INDOPAC EXPEDITION

LEG 4

R/V THOMAS WASHINGTON

INFORMAL REPORT AND INDEX OF

NAVIGATION, DEPTH, MAGNETIC AND SUBBOTTOM PROFILER DATA

Apra, Guam (22 June 1976)

to

Apra, Guam (4 July 1976)

Chief Scientist - J. Hawkins

Resident Marine Tech - R. Wilson

Post-Cruise Processing by - S. Smith,

G. Psaropulos, R. Lingley

Prepared by

Underway Data Processing Group

S.I.O. Geological Data Center

Scripps Institution of Oceanography

La Jolla, California

September 7, 1976

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 (.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 form 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 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). Phone: (714) 452-2752

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.

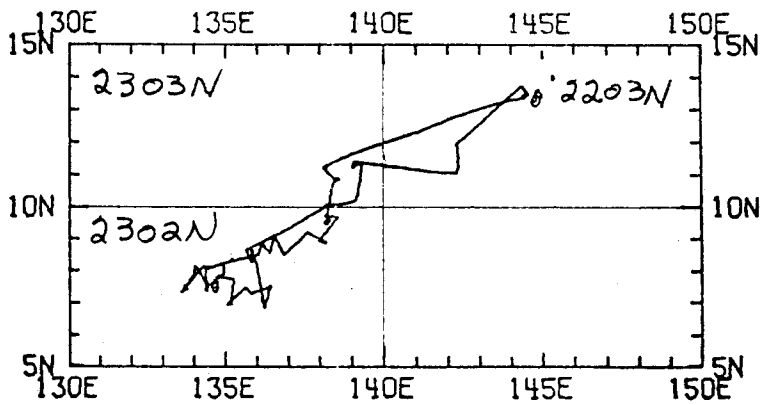
6. Microfilm or Xerox copies of:

   a. Echosounder records - 12 and 3.5 kHz frequency

   b. Subbottom profiler records (airgun)

