

15-041
MGG 15040058

TASADAY EXPEDITION

LEG 6

R/V T. WASHINGTON

INFORMAL REPORT AND INDEX OF
NAVIGATION, DEPTH, MAGNETIC AND SUBBOTTOM PROFILER DATA

Singapore (13 October 1973)

to

Singapore (20 November 1973)

Chief Scientist, Leg 6 - J. R. Curray

Computer Tech - A. J. Henry

Resident Marine Tech - M. P. Hausman

Post-Cruise Processing by - S. M. Smith, U. Albright, O. McConnell

Prepared by

Underway Data Processing Group

S.I.O. Geological Data Center

Scripps Institution of Oceanography

La Jolla, California

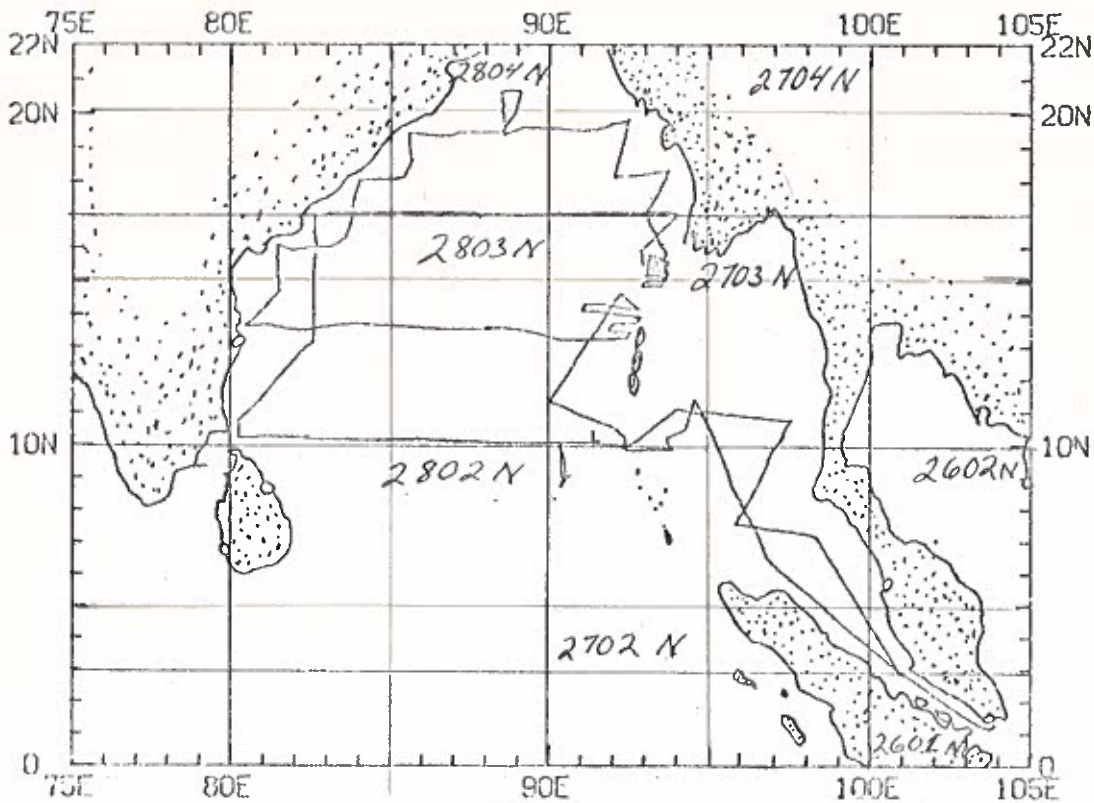
January 14, 1974

Preliminary Report and Index of Navigation, Depth, Magnetic and Subbottom Profiler DataContents:

- Index Chart - gives track of cruise leg and boundaries of depth compilation plots (see below).
- Track Charts - annotated with dates (day/month) and hour ticks. The scale (.3"/deg. long) is the same as the index charts of previous SIO cruises published as Report IMR TR-25.
- Profiles - Depth and magnetic anomaly vs. distance. Dates (day/month) and positions of major course changes (greater than 30 degrees) are annotated. Sections of track having subbottom profiler (airgun) records have a solid black line along the bottom of the profile.

For information on the availability and reproduction costs of data in the following forms, contact T. E. Chase, Curator, Geological Data Center, Scripps Institution of Oceanography, La Jolla, California 92037 (714-453-2000, Ext. 1534):

1. Navigation listing of times and positions of course and speed changes, fixes and drift velocity.
 2. Depth compilation plots - in fathoms (assumed sound velocity of 800 fm./sec.) at approximately 1 mile spacing, plotted at 4" degree with standard U.S. Navy Oceanographic Office BC series boundaries (see index chart).
 3. Plots of magnetic anomaly profiles along track-map scale = 1.2"/degree; anomaly scale between 15°N and 15°S latitude = 500 gamma/inch; anomaly scale north of 15°N and south of 15°S = 1000 gamma/inch) from values retrieved at approximately 1 mile spacing and regional field removed using the 1965 IGRF.
 4. Card Decks of navigation, depth and magnetics (for specific formats, contact S. M. Smith, Geological Data Center).
 5. S.I.O. Sample Index - list of beginning and end times and positions of all underway records as well as all other samples (geology, biology, physical oceanography, etc.) collected on the cruise leg.
 6. Microfilm or Xerox copies of:
 - a. Echosounder records - 12 and 3.5 kHz frequency
 - b. Subbottom profiler records (airgun)
 - c. Magnetometer records
 - d. Underway Data Log
-



TASADAY EXPEDITION

LEG 6

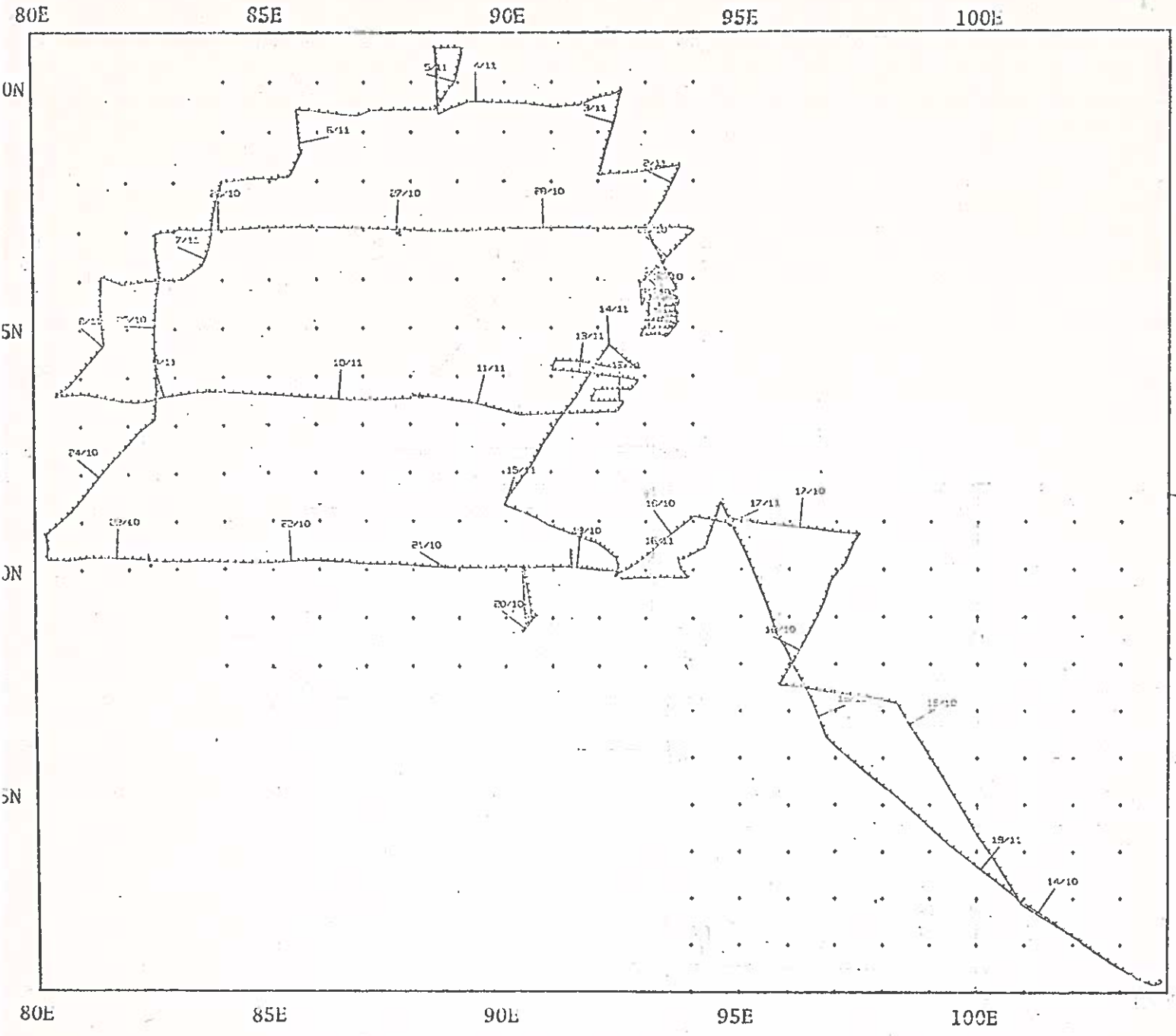
R/V T. WASHINGTON

CHIEF SCIENTIST - J.R. CURRAY

Singapore - Singapore (13 Oct. - 20 Nov. 1973)

