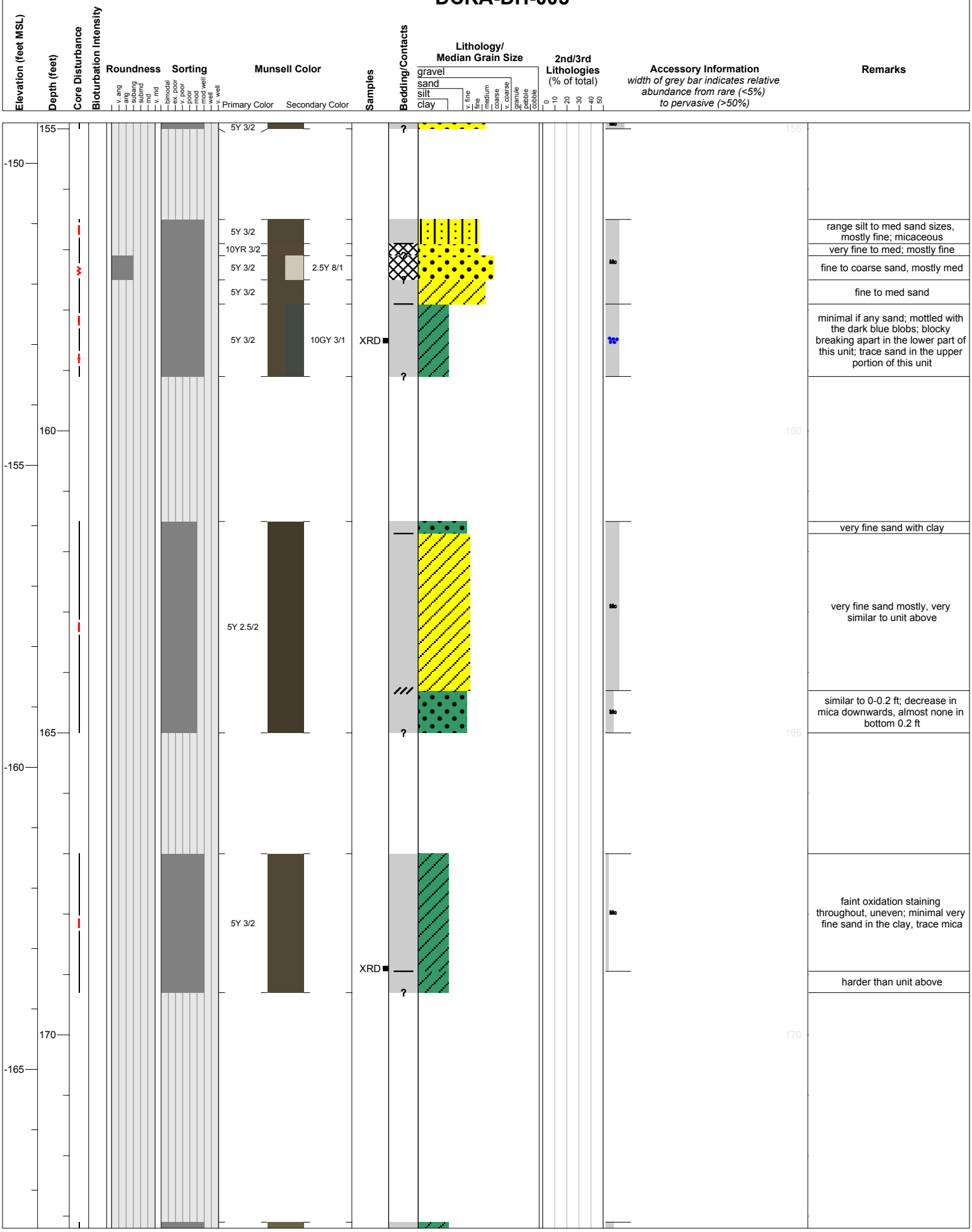
DCRA-DH-005


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-115
-120
-125
-130
120
125
130
135
5Y 3/2
5Y 4/3
5Y 4/3
5Y 4/3
5Y 4/2
5Y 4/2
5Y 4/2
5Y 2.5/2
10GY 4/1
5Y 4/2
5Y 3/2
5Y 3/2
5Y 4/3
XRD
XRD
Mc
Mc
fining upward unit; decrease in sand and mica upwards
colors mottled: 5Y4/3 and GLEY3/5G; carbonate nodules and carbonate veins throughout
fining upward into overlying unit; decrease in mica and sand upward
very fine to fine-grained sand with the clay
clay balls in this unit, not present in sandy clay above
gradaul upward decrease in sand content
fine to very fine sand with clay
colors mottled throughout; 0.2-1.1 ft: minimal sand; mottling of sandier and more clay-rich; 1.1-1.4 ft: minimal sand; carbonate concretions make this unit much harder; 1.4-2 ft: slightly more sand than units above
slightly more sand at the base

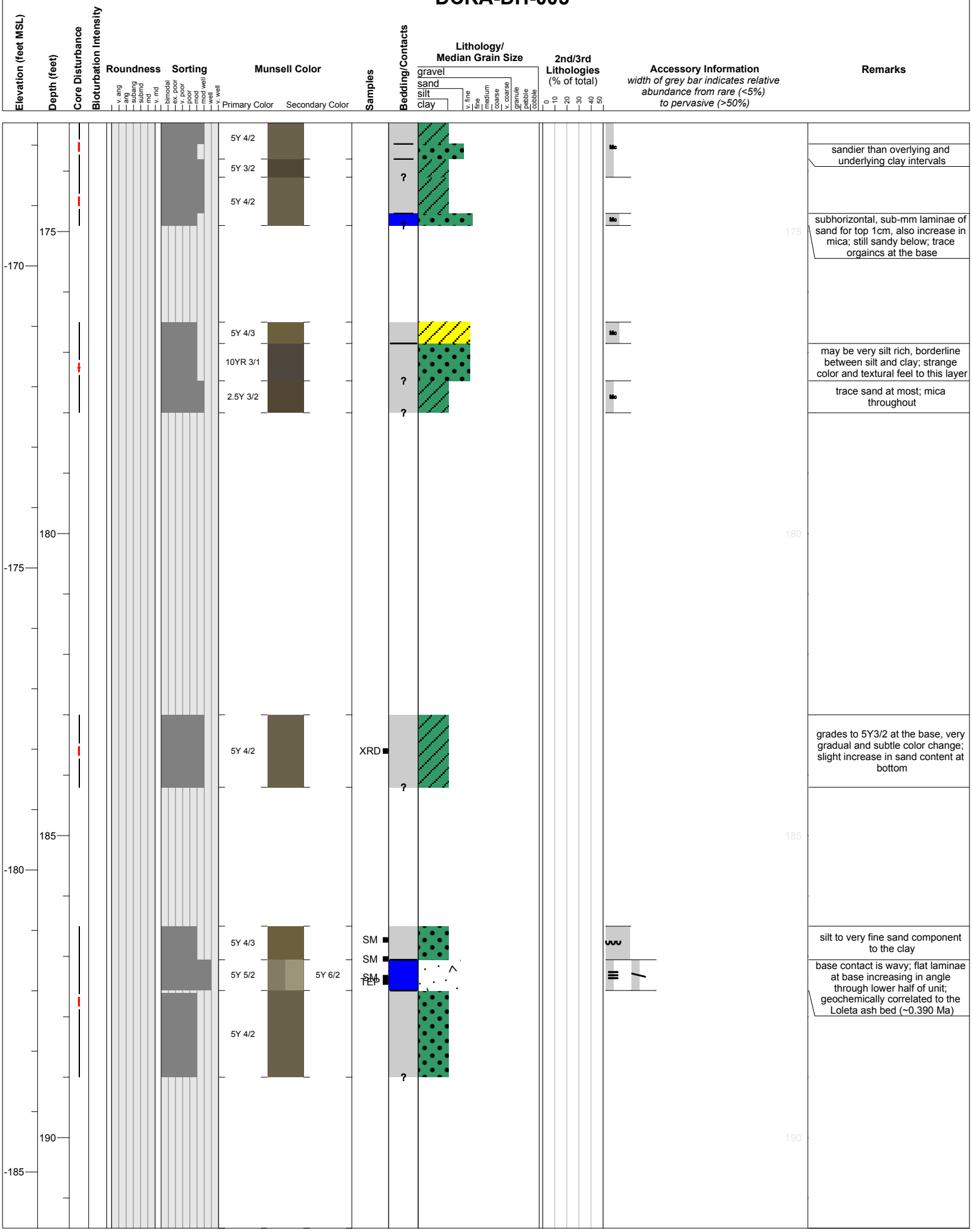
DCRA-DH-005


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative abundance from rare (<5%) to pervasive (>50%)
Remarks
-135
-140
-145
140
145
150
5Y 4/3
5Y 3/2
10YR 6/6
5Y 4/3
5Y 3/2
2.5Y 3/2
5Y 3/2
5Y 4/2
10GY 3/1
5Y 4/2
5Y 4/3
5Y 4/2
10GY 3/1
5Y 4/2
5Y 3/2
5Y 4/2
5Y 2.5/2
5Y 4/3
10Y 4/1
10GY 3/1
5Y 3/2
10GY 3/1
10Y 4/1
5G 4/1
Mc
up to med sand size in mostly clay
iron oxide stringers; 0-1.8 ft: up to med sand; 1.8-1.9 ft: clay balls
up to fine sand
mottled with color at 0.7 ft; these darker areas appear to be sandier; up to fine sand, mostly very fine and silt; @0.7 ft: 10GY3/1
mostly clay with minimal very fine and few fine sand; darker blob contains more sand and mica
mostly sand, up to med sand; subtle mottling with finer, more clay-rich units
up to med sand, mostly clay
clay mottling; possibly clay-filled burrows; large mica (coarse to very coarse)
up to med sand; mostly clay; mica less prevalent than unit above
few med sand, mostly fine sand, some clay; mica
minimal sand
mottled with blobs of the darker color, larger blobs at bottom

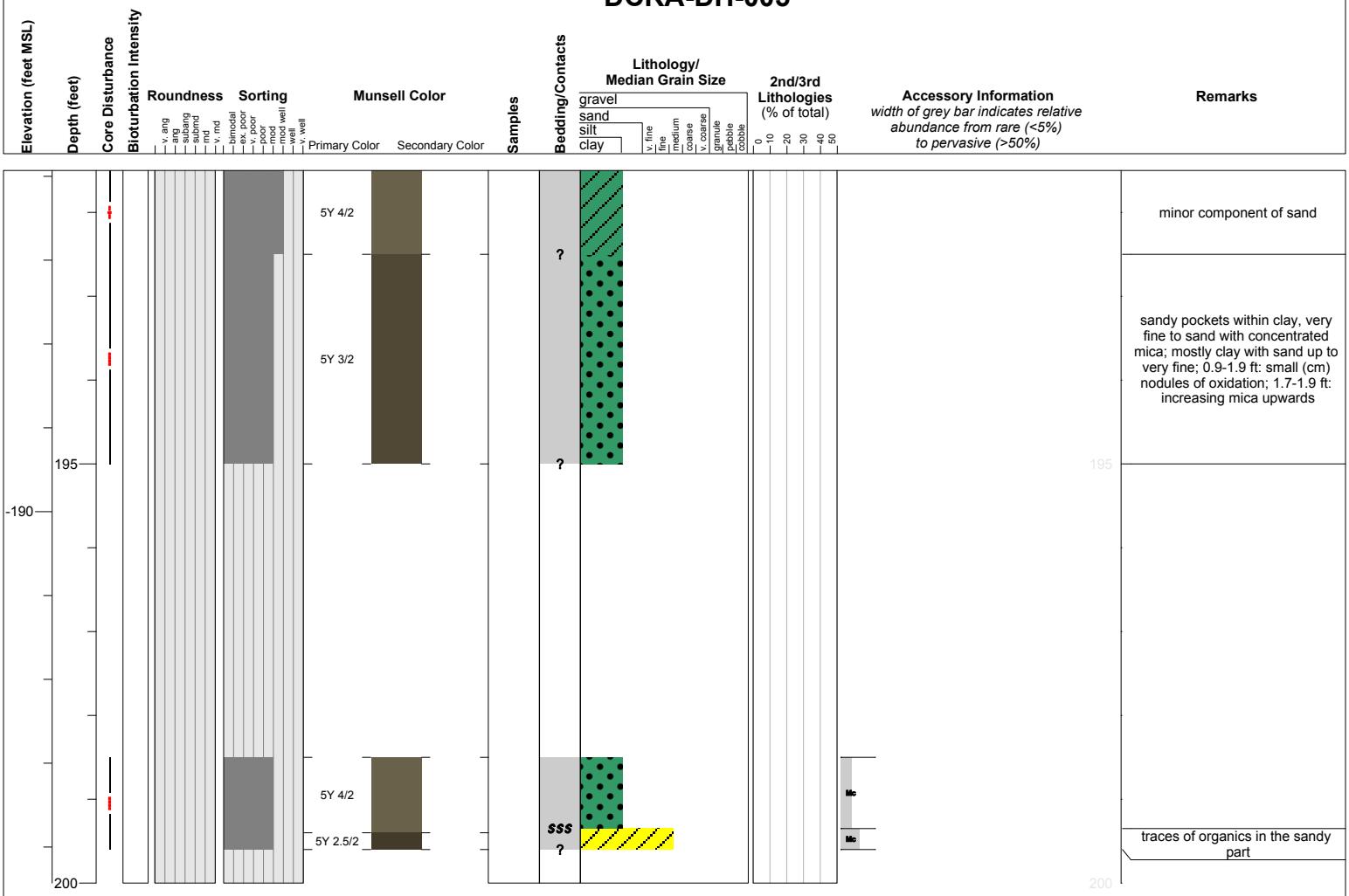
DCRA-DH-005


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
155
160
165
170
-150
-155
-160
-165
5Y 3/2
10YR 3/2
2.5Y 8/1
10GY 3/1
5Y 2.5/2
XRD
Mc
range silt to med sand sizes, mostly fine; micaceous
very fine to med; mostly fine
fine to coarse sand, mostly med
fine to med sand
minimal if any sand; mottled with the dark blue blobs; blocky breaking apart in the lower part of this unit; trace sand in the upper portion of this unit
very fine sand with clay
very fine sand mostly, very similar to unit above
similar to 0-0.2 ft; decrease in mica downwards, almost none in bottom 0.2 ft
faint oxidation staining throughout, uneven; minimal very fine sand in the clay, trace mica
harder than unit above

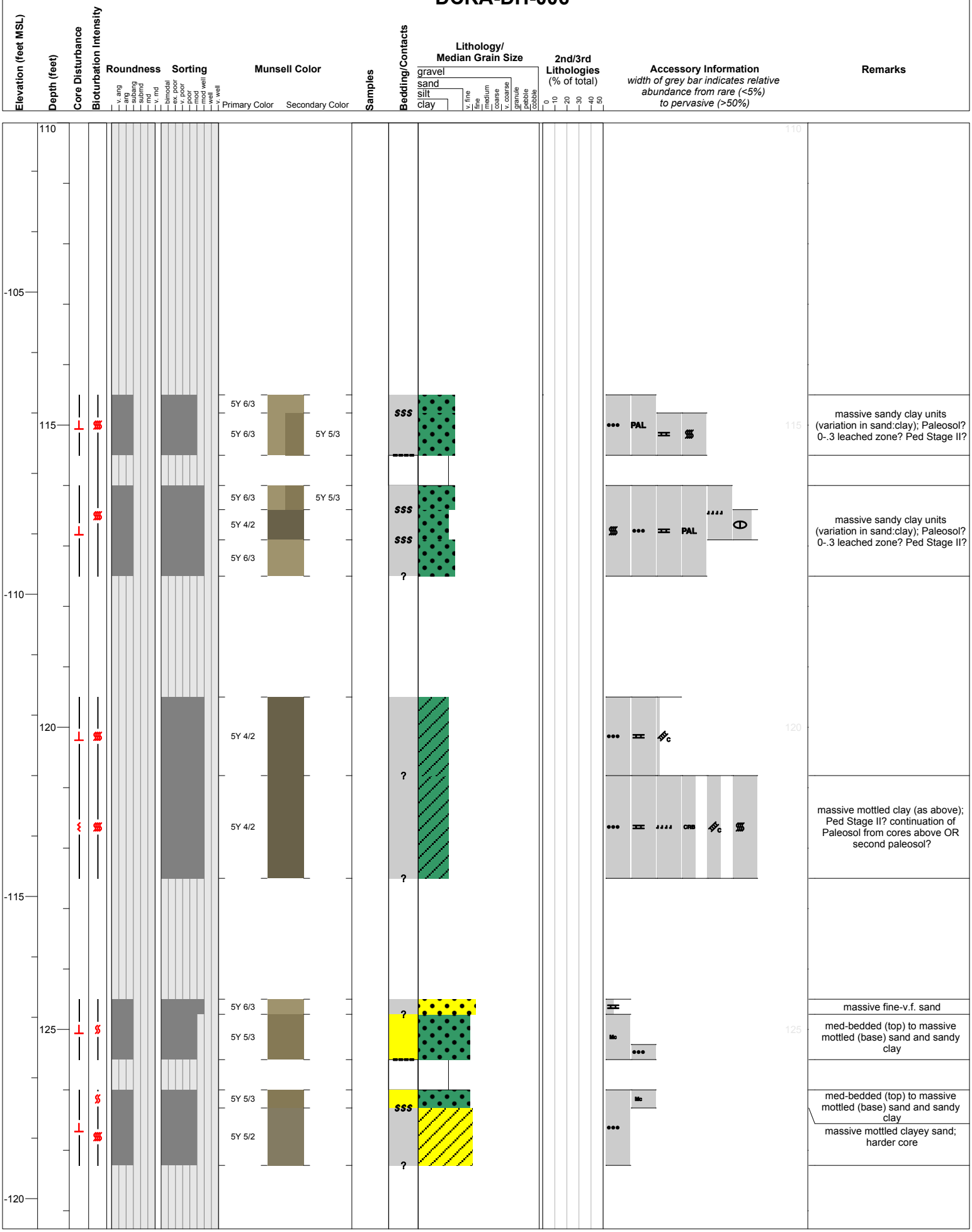
DCRA-DH-005


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative abundance from rare (<5%) to pervasive (>50%)
Remarks
-170
-175
-180
-185
175
180
185
190
5Y 4/2
5Y 3/2
5Y 4/2
5Y 4/3
10YR 3/1
2.5Y 3/2
5Y 4/2
5Y 4/3
5Y 5/2
5Y 6/2
5Y 4/2
XRD
SM
SM
SM
TEP
Mc
Mc
Mc
Mc
sandier than overlying and underlying clay intervals
subhorizontal, sub-mm laminae of sand for top 1cm, also increase in mica; still sandy below; trace orgaincs at the base
may be very silt rich, borderline between silt and clay; strange color and textural feel to this layer
trace sand at most; mica throughout
grades to 5Y3/2 at the base, very gradual and subtle color change; slight increase in sand content at bottom
silt to very fine sand component to the clay
base contact is wavy; flat laminae at base increasing in angle through lower half of unit; geochemically correlated to the Loleta ash bed (~0.390 Ma)

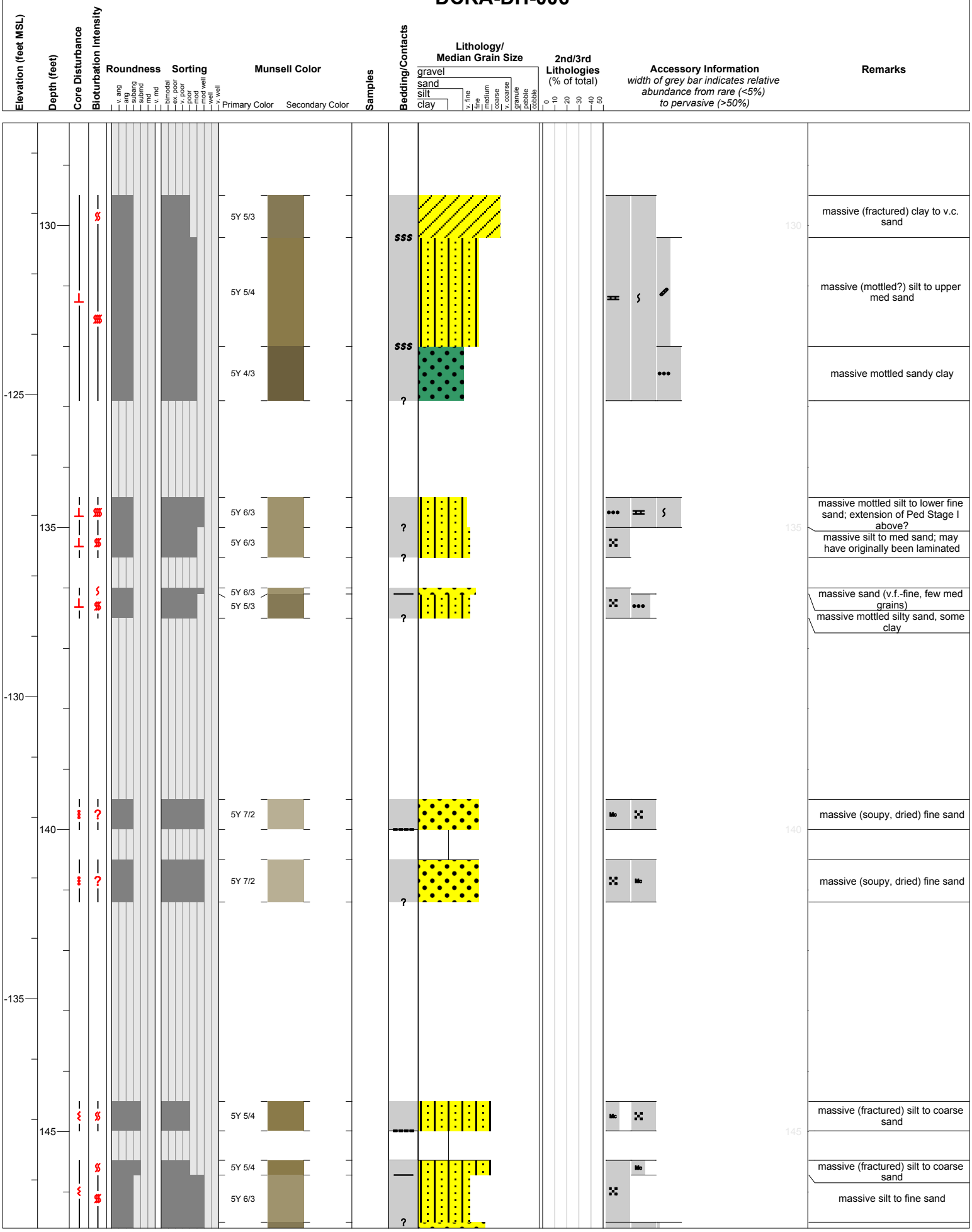
DCRA-DH-005


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
5Y 4/2
5Y 3/2
5Y 4/2
5Y 2.5/2
?
?
SSS
?
Mc
Mc
-190
195
200
minor component of sand
sandy pockets within clay, very fine to sand with concentrated mica; mostly clay with sand up to very fine; 0.9-1.9 ft: small (cm) nodules of oxidation; 1.7-1.9 ft: increasing mica upwards
traces of organics in the sandy part

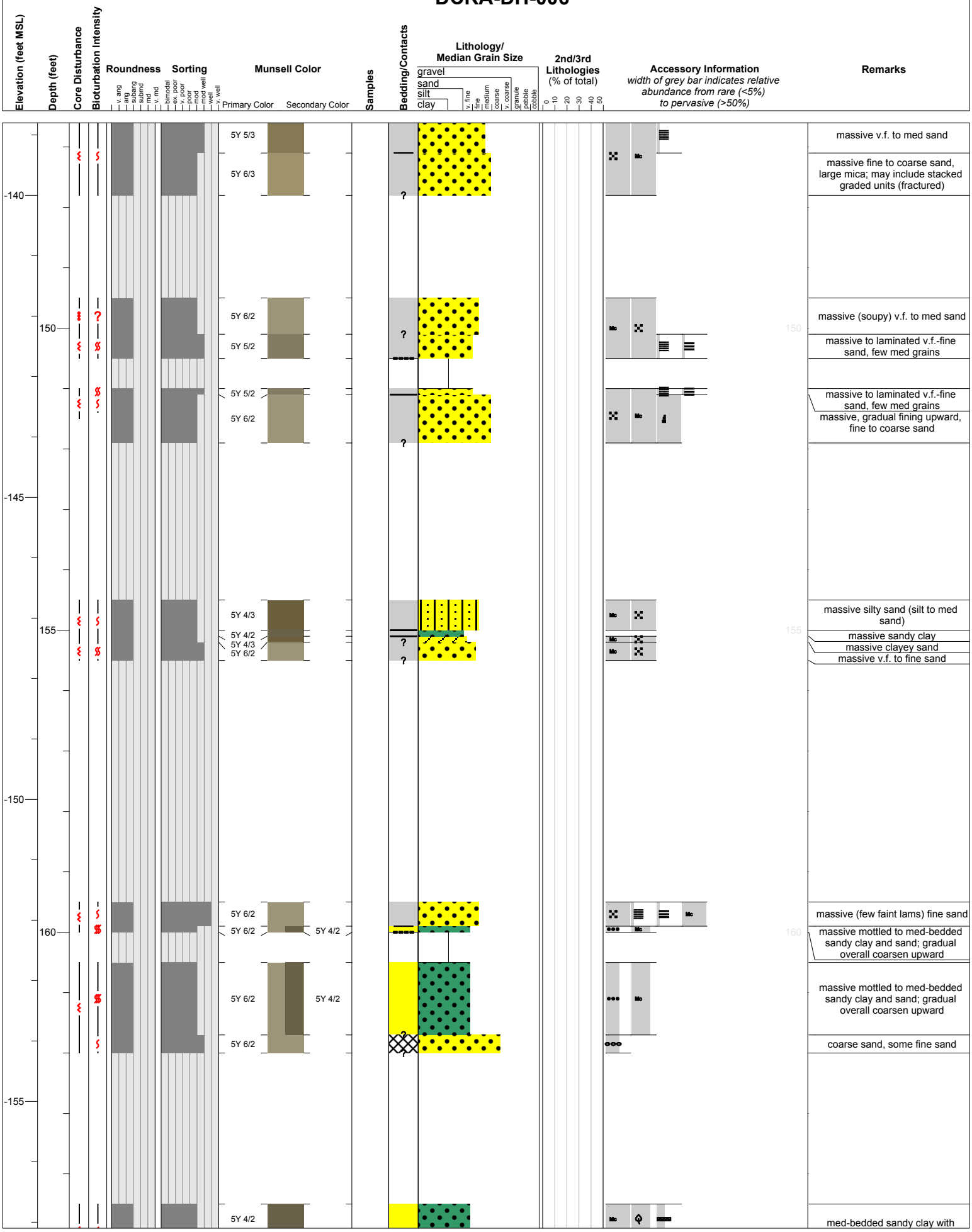
DCRA-DH-006


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
110
115
120
125
-105
-110
-115
-120
5Y 6/3
5Y 5/3
5Y 4/2
5Y 5/2
PAL
CRB
Mc
massive sandy clay units (variation in sand:clay); Paleosol? 0-.3 leached zone? Ped Stage II?
massive sandy clay units (variation in sand:clay); Paleosol? 0-.3 leached zone? Ped Stage II?
massive mottled clay (as above); Ped Stage II? continuation of Paleosol from cores above OR second paleosol?
massive fine-v.f. sand
med-bedded (top) to massive mottled (base) sand and sandy clay
med-bedded (top) to massive mottled (base) sand and sandy clay
massive mottled clayey sand; harder core

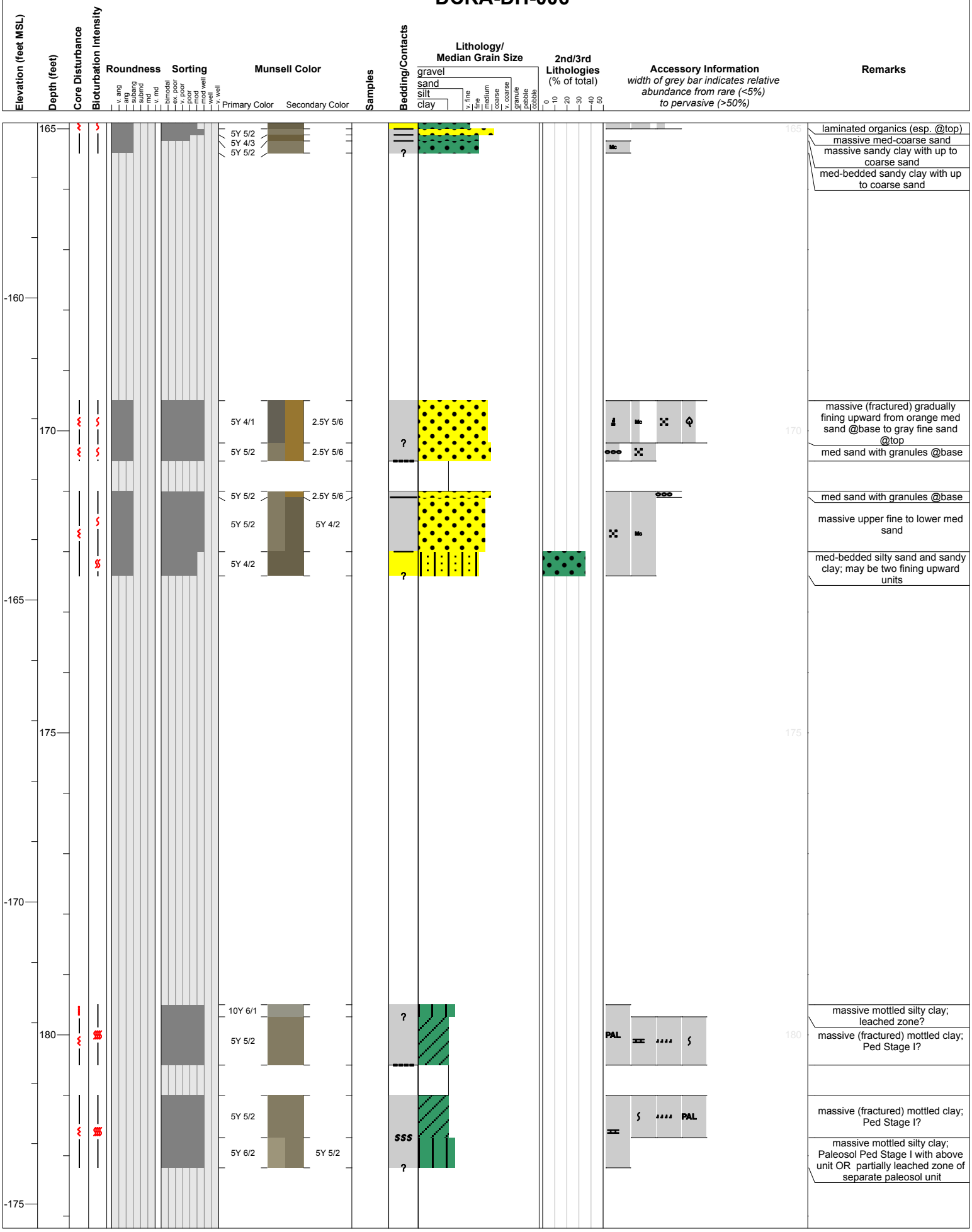
DCRA-DH-006


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative abundance from rare (<5%) to pervasive (>50%)
Remarks
130
-125
135
-130
140
-135
145
5Y 5/3
5Y 5/4
5Y 4/3
5Y 6/3
5Y 6/3
5Y 6/3
5Y 5/3
5Y 7/2
5Y 7/2
5Y 5/4
5Y 5/4
5Y 6/3
massive (fractured) clay to v.c. sand
massive (mottled?) silt to upper med sand
massive mottled sandy clay
massive mottled silt to lower fine sand; extension of Ped Stage I above?
massive silt to med sand; may have originally been laminated
massive sand (v.f.-fine, few med grains)
massive mottled silty sand, some clay
massive (soupy, dried) fine sand
massive (soupy, dried) fine sand
massive (fractured) silt to coarse sand
massive (fractured) silt to coarse sand
massive silt to fine sand

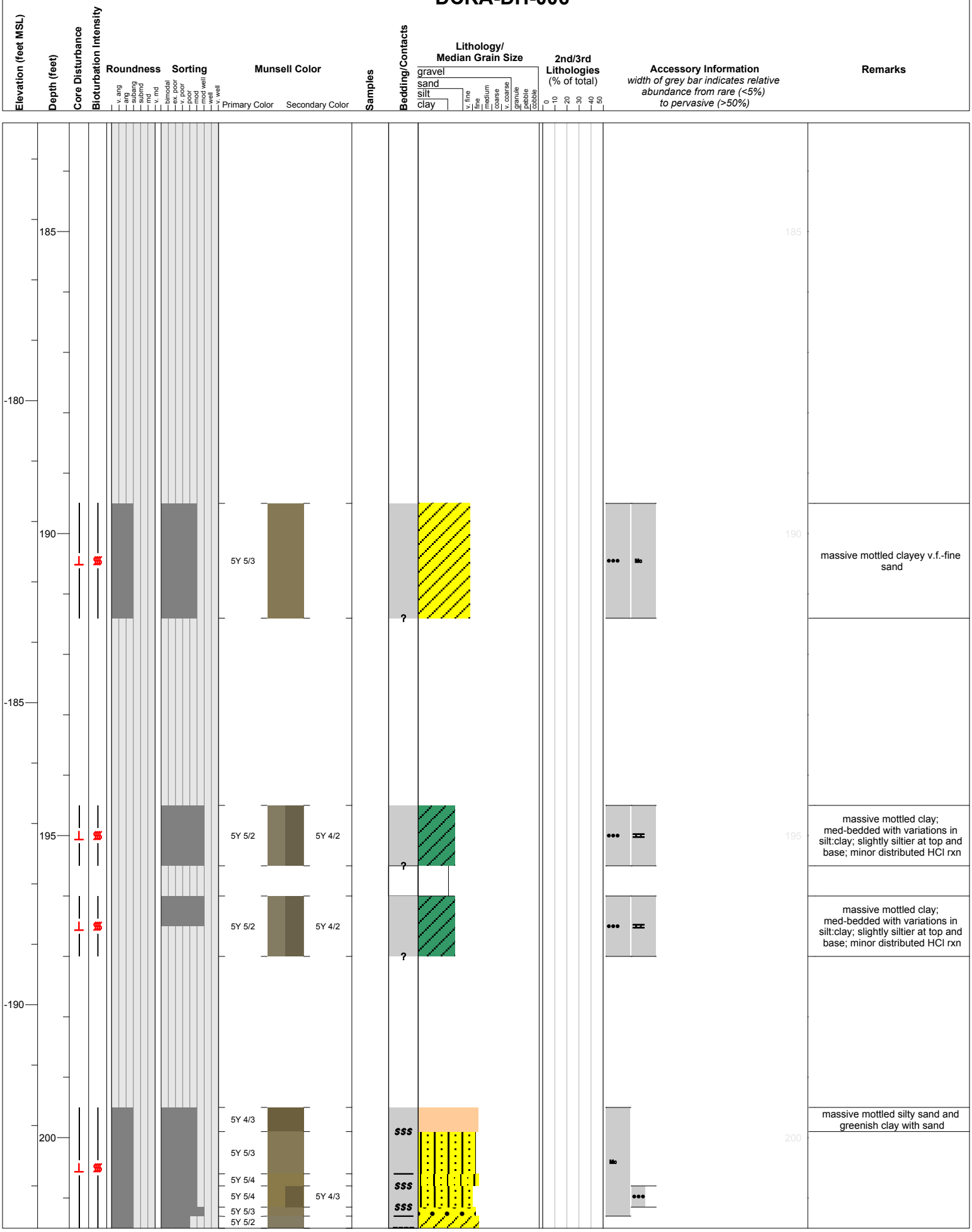
DCRA-DH-006


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-140
150
-145
155
-150
160
-155
5Y 5/3
5Y 6/3
5Y 6/2
5Y 5/2
5Y 5/2
5Y 6/2
5Y 4/3
5Y 4/2
5Y 4/3
5Y 6/2
5Y 6/2
5Y 6/2
5Y 4/2
5Y 6/2
5Y 4/2
5Y 6/2
5Y 4/2
Mc
massive v.f. to med sand
massive fine to coarse sand, large mica; may include stacked graded units (fractured)
massive (soupy) v.f. to med sand
massive to laminated v.f.-fine sand, few med grains
massive to laminated v.f.-fine sand, few med grains
massive, gradual fining upward, fine to coarse sand
massive silty sand (silt to med sand)
massive sandy clay
massive clayey sand
massive v.f. to fine sand
massive (few faint lams) fine sand
massive mottled to med-bedded sandy clay and sand; gradual overall coarsen upward
massive mottled to med-bedded sandy clay and sand; gradual overall coarsen upward
coarse sand, some fine sand
med-bedded sandy clay with

