

## Explanation

### Lithologic patterns



Sand



Silty or muddy sand



Silt



Interbedded sand and silt



Interbedded sand and mud



Interbedded clay and silt



Silty mud



Mud or clay



Peat

### Bedding and Physical Characteristics



Horizontal or laminated bedding



Inclined bedding



Deformed bedding (wavy)



Deformed bedding (concave down)



Deformed bedding (concave up)



Irregular bedding



Massive



Shell



Shell fragments



Organic fragments



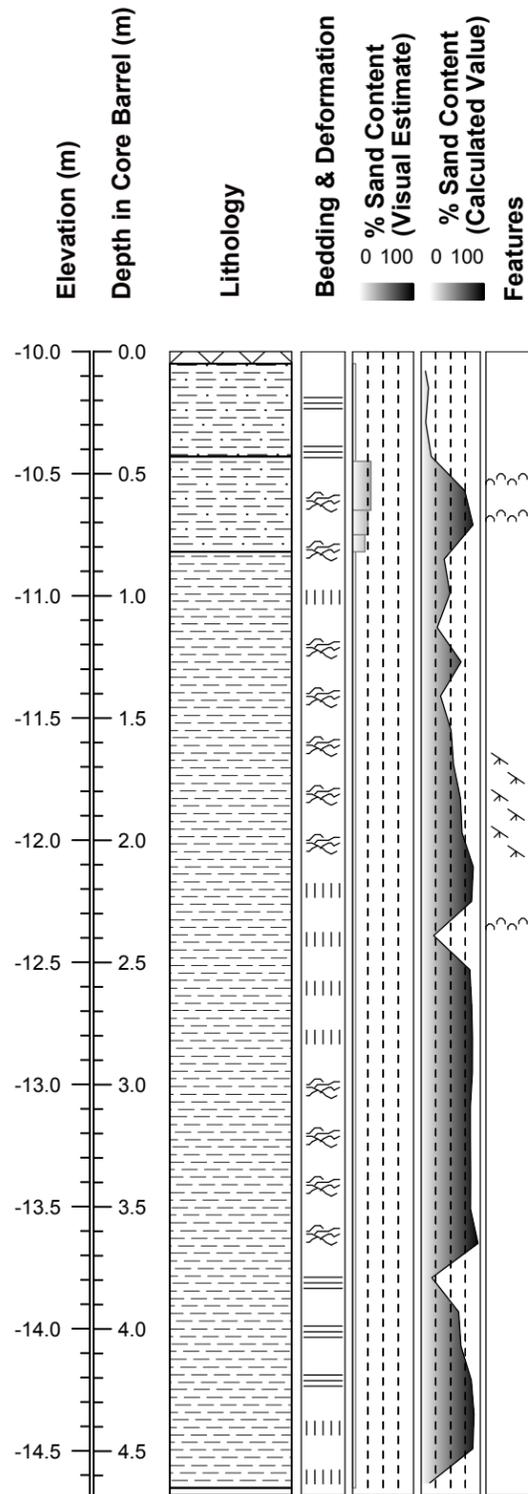
Burrow



Woody fragment

# CORE ID: 2014-336-FA-01

**LOCATION:** Southeast of Breton Island, on seismic lines 72 & 80  
**LATITUDE:** 29.38463 N      **LONGITUDE:** 89.13402 W  
**DATE CORED:** 01/12/2015      **DATE DESCRIBED:** 02/24/2015  
**WATER DEPTH (m):** 10.37      **ELEVATION (m):** -10.00  
**CORE LENGTH (m):** 4.68      **COMPACTION:** 22%



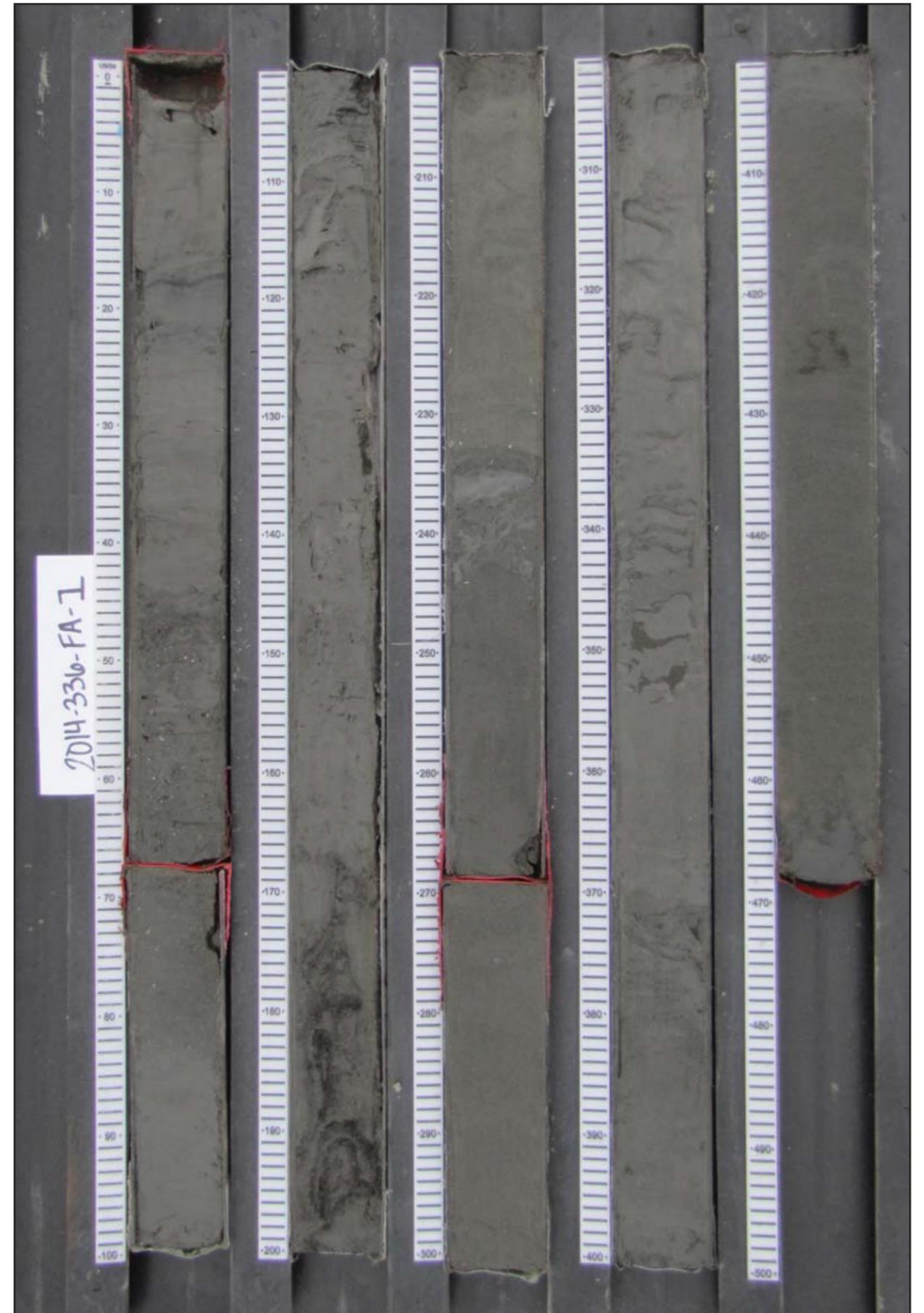
0-5 cm - Void in core barrel

5-43 cm - MUD: dark olive-gray (5Y 3/2), horizontally laminated silty mud; with a thin organic mud horizon at 17 cm and no visible shell material

43-82 cm - MUD: bioturbated, dark olive-gray (5Y 3/2), silty mud; with moderate disseminated shell fragments

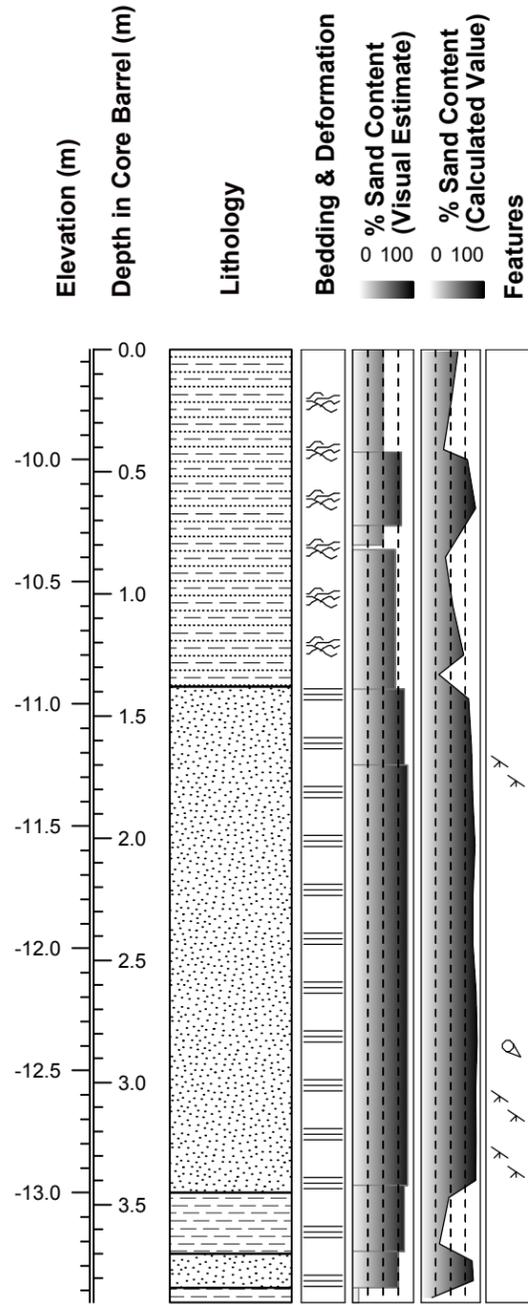
82-465 cm - MUD: interbedded dark olive-gray (5Y 3/2) mud and silty mud; with deformed black organic-rich lenses and horizons from 165 to 200 cm and abundant small organic flecks throughout; horizontal bedding evident where undisturbed

465-468 cm - CLAY: dark olive-gray (5Y 3/2), dense, massive clay



# CORE ID: 2014-336-FA-2A

**LOCATION:** Southeast of Breton Island, on seismic line 68  
**LATITUDE:** 29.39173 N      **LONGITUDE:** 89.13273 W  
**DATE CORED:** 01/12/2015      **DATE DESCRIBED:** 03/19/2015  
**WATER DEPTH (m):** 9.45      **ELEVATION (m):** -9.55  
**CORE LENGTH (m):** 3.90      **COMPACTION:** 36%



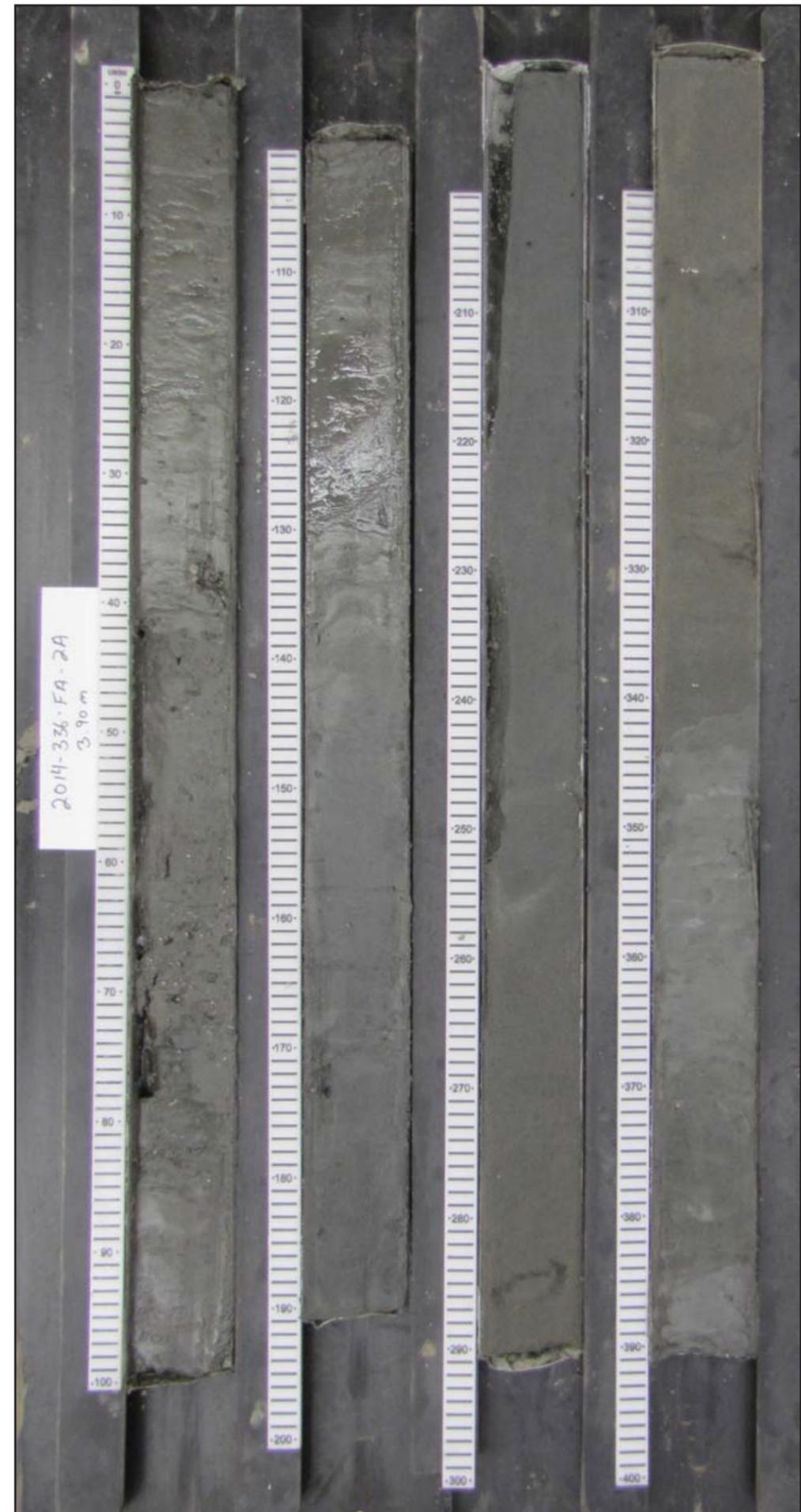
0-138 cm - MUD and MUDDY SAND: mottled olive-gray (5Y 4/2) mud and muddy sand; 0 to 42 cm is dominated by mud, 42 to 115 cm is dominated by muddy sand, and 115 to 138 is dominated by mud; with minimal disseminated shell material except for dense shell hash at 38 cm and heavy shell fragments from 60 to 80 cm

138-345 cm - SAND: brownish-gray (2.5Y 5/2), very fine-grained, well sorted, massive sand; with minimal scattered shell fragments and organic flecks; an oval-shaped silty mud-filled burrow at 286 cm; and occasional thin organic-rich mud horizons

345-370 cm - MUD: olive-gray (5Y 4/2), slightly silty, massive mud; no visible shell material

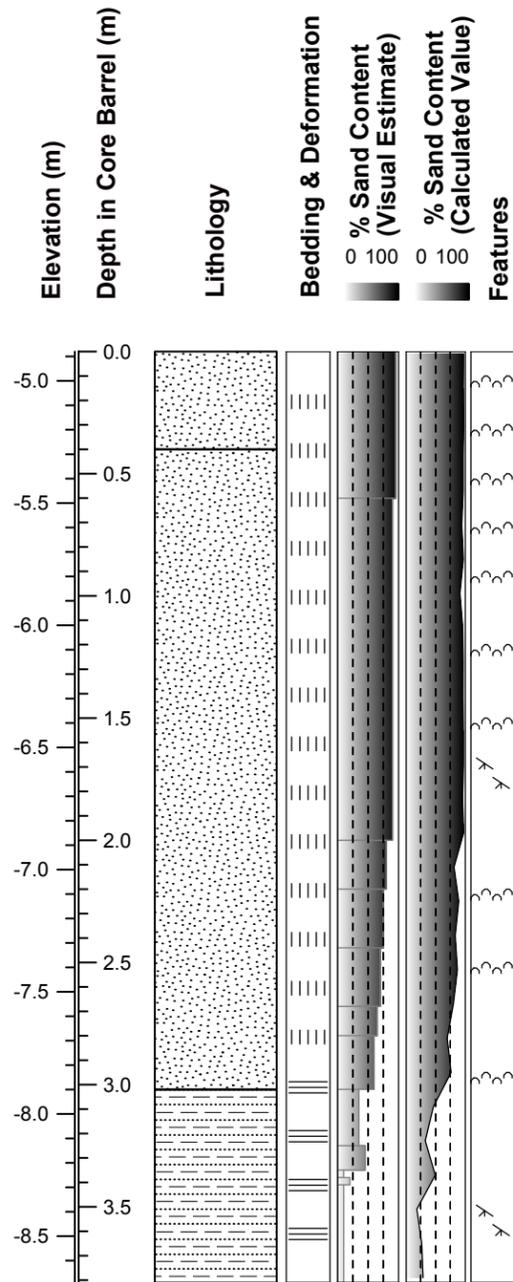
370-384 cm - SAND: olive-gray (5Y 4/2), very fine-grained, well sorted, massive sand; with small clay-filled burrows

384-390 cm - MUD: olive-gray (5Y 4/2), slightly silty, massive mud; no visible shell material



# CORE ID: 2014-336-FA-03

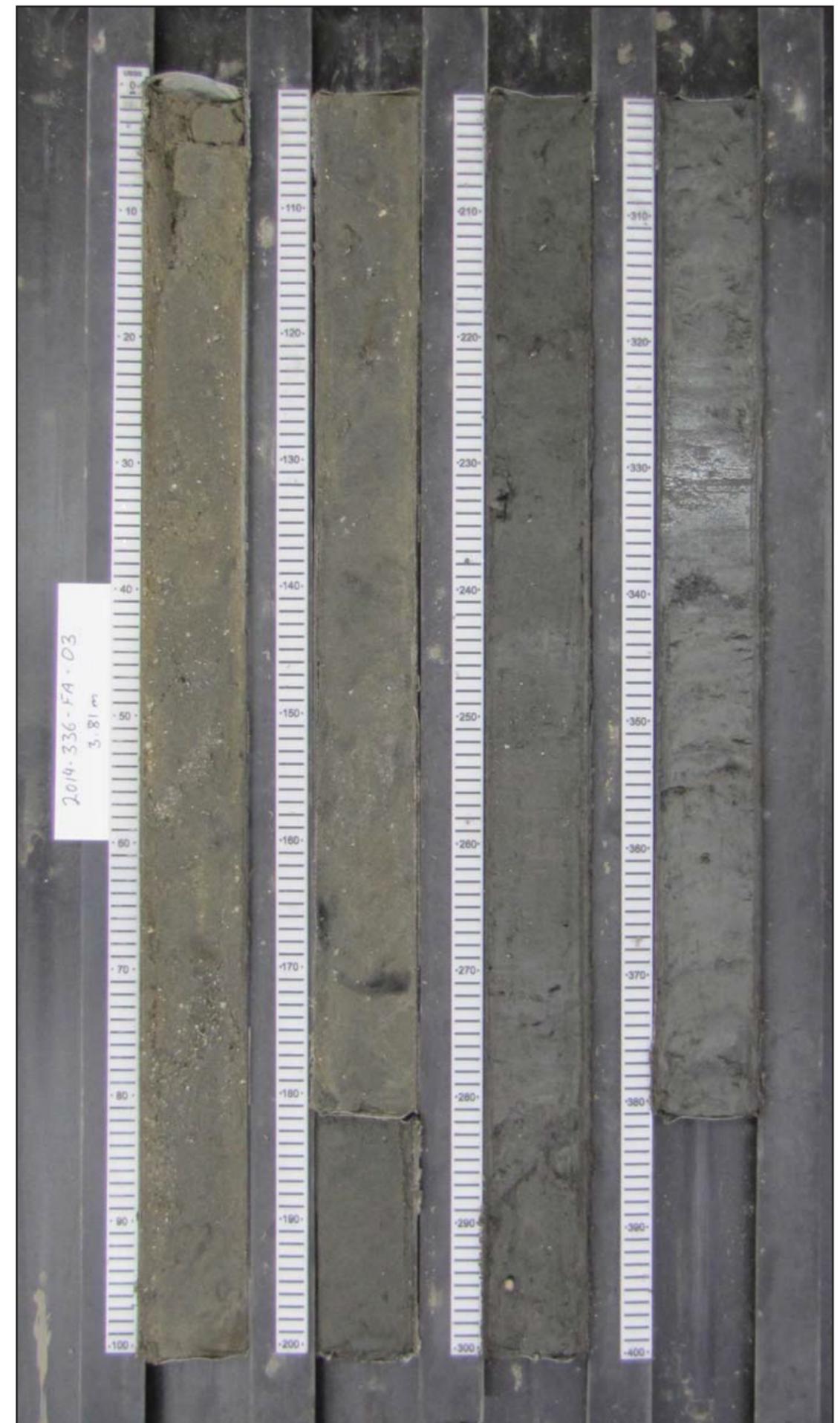
**LOCATION:** Southwest of Breton Island  
**LATITUDE:** 29.44192 N      **LONGITUDE:** 89.24760 W  
**DATE CORED:** 01/17/2015      **DATE DESCRIBED:** 03/26/15  
**WATER DEPTH (m):** 4.87      **ELEVATION (m):** Unavailable (use water depth)  
**CORE LENGTH (m):** 3.81      **COMPACTION:** 38%



0-40 cm - SAND: light grayish-brown (2.5Y 6/2), well sorted, medium-grained, massive sand; with moderate disseminated shell fragments

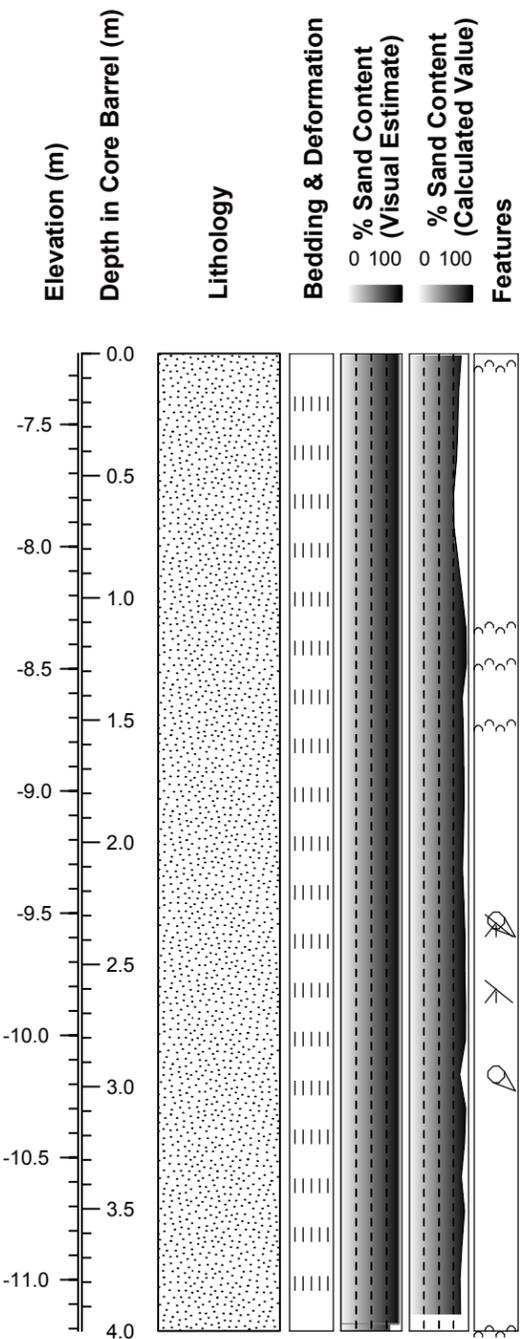
40-302 cm - SAND: grayish-brown (2.5Y 5/2), well sorted, fine- to very fine-grained, massive clean sand grades down-core into muddy sand

302-381 cm - MUD and SAND: olive-gray (5Y 4/2) mud interbedded with dark olive-gray (5Y 3/2) silt and very fine-grained sand horizons; with small, dark gray (5Y 3/1), organic-rich mud lenses; thin organic-rich horizons; and minimal disseminated shell fragments

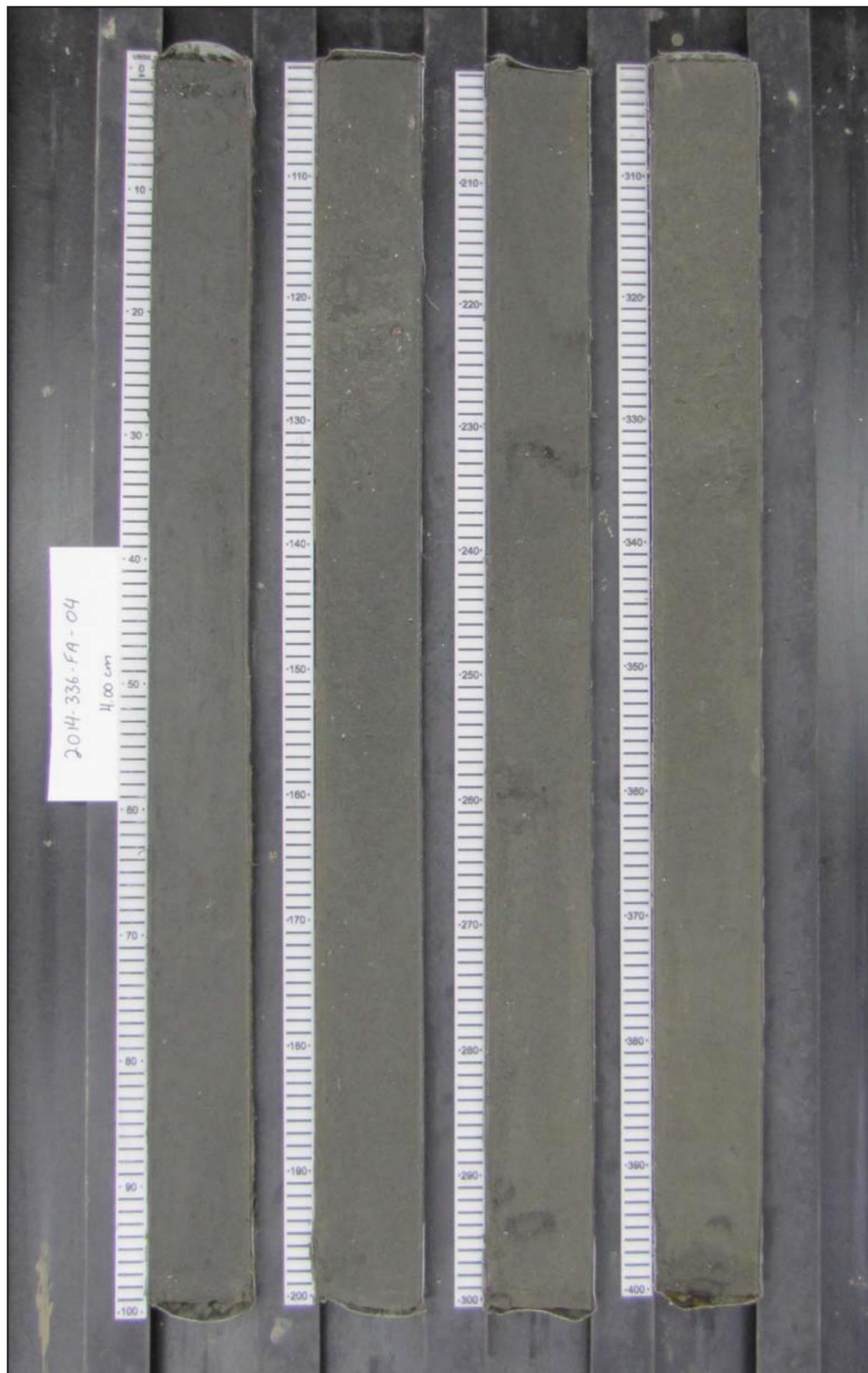


# CORE ID: 2014-336-FA-04

**LOCATION:** Southeast of Breton Island, on seismic lines 63 & 82  
**LATITUDE:** 29.40520 N     **LONGITUDE:** 89.12318 W  
**DATE CORED:** 01/12/2015     **DATE DESCRIBED:** 03/10/2015  
**WATER DEPTH (m):** 7.62     **ELEVATION (m):** -7.21  
**CORE LENGTH (m):** 4.0     **COMPACTION:** 34%

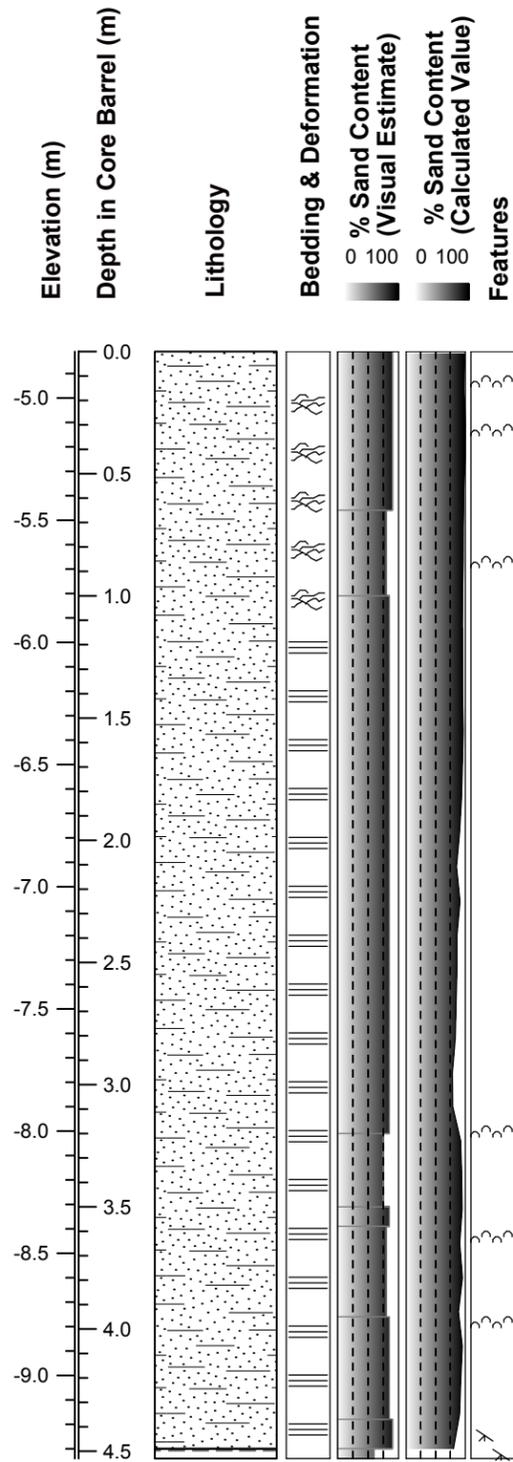


0-400 cm - SAND: grayish-brown (2.5Y 5/2), well sorted, fine- to very fine-grained, massive sand; with minimal disseminated shell material; localized small, dense shell-hash clusters; moderate disseminated mica flecks; and occasional small organic clasts and muddy sand-filled burrows



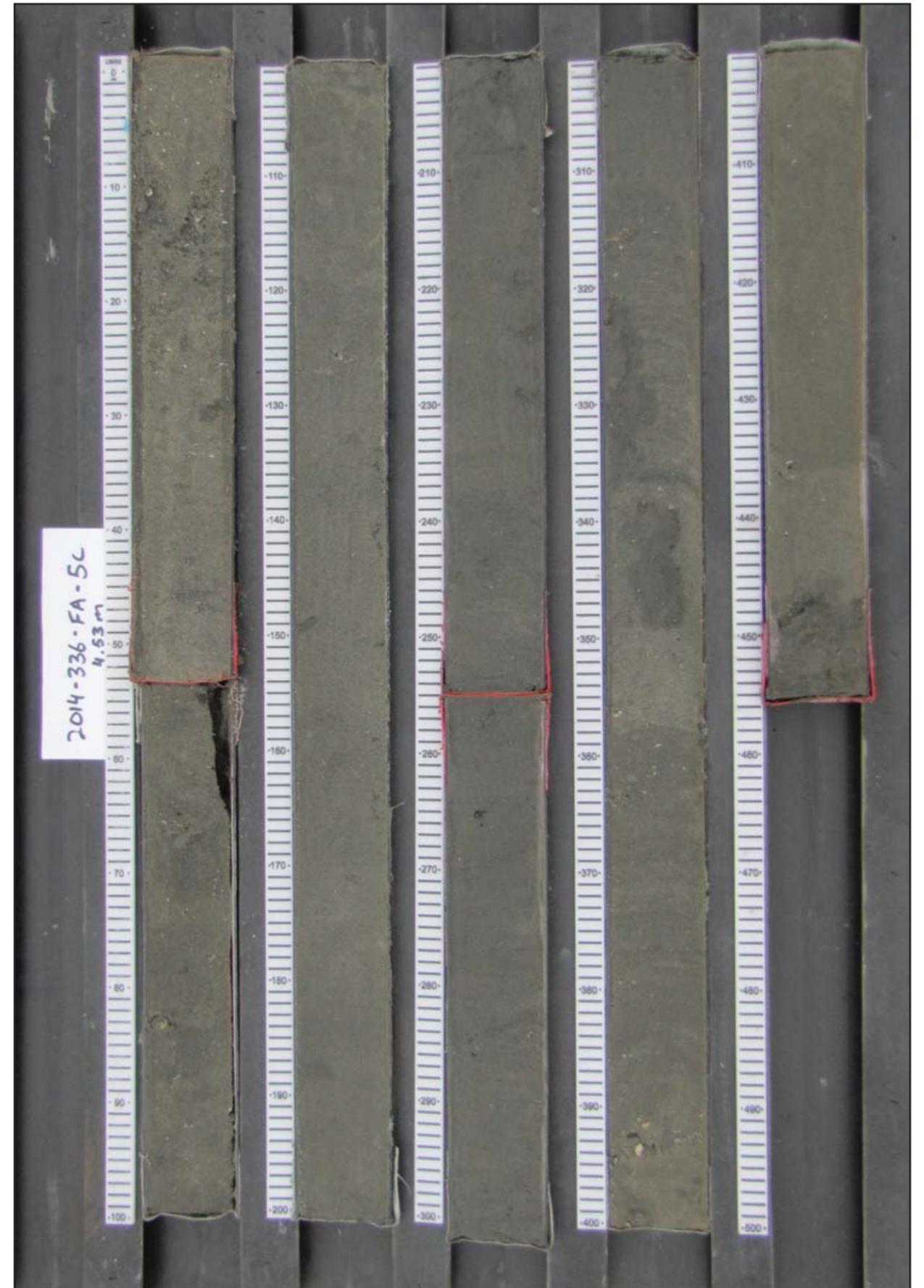
# CORE ID: 2014-336-FA-5C

**LOCATION:** Southeast of Breton Island, on seismic lines 59 & 84  
**LATITUDE:** 29.41875 N      **LONGITUDE:** 89.11067 W  
**DATE CORED:** 01/12/2015      **DATE DESCRIBED:** 02/24/2015  
**WATER DEPTH (m):** 5.18      **ELEVATION (m):** -4.81  
**CORE LENGTH (m):** 4.53      **COMPACTION:** 26%



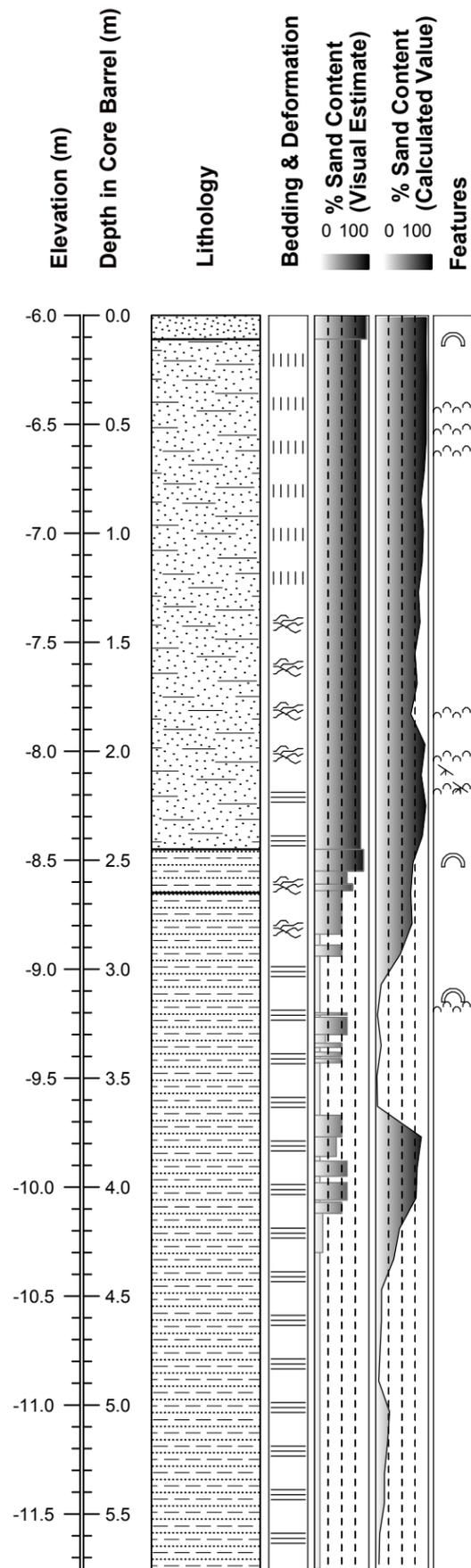
0-449 cm - SAND: dark olive-gray (5Y 3/2), fine- to very fine-grained, well-sorted muddy sand; with minimal disseminated shell fragments; localized dense shell-hash clusters including a small, intact gastropod at 84 cm; and very small disseminated organic fragments; horizontal bedding is somewhat masked by mild bioturbation

449-453 cm - SAND and CLAY: mottled very dark gray (5Y 3/1) muddy sand and clay; with abundant small shell fragments around the clay lenses and an organic-rich mud lens at 450 cm



# CORE ID: 2014-336-FA-06

**LOCATION:** East-southeast of Breton Island, on seismic line 56  
**LATITUDE:** 29.43613 N      **LONGITUDE:** 89.08840 W  
**DATE CORED:** 01/18/2015      **DATE DESCRIBED:** 03/10/15  
**WATER DEPTH (m):** 6.10      **ELEVATION:** -6.00  
**CORE LENGTH (m):** 5.76      **COMPACTION:** 6%



0-11 cm - SAND: light yellowish-brown (2.5Y 6/4), fine- to medium-grained, well sorted, massive clean sand; with moderate shell material

11-245 cm - SAND: dark gray (5Y 4/1), fine-grained, well sorted, predominantly massive silty sand; with minimal disseminated shell fragments; a small, intact gastropod at 71 cm; a large woody organic clast at 211 cm; and visible small mica flecks throughout

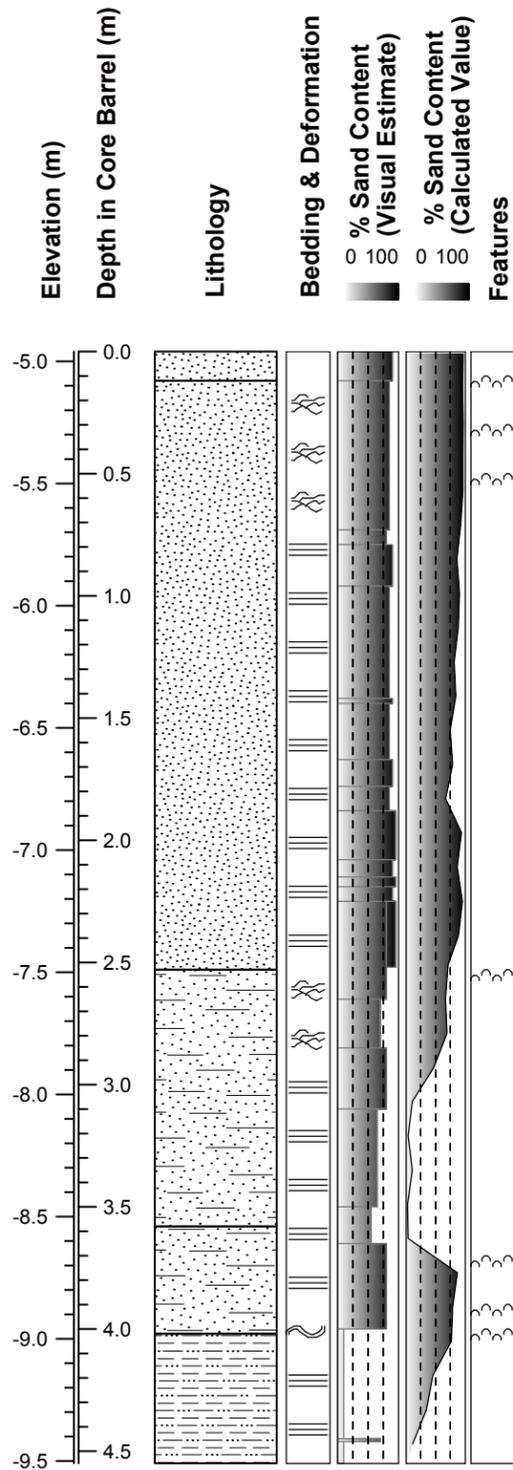
245-265 cm - MUD and SAND: mottled olive-gray (5Y 4/2) mud and dark gray (5Y 4/1) silty sand, representing the transition between adjacent units; with minimal disseminated shell material, a fragmented bryozoan at 251 cm; and a highly indurated pale yellow (5Y 8/3) clay nodule at 265 cm

265-575 cm - SAND and MUD: dark gray (5Y 4/1) silty sand interbedded with light gray (5Y 7/1) mud and clay; color changes to light grayish-brown (10YR 6/2) and sand content decreases down-core; with scattered small bivalve fragments and a thin lag deposit at 315 cm containing what looks like a fragmented crab claw, relatively large pebbles, and dense bivalve shell hash; bedding is horizontal with moderate deformation from coring



# CORE ID: 2014-336-FA-7A

**LOCATION:** East-southeast of Breton Island, on seismic line 59  
**LATITUDE:** 29.44038 N      **LONGITUDE:** 89.07128 W  
**DATE CORED:** 01/18/2015      **DATE DESCRIBED:** 02/24/2015  
**WATER DEPTH (m):** 4.57      **ELEVATION (m):** -4.96  
**CORE LENGTH (m):** 4.55      **COMPACTION:** 25%



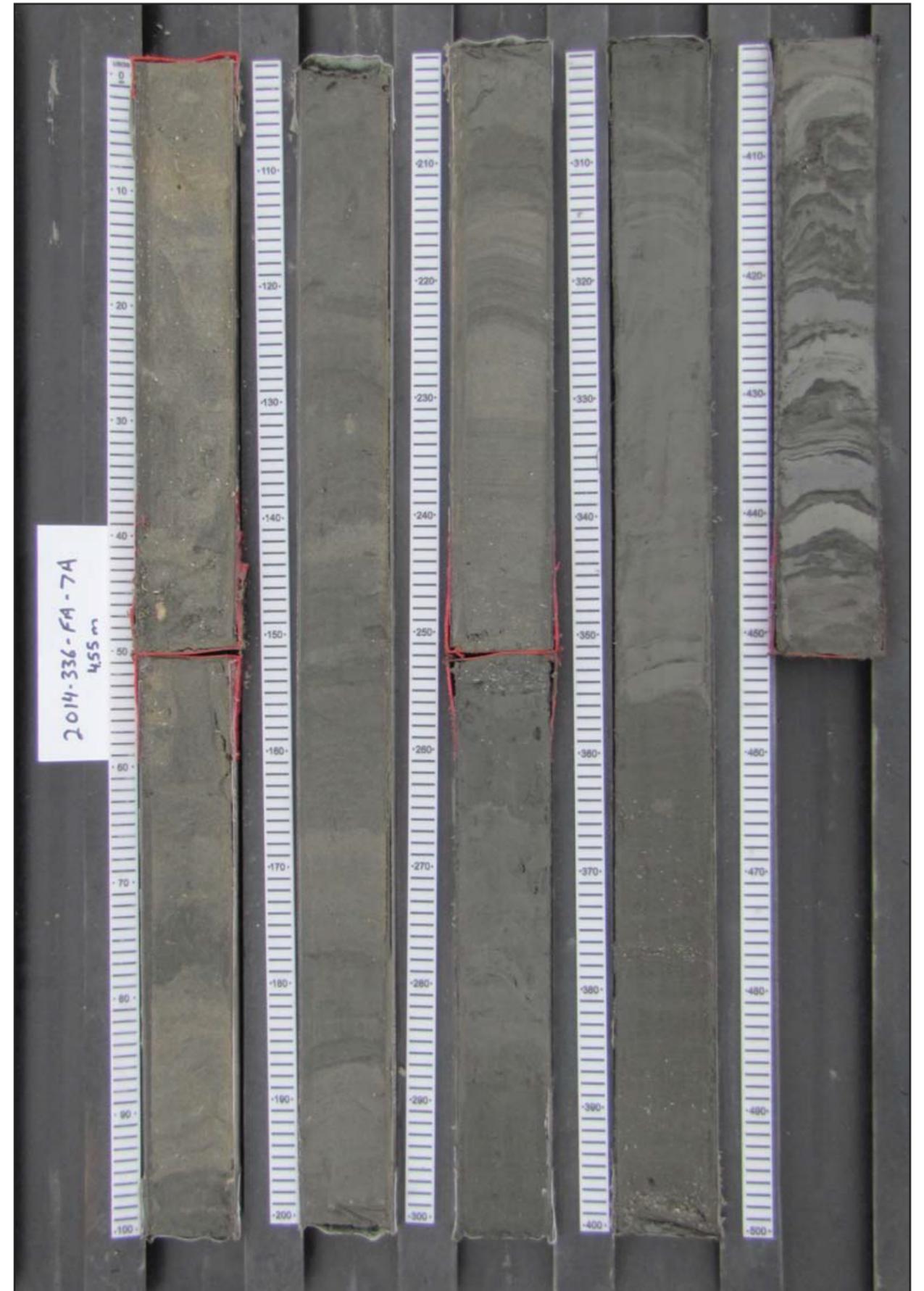
0-12 cm - SAND: pale brown (2.5Y 7/4), fine- to medium-grained, well sorted, clean sand; with scattered small shell fragments

