

INFORMAL REPORT AND INDEX OF
NAVIGATION, DEPTH AND MAGNETIC DATA
(ISSUED SEPTEMBER 1980)

RAMA EXPEDITION

LEG 4

Yokosuka, Japan (1 July 1980)
to
Apra, Guam (21 July 1980)

R/V T. Washington

Chief Scientist - K. F. Bradley (WHOI)

Resident Marine Tech - J. Charters

Post-Cruise Processing and Report Preparation
by S.I.O. Geological Data Center

Data Collection funded by ONR
Grant Number ONR-0440
Data Processing funded by SIA, NSF and ONR

NOTE

This is an index of underway geophysical data edited and processed shortly 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.

GDC I.D.# - 181

Informal Report and Index of Navigation, Depth, Magnetic
and Subbottom Profiler Data *

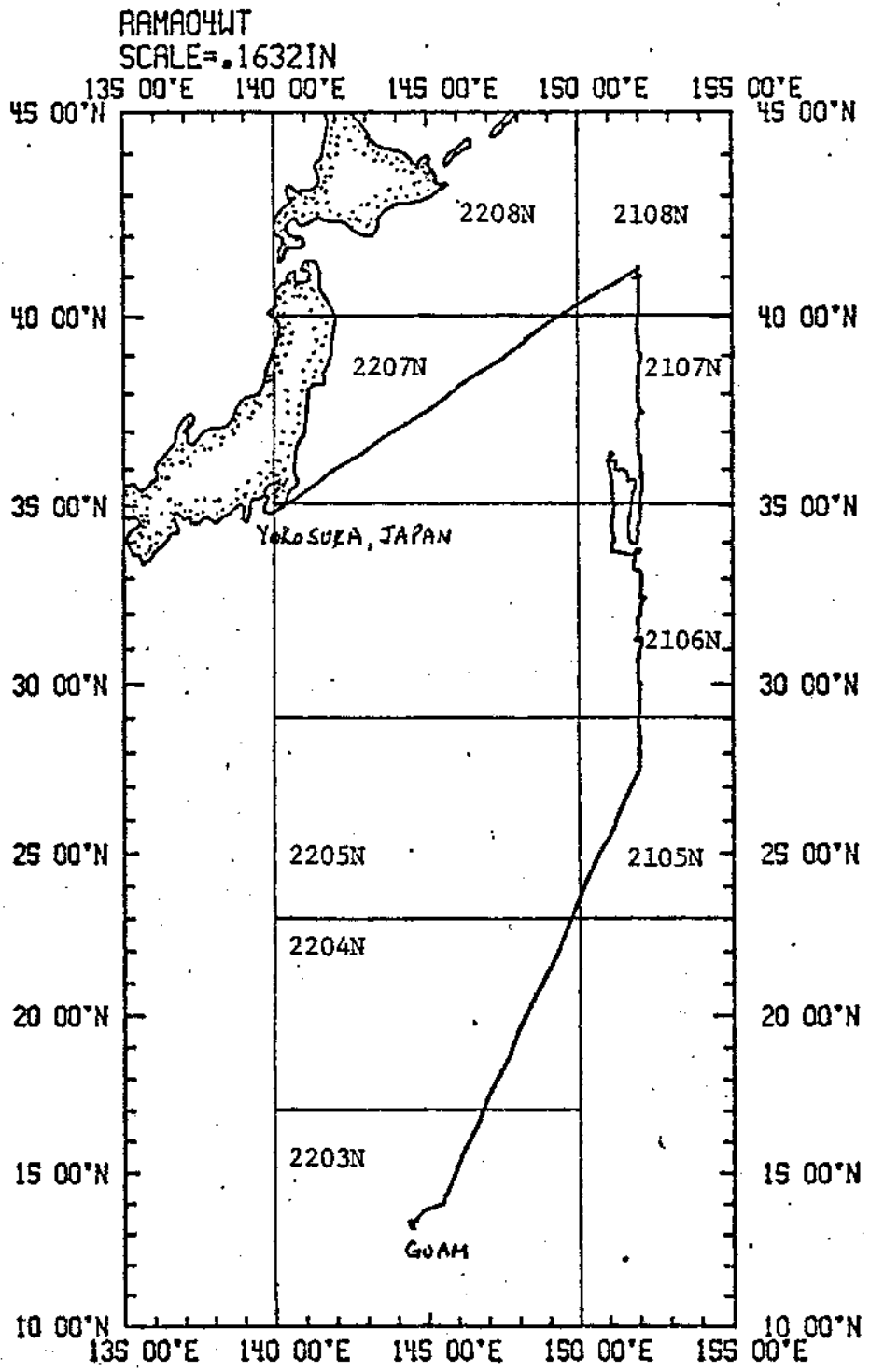
Contents:

- 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 is 3 in/degree longitude.
- 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 S. M. Smith, Curator, Geological Data Center, Scripps Institution of Oceanography, La Jolla, California 92093. Phone (714) 452-2752.

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) or meters (assumed sound velocity of 1500m/sec) at approximately 1 mile spacing, plotted at 4in/degree with standard U. S. Navy Oceanographic Office BC series boundaries (see index chart).
3. Plots of magnetic anomaly profiles along track - map scale = 1.2inch/degree, anomaly scale between 15N and 15 S latitude = 500 gamma/inch, anomaly scale north of 15N and south of 15S = 1000 gamma/inch, from values retrieved at approximately 1 mile spacing and regional field removed using the 1975 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

*No Subbottom Profiler Data Collected



RAMA EXPEDITION

LEG 04

CHIEF SCIENTIST - K. F. Bradley (WHOI)

