INFORMAL REPORT AND INDEX OF

NAVIGATION, DEPTH, MAGNETIC AND SUBBOTTOM PROFILER DATA

(Issued April 21, 1978)

GUAYMAS EXPEDITION

LEG 2

Guaymas, Sonora, Mexico (2 March 1978)
to
Guaymas, Sonora, Mexico (7 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

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.

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

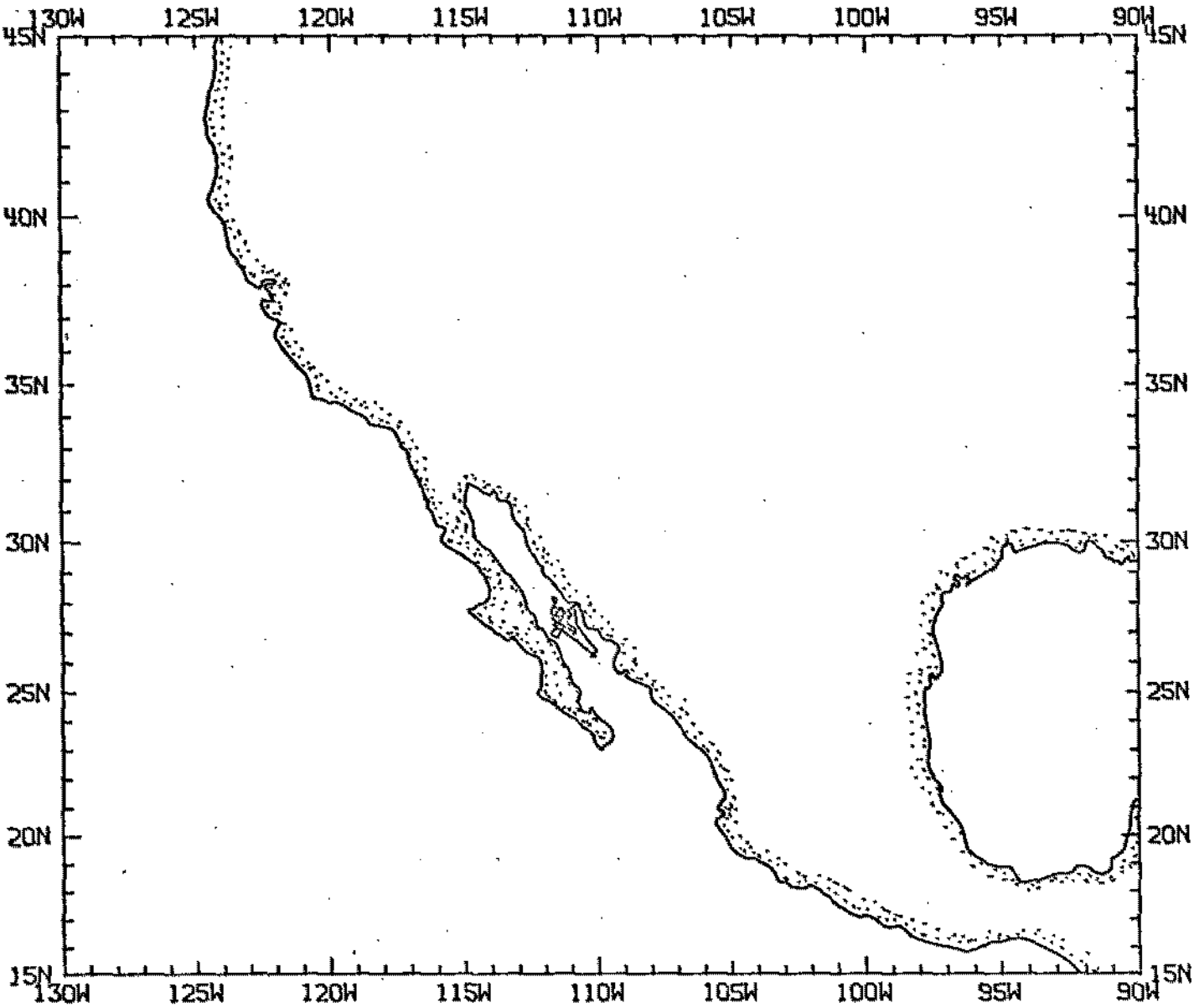
   b. Subbottom profiler records (airgun)

