

**REPORT AND INDEX OF  
UNDERWAY MARINE GEOPHYSICAL DATA  
WESTWARD EXPEDITION**

**LEG 12**

**(WEST12MV)**

**R/V MELVILLE**

**(Issued August 1995)**

**Ports:**

Hobart, Tasmania (18 April 1995)  
to  
Papeete, Tahiti (5 May 1995)

**Technicians in Charge:**

Resident Marine Technician -Ronald Comer

Computer Technician -Ronald Moe

No Sea Beam/Underway Processor on board

Post-Cruise Processing and Report Preparation by the  
Geological Data Center, Scripps Institution of-Oceanography  
La Jolla, California 92093-0223

Data Collection and Processing Funded by:  
NSF OCE94-00707

**NOTE:** *This is an index of underway geophysical data edited and processed after the completion of the cruise leg and is intended primarily for informal use within the institution. This document is not to be reproduced or distributed outside Scripps without prior approval of the chief scientist or the Geological Data Center, Scripps Institution of Oceanography, La Jolla, California 92093-0223*

GDC Cruise I.D.# 266



**REPORT AND INDEX OF NAVIGATION  
AND UNDERWAY GEOPHYSICAL DATA**

Processed by the Geological Data Center  
Scripps Institution of Oceanography

**Contents:**

**Index Chart** - gives track of cruise leg, dates, ports, and mileage of each type of data collected.

**Track Charts** - annotated with dates and hour ticks.

**Profiles** - depth, magnetic and gravity free air anomaly vs. distance. (Sections of track with seismic reflection data have a wide black line along the bottom of the profile.)

**Sample Index** - list of begin/end times and positions of all underway records as well as samples and measurements from other disciplines if collected on the cruise leg.

**NOTE:** One or more of the underway data types may not be collected on a given cruise leg. For information on the availability and reproduction costs of data in the following forms, contact S.M. Smith, Curator, Geological Data Center, Scripps Institution of Oceanography, La Jolla, California 92093-0223.

Phone: (619)534-2752, FAX: (619)534-5306, Internet email: ssmith@ucsd.edu

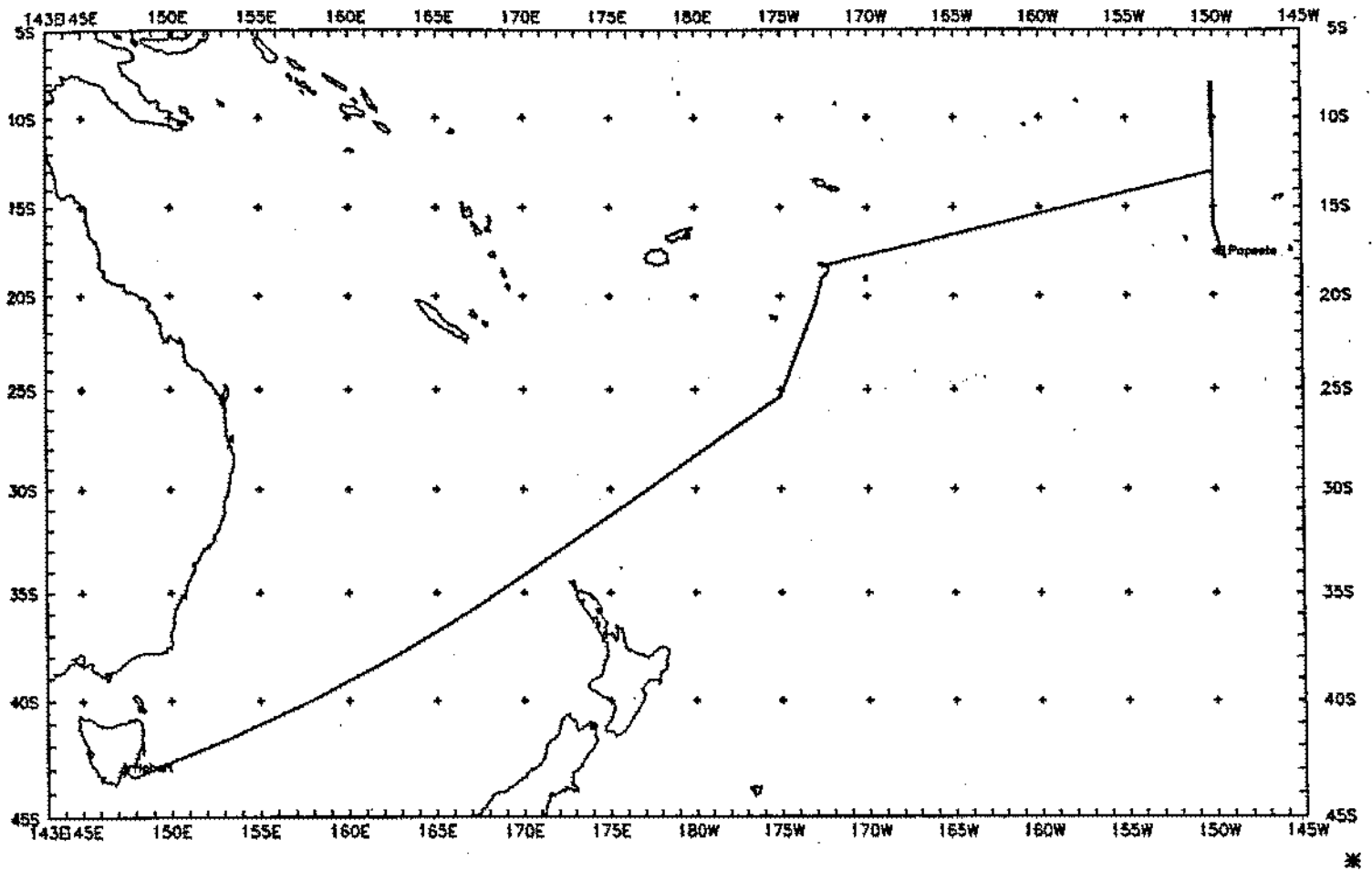
1. Files on Exabyte, DAT or 1/2 inch magnetic tape:
  - a) Separate time series ASCII files of navigation, single beam depth, gravity and magnetics.
  - b) These same data in a merged ASCII file in the MGD77 Exchange Format.
  - c) SeaBeam depth data (binary, Sun byte order) in SIO Swath Bathymetry Format (not available on 1/2" tape).
  - d) SeaBeam Sidescan data (not available on 1/2" tape).
2. Microfilm (35 mm flowfilm) or hard copies of:
  - a) Underway watch log book
  - b) SeaBeam vertical beam profile/Sidescan records.
  - c) Echosounder records - 3.5 kHz frequency.
  - d) Magnetometer records.
  - e) Seismic reflection profiler records.
3. Navigation listing with times and positions of fixes and course and speed changes.
4. Plots:
  - a) Copies of archived track plots.
  - b) Copies of archived SeaBeam contour plots.
  - c) Custom plots in Mercator projection:
    - 1) Track plots.
    - 2) SeaBeam depth contour plots.
    - 3) Depth, magnetic or gravity values printed or profiled along track.

### Sea Beam 2000 Data Collected in Ancillary Mode

In the absence of funding for Sea Beam operations on this leg, Sea Beam data were collected in "ancillary mode". In this mode of operation, no Hardware Technician or SB/Underway Processor were on board and the types of realtime records and post-processed data products are reduced from those available under the fully funded mode.

The Sea Beam data remain proprietary to the SIO Shipboard Technical Support Group, not the chief scientist.

