

INFORMAL REPORT AND INDEX OF
NAVIGATION, DEPTH, MAGNETIC AND SUBBOTTOM PROFILER DATA

(Issued April 21, 1978)

GUAYMAS EXPEDITION

LEG 1

San Diego, California (9 February 1978)
to
Guaymas, Sonora, Mexico (24 February 1978)

R/V T. Washington

Chief Scientist - D. Bibee (SIO)

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.

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).

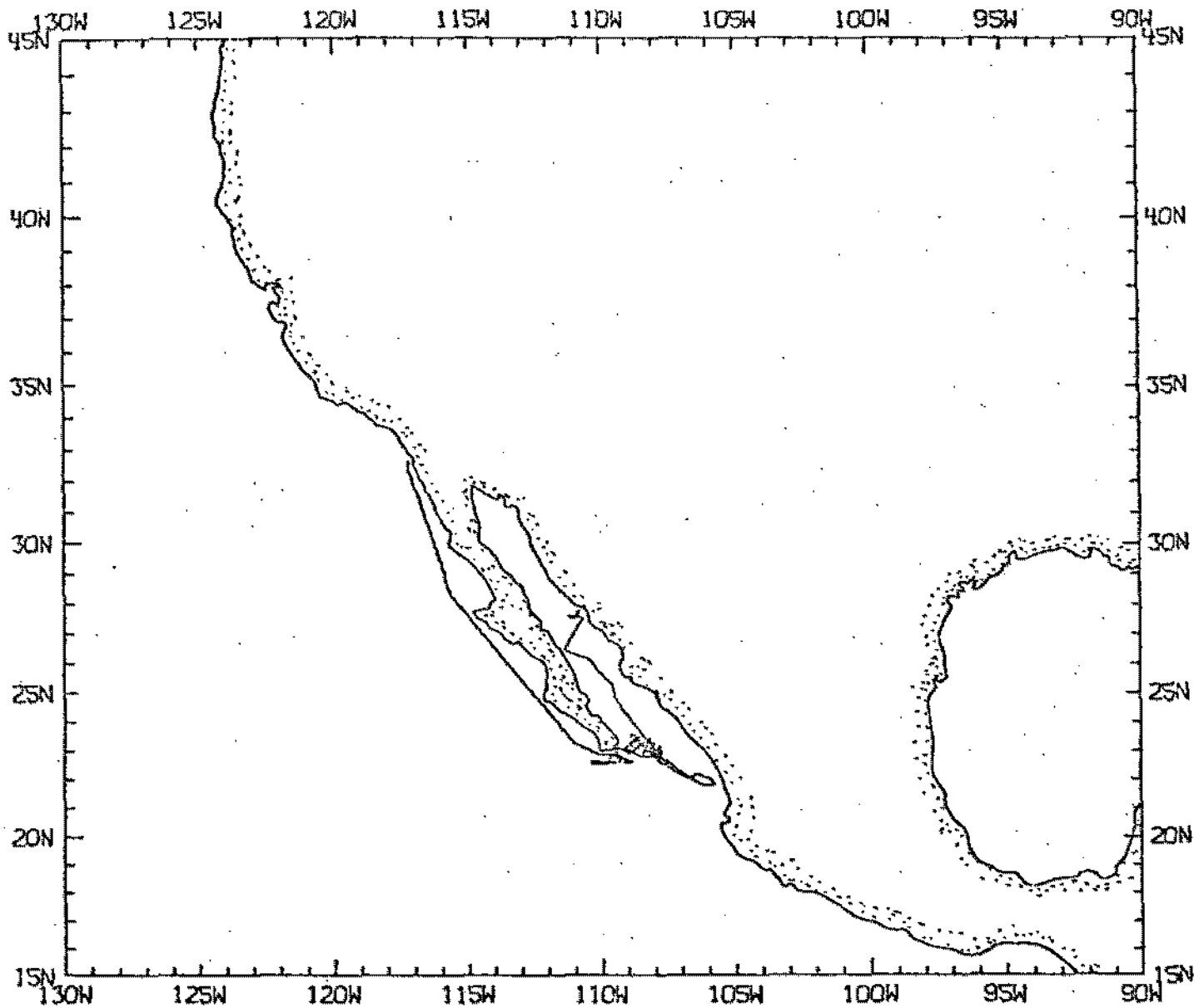
3. Plots of magnetic anomaly profiles along track - map scale = 1.2"/degree; anomaly scale between 15°N and 15°S latitude = 500 gamm/inch; anomaly scale north of 15°N and south of 15°S = 1000 gamm/inch; from values retrieved at approximately 1 mile spacing and regional field removed using the 1975 IGRF.

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 1

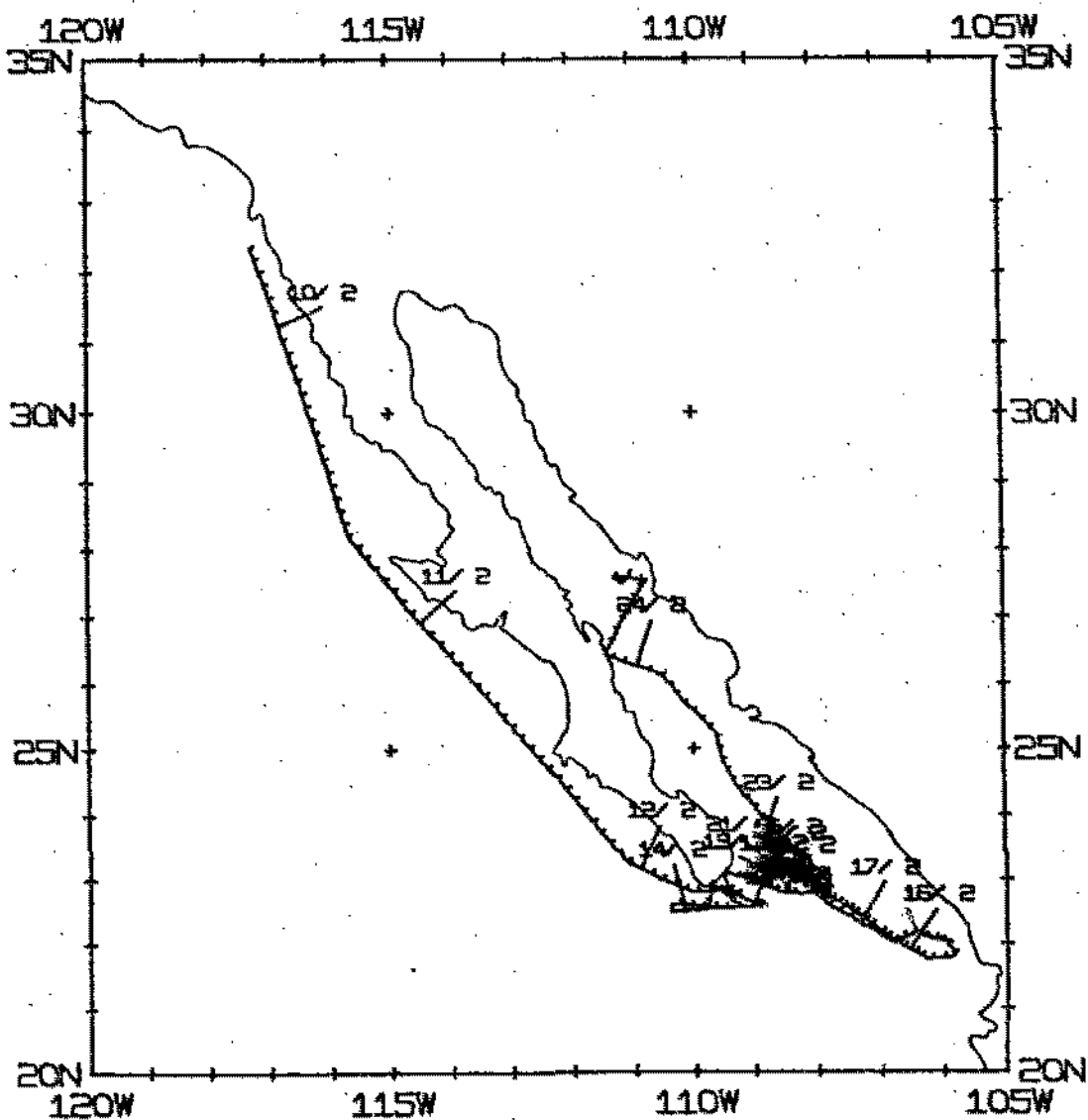
Chief Scientist - D. Bibee (SIO)
Ports: San Diego - Guaymas, Mexico
Dates: 9 February - 24 February 1978
Ship: R/V T. Washington

