INFORMAL REPORT AND INDEX OF

NAVIGATION, DEPTH, MAGNETIC AND SUBBOTTOM PROFILER DATA *

(Issued October 1983)

BENTHIC EXPEDITION

LEG 7

Papeete, Tahiti (9 April 1983)
to
Nuku Hiva, Marquesas (25 April 1983)

R/V Melville

Chief Scientist - H. Craig (SIO)

Resident Marine Tech - R. Comer

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

Data Collection Funded by NSF
Grant Number NSF-OCE80-24472
Data Processing funded by SIA and NSF

GDC Cruise I.D.# - 204

* Only navigation and Sample Index included in this report.

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

Contents:

Index Chart - gives track of cruise leg, dates, ports, and mileage of each type of data collected.

Track Charts - annotated with dates (day/month) and hour ticks. The scale is .312 in/degree longitude.

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 wide black line along the bottom of the profile. Sections having Sea Beam are indicated by a narrow line.

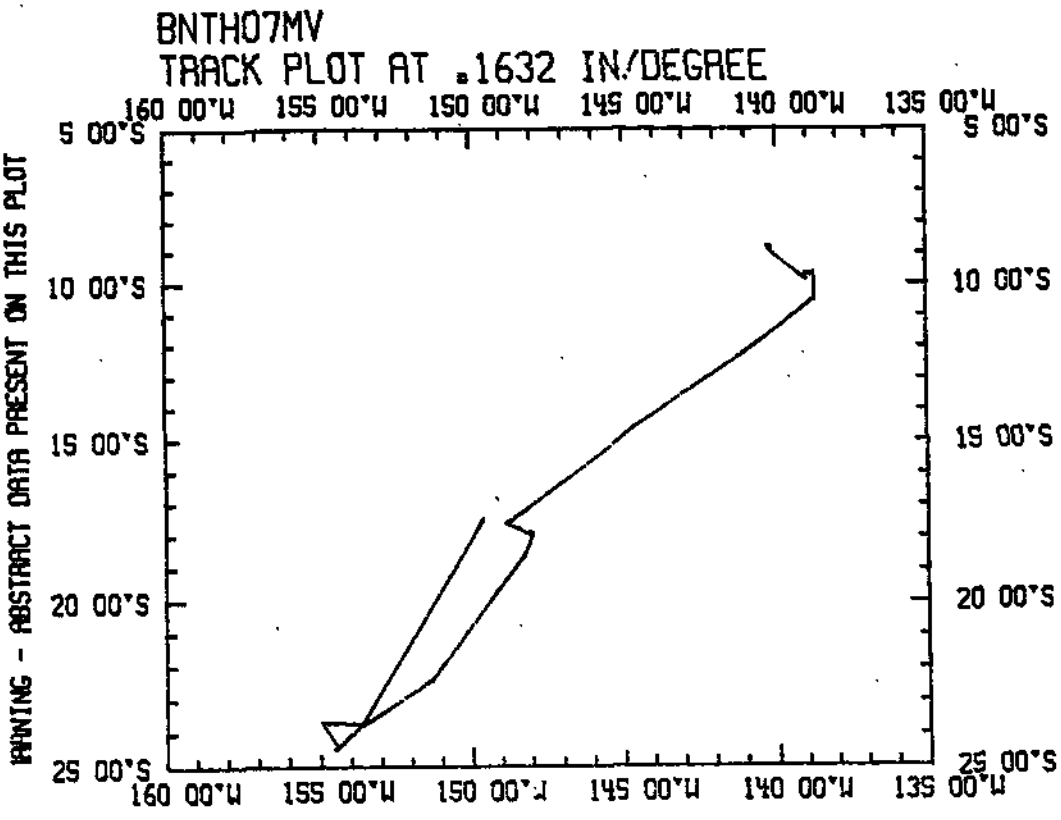
Sample Index - list of beginning and end times and positions of all underway records as well as all other samples (geology, biology, physical oceanography, etc.) collected on the cruise leg.