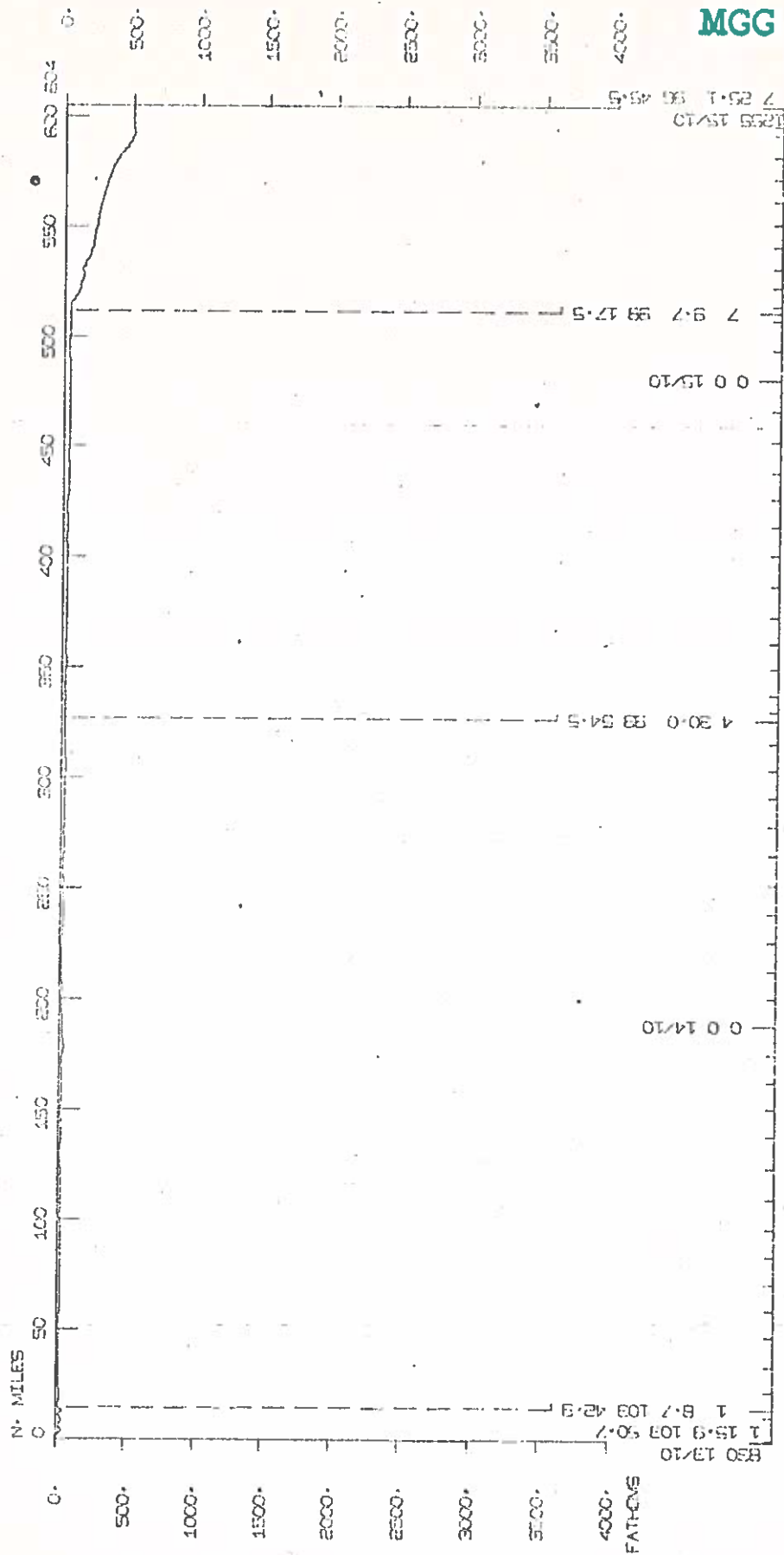
TOTAL MILEAGE

- 1) Cruise - 8177 miles
- 2) Magnetics - 7417 miles
- 3) Bathymetry - 7866 miles
- 4) Seismic Reflection - 7498 miles



TASADAY LEG 6 TRACKPLOT

TASADAY LEG. 5



7 25.1 58 45.5
CTAST 5820

0 0 13/10

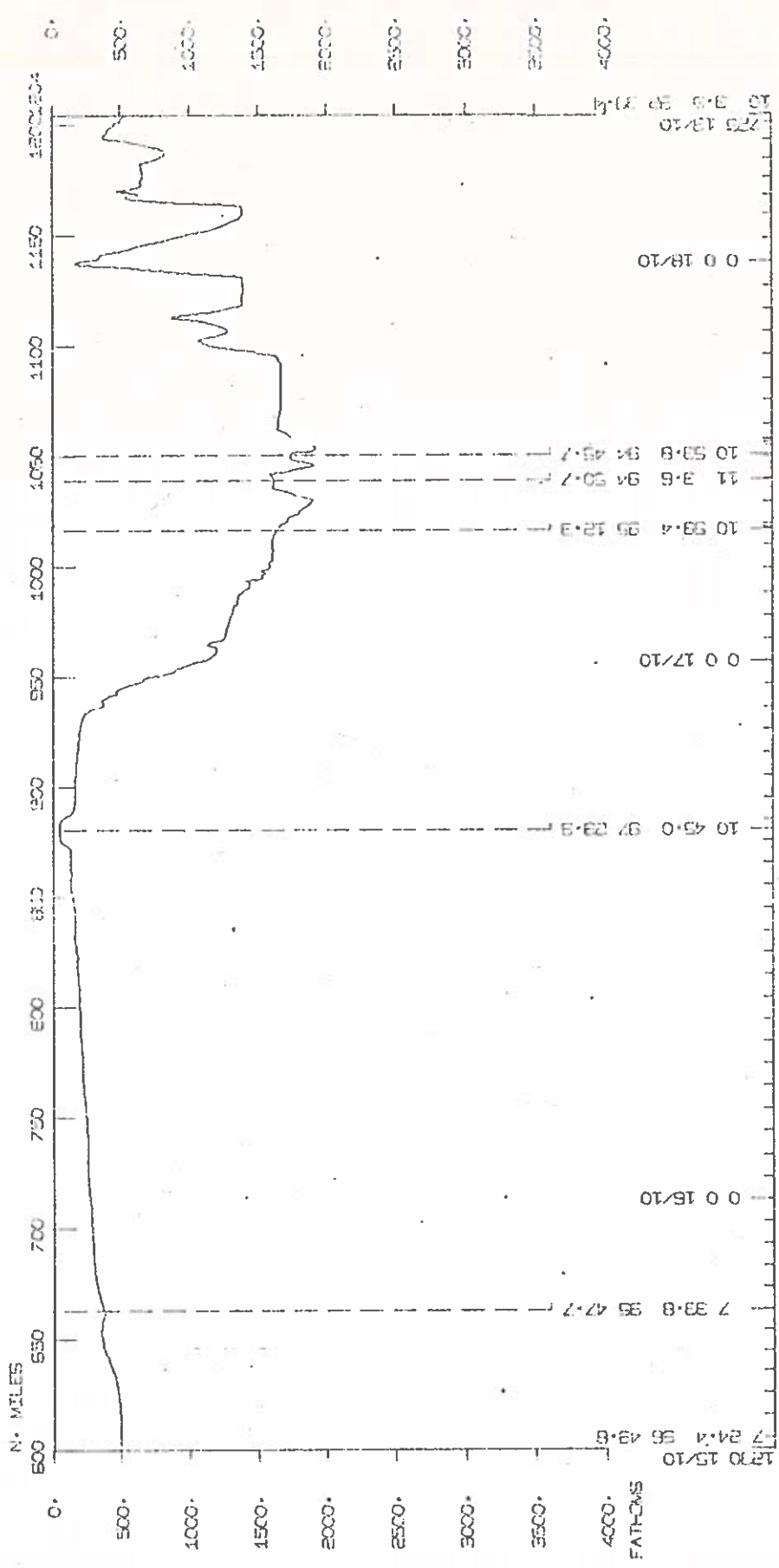
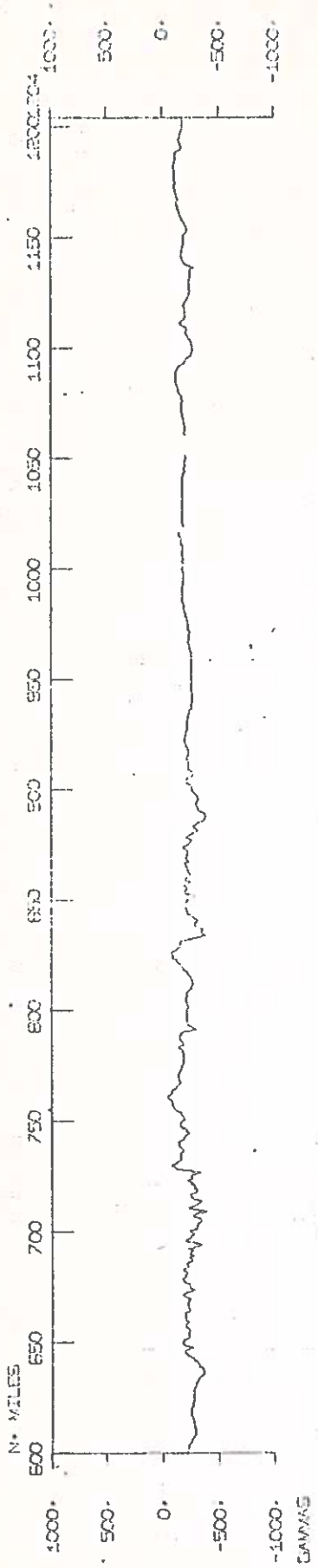
4 30.0 58 34.5 7

0 0 14/10

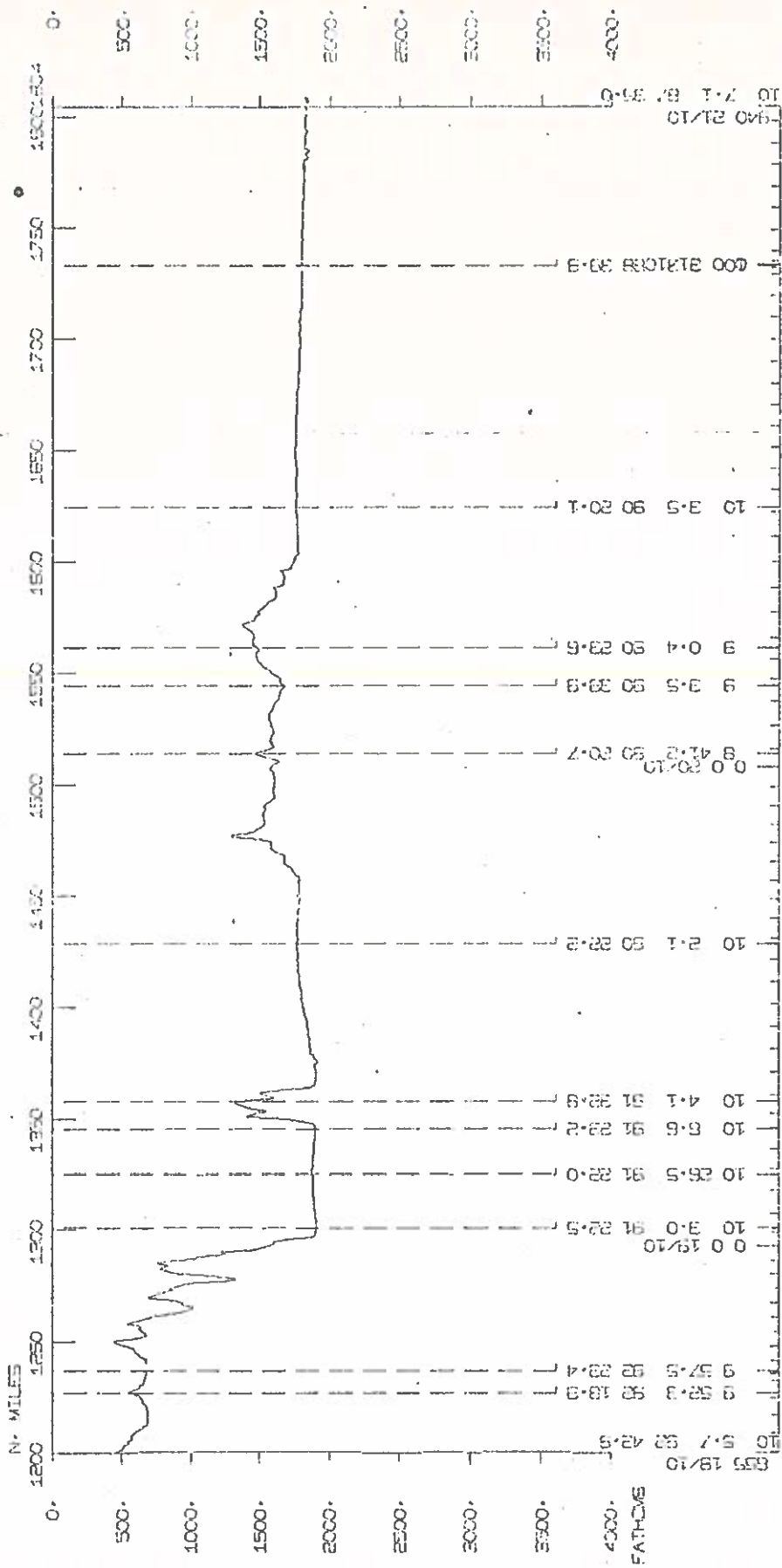
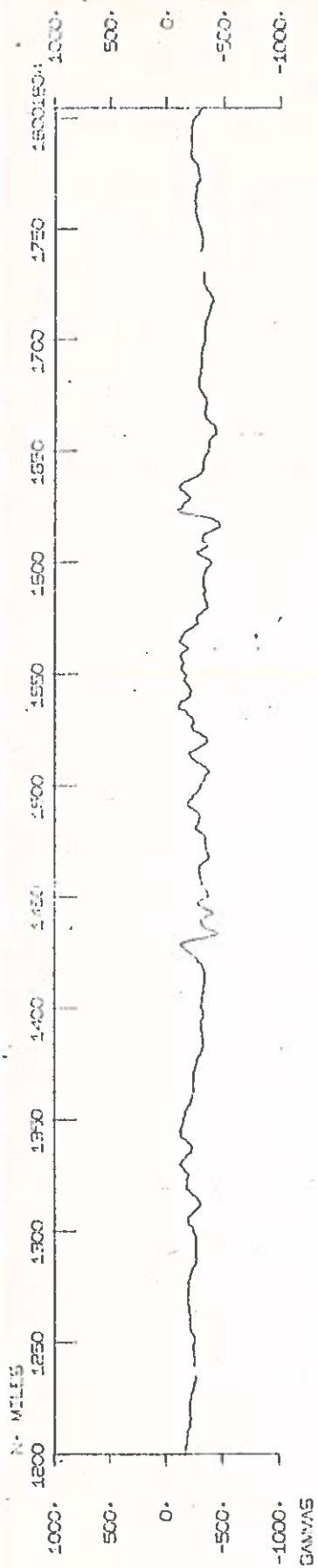
850 13/10
1 15.9 103 50.7
1 8.7 103 42.9



