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United States Department of the Interior

[redacted]

GEOLOGICAL SURVEY

BRANCH OF ATLANTIC MARINE GEOLOGY
Woods Hole, MA 02543
18 August 1989

89011

To: Brad Butman

From: John Risch

Subj: Cruise Report for 1989 Southern Lake Michigan survey

1. Vessel: R/V NEPTUNE
2. Cruise: NPTN 89-01
3. Parent Project: Southern Lake Michigan Study
4. Funding Agency: Congress
5. Funding Amount: $1.5 million
6. Contract Number 9470-04215
7. Contract start and end dates: 1 Oct. 1988 -
8. Area of Operations: Southern Lake Michigan
9. Dates and Ports: 21 - 25 May 1989: Great Lakes, IL
   25 - 31 May 1989: Chicago, IL
   1 - 3 June 1989: Michigan City, IN
10. Chief Scientist: John Risch
11. Names and Affiliations of Scientific Party:

    R.T. Race (Hydrographic Survey Co.), Captain
    B. Collins (Hydrographic Survey Co.), Deckhand
    J. Risch (USGS-Woods Hole), Scientist
    D. Nichols (USGS-Wood Hole), Technician
    R. Tagg (USGS-Menlo Park), Technician
    M. Chrzastowski (Illinois State Geological Survey), Scientist
    S. Davis (Indiana DNR), Scientist
    D. Spakoff, Student Volunteer

John Haines - USGS-Reston
Peter Barnes - Menlo

12. Purpose of Cruise:

Completion of Southern Lake Michigan geological framework study begun last year, collection of high resolution seismic data from the Indiana Shoals area, and sidescan sonar and seismic reconnaissance of proposed coastal process study sites.

13. Navigation: Miniranger Falcon IV and LORAN-C

14. Scientific Equipment:

Klein Sidescan Sonar
3.5 kHz subbottom profiler
Odom Echo Sounder
Van Veen Grab Sampler

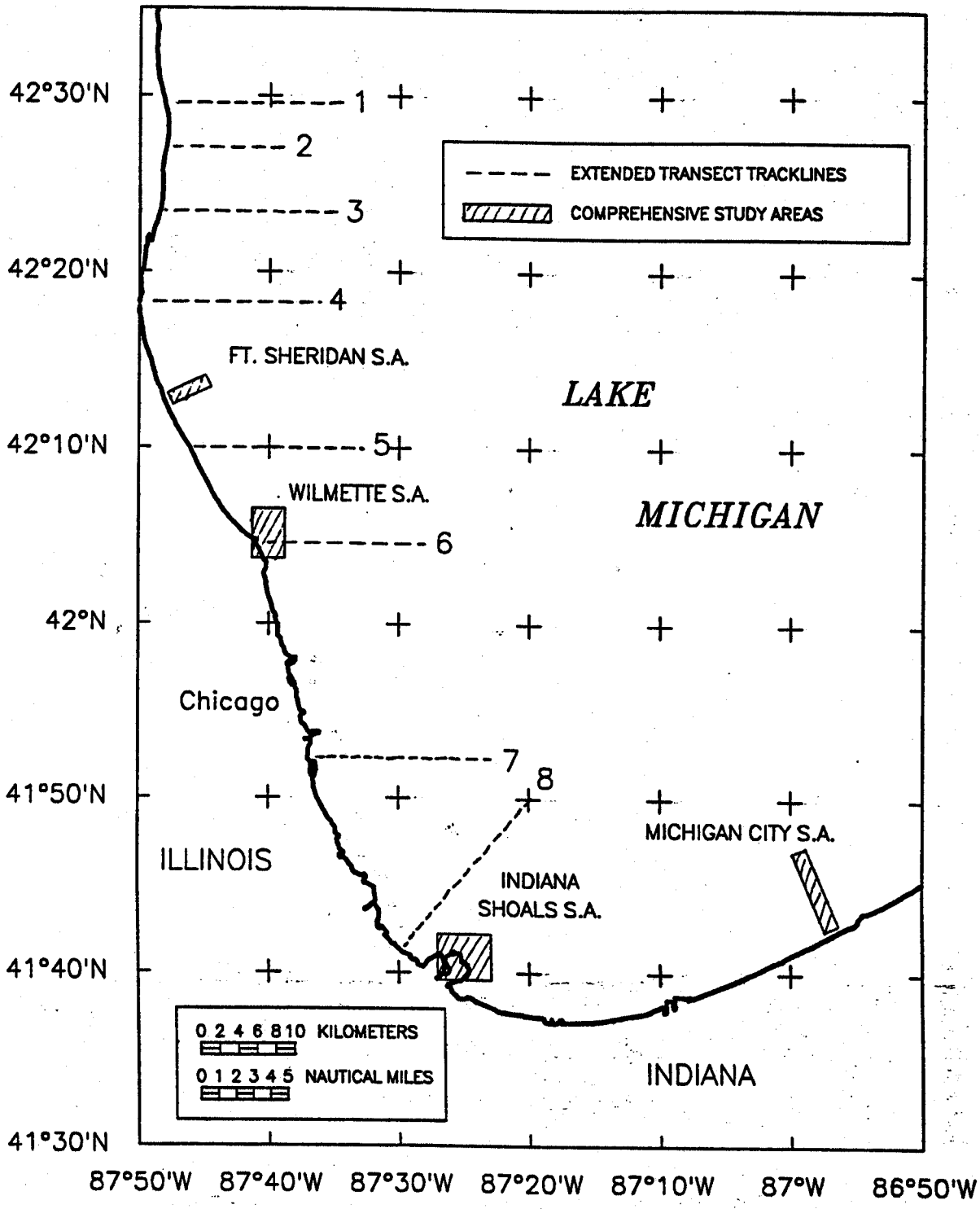
15. Days At Sea: 13
Data Collected: 279 line kilometers sidescan
325 line kilometers seismic
150 grab samples

