INFORMAL REPORT AND INDEX OF

NAVIGATION, DEPTH, MAGNETIC AND SUBBOTTOM PROFILER DATA

(Issued September 1979)

MARIANA EXPEDITION

LEG 11

Subic Bay, Philippines (1 July 1979)
to
Honolulu, Hawaii (1 August 1979)

R/V T. Washington

Chief Scientist - G. Shor (SIO)

Resident Marine Tech - R. Wilson

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

Data Collection Funded by NSF
Grant Number OCE78-16758
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 Cruise I.D.# - 176

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"/deg. long.

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.) 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 gamm/inch; anomaly scale north of 15°N and south of 15°S = 1000 gamm/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.

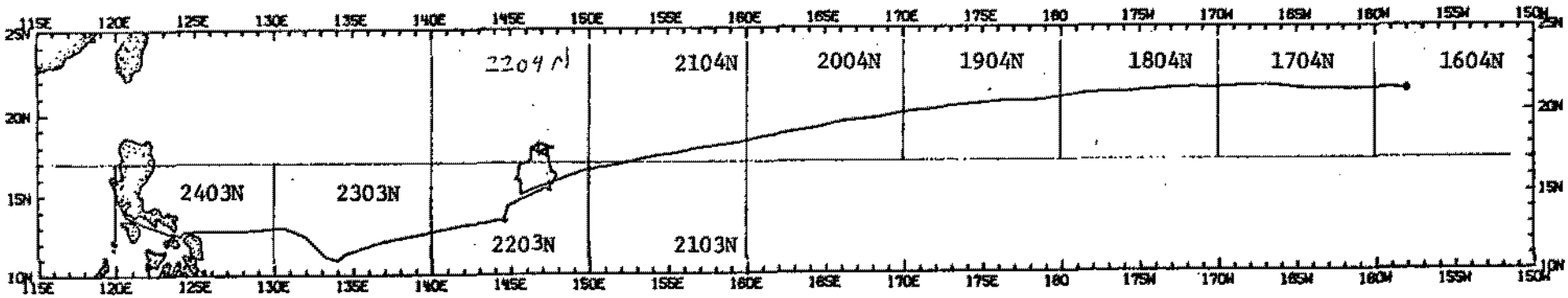
6. Microfilm or Xerox copies of:

   a. Echosounder records - 12 and 3.5 kHz frequency

   b. Subbottom profiler records (airgun)

   c. Magnetometer records

   d. Underway Data Log



MARIANA EXPEDITION LEG 11

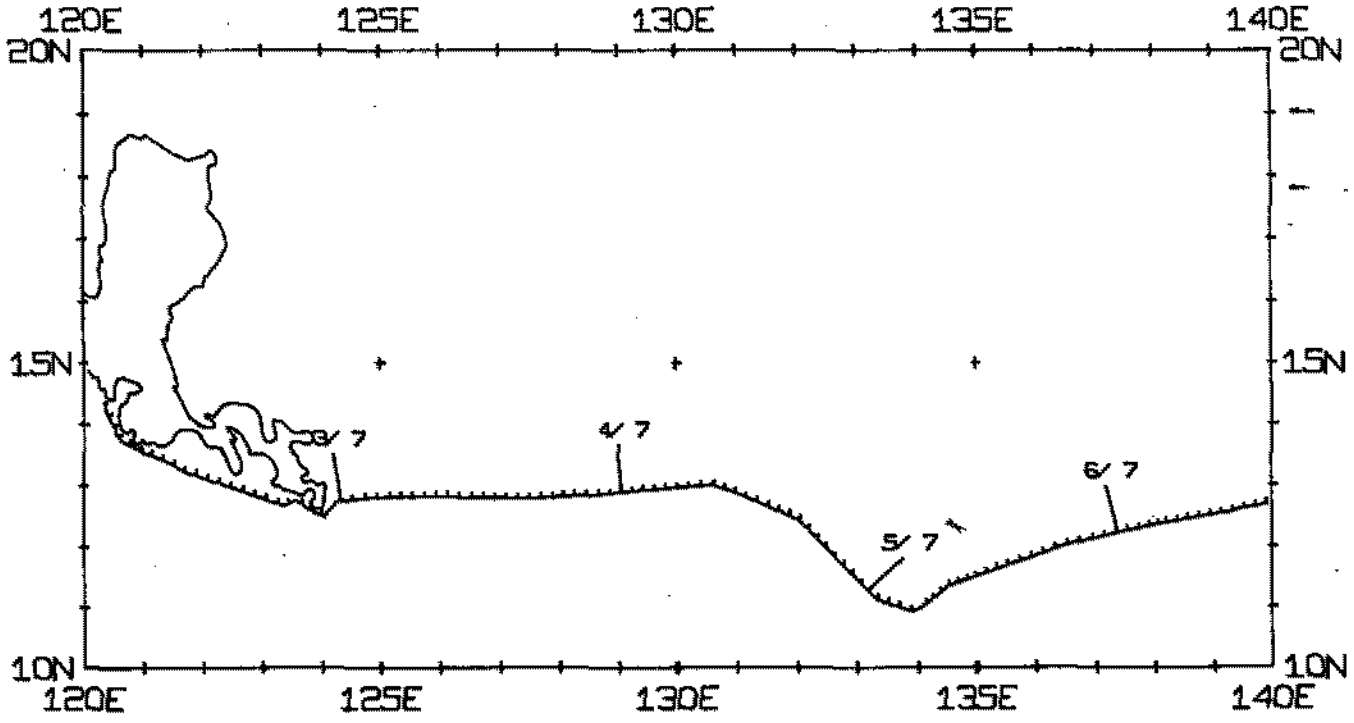
Chief Scientist: George Shor (SIO)
Ports: Subic Bay, Philippines - Honolulu, Hawaii
Dates: 1 July - 1 August 1979
Ship: R/V T. Washington

TOTAL MILEAGE

1) Cruise - 6226 miles
2) Bathymetry - 6116 miles
3) Magnetics - 4991 miles
4) Seismic Reflection - 208 miles
5) Gravity - none collected

MARIANA LEG 11 TRACK PLOT (1 OF 5)

MERCATOR PROJECTION, SCALE= 0.312 IN/DEG LONGITUDE



MARIANA LEG 11 TRACK PLOT (2 OF 5)

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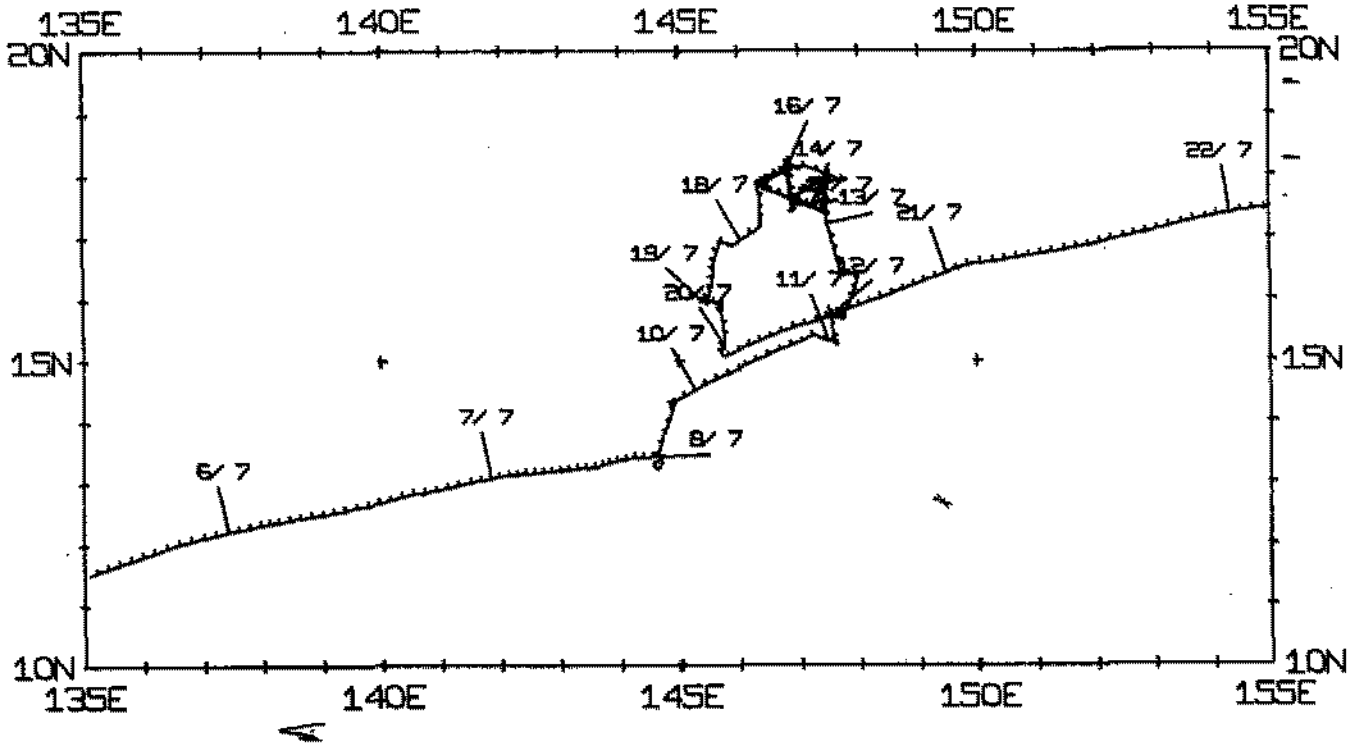
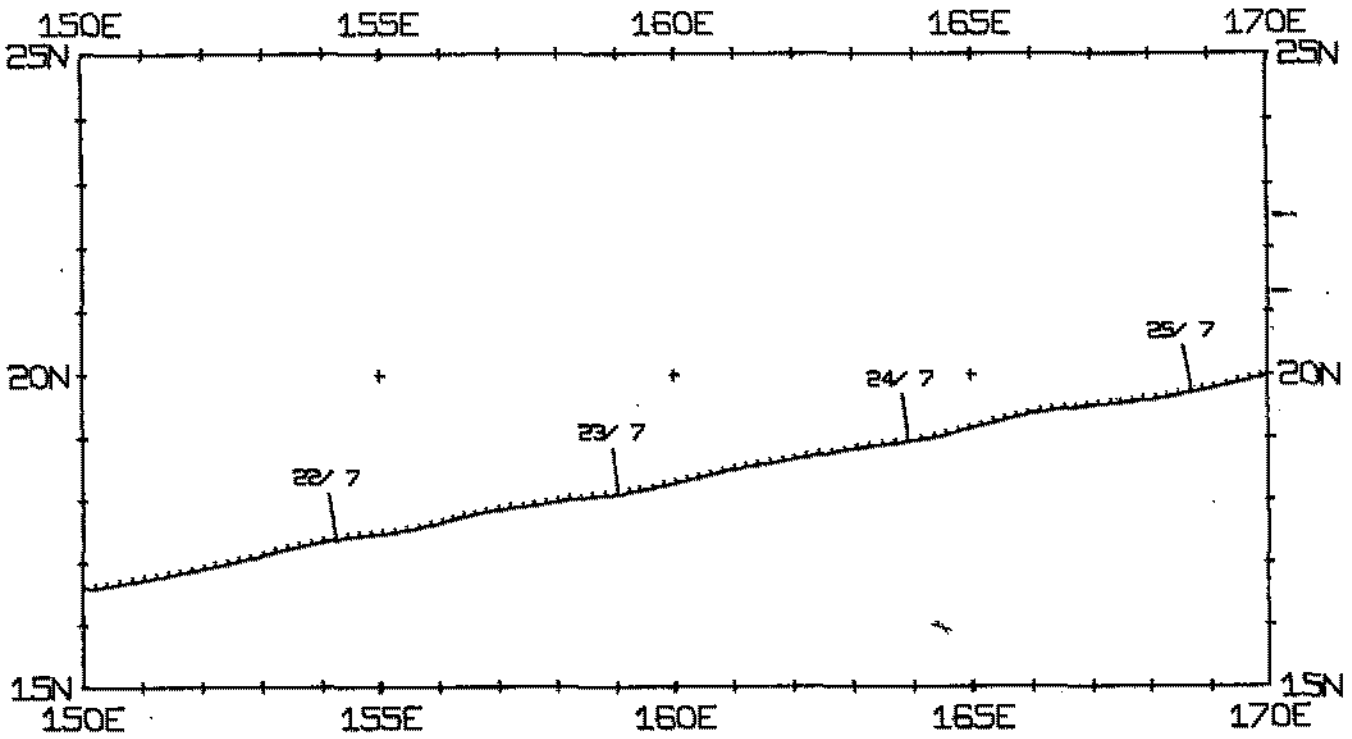


MARIANA LEG 11 TRACK PLOT (3 OF 5)

MERCATOR PROJECTION, SCALE= 0.312 IN/DEG LONGITUDE



MARIANA LEG 11 TRACK PLOT (4 OF 5)

