

INFORMAL REPORT AND INDEX OF
NAVIGATION, DEPTH AND MAGNETIC DATA

(Issued June 29, 1977)

F. DRAKE 77 EXPEDITION

LEG 2

Valparaiso, Chile (10 January 1977)
to
Punta Arenas, Chile (12 February 1977)

R/V Malville

Chief Scientist - W. Nowlin (Texas A&M)

Resident Marine Tech - D. Muus

Post-Cruise Processing and Report Preparation
by SIO Geological Data Center - S. Smith,
U. Albright, G. Paaropoulos, G. Papadopoulos

Data Collection Funded by NSF
Contract Number OCE74-14941-A02
Data Processing Funded by SIA 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.

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

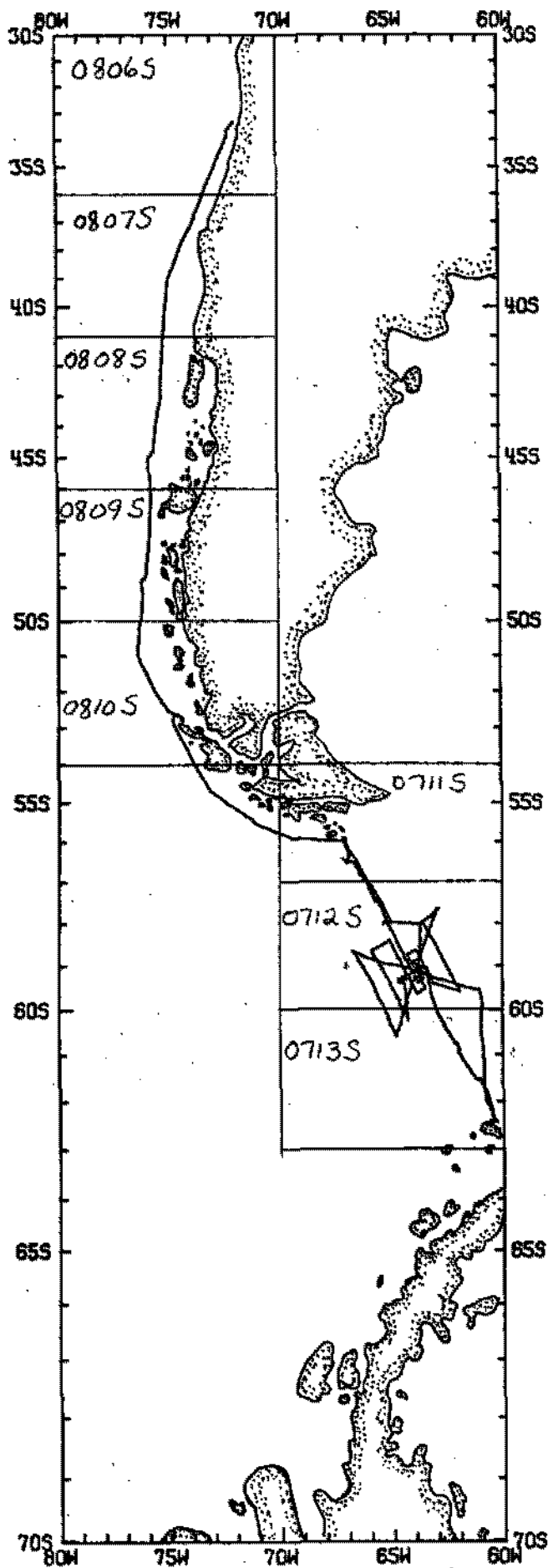
Contents:

- 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 (.3"/deg. long) is the same as the index charts of previous SIO cruises published as Report IMR TR-25.
- 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 gamma/inch; anomaly scale north of 15°N and south of 15°S = 1000 gamma/inch from values retrieved at approximately 1 mile spacing and regional field removed using the 1965 IGRF.
4. Card Decks of navigation, depth and magnetics (for specific formats, contact S. M. Smith, Geological Data Center). Phone: (714) 452-2752
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



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Ports - Valparaiso, Chile - Punta Arenas, Chile

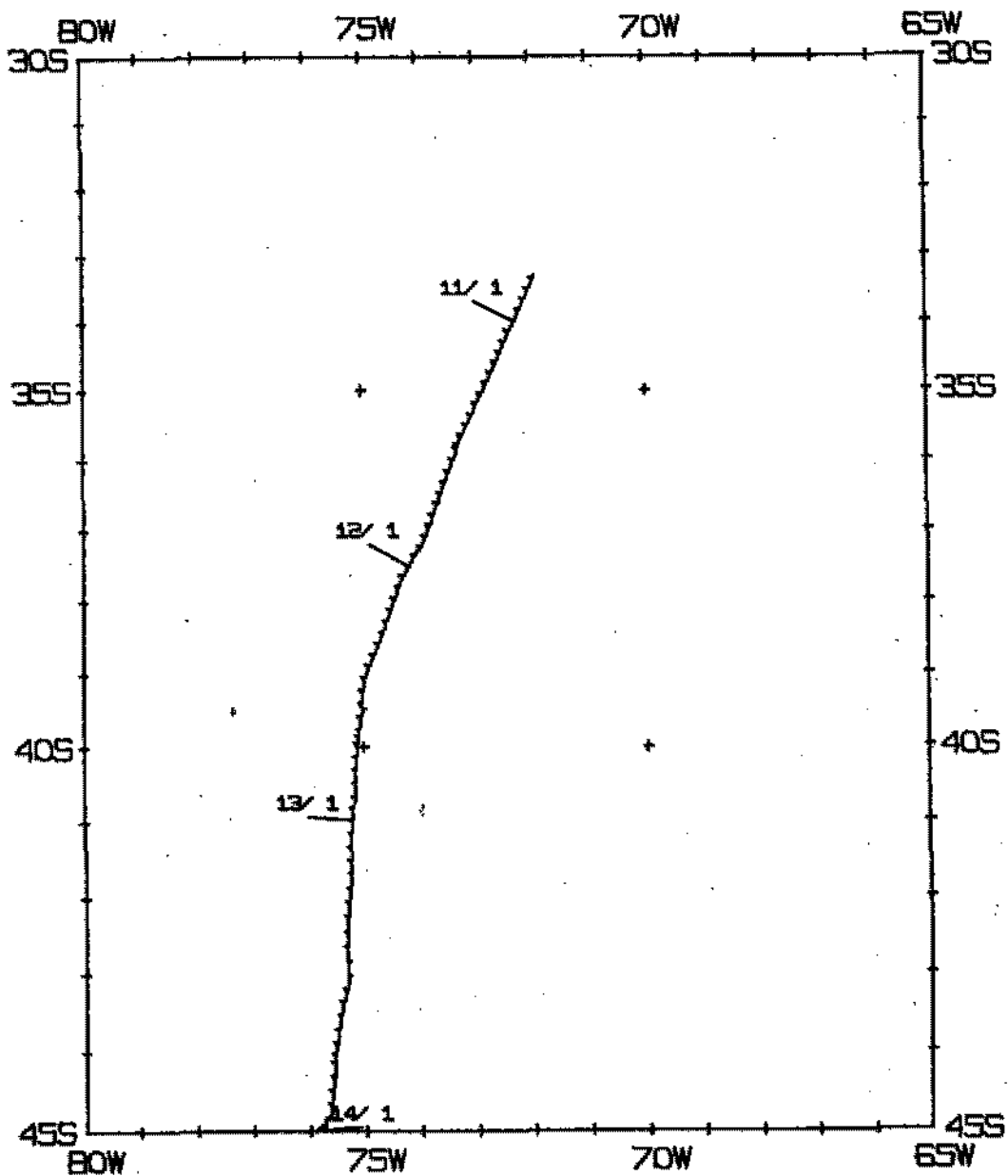
Dates - January 10 - February 12, 1977

TOTAL MILEAGE

- 1) Cruise - 4212 miles
- 2) Bathymetry - 2172 miles
- 3) Magnetics - 1835 miles
- 4) Seismic Reflection - none collected

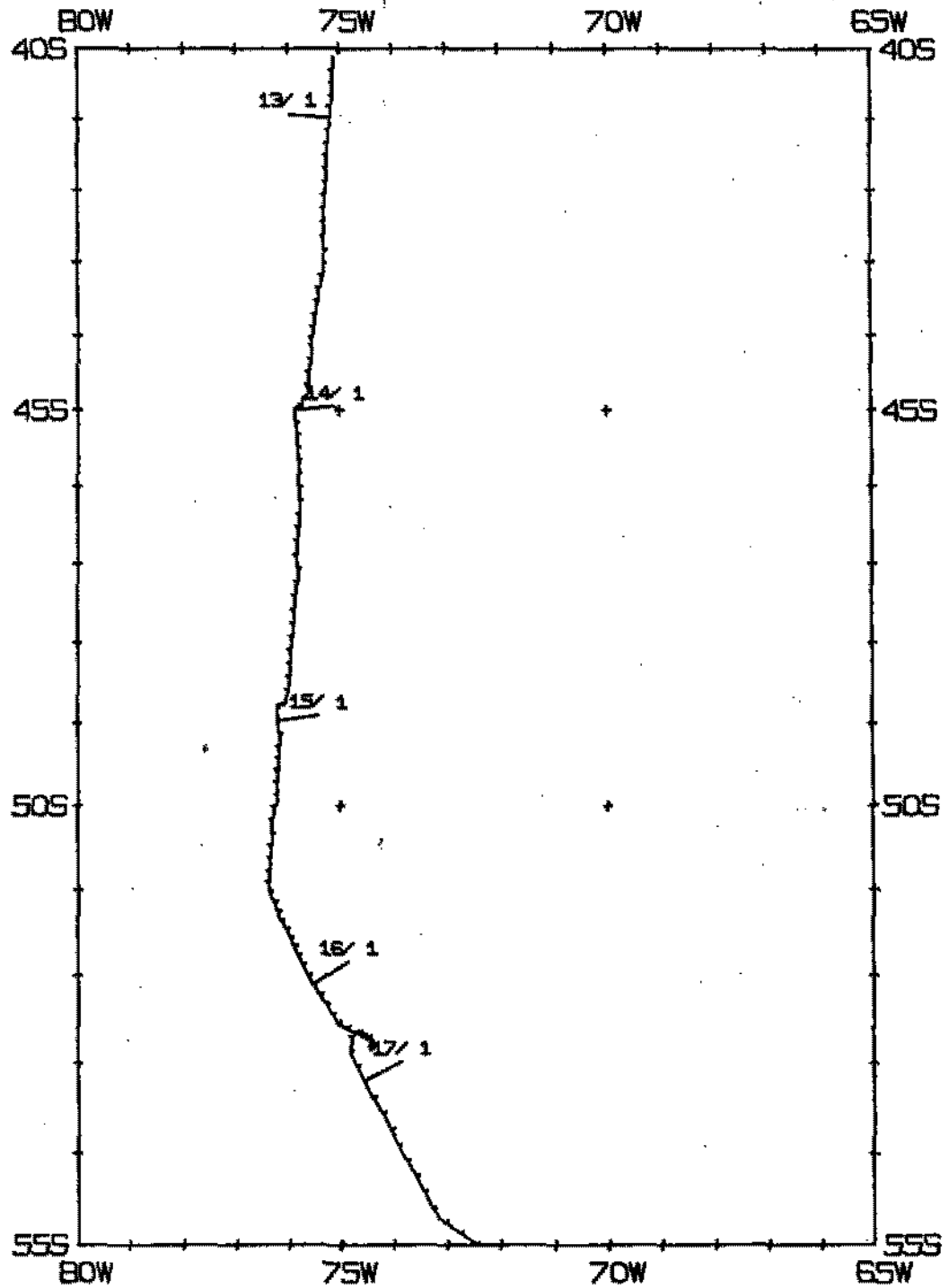
FD7702MV TRACK PLOT (1 OF 3)

