OCS Study
MMS 87-0072

FINAL REPORT

on

BEAUFORT SEA MONITORING PROGRAM: ANALYSIS OF TRACE METALS AND HYDROCARBONS FROM OUTER CONTINENTAL SHELF (OCS) ACTIVITIES

Submitted to:

Minerals Management Service
Alaska OCS Region
Anchorage, AK 99510

21 December 1987

by

Paul Boehm, Margarete Steinhauer,
Eric Crecelius, Jerry Neff, and Cary Tuckfield

BATTELLE
Ocean Sciences
397 Washington Street
Duxbury, MA 02332

This study was funded by the Alaska Outer Continental Shelf Region of the Minerals Management Service, U.S. Department of the Interior, Anchorage, AK, under Contract No. 14-12-001-30163
December 1987

TABLE OF CONTENTS

	Page
APPENDIX A -- CRUISE NARRATIVES	A-1
YEAR-1 CRUISE NARRATIVE	A-1
YEAR-2 CRUISE NARRATIVE	A-4
YEAR-3 CRUISE NARRATIVE	A-8
APPENDIX B -- QUALITY CONTROL RESULTS	B-1
APPENDIX C -- RESULTS OF STATISTICAL ANALYSES	c-1
SECTION 1	c-1
SECTION 2	c-lo
SECTION 3	c-118
SECTION 4	C-149
SECTION 5	C-209
SECTION 6	C-217
SECTION 7	c-236
SECTION 8	c-245
SECTION 9	c-254
SECTION 10	c-264
SECTION 11	C-279
SECTION 12	c-298
APPENDIX D -- DESCRIPTION OF THE PRINCIPAL COMPONENT ANALYSIS	D-1

LIST OF TABLES

	Page
TABLE B.1 YEAR-1 ANALYSIS OF REPLICATE SAMPLES OF MESS-1, A STANDARD REFERENCE SEDIMENT	B-1

LIST OF TABLES (CONTINUED)

		Page
TABLE B.2	YEAR-1 ANALYSIS OF REPLICATE SAMPLES OF OYSTER STANDARD 1566, A STANDARD REFERENCE TISSUE	B-2
TABLE B.3	YEAR-2 RESULTS OF FIVE REPLICATE ANALYSES OF NBS-1646 STANDARD REFERENCE SEDIMENT	B-3
TABLE 13.4	YEAR-2 RESULTS OF FIVE REPLICATE ANALYSES OF MESS-1 STANDARD REFERENCE SEDIMENT	B-4
TABLE B.5	YEAR-2 RESULTS OF FIVE REPLICATE ANALYSES OF OYSTER STANDARD 1566 REFERENCE TISSUE	B-5
TABLE 5.6	YEAR-3 RESULTS OF FIVE REPLICATE ANALYSES OF MESS-1 STANDARD REFERENCE SEDIMENT	B-6
TABLE B.7	YEAR-3 RESULTS OF FIVE REPLICATE ANALYSES OF OYSTER STANDARD 1566 REFERENCE TISSUE	B-7
TABLE B.8	YEAR-1 ANALYSIS OF REPLICATE PROCEDURAL BLANKS FOR SEDIMENT DIGESTION	B-8
TABLE B.9	YEAR-1 ANALYSIS OF REPLICATE PROCEDURAL BLANKS FOR TISSUE DIGESTION	B-9
TABLE B.10	YEAR-2 RESULTS OF FIVE REPLICATE ANALYSES OF PROCEDURAL BLANKS FOR SEDIMENT DIGESTION	B-10
TABLE B.11	YEAR-2 RESULTS OF FIVE REPLICATE ANALYSES OF PROCEDURAL BLANKS FOR TISSUE Digestion	B-11
TABLE B.12	YEAR-3 RESULTS OF RIVE REPLICATE ANALYSES OF PROCEDURAL BLANKS FOR SEDIMENT DIGESTION	B-12
TABLE B.13	YEAR-3 RESULTS OF FIVE REPLICATE ANALYSES OF PROCEDURAL BLANKS FOR TISSUE DIGESTION	B-13
TABLE B.14	YEAR-1 ANALYSIS OF REPLICATE SAMPLES OF REAGENTS TO ESTABLISH REAGENT BLANK FOR SEDIMENT DIGESTION	B-14
TABLE B.15	YEAR-2 RESULTS OF FIVE REPLICATE ANALYSES OF REAGENTS TO ESTABLISH REAGENT BLANK FOR SEDIMENT DIGESTION	B-15
TABLE B.16	YEAR-3 RESULTS OF FIVE REPLICATE ANALYSES OF REAGENTS TO ESTABLISH REAGENT BLANK FOR SEDIMENT DIGESTION	B-16

LIST OF TABLES (CONTINUED)

		Page
TABLE B.17	YEAR-1 ANALYSIS OF REPLICATE SAMPLES OF REAGENTS TO ESTABLISH REAGENT BLANK FOR TISSUE DIGESTION	B-17
TABLE B.18	YEAR-2 RESULTS OF FIVE REPLICATE ANALYSES OF REAGENTS TO ESTABLISH REAGENT BLANK FOR TISSUE DIGESTION	B-18
TABLE B.19	YEAR-3 RESULTS OF FIVE REPLICATE ANALYSES OF REAGENTS TO ESTABLISH REAGENT BLANK FOR TISSUE DIGESTION	B-19
TABLE B.20	YEAR-1 COMPARISON OF TECHNIQUES FOR DETERMINATION OF THE CONCENTRATION OF METALS IN SEDIMENTS	B-20
TABLE B.21	YEAR-2 COMPARISON OF THE RESULTS USING DIFFERENT ANALYTICAL TECHNIQUES FOR DETERMINATION OF THE CONCENTRATION OF METALS IN SEDIMENTS	B-21
TABLE B.22	YEAR-3 COMPARISON OF THE RESULTS USING DIFFERENT ANALYTICAL TECHNIQUES FOR DETERMINATION OF THE CONCENTRATION OF METALS IN SEDIMENTS	B-22
TABLE B.23	YEAR-1 CONCENTRATIONS OF TOTAL SATURATED HYDROCARBONS (F1) AND SELECTED HYDROCARBON PARAMETERS IN NOAA REFERENCE SEDIMENT	B-23
TABLE B.24	YEAR-1 CONCENTRATIONS OF N-ALKANES IN NOAA REFERENCE SEDIMENT	B-24
TABLE B.25	YEAR-1 CONCENTRATIONS OF POLYCYCLIC AROMATIC HYDROCARBONS (PAH) IN NOAA REFERENCE SEDIMENT	B-25
TABLE B.26	YEAR-2 SATURATED HYDROCARBON CONCENTRATIONS FOR NOAA TEST SEDIMENTS	B-26
TABLE B.27	YEAR-2 POLYCYCLIC AROMATIC HYDROCARBON (PAH) CONCENTRATIONS FOR NOAA TEST SEDIMENTS	B-27
TABLE B.28	YEAR-2 SATURATED HYDROCARBON CONCENTRATIONS FOR NOAA TEST TISSUE HOMOGENATE M-2	B-28

LIST OF TABLES (CONTINUED)

		Page
TABLE B.29	YEAR-2 POLYCYCLIC AROMATIC HYDROCARBON (PAH) CONCENTRATIONS FOR NOAA TEST TISSUE HOMOGENATE M-2	B-29
TABLE B.30	YEAR-2 MEAN CONCENTRATIONS OF HYDROCARBONS IN DUWAMISH-III REFERENCE SEDIMENT DETERMINED BY THREE NATIONAL MARINE FISHERIES (NMF) LABORATORIES	B-30
TABLE B.31	YEAR-3 SATURATED HYDROCARBON CONCENTRATIONS FOR CANADIAN TEST SEDIMENT HS-2	B-31
TABLE B.32	YEAR-3 POLYCYCLIC AROMATIC (PAH) CONCENTRATIONS FOR CANADIAN TEST SEDIMENT HS-2	B-32
TABLE B.33	YEAR-2 RESULTS OF 12 REPLICATE ANALYSES OF PROCEDURAL BLANKS FOR SEDIMENT HYDROCARBON DETERMINATIONS	B-33
TABLE B.34	YEAR-2 RESULTS OF 8 REPLICATE ANALYSES OF PROCEDURAL BLANKS FOR HYDROCARBON TISSUE DETERMINATION -- GC AND GC/MS DATA	B-34
TABLE B.35	YEAR-2 RESULTS OF SIX REPLICATE ANALYSES OF PROCEDURAL BLANKS FOR HYDROCARBON TISSUE DETERMINATION -- W/FDATA	B-35
TABLE B.36	YEAR-3 RESULTS OF 12 REPLICATE ANALYSES OF PROCEDURAL BLANKS FOR SEDIMENT HYDROCARBON DETERMINATIONS	B-36
TABLE B.37	YEAR-3 RESULTS OF 5 REPLICATE ANALYSES OF PROCEDURAL BLANKS FOR HYDROCARBON TISSUE DETERMINATION (GC-FID AND GC/MS)	B-37
TABLE B.38	YEAR-3 RESULTS OF FOUR REPLICATE ANALYSES OF PROCEDURAL BLANKS FOR HYDROCARBON TISSUE DETERMINATION -- UV/F DATA	B-38
TABLE B.39	YEAR-1 RECOVERIES OF PAR CONTAINED IN NBS-SRM-1647 SUBJECTED TO HYDROCARBON ANALYTICAL SCHEME	B-39
TABLE B.40	YEAR-1 ANALYTICALLY DETERMINED W/F TOTAL OIL CONCENTRATIONS IN SEDIMENTS FORTIFIED WITH VARYING CONCENTRATIONS OF PRUDHOE BAY CRUDE OIL	B-40

LIST OF TABLES (CONTINUED)

		Page
TABLE B.41	YEAR-2 RESULTS OF 8 REPLICATE ANALYSES OF SPIKED METHOD BLANKS FOR SEDIMENT PROCEDURE -- GC-FID DATA	B-41
TABLE B.42	YEAR-2 RESULTS OF 8 REPLICATE ANALYSES OF SPIKED METHOD BLANKS FOR SEDIMENT PROCEDURE -- GC/MS DATA	B-42
TABLE B.43	YEAR-2 RESULTS OF TRIPLICATE ANALYSES OF SEDIMENT SAMPLES SPIKED WITH PRUDHOE BAY CRUDE OIL	B-43
TABLE B.44	YEAR-2 RESULTS OF TRIPLICATE ANALYSES OF TISSUE SAMPLES SPIKED WITH PRUDHOE BAY CRUDE OIL -- W/F DATA	B-44
TABLE B.45	YEAR-2 RESULTS OF TRIPLICATE ANALYSES OF TISSUE SAMPLES FOR SELECTED HYDROCARBON PARAMETERS	B-45
TABLE B.46	YEAR-3 GC-FID RESULTS OF 11 REPLICATE ANALYSES OF SPIKED METHOD BLANKS FOR SEDIMENT PROCEDURE	B-46
TABLE B.47	YEAR-3 GC/MS RESULTS OF 10 REPLICATE ANALYSES OF SPIKED METHOD BLANKS FOR SEDIMENT PROCEDURE	B-47
TABLE B.48	YEAR-1 QUALITY CONTROL DATA FOR ORGANIC CARBON ANALYSES	B-48
TABLE B.49	SUMMARY OF YEAR-1 REPLICATE GRAIN SIZE ANALYSIS	B-49
TABLE B.50	SUMMARY OF YEAR-2 REPLICATE GRAIN SIZE ANALYSES	B-50
TABLE B.51	SUMMARY OF YEAR-3 REPLICATE GRAIN SIZE ANALYSES	B-51

APPENDIX A

CRUISE NARRATIVES

FOR

YEAR-1, YEAR-2, AND YEAR -3

YEAR-1 CRUISE NARRATIVE

Field sampling for the first year of the BSMP was initiated on Saturday, September 1, 1984, five days after contract award. A field team, that included R.E. Ruff, Field Party Chief, W.G. Steinhauer, and J.F. Campbell, was mobilized from Battelle Ocean Sciences in Duxbury MA. During the period of 27-31 August, all of the necessary cruise gear and equipment was ordered, assembled, packaged, and rushed to Prudhne Bay, AK for loading aboard the NOAA research vessel. During this same period, the NOAA field staff, including George Lapienne and Lt. Eric Gardiner, were in Prudhoe Bay preparing the government-supplied boat and performing sea trials.

The first station sampled, Station 5D, just outside of the lee of West Dock, east of Stump Island, served as a shakedown cruise and enabled the scientific party to assess the applicability of proposed sampling procedures aboard the n-m boat. Based on the experience at the first sampling, the weighted sediment grab (908 kg of steel weight) was exchanged for the unweighed grab that was subsequently used throughout the survey. In addition, a data station was fabricated to fit forward of the winch, a sieve frame was built to fit on the transom, and the grab stand was modified to fit between the legs of the hydraulic U-frame. Other than these minor modifications, the sampling equipment was used as planned for the remainder of the survey.

The major problem encountered in the shakedown cruise was the size and physical limitations of the n-m research vessel. As a scientific platform, the deck space was adequate for all of the sampling operations. However, deck and cabin space were limited, and with five people aboard, the boat was quite cramped. Due to limited deck space, extra fuel could not be carried as initially anticipated. This had no effect on the Year-1 survey. However, longer excursions to the east and west are anticipated during ice-free conditions in subsequent sampling years and fuel reserve may be limiting for these future surveys. Also, because of limited deck space, the second grab sampler could not be carried onboard and had to remain at the Nana Camp logistics center. Deck space for cold storage of food and samples was also limited and barely adequate for five-day survey legs. Careful planning for the Year-2 field survey should provide an additional 0.7 to 1.1 cubic meters of frozen space to allow for longer periods at sea.

Because sampling did not begin until September, the increasing presence of sea ice throughout the Study Area was the major factor in determining the eventual cruise trackline. Ice was very much in evidence at all but the shallowest stations. In general, a heavy band of polar pack ice completely prevented the vessel from reaching the furthest offshore stations

(Stations 6E, 4D, and 3C). To the west across Harrison Bay, this accumulation followed the 15-m contour and prevented sampling at the western-most stations. East of Prudhoe, the ice remained up against the barrier islands and impinged upon the coast at Brownlow Point, thereby preventing passage into Camden Bay and sampling at the eastern-most stations. At times, the ship was taken into the pack ice in order to reach a particular station location. Because the floes in the pack were constantly in motion relative to each other, care had to be taken in order to keep the vessel from being pinched or caught in the ice. this ice motion also meant that the leads that. were followed into the pack were not necessarily still present to follow back toward open water. Therefore, the stations had to be completely sampled early enough to allow sufficient daylight to locate the alternate paths back out of the ice. Grease ice was actively forming around the ice floes and inside the barrier islands and, by 12 September, this new ice stretched completely across the lagoon between Flaxman Island and the mainland. The presence of numerous ice floes and newly-formed ice slowed the cruise progress considerably and made seeking shelter behind protective barrier islands a nightly necessity. The net result was that transit time took far longer than planned, slowing the progress of the survey.

Sampling proceeded essentially as projected in the Battelle Field Survey Handbook. Inability to sample at some stations due either to ice conditions or mechanical problems was partially offset by sampling three additional stations not in the original sampling plan. Sediment samples could be quickly and efficiently collected with the Kynar-coated modified Van Veen. A total of 220 sediment samples was obtained from 27 stations occupied between the western part of Harrison Bay and Flaxman Island to the east. the photographic documentation and the hydrographic measurements were easily accomplished at each of these stations. Bivalve molluscs were more difficult to locate and occurred in very low abundances at most of the stations occupied. Concentrations of Astarte borealis were encountered at two of the mid-depth stations and Cyrtodaria kurriana was found at the shallowest station in Gwydyr Bay. At stations containing a high sediment silt-clay content, the flow rate of water available from the submersible pump proved to be inadequate for washing the large volumes of sediments necessary to obtain the required numbers of bivalves. The abundant offshore scallop, Arctinula groenlandica, could not be obtained because the pack ice precluded reaching the deepest stations. However, one otter trawl sample was taken to demonstrate that no unforeseen problems might be encountered in deploying or retrieving the net.

Several mechanical problems related to the relative newness of the vessel and to the fact that the Year-1 BSMP was essentially used as a shakedown cruise, had a direct bearing on the results obtained. The ship's alternator failed during the

cruise leg into Harrison Bay. This problem essentially negated any options to occupy the offshore stations in the ice pack or to steam toward the western-most stations off Pitt Point. Because the ship was limited to battery power, the emphasis was placed on heading back toward Prudhoe Bay, and station occupation became secondary in importance. An additional full day of cruise time was lost while a replacement alternator was located and flown up from Fairbanks. During the cruise leg to the east, a faulty relay caused the low engine oil alarm to sound intermittently. This resulted in a reduction of cruising speed and frequent stops to check the engine oil level, and this problem contributed to the decision not to try to push through the ice pack and into Camden Bay. Other mechanical problems that interfered with the progress of the cruise included a sticking compass, limited range on the radar, malfunctioning panel instruments, and the lack of proper trim on the vessel, holding the top speed down to only 8 knots. These and other mechanical and design problems were communicated to MMS with the request to have modifications made before the Year-2 field effort.

The Tracer Omega-2 navigation system, that was expected to be the main navigational aid during the cruise, was not available at the start-up date. Therefore, the onboard satellite navigation system was relied upon to determine the station locations.

In spite of all the problems encountered, the first cruise of the BSMP should be rated a success. The problems inherent with arctic research were addressed, onboard techniques and procedures were worked out, and valuable experience was obtained for planning the future field efforts. In addition, a majority of the projected stations were occupied and the requisite samples were obtained for laboratory analysis. The overall success of the field effort would not have been possible without the considerable efforts of Mr. George Lapiene in preparing and maintaining the NOAA vessel, and those of Lt. Eric Gardiner, the ship's skipper, and Mr. Steve Pace for planning throughout the cruise.

YEAR-2 CRUISE NARRATIVE

Field operations for Year-2 of the BSMP were resumed early in August 1985. The revised sampling program for Year-2 included reoccupation of the majority of Year-1 stations as well as the addition of stations to the east and west that could not be reached in Year-1. Emphasis was placed on occupying stations inside of the 25-m contour, and on obtaining both bivalve and amphipod samples for tissue analyses. In addition, stations along the shoreline and in the deltas of two major rivers were selected for samples of potential source materials.

The Year-2 sampling program was more ambitious than that attempted during Year-1. Elimination of the hydrographic measurements, however, permitted the survey to be accomplished by two, rather than three, field scientists.

R. Eugene Ruff and William Steinhauer arrived in Prudhoe Bay on the evening of 6 August 1985. the scientific gear was assembled and stowed aboard the NOAA Launch NO.1273 on 7-8 August, and the cruise got underway on 9 August 1985. The Year-2 BSMP field program was essentially accomplished in four legs as follows:

LEG 1 - WESTERN PRUDHOE BAY AREA: 9-12 AUGUST 1985

The first stations occupied were in Prudhoe Bay to ensure that any unforeseen problems requiring shore-based assistance could be quickly remedied. the satellite navigation system was used to position the boat within 0.3 nm of the established station positions. Where possible, a surface float tethered to an anchor was deployed at the site and the vessel was permitted to drift in the vicinity. This tactic prevented any stack gases from blowing across the work area. Stations 5(0), 5(l), 5(5), 5(10), 5A, 5B, 5D, 5E, 6A, 6B, and 6c were occupied for sediment chemistry grab samples. In addition, Station 6D was occupied for sediment grabs and bivalve samples.

The newly constructed road system on the North Slope, to the west of Prudhoe Bay, permitted the boat to be anchored at Oliktok Point rather than having to steam back to Prudhoe Bay between legs. This not only saved time, but also meant that the first shoreline peat station near Milne Point (Station 6J) could be reached via road. Between cruise legs 1 and 2, ice conditions in Harrison Bay were reconnoitered from a Cessna equipped with floats. The plane landed 6 miles upstream from the mouth of the Colville River, where a delta sample was collected (Station 6H).

LEG 2 - HARRISON BAY AND POINTS WEST: 15-18 AUGUST 1985

During the second cruise leg, Stations 5F, 6F, 6B, 7A, 7B, 7C, 7D, 7E, and 7G were sampled. Bivalves were obtained off Oliktok Point and in Gwydyr Bay. Because molluscs were not located at the proposed Station 7F location, this station was not occupied. Shore peat samples near Cape Halkett (Station 7H) and on the Kogru Peninsula (Station 7J) were obtained from a Zodiak boat because these regions were too shallow for the NOAA boat to land. The amphipod traps were routinely deployed and produced mixed results. At some stations, a large number of gammarid amphipods (Anonyx sp.) were captured, while at other stations only a few animals were obtained. In general, the amphipods were as small or smaller than the meshes (0.5 cm) of the collecting traps and could easily escape when the traps were pulled from the bottom. The traps were subsequently covered with fine nylon mesh (queen-size panty hose) to help retain the animals. Several different baits were compared and, as past experience had shown, sardines in mustard sauce were greatly preferred by the crustaceans.

The vessel arrived back at Prudhoe Bay for fueling and resupply the evening of 18 august. Between legs 2 and 3, peat samples were collected from a shore station on the east side of the bay on Heald Point (Station 5K) and from the Sagavanirktok River delta (Station 5J). Both locations were reached via road.

LEG 3 - EASTERN PRUDHOE BAY AREA: 21-23 AUGUST 1985

Stations 2F, 3A, 3B, 4A, and 4B were occupied during this leg, and shore peat samples were collected at Tigvariak and Flaxman Islands (Stations 3D and 2G, respectively). Specimens of the bivalve genus Astarte were obtained at Station 3A. As in Year-1, molluscs generally occurred in very low numbers. However, the improved bivalve washdown system employed during Year-2 permitted more grab samples to be processed and adequate numbers of bivalves to be collected. Generally, between 50 and 70 grab samples were processed at a station to obtain a sufficient number of bivalves for a sample.

The weather during leg 3 was very cold, windy and foggy . Diminished visibility and the presence of

ice floes greatly increased the travel time between stations. Many of the stations were sampled at anchor because the boat rolled too heavily while adrift. The northeast wind pushed the ice pack shoreward against the barrier island, preventing access to stations further east. therefore, the boat was again anchored at Prudhoe Bay to await a shift in the weather pattern.

A break in the weather occurred on Tuesday, 27 august, with clear skies, brilliant sunshine, and a light southeast breeze. Joy Geiselman (COTR) joined the vessel for a day trip to Station 5G to observe the sampling procedures. With a forecast of continuing southerly winds, preparations were made for a push eastward into Camden Bay and out to Barter Island.

LEG 4 - CAMDEN BAY AND POINTS EAST: 28 AUGUST - 1 SEPTEMBER 1985

With the aid of observations made from the air, an easy passage through Mary Sachs Entrance west of Flaxman Island was accomplished.

Stations 1A, 1B, 1C, 1D, lE, 2A, 2B, 2C, and 2D were successfully occupied in Camden Bay and in the vicinity of Barter Island. Because bivalves could not be located at Station 1E, they were collected nearby at Station 1A. Shore peat samples were obtained in Arey Lagoon (Station 1F) and near the Canning River (Station 2H). Station 2G was not occupied because bivalves were not located. Stations 2E and 4C were sampled on the return to Prudhoe, and a final bivalve station was established off the Endicott Causeway. All sampling was completed by late afternoon of 1 September.

Numerous factors contributed to the success of the Year-2 BSMP field effort. Unlike last year, lead time for planning, preparation, and implementation was adequate. Experience gained during the Year-1 cruise was invaluable in anticipating and solving sampling problems. The cruise was scheduled during August to take full advantage of the extended daylight and the short open water season. The elimination of the hydrographic measurements permitted the reduction in one crew member and resulted in a maximum of four, rather than five crew members onboard, a much more comfortable number for the size of the boat.

The ice reconnaissance flights were beneficial in planning and executing the short-term cruise goals. Observations made from the air had a direct bearing on the timing and route taken through the barrier islands on the east leg to Camden Bay. In addition, the ability of the plane to land on the Colville River made possible the occupation of the delta station in an otherwise inaccessible area. the expanded North Slope road system was also an asset to the overall sampling program. The fact that several areas could now be reached by truck resulted in more latitude in cruise planning as well as some direct time savings.

Finally, the personnel involved in the operations of NOAA launch No. 1273 were of tremendous help in bringing the Year-2 BSMP survey to a successful conclusion.

YEAR-3 CRUISE NARRATIVE

The field operations for Year-3 of the Beaufort Sea Monitoring Program were resumed in late July 1986. The goals for the field program included reoccupation of the 39 sediment stations sampled in Year-2 and continued emphasis on the collection of bivalve molluscs and gammarid amphipods for tissue analyses. Sampling at the shoreline peat stations sampled in Year-2 was discontinued, but additional samples for the chemical determination of source material were requested from four major river systems. Because this sampling effort was comparable to the ambitious program undertaken the previous year, the field program was initiated earlier in the season to ensure enough time to accomplish the outlined goals and to maximize the opportunities to reach the remote stations east of Flaxman Island.

R. Eugene Ruff and John S. Brown arrived in Deadhorse on the evening of 26 July 1986 after spending the day in Anchorage acquiring the final equipment and supplies, and arranging for shipment. The scientific gear was assembled, checked and stowed aboard NOAA launch No. 1273 on 27-28 July, and the research cruise got underway on 29 July 1986. As in Year-2, the Year-3 field program was essentially accomplished in four cruise legs as follows:

LEG 1 - CAMDEN BAY/EASTERN STUDY AREA: 29 JULY - 2 AUGUST 1986

It was agreed to attempt occupation of the far eastern stations in Camden Bay during the initial cruise leg. This region is often inaccessible to small boats due to pack ice that impinges against Brownlow Point, just east of Flaxman Island, blocking access to the bay. Aerial reconnaissance flown on 29 July, however, revealed that the area around Flaxman was free of heavy ice accumulations. Passage into Camden Bay was accomplished on the morning of 30 July, and during the next three days Stations 2F, ID, lE, 1A, 1B, 2A, 1C, 2C, 2B, and 2D were occupied for sediment chemistry sampling. The Nortec-leased airlift system, designed for infaunal sampling, was successfully employed at Station 1A to collect a large number of the bivalve Portlandia arctica, plus fewer of the larger Astarte borealis. The system was again used at Station 1B to collect A. borealis, although some problems were encountered with water vapor freezing in the air line. The amphipod Anonyx spp. was obtained at Stations 1A, 1B, and 2F using traps baited with tuna fish. The traps were also deployed at Station 1E, but virtually no specimens were captured at

that location. It was planned to move as close as possible to the mouth of the Canning River and take the inflatable raft into the delta region to obtain the river sediment samples. The pack ice was moving shoreward in the vicinity, however, and it was deemed prudent to steam back toward Flaxman Island with all possible haste. Entry into the protective lagoon behind Flaxman was accomplished with some difficulty, and the river sampling was aborted for this leg.

The vessel arrived back at West Dock for resupply at 12:30 am the morning of 3 August. In the interim before the next cruise leg, the Sagavanirktok and Kuparuk Rivers were sampled at locations that were reachable via road. Depositional areas were targeted at sites upstream of the developed areas to minimize the chances of sampling drilling-related contaminants.

LEG 2 - HARRISON BAY/PITT POINT: 5-8 AUGUST 1986

During the second cruise leg, the region in the far western part of the Study Area was occupied, and Stations 7D, 7C, 7B, 7E, 7G, 7A, 6F and 6G were sampled for sediment chemistry. Use of the airlift was attempted at Station 6G to obtain the bivalve Cyrtodaria kurriana, but choppy water and strong currents prevented the system from operating effectively. Therefore, the grab and the washdown system utilized in previous years were employed to obtain the mollusc sample. Gammarid amphipods were obtained at Stations 7B, 7C, and 7E, but none were found at Station 6G. The traps were lined with a sturdy fine mesh which resulted in the retention of a large number of specimens when present in the sampling area.

Between cruise legs 2 and 3, the vessel was anchored at Oliktok Point rather than returning to West Dock. Fueling and resupply were easily effected at this location, and it essentially saved a full day of steaming time.

LEG 3 - WESTERN PRUDHOE BAY AREA: 10-14 AUGUST 1986

During leg 3, Stations 6B, 6D, 6C, 6A, 5E, 5B, 5A, 5F, 5(10), 5G, and 5(5) were occupied for chemistry sampling. An in-line filter was installed on the airlift to solve the water vapor and any potential contamination problems, and the system was used to collect Astarte borealis at Station 6D. The system

was tried again at Station 5F in Gwydyr Bay to collect Cyrtodaria kurriana, but it was not successful and the bivalves were obtained by sieving the sediments from a large number (50) of grab samples. The weather during this leg was windy and very foggy, thus negating any opportunities to obtain samples from the Colville River delta.

Between cruise legs 3 and 4, Mr. Ruff was called away from Prudhoe Bay to participate in a scientific symposium in Europe. He was replaced by Mr. Jim Campbell, a veteran of the Year-1 field survey.

LEG 4 - EASTERN PRUDHOE BAY AREA: 16-19 AUGUST 1986

Prior to the departure of the final cruise leg, an ice reconnaissance was flown to assess the ice conditions in Mary Sachs Entrance west of Flaxman Island (Station 2E). This flight provided an opportunity to obtain the chemistry samples from the Colville and Canning Rivers, and sediments were taken with a small snapper grab in depositional areas from each of these locations. Ice conditions were found to be favorable, and the vessel immediately got underway before any shifts occurred in wind direction. Stations 2E, 3B, 3A, 4B, 4A, 5H, 4C, 5(l), 5(0), and 5(D) were successfully occupied for chemistry sediment samples. The airlift was employed at Station 3A for Astarte borealis but, because only one bivalve was captured after a 30 minute effort, the mollusc sample was obtained by taking multiple grabs. The grab was also used to obtain clam samples at Station 5H and 5(1). The amphipod traps were deployed at Stations 3A, 4A, and 4B with no success, and only a few Anonyx spp. were captured at Station 5H.

The final station was completed the morning of 19 August, and the vessel was offloaded that afternoon. The frozen samples and all of the scientific gear were packed up on the 20th and shipped south to Battelle New England Marine Research Laboratory.

Overall, Year-3 of the BSMP field effort was highly successful. The lead time was adequate for planning, preparation and implementation, and the experience gained on the previous two cruises was invaluable in anticipating and solving sampling and logistical problems. The cruise was initiated even earlier in the season than last year, allowing the cruise personnel to take full advantage of the extended daylight hours.

As in the past, the satellite navigation system was used to position the vessel within 0.25 nm of the established station positions. The Tracer Omega-2 navigation system was aboard again this year, but its usefulness as a tool for dead reckoning to a desired position was very limited. The satellite system was adequate for zeroing in on station, but unfortunately satellite passes were often more than an hour apart, and a great deal of time was spent hove to waiting for satellite fixes.

The airlift system employed at the bivalve stations proved to be only moderately effective. Problems were encountered with water vapor freezing and plugging the air line. This was solved by installing an in-line filter just below the pressure tanks on the compressor. A less-easily remedied problem involved the waves and/or currents in the vicinity of some of the clam stations which prevented the suction head from remaining upright and operating effectively. Even when at anchor, the vessel still swung enough to interfere with the performance. The airlift proved to be most effective in collecting *Portlandia arctica*, a species generally found in the top several centimeters of the sediment. The system was only partly successful in obtaining *Astarte borealis*, a much larger species living deeper in the substrate, and it was not useful at all in collecting *Cyrtodaria kurriana*. This latter species normally lives close to the sediment surface, but is capable of rapid burrowing when disturbed by the presence of the airlift suction head.

The amphipod traps were much more effective in collecting *Anonyx* spp. this year. The heavier mesh liner sewn into the coated wire traps greatly increased the retention of the captured specimens. However, even though amphipods are fairly ubiquitous across the continental shelf in the Beaufort Sea, they were not found at all stations where tissue samples were desired. In general, the gammarids were abundant when conditions were calm, and were not in evidence where wave activity was pronounced. In rough conditions, the scent of the tuna bait was probably dissipated before it could extend over a broad enough area of the bottom to attract a large number of specimens.

The cruise objectives this year were accomplished in a total of 25 days from vessel loading to final pack-up. This was two days shorter than the effort last year even though the number of open-water chemistry stations was the same (39 stations). As opposed to last year, however, no time was lost to weather, and the eight coastal peat stations were not re-occupied. Much of the credit for the smooth and efficient operation is due to the skipper, Mr. George Lapiene, who again this year was instrumental in bringing the final BSMP field survey to a successful conclusion.

APPENDIX B

QUALITY CONTROL RESULTS

FOR

YEAR-1, YEAR-2, AND YEAR-3

TABLE B.1 YEAR-1 ANALYSIS OF REPLICATE SAMPLES OF MESS-1, A STANDARD REFERENCE SEDIMENT.

	MET ALS (ppm Dry Height)						
	Ba	**Cd**	**Cr**	**Cu**	**Pb**	V	**Zn**
	270	0.720	63	23	35*4	77	16 I
	270	0.740	62	29	31.9	81	168
	284	0.760	62	26	33.5	79	171
	279	0.685	64	24	37*9	77	176
	279	0.631	66	27	34.5	81	176
	275	0.667	64	30	36.5	81	170
	273	0.707	64	24	32.7	77	164
	275	0.706	63	28	32.7	84	167
Mean	275	**0.702**	64	26	34.4	80	169
S.D.[a]	**4.8**	0.041	**1.3**	2.6	2.1	2.6	5.3,
CV(%)[b]	2	6	2	10	6	3	3
Beet Value[c]	270	0.59	71	25.1	34.0	72.4	191
S.D.		0.10	**11**	3.8	6.1	5.3	17

[a] Standard Deviation
[b] C oefficient of Variation
[c] Values reported by the M arine A nalytical Chemistry Standards Program, National Research C ouncil, Canada

TABLE B.2. YEAR-1 ANALYSIS OF REPLICATE SAMPLES OF OYSTER STANDARD 1566, A STANDARD REFERENCE TISSUE.

	14 ETALS (ppm Dry Weight)						
	Ba	Cd	Cr	Cu	Pb	V	Zn
	4.43	3.84	0.69	59.7	0.50	1.34	823
	4.78	4.05	.86	59.2	0.50	0.94	815
	5.48	4.16	2.01	59.7	0.46	1.14	832
	4.98	3.95	3.88	59.7	0.46	1.14	827
	5.33	3.89	0.75	58.7	0.46	1.14	827
Mean	5.00	3.98	1.64	59.4	0.48	1.14	8.25
S.D.	0.42	0.13	1.36	0.5	0.02	0.14	6
CV(%)	8	3	83	1	5	12	1
Beet Value	N/A	3.5	0.69	63.0	0.48	N/A	852
S.D.		0.4	0.27	3.5	0.04		14

N/A = Not Available.

TABLE B.3 YEAR-2 RESULTS OF FIVE REPLICATE ANALYSES OF NBS-1646 STANDARD REFERENCE SEDIMENT.

	Metals (µg/g dry weight)						
	Ba	Cd	Cr	Cu	Pb	V	Zn
	466	0.40	96	26.4	29.8	122	198
	437	0.44	81	22.3	28.9	109	186
	441	0.38	80	20.2	27.9	104	154
	396	0.41	86	21.8	27.9	105	164
	369	0.38	86	20.5	28.9	103	154
Mean	422	0.40	86	22.2	28.7	109	171
S.D.	35	0.02	6	2.2	0.7	7	18
Cv (%)	8	5	7	10	3	6	10
Best Value		0.36	76	18	28.2	94	138
S. D.		0.07	3	3	1.8	1	6

TABLE B.4 YEAR-2 RESULTS OF FIVE REPLICATE ANALYSES OF MESS-1 STANDARD REFERENCE SEDIMENT.

	Metals (µg/g dry weight)						
	Ba	Cd	Cr	Cu	Pb	V	Zn
	287	0.79	59	30.8	35.6	85	229
	296	0.76	62	31.2	36.6	86	222
	283	0.71	60	29.2	37.5	83	206
	272	0.71	63	28.7	37.5	81	208
	312	0.71	60	37.6	35.2	101	250
Mean	290	0.74	61	31.5	36.5	87	223
S.D.	13	0.03	2	3.2	0.9	7	16
Cv (%)	5	4	3	10	3	8	7
Best Value	270	0.59	71	25.1	34.0	72.4	191
S.D.		0.10	11	3.8	6.1	5.3	17

TABLE B.5 YEAR-2 RESULTS OF FIVE REPLICATE ANALYSES OF OYSTER STANDARD 1566 REFERENCE TISSUE.