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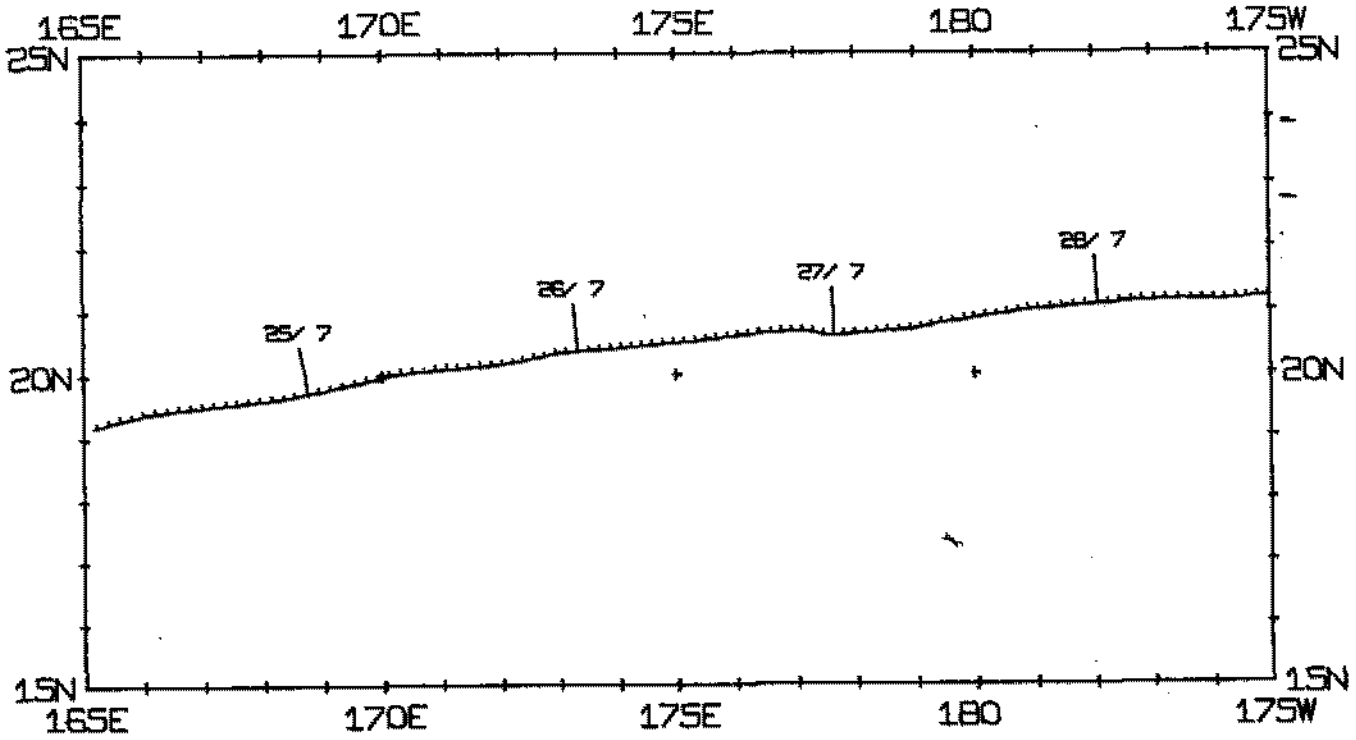

MARIANA LEG 11 TRACK PLOT (5 OF 5)

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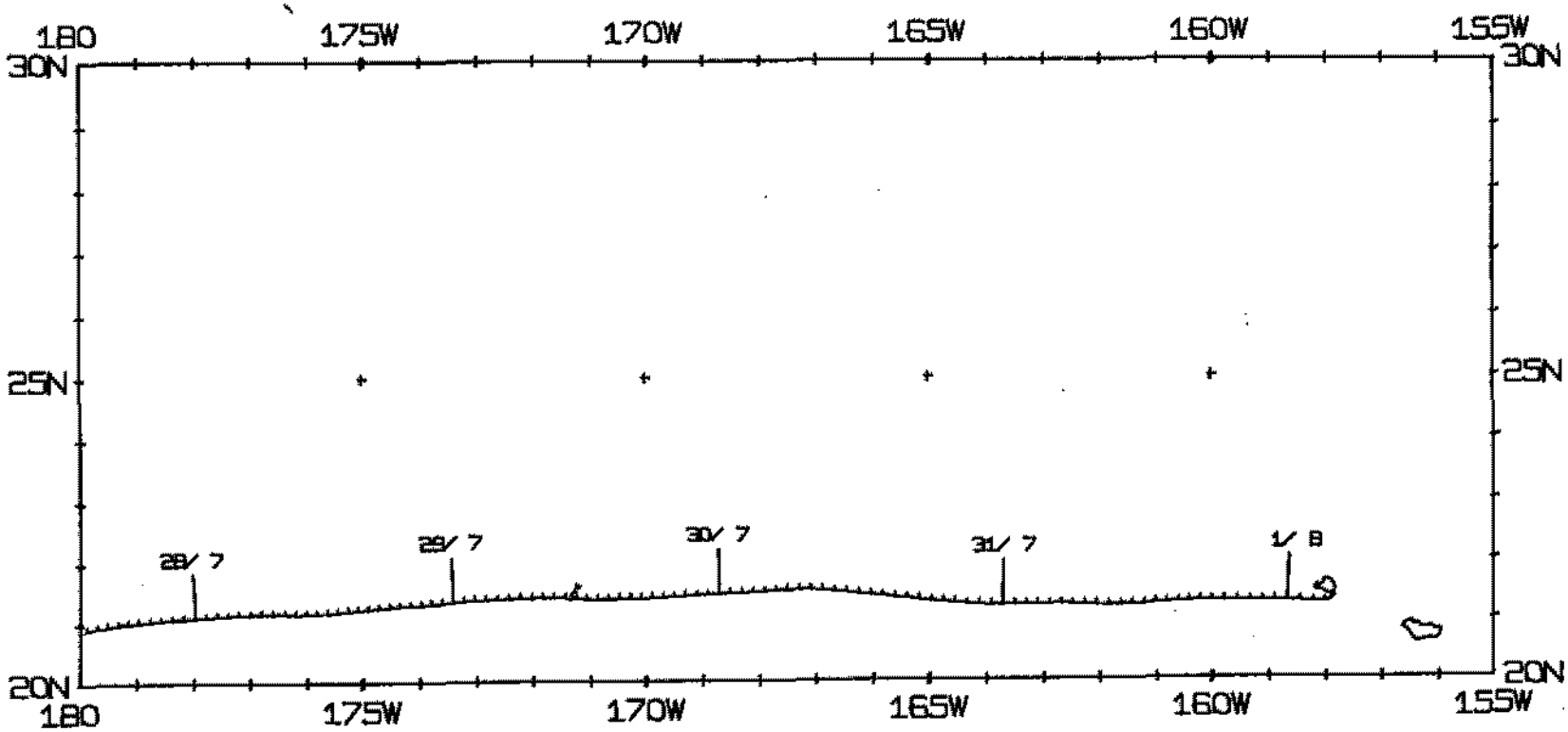

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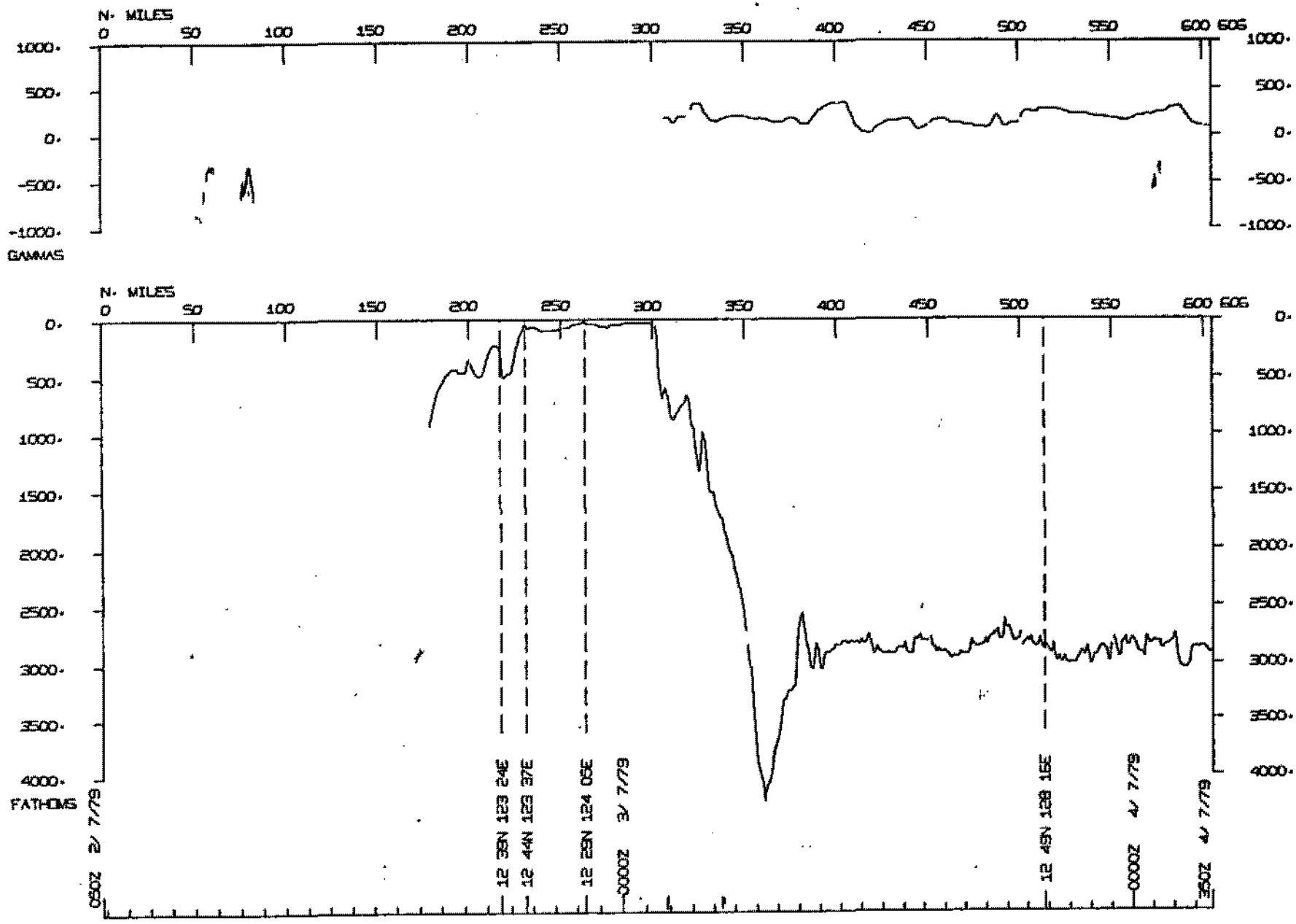

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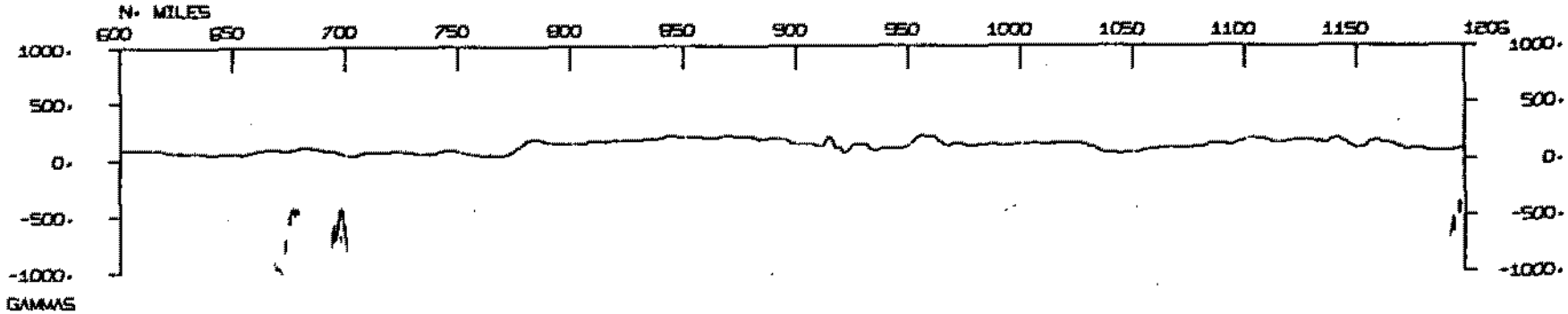

