

F. DRAKE EXPEDITION

LEG 5

R/V MELVILLE

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

Manzanillo, Mexico (24 May 1975)

to

San Diego, Calif. (12 June 1975)

Chief Scientist - M. Reichle

Resident Marine Tech - S. Witherow

Post-Cruise Processing by - S. Smith,  
U. Albright, G. Psaropulos, R. Lingley

Prepared By

Underway Data Processing Group

S.I.O. Geological Data Center

Scripps Institution of Oceanography

La Jolla, California

July 14, 1975

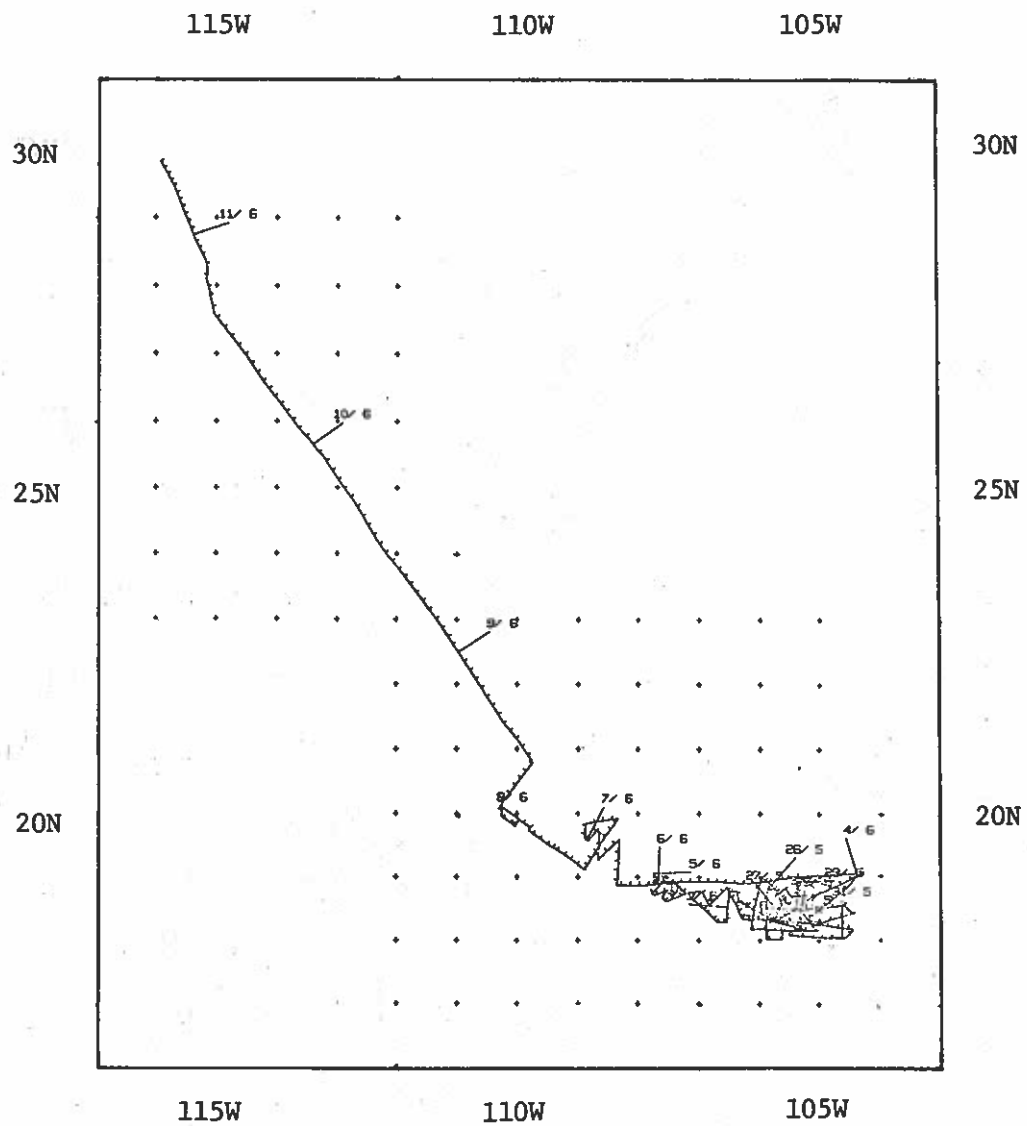
Preliminary Report and Index of Navigation, Depth, Magnetic and Subbottom Profiler Data

Contents:

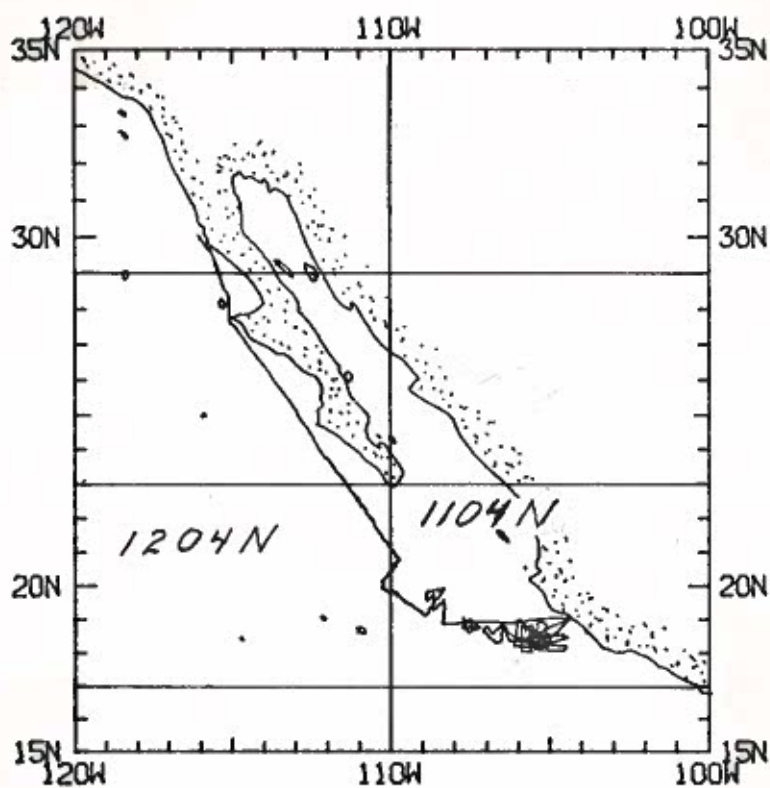
- Index Chart - gives track of cruise leg and boundaries of depth compilation plots (see below).
- Track Charts - annotated with dates (day/month) and hour ticks. The scale (.3"/deg. long) is the same as the index charts of previous SIO cruises published as Report IMR TR-25.
- Profiles - Depth and magnetic 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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F. DRAKE LEG 5 TRACK PLOT (1 of 1)



