

COCOTOW EXPEDITION

LEG 2

R/V MELVILLE

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

Acapulco, Mexico (25 September 1974)

to

Balboa, Panama (18 October 1974)

Chief Scientist - K. Klitgord
Chief Scientist - K. Klitgord

Resident Marine Techs - W. Keith; S. Witherow

Post-Cruise Processing by S. Smith, U. Albright,

G. Psaropulos, R. Lingley

Prepared by

Underway Data Processing Group

S.I.O. Geological Data Center

Scripps Institution of Oceanography

La Jolla, California

January 3, 1975

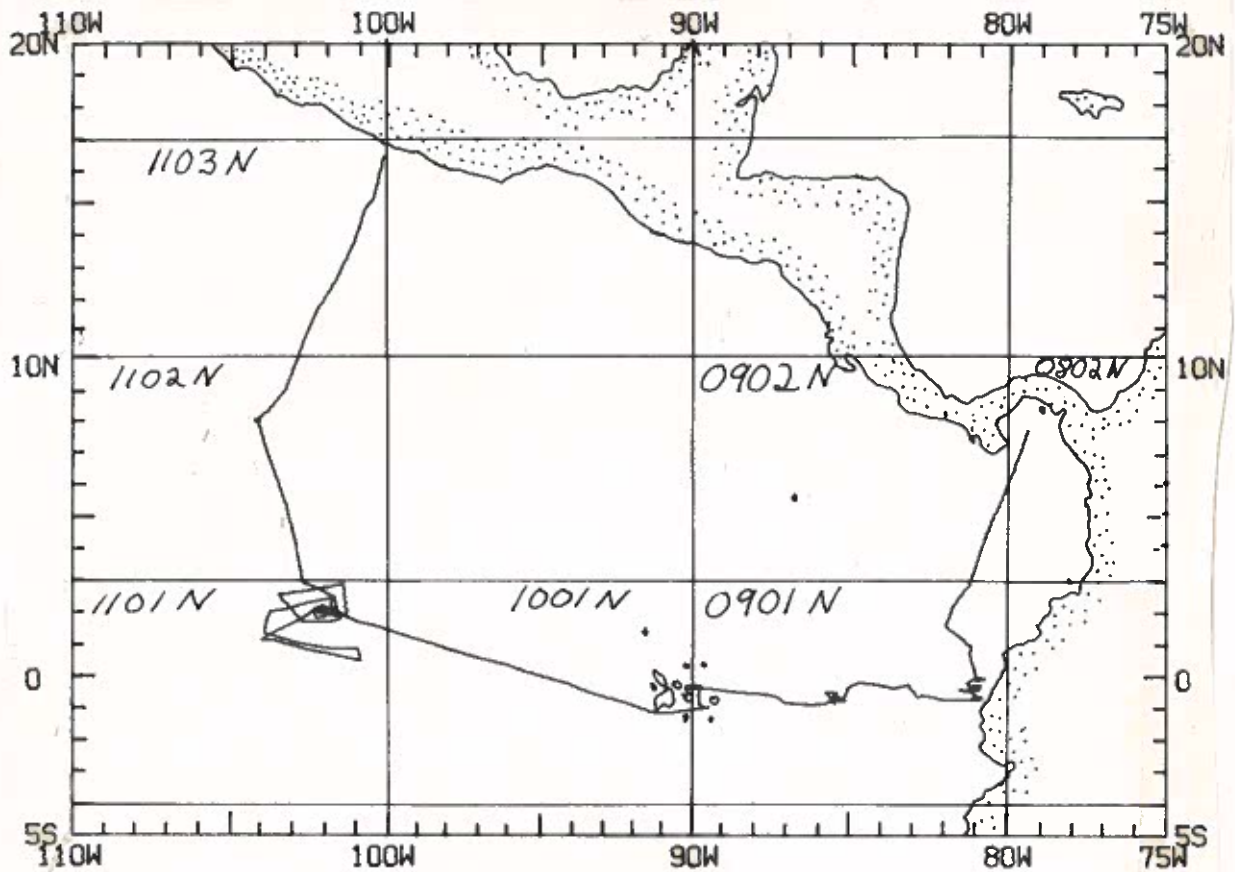
Preliminary Report and Index of Navigation, Depth, Magnetic and Subbottom Profiler Data

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 (.3"/deg. long) is the same as the index charts of previous SIO cruises published as Report IMR TR-25.
- 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 T. E. Chase, Curator, Geological Data Center, Scripps Institution of Oceanography, La Jolla, California 92037 (452-2182):

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 gamma/inch; anomaly scale north of 15°N and south of 15°S = 1000 gamma/inch from values retrieved at approximately 1 mile spacing and regional field removed using the 1965 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
-

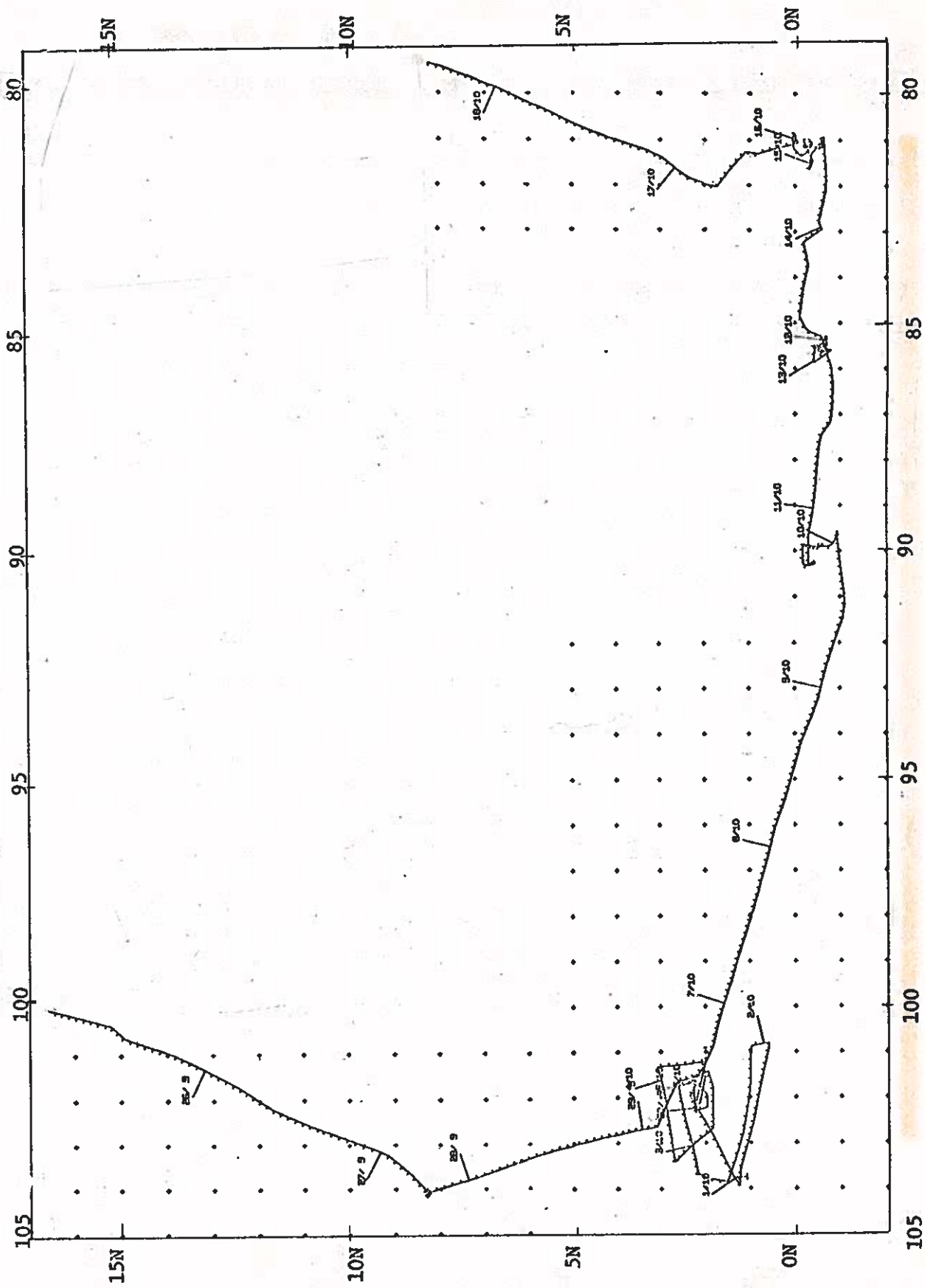


COCOTOW EXPEDITION
LEG 2

Chief Scientist - K. Klitgord
Acapulco, Mexico - Balboa, Panama (25 Sept. - 18 Oct. 1974)