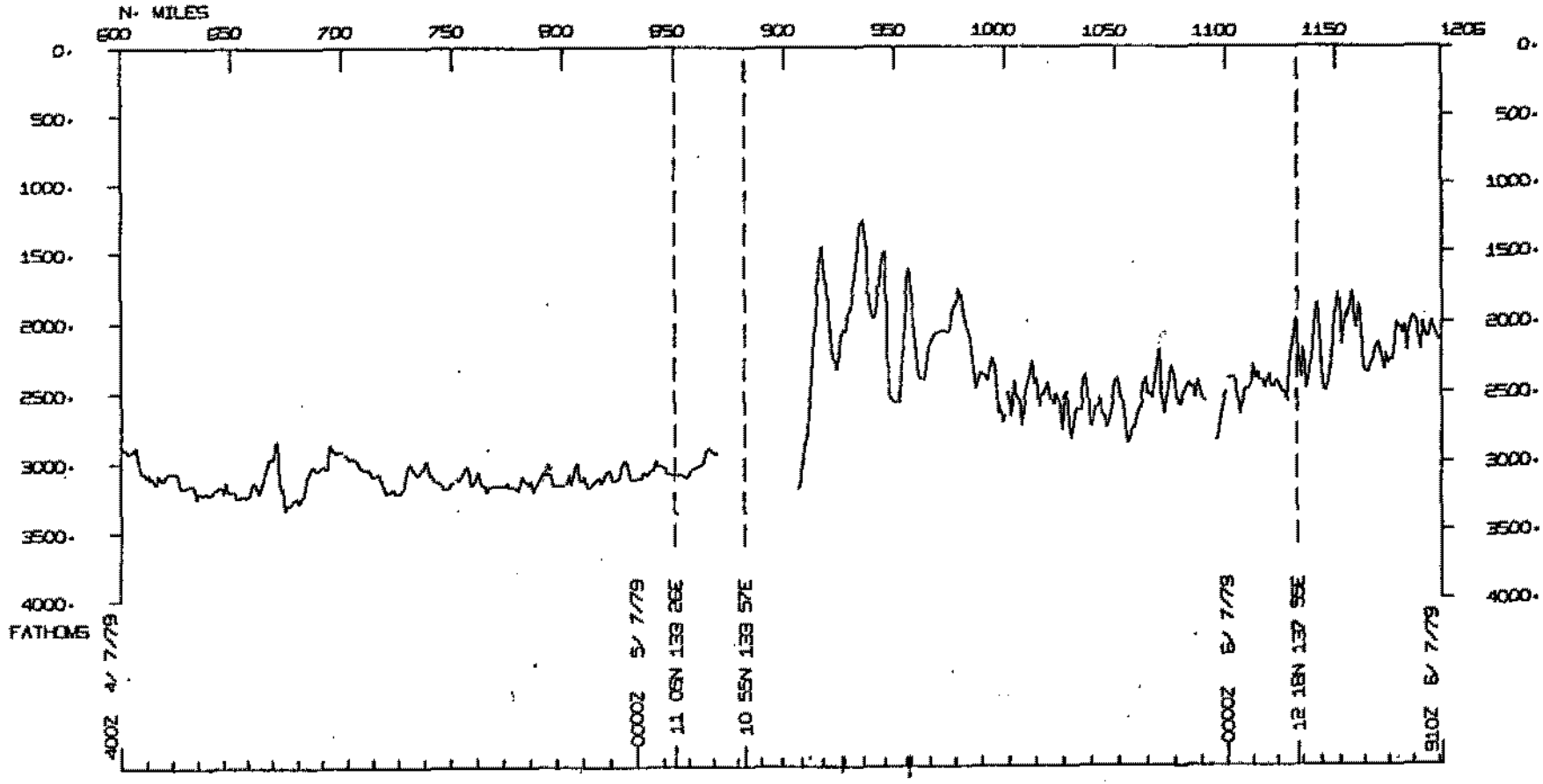

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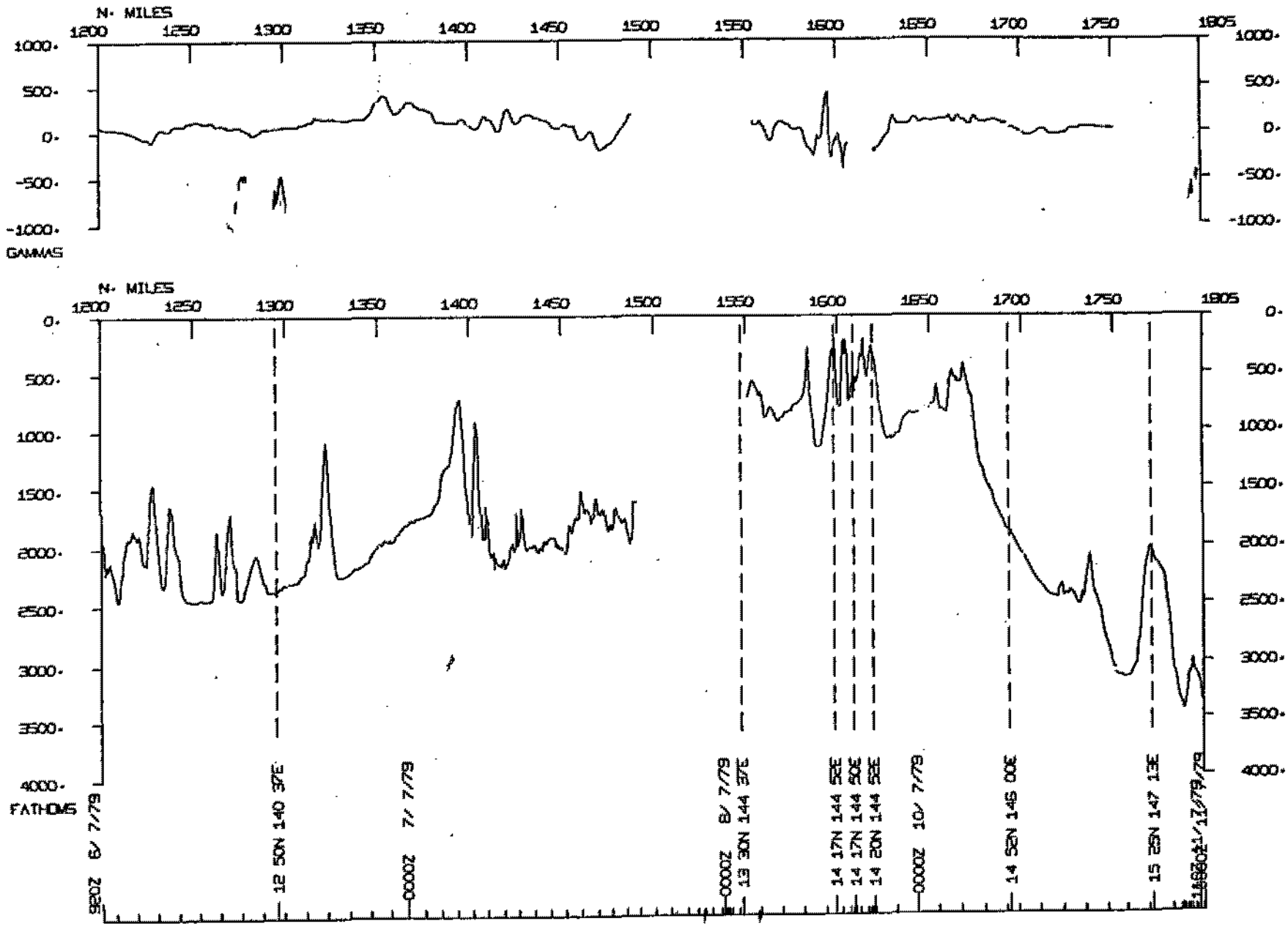

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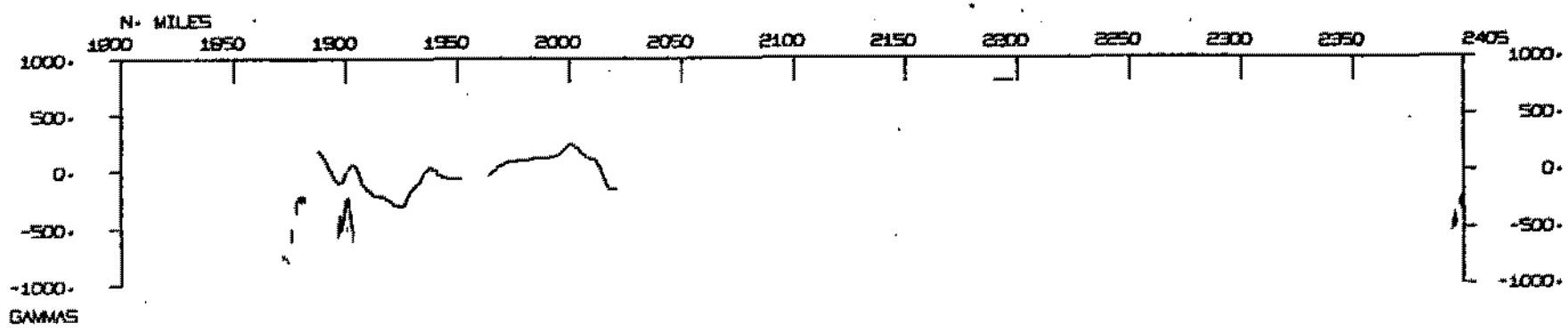

