

INFORMAL REPORT AND INDEX OF
NAVIGATION, DEPTH AND MAGNETIC DATA.

(Issued April 12, 1978)

INDOMED EXPEDITION

LEG 4

Alexandria, Egypt (16 December 1977)
to
Pt. Louis, Mauritius (22 January 1978)
R/V Melville

Chief Scientist - H. Craig (SIO)

Resident Marine Tech - S. Witherow

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

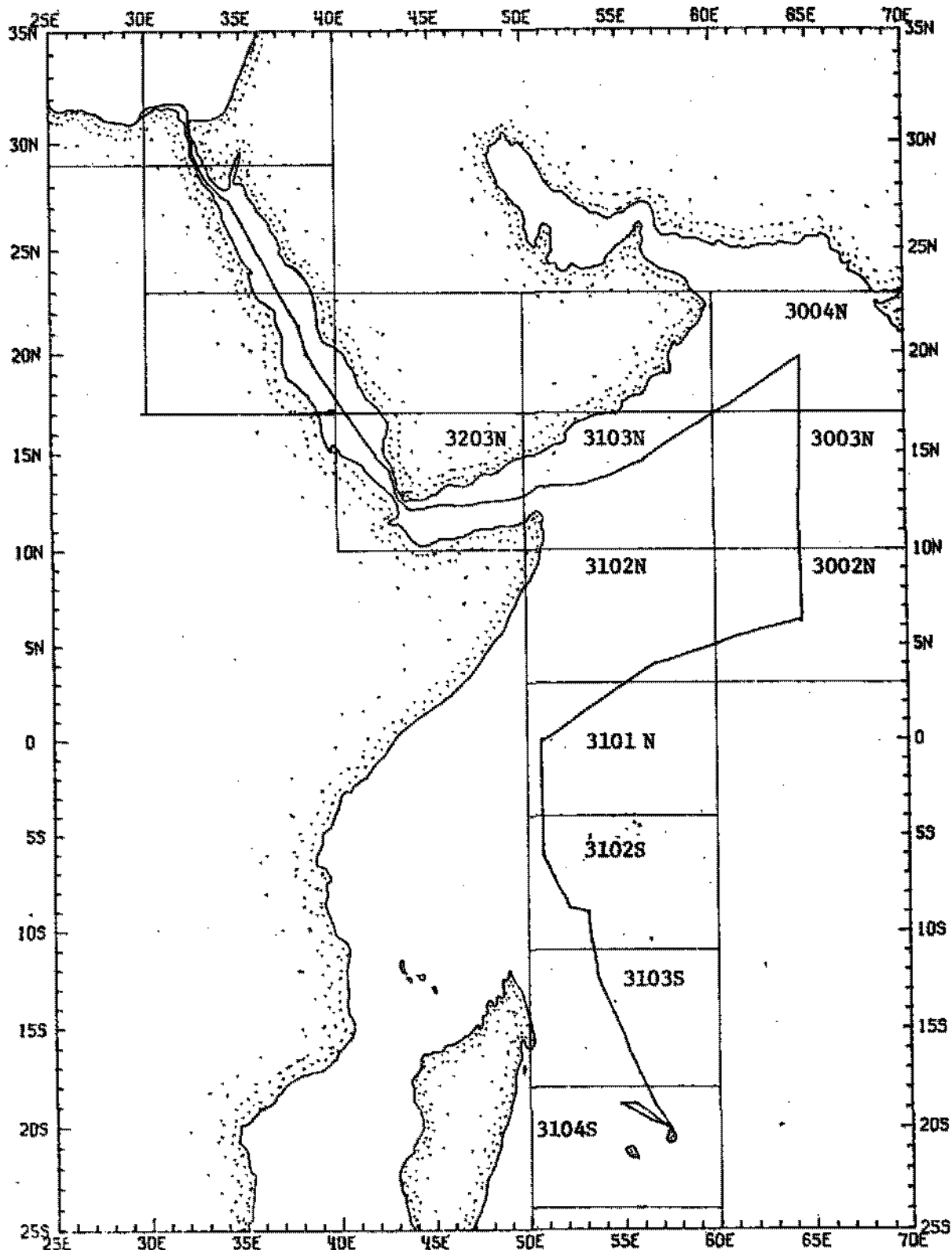
Data Collection Funded by NSF

Grant Number OCE76-03936

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 Geological Data Center, Scripps Institution of Oceanography, La Jolla, California 92093.

GDC Cruise I.D.# 169



INDOMED EXPEDITION

LEG 4

Chief Scientist - H. Craig (SIO)
 Ports: Alexandria, Egypt - Pt. Louis, Mauritius
 Dates: 16 December 1977 - 22 January 1978
 Ship: R/V Melville

TOTAL MILEAGE

- 1) Cruise - 6520 miles
- 2) Bathymetry - 4493 miles
- 3) Magnetics - 3830 miles
- 4) Seismic Reflection - none collected

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.

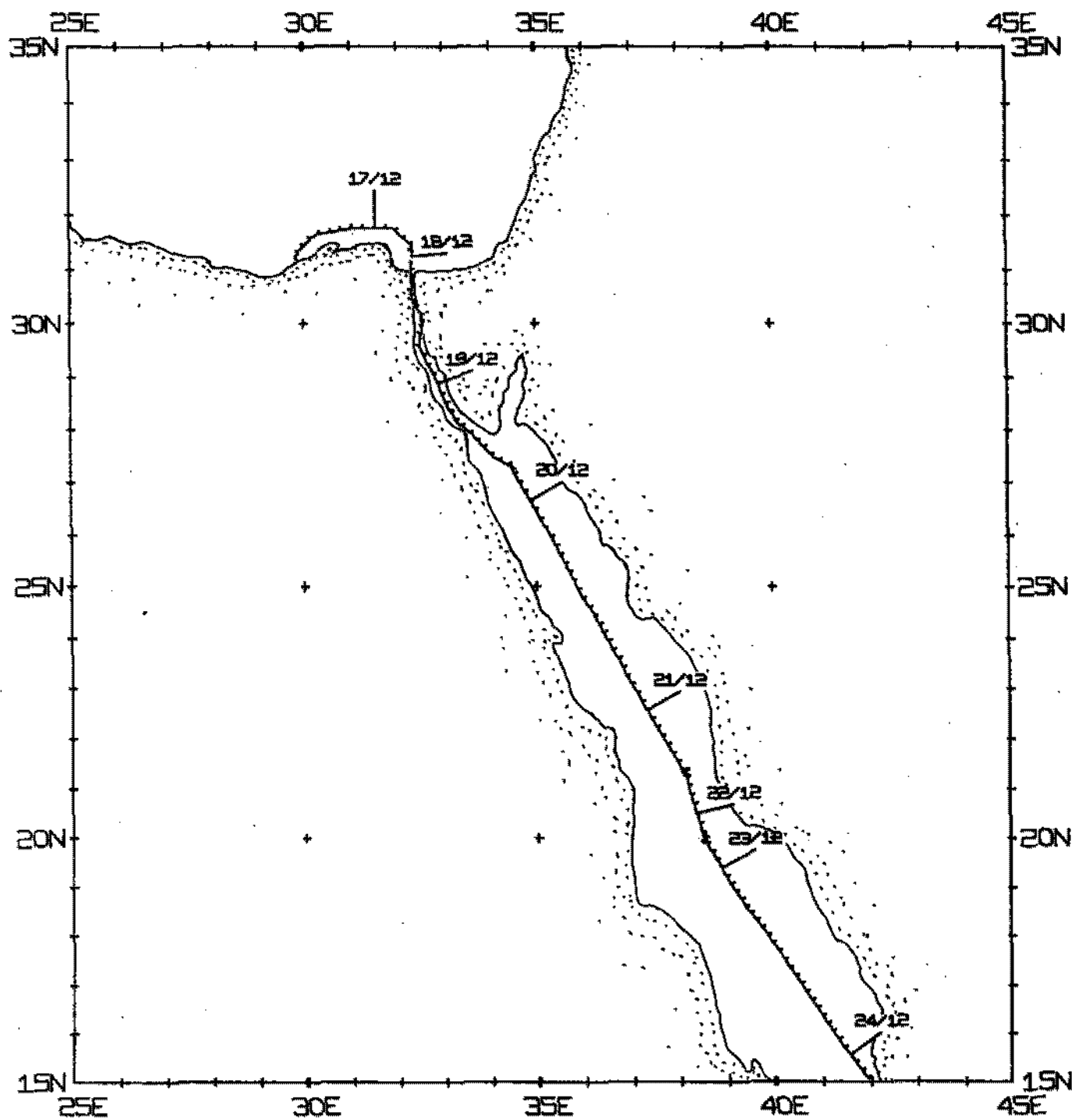
For information on the availability and reproduction costs of data in the following forms, contact S. M. Smith, Curator, Geological Data Center, Scripps Institution of Oceanography, La Jolla, California 92093. Phone: (714) 452-2752.

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

* NO SUBBOTTOM PROFILER DATA COLLECTED

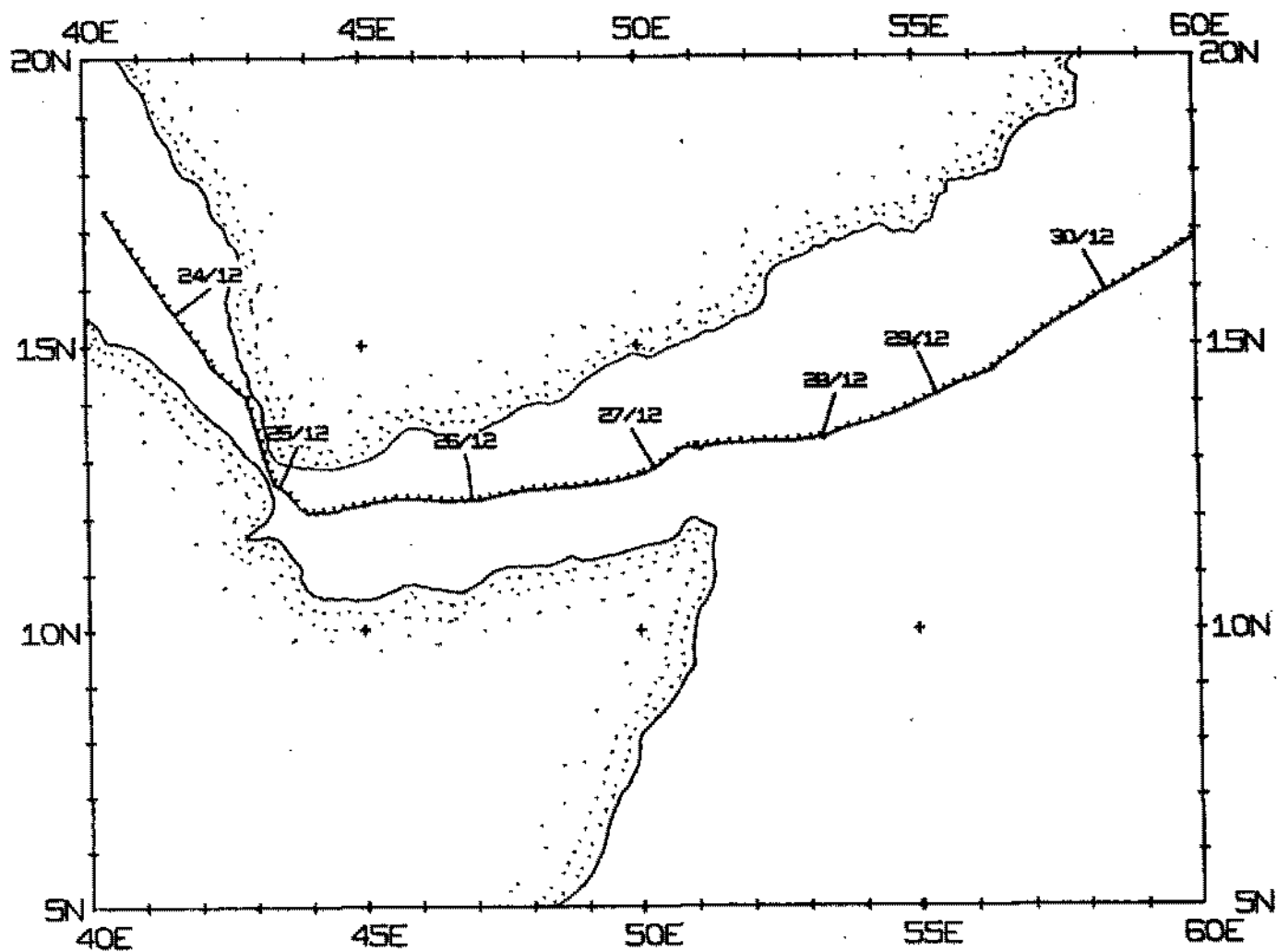
INM004MV TRACK PLOT (1 OF 5)

