

REPORT AND INDEX OF
UNDERWAY MARINE GEOPHYSICAL DATA

AVON EXPEDITION

LEG 12

(AVON12MV)

R/V Melville

(Issued October 1999)

Ports:

Eureka, California (19 August 1999)

to

San Diego, California (25 August 1999)

Chief Scientist:

Mariam Kastner - Scripps Institution of Oceanography
mkastner@ucsd.edu

Computer Technicians - Ron Moe, John Chatwood
Resident Marine Tech - Robert Wilson

Post-Cruise Processing and Report Preparation by the
Geological Data Center, Scripps Institution of Oceanography
La Jolla, California 92093-0223

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 92093-0223*

GDC Cruise I.D.# 284

**REPORT AND INDEX OF NAVIGATION
AND UNDERWAY GEOPHYSICAL DATA**

Processed by the Geological Data Center
Scripps Institution of Oceanography

Contents:

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

Track Charts - annotated with dates and hour ticks.

Profiles - depth, magnetic and gravity free air anomaly vs. distance. (Sections of track with seismic reflection data have a wide black line along the bottom of the profile.)

Sample Index - list of begin/end times and positions of all underway records as well as samples and measurements from other disciplines collected on the leg.

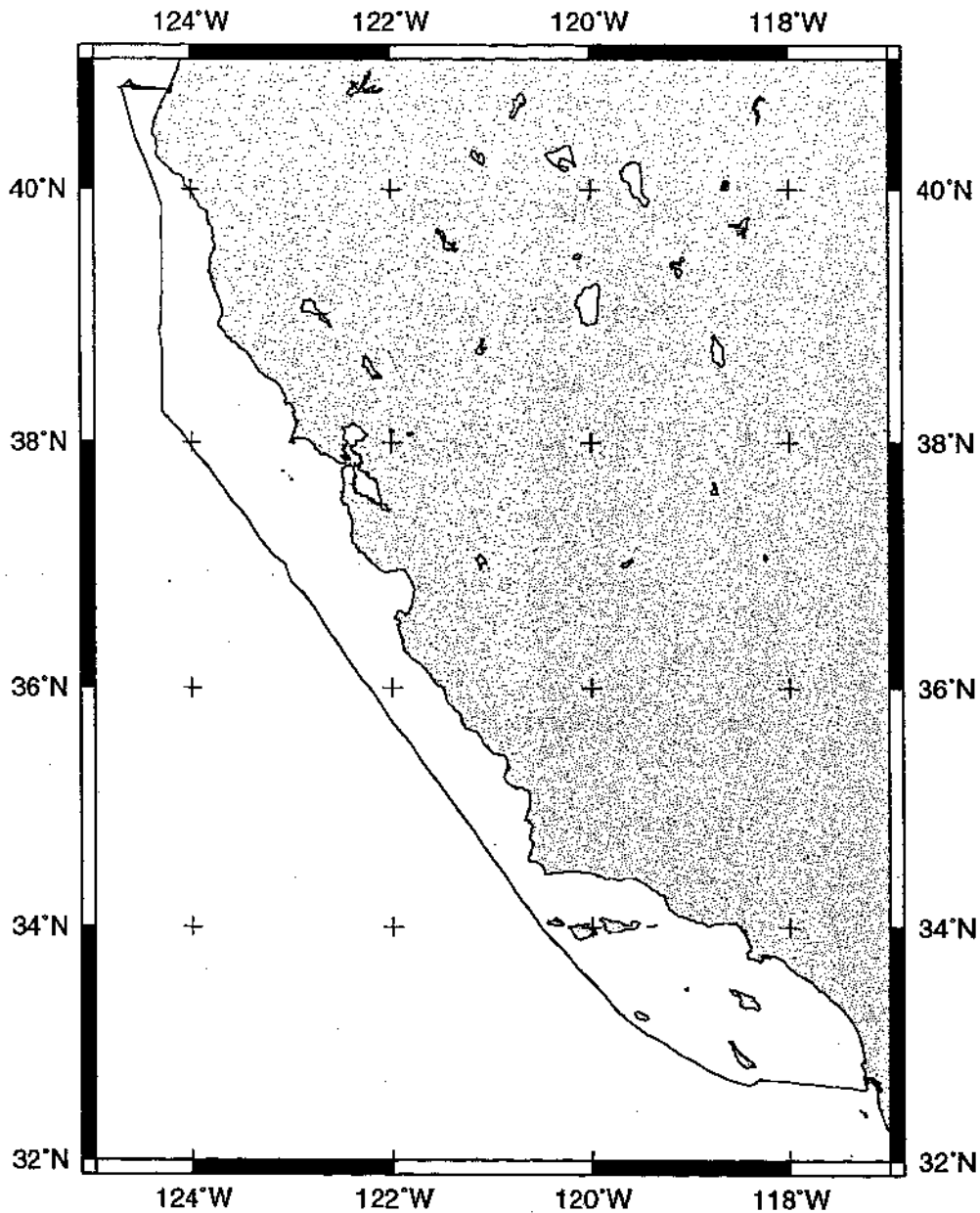
NOTE: One or more of the underway data types may not be collected on a given leg. For information on the availability and reproduction costs of data in the following forms, contact S.M. Smith, Curator, Geological Data Center, Scripps Institution of Oceanography, La Jolla, California 92093-0223. Phone: (619)534-2752, FAX: (619)534-6500, Internet email: ssmith@ucsd.edu

