Appendix 5.1-A

Geotechnical Borings
Correlated to Geophysical Data

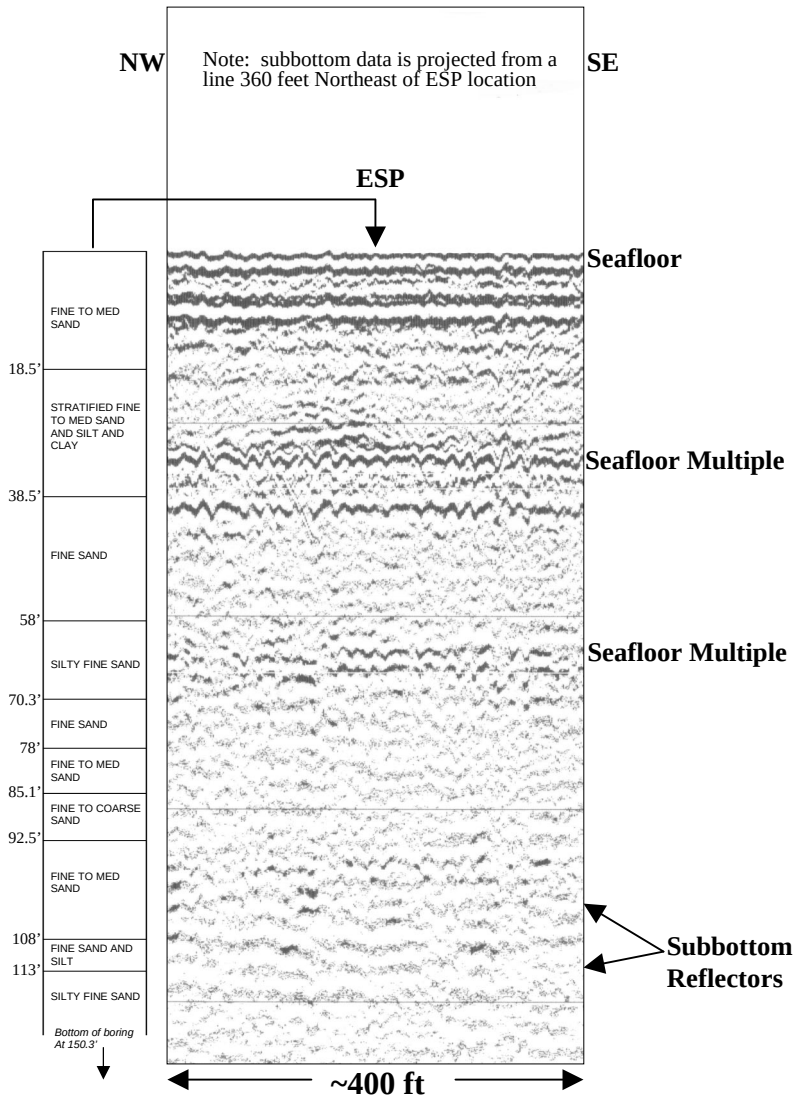
GEOTECHNICAL BORING CORRELATED TO GEOPHYSICAL DATA

Electrical Service Platform Location*	ESP

Sediment Boring ID	SB-01

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.

