

INFORMAL REPORT AND INDEX OF  
NAVIGATION, DEPTH, MAGNETIC AND SUBBOTTOM PROFILER DATA \*  
(Issued November 1983)

ECHO EXPEDITION

LEG 1

San Diego, Calif. (3 June 1983)  
to  
San Diego, Calif. (30 June 1983)  
R/V Melville

Chief Scientist - F. Spiess (SIO)

Resident Marine Tech - J. Boaz

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

Data Collection Funded by NSF and NOAA  
Grant Number NSF OCE80-24472  
and NOAA-00659  
Data Processing funded by SIA and NSF

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.# - 207

\* 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. M. Smith, Curator, Geological Data Center, Scripps Institution of Oceanography, La Jolla, California 92093. Phone (714) 452-2752.

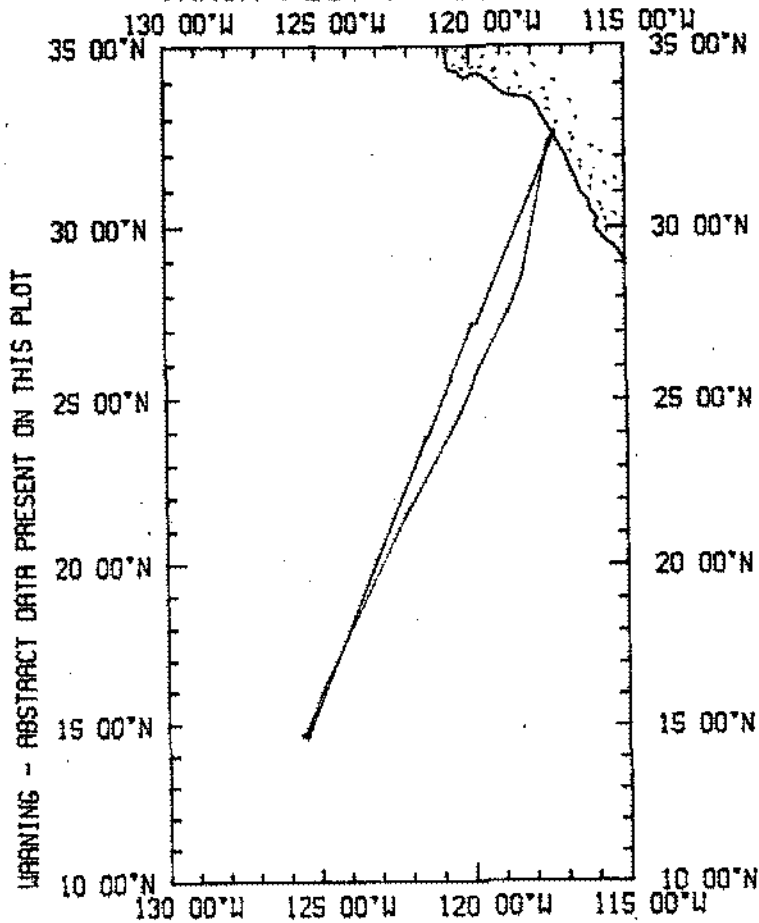
1. Navigation listing of times and positions of course and speed changes, fixes and drift velocity.
2. Depth Compilation Plots - Compilation plots at the traditional scale of 4"/degree longitude (1:1,000,000) are no longer produced for Sea Beam cruises. Custom plots may be requested of vertical beam (2 $\frac{2}{3}$  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.