12-253 cm - SAND: interbedded light gray (5Y 6/1) and dark gray (5Y 3/1), very fine to fine-grained, well sorted, horizontally laminated sand; with darker silty sand horizons; moderate disseminated shell material from 12 to 60 cm; minimal disseminated shell material from 60 to 252 cm; and dense shell hash at the basal contact; bedding is predominantly horizontal with deformation from bioturbation from 12 to 90 cm

253-358 cm - SAND: dark olive-gray (5Y 3/2) very fine-grained, well sorted muddy sand with olive-gray (5Y 4/2) mud interbeds; mud content is higher from 265 to 285 and 310 to 358 cm; with minimal disseminated shell material and a sharp basal contact

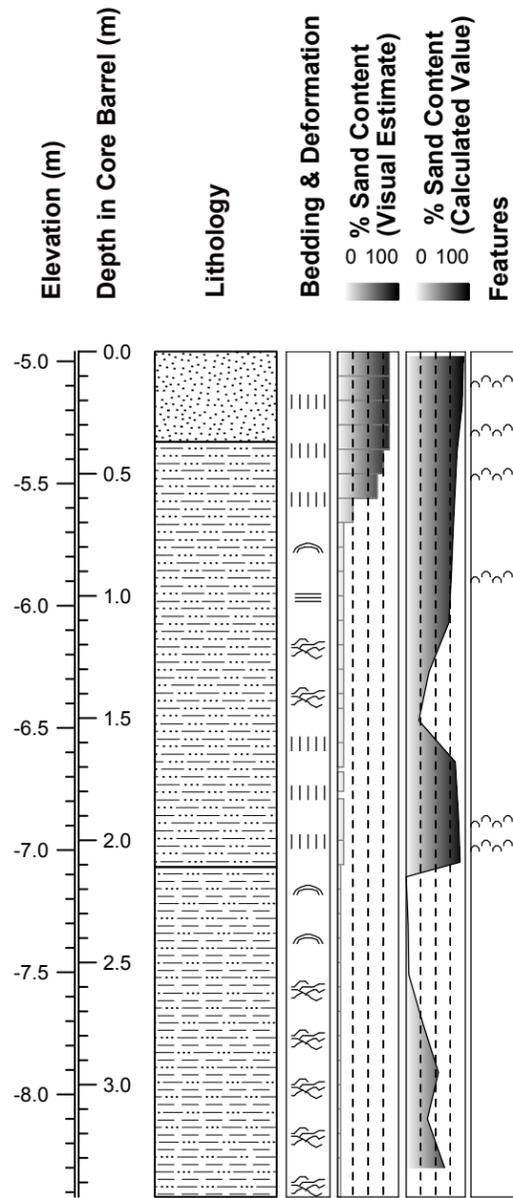
358-402 cm - SAND: dark olive-gray (5Y 3/2), very fine-grained, well sorted, horizontally laminated silty sand; with moderate disseminated shell fragments and occasional dense shell-hash horizons, including a thicker shell-hash deposit at the basal contact

402-455 cm - CLAY and SILT: interbedded olive-gray (5Y 4/2) clay and dark olive-gray (5Y 3/2) silt; with a small shell-hash cluster at 411 cm; original horizontal bedding is deformed by coring



# CORE ID: 2014-336-FA-07-OSL

**LOCATION:** East-southeast of Breton Island, on seismic line 59  
**LATITUDE:** 29.44038 N      **LONGITUDE:** 89.07128 W  
**DATE CORED:** 01/18/2015      **DATE DESCRIBED:** 06/02/2015  
**WATER DEPTH (m):** 4.57      **ELEVATION (m):** -4.96  
**CORE LENGTH (m):** 3.46      **COMPACTION:** Unavailable



0-37 cm - SAND: mottled, light grayish-brown (10YR 6/2), fine- to medium-grained, well sorted sand; with minimal scattered shell fragments and locally dense shell-hash clusters

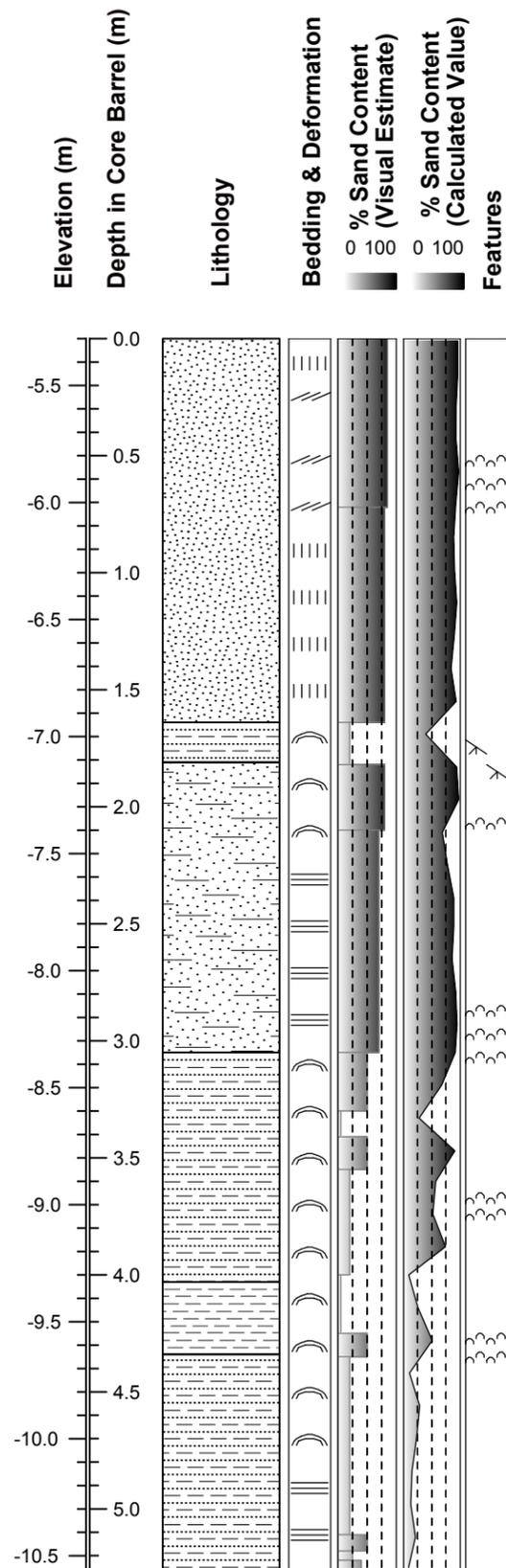
37-211 cm - SILT: dark brownish-olive (2.5Y 3/3), relatively clean silt with occasional mud-filled burrows and a large mud lens from 126-154 cm; minimal disseminated shell material with a lone, dense shell-hash horizon at 91 cm; shell content increases from 189 to 211 cm; an inclined organic-rich muddy silt horizon with abundant mica flecks at 105 cm; mostly mottled with areas of horizontal laminations exhibiting deformation from coring

211-346 cm - MUD and SILT: olive-gray (5Y 5/2) and pale yellow (5Y 7/3), dense mud and clay interbedded with dark gray (5Y 4/1) silt; with small light yellowish-brown (2.5Y 6/3), oxidized mud lenses throughout; mostly mottled with areas of flaser bedding



# CORE ID: 2015-336-FA-08

**LOCATION:** East-southeast of Breton Island, on seismic line 58  
**LATITUDE:** 29.43957 N      **LONGITUDE:** 89.07660 W  
**DATE CORED:** 01/18/2015      **DATE DESCRIBED:** 03/18/2015  
**WATER DEPTH (m):** 4.88      **ELEVATION (m):** -5.30  
**CORE LENGTH (m):** 5.26      **COMPACTION:** 14%



0-164 cm - SAND: olive-gray (5Y 5/2) and light yellowish-brown (2.5Y 6/3), very fine-grained, well sorted, mostly massive sand grades down-core into dark olive-gray (5Y 3/2) sand; with minimal disseminated shell fragments from 0 to 45 and 72 to 164 cm; abundant shell fragments from 45 to 72 cm; and minimal disseminated mica flecks; bedding is mostly massive with areas of inclined bedding and bioturbation

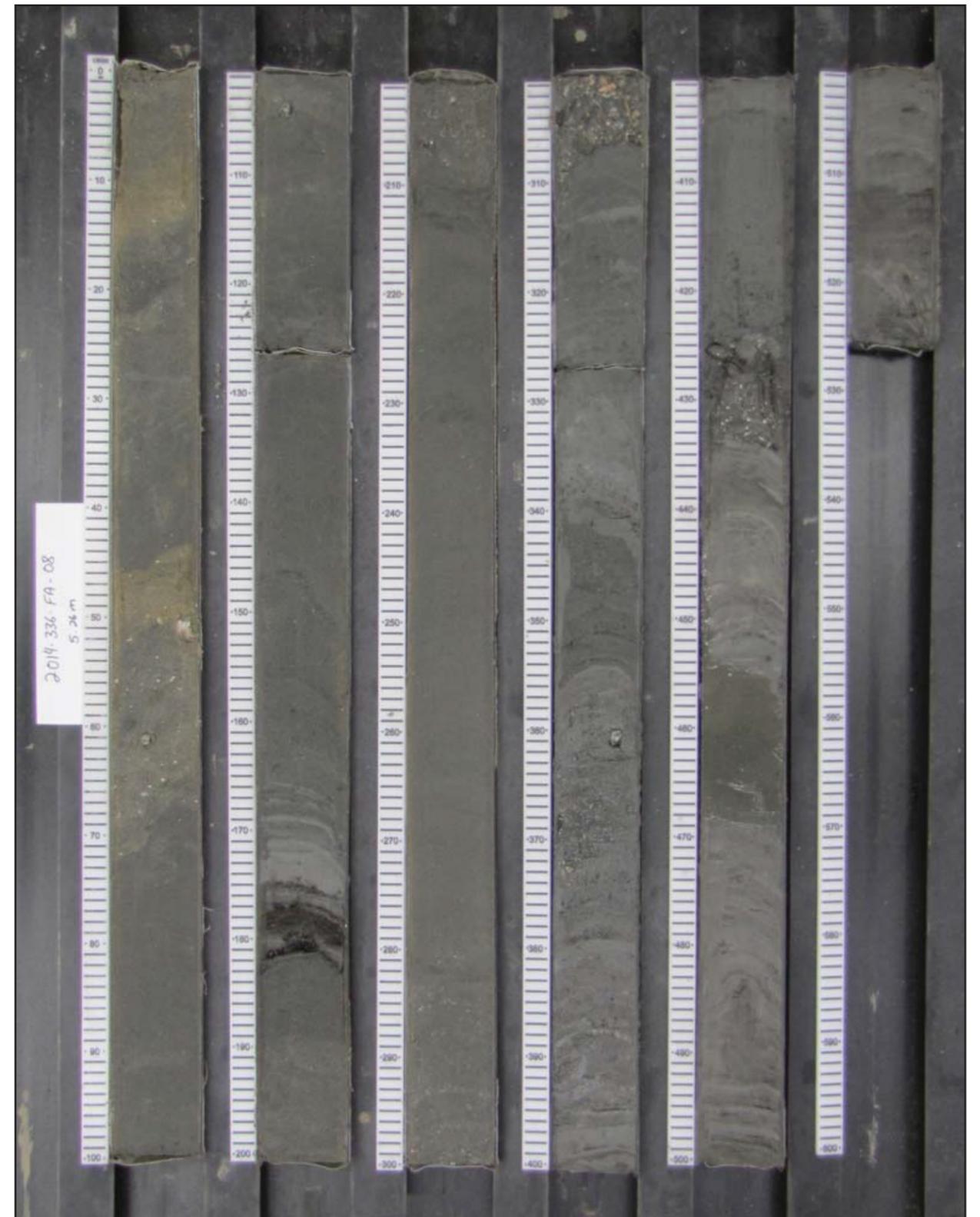
164-181 cm - MUD and SAND: olive-gray (5Y 5/2) mud interbedded with dark olive-gray (5Y 3/2) silty sand; mud content increases down-core; with dense woody organic-rich horizons from 173 to 181 cm and minimal disseminated shell material; horizontally laminated with deformation from coring

181-305 cm - SAND: olive-gray (5Y 5/2), very fine-grained, well sorted, silty sand; with minimal disseminated shell material from 181 to 200 and 209 to 280 cm; moderate shell fragments from 200 to 208 and 280 to 300 cm; and a dense shell-hash deposit from 300 to 305 cm at the basal contact consisting of fragmented and intact bivalves and gastropods; faint horizontal bedding with areas of bioturbation

305-403 cm - MUD and MUDDY SAND: olive-gray (5Y 4/2) mud with thin muddy sand interbeds; minimal disseminated shell content with areas of dense shell material, particularly within the sandy horizons

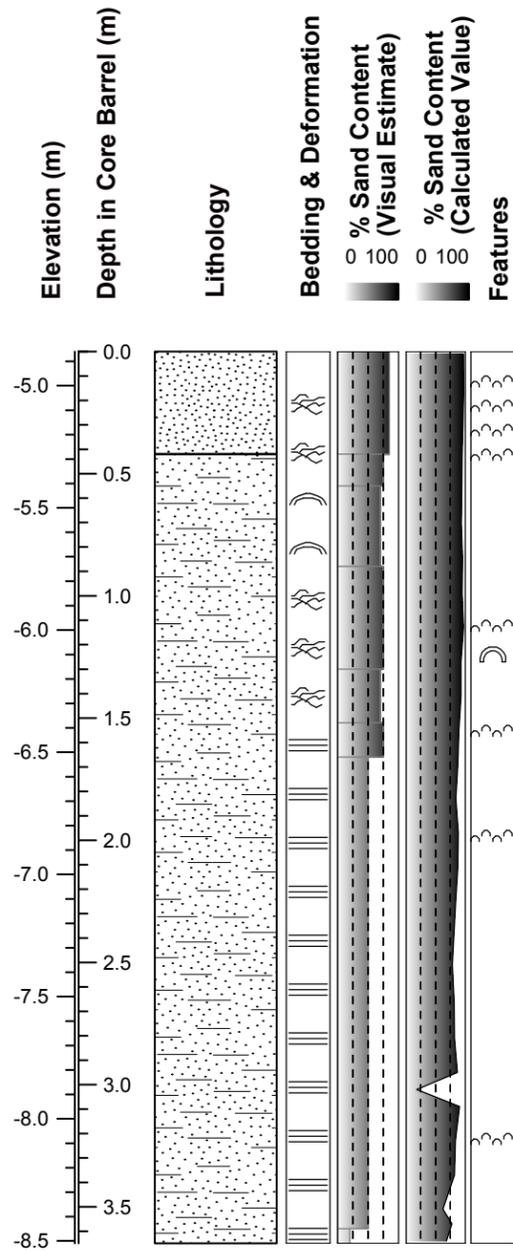
403-434 cm - MUD: olive-gray (5Y 4/2), massive mud; with minimal disseminated shell fragments; abundant small organic lenses and flecks; and dense shell deposit from 425 to 434 cm at the basal contact

434-526 cm - MUD and SAND: olive-gray (5Y 4/2), horizontally laminated mud and sandy mud; sand becomes more silty down-core with no visible shell material; bedding is somewhat deformed from coring



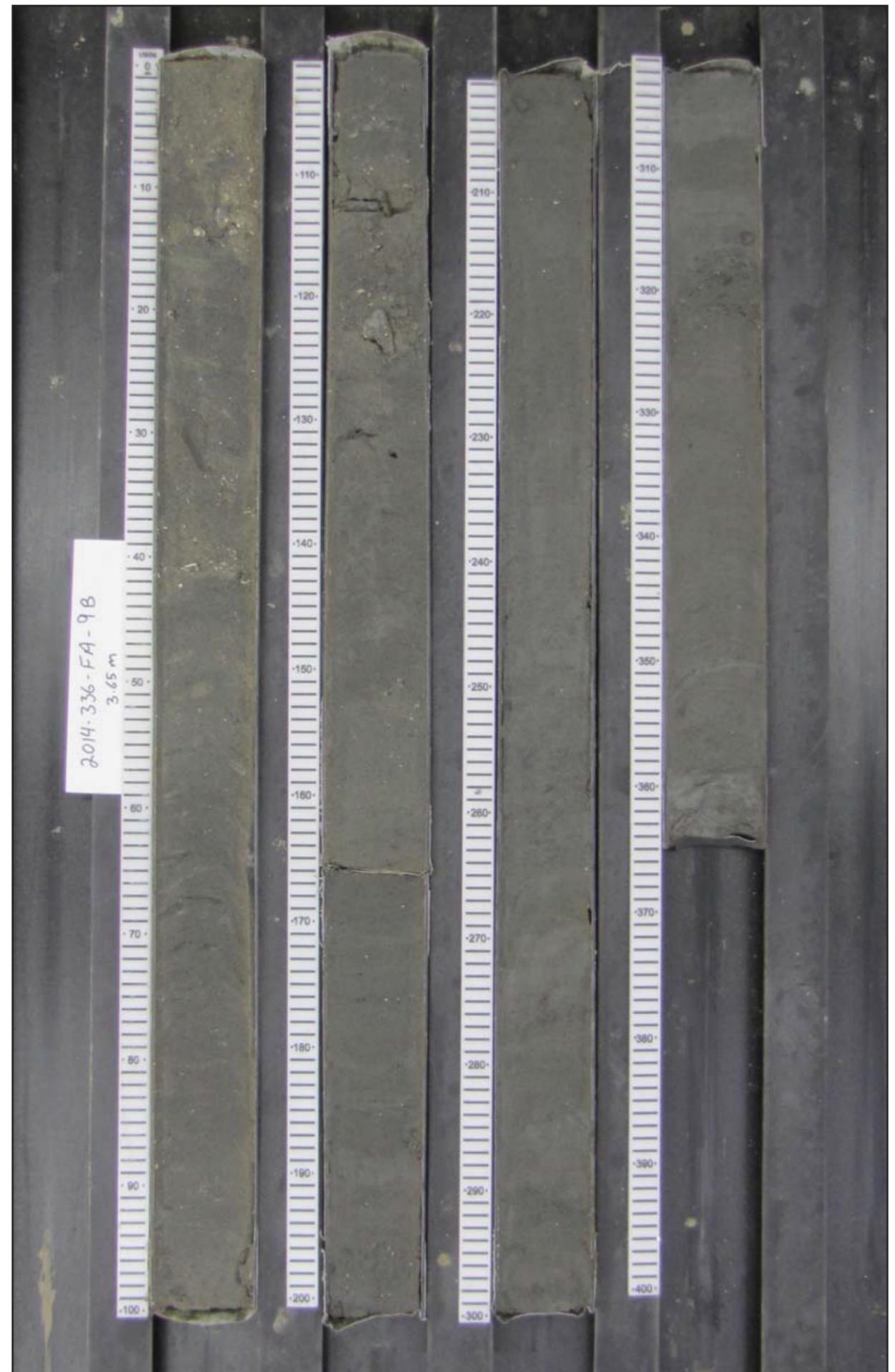
# CORE ID: 2015-336-FA-9B

**LOCATION:** East-southeast of Breton Island, on seismic line 51  
**LATITUDE:** 29.45210 N      **LONGITUDE:** 89.07395 W  
**DATE CORED:** 01/17/2015      **DATE DESCRIBED:** 03/18/2015  
**WATER DEPTH (m):** 4.88      **ELEVATION (m):** -4.86  
**CORE LENGTH (m):** 3.65      **COMPACTION:** 40%



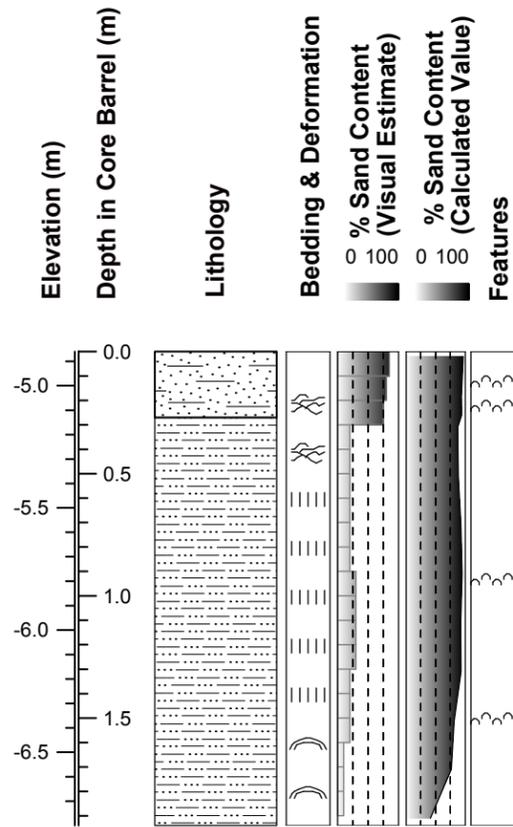
0-42 cm - SAND: mottled, brownish-gray (10YR 5/2), very fine-grained, well sorted sand; with moderate disseminated shell fragments and localized heavy shell-hash deposits

42-365 cm - SILTY SAND: dark olive-gray (5Y 3/2), very fine-grained, well sorted, silty sand; lithology transitions from silty sand to sandy mud at around 302 cm; with minimal disseminated shell material; scattered small organic flecks and small clasts; and a large, fragmented oyster shell at 123 cm; bedding is horizontal with some areas of bioturbation



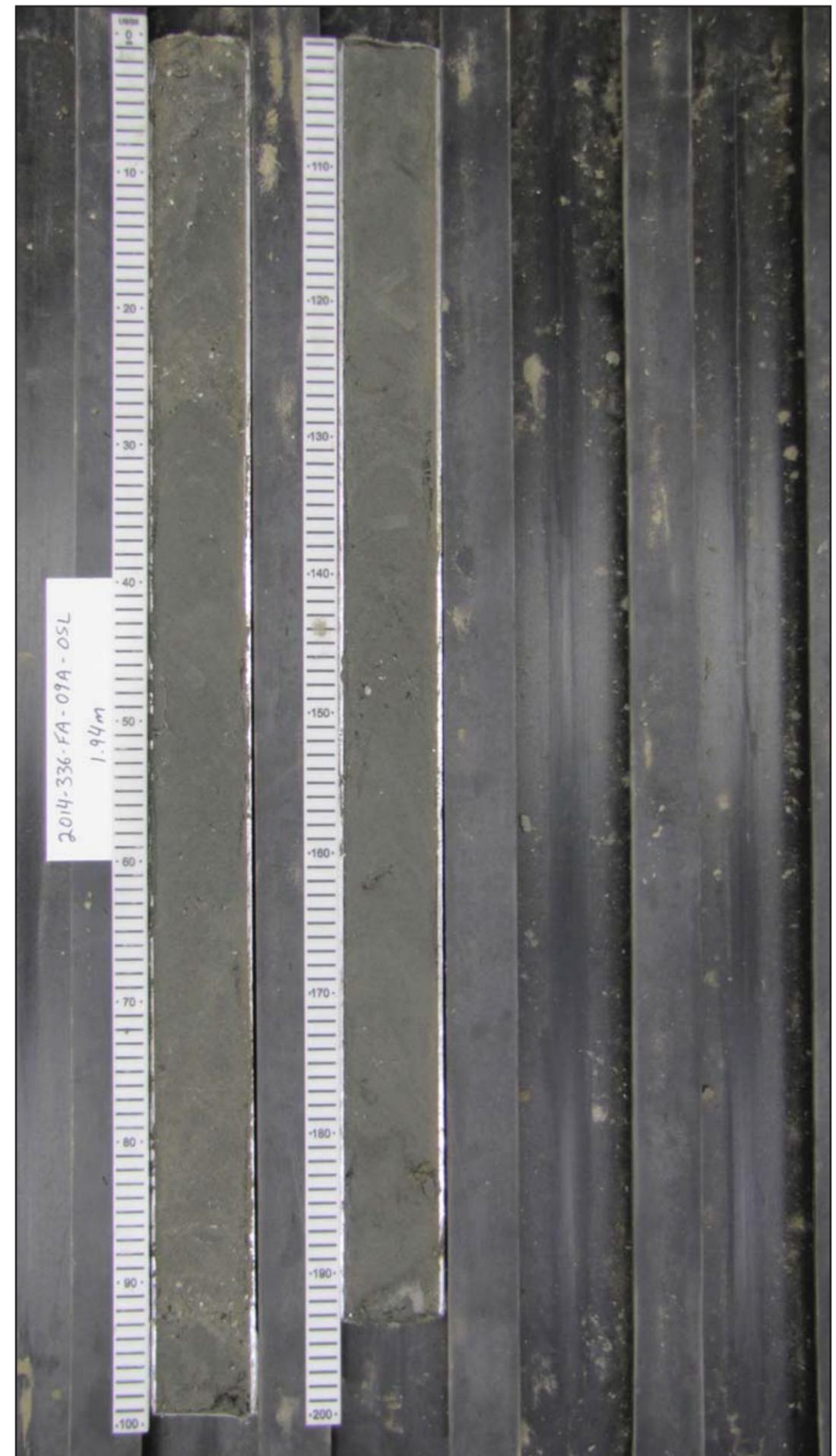
# CORE ID: 2014-336-FA-09-OSL

**LOCATION:** East-southeast of Breton Island, on seismic line 51  
**LATITUDE:** 29.45210 N      **LONGITUDE:** 89.07395 W  
**DATE CORED:** 01/17/2015      **DATE DESCRIBED:** 06/02/2015  
**WATER DEPTH (m):** 4.88      **ELEVATION (m):** -4.86  
**CORE LENGTH (m):** 1.94      **COMPACTION:** Unavailable



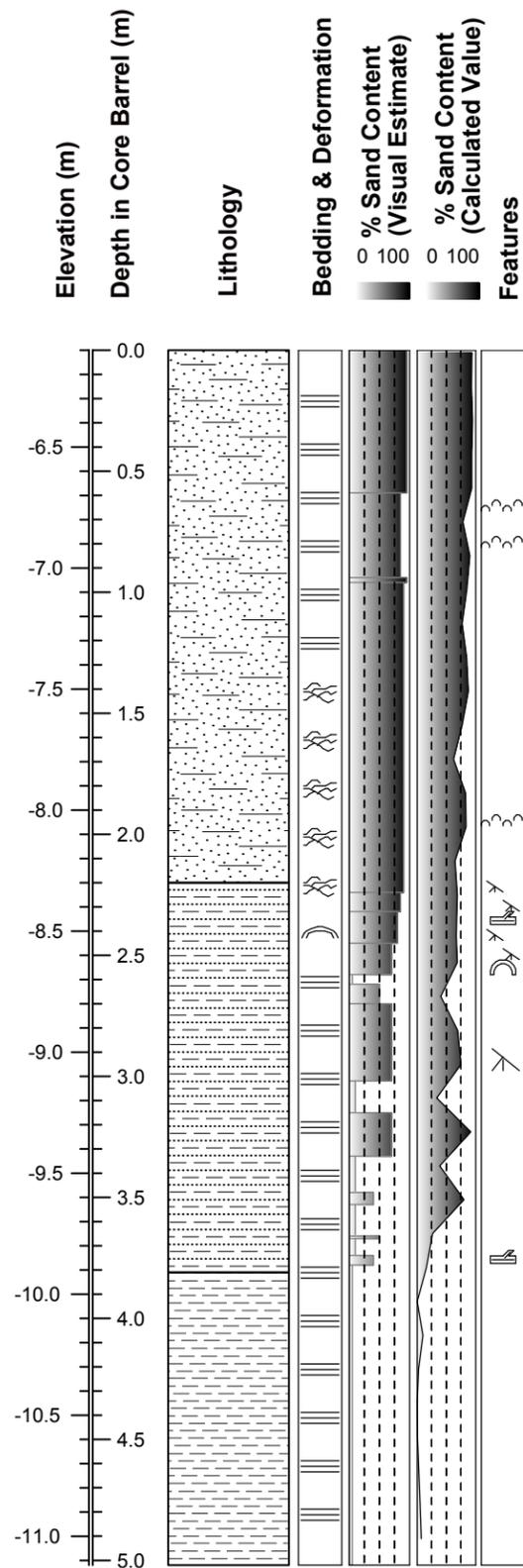
0-27 cm - SAND: mottled, light gray (5Y 7/1) to gray (5Y 5/1), very fine-grained, well sorted, moderately shelly, silty sand; with evidence of core drag

27-194 cm - SILT, dark gray (5Y 4/1), mostly massive sandy silt; with occasional thin, black organic-rich horizons; dense shell-hash horizons from 90 to 94 and 146 to 150 cm; a small, indurated, pale olive (5Y 6/4) clay nodule at 183 cm; and a small, gray mud lens a from 192 to 194 cm at bottom of core; faint horizontal bedding with moderate deformation from coring from 150 to 180 cm



# CORE ID: 2014-336-FA-10

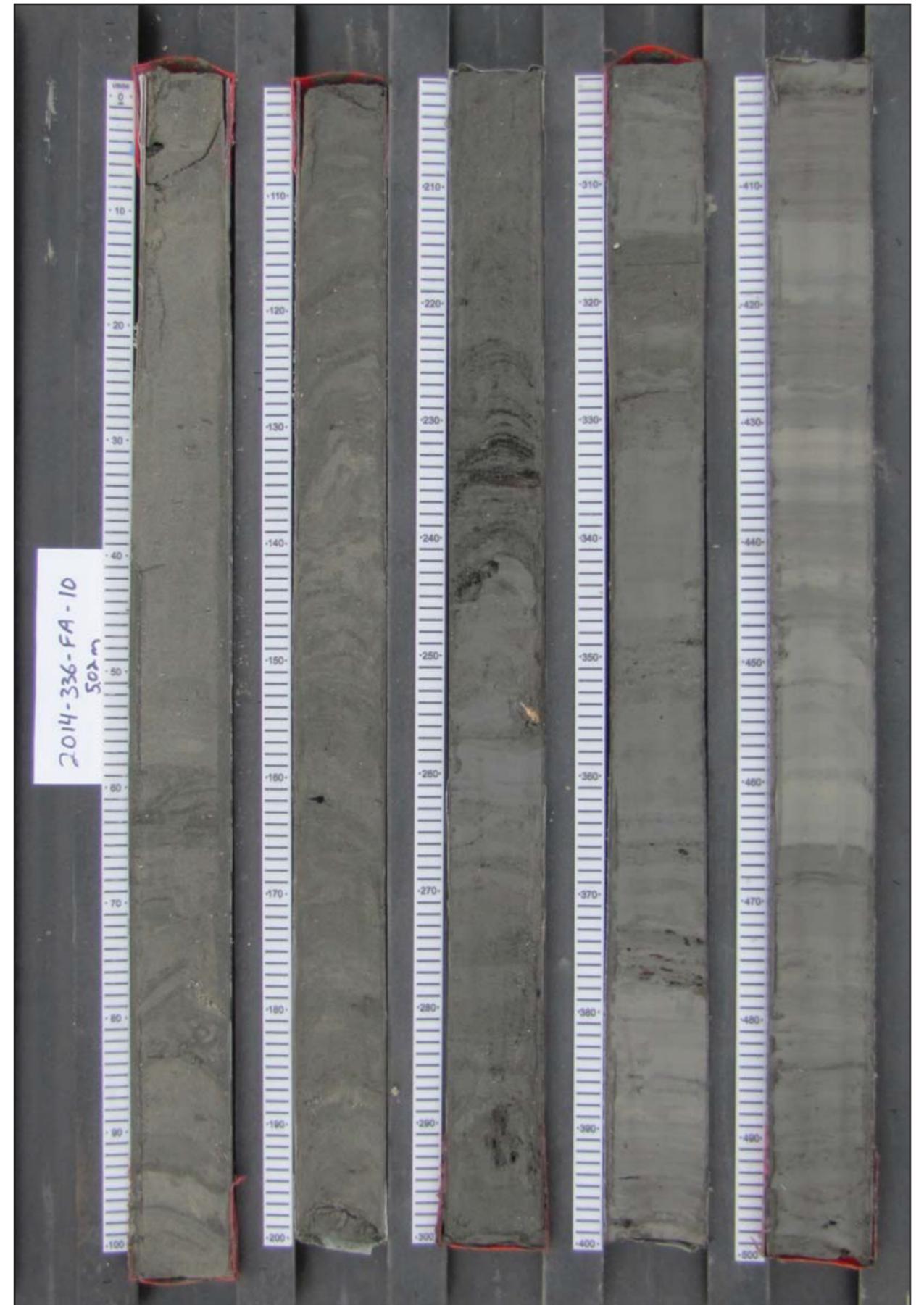
**LOCATION:** East-southeast of Breton Island, at intersection of seismic lines 17 & 22  
**LATITUDE:** 29.45340 N      **LONGITUDE:** 89.06403 W  
**DATE CORED:** 01/18/2015      **DATE DESCRIBED:** 02/24/2015  
**WATER DEPTH (m):** 6.10      **ELEVATION (m):** Unavailable (use water depth)  
**CORE LENGTH (m):** 5.02      **COMPACTION:** 18%



0-220 cm - SAND: light olive-gray (5Y 6/2) to olive-gray (5Y 5/2), very fine-grained, well sorted, horizontally bedded silty sand; color becomes darker and silt content increases down-core; with minimal disseminated shell fragments; localized dense shell-hash clusters at 79 and 192 cm; and occasional small organic lenses and thin organic-rich horizons; bedding is faint and somewhat masked from mild bioturbation

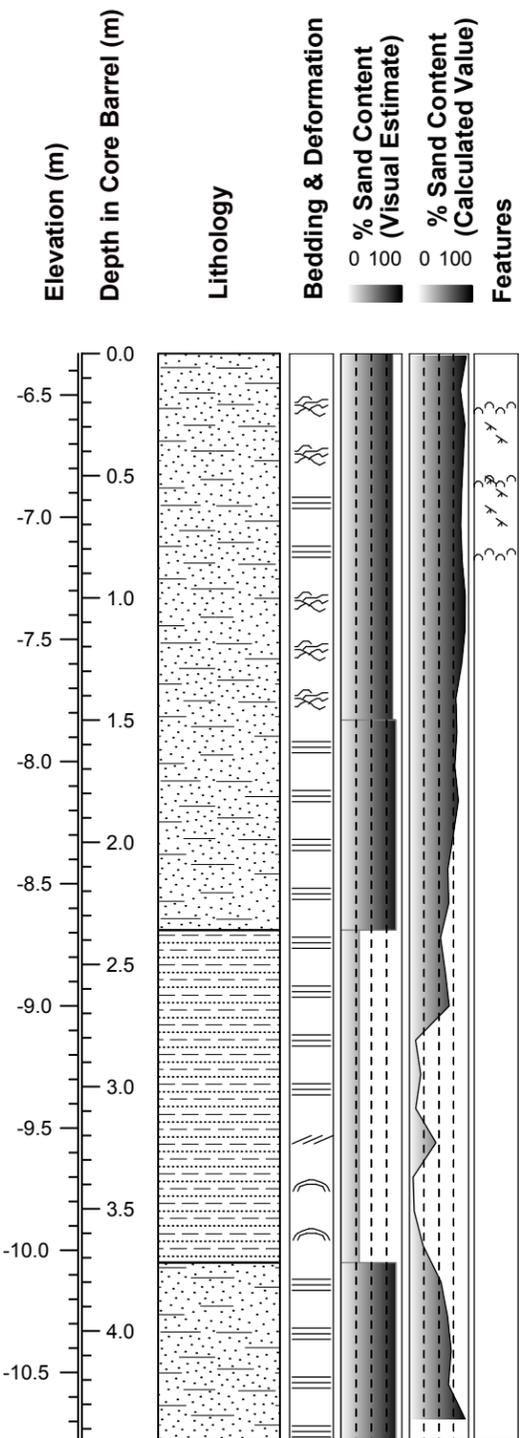
220-381 cm - MUD and SAND: interbedded olive-gray (5Y 4/2) mud and very fine-grained sand; with thin, dark olive-gray (5Y 3/2) silt horizons; abundant small, woody organic fragments especially within the silt and sand horizons; and an intact gastropod at 258 cm

381-502 cm - CLAY: light gray (5Y 7/2) and olive-gray (5Y 5/2), horizontally laminated fat clay; with occasional thin, dark olive-gray (5Y 3/2) silt horizons; shell content is minimal



# CORE ID: 2014-336-FA-11A

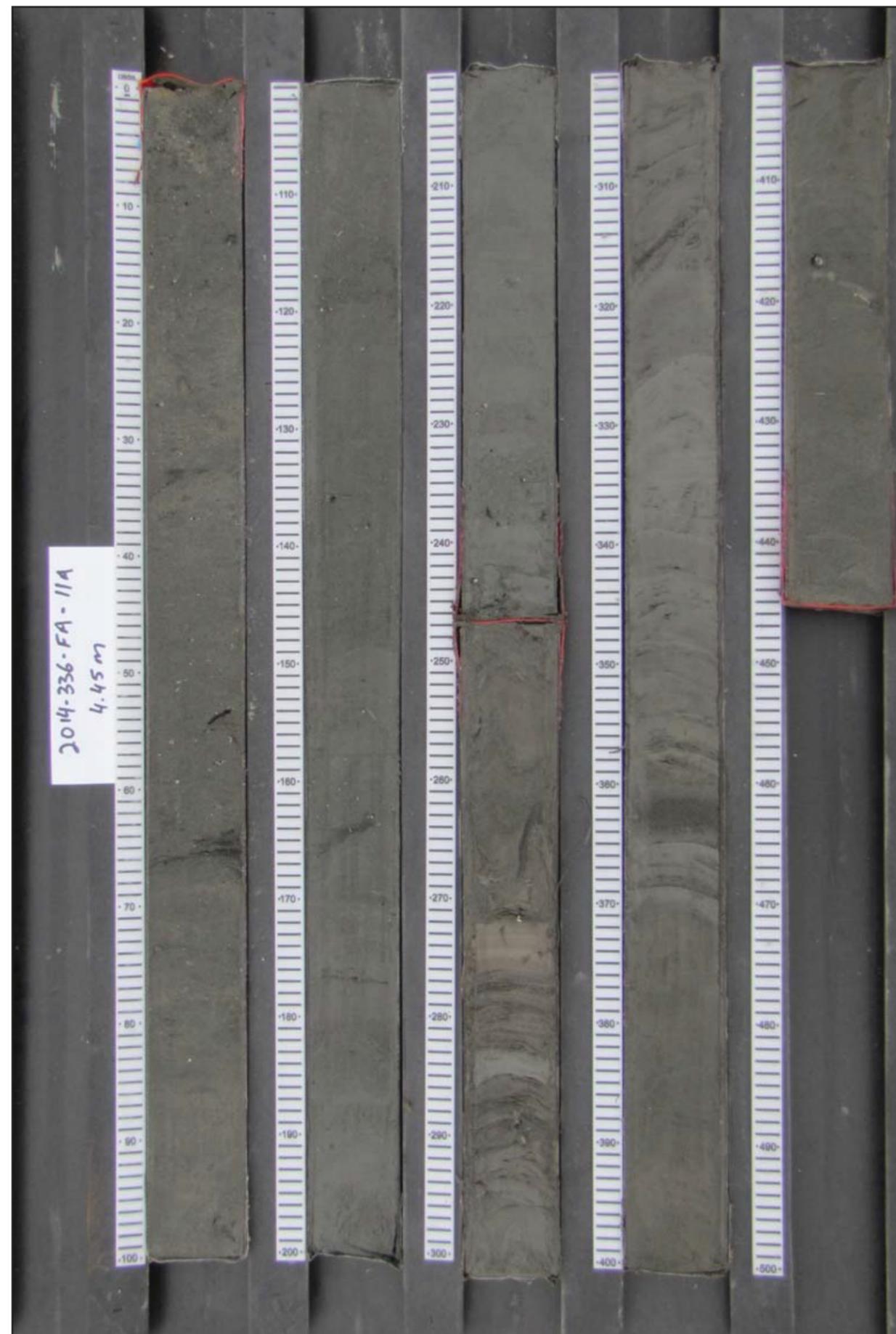
**LOCATION:** East-southeast of Breton Island, on seismic line 49  
**LATITUDE:** 29.44537 N    **LONGITUDE:** 89.09148 W  
**DATE CORED:** 01/18/2015    **DATE DESCRIBED:** 02/24/2015  
**WATER DEPTH (m):** 6.40    **ELEVATION (m):** -6.33  
**CORE LENGTH (m):** 4.45    **COMPACTION:** 27%



0-236 cm - SAND: dark olive-gray (5Y 3/2), very fine-grained, well sorted muddy sand; with minimal disseminated shell material; localized areas of higher shell content; and occasional small, black, organic mud clasts and thin organic-rich horizons; horizontal bedding evident but masked by bioturbation

236-377 cm - MUD and SAND: soft olive-gray (5Y 4/2) mud and clay with thin, dark gray (5Y 4/1), very fine-grained muddy sand interbeds; with a pale brown (2.5Y 7/4) clay horizon from 272 to 276 cm; minimal disseminated shell material; a dense shell-hash horizon at 289 cm; and occasional thin, organic-rich muddy sand horizons from 270 to 320 cm; horizontally bedded with moderate bioturbation

372-445 cm - SAND: dark olive-gray (5Y 3/2), very fine- to fine-grained, well sorted muddy sand; with scattered small, fragmented bivalves; a pale yellow (5Y 8/4) inclined clay lens; and an indurated clay clast from 415 to 420 cm; wavy bedding from 372 to 423 cm becomes mottled from 423 to 445 cm



Elevation (m)  
Depth in Core Barrel (m)

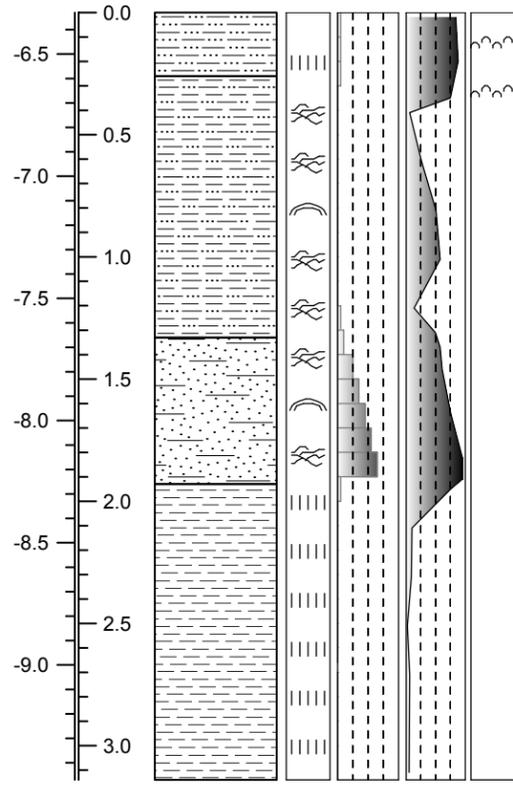
Lithology

Bedding & Deformation

% Sand Content (Visual Estimate)

% Sand Content (Calculated Value)

Features



# CORE ID: 2014-336-FA-11-OSL

LOCATION: East-southeast of Breton Island, on seismic line 49

LATITUDE: 29.44537 N      LONGITUDE: 89.09148 W

DATE CORED: 01/18/2015      DATE DESCRIBED: 06/02/2015

WATER DEPTH (m): 6.40      ELEVATION (m): -6.33

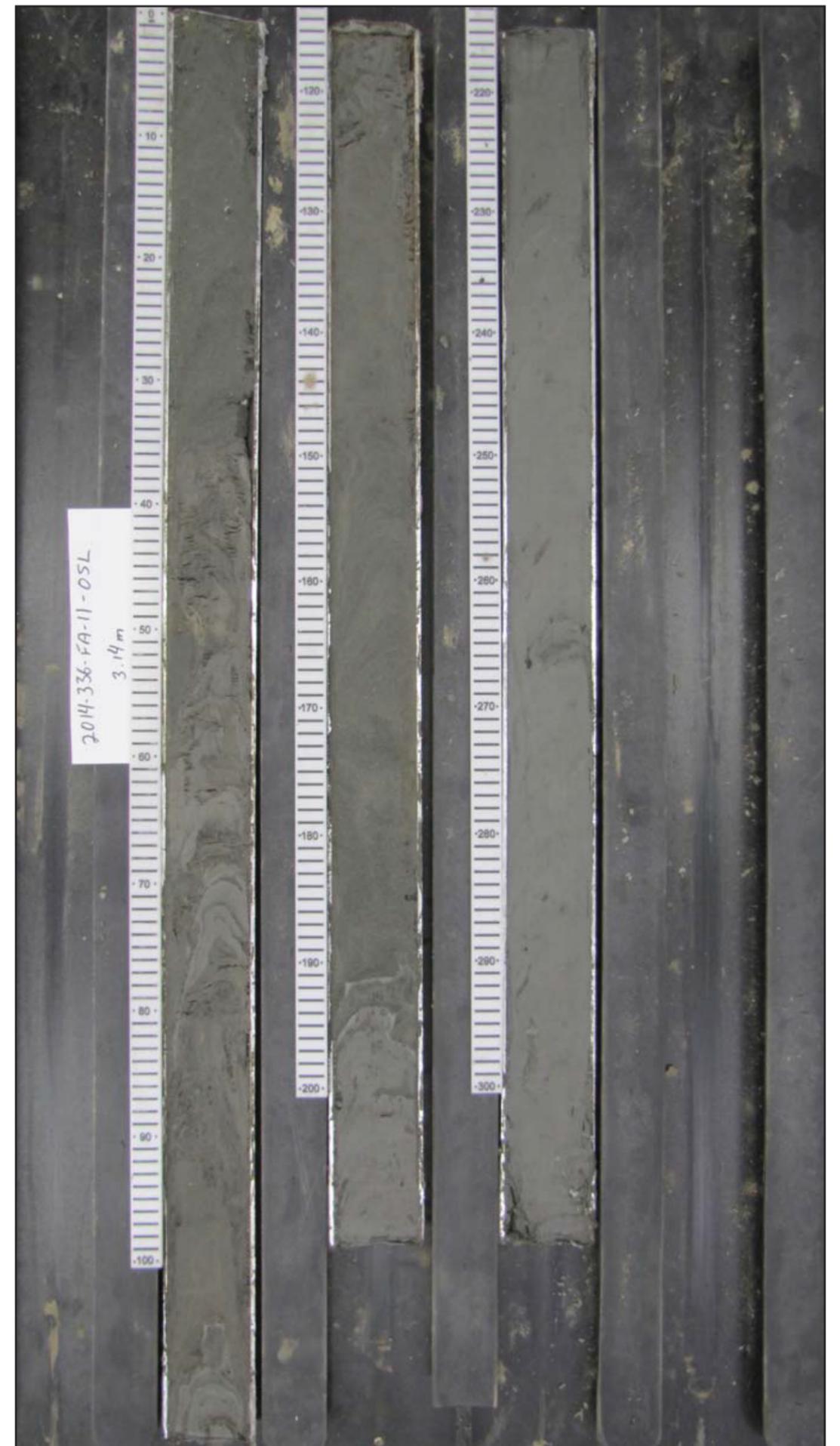
CORE LENGTH (m): 3.14      COMPACTION: Unavailable