	Metals (µg/g dry weight)						
	Ba	Cd	Cr	Cu	Pb	v	Zn
	5.4	3.44	0.52	67.7	0.52	2.1	936
	5.5	3.86	0.48	67.2	0.48	2.2	926
	5.6	3.76	0.60	66.4	0.48	2.2	903
	5.3	3.65	0.51	65.5	0.45	2.3	888
	5.2	3.69	0.40	64.8	0.47	2.4	885
Mean	5.4	3.68	0.50	66.3	0.48	2.2	908
S.D.	0.1	0.14	0.06	1.1	0.02	0.1	20
Cv (%)	3	4	13	2	4	5	2
Best Value	N/A	3.5	0.69	63.0	0.48	N/A	852
S.D.		0.4	0.27	3.5	0.04		14

TABLE B.6 YEAR-3 RESULTS OF FIVE REPLICATE ANALYSES OF MESS-1 STANDARD REFERENCE SEDIMENT.

	Metals(μg/g dry weight)						
	Ba	Cd	Cr	Cu	Pb	v	Zn
	284	0.65	67.0	26.5	36.7	75.9	191
	291	0.72	74.8	25.0	36.0	75.7	225
	281	0.64	70.6	27.9	40.1	79.4	177
	275	0.65	70.0	29.0	30.3	79.1	165
	286	0.64	70.9	26.7	31.7	78.8	184
Mean	283	0.66	70.7	27.0	35.0	77.8	188
SD	5	0.03	2.5	1.4	3.5	1.6	20
CV(%)	2	5	4	5	10	2	10
Best Value	270	0.59	71	25.1	34*O	72.4	191
SD		0.10	11	3.8	6.1	5.3	17

TABLE B.7 YEAR-3 RESULTS OF FIVE REPLICATE ANALYSES OF OYSTER STANDARD 1566 REFERENCE TISSUE.

	Metals(μg/g dry weight)						
	Ba	Cd	Cr	Cu	Pb	V	Zn
	2.89	3.97	0.54	59.0	0.48	1.80	771
	3.14	3.90	0.44	59.3	0.43	1.85	775
	2.94	3.98	0.44	59.1	0.47	1.85	777
	2.87	3.92	0.44	59.2	0.45	1.86	774
	3.30	3.94	0.44	59.1	0.44	1.78	788
Mean	3.03	3.94	0.46	59.1	0.45	1.83	777
SD	0.17	0.03	0.04	0.1	0.02	0.03	6
CV(%)	5	1	9	0	4	2	1
Best Value	N/A	3.5	0.69	63.0	0.48	N/A	852
SD		0.4	0.27	3.5	0.04		14

TABLE B.8 YEAR-1 ANALYSIS OF REPLICATE PROCEDURAL BLANKS FOR SEDIMENT DIGESTION.

	METALS (ppm Dry Weight)						
	Ba	Cd	Cr	Cu	Pb	v	Zn
	1.8	0.100	8.6	1.60	1.60	1.0	3.0
	1.6	0.100	8.4	0.80	1.60	1.80	4.0
	1.8	0.100	9.2	0.80	1.60	1.60	3.8
	1.6	0.100	9.2	0.40	1.28	1.0	3.4
	2.0	0.100	10.0	0.80	1.60	1.6	10.0
Mean	1.8	0.100	9.08	0.88	1.54	1.4	4.84
S.D.	0.17	0.0	0.63	0.44	0.14	0.37	2.91
CV (%)	9	0	7	50	9	27	60
Detection Limit	0.4	0.04	1.2	0.9	0.3	0.4	6.0

TABLE B.9 YEAR-1 ANALYSIS OF REPLICATE PROCEDURAL BLANKS FOR TISSUE DIGESTION.

	METALS (ppm Dry Weight)						
	Ba	Cd	Cr	Cu	Pb	v	Zn
	0.040	0.053	0.04	0.40	0.55	0.80	0.90
	0.040	0.053	0.07	0.40	0.50	2.20	1.00
	0.060	0.107	0.07	1.00	0.55	1.00	1.00
	0.040	0.053	0.08	0.40	0.50	0.80	1.00
	0.040	0.053	0.09	0.40	0.55	0.80	1.00
Mean	0.044	0.064	0.07	0.52	0.53	1.12	0.98
S.D.	0.009	0.024	0.02	0.27	0.03	0.61	0.05
CV (%)	20	38	27	52	5	54	5
Detection Limit	0.01	0.04	0.04	0.5	0.06	1.2	0.1

TABLE B.10 YEAR-2 RESULTS OF FIVE REPLICATE ANALYSES OF PROCEDURAL BLANKS FOR SEDIMENT DIGESTION.

	Metals (µg/g dry weight)						
	Ba	Cd	Cr	Cu	Pb	V	Zn
	0.0	0.02	0.0	0.7	0.42	0.5	1.5
	0.0	0.01	0.0	0.6	0.34	0.0	0.0
	0.0	0.02	0.0	0.0	0.25	0.0	0.0
	0.8	0.01	0.1	0.4	0.43	0.0	1.3
	0.7	0.01	0.1	0.9	0.26	0.0	0.5
Mean	0.3	0.014	0.04	0.52	0.34	0.1	0.46
S.D.	0.4	0.005	0.05	0.31	0.08	0.2	0.55
Cv(%)	133	35	122	59	22	200	120
Detection Limit	0.8	0.010	0.10	0.62	0.16	0.4	1.1

TABLE B.11 YEAR-2 RESULTS OF FIVE REPLICATE ANALYSES OF PROCEDURAL BLANKS FOR TISSUE DIGESTION.

	Metals (µg/g dry weight)						
	Ba	Cd	Cr	Cu	Pb	V	Zn
	0.0	0.10	0.60	0.2	0.31	0.2	0.2
	0.0	0.10	0.60	0.0	0.36	0.0	0.1
	0.0	0.10	0.63	0.0	0.30	0.0	0.0
	0.0	0.10	0.58	0.0	0.37	0.0	0.0
	0.0	0.10	0.60	0.1	0.36	0.4	3.2
Mean	0.0	0.10	0.60	0.06	0.34	0.12	0.7
S.D.		0.00	0.02	0.08	0.03	0.16	1.3
Cv (%)		0	3	133	9	133	179
Detection Limit	0.2	0.2	0.04	0.16	0.06	0.32	2.6

TABLE B.12 YEAR-3 RESULTS OF FIVE REPLICATE ANALYSES OF PROCEDURAL BLANKS FOR SEDIMENT DIGESTION.

	Metals(μg/g dry weight)						
	Ba	Cd	Cr	Cu	Pb	V	Zn
	<0.24	0-.026	5.47	<0.48	<0.50	<1.20	<2.39
	<0.24	0.026	5.01	<0.48	<0.50	<1.20	<2.39
	<0.24	0.026	4.77	<0.48	<0.50	<1.20	<2.39
	<0.24	0.026	5.03	<0.48	<0.50	<1.20	<2.39
	<0.24	0.053	5.66	<0.48	<0.50	<1.20	1.70
Mean	<0.24	0.031	5.19	<0.48	<0.50	<1.20	
SD		0.011	0.33	-			
CV(%)		35	6	-			
Detection Limit	0.48**	0.022*	0.66*	0.96**	1.00**	2.40**	4.78**

*Detection limit = 2 x the standard deviation.

**Detection limit = 2 x the "less than" value of the blank.

TABLE B.13 YEAR-3 RESULTS OF FIVE REPLICATE ANALYSES OF PROCEDURAL BLANKS FOR TISSUE DIGESTION.

	Metals (μg/g dry weight)						
	Ba	Cd	Cr	Cu	Pb	V	Zn
	<0.09	0.18	0.13	<0.19	0.15	<0.46	1.79
	<0.09	0.18	0.08	<0.19	0.17	<0.46	2.23
	<0.09	0.18	0.08	<0.19	0.16	<0.46	4.47
	<0.09	0.09	0.08	<0.19	0.16	<0.46	0.22
	<0.09	0.18	0.13	<0.19	0.14	<0.46	1.34
Mean	<0.09	0.16	0.10	<0.19	0.16	<0.46	2.01
SD		0.04	0.02	-	0.01	-	1.40
CV(%)		22	24	-	6	-	70
Detection Limit	0.18**	0.08*	0.04*	0.38**	0.02*	0.98**	2.80*

*Detection limit = 2 x the standard deviation.

**Detection limit = 2 x the "less than" value of the blank.

TABLE B.14 YEAR-1 ANALYSIS OF REPLICATE SAMPLES OF REAGENTS TO ESTABLISH REAGENT BLANK FOR SEDIMENT DIGESTION.

	METALS (ppm Dry Weight)						
	Ba	Cd	Cr	Cu	Pb	V	Zn
	6.0	0.100	2.6	7.0	1.92	10.0	8.I
	5.0	0.120	2.6	3.0	1.60	6.0	7.0
	5.0	0.140	2.4	3.0	1.92	5.0	7.0
Mean	5.3	0.12	2.5	4.3	1.81	7.0	7.4
S.D.	0.58	0.02	0.12	2.3	0.18	2.65	0.64
CV (%)	11	17	5	54	10	38	9

TABLE B.15 YEAR-2 RESULTS OF FIVE REPLICATE ANALYSES OF REAGENTS TO ESTABLISH REAGENT BLANK FOR SEDIMENT DIGESTION.

	Metals (µg/g dry weight)						
	Ba	Cd	Cr	Cu	Pb	V	Zn
	0.0	0.02	0.0	0.0	0.43	0.4	0.0
	0.0	0.02	0.0	0.0	0.68	0.2	0.1
	0.0	0.02	0.0	0.0	0.51	0.5	0.0
Mean	0.0	0.02	0.0	0.0	0.54	0.4	0.03
S.D.	0.0	0	0.0	0.0	0.10	0.1	0.05
CV (%)	0	0	0	0	19	25	157

TABLE B.16 YEAR-3 RESULTS OF FIVE REPLICATE ANALYSES OF REAGENTS TO ESTABLISH REAGENT BLANK FOR SEDIMENT DIGESTION.

	Metals(μg/g dry weight)						
	Ba	**Cd**	**Cr**	**Cu**	**Pb**	V	**Zn**
	<0.20	0.010	6.30	<0.46	0.25	<1.15	5.94
	<0.20	0.005	5.20	<0.46	0.22	<1.15	5.94
	<0.20	<0.005*	5.20	<0.46	0.22	<1.15	5.34
	<0.20	<0.005*	5.20	<0.46	0.25	<1.15	4.75
	<0.20	0.010	4.20	<0.46	0.22	<1.15	2.97
Mean	<0.20	0.005	5.22	<0.46	0.23	<1.15	4.99
SD		0.004	0.66	-	0.01	-	1.10
CV(%)		89	13		6	-	22

*For Cd mean determination, "less than" value = 0.

TABLE B.17 YEAR-1 ANALYSIS OF REPLICATE SAMPLES OF REAGENTS TO ESTABLISH REAGENT BLANK FOR TISSUE DIGESTION.

	METALS (ppm Dry Weight)						
	Ba	**Cd**	**Cr**	**Cu**	**Pb**	V	**Zn**
	0.2	0.107	.04	0.2	0.50	0.4	0.4
	0.2	0.160	.07	0.2	0.63	1.1	0.5
	0.3	0.040	.07	0.5	0.55	0.5	0.5
Mean	0.23	0.10	0.06	0.3	0.56	0.67	0.47
S.D.	0.05	0.06	0.02	0.14	0.07	0.31	0.05
CV (%)	22	60	29	47	12	46	10

TABLE B.18 YEAR-2 RESULTS OF FIVE REPLICATE ANALYSES OF REAGENTS TO ESTABLISH REAGENT BLANK FOR TISSUE DIGESTION.

	Metals (µg/g dry weight)						
	Ba	Cd	Cr	Cu	Pb	V	Zn
	0.0	0.09	0.07	0.6	0.27	0.0	0.2
	0.0	0.09	0.23	0.4	0s37	0.0	2.9
	0.0	0.09	0.17	0.2	0.36	0.2	0.0
	0.1	0.09	0.08	0.4	0.33	0.0	1.6
	0.0	0*09	0.10	0.0	0.28	0.0	0.3
Mean	0.02	0.09	0.13	0.32	0.32	0.04	1.0
S.D.	0.04	0.00	0.06	0.20	0.04	0.08	1.1
CV (%)	200	0	47	64	13	200	110

TABLE B.19 YEAR-3 RESULTS OF FIVE REPLICATE ANALYSES OF REAGENTS TO ESTABLISH REAGENT BLANK FOR TISSUE DIGESTION.

	Metals(#g/g dry weight)						
	Ba	Cd	Cr	Cu	Pb	V	Zn
	<0.09	0.002	0.04	<0.18	0.03	<0.46	0.228
	<0.09	0.005	0.04	<0.18	0.05	<0.46	0.228
	<0.09	0.005	0.04	<0.18	0.05	<0.46	0.228
	<0.09	0.005	0.04	<0.18	<0.02*	<0.46	0.228
	<0.09	0.007	0.04	<0.18	0.03	<0.46	0.228
Mean	<0.09	0.005	0.04	<0.18	0.03	<0.46	0.228
SD		0.002	0	-	0.02	-	0
CV(%)		32	0	-	61	-	0

* For Pb mean determination, “less than” value = 0.

TABLE B.20 YEAR-1 COMPARISON OF TECHNIQUES FOR DETERMINATION OF THE CONCENTRATION OF METALS IN SEDIMENTS.

	METALS			
	Ba	Cu	Pb	Zn
		Station 5(1) (5 Replicate Field Grab Samples)		
Mean XRF	235	14.4	7.06	41.7
S.D.	18	2.7	1.30	3.9
Mean ICAP	237	9.0		34.6
S.D.	18	2.7		2.2
Mean ZGFAA			4.92	
S.D.			0.33	
		Station 5A (5 Replicate FieldGrabSamples)		
Mean XRF	456	23.2	10.52	86.2
S.D.	167	2.8	2.06	5*3
Mean ICAP	541	20.6		65.4
S.D.	74	1.1		5.4
Mean ZGFAA			9.13	
S.D.			0.87	

TABLE B.21 YEAR-2 COMPARISON OF THE RESULTS USING DIFFERENT ANALYTICAL TECHNIQUES FOR DETERMINATION OF THE CONCENTRATION OF METALS IN SEDIMENTS.

	Metals (µg/g dry weight)					
	Ba	Cr	Cu	Pb	v	Zn
	Station 5A mud fraction (3 replicate composites)					
Mean XRF	641	87	21.8	8.6	87	83
SOD.	17	2	3.0	1.2	10	4
Mean ICAP	419	63	18.6	-	97	78
S.D.	82	1	0.3	-	2	1
Mean ZGFAA				11.3	-	-
S.D.				0.6	-	-
	Station 5D mud fraction (3 replicate composites)					
Mean XRF	423	111	18.1	6.7	119	83
S.D.	3	11	1.3	1.1	9	3
Mean ICAP	203	62	17.3	-	88	82
S.D.	150	4	0.9	-	5	2
Mean ZGFAA				3.3	-	-
S.D.				0.6	-	-
	Station 6B mud fraction (3 replicate composites)					
Mean XRF	668	113	33.6	14.1	136	113
S.D.	67	12	2.1	1.9	9	7
Mean ICAP	523	90	31.9	-	143	117
S.D.	3s	2	0.3	-	5	2
Mean ZGFAA				15.4	-	-
S. D.				1.0	-	-

TABLE B.22 YEAR-3 COMPARISON OF THE RESULTS USING DIFFERENT ANALYTICAL TECHNIQUES FOR DETERMINATION OF THE CONCENTRATION OF METALS IN SEDIMENTS.

	Metals(μg/g dry weight)					
	Ba	Cr	Cu	Pb	v	Zn
Station 5A mud fraction (3 replicate composites)						
Mean XRF	562	79	25.3	11.7	126	84
SD	18	17	0.5	1.6	8	3
Mean ICAP	404	81	19.8		112	79
SD	5	2	0.3		2	5
Mean ZGFAA				10.4		
SD				0.4		
Station 5D mud fraction (3 replicate composites)						
Mean XRF	406	97	17.8	9.7	100	86
SD	16	3	2.5	3.8″	4	1
Mean I CAP	309	8 4	15.7		92	75
SD	11	2	0.4	–	1	3
Mean ZGFAA				5.6		
SD				1.7		
Station 6B mud fraction (3 replicate composites)						
Mean XRF	729	103	37.7	16.0	147	118
SD	10	13	2.8	1.1	23	3
Mean I CAP	473	109	36.9		151	126
SD	40	0	0.2		12	10
Mean ZGFAA				14.2		
SD				0.5		

TABLE B.23 YEAR-1 CONCENTRATIONS OF TOTAL SATURATED HYDROCARBONS (F1) AND SELECTED HYDROCARBON PARAMETERS IN NOAA REFERENCE SEDIMENTS.

Parameter	Replicate No. 1	2	3	$\bar{x}$	±	sd
Total Saturated Hydrocarbons (µg/g dry weight)	10.39	10.89	9*93	10.40	+	0.48
% Resolved	15	15	14	15	+	1
% Unresolved	85	85	86	85	+	1
Pris/n-C_{17}	0.70	0.61	0.62	0.64	+	0.05
Phy/n-C_{18}	0.29	0.22	0.26	0.26	+	0.03
Pris/Phy	1.21	1.73	1.45	1.46	+	0.26
OEPI[a]	6.44	5.91	5.87	6.07	+	0.32

a Odd-Even PredominanceIndexas def!i.nedby Boehm (1984).

TABLE B.24 YEAR-1 CONCENTRATIONS OF N-ALKANES IN NOAA REFERENCE SEDIMENT.

n-Alkane Carbon No.	Concentration (ng/g dry wt.) Replicate No. 1	2	3	$\bar{x}$	±	sd
10	8	3	3	5	±	3
11[a]	308	357	285	317	±	37
12	3	4	3	3	±	1
13	4	4	4	4	±	0
14	3	5	4	4	±	1
15	9	10	10	10	±	1
16	24	21	20	22	±	2
17	9	12	11	11	±	2
18	18	18	8	15	±	6
19	16	12	15	14	±	2
20	8	8	8	8	±	0
21	50	50	48	49	±	1
22	18	14	12	15	±	3
23	26	20	17	21	±	5
24	26	16	14	19	±	6
25	41	34	30	35	±	6
26	30	23	20	24	±	5
27	75	73	62	70	±	7
28	38	34	29	34	±	4
29	160	178	149	162	±	15
30	6	28	23	19	±	12
31	237	267	220	241	±	24
32	24	22	19	22	±	3
33	90	113	75	93	±	19

a Elevated value due to contamination.

TABLE B.25 YEAR-1 CONCENTRATIONS OF POLYCYCLIC AROMATIC HYDROCARBONS (PAH) IN NOAA REFERENCE SEDIMENT.

Compound	Concentration (ng/g dry wt.) Replicate No. 1	2	3	$\bar{x}$	±	sd
Naphthalene	1	2	3	2	+	1
C_1-Naphthalenes	1	2	1	1	+	1
C_2-Naphthalenes	1	2	2	2	+	1
C3-Naphthalenes	1	2	1	1	+	1
C4-Naphthalenes	ND	ND	ND			
Biphenyl	< 1	1	3			
C_1-Biphenyls	<1	<1	<1			
C_2-Biphenyls	ND	<1	ND			
C_3-Biphenyls	ND	ND	ND			
C_4-Biphenyls	ND	ND	ND			
Phenanthrenes	3	4	2	3	±	1
C_1-Phenanthrenes	6	8	5	6	±	2
C2-Phenanthrenes	4	7	4	5	±	2
C3-Phenanthrenes	1	3	1	2	±	1
C4-Phenanthrenes	1	1	<1			
Dibenzothiophene	<1	<1	<1			
C_1-Dibenzothiophene	<1	1	<1			
C_2-Dibenzothiophene	1	2	<1			
C3-Dibenzothiophene	ND	1	ND			
Fluoranthene	6	10	6	7	±	2
Pyrene	8	11	8	9	+	2
Benzo(a)anthracene	3	13	3	6	+	6
Chrysene	5	12	4	7	±	4
Benzofluoranthene	25	56	25	35	±	18
Benzo(a)pyrene	9	20	9	13	+	6
Benzo(e)pyrene	6	18	6	10	±	7
Perylene	41	61	43	48	±	11

TABLE B.26 YEAR-2 SATURATED HYDROCARBON CONCENTRATIONS FOR NOAA TEST SEDIMENTS.

	NOAA-D3 (Jar 1)	NOAA-D3 (Jar 2)	NOAA-D3 (Jar 3)
Compound	Concentration (µg/g dry weight)		
n-C_{14}	< D.L.	0.03	0.02
n-C_{15}	0.05	0.04	0.05
n-C_{16}	0.52	0.05	0.06
Isoprenoid	<D.L.	0.05	0.03
n-C_{17}	0006	0.05	0.02
Pristane	0.12	0.14	0.15
n-C_{18}	0.06	0.10	0.08
Phytane	<D.L.	0.11	0.08
n-C_{19}	0.06	0.07	0.11
n-C_{20}	0.12	0.18	0.18
n-C_{21}	0.08	0.13	0.13
n-C_{22}	0.09	0.24	0.12
n-C_{23}	0.07	0.30	0.18
n-C_{24}	0.10	0.21	0.05
n-C_{25}	0.19	0.54	0.41
n-C_{26}	0.17	0.41	0.41
n-C_{27}	0.50	1.04	1.06
n-C_{28}	0.41	0.70	0.78
n-C_{29}	0.83	1.38	1.51
n-C_{30}	0.27	O*57	0.67
n-C_{31}	0.94	1.13	1.44
n-C_{32}	0.27	0.25	0.46
n-C_{33}	0.19	0.13	0.38
n-C_{34}	0.16	0.25	0.29
TOTAL RESOLVED CONCENTRATION	22.6	51.6	51.3
TOTAL UNRESOLVED CONCENTRATION	157.9	217.0	199.2

TABLE B.27 YEAR-2 POLYCYCLIC AROMATIC HYDROCARBON (PAH) CONCENTRATIONS FOR NOAA TEST SEDIMENTS.

	NOAA-D3 (Jar 1)	NOAA-D3 (Jar 2)	NOAA-D3 (Jar 3)
Compound	Concentration (µg/g dry weight)		
Naphthalene	0.23	0.21	0.19
C_1N	0.23	0.23	0.20
C2N	0.36	0.36	0.37
C3N	0.34	0*47	0.43
C4N	0.08	0.09	0.07
Biphenyl	0.07	0.07	0.06
Fluorene	0.36	0.36	0.37
C_1F	0.15	0.29	0.29
C2F	0.14	0.32	0.16
C3F	<D.L.	0.44	< D.L.
Phenanthrene	2.34	2.34	2.31
C_1P	0.98	1.11	0.96
C_2P	0.76	0.74	0.64
C_3P	0.31	0.37	0.26
C4P	< D.L.	<D.L.	<D.L.
Dibenzothiophene	0.16	0.16	0.16
C_1D	0.10	0.13	0.11
C2D	0.24	0.17	0.21
C3D	< D.L.	0.10	0.09
Fluoranthene	3.74	3.74	3.28
Pyrene	4.14	4.37	3.96
Benzanthracene	1.75	1.86	1.68
Chrysene	2.02	2.53	2.45
Benzofluoranthene	4.11	4.67	4.65
Benzo(e)pyrene	1.65	2.02	1.74
Benzo(a)pyrene	1.70	2.37	2.00
Perylene	0.33	0.86	0.74
TOTALPAH (Sum of Above Compounds)	26.46	30.39	27.37

TABLE B.28 YEAR-2 SATURATED HYDROCARBON CONCENTRATIONS FOR NOAA TEST TISSUE HOMOGENATE M-2.

	Replicate 1	Replicate 2	Replicate 3
	Concentration (µg/g wet weight)		
n-C_{14}	0.07	0.07	0.09
n-C_{15}	0.17	0.12	0.15
n-C_{16}	0.22	0.12	0.14
Isoprenoid	0.11	0.08	0.11
n-C_{17}	0.30	0.19	0.18
Pristane	0.59	0.37	0.37
n-C_{18}	0.19	0.11	0.17
Phy tane	0.21	0.11	0.11
n-C_{19}	0.19	0.11	0.11
n-C_{20}	0.23	0.12	0.11
n-C_{21}	0.17	0.10	0.09
n-C_{22}	0.17	0.08	0.08
n-C_{23}	0.13	0.07	0.06
n-C_{24}	0.10	0.05	0.05
n-C_{25}	0.12	0.06	0.05
n-C_{26}	0.10	0.04	0.03
n-C_{27}	0.12	0.06	0.05
n-C_{28}	0.17	0.10	0.08
n-C_{29}	0.29	0.17	0.14
n-C_{30}	0.42	0.26	0.20
n-C_{31}	0.50	0.30	0.23
n-C_{32}	0.32	0.24	0.15
n-C_{33}	0.28	0.20	0.13
n-C_{34}	0.28	0.17	0.12
TOTAL RESOLVED HYDROCARBON CONCENTRATION	14.36	8.00	8.70
TOTAL UNRESOLVED HYDROCARBON CONCENTRATION	15.98	4.09	6.44

TABLE B.29 YEAR-2 POLYCYCLIC AROMATIC HYDROCARBON (PAH) CONCENTRATIONS FOR NOAA TEST TISSUE HOMOGENATE M-2 .

	m/e	Replicate 1	Replicate 2	Replicate 3
		Concentration (µg/g wet weight)		
Naphthalene	128	0.04	0.04	0.02
C_1N	142	0.44	0.33	0.39
C2N	156	0.85	0.72	0.85
C3N	170	0.56	0.47	0.60
C4N	134	0.07	0.11	0.10
Biphenyl	154	0.07	0.05	0.07
Fluorene	166	0.07	0.07	0.08
C_1F	180	0.08	0.06	0.08
C2F	194	0.05	0.03	0.06
C3F	208	0.01	<D.L.	0.02
Phenanthrene	178	0.12	0.11	0.11
C_1P	192	0.35	0.27	0.34
C_2P	206	0.13	0.10	0.18
C3P	220	0.04	0.03	0.04
C4P	234	<D.L.	< D.L.	0.01
Dibenzothiophene	184	0.05	0.04	0.05
C_1D	198	0.07	0.04	0.06
C_2D	212	0.03	0.02	0.03
C_3D	226	<D.L.	<D.L.	0.01
Fluoranthene	202	0.07	0.06	0.07
Pyrene	202	0.04	0.04	0.04
Benzanthracene	228	0.03	0.03	0.03
Chrysene	22s	0.03	0.04	0.04
Benzfluoranthene	252	0.04	0.03	0.04
Benz(e)pyrene	252	0.01	0.01	0.02
Benz(a)pyrene	252	0.01	0.03	0.01
Perylene	252	<D.L.	0.03	0.01
TOTAL PAH (Sum of Above Compounds)		3.17	2.76	3.37

TABLE B.30 YEAR-2 MEAN CONCENTRATIONS OF HYDROCARBONS IN DUWAMISH III REFERENCE SEDIMENT DETERMINED BY THREE NATIONAL MARINE FISHERIES (NMF) LABORATORIES.

HYDROCARBONS	NMF, Seattle			NMF, Gloucester	NMF, Charleston
	Concentrations (ng/g dry weight)[a]				
Naphthalene	320 (11)	320 (15)	420 (18)	250 (21)	330 (11)
2-Methylnaphthalene	160 (17)	150 (4)	200 (33)	110 (19)	180 (6)
1-Methylnaphtha lene	120 (16)	110 (5)	150 (32)	80 (16)	150 (8)
Biphenyl	39 (13)	21 (7)	37 (23)	31 (8)	57 (7)
2,6-Dimethylnaphthalene	70 (10)	75 (7)	78 (16)	58 (15)	76 (4)
Acenaphthene	300 (22)	310 (8)	300 (2)	290 (16)	420 (9)
Fluorene	310 (3)	330 (5)	330 (9)	290 (18)	430 (lo)
Phenanthrene	2300 (8)	2300 (7)	2400 (5)	2200 (9)	3200 (6)
Anthracene	510 (3)	590 (9)	550 (2)	650 (16)	730 (2)
1-Methylphenanthrene	220 (11)	220 (7)	220 (5)	410 (52)	320 (10)
Fluoranthene	3900 (9)	4000 (6)	3900 (4)	3700 (4)	5600 (7)
Pyrene	4100 (5)	4400 (3)	4200 (4)	3900 (5)	5800 (6)
Benz(a)anthracene	1500 (7)	1900 (8)	1700 (3)	1400 (5)	2100 (lo)
Chrysene	2600 (7)	3800 (15)	2700 (4)	2100 (7)	3600 (6)
Benzo(e)pyrene	1600 (4)	2000 (8)	1700 (3)	1400 (5)	2000 (9)
Benzo(a)pyrene	1800 (3)	2220 (3)	1800 (3)	1 700 (7)	2700 (6)
Perylene	510 (2)	640 (5)	550 (5)	460 (8)	710 (5)
Dibenz(a,h)anthracene	310 (4)	470 (11)	280 (2)	310 (5)	430 (7)

[a]Results expressed as means (n=3)
Relative standard deviation expressed as a percent of the mean shown in parentheses.

TABLE B.31 YEAR-3 SATURATED HYDROCARBON CONCENTRATIONS FOR CANADIAN TEST SEDIMENT HS-2.

Compound	Replicate A	Replicate B	Replicate C
	Concentration(μg/g dry weight)		
n-C_{14}	0.14	0.18	0.14
n-C_{15}	0.28	0.28	0.24
n-C_{16}	0*41	0.46	0.37
Isoprenoid	0.55	0.60	0.49
n-C_{17}	0.59	0.56	0.46
Pristane	4.97	5.39	4.30
n-C_{18}	0.46	0.51	0.41
Phytane	1.22	1.33	1.06
n-C_{19}	0.63	0.76	0.64
n-C_{20}	0.47	0.46	0.39
n-C_{21}	0.63	0.67	0.54
n-C_{22}	0.39	0.41	0.32
n-C_{23}	0.63	0.63	0.53
n-C_{24}	0.40	0.37	0.37
n-C_{25}	0.68	0.59	0.54
n-C_{26}	0.42	0.43	0.41
n-C_{27}	0.89	0.85	0.73
n-C_{28}	0.59	0.53	0.44
n-C_{29}	2.06	1.74	1.39
n-C_{30}	0.72	0.42	0.31
n-C_{31}	0.27	1.77	1.81
n-C_{32}	0.38	0.64	0.52
n-C_{33}	1.09	0.76	0.63
n-C_{34}	0.31	0.52	0.13
TOTAL RESOLVED HYDROCARBON CONCENTRATION	34.6	38.3	38.7
TOTAL UNRESOLVED HYDROCARBON CONCENTRATION	198.7	264.9	292.6

TABLE B.32 YEAR-3 POLYCYCLIC AROMATIC (PAH) CONCENTRATIONS FOR CANADIAN TEST SEDIMENT HS-2.

Compound	Replicate A	Replicate B	Replicate C
	Concentration(μg/g dry weight)		
Naphthalene	0.13	0.17	0.12
C_1N	0.30	0.41	0.30
C_2N	0.50	0.78	0.59
C_3N	0.59	1.12	0.83
C_4N	0.20	0.61	0.52
Biphenyl	0.05	0.06	0.04
Fluorene	0.29	0.32	0.15
C_1F	0.14	0.25	0.14
C_2F	0.19	0.38	0.27
C_3F	0.14	0.51	0.34
Phenanthrene	3.30	3.71	2.16
C_1P	0.93	1.33	0.90
C_2P	0.48	1.14	0.81
C_3P	0.22	0.80	0.60
C_4P	0.29	0.76	0.38
Dibenzothiophene	0.21	0.24	0.16
C_1D	0.10	0.21	0.16
C_2D	0.14	0.33	0.24
C_3D	0.14	0.34	0.19
Fluoranthene	5.88	6.81	3.01
Pyrene	3.96	5.19	2.95
Benzo(a)anthracene	1.54	1.81	0.35
Chrysene	1.74	2.21	0.29
Benzofluoranthene	2.99	3.37	0.20
Benzo(e)pyrene	1.00	0.27	0.02
Benzo(a)pyrene	0.75	1.04	0.06
Perylene	0.30	1.17	0.13
TOTAL PAH (Sum of Above Compounds)	26.5	35.3	15.9

TABLE B.33 YEAR-2 RESULTS OF 12 REPLICATE ANALYSES OF PROCEDURAL BLANKS FOR SEDIMENT HYDROCARBON DETERMINATIONS .

	Σ n-alkanes	UCM	Σ PAH
	Hydrocarbons (µg/g dry weight)[a]		
	0.11	< D.L.	0.005
	0.06	0.54	< D.L.
	0.33	<D.L.	< D.L.
	0.41	<D.L.	0.001
	0.07	<D.L.	0.013
	0.23	<D.L.	0.011
	0.06	< D.L.	0.001
	0.60	< D.L.	0.003
	0.08	< D.L.	0.003
	0.09	< D.L.	0.064
	0.10	< D.L.	0.007
	0.16	< D.L.	0.007
Mean	0.19		0.010
S.D.	0.17		0.018
Cv	90		180
Detection Limits	0.01	0.01	0.001

[a]50 g dry weight assumed for computation.

TABLE B.34 YEAR-2 RESULTS OF 8 REPLICATE ANALYSES OF PROCEDURAL BLANKS FOR HYDROCARBON TISSUE DETERMINATION--GC AND GC/MS DATA.

	Σ n-alkanes	UCM	Σ PAH
	Hydrocarbon Concen tration (µg/g we t weight)[a]		
	0.6	<D.L.	0.012
	0.9	< D.L.	0.002
	0.1	<D.L.	0.003
	0.1	<D.L.	0.001
	0.1	<D.L.	0.001
	0.9	<D.L.	0.002
	1.3	< D.L.	0.041
	0.1	< D.L.	0.006
Mean	0.5		0.008
S.D.	0.3		0.014
Cv	100		175
Detection Lim its			0.001

[a]10 g wet weight assumed for computation.

TABLE B.35 YEAR-2 RESULTS OF SIX REPLICATE ANALYSES OF PROCEDURAL BLANKS FOR HYDROCARBON TISSUE DETERMINATION--UV/F DATA.

	312 nm	355 nm	425 nm
	Hydrocarbons Concentrations (µg/g wet weight)[a] Calculated at 312, 355, and 425 nm		
	0.28	0.07	< D.L.
	0.09	0.03	< D.L.
	<D.L.	< D.L.	<D.L.
	<D.L.	< D.L.	<D.L.
	0.27	0.07	<D.L.
	0.55	0.02	<D.L.
Mean	0.20	0.04	<D.L.
S.D.	0.20	0.03	
Cv	100	75	

alOg wet weight assumed for computation
limit of detection 0.01 µg/g wet weight.

TABLE Be36 YEAR-3 RESULTS OF 12 REPLICATE ANALYSES OF PROCEDURAL BLANKS FOR SEDIMENT HYDROCARBON DETERMINATIONS .

	Σ n-alkanes	UCM	Σ PAH
	Hydrocarbons(μg/g dry weight)[a]		
	0.11	<D.L.	0.001
	0.48	<D.L.	<D.L.
	0.44	<D.L.	0.002
	0.02	<D.L.	0.001
	<D.L.	<D.L.	<D.L.
	0.12	<D.L.	0.003
	0.06	<D.L.	<D.L.
	0.33	1.40	<D.L.
	0.08	<D.L.	<D.L.
	0.02	<D.L.	<D.L.
	0.01	<D.L.	<D.L.
	NA*	NA*	<D.L.
Mean	0.15		0.001
SD	0.18		0.001
CV(%)	119		100
Detection Limits	0.01	0.01	0.001

[a]50g dry weight assumed for computation

NA= Not analyzed

*Procedural blank for sample batch analyzed for PAH only.

TABLE B.37 YEAR-3 RESULTS OF 5 REPLICATE ANALYSES OF PROCEDURAL BLANKS FOR HYDROCARBON TISSUE DETERMINATION (GC-FID AND GC/MS).