TOTAL MILEAGE

- 1) Cruise - 2735 miles
- 2) Bathymetry - 2718 miles
- 3) Magnetics - 2633 miles
- 4) Seismic Reflection - 1325 miles
- 5) 24 Channel Digital Seismic Profiling - 369 miles
- 6) Gravity - Collected

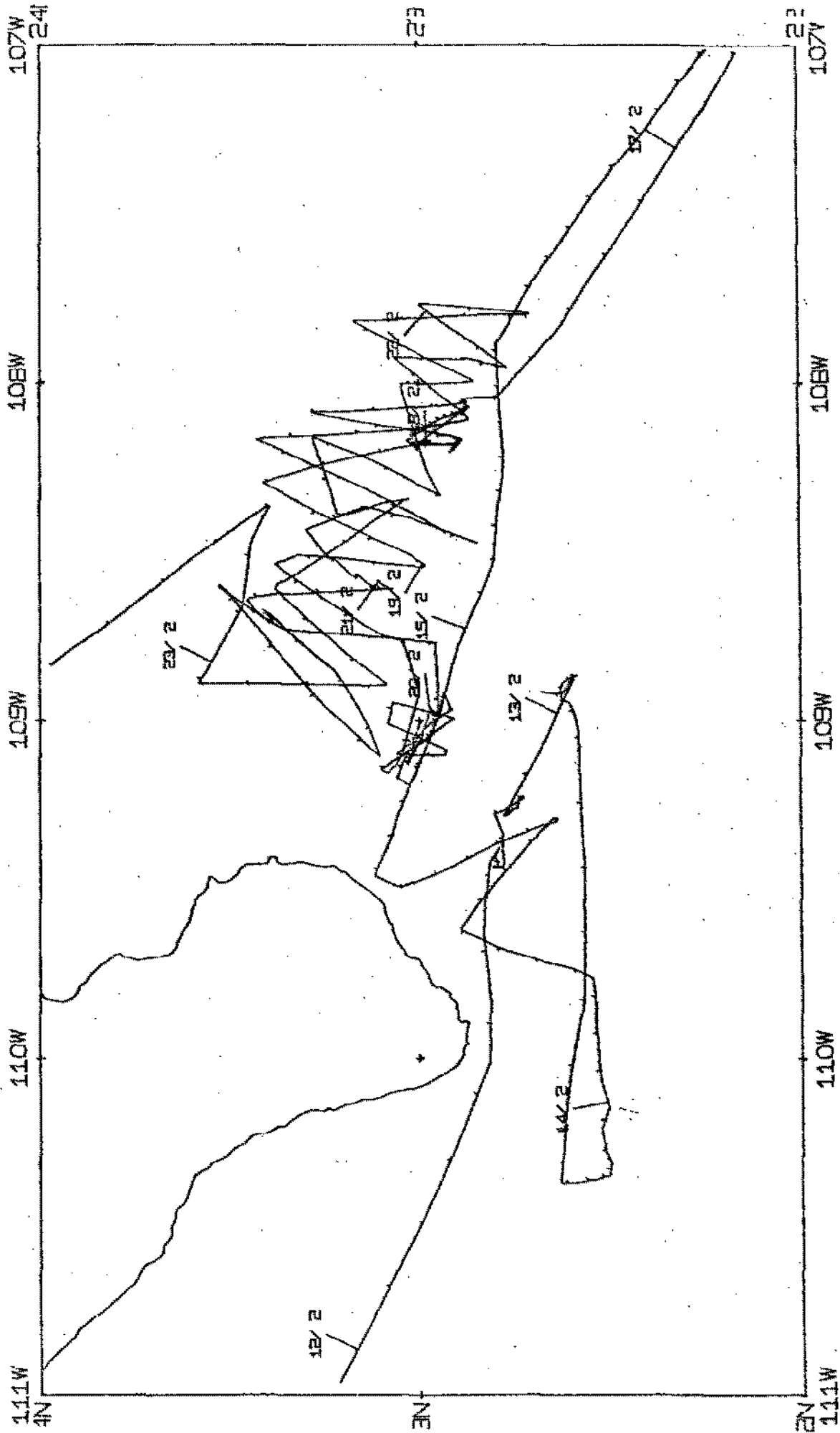
GUAYO1WT TRACK PLOT (1 OF 1)

