

GEOTECHNICAL BORINGS CORRELATED TO GEOPHYSICAL DATA

**CAPE WIND ENERGY PROJECT
NANTUCKET SOUND**

June 2003

Prepared by:

Ocean Surveys, Inc. (OSI)

GEOTECHNICAL BORING CORRELATED TO GEOPHYSICAL DATA

Electrical Service Platform Location*	ESP
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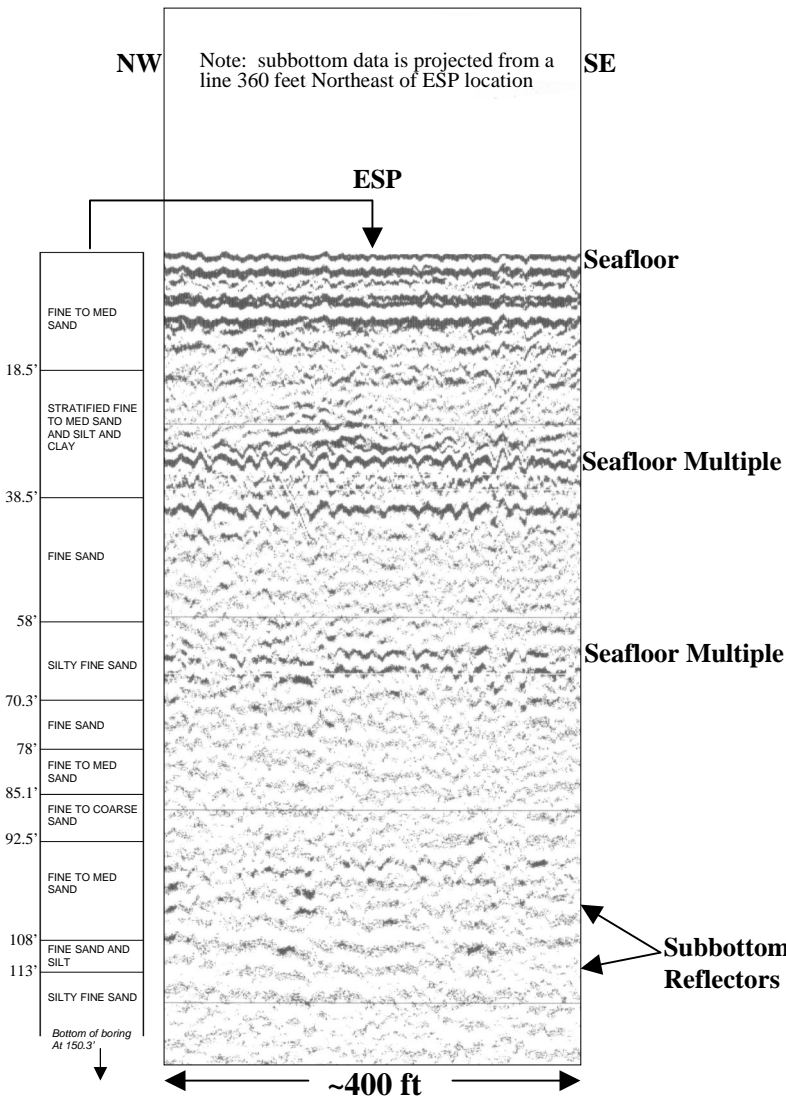
Sediment Boring ID	SB-01
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1,686,467.00 E 185,458.00 N

Coordinates are in feet and referenced to the Massachusetts State Plane Coordinate System, Island Zone (2002), NAD83

1,686,469.90 E 185,456.90 N

Boring location



Survey Information

Data Collection Date	6/16/03
Line Number	37
Run Number	13
Nearest Event Number	332
Water Depth - @ ESP (MLLW, ft)	28.0

Acoustical Data Quality

Sea State ¹	1
Penetration ²	1
Reflectivity ³	2
Overall Interpretation ⁴	2

* See ESS Group, Inc. Plan titled "Established 130 WTG Array", dated July 29, 2003

¹ Degree to which seismic data affected by weather/sea conditions (1=little or no effect, 2=moderate effect, 3=significant effect)

² Penetration through the depth of interest (75') due to local site conditions (1=good penetration, 2=moderate penetration, 3=poor penetration)