	Σ n-alkanes	UCM	Σ PAH
	Hydrocarbon Concentration (μg/g wet-weight)		
	0.2	<D.L.	0.003
	0.5	<D.L.	<D.L.
	0.6	<D.L.	<D.L.
	12.8*	41.9*	0.048*
	0.5	<D.L.	<D.L.
Mean	2.9		0.010
SD	5.5		0.021
Cv(%)	190		212
Detection Limits			0.001

[a]10g wet" weight assumed for computation.

*Samples processed with procedural blank were reanalyzed and hydrocarbon contamination was determined to be isolated in the procedural blank.

TABLE B.38 YEAR-3 RESULTS OF FOUR REPLICATE ANALYSES OF PROCEDURAL BLANKS FOR HYDROCARBON TISSUE DETERMINATION -- UV/F DATA.

	312 nm	355 nm	425 nm
	Hydrocarbon Concentrations (ug/g wet weight)[a] Calculated at 312, 355, and 425 nm		
	0.24	0.15	0.17
	0.85	0.38	0.33
	<D.L.	0.21	0.10
	<D.L.	0.89	0.13
Mean	0.27	0.41	0.18
SD	0.40	0.34	0.10
Cv %	149	82	57

[a]10g wet weight assumed for computation.

Limit of detection 0.01 ug/g wet weight.

For mean determination, <D.L. = 0.

TABLE B.39 YEAR-1 RECOVERIES OF PAN CONTAINED IN NBS-SRM-1647 SUBJECTED TO HYDROCARBON ANALYTICAL SCHEME. DATA REPORTED RELATIVE TO O-TERPHENYL INTERNAL STANDARD.

	Percent Recovery Relative to O-Terphenyl							
	Replicate No.							
	1	2	3	4	5	X	±	sd
Naphthalene	30	24	11	30	22	23	±	8
Fluorene	64	62	141	69	58	79	±	35
Phenanthrene + Anthracene	131	131	92	132	116	120	±	17
Fluoranthene	46	48	60	53	43	50	+	7
Pyrene	48	49	62	55	43	51	+	7
Benzo(a)anthracene	38	45	122	48	37	58	±	36
chrysene	43	46	112	51	38	58	±	31
Benzofluoranthene	95	119	81	113	97	101	+	15
Benzo(a)pyrene	30	38	86	30	30	43	±	24

TABLE B.40 YEAR-1 ANALYTICALLY DETERMINED W/F TOTAL OIL CONCENTRATIONS IN SEDIMENTS FORTIFIED WITH VARYING CONCENTRATIONS OF PRUDHOE BAY CRUDE OIL.

Sample Replicate	Concentration Added (μg/g dry weight)	UV/F (312 nm) Concentration (μg/g dry weight)	UV/F (355 nm) Concentration (μg/g dry weight)
1	181.8	136.2	145.7
2	149.0	94.7	94.7
3	228.8	135.5	145.9
4	148.4	93.5	97.6

TABLE B.41 YEAR-2 RESULTS OF 8 REPLICATE ANALYSES OF SPIKED METHOD BLANKS FOR SEDIMENT PROCEDURE--GC-FID DATA.

	n-C 10	n-C11	n-C14	n-C 15	n-C24	n-C25	n-C32	n-C34
	(µg Individual Hydrocarbon)							
	< D.L.	< D.L.	< D.L.	<D.L.	2.11	1.98	1.52	1.53
	2.91	4.74	0.98	0.51	1.64	1.43	1.24	1.32
	2.13	9.11	1.10	1.18	1.58	1.35	1.35	1.44
	0.05	0.13	0.17	0.20	1.75	1.56	1.59	1.67
	1.32	1.86	1.52	1.51	1.76	1.70	2.08	1.81
	0.93	1.42	1.11	1.20	1.46	1.36	1.16	1.34
	1.37	1.90	1.54	1.62	1.97	1.71	1.73	1.78
	0.93	20.46	1.45	0.95	2.38	2.21	1.68	1.78
Mean	1.21	4.95	0.98	0.90	1.83	1.66	1.54	1.58
S.D.	0.98	6.94	0.59	0.60	0.30	0.31	"0.30	0.20
CV	81	140	60	66	17	18	19	13
Amount Spiked (µg)	2.20	2.20	2.20	1.95	2.05	2.05	2.05	2.05
Average Recovery (%)	55	225	45	46	89	81	75	77

TABLE B.42 YEAR-2 RESULTS OF 8 REPLICATE ANALYSES OF SPIKED METHOD BLANKS FOR SEDIMENT PROCEDURE--GC/MS DATA.

									Mean	SD	CV	Amount of Spike (µg)	Average Recovery (%)
	(µg Individual Hydrocarbon)												
Naphthalene	<D.L.	< D.L.	0.02	1.86	1.37	2.00	1.50	2.07	1.11	0.93	84	2.05	54
l-Methyl naphthalene	< D.L.	<D.L.	0.11	1.73	1.39	1.99	1.56	0.97	0.97	0.82	84	2.05	54
2,3-Dimethyl naphthalene	<D.L.	<D.L.	< D.L.	1.91	1.65	2.31	1.99	<D.L.	0.99	1.06	107	2.05	48
Phenanthrene	1.84	1.14	1.85	1.80	1.63	1.97	2.11	1.92	1.78	0.29	16	2.05	87
Dibenzothiophene	1.14	0.76	1.72	1.73	1.58	2.13	2.05	1.91	1.62	0.47	29	2.05	79
Pyrene	0.50	0.77	2.69	2.11	1.97	2.40	2.36	2.43	1.90	0.81	42	2.05	93
Chrysene	1.86	2.81	2.54	2.18	1.71	2.31	2.39	2.13	2.24	0.36	16	2.05	109
Benzo(a)pyrene	<D.L.	2.91	0.20	1.26	1.47	1.11	0.69	Q.47	1.01	0.92	91	2.05	45
Perylene	0.30	1.76	1.85	1.36	1.32	1.78	1.81	0.64	1.35	0.59	43	2.05	66

TABLE B.43 YEAR-2 RESULTS OF TRIPLICATE ANALYSES OF SEDIMENT SAMPLES SPIKED WITH PRUDHOE BAY CRUDE OIL[a].

	Replicate 1	Replicate 2	Replicate 3	Mean	S.D.	CV
	Concentration (µg of Hydrocarbon)					
Gravimetric Data						
Saturated Hydrocarbons	14,674	15,120	14,922	14,905	233	1.5
Aromatic Hydrocarbons	12,396	12,158	12,248	12,251	94	<0.1
Total Hydrocarbons	27,020	27,278	27,170	27,156	129	<0.1
Chromatography ic Data						
Resolved Hydrocarbons[b]	3,207	3,201	3,106	3,171	56.6	1.8
Unresolved Complex Mixture[b]	371	790	706	622	222	35.6
Total Hydrocarbons[b]	3,579	3,991	3,812	3,791	206	5.4
Total Aromatic Hydrocarbons	800	825	680	768	78	10.1

aPre-extracted sediment was dehydrated, spiked with 50 mg Prudhoe Bay Crude Oil (36.3 percent residuum; Coleman, 1978), and processed according to sediment procedure used in the BSMP study.

bSaturated hydrocarbons from n-C_{10} to n-C_{34} analyzed by GC-FID.

cSuite of aromatic analytes analyzed by GC/MS.

TABLE B.44 YEAR-2 RESULTS OF TRIPLICATE ANALYSES OF TISSUE SAMPLES SPIKED WITH PRUDHOE BAY CRUDE OIL--W/F DATA[a].

Wavelength	Replicate 1	Replicate 2	Replicate 3	Mean	S.D.	CV
	(Total Oil in mg)					
312	48.6	42.1	46.9	45.9	3.4	7
355	42.2	38.4	39.5	40.0	2.0	5
425	41.9	38.2	38.6	39.6	2.0	5

[a]Commercial clams (Geisha brand) were homogenized and spiked with 50 mg Prudhoe Bay Crude Oil, and processed for UV/F analysis according to tissue procedure.

TABLE B.45 YEAR-2 RESULTS OF TRIPLICATE ANALYSES OF TISSUE SAMPLES FOR SELECTED HYDROCARBON PARAMETERS (CONCENTRATION μg/g WET WEIGHT}.

	Replicate 1	Replicate 2	Replicate 3	Mean	S.D.	CV
Gravimetric Data						
Saturated Hydrocarbons	3.50	4.80	6.4	4.9	1.5	30
Aromatic Hydrocarbons	30.6	123.6	88.2	80.9	46.9	58
Total Hydrocarbons	34.1	128.4	94.7	85.7	48.0	56
Chromatographic Data						
Resolved Hydrocarbons[a]	1.6	3.3	1.6	2.2	1.0	44
Unresolved Complex Mixture[a]	<D.L.	<D.L.	< D.L.	<D.L.	.	-
Total Hydrocarbons[a]	1.6	3.3	1.6	2.2	1.0	44
Total Aromatic Hydrocarbons[b]	7.2	20.0	4.1	10.4	8.4	81
UV/Fluorescence						
312 nm	9.8	9.3	11.0	10.1	0.9	9
355 nm	4.7	4.4	4.9	4.7	0.2	5
425 nm	2.7	2.4	2.6	2.6	0.1	5

aSaturated hydrocarbons analyzed by GC-FID.

bAromatic hydrocarbons analyzedby CC-MS.

TABLE B.46 YEAR-3 GC-FID RESULTS OF 11 REPLICATE ANALYSES OF SPIKED METHOD BLANKS FOR SEDIMENT PROCEDURE.

	(µg Individual Hydrocarbon)											Mean	SD	CV	Amount of Spike (ug)	Average Recovery (%)
n-C_{10}	6.11	3.70	5.18	4.50	1.50	3.69	4.61	4.57	4.89	4.83	4.95	4.41	1.17	27	4.4	100
n-C_{14}	9.17	7.00	6.27	5.18	5.84	5.14	0.48	4.99	5.43	4.99	5.32	5.44	2.06	38	4.4	133
n-C_{15}	8.44	5.85	5.62	4.55	6.72	4.69	4.67	4.78	5.26	4.81	5.12	5.50	1.17	21	3.9	134
n-C_{24}	19.83	5.02	8.55	7.04	11.43	8.30	6.40	6.18	6.27	6.30	5.71	8.28	4.22	51	4.1	202
n-C_{25}	1.8.69	5.02	8.47	7.08	10.90	10.53	6.14	5.98	6.17	6.05	5.68	8.25	3.98	48	4.1	201
n-C_{32}	8.46	5.13	7.99	4.63	7.23	7.33	4.73	5.69	6.78	6.47	4.82	6.30	1.37	22	4.1	154
n-C_{34}	8.01	5.08	8.68	4.39	7.00	7.88	4.85	6.14	7.42	7.17	5.03	6.51	1.48	23	4.1	159

TABLE B.47 YEAR-3 GC/MS RESULTS OF 10 REPLICATE ANALYSES OF SPIKED METHOD BLANKS FOR SEDIMENT PROCEDURE.

											Mean	SD	CV	Amount of Spike (µg)	Average Recovery (%)
	(µg Individual Hydrocarbon)														
Naphthalene	7.59	3.99	0.02	3.36	3.04	3.33	3.85	3.44	3.94	2.49	3.50	1.85	53	4.1	85
1-Methyl naphthalene	7.72	3.66	0.01	3.23	3.14	3.19	3.71	3.44	3.75	2.42	3.43	1.87	55	4.1	84
2,3-Dimethyl naphthalene	8.37	4.24	0.09	4.09	3.89	3.74	4.42	4.13	4.28	1.54	3.88	2.13	55	4.1	95
Phenanthrene	6.90	4.19	3.40	3.77	4.08	3.86	4.21	3.81	4.33	3.40	4.20	1.00	24	4.1	102
Dibenzothiophene	6.97	4.21	3.03	3.75	4.04	3.83	4.13	3.73	4.35	3.41	4.14	1.07	26	4.1	101
Pyrene	7.67	5.02	5.12	4.57	4.59	4.70	4.89	4.70	5.18	4.45	5.09	0.94	18	4.1	124
Chrysene	3.12	5.19	4.75	4.35	4.58	4*79	4.60	4.8a	4.68	4.30	4.52	0.56	12	4.1	110
Benzo(a)pyrene	2.05	5.01	3.82	3.35	4.25	5.33	4.04	4.33	3.%	3S6	3.97	0.91	23	4.1	97
Perylene	2.12	6.18	5.17	5.24	7.18	7.57	6.52	7.20	5.46	3.26	5.59	1.77	32	4.1	136

TABLE B.48 YEAR-1 QUALITY CONTROL DATA FOR TOTAL ORGANIC CARBON ANALYSES.

STATION 7E-1005	TOC (mg/g)
Split A	18.2
Split B	15.9
split c	18.9
STATION 7G-1006	
Split A	16.9
split B	17.8
split C	28.2

TABLE B.49 SUMMARY OF YEAR-1 REPLICATE GRAIN SIZE ANALYSIS

Ø	STATION 4A-1OO3 A	STATION 4A-1OO3 B	STATION 5(1)-1001 A	STATION 5(1)-1001 B	STATION 5B-1OO3 A	STATION 5B-1OO3 B
-1	38.79	58.86	0.33	0.06	0	0
0	4.91	3.60	0.75	0.53	0.04	0
1	4.43	3.46	2.19	2.58	0.46	0.47
2	10.72	7.37	11.14	11.89	16.45	17.42
3	8.82	5.94	60.97	60.59	77.28	76.19
4	3.13	2.12	12.16	10.53	3*37	3.42
5	4.21	2.09	2.08	3.00	1.91	2.00
6	3.98	2.65	2.61	2.33	0	0
7	3.98	2.76	1.47	2.04	0	0
8	3.48	2.38	1.49	1.39	0	0
9	4.01	2.06	1.13	0.88	0.48	0.52
10	1.55	1.39	0*90	1.31	0	0
>10	7.99	5.32	2.79	2.88	0	0

Ø	STATION 6F-1 004 A	STATION 6F-1 004 B	STATIO N 5E-1 003 A	STATIO N 5E-1 003 B	STATION 2F-1007 A	STATION 2F-1007 B
-1	0.91	0.47	4.92	2.52	0	0
0	0.47	0.08	2.20	1.84	0	0.02
1	0.68	0.26	11.11	11.42	0.07	0.07
2	0.48	0.50	15.49	17.76	1.53	1.46
3	1.38	1.25	34.66	37.11	42.87	41.73
4	14.36	11.77	8.36	8.11	37.42	35.13
5	7.58	12.24	1.54	0.56	3.63	4.80
6	11.67	9.36	2.22	2.95	4.16	4.38
7	13.53	13.70	3.20	2.64	2.99	3.80
8	10.93	11.04	3.70	3.71	1.71	2.42
9	8.73	9.90	3.17	3.37	1.83	1.59
10	6.87	8.22	2.70	1.64	0.65	1.03
>1o	22.42	21.18	6.73	6.36	3.11	3.58

Ø	STATION 5F-1OO3 A	STATION 5F-1OO3 B	STATION 7A-1001 A	STATION 7A-1001 B	STATION 7E-1OO1 A	STATION 7E-1OO1 B
-1	4.92	2.52	0	0	2.02	0
0	2.20	1.84	0.09	0.10	0.38	0.38
1	11.11	11.42	O*22	0.19	0.61	0.71
2	15.49	17.76	0.26	0.38	1.34	1.6o
3	34.66	37.11	1.82	1.90	4.06	3.92
4	8.36	8.11	26.19	27.21	28.30	25.98
5	1.54	0.56	39.88	37.94	25.97	30.88
6	2.22	2.95	13.8o	13.16	12.66	11.86
7	3.20	2.64	4.68	5.18	6.72	6.84
8	3.70	3.71	3.65	3.95	4.03	4.96
9	3.17	3.37	2.99	2.62	2.62	2.74
10	2.70	1.64	1.26	1.81	1.41	1.94
>10	6.73	6.36	s.16	5.57	9.88	8.19

TABLE B.50 SUMMARY OF YEAR-2 REPLICATE GRAIN SIZE ANALYSES

Phi	STATION 1 D A	STATION 1 D B	STATION 2B A	STATION 2B B	STATION 2E A	STATION 2E B	STATION 30 A	STATION 30 B
-1	0	0	0	0	0	0	1.27	0.02
0	0	0	0.01	0.02	0	0.01	0.07	0.05
1	0.01	0.01	0.18	0.20	0.05	0.02	0.20	0.17
2	0.24	0.17	0.49	0.45	0.26	0.22	0.59	0.54
3	52.84	52.05	23.56	22.41	5*05	4.80	1.89	1.68
4	35.89	36.39	11.93	11.14	4.54	4.32	22.09	21.45
5	5.29	5.45	3.91	4.17	3.13	2.95	23.68	27.39
6	2.06	2.27	8.17	5.46	13.94	14.40	17.39	16.72
7	1.14	1.19	11.45	11.73	18.45	19.05	9.56	9.39
8	0.76	0.78	9.83	12.91	16.68	16.10	6.37	6.27
9	0.44	0.58	5.92	8.10	10.49	12.45	3.39	4.35
10	0.02	0.05	8.95	6.99	7.16	7.01	2.22	1.72
>10	1.32	1.08	15.59	16.42	20.25	18.66	11.28	10.26

Phi	STATION 5A A	STATION 5A B	STATION 5E A	STATION 5E B	STATION 5K A	STATION 5K B	STATION 5(0) A	STATION 5(0) B"
-1	2.62	4.10	0.17	0.92	4.13	0	0.03	0
0	0.37	.0.18	0.30	0.03	0.63	1.13	0.05	0..07
1	0.79	0.65	0.57	0.38	1.88	2.39	0.29	0.30
2	8.88	8.20	6.19	6.42	5.41	7.31	24.53	24.50
3	11.85	11.83	32.54	40.27	9.13	12.01	66.12	65.71
4	32.15	31.52	7.42	7.68	9.63	10.94	5.25	5.37
5	14.99	15.22	0.52	2.39	7.68	9.78	3.13	3.47
6	10.12	10.07	4.75	5.36	20.28	19.88	0	0
7	5.87	5.88	8.39	7.23	20.49	18.51	0	0
8	3.78	3.72	7.83	8.46	6.83	7.21	0	0
9	1.53	2.19	8.95	4.05	1.45	1.27	0.60	0.57
10	2.56	2.19	6.06	5.72	0.83	0.29	0	0
>10	4.49	4.25	16.31	11.07	11.64	9.28	0	0

Phi	STATION 6C A	STATION 6C B	STATION 7A A	STATION 7A B	STATION 7D A	STATION 7D B
-1	0.06	0.19	0	0	0	0
0	0.04	0.11	0.03	0	0.02	0
1	0.17	0.15	0.01	0	0.01	0.03
2	0.72	0.74	0.12	0.08	0.10	0.10
3	7.84	7.80	0.46	0.50	7.78	8.06
4	30.52	31.69	27.25	26.12	45.74	45.06
5	5.47	5.70	41.13	43.02	7.17	8.26
6	8.65	7.56	14.57	14.83	5.72	6.09
7	8.76	9.04	6.13	5.63	6.96	6.56
8	8.86	8.62	2.81	2.97	6.86	6.92
9	6.30	5.71	0.88	0.83	5.46	5.80
10	6.66	6.19	0.96	1.00	3.40	3.28
>10	15.95	16.50	5.66	5.01	10.28	9.82

TABLE B.51 SUMMARY OF YEAR-3 REPLICATE GRAIN SIZE ANALYSES

	STATION 1A		STATION 1C		STATION 20		STATION 2C		STATION 2D	
PHI	A	B	h	B	A	B	A	B	A	B
-1	0	0	0	0	0	0.10	1.08	0.75	6.77	12.4
0	0.05	0	0.42	0.05	0.27	0.21	0.86	1.24	4.08	5.53
1	0.06	0.03	3.24	0.48	1.79	1.89	7.87	9.03	3.54	4.66
2	0.14	0.08	5.58	2,77	10.9	10.7	11.6	12.8	8.59	7.51
3	0.36	0.28	5.56	4.62	66.5	66.6	8.08	7.97	43.2	35.5
4	38.1	35.6	11.8	12.5	16.0	16.3	10.7	10.6	15.9	14.3
5	16.8	18.0	7.85	9.63	0.81	0.42	7.93	9.29	1.18	1.64
6	7.42	8.47	8.96	9.31	0.08	0.22	8.91	7.82	2.07	3.09
7	7.69	8.83	9.28	12.9	0.12	0.74	10.2	9.87	4.43	4.61
8	7.73	6.83	9.55	9.11	0.33	0.02	6.13	5.82	4.28	4.20
9	6.05	5.43	6.29	9.71	0.45	0.33	8.09	7.46	3.10	3.88
10	0.57	0.56	6.38	7.15	1.84	1.85	5.54	4.65	1.07	1.53
>10	14.9	15.8	25.0	21.8	0.99	0.64	13.0	12.6	1.75	1.11

	STATION 3A		STATION 4A		STATION 5(5)		STATION 613	
PHI	A	B	A	B	A	B	A	B
- 1	0	0.19	58.9	47.2	19.9	30.1	0	0
0	0.05	0.08	2.68	3.81	5.61	5.83	0.01	0.01
1	0.12	0.10	1.77	2.31	5.47	4.84	0.01	0.02
2	0.22	0.21	13.5	17.2	20.3	18.0	0.07	0.06
3	2.34	2.52	13.5	17.4	19.6	16.6	8.96	8.83
4	53.6	53.1	2.08	2.60	11.2	9.32	14.5	15.7
5	11.3	12.0	2.31	2.89	4.28	2.97	12.0	9.51
6	8.12	7.76	0.58	0.88	2.54	1.96	9.65	9.78
7	5.52	5.90	0.75	1.02	1.70	0.68	18.3	18.4
8	2.94	3.56	0.77	0.58	1.97	2.58	14.3	14.6
9	3.36	3.08	0.69	1.51	1.31	0.48	7.74	8.15
10	4.87	4.2$	0.28	0.13	2.45	2.23	4.05	4.23
>10	7.60	7.24	2.16	2.36	3.73	3.89	10.3	10.7

	STATION 6C		STATION 6F		STATION 7B		STATION 6K	
PHI	A	B	A	B	A	B	A	B
- 1	0.02	0	0	0	0	0	0	0
0	0.07	0.08	0	0	0	0.02	0.03	0.01
1	0.07	0.06	0.01	0.01	0.03	0.03	0.15	0.17
2	0.27	0.27	0.12	0.08	0.09	0.11	10.6	10.5
3	9.87	10.6	0.95	0.91	6.43	6.40	38.1	38.0
4	56.1	56.5	78.4	79.0	73.3	73.7	26.1	25.5
5	2.72	2.17	8.58	7.76	2.63	2.10	10.2	11.2
6	2.59	3.62	1.26	1.28	1.41	1.66	3.27	3.61
7	3.96	3.46	1.31	1.11	1.88	1.93	2.24	2.00
8	5.39	5.51	1.23	1.72	1.50	1.95	2.35	1.85
9	4.70	4.27	1.21	1.89	1.92	1.88	1.38	2.00
10	3.12	2.41	3.20	2.65	8.74	7.84	3.27	2.91
>10	11.1	11.0	3.68	3.73	2.10	2,06	2.28	2.25

APPENDIX C

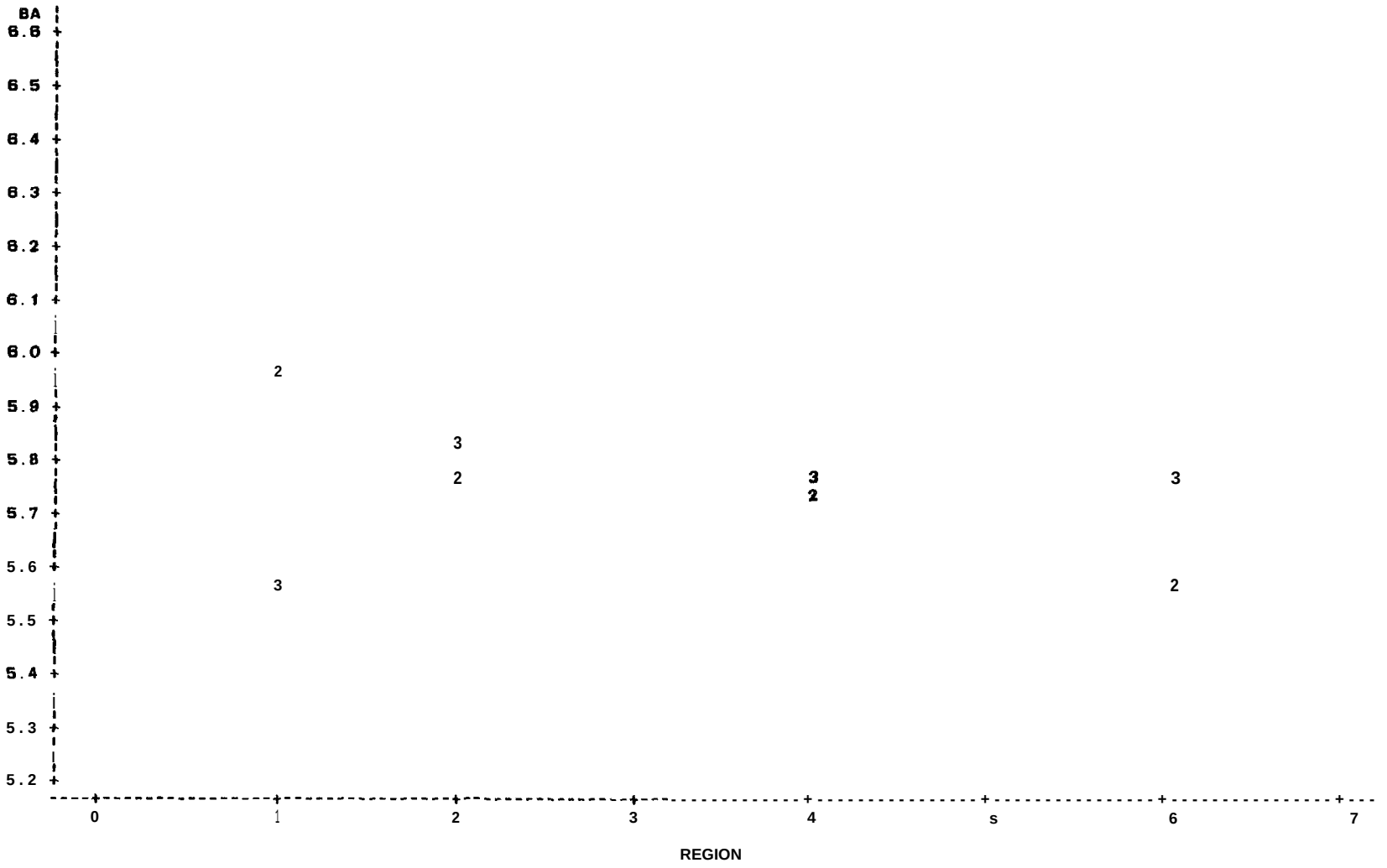
RESULTS OF STATISTICAL ANALYSES

SECTION 1

MEAN LOG CONCENTRATIONS OF METALS IN FINE SEDIMENT BY STUDY AREA REGION

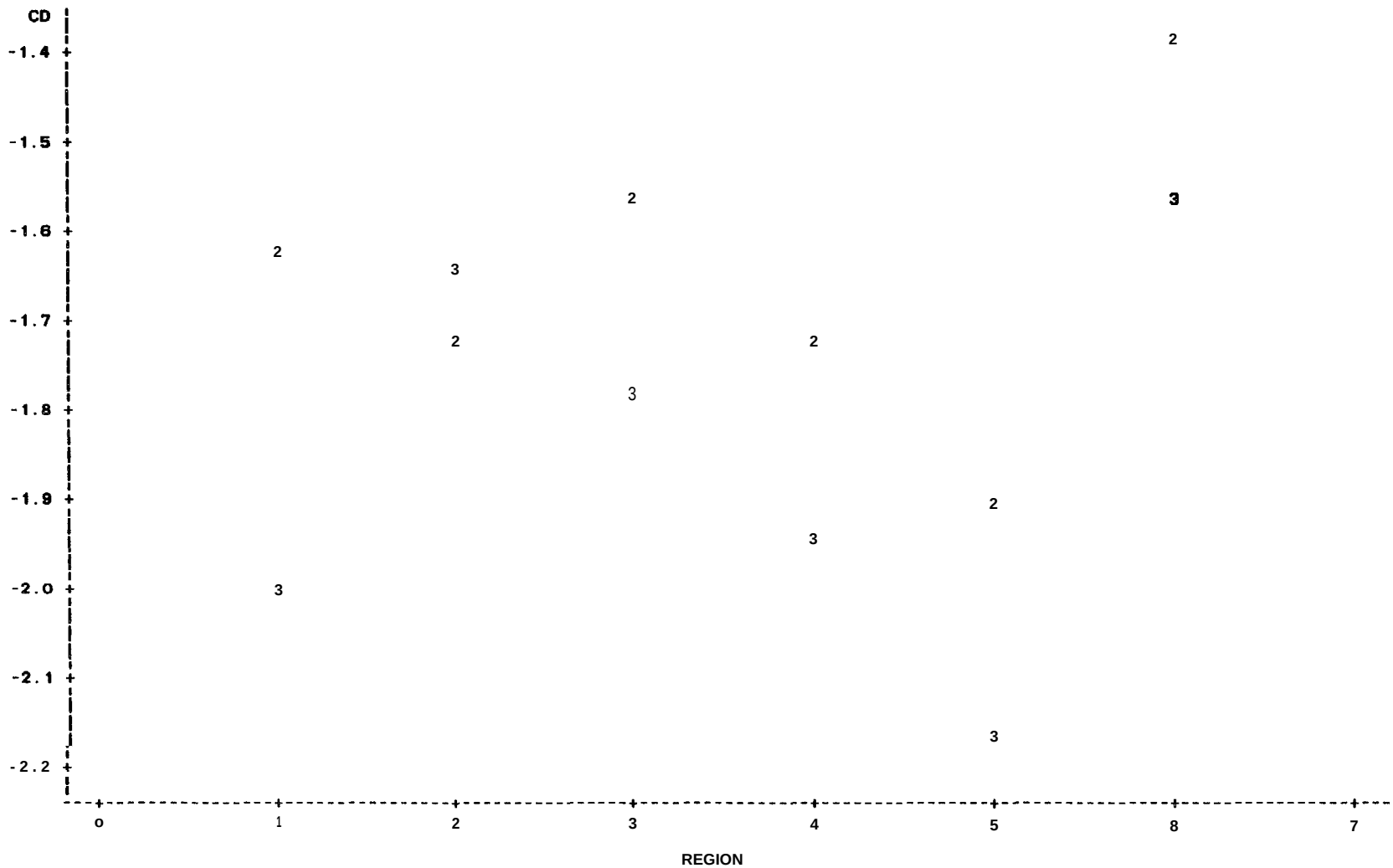
METALS FROM FINE SEDIMENTS SAMPLED AT REGIONS 1-6 (YEARS 2.3)
PLOT OF MEAN LOG CONCENTRATIONS FOR EACN SAMPLING YEAR
REGION NUMBER ON X-AXIS:
1=CAMDEN BAY AREA 2=FOGGY ISLAND BAY AREA 3=KUPARUK RIVER BAY AREA
4=EAST HARRISON BAY AREA 5=WEST HARRISON BAY AREA 6=ENDICOTT FIELD

PLOT OF BA*REGION SYMBOL 1S VALUE OF YEAR



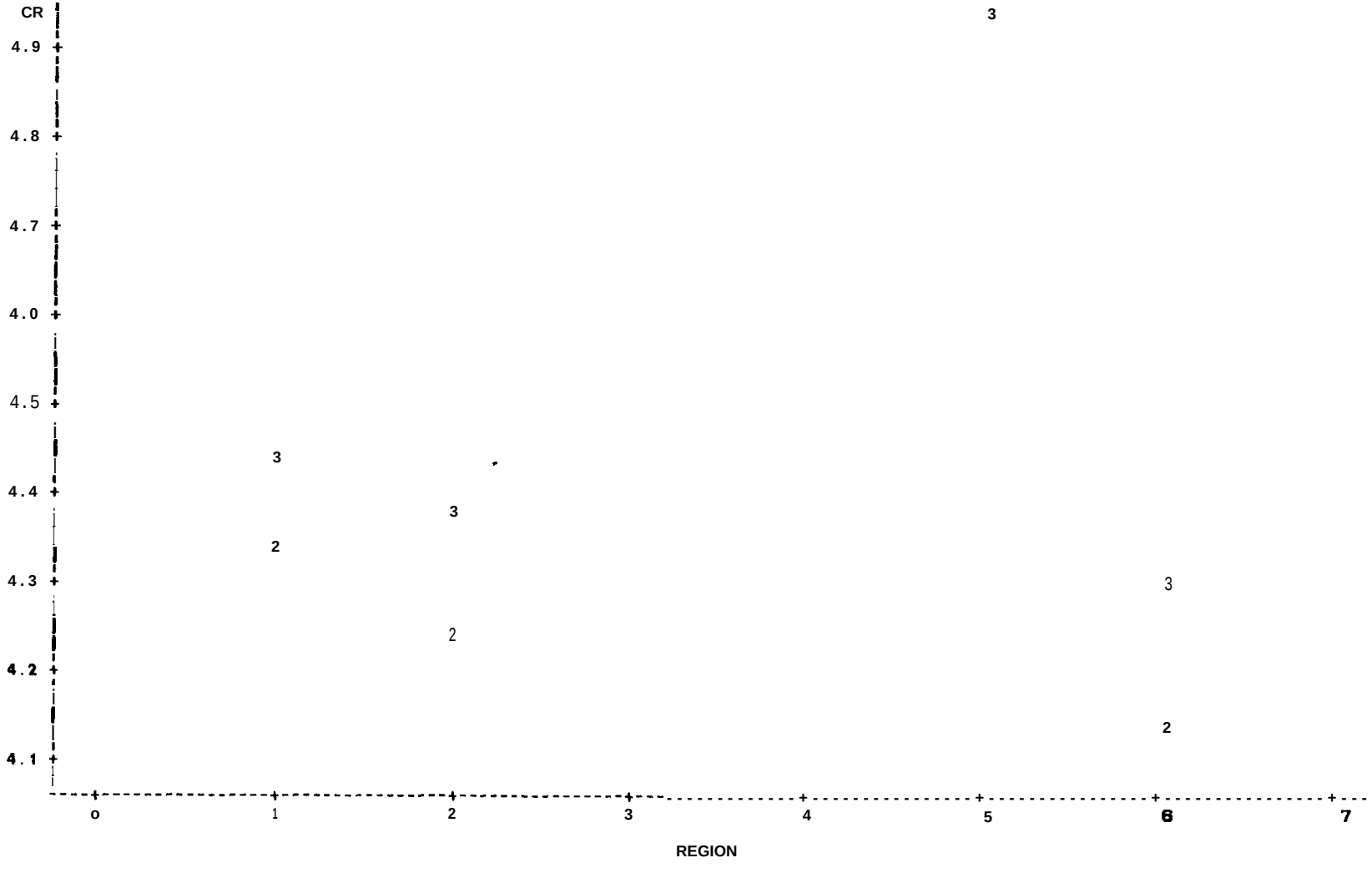
METALS FROM FINE SEDIMENTS SAMPLED AT REGIONS 1-6 (YEARS 2,3)
PLOT OF MEAN LOG CONCENTRATIONS FOR EACH SAMPLING YEAR
REGION NUMBER ON X-AXIS:
1=CAMDEN BAY AREA 2=FOGGY ISLAND BAY AREA 3=KUPARUK RIVER BAY AREA
4=EAST HARRISON BAY AREA 5=WEST HARRISON BAY AREA 6=ENDICOTT FIELD