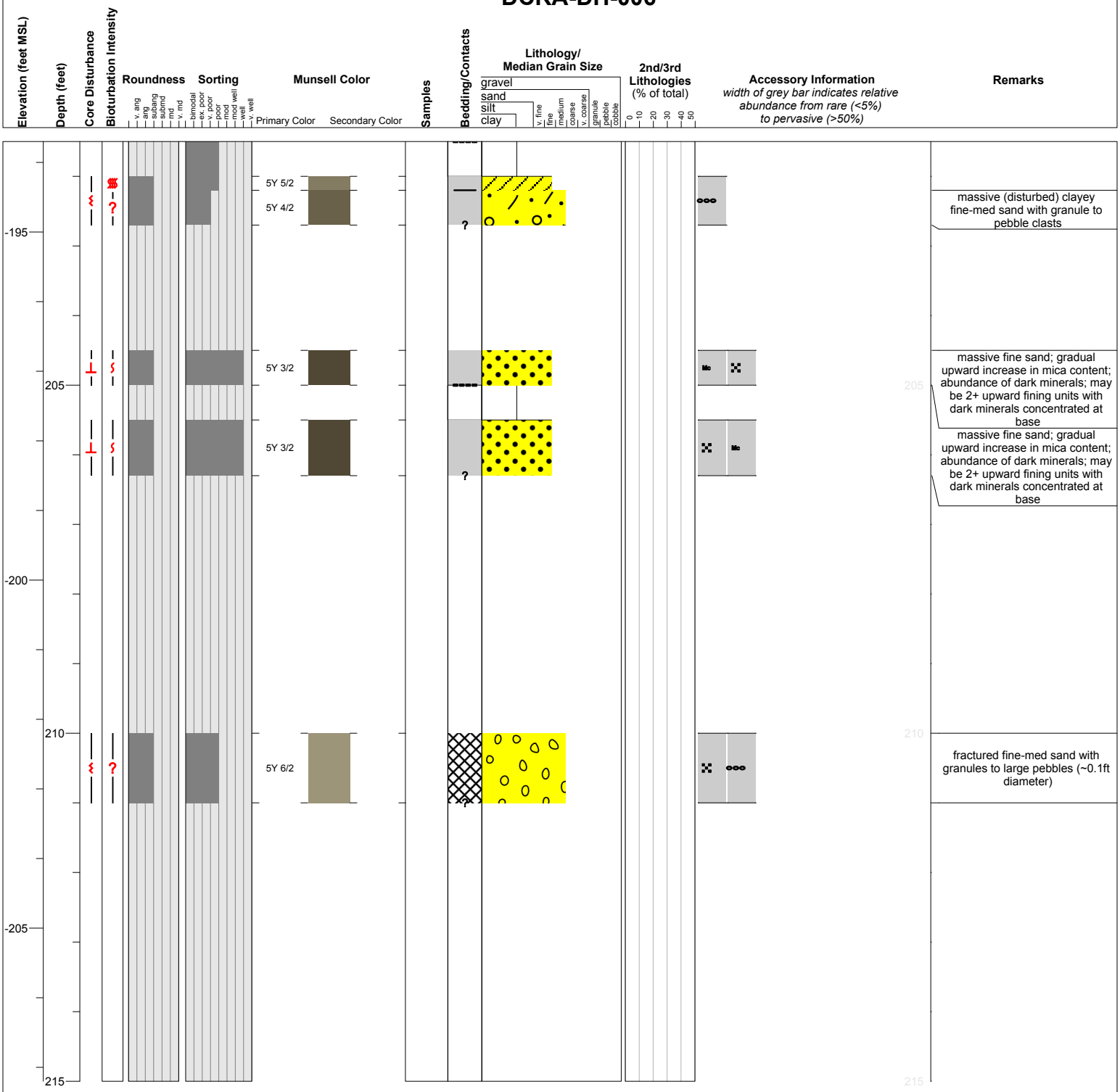
DCRA-DH-006


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
165
170
175
180
-160
-165
-170
-175
5Y 5/2
5Y 4/3
5Y 5/2
5Y 4/1
2.5Y 5/6
5Y 5/2
2.5Y 5/6
5Y 5/2
2.5Y 5/6
5Y 5/2
5Y 4/2
5Y 4/2
10Y 6/1
5Y 5/2
5Y 5/2
5Y 6/2
5Y 5/2
Mc
PAL
SSS
laminated organics (esp. @top)
massive med-coarse sand
massive sandy clay with up to coarse sand
med-bedded sandy clay with up to coarse sand
massive (fractured) gradually fining upward from orange med sand @base to gray fine sand @top
med sand with granules @base
med sand with granules @base
massive upper fine to lower med sand
med-bedded silty sand and sandy clay; may be two fining upward units
massive mottled silty clay; leached zone?
massive (fractured) mottled clay; Ped Stage I?
massive (fractured) mottled clay; Ped Stage I?
massive mottled silty clay; Paleosol Ped Stage I with above unit OR partially leached zone of separate paleosol unit

DCRA-DH-006


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
185
-180
190
-185
195
-190
200
5Y 5/3
5Y 5/2
5Y 4/2
5Y 5/2
5Y 4/2
5Y 4/3
5Y 5/3
5Y 5/4
5Y 5/4
5Y 4/3
5Y 5/3
5Y 5/2
Mo
Mo
massive mottled clayey v.f.-fine sand
massive mottled clay; med-bedded with variations in silt:clay; slightly siltier at top and base; minor distributed HCl rxn
massive mottled clay; med-bedded with variations in silt:clay; slightly siltier at top and base; minor distributed HCl rxn
massive mottled silty sand and greenish clay with sand

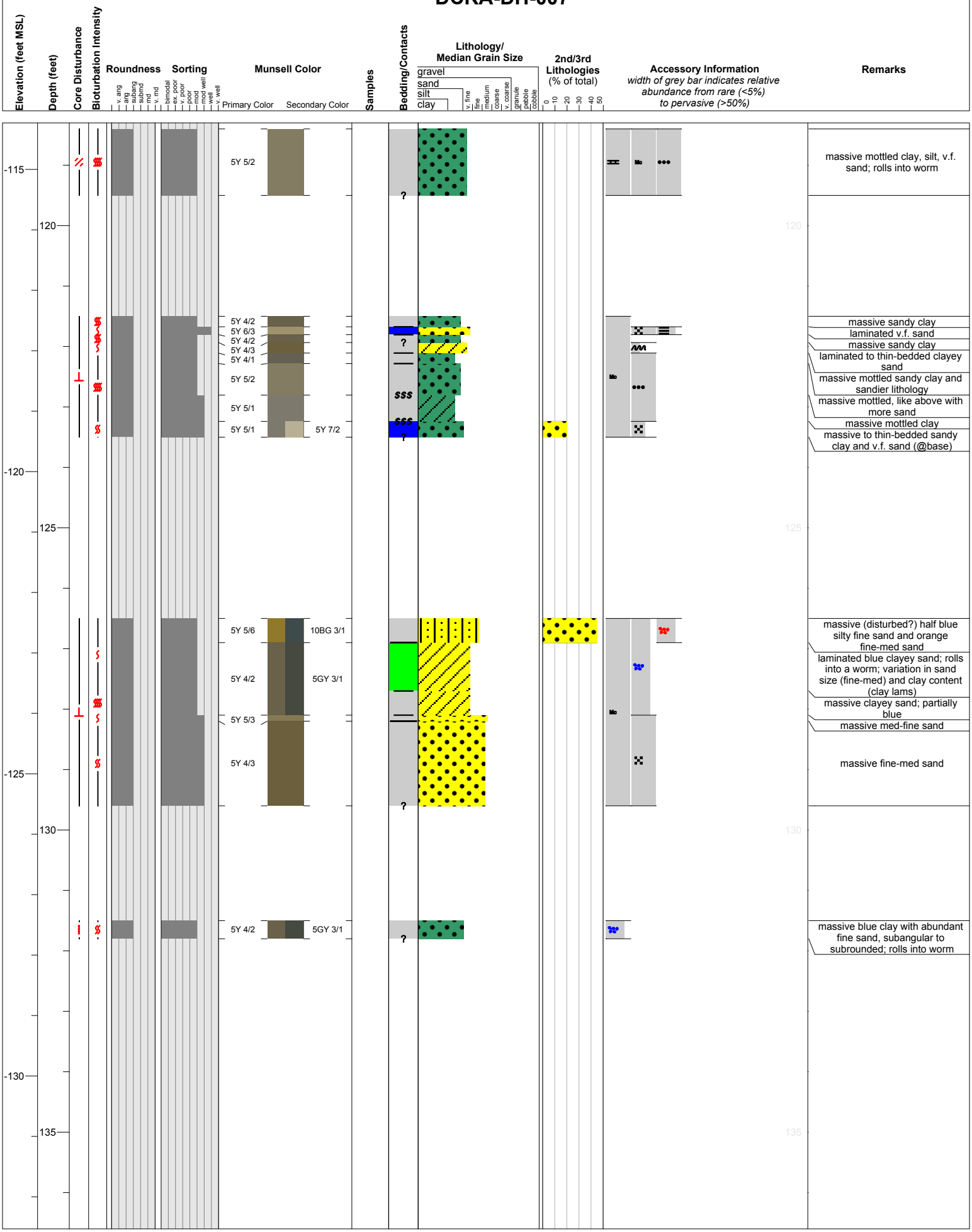
DCRA-DH-006


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
5Y 5/2
5Y 4/2
5Y 3/2
5Y 3/2
5Y 6/2
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Mc
Remarks
massive (disturbed) clayey fine-med sand with granule to pebble clasts
massive fine sand; gradual upward increase in mica content; abundance of dark minerals; may be 2+ upward fining units with dark minerals concentrated at base
massive fine sand; gradual upward increase in mica content; abundance of dark minerals; may be 2+ upward fining units with dark minerals concentrated at base
fractured fine-med sand with granules to large pebbles (~0.1ft diameter)
-195
205
-200
210
-205
215

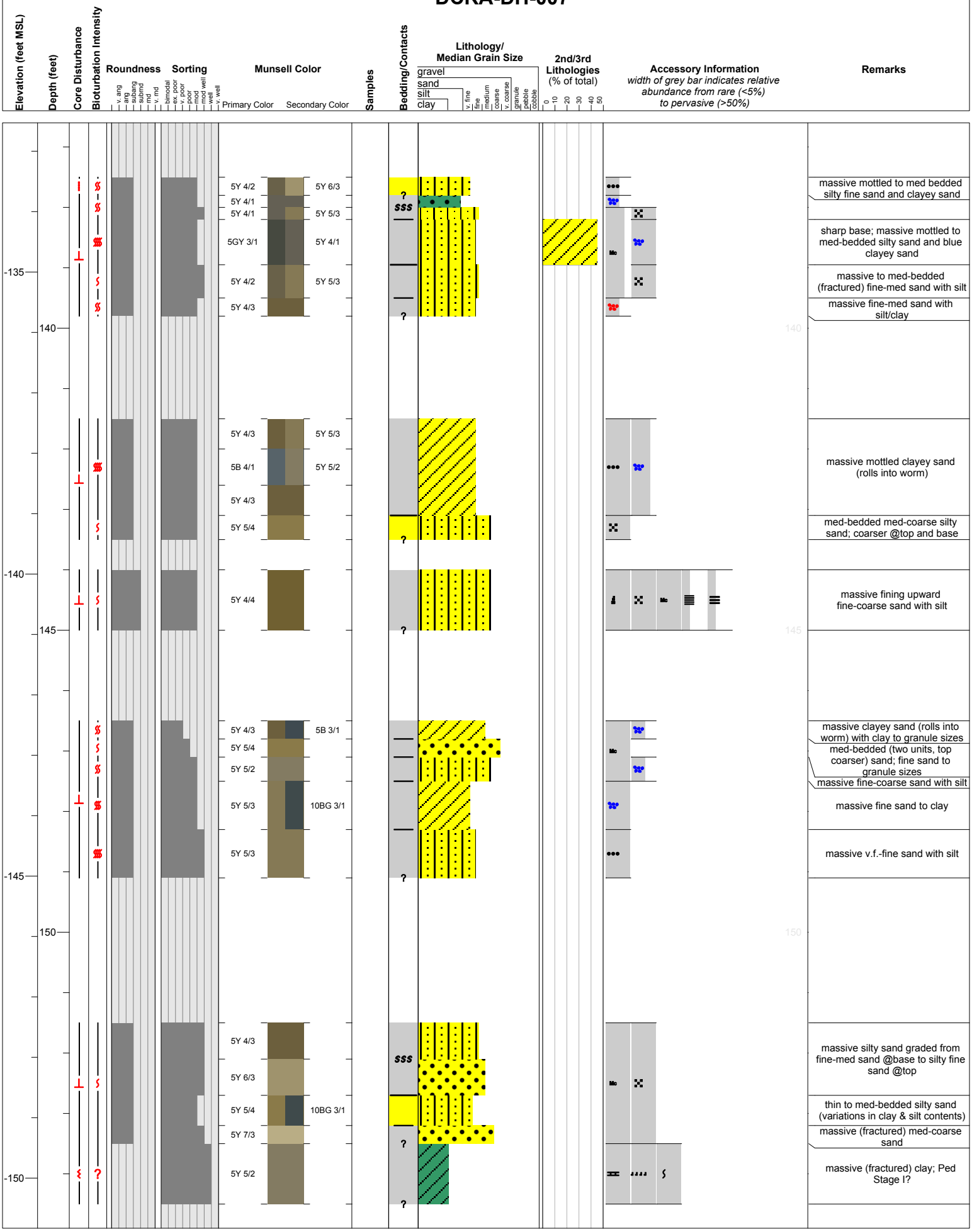
DCRA-DH-007

Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
v. poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
100
105
110
115
-100
-105
-110
5Y 4/2
5Y 6/4
5Y 3/2
5Y 5/2
5Y 5/3
stacked slightly graded
med-bedded fine-med sand with
granules; subangular to
subrounded grains
med-bedded fining upward sand
units (med-fine)
massive med-fine sand
massive med sand
thin-bedded fine-med sand
(lighter color) and fine sand
(darker color); subangular to
subrounded
med-bedded sand, like above
med-coarse sand with granules;
invasion of drilling fluid at top (?)
massive fine to coarse sand

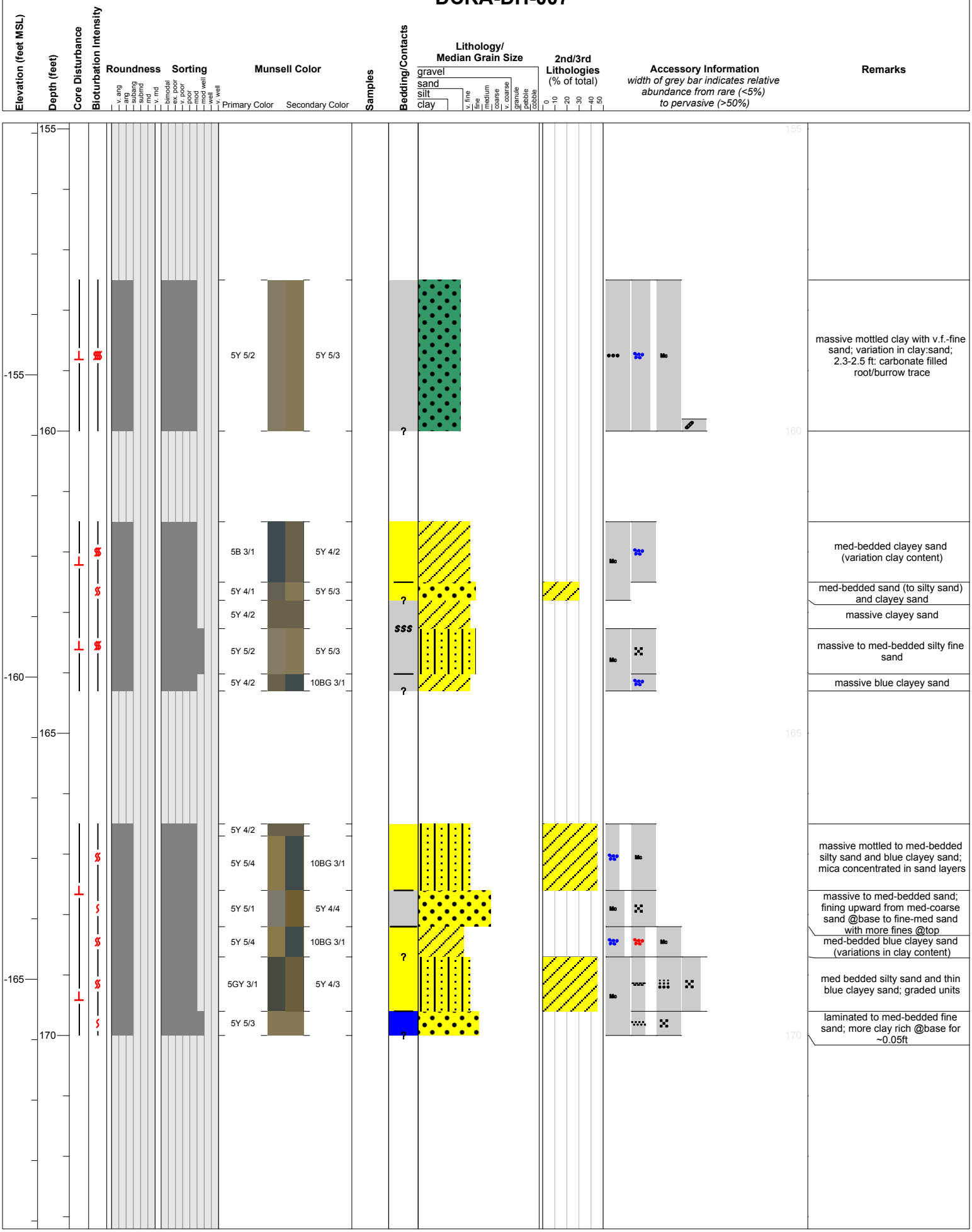
DCRA-DH-007


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-115
120
-120
125
-125
130
-130
135
5Y 5/2
5Y 4/2
5Y 6/3
5Y 4/2
5Y 4/3
5Y 4/1
5Y 5/2
5Y 5/1
5Y 5/1
5Y 7/2
5Y 5/6
10BG 3/1
5Y 4/2
5GY 3/1
5Y 5/3
5Y 4/3
5Y 4/2
5GY 3/1
massive mottled clay, silt, v.f. sand; rolls into worm
massive sandy clay
laminated v.f. sand
massive sandy clay
laminated to thin-bedded clayey sand
massive mottled sandy clay and sandier lithology
massive mottled, like above with more sand
massive mottled clay
massive to thin-bedded sandy clay and v.f. sand (@base)
massive (disturbed?) half blue silty fine sand and orange fine-med sand
laminated blue clayey sand; rolls into a worm; variation in sand size (fine-med) and clay content (clay lams)
massive clayey sand; partially blue
massive med-fine sand
massive fine-med sand
massive blue clay with abundant fine sand, subangular to subrounded; rolls into worm

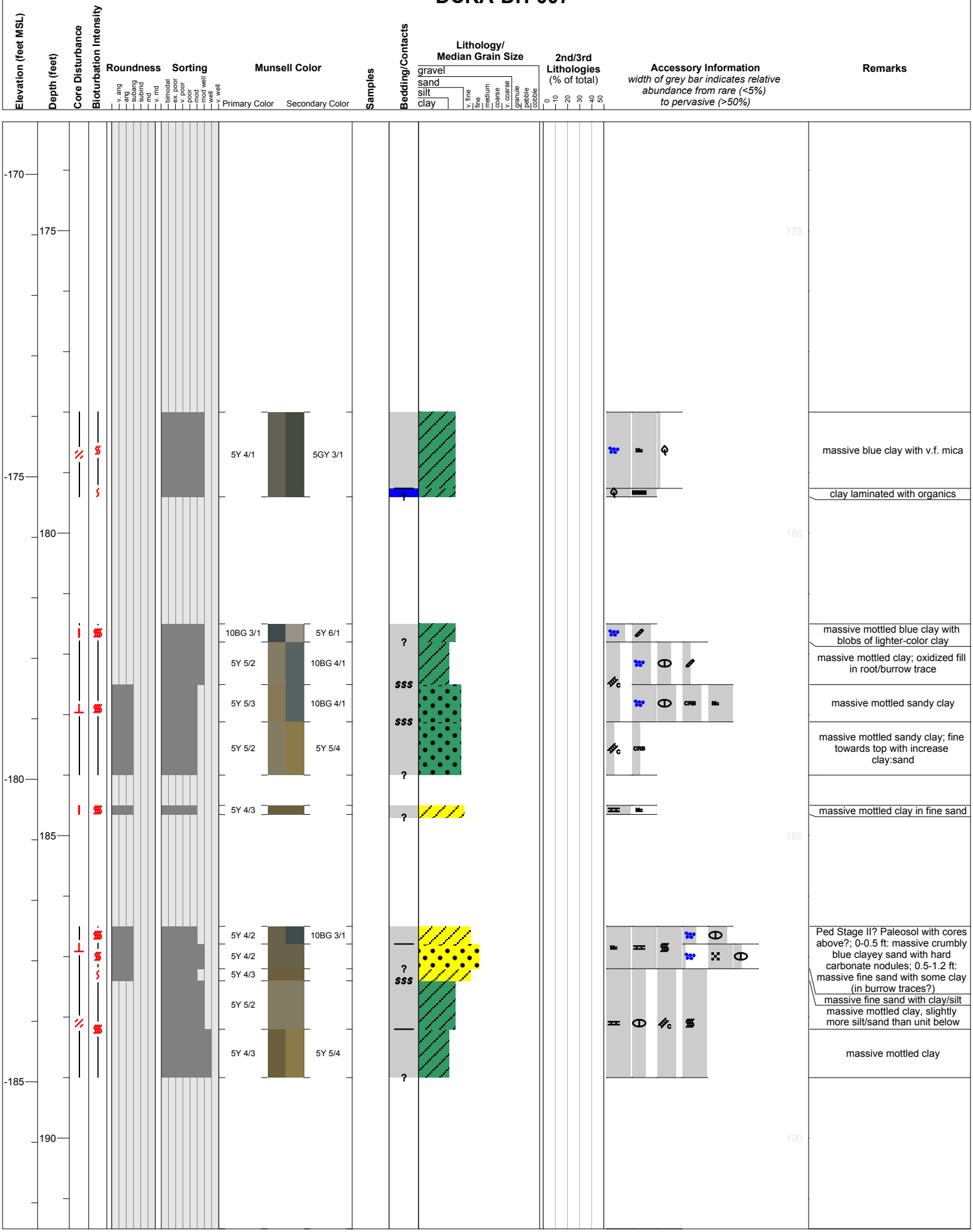
DCRA-DH-007


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-135
140
-140
145
-145
150
-150
5Y 4/2
5Y 6/3
5Y 4/1
5Y 4/1
5Y 5/3
5GY 3/1
5Y 4/1
5Y 4/2
5Y 5/3
5Y 4/3
massive mottled to med bedded silty fine sand and clayey sand
sharp base; massive mottled to med-bedded silty sand and blue clayey sand
massive to med-bedded (fractured) fine-med sand with silt
massive fine-med sand with silt/clay
5Y 4/3
5Y 5/3
5B 4/1
5Y 5/2
5Y 4/3
5Y 5/4
massive mottled clayey sand (rolls into worm)
med-bedded med-coarse silty sand; coarser @top and base
5Y 4/4
massive fining upward fine-coarse sand with silt
5Y 4/3
5B 3/1
5Y 5/4
5Y 5/2
5Y 5/3
10BG 3/1
5Y 5/3
massive clayey sand (rolls into worm) with clay to granule sizes
med-bedded (two units, top coarser) sand; fine sand to granule sizes
massive fine-coarse sand with silt
massive fine sand to clay
massive v.f.-fine sand with silt
5Y 4/3
5Y 6/3
5Y 5/4
10BG 3/1
5Y 7/3
5Y 5/2
massive silty sand graded from fine-med sand @base to silty fine sand @top
thin to med-bedded silty sand (variations in clay & silt contents)
massive (fractured) med-coarse sand
massive (fractured) clay; Ped Stage I?

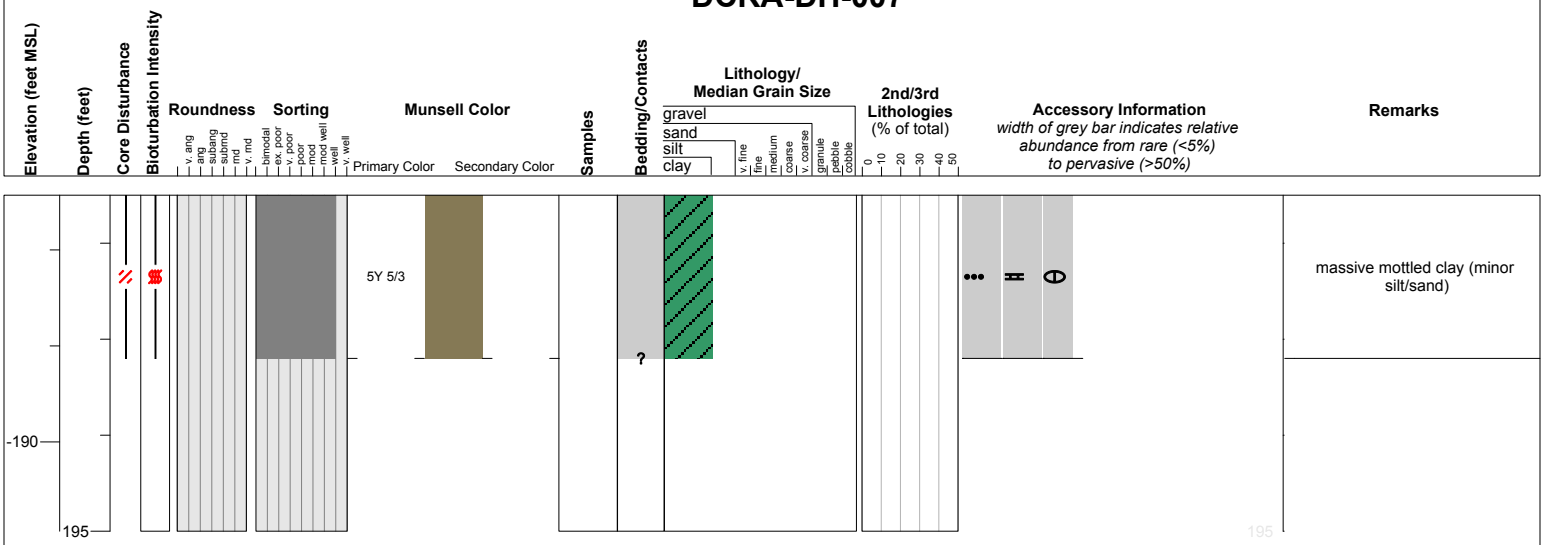
DCRA-DH-007


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
155
160
165
170
-155
-160
-165
5Y 5/2
5Y 5/3
5B 3/1
5Y 4/2
5Y 4/1
5Y 5/3
5Y 4/2
5Y 5/2
5Y 5/3
5Y 4/2
10BG 3/1
5Y 4/2
5Y 5/4
10BG 3/1
5Y 5/1
5Y 4/4
5Y 5/4
10BG 3/1
5GY 3/1
5Y 4/3
5Y 5/3
Mc
massive mottled clay with v.f.-fine sand; variation in clay:sand; 2.3-2.5 ft: carbonate filled root/burrow trace
med-bedded clayey sand (variation clay content)
med-bedded sand (to silty sand) and clayey sand
massive clayey sand
massive to med-bedded silty fine sand
massive blue clayey sand
massive mottled to med-bedded silty sand and blue clayey sand; mica concentrated in sand layers
massive to med-bedded sand; fining upward from med-coarse sand @base to fine-med sand with more fines @top
med-bedded blue clayey sand (variations in clay content)
med bedded silty sand and thin blue clayey sand; graded units
laminated to med-bedded fine sand; more clay rich @base for ~0.05ft

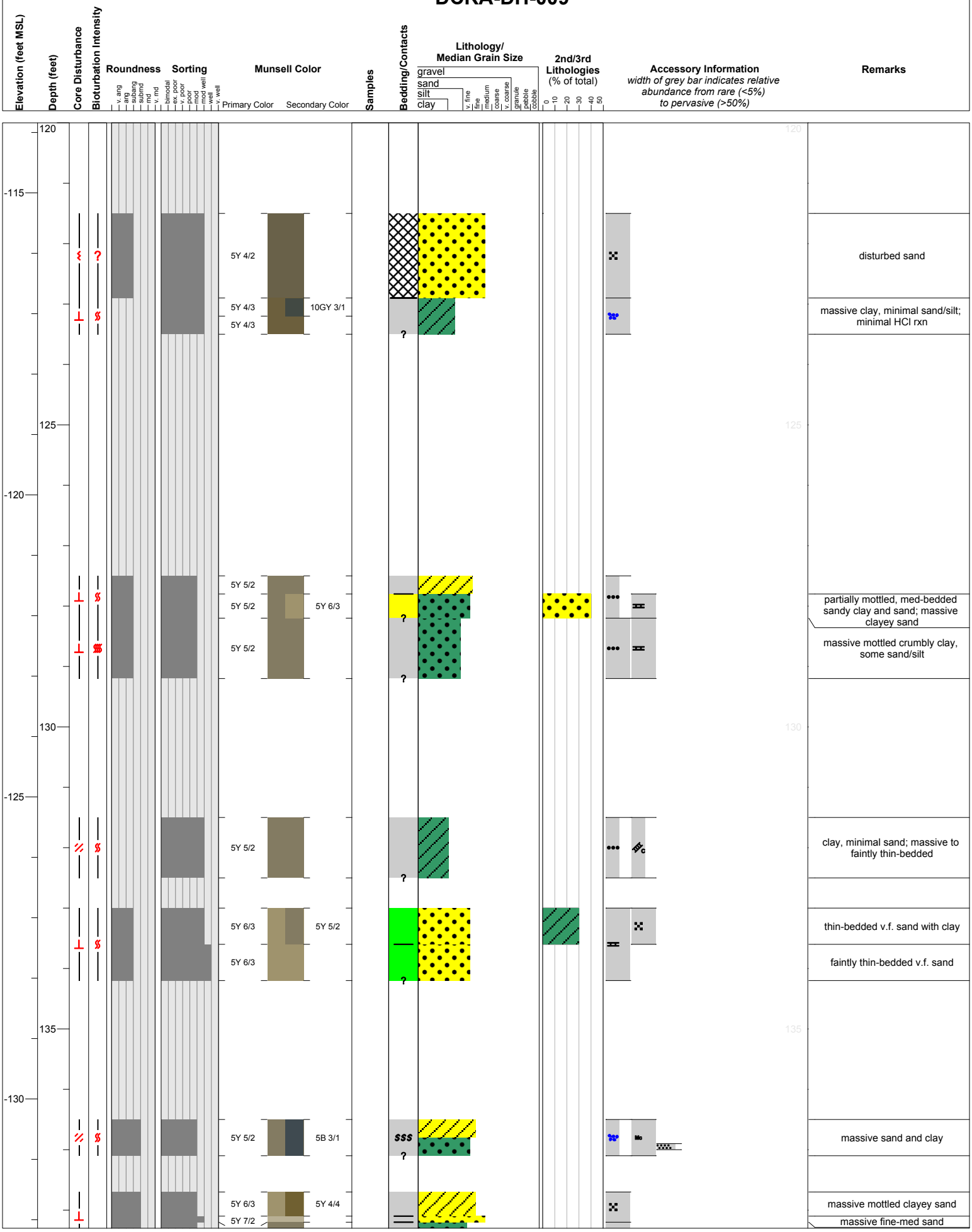
DCRA-DH-007


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-170
175
-175
180
-180
185
-185
190
5Y 4/1
5GY 3/1
10BG 3/1
5Y 6/1
5Y 5/2
10BG 4/1
5Y 5/3
10BG 4/1
5Y 5/2
5Y 5/4
5Y 4/3
5Y 4/2
10BG 3/1
5Y 4/2
5Y 4/3
5Y 5/2
5Y 4/3
5Y 5/4
Mc
CRB
massive blue clay with v.f. mica
clay laminated with organics
massive mottled blue clay with blobs of lighter-color clay
massive mottled clay; oxidized fill in root/burrow trace
massive mottled sandy clay
massive mottled sandy clay; fine towards top with increase clay:sand
massive mottled clay in fine sand
Ped Stage II? Paleosol with cores above?; 0-0.5 ft: massive crumbly blue clayey sand with hard carbonate nodules; 0.5-1.2 ft: massive fine sand with some clay (in burrow traces?)
massive fine sand with clay/silt
massive mottled clay, slightly more silt/sand than unit below
massive mottled clay

DCRA-DH-007


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
5Y 5/3
Samples
Bedding/Contacts
?
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
massive mottled clay (minor
silt/sand)
-190
195
195

