

GEOSECS EXPEDITION

LEG B

R/V MELVILLE

INFORMAL REPORT AND INDEX OF
NAVIGATION, DEPTH AND MAGNETIC DATA

Honolulu, Hawaii (16 September 1973)

to

Adak, Alaska (6 October 1973)

Chief Scientist, Leg B - W. Broecker

Resident Marine Tech - R. Wilson

Post-Cruise Processing by - S. Smith, U. Albright
R. Wilson, 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*

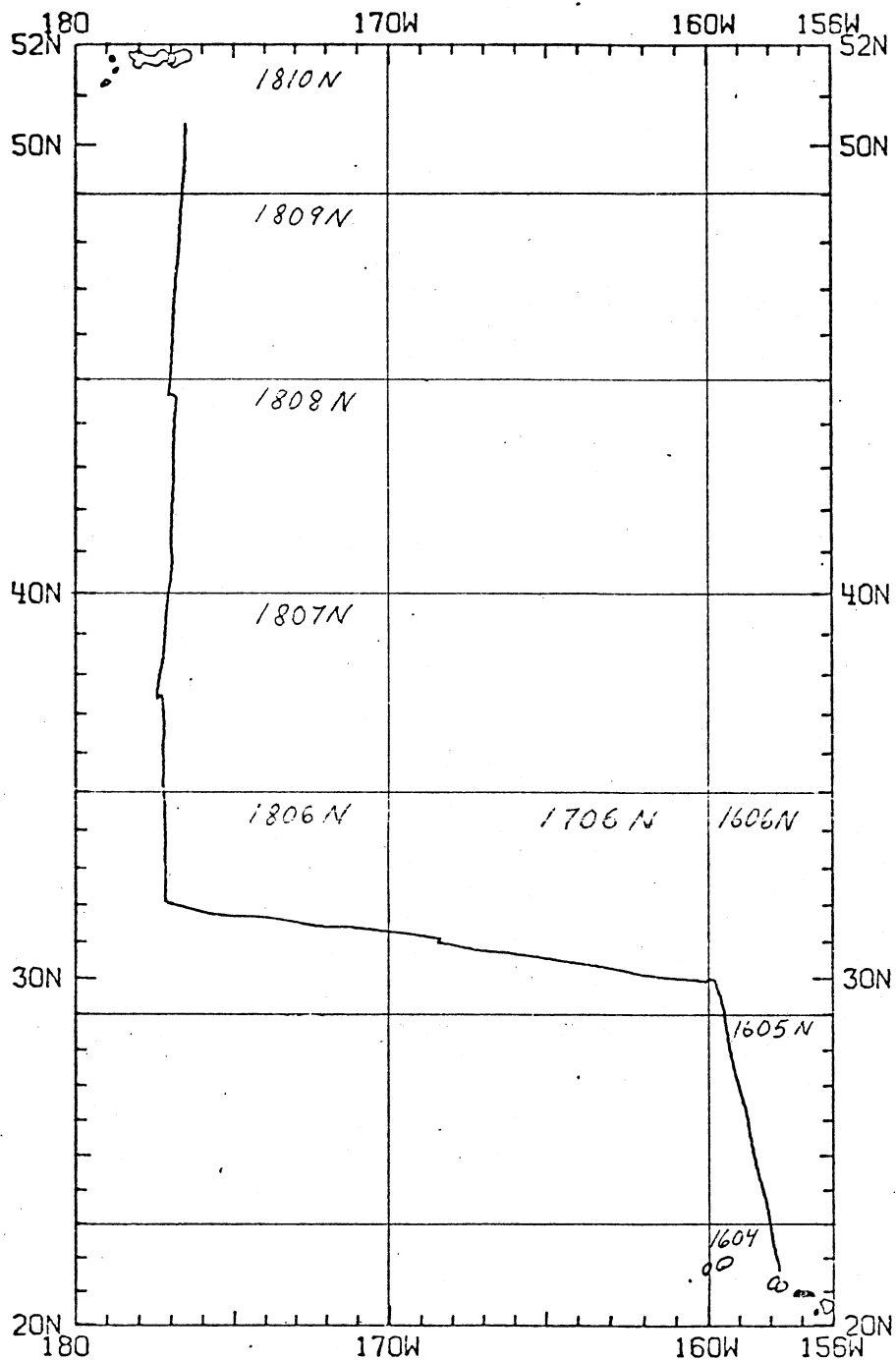
Contents:

- 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 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