F. DRAKE EXPEDITION

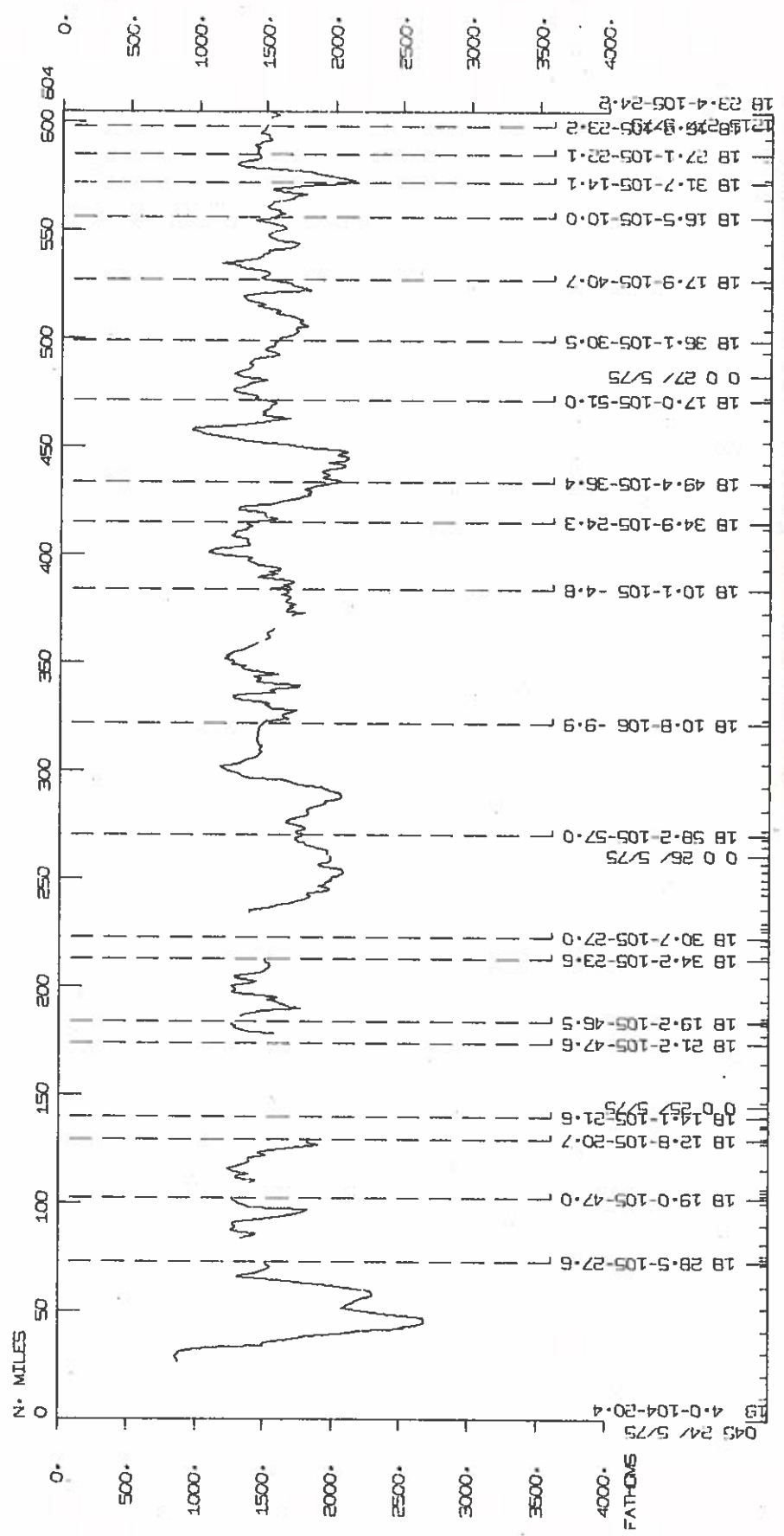
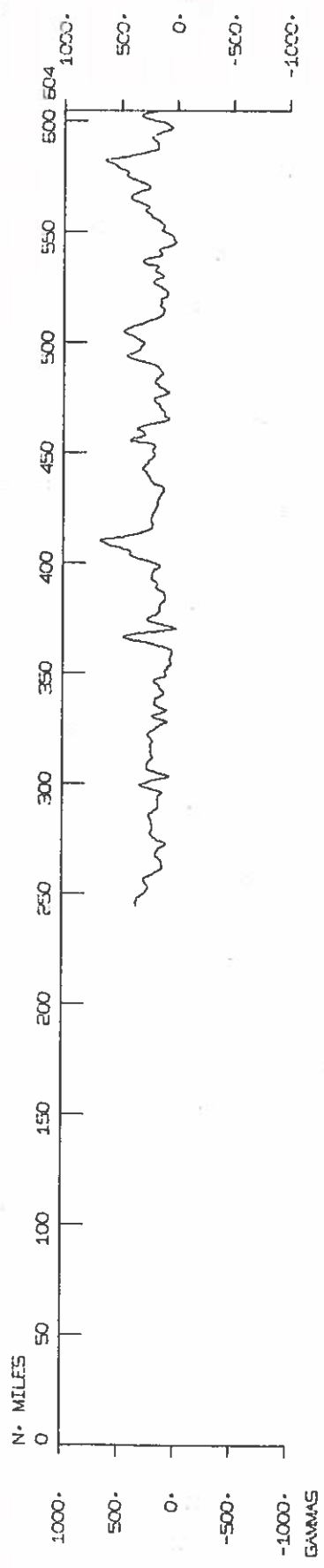
LEG 5

