

**REPORT AND INDEX OF
UNDERWAY MARINE GEOPHYSICAL DATA

TUNES EXPEDITION**

LEG 8
=====

R/V Thomas Washington

(Issued February 1992)

**Apra, Guam (1 January 1992)
to
Majuro, Marshall Islands (31 January 1992)**

Chief Scientist:

Paul Johnson (University of Washington)

Resident Marine Technician - Seth Mogk

Computer Technician - Ron Moe

Sea Beam Processor - Uta Albright

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

**Data Collection and Processing Funded by:
NSF Grant Number OCE91-02183**

**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.
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Geological Data Center, Scripps Institution of Oceanography,
La Jolla, California 92093.**

GDC Cruise I.D.# 254

INFORMAL 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 anomaly and gravity free air anomaly vs. distance. Sections of track having subbottom profile (airgun or watgun) 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 92093-0223. Phone (619)534-2752. Fax (619)534-5306.

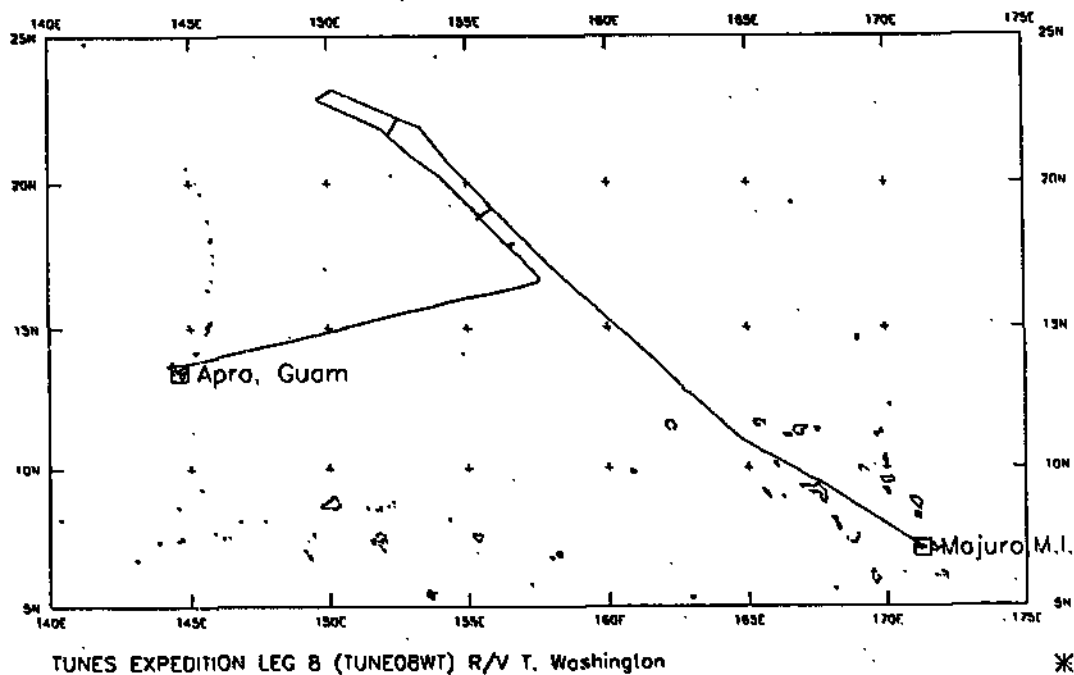
1. Navigation listing with times and positions of course and speed changes, fixes and drift velocity.
2. Depth compilation plots - compilation plots at the traditional scale of 4in/degree longitude (1:1,000,000) are no longer produced for Sea Beam cruises. Custom plots may be requested of vertical beam ($2\frac{2}{3}$ degree beam width) depths retrieved at one minute intervals of ship time.
3. 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. Underway data log book

SIO Sea Beam Data Information

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



TUNES EXPEDITION LEG 8

CHIEF SCIENTIST: Paul Johnson

University of Washington

PORTS: Apra, Guam - Majuro, Marshall Islands

DATES: 1 - 31 January 1992

SHIP: R/V T. Washington

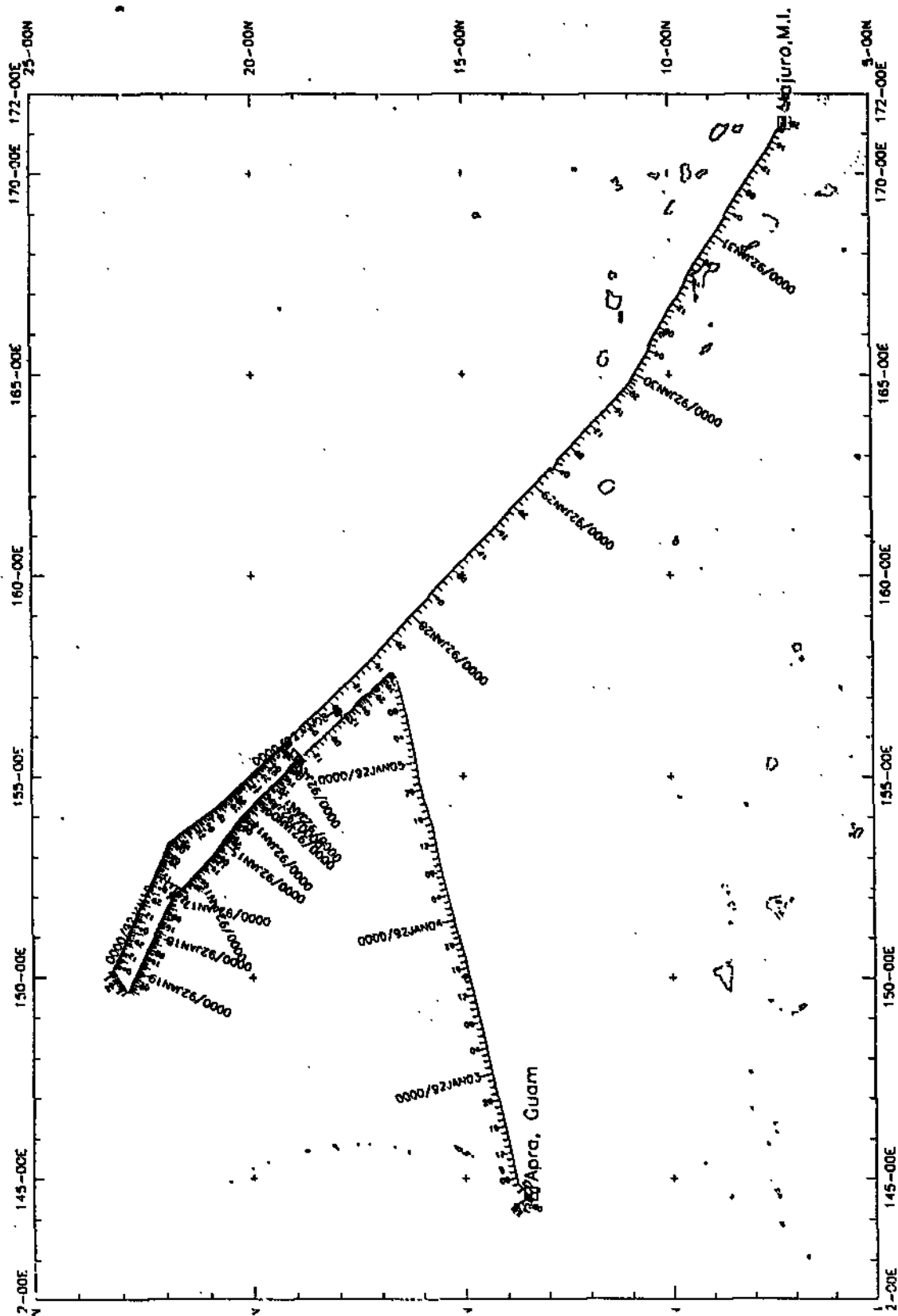
TOTAL MILEAGE OF UNDERWAY DATA COLLECTED