* no subbottom profiler data for this leg

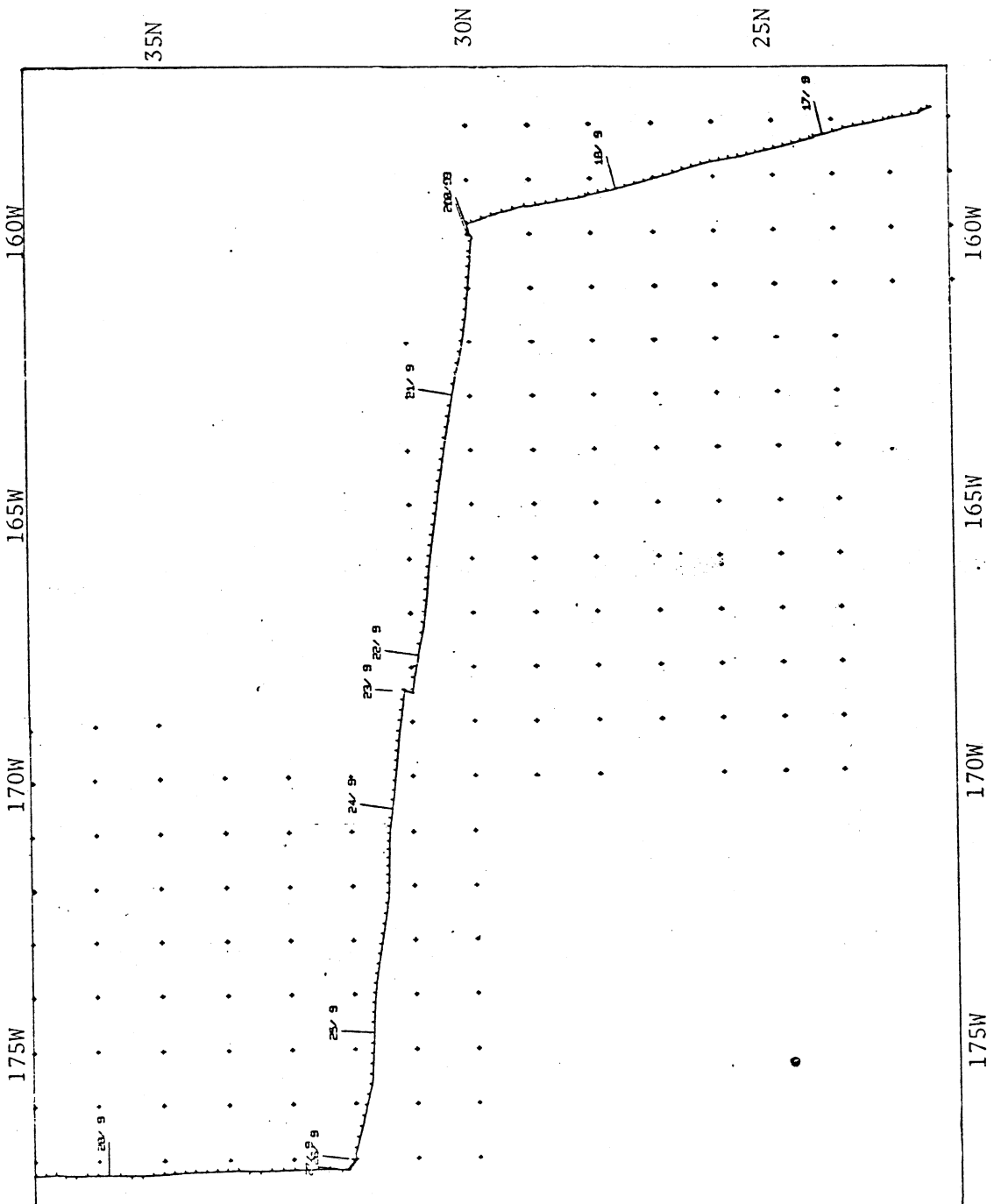
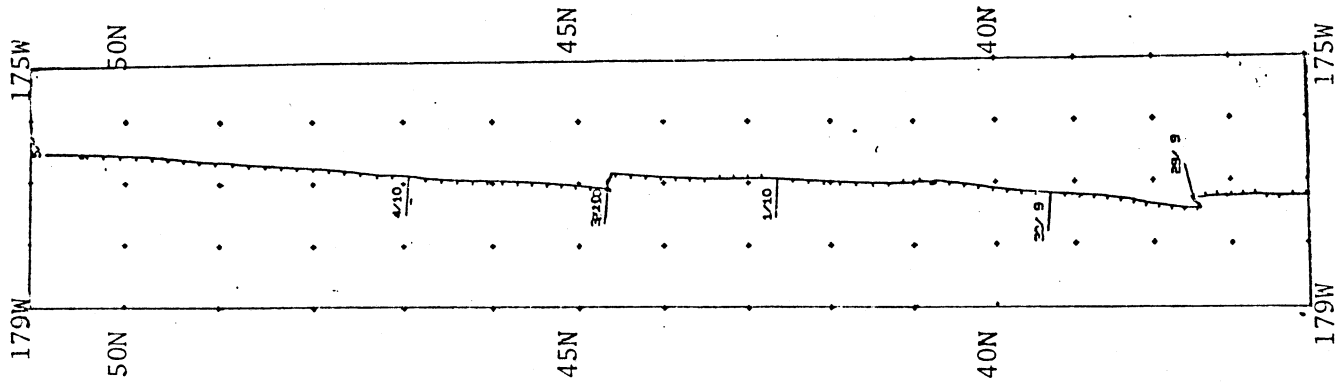


GEOSECS EXPEDITION
 LEG B
 R/V MELVILLE

Chief Scientist - W. Broecker
 Honolulu - Adak (16 Sept. 1973 - 6 Oct. 1973)