Chief Scientist - M. Reichle  
 Manzanillo, Mexico - San Diego (24 May - 12 June 1975)

TOTAL MILEAGE

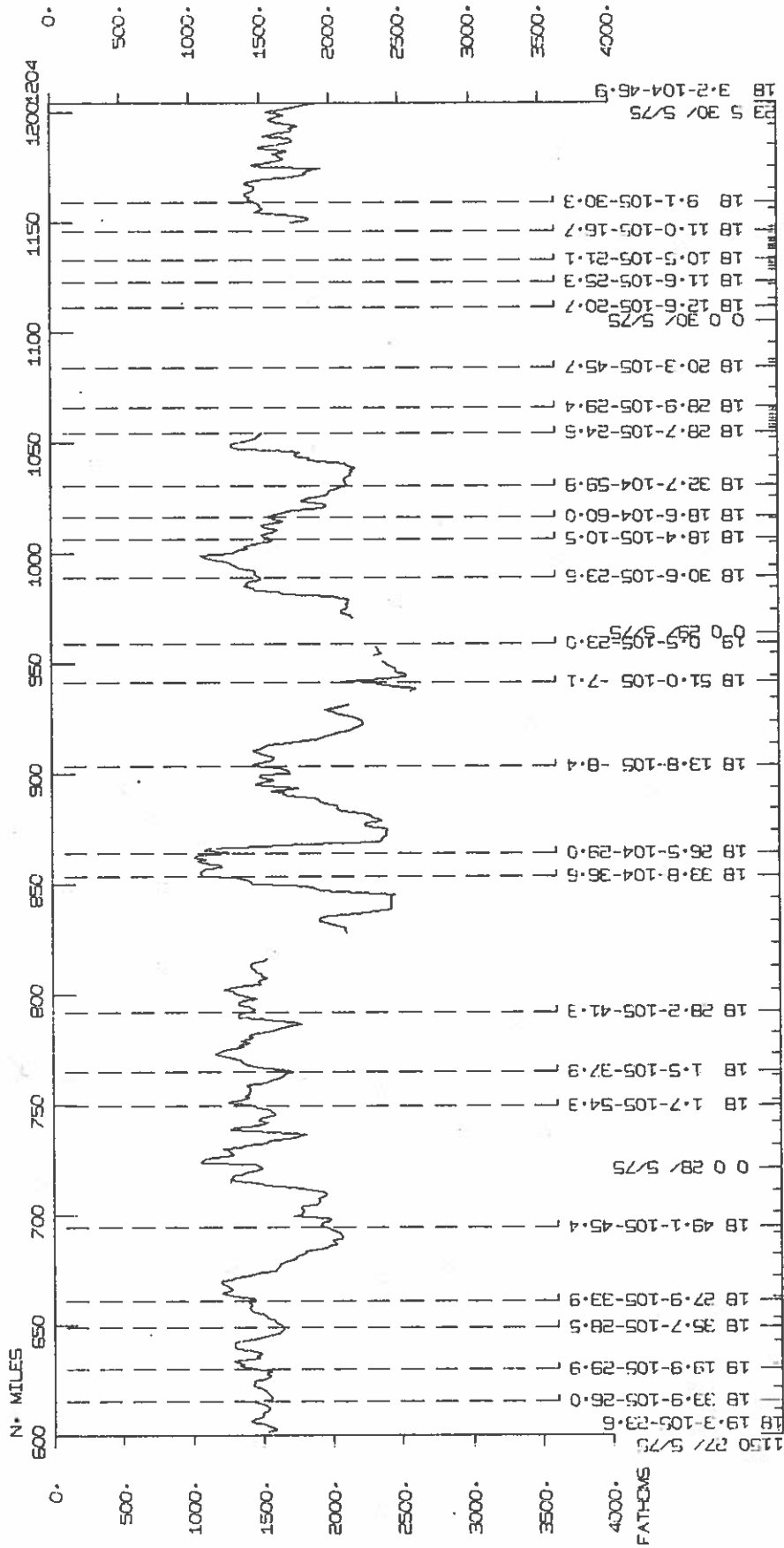
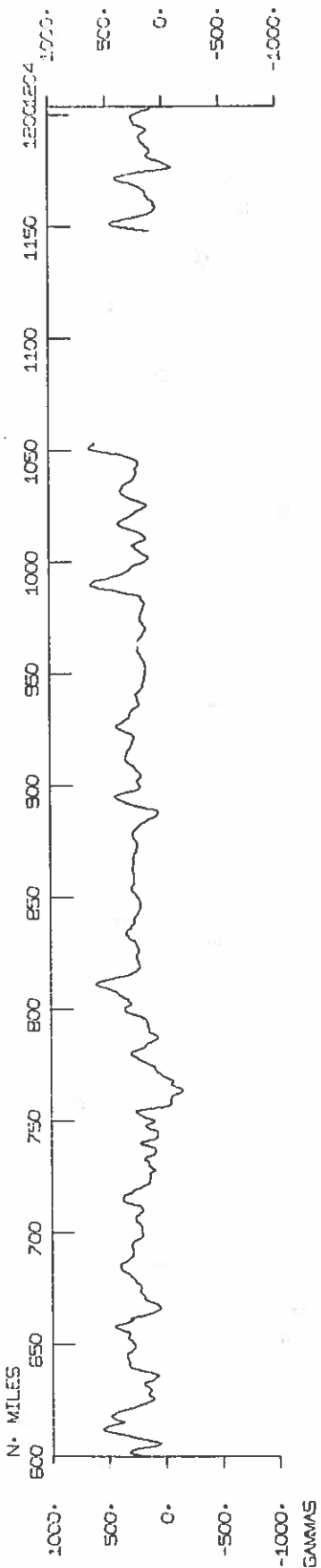
- 1) Cruise - 3127 miles
- 2) Bathymetry - 2277 miles
- 3) Magnetics - 2212 miles
- 4) Seismic Reflection - 2157 miles