MERCATOR PROJECTION, SCALE= 0.312 IN/DEG LONGITUDE



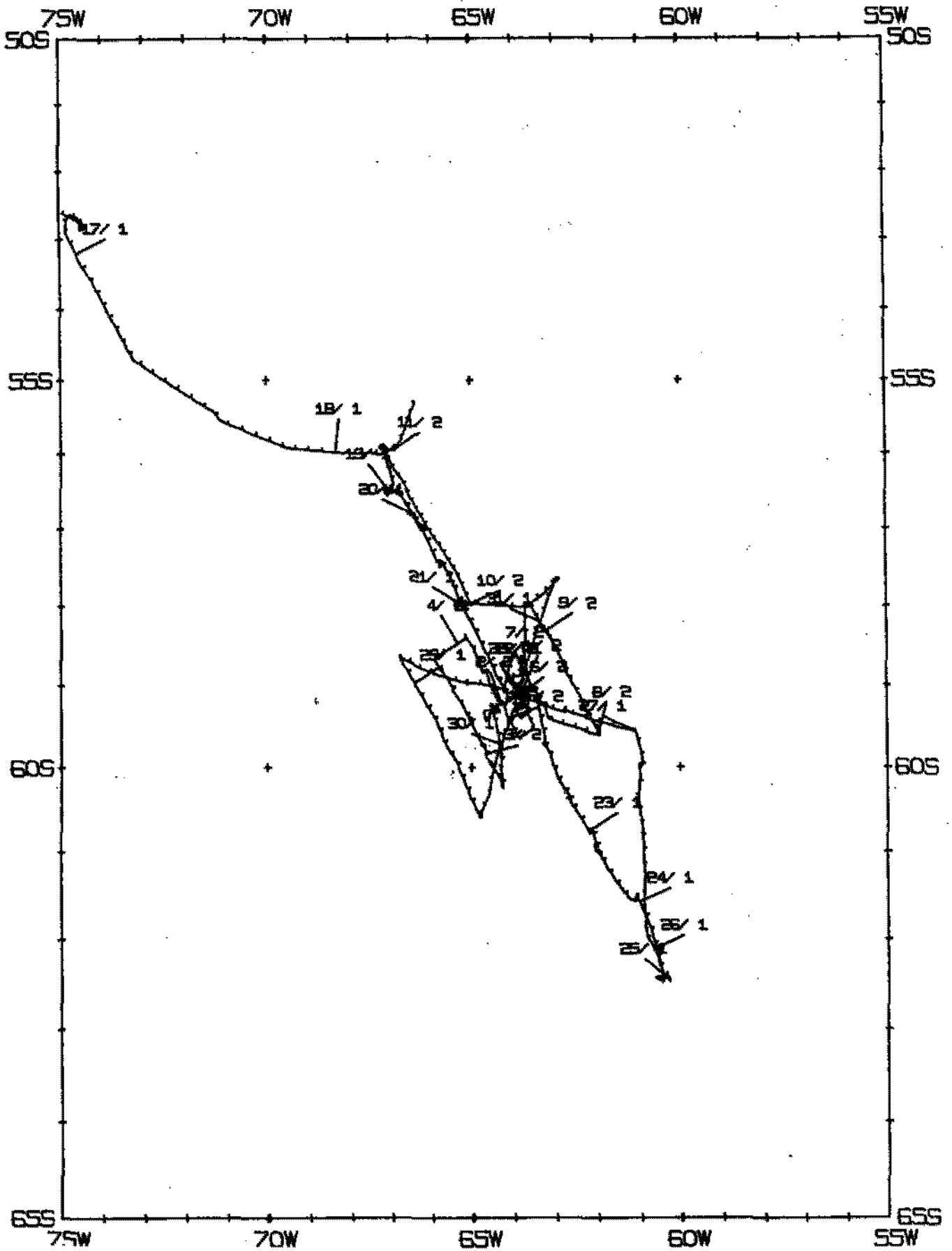
FD7702MV TRACK PLOT (2 OF 3)

MERCATOR PROJECTION, SCALE= 0.312 IN/DEG LONGITUDE

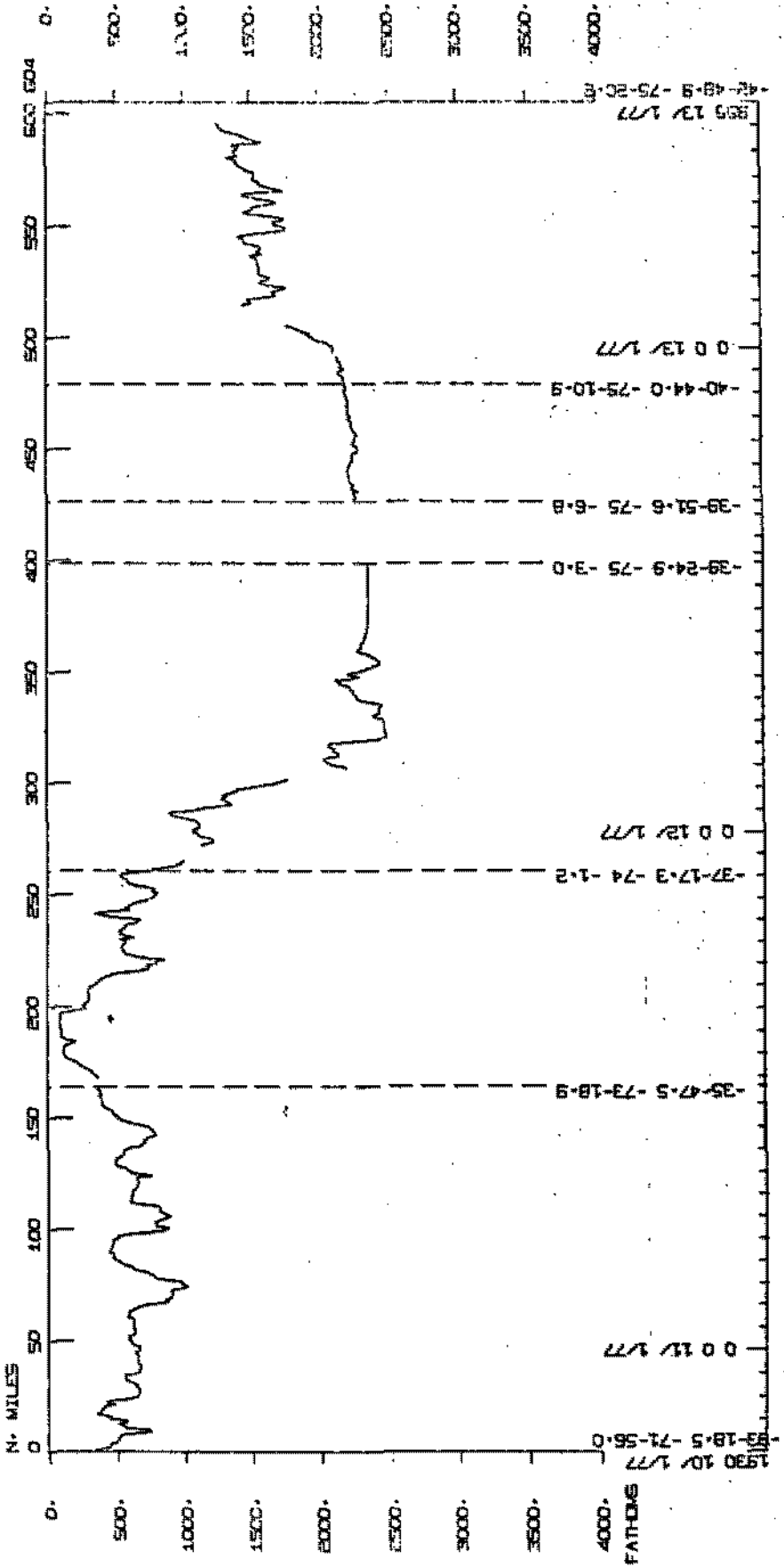
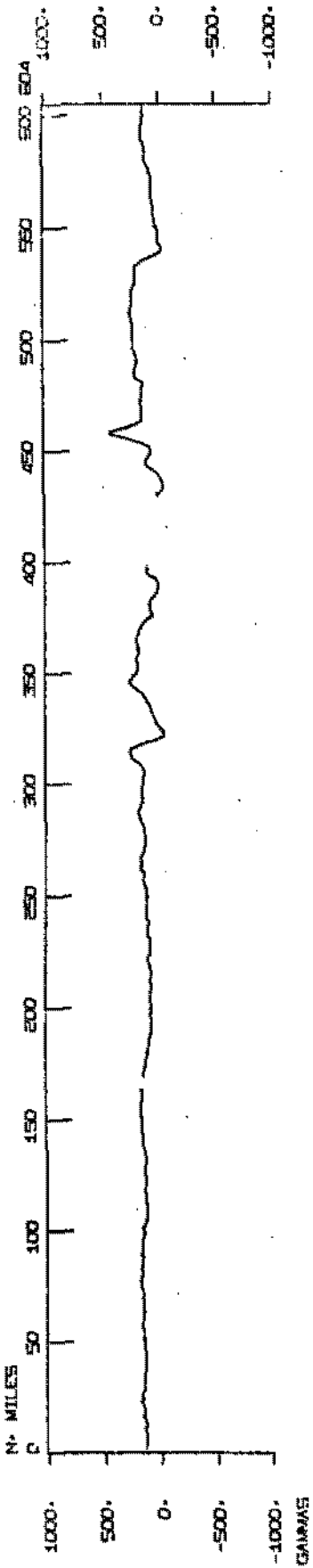