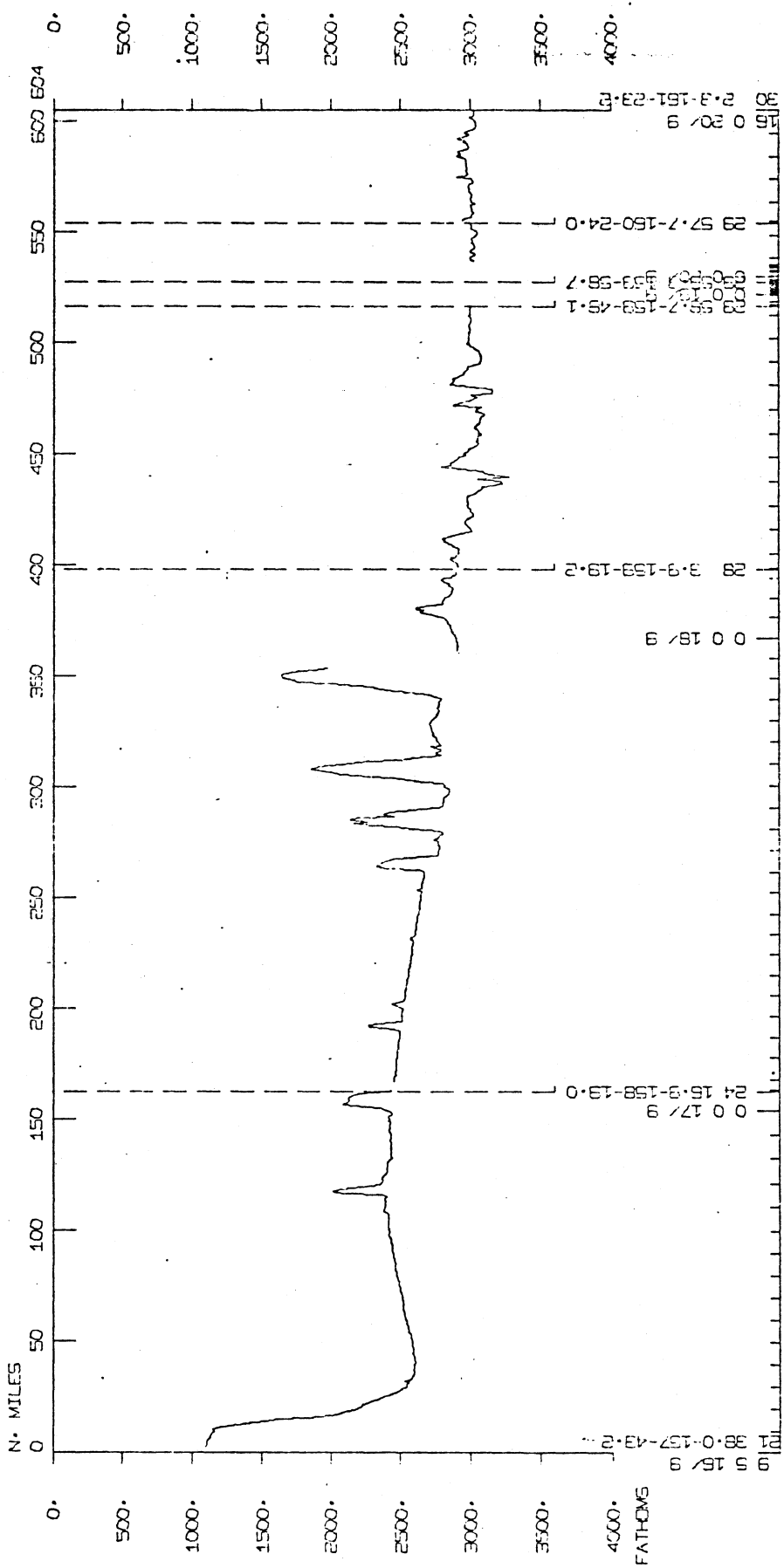
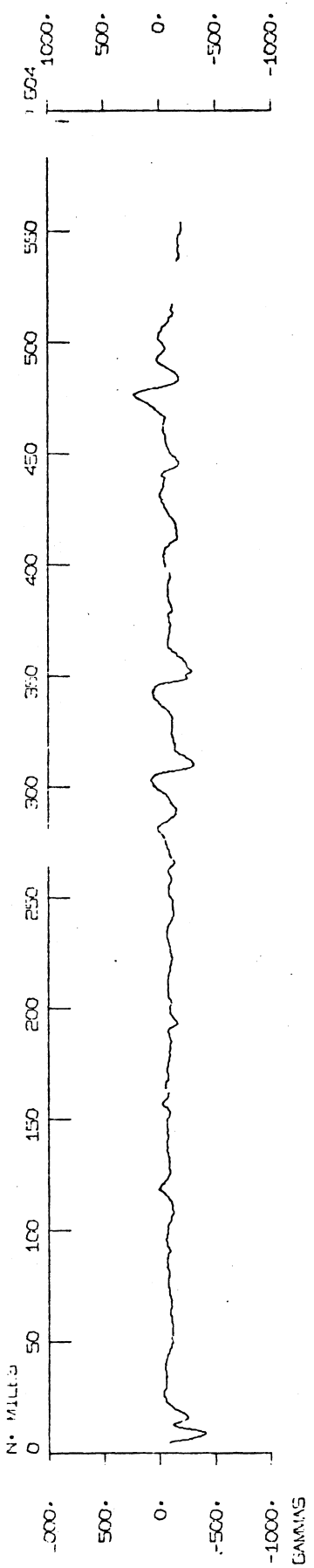
TOTAL MILEAGE