# F. DRAKE LEG 5

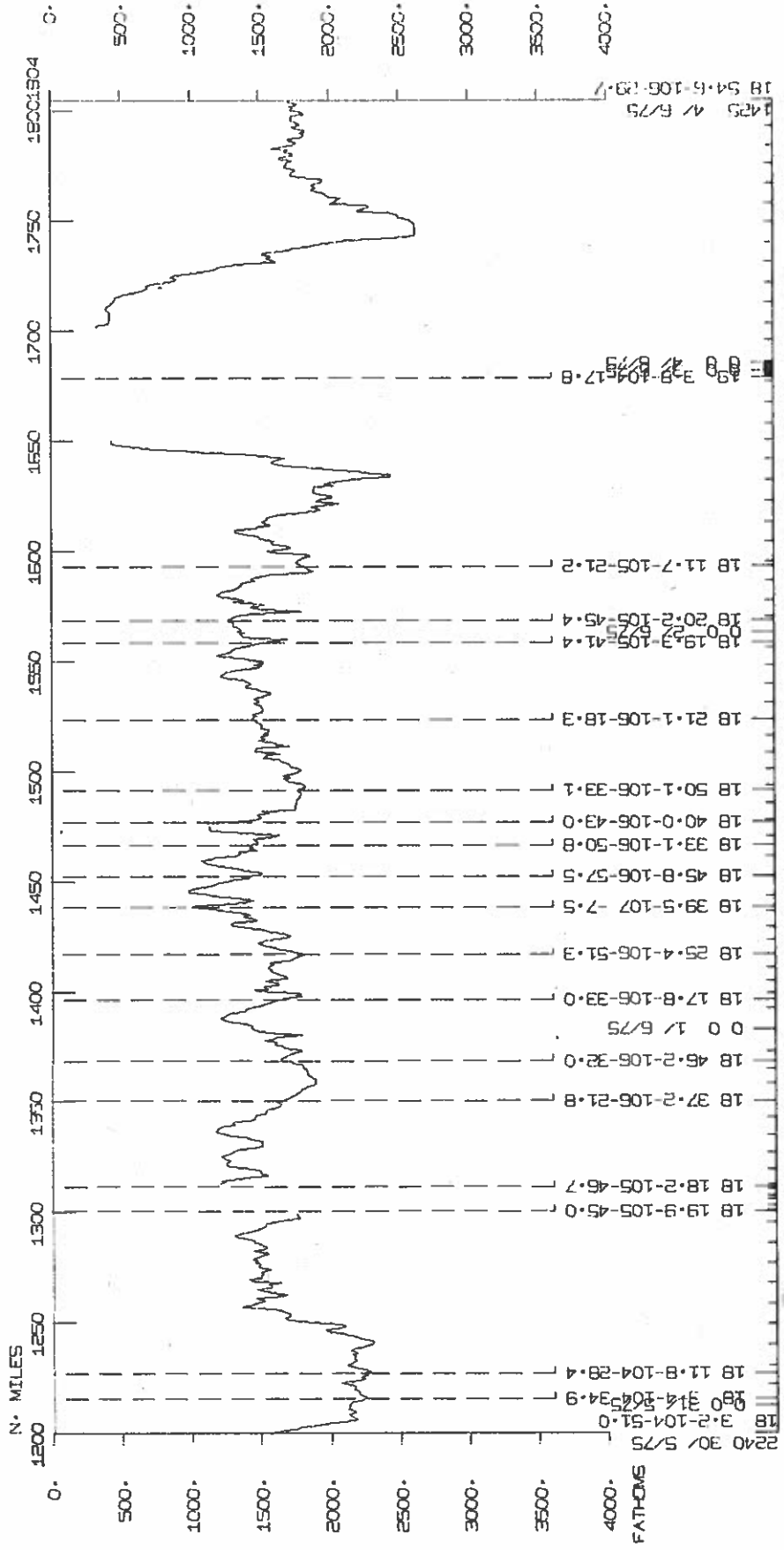
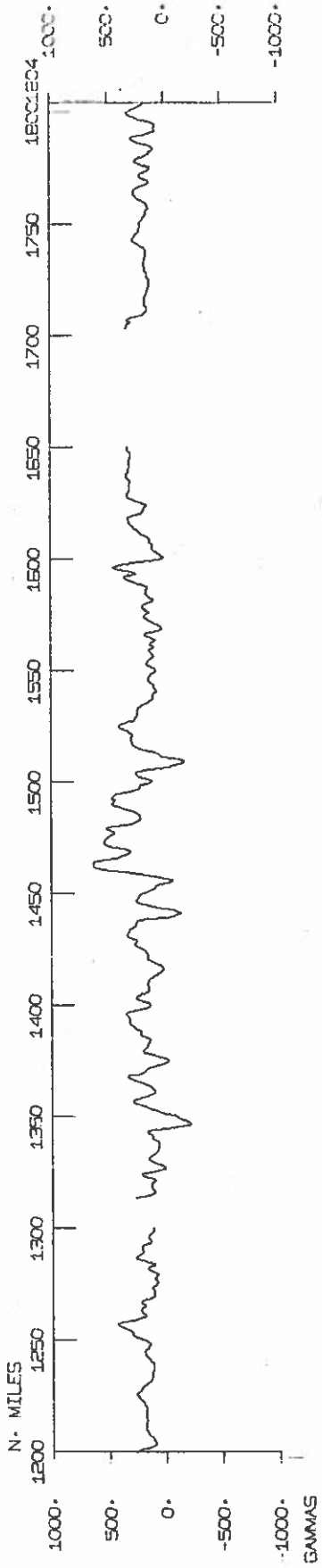


