

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

PLUME EXPEDITION

LEG 7

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R/V Thomas Washington

(Issued September 1990)

La Guaira, Venezuela (5 June 1990)  
to  
La Guaira, Venezuela (26 June 1990)

Co-Chief Scientists:

Jonathan Overpeck (Lamont-Doherty Geological Observatory)

Larry Peterson (University of Miami)

Resident Marine Technician - Geoff Hargreaves

Post-Cruise Processing and Report Preparation by the  
Geological Data Center, Scripps Institution of Oceanography  
La Jolla, California 92093

Data Collection and Processing Funded by:  
NSF Grant Number OCE90-00048

NOTE: This is an index of underway geophysical data edited and processed after the completion of the cruise leg and is intended primarily for informal use within the institution. This document is not to be reproduced or distributed outside Scripps without prior approval of the chief scientist or the Geological Data Center, Scripps Institution of Oceanography, La Jolla, California 92093.

GDC Cruise I.D.# 246

## INFORMAL REPORT AND INDEX OF NAVIGATION AND UNDERWAY GEOPHYSICAL DATA

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Processed by the Geological Data Center  
Scripps Institution of Oceanography

### Contents:

**Index Chart** - gives track of cruise leg, dates, ports, and mileage of each type of data collected.

**Track Charts** - annotated with dates and hour ticks.

**Profiles** - depth, magnetic anomaly and gravity free air anomaly vs. distance. Sections of track having subbottom profile (airgun or watergun) records have a wide black line along the bottom of the profile. Sections having Sea Beam are indicated by a narrow black line.

**Sample Index** - list of beginning and end times and positions of all underway records as well as all other samples and measurements (geology, biology, physical oceanography, etc.) collected on the cruise leg.

**NOTE:** One or more of the underway data types may not be collected on a given cruise leg.

For information on the availability and reproduction costs of data in the following forms, contact S. M. Smith, Curator, Geological Data Center, Scripps Institution of Oceanography, La Jolla, CA 92093-0223. Phone (619)534-2752. Fax (619)534-5306.

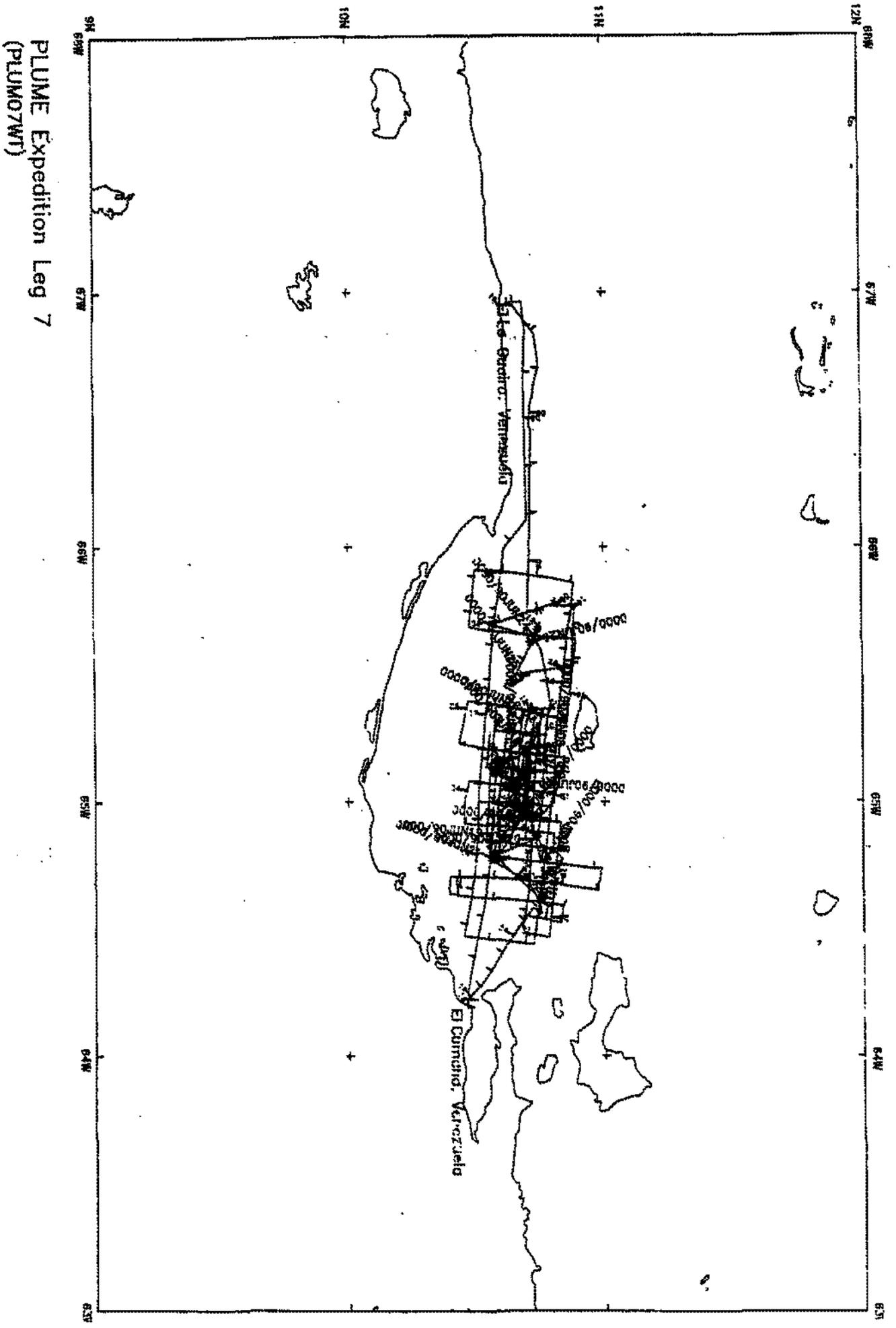
1. Navigation listing with times and positions of course and speed changes, fixes and drift velocity.
2. Depth compilation plots - compilation plots at the traditional scale of 4in/degree longitude (1:1,000,000) are no longer produced for Sea Beam cruises. Custom plots may be requested of vertical beam (2&2/3 degree beam width) depths retrieved at one minute intervals of ship time.
3. Plots of depths, magnetics or gravity profiles along track - custom plots at various map and profile scales on Mercator projection may be requested.
4. Separate time series files of navigation, depth, gravity and magnetics as well as these data merged in the MGD77 Exchange format on magnetic tape.
5. Microfilm or Xerox copies of:
  - a. Echosounder records - 12 and 3.5 kHz frequency
  - b. Subbottom profiler records
  - c. Magnetometer records
  - d. Underway data log book