PORTS: Yokosuka, Japan - Apra, Guam

DATES: 1 July - 21 July 1980

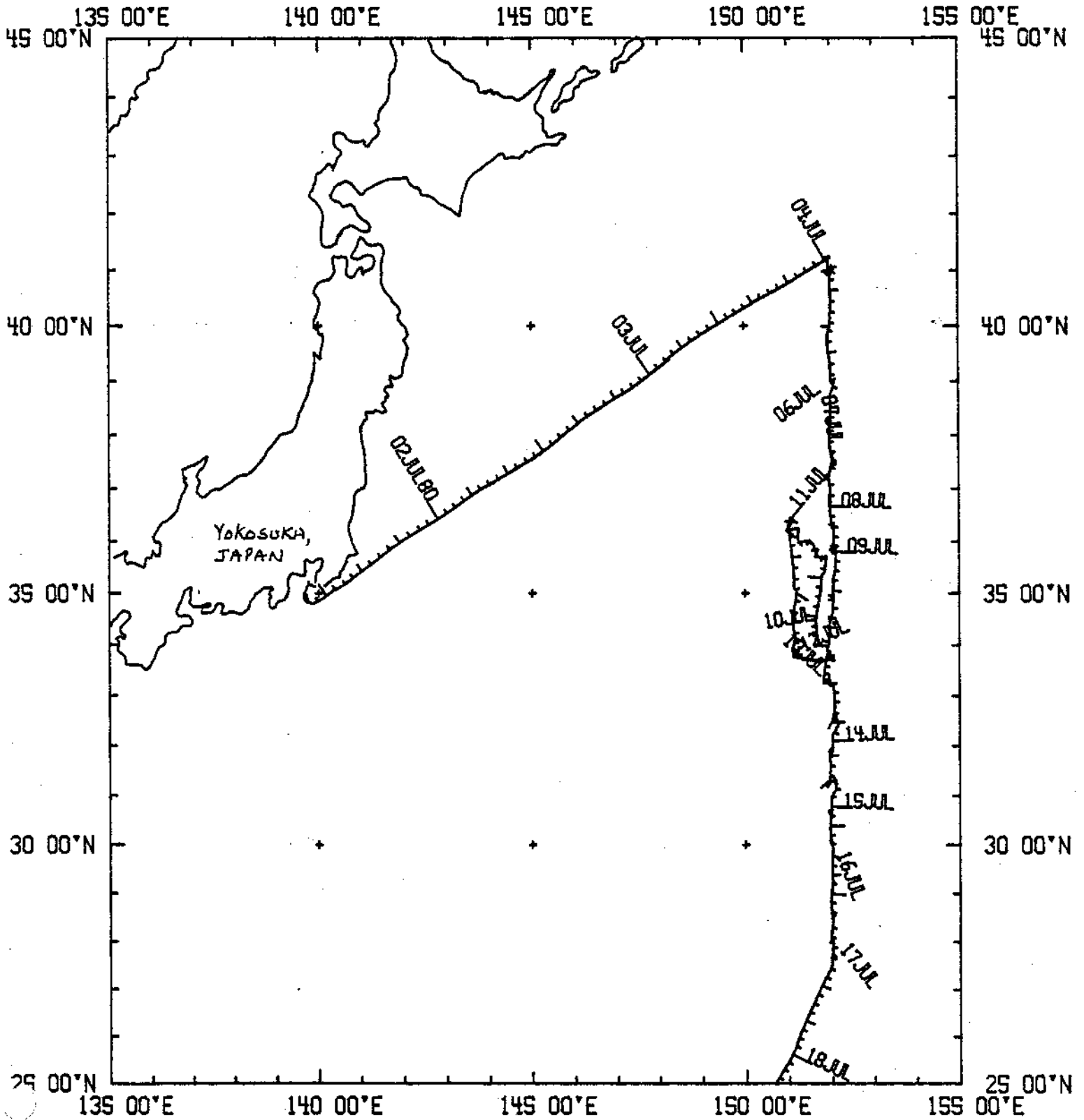
SHIP: R/V T. WASHINGTON

TOTAL MILEAGE OF UNDERWAY DATA COLLECTED

- 1) Cruise - 3229 miles
- 2) Bathymetry - 2729 miles
- 3) Magnetics - 2094 miles
- 4) Seismic Reflection - none collected
- 5) Gravity - none collected

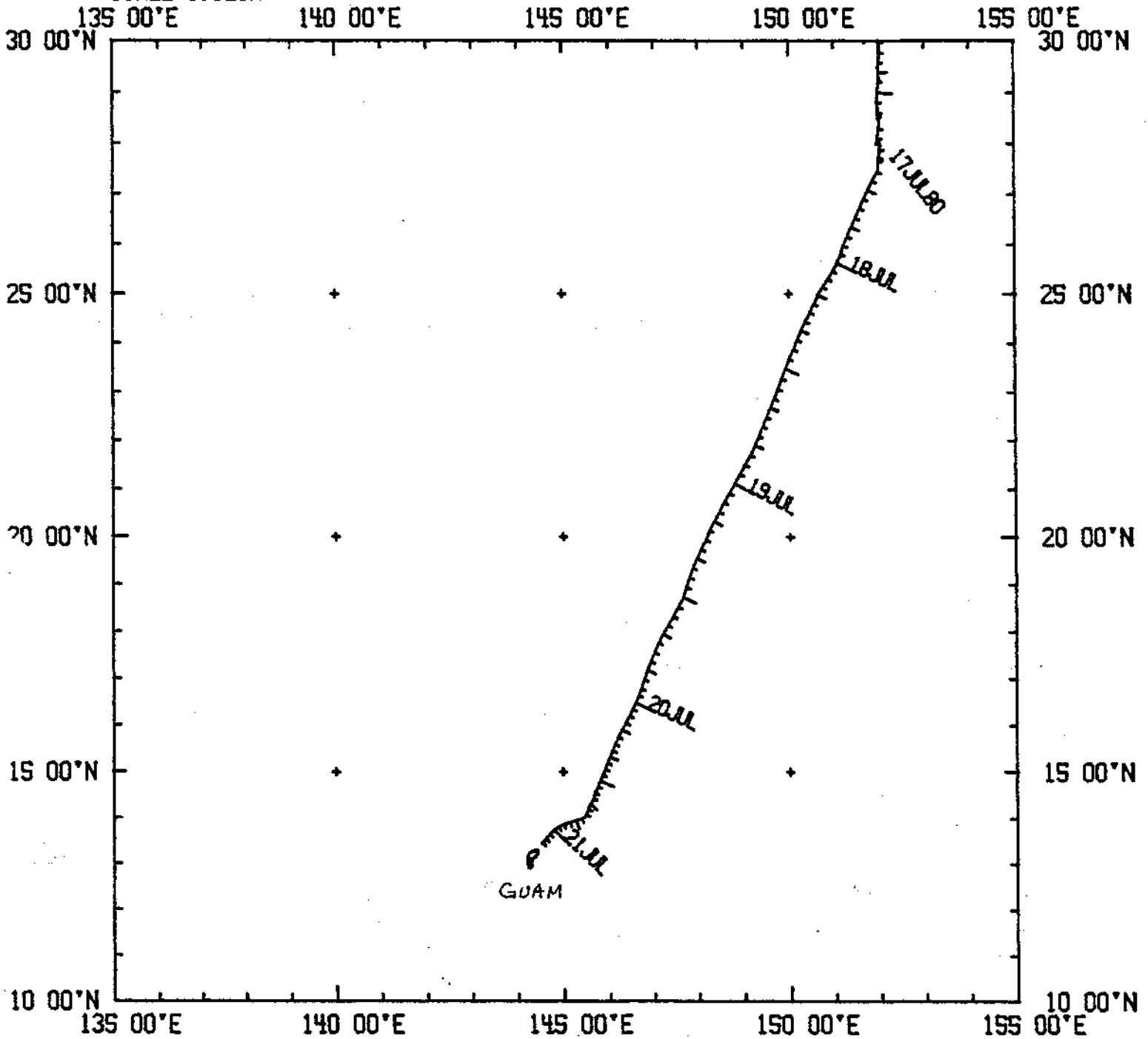
RAMA04WT (1 OF 2)

