

## Explanation

### Lithologic patterns



Sand



Laminated sand



Silty sand



Organic-rich sand

### Physical Characteristics



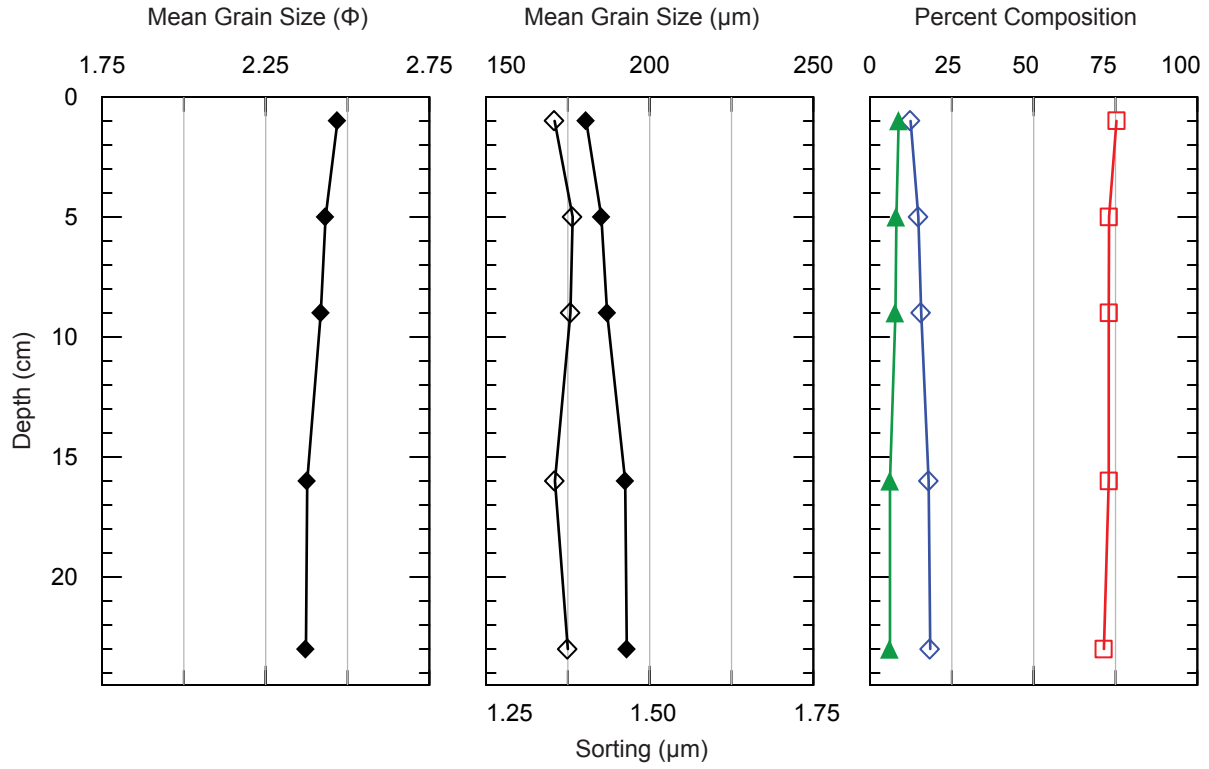
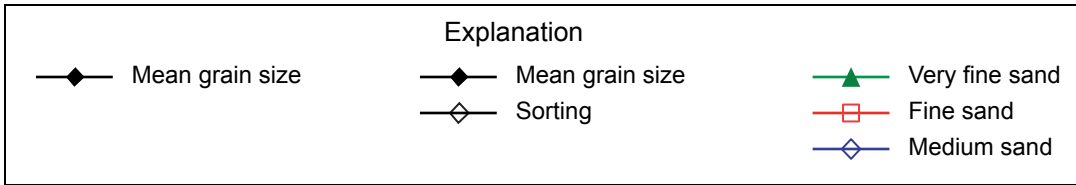
Shell fragments



Inclined bedding



**Core ID: 14BIM04-07**



**Core ID: 14BIM04-07**

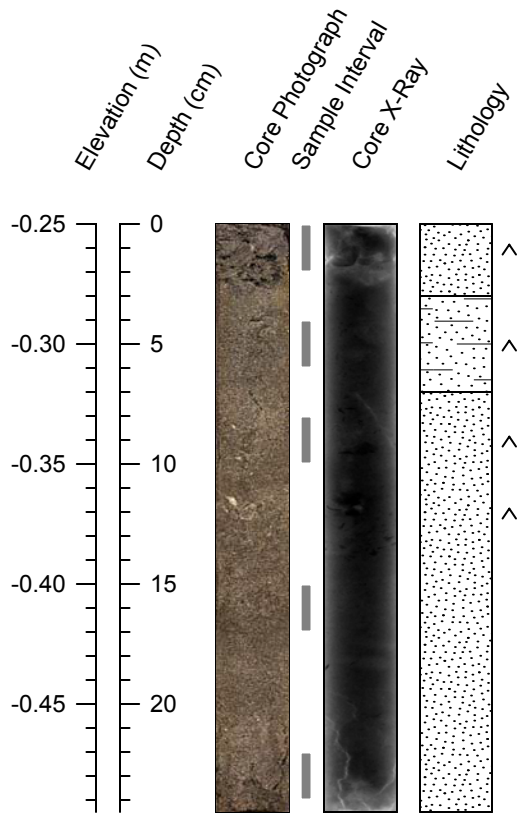
**Latitude:** 29.47513 N

**Elevation:** -0.25 m

**Longitude:** 89.17952 W

**Core Length:** 24.5 cm

**Location:** Breton Island - transect T1 shoreface/surf zone



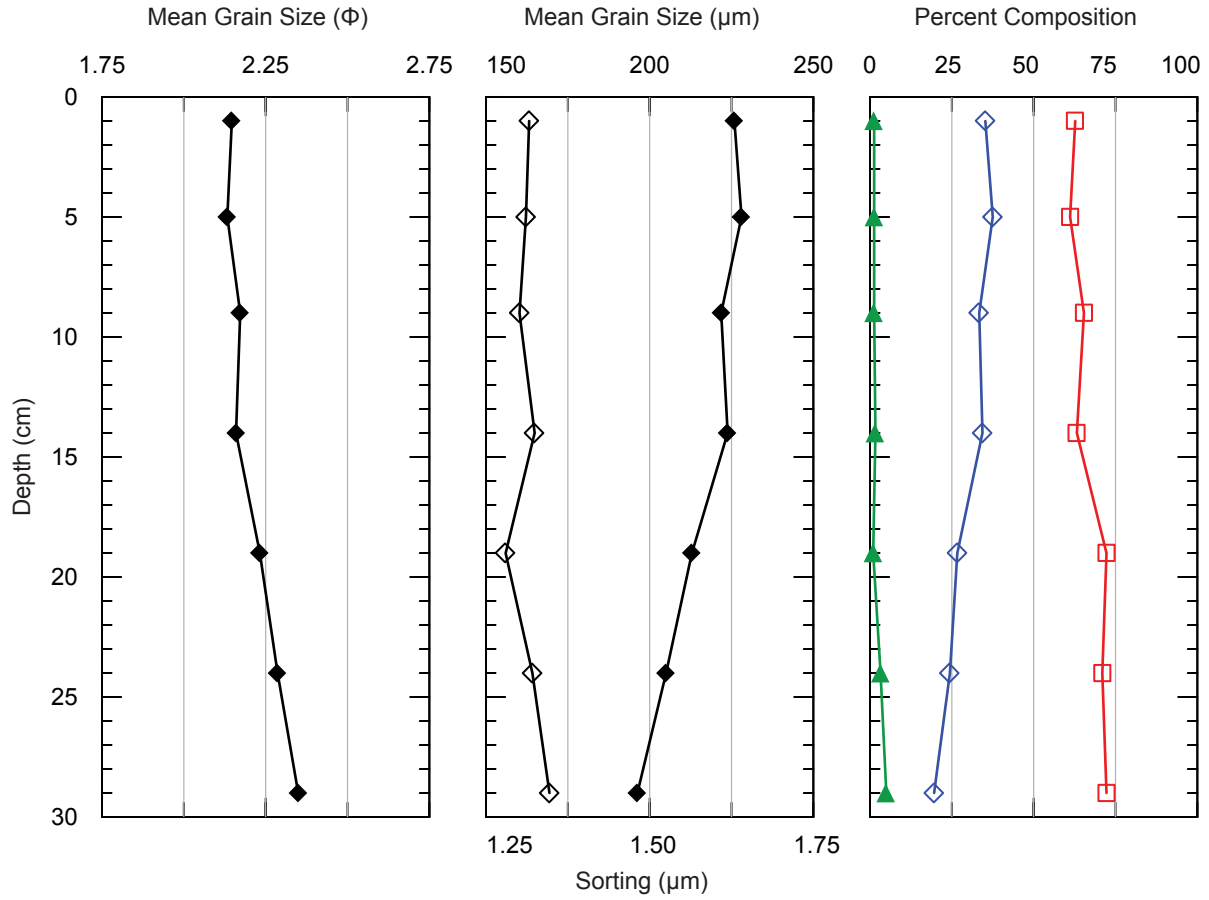
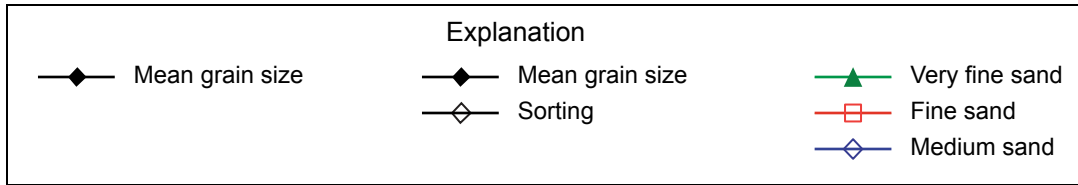
**Lithologic Description**

0 - 3 cm: SAND, massive, very dark gray (10YR 3/1), very fine-grained sand; with intact inarticulated clam valves, mica flecks, and possible organic-rich sediment

3 - 7 cm: SAND, massive, grayish-brown (10YR 4/1), well sorted, very fine-grained silty sand; with a few scattered shell fragments and mica flecks

7 - 24.5 cm: SAND, light grayish-brown (10 YR 6/2) to grayish-brown (10YR 5/2) very fine-grained sand and silty sand; with a few scattered shell fragments and mica flecks; faint horizontal bedding is slightly deformed

**Core ID: 14BIM04-08**



**Core ID: 14BIM04-08**

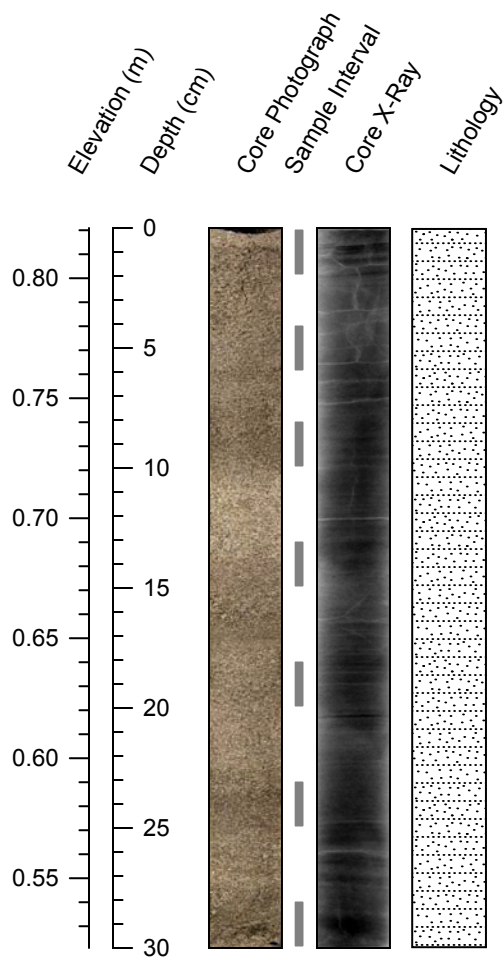
**Latitude:** 29.47526 N

**Elevation:** 0.82 m

**Longitude:** 89.17978 W

**Core Length:** 30 cm

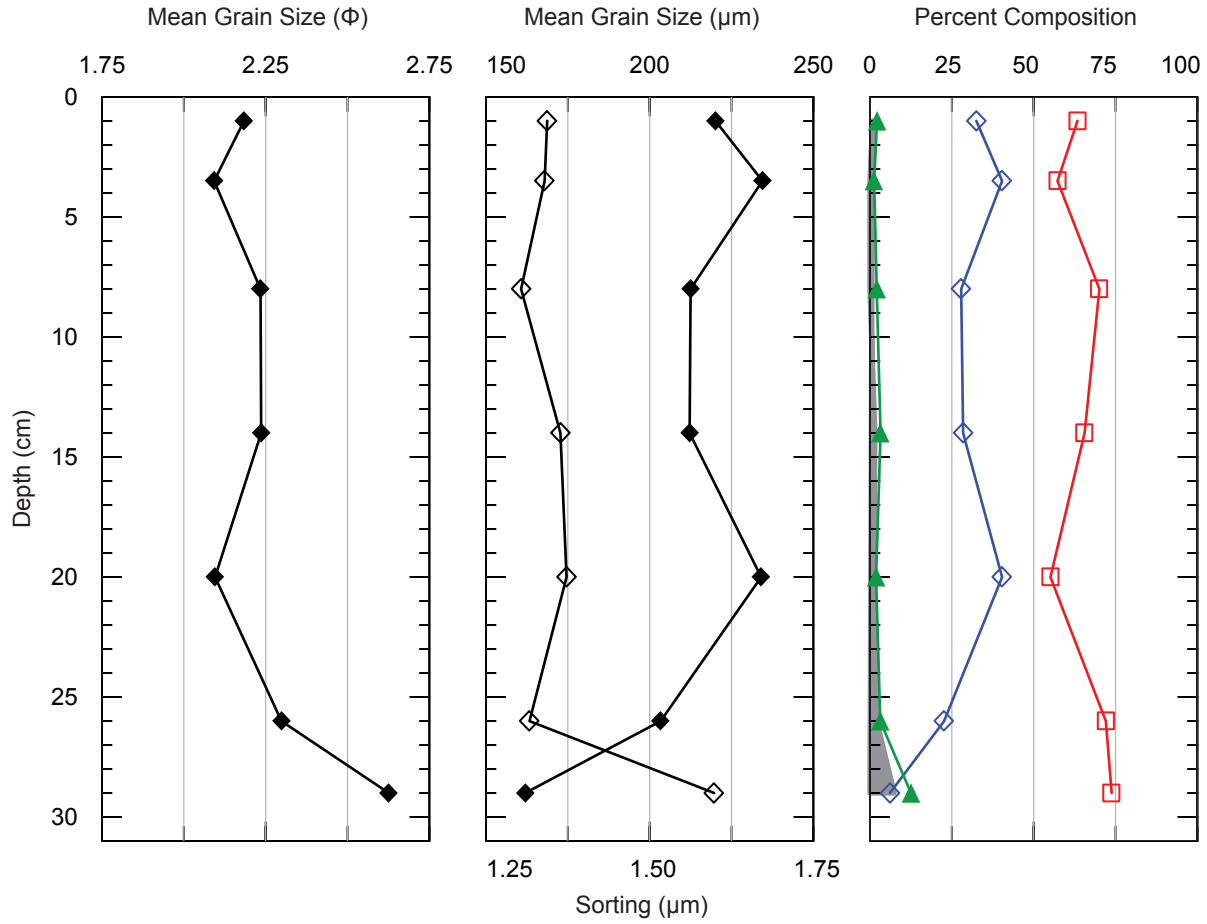
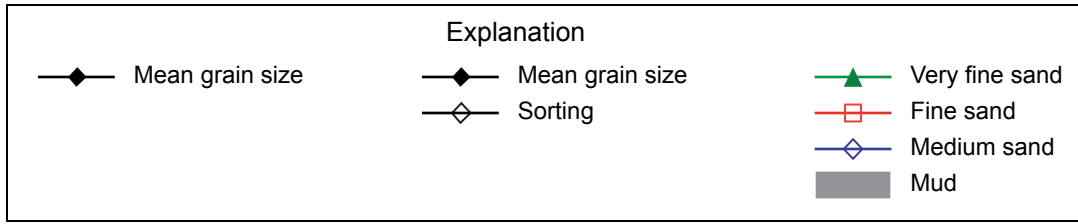
**Location:** Breton Island - transect T1 dune/berm crest