Cruise - 3786 miles

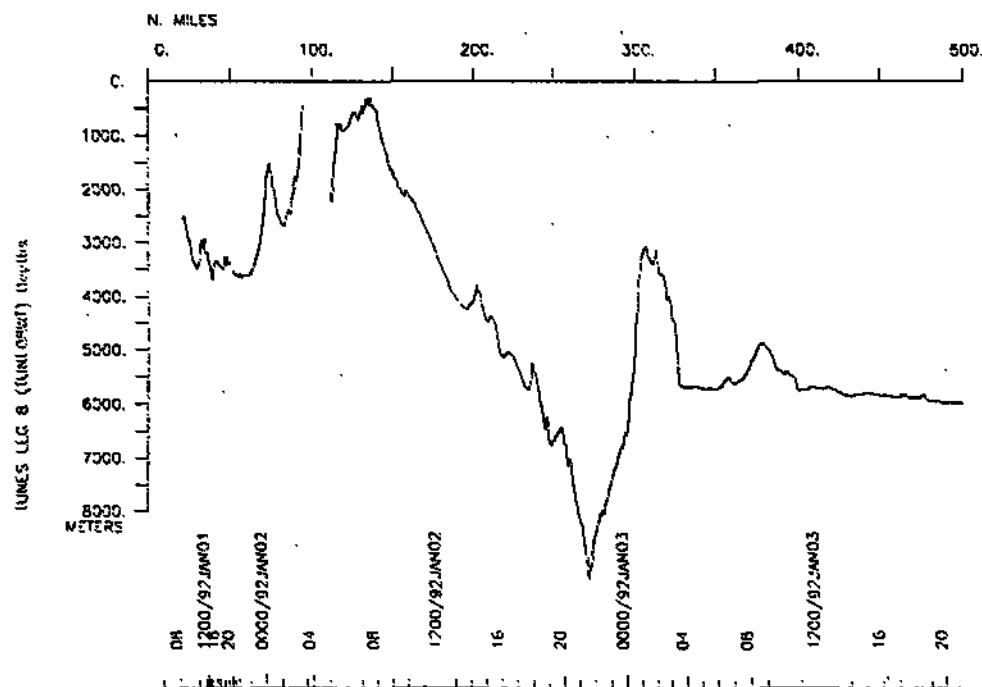
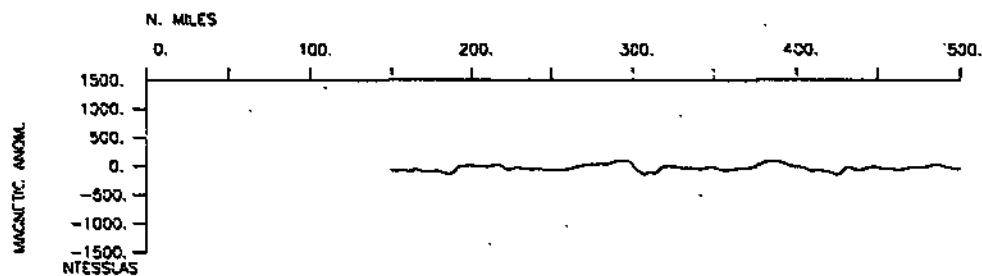
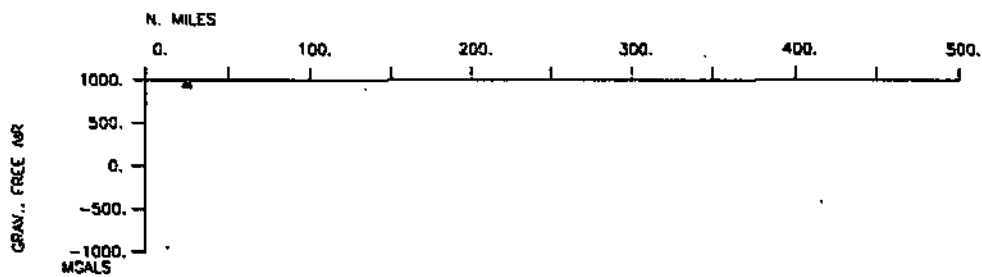
Magnetics - 2481 miles