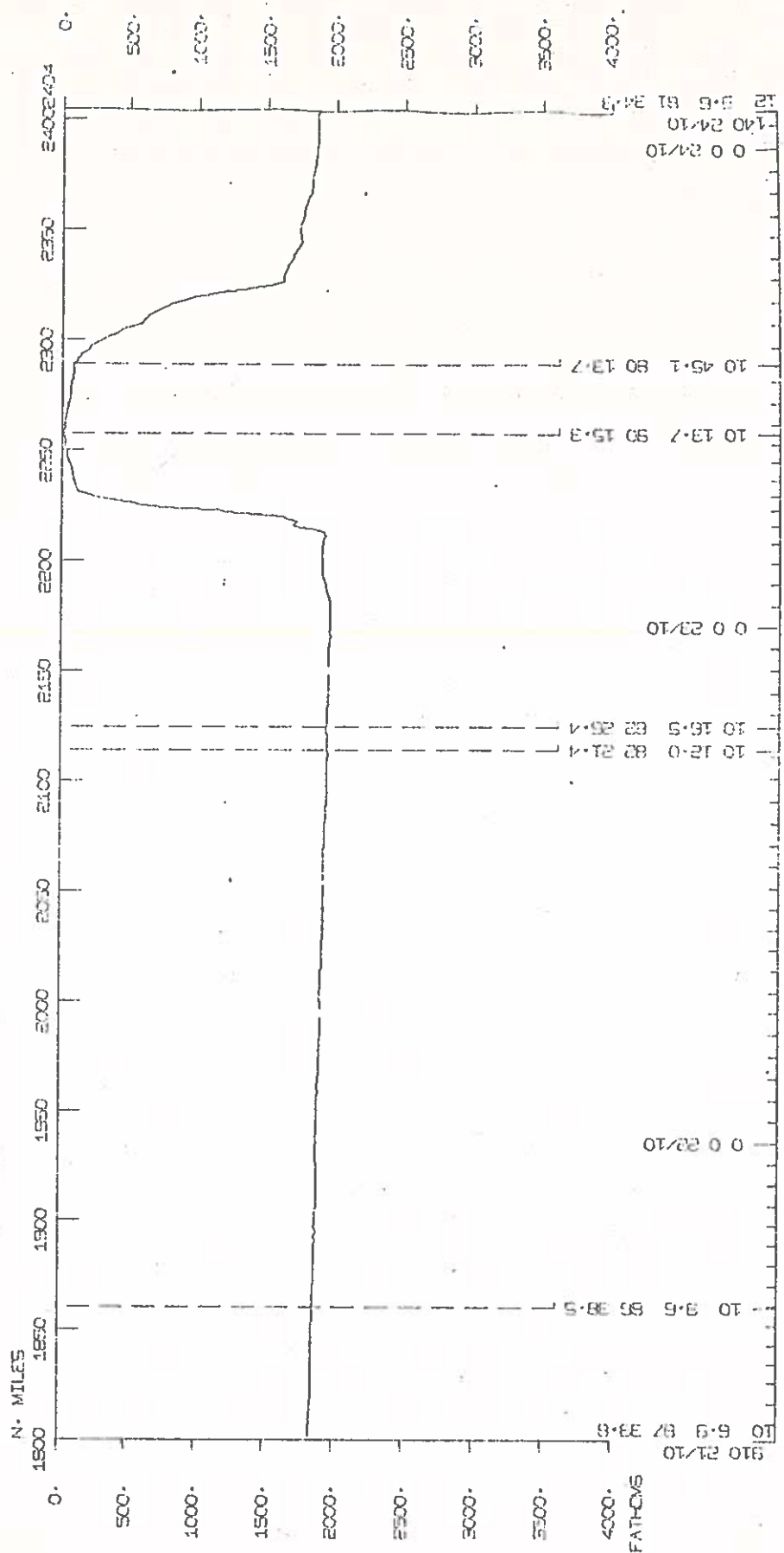
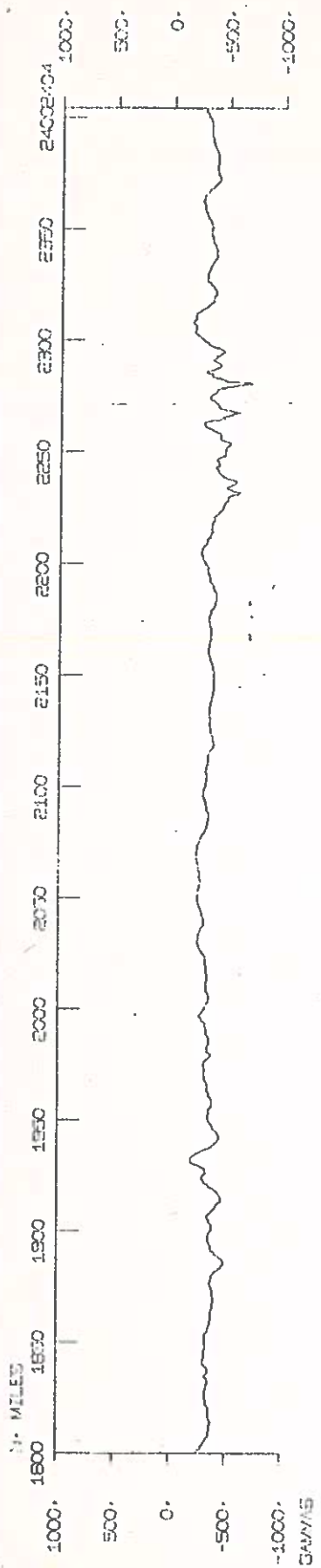
TASADAY LEG B