   c. Magnetometer records

   d. Underway Data Log



INDOPAC EXPEDITION

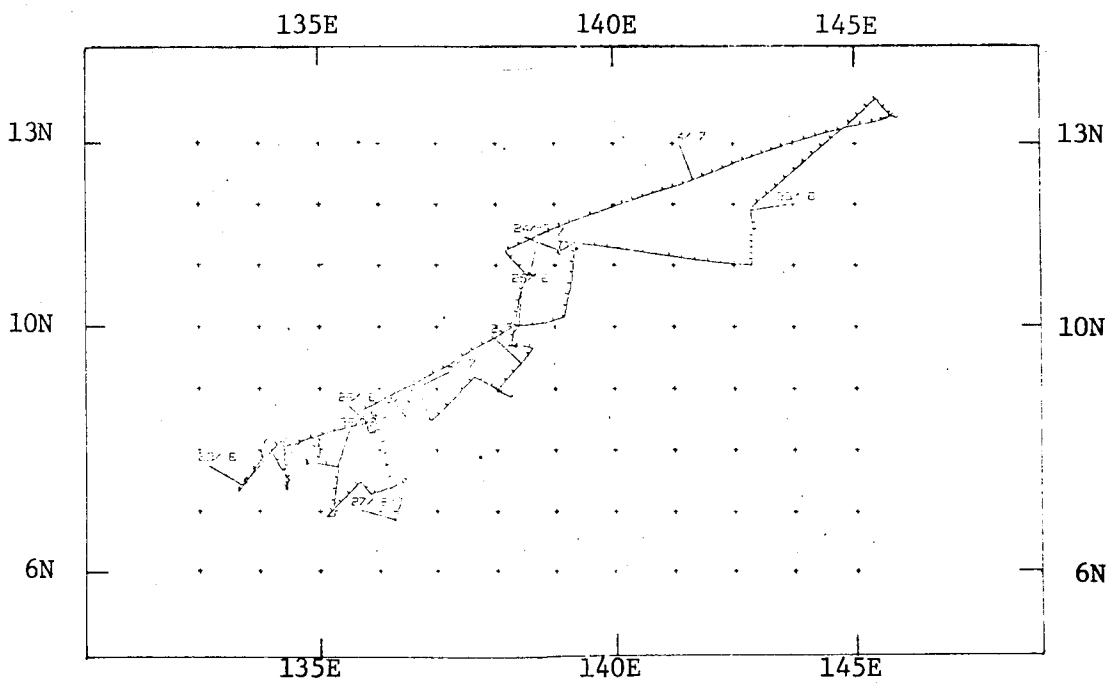
LEG 4

Chief Scientist - James Hawkins

Ports: Apra - Apra, Guam (22 June - 4 July 1976)

TOTAL MILEAGE

1) Cruise - 2546 miles
2) Bathymetry - 2494 miles
3) Magnetics - 2351 miles
4) Seismic Reflection - 2299 miles



INDOPAC EXPEDITION LEG 4

Track Plot

INDOPAC EXPEDITION LEG 4 SAMPLE INDEX

PORTS

655 22 676	LGPT	b	APRA, GUAM	13	246N	144	343E	F INDP04WT
2300 4 776	LGPT	E	APRA, GUAM	13	246N	144	343E	F INDP04WT

PERSONNEL

0 0 0 0	PECS	HAWKINS, J.	GRD	0	ON	0	OE	INDP04WT
0 0 0 0	PERT	WILSON,R.	GTG	0	ON	0	OE	INDP04WT
0 0 0 0	PECT	ELSTON, M.	SCG	0	ON	0	OE	INDP04WT
0 0 0 0	PEFT	MCKEE, J.	SGG	0	ON	0	OE	INDP04WT
0 0 0 0	PES	BATIZA, R.	SIO	0	ON	0	OE	INDP04WT
0 0 0 0	PEXN	CHAO, B.	SIX	0	ON	0	OE	INDP04WT
0 0 0 0	PEXN	DIXON, T.	CAN	0	ON	0	OE	INDP04WT
0 0 0 0	PE	DORMAN, L.	GRD	0	ON	0	OE	INDP04WT
0 0 0 0	PES	JACOBSON, R.	SIO	0	ON	0	OE	INDP04WT
0 0 0 0	PES	KIECKHEFER, R.	SIO	0	ON	0	OE	INDP04WT
0 0 0 0	PE	LAWVER, L.	MPL	0	ON	0	OE	INDP04WT
0 0 0 0	PE	ONEILL, P.	MPL	0	ON	0	OE	INDP04WT
0 0 0 0	PES	STERN, R.	SIO	0	ON	0	OE	INDP04WT
0 0 0 0	PE	WHITNEY, W.	MPL	0	ON	0	OE	INDP04WT