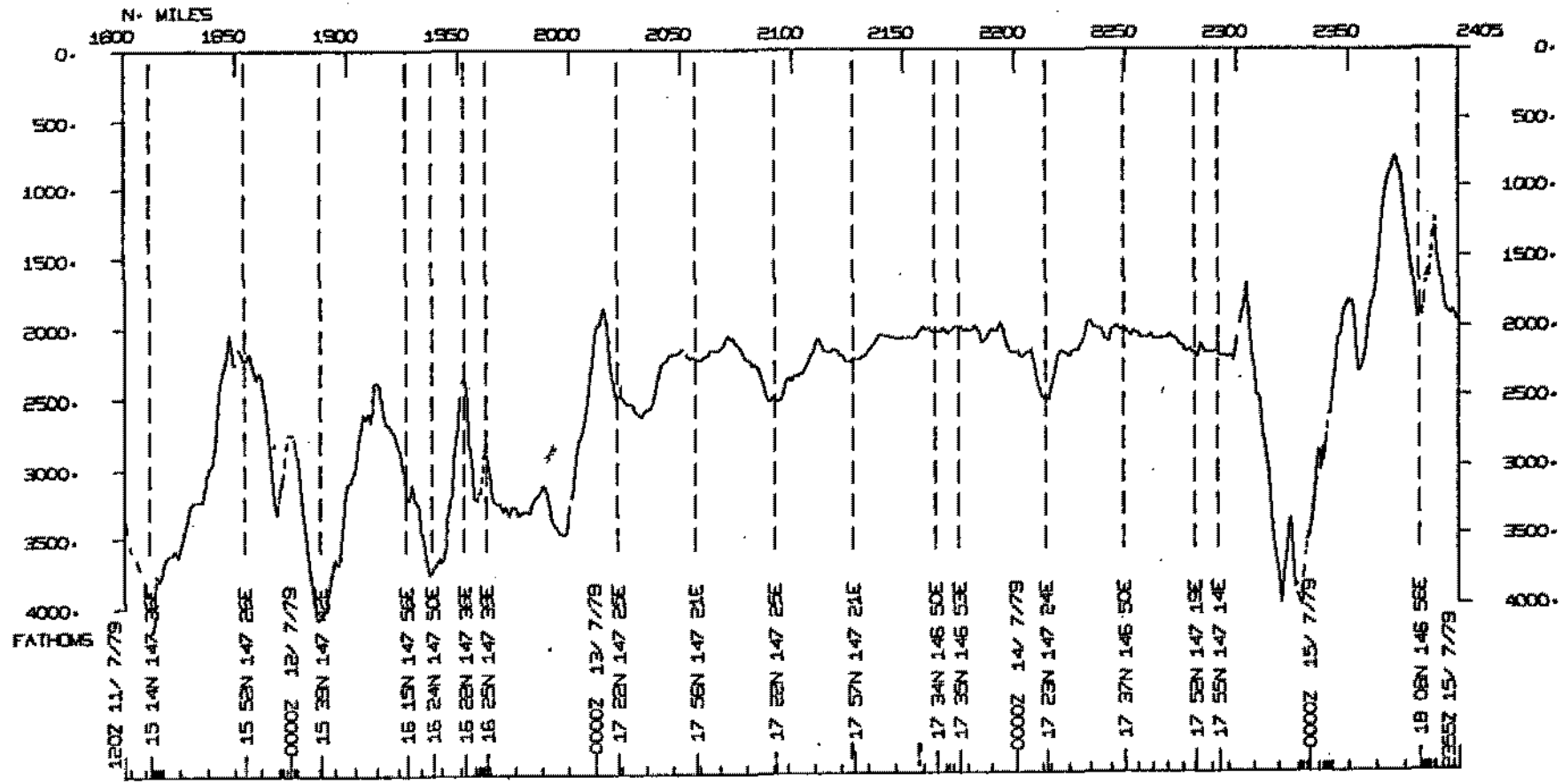

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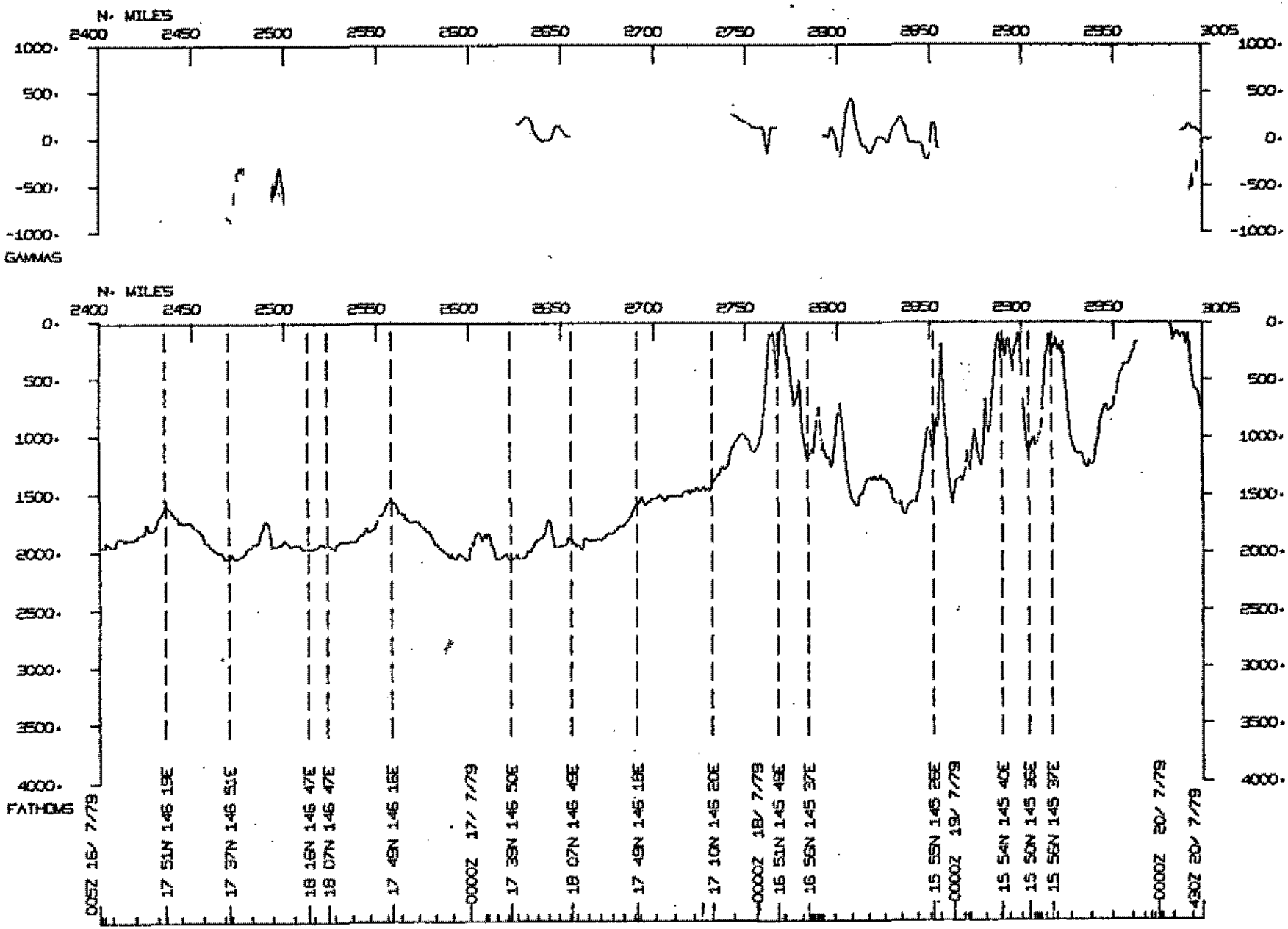

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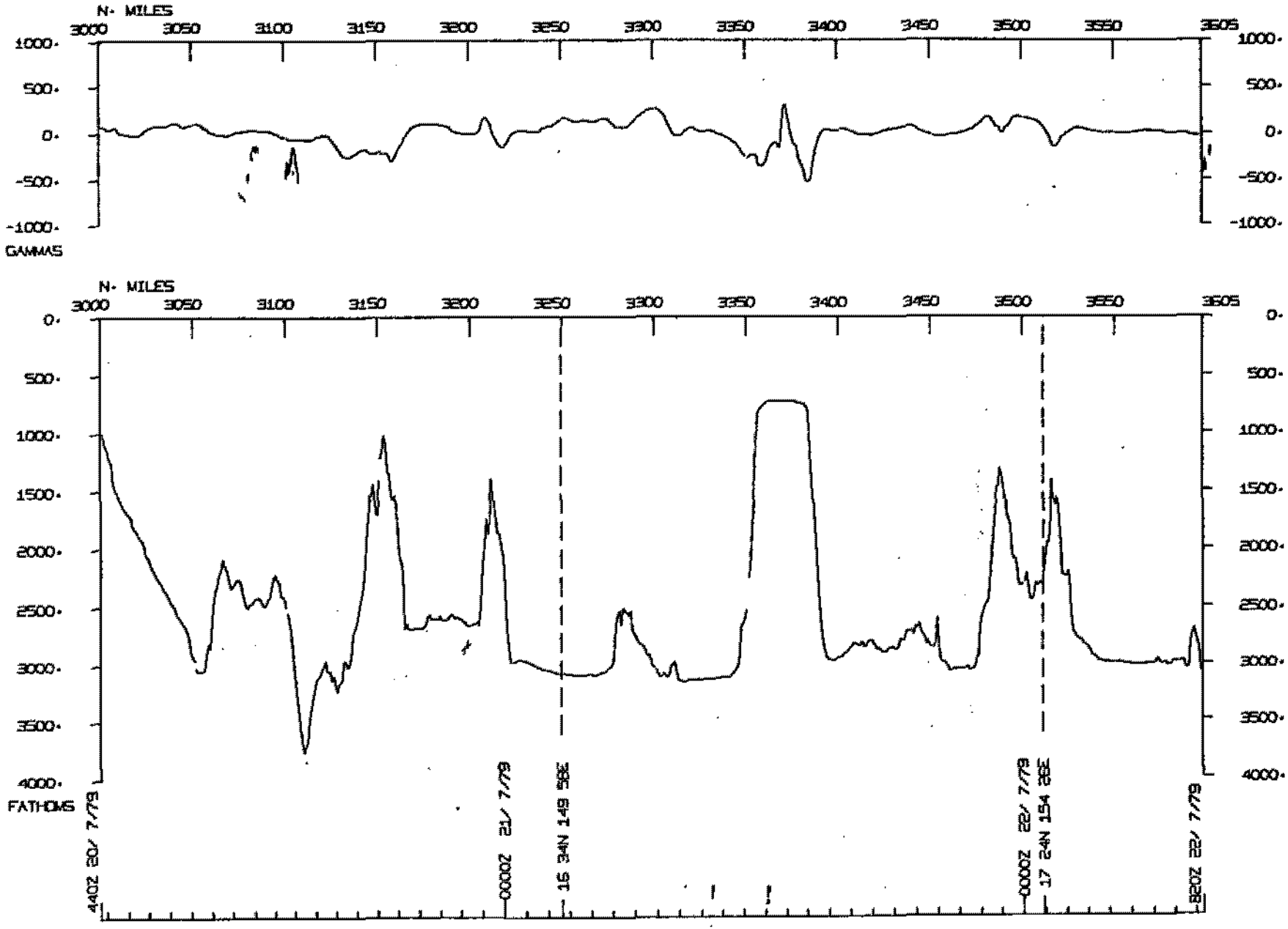

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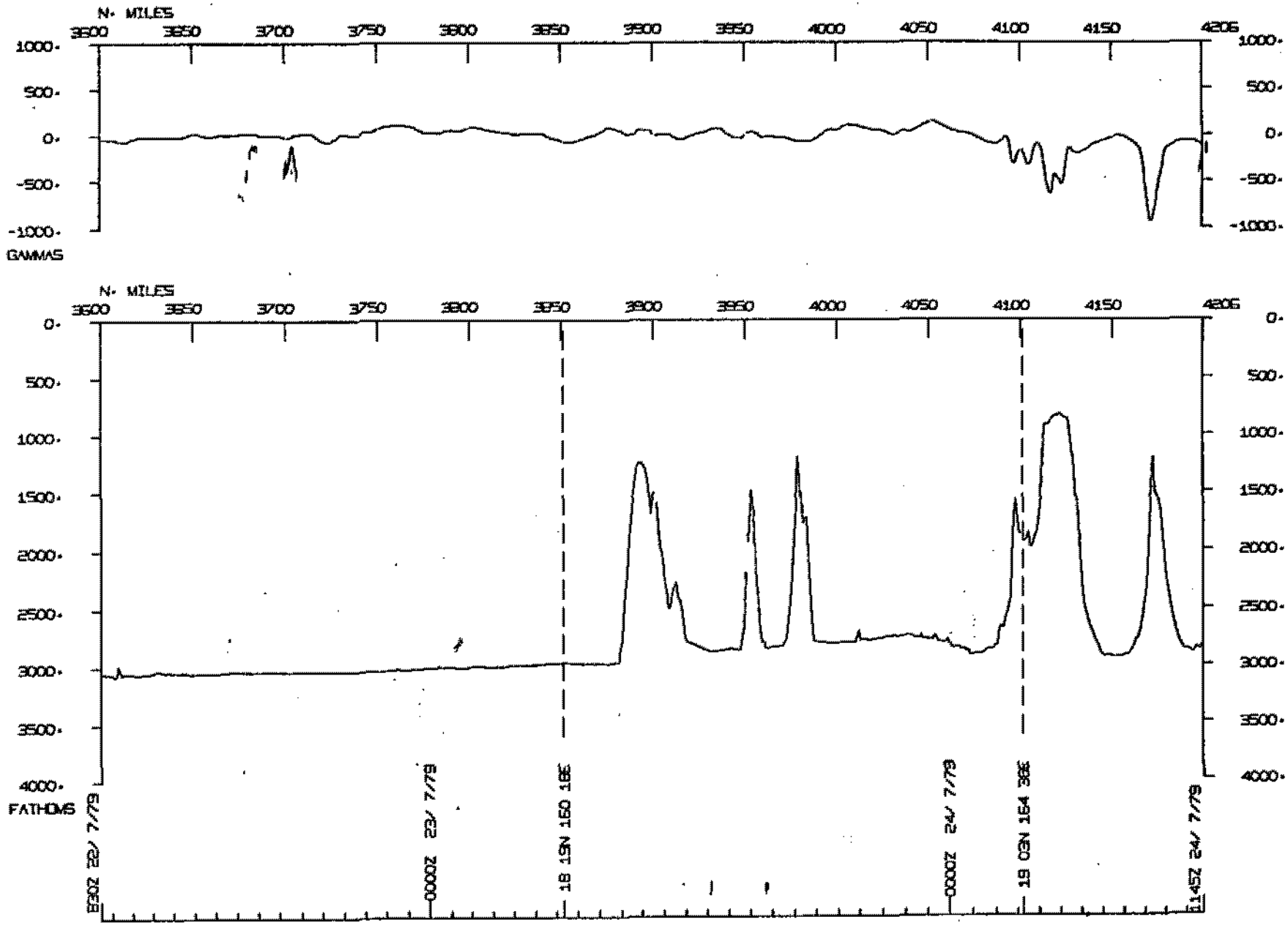

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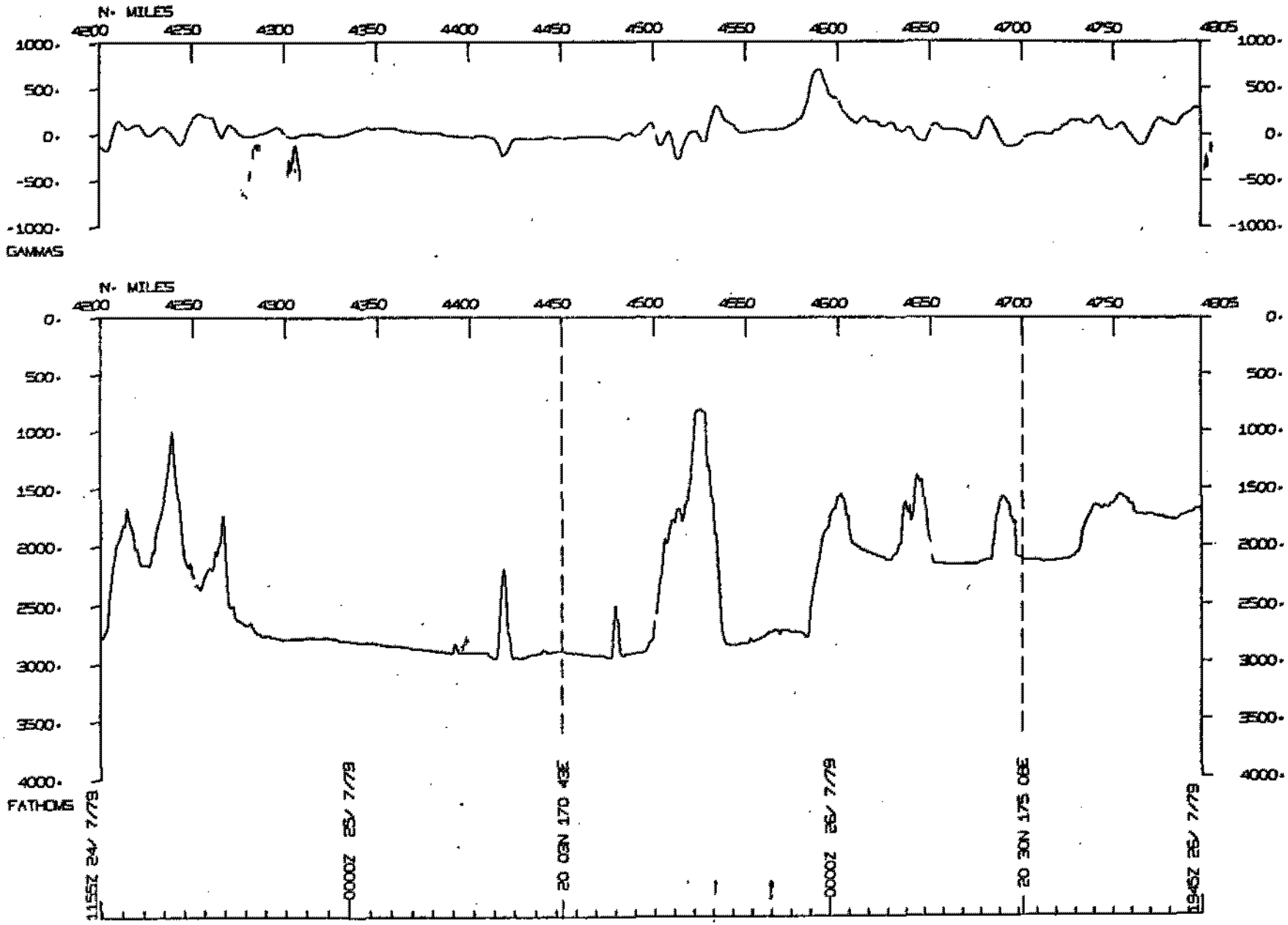

