GEOLOGICAL SURVEY OF ALABAMA

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Appendices

GEOLOGIC AND ENVIRONMENTAL CHARACTERIZATION AND NEAR-TERM LEASE POTENTIAL OF AN OFFSHORE SAND RESOURCE SITE FOR USE IN BEACH NOURISHMENT PROJECTS ON DAUPHIN ISLAND, ALABAMA

by

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The views and conclusions contained in this document are those of the authors and should not be interpreted as necessarily representing the official policies, either express or implied, of the U.S. government.

All reviewers of this report should satisfy themselves as to the accuracy of all

data, maps, and interpretations made.

EXPLANATION OF PATTERNS AND SYMBOLS

SEDIMENT TYPES

SAND

CLAYEY SAND

SILTY SAND

CLAYEY SILT

SAND-SILT-CLAY

CLAY

SANDY CLAY

SILTY CLAY

PEAT

OYSTER BIOSTROME

CONTACTS

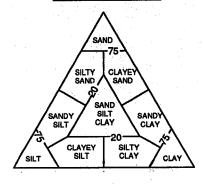
- SHARP

— — GRADATIONAL

SAMPLE INDEX

310 - SEDIMENT SAMPLE NOTE: Mean grain size and texture graphs on vibracore columnar sections extend only to lowest sample in vibracore.

SEDIMENT TEXTURE NOMENCLATURE



ACCESSORIES

OYSTER SHELL

ARTICULATED PELECYPOD

DISARTICULATED PELECYPOD

SHELL FRAGMENT

PEBBLE

GRANULE

ECHINOID FRAGMENT

PEAT BALL

人 ROOTS

♥ ORGANIC MATTER

RIP UP CLAST

SEDIMENTARY STRUCTURES

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SAND POCKET

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CLAY POCKET

£3

CLAYEY SAND POCKET

SHELL POCKET

5

MUD BURROW

61

SAND BURROW

CLAY DRAPE GRADED BED

HORIZONTAL LAMINATIONS

BIOTURBATION INDEX*

- No bioturbation recorded; all original sedimentary structures preserved.
- (2) Discrete, isolated trace fossils; up to 10% of original bedding disturbed.
- (3) Approximately 10 to 40% of original bedding disturbed.
 Burrows are generally isolated, but locally overlap.
 (4) Last vestiges of bedding discernable; approximately 40
- (4) Last vestiges of bedding discernable; approximately 40 to 60% disturbed. Burrows overlap and are not always well defined.
- (5) Bedding is completely disturbed, but burrows are still discrete in places and the fabric is not mixed.
- (6) Bedding is nearly or totally homogenized.

^{*(}Droser and Bottjer, 1986)

APPENDIX A

COLUMNAR SECTIONS OF EEZ SAND RESOURCE VIBRACORES AND FOUNDATION BORINGS

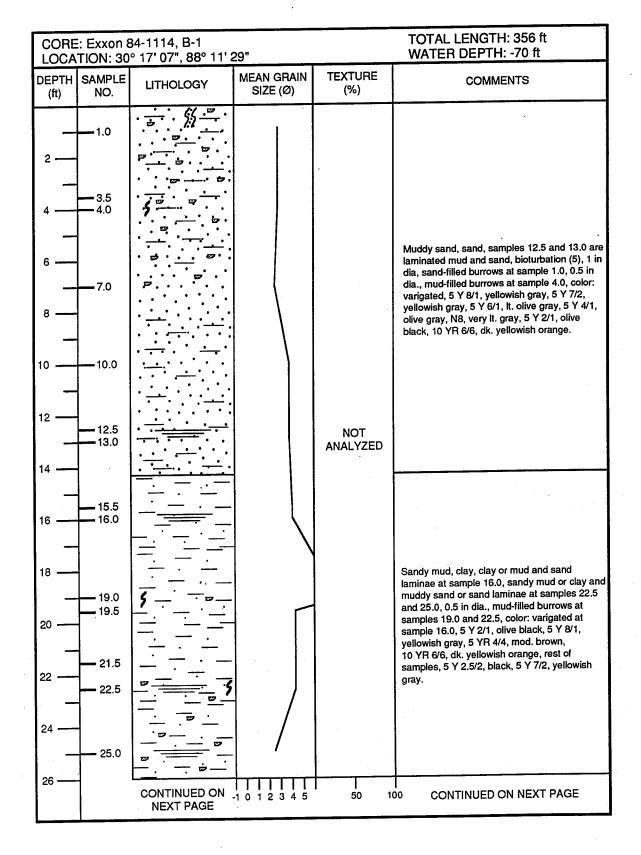


Figure A-1.--Columnar section of EEZ boring Exxon 84-1114, B-1.

