

*REPORT AND INDEX OF
UNDERWAY MARINE GEOPHYSICAL DATA*

WESTWARD EXPEDITION

LEG 14

(WEST14MV)

R/V MELVILLE

(Issued August 1995)

Ports:

Acapulco, Mexico (22 June 1995)
to
San Diego, California (5 July 1995)

Chief Scientist:

Peter Lonsdale (Scripps Institution)

Resident Marine Technician - Woody Sutherland

Computer Technician - Ronald Moe

On Board Processing by Peter Lonsdale

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

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.

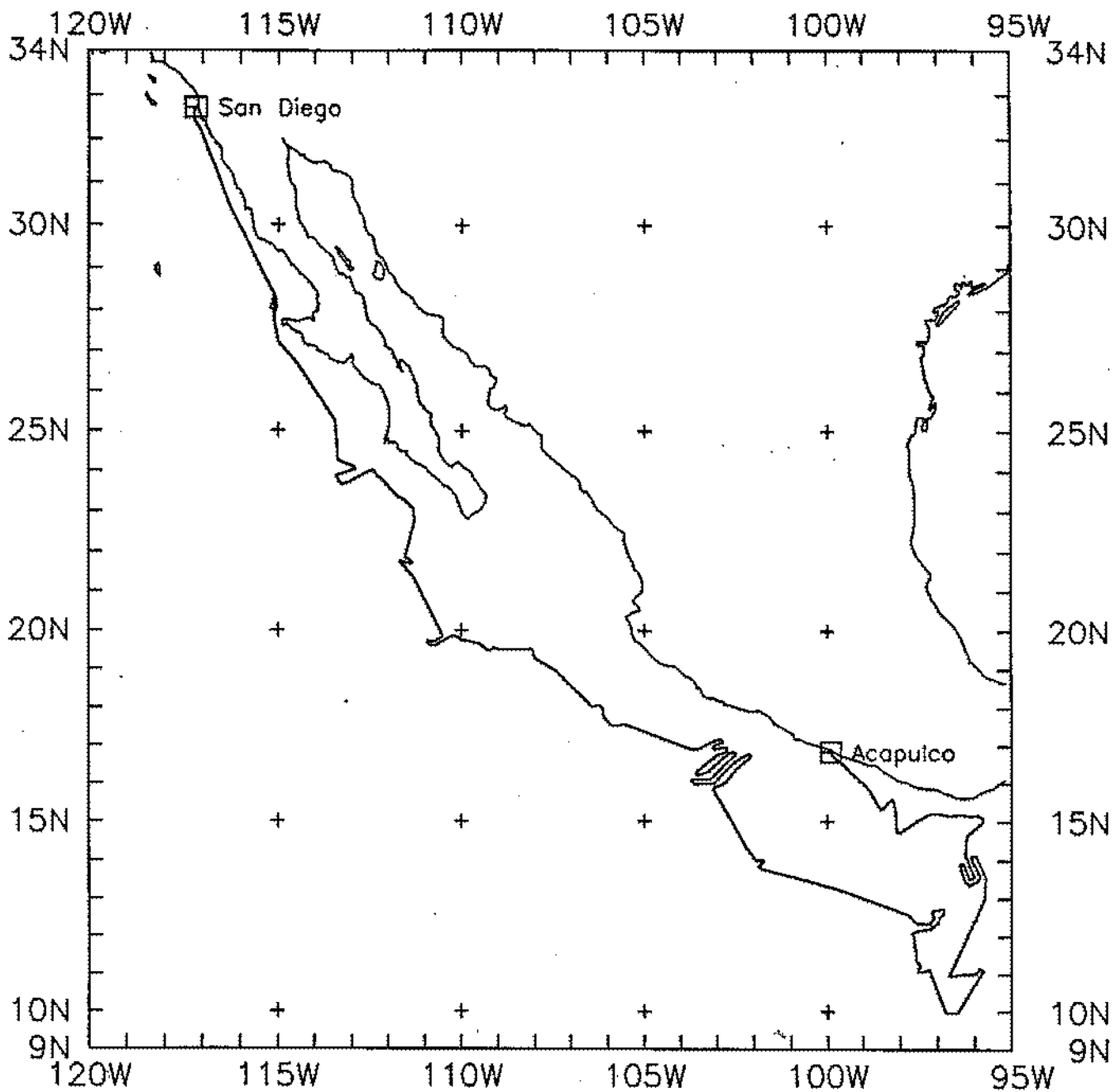
rev 7/93

SIO SEABEAM 2000 DATA INFORMATION

The following items are available, subject to the approval of the cruise leg chief scientist:

- 1) Hardcopy of realtime contour swath records and records with vertical beam and sidescan grayscale display are available for inspection at the data center.
- 2) Microfilm (35 mm film) of vertical beam/sidescan records.
- 3) SeaBeam merged tapes - SeaBeam data merged with GPS-based navigation. (Navigation is edited to the extent that DR courses and speeds are edited and poor fixes are removed after inspection of speeds and drift vectors between fix pairs. No editing is done on the basis of adjusting to overlapping SeaBeam swaths.)
- 4) Archive contour plots - 8 inches/degree chart scale, with contour interval nominally 50m, are generated for all transit lines. Some survey areas are plotted at appropriate scales as well. Available for inspection at data center.
- 5) Custom generated plots of SeaBeam swaths on Mercator projection in four colors at variable plot scales and contour intervals. There are provisions to adjust positions of individual track lines and to edit out beams (bad data or overlapping data on inside of turns.)

Revised September 1995



WESTWARD EXPEDITION LEG 14
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CHIEF SCIENTIST: Peter Lonsdale