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

TIME GMT	DATE D.M.Y.	TIME LOC	TZ LOC	SAMP CODE	SAMPLE IDENT.	DISP CODE	LAT.	LONG.	CRUISE LEG-SHIP
					UNDERWAY DATA - CURATOR S.M. SMITH (EXT.2182)				
*** LOG BOOKS ***									
711	22	676		LBUW	B GEOPHYSICAL LOG	GDC	13 270N	144 370E	S INDP04WT
2300	4	776		LBUW	E GEOPHYSICAL LOG	GDC	13 252N	144 395E	S INDP04WT
*** NAVIGATION PLOTS ***									
819	22	676		NVBP	B BRIDGE PLOT 01	GDC	13 335N	144 299E	S INDP04WT
1338	24	676		NVBP	E BRIDGE PLOT 01	GDC	10 246N	139 122E	S INDP04WT
1338	24	676		NVBP	B BRIDGE PLOT 02	GDC	10 246N	139 122E	S INDP04WT
150	28	676		NVBP	E BRIDGE PLOT 02	GDC	7 468N	134 543E	S INDP04WT
150	28	676		NVBP	B BRIDGE PLOT 03	GDC	7 468N	134 543E	S INDP04WT
1346	2	776		NVBP	E BRIDGE PLOT 03	GDC	10 14N	138 184E	S INDP04WT
1346	2	776		NVBP	B BRIDGE PLOT 04	GDC	10 14N	138 184E	S INDP04WT
2005	3	776		NVBP	E BRIDGE PLOT 04	GDC	12 116N	140 403E	S INDP04WT
2005	3	776		NVBP	B BRIDGE PLOT 05	GDC	12 116N	140 403E	S INDP04WT
2000	4	776		NVBP	E BRIDGE PLOT 05	GDC	13 257N	144 303E	S INDP04WT
500	22	676		NVCP	B COMPUTER DR PLOT 01	GDC	13 270N	144 370E	S INDP04WT
600	25	676		NVCP	E COMPUTER DR PLOT 01	GDC	9 540N	138 58E	S INDP04WT
700	25	676		NVCP	B COMPUTER DR PLOT 02	GDC	9 487N	137 560E	S INDP04WT
952	3	776		NVCP	E COMPUTER DR PLOT 02	GDC	11 339N	138 528E	S INDP04WT
1024	3	776		NVCP	B COMPUTER DR PLOT 03	GDC	11 361N	138 584E	S INDP04WT
2200	4	776		NVCP	E COMPUTER DR PLOT 03	GDC	13 290N	144 352E	S INDP04WT
***FATHOGRAMS ***									
751	22	676		DPRT	B GDR 12KHZ R-01	GDC	13 294N	144 343E	S INDP04WT
1042	24	676		DPRT	E GDR 12KHZ R-01	GDC	10 563N	139 181E	S INDP04WT
1047	24	676		DPRT	B GDR 12KHZ R-02	GDC	10 554N	139 181E	S INDP04WT
1521	27	676		DPRT	E GDR 12KHZ R-02	GDC	7 231N	135 338E	S INDP04WT
1529	27	676		DPRT	B GDR 12KHZ R-03	GDC	7 219N	135 326E	S INDP04WT
726	30	676		DPRT	E GDR 12KHZ R-03	GDC	8 20N	134 235E	S INDP04WT
732	30	676		DPRT	B GDR 12KHZ R-04	GDC	8 32N	134 235E	S INDP04WT
1913	2	776		DPRT	E GDR 12KHZ R-04	GDC	10 502N	138 380E	S INDP04WT