0-26 cm - SILT: dark gray (2.5Y 4/1), mostly massive silt; with a faint, very thin, wavy organic horizon that extends diagonally from 21 to 30 cm and minimal disseminated shell material

26-133 cm - MUD and SILT: mottled, interbedded dark brownish-gray (2.5Y 4/2) mud and silt; with pale brown (2.5Y 7/3) clean clay lenses and no visible shell material

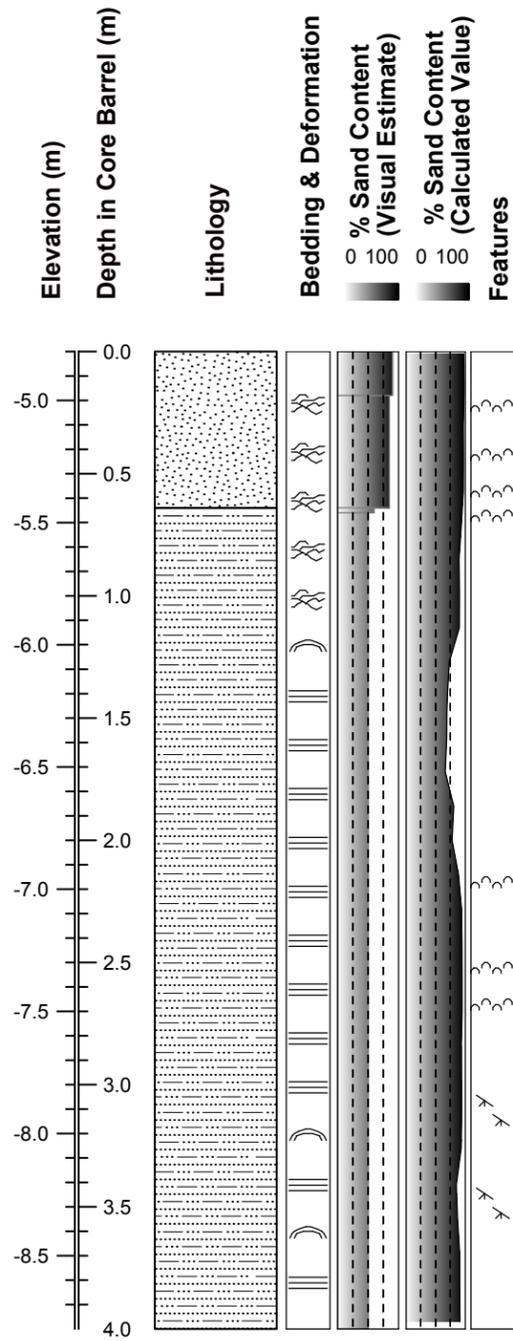
133-193 cm - SAND: dark brownish-gray (2.5Y 4/2), very fine-grained silty sand; with thin silt interbeds; silt content decreases down core; mostly mottled with deformed horizontal laminations from 150 to 170 cm

193-314 cm - CLAY: dark olive-gray (5Y 3/2), dense, massive, fat clay; with abundant small lenses and thin horizons of silt and very fine sand; no visible shell material; and occasional small organic flecks



# CORE ID: 2014-336-FA-12A

**LOCATION:** Southeast of Breton Island, at intersection of seismic lines 49 & 82  
**LATITUDE:** 29.42090 N      **LONGITUDE:** 89.13512 W  
**DATE CORED:** 01/18/2015      **DATE DESCRIBED:** 03/09/2015  
**WATER DEPTH (m):** 4.88      **ELEVATION (m):** -4.80  
**CORE LENGTH (m):** 4.00      **COMPACTION:** 34%



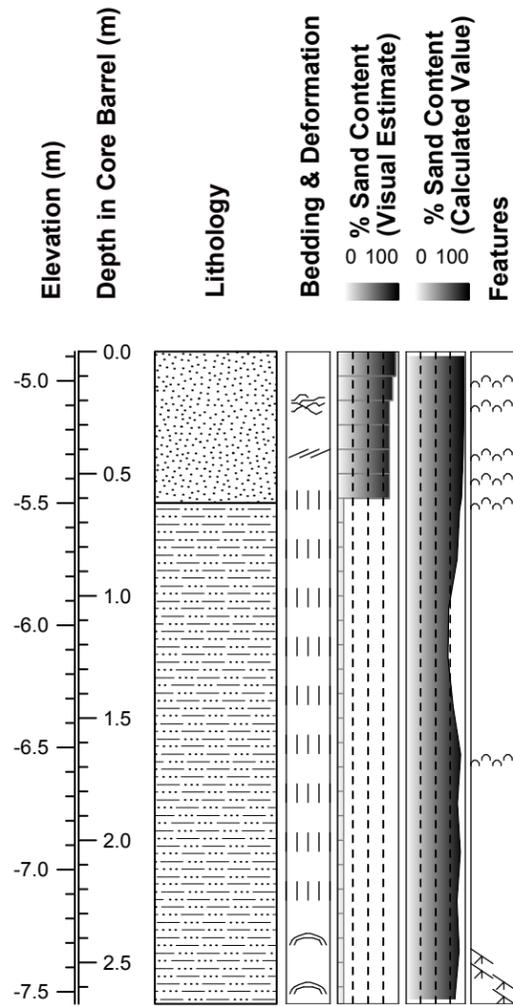
0-64 cm - SAND: mottled, light olive-brown (2.5Y 5/3) and dark gray (5Y 4/1), fine-grained, well sorted sand; with moderate disseminated shell fragments; a dense shell-hash cluster with small phosphatized pebbles at the basal contact; and moderate disseminated mica flecks

64-460 cm - SAND and SILT: dark olive-gray (5Y 3/2), very fine-grained, well sorted sand and silt; with minimal disseminated shell fragments; thin, organic-rich silt horizons at 310 and 338 cm; and occasional scattered organic flecks; faint horizontal bedding with mild deformation from coring



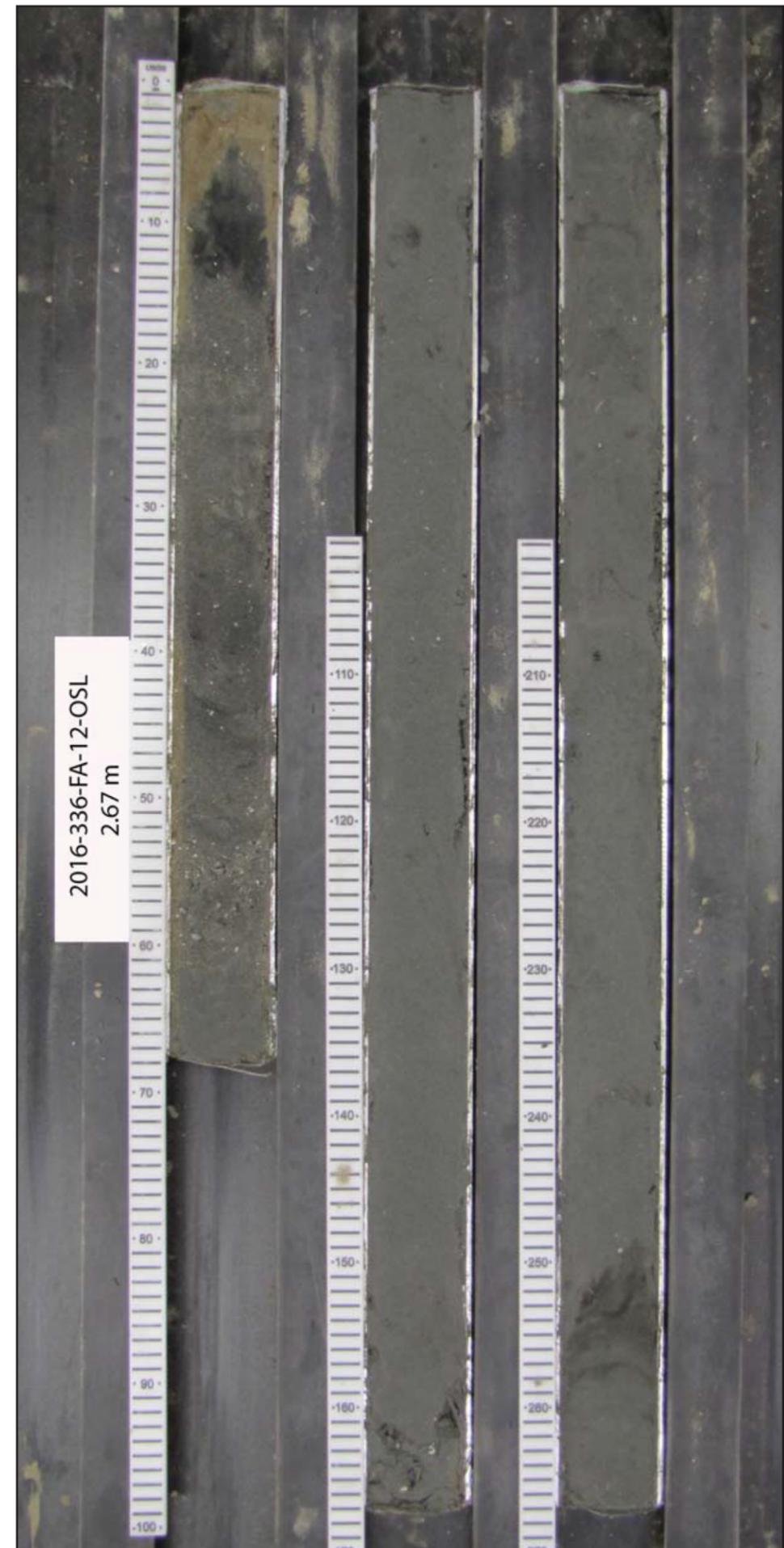
# CORE ID: 2014-336-FA-12-OSL

**LOCATION:** South-southeast of Breton Island, on the edge of the sand platform  
**LATITUDE:** 29.42090 N      **LONGITUDE:** 89.13512 W  
**DATE CORED:** 01/18/2015      **DATE DESCRIBED:** 06/02/2015  
**WATER DEPTH (m):** 4.80      **ELEVATION (m):** -4.88  
**CORE LENGTH (m):** 2.67      **COMPACTION:** Unavailable



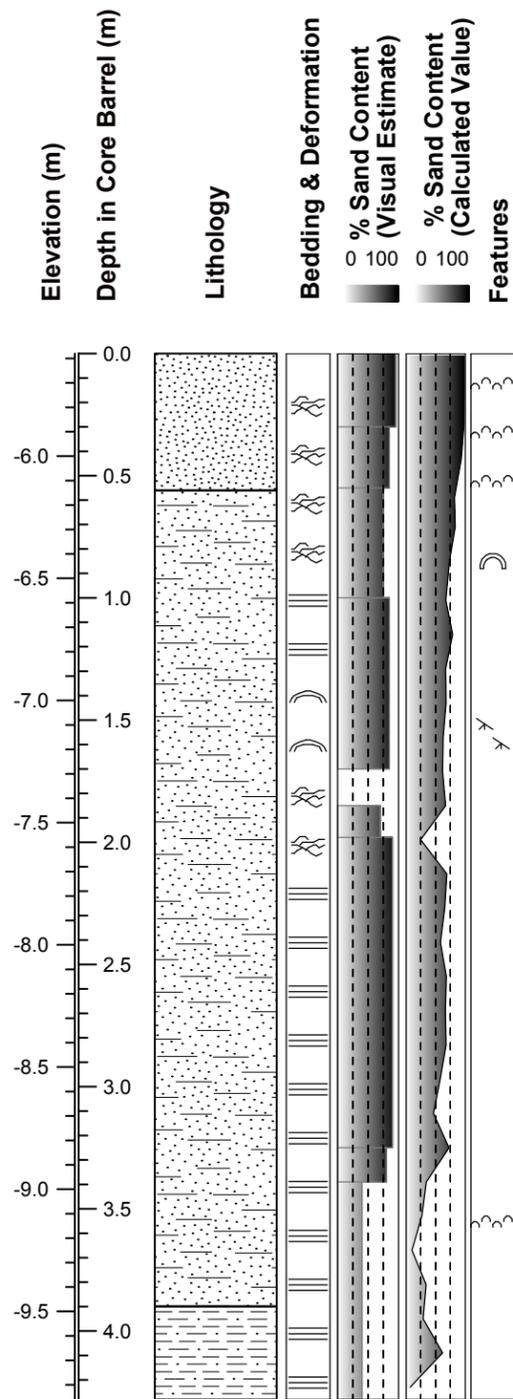
0-62 cm - SAND: light yellowish-brown (2.5Y 6/4) and gray (5Y 5/1), fine- to medium-grained, well sorted, massive sand; with very dark gray to black organic or heavy minerals surrounded by oxidized sediment from 5 to 15 cm; minimal disseminated shell material, and locally dense shell-hash clusters and horizons including a thick shell-hash deposit from 52 to 60 cm; core drag down the sides to 18 cm

62-267 cm - SILT: olive gray (5Y 5/2), massive silt; with occasional small, dark gray, organic-rich muddy clasts; horizontally bedded, brown, organic-rich mud horizons exhibiting deformation from coring from 250 to 260 cm; and minimal disseminated mica flecks



# CORE ID: 2014-336-FA-13B

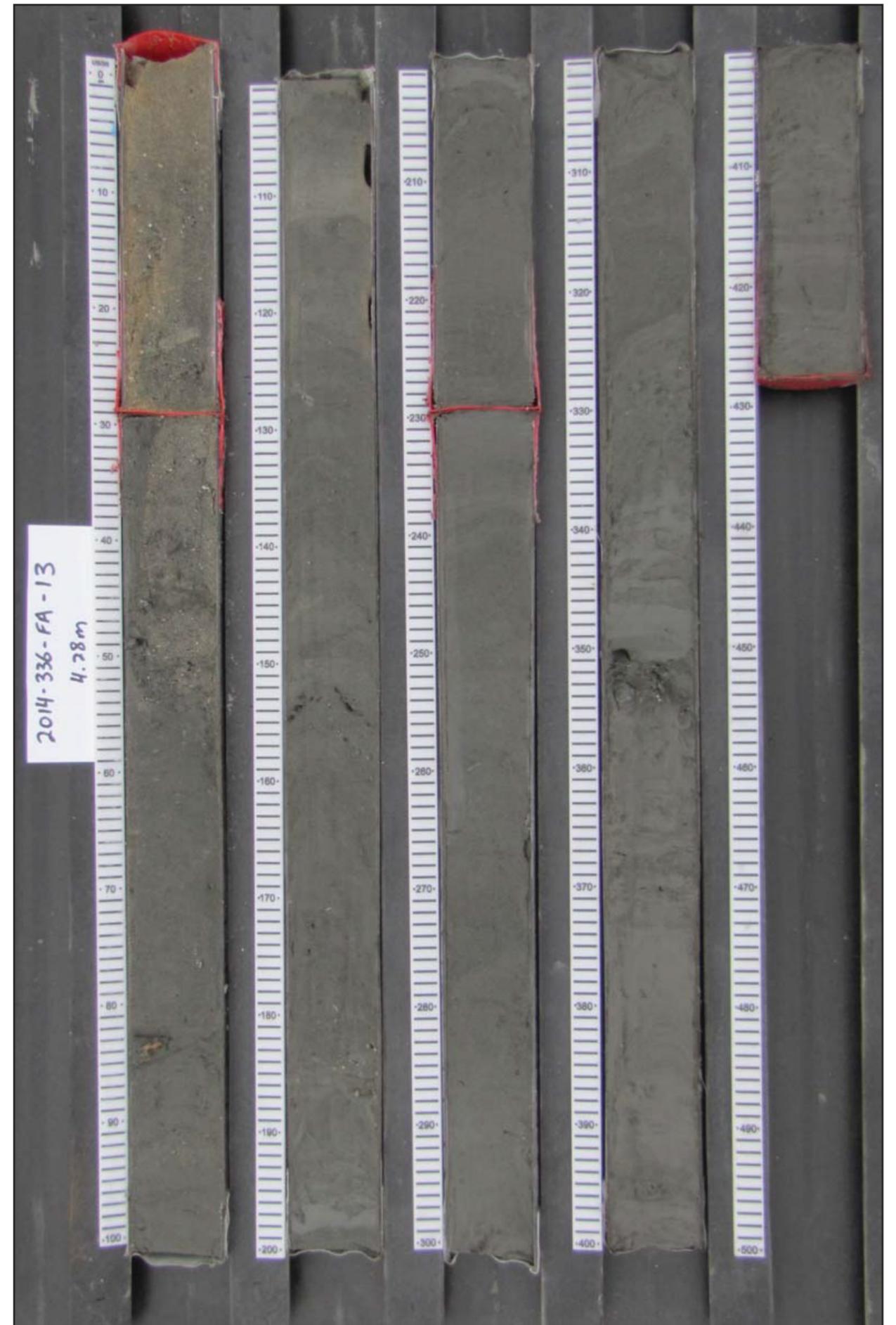
**LOCATION:** Southeast of Breton Island, on seismic line 40  
**LATITUDE:** 29.43820 N      **LONGITUDE:** 89.12732 W  
**DATE CORED:** 01/18/2015      **DATE DESCRIBED:** 02/24/2015  
**WATER DEPTH (m):** 5.49      **ELEVATION (m):** -5.58  
**CORE LENGTH (m):** 4.28      **COMPACTION:** 30%



0-56 cm - SAND: mottled, light yellowish-brown (2.5Y 6/4), fine- to medium-grained, well sorted sand; with occasional small muddy sand-filled burrows; moderate disseminated shell fragments; and a relatively sharp angular basal contact

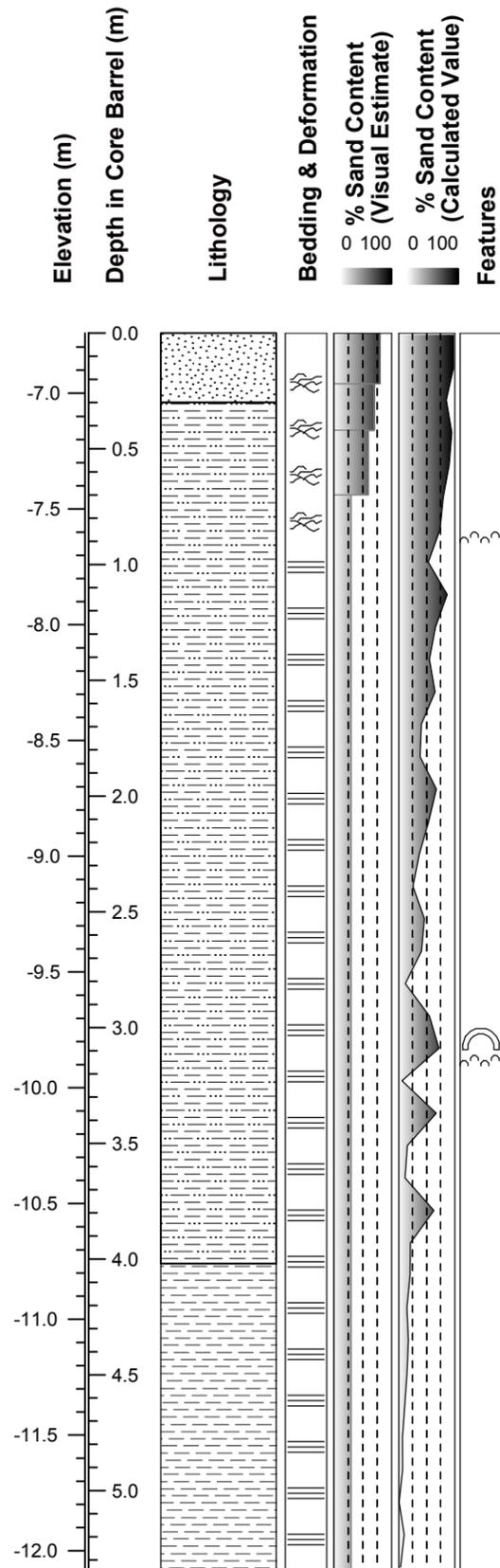
56-390 cm - SAND: dark olive-gray (5Y 3/2), very fine-grained, well sorted muddy sand; with minimal disseminated shell material; localized dense shell-hash horizons and small clusters; a woody organic horizon at 157 cm; mud content increases down core, with clean, olive-gray (5Y 4/2) mud interbeds from 187 to 200 cm

390-428 cm - MUD: dark olive-gray (5Y 3/2) sandy mud with thin muddy sand interbeds; minimal disseminated shell material except for moderately dense shell hash from 350 to 355 cm; horizontal bedding evident in areas of reduced bioturbation



# CORE ID: 2014-336-FA-14

**LOCATION:** East-southeast of Breton Island, near west end of seismic line 14  
**LATITUDE:** 29.45408 N      **LONGITUDE:** 89.13562 W  
**DATE CORED:** 01/13/2015      **DATE DESCRIBED:** 03/09/2015  
**WATER DEPTH (m):** 7.32      **ELEVATION (m):** -6.74  
**CORE LENGTH (m):** 5.34      **COMPACTION:** 12%



0-30 cm - SAND: mottled, grayish-brown (2.5YR 5/2), fine-grained, well sorted sand; with minimal disseminated shell fragments

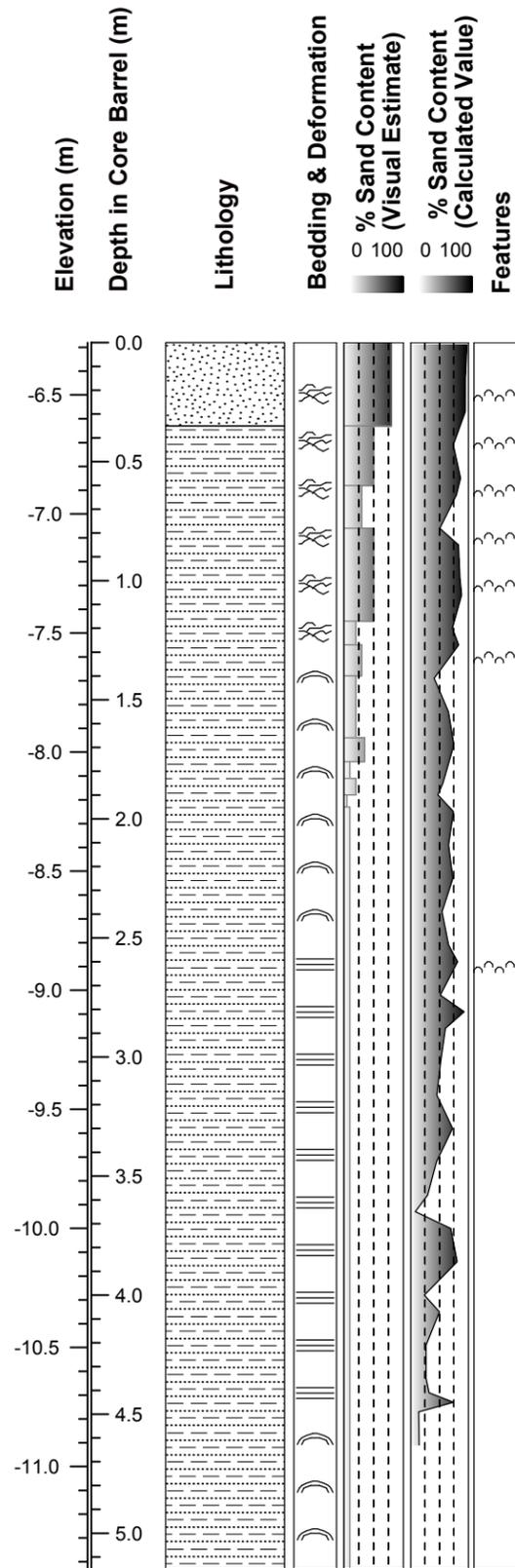
30-402 cm - MUD: grayish-brown (2.5Y 5/2) mud with thin, silt to very fine-grained sand laminations; silt and sand content decreases down core; minimal disseminated shell fragments; an intact, inarticulate bivalve (*sp. Mercenaria*) at 305 cm; and occasional thin, brown, organic-rich mud horizons

402-534 cm - CLAY: interbedded dark grayish-brown (2.5Y 4/2) and light yellowish-brown (2.5Y 6/3) clay; with thin silty laminations and no visible shell material



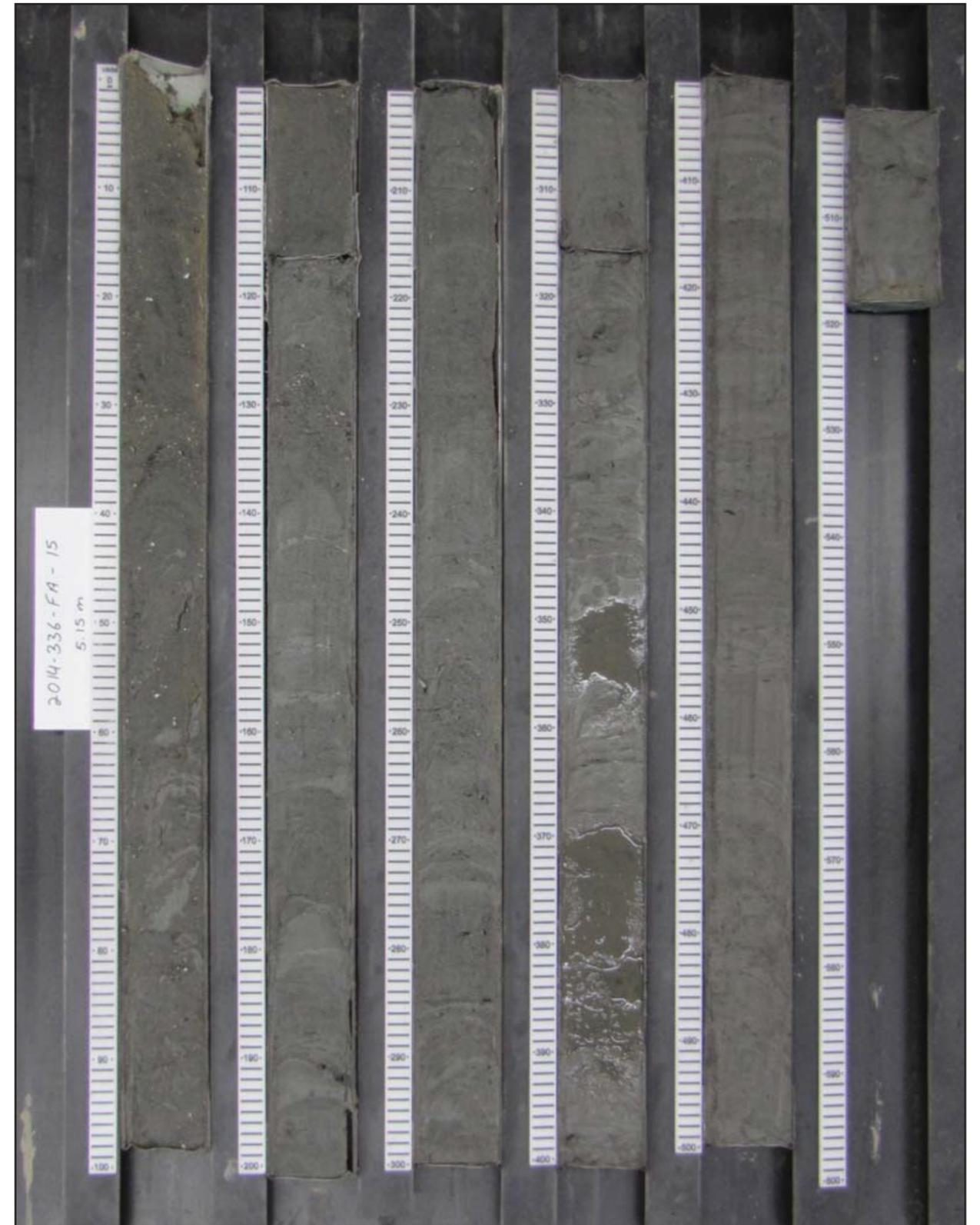
# CORE ID: 2014-336-FA-15

**LOCATION:** Southeast of Breton Island, near intersection of seismic lines 20 & 82  
**LATITUDE:** 29.45072 N      **LONGITUDE:** 89.13330 W  
**DATE CORED:** 01/13/2015      **DATE DESCRIBED:** 03/09/2015  
**WATER DEPTH (m):** 6.71      **ELEVATION (m):** -6.28  
**CORE LENGTH (m):** 5.15      **COMPACTION:** 15%



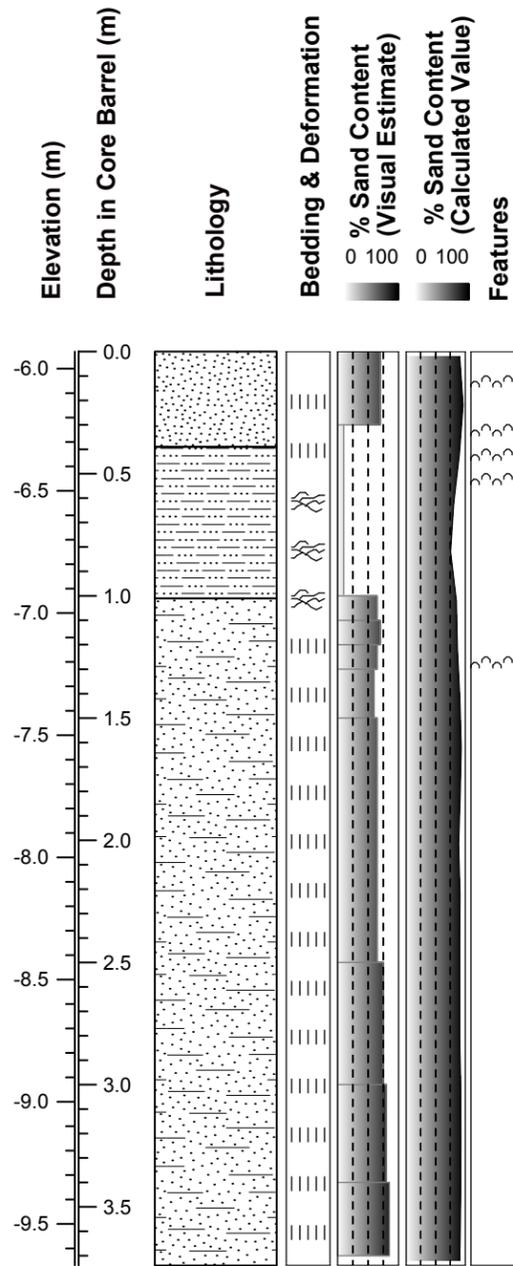
0-35 cm - SAND: mottled, dark brownish-gray (2.5Y 4/2), fine- to medium-grained, well sorted sand; with moderate disseminated shell fragments and small, very dark gray (5Y 2/1), organic-rich mud lenses and flecks

35-515 cm - MUD, SAND and SILT: interbedded dark olive-gray (5Y 3/2) very fine-grained sand, silt, and mud; mud content increases down-core; with minimal disseminated shell material; dense shell-hash horizons at 125 and 260 cm; and occasional small, black organic clasts and flecks; mostly horizontal bedding with mild bioturbation



# CORE ID: 2014-336-FA-16-OSL

**LOCATION:** Southeast of Breton Island, near intersection of seismic lines 54 & 82  
**LATITUDE:** 29.41555 N      **LONGITUDE:** 89.13092 W  
**DATE CORED:** 01/18/2015      **DATE DESCRIBED:** 06/01/2015  
**WATER DEPTH (m):** 6.10      **ELEVATION (m):** -5.93  
**CORE LENGTH (m):** 3.74      **COMPACTION:** Unavailable



0-39 cm - SAND: dark grayish-brown (2.5Y 4/2), very fine-grained, well sorted, massive sand; with moderate disseminated shell fragments and moderate disseminated mica flecks; shell content increases down-core from 35 to 39 cm

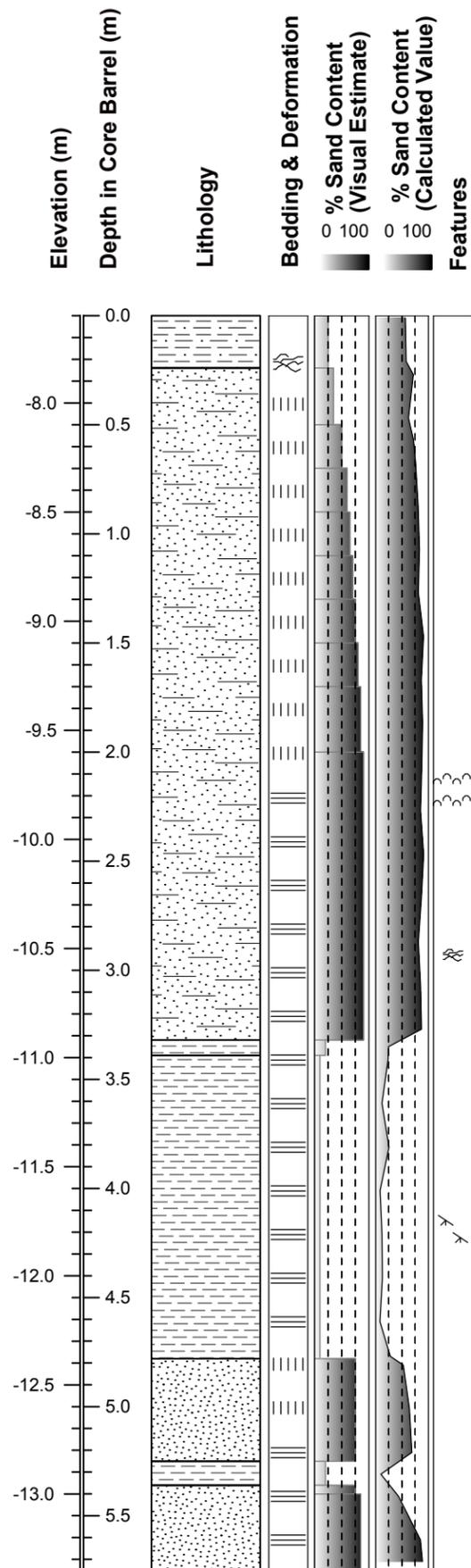
39-101 cm - SILT: mottled, dark gray (2.5Y 4/1), relatively clean silt; with minimal disseminated shell material and moderate disseminated mica flecks

101-374 cm - SAND: olive-gray (5Y 5/2), very fine-grained, well sorted, massive silty sand; with sparse small shell fragments and mica flecks and occasional thin sandy mud lenses; disturbed sediment from 162 to 169 cm is due to a FedEx label embedded in the sediment; disturbed sediment from 305 to 315 cm is due to the core catcher becoming dislodged from the base of the barrel



# CORE ID: 2014-336-FA-17

**LOCATION:** South of Breton Island, near intersection of seismic lines 46 & 80  
**LATITUDE:** 29.41438 N      **LONGITUDE:** 89.15583 W  
**DATE CORED:** 01/13/2015      **DATE DESCRIBED:** 03/19/2015  
**WATER DEPTH (m):** 7.62      **ELEVATION (m):** -7.60  
**CORE LENGTH (m):** 5.76      **COMPACTION:** 6%



0-24 cm - MUD: dark brownish-gray (2.5Y 4/2), soft silty mud; with scattered shell fragments and thin, black organic-rich horizons and lenses

24-332 cm - MUDDY SAND: dark olive-gray (5Y 3/2) muddy sand grades down-core into olive-gray (5Y 4/2) very fine-grained, well sorted sand; mud content decreases down-core; with minimal disseminated shell fragments; occasional thin shell-hash horizons; occasional small organic-rich mud lenses and flecks; and an organic-rich mud horizon containing small woody fragments at 292 cm; horizontally bedded with light bioturbation

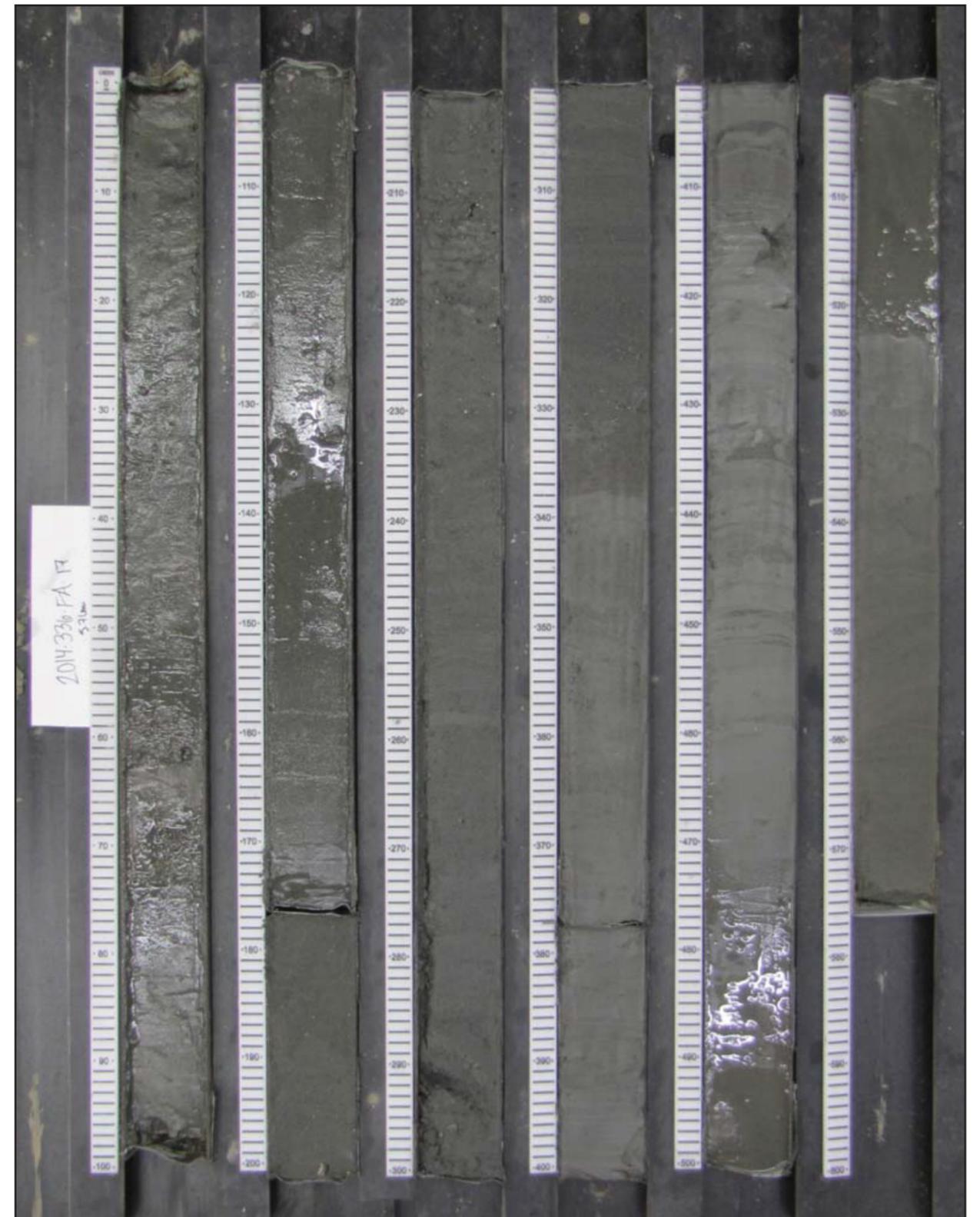
332-339 cm - MUD: grayish-brown (2.5Y 5/2), slightly organic-rich mud; with small organic flecks; faint horizontal bedding; and a sharp basal contact

339-478 cm - MUD: olive-gray (5Y 4/2), relatively dense mud; with thin, silt to very fine-grained sand horizons; minimal disseminated shell fragments; and a degraded brown woody fragment at 417 cm

478-525 cm - SAND: olive-gray (5Y4/2), very fine-grained, well sorted, horizontally laminated sand; with thin heavy mineral horizons and no visible shell material

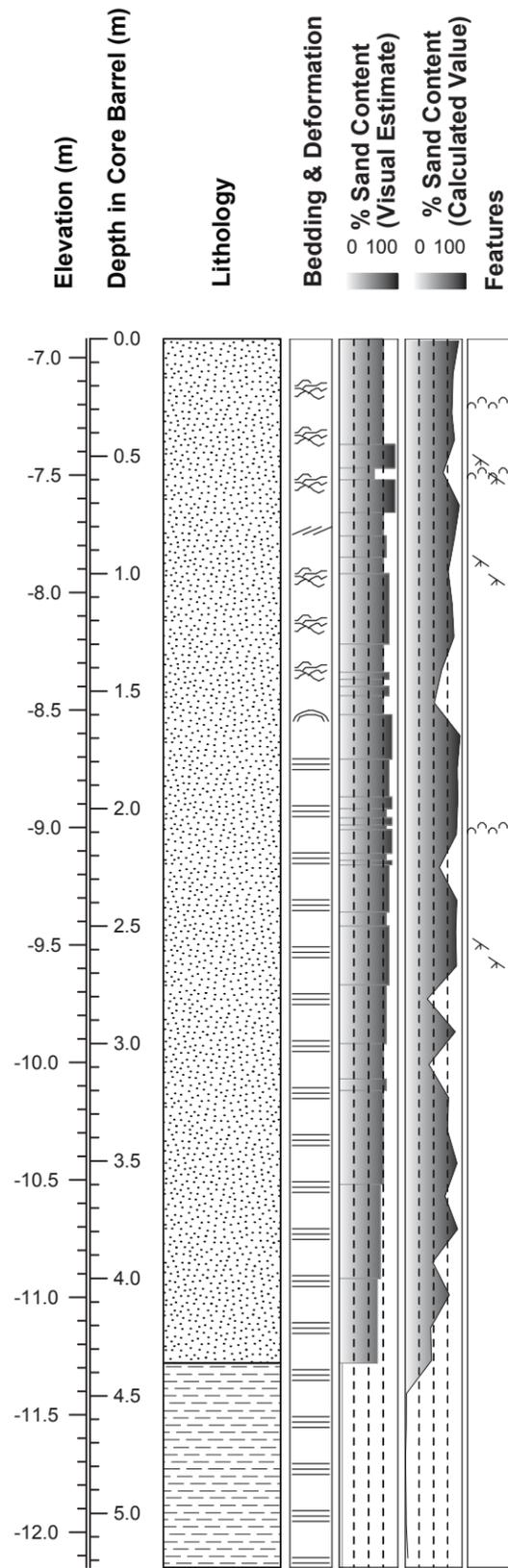
525-536 cm - MUD: olive-gray (5Y 4/2), soft, massive mud; no visible shell material

536-576 cm - SAND: olive-gray (5Y 4/2), very fine-grained, well sorted, horizontally laminated, slightly muddy sand; with no visible shell material; bedding is deformed from coring and mild bioturbation