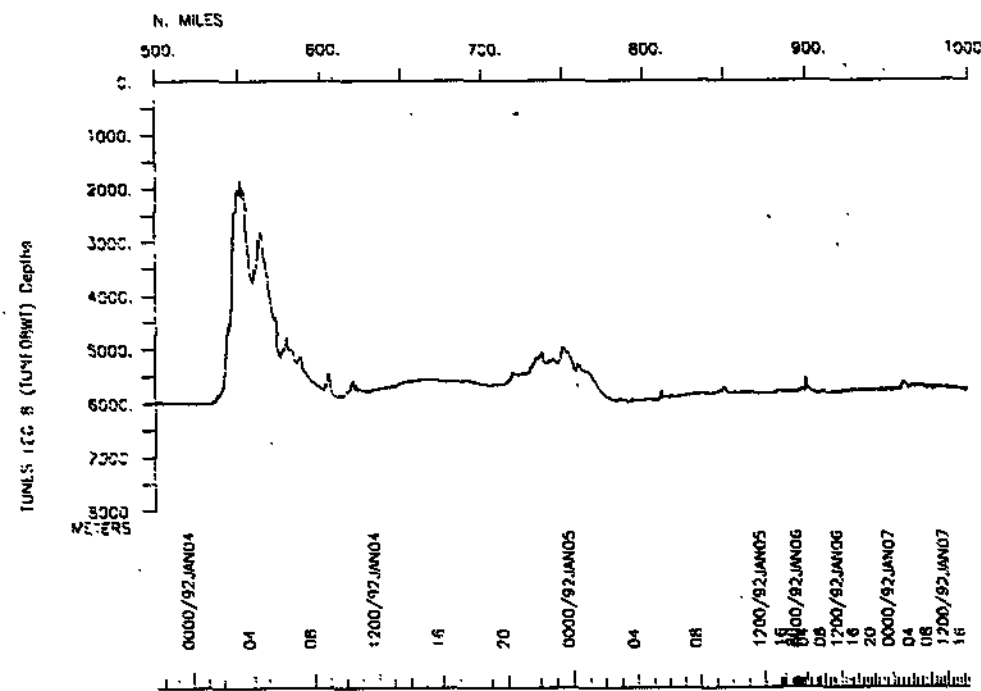
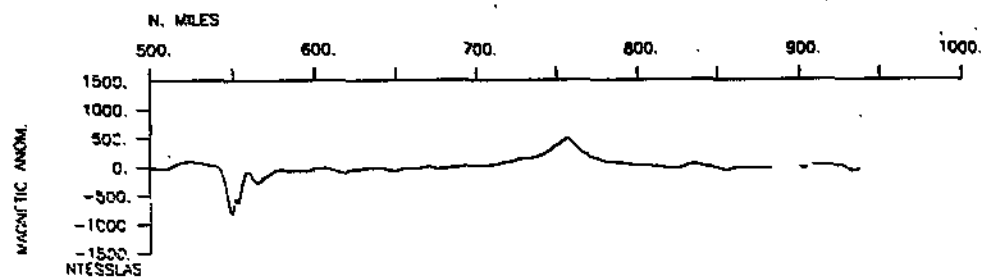
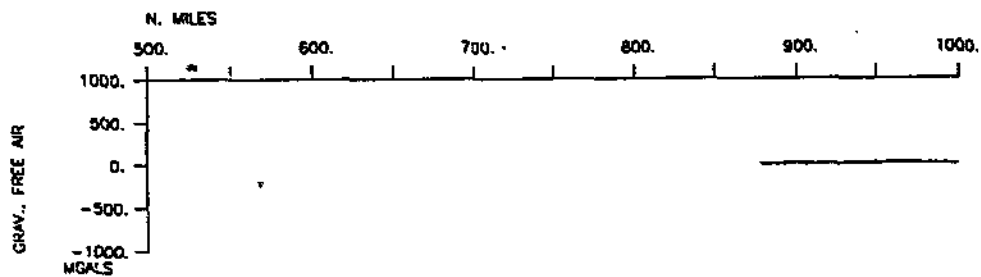
Bathymetry - 2700 miles

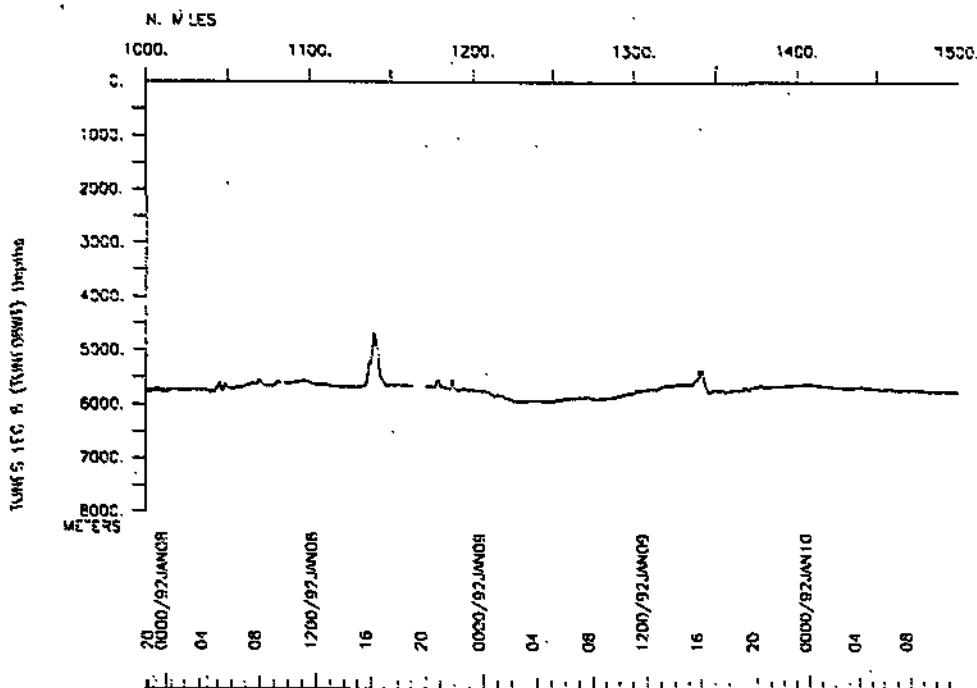
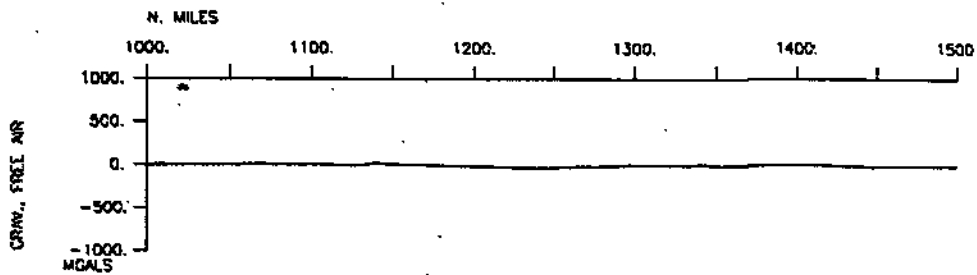
Salinity Collection - 740 miles