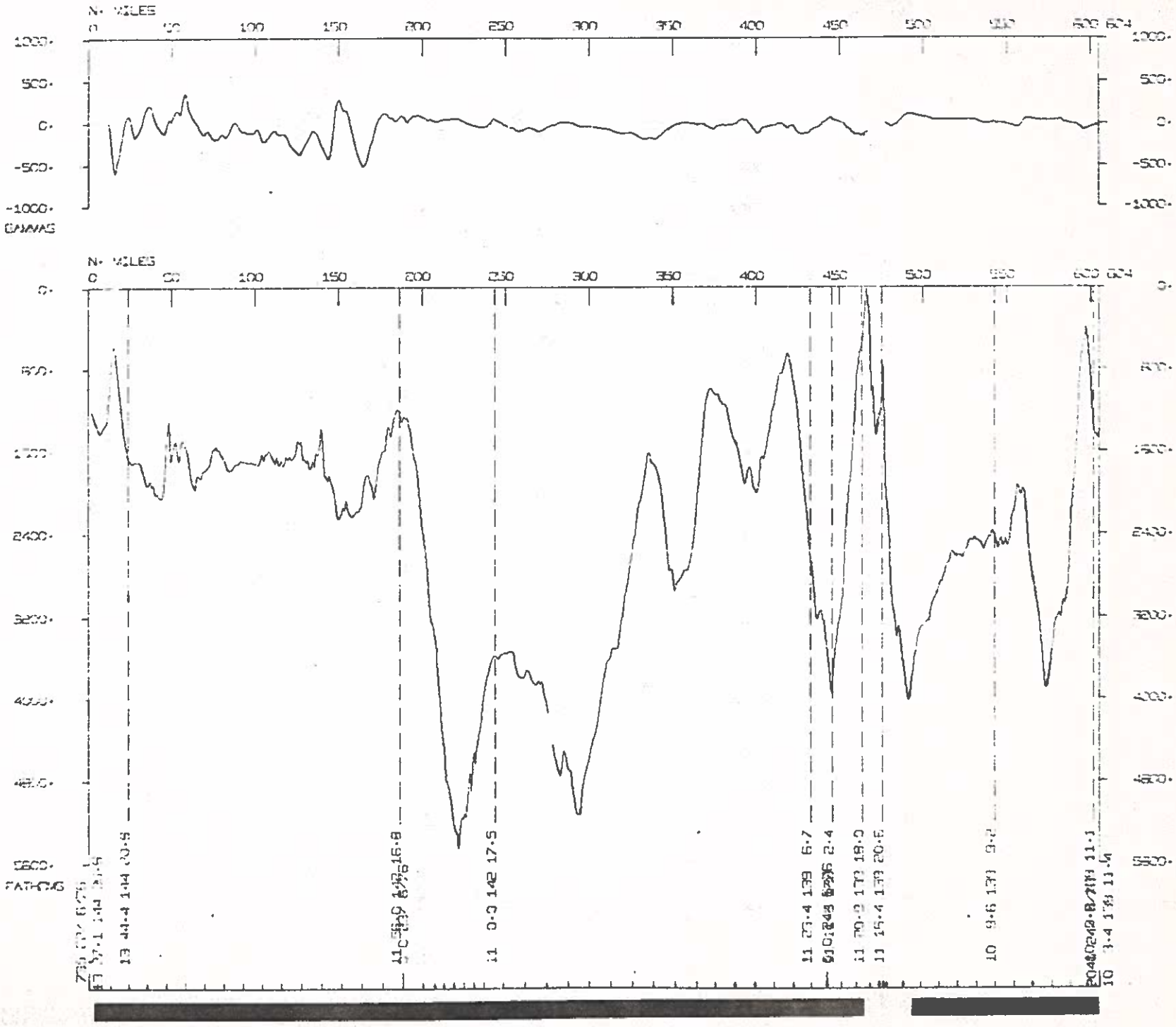
TIME GMT	DATE D.M.Y.	TIME LOC	TZ LOC	SAMP CODE	SAMPLE IDENT.	DISP CODE	LAT.	LONG.	CRUISE LEG-SHIP
1930	2 776			DPRT B	GDR 12KHZ R-05	GDC	10 495N	138 390E S	INDP04WT
1926	4 776			DPRT E	GDR 12KHZ R-05	GDC	13 273N	144 297E S	INDP04WT
803	22 676			DPR3 B	GDR 3.5KHZ R-01	GDC	13 311N	144 324E S	INDP04WT
957	24 676			DPR3 E	GDR 3.5KHZ R-01	GDC	11 43N	139 190E S	INDP04WT
1005	24 676			DPR3 B	GDR 3.5KHZ R-02	GDC	11 29N	139 188E S	INDP04WT
23	26 676			DPR3 E	GDR 3.5KHZ R-02	GDC	8 164N	135 539E S	INDP04WT
737	26 676			DPR3 B	GDR 3.5KHZ R-03	GDC	8 326N	135 506E S	INDP04W
700	29 676			DPR3 E	GDR 3.5KHZ R-03	GDC	7 291N	133 456E S	INDP04WT
912	29 676			DPR3 B	GDR 3.5KHZ R-04	GDC	7 340N	133 493E S	INDP04WT
1438	29 676			DPR3 E	GDR 3.5KHZ R-04	GDC	7 563N	134 25E S	INDP04WT
158	2 776			DPR3 B	GDR 3.5KHZ R-05	GDC	9 401N	138 328E S	INDP04WT
425	4 776			DPR3 E	GDR 3.5KHZ R-05	GDC	12 420N	142 39E S	INDP04WT
*** MAGNETOMETER ***									
849	22 676			MGR B	MAGNETICS R-01	GDC	13 355N	144 280E S	INDP04WT
235	28 676			MGR E	MAGNETICS R-01	GDC	7 465N	134 474E S	INDP04WT
1103	28 676			MGR B	MAGNETICS R-02	GDC	7 500N	134 501E S	INDP04WT
1856	4 776			MGR E	MAGNETICS R-02	GDC	13 249N	144 293E S	INDP04WT
*** SEISMIC REFLECTION PROFILES ***									
853	22 676			SPRF B	3SEC AIRGUN R-01	GDC	13 358N	144 277E S	INDP04WT
1900	4 776			SPRF E	3SEC AIRGUN R-01	GDC	13 252N	144 294E S	INDP04WT
853	22 676			SPRS B	10SEC AIRGUN R-01	GDC	13 358N	144 277E S	INDP04WT
1906	4 776			SPRS E	10SEC AIRGUN R-01	GDC	13 257N	144 295E S	INDP04W
GRAVIMETRIC RECORDS CURATOR L.M. DORMAN (EXT.2406)									
655	22 676			GVR B	GRAVITYMETER R-01	LMD	13 270N	144 370E S	INDP04WT
0	26 676			GVR E	GRAVITYMETER R-01	LMD	8 184N	135 557E S	INDP04WT
5	26 676			GVR B	GRAVITYMETER R-02	LMD	8 177N	135 551E S	INDP04WT
500	27 676			GVR E	GRAVITYMETER R-02	LMD	7 272N	136 233E S	INDP04WT
505	27 676			GVR B	GRAVITYMETER R-03	LMD	7 272N	136 235E S	INDP04WT
550	2 776			GVR E	GRAVITYMETER R-03	LMD	9 409N	138 204E S	INDP04WT
555	2 776			GVR B	GRAVITYMETER R-04	LMD	9 409N	138 204E S	INDP04WT
1900	2 776			GVR E	GRAVITYMETER R-04	LMD	10 511N	138 362E S	INDP04WT