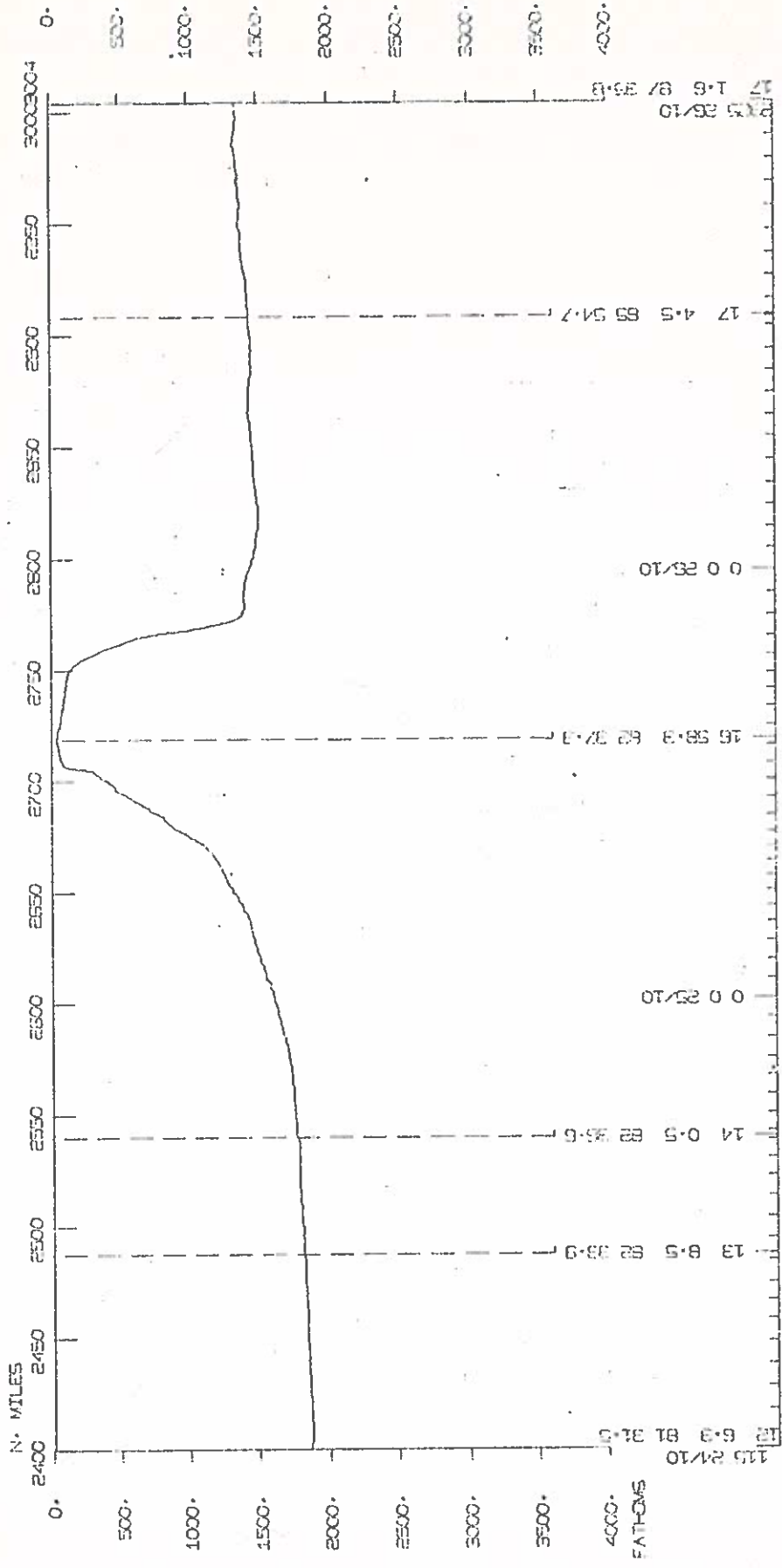
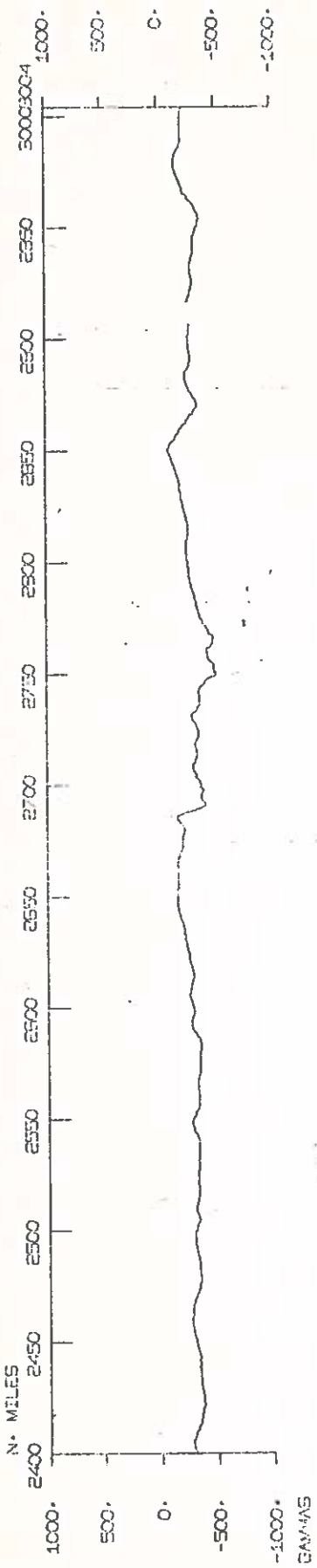
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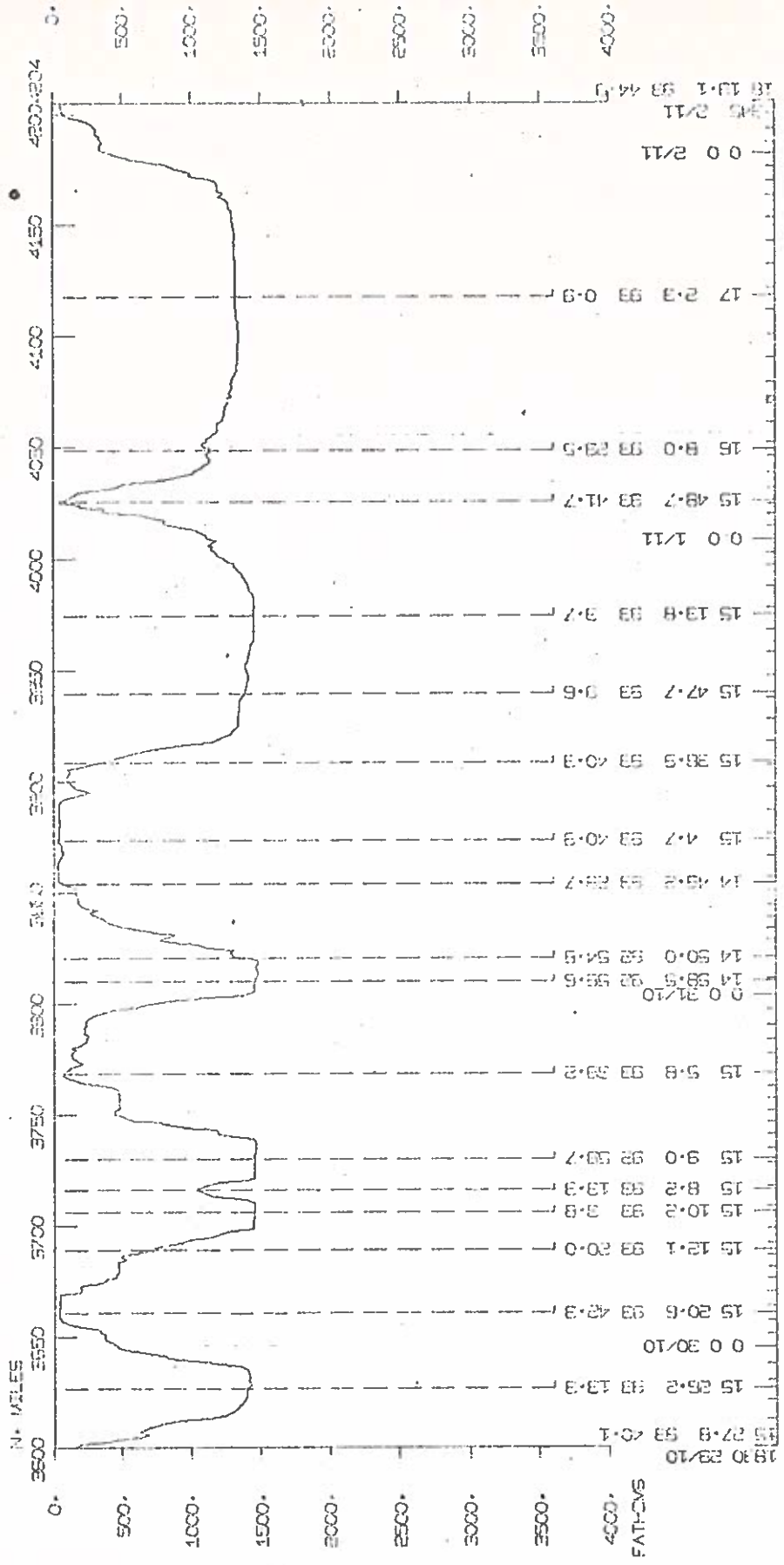
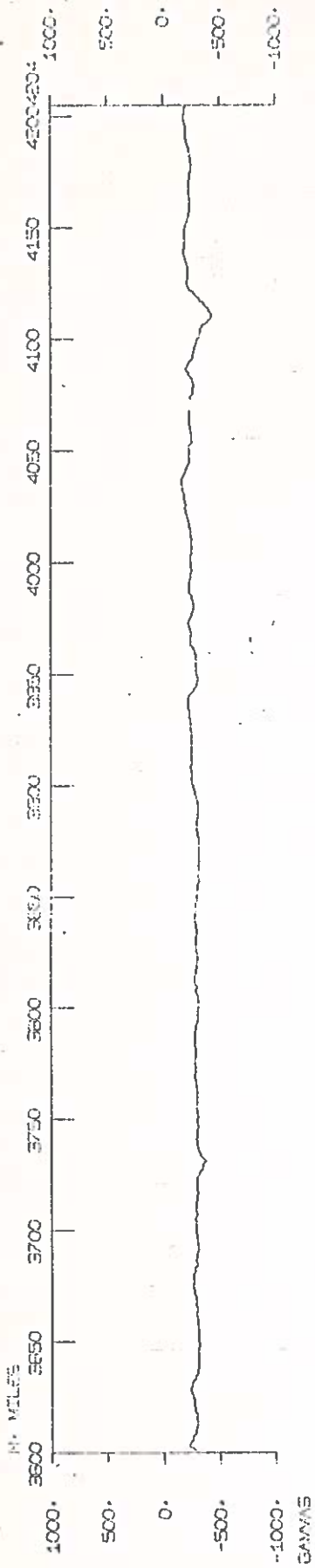
TASADAY LEG 6



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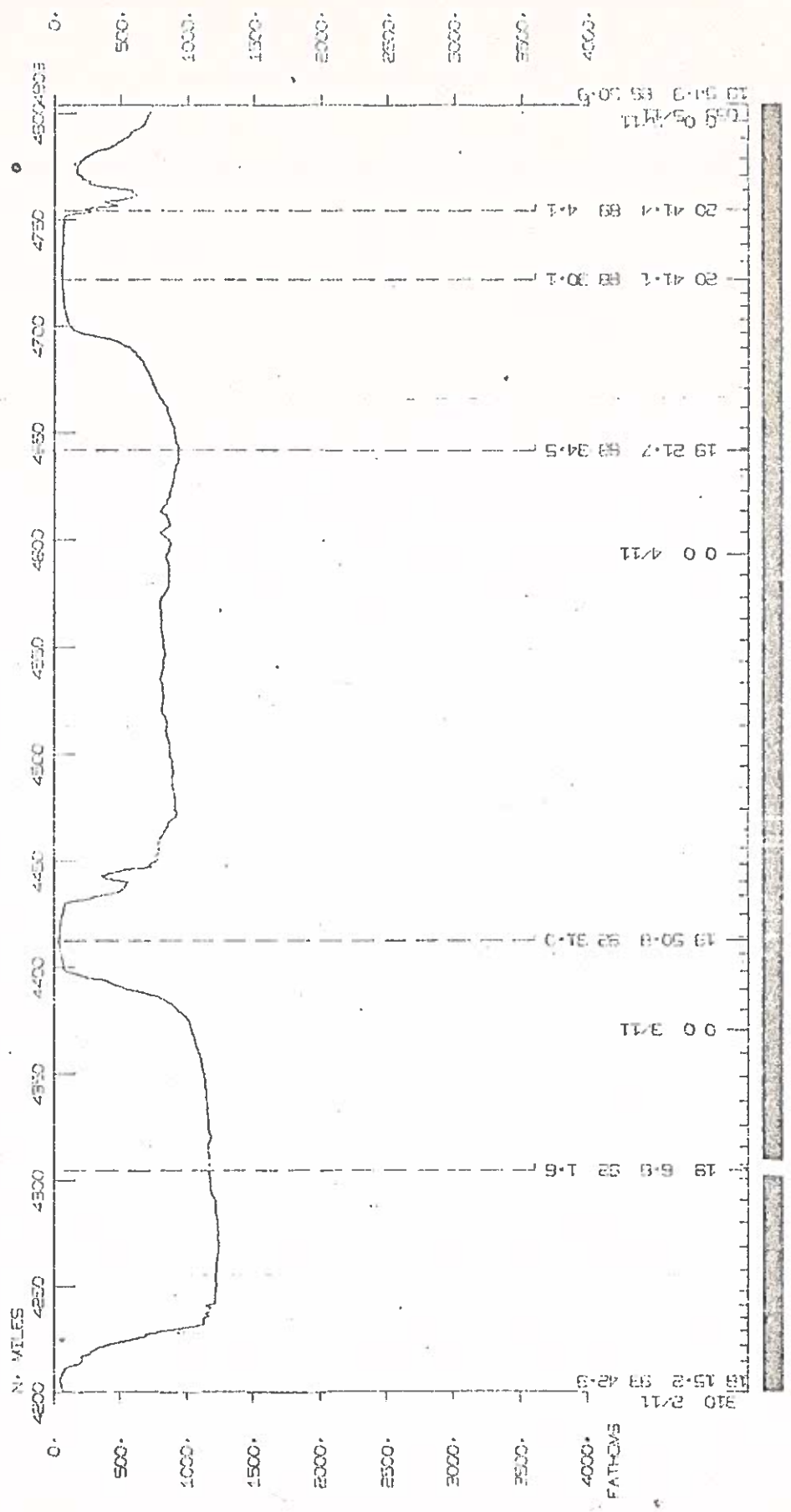
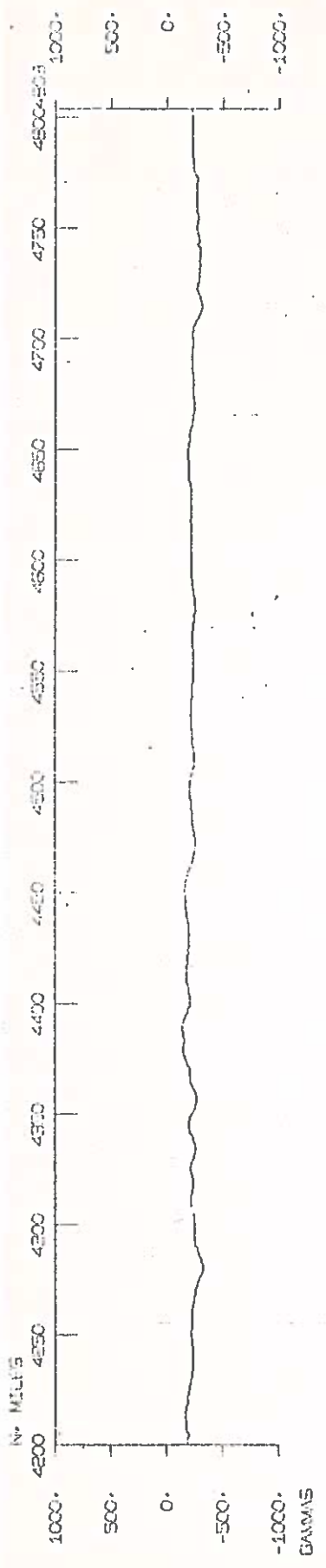