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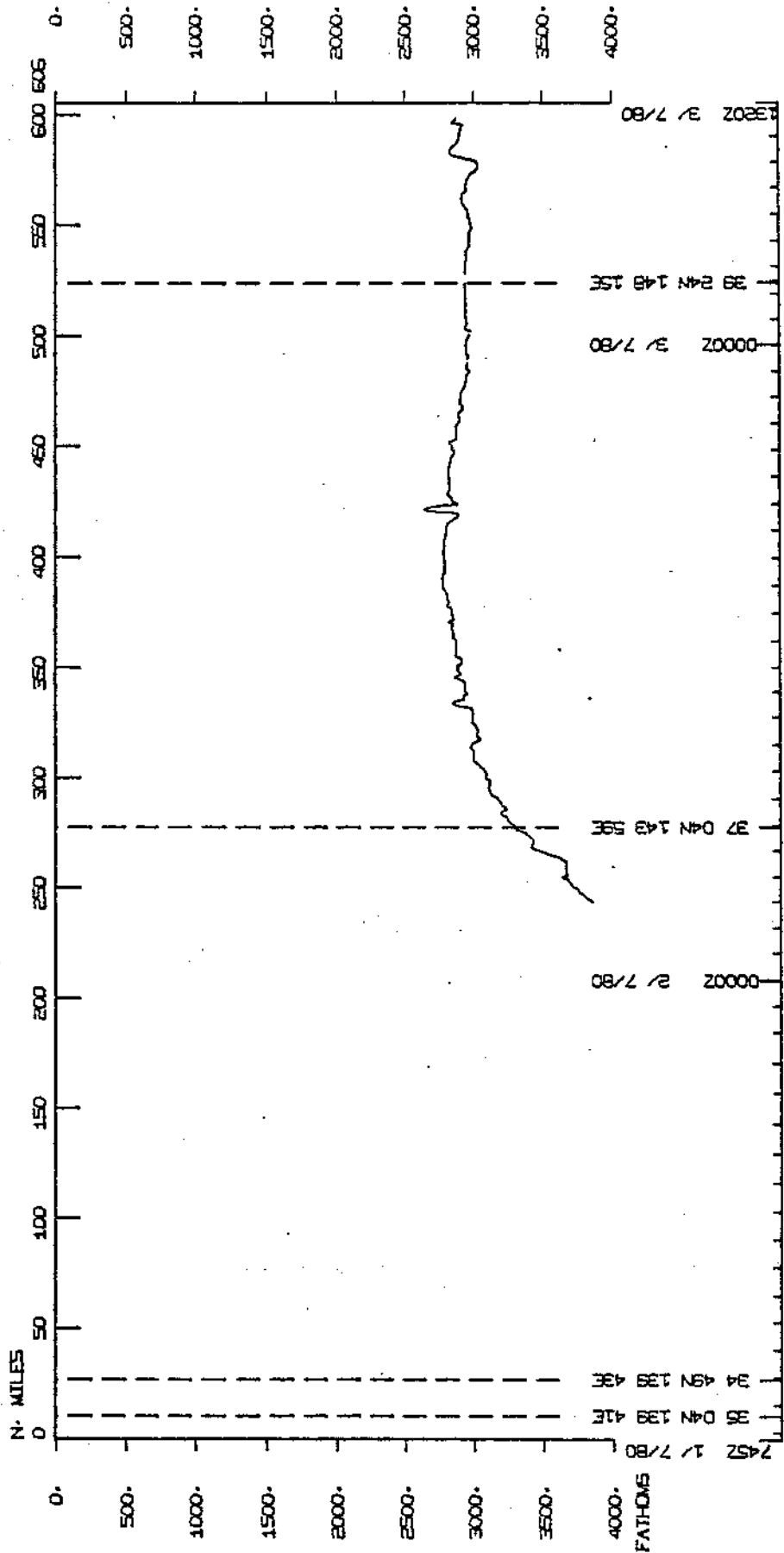
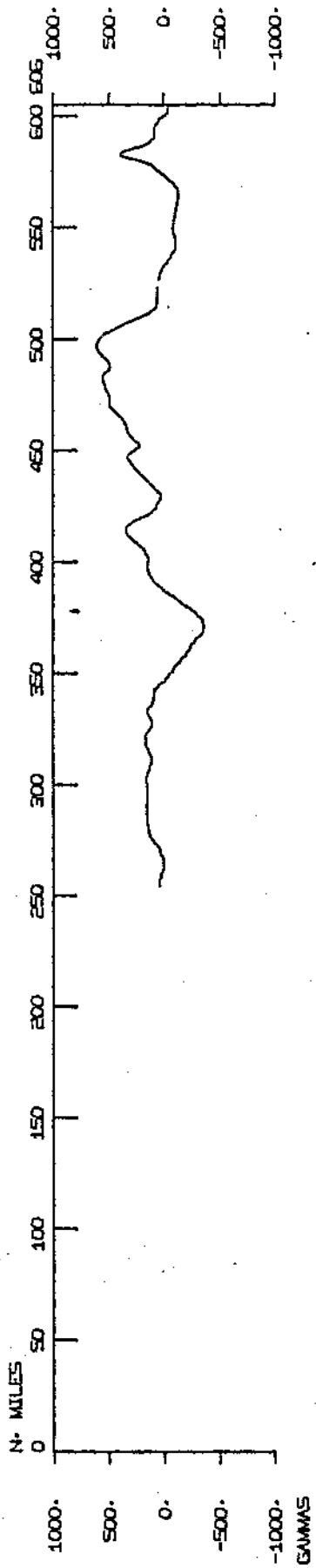


RAMA04WT (2 OF 2)

