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United States Department of the Interior

GEOLOGICAL SURVEY
RESTON, VA. 22092

86023

In Reply Refer To:
Mail Stop 914

January 3, 1987

Memorandum

To: Nancy Soderberg
AMG Data Librarian

From: Ron Circe'
AMG Data Collector

Subject: Post-Cruise Report

The following is a summary of the 3 Legs of the Sand Inventory Investigation Offshore Virginia Beach, Virginia.

Leg I

1. Vessel: R/V Langley, VIMS, Gloucester Point, VA
2. Cruise: LANG 86-1
3. Project: Sand Inventory Investigation Offshore Virginia Beach, VA
4. Funding: U.S. Army Corps of Engineers, Norfolk District
5. Study Area: Offshore VA Beach from Cape Henry, south to Rudee Inlet offshore to approx. 10 nm
6. Dates: October 7-10, 1986
7. Chief/Co-Chief Scientist: Ron Circe'/Jeff Williams
8. Scientific Party:
 - Rob Wertz - USGS
 - Ken Parolski - USGS
 - Don Wright - VIMS
 - Bob Gamish - VIMS
 - Mal Green - VIMS - Australian grad student
 - Lauro Calliari - VIMS - Brazilian grad student
 - Jae Kyung Oh - Visiting Professor from South Korea to VIMS

9. Captain: Charles Machem
10. Purpose: Offshore survey using high resolution geophysical equipment to collaborate with previously collected vibracores. Data will be used to assess area for quality sand to be used as nourishment for Virginia Beach.
11. Navigation & Techniques: A Motorola Falcon IV Microwave relay miniranger system was used as the primary navigational instrument. Furuno and Megapulse LORAN C receivers were also used as backup systems. This system was used primarily for navigating from the dock to the study site.
12. Equipment Used: See attached sheet.
13. Tabulated Data: Days at Sea: 3 days
Kilometers of continuous data: Approx. 150 km/approx. 100 nm.

Equipment Used:

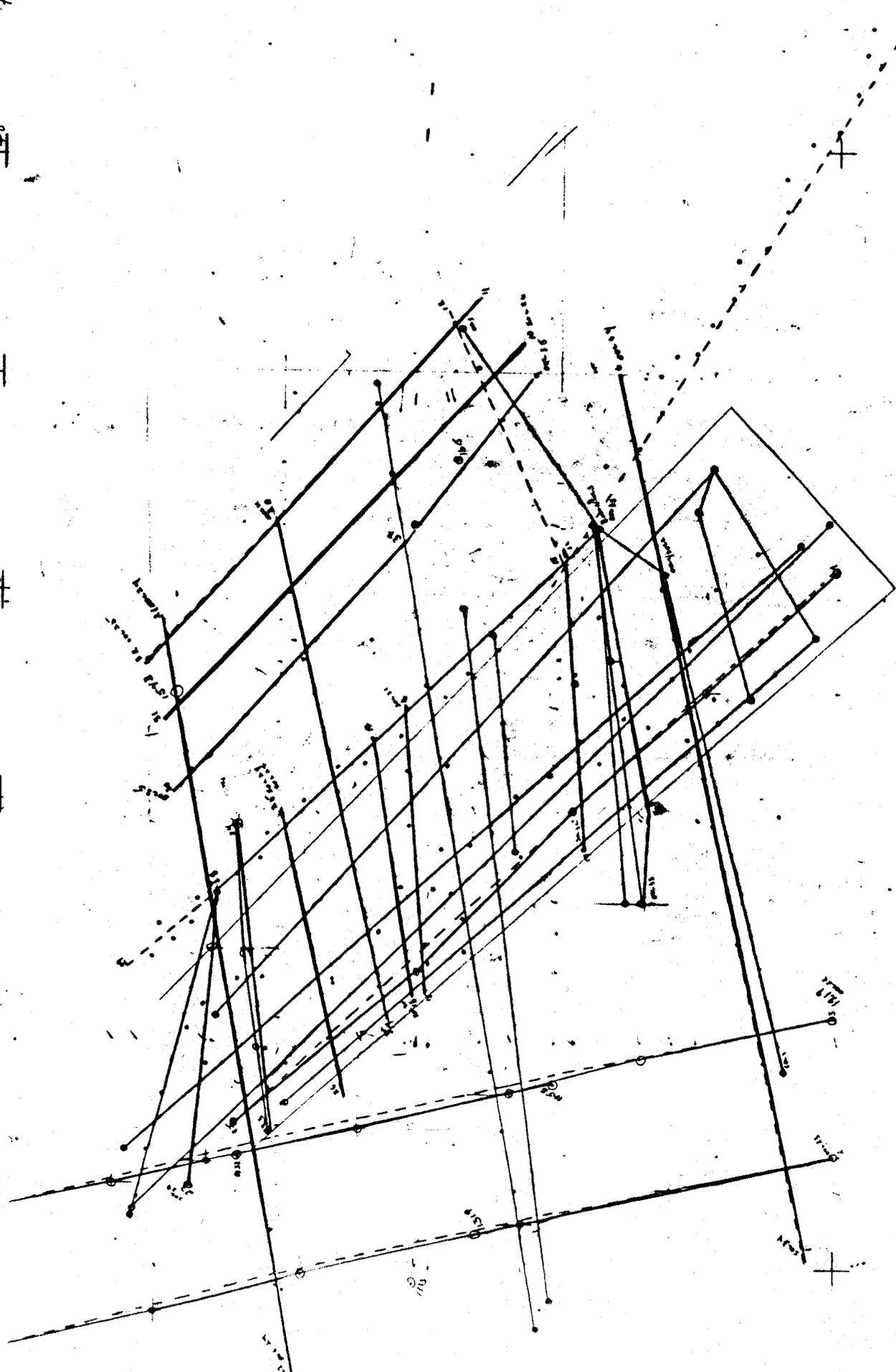
- o ORE or Datasonics 3.5 kHz high resolution seismic system
- o ORE Geopulse boomer system
- o Benthos 10 element hydrophone
- o Hewlett-Packard 8-track instrument recorder
- o EPC recorders - 1902, 3200, and 4800
- o Motorola Falcon IV Miniranger precision navigation system
- o IBM-PC Navigation Data Acquisition system
- o Raytheon DE 719 Recording Fathometer with accompanying digitizer

75° 57' 75° 57' 75° 57' 75° 57' 75° 57' 75° 57' 75° 57'

54

52

51



TRACK LINE CHART

LANG 86-1
HOLT 86-1