   c. Magnetometer records

   d. Underway Data Log

---

* Gravity - Contact L. M. Dorman (ext. 2406) for status



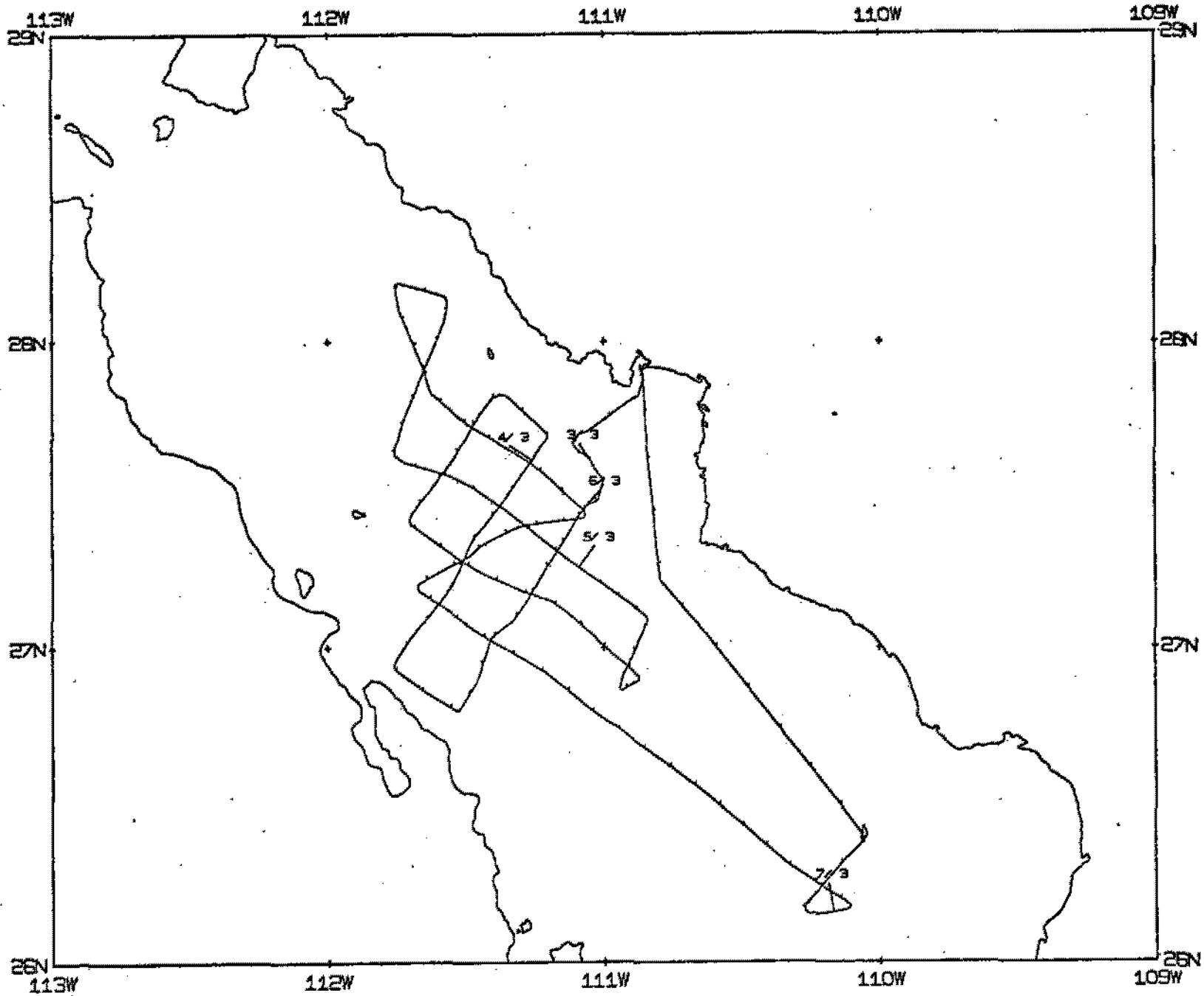
GUAYMAS EXPEDITION
LEG 2

Chief Scientist - L. Lawver (U.S. Geological Survey)
Ports: Guaymas - Guaymas, Mexico
Dates: 2 March - 7 March 1978
Ship: R/V T. Washington