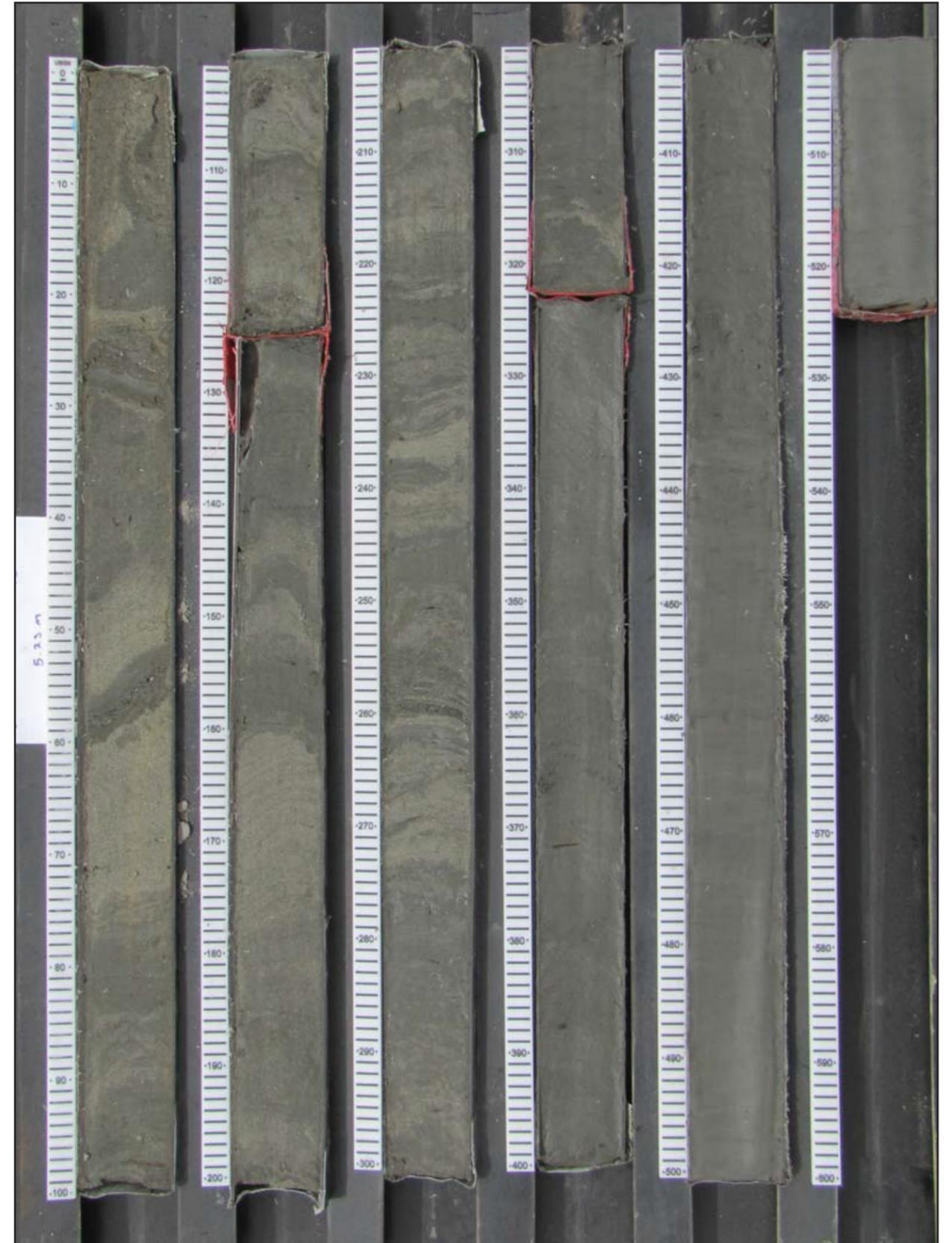
# CORE ID: 2014-336-FA-18

**LOCATION:** East of Breton Island, near intersection of seismic lines 8 & 22  
**LATITUDE:** 29.46292 N      **LONGITUDE:** 89.09572 W  
**DATE CORED:** 01/1/2015      **DATE DESCRIBED:** 02/27/2015  
**WATER DEPTH (m):** 7.32      **ELEVATION (m):** -6.92  
**CORE LENGTH (m):** 5.23      **COMPACTION:** 14%



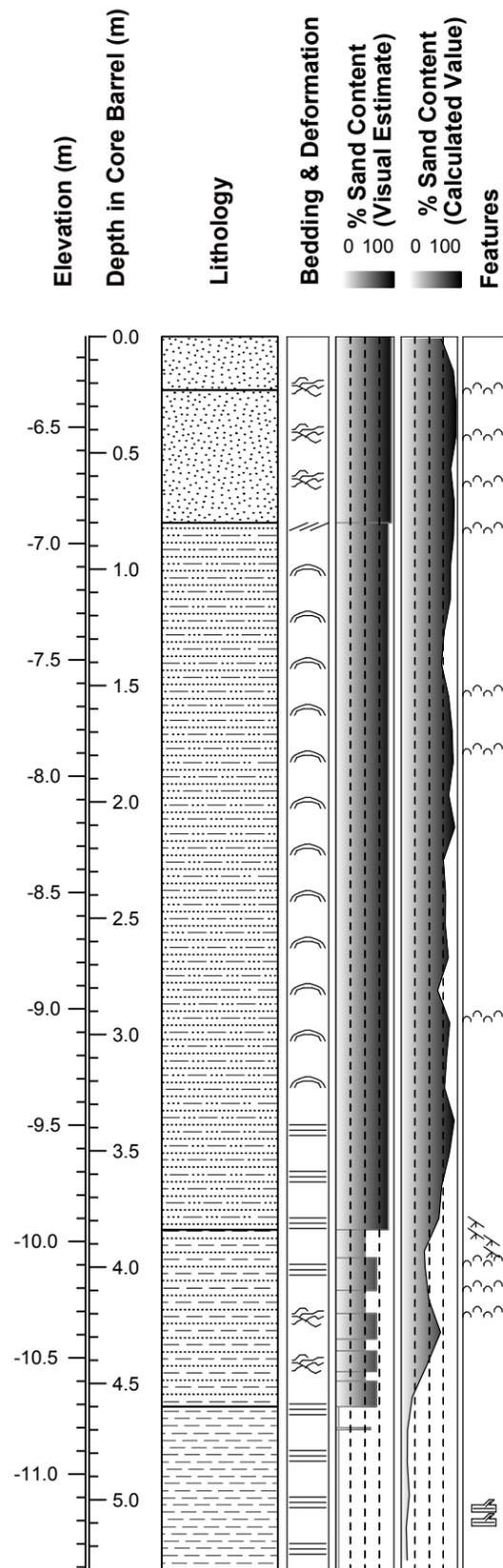
0-436 cm - SAND: light olive-gray (5Y 6/2), clean, well sorted, very fine- to fine-grained sand interbedded with dark olive-gray (5Y 3/2) muddy sand and silt; interbeds become muddier down-core; with organic-rich mud horizons at 55, 98, and 261 cm; very little disseminated shell material; and thin shell-hash horizons at 56 and 206 cm; bedding is predominantly horizontal with moderate bioturbation and deformation from coring

436-523 cm - CLAY: dark olive-gray (5Y 3/2), dense, horizontally laminated, fat clay; with minimal disseminated very small shell fragments



# CORE ID: 2014-336-FA-19

**LOCATION:** East of Breton Island, near intersection of seismic lines 14 & 22  
**LATITUDE:** 29.45490 N      **LONGITUDE:** 89.09430 W  
**DATE CORED:** 01/17/2015      **DATE DESCRIBED:** 02/22/2015  
**WATER DEPTH (m):** 6.10      **ELEVATION (m):** -6.11  
**CORE LENGTH (m):** 5.30      **COMPACTION:** 13%



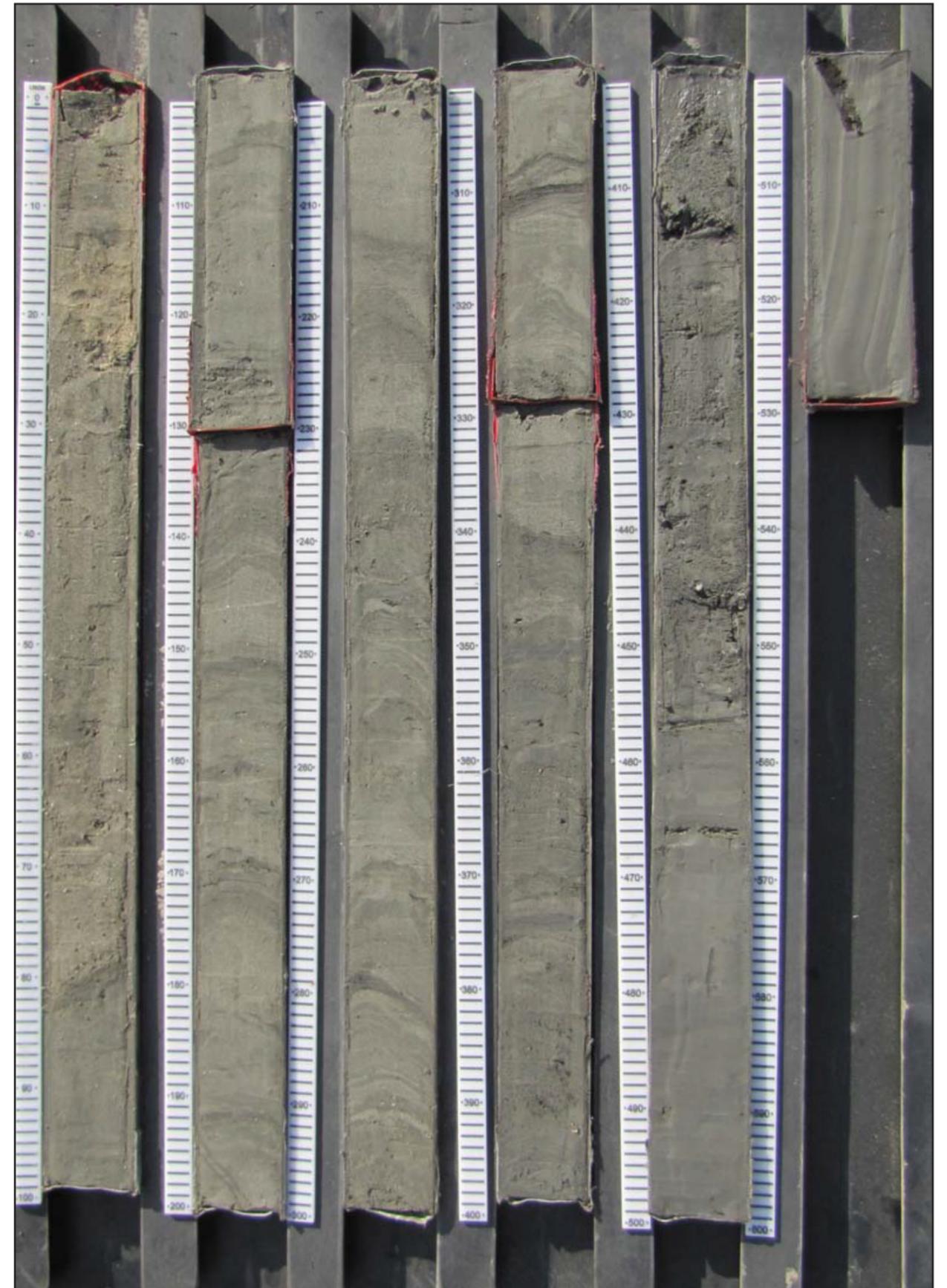
0-23 cm - SAND, mottled, pale brown (2.5Y 7/3), well sorted, fine- to medium-grained, relatively clean sand; with occasional small, dark gray (5Y 3/1), organic-rich mud clasts or infilled burrows

23-80 cm - SAND, mottled, olive-gray (5Y 5/2) to dark gray (5Y 4/1), fine-grained, well sorted, relatively clean sand; with occasional small mud clasts; minimal disseminated shell fragments; and sharp angular basal contact

80-384 cm - SAND and SILT, gray (5Y 6/1), fine-grained, well sorted sand interbedded with dark gray (5Y 4/1) silty horizons; interbeds become muddier from 350 to 384 cm; with very little disseminated shell fragments; occasional thin-shell hash horizons; and scattered organic flecks or thin organic-rich horizons; bedding is mostly horizontal with deformation from coring

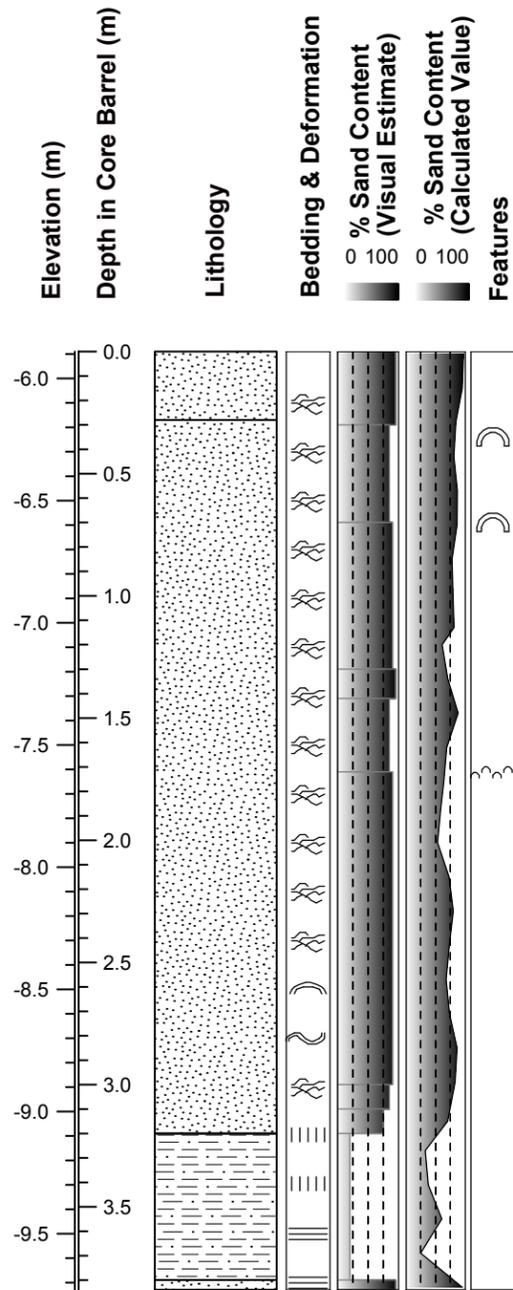
384-460 cm - SAND and MUD: light olive-gray (5Y6/2) sand interbedded with dark olive-gray (5Y 4/2) mud and muddy sand; with moderate disseminated shell material; dense shell-hash horizons at 406 and 417 cm; and scattered woody organic flecks

460-530 cm - CLAY: dark olive-gray (5Y 3/2), horizontally laminated, fat clay with thin sandy horizons; small sandy lenses; and a large, vertically oriented, woody organic clast from 502 to 510 cm



# CORE ID: 2014-336-FA-20

**LOCATION:** East-southeast of Breton Island, on seismic line 16  
**LATITUDE:** 29.45178 N      **LONGITUDE:** 89.11340 W  
**DATE CORED:** 01/13/2015      **DATE DESCRIBED:** 02/20/2015  
**WATER DEPTH (m):** 6.40      **ELEVATION (m):** -5.89  
**CORE LENGTH (m):** 3.84      **COMPACTION:** 38%



0-28 cm - SAND: mottled, very pale yellow (10YR 7/3), well sorted, fine- to medium-grained, clean sand; with moderate very small disseminated shell fragments; abundant, very small mica flecks; and a slightly angular basal contact

28-320 cm - SAND: gray (10YR 6/1), well sorted, very fine-grained, slightly muddy sand with thin silt horizons; mud content decreases down-core; with abundant disseminated mica flecks; moderate disseminated small shell fragments; occasional small mud clasts; and a clean, fine-grained sand deposit from 128 to 142 cm; shell content decreases down-core; horizontal bedding with deformation from coring

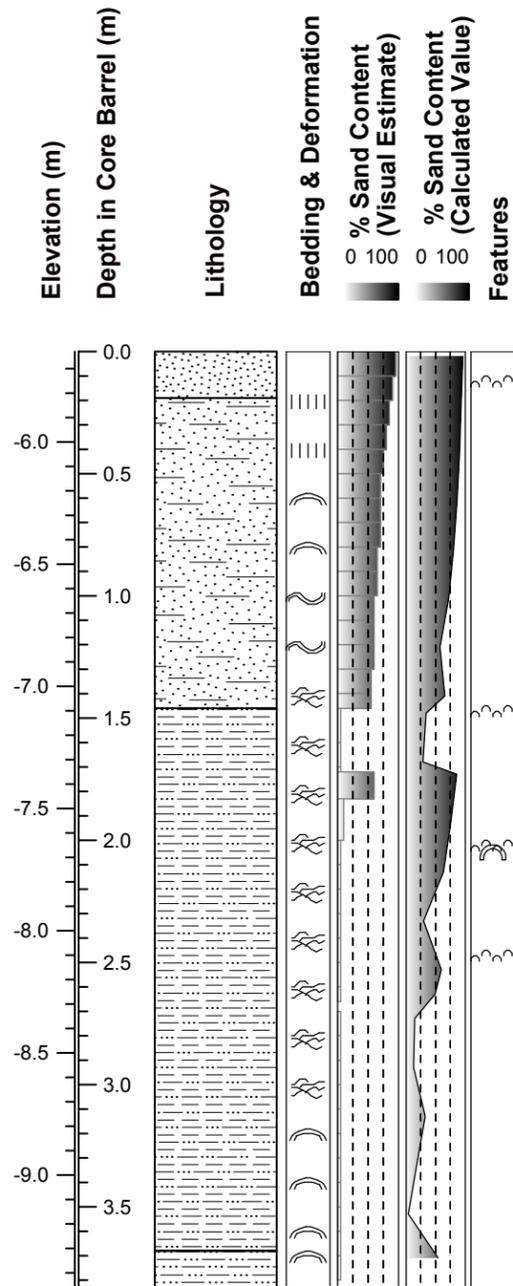
320-380 cm - MUD: dark gray (10YR 4/1) silty mud with thin, silt to very fine-grained sand horizons; mud content increases down core; with heavy mica content; minimal disseminated very small shell fragments; a very thin, organic-rich mud horizon at 370 cm; and a sharp basal contact

380-384 cm - SAND: light brownish-gray (10YR 6/2), well sorted, fine- to medium-grained, slightly muddy sand; with moderate disseminated mica flecks and a single visible shell fragment at 382 cm



# CORE ID: 2014-336-FA-21-OSL

**LOCATION:** Southeast of Breton Island, on seismic line 50  
**LATITUDE:** 29.43427 N      **LONGITUDE:** 89.10822 W  
**DATE CORED:** 01/18/2015      **DATE DESCRIBED:** 06/02/2015  
**WATER DEPTH (m):** 5.79      **ELEVATION (m):** -5.63  
**CORE LENGTH (m):** 3.83      **COMPACTION:** Unavailable

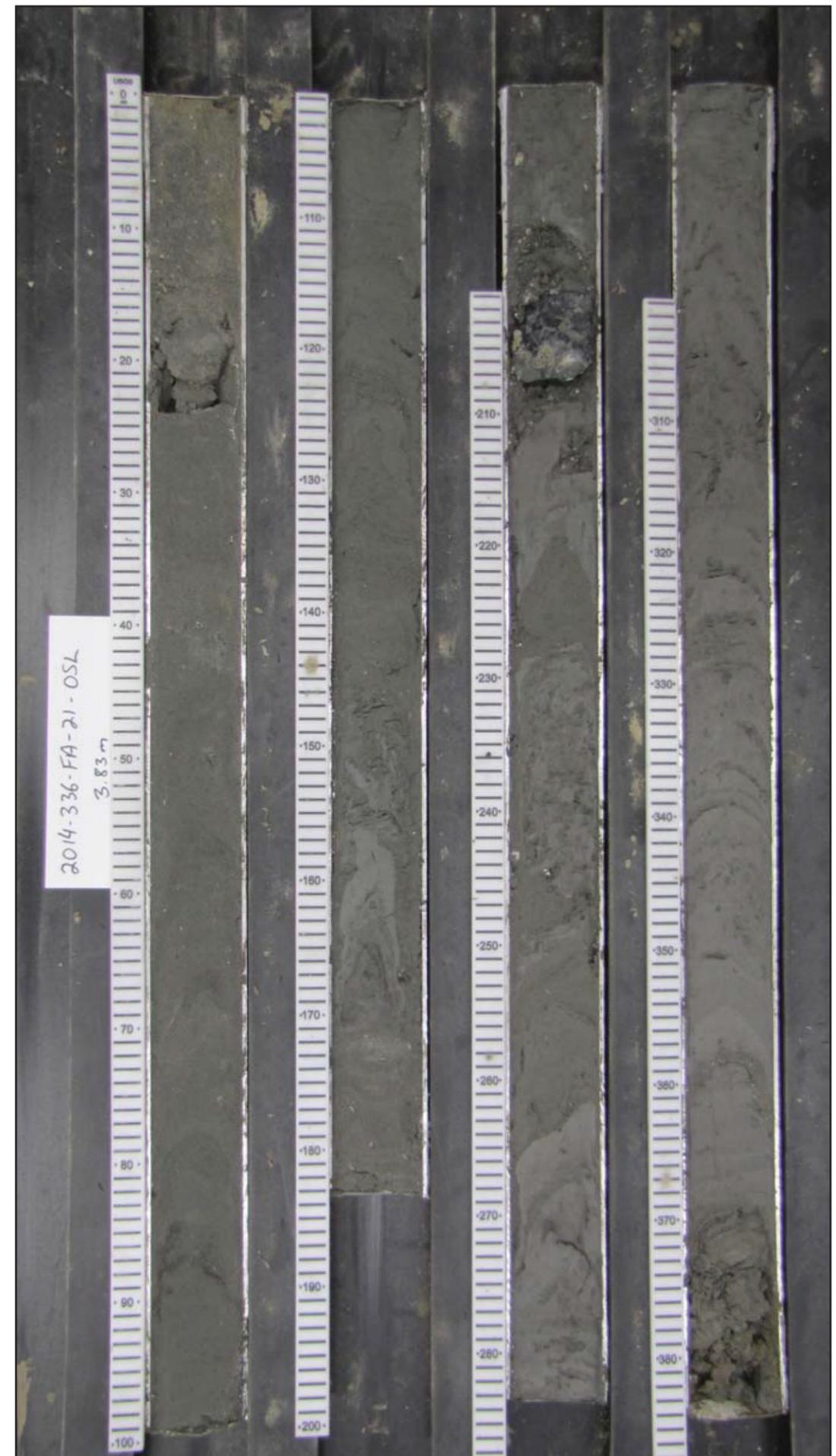


0-19 cm - SAND: olive-gray (5Y 5/2), fine- to medium-grained, well sorted, massive sand; with moderate disseminated shell fragments and minimal scattered mica flecks

19-146 cm - SAND: dark olive-gray (5Y 3/2), very fine-grained, well sorted silty sand; silt content increases down-core; with minimal disseminated shell fragments and mica flecks; occasional thin organic-rich horizons; and small organic clasts; horizontal bedding evident with moderate deformation from coring from 50 to 91 cm; wavy bedding from 91 to 120 cm; and flaser bedding from 121 to 146 cm;

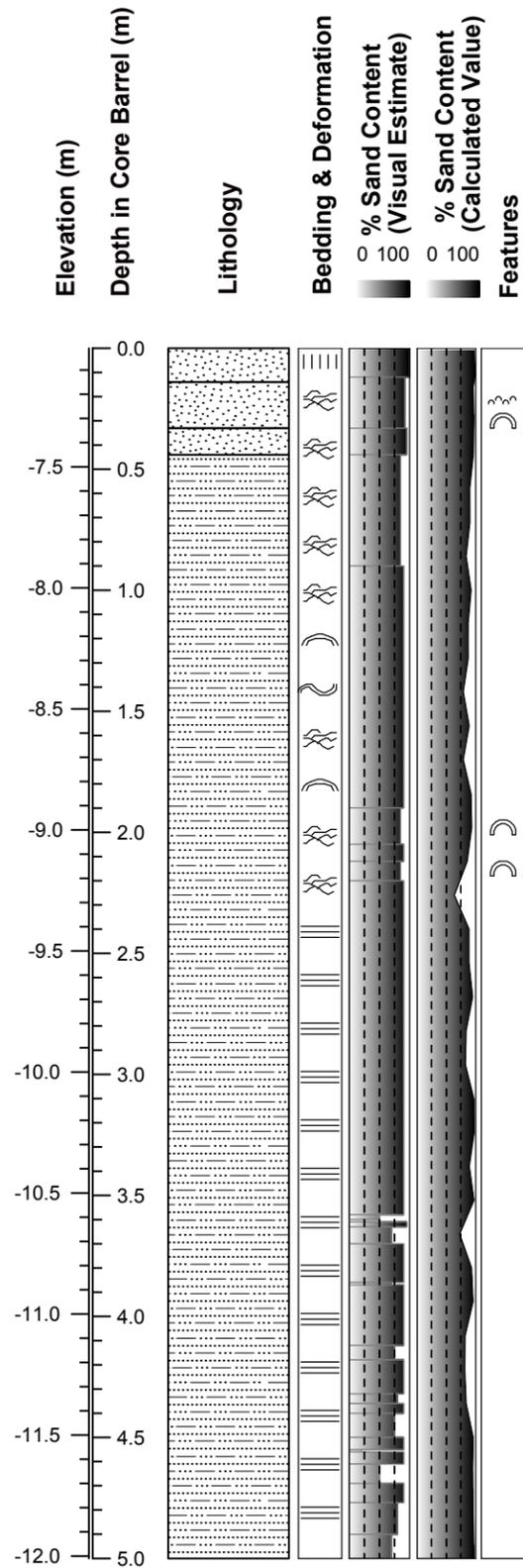
146-368 cm - SILT and MUD: brownish-gray (2.5Y 5/2) silt interbedded with soft, gray (2.5Y 5/1) mud and clay; with a massive, very fine-grained sand layer from 172 to 183 cm; a large lag deposit from 196 to 210 cm consisting of dense shell hash and a large, phosphatized oyster shell; thicker silt interbeds become thinner silt horizons as mud content increases down-core from 270 to 366 cm

368-383 cm - SILT: dark brown (10YR 3/3) silt with thin, black, horizontally bedded lamintions possibly representing heavy mineral horizons



# CORE ID: 2014-336-FA-22

**LOCATION:** East of Breton Island, on seismic line 6  
**LATITUDE:** 29.46477 N      **LONGITUDE:** 89.11708 W  
**DATE CORED:** 01/17/2015 W      **DATE DESCRIBED:** 02/23/2015  
**WATER DEPTH (m):** 7.62      **ELEVATION (m):** -7.01  
**CORE LENGTH (m):** 5.0      **COMPACTION:** 18%

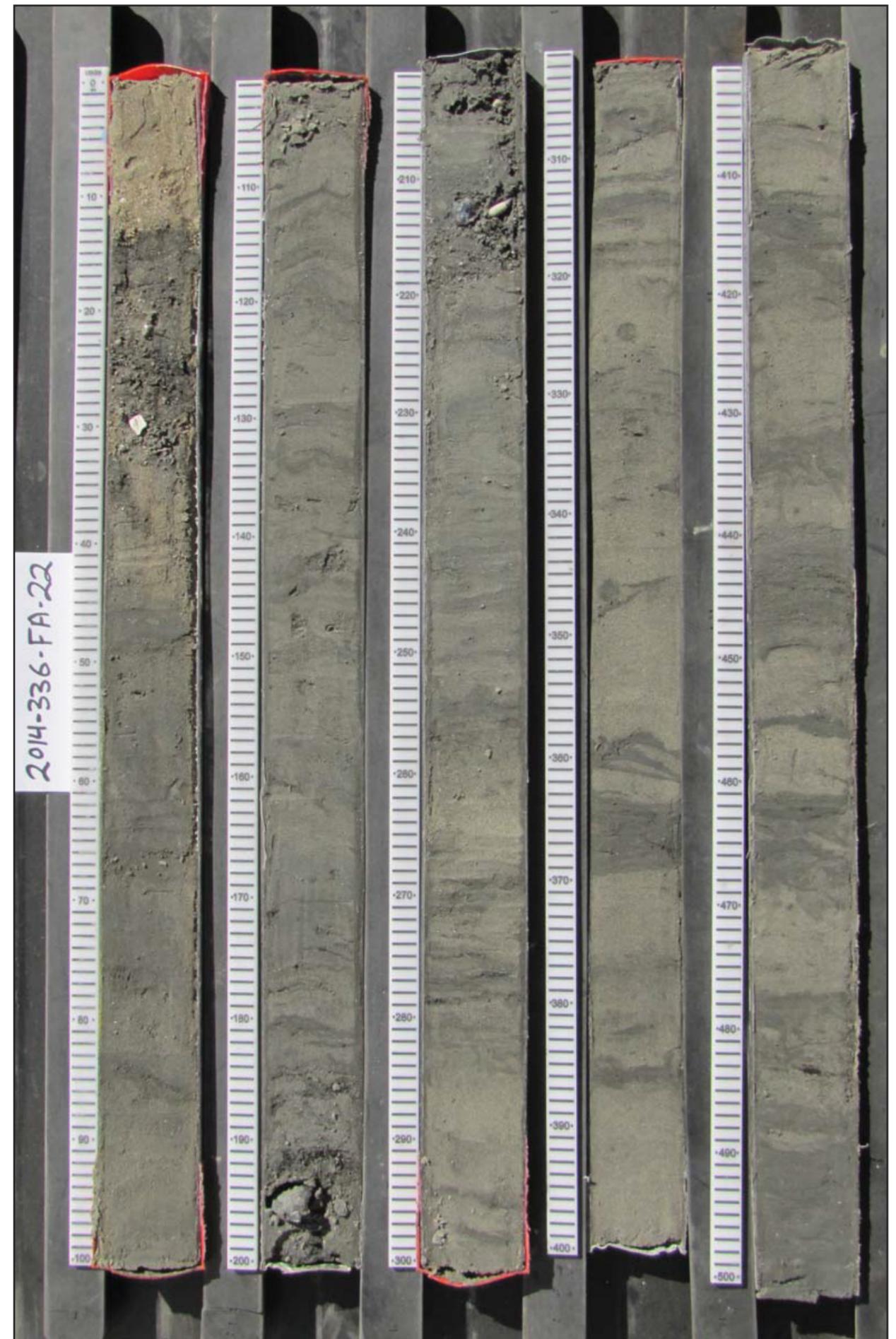


0-14 cm - SAND: very pale brown (10YR 7/4), well sorted, medium-grained, massive sand; with small, fragmented and intact, inarticulate bivalves and a sharp horizontal basal contact

14-33 cm - SAND: dark gray (5Y 4/1), fine-grained, well sorted, slightly muddy sand; with small mud clasts and thin muddy laminations; abundant visible shell fragments and very small mica flakes; and a relatively sharp basal contact

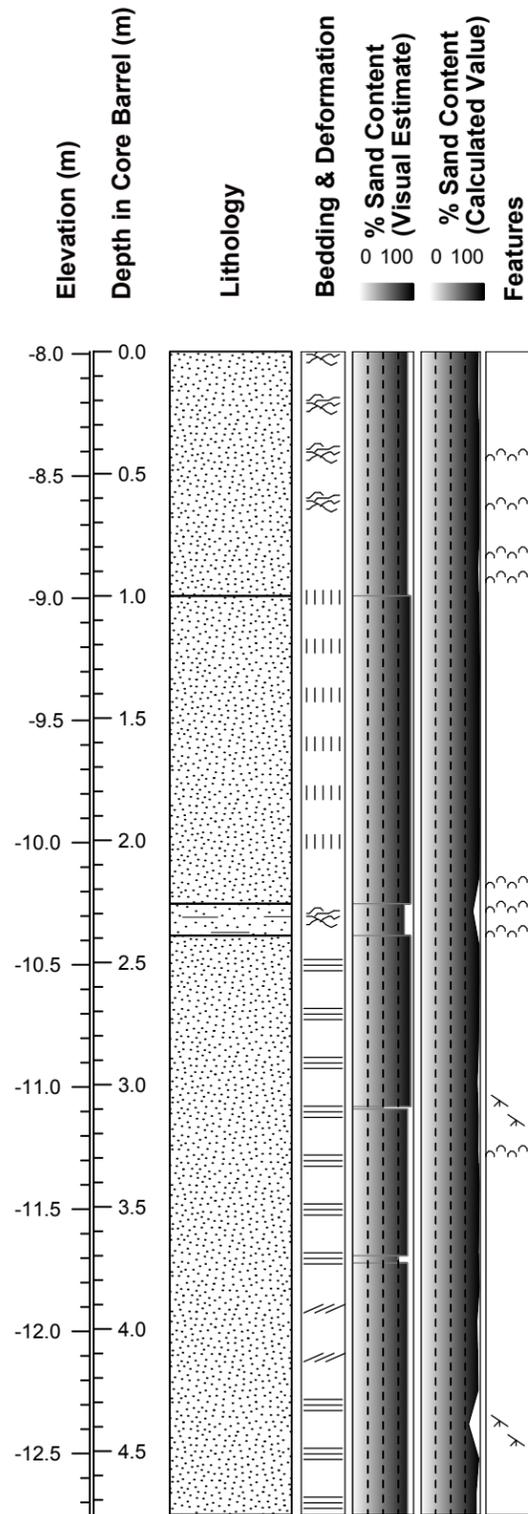
33-44 cm - SAND: grayish-brown (10YR 4/2), fine-grained, well sorted, massive quartz sand; with minimal disseminated shell material and a gradational basal contact

44-500 cm - SAND and SILT: light brownish-gray (10YR 6/2), fine-grained, well sorted sand with thin olive-gray (5Y 5/2) silt horizons; silt horizons become muddier down-core; with minimal disseminated shell fragments; localized dense shell lenses at 195, 205, and 214 cm consisting of intact and fragmented bivalves and gastropods; very small mica flakes throughout; and scattered, small organic flecks; bedding is predominantly horizontal with some areas of deformation from coring and bioturbation



# CORE ID: 2014-336-FA-23

**LOCATION:** East of Breton Island, on seismic line 2  
**LATITUDE:** 29.47053 N      **LONGITUDE:** 89.11872 W  
**DATE CORED:** 01/1/2015      **DATE DESCRIBED:** 01/17/2015  
**WATER DEPTH (m):** 8.23      **ELEVATION (m):** -7.99  
**CORE LENGTH (m):** 4.76      **COMPACTION:** 22%

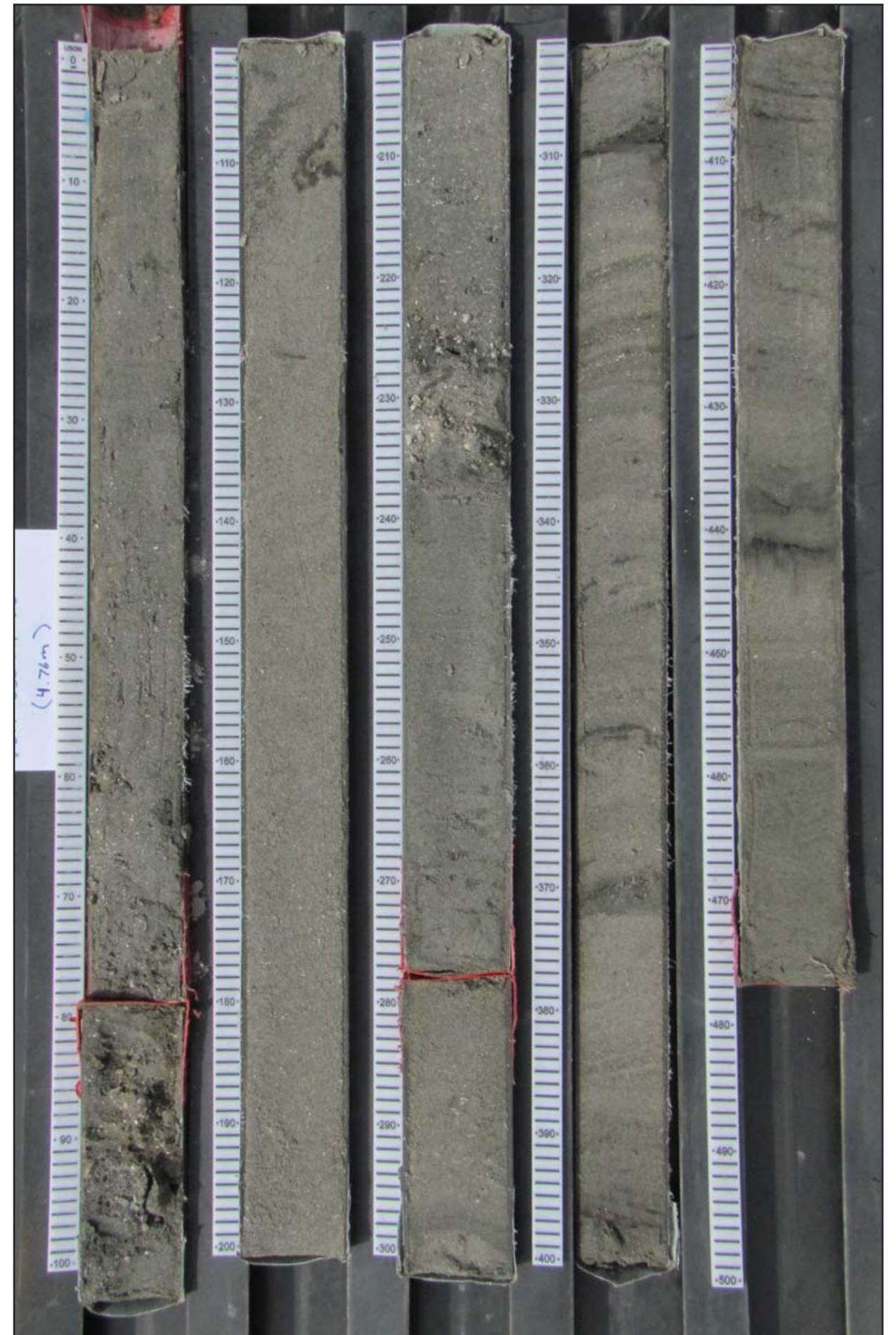


0-100 cm - SAND: dark olive-brown (2.5Y 3/3), very fine- to fine-grained, well sorted, bioturbated sand; with moderate disseminated shell material and small mica flecks throughout; shell content increases down-core

100-226 cm - SAND: olive-brown (2.5Y 4/6), very fine- to fine-grained, well sorted, clean, massive sand; with occasional small, clay-filled burrows; minimal disseminated, very small shell fragments; and minimal disseminated mica flecks; shell content increases down-core; bioturbated from 100-115 cm, with olive-gray (5Y 4/2) sandy mud-filled burrows

226-239 cm - SAND: mottled, light grayish-brown (2.5Y 6/2) and olive-gray (5Y 4/2), very shelly, bioturbated muddy sand; with small clay lenses and thin clay horizons

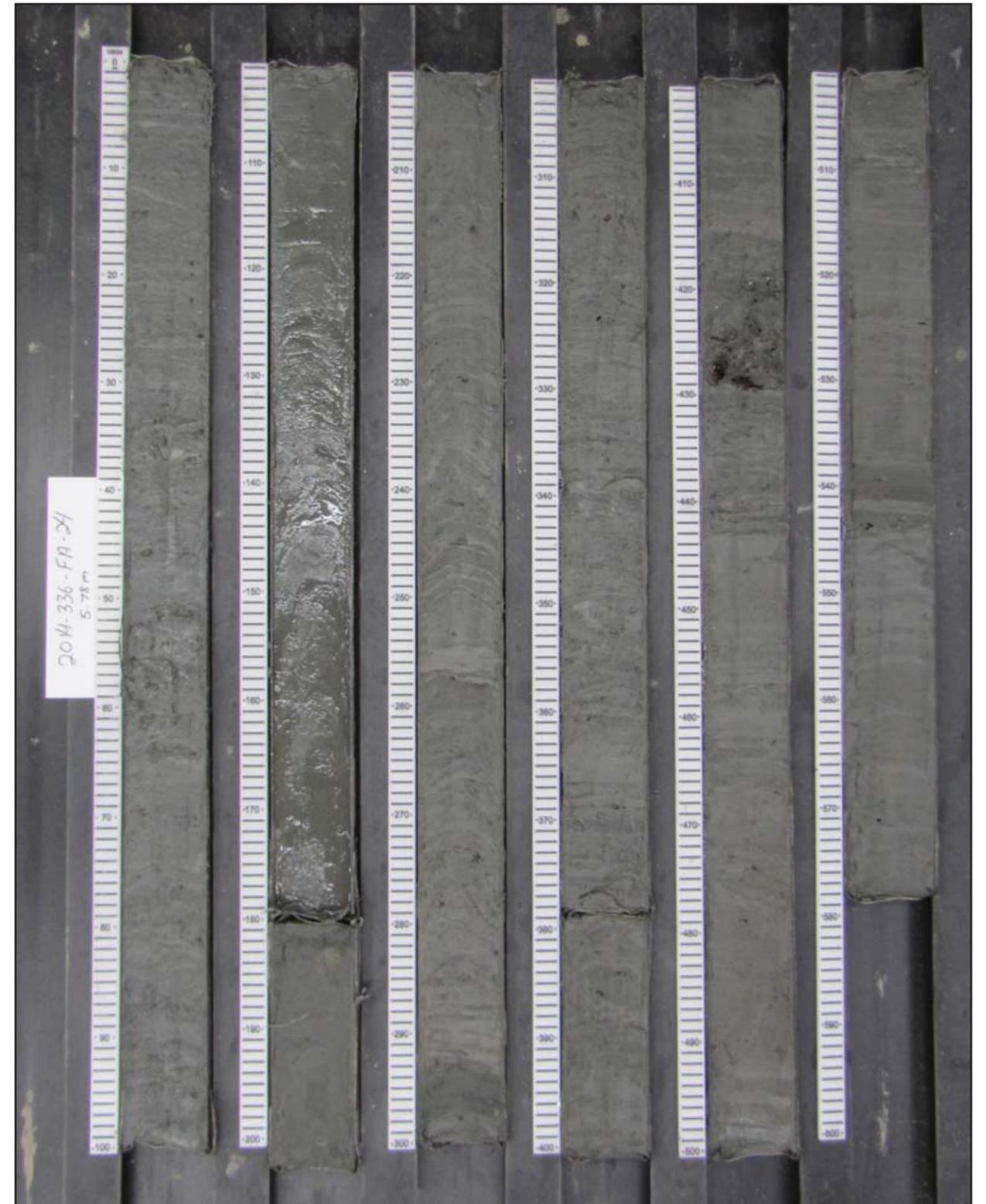
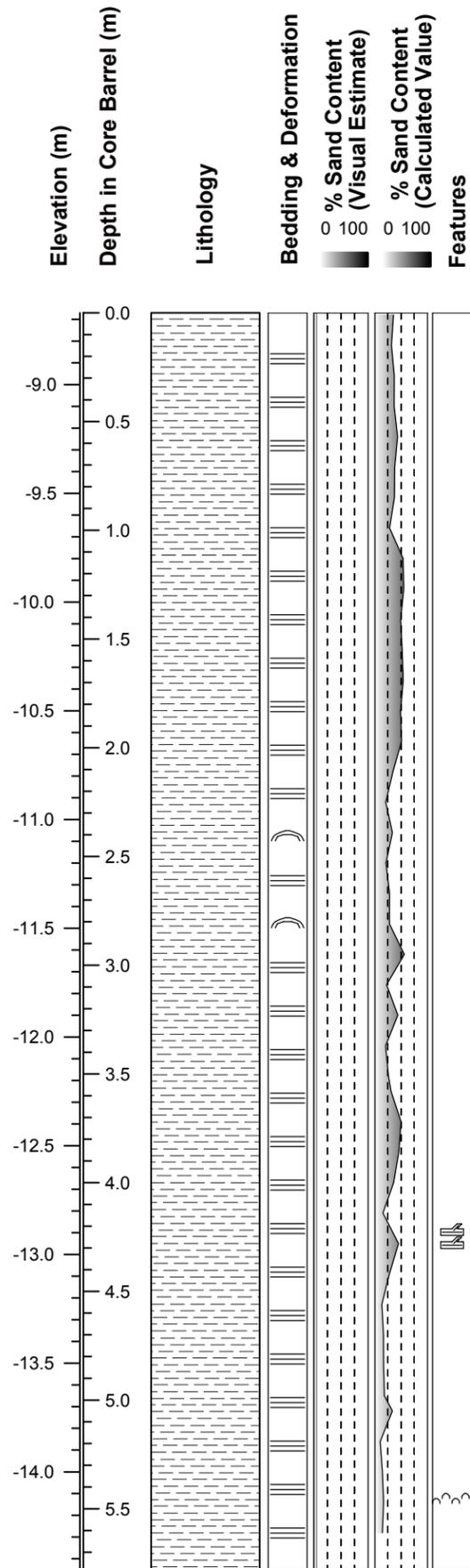
239-476 cm - SAND: olive-brown (2.5Y 4/6), very fine- to fine-grained, well sorted sand with thin, dark gray (2.5Y 4/1) mud interbeds; with minimal disseminated shell material except for thin shell-hash horizons within muddy interbeds; some mud interbeds are organic rich (for example, at 302 and 406 cm); bedding is horizontal from 239 to 365 and 450 to 476 cm and inclined from 365 to 450 cm



# CORE ID: 2014-336-FA-24

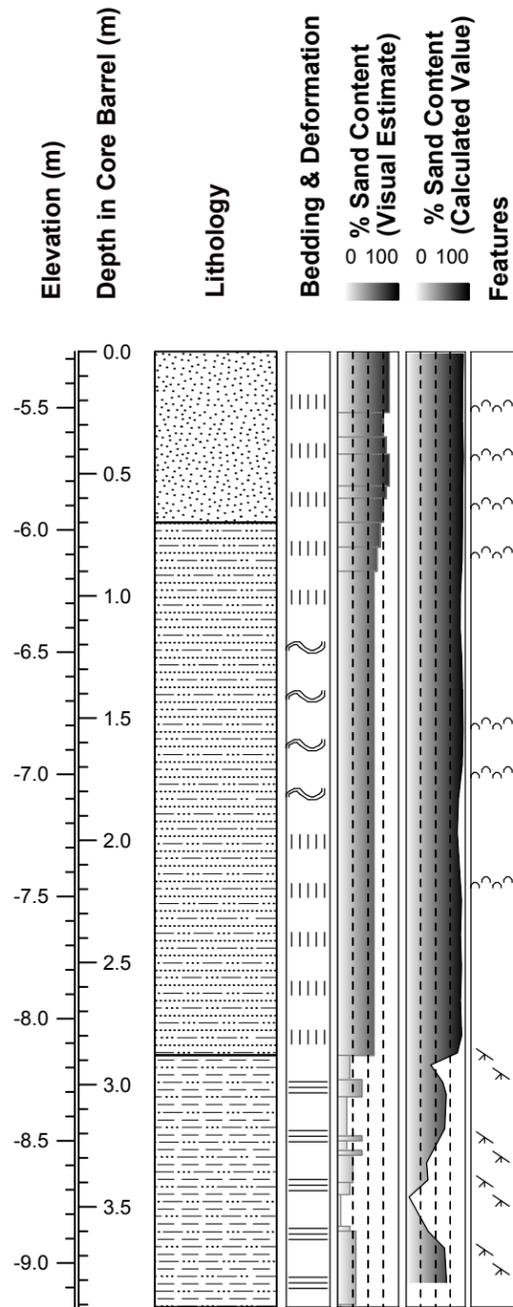
**LOCATION:** East of Breton Island, on seismic line 0  
**LATITUDE:** 29.47470 N      **LONGITUDE:** 89.11992 W  
**DATE CORED:** 01/17/2015      **DATE DESCRIBED:** 03/10/2015  
**WATER DEPTH (m):** 9.14      **ELEVATION (m):** -8.67  
**CORE LENGTH (m):** 5.78      **COMPACTION:** 5 %