³ Presence of distinguishable horizontal reflectors (1=numerous reflectors, 2=some reflectors, 3=few or no reflectors)

⁴ Overall ability to interpret seismic data (1=easily interpreted, 2=moderate to easily interpreted, 3=difficult to interpret)

Note: The data quality factors assigned above refer to the acoustical properties of the seismic data only. No inference to sediment lithologies should be made prior to appropriate ground truthing of the seismic profiles. Seismic image above is a section of "boomer" subbottom profile collected using a frequency range of 700 – 3500 Hz. Depth conversion based on an acoustic velocity of 4800 ft/sec. Lithologic information provided from GZA boring SB-01 advanced in April 2002.

**GEOTECHNICAL BORING CORRELATED
TO GEOPHYSICAL DATA**

Wind Turbine Location*	A10
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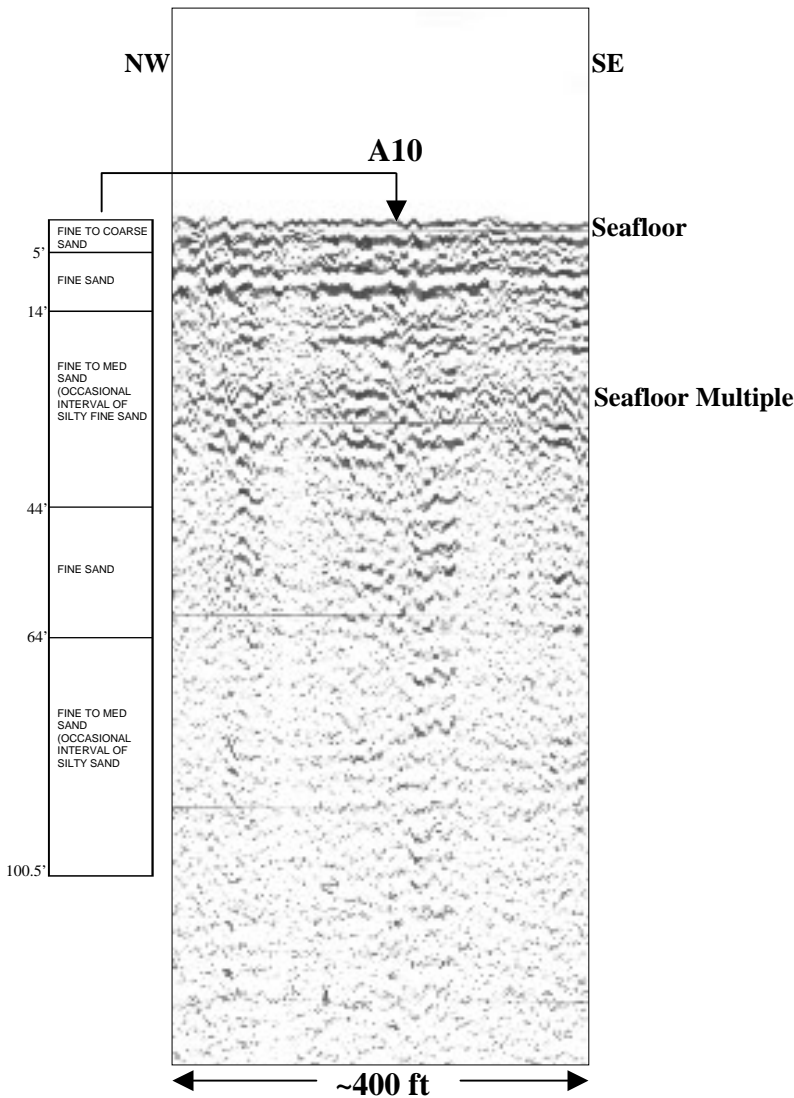
Sediment Boring ID	SB-A10
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1,673,840.64 E 176,503.68 N

Coordinates are in feet and referenced to the Massachusetts State Plane Coordinate System, Island Zone (2002), NAD83

1,673,876.92 E 176,546.93 N

Boring location



Survey Information

Data Collection Date	6/21/03
Line Number	22
Run Number	31
Nearest Event Number	1509
Water Depth (MLLW, ft)	25.0

Acoustical Data Quality

Sea State ¹	1
Penetration ²	2
Reflectivity ³	2
Overall Interpretation ⁴	2

* See ESS Group, Inc. Plan titled "Established 130 WTG Array", dated July 29, 2003