**Lithologic Description**

0 - 30 cm: SAND, laminated, light brownish-gray (10YR 6/2), well sorted, very fine- to fine-grained quartz sand; with scattered mica flecks and grayish-brown (10YR 5/2) silty sand horizons; sediment becomes predominantly silty sand from 23-30 cm

**Core ID: 14BIM04-09**



**Core ID: 14BIM04-09**

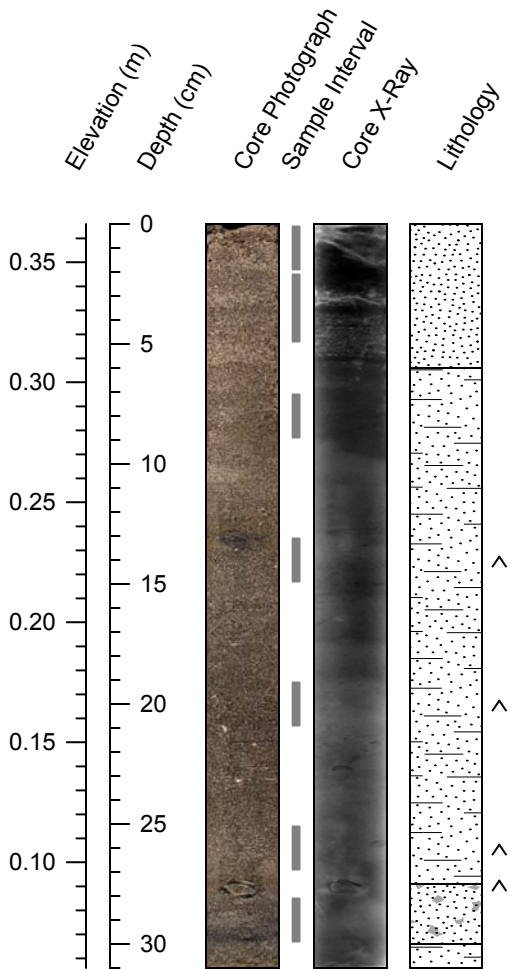
**Latitude:** 29.47570 N

**Elevation:** 0.37 m

**Longitude:** 89.18018 W

**Core Length:** 31 cm

**Location:** Breton Island - transect T1 sound side inner island



**Lithologic Description**

0 - 6 cm: SAND, dark grayish-brown (10YR 4/2) silty sand interbedded with grayish-brown (10YR 5/2), well sorted, very fine-grained sand; with scattered mica flecks

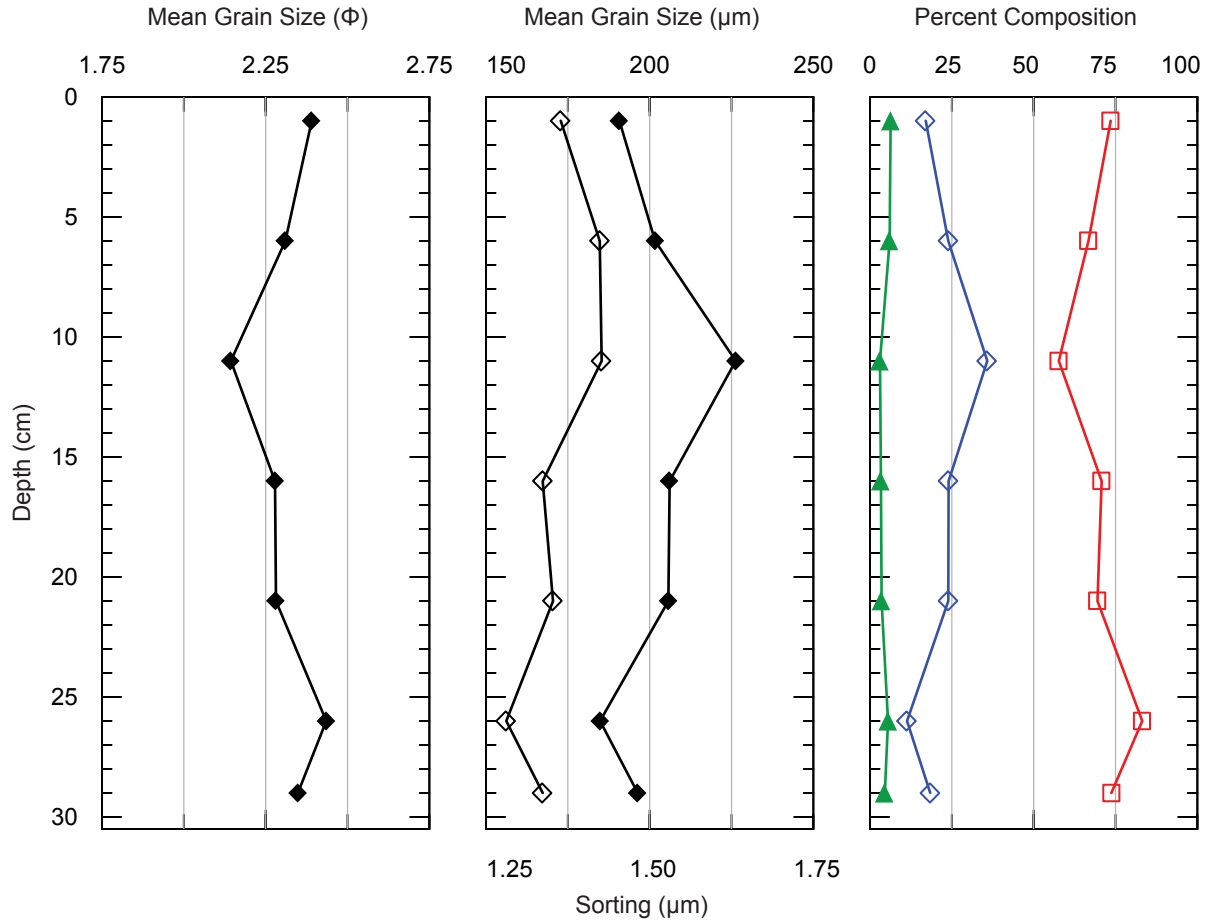
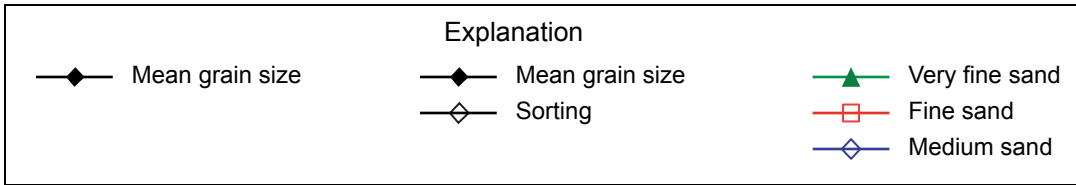
6 - 27.5 cm: SAND, dark grayish-brown (10YR 4/2) well sorted, very fine-grained silty sand; with faint horizontal bedding, scattered shell fragments, a small black organic lens at 13 cm, and an intact, inarticulated clam valve at basal contact; shell content increases down-core

27.5 - 30 cm: SAND, very dark gray (GLEY 1 3/N), well sorted, very fine-grained organic-rich silty sand; organic content increases down-core

30 - 31 cm: SAND, dark grayish-brown (10YR 4/2), well sorted, very fine-grained silty sand



**Core ID: 14BIM04-10**



**Core ID: 14BIM04-10**

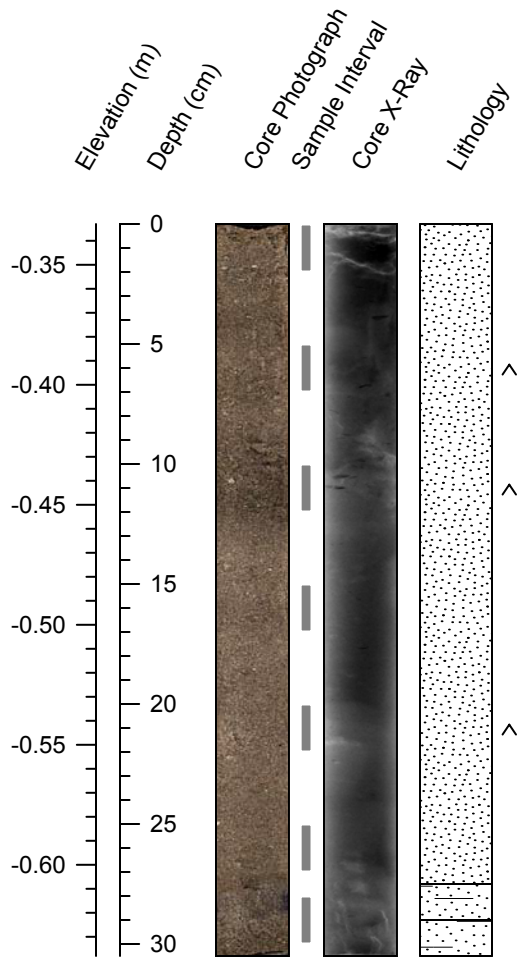
**Latitude:** 29.46698 N

**Elevation:** -0.33 m

**Longitude:** 89.17279 W

**Core Length:** 30.5 cm

**Location:** Breton Island - transect T2 shoreface/surf zone



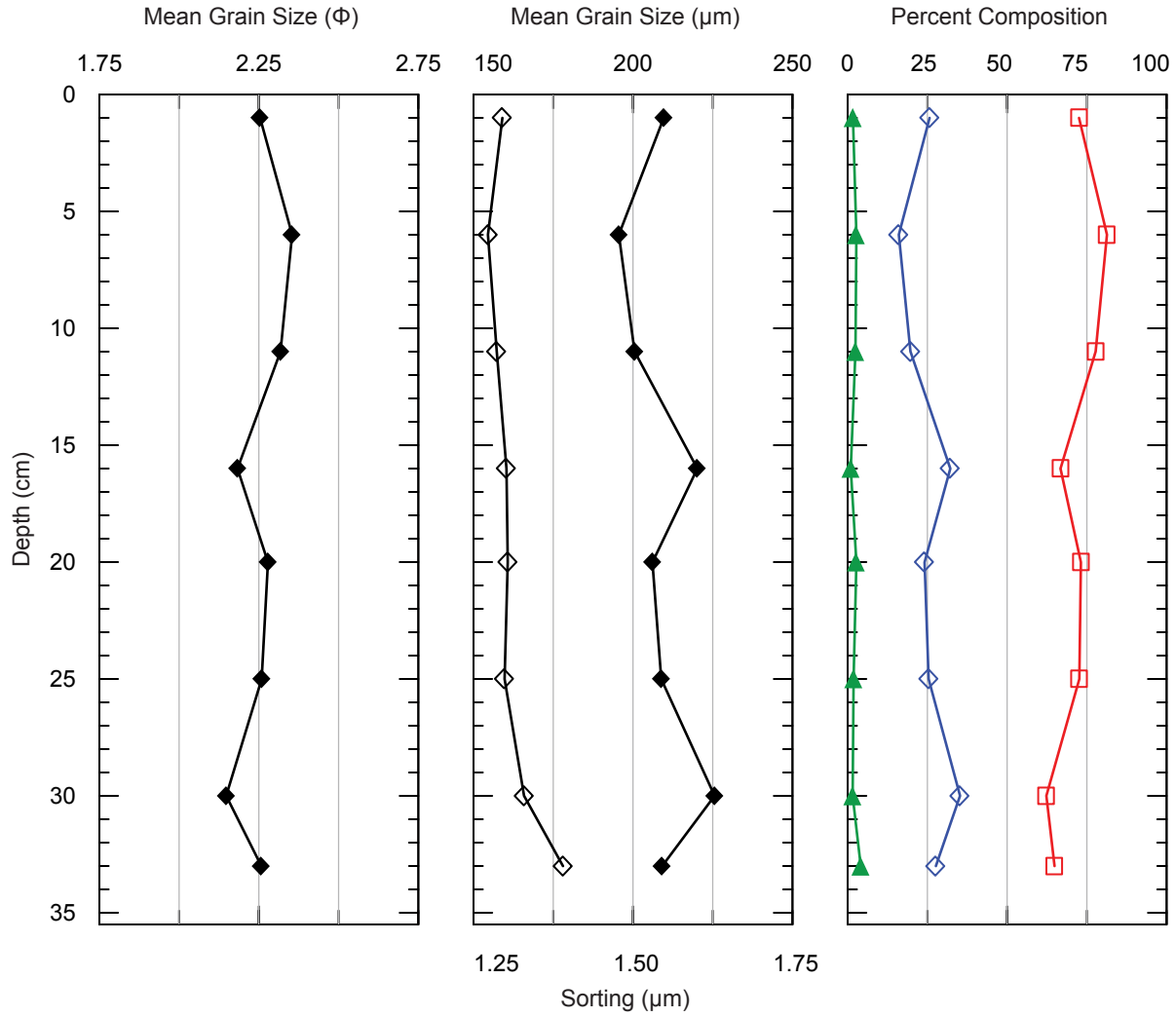
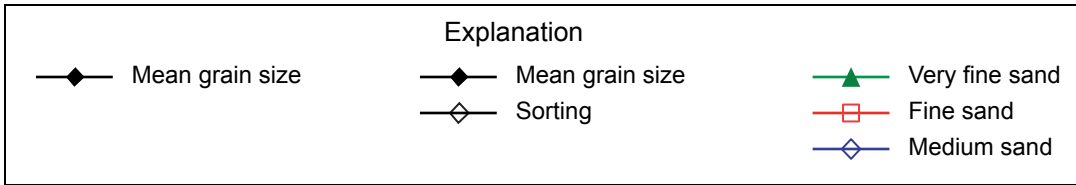
**Lithologic Description**

0 - 27.5 cm: SAND, dark gray (10YR 4/1), well sorted, very fine-grained sand; with mica flecks from 0-15 cm and scattered shell fragments