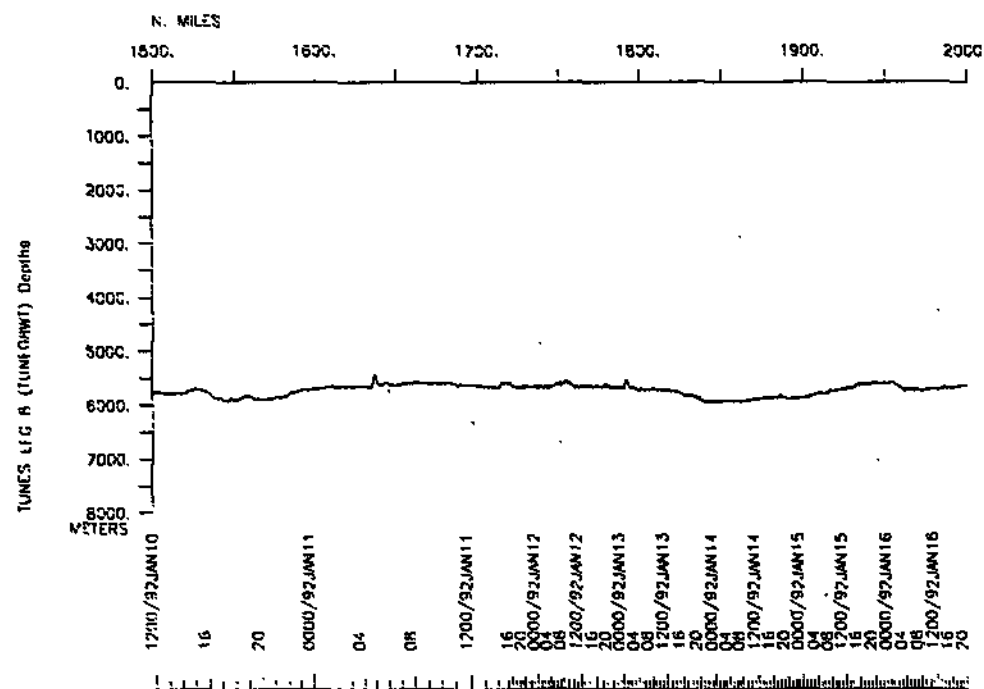
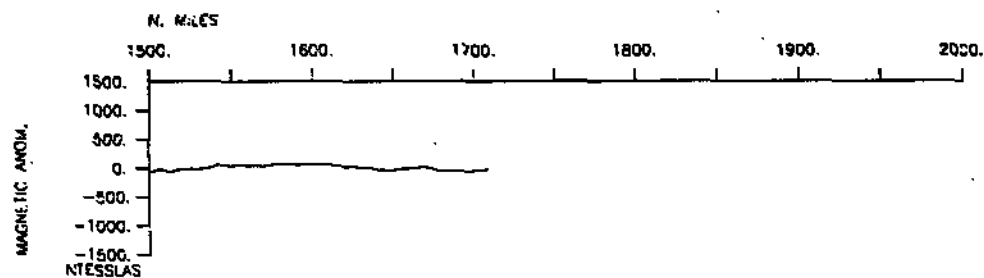
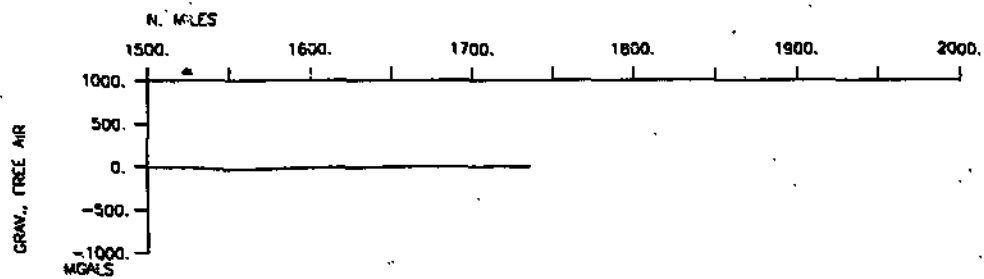