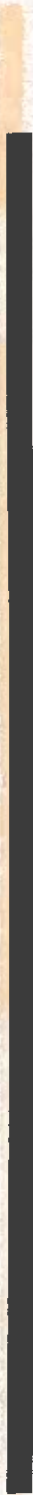
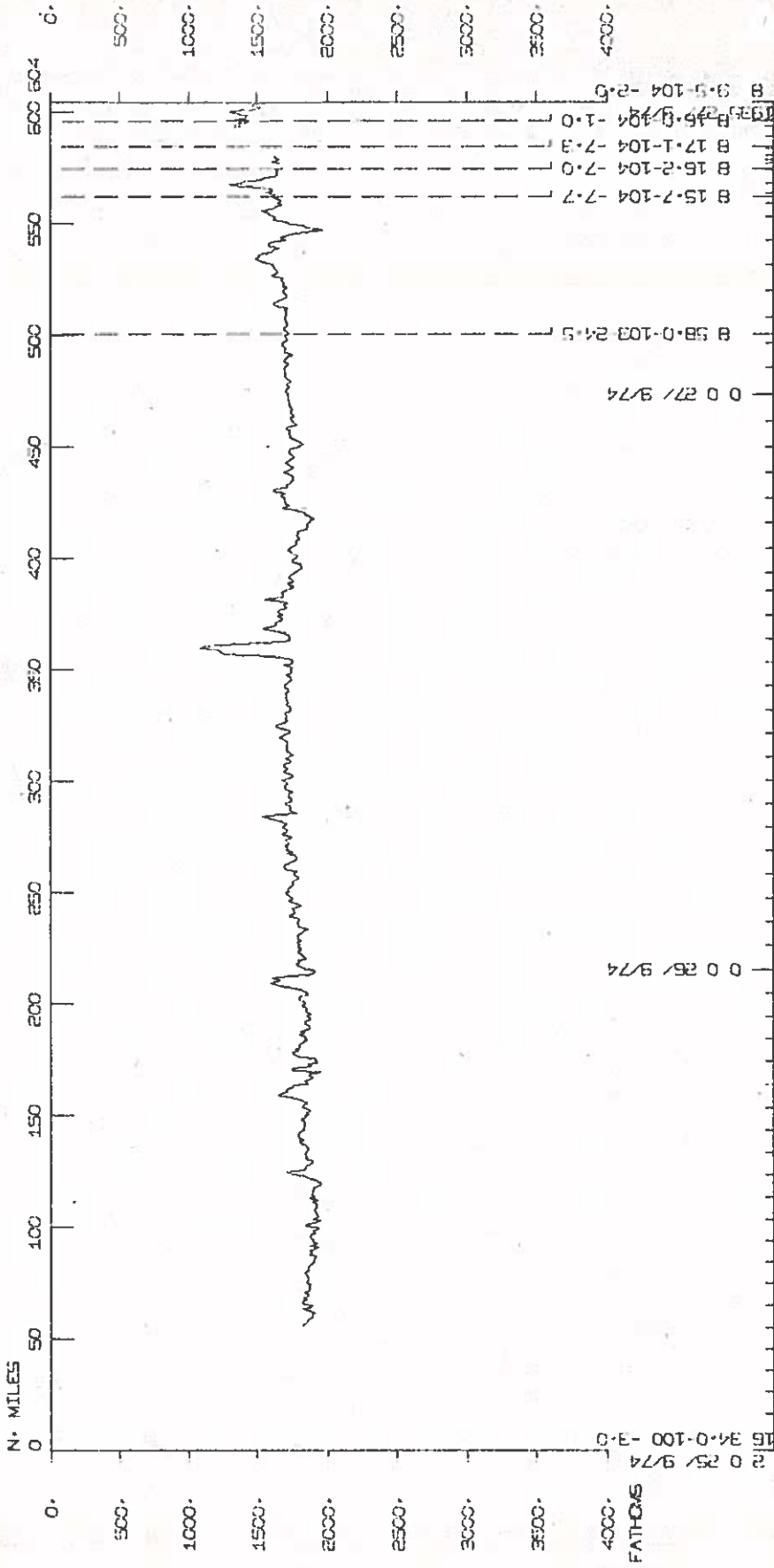
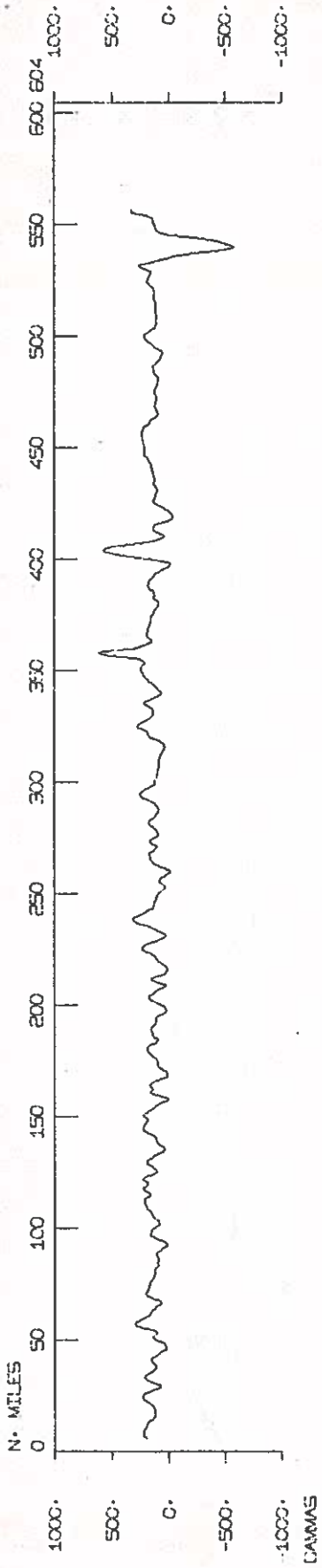
TOTAL MILEAGE

- 1) Cruise - 4876 miles
- 2) Magnetics - 5450 miles
- 3) Bathymetry - 4808 miles
- 4) Seismic Reflection - 4208 miles

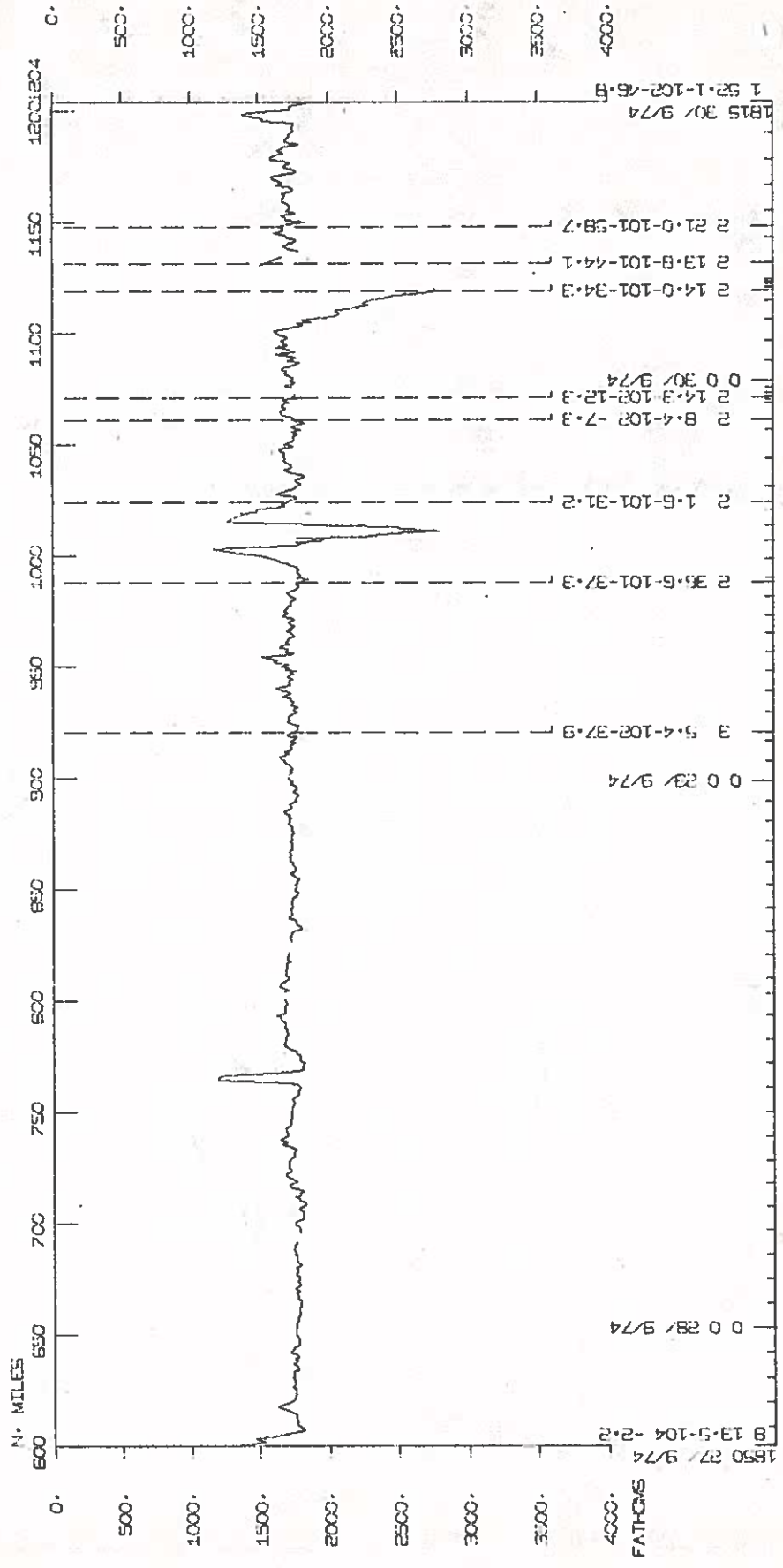
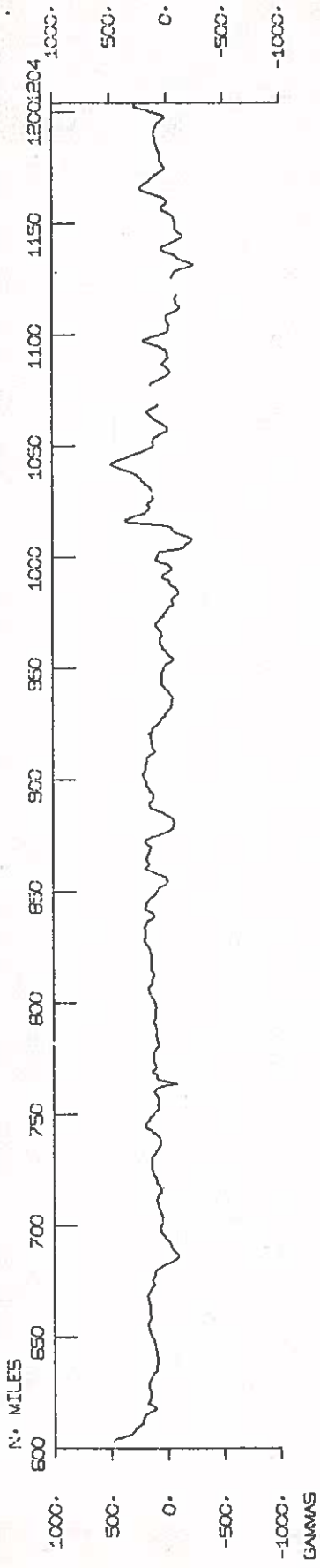