ECH001MV

TRACK PLOT AT .1632 IN/DEGREE



ECHO EXPEDITION  
LEG 1

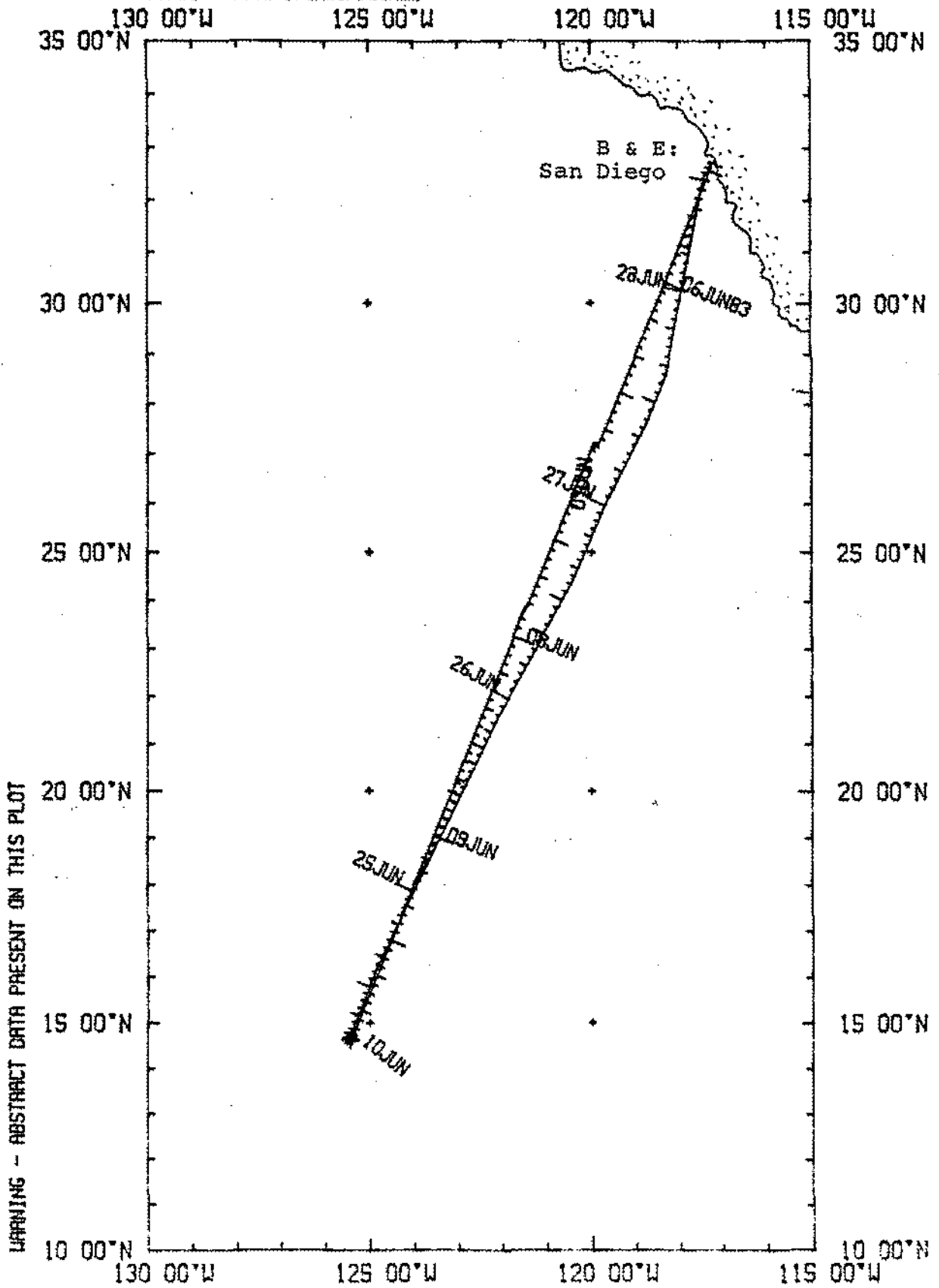
CHIEF SCIENTIST- F. Spiess (SIO)  
Ports: San Diego, Calif. - San Diego, Calif.  
Dates: 3 June - 30 June 1983  
Ship: R/V Melville

TOTAL MILEAGE OF UNDERWAY DATA COLLECTED

- 1) Cruise - 2813 miles
- 2) Bathymetry - none collected
- 3) Magnetics - none collected
- 4) Seismic Reflection - none collected
- 5) Gravity - none collected

ECH001MV

SCALE = .312 INCHES/DEGREE



S.I.O. Sample Index  
(Issued November 1983)

ECHO EXPEDITION

Leg 1

San Diego, Calif. (3 June 1983)  
to  
San Diego, Calif. (30 June 1983)

R/V Melville

Chief Scientist - F. Spiess (SIO)

Resident Marine Tech - J. Boaz

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.)

