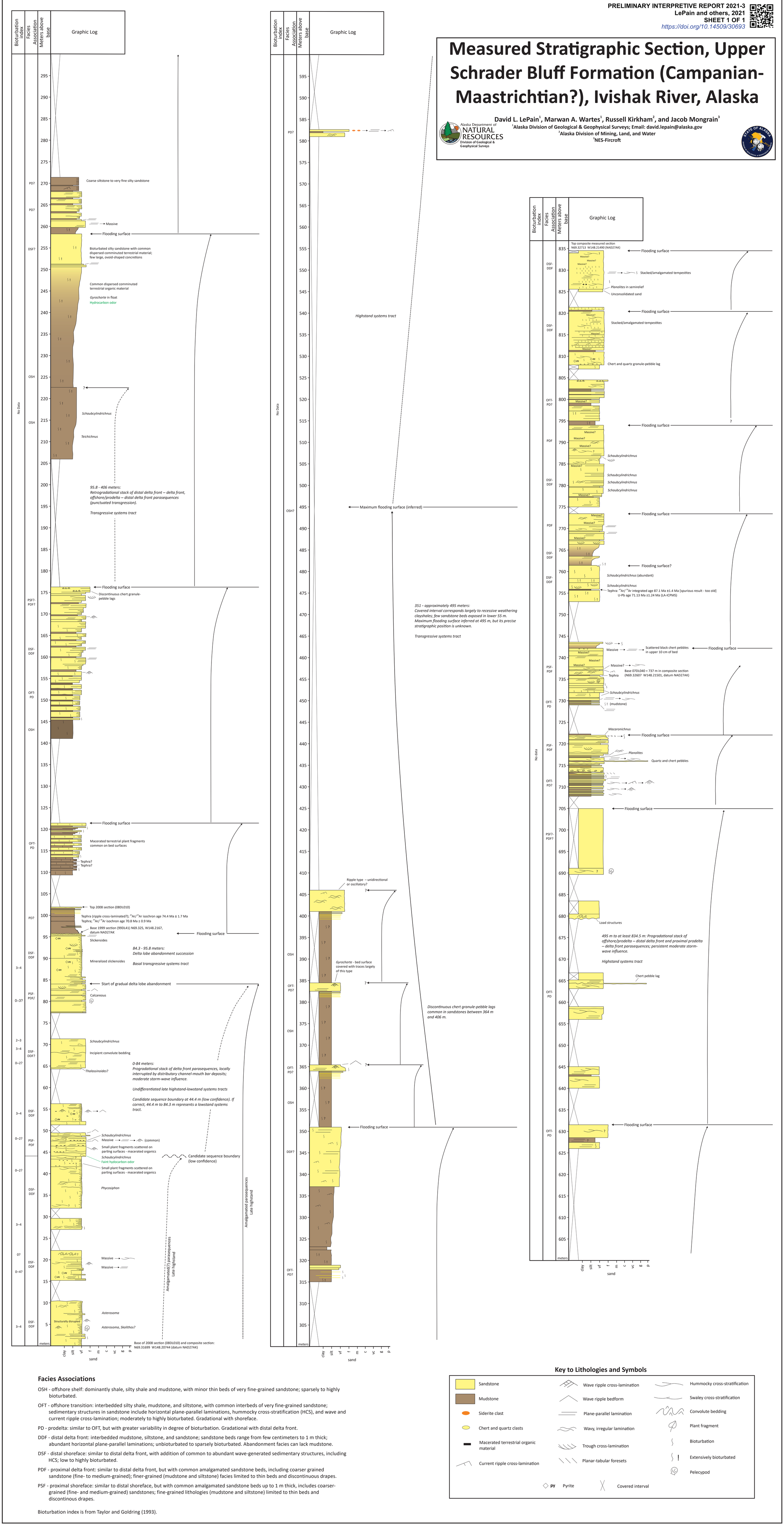
PRELIMINARY INTERPRETIVE REPORT 2021-3
LePain and others, 2021
SHEET 1 OF 1
https://doi.org/10.14509/30693

Measured Stratigraphic Section, Upper Schrader Bluff Formation (Campanian-Maastrichtian?), Ivishak River, Alaska

