USGS science for a changing world

Push Core Description Sheet

Core ID: 2014-336-FA-01
Latitude: 29° 23.078 N
Longitude: 89° 08.041 W
Date Collected: 01/12/2015
Geographic Location:

Date Described: 02/24/15
Described By: Kelso
Core Penetration: 19.7 ft
Core Length: 4.68m (22% comp)
WD - 34' / 10.36

SEDIMENTARY TEXTURE AND STRUCTURES	% SAND (0 – 50 – 100)	PHYSICAL CHARACTERISTICS	STRATIFICATION TYPE	SAMPLE	PHYSICAL DESCRIPTION

Columns: CLAY, SILT, FINE SAND, MEDIUM SAND, COARSE SAND, INTERVAL (cm) | COLOR, DEFORMATION, BED THICKNESS, % SHELL, % ORGANICS, % BIOTURBATION | WAVY, FLASER, LENTICULAR, CROSS BED, MASSIVE BED, INCLINED BED, HORIZON LAMINATION | GRAIN SIZE, HEAVY MINERAL, MICRO FOSSILS, RADIOMETRIC, RADIOGRAPH, PHOTOGRAPH

Interval (cm): 1.0, 2.0, 3.0, 4.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.0, 15.0, 20.0, 25.0, 30.0, 35.0, 40.0, 45.0, 50.0

0-5cm - VOID

5-43cm - Mud, dark olive gray ( ) silty mud, with a thin black organic horizon at 17cm

43-82 cm - Silt and mud, dark olive gray ( ) very silty silt with small mud clasts

82-468cm - Silt and mud dark olive gray silt interbedded with mud horizons and large lenses heavily bioturbated section from 165-198 with black wavy organic horizons / burrows bedding looks massive from 202-370cm and horizontally laminated from 202-468cm abundant organic flecks from 370-382cm and a small organic remnant from 423-427cm gets into dense clay at core base

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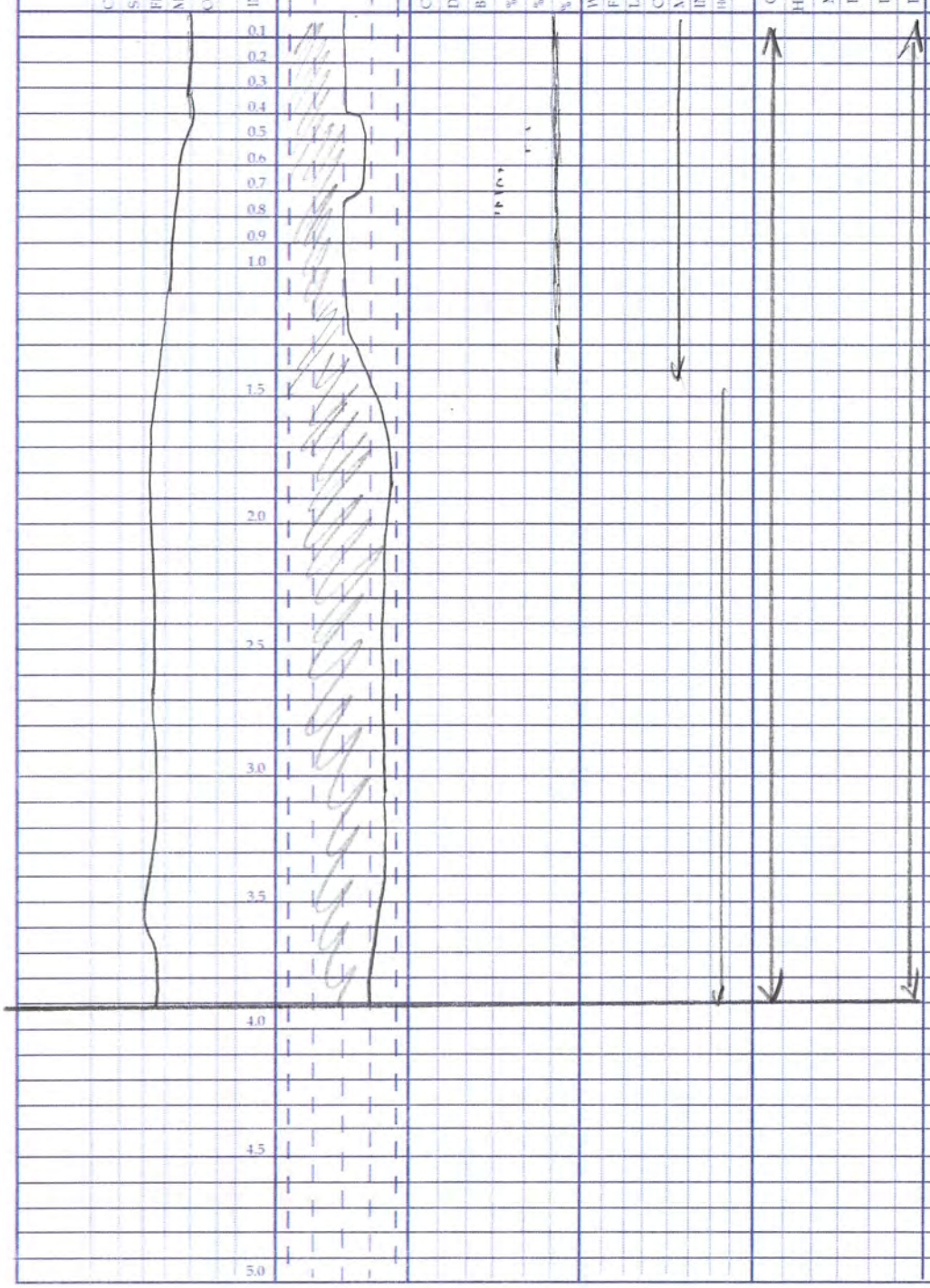
Vibracore Description Sheet

Core ID: 2014-336-FA-2A
Latitude: 29° 23.504 N
Longitude: 89° 07.964 W
Date Collected: 01/12/2015
Geographic Location:

Date Described: 03/19/15
Described By: Kelso
Core Penetration: Full
Core Length: 3.90 m (36% Comp)
W.D - 31' / 9.45m

SEDIMENTARY TEXTURE AND STRUCTURES	% SAND	PHYSICAL CHARACTERISTICS	STRATIFICATION TYPE	SAMPLE	PHYSICAL DESCRIPTION



0-138 cm - Mud and Muddy Sand, olive gray (vi-fine muddy sand / silt and mud interbeds, minimal shell material except for an increased area from 63-72 cm

138-345 cm - Sand, brownish gray, relatively clean, well sorted, fine, massive sand, with only scattered shell frags and small organic clasts, oval burrow at 286 cm, sand gets cleaner down core sharp basal contact

345-370 cm - Mud, olive gray ( ) slightly silty, massive silt mud, no visible shell material

370-384 cm - Sand, olive gray, very fine, well sorted, massive mud, with small clay-filled burrows

384-390 cm - Mud, olive gray, slightly silty-sandy, massive mud, no visible shell material

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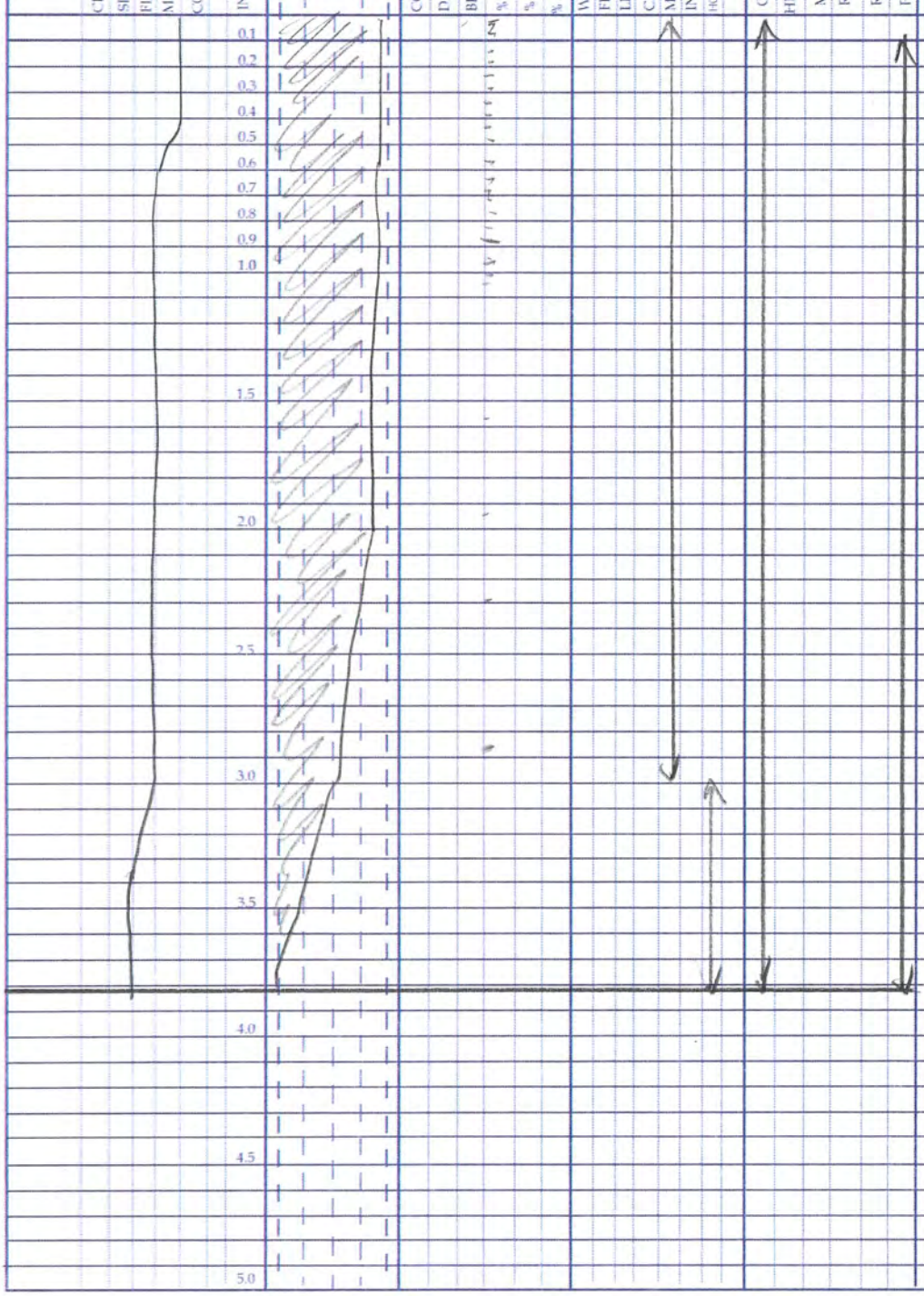
Vibracore Description Sheet

Core ID: 2014-336-FA-03
Latitude: 29° 56.515 N
Longitude: 89° 14.856 W
Date Collected: 01/17/2015
Geographic Location:

Date Described: 03/26/15
Described By: Kelso
Core Penetration: Full
Core Length: 3.81m (38% comp)
W.D. - 16' / 4.87m

SEDIMENTARY TEXTURE AND STRUCTURES	% SAND	PHYSICAL CHARACTERISTICS	STRATIFICATION TYPE	SAMPLE	PHYSICAL DESCRIPTION

Columns: CLAY, SILT, FINE SAND, MEDIUM SAND, COARSE SAND, INTERVAL (m) | % SAND (0, 50, 100) | COLOR, DEFORMATION, BED THICKNESS, % SHELL, % ORGANICS, % BIOTURBATION | WAVY, FLASER, LENTICULAR, CROSS BED, MASSIVE BED, INCLINED BED, HORIZON LAMINATION | GRAIN SIZE, HEAVY MINERAL, MICRO FOSSILS, RADIOMETRIC, RADIOGRAPH, PHOTOGRAPH



0-40cm - Sand, light grayish brown, well sorted, medium massive sand with moderate disseminated shell fragments

40 - 302 cm - Sand grayish brown, well sorted, very to very fine, color [illegible] in photo is due to the lower sections, retained water better, minimal disseminated shell frags, massive [illegible] content increase from 264 - 302cm

302 - 381 cm - Mud and silt / very fine sand, dark gray mud with thin silt and very fine sand, [illegible] minimal disseminated shell frags and occasional small dark gray organic-rich and lenses and horizons

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Vibracore Description Sheet

Core ID: 2014-336-FA-04
Latitude: 29° 24.312 N
Longitude: 89° 07.391 W
Date Collected: 01/12/2015
Geographic Location: W.D - 25' / 7.62 m

Date Described: 03/10/15
Described By: Kelso
Core Penetration: Full
Core Length: 4.0 m (34% comp)

SEDIMENTARY TEXTURE AND STRUCTURES	% SAND (0 – 50 – 100)	PHYSICAL CHARACTERISTICS	STRATIFICATION TYPE	SAMPLE	PHYSICAL DESCRIPTION
CLAY, SILT, FINE SAND, MEDIUM SAND, COARSE SAND, INTERVAL (m)		COLOR, DEFORMATION, BED THICKNESS, % SHELL, % ORGANICS, % BIOTURBATION	WAVY, FLASER, LENTICULAR, CROSS BED, MASSIVE BED, INCLINED BED, HORIZON LAMINATION	GRAIN SIZE, HEAVY MINERAL, MICRO FOSSILS, RADIOMETRIC, RADIOGRAPH, PHOTOGRAPH	
0.1					0-400 cm - Sand, grayish brown ( ) very fine well sorted, massive quartz sand, with minimal disseminated shell material and moderate, very small mica flakes throughout. occasional small organic lenses, with a muddy sand sand filled burrow at 118 cm, and intact inorticulate bivalve at 122 cm, a woody organic clast at 231 cm, and several, small dark clay organic mud clasts at base of core, there is a thin shell hash dipped at 3 cm
0.2					
0.3					
0.4					
0.5					
0.6					
0.7					
0.8					
0.9					
1.0					
1.5					
2.0					
2.5					
3.0					
3.5					
4.0					
4.5					
5.0					

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Vibracore Description Sheet

Core ID: 2014-336-FA-5C
Latitude: 29° 25.175 N
Longitude: 89° 06.640 W
Date Collected: 01/12/2015
Geographic Location:

Date Described: 02/24/2015
Described By: Kelso
Core Penetration: Full
Core Length: 4.53 m (26% comp)
W.D - 17' / 5.18 m

SEDIMENTARY TEXTURE AND STRUCTURES	% SAND	PHYSICAL CHARACTERISTICS	STRATIFICATION TYPE	SAMPLE	PHYSICAL DESCRIPTION

Columns: CLAY, SILT, FINE SAND, MEDIUM SAND, COARSE SAND, INTERVAL (m) | % SAND (0, 50, 100) | COLOR, DEFORMATION, BED THICKNESS, % SHELL, % ORGANICS, % BIOTURBATION | WAVY, FLASER, LENTICULAR, CROSS BED, MASSIVE BED, INCLINED BED, HORIZON LAMINATION | GRAIN SIZE, HEAVY MINERAL, MICRO FOSSILS, RADIOMETRIC, RADIOGRAPH, PHOTOGRAPH

Interval (m): 0.1, 0.2, 0.3, 0.4, 0.5, 0.6, 0.7, 0.8, 0.9, 1.0, 1.5, 2.0, 2.5, 3.0, 3.5, 4.0, 4.5, 5.0

4.53 m

0-449 cm - Muddy Sand, dark olive gray ( ) fine to very fine, well sorted muddy sand, bedding is horizontally laminated with mild bioturbation, minimal disseminated shell [illegible] with localized heavy shell hash clusters, [illegible] at 84 cm, very small organic [illegible]

449-453 cm - Sand and clay. Very dark olive gray mottled muddy sand with abundant clay lenses & abundant shell material surrounding the clay lenses and an organic lens @ 450 cm

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Vibracore Description Sheet

Core ID: 2014-336-FA-6
Latitude: 29° 26.168 N
Longitude: 89° 05.304 W
Date Collected: 01/18/2015
Geographic Location:

Date Described: 3/10/15
Described By: Kuhs
Core Penetration: Full
Core Length: 5.76m (6% comp)
W.D. - 20'/ 6.10m

SEDIMENTARY TEXTURE AND STRUCTURES	% SAND	PHYSICAL CHARACTERISTICS	STRATIFICATION TYPE	SAMPLE	PHYSICAL DESCRIPTION
CLAY, SILT, FINE SAND, MEDIUM SAND, COARSE SAND, INTERVAL (m)	0, 50, 100	COLOR, DEFORMATION, BED THICKNESS, % SHELL, % ORGANICS, % BIOTURBATION	WAVY, FLASER, LENTICULAR, CROSS BED, MASSIVE BED, INCLINED BED, HORIZON LAMINATION	GRAIN SIZE, HEAVY MINERAL, MICRO FOSSILS, RADIOMETRIC, RADIOGRAPH, PHOTOGRAPH	
0.1					0-265. Brownish grey fine, well sorted sand slightly fining down core. overall massive, minimal disiminated shell fragments with one articulated gastropod at 71cm, a small horizontal woody organic horizon occuring at 210-213cm, Bryozoan fragment at 251, and one highly indurated clay clast at 265. visable mica flakes throughout gradational basal contact with visable burrow infilled with fine sand from above.
0.2					
0.3					
0.4					
0.5					
0.6					
0.7					
0.8					
0.9					
1.0					
1.5					
2.0					
2.5					Interbedded very fine silty sand and clay deposits with horizontal bedding planes. Brownish grey turning greyish brown down core. Very few shell fragments except a lag deposit occuring at 315cm containing a partially articulated crab claw and large pelecypod and other shell fragments. No visable mica flakes. laminations are well sorted and most prominent between 320-405, 477-500.
3.0					
3.5					
4.0					
4.5					
5.0					

5.76

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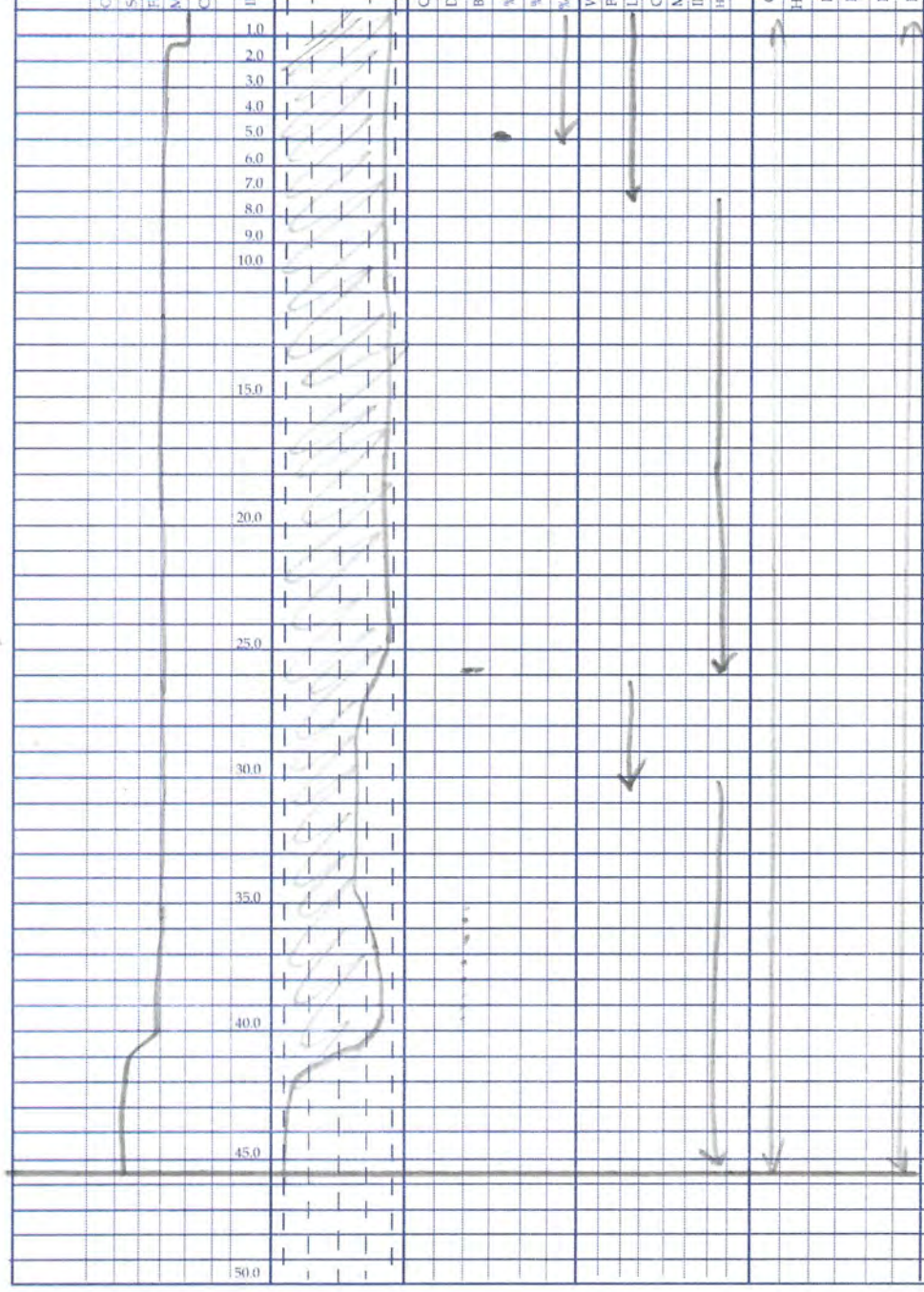
Push Core Description Sheet

Core ID: 2014-336-FA-7A
Latitude: 29° 26.423 N
Longitude: 89° 04.596 W
Date Collected: 01/15/2015
Geographic Location:

Date Described: 02/24/15
Described By: [illegible]
Core Penetration: Full
Core Length: 4.55 m (25% comp)
W.D. - 15'/4.57m

SEDIMENTARY TEXTURE AND STRUCTURES	% SAND	PHYSICAL CHARACTERISTICS	STRATIFICATION TYPE	SAMPLE	PHYSICAL DESCRIPTION



0-253cm - Sand, interbedded light and dark fine to very fine well sorted horizontally laminated [illegible] beddy, [illegible] Moderate [illegible] from 0-[illegible] then minimum [illegible] shell [illegible] 60-[illegible]cm, darker sand horizons have increased [illegible] content dense mud sand lag deposit at basal contact.

253-355 cm - Muddy sand dark olive gray ( ) very fine muddy sand with disseminated minimum shell [illegible] mud horizons [illegible] down [illegible] horizontal basal [illegible]

358-402 cm - Sand dark olive gray (very fine silty, horizontally laminated sand with moderate shell [illegible] disseminated and dense shell [illegible] horizons sharp basal contact

402-455 cm - Interbedded clay and silt exhibiting horizontal bedding mostly with some bioturbation, a lone shell high chaotic site at 404 cm, clay color varies by horizon then sand horizon @ 446 cm

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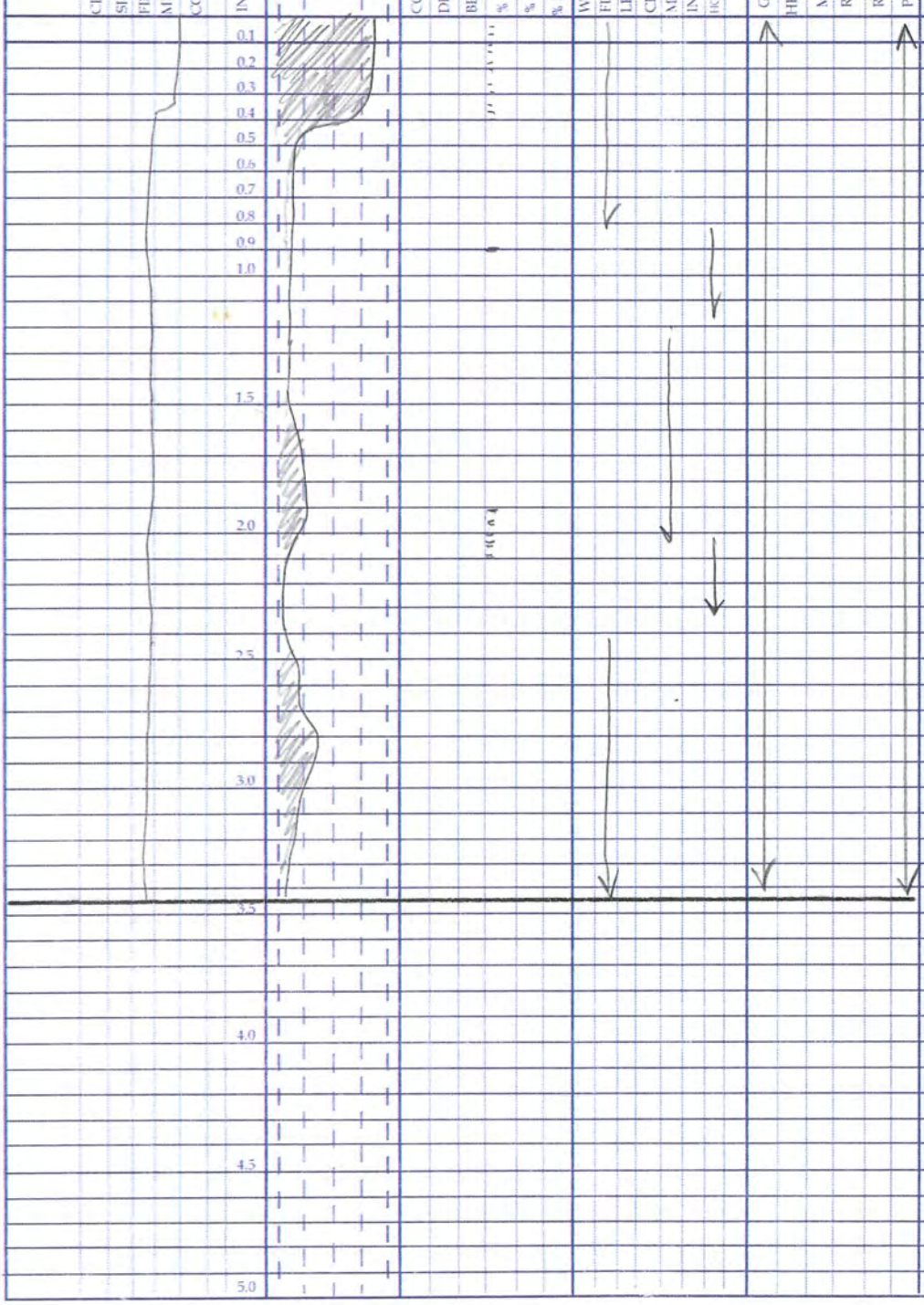
Vibracore Description Sheet

Core ID: 2014-336-FA-07-OSL
Latitude: 29° 26.423 N
Longitude: 89° 04.277 W
Date Collected: 01/18/15
Geographic Location: ESE of Breton IS

Date Described: 06/02/15
Described By: Kels
Core Penetration:
Core Length: 3.46 m

SEDIMENTARY TEXTURE AND STRUCTURES	% SAND	PHYSICAL CHARACTERISTICS	STRATIFICATION TYPE	SAMPLE	PHYSICAL DESCRIPTION



0-37cm - Sand, light grayish brown fine-med well sorted sand with minimal dissemination shell material - massive

37-211 cm - Silt, dark brownish olive gray relatively clean silt with mud filled burrows and large mud clast from 126-154 cm, dense shell hash horizon at 91cm and an inclined mica rich organic horizon @ 105 cm, bedding is mostly mottled with areas exhibiting horizontal bedding defined from coarse shell content increases from 189-211cm (basal contact)

211-346cm - Mud + Silt olive gray and pale yellow dense mud/clay interbedded with olive gray silt small brown (oxidized) clast throughout, bedding is completely mottled with areas of flaser bedding.