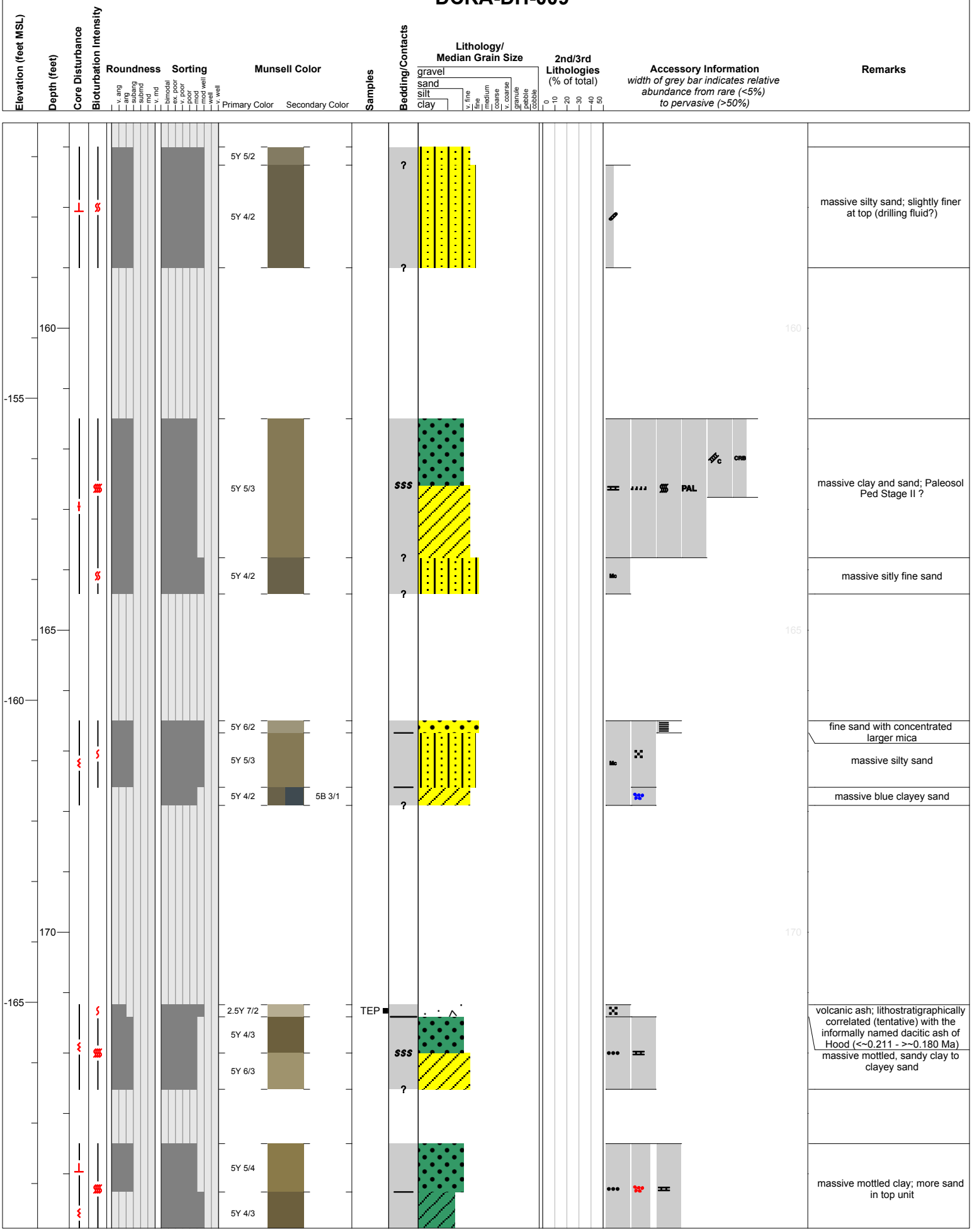
DCRA-DH-009


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
120
125
130
135
-115
-120
-125
-130
5Y 4/2
5Y 4/3
5Y 4/3
10GY 3/1
5Y 5/2
5Y 5/2
5Y 5/2
5Y 6/3
5Y 5/2
5Y 6/3
5Y 6/3
5Y 5/2
5Y 5/2
5B 3/1
5Y 6/3
5Y 7/2
5Y 4/4
disturbed sand
massive clay, minimal sand/silt; minimal HCl rxn
partially mottled, med-bedded sandy clay and sand; massive clayey sand
massive mottled crumbly clay, some sand/silt
clay, minimal sand; massive to faintly thin-bedded
thin-bedded v.f. sand with clay
faintly thin-bedded v.f. sand
massive sand and clay
massive mottled clayey sand
massive fine-med sand

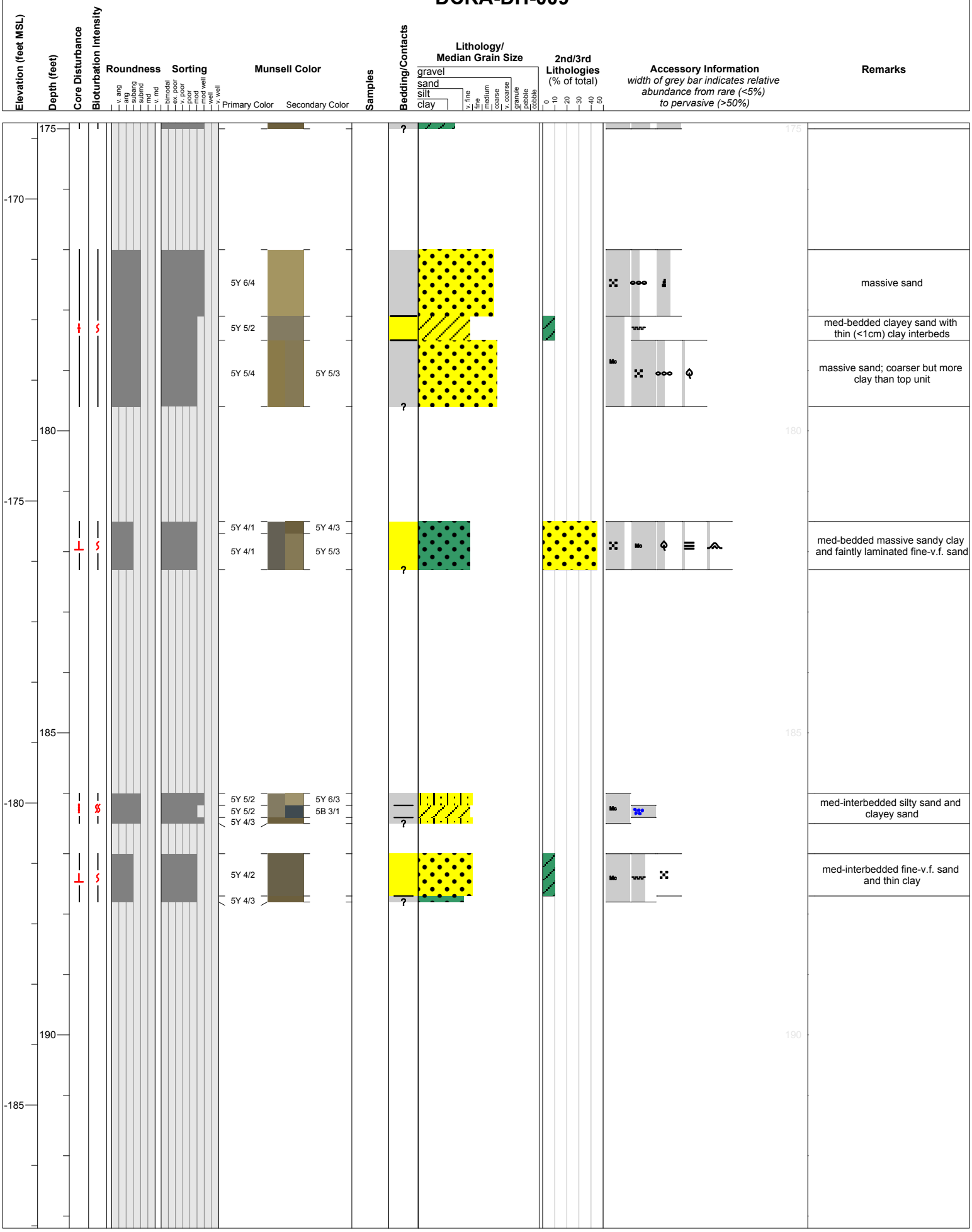
DCRA-DH-009

Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
140
145
150
155
-135
-140
-145
-150
5Y 5/2
5Y 5/3
5Y 4/3
5Y 5/2
5Y 4/3
5B 3/1
5Y 4/3
5Y 4/4
5Y 4/4
5Y 4/4
5Y 5/2
5Y 5/3
PAL
massive mottled sandy clay
massive clayey fine sand
med-bedded silty fine sand and
thin clay
massive mottled crumbly clay
with sand
massive mottled fine sand with
clay
massive sand

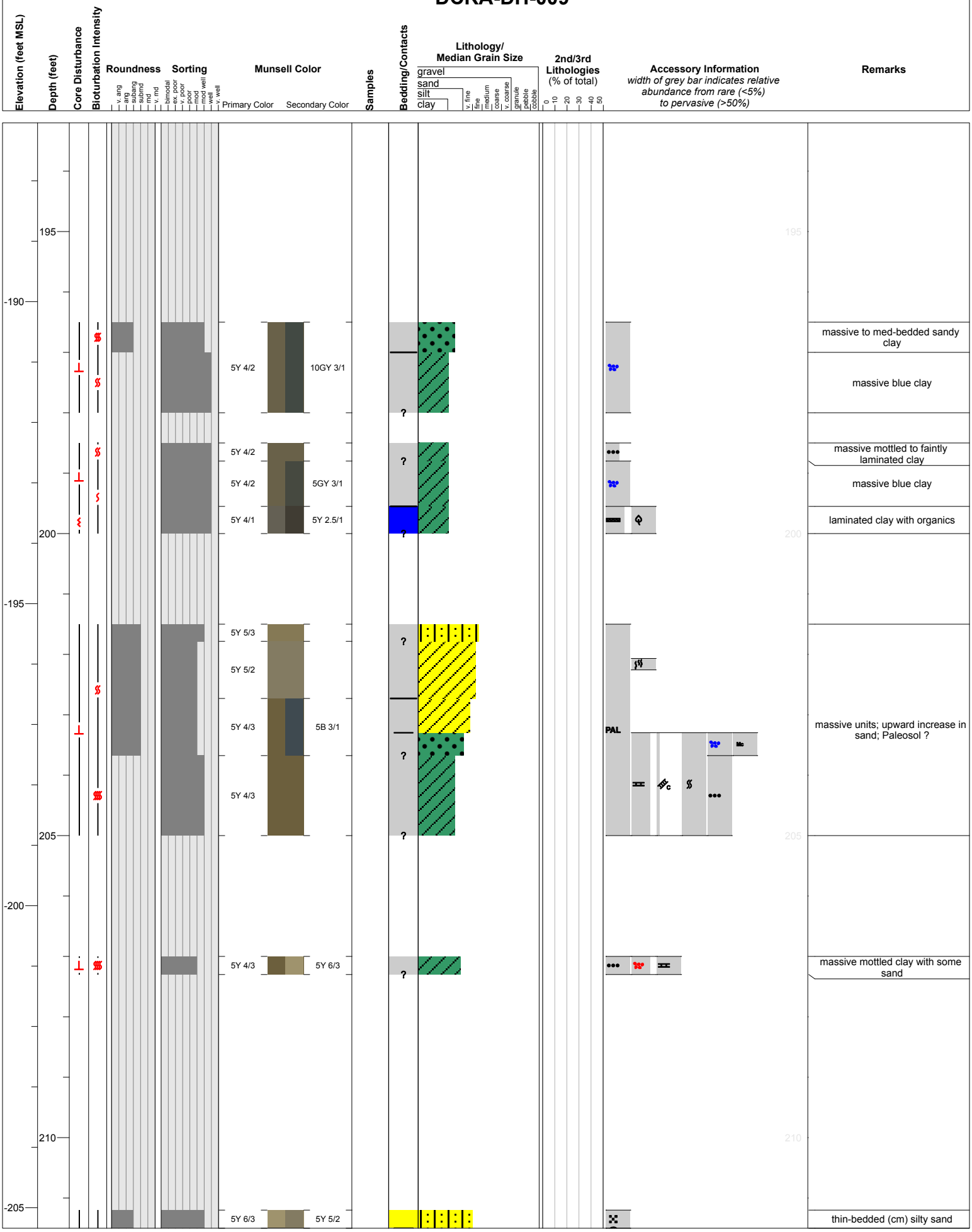
DCRA-DH-009


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
160
-155
165
-160
170
-165
5Y 5/2
5Y 4/2
5Y 5/3
5Y 4/2
5Y 6/2
5Y 5/3
5Y 4/2
5B 3/1
2.5Y 7/2
5Y 4/3
5Y 6/3
5Y 5/4
5Y 4/3
TEP
SSS
PAL
CRB
Mc
massive silty sand; slightly finer at top (drilling fluid?)
massive clay and sand; Paleosol Ped Stage II ?
massive sitly fine sand
fine sand with concentrated larger mica
massive silty sand
massive blue clayey sand
volcanic ash; lithostratigraphically correlated (tentative) with the informally named dacitic ash of Hood (<~0.211 - >~0.180 Ma)
massive mottled, sandy clay to clayey sand
massive mottled clay; more sand in top unit

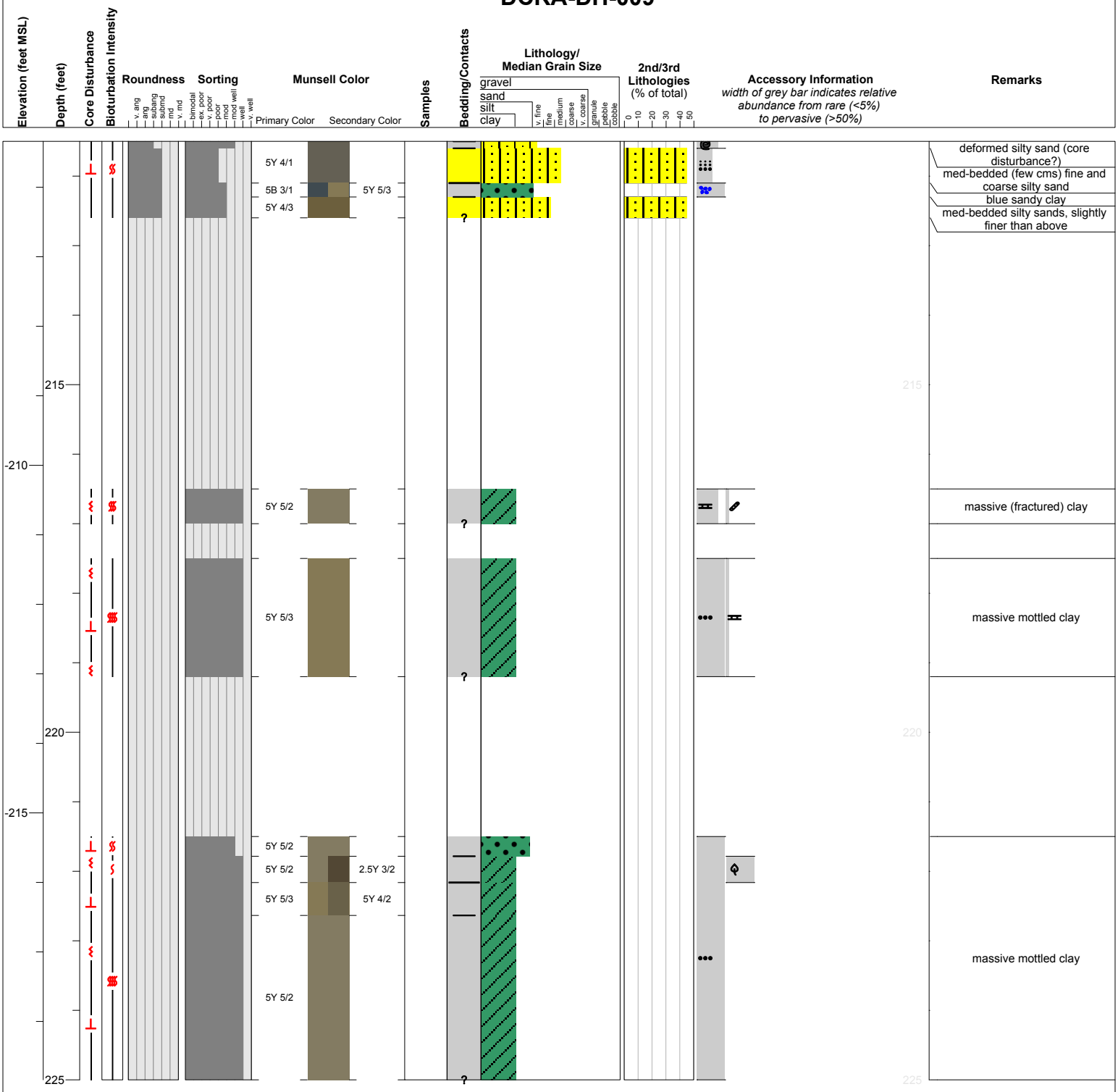
DCRA-DH-009


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
175
-170
180
-175
185
-180
190
-185
5Y 6/4
5Y 5/2
5Y 5/4
5Y 5/3
5Y 4/1
5Y 4/3
5Y 4/1
5Y 5/3
5Y 5/2
5Y 6/3
5Y 5/2
5B 3/1
5Y 4/3
5Y 4/2
5Y 4/3
massive sand
med-bedded clayey sand with
thin (<1cm) clay interbeds
massive sand; coarser but more
clay than top unit
med-bedded massive sandy clay
and faintly laminated fine-v.f. sand
med-interbedded silty sand and
clayey sand
med-interbedded fine-v.f. sand
and thin clay

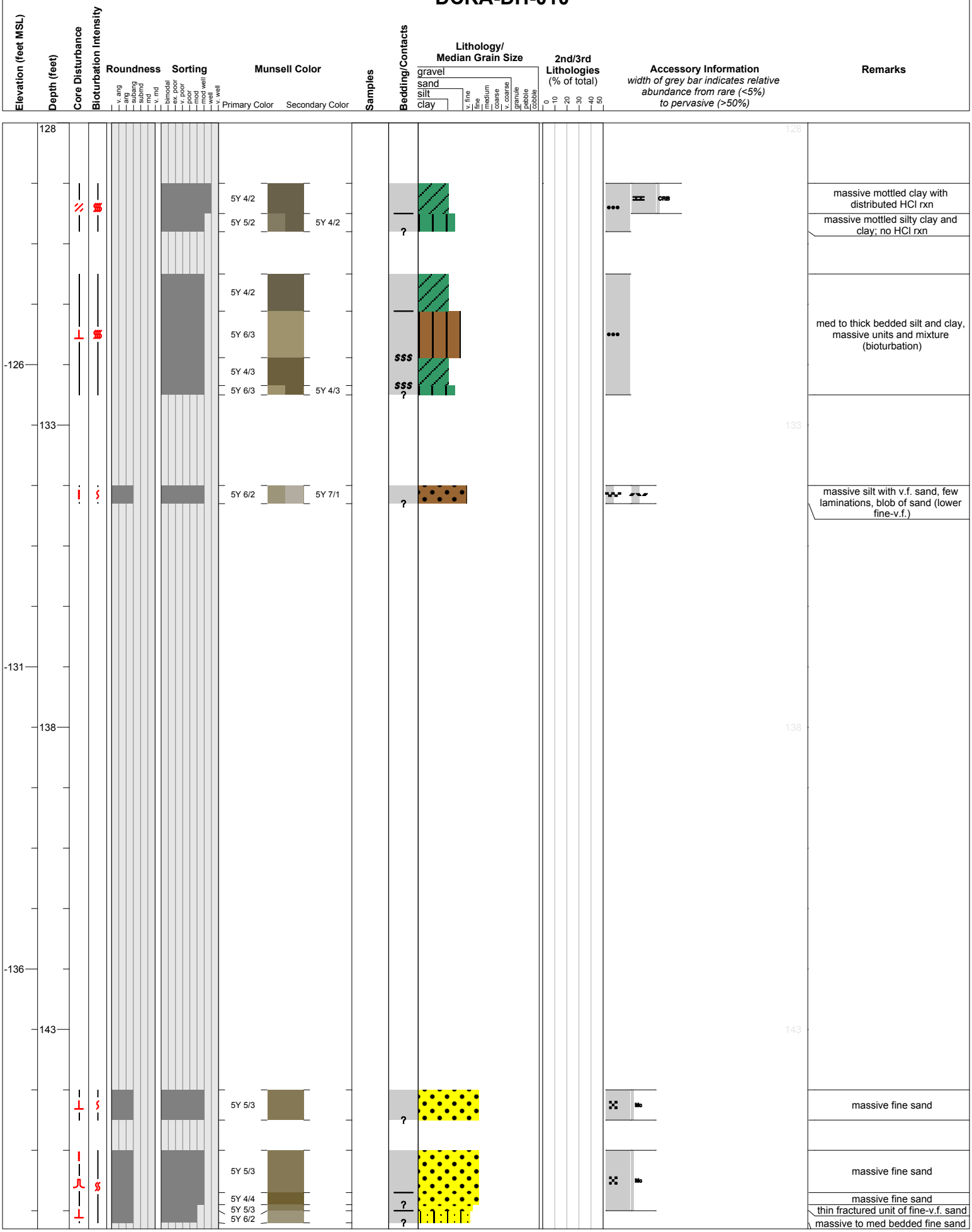
DCRA-DH-009


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
195
200
205
210
-190
-195
-200
-205
5Y 4/2
10GY 3/1
5Y 4/2
5Y 4/2
5GY 3/1
5Y 4/1
5Y 2.5/1
5Y 5/3
5Y 5/2
5Y 4/3
5B 3/1
5Y 4/3
5Y 4/3
5Y 6/3
5Y 6/3
5Y 5/2
PAL
massive to med-bedded sandy clay
massive blue clay
massive mottled to faintly laminated clay
massive blue clay
laminated clay with organics
massive units; upward increase in sand; Paleosol ?
massive mottled clay with some sand
thin-bedded (cm) silty sand

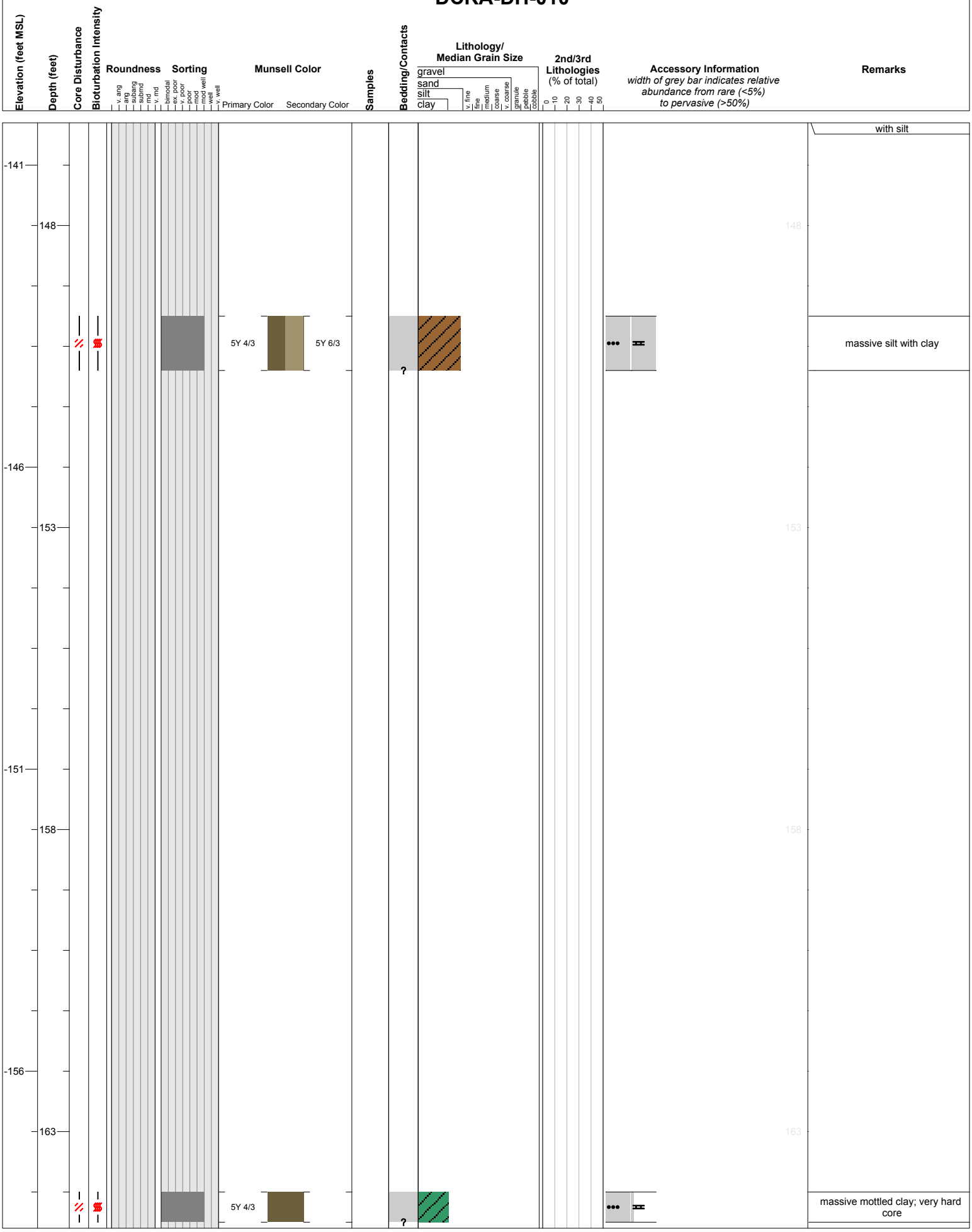
DCRA-DH-009


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
215
220
225
-210
-215
5Y 4/1
5B 3/1
5Y 4/3
5Y 5/3
5Y 5/2
5Y 5/3
5Y 5/2
5Y 5/2
5Y 5/3
2.5Y 3/2
5Y 4/2
5Y 5/2
deformed silty sand (core disturbance?)
med-bedded (few cms) fine and coarse silty sand
blue sandy clay
med-bedded silty sands, slightly finer than above
massive (fractured) clay
massive mottled clay
massive mottled clay

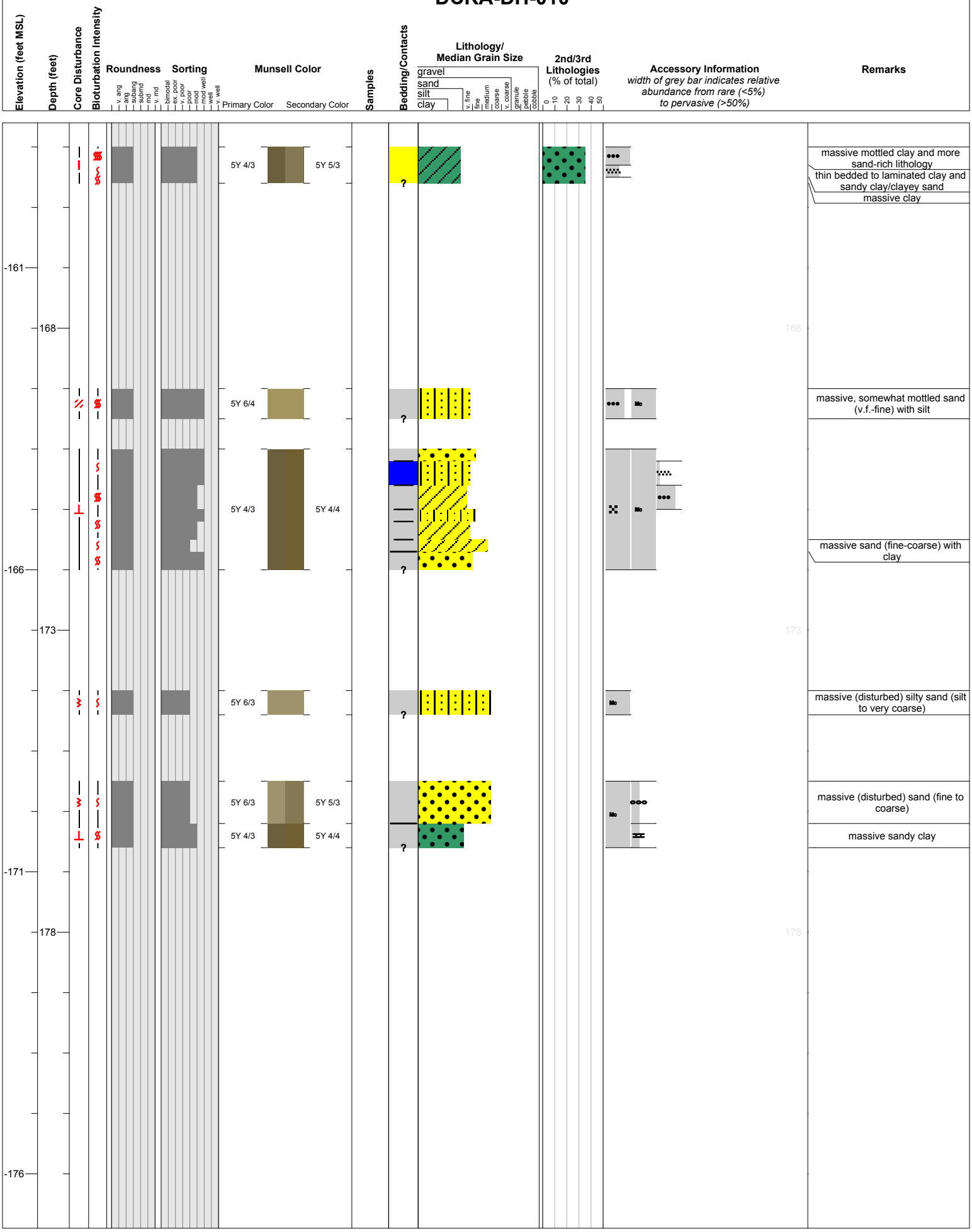
DCRA-DH-010


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
128
133
138
143
-126
-131
-136
5Y 4/2
5Y 5/2
5Y 4/2
5Y 4/2
5Y 6/3
5Y 4/3
5Y 6/3
5Y 4/3
5Y 6/2
5Y 7/1
5Y 5/3
5Y 5/3
5Y 4/4
5Y 5/3
5Y 6/2
CRB
Mo
Mo
massive mottled clay with distributed HCl rxn
massive mottled silty clay and clay; no HCl rxn
med to thick bedded silt and clay, massive units and mixture (bioturbation)
massive silt with v.f. sand, few laminations, blob of sand (lower fine-v.f.)
massive fine sand
massive fine sand
massive fine sand
thin fractured unit of fine-v.f. sand
massive to med bedded fine sand

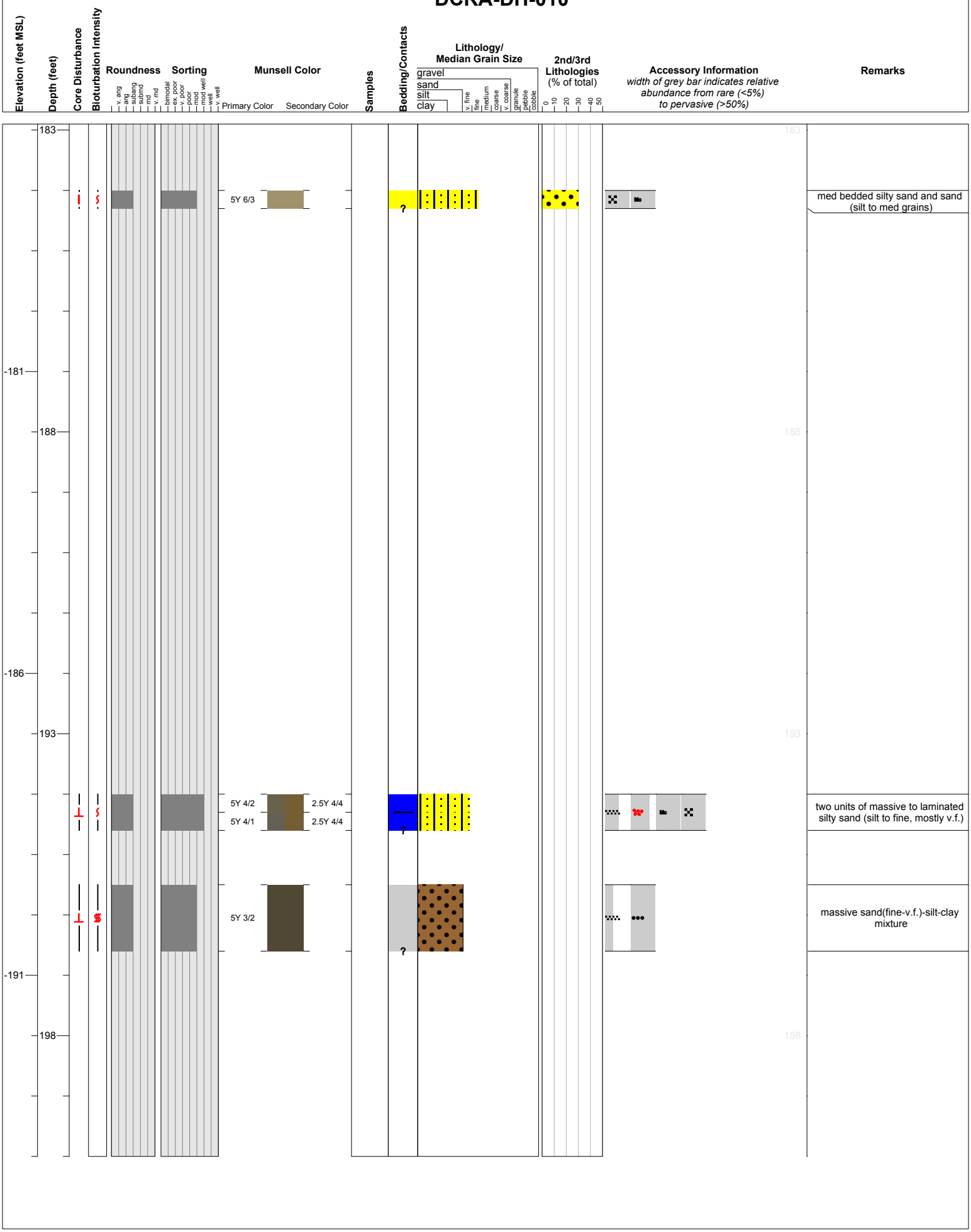
DCRA-DH-010


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
with silt
-141
148
5Y 4/3
5Y 6/3
massive silt with clay
-146
153
-151
158
-156
163
5Y 4/3
massive mottled clay; very hard
core

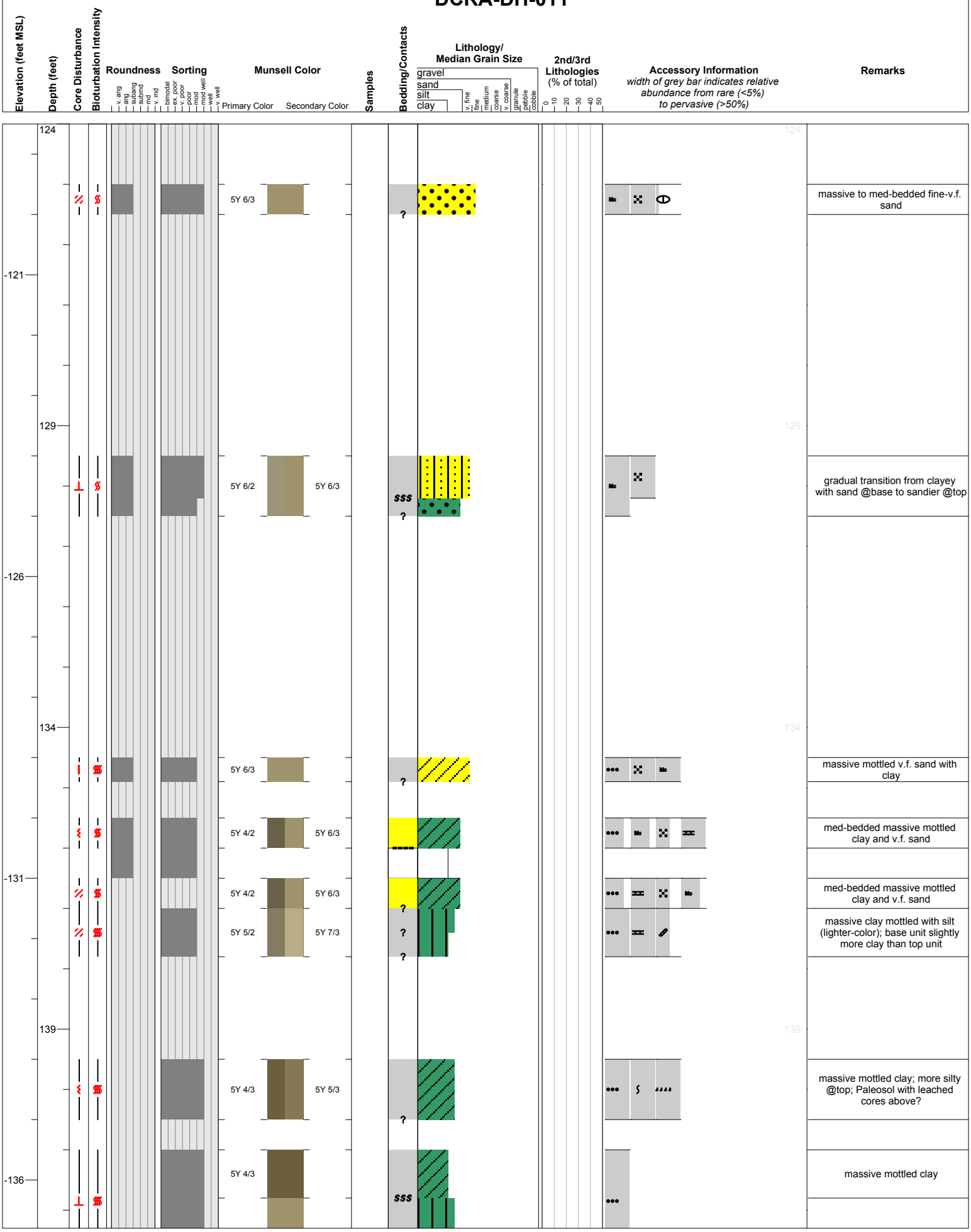
DCRA-DH-010


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-161
168
-166
173
-171
178
-176
5Y 4/3
5Y 5/3
5Y 6/4
5Y 4/3
5Y 4/4
5Y 6/3
5Y 6/3
5Y 5/3
5Y 4/3
5Y 4/4
Mc
massive mottled clay and more sand-rich lithology
thin bedded to laminated clay and sandy clay/clayey sand
massive clay
massive, somewhat mottled sand (v.f.-fine) with silt
massive sand (fine-coarse) with clay
massive (disturbed) silty sand (silt to very coarse)
massive (disturbed) sand (fine to coarse)
massive sandy clay