For information on the availability and reproduction costs of data in the following forms, contact S. N. 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 - Compilation plots at the traditional scale of 4"/degree longitude (1:1,000,000) are no longer produced for Sea Beam cruises. Custom plots may be requested of vertical beam (2&2/3 degree beam width) depths retrieved at one minute intervals of ship time.
3. Plots of magnetic anomaly profiles along track - map scale = 1.2inch/degree, anomaly scale between 15N and 15 S latitude = 500 gamma/inch, anomaly scale north of 15N and south of 15S = 1000 gamma/inch, from values retrieved at approximately 1 mile spacing and regional field removed using the 1980 IGRF.
4. Separate time series files of navigation, depth and magnetics of data merged in the MGD77 Exchange format on magnetic tape.
5. 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

Rev June 1982 (Sea Beam)

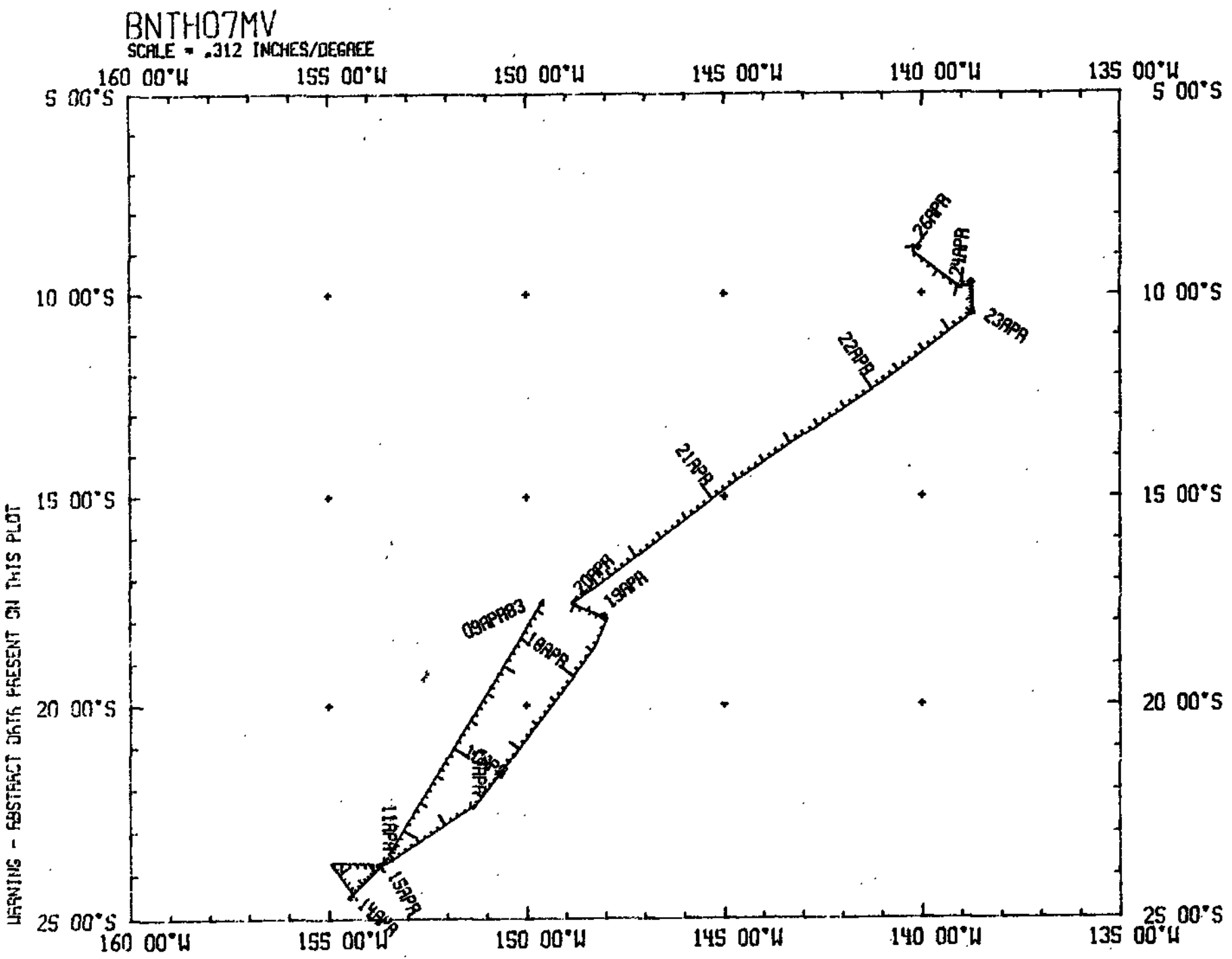
* Only navigation and Sample Index included in this report