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Vibracore Description Sheet

Core ID: 2014-336-FA-08
Latitude: 29° 26.374 N
Longitude: 89° 04.596 W
Date Collected: 01/18/2015
Geographic Location:

Date Described: 03/18/15
Described By: Kelso / Kuhns
Core Penetration: Full
Core Length: 5.26m (14% comp)
W.D. - 16' / 4.88m

SEDIMENTARY TEXTURE AND STRUCTURES	% SAND	PHYSICAL CHARACTERISTICS	STRATIFICATION TYPE	SAMPLE	PHYSICAL DESCRIPTION
CLAY, SILT, FINE SAND, MEDIUM SAND, COARSE SAND, INTERVAL (m)	0, 50, 100	COLOR, DEFORMATION, BED THICKNESS, % SHELL, % ORGANICS, % BIOTURBATION	WAVY, FLASER, LENTICULAR, CROSS BED, MASSIVE BED, INCLINED BED, HORIZON LAMINATION	GRAIN SIZE, HEAVY MINERAL, MICRO FOSSILS, RADIOMETRIC, RADIOGRAPH, PHOTOGRAPH	

0-164 cm - Sand, olive gray ( ) and yellow brown ( ) very fine well sorted, massive quartz sand, olive gray sand has minor dissemination shell hash, where as the yellow sand has more shell material, bedding is very faint, minimal bioturbation, mica also as well

164-181 cm - Mud + Sand interbedded olive gray mud and very fine gray sand with large wood organic horizon from 173-178 cm, minimal dissemination shell material

181-305 cm - Sand olive gray, very fine well sorted sand, minimal dissemination shell material, thin organic layer 280-294 cm at a high angle, shell hash dipping at basal contact, evidence of intense bioturbation - gastropods

305-403 cm - Sand and muddy sand, olive gray interbedded muddy sand and sand, with discontinuous shell layer, bioturbation within the muddy sand horizon

403-434 cm - Mud, olive gray, massive mud with small woody organic flecks, slightly very sharp clay deposit at base contact from 404-434 cm

434-526 cm - Sand, olive gray interbedded with muddy sand, where sand horizon tends to split down into horizontal bedding with thin laminations of organic material visible

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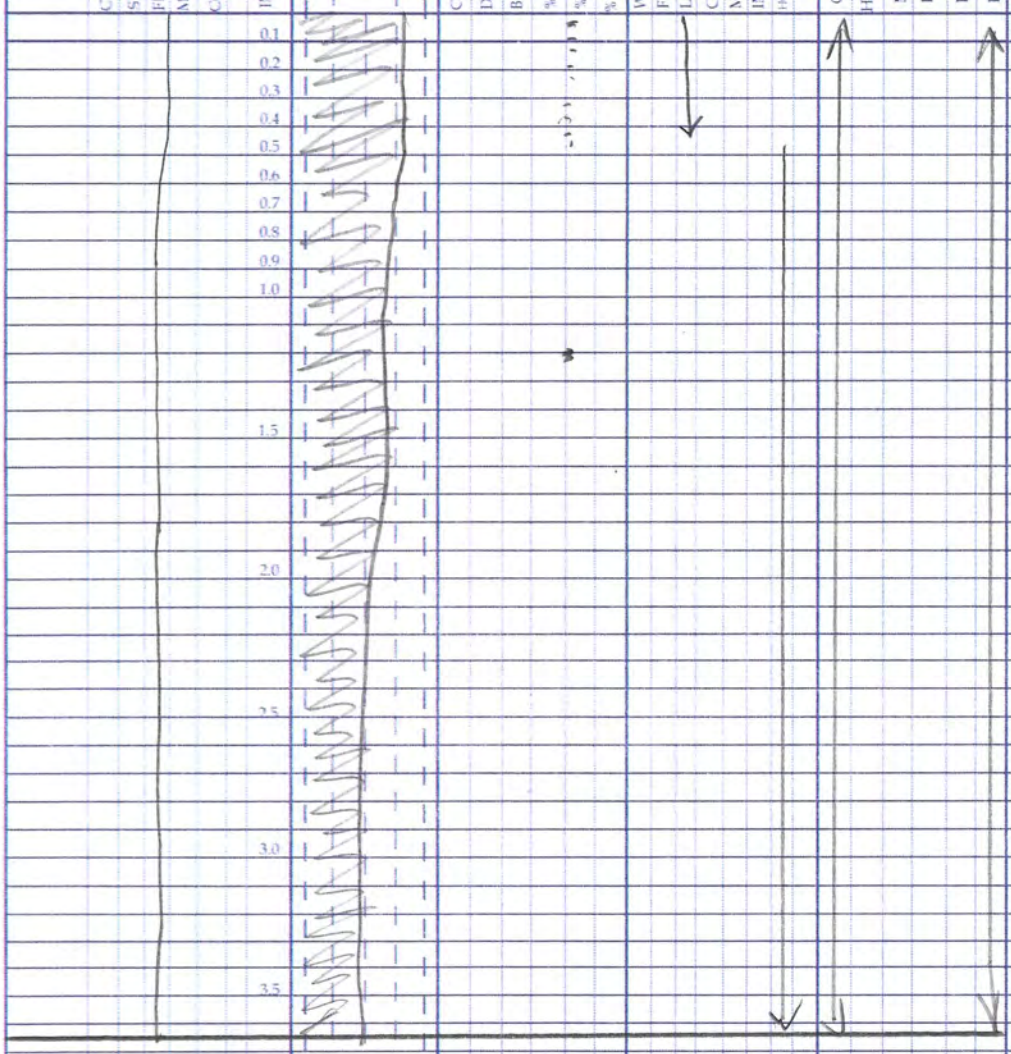
Vibracore Description Sheet

Core ID: 2014-336-FA-01B
Latitude: 29° 27.126 N
Longitude: 89° 04.437 W
Date Collected: 01/17/2015
Geographic Location: W.D. - 16' / 4.88m

Date Described: 03/18/15
Described By: Kelso
Core Penetration: Full
Core Length: 3.65 m (40% comp)



SEDIMENTARY TEXTURE AND STRUCTURES	% SAND	PHYSICAL CHARACTERISTICS	STRATIFICATION TYPE	SAMPLE	PHYSICAL DESCRIPTION
CLAY, SILT, FINE SAND, MEDIUM SAND, COARSE SAND, INTERVAL (m)	0, 50, 100	COLOR, DEFORMATION, BED THICKNESS, % SHELL, % ORGANICS, % BIOTURBATION	WAVY, FLASER, LENTICULAR, CROSS BED, MASSIVE BED, INCLINED BED, HORIZON LAMINATION	GRAIN SIZE, HEAVY MINERAL, MICRO FOSSILS, RADIOMETRIC, RADIOGRAPH, PHOTOGRAPH	
0.1					0-42cm - SAND, Brown dk gray ( ), well sorted fine sand, moderately shelly with lenses of dry shell hash @ 13 + 41cm. Mottled with evidence of bioturbation
0.2					
0.3					
0.4					
0.5					
0.6					
0.7					
0.8					
0.9					42 - 365cm - Muddy Sand, dark olive gray ( ), very fine, well sorted muddy sand, faint horizontal bedding with minimal disseminated shell material and small organic clasts. Mud content increases down core and muddy sand becomes sandy mud from 302 - 308cm (interbedded sandy mud and muddy sand from 302 - 365cm) large fragmented oyster shell from 122 - 126cm
1.0					
1.5					
2.0					
2.5					
3.0					
3.5					
4.0					
4.5					
5.0					

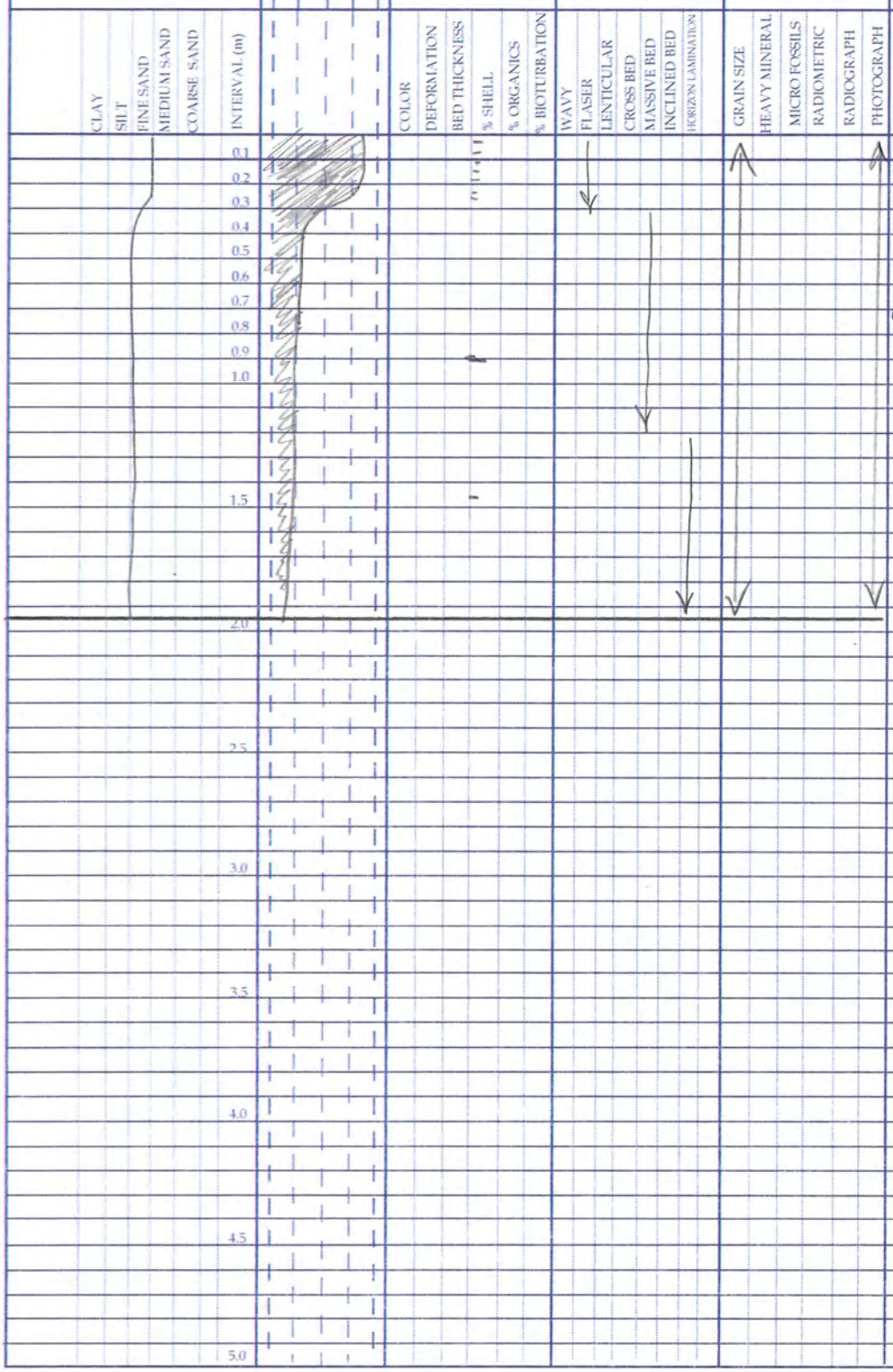
USGS science for a changing world

Vibracore Description Sheet

Core ID: 2014-336-FA-09-OSL
Latitude: 29° 27.126 N
Longitude: 89° 04.437 W
Date Collected: 01/17/2015
Geographic Location: ESE of Breton SL-51

Date Described: 06/02/2010
Described By: Kelso
Core Penetration: /
Core Length: 1.94m

SEDIMENTARY TEXTURE AND STRUCTURES	% SAND	PHYSICAL CHARACTERISTICS	STRATIFICATION TYPE	SAMPLE	PHYSICAL DESCRIPTION



0-27cm - Sand. light gray, very fine well sorted moderately shelly silty sand

27-194cm - Silt, gray massive, sandy silt with shell content limited to dense horizon from 90-94 & 146-150cm, small clay clast at bottom of the core

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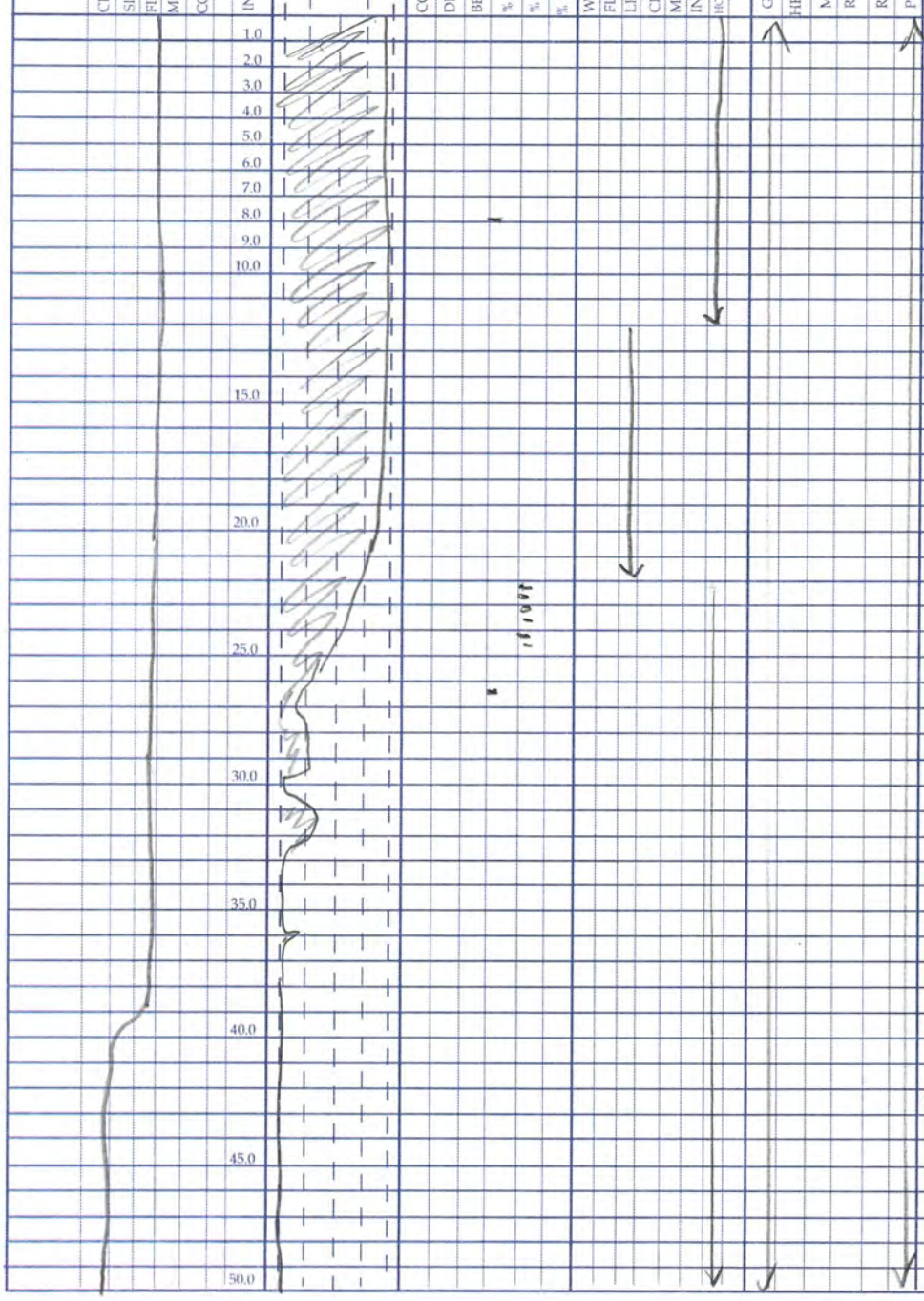
Push Core Description Sheet

Core ID: 2014-336-FA-10
Latitude: 29° 27.204 N
Longitude: 89° 03.842 W
Date Collected: 01/18/2015
Geographic Location:

Date Described: 02/24/15
Described By: Kelso
Core Penetration: Full
Core Length: 502 m (18% comp)
W.D. - 16'/ 4.88 m

SEDIMENTARY TEXTURE AND STRUCTURES	% SAND	PHYSICAL CHARACTERISTICS	STRATIFICATION TYPE	SAMPLE	PHYSICAL DESCRIPTION

Columns: CLAY, SILT, FINE SAND, MEDIUM SAND, COARSE SAND, INTERVAL (cm) | % SAND (0, 50, 100) | COLOR, DEFORMATION, BED THICKNESS, % SHELL, % ORGANICS, % BIOTURBATION | WAVY, FLASER, LENTICULAR, CROSS BED, MASSIVE BED, INCLINED BED, HORIZON LAMINATION | GRAIN SIZE, HEAVY MINERAL, MICRO FOSSILS, RADIOMETRIC, RADIOGRAPH, PHOTOGRAPH



502 cm

0-220 cm - Very fine sand to silt, light olive gray ( ) grading into olive gray very fine sand and silt; silt content increases down core, horizontal bedding somewhat masked from bioturbation, moderate disseminated shell fragments with localized dense shell hash clusters at 79 and 192 cm, occasional small organic lenses and thin horizons.

220-381 cm - Interbedded mud and very fine sand / silt, olive gray ( ) mud interbedded with dark olive gray silt and olive gray ( ) very fine sand, frequent organic horizons composed of woody vegetation, intact gastropods at 255 cm

381-502 cm - Clay, horizontally laminated clay of varying thickness and color, ranging from olive gray to yellowish gray, with occasional thin silt horizons, shell content limited to very thin horizons at the base of the core.

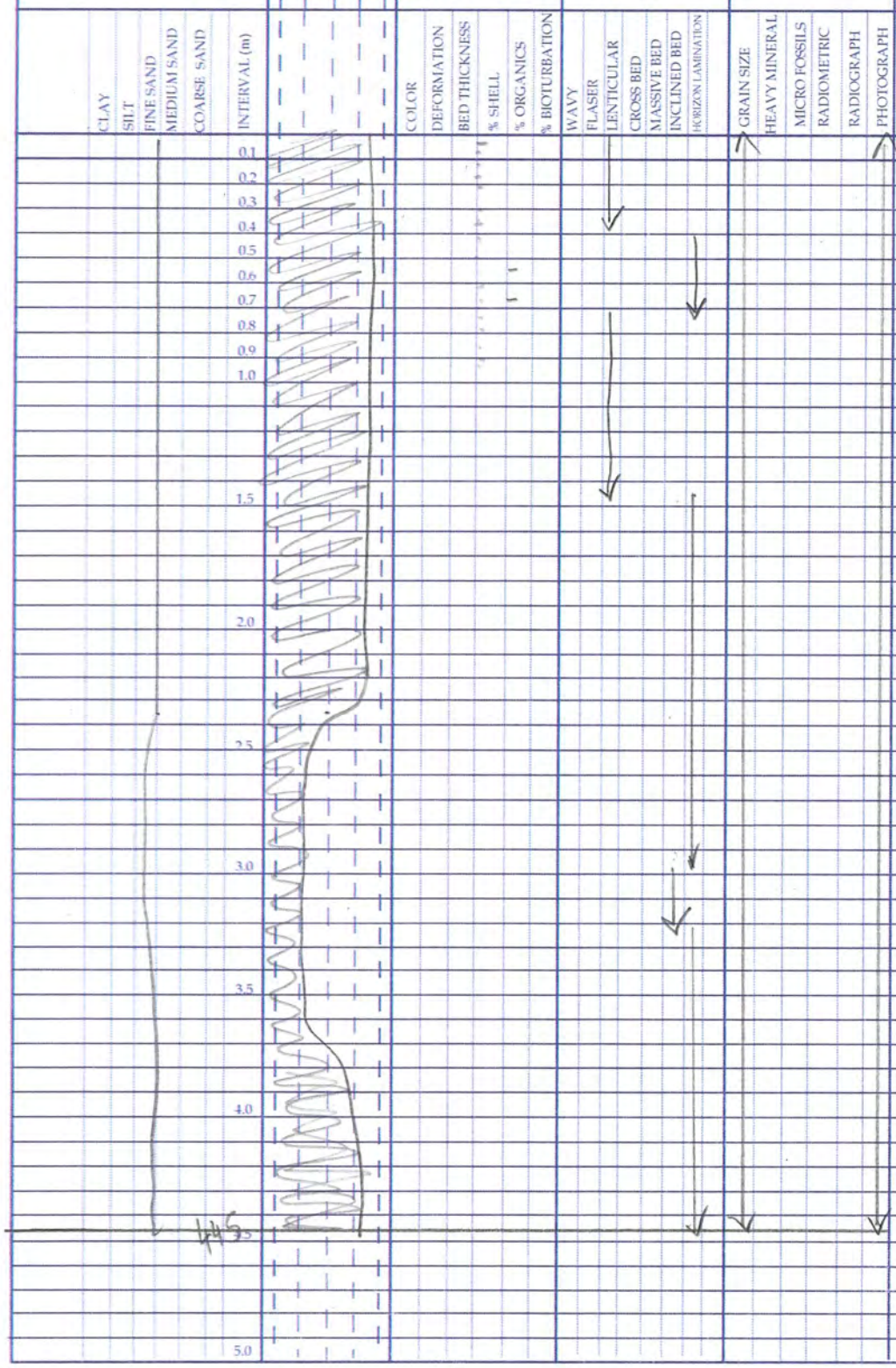
USGS science for a changing world

Vibracore Description Sheet

Core ID: 2014-336-FA-11A
Latitude: 29° 26.722 N
Longitude: 89° 05.489 W
Date Collected: 01/18/2015
Geographic Location:

Date Described: 02/24/2015
Described By: Kelso
Core Penetration: Full
Core Length: 4.45m (27% comp)
W.D - 16'/4.88m

SEDIMENTARY TEXTURE AND STRUCTURES	% SAND	PHYSICAL CHARACTERISTICS	STRATIFICATION TYPE	SAMPLE	PHYSICAL DESCRIPTION



0-236cm - Muddy Sand dark olive gray (very fine, well sorted sand, originally horizontal bedding evident but mottled from bioturbation, moderately disseminated shell fragments, small black organic clasts and horizons

236-372 cm - Mud and sand, horizontally laminated mud of varying color from 236-302, angular bedding from 302-330 cm, returns to horizontal bedding from 330-372 cm, very little disseminated shell material with a dense shell hash cluster @ 289 cm, sand horizons are very thin and muddy

372-445 cm - Sand, dark olive gray (muddy, fine-very fine, well sorted sand, with minimal disseminated shell fragments, bedding or wavy from 372-423 cm and mottled from 423-445 cm

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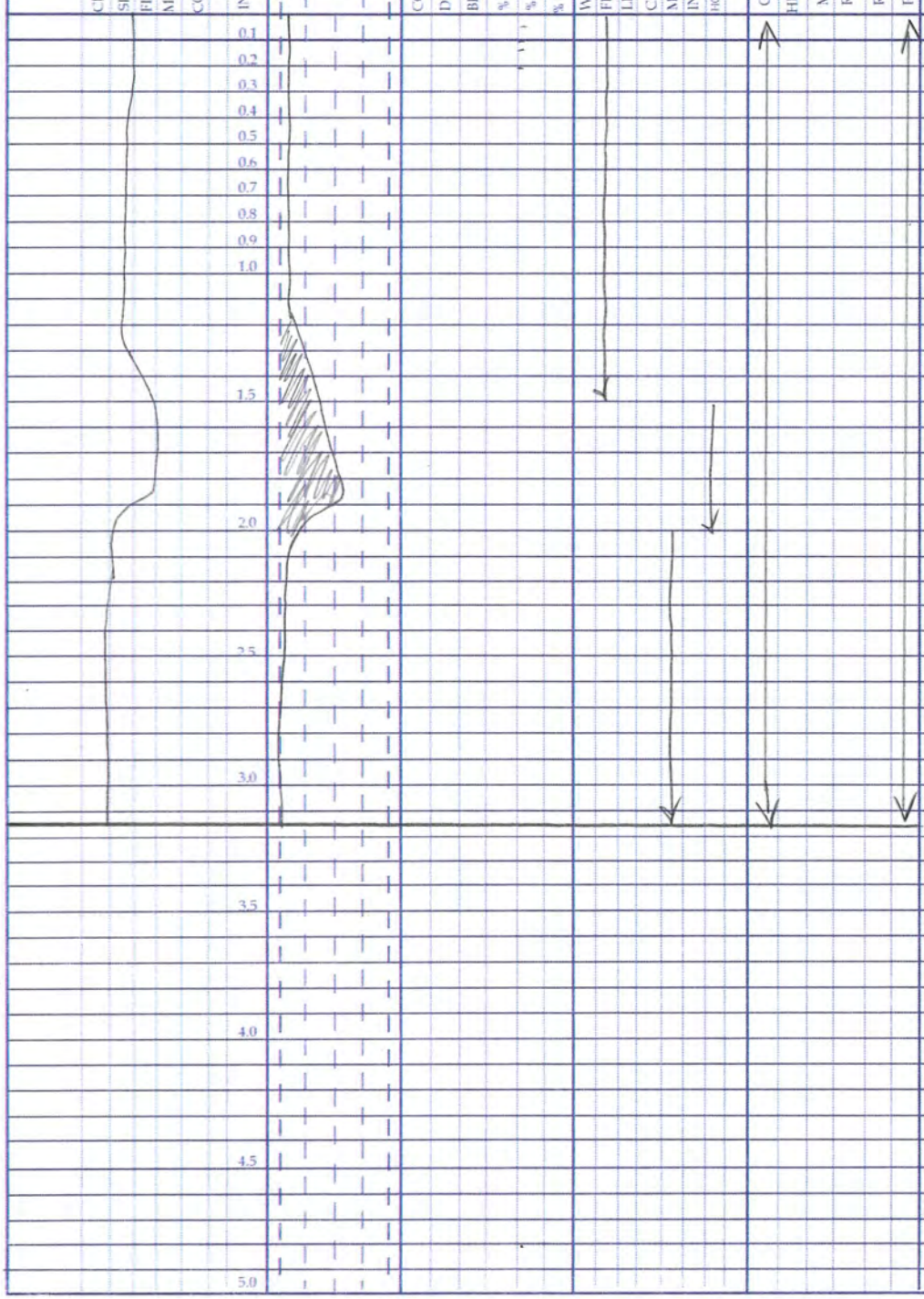
Vibracore Description Sheet

Core ID: 2014-336-FA-11-OSL
Latitude: 29° 26.722' N
Longitude: 89° 05.489' W
Date Collected: 01/18/15
Geographic Location: ESE of Breton, SL 49

Date Described: 06/02/15
Described By: Kelso
Core Penetration:
Core Length: 3.14 m

SEDIMENTARY TEXTURE AND STRUCTURES	% SAND (0 – 50 – 100)	PHYSICAL CHARACTERISTICS	STRATIFICATION TYPE	SAMPLE	PHYSICAL DESCRIPTION

Columns: CLAY, SILT, FINE SAND, MEDIUM SAND, COARSE SAND, INTERVAL (m) | COLOR, DEFORMATION, BED THICKNESS, % SHELL, % ORGANICS, % BIOTURBATION | WAVY, FLASER, LENTICULAR, CROSS BED, MASSIVE BED, INCLINED BED, HORIZON LAMINATION | GRAIN SIZE, HEAVY MINERAL, MICRO FOSSILS, RADIOMETRIC, RADIOGRAPH, PHOTOGRAPH



0-26cm - Silt, dark gray mostly massive silt with a faint very thin, black organic wavy horizon that extends from 21-30cm sharp basal contact

26-133cm - Mud and silt / v. fine sand, dark brownish gray. Interbedded mud and silt, extremely mottled and bioturbated but no visible shell material

133-193cm - Silt → Sand dark brownish gray silt grading into dark brownish gray and dark gray very thin, well sorted massive silty sand

103-314cm - Clay - dark olive gray dense massive fat clay with abundant small silt and very fine sand lenses and horizons no visible shell material, occasional small organic clast

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Vibracore Description Sheet

Core ID: 2014-336-FA-12A
Latitude: 29° 25.254 N
Longitude: 89° 08.107 W
Date Collected: 01/18/2014
Geographic Location:

Date Described: 03/09/2014
Described By: Kelso
Core Penetration: Full
Core Length: 4.0 m (34% comp)
W.D. - 16' / 4.88 m

SEDIMENTARY TEXTURE AND STRUCTURES	% SAND	PHYSICAL CHARACTERISTICS	STRATIFICATION TYPE	SAMPLE	PHYSICAL DESCRIPTION

Columns: CLAY, SILT, FINE SAND, MEDIUM SAND, COARSE SAND, INTERVAL (m) | % SAND (0, 50, 100) | COLOR, DEFORMATION, BED THICKNESS, % SHELL, % ORGANICS, % BIOTURBATION | WAVY, FLASER, LENTICULAR, CROSS BED, MASSIVE BED, INCLINED BED, HORIZON LAMINATION | GRAIN SIZE, HEAVY MINERAL, MICRO FOSSILS, RADIOMETRIC, RADIOGRAPH, PHOTOGRAPH

