

INFORMAL REPORT AND INDEX OF
NAVIGATION, DEPTH, MAGNETIC AND SUBBOTTOM PROFILER DATA
(Issued April 21, 1978)

GUAYMAS EXPEDITION

LEG 3

Guaymas, Sonora, Mexico (8 March 1978)
to
San Diego, California (18 March 1978)
R/V T. Washington

Chief Scientist - L. Lawver (S.I.O.)*

Resident Marine Tech - R. Wilson

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

Data Collection Funded by NSF
Grant Number OCE78-01664
Data Processing Funded by SIA, NSF and ONR

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

GDC Cruise I.D.# 173

* On leave from the U. S. Geological Survey

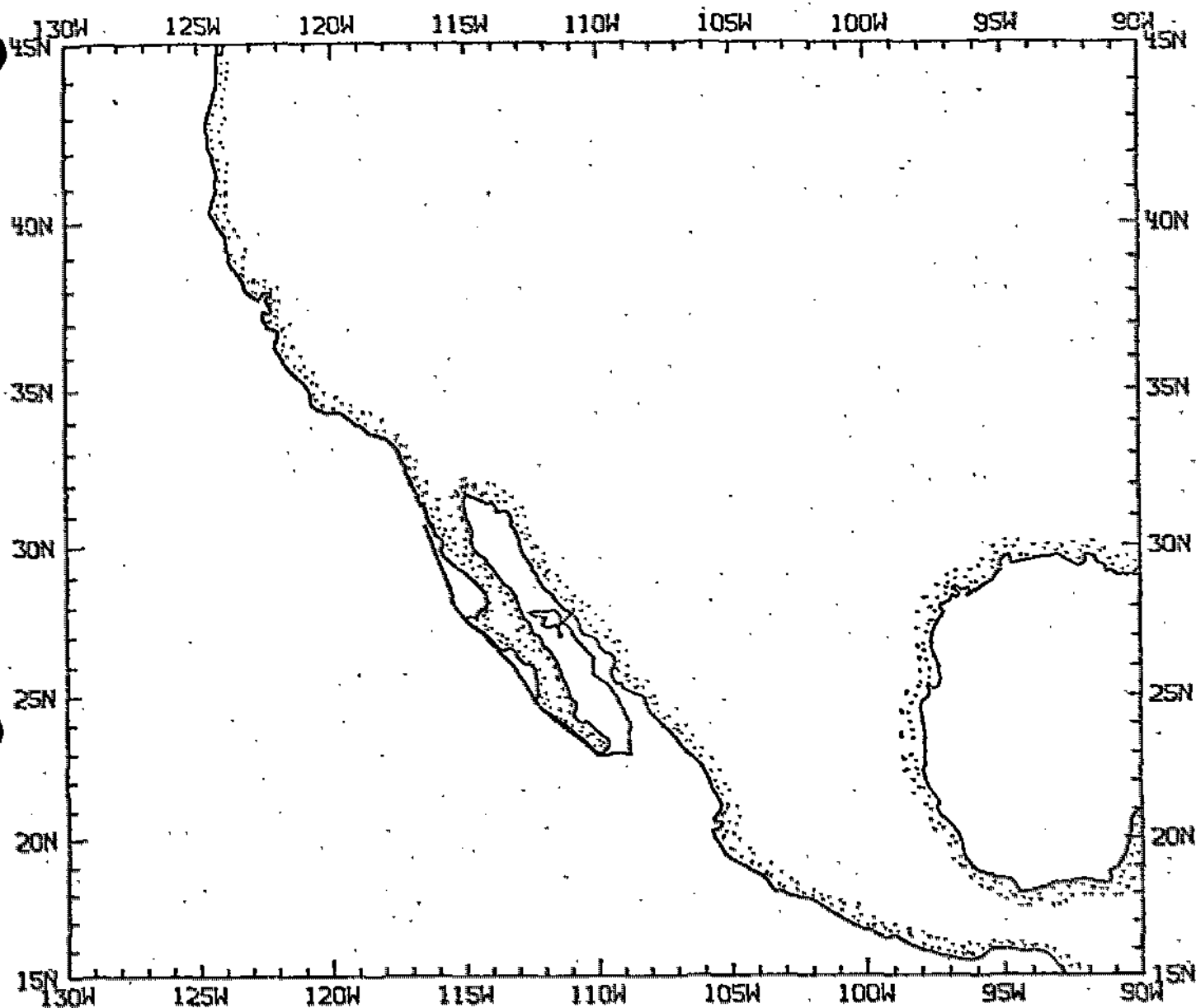
Informal Report and Index of Navigation, Depth, Magnetic and Subbottom Profiler Data

Contents:

- Index Chart - gives track of cruise leg and boundaries of depth compilation plots (see below).
- Track Charts - annotated with dates (day/month) and hour ticks. The scale is .3"/deg. long.
- 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 solid black line along the bottom of the profile.

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 - in fathoms (assumed sound velocity of 800 fm./sec.) at approximately 1 mile spacing, plotted at 4"/degree with standard U. S. Navy Oceanographic Office BC series boundaries (see index chart).
3. Plots of magnetic anomaly profiles along track - map scale = 1.2"/degree; anomaly scale between 15°N and 15°S latitude = 500 gamm/inch; anomaly scale north of 15°N and south of 15°S = 1000 gamm/inch; from values retrieved at approximately 1 mile spacing and regional field removed using the 1975 IGRF.
4. Card decks of navigation, depth and magnetics (for specific formats, contact S. M. Smith, Geological Data Center).
5. S. I. O. 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.
6. 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