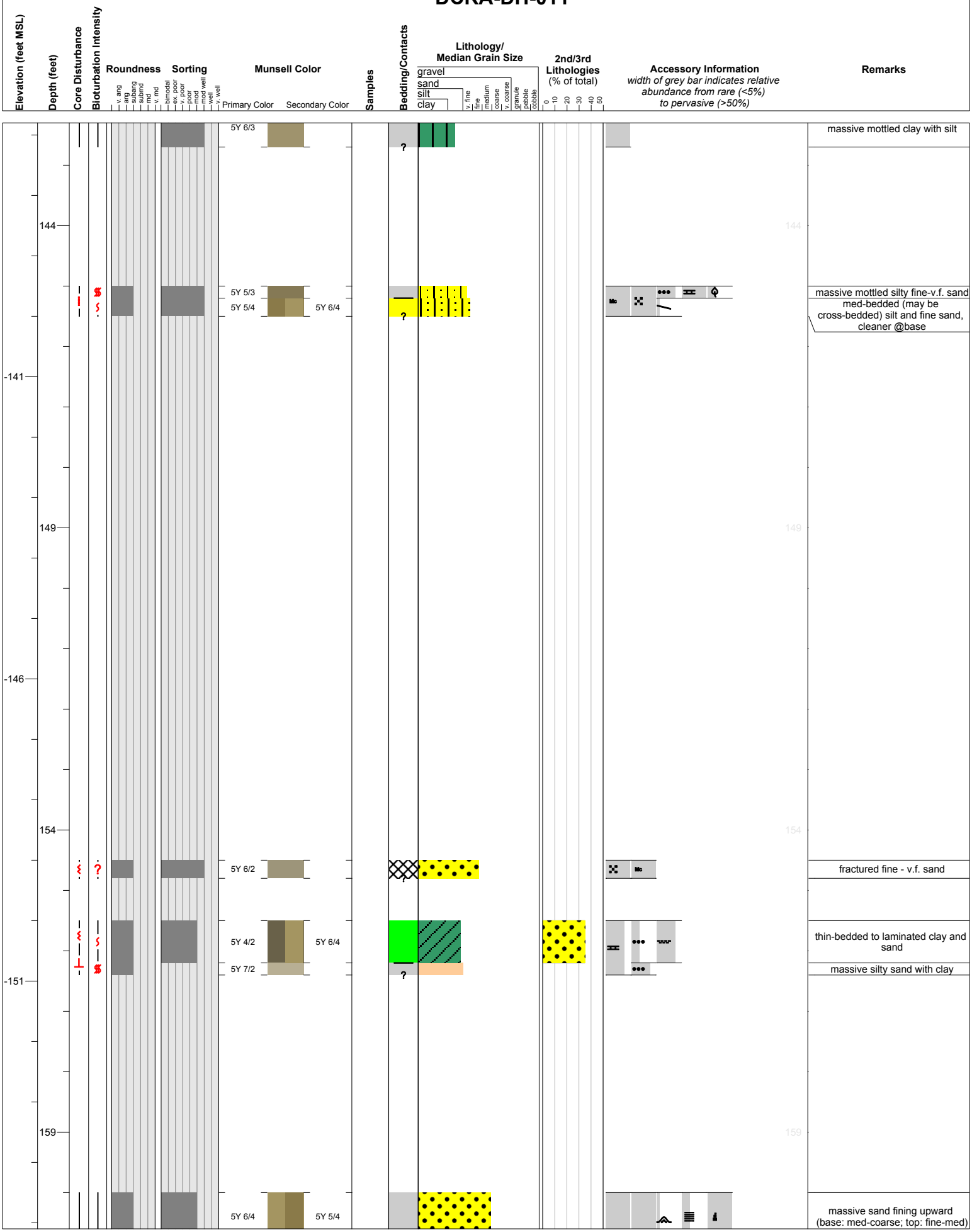
DCRA-DH-010


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
183
188
193
198
-181
-186
-191
5Y 6/3
5Y 4/2
5Y 4/1
2.5Y 4/4
2.5Y 4/4
5Y 3/2
med bedded silty sand and sand
(silt to med grains)
two units of massive to laminated
silty sand (silt to fine, mostly v.f.)
massive sand(fine-v.f.)-silt-clay
mixture

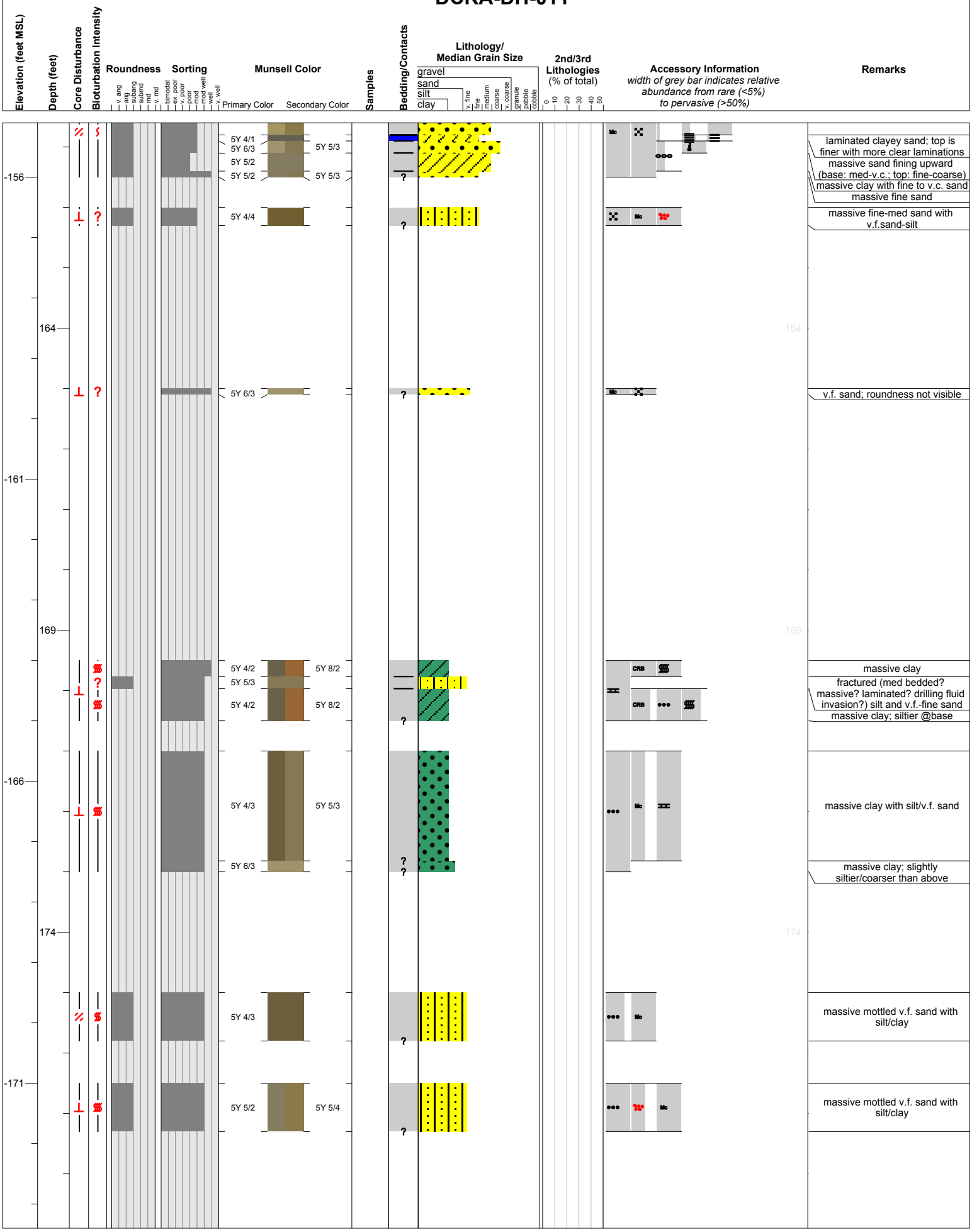
DCRA-DH-011


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
124
129
134
139
-121
-126
-131
-136
5Y 6/3
massive to med-bedded fine-v.f. sand
5Y 6/2
5Y 6/3
gradual transition from clayey with sand @base to sandier @top
5Y 6/3
massive mottled v.f. sand with clay
5Y 4/2
5Y 6/3
med-bedded massive mottled clay and v.f. sand
5Y 4/2
5Y 6/3
med-bedded massive mottled clay and v.f. sand
5Y 5/2
5Y 7/3
massive clay mottled with silt (lighter-color); base unit slightly more clay than top unit
5Y 4/3
5Y 5/3
massive mottled clay; more silty @top; Paleosol with leached cores above?
5Y 4/3
massive mottled clay

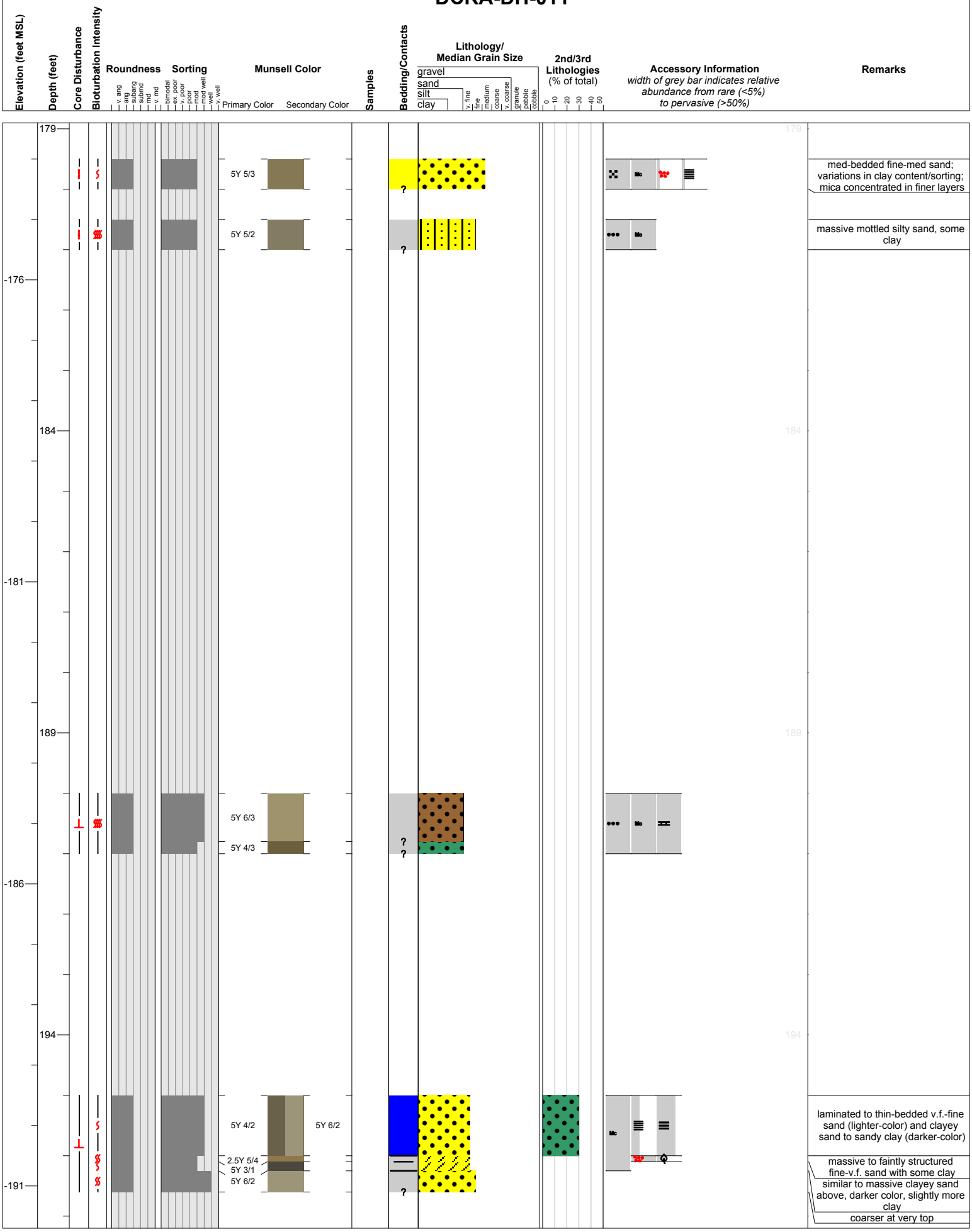
DCRA-DH-011


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
144
149
154
159
-141
-146
-151
5Y 6/3
5Y 5/3
5Y 5/4
5Y 6/4
5Y 6/2
5Y 4/2
5Y 7/2
5Y 6/4
5Y 5/4
massive mottled clay with silt
massive mottled silty fine-v.f. sand
med-bedded (may be
cross-bedded) silt and fine sand,
cleaner @base
fractured fine - v.f. sand
thin-bedded to laminated clay and
sand
massive silty sand with clay
massive sand fining upward
(base: med-coarse; top: fine-med)

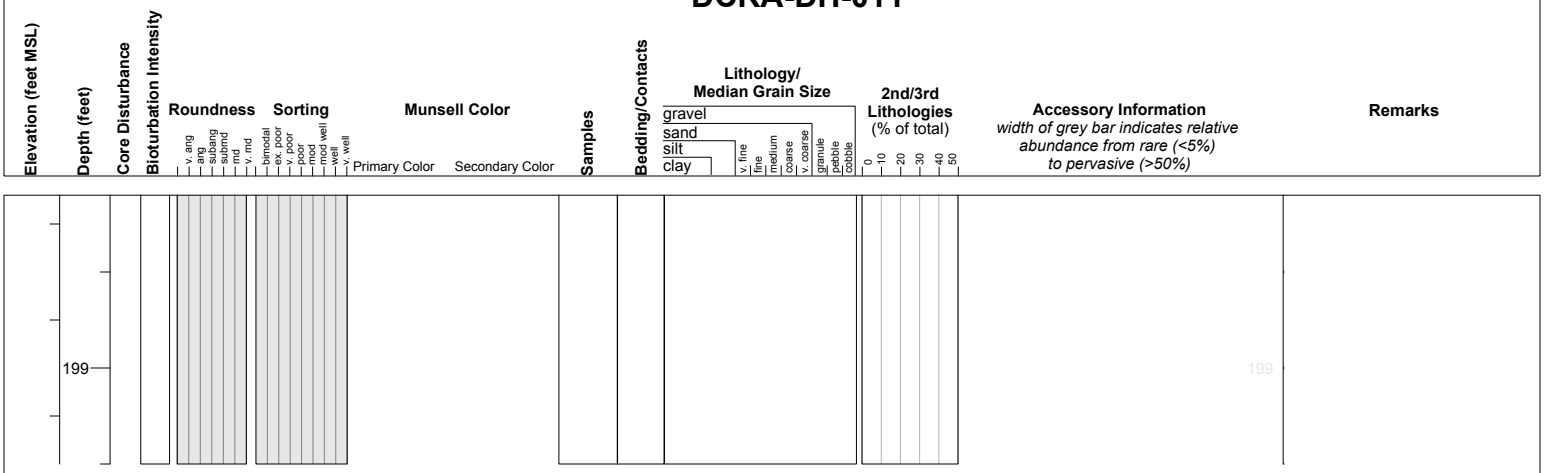
DCRA-DH-011


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-156
164
-161
169
-166
174
-171
5Y 4/1
5Y 6/3
5Y 5/2
5Y 5/2
5Y 5/3
5Y 5/3
5Y 4/4
5Y 6/3
5Y 4/2
5Y 5/3
5Y 4/2
5Y 8/2
5Y 8/2
5Y 4/3
5Y 5/3
5Y 6/3
5Y 4/3
5Y 5/2
5Y 5/4
Mc
CRB
laminated clayey sand; top is finer with more clear laminations
massive sand fining upward (base: med-v.c.; top: fine-coarse)
massive clay with fine to v.c. sand
massive fine sand
massive fine-med sand with v.f.sand-silt
v.f. sand; roundness not visible
massive clay
fractured (med bedded? massive? laminated? drilling fluid invasion?) silt and v.f.-fine sand
massive clay; siltier @base
massive clay with silt/v.f. sand
massive clay; slightly siltier/coarser than above
massive mottled v.f. sand with silt/clay
massive mottled v.f. sand with silt/clay

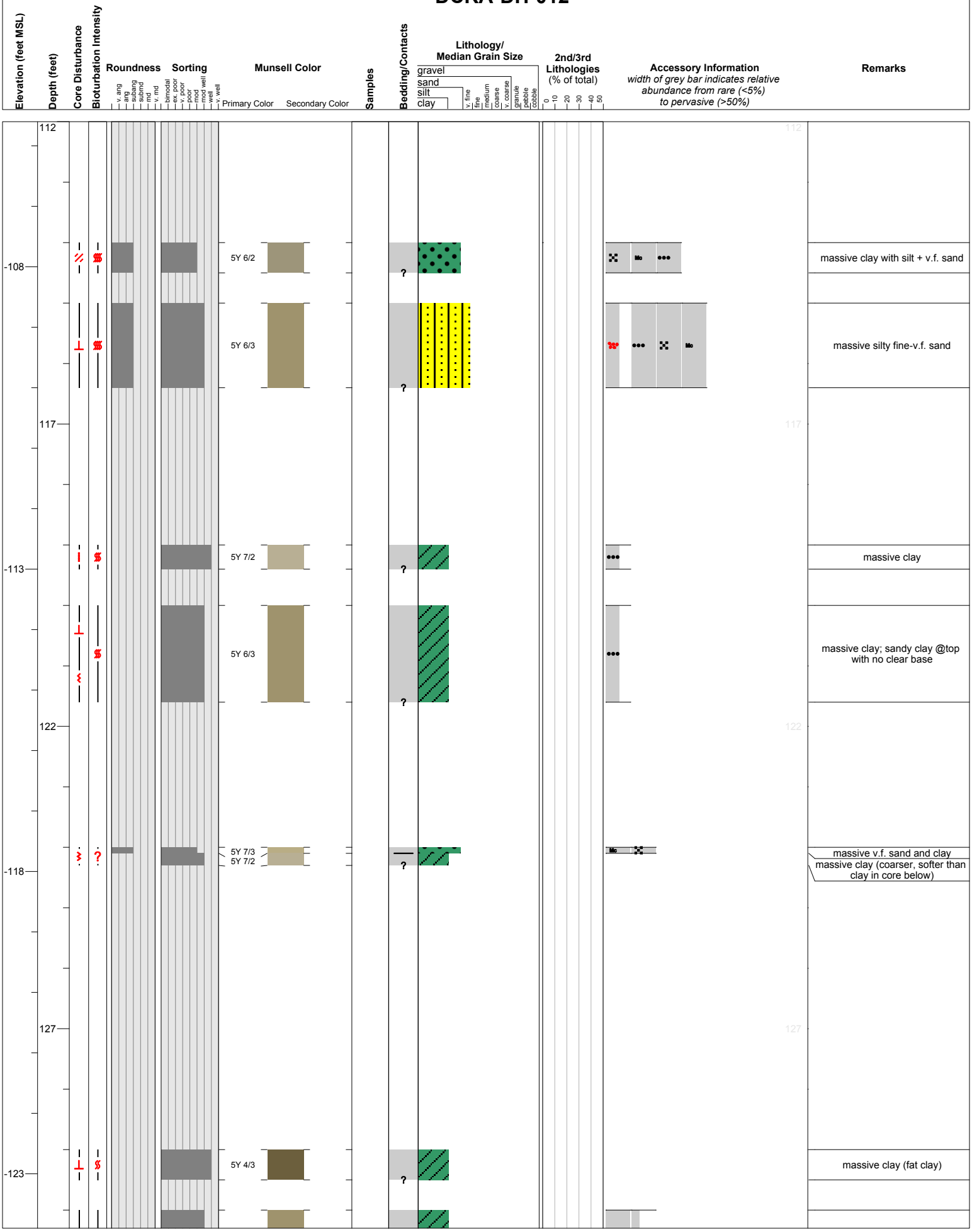
DCRA-DH-011


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative abundance from rare (<5%) to pervasive (>50%)
Remarks
179
184
189
194
-176
-181
-186
-191
5Y 5/3
5Y 5/2
5Y 6/3
5Y 4/3
5Y 4/2
5Y 6/2
2.5Y 5/4
5Y 3/1
5Y 6/2
Mc
med-bedded fine-med sand; variations in clay content/sorting; mica concentrated in finer layers
massive mottled silty sand, some clay
laminated to thin-bedded v.f.-fine sand (lighter-color) and clayey sand to sandy clay (darker-color)
massive to faintly structured fine-v.f. sand with some clay
similar to massive clayey sand above, darker color, slightly more clay
coarser at very top

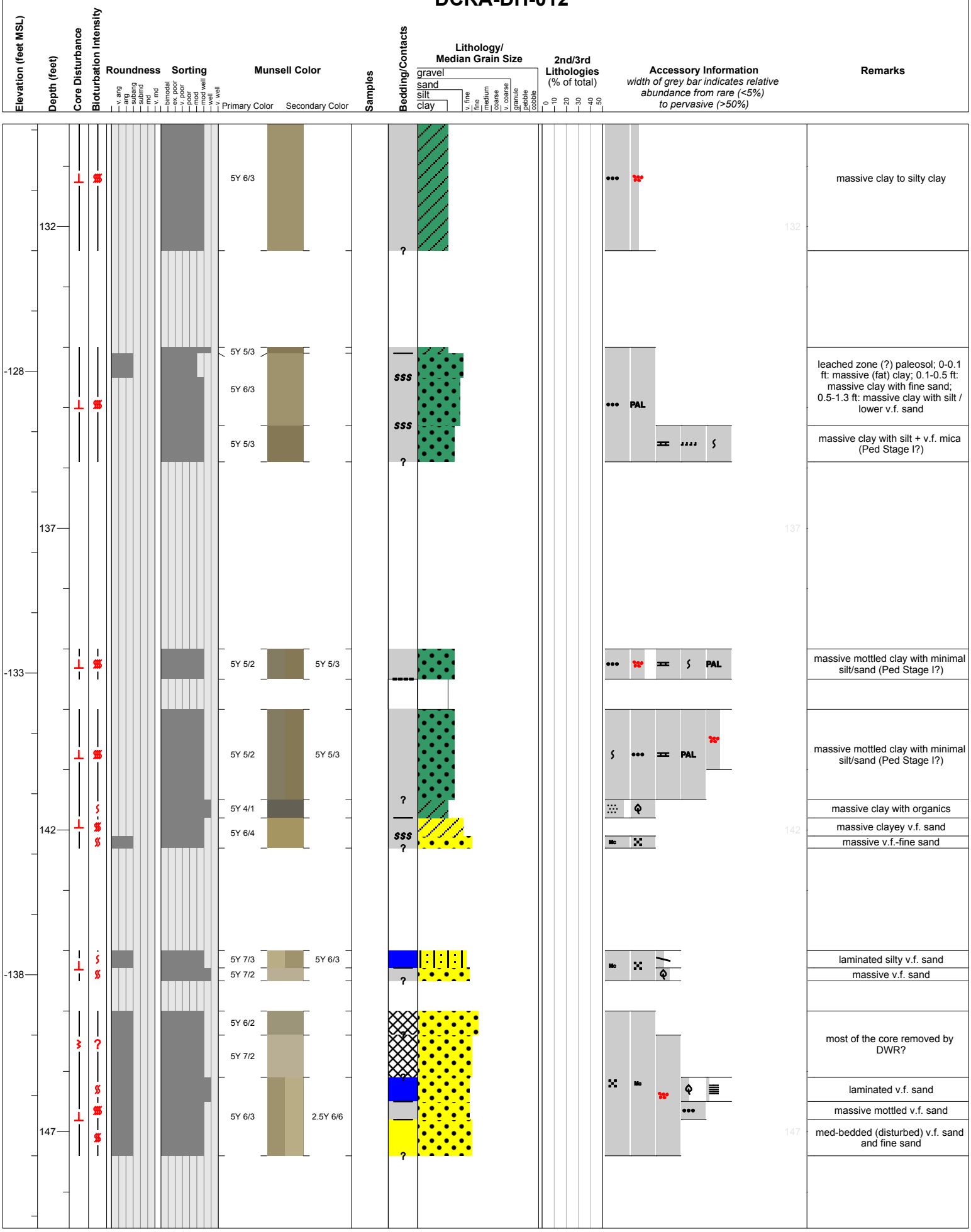
DCRA-DH-011


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
199
199

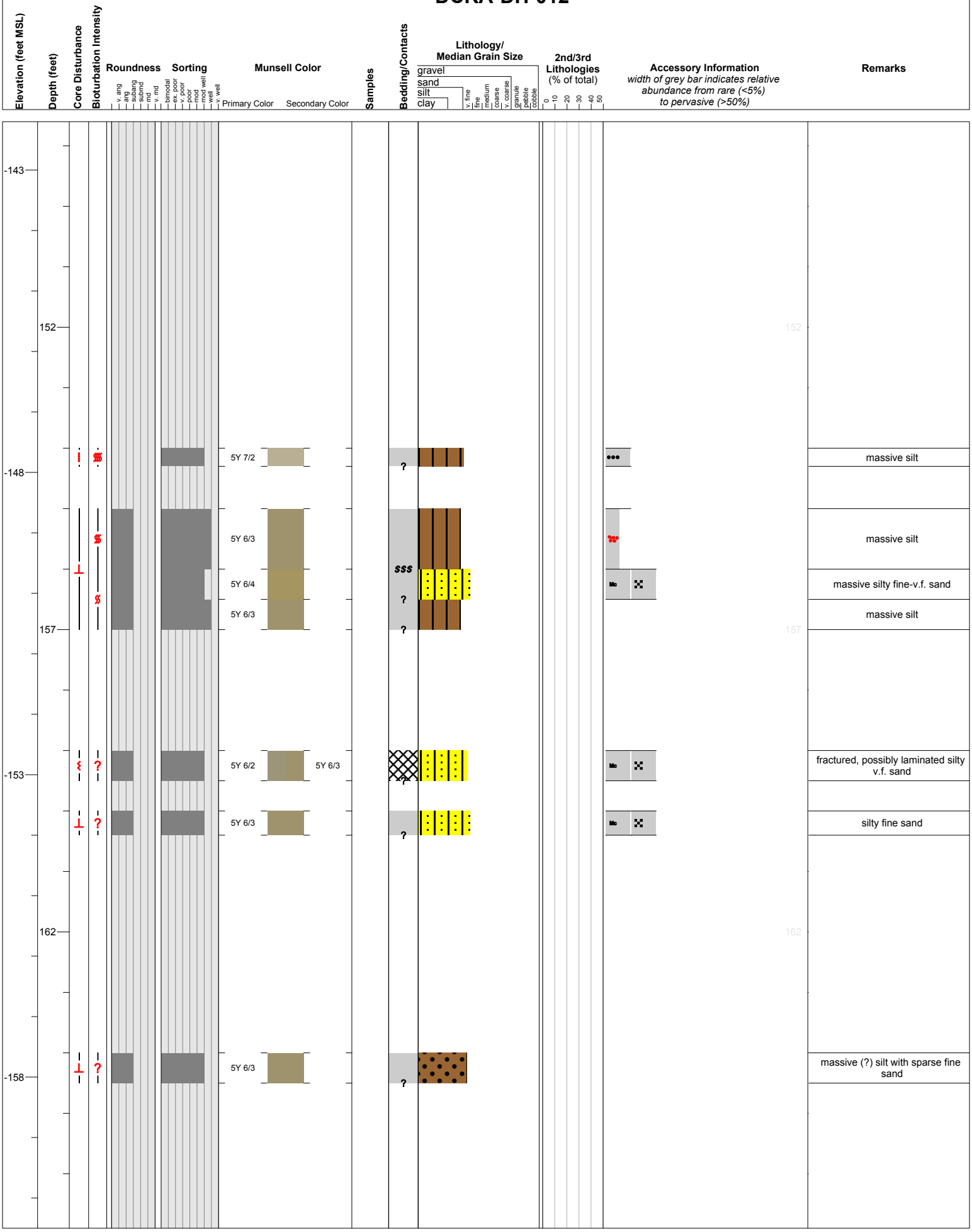
DCRA-DH-012


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
112
-108
117
-113
122
-118
127
-123
5Y 6/2
5Y 6/3
5Y 7/2
5Y 6/3
5Y 7/3
5Y 7/2
5Y 4/3
Mo
massive clay with silt + v.f. sand
massive silty fine-v.f. sand
massive clay
massive clay; sandy clay @top
with no clear base
massive v.f. sand and clay
massive clay (coarser, softer than
clay in core below)
massive clay (fat clay)

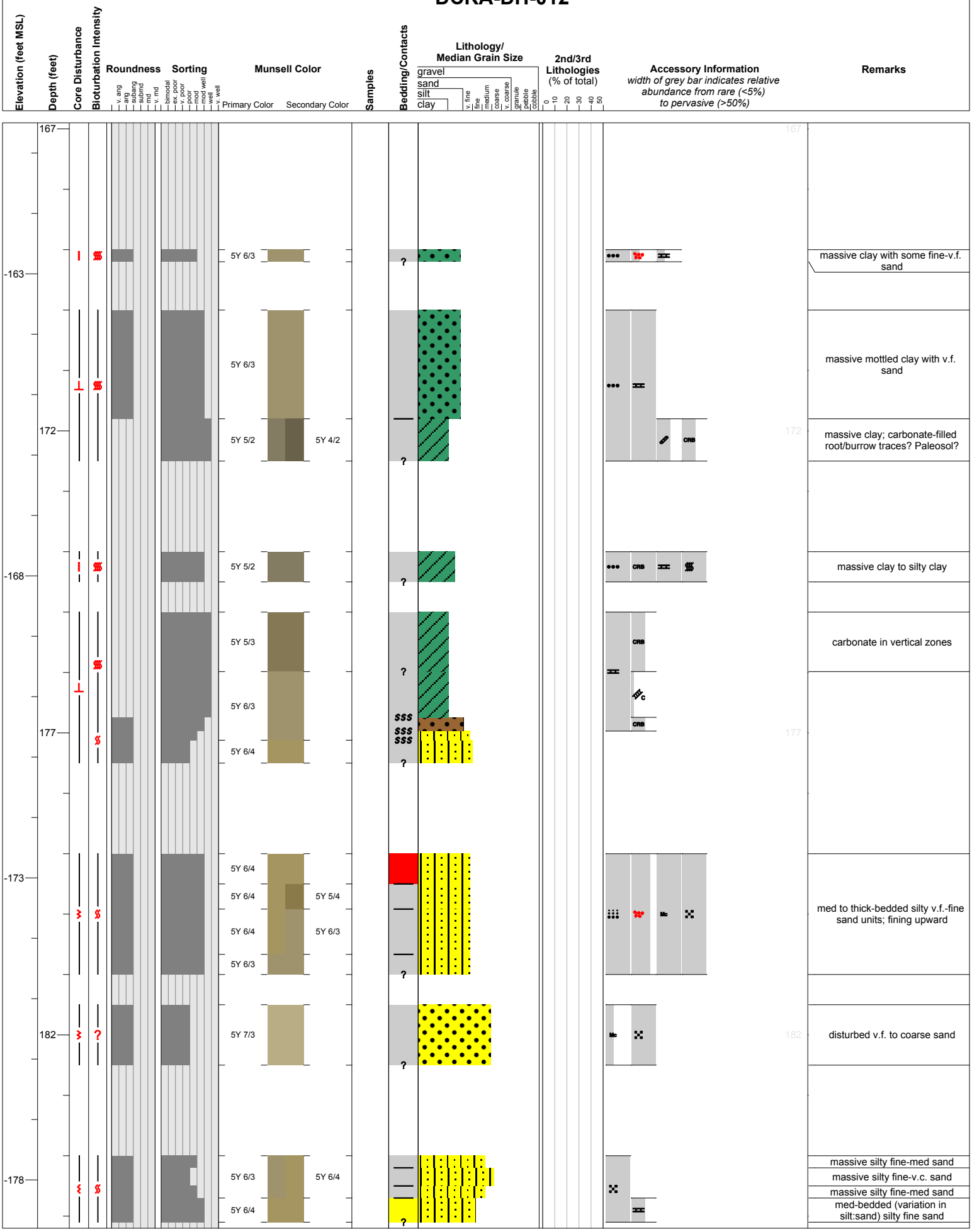
DCRA-DH-012


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative abundance from rare (<5%) to pervasive (>50%)
Remarks
132
-128
137
-133
142
-138
147
5Y 6/3
5Y 5/3
5Y 6/3
5Y 5/3
5Y 5/2
5Y 5/3
5Y 5/2
5Y 5/3
5Y 4/1
5Y 6/4
5Y 7/3
5Y 6/3
5Y 7/2
5Y 6/2
5Y 7/2
5Y 6/3
2.5Y 6/6
SSS
PAL
massive clay to silty clay
leached zone (?) paleosol; 0-0.1 ft: massive (fat) clay; 0.1-0.5 ft: massive clay with fine sand; 0.5-1.3 ft: massive clay with silt / lower v.f. sand
massive clay with silt + v.f. mica (Ped Stage I?)
massive mottled clay with minimal silt/sand (Ped Stage I?)
massive mottled clay with minimal silt/sand (Ped Stage I?)
massive clay with organics
massive clayey v.f. sand
massive v.f.-fine sand
laminated silty v.f. sand
massive v.f. sand
most of the core removed by DWR?
laminated v.f. sand
massive mottled v.f. sand
med-bedded (disturbed) v.f. sand and fine sand