Interval (m): 0.1, 0.2, 0.3, 0.4, 0.5, 0.6, 0.7, 0.8, 0.9, 1.0, 1.5, 2.0, 2.5, 3.0, 3.5, 4.0, 4.5, 5.0

0-64cm - Sand
fine, well sorted
brown & dark gray mottled
sand with moderate
disseminated shell fragments
and a dense shell hash
clusters (lag deposit) at
basal contact
occasional small micro
fleck

64-400cm - Sand/silt
dark olive gray very
fine sand and silt
with minimal disseminated
shell material occasional
small brown fine sand
lenses and thin, dark
organic horizons @
310 cm & 340 cm
with sporadic small
organic flecks distributed
randomly throughout

USGS science for a changing world

Vibracore Description Sheet

Core ID: 2014-336-FA-12-OSL
Latitude: 29°25.254' N
Longitude: 89° 08.107' W
Date Collected: 01/18/15
Geographic Location: Breton

Date Described: 06/02/2015
Described By: [illegible]
Core Penetration:
Core Length: 2.67m

SEDIMENTARY TEXTURE AND STRUCTURES	% SAND (0 – 50 – 100)	PHYSICAL CHARACTERISTICS	STRATIFICATION TYPE	SAMPLE	PHYSICAL DESCRIPTION

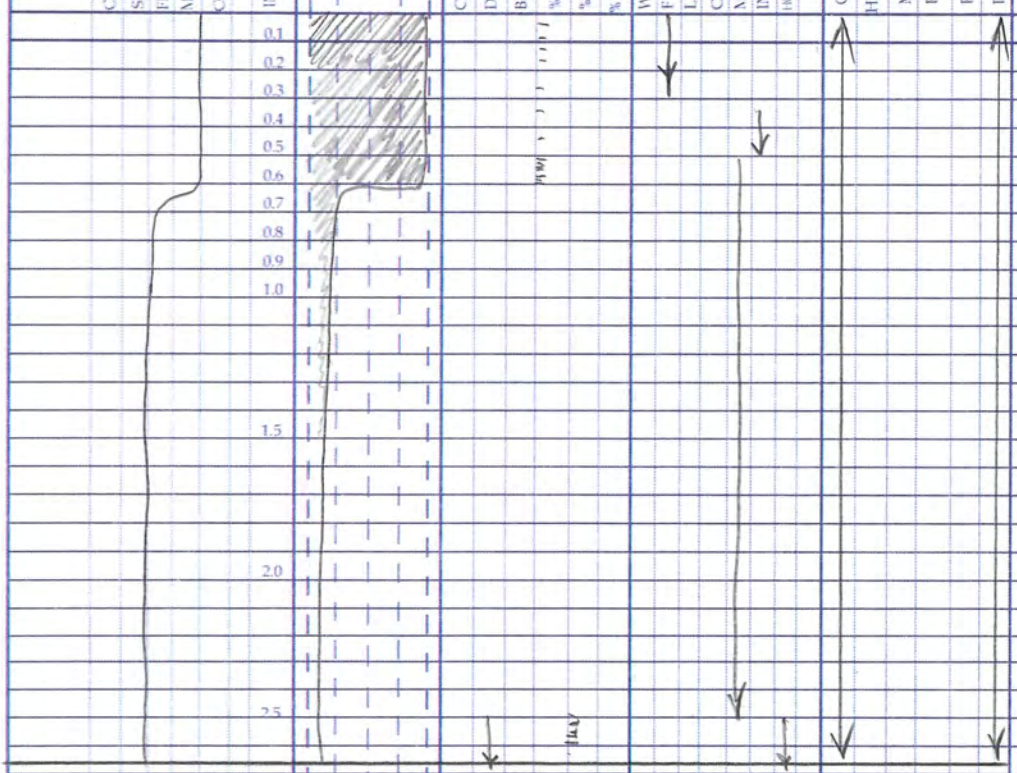
Sedimentary texture and structures: CLAY, SILT, FINE SAND, MEDIUM SAND, COARSE SAND

Physical characteristics: COLOR, DEFORMATION, BED THICKNESS, % SHELL, % ORGANICS, % BIOTURBATION

Stratification type: WAVY, FLASER, LENTICULAR, CROSS BED, MASSIVE BED, INCLINED BED, HORIZON LAMINATION

Sample: GRAIN SIZE, HEAVY MINERAL, MICRO FOSSILS, RADIOMETRIC, RADIOGRAPH, PHOTOGRAPH

Interval (m): 0.1, 0.2, 0.3, 0.4, 0.5, 0.6, 0.7, 0.8, 0.9, 1.0, 1.5, 2.0, 2.5, 3.0, 3.5, 4.0, 4.5, 5.0



0-62 cm - Sand - gray well sorted, fine to medium massive sand, with minimal disseminated shell material except for a denser shell hash cluster from 52-60 cm, large organic-rich mud lens from 7-13 cm and a few other smaller organic-rich sand clasts.

62-267 cm - Silt, olive gray massive silt with minimal disseminated shell fragment and abundant small woody organic flat and thin organic horizon

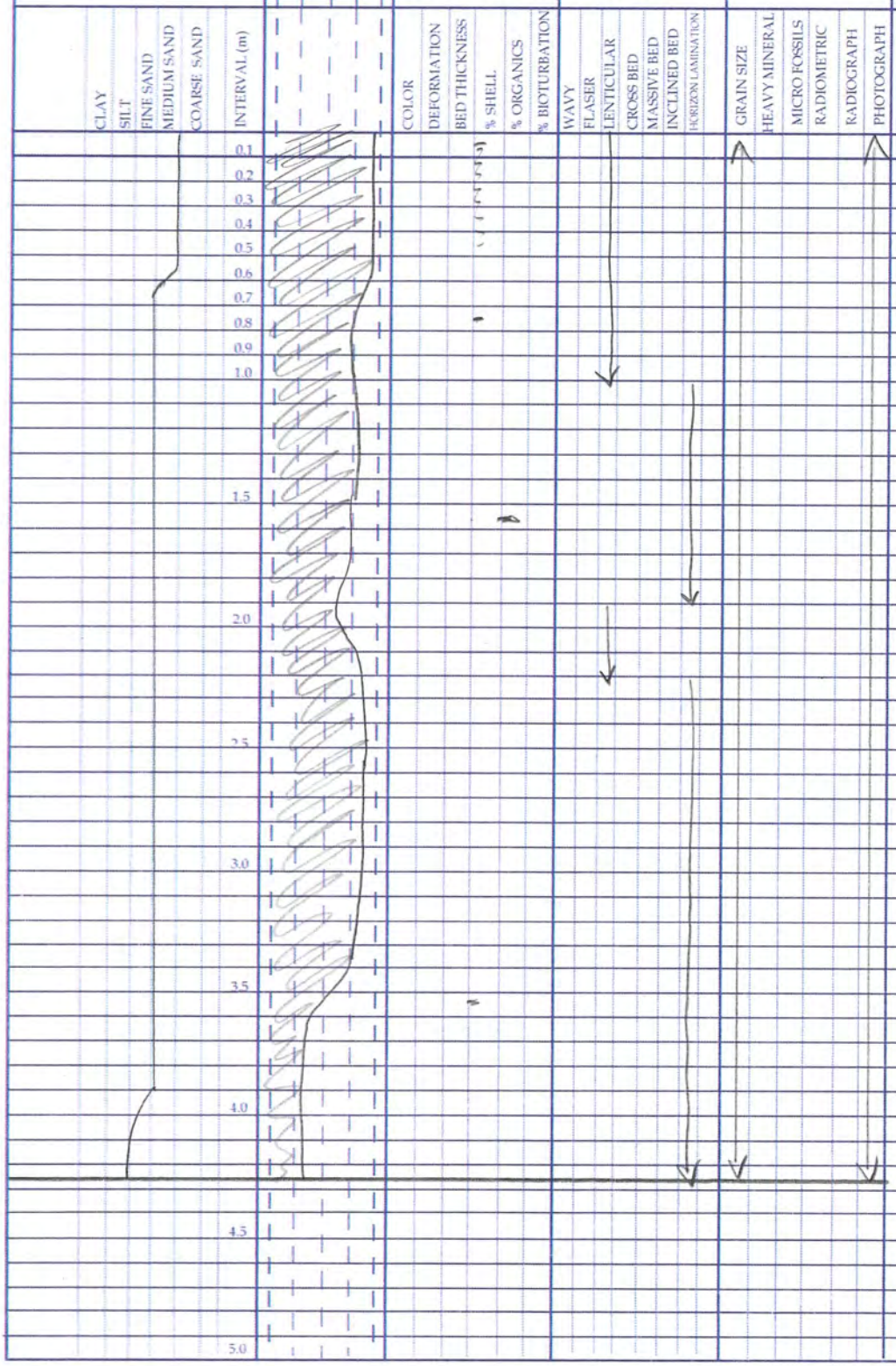
USGS science for a changing world

Vibracore Description Sheet

Core ID: 2014-336-FA-13B
Latitude: 29° 26.292 N
Longitude: 89° 07.639 W
Date Collected: 01/18/2015
Geographic Location:

Date Described: 02/24/2015
Described By: Kelso
Core Penetration: Full
Core Length: 4.28m (30% comp)
W.D - 18' / 5.49m

SEDIMENTARY TEXTURE AND STRUCTURES	% SAND	PHYSICAL CHARACTERISTICS	STRATIFICATION TYPE	SAMPLE	PHYSICAL DESCRIPTION



0-56cm - Sand, yellowish gray ( ) fine, well sorted, mottled, relatively clean sand, with moderate disseminate shell material and occasional muddy sand filled burrows, relatively sharp angular basal contact

56-428cm - Muddy Sand dark olive gray ( ) very fine muddy sand with minimal disseminated shell fragments and localized dense shell hash horizons and clusters, there is a woody organic horizon @ 157cm, mud content increases down core with thin mud horizon from 187-200cm and thicker mud/clay horizon from 330-390cm, mud dominates core from 390-428cm

USGS science for a changing world

Vibracore Description Sheet

Core ID: 2014-336-FA-14
Latitude: 29° 27.245 N
Longitude: 89° 08.137 W
Date Collected: 01/13/2015
Geographic Location:

Date Described: 03/09/15
Described By: Kuhs / Kelso
Core Penetration: Full
Core Length: 5.34 (12% comp)
W.D. - 24' / 7.32m

SEDIMENTARY TEXTURE AND STRUCTURES	% SAND	PHYSICAL CHARACTERISTICS	STRATIFICATION TYPE	SAMPLE	PHYSICAL DESCRIPTION
CLAY, SILT, FINE SAND, MEDIUM SAND, COARSE SAND, INTERVAL (m)	0, 50, 100	COLOR, DEFORMATION, BED THICKNESS, % SHELL, % ORGANICS, % BIOTURBATION	WAVY, FLASER, LENTICULAR, CROSS BED, MASSIVE BED, INCLINED BED, HORIZON LAMINATION	GRAIN SIZE, HEAVY MINERAL, MICRO FOSSILS, RADIOMETRIC, RADIOGRAPH, PHOTOGRAPH	
0.1					0-30 - Sand, greyish brown Fine grained, well sorted, Modled, minimal disiminated shell fragments
0.2					
0.3					
0.4					
0.5					30-402 Mud, very fine sand and silt horizons throughout, greyish brown, minimal disiminated shell fragments with semi dense shell horizons occuring at 87, 305-315 - Whole Bivalve (Mersenaria) - inarticulated
0.6					
0.7					
0.8					
0.9					
1.0					
1.5					402-534 - Clay, dark greyish brown grading into bands of light grey/brown no shell fragments. Fine horizontal laminations of color change with little grain size difference.
2.0					
2.5					
3.0					
3.5					
4.0					
4.5					
5.0					

534

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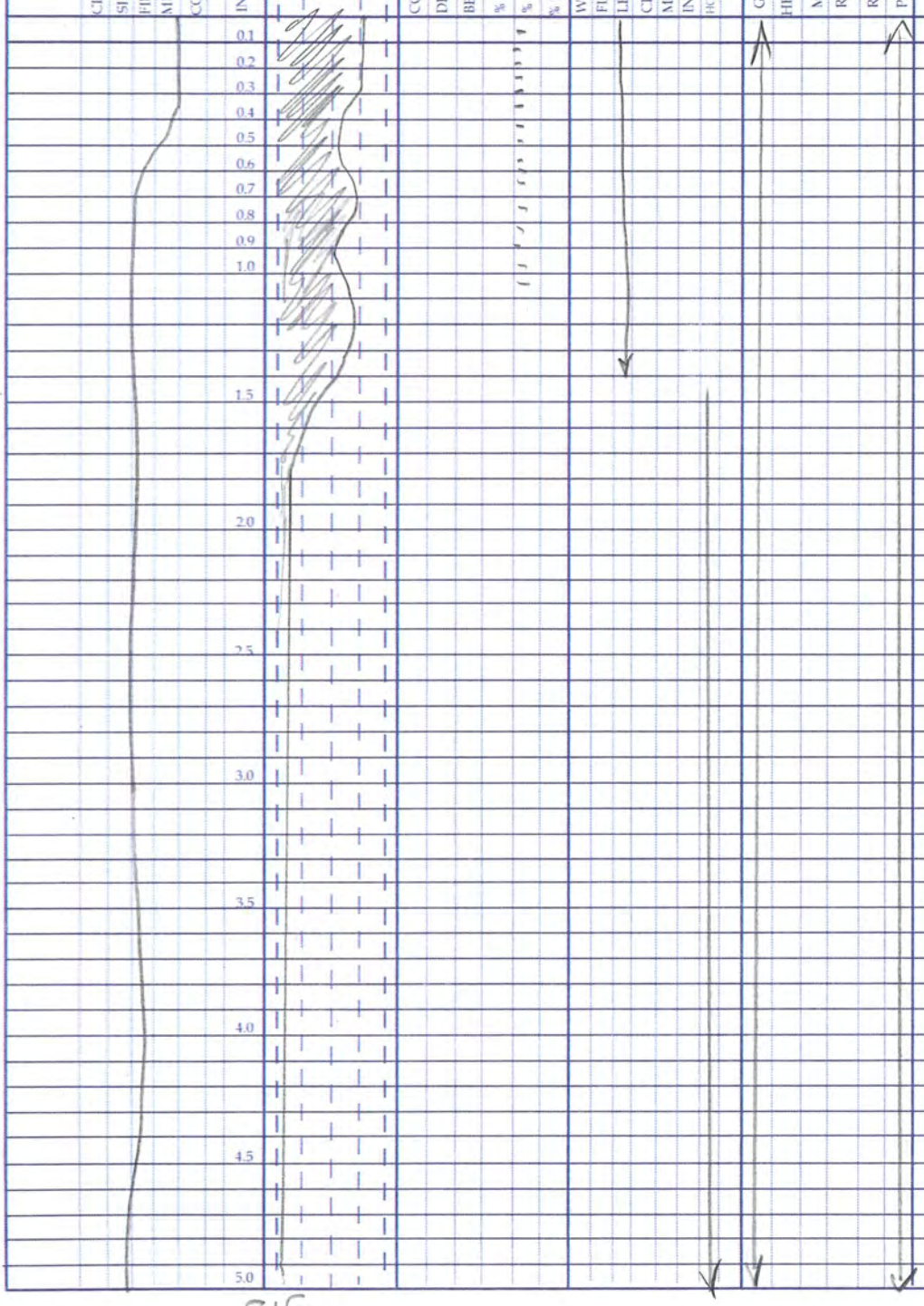
Vibracore Description Sheet

Core ID: 2014-336-FA-15
Latitude: 29°26.469 N
Longitude: 89° 09.738 W
Date Collected: 01/13/2015
Geographic Location:

Date Described: Kelso
Described By: 03/09/15
Core Penetration: Full
Core Length: 5.15m (15% comp)
W.D. - 22'/6.71m

SEDIMENTARY TEXTURE AND STRUCTURES	% SAND	PHYSICAL CHARACTERISTICS	STRATIFICATION TYPE	SAMPLE	PHYSICAL DESCRIPTION

Columns: CLAY, SILT, FINE SAND, MEDIUM SAND, COARSE SAND, INTERVAL (m) | % SAND (0, 50, 100) | COLOR, DEFORMATION, BED THICKNESS, % SHELL, % ORGANICS, % BIOTURBATION | WAVY, FLASER, LENTICULAR, CROSS BED, MASSIVE BED, INCLINED BED, HORIZON LAMINATION | GRAIN SIZE, HEAVY MINERAL, MICRO FOSSILS, RADIOMETRIC, RADIOGRAPH, PHOTOGRAPH



0-35cm - Sand, dark brownish gray (fine - medium, well sorted mottled quartz sand with moderated disseminated shell fragments and small organic sediment lenses and flecks

35-515 cm - Mud, Sand and Silt, dark olive gray, interbedded very fine sand, silt and mud mud content increases steadily down core. minimal disseminated shell fragments with locally heavy shell hash horizons at 125cm, 260cm and occasional thin shell hash horizon bedding is predominantly horizontally laminated

515cm

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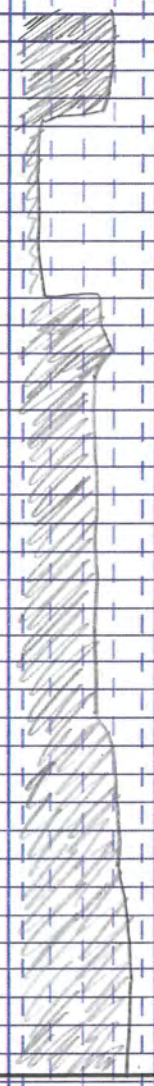
Vibracore Description Sheet

Core ID: 2014-336-FA-16-OSL
Latitude: 29° 24.933' N
Longitude: 89° 07.855' W
Date Collected: 01/18/15
Geographic Location: SE of Breton, SL X 54 & 82

Date Described: 06/01/15
Described By:
Core Penetration:
Core Length: 3.74m

SEDIMENTARY TEXTURE AND STRUCTURES	% SAND	PHYSICAL CHARACTERISTICS	STRATIFICATION TYPE	SAMPLE	PHYSICAL DESCRIPTION
CLAY, SILT, FINE SAND, MEDIUM SAND, COARSE SAND, INTERVAL (m)	0, 50, 100	COLOR, DEFORMATION, BED THICKNESS, % SHELL, % ORGANICS, % BIOTURBATION	WAVY, FLASER, LENTICULAR, CROSS BED, MASSIVE BED, INCLINED BED, HORIZON LAMINATION	GRAIN SIZE, HEAVY MINERAL, MICRO FOSSILS, RADIOMETRIC, RADIOGRAPH, PHOTOGRAPH	



Dark grayish brown

0-39cm - Sand, very fine well sorted, massive sand, with moderate disseminated shell fragments increased shell content from 35-39cm, and moderate disseminated very small mica flecks

39-101cm - Silt, mottled relatively clean silt with minimal shell material

101-374cm - Sand very fine, well sorted, massive sand, with minimal disseminated shell fragments and minimal disseminated mica flecks. "Fedex" tables discovered from 162-169cm and core catcher was pulled from the bottom of the core and residual from 305-315cm occasional small sandy mud lenses.

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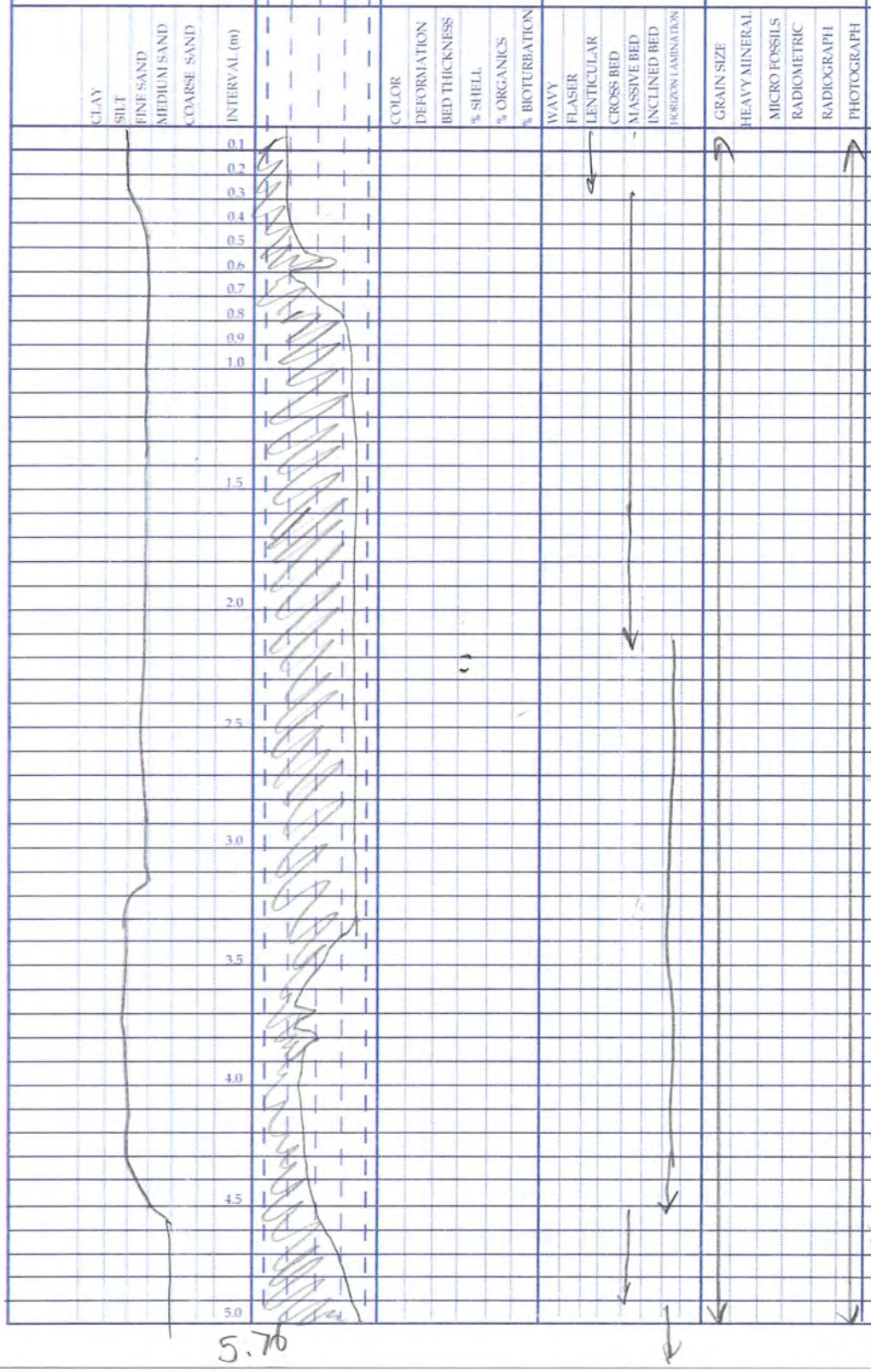
Vibracore Description Sheet

Core ID: 2014-336-FA-17
Latitude: 29° 24.863 N
Longitude: 89° 09.350 W
Date Collected: 01/13/15
Geographic Location: WD- 25'/ 7.62m

Date Described: 03/19/15
Described By: Kelso
Core Penetration: Full
Core Length: 5.76m (6% comp)

SEDIMENTARY TEXTURE AND STRUCTURES	% SAND	PHYSICAL CHARACTERISTICS	STRATIFICATION TYPE	SAMPLE	PHYSICAL DESCRIPTION



0-24cm - Mud dark brown gray ( ) soft silty mud with black organic thin horizon + lenses

24-332cm - Muddy Sand dark olive gray ( ) grading into olive gray ( ) lower core as mud content decreases sand is very fine, well sorted horizontally bedded with minimal bioturbation, minimal disseminated shell material, occasionally high shell high horizon and organic clasts, there is a woody organic horizon @ 292cm

332-339cm - Mud Grayish brown ( ) organic rich mud with small organic flecks throughout sharp base contact

339-478cm - Mud, olive gray, relatively dense mud with thin very fine sand and silt horizons (thin) only scattered shell frags and a brown woody organic clast @ 417cm

478-525cm - Sand, olive gray ( ) very fine well sorted sand, horizontally laminated with thin heavy mineral horizon, no visible shell material

525-536cm - Mud, olive gray, soft massive mud no visible shell material

536-576cm - Sand, olive gray very fine, well sorted, horizontally laminated, slightly muddy sand no visible shell material (thin)

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Vibracore Description Sheet

Core ID: 2014-336-FA-18
Latitude: 29° 27.775 N
Longitude: 89° 05.743 W
Date Collected: 01/17/2015
Geographic Location: W.D - 24' / 7.32m

Date Described: 02/22/15
Described By: [illegible]
Core Penetration: Full
Core Length: 523 cm (14 % comp)

SEDIMENTARY TEXTURE AND STRUCTURES	% SAND (0 – 50 – 100)	PHYSICAL CHARACTERISTICS	STRATIFICATION TYPE	SAMPLE	PHYSICAL DESCRIPTION
CLAY, SILT, FINE SAND, MEDIUM SAND, COARSE SAND, INTERVAL (m)		COLOR, DEFORMATION, BED THICKNESS, % SHELL, % ORGANICS, % BIOTURBATION	WAVY, FLASER, LENTICULAR, CROSS BED, MASSIVE BED, INCLINED BED, HORIZON LAMINATION	GRAIN SIZE, HEAVY MINERAL, MICRO FOSSILS, RADIOMETRIC, RADIOGRAPH, PHOTOGRAPH	

0-436 cm - Sand interbedded with silt and mud. Sand is fine, well sorted light olive gray to dark olive gray, horizontally laminated, with very little shell material. From 0-302 cm the sand is predominantly interbedded with silt horizons of varying thickness. Some silt horizons have thin organic mud horizons (95cm, 98cm, 261cm) and some have thin shell hash horizons (56cm, 206cm), silt horizons become more numerous down core.

436-523 cm - Clay, dense dark olive gray, horizontally laminated clay with minimal disseminated shell fragments.