GUAYMAS EXPEDITION
LEG 3

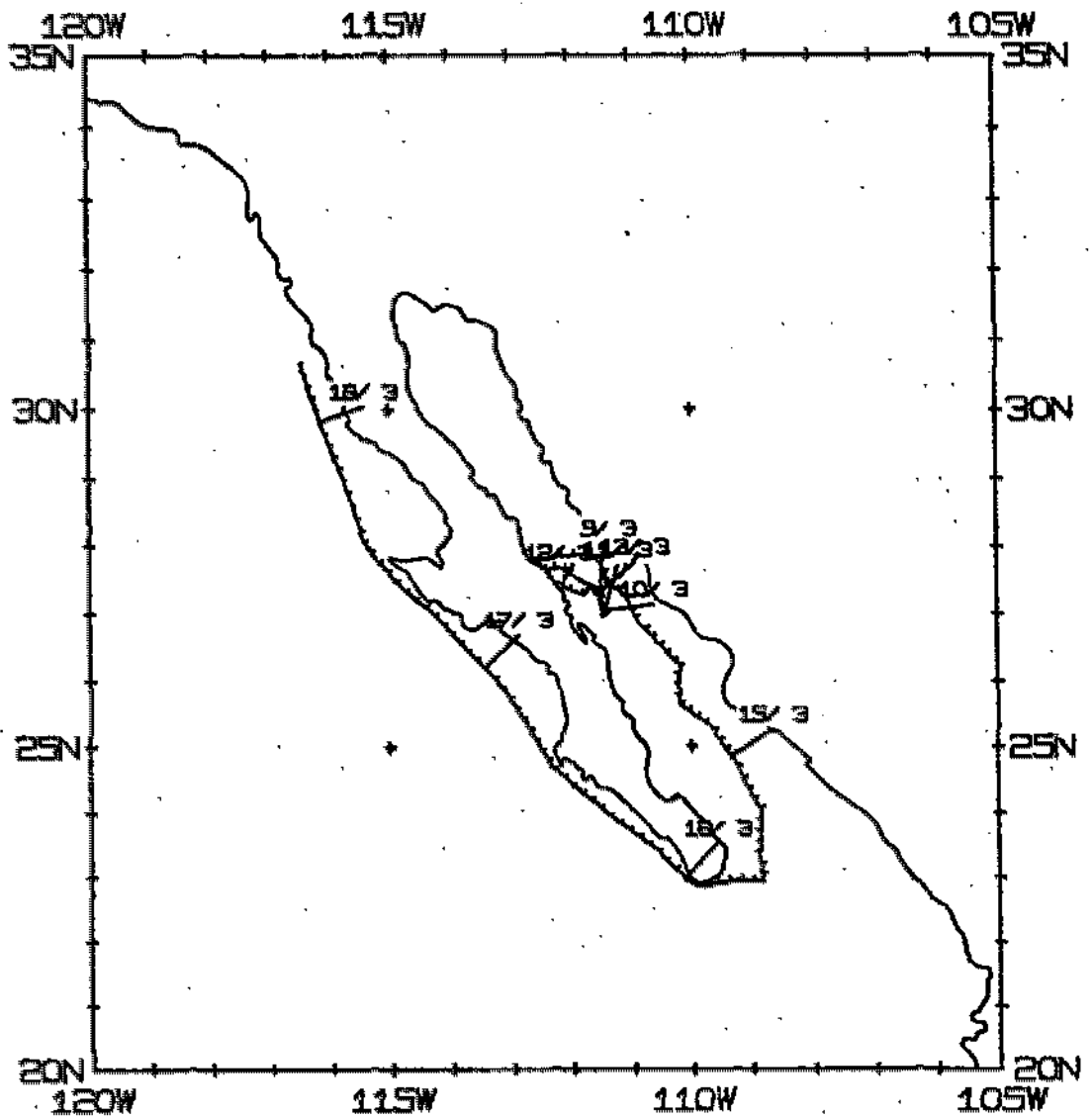
Chief Scientist - L. Lawver (U.S. Geological Survey)
 Ports: Guaymas, Mexico - San Diego
 Dates: 8 March - 18 March 1978
 Ship: R/V T. Washington