Scripps Institution of Oceanography

PORTS: Acapulco, Mexico - San Diego California

DATES: 22 June - 5 July 1995

SHIP: R/V Melville

TOTAL MILEAGE OF UNDERWAY DATA COLLECTED

Cruise - 3744 miles

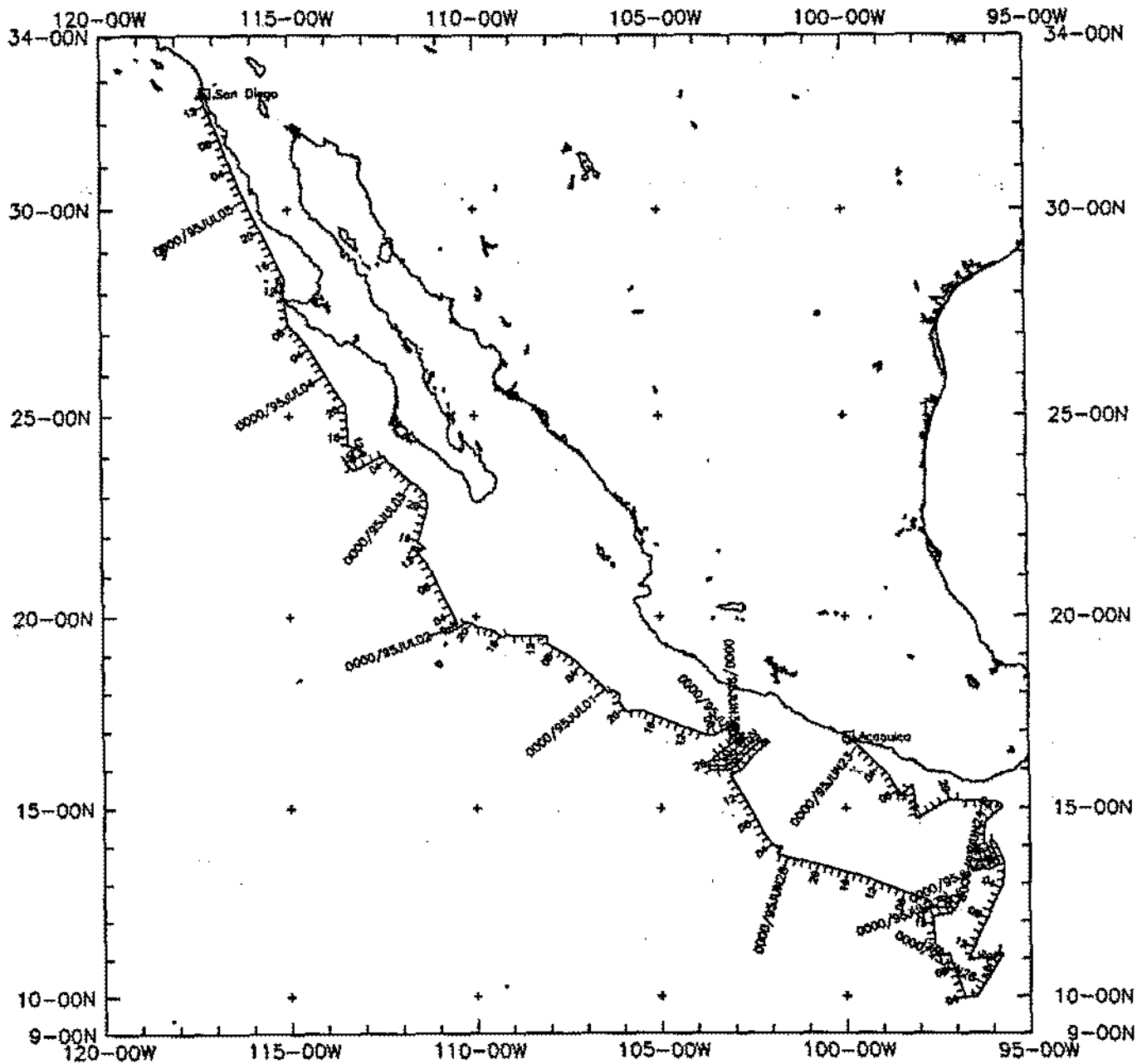
Magnetics - 3322 miles

Bathymetry - 3734 miles

Seismic Reflection - none collected