TIME GMT	DATE D.M.Y.	TIME LOC	TZ LOC	SAMP CODE	SAMPLE IDENT.	DISP CODE	LAT.	LONG.	CRUISE LEG-SHIP
1905	2 776			GVR	B GRAVITYMETER R-05	LMD	10 507N	138 370E	S INDP04WT
2300	4 776			GVR	E GRAVITYMETER R-05	LMD	13 252N	144 395E	S INDP04WT
655	22 676			GVXR	B CROSSCOUPLE R-01	LMD	13 270N	144 370E	S INDP04WT
1250	30 676			GVXR	E CROSSCOUPLE R-01	LMD	8 207N	135 227E	S INDP04WT
HEAT FLOW									
435	26 676			HF2M	HEATFLOW 01 3983M	MPL	8 165N	135 535E	S INDP04WT
1230	29 676			HF2M	HEATFLOW 02 4403M	MPL	7 533N	134 23E	S INDP04WT
GRAVITY CORES									
140	26 676			CUG	CORE 01 3994M	GCR	8 164N	135 536E	S INDP04WT
*** DREDGE ***									
533	24 676			DRR	B DREDGE 01 2350M	GCR	11 154N	139 210E	S INDP04WT
745	24 676			DRR	E DREDGE 01 1566M	GCR	11 158N	139 203E	S INDP04WT
2347	24 676			DRR	B DREDGE 02 4028M	GCR	10 18N	138 230E	S INDP04WT
745	25 676			DRR	E DREDGE 02 1492M	GCR	9 446N	137 483E	S INDP04WT
1113	26 676			DRR	B DREDGE 03 2742M	GCR	8 329N	135 523E	S INDP04WT
1301	26 676			DRR	E DREDGE 03 2742M	GCR	8 324N	135 532E	S INDP04WT
639	27 676			DRR	B DREDGE 04 3555M	GCR	7 273N	136 244E	S INDP04WT
855	27 676			DRR	E DREDGE 04 3555M	GCR	7 274N	136 242E	S INDP04WT
557	28 676			DRR	B DREDGE 05 4161M	GCR	7 467N	134 467E	S INDP04WT
907	28 676			DRR	E DREDGE 05 2686M	GCR	7 476N	134 453E	S INDP04WT
400	29 676			DRR	B DREDGE 06 3914M	GCR	7 261N	133 430E	S INDP04WT
746	29 676			DRR	E DREDGE 06 2723M	GCR	7 293N	133 459E	S INDP04WT
1540	1 776			DRR	B DREDGE 07 4546M	GCR	8 568N	138 13E	S INDP04WT
1838	1 776			DRR	E DREDGE 07 3593M	GCR	8 570N	137 595E	S INDP04WT
707	2 776			DRR	B DREDGE 08 3895M	GCR	9 406N	138 205E	S INDP04WT
1024	2 776			DRR	E DREDGE 08 2704M	GCR	9 408N	138 175E	S INDP04WT
2232	2 776			DRR	B DREDGE 09 4900M	GCR	10 489N	138 361E	S INDP04WT
122	3 776			DRR	E DREDGE 09 3275M	GCR	10 495N	138 314E	S INDP04WT