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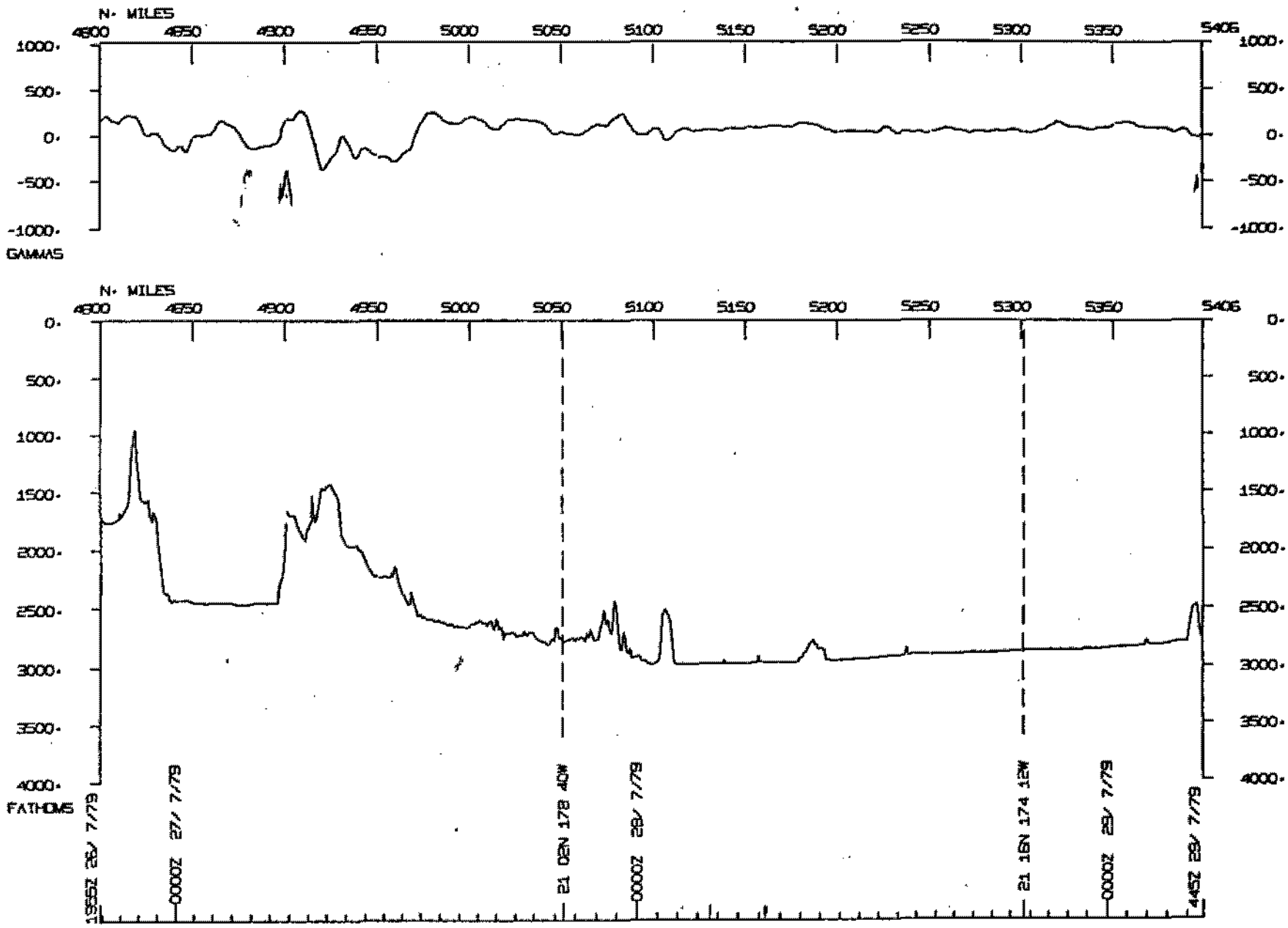

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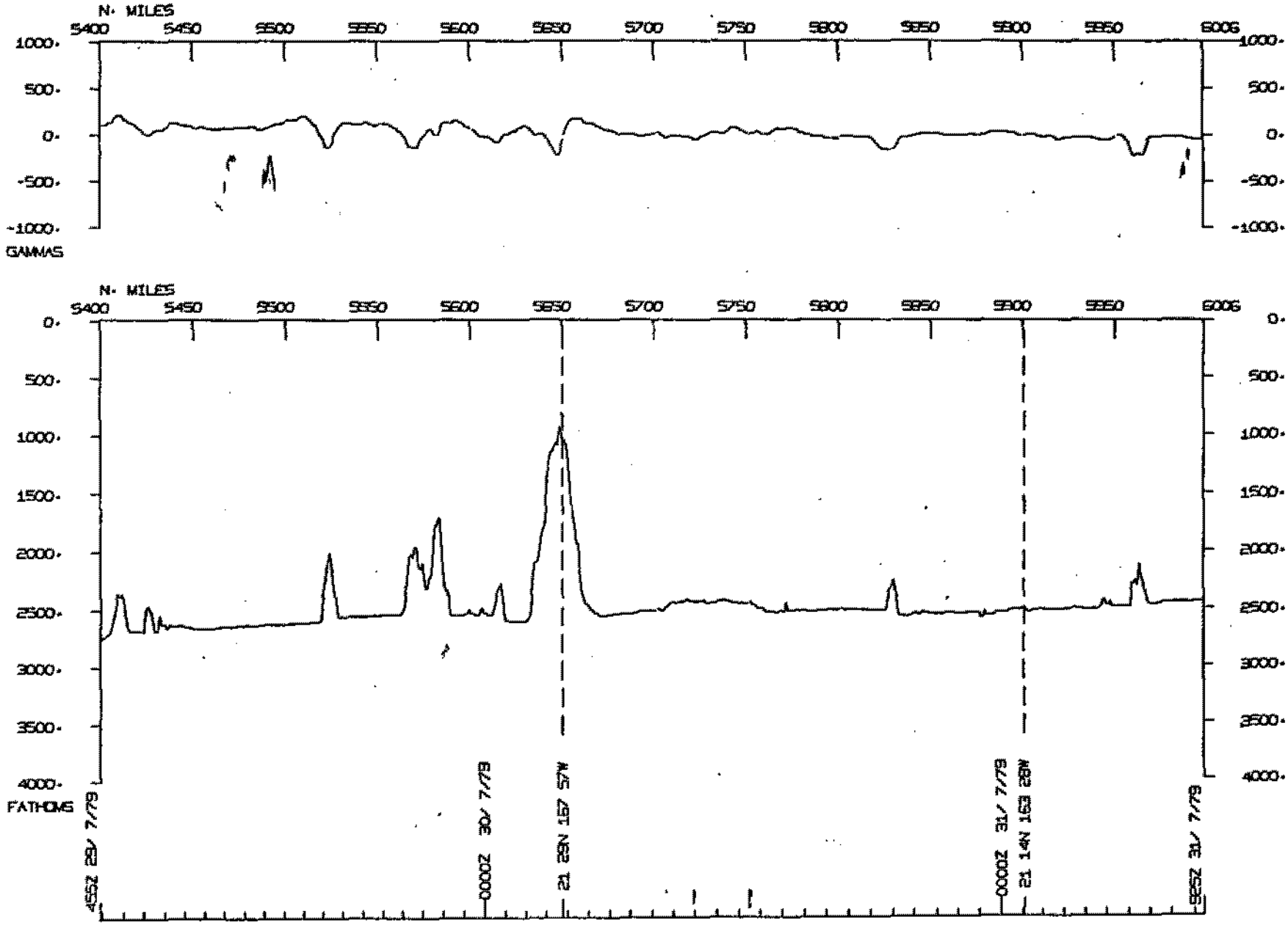
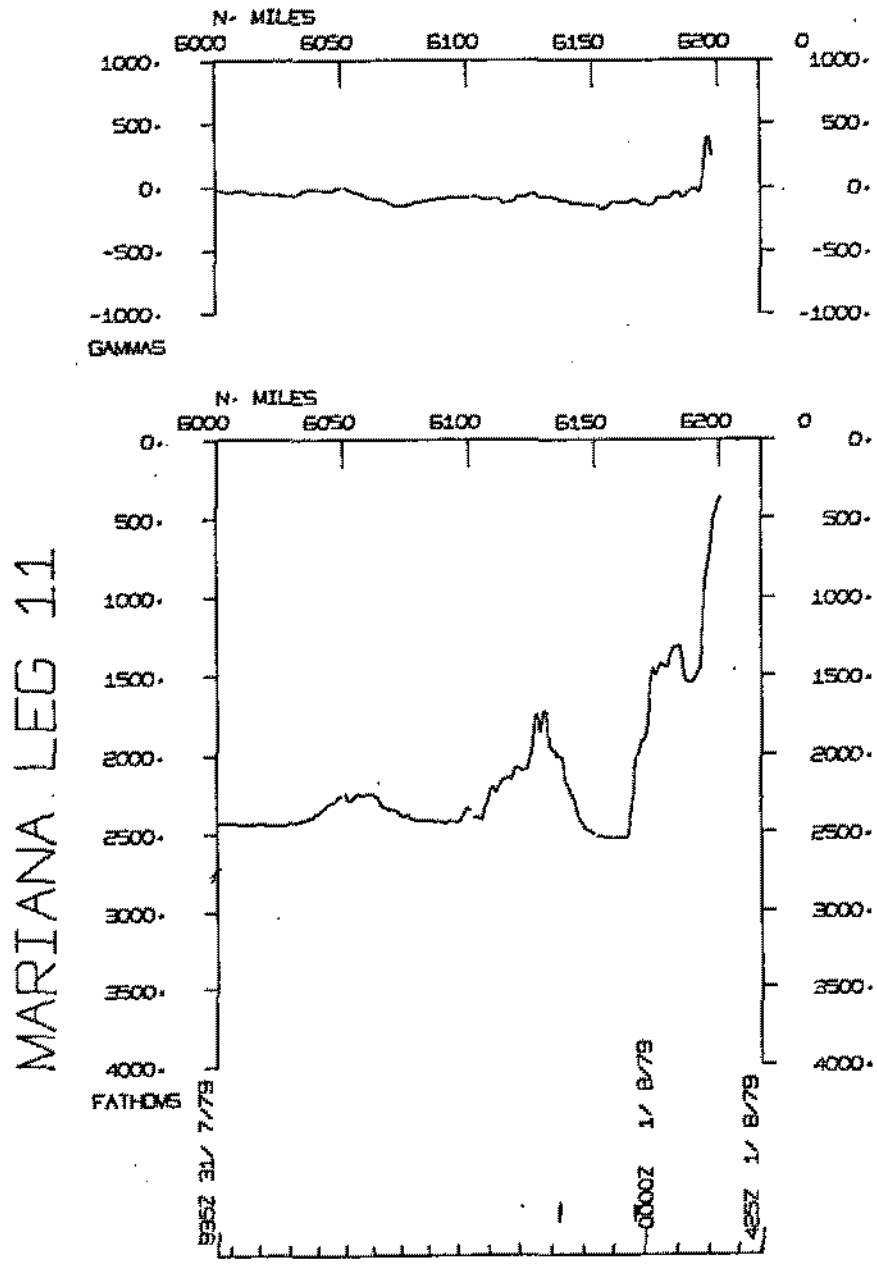



MARIANA LEG 11
N. MILES
6000
6050
6100
6150
6200
0
1000.
500.
0.
-500.
-1000.
GAMMAS
N. MILES
6000
6050
6100
6150
6200
0
0.
500.
1000.
1500.
2000.
2500.
3000.
3500.
4000.
FATHOMS
0352 31/ 7/79
0002 1/ 8/79
0452 1/ 8/79

S.I.O. SAMPLE INDEX

(Issued September 1979)

MARIANA EXPEDITION

LEG 11

Subic Bay, Philippines (1 July 1979)
to
Honolulu, Hawaii (1 August 1979)

R/V T. Washington

Chief Scientist - G. Shor (SIO)