TASADAY LEG. 6

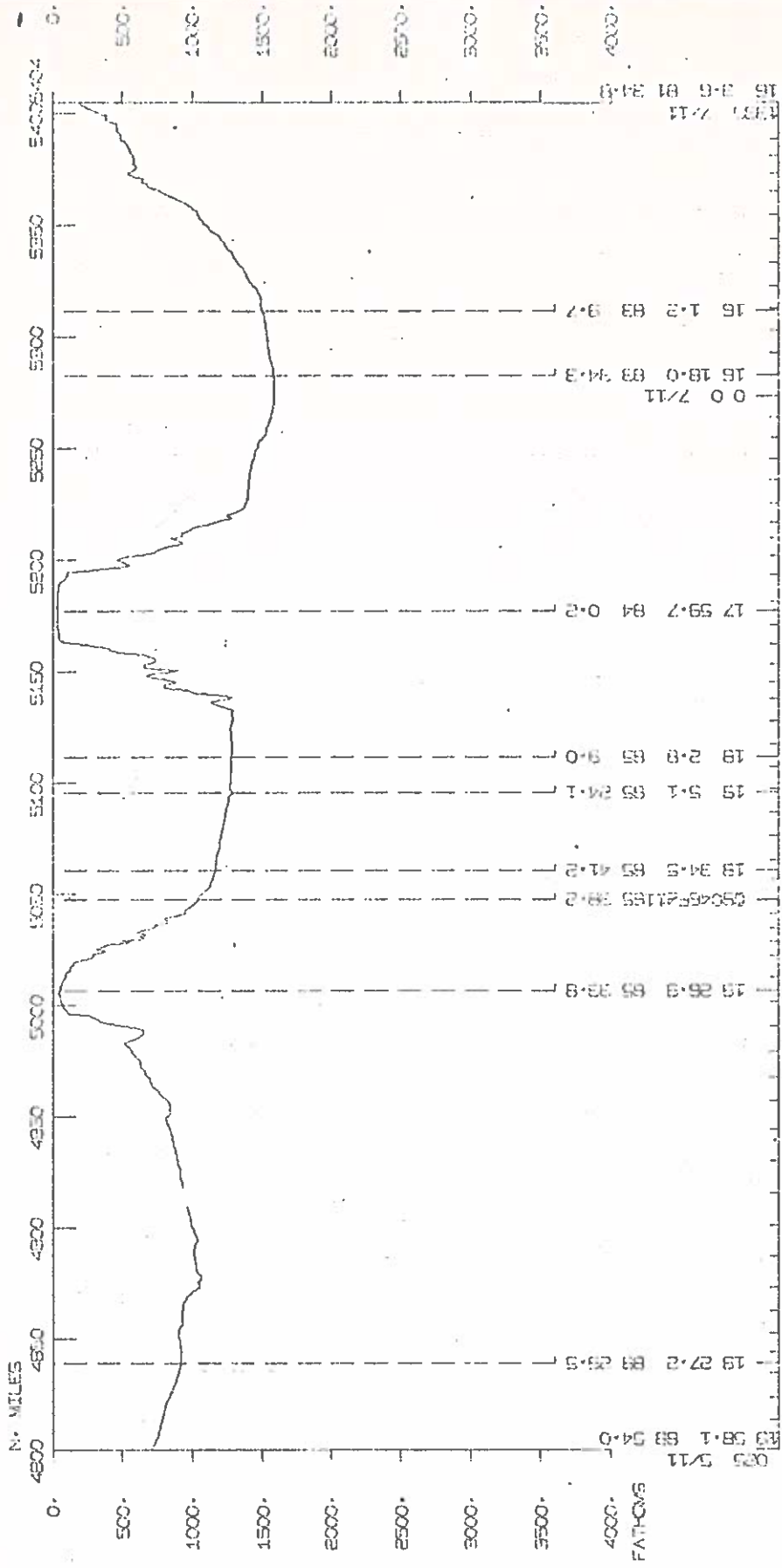
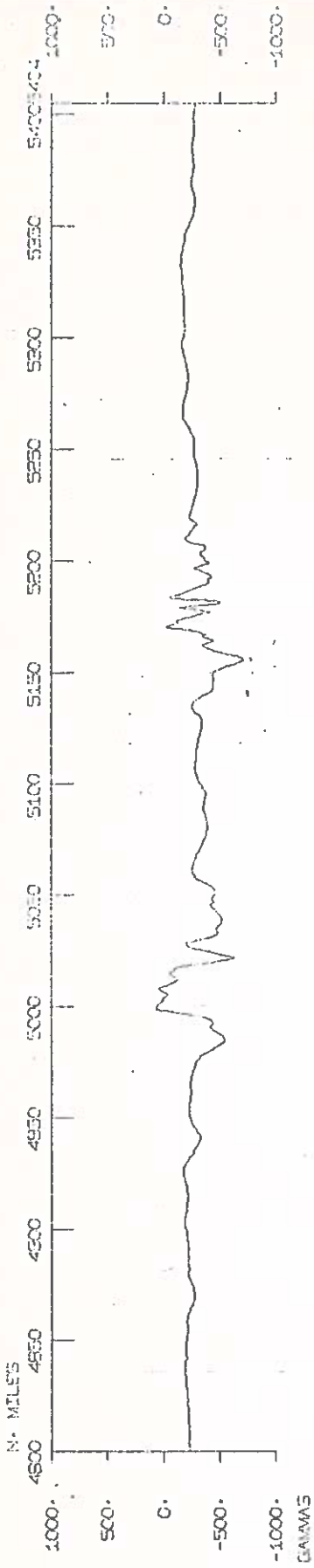


1930 23/10 15 27.8 93 2.1
15 26.2 93 13.3 7
0 0 30/10 15 20.6 93 42.3 7
15 12.1 93 20.0 7
15 10.2 93 3.8 7
15 8.2 93 13.3 7
15 9.0 92 50.7 7
15 5.8 93 39.2 7
0 0 21/10 14 58.5 92 55.6 7
14 50.0 92 54.5 7
14 45.2 92 28.7 7
15 4.7 92 40.3 7
15 36.5 92 40.3 7
15 47.7 92 0.6 7
15 13.8 92 3.7 7
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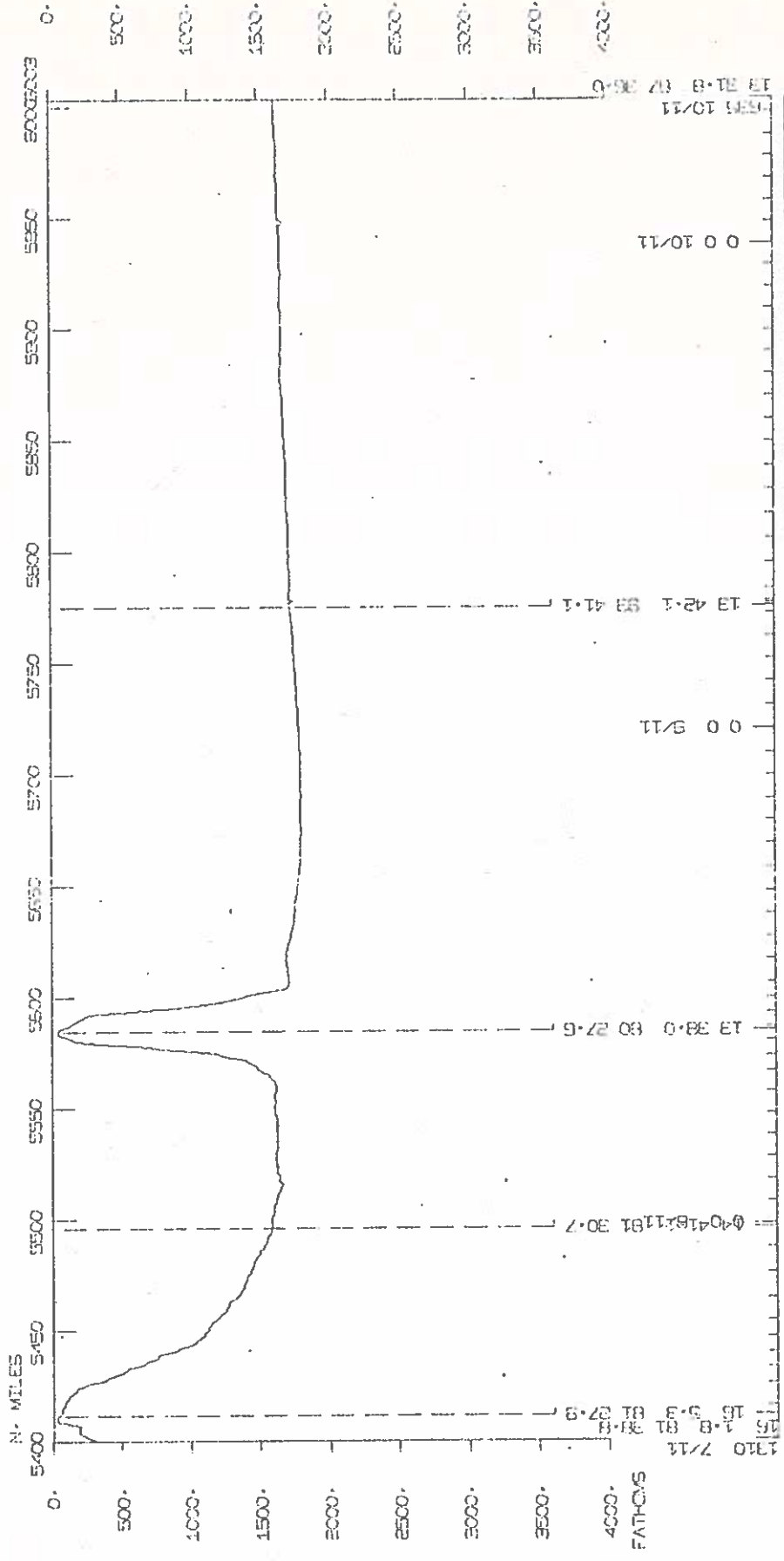
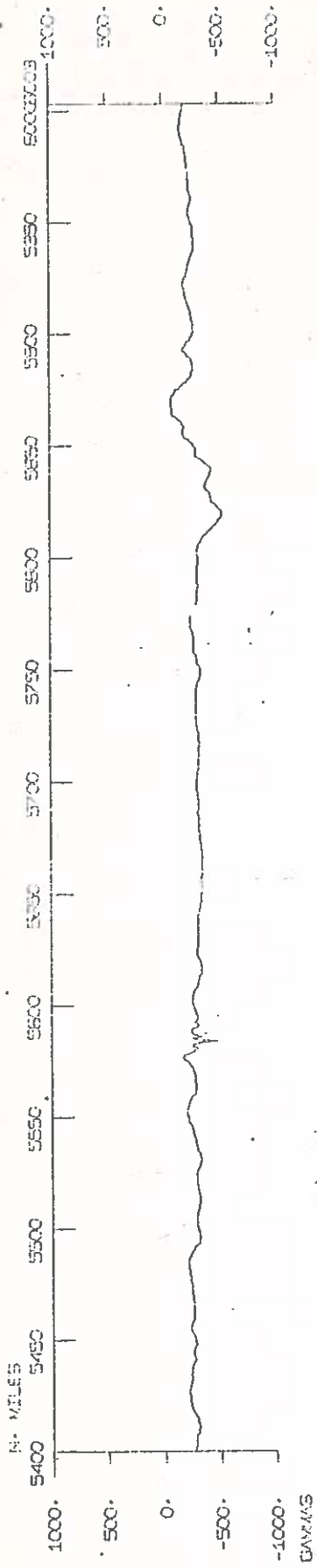
TASADAY LEG. B