## SIO Sea Beam Data Information

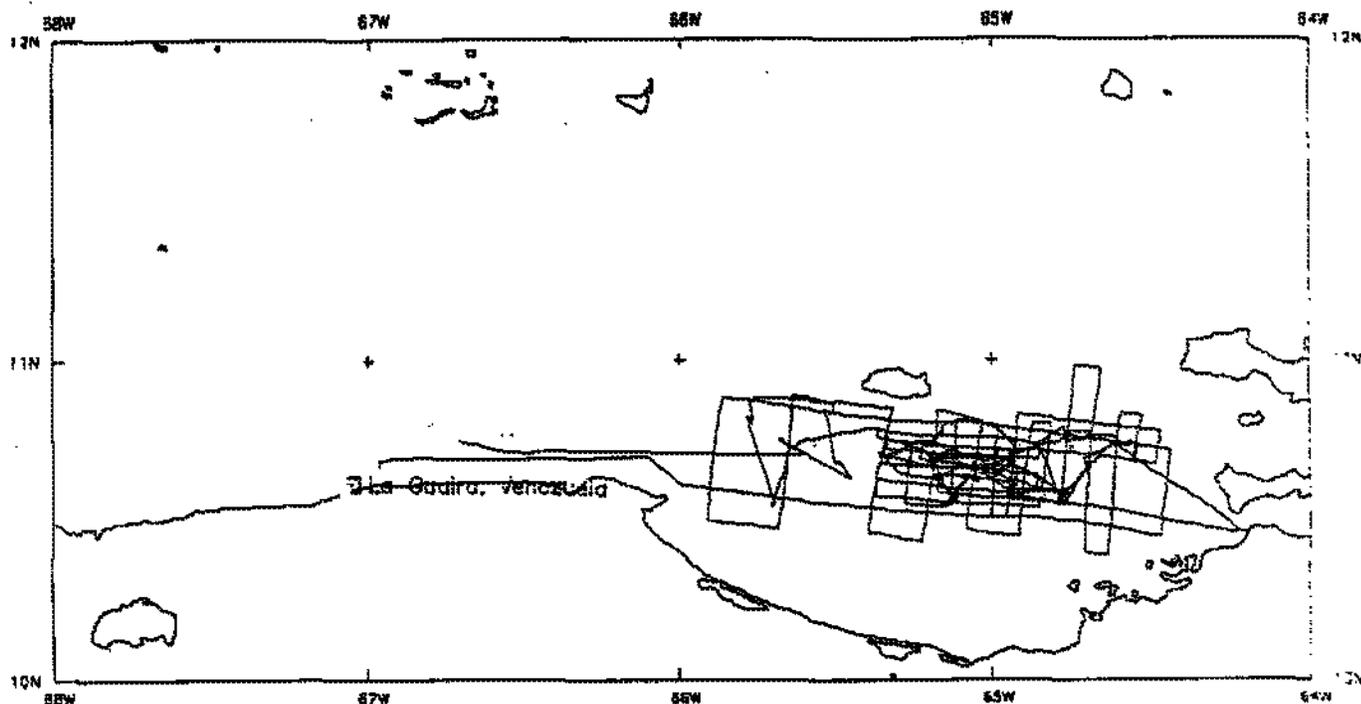
The following forms are available, subject to approval of the cruise leg chief scientist:

- 1) Archive copy of contour swath books generated in real time on board ship available for inspection at the data center.
- 2) Microfilm (35mm flowfilm) containing swath books plus, for some cruises, the Sea Beam monitor record and navigation list.
- 3) Sea Beam merged tapes - Sea Beam data merged with navigation. (Navigation is edited to the extent that DR courses and speeds are edited and poor fixes are removed after inspection of drift vectors between fix pairs. No editing is done on the basis of adjusting to overlapping Sea Beam swaths.)
- 4) Archive contour plots - 16"/degree chart scale, with contour interval nominally 50m, are generated for all transit lines. Some survey areas are plotted at appropriate scales as well. Available for inspection at data center; additional copies may be generated from plot files stored on tape.
- 5) Custom generated plots of Sea Beam swaths on Mercator projection in four colors at variable plot scales and contour intervals. There are provisions to adjust positions of individual track lines and to edit out beams (bad data or overlapping data on inside of turns).

Revised October 1986



PLUME Expedition Leg 7  
(PLUMOTWT)



**PLUME EXPEDITION LEG 7**

**CO-CHIEF SCIENTISTS:**

Jonathan Overpeck (Lamont-Doherty Geological Observatory)

Larry Peterson (University of Miami)

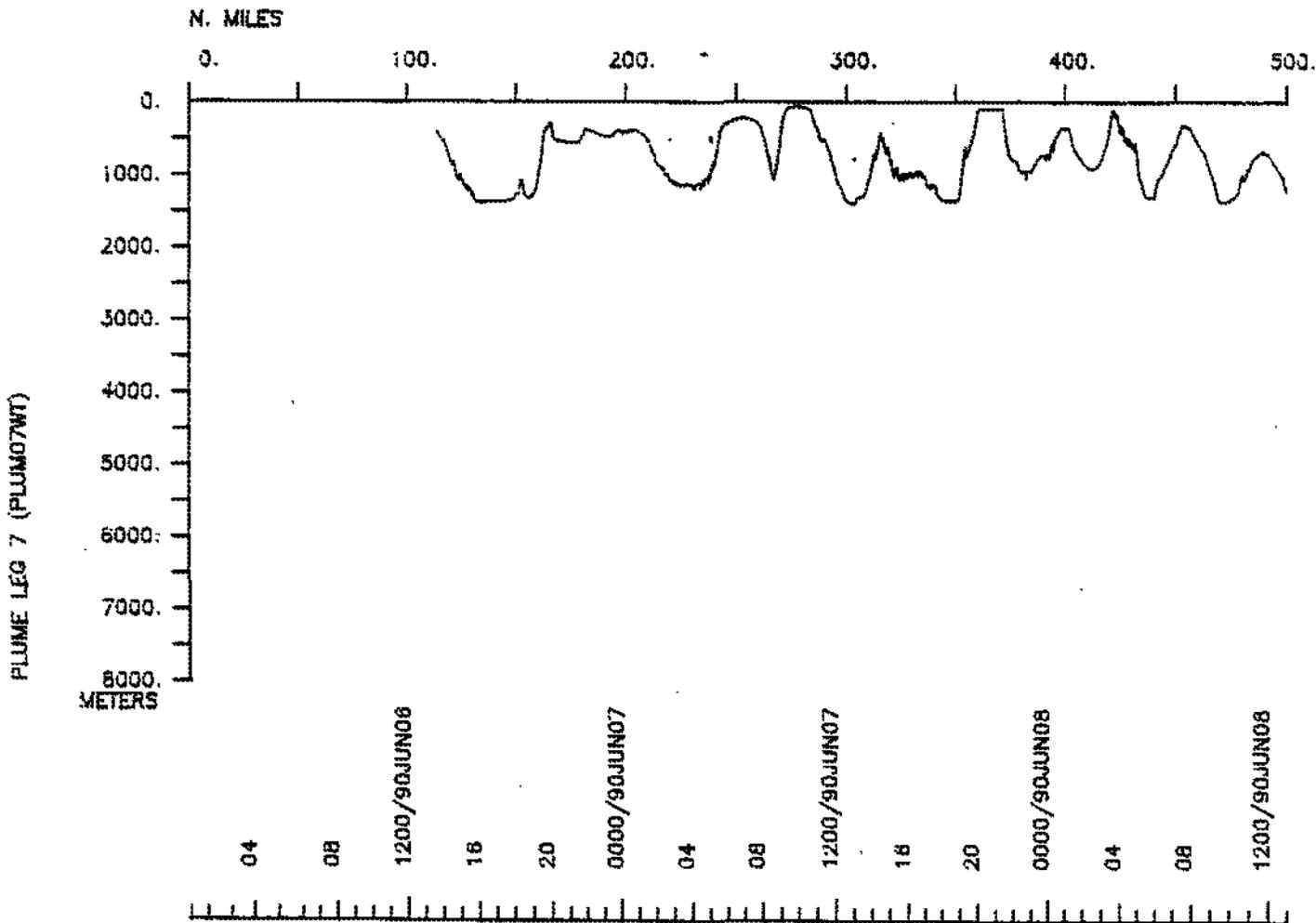
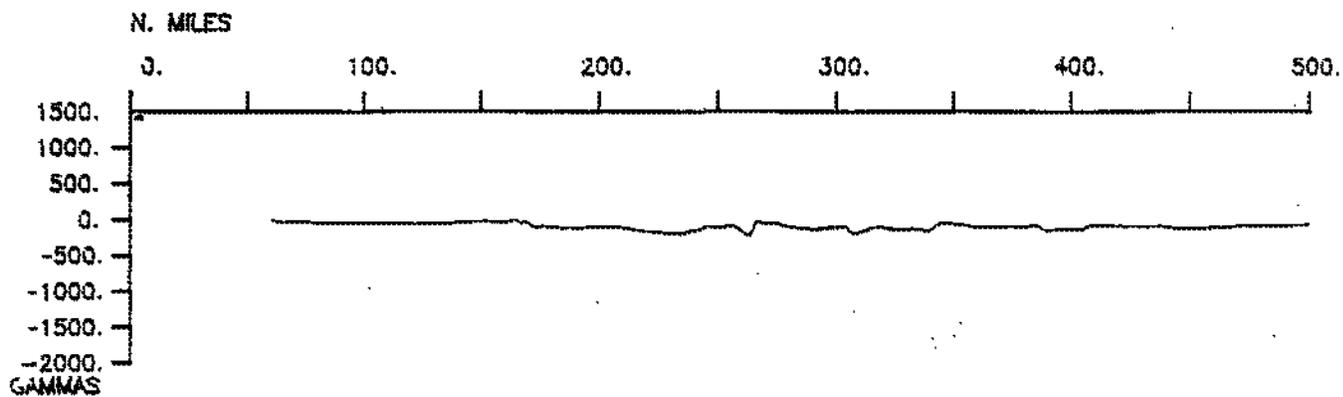
**PORTS:** La Guaira - La Guaira, Venezuela