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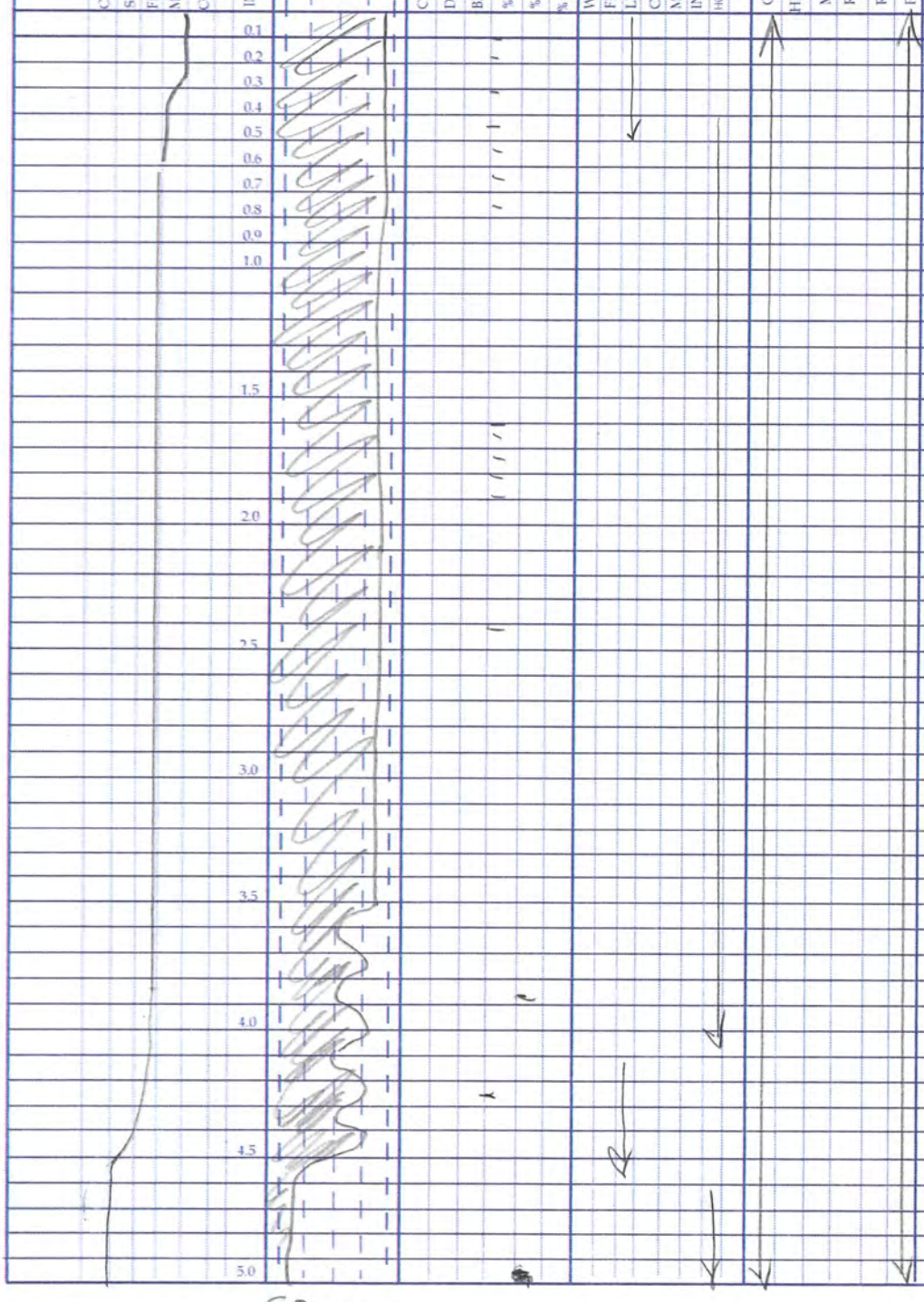
Vibracore Description Sheet

Core ID: 2014-336-FA-19
Latitude: 29° 27.294 N
Longitude: 89° 05.658 W
Date Collected: 01/17/2015
Geographic Location:

Date Described: 02/22/15
Described By: Kelso
Core Penetration: Full
Core Length: 5.30m (13% comp)
W.D. - 20' / 6.10m

SEDIMENTARY TEXTURE AND STRUCTURES	% SAND	PHYSICAL CHARACTERISTICS	STRATIFICATION TYPE	SAMPLE	PHYSICAL DESCRIPTION

Columns: CLAY, SILT, FINE SAND, MEDIUM SAND, COARSE SAND, INTERVAL (m) | % SAND (0, 50, 100) | COLOR, DEFORMATION, BED THICKNESS, % SHELL, % ORGANICS, % BIOTURBATION | WAVY, FLASER, LENTICULAR, CROSS BED, MASSIVE BED, INCLINED BED, HORIZON LAMINATION | GRAIN SIZE, HEAVY MINERAL, MICRO FOSSILS, RADIOMETRIC, RADIOGRAPH, PHOTOGRAPH



0 - 80 cm - Sand, dark yellowish gray to dark gray ( ) ( ) fine, well sorted, mottled sand with occasional small mud clast (burrows) minimal disseminated shell fragments, sharp angular basal contact

80 - 384 cm - Sand + silt, gray ( ) fine, well sorted sand interbedded with thin very dark gray silt horizons minimal disseminated shell fragments with thin shell hash horizons occasional organic fragments and thin horizons, bedding is mostly horizontal with deformation from coring, silt horizons turn to mud horizons from 350 - 384cm

384 - 460cm - Mud and Sand, dark olive gray ( ) interbedded mud and sand, with moderate disseminated shell fragments throughout and dense shell hash horizons @ 406, 417 + 449 cm, scattered woody organic flecks throughout as well

460 - 530 cm - clay, dark olive gray clay, with faint horizontal lamination, small sand lens and thin horizons large woody organic fragment from 502 - 510cm

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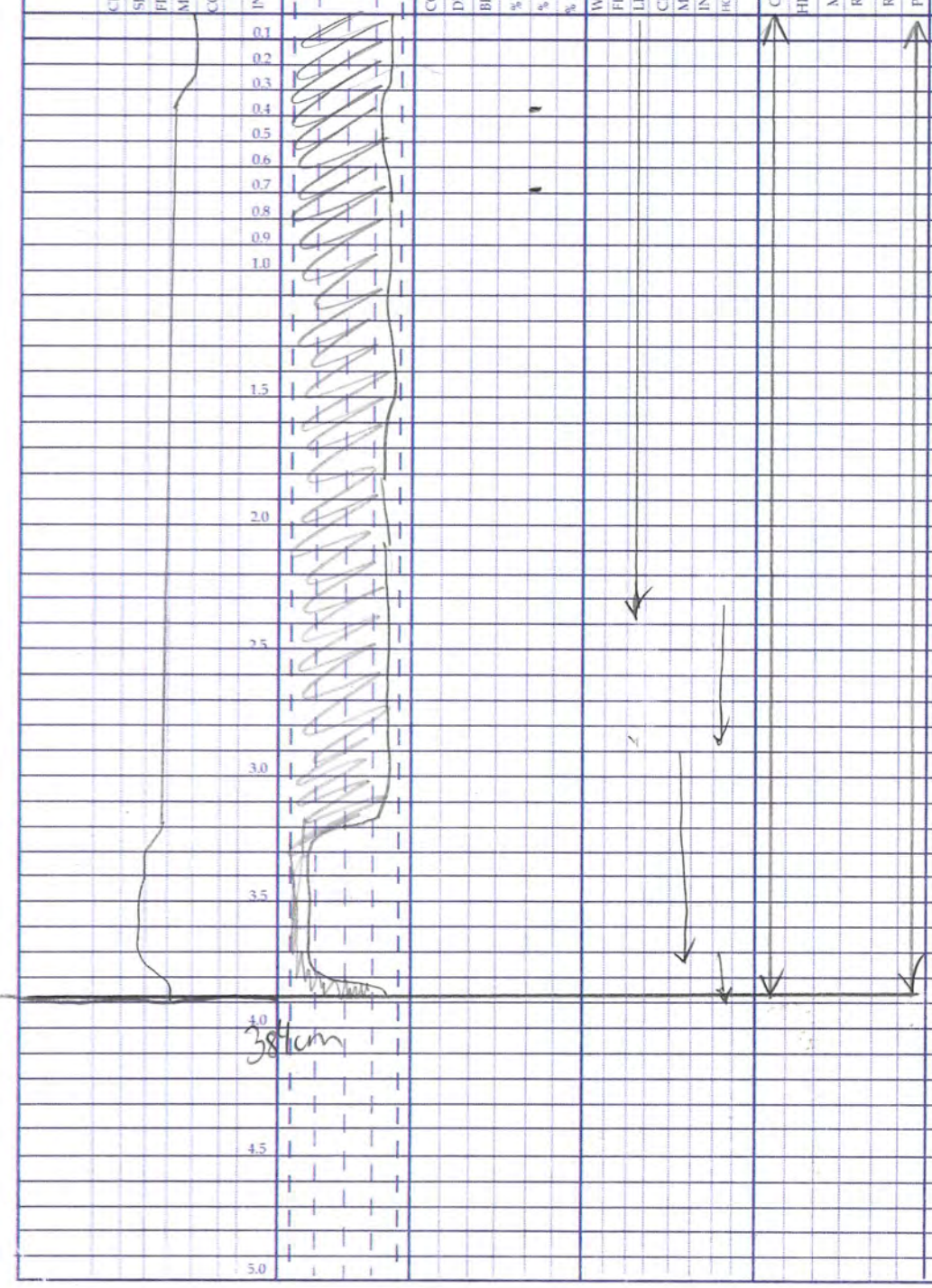
Vibracore Description Sheet

Core ID: 2014-336-FA-20
Latitude: 29 27.107 N
Longitude: 89 06.804 W
Date Collected: 01/13/2015
Geographic Location: Breton Is

Date Described: 02/20/15
Described By: Kelso
Core Penetration: Full
Core Length: 3.84m (38% comp)
W.D. 21 ft., 6.40 m

SEDIMENTARY TEXTURE AND STRUCTURES	% SAND	PHYSICAL CHARACTERISTICS	STRATIFICATION TYPE	SAMPLE	PHYSICAL DESCRIPTION



0-28cm - Sand, color is variable due to mottled or wavy bedding, sand is fine, well sorted, with moderate shell fragments, abundants flakes, angular basal contact

28 - 320 cm - Muddy Sand, dark gray ( ) slightly muddy sand at top with mud content increasing down core, sand is very fine with thin silt horizons throughout, abundant mica flecks and moderate shell material, shell material decreases in content down core, occasional mud lenses, clean sand deposit from 128-142 cm indicating a possible storm event, evidence of lamina bedding from 256-280cm with deformation from coring

320-380cm, Silty mud dark gray ( ) mud with thin very fine sand or silt horizon mud content increases down core, heavy mica content minimum fragmented shell material mud is slightly organic deformed organic horizon at 371cm, sharp basal contact

380 - 384 cm - Sand, slightly muddy fine to medium sand with grain size decreasing down with increased mud content, lone shell frag at 382 cm moderate mica flakes

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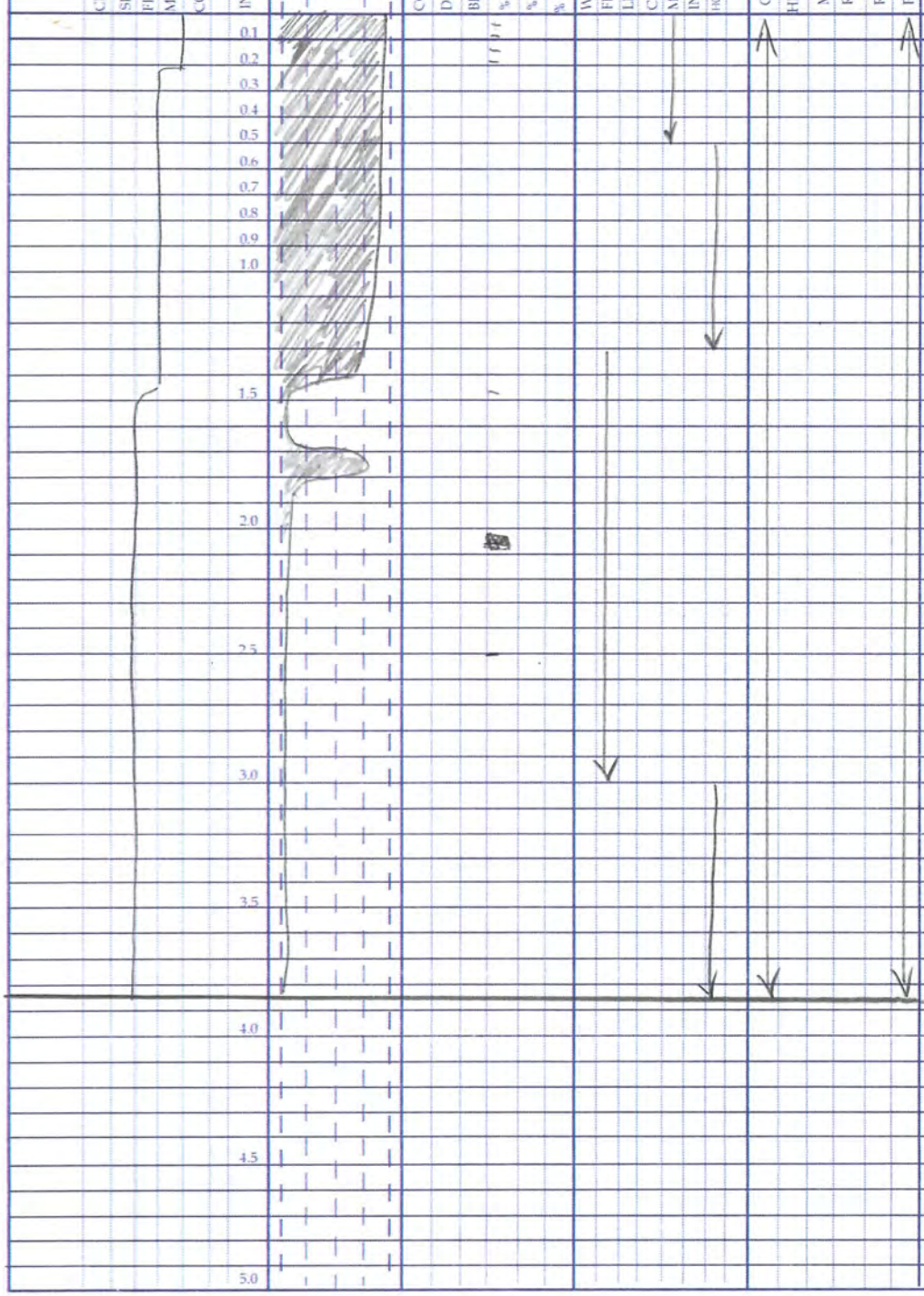
Vibracore Description Sheet

Core ID: 2014-336-FA-21-OSL
Latitude: 29° 26.056' N
Longitude: 89° 06.493' W
Date Collected: 01/18/15
Geographic Location: SE of Breton, SL 50

Date Described: 06/02/15
Described By: Kelso
Core Penetration:
Core Length: 3.83 m

SEDIMENTARY TEXTURE AND STRUCTURES	% SAND	PHYSICAL CHARACTERISTICS	STRATIFICATION TYPE	SAMPLE	PHYSICAL DESCRIPTION

Columns: CLAY, SILT, FINE SAND, MEDIUM SAND, COARSE SAND, INTERVAL (m) | % SAND (0, 50, 100) | COLOR, DEFORMATION, BED THICKNESS, % SHELL, % ORGANICS, % BIOTURBATION | WAVY, FLASER, LENTICULAR, CROSS BED, MASSIVE BED, INCLINED BED, HORIZON LAMINATION | GRAIN SIZE, HEAVY MINERAL, MICRO FOSSILS, RADIOMETRIC, RADIOGRAPH, PHOTOGRAPH



0-19 cm - Sand, Medium, well sorted, massive relatively clean sand with moderate dissemination shell frags and minimal mica flecks.

19-146 cm - Very fine Sand / silt, dark olive gray very fine sand grading into silt down core bedding ranges from concave down from 50-91, wavy from 91-120 cm and flaser from 121-146 cm minimal dissemination shell material and mica flecks, occasional thin organic clasts and thin horizons

146-368 cm - Silt and mud, brownish gray silt interbedded with gray soft mud, mud content increases down core, from 172-183 is a massive very fine sand horizon, large large deposit with dense shell wash and a large fragmented oyster shell which is highly phosphatic shell content is minimal otherwise, silt interbedded becomes thin silt horizon from 270-366

368-383 cm - Silt, dark brown silt laminated with thin black heavy mineral? horizon

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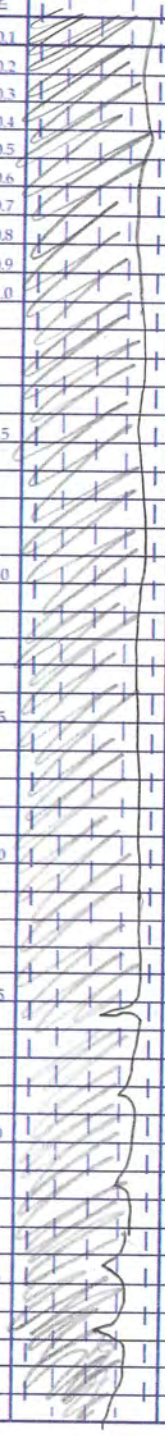
Vibracore Description Sheet

Core ID: 2014-336-FA-22
Latitude: 29 27.886 N
Longitude: 89 07.025 W
Date Collected: 01/17/2015
Geographic Location:

Date Described: 2/20/15
Described By: Kelso
Core Penetration: Full
Core Length: 5.0 m (18% comp)
W.D 25ft / 7.62m

SEDIMENTARY TEXTURE AND STRUCTURES	% SAND	PHYSICAL CHARACTERISTICS	STRATIFICATION TYPE	SAMPLE	PHYSICAL DESCRIPTION
CLAY, SILT, FINE SAND, MEDIUM SAND, COARSE SAND, INTERVAL (m)	0, 50, 100	COLOR, DEFORMATION, BED THICKNESS, % SHELL, % ORGANICS, % BIOTURBATION	WAVY, FLASER, LENTICULAR, CROSS BED, MASSIVE BED, INCLINED BED, HORIZON LAMINATION	GRAIN SIZE, HEAVY MINERAL, MICRO FOSSILS, RADIOMETRIC, RADIOGRAPH, PHOTOGRAPH	



0-14cm - Sand, light grayish brown ( ) fine well sorted, massive sand with intact and fragmented small bivalves, sharp horizontal basal contact

14-33cm - Sand, dark gray ( ) fine, well sorted, slightly muddy sand with small mud clast and thin laminae, abundant shell material and very small mica flecks, relatively sharp basal contact

33-44cm - Sand, grayish brown ( ) fine, well sorted massive sand with moderate no visible shell material, gradational basal contact

44-500cm - Interbedded sand and mud, light brown gray ( ) fine sand interbedded with dark gray mud and clay horizons increasing in frequency and thickness down core, large intact and fragmented oyster shells at 146cm and large intact bivalves and gastropods @ 214cm, small micro flecks throughout

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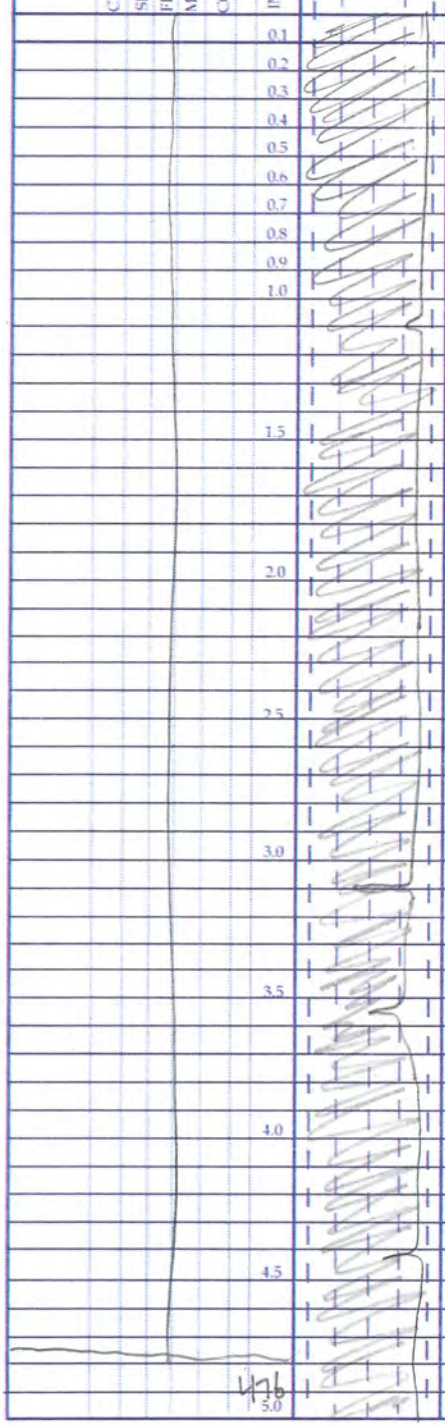
Vibracore Description Sheet

Core ID: 2014-336-FA-23
Latitude: 29° 28.232 N
Longitude: 89° 07.123 W
Date Collected: 01/17/2015
Geographic Location:

Date Described: 02/22/15
Described By: Kelso
Core Penetration: Full
Core Length: 4.76m (22% comp)
WD - 27' / 8.23m

SEDIMENTARY TEXTURE AND STRUCTURES	% SAND	PHYSICAL CHARACTERISTICS	STRATIFICATION TYPE	SAMPLE	PHYSICAL DESCRIPTION
CLAY, SILT, FINE SAND, MEDIUM SAND, COARSE SAND, INTERVAL (m)	0, 50, 100	COLOR, DEFORMATION, BED THICKNESS, % SHELL, % ORGANICS, % BIOTURBATION	WAVY, FLASER, LENTICULAR, CROSS BED, MASSIVE BED, INCLINED BED, HORIZON LAMINATION, Mottled	GRAIN SIZE, HEAVY MINERAL, MICRO FOSSILS, RADIOMETRIC, RADIOGRAPH, PHOTOGRAPH	



0-100cm - Sand, dark olive brown ( ) fine → v. fine, well sorted bioturbated quartz sand, with moderate disseminated shell fragments, small mica flecks throughout, shell content increase from 84-100cm indicating a possible lag deposit

100-226cm - Sand, olive brown ( ) fine → v. fine, massive sand, with a small clay-filled burrow @ 112cm, minimal disseminated mica flecks and heavy minerals, minimal disseminated shell fragments with shell content increasing down core

226-239cm - Sand and mud light grayish brown very shelly interbedded sand and clay

239-476cm - Sand, olive brown sand with thin dark gray mud interbeds. Some mud horizons have thin shell frag horizons underlying organic fragment and mud @ 302cm & 406cm minimal disseminated shell fragments otherwise horizontal bedding from 239-365cm then turns to inclined bedding from 365-450cm and back to horizontal bedding from 450-476cm

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Vibracore Description Sheet

Core ID: 2014-336-FA-24
Latitude: 29° 28.482 N
Longitude: 89° 07.195 W
Date Collected: 01/17/2015
Geographic Location:

Date Described: 3/10/15
Described By: Kelso
Core Penetration: Full
Core Length: 5.78m (5% Comp)
W.D. - 30' / 9.14m

SEDIMENTARY TEXTURE AND STRUCTURES	% SAND (0 – 50 – 100)	PHYSICAL CHARACTERISTICS	STRATIFICATION TYPE	SAMPLE	PHYSICAL DESCRIPTION
CLAY, SILT, FINE SAND, MEDIUM SAND, COARSE SAND, INTERVAL (m)		COLOR, DEFORMATION, BED THICKNESS, % SHELL, % ORGANICS, % BIOTURBATION	WAVY, FLASER, LENTICULAR, CROSS BED, MASSIVE BED, INCLINED BED, HORIZON LAMINATION	GRAIN SIZE, HEAVY MINERAL, MICRO FOSSILS, RADIOMETRIC, RADIOGRAPH, PHOTOGRAPH	
0.1					0-5.78m - Mud and silty mud, dark olive gray (interbedded mud and silty mud, with mud horizons becoming clay horizons. At ≈ 510cm, woody organic flecks throughout with a thick (10cm) wood fragment horizon from 420-430cm. Minimal dissemination shell material bedding is horizontal with deformation from coring in places. Occasional thin shell hash horizon particularly within the silty mud lamination.
0.2					
0.3					
0.4					
0.5					
0.6					
0.7					
0.8					
0.9					
1.0					
1.5					
2.0					
2.5					
3.0					
3.5					
4.0					
4.5					
5.0					

578

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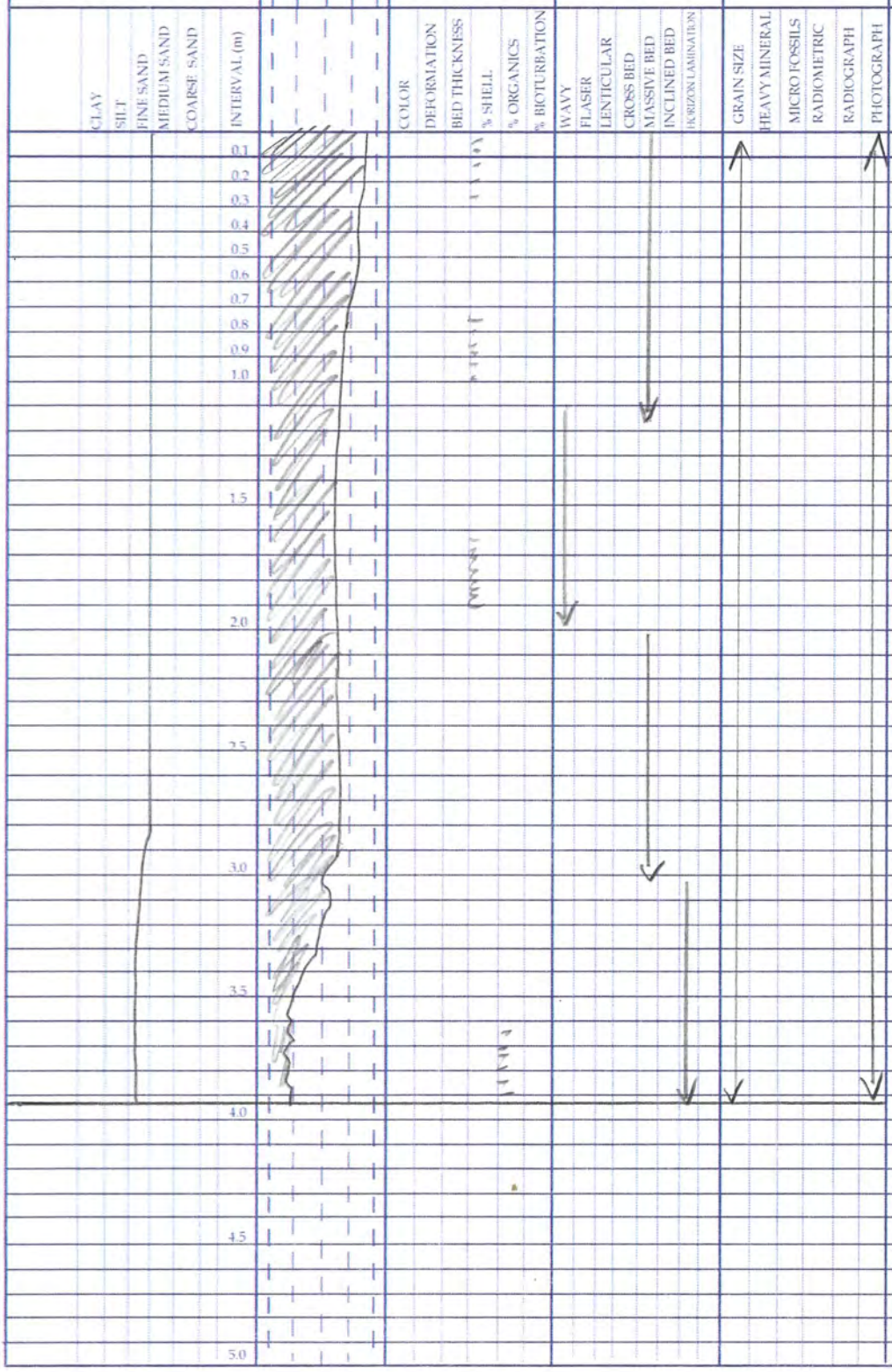
Vibracore Description Sheet

Core ID: 2014-336-FA-25A
Latitude: 29° 24 820 N
Longitude: 89° 06.137 W
Date Collected: 01/12/2015
Geographic Location:

Date Described: 03/09/15
Described By: Kelso
Core Penetration: Full
Core Length: 3.91m (36% comp)
W.D. -19'/ 5.79

SEDIMENTARY TEXTURE AND STRUCTURES	% SAND	PHYSICAL CHARACTERISTICS	STRATIFICATION TYPE	SAMPLE	PHYSICAL DESCRIPTION



0-70 cm - Sand, grayish brown, well sorted fine - very fine mottled sand with moderate disseminated shell frags, small very fine sand/silt lenses throughout, very wavy contact with underlying unit which extends from 55-87 cm

70-288 cm - Silt/very fine sand, dark olive gray massive silt mixed with very fine sand, minimal disseminated shell hash with localized heavy shell hash clusters and horizons

288-391 cm - Interbedded mud and silt, olive gray mud interbedded with olive gray silt, with horizontal of bleeding organic mud - almost platy in texture. Horizontal bedding w/ evidence of bioturbation