- 045 24 / 5/75
- 19 4-0-104-20-4
- 18 28-5-105-27-6
- 18 19-0-105-47-0
- 18 12-8-105-20-7
- 18 14-1-105-21-6
- 0 0 23 / 5/75
- 18 21-2-105-47-6
- 18 19-2-105-46-5
- 18 34-2-105-23-6
- 18 30-7-105-27-0
- 0 0 26 / 5/75
- 18 58-2-105-57-0
- 18 10-8-106-9-9
- 18 10-1-105-4-8
- 18 34-9-105-24-3
- 18 49-4-105-36-4
- 18 17-0-105-51-0
- 0 0 27 / 5/75
- 18 36-1-105-30-5
- 18 17-9-105-40-7
- 18 16-5-105-10-0
- 18 31-7-105-14-1
- 18 27-1-105-22-1
- 18 28-8-105-23-2
- 18 23-4-105-24-8

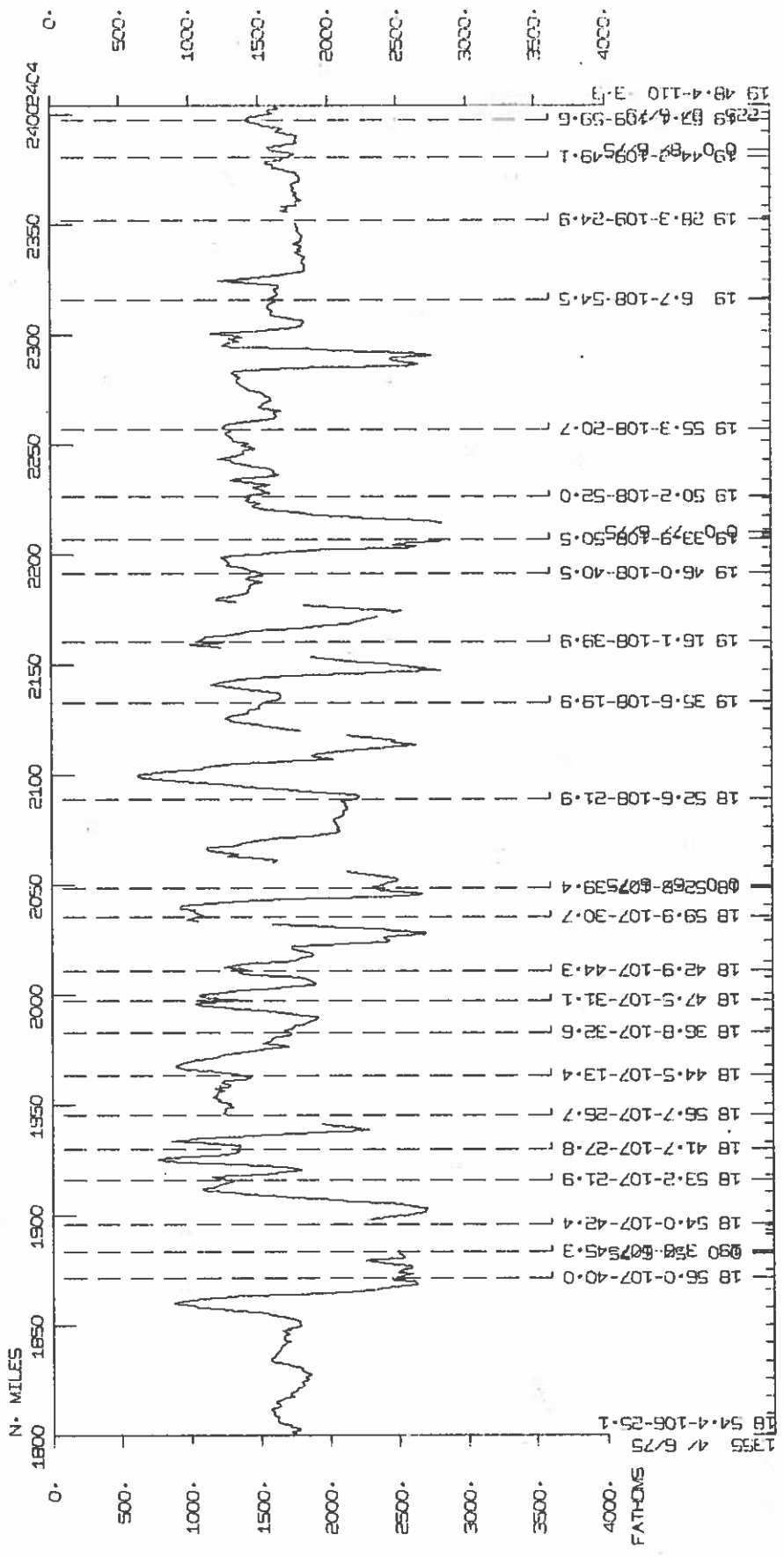
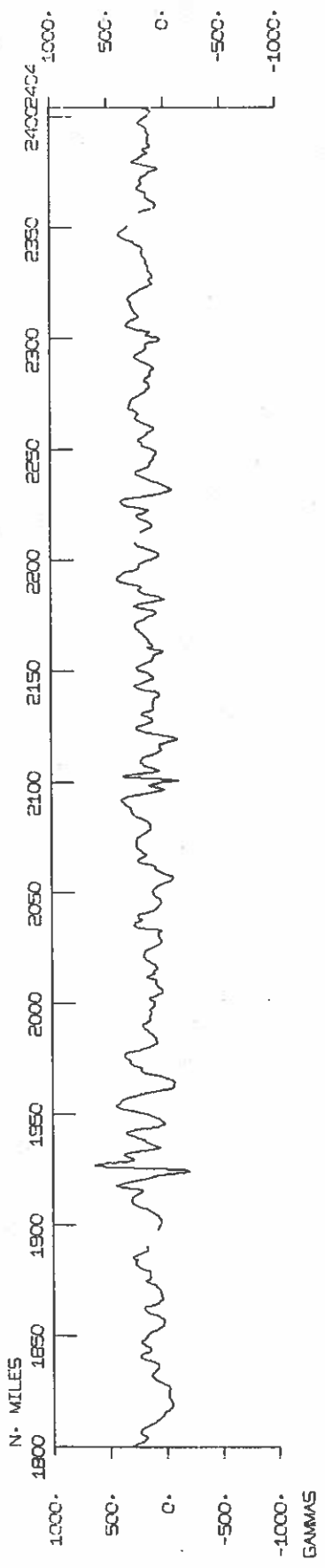
# F. DRAKE LEG 5