PLOT OF CD*REGION SYMBOL IS VALUE OF YEAR



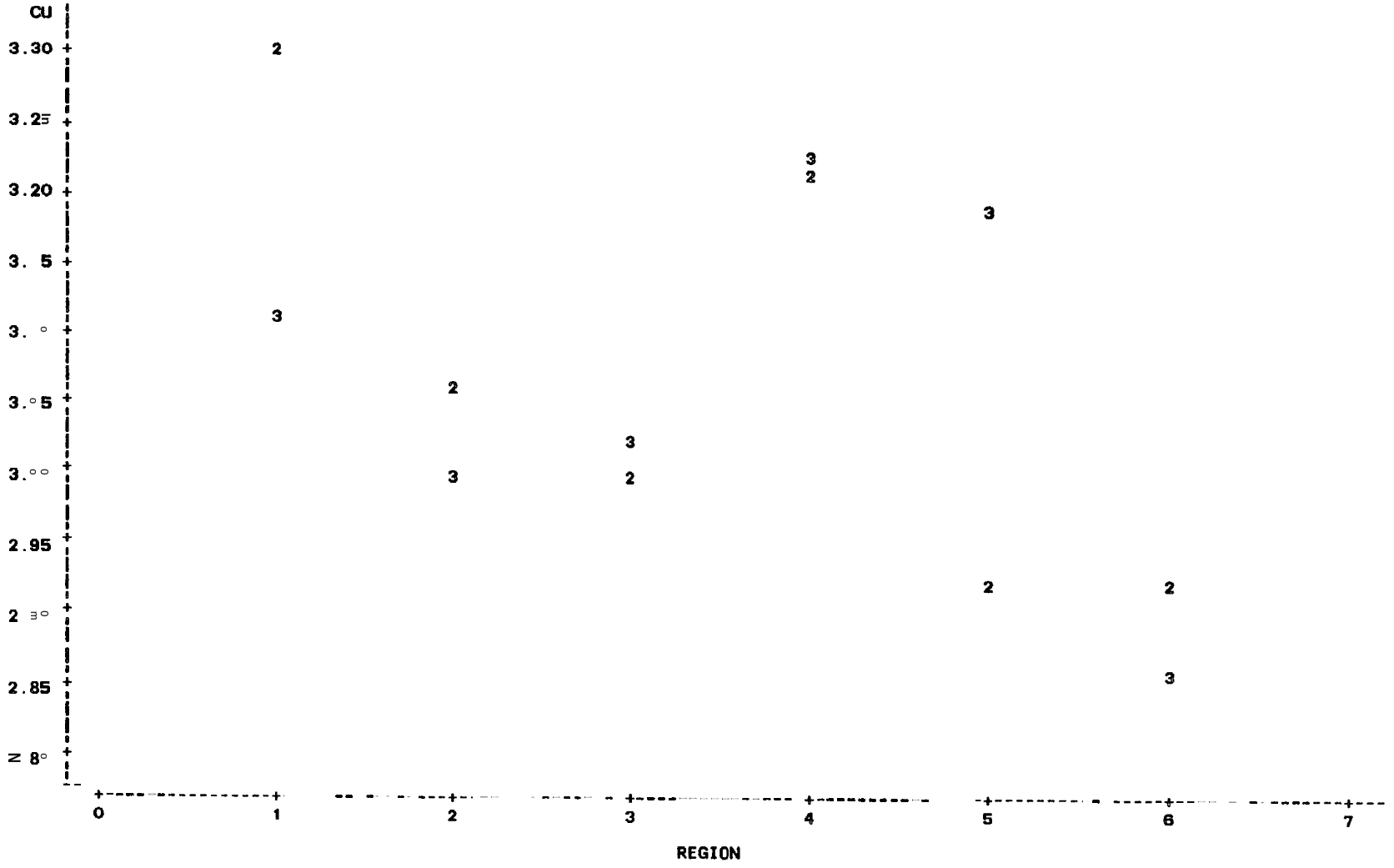
METALS FROM FINE SEDIMENTS SAMPLED AT REGIONS 1-6 (YEARS 2,3)
PLOT OF MEAN LOG CONCENTRATIONS FOR EACH SAMPLING YEAR
REGION NUMBER ON X-AXIS:
1=CAMDEN BAY AREA 2=FOGGY ISLANO BAY AREA 3=KUPARUK RIVER BAY AREA
4=EAST HARRISON BAY AREA 5=WEST HARRISON BAY AREA 6=ENDICOTT FIELD

PLOT OF CR*REGION SYMBOL IS VALUE OF YEAR



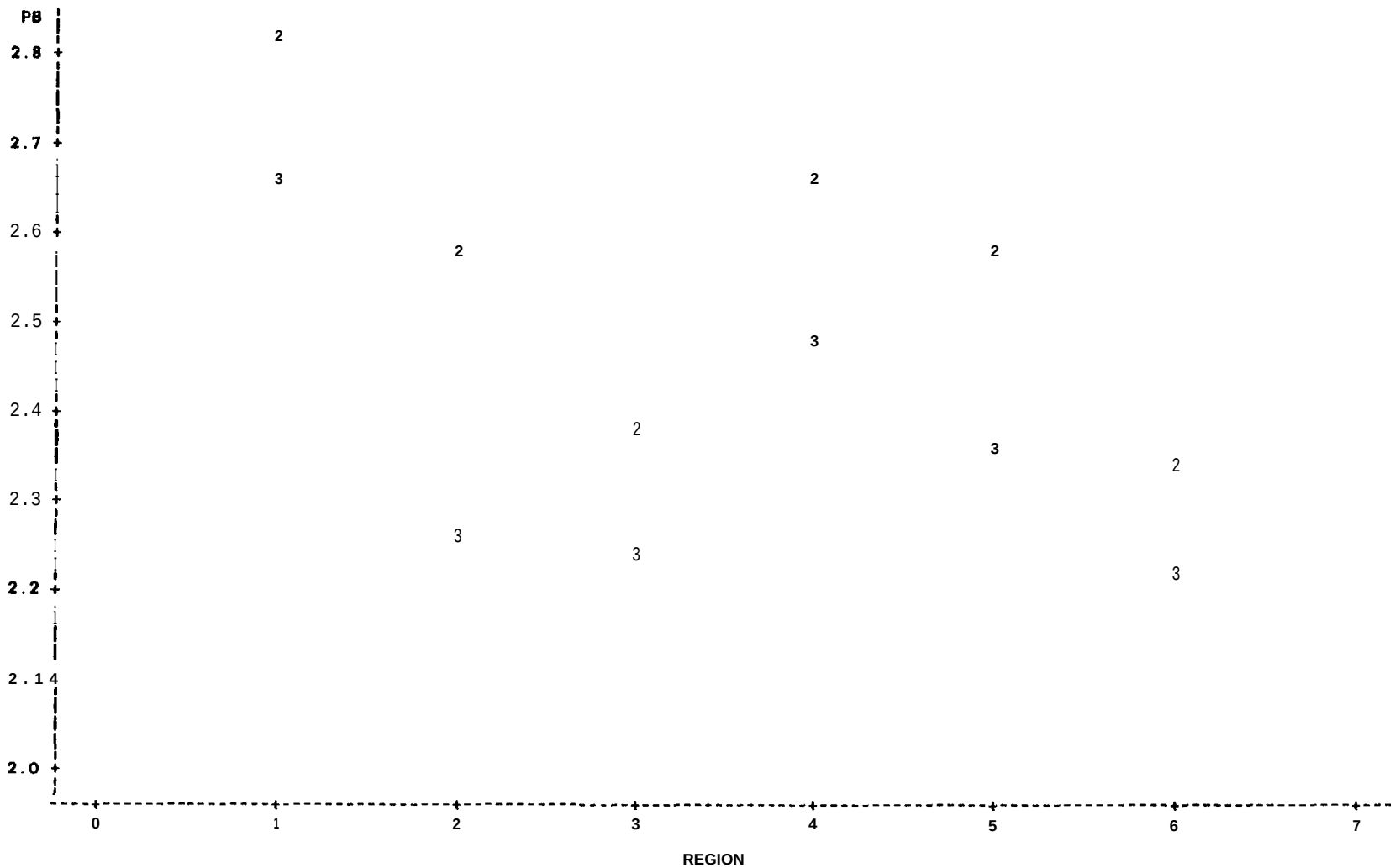
METALS FROM FINE SEDIMENTS SAMPLED AT REGIONS 1-6 (YEARS 2,3)
PLOT OF MEAN LOG CONCENTRATIONS FOR EACH SAMPLING YEAR
REGION NUMBER ON X-AXIS:
1=CAMDEN BAY AREA 2=FOGGY ISLAND BAY AREA 3=KUPARUK RIVER BAY AREA
4=EAST HARRISON BAY AREA 5=WEST HARRISON BAY AREA 6=ENDICOTT FIELD

PLOT OF CU*REGION SYMBOL IS VALUE OF YEAR



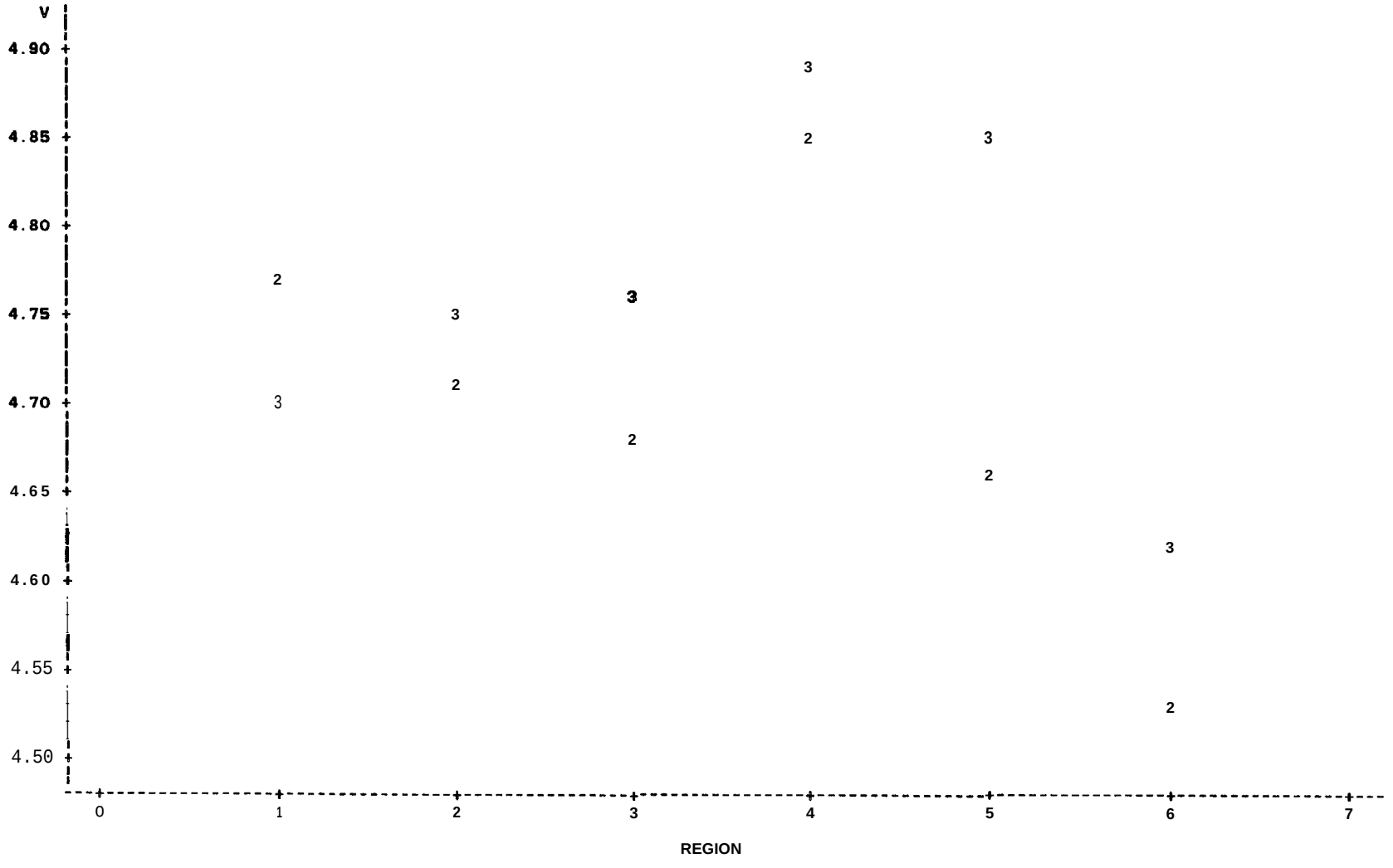
METALS FROM FINE SEDIMENTS SAMPLED AT REGIONS 1-6 (YEARS 2,3)
PLOT OF MEAN LOG CONCENTRATIONS FOR EACH SAMPLING YEAR
REGION NUMBER ON X-AXIS:
1=CAMDEN BAY AREA 2=FOGGY ISLAND BAY AREA 3=KUPARUK RIVER BAY AREA
4=EAST HARRISON BAY AREA 5=WEST HARRISON BAY AREA 6=ENDICOTT FIELD

PLOT OF PB*REGION SYMBOL IS VALUE OF YEAR



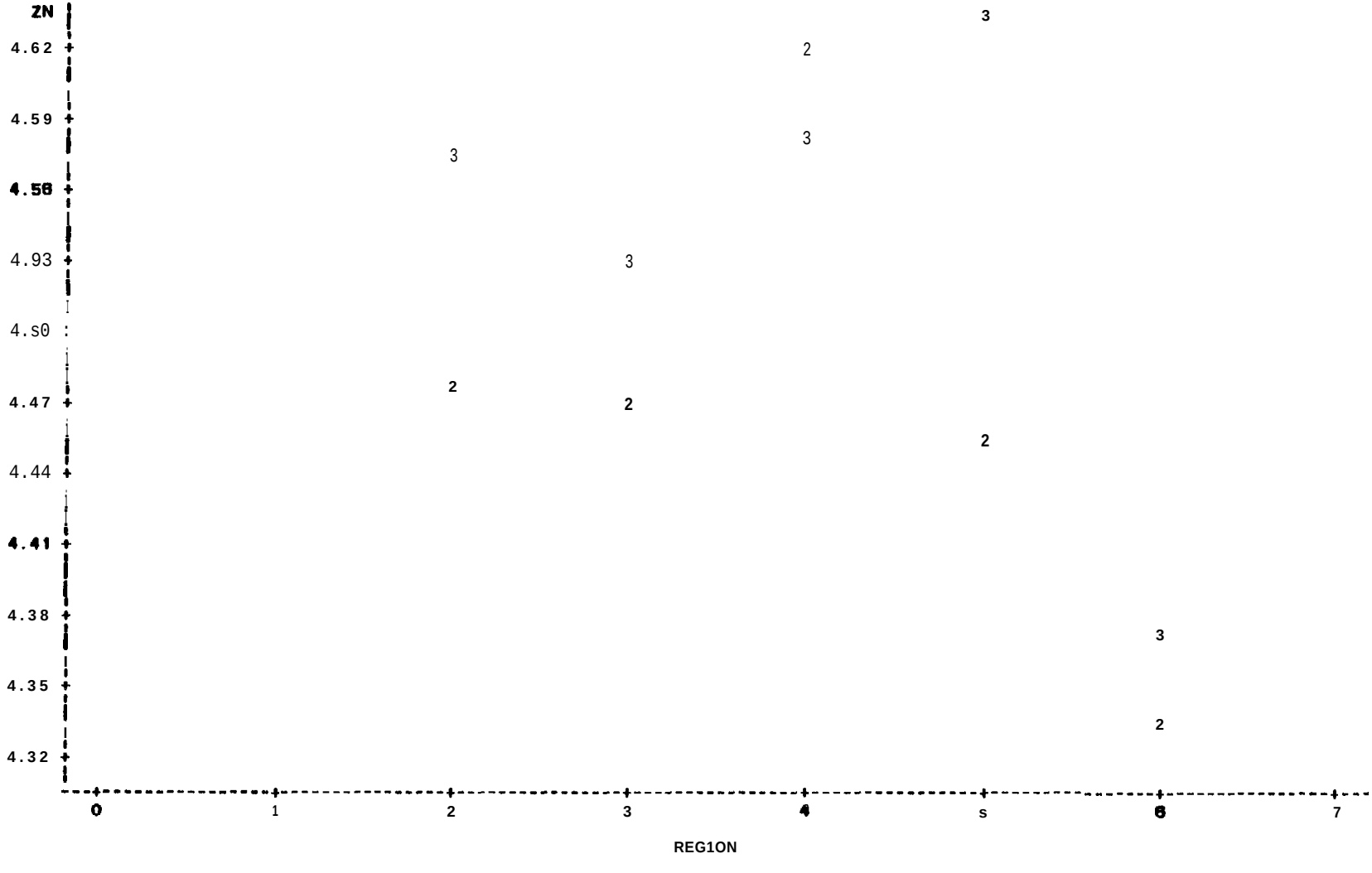
METALS FROM FINE SEDIMENTS SAMPLED AT REGIONS 1-6 (YEARS 2,3)
PLOT OF MEAN LOG CONCENTRATIONS FOR EACH SAMPLING YEAR
REGION NUMBER ON X-AXIS:
1=CAMDEN BAY AREA 2=FOGGY ISLAND BAY AREA 3=KUPARUK RIVER BAY AREA
4=EAST HARRISON BAY AREA 5=WEST HARRISON 6AY AREA 6=ENDICOTT FIELD

PLOT OF V*REGION SYMBOL IS VALUE OF YEAR



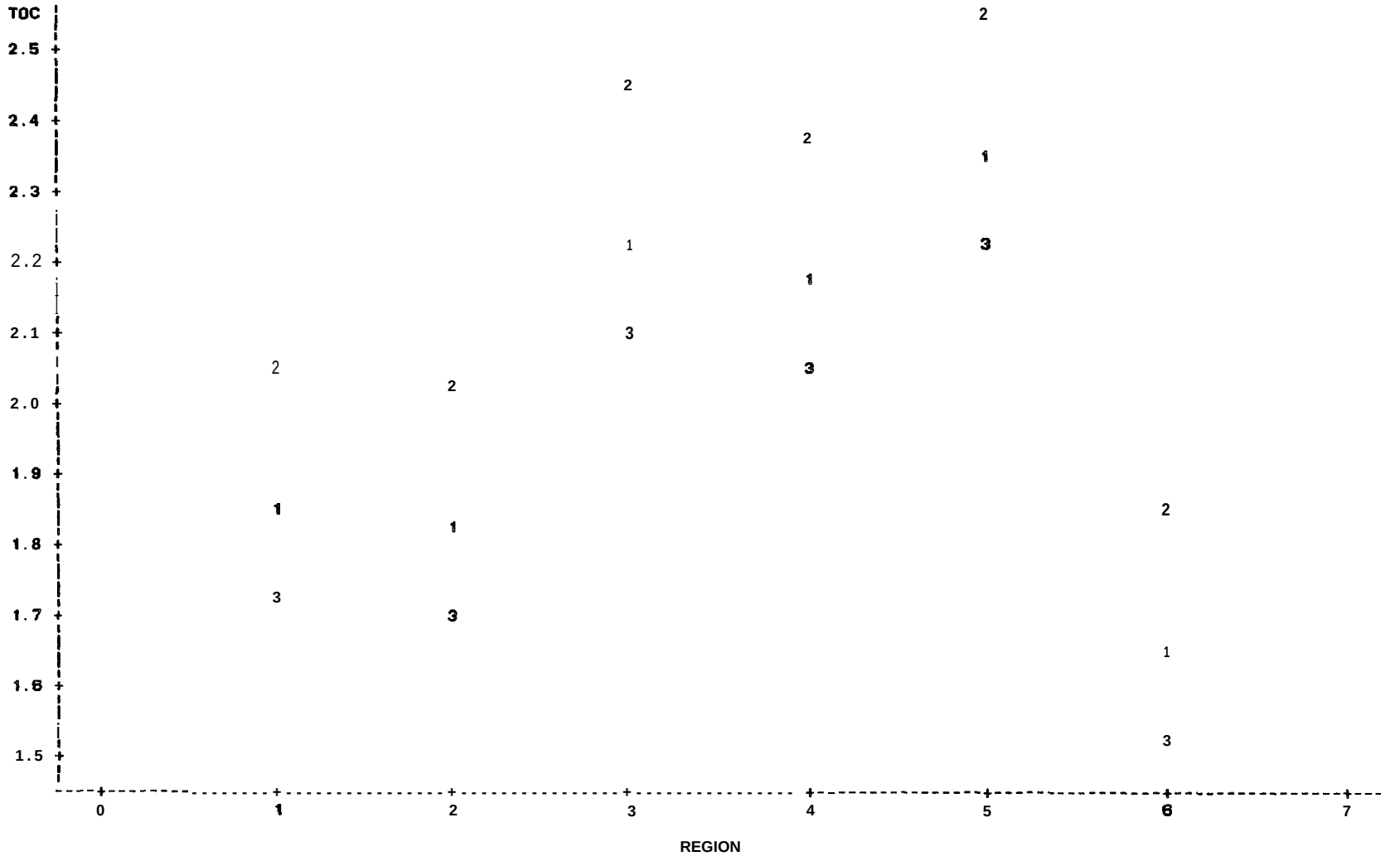
METALS FROM FINE SEDIMENTS SAMPLED AT REGIONS 1-6 (YEARS 2,3)
PLOT OF MEAN LOG CONCENTRATIONS FOR EACH SAMPLING YEAR
REGION NUMBER ON X-AXIS:
1=CAMDEN BAY AREA 2=FOGGY ISLAND BAY AREA 3=KUPARUK RIVER BAY AREA
4=EAST HARRISON BAY AREA 5=WEST HARRISON BAY AREA 6=ENDICOTT FIELD

PLOT OF ZN*REGION SYMBOL 1S VALUE OF YEAR



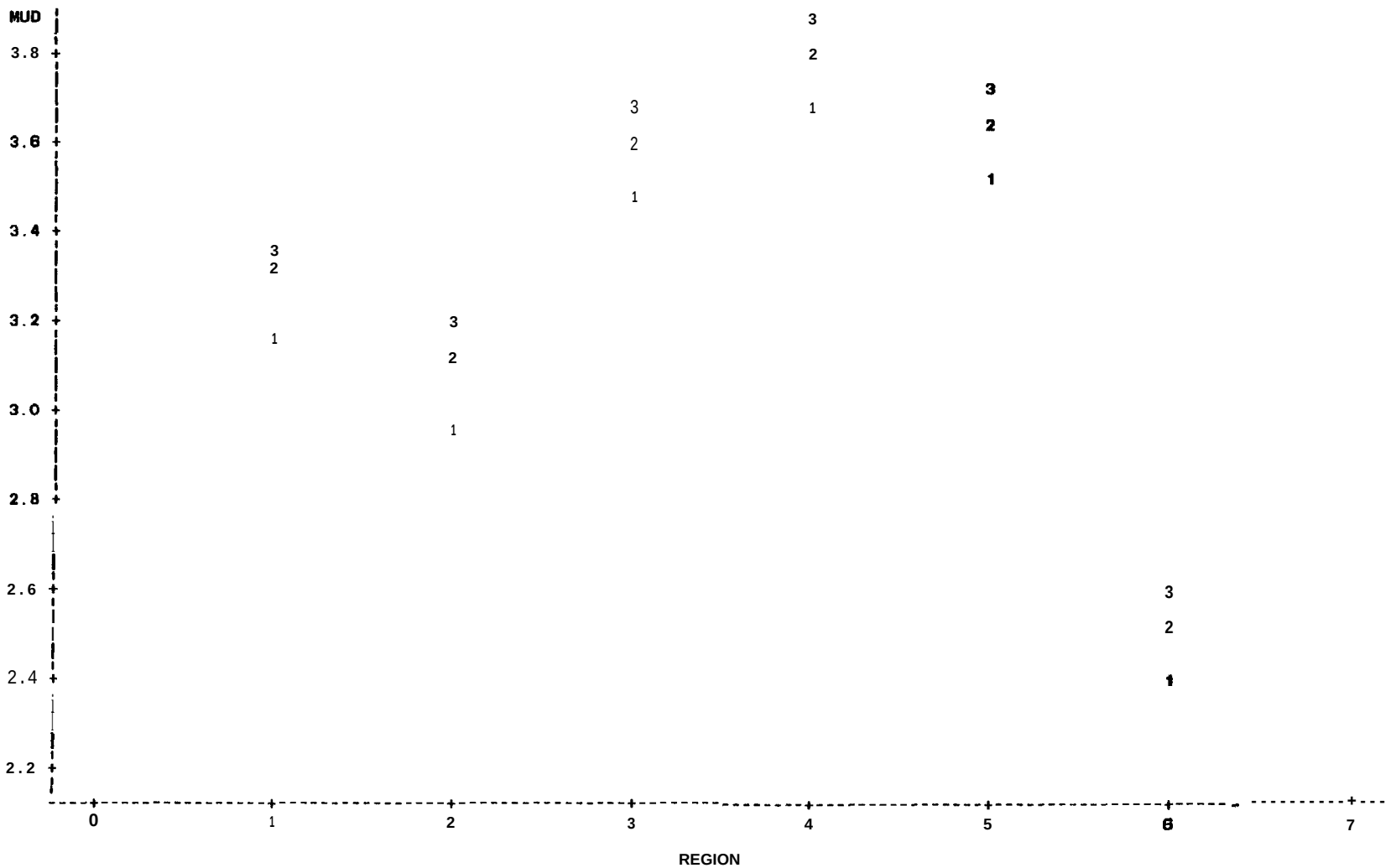
HYDROCARBONS AND AUX VARS FROM BULK SEDIMENTS SAMPLED AT REGIONS 1-6
PLOT OF MEAN LOG CONCENTRATIONS FOR EACH SAMPLING YEAR
REGION NUMBER ON X-AXIS:
1=CAMDEN BAY AREA 2=FOGGY ISLAND BAY AREA 3=KUPARUK RIVER BAY AREA
4=EAST HARRISON BAY AREA 5=WEST HARRISON BAY AREA 6=ENDICOTT FIELD

PLOT OF TOC*REGION SYMBOL 1S VALUE OF YEAR



HYDROCARBONS AND AUX VARS FROM BULK SEDIMENTS SAMPLED AT REGIONS 1-6
PLOT OF MEAN LOG CONCENTRATIONS FOR EACH SAMPLING YEAR
REGION NUMBER ON X-AXIS:
1=CAMDEN BAY AREA 2=FOGGY ISLAND BAY AREA 3=KUPARUK RIVER BAY AREA
4=EAST HARRISON BAY AREA 5=WEST HARRISON BAY AREA 6=ENDICOTT FIELD

PLOT OF MUD*REGION SYMBOL IS VALUE OF YEAR



SECTION 2

GEOMETRIC MEAN CONCENTRATIONS
AND 95 PERCENT CONFIDENCE INTERVALS
FOR EACH SET OF ANALYTES ARRANGED BY STATION

GEOMETRIC MEANS AND 95% CONFIDENCE INTERVALS FOR ALL VARIABLES
AT EACH MARINE STATION IN THE BEAUFORT SEA

FINE SEDIMENT SAMPLE OATA

STATION=1A

STATION	TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 9S% CONF. LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
1A	N	1	o. 1s			
1A	F	1	0.055			
1A	P	1	0.13			
1A	0		0.024			
1A	PAN	:	0.23			
1A	PHYT	1	0.053			
1A	PRIS	1	0.081			
1A	LALK	1	1.13			
1A	TALK	1	14.58			
1A	TOT	1	28.21			
1A	BA	2	341	1.22	232	sol
1A	co	2	0.19	1.13	0. 1s	0.2s
1A	CR	2	89	1.10	74	107
1A	CU	2	29.7	1.01	28.9	30.5
1A	PB	2	16.4	1.20	11.4	23.6
1A	V	2	128	1.04	110	139
1A	ZN	2	125	1.26	79	197
1A	TOC	2	9.64	1.20	6.73	13.82
1A	MUD	2	64.1	1.06	97.0	72.1
1A	FFPI	1	61			
1A	ISO/ALK	1	0.414			
1A	LALK/TAL	1	0.078			
1A	PRIS/PHY	1	1.s			
1A	N/P	1	1.1			
1A	P/D	1	5.6			
1A	PAH/TOC	1	0.020			
1A	TOT/TOC	1	2.3			
1A	BA/CR	2	3.8	1.33	2.2	6.7
1A	BA/V	2	2.7	1.27	1.7	4.3

GEOMETRIC MEANS AND 95% CONFIDENCE INTERVALS FOR ALL VARIABLES
AT EACH MARINE STATION IN THE BEAUFORT SEA

FINE SEDIMENT SAMPLE DATA

STATION=1B

STATION	TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 95% CONF. LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
1B	N	o				
1B	F	0				
1B	P	0				
1B	D	0				
1B	PAN	0				
1B	PHYT	0				
1B	PRIS	0				
1B	LALK	0				
1B	TALK	0				
1B	TOT	0				
1B	BA	2	364	1.59	147	903
1B	CD	2	0.13	1.09	0.11	0.15
1B	CR	2	84	1.0s	74	95
1B	w	2	26.3	1.06	23.4	29.5
1B	PB	2	18.7	1.03	15.8	17.7
1B	v	2	132	1.04	122	141
1B	ZN	2	91	1.04	84	98
1B	TOC	2	7,23	1.12	5.81	8.99
1B	MUD	2	13.1	1.08	11.2	15.4
1B	FFPI	0				
1B	ISO/ALK	0				
1B	LALK/TAL	O				
1B	PRIS/PHY	O				
1B	N/P	0				
1B	P/D	0				
1B	PAN/me	0				
1B	TOT/TOC	0				
1B	BA/CR	2	4.3	1.69	1.5	12.1
1B	BA/V	2	2.8	1.65	1.0	7.4

GEOMETRIC MEANs AND 95% CONFIDENCE INTERVALS FOR ALL VARIABLES
AT EACH MARINE STATION IN THE BEAUFORT SEA

FINE SEDIMENT SAMPLE DATA

STATION=1C

STATION	TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 95% CONF. LIMIT FOR G.M.	UPPER 95% cONF. LIMIT FOR G.M.
1C	N	0				
1C	F	0				
1C	P	0				
1C	D	0				
1C	PAH	0				
1C	PHYT	0				
1C	PRIS	0				
1C	LALK	0				
1C	TALK	0				
1C	Tot	0				
1C	BA	2	395	1.27	249	628
1C	CD	2	0.11	1.49	0.05	0.23
1C	CR	2	85	1.02	82	89
1C	w	2	24.7	1.04	22.8	26.7
1C	PB	2	18.6	1.01	18.2	18.9
1C	v	2	142	1.01	140	144
1C	ZN	2	97	1.08	83	114
1C	TOG	2	8.94	1.07	7.82	10.23
1C	MUD	2	69.9	1.00	69.9	70.0
1C	FFPI	0				
1C	ISO/ALK	0				
1C	LALK/TAL	0				
1C	PRIS/PHY	0				
1C	N/P	0				
1C	P/D	0				
1C	PAH/TOC	0				
1C	TOT/TOC	0				
1C	BA/CR	2	4.0	4.30	2.8	7.7
1C	BA/V	2	2.8	1.26	1.8	4.4

GEOMETRIC MEANS AND 95% CONFIDENCE INTERVALS FOR ALL VARIABLES
AT EACH MARINE STATION IN THE BEAUFORT SEA

FINE SEDIMENT SAMPLE OATA

STATION=1D

STATION	TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 95% CONF. LIMIT FOR G.M.	UPPER 9S% CONF. LIMIT FOR G.M.
1D	N	o				
1D	F	0				
1D	P	0				
1D	D	0				
ID	PAN	0				
1D	PHYT	0				
1D	PRIS	0				
1D	LALK	0				
1D	TALK	0				
1D	TOT	0				
1D	DA	2	471	1.08	403	551
10	co	2	0.10	1.24	0.10	0.24
1D	CR	2	75	1.08	65	87
10	CU	2	28.0	1.01	25.3	20.7
1D	PB	2	19.s	1.28	12.0	31.7
1D	v	2	98	1.08	88	110
1D	ZN	2	85	1.01	84	87
1D	TOC	2	5.88	1.12	4.88	7.39
1D	MUD	2	23.9	1.47	11.3	51.0
1D	FFPI	0				
1D	ISO/ALK	0				
1D	LALK/TAL	0				
1D	PRIS/PHY	0				
1D	N/P	0				
1D	P/D	0				
1D	PAH/TOC	0				
1D	TOT/TOC	0				
1D	BA/CR	2	6.3	1.01	0.2	6.4
1D	BA/V	2	4.8	1.15	3.6	6.3

GEOMETRIC MEANS AND 95% CONFIDENCE INTERVALS FOR ALL VARIABLES
AT EACH MARINE STATION IN THE BEAUFORT SEA

FINE SEDIMENT SAMPLE DATA

STATION=1E

STATION	TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 9S% CONF. LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
1E	N	o				
1E	F	0				
1E	P	0				
1E	D	0				
1E	PAN	O				
1E	PHYT	O				
1E	PRIS	o				
1E	LALK	0				
1E	TALK	0				
1E	TOT	0				
1E	DA	2	407	1.19	290	S72
1E	co	2	0.12	1.11	0.10	0.15
1E	CR	2	67	1.02	64	69
1E	CU	2	21.9	1.15	16.5	29.0
1E	PB	2	16.6	1.30	9.9	27.7
1E	v	2	83	1.10	69	101
1E	ZN	2	74	1.14	57	95
1E	TOC	2	8.82	1.70	2.41	19.32
1E	MUD	2	49.0	1.07	14.5	169.3
1E	FFPI	0				
1E	ISO/ALK	0				
1E	LALK/TAL	0				
1E	PRIS/PHY	0				
1E	N/P	0				
1E	P/cl	O				
1E	PAH/TOC	O				
1E	TOT/TOC	0				
1E	BA/CR	2	6.1	1.21	4.2	8.9
1E	BA/V	2	4.9	1.08	4.2	5.7

GEOMETRIC MEANS AND 95% CONFIDENCE INTERVALS FOR ALL VARIABLES
AT EACH MARINE STATION IN THE BEAUFORT SEA

FINE SEDIMENT SAMPLE DATA

STATION=2A

STATION	TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STO ERR OF GEOM. MEAN	LOWER 95% CONF. LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
2A	N	o				
2A	F	0				
2A	P	0				
2A	D	0				
2A	PAN	0				
2A	PHYT	0				
2A	PRIS	0				
2A	LALK	0				
2A	TALK	0				
2A	TOT	0				
2A	BA	2	394	1.23	263	591
2A	co	2	0.19	1.03	0.18	0.20
2A	CR	2	82	1.14	03	108
2A	CU	2	25.8	1.06	22.9	29.1
2A	PB	2	15.4	1.08	13.7	17.2
2A	v	2	114	1.00	113	115
2A	ZN	2	85	1.11	70	104
2A	Toc	2	13.37	1.21	9.16	19.50
2A	MUD	2	85.7	1.07	75.0	98.0
2A	FFPI	0				
2A	ISO/ALK	0				
2A	LALK/TAL	0				
2A	PRIS/PHY	0				
2A	N/P	0				
2A	P/D	0				
2A	PAH/TOC	0				
2A	TOT/TOC	0				
2A	BA/CR	2	4.8	1.40	2.5	9.3
2A	BA/V	2	3.5	1.23	2.3	5.2

GEOMETRIC MEANS AND 95% CONFIDENCE INTERVALS FOR ALL VARIABLES
AT EACH MARINE STATION IN THE BEAUFORT SEA

FINE SEDIMENT SAMPLE OATA

STATION=2B

STATION	TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 95% CONF. LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
2B	N	o				
20	F	0				
2B	P	0				
2B	D	O				
2B	PAN	0				
2B	PHYT	0				
2B	PRIS	O				
2B	LALK	O				
2B	TALK	o				
2B	TOT	0				
2B	BA	2	301	1.15	229	394
2B	co	2	0.18	1.08	0.16	0.20
29	CR	2	78	1.01	70	79
2B	CU	2	24.9	1.1s	19.1	32.6
2B	PB	2	14.1	1.12	11.3	17.7
2B	v	2	1 la	1.09	98	138
2B	ZN	2	89	1.08	77	104
2B	ToC	2	5.28	1.87	1.54	18.07
2B	MUD	2	10.4	1.05	9.4	11.5
2B	FFPI	0				
2B	ISO/ALK	0				
2B	LALK/TAL	0				
2B	PRIS/PHY	0				
2B	N/P	0				
2B	P/o	0				
2B	PAH/TOC	0				
2B	TOT/TOC	0				
2B	BA/CR	2	3.9	1.13	3.0	5.0
2B	BA/V	2	2.8	1.05	2.3	2,9

