

DEEPSONDE EXPEDITION

LEG 1

R/V THOMAS WASHINGTON

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

San Diego, Calif. (10 January 1976)

to

San Diego, Calif. (1 February 1976)

Chief Scientist - L. Dorman

Resident Marine Tech - W. Keith

Post-Cruise Processing by - S. Smith,

U. Albright, G. Psaropoulos, R. Lingley

Prepared By

Underway Data Processing Group

S.I.O. Geological Data Center

Scripps Institution of Oceanography

La Jolla, California

February 26, 1976

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

Contents:

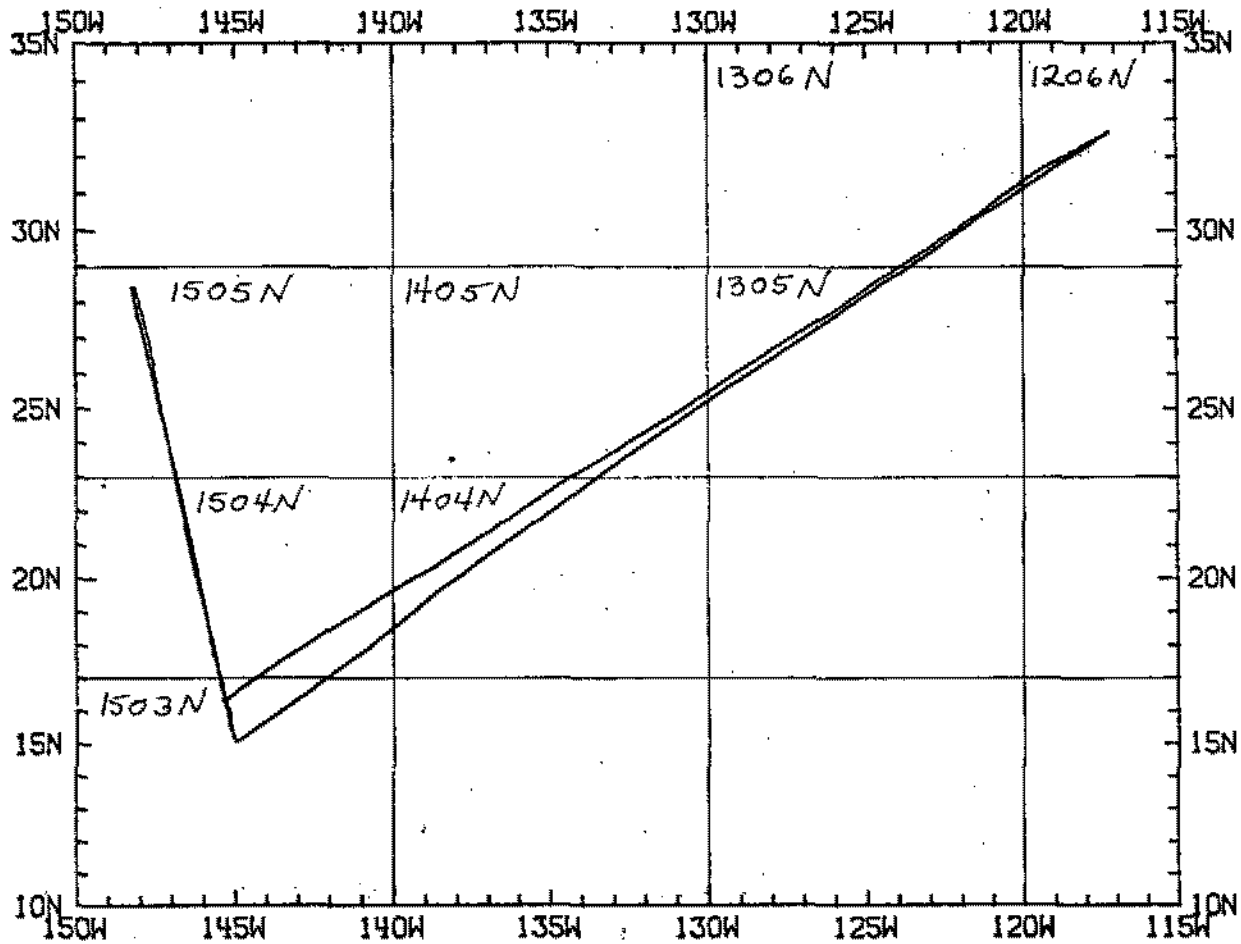
Index Chart - gives track of cruise leg and boundaries of depth compilation plots (see below).