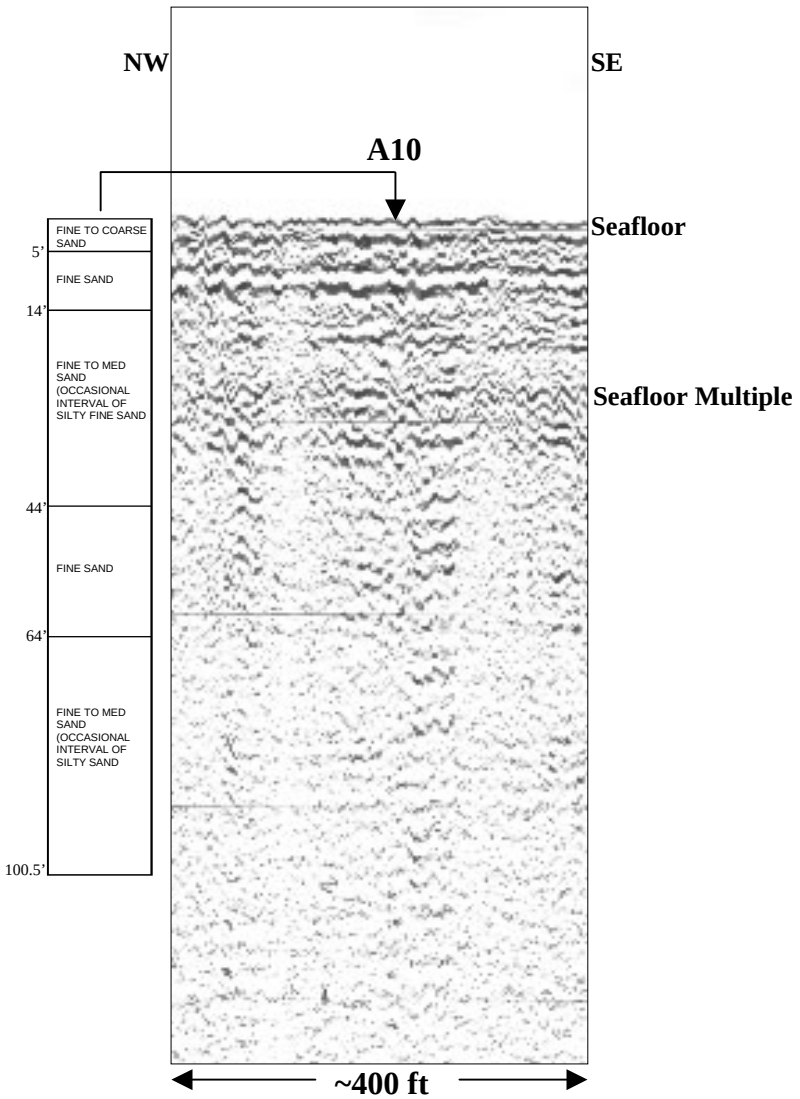
GEOTECHNICAL BORING CORRELATED TO GEOPHYSICAL DATA

Wind Turbine Location*	A10

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

Sediment Boring ID	SB-A10

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*

[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-A10 advanced in October 2002.

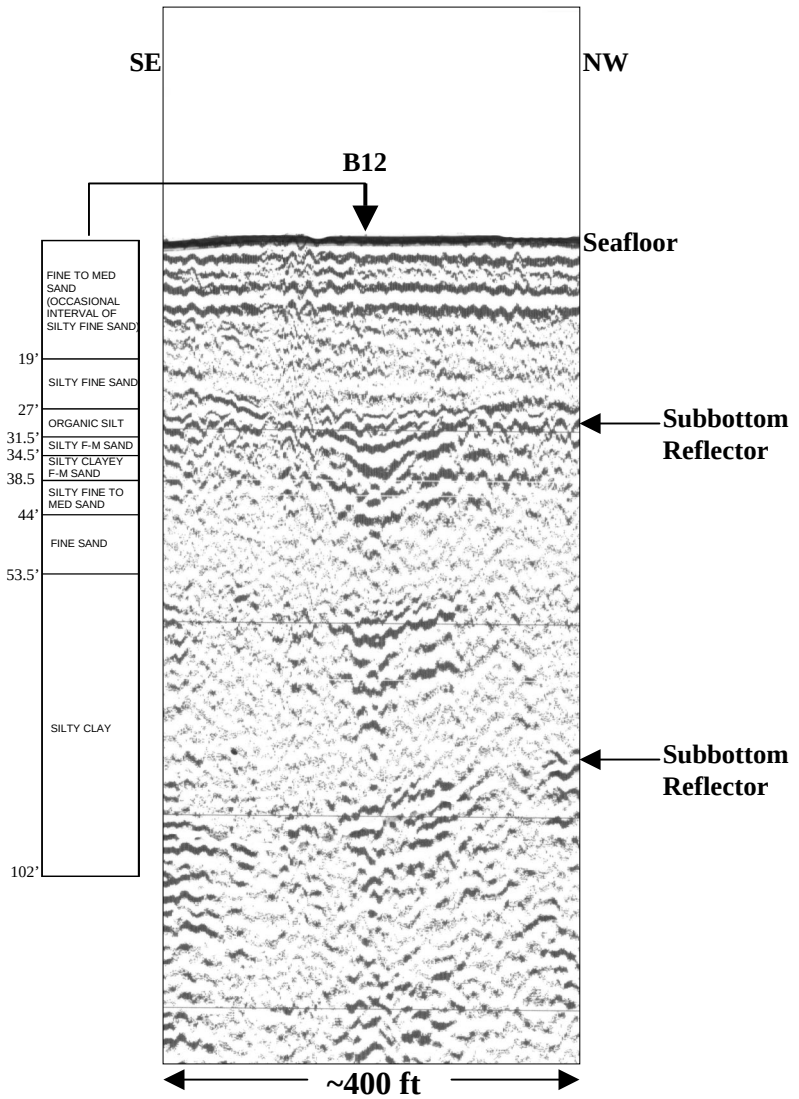
GEOTECHNICAL BORING CORRELATED TO GEOPHYSICAL DATA