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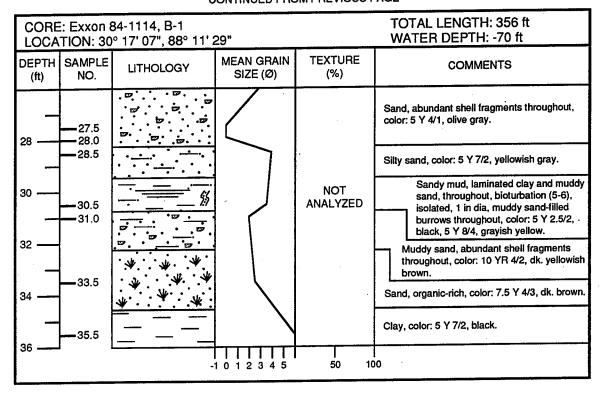


Figure A-1.--Columnar section of EEZ boring Exxon 84-1114, B-1.

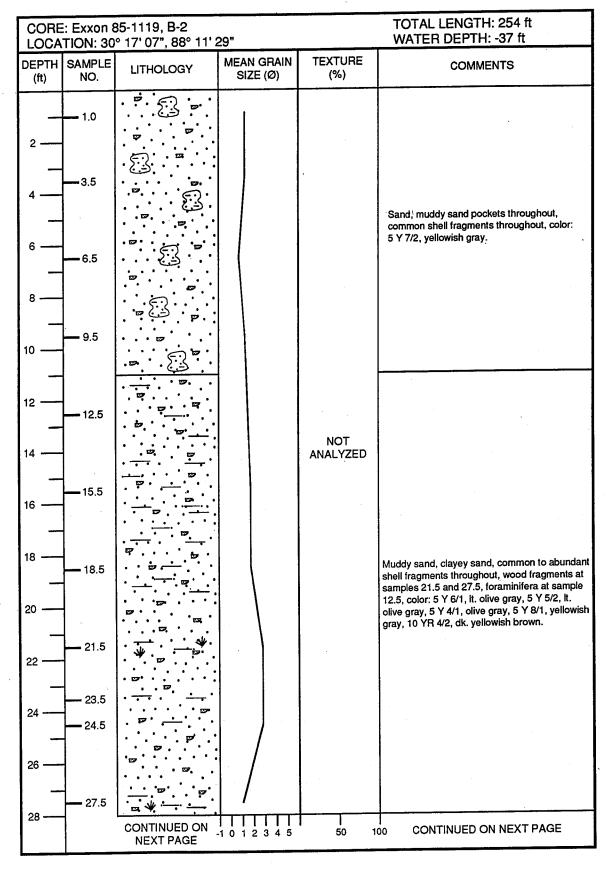


Figure A-2.--Columnar section of EEZ boring Exxon 85-1119, B-2.

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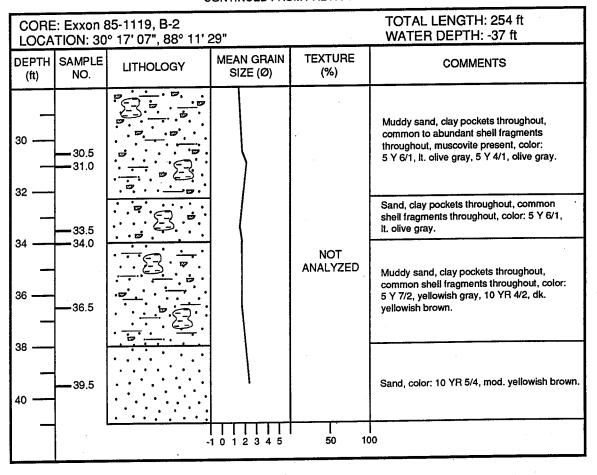


Figure A-2.--Columnar section of EEZ boring Exxon 85-1119, B-2.

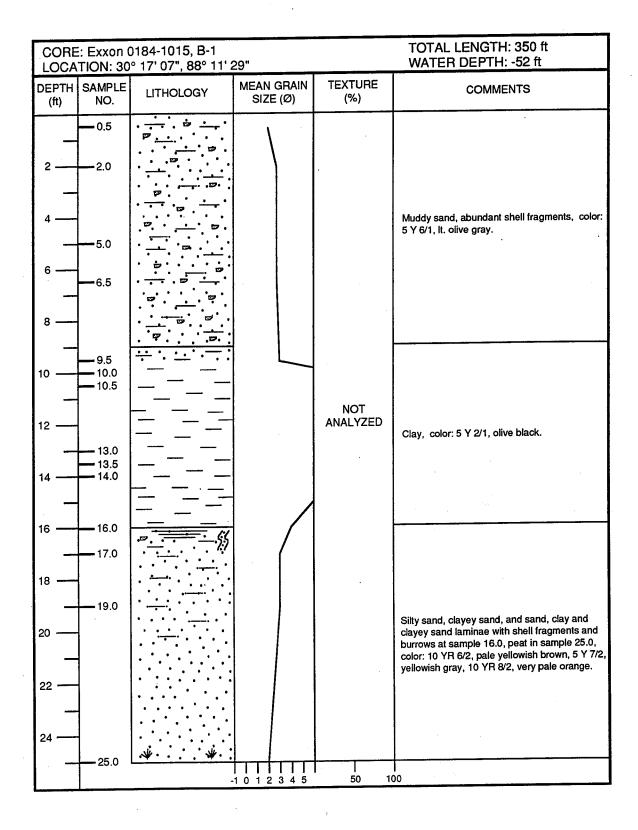


Figure A-3.--Columnar section of EEZ boring Exxon 0184-1015, B-1.