COCOTOW LEG 2 TRACK PLOT

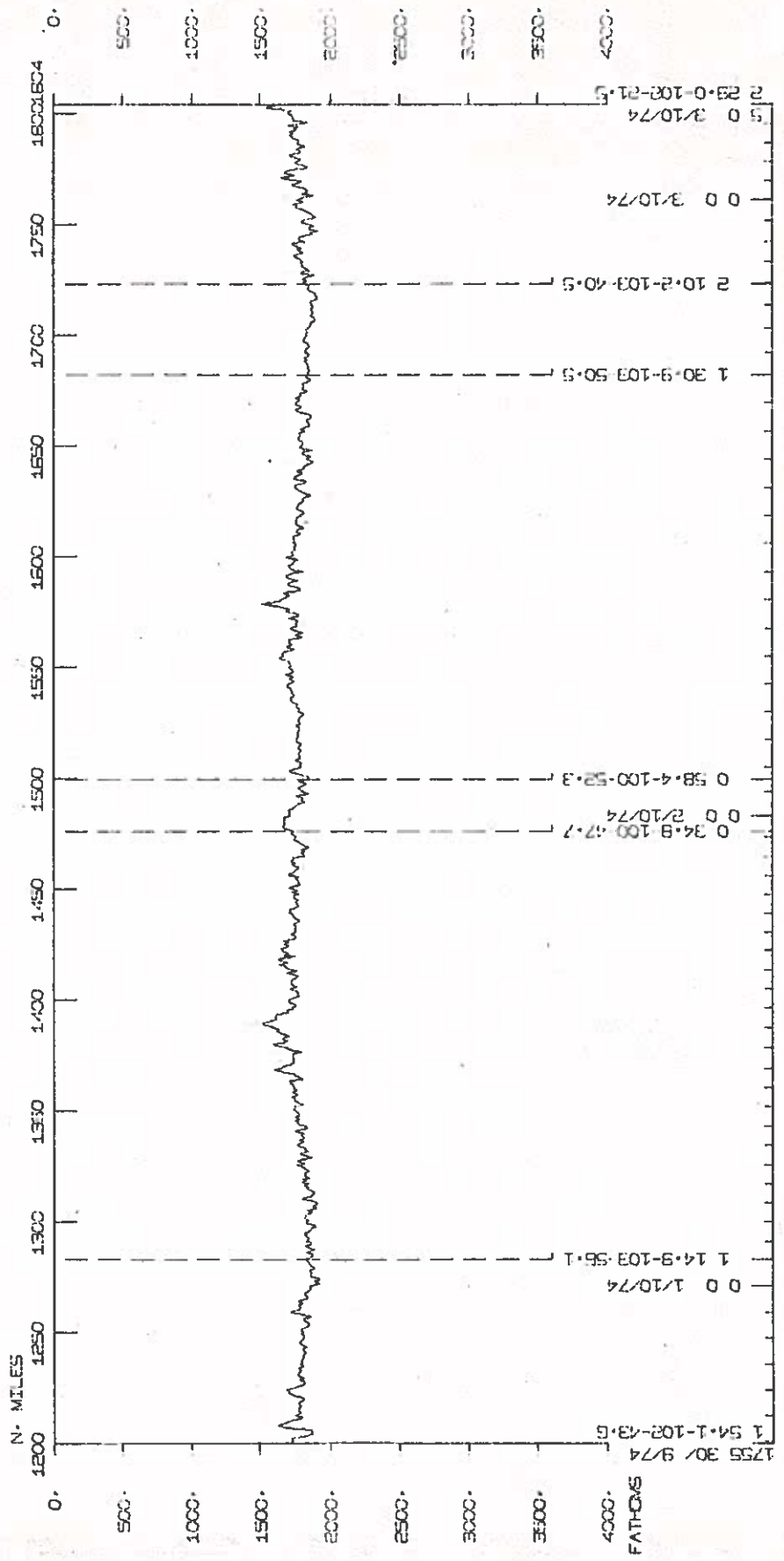
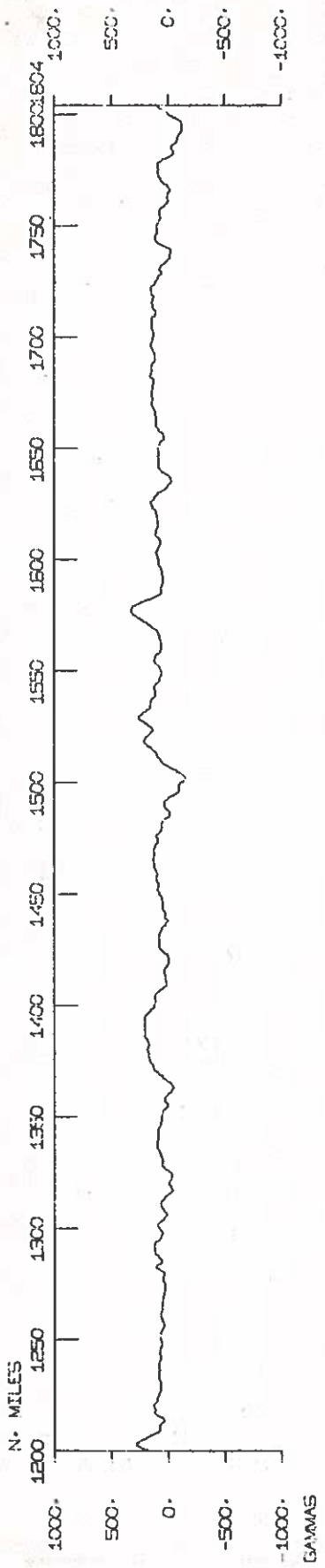
COCOTOW LEG 2