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GEOTECHNICAL BORING CORRELATED TO GEOPHYSICAL DATA

Wind Turbine Location*	B12
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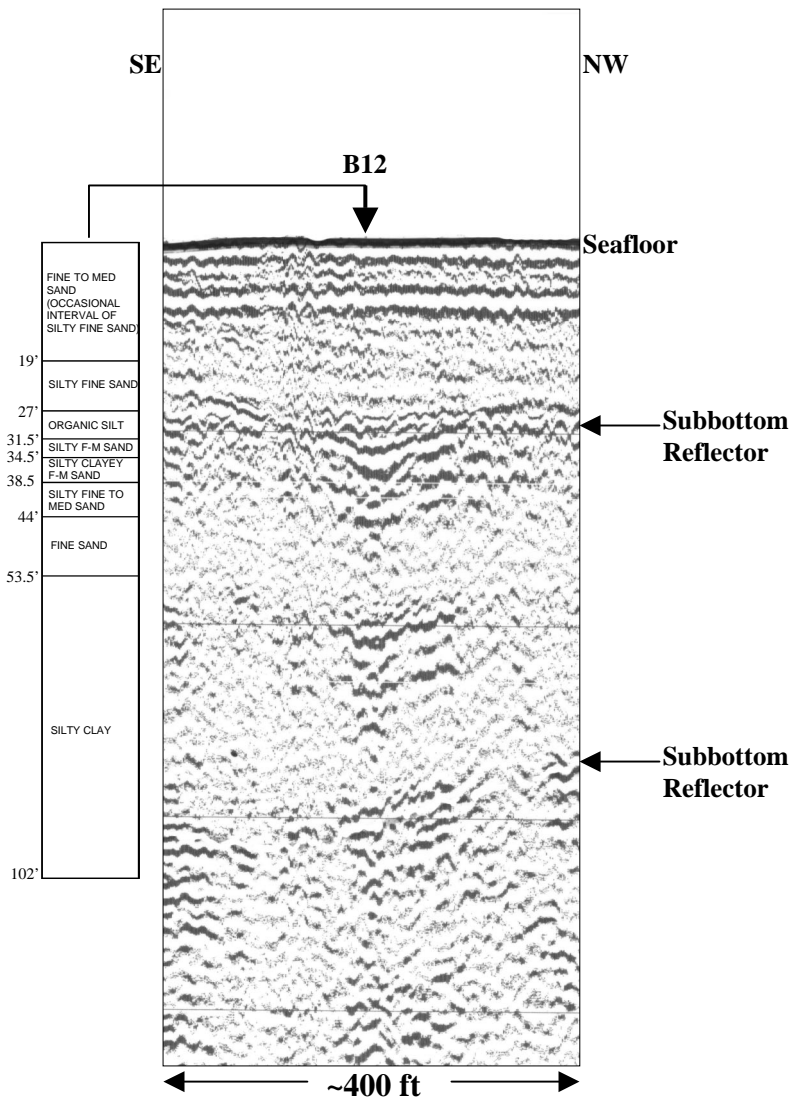
Sediment Boring ID	SB-B12
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1,678,823.53 E 173,057.86 N

Coordinates are in feet and referenced to the Massachusetts State Plane Coordinate System, Island Zone (2002), NAD83

1,678,878.51 E 173,086.82 N

Boring location



Survey Information

Data Collection Date	6/21/03
Line Number	25
Run Number	30
Nearest Event Number	1472
Water Depth (MLLW, ft)	28.0

Acoustical Data Quality

Sea State ¹	1
Penetration ²	1
Reflectivity ³	2
Overall Interpretation ⁴	2

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³ Presence of distinguishable horizontal reflectors (1=numerous reflectors, 2=some reflectors, 3=few or no reflectors)