27.5 - 29 cm: SAND, very dark gray (10YR 3/1) silty sand

29 - 30.5 cm: SAND, dark gray (10YR 4/1) very fine-grained silty sand

Core ID: 14BIM04-11



**Core ID: 14BIM04-11**

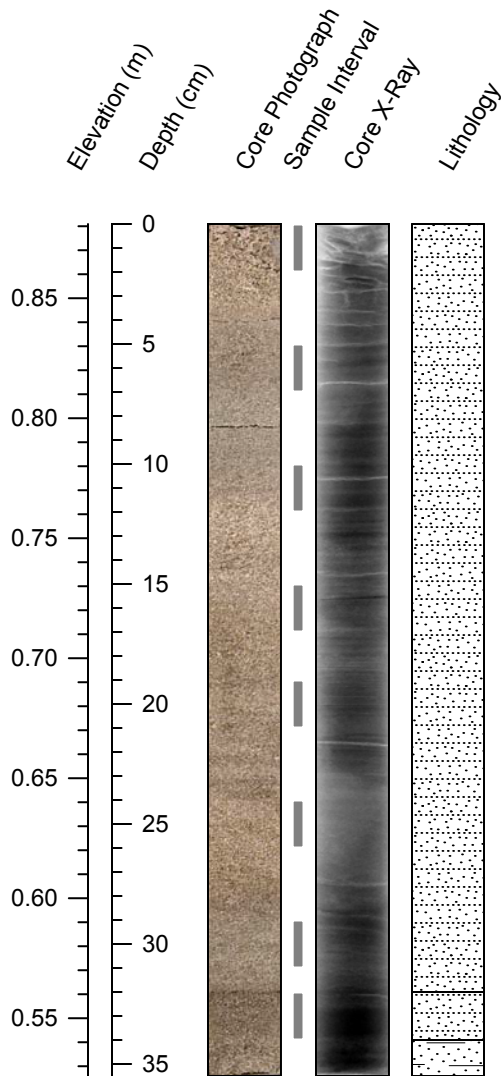
**Latitude:** 29.46721 N

**Elevation:** 0.88 m

**Longitude:** 89.17309 W

**Core Length:** 35.5 cm

**Location:** Breton Island - transect T2 dune/berm crest



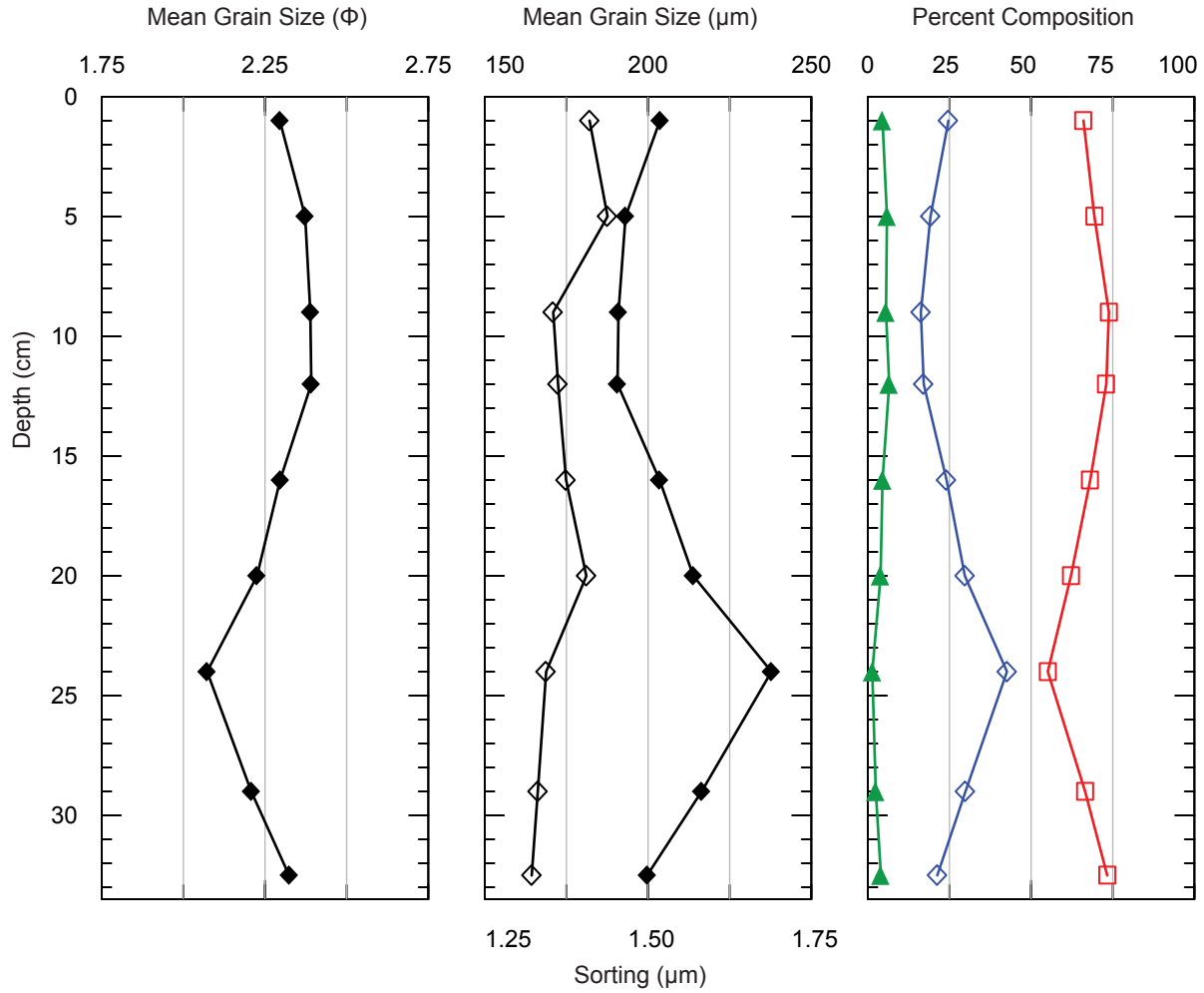
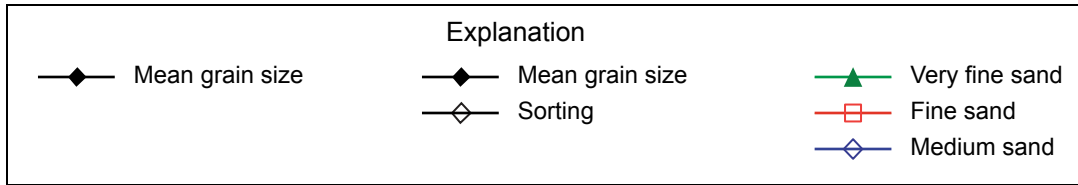
**Lithologic Description**

0 - 32 cm: SAND, laminated, light brownish-gray (10YR 6/2), well sorted, very fine-grained sand interbedded with dark grayish brown (10YR 4/2) very fine-grained silty sand; silt content increases down-core

32 - 34 cm: SAND, laminated very dark gray (10YR 3/1), very fine-grained organic-rich sand

34 - 35.5 cm: SAND, dark grayish-brown (10YR 4/2), well sorted, silty sand

**Core ID: 14BIM04-12**



**Core ID: 14BIM04-12**

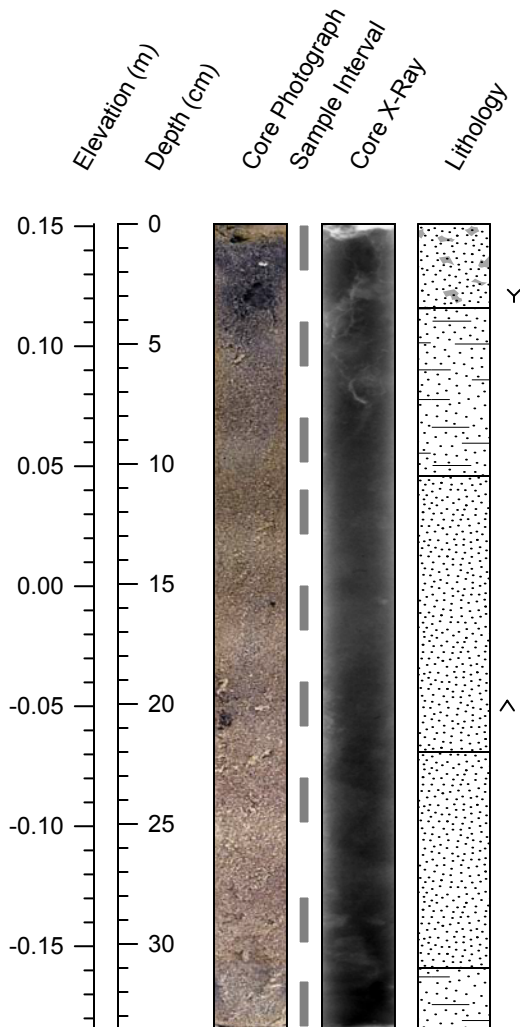
**Latitude:** 29.46813 N

**Elevation:** 0.15 m

**Longitude:** 89.17431 W

**Core Length:** 33.5 cm

**Location:** Breton Island - transect T2 sound side tidal flat



**Lithologic Description**

0 - 3.5 cm: SAND, very dark gray (GLE Y 1 3/N), well sorted, very fine-grained organic-rich sand; with a few scattered shell fragments

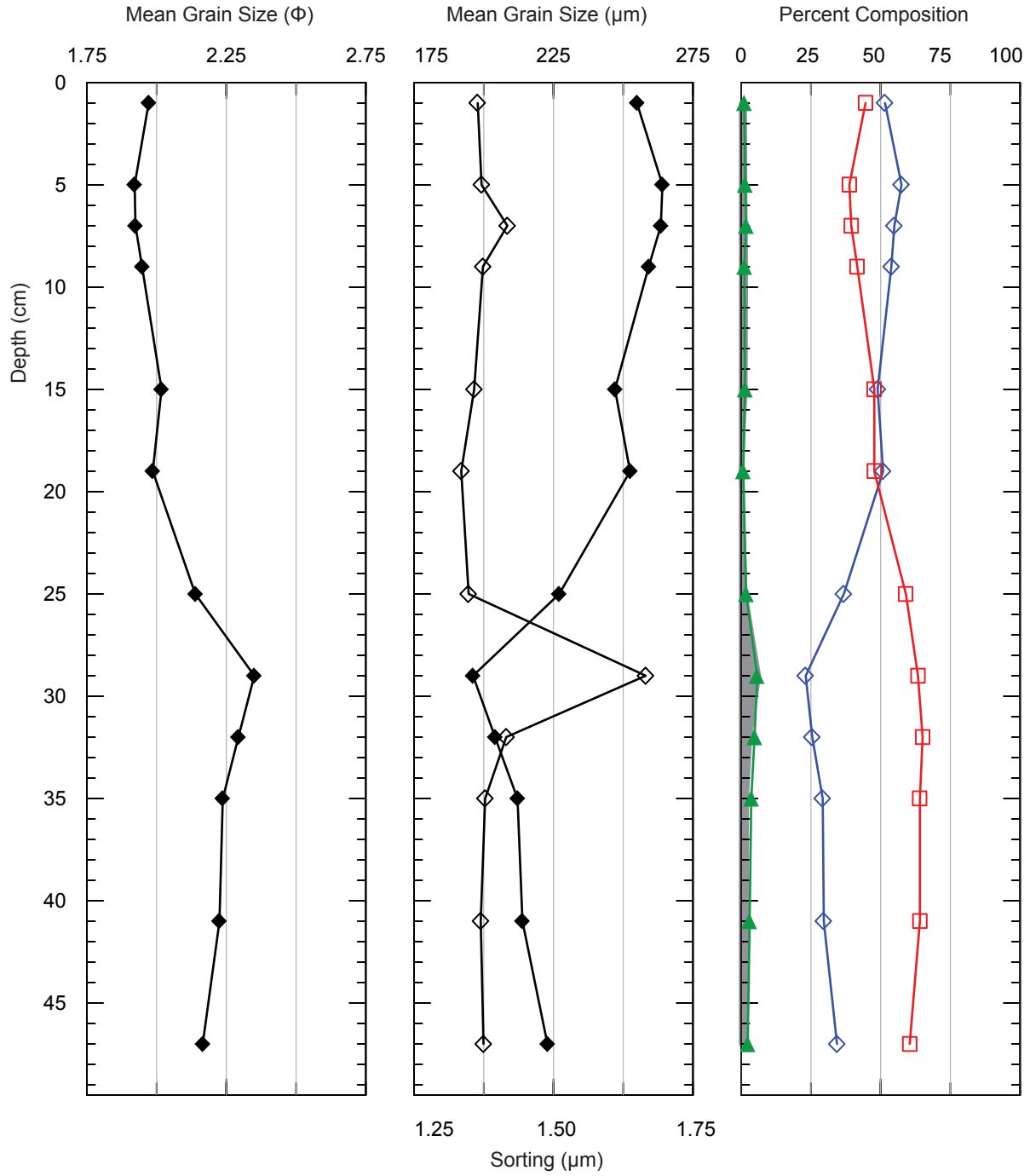
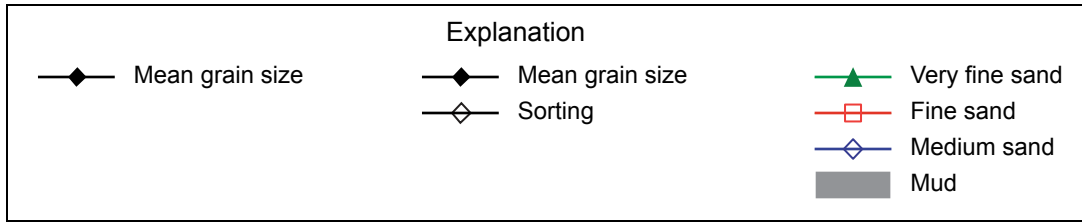
3.5 - 10.5 cm: SAND, mottled gray (2.5Y 5/1) silty sand; gradational contact

10.5 - 22 cm: SAND, mottled dark grayish-brown (2.5 Y 4/2), well sorted, very fine-grained sand; with a few scattered shell fragments

22 - 31 cm: SAND, dark grayish-brown (10YR 4/2), well sorted, very fine-grained sand

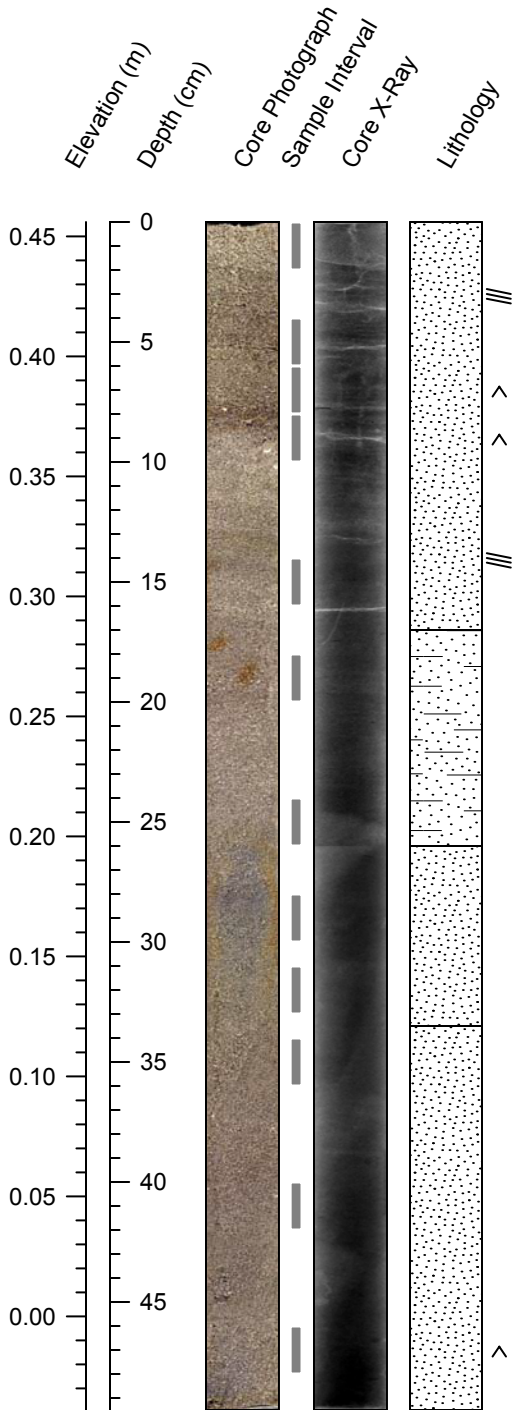
31 - 33.5 cm: SAND, massive, dark gray (2.5Y 4/1), well sorted, very fine-grained silty sand