**DATES:** 5-26 June 1990

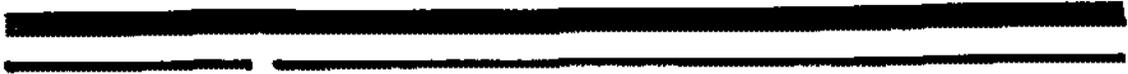
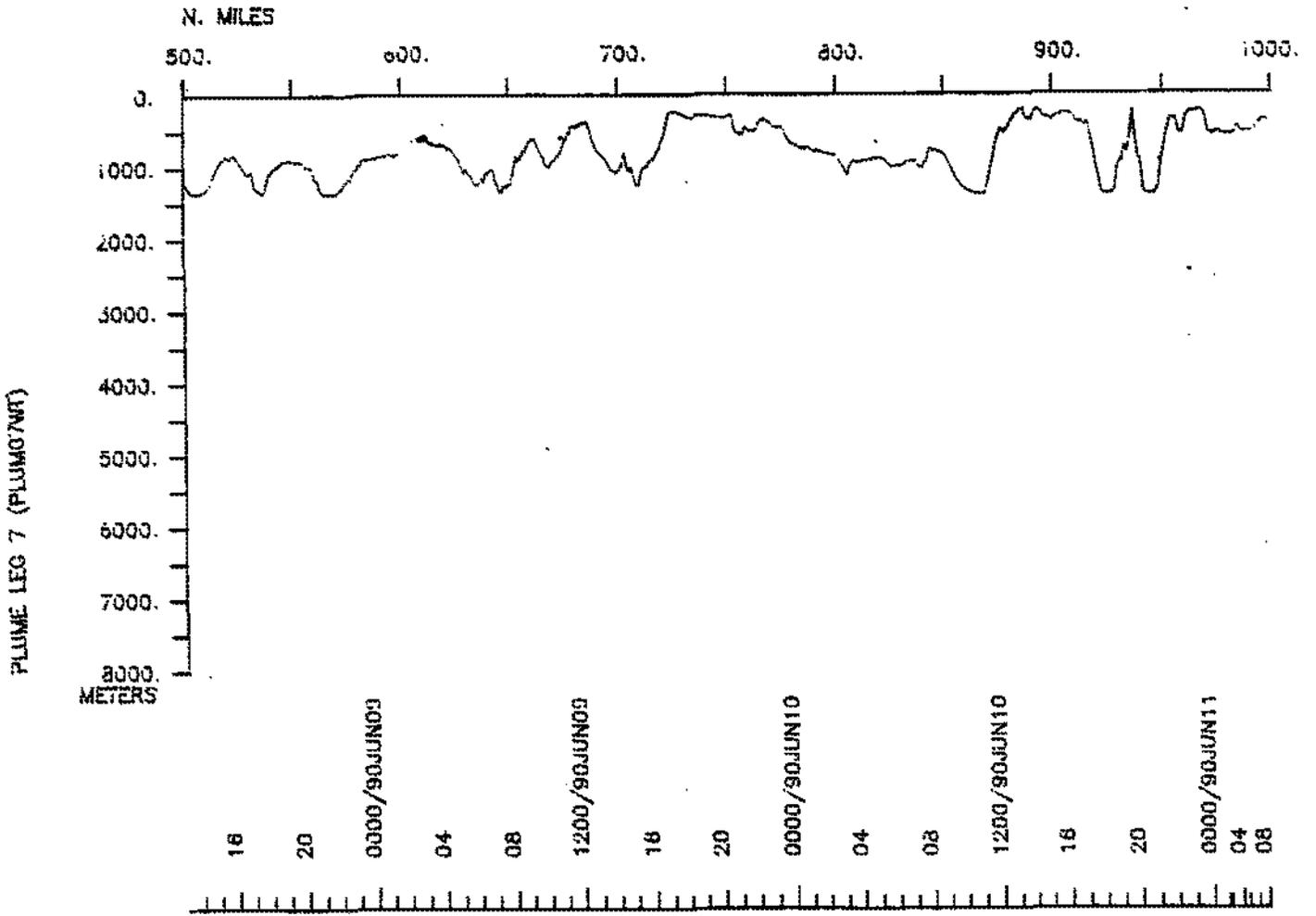
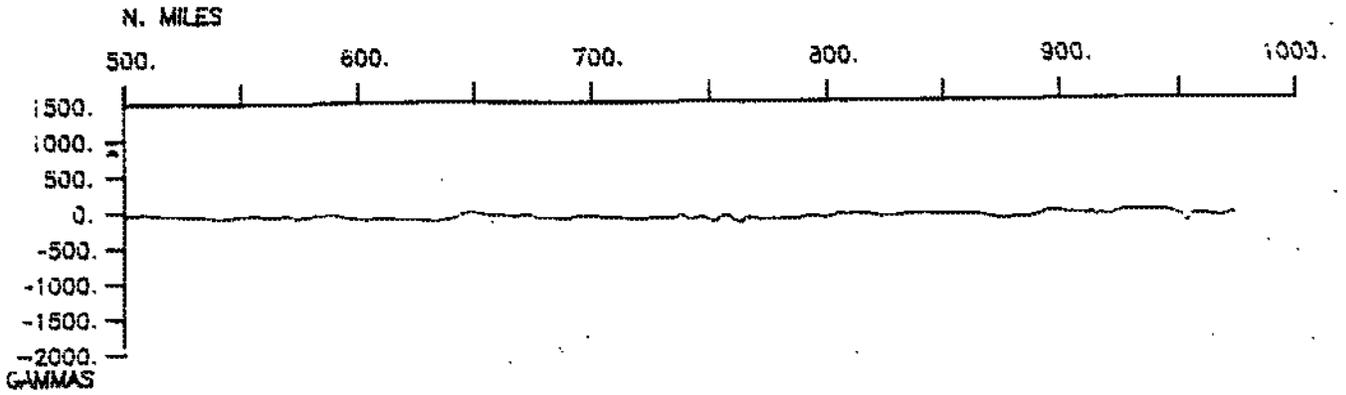
**SHIP:** R/V T. Washington