May 1993



**WESTWARD EXPEDITION LEG 12**

**TECHNICIANS IN CHARGE:** Ronald Moe and Ronald Comer

**Scripps Institution of Oceanography**

**PORTS:** Hobart, Tasmania - Papeete, Tahiti

**DATES:** 18 April - 5 May 1995

**SHIP:** R/V Melville

**TOTAL MILEAGE OF UNDERWAY DATA COLLECTED**

**Cruise - 4900 miles**

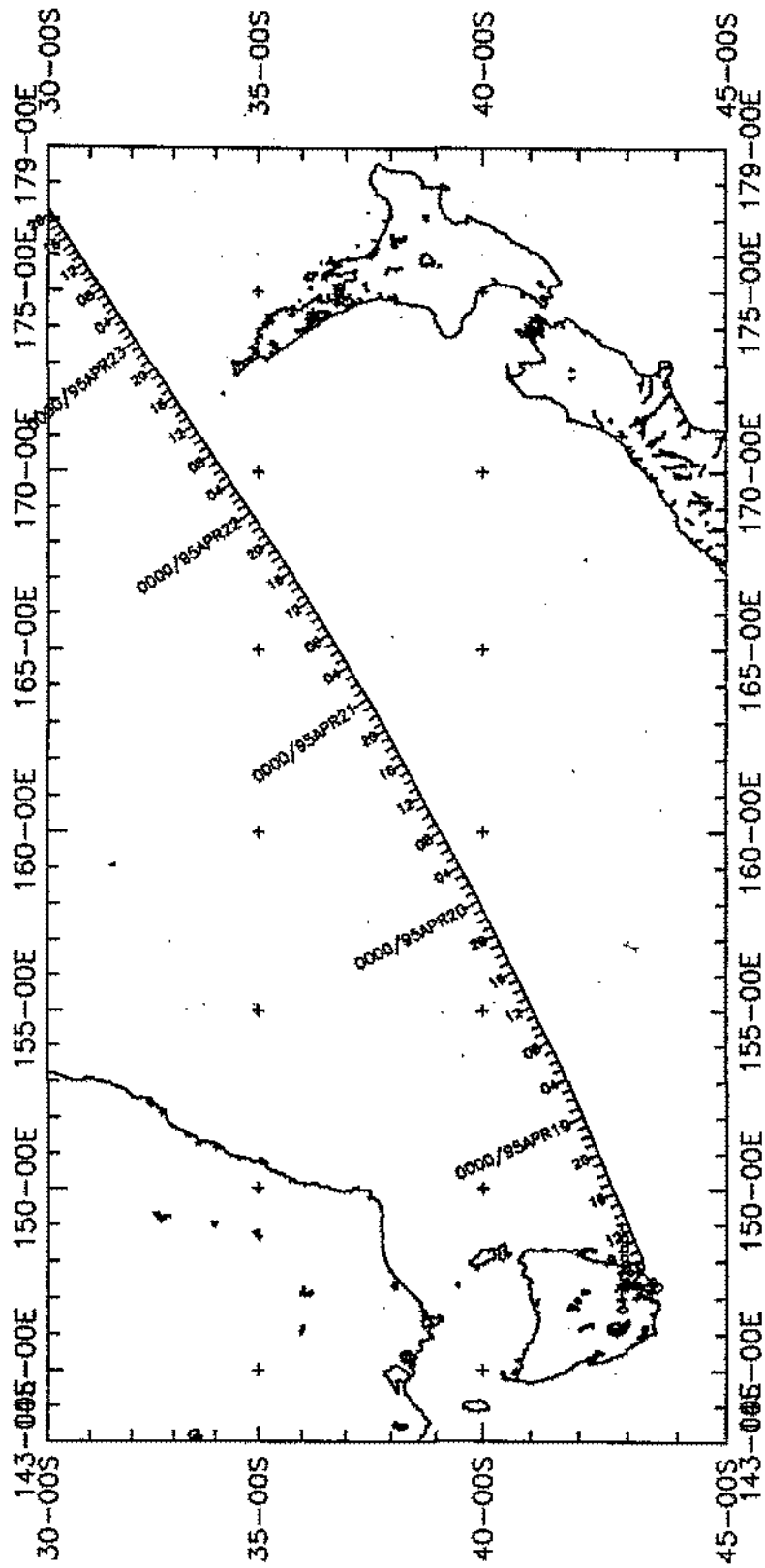
**Magnetics - 4097 miles**

**Bathymetry - 4830 miles**

**Seismic Reflection - none collected**

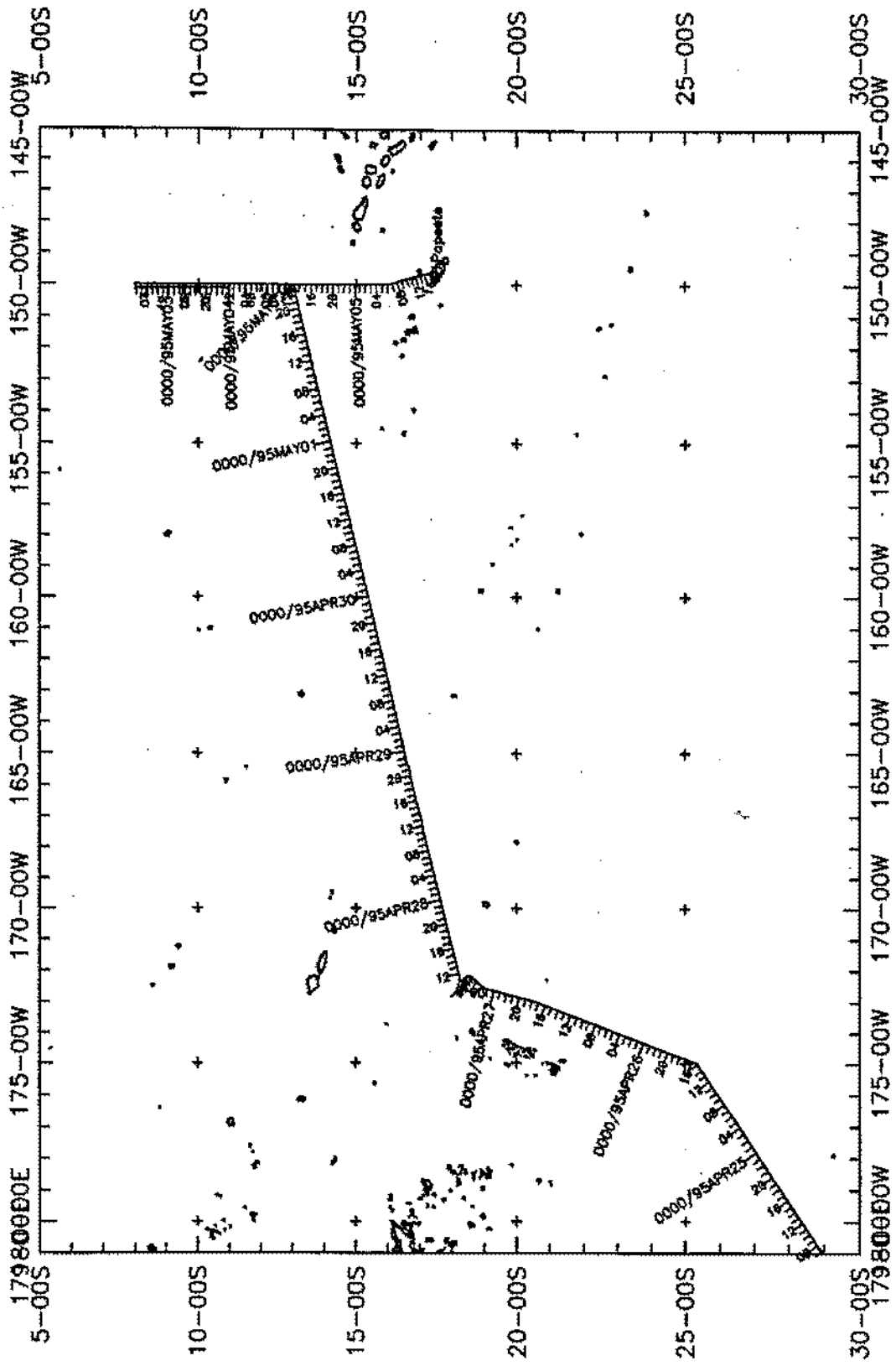