Core ID: 14BIM04-13



**Core ID: 14BIM04-13**

**Latitude:** 29.46801 N      **Elevation:** 0.46 m  
**Longitude:** 89.17501 W      **Core Length:** 49.5 cm  
**Location:** Breton Island - transect T2 back-barrier berm



**Lithologic Description**

0-17 cm: SAND, light brownish-gray (10YR 6/2), well sorted, fine-grained quartz sand interbedded with grayish-brown (10YR 5/2) very fine-grained silty sand; with scattered shell fragments; darker, siltier layers show faint inclined bedding

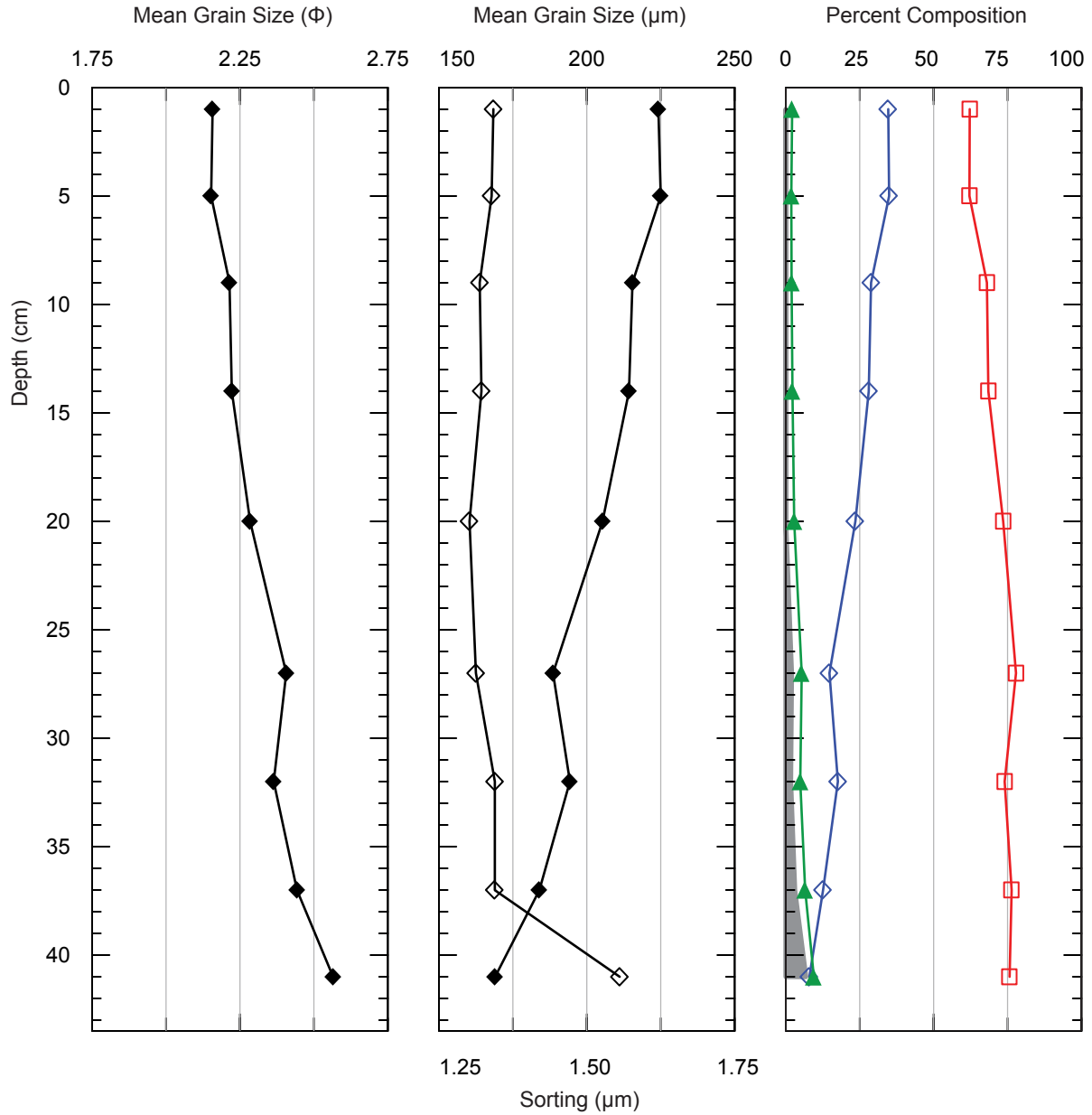
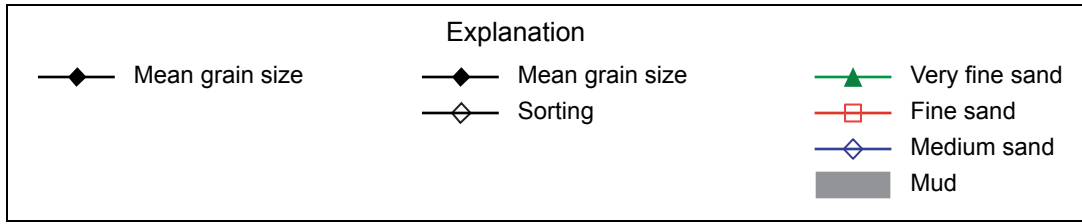
17 - 26 cm: SAND, massive, grayish-brown (10YR 5/2), well sorted, very fine-grained silty sand; with scattered shell fragments and yellowish-brown (10YR 5/8) oxidized sand lenses at 18 and 19 cm

26 - 33.5 cm: SAND, massive, dark gray (GLEY 1 4/N) very fine-grained sand; with oxidized lenses indicating possible heavy mineral content

33.5 - 49.5 cm: SAND, massive, grayish-brown (10YR 5/2), well sorted, very fine-grained sand; with scattered shell fragments

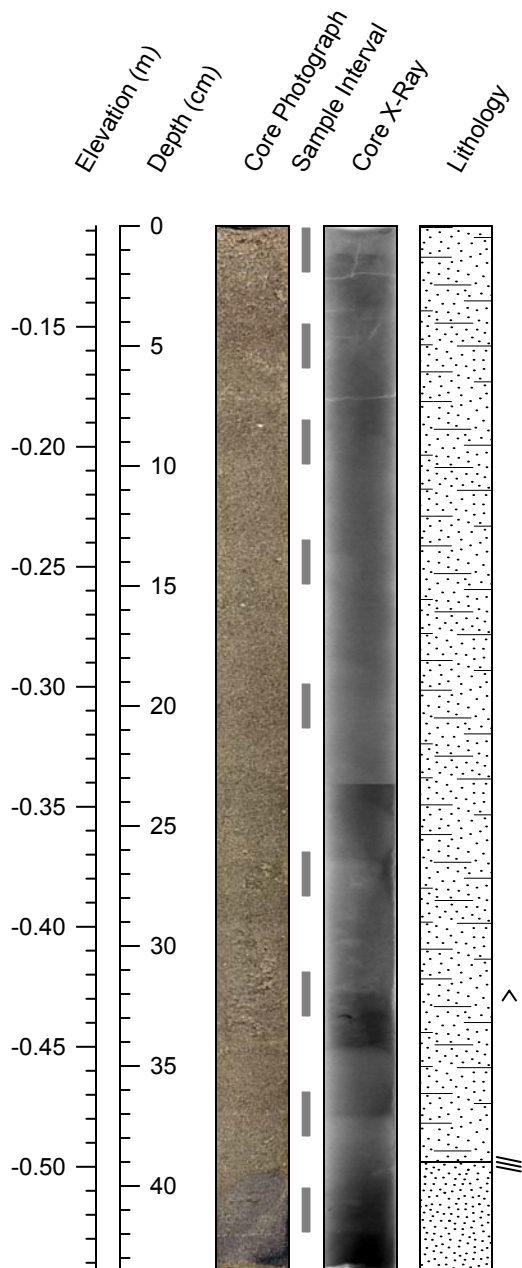


**Core ID: 14BIM04-14**



**Core ID: 14BIM04-14**

**Latitude:** 29.46811 N      **Elevation:** -0.11 m  
**Longitude:** 89.17523 W      **Core Length:** 43.5 cm  
**Location:** Breton Island - transect T2 Breton Sound

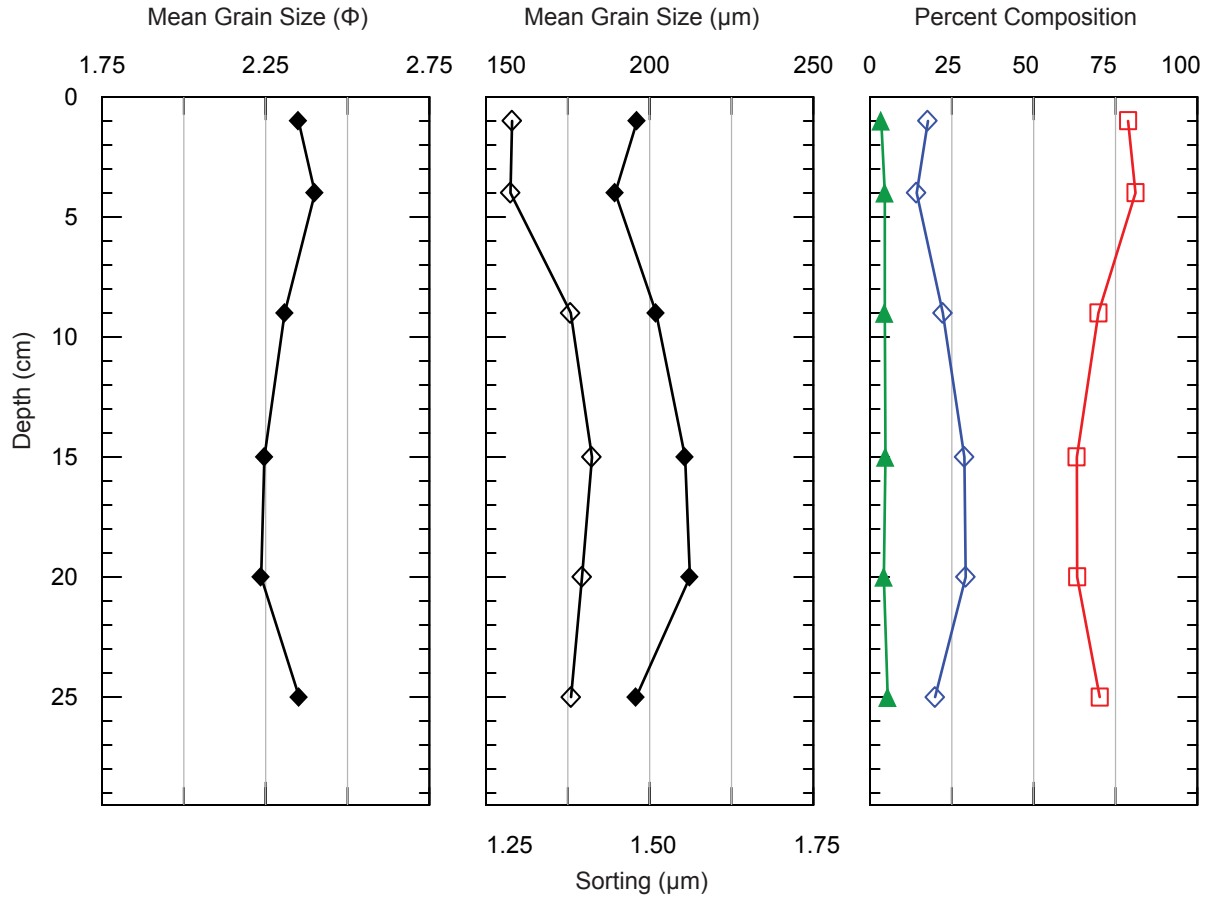
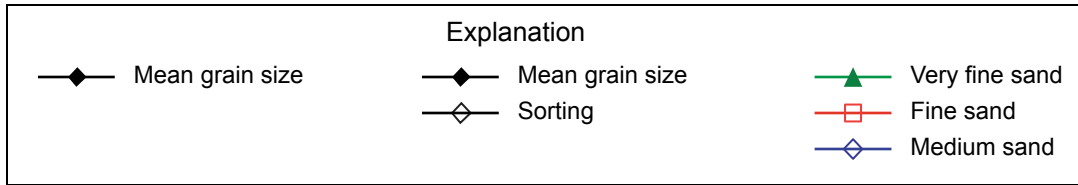


**Lithologic Description**

0 - 39 cm: SAND, dark grayish-brown (10YR 4/2), well sorted, very fine-grained silty sand; with scattered shell fragments and a few mica flecks, faint horizontal bedding, and inclined basal contact

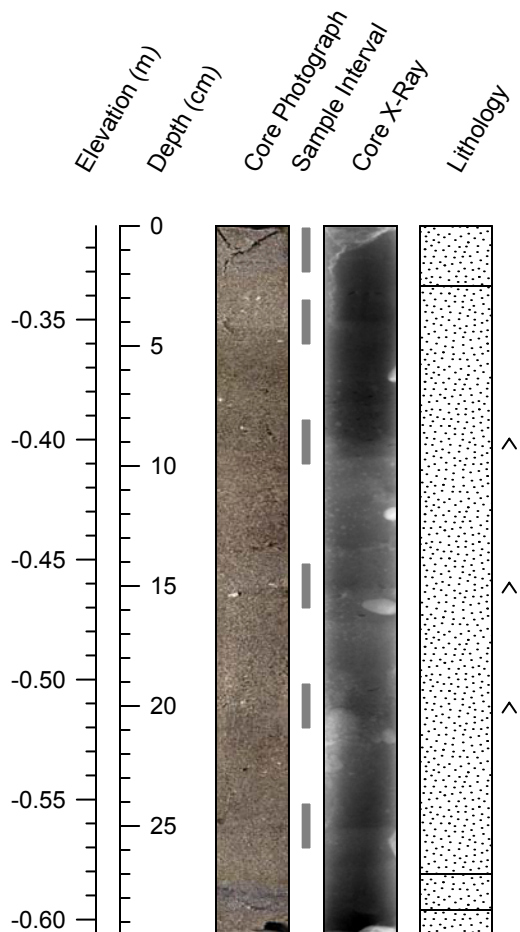
39 - 43.5 cm: SAND, dark gray (GLEY 1 4/1), well sorted, very fine-grained sand, with organic flecks

