## INFORMAL REPORT AND INDEX OF

NAVIGATION, DEPTH, MAGNETIC AND SUBBOTTOM PROFILER DATA

(Issued July 1988)

#### RAITT EXPEDITION

LEG 3

Manzanillo, Mexico (15 March 1988) to San Diego, California (2 April 1988)

R/V Washington

Chief Scientist - P. Lonsdale (SIO)

Resident Marine Technician - R. Comer

Post-Cruise Processing and Report Preparation by Geological Data Center, Scripps Institution of Oceanography

Data Collection and Processing Funded by ONR-0472 and NSF Grant Number OCE87-02835

NOTE: This is an index of underway geophysical data edited and processed 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 chief scientist or the Geological Data Center, Scripps Institution of Oceanography, La Jolla, California 92093.

GDC Cruise I.D.# 237

# INFORMAL REPORT AND INDEX OF NAVIGATION AND UNDERWAY GEOPHYSICAL DATA

Processed by the Geological Data Center Scripps Institution of Oceanography

# Contents:

Track Charts - annotated with dates and hour ticks.

Profiles - depth, magnetic anomaly and gravity free air anomaly vs. distance. Sections of track having subbottom profiles (airgun or watergun) records have a wide black - line along the bottom of the profile. Sections having Sea Beam are indicated by a narrow black line.

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

NOTE: One or more of the underway data types may not be collected on a given cruise leg.

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, CA 92093. Phone (619)534-2752.

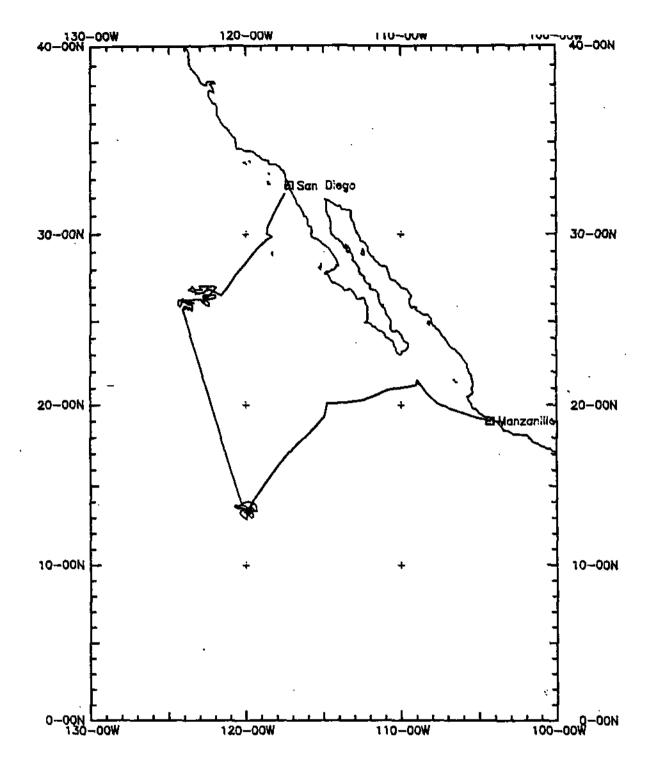
- Navigation listing with times and positions of course and speed changes, fixes and drift velocity.
- 2. Depth compilation plots compilation plots at the traditional scale of 4in/degree longitude (1:1,000,000) are no longer produced for Sea Beam cruises. Custom plots may be requested of vertical beam (2&2/3 degree beam width) depths retrieved at one minute intervals of ship time.
- Plots of depths, magnetics or gravity profiles along track custom plots at various map and profile scales on Mercator projection may be requested.
- 4. Separate time series files of navigation, depth, gravity and magnetics as well as these 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
  - c. Magnetometer records
  - d. Gravity records
  - e. Underway data log book

#### SIO Sea Beam Data

The following forms are available, subject to approval of the cruise leg chief scientist:

- 1) Archive copy of contour swath books generated in real time on board ship available for inspection at the data center.
- 2) Microfilm (35mm flowfilm) containing swath books plus, for some cruises, the Sea Beam monitor record and navigation list.
- 3) Sea Beam merged tapes Sea Beam data merged with navigation. (Navigation is edited to the extent that DR courses and speeds are edited and poor fixes are removed after inspection of drift vectors between fix pairs. No editing is done on the basis of adjusting to overlapping Sea Beam swaths.)
- 4) Archive contour plots 16"/degree chart scale, with contour interval nominally 50m, are generated for all transit lines. Some survey areas are plotted at appropriate scales as well. Available for inspection at data center; additional copies may be generated from plot files stored on tape.
- 5) Custom generated plots of Sea Beam swaths on Mercator projection in four colors at variable plot scales and contour intervals. There are provisions to adjust positions of individual track lines and to edit out beams (bad data or overlapping data on inside of turns).

revised October 1986



# RAITT EXPEDITION LEG 3

CHIEF SCIENTIST: P. Lonsdale (SIO)

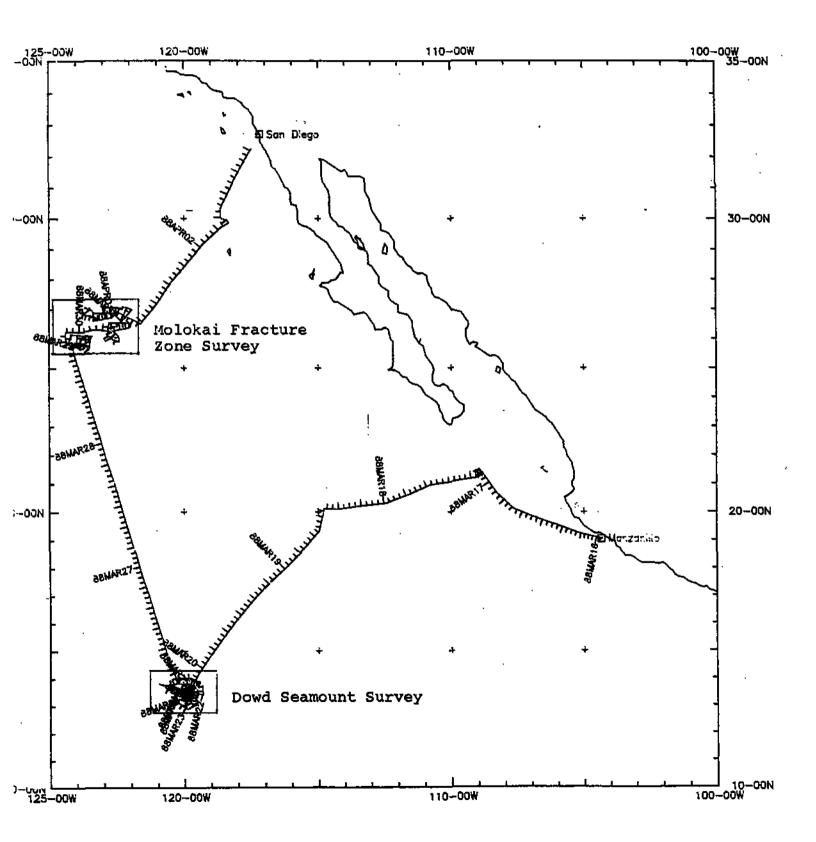
PORTS: Manzanillo, Mexico - San Diego, Calif.