**Sea Beam - 4830 miles**

**Gravity - none collected, meter malfunction**



WESTWARD Leg 12 (WEST12MV)  
Track 1 of 2

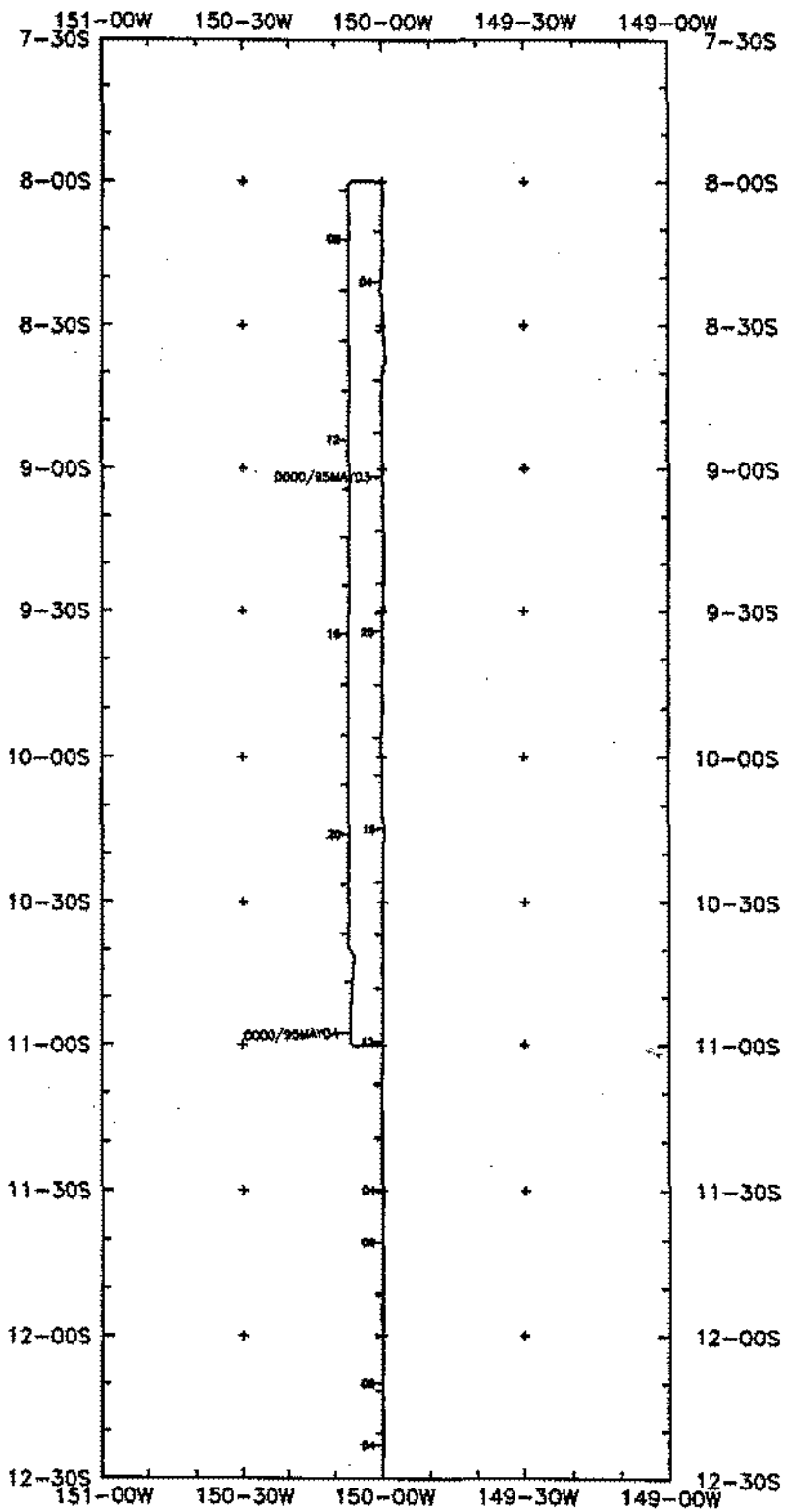
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WESTWARD Leg 12 (WEST12MV)

Track 2 of 2

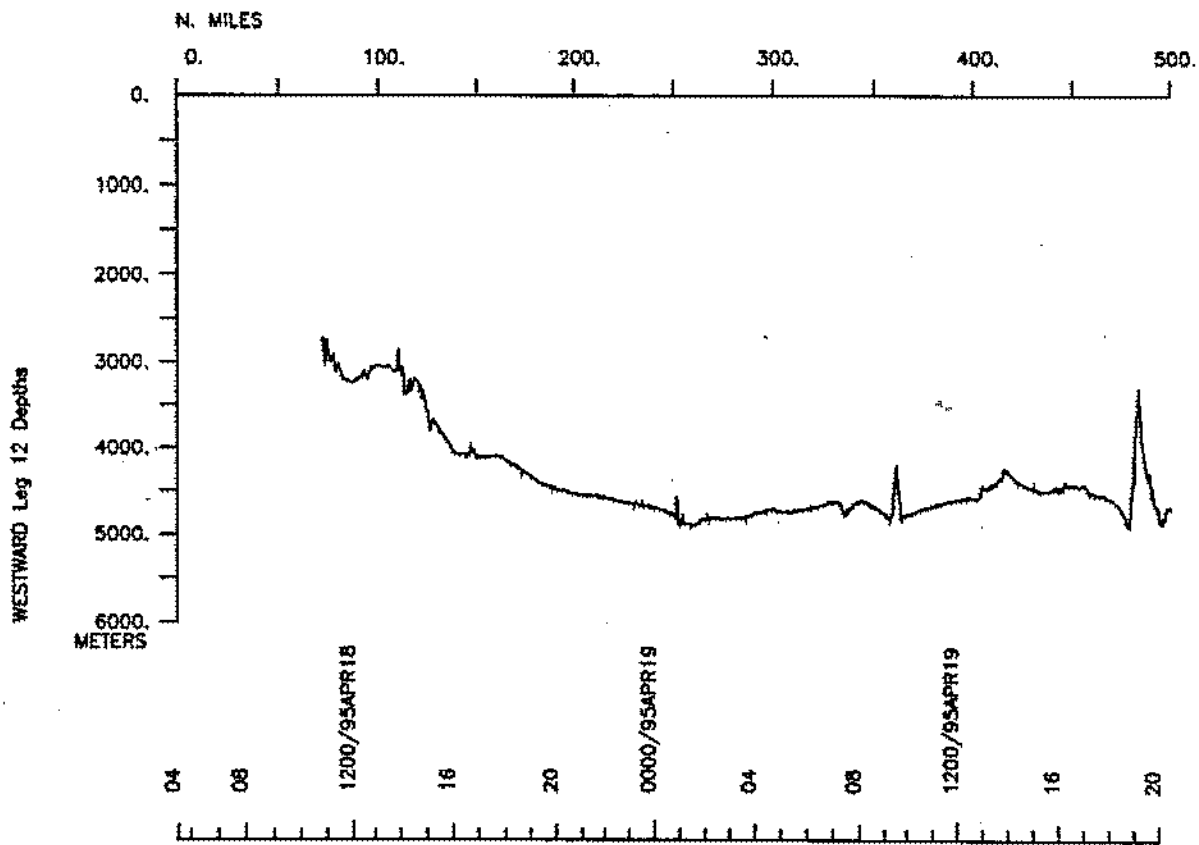
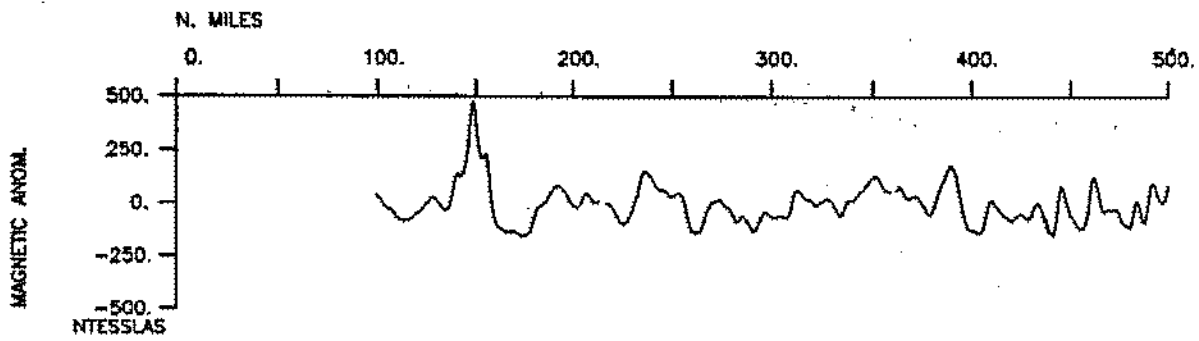
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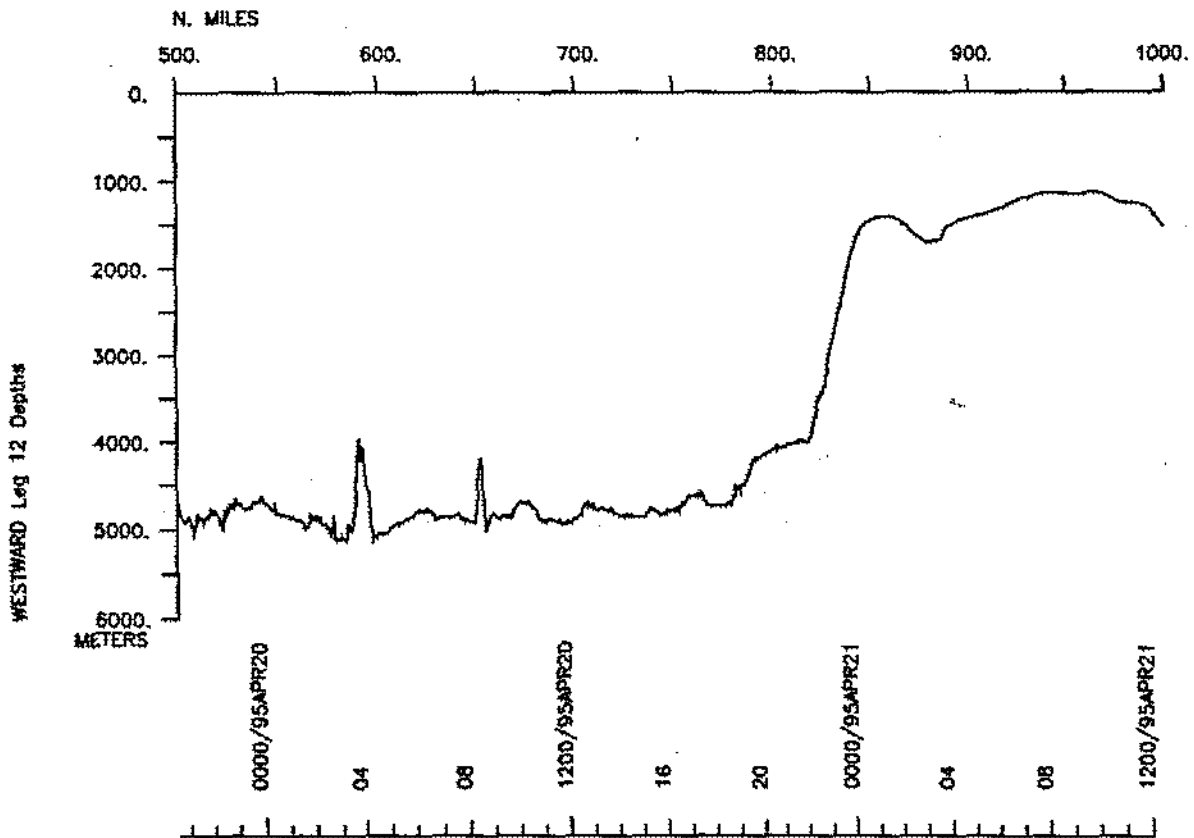
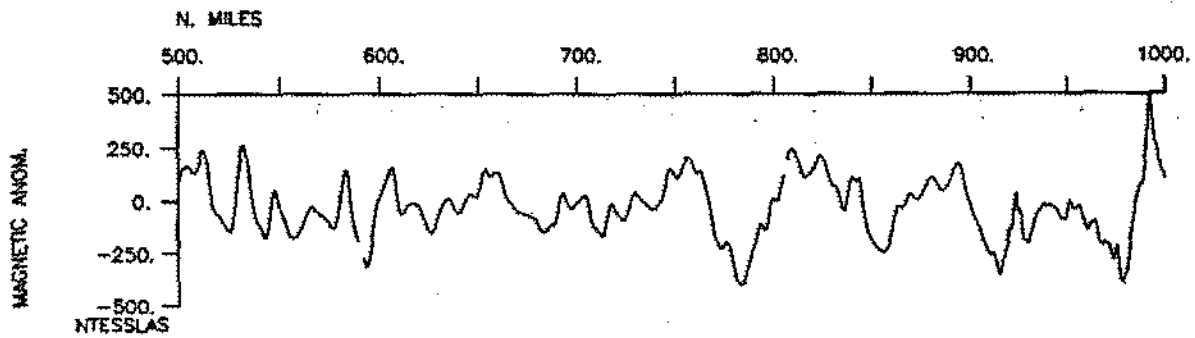


