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CRUISE REPORT
ATLANTIC TWIN 84
MINERALS MANAGAEMENT SERVICE/STATE OF CONNECTICUT COOPERATIVE PROGRAM

Vessel:	R/V Atlantic Twin (Alpine Ocean Seismic Survey, Inc.)
Cruise Number:	AT-84-1
Parent Project:	MMS/Coastal States Co-op. (14-12-0001-30115) (not USGS)
Funding Agency:	Minerals Management Service (MMS)
Contract Period:	January 1, 1984 - September 28, 1985
Area of Operations:	Long Island Sound, Block Island Sound, Narragansett Bay, Rhode Island Sound, Massachusetts Bay, New Hampshire Coast.
Cruise Dates:	26 Sept. 84 - 19 Oct. 84

Cruise Schedule:

26 Sept. - 29 Sept.	Long Island Sound
29 Sept.	Engine failure - resume cruise October 5, 1984
5 Oct. - 6 Oct.	Long Island Sound
7 Oct.	Block Island Sound
8 Oct.	Narragansett Bay/Block Island Sound
9 Oct.	Rhode Island Souund/Transit to Woods Hole, Mass. (offload cores)
10 Oct.	Transit to Portsmouth, New Hampshire
11 Oct. - 12 Oct.	New Hampshire Coast
13 Oct. - 18 Oct.	Massachusetts Bay
19 Oct.	Transit to Woods Hole, Mass. (offload cores)
	END CRUISE

Chief Scientist	Ralph S. Lewis - Connecticut Geological and Natural History Survey
Cruise Data Contact:	Ralph S. Lewis (203) 446-1020, Ext. 213 or 214

Scientific Party:

Ralph Lewis (Conn.)	26 Sept. - 12 Oct.	3+9= 2 days
Nancy Friedrich (R.I.)	26 Sept. - 8 Oct.	3+4= 7
Francis Birch (N.H.)	11 Oct. - 12 Oct.	2
Gerald Edwards (Mass/USGS)	10 Oct. - 19 Oct.	10
		31

Ship's Captain:	Wally Van Horn (Alpine)
Purpose of Cruise:	To obtain vibracores at selected targets (46) in the coastal waters of Connecticut, Rhode Island, Massachusetts and New Hampshire.

Navigation: Core sites were located using LORAN-C positioning (a coplete record of pertinent navigation data is on file with the cores at Woods Hole.

Seismic System: (Supplied by Alpine with funding from U.S.G.S.)
Sparker Innerspace Technology (Model 201) 20 joules
Recorder: Grifft (Model 4000T)
Hydrophone: Innerspace Technology (25 element)

Vibracorer: Alpine 30-foot system

Summary: The states of Connecticut, Rhode Island, Massachusetts and New Hampshire pooled their resources to hire Alpine Ocean Seismic Survey, Inc., to obtain vibracores at forty-six sites of scientific interest. Each state contributed all or a portion of their F.Y. 1983 MMS monies to the pool and each received a number of cores commensurate with their contribution (CT - 14, RI - 6, MA - 14, NH - 12). The four states were fortunate enough to be able to work with the New England Governor's Conference, Inc., which acted as the contracting agent for this project. Although equipment/weather problems caused some delays, the scientific objectives of each participant were met (44 cores were obtained) and the project was a success.

The pooling of individual state resources proved to be a very effective way to obtain a platform and product that the states singly could not have afforded. Each state determined its level of involvement, and the joint effort was a turn-key type contract that provided a mechanism for obtaining cores. Each of the participating states still has an individual responsibility to live up to its subagreement with MMS (in terms of deliverables, etc.). The cores are being curated through the good offices of the United States Geological Survey, Woods Hole, Mass. (U.S.G.S., Office of Marine Geology also provided funding to operate seismic reflection equipment during the cruise). For further information see attachments and/or contact Ralph Lewis, University of Connecticut, Avery Point, Groton, CT 06340.

Vibracore site-location maps attached.