0 - 578 cm - MUD: interbedded dark olive-gray (5Y 3/2) mud and silty mud becomes interbedded clay and silty mud at around 510 cm; with woody organic flecks throughout; a thick (10 cm) woody organic deposit from 420 to 430 cm; minimal disseminated shell material; and occasional thin shell-hash horizons, particularly within the silt laminations; bedding is mostly horizontal with deformation from coring



# CORE ID: 2014-336-FA-25A

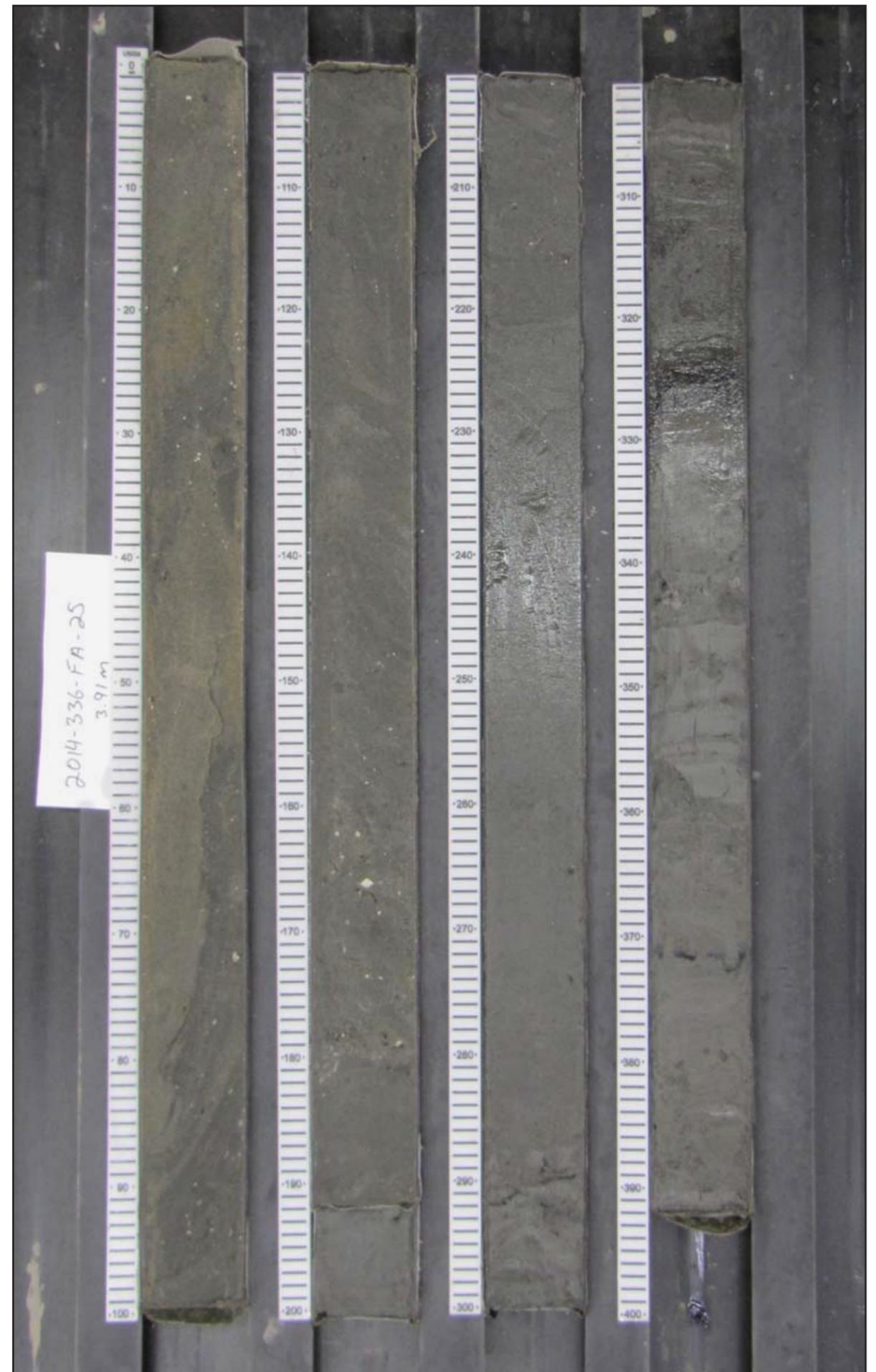
**LOCATION:** East of Breton Island, on eastern extent of seismic line 65  
**LATITUDE:** 29.41367 N      **LONGITUDE:** -89.10228 W  
**DATE CORED:** 01/12/2015      **DATE DESCRIBED:** 03/09/2015  
**WATER DEPTH (m):** 5.79      **ELEVATION (m):** -5.27  
**CORE LENGTH (m):** 3.91      **COMPACTION:** 36%



0-70 cm - SAND: mottled, grayish-brown (10YR 5/2), very fine- to fine-grained, well sorted sand; with small, very fine-grained sand and silt lenses throughout; moderate disseminated shell fragments; and a wavy basal contact

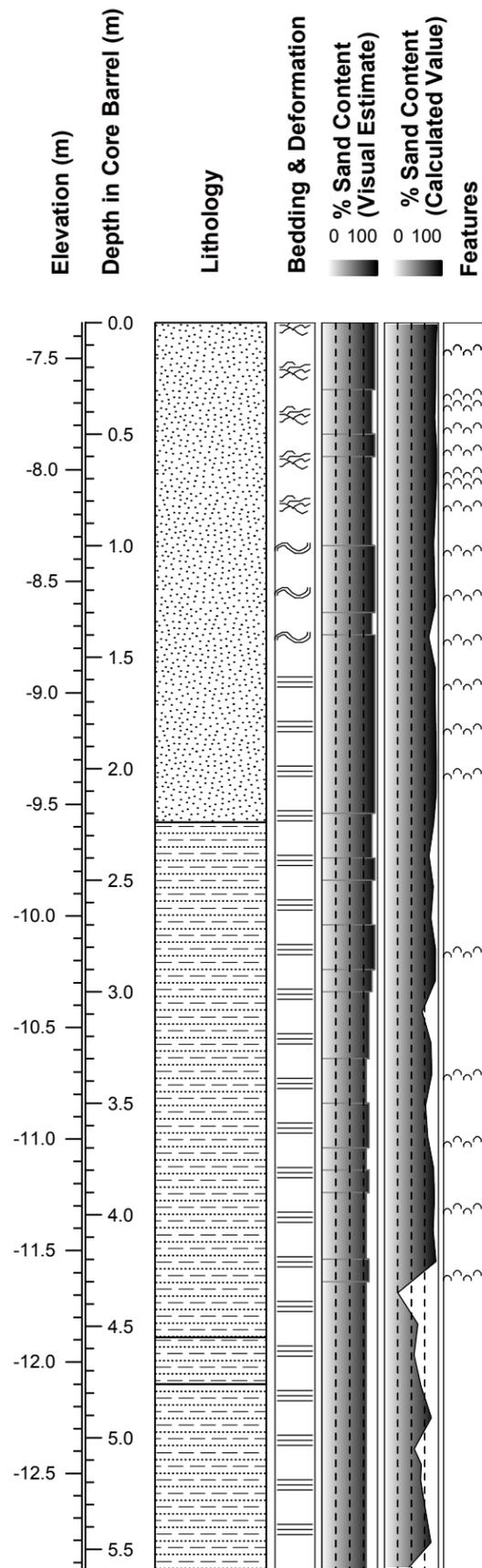
70-288 cm - SILT and SAND: dark olive-gray (5Y 3/2), massive silt and very fine-grained sand; with minimal disseminated shell material and localized dense shell-hash clusters and horizons

288-391 cm - MUD and SILT: olive-gray (5Y 4/2) mud interbedded with olive-gray (5Y 4/2) silt; with thin, black, organic-rich, peaty mud horizons; horizontally bedded with evidence of bioturbation



# CORE ID: 2014-336-FA-26

**LOCATION:** East of Breton Island, on seismic line 4  
**LATITUDE:** 29.46817 N      **LONGITUDE:** 89.10622 W  
**DATE CORED:** 01/17/2015      **DATE DESCRIBED:** 02/22/2015  
**WATER DEPTH (m):** 7.62      **ELEVATION (m):** -7.34  
**CORE LENGTH (m):** 5.59      **COMPACTION:** 8%

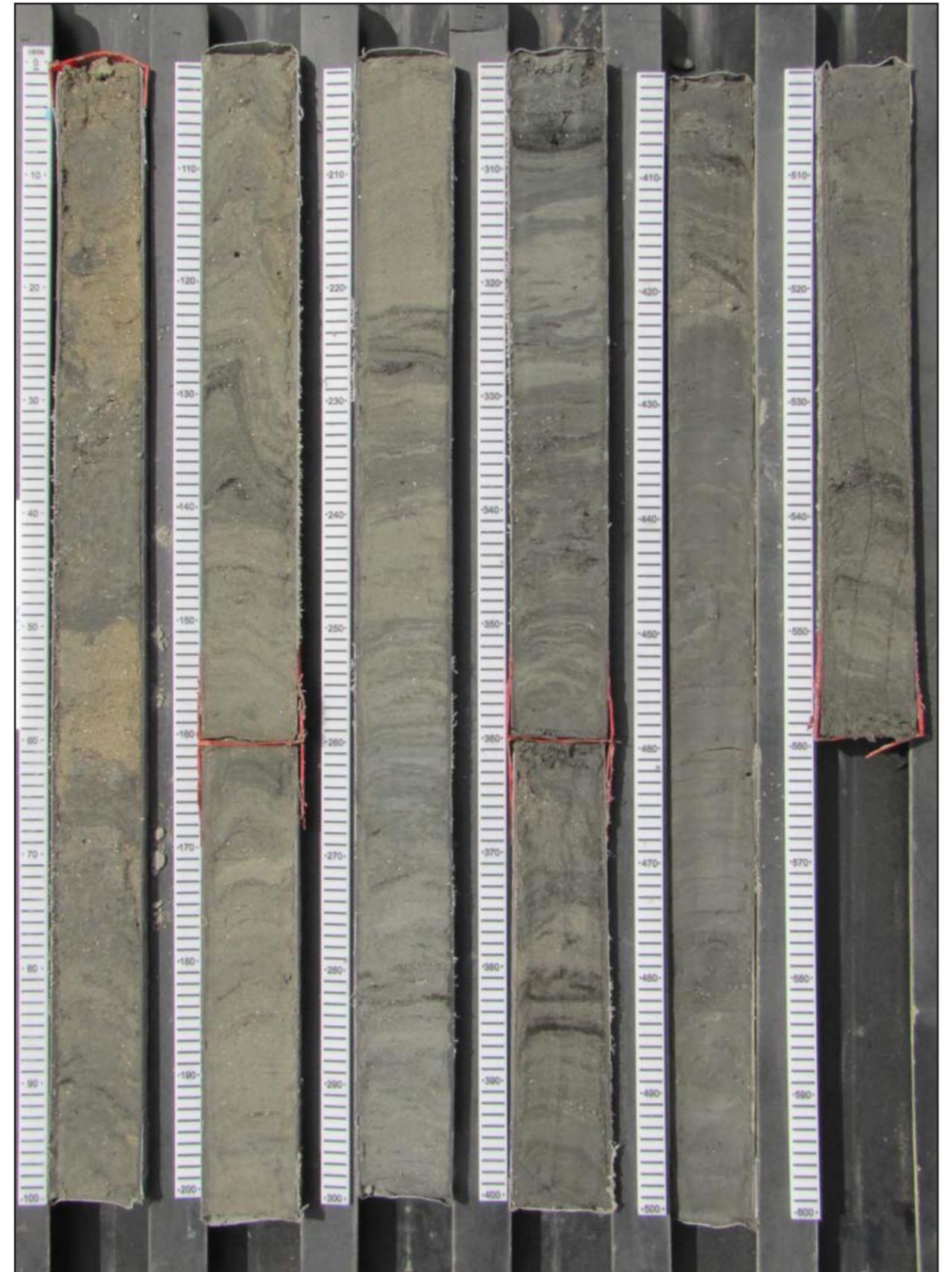


0-224 cm - SAND: very pale brown (10YR 8/4), well sorted, fine- to medium-grained sand and light gray (10YR 7/1), well sorted, fine-grained sand interbedded with dark gray (10YR 4/1) silt and silty sand; with variable shell content (moderate, 0 to 30 and 38 to 140 cm; heavy, 30 to 38 cm; minimal, 140 to 244 cm); with occasional small organic lenses and thin organic-rich horizons; bedding is predominantly mottled with moderate bioturbation and deformation from coring

244-455 cm - SAND and MUD: light olive-gray (5Y 6/2), fine-grained, well sorted sand interbedded with dark gray (5Y 4/1) mud; mud horizons increase in frequency and thickness down-core; with organic mud horizons at 309, 382, 386, and 409 cm; localized small shelly lenses and thin-shell hash horizons; and moderate disseminated mica flecks; bedding is horizontally laminated with deformation from coring

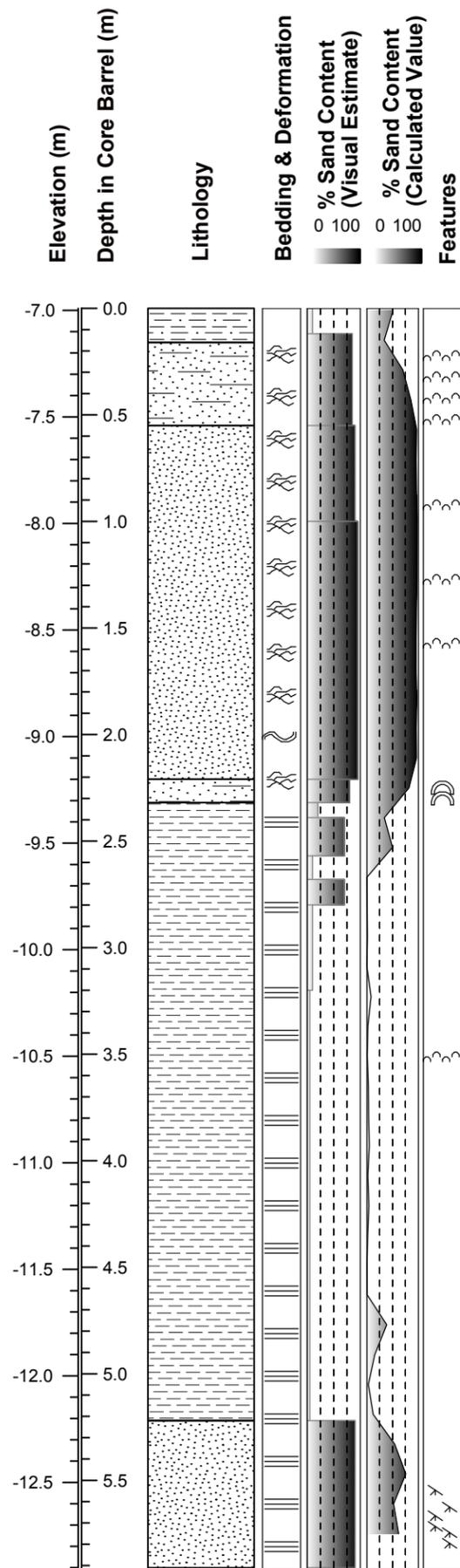
455-476 cm - CLAY and SAND, olive-gray (5Y 3/2) clay interbedded with thin, shelly, dark gray (5Y 4/1), very fine-grained muddy sand and silt horizons

476-559 cm - SAND and CLAY, dark gray (5Y 4/1), well sorted, very fine-grained muddy sand interbedded with dark gray (5Y 4/1) mud; with abundant small shell-hash clusters, particularly within the muddy sand horizons; occasional small black organic clasts; a thicker organic-rich horizon at 539 cm; and moderate disseminated mica flecks



# CORE ID: 2014-336-FA-27

**LOCATION:** East of Breton Island, on seismic line 0  
**LATITUDE:** 29.47397 N      **LONGITUDE:** 89.10045 W  
**DATE CORED:** 01/17/2015      **DATE DESCRIBED:** 03/10/15  
**WATER DEPTH (m):** 7.62      **ELEVATION (m):** -6.99  
**CORE LENGTH (m):** 5.92      **COMPACTION:** 3%



0-16 cm - MUD: mottled, dark olive-gray (5Y 3/2), soft silty mud; with minimal disseminated shell material

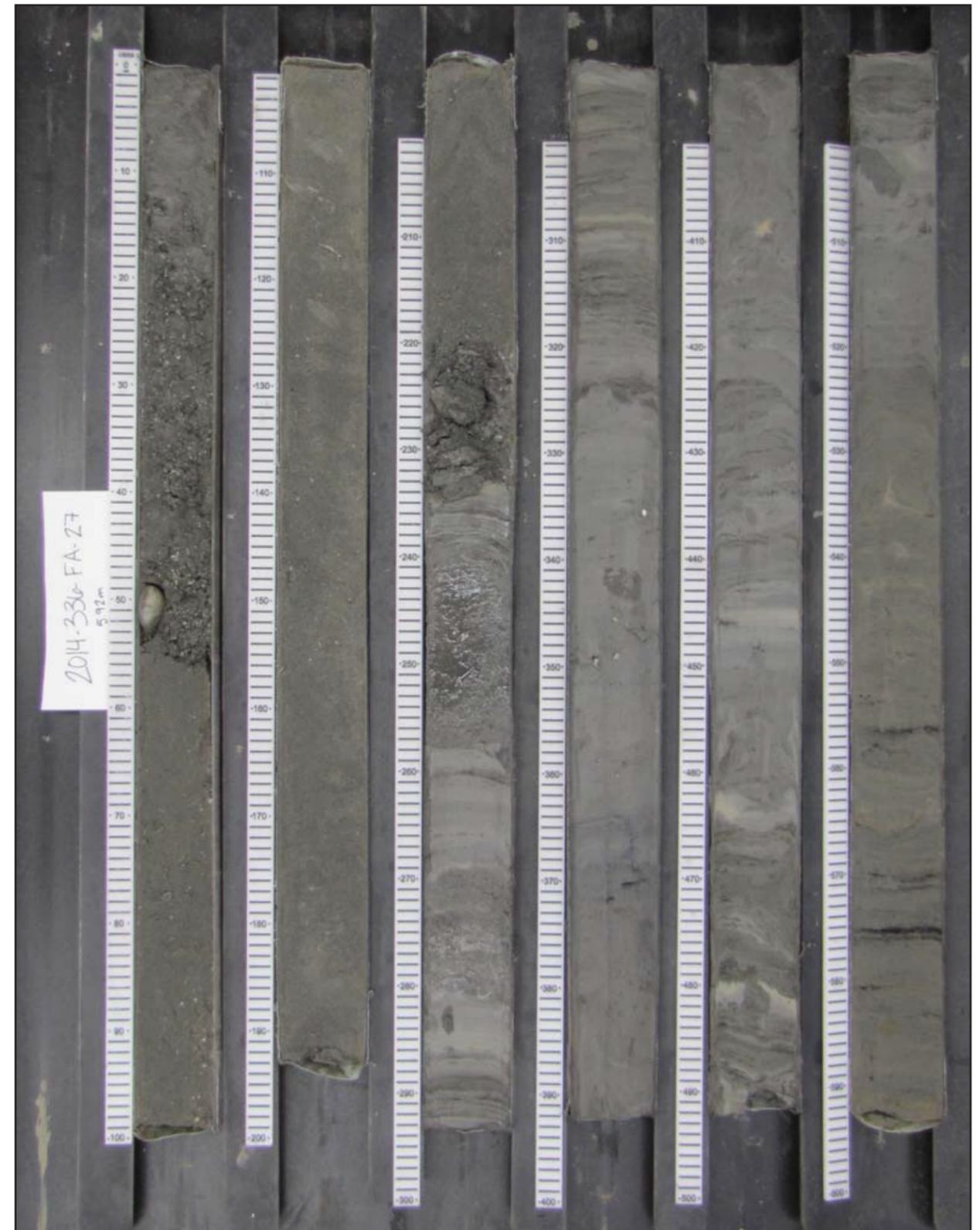
16-55 cm - SAND: dark olive-gray (5Y 3/2), very shelly, very fine- to fine-grained, well sorted, silty sand; with abundant shells of various size and species and a large pebble at sharp basal contact; some shell pieces are intact but inarticulate

55-221 cm - SAND: dark grayish-brown (2.5Y 4/2) grading into grayish-brown (2.5Y 5/2), very fine- to fine-grained, well sorted, massive sand; with minimal disseminated shell fragments and mica flecks

221-232 cm - SHELLY SAND: lag deposit consisting of grayish-brown (2.5Y 5/2) silty sand with large oyster shell fragments

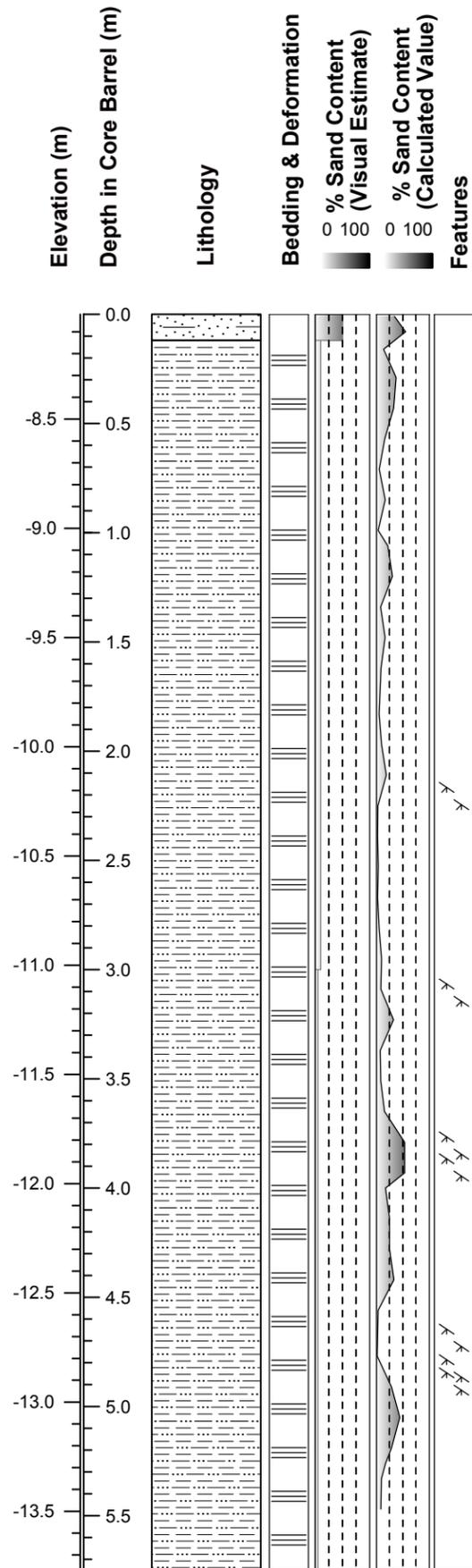
232-522 cm - CLAY: gray (5Y 4/1) and pale yellow (5Y 7/4), dense, clean clay interbedded with thin, dark olive-gray (5Y 3/2) silt horizons and muddy sand from 239-257 cm and 268-280 cm; with localized small shell-hash clusters and occasional thin, black organic-rich mud horizons; silt content decreases down-core

522-591 cm - SAND: grayish-brown (2.5Y 5/2), very fine-grained, well sorted, slightly muddy sand with dark olive-gray (5Y 3/2) silt interbeds; with thin, black, fibric, peaty horizons at 558, 570, and 575 cm and no visible shell material; bedding is horizontal



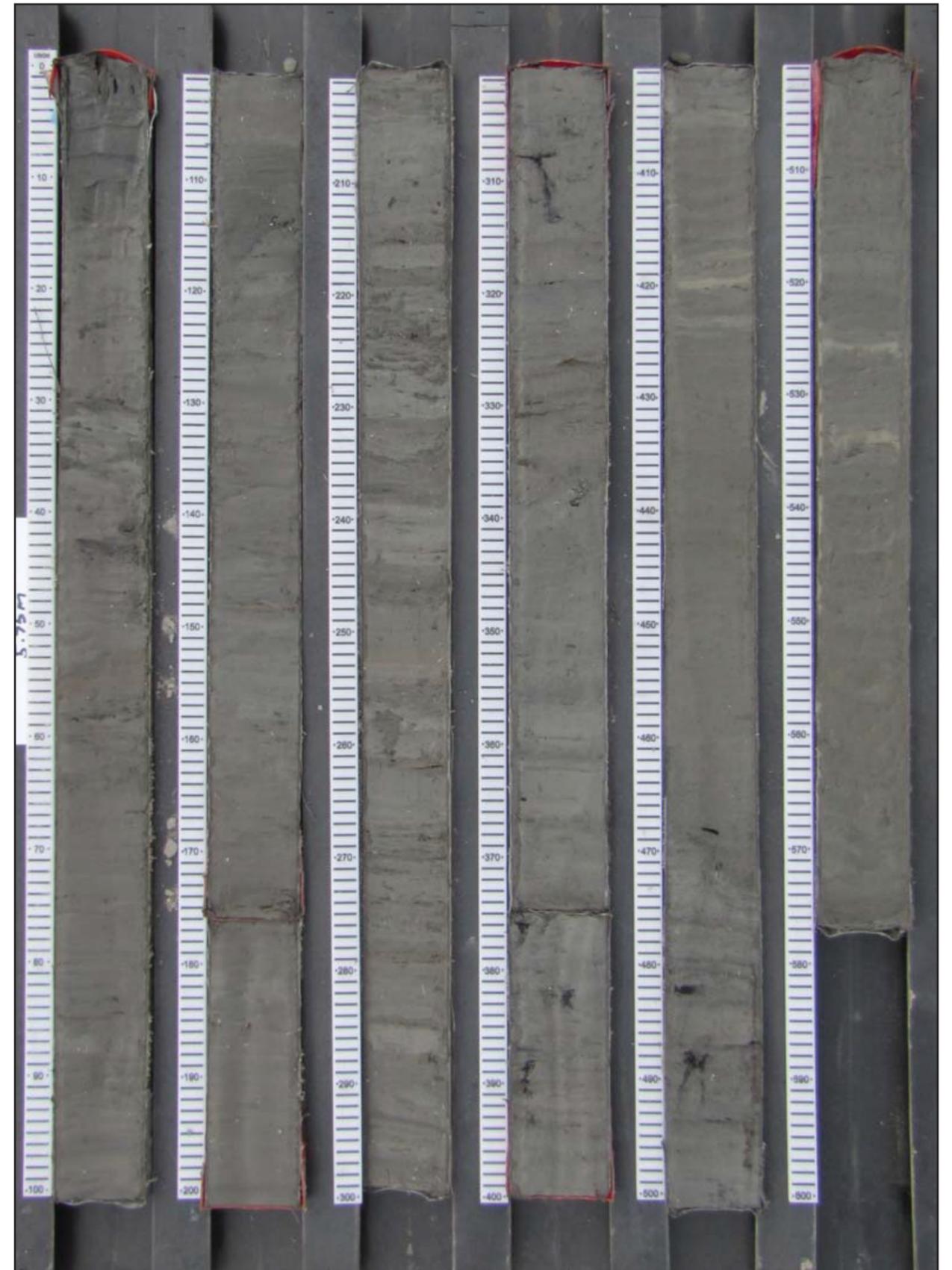
# CORE ID: 2014-336-FA-28

**LOCATION:** East of Breton Island, on seismic line 18  
**LATITUDE:** 29.46820 N      **LONGITUDE:** 89.07738 W  
**DATE CORED:** 01/17/2015      **DATE DESCRIBED:** 02/22/2015  
**WATER DEPTH (m):** 8.54      **ELEVATION (m):** -8.02  
**CORE LENGTH (m):** 5.75      **COMPACTION:** 6%



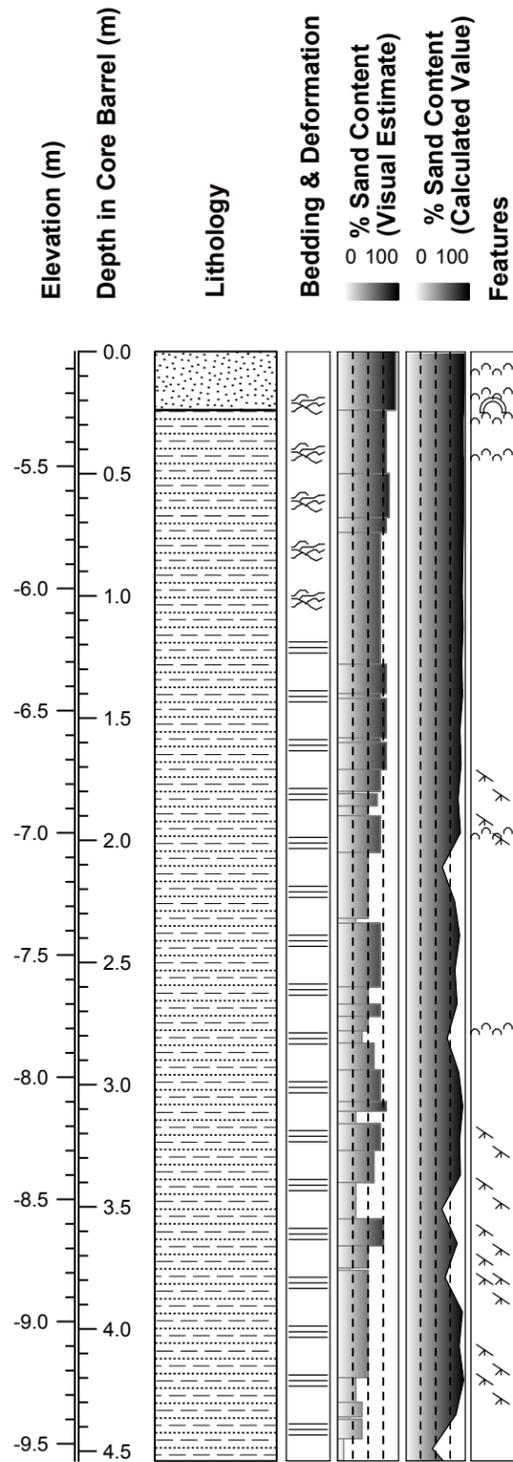
0-12 cm - SAND: mottled, very dark gray (5Y 3/1), muddy sand; with abundant organic flecks

12-575 cm - CLAY and SILT: dark gray (5Y 4/1) and yellowish-gray (5Y 7/6) clay interbedded with thin, dark gray (5Y 4/1) silt horizons; with very little disseminated shell material; occasional thin shell-hash horizons within silty interbeds; and occasional small, black organic clasts; horizontally laminated



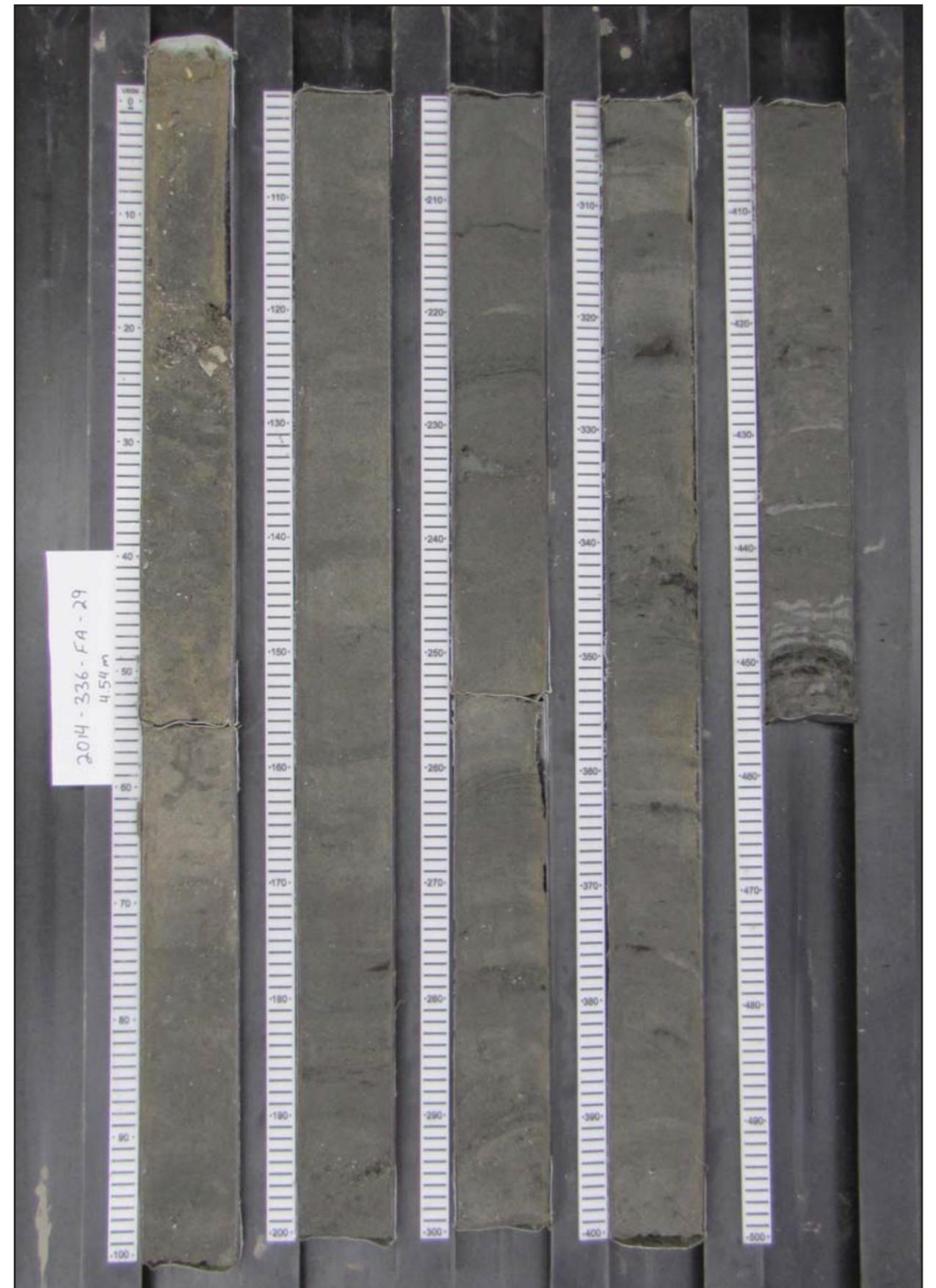
# CORE ID: 2014-336-FA-29

**LOCATION:** East of Breton Island, at the intersection of seismic lines 0 & 18  
**LATITUDE:** 29.47478 N      **LONGITUDE:** 89.07883 W  
**DATE CORED:** 01/17/2015      **DATE DESCRIBED:** 03/09/2015  
**WATER DEPTH (m):** 5.18      **ELEVATION (m):** -5.03  
**CORE LENGTH (m):** 4.54      **COMPACTION:** 26%



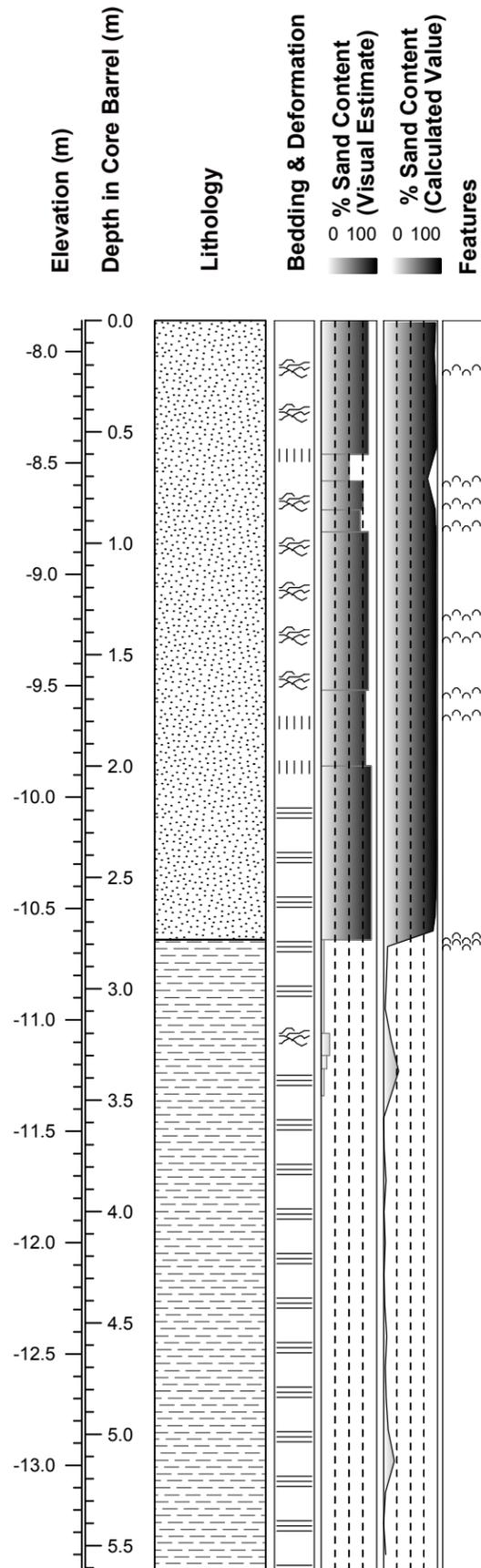
0-24 cm - SAND: mottled, very pale brown (10YR 7/3) and gray (10YR 5/1), fine- to medium-grained, well sorted sand; with moderate disseminated shell fragments and a dense shell hash and large shell-fragment cluster from 24 to 27 cm at the basal contact

24-454 cm - SAND and MUD: interbedded olive-gray (5Y 4/2) and dark olive-gray (5Y 3/2), well sorted, fine-grained silty sand and mud with thin silt horizons; silt and mud content increase down-core; with minimal disseminated shell fragments; occasional thin shell-hash horizons; and several thin organic-rich horizons with a dense, peaty horizon containing small woody fragments at 452 cm



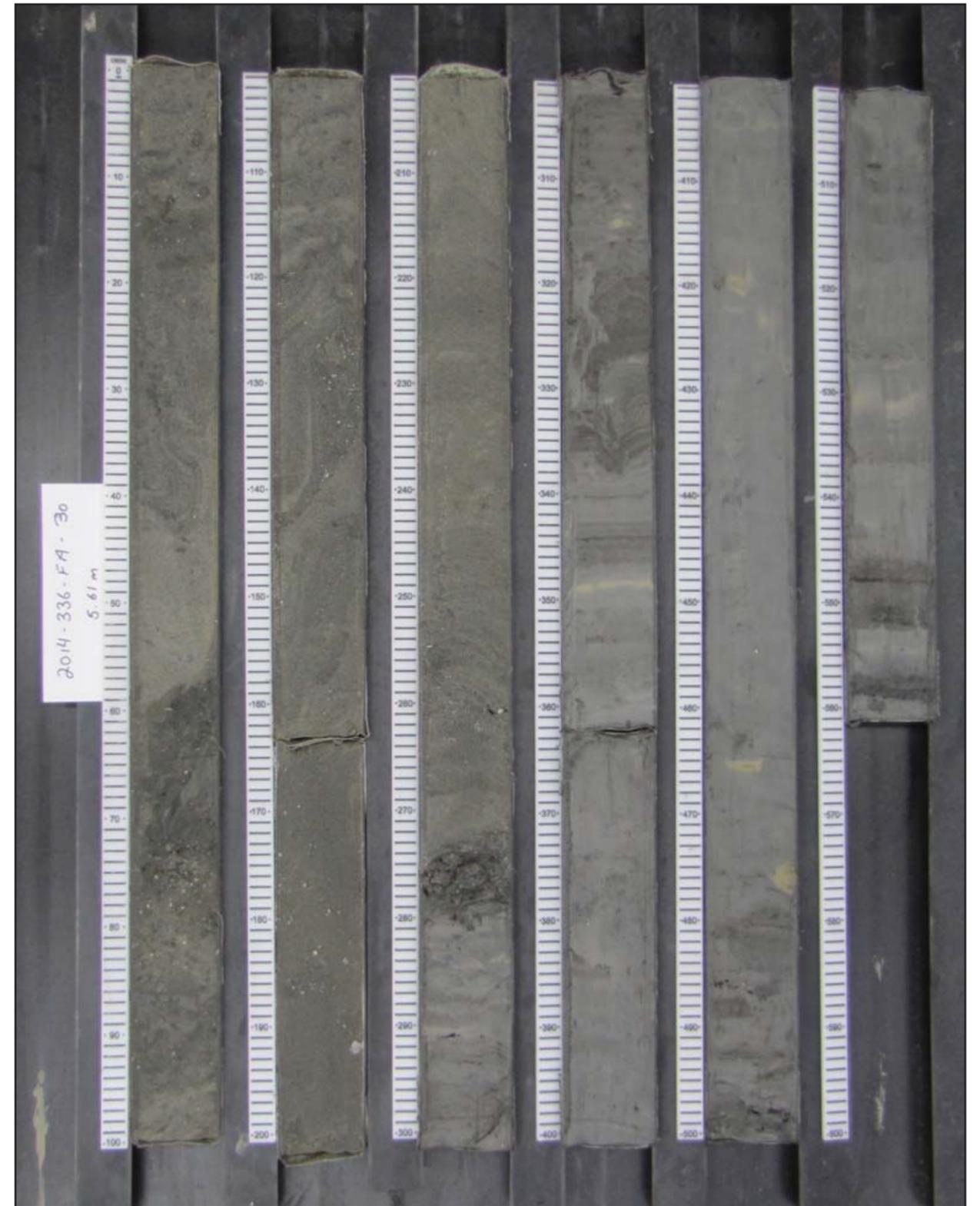
# CORE ID: 2014-336-FA-30

**LOCATION:** East of Breton Island, north of seismic line 0  
**LATITUDE:** 29.47600 N      **LONGITUDE:** 89.09543 W  
**DATE CORED:** 01/17/2015      **DATE DESCRIBED:** 03/09/2015  
**WATER DEPTH (m):** 7.93      **ELEVATION (m):** -7.86  
**CORE LENGTH (m):** 5.61      **COMPACTION:** 8%



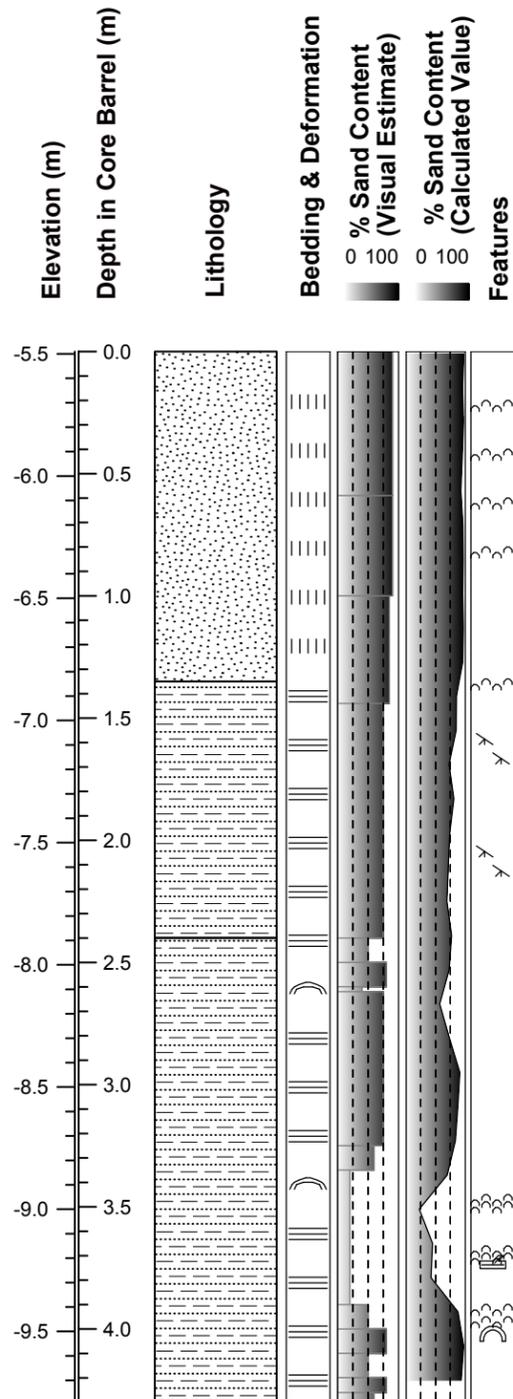
0-278 cm - SAND: light olive-gray (5Y 6/2) to olive-gray (5Y 4/2), fine-grained, well sorted sand; with moderate disseminated shell fragments; locally dense shell-hash clusters at 74 and 130 cm; and a dense shell lag deposit at the sharp basal contact; bedding is mottled/flaser from 0 to 43 and 59 to 200 cm, massive from 43 to 59 cm, and horizontally laminated from 200 to 278 cm

278-561 cm - CLAY: gray (5Y 5/1), dense, fat clay; with thin horizontal silt laminations; minimal disseminated shell material; occasional pale yellow (5Y 7/4) clay lenses and horizons; and thin, black, peaty mud horizons at 488, 500, and 548 cm; bedding is predominantly horizontal with areas of mild bioturbation