BENTHIC EXPEDITION
LEG 7

CHIEF SCIENTIST- H. Craig
Ports: Papeete, Tahiti - Nuku Hiva, Marquesas
Dates: 9 - 25 April 1983
Ship: R/V Melville

TOTAL MILEAGE OF UNDERWAY DATA COLLECTED
1) Cruise - 2373 miles
2) Bathymetry - collected but not processed
3) Magnetics - none collected
4) Seismic Reflection - none collected
5) Gravity - none collected
6) Seabeam - none collected


BNTH07MV
SCALE = .312 INCHES/DEGREE
160 00°W
155 00°W
150 00°W
145 00°W
140 00°W
135 00°W
5 00°S
10 00°S
15 00°S
20 00°S
25 00°S
WARNING - ABSTRACT DATA PRESENT ON THIS PLOT
26APR
24APR
23APR
22APR
21APR
20APR
19APR
09APR03
18APR
17APR
11APR
15APR
14APR

S.I.O. Sample Index

(Issued October 1983)

BENTHIC EXPEDITION

Leg 7

Nuku Hiva, Marquesas (26 April 1983)
to
San Diego, Calif. (11 May 1983)

R/V Melville

Chief Scientist - H. Craig (SIO)

Resident Marine Tech - R. Comer

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

Index Encoding Funded by NSF
Grant Number OCE80-22996
Index Processing and Report Preparation
funded in part by SIA

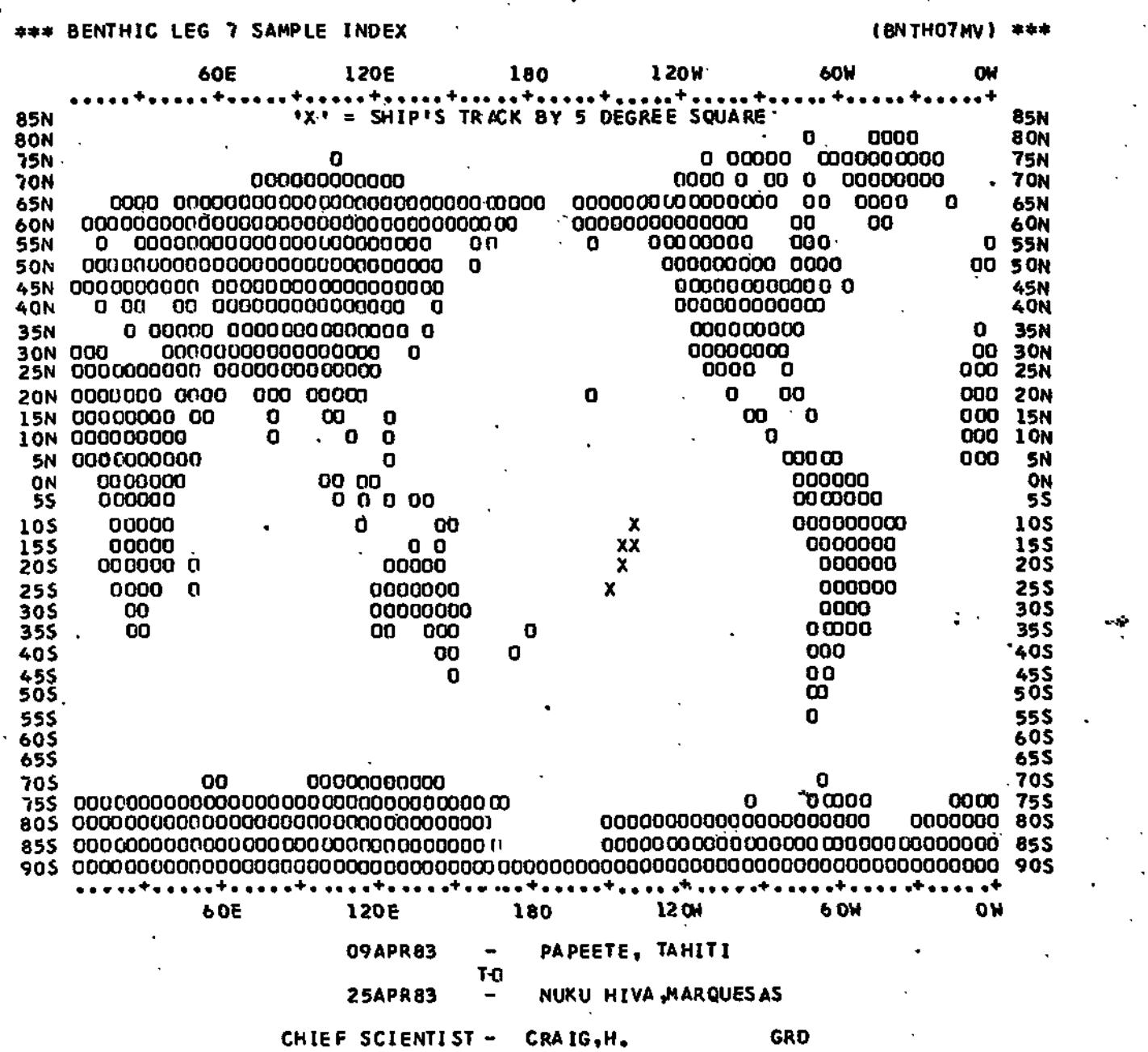
The Sample Index is a first level interdisciplinary listing of time, position, sample identification and disposition of all samples, records and measurements collected on this cruise leg. The index data are encoded at sea by the resident technician and processed on shore by the S.I.O. Geological Data 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.)