Resident Marine Tech - R. Wilson

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

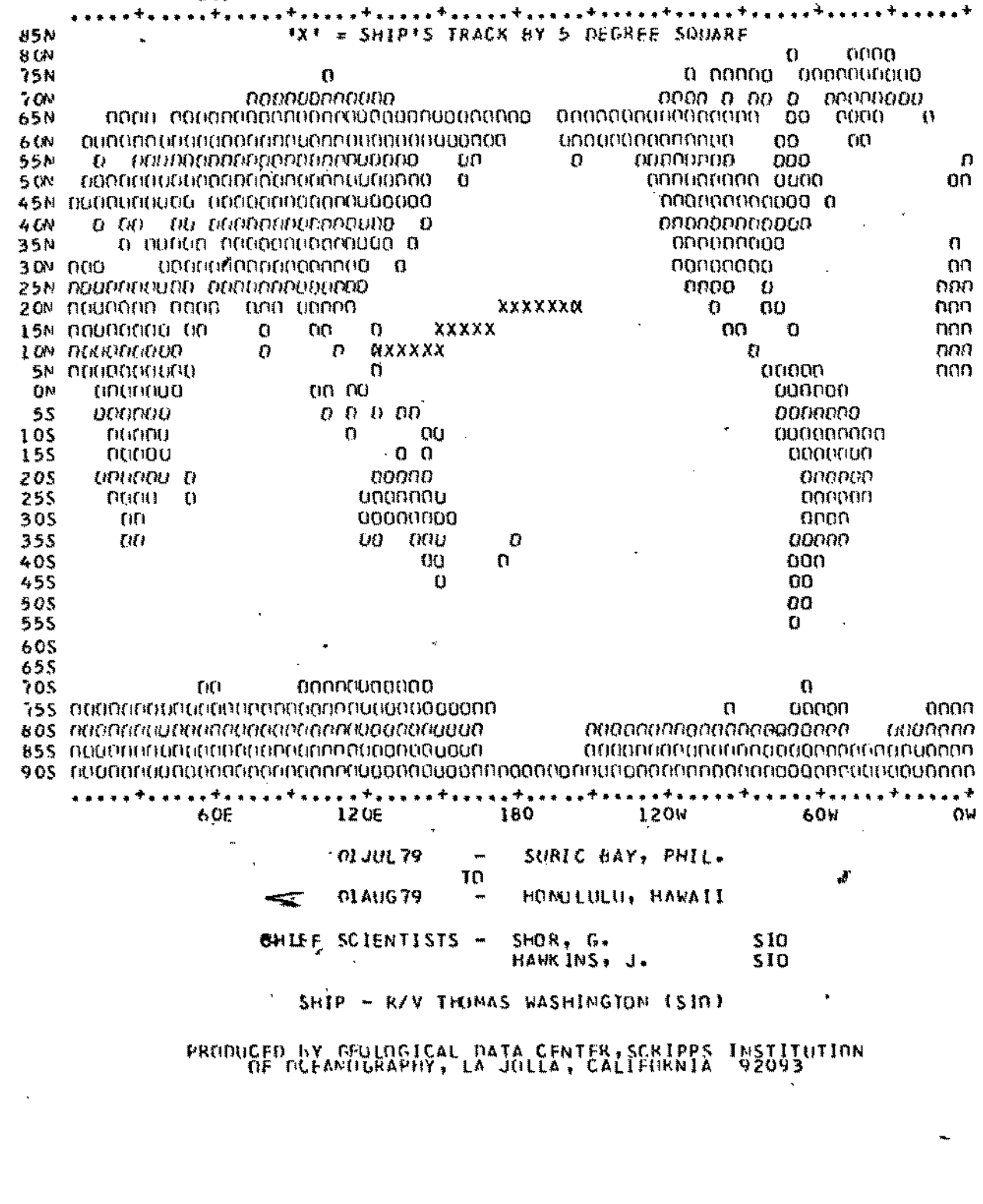
Index Encoding Funded by NSF
Grant Number OCE77-23704
Index Processing and Report Preparation
Funded in part by SIA

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 cards. Disposition and sample type are represented by three and four character codes to permit future conputer searches on these parameters. (Listings defining these codes are available from the Geological Data Center.)

S.I.O. SAMPLE INDEX GENERATED 17SEP79

*** MARA 11 SAMPLE INDEX (MARA11WT) ***



01JUL79 - SUBIC BAY, PHIL.
TO
01AUG79 - HONOLULU, HAWAII

CHIEF SCIENTISTS - SHOR, G. SIO
HAWKINS, J. SIO

SHIP - R/V THOMAS WASHINGTON (SIO)

PRODUCED BY GEOLOGICAL DATA CENTER, SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA, CALIFORNIA 92093

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

DISP	TYPE										TOTAL
	BT	DP	DR	GO	LB	MG	PE	SP	SR	TG	
GCR			13								13
GDC		23			1	2		2			28
MPL							1		71		72
MTG				1			3				4
NPX	15									22	37
SIO							12				12
SIX							1				1
TOTAL	15	23	13	1	1	2	17	2	71	22	167

SAMPLE 'TYPE' CODES USED ABOVE

BT = BATHYTHERMOGRAM
DP = DEPTH
DR = DREDGE
GO = GEOLOGICAL SAMPLE
LB = LOG BOOKS
MG = MAGNETICS (TOWED VEHICLE, SURFACE, TOTAL FIELD)
PE = PERSONNEL IN SCIENTIFIC PARTY
SP = SEISMIC REFLECTION PROFILE AIRGUN
SR = SEISMIC STATION - SHOOTING RUN
TG = THERMOGRAPH

SAMPLE 'DISP' CODES USED ABOVE

GCR = GEOLOGICAL CURATING FACILITY -- W. RIEDEL, (EXT. 4386)
GDC = GEOLOGICAL DATA CENTER -- S. SMITH (EXT. 2752)
MPL = MARINE PHYSICAL LAB. (EXT 2305)
MTG = MARINE TECHNOLOGY GROUP (EXT 4194)
NPX = NORTH PACIFIC EXPERIMENT (EXT. 3226)
SIO = SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA, CAL. 92093
SIX = SCRIPPS INSTITUTION NON-EMPLOYEE -(CONTACT DORCAS UTTER EXT. 2356)

GMT TIME	D /M /Y DATE	LOC TIME	LOC TZ	CODE SAMP	SAMPLE IDENT.	CODE DISP	LAT.	LONG.	LEG-SHIP CRUISE
	/ /	000			MARA 11 SAMPLE INDEX		00 00.	00 00.	MARA11WT

*** PORTS ***

2253	1/ 7/79			LGPT B	SUBIC BAY, PHIL.		14 45. N	120 11. E	F MARA11WT
0400	1/ 8/79			LGPT E	HONOLULU, HAWAII		21 18. N	157 52. W	F MARA11WT
2230	7/ 7/79			LGSS B	APRA HARBOR, GUAM		13 27. N	144 37. E	F MARA11WT
0930	9/ 7/79			LGSS E	APRA HARBOR, GUAM		13 27. N	144 37. E	F MARA11WT
2115	19/ 7/79			LGSS B	SAIPAN, MARIANA IS.		15 10.0N	145 45. E	F MARA11WT
0220	20/ 7/79			LGSS E	SAIPAN, MARIANA IS.		15 10.0N	145 45. E	F MARA11WT

PERSONNEL

*** NAME ***	*** TITLE ***	*** AFFILIATION ***
1 SHOR, G.	ASSOC DIR	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
2 HAWKINS, J.	PROFESSOR	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
3 WILSON, R.	MARINE TECH	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
4 HENRY, A.	PROGRAMMER	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
5 MUKENKA, F.	PR ELCTRN TECH	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
6 BENSON, N.	ASST DVLMT ENGR	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
7 BLOOMER, S.	STUDENT	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
8 BULTMAN, M.	STUDENT	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
9 DIXON, T.	STUDENT	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
10 EVANS, C.	STUDENT	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
11 KIDDER, G.	ASST EDITOR	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
12 KIECKHEFER, R.	STUDENT	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
13 NUEVO, F.	OBSERVER	SCRIPPS INSTITUTION NON-EMPLOYEE -(CONTACT DORCAS UTTER EXT. 23
14 OLTMAN, J.	STUDENT	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
15 POREDA, R.	STUDENT	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
16 SHELIME, H.	STUDENT	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
17 SHOR, R.	SR WRITER	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093

NOTES AN 'X' IN THE (B)EGIN/(F)IND 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 TIME	D /M /Y DATE	LOC TIME	LOC TZ	CODE SAMP	SAMPLE IDENT.	CODE DISP	LAT.	LONG.	LEG-SHIP CRUISE

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

*** LOG BOOKS ***

2253	1/ 7/79			LBUW B	UNDERWAY WATCH LOG	GDC	14 22.5N	120 19.9E	S MARA11WT
0230	1/ 8/79			LBUW E	UNDERWAY WATCH LOG	GDC	21 15.8N	158 06.6W	S MARA11WT

*** FATHOGRAMS ***

1545	2/ 7/79			DPRT B	GDK 12 KHZ R-01	GDC	12 51.2N	122 50.2E	S MARA11WT
0706	4/ 7/79			DPRT E	GDK 12 KHZ R-01	GDC	12 59.6N	130 28.2E	S MARA11WT
0713	4/ 7/79			DPRT B	GDK 12 KHZ R-02	GDC	12 59.6N	130 29.2E	S MARA11WT
0640	6/ 7/79			DPRT E	GDK 12 KHZ R-02	GDC	12 25.9N	138 32.9E	S MARA11WT
0644	6/ 7/79			DPRT B	GDK 12 KHZ R-03	GDC	12 26.0N	138 33.6E	S MARA11WT
1446	7/ 7/79			DPRT E	GDK 12 KHZ R-03	GDC	13 21.7N	143 54.1E	S MARA11WT
0931	9/ 7/79			DPRT B	GDK 12 KHZ R-04	GDC	13 34.5N	144 38.8E	S MARA11WT
1740	11/ 7/79			DPRT E	GDK 12 KHZ R-04	GDC	15 19.9N	147 32.6E	S MARA11WT
1244	11/ 7/79			DPRT B	GDK 12 KHZ R-05	GDC	15 20.7N	147 32.5E	S MARA11WT
2132	13/ 7/79			DPRT E	GDK 12 KHZ R-05	GDC	17 37.1N	146 50.8E	S MARA11WT
2155	13/ 7/79			DPRT B	GDK 12 KHZ R-06	GDC	17 37.2N	146 50.8E	S MARA11WT
0117	17/ 7/79			DPRT E	GDK 12 KHZ R-06	GDC	17 25.7N	146 52.6E	S MARA11WT
0124	17/ 7/79			DPRT B	GDK 12 KHZ R-07	GDC	17 25.8N	146 52.6E	S MARA11WT
2010	19/ 7/79			DPRT E	GDK 12 KHZ R-07	GDC	15 16.1N	145 40.9E	S MARA11WT
0232	20/ 7/79			DPRT B	GDK 12 KHZ R-08	GDC	15 13.3N	145 42.7E	S MARA11WT
2140	22/ 7/79			DPRT E	GDK 12 KHZ R-08	GDC	18 02.9N	158 34.3E	S MARA11WT
2146	22/ 7/79			DPRT B	GDK 12 KHZ R-09	GDC	18 03.0N	158 35.5E	S MARA11WT
0819	25/ 7/79			DPRT E	GDK 12 KHZ R-09	GDC	20 00.8N	170 20.2E	S MARA11WT
0852	25/ 7/79			DPRT B	GDK 12 KHZ R-10	GDC	20 01.6N	170 26.6E	S MARA11WT
0212	28/ 7/79			DPRT E	GDK 12 KHZ R-10	GDC	21 06.8N	177 31.6W	S MARA11WT
0228	28/ 7/79			DPRT B	GDK 12 KHZ R-11	GDC	21 07.0N	177 28.4W	S MARA11WT
0340	31/ 7/79			DPRT E	GDK 12 KHZ R-11	GDC	21 15.2N	162 57.2W	S MARA11WT
1415	31/ 7/79			DPRT B	GDK 12 KHZ R-12	GDC	21 16.3N	160 44.7W	S MARA11WT
0230	1/ 8/79			DPRT E	GDK 12 KHZ R-12	GDC	21 15.8N	158 06.6W	S MARA11WT
1536	2/ 7/79			DPR3 B	UGK 3.5KHZ R-01	GDC	12 51.8N	122 48.4E	S MARA11WT
2270	2/ 7/79			DPR3 E	UGK 3.5KHZ R-01	GDC	12 29.7N	124 05.7E	S MARA11WT

GMT TIME	D /M /Y DATE	LOC TIME	LOC TZ	CODE SAMP	SAMPLE IDENT.	CODE DISP	LAT.	LONG.	LEG-SHIP CRUISE
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2153	5/ 7/79			DPR3 E	UGK 3.5KHZ R-02	GDC	12 06.7N	136 57.4E	S MARA11WT
2213	5/ 7/79			DPR3 B	UGK 3.5KHZ R-03	GDC	12 07.6N	137 01.5E	S MARA11WT
1611	10/ 7/79			DPR3 E	UGK 3.5KHZ R-03	GDC	15 20.5N	147 28.8E	S MARA11WT
1630	10/ 7/79			DPR3 B	UGK 3.5KHZ R-04	GDC	15 20.7N	147 28.7E	S MARA11WT
1144	13/ 7/79			DPR3 E	UGK 3.5KHZ R-04	GDC	17 26.7N	147 23.8E	S MARA11WT
1155	13/ 7/79			DPR3 B	UGK 3.5KHZ R-05	GDC	17 27.2N	147 23.5E	S MARA11WT
0024	16/ 7/79			DPR3 E	UGK 3.5KHZ R-05	GDC	18 09.4N	146 50.0E	S MARA11WT
0045	16/ 7/79			DPR3 B	UGK 3.5KHZ R-06	GDC	18 09.0N	146 50.1E	S MARA11WT
1157	18/ 7/79			DPR3 E	UGK 3.5KHZ R-06	GDC	16 54.3N	145 39.9E	S MARA11WT
1215	18/ 7/79			DPR3 B	UGK 3.5KHZ R-07	GDC	16 54.2N	145 39.6E	S MARA11WT
1915	21/ 7/79			DPR3 E	UGK 3.5KHZ R-07	GDC	17 10.8N	153 18.5E	S MARA11WT
2044	21/ 7/79			DPR3 B	UGK 3.5KHZ R-08	GDC	17 15.0N	153 36.3E	S MARA11WT
1927	24/ 7/79			DPR3 E	UGK 3.5KHZ R-08	GDC	19 34.3N	167 49.1E	S MARA11WT
1940	24/ 7/79			DPR3 B	UGK 3.5KHZ R-09	GDC	19 34.6N	167 51.5E	S MARA11WT
1427	27/ 7/79			DPR3 E	UGK 3.5KHZ R-09	GDC	20 54.7N	179 46.7W	S MARA11WT
1447	27/ 7/79			DPR3 B	UGK 3.5KHZ R-10	GDC	20 55.2N	179 43.0W	S MARA11WT
0831	30/ 7/79			DPR3 E	UGK 3.5KHZ R-10	GDC	21 30.6N	166 58.4W	S MARA11WT
0847	30/ 7/79			DPR3 B	UGK 3.5KHZ R-11	GDC	21 30.7N	166 55.1W	S MARA11WT
0230	1/ 8/79			DPR3 E	UGK 3.5KHZ R-11	GDC	21 15.6N	158 06.6W	S MARA11WT