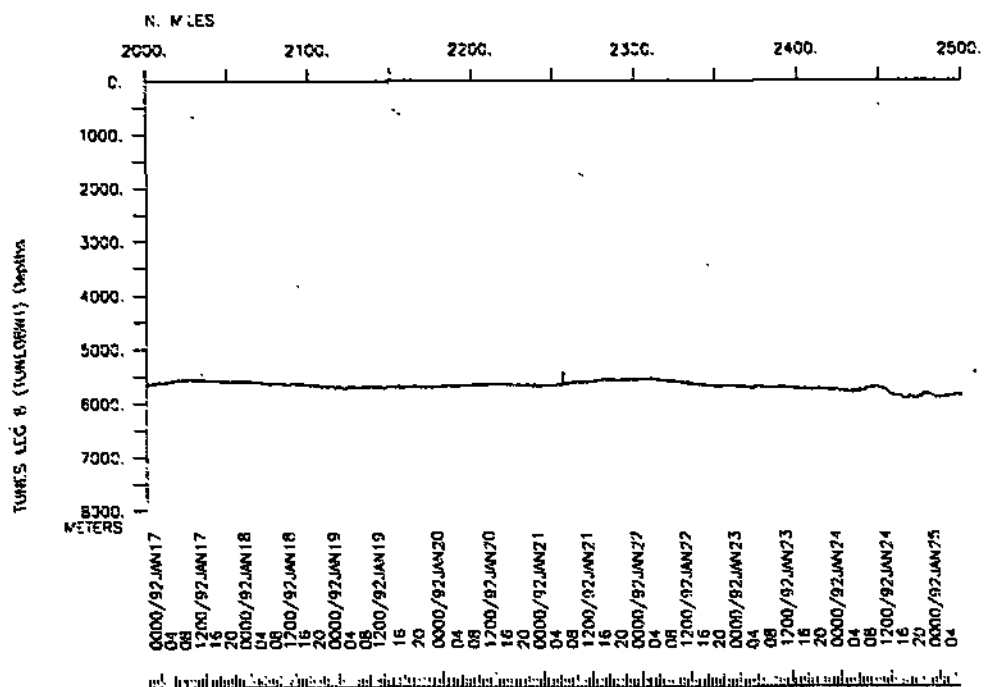
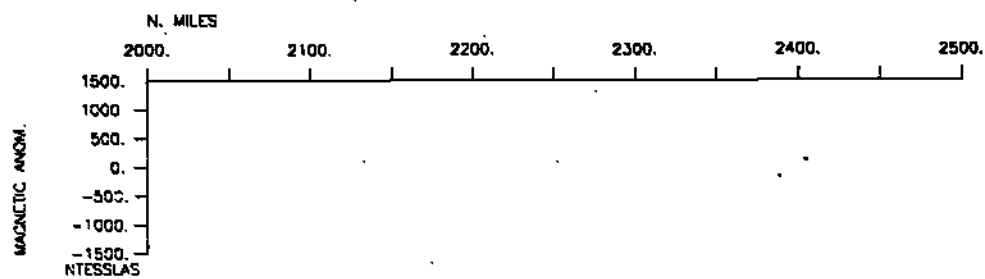
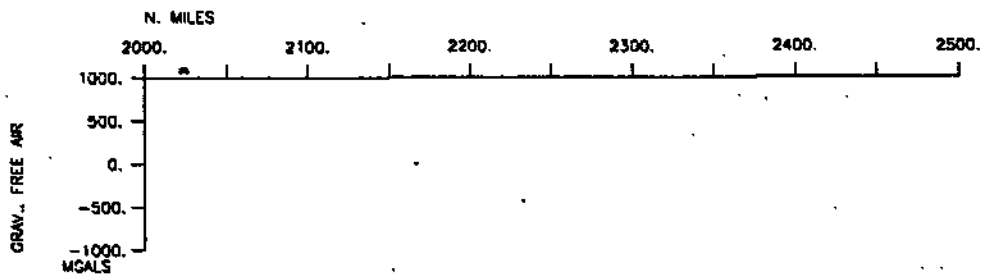
TUNES EXPEDITION LEG 8 (TUNE08WT) R/V T. Washington *

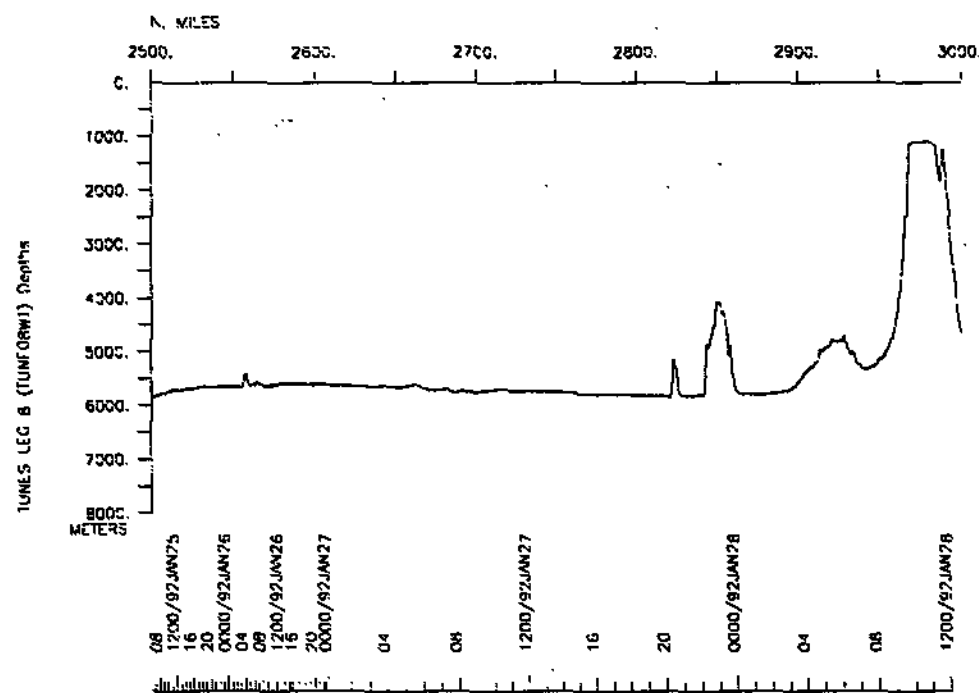
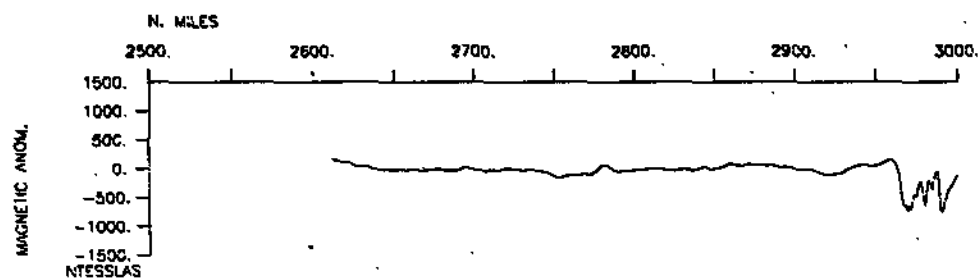
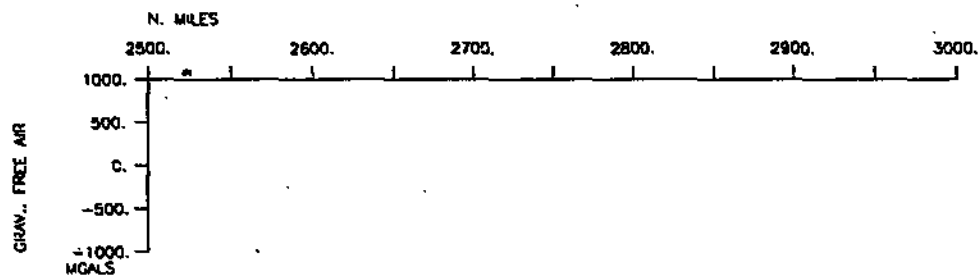