GDC Cruise I.D.# -204

S.I.O. SAMPLE INDEX GENERATED 20OCT83

*** BENTHIC LEG 7 SAMPLE INDEX (BNTH07MV) ***



09APR83 - PAPEETE, TAHITI

T-O

25APR83 - NUKU HIVA, MARQUESAS

CHIEF SCIENTIST - CRAIG, H. GRD

SHIP - R/V MELVILLE (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
	AS	BT	DP	DR	GC	HC	LB	PE	
FNC								2	2
GCR				2					2
GDC			2						2
GRD	3	2			32		1	6	44
MTG								1	1
NOA		1							1
PCF						17		1	18
SCG								1	1
SIX								2	2
SWZ								1	1
TOTAL	3	3	2	2	32	17	1	14	74

SAMPLE 'TYPE' CODES USED ABOVE.

AS = AIR SAMPLE.
BT = BATHYTHERMOGRAM
DP = DEPTH
DR = DREDGE
GC = GEOCHEMICAL SAMPLING
HC = HYDROGRAPHIC CAST
LB = LOG BOOKS
PE = PERSONNEL IN SCIENTIFIC PARTY

SAMPLE 'DISP' CODES USED ABOVE

FNC = FRANCE
GCR = GEOLOGICAL CURATING FACILITY -- W. RIEDEL, (EXT. 4386)
GDC = GEOLOGICAL DATA CENTER -- S. SMITH (EXT. 2752)
GRD = GEOLOGICAL RESEARCH DIVISION (EXT. 3360)
MTG = MARINE TECHNOLOGY GROUP (EXT 4194)
NOA = NATIONAL OCEANOG. + ATMOSPH. ADMINISTRATION
PCF = PHYSICAL AND CHEMICAL DATA FACILITY (EXT. 2240)
SCG = SHIPBOARD COMPUTER GROUP (EXT. 4195)
SIX = SCRIPPS INSTITUTION NON-EMPLOYEE - CONTACT D. UTTER (EXT.3675)
SWZ = SWITZERLAND

GMT TIME	D /N DATE	/Y	LOC TIME	LOC TZ	CODE SAMP	SAMPLE IDENT.	CODE DISP	LAT.	LONG.		LEG-SHIP CRUISE
						BENTHIC LEG 7 SAMPLE INDEX					BNTH07NV
*** PORTS ***											
0215	9/	4/83			LGPT	B PAPEETE, TAHITI		17 32. S	149 34. W	F	BNTH07NV
2130	25/	4/83			LGPT	E NUKU-HIVA,MARQUESAS		08 56. S	140 05. W	F	BNTH07NV
0814	16/	4/83			LGSS	B MOERAI, RURUTU		23 12.5S	152 40.0W	S	BNTH07NV
1704	16/	4/83			LGSS	E MOERAI, RURUTU		22 27.0S	151 19.5W	S	BNTH07NV
0912	18/	4/83			LGSS	B MEHETIA		17 55.3S	148 02.7W	S	BNTH07NV
1415	18/	4/83			LGSS	E MEHETIA		17 50.8S	147 59.6W	S	BNTH07NV
1630	22/	4/83			LGSS	B FATU HIVA,MARQUESAS		10 30.8S	138 41.5W	S	BNTH07NV
/330	23/04/83				LGSS	E FATU-HIVA,MARQUESAS		10 30.8S	138 41.5W	S	BNTH07NV
1558	23/04/83				LGSS	B HIVA OA,MARQUESAS		09 48. S	139 01. W	F	BNTH07NV
1100	25/04/83				LGSS	E HIVA-OA,MARQUESAS		09 48. S	139 01. W	F	BNTH07NV