# CORE ID: 2015-336-FA-31

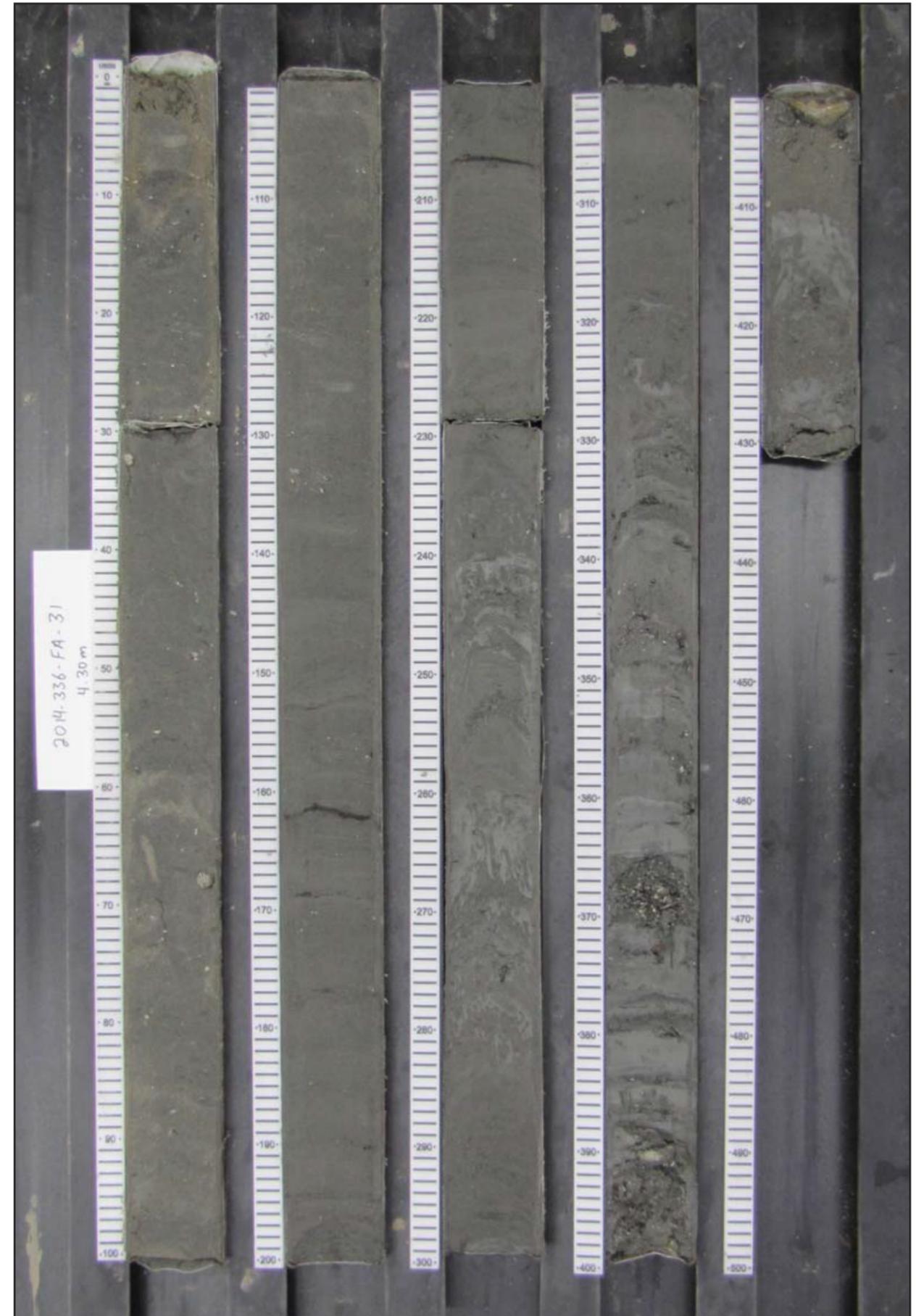
**LOCATION:** East of Breton Island, east of seismic line 18  
**LATITUDE:** 29.47048 N      **LONGITUDE:** 89.06847 W  
**DATE CORED:** 01/17/2015      **DATE DESCRIBED:** 03/18/2015  
**WATER DEPTH (m):** 5.49      **ELEVATION (m):** Unavailable (use water depth)  
**CORE LENGTH (m):** 4.30      **COMPACTION:** 30%



0-135 cm - SAND: light olive-gray (5Y 6/2), very fine-grained, well sorted, massive sand; with minimal disseminated shell fragments and very small mica flecks

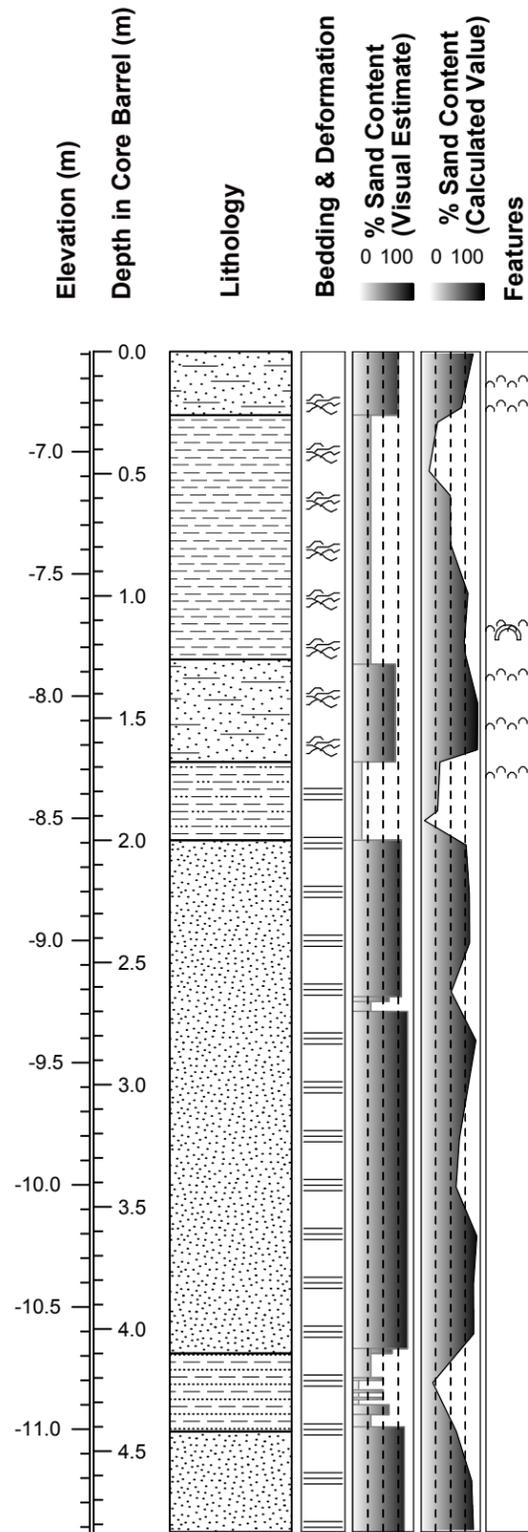
135-240 cm - MUD and SAND: horizontally bedded, olive-gray (5Y 5/2) sand interbedded with thin muddy sand horizons; with occasional thin, black to very dark brown organic-rich mud laminations

240-430 cm - MUD and SAND: olive-gray (5Y 5/2) mud interbedded with olive-gray (5Y 4/2) to dark grayish-brown (2.5Y 4/2) muddy sand, mud content increases from 240 to 390 cm then decreases from 390 to 430 cm; with minimal disseminated shell material; dense shell-hash clusters at 345, 367 and 395 cm; and a large bivalve fragment at 400 cm; shell clusters and small woody organic fragments occur mainly within the muddy sand horizons; bedding is predominantly horizontal with some deformation from coring and localized heavy bioturbation



# CORE ID: 2014-336-FA-32

**LOCATION:** South of Breton Island, at the intersection of seismic lines 31 & 82  
**LATITUDE:** 29.44115 N      **LONGITUDE:** 89.15042 W  
**DATE CORED:** 01/13/2015      **DATE DESCRIBED:** 03/09/2015  
**WATER DEPTH (m):** 7.32      **ELEVATION (m):** -6.57  
**CORE LENGTH (m):** 4.83      **COMPACTION:** 21%



0-26 cm - SAND: mottled, dark olive-gray (5Y 3/2), medium-grained, well sorted, muddy sand; with moderate disseminated shell material; a thin, dense, shell-hash horizon at the basal contact; and scattered organic mud clasts

26-126 cm - MUD: mottled, dark olive-gray (5Y 3/2), very fine-grained sandy mud; with moderate disseminated shell material and a dense oyster-shell cluster from 110 to 118 cm

126-168 cm - SAND: bioturbated, dark olive-gray (5Y 3/2), fine- to medium-grained, well sorted, mottled muddy sand; with abundant disseminated shell material

168-200 cm - MUD: dark olive-gray (5Y 3/2), relatively dense mud with thin very dark gray (5Y 3/1) silt interbeds; horizontally laminated with moderate deformation from coring

200-410 cm - SAND: dark grayish-brown (2.5Y 4/2), very fine-grained, well sorted, horizontally laminated, sand and muddy sand; with a thick mud horizon from 264 to 270 cm; organic-rich horizons of varying thickness from 300 to 331 cm; occasional small mud clasts; and minimal disseminated shell material

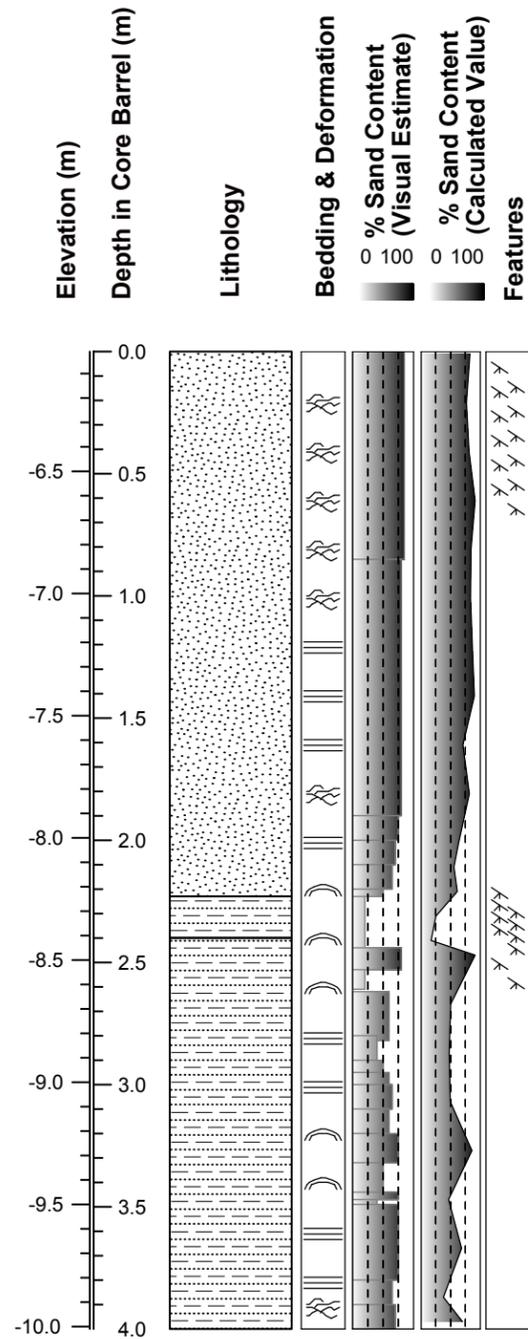
410-442 cm - SAND and MUD: dark grayish-brown (2.5Y 4/2) sand interbedded with gray (5Y 5/1), relatively dense mud; sand horizons start increase in thickness down-core; very little visible shell material

442-483 cm - SAND: dark grayish-brown (2.5Y 4/2), very fine-grained, well sorted, relatively clean sand; with minimal disseminated shell material and scattered small mud-filled burrows; faint horizontal bedding is somewhat masked from moderate bioturbation



# CORE ID: 2015-336-FA-33A

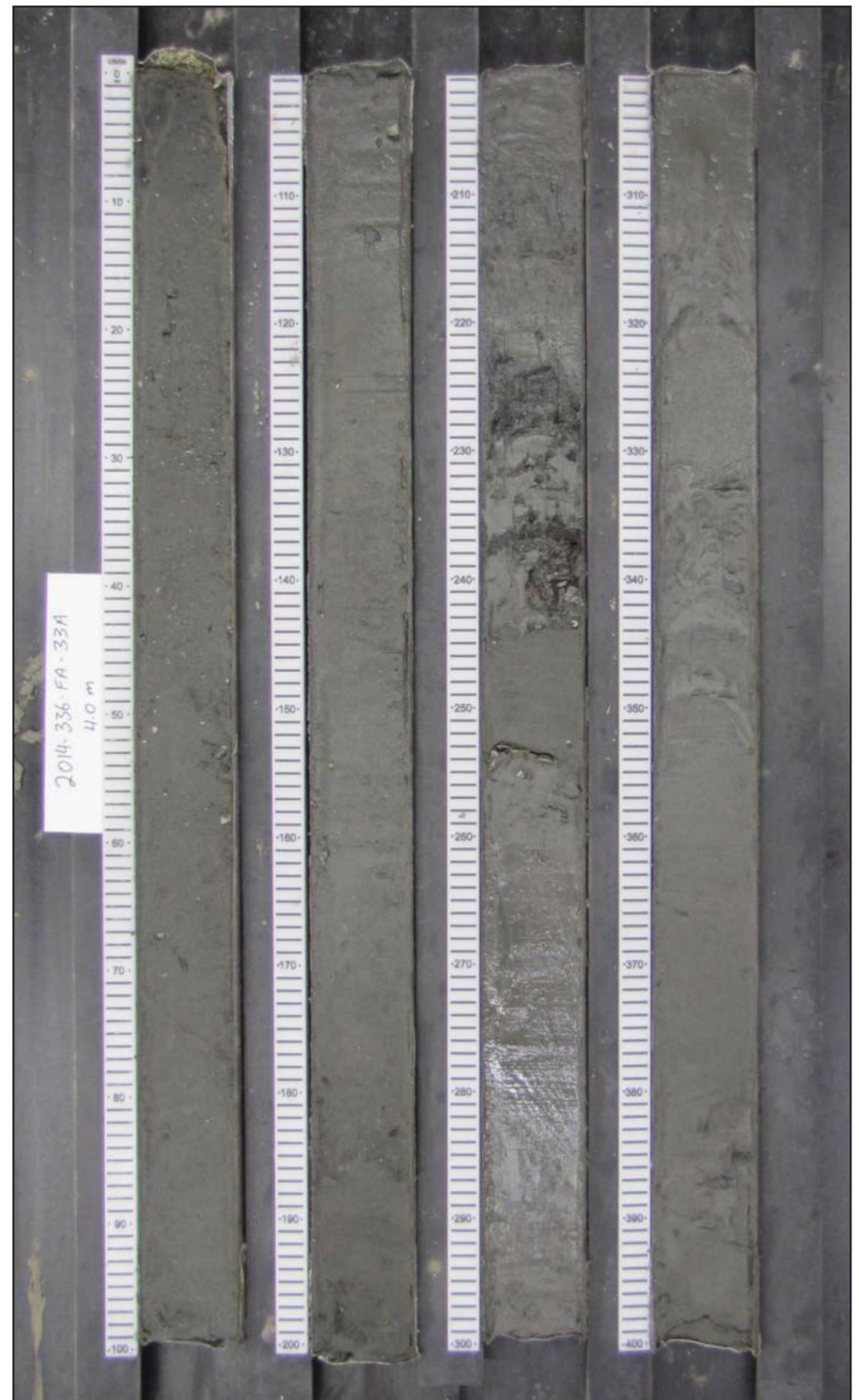
**LOCATION:** South of Breton Island, near the intersection of seismic lines 30 & 80  
**LATITUDE:** 29.43257 N      **LONGITUDE:** 89.16905 W  
**DATE CORED:** 01/11/2015      **DATE DESCRIBED:** 03/19/2015  
**WATER DEPTH (m):** 6.40      **ELEVATION (m):** -6.01  
**CORE LENGTH (m):** 4.0      **COMPACTION:** 34%



0-223 cm - SAND: olive-gray (5Y 4/2), very fine-grained, well sorted, slightly muddy sand; mud content gradually increases down-core with moderate disseminated shell fragments; bedding is mostly massive from 0 to 100 cm, with faint horizontal bedding from 100 to 223 cm

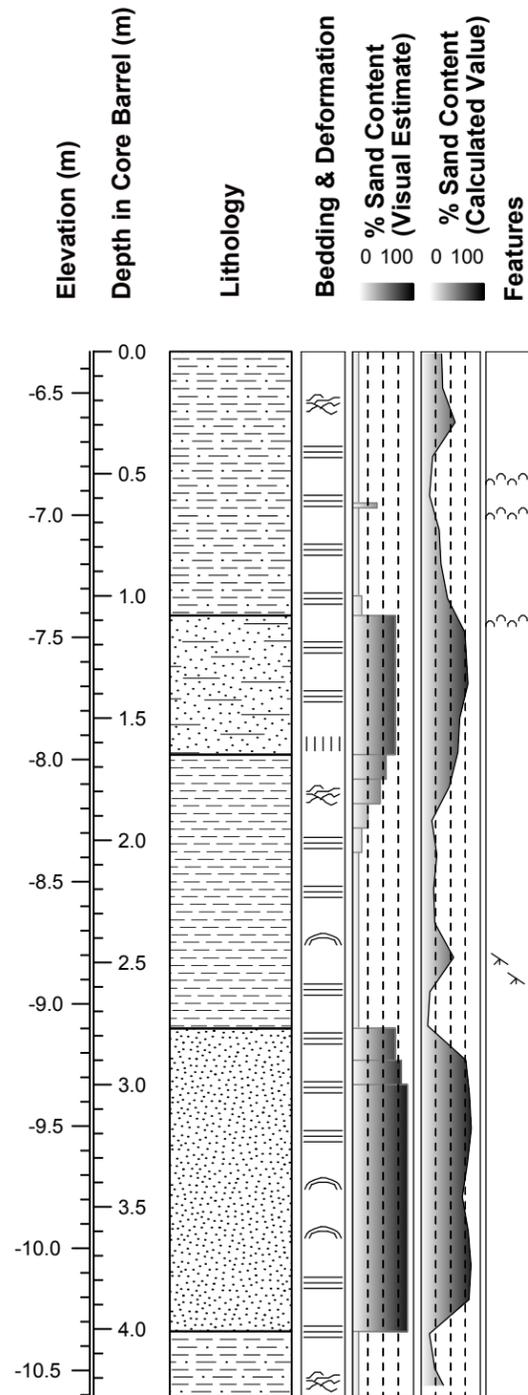
223-240 cm - MUD and SAND: interbedded olive-gray (5Y 4/2) mud and muddy sand; with dense shell-fragment clusters and organic fragments in a muddy matrix from 223 to 244 cm

240-400 cm - MUD and SAND: interbedded olive-gray (5Y 4/2) to grayish-brown (2.5Y 5/2) muddy sand and mud; mud horizons are relatively thick, averaging about 20 cm; with moderate disseminated shell fragments especially within the muddy sand horizons, and occasional small, black organic clasts and flecks; bedding is predominantly horizontal with extensive deformation from coring and bioturbation



# CORE ID: 2014-336-FA-34

**LOCATION:** South of Breton Island, on seismic line 32 near crossing with line 76  
**LATITUDE:** 29.41625 N      **LONGITUDE:** 89.19188 W  
**DATE CORED:** 01/11/2015      **DATE DESCRIBED:** 03/19/2015  
**WATER DEPTH (m):** 6.71      **ELEVATION (m):** -6.33  
**CORE LENGTH (m):** 4.28      **COMPACTION:** 30%



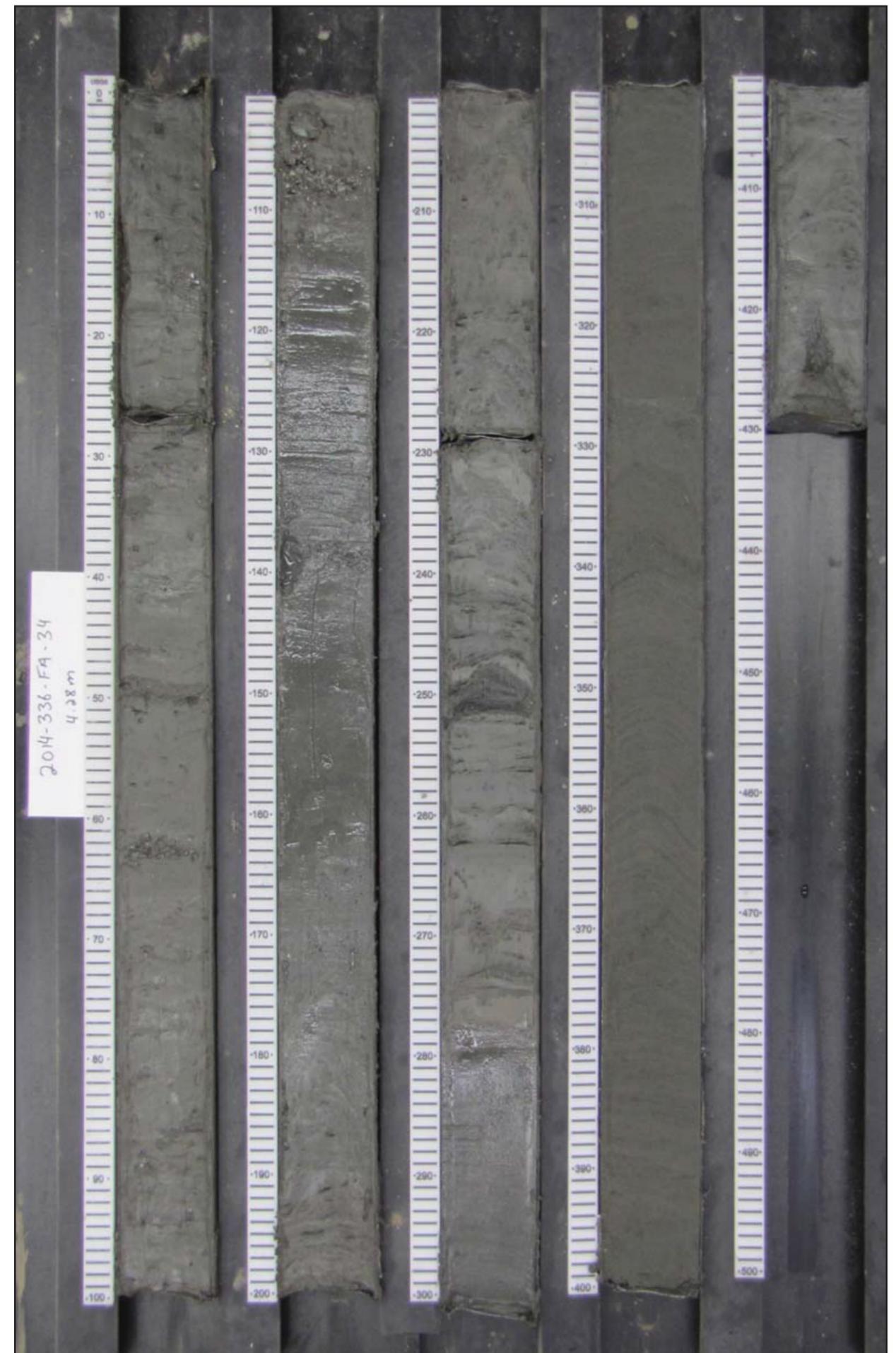
0-108 cm - MUD: olive-gray (5Y 4/2) silty mud; with minimal disseminated shell fragments; localized dense shell-hash deposits at 50, 64 and 108 cm (basal contact); sporadic dark gray, organic-rich mud lenses; and occasional thin silt horizons

108-165 cm - SAND: olive-gray (5Y 4/2), very fine-grained, well sorted, horizontally laminated muddy sand; with minimal disseminated shell fragments and a dense shell-hash horizon at 137 cm

165-277 cm - MUD: olive-gray (5Y 4/2) mud with thin, olive-gray (5Y 4/2) silt and very fine grained muddy sand horizons; a black to very dark gray, organic-rich horizon from 248 to 252 cm exhibits sapric ("coffee ground") peaty texture; horizontal bedding is somewhat deformed from coring

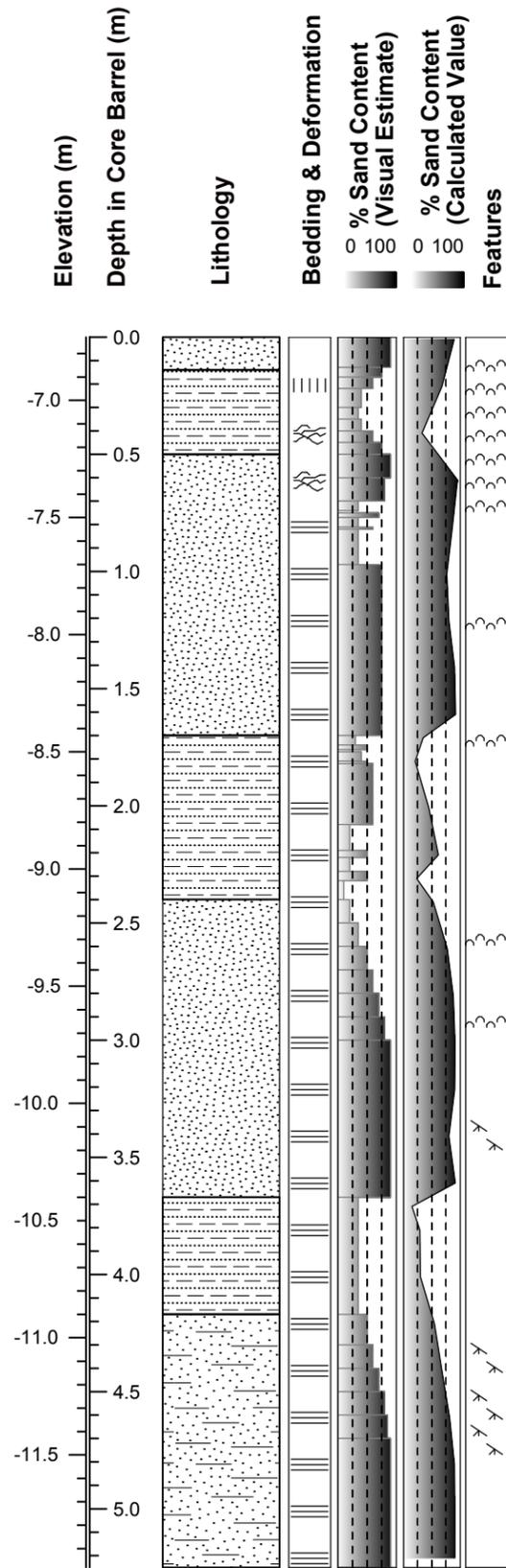
277-401 cm - SAND: dark grayish-brown (2.5Y 4/2), well sorted, very fine-grained, horizontal laminated sand; with thin, dark gray silt horizons; no visible shell material; and moderate disseminated very small mica flecks

401-428 cm - MUD: mottled, olive-gray (5Y 4/2), silty mud; with thin, dark gray silt horizons and small silty lenses and no visible shell material



# CORE ID: 2015-336-FA-35

**LOCATION:** South of Breton Island, at the intersection of seismic lines 38 & 80  
**LATITUDE:** 29.42363 N      **LONGITUDE:** 89.16230 W  
**DATE CORED:** 01/13/2015      **DATE DESCRIBED:** 03/18/2015  
**WATER DEPTH (m):** 6.71      **ELEVATION (m):** -6.73  
**CORE LENGTH (m):** 5.25      **COMPACTION:** 14%



0-14 cm - SAND: mottled, dark olive-gray (5Y 3/2), very fine-grained, well sorted sand and muddy sand; with minimal disseminated shell fragments

14-50 cm - SAND and MUD: mottled, olive-gray (5Y 4/2), muddy sand and mud; with abundant small shell fragments; small, black organic fragment; and heavy bioturbation

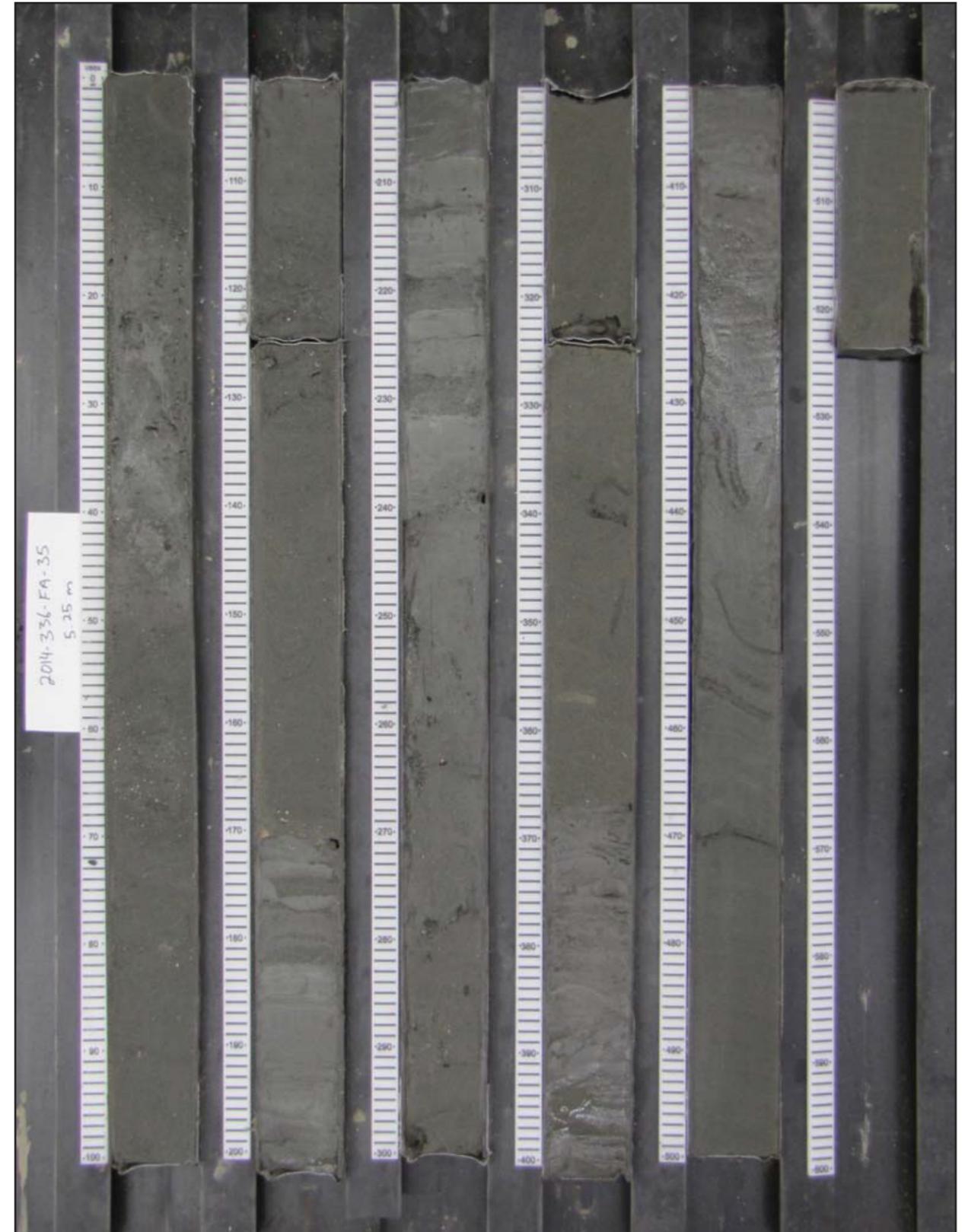
50-170 cm - SAND: dark olive-gray (5Y 3/2), very fine- to fine-grained, well sorted, massive sand; with abundant disseminated shell fragments, particularly from 58 to 69 cm

170-240 cm - MUD and SAND: olive-gray (5Y 4/2) mud interbedded with dark olive-gray (5Y 3/2) muddy sand; with moderate small, black, organic fragments

240-367 cm - SAND: grayish-brown (10YR 5/2), fine-grained, well sorted muddy sand grades down-core into cleaner sand; with localized dense shell-hash clusters; abundant scattered small, black, organic fragments; and moderate bioturbation, with mud-filled burrows and deformed bedding

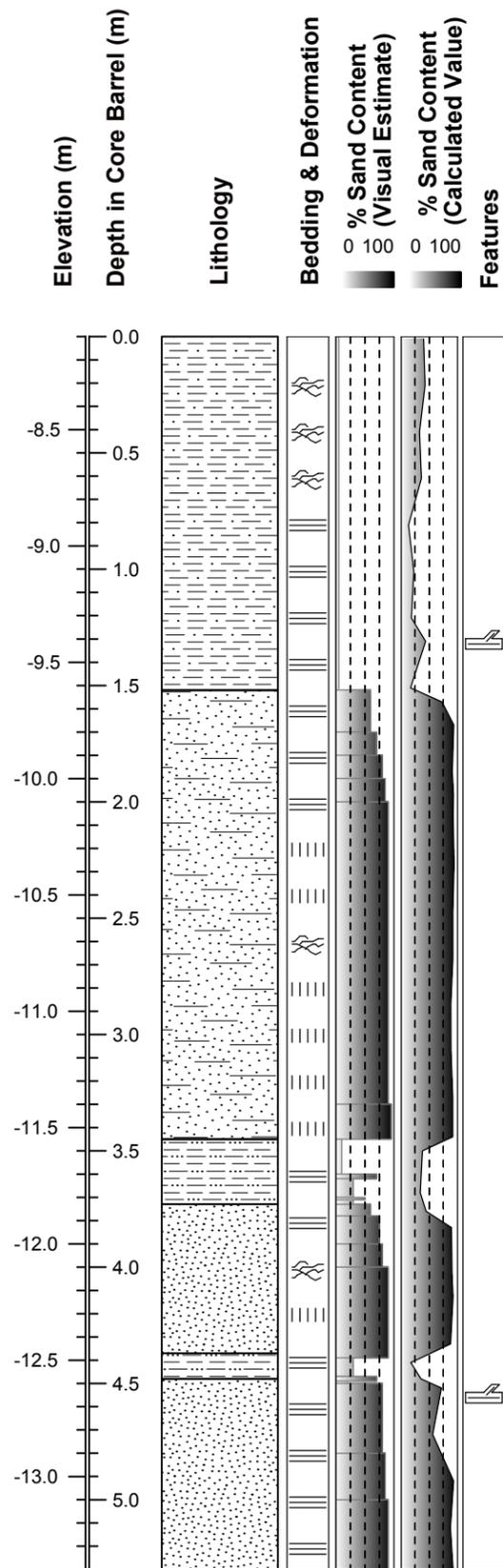
367-417 cm - MUD and SAND: olive-gray (5Y 4/2) mud with thin olive-gray (5Y 4/2), very fine-grained sand interbeds; no visible shell material; bedding is mostly horizontal with some deformation from coring

417-525 cm - SAND: olive-gray (5Y 4/2), very fine-grained, well sorted, silty sand; with scattered, small shell fragments and thin, black organic-rich mud laminations of varying orientation; bedding is mostly horizontal, with areas of inclined bedding and deformation from coring



# CORE ID: 2015-336-FA-36A

**LOCATION:** South of Breton Island, on seismic line 54  
**LATITUDE:** 29.40810 N      **LONGITUDE:** 89.14367 W  
**DATE CORED:** 01/12/2015      **DATE DESCRIBED:** 03/19/2015  
**WATER DEPTH (m):** 8.54      **ELEVATION (m):** -8.10  
**CORE LENGTH (m):** 5.30      **COMPACTION:** 13%



0-152 cm - MUD: mottled, olive-gray (5Y 4/2), silty mud; with localized heavy silt content; with minimal disseminated shell fragments concentrated within siltier layers; a large wood fragment at 130 cm; and small, black organic flecks surrounding the wood

152-345 cm - SAND: olive-gray (5Y 4/2), very fine-grained, well sorted, muddy sand; mud content decreases down-core; with minimal shell material; moderate disseminated very small mica flecks; and small organic mud lenses and mud filled burrows; bedding is mostly massive with some bioturbation and horizontal bedding from 180 to 200 cm

345-373 cm - MUD and SILT: olive-gray (5Y 4/2) mud interbedded with thin, dark olive-gray (5Y 3/2) silt to very fine-grained sand horizons; no visible shell material

373-437 cm - SAND: brownish-gray (2.5Y 5/2), very fine-grained, well sorted, massive, slightly muddy sand; mud content decreases down-core; with minimal disseminated shell material

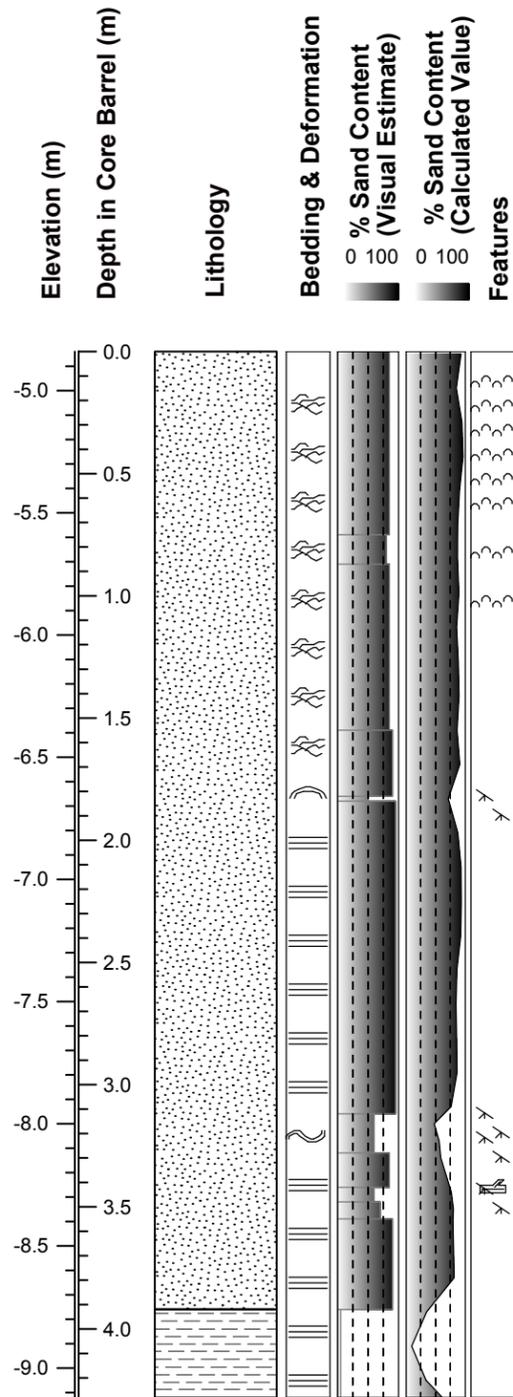
437-448 cm - MUD and SILT: interbedded olive-gray (5Y 4/2) mud and silt; no visible shell material

448-530 cm - SAND: brownish-gray (2.5YR 5/2), fine-grained, well sorted, horizontally laminated sand; with very small scattered bivalve fragments; scattered very small mica flecks; and a large wood fragment at 452 cm



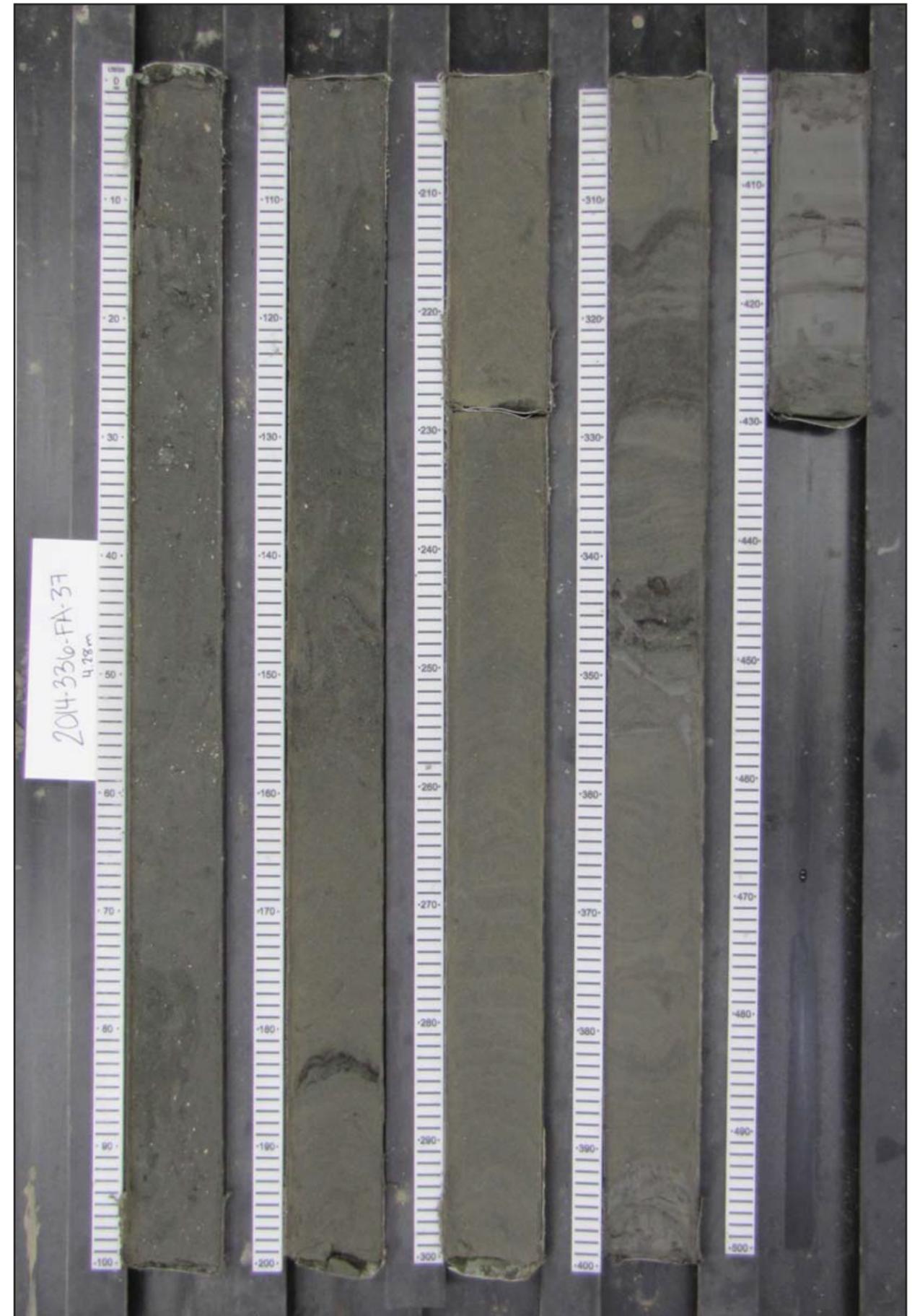
# CORE ID: 2014-336-FA-37

**LOCATION:** Southeast of Breton Island, in the nearshore  
**LATITUDE:** 29.45923 N      **LONGITUDE:** 89.16408 W  
**DATE CORED:** 01/17/2015      **DATE DESCRIBED:** 03/19/2015  
**WATER DEPTH (m):** 5.03      **ELEVATION (m):** -4.84  
**CORE LENGTH (m):** 4.28      **COMPACTION:** 30%



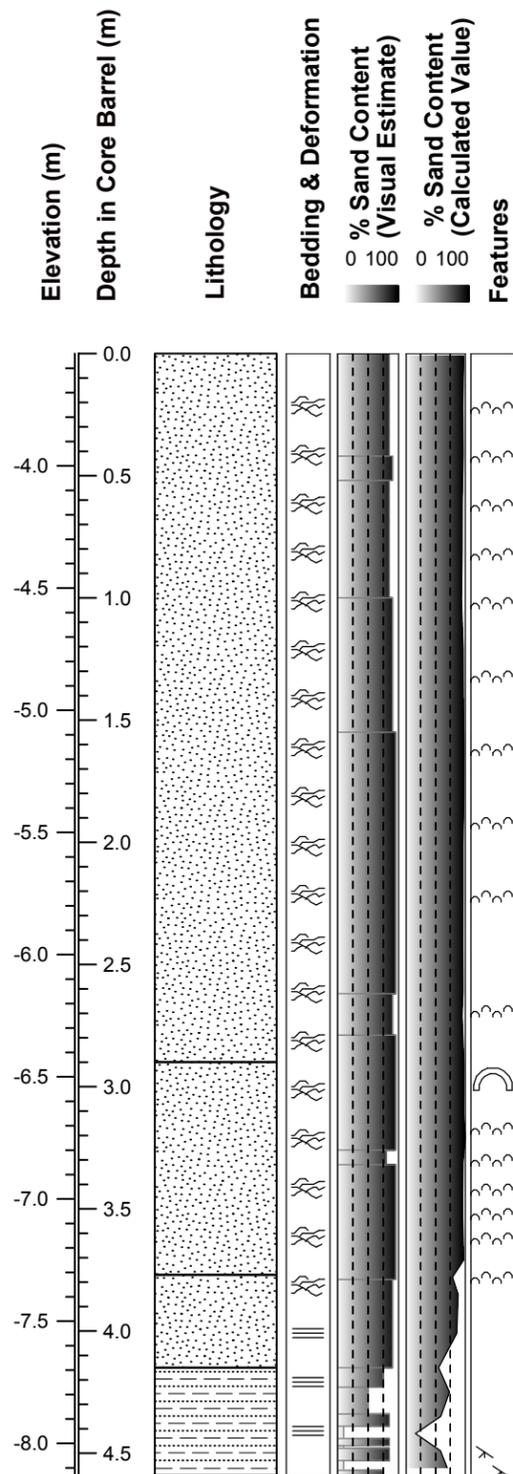
0-392 cm - SAND: grayish-brown (10YR 5/2) grading into light brownish-gray (10YR 6/2) sand with decreasing mud content; with abundant shell fragments from 0-100 cm and minimal shell fragments from 100-392 cm; abundant mica flecks; thin, black organic-rich mud horizons from 182 to 184 and 311 to 348 cm; woody organics at 343 cm; and a sharp basal contact with underlying clay unit; bedding is mottled from 0 to 155 cm and horizontally laminated from 155 to 392 cm, with some deformation from coring and localized bioturbation

