

EURYDICE EXPEDITION

LEG 4

R/V THOMAS WASHINGTON

INFORMAL REPORT AND INDEX OF  
NAVIGATION, DEPTH, MAGNETIC AND SUBBOTTOM PROFILER DATA

Noumea, New Caledonia (5 December 1974)

to

Singapore (22 December 1974)

Chief Scientist - M. Rottman

Resident Marine Tech - M. Hausman

Post-Cruise Processing by - S. Smith, U. Albright,

G. Psaropoulos, R. Lingley

Prepared by

Underway Data Processing Group

S.I.O. Geological Data Center

Scripps Institution of Oceanography

La Jolla, California

January 31, 1975

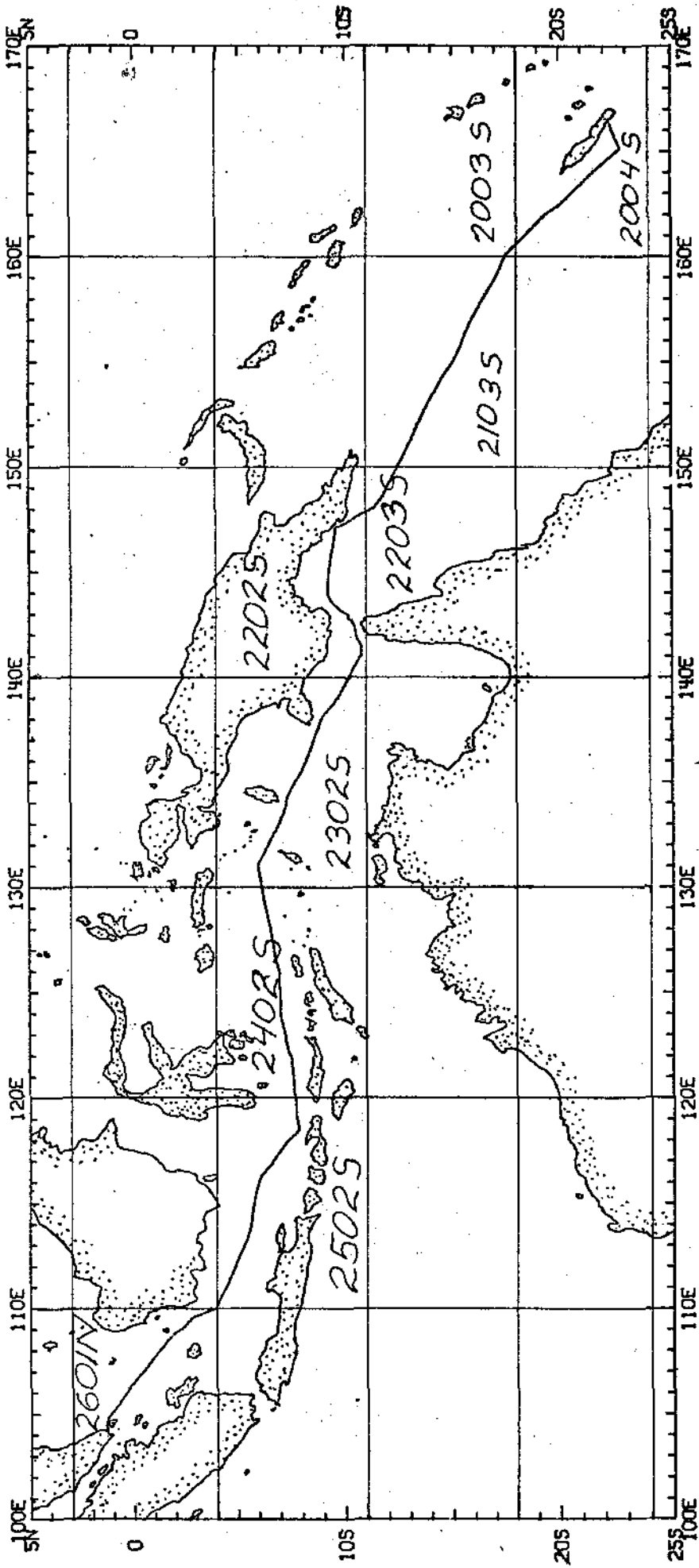
## Preliminary Report and Index of Navigation, Depth, Magnetic and Subbottom Profiler Data

### 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 T. E. Chase, Curator, Geological Data Center, Scripps Institution of Oceanography, La Jolla, California 92037 (452-2182):

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).
  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
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EURYDICE EXPEDITION

