

GEOSECS EXPEDITION

LEG A

R/V MELVILLE

INFORMAL REPORT AND INDEX OF
NAVIGATION, DEPTH AND MAGNETIC DATA

San Diego, Calif. (23 Aug. 1973)

To

Honolulu (10 Sept. 1973)

Co-Chief Scientists, Leg 1 - H. Craig, K. Turekian

Resident Marine Tech - R. Wilson

Post-Cruise Processing by - S. Smith, U. Albright,
W. Keith, O. McConnell

Prepared by

Underway Data Processing Group

S.I.O. Geological Data Center

Scripps Institution of Oceanography

La Jolla, California

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

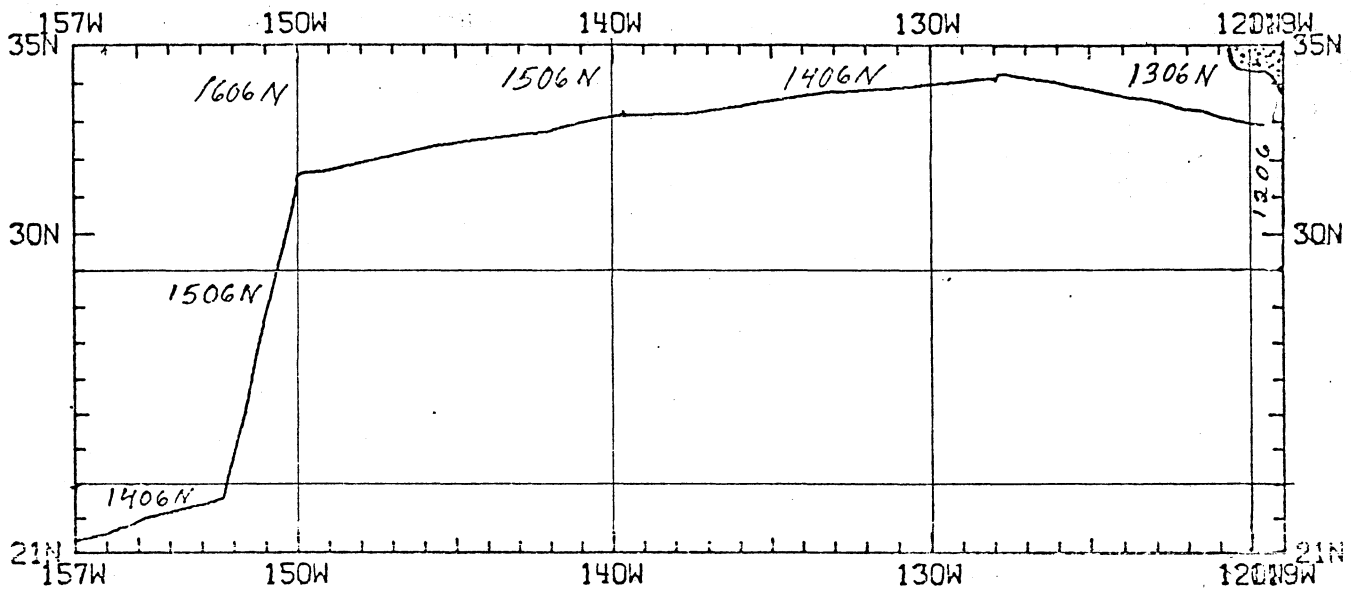
Contents:

- 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 (714-453-2000, Ext. 1534):

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 PC 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

* no subbottom profiler data for this leg

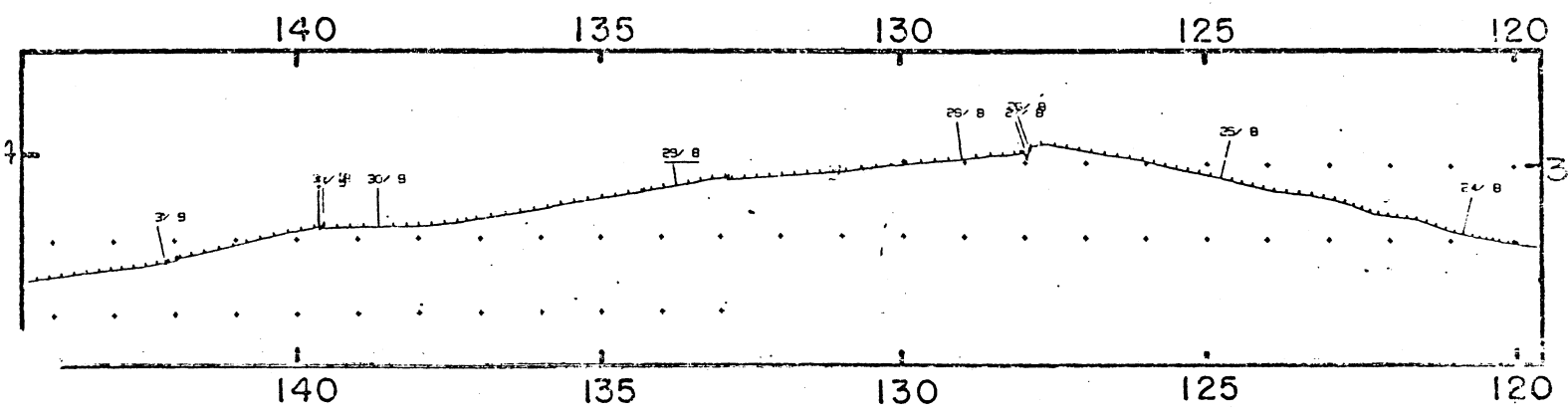


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 R/V MELVILLE

Chief Scientists - H.Craig, K.Turekian
 San Diego - Honolulu (23 Aug. 1973 - 10 Sept. 1973)

