#90005

Cruise Report USGS Marine Geology Project, conducted with the cooperation of the Puerto Rico Department of Natural Resources.

Ship

RV EOS (Puerto Rico Department of Natural Resources)

Parent project

USGS marine geology project - Study of the impact of Hurricane Hugo on the Coastal Resources of Puerto Rico - Poster session to be presented at the June 1990 AAPG meeting in San Francisco, CA.

Funding Agency and Amount

USGS Branch of Atlantic Marine Geology

Contract number
Puerto Rico Marine Geology Project Num. 9470-61053.

Area of operations

Escollo de Arenas - Trailing edge sand bank off the northwest coast of Vieques, Puerto Rico.

Dates and ports

Wednesday, May 2, 1990. Leave Puerto del Rey in Ceiba, PR at 0600 (60°W time meridian). Arrive at area of operations at 0820. Depart area of operations at 1630. Arrive back at Puerto del Rey at 1800.

Chief Scientists

Rafael W. Rodriguez (USGS) and Richard M.T. Webb (USGS)

Names and affiliations of scientific party

Juan L. Trias	-	USGS	- Geologist
Ramon Martinez	-	DNR	- Ship's Captain
Jose Berrios	-	DNR	- Biologist
Jose Caballero	-	DNR	- Biologist
Tito Echevarria	-	DNR	- First mate
Victor Estrada	-	DNR	- Deck Hand

Purpose of cruise

Investigate the morphological changes in the Escollo de Arenas sand bank caused by Hurricane Hugo.

Navigation

Radar

Scientific equipment

Mark IV Recording fathometer, Hydraulic, diver-operated vibracoring apparatus.