FD7702MV TRACK PLOT (3 OF 3)

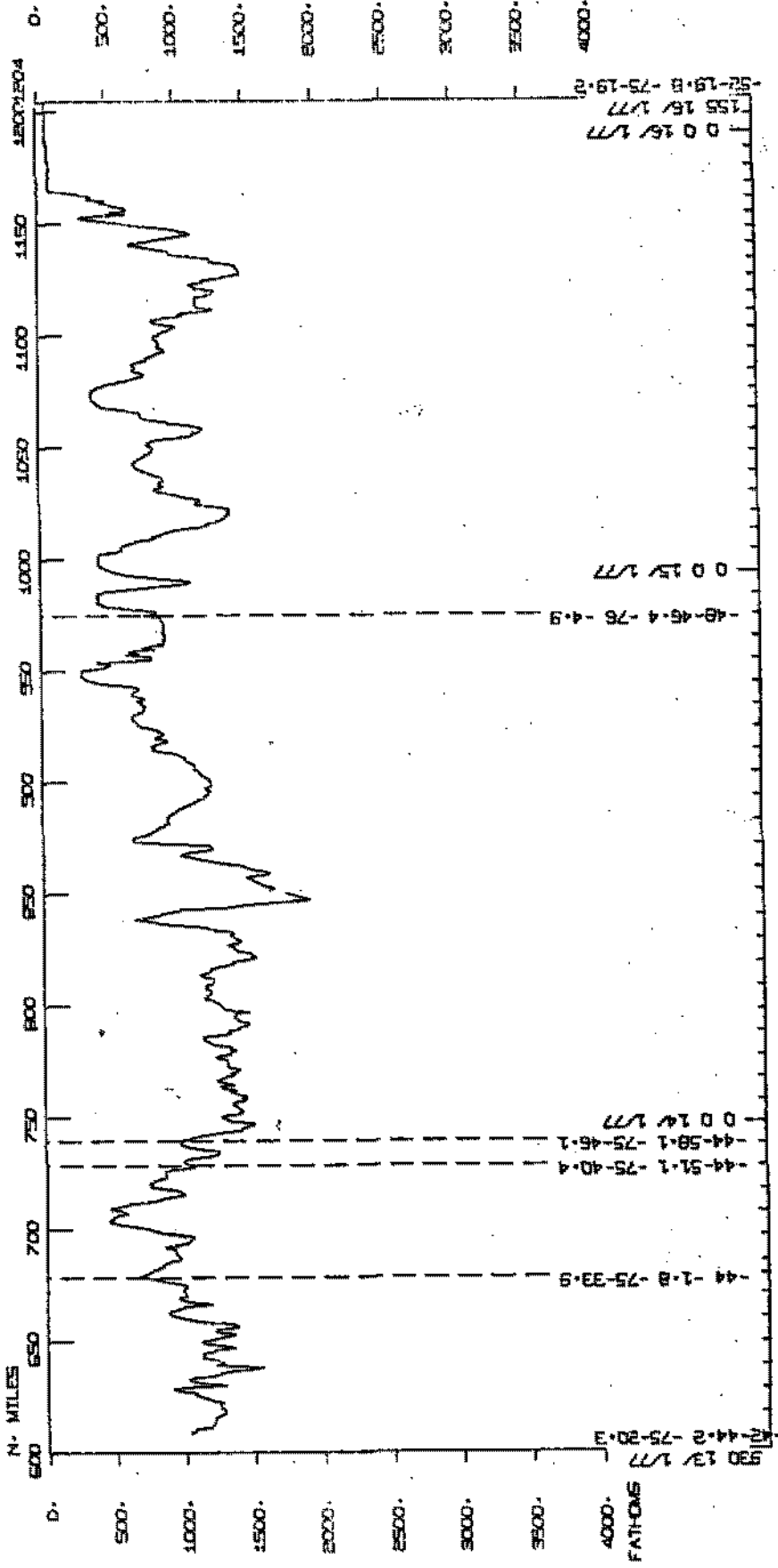
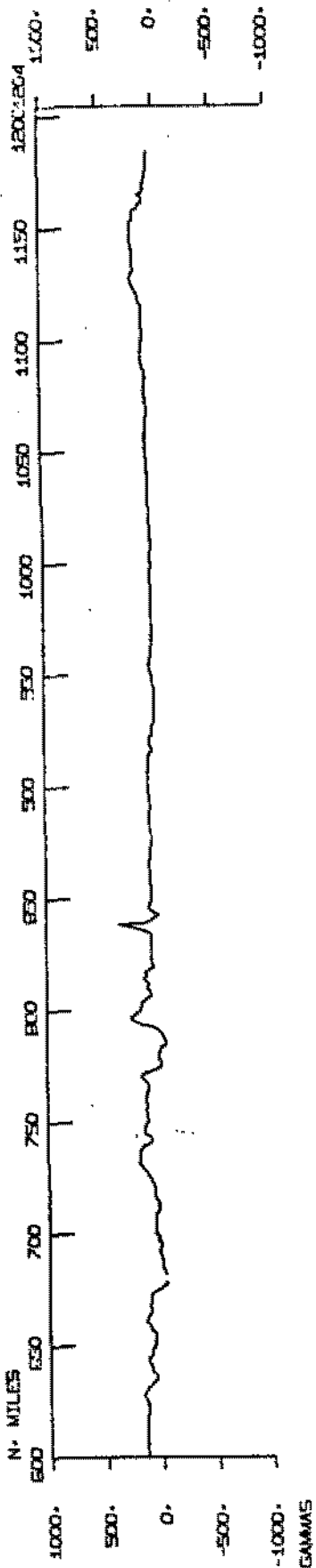
MERCATOR PROJECTION, SCALE= 0.312 IN/DEG LONGITUDE



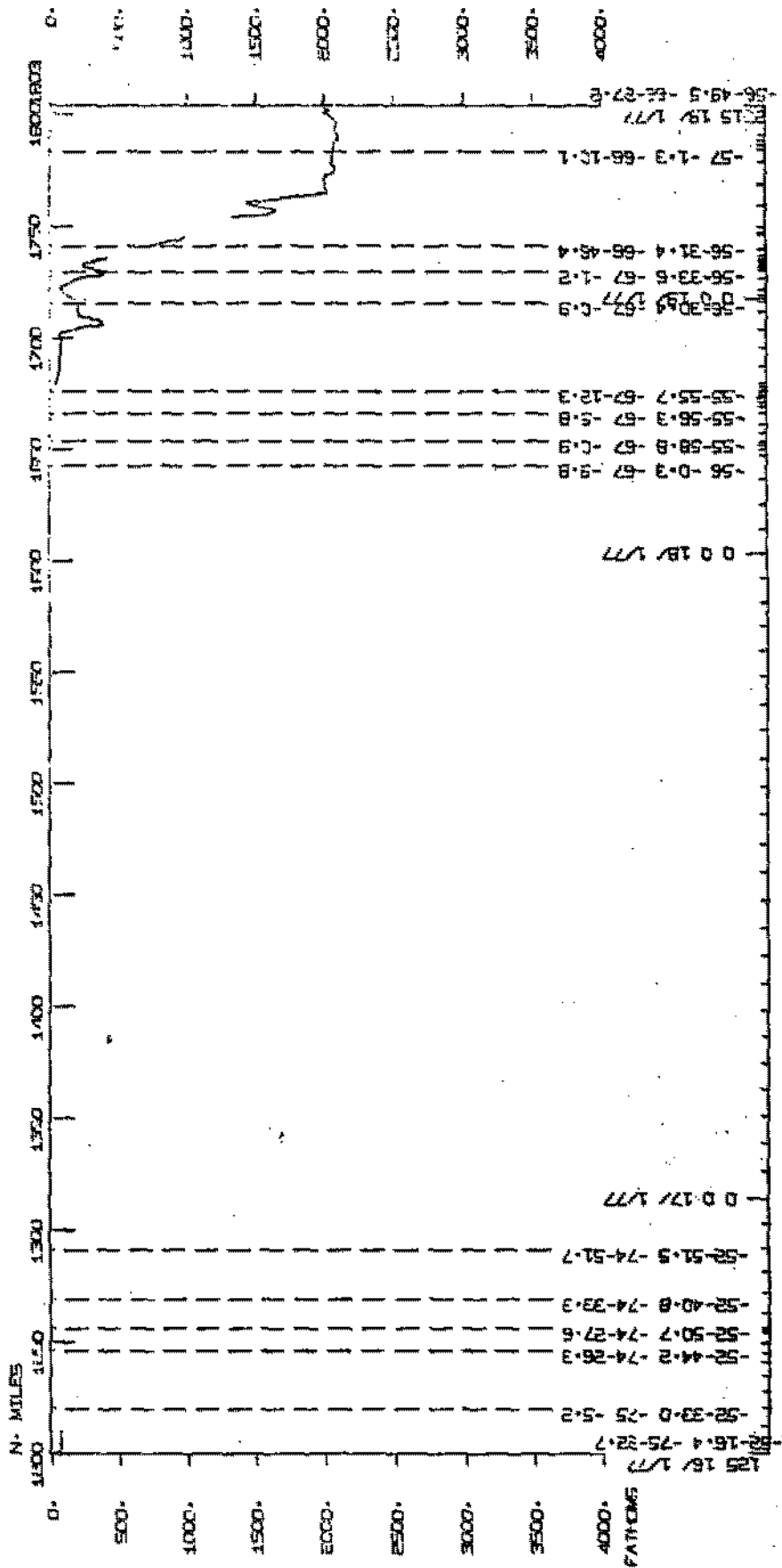
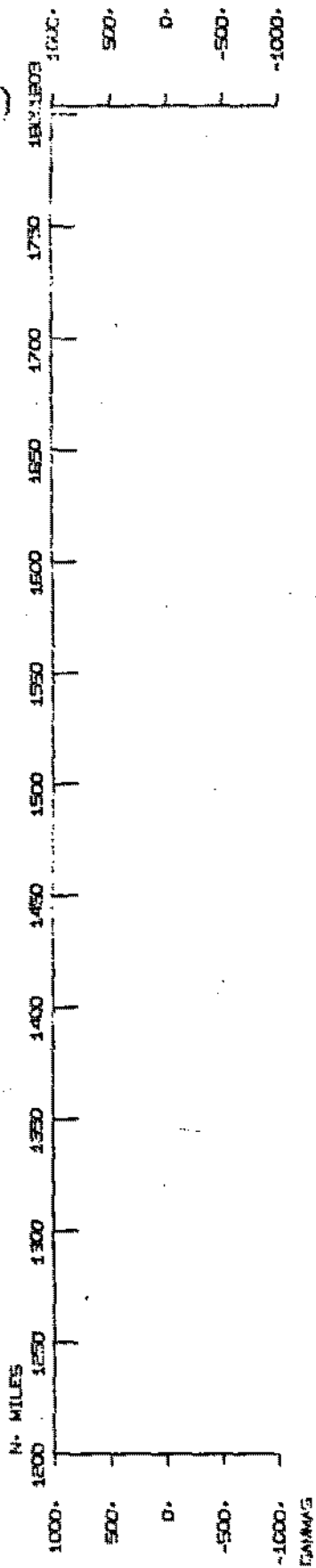
F. DRAKE 77 LEG 2