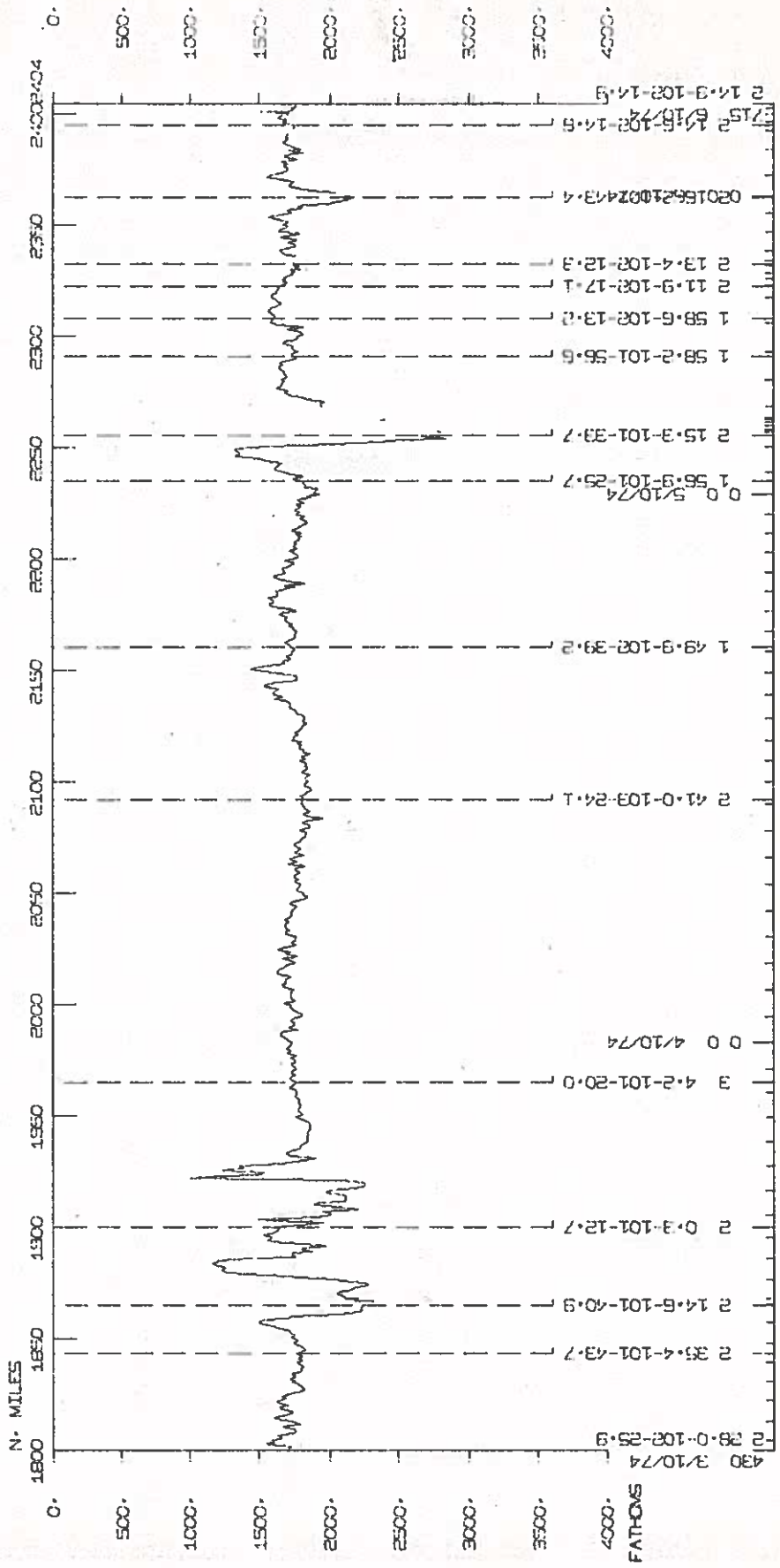
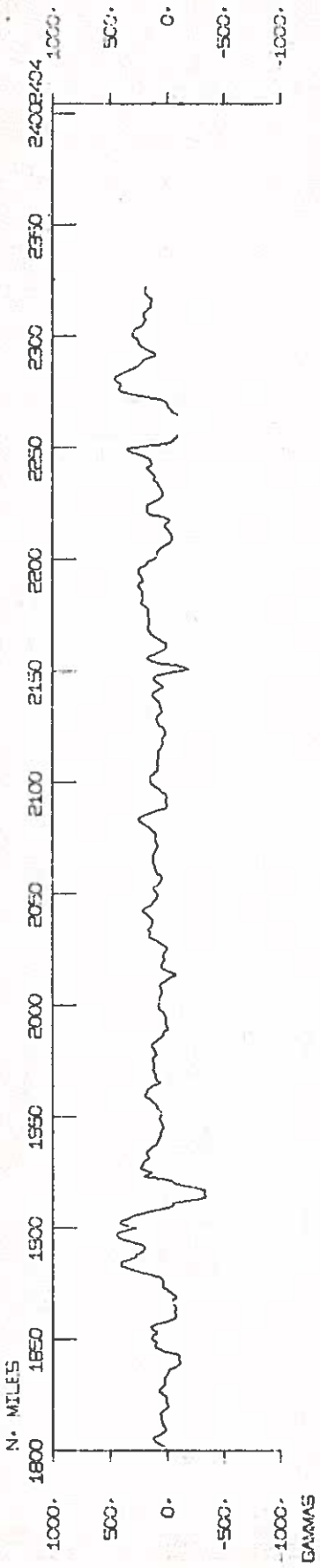
COCOTOM LEG 2



COCOTOW LEG 2

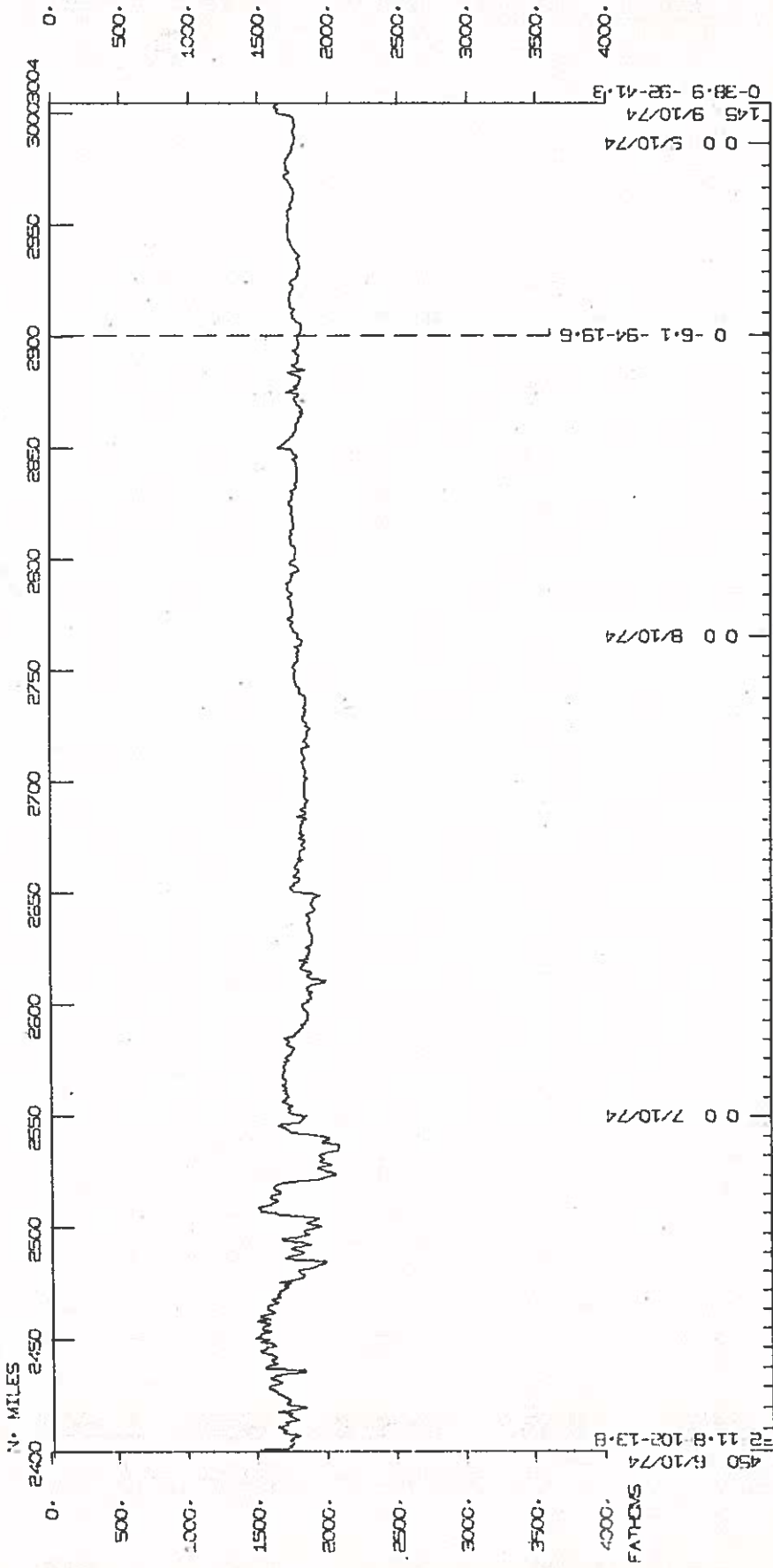
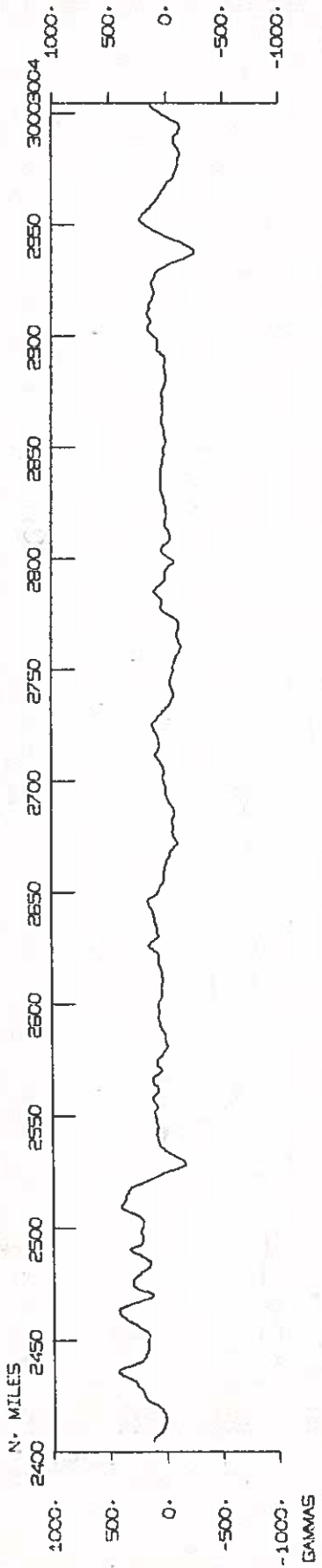