Wind Turbine Location*	B12

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

Sediment Boring ID	SB-B12

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**

* *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-B12 advanced in October 2002.

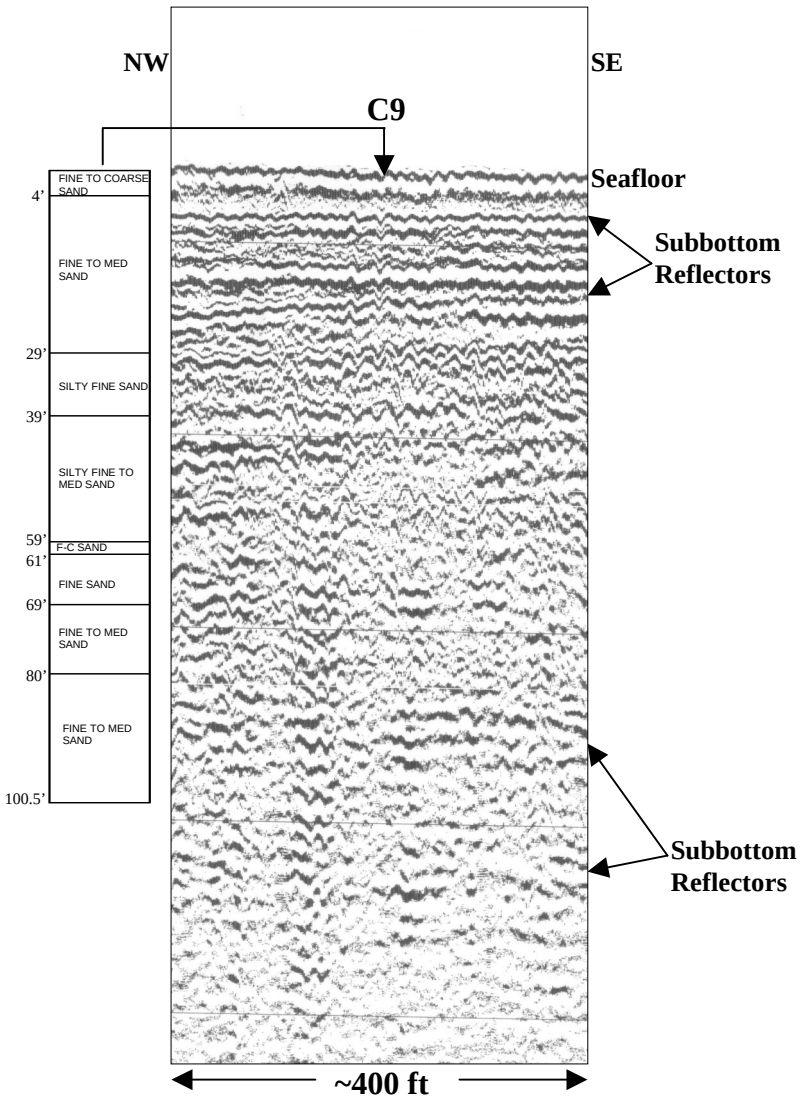
GEOTECHNICAL BORING CORRELATED TO GEOPHYSICAL DATA