TOTAL MILEAGE

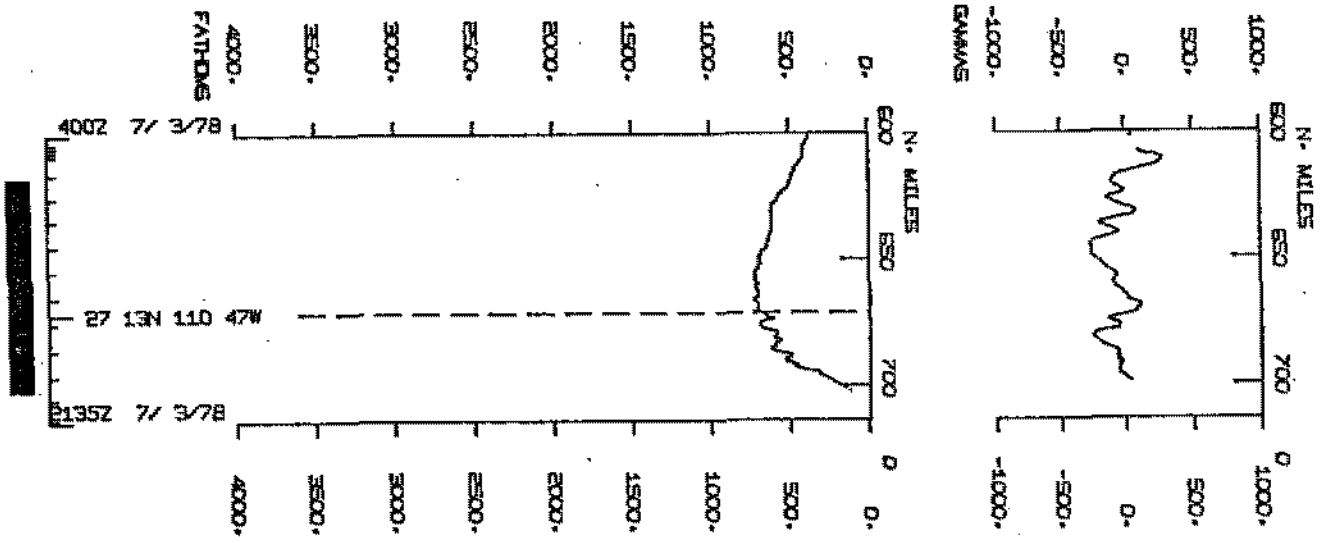
1) Cruise - 719 miles
2) Bathymetry - 694 miles
3) Magnetics - 661 miles
4) Seismic Reflection - 643 miles
5) 24 Channel Digital Seismic Profiling - 570 miles
6) Gravity - Collected

GUAY02WT TRACK PLOT (1 OF 1)



GUAYMAS LEG 2
N. MILES
GAMMAS
FATHOMS
2202 2/ 3/78
00002 3/ 3/78
27 27N 111 04W
27 01N 111 24W
26 47N 111 31W
26 56N 111 45W
00002 4/ 3/78
27 49N 111 21W
27 24N 111 42W
26 54N 110 52W
27 05N 110 50W
00002 5/ 3/78
27 37N 111 45W
28 08N 111 33W
28 11N 111 44W
00002 6/ 3/78
27 11N 111 40W
00002 7/ 3/78
3502 7/ 3/78

GUAYMAS LEG 2



S.I.O. SAMPLE INDEX

(Issued April 21, 1978)

GUAYMAS EXPEDITION

LEG 2

Guaymas, Sonora, Mexico (2 March 1978)
to
Guaymas, Sonora, Mexico (7 March 1978)