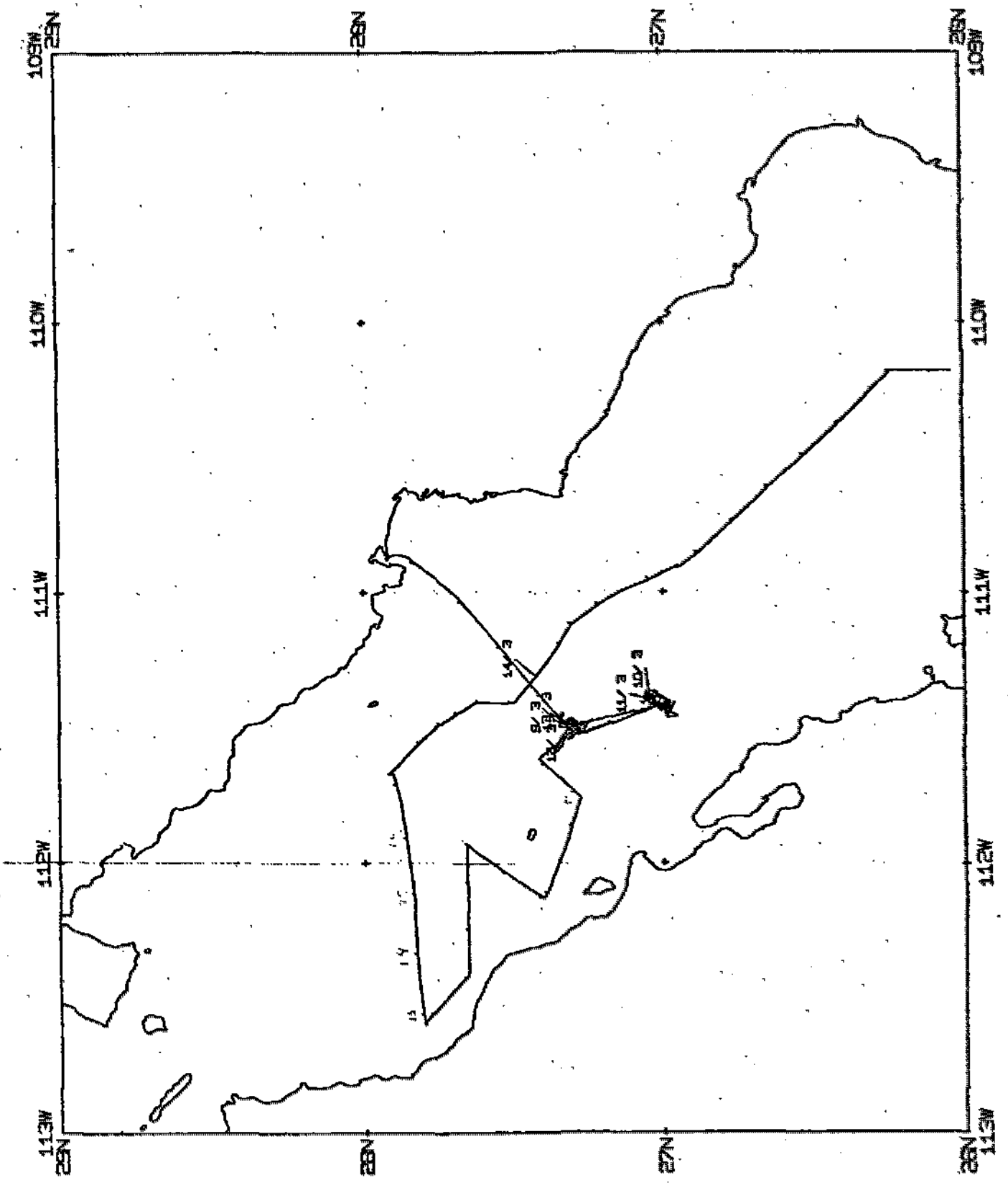
TOTAL MILEAGE

- 1) Cruise 1442 miles
- 2) Bathymetry - 1376 miles
- 3) Magnetics - 680 miles
- 4) Seismic Reflection - 357 miles
- 5) Gravity - Collected

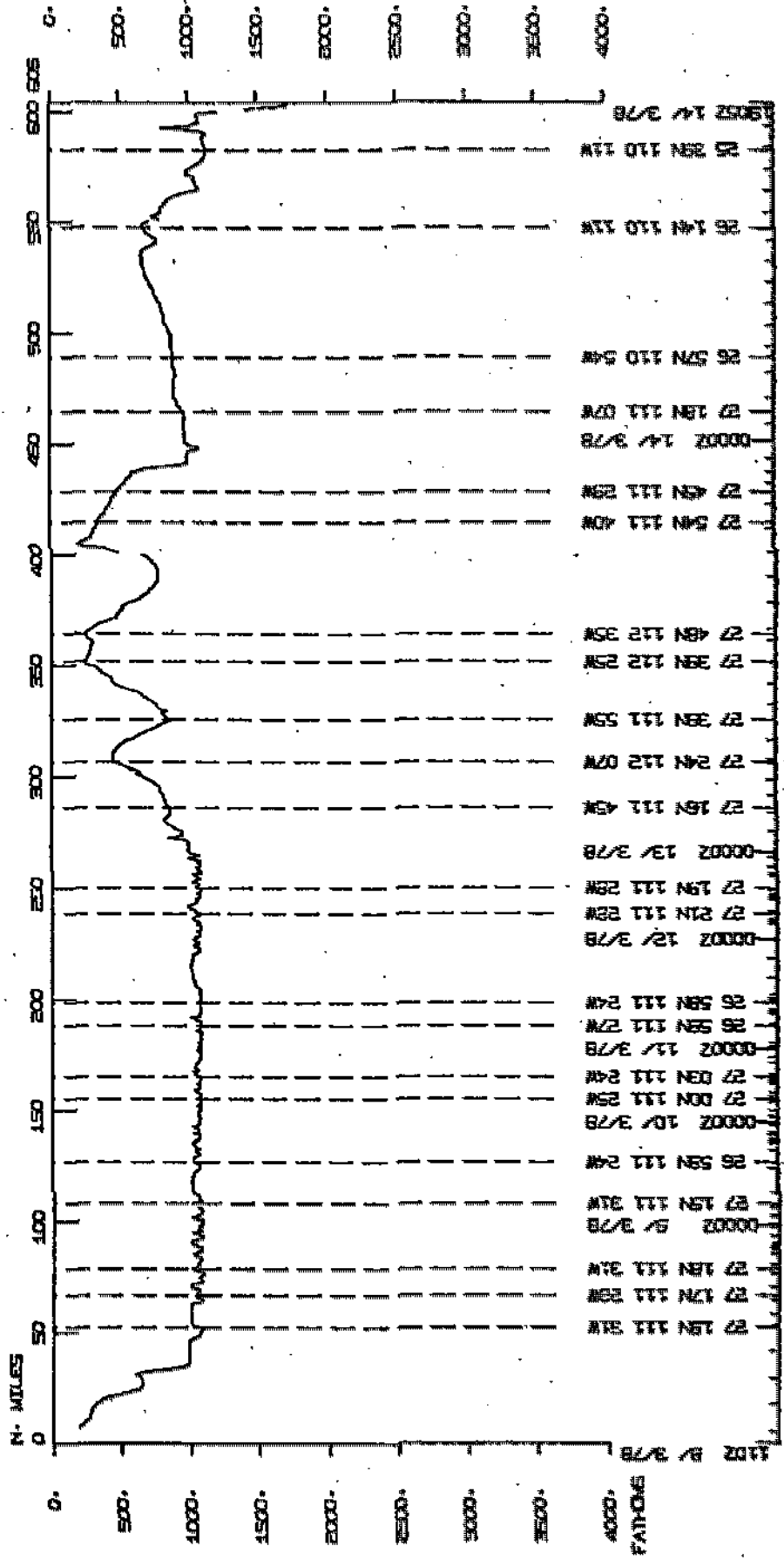
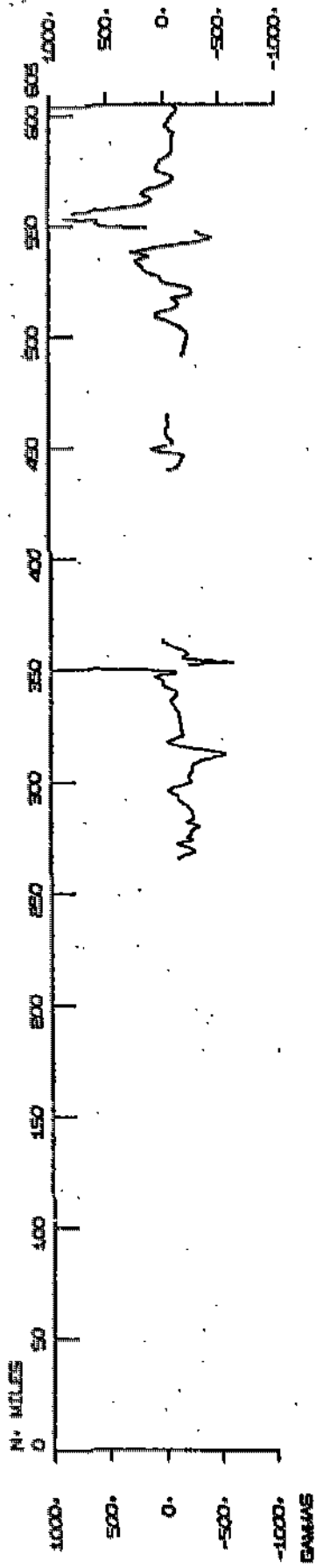
GLAY03WT TRACK PLOT (1 OF 1)