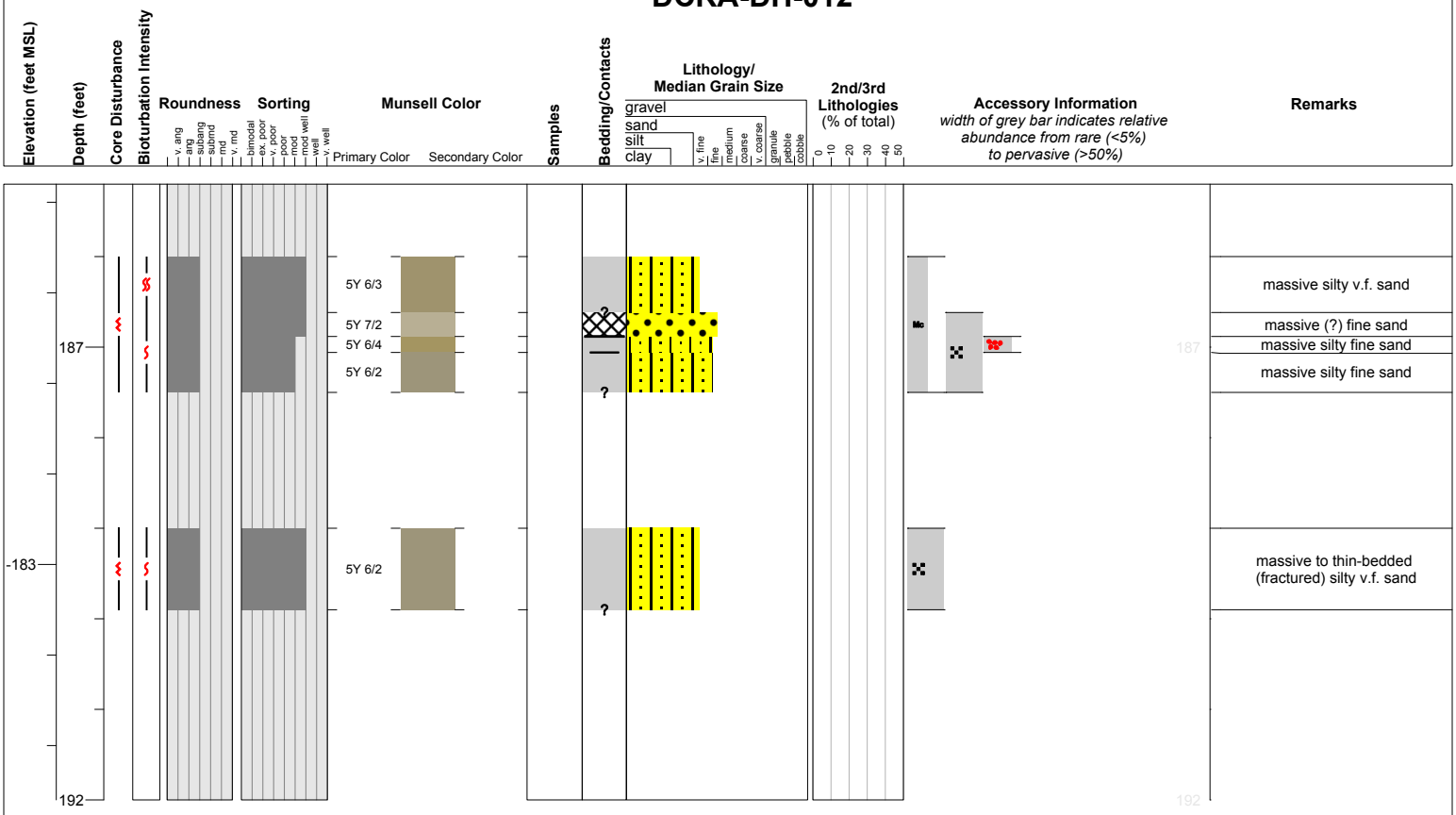
DCRA-DH-012


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-143
152
-148
157
-153
162
-158
5Y 7/2
5Y 6/3
5Y 6/4
5Y 6/3
5Y 6/2
5Y 6/3
5Y 6/3
5Y 6/3
massive silt
massive silt
massive silty fine-v.f. sand
massive silt
fractured, possibly laminated silty v.f. sand
silty fine sand
massive (?) silt with sparse fine sand

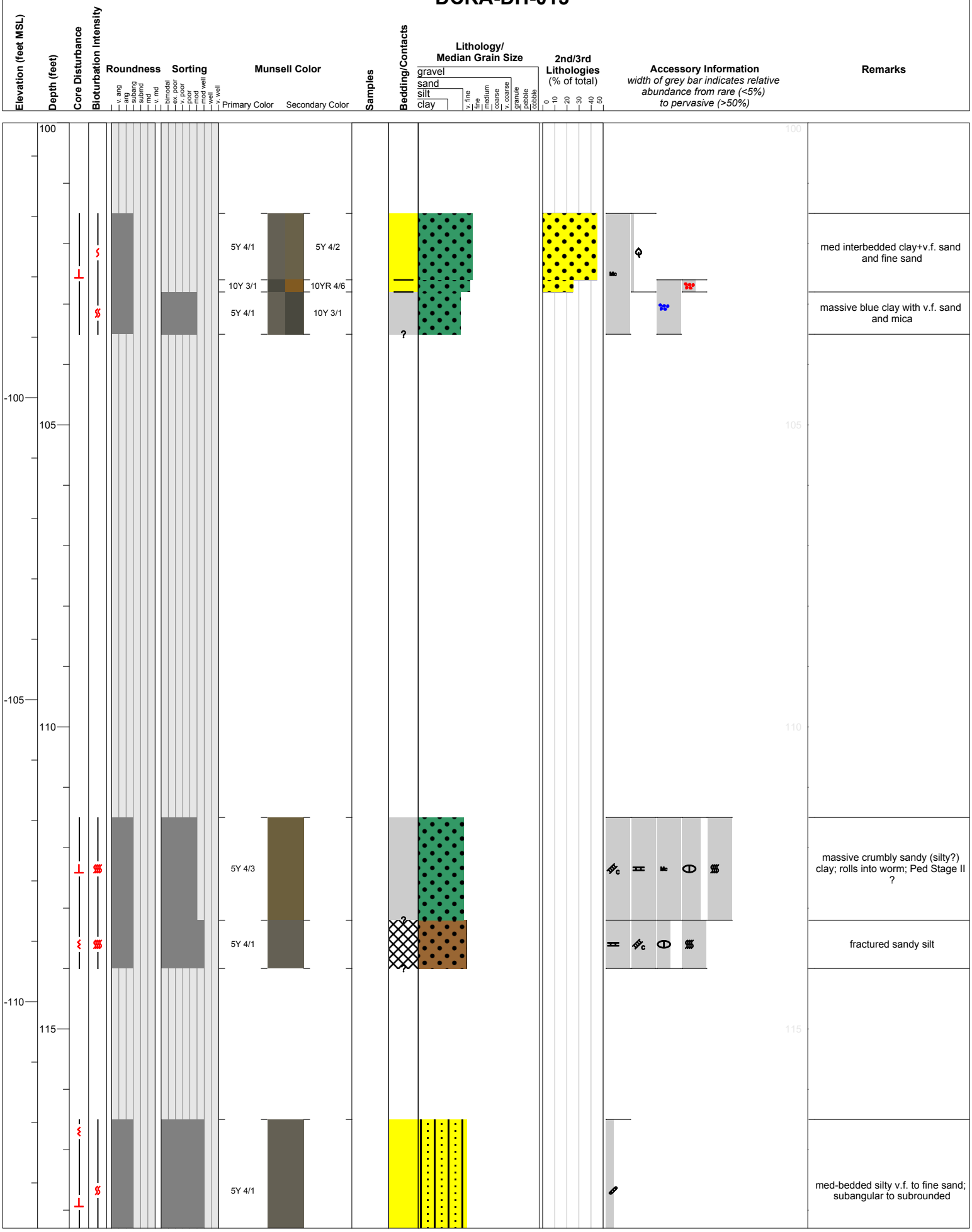
DCRA-DH-012


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative abundance from rare (<5%) to pervasive (>50%)
Remarks
167
-163
172
-168
177
-173
182
-178
5Y 6/3
5Y 6/3
5Y 5/2
5Y 4/2
5Y 5/2
5Y 5/3
5Y 6/3
5Y 6/4
5Y 6/4
5Y 5/4
5Y 6/4
5Y 6/3
5Y 6/3
5Y 7/3
5Y 6/3
5Y 6/4
5Y 6/4
CRB
Mc
massive clay with some fine-v.f. sand
massive mottled clay with v.f. sand
massive clay; carbonate-filled root/burrow traces? Paleosol?
massive clay to silty clay
carbonate in vertical zones
med to thick-bedded silty v.f.-fine sand units; fining upward
disturbed v.f. to coarse sand
massive silty fine-med sand
massive silty fine-v.c. sand
massive silty fine-med sand
med-bedded (variation in silt:sand) silty fine sand

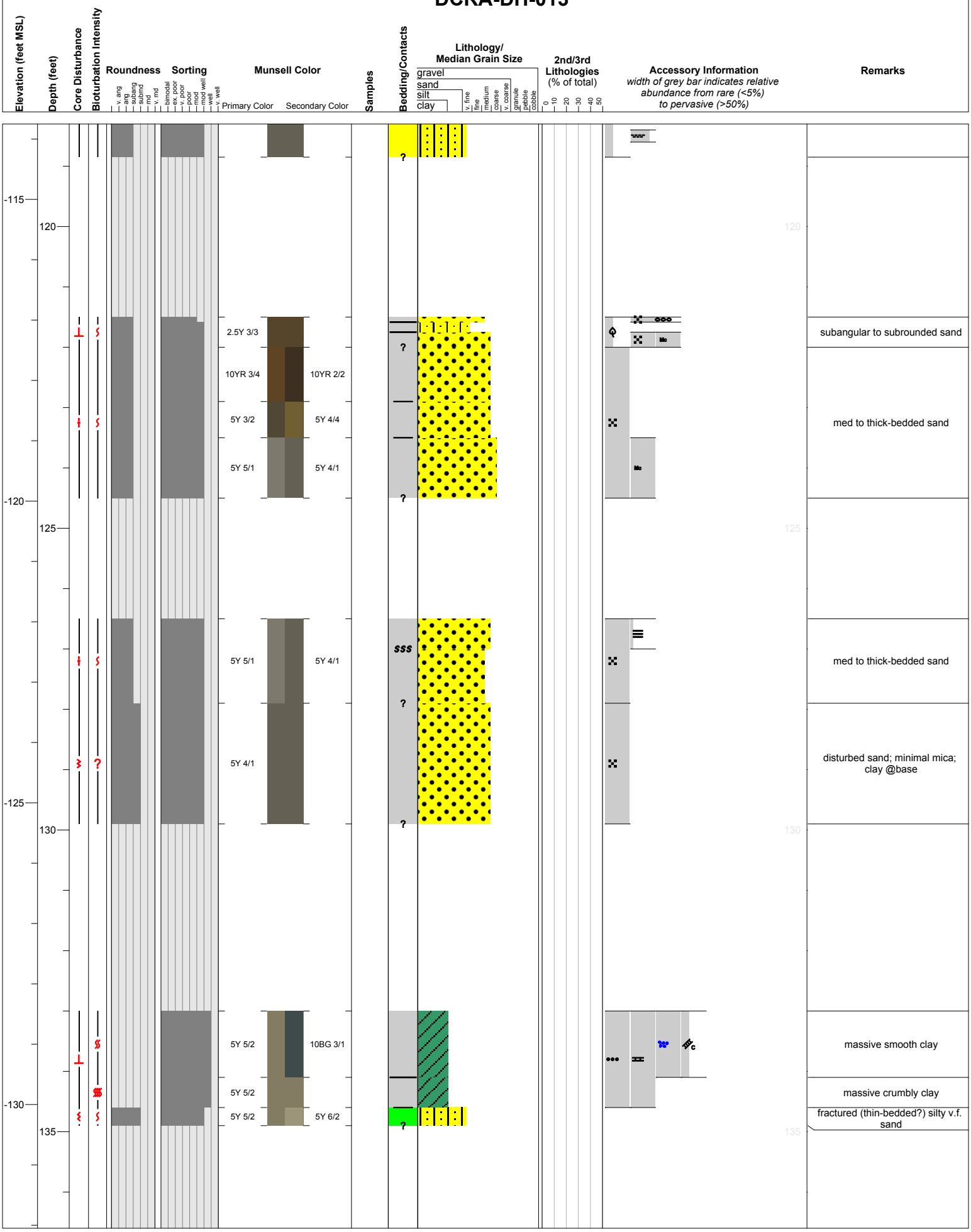
DCRA-DH-012


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
5Y 6/3
5Y 7/2
5Y 6/4
5Y 6/2
5Y 6/2
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
187
-183
192
massive silty v.f. sand
massive (?) fine sand
massive silty fine sand
massive silty fine sand
massive to thin-bedded
(fractured) silty v.f. sand

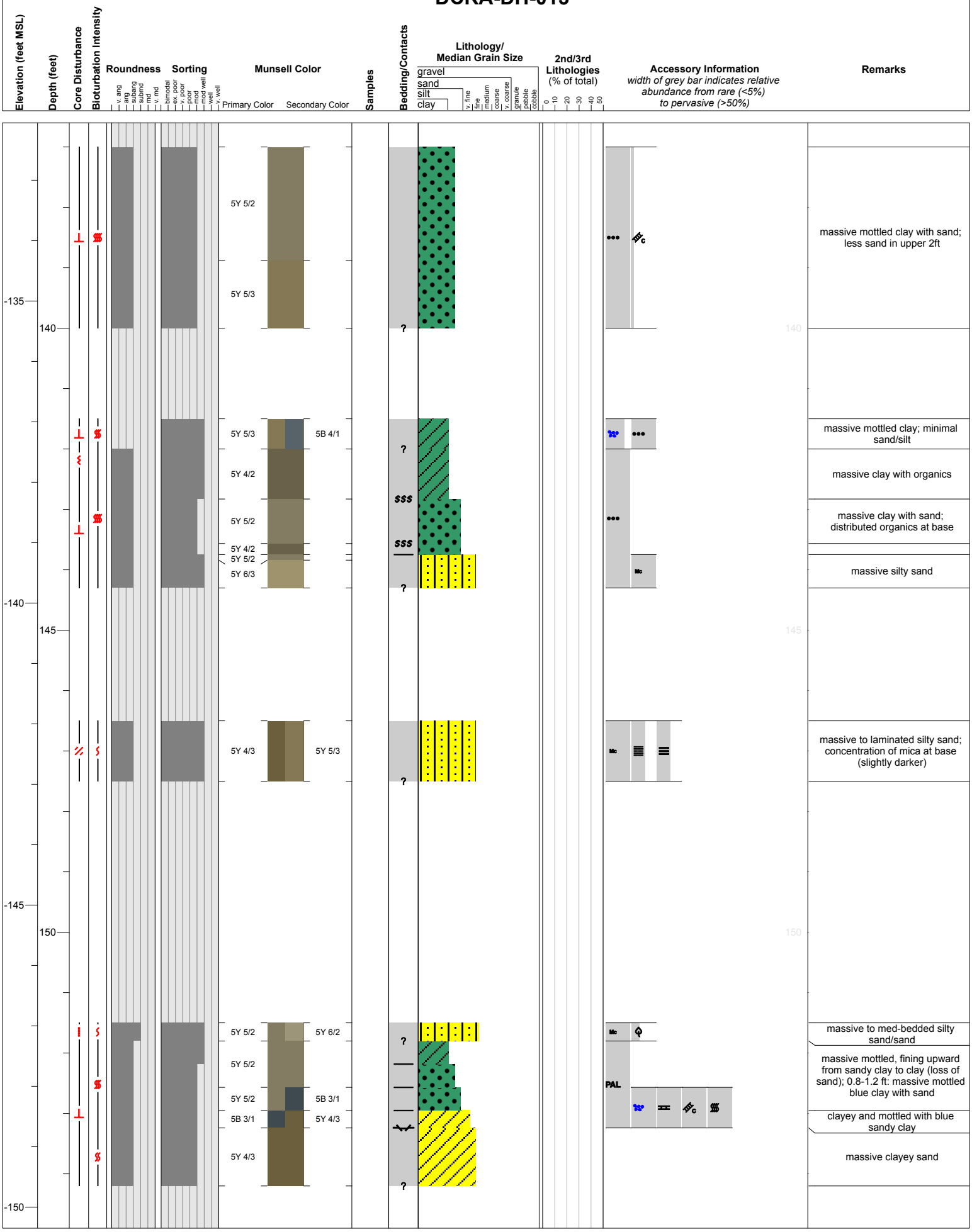
DCRA-DH-013


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
100
105
110
115
-100
-105
-110
5Y 4/1
5Y 4/2
10Y 3/1
10YR 4/6
5Y 4/1
10Y 3/1
5Y 4/3
5Y 4/1
5Y 4/1
med interbedded clay+v.f. sand and fine sand
massive blue clay with v.f. sand and mica
massive crumbly sandy (silty?) clay; rolls into worm; Ped Stage II ?
fractured sandy silt
med-bedded silty v.f. to fine sand; subangular to subrounded

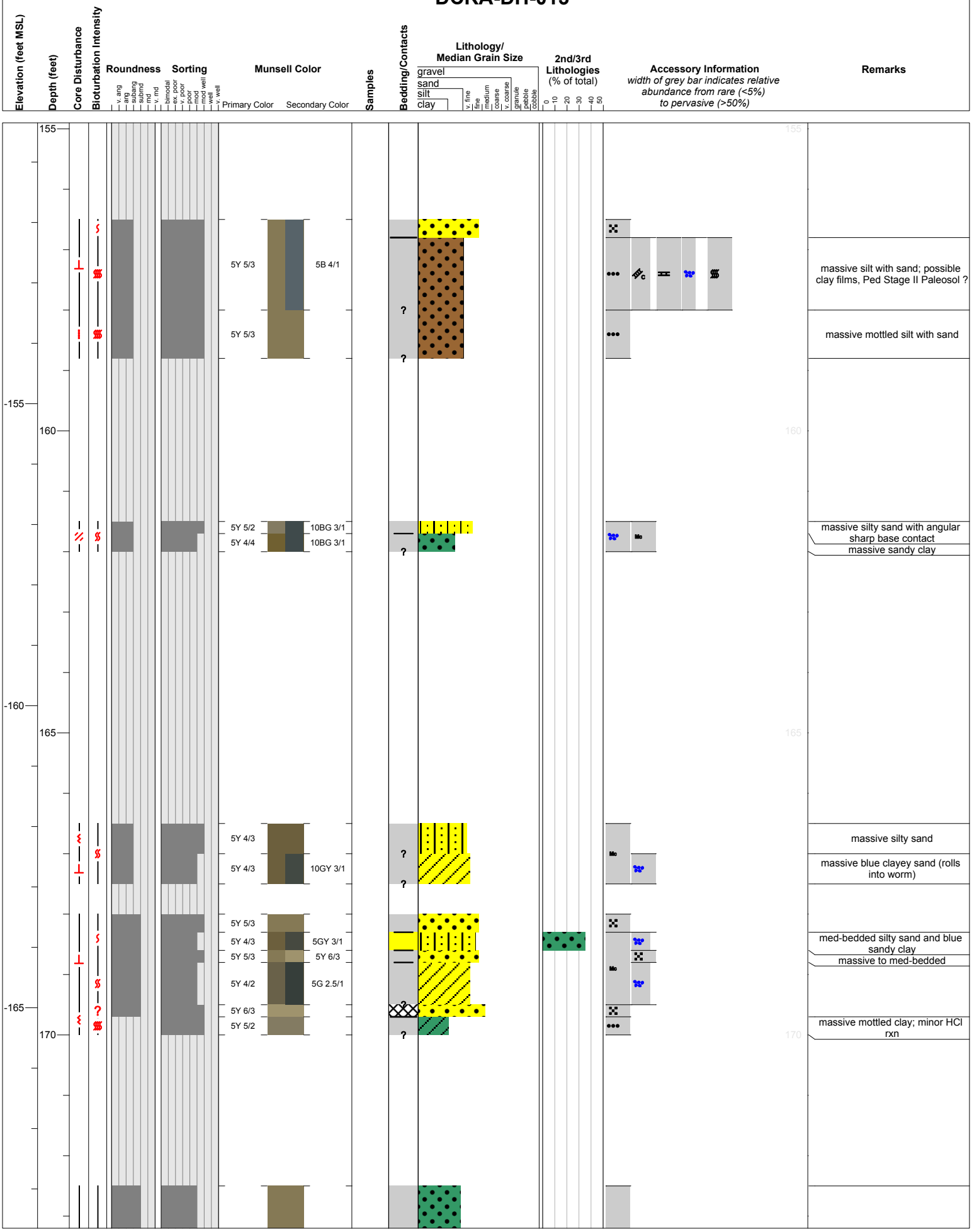
DCRA-DH-013


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-115
120
-120
125
-125
130
-130
135
2.5Y 3/3
10YR 3/4
10YR 2/2
5Y 3/2
5Y 4/4
5Y 5/1
5Y 4/1
5Y 5/1
5Y 4/1
5Y 4/1
5Y 5/2
10BG 3/1
5Y 5/2
5Y 5/2
5Y 6/2
SSS
Mo
Mo
subangular to subrounded sand
med to thick-bedded sand
med to thick-bedded sand
disturbed sand; minimal mica;
clay @base
massive smooth clay
massive crumbly clay
fractured (thin-bedded?) silty v.f.
sand

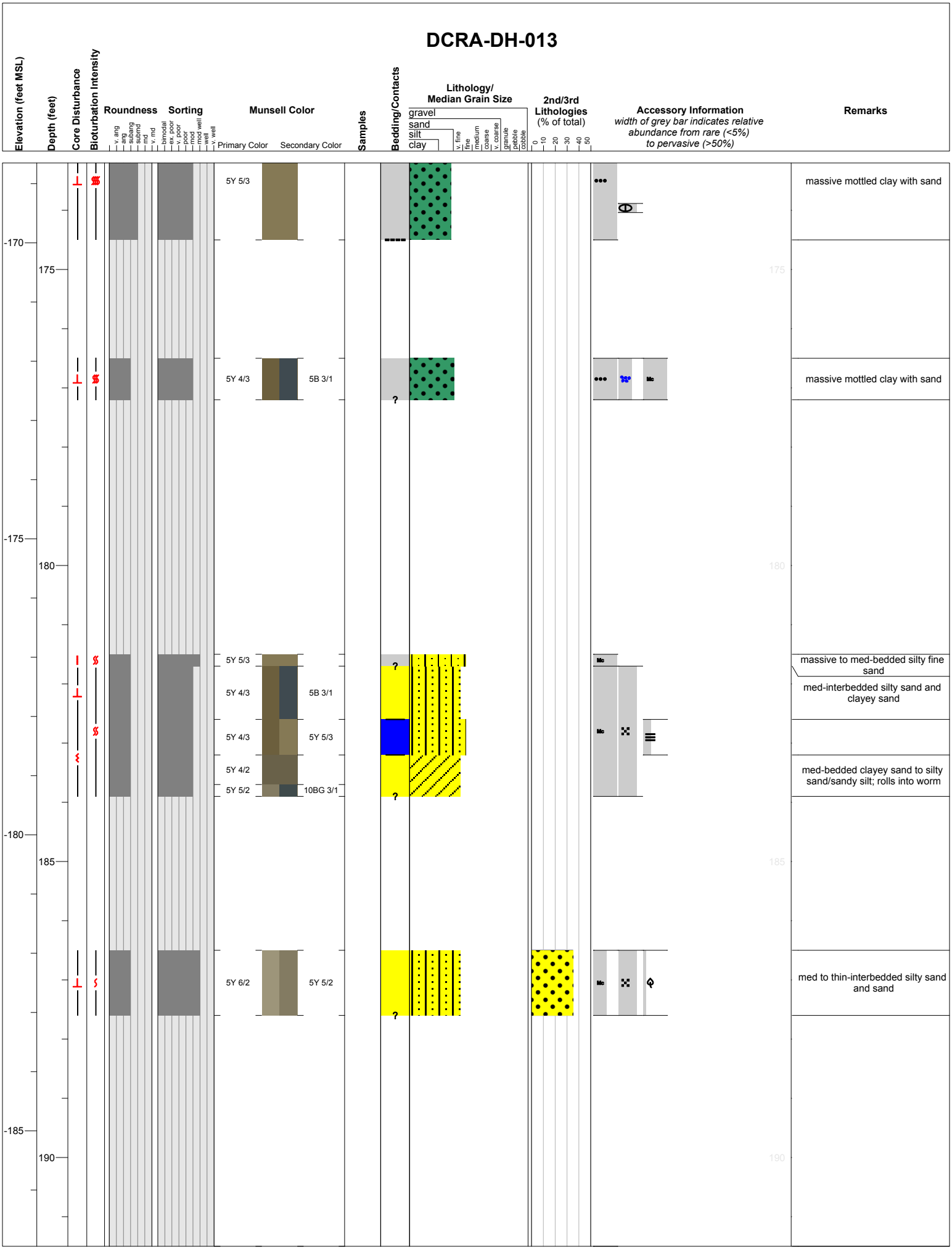
DCRA-DH-013


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-135
140
-140
145
-145
150
-150
5Y 5/2
5Y 5/3
5B 4/1
5Y 4/2
5Y 6/3
5Y 4/3
5B 3/1
5Y 6/2
PAL
massive mottled clay with sand; less sand in upper 2ft
massive mottled clay; minimal sand/silt
massive clay with organics
massive clay with sand; distributed organics at base
massive silty sand
massive to laminated silty sand; concentration of mica at base (slightly darker)
massive to med-bedded silty sand/sand
massive mottled, fining upward from sandy clay to clay (loss of sand); 0.8-1.2 ft: massive mottled blue clay with sand
clayey and mottled with blue sandy clay
massive clayey sand

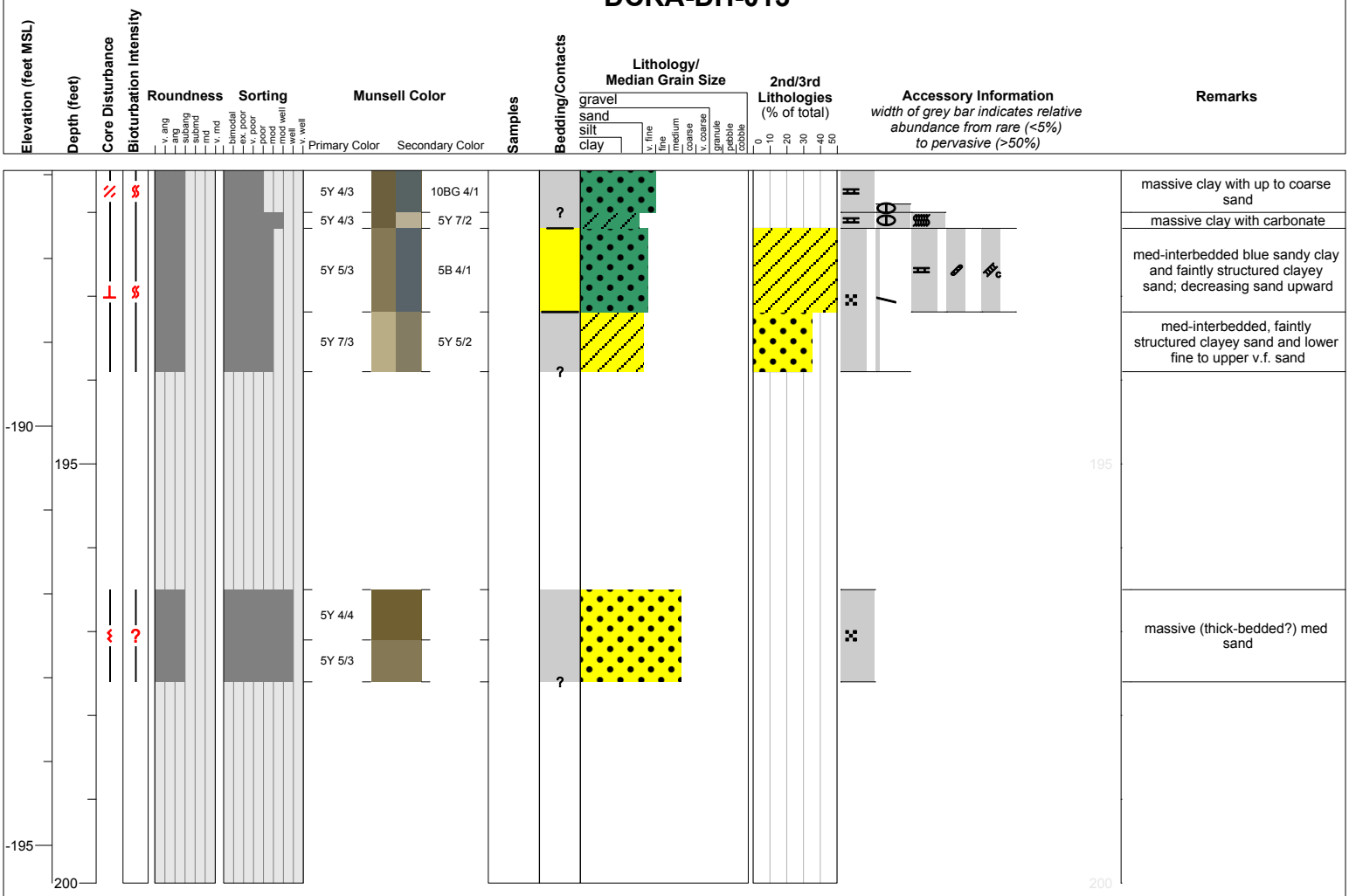
DCRA-DH-013


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
v. poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
155
160
165
170
-155
-160
-165
5Y 5/3
5B 4/1
5Y 5/3
5Y 5/2
10BG 3/1
5Y 4/4
10BG 3/1
5Y 4/3
5Y 4/3
10GY 3/1
5Y 5/3
5Y 4/3
5GY 3/1
5Y 5/3
5Y 6/3
5Y 4/2
5G 2.5/1
5Y 6/3
5Y 5/2
massive silt with sand; possible clay films, Ped Stage II Paleosol ?
massive mottled silt with sand
massive silty sand with angular sharp base contact
massive sandy clay
massive silty sand
massive blue clayey sand (rolls into worm)
med-bedded silty sand and blue sandy clay
massive to med-bedded
massive mottled clay; minor HCl rxn

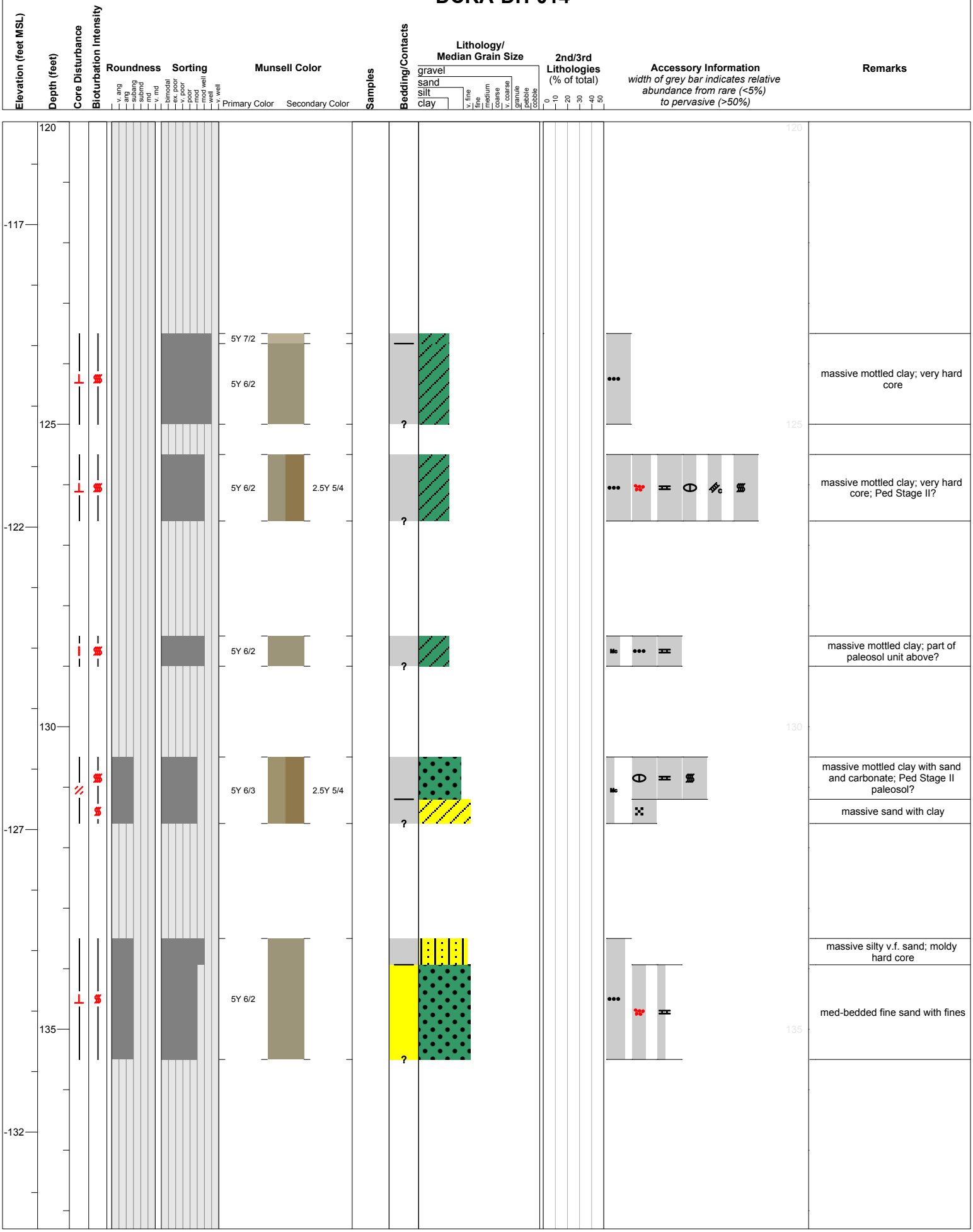
DCRA-DH-013


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-170
175
-175
180
-180
185
-185
190
5Y 5/3
5Y 4/3
5B 3/1
5Y 5/3
5Y 4/3
5B 3/1
5Y 4/3
5Y 5/3
5Y 4/2
5Y 5/2
10BG 3/1
5Y 6/2
5Y 5/2
massive mottled clay with sand
massive mottled clay with sand
massive to med-bedded silty fine sand
med-interbedded silty sand and clayey sand
med-bedded clayey sand to silty sand/sandy silt; rolls into worm
med to thin-interbedded silty sand and sand