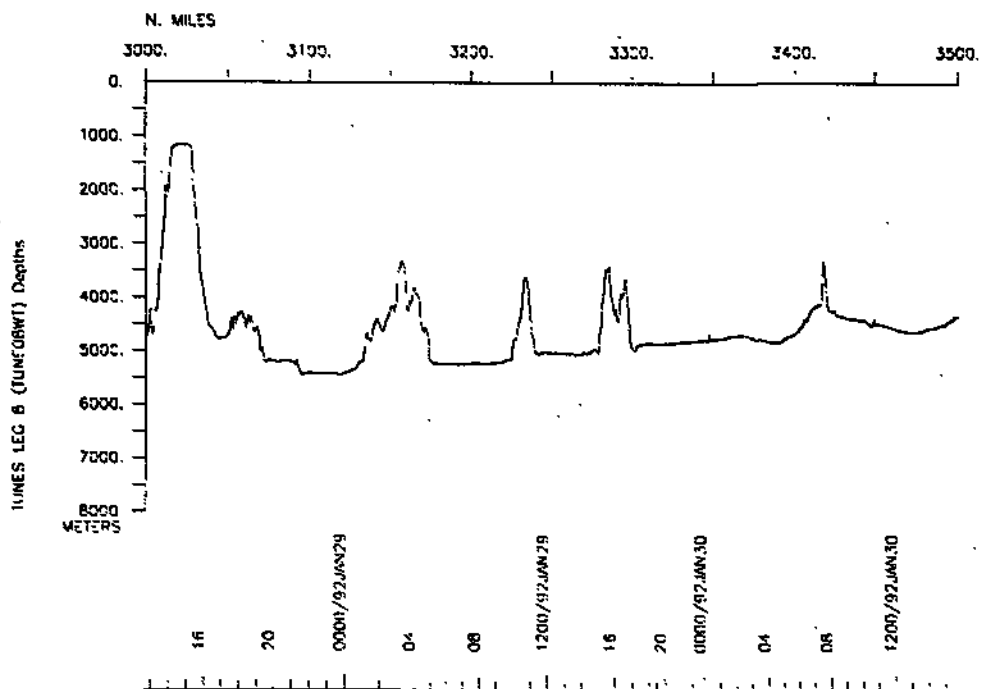
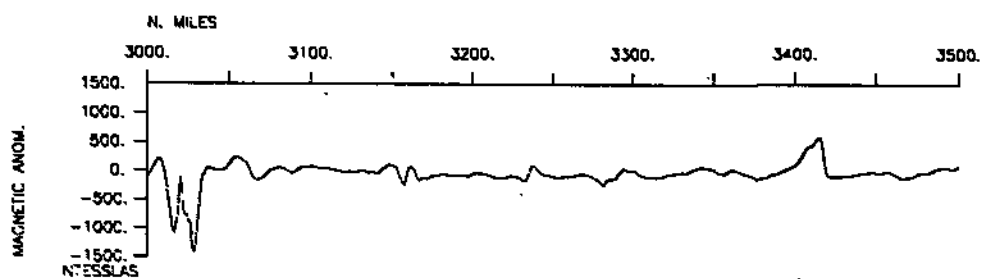
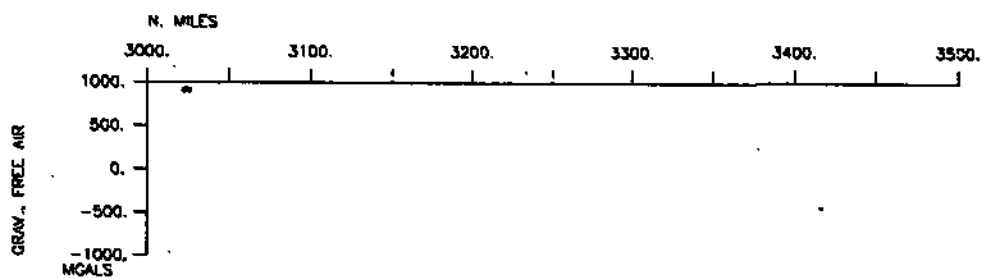