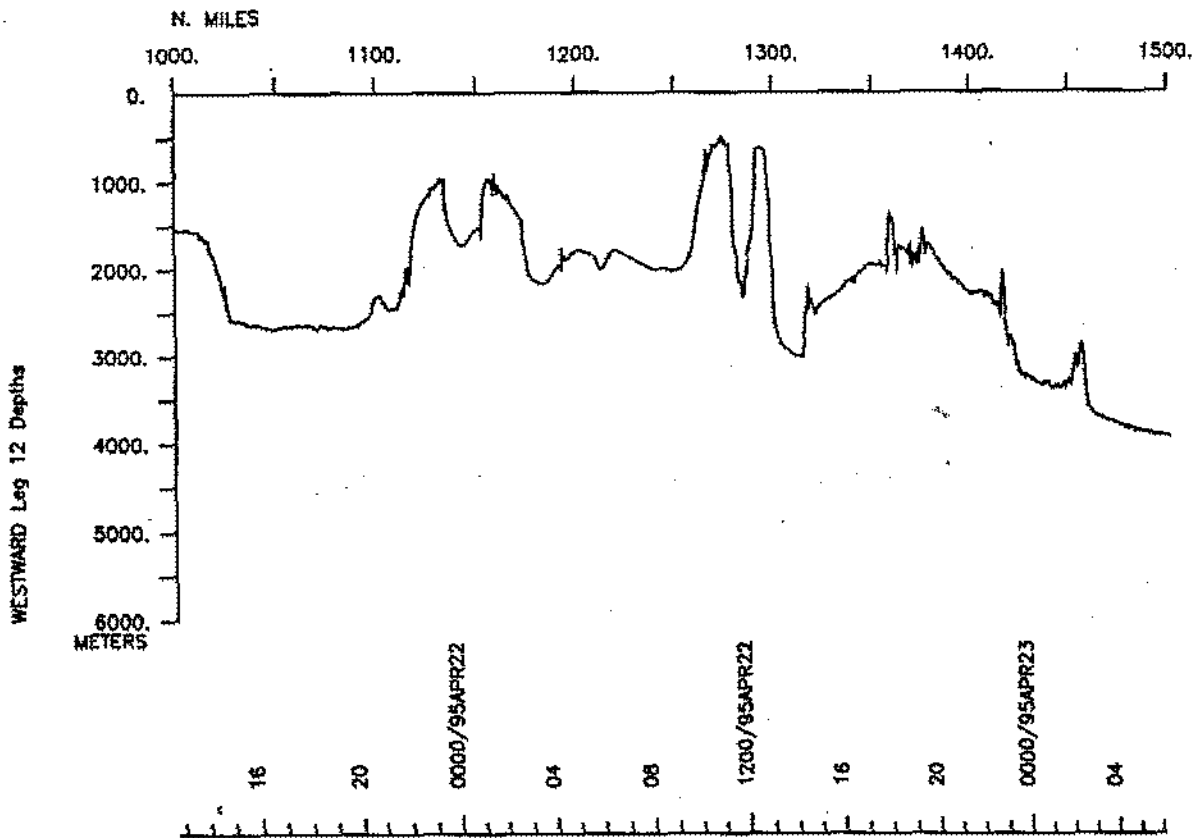
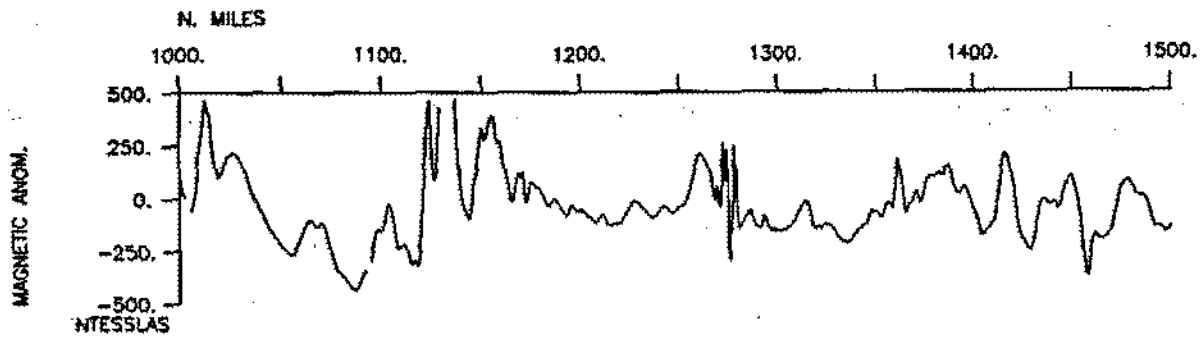
WESTWARD Leg 12 (WEST12MV)  
Survey area