*** MAGNETOMETER ***

0153	3/ 7/79			MGR B	MAGNETICS R-01	GDC	12 42.1N	124 45.0E	S MARA11WT
0150	22/ 7/79			MGR E	MAGNETICS R-01	GDC	17 25.7N	154 37.8E	S MARA11WT
0158	22/ 7/79			MGR B	MAGNETICS R-02	GDC	17 25.9N	154 39.4E	S MARA11WT
0216	1/ 8/79			MGR E	MAGNETICS R-02	GDC	21 15.9N	158 09.0W	S MARA11WT

*** SEISMIC REFLECTION PROFILES ***

0414	12/ 7/79			SPRS B	10 SEC SWEEP	GDC	15 39.5N	147 41.5E	S MARA11WT
2240	16/ 7/79			SPRS E	10 SEC SWEEP	GDC	15 57.0N	145 27.1E	S MARA11WT
0414	12/ 7/79			SPRF B	5 SEC SWEEP	GDC	15 39.5N	147 41.5E	S MARA11WT
2240	16/ 7/79			SPRF E	5 SEC SWEEP	GDC	15 57.0N	145 27.1E	S MARA11WT

GMT TIME	D /M /Y DATE	LOC TIME	LOC TZ	CODE SAMP	SAMPLE IDENT.	CODE DISP	LAT.	LONG.	LEG-SHIP CRUISE
*** SEISMIC REFRACTION STATION ***									
1118	13/ 7/79			SRRK	B STA 1-1	MPL	17 23.5N	147 24.6E	S MARA11WT
1412	13/ 7/79			SRRK	E STA 1-1	MPL	17 54.5N	147 21.8E	S MARA11WT
1435	13/ 7/79			SRRK	B STA 1-2	MPL	17 56.5N	147 20.2E	S MARA11WT
1721	13/ 7/79			SRRK	E STA 1-2	MPL	17 35.7N	146 51.2E	S MARA11WT
1955	13/ 7/79			SRRK	B STA 1-3	MPL	17 36.9N	146 51.6E	S MARA11WT
0051	14/ 7/79			SRRK	E STA 1-3	MPL	17 25.0N	147 21.4E	S MARA11WT
1111	16/ 7/79			SRRK	B STA 2-1	MPL	17 37.9N	146 51.9E	S MARA11WT
1435	16/ 7/79			SRRK	E STA 2-1	MPL	18 16.7N	146 48.0E	S MARA11WT
1547	16/ 7/79			SRRK	B STA 2-2	MPL	18 06.9N	146 46.0E	S MARA11WT
1910	16/ 7/79			SRRK	E STA 2-2	MPL	17 49.8N	146 17.2E	S MARA11WT
1938	16/ 7/79			SRRK	B STA 2-3	MPL	17 50.2N	146 18.6E	S MARA11WT
2250	16/ 7/79			SRRK	E STA 2-3	MPL	17 39.5N	146 47.6E	S MARA11WT
2345	16/ 7/79			SRRK	B STA 2-4	MPL	17 33.0N	146 51.5E	S MARA11WT
0037	17/ 7/79			SRRK	E STA 2-4	MPL	17 24.8N	146 52.4E	S MARA11WT
1820	17/ 7/79			SRRR	B STA 2-5	MPL	17 48.1N	146 18.4E	S MARA11WT
2148	17/ 7/79			SRRR	E STA 2-5	MPL	17 12.2N	146 21.2E	S MARA11WT
0029	21/ 7/79			SRRR	B STA 3	MPL	16 27.8N	149 33.0E	S MARA11WT
0144	21/ 7/79			SRRR	E STA 3	MPL	16 32.4N	149 47.6E	S MARA11WT
0822	21/ 7/79			SRRR	B STA 4	MPL	16 44.6N	151 08.7E	S MARA11WT
0935	21/ 7/79			SRRR	E STA 4	MPL	16 46.9N	151 23.5E	S MARA11WT
0335	22/ 7/79			SRRR	B STA 5	MPL	17 27.5N	154 59.0E	S MARA11WT
0443	22/ 7/79			SRRR	E STA 5	MPL	17 28.6N	155 12.8E	S MARA11WT
0552	22/ 7/79			SRRR	B STA 6	MPL	17 31.1N	155 26.8E	S MARA11WT
0701	22/ 7/79			SRRR	E STA 6	MPL	17 33.8N	155 40.7E	S MARA11WT
2221	22/ 7/79			SRRR	B STA 7	MPL	18 03.7N	158 42.7E	S MARA11WT
0015	23/ 7/79			SRRR	E STA 7	MPL	18 05.7N	159 06.1E	S MARA11WT
0307	23/ 7/79			SRRR	B STA 8	MPL	18 11.8N	159 39.9E	S MARA11WT
0413	23/ 7/79			SRRR	E STA 8	MPL	18 14.4N	159 53.0E	S MARA11WT
0706	23/ 7/79			SRRR	B STA 9	MPL	18 21.9N	160 27.2E	S MARA11WT
0842	23/ 7/79			SRRR	E STA 9	MPL	18 26.3N	160 46.6E	S MARA11WT
OCEAN BOTTOM SEISMOMETER									
0414	12/ 7/79			SROB	SONOBUOY 1	MPL	15 39.5N	147 41.5E	S MARA11WT
1310	13/ 7/79			SROB	SONOBUOY 2	MPL	17 42.2N	147 22.6E	S MARA11WT

GMT TIME	D /M /Y DATE	LOC TIME	LOC TZ	CODE SAMP	SAMPLE IDENT.	CODE DISP	LAT.	LONG.	LEG-SHIP CRUISE
2257	13/ 7/79			SRDB	SONOBUOY 3	MPL	17 33.6N	147 00.0E	S MARA11WT
0148	14/ 7/79			SRDB	SONOBUOY 4	MPL	17 23.5N	147 23.4E	S MARA11WT
0247	14/ 7/79			SRDB	SONOBUOY 5	MPL	17 26.5N	147 16.7E	S MARA11WT
0618	14/ 7/79			SRDB	SONOBUOY 6	MPL	17 37.8N	146 52.1E	S MARA11WT
0754	14/ 7/79			SRDB	SONOBUOY 7	MPL	17 43.1N	147 01.5E	S MARA11WT
1530	16/ 7/79			SRDB	SONOBUOY 8	MPL	18 08.0N	146 47.5E	S MARA11WT
1109	16/ 7/79			SRDB	SONOBUOY 8A	MPL	17 37.6N	146 52.0E	S MARA11WT
1726	16/ 7/79			SRDB	SONOBUOY 9	MPL	17 58.4N	146 31.7E	S MARA11WT
2020	16/ 7/79			SRDB	SONOBUOY 10	MPL	17 47.2N	146 24.8E	S MARA11WT
0318	17/ 7/79			SRDB	SONOBUOY 11	MPL	17 26.1N	146 52.7E	S MARA11WT
0617	17/ 7/79			SRDB	SONOBUOY 12	MPL	17 38.8N	146 49.9E	S MARA11WT
0627	17/ 7/79			SRDB	SONOBUOY 13	MPL	17 51.6N	146 48.3E	S MARA11WT
1016	17/ 7/79			SRDB	SONOBUOY 14	MPL	18 01.8N	146 48.8E	S MARA11WT
1219	17/ 7/79			SRDB	SONOBUOY 15	MPL	18 06.5N	146 45.8E	S MARA11WT
1225	17/ 7/79			SRDB	SONOBUOY 16	MPL	18 06.1N	146 45.1E	S MARA11WT
1320	17/ 7/79			SRDB	SONOBUOY 17	MPL	18 02.7N	146 39.9E	S MARA11WT
1606	17/ 7/79			SRDB	SONOBUOY 18	MPL	17 50.3N	146 18.2E	S MARA11WT
1935	17/ 7/79			SRDB	SONOBUOY 19	MPL	17 35.0N	146 19.0E	S MARA11WT
1947	17/ 7/79			SRDB	SONOBUOY 20	MPL	17 32.9N	146 19.1E	S MARA11WT
2010	17/ 7/79			SRDB	SONOBUOY 21	MPL	17 28.9N	146 19.3E	S MARA11WT
2012	18/ 7/79			SRDB	SONOBUOY 22	MPL	16 10.7N	145 28.8E	S MARA11WT
0020	21/ 7/79			SRDB	SONOBUOY 23	MPL	16 27.2N	149 31.2E	S MARA11WT
0021	21/ 7/79			SRDB	SONOBUOY 24	MPL	16 27.2N	149 31.4E	S MARA11WT
0022	21/ 7/79			SRDB	SONOBUOY 25	MPL	16 27.3N	149 31.6E	S MARA11WT
0024	21/ 7/79			SRDB	SONOBUOY 26	MPL	16 27.4N	149 32.0E	S MARA11WT
0805	21/ 7/79			SRDB	SONOBUOY 27	MPL	16 44.1N	151 05.2E	S MARA11WT
0807	21/ 7/79			SRDB	SONOBUOY 28	MPL	16 44.2N	151 05.6E	S MARA11WT
0808	21/ 7/79			SRDB	SONOBUOY 29	MPL	16 44.2N	151 05.8E	S MARA11WT
0813	21/ 7/79			SRDB	SONOBUOY 30	MPL	16 44.3N	151 06.9E	S MARA11WT
0320	22/ 7/79			SRDB	SONOBUOY 31	MPL	17 27.3N	154 55.9E	S MARA11WT
0321	22/ 7/79			SRDB	SONOBUOY 32	MPL	17 27.3N	154 56.1E	S MARA11WT
0322	22/ 7/79			SRDB	SONOBUOY 33	MPL	17 27.3N	154 56.3E	S MARA11WT
0537	22/ 7/79			SRDB	SONOBUOY 34	MPL	17 30.5N	155 23.8E	S MARA11WT
0538	22/ 7/79			SRDB	SONOBUOY 35	MPL	17 30.5N	155 24.0E	S MARA11WT
0539	22/ 7/79			SRDB	SONOBUOY 36	MPL	17 30.6N	155 24.2E	S MARA11WT
0545	22/ 7/79			SRDB	SONOBUOY 37	MPL	17 30.8N	155 25.4E	S MARA11WT
2206	22/ 7/79			SRDB	SONOBUOY 38	MPL	18 03.4N	158 39.6E	S MARA11WT
2208	22/ 7/79			SRDB	SONOBUOY 39	MPL	18 03.5N	158 40.0E	S MARA11WT
2209	22/ 7/79			SRDB	SONOBUOY 40	MPL	18 03.5N	158 40.2E	S MARA11WT
2252	22/ 7/79			SRDB	SONOBUOY 41	MPL	18 04.2N	158 49.1E	S MARA11WT
0252	23/ 7/79			SRDB	SONOBUOY 42	MPL	18 11.2N	159 36.9E	S MARA11WT
0253	23/ 7/79			SRDB	SONOBUOY 43	MPL	18 11.3N	159 37.1E	S MARA11WT
0254	23/ 7/79			SRDB	SONOBUOY 44	MPL	18 11.3N	159 37.3E	S MARA11WT
0653	23/ 7/79			SRDB	SONOBUOY 45	MPL	18 21.2N	160 24.6E	S MARA11WT
0654	23/ 7/79			SRDB	SONOBUOY 46	MPL	18 21.3N	160 24.8E	S MARA11WT
0721	23/ 7/79			SRDB	SONOBUOY 47	MPL	18 22.6N	160 30.2E	S MARA11WT

*** SONOBUOY DROP *** SEISMIC REFRACTION MONITORING

0244	13/ 7/79			SRSB B CASHIF	4614	MPL	17 23.0N	147 26.6E	S MARA11WT
1000	13/ 7/79			SRSB E CASHIF	4614	MPL	17 23.7N	147 24.9E	S MARA11WT