R/V T. Washington

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

Resident Marine Tech - R. Wilson

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

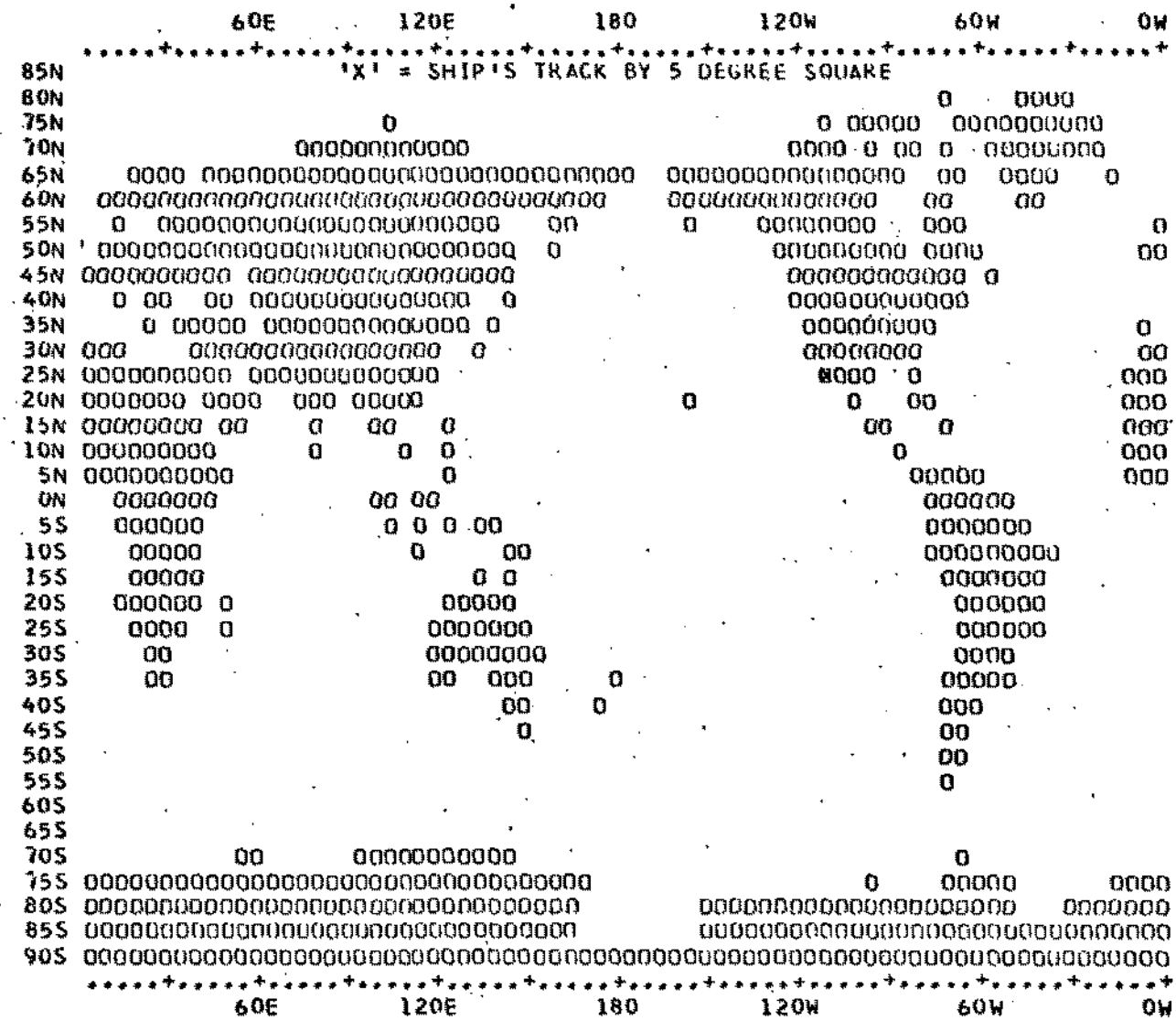
Index Encoding Funded by NSF
Grant Number OCE77-23704
Index Processing and Report Preparation
Funded in part by SIA

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.)

S.I.O. SAMPLE INDEX GENERATED 02MAY78

*** SAMPLE INDEX GUAYMAS 02 (GUAY02WT) ***



02MAR78 - GUAYMAS, SON. MEXICO
TO
07MAR78 - GUAYMAS, SON. MEXICO

CHIEF SCIENTIST - LAWVER, L. MPL

SHIP - R/V THOMAS WASHINGTON (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
	DP	GV	LB	MG	PE	SP	SR	
GDC	6		1	1		4		12
GRD					2			2
GSU					1			1
LMD		3						3
MPL					2		17	19
MTG					2			2
SCG					3	1		4
SGG					2			2
SIO					1			1
SIX					2			2
WHO					1			1
TOTAL	6	3	1	1	16	5	17	49

SAMPLE 'TYPE' CODES USED ABOVE

DP = DEPTH
GV = GRAVITY
LB = LOG BOOKS
MG = MAGNETICS (TOWED VEHICLE, SURFACE, TOTAL FIELD)
PE = PERSONNEL IN SCIENTIFIC PARTY
SP = SEISMIC REFLECTION PROFILE AIRGUN
SR = SEISMIC STATION - SHOOTING RUN