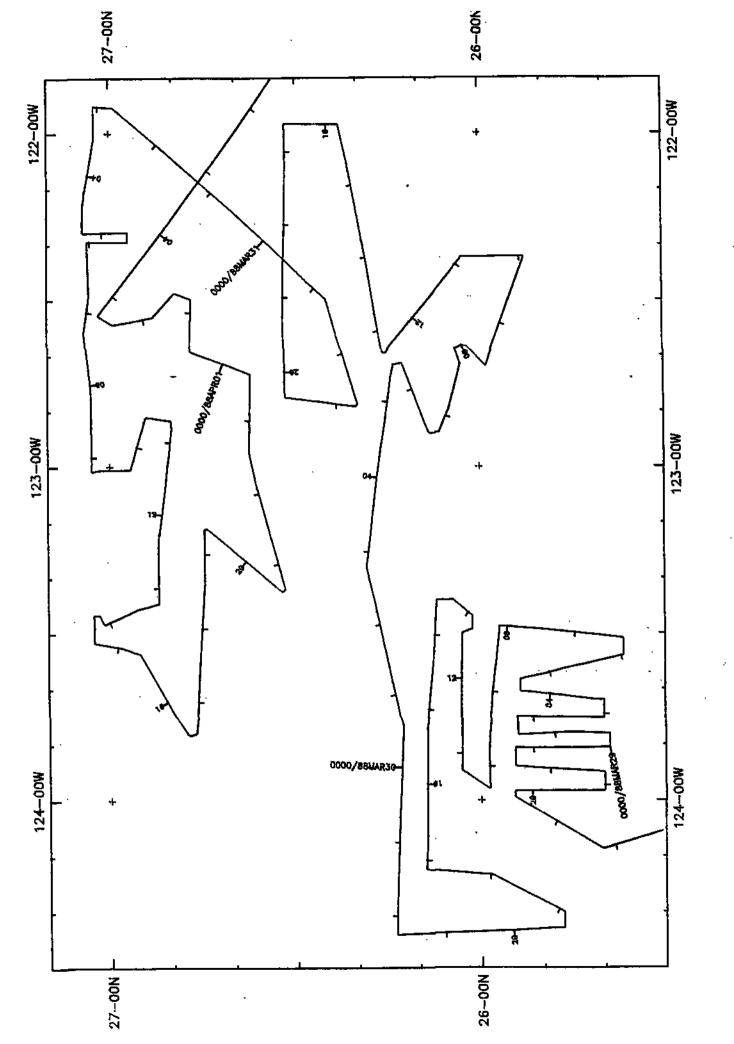
DATES: 15 March - 2 April 1988

SHIP: R/V T. Washington

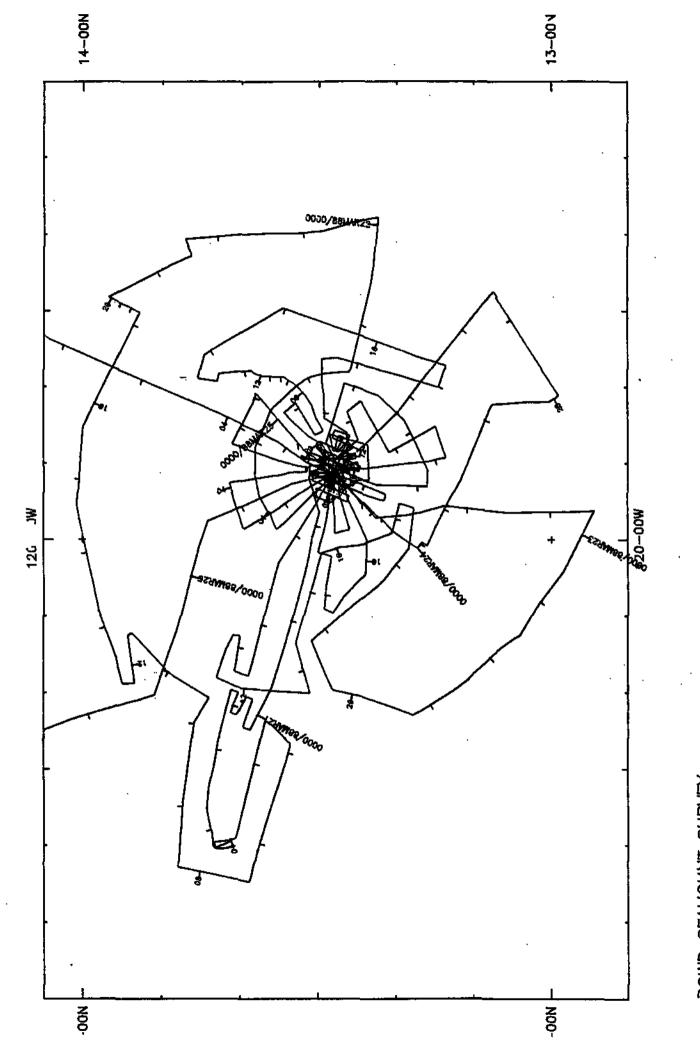
# TOTAL MILEAGE OF UNDERWAY DATA COLLECTED