Wind Turbine Location*	C9

Sediment Boring ID	SB-C9

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**

** 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-C9 advanced in October 2002.

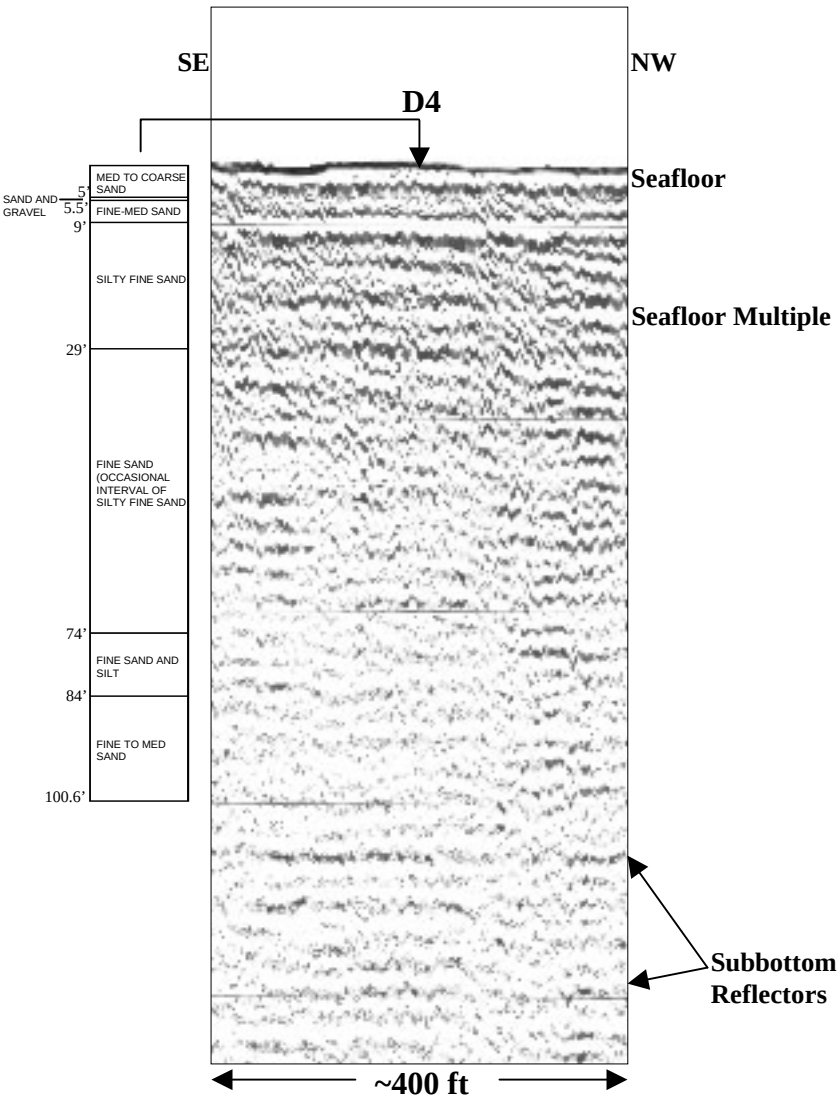
GEOTECHNICAL BORING CORRELATED TO GEOPHYSICAL DATA

Wind Turbine Location*	D4

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

Sediment Boring ID	SB-D4

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**

* *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-D4 advanced in October 2002.