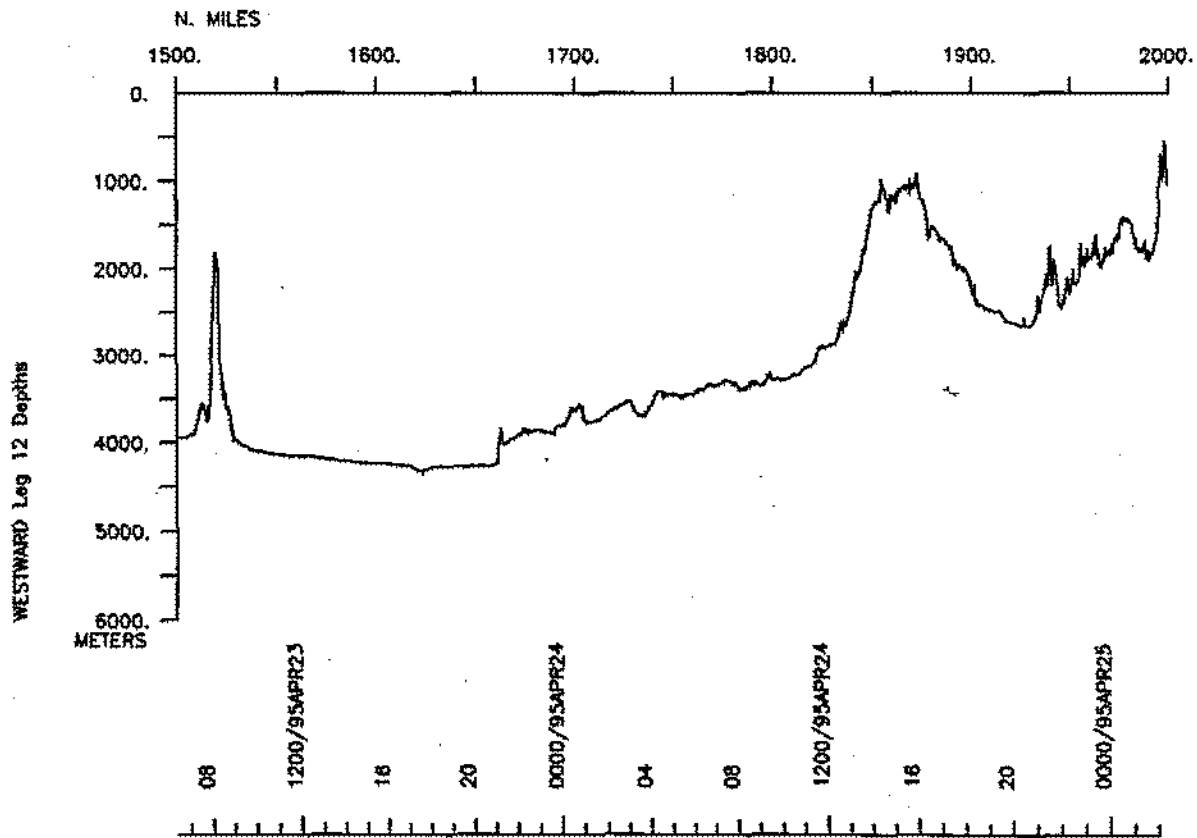
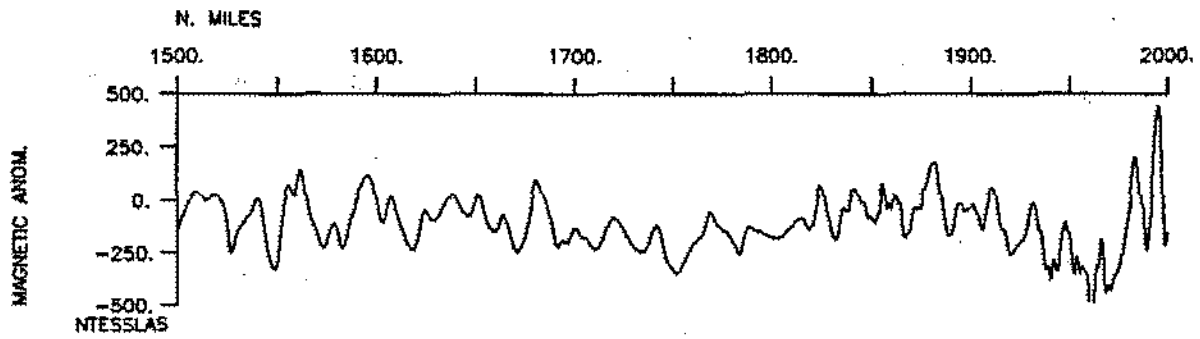
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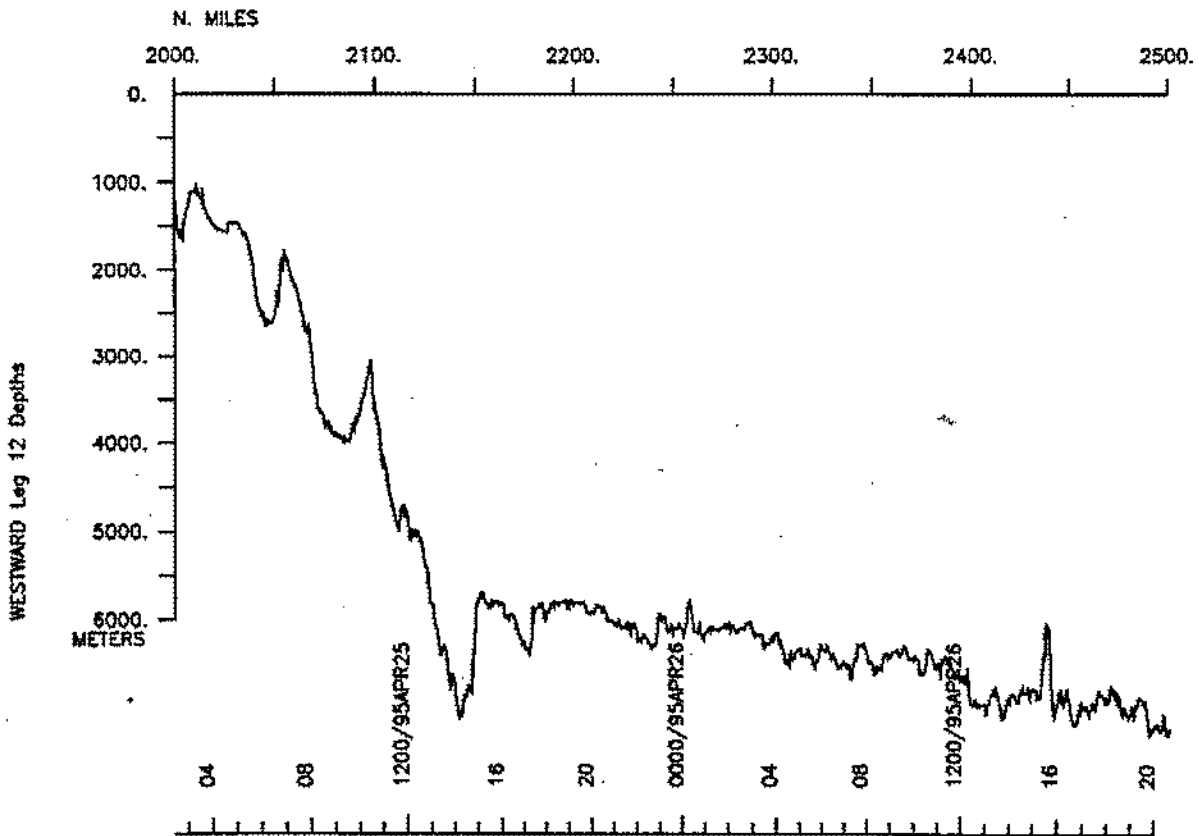
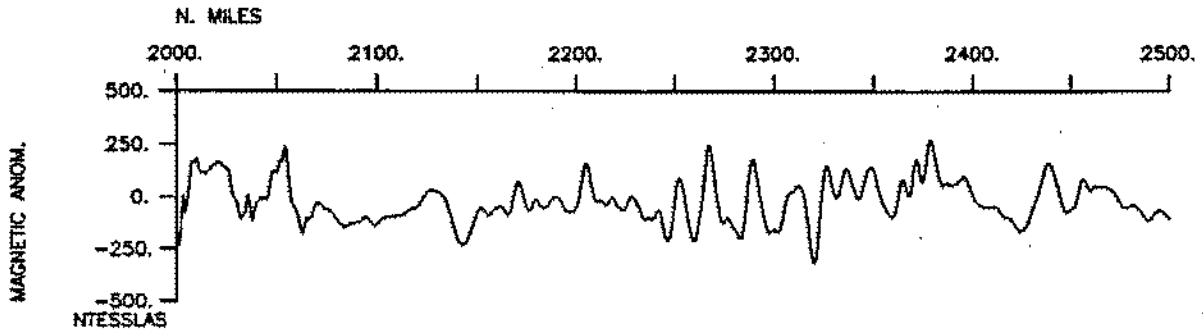