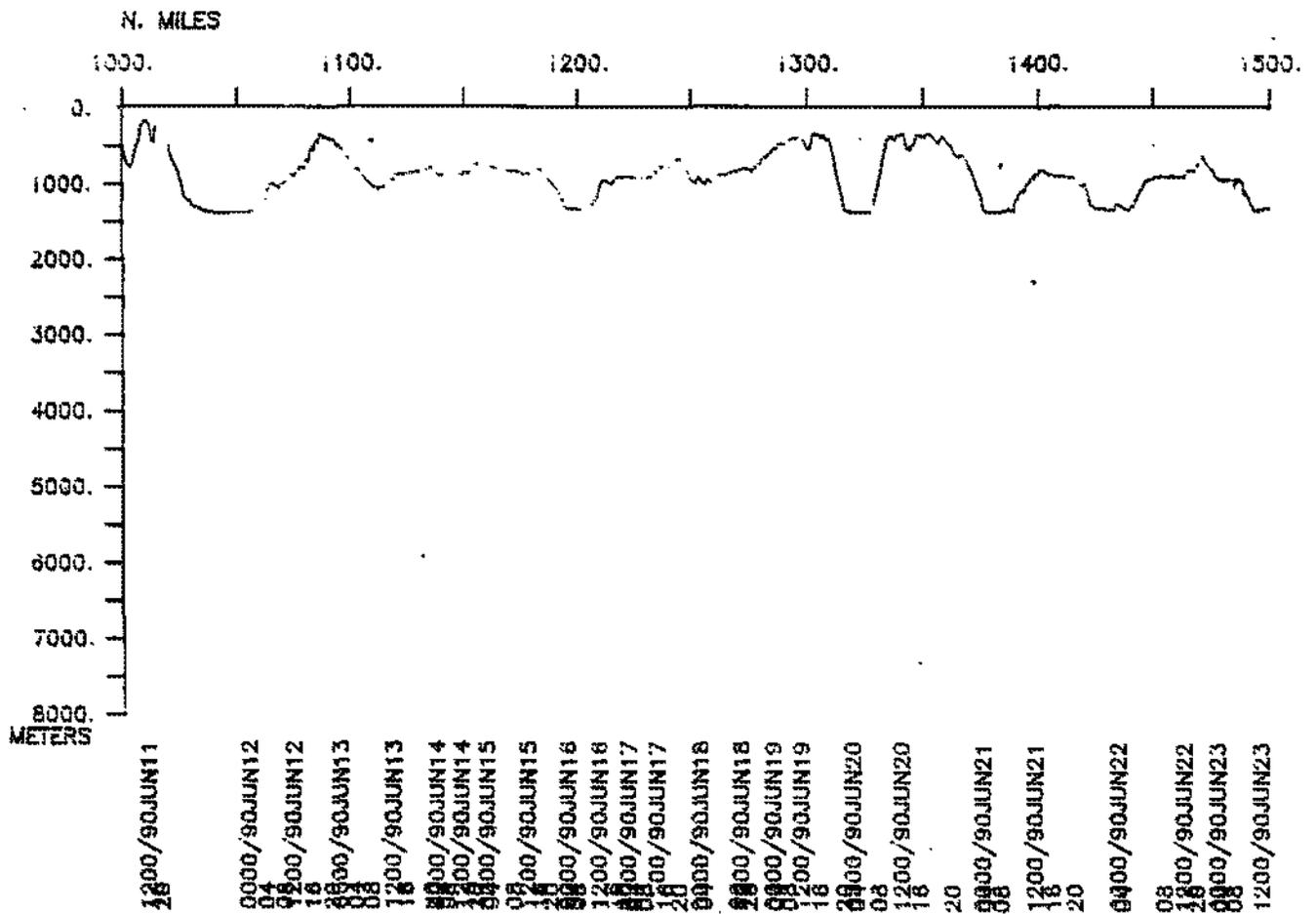
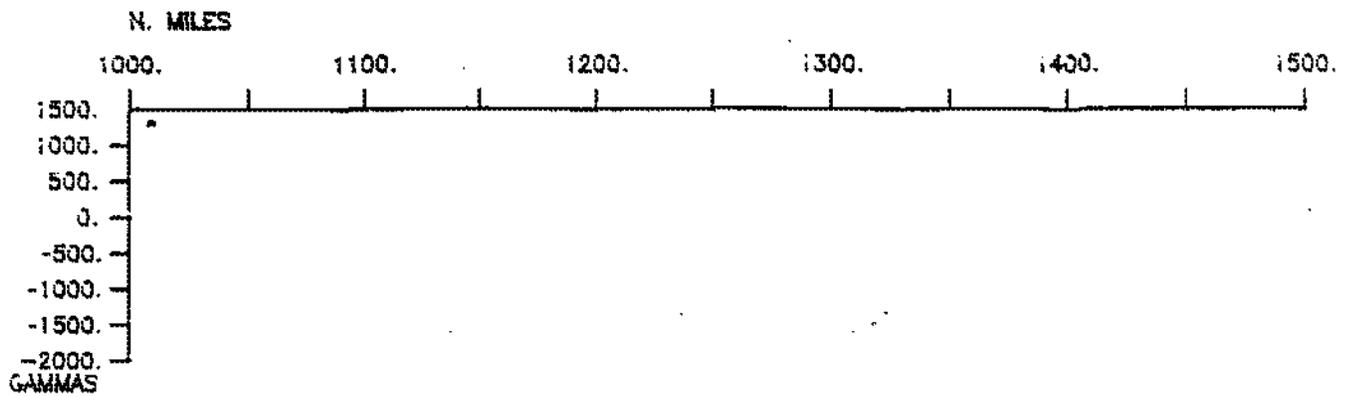
**TOTAL MILEAGE OF UNDERWAY DATA COLLECTED**

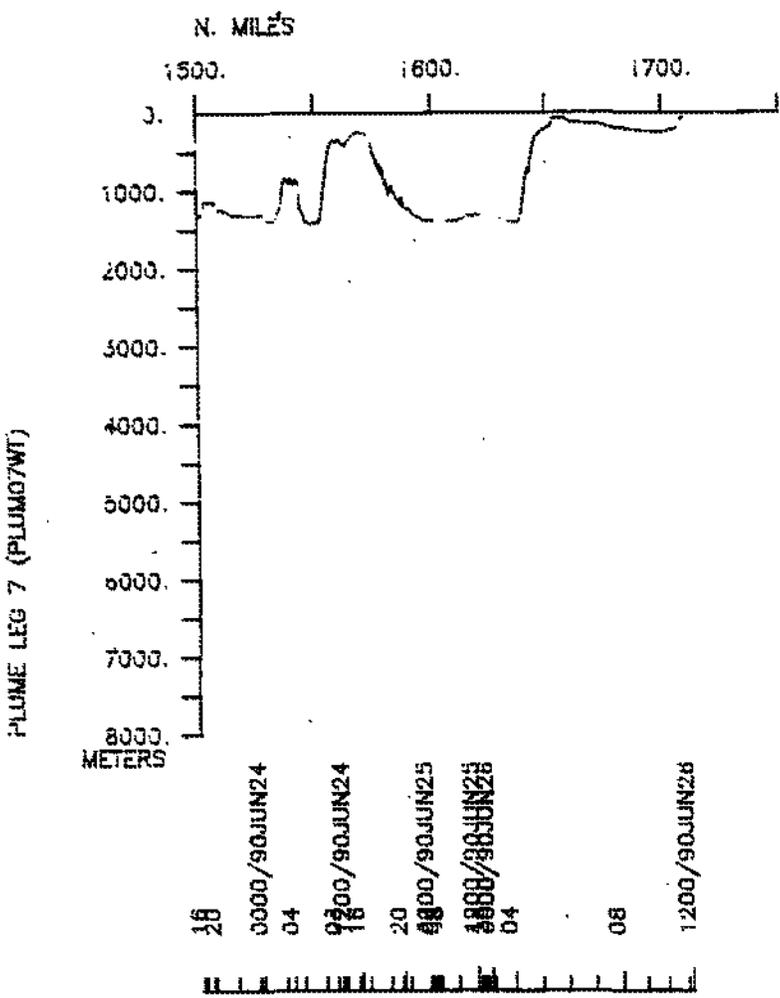
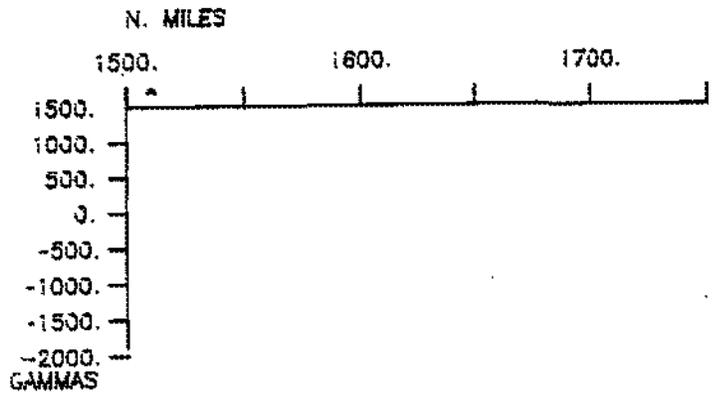
- 1) Cruise - 1711 miles
- 2) Bathymetry - 1581 miles
- 3) Magnetics - 910 miles
- 4) Seismic Reflection - 910 miles
- 5) Gravity - collected but not processed
- 6) Sea Beam - 1581 miles