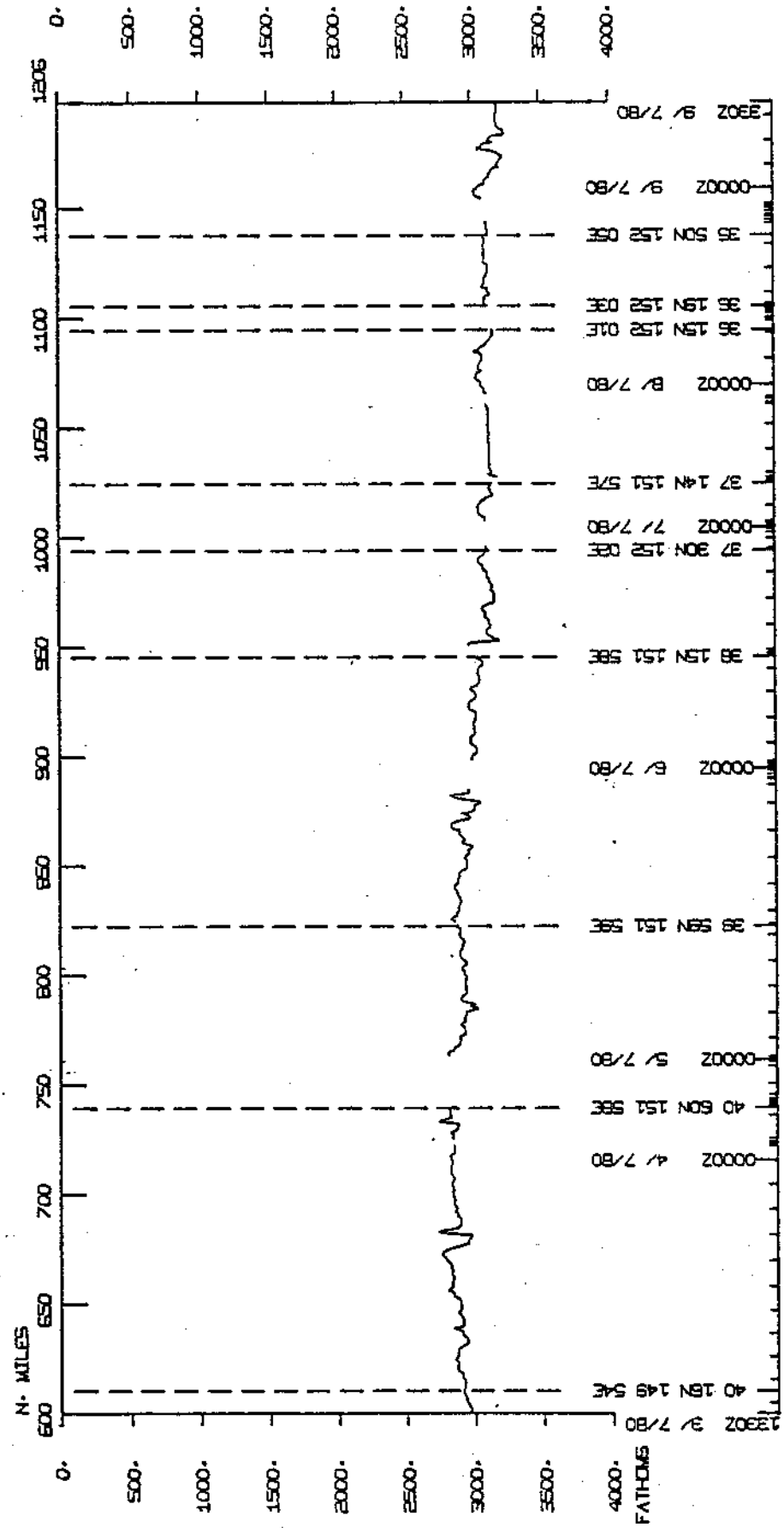
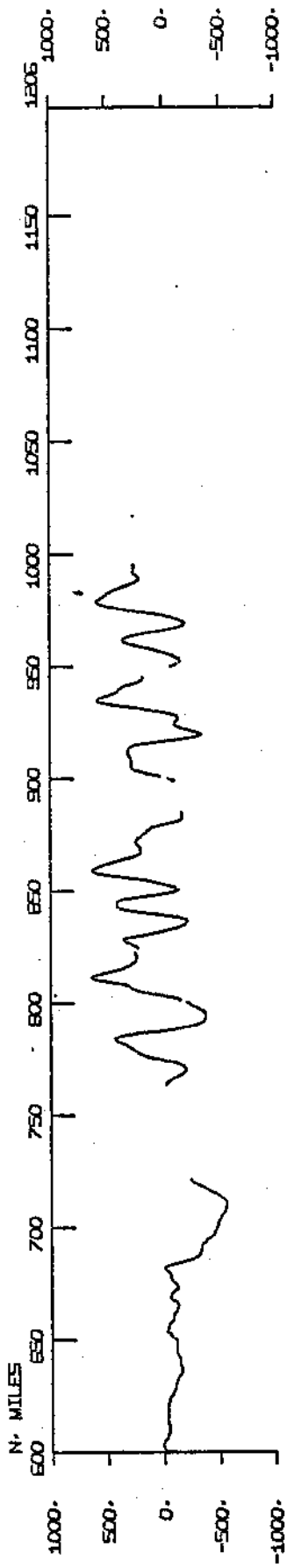
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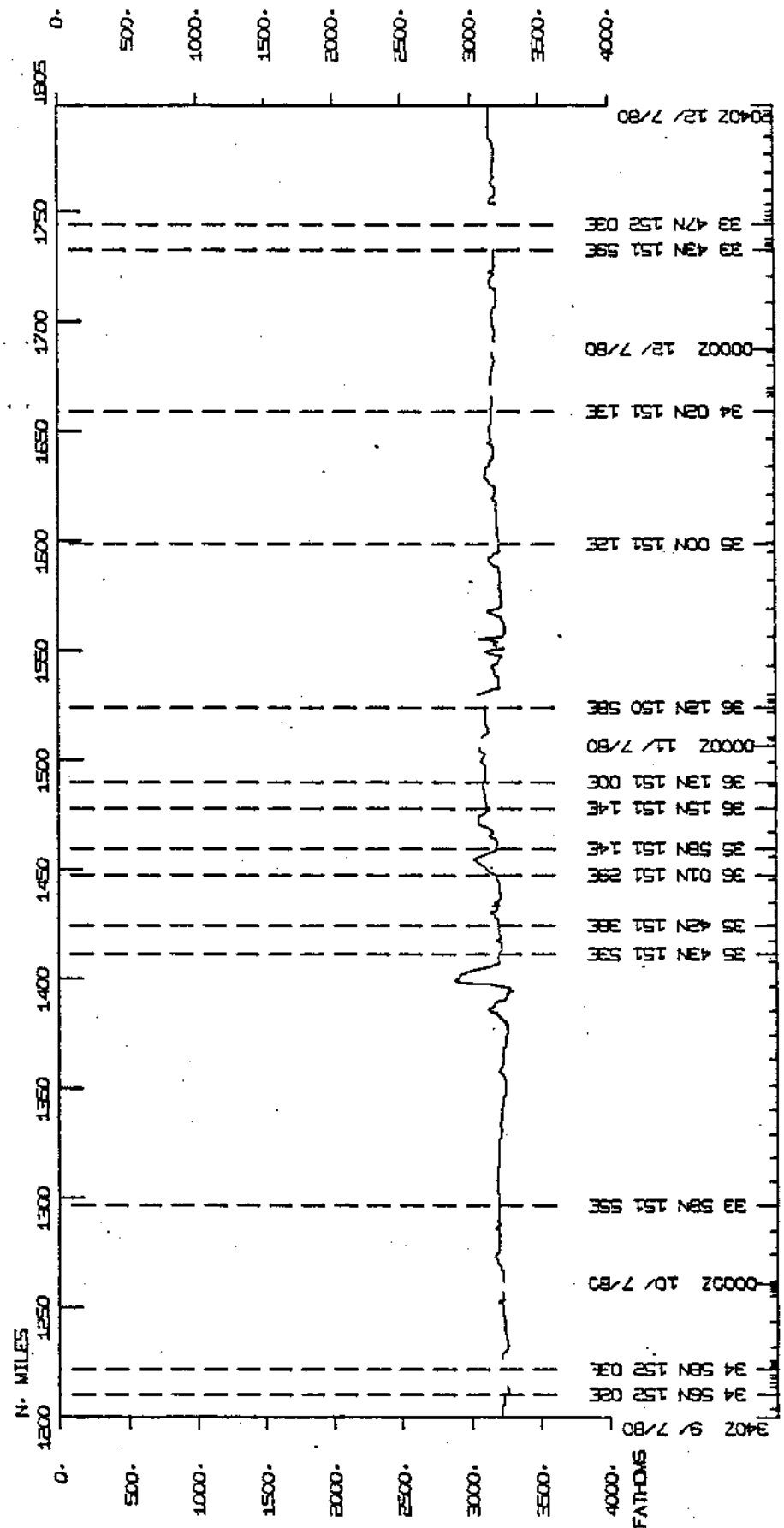
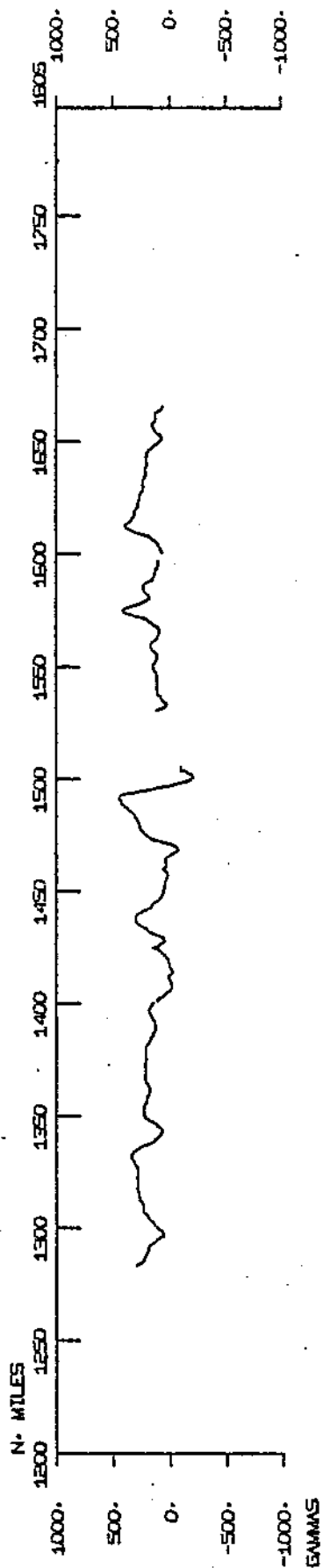
RAMA LEG 4