MERCATOR PROJECTION, SCALE= 0.312 IN/DEG LONGITUDE



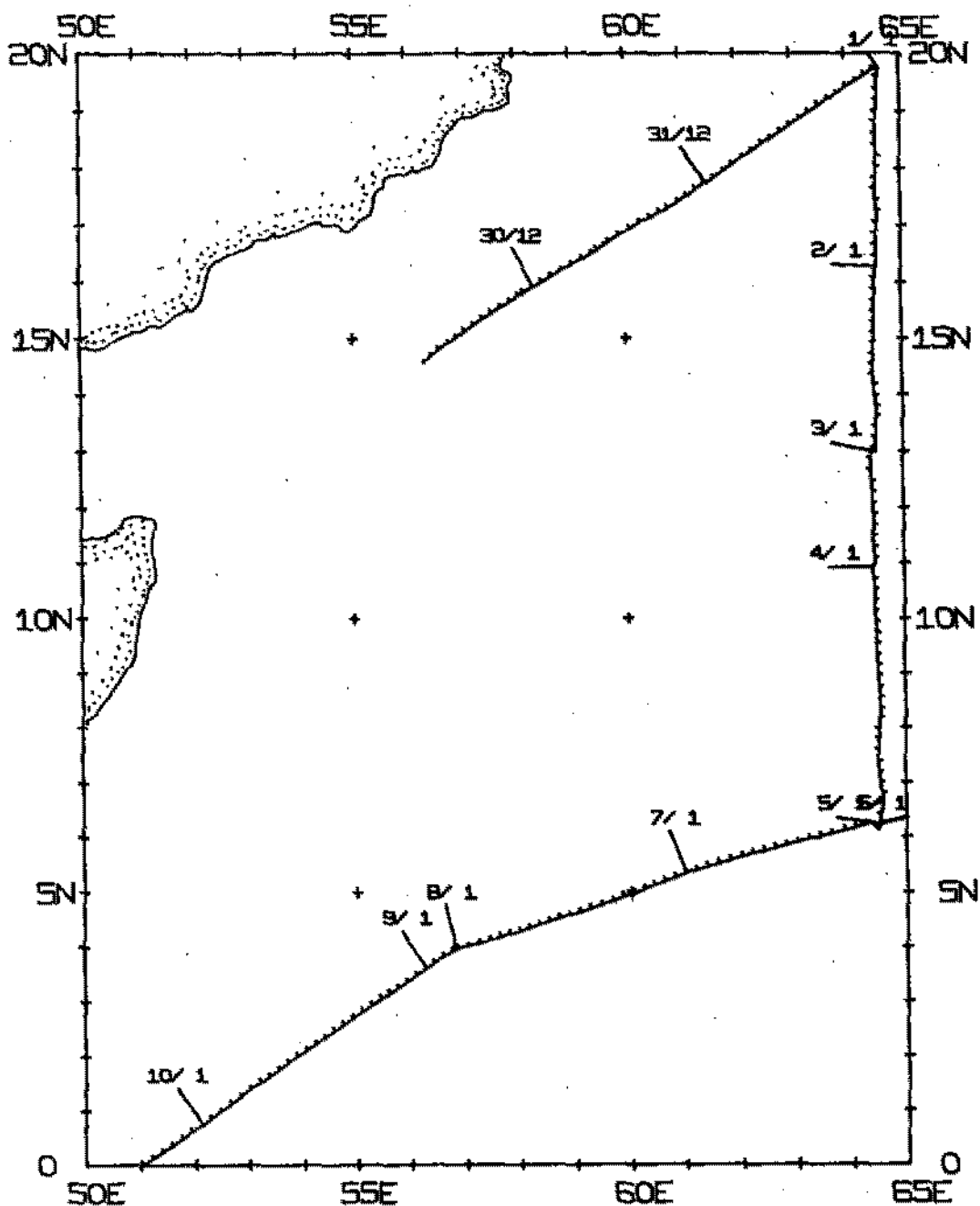
INM004MV TRACK PLOT (2 OF 5)

MERCATOR PROJECTION, SCALE= 0.312 IN/DEG LONGITUDE



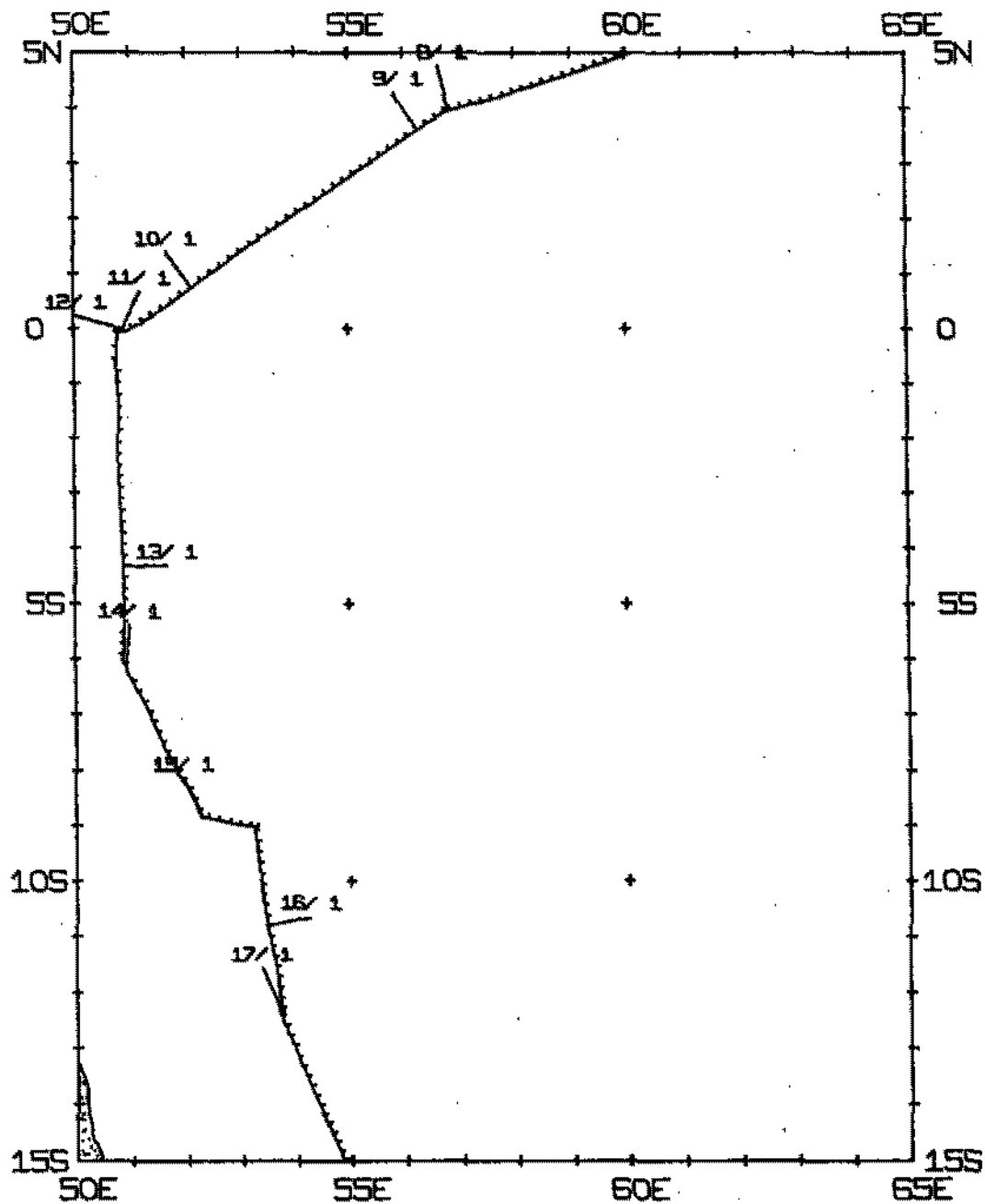
INM004MV TRACK PLOT (3 OF 5)

MERCATOR PROJECTION, SCALE= 0.312 IN/DEG LONGITUDE



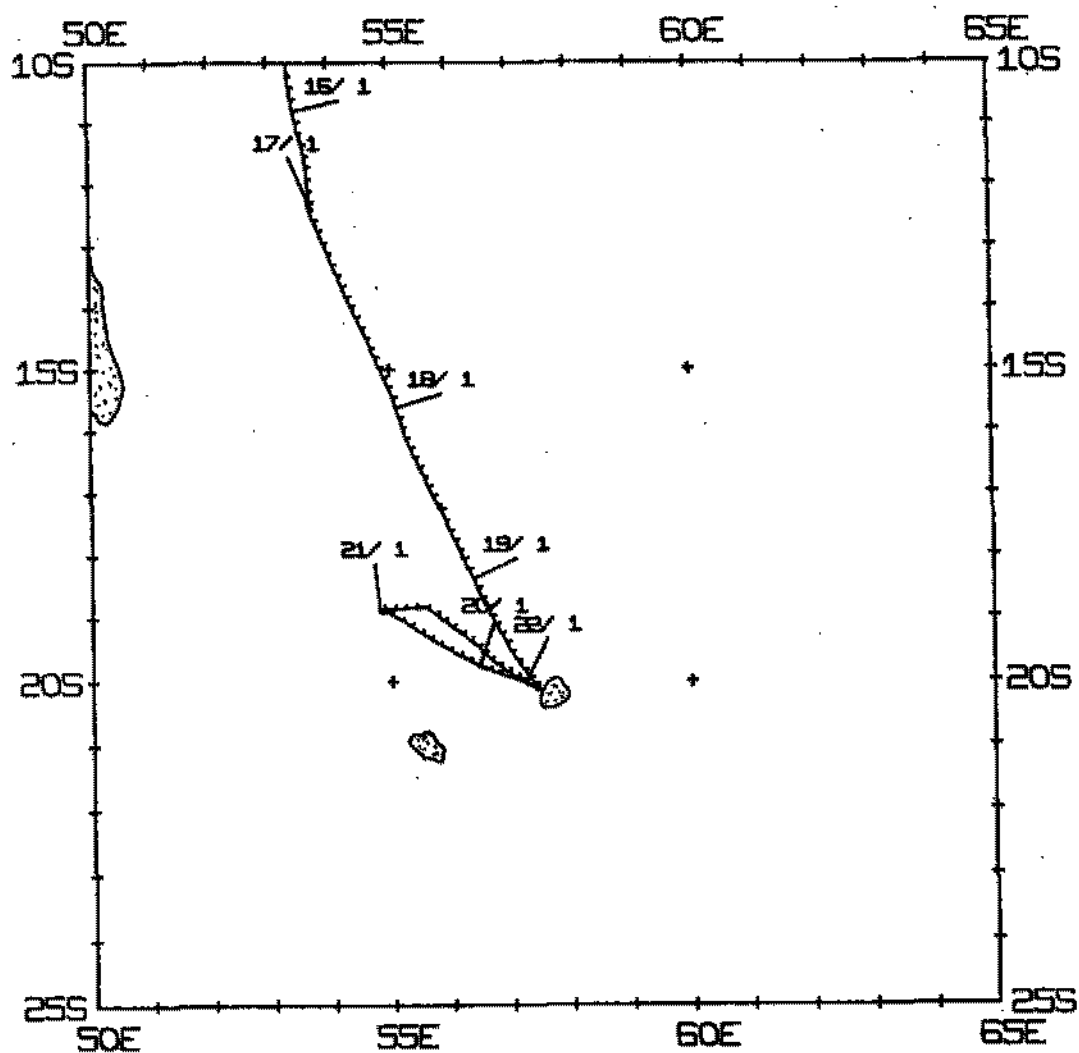
INM004MV TRACK PLOT (4 OF 5)