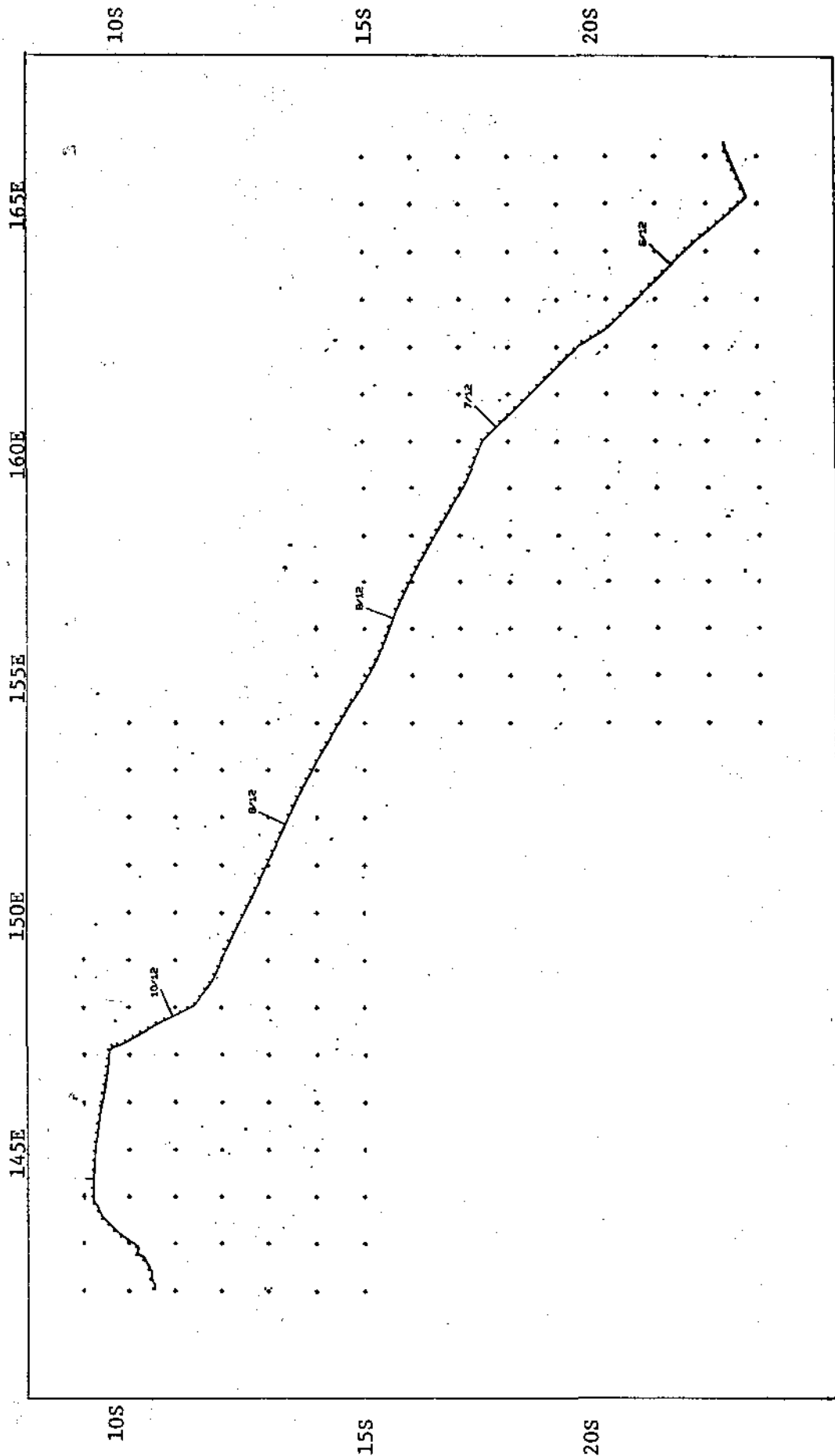
Leg 4

Chief Scientist - M. Rottman

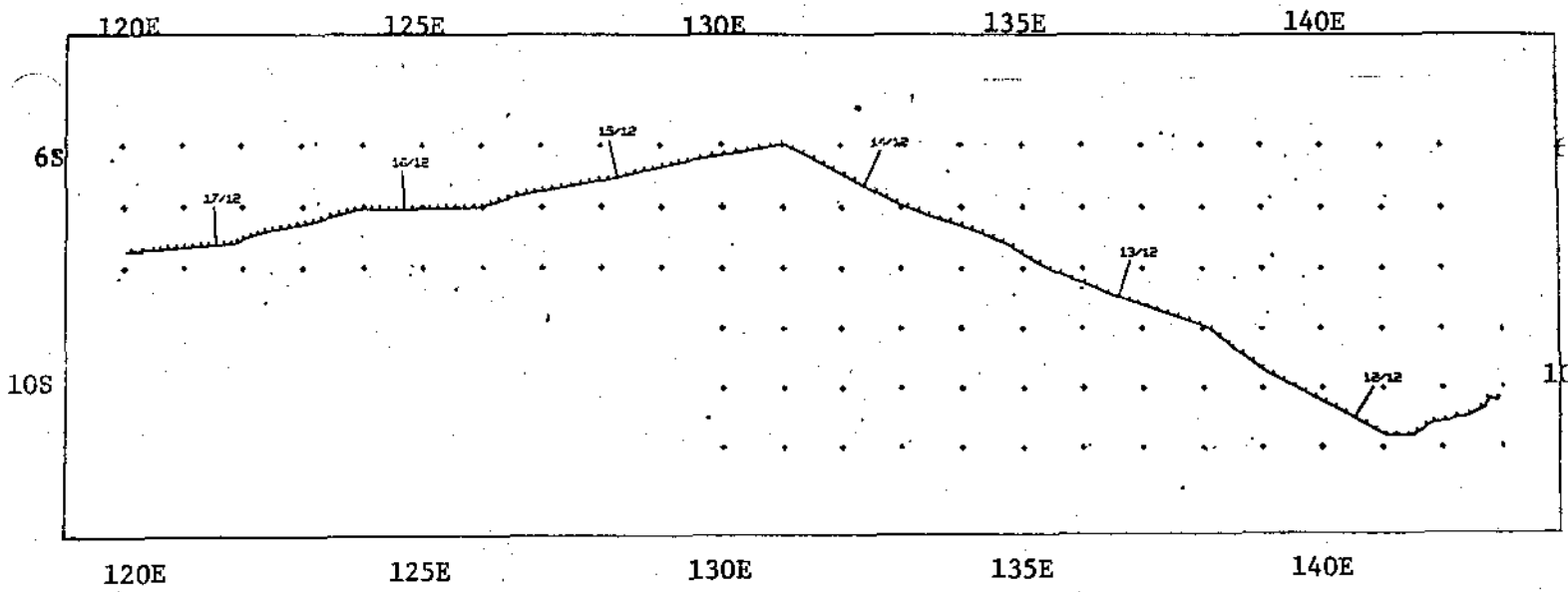
Noumea, New Caledonia - Singapore (5 December - 22 December 1974)

TOTAL MILEAGE

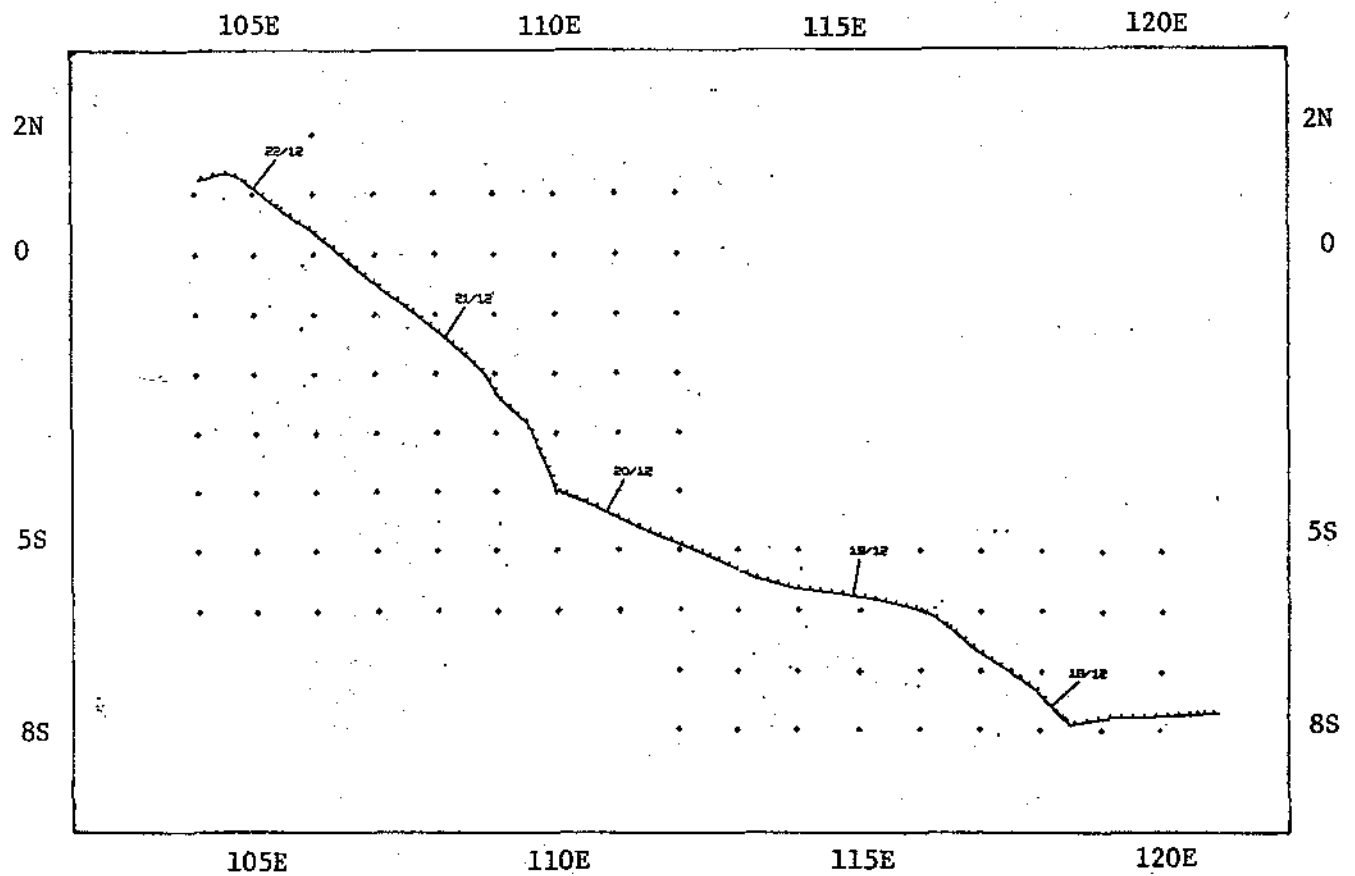
- 1) Cruise - 4313 miles
- 2) Bathymetry - 4083 miles
- 3) Magnetics - 3888 miles
- 4) Seismic Reflection - 3110 miles



EURYDICE EXPEDITION Leg 4 (1 of 3)

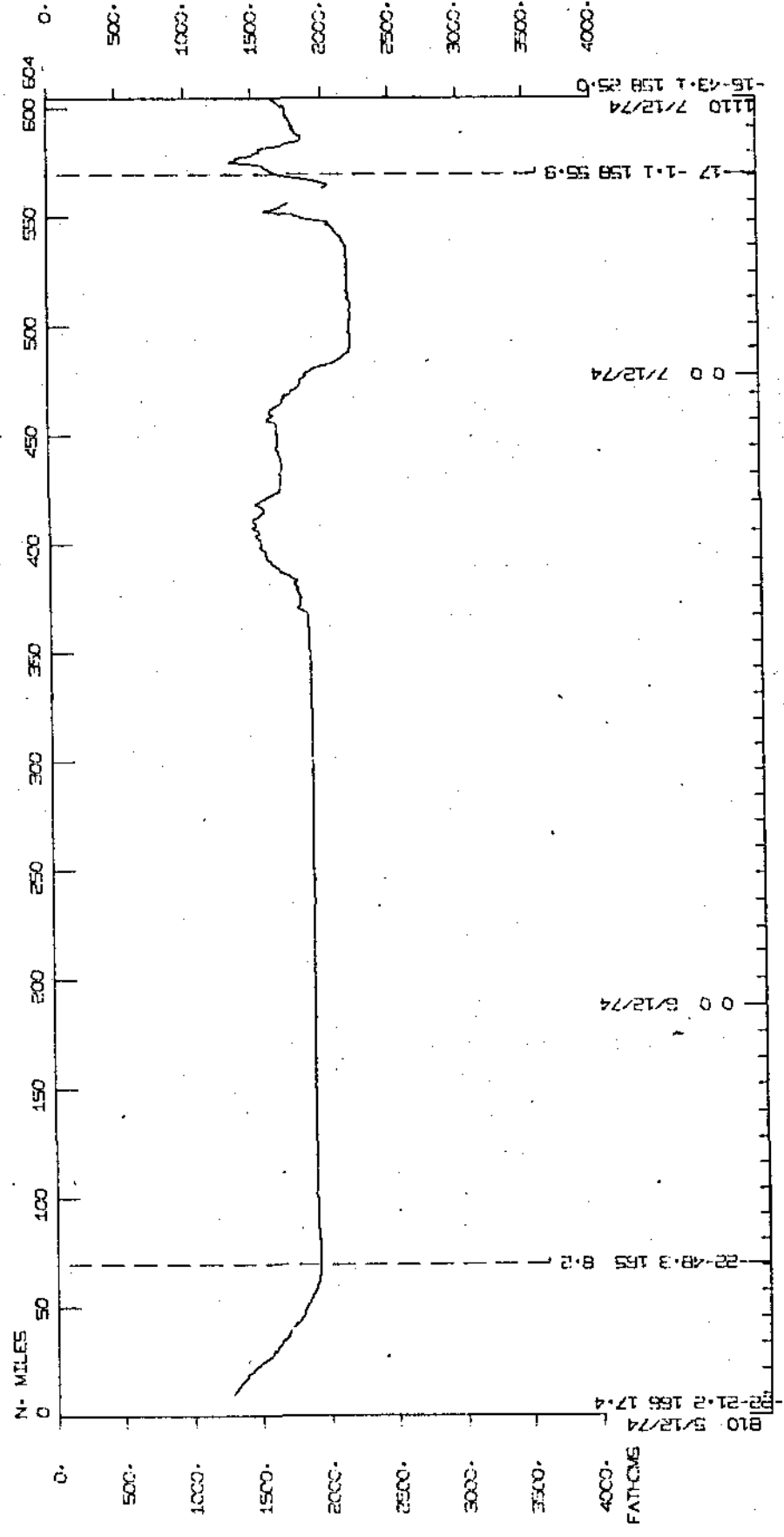
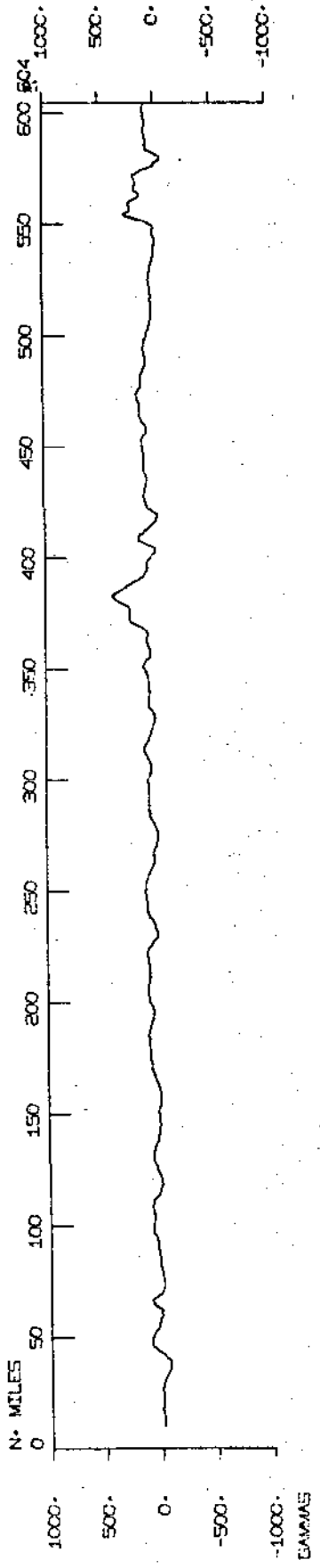