# F. DRAKE LEG 5

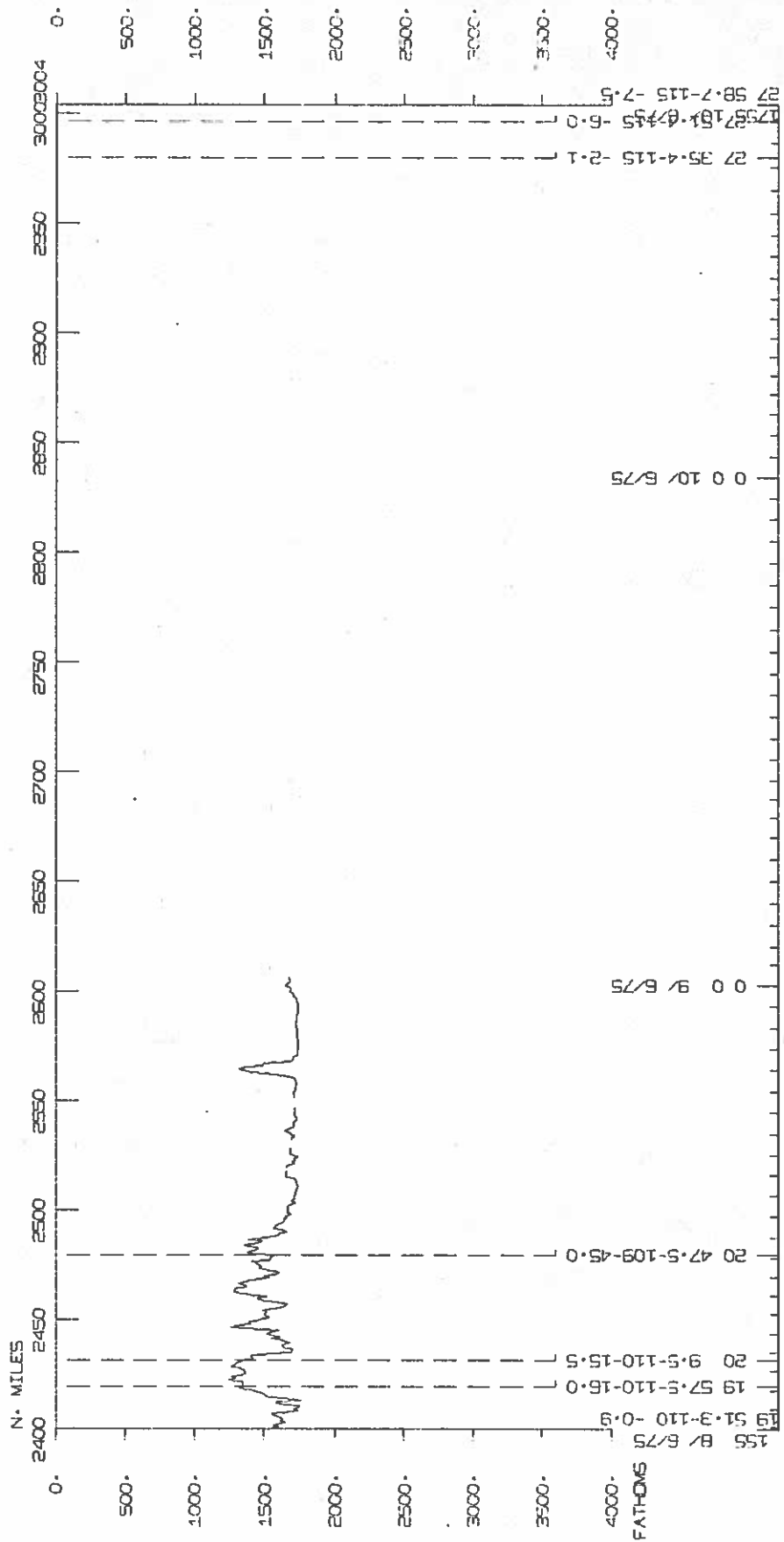
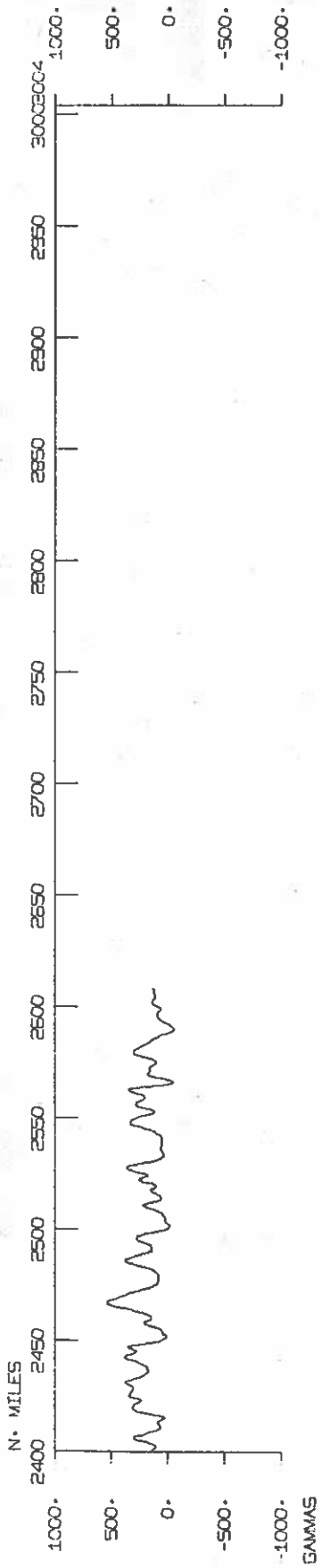