PERSONNEL

*** NAME ***	*** TITLE ***	*** AFFILIATION ***
1 CRAIG,H.	CHIEF SCIENTIST	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
2 COMER,R.	RESIDENT TECH	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
3 STILLWELL,P.E.	STAFF RES. ASSO.	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
4 COSTELLO,J.	MARINE TECH	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
5 LOOSLI,H.	PHYSICIST	SWITZERLAND
6 CRAIG,V.	VOLUNTEER	SCRIPPS INSTITUTION NON-EMPLOYEE - CONTACT D. UTTER (EXT.3675
7 BULLISTER,J.	GRAD. STUDENT	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
8 CARTER,M.	COMPUTER TECH	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
9 STEVENS,L.	OBSERVER	SCRIPPS INSTITUTION NON-EMPLOYEE - CONTACT D. UTTER (EXT.3675
10 KIM,K...	OCEANOGRAPHER	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
11 GRALL,H.	STUDENT	FRANCE
12 LEONARD,P.	OBSERVER	FRANCE
13 GUENTHER,P.	SPECIALIST	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
14 WEISS,R.	SCIENTIST	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093

NOTES AN 'X' IN THE (B)EGIN/(E)ND 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 N. SMITH EXT. 2752 ***									
*** LOG BOOKS ***									
0800	10/ 4/83			LBSC B	SCIENTIFIC LOG BOOK	GRD	22 18.8S	152 44.2W S	BNTH07MV
1402	15/ 4/83			LBSC E	SCIENTIFIC LOG BOOK	GRD	23 47.6S	153 42.5W S	BNTH07MV
*** FATHOGRAMS ***									
0246	9/ 4/83			DPRT B	12KHZ 2 S/SWP R-01	GDC	17 30.6S	149 37.4W S	BNTH07MV
0549	22/ 4/83			DPRT E	12KHZ 2 S/SWP R-01	GDC	11 42.7S	140 16.7W S	BNTH07MV
0618	22/ 4/83			DPRT B	12KHZ 2 S/SWP R-02	GDC	11 39.3S	140 11.8W S	BNTH07MV
2130	25/ 4/83			DPRT E	12KHZ 2 S/SWP R-02	GDC	08 52.2S	140 15.5W S	BNTH07MV
*** DREDGES ***									
0449	19/ 4/83			DRRO	DREDGE 10 2077M	GCR	17 56.8S	148 01.2W S	BNTH07MV
2153	19/ 4/83			DRRO	DREDGE 11 1800M	GCR	17 33.1S	148 49.1W S	BNTH07MV
**** AIR SAMPLE ****									
0215	9/ 4/83			ASCS B	FREON	GRD	17 31.4S	149 34.5W S	BNTH07MV
2130	25/ 4/83			ASCS E	FREON N,CO,H2	GRD	08 52.2S	140 15.5W S	BNTH07MV
2010	13/ 4/83			ASXX B	AIR SAMPLE N2O	GRD	24 29.9S	154 31.5W S	BNTH07MV
2252	13/ 4/83			ASXX E	AIR SAMPLE 83-04-01	GRD	24 29.9S	154 30.8W S	BNTH07MV
2140	21/ 4/83			ASXX B	AIR SAMPLE N2O	GRD	12 37.7S	141 40.2W S	BNTH07MV
0030	22/ 4/83			ASXX E	AIR SAMPLE 83-04-02	GRD	12 19.2S	141 10.9W S	BNTH07MV
HYDROGRAPHIC CAST									
1905	10/ 4/83			HCNI	STA-01 HC-01 4 420M	PCF	23 44.5S	153 37.9W S	BNTH07MV
2220	10/ 4/83			HCNI	STA-01 HC-02 4 42OM	PCF	23 45.5S	153 38.1W S	BNTH07MV
0240	11/ 4/83			HCNI	STA-01 HC-03 41 1520	PCF	23 43.5S	153 37.4W S	BNTH07MV
1814	11/ 4/83			HCNI X	STA-01 HC-04 4 442OM	PCF	23 45.4S	153 37.3W S	BNTH07MV
2156	11/ 4/83			HCNI X	STA-01 HC-05 4 4420M	PCF	23 46.5S	153 36.9W S	BNTH07MV
0140	12/ 4/83			HCNI	STA-01 HC-06 4 377OM	PCF	23 47.2S	153 36.8W S	BNTH07MV
0408	12/ 4/83			HCNI	STA-01 HC-07 J 1510M	PCF	23 47.4S	153 36.6W S	BNTH07MV
0737	12/ 4/83			HCNI	STA-01 HC-08 4 377OM	PCF	23 47.6S	153 36.1W S	BNTH07MV
2225	12/ 4/83			HCNI	STA-01 HC-09 4 820M	PCF	23 43.5S	153 38.7W S	BNTH07MV
0144	13/ 4/83			HCNI	STA-01 HC-10 4 82OM	PCF	23 44.9S	153 38.0W S	BNTH07MV
1925	13/ 4/83			HCNI	STA-02 HC-11 4 4967M	PCF	24 29.8S	154 31.3W S	BNTH07MV
0057	14/ 4/83			HCNI	STA-02 HC-12 4 492OM	PCF	24 29.9S	154 30.8W S	BNTH07MV