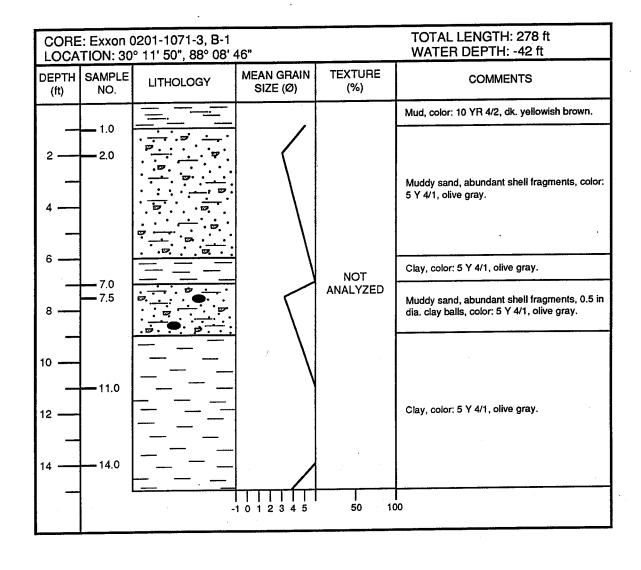


Figure A-4.--Columnar section of EEZ boring Exxon 0201-1071-3, B-1.

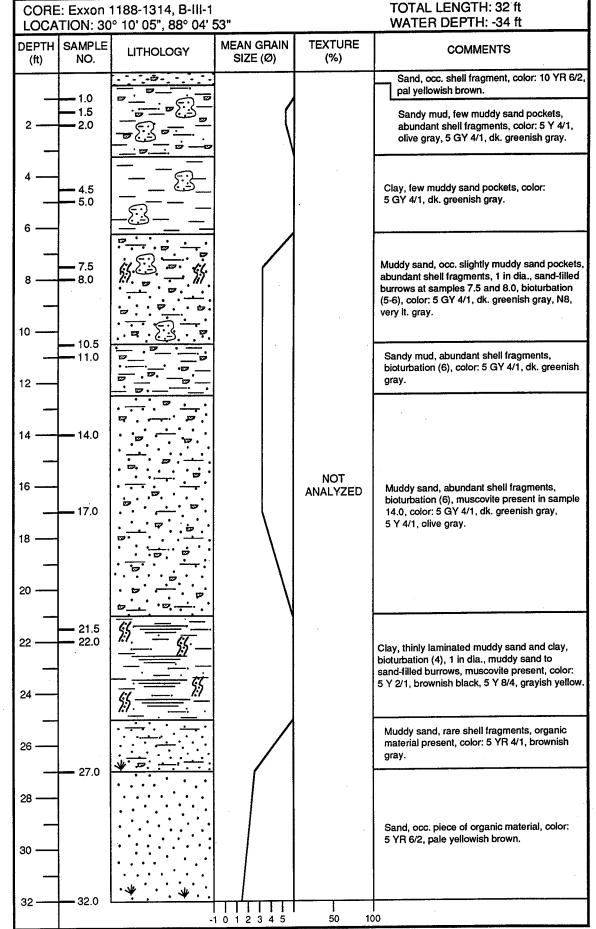


Figure A-5.--Columnar section of EEZ boring Exxon 1188-1314, B-III-1.

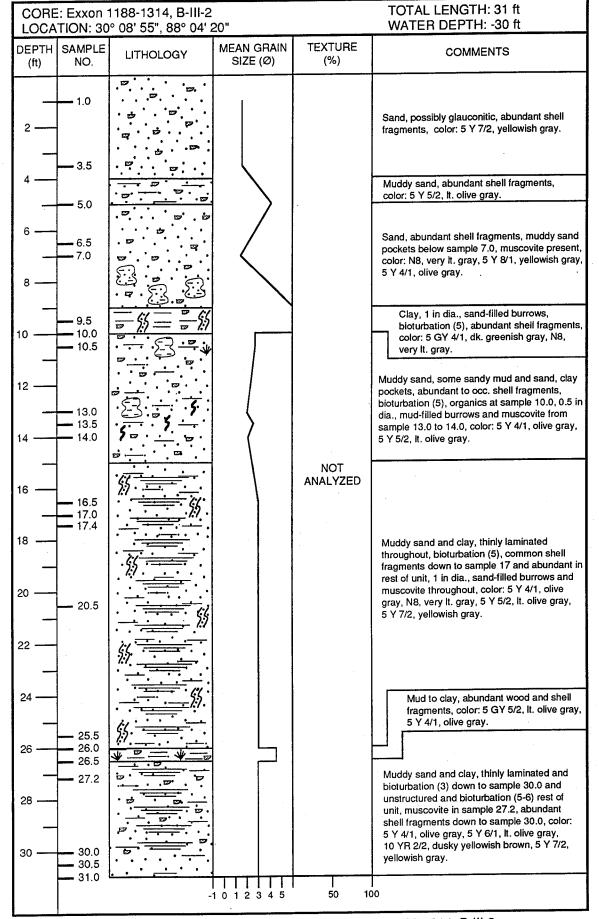


Figure A-6.--Columnar section of EEZ boring Exxon 1188-1314, B-III-2.