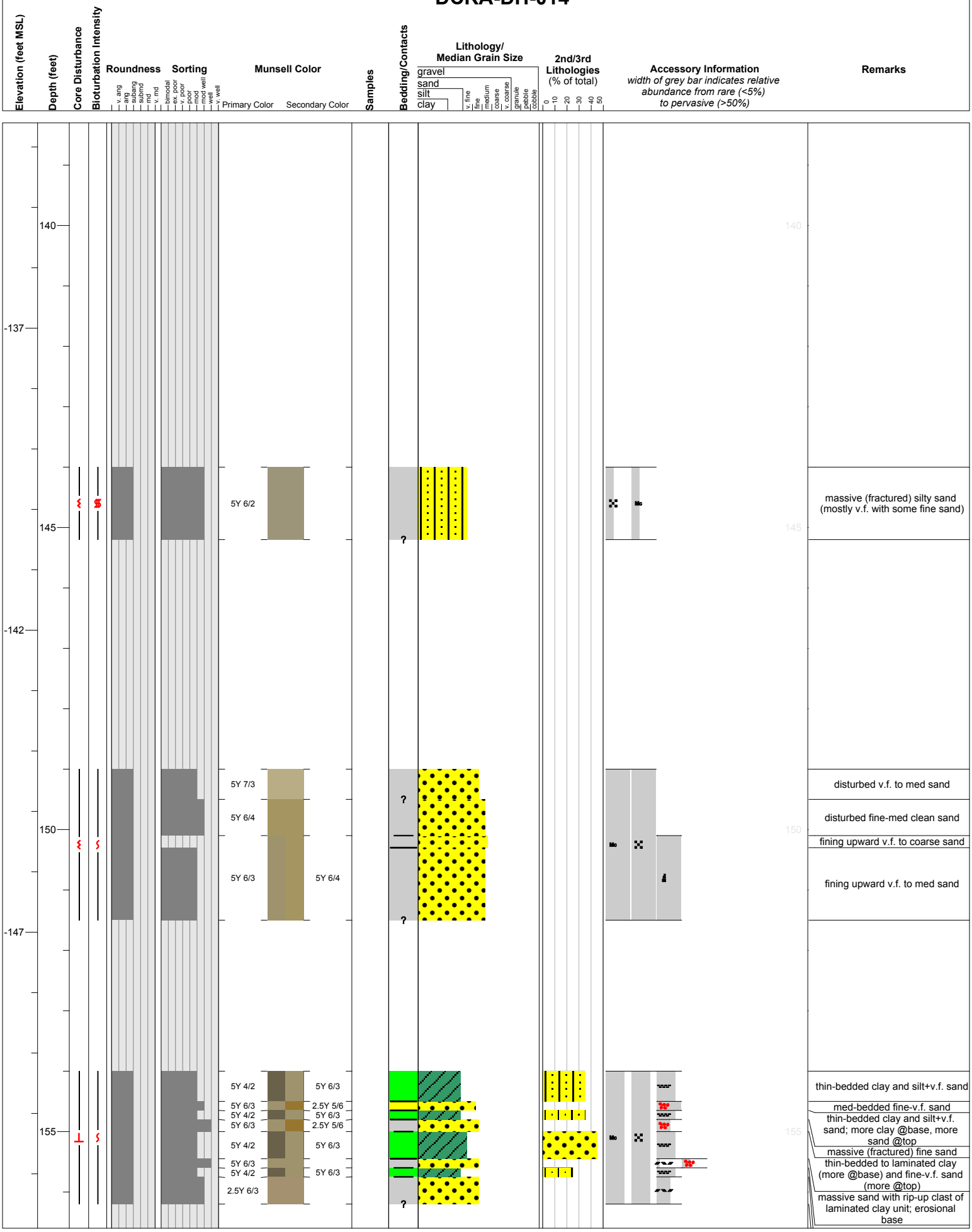
DCRA-DH-013


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-190
195
-195
200
5Y 4/3
5Y 4/3
5Y 5/3
5Y 7/3
10BG 4/1
5Y 7/2
5B 4/1
5Y 5/2
5Y 4/4
5Y 5/3
massive clay with up to coarse sand
massive clay with carbonate
med-interbedded blue sandy clay and faintly structured clayey sand; decreasing sand upward
med-interbedded, faintly structured clayey sand and lower fine to upper v.f. sand
massive (thick-bedded?) med sand

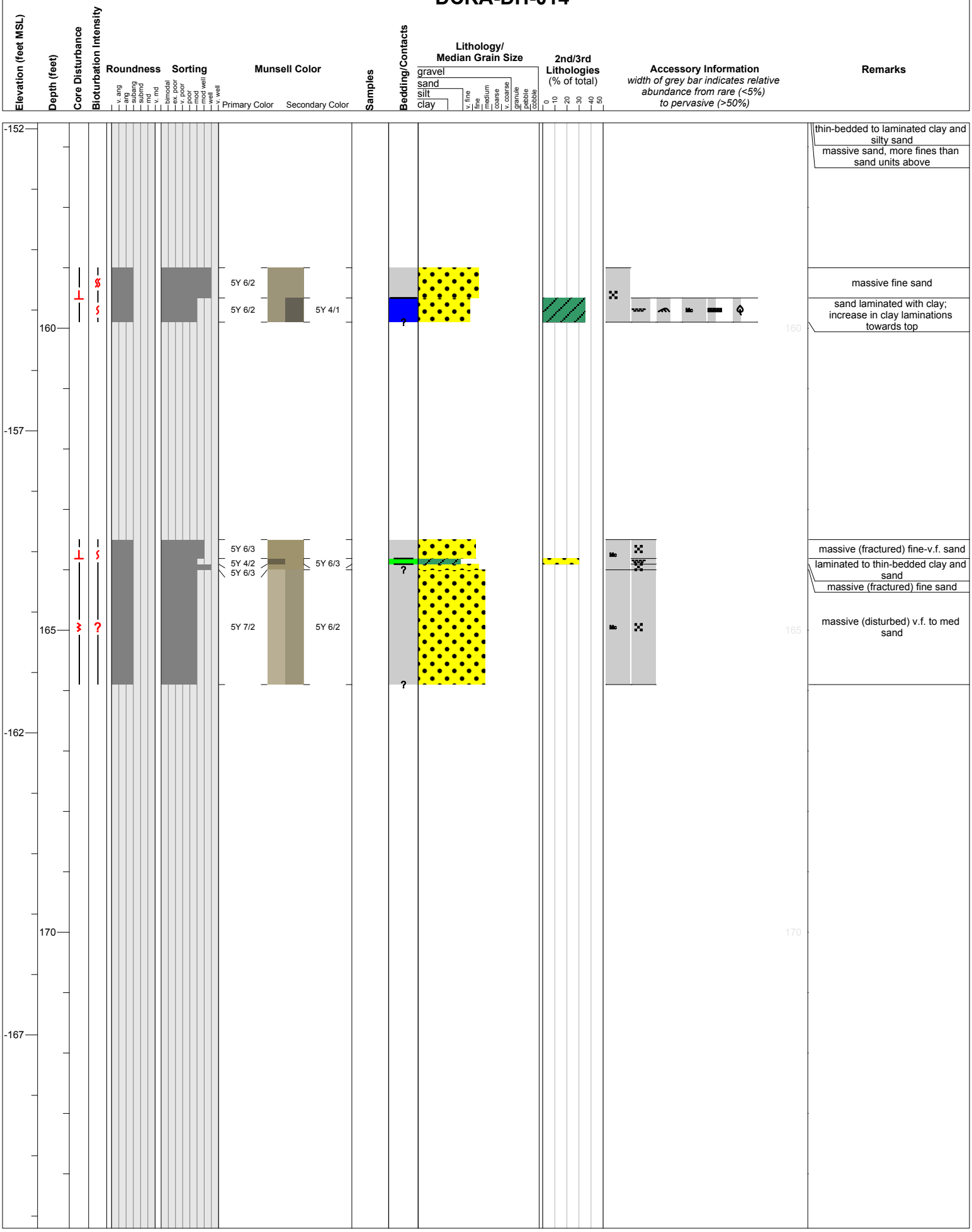
DCRA-DH-014


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
120
125
130
135
-117
-122
-127
-132
5Y 7/2
5Y 6/2
5Y 6/2
2.5Y 5/4
5Y 6/2
5Y 6/3
2.5Y 5/4
5Y 6/2
massive mottled clay; very hard core
massive mottled clay; very hard core; Ped Stage II?
massive mottled clay; part of paleosol unit above?
massive mottled clay with sand and carbonate; Ped Stage II paleosol?
massive sand with clay
massive silty v.f. sand; moldy hard core
med-bedded fine sand with fines

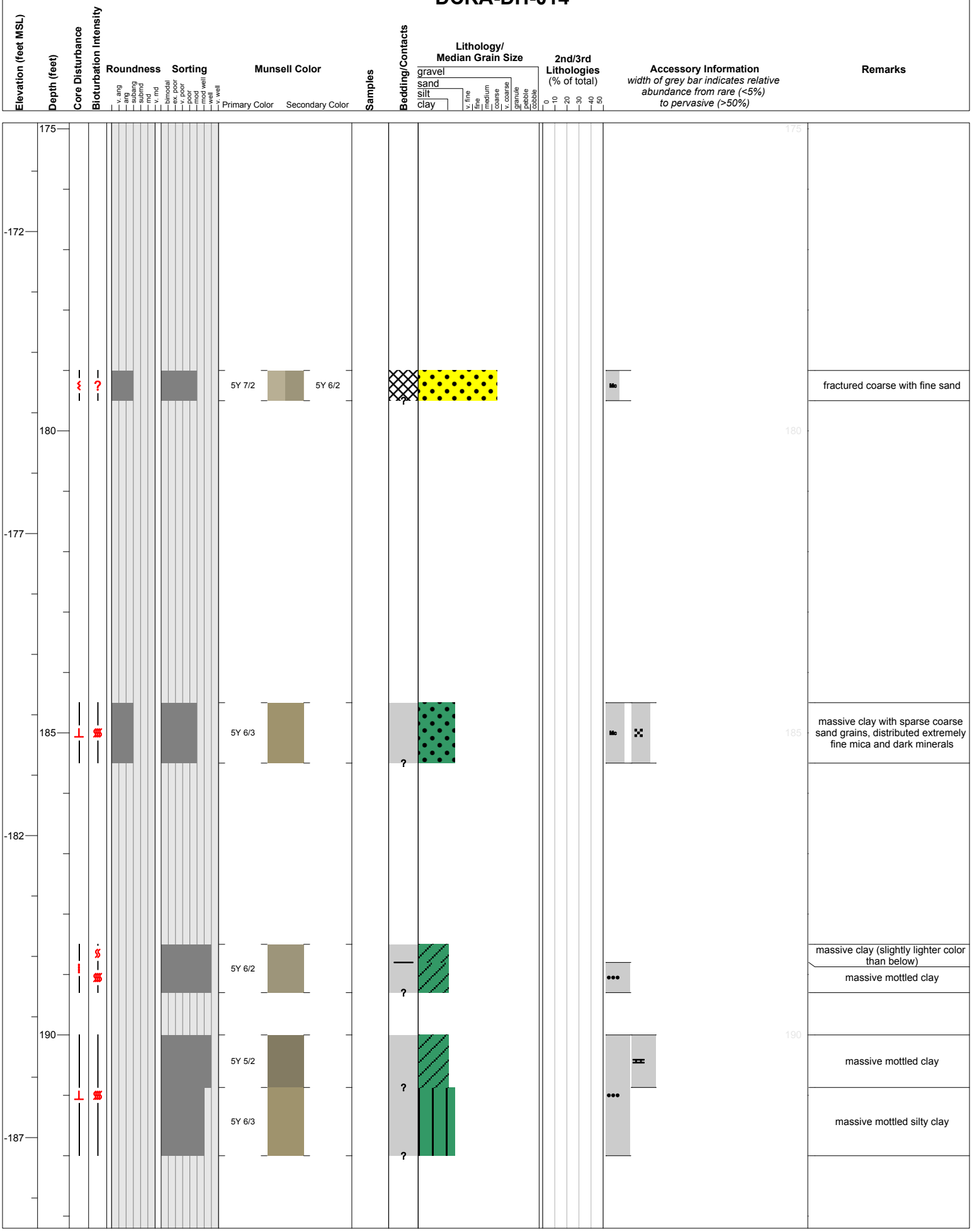
DCRA-DH-014


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
140
145
150
155
-137
-142
-147
5Y 6/2
5Y 7/3
5Y 6/4
5Y 6/3
5Y 6/4
5Y 4/2
5Y 6/3
5Y 4/2
5Y 6/3
5Y 4/2
5Y 6/3
5Y 4/2
2.5Y 6/3
5Y 6/3
2.5Y 5/6
5Y 6/3
2.5Y 5/6
5Y 6/3
5Y 6/3
massive (fractured) silty sand
(mostly v.f. with some fine sand)
disturbed v.f. to med sand
disturbed fine-med clean sand
fining upward v.f. to coarse sand
fining upward v.f. to med sand
thin-bedded clay and silt+v.f. sand
med-bedded fine-v.f. sand
thin-bedded clay and silt+v.f.
sand; more clay @base, more
sand @top
massive (fractured) fine sand
thin-bedded to laminated clay
(more @base) and fine-v.f. sand
(more @top)
massive sand with rip-up clast of
laminated clay unit; erosional
base

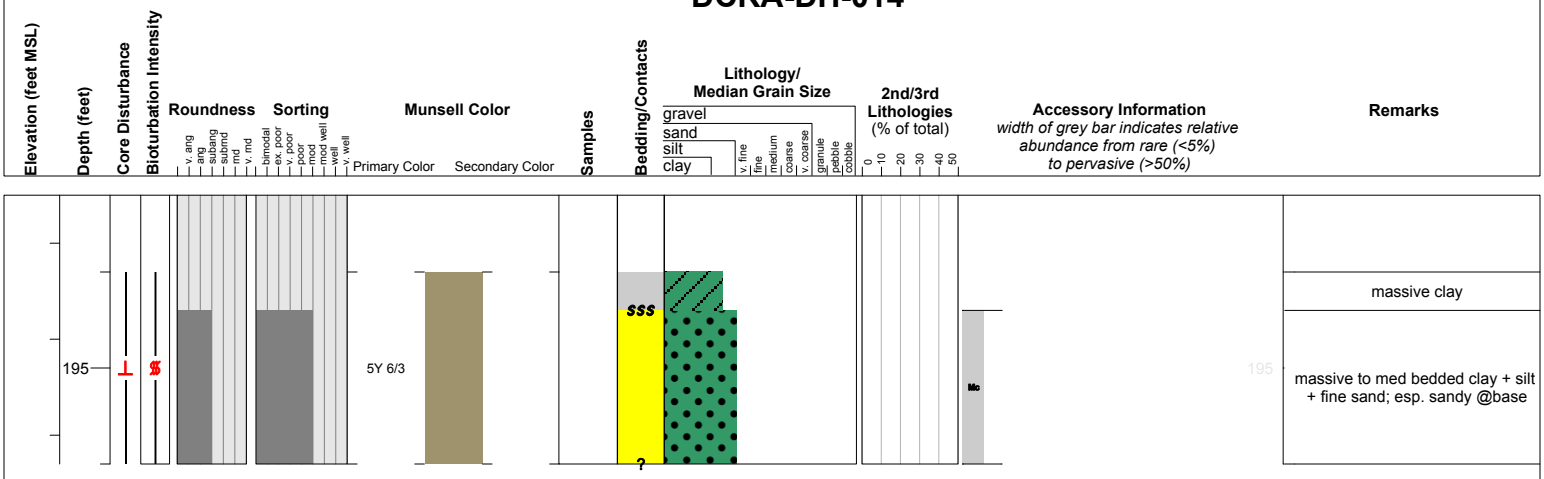
DCRA-DH-014


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative abundance from rare (<5%) to pervasive (>50%)
Remarks
-152
160
-157
165
-162
170
-167
5Y 6/2
5Y 6/2
5Y 4/1
5Y 6/3
5Y 4/2
5Y 6/3
5Y 6/3
5Y 7/2
5Y 6/2
thin-bedded to laminated clay and silty sand
massive sand, more fines than sand units above
massive fine sand
sand laminated with clay; increase in clay laminations towards top
massive (fractured) fine-v.f. sand
laminated to thin-bedded clay and sand
massive (fractured) fine sand
massive (disturbed) v.f. to med sand

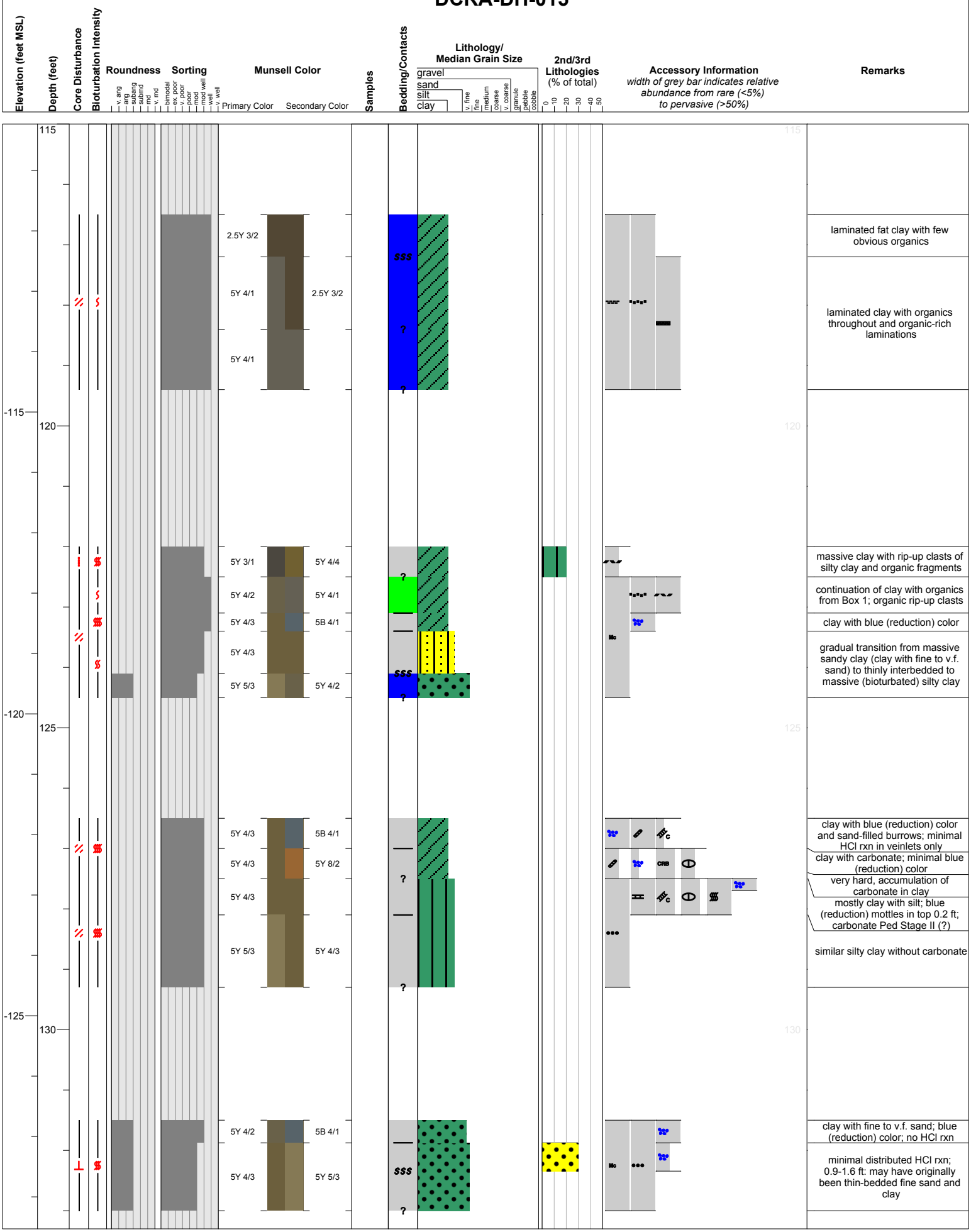
DCRA-DH-014


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
175
-172
180
-177
185
-182
190
-187
5Y 7/2
5Y 6/2
5Y 6/3
5Y 6/2
5Y 5/2
5Y 6/3
fractured coarse with fine sand
massive clay with sparse coarse sand grains, distributed extremely fine mica and dark minerals
massive clay (slightly lighter color than below)
massive mottled clay
massive mottled clay
massive mottled silty clay

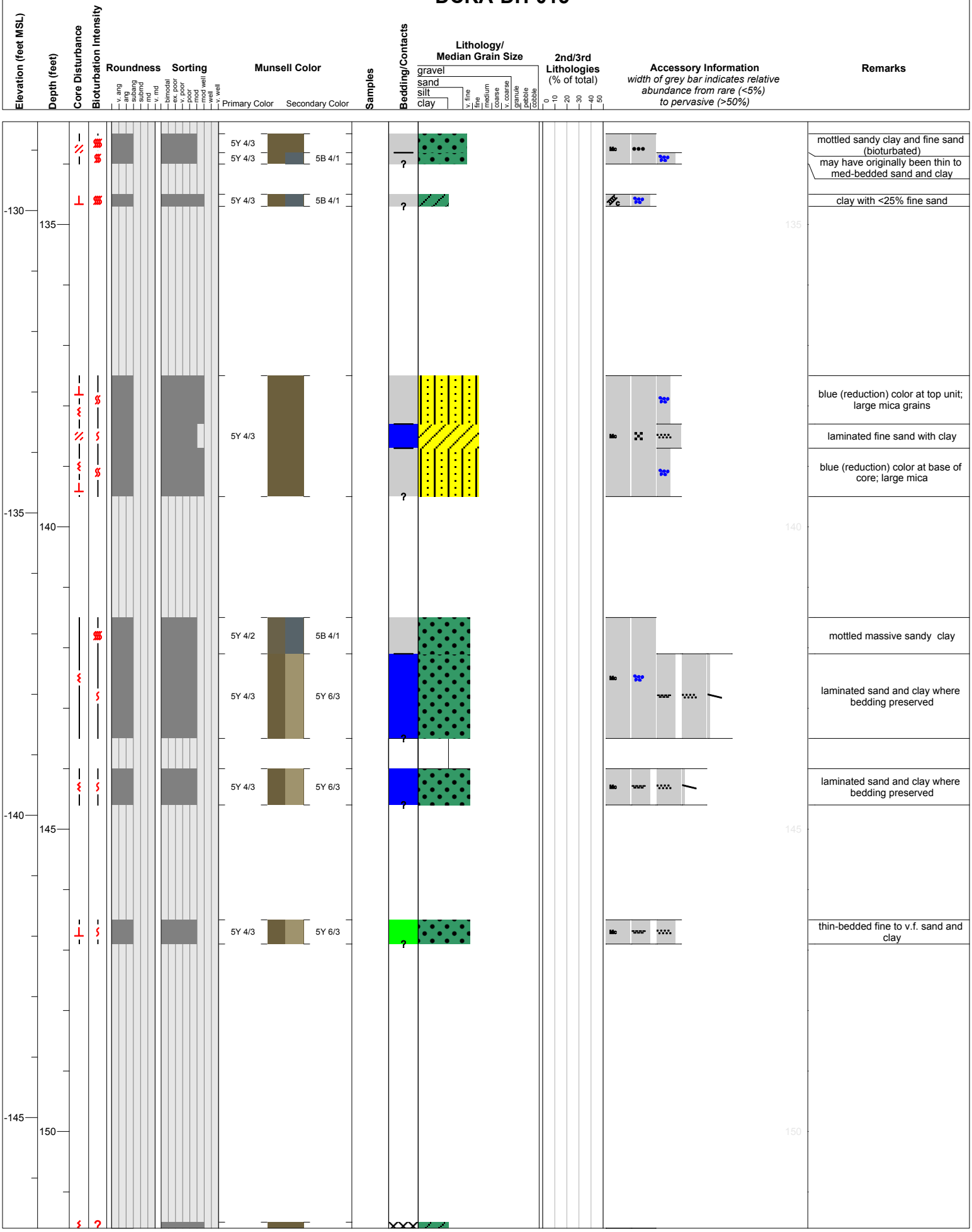
DCRA-DH-014


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
195
5Y 6/3
SSS
?
Mc
massive clay
195
massive to med bedded clay + silt
+ fine sand; esp. sandy @base

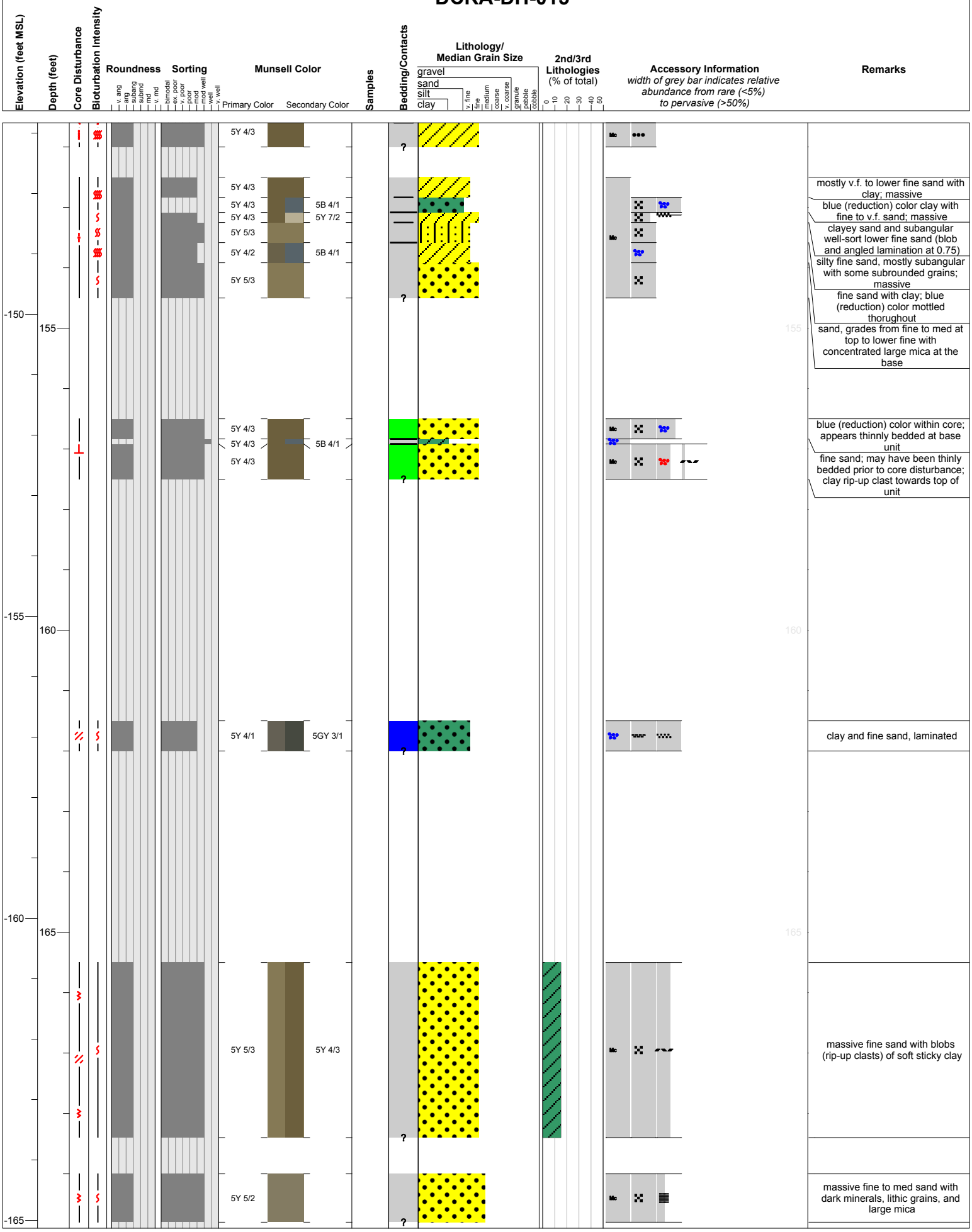
DCRA-DH-015


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative abundance from rare (<5%) to pervasive (>50%)
Remarks
115
120
125
130
-115
-120
-125
2.5Y 3/2
5Y 4/1
2.5Y 3/2
5Y 4/1
5Y 3/1
5Y 4/4
5Y 4/2
5Y 4/1
5Y 4/3
5B 4/1
5Y 4/3
5Y 5/3
5Y 4/2
5Y 4/3
5B 4/1
5Y 4/3
5Y 8/2
5Y 4/3
5Y 5/3
5Y 4/3
5Y 4/2
5B 4/1
5Y 4/3
5Y 5/3
SSS
?
Mc
CRB
laminated fat clay with few obvious organics
laminated clay with organics throughout and organic-rich laminations
massive clay with rip-up clasts of silty clay and organic fragments
continuation of clay with organics from Box 1; organic rip-up clasts
clay with blue (reduction) color
gradual transition from massive sandy clay (clay with fine to v.f. sand) to thinly interbedded to massive (bioturbated) silty clay
clay with blue (reduction) color and sand-filled burrows; minimal HCl rxn in veinlets only
clay with carbonate; minimal blue (reduction) color
very hard, accumulation of carbonate in clay
mostly clay with silt; blue (reduction) mottles in top 0.2 ft; carbonate Ped Stage II (?)
similar silty clay without carbonate
clay with fine to v.f. sand; blue (reduction) color; no HCl rxn
minimal distributed HCl rxn; 0.9-1.6 ft: may have originally been thin-bedded fine sand and clay

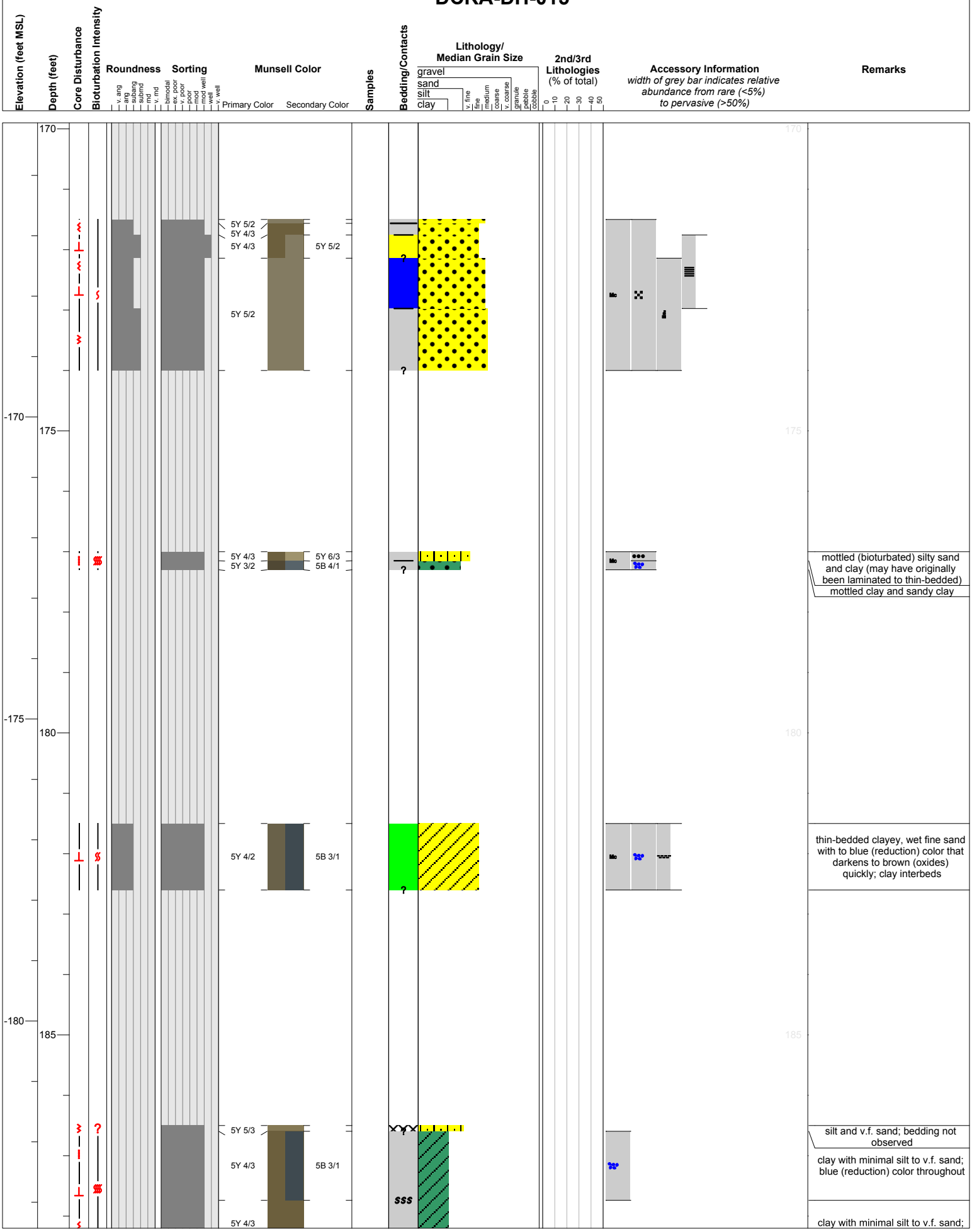
DCRA-DH-015


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-130
-135
-140
-145
135
140
145
150
5Y 4/3
5Y 4/3
5B 4/1
5Y 4/3
5B 4/1
5Y 4/3
5Y 4/2
5B 4/1
5Y 4/3
5Y 6/3
5Y 4/3
5Y 6/3
5Y 4/3
5Y 6/3
mottled sandy clay and fine sand (bioturbated)
may have originally been thin to med-bedded sand and clay
clay with <25% fine sand
blue (reduction) color at top unit; large mica grains
laminated fine sand with clay
blue (reduction) color at base of core; large mica
mottled massive sandy clay
laminated sand and clay where bedding preserved
laminated sand and clay where bedding preserved
thin-bedded fine to v.f. sand and clay

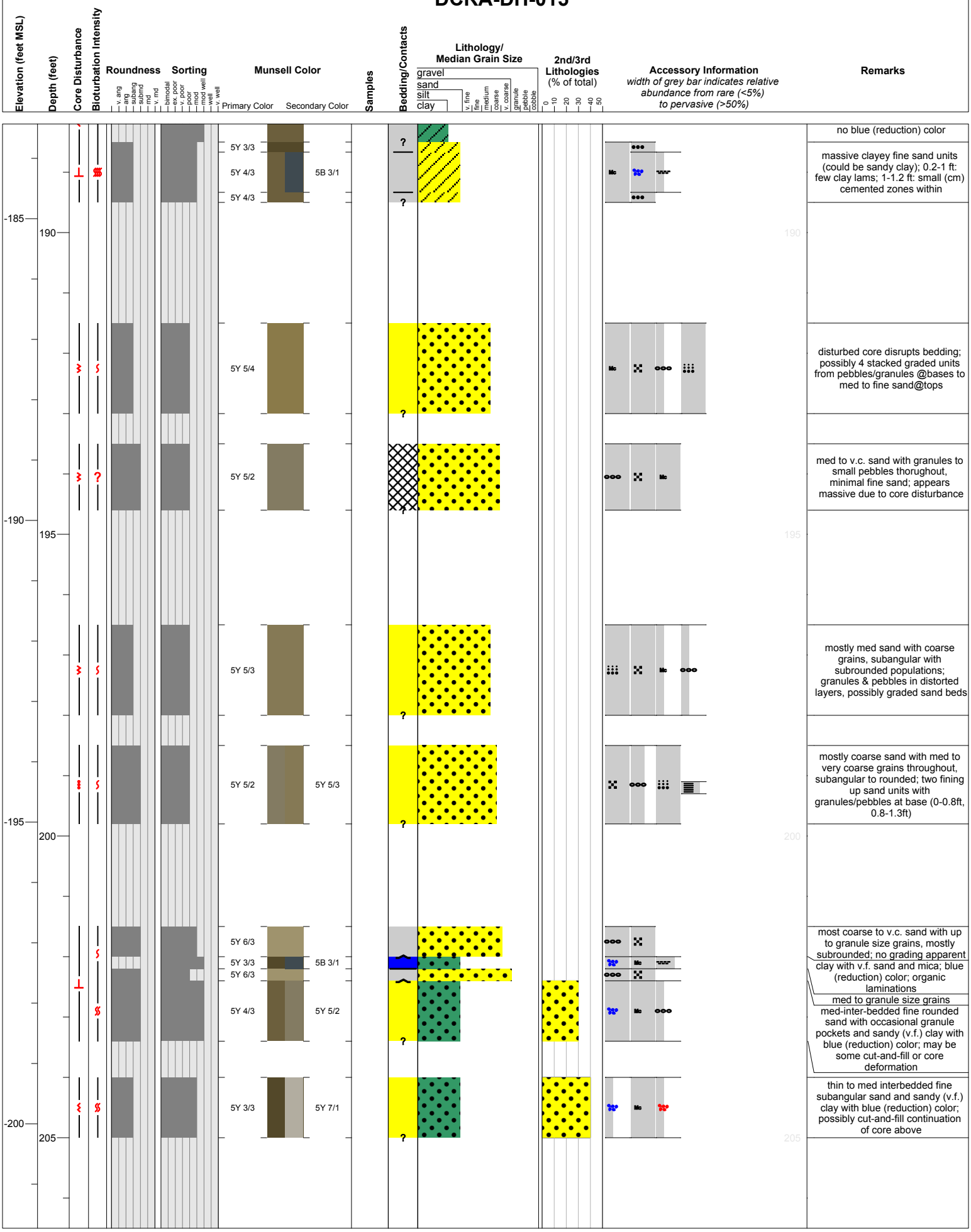
DCRA-DH-015


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-150
155
-155
160
-160
165
-165
5Y 4/3
5Y 4/3
5Y 4/3
5B 4/1
5Y 4/3
5Y 7/2
5Y 5/3
5Y 4/2
5B 4/1
5Y 5/3
5Y 4/3
5Y 4/3
5B 4/1
5Y 4/3
5Y 4/1
5GY 3/1
5Y 5/3
5Y 4/3
5Y 5/2
mostly v.f. to lower fine sand with clay; massive
blue (reduction) color clay with fine to v.f. sand; massive
clayey sand and subangular well-sort lower fine sand (blob and angled lamination at 0.75)
silty fine sand, mostly subangular with some subrounded grains; massive
fine sand with clay; blue (reduction) color mottled thorughout
sand, grades from fine to med at top to lower fine with concentrated large mica at the base
blue (reduction) color within core; appears thinnly bedded at base unit
fine sand; may have been thinly bedded prior to core disturbance; clay rip-up clast towards top of unit
clay and fine sand, laminated
massive fine sand with blobs (rip-up clasts) of soft sticky clay
massive fine to med sand with dark minerals, lithic grains, and large mica