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 92093 Phone: (714) 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). 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
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DEEPSONDE EXPEDITION

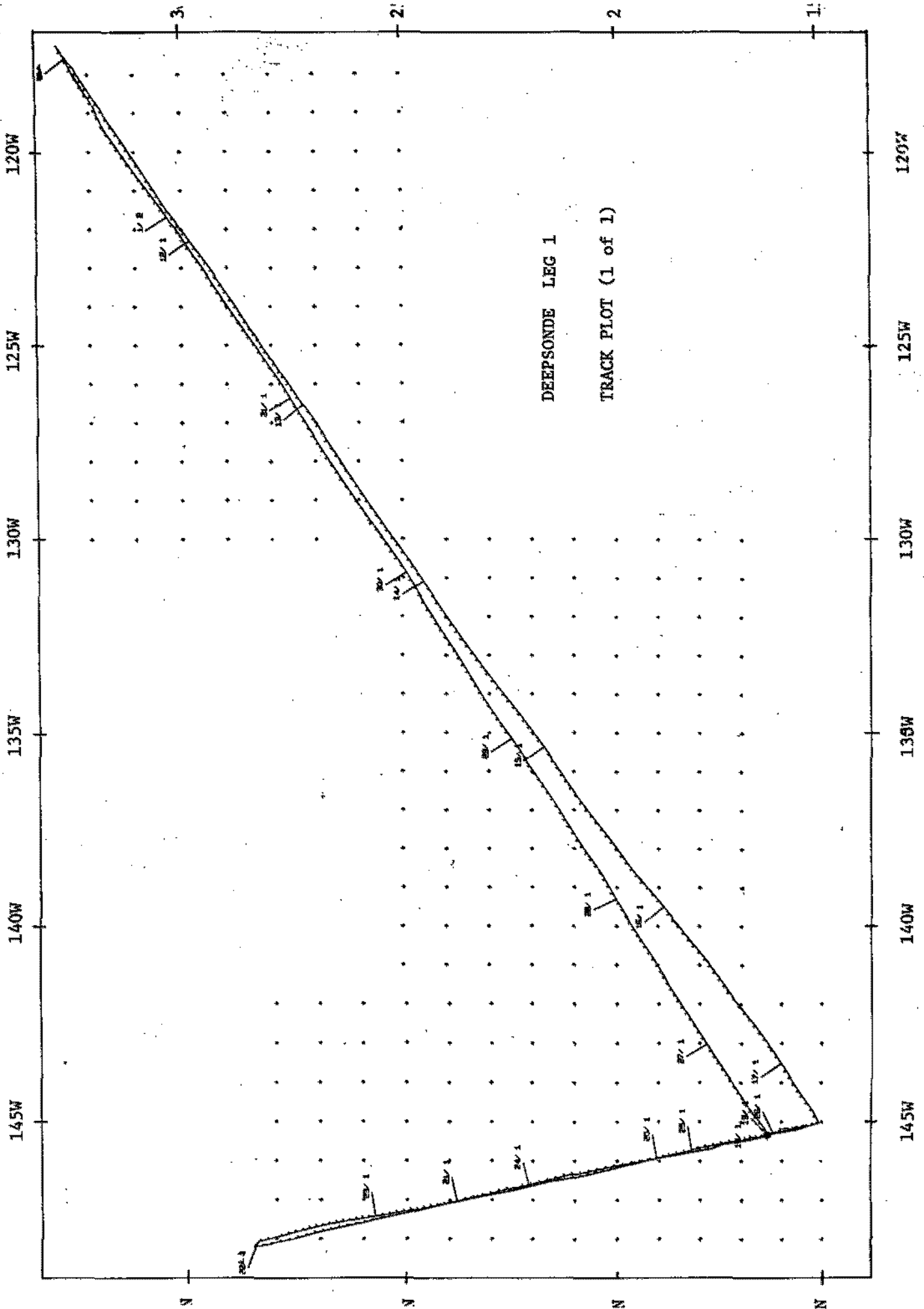
LEG 1

Chief Scientist - Leroy Dorman

Ports: San Diego - San Diego (10 Jan. - 2 Feb. 1976)