GMT TIME	D /M /Y DATE	LOC TIME	LOC TZ	CODE SAMP	SAMPLE IDENT.		CODE DISP	LAT.	LONG.	LEG-SHIP CRUISE
0706	13/ 7/79			SRSB B	JO	4168	MPL	17 56.0N	147 19.9E	S MARALLWT
1230	14/ 7/79			SRSB E	JO	4168	MPL	17 55.1N	147 14.2E	S MARALLWT
1036	13/ 7/79			SRSB B	REGINA	4713	MPL	17 22.6N	147 25.0E	S MARALLWT
1116	14/ 7/79			SRSB E	REGINA	4713	MPL	17 23.1N	147 24.0E	S MARALLWT
1919	13/ 7/79			SRSB B	CASHIF	3808	MPL	17 37.3N	146 50.9E	S MARALLWT
2035	13/ 7/79			SRSB E	CASHIF	3808	MPL	17 37.1N	146 50.8E	S MARALLWT
2152	13/ 7/79			SRSB B	CASHIF	3796	MPL	17 37.2N	146 50.8E	S MARALLWT
1550	14/ 7/79			SRSB E	CASHIF	3796	MPL	17 37.2N	146 50.7E	S MARALLWT
0226	16/ 7/79			SRSB B	REGINA	3671	MPL	18 07.9N	146 49.4E	S MARALLWT
1140	17/ 7/79			SRSB E	REGINA	3671	MPL	18 07.8N	146 48.1E	S MARALLWT
0615	16/ 7/79			SRSB B	JO	3001	MPL	17 51.1N	146 19.4E	S MARALLWT
1744	17/ 7/79			SRSB E	JO	3001	MPL	17 50.5N	146 18.1E	S MARALLWT
1023	16/ 7/79			SRSB B	CASHIF	3779	MPL	17 37.0N	146 51.8E	S MARALLWT
1554	17/ 7/79			SRSB E	CASHIF	3779	MPL	17 37.5N	146 50.1E	S MARALLWT

*** DREDGE *** CURATOR - W. RIEDEL EXT. 4386

1940	9/ 7/79			DRR B	DREDGE 47	1036	GCR	14 19.8N	144 54.1E	S MARALLWT
2116	9/ 7/79			DRR E	DREDGE 47	760	GCR	14 19.6N	144 52.4E	S MARALLWT
1559	10/ 7/79			DRR B	DREDGE 48	6424	GCR	15 20.5N	147 28.7E	S MARALLWT
2216	10/ 7/79			DRR E	DREDGE 48	5681	GCR	15 20.4N	147 25.3E	S MARALLWT
0616	11/ 7/79			DRR B	DREDGE 49	8189	GCR	15 15.4N	147 35.7E	S MARALLWT
1513	11/ 7/79			DRR E	DREDGE 49	7213	GCR	15 16.3N	147 34.5E	S MARALLWT
2122	11/ 7/79			DRR B	DREDGE 50	5865	GCR	15 43.3N	147 35.9E	S MARALLWT
1056	12/ 7/79			DRR E	DREDGE 50	5157	GCR	15 46.0N	147 34.8E	S MARALLWT
1425	12/ 7/79			DRR B	DREDGE 51	6021	GCR	16 24.5N	147 40.7E	S MARALLWT
1757	12/ 7/79			DRR E	DREDGE 51	5399	GCR	16 25.6N	147 39.5E	S MARALLWT
1831	14/ 7/79			DRR B	DREDGE 52	7532	GCR	17 56.1N	147 45.1E	S MARALLWT
2252	14/ 7/79			DRR E	DREDGE 52	7688	GCR	17 55.1N	147 41.2E	S MARALLWT
0428	15/ 7/79			DRR B	DREDGE 53	5584	GCR	17 56.2N	147 37.5E	S MARALLWT
1718	15/ 7/79			DRR E	DREDGE 53	4909	GCR	17 57.0N	147 35.3E	S MARALLWT
1407	15/ 7/79			DRR B	DREDGE 54	3587	GCR	18 08.0N	146 56.7E	S MARALLWT
1653	15/ 7/79			DRR E	DREDGE 54	3060	GCR	18 07.4N	146 59.2E	S MARALLWT
1932	15/ 7/79			DRR B	DREDGE 55	3003	GCR	18 06.6N	146 59.1E	S MARALLWT
2211	15/ 7/79			DRR E	DREDGE 55	1296	GCR	18 05.9N	147 01.0E	S MARALLWT
0525	18/ 7/79			DRR B	DREDGE 56	2218	GCR	16 56.1N	145 37.4E	S MARALLWT
0607	18/ 7/79			DRR E	DREDGE 56	2140	GCR	16 55.5N	145 38.6E	S MARALLWT

GMT TIME	D /M /Y DATE	LOC TIME	LOC TZ	CODE SAMP	SAMPLE IDENT.		CODE DISP	LAT.	LONG.	LEG-SHIP CRUISE
1034	16/ 7/79			DRR	B DREDGE 57	1690	GCR	16 54.8N	145 39.8E	S MARA11WT
1248	16/ 7/79			DRR	E DREDGE 57	1638	GCR	16 54.4N	145 39.5E	S MARA11WT
0150	19/ 7/79			DRR	B DREDGE 58	2519	GCR	16 01.2N	145 23.1E	S MARA11WT
0355	19/ 7/79			DRR	E DREDGE 58	2158	GCR	16 00.6N	145 24.2E	S MARA11WT
1116	19/ 7/79			DRR	B DREDGE 59	2016	GCR	15 51.1N	145 35.5E	S MARA11WT
1341	19/ 7/79			DRR	E DREDGE 59	1805	GCR	15 51.6N	145 36.7E	S MARA11WT
*** THERMOGRAPH ***										
0220	2/ 7/79			TGR	B THERMOGRAPH	1	NPX	14 06.1N	120 27.0E	S MARA11WT
0304	3/ 7/79			TGR	E THERMOGRAPH	1	NPX	12 47.7N	125 00.1E	S MARA11WT
0305	3/ 7/79			TGR	B THERMOGRAPH	2	NPX	12 47.7N	125 00.3E	S MARA11WT
0704	4/ 7/79			TGR	E THERMOGRAPH	2	NPX	12 59.5N	130 27.4E	S MARA11WT
0706	4/ 7/79			TGR	B THERMOGRAPH	3	NPX	12 59.5N	130 27.8E	S MARA11WT
1600	5/ 7/79			TGR	E THERMOGRAPH	3	NPX	11 03.4N	134 11.3E	S MARA11WT
0604	5/ 7/79			TGR	X THERMOGRAPH	4	NPX	11 03.8N	134 11.8E	S MARA11WT
0120	10/ 7/79			TGR	B THERMOGRAPH	5	NPX	14 38.7N	145 26.2E	S MARA11WT
0030	12/ 7/79			TGR	E THERMOGRAPH	5	NPX	15 46.4N	147 35.0E	S MARA11WT
0033	12/ 7/79			TGR	X THERMOGRAPH	6	NPX	15 46.5N	147 35.0E	S MARA11WT
1945	13/ 7/79			TGR	B THERMOGRAPH	7	NPX	17 37.2N	146 50.5E	S MARA11WT
2154	14/ 7/79			TGR	E THERMOGRAPH	7	NPX	17 55.3N	147 41.9E	S MARA11WT
2155	14/ 7/79			TGR	B THERMOGRAPH	8	NPX	17 55.3N	147 41.9E	S MARA11WT
0015	16/ 7/79			TGR	E THERMOGRAPH	8	NPX	18 09.6N	146 49.8E	S MARA11WT
0016	16/ 7/79			TGR	B THERMOGRAPH	9	NPX	18 09.7N	146 49.9E	S MARA11WT
2229	16/ 7/79			TGR	E THERMOGRAPH	9	NPX	17 40.6N	146 44.4E	S MARA11WT
2233	16/ 7/79			TGR	B THERMOGRAPH	10	NPX	17 40.4N	146 45.1E	S MARA11WT
2270	17/ 7/79			TGR	E THERMOGRAPH	10	NPX	17 08.1N	146 17.3E	S MARA11WT
2223	17/ 7/79			TGR	B THERMOGRAPH	11	NPX	17 07.8N	146 16.8E	S MARA11WT
2255	18/ 7/79			TGR	E THERMOGRAPH	11	NPX	15 57.1N	145 26.0E	S MARA11WT
2258	18/ 7/79			TGR	B THERMOGRAPH	12	NPX	15 57.1N	145 25.7E	S MARA11WT
0522	20/ 7/79			TGR	E THERMOGRAPH	12	NPX	15 11.7N	146 02.1E	S MARA11WT
0524	20/ 7/79			TGR	B THERMOGRAPH	13	NPX	15 11.9N	146 02.4E	S MARA11WT
2140	20/ 7/79			TGR	E THERMOGRAPH	13	NPX	16 16.3N	149 00.4E	S MARA11WT
2140	20/ 7/79			TGR	B THERMOGRAPH	14	NPX	16 16.3N	149 00.4E	S MARA11WT
2215	21/ 7/79			TGR	E THERMOGRAPH	14	NPX	17 18.7N	153 54.4E	S MARA11WT
2216	21/ 7/79			TGR	B THERMOGRAPH	15	NPX	17 18.8N	153 55.0E	S MARA11WT
2250	22/ 7/79			TGR	E THERMOGRAPH	15	NPX	18 04.2N	158 48.6E	S MARA11WT

GMT TIME	D /M /Y DATE	LOC TIME	LOC TZ	CODE SAMP	SAMPLE IDENT.	CODE DISP	LAT.	LONG.	LEG-SHIP CRUISE
2052	22/ 7/79			TGR B	THERMOGRAPH 16	NPX	18 01.8N	158 24.7E S	MARA11WT
2049	23/ 7/79			TGR E	THERMOGRAPH 16	NPX	18 50.8N	163 16.1E S	MARA11WT
2051	23/ 7/79			TGR B	THERMOGRAPH 17	NPX	18 50.9N	163 16.5E S	MARA11WT
2107	24/ 7/79			TGR E	THERMOGRAPH 17	NPX	19 36.4N	168 08.4E S	MARA11WT
2107	24/ 7/79			TGR B	THERMOGRAPH 18	NPX	19 36.4N	168 08.4E S	MARA11WT
1945	25/ 7/79			TGR E	THERMOGRAPH 18	NPX	20 14.7N	172 29.8E S	MARA11WT
1945	25/ 7/79			TGR B	THERMOGRAPH 19	NPX	20 14.7N	172 29.8E S	MARA11WT
2000	26/ 7/79			TGR E	THERMOGRAPH 19	NPX	20 39.8N	176 54.4E S	MARA11WT
2000	26/ 7/79			TGR B	THERMOGRAPH 20	NPX	20 39.8N	176 54.4E S	MARA11WT
2010	27/ 7/79			TGR E	THERMOGRAPH 20	NPX	21 01.7N	178 43.3W S	MARA11WT
2010	27/ 7/79			TGR B	THERMOGRAPH 21	NPX	21 01.7N	178 43.3W S	MARA11WT
1948	28/ 7/79			TGR E	THERMOGRAPH 21	NPX	21 16.7N	174 10.9W S	MARA11WT
1948	28/ 7/79			TGR B	THERMOGRAPH 22	NPX	21 16.7N	174 10.9W S	MARA11WT
1820	29/ 7/79			TGR E	THERMOGRAPH 22	NPX	21 23.9N	169 49.3W S	MARA11WT
1827	29/ 7/79			TGR B	THERMOGRAPH 23	NPX	21 23.9N	169 47.9W S	MARA11WT
1848	30/ 7/79			TGR E	THERMOGRAPH 23	NPX	21 18.8N	164 47.9W S	MARA11WT
1850	30/ 7/79			TGR B	THERMOGRAPH 24	NPX	21 18.8N	164 47.4W S	MARA11WT
0148	01/ 8/79			TGR E	THERMOGRAPH 24	NPX	21 16.0N	158 15.3W F	MARA11WT

*** BATHYTHERMOGRAPH ***

0000	16/ 7/79			BTX	NO. SAMPLES = 4	NPX	18 09.8N	146 50.0E S	MARA11WT
0000	17/ 7/79			BTX	NO. SAMPLES = 1	NPX	17 30.6N	146 51.8E S	MARA11WT
0000	18/ 7/79			BTX	NO. SAMPLES = 1	NPX	16 57.0N	145 59.7E S	MARA11WT
0000	20/ 7/79			BTX	NO. SAMPLES = 4	NPX	15 13.1N	145 43.2E S	MARA11WT
0000	21/ 7/79			BTX	NO. SAMPLES = 6	NPX	16 25.9N	149 27.4E S	MARA11WT
0000	22/ 7/79			BTX	NO. SAMPLES = 6	NPX	17 22.4N	154 15.6E S	MARA11WT
0000	23/ 7/79			BTX	NO. SAMPLES = 6	NPX	18 45.4N	159 03.0E S	MARA11WT
0000	24/ 7/79			BTX	NO. SAMPLES = 8	NPX	18 56.2N	163 56.6E S	MARA11WT
0000	25/ 7/79			BTX	NO. SAMPLES = 6	NPX	19 42.2N	168 42.7E S	MARA11WT
0000	26/ 7/79			BTX	NO. SAMPLES = 6	NPX	20 21.6N	173 17.2E S	MARA11WT
0000	27/ 7/79			BTX	NO. SAMPLES = 6	NPX	20 36.2N	177 36.5E S	MARA11WT
0000	28/ 7/79			BTX	NO. SAMPLES = 6	NPX	21 05.3N	177 57.3W S	MARA11WT
0000	29/ 7/79			BTX	NO. SAMPLES = 6	NPX	21 19.9N	173 23.7W S	MARA11WT
0000	30/ 7/79			BTX	NO. SAMPLES = 6	NPX	21 27.6N	168 42.2W S	MARA11WT
0000	31/ 7/79			BTX	NO. SAMPLES = 6	NPX	21 15.0N	163 41.9W S	MARA11WT

*** GEOLOGICAL SAMPLE ***

0130	18/ 7/79			GDXX B	GEO DIVE/ROCKS +	MTG	16 53.5N	145 51.0E F	MARA11WT
0249	18/ 7/79			GDXX E	PHOTOS-ZEALANDIA BK	MTG	16 53.5N	145 51.0E F	MARA11WT

9900 END SAMPLE INDEX MARA11WT