- 1) Cruise 4546 miles
- 2) Bathymetry 4521 miles
- 3) Magnetics 3261 miles
- 4) Seismic Reflection none collected
- 5) Gravity collected but not funded for processing
- 6) Sea Beam 4546 miles

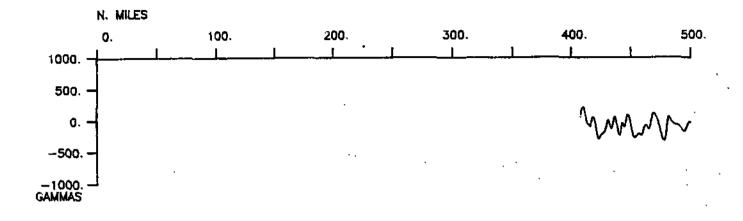


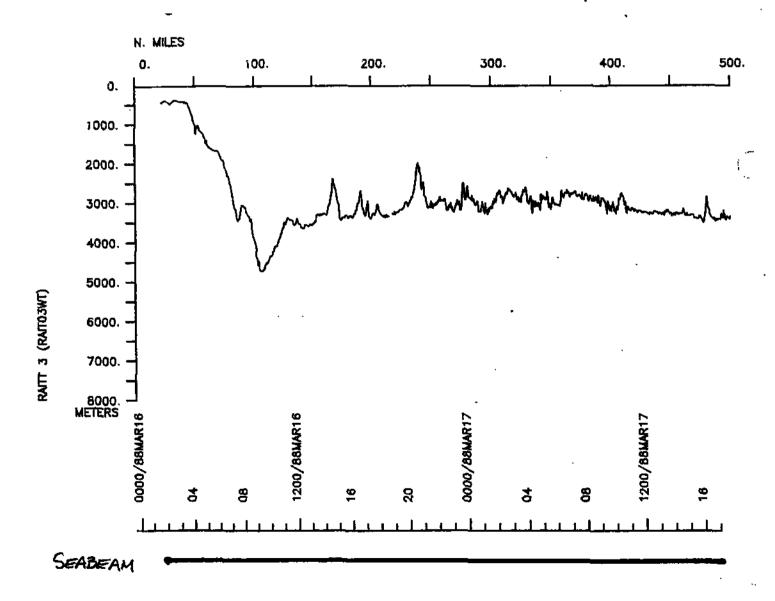


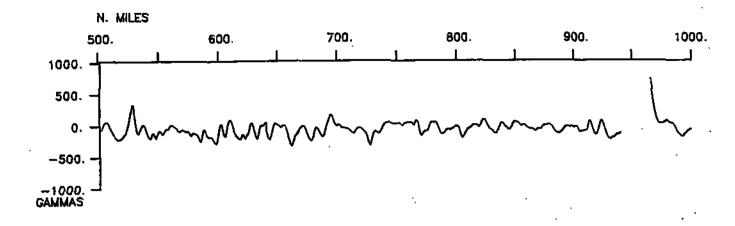
MOI OKAI F.Z./SHIRLEY TROUGH SURVEY Mei or at 4.8 inches per degree longitude

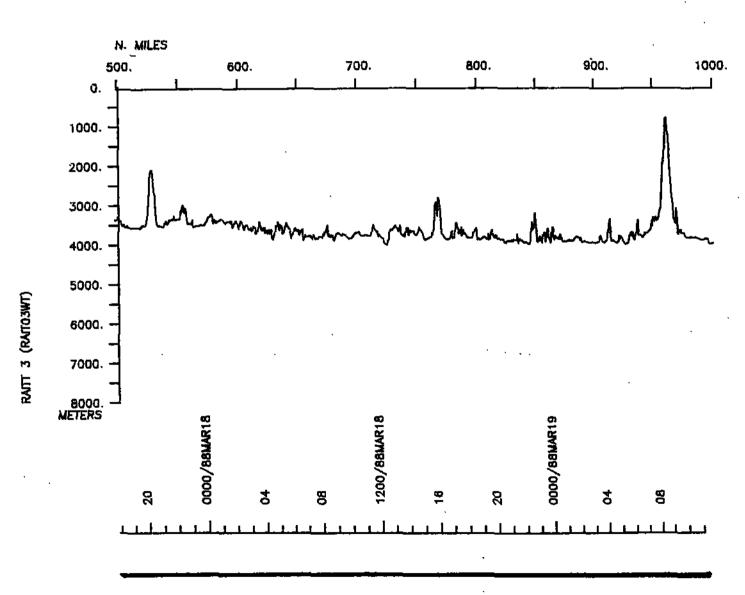


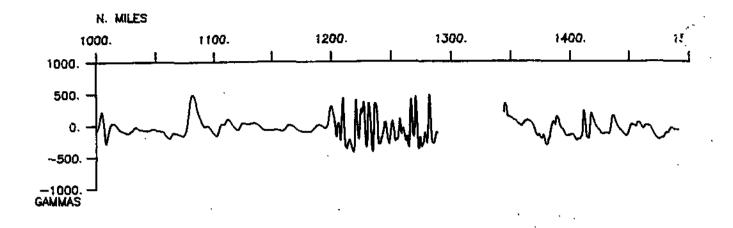
DOWD SEAMOUNT SURVEY
Mercator at 4.8 inches per degree longitude