MERCATOR PROJECTION, SCALE= 0.312 IN/DEG LONGITUDE

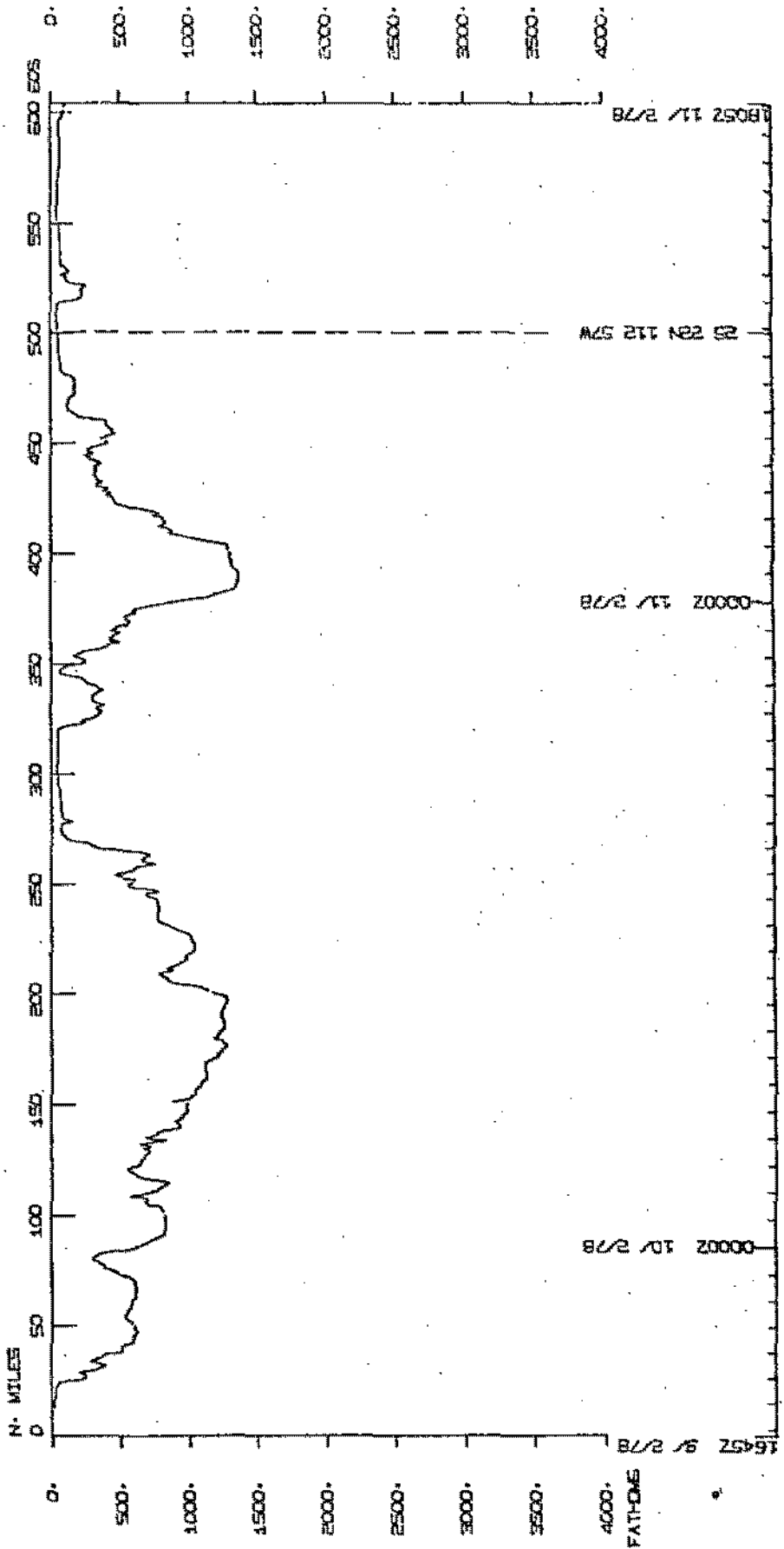
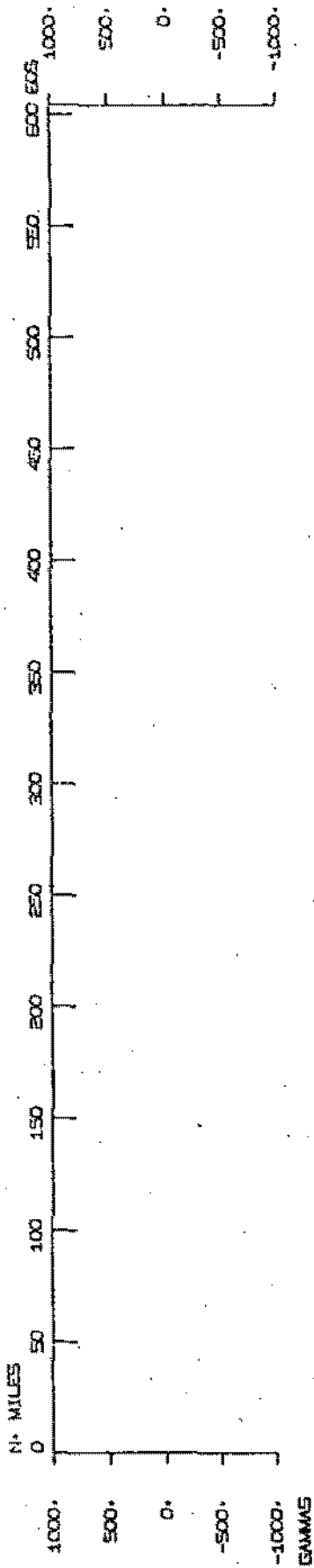


GUJAYO1WT TRACK PLOT (1 OF 1)