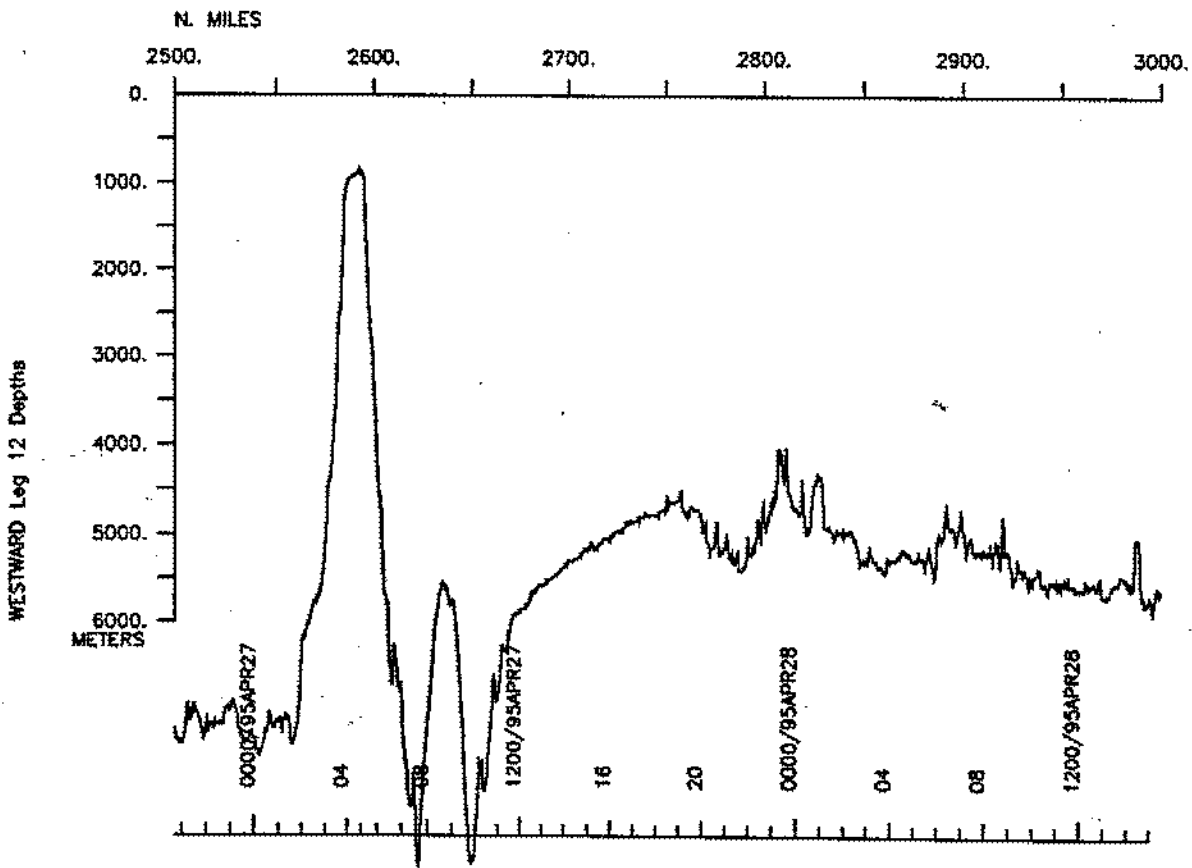
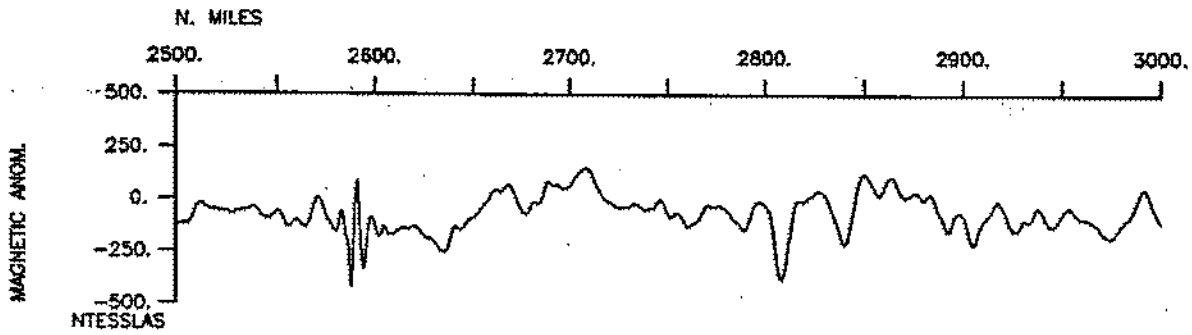


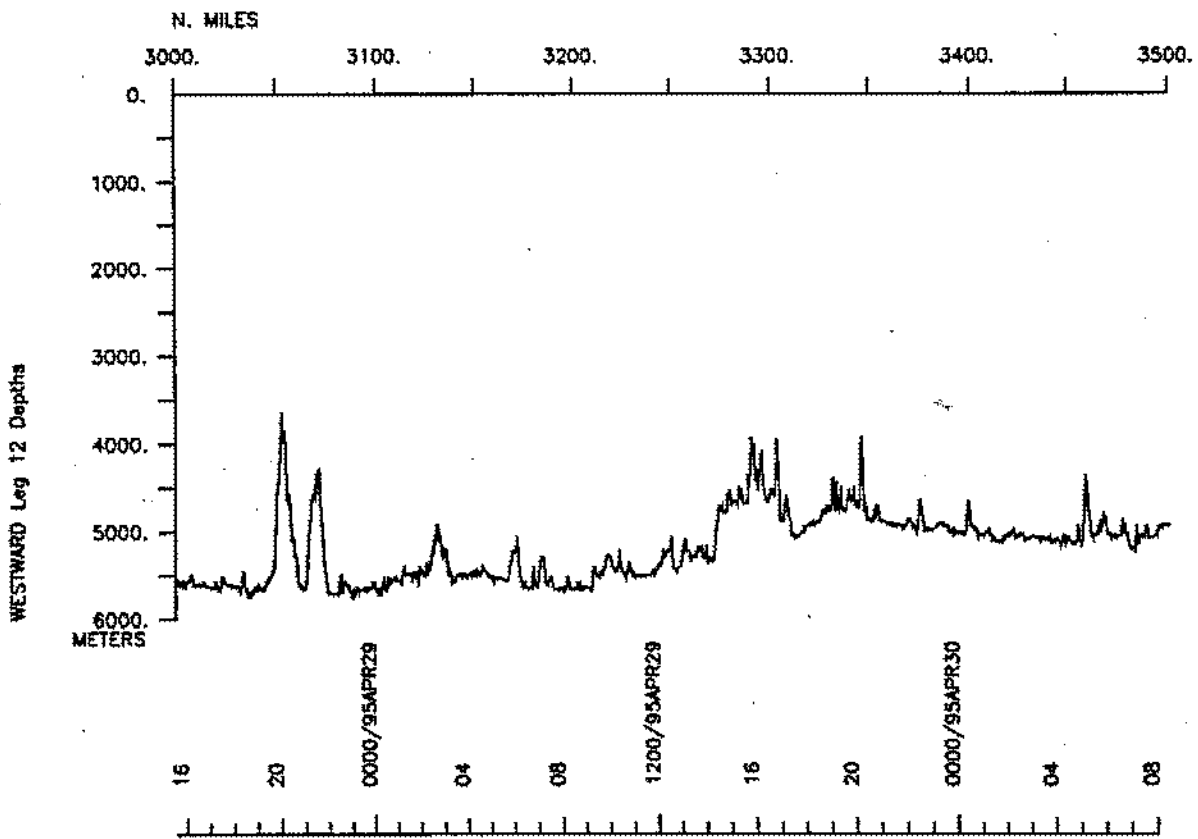
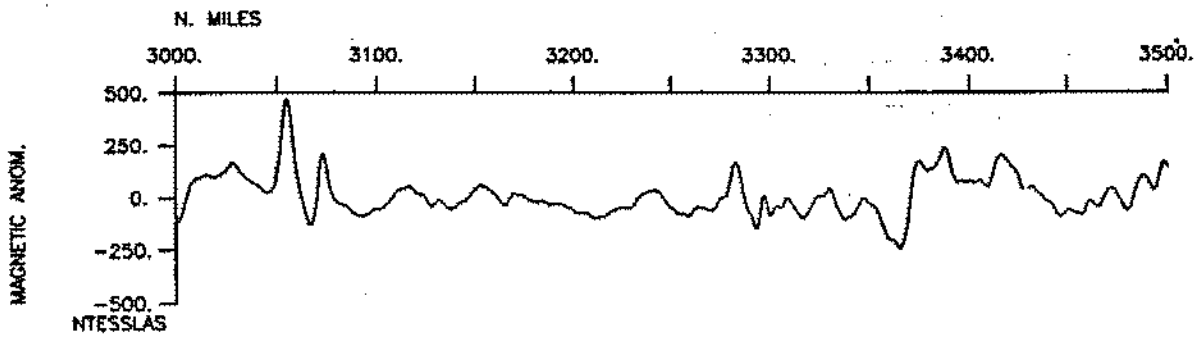