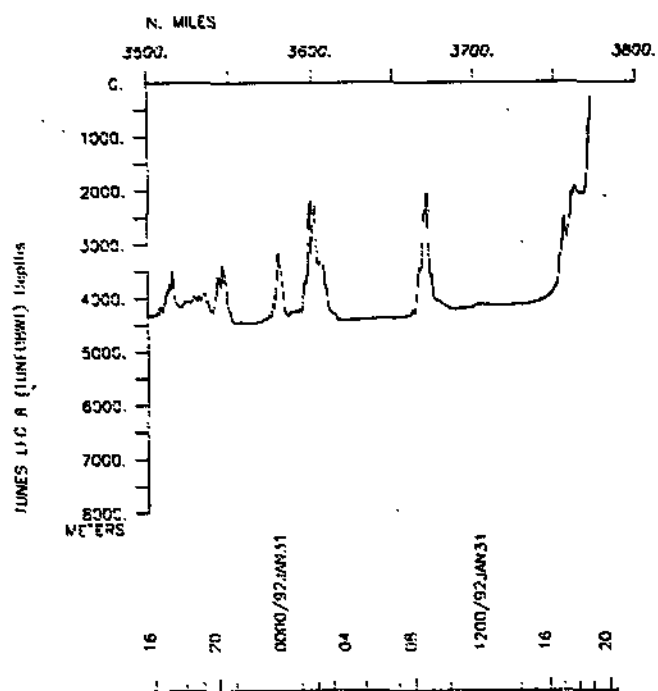
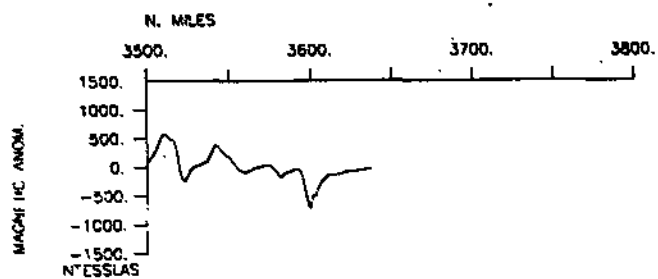
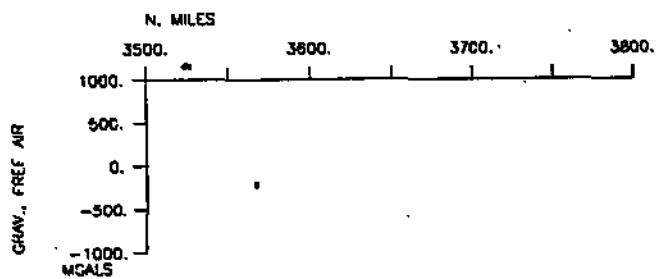












S.I.O. SAMPLE INDEX

(Issued February 1992)

TUNES EXPEDITION

Leg 8

R/V T. Washington

Apra, Guam (1 January 1992)
to
Majuro, Marshall Islands (31 January 1992)

Chief Scientist:

Paul Johnson (University of Washington)

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.# 254

****PORTS****

0600 010192	LGPT B Apra Harbor, Guam	13-042N 144-060E	FTUNE08WT
2000 310192 *	LGPT E Majuro, Marshall Islands	7-01 N 171-025E	FTUNE08WT
1900 020192	LGUS B Apra Harbor, Guam	13-042N 144-060E	FTUNE08WT
2000 020192	LGUS E Apra Harbor, Guam	13-042N 144-060E	FTUNE08WT

****PERSONNEL****

#	***NAME***	***TITLE***	***AFFILIATION***	**CRID**
PECS UWA	Johnson, Dr. H. P.	Chief Scientist	Univ. of Washington	TUNE08WT
PEBO STS	Albright, U. G.	Seabeam Operator	Scripps Institution	TUNE08WT
PEAT STS	Crampton, P. J. S.	Geophysical Tech	Scripps Institution	TUNE08WT
PEST UWA	Daniel, A.	Undergrad Student	Univ. of Washington	TUNE08WT
PESP UWA	Halbert, B.	UW Lead Tech	Univ. of Washington	TUNE08WT
PESP UWA	Merle, S.	UW Tech	Univ. of Washington	TUNE08WT
PECT STS	Moe, R. L.	Computer Tech	Scripps Institution	TUNE08WT
PERT STS	Mogk, S. A.	Resident Tech	Scripps Institution	TUNE08WT
PEST TAM	Rozman, E.	Undergrad Student	Texas A&M Univeristy	TUNE08WT
PESP TAM	Sager, Dr. W. W.	Professor	Texas A&M Univeristy	TUNE08WT
PESP UWA	Semyan, S.	Tech	Univ. of Washington	TUNE08WT
PESP WHO	Tivey, Dr. M.	Asst. Sci.	Woods Hole Ocean. Inst.	TUNE08WT

*** 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	SAMP	SAMPLE	DISP			CRUISE
#TIME	DATE	TIME	Z	CODE	IDENTIFIER	CODE	LAT.	LONG.	LEG-SHIP

*** Underway Data Curator - S. M. Smith ext. 42752 ***

*** Log Books ***

0600	010192			LGSC	B Scientific log book	UWA	13-252N	144-399E	sTUNE08WT
0530	310192			LGSC	E Scientific log book	UWA	8-243N	169-161E	sTUNE08WT
0600	010192			LGUW	B Underway Watch log	GDC	13-252N	144-399E	sTUNE08WT
0530	310192			LGUW	E Underway Watch log	GDC	8-243N	169-161E	sTUNE08WT

*** Sea Beam Swath Books ***

0811	010192			MBSB	B SeaBeam Swath bk 01	GDC	13-346N	144-211E	sTUNE08WT
2139	030192			MBSB	E SeaBeam Swath bk 01	GDC	15-090N	151-051E	sTUNE08WT
2139	030192			MBSB	B SeaBeam Swath bk 02	GDC	15-090N	151-051E	sTUNE08WT
1448	070192			MBSB	E SeaBeam Swath bk 02	GDC	17-497N	156-315E	sTUNE08WT
1450	070192			MBSB	B SeaBeam Swath bk 03	GDC	17-498N	156-315E	sTUNE08WT
0356	100192			MBSB	E SeaBeam Swath bk 03	GDC	22-019N	153-026E	sTUNE08WT
0356	100192			MBSB	B SeaBeam Swath bk 04	GDC	22-019N	153-026E	sTUNE08WT
0802	150192			MBSB	E SeaBeam Swath bk 04	GDC	20-523N	153-061E	sTUNE08WT
0802	150192			MBSB	B SeaBeam Swath bk 05	GDC	20-523N	153-061E	sTUNE08WT
0623	250192			MBSB	E SeaBeam Swath bk 05	GDC	20-190N	154-442E	sTUNE08WT
0623	250192			MBSB	B SeaBeam Swath bk 06	GDC	20-190N	154-442E	sTUNE08WT
1135	280192			MBSB	E SeaBeam Swath bk 06	GDC	14-472N	160-368E	sTUNE08WT
1135	280192			MBSB	B SeaBeam Swath bk 07	GDC	14-472N	160-368E	sTUNE08WT
0933	300192			MBSB	E SeaBeam Swath bk 07	GDC	10-058N	166-240E	sTUNE08WT
0933	300192			MBSB	B SeaBeam Swath bk 08	GDC	10-058N	166-240E	sTUNE08WT
2000	310192			MBSB	E SeaBeam Swath bk 08	GDC	7-066N	171-180E	sTUNE08WT