TIME GMT	DATE D.M.Y.	TIME LOC	TZ LOC	SAMP CODE	SAMPLE IDENT.	DISP CODE	LAT.	LONG.	CRUISE LEG-SHIP
*** SURFACE NET ***									
1002	27 676			SNNU B	H	MIC	7 273N	136 231E	S INDP04WT
1013	27 676			SNNU E	H	MIC	7 273N	136 229E	S INDP04WT
1358	29 676			SNNU B	H	MIC	7 548N	134 23E	S INDP04WT
1408	29 676			SNNU E	H	MIC	7 549N	134 24E	S INDP04WT
BATHYTHERMOGRAPH CURATOR CAROL CONWAY (EXT.3368)									
	0 22 676			BTX	NO. SAMPLES = 1	DCP	13 270N	144 370E	S INDP04WT
	0 23 676			BTX	NO. SAMPLES = 2	DCP	11 541N	142 171E	S INDP04WT
	0 25 676			BTX	NO. SAMPLES = 2	DCP	10 17N	138 227E	S INDP04WT
	0 26 676			BTX	NO. SAMPLES = 1	DCP	8 184N	135 557E	S INDP04WT
	0 27 676			BTX	NO. SAMPLES = 1	DCP	6 510N	136 164E	S INDP04WT
	0 28 676			BTX	NO. SAMPLES = 2	DCP	7 433N	135 167E	S INDP04WT
	0 29 676			BTX	NO. SAMPLES = 1	DCP	7 257N	133 409E	S INDP04WT
	0 30 676			BTX	NO. SAMPLES = 2	DCP	7 213N	134 270E	S INDP04WT
	0 1 776			BTX	NO. SAMPLES = 1	DCP	8 599N	136 381E	S INDP04WT
	0 2 776			BTX	NO. SAMPLES = 1	DCP	9 249N	138 248E	S INDP04WT
	0 3 776			BTX	NO. SAMPLES = 1	DCP	10 494N	138 333E	S INDP04WT