S.I.O. SAMPLE INDEX

GENERATED 18NOV83

\*\*\* ECHO LEG 1 SAMPLE INDEX

(ECHO01MVI) \*\*\*

	60E	120E	180	120W	60W	0W
+.....+.....+.....+.....+.....+.....+.....+						
'X' = SHIP'S TRACK BY 5 DEGREE SQUARE						
85N						85N
80N					0 0000	80N
75N		0		0 00000	0000000000	75N
70N		0000000000		0000 0 00 0	00000000	70N
65N	0000 0000000000000000000000000000			0000000000000000	01 0000 0	65N
60N	0000000000000000000000000000000000			0000000000000000	00 00	60N
55N	0 0000000000000000000000000000		01	0 00000000	000	0 55N
50N	00000000000000000000000000000000		0	0000000000 0000		00 50N
45N	0000000000 0000000000000000000000			000000000000 0		45N
40N	0 00 00 0000000000000000 0			000000000000		40N
35N	0 00000 00000000000000 0			0000000000		0 35N
30N	000 000000000000000000 0			00000000		00 30N
25N	0000000000 00000000000000000000			0000 0		000 25N
20N	00000000 0000 0000 000000		0	0 00		000 20N
15N	00000000 00 0 00 0			00 0		000 15N
10N	0000000000 0 0 0 0			X 0		000 10N
5N	0000000000 0				00000	000 5N
0N	00000000	00 00			000000	0N
5S	000000	0 0 0 00			00 0000	5S
10S	00000	0 0000			0000000000	10S
15S	00000	0 0			0000000	15S
20S	000000 0	00000			000000	20S
25S	0000 0	0000000			000000	25S
30S	00	00000000			0000	30S
35S	00	00 000	0		00000	35S
40S		00	0		000	40S
45S		0			00	45S
50S					00	50S
55S					0	55S
60S						60S
65S						65S
70S	00 00000000000				0	70S
75S	0000000000000000000000000000000000			0 00000	0000	75S
80S	0000000000000000000000000000000000			0000000000000000000000000000000000	0000000	80S
85S	0000000000000000000000000000000000			0000000000000000000000000000000000	00000000000000	85S
90S	0000000000000000000000000000000000			0000000000000000000000000000000000	0000000000000000000000000000000000	90S
+.....+.....+.....+.....+.....+.....+.....+						
	60E	120E	180	120W	60W	0W

05JUN83 - SAN DIEGO, CALIF.

TR

28JUN83 - SAN DIEGO, CALIF.

CHIEF SCIENTIST - SPIESS, R. MPL

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	
	BU	CO	DT	PE		
GSU	1			1	1	
MBD	1			3	3	
MPL	1	5	4	11	20	
MTG	1			2	2	
NDA	1			2	2	
RRH	1	16		1	17	
SIO	1			1	1	
SIX	1			5	5	
TOTAL	1	5	16	4	26	51

SAMPLE 'TYPE' CODES USED ABOVE

BU = BUOY (OCEANOGRAPHIC) REPLACED TYPE RB MAR. 74  
 CO = CORE  
 DT = DEEP TOWED INSTRUMENT PACKAGE (MPL PROJECT)  
 PE = PERSONNEL IN SCIENTIFIC PARTY

SAMPLE 'DISP' CODES USED ABOVE

GSU = U.S. GEOLOGICAL SURVEY  
 MBD = MARINE BIOLOGY RESEARCH DIVISION (EXT. 4245)  
 MPL = MARINE PHYSICAL LAB. (EXT 2305)  
 MTG = MARINE TECHNOLOGY GROUP (EXT 4194)  
 NDA = NATIONAL OCEANOGR. + ATMOSPHER. ADMINISTRATION  
 RRH = ROBERT R. HESSLER (EXT 2665)  
 SIO = SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA, CAL. 92093  
 SIX = SCRIPPS INSTITUTION NON-EMPLOYEE - CONTACT D. UTTER (EXT. 3675)