David L. LePain[1], Marwan A. Wartes[1], Russell Kirkham[2], and Jacob Mongrain[3]
[1]Alaska Division of Geological & Geophysical Surveys; Email: david.lepain@alaska.gov
[2]Alaska Division of Mining, Land, and Water
[3]NES-Fircroft

Alaska Department of NATURAL RESOURCES
Division of Geological & Geophysical Surveys

STATE OF ALASKA



Facies Associations

OSH - offshore shelf: dominantly shale, silty shale and mudstone, with minor thin beds of very fine-grained sandstone; sparsely to highly bioturbated.

OFT - offshore transition: interbedded silty shale, mudstone, and siltstone, with common interbeds of very fine-grained sandstone; sedimentary structures in sandstone include horizontal plane-parallel laminations, hummocky cross-stratification (HCS), and wave and current ripple cross-lamination; moderately to highly bioturbated. Gradational with shoreface.

PD - prodelta: similar to OFT, but with greater variability in degree of bioturbation. Gradational with distal delta front.

DDF - distal delta front: interbedded mudstone, siltstone, and sandstone; sandstone beds range from few centimeters to 1 m thick; abundant horizontal plane-parallel laminations; unbioturbated to sparsely bioturbated. Abandonment facies can lack mudstone.

DSF - distal shoreface: similar to distal delta front, with addition of common to abundant wave-generated sedimentary structures, including HCS; low to highly bioturbated.

PDF - proximal delta front: similar to distal delta front, but with common amalgamated sandstone beds, including coarser grained sandstone (fine- to medium-grained); finer-grained (mudstone and siltstone) facies limited to thin beds and discontinuous drapes.

PSF - proximal shoreface: similar to distal shoreface, but with common amalgamated sandstone beds up to 1 m thick, includes coarser-grained (fine- and medium-grained) sandstones; fine-grained lithologies (mudstone and siltstone) limited to thin beds and discontinuous drapes.

Bioturbation index is from Taylor and Goldring (1993).

Key to Lithologies and Symbols

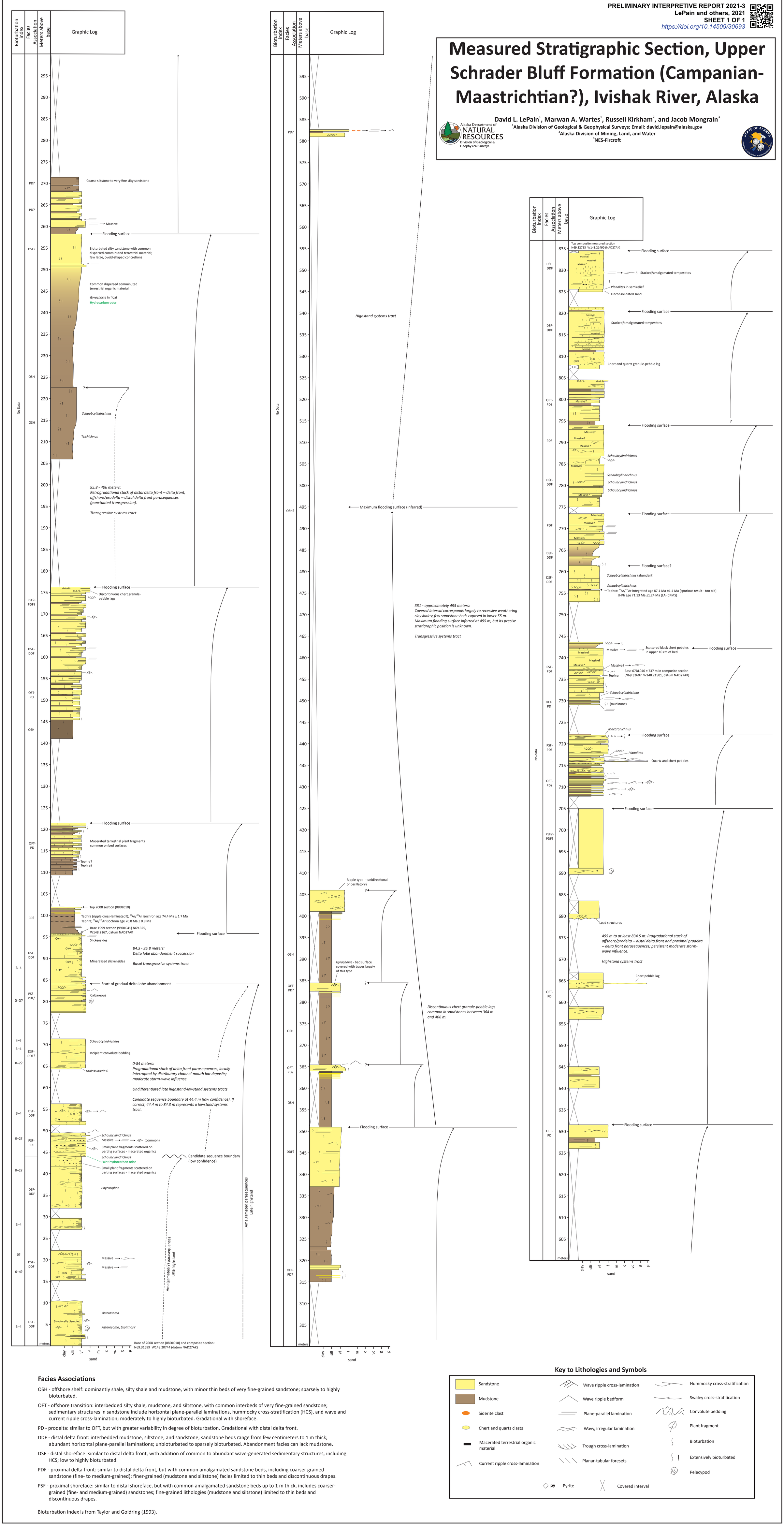
PRELIMINARY INTERPRETIVE REPORT 2021-3
LePain and others, 2021
SHEET 1 OF 1
https://doi.org/10.14509/30693