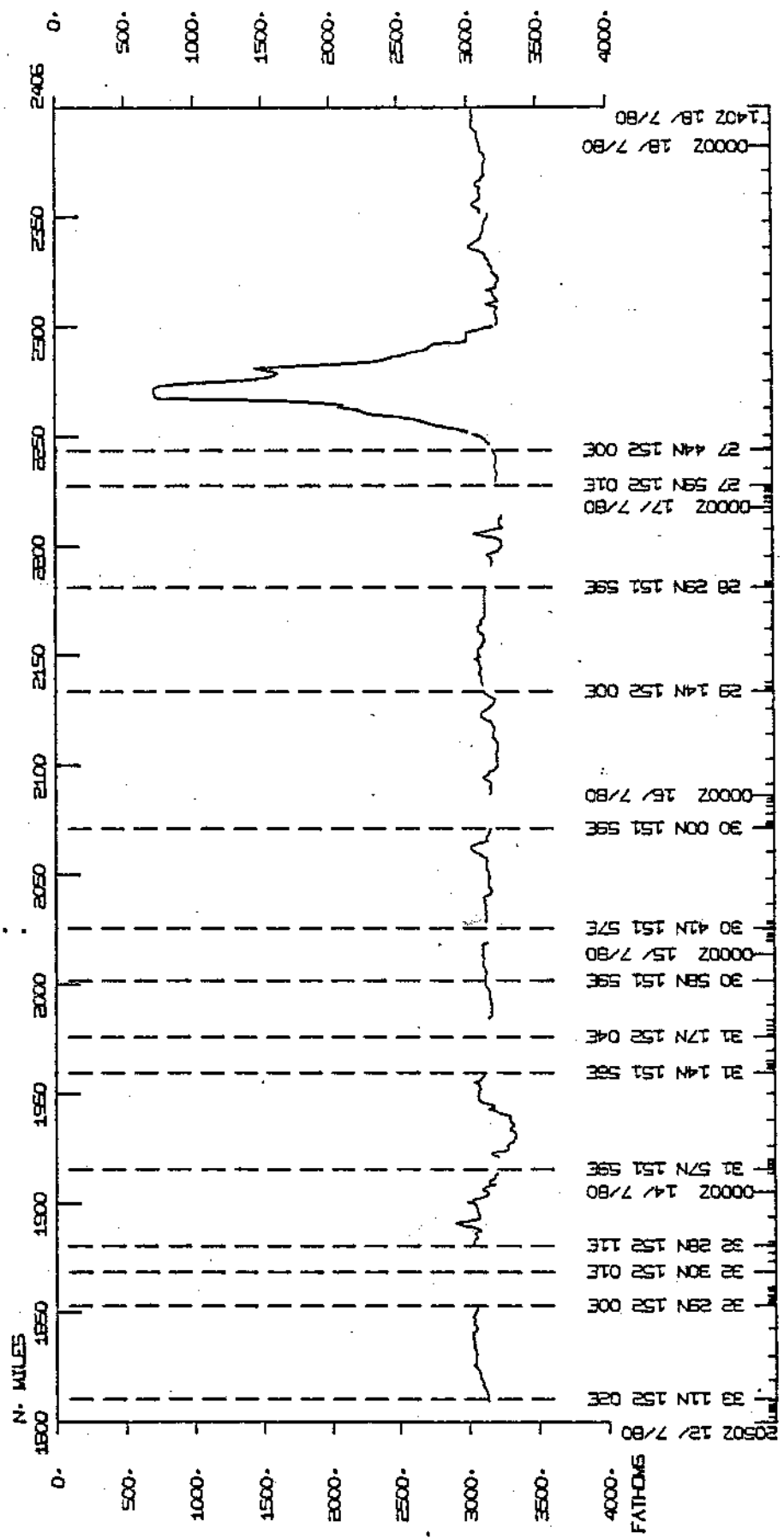
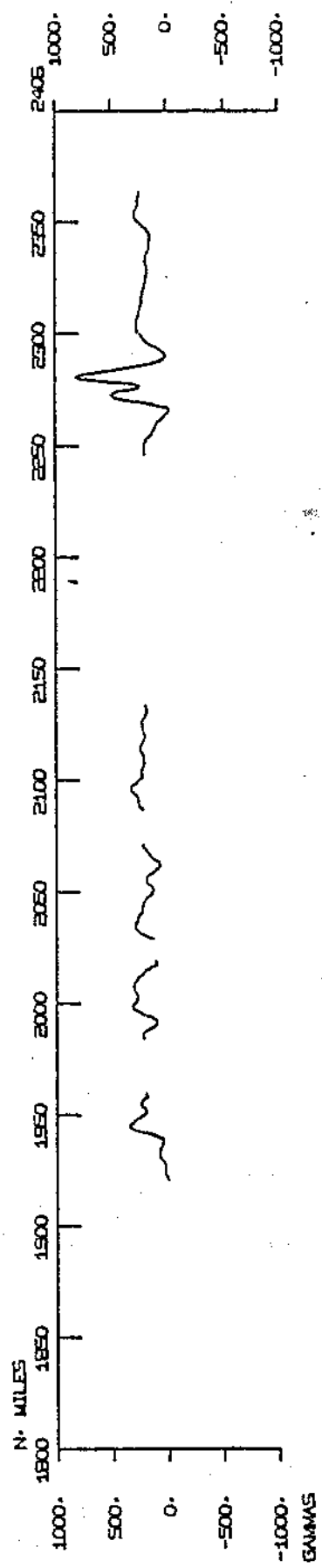
RAMA LEG 4