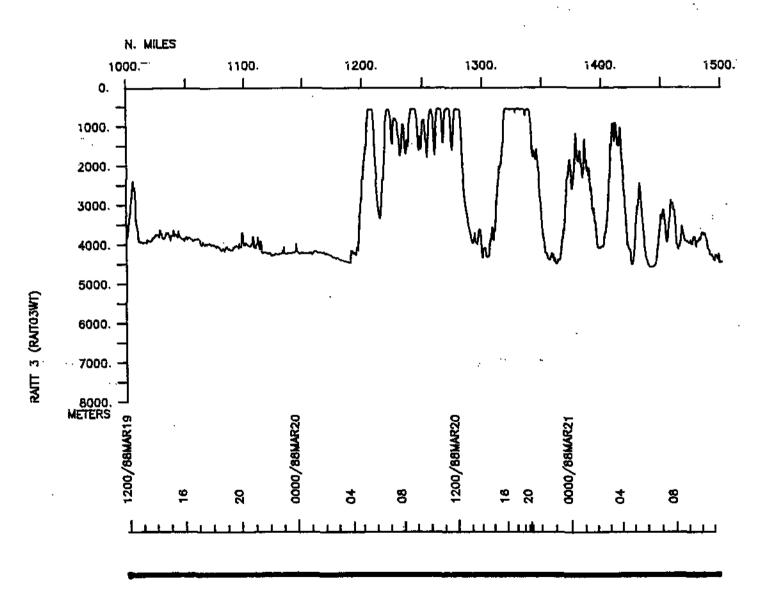


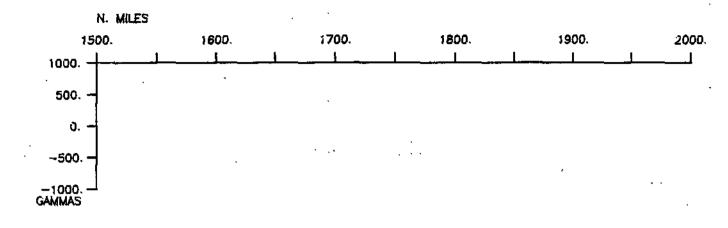


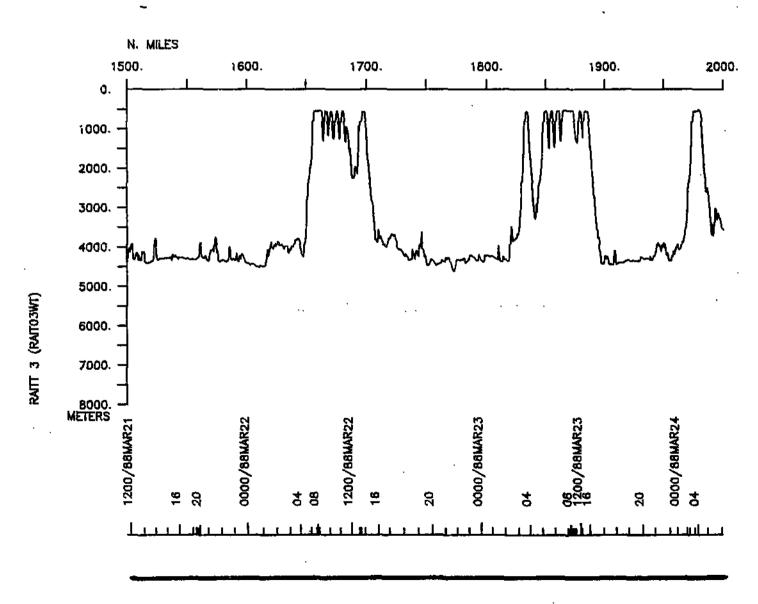


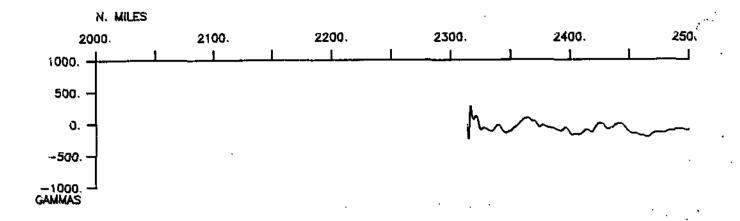


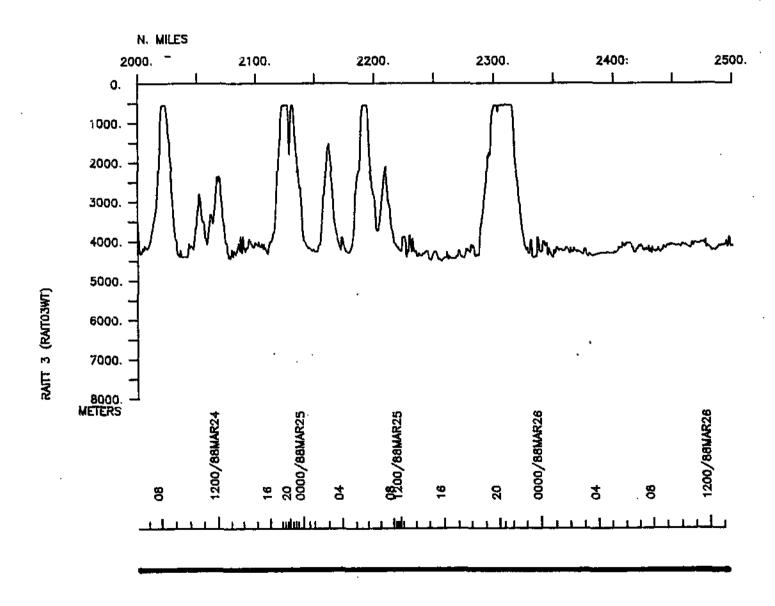


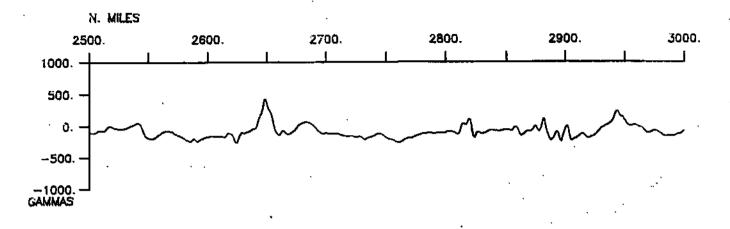


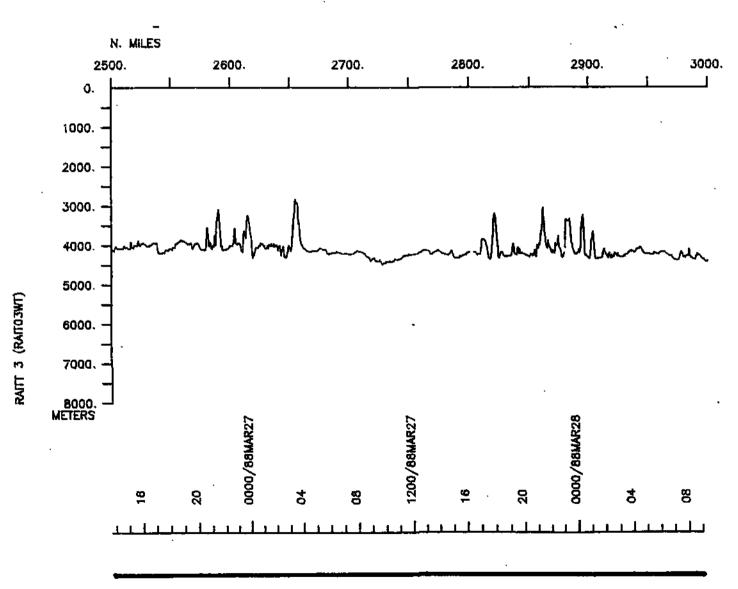


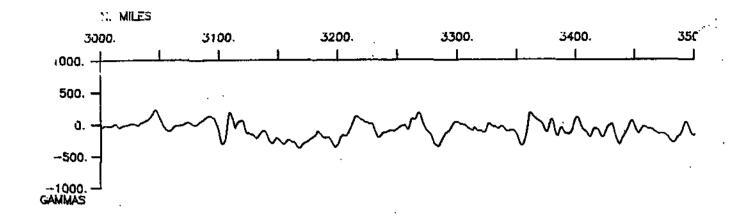


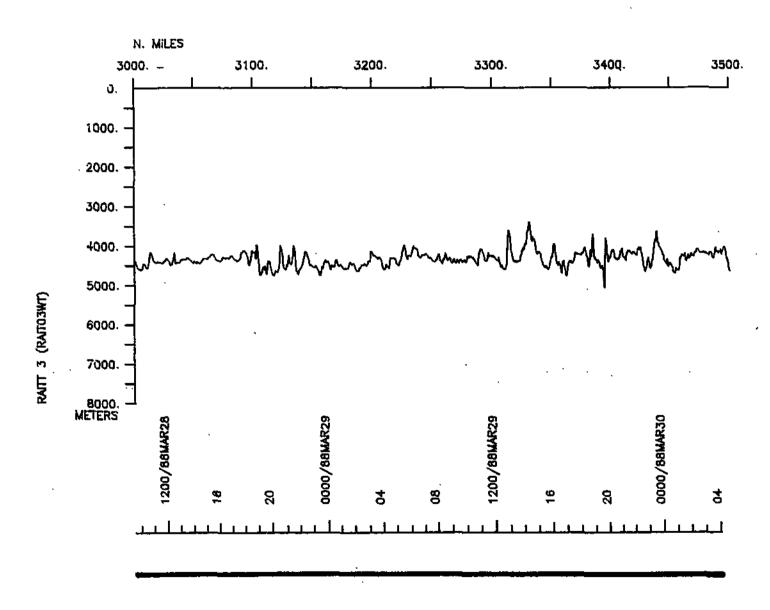


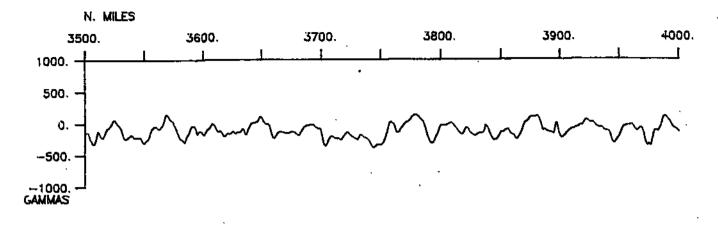


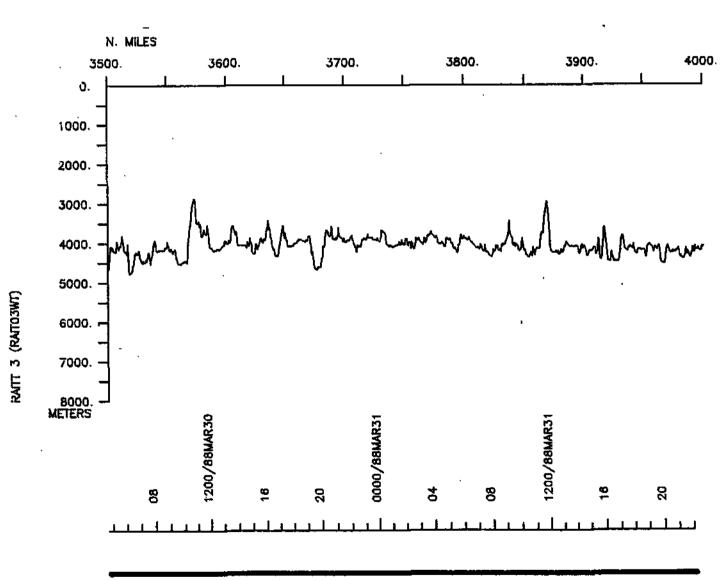


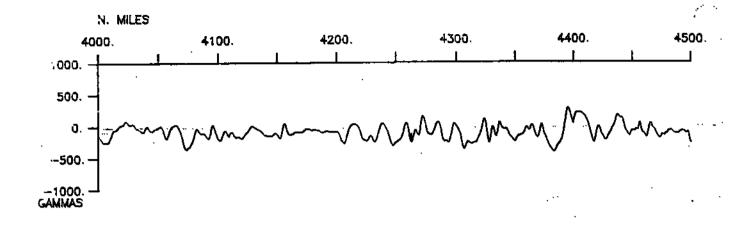


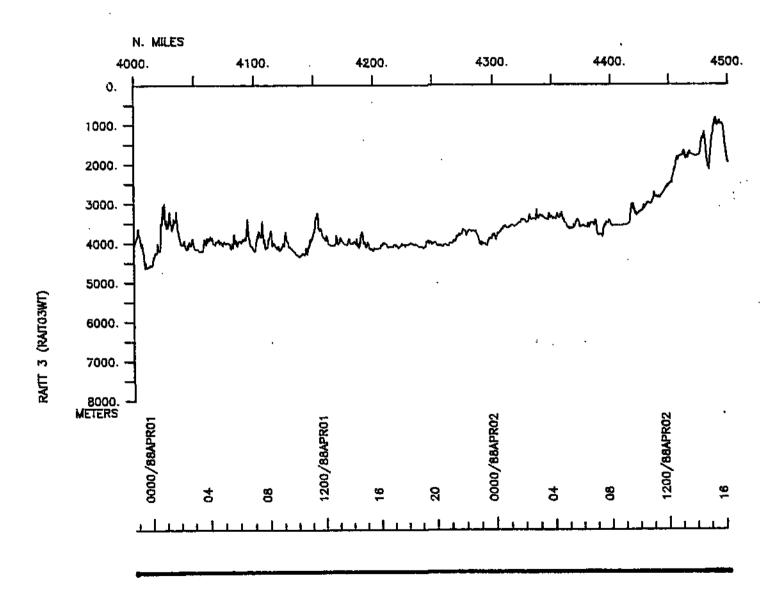


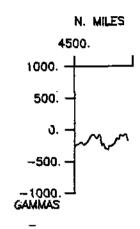


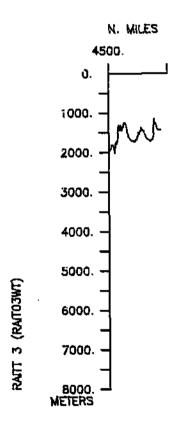












° ئىي S.I.O. SAMPLE INDEX

(Issued July 1988)

RAITT EXPEDITION

Leg 3

Manzanillo, Mexico (15 March 1988)
to
San Diego, Calif. (2 April 1988)
R/V T. Washington

Chief Scientist - P. Lonsdale (SIO)

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 marine 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 lines. Disposition and sample type are represented by three and four character codes to permit further computer searches on these parameters. (Listings defining these codes are available from the Geological Data Center.)

GDC Cruise I.D.# 237

# ul 8 11:34 1988 RAIT LEG 3 SAMPLE INDEX Page 1

### #\*\*\*PORTS\*\*\*

2330 150388	LGPT B MANZANILLO, MEXICO	19-034N 104-201W fRAIT03WT
2330 020488	LGPT E SAN DIEGO, CALIF.	32-43 N 117-11 W FRAITO3WT.