TASADAY LEG B

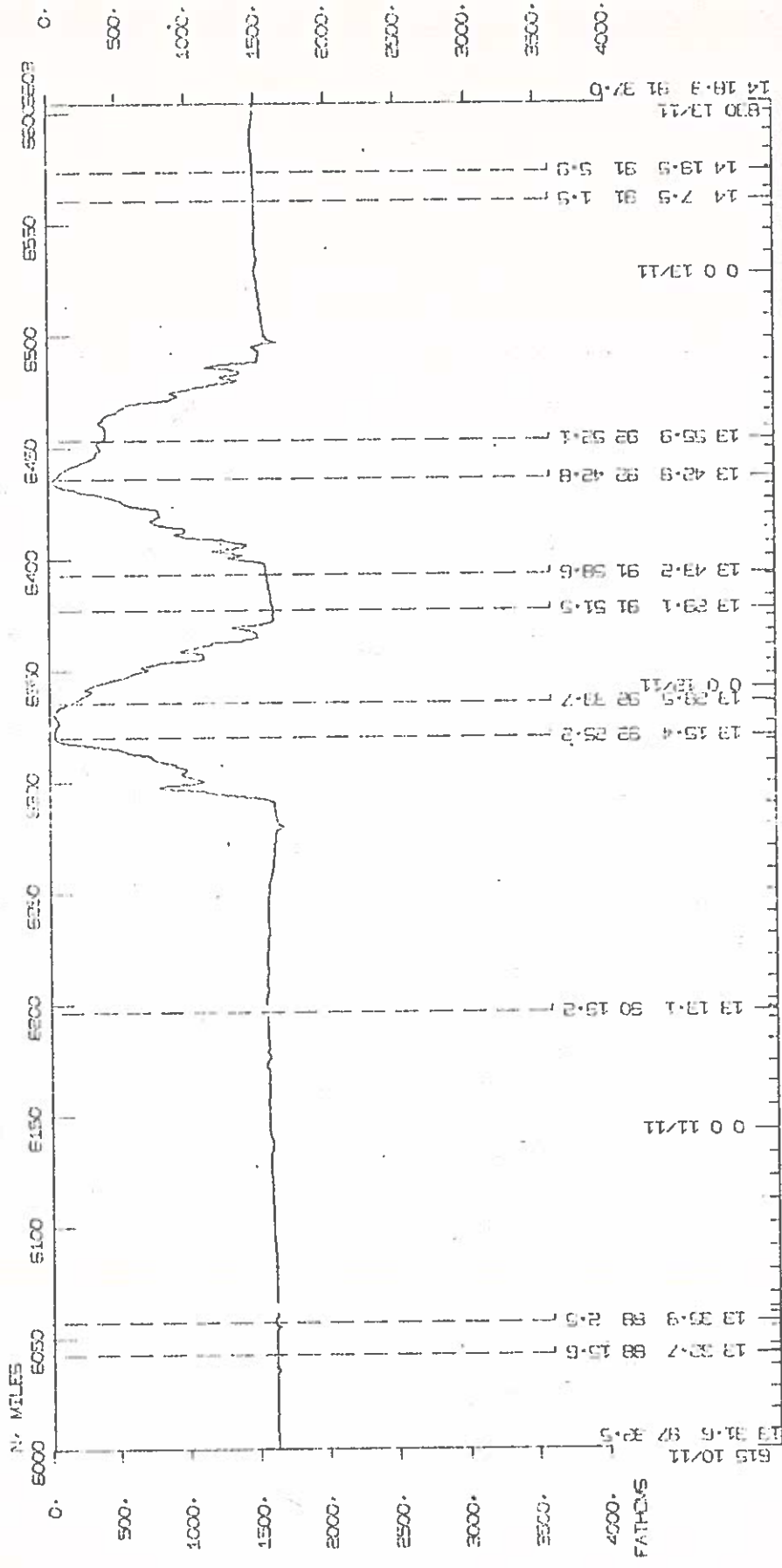
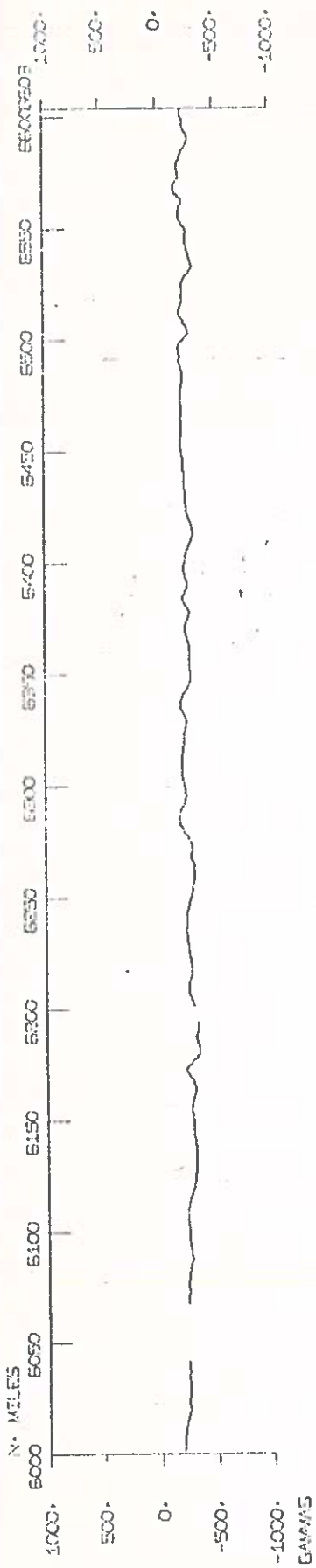


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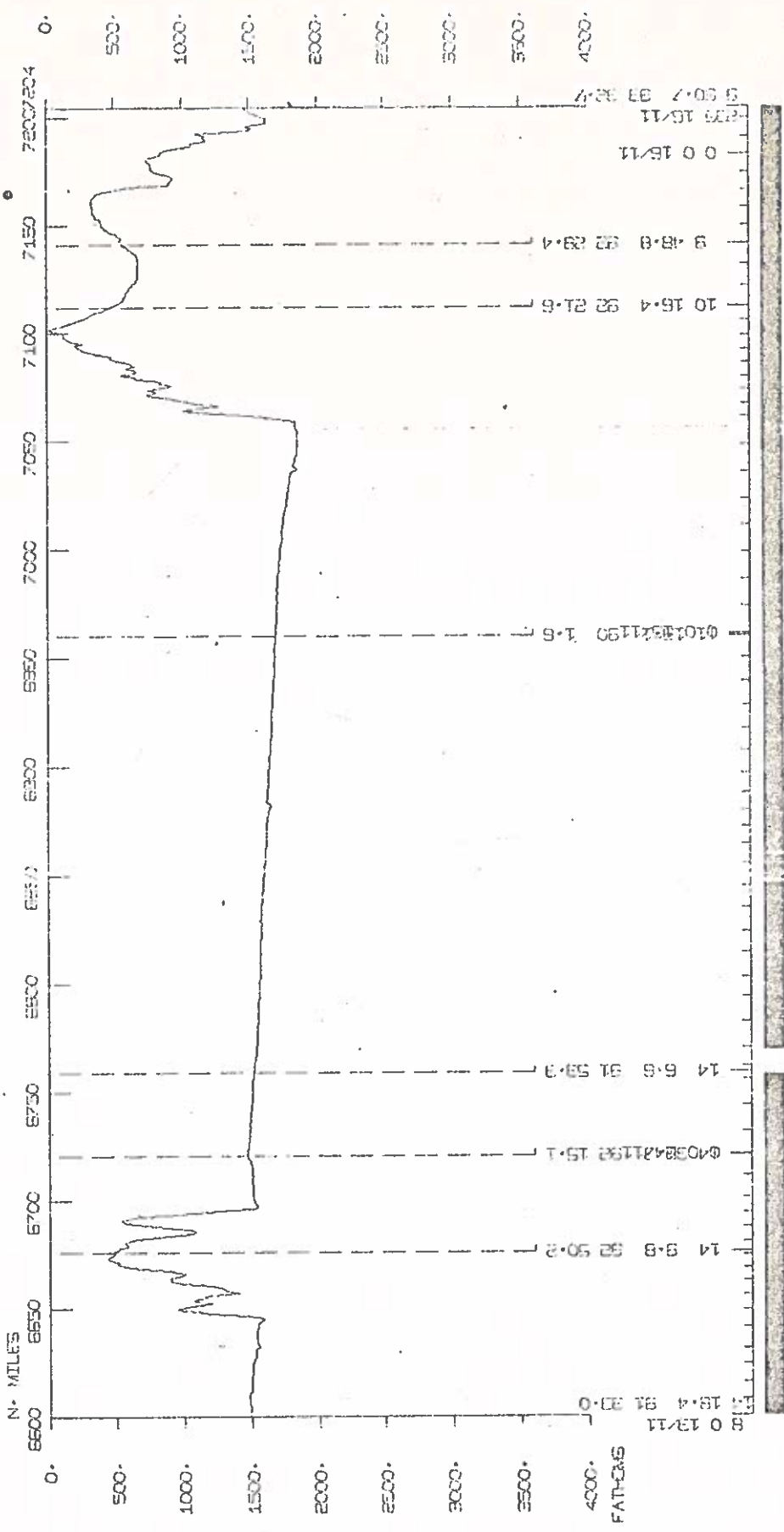
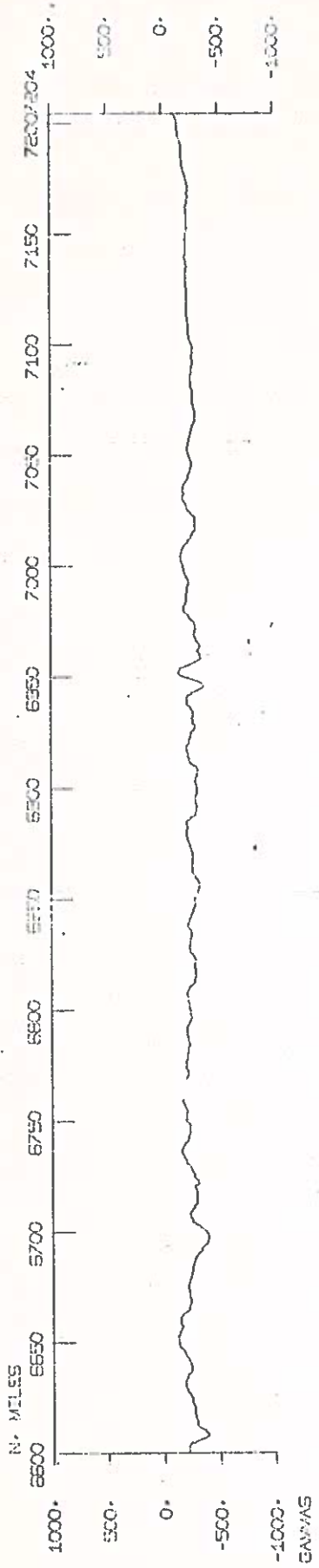