MERCATOR PROJECTION, SCALE= 0.312 IN/DEG LONGITUDE

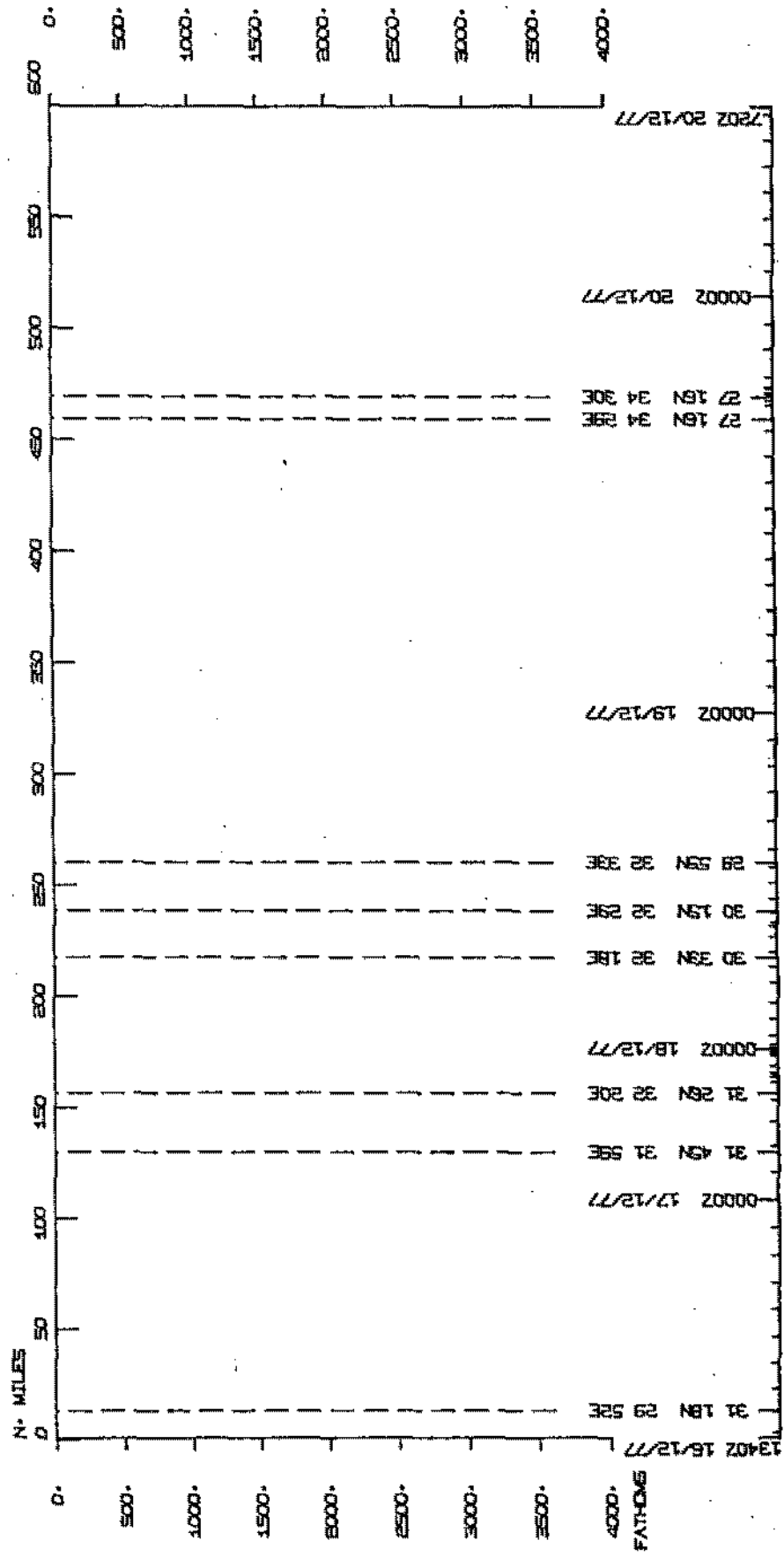
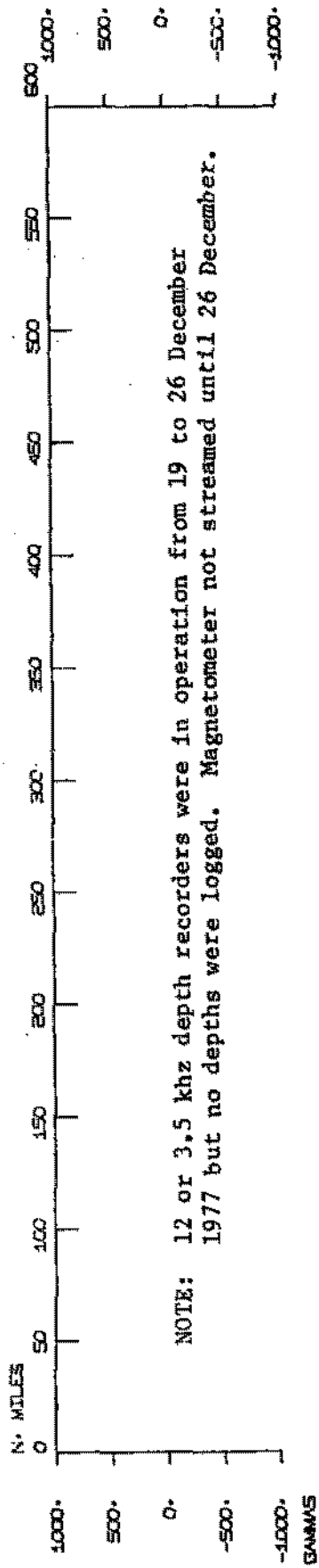


INM004MV TRACK PLOT (5 OF 5)

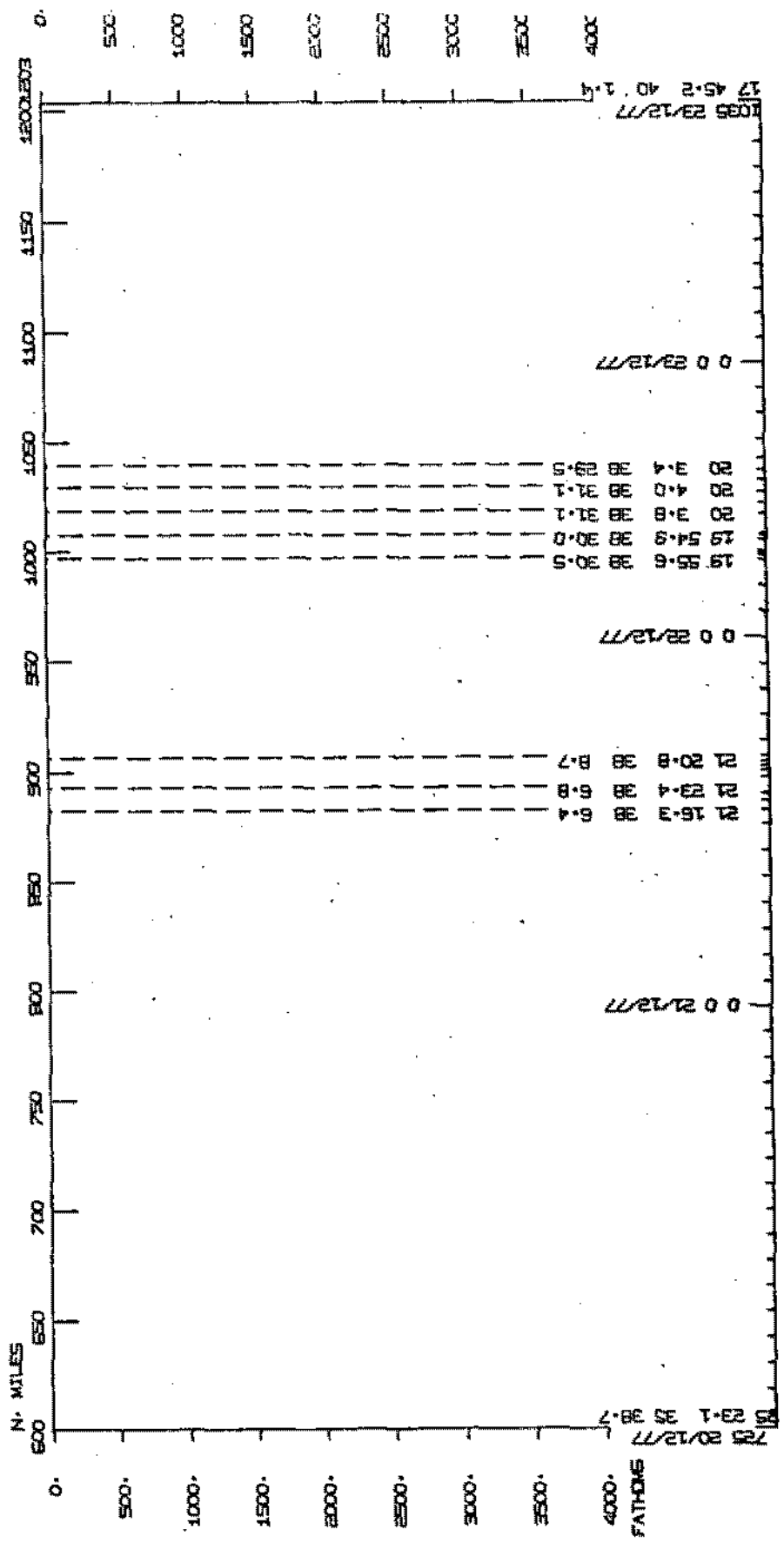
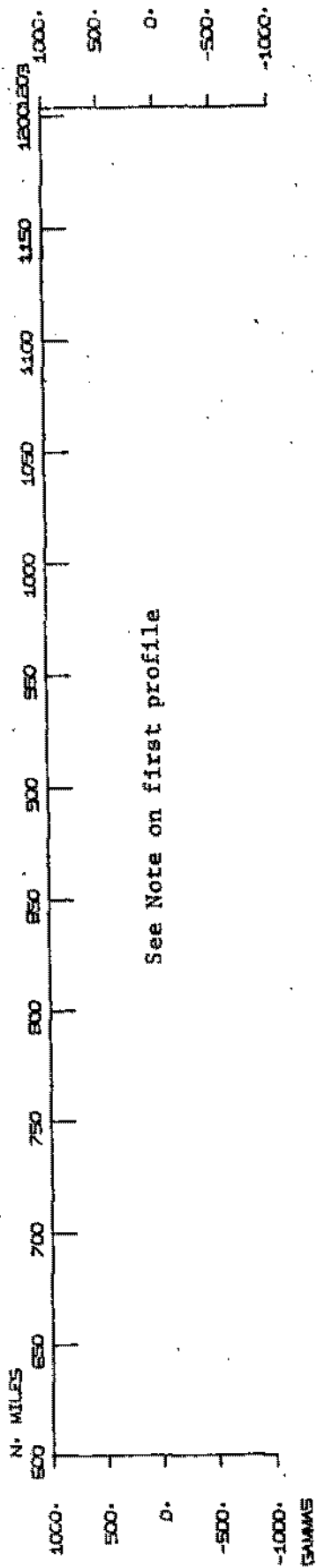
MERCATOR PROJECTION, SCALE= 0.312 IN/DEG LONGITUDE