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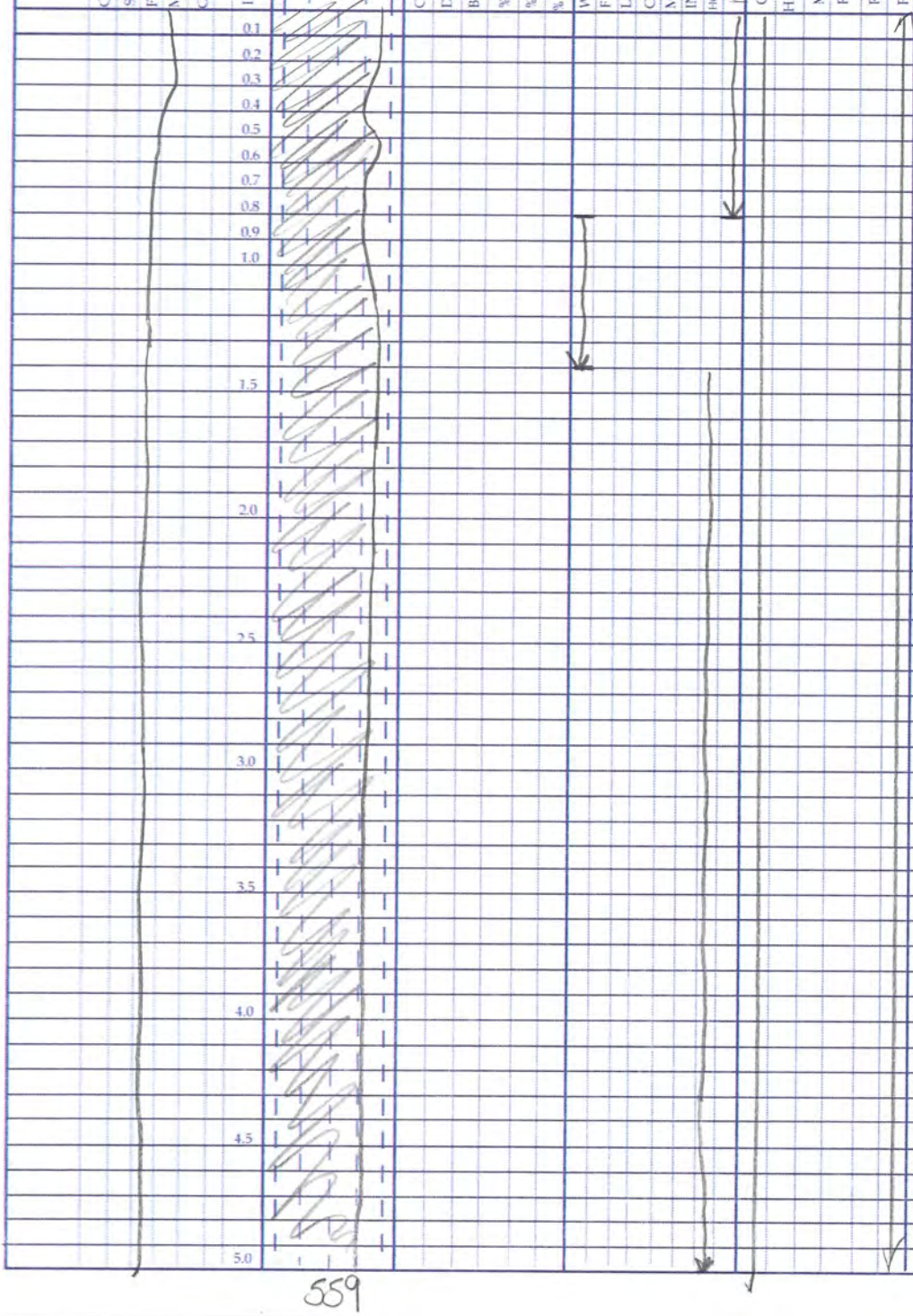
Vibracore Description Sheet

Core ID: 2015-336-FA-26
Latitude: 29° 28.090' N
Longitude: 89° 06.373 W
Date Collected: 01/17/2015
Geographic Location: Barataria Island

Date Described: 02/22/15
Described By: 14/50
Core Penetration: Full
Core Length: 559cm (8% comp)
WD-25 ft / 7.62m

SEDIMENTARY TEXTURE AND STRUCTURES	% SAND	PHYSICAL CHARACTERISTICS	STRATIFICATION TYPE	SAMPLE	PHYSICAL DESCRIPTION
CLAY, SILT, FINE SAND, MEDIUM SAND, COARSE SAND, INTERVAL (m)	0, 50, 100	COLOR, DEFORMATION, BED THICKNESS, % SHELL, % ORGANICS, % BIOTURBATION	WAVY, FLASER, LENTICULAR, CROSS BED, MASSIVE BED, INCLINED BED, HORIZON LAMINATION (Mottled)	GRAIN SIZE, HEAVY MINERAL, MICRO FOSSILS, RADIOMETRIC, RADIOGRAPH, PHOTOGRAPH	



0-224cm - Sand and silt, light yellowish gray (5Y 7/2) and light olive gray fine to very fine, well sorted sand interbedded with dark gray silt and silty sand horizons, moderate shell fragments, from 0-194cm bedding looks wavy but may be due to alteration and coring. Small mud clasts throughout with occasional small organic lens and thin horizons

224-455cm - Interbedded sand and mud, light olive gray (5Y 5/2) to very fine well sorted sand interbedded with dark gray mud horizons. Mud horizons increase in frequency and thickness downcore, organic mud horizons @ 309, 382, 386, and 409cm, moderate localized shell hash lenses and horizons, and moderate disseminated mica flecks

455-476cm, interbedded sand and clay, clay is brought in this section with thin shelly sand horizons

476-559cm - Sand and clay, Interbedded (Mottled) light gray (5Y 7/2) and dark gray mud horizons with sandy shell hash, clasts in muddy sand horizons, occasional shell black organic lenses and a larger organic horizon @ 539cm, moderate disseminated mica flecks

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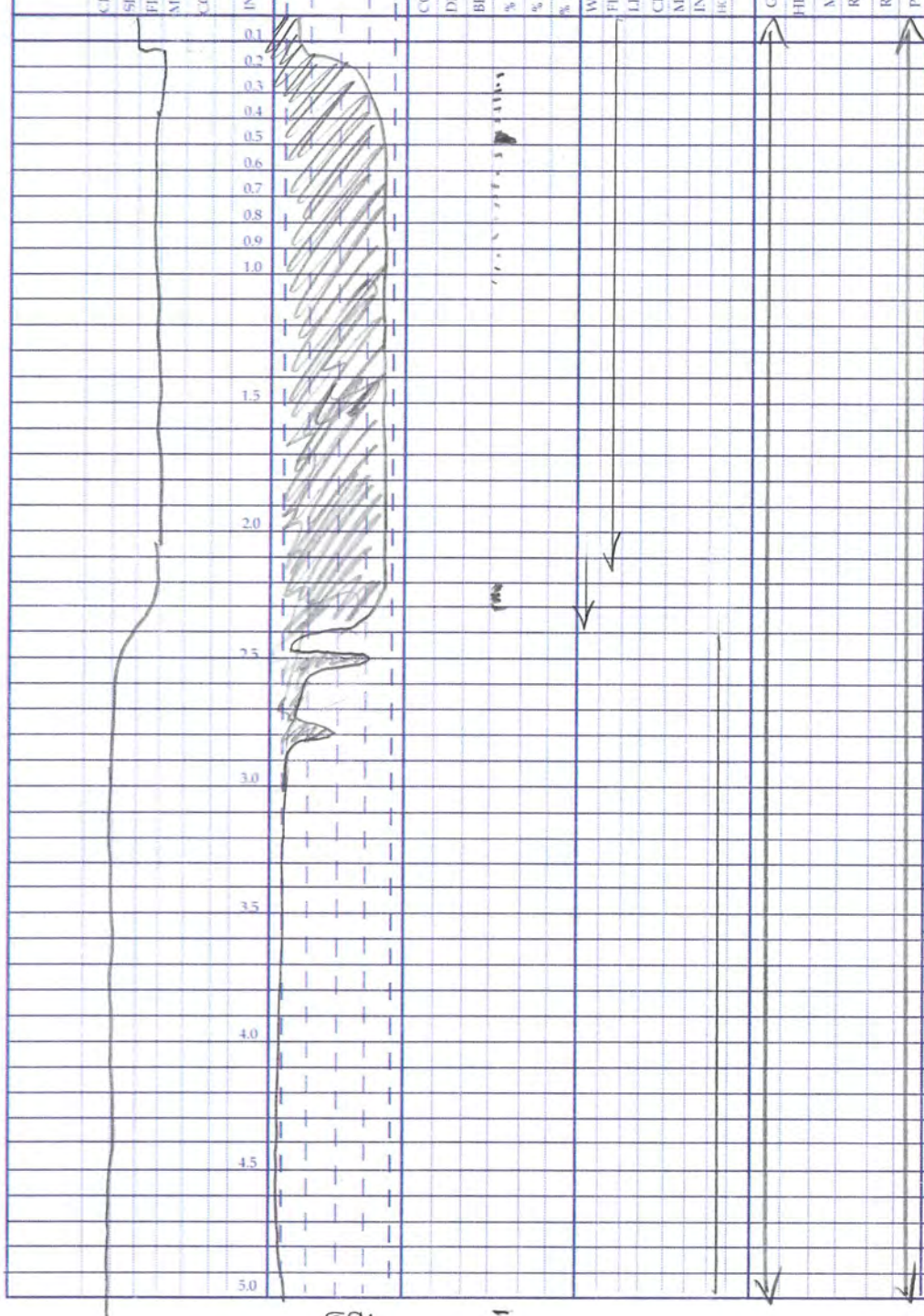
Vibracore Description Sheet

Core ID: 2014-336-FA-27
Latitude: 29° 28.438 N
Longitude: 89° 06.027 W
Date Collected: 01/17/2015
Geographic Location:

Date Described: 03/10/15
Described By: Kelso, Kuha
Core Penetration: Full
Core Length: 5.92 m (3% Comp)
W.D - 25' / 7.62 m

SEDIMENTARY TEXTURE AND STRUCTURES	% SAND	PHYSICAL CHARACTERISTICS	STRATIFICATION TYPE	SAMPLE	PHYSICAL DESCRIPTION



0-16 cm, Silty Mud, dark olive gray ( ) mottled silty mud with minimal disseminated shell frags.

16-55 cm - Silty Sand, dark olive gray very shelly silty very fine sand fragmented and intact inarticulate shell of various size & species sharp basal contact

55-221 cm - Sand, brownish grayish ( ) Fine to very fine, well sorted massive quartz sand with minimal disseminated shell frags and mica flakes

221-232 cm - Shell lag deposit consisting of mostly fragmented large oyster shells in a silty sand matrix

252-522 cm - Interbedded clay and silt with muddy sand horizons from 239-257 cm and 268-280 cm clay is dense, relatively clean with localized shell fragment lenses/clusters thin silt horizons decrease in frequency down core occasional black organic horizons, clay is mostly olive gray with some grayish yellow interbeds

522-591 cm - Sand, grayish brown ( ), very fine well sorted, sand with thin silt interbeds and horizons of peaty organics no visible shell material

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Vibracore Description Sheet

Core ID: 2014-336-FA-28
Latitude: 29 28.092 N
Longitude: 89 04.643 W
Date Collected: 01/17/205
Geographic Location:

Date Described: 02/22/15
Described By: Kelso
Core Penetration: Full
Core Length: 5.75m (6% wma)
DUD - 28' / 8.54m

SEDIMENTARY TEXTURE AND STRUCTURES	% SAND (0 – 50 – 100)	PHYSICAL CHARACTERISTICS	STRATIFICATION TYPE	SAMPLE	PHYSICAL DESCRIPTION
CLAY, SILT, FINE SAND, MEDIUM SAND, COARSE SAND, INTERVAL (m)		COLOR, DEFORMATION, BED THICKNESS, % SHELL, % ORGANICS, % BIOTURBATION	WAVY, FLASER, LENTICULAR, CROSS BED, MASSIVE BED, INCLINED BED, HORIZON LAMINATION	GRAIN SIZE, HEAVY MINERAL, MICRO FOSSILS, RADIOMETRIC, RADIOGRAPH, PHOTOGRAPH	
0.1					0-12cm - Muddy Sand very dark gray (mottled muddy Sand with abundant small black organic flecks
0.2					
0.3					
0.4					
0.5					
0.6					
0.7					12-575cm - Clay and silt dark gray and light yellowish gray clay - interbedded with thin dark gray silt horizons, horizontally laminated, very little and in some areas no visible shell material, occasion black organic clasts and root fragments and horizons at ≈ 220 cm 270cm, 370cm, 470cm, ≈ 510 cm
0.8					
0.9					
1.0					
1.5					
2.0					
2.5					
3.0					
3.5					
4.0					
4.5					
5.0					

575cm

USGS science for a changing world

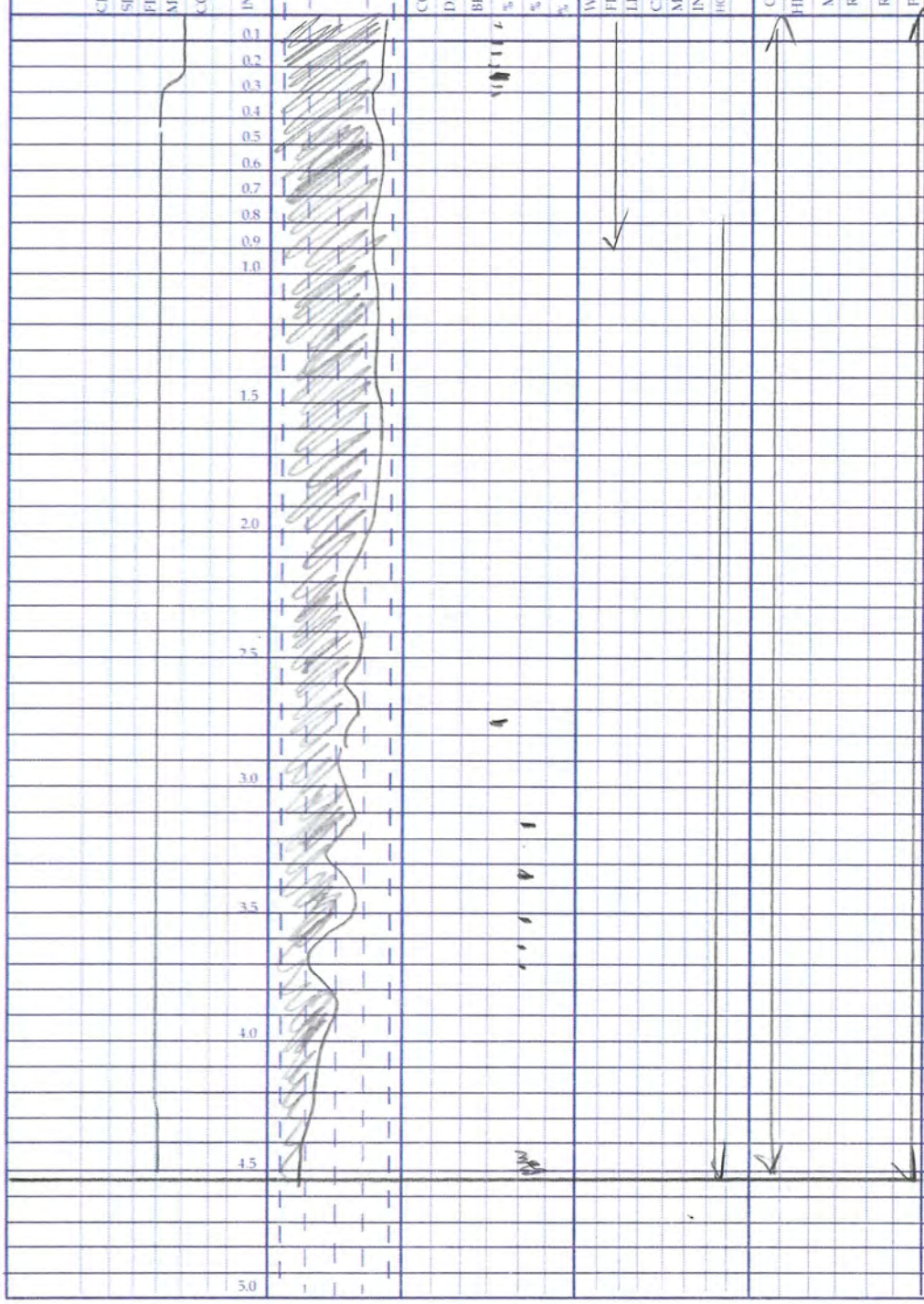
Vibracore Description Sheet

Core ID: 2014-336-FA-29
Latitude: 29° 28.487 N
Longitude: 89° 04.730 W
Date Collected: 01/17/2014
Geographic Location:

Date Described: 03/09/15
Described By: Kelso
Core Penetration: Full
Core Length: 4.54m (26% comp)
W.D - 17'/ 5.18m

SEDIMENTARY TEXTURE AND STRUCTURES	% SAND	PHYSICAL CHARACTERISTICS	STRATIFICATION TYPE	SAMPLE	PHYSICAL DESCRIPTION

Columns: CLAY, SILT, FINE SAND, MEDIUM SAND, COARSE SAND, INTERVAL (m) | % SAND (0, 50, 100) | COLOR, DEFORMATION, BED THICKNESS, % SHELL, % ORGANICS, % BIOTURBATION | WAVY, FLASER, LENTICULAR, CROSS BED, MASSIVE BED, INCLINED BED, HORIZON LAMINATION | GRAIN SIZE, HEAVY MINERAL, MICRO FOSSILS, RADIOMETRIC, RADIOGRAPH, PHOTOGRAPH



0-24 cm - Sand, light grayish brown (to olive gray), fine, well sorted, mottle sand, with minimal disseminated shell material and a dense fragmented shell hash deposit from 24-27 cm (basal contact

24-454 cm - Sand, silt and mud, interbedded very fine sand with silt and mud, silt and mud content increase down core, minimal disseminated shell material with localized heavy shell fragment clusters several thin organic horizons and lenses throughout and a dense organic horizon containing wood fragment @ 452 cm

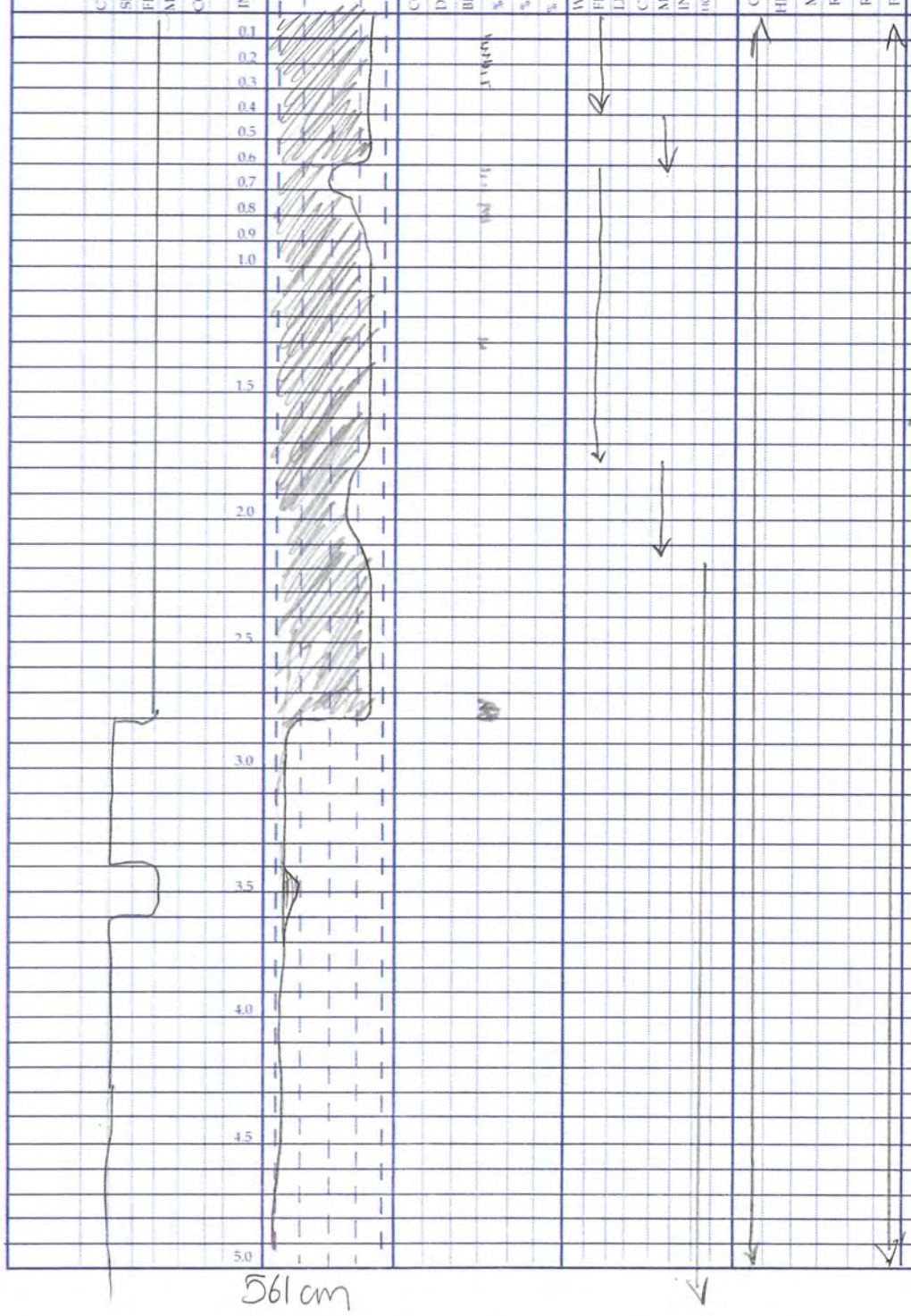
USGS science for a changing world

Vibracore Description Sheet

Core ID: 2014-336-FA-30
Latitude: 29° 28.560 N
Longitude: 89° 05.726 W
Date Collected: 01/17/2015
Geographic Location:

Date Described: 03/09/15
Described By: Kelso
Core Penetration: Full
Core Length: 5.61m (8% comp)
W.D. - 18' / 5.49m

SEDIMENTARY TEXTURE AND STRUCTURES	% SAND	PHYSICAL CHARACTERISTICS	STRATIFICATION TYPE	SAMPLE	PHYSICAL DESCRIPTION



0-278 cm - Sand, yellowish gray ( ) fine well sorted, horizontally laminated quartz sand with areas of bioturbation, moderate disseminated shell fragments locally heavy shell hash clusters @ 74cm, 130cm, and a denser shell lag deposit at basal contact with large and small shell fragments sharp basal contact

278-561 cm, clay and silt, gray, fat, dense clay with thin silt interbeds, bedding predominantly horizontal, with wavy bedding from 320-340 cm, minimal disseminated shell frag woody organic horizon @ 488 and 500 m

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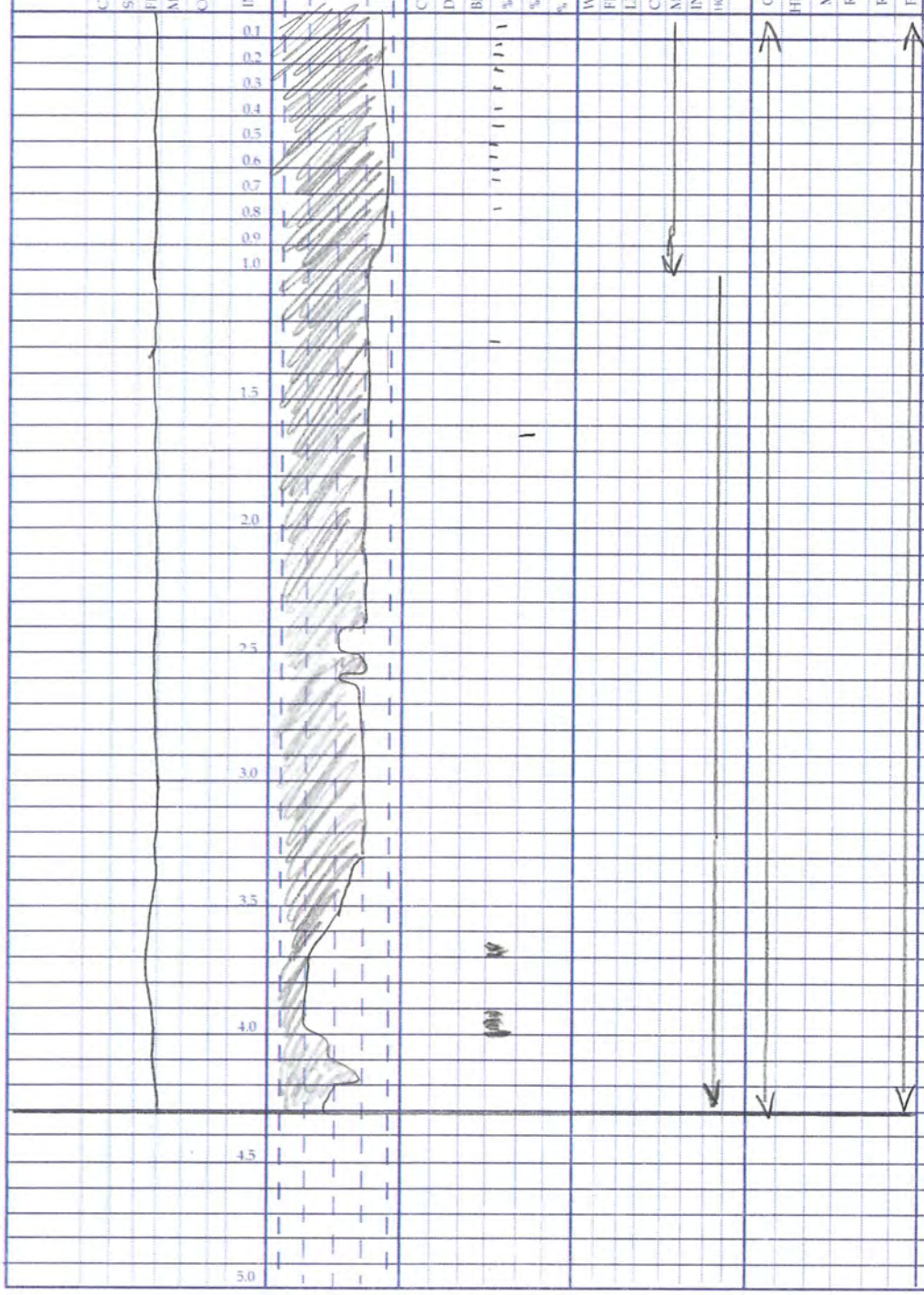
Vibracore Description Sheet

Core ID: 2014-336-FA 31
Latitude: 29° 28.229 N
Longitude: 89° 04.108 W
Date Collected: 01/17/2015
Geographic Location:

Date Described: 03/18/15
Described By: Kelso Kahn
Core Penetration: Full
Core Length: 4.30 m (30% comp)
W.D - 18' / 5.49m

SEDIMENTARY TEXTURE AND STRUCTURES	% SAND	PHYSICAL CHARACTERISTICS	STRATIFICATION TYPE	SAMPLE	PHYSICAL DESCRIPTION



0-135 cm - Sand, light olive gray, massive, well sorted, fine to very fine sand, with minimal disseminated shell fragments. Mica flakes are visible but very small

135-390 cm - Sand & Mud, olive gray ( ) interbedded muddy sand and mud. Sand horizons become more silty during core. Horizontally bedded from 135-240 cm then mottled from 240-283 cm, [illegible] back to horizontal bedding from 283-390 cm with some deformation from coring and bioturbation. Minimal disseminated shell material with dense shell beds deposited from 345-348 cm, and 365-371 cm. Sharp, basal contact, masked by a dense shell [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]

390-430 Sand & Mud interbedded well sorted fine to medium sand and mud. Sand is relatively clean and has moderately disseminated shell material, mud is mottled and very clean

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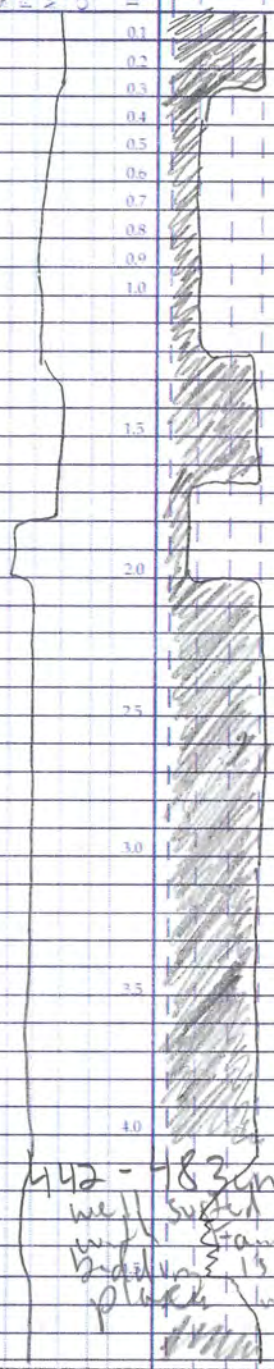
science for a changing world