MERCATOR PROJECTION, SCALE= 0.312 IN/DEG LONGITUDE

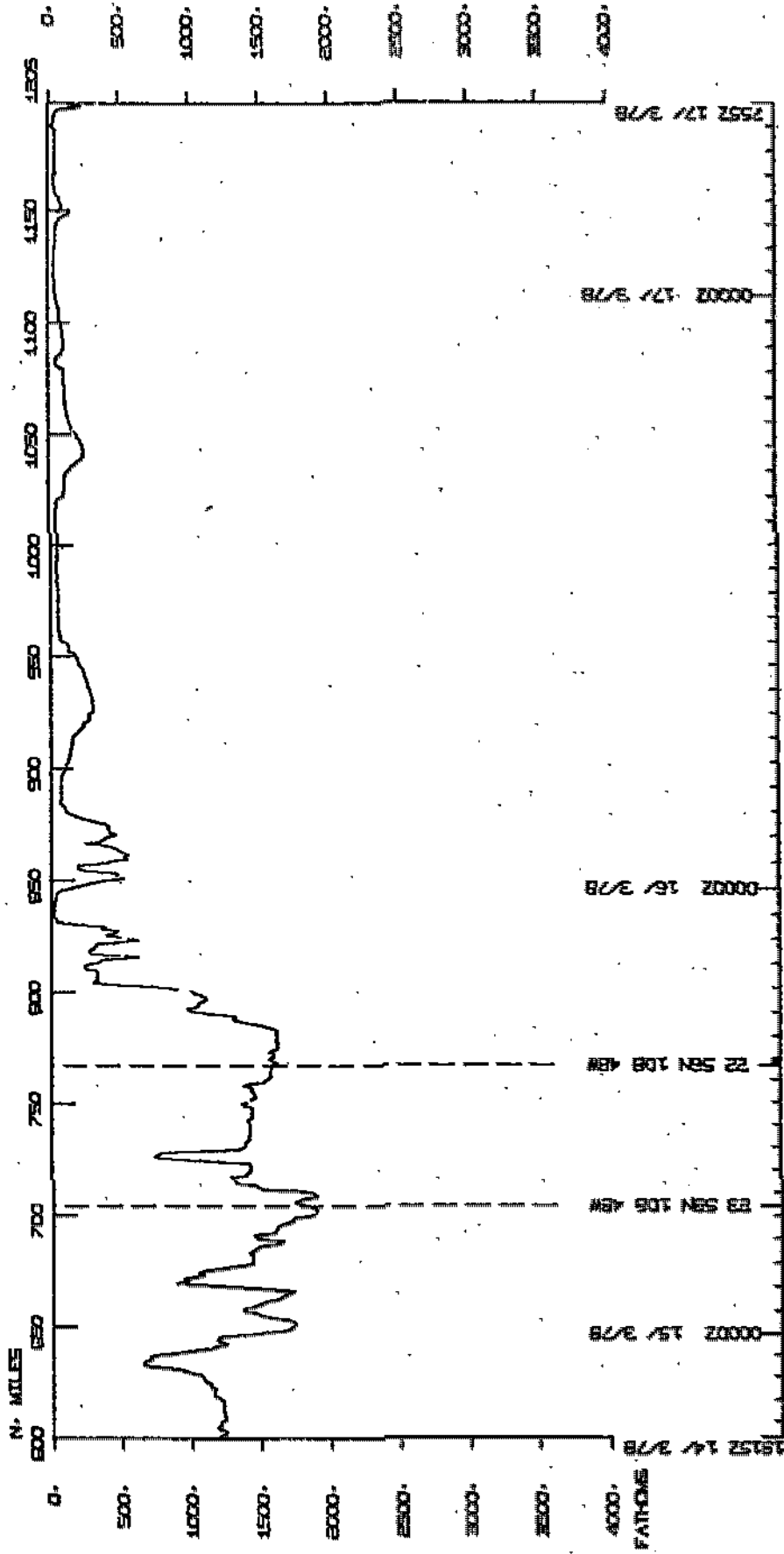
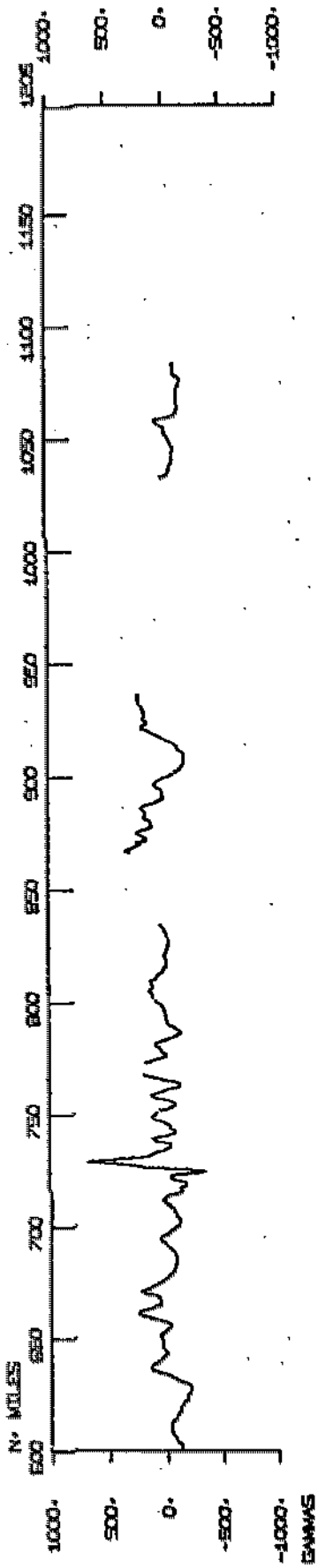