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**GEOTECHNICAL BORING CORRELATED
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Wind Turbine Location*	C9
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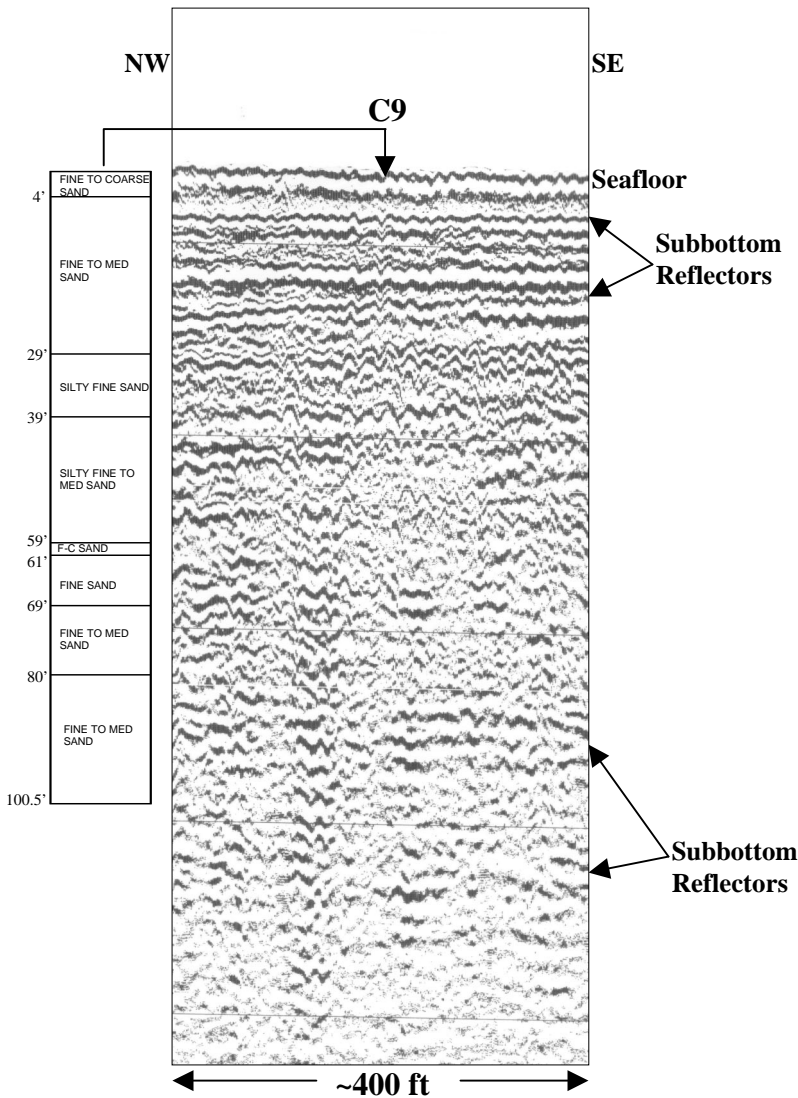
Sediment Boring ID	SB-C9
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1,679,511.48 E 179,063.32 N

Coordinates are in feet and referenced to the Massachusetts State Plane Coordinate System, Island Zone (2002), NAD83

1,679,471.52 E 179,100.07 N

Boring location



Survey Information

Data Collection Date	6/21/03
Line Number	28
Run Number	29
Nearest Event Number	1396
Water Depth (MLLW, ft)	22.9

Acoustical Data Quality

Sea State ¹	2
Penetration ²	1
Reflectivity ³	1
Overall Interpretation ⁴	2

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**GEOTECHNICAL BORING CORRELATED
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Wind Turbine Location*	D4
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Sediment Boring ID	SB-D4
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1,678,484.48 E 188,849.61 N