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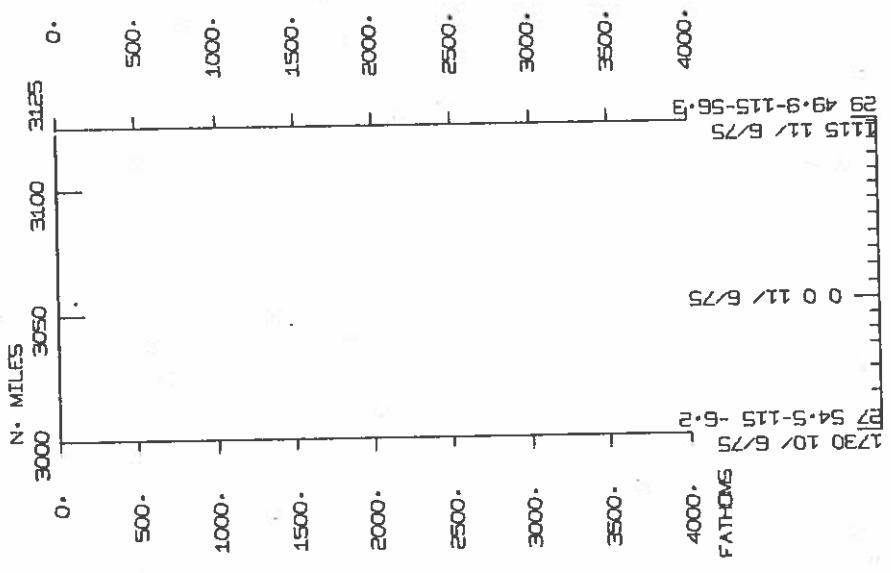
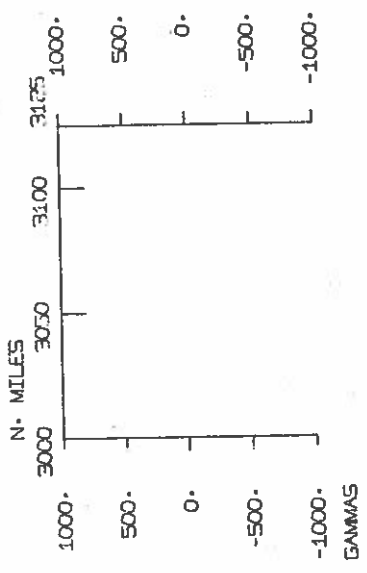




# F<sup>2</sup> DRAKE LEG 5



# F. DRAKE LEG 5



1730 10 / 6/75  
 57 54.5-115 -6.2  
 0 0 11 / 6/75  
 1115 11 / 6/75  
 28 49.9-115-56.3

## F. DRAKE EXPEDITION

## LEG 05

## SAMPLE INDEX

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0033 240575	LGSS B MANZANILLO, MEX.	19 030N 104 200W	FDRK05MV
1400 020675	LGSS E MANZANILLO, MEX.	19 030N 104 200W	FDRK05MV
0000 050675	LGSS B MANZANILLO, MEX.	19 030N 104 200W	FDRK05MV
1500 120675	LGSS E SAN DIEGO, CALIF.	32 400N 107 120W	FDRK05MV

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

PECS	REICHLE, M.	IGP
PERT	WITHEROW, S.	MTG
PEAT	HUBENKA, F.	MTG
PECT	OTT, J.	MTG
PEET	WILLOUGHBY, D.	IGP
PEXN	REID, I.	SIO
PE	GARY, J.	NES
PE	HIGGINS, A.	UCJ
PE	HUNT, L.	NES
PE	LEISTER, G.	NES
PE	ORCUTT, J.	SIO
PE	WALSH, J.	NES
PE	YOUNG, C.	NES

\*\*\* 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 T.E. CHASE (EXT.2182)
 

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## \*\*\* NAVIGATION PLOTS \*\*\*

818	24	575		NVBP B	BRIDGE PLOT 01	GDC 18	286N	105 276W	S FDRK05MV
854	27	575		NVBP E	BRIDGE PLOT 01	GDC 18	320N	105 146W	S FDRK05MV
854	27	575		NVBP B	BRIDGE PLOT 02	GDC 18	320N	105 146W	S FDRK05MV
1844	30	575		NVBP E	BRIDGE PLOT 02	GDC 19	40N	104 204W	S FDRK05MV
1844	30	575		NVBP B	BRIDGE PLOT 03	GDC 19	40N	104 204W	S FDRK05MV
912	1	675		NVBP E	BRIDGE PLOT 03	GDC 18	406N	104 449W	S FDRK05MV
508	4	675		NVBP B	BRIDGE PLOT 04	GDC 19	18N	105 41W	S FDRK05MV
1556	6	675		NVBP E	BRIDGE PLOT 04	DCP 19	441N	108 419W	S FDRK05MV
1556	6	675		NVBP B	BRIDGE PLOT 05	DCP 19	441N	108 419W	S FDRK05MV
110	9	675		NVBP E	BRIDGE PLOT 05	GDC 22	380N	111 50W	S FDRK05MV
1800	23	575		NVCP B	COMPUTER PLOT 01	GDC 19	40N	104 204W	S FDRK05MV
1400	24	575		NVCP E	COMPUTER PLOT 01	GDC 18	191N	105 466W	S FDRK05MV
1400	24	575		NVCP B	COMPUTER PLOT 02	GDC 18	191N	105 466W	S FDRK05MV
1108	28	575		NVCP E	COMPUTER PLOT 02	GDC 18	311N	104 566W	S FDRK05MV
1130	28	575		NVCP B	COMPUTER PLOT 03	GDC 18	316N	104 527W	S FDRK05MV
1530	31	575		NVCP E	COMPUTER PLOT 03	GDC 18	200N	105 496W	S FDRK05MV
1440	31	575		NVCP B	COMPUTER PLOT 04	GDC 18	179N	105 466W	S FDRK05MV
1640	2	675		NVCP E	COMPUTER PLOT 04	GDC 19	34N	104 190W	S FDRK05MV
2300	3	675		NVCP B	COMPUTER PLOT 05	GDC 19	35N	104 240W	S FDRK05MV
2130	4	675		NVCP E	COMPUTER PLOT 05	GDC 18	557N	107 307W	S FDRK05MV
2330	4	675		NVCP B	COMPUTER PLOT 06	GDC 18	594N	107 449W	S FDRK05MV
219	6	675		NVCP E	COMPUTER PLOT 06	GDC 18	517N	108 19W	S FDRK05MV
307	7	675		NVCP B	COMPUTER PLOT 07	GDC 19	501N	108 525W	S FDRK05MV
824	8	675		NVCP E	COMPUTER PLOT 07	GDC 20	291N	109 595W	S FDRK05MV
824	8	675		NVCP B	COMPUTER PLOT 08	GDC 20	291N	109 595W	S FDRK05MV
1500	12	675		NVCP E	COMPUTER PLOT 08	GDC 29	504N	115 566W	S FDRK05MV