F. DRAKE 77 LEG 2

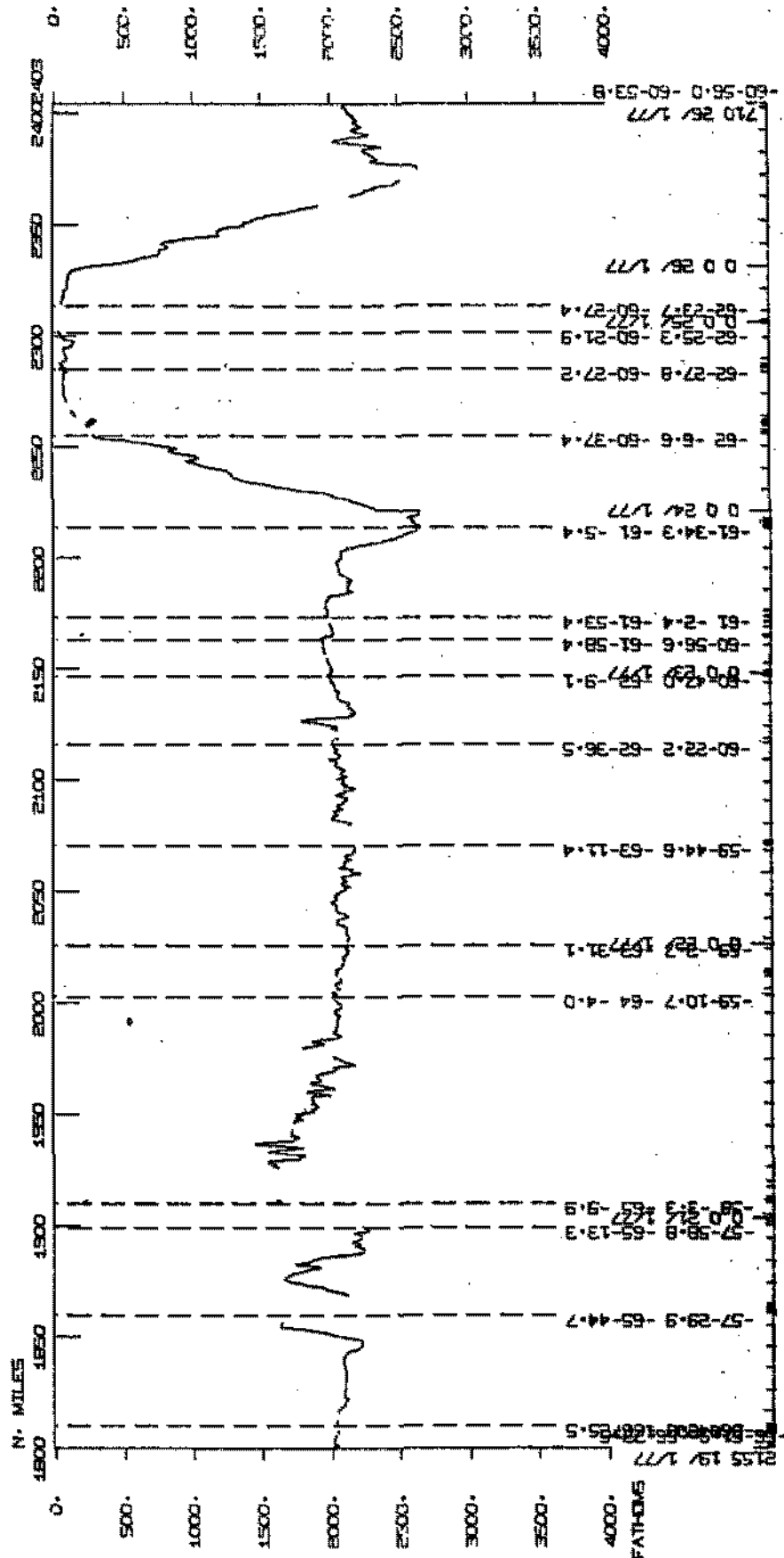
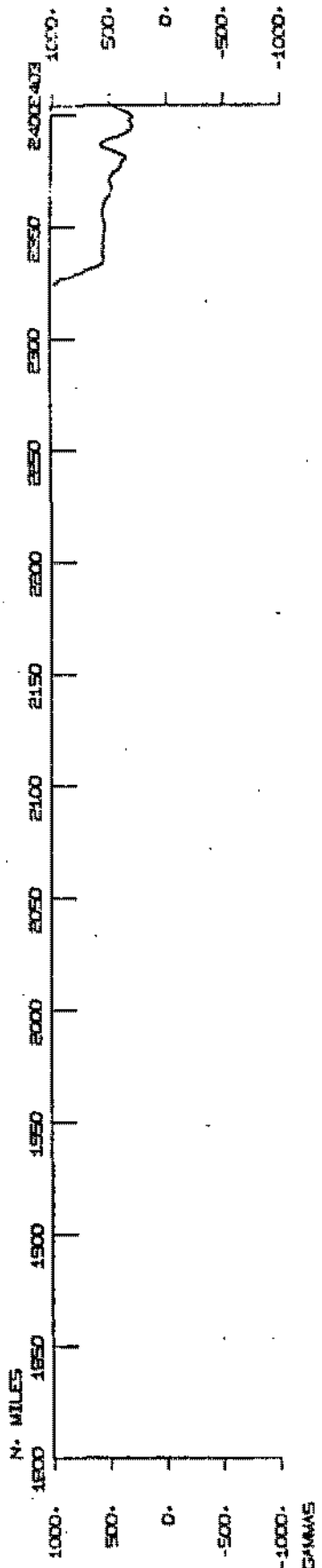


F. DRAKE 77 LEG 2

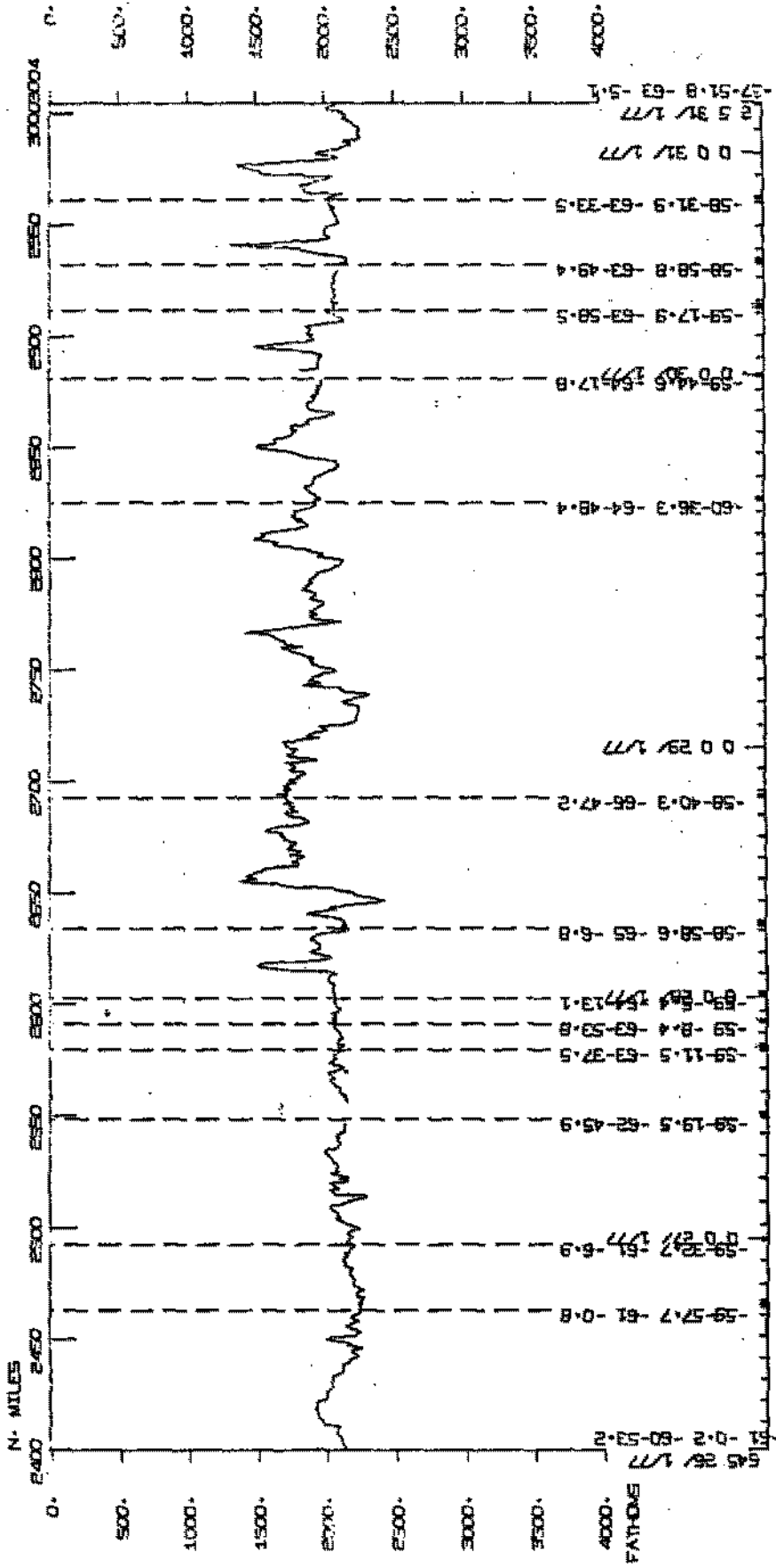
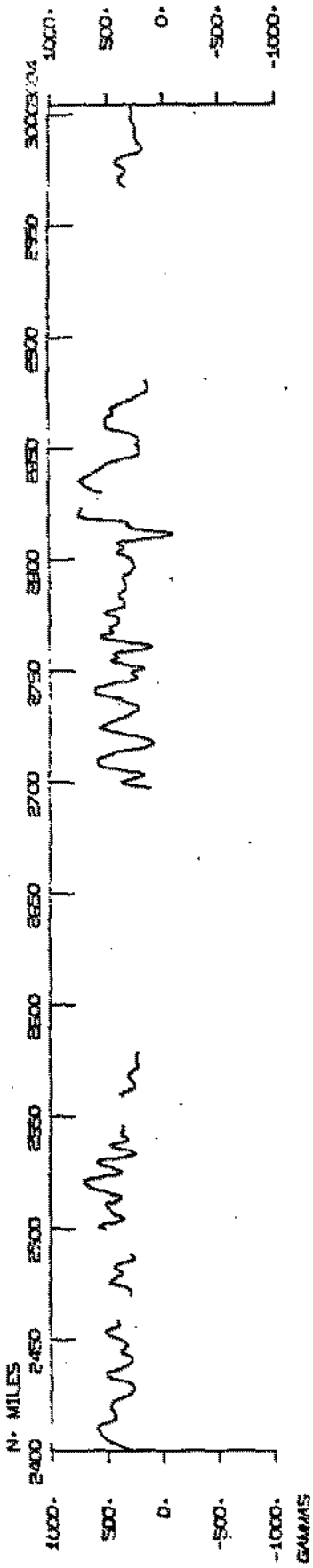