99 END SAMPLE INDEX

INDUPAC LEG 4



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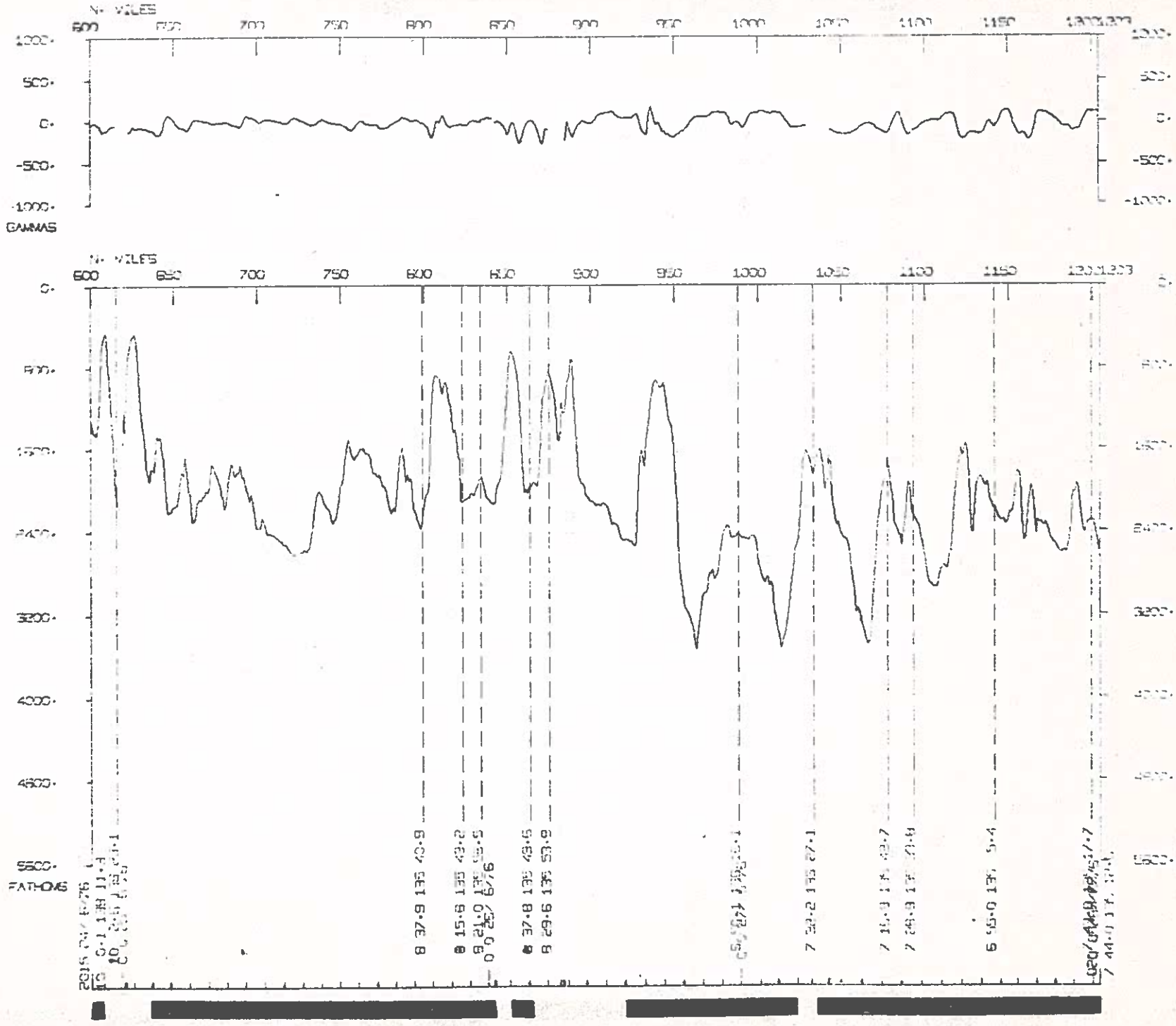