16. Trackline and sample location charts attached.

cc: D. Folger
J. Schlee
D. Nichols
R. Tagg
P. Barnes
D. Foster
C. Polloni
B. Irwin
N. Soderberg
G. Sexton
J. Newell
S. Barton
A. Sallenger
J. Williams

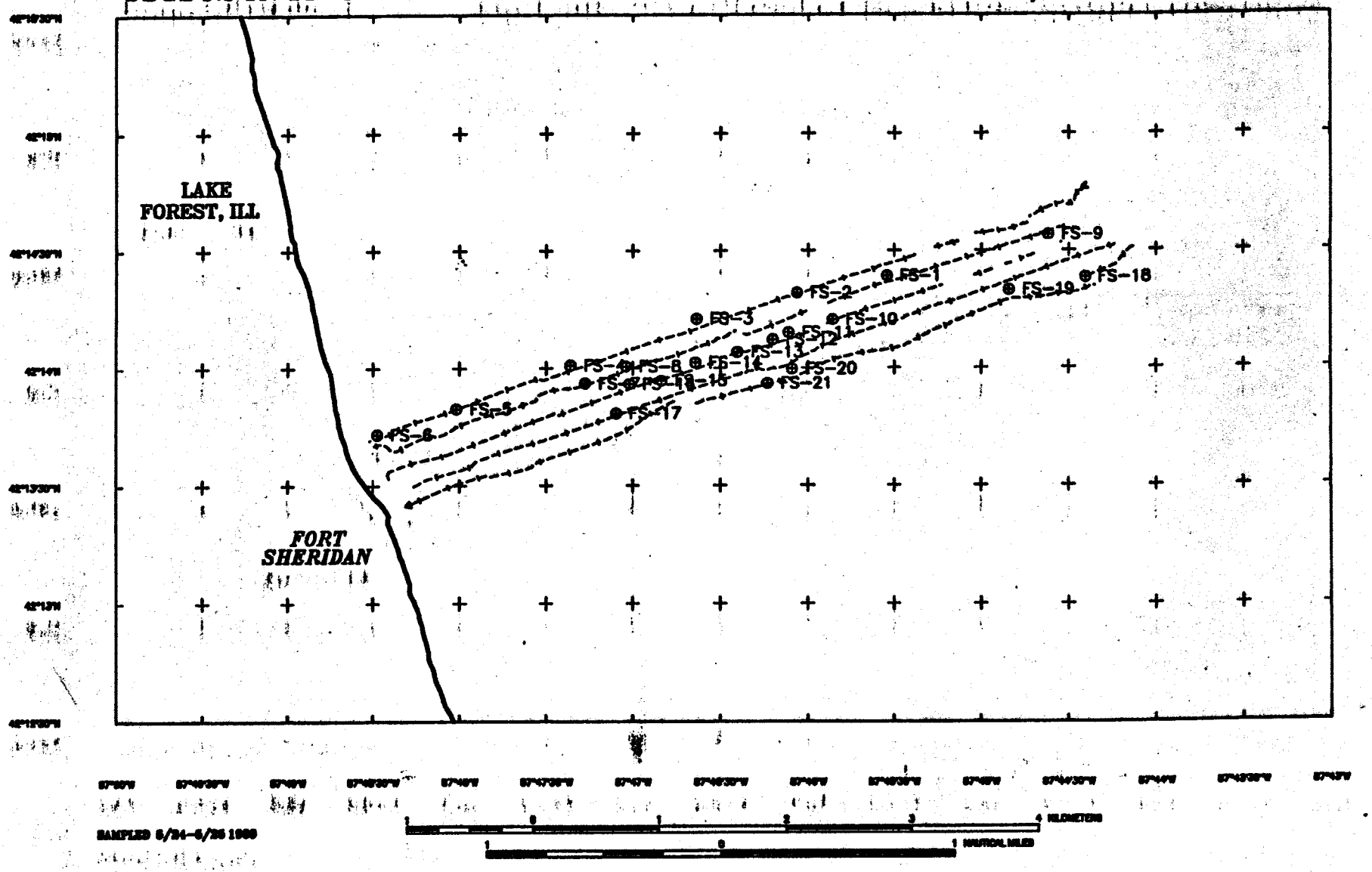
SOUTHERN LAKE MICHIGAN COASTAL EROSION STUDY