TOTAL MILEAGE

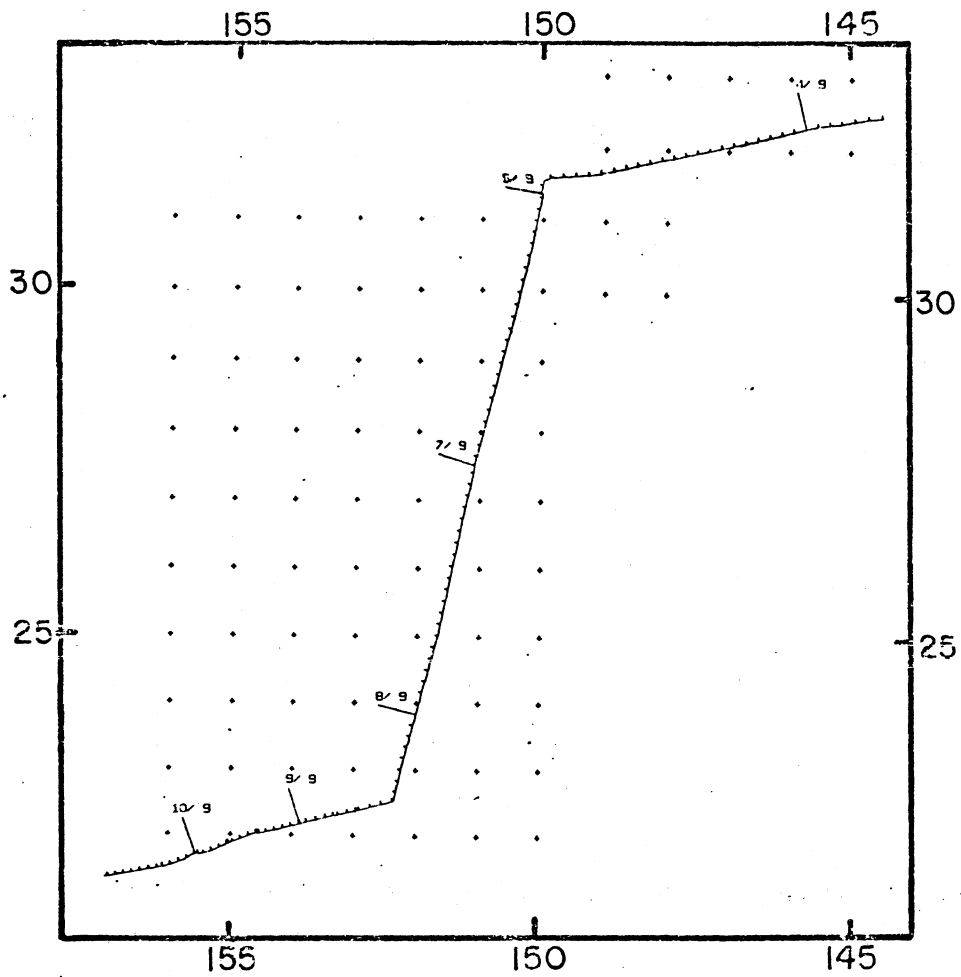
- 1) Cruise - 2440 miles
- 2) Bathymetry - 2360 miles
- 3) Magnetics - 2095 miles