125 18 1/77
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F. DRAKE 77 LEG 2



F. DRAKE 77 LEG 2



S.I.O. SAMPLE INDEX

(Issued June 29, 1977)

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Valparaiso, Chile (10 January 1977)
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Chief Scientist - W. Nowlin (Texas A&M)

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Post-Cruise Processing and Report Preparation
by S.I.O. Geological Data Center - S. Smith, U. Albright,
R. Lingley, G. Psaropoulos, G. Papadopoulos

Index Encoding Funded by NSF
Grant Number OCE74-14941-A02
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 onshore 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.)

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

DISP	TYPE											TOTAL	
	BK	BT	CM	DP	HC	LB	MG	ON	PE	SS	TD		
ARG	I								1			I	1
CHL	I								2			I	2
DGP	I								1			I	1
GDC	I			16		1	1					I	18
MIC	I							1				I	1
NOR	I								1			I	1
OSU	I		5						7			I	12
SCG	I								1			I	1
SIX	I								3			I	3
TAM	I	16	15			96			9	16	97	I	249
UWA	I			3					2			I	5
TOTAL	I	16	15	8	16	96	1	1	1	27	16	97	I 294

SAMPLE 'TYPE' CODES USED ABOVE

BK = BUCKET WATER SAMPLE
 BT = BATHY THERMOGRAM NOTE-BT LOGS, TRACES TO BE RETURNED, BEGINNING
 CM = CURRENT MEASUREMENT
 DP = DEPTH
 HC = HYDROGRAPHIC CAST
 LB = LOG BOOKS
 MG = MAGNETICS (TOWED VEHICLE, SURFACE, TOTAL FIELD)
 ON = OPEN NET
 PE = PERSONNEL IN SCIENTIFIC PARTY
 SS = SURFACE SAMPLE
 TD = SALINITY/TEMPERATURE/DEPTH (STD)

SAMPLE 'DISP' CODES USED ABOVE

ARG = ARGENTINA
 ARG = SERKA, JORGE, SERVICIO, HIDROGRAFIA NAVAL (SIHN), ARGENTINA
 CHL = CHILE
 CHL = CHILEAN HYDROGRAPHIC INSTITUTE. (IHA), H. SIEVERS, N. ZULETA
 DGP = DATA COLLECTION, PROCESSING GROUP -- F. WILKES (EXT. 3668)
 GDC = GEOLOGICAL DATA CENTER -- S. M. SMITH (EXT. 2182)
 MIC = MARINE INVERTEBRATE CURATOR - A. FLEMING, (EXT. 2071)
 NOR = NORWAY
 NOR = I. MILJETEIG
 OSU = OREGON STATE UNIVERSITY -- TJEERD VAN ANDEL
 SCG = SHIPBOARD COMPUTER GROUP (EXT. 4195)
 SIX = SCRIPPS INSTITUTION NON-EMPLOYEE -(CONTACT DORCAS UTTER EXT. 2356)
 TAM = TEXAS A+M UNIVERSITY
 UWA = UNIV. OF WASHINGTON, SEATTLE

S.I.O. SAMPLE INDEX

F. DRAKE 77 EXPEDITION LEG 2

FD7702MV

*** PORTS ***

1614 10 177	LGPT B VALPARAISO, CHILE	33 02 S	71 37 W	F	FD7702MV
2040 12 277	LGPT E PUNTA ALENAS, CHILE	53 10 S	70 54 W	F	FD7702MV
1105 16 177	LGUS B TUESDAY BAY, CHILE	52 505S	74 279W	S	FD7702MV
1900 16 177	LGUS E TUESDAY BAY, CHILE	52 459S	74 281W	S	FD7702MV
2000 24 177	LGUS B DESOLATION ISLAND	62 282S	60 178W	S	FD7702MV
2125 25 177	LGUS E DESOLATION ISLAND	62 274S	60 186W	S	FD7702MV

PERSONNEL

PECS	NOWLIN, W	TAM	FD7702MV
PERT	MOUS, D.	DCP	FD7702MV
PECT	HENRY, A.	SCG	FD7702MV
PEET	PITTMAN, R.	TAM	FD7702MV
PEET	STASNY, J.	TAM	FD7702MV
PEXN	ALDUNATE, R.	CHL	FD7702MV
PE	BARKSDALE, G.	TAM	FD7702MV
PE	BOTTOM, K.	TAM	FD7702MV
PES	ELLIOTT, B.	TAM	FD7702MV
PEXN	GALLO, J.	ARG	FD7702MV
PE	HARTNETT, L.	OSU	FD7702MV
PE	KRAUSE, E.	UWA	FD7702MV
PE	MURPHY, T.	OSU	FD7702MV
PES	OLSON, D.	TAM	FD7702MV
PE	PILLSBURY, D.	SIX	FD7702MV
PEXN	ROJAS, R.	CHL	FD7702MV
PE	ROUT, D.	USU	FD7702MV
PEXN	SAGSTAD, G.	NOR	FD7702MV
PE	SCHMITZ, J.	TAM	FD7702MV
PE	SEIFERT, E.	USU	FD7702MV
PE	SEIFERT, J.	OSU	FD7702MV
PE	SIMKINS, J.	OSU	FD7702MV
PE	SIMONS, J.	SIX	FD7702MV
PE	STILL, R.	OSU	FD7702MV
PE	WEARN, R.	UWA	FD7702MV
PE	WEST, N.	SIX	FD7702MV
PES	WHITWORTH, T.	TAM	FD7702MV

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

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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UNDERWAY DATA CURATOR - STUART SMITH (EXT.2752)

*** LOG BOOKS ***

1940	10	177		LBUM B	UNDERWAY WATCH LOG	GDC 33	200S	71 568W	F FD7702MV
1815	10	277		LBUM E	UNDERWAY WATCH LOG	GDC 56	46S	67 44W	F FD7702MV

*** FATHOGRAMS ***

1940	10	177		DPKT B	GDK 12 KHZ R-01	GDC 33	200S	71 568W	S FD7702MV
2325	12	177		DPRT E	GDK 12 KHZ R-01	GDC 40	533S	75 121W	S FD7702MV
2350	12	177		DPRT B	GDK 12 KHZ R-02	GDC 40	576S	75 125W	S FD7702MV
230	16	177		DPRT E	GDK 12 KHZ R-02	GDC 52	237S	75 150W	S FD7702MV
1755	18	177		DPKT B	GDK 12 KHZ R-03	GDC 55	565S	67 99W	S FD7702MV
100	20	177		DPKT E	GDK 12 KHZ R-03	GDC 56	476S	66 267W	S FD7702MV
120	20	177		DPRT B	GDK 12 KHZ R-04	GDC 56	474S	66 266W	S FD7702MV
255	23	177		DPRT E	GDK 12 KHZ R-04	GDC 60	535S	61 597W	S FD7702MV
305	23	177		DPRT B	GDK 12 KHZ R-05	GDC 60	550S	61 589W	S FD7702MV
1910	24	177		DPRT E	GDK 12 KHZ R-05	GDC 62	252S	60 234W	S FD7702MV
1940	10	177		DPR3 B	GDK 3.5 KHZ R-01	GDC 33	200S	71 568W	S FD7702MV
2325	12	177		DPR3 E	GDK 3.5 KHZ R-01	GDC 40	533S	75 121W	S FD7702MV
2350	12	177		DPR3 B	GDK 3.5 KHZ R-02	GDC 40	576S	75 125W	S FD7702MV
2000	14	177		DPR3 E	GDK 3.5 KHZ R-02	GDC 48	259S	76 9W	S FD7702MV
2010	14	177		DPR3 B	GDK 3.5 KHZ R-03	GDC 48	275S	76 12W	S FD7702MV
230	16	177		DPR3 E	GDK 3.5 KHZ R-03	GDC 52	237S	75 150W	S FD7702MV
1425	19	177		DPR3 B	GDK 3.5 KHZ R-04	GDC 56	364S	66 379W	S FD7702MV
30	21	177		DPR3 E	GDK 3.5 KHZ R-04	GDC 57	593S	65 146W	S FD7702MV
125	21	177		DPR3 B	GDK 3.5 KHZ R-05	GDC 58	6S	65 121W	S FD7702MV
735	23	177		DPR3 E	GDK 3.5 KHZ R-05	GDC 61	11S	61 562W	S FD7702MV
2215	25	177		DPR3 B	GDK 3.5 KHZ R-06	GDC 62	237S	60 274W	S FD7702MV
2104	28	177		DPR3 E	GDK 3.5 KHZ R-06	GDC 58	401S	66 460W	S FD7702MV
2106	28	177		DPR3 B	GDK 3.5 KHZ R-07	GDC 58	400S	66 459W	S FD7702MV
1920	31	177		DPR3 E	GDK 3.5 KHZ R-07	GDC 58	556S	64 71W	S FD7702MV