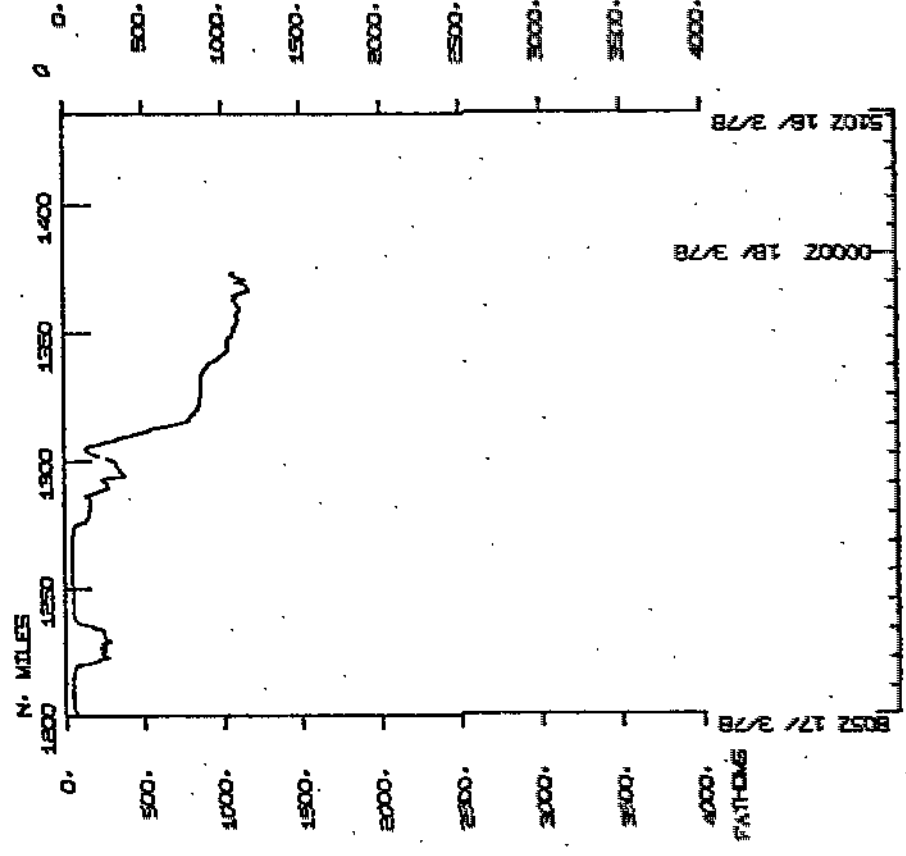
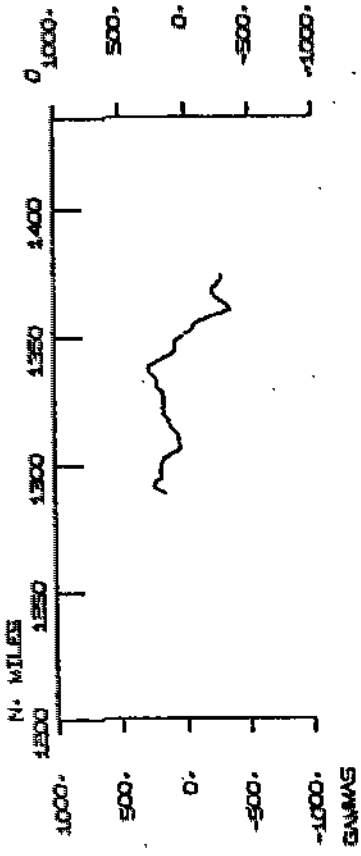
GUAYMAS LEG 3



GUAYMAS LEG 3



GUAYMAS LEG B



510Z 18/ 3/78
0000Z 18/ 3/78

BOSZ 17/ 3/78
FATHOMS

S.I.O. SAMPLE INDEX

(Issued April 21, 1978)

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Chief Scientist - L. Lawver (U.S. Geological Survey)

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

Index Encoding Funded by NSF
Grant Number OCE77-23704
Index Processing and Report Preparation
Funded in part by SIA

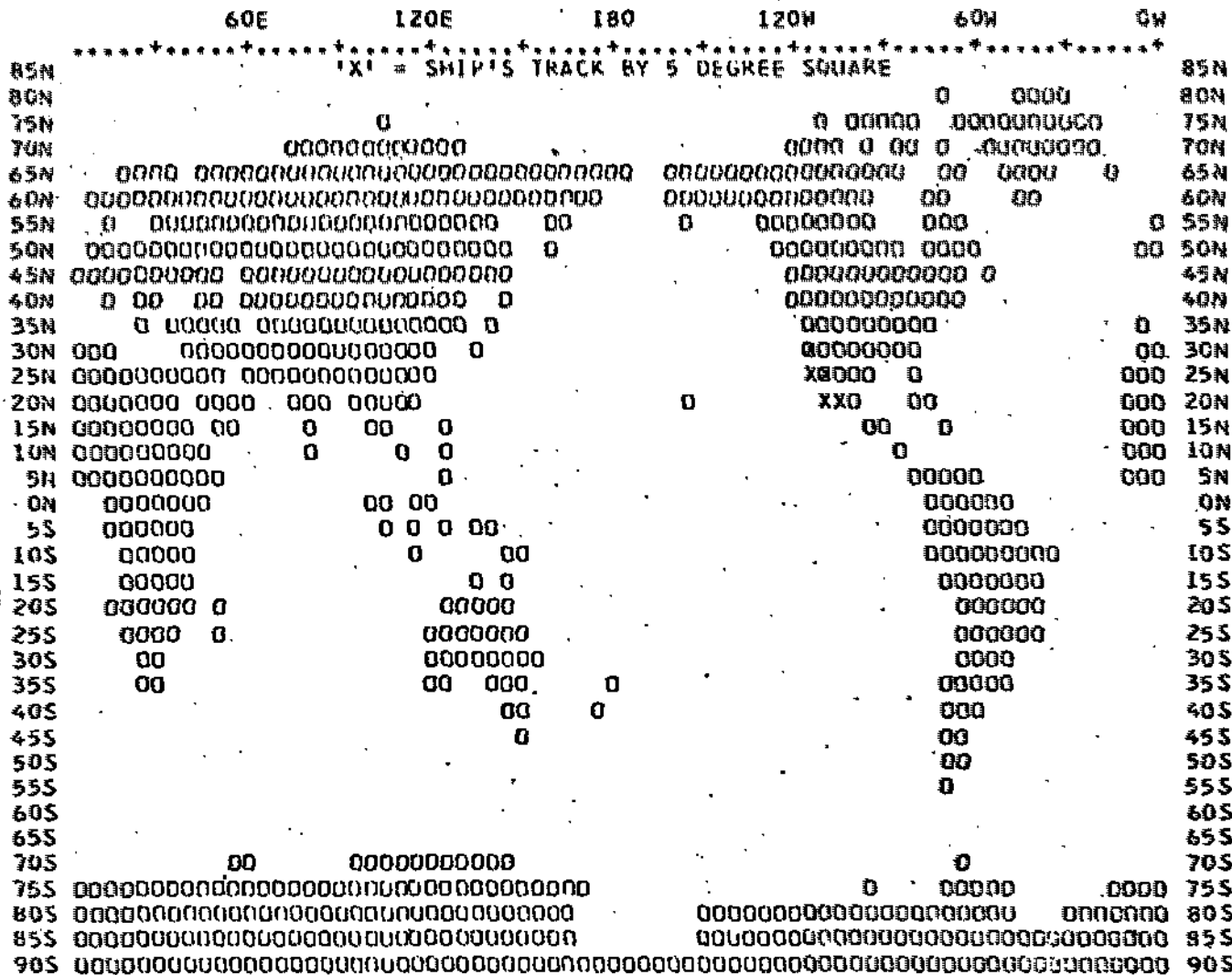
The Sample Index is a first level interdisciplinary listing of time, position, sample identification and disposition of all samples, records and measurements collected on this cruise leg. The index data are encoded at sea by the Resident Technician and processed on shore by the S.I.O. Geological Data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