*	GMT TIME	D /M /Y DATE	LOC TIME	LOC TZ	CODE SAMP		SAMPLE IDENT.	CODE DISP	LAT.	LONG.		LEG-SHIP CRUISE
	1723	14/ 4/83			HCNI		STA-01 HC-13 4 2420M	PCF	23 44.4S	153 37.7W	S	BNTH07MV
	2135	14/ 4/83			HCNI		STA-01 HC-14 4 242OM	PCF	23 44.1S	153 37.1W	S	BNTH07MV
	0106	15/ 4/83			HCNI		STA-01 HC-15 4 1510M	PCF	23 44.6S	153 37.5W	S	BNTH07MV
	1704	15/ 4/83			HCNI		STA-01 HC-16 4 595M	PCF	23 44.2S	153 38.5W	S	BNTH07MV
	1921	15/ 4/83			HCNI		STA-01 HC-17 4 595M	PCF	23 43.9S	153 39.5W	S	BNTH07MV
	2204	15/ 4/83			HCNI		STA-01 HC-18 4 32OM	PCF	23 45.5S	153 37.9W	S	BNTH07MV
	0100	16/ 4/83			HCNI		STA-01 HC-19 201505M	PCF	23 44.0S	153 35.7W	S	BNTH07MV
	GEOCHEMICAL STATION - LARGE VOLUME											
	1905	10/ 4/83			GCLV		STA-01 CAST-01 42OM	GRD	23 44.5S	153 37.9W	S	BNTH07MV
	1905	10/ 4/83			GCLV		GERRARD 4BRL 01	GRD	23 44.5S	153 37.9W	S	BNTH07MV
	2220	10/ 4/83			GCLV		STA-01 CAST-02 42OM	GRD	23 45.5S	153 38.1W	S	BNTH07MV
	2220	10/ 4/83			GCLV		GERRARD 4BRL 02	GRD	23 45.5S	153 38.1W	S	BNTH07MV
	0240	11/ 4/83			GCLV		STA-01 CAST-03 152OM	GRD	23 43.5S	153 37.4W	S	BNTH07MV
	0240	11/ 4/83			GCLV		GERRARD 4BRL 03	GRD	23 43.5S	153 37.4W	S	BNTH07MV
	1814	11/ 4/83			GCLV	X	STA-01 CAST-04 442OM	GRD	23 45.4S	153 37.3W	S	BNTH07MV
	1814	11/ 4/83			GCLV	X	GERRARD 4BRL 04	GRD	23 45.4S	153 37.3W	S	BNTH07MV
	2156	11/ 4/83			GCLV	X	STA-01 CAST-05 442OM	GRD	23 46.5S	153 36.9W	S	BNTH07MV
	2156	11/ 4/83			GCLV	X	GERRARD 4BRL 05	GRD	23 46.5S	153 36.9W	S	BNTH07MV
	0140	12/ 4/83			GCLV		STA-01 CAST-06 377OM	GRD	23 47.2S	153 36.8W	S	BNTH07MV
	0140	12/ 4/83			GCLV		GERRARD 4BRL 06	GRD	23 47.2S	153 36.8W	S	BNTH07MV
	0408	12/ 4/83			GCLV		STA-01 CAST-07151OM	GRD	23 47.4S	153 36.6W	S	BNTH07MV
	0408	12/ 4/83			GCLV		GERRARD 4BRL 07	GRD	23 47.4S	153 36.6W	S	BNTH07MV
	1737	12/ 4/83			GCLV		STA-01 CAST-08 377OM	GRD	23 43.8S	153 35.5W	S	BNTH07MV
	1737	12/ 4/83			GCLV		GERRARD 4BRL 08	GRD	23 43.8S	153 35.5W	S	BNTH07MV