COCOTOW LEG 2

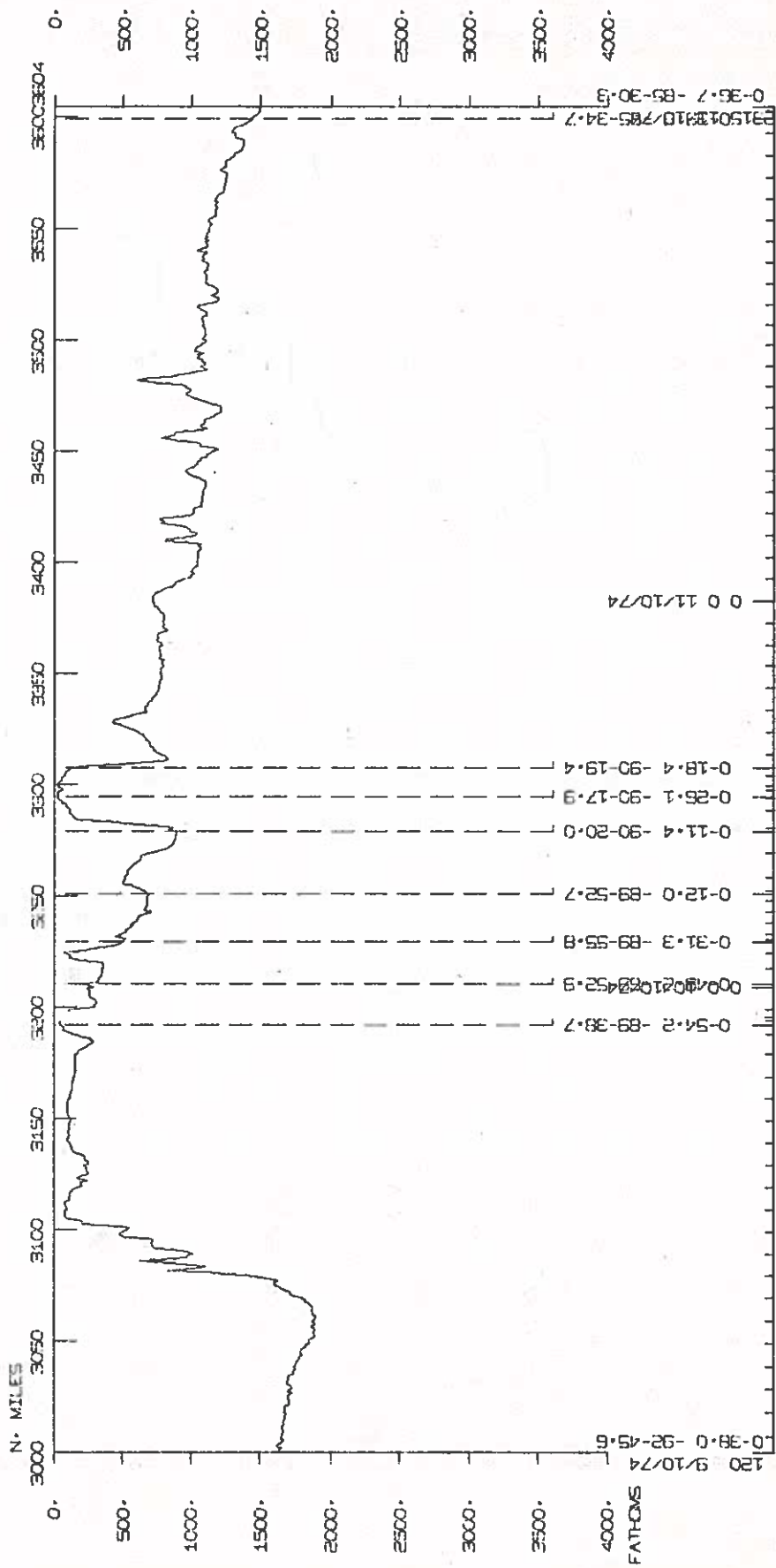
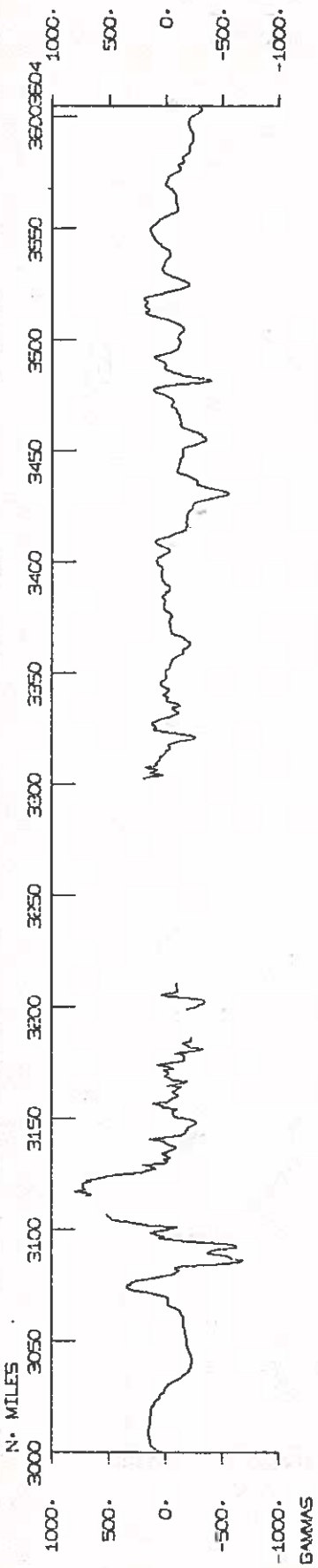


430 3/10/74
 2 38-0-102-25.9
 2 33-4-101-43.7
 2 14-6-101-40.9
 2 0-3-101-12.7
 3 4-2-101-20.0
 0 0 4/10/74
 2 41-0-103-24.1
 1 19-9-102-39.2
 0 0 5/10/74
 1 56-9-101-29.7
 2 15-3-101-33.7
 1 58-2-101-56.6
 1 58-6-102-13.2
 2 11-9-102-17.1
 2 13-4-102-12.3
 0201662100243.4
 2 17-10-102-14.6
 2 14-9-102-14.5