1. Files via ftp or on 8mm (Exabyte) and 4mm (DAT) magnetic tape:
 - a) Separate time series ASCII files of navigation, single beam depth, gravity and magnetics.
 - b) Above data in a single merged ASCII file in the MGD77 Exchange Format.
 - c) SeaBeam depth data (binary, Sun byte order)
 - d) SeaBeam Sidescan data.

2. Microfilm (35 mm flowfilm) or hard copies of:
 - a) Underway watch log book.
 - b) SeaBeam vertical beam profile/Sidescan records.
 - c) 3.5 kHz and 12 kHz echosounder records.
 - d) Seismic reflection profiler records.

3. Navigation listing with times and positions of fixes and course and speed changes.

4. Custom plots in Mercator projection:
 - a) Track plots.
 - b) SeaBeam depth contour plots.
 - c) Depth, magnetic or gravity values printed or profiled along track.



AVON EXPEDITION LEG 12 (AVON12MV)

CHIEF SCIENTIST: Mariam Kastner, Scripps Institution

PORTS: Eureka - San Diego, California

DATES: 19 - 25 August 1999

SHIP: R/V Melville

TOTAL MILEAGE OF UNDERWAY DATA COLLECTED

Cruise - 776 miles

Magnetics - none collected

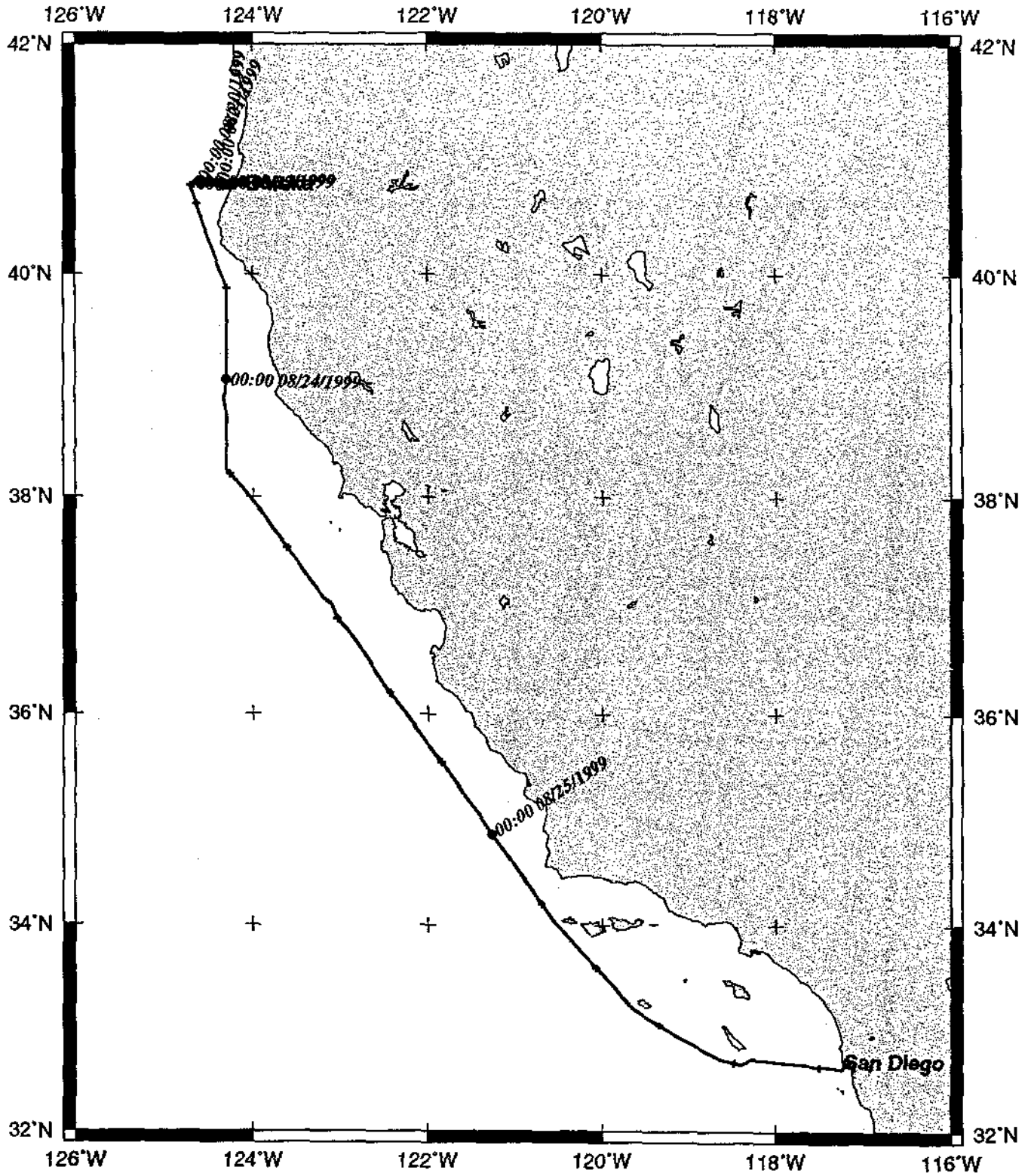
Bathymetry - 731 miles

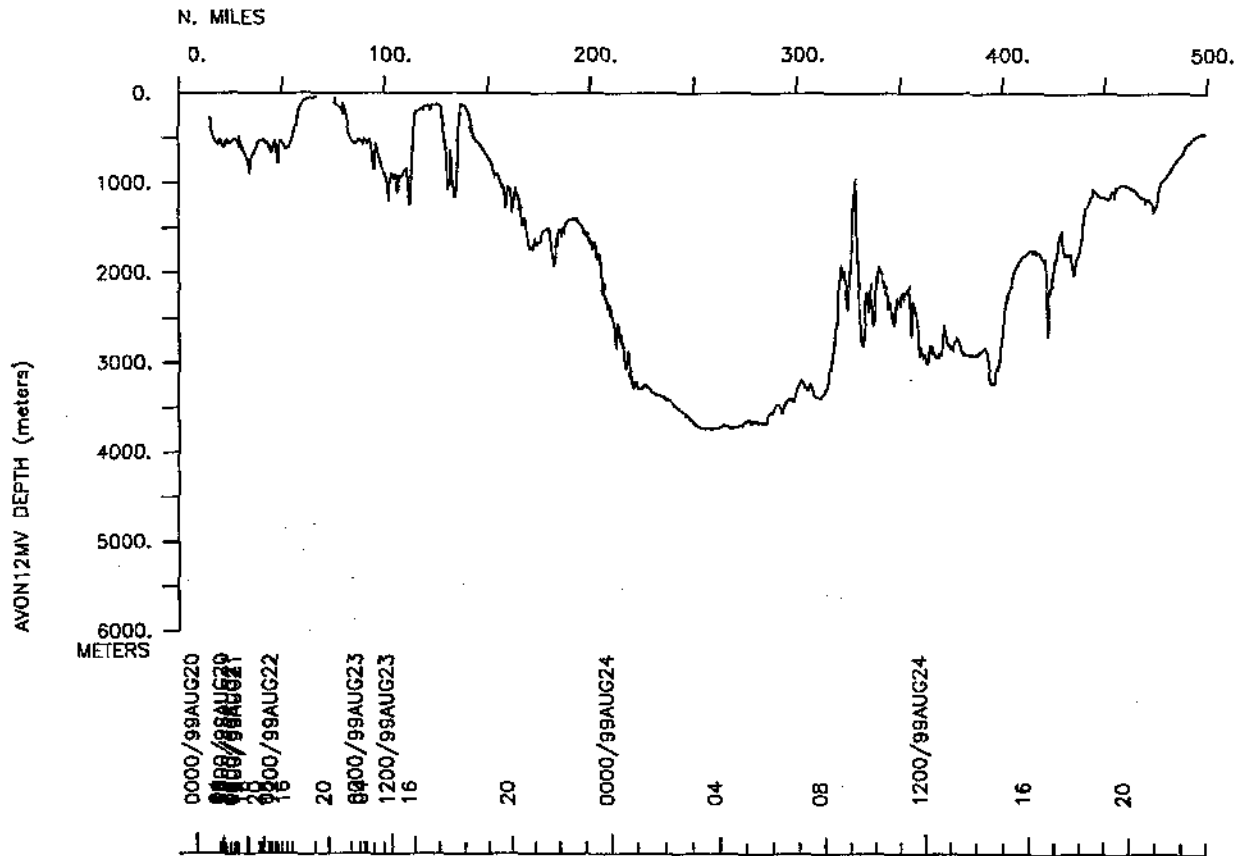
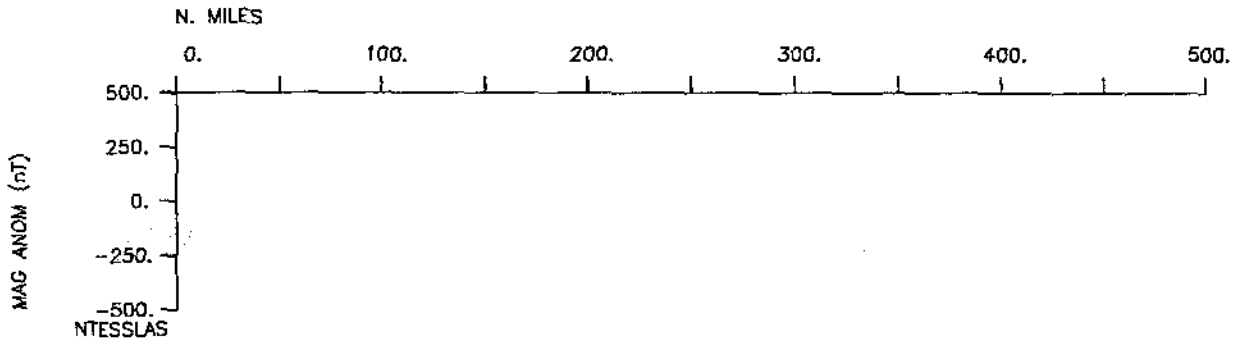
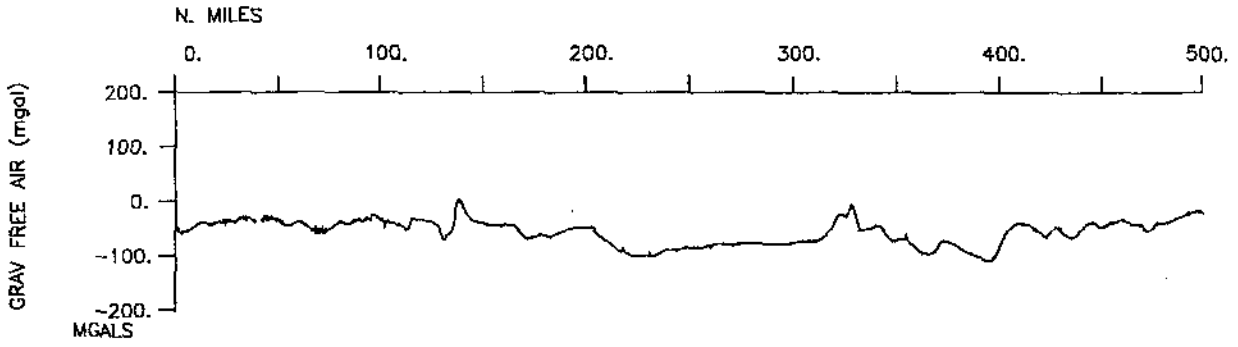
Seismic Reflection - none collected