392-428 cm - CLAY: olive-gray (5Y 4/2), fat clay; with thin, dark olive-gray (5Y 3/2) silt horizons and no visible shell material



# CORE ID: 2014-336-FA-38A

**LOCATION:** Southeast of Breton Island, near the shoreline  
**LATITUDE:** 29.46937 N      **LONGITUDE:** 89.17213 W  
**DATE CORED:** 01/17/2015      **DATE DESCRIBED:** 03/25/2015  
**WATER DEPTH (m):** 3.66      **ELEVATION (m):** -3.54  
**CORE LENGTH (m):** 4.59      **COMPACTION:** 25%

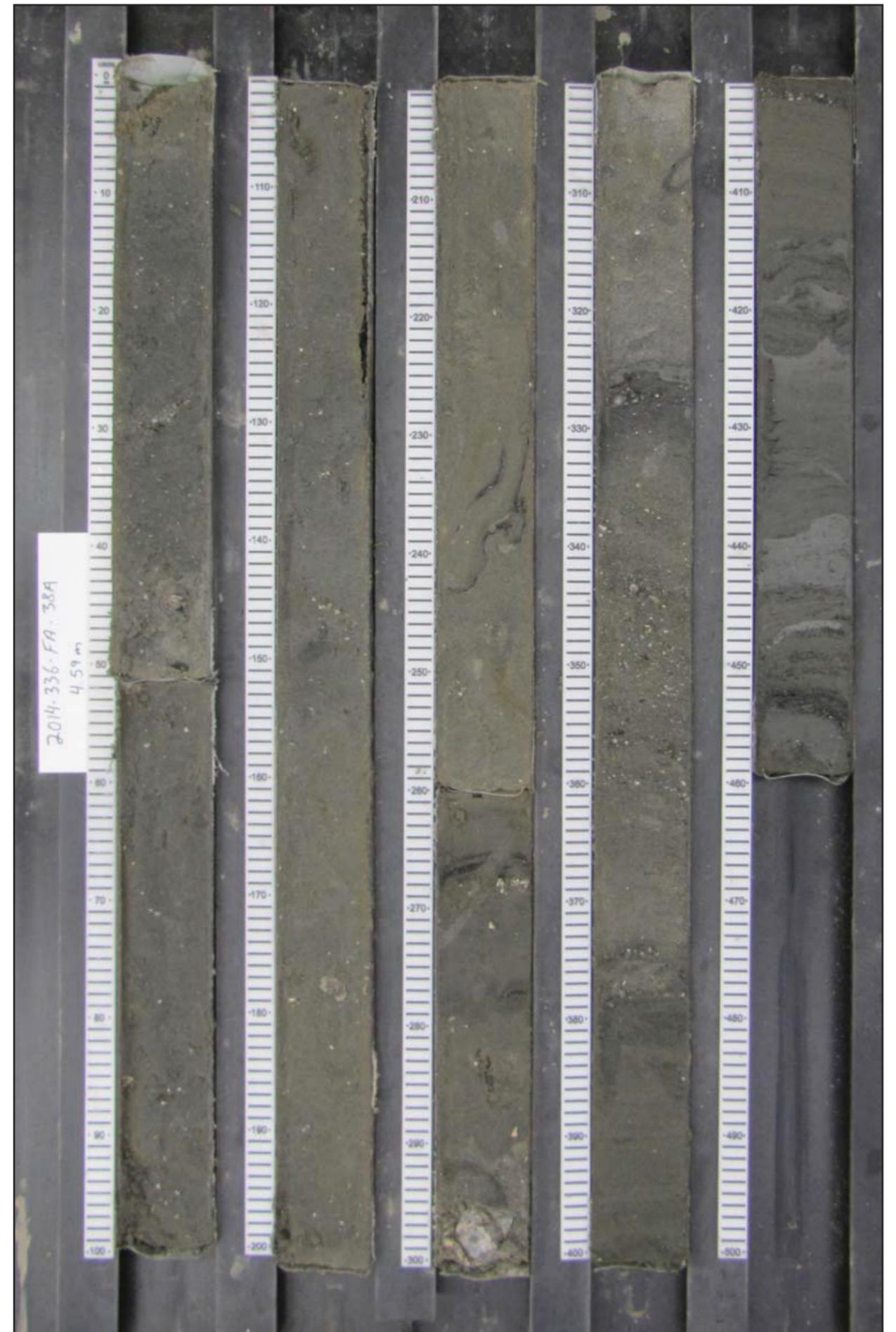


0-290 cm - SAND: mottled, grayish-brown (10YR 5/2) grading into light grayish-brown (10YR 6/2), fine-grained, well sorted muddy sand; mud content decreases down-core; with moderate disseminated shell fragments, localized dense shell-hash clusters; and thin, wavy, organic-rich horizons from 229 to 243 cm

290-377 cm - SAND: light brownish-gray (10YR 6/2), well sorted, fine- to medium-grained sand; with a thin mud horizon at 325 cm and dense shell material from 340 to 360 cm; bedding is mottled and bioturbated

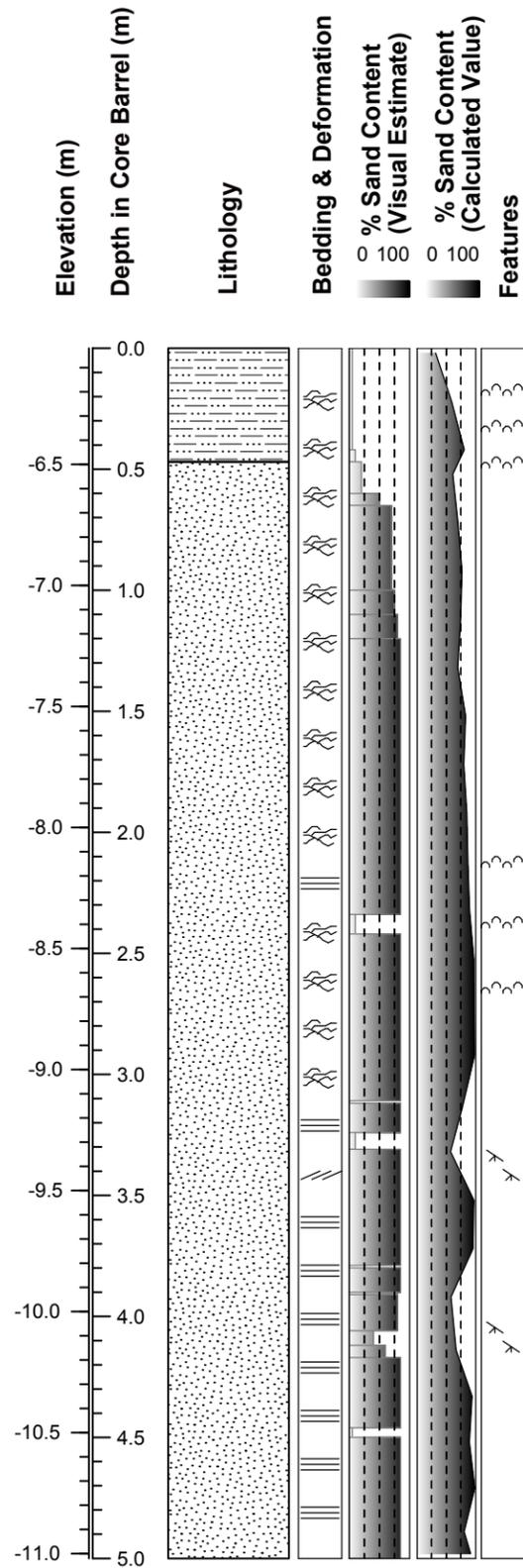
377-415 cm - SAND: olive-brown (2.5Y 4/3), very fine-grained, well sorted, horizontally laminated sand; with minimal disseminated shell material and a dense shell-hash horizon at 403 cm

415-459 cm - SAND and MUD: interbedded olive-gray (5Y 4/2) mud and sand; with occasional thin organic-rich horizons; small organic clasts; and a dense organic-rich layer with a thin underlying shell-hash horizon at 455 cm



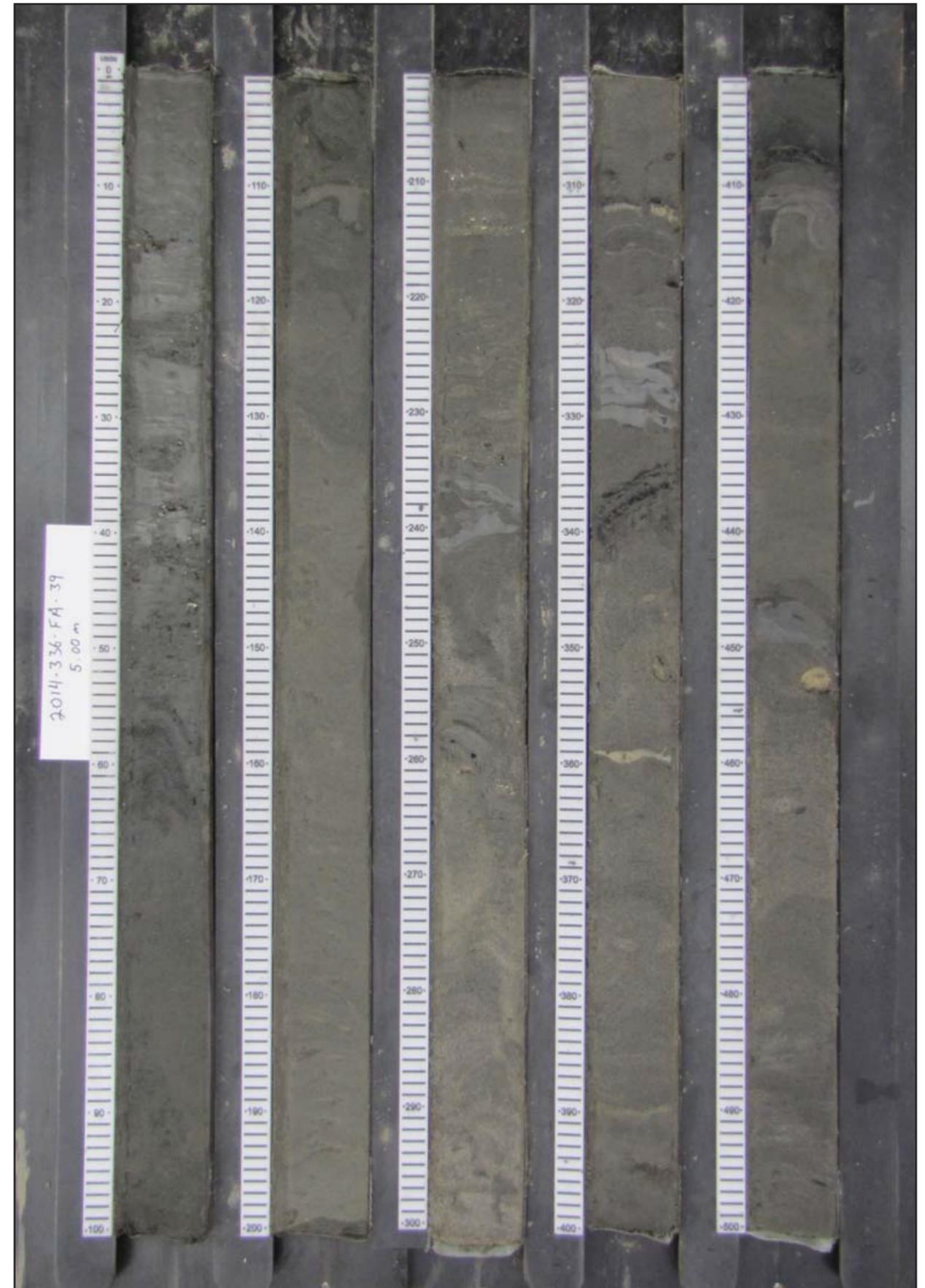
# CORE ID: 2014-336-FA-39

**LOCATION:** North of Breton Island, near the shoreline  
**LATITUDE:** 29.50255 N      **LONGITUDE:** 89.18273 W  
**DATE CORED:** 01/18/2015      **DATE DESCRIBED:** 03/26/2015  
**WATER DEPTH (m):** 6.40      **ELEVATION (m):** -6.02  
**CORE LENGTH (m):** 5.00      **COMPACTION:** 18%



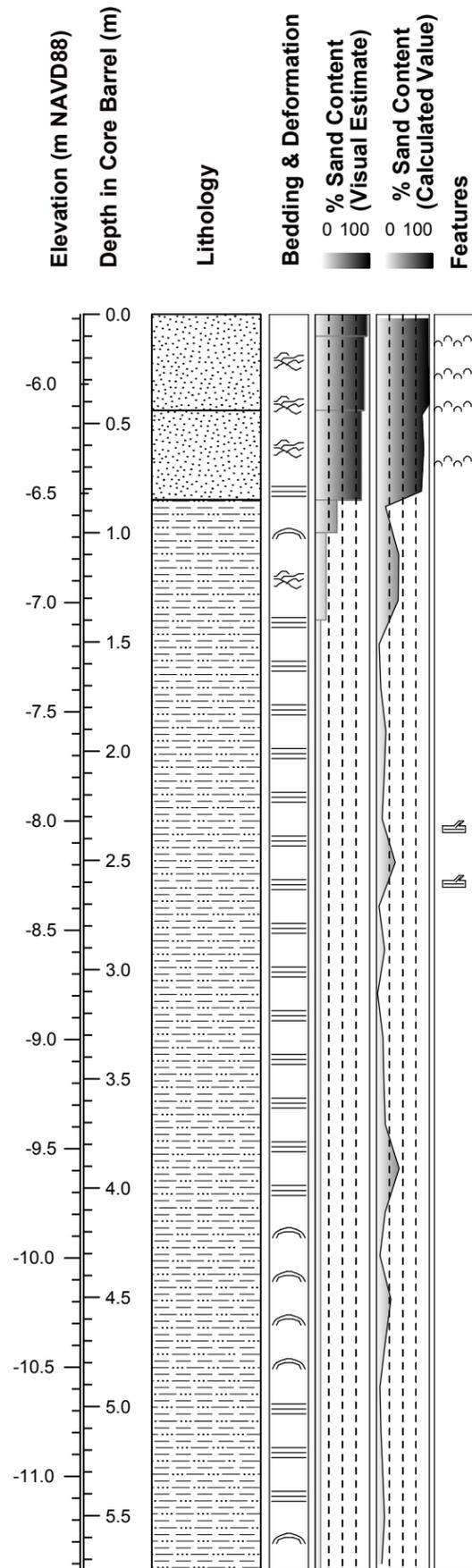
0-47 cm - MUD: soft olive-gray (5Y 4/2) silty mud and silt; with scattered shell fragments except for moderate shell content within the coarsersilt lenses

47-500 cm - SAND: light grayish-brown (10YR 6/2), well sorted sand; grain size increases down-core from very fine- to medium-grained sand; with thin, medium-grained sand horizons within very fine- to fine-grained sand from 47-200 cm; occasional olive-gray (5Y 4/2) to pale yellow (5Y 7/4) clay horizons throughout the unit; dense, highly indurated clay lenses at 353 and 454 cm; thin, inclined organic horizons from 335 to 340 cm; and minimal shell content within the thin, medium-grained sand horizons



# CORE ID: 2104-336-FA-40

**LOCATION:** NE of Breton Is., just south of the MRGO  
**LATITUDE:** 29 30.478 N      **LONGITUDE:** 89 09.565 W  
**DATE CORED:** 01/18/2015      **DATE DESCRIBED:** 03/25/2015  
**WATER DEPTH (m):** 6.10      **ELEVATION (m):** -5.68  
**CORE LENGTH (m):** 5.75      **COMPACTION:** 6%



0-44 cm - SAND: mottled, dark grayish-brown (2.5Y 4/2), moderately sorted, fine- to coarse-grained sand; with small, black, organic-rich mud lenses and abundant shell fragments

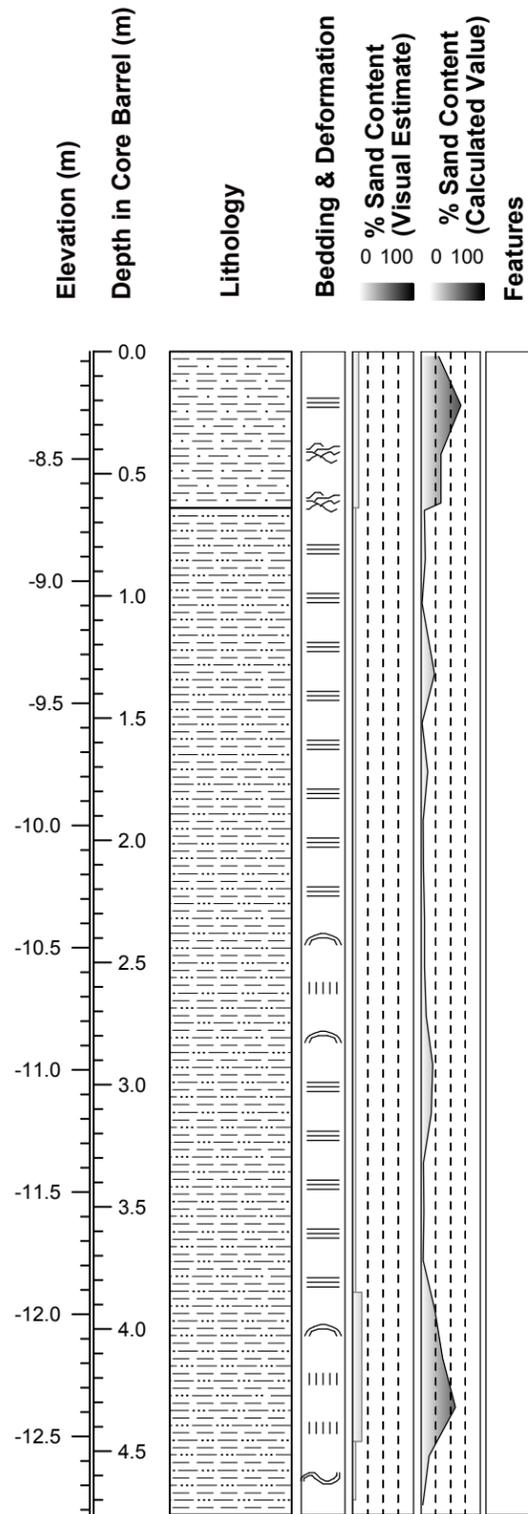
44-85 cm - SAND: mottled, dark olive-gray (5Y 3/2), fine-grained, well sorted sand; with occasional small, black, organic-rich mud lenses and burrows and moderate small shell fragments

85-575 cm - MUD: olive-gray (5Y 4/2) to light olive-gray (5Y 6/2) mud and clay interbedded with thin, dark olive-gray (5Y 3/2) silt and very fine-grained muddy sand horizons; with abundant very small wood fragments and small shell pieces, particularly within the silt and sand horizons; horizontally bedded with areas of deformation from coring



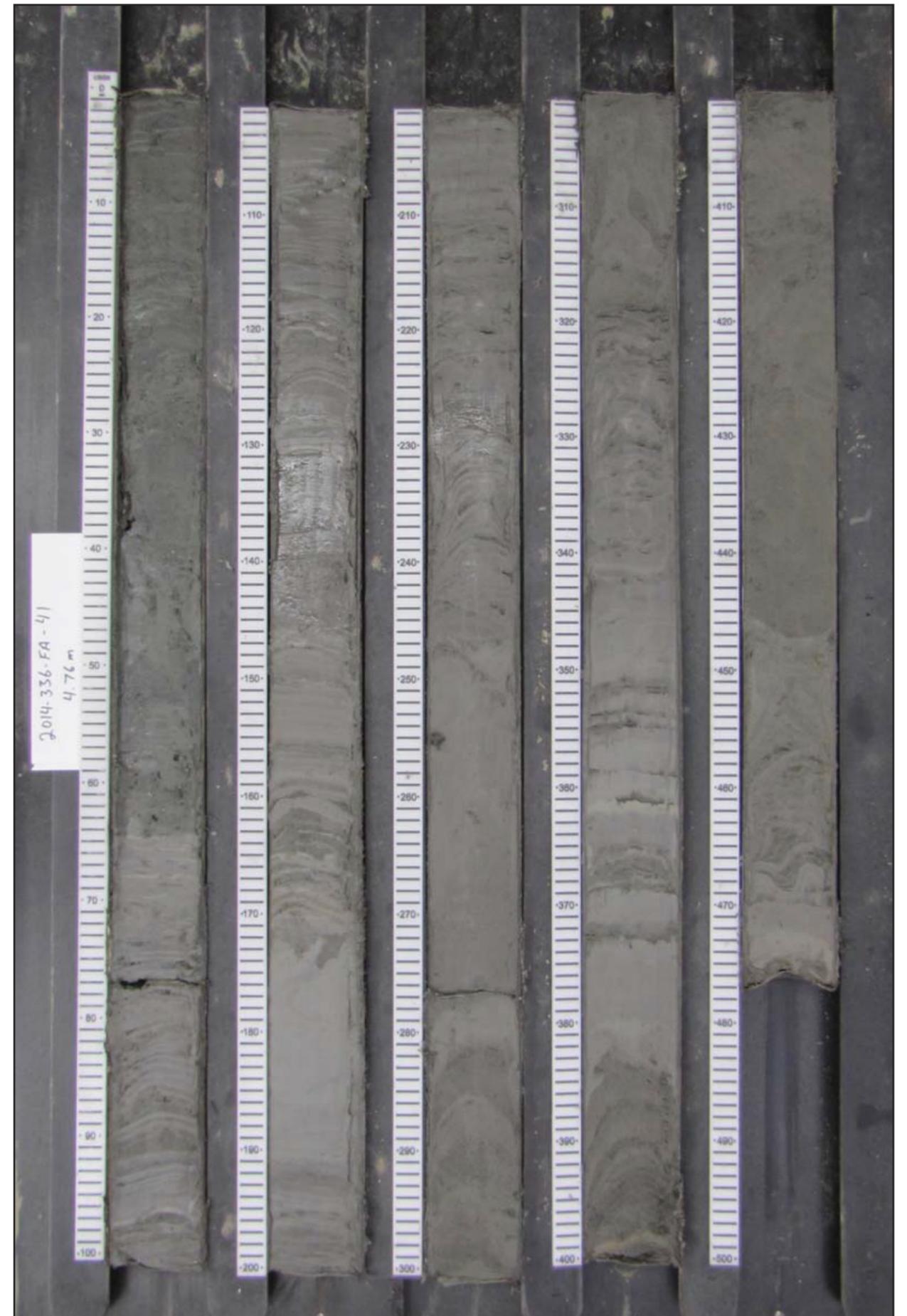
# CORE ID: 2014-336-FA-41

**LOCATION:** Northeast of Breton Island, east of the MRGO  
**LATITUDE:** 29.51278 N      **LONGITUDE:** 89.13828 W  
**DATE CORED:** 01/18/2015      **DATE DESCRIBED:** 03/26/2015  
**WATER DEPTH (m):** 8.23      **ELEVATION (m):** -8.06  
**CORE LENGTH (m):** 4.76      **COMPACTION:** 22%



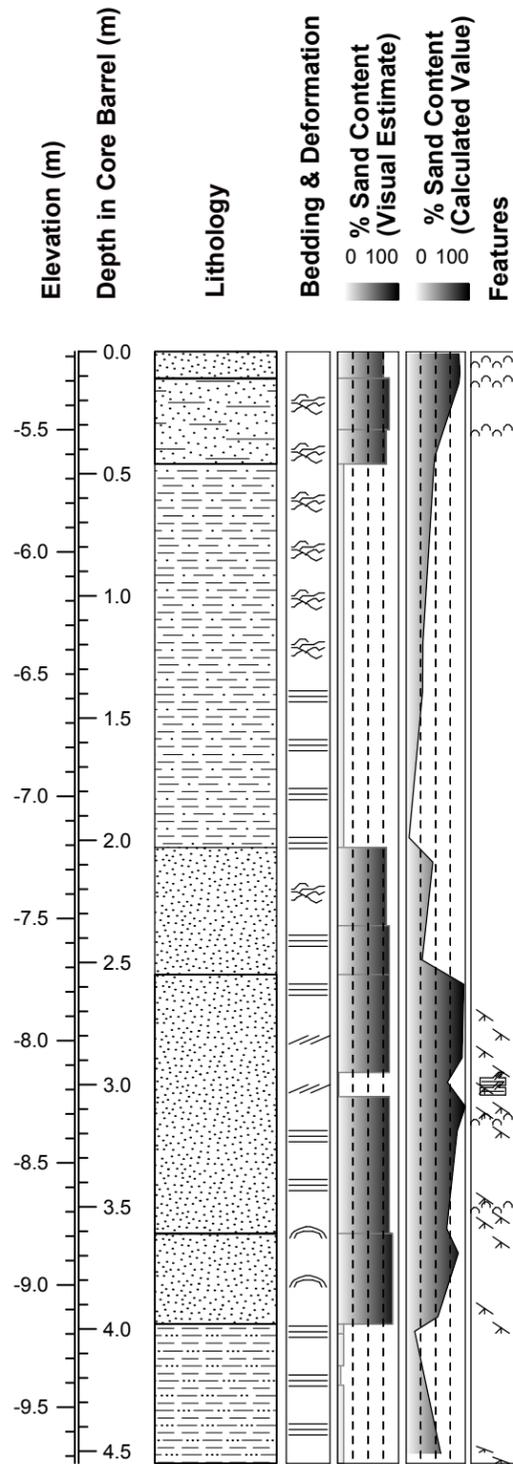
0-64 cm - MUD: mottled, olive-gray (5Y 4/2), silty mud; with scattered small shell fragments; unit is bioturbated with faint horizontal bedding

64-476 cm - MUD and SILT: olive-gray (5Y 4/2) and pale yellow (5Y 7/3) mud interbedded with dark olive-gray (5Y 3/2) and gray (10YR 5/1) silt; with no visible shell material and minimal scattered mica flecks within the silt horizons



# CORE ID: 2014-336-FA-42A

**LOCATION:** Northwest of Breton Island  
**LATITUDE:** 29.51688 N      **LONGITUDE:** 89.20355 W  
**DATE CORED:** 01/11/2015      **DATE DESCRIBED:** 03/25/2015  
**WATER DEPTH (m):** 5.18      **ELEVATION (m):** Unavailable (use water depth)  
**CORE LENGTH (m):** 4.55      **COMPACTION:** 25%



0-11 cm - SHELLY SAND: dark gray (5Y 4/1) to dark olive-gray (5Y 3/2) shell deposit in a muddy sand matrix

11-46 cm - SAND: mottled, olive-gray (5Y 4/2), very fine-grained muddy sand; with moderate disseminated shell material and occasional small woody organic flecks

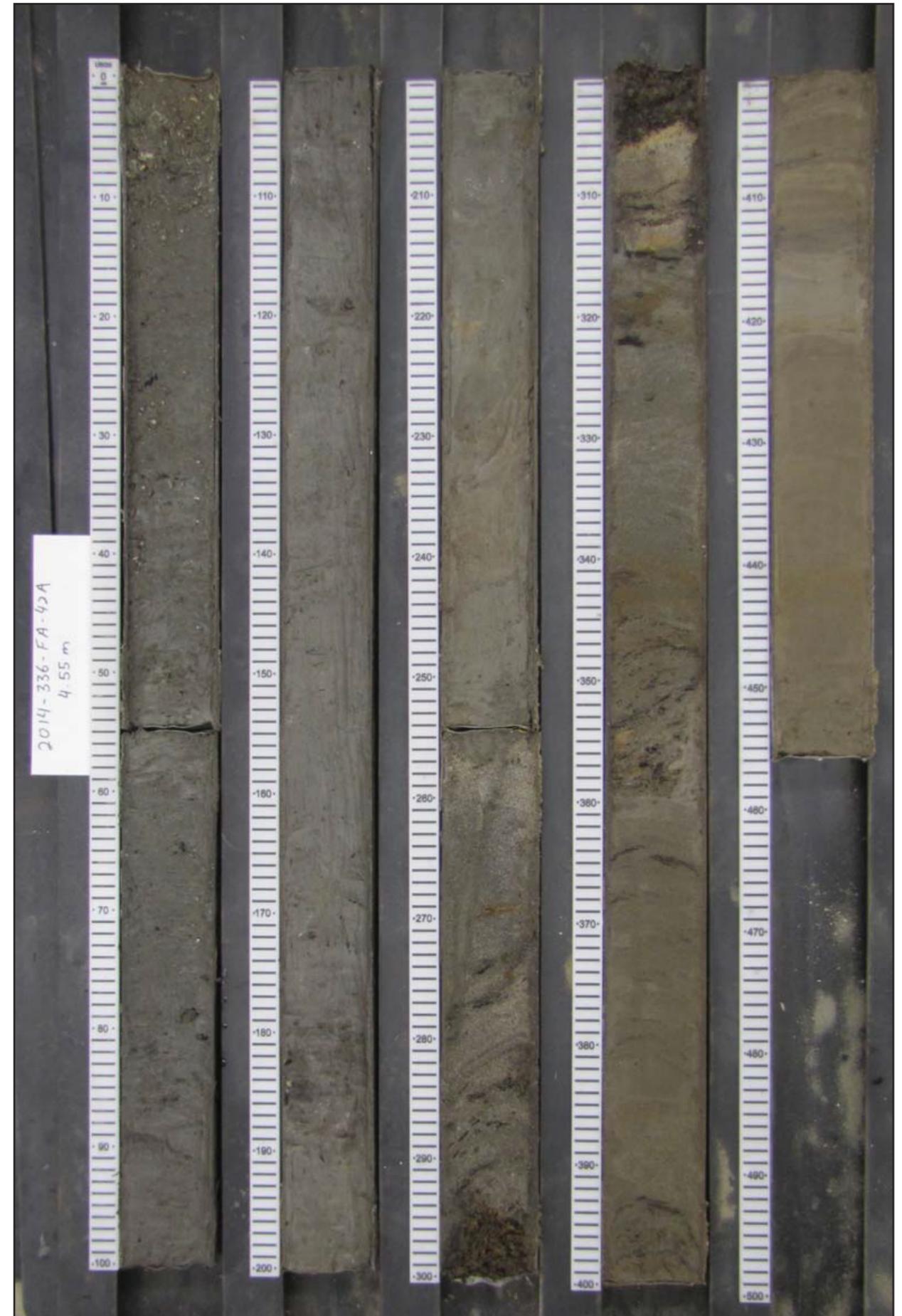
46-203 cm - MUD: olive-gray (5Y 4/2) silty mud; silt content decreases down-core; with moderate disseminated woody organic clasts from 50 to 85 cm

203-255 cm - SAND: olive-gray (5Y 4/2) to grayish-brown (10YR 5/2), very fine-grained, well sorted, slightly muddy sand; with small sandy mud and clay lenses and no visible shell material

255-361 cm - SAND: grayish-brown (10YR 5/2), medium-grained, well sorted sand; with a pale yellow (5Y 7/6), moderately indurated clay clast at 271 cm; a dense woody organic-rich layer from 296 to 307 cm; organic lenses and thin organic-rich horizons exhibiting angular bedding are abundant from 270 to 315 cm; and a highly degraded wood fragment at 322 cm

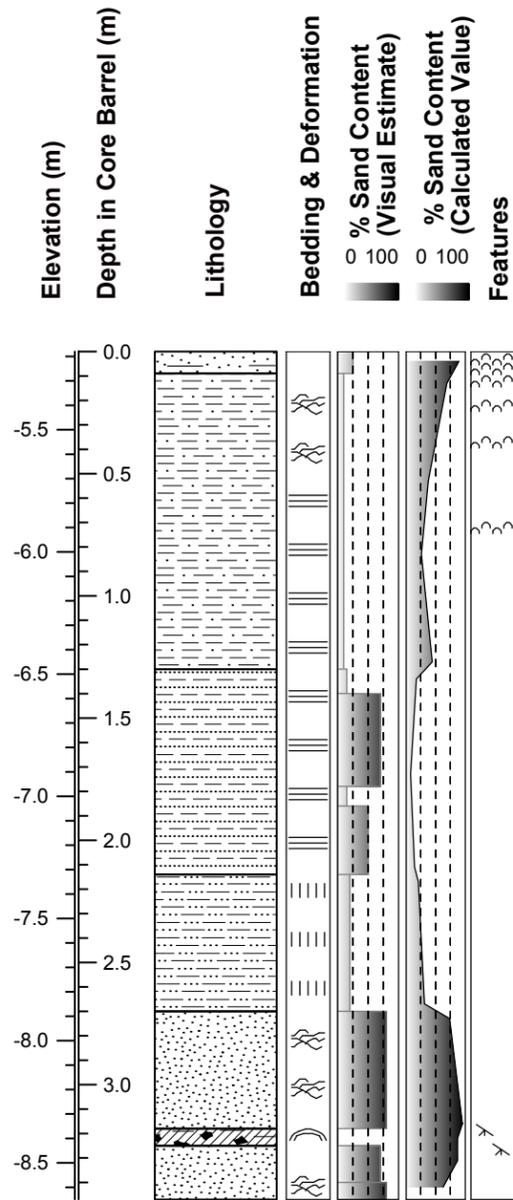
361-398 cm - SAND: grayish-brown (2.5Y 5/2), very fine-grained, well sorted, horizontally laminated, relatively clean sand; with moderate very small mica flecks; no visible shell material; and occasional thin, dark gray (5Y 3/1), organic-rich silt horizons

398-455 cm - SILT and CLAY: light grayish-brown (10YR 4/2), horizontally laminated silt; with relatively thick horizontally laminated clay interbeds from 398 to 403 cm and 415 to 423 cm; no visible shell material; and small organic lenses and flecks from 402 to 404 cm



# CORE ID: 2014-336-FA-43

**LOCATION:** Northwest of Breton Island  
**LATITUDE:** 29.51665 N      **LONGITUDE:** 89.21710 W  
**DATE CORED:** 01/11/2015      **DATE DESCRIBED:** 03/26/2015  
**WATER DEPTH (m):** 5.18      **ELEVATION (m):** Unavailable (use water depth)  
**CORE LENGTH (m):** 3.47      **COMPACTION:** 43%



0-9 cm -SHELLY SAND: olive-gray (5Y 4/2), dense shell deposit in a muddy sand matrix; shells consist of fragmented and intact but inarticulate bivalves and gastropods

9-130 cm - MUD: olive-gray (5Y 4/2) silty mud; with minimal disseminated shell fragments; localized dense shell-hash clusters decrease in frequency down-core; and occasional small woody organic fragments; bedding is mottled and bioturbated from 9 to 45 cm then becomes horizontally bedded with minimal bioturbation

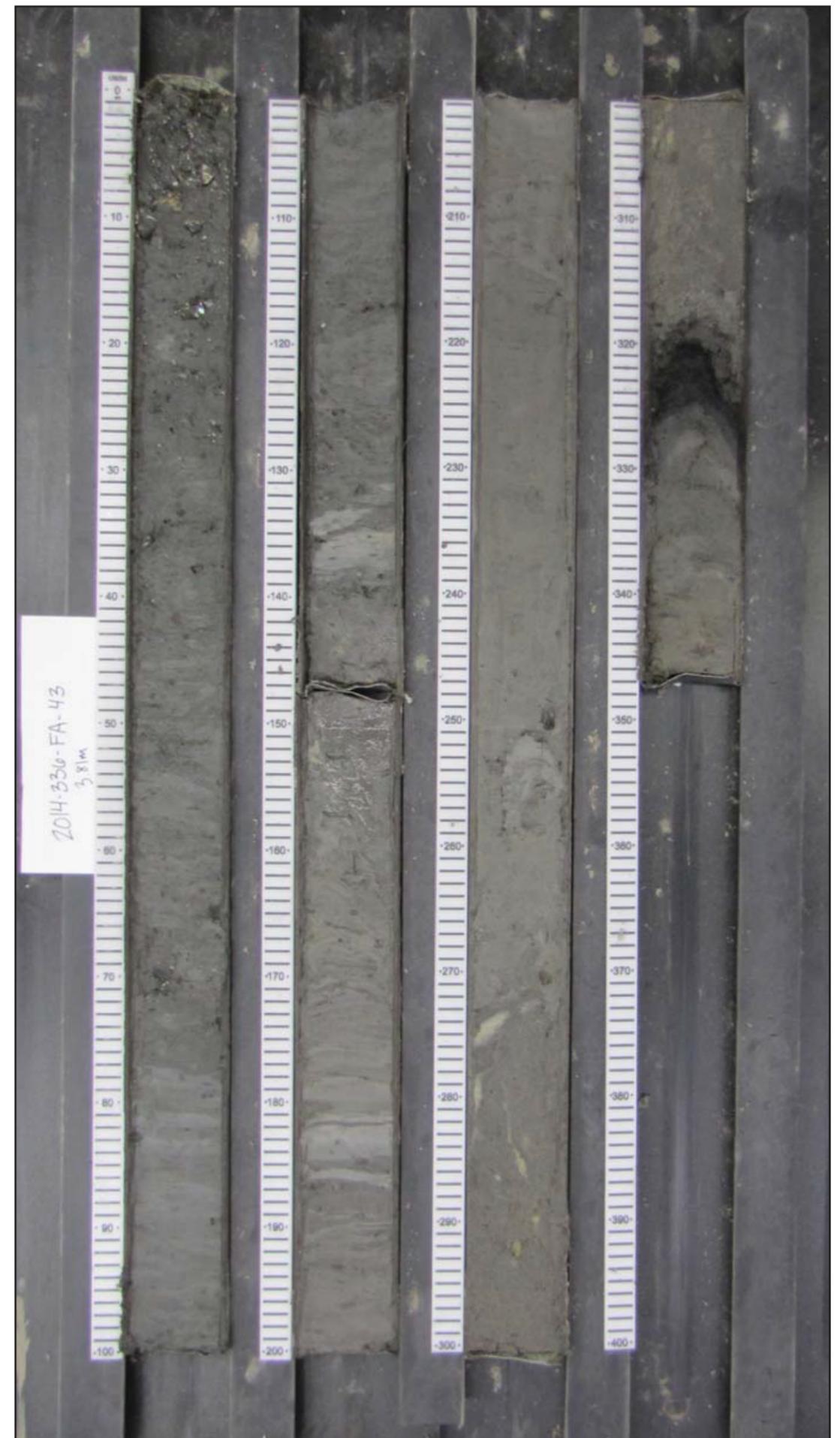
130-214 cm - MUD and SAND: interbedded grayish-brown (10YR 5/2) mud and muddy sand; with no visible shell material and scattered organic flecks

214-270 cm - SILT: grayish-brown (10YR 5/2), massive silt; with small organic clasts and flecks throughout and large mud lens from 251 to 257 cm

270-318 cm - SAND: light grayish-brown (10YR 6/2), medium- to coarse-grained, moderately sorted sand; with small, indurated, pale olive (5Y 6/4) clay lenses

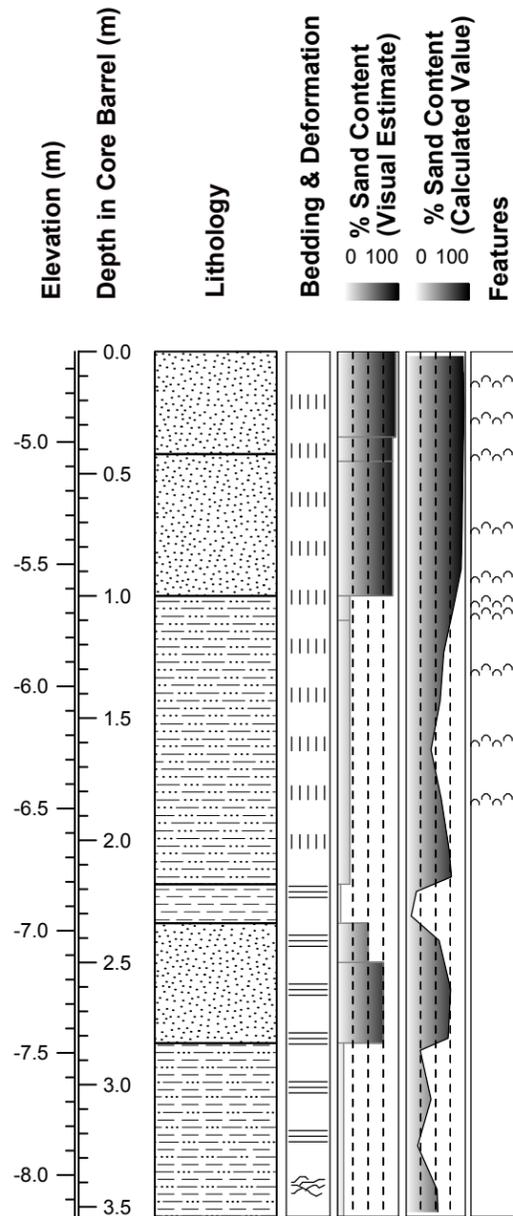
318-325 cm - PEAT: black to very dark brown (10YR 2/2) fibric peat; unit exhibits deformation from coring

325-347 cm - SAND: grayish-brown (10YR 5/2), very fine- to fine-grained, well sorted, massive sand; with small, brown silt lenses and black, organic-rich, silty horizons



# CORE ID: 2014-336-FA-44B

**LOCATION:** South-southwest of Breton Island  
**LATITUDE:** 29.42850 N      **LONGITUDE:** 89.22400 W  
**DATE CORED:** 01/11/2015      **DATE DESCRIBED:** 03/26/2015  
**WATER DEPTH (m):** 5.18      **ELEVATION (m):** -4.63  
**CORE LENGTH (m):** 3.54      **COMPACTION:** 42%



0-42 cm - SAND: grayish-brown (2.5Y 5/2), well sorted, medium-grained, massive sand; with moderate disseminated shell fragments, including intact but inarticulate small bivalves

42-100 cm - SAND: brownish-gray (10YR 5/2), fine-grained, well sorted, massive sand; with moderate disseminated very small shell fragments

100-218 cm - SILT: olive-gray (5Y 4/2) massive silt; with scattered small clay lenses; abundant disseminated shell fragments from 100 to 110 cm; and scattered, dense, shell-hash clusters at 128, 142, 157, and 181 cm

218-234 cm - MUD and CLAY: light brownish-gray (10YR 6/2) clay interbedded with olive-gray (5Y 4/2) mud and thin, dark gray (5Y 3/1) silt horizons; no visible shell material; horizontally bedded

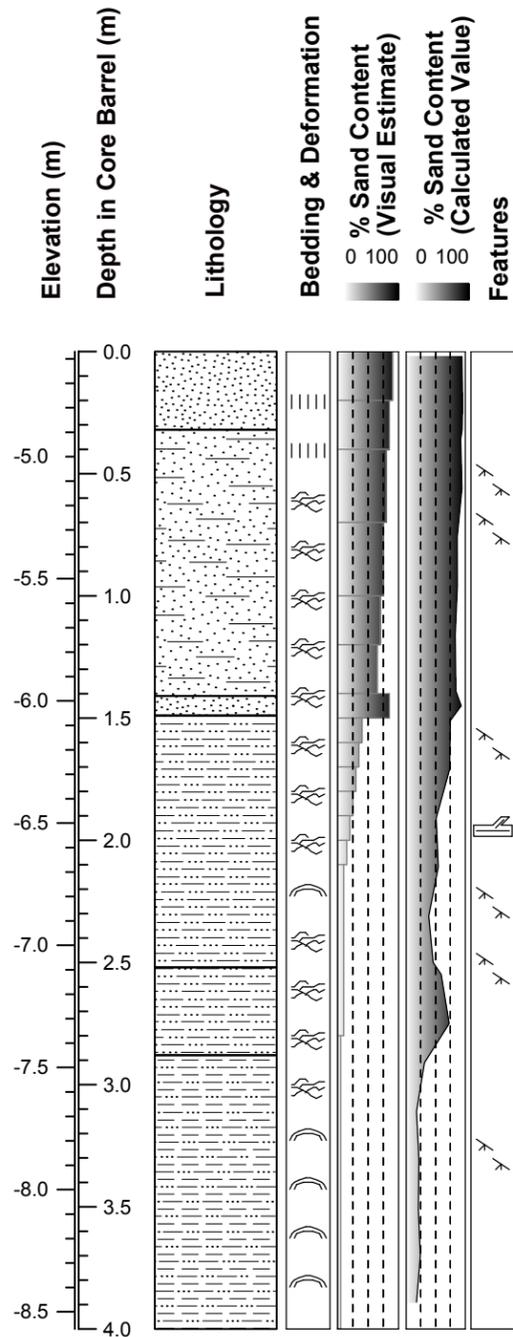
234-283 cm - SAND: olive-gray (5Y 4/2), well sorted, fine-grained, horizontally laminated, slightly muddy sand; no visible shell material

283-354 cm - MUD and SILT: olive-gray (5Y 4/2) mud with thin silt interbeds; with a pale yellow (5Y 7/4) indurated clay lens and thin clay horizon at 326 cm; scattered small woody organic fragments; thin, very dark gray (5Y 2/1) organic-rich mud lenses; and no visible shell material



# CORE ID: 2014-336-FA-45-OSL

**LOCATION:** Southwest of Breton Island  
**LATITUDE:** 29.43328 N      **LONGITUDE:** 89.24827 W  
**DATE CORED:** 10/17/2015      **DATE DESCRIBED:** 05/29/2015  
**WATER DEPTH (m):** 4.57      **ELEVATION (m):** Unavailable (use water depth)  
**CORE LENGTH (m):** 4.0      **COMPACTION:** Unavailable



0-32 cm - SAND: grayish-brown (10YR 4/2) fine- to medium-grained, well sorted, massive sand; with scattered shell fragments and occasional small muddy sand lenses and organic clasts

32-141 cm - SAND: mottled, dark grayish-brown (10YR 4/2) to very dark brownish-gray (10YR 3/2), very fine- to fine-grained, well sorted muddy sand; mud content increases down-core; with minimal disseminated shell fragments and mica flecks and occasional small, black, organic clasts