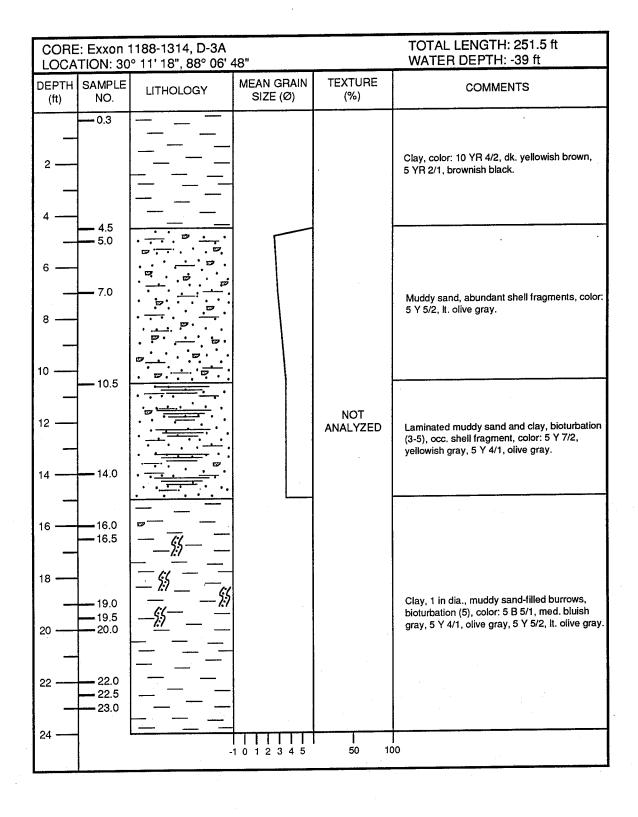


Figure A-7.--Columnar section of EEZ boring Exxon 1188-1314, D-3A.

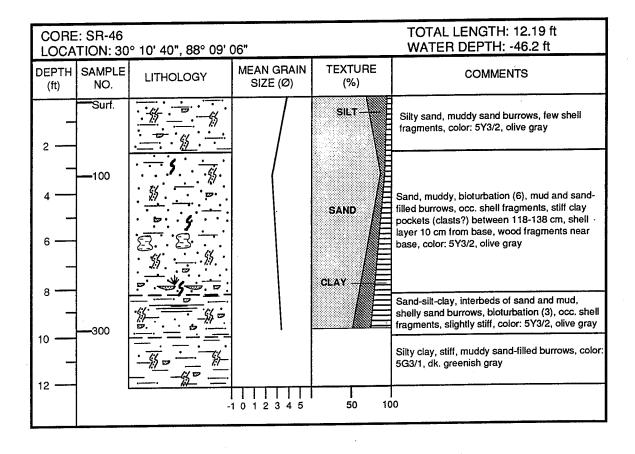


Figure A-8.--Columnar section of EEZ vibracore SR-46.

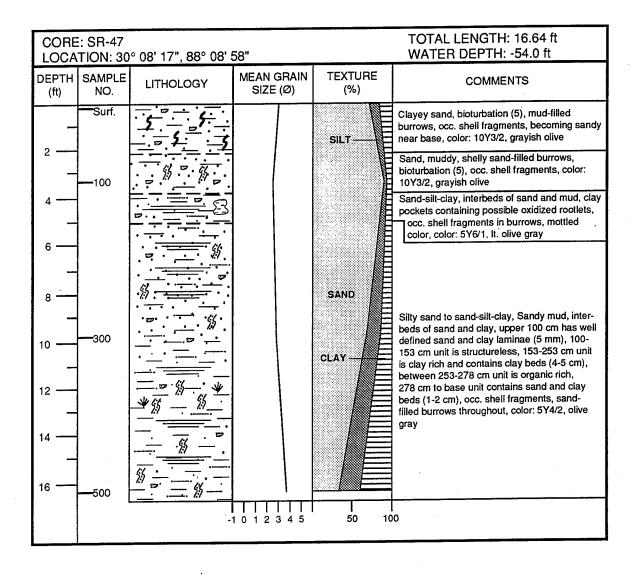


Figure A-9.--Columnar section of EEZ vibracore SR-47.