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

	***NAME***	. ***TITLE***	***AFFILIATION***	**CRID**
PECS MPL	LONSDALE, DR.P.	CHIEF SCIENTIST	SCRIPPS INSTITUTION	RAITO3WT
PESP MBD	SMITH, DR.K.	ASSOC, RES. BIOL.	SCRIPPS INSTITUTION	RAITO3WT
PESP MIT	SMITH, DR.D.	POST DOC.	MASS.INST. TECHNOLOGY	RAITO3WT
PESP MPL	DEMOUSTIER, DR.C.	RES. OCEANOG.	SCRIPPS INSTITUTION	RAITO3WT
PERT STS	COMER, R.L.	RESIDENT TECH.	SCRIPPS INSTITUTION	RAITOSWT
PECT STS	STUBER,D.	COMPUTER TECH.	SCRIPPS INSTITUTION	RAIT03WT
PEBE STS	HYLAS,T.	SEABEAM ENG.	SCRIPPS INSTITUTION	RAITO3WT
PEBO STS	ALBRIGHT, U.	SEABEAM PROC.	SCRIPPS INSTITUTION	RAITO3WT
PEMT STS	MEAD,R.	MARINE TECH.	SCRIPPS INSTITUTION	RAITO3WT
PESP MPL	FOSTER,A.	ENGINEERING AID	SCRIPPS INSTITUTION	RAITO3WT
PESP MBD	BALDWIN, R.	STAFF RES. ASSIS	SCRIPPS INSTITUTION	RAITO3WT
PEST MPL	DIEU,J.	GRAD. STUDENT	SCRIPPS INSTITUTION	RAITO3WT
PEST UCJ	RITSON, P.	STUDENT	U.OF CAL. SAN DIEGO	RAITO3WT
PEST GRD	FLORENDO, F.	GRAD. STUDENT	SCRIPPS INSTITUTION	RAITO3WT
TEVL MPL	DANES, P.	VOLUNTEER	SCRIPPS INSTITUTION	RAITO3WT
EXN MEX	RUBI,G.	OBSERVER	MEXICO	RAITO3WT

#### #\*\*\*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 A PARTICULAR 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. POSITIONS ARE IN TENTHS #OF MINUTES.

#GMT DDMMYY LOC T #TIME DATE TIME Z	SAMP SAMPLE CODE IDENTIFIER	DISP CODE LAT.	CRUISE LONG. LEG-SHIP
	JRATOR - S. M. SMITH EXT.		