#GMT #TIME	DDMMYY DATE	LOC TIME	T Z	SAMP CODE	SAMPLE IDENTIFIER	DISP CODE	LAT.	LONG.	CRUISE LEG-SHIP
#*** Echo Sounder Records ***									
0811	010192			MBMR B	SB Monitor R-01	GDC	13-346N	144-211E	STUNE08WT
2112	020192			MBMR E	SB Monitor R-01	GDC	14-150N	147-092E	STUNE08WT
#*** Note: Seabeam monitor secured due to loss of signal ***									
0600	020192			DPR3 B	EPC 3.5KHz R-01	GDC	13-391N	144-442E	STUNE08WT
1840	050192			DPR3 E	EPC 3.5KHz R-01	GDC	16-376N	157-310E	STUNE08WT
1930	050192			DPR3 B	EPC 3.5KHz R-02	GDC	16-382N	157-317E	STUNE08WT
0510	060192			DPR3 E	EPC 3.5KHz R-02	GDC	16-450N	157-365E	STUNE08WT
0518	060192			DPR3 B	EPC 3.5KHz R-03	GDC	16-454N	157-365E	STUNE08WT
2032	080192			DPR3 E	EPC 3.5KHz R-03	GDC	19-304N	154-468E	STUNE08WT
2040	080192			DPR3 B	EPC 3.5KHz R-04	GDC	19-312N	154-459E	STUNE08WT
2028	100192			DPR3 E	EPC 3.5KHz R-04	GDC	20-255N	154-369E	STUNE08WT
2029	100192			DPR3 B	EPC 3.5KHz R-05	GDC	20-254N	154-370E	STUNE08WT
1035	130192			DPR3 E	EPC 3.5KHz R-05	GDC	19-464N	154-303E	STUNE08WT
1041	130192			DPR3 B	EPC 3.5KHz R-06	GDC	19-466N	154-302E	STUNE08WT
2211	150192			DPR3 E	EPC 3.5KHz R-06	GDC	21-128N	152-415E	STUNE08WT
2215	150192			DPR3 B	EPC 3.5KHz R-07	GDC	21-129N	152-414E	STUNE08WT
1945	180192			DPR3 E	EPC 3.5KHz R-07	GDC	22-341N	150-175E	STUNE08WT
1953	180192			DPR3 B	EPC 3.5KHz R-08	GDC	22-343N	150-172E	STUNE08WT
2009	210192			DPR3 E	EPC 3.5KHz R-08	GDC	22-271N	151-591E	STUNE08WT
2012	210192			DPR3 B	EPC 3.5KHz R-09	GDC	22-271N	151-593E	STUNE08WT
1709	240192			DPR3 E	EPC 3.5KHz R-09	GDC	20-425N	154-199E	STUNE08WT
1714	240192			DPR3 B	EPC 3.5KHz R-10	GDC	20-423N	154-200E	STUNE08WT
1743	270192			DPR3 E	EPC 3.5KHz R-10	GDC	17-002N	158-102E	STUNE08WT
1747	270192			DPR3 B	EPC 3.5KHz R-11	GDC	16-597N	158-107E	STUNE08WT
2300	290192			DPR3 E	EPC 3.5KHz R-11	GDC	10-544N	164-541E	STUNE08WT

#GMT	DDMMYY	LOC	T	SAMP	SAMPLE	DISP			CRUISE
#TIME	DATE	TIME	Z	CODE	IDENTIFIER	CODE	LAT.	LONG.	LEG-SHIP

*** Seismic Reflection Records ***

0525	060192			SPRS	B Airgun 4Sec	R-01	GDC	16-457N	157-364E	sTUNE08WT
2300	290192			SPRS	E Airgun 4Sec	R-01	GDC	10-544N	164-541E	sTUNE08WT
1814	290192			SPRF	B Airgun 2Sec	R-01	GDC	11-102N	164-337E	sTUNE08WT
2300	290192			SPRF	E Airgun 2Sec	R-01	GDC	10-544N	164-541E	sTUNE08WT

*** Magnetics (Earth Total Field) Records ***

0100	270192			MGRA	B Magnetics	R-01	GDC	19-086N	155-553E	sTUNE08WT
0530	310192			MGRA	E Magnetics	R-01	GDC	8-243N	169-161E	sTUNE08WT

*** Deep Tow Magnetic Survey ***

0225	120192			MGSV	B Deep Tow mag survey		UWA	18-576N	155-240E	sTUNE08WT
1400	260192			MGSV	E Deep Tow mag survey		UWA	19-194N	155-454E	sTUNE08WT

*** Expendable Bathythermographs ***

0202	290192			BTXP	xbt 0001 Probe T-4		GDC	13-010N	162-325E	sTUNE08WT
0213	290192			BTXP	xbt 0002 Probe T-4		GDC	12-596N	162-340E	sTUNE08WT

*** Continuous Recorded Gravity ***

0630	020192			GVSV	B Gravity		GDC	13-424N	144-479E	sTUNE08WT
0500	220192			GVSV	E Gravity		GDC	22-183N	152-209E	sTUNE08WT

*** Note: Gravity off due to gyro failure--repair impossible at sea ***

*** Thermograph Records ***

0630	020192			TGRC	B Thermographs 1-17		GDC	13-424N	144-479E	sTUNE08WT
2000	310192			TGRC	E Thermographs 1-17		GDC	7-066N	171-180E	sTUNE08WT

#

End Sample Index

TUNE08WT