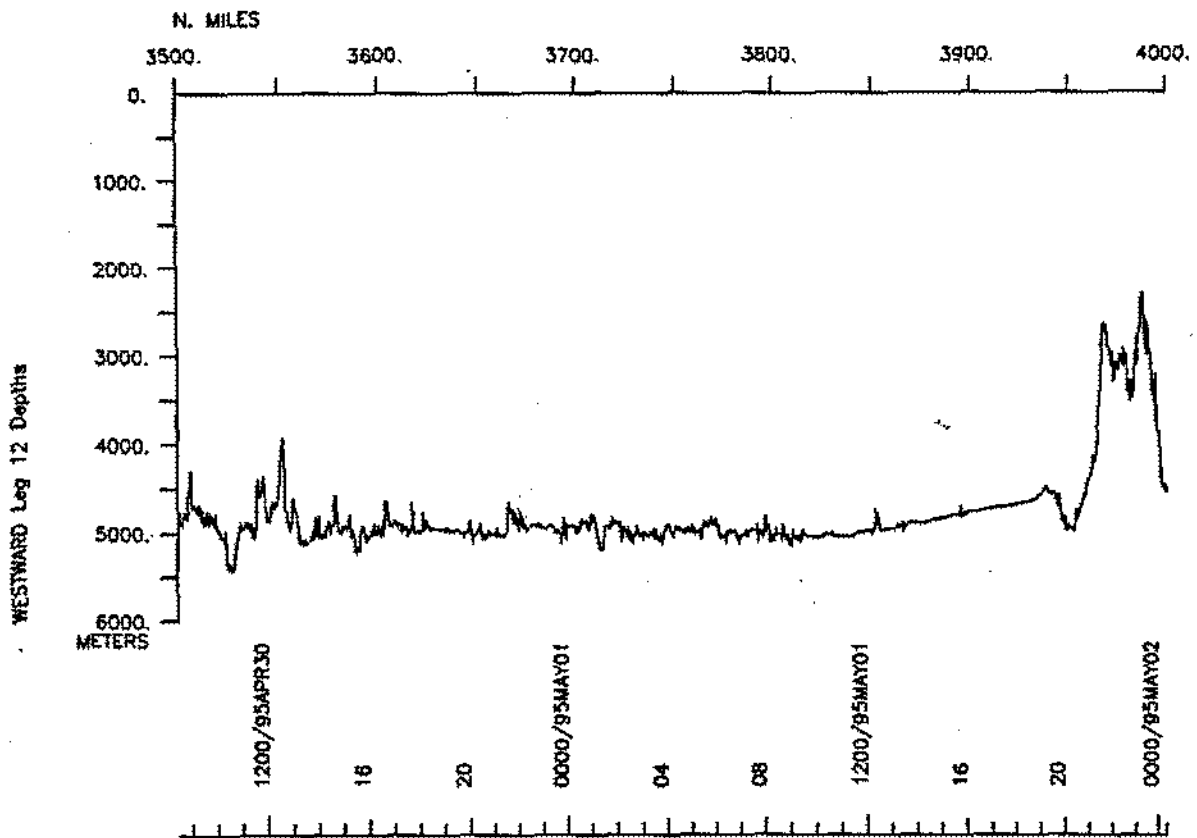
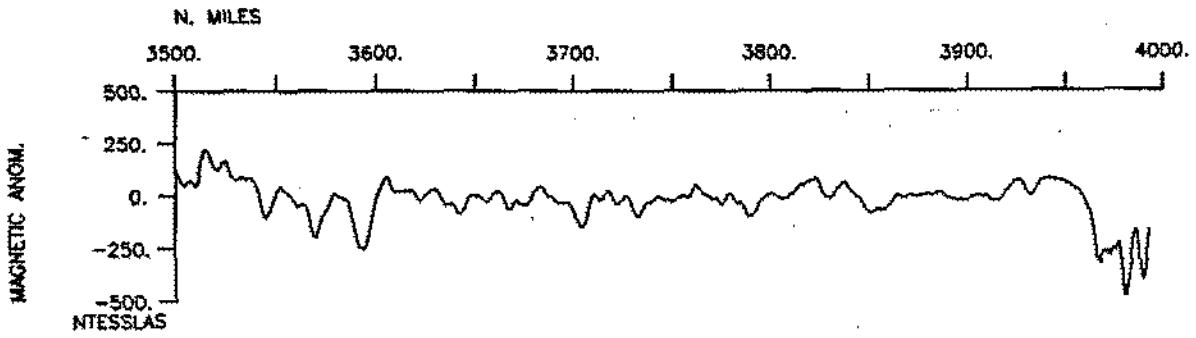




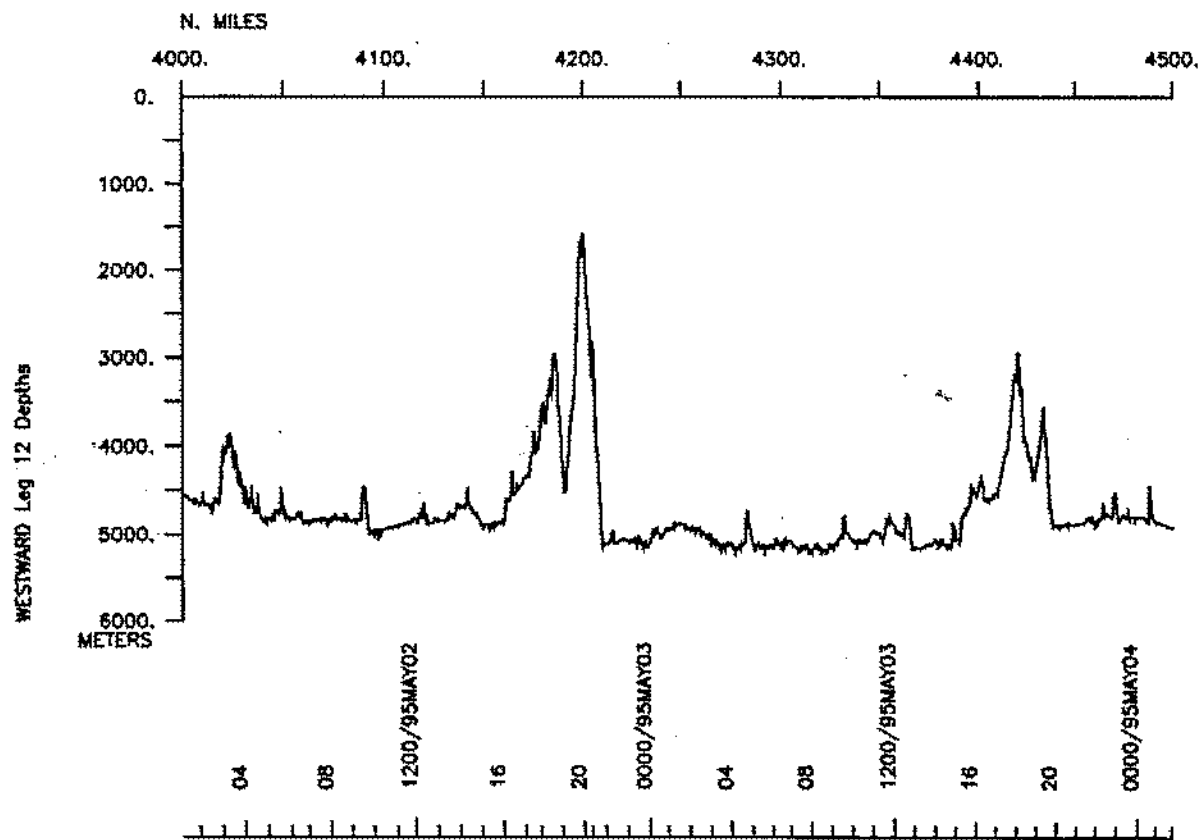
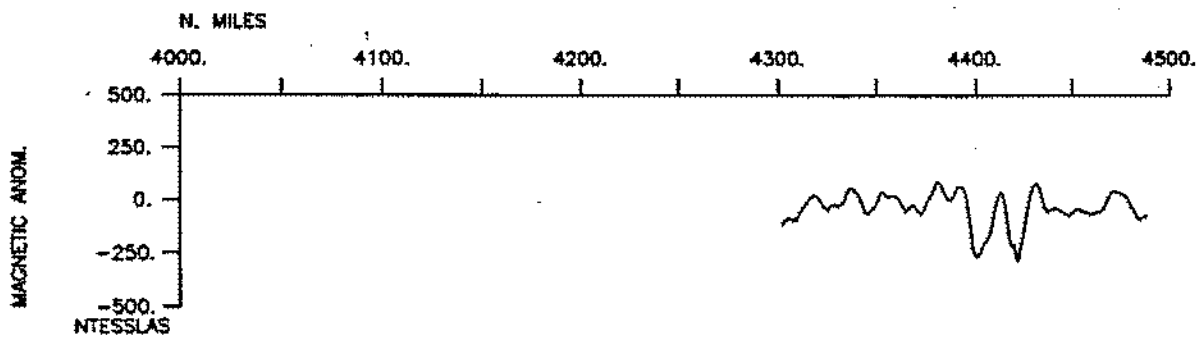