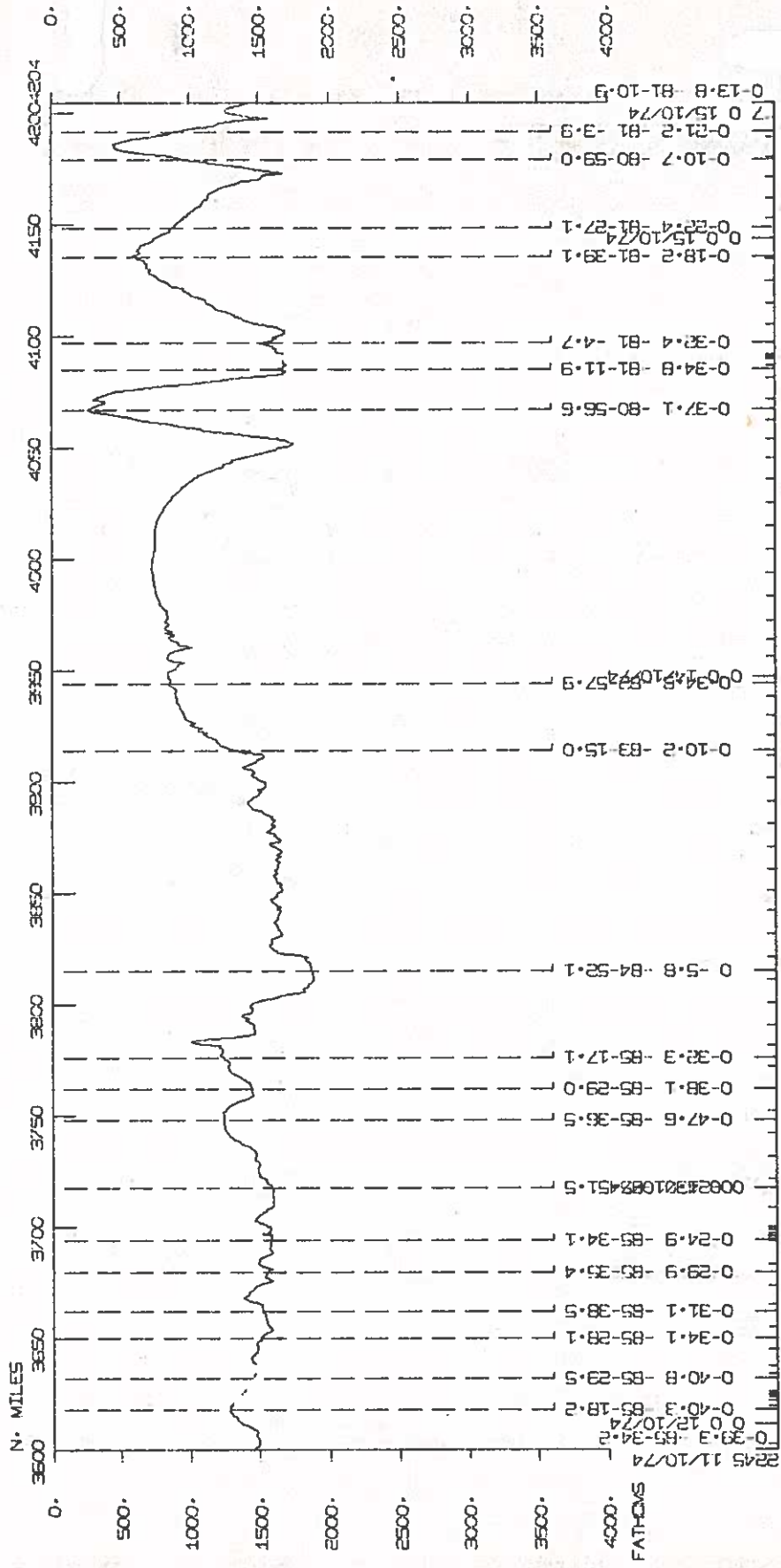
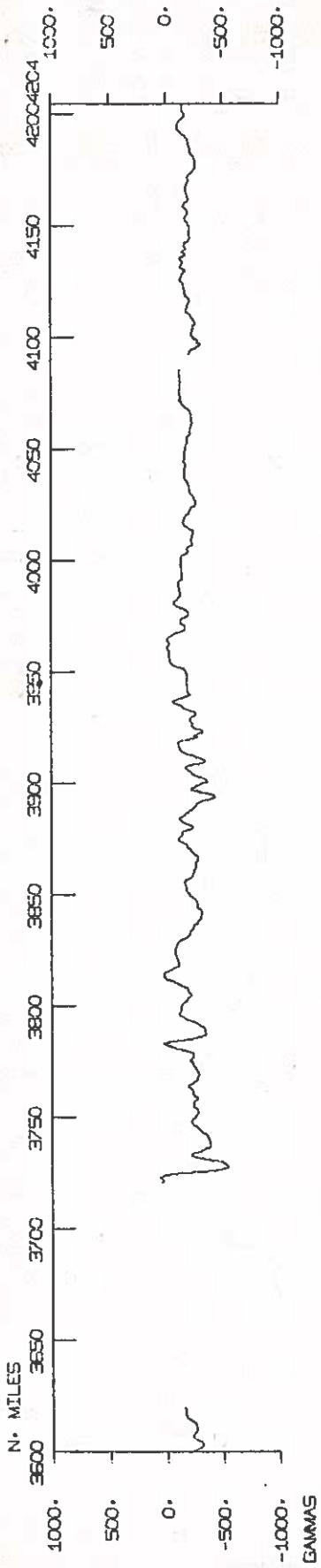
COCCOTOW LEG 2



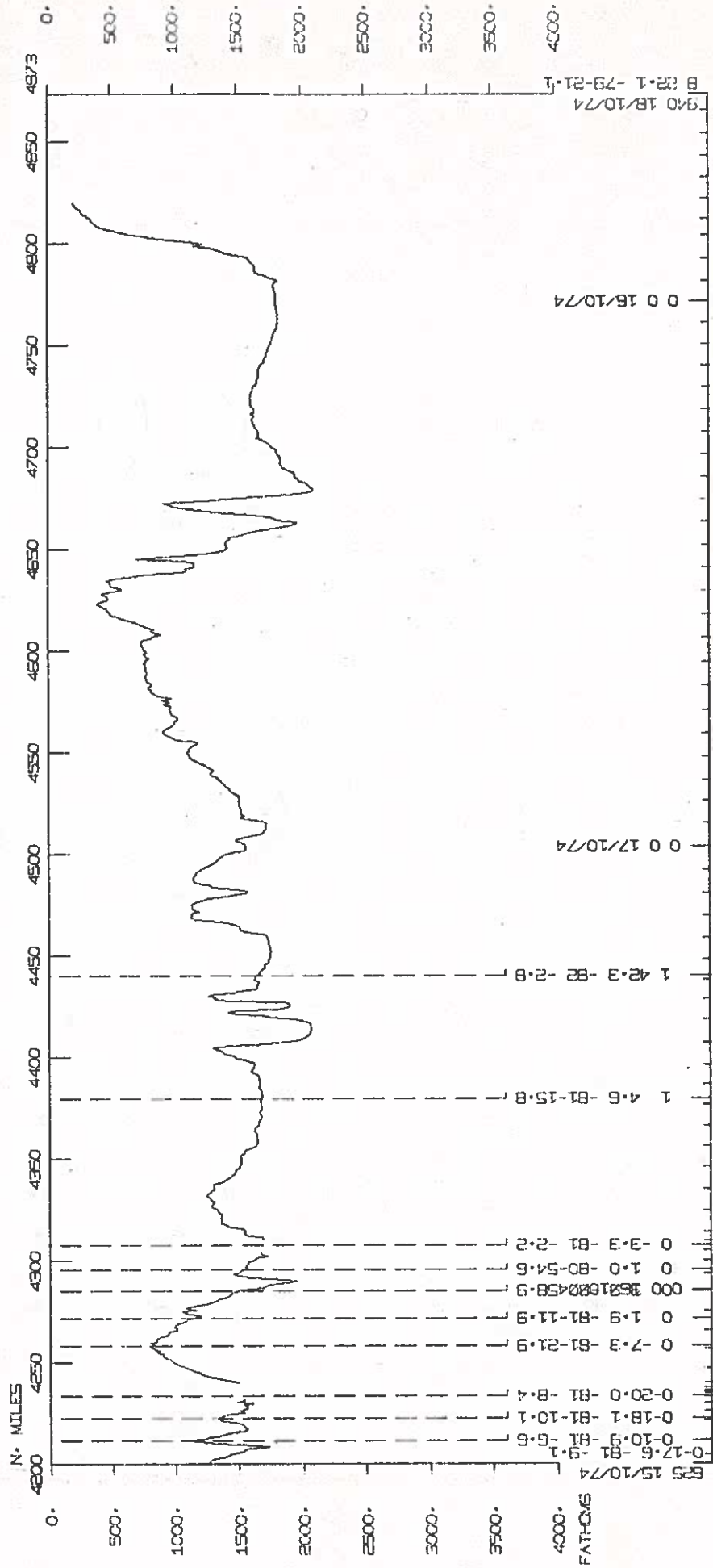
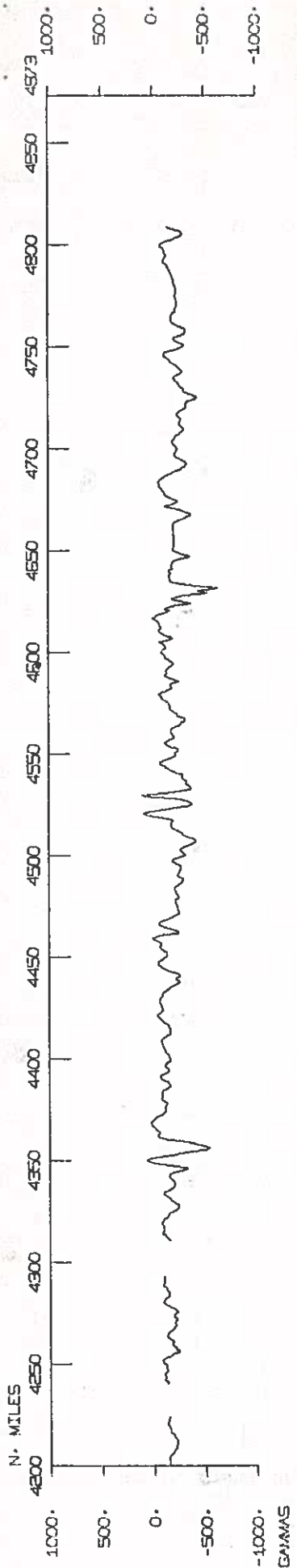
COCOTOW LEG 2



COCOTOW LEG 2



COCOTOW LEG 2



SAMPLE INDEX

COCOTOW EXPEDITION

LEG 02

LIST 30DEC1974

0000 250974	LG B ACAPULCO, MEXICO	16 510N 99 560W	CCTW02MV
2025 090974	LGSS B GALAPAGOS ISLANDS	00 46.0S 89 26.0W	CCTW02MV
0330 100974	LGSS E GALAPAGOS ISLANDS	00 36.0S 89 16.0W	CCTW02MV
0400 181074	LG E BALBOA, PANAMA	8 570N 79 340W	CCTW02MV