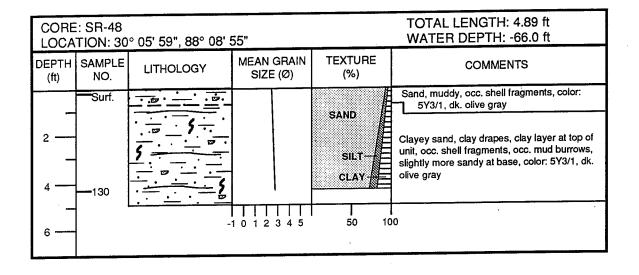


Figure A-10.--Columnar section of EEZ vibracore SR-48.

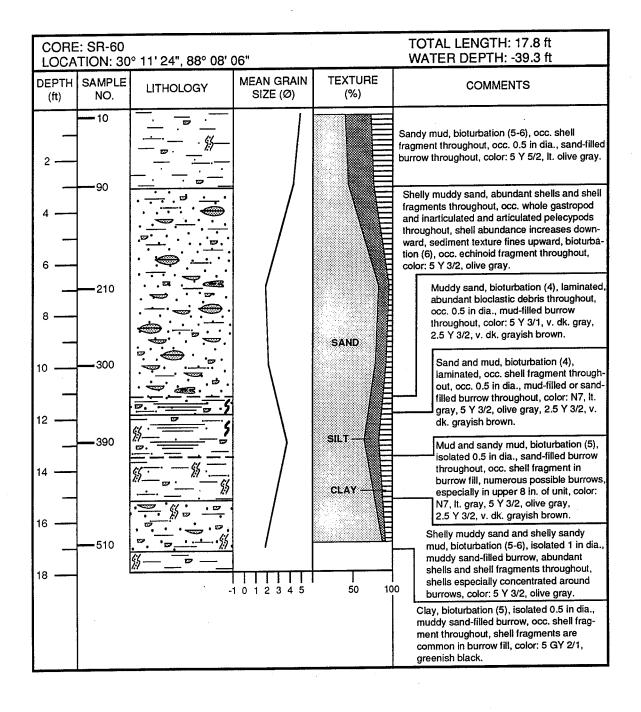


Figure A-11.--Columnar section of EEZ vibracore SR-60.

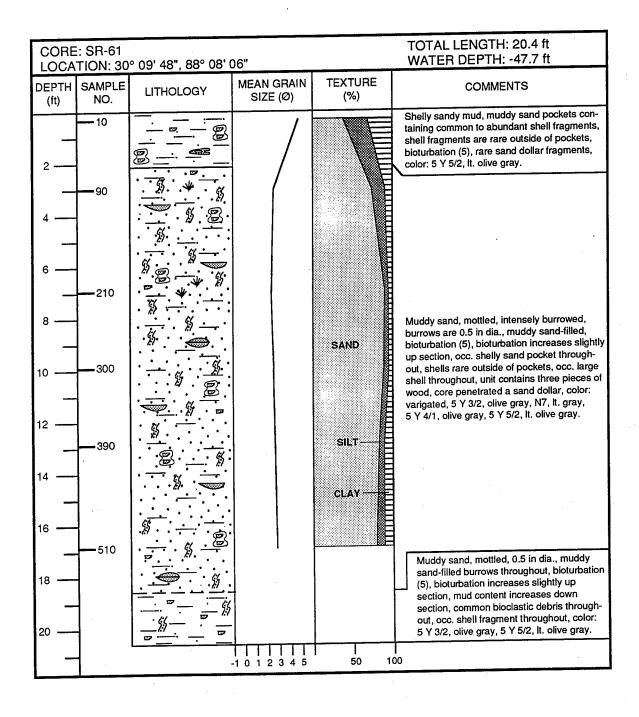


Figure A-12.--Columnar section of EEZ vibracore SR-61.

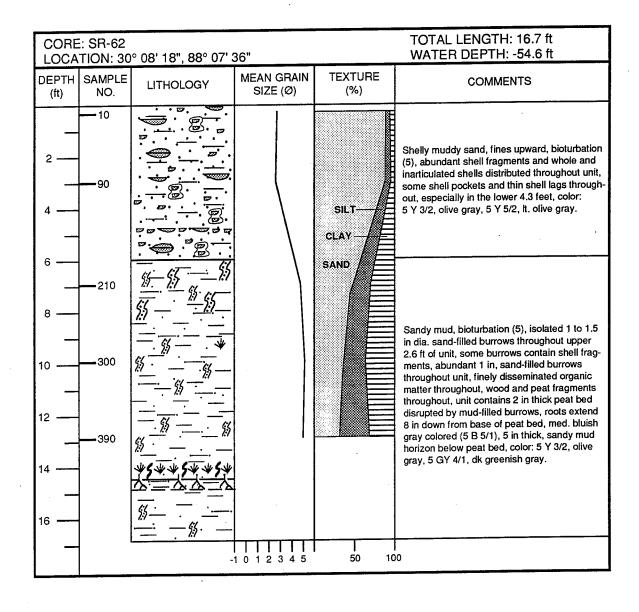


Figure A-13.--Columnar section of EEZ vibracore SR-62.