EURYDICE EXPEDITION Leg 4 Track Plot (2 of 3)



EURYDICE EXPEDITION Leg 4 Track Plot (3 of 3)

# EURYOICE LEG 4



1110 7/12/74  
15-43.1 158 25.0

17 -1.1 158 26.9

0 0 7/12/74

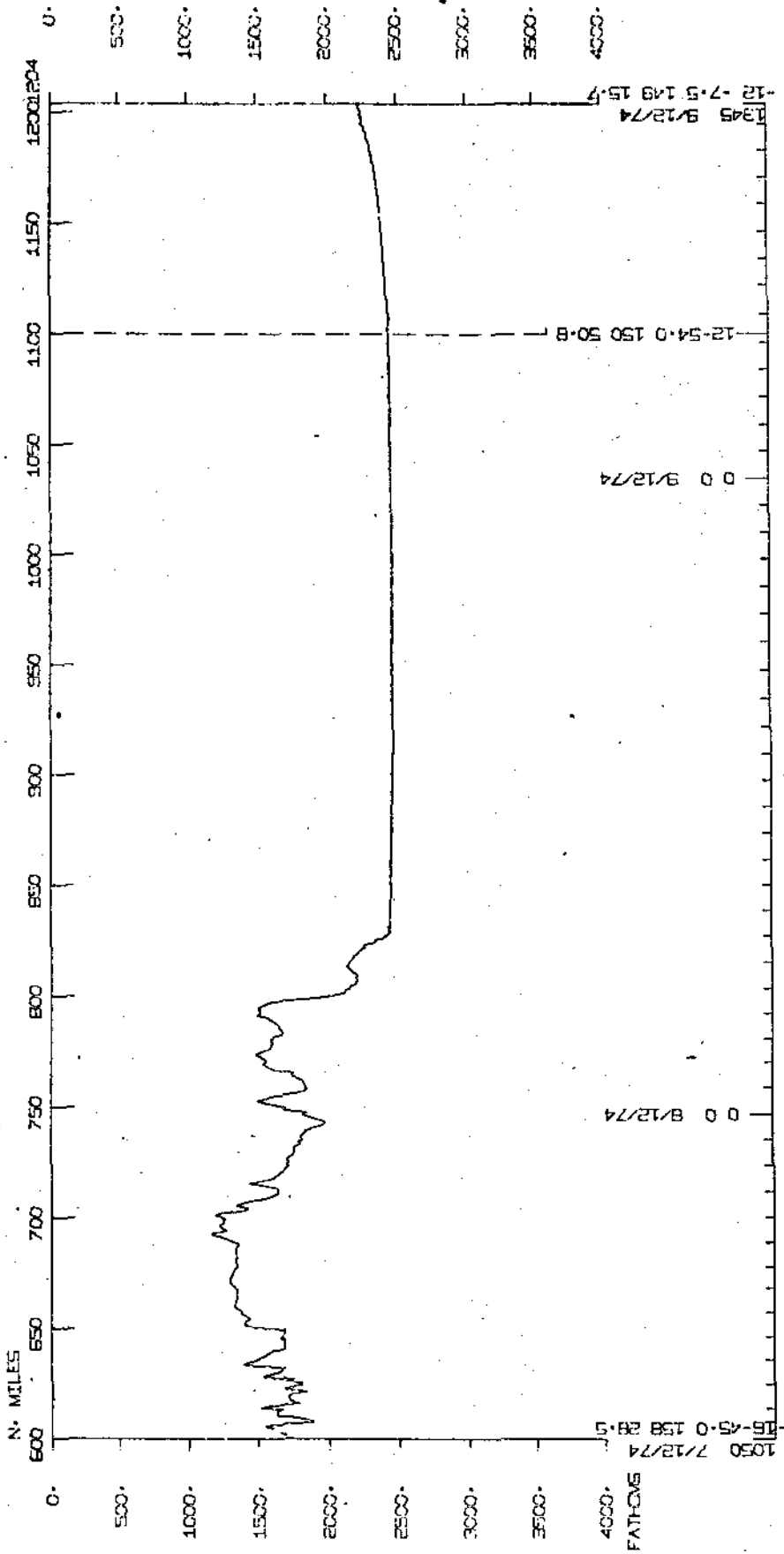
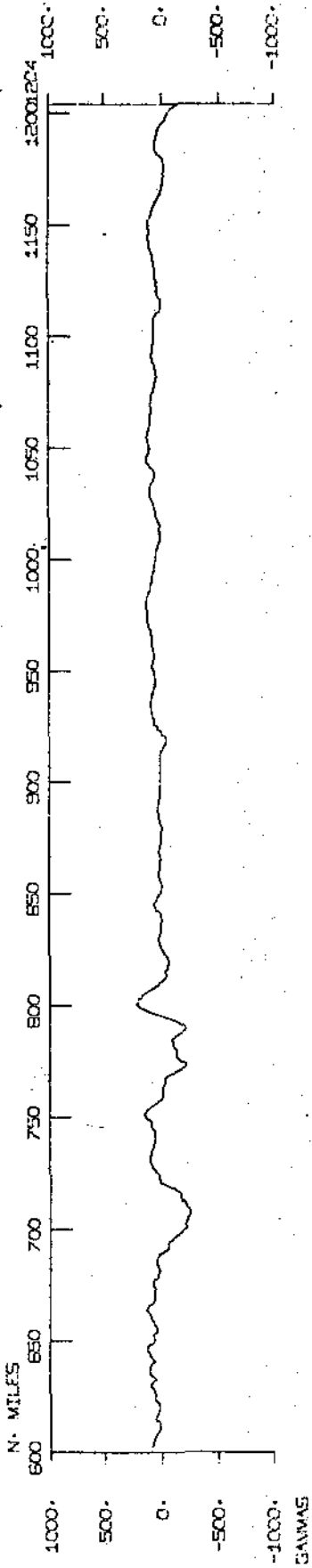
0 0 6/12/74