- 1) Cruise - 2607 miles
- 2) Magnetics - 2457 miles



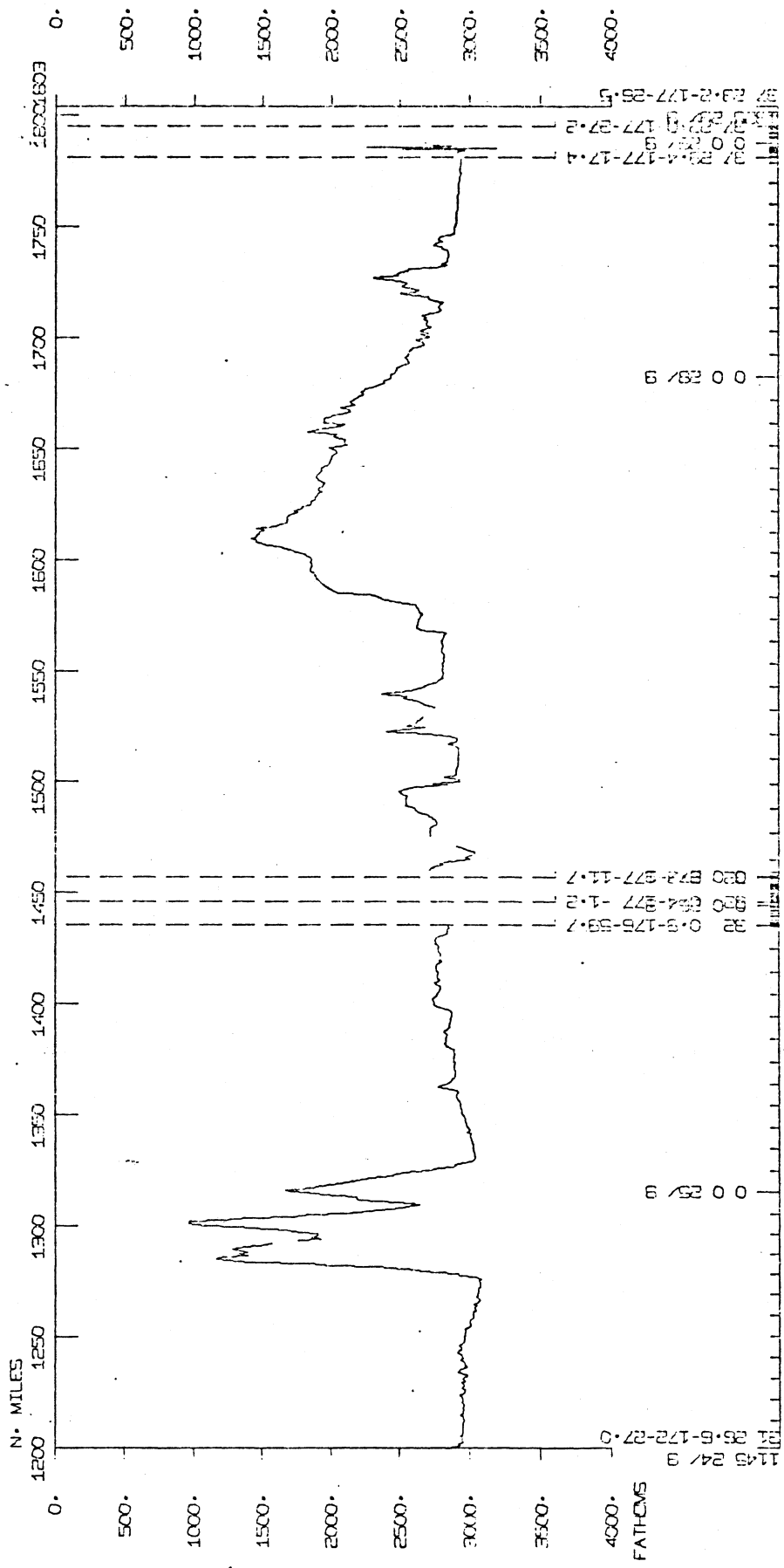
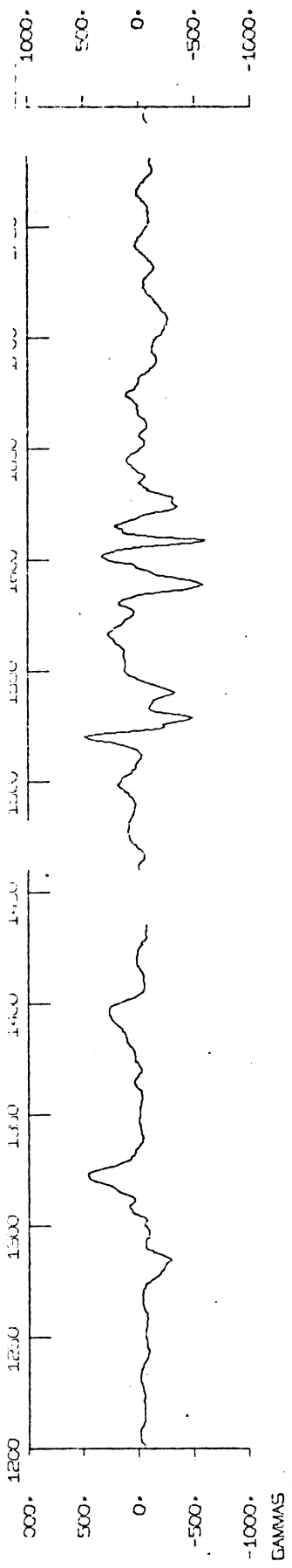
GEOSECS LEG B (track plot)