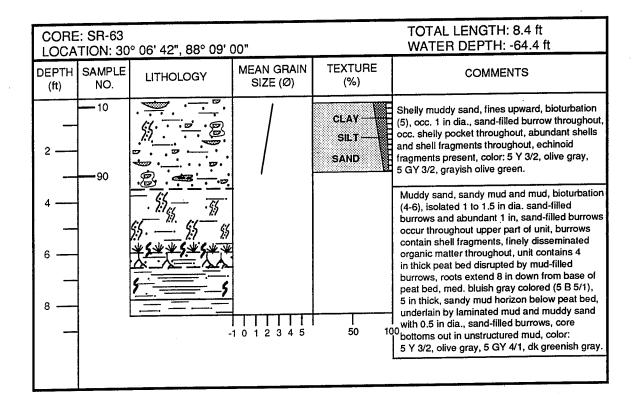


Figure A-14.--Columnar section of EEZ vibracore SR-63.

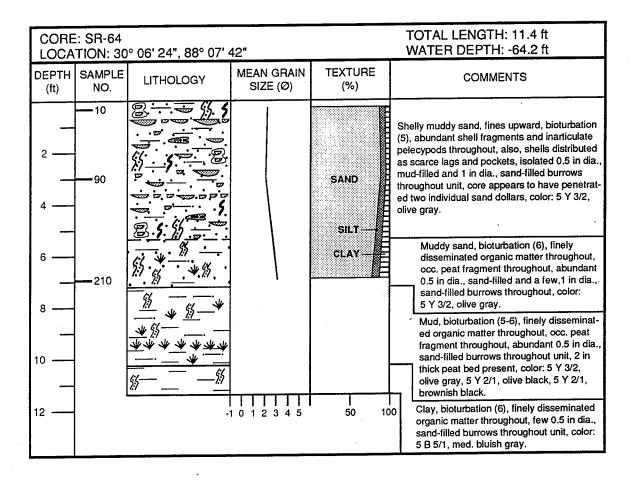


Figure A-15.--Columnar section of EEZ vibracore SR-64.

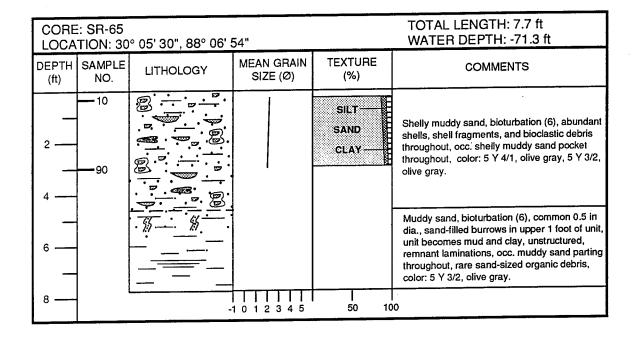


Figure A-16.--Columnar section of EEZ vibracore SR-65.

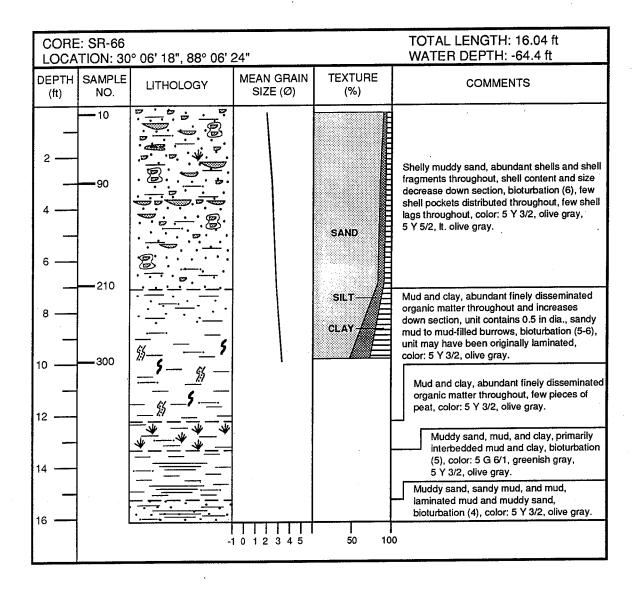


Figure A-17.--Columnar section of EEZ vibracore SR-66.

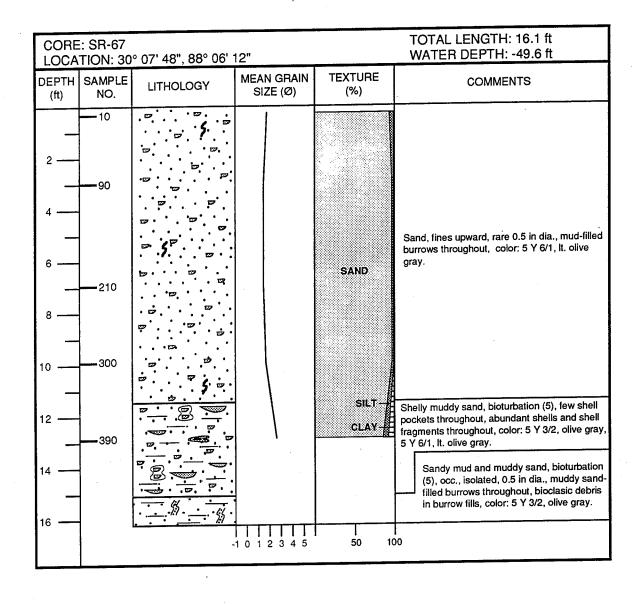


Figure A-18.--Columnar section of EEZ vibracore SR-67.