	2225	12/ 4/83			GCLV		STA-01 CAST-09 82OM	GRD	23 43.5S	153 38.7W	S	BNTH07MV
	2225	12/ 4/83			GCLV		GERRARD 4BRL 09	GRD	23 43.5S	153 38.7W	S	BNTH07MV
	0144	13/ 4/83			GCLV		STA-01 CAST-10 82OM	GRD	23 44.9S	153 38.0W	S	BNTH07MV
	0144	13/ 4/83			GCLV		GERRARD 4BRL 10	GRD	23 44.9S	153 38.0W	S	BNTH07MV
	1925	13/ 4/83			GCLV		STA-02 CAST-11 4967M	GRD	24 29.8S	154 31.3W	S	BNTH07MV
	1925	13/ 4/83			GCLV		GERRARD 4BRL 11	GRD	24 29.8S	154 31.3W	S	BNTH07MV
	0057	14/ 4/83			GCLV		STA-02 CAST-12 492OM	GRD	24 29.9S	154 30.8W	S	BNTH07MV
	0057	14/ 4/83			GCLV		GERRARD 4BRL 12	GRD	24 29.9S	154 30.8W	S	BNTH07MV
	1723	14/ 4/83			GCLV		STA-01 CSST-13 242OM	GRD	23 44.4S	153 37.7W	S	BNTH07MV
	1723	14/ 4/83			GCLV		GERRARD 4BRL 13	GRD	23 44.4S	153 37.7W	S	BNTH07MV
	2135	14/ 4/83			GCLV		STA-01 CAST-14 242OM	GRD	23 44.1S	153 37.1W	S	BNTH07MV
	2135	14/ 4/83			GCLV		GERRARD 4BRL 14	GRD	23 44.1S	153 37.1W	S	BNTH07MV
	0106	15/ 4/83			GCLV		STA-01 CAST-15 151OM	GRD	23 44.6S	153 37.5W	S	BNTH07MV
	0106	15/ 4/83			GCLV		GERRARD 4BRL 15	GRD	23 44.6S	153 37.5W	S	BNTH07MV
	1704	15/ 4/83			GCLV		STA-01 CAST-16 595M	GRD	23 44.2S	153 38.5W	S	BNTH07MV
	1704	15/ 4/83			GCLV		GERRARD 4BRL 16	GRD	23 44.2S	153 38.5W	S	BNTH07MV
	1921	15/ 4/83			GCLV		STA-01 CAST-17 595M	GRD	23 43.9S	153 39.5W	S	BNTH07MV
	1921	15/ 4/83			GCLV		GERRARD 4BRL 17	GRD	23 43.9S	153 39.5W	S	BNTH07MV
	2204	15/ 4/83			GCLV		STA-01 CAST-18 32OM	GRD	23 45.5S	153 37.9W	S	BNTH07MV
	2204	15/ 4/83			GCLV		GERRARD 4BRL 18	GRD	23 45.5S	153 37.9W	S	BNTH07MV

GMT TIME	D/M/Y DATE	LOC TIME	LOC TZ	CODE SAMP	SAMPLE IDENT.	CODE DISP	LAT.	LONG.	LEG-SHIP CRUISE
*** BATHYTHERMOGRAPH ***									
0752	20/ 4/83			BTXP	XBT-01 T6	750M	GRD 16 54.9S	147 55.8W	S BNTH07MV
1559	20/ 4/83			BTXP	XBT-02 T6	550M	GRD 16 02.0S	146 34.2W	S BNTH07MV
0111	21/ 4/83			BTXP	XBT-03 T6	430M	NOA 14 56.8S	145 07.3W	S BNTH07MV
9900					END SAMPLE INDEX				BNTH07MV