GEOSTICS LEG B



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GEOSECS LEG B



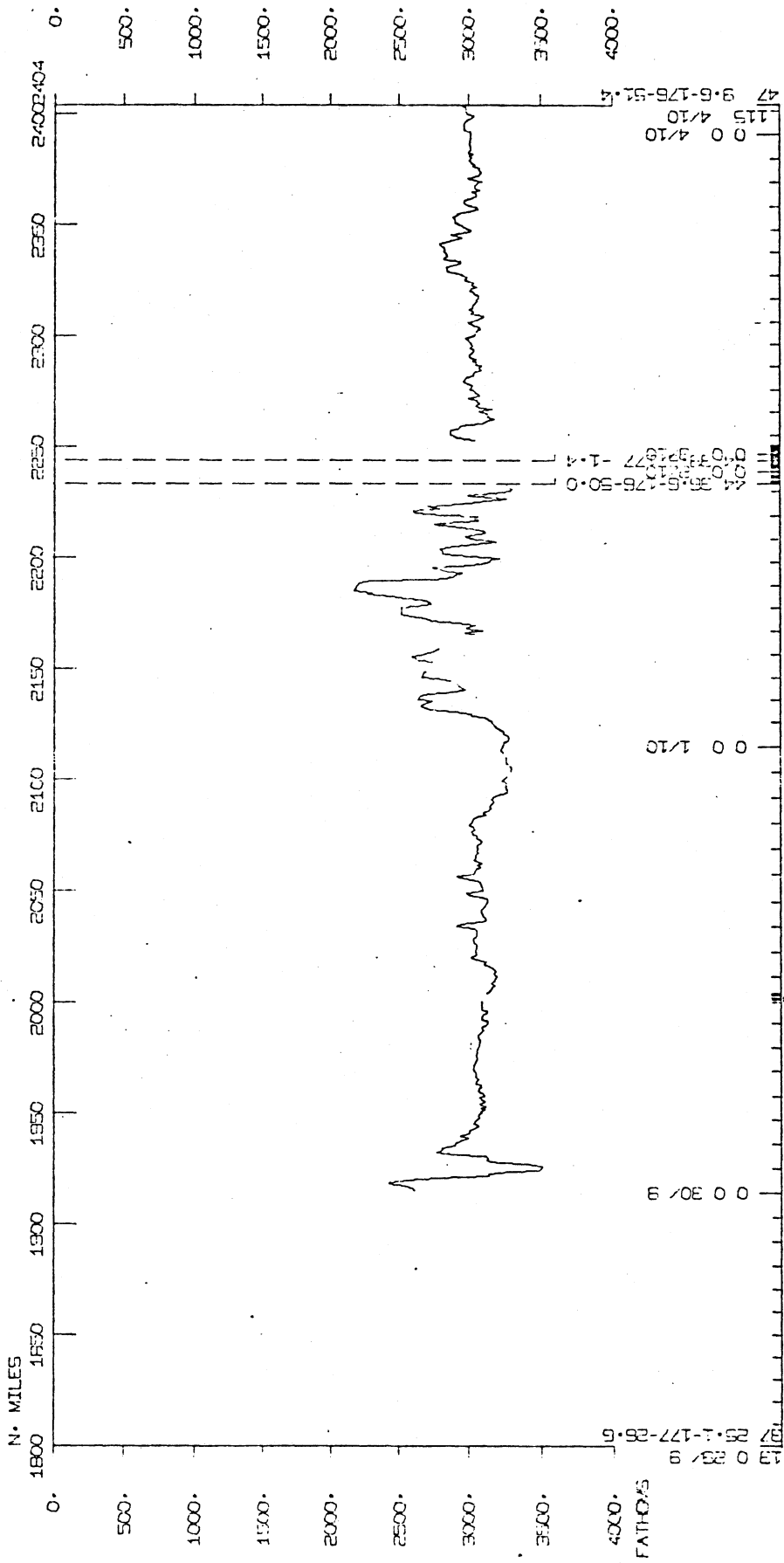
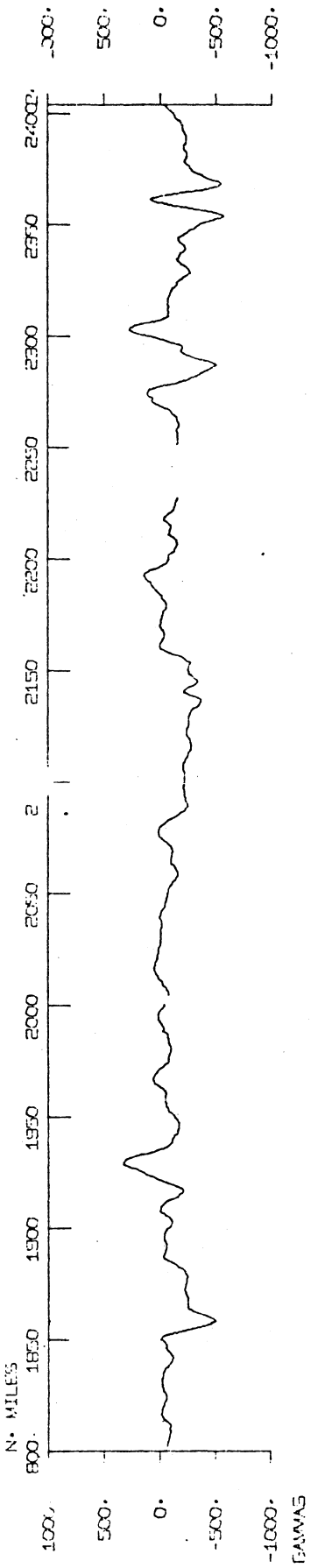
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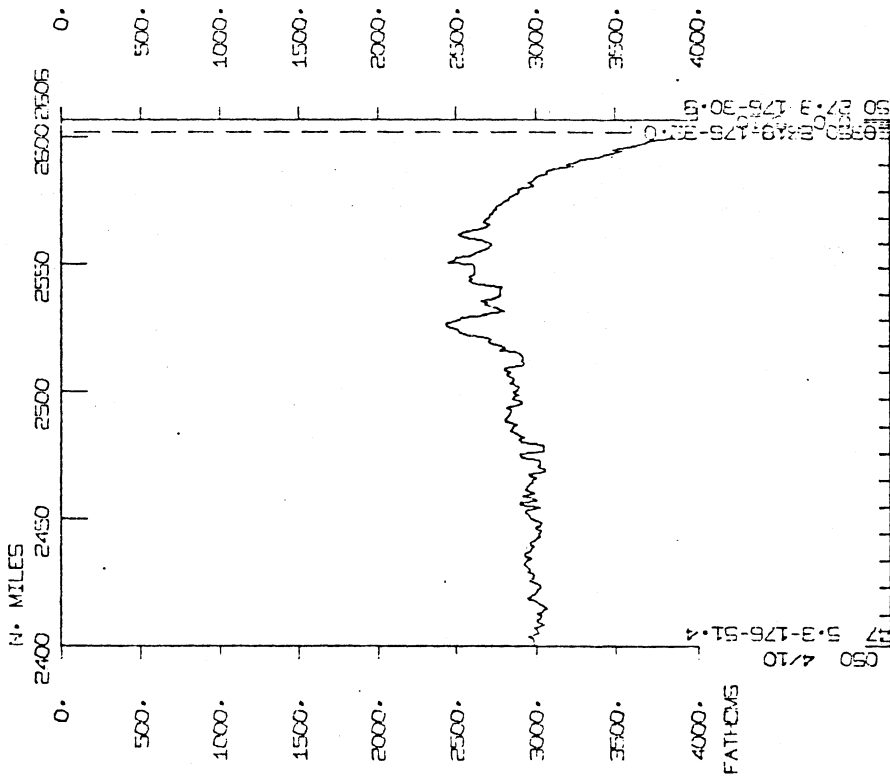
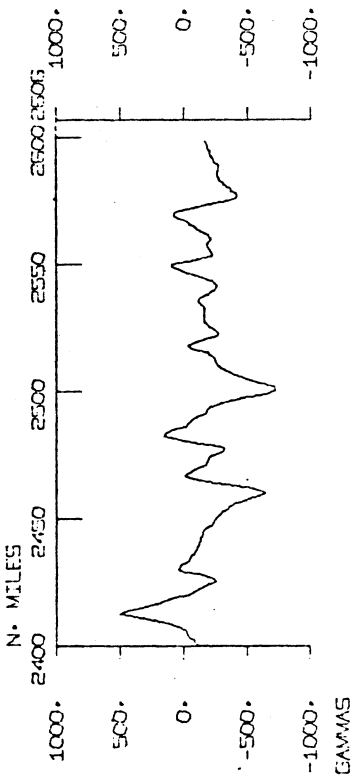
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DECLINATION

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050 4/10
5-3-178-51-A
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GEOSECS EXPEDITION LEG B SAMPLE INDEX