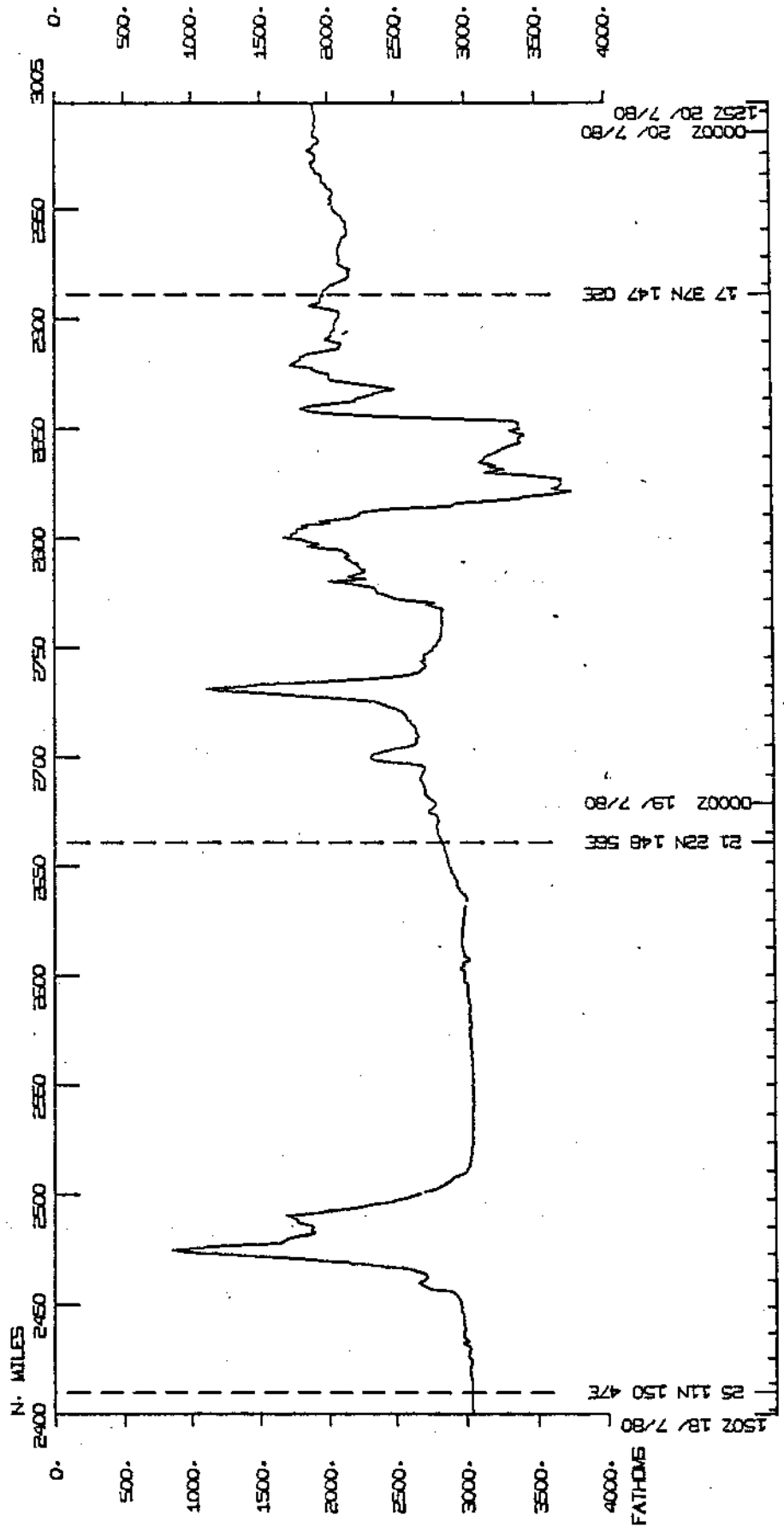
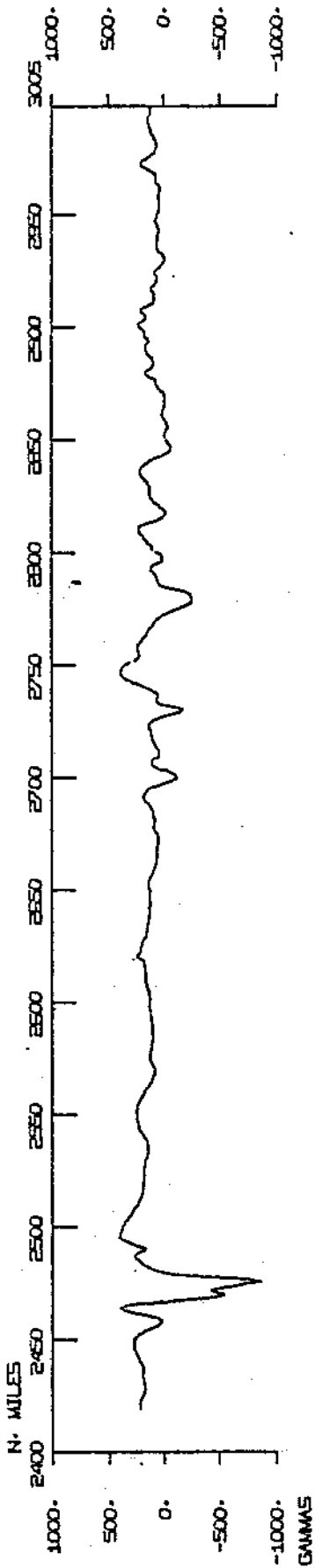
RAMA LEG 4



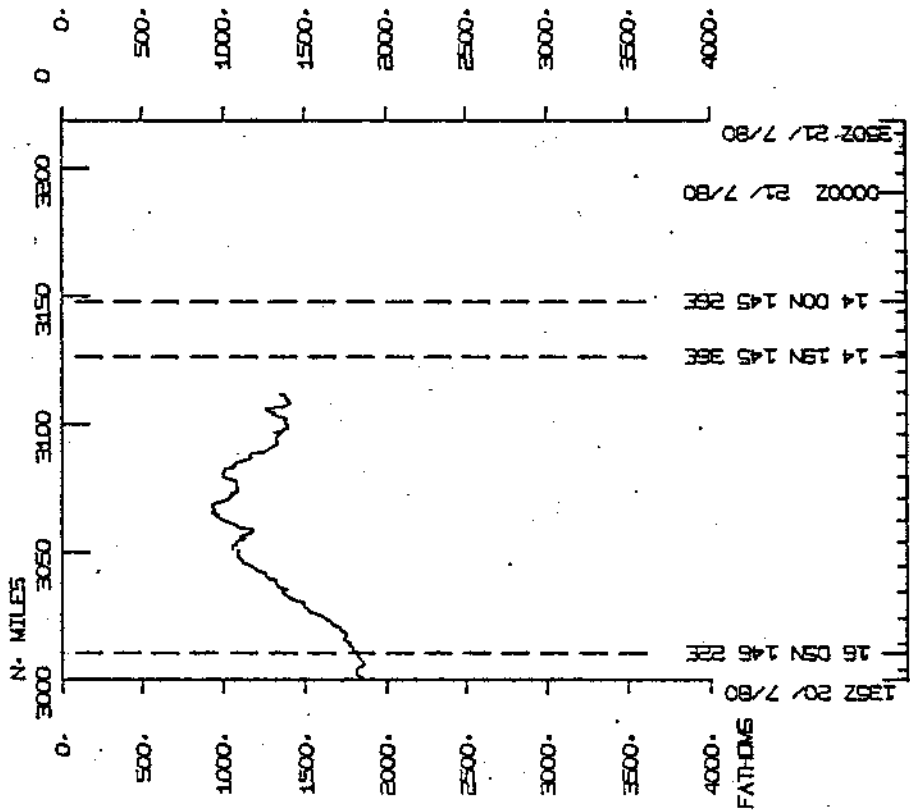
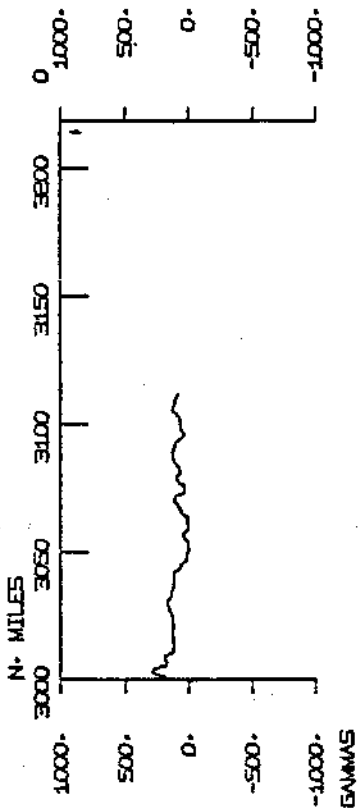
RAMA LEG 4



RAMA LEG 4



RAMA LEG 4



S.I.O. SAMPLE INDEX

(Issued September 1980)

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LEG 4

Yokosuka, Japan (1 July 1980)

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Chief Scientist - K. F. Bradley (WHOI)

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Post-Cruise Processing and Report Preparation
by S.I.O. Geological Data Center

Index Encoding Funded by NSF

Grant Number OCE77-23258

Index Processing and Report Preparation
funded in part by SIA

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 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.)