Vibracore Description Sheet

Core ID: 2014-336-1-A-32
Latitude: 29° 26.469 N
Longitude: 89° 69.025 W
Date Collected: 01/13/2015
Geographic Location:

Date Described: 03/04/2015
Described By: Kelso
Core Penetration: Full
Core Length: 4.83m (21% comp)
W.D. 24'/7.32m

SEDIMENTARY TEXTURE AND STRUCTURES	% SAND	PHYSICAL CHARACTERISTICS	STRATIFICATION TYPE	SAMPLE	PHYSICAL DESCRIPTION
CLAY, SILT, FINE SAND, MEDIUM SAND, COARSE SAND, INTERVAL (m)	0, 50, 100	COLOR, DEFORMATION, BED THICKNESS, % SHELL, % ORGANICS, % BIOTURBATION	WAVY, FLASER, LENTICULAR, CROSS BED, MASSIVE BED, INCLINED BED, HORIZON LAMINATION	GRAIN SIZE, HEAVY MINERAL, MICRO FOSSILS, RADIOMETRIC, RADIOGRAPH, PHOTOGRAPH	



0 - 26cm - Muddy Sand, dark olive gray, > muddy sand with moderate dissemination shell and a dense shell hash horizon at base. Contains slightly organic sandy mud throughout

26 - 126 cm - Sandy Mud dark olive gray. Very fine sandy mud with moderate dissem. shell hash and a denser coquina shell chd from 110 - 118 cm

126 - 168 cm - Muddy Sand dark olive gray with muddy fine - medium well sorted sand with abundant disseminated shell hash. bioturbated

168 - 200 cm - Mud and Silt interbeds, dark olive gray relatively dense mud with thin silt interbeds, horizontally laminated

200 - 410 cm - Sand, grayish brown (very fine, horizontally laminated sand exhibiting sponge at cm detail) thick mud horizons from 264 - 270 cm, organic horizons at various thickness from 308 - 331 cm occasional small mud clasts, very high dissem. of shell material

410 - 442 cm - interbedded mud and sand, relatively dense mud with thin very fine sand horizons, very high shell material

442 - 483 cm - Sand, gray brown very fine sand with bioturbated bedding - mud - filled burrows

well sorted sand with bedding is present in places

USGS science for a changing world

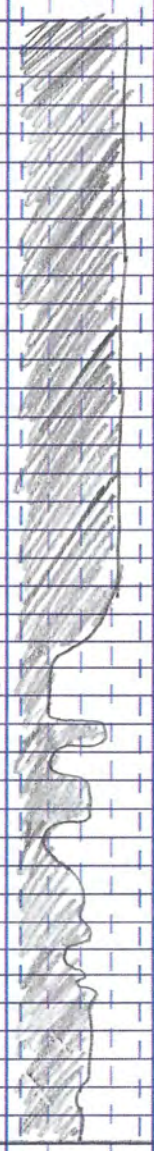
Vibracore Description Sheet

Core ID: 2014-336-FA-33A
Latitude: 29° 25.954 N
Longitude: 89° 10.143 W
Date Collected: 01/11/15
Geographic Location: W.D. - 21' / 6.40 m

Date Described: 03/19/15
Described By: Kelso
Core Penetration: Full
Core Length: 4.0 m (34% comp)

SEDIMENTARY TEXTURE AND STRUCTURES	% SAND	PHYSICAL CHARACTERISTICS	STRATIFICATION TYPE	SAMPLE	PHYSICAL DESCRIPTION

Columns: CLAY, SILT, FINE SAND, MEDIUM SAND, COARSE SAND, INTERVAL (m) | % SAND (0, 50, 100) | COLOR, DEFORMATION, BED THICKNESS, % SHELL, % ORGANICS, % BIOTURBATION | WAVY, FLASER, LENTICULAR, CROSS BED, MASSIVE BED, INCLINED BED, HORIZON LAMINATION | GRAIN SIZE, HEAVY MINERAL, MICRO FOSSILS, RADIOMETRIC, RADIOGRAPH, PHOTOGRAPH



Interval (m): 0.1, 0.2, 0.3, 0.4, 0.5, 0.6, 0.7, 0.8, 0.9, 1.0, 1.5, 2.0, 2.5, 3.0, 3.5, 4.0, 4.5, 5.0

0-223 cm - Sand olive gray (?) well sorted, very fine, slightly muddy sand with moderate dissemination shell material, bedding is mostly massive with faint, very thin horizontal lamination [illegible]

186-197 cm - unit gets a bit more muddy leading into underlying unit (gradational contact)

223-240 cm - mud and sand, interbedded thick mud and muddy sand horizons, dense shell and orange [illegible] in a mud matrix from 223-244

240-400 mud and sand interbedded muddy sand and mud horizons [illegible] are thick [illegible] around 20 cm, bedding is mostly mottled - particularly within the mud horizons, sand or horizontally laminated (very thin) from 360-380 cm minimal small shell frag scattered throughout the sand horizons and an occasional small organic clast

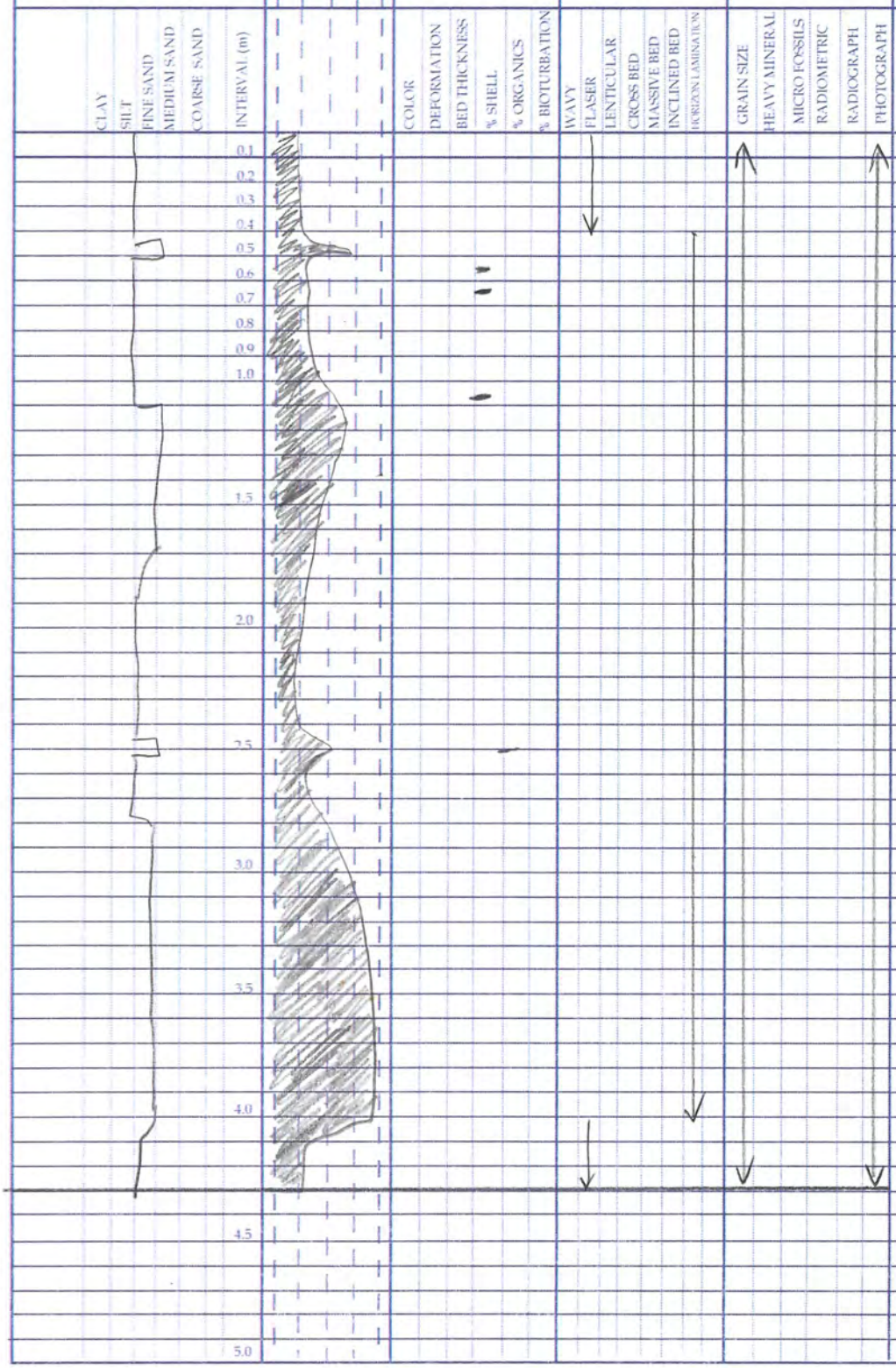
USGS science for a changing world

Vibracore Description Sheet

Core ID: 2014-336-FA-34
Latitude: 29° 24.975 N
Longitude: 89° 11.513 W
Date Collected: 01/11/2015
Geographic Location:

Date Described: 03/19/15
Described By: [illegible]
Core Penetration: Full
Core Length: 4.25 m (30% comp)
W.D. - 22' / 6.71 m

SEDIMENTARY TEXTURE AND STRUCTURES	% SAND	PHYSICAL CHARACTERISTICS	STRATIFICATION TYPE	SAMPLE	PHYSICAL DESCRIPTION



0-108 cm - Mud, olive gray silty mud with minimal disseminated shell frags and heavy shell lag deposit @ 63 and at basal contact 108 cm

108-165 cm - Sand, olive gray muddy sand, sand is very fine, with minimal disseminated shell material and a relatively dense shell hash horizon @ 137 cm bedding is massive.

165-277 cm - Mud, olive gray mud with thin silt/very fine sand horizons. At 250 cm is an organ horizons consisting of highly disorded organic material black in color, some mud is cleaner and more clay-like and brown in color. Sharp basal contact

277-401 cm - Sand, grayish brown ( ) well sorted, very fine relatively clean horizontally laminated sand, most (no visible shell material and moderate very small mud [illegible]. Sharp basal contact

401-428 cm - Mud, olive gray ( ) mottled silty mud with thin silt horizons and small lenses, no visibly shell material but highly bioturbated

USGS science for a changing world

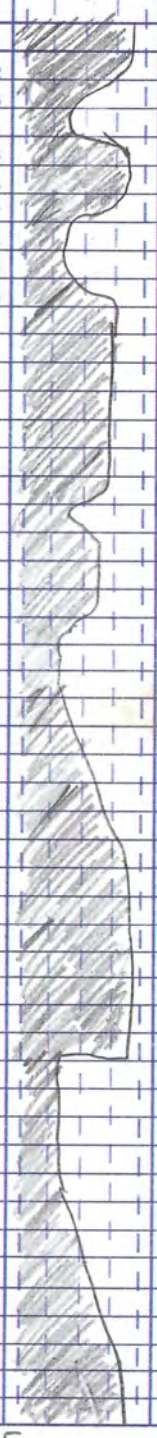
Vibracore Description Sheet

Core ID: 2014-336-FA-35
Latitude: 29° 25.418 N
Longitude: 89° 09.738 W
Date Collected: 01/13/2015
Geographic Location:

Date Described: 03/18/15
Described By: Kelso
Core Penetration: Full
Core Length: 5.25m (14% comp)
WD ~ 22'/6.71m

SEDIMENTARY TEXTURE AND STRUCTURES	% SAND	PHYSICAL CHARACTERISTICS	STRATIFICATION TYPE	SAMPLE	PHYSICAL DESCRIPTION

Columns: CLAY, SILT, FINE SAND, MEDIUM SAND, COARSE SAND, INTERVAL (m) | % SAND (0, 50, 100) | COLOR, DEFORMATION, BED THICKNESS, % SHELL, % ORGANICS, % BIOTURBATION | WAVY, FLASER, LENTICULAR, CROSS BED, MASSIVE BED, INCLINED BED, HORIZON LAMINATION | GRAIN SIZE, HEAVY MINERAL, MICRO FOSSILS, RADIOMETRIC, RADIOGRAPH, PHOTOGRAPH



525 cm

0-70cm - Sand and mud muddy sand with increased mud content from 20-47cm very shelly, massive with occasional small organic clasts

70-170cm - Sand, olive gray, well sorted very fine massive sand with minimal disseminated shell material

170-240cm - Mud & Sand olive gray interbedded mud and muddy sand with abundant small organic clasts and shell

240-367cm - Sand, brownish gray, well sorted very fine sand with minimal disseminated shell fragments, locally heavy shell, high clastic [illegible] muddy sand filled burrows @ 340cm, sharp basal contact

367-417cm - Mud and very fine sand/silt, olive gray mud interbedded with thin silt/very fine sand horizons, no visible shell material

417-525cm - Sand olive gray (?) very fine, well sorted, pitty sand, [illegible] with some deformation from coring, only scattered shell fragments some deformation from coring

USGS science for a changing world

Vibracore Description Sheet

Core ID: 2014-336-FA-36A
Latitude: 29° 24.486 N
Longitude: 89° 08.620 W
Date Collected: 01/12/15
Geographic Location: W.D - 28' / 8.53m

Date Described: Kelso
Described By: 03/19/15
Core Penetration: Full
Core Length: 5.30m (13% comp)

SEDIMENTARY TEXTURE AND STRUCTURES	% SAND	PHYSICAL CHARACTERISTICS	STRATIFICATION TYPE	SAMPLE	PHYSICAL DESCRIPTION

COLOR | DEFORMATION | BED THICKNESS | % SHELL | % ORGANICS | % BIOTURBATION | WAVY | FLASER | LENTICULAR | CROSS BED | MASSIVE BED | INCLINED BED | HORIZON LAMINATION | GRAIN SIZE | HEAVY MINERAL | MICRO FOSSILS | RADIOMETRIC | RADIOGRAPH | PHOTOGRAPH

0-152cm: Mud, olive gray silty mud, with areas of high and low silt content, minimal disseminated shell material predominantly embedded with the higher content of silt, large wood fragment @ 130cm and sporadic small organic fleck surrounding the large wood frag.

gradational basal contact

152-345 cm - Sand, olive gray ( ) very fine, well sorted sand, muddier at the top with mud content decreasing down core, minimal disseminated shell material and moderate very small mica flecks throughout bedding is predominantly massive, occasional small organic [illegible] and mud [illegible]

sharp basal contact

345-373 cm - Mud and silt, olive gray ( ) mud interbedded with thin very fine sand / silt horizon, no visible shell material

373-437 cm - Sand, brownish gray ( ) very fine, well sorted, massive, slightly muddy sand, mud content decreasing down core

437-448 cm - Mud & silt olive gray interbedded mud & silt horizon, horizontally [illegible] with no visible shell material

448-530 cm - Sand, brownish gray ( ) well sorted [illegible] horizontally [illegible] sand [illegible] visible [illegible] 452 cm

530cm

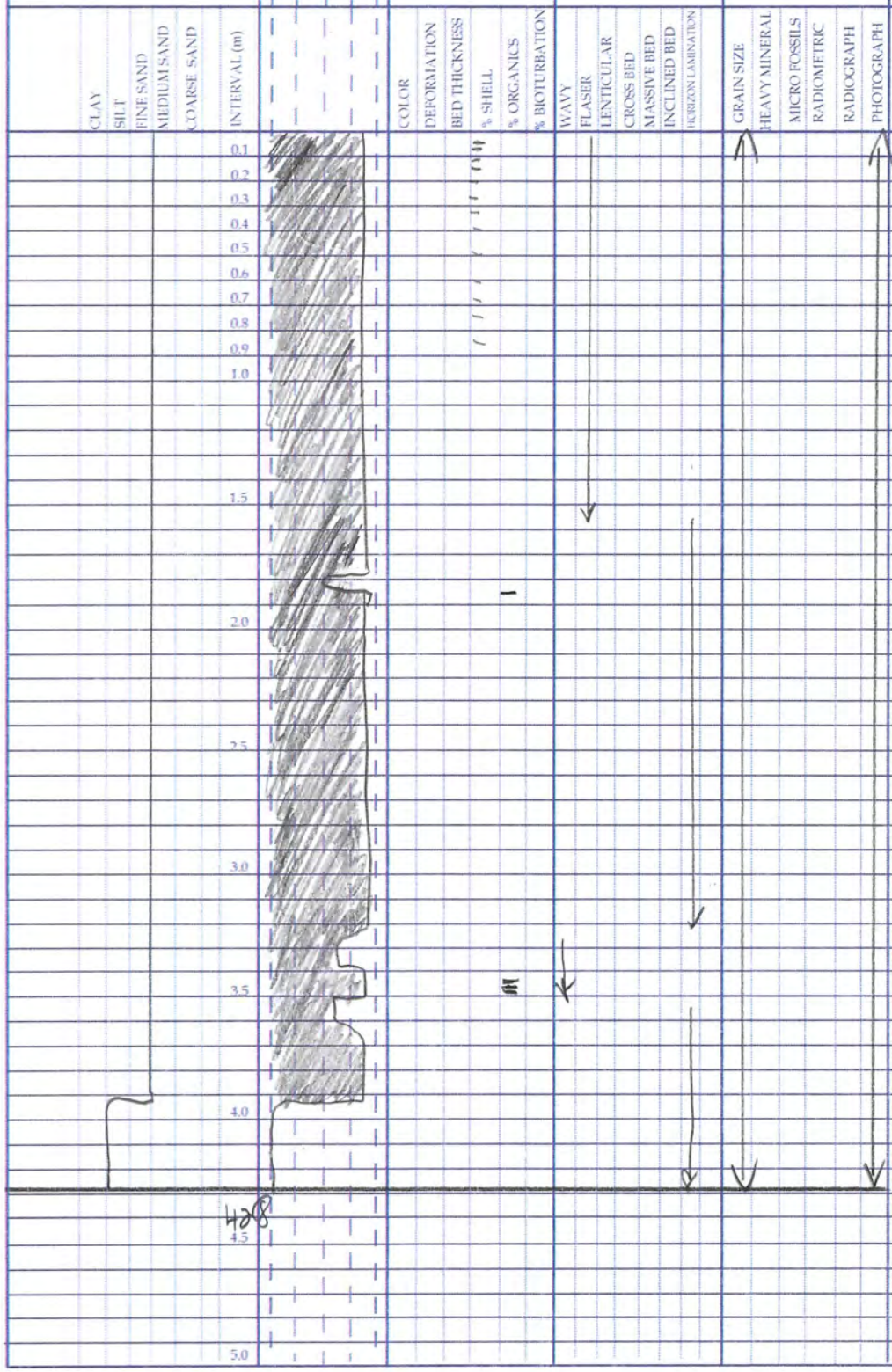
USGS science for a changing world

Vibracore Description Sheet

Core ID: 2014-336-FA-37
Latitude: 29° 27.554 N
Longitude: 89° 09.845 W
Date Collected: 01/17/2015
Geographic Location:

Date Described: 03/19/15
Described By: Kelso
Core Penetration: Full
Core Length: 4.28 (30% comp)
W.D. - 16.5' / 5.08 m

SEDIMENTARY TEXTURE AND STRUCTURES	% SAND	PHYSICAL CHARACTERISTICS	STRATIFICATION TYPE	SAMPLE	PHYSICAL DESCRIPTION



0-392 - Sand, grayish brown well sorted very fine sand with material bedding from 0-240 then becomes horizontal to wavy from 240-392cm black organic horizon deform from coarse at 184cm, heavy dissemination mica throughout shell material is heavy from 0-1m and virtually no existent from 150-343cm wavy organic horizon abundant from 311-345 with a relative layer weed fragment @ 343cm and thin clay lined horizon at 345, 350 and 355cm sharp basal contact

392-428 cm, clay and silt, dark gray, clay interbedded with dark gray silt, no visible shell material

USGS science for a changing world

Vibracore Description Sheet

Core ID: 2014-336-FA-38A
Latitude: 29° 28.162 N
Longitude: 89° 16.328 W
Date Collected: 01/17/2015
Geographic Location:

Date Described: 03/25/15
Described By: Kelso
Core Penetration: Full
Core Length: 4.59 m (25% comp)
W.D - 12' / 3.66m

SEDIMENTARY TEXTURE AND STRUCTURES	% SAND	PHYSICAL CHARACTERISTICS	STRATIFICATION TYPE	SAMPLE	PHYSICAL DESCRIPTION

Columns: CLAY, SILT, FINE SAND, MEDIUM SAND, COARSE SAND, INTERVAL (m) | % SAND (0, 50, 100) | COLOR, DEFORMATION, BED THICKNESS, % SHELL, % ORGANICS, % BIOTURBATION | WAVY, FLASER, LENTICULAR, CROSS BED, MASSIVE BED, INCLINED BED, HORIZON LAMINATION | GRAIN SIZE, HEAVY MINERAL, MICRO FOSSILS, RADIOMETRIC, RADIOGRAPH, PHOTOGRAPH

Interval (m): 0.1, 0.2, 0.3, 0.4, 0.5, 0.6, 0.7, 0.8, 0.9, 1.0, 1.5, 2.0, 2.5, 3.0, 3.5, 4.0, 4.5, 5.0

0-290 - Sand, grayish brown ( ), grading into light grayish brown ( ) down core as mud content decreases fine well sorted, massive with moderate disseminated shell fragment and localized dense shell hash horizons and lenses, thin wavy organic horizons from 229-243 cm and thin horizontally laminated organic horizon @ 205 cm, large fossilized fragmented oyster shell at 300 cm (basal contact)

290 - 377 cm - Sand, light brownish gray ( ), well sorted, fine - medium sand with abundant shell material from 340-360 cm, 1 cm mud horizon @ 225 cm

377 - 415 cm - Sand, olive brown ( ), very fine well sorted, horizontally laminated sand with a thin dense shell hash horizon @ 403 cm with minimal disseminated shell material

415 - 459 cm - Sand & mud, olive gray, interbedded sand and mud w/ moderate disseminated organic flecks, thin organic horizons from 450 - 454 cm and a dense organic horizon @ 455 cm with scattered shell fragments

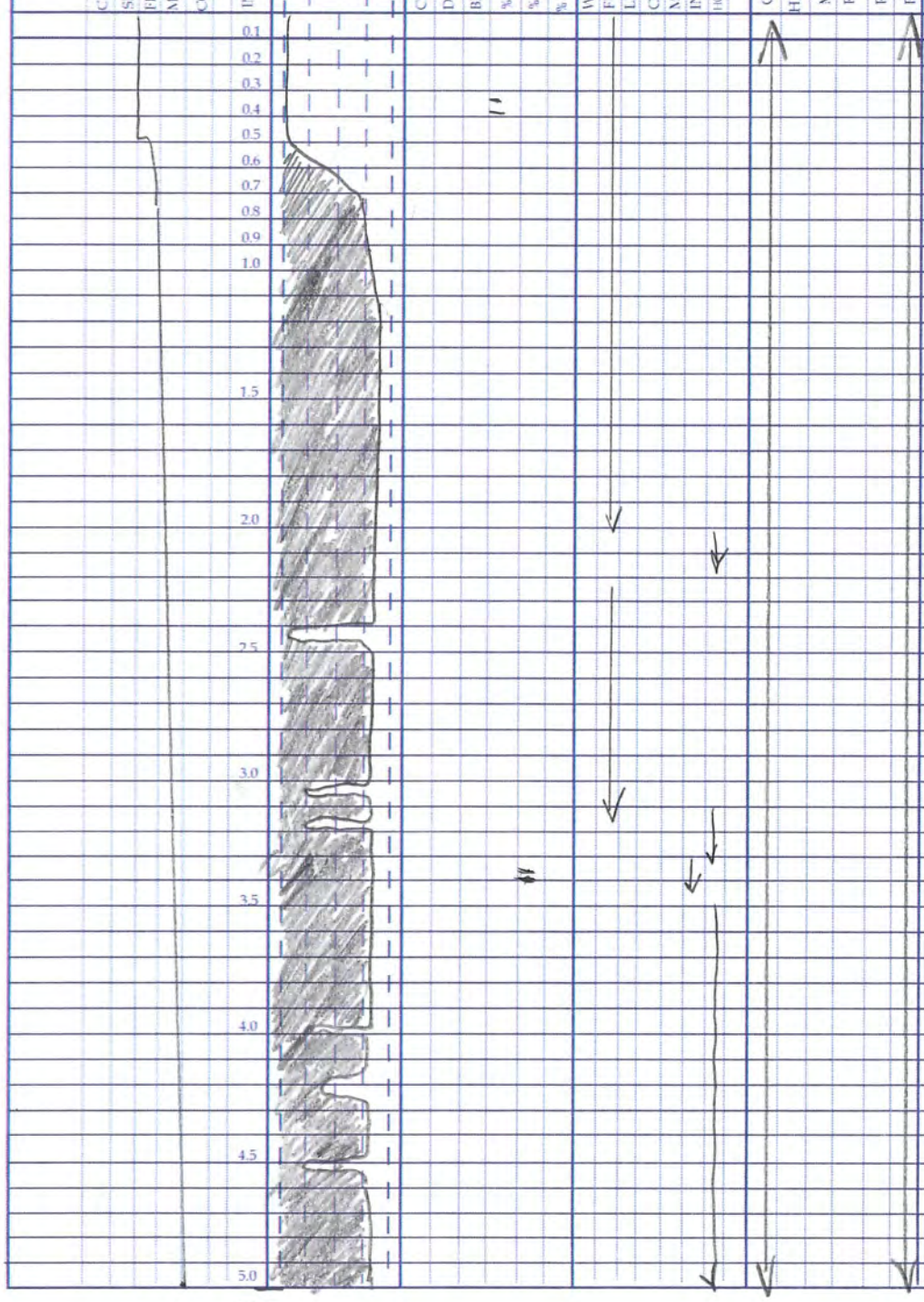
USGS science for a changing world

Vibracore Description Sheet

Core ID: 2014-336-FA-39
Latitude: 29° 30.153 N
Longitude: 89° 10.964 W
Date Collected: 01/18/2015
Geographic Location:

Date Described: 03/26/15
Described By: Kelso
Core Penetration: Full
Core Length: 5.00m (18%)
W.D. - 21' / 6.40m

SEDIMENTARY TEXTURE AND STRUCTURES	% SAND	PHYSICAL CHARACTERISTICS	STRATIFICATION TYPE	SAMPLE	PHYSICAL DESCRIPTION



0-47cm - Mud, olive gray ( ) soft, silty mud with lenses of shell hash particularly within areas of increased silt content

47-500cm - Sand, light grayish brown ( ) well sorted sand, with grain size increasing down core. Sand size goes from v. fine → fine → medium with medium sand horizon within the fine sand unit bedding is wavy from 47-200cm horizontal, laminated from 200-230cm and returns to wavy from 230-500cm. Clasts of yellow highly indurated clay @ 353, and 454cm. inclined organic horizon from 335-343cm - black in color with small brown woody organic fragments, another exhibiting horizontal bedding with deformation from coring @ 409cm, relatively thick clay horizon from 234-242cm, 254-260cm, 325-332cm, 413-415cm and 447-451cm; little to no visible shell material except a couple thin shell hash horizon @ 210cm and 214cm and a shell hash lens @ 263cm.

USGS science for a changing world

Vibracore Description Sheet

Core ID: 2014-336-FA-40
Latitude: 29° 30.478 N
Longitude: 89° 09.565 W
Date Collected: 01/18/15
Geographic Location:

Date Described: 03/25/15
Described By: Kelso
Core Penetration: Full
Core Length: 5.75 m (6% comp)
W.D. - 20' / 6.10m

SEDIMENTARY TEXTURE AND STRUCTURES	% SAND	PHYSICAL CHARACTERISTICS	STRATIFICATION TYPE	SAMPLE	PHYSICAL DESCRIPTION

CLAY, SILT, FINE SAND, MEDIUM SAND, COARSE SAND, INTERVAL (m) — % SAND 0 50 100 — COLOR, DEFORMATION, BED THICKNESS, % SHELL, % ORGANICS, % BIOTURBATION — WAVY, FLASER, LENTICULAR, CROSS BED, MASSIVE BED, INCLINED BED, HORIZON LAMINATION — GRAIN SIZE, HEAVY MINERAL, MICRO FOSSILS, RADIOMETRIC, RADIOGRAPH, PHOTOGRAPH

575cm

0-44 cm - Sand, dark grayish brown ( ) moderately sorted, fine-coarse, very shelly sand, mottled by bioturbation

44-85 cm - Sand, dark olive gray, fine, well sorted, moderately shelly, mottled quartz sand, with occasional small olive gray mud clasts / burrows.