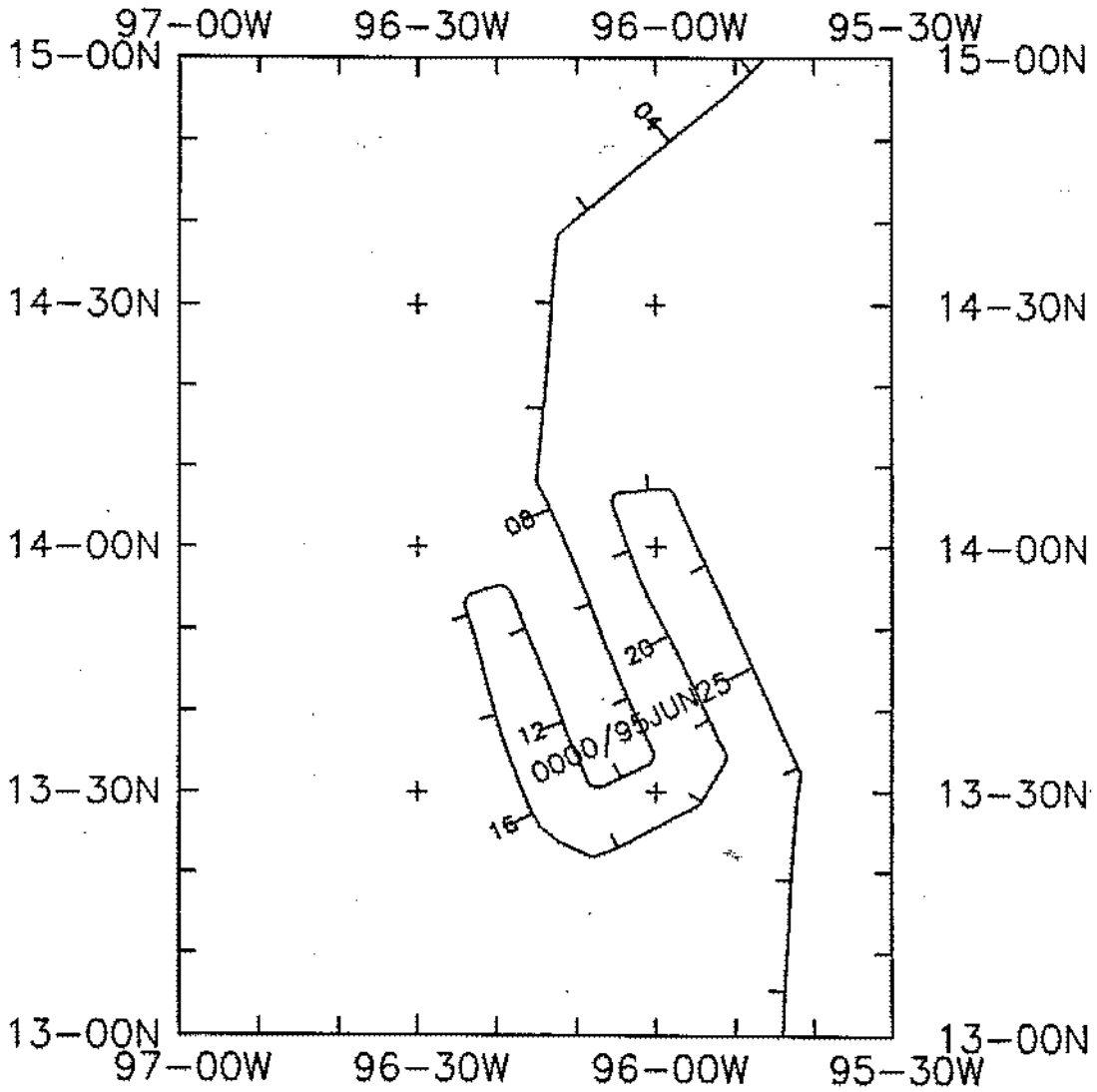
Sea Beam - 3734 miles

Gravity - none collected



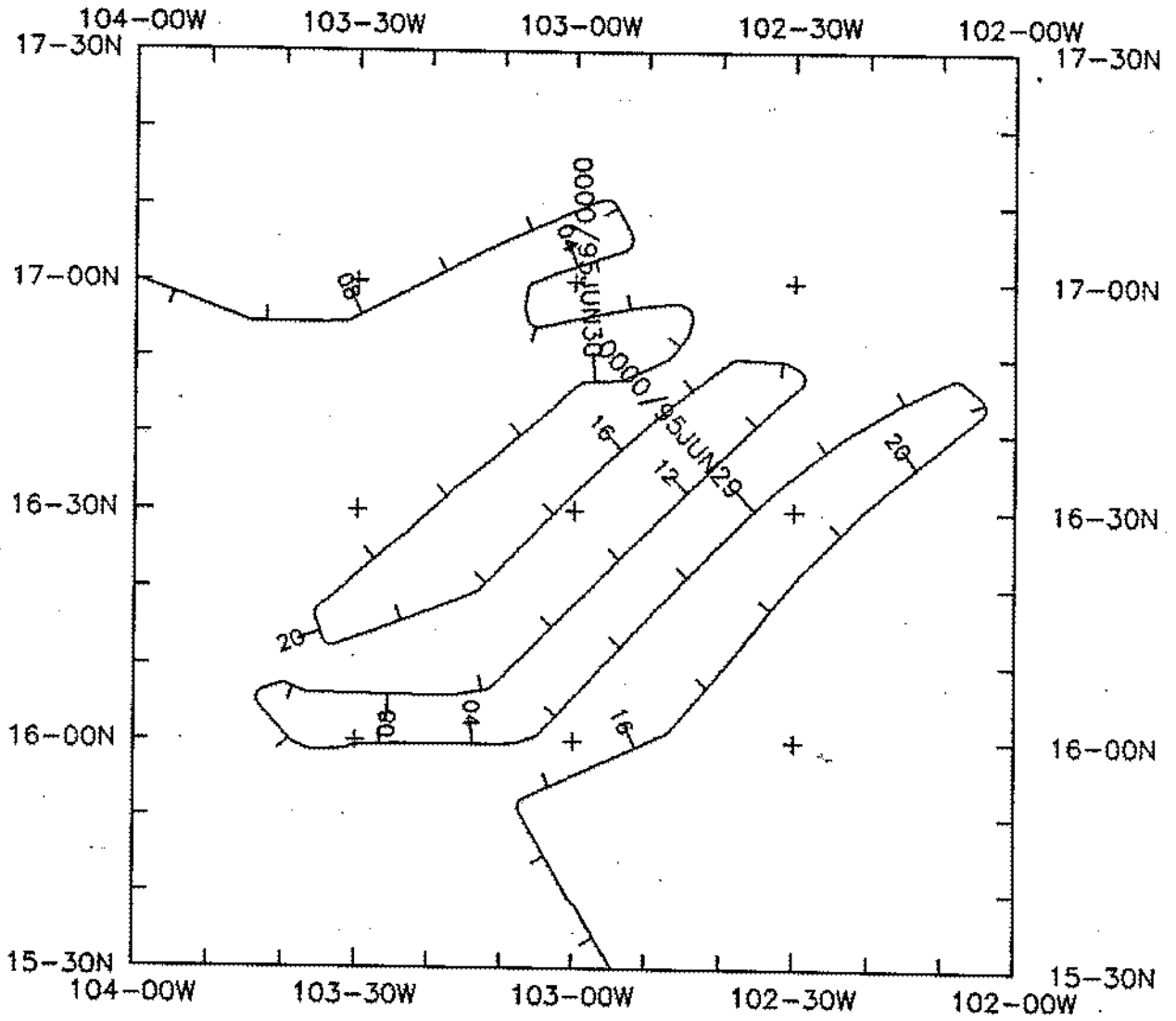
WESTWARD Leg 14 (WEST14MV)

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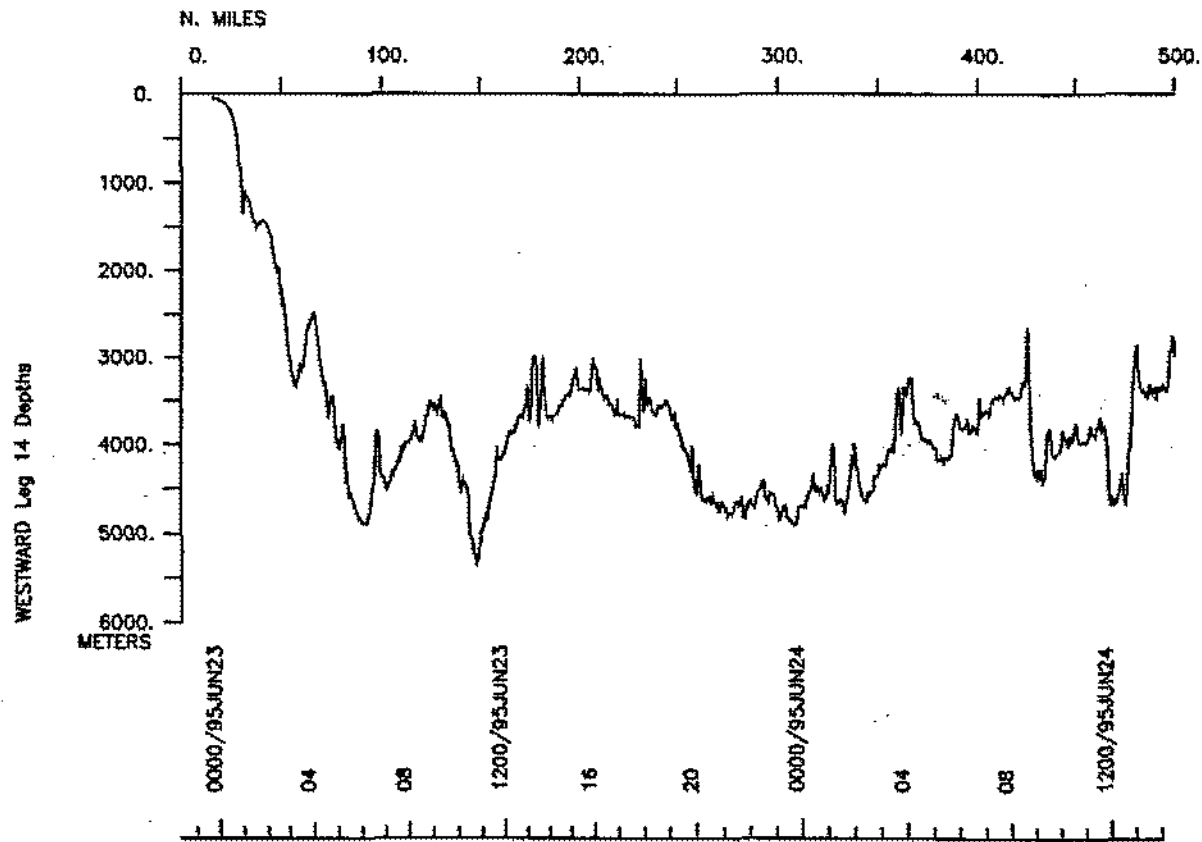
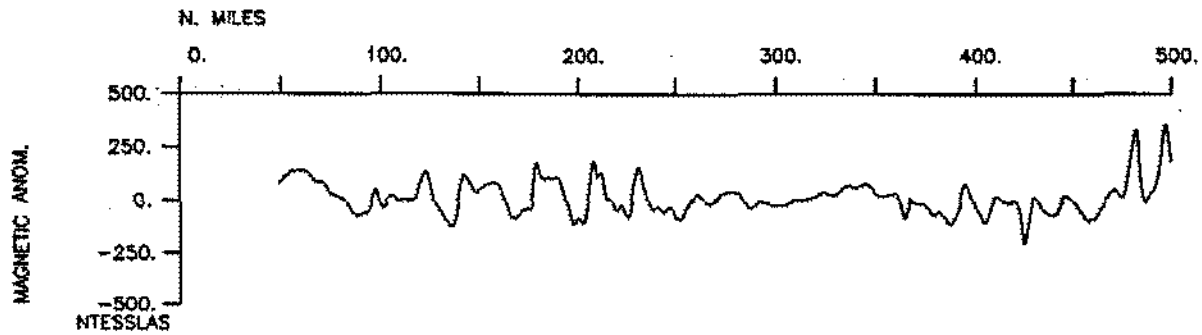
WESTWARD Leg 14 (WEST14MV)
 Survey Area A