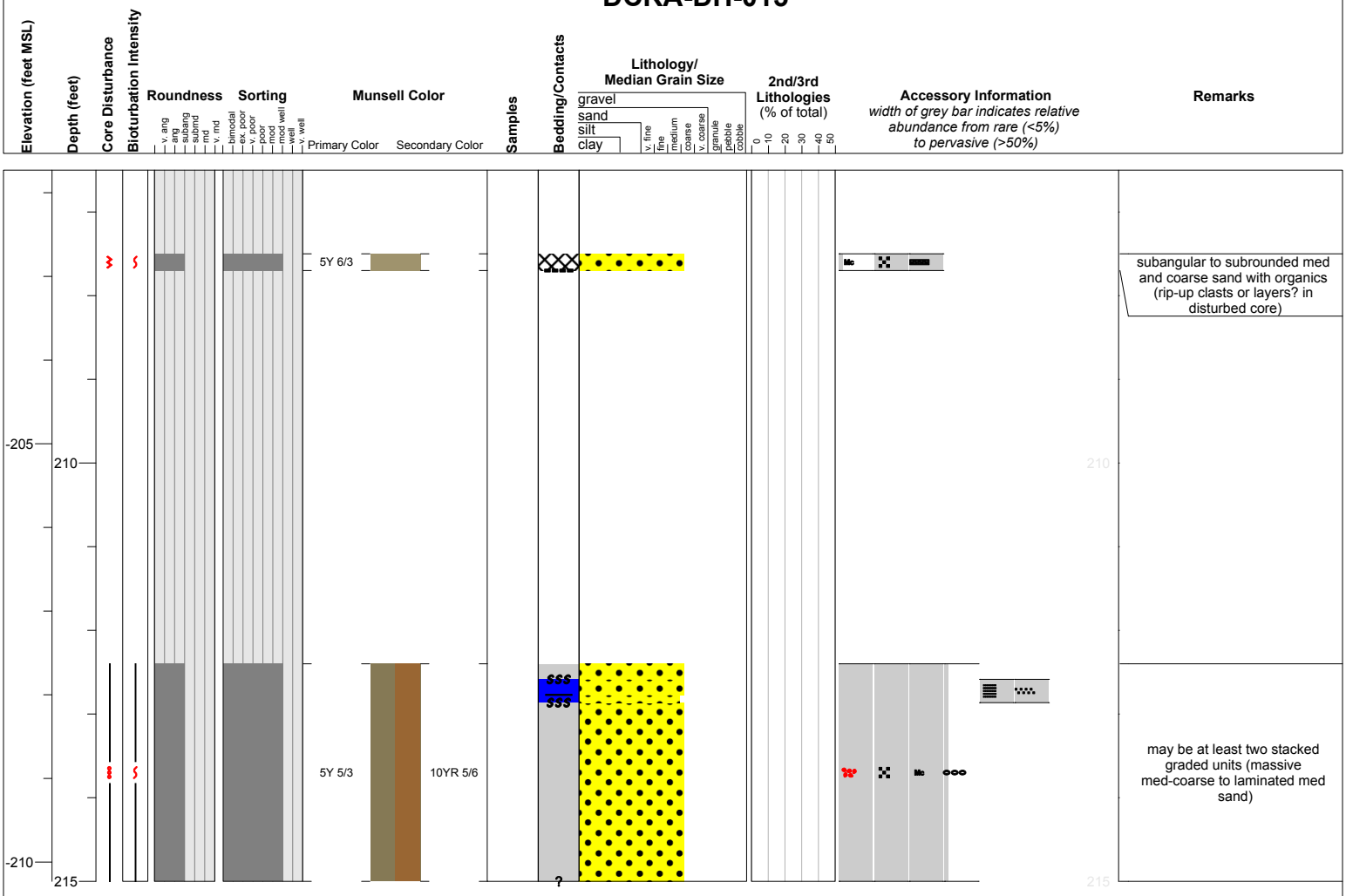
DCRA-DH-015


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
170
175
180
185
-170
-175
-180
5Y 5/2
5Y 4/3
5Y 4/3
5Y 5/2
5Y 5/2
5Y 4/3
5Y 3/2
5Y 6/3
5B 4/1
5Y 4/2
5B 3/1
5Y 5/3
5Y 4/3
5B 3/1
5Y 4/3
Mc
mottled (bioturbated) silty sand and clay (may have originally been laminated to thin-bedded)
mottled clay and sandy clay
thin-bedded clayey, wet fine sand with to blue (reduction) color that darkens to brown (oxides) quickly; clay interbeds
silt and v.f. sand; bedding not observed
clay with minimal silt to v.f. sand; blue (reduction) color throughout
clay with minimal silt to v.f. sand;

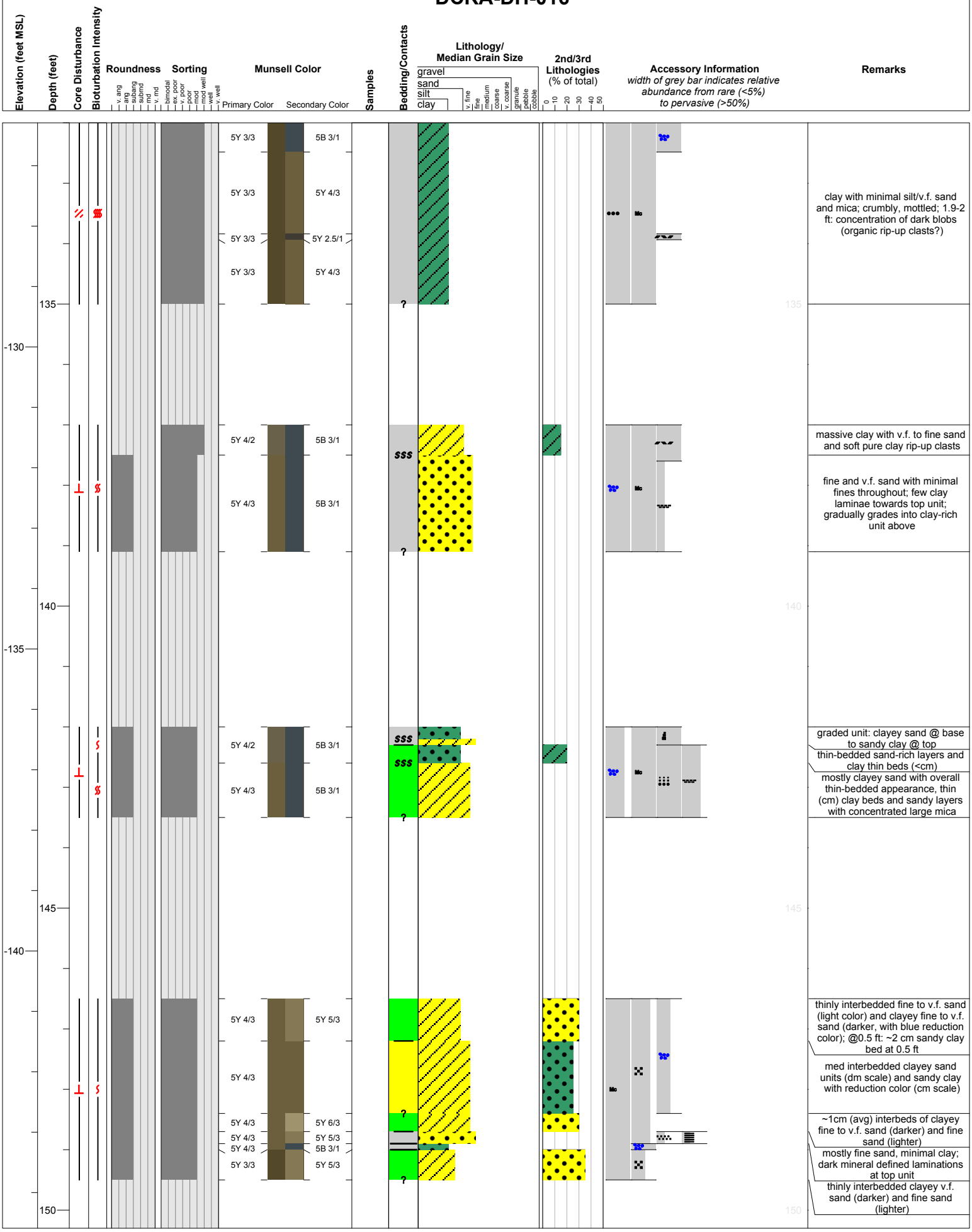
DCRA-DH-015


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative abundance from rare (<5%) to pervasive (>50%)
Remarks
-185
190
-190
195
-195
200
-200
205
5Y 3/3
5Y 4/3
5B 3/1
5Y 4/3
5Y 5/4
5Y 5/2
5Y 5/3
5Y 5/2
5Y 5/3
5Y 6/3
5Y 3/3
5B 3/1
5Y 6/3
5Y 4/3
5Y 5/2
5Y 3/3
5Y 7/1
Mc
no blue (reduction) color
massive clayey fine sand units (could be sandy clay); 0.2-1 ft: few clay lams; 1-1.2 ft: small (cm) cemented zones within
disturbed core disrupts bedding; possibly 4 stacked graded units from pebbles/granules @bases to med to fine sand@tops
med to v.c. sand with granules to small pebbles thoroughout, minimal fine sand; appears massive due to core disturbance
mostly med sand with coarse grains, subangular with subrounded populations; granules & pebbles in distorted layers, possibly graded sand beds
mostly coarse sand with med to very coarse grains throughout, subangular to rounded; two fining up sand units with granules/pebbles at base (0-0.8ft, 0.8-1.3ft)
most coarse to v.c. sand with up to granule size grains, mostly subrounded; no grading apparent
clay with v.f. sand and mica; blue (reduction) color; organic laminations
med to granule size grains
med-inter-bedded fine rounded sand with occasional granule pockets and sandy (v.f.) clay with blue (reduction) color; may be some cut-and-fill or core deformation
thin to med interbedded fine subangular sand and sandy (v.f.) clay with blue (reduction) color; possibly cut-and-fill continuation of core above

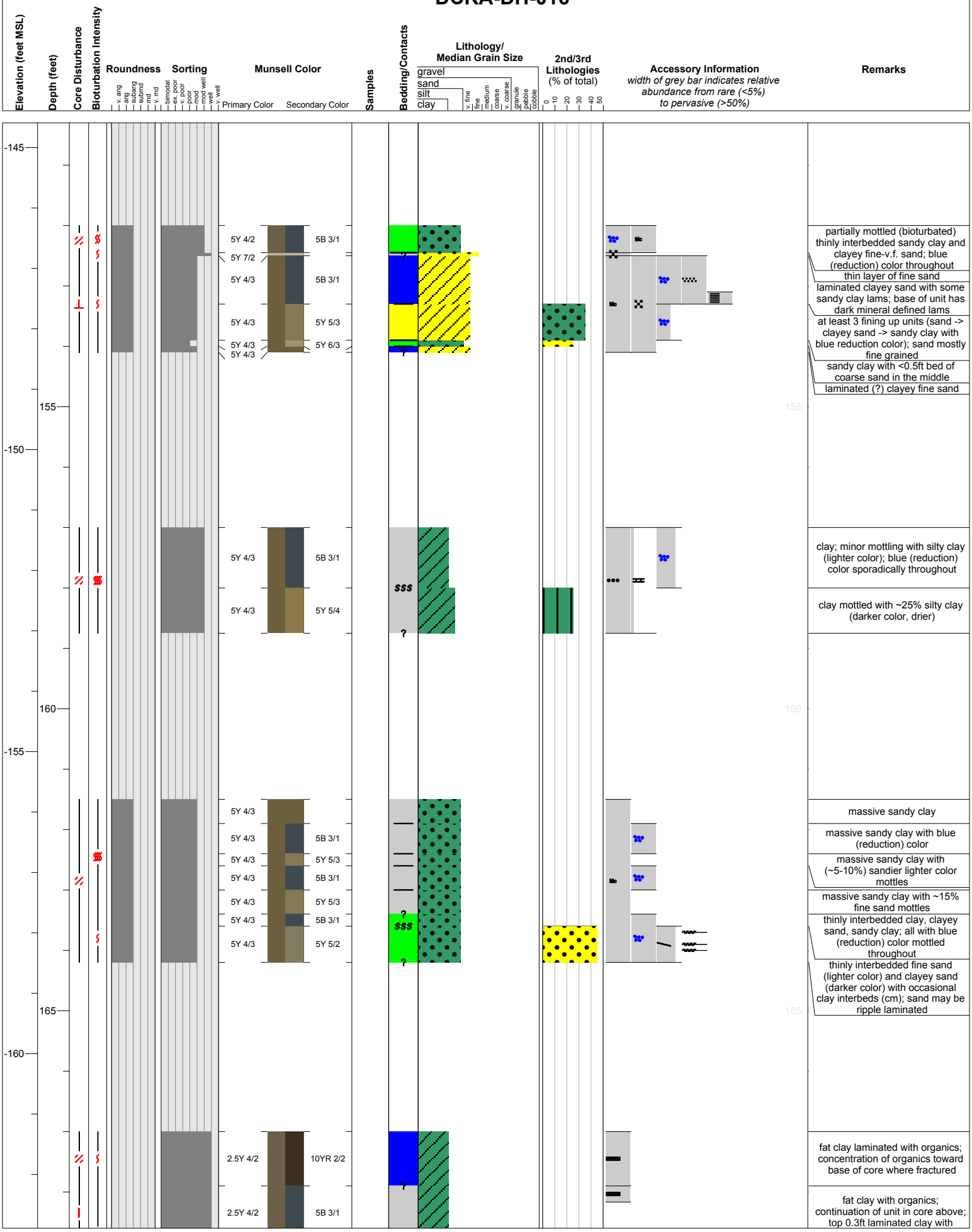
DCRA-DH-015


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-205
210
-210
215
5Y 6/3
5Y 5/3
10YR 5/6
Mc
Mc
?
subangular to subrounded med and coarse sand with organics (rip-up clasts or layers? in disturbed core)
may be at least two stacked graded units (massive med-coarse to laminated med sand)

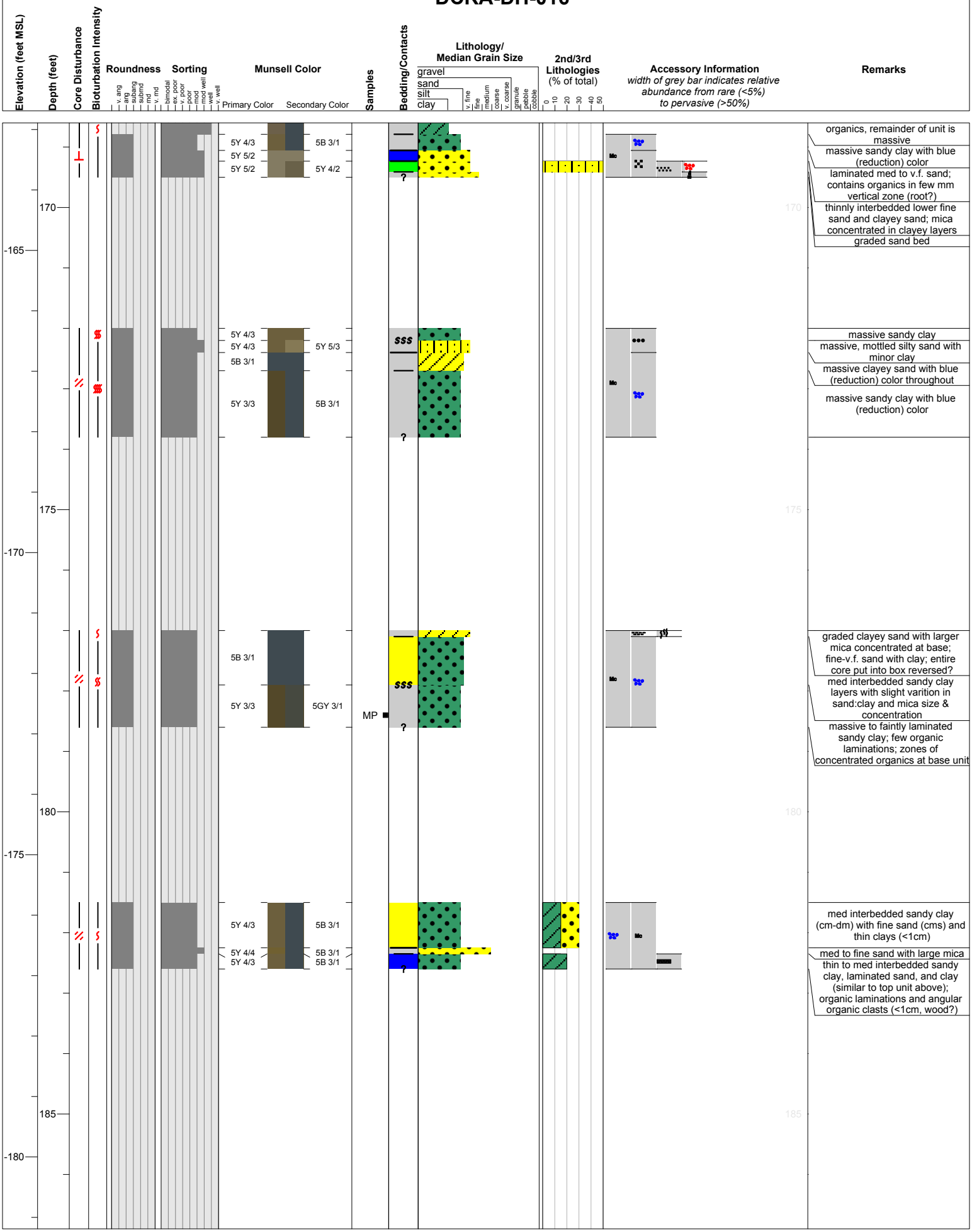
DCRA-DH-016


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative abundance from rare (<5%) to pervasive (>50%)
Remarks
135
140
145
150
-130
-135
-140
5Y 3/3
5B 3/1
5Y 3/3
5Y 4/3
5Y 3/3
5Y 2.5/1
5Y 3/3
5Y 4/3
5Y 4/2
5B 3/1
5Y 4/3
5B 3/1
5Y 4/2
5B 3/1
5Y 4/3
5B 3/1
5Y 4/3
5Y 5/3
5Y 4/3
5Y 4/3
5Y 6/3
5Y 4/3
5Y 5/3
5Y 4/3
5B 3/1
5Y 3/3
5Y 5/3
Mo
clay with minimal silt/v.f. sand and mica; crumbly, mottled; 1.9-2 ft: concentration of dark blobs (organic rip-up clasts?)
massive clay with v.f. to fine sand and soft pure clay rip-up clasts
fine and v.f. sand with minimal fines throughout; few clay laminae towards top unit; gradually grades into clay-rich unit above
graded unit: clayey sand @ base to sandy clay @ top
thin-bedded sand-rich layers and clay thin beds (<cm)
mostly clayey sand with overall thin-bedded appearance, thin (cm) clay beds and sandy layers with concentrated large mica
thinly interbedded fine to v.f. sand (light color) and clayey fine to v.f. sand (darker, with blue reduction color); @0.5 ft: ~2 cm sandy clay bed at 0.5 ft
med interbedded clayey sand units (dm scale) and sandy clay with reduction color (cm scale)
~1cm (avg) interbeds of clayey fine to v.f. sand (darker) and fine sand (lighter)
mostly fine sand, minimal clay; dark mineral defined laminations at top unit
thinly interbedded clayey v.f. sand (darker) and fine sand (lighter)

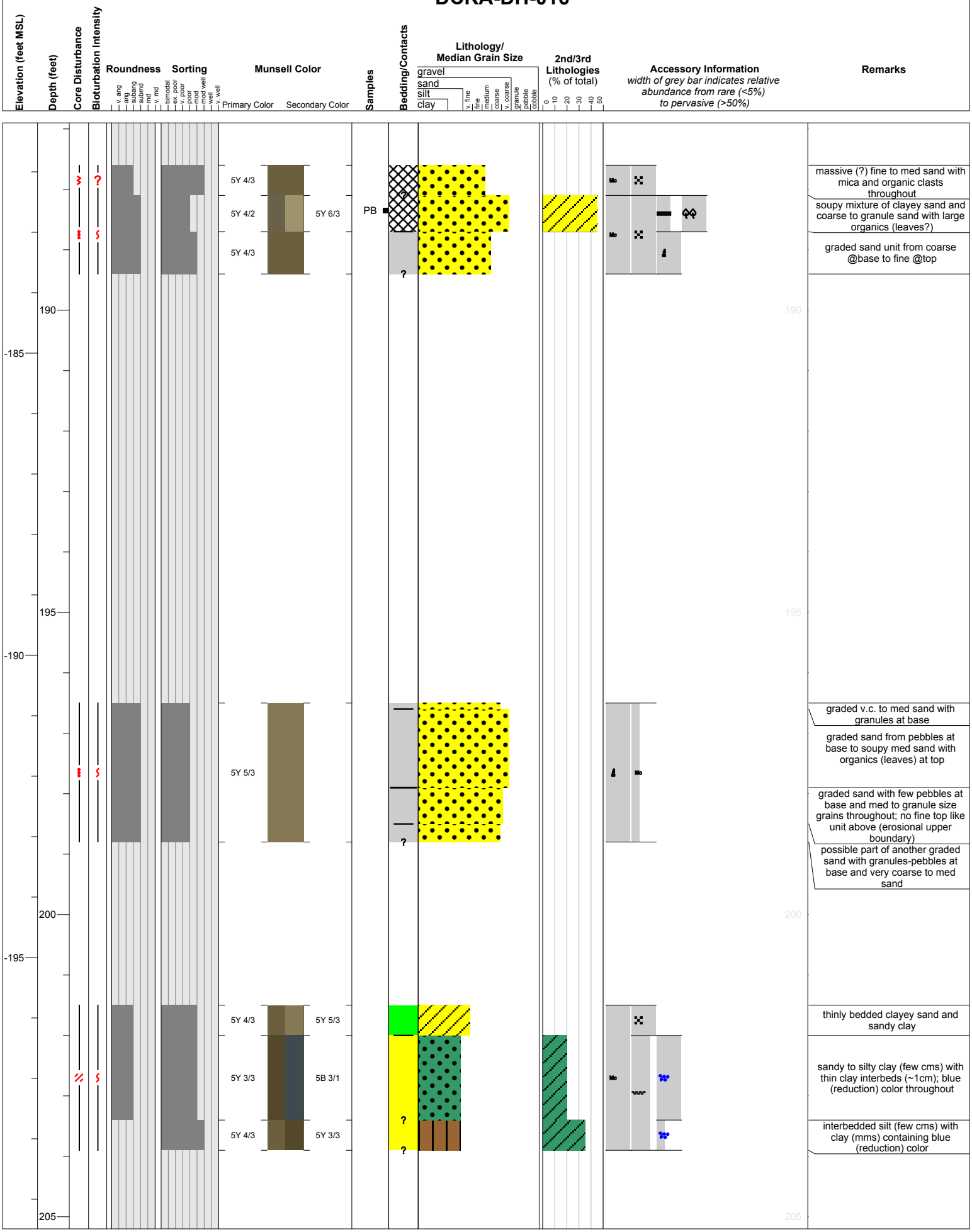
DCRA-DH-016


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative abundance from rare (<5%) to pervasive (>50%)
Remarks
-145
-150
-155
-160
155
160
165
5Y 4/2
5B 3/1
5Y 7/2
5Y 4/3
5B 3/1
5Y 4/3
5Y 5/3
5Y 4/3
5Y 6/3
5Y 4/3
5Y 4/3
5B 3/1
5Y 4/3
5Y 5/4
5Y 4/3
5Y 4/3
5B 3/1
5Y 4/3
5Y 5/3
5Y 4/3
5B 3/1
5Y 4/3
5Y 5/3
5Y 4/3
5B 3/1
5Y 4/3
5Y 5/2
2.5Y 4/2
10YR 2/2
2.5Y 4/2
5B 3/1
Mc
partially mottled (bioturbated) thinly interbedded sandy clay and clayey fine-v.f. sand; blue (reduction) color throughout
thin layer of fine sand
laminated clayey sand with some sandy clay lams; base of unit has dark mineral defined lams
at least 3 fining up units (sand -> clayey sand -> sandy clay with blue reduction color); sand mostly fine grained
sandy clay with <0.5ft bed of coarse sand in the middle
laminated (?) clayey fine sand
clay; minor mottling with silty clay (lighter color); blue (reduction) color sporadically throughout
clay mottled with ~25% silty clay (darker color, drier)
massive sandy clay
massive sandy clay with blue (reduction) color
massive sandy clay with (~5-10%) sandier lighter color mottles
massive sandy clay with ~15% fine sand mottles
thinly interbedded clay, clayey sand, sandy clay; all with blue (reduction) color mottled throughout
thinly interbedded fine sand (lighter color) and clayey sand (darker color) with occasional clay interbeds (cm); sand may be ripple laminated
fat clay laminated with organics; concentration of organics toward base of core where fractured
fat clay with organics; continuation of unit in core above; top 0.3ft laminated clay with

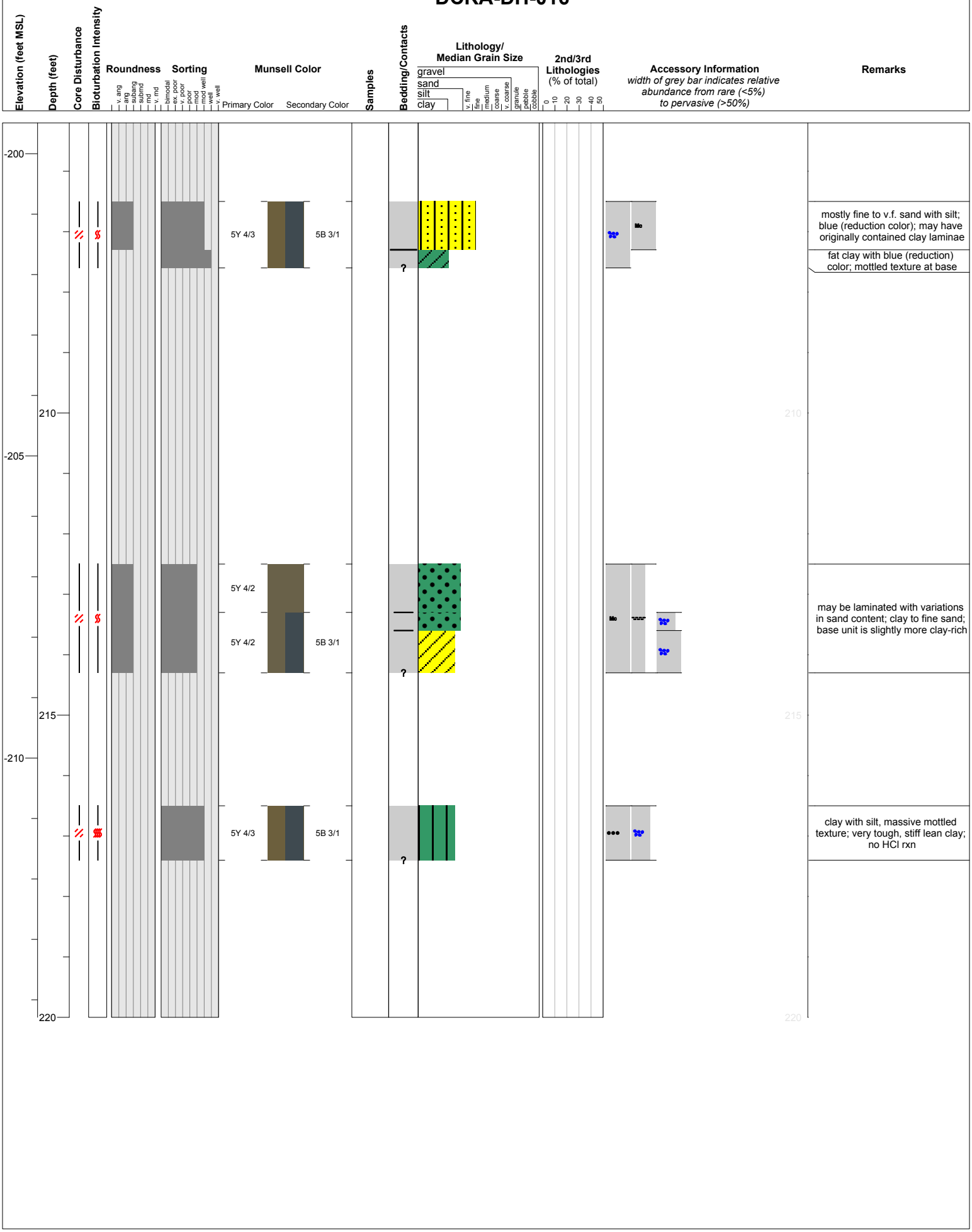
DCRA-DH-016


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
170
175
180
185
-165
-170
-175
-180
5Y 4/3
5Y 5/2
5Y 5/2
5B 3/1
5Y 4/2
5Y 4/3
5Y 4/3
5B 3/1
5Y 3/3
5Y 5/3
5B 3/1
5B 3/1
5Y 3/3
5GY 3/1
5Y 4/3
5Y 4/4
5Y 4/3
5B 3/1
5B 3/1
5B 3/1
MP
Mc
organics, remainder of unit is massive
massive sandy clay with blue (reduction) color
laminated med to v.f. sand; contains organics in few mm vertical zone (root?)
thinnly interbedded lower fine sand and clayey sand; mica concentrated in clayey layers
graded sand bed
massive sandy clay
massive, mottled silty sand with minor clay
massive clayey sand with blue (reduction) color throughout
massive sandy clay with blue (reduction) color
graded clayey sand with larger mica concentrated at base; fine-v.f. sand with clay; entire core put into box reversed?
med interbedded sandy clay layers with slight varition in sand:clay and mica size & concentration
massive to faintly laminated sandy clay; few organic laminations; zones of concentrated organics at base unit
med interbedded sandy clay (cm-dm) with fine sand (cms) and thin clays (<1cm)
med to fine sand with large mica
thin to med interbedded sandy clay, laminated sand, and clay (similar to top unit above); organic laminations and angular organic clasts (<1cm, wood?)