PERSONNEL

PECS	KLITGORD, K.	MPL	CCTW02MV
PERT	KEITH, W.	MTG	CCTW02MV
PERT	WITHEROW, S.	MTG	CCTW02MV
PECT	STUBER, D.	SCG	CCTW02MV
PEAT	MCKEE, J.	GRD	CCTW02MV
PEET	FERREIRA, S.	MLR	CCTW02MV
PE	ALEXANDER, C.	SIO	CCTW02MV
PEXN	AYALA, L.	IOG	CCTW02MV
PE	COLES, A.	SCG	CCTW02MV
PE	CRANE, K.	SIO	CCTW02MV
PEXN	DE OCHOA, C.	CSE	CCTW02MV
PE	GREEN, S.	USB	CCTW02MV
PE	HUESTIS, S.	SIO	CCTW02MV
PE	LFE, C.	SIO	CCTW02MV
PEXN	LONSDALE, P.	MPL	CCTW02MV
PE	MAYER, L.	SIO	CCTW02MV
PE	MCKINNEY, D.	MPL	CCTW02MV
PE	MCNUTT, M.	SIO	CCTW02MV
PE	YOUNG, C.	NES	CCTW02MV

THE FOLLOWING CODES ARE NEW

CSE=CENTRO DE INVESTIGACION CIENTIFICA Y EDUCACION SUPERIOR DE ENSENADA
 IOG=INSTITUTO OCEANOGRAFICO DE LA ARMADA DEL ECUADOR, GUAYAQUIL, ECUADOR

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

NOTE=SPRF AIRGUN RECORDS COVER .3 AND .5 SWEEPS
 SPR5 AIRGUN RECORDS COVER .5, .3 AND .4 SWEEPS

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

 UNDERWAY DATA - CURATOR T.E. CHASE 2ND FLOOR AQUARIUM (EXT.1534)

*** NAVIGATION PLOTS ***

18 25 974				NVBP B	BRIDGE PLOT 02-1	GDC 15	196N	100 217W	S CCTW02MV
300 26 974				NVBP E	BRIDGE PLOT 02-1	GDC 12	448N	101 340W	S CCTW02MV
300 26 974				NVBP B	BRIDGE PLOT 02-2	GDC 12	448N	101 340W	S CCTW02MV
2258 28 974				NVBP E	BRIDGE PLOT 02-2	GDC 3	365N	102 433W	S CCTW02MV
2258 28 974				NVBP B	BRIDGE PLOT 02-3	GDC 3	365N	102 433W	S CCTW02MV
36 51074				NVBP E	BRIDGE PLOT 02-3	GDC 1	565N	101 258W	S CCTW02MV
28 51074				NVBP B	BRIDGE PLOT 02-4	GDC 1	561N	101 270W	S CCTW02MV
346 121074				NVBP E	BRIDGE PLOT 02-4	GDC 0	407S	85 221W	S CCTW02MV
346 121074				NVBP B	BRIDGE PLOT 02-5	GDC 0	407S	85 221W	S CCTW02MV
30 151074				NVBP E	BRIDGE PLOT 02-5	GDC 0	226S	81 277W	S CCTW02MV
30 151074				NVBP B	BRIDGE PLOT 02-6	GDC 0	226S	81 277W	S CCTW02MV
452 171074				NVBP E	BRIDGE PLOT 02-6	GDC 3	266N	81 111W	S CCTW02MV
452 171074				NVBP B	BRIDGE PLOT 02-7	GDC 3	266N	81 111W	S CCTW02MV
150 181074				NVBP E	BRIDGE PLOT 02-7	GDC 7	33N	79 465W	S CCTW02MV

***FATHOGRAMS ***

30 25 974				DPRT B	GDR 12KHZ R-01	GDC 15	196N	100 217W	S CCTW02MV
1346 26 974				DPRT E	GDR 12KHZ R-01	GDC 11	47N	102 289W	S CCTW02MV
1349 26 974				DPRT B	GDR 12KHZ R-02	GDC 11	42N	102 291W	S CCTW02MV
220 28 974				DPRT E	GDR 12KHZ R-02	GDC 6	582N	103 398W	S CCTW02MV
301 28 974				DPRT B	GDR 12KHZ R-03	GDC 6	510N	103 374W	S CCTW02MV
1520 28 974				DPRT E	GDR 12KHZ R-03	GDC 4	503N	102 595W	S CCTW02MV
200 25 974				DPR3 B	GDR 3.5KHZ R-01	GDC 16	340N	100 30W	S CCTW02MV
1131 26 974				DPR3 E	GDR 3.5KHZ R-01	GDC 11	267N	102 195W	S CCTW02MV
1133 26 974				DPR3 B	GDR 3.5KHZ R-02	GDC 11	264N	102 196W	S CCTW02MV
204 28 974				DPR3 E	GDR 3.5KHZ R-02	GDC 7	10N	103 407W	S CCTW02MV
207 28 974				DPR3 B	GDR 3.5KHZ R-03	GDC 7	5N	103 405W	S CCTW02MV
1337 28 974				DPR3 E	GDR 3.5KHZ R-03	GDC 5	29N	103 31W	S CCTW02MV
1340 28 974				DPR3 B	GDR 3.5KHZ R-04	GDC 5	29N	103 31W	S CCTW02MV
191 5 30 974				DPR3 E	GDR 3.5KHZ R-04	GDC 1	467N	102 574W	S CCTW02MV

TIME GMT	DATE D.M.Y.	TIME LOC	TZ LOC	SAMP CODE	SAMPLE IDENT.	DISP CODE	LAT.	LONG.	CRUISE LEG-SHIP
1918	30	974		DPR3 B	GDR 3.5KHZ R-05	GDC	1 464N	102 580W	S CCTW02MV
1120	21	074		DPR3 E	GDR 3.5KHZ R-05	GDC	1 121N	102 541W	S CCTW02MV
1123	21	074		DPR3 B	GDR 3.5KHZ R-06	GDC	1 123N	102 547W	S CCTW02MV
120	41	074		DPR3 E	GDR 3.5KHZ R-06	GDC	2 553N	101 525W	S CCTW02MV
130	41	074		DPR3 B	GDR 3.5KHZ R-07	GDC	2 550N	101 545W	S CCTW02MV
653	51	074		DPR3 E	GDR 3.5KHZ R-07	GDC	2 154N	101 362W	S CCTW02MV
654	51	074		DPR3 B	GDR 3.5KHZ R-08	GDC	2 154N	101 362W	S CCTW02MV
435	61	074		DPR3 E	GDR 3.5KHZ R-08	GDC	2 123N	102 151W	S CCTW02MV
457	61	074		DPR3 B	GDR 3.5KHZ R-09	GDC	2 118N	102 138W	S CCTW02MV
2300	91	074		DPR3 E	GDR 3.5KHZ R-09	GDC	0 551S	89 430W	S CCTW02MV
2305	06	1074		DPR3 B	GDR 3.5KHZ R-10	GDC	0 551S	89 430W	S CCTW02MV
500	10	1074		DPR3 E	GDR 3.5KHZ R-10	GDC	0 245S	89 553W	S CCTW02MV
505	10	1074		DPR3 B	GDR 3.5KHZ R-11	GDC	0 241S	89 552W	S CCTW02MV
400	13	1074		DPR3 E	GDR 3.5KHZ R-11	GDC	0 435S	85 360W	S CCTW02MV
403	13	1074		DPR3 B	GDR 3.5KHZ R-12	GDC	0 430S	85 359W	S CCTW02MV
1255	16	1074		DPR3 E	GDR 3.5KHZ R-12	GDC	1 81N	81 205W	S CCTW02MV
1300	16	1074		DPR3 B	GDR 3.5KHZ R-13	GDC	1 86N	81 211W	S CCTW02MV
1955	16	1074		DPR3 E	GDR 3.5KHZ R-13	GDC	1 594N	81 583W	S CCTW02MV
2004	16	1074		DPR3 B	GDR 3.5KHZ R-14	GDC	2 8N	81 578W	S CCTW02MV
150	18	1074		DPR3 E	GDR 3.5KHZ R-14	GDC	7 33N	79 465W	S CCTW02MV
MAGNETOMETER									
300	25	974		MGR B	MAGNETICS R-01	GDC	16 265N	100 47W	S CCTW02MV
1600	71	074		MGR E	MAGNETICS R-01	GDC	0 517N	97 402W	S CCTW02MV
1605	71	074		MGR B	MAGNETICS R-02	GDC	0 515N	97 397W	S CCTW02MV
400	18	1074		MGR E	MAGNETICS R-02	GDC	7 228N	79 387W	S CCTW02MV
2140	29	974		MSST B	MAG MOORING R-01	GDC	2 137N	102 133W	S CCTW02MV
1719	51	074		MSST E	MAG MOORING R-01	GDC	2 139N	102 172W	S CCTW02MV