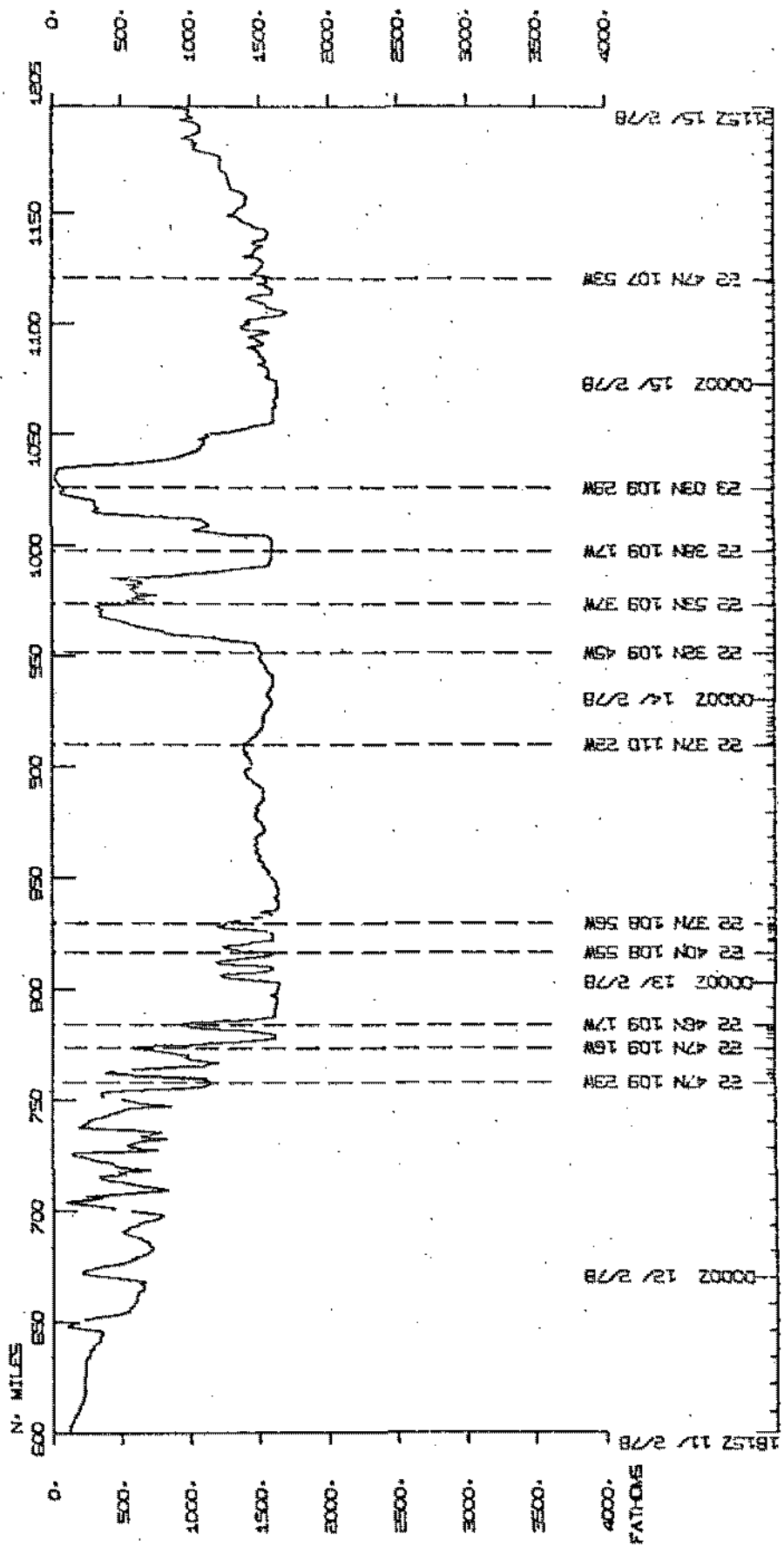
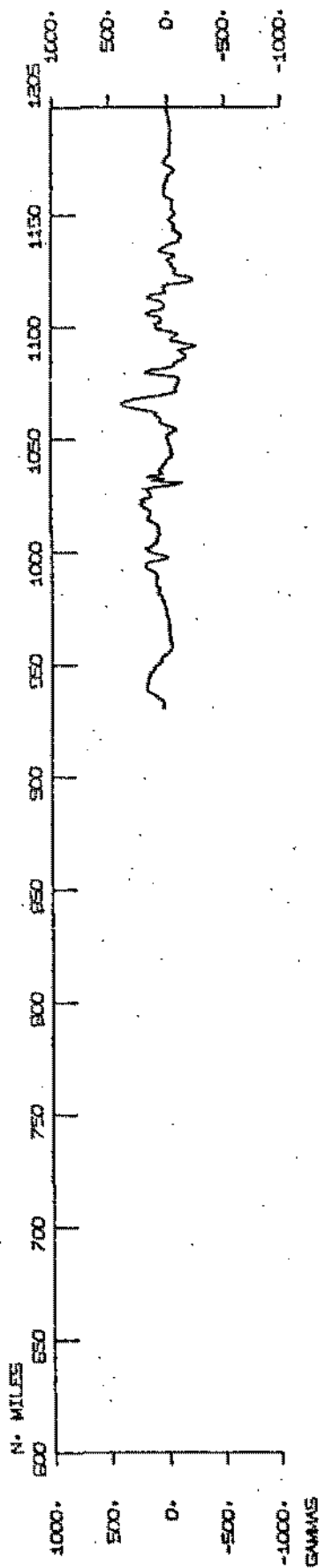
MERCATOR PROJECTION; SCALE= 2.500 IN/DEG LONGITUDE



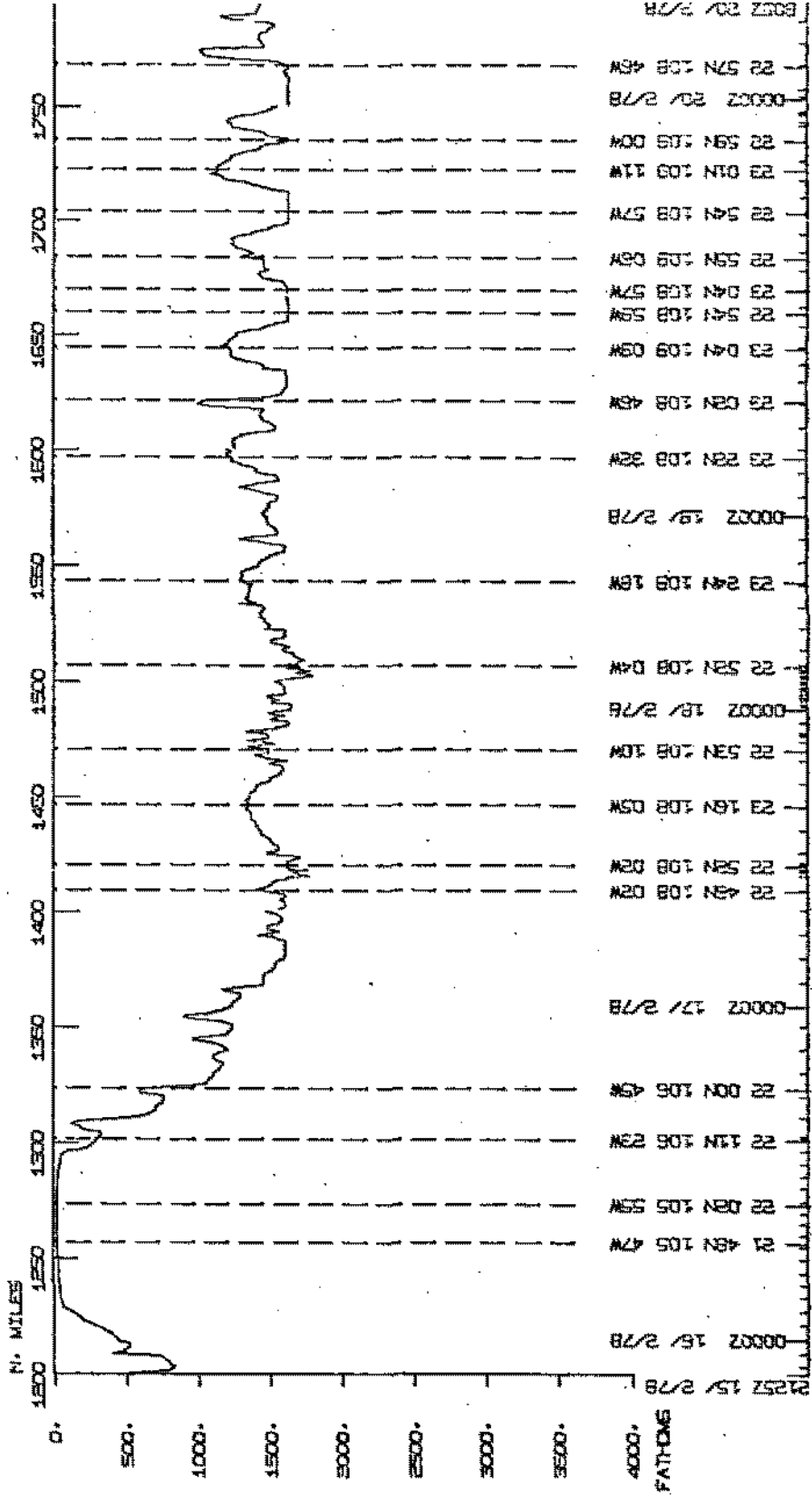
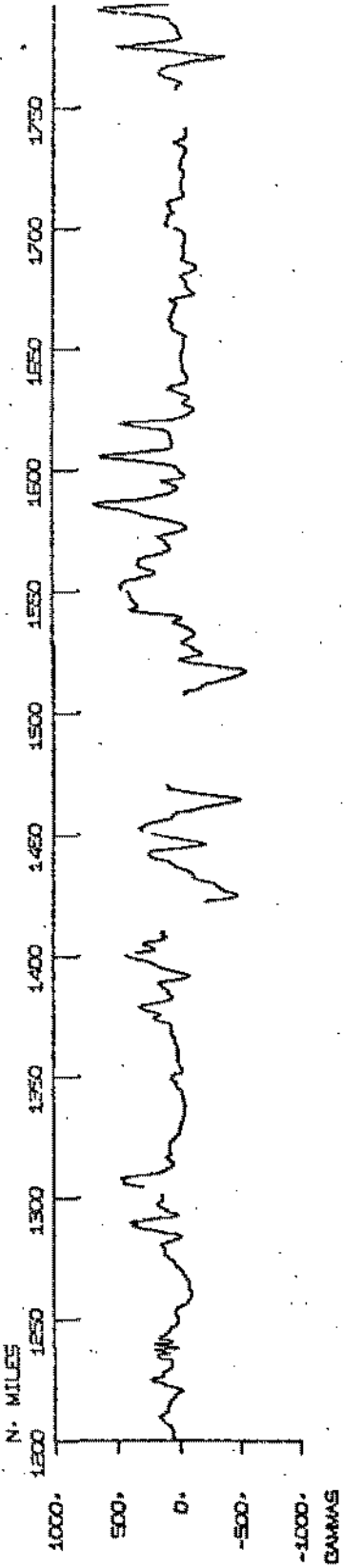
GUAYMAS LEG 1