#***LOG BOOKS***			
2330 150388 2005 020488	LBUW B UNDERWAY WATCH LOC	G GDC 19-034N G GDC 32-120N	104-201W sRAITO3WT 117-314W sRAITO3WT
#*** ECHO SOUNDER RI	ECORDS - 12 KHZ SEA BEAM P	MONITOR ***	
0136 160388 2015 190388	SBRM B SEABEAM MONITOR R-SBRM E SEABEAM MONITOR R-		104-400W sRAIT03WT 118-545W sRAIT03WT
2020 190388 1204 230388	SBRM B SEABEAM MONITOR R- SBRM E SEABEAM MONITOR R-		118-551W sRAITO3WT 119-497W sRAITO3WT
1209 230388 0223 270388	SBRM B SEABEAM MONITOR R-SBRM E SEABEAM MONITOR R-		119-498W sRAIT03
0230 270388 1854 300388	SBRM B SEABEAM MONITOR R-SBRM E SEABEAM MONITOR R-		121-485W sRAITO3WT 122-283W sRAITO3WT
1859 300388 2112 020488	SBRM B SEABEAM MONITOR R-SBRM E SEABEAM MONITOR R-		122-294W sRAIT03WT 117-306W sRAIT03WT
#*** SEA BEAM SWATH	BOOKS ***		•
0137 160388 2246 160388	MBSB B ARCHIVE SWATH BK. MBSB E ARCHIVE SWATH BK.	01 GDC 19-041N 01 GDC 20-500N	104-402W sRAIT03WT 108-259W sRAIT03WT
2246 160388 0548 180388	MBSB B ARCHIVE SWATH BK. MBSB E ARCHIVE SWATH BK.	02 GDC 20-500M 02 GDC 20-085M	108-259W sRAIT03WT   113-460W sRAIT03WT
0548 180388 1238 190388	MBSB B ARCHIVE SWATH BK. MBSB E ARCHIVE SWATH BK.		113-460W sRAIT03WT   117-596W sRAIT03WT
1238 190388 1512 200388	MBSB B ARCHIVE SWATH BK. MBSB E ARCHIVE SWATH BK.		117-596W sRAITO3WT   119-396W sRAITO3WT
1512 200388 0111 220388	MBSB B ARCHIVE SWATH BK. MBSB E ARCHIVE SWATH BK.		N 119-396W SRAITO3WT N 119-344W SRAITO3WT