85-575 cm - Mud + silt mud and clay of various color (olive gray, grayish yellow, reddish brown) interbedded with thin silt / very fine sand horizons, frequent woody organic fragments within the silty horizons as well as shell hash / minimal shell material in the mud / clay horizon bedding is horizontal with deformation from coring

USGS science for a changing world

Vibracore Description Sheet

Core ID: 2014-336-FA-41
Latitude: 29° 30.767 N
Longitude: 89° 08.297 W
Date Collected: 01/18/15
Geographic Location:

Date Described: 03/26/15
Described By: Kelso
Core Penetration: Full
Core Length: 4.76m (22% comp)
W.D. - 27' / 8.23m

SEDIMENTARY TEXTURE AND STRUCTURES	% SAND (0 – 50 – 100)	PHYSICAL CHARACTERISTICS	STRATIFICATION TYPE	SAMPLE	PHYSICAL DESCRIPTION
CLAY, SILT, FINE SAND, MEDIUM SAND, COARSE SAND, INTERVAL (m)		COLOR, DEFORMATION, BED THICKNESS, % SHELL, % ORGANICS, % BIOTURBATION	WAVY, FLASER, LENTICULAR, CROSS BED, MASSIVE BED, INCLINED BED, HORIZON LAMINATION	GRAIN SIZE, HEAVY MINERAL, MICRO FOSSILS, RADIOMETRIC, RADIOGRAPH, PHOTOGRAPH	
0.1					0 - 64cm - Mud, olive gray silty mud, mottled - bioturbated with only scattered shell frags
0.2					
0.3					
0.4					
0.5					
0.6					64 - 476cm - Mud and silt interbedded mud and silt horizons, color is predominantly olive gray with mud horizons [illegible] occasional thin grayish yellow horizons, silt is grayish brown ( ) no visible shell material and silt horizons contain very small mica flecks minimal in abundance -
0.7					
0.8					
0.9					
1.0					
1.5					
2.0					
2.5					
3.0					
3.5					
4.0					
4.5					
5.0					

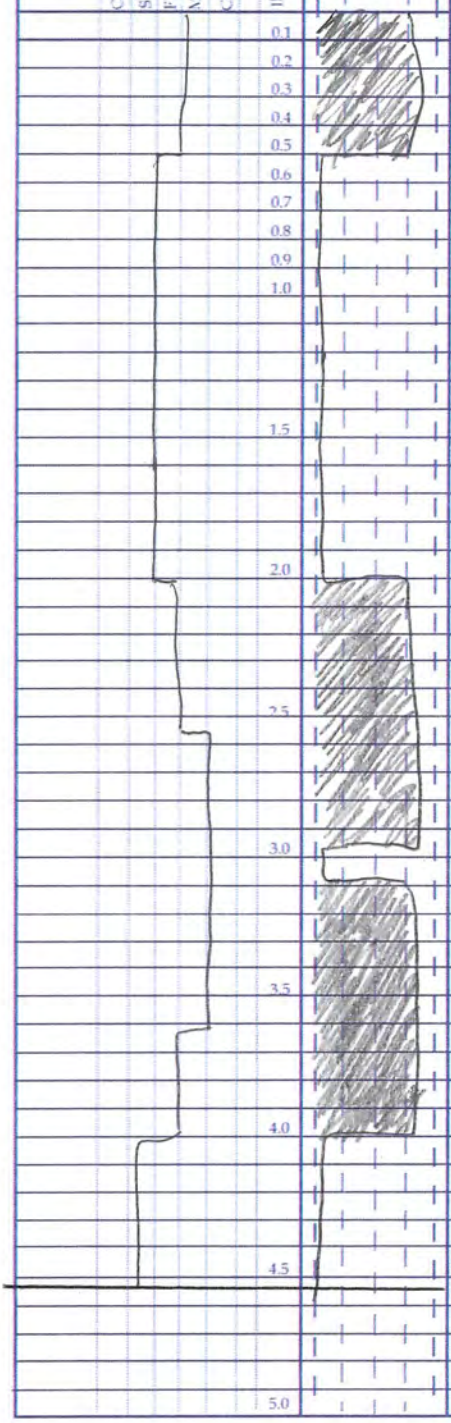
USGS science for a changing world

Vibracore Description Sheet

Core ID: 2014-336-FA-42A
Latitude: 29° 31.013 N
Longitude: 89° 12.213 W
Date Collected: 01/11/15
Geographic Location:

Date Described: 03/26/15
Described By: Kelso
Core Penetration: Full
Core Length: 4.55 (25% comp)
W.D. - 17' / 5.18 m

SEDIMENTARY TEXTURE AND STRUCTURES	% SAND	PHYSICAL CHARACTERISTICS	STRATIFICATION TYPE	SAMPLE	PHYSICAL DESCRIPTION



COLOR	DEFORMATION	BED THICKNESS	% SHELL	% ORGANICS	% BIOTURBATION	WAVY	FLASER	LENTICULAR	CROSS BED	MASSIVE BED	INCLINED BED	HORIZON LAMINATION	GRAIN SIZE	HEAVY MINERAL	MICRO FOSSILS	RADIOMETRIC	RADIOGRAPH	PHOTOGRAPH

0-11cm - Shelly Sand, dark to very dark olive gray ( ) shelly lag deposit in a medium sand matrix

11-46 cm - Sand, olive gray ( ) very fine muddy sand - beginning of a fining down sequence, moderate disseminated shell material occasional small woody-organic fragment scattered throughout, bedding is mottled

46-203 cm - Mud, silty olive gray ( ) mud with moderate disseminated woody organic clasts on 50-85 cm mud becomes cleaner and less silty down core

203-255 cm - SAND, olive gray to grayish brown, very fine, slightly muddy, sand with small sand, mud and clay lenses; no visible shell material, sharp basal contact

255-361 cm - Sand, grayish brown, well sorted, medium grained sand, with shell fragment not much larger than the sand particles, there is an indurated clay clast at 271 cm and abundant organic clasts and horizons, with a large fragment wood horizon from 296-307 cm, a mottled clay/sand mix at base of unit marks transition between medium sand and fine sand

398-455 cm - Silt and clay light grayish brown silt - horizontally bedded with a laminated clay unit from 415-423 no vis shell, small org fleck

361-398 cm - Sand, very fine well sorted grayish brown ( ) horizontally laminated clean sand with no visible shell and very small mica fleck

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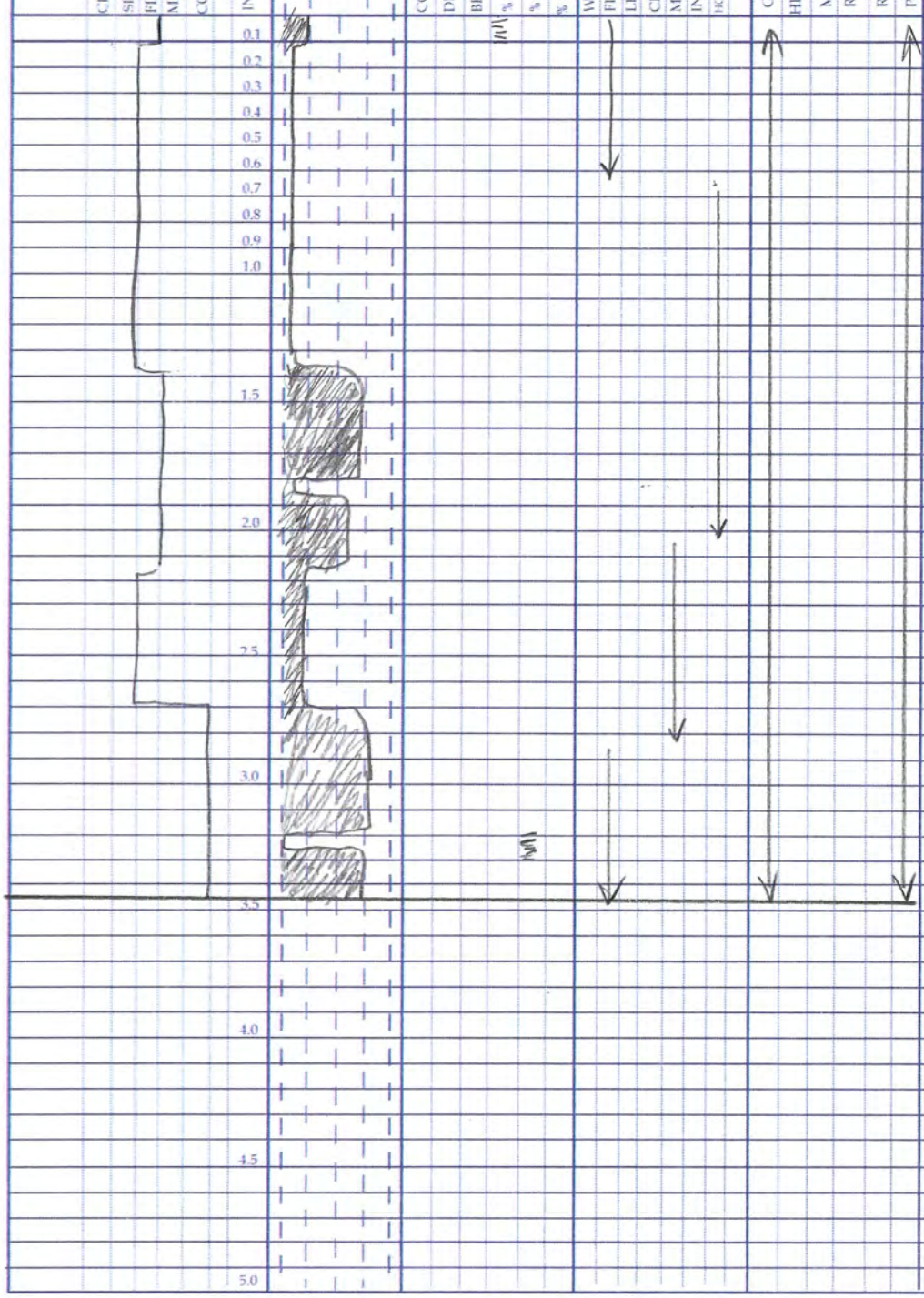
Vibracore Description Sheet

Core ID: 2014-336-FA-43
Latitude: 29° 30.999 N
Longitude: 89° 13.026 W
Date Collected: 01/11/15
Geographic Location:

Date Described: 03/26/15
Described By: Kelso
Core Penetration: Full
Core Length: 3.47m (43% comp)
W.D. - 17' / 5.18m

SEDIMENTARY TEXTURE AND STRUCTURES	% SAND	PHYSICAL CHARACTERISTICS	STRATIFICATION TYPE	SAMPLE	PHYSICAL DESCRIPTION



0-9cm - Shelly Sand, olive gray shell lag deposits in a muddy sand matrix. Shells consist of fragmented and intact but [illegible] bivalve and gastropods

9-130 cm - Mud, olive gray silty mud, with minimal dissemination shell frags and localized dense shell hash clusters, [illegible] occasional small woody organic frags

130-214 cm - Mud & Sand grayish brown interbedded muddy sand and muddy no visible shell material, [illegible] organic flecks throughout

214-270 cm - Silt, gray brown massive silt, with small organic clast [illegible] occasional clay [illegible] sharp basal [illegible]

270-318 - Sand tight grayish brown, moderately sorted medium - coarse, massive sand with lenses of indurated yellow clay

318-325 cm - Peat, black to very dark brown peat (fibrous) exhibiting deformation [illegible] coring

325-347 cm Sand grayish brown, well sorted, tiny - V. fine massive sand with small brown silt clast and thin black [illegible] rich silt [illegible]

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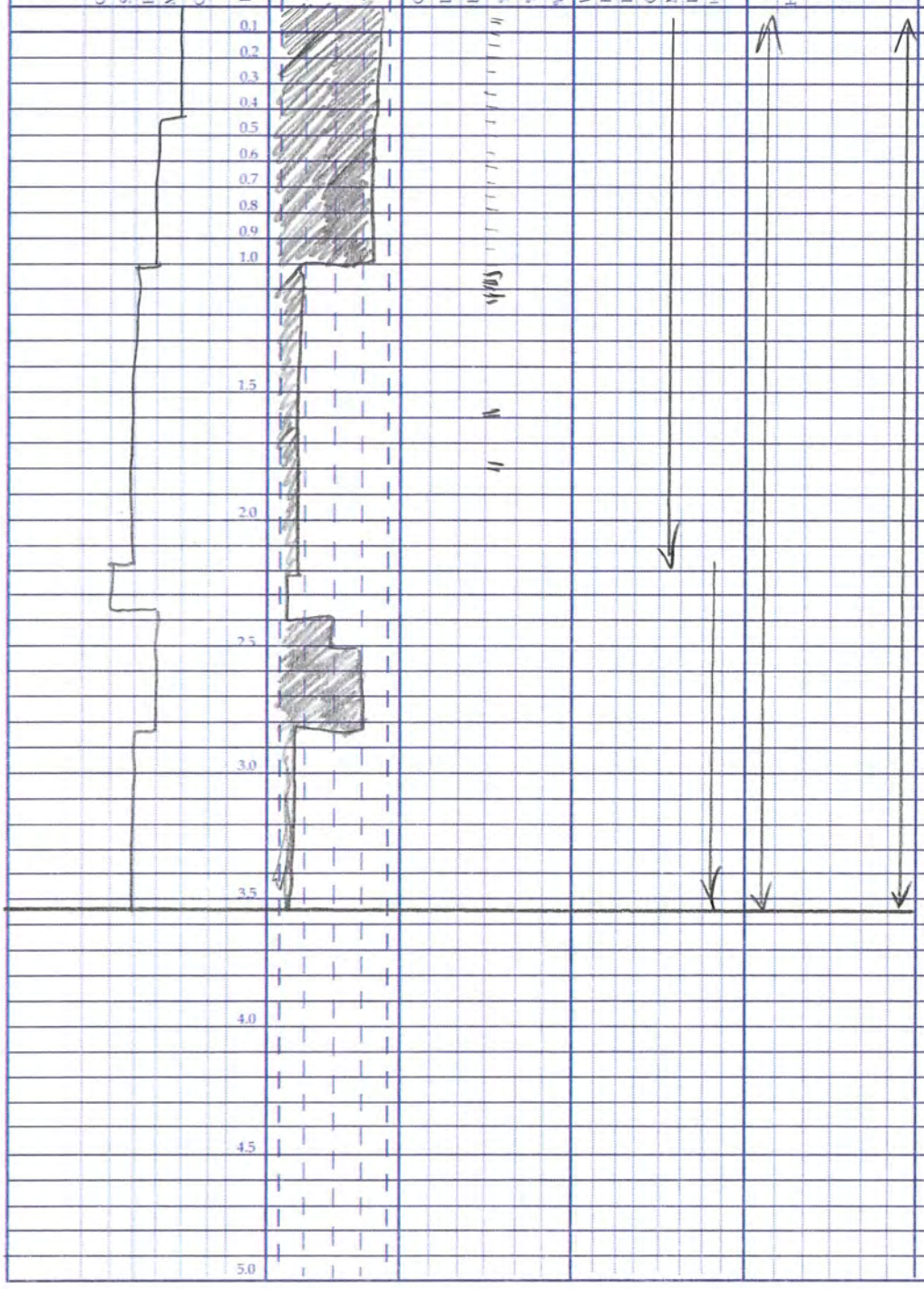
Vibracore Description Sheet

Core ID: 2014-336-FA-44B
Latitude: 29° 25.710 N
Longitude: 89° 13.440 W
Date Collected: 01/11/2015
Geographic Location:

Date Described: 03/26/15
Described By: Kelso
Core Penetration: Full
Core Length: 3.54m (42.% comp)
W.D. - 17' / 5.18m

SEDIMENTARY TEXTURE AND STRUCTURES	% SAND	PHYSICAL CHARACTERISTICS	STRATIFICATION TYPE	SAMPLE	PHYSICAL DESCRIPTION



0 - 42cm - Sand, grayish brown ( ) well sorted, medium, massive sand, with moderate disseminated shell frag - some intact but inarticulate

42 - 100cm - Sand, brownish gray ( ) fine, well sorted with very small shell frag (moderate) throughout bedding or massive

100 - 218cm - Silt, olive gray massive silt with large shell horizons at 100 - 110 cm and lens of dense shell hash throughout occasional small clay lenses

218 - 234cm - Mud/clay, horizontally laminated (thick) interbedded of clays of various color and thin silt horizon no visible shell material

234 - 283cm - Sand, olive gray, well sorted very fine thinly horizontally laminated muddy sand, no visible shell material

283 - 354cm - Mud and silt, olive gray mud and thin silt interbeds, yellow indurated clay horizon @ 326cm, scattered small woody organic frags, no visible shell material

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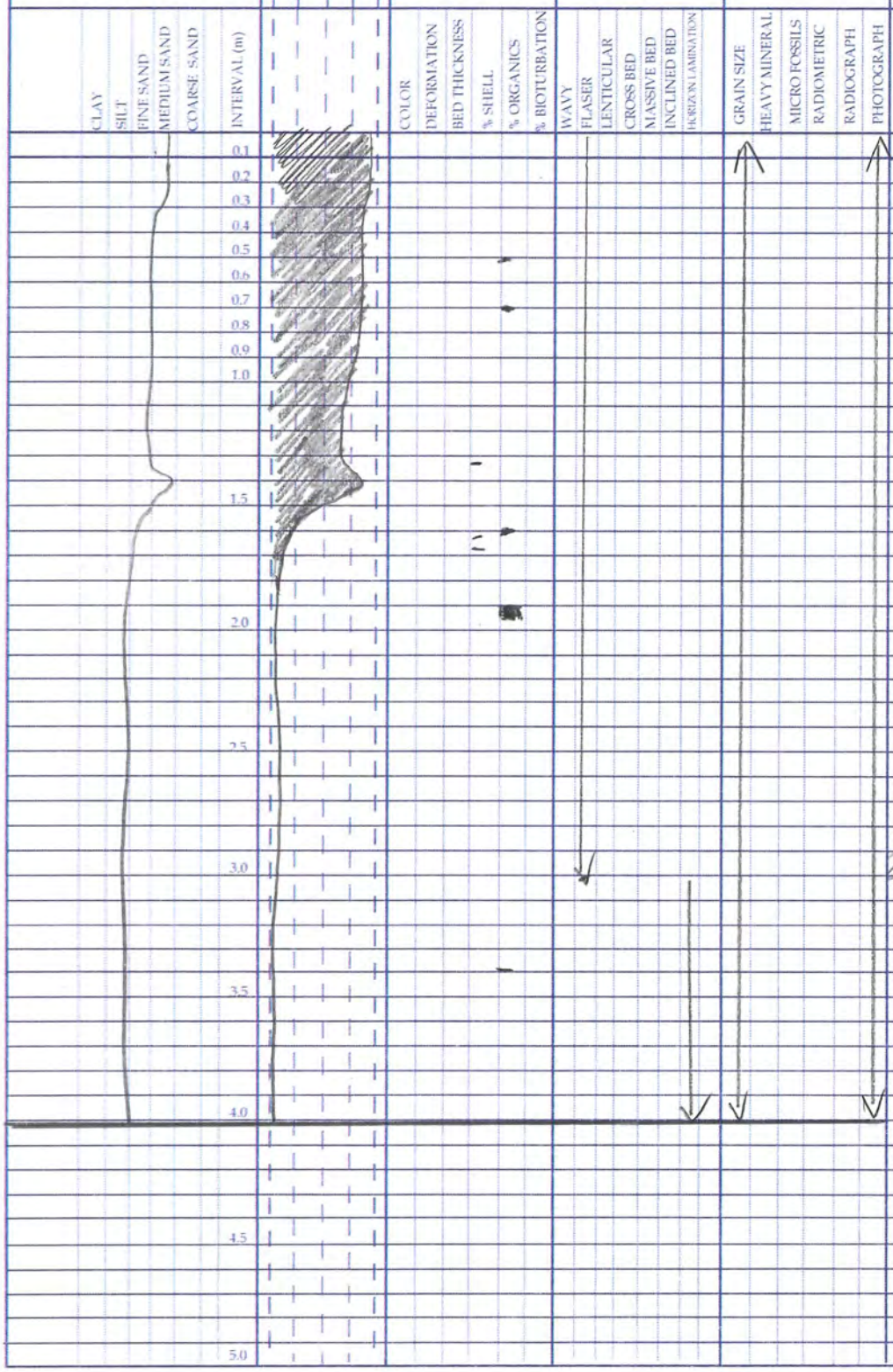
Vibracore Description Sheet

Core ID: 2014-336-FA-45-OSL
Latitude: 29° 25.997 N
Longitude: 89 14.896 W
Date Collected: 01/17/15
Geographic Location: SW of Breton Is.

Date Described: 05/ /2015
Described By: Kelso
Core Penetration:
Core Length: 4.00 m

SEDIMENTARY TEXTURE AND STRUCTURES	% SAND	PHYSICAL CHARACTERISTICS	STRATIFICATION TYPE	SAMPLE	PHYSICAL DESCRIPTION



0-32 cm - Sand, grayish brown, well sorted fine to medium massive sand with scattered shell fragments and occasionally small mud sand lenses, and organic clasts

32-141 cm - Sand, dark grayish brown to very dark brownish gray, fine to very fine mottled, muddy sand mud/silt content increases down core, minimal disseminated shell fragments

141-149 cm - Sand, brownish gray, fine well sorted slightly cleaner sand, no visible shell material

149-252 cm - Silt, dark gray silt with mud lenses and thin horizons, abundant small organic flecks and a large wood fragment at 194 cm, moderate disseminated shell fragments bedding is irregular

252-288 cm - Silt dark gray massive silt with minimal very small clam shell fragments and abundant small micro flecks, small fragmented bryozoan pieces

288-400 cm - Mud + silt dark gray and dark grayish brown interbedded silt and thin mud horiz. minimal disseminated shell fragm and abundant very small organic flecks concave down bedding possibly a result of horizontal bedding distortion from coring

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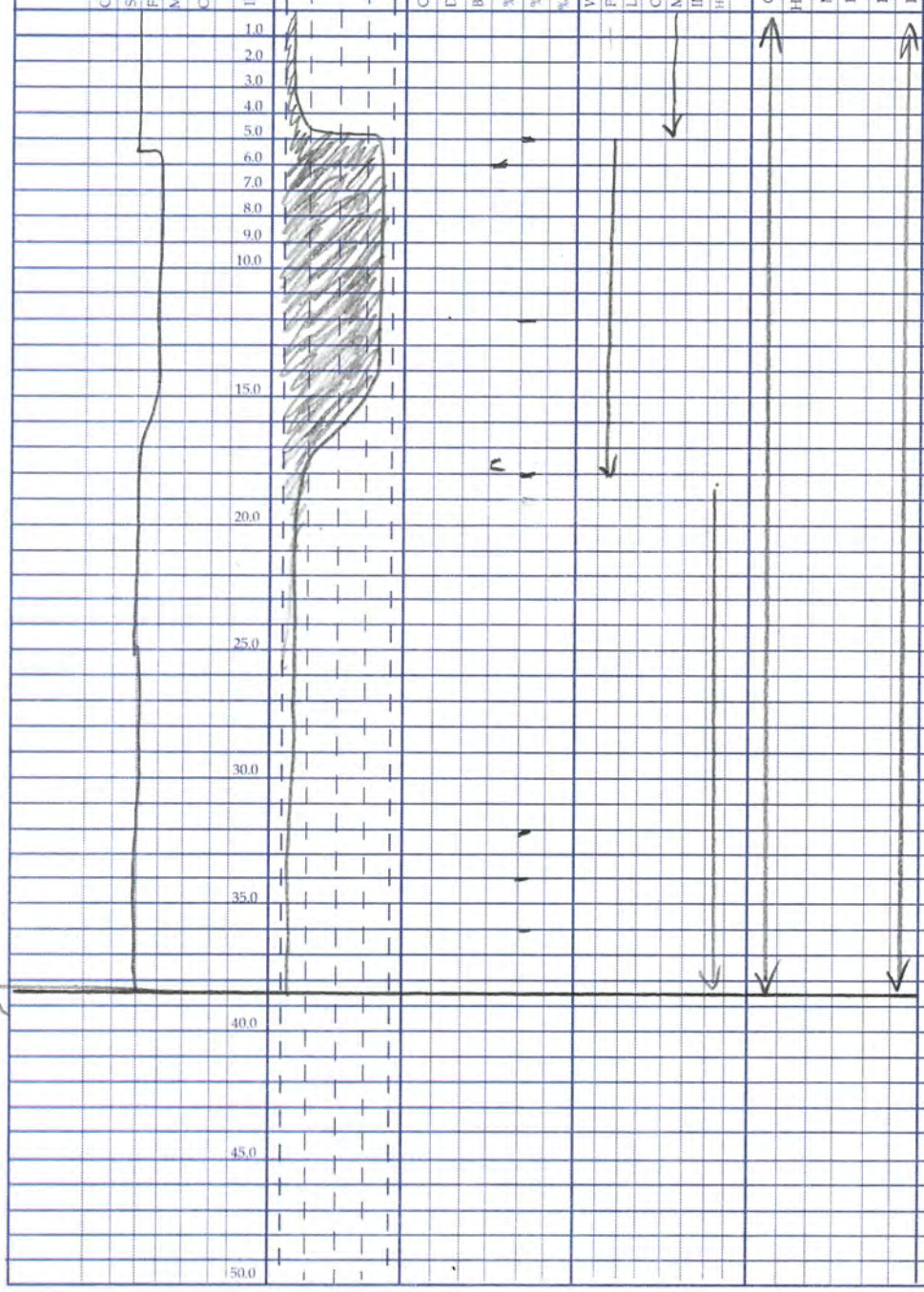
Push Core Description Sheet

Core ID: 2014-336-FA-46A
Latitude: 29° 27.050 N
Longitude: 89° 15.738 W
Date Collected: 01/11/2015
Geographic Location:

Date Described: 02/24/15
Described By: Kelso
Core Penetration: Full
Core Length: 3.85 m (37% comp)
W.D. - 17'/5.18 m

SEDIMENTARY TEXTURE AND STRUCTURES	% SAND	PHYSICAL CHARACTERISTICS	STRATIFICATION TYPE	SAMPLE	PHYSICAL DESCRIPTION
CLAY, SILT, FINE SAND, MEDIUM SAND, COARSE SAND, INTERVAL (cm)	0, 50, 100	COLOR, DEFORMATION, BED THICKNESS, % SHELL, % ORGANICS, % BIOTURBATION	WAVY, FLASER, LENTICULAR, CROSS BED, MASSIVE BED, INCLINED BED, HORIZON LAMINATION	GRAIN SIZE, HEAVY MINERAL, MICRO FOSSILS, RADIOMETRIC, RADIOGRAPH, PHOTOGRAPH	



0-55 cm - Silty Mud - dark olive gray massive silty mud from 0-38 cm become sandy mud from 38-55 cm with sand content increasing down core. minimal disturbed shell fragments and a weak organic layer at 48 cm

55-146 cm - Sand, dark yellowish brown, fine to very fine well sorted silty sand with faint horizontal bedding. unit has dark (black) thin organic horizons at varying orientation from 115-147 cm. gradational basal contact

146-385 cm - Mud and silt/very fine sand, dark olive gray silty mud with thin silt/v. fine sand horizons, organic flecks and thin horizons throughout. no visible shell material