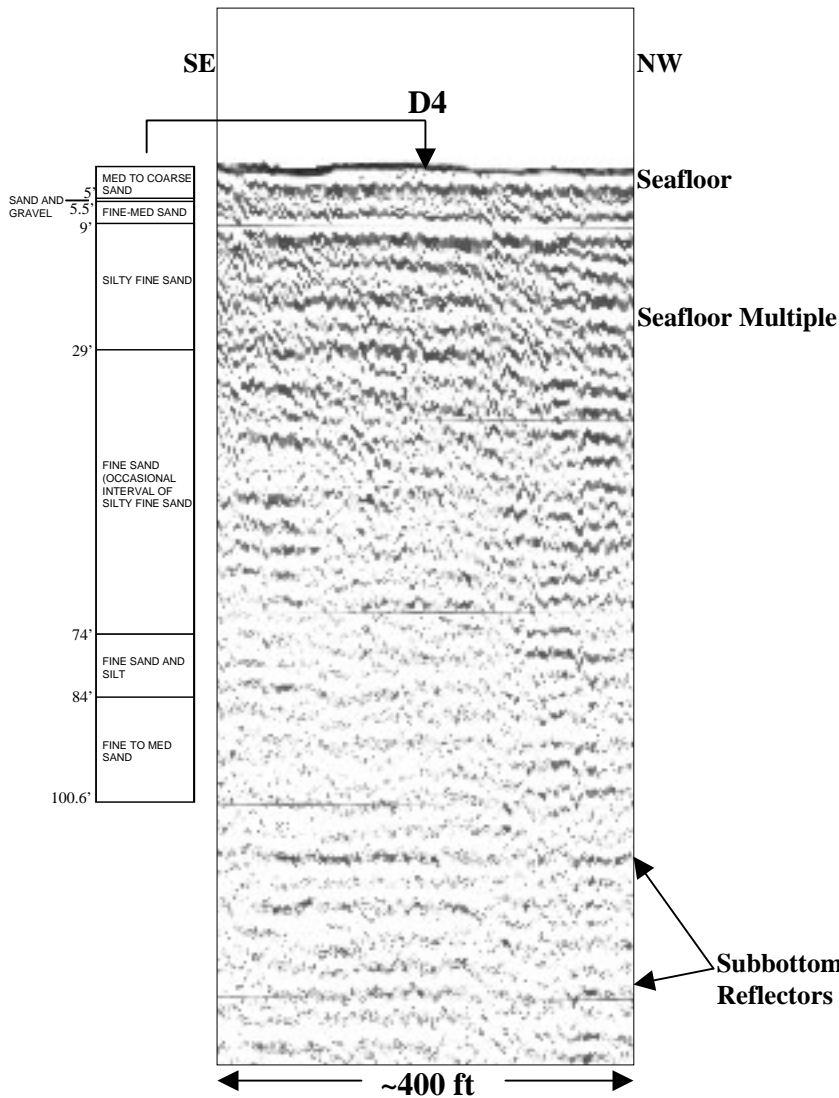
Coordinates are in feet and referenced to the Massachusetts State Plane Coordinate System, Island Zone (2002), NAD83

1,678,455.84 E 188,882.08 N

Boring location

Survey Information

Data Collection Date	6/21/03
Line Number	31
Run Number	27
Nearest Event Number	1244
Water Depth (MLLW, ft)	18.4



Acoustical Data Quality

Sea State ¹	1
Penetration ²	2
Reflectivity ³	2
Overall Interpretation ⁴	2

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**GEOTECHNICAL BORING CORRELATED
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Wind Turbine Location*	D11
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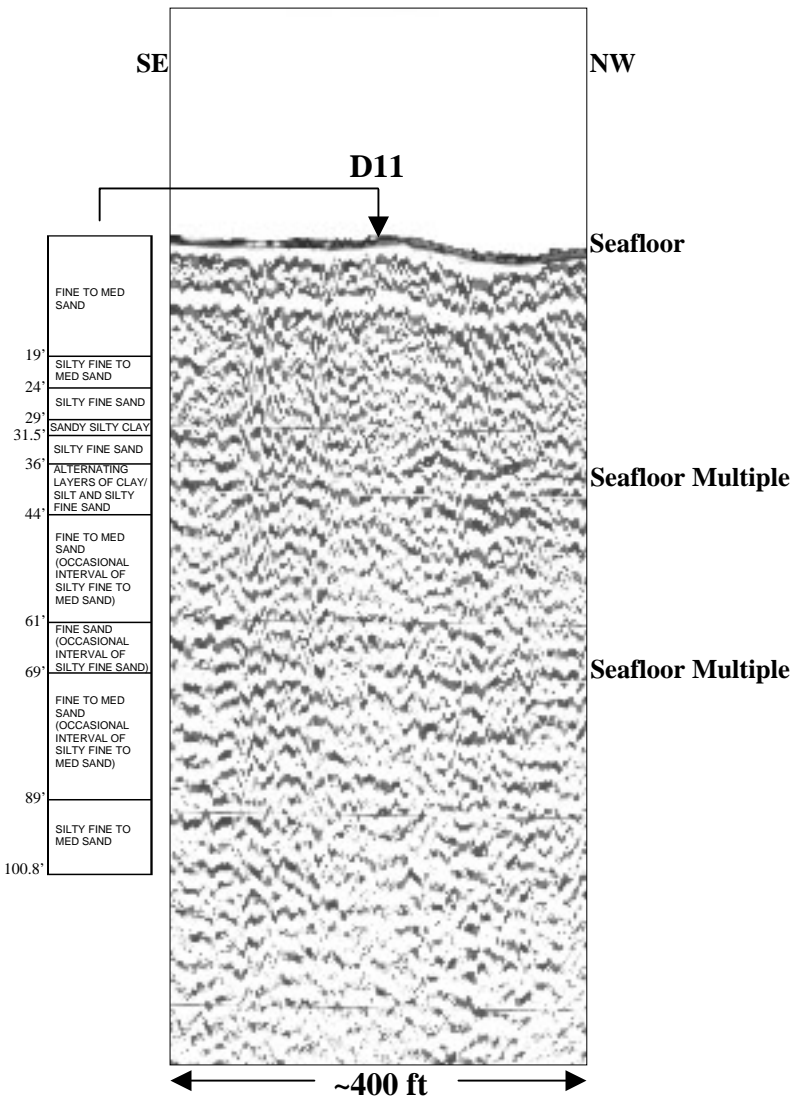
Sediment Boring ID	SB-D11
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1,684,484.85 E 175,616.52 N