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LEG A

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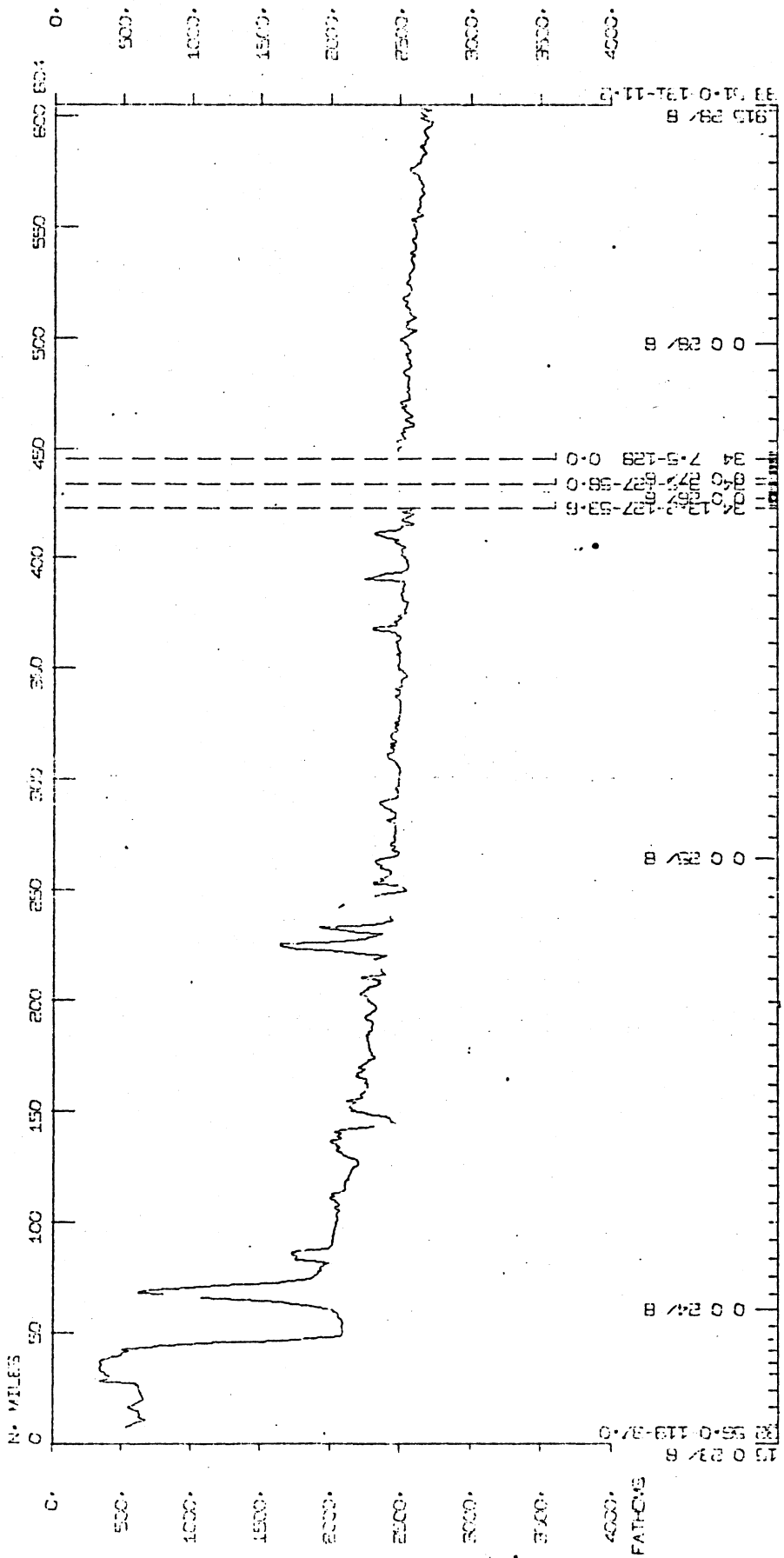
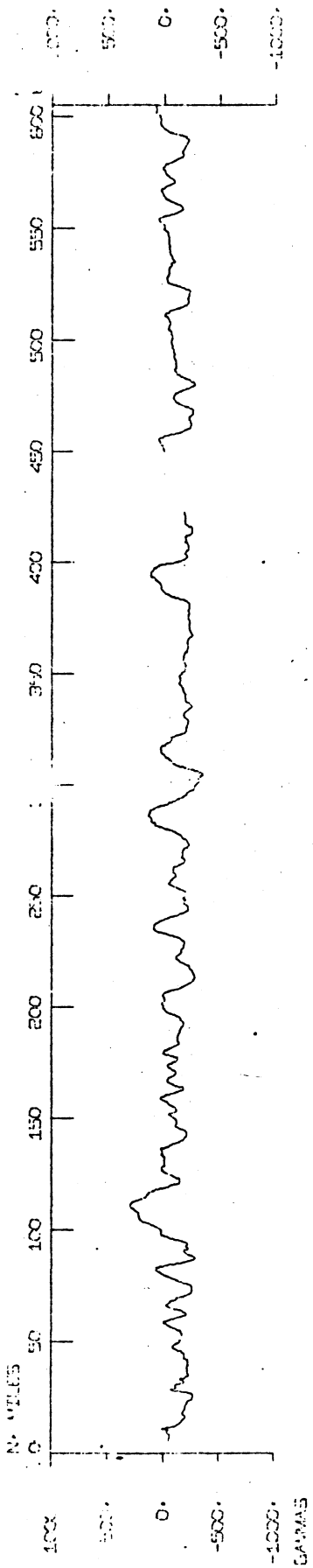