NOTE:

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NUMBER OF SAMPLES OF CLASS 'TYPE' GOING TO DESTINATION 'DISP'

DISP	TYPE							TOTAL
	CM	DP	GC	LR	MG	PE		
AUA	I						1 I	1
GDC	I		5		1	1	1 I	7
JPN	I						2 I	2
MIT	I						1 I	1
MTG	I						1 I	1
PCF	I			28			2 I	30
WHO	I	10					8 I	18
TOTAL	I	10	5	28	1	1	15 I	60

SAMPLE 'TYPE' CODES USED ABOVE

CM = CURRENT MEASUREMENT
 DP = DEPTH
 GC = GEOCHEMICAL SAMPLING
 LR = LOG BOOKS
 MG = MAGNETICS (TOWED VEHICLE, SURFACE, TOTAL FIELD)
 PE = PERSONNEL IN SCIENTIFIC PARTY

SAMPLE 'DISP' CODES USED ABOVE

AUA = AUSTRALIA
 GDC = GEOLOGICAL DATA CENTER -- S. SMITH (EXT. 2752)
 JPN = JAPAN
 MIT = MASS. INST. TECHNOLOGY
 MTG = MARINE TECHNOLOGY GROUP (EXT 4194)
 PCF = PHYSICAL AND CHEMICAL DATA FACILITY (EXT. 2240)
 WHO = WOODS HOLE OCEANOGRAPHIC INSTITUTION

GMT D /M /Y TIME DATE	LOC LOC TIME TZ	CODE SAMP	SAMPLE IDFN.T.	CODE DISP	LAT.	LONG.	LEG-SHIP CRUISE
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RAMA LEG 4 SAMPLE INDEX

RAMA04WT

*** PORTS ***

1600 1/ 7/80			LGPT B YOKOSUKA, JAPAN		35 17. N	139 40. E	F RAMA04WT
1430 21/ 7/80			LGPT E APKA, GUAM		13 27. N	144 37. E	F RAMA04WT

PERSONNEL

*** NAME ***	*** TITLE ***	*** AFFILIATION ***
1 BRADLEY, K. F.	CHIEF SCIENTIST	WOODS HOLE OCEANOGRAPHIC INSTITUTION
2 CHARTERS, J. S.	COMPUTER TECH	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
3 CIESLUK, A.	MARINE TECH	WOODS HOLE OCEANOGRAPHIC INSTITUTION
4 MORRILLO, S.	MARINE TECH	WOODS HOLE OCEANOGRAPHIC INSTITUTION
5 SIMKINS, S.	MARINE TECH	WOODS HOLE OCEANOGRAPHIC INSTITUTION
6 SIMKINS, S.	MARINE TECH	WOODS HOLE OCEANOGRAPHIC INSTITUTION
7 HORN, W.	MARINE TECH	WOODS HOLE OCEANOGRAPHIC INSTITUTION
8 OSTROM, W. M.	MARINE TECH	WOODS HOLE OCEANOGRAPHIC INSTITUTION
9 REESE, J.	MARINE TECH	WOODS HOLE OCEANOGRAPHIC INSTITUTION
10 EDWARDS, W.	SCIENTIST	AUSTRALIA
11 BERTEAUX, H.	SCIENTIST	MASS. INST. TECHNOLOGY
12 MISUMI, A.	SCIENTIST	JAPAN
13 NOMOTO, H.	SCIENTIST	JAPAN
14 PATRICK, R.	MARINE TECH	PHYSICAL AND CHEMICAL DATA FACILITY (EXT. 2240)
1 PARKS, M.	MARINE TECH	PHYSICAL AND CHEMICAL DATA FACILITY (EXT. 2240)

NOTES AN 'X' IN THE (R)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 THIS 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.

GMT D /M /Y	LOC	LOC	CODE	SAMPLE IDENT.	CODE	LAT.	LONG.	LEG-SHIP
TIME DATE	TIME	TZ	SAMP		DISP			CRUISE

UNDERWAY DATA CURATOR - STUART M. SMITH (EXT.2752)

*** LOG BOOKS ***

0310	2/	7/80	LBHJW	B UNDERWAY LOG	GDC	36	47.8N	143	26.0E	S	RAMA04WT
1400	20/	7/80	LRUW	E UNDERWAY LOG	GDC	14	32.5N	145	41.1E	S	RAMA04WT

*** BATHYGRAMS ***

0310	2/	7/80	DPR3	B 3.5 KHZ R-01	GDC	36	47.8N	143	26.0E	S	RAMA04WT
1445	3/	7/80	DPR3	E 3.5 KHZ R-01	GDC	40	18.3N	149	57.4E	S	RAMA04WT
1457	3/	7/80	DPR3	B 3.5 KHZ R-02	GDC	40	19.3N	149	59.7E	S	RAMA04WT
0435	9/	7/80	DPR3	E 3.5 KHZ R-02	GDC	34	55.2N	152	02.4E	S	RAMA04WT
0830	9/	7/80	DPR3	B 3.5 KHZ R-03	GDC	34	58.5N	152	01.7E	S	RAMA04WT
0050	14/	7/80	DPR3	E 3.5 KHZ R-03	GDC	31	58.0N	152	01.3E	S	RAMA04WT
0735	14/	7/80	DPR3	B 3.5 KHZ R-04	GDC	31	52.4N	151	56.7E	S	RAMA04WT
2015	18/	7/80	DPR3	E 3.5 KHZ R-04	GDC	21	50.9N	149	12.4E	S	RAMA04WT
2040	18/	7/80	DPR3	B 3.5 KHZ R-05	GDC	21	45.8N	149	09.9E	S	RAMA04WT
1400	20/	7/80	DPR3	E 3.5 KHZ R-05	GDC	14	32.5N	145	41.1E	S	RAMA04WT

*** MAGNETOMETER ***

0350	2/	7/80	MGRA	B MAGNETICS R-01	GDC	36	52.4N	143	33.8E	S	RAMA04WT
1400	20/	7/80	MGRA	E MAGNETICS R-01	GDC	14	32.5N	145	41.1E	S	RAMA04WT

CURRENT MEASUREMENT

0048	5/	7/80	CMAB	CURRENT METER NO-695	WHO	40	59.4N	152	02.6E	S	RAMA04WT
2130	5/	7/80	CMAB	CURRENT METER NO-696	WHO	38	58.1N	152	02.6E	S	RAMA04WT
2256	6/	7/80	CMAB	CURRENT METER NO-697	WHO	37	31.3N	152	02.6E	S	RAMA04WT
0432	8/	7/80	CMAB	CURRENT METER NO-698	WHO	36	16.7N	152	01.9E	S	RAMA04WT
0723	9/	7/80	CMAB	CURRENT METER NO-699	WHO	34	58.0N	152	02.1E	S	RAMA04WT
1049	12/	7/80	CMAB	CURRENT METER NO-700	WHO	33	47.5N	152	03.2E	S	RAMA04WT
2047	13/	7/80	CMAB	CURRENT METER NO-701	WHO	32	28.4N	152	10.5E	S	RAMA04WT
2011	14/	7/80	CMAB	CURRENT METER NO-702	WHO	31	15.6N	152	05.0E	S	RAMA04WT
2214	15/	7/80	CMAB	CURRENT METER NO-703	WHO	30	01.2N	152	00.1E	S	RAMA04WT
0210	17/	7/80	CMAB	CURRENT METER NO-704	WHO	27	59.5N	151	56.3E	S	RAMA04WT