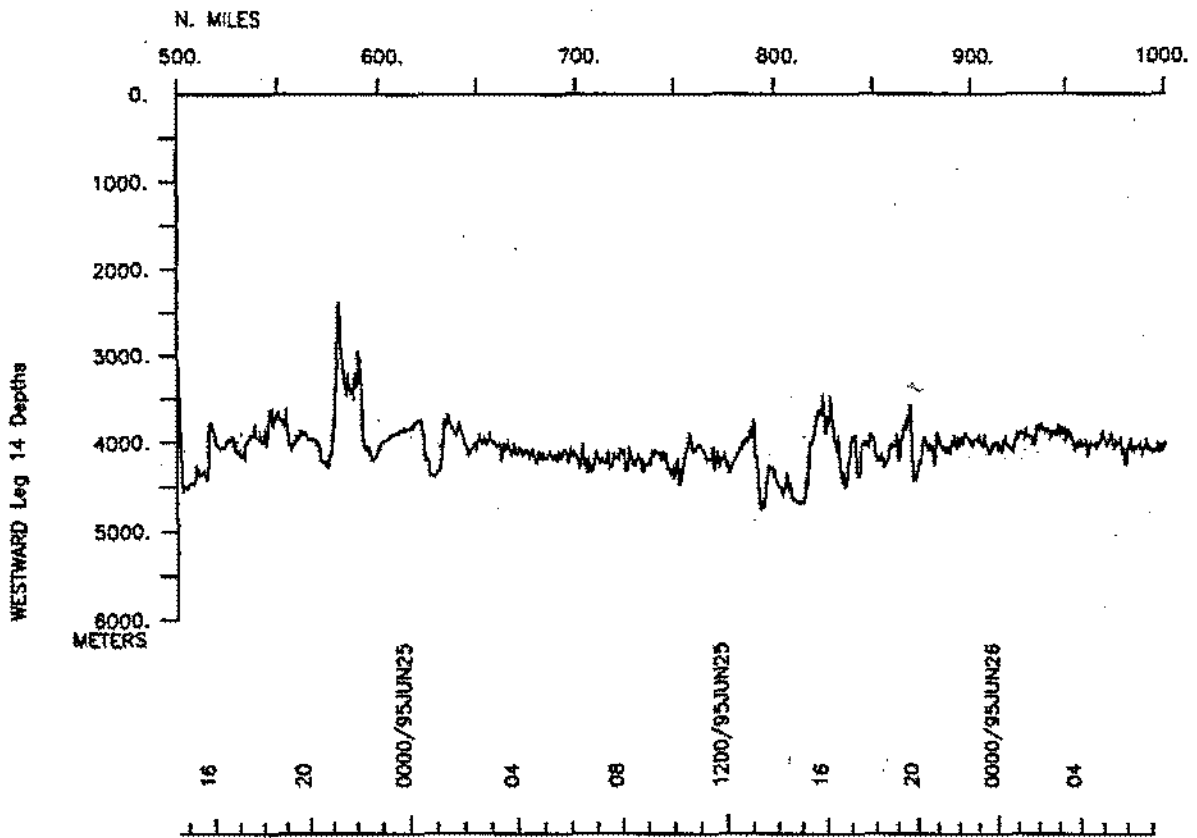
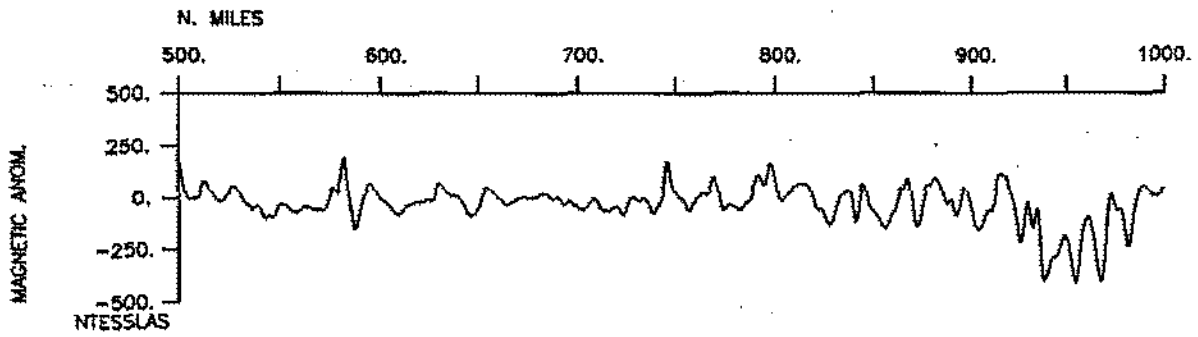