GEOSLCS EXPEDITION

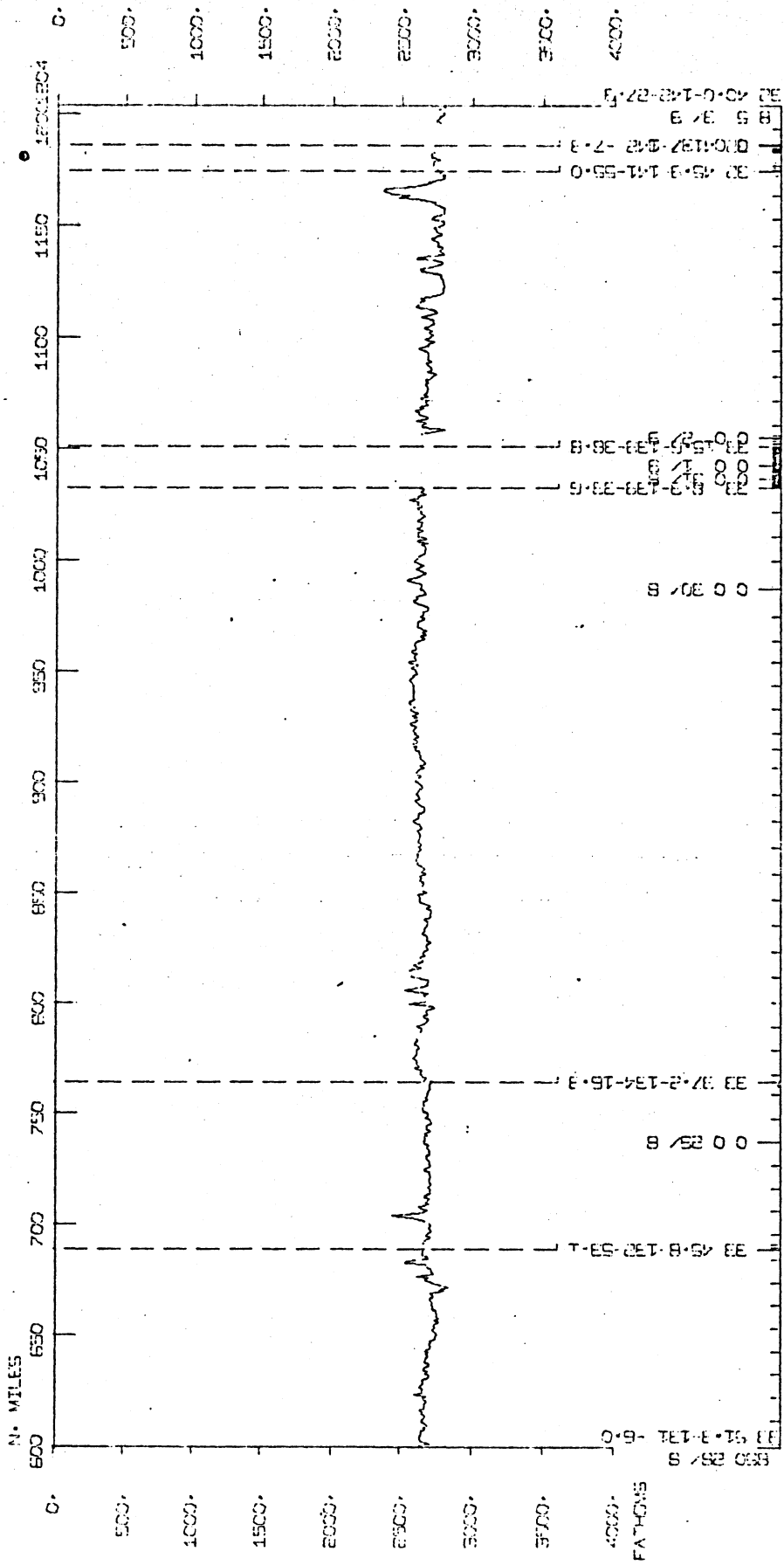
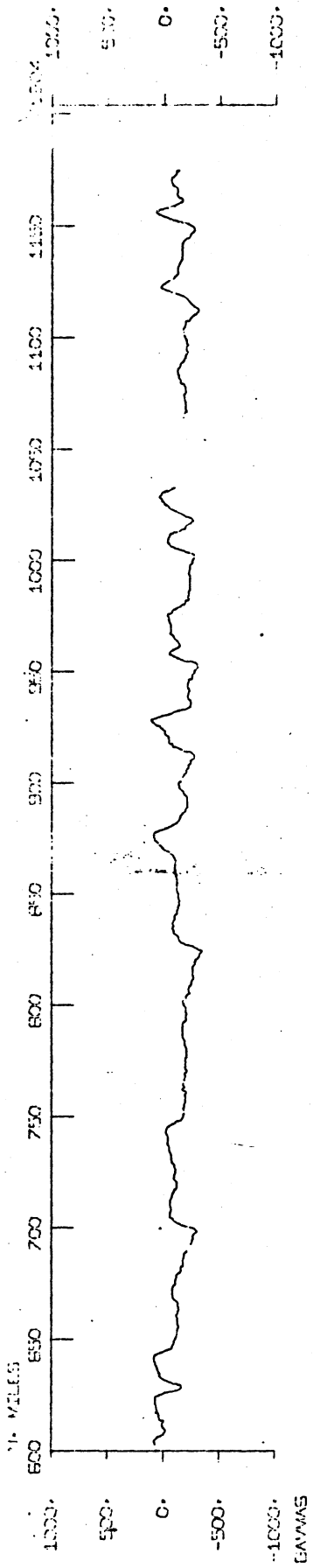
LEG A

