



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

Received Jul 13, 81

Copied 7/90  
Filed in 7/90

81020

Cruise No.: 81-7 (Second part-after the end of Dominican Republic Project)

Location: Escollo de arena, Vieques Island, P. R.

Date: June 26, 1981

Objective: Make high resolution seismic profiles at different frequencies to determine the best one to use for a future manuscript on that area to be prepared by Jim Trumbull and Juan Luis Trías

Vessel: Research vessel Jean A, total 1 day

Personnel: Juan Luis Trías-Chief scientist  
Greg Miller-Technician

Equipment: Uniboom  
3.5 kh<sub>z</sub>  
Sparker

Schedule:	Day	Time	Place
	June 26	0700-1115	Escollo de arena, Vieques Island, P. R.

Result & comments:

- The different combinations of gear & frequencies were the following:
  - Uniboom 100 joules firing at 1/8 sec  
400-1000 fr.  
1000-2000 fr.  
400-2000 fr.
  - 3.5 kh<sub>z</sub> 2 kw power (no penetration at all)  
pulse width .2 ms  
pulse width .5 ms  
pulse width 1 ms
  - Sparker firing at 1/8 sec  
.1 4 fd  
.2 4 fd  
.6 4 fd
- The scales were 1/8:0-93.8 mt and 1/16:0-46.9 mt (This scale was too cumbersome for accurate data)



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

3. I strongly recommend the uniboom at  $1/8$  sec:400-2000 fr  
or the sparker at  $1/8$  sec
4. Total of 1 boat day, 2 man days