621 16 973 1800 61073 B HONOLULU, HAWAII USA 21 3:00N 157 432W S GECS RMV
 E ADAK, ALASKA, US 50 273N 176 308W S GECS RMV

PERSONNEL

PECS	ROOPER, W.	LDG	GECS RMV
PEPI	EVANS, W.	GUG	GECS RMV
PEPT	FORD, R.	GUG	GECS RMV
PEPT	RAGAN, P.	GUG	GECS RMV
PEPT	SEIFERT, E.	DSU	GECS RMV
PECT	SPIEGELBERG, JOHN	GUG	GECS RMV
PEPT	TUY, C.	GUG	GECS RMV
PEPT	VANZEL, R.	GUG	GECS RMV
PEPT	WALDOLF, R.	GUG	GECS RMV
PEPT	WILSON, R.	GUG	GECS RMV
PEPT	WHITEHOUSE, A.	GUG	GECS RMV
PECT	WYBURN, V.	GUG	GECS RMV
PE	BERLEY, C.	GUG	GECS RMV
PE	FERLY, H.	LDG	GECS RMV
PE	GILBERT, A.	GUG	GECS RMV
PE	GREENLIZ, R.	GUG	GECS RMV
PE	JONES, B.	GUG	GECS RMV
PE	KENT, C.	LDG	GECS RMV
PE	LEVILLE, K.	GUG	GECS RMV
PE	LIDGER, D.	GUG	GECS RMV
PE	PARR, K.	DSU	GECS RMV
PE	ROGER, W.	GUG	GECS RMV
PEXP	SEATON, E.	CAN	GECS RMV
PE	SPIEGELBERG, JUAN	GUG	GECS RMV
PE	WILLIAMS, R.	GUG	GECS RMV

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

OPERATION DATA - CURATOR T.E. CHASE 2ND FLOOR ALHARBURG (EXL.1534)

*** NAVIGATION PLOTS ***

TIME GAT	DATE D.M.Y.	TIME T2 LOC	SAMP CODE	SAMPLE IDENT.	DISP CODE	LAT.	LONG.	CRUISE LEG-SHIP
1230	16	573	NVBP B	BRIDGE PLOT 1	GDC 23	107N 158	31W S	GECS RMV
1238	20	573	NVBP F	BRIDGE PLOT 1	GDC 29	554N 160	51W S	GECS RMV
1238	20	573	NVBP B	BRIDGE PLOT 2	GDC 29	554N 160	51W S	GECS RMV
2005	27	573	NVBP F	BRIDGE PLOT 2	GDC 35	111N 177	150W S	GECS RMV
2005	27	573	NVBP B	BRIDGE PLOT 3	GDC 35	111N 177	150W S	GECS RMV
1800	30	573	NVBP F	BRIDGE PLOT 3	GDC 40	439N 176	575W S	GECS RMV
1800	30	573	NVBP B	BRIDGE PLOT 4	GDC 40	439N 176	575W S	GECS RMV
1246	31	073	NVBP F	BRIDGE PLOT 4	GDC 44	595N 177	19W S	GECS RMV

*** FATHOMETS ***

TIME GAT	DATE D.M.Y.	TIME T2 LOC	SAMP CODE	SAMPLE IDENT.	DISP CODE	LAT.	LONG.	CRUISE LEG-SHIP
926	16	573	DPRT F	GDR 12 KHZ R-01	GDC 21	416N 157	45W S	GECS RMV
1615	18	573	DPRT F	GDR 12 KHZ R-01	GDC 29	578N 159	477W S	GECS RMV
1847	20	573	DPRT B	GDR 12 KHZ R-02	GDC 29	554N 160	53W S	GECS RMV
1850	21	573	DPRT F	GDR 12 KHZ R-02	GDC 30	180N 163	43W S	GECS RMV
1850	21	573	DPRT B	GDR 12 KHZ R-03	GDC 30	316N 164	438W S	GECS RMV
1857	22	573	DPRT F	GDR 12 KHZ R-03	GDC 30	587N 168	262W S	GECS RMV
1214	23	573	DPRT F	GDR 12 KHZ R-04	GDC 31	66N 168	268W S	GECS RMV
1200	25	573	DPRT F	GDR 12 KHZ R-04	GDC 32	9N 176	593W S	GECS RMV
228	27	573	DPRT B	GDR 12 KHZ R-05	GDC 32	35N 177	107W S	GECS RMV
1000	28	573	DPRT F	GDR 12 KHZ R-05	GDC 37	271N 177	170W S	GECS RMV
1241	29	573	DPRT B	GDR 12 KHZ R-06	GDC 37	226N 177	269W S	GECS RMV
1251	30	573	DPRT F	GDR 12 KHZ R-06	GDC 40	432N 176	576W S	GECS RMV
1411	30	573	DPRT B	GDR 12 KHZ R-07	GDC 40	478N 176	584W S	GECS RMV
1115	11	073	DPRT F	GDR 12 KHZ R-07	GDC 44	356N 176	500W S	GECS RMV
1043	31	073	DPRT B	GDR 12 KHZ R-08	GDC 44	386N 177	48W S	GECS RMV
2015	41	073	DPRT F	GDR 12 KHZ R-08	GDC 50	269N 176	320W S	GECS RMV