TOTAL MILEAGE

- 1) Cruise - 5482 miles
- 2) Bathymetry - 5427 miles
- 3) Magnetics - 4507 miles
- 4) Seismic Reflection - 3432 miles



DEEPSUNDE EXPEDITION LEG 1

2200 10 176
2200 1 276

LGPT B SAN DIEGO, CA.
LGPT E SAN DIEGO, CA.

32 405N 117 136W F DPSNO1WT
32 405N 117 136W F DPSNO1WT

PERSONNEL

PECS	DORMAN, L.M.	GRD	DPSNO1WT
PERT	KEITH, W.E.	MTG	DPSNO1WT
PEAT	HATTEY, R.K.	MTG	DPSNO1WT
PECT	CHARTERS, J.S.	MTG	DPSNO1WT
PES	GARMANY, J.D.	SIO	DPSNO1WT
PE	HOLLINSHEAD, C.B.	NES	DPSNO1WT
PE	ILLIG, G.L.	NES	DPSNO1WT
PE	JORDAN, T.H.	IGP	DPSNO1WT
PE	JORDAN, R.	NES	DPSNO1WT
PE	NEWHOUSE, D.A.	MTG	DPSNO1WT
PES	ORCUTT, J.A.	SIO	DPSNO1WT
PES	ROSENDAHL, B.R.	SIO	DPSNO1WT
PE	SCHNEIDER, J.F.	NES	DPSNO1WT
PES	SIPKIN, S.A.	SIO	DPSNO1WT
PES	SPUDICH, P.A.	SIO	DPSNO1WT
PE	WILLOUGHBY, D.F.	IGP	DPSNO1WT

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

*** NEW CODE - SROB - SEISMIC REFRACTION DATA RECORDED ON OCEAN BOTTOM SEISMO.

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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UNDERWAY DATA - CURATOR T.E. CHASE (EXT.2182)

*** LOG BOOKS ***

130	11	176		LBWU B	UNDERWAY WATCH LOG	GDC 32	174N	117 509W	S DPSN01WT
2130	1	276		LBWU E	UNDERWAY WATCH LOG	GDC 32	324N	117 250W	S DPSN01WT

*** NAVIGATION PLOTS ***

2356	10	176		NVBP B	BRIDGE PLOT 01	GDC 32	289N	117 322W	S DPSN01WT
400	12	176		NVBP E	BRIDGE PLOT 01	GDC 29	208N	123 21W	S DPSN01WT
554	12	176		NVBP B	BRIDGE PLOT 02	GDC 29	81N	123 242W	S DPSN01WT
854	14	176		NVBP E	BRIDGE PLOT 02	GDC 23	312N	132 434W	S DPSN01WT
854	14	176		NVBP B	BRIDGE PLOT 03	GDC 23	312N	132 434W	S DPSN01WT
900	16	176		NVBP E	BRIDGE PLOT 03	GDC 17	448N	141 5W	S DPSN01WT
912	16	176		NVBP B	BRIDGE PLOT 04	GDC 17	434N	141 26W	S DPSN01WT
1700	19	176		NVBP E	BRIDGE PLOT 04	GDC 17	375N	145 396W	S DPSN01WT
1606	19	176		NVBP B	BRIDGE PLOT 05	GDC 17	280N	145 362W	S DPSN01WT
2000	20	176		NVBP E	BRIDGE PLOT 05	GDC 23	20N	146 507W	S DPSN01WT
2016	20	176		NVBP B	BRIDGE PLOT 06	GDC 23	52N	146 516W	S DPSN01WT
1026	23	176		NVBP E	BRIDGE PLOT 06	GDC 24	38N	147 56W	S DPSN01WT
1123	23	176		NVBP B	BRIDGE PLOT 07	GDC 23	549N	147 39W	S DPSN01WT
16	25	176		NVBP E	BRIDGE PLOT 07	GDC 18	110N	145 430W	S DPSN01WT
16	25	176		NVBP B	BRIDGE PLOT 08	GDC 18	110N	145 430W	S DPSN01WT
2104	26	176		NVBP E	BRIDGE PLOT 08	GDC 17	327N	143 294W	S DPSN01WT
2104	26	176		NVBP B	BRIDGE PLOT 09	GDC 17	327N	143 294W	S DPSN01WT
500	29	176		NVBP E	BRIDGE PLOT 09	GDC 23	4N	134 187W	S DPSN01WT
438	29	176		NVBP B	BRIDGE PLOT 10	GDC 22	582N	134 225W	S DPSN01WT
1210	31	176		NVBP E	BRIDGE PLOT 10	GDC 28	583N	123 584W	S DPSN01WT
1200	31	176		NVBP B	BRIDGE PLOT 11	GDC 28	571N	124 3W	S DPSN01WT
2000	1	276		NVBP E	BRIDGE PLOT 11	GDC 32	274N	117 383W	S DPSN01WT