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*** SAMPLE INDEX GUAYMAS 03

(GUAYMAS 03) ***



+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
 | 60E 120E 180 120W 60W 0W |
 |-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
 | 08MAR78 - GUAYMAS, SON, MEXICO |
 | Tn |
 | 18MAR78 - SAN DIEGO, CALIF. |

CHIEF SCIENTIST - LAWVER, L. NPL

SHIP - R/V THOMAS WASHINGTON (510)

NUMBER OF SAMPLES OF CLASS 'TYPE' GOING TO DESTINATION 'DISP'

DISP	TYPE										TOTAL	
	CO	DP	GV	HC	HF	LB	MG	PE	SP			
DCP	I			6							I	6
GCR	I	30									I	30
GDC	I		11			1	2			2	I	16
GRD	I							4			I	4
GSU	I				14			1			I	15
LMD	I		2								I	2
MPL	I							2			I	2
MTG	I							2			I	2
SCG	I							1			I	1
SGG	I							1			I	1
SIO	I							1			I	1
SIX	I							4			I	4
TAM	I							1			I	1
UCL	I							1			I	1
TOTAL	I	30	11	2	6	14	1	2	18	2	I	86

SAMPLE 'TYPE' CODES USED ABOVE

- CO = CORE (SEE ALSO TYPE DH**)
- DP = DEPTH
- GV = GRAVITY
- HC = HYDROGRAPHIC CAST
- HF = HEAT PROBE
- LB = LOG BOOKS
- MG = MAGNETICS (TOWED VEHICLE, SURFACE, TOTAL FIELD)
- PE = PERSONNEL IN SCIENTIFIC PARTY
- SP = SEISMIC REFLECTION PROFILE AIRGUN

SAMPLE 'DISP' CODES USED ABOVE

- DCP = DATA COLLECTION, PROCESSING GROUP -- F. WILKES (EXT. 3668)
- GCR = GEOLOGICAL CURATING FACILITY -- W. RIEDEL, (EXT. 4386)
- GDC = GEOLOGICAL DATA CENTER -- S. SMITH (EXT. 2752)
- GRD = GEOLOGICAL RESEARCH DIVISION (EXT. 3360)
- GSU = U.S. GEOLOGICAL SURVEY
- LMD = LEROY M. DORRMAN (EXT. 2406)
- MPL = MARINE PHYSICAL LAB. (EXT 2305)
- MTG = MARINE TECHNOLOGY GROUP (EXT 4194)
- SCG = SHIPBOARD COMPUTER GROUP (EXT. 4195)
- SGG = SHIPBOARD GEOPHYSICAL GROUP--P. CRAMPTON (EXT.2079)
- SIO = SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA, CAL. 92093
- SIX = SCRIPPS INSTITUTION NON-EMPLOYEE (CONTACT DORCAS UTTER EXT. 2356)
- TAM = TEXAS A+M UNIVERSITY
- UCL = UNIV. CALIF. LOS ANGELES (UCLA)

SAMPLE INDEX GUAYMAS 03

GUAY03WT

*** PORTS ***

124 8 378
512 18 378

LGPT B GUAYMAS, SON. MEXICO
LGPT E SAN DIEGO, CALIF.

27 55 N 110 552W F GUAY03WT
32 43 N 117 11 W F GUAY03WT

PERSONNEL

PECS	LAWVER, L.	MPL	GUAY03WT
PERT	WILSON, K.	MTG	GUAY03WT
PEAT	CRAMPYON, P.	SCG	GUAY03WT
PECT	ABBOTT, L.	SCG	GUAY03WT
PEMT	COMER, R.	MTG	GUAY03WT
PEXN	ACOSTA, C.	SIX	GUAY03WT
PEXN	CARREON, H.	SIX	GUAY03WT
PES	BECKER, K.	MPL	GUAY03WT
PE	BODIN, P.	GRD	GUAY03WT
PEXN	SINGH, S.	SIX	GUAY03WT
PE	VACQUIER, V.	STO	GUAY03WT
PE	BROMELY, E.	GRD	GUAY03WT
PEXN	GUTIERREZ, M.	SIX	GUAY03WT
PE	HAZUREK, M.	UCL	GUAY03WT
PE	STALLINGS,	TAM	GUAY03WT
PE	KASTNER, M.	GRD	GUAY03WT
PE	CHAVEZ, C.	GRD	GUAY03WT
PE	WILLIAMS, D.	GSU	GUAY03WT