22-48.3 155 8.2

810 5/12/74  
21-21.2 166 17.4



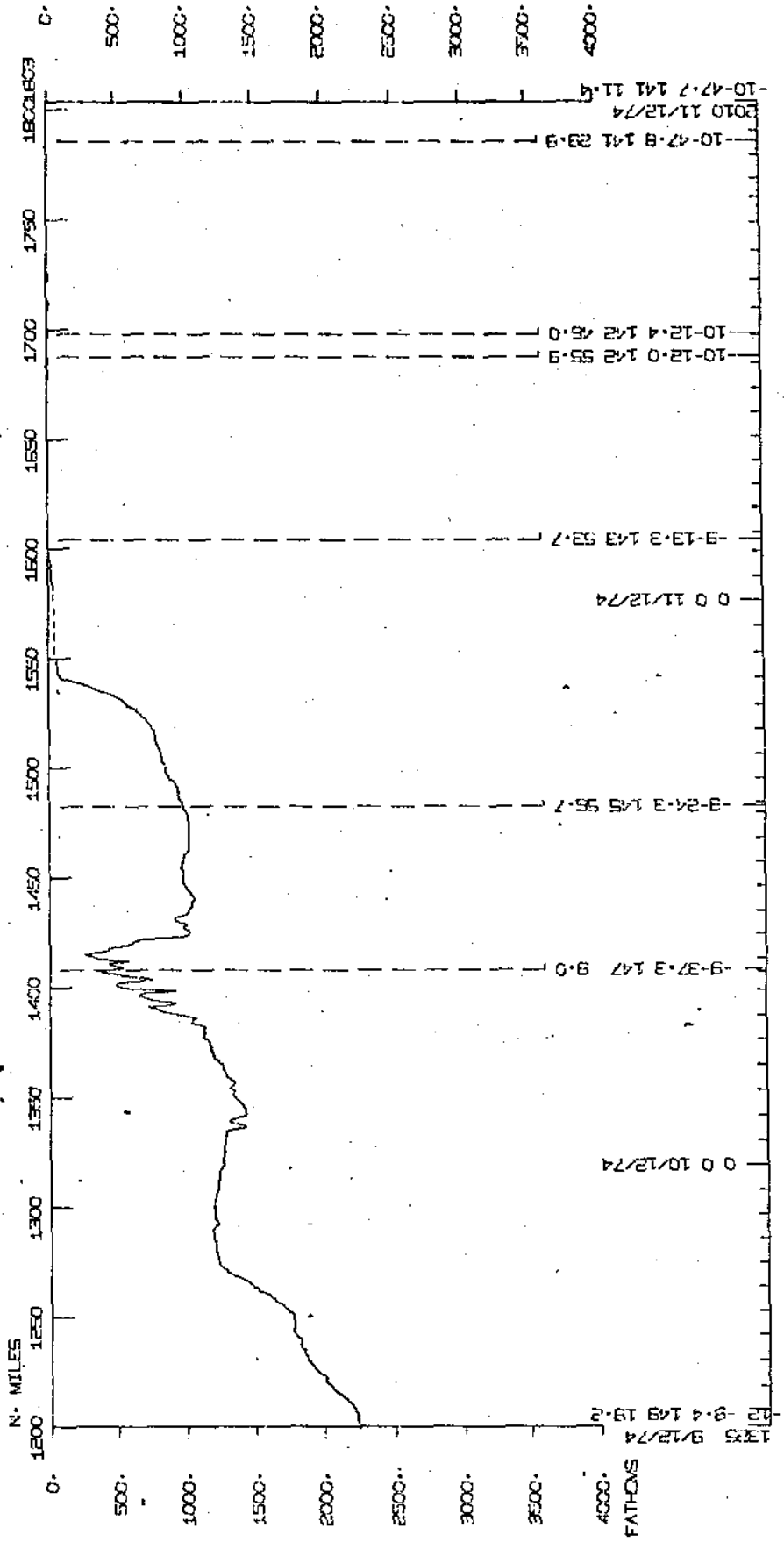
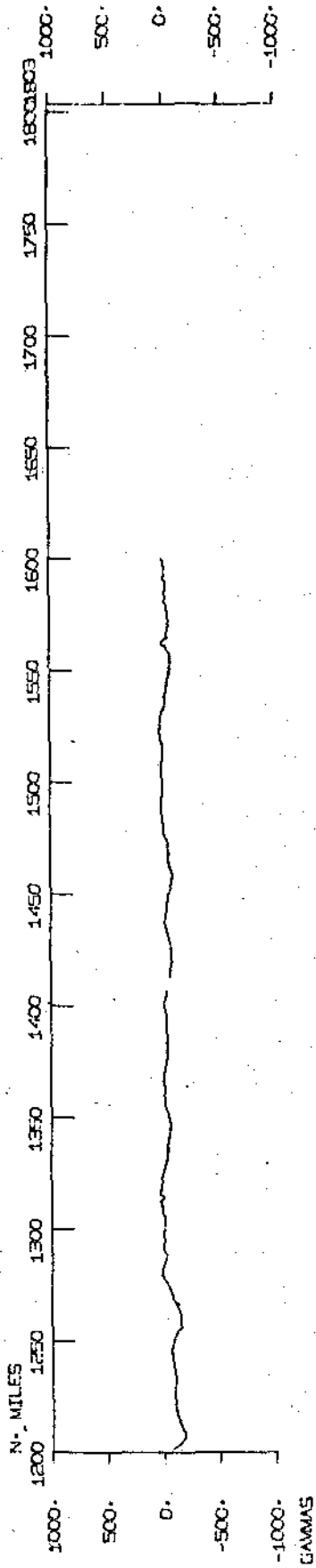
# EURYDICE LEG 4



1050 7/12/74  
 15-5-0 158 28.5  
 00 8/12/74  
 00 9/12/74  
 12-54.0 150 50.8  
 1345 9/12/74  
 12-7.5 149 15.7

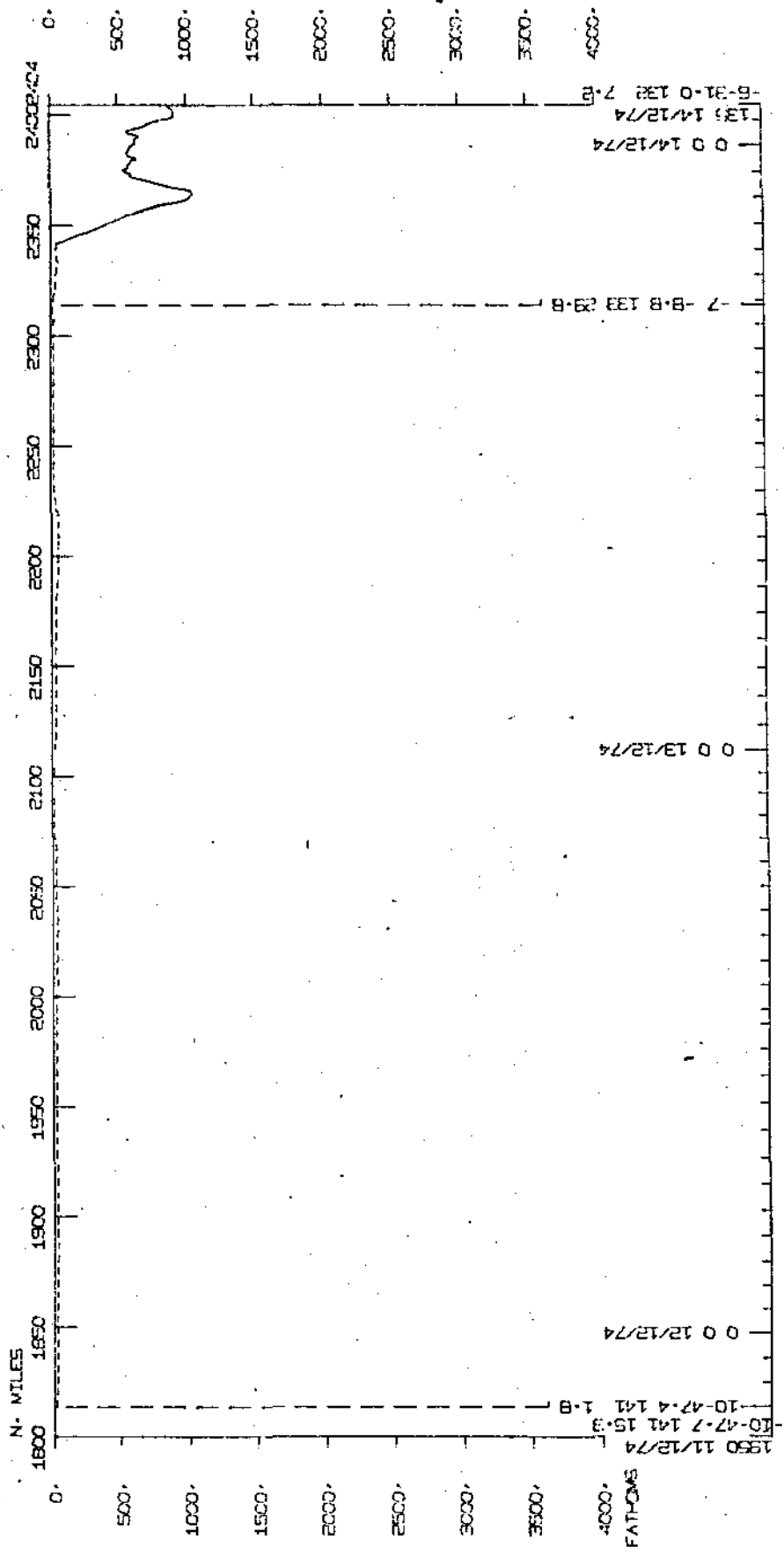
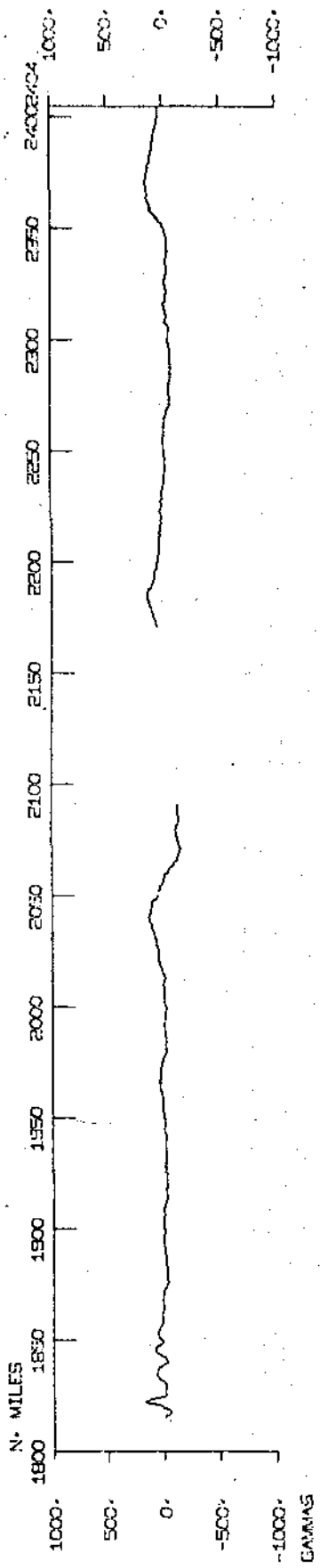