Measured Stratigraphic Section, Upper Schrader Bluff Formation (Campanian-Maastrichtian?), Ivishak River, Alaska

David L. LePain[1], Marwan A. Wartes[1], Russell Kirkham[2], and Jacob Mongrain[3]
[1]Alaska Division of Geological & Geophysical Surveys; Email: david.lepain@alaska.gov
[2]Alaska Division of Mining, Land, and Water
[3]NES-Fircroft

Alaska Department of NATURAL RESOURCES
Division of Geological & Geophysical Surveys

STATE OF ALASKA



Facies Associations

OSH - offshore shelf: dominantly shale, silty shale and mudstone, with minor thin beds of very fine-grained sandstone; sparsely to highly bioturbated.

OFT - offshore transition: interbedded silty shale, mudstone, and siltstone, with common interbeds of very fine-grained sandstone; sedimentary structures in sandstone include horizontal plane-parallel laminations, hummocky cross-stratification (HCS), and wave and current ripple cross-lamination; moderately to highly bioturbated. Gradational with shoreface.

PD - prodelta: similar to OFT, but with greater variability in degree of bioturbation. Gradational with distal delta front.

DDF - distal delta front: interbedded mudstone, siltstone, and sandstone; sandstone beds range from few centimeters to 1 m thick; abundant horizontal plane-parallel laminations; unbioturbated to sparsely bioturbated. Abandonment facies can lack mudstone.

DSF - distal shoreface: similar to distal delta front, with addition of common to abundant wave-generated sedimentary structures, including HCS; low to highly bioturbated.

PDF - proximal delta front: similar to distal delta front, but with common amalgamated sandstone beds, including coarser grained sandstone (fine- to medium-grained); finer-grained (mudstone and siltstone) facies limited to thin beds and discontinuous drapes.

PSF - proximal shoreface: similar to distal shoreface, but with common amalgamated sandstone beds up to 1 m thick, includes coarser-grained (fine- and medium-grained) sandstones; fine-grained lithologies (mudstone and siltstone) limited to thin beds and discontinuous drapes.

Bioturbation index is from Taylor and Goldring (1993).

Key to Lithologies and Symbols