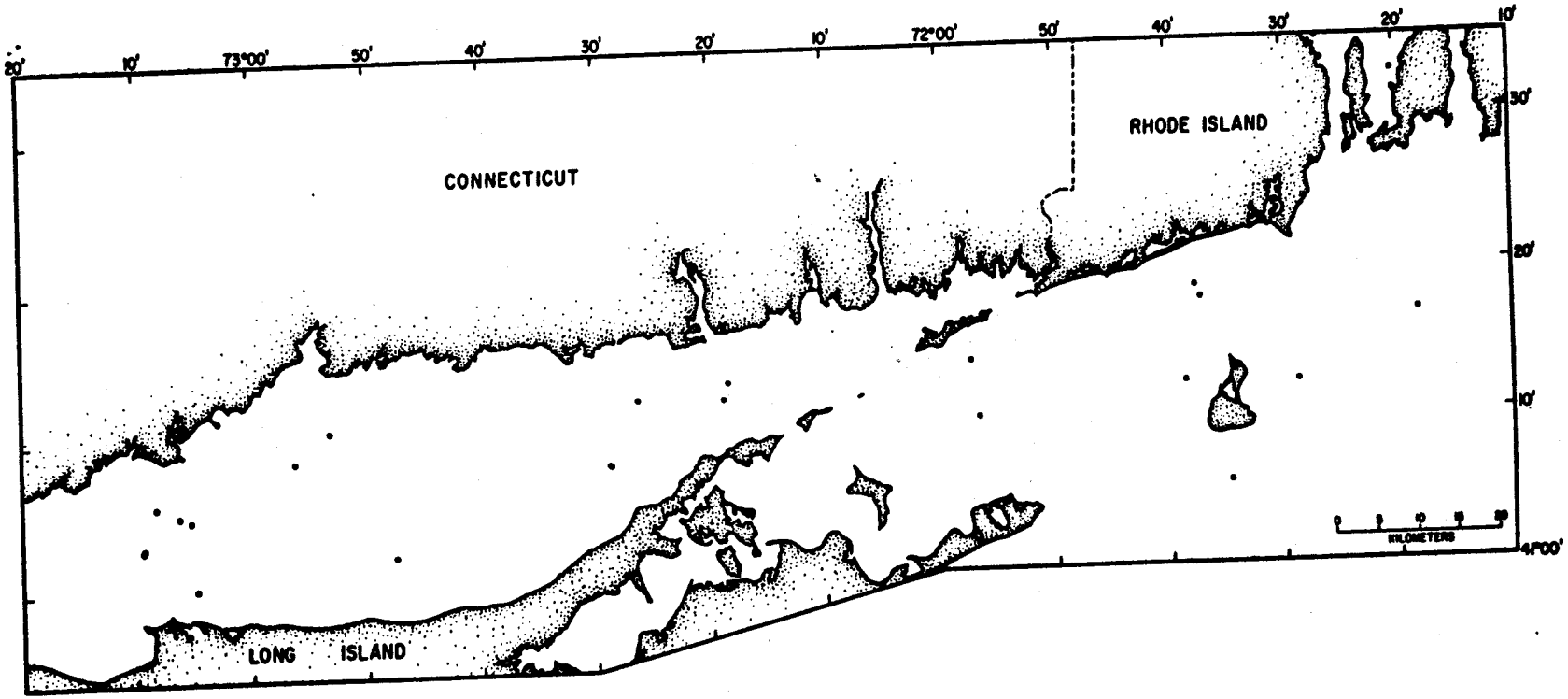

Figure 1. Vibracore locations off Connecticut and Rhode Island.

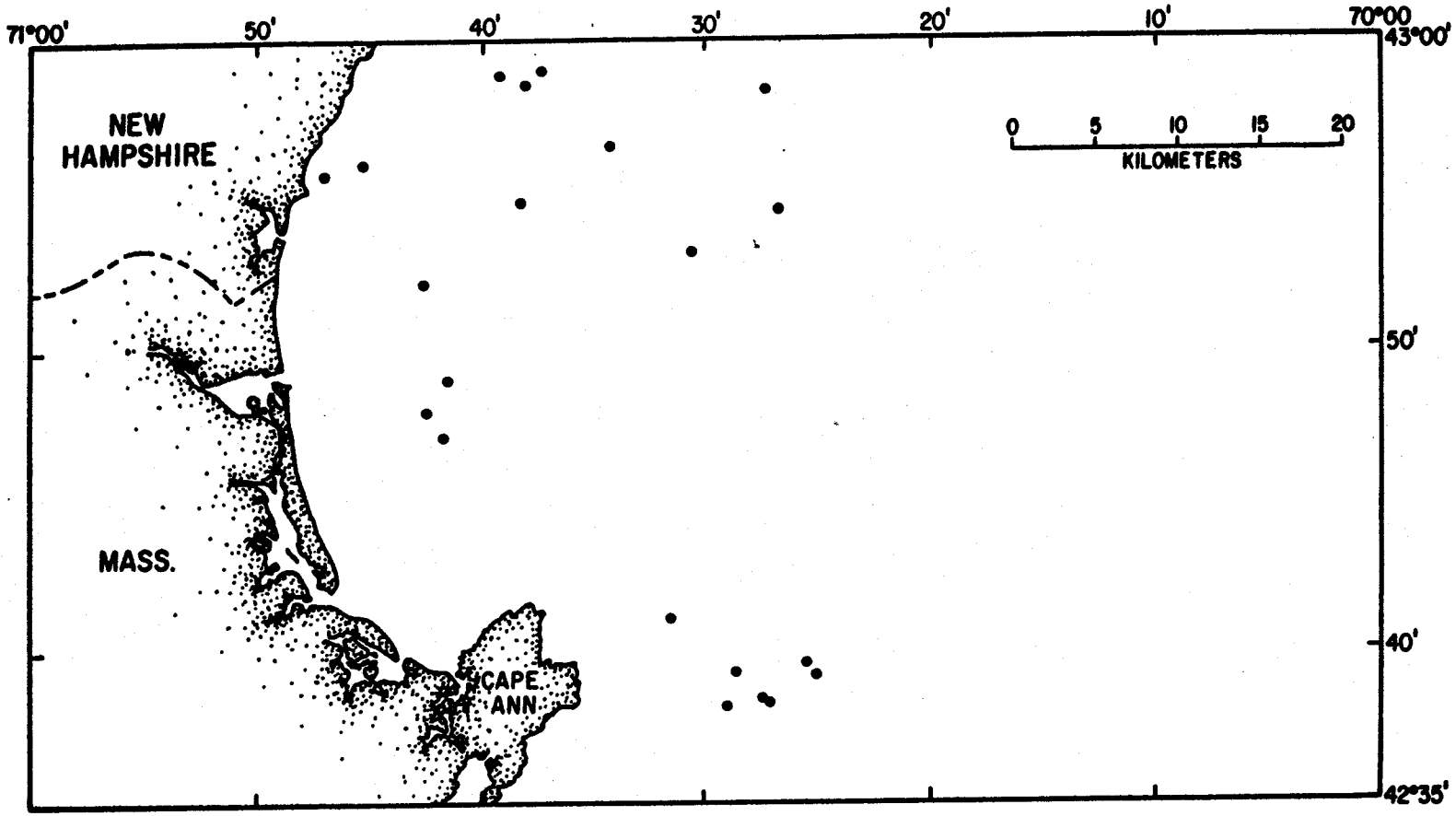

Figure 2. Vibracore locations off Massachusetts and New Hampshire.