GMT D / M / Y TIME DATE	LOC TIME TZ	LOC TZ	CODE SAMP	SAMPLE IDENT.	CODE DISP	LAT.	LONG.	LEG-SHIP CRUISE
----------------------------	----------------	-----------	--------------	---------------	--------------	------	-------	--------------------

ECHO LEG 1 SAMPLE INDEX

ECHO1MV

\*\*\* PORTS \*\*\*

0236	5 / 6/83			LGPT B SAN DIEGO, CALIF.		32 43. N	117 11. W	F ECHO1MV
1502	28 / 6/83			LGPT E SAN DIEGO, CALIF.		32 40.6N	117 10.1W	ECHO1MV

\*\*\* PERSONNEL \*\*\*

*** NAME ***	*** TITLE ***	*** AFFILIATION ***
1 SPIESS, R.	CHIEF SCIENTIST	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
2 BOAZ, J.	RESIDENT TECH	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
3 MOE, R.	COMPUTER TECH	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
4 HESSLER, R.	PROFESSOR	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
5 WILSON, G.	TECHNICIAN	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
6 LOWENSTEIN, C.	SPECIALIST	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
7 LAWHEAD, R.	COMPUTER TECH	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
8 ELDER, R.	ENGINEER	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
9 BOEGEMAN, A.	ENGINEER	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
10 JAIN, J.	ENGINEER	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
11 CLARY, T.	TECHNICIAN	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
12 MOUSTIER, C.	STUDENT	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
13 WEYDERT, M.	STUDENT	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
14 CAROLLO, G.	TECHNICIAN	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
15 VARUM, E.	VOLUNTEER	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
16 SNIDER, J.	NOAA	NATIONAL OCEANOGRAPHIC + ATMOSPHERIC ADMINISTRATION
17 MULLINEAUX, L.	STUDENT	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
18 DICK, R.	DEEPSEA VENTURES	SCRIPPS INSTITUTION NON-EMPLOYEE - CONTACT D. UTTER (EXT. 3675)
19 FDELL, E.	DEEPSEA VENTURES	SCRIPPS INSTITUTION NON-EMPLOYEE - CONTACT D. UTTER (EXT. 3675)
20 THEBERGE, S.	NOAA	NATIONAL OCEANOGRAPHIC + ATMOSPHERIC ADMINISTRATION
21 CRAWFORD, M.	LOCKHEED	SCRIPPS INSTITUTION NON-EMPLOYEE - CONTACT D. UTTER (EXT. 3675)
22 RUDE, P.	SCIENTIST	U.S. GEOLOGICAL SURVEY
23 WINN, R. (USC)	VOLUNTEER, USC	SCRIPPS INSTITUTION NON-EMPLOYEE - CONTACT D. UTTER (EXT. 3675)
24 HAN, S.	KOREA	SCRIPPS INSTITUTION NON-EMPLOYEE - CONTACT D. UTTER (EXT. 3675)
25 WILKINSON, J.	TECHNICIAN	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093
26 STOCKON, W.	VOLUNTEER	SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA CAL. 92093

\*\*\*NOTES\*\*\* AN 'X' IN THE (BEGIN/FIND) 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. (HOOKED 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 D /M /Y TIME DATE	LOC LOC TIME TZ	CODE SAMP	SAMPLE IDENT.	CODE DISP	LAT.	LONG.	LEG-SHIP CRUISE
--------------------------	--------------------	--------------	---------------	--------------	------	-------	--------------------

\*\*\* BUOY \*\*\*

0214	10 / 6/83		BUAB B DROP B-1	MPL 14	41.8N	125 26.3W	S ECH001MV
2130	23 / 6/83		BUAB E RCVR B-1	MPL 14	41.6N	125 26.4W	S ECH001MV
0501	10 / 6/83		BUAB B DROP G-1	MPL 14	39.7N	125 26.0W	S ECH001MV
2218	23 / 6/83		BUAB E RCVR G-1	MPL 14	39.8N	125 26.0W	S ECH001MV
0648	10 / 6/83		BUAB B DROP G-2	MPL 14	41.6N	125 23.6W	S ECH001MV
0145	24 / 6/83		BUAB E RCVR G-2	MPL 14	42.5N	125 23.7W	S ECH001MV
0738	10 / 6/83		BUAB B DROP H-2	MPL 14	40.2N	125 22.5W	S ECH001MV
0035	24 / 6/83		BUAB E RCVR H-2	MPL 14	40.8N	125 23.7W	S ECH001MV
0851	10 / 6/83		BUAB B DROP R-1	MPL 14	38.3N	125 24.4W	S ECH001MV
2330	23 / 6/83		BUAB E RCVR R-1	MPL 14	38.2N	125 25.2W	S ECH001MV