TIME GMT	DATE D.M.Y.	TIME LOC	TZ LOC	SAMP CODE	SAMPLE IDENT.	DISP CODE	LAT.	LONG.	CRUISE LEG-SHIP
***FATHOGRAMS ***									
200	11	176		OPRT B	GDR 12KHZ R-01	GDC 32	146N	117 565W	S DPSNO1WT
1452	11	176		OPRT E	GDR 12KHZ R-01	GDC 30	501N	120 296W	S DPSNO1WT
1456	11	176		DPRT B	GDR 12KHZ R-02	GDC 30	497N	120 304W	S DPSNO1WT
629	13	176		DPRT E	GDR 12KHZ R-02	GDC 26	335N	127 440W	S DPSNO1WT
700	13	176		DPRT B	GDR 12KHZ R-03	GDC 26	301N	127 501W	S DPSNO1WT
1836	15	176		DPRT E	GDR 12KHZ R-03	GDC 19	347N	138 370W	S DPSNO1WT
1913	15	176		DPRT B	GDR 12KHZ R-04	GDC 19	302N	138 428W	S DPSNO1WT
2306	17	176		DPRT E	GDR 12KHZ R-04	GDC 16	226N	145 163W	S DPSNO1WT
2308	17	176		DPRT B	GDR 12KHZ R-05	GDC 16	227N	145 161W	S DPSNO1WT
1237	21	176		DPRT E	GDR 12KHZ R-05	GDC 26	180N	147 397W	S DPSNO1WT
1241	21	176		DPRT B	GDR 12KHZ R-06	GDC 26	188N	147 399W	S DPSNO1WT
737	22	176		DPRT E	GDR 12KHZ R-06	GDC 28	154N	148 19W	S DPSNO1WT
753	22	176		DPRT B	GDR 12KHZ R-07	GDC 28	129N	148 11W	S DPSNO1WT
617	24	176		DPRT E	GDR 12KHZ R-07	GDC 21	205N	146 294W	S DPSNO1WT
621	24	176		DPRT B	GDR 12KHZ R-08	GDC 21	201N	146 294W	S DPSNO1WT
2354	26	176		DPRT E	GDR 12KHZ R-08	GDC 17	488N	143 23W	S DPSNO1WT
0	27	176		DPRT B	GDR 12KHZ R-09	GDC 17	494N	143 13W	S DPSNO1WT
1631	29	176		DPRT E	GDR 12KHZ R-09	GDC 24	95N	132 158W	S DPSNO1WT
1641	29	176		DPRT B	GDR 12KHZ R-10	GDC 24	105N	132 140W	S DPSNO1WT
2212	31	176		DPRT E	GDR 12KHZ R-10	GDC 30	53N	122 5W	S DPSNO1WT
2217	31	176		DPRT B	GDR 12KHZ R-11	GDC 30	59N	121 596W	S DPSNO1WT
2130	1	276		DPRT E	GDR 12KHZ R-11	GDC 32	324N	117 250W	S DPSNO1WT
200	11	176		DPR3 B	GDR 3.5KHZ R-01	GDC 32	146N	117 565W	S DPSNO1WT
0	13	176		DPR3 E	GDR 3.5KHZ R-01	GDC 27	174N	126 313W	S DPSNO1WT
110	13	176		DPR3 B	GDR 3.5KHZ R-02	GDC 27	86N	126 431W	S DPSNO1WT
352	14	176		DPR3 E	GDR 3.5KHZ R-02	GDC 24	61N	131 474W	S DPSNO1WT
405	14	176		DPR3 B	GDR 3.5KHZ R-03	GDC 24	46N	131 498W	S DPSNO1WT
2240	16	176		DPR3 E	GDR 3.5KHZ R-03	GDC 16	99N	143 165W	S DPSNO1WT
2252	16	176		DPR3 B	GDR 3.5KHZ R-04	GDC 16	86N	143 187W	S DPSNO1WT
420	18	176		DPR3 E	GDR 3.5KHZ R-04	GDC 16	201N	145 142W	S DPSNO1WT
1919	18	176		DPR3 B	GDR 3.5KHZ R-05	GDC 16	194N	145 193W	S DPSNO1WT
10	20	176		DPR3 E	GDR 3.5KHZ R-05	GDC 19	54N	145 570W	S DPSNO1WT