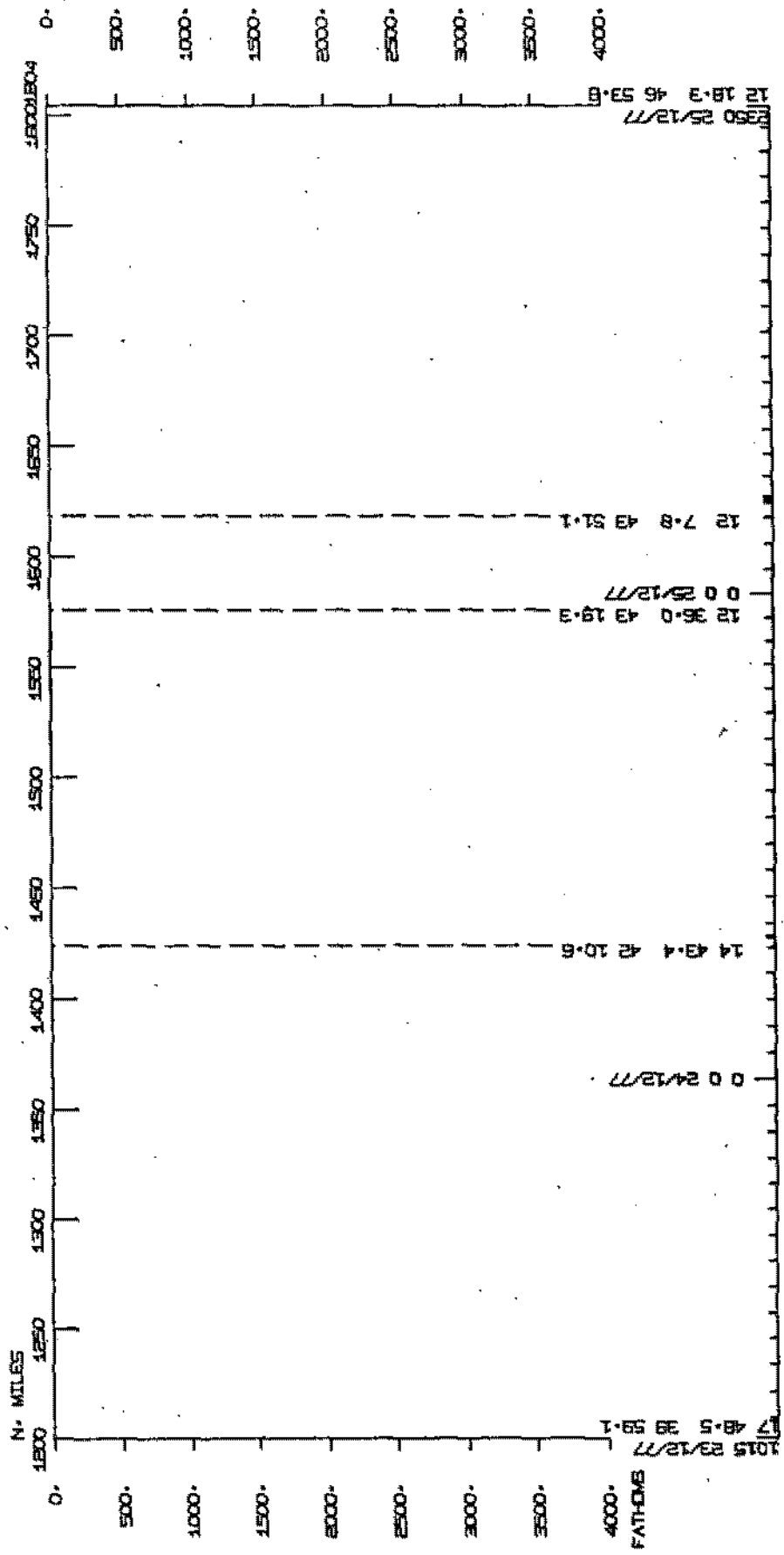
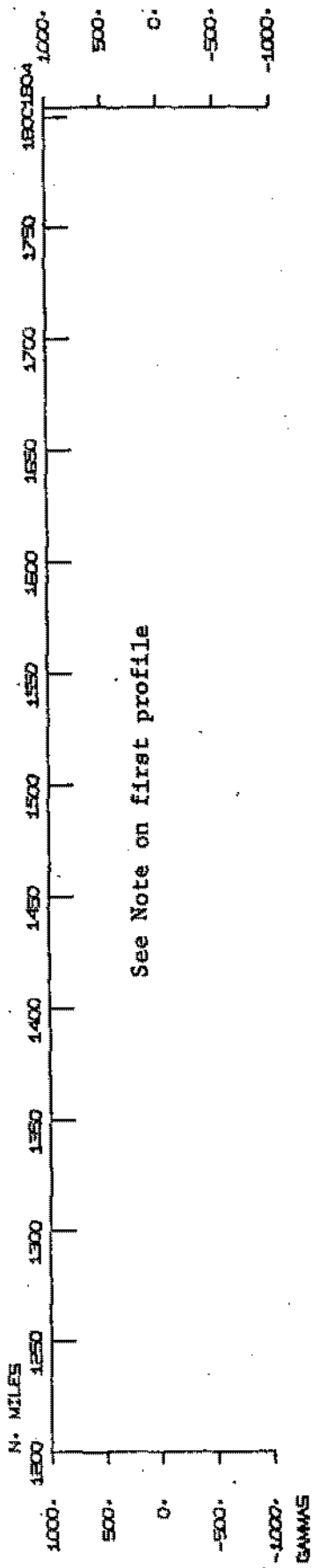
INDEXED LEG 4