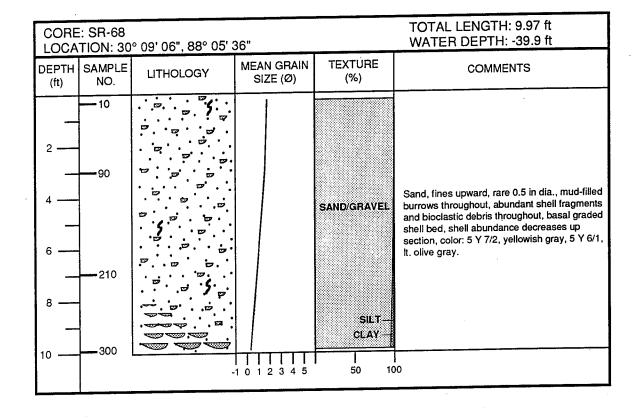


Figure A-19.--Columnar section of EEZ vibracore SR-68.

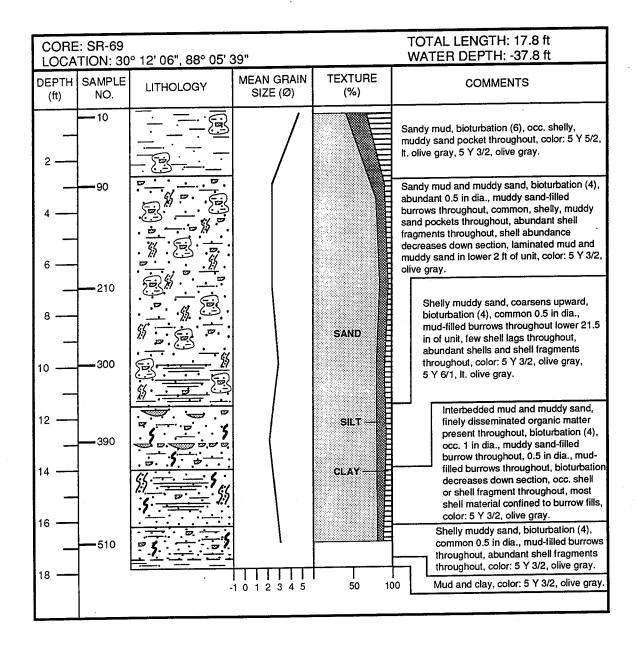


Figure A-20.--Columnar section of EEZ vibracore SR-69.

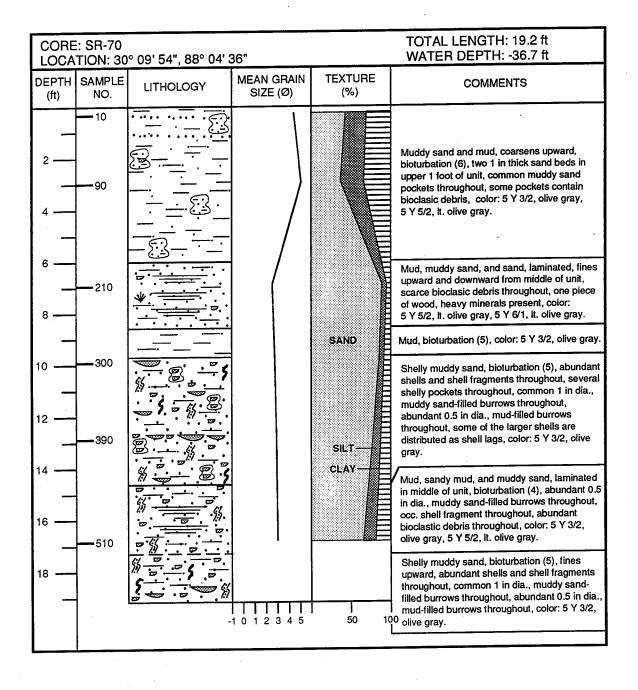


Figure A-21.--Columnar section of EEZ vibracore SR-70.