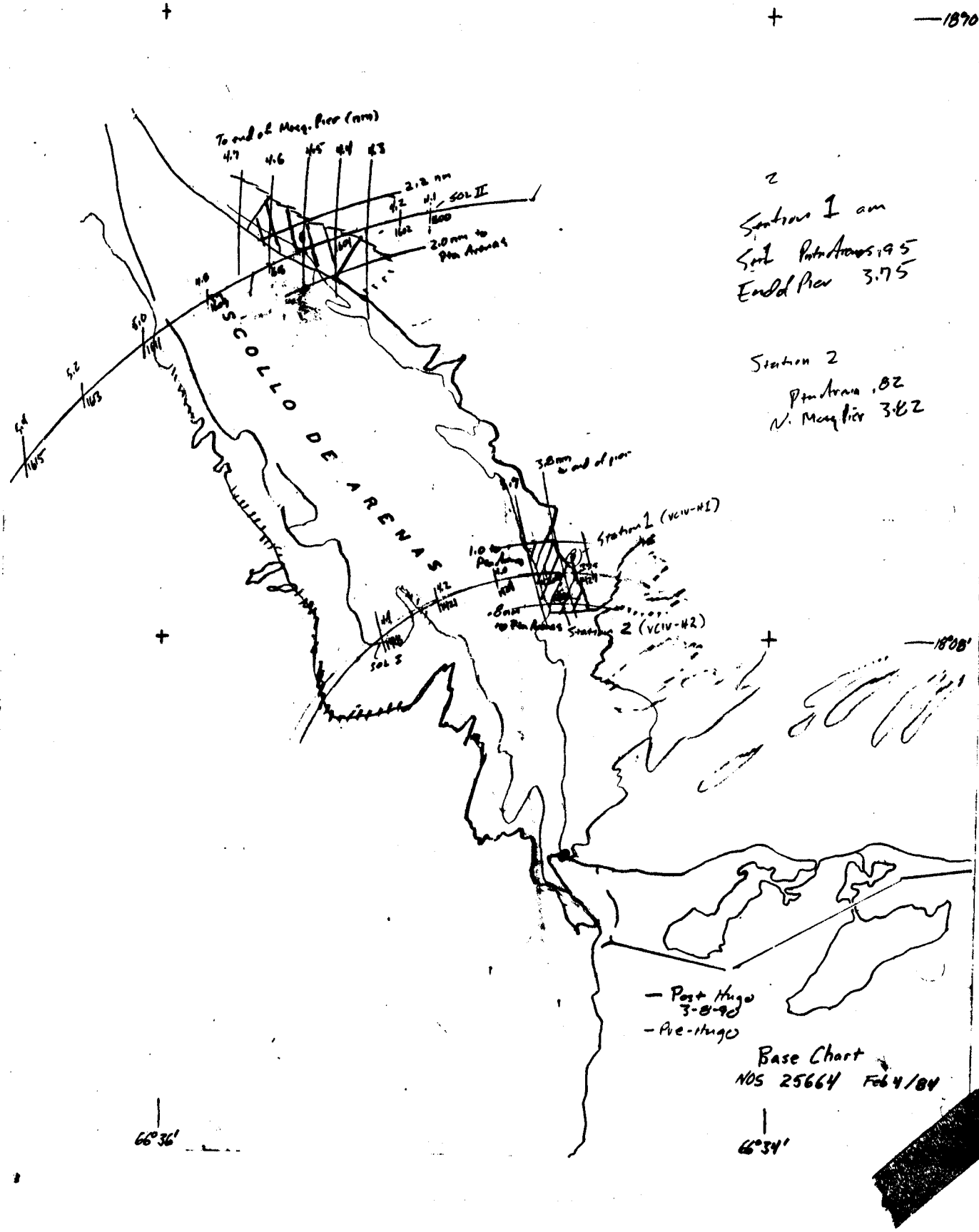
Data

Two cores recovered:

	Depth(m)	Penetrated(cm)	Retained(cm)	Dist (nm) Pta Arenas	Dist Mosq. Pier
VCIV-H1	5	221	160	.95	3.75
VCIV-H2	5	237	104	.82	3.82

Two fathometer runs totaling approximately 1.9 nautical miles

Core locations and track lines on attached chart.


18°10'
18°08'
66°36'
66°34'
SCOLLO DE ARENAS
To end of Mag. Pier (nm)
4.7
4.6
4.5
4.4
4.3
2.2 nm
SOL II
2.0 nm to Pta Arenas
3.8 nm to end of pier
Station 1 (VCIV-H1)
Station 2 (VCIV-H2)
1.0 to Pta Arenas
.8 nm to Pta Arenas
SOL 3
Station 1 am
Sol Pta Arenas .95
End of Pier 3.75
Station 2
Pta Arenas .82
N. Mag Pier 3.82
— Post Hugo 3-8-90
— Pre-Hugo
Base Chart
NOS 25664 Feb 4/84