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*** FATHOGRAMS *** (CONT.)

15	20	176		DPR3 B	GDR 3.5KHZ R-06	GDC 19	64N	145 572W	S DPSNO1WT
43	22	176		DPR3 E	GDR 3.5KHZ R-06	GDC 28	279N	148 113W	S DPSNO1WT
626	22	176		DPR3 B	GDR 3.5KHZ R-07	GDC 28	241N	148 39W	S DPSNO1WT
105	25	176		DPR3 E	GDR 3.5KHZ R-07	GDC 18	20N	145 411W	S DPSNO1WT
115	25	176		DPR3 B	GDR 3.5KHZ R-08	GDC 18	2N	145 407W	S DPSNO1WT
1235	27	176		DPR3 E	GDR 3.5KHZ R-08	GDC 18	591N	141 44W	S DPSNO1WT
1237	27	176		DPR3 B	GDR 3.5KHZ R-09	GDC 18	592N	141 41W	S DPSNO1WT
2222	29	176		DPR3 E	GDR 3.5KHZ R-09	GDC 24	455N	131 112W	S DPSNO1WT
2226	29	176		DPR3 B	GDR 3.5KHZ R-10	GDC 24	459N	131 105W	S DPSNO1WT
1857	31	176		DPR3 E	GDR 3.5KHZ R-10	GDC 29	434N	122 405W	S DPSNO1WT
1859	31	176		DPR3 B	GDR 3.5KHZ R-11	GDC 29	436N	122 402W	S DPSNO1WT
2130	1	276		DPR3 E	GDR 3.5KHZ R-11	GDC 32	324N	117 250W	S DPSNO1WT

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

2140	10	176		GVR B	GRAVIMETER DATA	LMD 32	405N	117 136W	S DPSNO1WT
2230	1	276		GVR E	GRAVIMETER DATA	LMD 32	405N	117 136W	S DPSNO1WT

MAGNETOMETER

200	11	176		MGR B	MAGNETICS R-01	GDC 32	146N	117 565W	S DPSNO1WT
26	16	176		MGR E	MAGNETICS R-01	GDC 18	491N	139 342W	S DPSNO1WT
31	16	176		MGR B	MAGNETICS R-02	GDC 18	485N	139 351W	S DPSNO1WT
442	27	176		MGR E	MAGNETICS R-02	GDC 18	169N	142 160W	S DPSNO1WT
449	27	176		MGR B	MAGNETICS R-03	GDC 18	176N	142 149W	S DPSNO1WT
2027	1	276		MGR E	MAGNETICS R-03	GDC 32	298N	117 322W	S DPSNO1WT

*** SEISMIC REFLECTION PROFILES ***

430	13	176		SPRF B	AIRGUN (RF) R-01	GDC 26	469N	127 208W	S DPSNO1WT
1831	31	176		SPRF E	AIRGUN (RF) R-01	GDC 29	420N	122 425W	S DPSNO1WT
430	13	176		SPRS B	AIRGUN (RS) R-01	GDC 26	469N	127 208W	S DPSNO1WT
1831	31	176		SPRS E	AIRGUN (RS) R-01	GDC 29	420N	122 425W	S DPSNO1WT

