



United States Department of the Interior

GEOLOGICAL SURVEY

Woods Hole, MA 02543



MEMORANDUM

Date: August 24, 1988

TO: Tom Aldrich and Nancy Soderberg

FROM: John Schlee *JS*

SUBJECT: Post cruise report of the Indiana Shoals - Southern Lake Michigan
aboard the R/V Neecho

Cruise Narrative:

I arrived in Portage, Indiana the night of August 14th and was informed that half of the area had already been surveyed geophysically (echo-sounding, Hunttek, and side scan) in lines 25-14 presumably on August 12 and 13th. On August 15 lines 14 and 15 were run.

August 16th - clear, hot sunny, calm sea state left Calumet Coast Guard station at 0910 to proceed to the Calumet Breakwater to calibrate the mini-ranger system, which was completed by 0942. After that we proceed to the Indiana Shoals area and began to run lines 13 to 1 and a tie line (#26) to complete the geophysical survey of Indiana Shoals.

August 17th - off loaded geophysical gear for storage in the van.

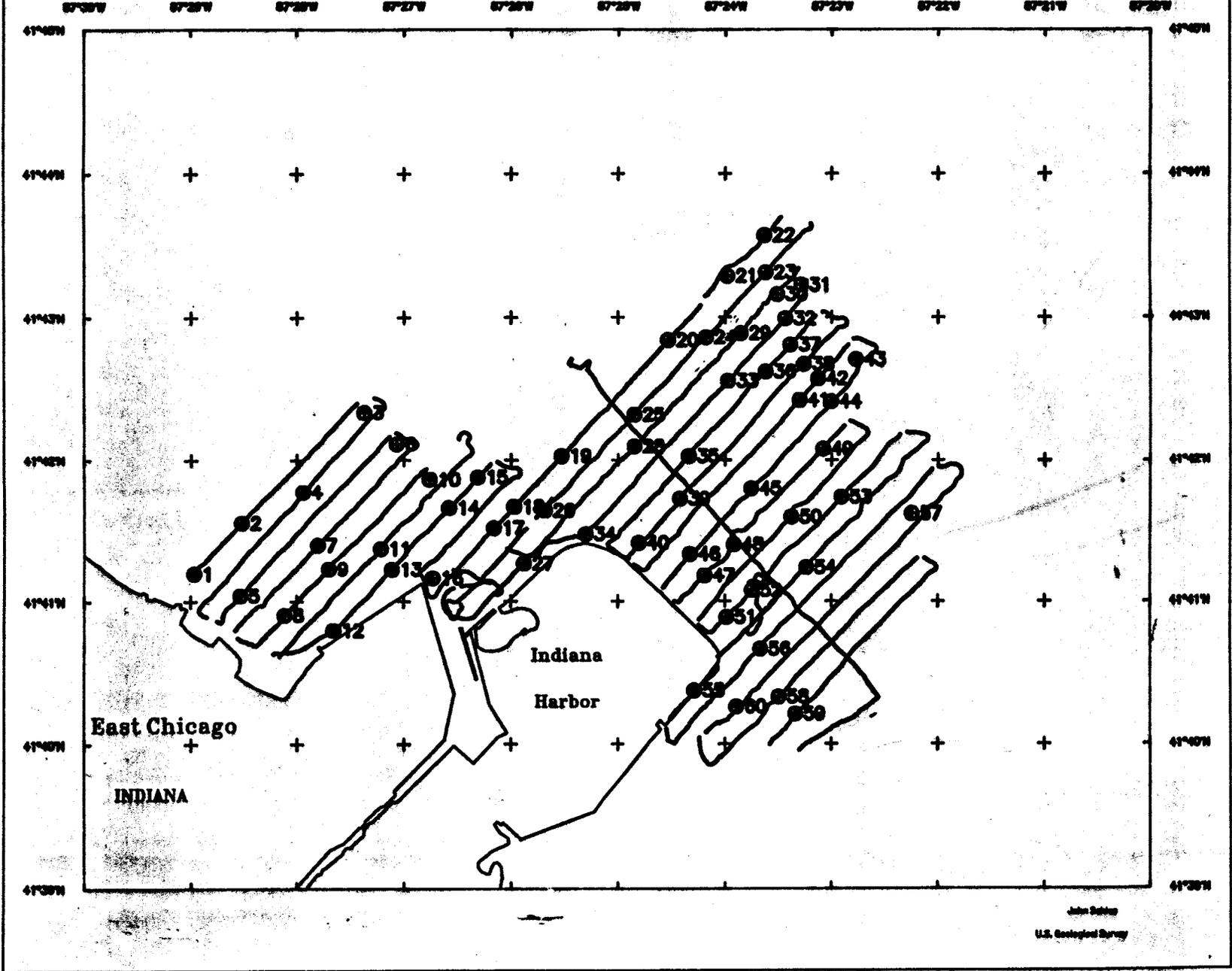
August 18th - sunny hot; seas 3-6 ft; depart Pastrick Marina at 0950 after loading on board a Van Veen sediment grab sampler. Occupied 10 stations, but abort the cruise because of rough seas and a malfunctioning mini-ranger navigation system at 1345 local time.

August 19th - depart Pastrick Marina under leaden skies and rough sea state at 0912 local time. At 1030, aborted cruise because of rough seas and because the vital Gary mini-ranger station would not operate properly.

August 20th - departed Pastrick Marina at 0830 under sunny, warm conditions with a rough choppy seas. We worked until 1700 collecting 50 sediment grab samples at 50 stations. The mini ranger once again unreliable so we switched to Loran to locate the stations. Four out six mini-ranger stations were inoperative.

August 21st - R/V Neecho moved to Calumet and gear and samples to be sent back to Woods Hole were put on board. The vessel was made ready for lifting aboard the trailer on August 22nd, and it was moved to the boat yard in Chicago where the move to the trailer would occur.

LAKE MICHIGAN (Phase 3 / NEECHO 88-2)



SEISMIC DATA 147.5 miles = 106.2 km

Cruise Report Outline

1. Ship Name (Parent vessel if submersible used) / submersible name
2. Cruise number and leg (if any)
3. Parent project
4. Funding agency
5. Funding amount
6. Contract number
7. Contract start and end date
8. Area of operations
9. Dates and ports, start and end of cruise
10. Chief scientist
- *11. Names and affiliations of scientific party; ship's captain + observers*
12. Brief statement of purpose of cruise
13. Brief statement describing navigation techniques
14. Scientific equipment
15. Tabulated information:
 - † Days at sea
 - † Kilometers of each type of continuous data 106
 - Stations occupied (stationary and underway)
 - Submersible dives (including dive number)
 - Station information:
 - Station number
 - Date of occupation
 - Latitude/longitude
 - Water depth
 - Sampling device (include dive number here)
 - *Number and type of samples
 - Remarks
16. Page-size track chart

You want too much. it will take time to get all of this

60 sediment samples IS-1 to IS-60
Side Scan records for a 26 line survey of Indian
Hunter " " " " " " " " Shoals
Echo sounding " " " " " " " " "