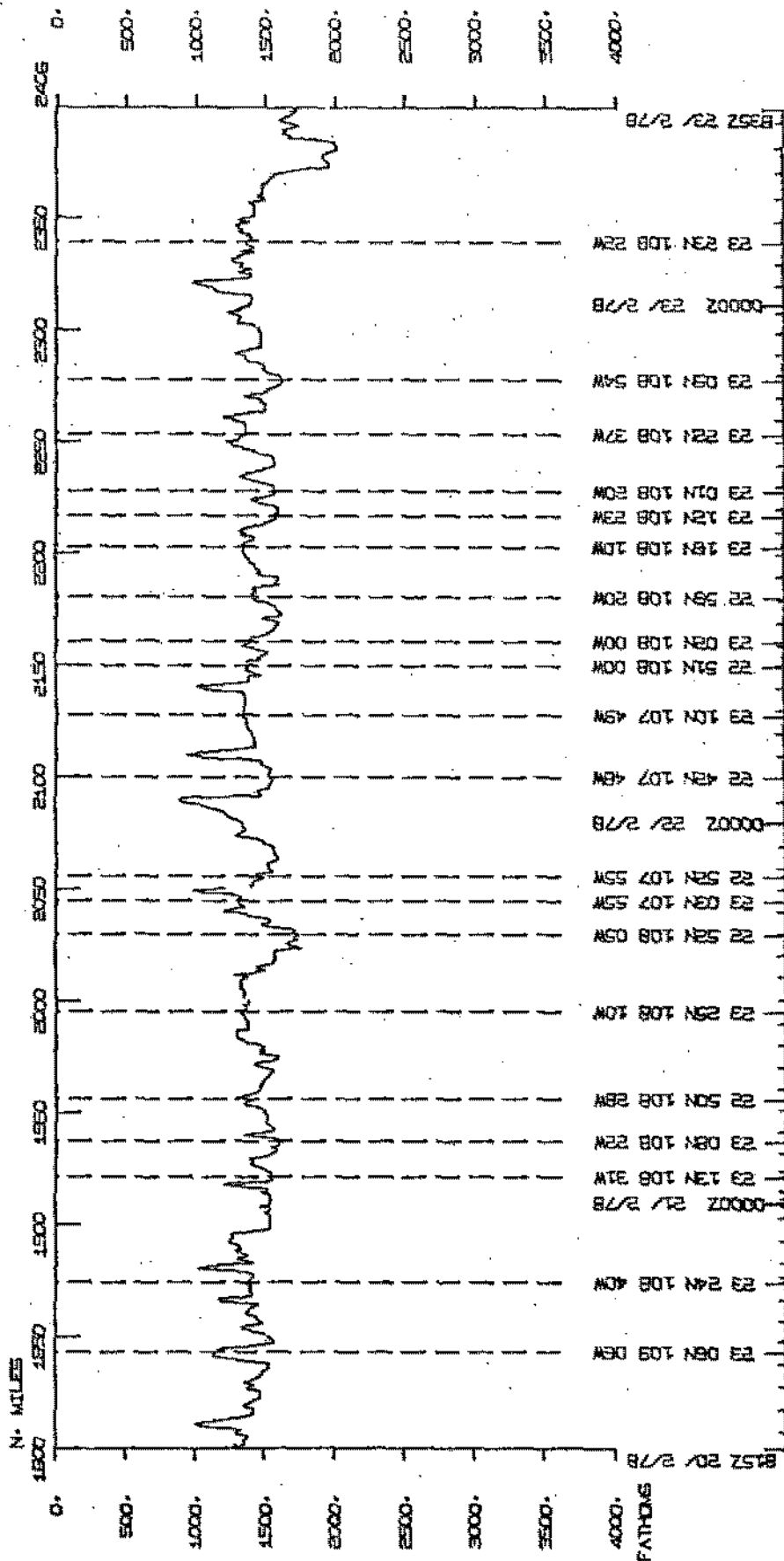
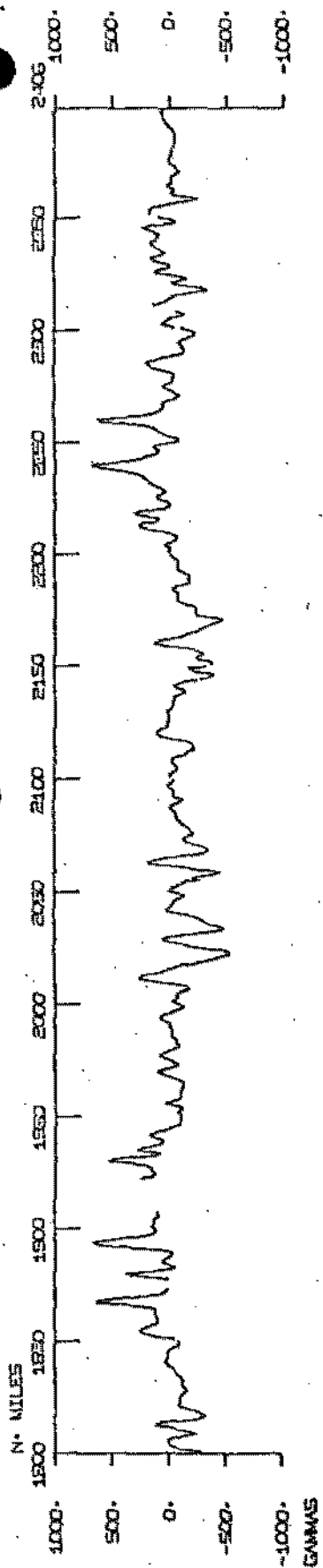
GUAYMAS LEG 1