TIME GMT	DATE D.M.Y.	TIME LOC	TZ LOC	SAMP CODE	SAMPLE IDENT.	DISP CODE	LAT.	LONG.	CRUISE LEG-SHIP
*** SEISMIC REFLECTION PROFILES ***									
200	25	974		SPRF B	AIRGUN-RS R-01	GDC	16 340N	100 30W	S CCTW02MV
1100	121074			SPRF E	AIRGUN-RS R-01	GDC	0 310S	85 323W	S CCTW02MV
1100	121074			SPRF B	AIRGUN-RS R-02	GDC	0 310S	85 323W	S CCTW02MV
400	181074			SPRF E	AIRGUN-RS R-02	GDC	7 228N	79 387W	S CCTW02MV
200	25	974		SPR5 B	AIRGUN-R5 R-01	GDC	16 340N	100 30W	S CCTW02MV
400	181074			SPR5 E	AIRGUN-R5 R-01	GDC	7 228N	79 387W	S CCTW02MV
*** CORES ***									
58	101074			C G B	CCTW02-05G 667	GCR	0 435S	89 553W	S CCTW02MV
115	101074			C G E	CCTW02-05G	GCR	0 430S	89 552W	S CCTW02MV
232	101074			C G B	CCTW02-06G 953	GCR	0 313S	89 558W	S CCTW02MV
255	101074			C G E	CCTW02-06G	GCR	0 309S	89 555W	S CCTW02MV
315	121074			C P B	CCTW02-07P 2635	GCR	0 412S	85 219W	S CCTW02MV
540	121074			C P E	CCTW02-07P NO CORE	GCR	0 410S	85 230W	S CCTW02MV
315	121074			C PG B	CCTW02-07PG 2635	GCR	0 412S	85 219W	S CCTW02MV
540	121074			C PG E	CCTW02-07PG NO CORE	GCR	0 410S	85 230W	S CCTW02MV
1541	121074			C P B	CCTW02-08P 2950	GCR	0 250S	85 340W	S CCTW02MV
1822	121074			C P E	CCTW02-08P	GCR	0 241S	85 334W	S CCTW02MV
1541	121074			C PG B	CCTW02-08PG 2950	GCR	0 250S	85 340W	S CCTW02MV
1822	121074			C PG E	CCTW02-08PG	GCR	0 241S	85 334W	S CCTW02MV
1547	141074			C P B	CCTW02-09P 3138	GCR	0 337S	81 91W	S CCTW02MV
1743	141074			C P E	CCTW02-09P	GCR	0 325S	81 98W	S CCTW02MV
1547	141074			C PG B	CCTW02-09PG 3138	GCR	0 337S	81 91W	S CCTW02MV
1743	141074			C PG E	CCTW02-09PG	GCR	0 325S	81 98W	S CCTW02MV
1405	151074			C P B	CCTW02-10P 2965	GCR	0 200S	81 96W	S CCTW02MV
1628	151074			C P E	CCTW02-10P	GCR	0 201S	81 91W	S CCTW02MV
1405	151074			C PG B	CCTW02-10PG 2965	GCR	0 200S	81 96W	S CCTW02MV
1628	151074			C PG E	CCTW02-10PG	GCR	0 201S	81 91W	S CCTW02MV
300	161074			C P B	CCTW02-11P 3105	GCR	0 13S	81 11W	S CCTW02MV
510	161074			C P E	CCTW02-11P	GCR	0 31S	81 43W	S CCTW02MV
300	161074			C PG B	CCTW02-11PG 3105	GCR	0 13S	81 11W	S CCTW02MV
510	161074			C PG E	CCTW02-11PG	GCR	0 31S	81 43W	S CCTW02MV

500 161074
510 161074

C PG B CCTW02-11PG 3105
C PG E CCTW02-11PG

GCR 0 13S 81 11W S CCTW02MV
GCR 0 31S 81 43W S CCTW02MV

30DEC74 PAGE 4

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

CURRENT MEASUREMENTS - CURATOR SARILEE VALENTINE (EXT. 1080)

1921	29	974		CMAB B	CCTW-02-01CM		VAL	2	140N	102	105W	S	CCTW02MV
730	61074			CMAB E	CCTW-02-01CM	NOT RCV	VAL	2	147N	102	140W	S	CCTW02MV
1235	31074			CMAB B	CCTW-02-02CM		VAL	2	160N	101	417W	S	
30	61074			CMAB E	CCTW-02-02CM		VAL	2	157N	101	475W	S	
135	121074			CMAB	CCTW-02-03CM	DROP	VAL	0	410S	85	196W	S	CCTW02MV
758	121074			CMAB	CCTW-02-04CM	DROP	VAL	0	422S	85	297W	S	CCTW02MV
855	121074			CMAB	CCTW-02-05CM	DROP	VAL	0	411S	85	282W	S	CCTW02MV
955	151074			CMAB	CCTW-02-06CM	DROP	VAL	0	196S	81	78W	S	CCTW02MV
1850	151074			CMAB	CCTW-02-07CM	DROP	VAL	0	204S	81	93W	S	CCTW02MV

SALINITY, TEMPERATURE, DEPTH

510	30	974		TD01 B	TDS-01-4572CM		DCP	2	152N	101	347W	S	CCTW02MV
815	30	974		TD01 E	TDS-01		DCP	2	158N	101	359W	S	CCTW02MV
516	51074			TU01 B	TDS-02 4500CM		DCP	2	156N	101	352W	S	CCTW02MV
1025	51074			TU01 E	TDS-02		DCP	2	158N	101	358W	S	CCTW02MV

HYDROGRAPHIC CAST

510	30	974		HCNA B	HYDCST-01-4572CM		DCP	2	152N	101	347W	S	CCTW02MV
815	30	974		HCNA E	HYDCST-01		DCP	2	158N	101	359W	S	CCTW02MV
1000	30	974		HCNA B	HYDCST-02-1000M		DCP	2	157N	101	362W	S	CCTW02MV
1110	30	974		HCNA E	HYDCST-02		DCP	2	150N	101	368W	S	CCTW02MV
516	51074			HCNA B	HYDCST-03-4500CM		DCP	2	156N	101	352W	S	CCTW02MV
1025	51074			HCNA E	HYDCST-03		DCP	2	158N	101	358W	S	CCTW02MV
1926	121074			HCNA B	HYDCST-04-1579M		DCP	0	256S	85	339W	S	CCTW02MV
2141	121074			HCNA E	HYDCST-04		DCP	0	256S	85	336W	S	CCTW02MV

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

BATHYTHERMOGRAPHS - CURATORIAL GROUP, (EXT. 1135)

0	41074			BTX	NO. SAMPLES=03	BTS	2 592N	101 373W	S CCTW02MV
0	51074			BTX	NO. SAMPLES=01	BTS	1 549N	101 311W	S CCTW02MV
0	61074			BTX	NO. SAMPLES=01	BTS	2 160N	101 435W	S CCTW02MV
0	71074			BTX	NO. SAMPLES=04	BTS	1 343N	99 555W	S CCTW02MV
0	81074			BTX	NO. SAMPLES=04	BTS	0 321N	96 290W	S CCTW02MV
0	91074			BTX	NO. SAMPLES=03	BTS	0 348S	92 589W	S CCTW02MV
0	101074			BTX	NO. SAMPLES=03	BTS	0 499S	89 515W	S CCTW02MV
0	111074			BTX	NO. SAMPLES=03	BTS	0 231S	89 50W	S CCTW02MV
0	121074			BTX	NO. SAMPLES=02	BTS	0 368S	85 238W	S CCTW02MV
0	131074			BTX	NO. SAMPLES=04	BTS	0 240S	85 515W	S CCTW02MV
0	141074			BTX	NO. SAMPLES=04	BTS	0 335S	82 552W	S CCTW02MV
0	151074			BTX	NO. SAMPLES=04	BTS	0 211S	81 320W	S CCTW02MV
0	161074			BTX	NO. SAMPLES=01	BTS	0 36N	80 581W	S CCTW02MV

SALINITY SAMPLES

0	41074			SSSA	NO. SAMPLES=01	DCP	2 592N	101 373W	S CCTW02MV
0	51074			SSSA	NO. SAMPLES=01	DCP	1 549N	101 311W	S CCTW02MV
0	61074			SSSA	NO. SAMPLES=01	DCP	2 160N	101 435W	S CCTW02MV
0	71074			SSSA	NO. SAMPLES=04	DCP	1 343N	99 555W	S CCTW02MV
0	81074			SSSA	NO. SAMPLES=04	DCP	0 321N	96 290W	S CCTW02MV
0	91074			SSSA	NO. SAMPLES=03	DCP	0 348S	92 589W	S CCTW02MV
0	101074			SSSA	NO. SAMPLES=03	DCP	0 499S	89 515W	S CCTW02MV
0	111074			SSSA	NO. SAMPLES=03	DCP	0 231S	89 50W	S CCTW02MV
0	121074			SSSA	NO. SAMPLES=02	DCP	0 368S	85 238W	S CCTW02MV
0	131074			SSSA	NO. SAMPLES=04	DCP	0 240S	85 515W	S CCTW02MV
0	141074			SSSA	NO. SAMPLES=04	DCP	0 335S	82 552W	S CCTW02MV
0	151074			SSSA	NO. SAMPLES=04	DCP	0 211S	81 320W	S CCTW02MV
0	161074			SSSA	NO. SAMPLES=01	DCP	0 36N	80 581W	S CCTW02MV

99

END SAMPLE INDEX