SAMPLE 'DISP' CODES USED ABOVE

GDC = GEOLOGICAL DATA CENTER -- S. SMITH (EXT. 2752)
GRD = GEOLOGICAL RESEARCH DIVISION (EXT. 3360)
GSU = U.S. GEOLOGICAL SURVEY
LMD = LEROY M. DORMAN (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)
WHO = WOODS HOLE OCEANOGRAPHIC INSTITUTION

SAMPLE INDEX GUAYMAS 02 GUAYO2WT

*** PORTS ***

1248 2 378	LGPT B	GUAYMAS, SON. MEXICO	27 55 N	110 552W	F GUAYO2WT
2000 7 378	LGPT E	GUAYMAS, SON. MEXICO	27 55 N	110 552W	F GUAYO2WT

PERSONNEL

PECS	LAWVER, L.	MPL	GUAYO2WT
PERT	WILSON, R.	MTG	GUAYO2WT
PEAT	CRAMPTON, P.	SGG	GUAYO2WT
PEAT	HUBENKA, F.	SGG	GUAYO2WT
PECT	ABBOTT, L.	SCG	GUAYO2WT
PECT	BURKHALTER, A.	SCG	GUAYO2WT
PECT	MOE, R.	SCG	GUAYO2WT
PEMT	COMER, R.	MTG	GUAYO2WT
PEXN	ACOSTA, C.	SIX	GUAYO2WT
PEXN	CARREON, H.	SIX	GUAYO2WT
PE	CRANE, K.	WHO	GUAYO2WT
PES	BECKER, K.	MPL	GUAYO2WT
PE	BODIN, P.	GRD	GUAYO2WT
PE	MOORE, G.	GRD	GUAYO2WT
PE	WILLIAMS, D.	GSU	GUAYO2WT
PE	VACQUIER, V.	SIO	GUAYO2WT

*** 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	TZ LOC	SAMP CODE	SAMPLE IDENT.	DISP CODE	LAT.	LONG.	CRUISE LEG-SHIP

UNDERWAY DATA CURATOR - STUART M. SMITH (EXT.2752)

*** LOG BOOKS ***

1445	020378			LBUW	B UNDERWAY WATCH LOG	GDC	27 432N	111 24W	S GUAYO2WT
1845	070378			LBUW	E UNDERWAY WATCH LOG	GDC	27 441N	110 508W	S GUAYO2WT

*** FATHOGRAMS ***

1422	2	378		DPRT	B GDR 12 KHZ R-01	GDC	27 432N	111 24W	S GUAYO2WT
635	4	378		DPRT	E GDR 12 KHZ R-01	GDC	27 306N	111 377W	S GUAYO2WT
637	4	378		DPRT	B GDR 12 KHZ R-02	GDC	27 304N	111 379W	S GUAYO2WT
1611	6	378		DPRT	E GDR 12 KHZ R-02	GDC	26 365N	110 446W	S GUAYO2WT
1620	6	378		DPRT	B GDR 12 KHZ R-03	GDC	26 360N	110 438W	S GUAYO2WT
1840	7	378		DPRT	E GDR 12 KHZ R-03	GDC	27 438N	110 508W	S GUAYO2WT
1429	2	378		DPR3	B UGR 3.5KHZ R-01	GDC	27 425N	111 36W	S GUAYO2WT
1226	3	378		DPR3	E UGR 3.5KHZ R-01	GDC	26 547N	111 271W	S GUAYO2WT
1235	3	378		DPR3	B UGR 3.5KHZ R-02	GDC	26 538N	111 275W	S GUAYO2WT
1746	5	378		DPR3	E UGR 3.5KHZ R-02	GDC	27 493N	111 366W	S GUAYO2WT
1757	5	378		DPR3	B UGR 3.5KHZ R-03	GDC	27 486N	111 357W	S GUAYO2WT
1845	7	378		DPR3	E UGR 3.5KHZ R-03	GDC	27 441N	110 508W	S GUAYO2WT

*** MAGNETOMETER ***

506	3	378		MGR	B MAGNETICS R-01	GDC	27 285N	111 17W	S GUAYO2WT
1829	7	378		MGR	E MAGNETICS R-01	GDC	27 428N	110 507W	S GUAYO2WT

*** SEISMIC REFLECTION PROFILES ***

520	3	378		SPRF	B SEIS PROF 2SEC R-01	GDC	27 282N	111 26W	S GUAYO2WT
407	7	378		SPRF	E SEIS PROF 2SEC R-01	GDC	26 235N	110 27W	S GUAYO2WT
915	7	378		SPRF	B SEIS PROF 2SEC R-02	GDC	26 243N	110 40W	S GUAYO2WT
1832	7	378		SPRF	E SEIS PROF 2SEC R-02	GDC	27 432N	110 507W	S GUAYO2WT