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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## \*\*\*FATHOGRAMS \*\*\*

1950	25	575		DPR3 B	GDR 3.5KHZ ROLL-01	GDC 18	412N	105 385W	S FDRK05MV
1023	28	575		DPR3 E	GDR 3.5KHZ ROLL-01	GDC 18	301N	105 46W	S FDRK05MV
2300	28	575		DPR3 B	GDR 3.5KHZ ROLL-02	GDC 18	581N	105 188W	S FDRK05MV
900	29	575		DPR3 E	GDR 3.5KHZ ROLL-02	GDC 18	290N	105 223W	S FDRK05MV
1700	30	575		DPR3 B	GDR 3.5KHZ ROLL-03	GDC 18	107N	105 182W	S FDRK05MV
1730	4	675		DPR3 E	GDR 3.5KHZ ROLL-03	GDC 18	556N	106 562W	S FDRK05MV
1736	4	675		DPR3 B	GDR 3.5KHZ ROLL-04	GDC 18	556N	106 571W	S FDRK05MV
405	7	675		DPR3 E	GDR 3.5KHZ ROLL-04	GDC 19	517N	108 434W	S FDRK05MV
413	7	675		DPR3 B	GDR 3.5KHZ ROLL-05	GDC 19	519N	108 421W	S FDRK05MV
30	9	675		DPR3 E	GDR 3.5KHZ ROLL-05	GDC 22	336N	111 19W	S FDRK05MV
345	24	575		DPRT B	GDR 12KHZ ROLL-01	GDC 18	508N	104 472W	S FDRK05MV
1945	25	575		DPRT E	GDR 12KHZ ROLL-01	GDC 18	410N	105 383W	S FDRK05MV
1024	28	575		DPRT B	GDR 12KHZ ROLL-02	GDC 18	301N	105 44W	S FDRK05MV
2330	28	575		DPRT E	GDR 12KHZ ROLL-02	GDC 19	5N	105 230W	S FDRK05MV

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

1950	25	575		MGR B	MAGNETICS ROLL-01	GDC 18	412N	105 385W	S FDRK05MV
1747	7	675		MGR E	MAGNETICS ROLL-01	GDC 19	246N	109 197W	S FDRK05MV
1753	7	675		MGR B	MAGNETICS ROLL-02	GDC 19	250N	109 203W	S FDRK05MV
44	9	675		MGR E	MAGNETICS ROLL-02	GDC 22	355N	111 32W	S FDRK05MV

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

305	26	575		SPRS B	AIRGUN ROLL-01	GDC 18	582N	106 1W	S FDRK05MV
30	9	675		SPRS E	AIRGUN ROLL-01	GDC 22	336N	111 19W	S FDRK05MV

## \*\*\* CORES \*\*\*

103	5	675		C G B	RIVERA TRENCH 01 518	GDC 18	575N	107 413W	S FDRK05MV
515	5	675		C G E	NO SAMPLE	GDC 18	540N	107 420W	S FDRK05MV
1756	6	675		C G B	RIVERA TRENCH 02 592	GDC 19	347N	108 516W	S FDRK05MV
30	7	675		C G E	RIVERA TRENCH 02	GDC 19	350N	108 518W	S FDRK05MV

TIME GMT	DATE D.M.Y.	TIME TZ LOC	SAMP LOC CODE	SAMPLE IDENT.	DISP CODE	LAT.	LONG.	CRUISE LEG-SHIP
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BATHYTHERMOGRAPH - CURATOR CAROL CONWAY (EXT.2087)

0 28	575	BTX	XBT NO. SAMPLES 01	DCP 18	301N	105 543W	S FDRK05MV
0 29	575	BTX	XBT NO. SAMPLES 02	DCP 18	558N	105 229W	S FDRK05MV
0 30	575	BTX	XBT NO. SAMPLES 01	DCP 18	141N	105 275W	S FDRK05MV
0 31	575	BTX	XBT NO. SAMPLES 02	DCP 18	32N	104 381W	S FDRK05MV
0 1	675	BTX	XBT NO. SAMPLES 02	DCP 18	315N	106 329W	S FDRK05MV
0 4	675	BTX	XBT NO. SAMPLES 01	DCP 19	35N	104 241W	S FDRK05MV
0 5	675	BTX	XBT NO. SAMPLES 03	DCP 19	31N	107 452W	S FDRK05MV
0 6	675	BTX	XBT NO. SAMPLES 02	DCP 18	528N	107 407W	S FDRK05MV
0 7	675	BTX	XBT NO. SAMPLES 02	DCP 19	349N	108 517W	S FDRK05MV
0 8	675	BTX	XBT NO. SAMPLES 02	DCP 19	465N	109 473W	S FDRK05MV

99 END OF SAMPLE INDEX