Coordinates are in feet and referenced to the Massachusetts State Plane Coordinate System, Island Zone (2002), NAD83

1,684,496.26 E 175,617.88 N

Boring location



Survey Information

Data Collection Date	6/21/03
Line Number	31
Run Number	28
Nearest Event Number	1320
Water Depth (MLLW, ft)	30.3

Acoustical Data Quality

Sea State ¹	1
Penetration ²	1
Reflectivity ³	2
Overall Interpretation ⁴	2

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**GEOTECHNICAL BORING CORRELATED
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Wind Turbine Location*	G2
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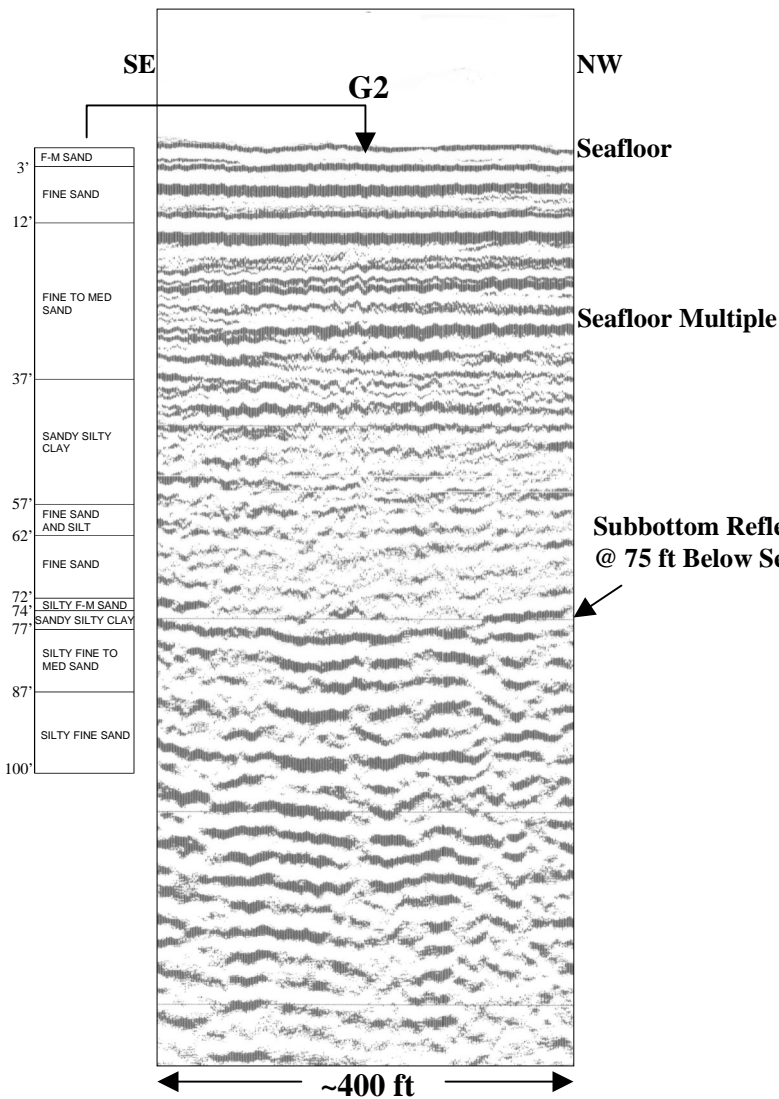
Sediment Boring ID	SB-G2
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1,686,562.71 E 193,634.35 N