GMT D /M /Y	LOC LOC	CODE	SAMPLE IDENT.	CODE	LAT.	LONG.	LEG-SHIP
TIME DATE	TIME TZ	SAMP		DISP			CRUISE

CONDUCTIVITY, TEMPERATURE, DEPTH

0420 0630	3/ 7/80		GCTD B 01	1600M R05	PCF 39	25.1N 148 15.1E	S RAMA04WT
0053 0707	4/ 7/80		GCTD B 02	5437M R05	PCF 41	13.7N 152 00.6E	S RAMA04WT
	4/ 7/80		GCTD E 02	5437M R05	PCF 41	13.5N 151 58.2E	S RAMA04WT
1420 2030	4/ 7/80		GCTD B 03	5482M R06	PCF 40	59.2N 151 54.8E	S RAMA04WT
	4/ 7/80		GCTD E 03	5482M R06	PCF 40	58.7N 151 50.1E	S RAMA04WT
0731 1305	5/ 7/80		GCTD B 04	5400M R06	PCF 39	59.4N 151 59.7E	S RAMA04WT
	5/ 7/80		GCTD E 04	5400M R06	PCF 40	00.5N 151 59.6E	S RAMA04WT
2315 0505	5/ 7/80		GCTD B 05	5650M R06	PCF 38	59.4N 152 02.8E	S RAMA04WT
	6/ 7/80		GCTD E 05	5650M R06	PCF 39	01.0N 152 04.7E	S RAMA04WT
0940 1550	6/ 7/80		GCTD B 06	5800M R06	PCF 38	15.3N 151 59.0E	S RAMA04WT
	6/ 7/80		GCTD E 06	5800M R06	PCF 38	15.2N 151 59.7E	S RAMA04WT
0025 0600	7/ 7/80		GCTD B 07	5910M R06	PCF 37	29.9N 152 02.1E	S RAMA04WT
	7/ 7/80		GCTD E 07	5910M R06	PCF 37	30.3N 152 02.2E	S RAMA04WT
1600 2323	7/ 7/80		GCTD B 08	5503M R06	PCF 36	44.0N 151 58.3E	S RAMA04WT
	7/ 7/80		GCTD E 08	5503M R06	PCF 36	45.4N 151 58.7E	S RAMA04WT
0607 1205	8/ 7/80		GCTD B 09	5641M R06	PCF 36	16.6N 152 02.3E	S RAMA04WT
	8/ 7/80		GCTD E 09	5641M R06	PCF 36	20.7N 152 04.1E	S RAMA04WT
1608 2326	8/ 7/80		GCTD B 10	6000M R06	PCF 35	46.1N 152 02.4E	S RAMA04WT
	8/ 7/80		GCTD E 10	6000M R06	PCF 35	53.9N 152 07.2E	S RAMA04WT
0856 1520	9/ 7/80		GCTD B 11	6000M R06	PCF 34	58.8N 152 03.7E	S RAMA04WT
	9/ 7/80		GCTD E 11	6000M R06	PCF 35	00.5N 152 02.7E	S RAMA04WT
1837 0050	9/ 7/80		GCTD B 12	5996M R06	PCF 34	30.5N 152 00.2E	S RAMA04WT
	10/ 7/80		GCTD E 12	5996M R06	PCF 34	32.6N 151 57.7E	S RAMA04WT
2355 0148	10/ 7/80		GCTD B 13	1500M R06	PCF 36	26.4N 151 04.8E	S RAMA04WT
	11/ 7/80		GCTD E 13	1500M R06	PCF 36	24.3N 151 08.8E	S RAMA04WT
0355 0548	11/ 7/80		GCTD B 14	1600M R06	PCF 36	11.2N 150 60.0E	S RAMA04WT
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	11/ 7/80		GCTD E 15	1600M R06	PCF 35	00.1N 151 11.2E	S RAMA04WT
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	11/ 7/80		GCTD E 16	1650M R06	PCF 34	04.0N 151 08.5E	S RAMA04WT
2243 0010	11/ 7/80		GCTD B 17	1550M R06	PCF 33	47.4N 151 07.0E	S RAMA04WT
	12/ 7/80		GCTD E 17	1550M R06	PCF 33	45.9N 151 07.6E	S RAMA04WT

GMT TIME	D/M/Y DATE	LOC TIME	LOC TZ	CODE SAMP	SAMPLE IDENT.	CODE DISP	LAT.	LONG.	LEG-SHIP CRUISE
0407	12/ 7/80			GCTD B 18	6000M R06	PCF 33	43.7N	151 59.8E	S RAMA04WT
0950	12/ 7/80			GCTD E 18	6000M R06	PCF 33	45.3N	151 58.4E	S RAMA04WT
2330	12/ 7/80			GCTD B 19	4200M R06	PCF 33	11.5N	151 59.2E	S RAMA04WT
0400	13/ 7/80			GCTD E 19	4200M R06	PCF 33	13.4N	152 02.4E	S RAMA04WT
0836	13/ 7/80			GCTD B 20	5864M R06	PCF 32	30.0N	152 00.6E	S RAMA04WT
1400	13/ 7/80			GCTD E 20	5864M R06	PCF 32	30.2N	152 05.6E	S RAMA04WT
0153	14/ 7/80			GCTD B 21	6000M R06	PCF 31	57.6N	151 59.9E	S RAMA04WT
0722	14/ 7/80			GCTD E 21	6000M R06	PCF 31	53.5N	151 56.7E	S RAMA04WT
1107	14/ 7/80			GCTD B 22	5950M R06	PCF 31	14.7N	151 56.7E	S RAMA04WT
1638	14/ 7/80			GCTD E 22	5950M R06	PCF 31	16.7N	151 52.7E	S RAMA04WT
0040	15/ 7/80			GCTD B 23	5996M R06	PCF 30	41.8N	151 58.4E	S RAMA04WT
0542	15/ 7/80			GCTD E 23	5996M R06	PCF 30	42.7N	151 59.5E	S RAMA04WT
1415	15/ 7/80			GCTD B 24	6000M R06	PCF 30	00.1N	151 59.8E	S RAMA04WT
1920	15/ 7/80			GCTD E 24	6000M R06	PCF 30	02.8N	152 00.1E	S RAMA04WT
0551	16/ 7/80			GCTD B 25	6000M R06	PCF 29	14.1N	152 00.2E	S RAMA04WT
1041	16/ 7/80			GCTD E 25	6000M R06	PCF 29	13.8N	152 00.2E	S RAMA04WT
1446	16/ 7/80			GCTD B 26	6000M R06	PCF 28	28.9N	151 59.4E	S RAMA04WT
1956	16/ 7/80			GCTD E 26	6000M R06	PCF 28	29.1N	152 01.0E	S RAMA04WT
0350	17/ 7/80			GCTD B 27	5981M R06	PCF 27	59.0N	151 59.0E	S RAMA04WT
0921	17/ 7/80			GCTD E 27	5981M R06	PCF 28	00.5N	152 01.2E	S RAMA04WT
1058	17/ 7/80			GCTD B 28	1535M R06	PCF 27	44.0N	152 00.1E	S RAMA04WT
1230	17/ 7/80			GCTD E 28	1535M R06	PCF 27	43.7N	151 59.2E	S RAMA04WT
9900				END SAMPLE INDEX					RAMA04WT