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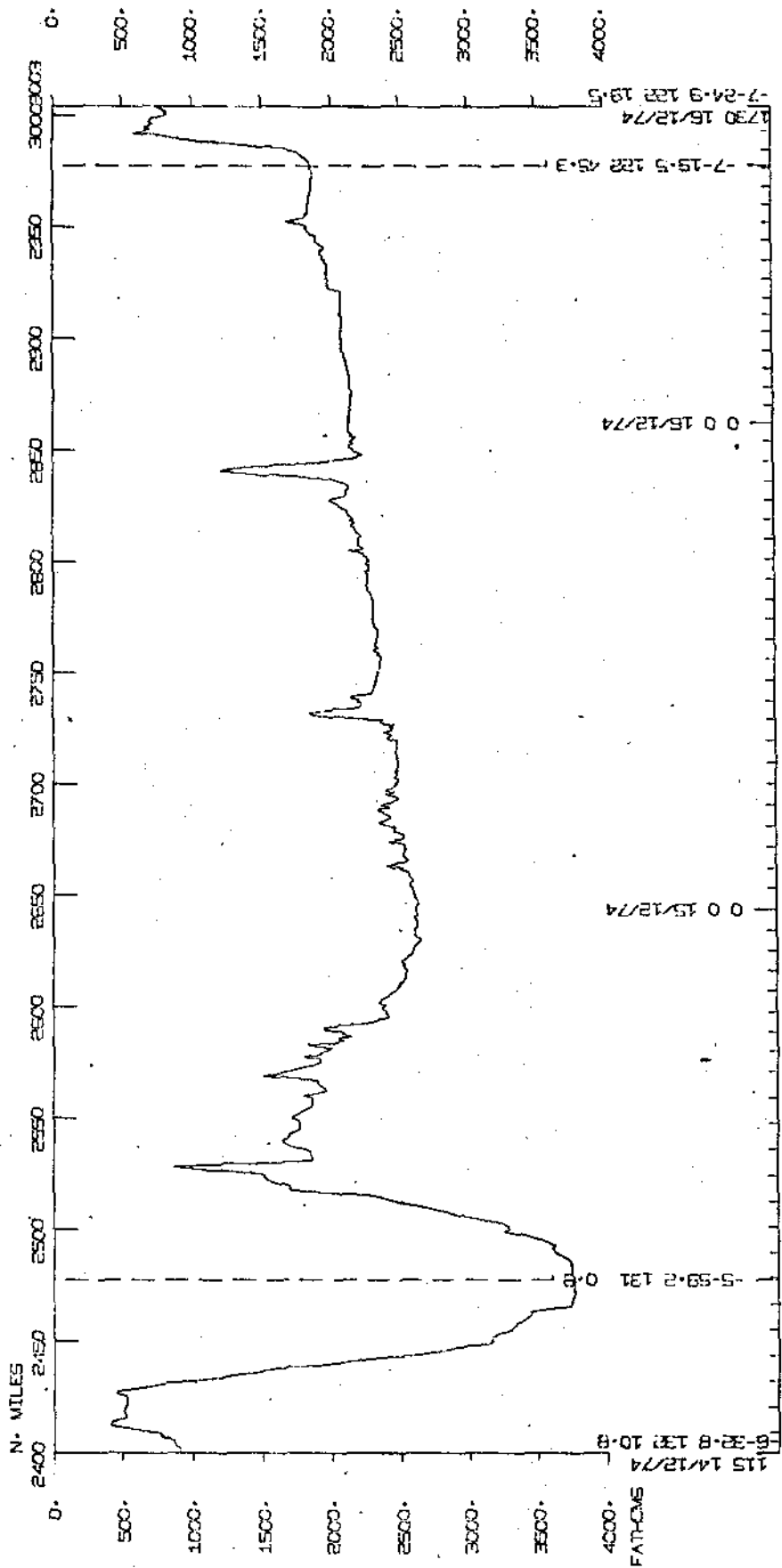
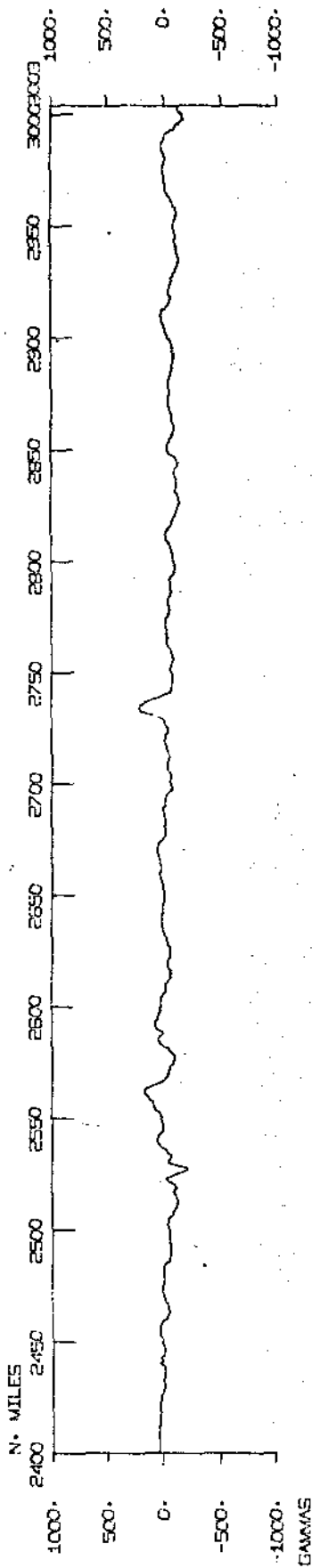