SEABEAM







## S.I.O. SAMPLE INDEX

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(Issued September 1990)

### PLUME EXPEDITION

#### Leg 7

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R/V T. Washington

La Guaira, Venezuela (5 June 1990)  
to  
La Guaira, Venezuela (26 June 1990)

Co-Chief Scientists:

Jonathan Overpeck (Lamont-Doherty Geological Observatory)

Larry Peterson (University of Miami)

The Sample Index is a first level interdisciplinary listing of time, position, sample identification and disposition of all samples, records and measurements collected on this cruise leg. The index data are encoded at sea by the resident marine technician and processed on shore by the S.I.O. Geological Data Center shortly after the completion of the cruise leg.

Positions are interpolated on the basis of sample time by comparison to a single, edited navigation file. Samples beginning at one time and position and ending at another are entered on two consecutive lines. Disposition and sample type are represented by three and four character codes to permit further computer searches on these parameters. (Listings defining these codes are available from the Geological Data Center.)

GDC Cruise I.D.# 246

\*\*\*\* PORTS \*\*\*\*

2342	050690	LGPT B LA GUAIRA, VENEZUELA	10-37 N 066-56 W	fPLUM07WT
1200	260690	LGPT E LA GUAIRA, VENEZUELA	10-37 N 066-56 W	fPLUM07WT
0600	110690	LGSS B CUMANA, VENEZUELA	10-434N 64-356W	sPLUM07WT
2130	110690	LGSS E CUMANA, VENEZUELA	10-302N 64-284W	sPLUM07WT

\*\*\*\*PERSONNEL\*\*\*\*

	***NAME***	***TITLE***	***AFFILIATION***	**CRID**
PECS LDO	OVERPECK, J.	COCHIEF SCIENTIST	LAMONT-DOHERTY GEO.OB.	PLUM07WT
PECS UMI	PETERSON, L.	COCHIEF SCIENTIST	UNIV. OF MIAMI	PLUM07WT
PEXN SIX	APARICIO, R.	RESEARCHER	VENEZUELA	PLUM07WT
PEST UMI	BLACK, D.	GRAD STUDENT	UNIV. OF MIAMI	PLUM07WT
PEXN SIX	CASTANEDA, J.	RESEARCHER	VENEZUELA	PLUM07WT
PECT STS	CHARTERS, J.	COMPUTER TECH	SCRIPPS INSTITUTION	PLUM07WT
PEST LDO	COLE, J.	GRAD STUDENT	LAMONT-DOHERTY GEO,OB.	PLUM07WT
PEAT STS	CRAMPTON, P.	AIR GUN TECH	SCRIPPS INSTITUTION	PLUM07WT
PESP SIX	DEVRIES, T.	RESEARCH ASST.	UNIV.OF SO. CAROLINA	PLUM07WT
PESP LDO	DONER, L.	RESEARCH ASST.	LAMONT-DOHERTY GEO.OB.	PLUM07WT
PESP LDO	DRISCOL, N.	GRAD STUDENT	LAMONT-DOHERTY GEO.OB.	PLUM07WT
PERT STS	HARGREAVES, G.	RESIDENT TECH	SCRIPPS INSTITUTION	PLUM07WT
PESP OSU	KALK, P.	CORING TECH	OREGON STATE UNIV.	PLUM07WT
PEST UMI	LIN, H.	GRAD STUDENT	UNIV. OF MIAMI	PLUM07WT
PEST UMI	LYNN, M.	GRAD STUDENT	UNIV. OF MIAMI	PLUM07WT
PESP SIX	MURRAY, D.	POST DOC.	BROWN UNIVERSITY	PLUM07WT
PEST URI	NEFF, E.	GRAD STUDENT	UNIV.OF RHODE ISLAND	PLUM07WT
PEXN SIX	RINALDI DE REYNA, M.	RESEARCH ASSO.	VENEZUELA	PLUM07WT
PESP SIX	SCHUBERT, C.	INVESTIGATOR	VENEZUELA	PLUM07WT
PESP LLL	TRUMBORE, S.	RESEARCH ASST.	LAWRENCE LIVERMORE LAB.	PLUM07WT
PEOB SIX	VALERO, S.	FOREIGN MINISTRY	VENEZUELA	PLUM07WT
PESP UMI	ZHANG, J.	GRADSTUDENT	UNIV. OF MIAMI	PLUM07WT

\*\*\*\*NOTES\*\*\*\*

#AN 'X' IN THE (B)EGIN/(E)ND COLUMN FOLLOWING THE SAMPLE CODE INDICATES NO  
#SAMPLE OR DATA RECOVERED. A 'C' INDICATES CONTINUATION OF DATA COLLECTION  
#FROM BEFORE THE BEGINNING OR AFTER THE END OF A PARTICULAR LEG. (MOORED  
#BOTTOM INSTRUMENTS, FOR EXAMPLE.) THE NUMBER APPEARING IN THE COLUMNS  
#BETWEEN THE SAMPLE IDENTIFIER AND THE DISPOSITION CODE, FOR MANY SAMPLE  
#ENTRIES, IS THE WATER DEPTH IN CORRECTED METERS. POSITIONS ARE IN TENTHS  
#OF MINUTES.