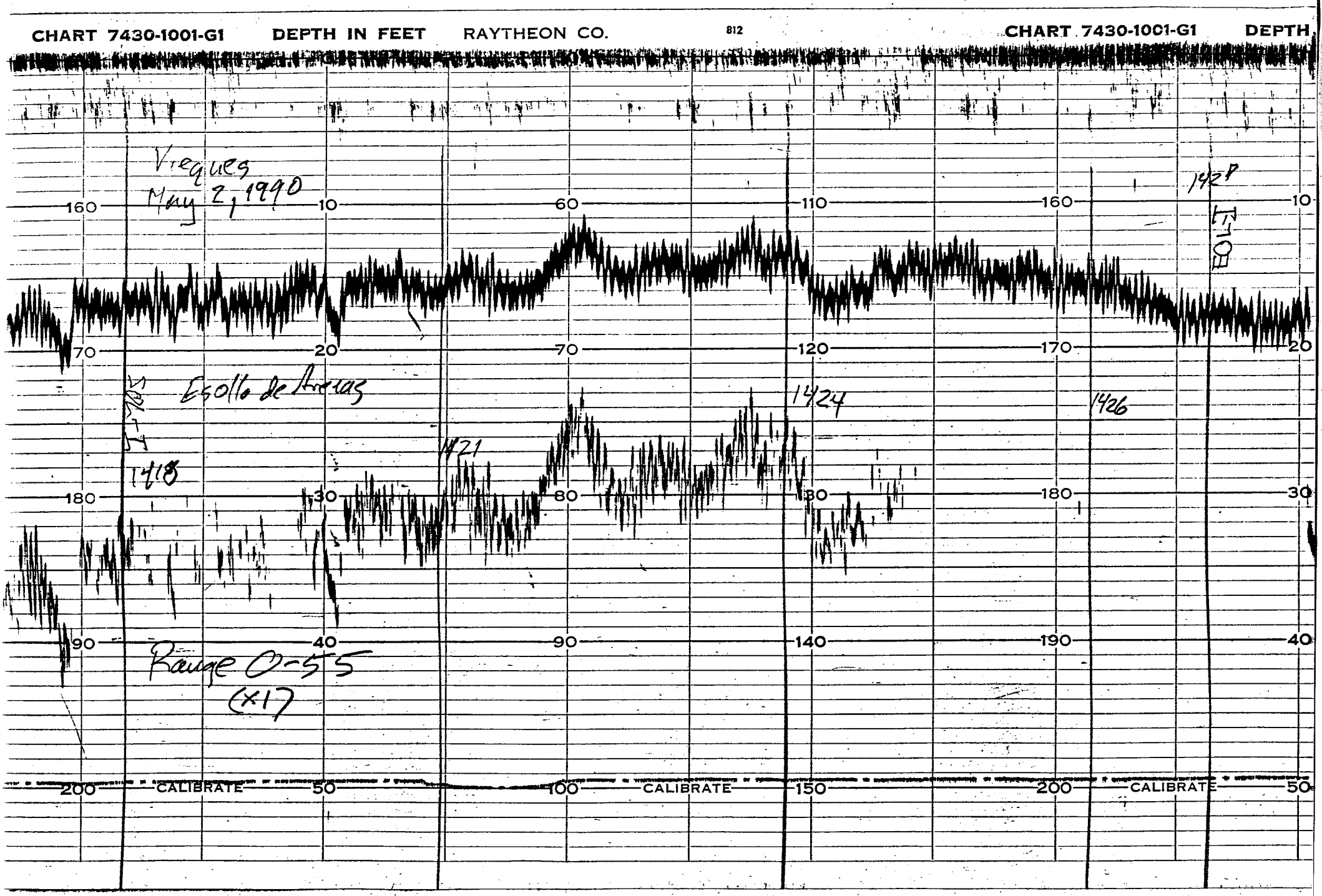
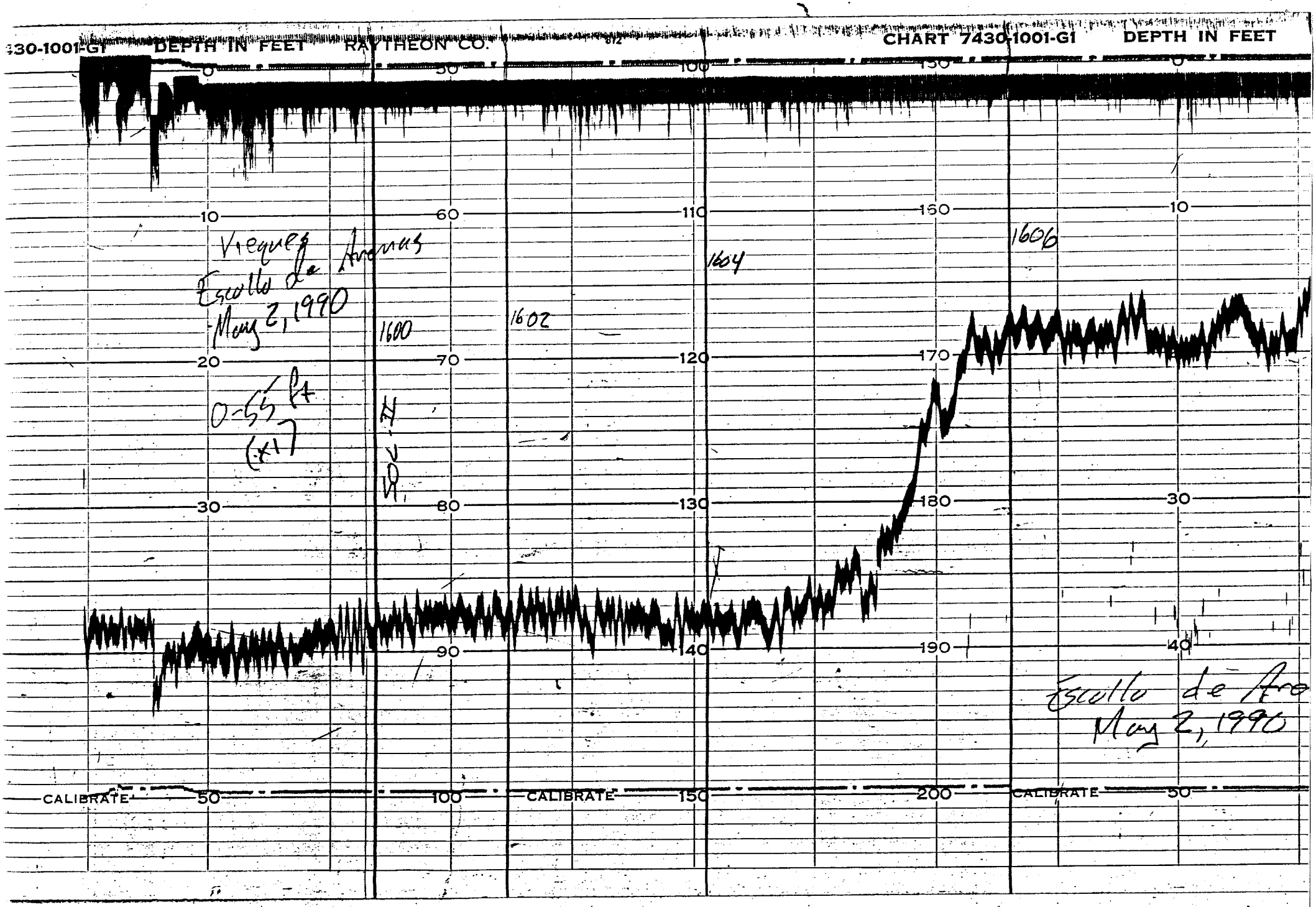
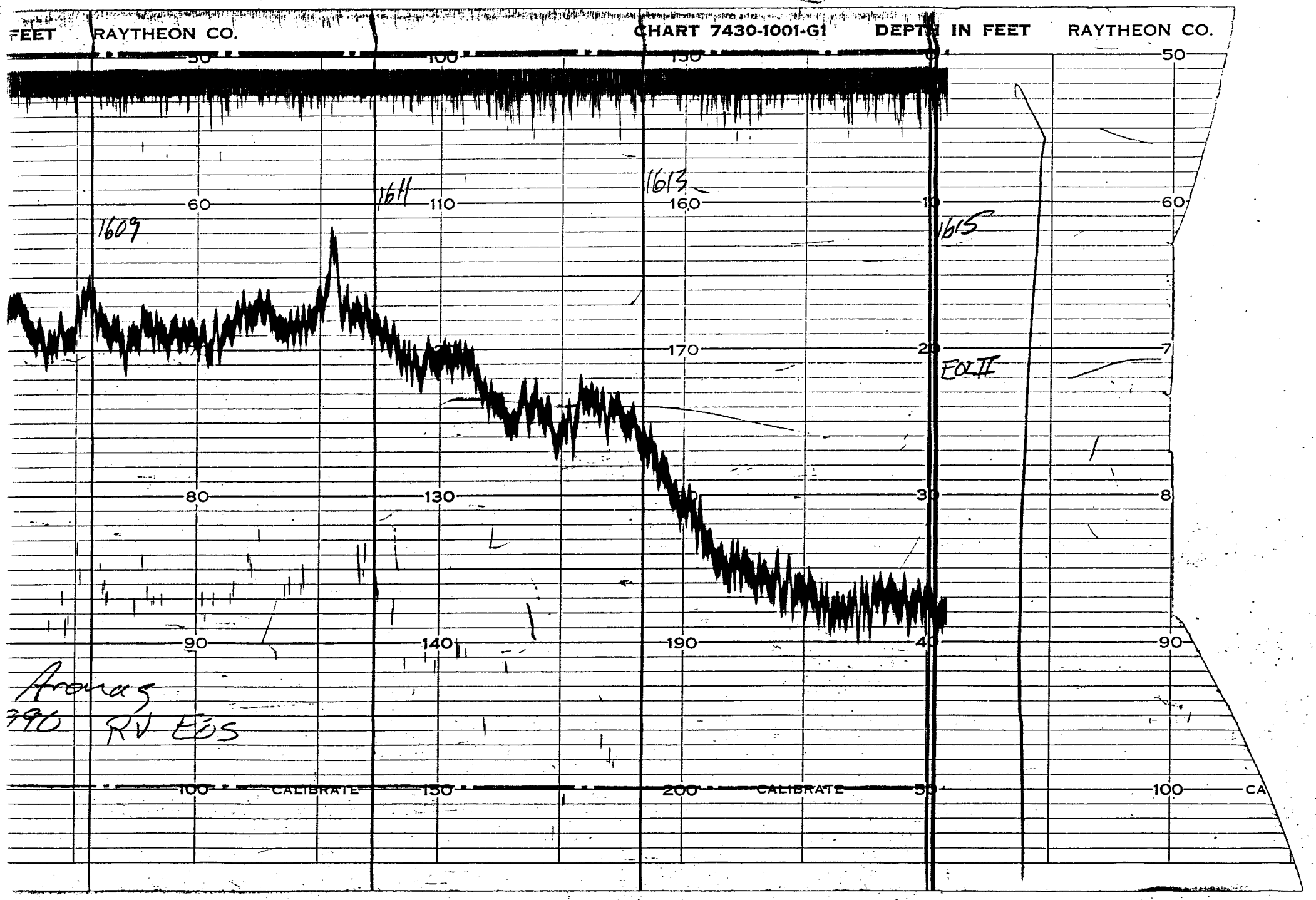


CHART 7430-1001-G1 DEPTH IN FEET RAYTHEON CO. 812 CHART 7430-1001-G1 DEPTH
Vieques
May 2, 1990
Esollo de Arenas
1418
1421
1424
1426
1428
Range 0-55
(x1)
CALIBRATE
CALIBRATE
CALIBRATE


7430-1001-G1 DEPTH IN FEET RAYTHEON CO.
CHART 7430-1001-G1 DEPTH IN FEET
Vieques
Escollo de Arrecife
May 2, 1990
1600
1602
1604
1606
0-55 ft
(x1)
Escollo de Arrecife
May 2, 1990
CALIBRATE
CALIBRATE
CALIBRATE


FEET
RAYTHEON CO.
CHART 7430-1001-G1
DEPTH IN FEET
RAYTHEON CO.
1609
1611
1613
1615
EOL II
Aronas
390 RV EOS
CALIBRATE
CALIBRATE