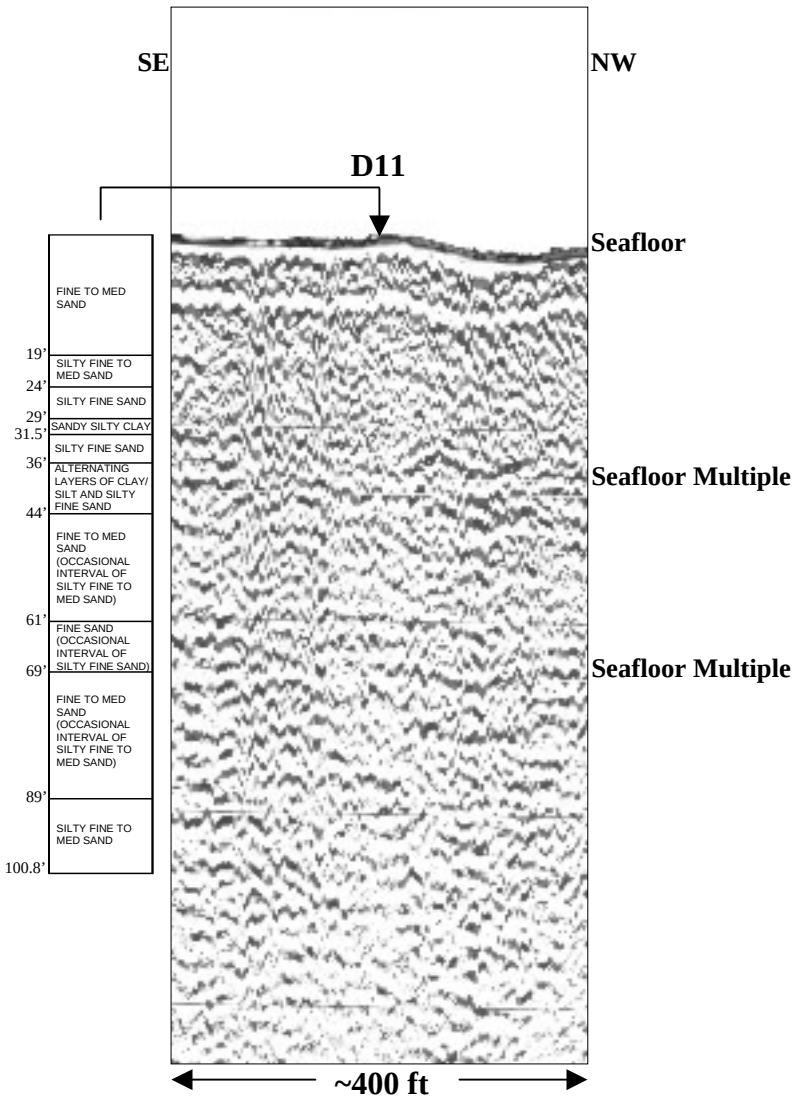
GEOTECHNICAL BORING CORRELATED TO GEOPHYSICAL DATA

Wind Turbine Location*	D11

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

Sediment Boring ID	SB-D11

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**

* *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-D11 advanced in October 2002.