TIME		DATE	TIME	TZ	SAMP	DISP		28JUN77		PAGE	2
GMT	D.M.Y.	LUC	LOC	CODE	SAMPLE	IDENT.	CODE	LAT.	LONG.	CRUISE	LEG-SHIP
1945	31	177			DPR3	B GDR 3.5 KHZ R-08	GDC 58	557S	64 57W	S	FD7702MV
900	4	277			DPR3	E GDR 3.5 KHZ R-08	GDC 58	505S	64 419W	S	FD7702MV
905	4	277			DPR3	B GDR 3.5 KHZ R-09	GDC 58	505S	64 418W	S	FD7702MV
545	5	277			DPR3	E GDR 3.5 KHZ R-09	GDC 59	388S	63 516W	S	FD7702MV
600	5	277			DPR3	B GDR 3.5 KHZ R-10	GDC 59	388S	63 517W	S	FD7702MV
517	8	277			DPR3	E GDR 3.5 KHZ R-10	GDC 59	135S	62 201W	S	FD7702MV
519	8	277			DPR3	B GDR 3.5 KHZ R-11	GDC 59	135S	62 200W	S	FD7702MV
1815	10	277			DPR3	E GDR 3.5 KHZ R-11	GDC 56	15S	67 66W	S	FD7702MV
1940	10	177			MGR	B MAGNETICS R-01	GDC 33	200S	71 568W	S	FD7702MV
1751	10	277			MGR	E MAGNETICS R-01	GDC 56	46S	67 44W	S	FD7702MV

SALINITY, TEMPERATURE, DEPTH

1537	12	177			TDDT	TEST	1200M	S18	TAM 39	512S	75 64W	S	FD7702MV
557	19	177			TDDT	1	370M	S10	TAM 56	315S	67 9W	S	FD7702MV
121	20	177			TDDT	2D	3710M	S17	TAM 56	474S	66 266W	S	FD7702MV
608	20	177			TDDT	2S	500M	S14	TAM 56	461S	66 256W	S	FD7702MV
1243	20	177			TDDT	3D	3545M	S17	TAM 57	298S	65 445W	S	FD7702MV
1649	20	177			TDDT	3S	600M	S15	TAM 57	278S	65 421W	S	FD7702MV
213	21	177			TDDT	4D	2995M	S13	TAM 58	32S	65 98W	S	FD7702MV
520	21	177			TDDT	4S	500M	S15	TAM 58	22S	65 83W	S	FD7702MV
517	22	177			TDDT	5D	4125M	S18	TAM 59	446S	63 114W	S	FD7702MV
954	22	177			TDDT	5S	600M	S15	TAM 59	434S	63 117W	S	FD7702MV
2027	22	177			TDDT	6D	3555M	S16	TAM 60	470S	62 91W	S	FD7702MV
54	23	177			TDDT	6S	600M	S15	TAM 60	448S	62 98W	S	FD7702MV
1520	23	177			TDDT	7M	4775M	S10	TAM 61	342S	61 56W	S	FD7702MV
2001	23	177			TDDT	7D	4595M	S04	TAM 61	326S	61 46W	S	FD7702MV
2237	23	177			TDDT	7S	800M	S17	TAM 61	317S	61 37W	S	FD7702MV
351	24	177			TDDT	8	515M	S16	TAM 62	66S	60 380W	S	FD7702MV
1030	26	177			TDDT	CM 1	2000M	S 2	TAM 60	243S	61 8W	S	FD7702MV
1619	26	177			TDDT	CM 2	2000M	S 2	TAM 59	581S	60 587W	S	FD7702MV
2056	26	177			TDDT	9D	3865M	S17	TAM 59	331S	61 79W	S	FD7702MV
2335	26	177			TDDT	9S	600M	S16	TAM 59	337S	61 72W	S	FD7702MV
600	27	177			TDDT	10D	3795M	S18	TAM 59	194S	62 452W	S	FD7702MV
903	27	177			TDDT	10S	600M	S15	TAM 59	202S	62 443W	S	FD7702MV
1304	27	177			TDDT	11D	3805M	S18	TAM 59	115S	63 371W	S	FD7702MV
1630	27	177			TDDT	11S	600M	S16	TAM 59	100S	63 367W	S	FD7702MV
1842	27	177			TDDT	12D	3695M	S17	TAM 59	83S	63 541W	S	FD7702MV
2144	27	177			TDDT	12S	600M	S16	TAM 59	79S	63 550W	S	FD7702MV
2348	27	177			TDDT	13D	3695M	S17	TAM 59	53S	64 130W	S	FD7702MV
318	28	177			TDDT	13S	400M	S13	TAM 59	32S	64 123W	S	FD7702MV
747	28	177			TDDT	14D	3845M	S18	TAM 58	594S	65 56W	S	FD7702MV
1108	28	177			TDDT	14S	600M	S15	TAM 58	591S	65 58W	S	FD7702MV
1759	28	177			TDDT	15D	3095M	S14	TAM 58	402S	66 473W	S	FD7702MV
2056	28	177			TDDT	15S	600M	S17	TAM 58	401S	66 461W	S	FD7702MV
1150	29	177			TDDT	16D	3455M	S18	TAM 60	361S	64 493W	S	FD7702MV

TIME GMT	DATE D.M.Y.	TIME LOC	TZ LOC	SAMP CODE	SAMPLE IDENT.	DISP CODE	LAT.	LONG.	CRUISE LEG-SHIP
1507	29	177		TDDT	16S	450M S15	TAM 60 361S	64 491W	S FD7702MV
2200	29	177		TDDT	17D	2835M S14	TAM 59 444S	64 173W	S FD7702MV
30	30	177		TDDT	17S	500M S15	TAM 59 438S	64 159W	S FD7702MV
410	30	177		TDDT	18D	3745M S18	TAM 59 179S	63 585W	S FD7702MV
755	30	177		TDDT	18S	550M S15	TAM 59 158S	63 570W	S FD7702MV
1038	30	177		TDDT	19D	3910M S18	TAM 58 587S	63 494W	S FD7702MV
1437	30	177		TDDT	19S	600M S15	TAM 58 571S	63 467W	S FD7702MV
1812	30	177		TDDT	20D	3695M S16	TAM 58 319S	63 336W	S FD7702MV
2112	30	177		TDDT	20S	600M S15	TAM 58 316S	63 324W	S FD7702MV
318	31	177		TDDT	21D	3630M S18	TAM 57 408S	62 574W	S FD7702MV
632	31	177		TDDT	21S	400M S13	TAM 57 393S	62 524W	S FD7702MV
1647	2	277		TDDT	22D	3100M S14	TAM 60 151S	64 156W	S FD7702MV
1916	2	277		TDDT	22S	600M S15	TAM 60 141S	64 143W	S FD7702MV
2257	2	277		TDDT	23D	3415M S16	TAM 59 508S	64 401W	S FD7702MV
233	3	277		TDDT	23S	500M S15	TAM 59 494S	64 402W	S FD7702MV
628	3	277		TDDT	24D	2955M S15	TAM 59 264S	65 41W	S FD7702MV
845	3	277		TDDT	24S	600M S15	TAM 59 253S	65 34W	S FD7702MV
1217	3	277		TDDT	25D	2200M S12	TAM 59 34S	65 284W	S FD7702MV
1432	3	277		TDDT	25S	600M S14	TAM 59 24S	65 277W	S FD7702MV
1810	3	277		TDDT	26D	4285M S18	TAM 58 402S	65 548W	S FD7702MV
2108	3	277		TDDT	26S	600M S17	TAM 58 393S	65 512W	S FD7702MV
100	4	277		TDDT	27D	3345M S14	TAM 58 255S	65 77W	S FD7702MV
400	4	277		TDDT	27S	700M S16	TAM 58 243S	65 77W	S FD7702MV
832	4	277		TDDT	28D	3715M S18	TAM 58 507S	64 421W	S FD7702MV
1205	4	277		TDDT	28S	550M S15	TAM 58 501S	64 398W	S FD7702MV
1432	4	277		TDDT	29D	3600M S16	TAM 59 40S	64 294W	S FD7702MV
1715	4	277		TDDT	29S	500M S14	TAM 59 42S	64 290W	S FD7702MV
1920	4	277		TDDT	30D	3630M S16	TAM 59 147S	64 162W	S FD7702MV
2210	4	277		TDDT	30S	500M S14	TAM 59 145S	64 146W	S FD7702MV
21	5	277		TDDT	31D	3340M S16	TAM 59 275S	64 52W	S FD7702MV
317	5	277		TDDT	31S	700M S14	TAM 59 270S	64 43W	S FD7702MV
550	5	277		TDDT	32D	3460M S18	TAM 59 388S	63 517W	S FD7702MV
843	5	277		TDDT	32S	500M S12	TAM 59 393S	63 513W	S FD7702MV
1050	5	277		TDDT	33D	3970M S18	TAM 59 325S	63 301W	S FD7702MV
1430	5	277		TDDT	33S	530M S14	TAM 59 319S	63 296W	S FD7702MV
1649	5	277		TDDT	34D	3725M S18	TAM 59 204S	63 408W	S FD7702MV
1950	5	277		TDDT	34S	500M S15	TAM 59 203S	63 380W	S FD7702MV
2202	5	277		TDDT	35D	3720M S18	TAM 59 92S	63 536W	S FD7702MV
108	6	277		TDDT	35S	600M S16	TAM 59 89S	63 516W	S FD7702MV
345	6	277		TDDT	36D	3690M S18	TAM 58 564S	64 72W	S FD7702MV
647	6	277		TDDT	36S	550M S14	TAM 58 569S	64 55W	S FD7702MV
909	6	277		TDDT	37D	3760M S17	TAM 58 446S	64 184W	S FD7702MV
1208	6	277		TDDT	37S	600M S15	TAM 58 447S	64 154W	S FD7702MV
1420	6	277		TDDT	38D	3680M S18	TAM 58 390S	63 572W	S FD7702MV
1743	6	277		TDDT	38S	600M S15	TAM 58 388S	63 548W	S FD7702MV
2055	6	277		TDDT	39D	3840M S18	TAM 58 536S	63 387W	S FD7702MV
2210	6	277		TDDT	39S	600M S15	TAM 58 532S	63 389W	S FD7702MV
220	7	277		TDDT	40D	3840M S18	TAM 59 27S	63 318W	S FD7702MV
539	7	277		TDDT	40S	550M S14	TAM 59 33S	63 283W	S FD7702MV
805	7	277		TDDT	41D	3560M S18	TAM 59 145S	63 175W	S FD7702MV
1104	7	277		TDDT	41S	450M S12	TAM 59 142S	63 151W	S FD7702MV
1310	7	277		TDDT	42D	3750M S18	TAM 59 250S	63 79W	S FD7702MV