GEOMETRIC MEANS AND 95% CONFIDENCE INTERVALS FOR ALL VARIABLES
AT EACH MARINE STATION IN THE BEAUFORT SEA

FINE SEDIMENT SAMPLE DATA

STATION=2C

STATION	TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 95% CONF. LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
2C	N	o				
2C	F	0				
2C	P	0				
2C	D	0				
2C	PAH	0				
2C	PHYT	0				
2C	PRIS	0				
2C	LALK	0				
2C	TALK	0				
2C	TOT	0				
2C	BA	2	385	1.34	218	686
2C	CD	2	0.12	1.25	0.08	0.19
2C	CR	2	84	1.02	81	88
2C	CU	2	25.0	1.08	21.5	29.0
2C	PB	2	17.6	1.09	14.9	20.9
2C	v	2	13a	1.03	131	146
2C	ZN	2	103	9.02	100	107
2C	TOC	2	8.71	1.19	6.21	12.22
2C	MUD	2	63.8	1.12	51.5	79.0
2C	FFPI	O				
2C	ISO/ALK	O				
2C	LALK/TAL	O				
2C	PRIS/PHY	O				
2C	N/P	0				
2C	P/o	0				
2C	PAH/TOC	0				
2C	TOT/TOC	0				
2C	BA/CR	2	4.6	1.37	2.5	8.5
2C	BA/V	2	2.8	1.31	1.7	4.7

GEOMETRIC MEANS ANO 95% CONFIDENCE INTERVALS FOR ALL VARIABLES
AT EACH MARINE STATION IN THE BEAUFORT SEA

FINE SEDIMENT SAMPLE DATA

STATION=2D

STATION	TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% S10 ERR OF GEOM. MEAN	LOWER 95% CONF. LIMIT FOR G.M.	UPPER 95% CONF LIMIT FOR G.M.
20	N	o				
20	F	0				
2D	P	0				
2D	D	0				
2D	PAN	0				
20	PHYT	0				
2D	PRIS	0				
20	LALK	0				
2D	TALK	0				
2D	TOT	o				
20	BA	2	332	1.01	328	339
20	CD	2	0.27	1.08	0.24	0.30
2D	CR	2	83	1.03	77	88
2D	w	2	27.3	1.12	22.0	34.0
2D	PB	2	18.0	1.18	11.5	22.3
2D	v	2	120	1.08	107	133
20	ZN	2	100	1.09	85	118
2D	TOC	2	7.40	1.22	5.00	10.95
2D	MUD	2	17.5	1.14	13.4	22.7
2D	FFPI	0				
20	ISO/ALK	0				
20	LALK/TAL	0				
2D	PRIS/PHY	0				
2D	N/P	0				
2D	P/D	0				
2D	PAH/TOC	0				
2D	TOT/TOC	0				
2D	BA/CR	2	4.0	1.02	3.8	4.2
20	BA/V	2	2.8	1.07	2.4	3.2

GEOMETRIC MEANS AND 95% CONFIDENCE INTERVALS FOR ALL VARIABLES
AT EACN MARINE STATION IN THE BEAUFORT SEA

FINE SEDIMENT SAMPLE DATA

STATION=2E

STATION	TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 95% CONF. LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
2E	N	o				
2E	F	0				
2E	P	0				
2E	D	0				
2E	PAN	0				
2E	PHYT	0				
2E	PRIS	0				
2E	LALK	0				
2E	TALK	0				
2E	TOT	0				
2E	8A	2	250	1.58	102	614
2E	CD	2	0.20	1.10	0.22	0.32
2E	CR	2	77	1.03	73	81
2E	CU	2	26.8	1.11	21.7	33.0
2E	PB	2	13.9	1.14	10.7	18.1
2E	V	2	120	1.10	99	145
2E	ZN	2	96	1.18	72	128
2E	TOC	3	5.01	1.54	2.16	11.61
2E	MUD	3	29.2	1.93	7.5	98.4
2E	FFPI	0				
2E	ISO/ALK	0				
2E	LALK/TAL	0				
2E	PRIS/PHY	0				
2E	N/P	0				
2E	P/D	0				
2E	PAH/TOC	0				
2E	TOT/TOC	0				
2E	BA/CR	2	3.3	1.63	1.3	8.5
2E	BA/V	2	2.1	1.74	0.7	6.2

GEOMETRIC MEANS AND 95% CONFIDENCE INTERVALS FOR ALL VARIABLES
AT EACH MARINE STATION IN THE BEAUFORT SEA

FINE SEDIMENT SANPLE DATA

STATION=2F

STATION	TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 95% CONF. LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
2F	N	o				
2F	F	0				
2F	P	0				
2F	D	0				
2F	PAH	0				
2F	PHYT	0				
2F	PRIS	0				
2F	LALK	0				
2F	TALK	0				
2F	TOT	0				
2F	BA	2	95	2.89	12	781
2F	CD	2	0.14	1.95	0.04	0.52
2F	CR	2	85	1.20	59	122
2F	CU	2	15.7	1.28	9.8	25.4
2F	PB	2	8.6	1.27	5.4	13.7
2F	v	2	82	1.08	70	95
2F	ZN	2	77	1.02	74	80
2F	TOC	3	4.29	1.19	3.05	9.03
2F	MUD	3	12.8	1.10	10.6	15.4
2F	FFPI	0				
2F	ISO/ALK	0				
2F	LALK/TAL	0				
2F	PRIS/PHY	0				
2F	N/P	0				
2F	P/D	0				
2F	PAH/TOC	0				
2F	TOT/TOC	0				
2F	BA/CR	2	1.1	3.48	0.1	12.8
2F	BA/V	2	1.2	2.67	0.2	8.0

GEOMETRIC MEANS AND 95% CONFIDENCE INTERVALS FOR ALL VARIABLES
AT EACH MARINE STATION IN THE BEAUFORT SEA

FINE SEDIMENT SAMPLE DATA

STATION=3A

STATION	TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 95% CONF. LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
3A	N	o				
3A	F	0				
3A	P	0				
3A	D	0				
3A	PAH	0				
3A	PHYT	0				
3A	PRIS	0				
3A	LALK	0				
3A	TALK	0				
3A	TOT	0				
3A	BA .	2	407	1.11	329	503
3A	CD	2	0.16	1.09	0.14	0.20
3A	CR	2	'72	1.07	64	82
3A	CU	2	20.6	1.09	17.4	24.5
3A	PB	2	12.7	1.13	10.0	16.0
3A	v	2	108	1.01	107	110
3A	ZN	2	85	1.02	B2	88
3A	ToC	3	8.65	1.13	6.83	10.94
3A	MUD	3	37.9	1.16	28.2	50.9
3A	FFPI	0				
3A	ISO/ALK	0				
3A	LALK/TAL	0				
3A	PRIS/PHY	0				
3A	N/P	0				
3A	P/D	O				
3A	PAH/TOC	0				
3A	TOT/TOC	0				
3A	BA/CR	2	5.6	1.19	4.0	7.$
3A	BA/V	2	3.0	1.12	3.0	4.7

GEOMETRIC MEANS AND 95% CONFIDENCE INTERVALS FOR ALL VARIABLES
AT EACH MARINE STATION IN THE BEAUFORT SEA

FINE SEDIMENT SAMPLE OATA

STATION=38

STATION	TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 95% CONF. LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
3B	N	o				
3B	F	0				
36	P	O				
36	D	O				
36	PAN	0				
36	PHYT	0				
3B	PRIS	O				
36	LALK	O				
36	TALK	0				
3B	TOT	0				
36	BA	2	377	1.03	358	398
3B	CD	2	0.17	1.08	0.15	0.20
3B	CR	2	73	1.10	61	88
36	CU	2	19.9	1.04	18.4	21.4
3B	PB	2	11.3	1.00	11.3	11.3
36	v	2	111	1.06	99	124
38	ZN	2	83	1.04	77	89
3B	TOC	3	10.22	1.06	9.10	11.47
36	NUD	3	69.0	1.04	63.8	74.5
3B	FFPI	O				
3B	ISO/ALK	0				
36	LALK/TAL	0				
3B	PRIS/PHY	0				
3B	N/P	0				
36	P/D	0				
3B	PAH/TOC	0				
3B	TOT/TOC	0				
3B	8A/CR	2	5.2	1.13	4.1	0.s
39	BA/V	2	3,4	1.08	2.9	4.0

GEOMETRIC MEANS AND 95% CONFIDENCE INTERVALS FOR ALL VARIABLES
AT EACH MARINE STATION IN THE BEAUFORT SEA

FINE SEDIMENT SAMPLE DATA

STATION=4A

STATION	TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STO ERR OF GEOM. MEAN	LOWER 95% CONF. LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
4A	N	o				
4A	F	0				
4A	P	0				
4A	D	0				
4A	PAN	0				
4A	PHYT	0				
4A	PRIS	0				
4A	LALK	0				
4A	TALK	0				
4A	TOT	0				
4A	BA	2	328	1.17	23$	450
4A	CD	2	0.29	1.21	0.20	0.42
4A	CR	2	81	1.03	70	86
4A	CU	2	26.1	1.0s	23.7	28.8
4A	PB	2	12.3	1.18	8.9	16.9
4A	v	2	127	1.01	12s	130
4A	ZN	2	104	1.00	104	105
4A	Toc	3	7.?9	1.33	4.42	13.72
4A	MUD	3	30.1	1.05	27.5	33.0
4A	FFPI	0				
4A	I SD/ALK	0				
4A	LALK/TAL	0				
4A	PRIS/PHY	0				
4A	N/P	0				
4A	P/D	0				
4A	PAH/TOC	0				
4A	TOT/TOC	0				
4A	BA/CR	2	4.1	1.14	3.2	5.2
4A	BA/V	2	2.8	1.19	1.8	3.6

GEOMETRIC MEANS AND 95% CONFIDENCE INTERVALS FOR ALL VARIABLES
AT EACH MARINE STATION IN THE BEAUFORT SEA

FINE SEDIMENT SAMPLE DATA

STATION=4B

STATION	TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 95% CONF. LIMIT FOR G.M.	UPPER 9S% CONF. LIMIT FOR G.M.
4B	N	o				
4B	F	0				
4B	P	0				
4B	0	0				
4B	PAN	0				
4B	PHYT	0				
4B	PRIS	0				
4B	LALK	0				
4B	TALK	0				
4B	TOT	0				
4B	BA	2	300	1.16	225	399
4B	CD	2	0.19	1.01	0.19	0.20
4B	CR	2	66	1.13	52	84
4B	CU	2	19.3	1.00	19,2	10.3
4B	PB	2	9.6	1.11	7.8	11.7
4B	v	2	103	1.05	93	114
4B	ZN	2	87	1.06	78	98
4B	TOC	3	3.39	1.16	2.53	4.55
4B	MUD	3	7.6	1.29	4.6	12.4
40	FFPI	0				
40	ISO/ALK	0				
4B	LALK/TAL	0				
4B	PRIS/PHY	0				
40	N/P	0				
40	P/D	0				
4B	PAH/TOC	0				
4B	TOT/TOC	0				
4B	BA/CR	2	4.9	1.02	4.4	4.7
4B	BA/V	2	2.9	1.10	2.4	3.s

GEOMETRIC MEANS AND 95% CONFIDENCE INTERVALS FOR ALL VARIABLES
AT EACH MARINE STATION IN THE BEAUFORT SEA

FINE SEDIMENT SAMPLE OATA

STATION=4C

STATION	TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STO ERR OF GEOM. MEAN	LOWER 95% CONF. LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
4C	N	o				
4C	F	0				
4C	P	0				
4C	D	0				
4C	PAN	0				
4C	PHYT	0				
4C	PRIS	0				
4C	LALK	0				
4C	TALK	0				
4C	TOT	0				
4C	BA	2	384	1.28	237	623
4C	CD	2	0. 18	1.0s	0. 14	0.18
4C	CR	2	80	1.02	76	83
4C	CU	2	22.2	1.07	19.8	25.1
4C	PB	2	10.8	1.59	4.3	27.0
4C	v	2	122	1.00	122	123
4C	ZN	2	88	1.07	77	101
4C	TOC	3	4.86	1.49	2.21	10.69
4C	MUD	3	10.7	1.37	5.8	19.8
4C	FFPI	O				
4C	ISO/ALK	O				
4C	LALK/TAL	0				
4C	PRIS/PHY	0				
4C	N/P	0				
4C	P/o	0				
4C	PAH/TOC	0				
4C	TOT/TOC	0				
4C	BA/CR	2	4.8	1.31	2.8	8.2
4C	BA/V	2	3.1	1.28	1.9	5.1

GEOMETRIC MEANS AND 95% CONFIDENCE INTERVALS FOR ALL VARIABLES
AT EACH MARINE STATION IN THE BEAUFORT SEA

FINE SEDIMENT SAMPLE DATA

STATION=5A

STATION	TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 95% CONF. LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
5A	N	0				
5A	F	0				
5A	P	0				
5A	D	0				
5A	PAH	0				
5A	PHYT	0				
5A	PRIS	0				
5A	LALK	0				
5A	TALK	0				
5A	TOT	0				
5A	BA	2	398	1.02	385	411
5A	co	2	0.19	1.05	0.17	0.21
5A	CR	2	72	1.13	57	90
5A	CU	2	19.3	1.02	18.s	20.2
5A	PB	2	10.8	1.04	9.9	11.8
5A	v	2	108	1.00	95	118
5A	ZN	2	79	1.03	75	83
5A	TOC	3	9.57	1.23	6.33	14.46
5A	MUD	3	53.1	1.17	38.9	72.5
5A	FFPI	0				
5A	ISO/ALK	0				
5A	LALK/TAL	0				
5A	PRIS/PHY	0				
5A	N/P	0				
5A	P/o	0				
5A	PAH/TOC	0				
5A	TOT/TOC	0				
5A	BA/CR	2	5.5	4.11	4.s	6.8
5A	BA/V	2	3.8	1.04	3.5	4.1

G EOMETRIC MEANS AND 95% CONFIDENCE INTERVALS FOR ALL VARIABLES
AT EACH MARINE STATION IN THE BEAUFORT SEA

FINE SEDIMENT SAMPLE OATA

STATION=5B

STATION	TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 95% CONF. LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
5B	N	o				
5B	F	0				
5B	P	0				
5B	D	0				
5B	PAH	0				
5B	PHYT	0				
5B	PRIS	0				
5B	LALK	0				
5B	TALK	0				
5B	TOT	0				
5B	8A	2	330	1.01	324	336
5B	CD	2	0. 14	1.08	0.13	0.$6
5B	CR	2	87	1.07	77	99
5B	w	2	27.4	1.01	20.8	28.1
5B	PB	2	14.0	1.18	10.2	19.3
5B	v	2	144	1.03	138	152
5B	ZN	2	121	1.17	90	164
5B	TOC	3	5.22	1.62	2.03	13.39
5B	MUD	3	21.9	2.65	3.2	148.0
5B	FFPI	0				
5B	ISO/ALK	0				
5B	LALK/TAL	0				
56	PRIS/PHY	0				
5B	N/P	0				
5B	P/D	0				
5B	PAH/TOC	0				
5B	TOT/TOC	0				
5B	BA/CR	2	3.8	1.08	3.3	4.4
5B	BA/V	2	2.3	1.04	2.1	2.4

GEOMETRIC MEANS AND 95% CONFIDENCE INTERVALS FOR ALL VARIABLES
AT EACH MARINE STATION IN THE BEAUFORT SEA

FINE SEDIMENT SAMPLE DATA

STATION=5D

STATION	TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 95% CONF. LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
50	N	o				
5D	F	0				
5D	P	0				
5D	D	0				
5D	PAH	0				
5D	PHYT	0				
5D	PRIS	0				
5D	LALK	0				
5D	TALK	0				
50	TOT	0				
5D	BA	2	220	1.41	113	428
50	CD	2	0.23	1.27	0.14	0.30
5D	CR	2	72	1.17	53	98
5D	CU	2	16.4	1.05	15.0	18.1
5D	PB	2	6.6	1.2s	4.3	10.2
5D	v	2	90	1.02	86	94
5D	ZN	2	79	1.04	73	85
5D	TOC	3	17.83	1.28	11.02	28.85
5D	MUD	3	67.0	1.05	61.4	74.4
5D	FFPI	0				
5D	ISO/ALK	0				
5D	LALK/TAL	0				
5D	PRIS/PHY	0				
SD	N/P	0				
5D	P/D	0				
5D	PAH/TOC	0				
5D	TOT/TOC	0				
5D	BA/CR	2	3.0	1.20	2.1	4.4
5D	BA/V	2	2.4	1.37	1.3	4.6

GEOMETRIC MEANS AND 95% CONFIDENCE INTERVALS FOR ALL VARIABLES
AT EACH MARINE STATION IN THE BEAUFORT SEA

FINE SEDIMENT SAMPLE DATA

STATION=5E

STATION	TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 95% CONF. LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
5E	N	o				
5E	F	0				
5E	P	0				
5E	" o	o				
5E	PAN	0				
5E	PHYT	0				
5E	PRIS	0				
5E	LALK	0				
5E	TALK	0				
5E	TOT	0				
5E	BA	2	313	1.0s	287	342
5E	co	2	0.18	1.18	0.13	0.24
5E	CR	2	85	1.07	74	97
SE	w	2	28.3	1.03	28.8	29.8
5E	PB	2	14.2	1.12	11.4	17.7
5E	v	2	147	1.01	143	151
5E	ZN	2	98	1.03	93	105
5E	TOC	3	8.12	1.18	5.88	11.23
5E	MUD	3	2S.3	1.48	11.7	5s.1
5E	FFPI	0				
5E	ISO/ALK	0				
5E	LALK/TAL	0				
5E	PRIS/PHY	0				
5E	N/P	0				
5E	P/D	0				
5E	PAH/TOC	0				
5E	TOT/TOC	0				
5E	BA/CR	2	3.7	1.12	3.0	4.6
5E	BA/V	2	2.1	1.06	1.9	2.4

GEOMETRIC MEANS AND 95% CONFIDENCE Intervals FOR ALL VARIABLES
AT EACH MARINE STATION IN THE BEAUFORT SEA

FINE SEDIMENT SAMPLE DATA

STATION=5F

STATION	TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 95% CONF. LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
5F	N	o				
SF	F	0				
5F	P	0				
5F	D	0				
5F	PAN	0				
5F	PHYT	0				
5F	PRIS	0				
5F	LALK	0				
5F	TALK	0				
5F	TOT	0				
5F	BA	2	1s2	2.11	35	854
5F	CD	2	0.22	1.18	0.17	0.30
5F	CR	2	66	1.18	48	91
SF	CU	2	13.9	1.13	10.9	17.8
5F	PB	2	7.3	1.18	5.4	9.7
SF	v	2	86	1.09	73	102
5F	ZN	2	80	1.08	69	93
5F	TOC	3	11.60	1.26	7.33	18.38
5F	MUD	3	51.0	1.12	41.8	84.4
5F	FFPI	o				
5F	ISO/ALK	0				
5F	LALK/TAL	0				
5F	PRIS/PHY	0				
5F	N/P	0				
5F	P/D	0				
5F	PAH/TOC	0				
5F	TOT/TOC	0				
5F	BA/CR	2	2.3	1.79	0.7	7.2
5F	BA/V	2	1.8	1.93	0.5	6.4

GEOMETRIC MEANS AND 9S% CONFIDENCE INTERVALS FOR ALL VARIABLES
AT EACH MARINE STATION IN THE BEAUFORT sEA

FINE SEDIMENT SAMPLE OATA

STATION=5G

STAT ION	TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 95% CONF. LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
5G	N	o				
5G	F	0				
5G	P	O				
5G	D	O				
5G	PAN	O				
5G	PHYT	O				
5G	PRIS	0				
5G	LALK	0				
5G	TALK	O				
5G	TOT	O				
5G	BA	2	287	1.04	268	308
5G	CD	2	0. 1s	1.01	0.15	0.15
5G	CR	2	83	1.05	75	92
5G	CU	2	18.7	1.01	18.3	19.2
5G	PB	2	11.7	1.17	8.6	16.0
5G	v	2	115	1.02	110	120
5G	ZN	2	85	1.02	82	88
5G	TOC	3	5.60	1.14	4.30	7.19
5G	MUD	3	15.5	1.20	10.9	22.1
5G	FFPI	0				
5G	ISO/ALK	0				
5G	LALK/TAL	O				
5G	PRIS/PHY	O				
5G	N/P	0				
5G	P/D	0				
5G	PAH/TOC	0				
5G	TOT/TOC	0				
5G	BA/CR	2	3.s	1.02	3.4	3.6
5G	BA/V	2	2.5	1.01	2.4	2.6

GEOMETRIC MEANS AND 95% CONFIDENCE INTERVALS FOR ALL VARIABLES
AT EACH MARINE STATION IN THE BEAUFORT SEA

FINE SEDIMENT SAMPLE DATA

STATION=5H

STATION	TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 95% CONF. LIMIT FOR G.M.	UPPER 9S% CONF. LIMIT FOR G.M.
5H	N	0				
5H	F	0				
5H	P	0				
5H	o	0				
5H	PAH	0				
5H	PHYT	0				
5H	PRIS	0				
5H	LALK	0				
5H	TALK	0				
5H	TOT	0				
5H	BA	2	259	1.38	138	405
5H	CD	2	0.22	1.04	0.20	0.23
5H	CR	2	69	1.10	57	83
5H	CU	2	19.8	1.06	17.7	22.0
5H	PB	2	10.3	1.12	8.3	12.8
5H	v	2	108	1.01	106	109
5H	ZN	2	82	1.08	71	94
5H	TOC	2	9.21	1.46	4,40	19.27
5H	MUD	2	18.1	1.16	13.5	24.2
5H	FFPI	0				
5H	ISO/ALK	0				
5H	LALK/TAL	0				
5H	PRIS/PHY	0				
5H	N/P	0				
5H	P/D	0				
5H	PAH/TOC	0				
5H	TOT/TOC	0				
5H	BA/CR	2	3.8	1.2s	2.4	5.9
5H	BA/V	2	2.4	1.39	1.3	4.6

GEOMETRIC MEANS AND 9S% CONFIDENCE INTERVALS FOR ALL VARIABLES
AT EACH MARINE STATION IN THE BEAUFORT SEA

FINE SEDIMENT SAMPLE OATA

STATION=50

STATION	TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 95% CONF. LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
50	N	o				
50	F	0				
50	P	0				
50	D	0				
50	PAN	0				
50	PHYT	0				
50	PRIS	0				
50	LALK	0				
50	TALK	0				
50	TOT	0				
50	BA	2	241	1.15	184	315
50	CD	2	0.25	1.18	0.19	0.33
50	CR	2	61	1.19	43	86
50	CU	2	19.2	1.02	18.4	20.1
so	PB	2	9.2	1.02	8.7	9.8
50	v	2	98	1.03	92	105
50	ZN	2	85	1.09	72	100
50	TOC	2	3.37	1.15	2.55	4.46
50	MUD	2	6.0	1.40	3.4	12.7
50	FFPI	0				
50	ISO/ALK	0				
50	LALK/TAL	0				
so	PRIS/PHY	0				
50	N/P	0				
50	P/D	0				
50	PAH/TOC	0				
50	TOT/TOC	0				
50	BA/CR	2	4.0	1.04	3.7	4.3
50	BA/V	2	2.4	1.11	2.0	3.0

GEOMETRIC MEANS AND 95% CONFIDENCE INTERVALS FOR ALL VARIABLES
AT EACH MARINE STATION IN THE BEAUFORT SEA

FINE SEDIMENT SAMPLE DATA

STATION=51

STATION	TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 9S% CONF. LIMIT FOR G.M.	UPPER 9S% CONF. LIMIT FOR G.M.
51	N	o				
51	F	0				
51	P	0				
51	D	0				
51	PAN	0				
51	PHYT	0				
51	PRIS	0				
51	LALK	0				
51	TALK	0				
St	TOT	0				
51	BA	2	2s0	1.12	202	310
51	CD	2	0.32	1.28	0.20	0.52
St	CR	2	69	1.00	68	69
51	CU	2	1s.1	1.0s	13.5	10.9
51	PB	2	9.0	1.28	5.6	14.5
51	v	2	84	1.10	70	101
51	ZN	2	71	1.10	59	86
51	TOC	3	3.s1	1.18	2.S3	4.87
51	MUD	3	3.3	1.91	0.9	11.7
51	FFPI	0				
51	ISO/ALK	0				
51	LALK/TAL	0				
51	PRIS/PHY	0				
51	N/P	0				
51	P/D	0				
51	PAH/TOC	0				
51	TOT/TOC	0				
51	BA/CR	2	3.8	1.12	2.9	4.5
51	BA/V	2	3.0	1.02	2.9	3.1

GEOMETRIC MEANS AND 95% CONF1OENCE INTERVALS FOR ALL VARIABLES
AT EACH MARINE STATION IN THE BEAUFORT sEA

FINE SEDIMENT SAMPLE OATA

STATION=52

STATION	TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 95% CONF. LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
52	N	0				
52	F	0				
52	P	0				
52	D	0				
52	PAH	0				
52	PHYT	0				
52	PRIS	0				
52	LALK	0				
52	TALK	0				
52	TOT	0				
52	BA	0				
52	CD	0				
52	CR	0				
52	CU	0				
52	PB	0				
52	v	0				
52	ZN	0				
52	TOC	1	2.82			
52	MUD	1	3.5			
52	FFPI	0				
52	ISO/ALK	0				
52	LALK/TAL	0				
52	PRIS/PHY	0				
52	N/P	0				
52	P/D	0				
52	PAH/TOC	0				
52	TOT/TOC	0				
52	BA/CR	0				
52	BA/V	0				

GEOMETRIC MEANS AND 95% CONFIDENCE INTERVALS FOR ALL VARIABLES
AT EACH MARINE STATION IN THE BEAUFORT SEA

FINE SEDIMENT SAMPLE DATA

STATION=55

STATION	TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	%STD ERR OF GEOM. MEAN	LOWER 95% CONF. LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
55	N	1	0.34			
55	F	1	0.070			
55	P	1	0.29			
55	D	1	0.032			
55	PAN	t	0.32			
55	PHYT	1	0.066			
5s	PRIS	1	0.131			
55	LALK	1	2.22			
55	TALK	1	12.26			
55	TOT	1	20.88			
5s	BA	2	358	1.07	314	404
55	co	2	0.20	1.08	0.17	0.23
55	CR	2	75	1.08	05	86
55	CU	2	20.1	1.05	18.2	22.2
55	PB	2	10.9	1.01	10.7	11.1
55	v	2	108	1.02	10s	112
55	ZN	2	81	1.06	72	91
5s	TOC	3	5.71	1.20	3.84	8.94
55	MUD	3	21.2	1.37	11.5	39.0
5s	FFPI	1	68			
55	ISO/ALK	1	0.398			
55	LALK/TAL	1	0.181			
55	PRIS/PHY	1	2.0			
55	N/P	1	1.3			
55	P/D	1	8.0			
55	PAH/TOC	1	0.069			
55	TOT/TOC	1	4.5			
55	BA/CR	2	4.8	1.15	3.6	6.2
55	BA/V	2	3.3	1.09	2.8	3.9

GEOMETRIC MEANS AND 95% CONFIDENCE INTERVALS FOR ALL VARIABLES
AT EACH MARINE STATION IN THE BEAUFORT SEA

FINE SEDIMENT SAMPLE OATA

STATION=510

STATION	TYPE OF CONCENTRATION	# MISSING VALUES	GEOMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 95% CONF. LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
510	N	o				
510	F	0				
510	P	0				
510	D	0				
510	PAH	0				
510	PHYT	0				
510	PRIS	0				
510	LALK	0				
510	TALK	0				
510	TOT	0				
510	BA	2	32S	1.20	232	468
510	CD	2	O. 18	1.18	0.13	0.2s
510	CR	2	68	1.09	57	81
510	w	2	17.8	1.07	15.6	20.3
510	PB	2	9.7	1.03	9.2	10.2
510	v	2	98	1.00	97	99
510	ZN	2	7s	1.05	69	82
510	TOC	3	7.20	1.23	4.82	10.78
510	MUD	3	22.0	1.22	14.9	32.6
510	FFPI	0				
510	ISO/ALK	0				
510	LALK/TAL	0				
510	PRIS/PHY	0				
510	N/P	0				
510	P/o	0				
510	PAH/TOC	0				
510	TOT/TOC	0				
510	BA/CR	2	4.8	1.10	4.0	5.8
510	BA/V	2	3.4	1.19	2.4	4.8

GEOMETRIC MEANS ANO 95% CONFIDENCE INTERVALS FOR ALL VARIABLES
AT EACH MARINE STATION IN THE BEAUFORT SEA

FINE SEDIMENT SAMPLE DATA

STATION=6A

STATION	TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STO ERR OF GEOM. MEAN	LOWER 95% CONF. LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
6A	N	o				
6A	F	0				
6A	P	0				
6A	D	0				
6A	PAN	0				
6A	PHYT	O				
6A	PRIS	O				
6A	LALK	0				
6A	TALK	0				
6A	TOT	0				
6A	BA	2	342	1.04	319	366
6A	CD	2	0.10	1.11	0.15	0.23
6A	CR	2	84	1.11	68	103
6A	CU	2	21.2	1.09	17.9	25.1
6A	PB	2	12.0	1.21	8.3	17.3
6A	v	2	111	1.03	10B	117
6A	ZN	2	94	1.07	83	100
6A	TOC	3	11.25	1.11	9.24	13.70
6A	MUD	3	72.9	1.00	64.8	82.0
6A	FFPI	0				
6A	ISO/ALK	0				
6A	LALK/TAL	0				
6A	PRIS/PHY	0				
6A	N/P	0				
6A	P/D	0				
6A	PAH/TOC	0				
6A	TOT/TOC	0				
6A	BA/CR	2	4.1	1.15	3.1	5.4
8A	BA/V	2	3.1	1.01	3.0	3.1

GEOMETRIC MEANS AND 95% CONFIDENCE INTERVALS FOR ALL VARIABLES
AT EACH MARINE STATION IN THE BEAUFORT SEA

FINE SEDIMENT SAMPLE DATA

STATION=6B

STATION	TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 95% CONF. LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
6B	N	0				
6B	F	0				
6B	P	0				
6B	D	0				
6B	PAN	0				
6B	PHYT	0				
6B	PRIS	0				
6B	LALK	0				
6B	TALK	0				
6B	ToT	0				
6B	BA	2	498	1.05	449	548
6B	CD	2	0.23	1.08	0.20	0.28
6B	CR	2	99	1.10	82	120
6B	CU	2	34.3	1.08	29.7	39.6
6B	PB	2	14.8	1.04	13.7	15.9
6B	V	2	147	1.03	139	155
6B	ZN	2	121	1.04	113	130
6B	TOC	3	16.63	1.05	15.03	18.41
6B	MUD	3	83.9	1.03	79.3	88.8
6B	FFPI	0				
6B	ISO/ALK	o				
6B	LALK/TAL	0				
6B	PRIS/PHY	0				
6B	N/P	0				
6B	P/D	0				
6B	PAH/TOC	0				
6B	TOT/TOC	0				
6B	BA/CR	2	5.0	1.16	3.$	8.7
6B	BA/V	2	3.4	1.08	2.9	3.9

GEOMETRIC MEANS AND 95% CONFIDENCE INTERVALS FOR ALL VARIABLES
AT EACH MARINE STATION IN THE BEAUFORT SEA

FINE SEDIMENT SAMPLE DATA

STATION=6C

STATION	TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 95% CONF. LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
6C	N	0				
6C	F	0				
6C	P	0				
6C	D	0				
6C	PAN	0				
6C	PHYT	0				
6C	PRIS	0				
6C	LALK	0				
6C	TALK	0				
6C	TOT	o				
6C	BA	2	312	1.28	191	509
6C	CD	2	0.14	1.21	0.10	0.20
6C	CR	2	93	1.0s	85	101
6C	CU	2	29.4	1.04	27.S	31.5
6C	PO	2	15.s	1.09	13.9	17.4
6C	v	2	1s3	1.01	150	158
6C	ZN	2	108	1.04	99	117
6C	TOC	3	7.32	1.10	0.04	8.88
6C	MUD	3	34.0	1.18	24.5	47.3
6C	FFPI	0				
6C	ISO/ALK	0				
6C	LALK/TAL	0				
ec	PRIS/PHY	0				
ec	N/P	0				
6C	P/o	0				
6C	PAH/TOC	0				
6C	TOT/TOC	0				
6C	BA/CR	2	3.4	1.34	1.9	6.0
ec	BA/V	2	2.0	1.30	1.2	3.4

GEOMETRIC MEANS AND 95% CONFIDENCE INTERVALS FOR ALL VARIABLES
AT EACH MARINE STATION IN THE BEAUFORT SEA

F N SEDIMENT SAMPLE DATA

STATION=6D

STATION	TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 95% CONF. LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
6D	N	1	0.69			
6D	F	1	0.151			
6D	P	1	0.49			
6D	D	1	0.073			
6D	PAH	1	0.61			
6D	PHYT	1	0.141			
6D	PRIS	1	0.257			
6D	LALK	1	3.33			
6D	TALK	1	16.72			
6D	TOT	1	34.68			
6D	BA	2	333	1.08	285	390
6D	CD	2	0.11	1.34	0.06	0.19
6D	CR	2	89	1.11	72	109
6D	CU	2	25.5	1.04	23.5	27.6
6D	PB	2	14.0	1.00	13.9	14.0
6D	V	2	142	1.07	125	161
6D	ZN	2	98	1.03	93	103
6D	TOC	3	4.51	1.16	3.36	6.07
6D	MUD	3	13.6	1.62	5.3	35.0
6D	FFPI	1	70			
6D	ISO/ALK	1	0.448			
6D	LALK/TAL	1	0.199			
6D	PRIS/PHY	1	1.8			
6D	N/P	1	1.4			
6D	P/D	1	6.8			
6D	PAH/TOC	1	0.145			
6D	TOT/TOC	1	8.3			
6D	BA/CR	2	3.8	1.21	2.6	5.4
6D	BA/V	2	2.3	1.16	1.8	3.1

GEOMETRIC MEANS AND 95% CONFIDENCE INTERVALS FOR ALL VARIABLES
AT EACH MARINE STATION IN THE BEAUFORT SEA

F SEDIMENT SAMPLE DATA

STATION=6F

STATION	TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 95% CONF. LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
6F	N	0				
6F	F	0				
6F	P	0				
6F	D	0				
6F	PAH	0				
6F	PHYT	0				
6F	PRIS	0				
6F	LALK	0				
6F	TALK	0				
6F	TOT	0				
6F	BA	2	268	1.14	204	348
6F	CD	2	0.14	1.01	0.14	0.15
6F	CR	2	100	1.12	79	125
6F	CU	2	24.5	1.13	19.1	31.4
6F	PB	2	14.3	1.01	14.1	14.5
6F	V	2	138	1.08	118	160
6F	ZN	2	93	1.01	92	94
6F	TOC	3	8.34	1.09	6.99	9.94
6F	MUD	3	46.3	1.14	35.6	60.3
6F	FFPI	0				
6F	ISO/ALK	0				
6F	LALK/TAL	0				
6F	PRIS/PHY	0				
6F	N/P	0				
6F	P/D	0				
6F	PAH/TOC	0				
6F	TOT/TOC	0				
6F	BA/CR	2	2.7	1.02	2.6	2.8
6F	BA/V	2	1.9	1.06	1.7	2.2

GEOMETRIC MEANS AND 95% CONFIDENCE INTERVALS FOR ALL VARIABLES
AT EACN MARINE STATION IN THE BEAUFoRT SEA

FINE SEDIMENT SAMPLE DATA

STATION=8G

STATION	TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% S10 ERR OF GEOM. MEAN	LOWER 95% CONF. LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
8G	N	o				
8G	F	0				
8G	P	0				
8G	o	0				
8G	PAH	0				
8G	PHYT	0				
8G	PRIS	0				
8G	LALK	0				
8G	TALK	0				
8G	TOT	0				
8G	BA	2	207	1.40	107	400
8G	CD	2	0. 19	1.28	0.12	0.29
8G	CR	2	78	1.2s	51	120
8G	w	2	18.0	1.07	15.8	20.6
8G	PB	2	9.1	1.27	5.7	14.s
8G	v	2	100	1.02	98	104
8G	ZN	2	87	1.10	73	105
8G	Toc	2	13.s3	1.36	7.44	24.61
8G	MUD	2	77.0	1.03	73.1	81.1
8G	FFPI	O				
8G	ISO/ALK	0				
8G	LALK/TAL	0				
8G	PRIS/PHY	O				
8G	N/P	O				
8G	P/D	0				
8G	PAH/TOC	0				
8G	TOT/TOC	0				
8G	BA/CR	2	2.8	1.12	2.1	3.3
8G	BA/V	2	2.1	1.43	1.0	4.2