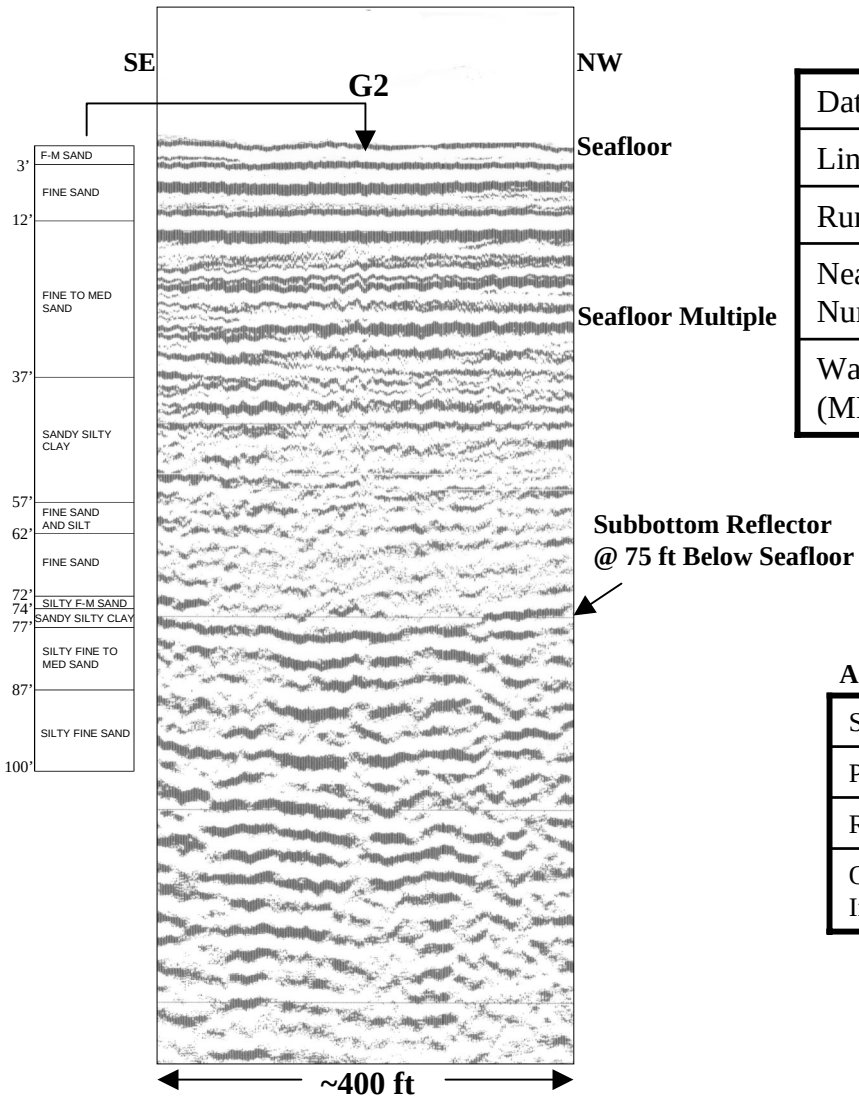
GEOTECHNICAL BORING CORRELATED TO GEOPHYSICAL DATA

Wind Turbine Location*	G2

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

Sediment Boring ID	SB-G2

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**

* *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-G2 advanced in October 2002.

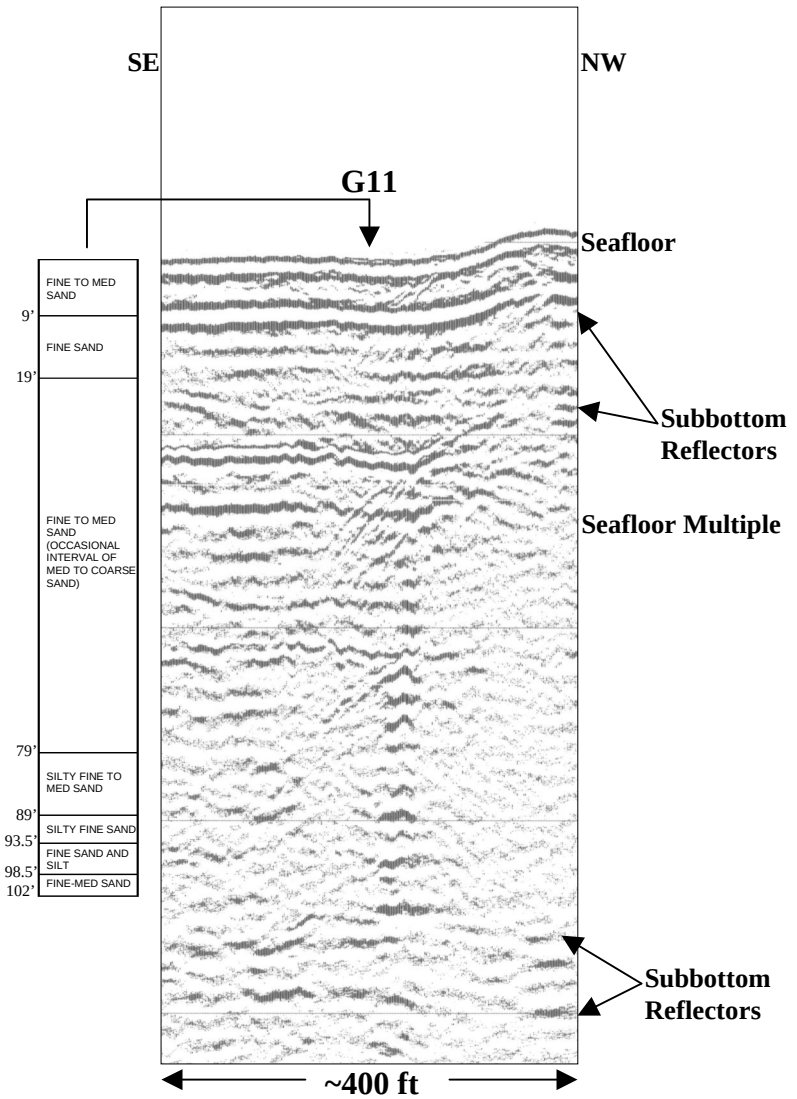
GEOTECHNICAL BORING CORRELATED TO GEOPHYSICAL DATA