Core ID: 14BIM04-15



**Core ID: 14BIM04-15**

**Latitude:** 29.47121 N      **Elevation:** -0.31 m  
**Longitude:** 89.17108 W      **Core Length:** 29.5 cm  
**Location:** Breton Island - transect T3 shoreface/surf zone



**Lithologic Description**

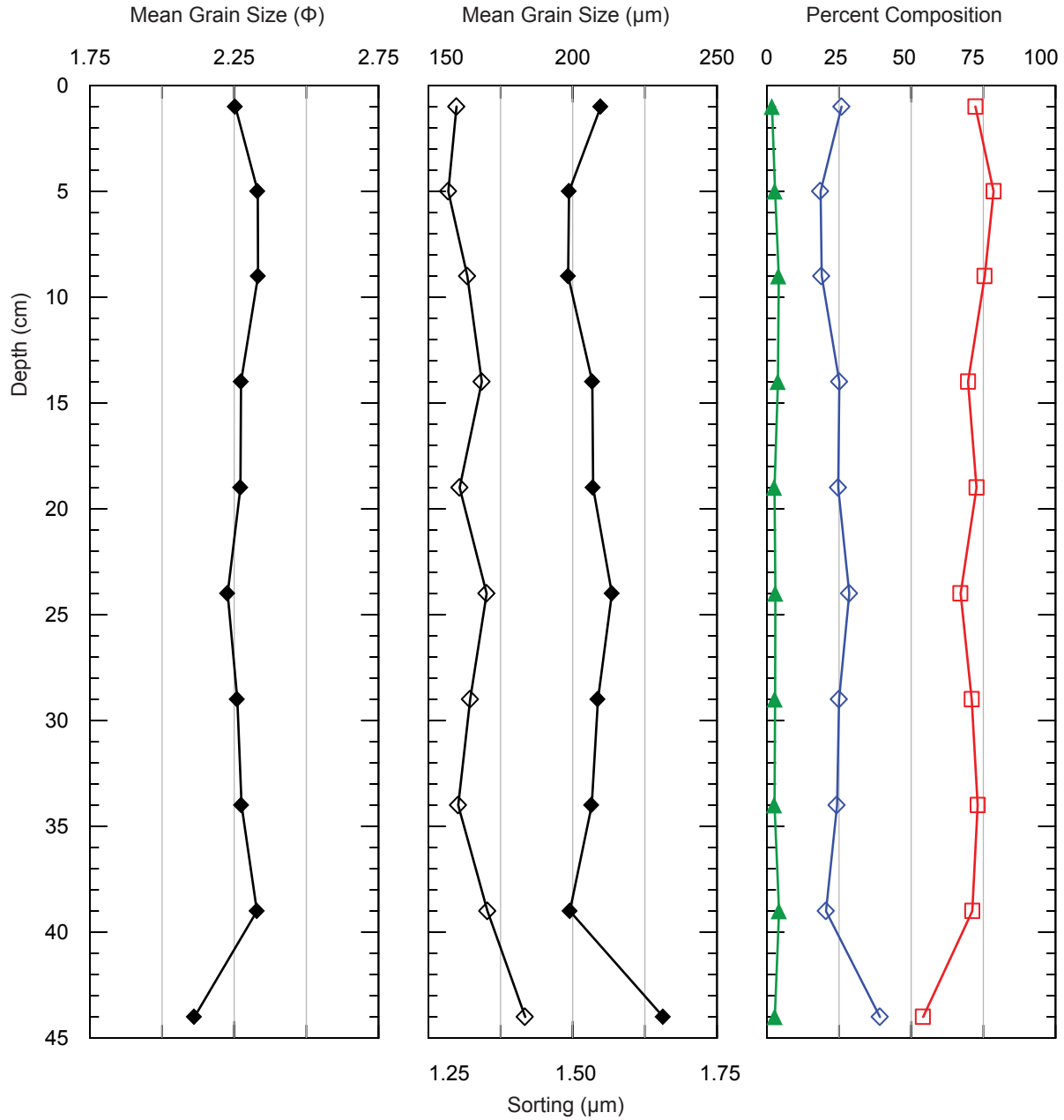
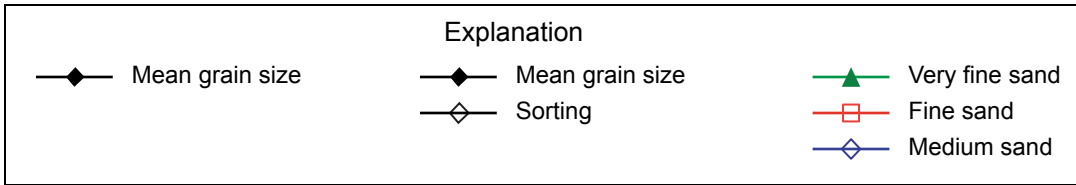
0 - 2.5 cm: SAND, gray (10YR 5/1), well sorted, very fine-grained sand

2.5 - 27 cm: SAND, massive, dark grayish-brown (10YR 4/2), well sorted, very fine-grained sand; with scattered shell fragments and mica flecks

27 - 28.5 cm: SAND, dark gray (GLEY 1 3/1), well sorted, very fine-grained organic-rich sand

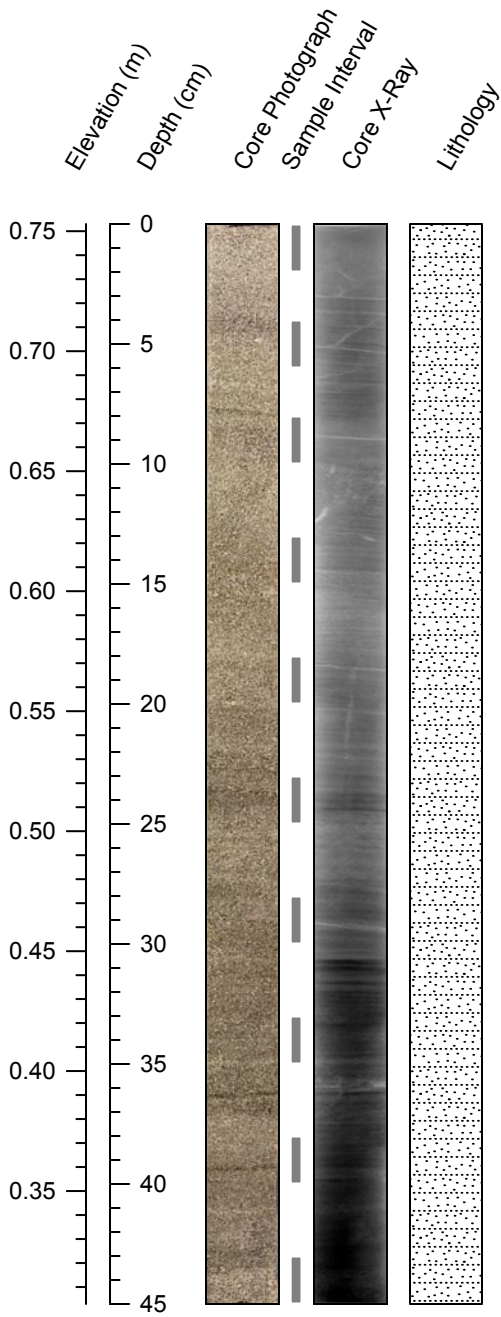
28.5 - 29.5 cm: SAND, dark grayish-brown (10YR 4/2), well sorted, very fine-grained sand

Core ID: 14BIM04-16



**Core ID: 14BIM04-16**

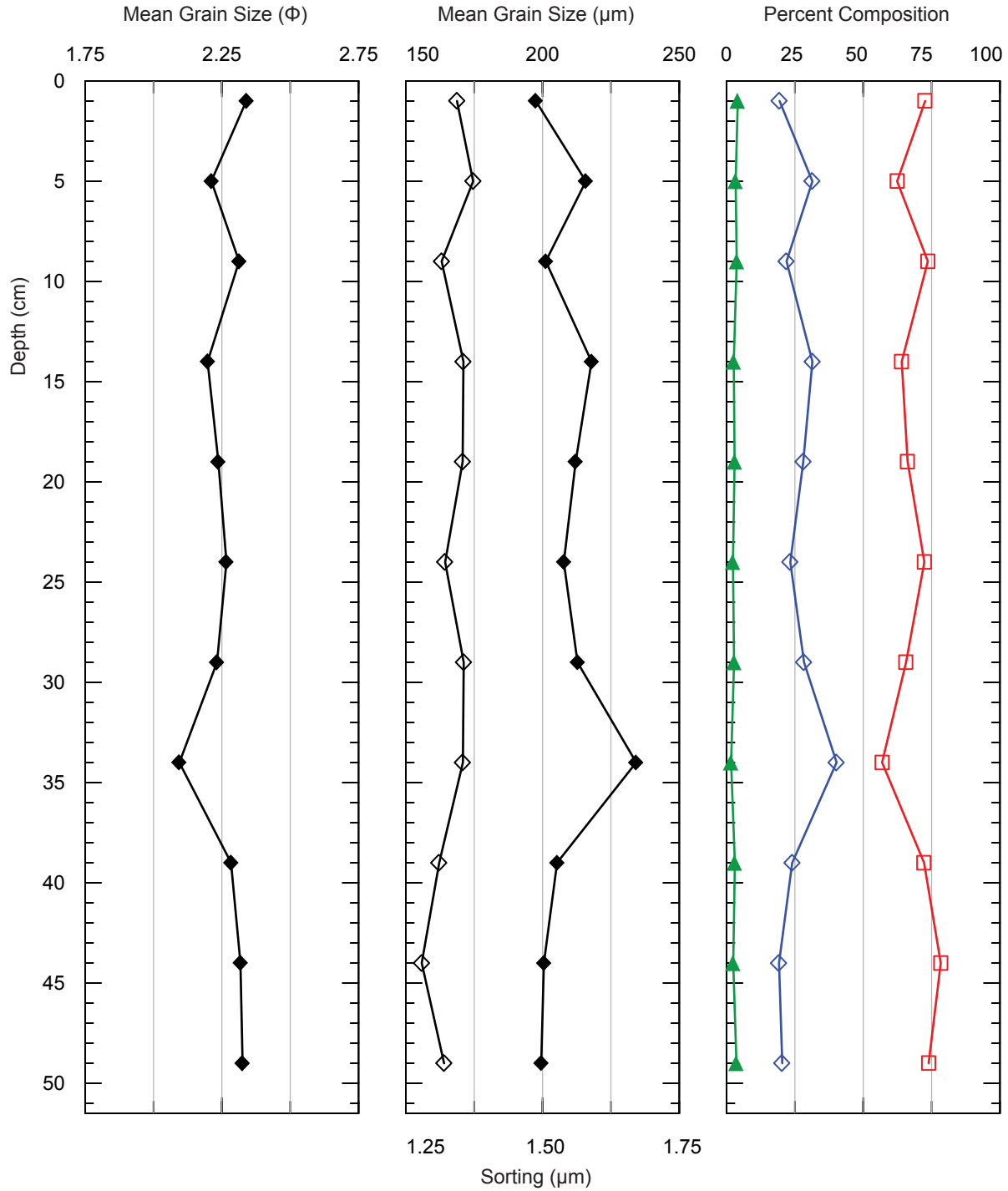
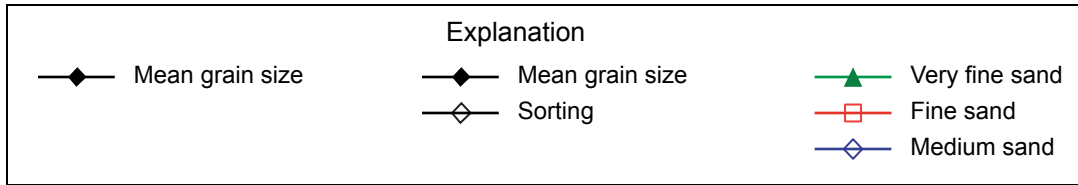
**Latitude:** 29.47131 N      **Elevation:** 0.75 m  
**Longitude:** 89.17153 W      **Core Length:** 45 cm  
**Location:** Breton Island - transect T3 berm



**Lithologic Description**

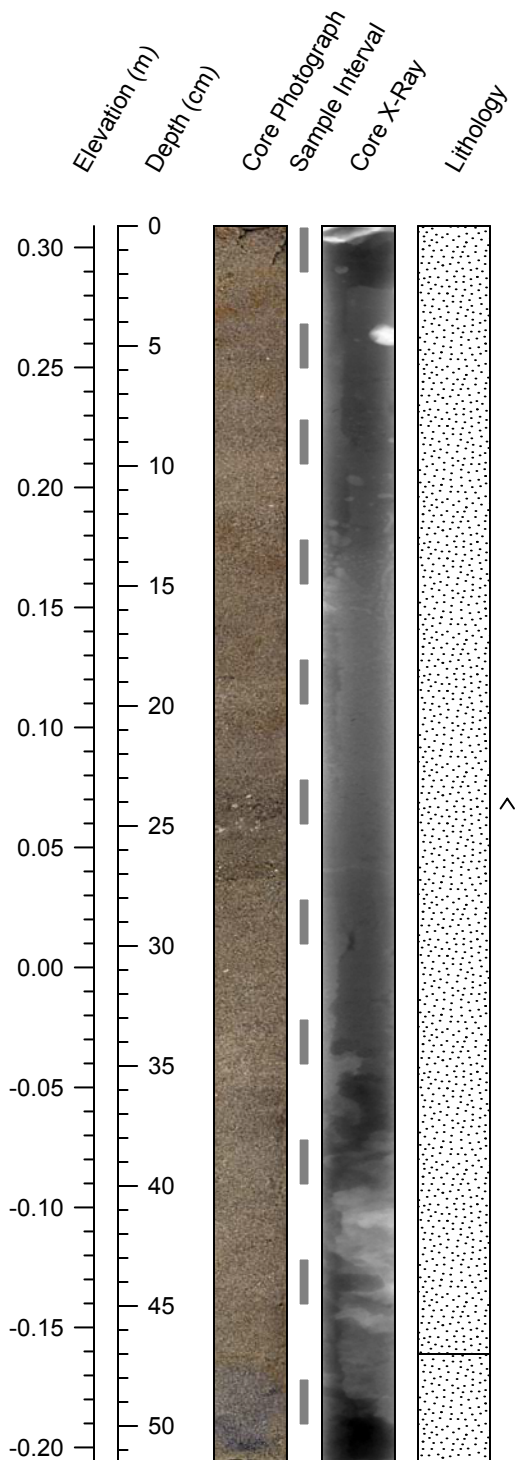
0 - 45 cm: SAND, laminated light brownish-gray (10YR 6/2), well sorted, very fine-grained sand interbedded with darker grayish-brown (10YR 5/2) silty sand; with occasional very small mica flecks, silty sand content increases down-core