*** MANUFATURER ***

TIME GRT	DATE D.M.Y.	TIME TZ	SAMP LOC CODE	SAMP IDENT.	DISP CODE	LAT.	LONG.	CRUISE LEG-SHIP
911	16	973	MGR R	MAGNETICS R-01	GDC 21	390N	157 434W	S GECS RMV
1000	28	973	MGR E	MAGNETICS R-01	GDC 37	271N	177 170W	S GECS RMV
1234	29	973	MGR B	MAGNETICS R-02	GDC 37	215N	177 271W	S GECS RMV
2106	41073		MGR F	MAGNETICS R-02	GDC 50	265N	176 340W	S GECS RMV

*** GEOCHEMICAL STATION LARGE VOLUME ***

TIME GRT	DATE D.M.Y.	TIME TZ	SAMP LOC CODE	SAMP IDENT.	DISP CODE	LAT.	LONG.	CRUISE LEG-SHIP
1615	18	973	GCLV R	GEUSECS LV 212	G06 29	570N	159 477W	S GECS RMV
860	20	973	GCLV F	GEUSECS LV 212	G06 29	555N	160 51W	S GECS RMV
217	22	973	GCLV R	GEUSECS LV 213	G06 30	587N	168 262W	S GECS RMV
1155	23	973	GCLV F	GEUSECS LV 213	G06 31	62N	168 233W	S GECS RMV
1200	25	973	GCLV R	GEUSECS LV 214	G06 32	9N	176 593W	S GECS RMV
223	27	973	GCLV F	GEUSECS LV 214	G06 32	82N	177 107W	S GECS RMV
1105	11073		GCLV R	GEUSECS LV 217	G06 44	347N	176 502W	S GECS RMV
1043	31073		GCLV F	GEUSECS LV 217	G06 46	385N	177 48W	S GECS RMV
2015	41073		GCLV R	GEUSECS LV 218	G06 50	265N	176 320W	S GECS RMV
800	61073		GCLV F	GEUSECS LV 218	G06 50	273N	176 308W	S GECS RMV

*** GEOCHEMICAL STATION SMALL VOLUME ***

TIME GRT	DATE D.M.Y.	TIME TZ	SAMP LOC CODE	SAMP IDENT.	DISP CODE	LAT.	LONG.	CRUISE LEG-SHIP
66	17	973	GCSV R	GEUSECS SV 211	G06 24	166N	158 188W	S GECS RMV
232	17	973	GCSV F	GEUSECS SV 211	G06 24	166N	158 201W	S GECS RMV
1017	28	973	GCSV R	GEUSECS SV 215	G06 37	290N	177 172W	S GECS RMV
1234	29	973	GCSV F	GEUSECS SV 215	G06 37	215N	177 271W	S GECS RMV
751	30	973	GCSV R	GEUSECS SV 216	G06 40	452N	176 576W	S GECS RMV
1411	30	973	GCSV F	GEUSECS SV 216	G06 40	478N	176 584W	S GECS RMV

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

*** KATHYTHERMOCROGRAPH ***

TIME	DATE	TIME	TZ	SAMP	SAMPLE IDENT.	DISP	LAT.	LONG.	CRUISE
GMT	D.P.	Y.	LOC	LUC	CODE	LONG.	LEG-SHIP		
0 17	573			RTX	NO. SAMPLES = 6	BTS 24	24N	158 165W	S GFCS RMV
0 18	573			RTX	NO. SAMPLES = 3	BTS 27	343N	159 120W	S GFCS RMV
0 20	573			RTX	NO. SAMPLES = 3	BTS 29	593N	160 4W	S GFCS RMV
0 21	573			RTX	NO. SAMPLES = 4	BTS 30	170N	162 583W	S GFCS RMV
0 22	573			RTX	NO. SAMPLES = 1	BTS 30	531N	167 466W	S GFCS RMV
0 23	573			RTX	NO. SAMPLES = 2	BTS 31	22N	168 265W	S GFCS RMV
0 24	573			RTX	NO. SAMPLES = 3	BTS 31	197N	170 344W	S GFCS RMV
0 27	573			RTX	NO. SAMPLES = 3	BTS 32	66N	177 117W	S GFCS RMV
0 28	573			RTX	NO. SAMPLES = 2	BTS 35	510N	177 149W	S GFCS RMV
0 29	573			RTX	NO. SAMPLES = 1	BTS 37	267N	177 208W	S GFCS RMV
0 30	573			RTX	NO. SAMPLES = 3	BTS 39	184N	177 101W	S GFCS RMV
0 11073				RTX	NO. SAMPLES = 1	BTS 42	386N	176 553W	S GFCS RMV
0 31073				RTX	NO. SAMPLES = 1	BTS 44	401N	177 10W	S GFCS RMV
0 41073				RTX	NO. SAMPLES = 3	BTS 46	563N	176 524W	S GFCS RMV

END SAMPLE INDEX