13 38.0 (80 27.6)
 13 42.1 (93 41.1)
 13 41.1

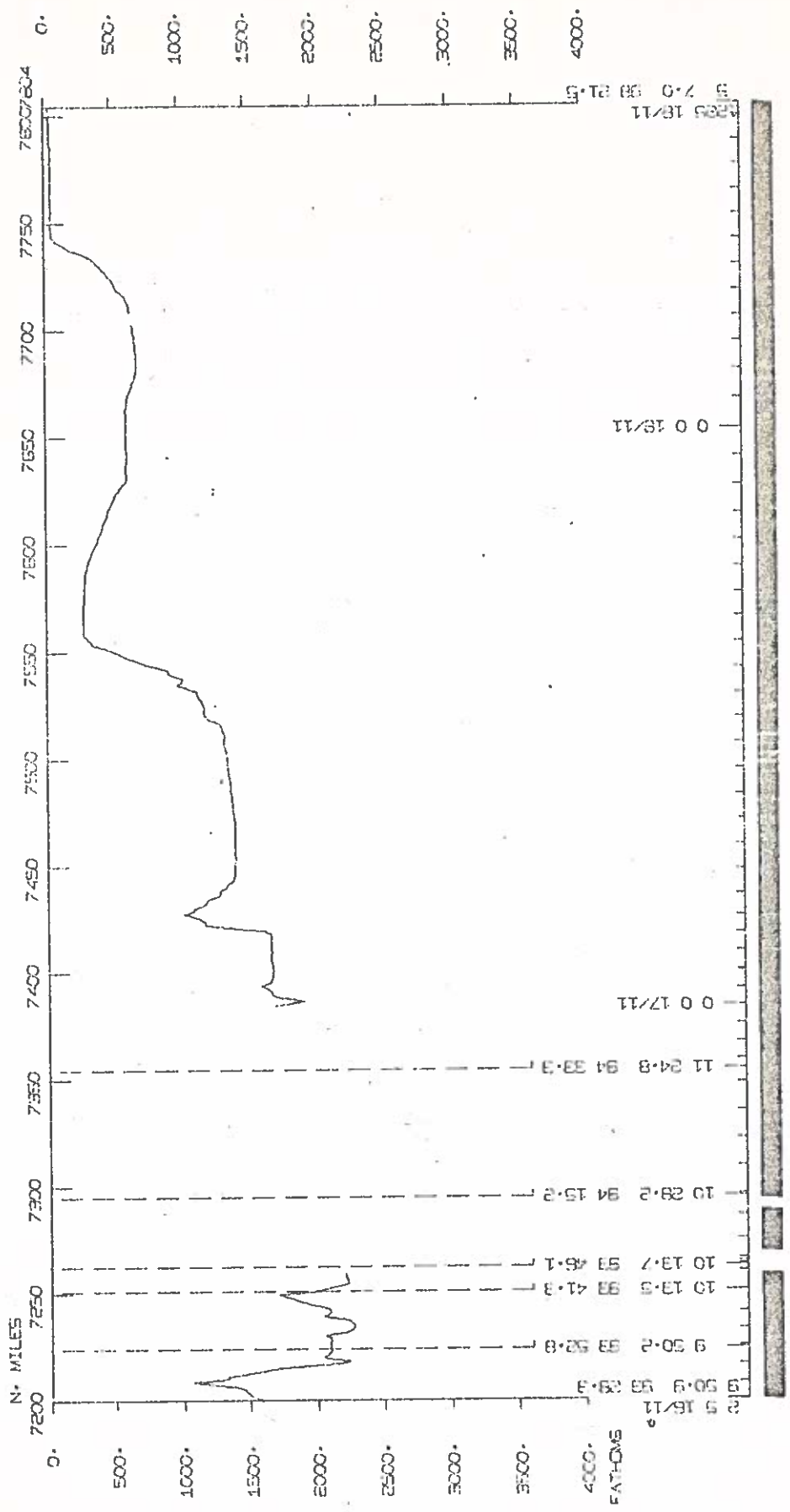
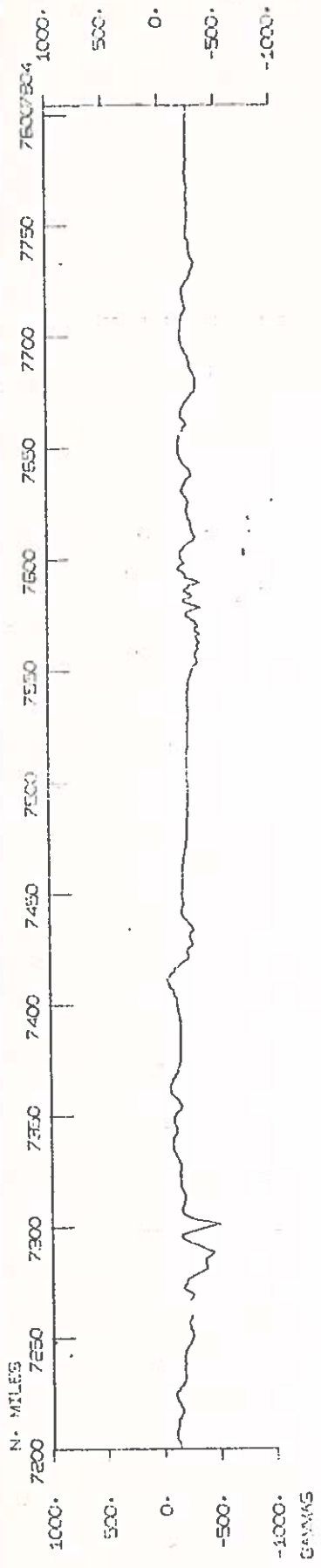
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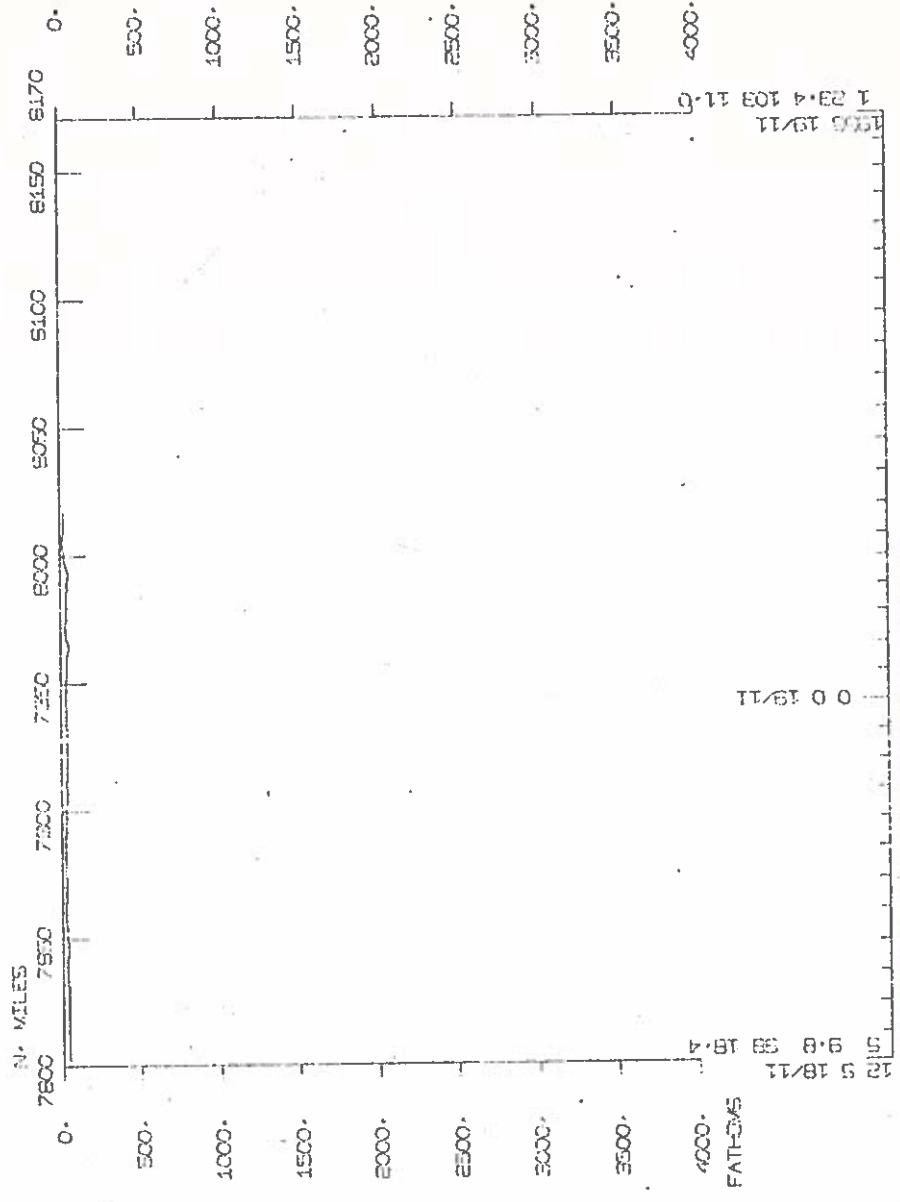
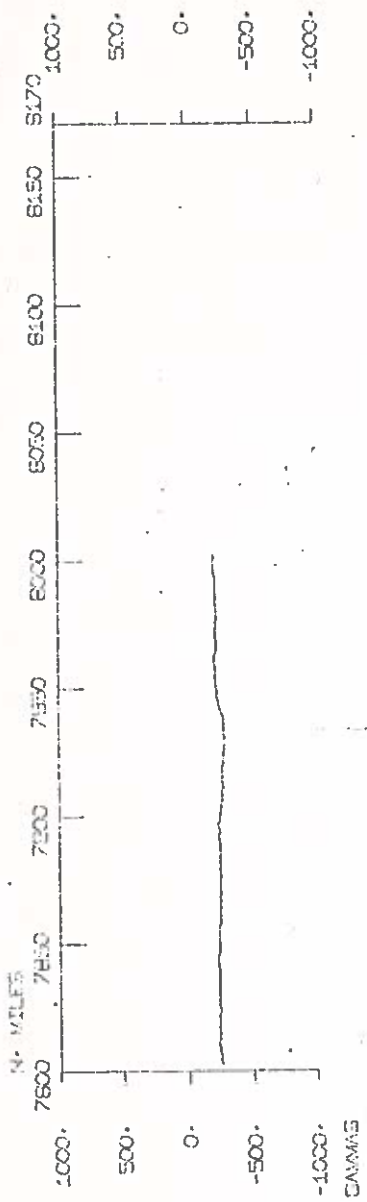
TASADAY LEG. 6