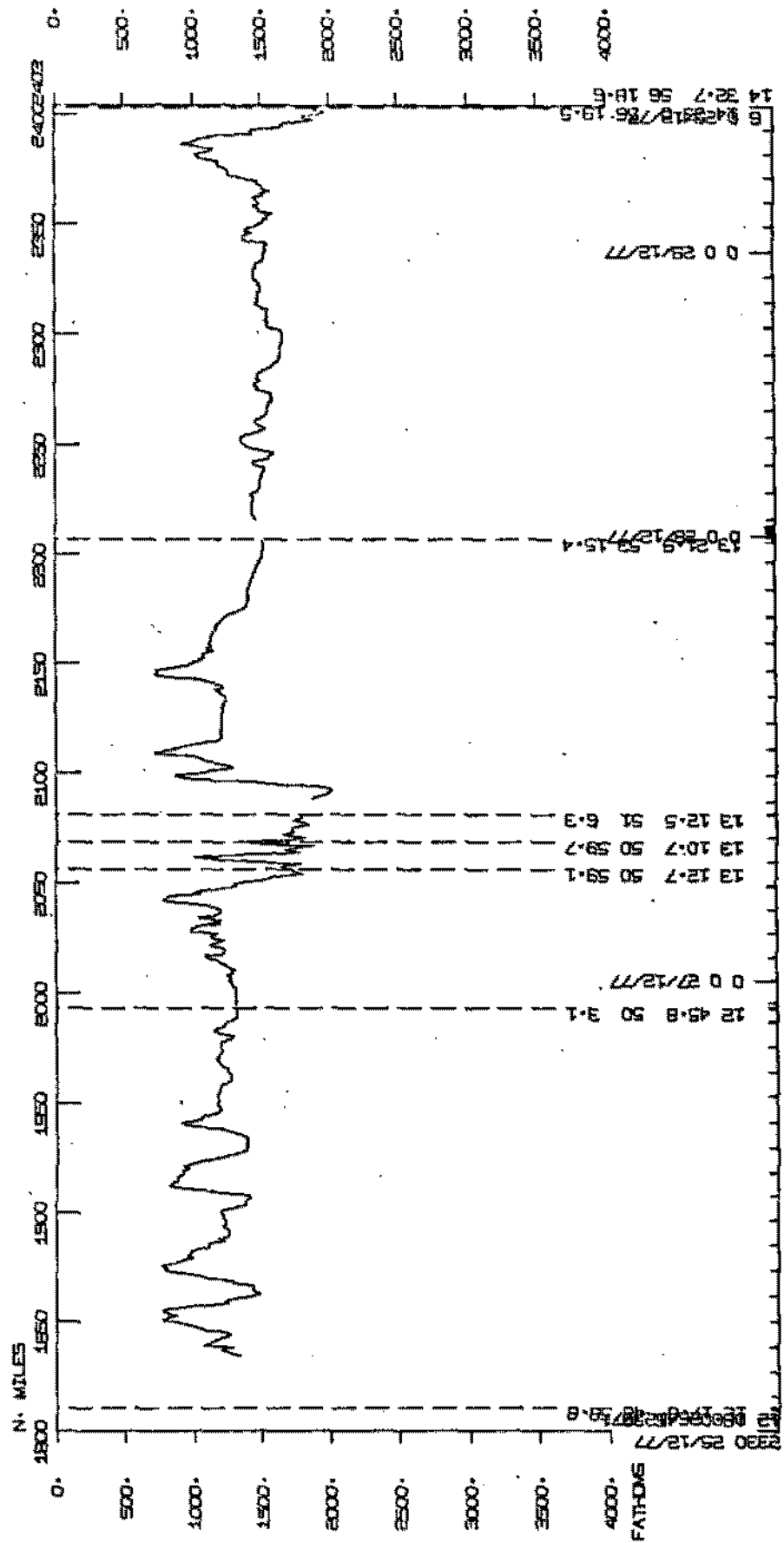
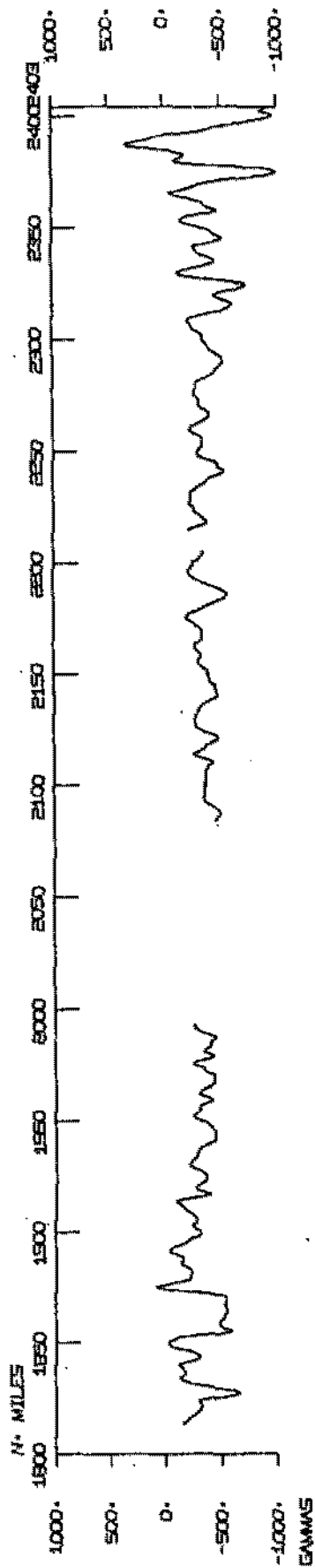
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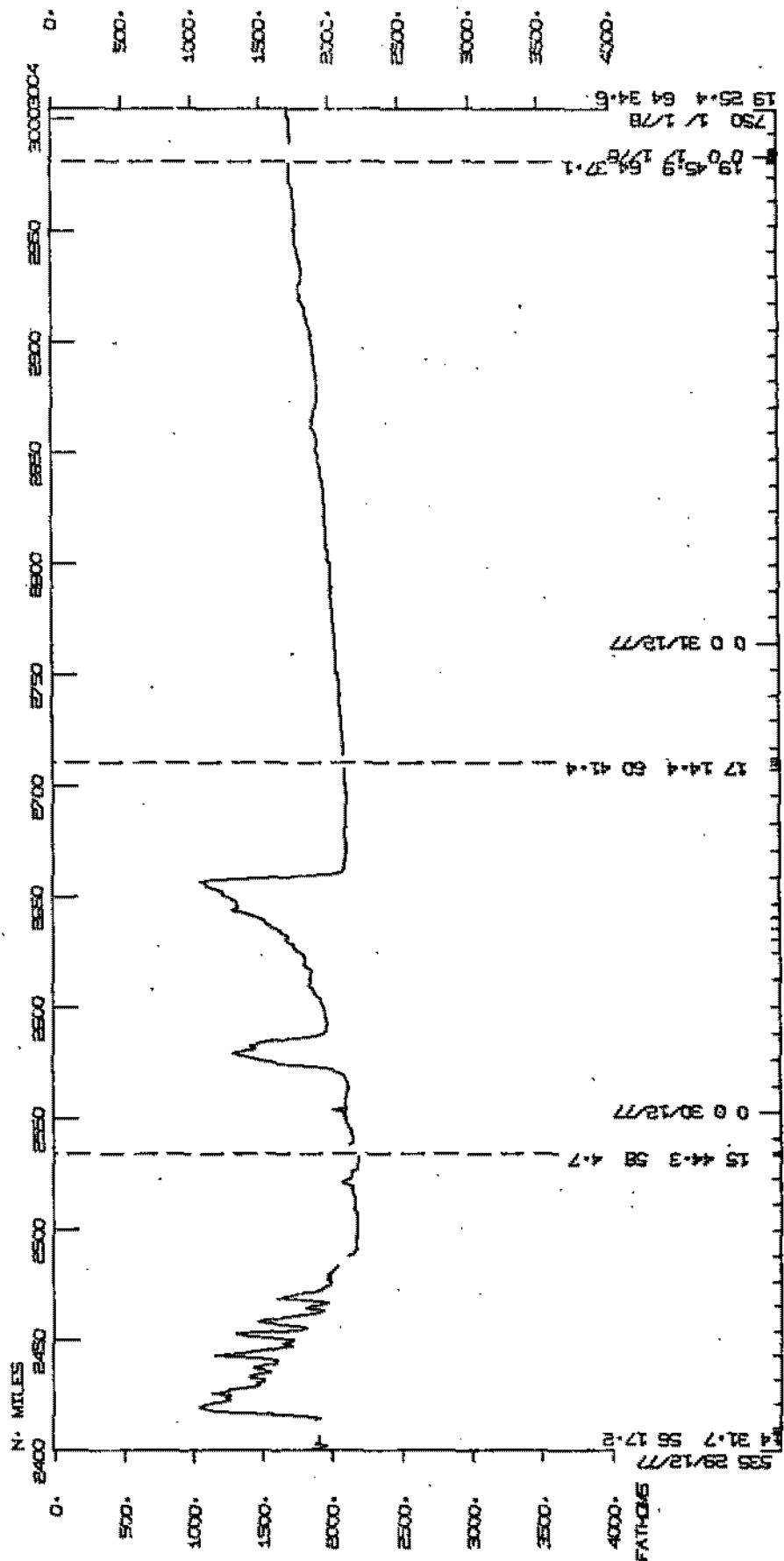
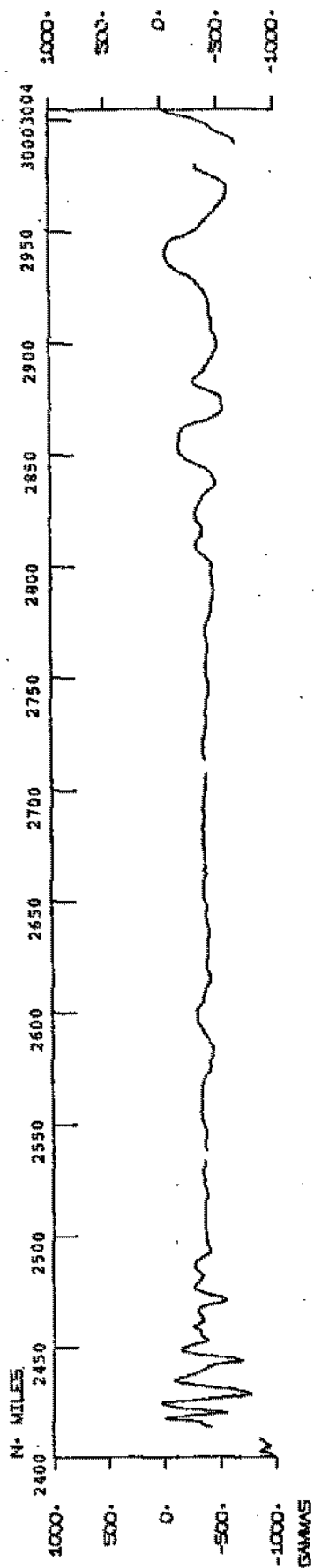
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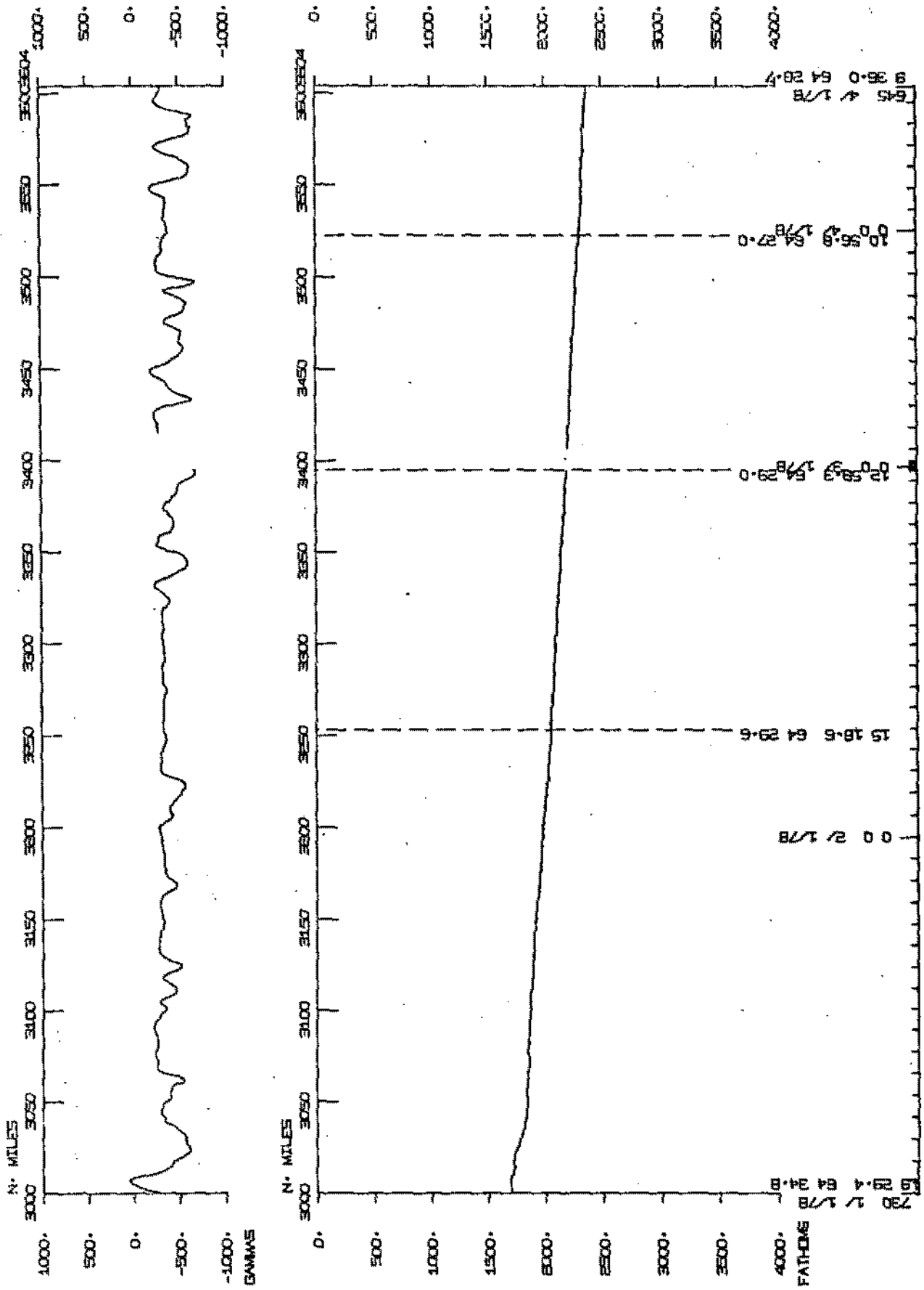
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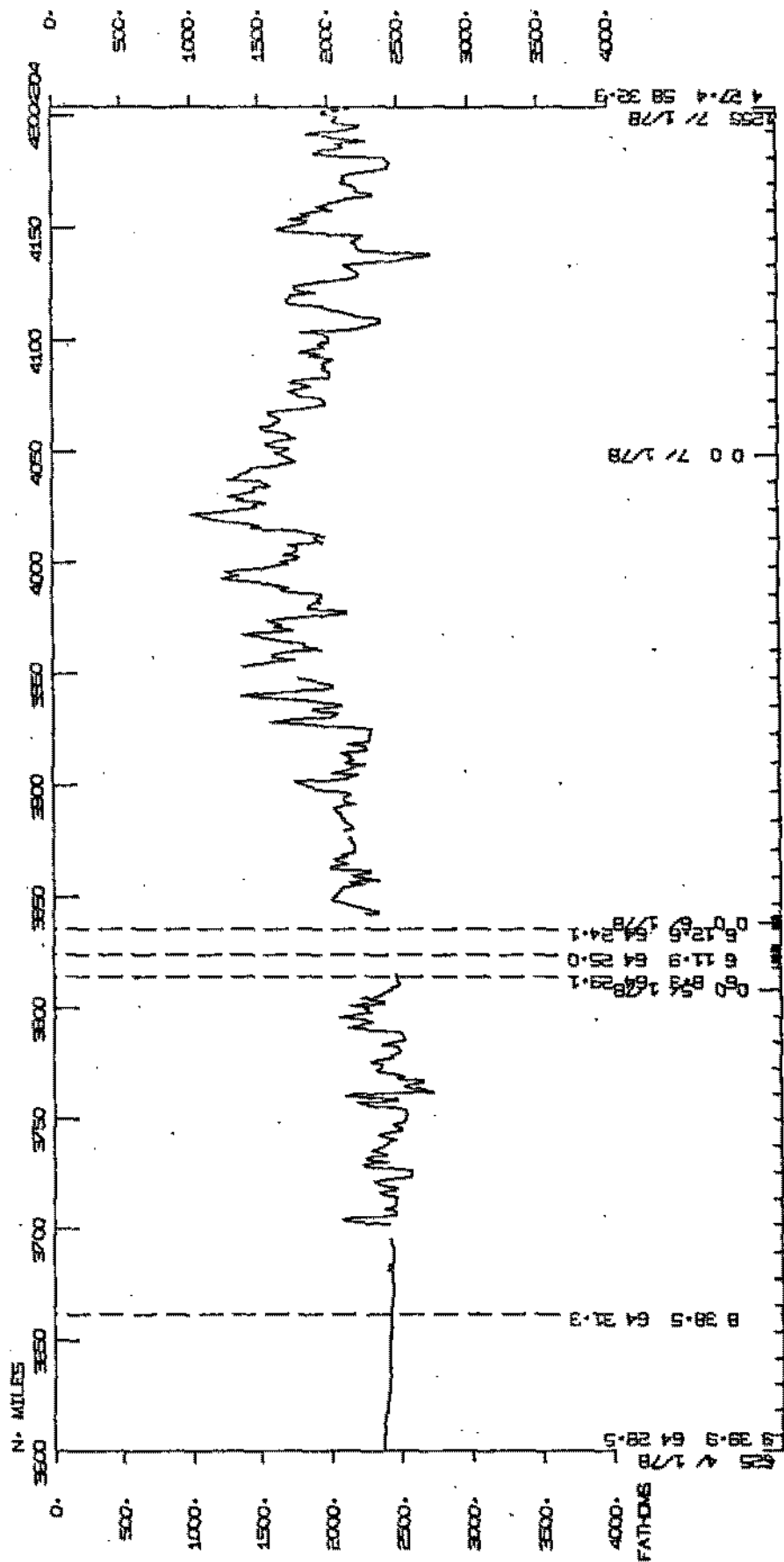
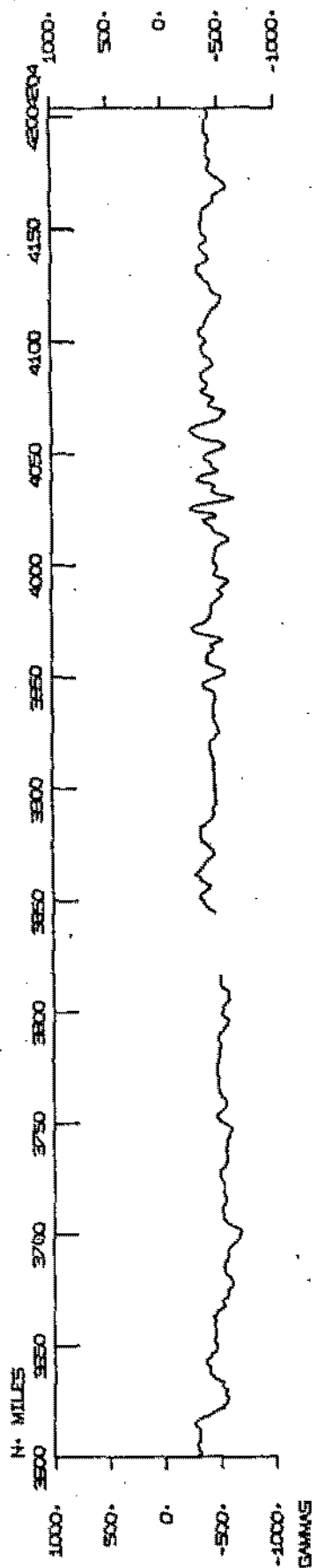
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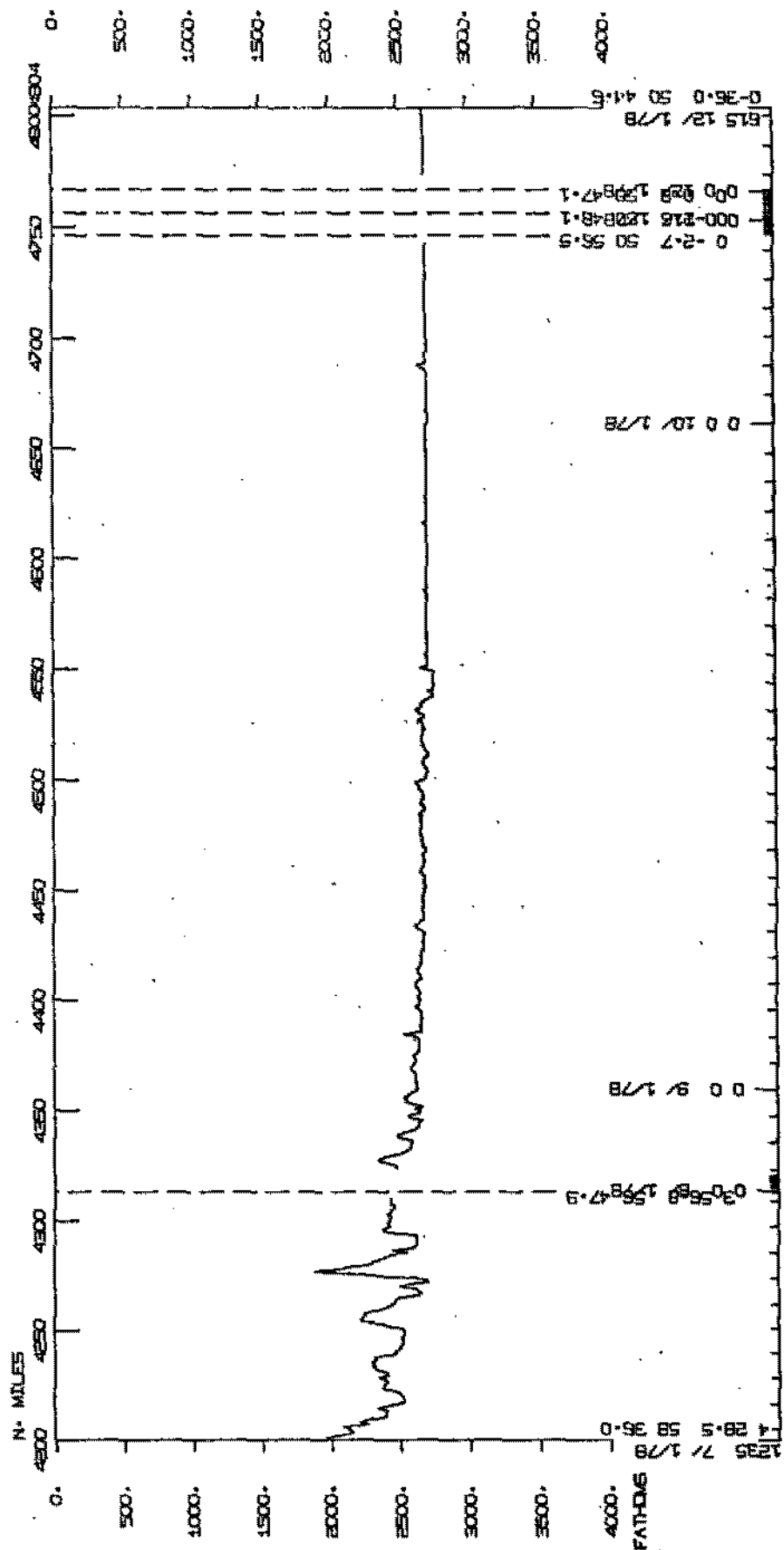