# EURYOICE LEG 4



# EURYDICE LEG 4



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0-32-B 131 10-B

5-58-2 131 0-B

0 0 15/12/74

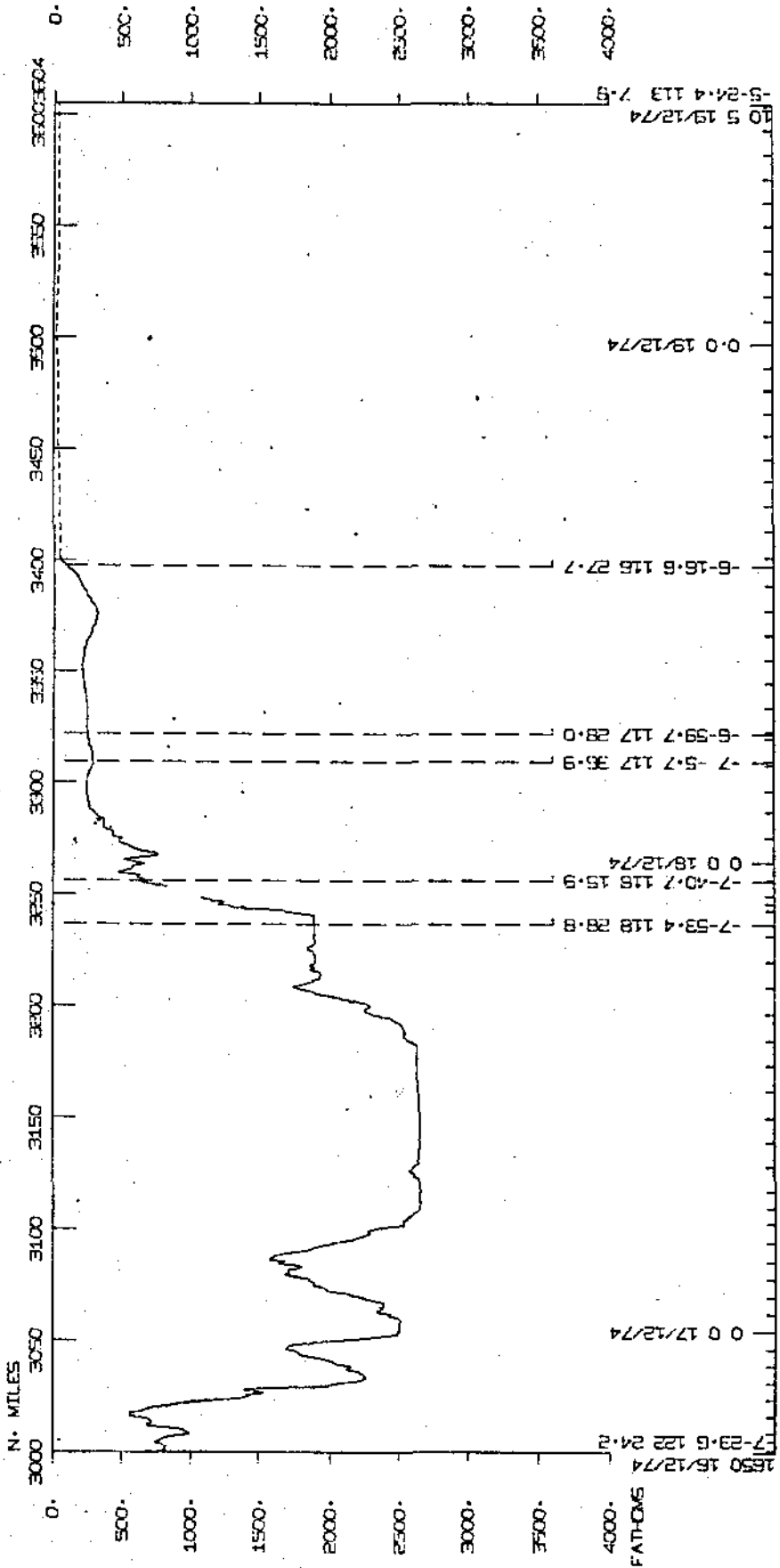
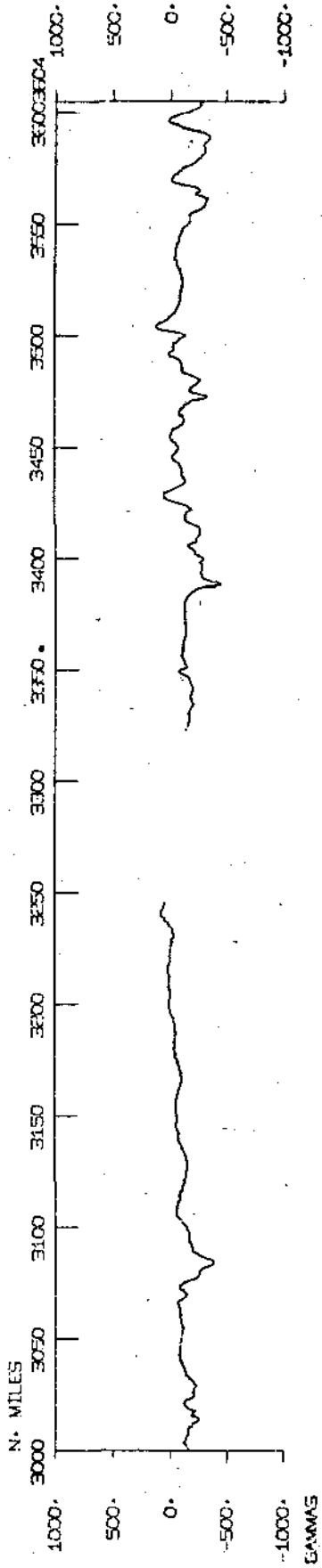
0 0 15/12/74

7-15-5 132 45-3

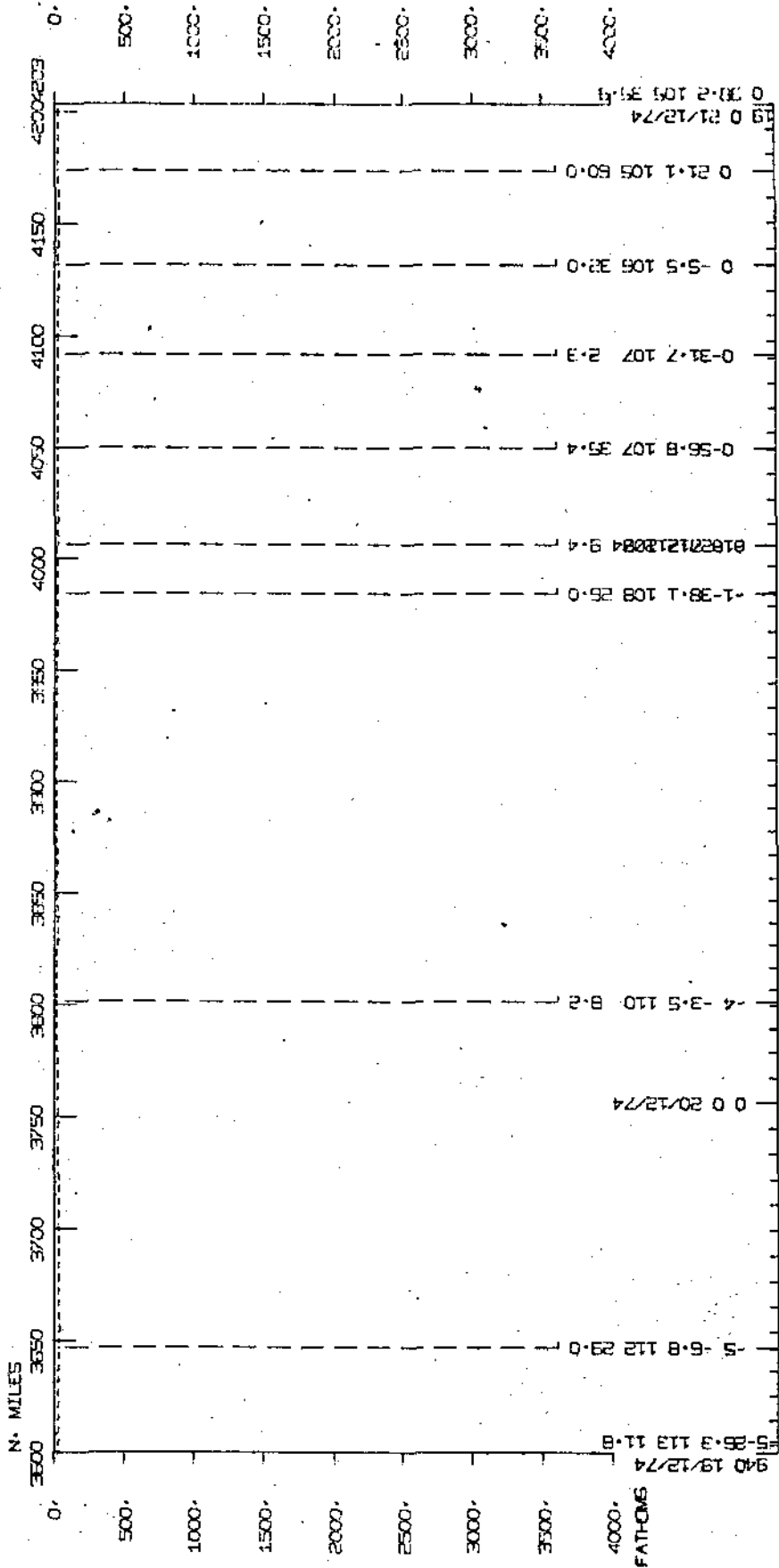
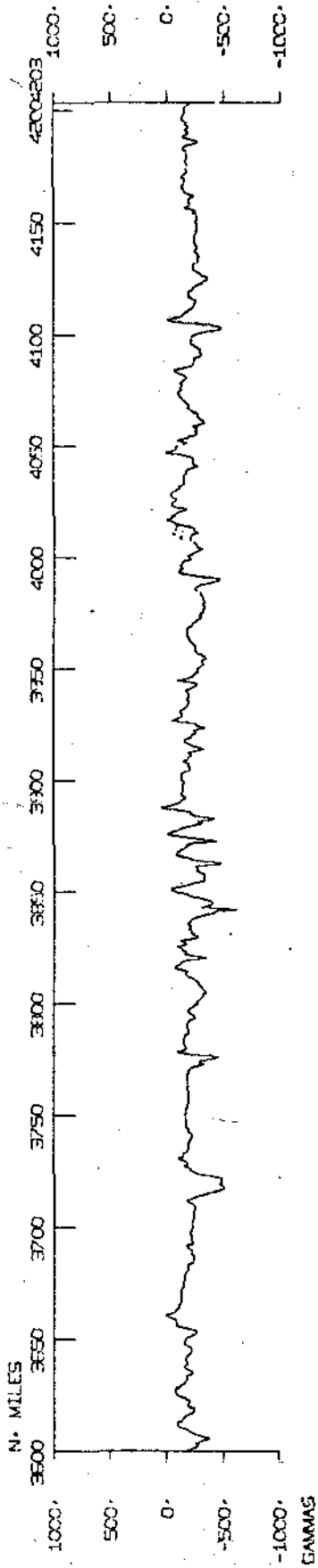
1730 16/12/74