Core ID: 14BIM04-17



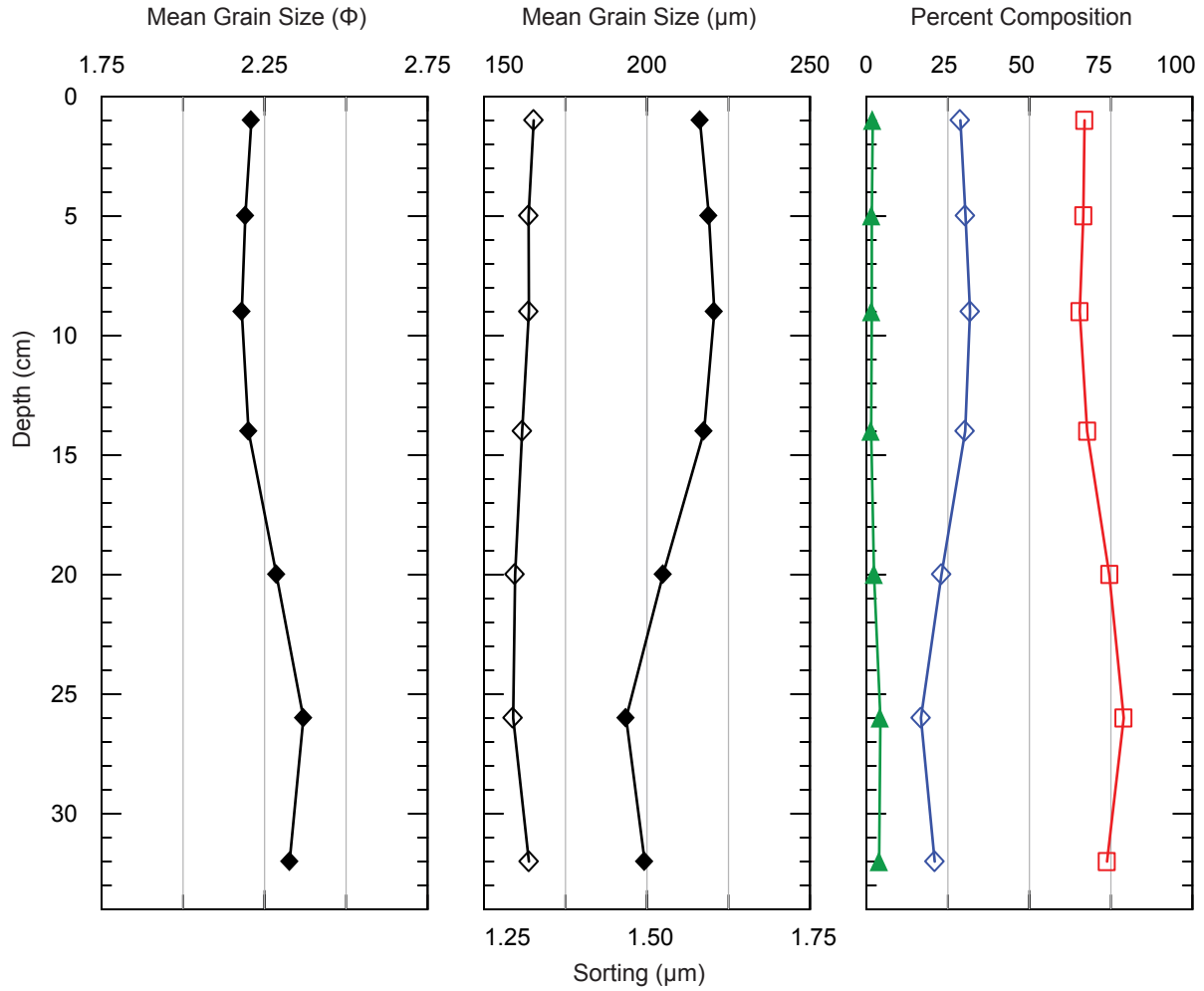
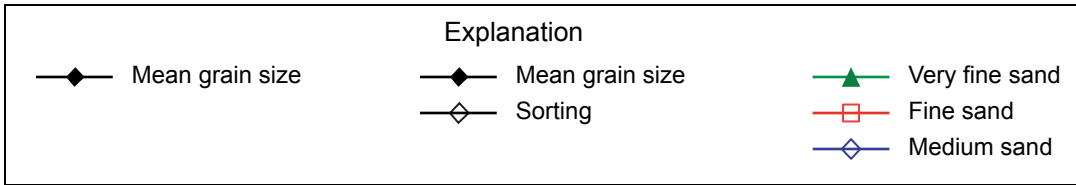
**Core ID: 14BIM04-17**

**Latitude:** 29.47143 N      **Elevation:** 0.31 m  
**Longitude:** 89.17223 W      **Core Length:** 51.5 cm  
**Location:** Breton Island - transect T3 sound side inner island





**Core ID: 14BIM04-41**



**Core ID: 14BIM04-41**

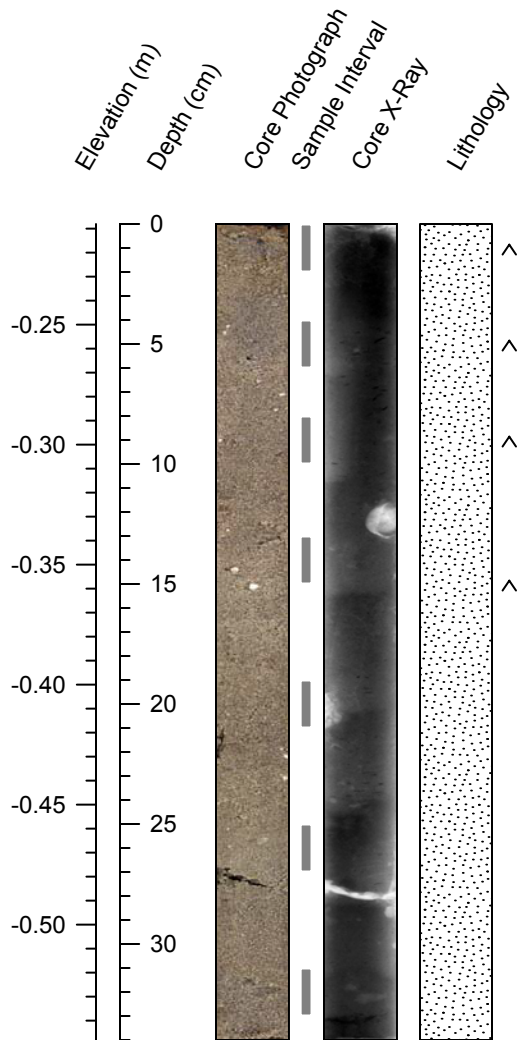
**Latitude:** 29.47394 N

**Elevation:** -0.21 m

**Longitude:** 89.17843 W

**Core Length:** 34 cm

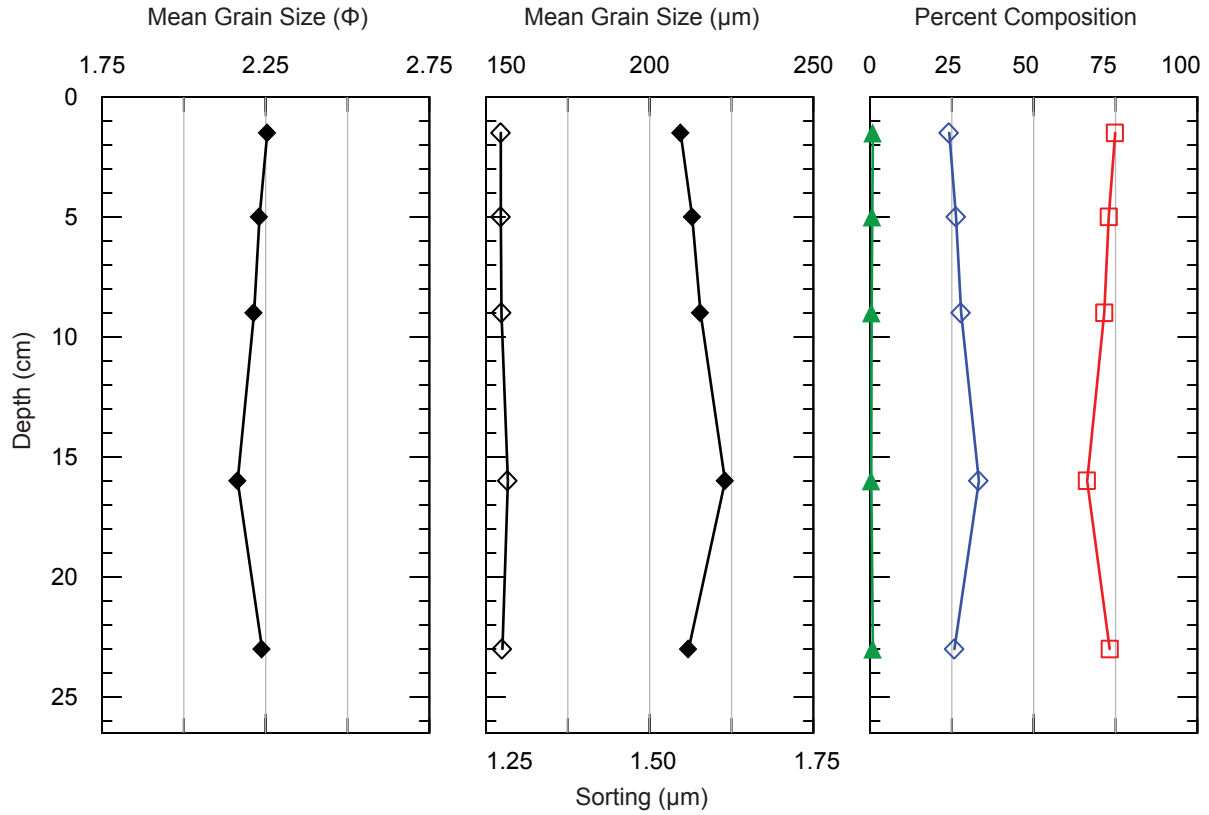
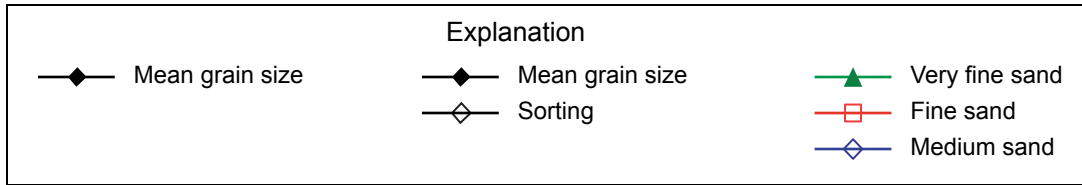
**Location:** Gosier Island - transect T5 spit southwest of island



**Lithologic Description**

0 - 34 cm: SAND, dark grayish-brown (10YR 4/2), well sorted, very fine-grained sand; with disseminated shell fragments and mica flecks

**Core ID: 14BIM04-42**



**Core ID: 14BIM04-42**

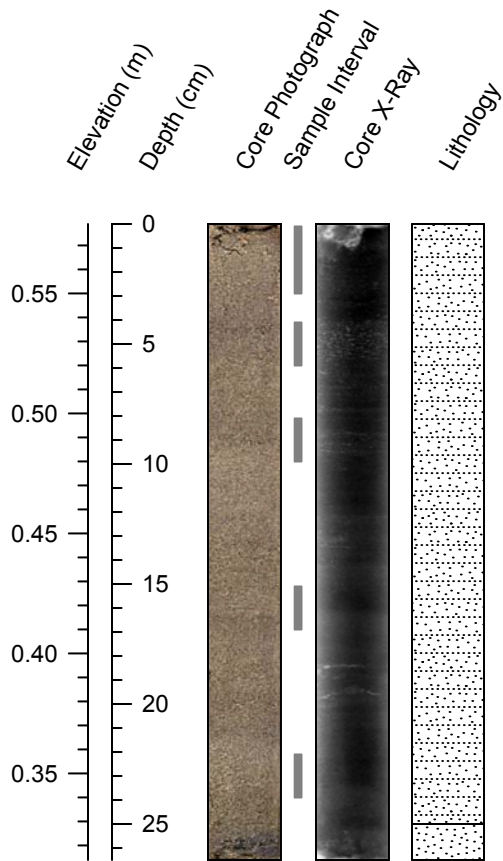
**Latitude:** 29.47408 N

**Elevation:** 0.58 m

**Longitude:** 89.17793 W

**Core Length:** 26.5 cm

**Location:** Gosier Island - transect T5 south end of island

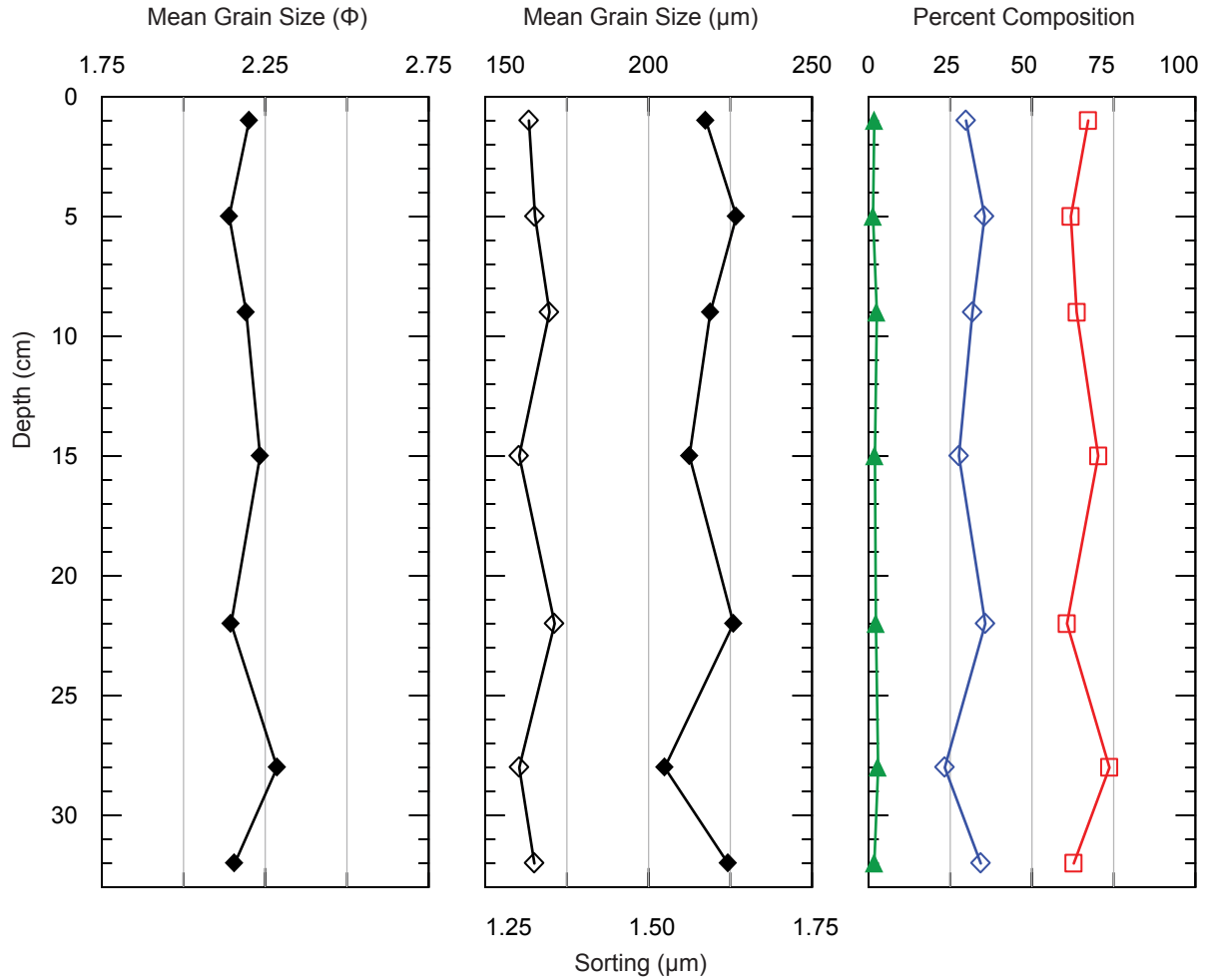
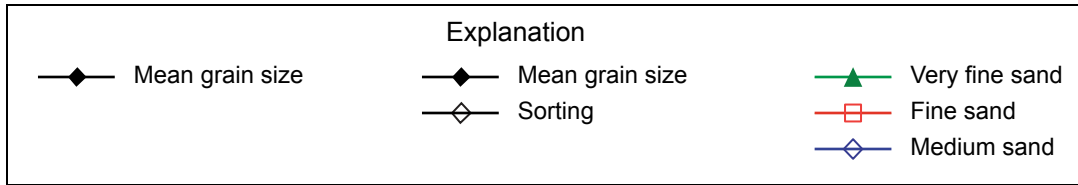