ASADAY LEG B

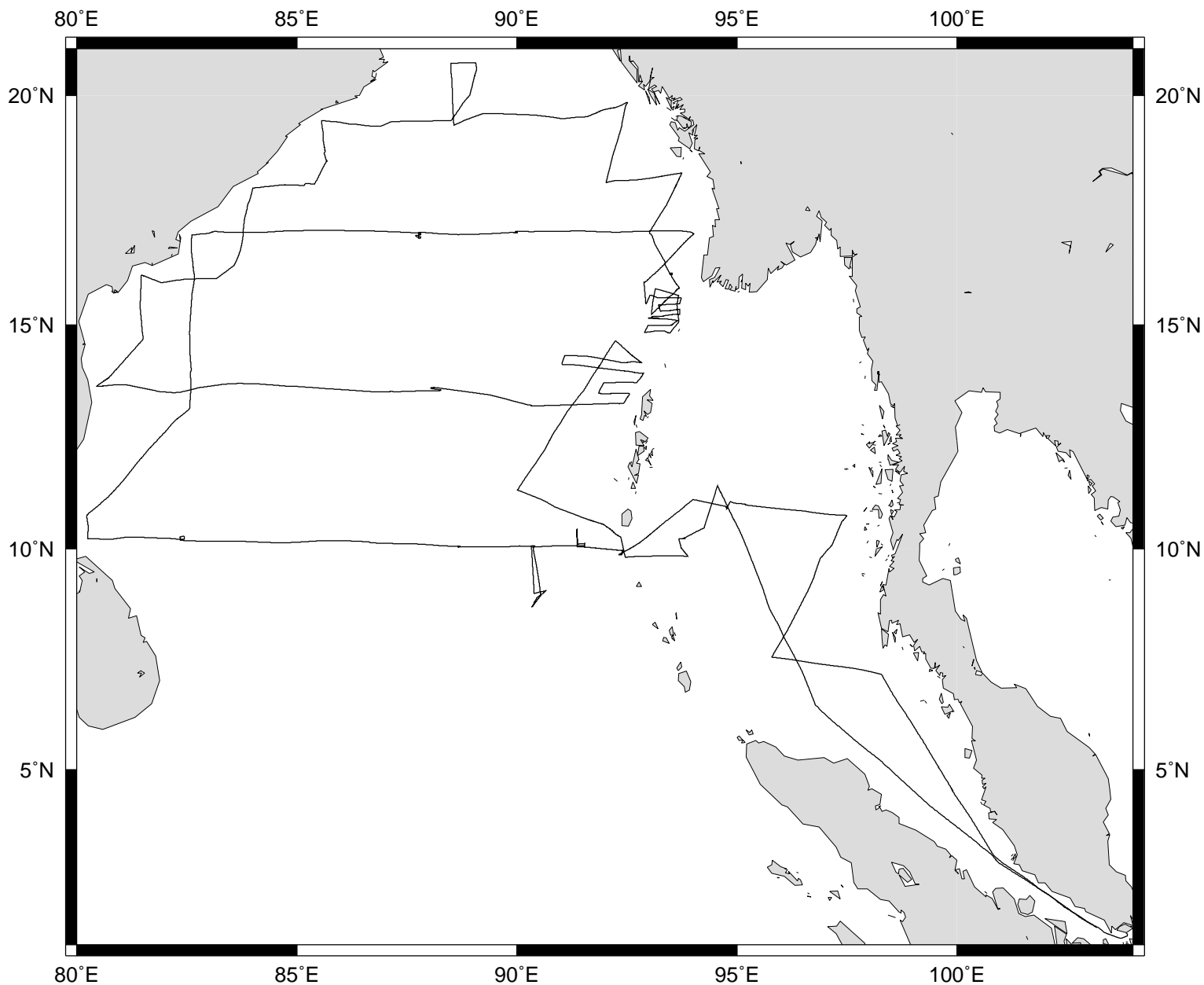


TASADAY LEG B



12 5 18/11
 5 9.8 39 18.4
 0 0 19/11
 1 23.4 103 11.0





Cruise: TSDY06WT

Begin date (dd/mm/yyyy): 13/10/1973 End date: 19/11/1973

Data collected (# points): twtt: 10060 tcor: 10060 mtot: 9543 manm: 9543

File: TSDY06WT.gmtd

Cruise level information

cruise-id::TSDY06WT
cruise-name::TASADAY LEG 6
cruise-narrative::geological and geophysical evaluation of the Andaman Sea, Bay of Bengal, and southwest side of Sumatra.
pi-title::Professor Emeritus Geosciences Research Division
science-themes::Biological Oceanography, Geological Oceanography, Marine Geophysics
scientific-party-equipment::70 CM OPEN NET, 2 METER HEAT PROBE, FREE-FALL CORE, TRIP GRAVITY CORE (WITH PISTON CORE), PISTON CORE, SEISMIC BOUY, SONOBUOY, DRIFTING, DIGITAL RECORDER DATA, AIRGUN

cruise-start-date::1973-10-13
cruise-start-port::SINGAPORE
latitude-start::1.2652
longitude-start::103.84551
cruise-end-date::1973-11-20
cruise-end-port::SINGAPORE
latitude-end::1.3899
longitude-end::103.1839

latitude-minimum::1.14449
longitude-minimum::80.22620
latitude-maximum::20.70040
longitude-maximum::103.87960

data-corrected-for-ship-draft::YES
data-corrected-for-tides::NO
data-types::depth_sec magnetic_field magnetic_anomaly subbottom_3.5 seismic_reflection

pi-city-state-zip::La Jolla, CA 92093-0220
pi-email::jcurray@ucsd.edu
pi-fax::858-534-0784
pi-institution::Scripps Institution of Oceanography, UCSD
pi-name::Curray, Joseph R.
pi-phone::858-534-3299
pi-street-address::9500 Gilman Drive, Mail Code: 0220
pi-title::Professor Emeritus Geosciences Research Division

SIO Log weekly reports
Tasaday Expedition Leg 06

Thomas Washington DIG 171315Z Oct 73. Departed Singapore 13 October. Usual difficulties in starting and maintaining complex geophysical systems but now running 3.5 KHZ gravity, magnetometer. Two sweeps of analog and one of digital seismic reflection with up to four airguns, and taping all underway seismic data and passive listening on stations. Have accomplished four successful combined airgun and explosion wide angle and refraction lines in southern and central Andaman Sea, two heat flow measurements and one piston core and detection of two earthquakes and active normal faulting near central Andaman Rift Valley. Structure complex cut compatible with preconceived ideas of extensional basin. Curray/Moore.

Thomas Washington 250405Z Oct 73. Obtaining excellent seismic reflection, seismic refraction and wide angle reflection results. Gravity results as yet unknown because of tape reading problems although solution now probably in sight. Have followed Paleocene-Eocene sedimentary horizon beneath Bengal Fan from DSDP 217 on Ninety-East Ridge westward to Indian continental margin and eastward dipping into the Sunda subduction zone. Superb reflection records of fan sediments folded into the Andaman-Nicobar Ridge above subduction zone. Curray/Moor/Raitt.

Thomas Washington 010510Z Nov 73. Scientific progress to date excellent. We have now completed second transverse section across Bay of Bengal with continuous analog and digital seismic reflection and close spaced underway refraction runs. Three day survey in holding pattern at approaches to Rangoon yielded details of a huge slide mass at the foot of the slope and demonstrated the deformational style of the thick sediment column at the subduction zone. Progress in international relations remains zero with denial of requests to operate in either Indian or Burmese territorial waters and last minute refusal of request for port call in Rangoon. We will continue on one engine to conserve fuel. ETA Singapore 20 November or earlier if fuel requirements demand. Disappointment prevails over lack of an intermediate stop. Curray/Moore/Raitt.

Thomas Washington 141155Z Nov 73. Have completed all four planned East-West geophysical transects across Bay of Bengal plus detailed surveys of both margin slopes between 10 and 20N and delineation of Ninety-East Ridge with extensive seismic refraction and wide angle reflection as well as continuous bathymetry, magnetics, gravity and seismic reflection. Plans for our final week of work in Andaman Sea temporarily delayed by diversion to avoid cyclone. Curry/Moore/Raitt

MGD77 file information			
4TSDY06WTMGD77	5533320030711	SCRIPPS INSTITUTION OF OCEANOGRAPHY	01
USA	R/V THOMAS WASHINGTON	SHIP CURRAY J.R.	02
TASADAY LEG 6			03
19731013	SINGAPORE	19731120	SINGAPORE
SATNAV,AUTOLOG GYRO + EMLOG		LINEAR INTERP.BETWEEN ADJACENT FIXES	05
3.5KHZ/GIFFT RECORDER/WIDE BEAM		ANAL.RECORDS,CARDS,35MMFILM	06
VARIAN MFD PROTON PRECESSION MOD 4970		ANAL.RECORDS,CARDS	07
ASKANIA GSS2,ANSCHUTZ ELECT. GYRO TABLE			08
20TO300CU.IN.AIRGUN,10-300HZ,EDO PSR RECANAL.RECORDS,35MM MICROFILM			09
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F7.1,F6.1,F5.1,A5,A6,I1)			11
0501SECONDSWEEP14630005	MINUTE INTERVAL		12
05006	03IGRF 1965	LIN. INTERP.POINTS WITHIN ONE DEGREE SQUARE	13
			14
			15
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