TIME GMT	DATE D.M.Y.	TIME LOC	TZ LOC	SAMP CODE	SAMPLE IDENT.	DISP CODE	LAT.	LONG.	CRUISE LEG-SHIP
1704	7	277		TDDT	42S	500M S15	TAM 59 254S	63 63W	S FD7702MV
2217	7	277		TDDT	430	3940M S18	TAM 59 366S	61 561W	S FD7702MV
133	8	277		TDDT	43S	500M S15	TAM 59 365S	61 563W	S FD7702MV
503	8	277		TDDT	440	3870M S18	TAM 59 135S	62 201W	S FD7702MV
912	8	277		TDDT	44S	500M S14	TAM 59 130S	62 211W	S FD7702MV
1245	8	277		TDDT	450	3740M S18	TAM 58 501S	62 454W	S FD7702MV
1615	8	277		TDDT	45S	600M S16	TAM 58 496S	62 442W	S FD7702MV
2040	8	277		TDDT	460	3600M S17	TAM 58 210S	63 125W	S FD7702MV
2343	8	277		TDDT	46S	600M S15	TAM 58 203S	63 132W	S FD7702MV
307	9	277		TDDT	470	3890M S18	TAM 58 13S	63 344W	S FD7702MV
623	9	277		TDDT	47S	500M S15	TAM 58 14S	63 361W	S FD7702MV
1326	9	277		TDDT	48	2100M S20	TAM 57 588S	65 147W	S FD7702MV

HYDROGRAPHIC CAST

TIME GMT	DATE D.M.Y.	TIME LOC	TZ LOC	SAMP CODE	SAMPLE IDENT.	DISP CODE	LAT.	LONG.	CRUISE LEG-SHIP
1638	12	177		HCNA	TSO	TEST	TAM 39 516S	75 68W	S FD7702MV
624	19	177		HCNA	TSO	1	TAM 56 313S	66 599W	S FD7702MV
245	20	177		HCNA	TSO	20	TAM 56 467S	66 267W	S FD7702MV
638	20	177		HCNA	TSO	25	TAM 56 462S	66 256W	S FD7702MV
1455	20	177		HCNA	TSO	30	TAM 57 287S	65 433W	S FD7702MV
1719	20	177		HCNA	TSO	35	TAM 57 275S	65 412W	S FD7702MV
344	21	177		HCNA	TSO	40	TAM 58 30S	65 91W	S FD7702MV
551	21	177		HCNA	TSO	45	TAM 58 18S	65 76W	S FD7702MV
728	22	177		HCNA	TSO	50	TAM 59 444S	63 114W	S FD7702MV
1020	22	177		HCNA	TSO	55	TAM 59 433S	63 116W	S FD7702MV
2228	22	177		HCNA	TSO	60	TAM 60 462S	62 99W	S FD7702MV
121	23	177		HCNA	TSO	65	TAM 60 447S	62 85W	S FD7702MV
414	23	177		HCNA	TSO	0	TAM 60 568S	62 9W	S FD7702MV
1712	23	177		HCNA	TSO	7M	TAM 61 330S	61 51W	S FD7702MV
2056	23	177		HCNA	TSO	70	TAM 61 323S	61 47W	S FD7702MV
2306	23	177		HCNA	TSO	7S	TAM 61 315S	61 31W	S FD7702MV
421	24	177		HCNA	TSO	8	TAM 62 66S	60 387W	S FD7702MV
2200	26	177		HCNA	TSO	90	TAM 59 333S	61 81W	S FD7702MV
0	27	177		HCNA	TSO	9S	TAM 59 339S	61 66W	S FD7702MV
725	27	177		HCNA	TSO	100	TAM 59 196S	62 442W	S FD7702MV
932	27	177		HCNA	TSO	10S	TAM 59 204S	62 444W	S FD7702MV
1439	27	177		HCNA	TSO	110	TAM 59 107S	63 361W	S FD7702MV
1659	27	177		HCNA	TSO	11S	TAM 59 96S	63 369W	S FD7702MV
1959	27	177		HCNA	TSO	120	TAM 59 80S	63 554W	S FD7702MV
2211	27	177		HCNA	TSO	12S	TAM 59 77S	63 547W	S FD7702MV
113	28	177		HCNA	TSO	130	TAM 59 41S	64 127W	S FD7702MV
343	28	177		HCNA	TSO	13S	TAM 59 32S	64 127W	S FD7702MV
913	28	177		HCNA	TSO	140	TAM 58 590S	65 52W	S FD7702MV
1135	28	177		HCNA	TSO	14S	TAM 58 592S	65 56W	S FD7702MV
1908	28	177		HCNA	TSO	150	TAM 58 400S	66 470W	S FD7702MV
2120	28	177		HCNA	TSO	15S	TAM 58 400S	66 457W	S FD7702MV
1321	29	177		HCNA	TSO	160	TAM 60 359S	64 468W	S FD7702MV
1535	29	177		HCNA	TSO	16S	TAM 60 362S	64 489W	S FD7702MV
2258	29	177		HCNA	TSO	170	TAM 59 442S	64 165W	S FD7702MV
52	30	177		HCNA	TSO	17S	TAM 59 437S	64 157W	S FD7702MV

TIME GMT	DATE D.M.Y.	TIME LOC	TZ LOC	SAMP CODE	SAMPLE IDENT.	DISP CODE	LAT.	LONG.	CRUISE LEG-SHIP
606	30	177		HCNA	TSO	18D	TAM 59 172S	63 572W	S FD7702MV
820	30	177		HCNA	TSO	18S	TAM 59 156S	63 566W	S FD7702MV
1234	30	177		HCNA	TSO	19D	TAM 58 575S	63 478W	S FD7702MV
1505	30	177		HCNA	TSO	19S	TAM 58 569S	63 462W	S FD7702MV
1925	30	177		HCNA	TSO	20D	TAM 58 317S	63 328W	S FD7702MV
2138	30	177		HCNA	TSO	20S	TAM 58 315S	63 322W	S FD7702MV
449	31	177		HCNA	TSO	21D	TAM 57 400S	62 545W	S FD7702MV
653	31	177		HCNA	TSO	21S	TAM 57 391S	62 522W	S FD7702MV
1755	2	277		HCNA	TSO	22D	TAM 60 145S	64 155W	S FD7702MV
1942	2	277		HCNA	TSO	22S	TAM 60 140S	64 139W	S FD7702MV
20	3	277		HCNA	TSO	23D	TAM 59 502S	64 400W	S FD7702MV
303	3	277		HCNA	TSO	23S	TAM 59 491S	64 393W	S FD7702MV
727	3	277		HCNA	TSO	24D	TAM 59 259S	65 37W	S FD7702MV
913	3	277		HCNA	TSO	24S	TAM 59 250S	65 33W	S FD7702MV
1322	3	277		HCNA	TSO	25D	TAM 59 28S	65 280W	S FD7702MV
1459	3	277		HCNA	TSU	25S	TAM 59 22S	65 275W	S FD7702MV
1926	3	277		HCNA	TSO	26D	TAM 58 389S	65 537W	S FD7702MV
2131	3	277		HCNA	TSU	26S	TAM 58 394S	65 507W	S FD7702MV
224	4	277		HCNA	TSO	27D	TAM 58 247S	65 75W	S FD7702MV
430	4	277		HCNA	TSO	27S	TAM 58 241S	65 80W	S FD7702MV
1030	4	277		HCNA	TSO	28D	TAM 58 500S	64 412W	S FD7702MV
1230	4	277		HCNA	TSO	28S	TAM 58 501S	64 397W	S FD7702MV
1543	4	277		HCNA	TSU	29D	TAM 59 41S	64 290W	S FD7702MV
1736	4	277		HCNA	TSO	29S	TAM 59 42S	64 291W	S FD7702MV
2033	4	277		HCNA	TSO	30D	TAM 59 149S	64 156W	S FD7702MV
2228	4	277		HCNA	TSO	30S	TAM 59 144S	64 145W	S FD7702MV
143	5	277		HCNA	TSU	31D	TAM 59 273S	64 49W	S FD7702MV
349	5	277		HCNA	TSO	31S	TAM 59 269S	64 41W	S FD7702MV
708	5	277		HCNA	TSO	32D	TAM 59 390S	63 517W	S FD7702MV
903	5	277		HCNA	TSO	32S	TAM 59 394S	63 511W	S FD7702MV
1231	5	277		HCNA	TSO	33D	TAM 59 324S	63 299W	S FD7702MV
1453	5	277		HCNA	TSO	33S	TAM 59 315S	63 295W	S FD7702MV
1807	5	277		HCNA	TSO	34D	TAM 59 203S	63 393W	S FD7702MV
2010	5	277		HCNA	TSO	34S	TAM 59 203S	63 378W	S FD7702MV
2325	5	277		HCNA	TSO	35D	TAM 59 91S	63 531W	S FD7702MV
138	6	277		HCNA	TSO	35S	TAM 59 88S	63 510W	S FD7702MV
506	6	277		HCNA	TSO	36D	TAM 58 568S	64 59W	S FD7702MV
707	6	277		HCNA	TSO	36S	TAM 58 569S	64 53W	S FD7702MV
1021	6	277		HCNA	TSO	37D	TAM 58 445S	64 171W	S FD7702MV
1232	6	277		HCNA	TSO	37S	TAM 58 447S	64 150W	S FD7702MV
1547	6	277		HCNA	TSO	38D	TAM 58 391S	63 563W	S FD7702MV
1822	6	277		HCNA	TSO	38S	TAM 58 388S	63 544W	S FD7702MV
2213	6	277		HCNA	TSO	39D	TAM 58 532S	63 389W	S FD7702MV
33	7	277		HCNA	TSO	39S	TAM 58 532S	63 384W	S FD7702MV
341	7	277		HCNA	TSO	40D	TAM 59 32S	63 293W	S FD7702MV
559	7	277		HCNA	TSO	40S	TAM 59 34S	63 278W	S FD7702MV
920	7	277		HCNA	TSO	41D	TAM 59 144S	63 164W	S FD7702MV
1124	7	277		HCNA	TSO	41S	TAM 59 141S	63 149W	S FD7702MV
1444	7	277		HCNA	TSO	42D	TAM 59 252S	63 79W	S FD7702MV
1727	7	277		HCNA	TSO	42S	TAM 59 256S	63 64W	S FD7702MV
2342	7	277		HCNA	TSO	43D	TAM 59 366S	61 570W	S FD7702MV
256	8	277		HCNA	TSO	43S	TAM 59 312S	62 18W	S FD7702MV