Wind Turbine Location*	G11

1,694,277.48 E 176,620.38 N
Coordinates are in feet and referenced to the Massachusetts State Plane Coordinate System, Island Zone (2002), NAD83

Sediment Boring ID	SB-G11

1,694,262.55 E 176,639.06 N
Boring location



Survey Information

Data Collection Date	**6/17/03**
Line Number	**40**
Run Number	**14**
Nearest Event Number	**507**
Water Depth (MLLW, ft)	**29.7**

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-G11 advanced in October 2002.

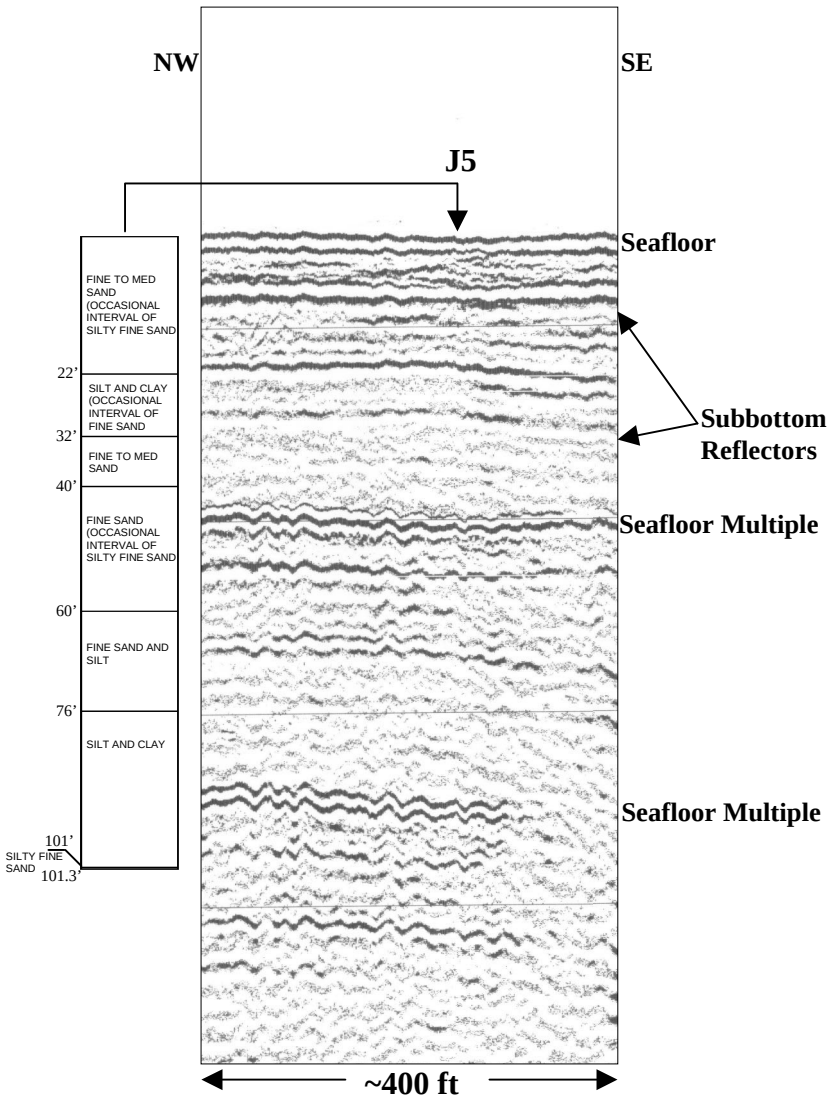
GEOTECHNICAL BORING CORRELATED TO GEOPHYSICAL DATA