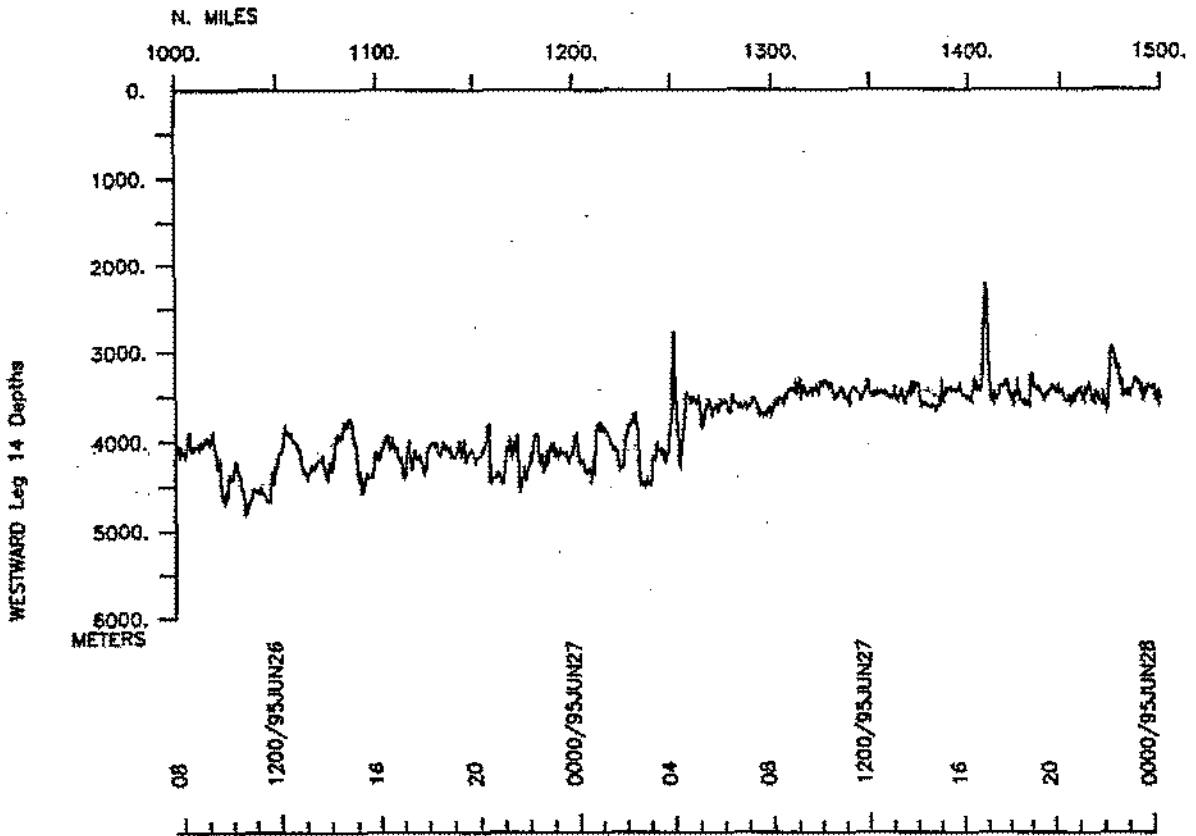
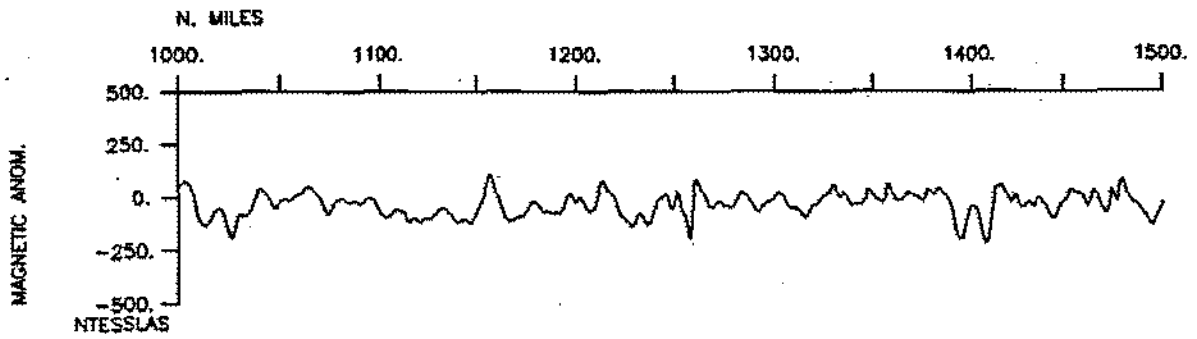


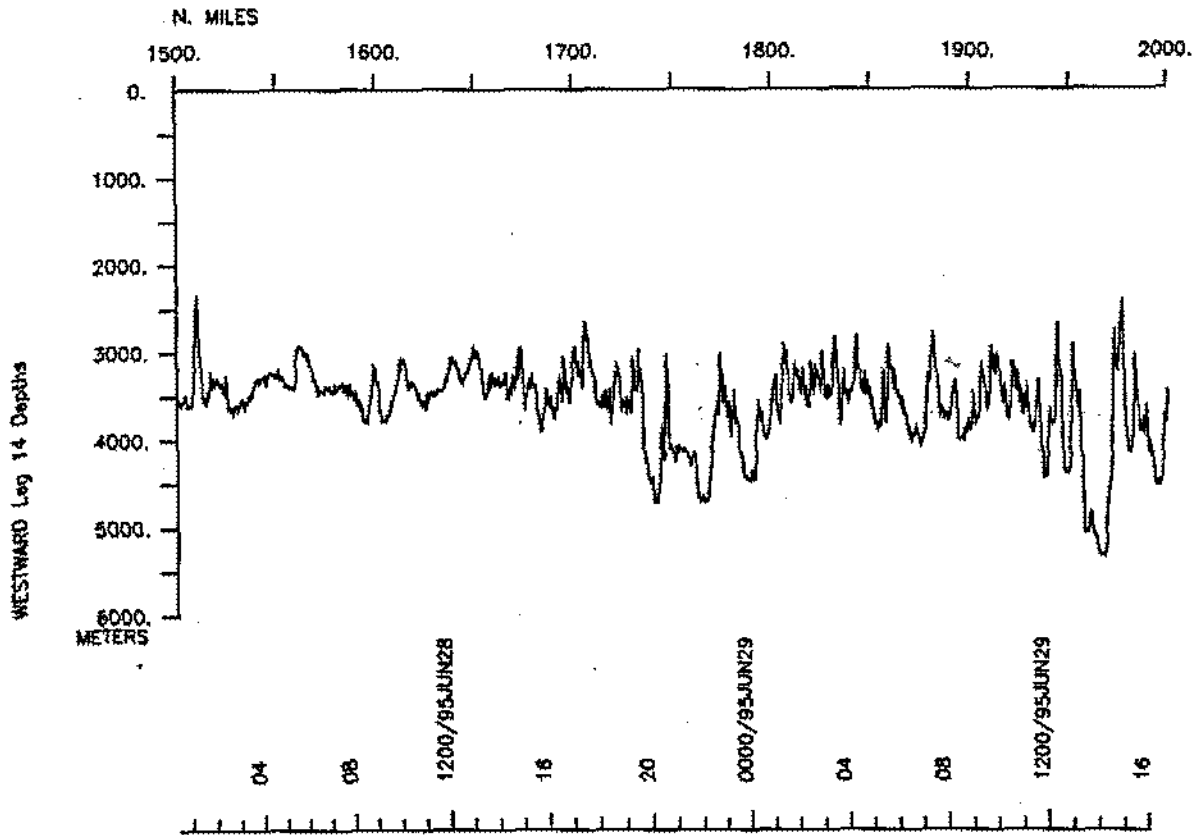
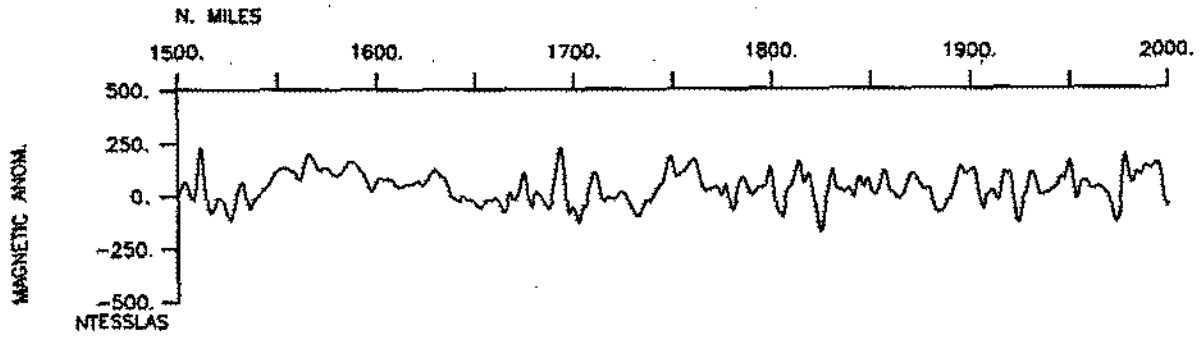
WESTWARD Leg 14 (WEST14MV)
 Survey Area B