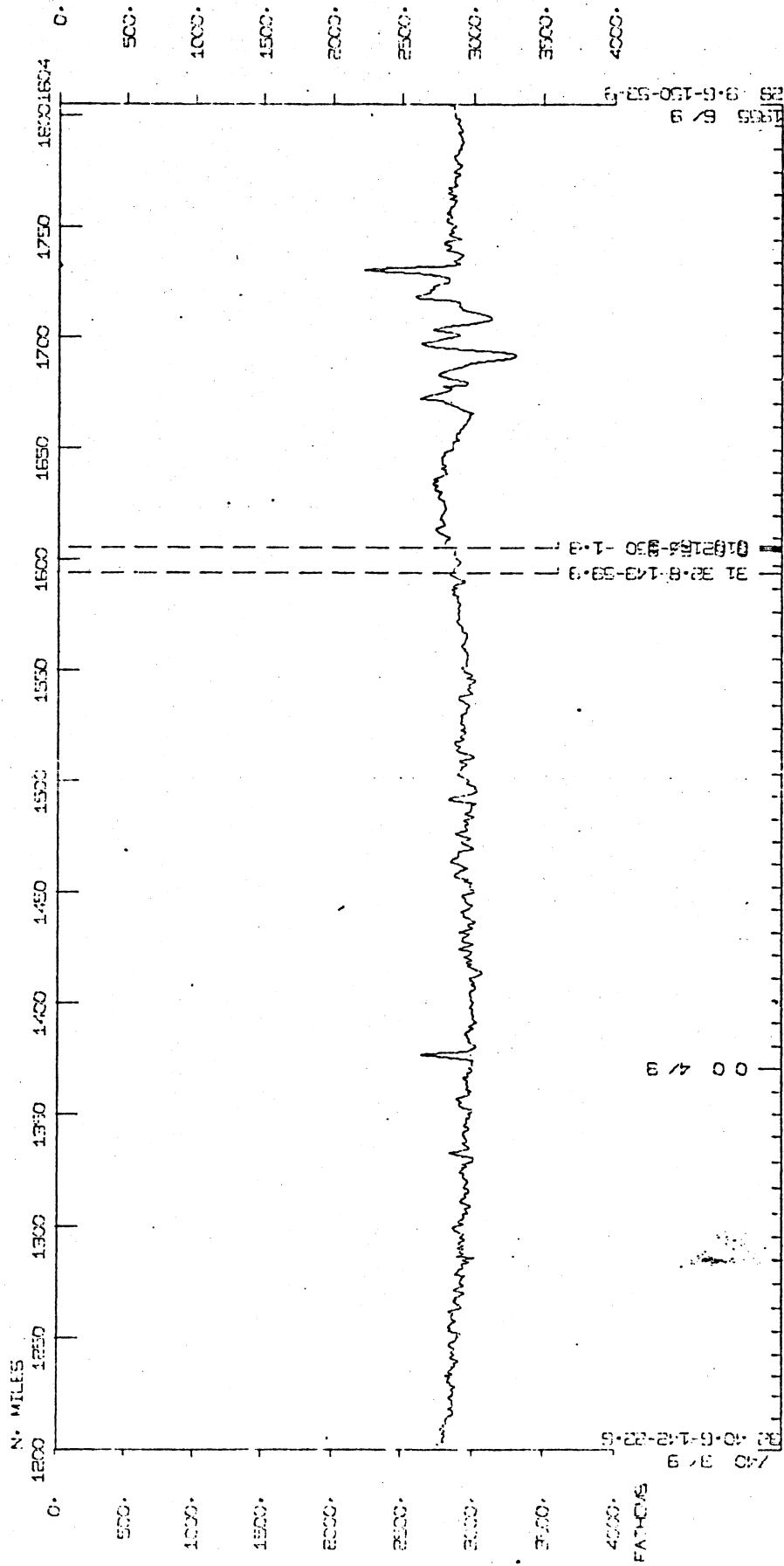
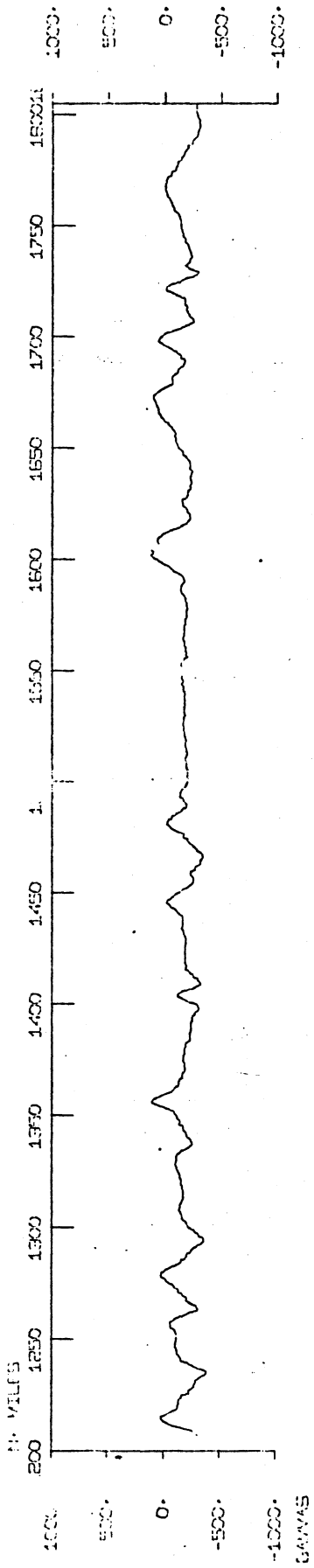
(2 of 2)