TIME GMT	DATE D.M.Y.	TIME LOC	TZ LOC	SAMP CODE		SAMPLE IDENT.	DISP CODE	LAT.	LONG.	CRUISE LEG-SHIP
520	3 378			SPRS	B	SEIS PROF 5SEC R-01	GDC	27 282N	111 26W	S GUAYO2WT
407	7 378			SPRS	E	SEIS PROF 5SEC R-01	GDC	26 235N	110 27W	S GUAYO2WT
930	7 378			SPRS	B	SEIS PROF 5SEC R-02	GDC	26 261N	110 55W	S GUAYO2WT
1832	7 378			SPRS	E	SEIS PROF 5SEC R-02	GDC	27 432N	110 507W	S GUAYO2WT
GRAVIMETRIC RECORDS CURATOR L.M. DORMAN (EXT.2406)										
1248	2 378			GVR	B	GRAVITYMETER R-01	LMD	27 540N	110 515W	S GUAYO2WT
355	4 378			GVR	E	GRAVITYMETER R-01	LMD	27 447N	111 277W	S GUAYO2WT
402	4 378			GVR	B	GRAVITYMETER R-02	LMD	27 441N	111 281W	S GUAYO2WT
130	7 378			GVR	E	GRAVITYMETER R-02	LMD	26 121N	110 144W	S GUAYO2WT
135	7 378			GVR	B	GRAVITYMETER R-03	LMD	26 125N	110 141W	S GUAYO2WT
1845	7 378			GVR	E	GRAVITYMETER R-03	LMD	27 441N	110 508W	S GUAYO2WT
MULTI-CHANNEL DIGITAL SEISMIC TAPE										
532	3 378			SPML	B	MULTI CHAN LINE 2	SCG	27 279N	111 34W	S GUAYO2WT
0411	7 378			SPML	E	MULTI CHAN LINE 2	SCG	26 239N	110 024W	S GUAYO2WT
*** SONOBUOY DROP *** SEISMIC REFRACTION MONITORING										
700	3 378			SRSB		SONOBUOY 1	MPL	27 210N	111 85W	S GUAYO2WT
1055	3 378			SRSB		SONOBUOY 2	MPL	27 29N	111 230W	S GUAYO2WT
1127	3 378			SRSB		SONOBUOY 3	MPL	27 5N	111 249W	S GUAYO2WT
1958	3 378			SRSB		SONOBUOY 4	MPL	27 161N	111 308W	S GUAYO2WT
2112	3 378			SRSB		SONOBUOY 5	MPL	27 226N	111 269W	S GUAYO2WT
124	4 378			SRSB		SONOBUOY 6	MPL	27 439N	111 146W	S GUAYO2WT
930	4 378			SRSB		SONOBUOY 7	MPL	27 179N	111 325W	S GUAYO2WT
26	5 378			SRSB		SONOBUOY 8	MPL	27 168N	111 74W	S GUAYO2WT
242	5 378			SRSB		SONOBUOY 9	MPL	27 264N	111 207W	S GUAYO2WT
700	5 378			SRSB		SONOBUOY 10	MPL	27 386N	111 452W	S GUAYO2WT
728	5 378			SRSB		SONOBUOY 11	MPL	27 411N	111 444W	S GUAYO2WT
1610	5 378			SRSB		SONOBUOY 12	MPL	27 585N	111 407W	S GUAYO2WT
1628	5 378			SRSB		SONOBUOY 13	MPL	27 569N	111 400W	S GUAYO2WT
2015	5 378			SRSB		SONOBUOY 14	MPL	27 406N	111 235W	S GUAYO2WT
511	6 378			SRSB		SONOBUOY 15	MPL	27 157N	111 334W	S GUAYO2WT
1840	6 378			SRSB		SONOBUOY 16	MPL	26 273N	110 314W	S GUAYO2WT
2030	6 378			SRSB	X	SONOBUOY 17	MPL	26 201N	110 221W	S GUAYO2WT
128	7 378			SRSB		SONOBUOY 18	MPL	26 120N	110 145W	S GUAYO2WT
9900						END SAMPLE INDEX				GUAYO2WT