#GMT	DDMMYY	LOC	T	SAMP	SAMPLE	DISP			CRUISE
#TIME	DATE	TIME	Z	CODE	IDENTIFIER	CODE	LAT.	LONG.	LEG-SHIP

\*\*\*UNDERWAY DATA CURATOR - S. M. SMITH EXT. 42752

\*\*\* ECHO SOUNDER RECORDS \*\*\*

0600	060690			DPR3	B 3.5 KHZ R-01	GDC	10-419N	66-079W	sPLUM07WT
1210	070690			DPR3	E 3.5 KHZ R-01	GDC	10-344N	65-401W	sPLUM07WT
1223	070690			DPR3	B 3.5 KHZ R-02	GDC	10-362N	65-399W	sPLUM07WT
0233	090690			DPR3	E 3.5 KHZ R-02	GDC	10-448N	64-554W	sPLUM07WT
0241	090690			DPR3	B 3.5 KHZ R-03	GDC	10-449N	64-566W	sPLUM07WT
1435	100690			DPR3	E 3.5 KHZ R-03	GDC	10-588N	64-418W	sPLUM07WT
1442	100690			DPR3	B 3.5 KHZ R-04	GDC	10-585N	64-410W	sPLUM07WT
1540	120690			DPR3	E 3.5 KHZ R-04	GDC	10-478N	65-001W	sPLUM07WT
1546	120690			DPR3	B 3.5 KHZ R-05	GDC	10-478N	65-000W	sPLUM07WT
0538	140690			DPR3	E 3.5 KHZ R-05	GDC	10-388N	64-589W	sPLUM07WT
0544	140690			DPR3	B 3.5 KHZ R-06	GDC	10-388N	64-588W	sPLUM07WT
0156	160690			DPR3	E 3.5 KHZ R-06	GDC	10-410N	65-203W	sPLUM07WT
0208	160690			DPR3	B 3.5 KHZ R-07	GDC	10-408N	65-203W	sPLUM07WT
2320	170690			DPR3	E 3.5 KHZ R-07	GDC	10-419N	65-121W	sPLUM07WT
2327	170690			DPR3	B 3.5 KHZ R-08	GDC	10-419N	65-120W	sPLUM07WT
1355	190690			DPR3	E 3.5 KHZ R-08	GDC	10-410N	64-407W	sPLUM07WT
1359	190690			DPR3	B 3.5 KHZ R-09	GDC	10-406N	64-410W	sPLUM07WT
1936	200690			DPR3	E 3.5 KHZ R-09	GDC	10-456N	64-490W	sPLUM07WT
1946	200690			DPR3	B 3.5 KHZ R-10	GDC	10-446N	64-504W	sPLUM07WT
1539	220690			DPR3	E 3.5 KHZ R-10	GDC	10-348N	65-079W	sPLUM07WT
1552	220690			DPR3	B 3.5 KHZ R-11	GDC	10-348N	65-080W	sPLUM07WT
1045	240690			DPR3	E 3.5 KHZ R-11	GDC	10-478N	65-467W	sPLUM07WT
1055	240690			DPR3	B 3.5 KHZ R-12	GDC	10-478N	65-466W	sPLUM07WT
2313	250690			DPR3	E 3.5 KHZ R-12	GDC	10-432N	65-388W	sPLUM07WT
2319	250690			DPR3	B 3.5 KHZ R-13	GDC	10-432N	65-387W	sPLUM07WT
0400	260690			DPR3	E 3.5 KHZ R-13	GDC	10-422N	65-451W	sPLUM07WT

#GMT #TIME #	DMMYY DATE	LOC TIME	T Z	SAMP CODE	SAMPLE IDENTIFIER	DISP CODE	LAT.	LONG.	CRUISE LEG-SHIP
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\*\*\* MAGNETIC (EARTH TOTAL FIELD) RECORDS \*\*\*

0635	060690			MGRA B	MAGNETICS R-01	GDC	10-401N	66-040W	sPLUM07WT
0000	110690			MGRA E	MAGNETICS R-01	GDC	10-456N	64-324W	sPLUM07WT

\*\*\* SEISMIC REFLECTION RECORDS \*\*\*

0658	060690			SPRS B	SLOW SEISMIC R-01	GDC	10-383N	66-018W	sPLUM07WT
1200	090690			SPRS E	SLOW SEISMIC R-01	GDC	10-478N	65-016W	sPLUM07WT
1200	090690			SPRS B	SLOW SEISMIC R-02	GDC	10-478N	65-016W	sPLUM07WT
1100	100690			SPRS E	SLOW SEISMIC R-02	GDC	10-335N	64-471W	sPLUM07WT
1100	100690			SPRS B	SLOW SEISMIC R-03	GDC	10-335N	64-471W	sPLUM07WT
0018	110690			SPRS E	SLOW SEISMIC R-03	GDC	10-432N	64-329W	sPLUM07WT
0639	060690			SPRF B	FAST SEISMIC R-01	GDC	10-398N	66-037W	sPLUM07WT
0018	110690			SPRF E	FAST SEISMIC R-01	GDC	10-432N	64-329W	sPLUM07WT

\*\*\* CORES \*\*\*

0150	110690			COGV	GGC 09	LDO	10-442N	64-335W	sPLUM07WT
0422	110690			COGV	GGC 10	LDO	10-447N	64-376W	sPLUM07WT
0218	120690			COBX	BC 11	LDO	10-357N	64-568W	sPLUM07WT
0603	120690			COGV	GGC 12	LDO	10-359N	64-567W	sPLUM07WT
0802	120690			COBX	BC 13	LDO	10-403N	64-560W	sPLUM07WT
0922	120690			COGV	GGC 14	LDO	10-401N	64-560W	sPLUM07WT
1131	120690			COBX	BC 15	LDO	10-426N	64-556W	sPLUM07WT
1333	120690			COGV	GGC 16	LDO	10-422N	64-553W	sPLUM07WT
1522	120690			COBX	BC 17	LDO	10-479N	65-000W	sPLUM07WT
1225	120690			COGV	GGC 18	LDO	10-426N	64-553W	sPLUM07WT
1831	120690			COBX	BC 19	LDO	10-483N	65-076W	sPLUM07WT
2004	120690			COBX	BC 20	LDO	10-479N	65-081W	sPLUM07WT
2050	120690			COGV	GGC 21	LDO	10-478N	65-081W	sPLUM07WT
2258	120690			COBX	BC 22	LDO	10-471N	65-094W	sPLUM07WT
2357	120690			COGV	GGC 23	LDO	10-468N	65-095W	sPLUM07WT
0201	130690			COBX	BC 24	LDO	10-446N	65-113W	sPLUM07WT

#GMT #TIME	DDMMYY DATE	L <sup>OC</sup> T TIME Z	SAMP CODE	SAMPLE IDENTIFIER	DISP CODE	LAT.	LONG.	CRUISE LEG-SF
0253	130690		COGV	GGC-25	LDO	10-445N	65-112W	sPLUM07WT
0529	130690		COBX	BC 26	LDO	10-443N	65-171W	sPLUM07WT
0731	130690		COBX	BC 27	LDO	10-443N	65-172W	sPLUM07WT
0850	130690		COGV	GGC 28	LDO	10-443N	65-170W	sPLUM07WT
1114	130690		COBX	BC 29	LDO	10-419N	65-095W	sPLUM07WT
1221	130690		COGV	GGC 30	LDO	10-420N	65-095W	sPLUM07WT
1413	130690		COBX	BC 31	LDO	10-421N	65-058W	sPLUM07WT
1516	130690		COGV	GGC 32	LDO	10-422N	65-060W	sPLUM07WT
1735	130690		COBX	BC 33	LDO	10-421N	64-594W	sPLUM07WT
1831	130690		COGV	GGC 34	LDO	10-420N	64-595W	sPLUM07WT
2029	130690		COBX	BC 35	LDO	10-389N	64-591W	sPLUM07WT
2135	130690		COGV	GGC 36	LDO	10-388N	64-587W	sPLUM07WT
0705	140690		COPS B	PISTON CORE 37	LDO	10-389N	64-586W	sPLUM07WT
0705	140690		COPG E	TRIP KINGKONG 37	LDO	10-389N	64-586W	sPLUM07
1243	140690		COPS B	PISTON CORE 38	LDO	10-407N	64-566W	sPLUM07WT
1243	140690		COPG E	TRIP KINGKONG 38	LDO	10-407N	64-566W	sPLUM07WT
1955	140690		COPS B	PISTON CORE 39	LDO	10-420N	64-566W	sPLUM07WT
1955	140690		COPG E	TRIP KINGKONG 39	LDO	10-420N	64-566W	sPLUM07WT
0058	150690		COPS B	PISTON CORE 40	LDO	10-418N	64-594W	sPLUM07WT
0058	150690		COPG E	TRIP KINGKONG 40	LDO	10-418N	64-594W	sPLUM07WT
0626	150690		COPS B	PISTON CORE 41	LDO	10-429N	65-067W	sPLUM07WT
0626	150690		COPG E	TRIP KINGKONG 41	LDO	10-429N	65-067W	sPLUM07WT
1023	150690		COPS B	PISTON CORE 42	LDO	10-419N	65-094W	sPLUM07WT
1023	150690		COPG E	TRIP KINGKONG 42	LDO	10-419N	65-094W	sPLUM07WT
1406	150690		COPS B	PISTON CORE 43	LDO	10-445N	65-112W	sPLUM07WT
1406	150690		COPG E	TRIP KINGKONG 43	LDO	10-445N	65-112W	sPLUM07WT
1852	150690		COPS B	PISTON CORE 44	LDO	10-443N	65-169W	sPLUM07WT
1852	150690		COPG E	TRIP KINGKONG 44	LDO	10-443N	65-169W	sPLUM07WT
2326	150690		COPS B	PISTON CORE 45	LDO	10-423N	65-213W	sPLUM07WT
2326	150690		COPG E	TRIP KINGKONG 45	LDO	10-423N	65-213W	sPLUM07WT