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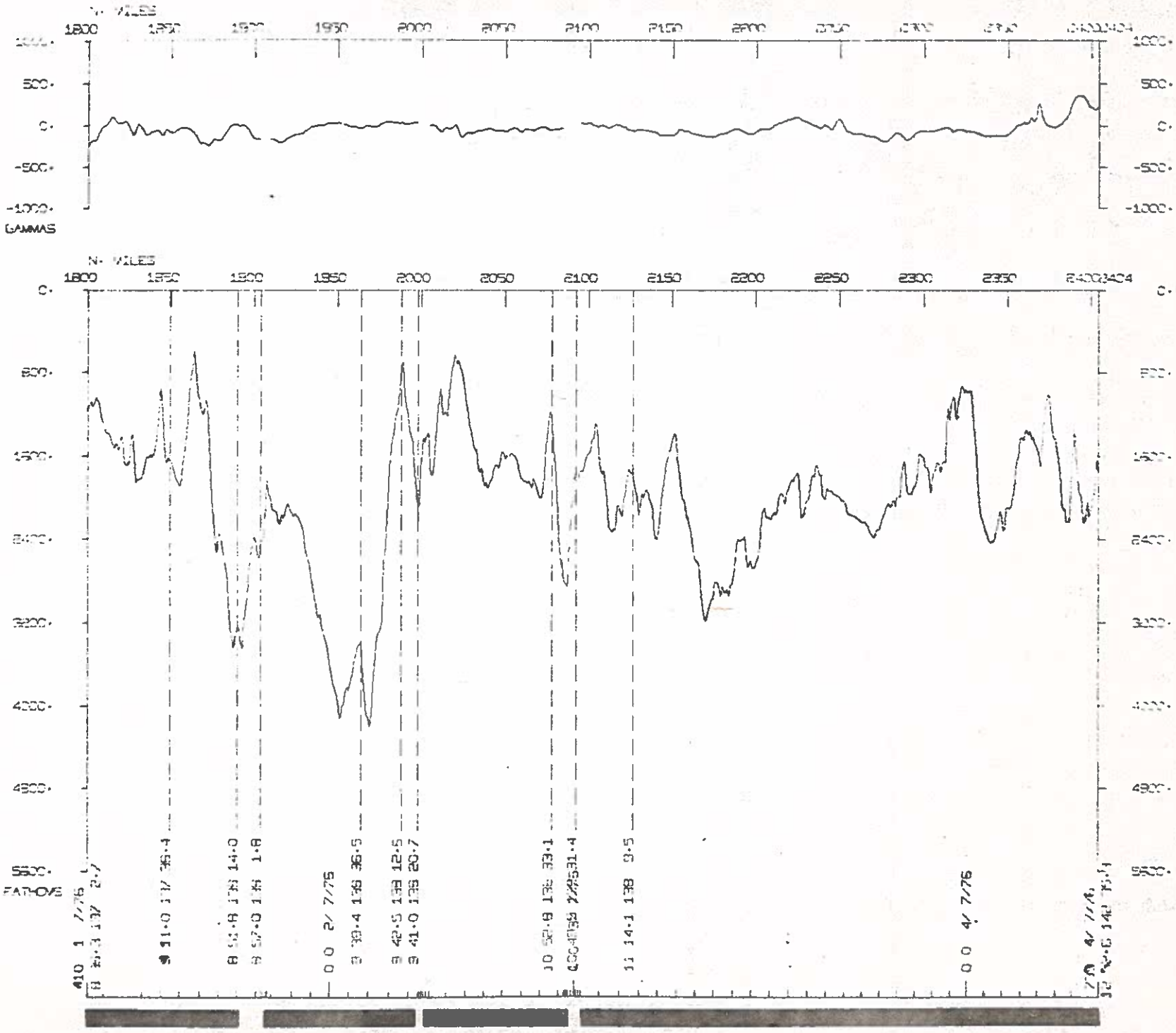

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FATHOMS
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1600.
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4000.
4800.
5600.
INDOPAC LEG 4