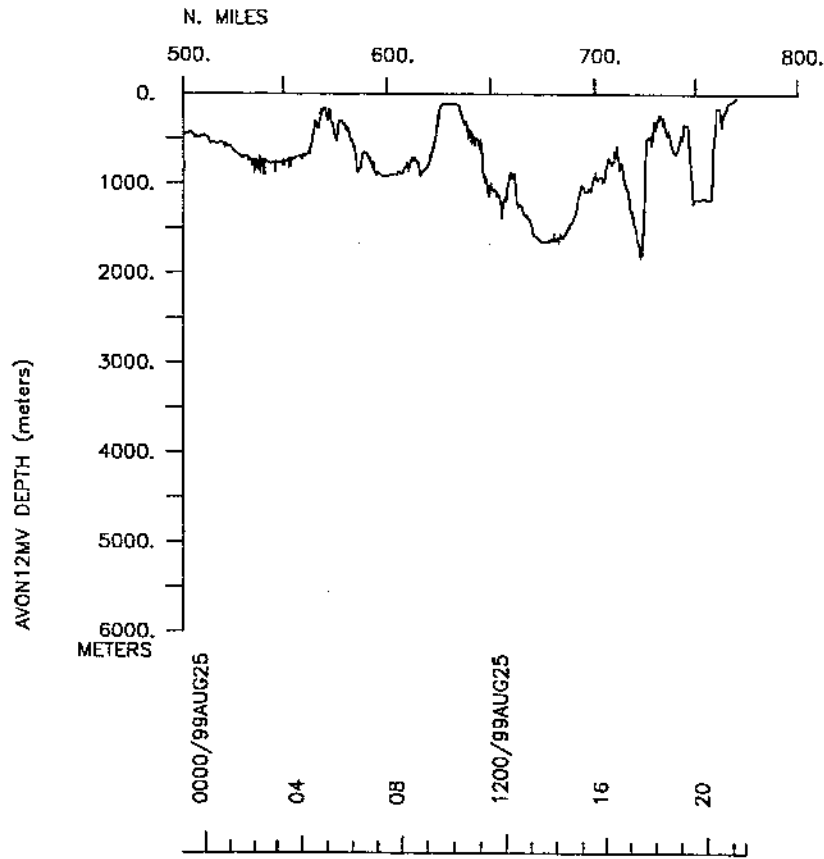
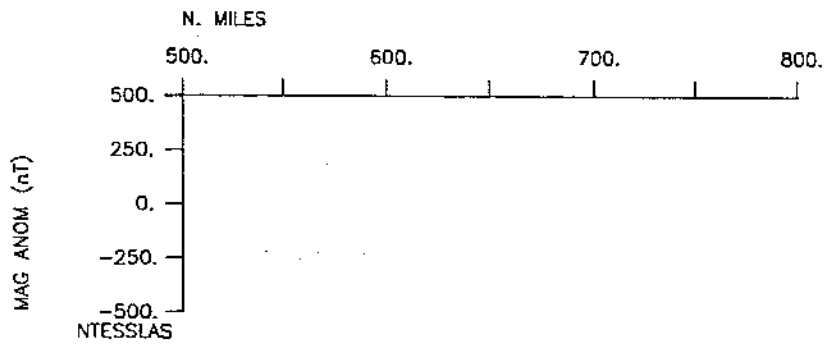
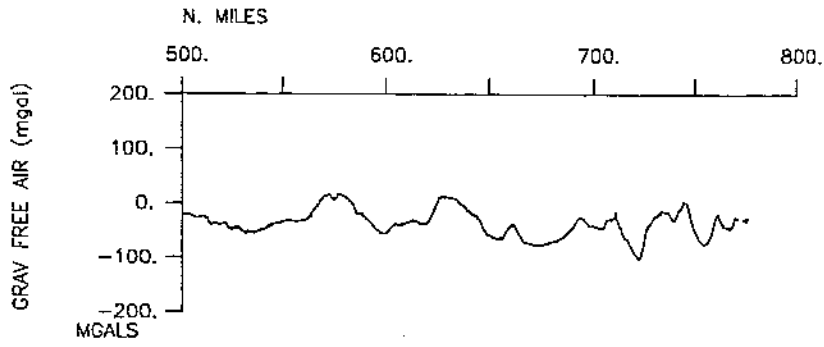
Sea Beam - 731 miles

Gravity - 770 miles

AVON Leg 12 Track







S.I.O. SAMPLE INDEX

AVON EXPEDITION

LEG 12

(AVON12MV)

R/V Melville

(Issued October 1999)

Ports:

Eureka, California (19 August 1999)

to

San Diego, California (25 August 1999)

Chief Scientist:

Mariam Kastner, Scripps Institution

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 future computer searches on these parameters. (Listings defining these codes are available from the Geological Data Center.)