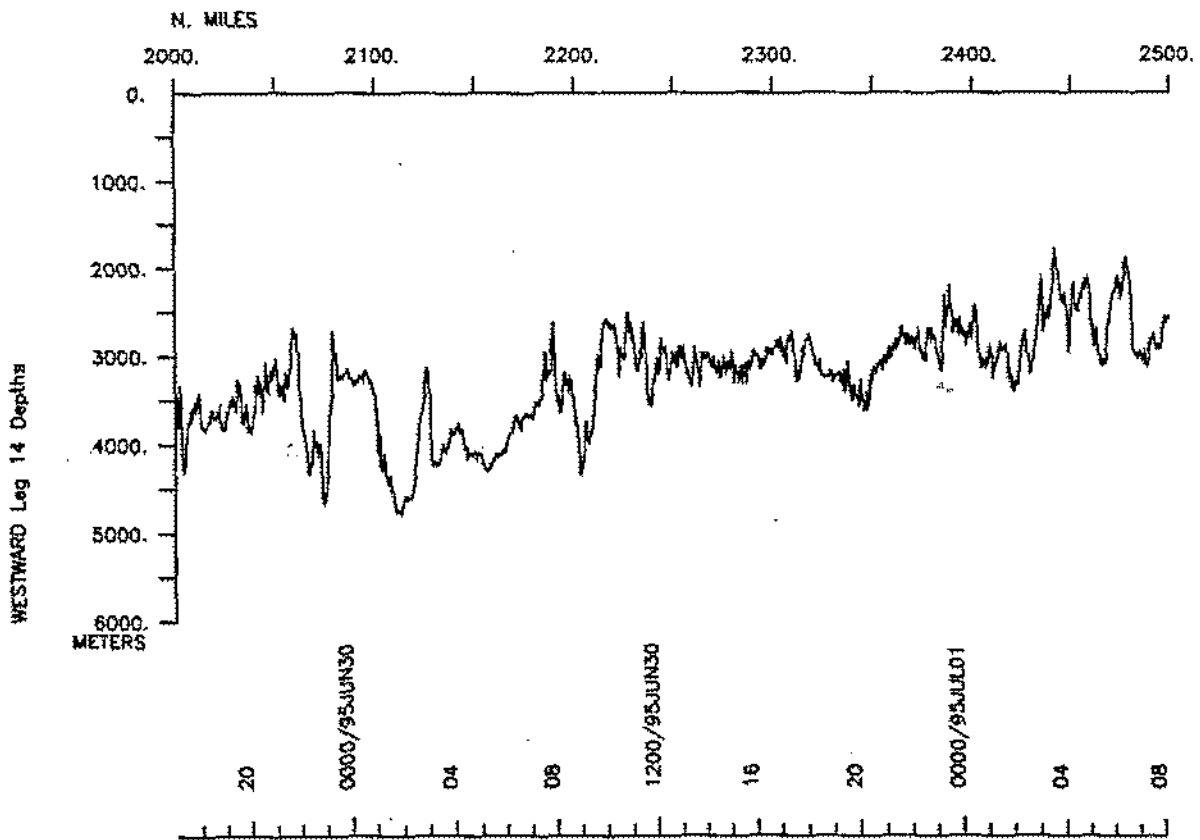
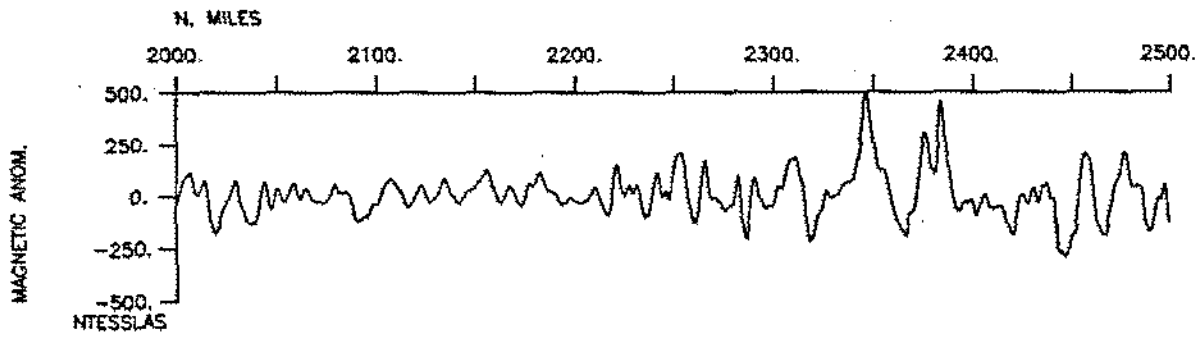