GEOSSECS LEG A



GEOSECS LEG A





CROSS SECS LFC A

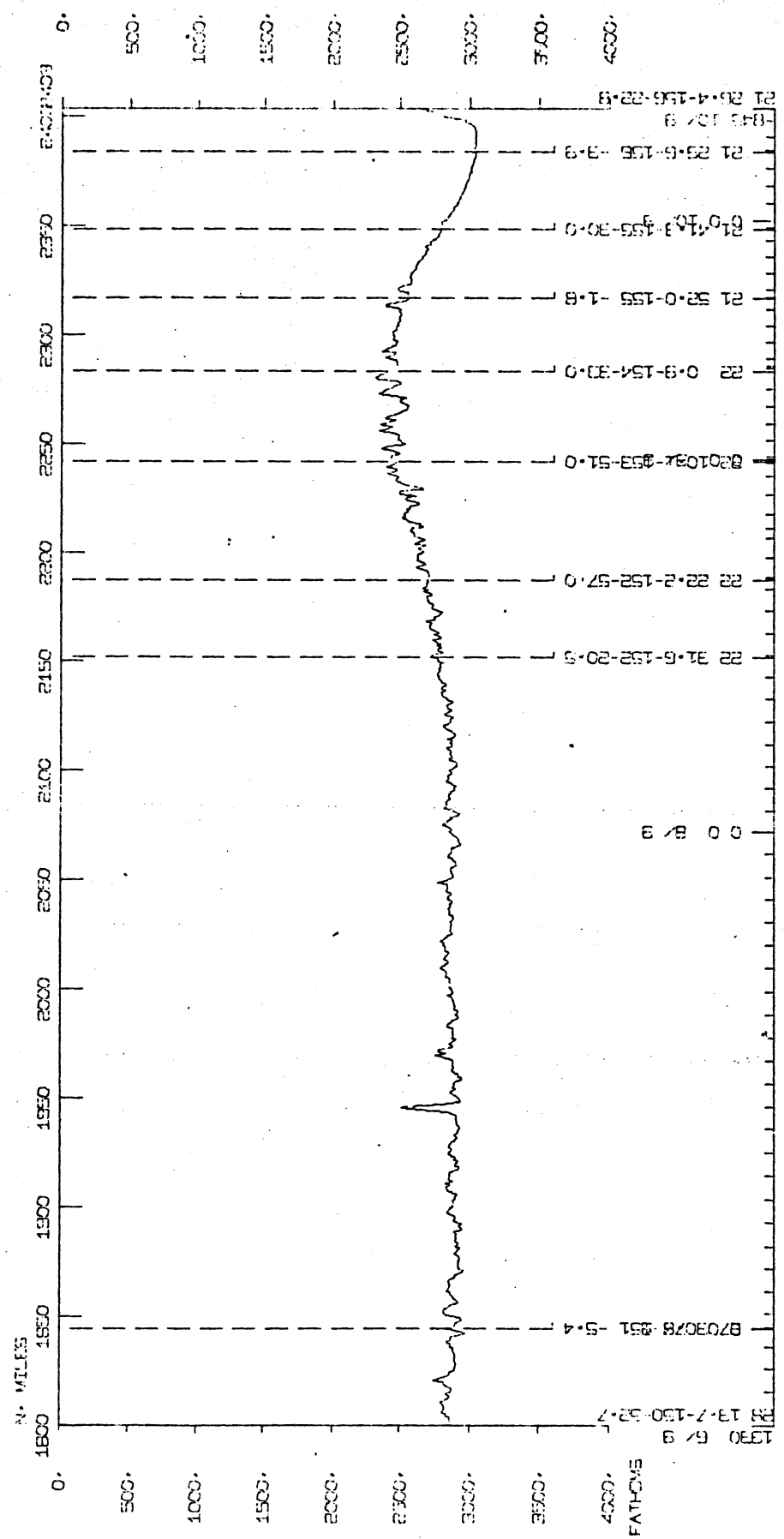
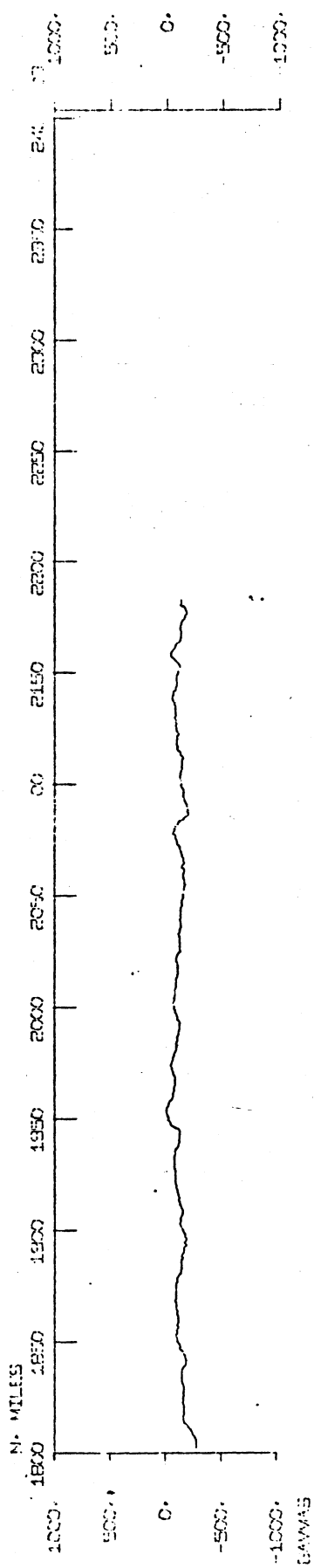
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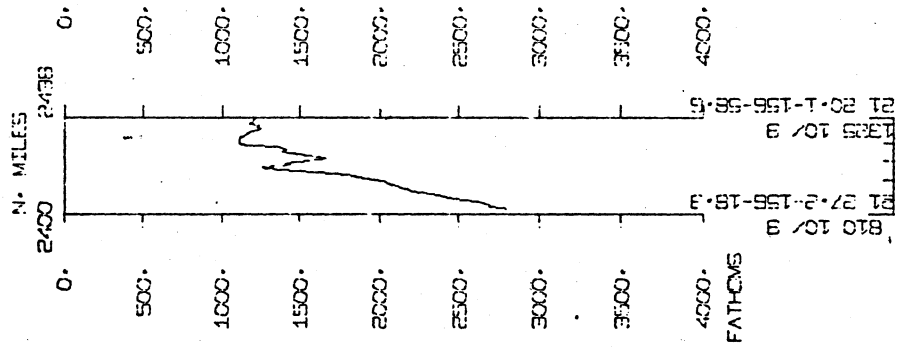
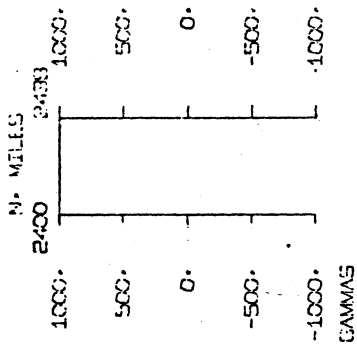
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GEOSECS LEG A