**Lithologic Description**

0 - 25 cm: SAND, faintly laminated dark grayish-brown (10YR 4/2), well sorted, very fine-grained sand; with scattered mica flecks

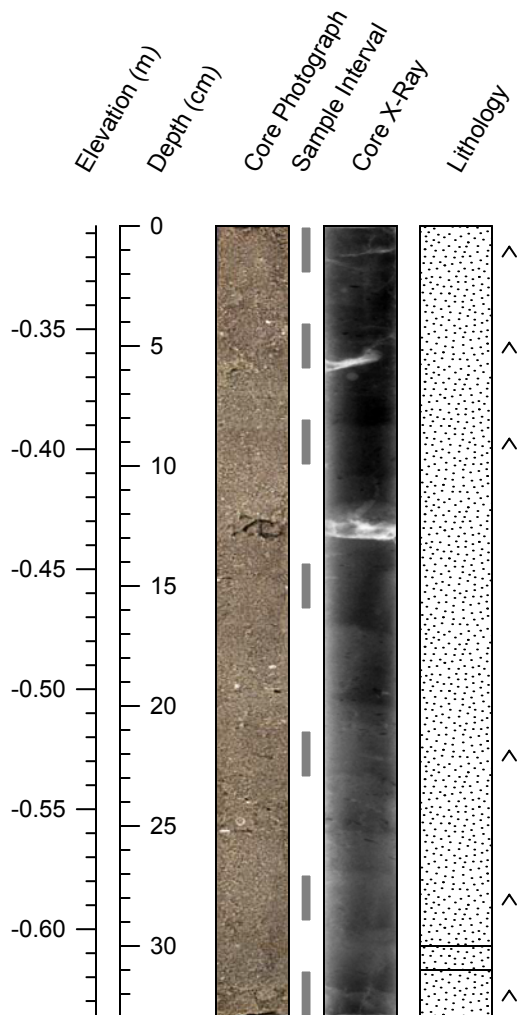
25 - 26.5 cm: SAND, gray (GLEYS 4/N), well sorted, very fine-grained sand

**Core ID: 14BIM04-44**



**Core ID: 14BIM01-44**

**Latitude:** 29.48283 N      **Elevation:** -0.31 m  
**Longitude:** 89.17084 W      **Core Length:** 33 cm  
**Location:** Gosier Island - transect T4 shoreface/surf zone



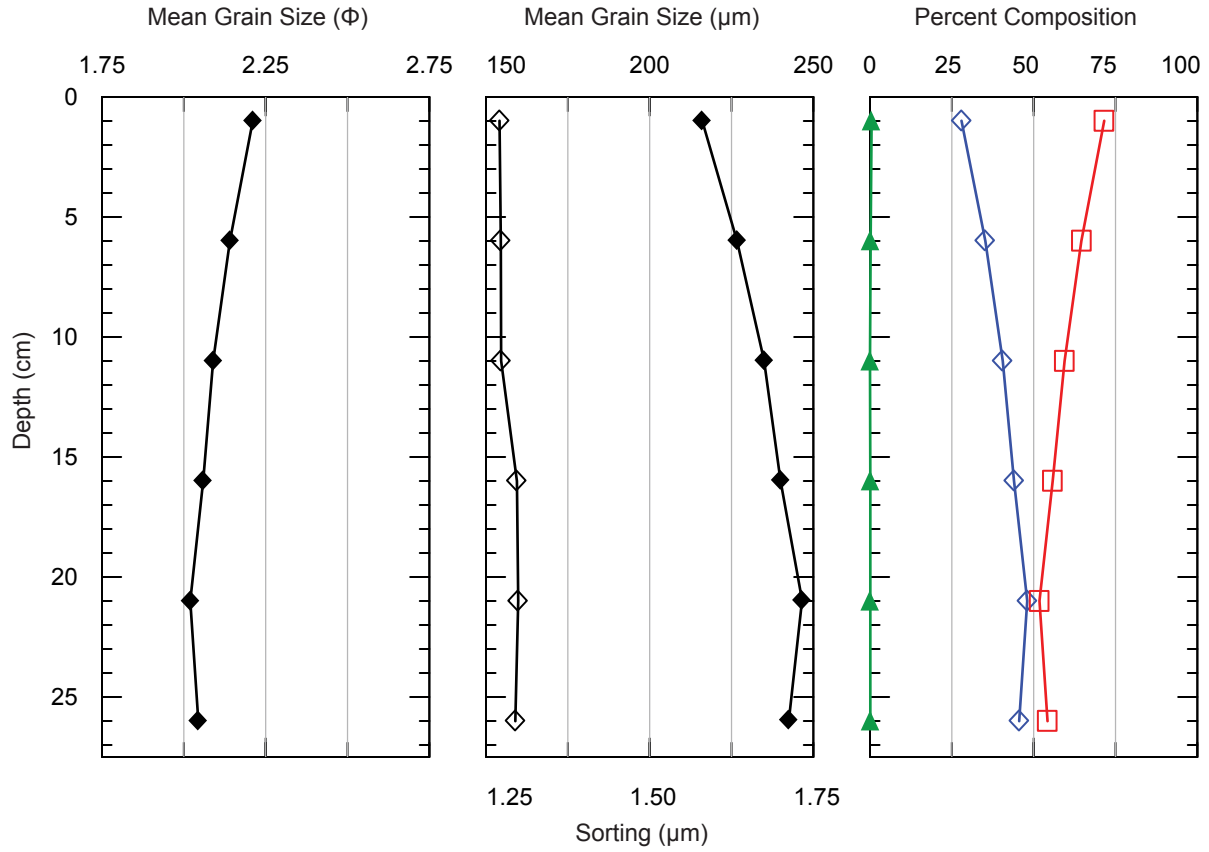
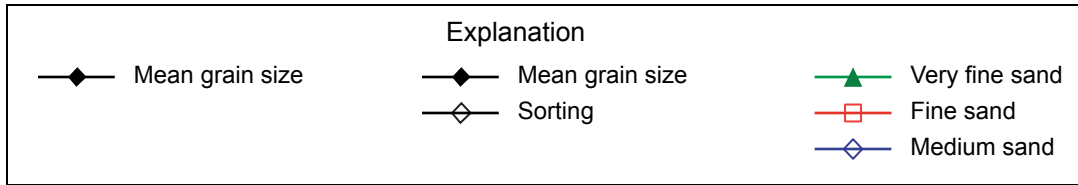
**Lithologic Description**

0 - 30 cm: SAND, massive, dark grayish-brown (10YR 4/2), well sorted, very fine-grained sand; with disseminated shell fragments and a few scattered mica flecks

30 - 31 cm: SAND, gray (GLEY 1 4/N), well sorted, very fine-grained sand; with small shell fragments

31 - 33 cm: SAND, dark grayish-brown (10YR 4/2), well sorted, very fine-grained sand

**Core ID: 14BIM04-45**



**Core ID: 14BIM04-45**

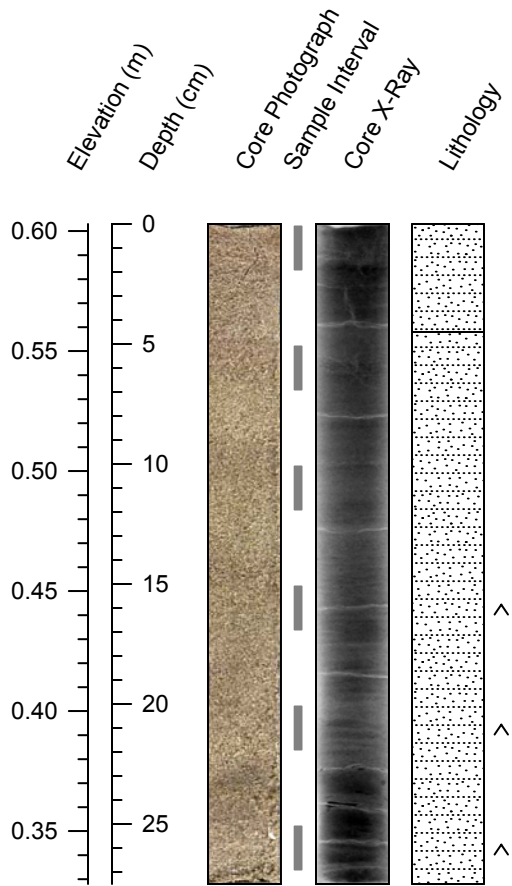
**Latitude:** 29.48290 N

**Elevation:** 0.60 m

**Longitude:** 89.17101 W

**Core Length:** 27.5 cm

**Location:** Gosier Island - transect T4 dune/berm crest



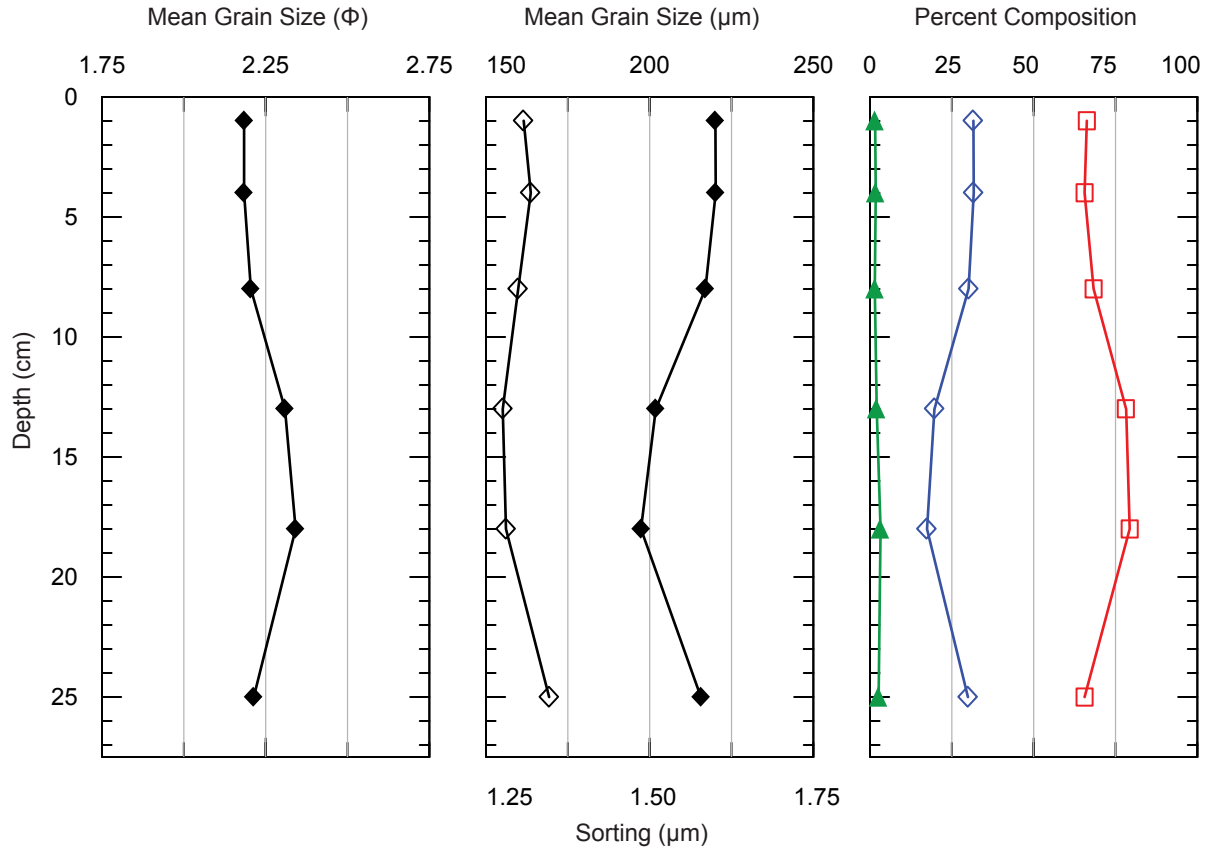
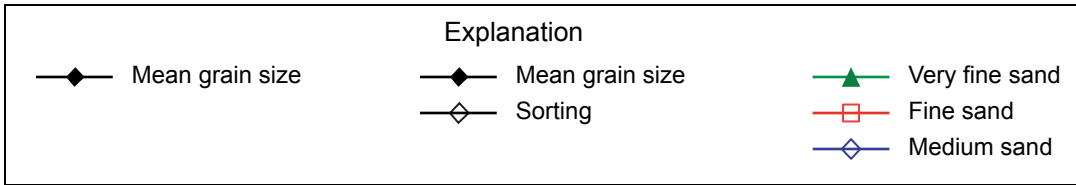
**Lithologic Description**

0 - 4.5 cm: SILT and SAND, laminated dark gray (10YR 6/1) silty sand interbedded with light brownish-gray (10YR 6/2), well sorted, fine-grained sand

4.5 - 27.5 cm: SAND, laminated light brownish-gray (10YR 6/2), well sorted, very fine-grained sand; with occasional small shell fragments