141-149 cm - SAND: brownish-gray (10YR 5/2), fine-grained, well sorted, slightly cleaner sand; no visible shell material

149-252 cm - SILT: dark gray (5Y 4/1) silt; with mud lenses and thin mud horizons; abundant small organic flecks and fragments; a large, highly degraded wood chunk at 194 cm; moderate disseminated shell fragments; bedding is irregular with mottled areas from 149 to 215 cm and horizontal bedding deformed from coring from 215 to 240 cm

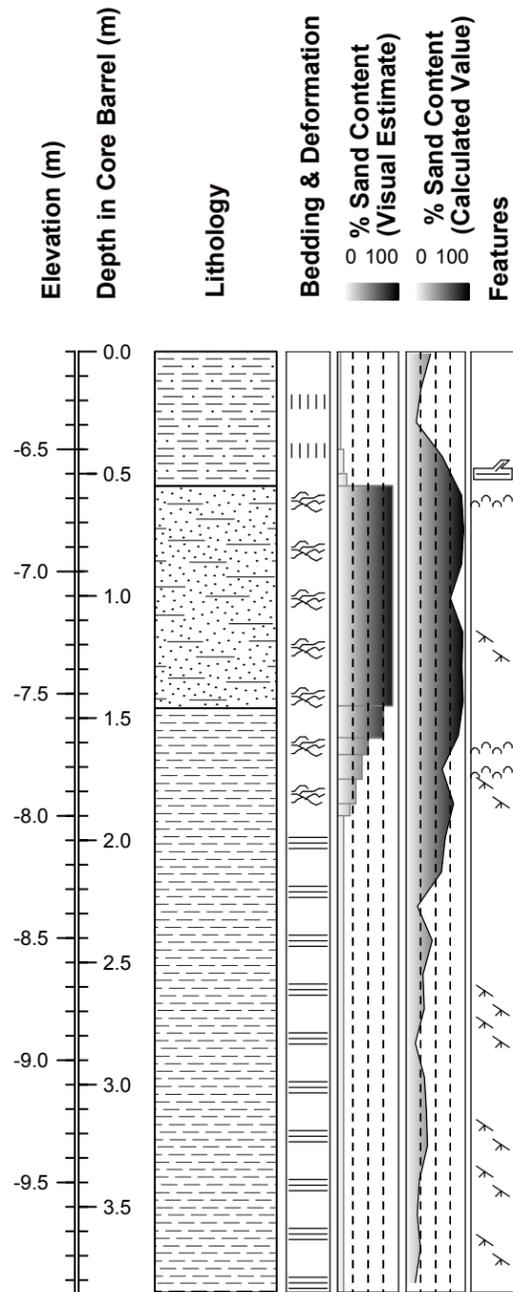
252-288 cm - SILT: dark gray (5Y 4/1), massive silt; with mud lenses and thin mud horizons; minimal very small bivalve and bryozoan fragments; and abundant very small mica flecks

288-400 cm - MUD and SILT: interbedded dark grayish-brown (2.5Y 5/2) mud and silt; with minimal disseminated shell material and abundant very small organic flecks; bedding is mottled from 288 to 315 cm then becomes horizontally laminated with deformation from coring from 315 to 390 cm



# CORE ID: 2014-336-FA-46A

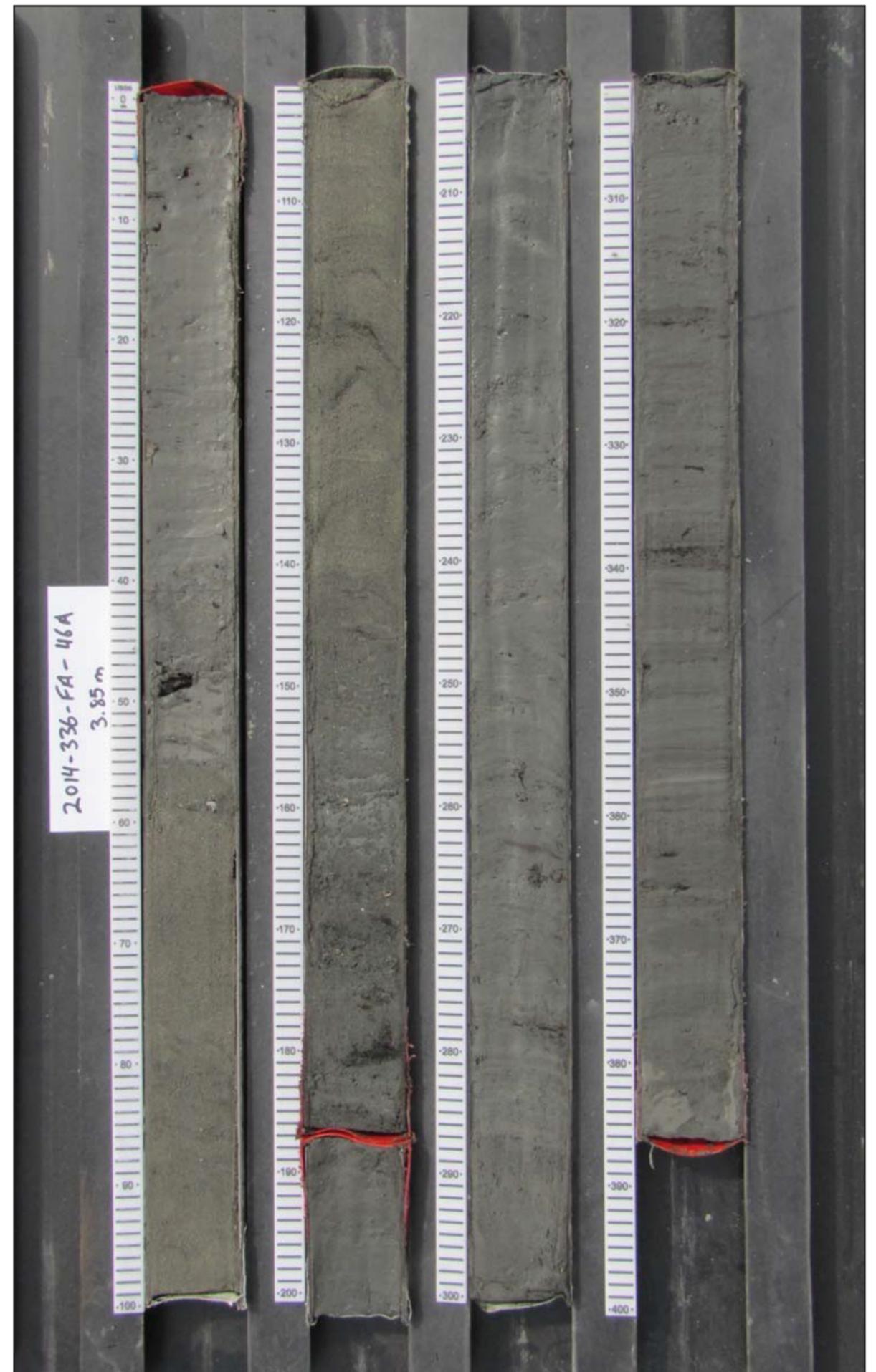
**LOCATION:** West-southwest of Breton Island  
**LATITUDE:** 29.45083 N      **LONGITUDE:** 89.26230 W  
**DATE CORED:** 01/11/2015      **DATE DESCRIBED:** 02/24/2015  
**WATER DEPTH (m):** 6.10      **ELEVATION (m):** Unavailable (use water depth)  
**CORE LENGTH (m):** 3.85      **COMPACTION:** 37%



0-55 cm - MUD: dark olive-gray (5Y 3/2), massive, soft silty mud from 0 to 38 cm grades down-core into sandy mud from 38 to 55 cm; with minimal disseminated shell fragments and small organic flecks and a large woody organic fragment at 48 cm

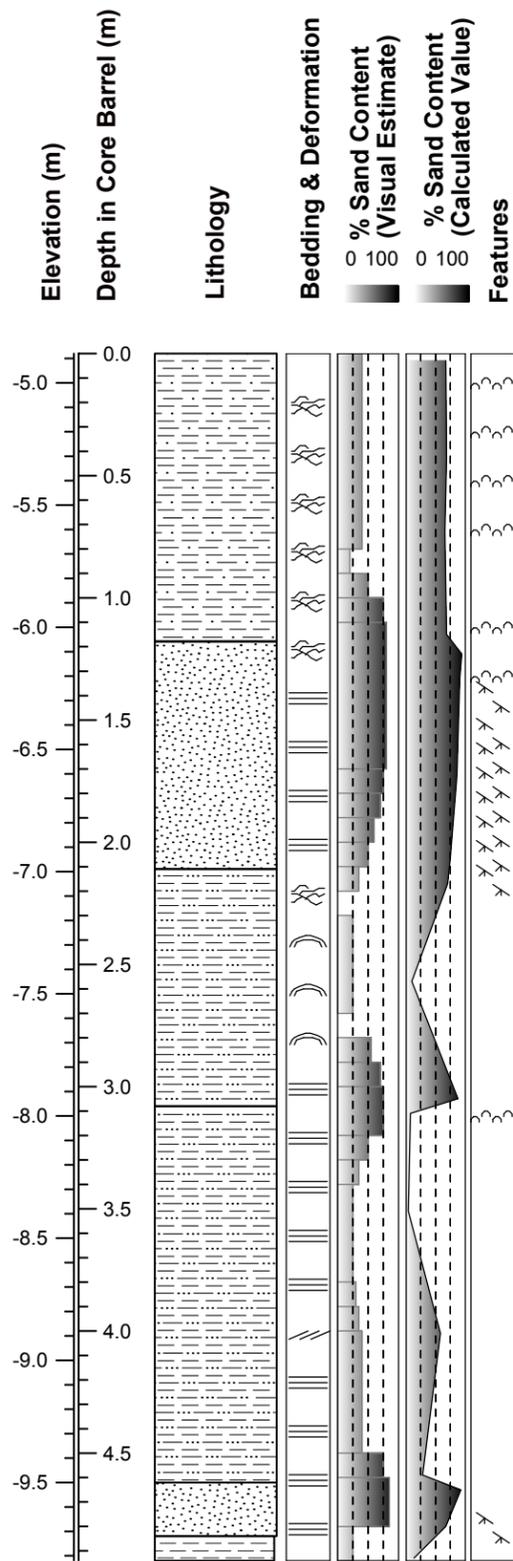
55-146 cm - SAND: dark yellowish-brown (10YR 4/4), very fine- to fine-grained, well sorted silty sand; with thin, very dark brown to black organic-rich mud laminations from 115 to 147 cm and a gradational basal contact; faint horizontal bedding is somewhat mottled from mild bioturbation

146-385 cm - MUD: dark olive-gray (5Y 3/2) mud with thin silt to very fine-grained sand laminations; 146 to 185 cm is gradational between the overlying sand unit and the underlying mud; with organic flecks, lenses and thin organic-rich horizons throughout; scattered shell fragments from 146 to 185 cm; and no visible shell material from 185 to 385 cm; horizontal bedding



# CORE ID: 2014-336-FA-47

**LOCATION:** Northwest of Breton Island  
**LATITUDE:** 29.50370 N      **LONGITUDE:** 89.22130 W  
**DATE CORED:** 01/11/2015      **DATE DESCRIBED:** 03/25/2015  
**WATER DEPTH (m):** 5.18      **ELEVATION (m):** -4.88  
**CORE LENGTH (m):** 4.94      **COMPACTION:** 19%



0-118 cm - MUD: mottled, olive-gray (5Y 4/2), silty to very fine sandy mud; bioturbated with moderate disseminated shell material and a sharp basal contact

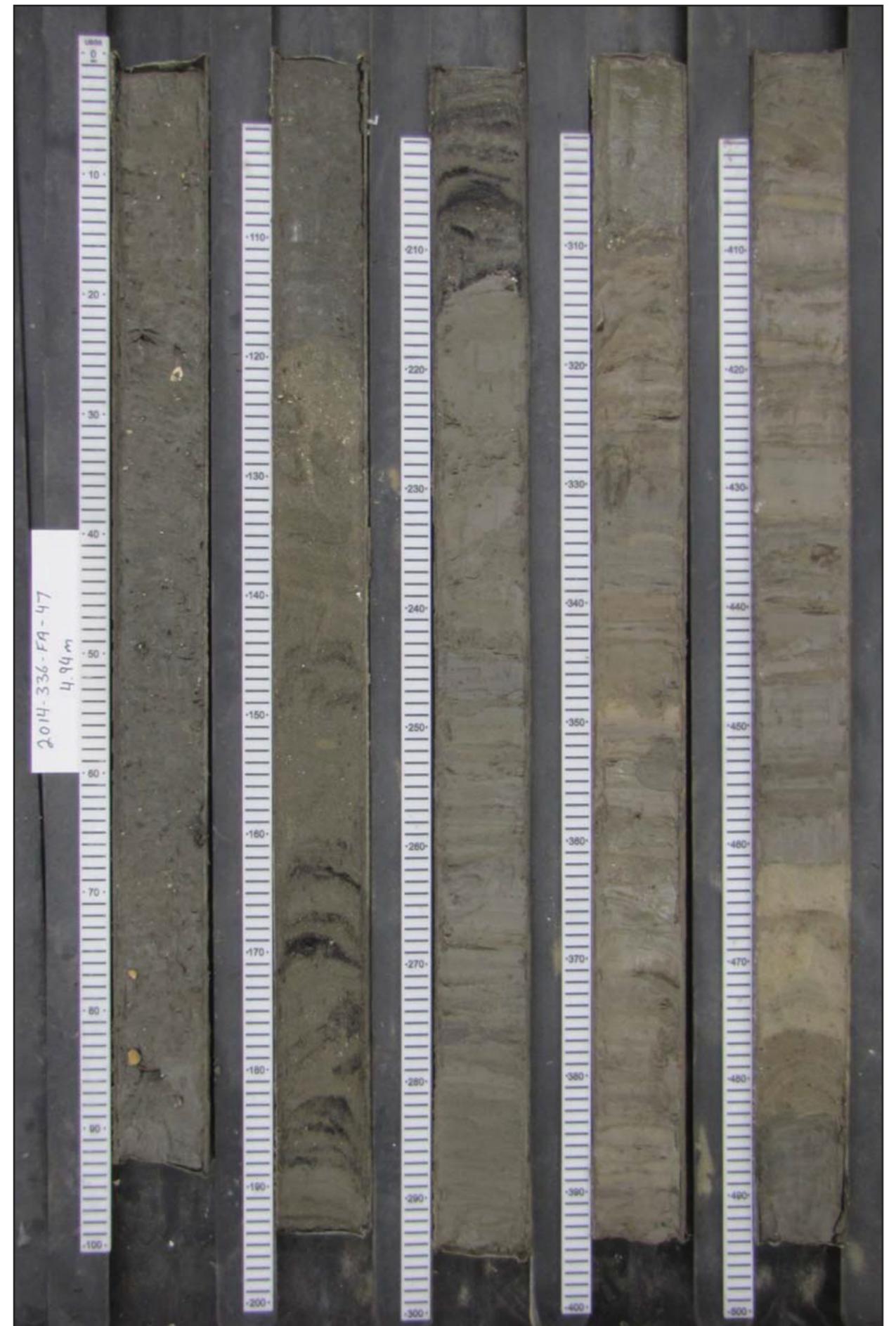
118-210 cm - SAND: dark brown (10YR 2/2), very fine-grained, well sorted, slightly muddy sand; with moderate disseminated shell material from 119 to 130 cm; occasional small wood fragments within thin organic-rich horizons from 130 to 211 cm; organic-rich horizons increase in frequency down-core; moderate disseminated mica flecks, especially concentrated within the organic horizons; and a sharp basal contact

211-308 cm - MUD and SILT: light olive-gray (5Y 6/2) and olive-gray (5Y 4/2) mud interbedded with olive-gray (5Y 4/2) silt; with minimal disseminated shell material; occasional small shell-hash clusters; moderate mica flecks within the silt horizons; and occasional very small organic-rich clasts; bedding is horizontal with areas of bioturbation

308-462 cm - CLAY and SILT: grayish-brown (10YR 5/2), light brownish-gray (10YR 6/2), and light olive-gray (5Y 6/2) clay interbedded with grayish-brown (10YR 5/2) silt and very fine sand; with minimal scattered shell fragments and a sharp basal contact; horizontal bedding

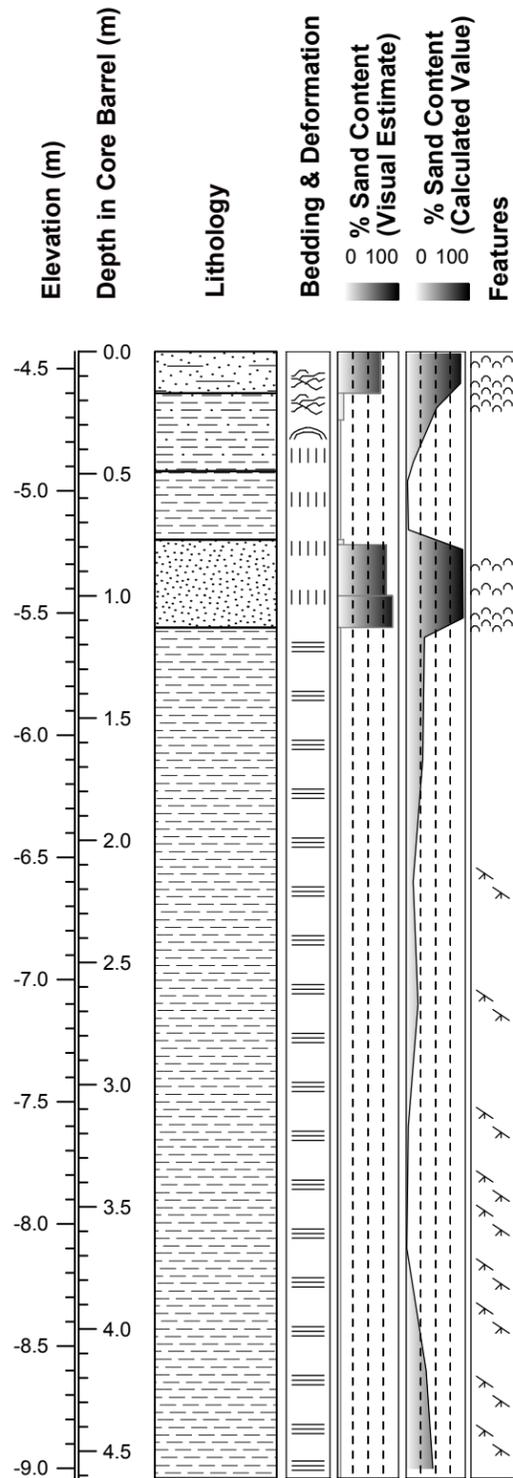
462-484 cm - SAND: very pale brown (10YR 7/3) grading into pale brown (10YR 6/3), very fine-grained, well sorted sand; with a horizon of abundant very small, black, organic flecks that was disturbed by coring and a sharp basal contact

484-494 cm - CLAY: olive-gray (5Y 5/2), dense, horizontally laminated clay; with very small silty lenses



# CORE ID: 2014-336-FA-48

**LOCATION:** North of Breton Island  
**LATITUDE:** 29.51807 N      **LONGITUDE:** 89.17398 W  
**DATE CORED:** 01/18/2015      **DATE DESCRIBED:** 03/25/2015  
**WATER DEPTH (m):** 4.57      **ELEVATION (m):** -4.4  
**CORE LENGTH (m):** 4.61      **COMPACTION:** 24%



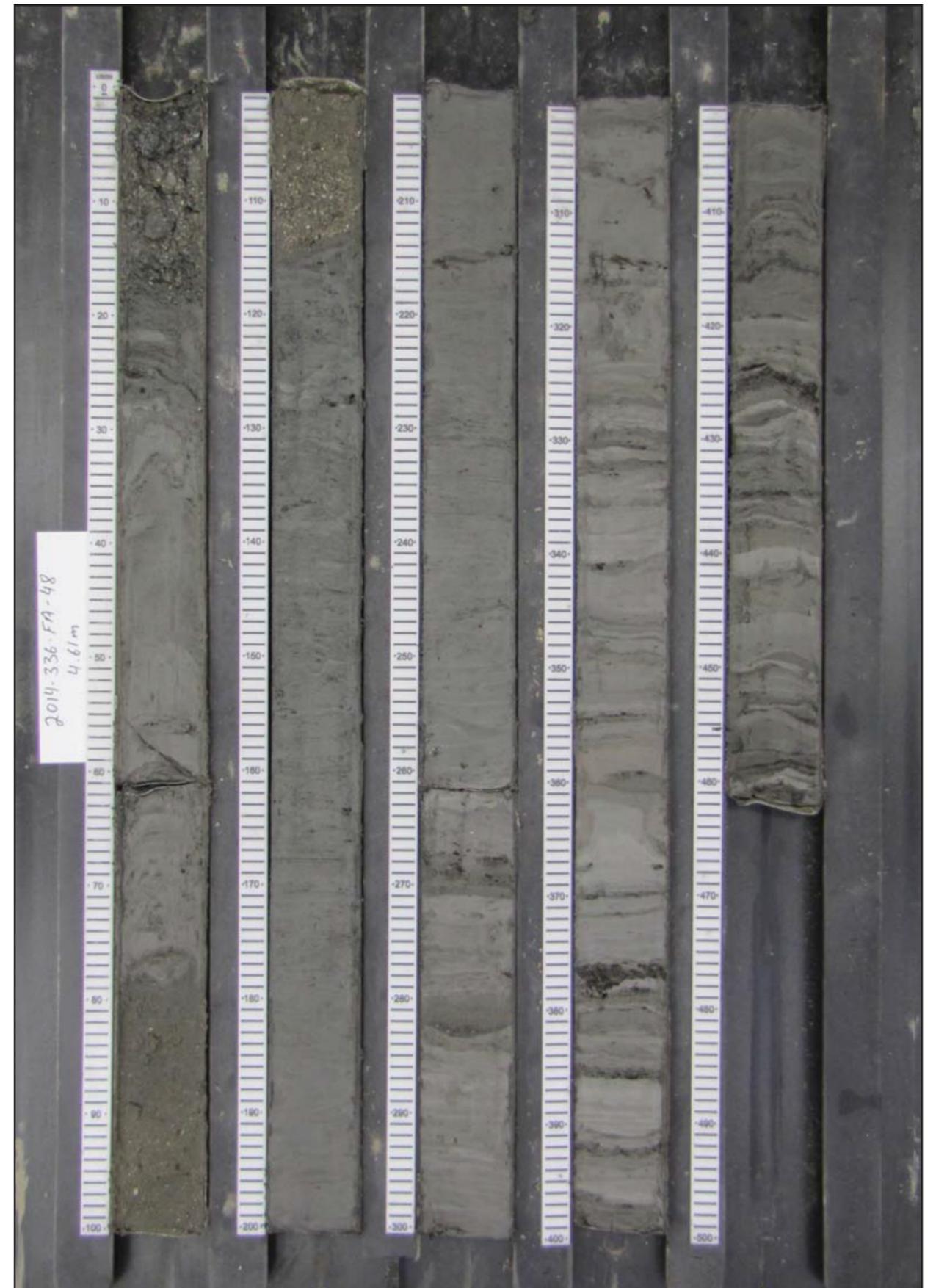
0-17 cm - SHELLY SAND: olive-gray (5Y 4/2) shell deposit in a muddy sand matrix; shells consist mostly of fragmented bivalves

17-49 cm - MUD: dark olive-gray (5Y 3/2) silty mud; with thin, black, organic-rich horizons containing small woody fragments and minimal shell material

49-77 cm - MUD: olive-gray (5Y 4/2), soft, massive mud; with scattered small silt lenses and no visible shell material

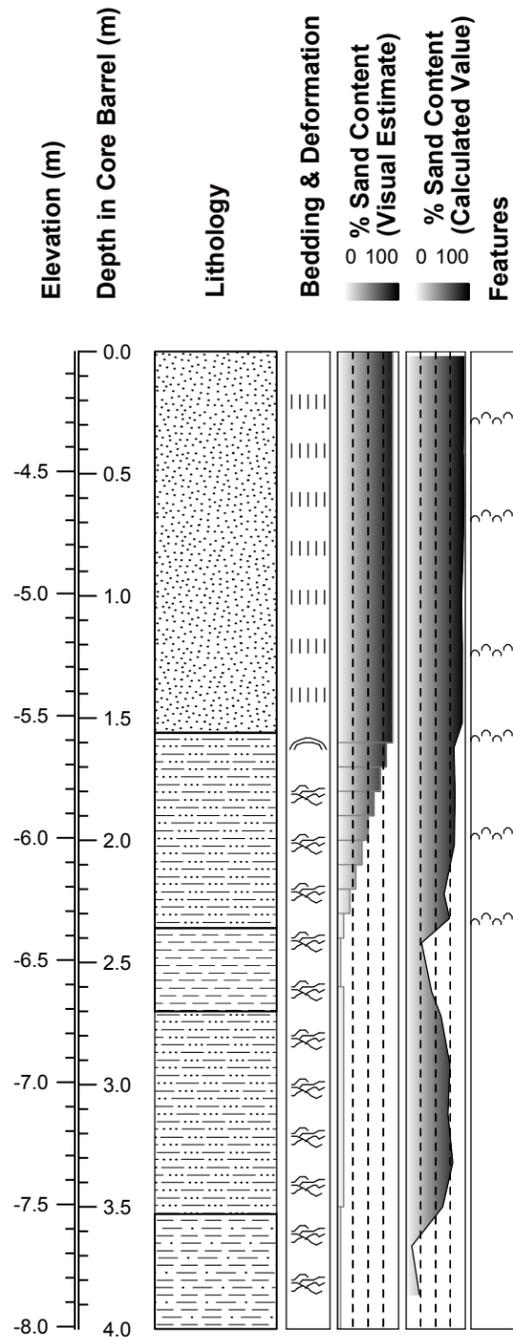
77-113 cm - SAND: dark grayish-brown (10YR 4/2), well sorted, medium-grained, massive sand; with moderate disseminated shell fragments from 77 to 105 cm and abundant shell material from 105 to 113 cm

113-461 cm - MUD and CLAY: light olive-gray (5Y 6/2), olive-gray (5Y 4/2), and dark olive-gray (5Y 3/2) clay and mud with thin silt interbeds; with abundant, thin, organic-rich horizons containing very small wood fragments and occasional thin shell-hash horizons within the silt layers



# CORE ID: 2014-336-FA-49-OSL

**LOCATION:** Southwest of Breton Island  
**LATITUDE:** 29.44632 N      **LONGITUDE:** 89.22550 W  
**DATE CORED:** 01/17/2015      **DATE DESCRIBED:** 05/29/2015  
**WATER DEPTH (m):** 3.66      **ELEVATION (m):** -4.01  
**CORE LENGTH (m):** 4.0      **COMPACTION:** Unavailable



0-156 cm - SAND: light olive-brown (2.5Y 5/4), very fine- to fine- grained, well sorted, massive, relatively clean sand; with occasional small, dark gray, muddy sand lenses and moderate disseminated shell fragments

156-236 cm - SILT: mottled dark gray (10YR 4/1) silt; with occasional small, fine-grained sand lenses; moderate disseminated shell fragments; and moderate very small mica flakes

236-270 cm - MUD: mottled, gray (10YR 5/1) to grayish-brown (10YR 5/2), soft mud; with dark gray muddy silt lenses; a cleaner silt horizon from 255 to 261 cm; and no visible shell material

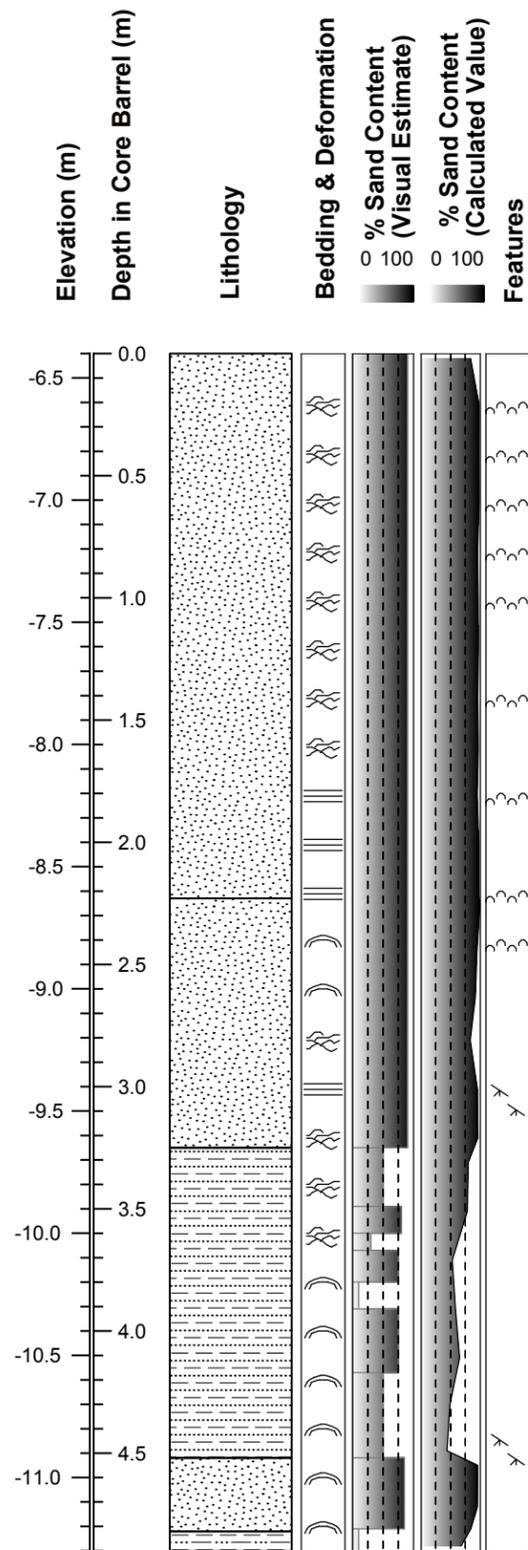
270-353 cm - SILT: dark gray (10YR 4/1), very fine-grained sandy silt; with small, black, organic clasts and flecks and no visible shell material

353-400 cm - MUD: dark brownish-gray (10YR 4/2) silty mud; with thin silt horizons exhibiting deformation from coring



# CORE ID: 2014-336-FA-50

**LOCATION:** East-northeast of Breton Island, east of the MRGO  
**LATITUDE:** 29.50323 N      **LONGITUDE:** -89.11878 W  
**DATE CORED:** 01/18/2015      **DATE DESCRIBED:** 03/26/2015  
**WATER DEPTH (m):** 6.10      **ELEVATION (m):** -6.40  
**CORE LENGTH (m):** 4.90      **COMPACTION:** 20%



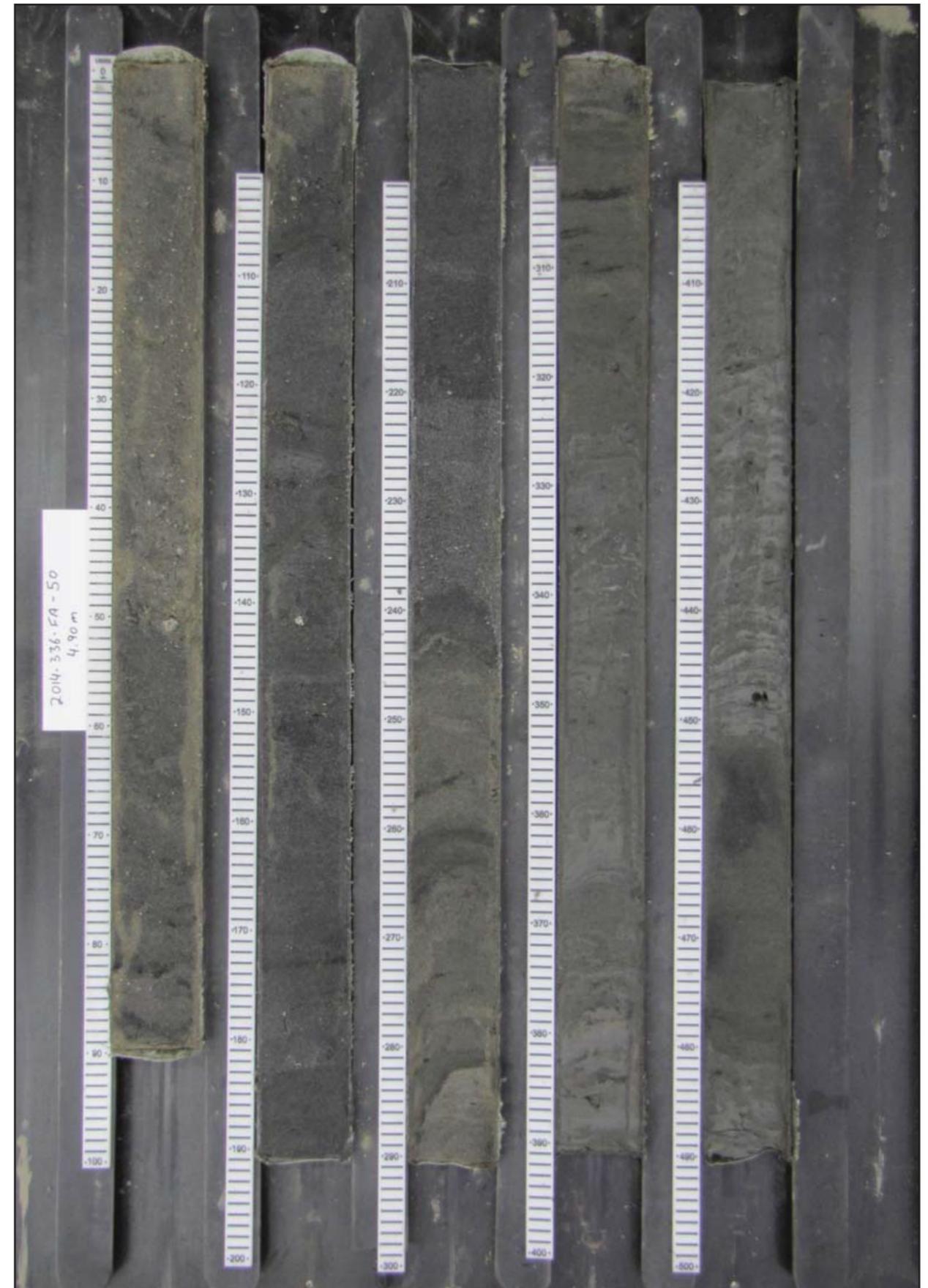
0-223 cm - SAND: light yellowish-brown (2.5Y 6/3) to dark gray (5Y 4/2), well sorted, medium-grained, massive sand; with occasional small olive-gray clay lenses; thin clay horizons; and minimal disseminated shell material

223-325 cm - SAND: grayish-brown (2.5Y 5/2) to light grayish-brown (2.5Y 6/2), well sorted, fine-grained sand; with dark gray (5Y 3/2) silt horizons; minimal disseminated shell fragments and mica flecks; and scattered organic flecks and thin woody organic horizons

325-452 cm - MUD and SAND: interbedded olive-gray (5Y 4/2) mud and very fine-grained sand; with occasional small woody organic clasts; horizontally bedded with some deformation from coring

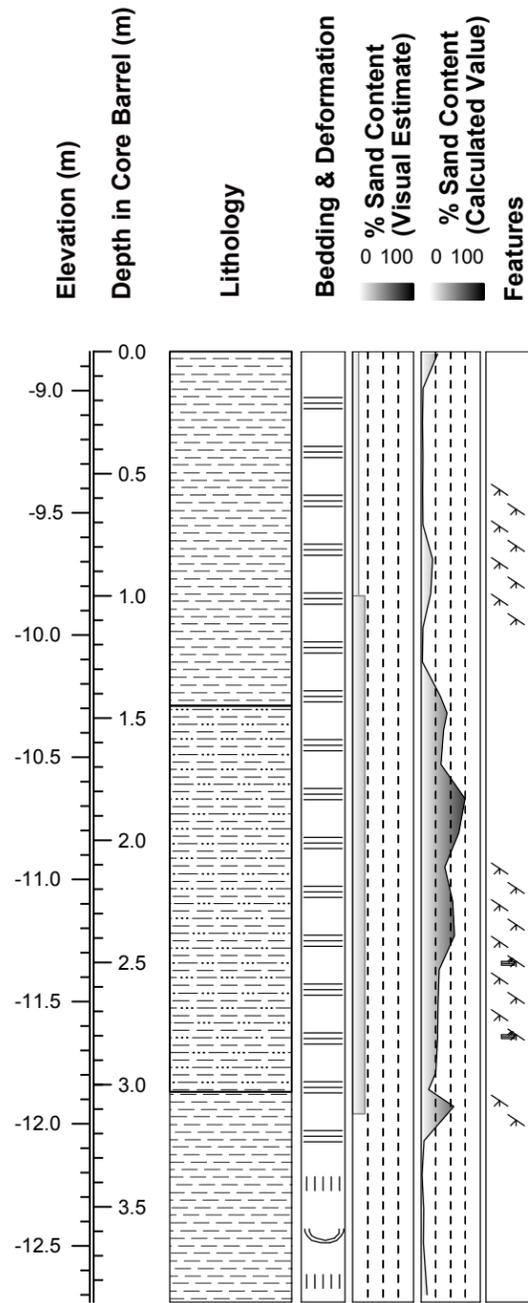
452-482 cm - SAND: dark gray (5Y 3/1), well sorted, fine- to medium-grained, massive clean sand; with very small disseminated mica flecks and no visible shell material

482-490 cm - MUD and SILT: interbedded mottled olive-gray (5Y 4/2) soft mud and silt; with no visible shell material



# CORE ID: 2014-336-FA-51

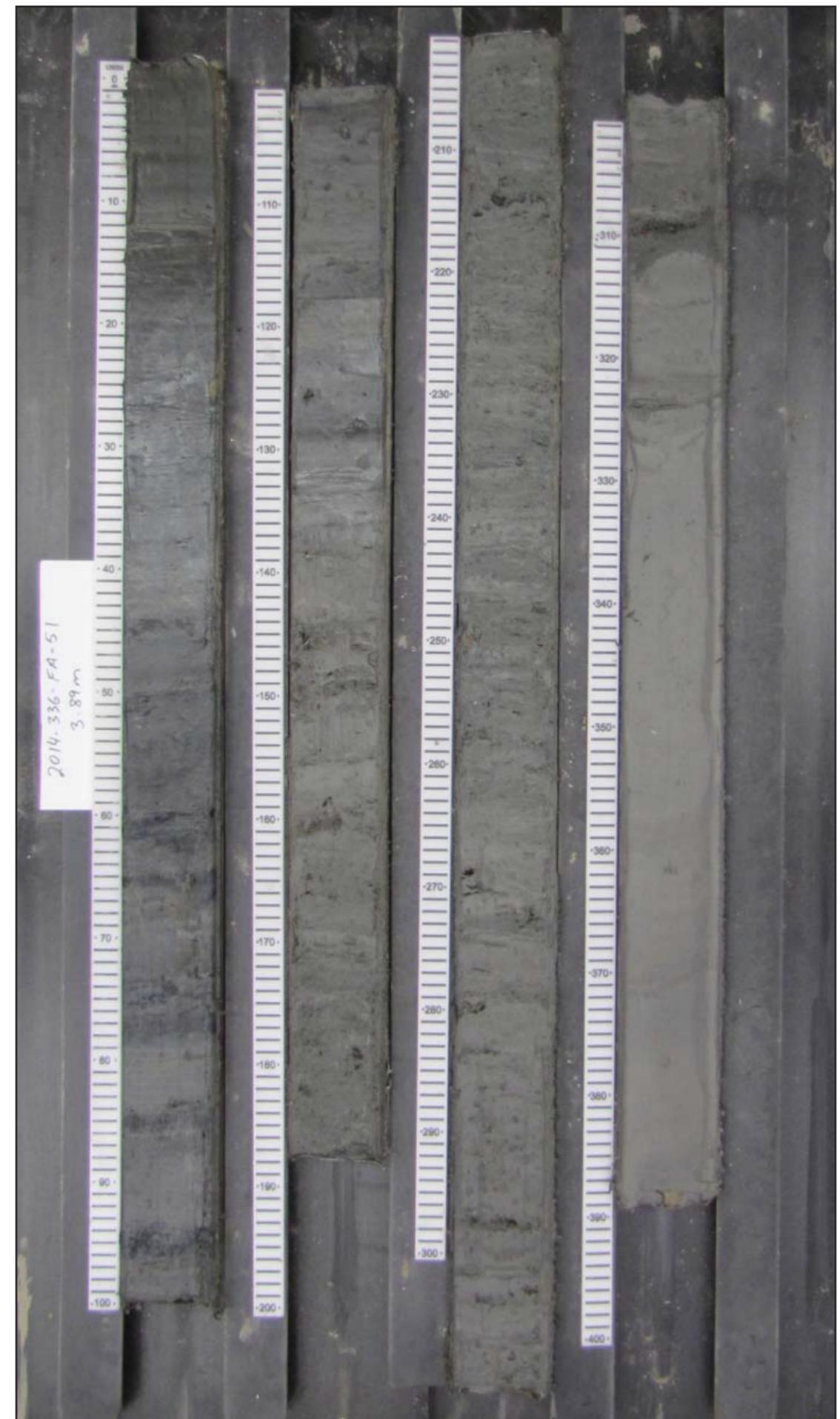
**LOCATION:** Southwest of Breton Island  
**LATITUDE:** 29.41842 N      **LONGITUDE:** 89.27168 W  
**DATE CORED:** 01/11/2015      **DATE DESCRIBED:** 03/25/2015  
**WATER DEPTH (m):** 8.84      **ELEVATION (m):** Unavailable (use water depth)  
**CORE LENGTH (m):** 3.89      **COMPACTION:** 36%



0-145 cm - MUD: interbedded dark gray (5Y 4/1) and olive-gray (5Y 4/2) organic-rich mud and soft, cleaner mud; with no visible shell material; organic-rich mud horizons are most prevalent between 60 and 100 cm; silt lenses appear around 103 cm and continue into underlying unit; horizontally bedded

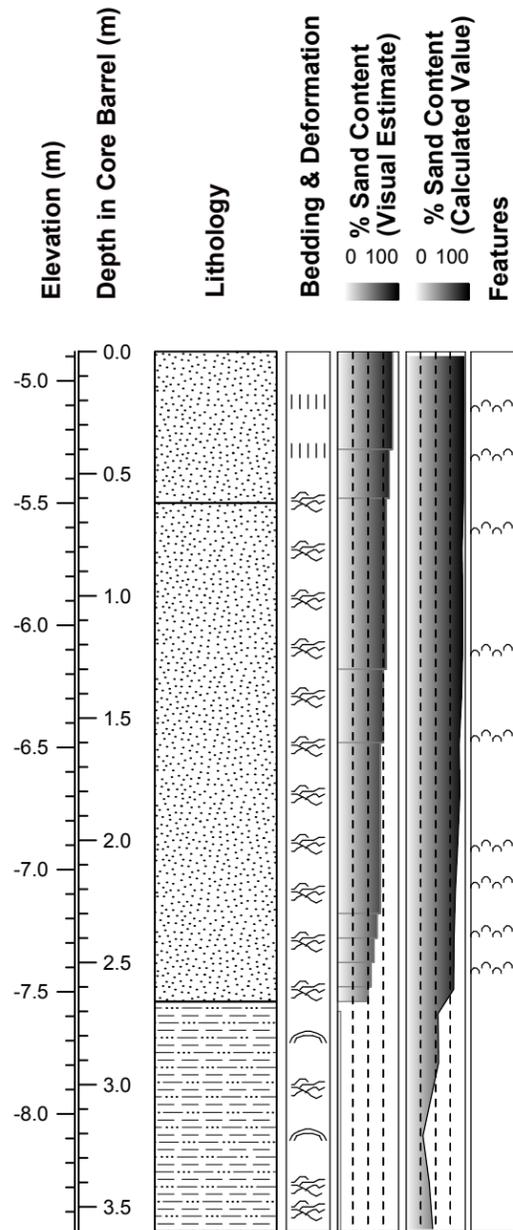
145-303 cm - MUD and SILT: olive-gray (5Y 4/2) mud interbedded with thin silt and very fine-grained sand horizons; with abundant disseminated small woody organic fragments and very few visible small shell fragments; mud content increases down core

303-389 cm - CLAY: olive-gray (5Y 4/2), relatively dense, massive, fat clay; with minimal disseminated shell fragments; occasional small silt lenses and thin silt horizons; and small, indurated, yellow clay clast at the base of the core; deformed horizontal bedding faintly visible from 357 to 389 cm



# CORE ID: 2014-336-FA-52-OSL

**LOCATION:** Southwest of Breton Island  
**LATITUDE:** 29.42608 N      **LONGITUDE:** 89.26003 W  
**DATE CORED:** 01/17/2015      **DATE DESCRIBED:** 06/01/2015  
**WATER DEPTH (m):** 4.88      **ELEVATION (m):** Unavailable (use water depth)  
**CORE LENGTH (m):** 3.60      **COMPACTION:** Unavailable



0-62 cm - SAND: brownish-gray (2.5Y 5/2), fine- to medium-grained, well sorted, massive sand; with minimal disseminated shell fragments from 0 to 30 and 40 to 62 cm and increased shell material from 30 to 40 cm

62-266 cm - SAND: dark gray (2.5Y 4/1), very fine-grained, well sorted, massive, slightly silty sand; with minimal scattered shell fragments; locally dense shell-hash clusters and thin shelly horizons; occasional thin, black, organic-rich horizons and lenses; and abundant very small disseminated mica flecks, particularly within and surrounding the organic horizons

266-360 cm - MUD and SILT, gray (5Y 5/1), soft mud interbedded with thin, dark gray (5Y 4/1) silt horizons; with small, pale yellow (5Y 7/3) clay lenses within the mud horizons; scattered small, black, organic flecks and woody fragments; and no visible shell material