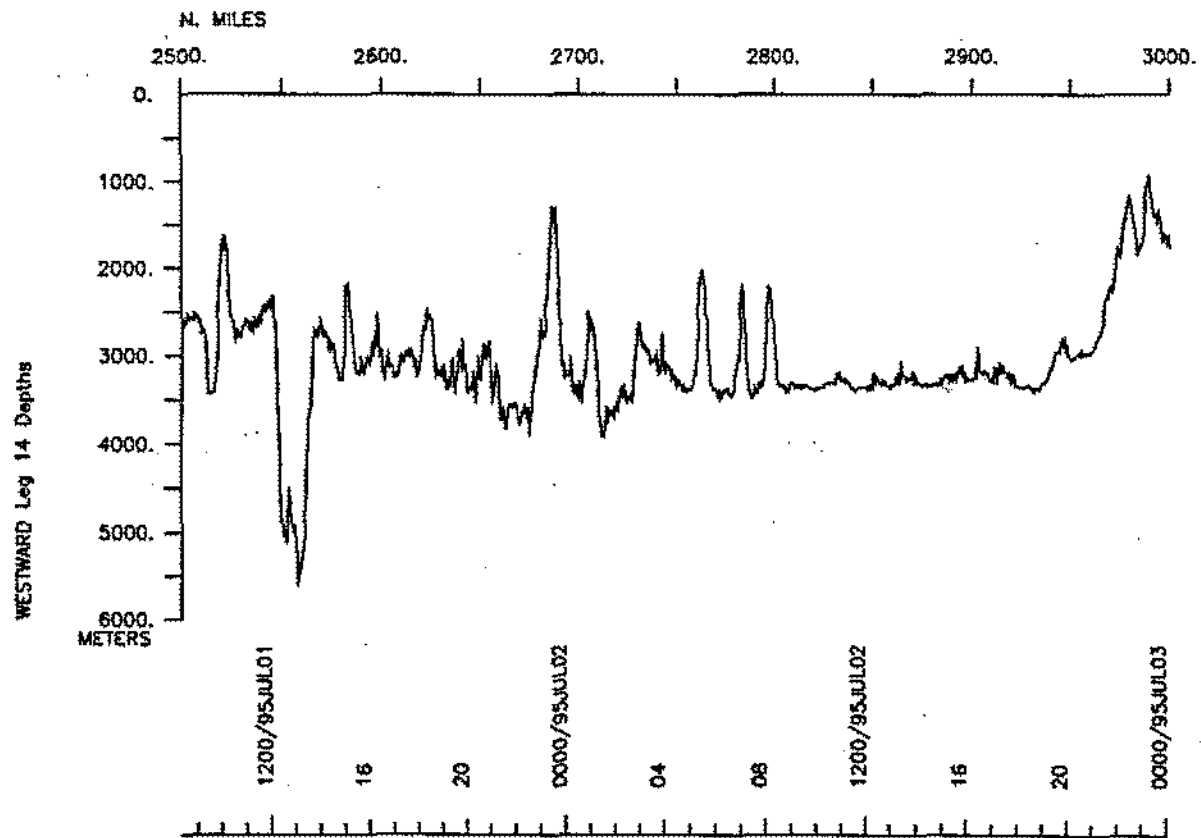
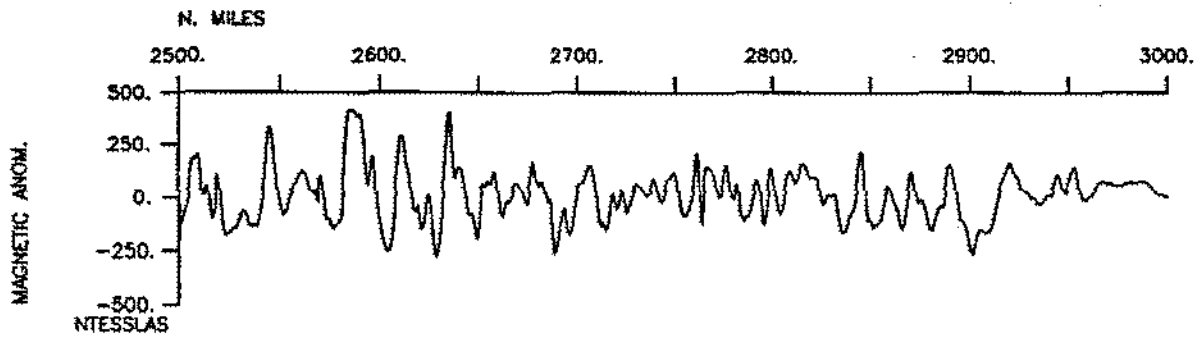


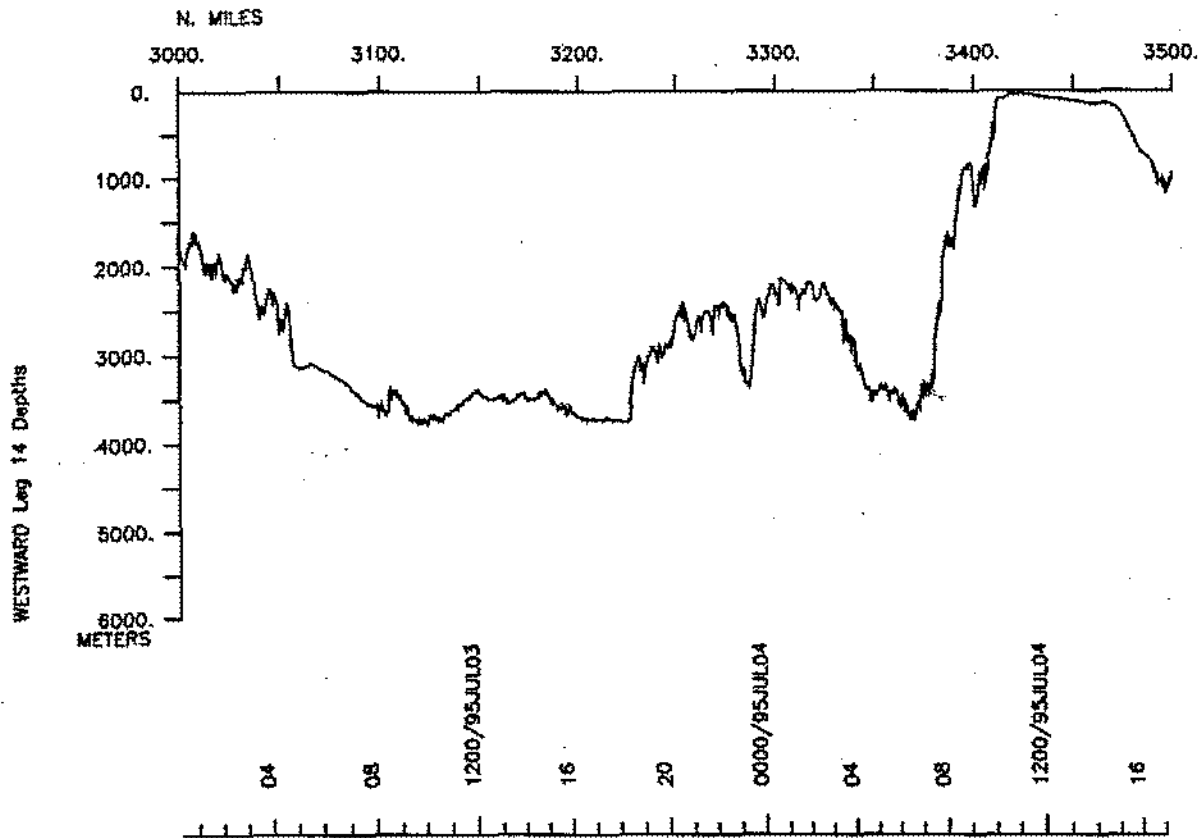
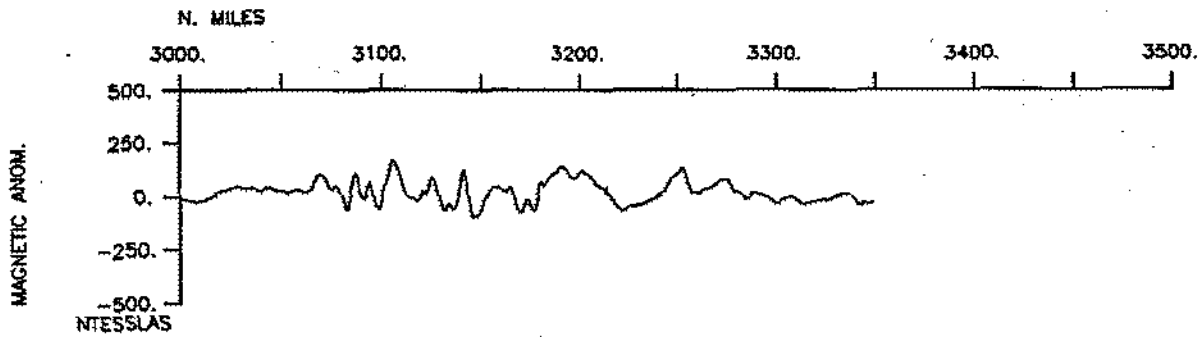