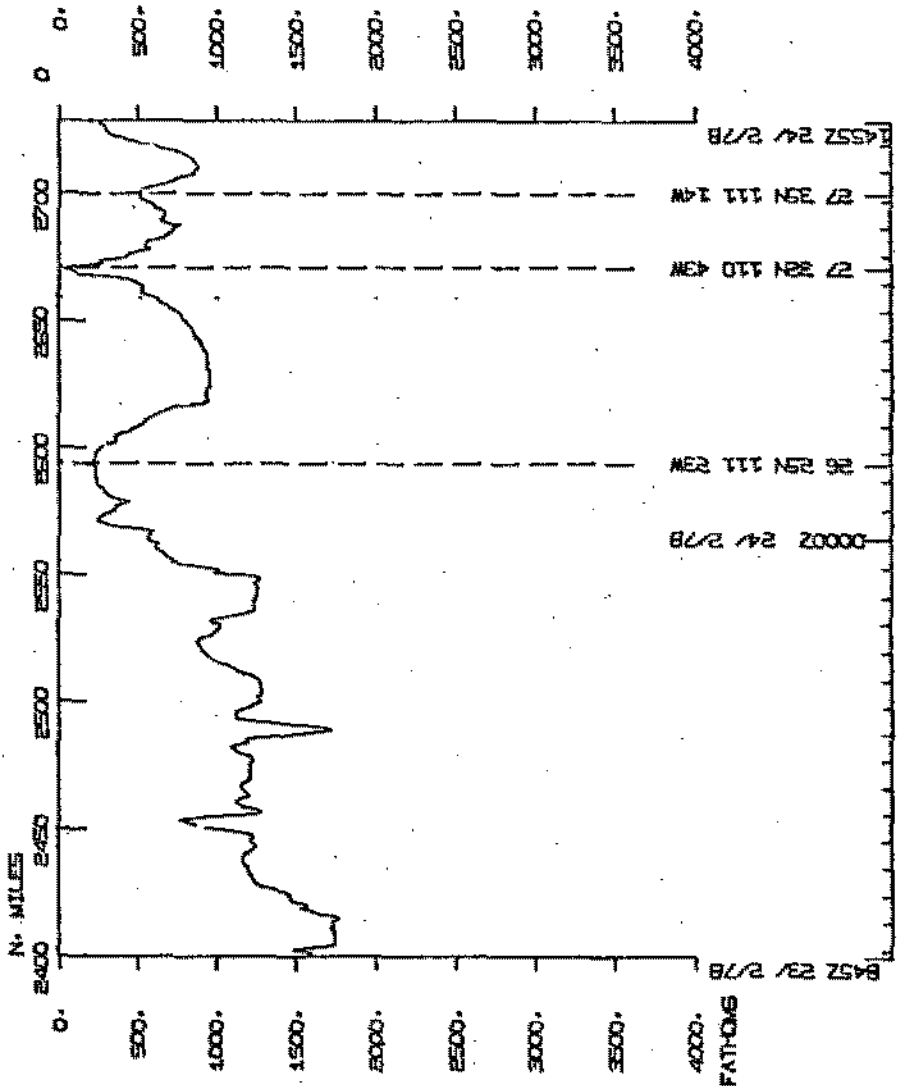
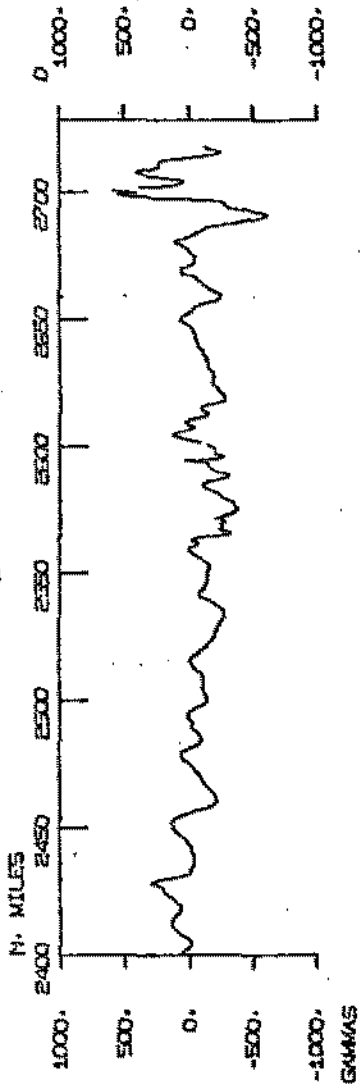
GUAYMAS LEG 1



GUAYMAS LEG 1



GUAYMAS LEG 1



S.I.O. SAMPLE INDEX

(Issued April 21, 1978)

GUAYMAS EXPEDITION

LEG I

San Diego, California (9 February 1978)
to
Guaymas, Sonora, Mexico (24 February 1978)

R/V T. Washington

Chief Scientist - D. Bibee (SIO)

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.)