**Core ID: 14BIM04-46**



**Core ID: 14BIM04-46**

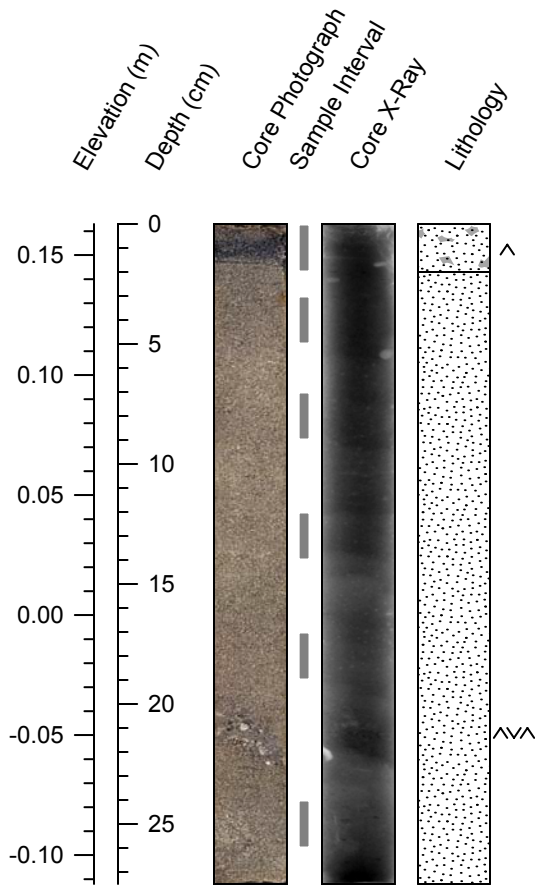
**Latitude:** 29.48302 N

**Elevation:** 0.16 m

**Longitude:** 89.17136 W

**Core Length:** 27.5 cm

**Location:** Gosier Island - transect T4 back-barrier tidal flat

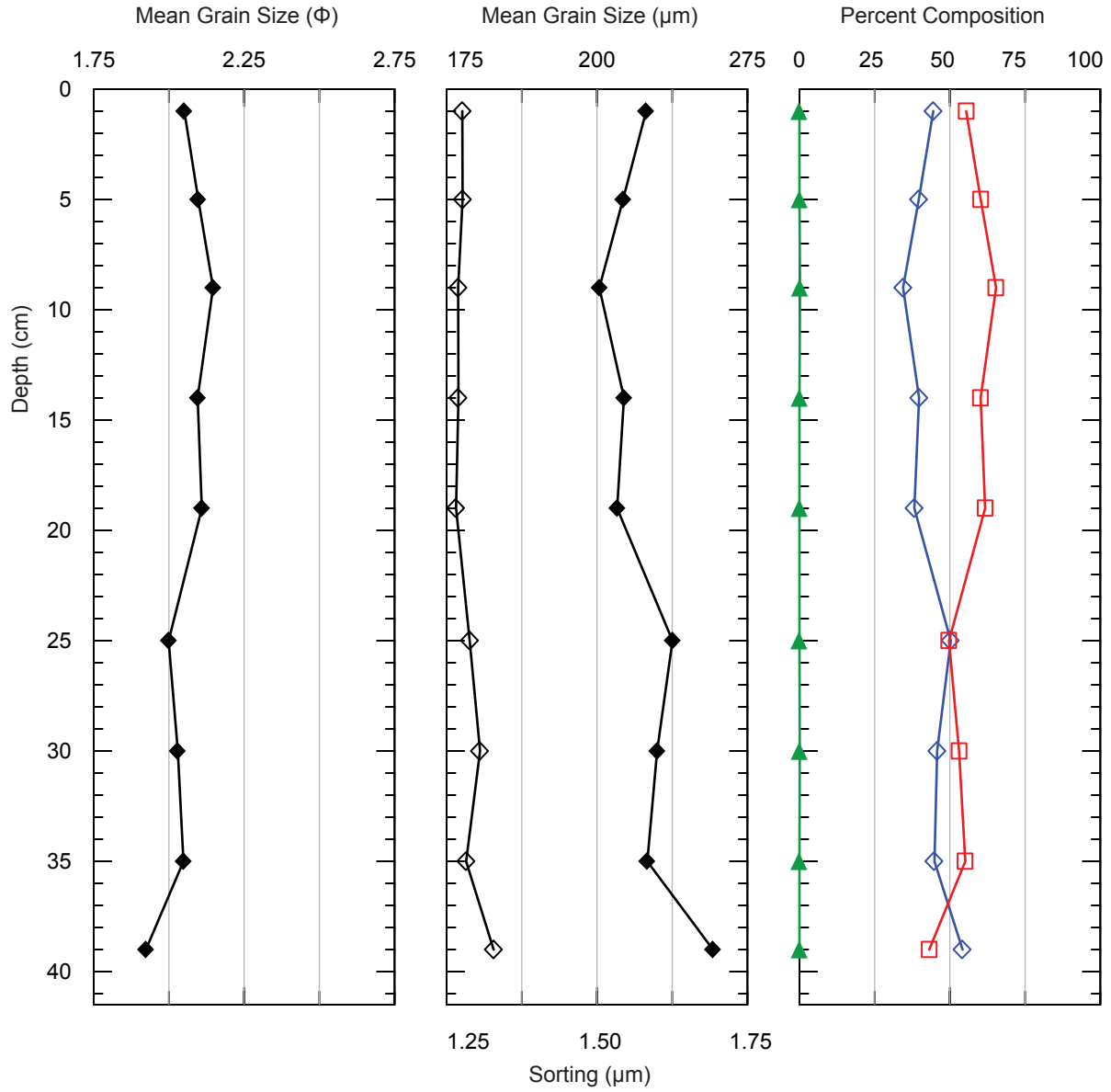
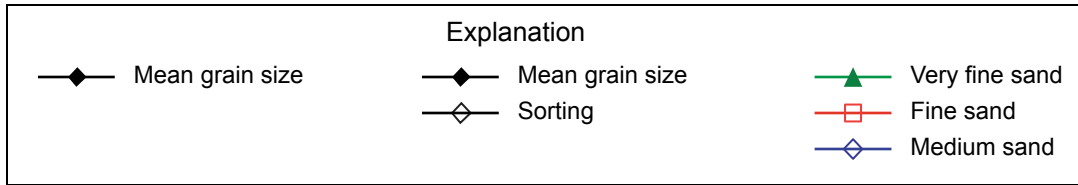


**Lithologic Description**

0 - 2 cm: SAND, black (N1), well sorted, very fine-grained organic-rich sand

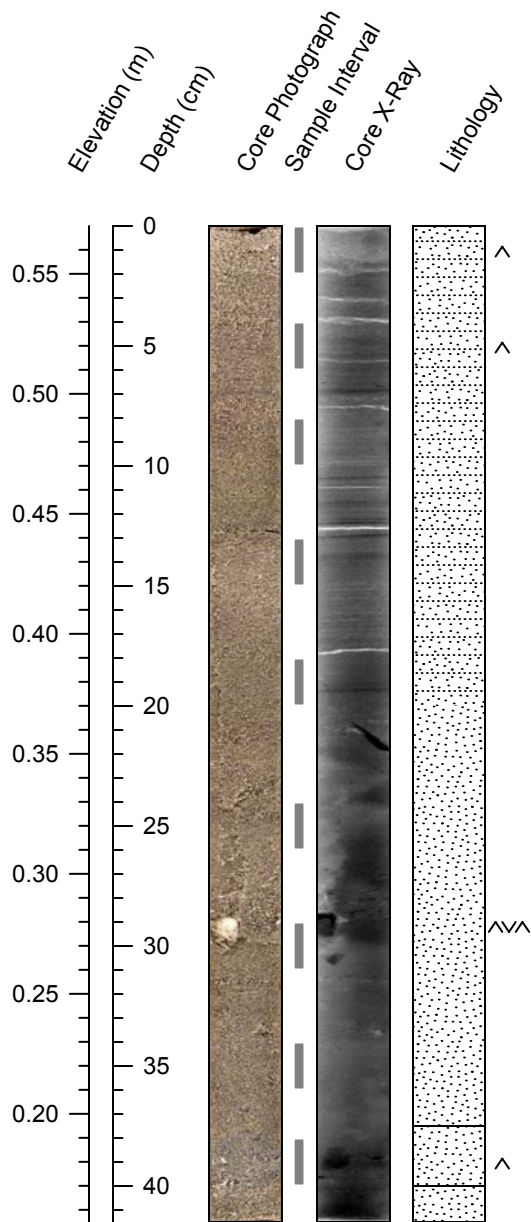
2 - 27.5 cm: SAND, dark gray (10YR 4/1), well sorted, very fine-grained sand; with a few scattered very small shell fragments and an inclined bed with more concentrated shell fragments from 20-22.5 cm

**Core ID: 14BIM04-53**



**Core ID: 14BIM04-53**

**Latitude:** 29.47277 N      **Elevation:** 0.57 m  
**Longitude:** 89.17370 W      **Core Length:** 41.5 cm  
**Location:** Grand Gosier Island - transect T6 emergent shoal



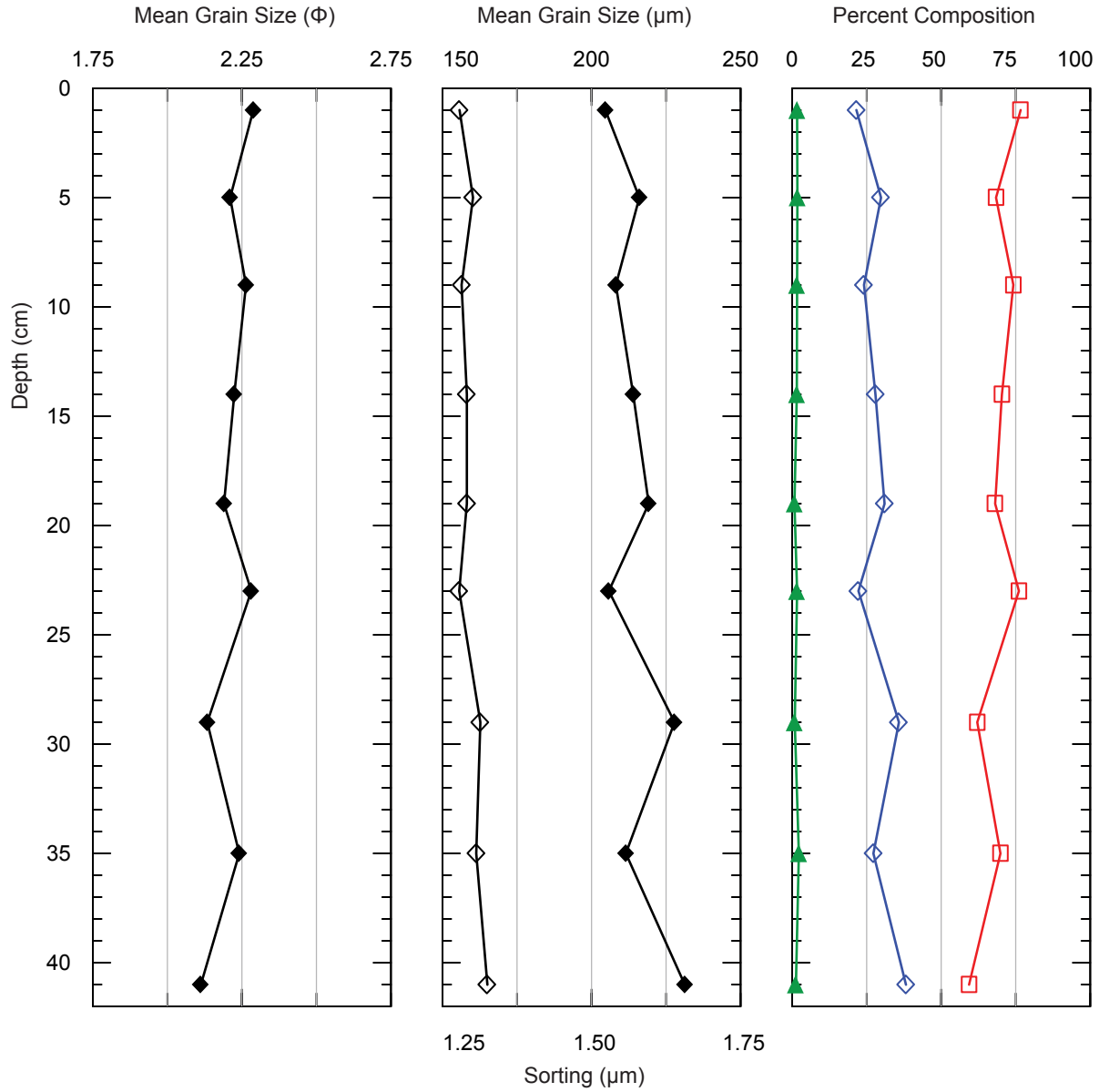
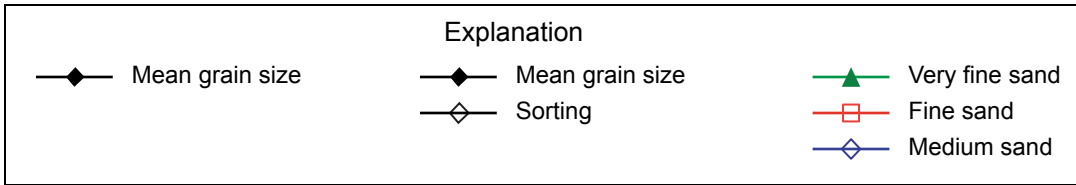
**Lithologic Description**

0 - 37.5 cm: SAND, dark grayish-brown (10YR 4/2), well sorted, very fine-grained sand interbedded with dark gray (10YR 4/1) silty sand; with laminations visible in upper 20 cm of x-ray image, a few scattered shell fragments, and more concentrated shell hash from 27 to 30 cm

37.5 - 40 cm: SAND, gray (GLE 1 4/N), well sorted, very fine-grained sand with scattered shell fragments

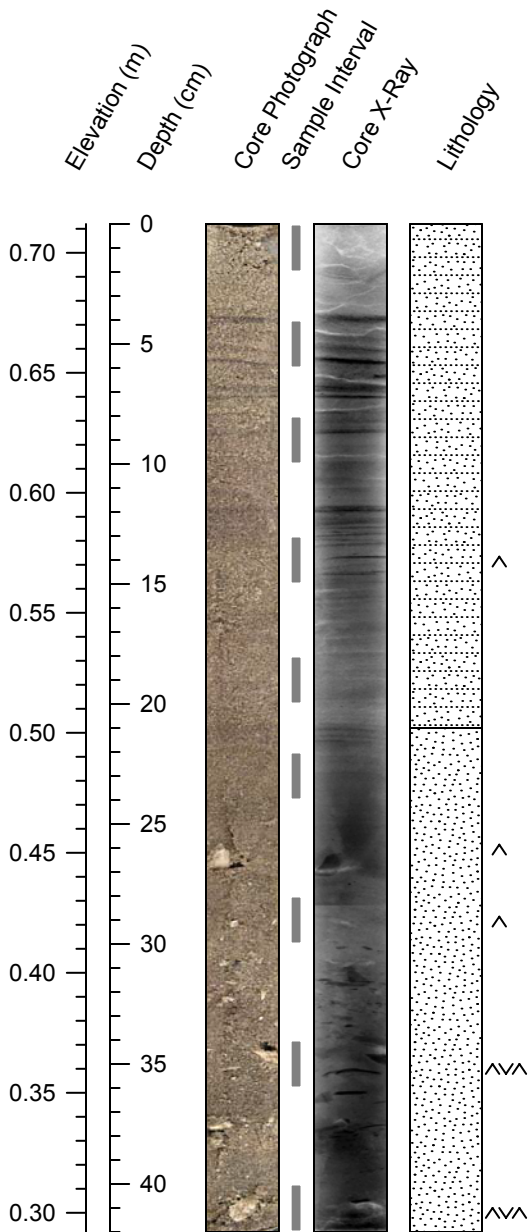
40 - 41.5 cm: SAND, dark grayish-brown (10YR 6/2), well sorted, very fine-grained sand

**Core ID: 14BIM04-54**



**Core ID: 14BIM04-54**

**Latitude:** 29.47261 N      **Elevation:** 0.71 m  
**Longitude:** 89.17575 W      **Core Length:** 42 cm  
**Location:** Grand Gosier Island - transect T6 dune/berm crest



**Lithologic Description**

0 - 21 cm: SAND, laminated light grayish-brown (10YR 4/2), well sorted, very fine-grained sand interbedded with thin dark gray (10YR 4/1) silty sand horizons; with a few scattered mica flecks

21 - 42 cm: SAND, massive dark grayish-brown (10YR 4/2), well sorted, very fine-grained sand; with abundant fragmented and intact inarticulated shells