Coordinates are in feet and referenced to the Massachusetts State Plane Coordinate System, Island Zone (2002), NAD83

1,686,539.21 E 193,621.25 N

Boring location



Survey Information

Data Collection Date	6/17/03
Line Number	40
Run Number	14
Nearest Event Number	414
Water Depth (MLLW, ft)	17.3

Acoustical Data Quality

Sea State ¹	1
Penetration ²	1
Reflectivity ³	1
Overall Interpretation ⁴	1

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GEOTECHNICAL BORING CORRELATED TO GEOPHYSICAL DATA

Wind Turbine Location*	J5
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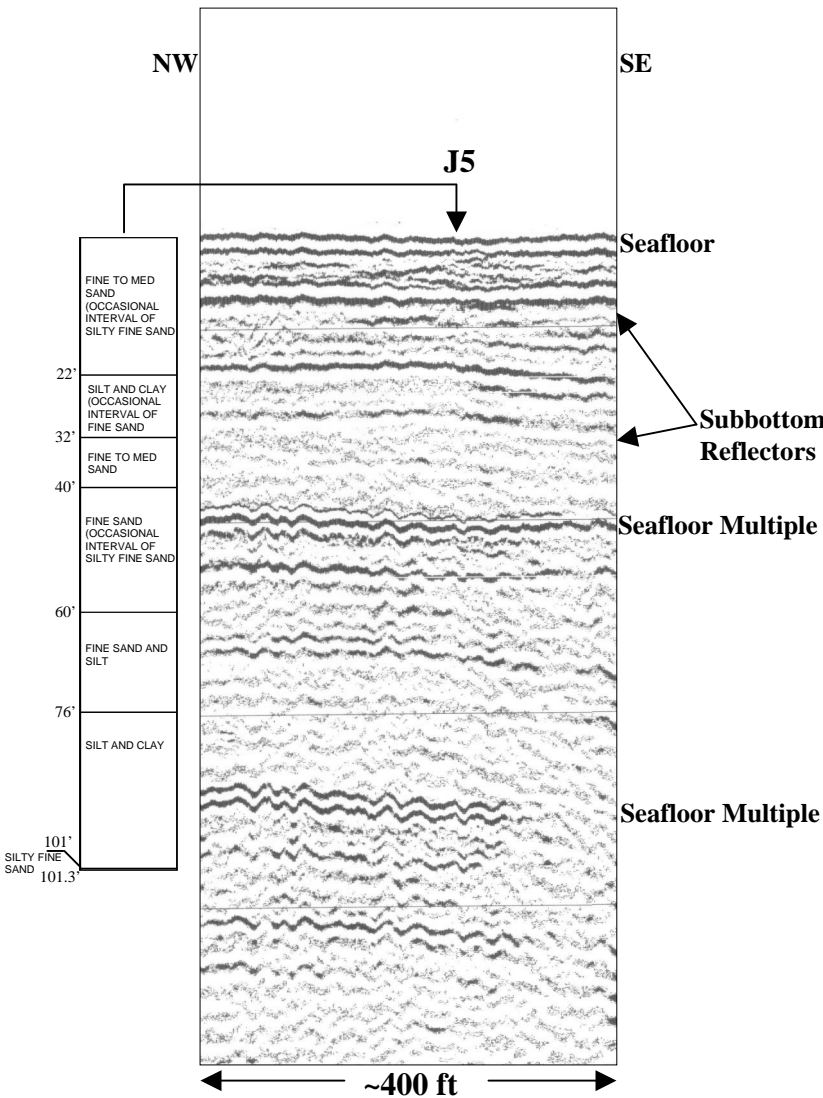
Sediment Boring ID	SB-J5
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1,698,926.93 E 188,966.89 N