#GMT #TIME	DDMMYY DATE	LOC TIME	T Z	SAMP CODE	SAMPLE IDENTIFIER	DISP CODE	LAT.	LONG.	CRUISE LEG-SHIP
1139	160690			COPS B	PISTON CORE 46	LDO	10-380N	65-111W	sPLUM07WT
1139	160690			COPG E	TRIP KINGKONG 46	LDO	10-380N	65-111W	sPLUM07WT
1540	160690			COPS B	PISTON CORE 47	LDO	10-405N	65-061W	sPLUM07WT
1540	160690			COPG E	TRIP KINGKONG 47	LDO	10-405N	65-061W	sPLUM07WT
2312	160690			COPS B	PISTON CORE 48	LDO	10-388N	65-043W	sPLUM07WT
2312	160690			COPG E	TRIP KINGKONG 48	LDO	10-388N	65-043W	sPLUM07WT
0258	170690			COPS B	PISTON CORE 49	LDO	10-376N	65-028W	sPLUM07WT
0258	170690			COPG E	TRIP KINGKONG 49	LDO	10-376N	65-028W	sPLUM07WT
0704	170690			COPS B	PISTON CORE 50	LDO	10-379N	65-055W	sPLUM07WT
0704	170690			COPG E	TRIP KINGKONG 50	LDO	10-379N	65-055W	sPLUM07WT
1118	170690			COPS B	PISTON CORE 51	LDO	10-349N	65-080W	sPLUM07WT
1118	170690			COPG E	TRIP KINGKONG 51	LDO	10-349N	65-080W	sPLUM07WT
1440	170690			COPS B	PISTON CORE 52	LDO	10-348N	65-063W	sPLUM07WT
1440	170690			COPG E	TRIP KINGKONG 52	LDO	10-348N	65-063W	sPLUM07WT
1851	170690			COPS B	PISTON CORE 53	LDO	10-333N	65-083W	sPLUM07WT
1851	170690			COPG E	TRIP KINGKONG 53	LDO	10-333N	65-083W	sPLUM07WT
2313	170690			COPS B	PISTON CORE 54	LDO	10-419N	65-121W	sPLUM07WT
2313	170690			COPG E	TRIP KINGKONG 54	LDO	10-419N	65-121W	sPLUM07WT
0349	180690			COPS B	PISTON CORE 55	LDO	10-418N	65-119W	sPLUM07WT
0349	180690			COPG E	TRIP KINGKONG 55	LDO	10-418N	65-119W	sPLUM07WT
0804	180690			COPS B	PISTON CORE 56	LDO	10-412N	64-580W	sPLUM07WT
0804	180690			COPG E	TRIP KINGKONG 56	LDO	10-412N	64-580W	sPLUM07WT
1244	180690			COPS B	PISTON CORE 57	LDO	10-412N	64-582W	sPLUM07WT
1244	180690			COPG E	TRIP KINGKONG 57	LDO	10-412N	64-582W	sPLUM07WT
1614	180690			COPS B	PISTON CORE 58	LDO	10-411N	64-578W	sPLUM07WT
1614	180690			COPG E	TRIP KINGKONG 58	LDO	10-411N	64-578W	sPLUM07WT
2129	180690			COPS B	PISTON CORE 59	LDO	10-433N	64-518W	sPLUM07WT
2129	180690			COPG E	TRIP KINGKONG 59	LDO	10-433N	64-518W	sPLUM07WT

#GMT #TIME	DDMMYY DATE	LOC TIME	T Z	SAMP CODE	SAMPLE IDENTIFIER	DISP CODE	LAT.	LONG.	CRUISE LEG-SHIP
0109	190690			COPS	B PISTON CORE 60	LDO	10-455N	64-461W	sPLUM07WT
0109	190690			COPG	E TRIP KINGKONG 60	LDO	10-455N	64-461W	sPLUM07WT
0547	190690			COPS	B PISTON CORE 61	LDO	10-453N	64-421W	sPLUM07WT
0547	190690			COPG	E TRIP KINGKONG 61	LDO	10-453N	64-421W	sPLUM07WT
1050	190690			COPS	B PISTON CORE 62	LDO	10-446N	64-363W	sPLUM07WT
1050	190690			COPG	E TRIP KINGKONG 62	LDO	10-446N	64-363W	sPLUM07WT
1504	190690			COPS	B PISTON CORE 63	LDO	10-401N	64-419W	sPLUM07WT
1504	190690			COPG	E TRIP KINGKONG 63	LDO	10-401N	64-419W	sPLUM07WT
0159	200690			COBX	X BOXCORE NOTRIP 64	LDO	10-335N	64-473W	sPLUM07WT
0323	200690			COBX	BC 64A	LDO	10-339N	64-474W	sPLUM07WT
0609	200690			COGV	GGC 65	LDO	10-333N	64-465W	sPLUM07WT
0838	200690			COBX	BC 66	LDO	10-404N	64-422W	sPLUM07WT
0938	200690			COBX	BC 67	LDO	10-406N	64-421W	sPLUM07WT
1027	200690			COGV	GGC 68	LDO	10-409N	64-424W	sPLUM07WT
1224	200690			COBX	BC 69	LDO	10-445N	64-363W	sPLUM07WT
1315	200690			COGV	GGC 70	LDO	10-451N	64-364W	sPLUM07WT
1505	200690			COBX	BC 71	LDO	10-456N	64-420W	sPLUM07WT
1540	200690			COGV	GGC 72	LDO	10-460N	64-420W	sPLUM07WT
1737	200690			COBX	BC 73	LDO	10-459N	64-462W	sPLUM07WT
1815	200690			COGV	GGC 74	LDO	10-462N	64-462W	sPLUM07WT
1847	200690			COGV	GGC 75	LDO	10-467N	64-463W	sPLUM07WT
2037	200690			COBX	BC 76	LDO	10-436N	64-518W	sPLUM07WT
2121	200690			COGV	GGC 77	LDO	10-440N	64-517W	sPLUM07WT
0029	210690			COBX	BC 78	LDO	10-333N	64-470W	sPLUM07WT
0159	210690			COGV	GGC 79	LDO	10-330N	64-464W	sPLUM07WT
0355	210690			COBX	BC 80	LDO	10-333N	64-460W	sPLUM07WT
0748	210690			COBX	BC 81	LDO	10-353N	64-463W	sPLUM07WT
1204	210690			COBX	BC 82	LDO	10-412N	64-580W	sPLUM07WT
1308	210690			COGV	GGC 83	LDO	10-411N	64-578W	sPLUM07WT
1520	210690			COBX	BC 84	LDO	10-395N	65-040W	sPLUM07WT