TIME GMT	DATE D.M.Y.	TIME LOC	TZ LOC	SAMP CODE	SAMPLE IDENT.	DISP CODE	LAT.	LONG.	CRUISE LEG-SHIP
637	8	277		HCNA	TSO	44D	TAM 59 133S	62 204W	S FD7702MV
939	8	277		HCNA	TSO	44S	TAM 59 129S	62 210W	S FD7702MV
1423	8	277		HCNA	TSO	45D	TAM 58 497S	62 449W	S FD7702MV
1644	8	277		HCNA	TSO	45S	TAM 58 494S	62 442W	S FD7702MV
2154	8	277		HCNA	TSO	46D	TAM 58 208S	63 129W	S FD7702MV
6	9	277		HCNA	TSO	46S	TAM 58 200S	63 130W	S FD7702MV
440	9	277		HCNA	TSO	47D	TAM 58 12S	63 347W	S FD7702MV
707	9	277		HCNA	TSO	47S	TAM 58 13S	63 364W	S FD7702MV
1430	9	277		HCNA	TSO	48	TAM 57 583S	65 148W	S FD7702MV

CURRENT MEASUREMENT

2045	19	177		CMAB E	D	RECOVER	OSU 57 15	66 70W	S FD7702MV
1905	21	177		CMAB E	19	RECOVER	OSU 59 101S	64 54W	S FD7702MV
2200	21	177		CMAB E	A	RECOVER	OSU 59 64S	63 508W	S FD7702MV
100	22	177		CMAB E	76	RECOVER	OSU 59 32S	63 264W	S FD7702MV
1718	22	177		CMAB E	K	RECOVER	OSU 60 232S	62 387W	S FD7702MV
1010	23	177		CMAB E	E	RECOVER	OSU 61 26S	61 537W	S FD7702MV
2155	31	177		CMAB B	NORTH	DROP	OSU 58 554S	64 70W	S FD7702MV
239	1	277		CMAB B	EAST	DROP	OSU 59 29S	63 388W	S FD7702MV
1504	1	277		CMAB B	SOUTH	DROP	OSU 59 129S	63 443W	S FD7702MV
2016	1	277		CMAB B	CENTRAL	DROP	OSU 59 64S	63 505W	S FD7702MV
840	2	277		CMAB B	WEST	DROP	OSU 59 165S	64 303W	S FD7702MV
1739	18	177		CMTG E	CAPE HORN	RCVD	OSU 55 564S	67 103W	S FD7702MV
516	19	177		CMTG B	1(PRESSURE)	DROP	UWA 56 323S	67 8W	S FD7702MV
930	19	177		CMTG E	BLUE(PRESSURE)	REVD	UWA 56 317S	66 564W	S FD7702MV
1342	19	177		CMTG B	WHITE(PRESSURE)	RCVD	UWA 56 334S	66 403W	S FD7702MV
757	24	177		CMTG E	RED(PRESSURE)	RCVD	UWA 62 75S	60 367W	S FD7703MV
1132	24	177		CMTG B	2(PRESSURE)	DROP	UWA 62 57S	60 350W	S FD7702MV
1736	24	177		CMTG E	HERD BAY	RCVD	OSU 62 282S	60 266W	S FD7702MV

*** BATHY THERMOGRAPH ***

0	14	177		BTX	NO. OF SAMPLES	2	TAM 44 596S	75 539W	S FD7702MV
0	15	177		BTX	NO. OF SAMPLES	5	TAM 48 586S	76 137W	S FD7702MV
0	18	177		BTX	NO. OF SAMPLES	1	TAM 55 588S	68 193W	S FD7702MV
0	19	177		BTX	NO. OF SAMPLES	3	TAM 56 301S	67 28W	S FD7702MV
0	20	177		BTX	NO. OF SAMPLES	8	TAM 56 479S	66 274W	S FD7702MV
0	21	177		BTX	NO. OF SAMPLES	7	TAM 57 589S	65 143W	S FD7702MV
0	22	177		BTX	NO. OF SAMPLES	9	TAM 59 25S	63 311W	S FD7702MV
0	23	177		BTX	NO. OF SAMPLES	5	TAM 60 455S	62 103W	S FD7702MV

TIME GMT	DATE D.M.Y.	TIME LOC	TZ LOC	SAMP. CODE	SAMPLE IDENT.	DISP CODE	LAT.	LONG.	CRUISE LEG-SHIP
0 24	177			BTX	NO. OF SAMPLES	2	TAM 61 347S	60 595W	S FD7702MV
0 26	177			BTX	NO. OF SAMPLES	13	TAM 62 72S	60 402W	S FD7702MV
0 28	177			BTX	NO. OF SAMPLES	8	TAM 59 50S	64 129W	S FD7702MV
0 29	177			BTX	NO. OF SAMPLES	16	TAM 58 583S	66 235W	S FD7702MV
0 30	177			BTX	NO. OF SAMPLES	4	TAM 59 440S	64 157W	S FD7702MV
0 31	177			BTX	NO. OF SAMPLES	10	TAM 58 128S	63 197W	S FD7702MV
0 10	277			BTX	NO. OF SAMPLES	5	TAM 57 587S	65 23W	S FD7702MV

BUCKET WATER SAMPLE SURFACE TEMPERATURE

0 14	177			BKST	NO. OF SAMPLES	2	TAM 44 596S	75 539W	S FD7702MV
0 15	177			BKST	NO. OF SAMPLES	5	TAM 48 586S	76 137W	S FD7702MV
0 18	177			BKST	NO. OF SAMPLES	2	TAM 55 588S	68 193W	S FD7702MV
0 19	177			BKST	NO. OF SAMPLES	3	TAM 56 301S	67 26W	S FD7702MV
0 20	177			BKST	NO. OF SAMPLES	9	TAM 56 479S	66 274W	S FD7702MV
0 21	177			BKST	NO. OF SAMPLES	6	TAM 57 589S	65 143W	S FD7702MV
0 22	177			BKST	NO. OF SAMPLES	9	TAM 59 25S	63 311W	S FD7702MV
0 23	177			BKST	NO. OF SAMPLES	5	TAM 60 455S	62 103W	S FD7702MV
0 24	177			BKST	NO. OF SAMPLES	2	TAM 61 347S	60 595W	S FD7702MV
0 26	177			BKST	NO. OF SAMPLES	13	TAM 62 72S	60 402W	S FD7702MV
0 27	177			BKST	NO. OF SAMPLES	6	TAM 59 339S	61 66W	S FD7702MV
0 28	177			BKST	NO. OF SAMPLES	8	TAM 59 50S	64 129W	S FD7702MV
0 29	177			BKST	NO. OF SAMPLES	16	TAM 58 583S	66 235W	S FD7702MV
0 30	177			BKST	NO. OF SAMPLES	4	TAM 59 440S	64 157W	S FD7702MV
0 31	177			BKST	NO. OF SAMPLES	10	TAM 58 128S	63 197W	S FD7702MV
0 10	277			BKST	NO. OF SAMPLES	5	TAM 57 587S	65 23W	S FD7702MV

SURFACE SAMPLE

0 14	177			SSSA	NO. OF SAMPLES	2	TAM 44 596S	75 539W	S FD7702MV
0 15	177			SSSA	NO. OF SAMPLES	5	TAM 48 586S	76 137W	S FD7702MV
0 18	177			SSSA	NO. OF SAMPLES	2	TAM 55 588S	68 193W	S FD7702MV
0 19	177			SSSA	NO. OF SAMPLES	3	TAM 56 301S	67 28W	S FD7702MV
0 20	177			SSSA	NO. OF SAMPLES	9	TAM 56 479S	66 274W	S FD7702MV
0 21	177			SSSA	NO. OF SAMPLES	6	TAM 57 589S	65 143W	S FD7702MV
0 22	177			SSSA	NO. OF SAMPLES	9	TAM 59 25S	63 311W	S FD7702MV
0 23	177			SSSA	NO. OF SAMPLES	5	TAM 60 455S	62 103W	S FD7702MV
0 24	177			SSSA	NO. OF SAMPLES	2	TAM 61 347S	60 595W	S FD7702MV
0 26	177			SSSA	NO. OF SAMPLES	13	TAM 62 72S	60 402W	S FD7702MV
0 27	177			SSSA	NO. OF SAMPLES	6	TAM 59 339S	61 66W	S FD7702MV
0 28	177			SSSA	NO. OF SAMPLES	8	TAM 59 50S	64 129W	S FD7702MV
0 29	177			SSSA	NO. OF SAMPLES	16	TAM 58 583S	66 235W	S FD7702MV
0 30	177			SSSA	NO. OF SAMPLES	4	TAM 59 440S	64 157W	S FD7702MV
0 31	177			SSSA	NO. OF SAMPLES	10	TAM 58 128S	63 197W	S FD7702MV
0 10	277			SSSA	NO. OF SAMPLES	5	TAM 57 587S	65 23W	S FD7702MV

TIME	DATE	TIME	TZ	SAMP	DISP							PAGE	B
GMT	D.M.Y.	LOC	LOC	CODE	CODE	LAT.	LONG.	LEG	SHIP				

OPEN NET

500	18	177		ONIM B	5050	30	0 1	MIC 55	568S	67	50W S	FD7702MV	
525	18	177		ONIM E	5050	30	0 1	MIC 55	577S	67	57W S	FD7702MV	

9900

END SAMPLE INDEX

FD7702MV