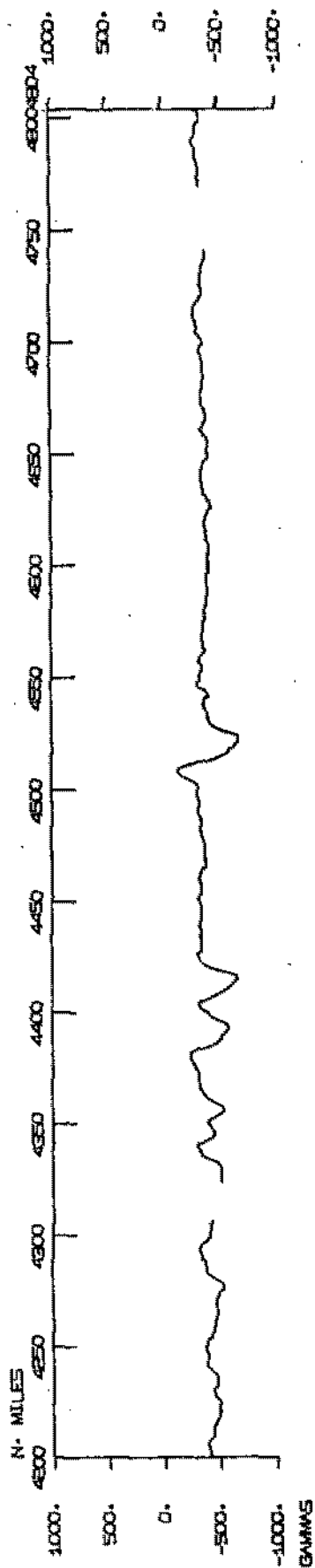
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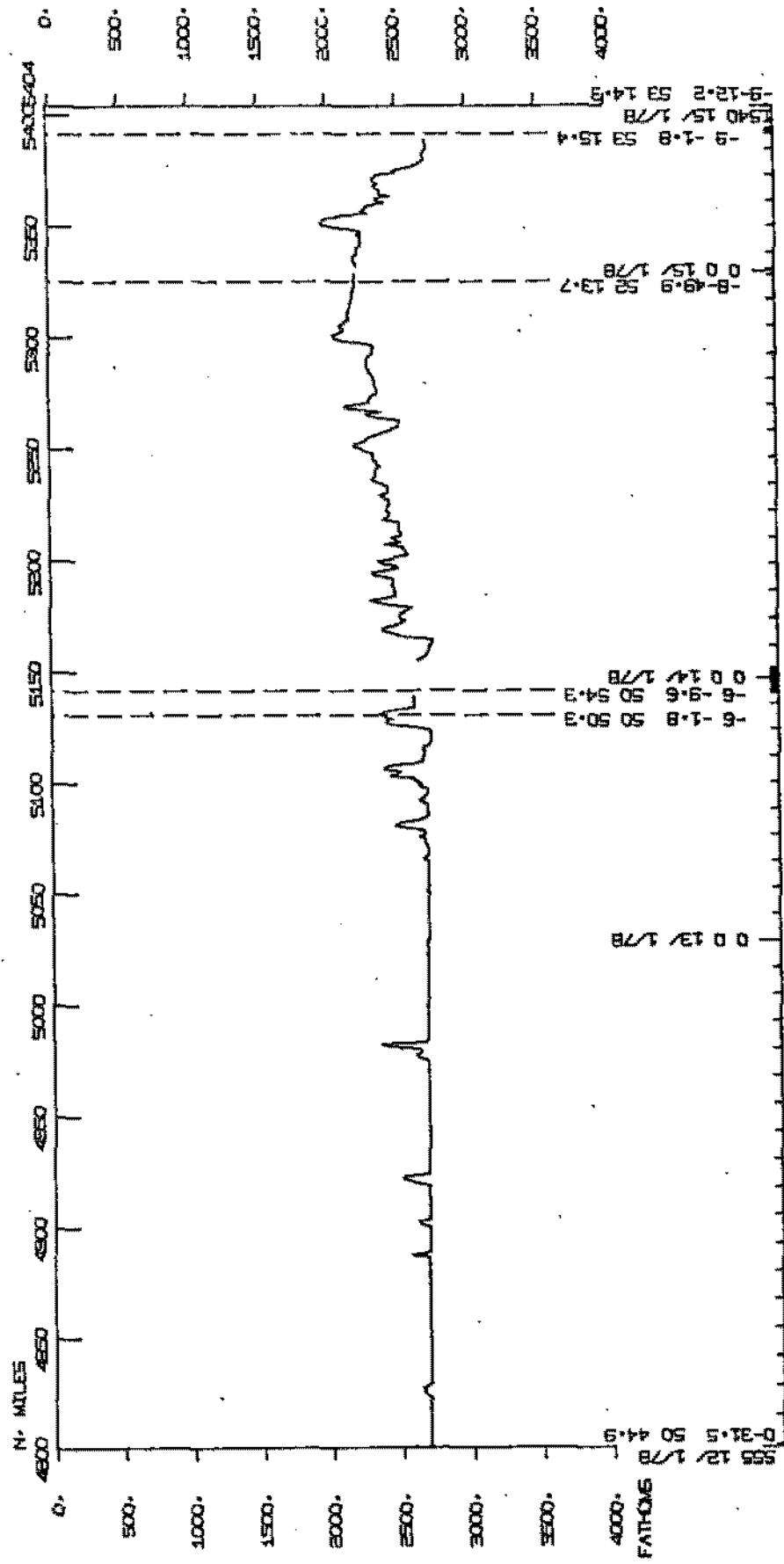
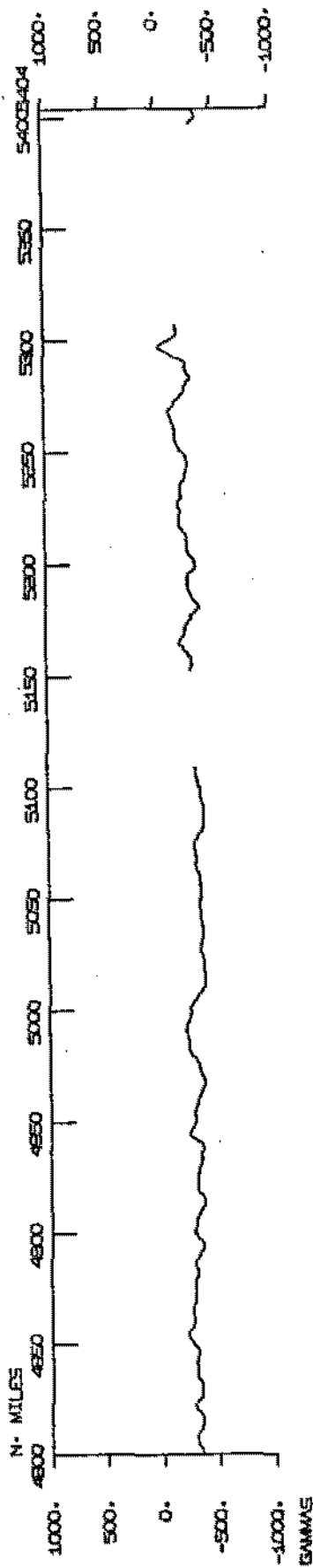
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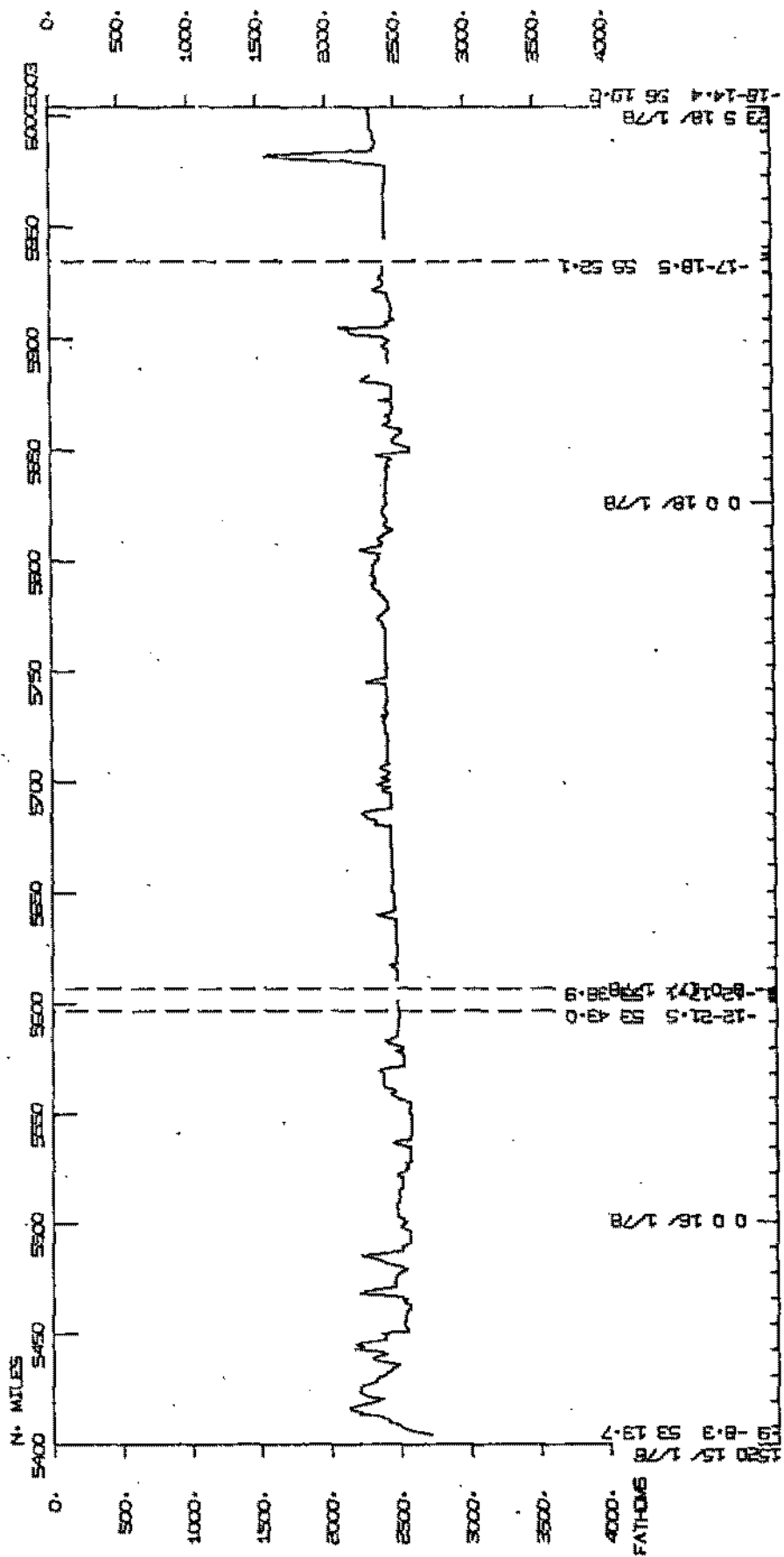
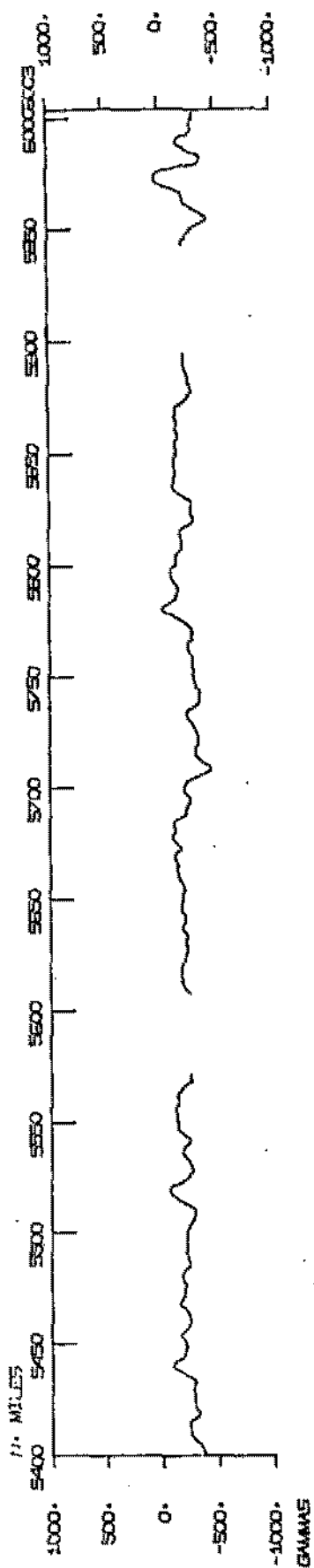
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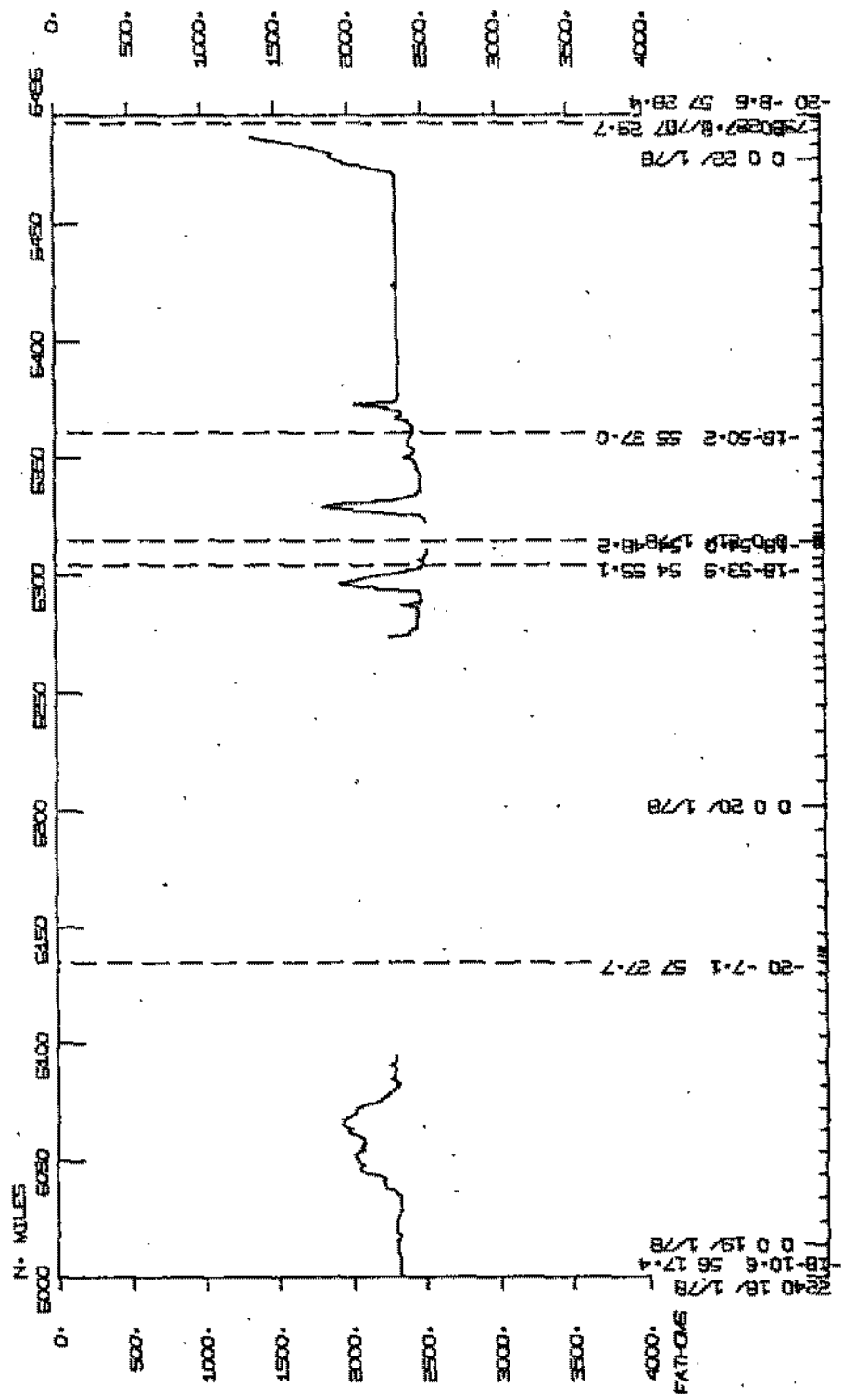
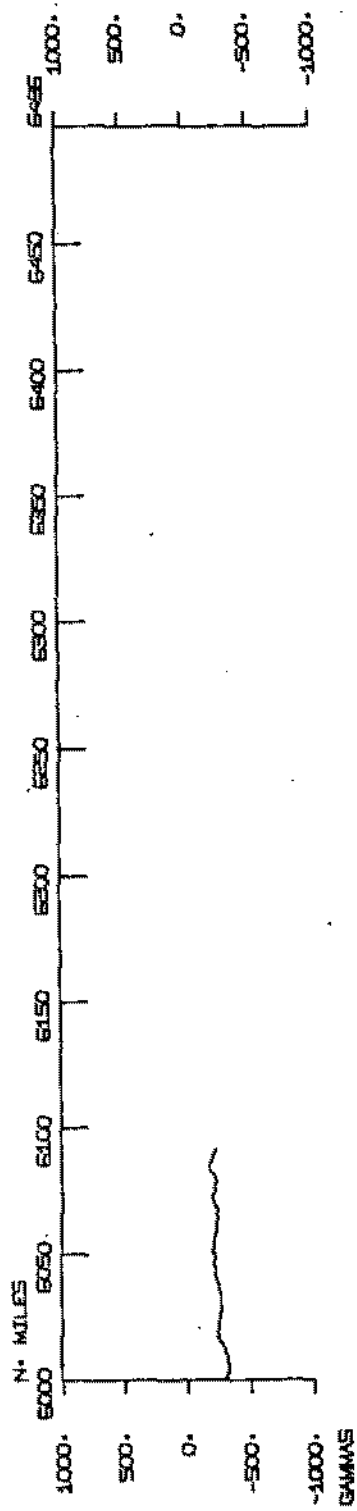
INDOMED LEG 4