GEOSECS LEG A



810 107 B
 81 27-2-156-18-3
 1388 107 B
 81 20-1-156-58-5

GENSECS EXPEDITION LEG A SAMPLE INDEX

0 23 873
2300 10 973

LG A B SAN DIEGO
LG A E HONOLULU

32 560N 119 370W S GECS AMV
21 200N 156 592W S GECS AMV

PERSONNEL

0 0 0 0	PECS	CRAIG, H.	GOG	GECS	AMV
0 0 0 0	PECS	TURFKIAN, K.	NES	GECS	AMV
0 0 0 0	PEMT	CUNNINGHAM, L.	GOG	GECS	AMV
0 0 0 0	PECT	MANTYLA, N.	GOG	GECS	AMV
0 0 0 0	PEMT	REGAN, P.	GOG	GECS	AMV
0 0 0 0	PEMT	SEIFERT, E.	NES	GECS	AMV
0 0 0 0	PECT	SPIEGELBERG, JOH	GOG	GECS	AMV
0 0 0 0	PECT	TRIST, A.	GOG	GECS	AMV
0 0 0 0	PEMT	WALDORF, B.	GOG	GECS	AMV
0 0 0 0	PEKT	WILSON, K.	GRD	GECS	AMV
0 0 0 0	PEMT	WHITEHOUSE, A.	GOG	GECS	AMV
0 0 0 0	PE	ACKERMAN, R.	GOG	GECS	AMV
0 0 0 0	PEXN	BAINBRIDGE, A.	NZD	GECS	AMV
0 0 0 0	PE	DIXON, F.	GOG	GECS	AMV
0 0 0 0	PE	EVANS, W.	GOG	GECS	AMV
0 0 0 0	PE	HESTER, A.	GOG	GECS	AMV
0 0 0 0	PE	HURDWITZ, R.	GOG	GECS	AMV
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0 0 0 0	PE	PRICE, W.	GOG	GECS	AMV
0 0 0 0	PEXN	SLATER, E.	CAN	GECS	AMV
0 0 0 0	PE	SPIEGELBERG, JOA	GOG	GECS	AMV
0 0 0 0	PE	TRIER, R.	GOG	GECS	AMV
0 0 0 0	PE	VADNAIS, R.	GOG	GECS	AMV
0 0 0 0	PE	WILLIAMS, R.	GOG	GECS	AMV

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

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

*** NAVIGATION PLOTS ***

TIME GMT	DATE D.M.Y.	TIME LUC	TZ LUC	SAMP CODE	SAMPLE IDENT.	DISP CODE	LAT.	LONG.	CRUISE LEG-SHIP
1130	250873			NVBP B	BRIDGE PLOT 1	GDC	34-098N	127-013W	S GECS AMV
1100	060973			NVBP E	BRIDGE PLOT 1	GDC	29-396N	150-265W	S GECS AMV
1100	060973			NVBP B	BRIDGE PLOT 2	GDC	29-396N	150-265W	S GECS AMV
0100	080973			NVBP E	BRIDGE PLOT 2	GDC	23-402N	152-026W	S GECS AMV
0100	080973			NVBP B	BRIDGE PLOT 3	GDC	23-402N	152-026W	S GECS AMV
0952	090973			NVBP E	BRIDGE PLOT 3	GDC	22-022N	154-313W	S GECS AMV