#GMT	DDMMYY	LOC	T	SAMP	SAMPLE	DISP			CRUISE
#TIME	DATE	TIME	Z	CODE	IDENTIFIER	CODE	LAT.	LONG.	LEG-SHIP
1647	210690			COGV	GGC 85	LDO	10-403N	65-036W	sPLUM07WT
1837	210690			COBX	BC 86	LDO	10-379N	65-027W	sPLUM07WT
2219	210690			COBX	BC 87	LDO	10-352N	64-461W	sPLUM07WT
0117	220690			COBX	BC 88	LDO	10-353N	64-516W	sPLUM07WT
0413	220690			COBX	BC 89	LDO	10-354N	64-514W	sPLUM07WT
0818	220690			COBX	BC 90	LDO	10-406N	65-065W	sPLUM07WT
1032	220690			COBX	BC 91	LDO	10-382N	65-054W	sPLUM07WT
1246	220690			COBX	BC 92	LDO	10-356N	65-065W	sPLUM07WT
1404	220690			COGV	GGC 93	LDO	10-358N	65-064W	sPLUM07WT
1605	220690			COBX	BC 94	LDO	10-348N	65-080W	sPLUM07WT
1725	220690			COGV	GGC 95	LDO	10-345N	65-082W	sPLUM07WT
1941	220690			COBX	BC 96	LDO	10-332N	65-077W	sPLUM07WT
2230	220690			COBX	BC 97	LDO	10-381N	65-108W	sPLUM07WT
0302	230690			COPS	B PISTON CORE 98	LDO	10-377N	65-111W	sPLUM07WT
0302	230690			COPG	E TRIP KINGKONG 98	LDO	10-377N	65-111W	sPLUM07WT
0721	230690			COBX	BC 99	LDO	10-416N	65-119W	sPLUM07WT
1049	230690			COBX	BC 100	LDO	10-425N	65-217W	sPLUM07WT
1443	230690			COBX	BC 101	LDO	10-431N	65-209W	sPLUM07WT
1601	230690			COGV	GGC 102	LDO	10-436N	65-210W	sPLUM07WT
1814	230690			COBX	BC 103	LDO	10-455N	65-202W	sPLUM07WT
1930	230690			COGV	GGC 104	LDO	10-462N	65-206W	sPLUM07WT
2303	230690			COBX	B BC 105	LDO	10-434N	65-392W	sPLUM07WT
2343	230690			COBX	E BC 105	LDO	10-436N	65-390W	sPLUM07WT
0217	240690			COBX	BC 106	LDO	10-331N	65-421W	sPLUM07WT
0336	240690			COGV	GGC 107	LDO	10-329N	65-422W	sPLUM07WT
0712	240690			COBX	BC 108	LDO	10-489N	65-467W	sPLUM07WT
0801	240690			COGV	GGC 109	LDO	10-488N	65-462W	sPLUM07WT
0913	240690			COGV	GGC 110	LDO	10-491N	65-470W	sPLUM07WT
1032	240690			COBX	BC 111	LDO	10-478N	65-466W	sPLUM07WT
1115	240690			COGV	GGC 112	LDO	10-479N	65-468W	sPLUM07WT
1235	240690			COGV	GGC 113	LDO	10-479N	65-465W	sPLUM07WT
1421	240690			COBX	BC 114	LDO	10-521N	65-464W	sPLUM07WT
1533	240690			COBX	BC 115	LDO	10-525N	65-458W	sPLUM07WT
1557	240690			COGV	GGC 116	LDO	10-527N	65-456W	sPLUM07WT
2250	240690			COBX	BC 117	LDO	10-409N	65-299W	sPLUM07WT
0007	250690			COGV	GGC 118	LDO	10-410N	65-296W	sPLUM07WT
1256	250690			COBX	BC 119	LDO	10-449N	65-411W	sPLUM07WT

#GMT #TIME	DDMMYY DATE	LOC TIME	T Z	SAMP CODE	SAMPLE IDENTIFIER	DISP CODE	LAT.	LONG.	CRUISE LEG-SHIP
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**** PLANKTON PUMPS ****									
0404	160690			PHPM B	PLANKTON PUMP	LDO	10-408N	65-199W	sPLUM07WT
0936	160690			PHPM E	PLANKTON PUMP	LDO	10-396N	65-188W	sPLUM07WT
2042	160690			PHPM B	PLANKTON PUMP	LDO	10-395N	65-042W	sPLUM07WT
2202	160690			PHPM E	PLANKTON PUMP	LDO	10-394N	65-042W	sPLUM07WT
2258	170690			PHPM B	PLANKTON PUMP	LDO	10-420N	65-122W	sPLUM07WT
0323	180690			PHPM E	PLANKTON PUMP	LDO	10-418N	65-120W	sPLUM07WT
0912	180690			PHPM B	PLANKTON PUMP	LDO	10-412N	64-580W	sPLUM07WT
1133	180690			PHPM E	PLANKTON PUMP	LDO	10-415N	64-581W	sPLUM07WT
1359	180690			PHPM B	PLANKTON PUMP	LDO	10-411N	64-580W	sPLUM07WT
1712	180690			PHPM E	PLANKTON PUMP	LDO	10-410N	64-571W	sPLUM07WT
1750	180690			PHPM B	PLANKTON PUMP	LDO	10-418N	64-564W	sPLUM07WT
2000	180690			PHPM E	PLANKTON PUMP	LDO	10-422N	64-556W	sPLUM07WT
0205	190690			PHPM B	PLANKTON PUMP	LDO	10-453N	64-459W	sPLUM07WT
0432	190690			PHPM E	PLANKTON PUMP	LDO	10-447N	64-459W	sPLUM07WT
0650	190690			PHPM B	PLANKTON PUMP	LDO	10-452N	64-415W	sPLUM07WT
0927	190690			PHPM E	PLANKTON PUMP	LDO	10-451N	64-414W	sPLUM07WT
1053	190690			PHPM B	PLANKTON PUMP	LDO	10-446N	64-363W	sPLUM07WT
1308	190690			PHPM E	PLANKTON PUMP	LDO	10-448N	64-363W	sPLUM07WT
1615	190690			PHPM B	PLANKTON PUMP	LDO	10-400N	64-414W	sPLUM07WT
1847	190690			PHPM E	PLANKTON PUMP	LDO	10-402N	64-411W	sPLUM07WT
2015	190690			PHPM B	PLANKTON PUMP	LDO	10-332N	64-470W	sPLUM07WT
2319	190690			PHPM E	PLANKTON PUMP	LDO	10-345N	64-470W	sPLUM07WT
0149	250690			PHPM B	PLANKTON PUMP	LDO	10-406N	65-290W	sPLUM07WT
0757	250690			PHPM B	PLANKTON PUMP	LDO	10-386N	65-275W	sPLUM07WT
1004	250690			PHPM E	PLANKTON PUMP	LDO	10-380N	65-273W	sPLUM07WT
1521	250690			PHPM B	PLANKTON PUMP	LDO	10-452N	65-410W	sPLUM07WT
1750	250690			PHPM E	PLANKTON PUMP	LDO	10-446N	65-400W	sPLUM07WT
1820	250690			PHPM B	PLANKTON PUMP	LDO	10-445N	65-400W	sPLUM07WT
2037	250690			PHPM E	PLANKTON PUMP	LDO	10-442N	65-398W	sPLUM07WT
2100	250690			PHPM B	PLANKTON PUMP	LDO	10-440N	65-395W	sPLUM07WT
2306	250690			PHPM E	PLANKTON PUMP	LDO	10-432N	65-389W	sPLUM07WT

#GMT	DDMMYY	LOC	T	SAMP	SAMPLE	DISP			CRUISE
#TIME	DATE	TIME	Z	CODE	IDENTIFIER	CODE	LAT.	LONG.	LEG-SHIP

\*\*\* HYDROCASTS (CASTS SPLIT BETWEEN LAMONT-DOHERTY AND VENEZUELA) \*\*\*

0459	160690			HCNI	HYDROCAST	1A	LDO 10-406N	65-200W	sPLUM07WT
0720	160690			HCNI	HYDROCAST	1B	SIX 10-404N	65-192W	sPLUM07WT
0914	160690			HCNI	HYDROCAST	1C	LDO 10-397N	65-187W	sPLUM07WT
2050	190690			HCNI	HYDROCAST	2A	SIX 10-334N	64-470W	sPLUM07WT
2232	190690			HCNI	HYDROCAST	2B	LDO 10-342N	64-471W	sPLUM07WT
0041	200690			HCNI	HYDROCAST	2C	SIX 10-334N	64-471W	sPLUM07WT

\*\*\* END SAMPLE INDEX \*\*\*