GDC Cruise I.D.# 284

**** Ports ****

0100	190899	LGPT B	Eureka, California	40-48.00N	124-11.00W	f	AVON12MV
0100	250899	LGPT E	San Diego, California	32-40.00N	117-14.00W	f	AVON12MV
1925	220899	0 LGSS B	Humbolt Bay, Calif.	40-45.47N	124-13.99W	g	AVON12MV
1937	220899	0 LGSS E	Humbolt Bay, Calif.	40-45.27N	124-13.67W	g	AVON12MV

**** Personnel ****

#	*****NAME*****	*****TITLE*****	*****AFFILIATION*****	**CRID**
PECS GRD	Kastner, M.	Chief Scientist	Scripps Institution	AVON12MV
PESP STF	Payton, A.	Scientist	Stanford	AVON12MV
PESP GRD	Robertson, G.	Technician	Scripps Institution	AVON12MV
PESP GRD	Weinstein, Y.	Scientist	Scripps Institution	AVON12MV
PEST GRD	Kminek, G.	Student	Scripps Institution	AVON12MV
PEST GRD	Wei Wei	Student	Scripps Institution	AVON12MV
PEST GRD	Englehorn, G.	Student	Scripps Institution	AVON12MV
PESP GRD	Michaelis, H.	Technician	Scripps Institution	AVON12MV
PESP SIX	Ludwig, K.	Technician	Scripps Institution	AVON12MV
PEST GRD	Powers, L.	Student	Scripps Institution	AVON12MV
PEST GRD	Vollmer, M.	Student	Scripps Institution	AVON12MV
PESP GRD	Solem, C.	Studentian	Scripps Institution	AVON12MV
PESP UCSD	Daly, J.	Professor/M.D.	Scripps Institution	AVON12MV
PESP SIO	Colgan, C.	Photographer	Scripps Institution	AVON12MV
PESP SIO	Call, W.	Photographer	Scripps Institution	AVON12MV
PESP UCI	Blanton, D.	Scientist	Unv. of Cal. Irvine	AVON12MV
PESP UCI	Valentine, D.	Scientist	Unv. of Cal. Irvine	AVON12MV
PESP SIX	Pelzer, E.	Scientist	MontereyBayRes.Inst.	AVON12MV
PESP USGS	Lorenson, T.	Scientist	U.S.Geological Surv.	AVON12MV
PEST UCSD	Carroll, A.	Student	U.C. San Diego	AVON12MV
PEST STF	Young, M.	Student	Stanford	AVON12MV
PERT STS	Wilson, R.	Resident Tech	Scripps Institution	AVON12MV
PECT SCG	Moe, R.	Sr. Computer Tech	Scripps Institution	AVON12MV
PECT SCG	Chatwood, J.	Computer Tech	Scripps Institution	AVON12MV
PEET ODF	Hiller, S.	Electronics Tech	Scripps Institution	AVON12MV
PESP STS	Gallagher, J.	Volunteer	Non-Scripps Employee	AVON12MV
PESP SCG	Moe, D.	Volunteer	Non-Scripps Employee	AVON12MV

**** 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.

#GMT	DDMMYY	SAMP	B	SAMPLE	DISP				p	CRUISE
#TIME	DATE	TZ	CODE	E IDENTIFIER	CODE	LATITUDE	LONGITUDE		c	LEG-SHIP

**** Underway Data Curator - Geological Data Center ext.42752 ****

**** Log Books ****

2258	190899	0 LBUW B	partial Underway log	GDC	40-47.68N	124-11.30W	g	AVON12MV
1718	250899	0 LBUW E	partial Underway log	GDC	32-42.07N	118-10.89W	g	AVON12MV
0100	200899	0 LBSC B	Chief Scientist log	GRD	40-47.15N	124-35.84W	g	AVON12MV
0100	250899	0 LBSC E	Chief Scientist log	GRD	32-42.40N	117-14.18W	g	AVON12MV