*** NOTE *** TIME ZONES AND MINUTES OF LATITUDE AND LONGITUDE ARE LISTED
IN TENTHS (E.G. 10.6 IS LISTED AS 106)

*** NOTE *** AN 'X' IN THE (B)EGIN/(E)ND COLUMN FOLLOWING THE SAMPLE
CODE INDICATES NO SAMPLE OR DATA RECOVERED

TIME GMT	DATE D.M.Y.	TIME LOC	IZ LOC	SAMP CODE	SAMPLE IDENT.	DISP CODE	LAT.	LONG.	CRUISE LEG-SHIP
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UNDERWAY DATA CURATOR - STUART M. SMITH (EXT.2752)

*** LOG BOOKS ***

0220	080378			LBWU B	UNDERWAY WATCH LOG	GDC 27	464N	110 564W	S GUAY03WT
2330	170378			LBWU E	UNDERWAY WATCH LOG	GDC 29	429N	116 63W	S GUAY03WT

*** FATHOGRAMS ***

222	8 378			DPRT B	GDR 12 KHZ R-01	GDC 27	464N	110 564W	S GUAY03WT
1900	9 378			DPRT E	GDR 12 KHZ R-01	GDC 27	33N	111 229W	S GUAY03WT
2105	9 378			DPRT B	GDR 12 KHZ R-02	GDC 27	36N	111 233W	S GUAY03WT
921	12 378			DPRT E	GDR 12 KHZ R-02	GDC 27	211N	111 282W	S GUAY03WT
926	12 378			DPRT B	GDR 12 KHZ R-03	GDC 27	211N	111 232W	S GUAY03WT
245	15 378			DPRT E	GDR 12 KHZ R-03	GDC 24	238N	109 29W	S GUAY03WT
250	15 378			DPRT B	GDR 12 KHZ R-04	GDC 24	230N	109 24W	S GUAY03WT
1625	17 378			DPRT E	GDR 12 KHZ R-04	GDC 28	287N	115 340W	S GUAY03WT
1633	17 378			DPRT B	GDR 12 KHZ R-05	GDC 28	301N	115 345W	S GUAY03WT
2330	17 378			DPRT E	GDR 12 KHZ R-05	GDC 29	429N	116 63W	S GUAY03WT
214	8 378			DPR3 B	UGR 3.5KHZ R-01	GDC 27	477N	110 552W	S GUAY03WT
610	8 378			DPR3 E	UGR 3.5KHZ R-01	GDC 27	200N	111 334W	S GUAY03WT
705	8 378			DPR3 B	UGR 3.5KHZ R-02	GDC 27	220N	111 359W	S GUAY03WT
1630	10 378			DPR3 E	UGR 3.5KHZ R-02	GDC 27	29N	111 242W	S GUAY03WT
1650	10 378			DPR3 B	UGR 3.5KHZ R-03	GDC 27	31N	111 241W	S GUAY03WT
315	13 378			DPR3 E	UGR 3.5KHZ R-03	GDC 27	189N	111 540W	S GUAY03WT
322	13 378			DPR3 B	UGR 3.5KHZ R-04	GDC 27	191N	111 548W	S GUAY03WT
1500	15 378			DPR3 E	UGR 3.5KHZ R-04	GDC 22	566N	108 485W	S GUAY03WT
1505	15 378			DPR3 B	UGR 3.5KHZ R-05	GDC 22	567N	108 485W	S GUAY03WT
2207	15 378			DPR3 E	UGR 3.5KHZ R-05	GDC 22	515N	109 467W	S GUAY03WT
2243	15 378			OPK3 B	UGR 3.5KHZ R-06	GDC 22	516N	109 540W	S GUAY03WT
940	17 378			OPK3 E	UGR 3.5KHZ R-06	GDC 27	243N	114 491W	S GUAY03WT

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

2351	12	378		MGR	B MAGNETICS R-01	GDC 27	175N	111 304W	S GUAY03WT
2240	15	378		MGR	E MAGNETICS R-01	GDC 22	517N	109 534W	S GUAY03WT
137	16	378		MGR	B MAGNETICS R-02	GDC 23	116N	110 217W	S GUAY03WT
2330	17	378		MGR	E MAGNETICS R-02	GDC 29	429N	116 63W	S GUAY03WT

*** SEISMIC REFLECTION PROFILES ***

2357	12	378		SPRF	B SEIS PROF 2SEC R-01	GDC 27	180N	111 309W	S GUAY03WT
1140	15	378		SPRF	E SEIS PROF 2SEC R-01	GDC 22	563N	108 489W	S GUAY03WT
2357	12	378		SPRS	B SEIS PROF 5SEC R-01	GDC 27	180N	111 309W	S GUAY03WT
1140	15	378		SPRS	E SEIS PROF 5SEC R-01	GDC 22	563N	108 489W	S GUAY03WT

GRAVIMETRIC RECORDS CURATOR L.M. DORMAN (EXT.2406)

230	8	378		GVR	B GRAVITYMETER R-01	LMD 27	451N	110 575W	S GUAY03WT
500	17	378		GVR	E GRAVITYMETER R-01	LMD 26	488N	114 58W	S GUAY03WT
505	17	378		GVR	B GRAVITYMETER R-02	LMD 26	494N	114 65W	S GUAY03WT
2315	18	378		GVR	E GRAVITYMETER R-02	LMD 30	413N	116 298W	S GUAY03WT

*** GRAVITY CORE ***

1117	8	378		COG	GRAVITY 10 1964	GCR 27	181N	111 302W	S GUAY03WT
1233	8	378		COG	GRAVITY 11 1964	GCR 27	179N	111 307W	S GUAY03WT
1339	8	378		COG	GRAVITY 12 1944	GCR 27	177N	111 309W	S GUAY03WT
1603	8	378		COG	GRAVITY 13 2001	GCR 27	183N	111 298W	S GUAY03WT
306	9	378		COG	GRAVITY 14 1856	GCR 27	180N	111 311W	S GUAY03WT
1710	9	378		COG	GRAVITY 15 1986	GCR 27	28N	111 229W	S GUAY03WT
2225	9	378		COG	GRAVITY 16 1988	GCR 27	25N	111 231W	S GUAY03WT
2341	9	378		COG	GRAVITY 17 1988	GCR 27	26N	111 231W	S GUAY03WT
914	10	378		COG	GRAVITY 18 2009	GCR 27	9N	111 246W	S GUAY03WT
2157	10	378		COG	GRAVITY 19 2003	GCR 26	596N	111 251W	S GUAY03WT
2256	10	378		COG	GRAVITY 20 2005	GCR 26	598N	111 252W	S GUAY03WT
158	11	378		COG	GRAVITY 21 1966	GCR 27	18N	111 247W	S GUAY03WT
1138	11	378		COG	GRAVITY 22 1999	GCR 26	595N	111 265W	S GUAY03WT
1630	11	378		COG	GRAVITY 23 2007	GCR 26	595N	111 257W	S GUAY03WT
552	12	378		COG	GRAVITY 24 1923	GCR 27	204N	111 272W	S GUAY03WT
1939	12	378		COG	GRAVITY 25 2014	GCR 27	224N	111 272W	S GUAY03WT
2039	12	378		COG	GRAVITY 26 2014	GCR 27	224N	111 271W	S GUAY03WT
2313	12	378		COG	GRAVITY 27 1958	GCR 27	168N	111 307W	S GUAY03WT