Wind Turbine Location*	J5

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

Sediment Boring ID	SB-J5

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**

* *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-J5 advanced in October 2002.

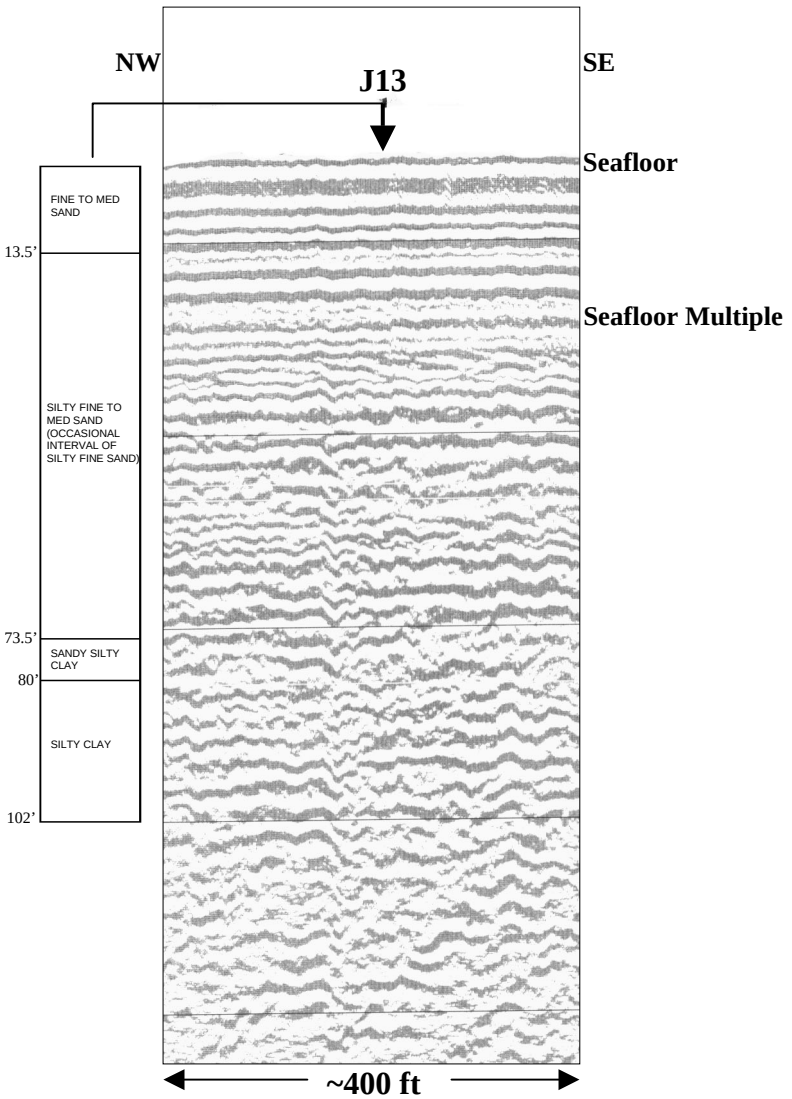
GEOTECHNICAL BORING CORRELATED TO GEOPHYSICAL DATA

Wind Turbine Location*	J13

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

Sediment Boring ID	SB-J13

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**

* *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)*

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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-J13 advanced in October 2003.