Coordinates are in feet and referenced to the Massachusetts State Plane Coordinate System, Island Zone (2002), NAD83

1,698,976.89 E 188,990.64 N

Boring location



Survey Information

Data Collection Date	6/23/03
Line Number	49
Run Number	32
Nearest Event Number	1602
Water Depth (MLLW, ft)	41.7

Acoustical Data Quality

Sea State ¹	1
Penetration ²	2
Reflectivity ³	2
Overall Interpretation ⁴	2

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**GEOTECHNICAL BORING CORRELATED
TO GEOPHYSICAL DATA**

Wind Turbine Location*	J13
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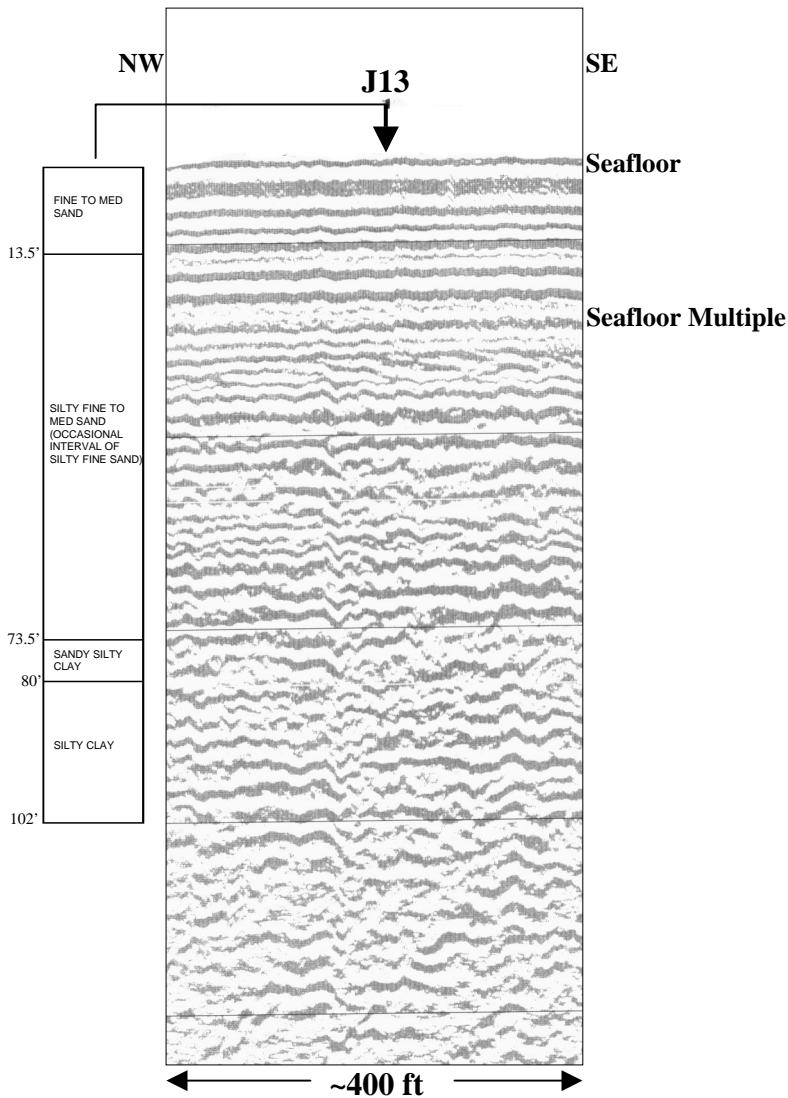
Sediment Boring ID	SB-J13
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1,705,783.09 E 173,843.22 N

Coordinates are in feet and referenced to the Massachusetts State Plane Coordinate System, Island Zone (2002), NAD83

1,705,741.79 E 173,856.06 N

Boring location



Survey Information

Data Collection Date	6/18/03
Line Number	58
Run Number	20
Nearest Event Number	889
Water Depth (MLLW, ft)	24.1

Acoustical Data Quality

Sea State ¹	1
Penetration ²	1
Reflectivity ³	1
Overall Interpretation ⁴	1

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