SPRING 1989 SURVEY

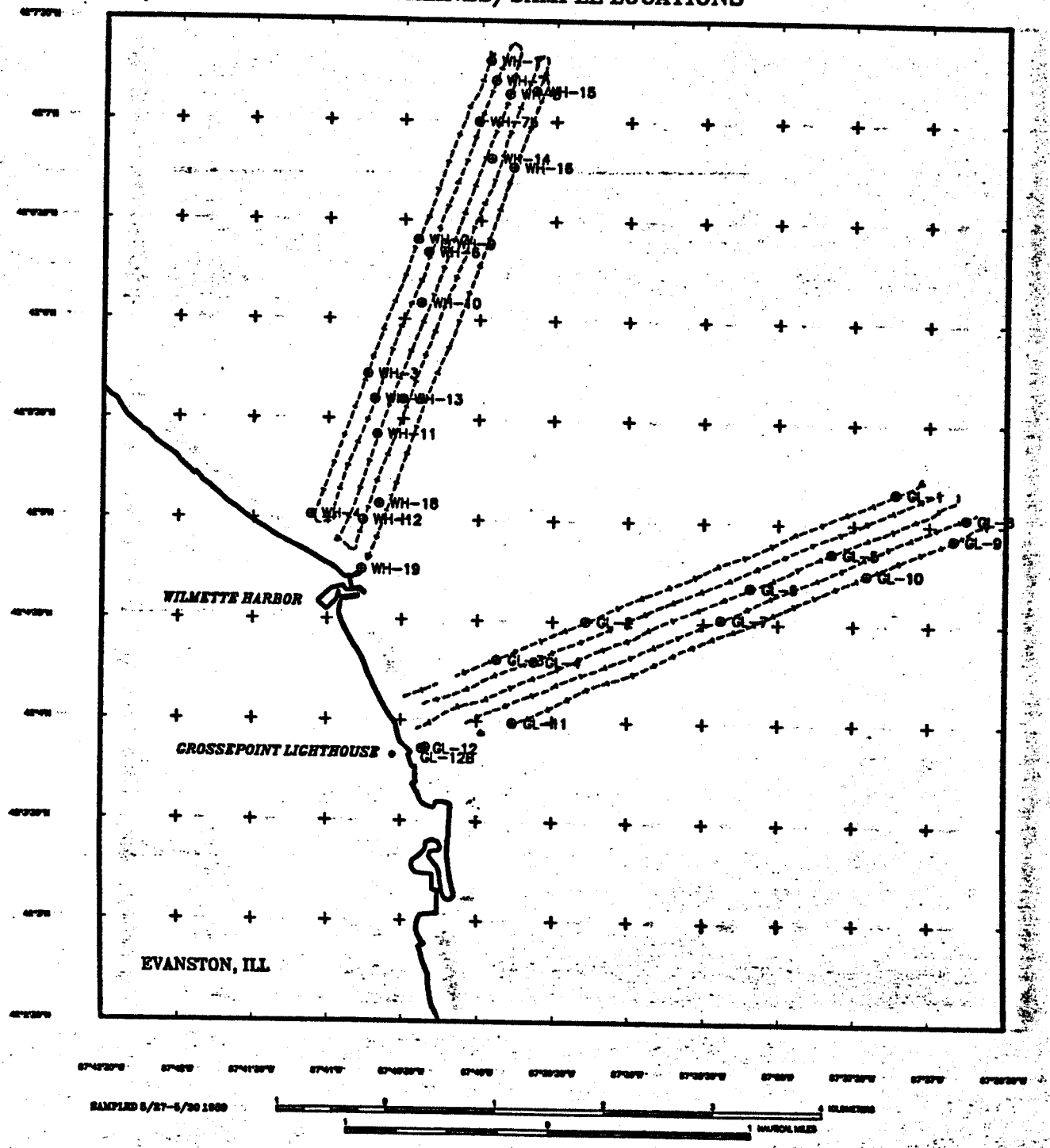


USGS NPTN 89-1

FORT SHERIDAN TRANSECT TRACKLINES/SAMPLE LOCATIONS