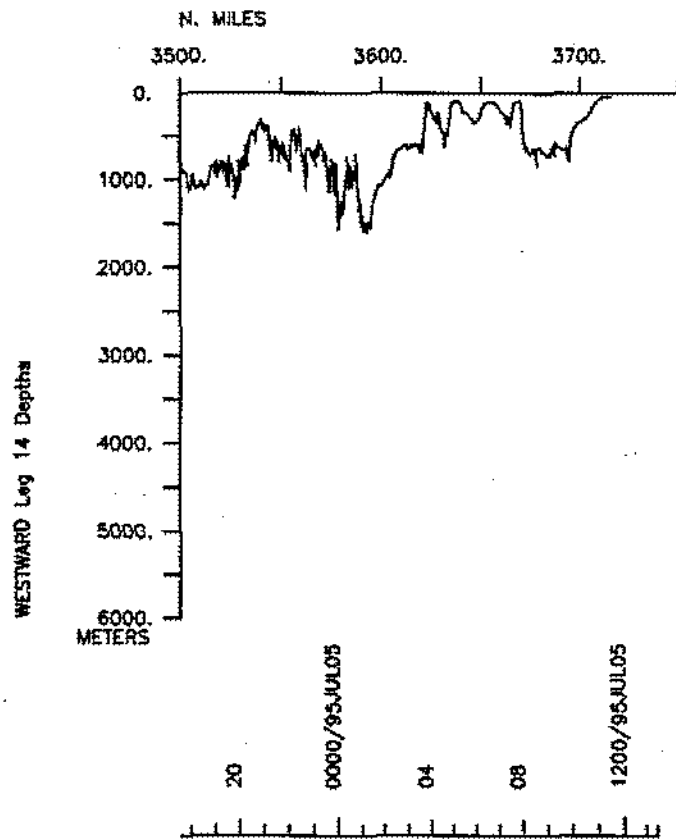
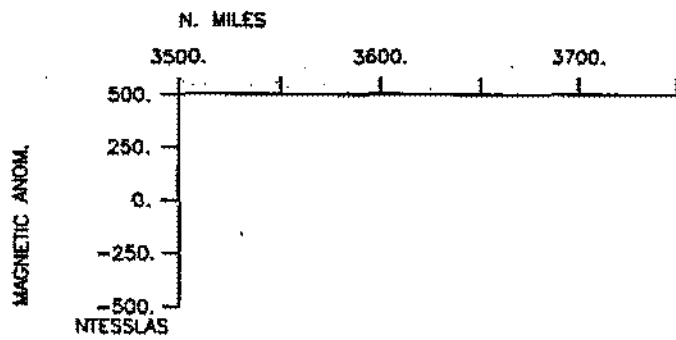












S.I.O. SAMPLE INDEX

(Issued August 1995)

WESTWARD EXPEDITION

Leg 14

(WEST14MV)

R/V Melville

Acapulco, Mexico (22 June 1995)
to
San Diego, California (5 July 1995)

Chief Scientist:

Peter Lonsdale (Scripps Institution)

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

**** Ports ****

2216	220695	LGPT B Acapulco, Mexico	16-51.00N	99-56.00W	f	WEST14MV
2345	050795	LGPT E San Diego, California	32-43.00N	117-11.00W	f	WEST14MV

**** Personnel ****

#	*****NAME*****	*****TITLE*****	*****AFFILIATION*****	**CRID**
PECS MPL	Lonsdale, P.	Chief Scientist	Scripps Institution	WEST14MV
PEST SIO	Bazin, S.	Grad Student	Scripps Institution	WEST14MV
PEST SIO	Brown, K.	Grad Student	Scripps Institution	WEST14MV
PEST SIO	Ceramicola, S.	Grad Student	Scripps Institution	WEST14MV
PEVL SIX	Johnson, P.	Volunteer	Non-Scripps Employee	WEST14MV
PEST SIO	Kanjorski, N.	Grad Student	Scripps Institution	WEST14MV
PECT SCG	Moe, R.	Comp Engr	Scripps Institution	WEST14MV
PEST SIO	Mortyn, G.	Grad Student	Scripps Institution	WEST14MV
PEVL SIX	Overway, R.	Volunteer	Non-Scripps Employee	WEST14MV
PEVL SIX	Padilla, S.	Volunteer	Non-Scripps Employee	WEST14MV
PEST SIO	Rebstock, G.	Grad Student	Scripps Institution	WEST14MV
PESP SIX	Root, E.	Birdwatcher	Non-Scripps Employee	WEST14MV
PESP MEX	Sandoval, H.	Observer	Mexico	WEST14MV
PEST SIO	Solidum, R.	Grad Student	Scripps Institution	WEST14MV
PERT STS	Sutherland, W.	Res Tech	Scripps Institution	WEST14MV
PEVL SIX	Taranto, M.	Volunteer	Non-Scripps Employee	WEST14MV
PEST SIO	Tryon, M.	Grad Student	Scripps Institution	WEST14MV
PESP SIX	Walens, S.	Birdwatcher	Non-Scripps Employee	WEST14MV
PEST SIO	Williams, K.	Grad Student	Scripps Institution	WEST14MV
PEST SIO	Zhu, P.	Grad Student	Scripps Institution	WEST14MV

**** NOTES ****

#An 'X' in the (B)egin/(E)nd column following the sample code indicates no sample or data recovered. A 'C' indicates continuation of data collection from before the beginning or after the end of a particular leg, (moored #bottom instruments, for example.) The number appearing in the columns #between the sample identifier and the disposition code, for many sample #entries, is the water depth in corrected meters. Positions are in tenths #of minutes.

#GMT	DDMMYY	SAMP	B	SAMPLE	DISP				p	CRUISE
#TIME	DATE	TZ	CODE	E IDENTIFIER	CODE	LATITUDE	LONGITUDE		c	LEG-SHIP

**** Underway data curator - S. M. Smith ext. 42752

**** Log books****

2340	220695	0	LEUW	B underway watch log	GDC	16-39.41N	99-44.20W	g	WEST14MV
1200	030795	0	LEUW	E underway watch log	GDC	24-01.52N	112-59.17W	g	WEST14MV

**** Sea Beam Records (vertical beam and side scan) ****

2340	220695	0	MBSR	B v.beam&sidescan R-01	GDC	16-39.41N	99-44.20W	g	WEST14MV
0933	020795	0	MBSR	E v.beam&sidescan R-01	GDC	21-10.37N	111-12.59W	g	WEST14MV
0940	020795	0	MBSR	B v.beam&sidescan R-02	GDC	21-11.66N	111-13.31W	g	WEST14MV
1130	050795	0	MBSR	E v.beam&sidescan R-02	GDC	32-19.98N	117-09.35W	g	WEST14MV

**** Magnetism (Earth Total Field) Records ****

0230	230695	0	MGRA	B Magnetism R-01	GDC	16-16.89N	99-19.20W	g	WEST14MV
2130	300695	0	MGRA	E Magnetism R-01	GDC	17-53.46N	106-07.33W	g	WEST14MV
2135	300695	0	MGRA	B Magnetism R-02	GDC	17-54.53N	106-07.37W	g	WEST14MV
0449	040795	0	MGRA	E Magnetism R-02	GDC	26-45.45N	114-33.01W	g	WEST14MV

**** End Sample Index WEST14MV

