



# United States Department of the Interior

GEOLOGICAL SURVEY  
San Juan, Puerto Rico

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85011

## Cruise Report

### Puerto Rico Marine Geology Cooperative Project

Cruise Report : 85-01  
Location : Condado, Ocean Park, Isla Verde  
Dates : 8 - 9 May, 1985  
Research Project : Erosion Study  
Objectives : Locate & vibracore potential sand deposits to be used as borrow sites for beach nourishment projects in the Metropolitan area.  
Vessel : Jean A  
Personnel : Rafael W. Rodriguez = Co-Chief Scientist - USGS  
Richard Webb = Co-Chief Scientist - DNR  
Juan Trias = USGS  
Jose Muñiz = USGS/DNR  
Nelson Espinell = USGS/DNR  
Hector Merced = DNR  
Equipment : Diver-operated vibracorer

Results & Comments: Nine sites were investigated and five cores were obtained.

<u>Station</u>	<u>Latitude(N) / Longitude(W)</u>	<u>Depth(m)</u>	<u>Remarks</u>
1	18.29.18 / 66.04.42	10	Sand:Core VCIV-Q6
2	18.28.20 / 66.04.30	14	Sand:Core VCIV-07
3	18.27.54 / 66.03.39	8	Rocky:Gorgonians
4	18.28.11 / 66.03.32	8	Rocky:Gorgonians
5	18.28.00 / 66.01.36	11	Rocky:Gorgonians
6	18.27.53 / 65.58.32	18	Sand: m thick
7	18.27.37 / 65.58.18	9	Sand:Core VCIV-08
8	18.27.36 / 65.57.53	12	Sand:Core VCIV-09
9	18.27.50 / 66.00.24	4-25	Old river channel

Discussion : Approximately 200,000 m<sup>3</sup> of sand will be needed for beach fill to offer immediate protection and recreational areas in the study area. The coarse moderately sorted sand retrieved in the cores appears to be suitable for use as beach fill. Two small deposits (possible 50,000 m<sup>3</sup> each) were investigated north of Punta Boqueron. One medium sized deposit (possible greater than 100,000 m<sup>3</sup>) was verified to exist in a depression north of Piñones. Sub-bottom seismic profiling and further vibracoring in upcoming months will further define the characteristics of these deposits.

cc: B. Dillon  
T. Aldrich  
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Winget