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

DISP	TYPE										TOTAL	
	CO	DP	DR	GV	LB	MG	PE	SP	SR			
GCR	I	9		6							I	15
GDC	I		13			1	2	1	6		I	23
GRD	I							5			I	5
LMD	I				3						I	3
MPL	I							1		13	I	14
MTG	I							1			I	1
SCG	I							3	1		I	4
SGG	I							2			I	2
SIX	I							5			I	5
WHO	I							1			I	1
TOTAL	I	9	13	6	3	1	2	19	7	13	I	73

SAMPLE 'TYPE' CODES USED ABOVE

- CO = CORE (SEE ALSO TYPE DH**)
- DP = DEPTH
- DR = DREDGE
- 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

- GCR = GEOLOGICAL CURATING FACILITY -- W. RIEDEL, (EXT. 4386)
- GDC = GEOLOGICAL DATA CENTER -- S. SMITH (EXT. 2752)
- GRD = GEOLOGICAL RESEARCH DIVISION (EXT. 3360)
- 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)
- SIX = SCRIPPS INSTITUTION NON-EMPLOYEE -- (CONTACT OORCAS UTTER EXT. 2356)
- WHO = WOODS HOLE OCEANOGRAPHIC INSTITUTION

SAMPLE INDEX GUAYMAS 01

GUAYO1WT

*** PORTS ***

1600 9 278
1637 24 278LGPT B SAN DIEGO, CAL
LGPT E GUAYMAS, SON. MEXICO32 425N 117 143W F GUAYO1WT
27 55 N 110 552W F GUAYO1WT

PERSONNEL

PECS	BIBEE, D.	MPL	GUAYO1WT
PERT	WILSON, R.	MTG	GUAYO1WT
PEAT	CRAMPTON, P.	SGG	GUAYO1WT
PEAT	HUBENKA, F.	SGG	GUAYO1WT
PECT	ABBOTT, L.	SCG	GUAYO1WT
PECT	BURKHALTER, A.	SCG	GUAYO1WT
PECT	MOE, R.	SCG	GUAYO1WT
PEXN	ACOSTA, C.	SIX	GUAYO1WT
PES	BECKER, K.	GRD	GUAYO1WT
PEXN	CARREON-PEREZ, H.	SIX	GUAYO1WT
PE	CRANE, K.	WHO	GUAYO1WT
PEXN	GUERRERO, J.	SIX	GUAYO1WT
PE	HAWKINS, J.	GRD	GUAYO1WT
PEXN	HERNANDEZ, J.	SIX	GUAYO1WT
PES	KASTENS, K.	GRD	GUAYO1WT
PES	MELCHIOR, J.	GRD	GUAYO1WT
PE	MODRE, G.	GRD	GUAYO1WT
PEXN	PEREZ-REYNOSO, J.	SIX	GUAYO1WT
PE	SMITH, S.	GDC	GUAYO1WT

*** 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
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*** LOG BOOKS ***

1800	090278			LBWU	B UNDERWAY WATCH LOG	GDC 32	225N	117 140W	S GUAYO1WT
1510	240278			LBWU	E UNDERWAY WATCH LOG	GDC 27	460N	110 552W	S GUAYO1WT

*** FATHOGRAMS ***

1800	9 278			DPRT	B GDR 12 KHZ R-01	GDC 32	225N	117 140W	S GUAYO1WT
725	10 278			DPRT	E GDR 12 KHZ R-01	GDC 29	495N	116 124W	S GUAYO1WT
730	10 278			DPRT	B GDR 12 KHZ R-02	GDC 29	485N	116 120W	S GUAYO1WT
630	12 278			DPRT	E GDR 12 KHZ R-02	GDC 22	495N	109 344W	S GUAYO1WT
645	12 278			DPRT	B GDR 12 KHZ R-03	GDC 22	493N	109 311W	S GUAYO1WT
1727	14 278			DPRT	E GDR 12 KHZ R-03	GDC 23	55N	109 239W	S GUAYO1WT
1735	14 278			DPRT	B GDR 12 KHZ R-04	GDC 23	52N	109 232W	S GUAYO1WT
510	17 278			DPRT	E GDR 12 KHZ R-04	GDC 22	481N	108 26W	S GUAYO1WT
515	17 278			DPRT	B GDR 12 KHZ R-05	GDC 22	484N	108 25W	S GUAYO1WT
2105	17 278			DPRT	E GDR 12 KHZ R-05	GDC 22	544N	108 111W	S GUAYO1WT
2110	17 278			DPRT	B GDR 12 KHZ R-06	GDC 22	545N	108 111W	S GUAYO1WT
1135	19 278			DPRT	E GDR 12 KHZ R-06	GDC 23	28N	109 20W	S GUAYO1WT
1140	19 278			DPRT	B GDR 12 KHZ R-07	GDC 23	21N	109 23W	S GUAYO1WT
2145	21 278			DPRT	E GDR 12 KHZ R-07	GDC 22	522N	107 558W	S GUAYO1WT
2200	21 278			DPRT	B GDR 12 KHZ R-08	GDC 22	497N	107 565W	S GUAYO1WT
1310	24 278			DPRT	E GDR 12 KHZ R-08	GDC 27	306N	111 54W	S GUAYO1WT
1800	9 278			DPR3	B UGR 3.5KHZ R-01	GDC 32	225N	117 140W	S GUAYO1WT
1510	10 278			DPR3	E UGR 3.5KHZ R-01	GDC 28	218N	115 402W	S GUAYO1WT
1610	10 278			DPR3	B UGR 3.5KHZ R-02	GDC 28	111N	115 355W	S GUAYO1WT
945	13 278			DPR3	E UGR 3.5KHZ R-02	GDC 22	342N	109 119W	S GUAYO1WT
1000	13 278			DPR3	B UGR 3.5KHZ R-03	GDC 22	341N	109 149W	S GUAYO1WT
615	17 278			DPR3	E UGR 3.5KHZ R-03	GDC 22	524N	108 52W	S GUAYO1WT
625	17 278			DPR3	B UGR 3.5KHZ R-04	GDC 22	524N	108 51W	S GUAYO1WT
2315	21 278			DPR3	E UGR 3.5KHZ R-04	GDC 22	522N	107 521W	S GUAYO1WT
11	22 278			DPR3	B UGR 3.5KHZ R-05	GDC 22	596N	107 460W	S GUAYO1WT
1514	24 278			DPR3	E UGR 3.5KHZ R-05	GDC 27	460N	110 552W	S GUAYO1WT

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

*** MAGNETOMETER ***

2320	13	278		MGR	B	MAGNETICS	R-01	GDC	22	304N	110	99W	S	GUAYO1WT
2035	20	278		MGR	E	MAGNETICS	R-01	GDC	23	102N	108	371W	S	GUAYO1WT
2041	20	278		MGR	B	MAGNETICS	R-02	GDC	23	92N	108	370W	S	GUAYO1WT
1330	24	278		MGR	E	MAGNETICS	R-02	GDC	27	335N	111	28W	S	GUAYO1WT