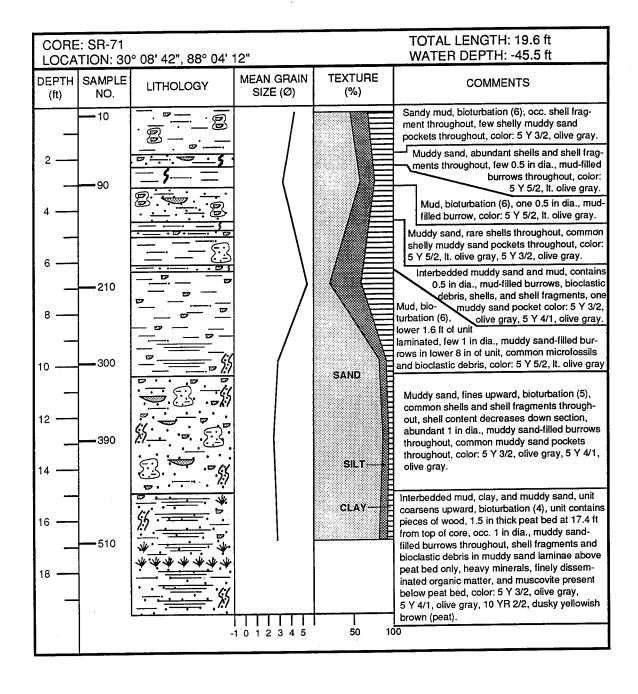


Figure A-22.--Columnar section of EEZ vibracore SR-71.

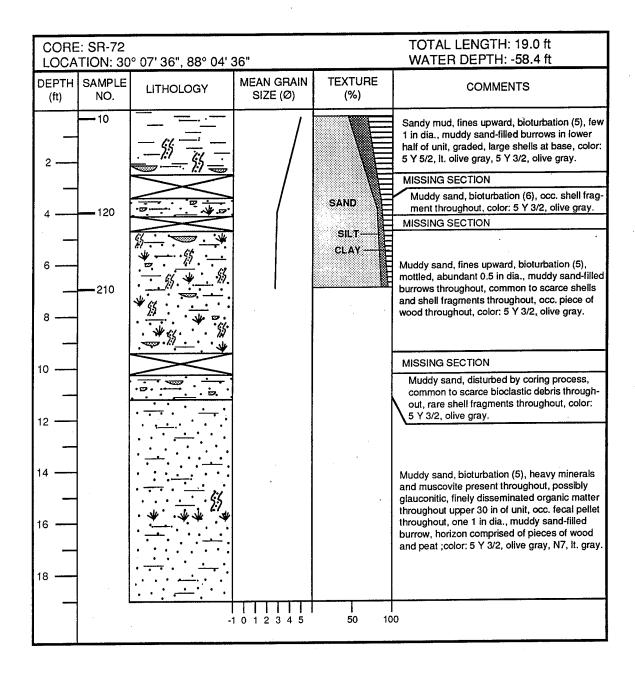


Figure A-23.--Columnar section of EEZ vibracore SR-72.

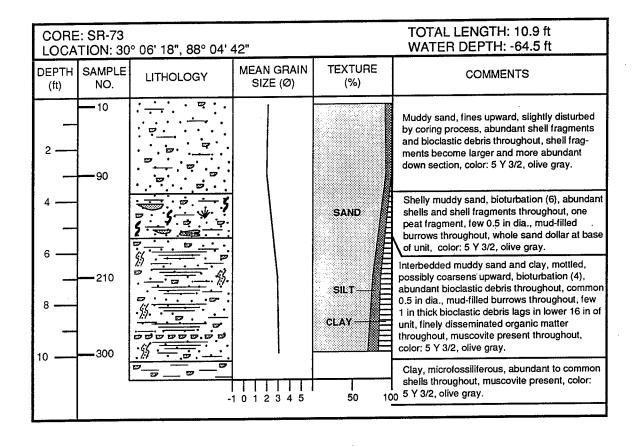


Figure A-24.--Columnar section of EEZ vibracore SR-73.

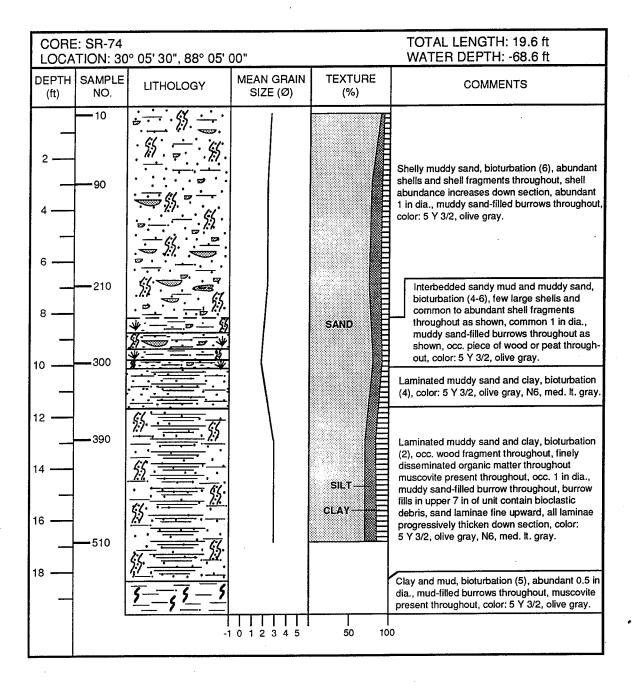


Figure A-25.--Columnar section of EEZ vibracore SR-74.