#GMT	DDMMYY	SAMP	B	SAMPLE	DISP				p	CRUISE
#TIME	DATE	TZ	CODE	E IDENTIFIER	CODE	LATITUDE	LONGITUDE		c	LEG-SHIP
#-----	-----	---	---	-----	----	-----	-----	-----	---	-----
*** Digital Gravity ***										
2258	190899	0	GVDR	B digital gravity	GDC	40-47.68N	124-11.30W	g		AVON12MV
1718	250899	0	GVDR	E digital gravity	GDC	32-42.07N	118-10.89W	g		AVON12MV
*** Sea Beam Records (vertical beam and side scan) ***										
0031	200899	0	MBSR	B v.beam&sidescan r-01	GDC	40-46.92N	124-28.90W	g		AVON12MV
1900	250899	0	MBSR	E v.beam&sidescan r-01	GDC	32-39.85N	117-45.47W	g		AVON12MV
*** Echo Sounder Records ***										
1800	230899	0	DPR3	B Knudsen 3.5khz r-01	GDC	40-14.17N	124-28.91W	g		AVON12MV
1800	250899	0	DPR3	E Knudsen 3.5khz r-01	GDC	32-41.17N	118-00.56W	g		AVON12MV
*** Cores - King Kong and Box ***										
1031	200899	0	COKK	Core 1	564M	GCR	40-47.10N	124-35.32W	g	AVON12MV
1136	200899	0	COKK	Core 2	565M	GCR	40-47.10N	124-35.31W	g	AVON12MV
1244	200899	0	COKK	Core 3	567M	GCR	40-47.10N	124-35.25W	g	AVON12MV
1340	200899	0	COKK	Core 4	566M	GCR	40-47.10N	124-35.17W	g	AVON12MV
2341	200899	0	COKK	Core 5	526M	GCR	40-47.14N	124-35.80W	g	AVON12MV
0053	210899	0	COKK	Core 6	525M	GCR	40-47.14N	124-35.77W	g	AVON12MV
0202	210899	0	COKK	Core 7	529M	GCR	40-47.10N	124-35.72W	g	AVON12MV
0258	210899	0	COKK	Core 8	528M	GCR	40-47.10N	124-35.72W	g	AVON12MV
0400	210899	0	COKK	Core 9	529M	GCR	40-47.10N	124-35.72W	g	AVON12MV
0444	210899	0	COKK	Core 10	529M	GCR	40-47.10N	124-35.72W	g	AVON12MV
0536	210899	0	COKK	Core 11	524M	GCR	40-47.10N	124-35.65W	g	AVON12MV
0626	210899	0	COKK	Core 12	526M	GCR	40-47.10N	124-35.69W	g	AVON12MV
0724	210899	0	COKK	Core 13	527M	GCR	40-47.10N	124-35.69W	g	AVON12MV
0830	210899	0	COKK	Core 14	532M	GCR	40-47.16N	124-35.67W	g	AVON12MV
0921	210899	0	COKK	Core 15	529M	GCR	40-47.13N	124-35.66W	g	AVON12MV
0217	220899	0	COKK	Core 16	529M	GCR	40-47.13N	124-35.72W	g	AVON12MV
0303	220899	0	COKK	Core 17	529M	GCR	40-47.10N	124-35.72W	g	AVON12MV
0353	220899	0	COKK	Core 18	529M	GCR	40-47.10N	124-35.72W	g	AVON12MV
0445	220899	0	COKK	Core 19	527M	GCR	40-47.10N	124-35.72W	g	AVON12MV
0618	220899	0	COKK	Core 20	571M	GCR	40-48.83N	124-36.94W	g	AVON12MV
0735	220899	0	COKK	Core 21	629M	GCR	40-49.68N	124-37.61W	g	AVON12MV
2209	220899	0	COKK	Core 22	527M	GCR	40-48.73N	124-36.68W	g	AVON12MV
2306	220899	0	COKK	Core 23	523M	GCR	40-48.68N	124-36.68W	g	AVON12MV
2354	220899	0	COKK	Core 24	526M	GCR	40-48.62N	124-36.68W	g	AVON12MV
0117	230899	0	COKK	Core 25	531M	GCR	40-48.57N	124-36.68W	g	AVON12MV
0214	230899	0	COKK	Core 26	531M	GCR	40-48.52N	124-36.68W	g	AVON12MV
0335	230899	0	COKK	Core 27	522M	GCR	40-47.06N	124-35.58W	g	AVON12MV
0420	230899	0	COKK	Core 28	525M	GCR	40-47.08N	124-35.63W	g	AVON12MV
0513	230899	0	COKK	Core 29	527M	GCR	40-47.09N	124-35.69W	g	AVON12MV
0555	230899	0	COKK	Core 30	526M	GCR	40-47.11N	124-35.74W	g	AVON12MV
0649	230899	0	COKK	Core 31	525M	GCR	40-47.13N	124-35.78W	g	AVON12MV
0745	230899	0	COKK	Core 32	527M	GCR	40-47.10N	124-35.72W	g	AVON12MV
2245	210899	0	COBX	Box Core 1	523M	GCR	40-47.13N	124-35.72W	g	AVON12MV
0011	220899	0	COBX	Box Core 2	529M	GCR	40-47.11N	124-35.71W	g	AVON12MV
0114	220899	0	COBX	Box Core 3	529M	GCR	40-47.11N	124-35.71W	g	AVON12MV