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SEISMIC REFRACTION

648	24	176		SKUR B DEEPSONDE 1 (OBS)	LMD 21	166N	146 288W	S	DPSNO1WT
1930	25	176		SKUR E DEEPSONDE 1 (OBS)	LMD 15	227N	145 62W	S	DPSNO1WT

*** OCEAN BOTTOM SEISMOGRAPH *** W.A. PROTHERO (EXT. 2875)

611	18	176		SROB B OBS (INEZ)	LMD 16	172N	145 189W	S	DPSNO1WT
45	26	176		SROB E OBS (INEZ)	LMD 16	182N	145 195W	S	DPSNO1WT
707	18	176		SROB B OBS (GWEN)	LMD 16	180N	145 186W	S	DPSNO1WT
350	26	176		SROB E OBS (GWEN)	LMD 16	192N	145 169W	S	DPSNO1WT
2115	18	176		SROB B OBS (DOE)	LMD 16	188N	145 189W	S	DPSNO1WT
750	26	176		SROB E OBS (DOE)	LMD 16	195N	145 189W	S	DPSNO1WT

*** SONOBUOY DROP *** SEISMIC REFRACTION MONITORING

205	25	176		SRUR SONOBUOY A1	LMD 17	510N	145 386W	S	DPSNO1WT
233	25	176		SKUR SONOBUOY A2	LMD 17	458N	145 376W	S	DPSNO1WT
257	25	176		SKUR SONOBUOY A3	LMD 17	412N	145 367W	S	DPSNO1WT
317	25	176		SKUR SONOBUOY A4	LMD 17	374N	145 359W	S	DPSNO1WT
333	25	176		SKUR SONOBUOY A5	LMD 17	343N	145 353W	S	DPSNO1WT
346	25	176		SKUR SONOBUOY A6	LMD 17	319N	145 348W	S	DPSNO1WT
352	25	176		SKUR SONOBUOY A7	LMD 17	307N	145 346W	S	DPSNO1WT
357	25	176		SKUR SONOBUOY A8	LMD 17	298N	145 344W	S	DPSNO1WT
421	25	176		SKUR SONOBUOY A9	LMD 17	251N	145 335W	S	DPSNO1WT
626	25	176		SKUR SONOBUOY B1	LMD 17	9N	145 283W	S	DPSNO1WT
629	25	176		SKUR SONOBUOY B2	LMD 17	3N	145 282W	S	DPSNO1WT
632	25	176		SKUR SONOBUOY B3	LMD 16	597N	145 281W	S	DPSNO1WT
634	25	176		SKUR SONOBUOY B4	LMD 16	593N	145 280W	S	DPSNO1WT
638	25	176		SKUR SONOBUOY B5	LMD 16	585N	145 278W	S	DPSNO1WT
641	25	176		SRUR SONOBUOY B6	LMD 16	579N	145 276W	S	DPSNO1WT
644	25	176		SKUR SONOBUOY B7	LMD 16	573N	145 275W	S	DPSNO1WT
647	25	176		SKUR SONOBUOY B8	LMD 16	567N	145 273W	S	DPSNO1WT
700	25	176		SKUR SONOBUOY B9	LMD 16	541N	145 267W	S	DPSNO1WT
1027	25	176		SKUR SONOBUOY C1	LMD 16	267N	145 211W	S	DPSNO1WT
1029	25	176		SKUR SONOBUOY C2	LMD 16	265N	145 211W	S	DPSNO1WT
1031	25	176		SKUR SONOBUOY C3	LMD 16	262N	145 210W	S	DPSNO1WT
1033	25	176		SKUR SONOBUOY C4	LMD 16	259N	145 209W	S	DPSNO1WT
1037	25	176		SKUR SONOBUOY C5	LMD 16	254N	145 208W	S	DPSNO1WT
1039	25	176		SKUR SONOBUOY C6	LMD 16	251N	145 207W	S	DPSNO1WT
1041	25	176		SKUR SONOBUOY C7	LMD 16	248N	145 207W	S	DPSNO1WT
1043	25	176		SKUR SONOBUOY C8	LMD 16	245N	145 206W	S	DPSNO1WT
1046	25	176		SKUR SONOBUOY C9	LMD 16	241N	145 205W	S	DPSNO1WT
1345	25	176		SKUR SONOBUOY D1	LMD 16	39N	145 159W	S	DPSNO1WT
1413	25	176		SKUR SONOBUOY D2	LMD 16	8N	145 152W	S	DPSNO1WT
1437	25	176		SKUR SONOBUOY D3	LMD 15	582N	145 146W	S	DPSNO1WT
1457	25	176		SKUR SONOBUOY D4	LMD 15	561N	145 141W	S	DPSNO1WT
1513	25	176		SKUR SONOBUOY D5	LMD 15	543N	145 137W	S	DPSNO1WT
1526	25	176		SKUR SONOBUOY D6	LMD 15	529N	145 133W	S	DPSNO1WT
1533	25	176		SKUR SONOBUOY D7	LMD 15	522N	145 131W	S	DPSNO1WT
1611	25	176		SKUR SONOBUOY D8	LMD 15	481N	145 122W	S	DPSNO1WT