GEOMETRIC MEANS AND 95% CONFIDENCE INTERVALS FOR ALL VARIABLES
AT EACH MARINE STATION IN THE BEAUFORT SEA

FINE SEDIMENT SAMPLE DATA

STATION=7A

STAT ION	TYPE OF CONCENTRATION	# NONMISSING V^LUES	GEOMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 95% CONF. LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
7A	N	0				
7A	F	0				
7A	P	0				
7A	D	0				
7A	PAN	0				
7A	PHYT	0				
7A	PRIS	0				
7A	LALK	0				
7A	TALK	0				
7A	TOT	0				
7A	BA	2	698	1.11	564	063
7A	CD	2	0.10	1.05	0.09	0.11
7A	CR	2	114	1.27	72	182
7A	CU	2	18.9	1.33	10.9	33.0
7A	PB	2	11.1	1.03	10.4	11.9
7A	v	2	110	1 14	86	141
7A	ZN	2	90	1:04	83	97
7A	TOC	3	10.12	1.05	9.21	11.11
7A	MUD	3	61.6	1.07	53.5	71.0
7A	FFPI	0				
7A	ISO/ALK	0				
7A	LALK/TAL	0				
7A	PRIS/PHY	0				
7A	N/P	0				
7A	P/o	0				
7A	PAH/TOC	0				
7A	TOT/TOC	0				
7A	BA/CR	2	6.1	1.41	3.1	12.0
7A	BA/V	2	6.3	1.27	4.0	10.1

GEOMETRIC MEANS AND 95% CONFIDENCE INTERVALS FOR ALL VARIABLES
AT EACH MARINE STATION IN THE BEAUFORT SEA

FINE SEDIMENT SAMPLE DATA

STATION=7B

STATION	TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 95% CONF. LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
7B	N	o				
7B	F	0				
7B	P	0				
7B	D	0				
7B	PAH	0				
7B	PHYT	0				
7B	PRIS	0				
76	LALK	0				
7B	TALK	0				
7B	TOT	0				
7B	9A	2	459	1.41	233	903
7B	CD	2	0.10	1.24	0.07	0.16
7B	CR	2	134	1.20	93	192
7B	CU	2	20.0	1.35	11.1	35.8
7B	PB	2	11.5	1.05	10.4	12.7
7B	V	2	113	1.22	76	167
7B	ZN	2	86	1.21	59	124
7B	TOC	3	5.27	1.03	4.95	5.61
7B	MUD	3	11.8	1.28	7.3	19.0
7B	FFPI	O				
7B	I S0/ ALK	o				
7B	LALK/TAL	O				
7B	PRIS/PHY	O				
7B	N/P	0				
7B	P/D	0				
7B	PAH/TOC	0				
7B	TOT/TOC	0				
7B	BA/CR	2	3.4	1.70	1.2	9.7
7B	BA/V	2	4.1	1.73	1.4	11.9

GEOMETRIC MEANS AND 95% CONFIDENCE INTERVALS FOR ALL VARIABLES
AT EACH MARINE STATION IN THE B E A UFORT SEA

FINE SEDIMENT SAMPLE OATA

STATION=7C

STATION	TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 95% CONF. LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
7C	N	o				
7C	F	0				
7C	P	0				
7C	D	0				
7C	PAN	0				
7C	PHYT	0				
7C	PRIS	0				
7C	LALK	0				
7C	TALK	0				
7C	TOT	0				
7C	BA	2	373	1.30	221	628
7C	CD	2	0.10	1.27	0.12	0.30
7C	CR	2	84	1.15	64	111
7C	CU	2	25.8	1.07	22.8	29.2
7C	PB	2	14.5	1.15	11.1	19.0
7C	v	2	136	1.09	115	161
7C	ZN	2	101	1.07	89	114
7C	TOC	3	10.91	1.21	7.49	15.91
7C	MUD	3	86.5	1.01	84.3	88.8
7C	FFPI	0				
7C	ISO/ALK	0				
7C	LALK/TAL	0				
7C	PRIS/PHY	0				
7C	N/P	0				
7C	P/D	0				
7C	PAH/TOC	0				
7C	TOT/TOC	0				
7C	BA/CR	2	4.4	1.50	2.0	9.8
7C	BA/V	2	2.7	1.42	1.4	5.s

GEOMETRIC MEANS AND 95% CONFIDENCE INTERVALS FOR ALL VARIABLES
AT EACH MARINE STATION IN THE BEAUFORT SEA

FINE SEDIMENT SAMPLE OATA

STATION=7D

STATION	TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	%STD ERR OF GEOM. MEAN	LOWER 95% CONF. LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
7D	N	o				
7D	F	0				
7D	P	0				
70	o	0				
70	PAN	0				
7D	PHYT	0				
70	PRIS	0				
7D	LALK	0				
7D	TALK	0				
7D	TOT	0				
7D	BA	2	420	1.15	319	554
7D	CD	2	0. 1s	1.08	0.13	0.17
7D	CR	2	103	1.24	97	157
7D	CU	2	23.$	1.18	17.2	33.3
70	PB	2	12.0	1.19	8.5	17.0
7D	v	2	119	1.06	107	133
70	ZN	2	92	1.12	74	115
70	TOC	2	6.36	1.54	2.74	14.76
70	MUD	2	25.o	1.59	10.0	62.5
7D	FFPI	0				
7D	ISO/ALK	0				
7D	LALK/TAL	0				
7D	PRIS/PHY	0				
70	N/P	0				
70	P/D	0				
7D	PAH/TOC	0				
7D	TOT/TOC	0				
7D	BA/CR	2	4.1	1.43	2.0	8.2
70	BA/V	2	3.5	1.09	3.0	4.2

GEOMETRIC MEANS AND 95% CONF1OENCE INTERVALS FOR ALL VARIABLES
AT EACH MARINE STATIONIN THE BEAUFORT SEA

FINE SEDIMENT SAMPLE OATA

STATION=7E

STATION	TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	%STD ERR OF GEOM. MEAN	LOWER 95% CONF. LIMIT FOR G.M.	UPPER 9596 CONF. LIMIT FOR G.M.
7E	N	o				
7E	F	0				
7E	P	0				
7E	D	0				
7E	PAN	0				
7E	PHYT	O				
7E	PRIS	O				
7E	LALK	0				
7E	TALK	O				
7E	TOT	O				
7E	BA	2	568	1.38	302	1067
7E	co	2	0.12	1.14	0.90	0.18
7E	CR	2	112	1.19	79	158
7E	CU	2	21.2	1.12	16.9	20.7
7E	PB	2	12.0	1.19	8.5	17.1
7E	v	2	119	1.09	101	140
7E	ZN	2	114	1.31	67	194
7E	TOC	3	17.41	1.19	12.31	24.64
7E	MUD	3	89.3	1.06	61.7	77.9
7E	FFPI	0				
7E	ISO/ALK	0				
7E	LALK/TAL	0				
7E	PRIS/PHY	0				
7E	N/P	O				
7E	P/D	O				
7E	PAH/TOC	0				
7E	TOT/TOC	0				
7E	BA/CR	2	5.1	1.65	1.9	13.5
7E	BA/V	2	4.8	1.50	2.2	10.8

GEOMETRIC MEANS AND 95% CONFIDENCE INTERVALS FOR ALL VARIABLES
AT EACH MARINE STATION IN THE BEAUFORT SEA

FINE SEDIMENT SAMPLE DATA

STATION=7G

STATION	TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 95% CONF. LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
7G	N	o				
7G	F	0				
7G	P	0				
7G	D	0				
7G	PAN	0				
7G	PHYT	O				
7G	PRIS	O				
7G	LALK	0				
7G	TALK	0				
7G	TOT	0				
7G	BA	2	678	1.07	591	774
7G	CD	2	0.14	1.02	O.13	0.14
7G	CR	2	132	1.47	62	280
7G	CU	2	17.8	1.25	11.3	27.S
7G	PB	2	9.9	1.05	9.1	10.8
7G	v	2	100	1.18	72	138
7G	ZN	2	81	1.13	64	102
7G	TOC	3	13.04	1.38	e.92	24.56
7G	MUD	3	22.0	1.57	9.5	55.4
7G	FFPI	O				
7G	ISO/ALK	0				
7G	LALK/TAL	0				
7G	PRIS/PHY	0				
7G	N/P	0				
7G	P/o	0				
7G	PAH/TOC	0				
7G	TOT/TOC	0				
7G	BA/CR	2	5.1	1.57	2.1	12.4
7G	BA/V	2	6.8	1.27	4.3	10.8

GEOMETRIC MEANS AND 95% CONFIDENCE INTERVALS FOR ALL VARIABLES
AT EACH MARINE STATION IN THE BEAUFORT SEA

BULK SEDIMENT SAMPLE DATA

STATION=1A

STATION	TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STO ERR OF GEOM. MEAN	LOWER 95% CONF. LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
1A	N	2	0.10	1.51	0.04	0.22
1A	F	2	0.018	1.s7	0.007	0.044
1A	P	2	0.09	1.32	0.05	0. 1s
1A	o	2	0.014	1.18	0.010	0.019
1A	PAH	2	0.09	1.09	0.08	0.11
1A	PHVT	2	0.022	1.09	0.018	0. 02e
1A	PRIS	2	0.043	1.18	0.031	0.059
1A	LALK	2	0.s0	1.00	0.50	0.51
1A	TALK	2	8.63	1.06	5.88	7.48
1A	TOT	2	15.09	1.10	12.60	18.08
1A	BA	0				
1A	co	0				
1A	CR	0				
1A	w	0				
1A	PB	0				
1A	v	0				
1A	ZN	0				
1A	TOC	2	9.84	1.20	6.73	13.82
1A	MUD	2	64.1	1.06	57.0	72.1
1A	FFPI	2	69	1.13	54	88
1A	ISO/ALK	2	o. 396	1.04	0.369	0.425
1A	LALK/TAL	2	o. 076	1.07	0.007	0.086
1A	PRIS/PHY	2	2.0	1.07	1.7	2.3
1A	N/P	2	1.1	1.15	0.9	1.5
1A	P/D	2	e.4	1.11	5.1	7.9
1A	PAH/TOC	2	0.010	1.10	0.008	0.012
1A	TOT/TOC	2	1.6	1.10	1.3	1.9
1A	BA/CR	0				
1A	BA/V	0				

GEOMETRIC MEANS AND 95% CONFIDENCE INTERVALS FOR ALL VARIABLES
AT EACH MARINE STATION IN THE BEAUFORT SEA

BULK SEDIMENT SAMPLE DATA

STATION=1B

STATION	TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 95% CONF. LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
1B	N	2	0.03	1.11	0.03	0.04
1B	F	2	0.020	2.68	0.004	0.183
1B	P	2	0.04	1.04	0.03	0.04
1B	D	2	0.013	2.22	0.003	0.065
1B	PAH	2	0.0s	1.37	0.03	0.09
1B	PHYT	2	0.017	1.06	0.01s	0.019
1B	PRIS	2	0.032	1.13	0.026	0.041
1B	LALK	2	0.37	1.12	0.29	0.46
1B	TALK	2	2.37	1.08	2.00	2.74
1B	TOT	2	4.87	1.03	4.83	5.12
1B	BA	0				
1B	co	0				
1B	CR	0				
1B	CU	0				
1B	PB	0				
1B	v	0				
1B	ZN	0				
1B	TOC	2	7.23	1.12	5.81	8.99
1B	MUD	2	13.1	1.08	11.2	15.4
1B	FFPI	2	73	1.03	69	77
1B	ISO/ALK	2	0.468	1.01	0.457	0.480
1B	LALK/TAL	2	0.154	1.04	0.141	O.168
1B	PRIS/PHY	2	1.9	1.07	1.7	2.2
1B	N/P	2	0.9	1.1s	0.7	1.2
1B	P/D	2	5.7	1.02	5.s	5.9
1B	PAH/TOC	2	0.007	1.23	0.004	0.010
1B	TOT/TOC	2	0.7	1.09	0.6	0.$
1B	BA/CR	0				
1B	BA/V	0				

GEOMETRIC MEANS AND $5% CONFIDENCE INTERVALS FOR ALL VARIABLES
AT EACH MARINE STATION IN THE BEAUFORT SEA

BULK SEDIMENT SAMPLE OATA

STATION=1C

STATION	TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STO ERR OF GEOM. MEAN	LOWER 95% CONF. LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
1C	N	2	0.17	1.28	0.10	0.27
1C	F	2	0.039	1.91	0.011	0. 140
1C	P	2	0.13	1.30	0.08	0.22
1C	D	2	0.018	2.08	0.004	0.074
1C	PAN	2	0.19	1.23	0.13	0.28
1C	PHYT	2	0.078	1.08	0.070	0.087
1C	PRIS	2	0.123	1.13	0.098	0.155
1C	LALK	2	1.03	1.04	0.90	1.11
1C	TALK	2	8.48	1.01	6.30	0.07
1C	TOT	2	19.72	1.23	13.05	29.77
1C	BA	0				
1C	co	0				
1C	CR	0				
1C	CU	0				
1C	PB	0				
1C	v	0				
1C	ZN	0				
1C	TOC	2	8.94	1.07	7.82	10.23
1C	MUD	2	69.9	1.00	69.9	70.0
1C	FFPI	2	63	1.08	54	73
1C	ISO/ALK	2	0.5131	1.06	0.51s	0. 656
1C	LALK/TAL	2	0.159	1.02	0.152	o. 167
1C	PRIS/PHY	2	1.6	1.07	1.4	1.8
1C	N/P	2	1.3	1.01	1.3	1.3
1C	P/o	2	6.7	1.40	3.2	14.1
1C	PAH/TOC	2	0.021	1.15	0.016	0.028
1C	TOT/TOC	2	2.2	1.15	1.7	2.9
1C	BA/CR	0				
1C	BA/V	0				

GEOMETRIC MEANS AND 95% CONFIDENCE INTERVALS FOR ALL VARIABLES
AT EACH MARINE STATION IN THE BEAUFORT SEA

BULK SEDIMENT SAMPLE DATA

STATION=1D

STATION	TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STD ERROF GEOM. MEAN	LOWER 95% CONF. LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
1D	N	2	0.02	1.17	0.02	0.03
1D	F	2	0.004	9.92	0.001	0.014
1D	P	2	0.02	1.19	0.01	0.03
1D	D	2	0.001	1.07	0.001	0.002
1D	PAN	2	0.01	1.83	0.00	0.04
1D	PHYT	2	0.005	1.06	0-005	0.006
1D	PRIS	2	0.012	1.04	0.011	0.013
1D	LALK	2	0.24	1.22	0.16	0.3s
1D	TALK	2	3.16	1.06	2.81	3.55
1D	TOT	2	14.24	2.97	1.69	120.38
1D	BA	0				
1D	CD	0				
1D	CR	0				
1D	CU	0				
1D	PB	0				
1D	v	0				
1D	ZN	0				
ID	TOC	2	5.88	1.12	4.68	7.39
10	MUD	2	23.9	1.47	11.3	51.0
1D	FFPI	2	75	1.14	58	97
1D	ISO/ALK	2	0.240	1.22	0.103	0.351
1D	LALK/TAL	2	0.076	1.15	0.058	0.099
1D	PRIS/PHY	2	2.3	1.02	2.2	2.4
10	N/P	2	1.3	1.02	1.3	1.4
1D	P/o	2	13.6	1.11	11.0	16.8
1D	PAH/TOC	2	0.002	1.63	0.001	0.006
1D	TOT/TOC	2	2.4	3.34	0.2	25.7
1D	BA/CR	0				
1D	BA/V	0				

GEOMETRIC MEANS ANO 95% CONFIDENCE INTERVALS FOR ALL VARIABLES
AT EACH MARINE STATION IN THE BEAUFORT SEA

BULK SEDIMENT SAMPLE DATA

STATION=1E

STATION	TVPE OF CONCENTRATION	# NONMISSING VALUES	GEoMETRIC MEAN	% STD ERR OF GEOM. MEAN	LoWER 95% CONF. LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
1E	N	2	0.02	2.34	0.00	0.10
1E	F	2	0.004	1.99	0.001	0.01s
1E	P	2	0.02	1.95	0.01	0.07
1E	D	2	0.003	1.02	0.003	0.003
1E	PAH	2	0.02	2.15	0.00	0.O8
1E	PHYT	2	0.008	1.77	0.003	0.025
1E	PRIS	2	0.016	1.82	0.006	0.042
1E	LALK	2	0.48	2.15	0.11	2.14
1E	TALK	2	5.29	2.23	1.10	25.57
1E	ToT	2	10.03	2.08	2.57	45.59
1E	BA	0				
1E	co	0				
1E	CR	0				
1E	CU	0				
1E	PB	0				
1E	v	0				
1E	ZN	0				
1E	TOC	2	0.82	1.70	2.41	19.32
1E	MUD	2	49.6	1.87	14.5	169.3
1E	FFPI	2	76	1.07	67	87
1E	ISO/ALK	2	0.153	1.22	0.104	0.227
1E	LALK/TAL	2	0-090	1.04	0.084	0.097
1E	PRIS/PHY	2	2.0	1.09	1.7	2.4
1E	N/P	2	0.9	1.20	0.7	1.3
1E	P/D	2	7.3	1.84	2.2	24.1
1E	PAH/TOC	2	0.003	1.26	0.002	0.004
1E	TOT/TOC	2	1.6	1.22	1.1	2.4
1E	BA/CR	0				
1E	BA/V	0				

GEOMETRIC MEANS AND 95% CONFIDENCE INTERVALS FOR ALL VARIABLES
AT EACH MARINE STATION IN THE BEAUFORT SEA

BULK SEDIMENT SAMPLE OATA

STATION=2A

STATION	TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 95% CONF. LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
2A	N	2	0.30	1.02	0.29	0.32
2A	F	2	0.097	1.02	0.093	0.101
2A	P	2	0.37	1.00	0.30	0.37
2A	D	2	0.047	1.15	0.036	0.062
2A	PAN	2	0.31	1.01	0.30	0.31
2A	PHYT	2	0.069	1.13	0.054	0.087
2A	PRIS	2	0.116	1.27	0.073	0.185
2A	LALK	2	1.36	1.12	1.08	1.70
2A	TALK	2	9.27	1.03	8.67	9.90
2A	TOT	2	22.00	1.04	20.19	23.97
2A	BA	0				
2A	CD	0				
2A	CR	0				
2A	w	0				
2A	PB	0				
2A	v	0				
2A	ZN	0				
2A	TOC	2	13.37	1.21	9.16	19.50
2A	MUD	2	85.7	1.07	75.0	98.0
2A	FFPI	2	73	1.01	71	74
2A	ISO/ALK	2	0.438	1.02	0.419	0.458
2A	LALK/TAL	2	0.146	1.09	0.124	0.172
2A	PRIS/PHY	2	1.7	1.13	1.3	2.1
2A	N/P	2	0.8	1.02	0.8	0.9
2A	P/D	2	7.8	1.15	5.9	10.2
2A	PAH/TOC	2	0.023	1.20	0.016	0.033
2A	TOT/TOC	2	1.6	1.27	1.0	2.6
2A	BA/CR	0				
2A	BA/V	0				

GEOMETRIC MEANS AND 95% CONFIDENCE INTERVALS FOR ALL VARIABLES
AT EACH MARINE STATION IN THE BEAUFORT SEA

BULK SEDIMENT SAMPLE DATA

STATION=2B

STATION	TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 95% CONF. LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
2B	N	2	0.05	1.18	0.04	0.07
2B	F	2	0.013	1.37	0.007	0.023
2B	P	2	0.05	1.19	0.04	0.07
2B	D	2	0.008	1.07	0.007	0.009
2B	PAN	2	0.05	1.32	0.03	0.09
2B	PHYT	2	0.009	1.91	0.002	0.031
2B	PRIS	2	0.026	1.12	0.021	0.033
2B	LALK	2	0.24	1.38	0.13	0.46
2B	TALK	2	1.71	1.65	0.64	4.54
2B	TOT	2	4.90	1.14	3.76	6.38
26	BA	0				
2B	CD	0				
2B	CR	0				
29	CU	0				
2B	PB	0				
2B	v	0				
2B	ZN	0				
2B	TOC	2	S.28	1.87	1.54	18.07
2B	MUD	2	10.4	1.05	9.4	11.5
2B	FFPI	2	71	1.03	66	75
2B	ISO/ALK	2	0.459	1.04	0.428	0.492
20	LALK/TAL	2	0.143	1.20	0.101	0.204
2B	PRIS/PHY	2	2.3	1.28	1.4	3.7
2B	N/P	2	1.1	1.02	1.0	1.1
2B	P/D	2	6.8	1.11	5.3	8.1
2B	PAH/TOC	2	0.010	1.42	0.005	0.020
2B	TOT/TOC	2	0.9	1.64	0.4	2.4
2B	BA/CR	0				
2B	BA/V	0				

GEOMETRIC MEANS AND 95% CONFIDENCE INTERVALS FOR ALL VARIABLES
AT EACH MARINE STATION IN THE BEAUFORT SEA

BULK SEDIMENT SAMPLE DATA

STATION=2C

STAT ION	TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 95% CONF. LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
2C	N	2	0.28	1.22	0.19	0.42
2C	F	2	0.085	1.18	0.061	0.110
2C	P	2	0.20	1.17	0.15	0.28
2C	D	2	0.051	1.33	0.029	0.090
2C	PAH	2	0.22	1.02	0.21	0.23
2C	PHYT	2	0.073	1.07	0.084	0.084
2C	PRIS	2	0.113	1.01	0.111	0.115
2C	LALK	2	0.95	1.09	0.80	1.13
2C	TALK	2	5.98	1.08	5.10	7.01
2C	TOT	2	13.82	1.03	13.00	14.62
2C	BA	0				
2C	CD	0				
2C	CR	0				
2C	CU	0				
2C	PB	0				
2C	v	0				
2C	ZN	0				
2C	TOC	2	8.71	1.19	6.21	12.22
2C	MUD	2	63.8	1.12	51.5	79.0
2C	FFPI	2	73	1.06	66	82
2C	ISO/ALK	2	0.552	1.01	0.542	0.561
2C	LALK/TAL	2	0.159	1.01	0.157	0.161
2C	PRIS/PHY	2	1.5	1.06	1.4	1.7
2C	N/P	2	1.4	1.04	1.3	1.5
2C	P/D	2	4.0	1.14	3.1	5.1
2C	PAH/TOC	2	0.028	1.17	0.019	0.035
2C	TOT/TOC	2	1.6	1.15	1.2	2.1
2C	BA/CR	0				
2C	BA/V	0				

GEOMETRIC MEANS AND 95% CONFIDENCE INTERVALS FOR ALL VARIABLES
AT EACH MARINE STATION IN THE BEAUFORT SEA

BULK SEDIMENT SAMPLE DATA

STATION=2D

STATION	TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STO ERR OF GEOM. MEAN	LOWER 9S% CONF. LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
2D	N	2	0.11	1.s3	0.05	0.24
20	F	2	0.020	1.31	0.015	0.044
2D	P	2	0.09	1.59	0.03	0.22
20	o	2	0.018	1.23	0.012	0-029
2D	PAH	2	0.08	1.11	0.07	0.10
2D	PHYT	2	0.018	1.59	0.006	0.039
20	PRIS	2	0.029	1.78	0.010	0.087
2D	LALK	2	0.40	1.52	0.17	0.90
2D	TALK	2	2.82	1.41	1.44	5.55
2D	TOT	2	9.83	1.63	3.76	2S.71
2D	BA	0				
2D	CD	0				
2D	CR	0				
2D	CU	0				
2D	PB	0				
2D	v	0				
2D	ZN	0				
2D	TOC	2	7.40	1.22	5.00	10.95
2D	MUD	2	17.s	1.14	13.4	22.7
2D	FFPI	2	72	1.10	60	87
20	ISO/ALK	2	0.383	t.03	0.372	0.415
2D	LALK/TAL	2	o. 140	1.08	0.121	0.163
2D	PRIS/PHY	2	1.8	1.11	1.5	2.2
20	N/P	2	1.2	1.04	1.1	1.3
20	P/D	2	5.7	1.13	4.5	7.2
2D	PAH/TOC	2	0.011	1.35	0.009	0.021
2D	TOT/TOC	2	1.3	1.99	0.3	5.1
2D	BA/CR	0				
2D	BA/V	0				

GEOMETRIC MEANS AND 95% CONFIDENCE INTERVALS FOR ALL VARIABLES
AT EACH MARINE STATION IN THE BEAUFORT SEA

BULK SEDIMENT SAMPLE DATA

STATION=2E

STATION	TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 9S% CONF LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
2E	N	3	0.08	1.91	0.02	0.20
2E	F	3	0.018	2.52	0.003	0.112
2E	P	3	0.07	1.56	0.03	0.16
2E	D	3	0.009	1.63	0.003	0.024
2E	PAH	3	0.05	1.99	0.01	0.18
2E	PHYT	3	0.016	2.02	0.004	0.063
2E	PRIS	3	0.032	1.87	0.009	0.108
2E	LALK	3	0.49	1.s1	0.22	1.09
2E	TALK	3	2.30	1.83	0.73	7.74
2E	TOT	3	7.94	1.78	2.s5	24.73
2E	BA	2	161	1.20	112	231
2E	CD	2	0.20	1.52	0.09	0.46
2E	CR	2	55	1.47	26	116
2E	CU	2	21.2	1.42	10.8	42.0
2E	PO	2	9.3	1.s7	2.5	35.5
2E	v	2	82	1.64	31	217
2E	ZN	2	62	1.89	18	213
2E	TOC	3	5.01	1.54	2.16	11.61
2E	MUD	3	27.2	1.93	7.5	S8.4
2E	FFPI	3	77	1.06	68	80
2E	ISO/ALK	3	0.443	1.05	0.401	0.489
2E	LALK/TAL	3	0.205	1.2s	0.133	0.318
2E	PRIS/PHY	3	2.0	1.11	1.6	2.5
2E	N/P	3	0.0	1.23	0.6	1.2
2E	P/o	3	7.3	1.05	6.6	8.0
2E	PAH/TOC	3	0.010	1.26	0.006	0.015
2E	TOT/TOC	3	1.7	1.12	1.4	2.1
2E	BA/CR	2	2.9	1.77	1.0	9.0
2E	BA/V	2	1.9	1.97	0.5	7.4

GEOMETRIC MEANS ANO 95% CONFIDENCE INTERVALS FOR ALL vARIABLES
AT EACH MARINE STATION IN THE BEAUFORT SEA

BULK SEDIMENT SAMPLE DATA

STATION=2F

STATION	TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 95% CONF LIMIT FoR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
2F	N	3	0.03	1.2s	0.02	0.05
2F	F	3	0.009	1.20	0.006	0.013
2F	P	3	0.0s	1.27	0.03	0.08
2F	D	3	0.004	1.48	0.002	0.008
2F	PAH	3	0.02	1.22	0.02	0.04
2F	PHYT	3	0.009	1.17	0.006	0.012
2F	PRIS	3	0.018	1.2s	0.042	0.029
2F	LALK	3	0.32	1.17	0.24	0.44
2F	TALK	3	0.99	1.22	0.68	1.46
2F	TOT	3	3.69	1.49	1.68	8.11
2F	BA	2	179	1.49	80	385
2F	co	2	0.21	1.02	0.21	0.22
2F	CR	2	41	1.11	34	51
2F	CU	2	12.7	1.25	8.2	19.7
2F	PB	2	7.3	1.00	6.1	8.7
2F	v	2	68	1.08	58	79
2F	ZN	2	53	1.08	46	62
2F	TOC	3	4.29	1.19	3.05	6.03
2F	MUD	3	12.8	1.10	10.6	15.4
2F	FFPI	3	82	1.04	76	88
2F	I S0/ ALK	3	0.439	1.05	0.402	0.480
2F	LALK/TAL	3	0.324	1.09	0.275	0.381
2F	PRIS/PHY	3	2.1	1.09	1.8	2.5
2F	N/P	3	0.6	1.18	0.s	0.9
2F	P/o	3	16.4	1.42	8.2	32.7
2F	PAH/TOC	3	0.006	1.0s	0.005	0.006
2F	TOT/TOC	3	0.9	1.61	0.3	2.2
2F	BA/CR	2	4.2	1.35	2.4	7.0
2F	BA/V	2	2.6	1.38	1.4	4.9

GEOMETRIC MEANS AND 95% CONFIDENCE INTERVALS FOR ALL VARIABLES
AT EACH MARINE STATION IN THE BEAUFORT SEA

BULK SEDIMENT SAMPLE DATA

STATION=3A

STATION	TYPE OF CONCENTRATION	# NONMISSING VALUES	GEoMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 95% CONF. LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
3A	N	3	o. 13	1.11	0.11	0.16
3A	F	3	0.033	1.07	0.029	0.037
3A	P	3	0.13	1.18	0.09	0.18
3A	D	3	0.019	1.25	0.012	0.028
3A	PAH	3	0.09	1.03	0.09	0.10
3A	PHYT	3	0.016	1.17	0.012	0.022
3A	PRIS	3	0.034	*.22	0.023	0.050
3A	LALK	3	0.43	1.13	0.34	0.54
3A	TALK	3	2.92	1.10	2.41	3.54
3A	TOT	3	7.74	1.28	4.74	12.64
3A	BA	2	286	1.21	198	415
3A	CD	2	0.16	1.02	0.15	0.17
3A	CR	2	49	1.06	44	55
3A	CU	2	19.3	1.19	13.7	27.2
3A	PB	2	7.9	1.30	4.7	43.3
3A	v	2	83	t o e	73	94
3A	ZN	2	61	1.05	55	07
3A	TOC	3	8.65	1.13	0.03	10.94
3A	MUD	3	37.9	1.16	28.2	50.9
3A	FFPI	3	78	?.02	75	81
3A	ISO/ALK	3	0. 4s0	1.00	0.447	0.452
3A	LALK/TAL	3	0.947	1.10	0. 122	0.177
3A	PRIS/PHY	3	2.1	1.04	1.9	2.3
3A	N/P	3	1.1	1.16	0.8	1.4
3A	P/D	3	6.8	1.23	4.5	10.3
3A	PAH/TOC	3	0.010	1.12	0.008	0.013
3A	TOT/TOC	3	0.9	1.43	0.4	1.8
3A	BA/CR	2	5.8	1.14	4.5	-?.5
3A	BA/V	2	3.5	1.14	2.7	4.4

GEOMETRIC MEANS AND 95% CONFIDE*E INTERVALS FOR ALL VARIABLES
AT EACH MARINE STATION IN THE BEAUFORT SEA

BULK SEDIMENT SAMPLE DATA

STATION=3B

STATION	TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 95% CONF LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
3B	N	3	0.13	1.20	0.09	0.19
3B	F	3	0.032	1.13	0.025	0.040
3B	P	3	0. 15	1.0s	0.14	0.17
3B	D	3	0.024	1.15	0.018	0.031
3B	PAH	3	0.00	1.1s	0.07	0.11
3B	PHYT	3	0.030	1.18	0.022	0.042
3B	PRIS	3	0.061	1,17	0.045	0.082
3B	LALK	3	0.88	1.11	0.72	1.08
3B	TALK	3	5.79	1.18	4.3s	7.72
3B	TOT	3	19.73	1.13	13.14	21.29
3B	6A	2	347	1.10	287	419
3B	CD	2	0.10	1.08	0. 14	0.19
3B	CR	2	5a	1.01	57	59
3%	CU	2	23.6	1.20	l e e	33.8
3B	PB	2	8.0	1.31	4.7	13.8
3B	v	2	99	1.02	95	103
3B	ZN	2	70	1.09	59	82
3B	TOC	3	10.22	1.0s	9.10	11.47
3B	MUD	3	09.0	1.04	63.8	74.5
3B	FFPI	3	79	1.02	76	82
3B	ISO/ALK	3	0.432	1.01	0.424	0.441
3B	LALK/TAL	3	0.152	1.12	o. 121	0.192
3B	PRIS/PHY	3	2.0	1.09	1.7	2.4
3B	N/P	3	0.9	1.2s	0.6	1.3
3B	P/D	3	6.3	1.21	4.3	0.2
3B	PAH/TOC	3	0.008	1.14	0.006	0.011
3B	TOT/TOC	3	1.8	1.07	1.4	1.9
3B	BA/CR	2	6.0	1.09	5.1	7.2
3B	BA/V	2	3.5	1.12	2.s	4.4

GEOMETRIC MEANS AND 95% CONFIDENCE INTERVALS FOR ALL VARIABLES
AT EACH MARINE STATION IN THE BEAUFORT SEA

BULK SEDIMENT SAMPLE DATA

STATION=4A

STATION	TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 95% CONF. LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
4A	N	3	0.12	1.19	0.09	0.17
4A	F	3	0.024	1.74	0.008	0.071
4A	P	3	0.12	1.27	0.07	0.19
4A	D	3	0.022	1.76	0.007	0.065
4A	PAN	3	0.07	1.27	0.04	0.11
4A	PHYT	3	0.019	1.06	0.017	0.021
4A	PRIS	3	0.041	1.21	0.028	0.059
4A	LALK	3	0.57	1.05	0.51	0.63
4A	TALK	3	3.22	$.03	3.05	3.40
4A	TOT	3	9.65	1.15	7.34	12.68
4A	BA	2	269	1.36	147	493
4A	CD	2	0.12	1.18	0.09	0.16
4A	CR	2	44	1.17	32	60
4A	CU	2	18.9	1.31	11.1	32.2
4A	PB	2	8.6	1.07	7.5	9.8
4A	v	2	78	1.20	54	111
4A	ZN	2	59	1.08	51	69
4A	TOC	3	7.79	1.33	4.42	13.72
4A	MUD	3	30.1	1.0s	27.5	33.0
4A	FFPI	3	81	1.01	79	83
4A	ISO/ALK	3	0.412	1.04	0.383	0.443
4A	LALK/TAL	3	0.179	1.04	0.163	o.189
4A	PRIS/PHY	3	2.1	1.15	1.0	2.8
4A	NIP	3	1.0	1.09	0.9	1.2
4A	P/D	3	5.5	1.44	2.7	11.3
4A	PAH/TOC	3	0.009	1.58	0.004	0.022
4A	TOT/TOC	3	1.2	1.32	0.7	2.1
4A	BA/CR	2	6.1	1.16	4.0	8.2
4A	BA/V	2	3.5	1.13	2.7	4.4

GEOMETRIC MEANS AND 9: ONFIDENCE INTERVALS FOR ALL VARIABLES
AT EACH MARINE STATION IN THE BEAUFORT SEA

BULK SEDIMENT SAMPLE DATA

STATION=4B

STATION	TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 95% CONF LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
46	N	3	0.05	1.23	0.03	0.08
4B	F	3	0.010	1.28	0.006	0.016
48	P	3	0.04	1.10	0.04	0.05
4B	D	3	0.009	1.40	0.005	0.018
4B	PAN	3	0.03	1.41	0.02	0.06
4B	PHYT	3	0.008	1.10	0.006	0.010
4B	PRIS	3	0.017	1.11	0.014	0.021
4B	LALK	3	0.30	1.20	0.21	0.43
4B	TALK	3	1.31	1.19	0.93	1.86
4B	TOT	3	3.98	1.09	3.57	4.40
4B	BA	2	185	1.05	168	203
4B	co	2	0.10	1.07	0.14	0.18
4B	CR	2	30	1.0s	28	34
4B	CU	2	12.5	1.4s	6.1	26.0
4B	PB	2	5.9	1.02	5.6	a.2
4B	v	2	40	1.04	43	49
4B	ZN	2	39	1.10	32	47
4B	TOC	3	3.39	1.16	2.53	4.55
4B	MUD	3	7.6	1.29	4.6	12.4
4B	FFPI	3	79	1.0s	72	87
4B	ISO/ALK	3	0.421	1.03	0.305	0.447
4B	LALK/TAL	3	0.229	1.17	0.170	0.309
4B	PRIS/PHY	3	2.2	1.08	1.8	2.s
4B	N/P	3	1.2	1.14	0.9	1.5
4B	P/D	3	4.9	1.43	2.4	9.7
4B	PAH/TOC	3	0.008	1.s3	0.003	0.018
4B	TOT/TOC	3	1.0	1.19	0.7	1.5
4B	BA/CR	2	6.1	1.00	6.1	6.1
4B	BA/V	2	4.0	1.01	3.9	4.1

