

Accepted Manuscript

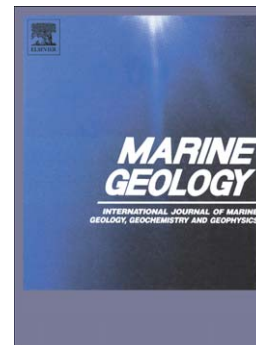
Hydrodynamic Controls on Muddy Sedimentary-Fabric Development on the Southwest Louisiana Subaqueous Delta

Kathryn C. Denommee, Samuel J. Bentley, Dario Harazim, James H.S. Macquaker

PII: S0025-3227(16)30219-5
DOI: doi:[10.1016/j.margeo.2016.09.013](https://doi.org/10.1016/j.margeo.2016.09.013)
Reference: MARGO 5515

To appear in: *Marine Geology*

Received date: 8 February 2016
Revised date: 18 September 2016
Accepted date: 24 September 2016



Please cite this article as: Denommee, Kathryn C., Bentley, Samuel J., Harazim, Dario, Macquaker, James H.S., Hydrodynamic Controls on Muddy Sedimentary-Fabric Development on the Southwest Louisiana Subaqueous Delta, *Marine Geology* (2016), doi:[10.1016/j.margeo.2016.09.013](https://doi.org/10.1016/j.margeo.2016.09.013)

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

**Hydrodynamic Controls on Muddy Sedimentary-Fabric Development on the Southwest
Louisiana Subaqueous Delta**

*Kathryn C. Denommee^{1,2†}, Samuel J. Bentley^{1,3}, Dario Harazim⁴, and James H.S.
Macquaker²

¹ Department of Geology and Geophysics, Louisiana State University, Baton Rouge, LA,
70803, USA

² ExxonMobil Upstream Research Company, 22777 Springwoods Village Pkwy, Spring, TX,
77389, USA

³ Coastal Studies Institute, Louisiana State University, Baton Rouge, LA, 70803, USA

⁴ Department of Geosciences, Colorado State University, 322 Natural Resources Building,
Fort Collins, CO, 80523, USA

†current address

*Corresponding Author: *kathryn.c.denommee@gmail.com*

Abstract

This study examines the sedimentary products of current-wave-enhanced sediment gravity flows (CWESGFs) on the muddy Southwest Louisiana subaqueous delta where the combined effects of currents, gravity, and wave orbital velocity exert a strong control on sedimentary-fabric development, and contribute to development of a muddy inner-shelf clinotherm. CWESGF microstratigraphy from our study area displays an overall structure similar that is similar to the tripartite layering of CWESGFs from the Eel Shelf, where such deposits were first described (basal crossbeds, intermediate planar interlaminae of clay and silt; topmost clay-rich drape). However, on the Louisiana shelf, a shorter wave period

Download English Version:

<https://daneshyari.com/en/article/8912104>

Download Persian Version:

<https://daneshyari.com/article/8912104>

[Daneshyari.com](https://daneshyari.com)