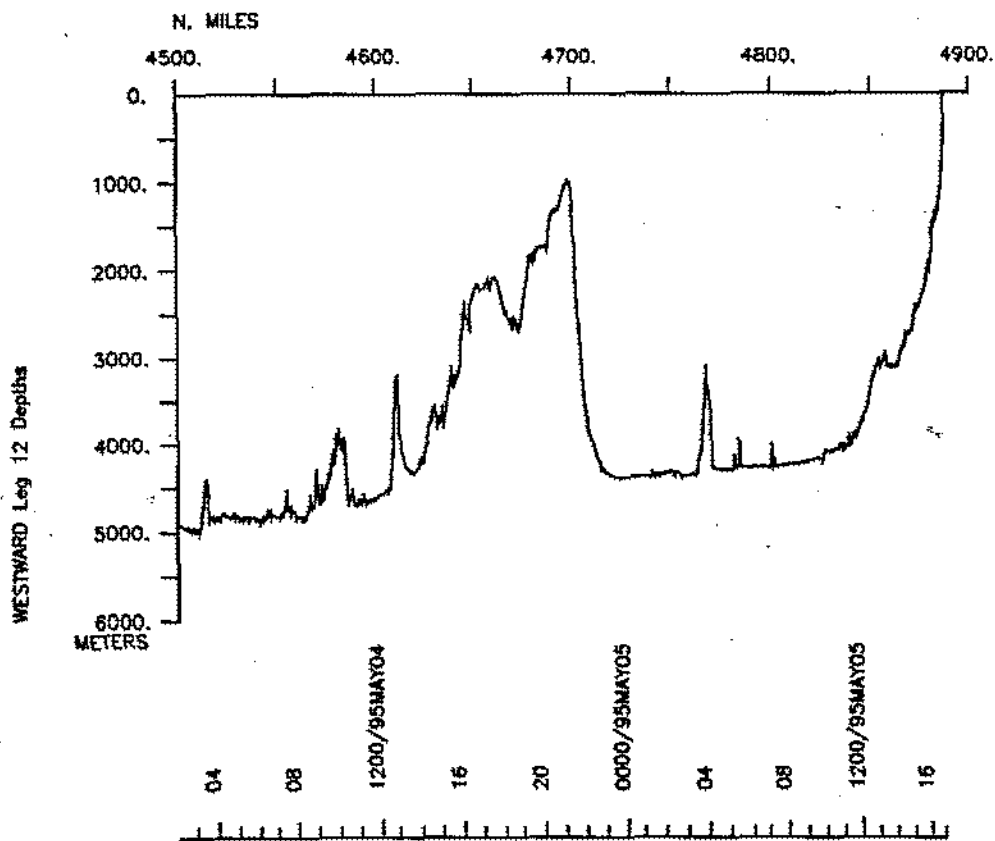
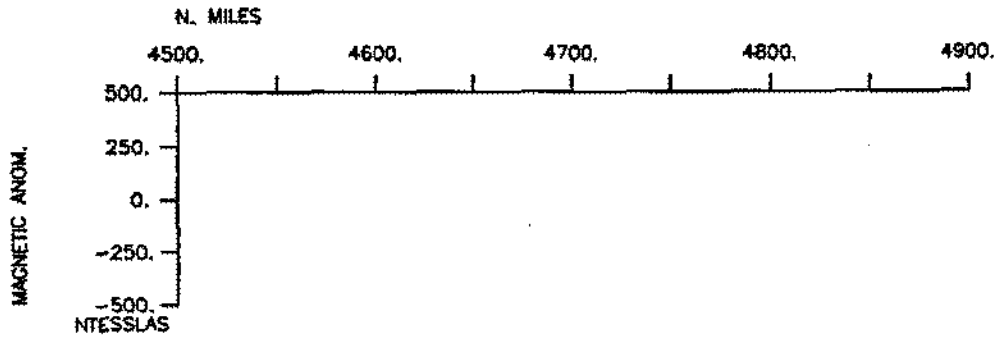












**S.I.O. SAMPLE INDEX**

**(Issued August 1995)**

**WESTWARD EXPEDITION**

Leg 12

(WEST12MV)

R/V Melville

Hobart, Tasmania (18 April 1995)  
to  
Papeete, Tahiti (5 May 1995)

**Technicians in Charge:**

Ronald Comer and Ronald Moe (SIO)

*The Sample Index is a first level interdisciplinary listing of time, position, sample identification and disposition of all samples, records and measurements collected on this cruise leg. The index data are encoded at sea by the resident marine technician and processed on shore by the S.I.O. Geological Data Center shortly after the completion of the cruise leg.*

*Positions are interpolated on the basis of sample time by comparison to a single, edited navigation file. Samples beginning at one time and position and ending at another are entered on two consecutive lines. Disposition and sample type are represented by three and four character codes to permit future computer searches on these parameters. (Listings defining these codes are available from the Geological Data Center.)*

GDC Cruise I.D.# 266

SAMP	B	SAMPLE	DISP		p	CRUISE
TZ	CODE	E IDENTIFIER	CODE	LATITUDE	LONGITUDE	c LEG-SHIP

ology Measurements \*\*\*

0	IMET	B	Weather Data	GDC	42-50.69S	147-19.82E	g WEST12MV
0	IMET	E	Weather Data	GDC	17-32.33S	149-34.57W	g WEST12MV

ble Bathythermographs \*\*\*

0	BTXP	XBT	T-5 t-5\$1.sip	NOAA	42-50.68S	147-19.85E	g WEST12MV
0	BTXP	XBT	T-5 t-5\$2.sip	NOAA	39-53.87S	158-07.74E	g WEST12MV
0	BTXP	XBT	T-5 t-5\$3.sip	NOAA	39-34.91S	158-52.28E	g WEST12MV
0	BTXP	XBT	T-5 t-5\$4.sip	NOAA	37-47.63S	163-00.82E	g WEST12MV
0	BTXP	XBT	T-5 t-5\$5.sip	NOAA	37-45.76S	163-04.81E	g WEST12MV
0	BTXP	XBT	T-5 t-5\$6.sip	NOAA	37-43.85S	163-08.69E	g WEST12MV
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0	BTXP	XBT	T-5 t-5\$20.sip	NOAA	12-45.98S	149-59.90W	g WEST12MV

End sample index

WEST12MV

IV  
IV

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