GEOMETRIC MEANS AND 95% CONFIDENCE INTERVALS FOR ALL VARIABLES
AT EACH MARINE STATION IN THE BEAUFORT SEA

BULK SEDIMENT SAMPLE DATA

STATION=4C

STATION	TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 95% CONF LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
4C	N	3	0.07	1.12	0.08	0,09
4C	F	3	0.020	1.03	0.019	0.021
4C	P	3	0.07	1.15	0.08	0.10
4C	D	3	0.014	1.25	0.009	0.022
4C	PAH	3	0.08	1.15	0.05	0.08
4C	PHYT	3	0.014	1.07	0.012	0.016
4C	PRIS	3	0.028	1.03	0.02'?	0.030
4C	LALK	3	o".47	1.20	0.33	0.08
4C	TALK	3	2.28	1.15	1.73	3.01
4C	TOT	3	7.50	1.09	6.33	8.90
4C	BA	2	270	1.08	234	311
4C	CD	2	0.07	1.22	0.05	0.10
4C	CR	2	37	1.05	34	41
4C	CU	2	14.0	1.28	8.7	22.5
4C	PB	2	6.3	1.57	2.6	15.3
4C	v	2	59	1.08	52	66
4C	ZN	2	38	1.17	2a	52
4C	TOC	3	4.86	1.49	2.21	10.69
4C	MUD	3	10.7	1.37	5.8	19.8
4C	FFPI	3	75	1.03	71	80
4C	ISO/ALK	3	0.415	1.02	0.402	0.429
4C	LALK/TAL	3	0.207	1.17	0.151	0.284
4C	PRIS/PHY	3	2.1	1.10	1.7	2.5
4C	N/P	3	1.0	1.13	0.8	1.3
4C	P/D	3	5.2	1.33	3.0	9.0
4C	PAH/TOC	3	0.009	1.26	0.006	0.015
4C	TOT/TOC	3	1.2	1.23	0.8	1.8
4C	BA/CR	2	7.3	1.13	5.7	9.2
4C	BA/V	2	4.6	1.01	4.5	4.7

GEOMETRIC MEANS AND 95% CONFIDENCE INTERVALS FOR ALL VARIABLES
AT EACH MARINE STATION IN THE BEAUFORT SEA

BULK SEDIMENT SAMPLE OATA

STATION=5G

STATION	TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 95% CONF LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
5G	N	3	0.08	1.23	0.05	0.13
5G	F	3	0.014	1.18	0.010	0.019
5G	P	3	0.07	1.36	0.04	0.13
5G	D	3	0.009	1.49	0.004	0.019
5G	PAH	3	0.07	1.13	0.05	0.08
5G	PHYT	3	0.017	1.17	0.012	0.023
5G	PRIS	3	0.037	1.25	0.024	0.057
5G	LALK	3	0.47	1.27	0.30	0.74
5G	TALK	3	2.24	1.1s	1.70	2.98
5G	TOT	3	7.18	1.23	4.75	10.85
5G	6A	2	271	1.0s	246	298
5G	CD	2	0.10	1.02	0.09	0.10
5G	CR	2	35	1.03	33	37
5G	CU	2	10.9	1.03	10.3	11.4
5G	PB	2	6.7	1.10	5.6	8.0
5G	v	2	61	1.00	61	61
5G	ZN	2	43	1.09	36	51
5G	TOC	3	5.60	1.14	4.36	7.19
5G	MUD	3	1s.s	1.20	10.9	22.1
5G	FFPI	3	71	1.04	66	77
5G	ISO/ALK	3	0. 445	1.02	0.427	0.465
5G	LALK/TAL	3	0.209	1.10	0.173	0.252
5G	PRIS/PHY	3	2.2	1.07	1.9	2.5
5G	N/P	3	1.2	1.11	0.9	1.4
5G	P/D	3	8.2	1.24	5.4	12.9
5G	PAH/TOC	3	0.015	1.31	0.009	0.025
5G	TOT/TOC	3	1.5	1.40	0.8	2.9
5G	BA/CR	2	7.7	1.08	9.6	8.9
5G	BA/V	2	4.4	1.05	4.0	4.9

GEOMETRIC MEANS AND 95% CONFIDENCE INTERVALS FOR ALL VARIABLES
AT EACH MARINE STATION IN THE BEAUFORT SEA

BULK SEDIMENT SAMPLE DATA

STATION=5A

STATION	TYPE OF CONCENTRATION	IV NONMISSING VALUES	GEOMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 95% CONF. LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
5A	N	3	0.21	1.19	0.15	0.29
5A	F	3	0.031	1.18	0.023	0.044
5A	P	3	0.14	1.35	0.08	0.20
5A	D	3	0.024	1.22	0.010	0.035
5A	PAN	3	0.13	1.13	0.10	0.16
5A	PHYT	3	0.031	1.18	0.022	0.043
!5A	PRIS	3	0.060	1.19	0.042	0.08S
5A	LALK	3	0.78	1.22	0.53	1.17
5A	TALK	3	4.79	1.13	3,78	0.07
5A	TOT	3	12.1$	1.08	10.48	14.18
5A	BA	2	413	1.33	236	724
5A	CD	2	0.22	1.01	0.21	0.22
5A	CR	2	51	1.06	45	58
5A	CU	2	18.8	1.09	15.7	22.4
5A	PB	2	8.7	1.05	8.0	9.5
5A	v	2	83	1.15	63	109
5A	ZN	2	63	1.04	58	68
5A	TOC	3	9.57	1.23	6.33	14.46
5A	MUD	3	53.1	1.17	38.9	72.5
5A	FFPI	3	76	1.03	73	80
5A	ISO/ALK	3	0.4$4	1.05	0.443	0.s29
5A	LALK/TAL	3	0.164	1.11	0. 133	0.201
5A	PRIS/PHY	3	2.0	1.09	1.6	2.3
5A	N/P	3	1.4	1.14	1.1	1.9
5A	P/o	3	6.0	1.33	3.4	10.6
5A	PAH/TOC	3	0.013	1.20	0.009	0.019
5A	TOT/TOC	3	1.3	1.23	0.8	1.9
5A	BA/CR	2	8.1	1.25	5.2	12.5
5A	BA/V	2	5.0	1.16	3.7	6.6

GEOMETRIC MEANS AND 95% CONFIDENCE INTERVALS FOR ALL VARIABLES
AT EACH MARINE STATION IN THE BEAUFORT SEA

BULK SEDIMENT SAMPLE DATA

STATION=58

STATION	TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 95% CONF LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
58	N	3	0.32	1.25	0.21	0.49
58	F	3	0.085	1.13	0.066	0.109
58	P	3	0.27	1.15	0.21	0.35
58	D	3	0.084	1.02	0.082	0.007
58	PAN	3	0.18	1.46	0.08	0.37
58	PHYT	3	0.026	2.54	0.004	0.160
58	PRIS	3	0.047	2.18	0.010	0.214
58	LALK	3	0.07	1.58	0.28	1.59
58	TALK	3	3.05	2.00	0.78	11.93
50	TOT	3	12.24	2.10	2.85	52.63
58	BA	2	321	1.87	118	871
58	CD	2	0.07	1.87	0.02	0.25
58	CR	2	39	2.25	8	190
58	CU	2	12.4	2.53	2.0	7B.2
58	PB	2	8.2	2.18	1.8	38.0
58	v	2	70	2.14	18	311
58	ZN	2	46	2.s0	8	279
58	TOC	3	S.22	1.02	2.03	13.39
50	MUD	3	21.9	2.05	3.2	148.0
58	FFPI	3	80	1.05	72	88
58	1S0/ ALK	3	0.501	1.10	0.418	0.004
58	LALK/TAL	3	0.219	1.29	0.133	0.359
58	PRIS/PHY	3	1.8	1.25	1.2	2.8
58	N/P	3	1.2	1.17	0.9	1.6
58	P/D	3	4.2	1.15	3.2	5.5
58	PAH/TOC	3	0.035	1.66	0.013	0.096
58	TOT/TOC	3	2.4	1.26	1.5	3.9
58	8A/CR	2	8.3	1.35	4.0	15.0
5B	BA/V	2	4.6	1.28	2.8	7.5

GEOMETRIC MEANS AND 95% CONFIDENCE INTERVALS FOR ALL VARIABLES
AT' EACH MARINE STATION IN THE BEAUFORT SEA

BULK SEDIMENT SAMPLE DATA

STATION=5D

STATION	TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 95% CONF LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FDR G.M.
5D	N	3	0.27	1.18	0.19	0.37
5D	F	3	0.044	1.07	0.038	0.051
5D	P	3	0.22	1.34	0.12	0.39
5D	D	3	0.051	1.21	0.035	0.075
5D	PAN	3	0.17	1.18	0.13	0.23
5D	PHYT	3	0.033	1.04	0.031	0.038
5D	PRIS	3	0.052	1.16	0.047	0.083
5D	LALK	3	0.s0	1.06	0.8S	1.07
SD	TALK	3	8.8s	1.07	7.79	10.06
5D	TOT	3	29.34	1.07	25.62	33.58
SD	BA	2	128	2.01	16	1039
5D	CD	2	0.25	1.14	0.19	0.33
5D	CR	2	52	1.08	47	58
5D	a l	2	21.1	1.18	15.3	29.1
5D	PB	2	8.4	1.17	6.2	11.5
50	v	2	85	1.08	74	99
5D	ZN	2	77	1.01	76	78
5D	Toc	3	17.83	1.28	11.02	28.85
5D	MUD	3	67.0	1.05	61.4	74.4
5D	FFPI	3	77	1.02	73	81
5D	ISO/ALK	3	0.435	1.04	0.404	0.409
5D	LALK/TAL	3	0.108	1.01	0. 10B	0.410
5D	PRIS/PHY	3	1.9	1.20	1.3	2.7
5D	N/P	3	1.2	1.18	0.9	1.6
SD	P/D	3	4.3	1.19	3.1	6.0
5D	PAH/TOC	3	0.010	1.11	0.008	0.012
5D	TOT/TOC	3	1.8	1.20	1.2	2.3
511	BA/CR	2	2.5	2.78	0.3	17.9
5D	BA/V	2	1.5	2.70	0.2	10.5

GEOMETRIC MEANS AND 95% CONFIDENCE Intervals FOR ;RIABLES
AT EACH MARINE STATION IN THE BEAUFORT S

BULK SEDIMENT SAMPLE DATA

STATION=5E

STATION	TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 95% CDNF LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
5E	N	3	0.28	1.30	0.19	0.50
5E	F	3	0.05s	1.24	0.036	0.083
5E	P	3	0.24	1.19	0.17	0.33
5E	D	3	0.047	1.12	0.037	0.058
5E	PAH	3	0.17	1.50	0.08	0.38
5E	PHYT	3	0. 05s	1.71	0.019	0.157
5E	PRIS	3	0.107	1.84	0.041	0.282
5E	LALK	3	1.16	1.39	0.61	2.22
5E	TALK	3	5.94	1.60	2.35	1s.00
5E	TOT	3	28.82	1.98	7.73	107.48
5E	BA	2	393	1.20	277	560
5E	CD	2	0.12	1.67	0.04	0.32
5E	CR	2	50	1.66	18	134
5E	CU	2	17.6	1.61	7.0	44.0
5E	PB	2	9.8	1.7s	3.3	29.3
5E	v	2	92	1.59	37	228
5E	ZN	2	60	1.79	19	189
5E	TOC	3	8.12	1.18	5.88	11.23
SE	MUD	3	2S.3	1.49	11.7	5s.1
5E	FFPI	3	77	1.04	71	83
5E	ISO/ALK	3	0.491	1.04	0.455	0.s31
SE	LALK/TAL	3	0.195	1.16	0.146	0.260
5E	PRIS/PHY	3	2.0	1.17	1.4	2.7
5E	N/P	3	1.2	1.14	0.9	1.5
5E	P/D	3	5.0	1.07	4.5	5.7
5E	PAH/TOC	3	0.030	1.27	0.019	0.047
5E	TOT/TOC	3	5.0	1.42	2.5	10.0
5E	BA/CR	2	7.9	1.39	4.2	15.0
5E	BA/V	2	4.3	1.33	2.5	7.5

GEOMETRIC MEANS AND 95% CONFIDENCE INTERVALS FOR ALL VARIABLES
AT EACH MARINE STATION IN THE BEAUFORT SEA

BULK SEDIMENT SAMPLE DATA

STATION=5F

STATION	TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 95% CONF LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
5F	N	3	0.14	1.51	0.0s	0.31
5F	F	3	0.025	1.52	0.011	0.058
SF	P	3	0.12	1..50	0.05	0.27
5F	D	3	0.028	1.34	0.016	0.050
5F	PAN	3	0.13	1.43	0.06	0.26
5F	PHYT	3	0.027	1.20	0.019	0.039
5F	PRIS	3	0. 054	1.37	0.029	0.100
5F	LALK	3	0.96	1.28	0.59	1.54
5F	TALK	3	7.22	1.52	3.16	10.49
5F	TOT	3	4.34	2.17	0.95	19.89
5F	BA	2	304	1.09	258	357
SF	CD	2	0.18	1.10	0.13	0.24
5F	CR	2	42	1.17	31	57
5F	CU	2	13.4	1.35	7.s	24.1
5F	PB	2	7.2	1.07	0.3	8.3
5F	v	2	66	1.21	46	95
5F	ZN	2	58	1.10	47	70
5F	TOC	3	11.80	1.26	7.33	18.36
5F	MUD	3	51.9	1.12	41.8	64.4
5F	FFPI	3	71	1.05	65	77
5F	ISO/ALK	3	0.427	1.02	0.414	0.440
5F	LALK/TAL	3	0.132	1.20	0.092	0.$89
5F	PRIS/PHY	3	2.0	1.15	1.5	2.6
SF	N/P	3	1.1	1.18	0.8	1.6
5F	P/D	3	4.3	1.24	2.8	6.6
5F	PAH/TOC	3	0.011	1.18	0.008	0.016
5F	TOT/TOC	3	0.4	2.55	0.1	2.4
5F	8A/CR	2	7.3	1.08	6.3	8.4
5F	BA/V	2	4.0	1.11	3.8	5.7

GEOMETRIC MEANS AND $5% CONFIDENCE INTERVALS FOR ALL VARIABLES
AT EACH MARINE STATION IN THE BEAUFORT SEA

BULK SEDIMENT SAMPLE OATA

STATION=5H

STATION	TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 95% CONF. LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
5H	N	2	0.05	1.12	0.04	0.07
5H	F	2	0.011	1.15	0.009	0.015
5H	P	2	0.06	1.08	0.05	0.07
5H	D	2	0.007	1.03	0.007	0.008
5H	PAN	2	0.05	1.17	0.04	0.07
5H	PHYT	2	0.015	1.01	0.015	0.015
5H	PRIS	2	0.031	1.05	0.028	0.035
5H	LALK	2	0.60	1.20	0.41	0.86
5H	TALK	2	3.50	1.09	2.98	4.11
5H	TOT	2	9.56	1.10	7.91	11.55
5H	BA	0				
5H	co	0				
5H	CR	0				
5H	CU	0				
5H	PB	0				
5H	v	0				
5H	ZN	0				
5H	TOC	2	9.21	1.46	4.40	19.27
5H	MUD	2	18.1	1.10	13.5	24.2
5H	FFPI	2	70	1.0	62	80
5H	ISO/ALK	2	0.387	1.04	0.358	0.418
5H	LALK/TAL	2	0.171	1.3'	0.101	0.289
5H	PRIS/PHY	2	2.1	lo 8	1.s	2.4
5H	N/P	2	0.9	1.04	0.9	1.0
5H	P/D	2	7.6	1.05	7.0	8.3
5H	PAH/TOC	2	0.006	1.7'	0.002	0.016
5H	TOT/TOC	2	1.0	1.s'	0.4	2.6
5H	BA/CR	0				
5H	BA/V	0				

GEOMETRIC MEANS AND 95% CONFIDENCE INTERVALS FOR ALL VARIABLES
AT EACH MARINE STATION IN THE BEAUFORT SEA

BULK SEDIMENT SAMPLE DATA

STATION=50

STATION	TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 95% CONF. LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
50	N	2	0.04	1.53	0.02	0.09
50	F	2	0.011	1.34	0.006	0.019
50	P	2	0.03	1.37	0.02	0.03
50	D	2	0.006	1.89	0.002	0.022
50	PAN	2	0.03	1.01	0.03	0.03
50	PHYT	2	0.008	1.02	0.008	0.OO8
50	PRIS	2	0.017	1.10	0.014	0.020
50	LALK	2	0.27	1.06	0.24	0.30
50	TALK	2	1.36	1.01	1.34	1.38
50	TOT	2	2.89	1.15	2.03	3.56
50	BA	0				
50	CD	0				
50	CR	0				
50	CU	0				
50	PB	0				
50	v	0				
50	ZN	0				
50	TOC	2	3.37	1.15	2.55	4.46
50	MUD	2	6.6	1.40	3.4	12.7
50	FFPI	2	72	1.12	57	90
50	ISO/ALK	2	0.395	1.03	0.376	0.416
50	LALK/TAL	2	0.196	1.06	0.174	0.222
50	PRIS/PHY	2	2.2	1.08	1.9	2.5
50	NIP	2	1.1	1.11	0.9	1.4
50	P/D	2	5.5	1.38	2.9	10.4
50	PAH/TOC	2	0.009	1.14	0.007	0.012
50	TOT/TOC	2	0.8	1.00	0.8	0.8
50	BA/CR	0				
50	BA/V	0				

GEOMETRIC MEANS AND 95% CONFIDENCE INTERVALS FOR ALL VARIABLES
AT EACH MARINE STATION IN THE BEAUFORT SEA

BULK SEDIMENT SAMPLE DATA

STATION=51

STATION	TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 9S% CONF LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
51	N	3	0.03	1.32	0.02	0.05
51	F	3	0.007	1.28	0.004	0.011
51	P	3	0.03	1.33	0.02	0.06
51	D	3	0.005	1.75	0.002	0.018
51	PAN	3	0.03	1.28	0.02	0.04
51	PHYT	3	0.004	1.29	0.003	0.007
51	PRIS	3	0.011	1.33	0.005	0.019
51	LALK	3	0.20	1.20	0.13	0.32
51	TALK	3	0.70	1.27	0.49	1.25
51	TOT	3	1.96	1.56	0.82	4.65
51	BA	2	209	1.13	164	265
51	CD	2	0.11	1.32	0.06	0.19
51	CR	2	22	1.04	20	23
51	w	2	7.6	1.21	5.3	11.1
51	PB	2	6.3	1.28	3.9	10.2
51	v	2	42	9.07	37	48
51	ZN	2	37	1.05	33	41
51	TOC	3	3.51	1.18	2.53	4.87
51	MUD	3	3.3	1.01	0.9	11.7
51	FFPI	3	73	1.04	87	78
51	ISO/ALK	3	0.333	1.23	0.221	0.501
51	LALK/TAL	3	0.257	1.05	0.232	0.284
51	PRIS/PHY	3	2.1	1.04	1.9	2.3
51	N/P	3	0.9	1.11	0.7	1.1
51	P/D	3	5.2	1.49	2.4	11.3
51	PAH/TOC	3	0.008	1.14	0.006	0.010
51	TOT/TOC	3	0.5	1.35	0.3	1.0
51	BA/CR	2	9.6	1.09	8.2	11.3
51	BA/V	2	5.0	1.06	4.4	5.6

GEOMETRIC MEANS AND 95% CONFIDENCE INTERVALS FOR ALL VARIABLES
AT EACH MARINE STATION IN THE BEAUFORT SEA

BULK SEDIMENT SANPLE DATA

STATION=55

STATION	TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 95% CONF. LIMIT FOR G.M	UPPER 95% CONF. LIMIT FOR G.M.
55	N	3	0.08	1.71	0.02	0.18
55	F	3	0.021	1.35	0.012	0.038
55	P	3	0.07	1.67	0.03	0.19
55	D	3	0.013	1.75	0.004	0.039
55	PAN	3	0.05	1.62	0.02	0.13
55	PHYT	3	0.016	1.33	0.009	0.027
55	PRIS	3	0.032	1.35	0.018	0.057
55	LALK	3	0.44	1.24	0.29	0.67
55	TALK	3	2.42	1.21	1.68	3.50
55	TOT	3	7.25	1.3s	4.00	13.15
55	BA	2	2S7	1.14	197	335
55	CD	2	O. 18	1.24	0.12	0.27
55	CR	2	37	1.08	32	43
55	CU	2	13.5	1.16	10.0	18.2
55	PB	2	6.6	1.06	5.8	7.4
55	v	2	03	1.09	54	74
55	ZN	2	51	1.02	49	53
55	TOC	3	5.71	1.26	3.64	8.94
55	MUD	3	21.2	1.37	11.5	39.0
55	FFPI	3	77	1.06	68	88
55	ISO/ALK	3	0.435	1.12	0.340	0.542
55	LALK/TAL	3	0.183	1.03	0. 174	0. 192
55	PRIS/PHY	3	2.0	1.03	1.9	2.2
55	N/P	3	0.9	1.18	0.7	1.3
55	P/D	3	5.3	1.06	4.7	6.0
55	PAH/TOC	3	0.010	1.45	0. 005	0.020
55	TOT/TOC	3	1.4	1.21	1.0	2.1
55	19A/CR	2	7.0	1.06	6.2	7.9
55	BA/V	2	4.1	1.05	3.7	4.s

GEOMETRIC MEANS AND 95% CONFIDENCE INTERVALS FOR ALL VARIABLES
AT EACH MARINE STATION IN THE BEAUFORT SEA

BULK SEDIMENT SAMPLE DATA

STATION=51O

STATION	TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STO ERR OF GEOM. MEAN	LOWER 95% CONF LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
510	N	3	0.08	1.3s	0.04	0.14
510	F	3	0.023	1.47	0.011	0.040
510	P	3	0.08	1.41	0.04	0.16
510	D	3	0.018	1.40	0.009	0.035
510	PAH	3	0.05	1.11	0.05	0.08
510	PHYT	3	0.016	1.12	0.012	0.01s
510	PRIS	3	0.034	1.26	0.022	0.053
510	LALK	3	0.48	1.30	0.27	0.77
510	TALK	3	2.81	1.1s	2.15	3.69
510	TOT	3	9.85	1.19	6.98	13,90
510	BA	2	137	2.08	33	578
510	CD	2	0.24	1.02	0.23	0.25
510	C R	2	39	1.02	37	40
510	CU	2	14.1	1.22	9.6	20.7
510	PO	2	5.7	1.04	5.3	6.1
510	v	2	04	1.03	60	67
510	ZN	2	53	1.10	44	64
510	TOC	3	7.20	1.23	4.82	10.76
510	MUD	3	22.0	1.22	14.9	32.6
510	FFPI	3	75	1.05	66	84
510	ISO/ALK	3	0.450	1.03	0.421	0.481
510	LALK/TAL	3	0.163	1.14	0.126	0.210
510	PRIS/PHY	3	2.2	1.16	1.7	2.9
510	N/P	3	1.0	1.14	0.8	1.3
510	P/o	3	4.4	1.09	3.7	5.3
510	PAH/TOC	3	0.007	1.41	0.004	0.014
510	TOT/TOC	3	1.1	1.32	0.6	1.9
510	BA/CR	2	3.5	2.12	0.8	15.4
510	BA/V	2	2.2	2.02	0.5	8.6

GEOMETRIC MEANS AND 9S% CONFIDENCE INTERVALS FOR ALL VARIABLES
AT EACH MARINE STATION IN THE BEAUFORT SEA

BULK SEDIMENT SAMPLE DATA

STATION=52

STATION	TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 95% CONF. LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
52	N	1	0.01			
52	F	1	0.002			
52	P	1	0.02			
52	D	1	0.006			
52	PAN	1	0.01			
52	PHYT	1	0.003			
52	PRIS	1	0.008			
52	LALK	1	0.27			
52	TALK	1	0.68			
52	TOT	1	2.69			
52	BA	1	186			
52	co	1	0.11			
52	CR	1	22			
52	CU	1	9.9			
52	PB	1	5.2			
52	v	1	44			
52	ZN	1	71			
52	TOC	1	2.82			
52	MUD	1	3.5			
52	FFPI	1	75			
52	ISO/ALK	1	0.389			
52	LALK/TAL	1	0.392			
52	PRIS/PHY	1	2.4			
52	N/P	1	0.8			
52	P/o	1	3.8			
52	PAH/TOC	1	0.008			
52	TOT/TOC	1	1.4			
52	BA/CR	1	8.3			
52	BA/V	1	4.2			

GEOMETRIC MEANS ANO 95% CONFIDENCE INTERVALS FoR ALL VARIABLES
AT EACH MARINE STATION IN THE BEAUFORT SEA

BULK SEDIMENT SAMPLE DATA

STATION=6A

STATION	TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 95% CONF LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
6A	N	3	0.45	1.0s	0.41	0.50
6A	F	3	0.116	1.13	0.092	0.147
6A	P	3	0.31	1.15	0.23	0.40
6A	D	3	0.081	1.28	0.050	0.133
6A	PAN	3	0.21	1.27	0.13	0.33
6A	PHYT	3	0.046	1.08	0.039	0.0s4
6A	PRIS	3	0.101	1.18	0.076	0.134
6A	LALK	3	1.47	1.2s	0.88	2.43
6A	TALK	3	9.58	1.08	8.26	11.11
6A	TOT	3	41.32	1.52	18.12	94.23
6A	BA	2	380	1.01	370	390
6A	CD	2	0.15	1.24	0.10	0.23
6A	CR	2	60	1.00	59	60
6A	CU	2	22.8	1.03	21.6	24.1
6A	PB	2	11.3	1.31	6.6	19.3
6A	v	2	95	1.04	88	104
6A	ZN	2	79	1.12	63	99
6A	TOC	3	11.2s	1.11	B.24	13.70
6A	MUD	3	72.9	1.08	64.8	82.0
9A	FFPI	3	81	1.03	76	85
6A	ISO/ALK	3	0.490	1.01	0. 47e	0.505
6A	LALK/TAL	3	0. 1s3	1.39	0.080	0.292
6A	PRIS/PHY	3	2.2	1.15	1.7	2.9
6A	N/P	3	1.5	1.17	1.1	2.0
6A	P/o	3 *	3.8	1.19	2.8	5.0
6A	PAH/TOC	3	0.017	1.12	0.014	0.022
6A	TOT/TOC	3	3.4	1.72	1.2	10.0
6A	BA/CR	2	e.4	1.02	0.2	6.6
6A	BA/V	2	4.0	1.00	3.6	4.4

GEOMETRIC MEANS AND 95% CONFIDENCE INTERVALS FOR ALL VARIABLES
AT EACH MARINE STATION IN THE BEAUFORT SEA

BULK SEDIMENT SAMPLE DATA

STATION=6B

STATION	TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 95% CONF. LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
6B	N	3	1.97	1.42	0.99	3.93
6B	F	3	0.412	1.37	0.224	0.758
6B	P	3	0.90	1.55	0.38	2.13
6B	D	3	0.177	1.46	0.084	0.370
6B	PAN	3	0.64	1.42	0.32	1.28
6B	PHYT	3	0.107	1.78	0.035	0.323
6%	PRIS	3	0.234	1.60	0.093	0.581
6B	LALK	3	2.50	1.63	0.96	6.53
6B	TALK	3	19.44	1.37	10.43	36.22
6B	TOT	3	51.80	1.28	32.98	81.38
6B	6A	2	609	1.22	411	901
6B	co	2	0.24	1.21	0. 16	0.34
6B	CR	2	79	1.18	58	106
6B	CU	2	2$.2	1.25	18.7	45.6
6B	Pa	2	14.4	$.18	10.8	19.2
6B	v	2	128	1.19	91	180
6B	ZN	2	99	1.14	77	127
6B	TOC	3	16.63	1.05	15.03	18.41
6B	MUD	3	83.9	1.03	79.3	88.8
6B	FFPI	3	84	1.01	82	87
6B	ISO/ALK	3	0.552	1.06	0.495	0.616
6B	LALK/TAL	3	O. 129	1.22	0.087	o. 190
6B	PRIS/PHY	3	2.2	1.10	1.8	2.6
6B	N/P	3	2.2	1.11	1.8	2.7
6B	P/o	3	5.1	1.09	4.3	6.1
6B	PAH/TOC	3	0.038	1.35	0.021	0.069
6B	TOT/TOC	3	3.1	1.20	2.2	4.4
6B	BA/CR	2	7.7	1.05	7.0	8.5
6B	BA/V	2	4.7	1.03	4.5	5.0

GEOMETRIC MEANS AND 95% CONFIDENCE INTERVALS FOR ALL VARIABLES
AT EACH MARINE STATION IN THE BEAUFORT SEA

BULK SEDIMENT SAMPLE DATA

STATION=6C

STATION	TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STD ERR OF GEOM MEAN	LOWER 95% CONF LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
6C	N	3	0.32	1.08	0.2B	0.37
6C	F	3	0.068	1.32	0.040	0.118
6C	P	3	0.2s	1.17	0.18	0.34
6C	D	3	0.055	1.22	0.037	0.081
6C	PAH	3	0.10	1.10	0.16	0.23
6C	PHYT	3	0.034	1.43	0.017	0.070
6C	PRIS	3	0.085	1.34	0.048	0.151
6C	LALK	3	0.95	1.29	0.58	1.57
6C	TALK	3	5.79	1.24	3.7a	8.89
6C	TOT	3	28.25	1.61	11.10	71.90
6C	BA	2	403	1.05	3e7	444
6C	co	2	0.09	1.47	0.04	0.18
6C	CR	2	65	1.02	62	68
6C	CU	2	21.0	1.04	19.7	22.5
6C	PB	2	10.3	1.26	6.6	16.2
6C	v	2	105	1.11	87	128
6C	ZN	2	76	1.15	58	100
6C	TOC	3	7.32	1.10	6.04	8.88
6C	MUD	3	34.0	1.18	24.5	47.3
6C	FFPI	3	75	1.05	67	83
6C	ISO/ALK	3	0.482	1.02	0.461	0.504
6C	LALK/TAL	3	0.165	1.42	0.082	0.329
6C	PRIS/PHY	3	2.5	1.10	2.1	3.0
6C	N/P	3	1.3	1.15	1.0	1.7
6C	P/D	3	4.5	1.04	4.2	4.9
6C	PAH/TOC	3	0.026	1.04	0.024	0.028
6C	TOT/TOC	3	3.9	1.55	1.6	9.1
6C	BA/CR	2	6.2	1.02	5.9	6.5
6C	BA/V	2	3.8	1.05	3.5	4.2

GEOMETRIC MEANS AND 95% CONFIDENCE INTERVALS FOR ALL VARIABLES
AT EACH MARINE STATION IN THE BEAUFORT SEA

BULK SEDIMENT SAMPLE DATA

STATION=6D

STATION	TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 95% CONF. LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
6D	N	3	0.14	1.57	0.06	0.33
6D	F	3	0.026	1.79	0.008	0.082
6D	P	3	0.10	1.36	0.06	0.18
60	D	3	0.022	1.42	0.011	0.044
00	PAN	3	0.00	1.28	0.05	0.13
60	PHYT	3	0.019	1.45	0.009	0.039
6D	PRIS	3	0.038	1.49	0.017	0.083
6D	LALK	3	0.57	1.66	0.21	1.54
6D	TALK	3	3.13	1.43	1.56	6.31
6D	TOT	3	8.39	1.38	4.4e	15.76
6D	BA	2	282	too	282	282
6D	CD	2	0.06	1.00	0.06	0.06
6D	CR	2	36	1.06	32	40
6D	CU	2	9.4	1.05	8.6	10.3
6D	PB	2	8.0	1.14	e.2	10.4
6D	v	2	67	1.02	65	70
6D	ZN	2	50	1.09	42	59
6D	TOC	3	4.51	1.16	3.3e	6.07
6D	MUD	3	13.6	1.62	5.3	35.0
6D	FFPI	3	78	1.04	72	83
6D	ISO/ALK	3	0.498	1.05	0.454	0.547
6D	LALK/TAL	3	0.182	1.58	0.074	0.444
6D	PRIS/PHY	3	2.0	1.16	1.5	2.6
6D	N/P	3	1.4	1.19	1.0	1.9
6D	P/D	3	4.5	1.06	4.0	5.0
6D	PAH/TOC	3	0.018	1.10	0.015	0.021
6D	TOT/TOC	3	1.9	1.24	1.2	2.8
6D	BA/CR	2	7.8	1.06	7.0	8.7
6D	BA/V	2	4.2	1.02	4.0	4.4

GEOMETRIC MEANS AND 95% CONFIDENCE INTERVALS FOR ALL VARIABLES
AT EACH MARINE STATION IN THE BEAUFORT SEA

BULK SEDIMENT SAMPLE OATA

STATION=6F

STATION	TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 95% CONF LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
6F	N	3	0.32	1.24	0.21	0.49
6F	F	3	0.004	1.21	0.057	0.122
6F	P	3	0.22	1.38	0.11	0.41
6F	D	3	0.043	1.40	0.022	0.084
6F	PAN	3	0.16	1.32	0.09	0.27
6F	PHYT	3	0-038	1.12	0.030	0.047
6F	PRIS	3	0.077	1.16	0.058	0. 103
6F	LALK	3	0.95	1.23	0.63	1.43
6F	TALK	3	6.24	1.15	4.71	8.27
6F	TOT	3	18.31	1.19	12.98	25. 85
6F	BA	2	330	1.14	257	423
6F	CD	2	0.12	1.03	O f t	0. 13
6F	CR	2	54	1.1s	41	72
6F	CU	2	16.4	1.2s	10.8	25.4
6F	PB	2	10.0	1.12	8.5	13.1
6F	v	2	92	1.16	68	123
6F	ZN	2	64	1.06	57	72
6F	TOC	3	8.34	1.00	6.98	9.94
6F	MUD	3	46.3	1.14	35.8	eo.3
6F	FFPI	3	81	1.00	80	81
6F	ISO/ALK	3	0.480	1.06	0.431	0.535
6F	LALK/TAL	3	0.152	1.13	0.119	0.194
6F	PRIS/PHY	3	2.1	1.09	1.7	2.4
6F	N/P	3	1.5	1.14	1.1	1.9
6F	P/D	3	5.0	1.04	4.6	5.4
6F	PAH/TOC	3	0.017	1.12	0.014	0.022
6F	TOT/TOC	3	2.0	1.07	1.8	2.4
6F	BA/CR	2	6.1	1.01	5.9	6.2
6F	BA/V	2	3.6	1.03	3.4	3.8

GEOMETRIC MEANS AND 95% ICONFIDENCE INTERVALS FOR ALL VARIABLES
AT EACH MARINE STATION IN THE BEAUFORT SEA

BULK SEDIMENT SAMPLE DATA

STATION=6G

STATION	TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 95% CONF. LIMIT FOR G.M.	UPPER 9S% CONF. LIMIT FOR G.M.
6G	N	2	0.3s	1.30	0.18	0.66
6G	F	2	0.072	1.16	0.0s4	0. 096
6G	P	2	0.2$	1.31	0.12	0.3e
6G	D	2	0.043	1.18	0.031	0.060
6G	PAN	2	0.16	11.57	0.07	0.39
6G	PHYT	2	0.0s0	1.06	0. 0s4	0.067
6G	PRIS	2	0.088	1.41	0-045	O. 172
6G	LALK	2	1.41	1.58	0.58	3.44
6G	TALK	2	14.39	1.44	7.09	29.23
6G	TOT	2	33.64	1.79	10.76	105.17
6G	BA	0				
6G	CD	o				
6G	CR	0				
6G	CU	0				
6G	PB	0				
6G	V	0				
6G	ZN	0				
6G	TOC	2	13.53	1.36	7.44	24.61
6G	MUD	2	77.0	1.03	73.1	81.1
6G	FFPI	2	80	1.03	75	85
6G	ISO/ALK	2	0.470	1.20	0.329	0.870
6G	LALK/TAL	2	0.098	1.10	0.002	0.118
6G	PRIS/PHY	2	1.5	1.33	0.8	2.0
6G	N/P	2	1.7	1.06	1.5	1.9
6G	P/D	2	4.9	1.11	4.0	6.0
6G	PAH/TOC	2	0.011	1.24	0.007	0.017
6G	TOT/TOC	2	2.1	1.60	0.8	5.1
6G	BA/CR	0				
6G	BA/V	0				