#GMT #TIM1 #	DDMMYY LO E DATE TIM	C T SAMP		SAMPLE IDENTIFIER			DISP CODE	LAT.	LONG.	CRUISE LEG-SHIP
0112	220388	MBSB	B	ARCHIVE SWAT	н вк. (	06	GDC	13-251N	119-346W	sRAITO3WT
1055	230388	MBSB	E		н вк. (	06	GDC	13-311N	119-495W	sRAITO3WT
1058 0502	230388 250388	MBSB MBSB	B E	ARCHIVE SWAT	H BK. (	07 07	GDC GDC	13-312N 13-341N	119-495W 119-551W	sRAITO3WT sRAITO3WT
0502	250388	_ MBSB	B	ARCHIVE SWAT ARCHIVE SWAT	н вк. (	80	GDC	13-341N	119-551W	sRAITO3WT
1702	260388	MBSB	E		н вк. (	80	GDC	16-477N	121-163W	sRAITO3WT
1702	260388	MBSB	B	ARCHIVE SWAT	н вк. (	09	GDC	16-477N	121-163W	sRAITO3WT
0303	280388	MBSB	E		н вк. (	09	GDC	22-578N	123-160W	sRAITO3WT
0303	280388	MBSB	B	ARCHIVE SWAT	н вк. :	10	GDC	22-578N	123-160W	sRAITO3WT
1106	290388	MBSB	E		н вк. :	10	GDC	26-031N	123-503W	sRAITO3WT
1106	290388	MBSB	B	ARCHIVE SWAT	н вк. :	11	GDC	26-031N	123-503W	sRAITO3WT
727	300388	MBSB	E		н вк. :	11	GDC	26-317N	122-093W	sRAITO3WT
1727	300388	MBSB	B	ARCHIVE SWAT	н вк. :	12	GDC	26-317N	122-093W	sRAITO3WT
0053	010488	MBSB	E		н вк. :	12	GDC	26-470N	122-340W	sRAITO3WT
0053	010488	MBSB	B	ARCHIVE SWAT	н вк. :	13	GDC	26-470N	122-340W	sRAITO3WT
1150	020488	MBSB	E		н вк. :	13	GDC	30-451N	118-265W	sraito3WT
1150	020488	MBSB	B	ARCHIVE SWAT	H BK.	14	GDC	30-451N	118-265W	sRAITO3WT
2047	-020488	MBSB	E	ARCHIVE SWAT		14	GDC	32-130N	117-306W	sRAITO3WT
#***	SEA BEAM	SURVEY ***								
0229	190388	MBSV	B	DOWD SEAMOUN	T SURVI	EY	GDC	17-378N	116-401W	sRAITO3WT
2341	250388	MBSV	E	DOWD SEAMOUN		EY	GDC	13-453N	120-009W	sRAITO3WT

		SAMPLE IDENTIFIER				CRUISE LEG-SHIP
#*** MAGNETIC RECOR						•
1010 170388 2005 020488	MGRA B MGRA E	MAGNETICS R-01 MAGNETICS R-01	GDC GDC	21-034N 32-120N	109-422W 117-314W	sRAITO3WT sRAITO3WT
#*** THERMOGRAPH RE	CORDING	S ***				
2345 150388 - 2330 020488	TGRC B	THERMOGRAPHS 1-14 THERMOGRAPHS 1-14	GDC GDC	19-038N 32-130N	104-205W 117-306W	sRAITO3WT sRAITO3WT
#*** EXPENDABLE BAT	HYTHERM	OGRAPHS ***				
0000 160388 2000 020488	BTXP B BTXP E	BATHYTHERMOGRAPHS BATHYTHERMOGRAPHS	GDC GDC	19-032N 32-111N	104-235W 117-320W	sRAITO3WT sRAITO3WT
#*** CONTINUOUS GRA	VIMETER	***				1
2330 150388 0000 030488	GVSV B GVSV E	GRAVITY METER GRAVITY METER	GDC GDC	19-034N 32-130N	104-201W 117-306W	sRAITO3WT sRAITO3WT
#*** ROCK DREDGES *	***					
1315 220388 1411 220388	DRRO B DRRO E	ROCK DREDGE 125 961 ROCK DREDGE 125 829	M GCR M GCR	13-253N 13-261N	119-527W 119-530W	sRAITO3WT sRAITO3WT
#*** CURRENT METER	STATION	S ***				
1625 200388 2000 250388		STA. 101DS 545 STA. 101DS				sRAITO3WT sRAITO3WT
1710 200388 2026 250388		STA. 102DS 574 STA. 102DS 494				sRAITO3WT sRAITO3WT
1750 200388 2057 250388		STA. 103DS 548 STA. 103DS				sRAITO3WT sRAITO3WT