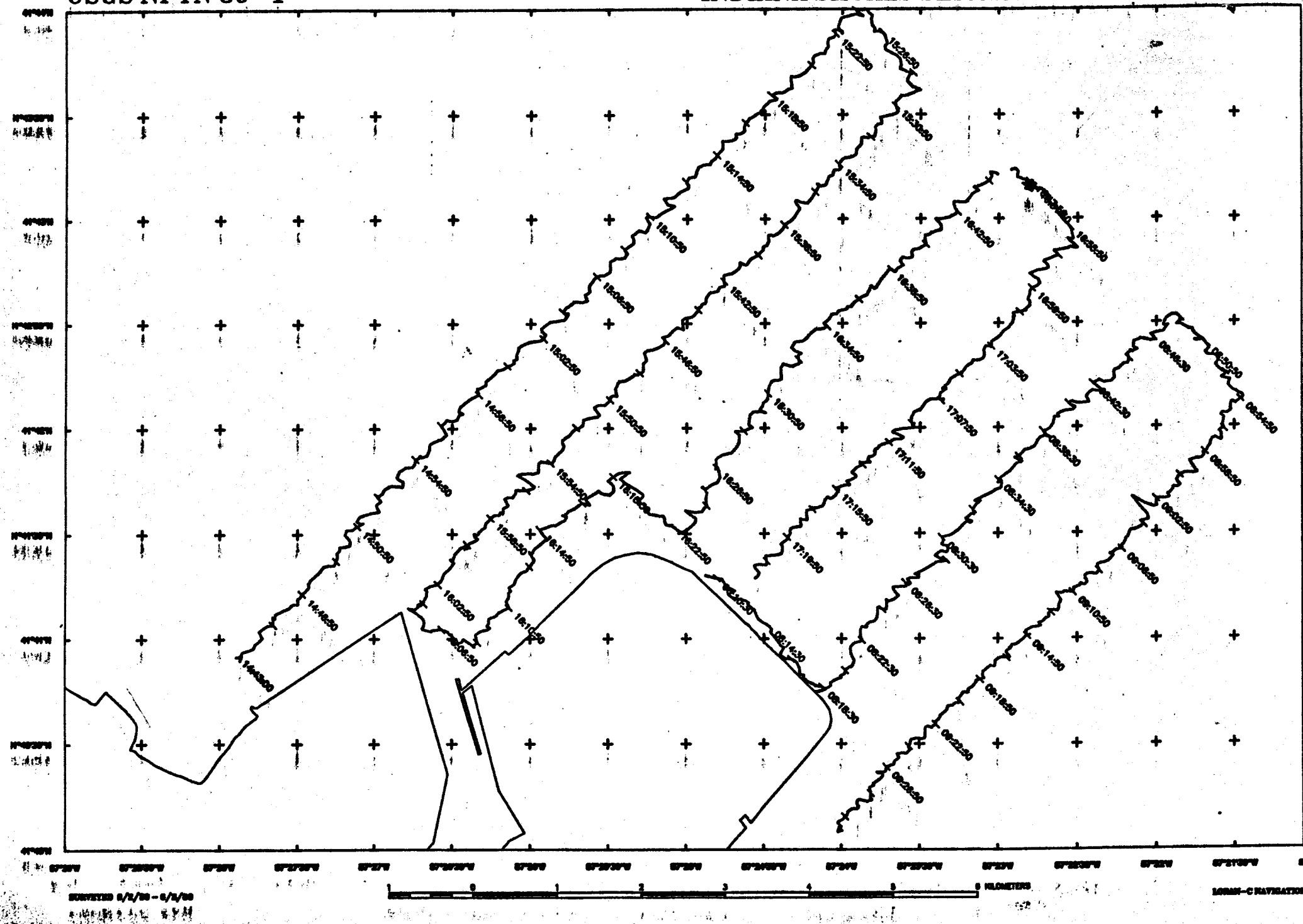


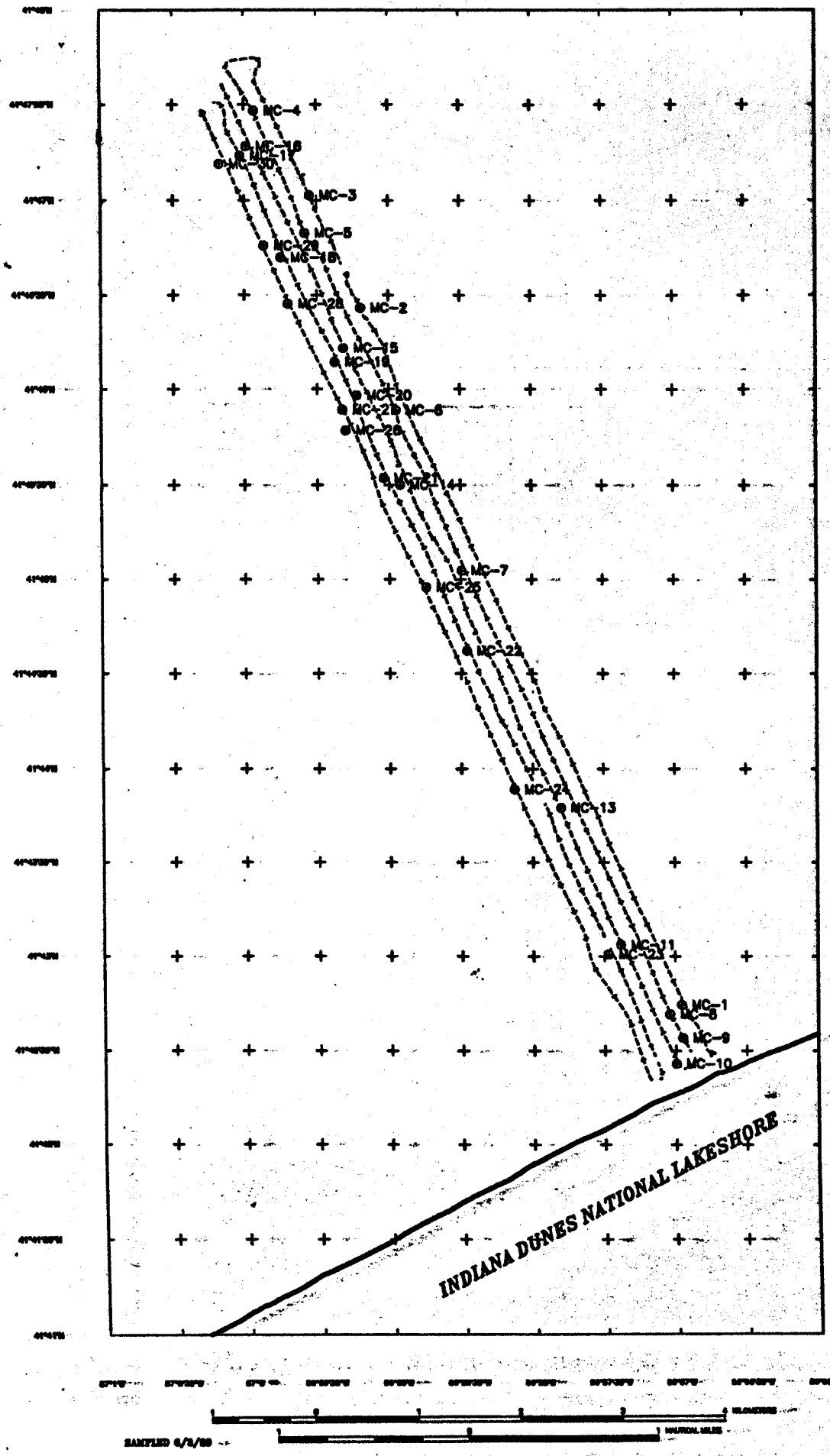
USGS NPTN 89-1
WH/GPL TRANSECT TRACKLINES/SAMPLE LOCATIONS



USGS NPTN 89-1

INDIANA SHOALS SEISMIC SURVEY TRACKLINES



USGS NPTN 89-1

MICHIGAN CITY TRANSECT TRACKLINES/SAMPLE LOCATIONS