TIME GMT	DATE D.M.Y.	TIME LOC	TZ LOC	SAMP CODE	SAMPLE IDENT.	DISP CODE	LAT.	LONG.	CRUISE LFG-SHIP
528	13	378		COG	GRAVITY 28 841	GCR 27	240N 112	75W S	GUAY03WT
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1729	13	378		COG	GRAVITY 30 646	GCR 27	542N 111	402W S	GUAY03WT
1805	13	378		COG	GRAVITY 31 641	GCR 27	545N 111	402W S	GUAY03WT
1948	13	378		COG	GRAVITY 32 895	GCR 27	450N 111	292W S	GUAY03WT
2022	13	378		COG	GRAVITY 33 899	GCR 27	449N 111	292W S	GUAY03WT
2145	13	378		COG	GRAVITY 34 1158	GCR 27	374N 111	244W S	GUAY03WT
159	14	378		COG	GRAVITY 35 1800	GCR 27	184N 111	71W S	GUAY03WT
459	14	378		COG	GRAVITY 36 1642	GCR 26	568N 110	545W S	GUAY03WT
1156	14	378		COG	GRAVITY 37 1230	GCR 26	144N 110	112W S	GUAY03WT
1239	14	378		COG	GRAVITY 38 1230	GCR 26	144N 110	110W S	GUAY03WT
1238	15	378		COG	GRAVITY 39 3000	GCR 22	561N 108	489W S	GUAY03WT

HYDROGRAPHIC CAST

224	10	378		HCNA	T I	HC1 4	DCP 27	13N 111	249W S	GUAY03WT
48	11	378		HCNA	TS	HC2 7	DCP 27	16N 111	243W S	GUAY03WT
351	11	378		HCNA	T I	HC3 5	DCP 27	18N 111	244W S	GUAY03WT
200	12	378		HCNA	TS	HC4 7	DCP 27	204N 111	289W S	GUAY03WT
436	12	378		HCNA	T I	HC5 7	DCP 27	207N 111	289W S	GUAY03WT
754	12	378		HCNA	TS I	HC6 7	DCP 27	202N 111	289W S	GUAY03WT

HEAT FLOW

1743	8	378		HFX	B STA 01	1991	GSU 27	180N 111	303W S	GUAY03WT
2026	8	378		HFX	E STA 01	2000	GSU 27	184N 111	325W S	GUAY03WT
2205	8	378		HFX	B STA 02	1942	GSU 27	182N 111	288W S	GUAY03WT
210	9	378		HFX	E STA 02	2110	GSU 27	191N 111	290W S	GUAY03WT
430	9	378		HFX	B STA 03	1947	GSU 27	153N 111	290W S	GUAY03WT
825	9	378		HFX	E STA 03	2088	GSU 27	161N 111	312W S	GUAY03WT
1205	9	378		HFX	B STA 04	1878	GSU 27	15N 111	220W S	GUAY03WT
1615	9	378		HFX	E STA 04	1994	GSU 27	22N 111	231W S	GUAY03WT
1740	9	378		HFX	B STA 05	1996	GSU 27	28N 111	227W S	GUAY03WT
1955	9	378		HFX	E STA 05	2062	GSU 27	36N 111	234W S	GUAY03WT
450	10	378		HFX	B STA 06	2001	GSU 26	595N 111	247W S	GUAY03WT
815	10	378		HFX	E STA 06	1970	GSU 27	10N 111	255W S	GUAY03WT
1120	10	378		HFX	B STA 07	1984	GSU 27	17N 111	233W S	GUAY03WT
1604	10	378		HFX	E STA 07	1998	GSU 27	28N 111	243W S	GUAY03WT
1655	10	378		HFX	B STA 08	1988	GSU 27	31N 111	241W S	GUAY03WT
1950	10	378		HFX	E STA 08	1917	GSU 27	40N 111	247W S	GUAY03WT

TIME GMT	DATE D.M.Y.	TIME LOC	TZ LOC	SAMP CODE	SAMPLE IDENT.	DISP CODE	LAT.	LONG.	CRUISE LEG-SHIP
0650	11	378		HFXX B	STA 09	2001	GSU 26 585N	111 258W	S GUAY03WT
1040	11	378		HFXX E	STA 09	2002	GSU 26 592N	111 267W	S GUAY03WT
1240	11	378		HFXX B	STA 10	1998	GSU 26 586N	111 264W	S GUAY03WT
1600	11	378		HFXX E	STA 10	1998	GSU 26 593N	111 257W	S GUAY03WT
1715	11	378		HFXX B	STA 11	2003	GSU 26 597N	111 257W	S GUAY03WT
2045	11	378		HFXX E	STA 11	1994	GSU 26 586N	111 267W	S GUAY03WT
0930	12	378		HFXX B	STA 12	2009	GSU 27 211N	111 262W	S GUAY03WT
1255	12	378		HFXX E	STA 12	2009	GSU 27 207N	111 290W	S GUAY03WT
1350	12	378		HFXX B	STA 13	1938	GSU 27 182N	111 286W	S GUAY03WT
1720	12	378		HFXX E	STA 13	1986	GSU 27 181N	111 298W	S GUAY03WT
1353	15	378		HFXX B	STA 14	2966	GSU 22 564N	108 481W	S GUAY03WT
1700	15	378		HFXX E	STA 14	2958	GSU 22 571N	108 481W	S GUAY03WT
9900					END SAMPLE INDEX				GUAY03WT