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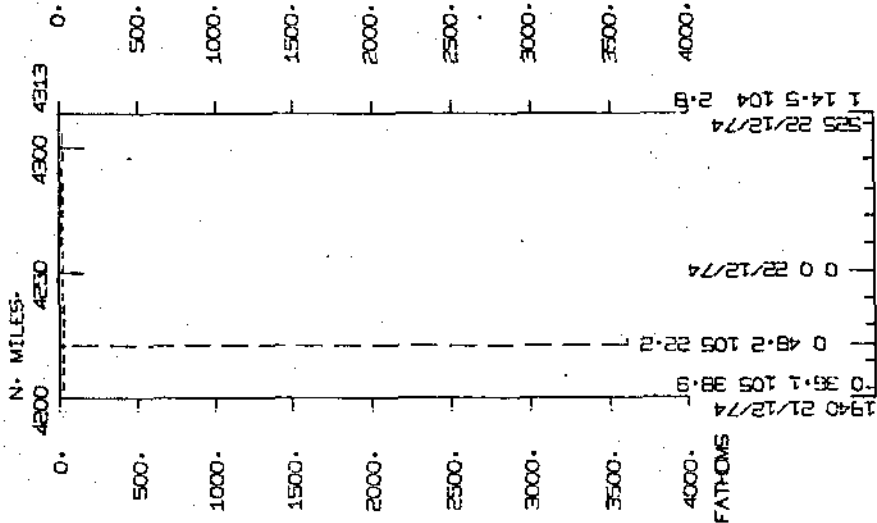
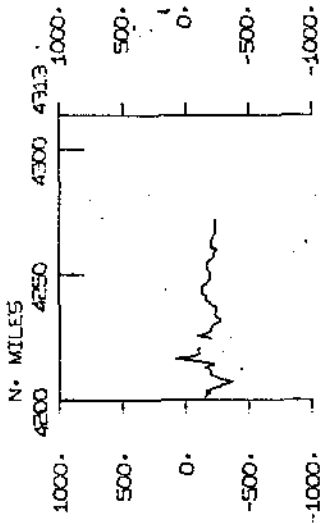


# EURYDICE LEG 4



940 18/12/74  
 5-B-3 113 11-B  
 5-6-B 112 23-0  
 0 0 20/12/74  
 4-3-5 110 B-2  
 -1-38-1 108 25-0  
 818271212884 9-4  
 0-56-B 107 35-4  
 0-31-7 107 2-3  
 0-5-5 106 32-0  
 0 21-1 105 50-0  
 0 21-2 105 31-4  
 0 21/12/74

# EURYDICE LEG 4



1940 21/12/74 0 361.1 105 38.9  
0 48.2 105 22.2  
0 0 22/12/74  
525 22/12/74 1 14.5 104 2.8

## SAMPLE DATA INDEX

## EPRYDICE EXPEDITION

LEG 04

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715 51274	LG04 B NOUMEA NEW CALEDONIE	22 210S 166 177E S	ERDC04WT
615 221274	LG04 E SINGAPORE	1 145N 104 26E S	ERDC04WT

## \*\*\*PERSONNEL\*\*\*

PECS	ROTTMAN M.	UCO	ERDC04WT
PERT	HAUSMAN M.	MTG	ERDC04WT
PECT	MOORE M.	SCG	ERDC04WT
PEAT	BATTEY R.	SGG	ERDC04WT

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

\*\*\*THE FOLLOWING CODES ARE NEW\*\*\*  
UCO=UNIVERSITY OF COLORADO AT BOULDER

TIME GMT	DATE D.M.Y.	TIME TZ LOC LOC	SAMP COOE	SAMPLE IDENT.	DISP CODE	LAT.	LONG.	CRUISE LEG-SHIP
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UNDERWAY DATA - CURATOR T.E. CHASE 2ND FLOOR AQUARIUM (EXT.1534)								
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## \*\*\* NAVIGATION PLOTS \*\*\*

1110	51274			NVBP B BRIDGE PLOT 4-01	GDC 22	345S	165 423E	S ERDC04WT
100	71274			NVBP E BRIDGE PLOT 4-01	GDC 17	374S	160 97E	S ERDC04WT
100	71274			NVBP B BRIDGE PLOT 4-02	GDC 17	374S	160 97E	S ERDC04WT
2036	101274			NVBP E BRIDGE PLOT 4-02	GDC 9	158S	145 24E	S ERDC04WT
2036	101274			NVBP B BRIDGE PLOT 4-03	GDC 9	158S	145 24E	S ERDC04WT
1208	111274			NVBP E BRIDGE PLOT 4-03	GDC 10	221S	142 383E	S ERDC04WT
1208	111274			NVBP B BRIDGE PLOT 4-04	GDC 10	221S	142 383E	S ERDC04WT
1810	111274			NVBP E BRIDGE PLOT 4-04	GDC 10	457S	141 338E	S ERDC04WT
1810	111274			NVBP B BRIDGE PLOT 4-05	GDC 10	457S	141 338E	S ERDC04WT
1504	141274			NVBP E BRIDGE PLOT 4-05	GDC 6	136S	129 392E	S ERDC04WT
1504	141274			NVBP B BRIDGE PLOT 4-06	GDC 6	136S	129 392E	S ERDC04WT
400	171274			NVBP E BRIDGE PLOT 4-06	GDC 7	398S	121 7E	S ERDC04WT
400	171274			NVBP B BRIDGE PLOT 4-07	GDC 7	398S	121 7E	S ERDC04WT
400	201274			NVBP E BRIDGE PLOT 4-07	GDC 4	36S	110 90E	S ERDC04WT
400	201274			NVBP B BRIDGE PLOT 4-08	GDC 4	36S	110 90E	S ERDC04WT
615	221274			NVBP E BRIDGE PLOT 4-08	GDC 1	145N	104 26E	S ERDC04WT
730	51274			NVCP B COMPUTER PLOT 4-01	GDC 22	210S	166 177E	S ERDC04WT
100	71274			NVCP E COMPUTER PLOT 4-01	GDC 17	374S	160 97E	S ERDC04WT
130	71274			NVCP B COMPUTER PLOT 4-02	GDC 17	340S	160 60E	S ERDC04WT
1230	81274			NVCP E COMPUTER PLOT 4-02	GDC 14	283S	154 25E	S ERDC04WT
1245	81274			NVCP B COMPUTER PLOT 4-03	GDC 14	268S	153 598E	S ERDC04WT
915	101274			NVCP E COMPUTER PLOT 4-03	GDC 9	337S	147 37E	S ERDC04WT
945	101274			NVCP B COMPUTER PLOT 4-04	GDC 9	332S	146 577E	S ERDC04WT
300	121274			NVCP E COMPUTER PLOT 4-04	GDC 10	148S	140 30E	S ERDC04WT
315	121274			NVCP B COMPUTER PLOT 4-05	GDC 10	136S	140 4E	S ERDC04WT
2230	131274			NVCP E COMPUTER PLOT 4-05	GDC 6	476S	132 397E	S ERDC04WT
2300	131274			NVCP B COMPUTER PLOT 4-06	GDC 6	449S	132 345E	S ERDC04WT
1330	151274			NVCP E COMPUTER PLOT 4-06	GDC 6	554S	126 127E	S ERDC04WT
1400	151274			NVCP B COMPUTER PLOT 4-07	GDC 6	566S	126 83E	S ERDC04WT
1115	171274			NVCP E COMPUTER PLOT 4-07	GDC 7	448S	119 525E	S ERDC04WT
1145	171274			NVCP B COMPUTER PLOT 4-08	GDC 7	450S	119 466E	S ERDC04WT
1100	191274			NVCP E COMPUTER PLOT 4-08	GDC 5	202S	112 587E	S ERDC04WT

TIME GMT	DATE D.M.Y.	TIME TZ LOC LOC	SAMP CODE	SAMPLE IDENT.	DISP CODE	LAT.	LONG.	CRUISE LEG-SHIP
1115	191274		NVCP B	COMPUTER PLOT 4-09	GDC	5 191S	112 563E	S ERDC04WT
645	211274		NVCP E	COMPUTER PLOT 4-09	GDC	0 411S	107 142E	S ERDC04WT
700	211274		NVCP B	COMPUTER PLOT 4-10	GDC	0 395S	107 119E	S ERDC04WT
615	221274		NVCP E	COMPUTER PLOT 4-10	GDC	1 145N	104 26E	S ERDC04WT
***FATHOGRAMS ***								
918	51274		DPR3 B	GDR 3.5KHZ ROLL 01	GDC	22 252S	166 55E	S ERDC04WT
800	71274		DPR3 E	GDR 3.5KHZ ROLL 01	GDC	17 16S	158 568E	S ERDC04WT
804	71274		DPR3 B	GDR 3.5KHZ ROLL 02	GDC	17 12S	158 561E	S ERDC04WT
926	91274		DPR3 E	GDR 3.5KHZ ROLL 02	GDC	12 314S	150 29E	S ERDC04WT
939	91274		DPR3 B	GDR 3.5KHZ ROLL 03	GDC	12 302S	150 4E	S ERDC04WT
731	111274		DPR3 E	GDR 3.5KHZ ROLL 03	GDC	9 462S	143 136E	S ERDC04WT
2034	111274		DPR3 B	GDR 3.5KHZ ROLL 04	GDC	10 477S	141 68E	S ERDC04WT
2133	121274		DPR3 E	GDR 3.5KHZ ROLL 04	GDC	8 359S	136 594E	S ERDC04WT
2354	121274		DPR3 B	GDR 3.5KHZ ROLL 05	GDC	8 290S	136 377E	S ERDC04WT
920	151274		DPR3 E	GDR 3.5KHZ ROLL 05	GDC	6 466S	126 490E	S ERDC04WT
926	151274		DPR3 B	GDR 3.5KHZ ROLL 06	GDC	6 467S	126 484E	S ERDC04WT
1345	171274		DPR3 E	GDR 3.5KHZ ROLL 06	GDC	7 455S	119 234E	S ERDC04WT
1402	171274		DPR3 B	GDR 3.5KHZ ROLL 07	GDC	7 456S	119 201E	S ERDC04WT
935	191274		DPR3 E	GDR 3.5KHZ ROLL 07	GDC	5 267S	113 126E	S ERDC04WT
945	191274		DPR3 B	GDR 3.5KHZ ROLL 08	GDC	5 259S	113 110E	S ERDC04WT
1110	211274		DPR3 E	GDR 3.5KHZ ROLL 08	GDC	0 118S	106 391E	S ERDC04WT
1150	211274		DPR3 B	GDR 3.5KHZ ROLL 09	GDC	0 69S	106 335E	S ERDC04WT
552	221274		DPR3 E	GDR 3.5KHZ ROLL 09	GDC	1 145N	104 26E	S ERDC04WT
915	51274		DPRT B	UGR 12KHZ ROLL 01	GDC	22 249S	166 62E	S ERDC04WT
1755	61274		DPRT E	UGR 12KHZ ROLL 01	GDC	18 378S	161 119E	S ERDC04WT
1836	61274		DPRT B	UGR 12KHZ ROLL 02	GDC	18 315S	161 51E	S ERDC04WT
2050	111274		DPRT E	UGR 12KHZ ROLL 02	GDC	10 477S	141 37E	S ERDC04WT
2142	111274		DPRT B	UGR 12KHZ ROLL 03	GDC	10 433S	140 545E	S ERDC04WT
1724	161274		DPRT E	UGR 12KHZ ROLL 03	GDC	7 247S	122 202E	S ERDC04WT
1806	161274		DPRT B	UGR 12KHZ ROLL 04	GDC	7 261S	122 152E	S ERDC04WT
705	211274		DPRT E	UGR 12KHZ ROLL 04	GDC	0 390S	107 112E	S ERDC04WT
725	211274		DPRT B	UGR 12KHZ ROLL 05	GDC	0 367S	107 82E	S ERDC04WT
552	221274		DPRT E	UGR 12KHZ ROLL 05	GDC	1 145N	104 26E	S ERDC04WT