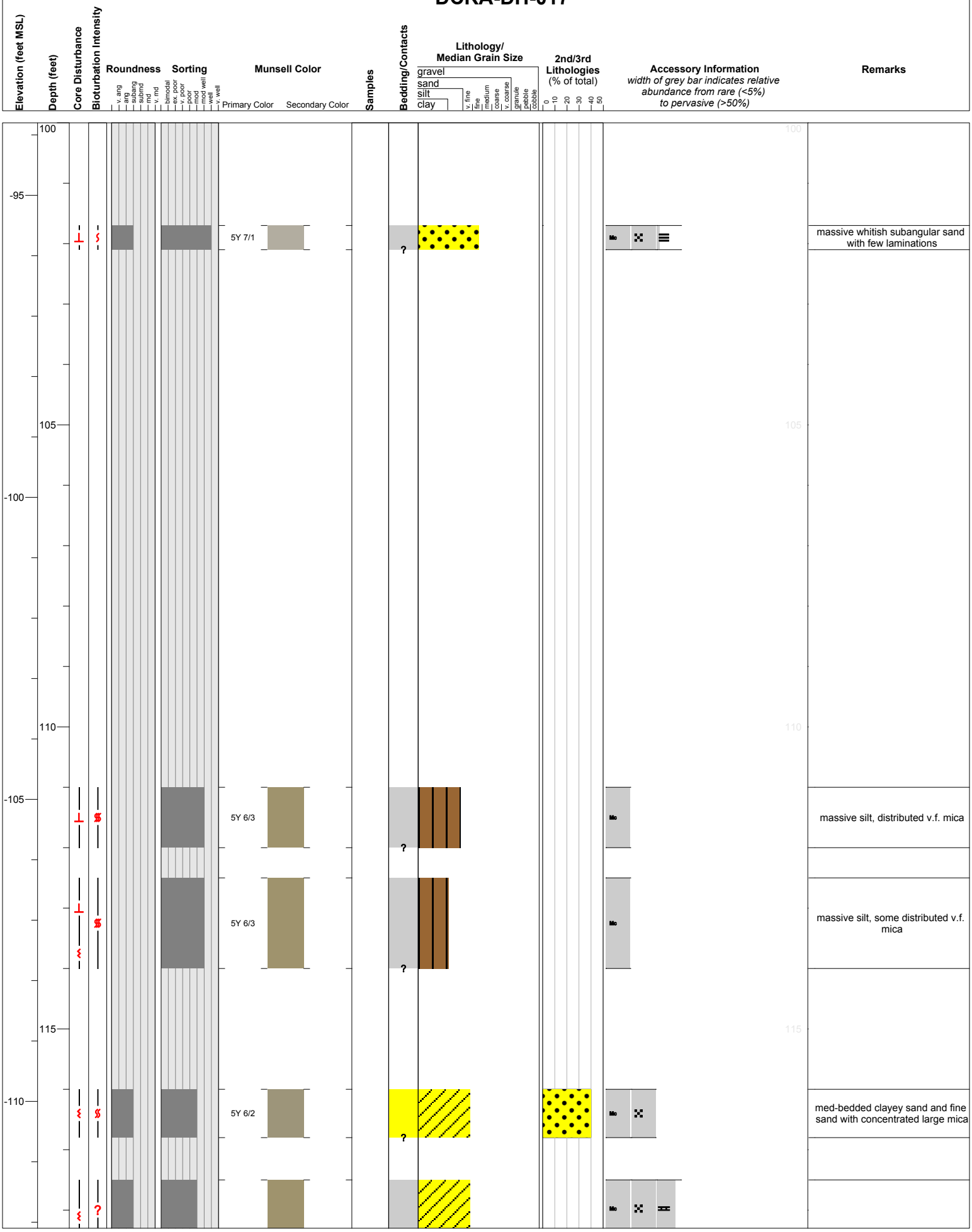
DCRA-DH-016


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
5Y 4/3
5Y 4/2
5Y 6/3
5Y 4/3
PB
massive (?) fine to med sand with mica and organic clasts throughout
soupy mixture of clayey sand and coarse to granule sand with large organics (leaves?)
graded sand unit from coarse @base to fine @top
190
-185
195
-190
5Y 5/3
graded v.c. to med sand with granules at base
graded sand from pebbles at base to soupy med sand with organics (leaves) at top
graded sand with few pebbles at base and med to granule size grains throughout; no fine top like unit above (erosional upper boundary)
possible part of another graded sand with granules-pebbles at base and very coarse to med sand
200
-195
5Y 4/3
5Y 5/3
5Y 3/3
5B 3/1
5Y 4/3
5Y 3/3
thinly bedded clayey sand and sandy clay
sandy to silty clay (few cms) with thin clay interbeds (~1cm); blue (reduction) color throughout
interbedded silt (few cms) with clay (mms) containing blue (reduction) color
205

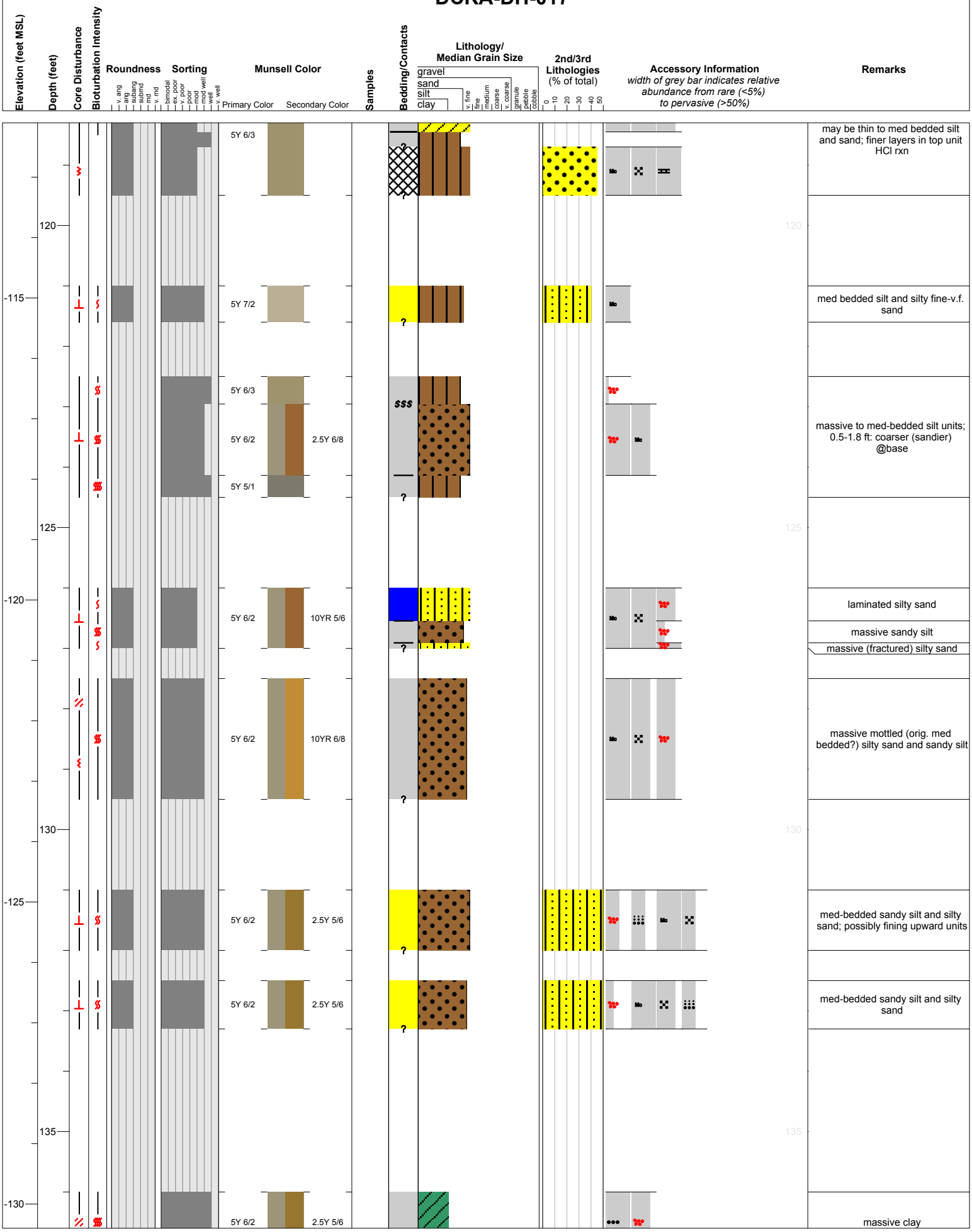
DCRA-DH-016


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-200
-205
-210
210
215
220
5Y 4/3
5B 3/1
5Y 4/2
5Y 4/2
5B 3/1
5Y 4/3
5B 3/1
Mo
Mo
mostly fine to v.f. sand with silt; blue (reduction color); may have originally contained clay laminae
fat clay with blue (reduction) color; mottled texture at base
may be laminated with variations in sand content; clay to fine sand; base unit is slightly more clay-rich
clay with silt, massive mottled texture; very tough, stiff lean clay; no HCl rxn

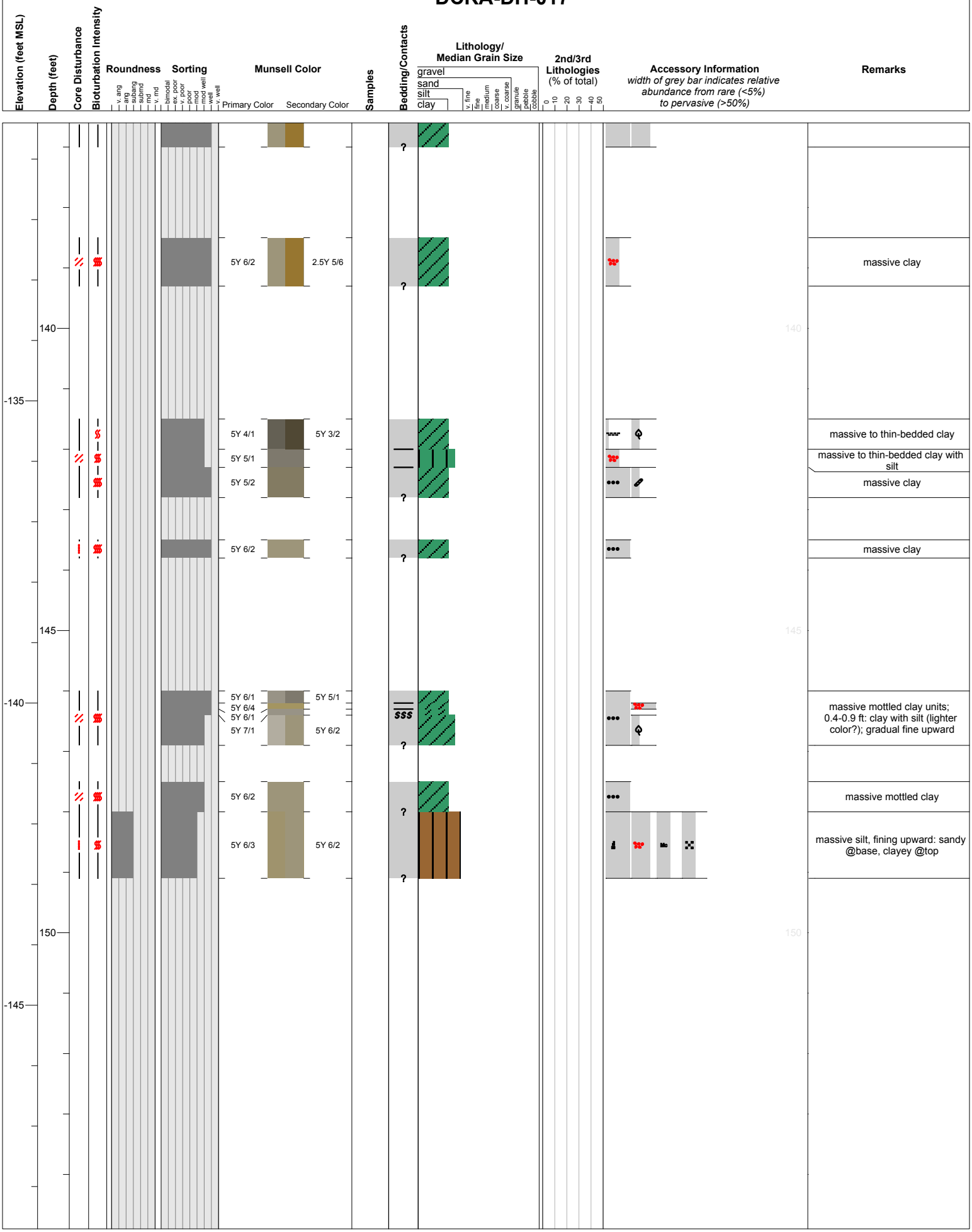
DCRA-DH-017


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
100
-95
105
-100
110
-105
115
-110
5Y 7/1
5Y 6/3
5Y 6/3
5Y 6/2
massive whitish subangular sand with few laminations
massive silt, distributed v.f. mica
massive silt, some distributed v.f. mica
med-bedded clayey sand and fine sand with concentrated large mica

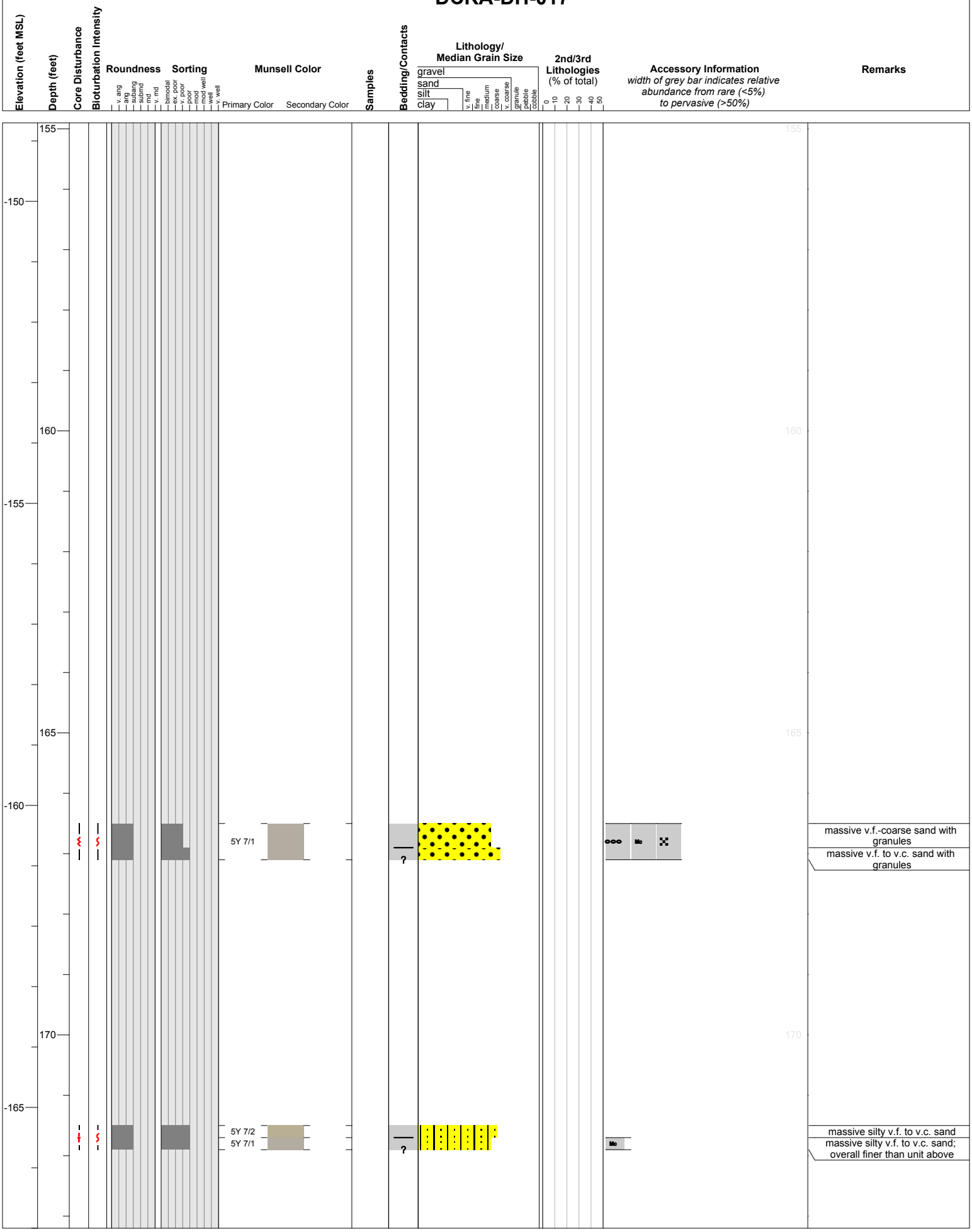
DCRA-DH-017


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
120
-115
125
-120
130
-125
135
-130
5Y 6/3
5Y 7/2
5Y 6/3
5Y 6/2
2.5Y 6/8
5Y 5/1
5Y 6/2
10YR 5/6
5Y 6/2
10YR 6/8
5Y 6/2
2.5Y 5/6
5Y 6/2
2.5Y 5/6
5Y 6/2
2.5Y 5/6
may be thin to med bedded silt and sand; finer layers in top unit HCl rxn
med bedded silt and silty fine-v.f. sand
massive to med-bedded silt units; 0.5-1.8 ft: coarser (sandier) @base
laminated silty sand
massive sandy silt
massive (fractured) silty sand
massive mottled (orig. med bedded?) silty sand and sandy silt
med-bedded sandy silt and silty sand; possibly fining upward units
med-bedded sandy silt and silty sand
massive clay

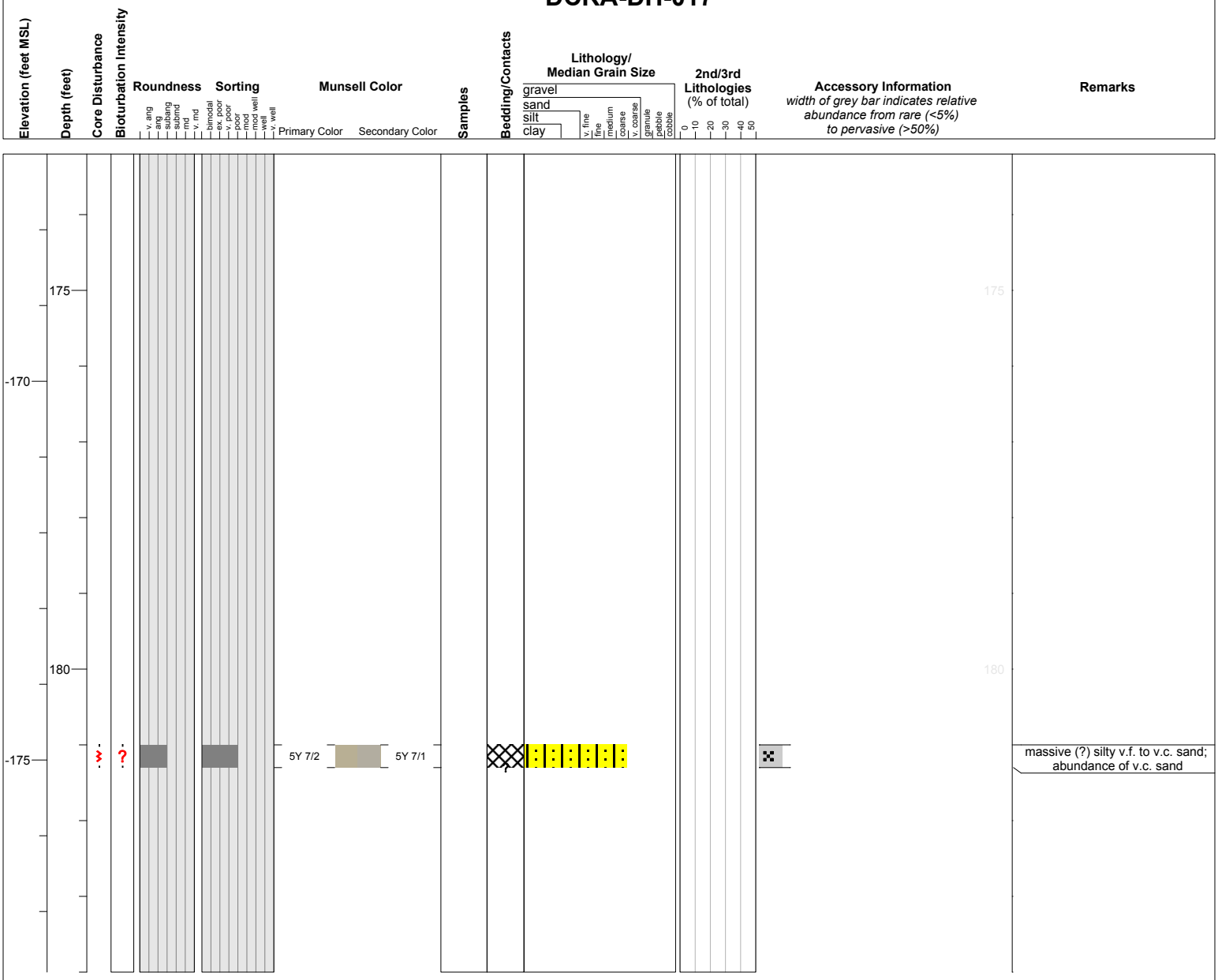
DCRA-DH-017


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
140
-135
145
-140
150
-145
5Y 6/2
2.5Y 5/6
5Y 4/1
5Y 3/2
5Y 5/1
5Y 5/2
5Y 6/2
5Y 6/1
5Y 6/4
5Y 6/1
5Y 7/1
5Y 5/1
5Y 6/2
5Y 6/2
5Y 6/3
5Y 6/2
massive clay
massive to thin-bedded clay
massive to thin-bedded clay with silt
massive clay
massive clay
massive mottled clay units; 0.4-0.9 ft: clay with silt (lighter color?); gradual fine upward
massive mottled clay
massive silt, fining upward: sandy @base, clayey @top

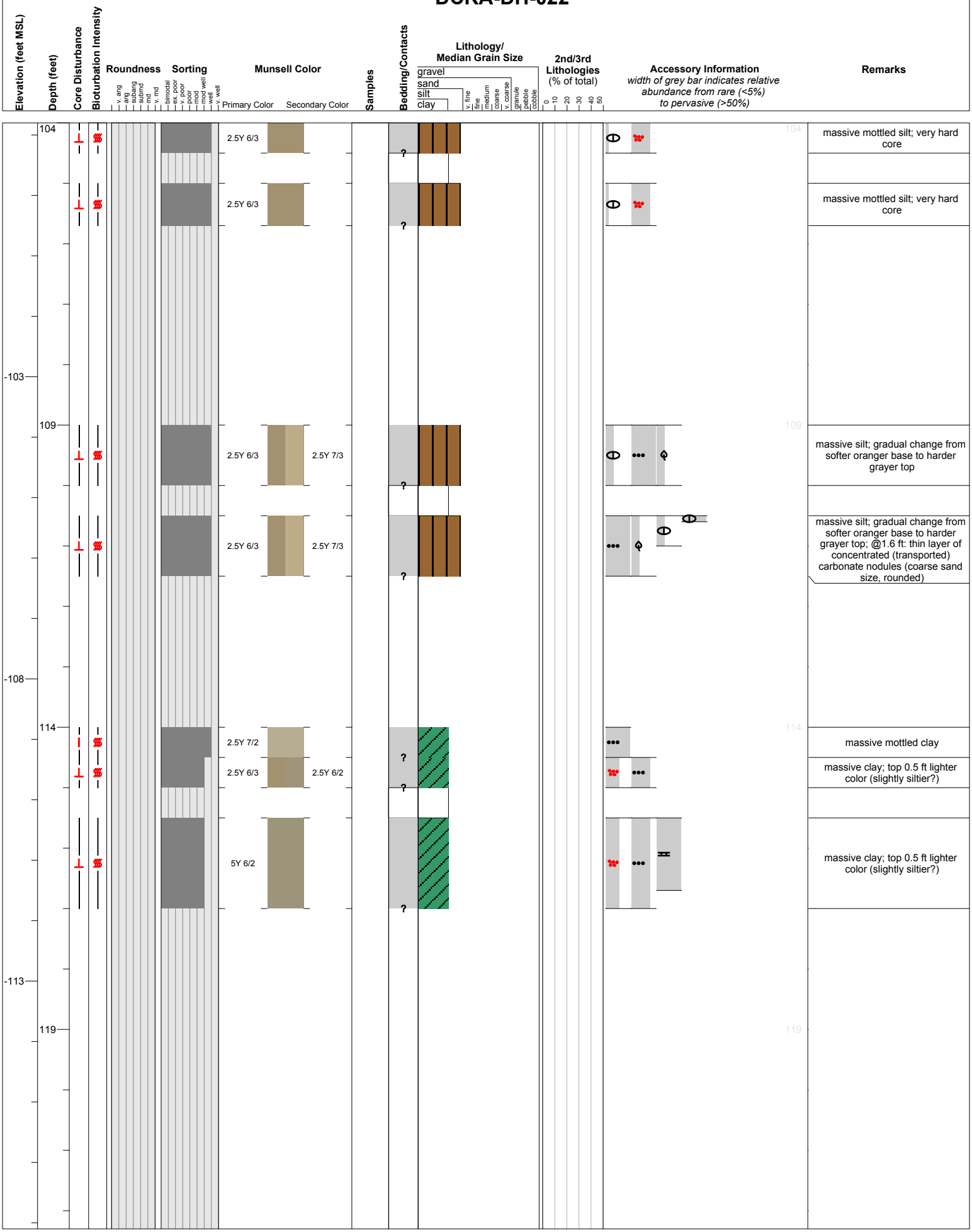
DCRA-DH-017


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
155
160
165
170
-150
-155
-160
-165
5Y 7/1
5Y 7/2
5Y 7/1
Mc
Mc
massive v.f.-coarse sand with granules
massive v.f. to v.c. sand with granules
massive silty v.f. to v.c. sand
massive silty v.f. to v.c. sand; overall finer than unit above

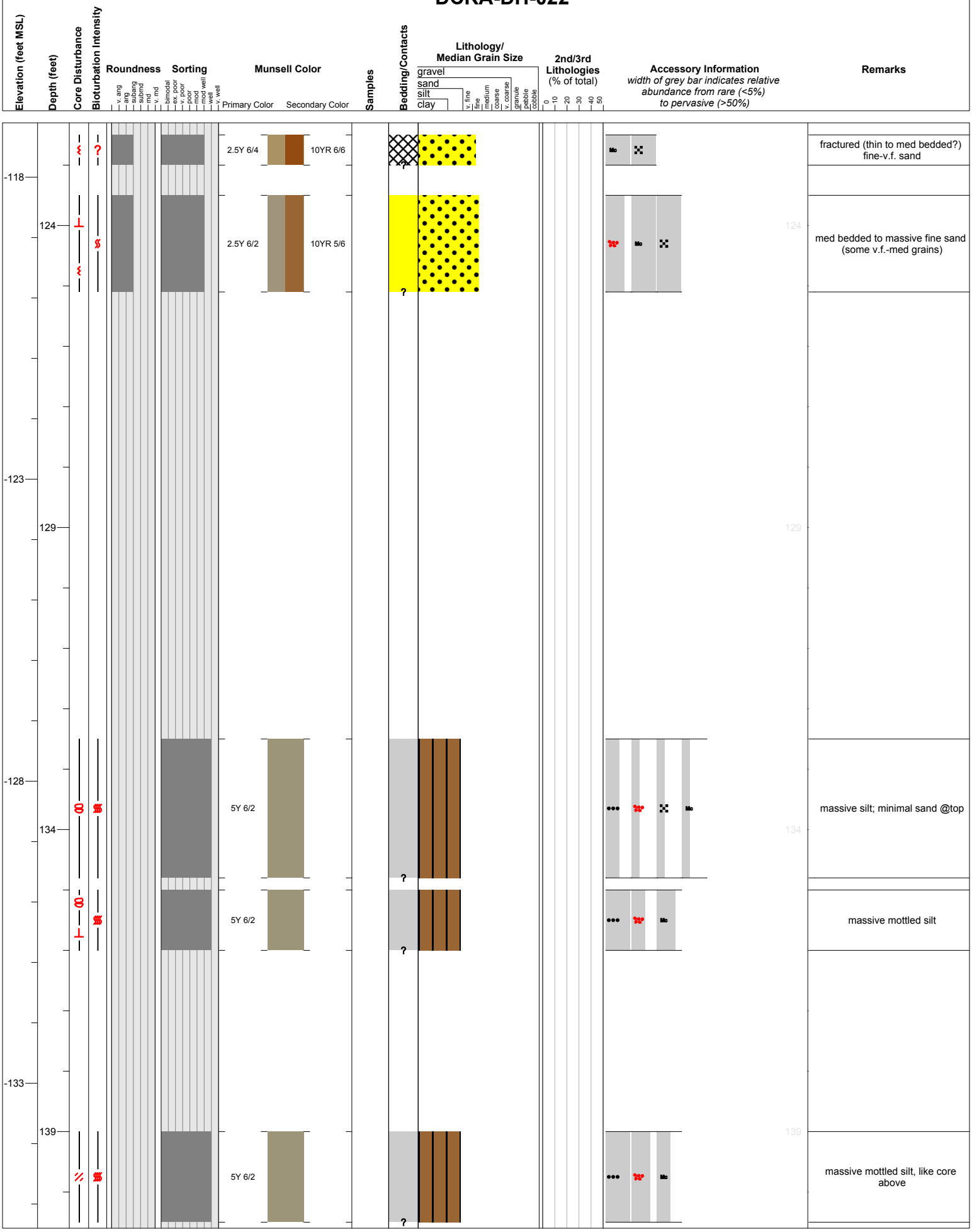
DCRA-DH-017


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
175
-170
180
-175
5Y 7/2
5Y 7/1
massive (?) silty v.f. to v.c. sand;
abundance of v.c. sand

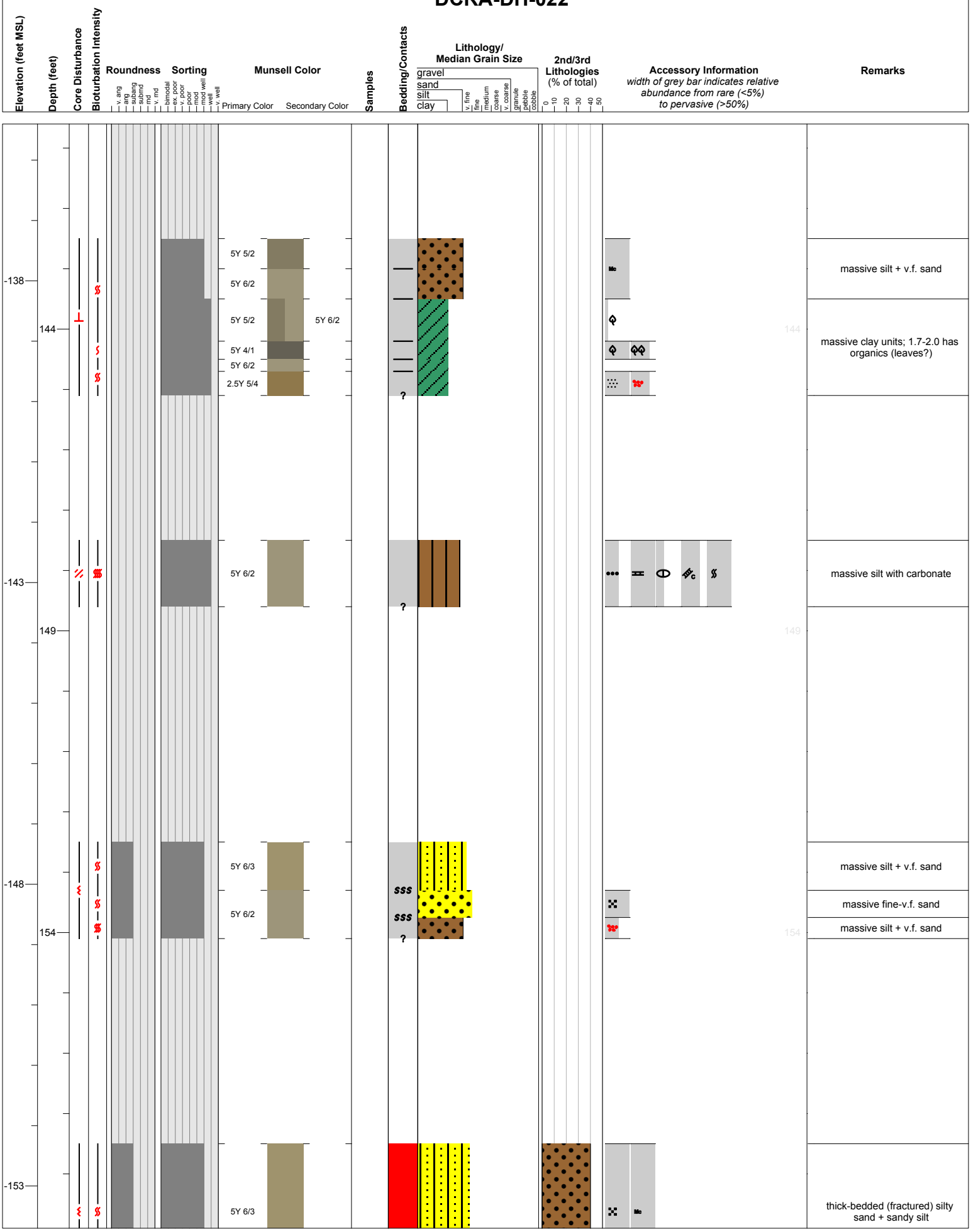
DCRA-DH-022


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
104
109
114
119
-103
-108
-113
2.5Y 6/3
2.5Y 6/3
2.5Y 6/3
2.5Y 7/3
2.5Y 6/3
2.5Y 7/3
2.5Y 7/2
2.5Y 6/3
2.5Y 6/2
5Y 6/2
massive mottled silt; very hard core
massive mottled silt; very hard core
massive silt; gradual change from softer oranger base to harder grayer top
massive silt; gradual change from softer oranger base to harder grayer top; @1.6 ft: thin layer of concentrated (transported) carbonate nodules (coarse sand size, rounded)
massive mottled clay
massive clay; top 0.5 ft lighter color (slightly siltier?)
massive clay; top 0.5 ft lighter color (slightly siltier?)

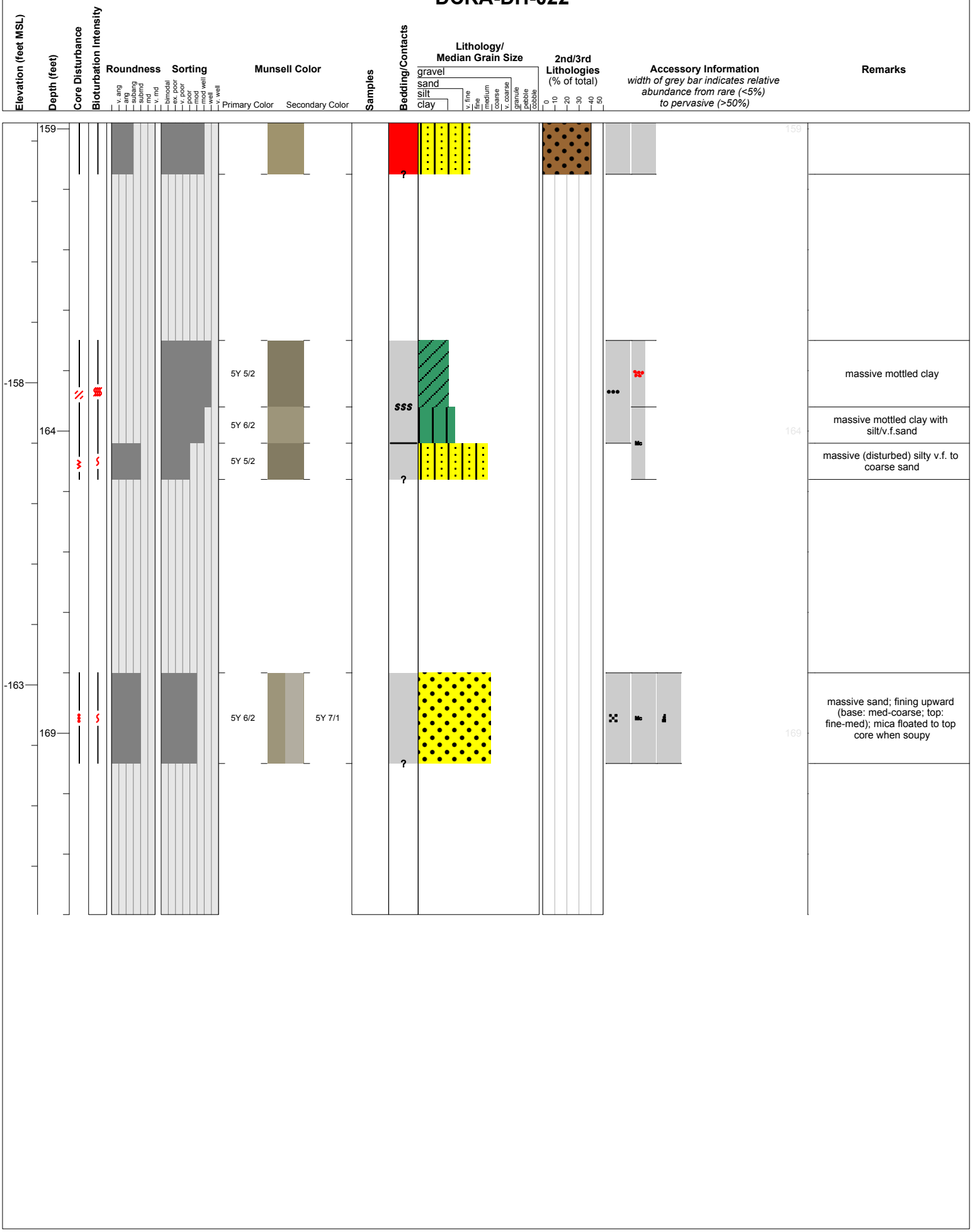
DCRA-DH-022


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-118
124
-123
129
-128
134
-133
139
2.5Y 6/4
10YR 6/6
2.5Y 6/2
10YR 5/6
5Y 6/2
5Y 6/2
5Y 6/2
Mo
fractured (thin to med bedded?)
fine-v.f. sand
med bedded to massive fine sand
(some v.f.-med grains)
massive silt; minimal sand @top
massive mottled silt
massive mottled silt, like core
above

DCRA-DH-022


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
-138
144
-143
149
-148
154
-153
5Y 5/2
5Y 6/2
5Y 5/2
5Y 6/2
5Y 4/1
5Y 6/2
2.5Y 5/4
5Y 6/2
5Y 6/3
5Y 6/2
5Y 6/3
massive silt + v.f. sand
massive clay units; 1.7-2.0 has organics (leaves?)
massive silt with carbonate
massive silt + v.f. sand
massive fine-v.f. sand
massive silt + v.f. sand
thick-bedded (fractured) silty sand + sandy silt

DCRA-DH-022


Elevation (feet MSL)
Depth (feet)
Core Disturbance
Bioturbation Intensity
Roundness
v. ang
ang
subang
subrnd
rnd
v. rnd
Sorting
bimodal
v. poor
poor
v. poor
poor
mod
mod well
well
v. well
Munsell Color
Primary Color
Secondary Color
Samples
Bedding/Contacts
Lithology/
Median Grain Size
gravel
sand
silt
clay
v. fine
fine
medium
coarse
v. coarse
granule
pebble
cobble
2nd/3rd
Lithologies
(% of total)
0
10
20
30
40
50
Accessory Information
width of grey bar indicates relative
abundance from rare (<5%)
to pervasive (>50%)
Remarks
159
-158
164
-163
169
5Y 5/2
5Y 6/2
5Y 5/2
5Y 6/2
5Y 7/1
massive mottled clay
massive mottled clay with
silt/v.f.sand
massive (disturbed) silty v.f. to
coarse sand
massive sand; fining upward
(base: med-coarse; top:
fine-med); mica floated to top
core when soupy