*** SEISMIC REFLECTION PROFILES ***

100	14	278		SPRS	B	SEIS PROF	5SEC R-01	GDC	22	314N	110	21W	S	GUAYO1WT
1715	14	278		SPRS	E	SEIS PROF	5SEC R-01	GDC	23	60N	109	251W	S	GUAYO1WT
1724	14	278		SPRS	B	SEIS PROF	5SEC R-02	GDC	23	57N	109	242W	S	GUAYO1WT
1715	17	278		SPRS	E	SEIS PROF	5SEC R-02	GDC	22	543N	108	98W	S	GUAYO1WT
1714	18	278		SPRS	B	SEIS PROF	5SEC R-03	GDC	22	525N	108	50W	S	GUAYO1WT
1937	19	278		SPRS	E	SEIS PROF	5SEC R-03	GDC	23	10N	109	55W	S	GUAYO1WT
345	20	278		SPRS	B	SEIS PROF	5SEC R-04	GDC	22	570N	108	583W	S	GUAYO1WT
2247	22	278		SPRS	E	SEIS PROF	5SEC R-04	GDC	23	344N	108	536W	S	GUAYO1WT
930	13	278		SPRF	B	SEIS PROF	2SEC R-01	GDC	22	343N	109	90W	S	GUAYO1WT
1717	17	278		SPRF	E	SEIS PROF	2SEC R-01	GDC	22	540N	108	99W	S	GUAYO1WT
1714	18	278		SPRF	B	SEIS PROF	2SEC R-02	GDC	22	525N	108	50W	S	GUAYO1WT
2247	22	278		SPRF	E	SEIS PROF	2SEC R-02	GDC	23	344N	108	536W	S	GUAYO1WT

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

1830	9	278		GVR	B	GRAVITYMETER	R-01	LMD	32	170N	117	124W	S	GUAYO1WT
2209	10	278		GVR	E	GRAVITYMETER	R-01	LMD	27	127N	114	425W	S	GUAYO1WT
2215	10	278		GVR	B	GRAVITYMETER	R-02	LMD	27	117N	114	416W	S	GUAYO1WT
300	21	278		GVR	E	GRAVITYMETER	R-02	LMD	23	96N	108	344W	S	GUAYO1WT
311	21	278		GVR	B	GRAVITYMETER	R-03	LMD	23	96N	108	343W	S	GUAYO1WT
1637	24	278		GVR	E	GRAVITYMETER	R-03	LMD	27	460N	110	552W	S	GUAYO1WT

*** DREDGE ***

928	12	278		DRR	B	DREDGE	01	2043	GCR	22	475N	109	252W	S	GUAYO1WT
1317	12	278		DRR	E	DREDGE	01	742	GCR	22	482N	109	262W	S	GUAYO1WT

TIME GMT	DATE D.M.Y.	TIME TZ LOC LOC	SAMP CODE	SAMPLE IDENT.	DISP CODE	LAT.	LONG.	CRUISE LEG-SHIP
1808	12	278	DRR B	DREDGE 02 3000	GCR 22	440N	109 142W	S GUAYO1WT
2132	12	278	DRR E	DREDGE 02 1823	GCR 22	458N	109 171W	S GUAYO1WT
307	13	278	DRR B	DREDGE 03 2992	GCR 22	350N	108 519W	S GUAYO1WT
633	13	278	DRR E	DREDGE 03 2227	GCR 22	371N	108 561W	S GUAYO1WT
730	17	278	DRR B	DREDGE 04 3128	GCR 22	522N	108 45W	S GUAYO1WT
1015	17	278	DRR E	DREDGE 04 3009	GCR 22	528N	108 30W	S GUAYO1WT
1920	17	278	DRR B	DREDGE 05 2753	GCR 22	535N	108 103W	S GUAYO1WT
2123	17	278	DRR E	DREDGE 05 2494	GCR 22	545N	108 111W	S GUAYO1WT
237	18	278	DRR X	DREDGE 06 3062	GCR 22	595N	108 105W	S GUAYO1WT
405	21	278	DRR B	DREDGE 07 2950	GCR 23	97N	108 344W	S GUAYO1WT
423	21	278	DRR E	DREDGE 07 2825	GCR 23	98N	108 345W	S GUAYO1WT

MULTI-CHANNEL DIGITAL SEISMIC TAPE

15	14	278	SPML B	MULTICHANNEL LINE 01	SCG 22	304N	110 70W	S GUAYO1WT
1537	16	278	SPML E	MULTICHANNEL LINE 01	SCG 22	112N	106 228W	S GUAYO1WT

**** GRAVITY CORE ****

2050	19	278	COG	GRAVITY 01 2205	GCR 23	15N	109 78W	S GUAYO1WT
2247	19	278	COG	GRAVITY 02 2711	GCR 22	597N	109 33W	S GUAYO1WT
36	20	278	COG	GRAVITY 03 3011	GCR 22	580N	108 581W	S GUAYO1WT
214	20	278	COG	GRAVITY 04 3020	GCR 22	575N	108 590W	S GUAYO1WT
1719	20	278	COG	GRAVITY 05 2651	GCR 23	234N	108 426W	S GUAYO1WT
2230	20	278	COG	GRAVITY 06 2874	GCR 23	61N	108 354W	S GUAYO1WT
2327	20	278	COG	GRAVITY 07 2878	GCR 23	63N	108 355W	S GUAYO1WT
58	21	278	COG	GRAVITY 08 2885	GCR 23	66N	108 363W	S GUAYO1WT
640	21	278	COG	GRAVITY 09 2912	GCR 23	137N	108 315W	S GUAYO1WT

*** SONOBUOY DROP *** SEISMIC REFRACTION MONITORING

200	14	278	SRSB	SONOBUOY 01	MPL 22	318N	109 555W	S GUAYO1WT
2006	14	278	SRSB	SONOBUOY 02	MPL 22	598N	109 77W	S GUAYO1WT
2220	14	278	SRSB	SONOBUOY 03	MPL 22	554N	108 539W	S GUAYO1WT
255	15	278	SRSB	SONOBUOY 04	MPL 22	474N	108 259W	S GUAYO1WT
1555	15	278	SRSB	SONOBUOY 05	MPL 22	217N	107 122W	S GUAYO1WT
1725	15	278	SRSB	SONOBUOY 06	MPL 22	165N	107 46W	S GUAYO1WT
315	16	278	SRSB	SONOBUOY 07	MPL 21	454N	106 107W	S GUAYO1WT
735	16	278	SRSB	SONOBUOY 08	MPL 21	497N	105 476W	S GUAYO1WT
755	16	278	SRSB	SONOBUOY 09	MPL 21	513N	105 484W	S GUAYO1WT
55	17	278	SRSB	SONOBUOY 10	MPL 22	237N	107 273W	S GUAYO1WT
2110	18	278	SRSB	SONOBUOY 11	MPL 23	237N	108 187W	S GUAYO1WT

TIME	DATE	TIME	TZ	SAMP		DISP				
GMT	D.M.Y.	LOC	LOC	CODE	SAMPLE IDENT.	CODE	LAT.	LONG.	CRUISE	LEG-SHIP
1554	19	278		SRSB	SONOBUOY 12	MPL 22	570N	108 592W	S GUAYO1WT	
153	21	278		SRSB	SONOBUOY 13	MPL 23	69N	108 366W	S GUAYO1WT	
9900					END SAMPLE INDEX				GUAYO1WT	