TIME GMT	DATE D.M.Y.	TIME TZ LUC	SAMP LUC	SAMP CODE	SAMPLE IDENT.	DISP CODE	LAT.	LONG.	CRUISE LFG-SHIP
*** BATHYTHERMOGRAPH ***					CURATOR CAROL CONWAY (EXT. 2087)				
1853	12	176		BTX	XBT 01	MTG 27	492N	125 382W	S DPSN01WT
30	13	176		BTX	XBT 02	MTG 27	136N	126 355W	S DPSN01WT
1753	13	176		BTX	XBT 03	MTG 25	150N	129 562W	S DPSN01WT
2337	13	176		BTX	XBT 04	MTG 24	346N	131 6W	S DPSN01WT
1833	14	176		BTX	XBT 05	MTG 22	216N	134 256W	S DPSN01WT
0	15	176		BTX	XBT 06	MTG 21	426N	135 219W	S DPSN01WT
1817	15	176		BTX	XBT 07	MTG 19	369N	138 338W	S DPSN01WT
40	16	176		BTX	XBT 08	MTG 18	473N	139 366W	S DPSN01WT
1804	16	176		BTX	XBT 09	MTG 16	391N	142 332W	S DPSN01WT
15	17	176		BTX	XBT 10	MTG 15	593N	143 331W	S DPSN01WT
9	18	176		BTX	XBT 11	MTG 16	206N	145 227W	S DPSN01WT
1845	18	176		BTX	XBT 12	MTG 16	187N	145 195W	S DPSN01WT
1820	19	176		BTX	XBT 13	MTG 17	526N	145 435W	S DPSN01WT
603	20	176		BTX	XBT 14	MTG 20	168N	146 112W	S DPSN01WT
12	21	176		BTX	XBT 15	MTG 23	520N	147 29W	S DPSN01WT
1757	21	176		BTX	XBT 16	MTG 27	186N	147 550W	S DPSN01WT
1817	23	176		BTX	XBT 17	MTG 22	479N	146 499W	S DPSN01WT
2344	25	176		BTX	XBT 18	MTG 16	94N	145 166W	S DPSN01WT
1850	26	176		BTX	XBT 19	MTG 17	195N	143 498W	S DPSN01WT
20	27	176		BTX	XBT 20	MTG 17	512N	142 580W	S DPSN01WT
2352	27	176		BTX	XBT 21	MTG 20	10N	139 190W	S DPSN01WT
1751	28	176		BTX	XBT 22	MTG 21	487N	136 140W	S DPSN01WT
53	29	176		BTX	XBT 23	MTG 22	348N	135 2W	S DPSN01WT
1814	29	176		BTX	XBT 24	MTG 24	199N	131 570W	S DPSN01WT
2347	29	176		BTX	XBT 25	MTG 24	539N	130 551W	S DPSN01WT
1818	31	176		BTX	XBT 26	MTG 29	404N	122 451W	S DPSN01WT
51	1	276		BTX	XBT 27	MTG 30	233N	121 301W	S DPSN01WT