*** FATHOGRAMS ***

TIME GMT	DATE D.M.Y.	TIME LUC	TZ LUC	SAMP CODE	SAMPLE IDENT.	DISP CODE	LAT.	LONG.	CRUISE LEG-SHIP
1535	23 873			DPRT B	GDR 12KHZ R-01	GDC	32 56.2N	119 428W	S GECS AMV
1553	25 873			DPRT E	GDR 12KHZ R-01	GDC	34 132N	127 536W	S GECS AMV
1920	27 873			DPRT B	GDR 12KHZ R-02	GDC	34 73N	128 43W	S GECS AMV
400	30 873			DPRT E	GDR 12KHZ R-02	GDC	33 89N	139 332W	S GECS AMV
137	2 973			DPRT B	GDR 12KHZ R-03	GDC	33 103N	139 367W	S GECS AMV
1600	2 973			DPRT E	GDR 12KHZ R-03	GDC	32 431N	142 39W	S GECS AMV
713	3 973			DPRT B	GDR 12KHZ R-04	GDC	32 413N	142 168W	S GECS AMV
2230	4 973			DPRT E	GDR 12KHZ R-04	GDC	31 236N	150 19W	S GECS AMV
30	6 973			DPRT B	GDR 12KHZ R-05	GDC	31 218N	150 1W	S GECS AMV
940	6 973			DPRT E	GDR 12KHZ R-05	GDC	29 517N	150 233W	S GECS AMV
948	6 973			DPRT B	GDR 12KHZ R-06	GDC	29 503N	150 237W	S GECS AMV
1117	8 973			DPRT E	GDR 12KHZ R-06	GDC	22 224N	152 565W	S GECS AMV
1410	8 973			DPRT B	GDR 12KHZ R-07	GDC	22 228N	152 555W	S GECS AMV
2020	8 973			DPRT E	GDR 12KHZ R-07	GDC	22 111N	153 476W	S GECS AMV
254	9 973			DPRT B	GDR 12KHZ R-08	GDC	22 100N	153 512W	S GECS AMV
1330	10 973			DPRT E	GDR 12KHZ R-08	GDC	21 200N	156 592W	S GECS AMV

*** MAGNETOMETER ***

TIME GMT	DATE D.M.Y.	TIME LOC	TZ LOC	SAMP CODE	SAMPLE IDENT.	DISP CODE	LAT.	LONG.	CRUISE LEG-SHIP
1520	23	873		MGR B	MAGNETICS R-01	GDC 32	560N	119 397W	S GECS AMV
1226	2	973		MGR E	MAGNETICS R-01	GDC 32	459N	141 550W	S GECS AMV
821	3	973		MGR B	MAGNETICS R-02	GDC 32	396N	142 313W	S GECS AMV
1117	8	973		MGR E	MAGNETICS R-02	GDC 22	224N	152 565W	S GECS AMV

*** GEOCHEMICAL STATION LARGE VOLUME ***

TIME GMT	DATE D.M.Y.	TIME LOC	TZ LOC	SAMP CODE	SAMPLE IDENT.	DISP CODE	LAT.	LONG.	CRUISE LEG-SHIP
1553	25	873		GCLV B	GEOSECS LV 201	GOG 34	132N	127 536W	S GECS AMV
1920	27	873		GCLV E	GEOSECS LV 201	GOG 34	73N	128 43W	S GECS AMV
400	30	873		GCLV B	GEOSECS LV 202	GOG 33	89N	139 332W	S GECS AMV
135	2	973		GCLV E	GEOSECS LV 202	GOG 33	103N	139 367W	S GECS AMV
1830	2	973		GCLV B	GEOSECS LV 203	GOG 32	425N	142 55W	S GECS AMV
600	3	973		GCLV E	GEOSECS LV 203	GOG 32	422N	142 81W	S GECS AMV
2230	4	973		GCLV B	GEOSECS LV 204	GOG 31	236N	150 19W	S GECS AMV
15	6	973		GCLV E	GEOSECS LV 204	GOG 31	218N	150 2W	S GECS AMV

*** GEOCHEMICAL STATION STD ***

TIME GMT	DATE D.M.Y.	TIME LOC	TZ LOC	SAMP CODE	SAMPLE IDENT.	DISP CODE	LAT.	LONG.	CRUISE LEG-SHIP
1117	8	973		GCTD B	GEOSECS STD 205	GOG 22	224N	152 565W	S GECS AMV
1410	8	973		GCTD E	GEOSECS STD 205	GOG 22	228N	152 555W	S GECS AMV
2042	8	973		GCTD B	GEOSECS STD 206	GOG 22	101N	153 506W	S GECS AMV
254	9	973		GCTD E	GEOSECS STD 206	GOG 22	100N	153 512W	S GECS AMV
758	9	973		GCTD B	GEOSECS STD 207	GOG 22	9N	154 330W	S GECS AMV
1035	9	973		GCTD E	GEOSECS STD 207	GOG 22	24N	154 310W	S GECS AMV
1439	9	973		GCTD B	GEOSECS STD 208	GOG 21	519N	155 19W	S GECS AMV
1642	9	973		GCTD E	GEOSECS STD 208	GOG 21	522N	155 0W	S GECS AMV
2040	9	973		GCTD B	GEOSECS STD 209	GOG 21	413N	155 300W	S GECS AMV
2340	9	973		GCTD E	GEOSECS STD 209	GOG 21	425N	155 309W	S GECS AMV
355	10	973		GCTD B	GEOSECS STD 210	GOG 21	296N	156 39W	S GECS AMV
614	10	973		GCTD E	GEOSECS STD 210	GOG 21	301N	156 33W	S GECS AMV

BATHYTHERMOGRAPHS - CURATORIAL GROUP, E. DROLLINGER (EXT. 1135)

*** BATHYTHERMOGRAPH ***

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0	6	973		BTX	NO. SAMPLES = 4	BTS 31	218N	150 3W	S GECS AMV
0	7	973		BTX	NO. SAMPLES = 3	BTS 27	308N	151 54W	S GECS AMV
0	8	973		BTX	NO. SAMPLES = 2	BTS 23	498N	151 599W	S GECS AMV
0	9	973		BTX	NO. SAMPLES = 2	BTS 22	97N	153 509W	S GECS AMV