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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## \*\*\* MAGNETOMETER \*\*\*

913	51274			MGR B	MAGNETICS ROLL 01	GDC 22	248S	166 66E	S ERDC04WT
739	161274			MGR E	MAGNETICS ROLL 01	GDC 7	68S	123 384E	S ERDC04WT
755	161274			MGR B	MAGNETICS ROLL 02	GDC 7	73S	123 363E	S ERDC04WT
200	221274			MGR E	MAGNETICS ROLL 02	GDC 1	181N	104 416E	S ERDC04WT

## \*\*\* SEISMIC REFLECTION PROFILES \*\*\*

907	051274			SPRF B	AIRGUN ROLL 01	GDC 22	244S	166 75E	S ERDC04WT
315	191274			SPRF E	AIRGUN ROLL 01	GDC 5	411S	114 188E	S ERDC04WT
907	51274			SPRS B	AIRGUN ROLL 01	GDC 22	244S	166 75E	S ERDC04WT
315	191274			SPRS E	AIRGUN ROLL 01	GDC 5	411S	114 188E	S ERDC04WT

## INVERTEBRATE BIOLOGY-CURATOR ABRAHAM FLEMINGER (EXT. 1131)

1519	101274			ON1M B	OPEN NET TOW 4-01	MIC 9	247S	145 571E	S ERDC04WT
1545	101274			ON1M E	OPEN NET TOW 4-01	MIC 9	242S	145 567E	S ERDC04WT
1630	111274			ON1M B	OPEN NET TOW 4-02	MIC 10	379S	141 468E	S ERDC04WT
1642	111274			ON1M E	OPEN NET TOW 4-02	MIC 10	380S	141 467E	S ERDC04WT
1232	121274			ON1M B	OPEN NET TOW 4-03	MIC 9	152S	138 258E	S ERDC04WT
1243	121274			ON1M E	OPEN NET TOW 4-03	MIC 9	149S	138 256E	S ERDC04WT
2108	171274			ON1M B	OPEN NET TOW 4-04	MIC 7	475S	118 226E	S ERDC04WT
2129	171274			ON1M E	OPEN NET TOW 4-04	MIC 7	473S	118 221E	S ERDC04WT
439	181274			ON1M B	OPEN NET TOW 4-05	MIC 7	60S	117 371E	S ERDC04WT
458	181274			ON1M E	OPEN NET TOW 4-05	MIC 7	64S	117 372E	S ERDC04WT
1403	181274			ON1M B	OPEN NET TOW 4-06	MIC 6	165S	116 277E	S ERDC04WT
1422	181274			ON1M E	OPEN NET TOW 4-06	MIC 6	163S	116 274E	S ERDC04WT
1406	191274			ON1M B	OPEN NET TOW 4-07	MIC 5	68S	112 291E	S ERDC04WT
1416	191274			ON1M E	OPEN NET TOW 4-07	MIC 5	68S	112 289E	S ERDC04WT
407	201274			ON1M B	OPEN NET TOW 4-08	MIC 4	35S	110 84E	S ERDC04WT
417	201274			ON1M E	OPEN NET TOW 4-08	MIC 4	35S	110 81E	S ERDC04WT
2130	201274			ON1M B	OPEN NET TOW 4-09	MIC 1	382S	108 262E	S ERDC04WT
2140	201274			ON1M E	OPEN NET TOW 4-09	MIC 1	381S	108 260E	S ERDC04WT
2348	201274			ON1M B	OPEN NET TOW 4-10	MIC 1	244S	108 95E	S ERDC04WT
2358	201274			ON1M E	OPEN NET TOW 4-10	MIC 1	242S	108 93E	S ERDC04WT

TIME GMT	DATE D.M.Y.	TIME LOC	TZ LOC	SAMP CODE	SAMPLE IDENT.	DISP CODE	LAT.	LONG.	CRUISE LEG-SHIP
400	211274			ON1M B	OPEN NET TOW 4-11	MIC	0 569S	107 357E	S ERDC04WT
410	211274			ON1M E	OPEN NET TOW 4-11	MIC	0 568S	107 354E	S ERDC04WT
806	211274			ON1M B	OPEN NET TOW 4-12	MIC	0 320S	107 25E	S ERDC04WT
816	211274			ON1M E	OPEN NET TOW 4-12	MIC	0 318S	107 23E	S ERDC04WT
1201	211274			ON1M B	OPEN NET TOW 4-13	MIC	0 57S	106 321E	S ERDC04WT
1211	211274			ON1M E	OPEN NET TOW 4-13	MIC	0 55S	106 320E	S ERDC04WT
1558	211274			ON1M B	OPEN NET TOW 4-14	MIC	0 208N	106 2E	S ERDC04WT
1608	211274			ON1M E	OPEN NET TOW 4-14	MIC	0 211N	106 0E	S ERDC04WT
2032	211274			ON1M B	OPEN NET TOW 4-15	MIC	0 480N	105 224E	S ERDC04WT
2043	211274			ON1M E	OPEN NET TOW 4-15	MIC	0 481N	105 222E	S ERDC04WT
2037	171274			GBG	GRAB 01 NO SAMPLE	GCR	7 475S	118 226E	S ERDC04WT
2252	171274			GBG	GRAB 02 NO SAMPLE	GCR	7 407S	118 157E	S ERDC04WT
423	181274			GBG	GRAB SAMPLE 03 546M	GCR	7 58S	117 370E	S ERDC04WT
626	181274			GBG	GRAB SAMPLE 04 473M	GCR	6 597S	117 281E	S ERDC04WT
1354	181274			GBG	GRAB SAMPLE 05 192M	GCR	6 166S	116 277E	S ERDC04WT
2145	201274			GBG	GRAB SAMPLE 06 38M	GCR	1 381S	108 260E	S ERDC04WT
2	211274			GBG	GRAB SAMPLE 07 40M	GCR	1 242S	108 93E	S ERDC04WT
2	211274			GBG	GRAB SAMPLE 07 40M	GCR	1 242S	108 93E	S ERDC04WT
414	211274			GBG	GRAB SAMPLE 08 40M	GCR	0 568S	107 354E	S ERDC04WT
821	211274			GBG	GRAB SAMPLE 09 47M	GCR	0 317S	107 23E	S ERDC04WT
1215	211274			GBG	GRAB SAMPLE 10 42M	GCR	0 55S	106 320E	S ERDC04WT
1614	211274			GBG	GRAB SAMPLE 11 47M	GCR	0 211N	106 0E	S ERDC04WT
2056	211274			GBG	GRAB SAMPLE 12 46M	GCR	0 480N	105 224E	S ERDC04WT

## BATHYTHERMOGRAPHS - CURATORIAL GROUP, (EXT. 1135)

0	61274	BTX	NO. SAMPLES = 4	BTS	21 197S	163 442E	S ERDC04WT
0	71274	BTX	NO. SAMPLES = 4	BTS	17 459S	160 189E	S ERDC04WT
0	81274	BTX	NO. SAMPLES = 2	BTS	15 365S	156 139E	S ERDC04WT
0	91274	BTX	NO. SAMPLES = 3	BTS	13 220S	151 518E	S ERDC04WT
0	101274	BTX	NO. SAMPLES = 3	BTS	10 569S	147 486E	S ERDC04WT
0	151274	BTX	NO. SAMPLES = 4	BTS	6 314S	128 169E	S ERDC04WT
0	161274	BTX	NO. SAMPLES = 4	BTS	7 26S	124 402E	S ERDC04WT

END SAMPLE INDEX