INDOMED LEG 4



INDOMED LEG 4



S.I.O. SAMPLE INDEX

(Issued April 12, 1978)

INDOMED EXPEDITION

LEG 4

Alexandria, Egypt (16 December 1977)
to
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Chief Scientist - H. Craig (SIO)

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

Index Encoding Funded by NSF
Grant Number OCE76-80618
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 computer searches on these parameters. (Listings defining these codes are available from the Geological Data Center.)

NOTE: This document is intended primarily for informal use within the institution and is not to be reproduced or distributed outside Scripps without prior approval of the Geological Data Center, Scripps Institution of Oceanography, La Jolla, California 92093.

GENERATED 30MAR78

(I NMDO 4M V) 程 序 表

77

GRD

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
	DP	GC	LB	MG	PE		
GDC	I	26	1	2	1		29
GOG	I		22		15	1	37
GRD	I				2	1	2
GSX	I				1	1	1
HIG	I				1	1	1
LDO	I				2	1	2
MTG	I				2	1	2
SIO	I				2	1	2
SIX	I				3	1	3
TOTAL	I	26	22	1	2	28	79

SAMPLE 'TYPE' CODES USED ABOVE

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

SAMPLE 'DISP' CODES USED ABOVE

GDC = GEOLOGICAL DATA CENTER -- S. SMITH (EXT. 2752)
 GOG = GEOCHEMICAL OCEAN SECTIONS PROJECT - SEE GSX
 GRD = GEOLOGICAL RESEARCH DIVISION (EXT. 3360)
 GSX = GEOCHEMICAL OCEAN SECTIONS STUDY (EXT. 4420)
 HIG = HAWAIIAN INSTITUTE OF GEOPHYSICS, UNIV. OF HAWAII, HONOLULU
 LDO = LAMONT-DOHERTY GEOPHYSICAL OBSERVATORY, COLUMBIA UNIVERSITY
 MTG = MARINE TECHNOLOGY GROUP (EXT 4194)
 SIO = SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA, CAL. 92093
 SIX = SCRIPPS INSTITUTION NON-EMPLOYEE -(CONTACT DORCAS UTTER EXT. 2356)

INDOMED LEG 4 SAMPLE INDEX

INMD04MV

*** PORTS ***

1600 161277	LGPT B ALEXANDRIA, EGYPT	31 11 N	29 54 E	F	INMD04MV
140 22 178	LGPT E PT. LOUIS, MAURITIUS	20 10 S	57 30 E	F	INMD04MV

PERSONNEL

PECS	CRAIG, H.	GRD	INMD04MV
PERT	WITHEROW, S.	MTG	INMD04MV
PECT	ELSTON, M.	MTG	INMD04MV
PE	BEAUPRE, M.	GOG	INMD04MV
PE	BOS, D.	GOG	INMD04MV
PE	CHRISTIANSON, M.	GOG	INMD04MV
PE	CHUNG, Y.	GSX	INMD04MV
PE	CRAIG, V.	SIO	INMD04MV
PENT	FIELD, T.	GOG	INMD04MV
PEXN	GOBAT, D.	GOG	INMD04MV
PE	HESTER, A.	GOG	INMD04MV
PEET	JAEGER, E.	GOG	INMD04MV
PEXN	KIM, K.	SIO	INMD04MV
PE	KROOPNICK, P.	HIG	INMD04MV
PE	MANTYLA, N.	GOG	INMD04MV
PE	MOORE, W.	SIX	INMD04MV
PE	MORRIONE, M.	GOG	INMD04MV
PENT	RAGAN, R.	GOG	INMD04MV
PE	RICHTER, W.	GOG	INMD04MV
PE	SAIGN, D.	LDO	INMD04MV
PE	SANBORN, K.	GOG	INMD04MV
PEXN	SARIN, M. M.	SIX	INMD04MV
PE	SCHECTMAN, N.	LDO	INMD04MV
PENT	SLATER, F.	GOG	INMD04MV
PEXN	SOMAYAJULI, B. L. K.	SIX	INMD04MV
PE	VAN WOY, F.	GRD	INMD04MV
PENT	WELLS, J.	GOG	INMD04MV
PE	WILLIAMS, R.	GOG	INMD04MV