#GMT DDMMYY LOC T #TIME DATE TIME Z #	SAMP SAMPLE CODE IDENTIFIER	DISP CODE LAT.	CRUISE LONG. LEG-SHIP
#*** FREE VEHICLE T	RAP STATIONS ***		
1625 200388	TRFV B STA. 101DS	553M MBD 13-269N	119-522W sRAIT03WT
2000 250388	TRFV E STA. 101DS	MBD 13-262N	119-529W sRAIT03WT
1710 200388	TRFV B STA. 102DS	582M MBD 13-299N	119-495W sRAIT03WT
2026 250388	TRFV E STA. 102DS	MBD 13-274N	119-520W sRAIT03WT
1750 200388	TRFV B STA. 103DS	556M MBD 13-266N	119-497W sRAITO3WT
2057 250388	TRFV E STA. 103DS	MBD 13-296N	119-503W sRAITO3WT
#*** OPEN NET STATI	ONS ***		
1828 200388	ONIM B IM OBLIQ. SONIM E IM OBLIQ. S	TAO1 300M MLR 13-272N	119-528W sRAIT03WT
1854 200388		TAO1 300M MLR 13-277N	119-523W sRAIT03WT
3900 200388	ONIM B 1M OBLIQ. S	TAO2 710M MLR 13-278N	119-522W sRAIT03WT
J00 200388	ONIM E 1M OBLIQ. S	TAO2 710M MLR 13-290N	119-513W sRAIT03WT
2000 200388	ONIM B 1M OBLIQ. S	TAO3 300M MLR 13-290N	119-513W sRAIT03WT
2021 200388	ONIM E 1M OBLIQ. S	TAO3 300M MLR 13-294N	119-513W sRAIT03WT
2030 200388	ONIM B IM OBLIQ. S	TAO4 710M MLR 13-295N	119-513W sRAIT03WT
2129 200388	ONIM E IM OBLIQ. S	TAO4 710M MLR 13-313N	119-521W sRAIT03WT
1725 210388	ONIM B IM OBLIQ. S	TAO5 300M MLR 13-531N	119-301W sRAIT03WT
1746 210388	ONIM E IM OBLIQ. S	TAO5 300M MLR 13-536N	119-299W sRAIT03WT
1752 210388	ONIM B IM OBLIQ. S	TAO6 710M MLR 13-537N	119-298W sRAIT03WT
1842 210388	ONIM E IM OBLIQ. S	TAO6 710M MLR 13-548N	119-292W sRAIT03WT
1850 210388	ONIM B 1M OBLIQ. S	TAO7 710M MLR 13-550N	119-292W sRAIT03WT
1939 210388	ONIM E 1M OBLIQ. S	TAO7 710M MLR 13-560N	119-286W sRAIT03WT
1947 210388	ONIM B 1M OBLIQ. S	TAO8 300M MLR 13-562N	119-286W sRAIT03WT
2008 210388	ONIM E 1M OBLIQ. S	TAO8 300M MLR 13-565N	119-283W sRAIT03WT

#GMT DDMMYY LOC T #TIME DATE TIME Z #	SAMP CODE	SAMPLE IDENTIFIER	DISP CODE LAT.	CRUISE LONG. LEG-SHIP
0716 230388	ONIM B	1M OBLIQ. STA09	710M MLR 13-262N	119-511W sRAITO3WT
0806 230388	ONIM E		710M MLR 13-272N	119-505W sRAITO3WT
0812 230388	ONIM B	1M OBLIQ. STA10	710M MLR 13-273N	119-506W sRAIT03WT
0910 230388	ONIM E	1M OBLIQ. STA10	710M MLR 13-286N	119-502W sRAIT03WT
0915 230388	ONIM B	1M OBLIQ. STA11	300M MLR 13-287N	119-501W sRAIT03WT
0942 230388	ONIM E	1M OBLIQ. STA11	300M MLR 13-293N	119-501W sRAIT03WT
0947 230388 1002 230388	ONIM B	1M OBLIQ. STA12 1M OBLIQ. STA12	300M MLR 13-295N	119-501W sRAIT03WT 119-499W sRAIT03WT
1008 230388	ONIM B	1M OBLIQ. STA13	300M MLR 13-299N	119-499W sRAIT03WT
1029 230388	ONIM E	1M OBLIQ. STA13	300M MLR 13-303N	119-498W sRAIT03WT
1035 230388	ON1M B	1M OBLIQ. STA14	710M MLR 13-305N	119-497W sRAITO3WT
1125 230388	ON1M E		710M MLR 13-320N	119-492W sRAITO3WT
0823 250388	ONIM B	1M OBLIQ. STA15	300M MLR 13-334N	119-395W sRAITO
0845 250388		IM OBLIQ. STA15	300M MLR 13-337N	119-393W sRAITO3WT
0849 250388	ONIM B	1M OBLIQ. STA16	710M MLR 13-338N	119-393W sRAITO3WT
0939 250388	ONIM E		710M MLR 13-345N	119-388W sRAITO3WT
0946 250388 1008 250388	ONIM B	1M OBLIQ. STA17	300M MLR 13-346N 300M MLR 13-351N	119-387W sRAITO3WT 119-387W sRAITO3WT
1012 250388	ONIM B	1M OBLIQ. STA18	300M MLR 13-352N	119-387W sRAITO3WT
1033 250388	ONIM E		300M MLR 13-356N	119-387W sRAITO3WT
1040 250388	ON1M B	3 1M OBLIQ. STA19	710M MLR 13-358N	119-387W sRAITO3WT
1130 250388	ON1M E	1M OBLIQ. STA19	710M MLR 13-369N	119-386W sRAITO3WT
1136 250388 1229 250388	ONIM B	IM OBLIQ. STA20	710M MLR 13-370N 710M MLR 13-380N	119-386W sRAITO3WT 119-384W sRAITO3WT

# 11 8 11:34 1988 RAIT LEG 3 SAMPLE INDEX Page 7

#GMT DDMMYY LOC #TIME DATE TIME #		SAMPLE IDENTIFIER		OISP CODE LAT.		CRUISE LEG-SHIP
" #*** CAMERA STA	TIONS ***					
0555 220388 0900 220388		B STA. 104DS E STA. 104DS		MBD 13-278N MBD 13-281N		
1220 230388 1510 230388	CATB CATB	B STA. 105DS E STA. 105DS	567-725M 567-725M	MBD 13-297N MBD 13-308N		
#*** ISACC-KIDD	- MIDWATER	NET TRAWL ***	•			
1710 240388 2007 240388				MBD 13-271N MBD 13-303N		
#*** HYDROCASTS	***					
150 240388 0342 240388 2110 240388	HCNA HCNA HCNA HCNA HCNA	SO G SO G	12 1005M 12 505M 12 506M 12 1006M	MLR 13-170N MLR 13-242N MLR 13-279N MLR 13-296N MLR 13-328N MLR 13-383N	119-553W 119-508W 119-497W 119-476W	sRAITO3WT sRAITO3WT sRAITO3WT sRAITO3WT
# * * *		END SAMPLE	INDEX			