\*\*\*\* DEEP TOW SURVEY \*\*\*\* CURATOR ROBERT LAWHEAD EXT. 4892

1035	10 / 6/83		DTWS B FISH-5	MPL 14	41.9N	125 29.7W	S ECH001MV
1505	13 / 6/83		DTWS E FISH-5	MPL 14	42.0N	125 34.9W	S ECH001MV
0845	15 / 6/83		DTWS B FISH-5	MPL 14	37.7N	125 26.8W	S ECH001MV
1010	16 / 6/83		DTWS E FISH-5	MPL 14	43.8N	125 23.6W	S ECH001MV
1958	16 / 6/83		DTWS B FISH-5	MPL 14	45.3N	125 22.1W	S ECH001MV
2150	17 / 6/83		DTWS E FISH-5	MPL 14	41.8N	125 22.1W	S ECH001MV
1545	19 / 6/83		DTWS B FISH-5 BROKE	MPL 14	41.6N	125 23.9W	S ECH001MV
1427	22 / 6/83		DTWS E FISH RECOVERED	MPL 14	43.3N	125 27.7W	S ECH001MV

\*\*\*BOX CORE\*\*\*

2249	13 / 6/83	COBX	STA H-347	BX-01	RRH 14	38.4N 125 27.1W	S ECH001MV
0400	14 / 6/83	COBX	STA H-348	BX-02	RRH 14	38.0N 125 27.6W	S ECH001MV
0922	14 / 6/83	COBX	STA H-349	BX-03	RRH 14	38.3N 125 27.2W	S ECH001MV
1412	14 / 6/83	COBX	STA H-350	BX-04	RRH 14	38.2N 125 26.9W	S ECH001MV
1935	14 / 6/83	COBX	STA H-351	BX-05	RRH 14	37.5N 125 26.3W	S ECH001MV
0027	15 / 6/83	COBX	STA H-352	BX-06	RRH 14	38.2N 125 26.1W	S ECH001MV
0508	18 / 6/83	COBX	STA H-353	BX-07	RRH 14	42.1N 125 24.3W	S ECH001MV
0952	18 / 6/83	COBX	STA H-354	BX-08	RRH 14	41.5N 125 24.2W	S ECH001MV
1445	18 / 6/83	COBX	STA H-355	BX-09	RRH 14	42.0N 125 24.3W	S ECH001MV
1923	18 / 6/83	COBX	STA H-356	BX-10	RRH 14	42.5N 125 24.4W	S ECH001MV
0023	19 / 6/83	COBX	STA H-357	BX-11	RRH 14	42.1N 125 24.1W	S ECH001MV
0457	19 / 6/83	COBX	STA H-358	BX-12	RRH 14	42.2N 125 24.2W	S ECH001MV

GMT D /M /Y	LOC LOC	CODE	SAMPLE IDENT.	CODE	LAT.	LONG.	LEG-SHIP
TIME DATE	TIME TZ	SAMP		DISP			CRUISE
0939 19 / 6/83		COBX	STA H-359	BX-13	RRH 14 41.3N	125 22.8W	S ECHO01MV
0928 21 / 6/83		COBX	STA H-360	BX-14	RRH 14 41.4N	125 27.5W	S ECHO01MV
1039 23 / 6/83		COBX	STA H-361	BX-15	RRH 14 40.9N	125 22.0W	S ECHO01MV
1719 23 / 6/83		COBX	STA H-362	BX-16	RRH 14 42.0N	125 26.0W	S ECHO01MV

99

END SAMPLE INDEX

ECHO01MV