*** NOTE *** TIME ZONES AND MINUTES OF LATITUDE AND LONGITUDE ARE LISTED
IN TENTHS (E.G. 10.6 IS LISTED AS 106)

*** NOTE *** AN 'X' IN THE (B)EGIN/(F)IND COLUMN FOLLOWING THE SAMPLE
CODE INDICATES NO SAMPLE OR DATA RECOVERED

TIME GMT	DATE D.M.Y.	TIME T2 LDC LDC	SAMP CODE	SAMPLE IDENT.	DISP CODE	LAT.	LONG.	INMD04MV
2045	8	178	DPR3 B	EDR 3.5 KHZ R-16	GDC 3	572N	56 476E	S INMD04MV
550	10	178	DPR3 E	EDR 3.5 KHZ R-16	GDC 0	17N	51 32E	S INMD04MV
353	12	178	DPR3 B	EDR 3.5 KHZ R-17	GDC 0	42S	50 462E	S INMD04MV
1014	12	178	DPR3 E	EDR 3.5 KHZ R-17	GDC 1	290S	50 460E	S INMD04MV
1017	12	178	DPR3 B	EDR 3.5 KHZ R-18	GDC 1	296S	50 460E	S INMD04MV
810	13	178	DPR3 E	EDR 3.5 KHZ R-18	GDC 5	570S	50 504E	S INMD04MV
709	14	178	DPR3 B	EDR 3.5 KHZ R-19	GDC 6	157S	50 552E	S INMD04MV
840	15	178	DPR3 E	EDR 3.5 KHZ R-19	GDC 9	17S	53 153E	S INMD04MV
1538	15	178	DPR3 B	EDR 3.5 KHZ R-20	GDC 9	118S	53 142E	S INMD04MV
700	16	178	DPR3 E	EDR 3.5 KHZ R-20	GDC 12	65S	53 403E	S INMD04MV
520	17	178	DPR3 B	EDR 3.5 KHZ R-21	GDC 12	297S	53 432E	S INMD04MV
1028	18	178	DPR3 E	EDR 3.5 KHZ R-21	GDC 17	180S	55 519E	S INMD04MV
1717	18	178	DPR3 B	EDR 3.5 KHZ R-22	GDC 17	200S	55 532E	S INMD04MV
800	19	178	DPR3 E	EDR 3.5 KHZ R-22	GDC 19	325S	57 16E	S INMD04MV
830	20	178	DPR3 B	EDR 3.5 KHZ R-23	GDC 19	102S	55 234E	S INMD04MV
140	22	178	DPR3 E	EDR 3.5 KHZ R-23	GDC 20	56S	57 243E	S INMD04MV
1000	191277		DPRT B	EDR 12 KHZ R-01	GDC 27	251N	34 139E	S INMD04MV
1155	191277		DPRT E	EDR 12 KHZ R-01	GDC 27	150N	34 291E	S INMD04MV
2020	191277		DPRT B	EDR 12 KHZ R-02	GDC 27	142N	34 289E	S INMD04MV
1052	221277		DPRT E	EDR 12 KHZ R-02	GDC 19	571N	38 301E	S INMD04MV
1720	211277		DPRT B	EDR 12 KHZ R-03	GDC 21	204N	38 55E	S INMD04MV
220	221277		DPRT E	EDR 12 KHZ R-03	GDC 20	38N	38 292E	S INMD04MV
1029	241277		DPRT B	EDR 12 KHZ R-06	GDC 14	420N	42 107E	S INMD04MV
330	251277		DPRT E	EDR 12 KHZ R-06	GDC 12	79N	43 558E	S INMD04MV
800	251277		DPRT B	EDR 12 KHZ R-06A	GDC 12	51N	43 541E	S INMD04MV
31	261277		DPRT E	EDR 12 KHZ R-06A	GDC 12	188N	46 587E	S INMD04MV
*** MAGNETOMETER ***								
550	261277		MGR B	MAGNETICS R-01	GDC 12	224N	47 249E	S INMD04MV
1500	1	178	MGR E	MAGNETICS R-01	GDC 18	17N	64 331E	S INMD04MV
1510	1	178	MGR B	MAGNETICS R-02	GDC 17	598N	64 331E	S INMD04MV
800	18	178	MGR E	MAGNETICS R-02	GDC 16	549S	55 407E	S INMD04MV

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

0550	261277			LBWU B	UNDERWAY WATCH LOG	GDC 12	372N	47 414E	S INMD04MV
140	22 178			LBWU E	UNDERWAY WATCH LOG	GDC 20	56S	57 243E	S INMD04MV

*** FATHOGRAMS ***

1421	221277			DPR3 B	EDR 3.5 KHZ R-04	GDC 19	577N	38 309E	S INMD04MV
1120	231277			DPR3 E	EDR 3.5 KHZ R-04	GDC 17	376N	40 67E	S INMD04MV
1124	231277			DPR3 B	EDR 3.5 KHZ R-05	GDC 17	369N	40 72E	S INMD04MV
457	241277			DPR3 E	EDR 3.5 KHZ R-05	GDC 14	448N	42 99E	S INMD04MV
550	261277			DPR3 B	EDR 3.5 KHZ R-07	GDC 12	224N	47 249E	S INMD04MV
1940	261277			DPR3 E	EDR 3.5 KHZ R-07	GDC 12	458N	50 30E	S INMD04MV
2259	261277			DPR3 B	EDR 3.5 KHZ R-07A	GDC 12	461N	50 50E	S INMD04MV
650	271277			DPR3 E	EDR 3.5 KHZ R-07A	GDC 13	113N	51 62E	S INMD04MV
1044	271277			DPR3 B	EDR 3.5 KHZ R-08	GDC 13	133N	51 94E	S INMD04MV
2042	271277			DPR3 E	EDR 3.5 KHZ R-08	GDC 13	222N	53 129E	S INMD04MV
1351	281277			DPR3 B	EDR 3.5 KHZ R-09	GDC 13	234N	53 205E	S INMD04MV
610	291277			DPR3 E	EDR 3.5 KHZ R-09	GDC 14	326N	56 190E	S INMD04MV
818	291277			DPR3 B	EDR 3.5 KHZ R-10	GDC 14	369N	56 217E	S INMD04MV
1848	291277			DPR3 E	EDR 3.5 KHZ R-10	GDC 15	433N	58 33E	S INMD04MV
2224	291277			DPR3 B	EDR 3.5 KHZ R-11	GDC 15	447N	58 51E	S INMD04MV
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1050	301277			DPR3 E	EDR 3.5 KHZ R-12A	GDC 16	750N	59 806E	F INMD04MV
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338	311277			DPR3 E	EDR 3.5 KHZ R-12	GDC 18	83N	62 60E	S INMD04MV
1800	1 178			DPR3 B	EDR 3.5 KHZ R-13	GDC 17	465N	64 532E	F INMD04MV
1520	2 178			DPR3 E	EDR 3.5 KHZ R-13	GDC 13	225N	64 308E	S INMD04MV
1400	3 178			DPR3 B	EDR 3.5 KHZ R-14	GDC 12	522N	64 250E	S INMD04MV
2200	4 178			DPR3 E	EDR 3.5 KHZ R-14	GDC 6	372N	64 336E	S INMD04MV
735	6 178			DPR3 B	EDR 3.5 KHZ R-15	GDC 6	148N	64 200E	S INMD04MV
2040	7 178			DPR3 E	EDR 3.5 KHZ R-15	GDC 4	13N	57 63E	S INMD04MV

TIME	DATE	TIME	TZ	SAMP		DISP		30MAR78	PAGE	3
GMT	D.M.Y.	LNC	LNC	CODE	SAMPLE IDENT.	CODE	LAT.	LONG.	CRUISE	LEG-SHIP

GEOCHEMICAL SAMPLE

1155	191277			GCLV B	GEOSECS STA 405	GOG 27	150N	34 291E	S	INMD04MV
2030	191277			GCLV E	GEOSECS STA 405	GOG 27	141N	34 290E	S	INMD04MV
1306	211277			GCLV B	GEOSECS STA 406	GOG 21	207N	38 48E	S	INMD04MV
1915	211277			GCLV E	GEOSECS STA 406	GOG 21	206N	38 78E	S	INMD04MV
606	221277			GCLV B	GEOSECS STA 407	GOG 19	550N	38 300E	S	INMD04MV
2030	221277			GCLV E	GEOSECS STA 407	GOG 19	594N	38 314E	S	INMD04MV
457	241277			GCLV B	GEOSECS STA 408	GOG 14	448N	42 99E	S	INMD04MV
1030	241277			GCLV E	GEOSECS STA 408	GOG 14	420N	42 107E	S	INMD04MV
330	251277			GCLV B	GEOSECS STA 409	GOG 12	79N	43 558E	S	INMD04MV
800	251277			GCLV E	GEOSECS STA 409	GOG 12	51N	43 541E	S	INMD04MV
30	261277			GCLV B	GEOSECS STA 410	GOG 12	188N	46 586E	S	INMD04MV
335	261277			GCLV E	GEOSECS STA 410	GOG 12	176N	46 599E	S	INMD04MV
1942	261277			GCLV B	GEOSECS STA 411	GOG 12	458N	50 31E	S	INMD04MV
2246	261277			GCLV E	GEOSECS STA 411	GOG 12	454N	50 38E	S	INMD04MV
655	271277			GCLV B	GEOSECS STA 412	GOG 13	123N	51 63E	S	INMD04MV
1020	271277			GCLV E	GEOSECS STA 412	GOG 13	129N	51 72E	S	INMD04MV
2100	271277			GCLV B	GEOSECS STA 413	GOG 13	222N	53 139E	S	INMD04MV
1338	281277			GCLV E	GEOSECS STA 413	GOG 13	230N	53 198E	S	INMD04MV
626	291277			GCLV B	GEOSECS STA 414	GOG 14	334N	56 186E	S	INMD04MV
932	291277			GCLV E	GEOSECS STA 414	GOG 14	451N	56 330E	S	INMD04MV
1513	301277			GCLV B	GEOSECS STA 415	GOG 17	140N	60 396E	S	INMD04MV
1932	301277			GCLV E	GEOSECS STA 415	GOG 17	151N	60 444E	S	INMD04MV
1824	311277			GCLV B	GEOSECS STA 416	GOG 19	453N	64 359E	S	INMD04MV
638	1 178			GCLV E	GEOSECS STA 416	GOG 19	405N	64 353E	S	INMD04MV
1734	2 178			GCLV B	GEOSECS STA 417	GOG 12	585N	64 290E	S	INMD04MV
1331	3 178			GCLV E	GEOSECS STA 417	GOG 12	577N	64 247E	S	INMD04MV
1856	5 178			GCLV B	GEOSECS STA 418	GOG 6	126N	64 241E	S	INMD04MV
730	6 178			GCLV E	GEOSECS STA 418	GOG 6	149N	64 203E	S	INMD04MV
2215	7 178			GCLV B	GEOSECS STA 419	GOG 3	569N	56 484E	S	INMD04MV
2045	8 178			GCLV E	GEOSECS STA 419	GOG 3	572N	56 476E	S	INMD04MV
550	10 178			GCLV B	GEOSECS STA 420	GOG 0	17N	51 32E	S	INMD04MV
330	12 178			GCLV E	GEOSECS STA 420	GOG 0	1N	50 467E	S	INMD04MV

TIME GMT	DATE D.M.Y.	TIME LOC	TZ LOC	SAMP CODE	SAMPLE IDENT.	DISP CODE	LAT.	LONG.	
920	13	178		GCLV B	GEOSECS STA 421	GOG 6	92S	50 544E	S INMD04MV
709	14	178		GCLV E	GEOSECS STA 421	GOG 6	157S	50 552E	S INMD04MV
2150	14	178		GCLV B	GEOSECS STA 422	GOG 8	501S	52 153E	S INMD04MV
327	15	178		GCLV E	GEOSECS STA 422	GOG 8	499S	52 158E	S INMD04MV
840	15	178		GCLV B	GEOSECS STA 423	GOG 9	17S	53 153E	S INMD04MV
1449	15	178		GCLV E	GEOSECS STA 423	GOG 9	24S	53 130E	S INMD04MV
830	16	178		GCLV B	GEOSECS STA 424	GOG 12	195S	53 418E	S INMD04MV
416	17	178		GCLV E	GEOSECS STA 424	GOG 12	180S	53 388E	S INMD04MV
1100	18	178		GCLV B	GEOSECS STA 425	GOG 17	185S	55 519E	S INMD04MV
1730	18	178		GCLV E	GEOSECS STA 425	GOG 17	223S	55 542E	S INMD04MV
1535	20	178		GCLV B	GEOSECS STA 426	GOG 18	550S	54 490E	S INMD04MV
658	21	178		GCLV E	GEOSECS STA 426	GOG 18	514S	54 540E	S INMD04MV
9900					END SAMPLE INDEX				INMD04MV