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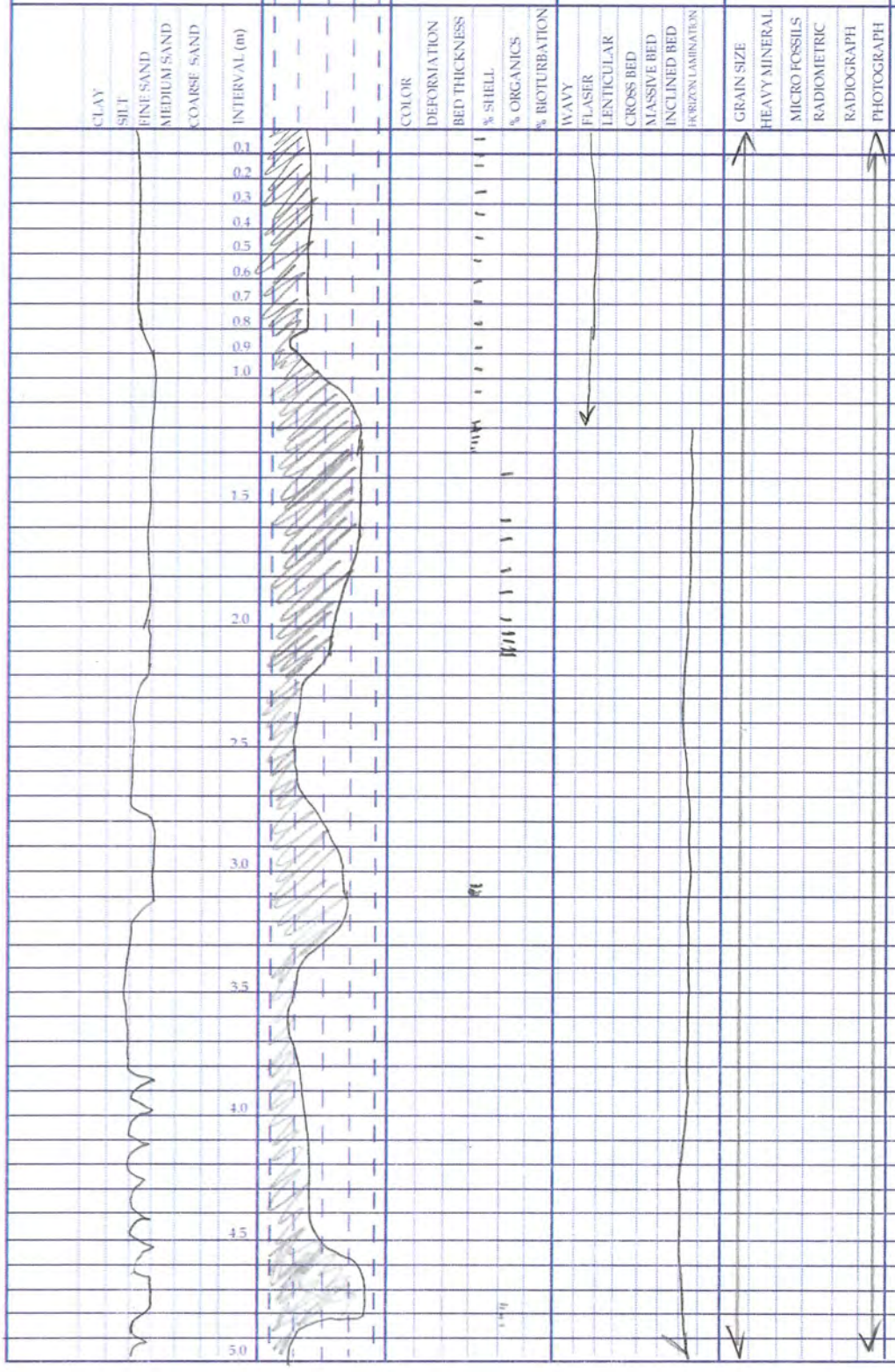
Vibracore Description Sheet

Core ID: 2014-336-FA47
Latitude: 29° 30.222 N
Longitude: 89° 13.278 W
Date Collected: 01/11/15
Geographic Location:

Date Described: 03/25/15
Described By: Kelso
Core Penetration: Full
Core Length: 4.94 m (19% comp)
WD - 13' / 3.96 m

SEDIMENTARY TEXTURE AND STRUCTURES	% SAND	PHYSICAL CHARACTERISTICS	STRATIFICATION TYPE	SAMPLE	PHYSICAL DESCRIPTION



0-118 cm - Sandy Mud, olive gray (5y 5/2) mottled shelly bioturbated silty mud

118-211 cm - Sand, slightly muddy brown, horizontally laminated very fine, well sorted sand, with abundant shell hash fragments
118-130 cm, abundant small mica flecks, dense
130-211 cm, black organic horizon increasing in frequency and width from 130-211 cm, occasional small wood fragments within the organic horizons and scattered shell fragments with localized dense shell hash clusters, sharp basal contact

211-308 cm - Silt + Mud, interbedded olive gray (5y 5/2) silt and dark olive gray (5y 3/2) mud horizons, minimal shell content and moderate mica flecks within the silt horizons

308-462 cm - Clay and silt/v. fine sand, brown (10yr 5/3) light brown (10yr 7/3) and olive gray, clay interbedded with grayish brown (10yr 5/2) silt and very fine sand horizons, minimal scattered shell material, sharp basal contact

462-484 cm - Sand, very light brown (10yr 7/3) grading to brown very fine sand with abundant small black organic flecks, SBC

484-494 cm - Clay, olive gray (5y 3/2) dense clay with very small silt lenses

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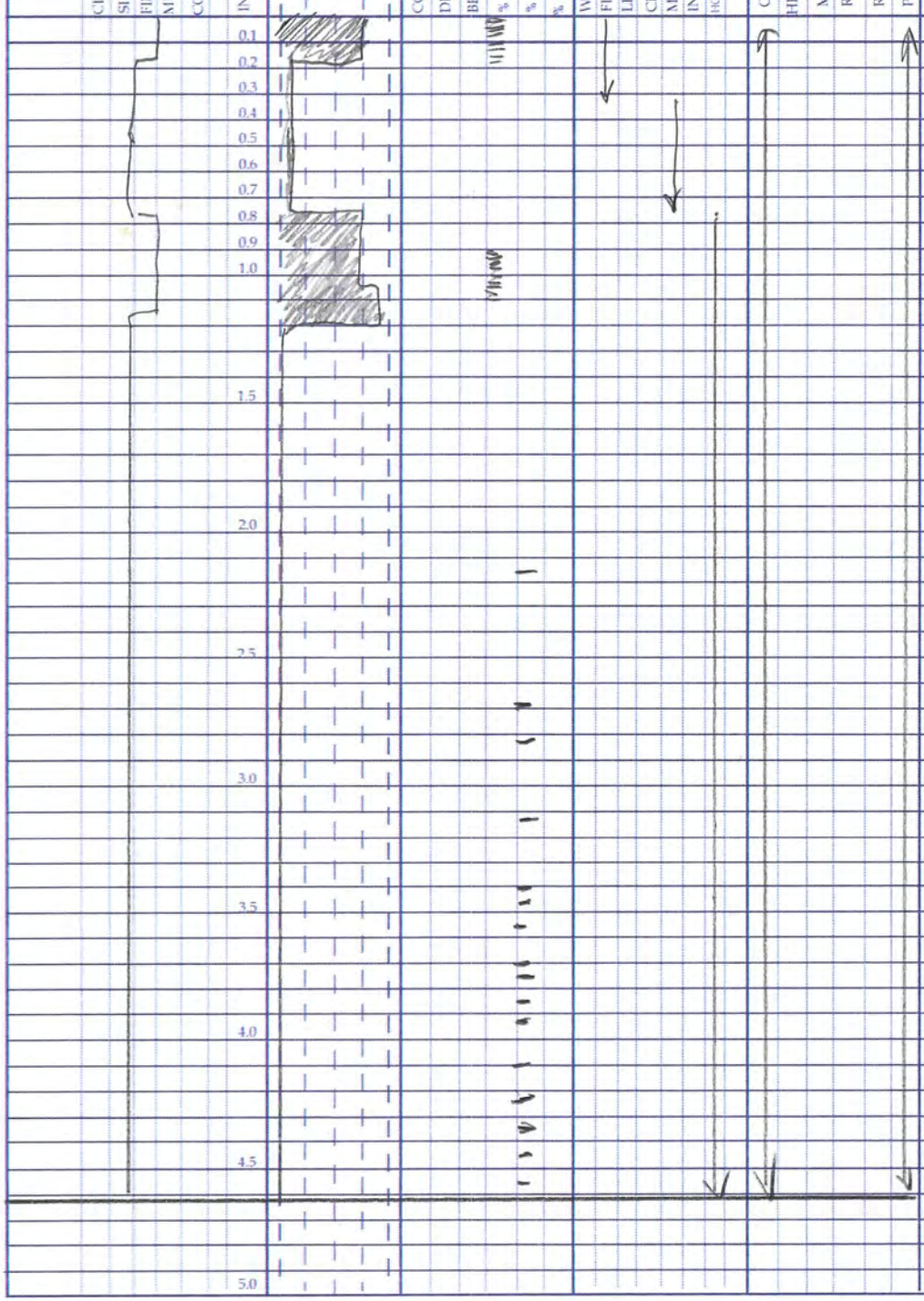
Vibracore Description Sheet

Core ID: 2014-336-FA-48
Latitude: 29° 31.084 N
Longitude: 89° 10.439 W
Date Collected: 01/18/2015
Geographic Location:

Date Described: 03/26/15
Described By: Kelso
Core Penetration: Full
Core Length: 4.61m (24% comp)
W.D. - 15'/ 4.57m

SEDIMENTARY TEXTURE AND STRUCTURES	% SAND	PHYSICAL CHARACTERISTICS	STRATIFICATION TYPE	SAMPLE	PHYSICAL DESCRIPTION



0-17cm - Shelly Sand olive gray ( ) shell clay deposit consisting of mostly fragmented bivalves in a muddy sand matrix

17-49cm - Mud, dark olive gray silty mud, with thin black organic horizons and small wood fragments only scattered shell fragment

49-77cm - Mud olive gray ( ) soft, massive mud, with scattered very small silt clasts, no visible shell material

77-113cm - Sand, dark brown ( ) well sorted, medium-grained massive sand, with moderate disseminated shell fragment and a dense shell hash horizon at basal contact from 106-113cm, sharp basal contact

113-461cm - Mud/clay, predominantly olive gray silty mud grading into clay with thin silty mud horizons down core. Abundant thin woody organic horizon throughout unit and seemingly increase in frequency down core. Clay varies in color from grayish yellow to reddish brown to olive gray, shell content is limited to a small shell hash lens @ 259cm and a thin shell hash horizon embedded in a silt horizon @ 283cm horizontally bedded.

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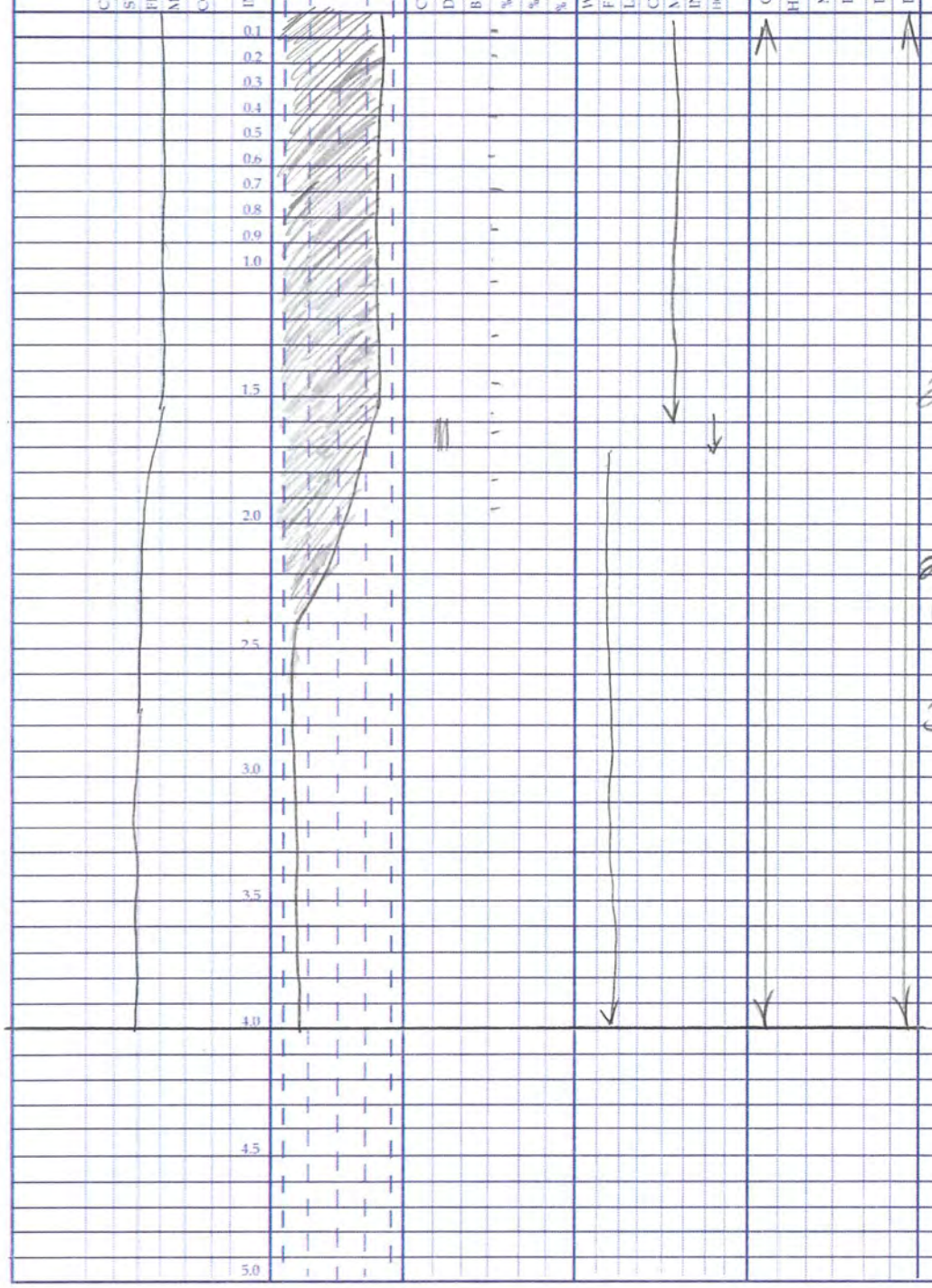
Vibracore Description Sheet

Core ID: 2014-336-FA-49-OSL
Latitude: 29°26.779' N
Longitude: 89° 13.530' W
Date Collected: 01/17/2015
Geographic Location: SW of Breton

Date Described: 05/29/15
Described By: [illegible]
Core Penetration:
Core Length: 4.0 m



SEDIMENTARY TEXTURE AND STRUCTURES	% SAND	PHYSICAL CHARACTERISTICS	STRATIFICATION TYPE	SAMPLE	PHYSICAL DESCRIPTION
CLAY, SILT, FINE SAND, MEDIUM SAND, COARSE SAND, INTERVAL (m)	0, 50, 100	COLOR, DEFORMATION, BED THICKNESS, % SHELL, % ORGANICS, % BIOTURBATION	WAVY, FLASER, LENTICULAR, CROSS BED, MASSIVE BED, INCLINED BED, HORIZON LAMINATION	GRAIN SIZE, HEAVY MINERAL, MICRO FOSSILS, RADIOMETRIC, RADIOGRAPH, PHOTOGRAPH	
0.1					0-156 cm - Sand, grayish brown, fine-v. fine, well sorted, massive, relatively clean sand, with occasional small dark gray mottled sand lenses and moderate disseminated shell fragments
0.2					
0.3					
0.4					
0.5					
0.6					
0.7					
0.8					
0.9					156-236 cm - Silt, dark gray, silt with occasional small fine sand lenses, moderately disseminated shell material, moderate mica content
1.0					
1.5					236-270 cm - dark grayish brown mottled mud with dark gray mud silt lenses and a thick silt unit from 255-261 cm no visible shell material
2.0					
2.5					270-353 cm - Silt, dark gray, very fine sandy silt with small black organic lenses, no visible shell material
3.0					353-400 cm - Mud dark brownish gray silt mud with thin silt horizons exhibiting [illegible] fine coring (concave down)
3.5					
4.0					
4.5					
5.0					

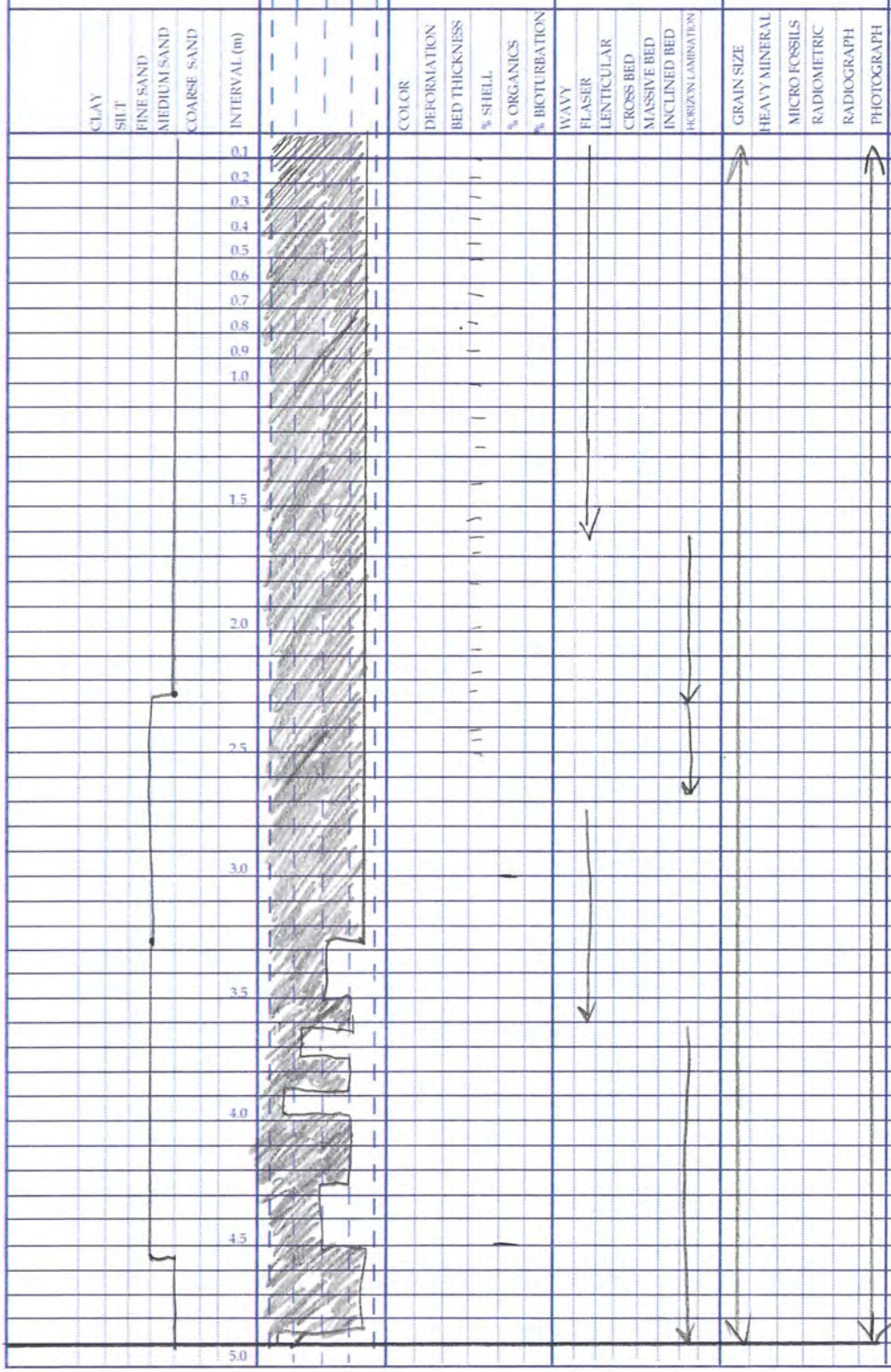
USGS science for a changing world

Vibracore Description Sheet

Core ID: 2014-336-FA-50
Latitude: 29° 30.194 N
Longitude: 89° 07.127 W
Date Collected: 01/18/15
Geographic Location:

Date Described: 03/26/15
Described By: Kelso
Core Penetration: Full
Core Length: 4.90m (20%)
W.D. 20'/ 6.09m

SEDIMENTARY TEXTURE AND STRUCTURES	% SAND	PHYSICAL CHARACTERISTICS	STRATIFICATION TYPE	SAMPLE	PHYSICAL DESCRIPTION



0-223 cm - Sand, brown to dark gray well sorted medium sand, massive with minimal disseminated shell fragments and occasional small olive gray clay lenses and thin horizons.

223-325 cm - Sand, grayish brown to light grayish brown well sorted fine sand with dark gray silt horizons throughout, minimal disseminated shell frags and very small mica flecks throughout, scattered organic flecks and thin woody organic horizons.

325-452 cm - Mud and sand, olive gray interbedded mud and very fine sand horizons, horizontally bedded with some deformation from coring, occasional small woody organic clasts.

452-482 cm - Sand, dark gray, well sorted, fine-medium, massive clean sand, no visible shell material and very small disseminated mica flecks.

482-490 cm - Mud & silt olive gray interbedded silt mud and thin silt, no visible shell and bedding is wavy.

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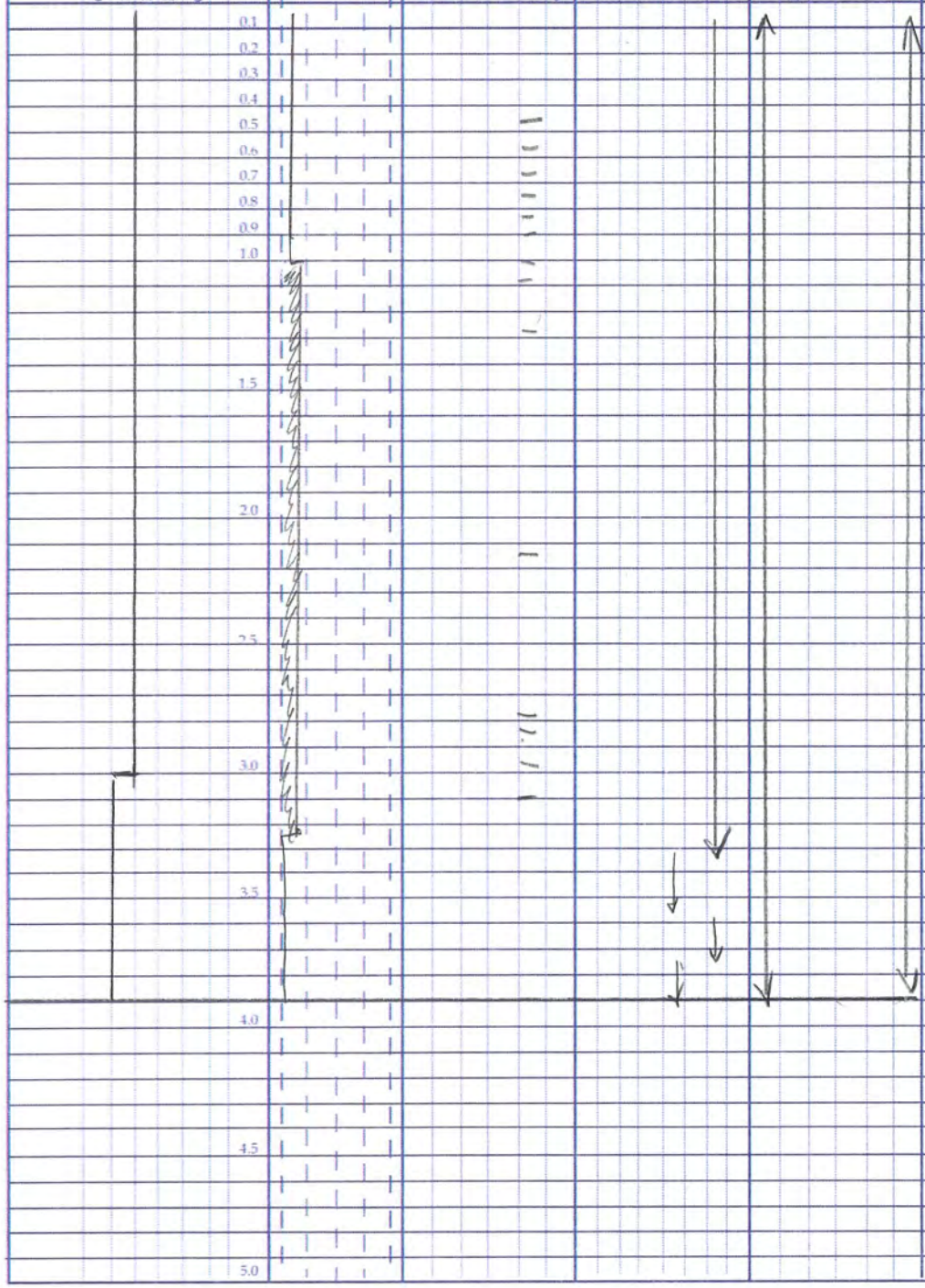
Vibracore Description Sheet

Core ID: 2014-336-FA-51
Latitude: 29° 25.105 N
Longitude: 89° 16.301 W
Date Collected: 01/11/15
Geographic Location: W.D - 29' / 8:84m

Date Described: 03/25/15
Described By: Kelso
Core Penetration: Full
Core Length: 3.89 m (36% comp)

SEDIMENTARY TEXTURE AND STRUCTURES	% SAND	PHYSICAL CHARACTERISTICS	STRATIFICATION TYPE	SAMPLE	PHYSICAL DESCRIPTION
CLAY, SILT, FINE SAND, MEDIUM SAND, COARSE SAND, INTERVAL (m)	0, 50, 100	COLOR, DEFORMATION, BED THICKNESS, % SHELL, % ORGANICS, % BIOTURBATION	WAVY, FLASER, LENTICULAR, CROSS BED, MASSIVE BED, INCLINED BED, HORIZON LAMINATION	GRAIN SIZE, HEAVY MINERAL, MICRO FOSSILS, RADIOMETRIC, RADIOGRAPH, PHOTOGRAPH	



0-145cm - Mud, dark gray and olive gray interbedded organic mud and mud, mud is soft with no visible shell material organic content decreases down core, thin silt horizons begin to appear 103 cm and continue into next unit

* gradational basal contact

145-303cm - Mud + silt, interbedded muddy silt and silt / very fine sand, with abundant scattered woody organic fragments and occasional thin woody organic horizons mud content increases down core

303-389 cm Clay, olive gray, relatively plastic massive fat clay with minimal disseminated organic flecks and silt clasts horizons.

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Vibracore Description Sheet

Core ID: 2014-336-FA-52-OSL
Latitude: 29° 25.565'N
Longitude: 89° 15.602'W
Date Collected: 01/17/15
Geographic Location: SW of Breton

Date Described: 06/01/15
Described By: Kelso
Core Penetration:
Core Length: 360 cm

SEDIMENTARY TEXTURE AND STRUCTURES	% SAND	PHYSICAL CHARACTERISTICS	STRATIFICATION TYPE	SAMPLE	PHYSICAL DESCRIPTION
CLAY, SILT, FINE SAND, MEDIUM SAND, COARSE SAND, INTERVAL (m)	0, 50, 100	COLOR, DEFORMATION, BED THICKNESS, % SHELL, % ORGANICS, % BIOTURBATION	WAVY, FLASER, LENTICULAR, CROSS BED, MASSIVE BED, INCLINED BED, HORIZON LAMINATION	GRAIN SIZE, HEAVY MINERAL, MICRO FOSSILS, RADIOMETRIC, RADIOGRAPH, PHOTOGRAPH	

0.1, 0.2, 0.3, 0.4, 0.5, 0.6, 0.7, 0.8, 0.9, 1.0, 1.5, 2.0, 2.5, 3.0, 3.5, 4.0, 4.5, 5.0

0-62 cm - Sand, brownish gray, well sorted, fine-medium, mass sand with minimal disseminated shell frag with a more shell hash clast for 30-41 cm, gradational basal contact

62-266 cm - Sand, dark gray, well sorted, very fine, massive sand with minimal shell disseminated, and locally heavy shell hash horizons, & clusters occasional thin organic horizons and lenses abundant, very small mica flecks, particularly with the organic sediment horizons

(Sharp basal contact)

266-360 cm - Mud, and silt, gray, soft mud interbedded with thin gray silt, heavy small light pale with clay clasts. Scattered black and woody organic flecks throughout, no visible shell material