#GMT	DDMMYY	SAMP	B	SAMPLE	DISP				p	CRUISE
#TIME	DATE	TZ	CODE	E IDENTIFIER	CODE	LATITUDE	LONGITUDE		c	LEG-SHIP
#										
#*** Conductivity, Temperature, Depth ***										
0221	200899	0	TDCT	B 24 Bottles	530M	ODF	40-47.12N	124-35.80W	g	AVON12MV
0305	200899	0	TDCT	E 24 Bottles	528M	ODF	40-47.12N	124-35.80W	g	AVON12MV
0434	200899	0	TDCT	B 24 Bottles	524M	ODF	40-47.08N	124-35.65W	g	AVON12MV
0448	200899	0	TDCT	E 24 Bottles	525M	ODF	40-47.08N	124-35.65W	g	AVON12MV
0623	200899	0	TDCT	B 24 Bottles	555M	ODF	40-47.09N	124-35.35W	g	AVON12MV
0718	200899	0	TDCT	E 24 Bottles	558M	ODF	40-47.09N	124-35.35W	g	AVON12MV
1025	210899	0	TDCT	B 24 Bottles	561M	ODF	40-47.01N	124-36.06W	g	AVON12MV
1112	210899	0	TDCT	E 24 Bottles	539M	ODF	40-47.01N	124-36.06W	g	AVON12MV
1220	210899	0	TDCT	H 24 Bottles	570M	ODF	40-47.53N	124-35.92W	g	AVON12MV
1312	210899	0	TDCT	E 24 Bottles	575M	ODF	40-47.53N	124-35.93W	g	AVON12MV
0821	220899	0	TDCT	B 24 Bottles	632M	ODF	40-49.69N	124-37.61W	g	AVON12MV
0925	220899	0	TDCT	E 24 Bottles	628M	ODF	40-49.69N	124-37.61W	g	AVON12MV
1035	220899	0	TDCT	B 24 Bottles	568M	ODF	40-48.83N	124-36.95W	g	AVON12MV
1135	220899	0	TDCT	E 24 Bottles	548M	ODF	40-48.83N	124-36.95W	g	AVON12MV
1240	220899	0	TDCT	B 8 Bottles	769M	ODF	40-49.70N	124-36.29W	g	AVON12MV
1345	220899	0	TDCT	E 8 Bottles	769M	ODF	40-49.46N	124-36.37W	g	AVON12MV
1449	220899	0	TDCT	B	618M	ODF	40-46.01N	124-35.60W	g	AVON12MV
1504	220899	0	TDCT	E	618M	ODF	40-46.01N	124-35.61W	g	AVON12MV
1544	220899	0	TDCT	B	604M	ODF	40-46.25N	124-35.44W	g	AVON12MV
1617	220899	0	TDCT	E	588M	ODF	40-46.25N	124-35.46W	g	AVON12MV
0900	230899	0	TDCT	B 24 Bottles	815M	ODF	40-50.30N	124-37.22W	g	AVON12MV
1015	230899	0	TDCT	E 24 Bottles	818M	ODF	40-50.31N	124-37.21W	g	AVON12MV
1151	230899	0	TDCT	B 24 Bottles	912M	ODF	40-46.70N	124-42.91W	g	AVON12MV
1246	230899	0	TDCT	E 24 Bottles	915M	ODF	40-46.70N	124-42.90W	g	AVON12MV
1339	230899	0	TDCT	B 24 Bottles	914M	ODF	40-46.70N	124-42.90W	g	AVON12MV
1407	230899	0	TDCT	E 24 Bottles	915M	ODF	40-46.70N	124-42.90W	g	AVON12MV
#***				End Sample Index						AVON12MV