GEOMETRIC MEANS ANO 95% CONFIDENCE INTERVALS FOR AI-1. VARIABLES
AT EACH MARINE STATION IN THE BEAUFORT SEA

BULK SEDIMENT SAMPLE DATA

STATION=7A

STAT ION	TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 95% CONF LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
7A	N	3	0.49	1.08	0.42	0.57
7A	F	3	0.113	1.30	0.088	0. 189
7A	P	3	0.28	1.22	0. 19	0.42
7A	D	3	0.067	1.33	0.038	0.118
7A	PAN	3	O. 18	1.18	0.13	0.25
7A	PHYT	3	0.044	1.26	0.028	0.089
7A	PRIS	3	0.093	1.13	0.073	0.118
7A	LALK	3	1.12	1.06	1.00	1.25
7A	TALK	3	8.41	1.31	4.94	14.31
7A	TOT	3	23. 75	1.09	20. 10	28.07
7A	BA	2	704	1.01	692	716
7A	co	2	0.10	1.09	0.09	0.12
7A	CR	2	67	1.06	59	76
7A	CU	2	14.1	1.03	13.3	15.0
7A	PB	2	10.7	1.27	6.7	17.3
7A	V	2	88	1.01	86	89
7A	ZN	2	80	1.07	70	82
7A	TOC	3	10.12	1.05	9.21	11.11
7A	MUD	3	61.6	1.07	53.5	71.0
7A	FFPI	3	82	1.04	76	88
7A	ISO/ALK	3	0.531	1.02	0.s13	0.548
7A	LALK/TAL	3	0.133	1.35	0.073	0.240
7A	PRIS/PHY	3	2.1	1.11	1.7	2.0
7A	N/P	3	1.7	1.13	1.4	2.2
7A	P/D	3	4.7	1.14	3.6	8.0
7A	PAH/TOC	3	0.018	1.18	0.013	0.025
7A	TOT/TOC	3	2.3	1.14	1.8	3.0
7A	BA/CR	2	10.5	1.06	9.5	11.7
7A	BA/V	2	8.0	1.00	8.o	8.1

GEOMETRIC MEANS AND 95% CONFIDENCE INTERVALS FOR ALL VARIABLES
AT EACN MARINE STATION IN THE BEAUFORT SEA

BULK SEDIMENT SAMPLE DATA

STATION=7B

STATION	TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 95% CONF. LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
7B	N	3	0.18	1.27	0.11	0.29
7B	F	3	0.033	1.41	0.017	0.054
7B	P	3	0.12	1.33	0.07	0.21
7B	D	3	0.020	1.33	0.015	0.046
7B	PAN	3	0.10	1.28	0.08	0.16
7B	PHYT	3	0.022	1.33	0.013	0.039
7B	PRIS	3	0.050	1.20	0.035	0.072
7B	LALK	3	0.76	1.30	0.45	1.26
7B	TALK	3	4.21	1.27	2.65	0.70
7B	TOT	3	10.85	1.29	0.84	17.75
7B	BA	2	470	1.03	443	498
7B	CD	2	0.05	1.03	0.05	0.05
7B	CR	2	51	1.04	47	55
7B	CU	2	8.3	1.16	6.2	11.1
7B	PB	2	8.2	1.23	5.4	12.2
7B	v	2	63	1.08	54	73
7B	ZN	2	50	1.01	50	51
7B	TOC	3	5.27	1.03	4.95	5.61
7B	MUD	3	11.8	1.28	7.3	19.0
7B	FFPI	3	78	1.01	77	79
7B	ISO/ALK	3	0.461	1.05	0.423	0.503
7B	LALK/TAL	3	0.170	1.36	0.099	0.326
7B	PRIS/PHY	3	2.3	1.11	1.8	2.8
7B	N/P	3	1.5	1.15	1.1	2.0
7B	P/D	3	4.6	1.00	4.6	4.7
7B	PAH/TOC	3	0.019	1.24	0.012	0.029
7B	TOT/TOC	3	2.1	1.26	1.3	3.2
7B	BA/CR	2	9.2	lot	9.0	$.4
7B	BA/V	2	7.5	1.11	6.1	9.3

GEOMETRIC MEANS AND 95% CONFIDENCE INTERVALS FOR ALL VARIABLES
AT EACH MARINE STATION IN THE BEAUFORT SEA

BULK SEDIMENT SAMPLE OATA

STATION=7C

STATION	TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 95% CONF LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
7C	N	3	0.66	1.03	0.83	0.70
7C	F	3	0.121	1.14	0.094	0.157
7C	P	3	0.46	1.1s	0.35	0.61
7C	D	3	0.099	1.07	0.007	0. 112
7C	PAN	3	0.21	1.60	0.08	0.52
7C	PHYT	3	0. 0s0	1.17	0.041	0.075
7C	PRIS	3	0.121	1.16	0,090	0.103
7C	LALK	3	1.s4	1.09	1.29	1.84
7C	TALK	3	9.s3	1.17	7.35	13.43
7C	TOT	3	29.72	1.13	23.59	37.45
7C	BA	2	533	1.07	471	003
7C	co	2	0.14	1.12	0.11	0.18
7C	CR	2	81	1.04	74	88
7C	CU	2	28.0	1.04	28.1	30.0
7C	PB	2	17.2	1.17	12.6	23.5
7C	v	2	143	1.02	138	147
7C	ZN	2	102	1.0s	92	113
7C	TOC	3	10.B1	1.21	7.49	15.91
7C	MUD .	3	86.5	1.01	84.3	88.8
7C	FFPI	3	84	1.03	79	89
7C	ISO/ALK	3	0.458	1.02	0.438	0.479
7C	LALK/TAL	3	0.155	1.22	0. 10B	0.228
7C	PRIS/PHY	3	2.2	1.01	2.1	2.2
7C	N/P	3	1.4	1.12	1.1	1.8
7C	P/D	3	4.7	1.10	3.9	5.7
7C	PAH/TOC	3	0.019	1.77	0.008	0.058
7C	TOT/TOC	3	2.7	1.33	1.6	4.8
7C	BA/CR	2	6.6	1.11	5.3	8.1
7C	BA/V	2	3.7	1.05	3.4	4.1

GEOMETRIC MEANS AND 95% CONFIDENCE INTERVALS FOR ALL VARIABLES
AT EACH MARINE STATION IN THE BEAUFORT SEA

BULK SEDIMENT SAMPLE DATA

STATION=7D

STATION	TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 95% CONF. LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
7D	N	2	0.17	1.00	0.07	0.41
70	F	2	0.033	2.1s	0.007	0.148
7D	P	2	0.15	2.10	0.03	0.02
7D	0	2	0.033	1.75	0.011	0.098
7D	PAH	2	0.11	1.50	0.05	0.24
7D	PHYT	2	0.029	1.98	0.008	0.110
7D	PRIS	2	0.0s9	1.90	0.018	0.259
7D	LALK	2	0.79	2.17	0.17	3.s8
7D	TALK	2	5.82	2.22	1.18	26.78
7D	TOT	2	24.8S	1.38	13.20	49.79
7D	BA	0				
7D	CD	0				
7D	CR	0				
7D	CU	0				
7D	PB	0				
7D	V	0				
7D	ZN	0				
7D	TOC	2	8.38	1.54	2.74	14.76
7D	MUD	2	2s.0	1.59	too	82.5
7D	FFPI	2	78	1.05	71	85
7D	ISO/ALK	2	0.459	1.01	0.451	0.467
7D	LALK/TAL	2	0.140	1.02	0.134	0.147
7D	PRIS/PHY	2	2.4	1.01	2.3	2.4
7D	N/P	2	1.1	1.32	0.7	1.9
70	P/D	2	4.5	1.20	3.1	6.3
7D	PAH/TOC	2	0.018	1.03	0.017	0.019
7D	TOT/TOC	2	3.9	1.11	3.2	4.8
7D	BA/CR	0				
7D	BA/V	0				

GEOMETRIC MEANS AND 9S% CONFIDENCE INTERVALS FOR ALL VARIABLES
AT EACH MARINE-STATION IN THE BEAUFORT SEA

BULK SEDIMENT SAMPLE OATA

STATION=7E

STATION	TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 95% CONF. LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
7E	N	3	0.82	1.08	0.73	0.93
7E	F	3	0.093	1.1s	0.071	0.122
7E	P	3	0.41	1.11	0.33	0.50
7E	D	3	0.075	1.18	0. 058	0. 101
7E	PAH	3	0.27	1.07	0.24	0.31
7E	PHYT	3	0. 0s3	1.18	0.039	0.071
7E	PRIS	3	O. 172	1.10	0.142	0.207
7E	LALK	3	1.58	1.05	1.42	1.73
7E	TALK	3	9.80	1.11	7.94	12.09
7E	TOT	3	12.98	2.24	2.66	63.33
7E	BA	2	582	1.04	S40	628
7E	co	2	0.14	1.09	0.11	0.10
7E	CR	2	02	1.00	62	62
7E	w	2	17.7	1.06	15.9	19.7
7E	PB	2	10.7	1.29	6.5	17.8
7E	V	2	92	1.00	91	93
7E	ZN	2	73	1.03	69	79
7E	TOC	3	17.41	1.19	12.31	24.64
7E	MUD	3	69.3	1.06	61.7	77.9
7E	FFPI	3	84	1.02	81	87
7E	ISO/ALK	3	0.607	1.01	0.594	0.620
7E	LALK/TAL	3	0.100	1.17	0.117	0.217
7E	PRIS/PHY	3	3.3	1.08	2.8	3.8
7E	N/P	3	2.0	1.09	1.7	2.4
7E	P/D	3	S.4	1.22	3.7	8.1
7E	PAH/TOC	3	0.015	1.19	0.011	0.022
7E	TOT/TOC	3	0.7	2.26	0.1	3.6
7E	BA/CR	2	9.4	1.04	8.7	10.1
7E	BA/V	2	6.3	1.03	5.9	6.8

GEOMETRIC MEANS AND 95% CONFIDENCE INTERVALS FOR ALL VARIABLES
AT EACH MARINE STATION IN THE BEAUFORT SEA

BULK SEDIMENT SAMPLE DATA

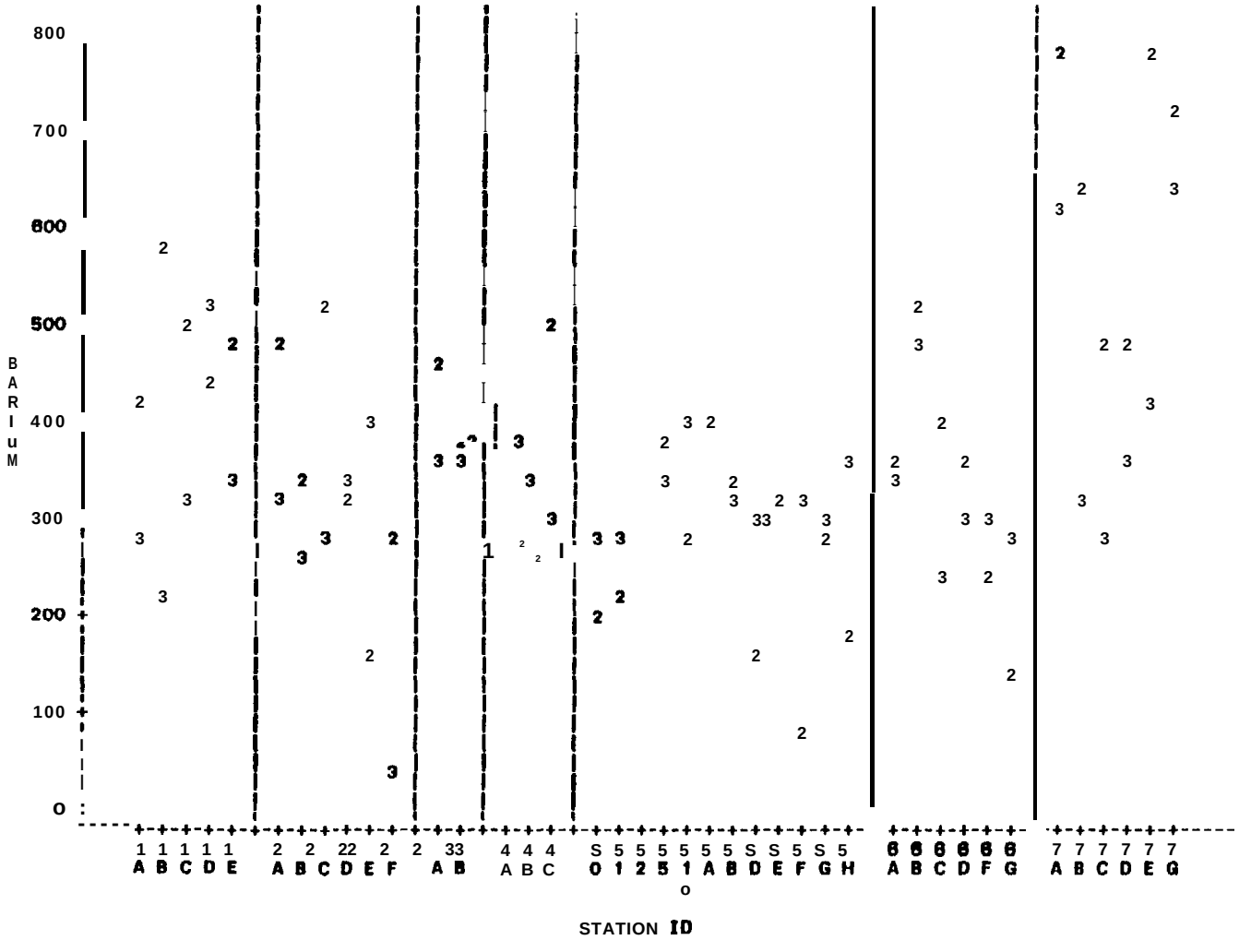
STATION=7G

STATION	TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 95% CONF. LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
7G	N	3	0.58	1.44	0.28	1.16
7G	F	3	0.029	1.66	0.011	0.077
7G	P	3	0.37	1.20	0.26	0.53
7G	D	3	0-040	1.08	0.039	0.053
7G	PAN	3	0.20	1.09	0.17	0.24
7G	PHYT	3	0.050	1.09	0.042	0.058
7G	PRIS	3	0.201	1.04	0.187	0.216
7G	LALK	3	1.15	1.08	0.99	1.3s
7G	TALK	3	5.$4	1.26	3.81	9.27
7G	TOT	3	20.81	1.09	17.60	24.60
7G	BA	2	621	1.02	593	650
7G	co	2	0.00	1.30	0.05	0.14
7G	CR	2	43	1.04	40	47
7G	CU	2	11.0	1.07	9.6	12.7
7G	PB	2	12.4	1.12	9.9	15.5
7G	v	2	68	too	68	88
7G	ZN	2	58	1.09	49	68
7G	TOC	3	13.04	1.38	6.92	24.50
7G	MUD	3	22.9	1.57	8.5	55.4
7G	FFPI	3	84	1.03	79	
7G	ISO/ALK	3	0.794	1.08	0.684	;:921
7G	LALK/TAL	3	0.194	1.26	0.124	0.304
7G	PRIS/PHY	3	4.1	1.12	3.2	5.1
7G	N/P	3	1.5	1.32	0.9	2.7
7G	P/D	3	8.0	1.20	5.6	11.6
7G	PAH/TOC	3	0.014	1.60	0.000	0.035
7G	TOT/TOC	3	1.3	1.78	0.4	4.2
7G	BA/CR	2	14.4	1.02	13.9	15.0
7G	BA/V	2	9.1	1.02	8.7	9.6

BEAUFORT SEA MONITORING PROGRAM
PLOT OF YEARLY GEOMETRIC MEANS FOR MARINE STATIONS

TYPE OF SEDIMENT: FINE

PLOT OF BA*STATID SYMBOL IS VALUE OF YEAR

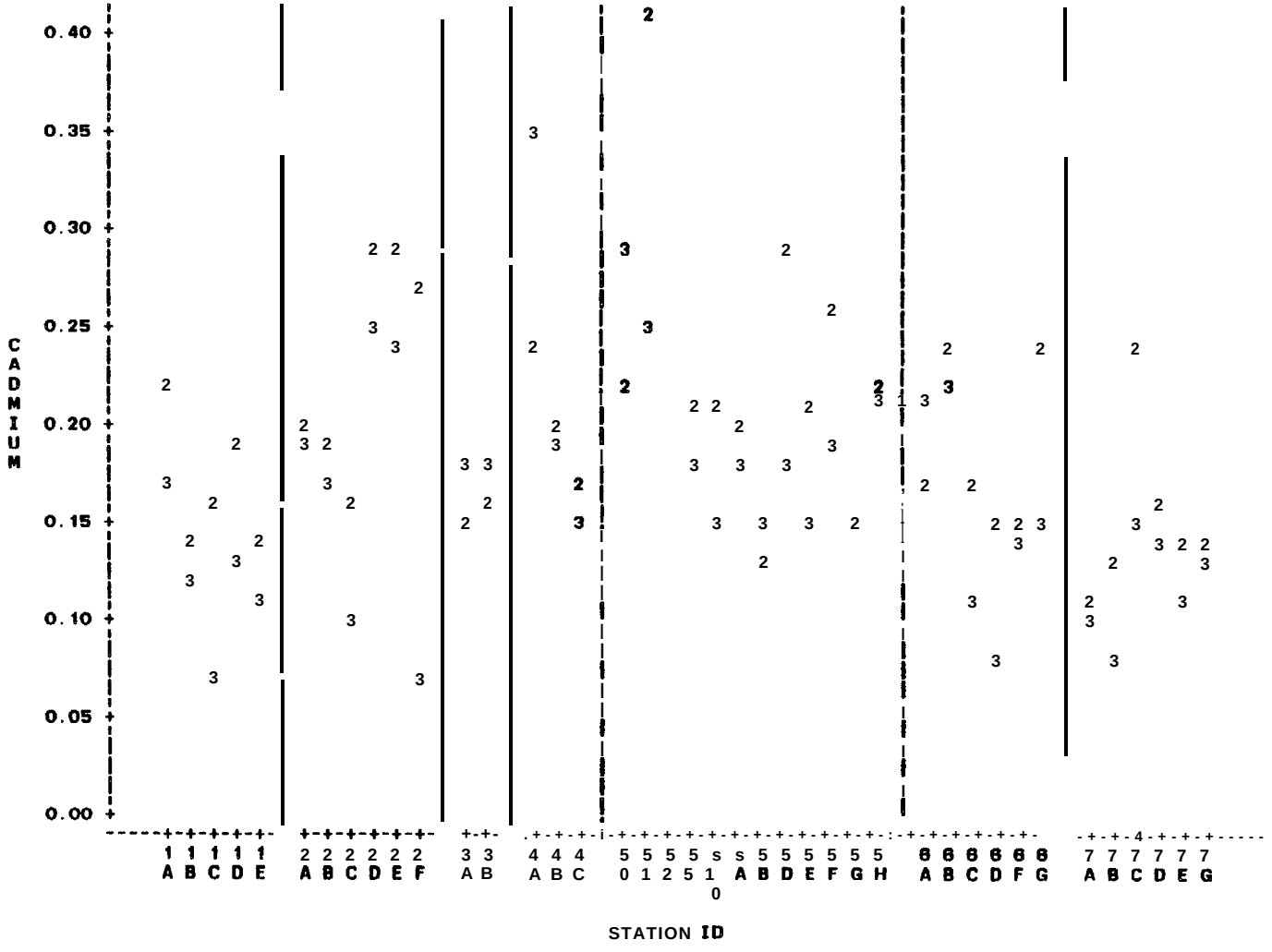


NOTE: 1 OBS HIDDEN

BEAUFORT SEA MONITORING PROGRAM
PLOT OF YEARLY GEOMETRIC MEANS FOR MARINE STATIONS

TYPE OF SEDIMENT: FINE

PLOT OF CD*STATID SYMBOL IS VALUE OF YEAR

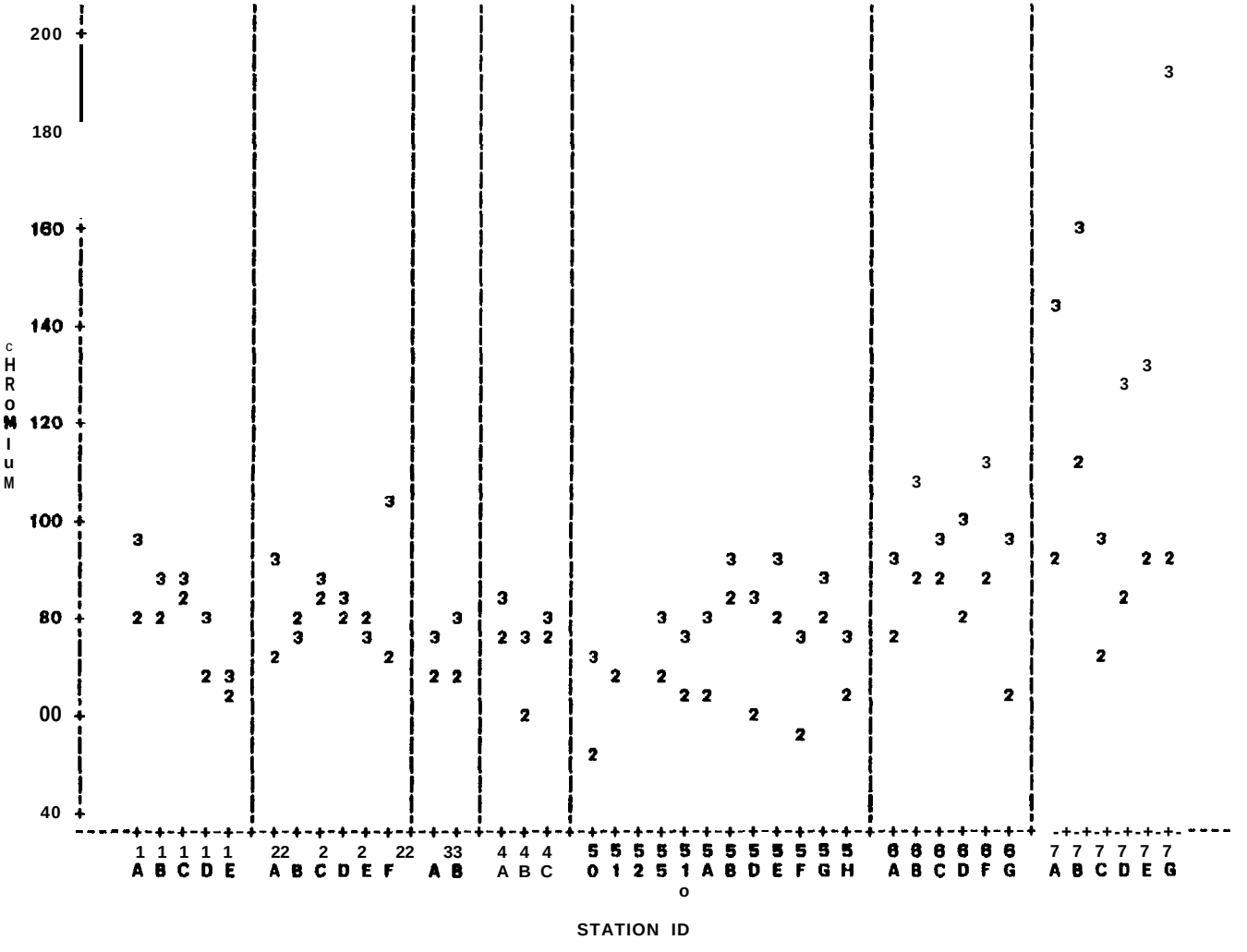


NOTE : 1 OBS HIDDEN

BEAUFORT SEA MONITORING PROGRAM
PLOT OF YEARLY GEOMETRIC MEANS FOR MARINE STATIONS

TYPE OF SEDIMENT: FINE

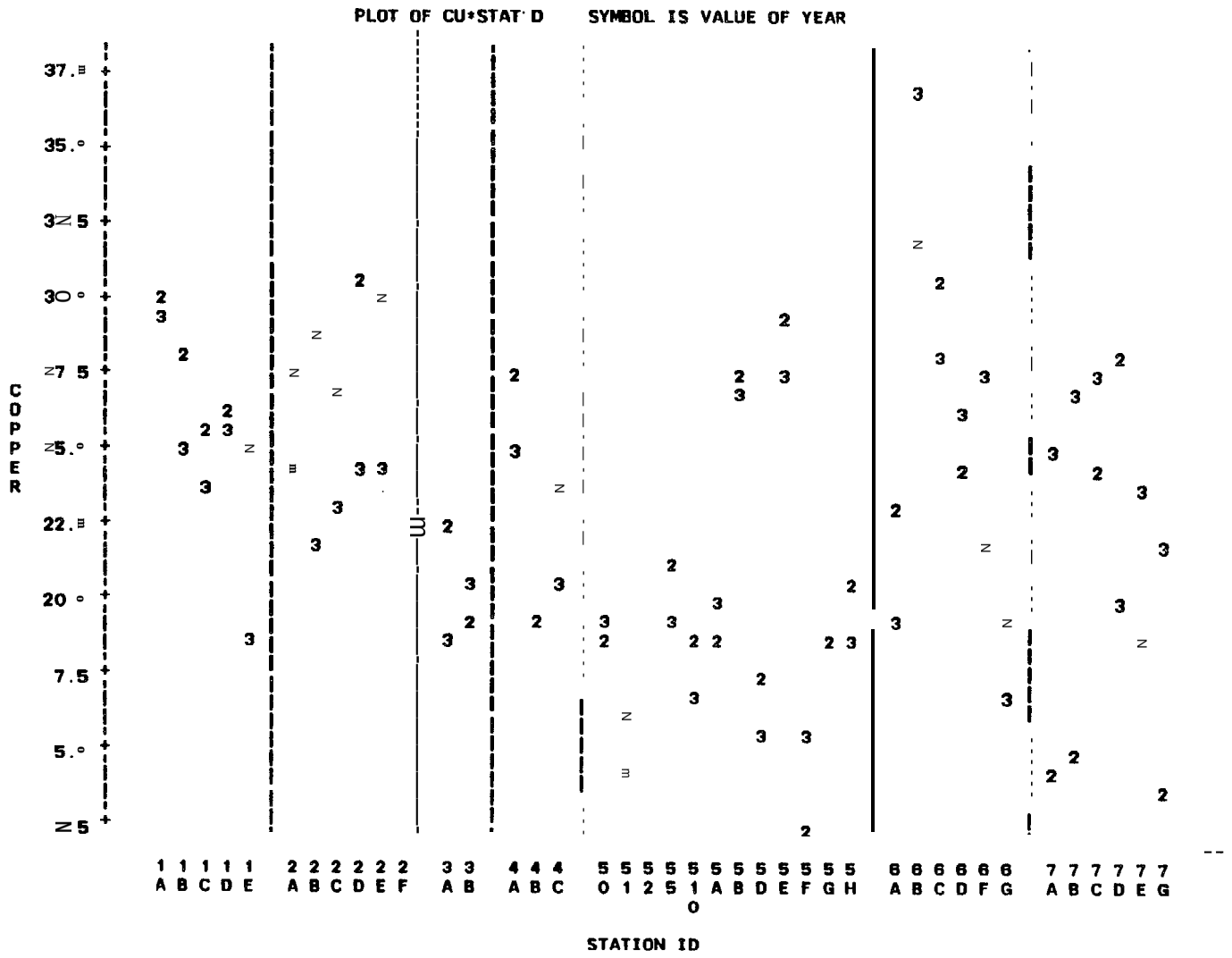
PLOT OF CR*STATID SYMBOL IS VALUE OF YEAR



NOTE : 1 OBS HIDDEN

BEAUFORT SEA MONITORING PROGRAM
PLOT OF YEARLY GEOMETRIC MEANS FOR MARINE STATIONS

TYPE OF SEDIMENT: FINE

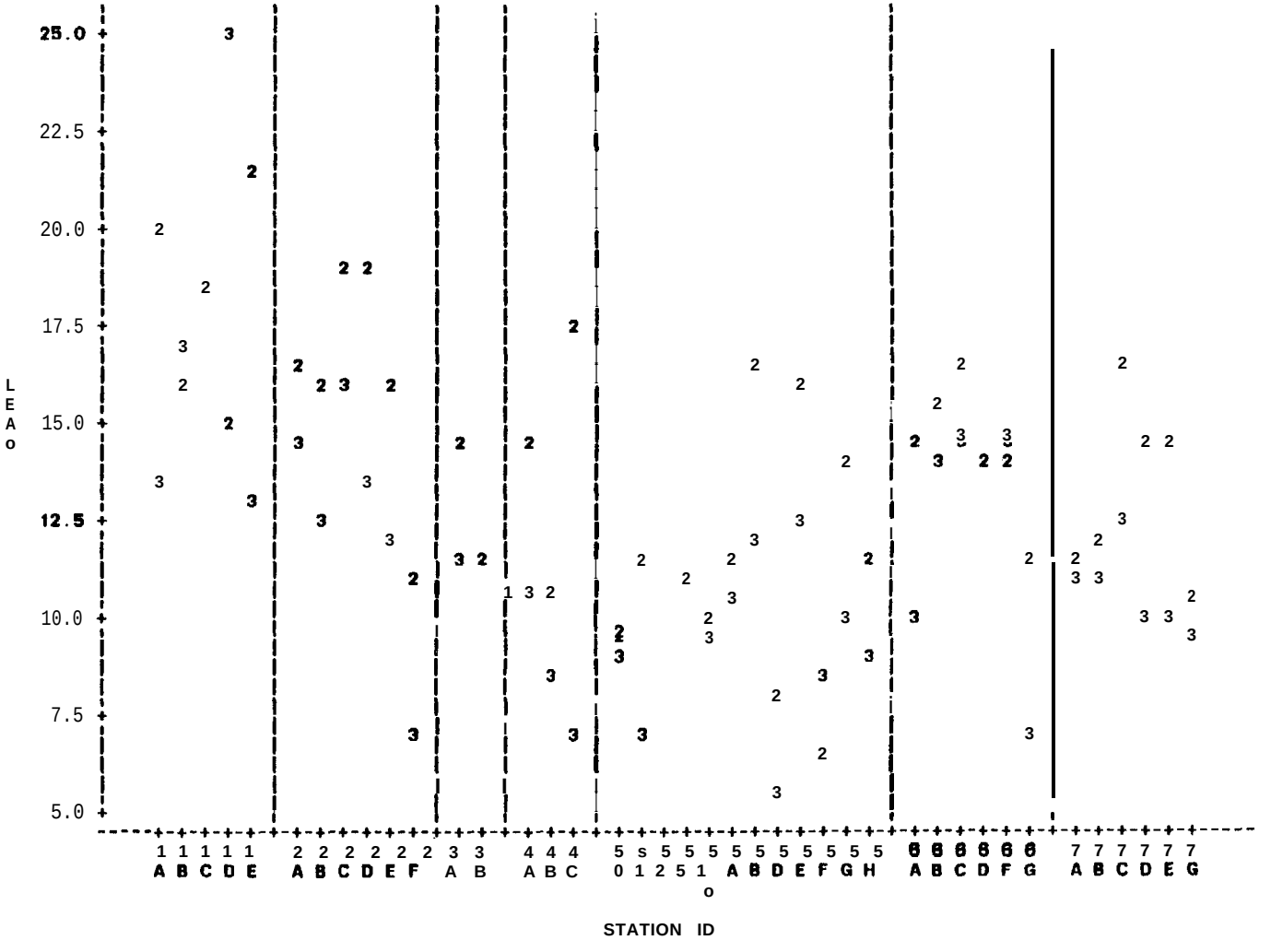


NOTE 2 OBS HIDDEN

BEAUFORT SEA MONITORING PROGRAM
PLOT OF YEARLY GEOMETRIC MEANS FOR MARINE STATIONS

TYPE OF SEDIMENT: FINE

PLOT OF PB*STATID SYMBOL IS VALUE OF VEAR

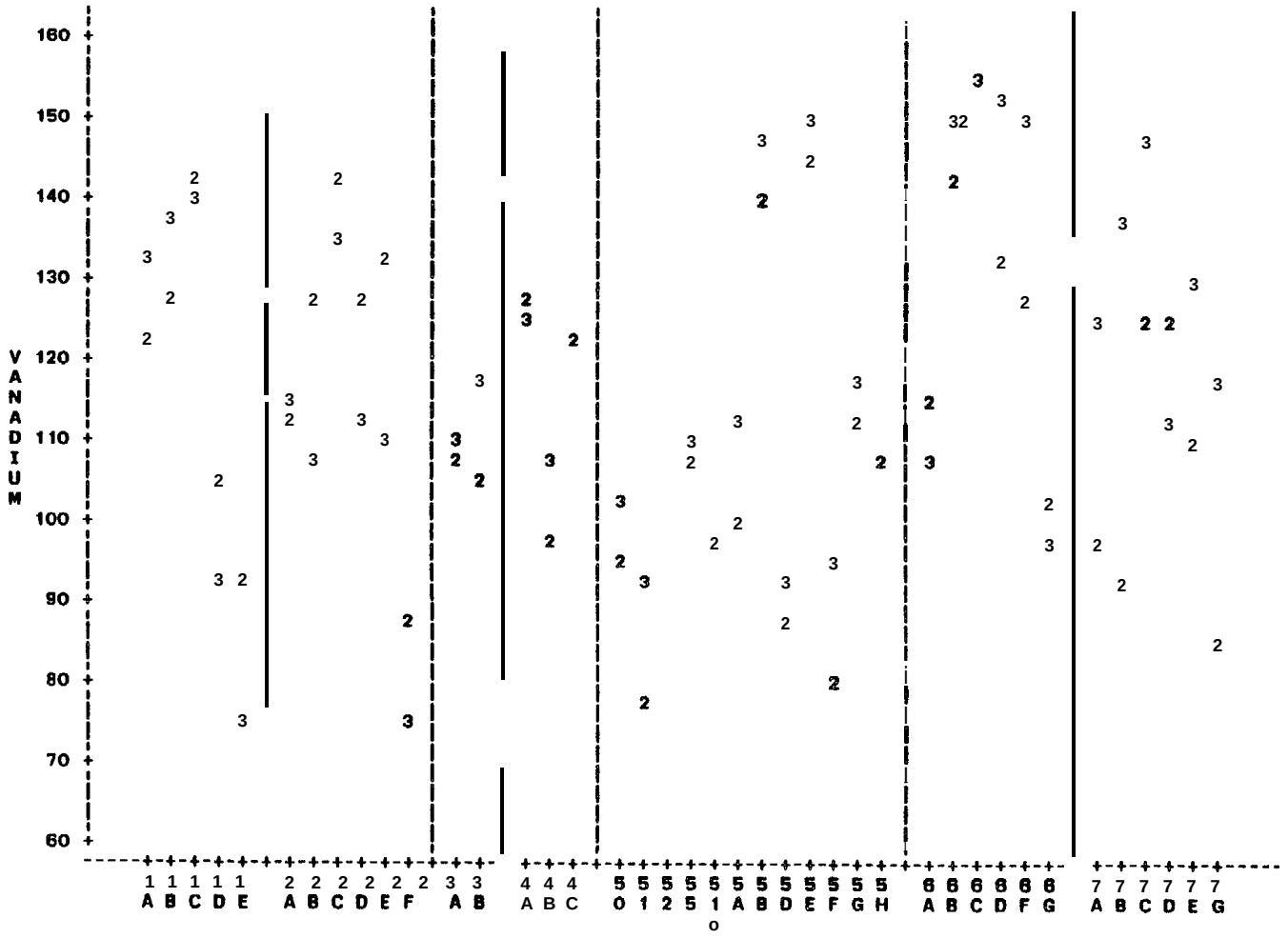


NoTE : 4 OBS HIDDEN

BEAUFORT SEA MONITORING PROGRAM
PLOT OF YEARLY GEOMETRIC MEANS FOR MARINE STATIONS

TYPE OF SEDIMENT: FINE

PLOT OF V*STATID SYMBOL IS VALUE OF YEAR



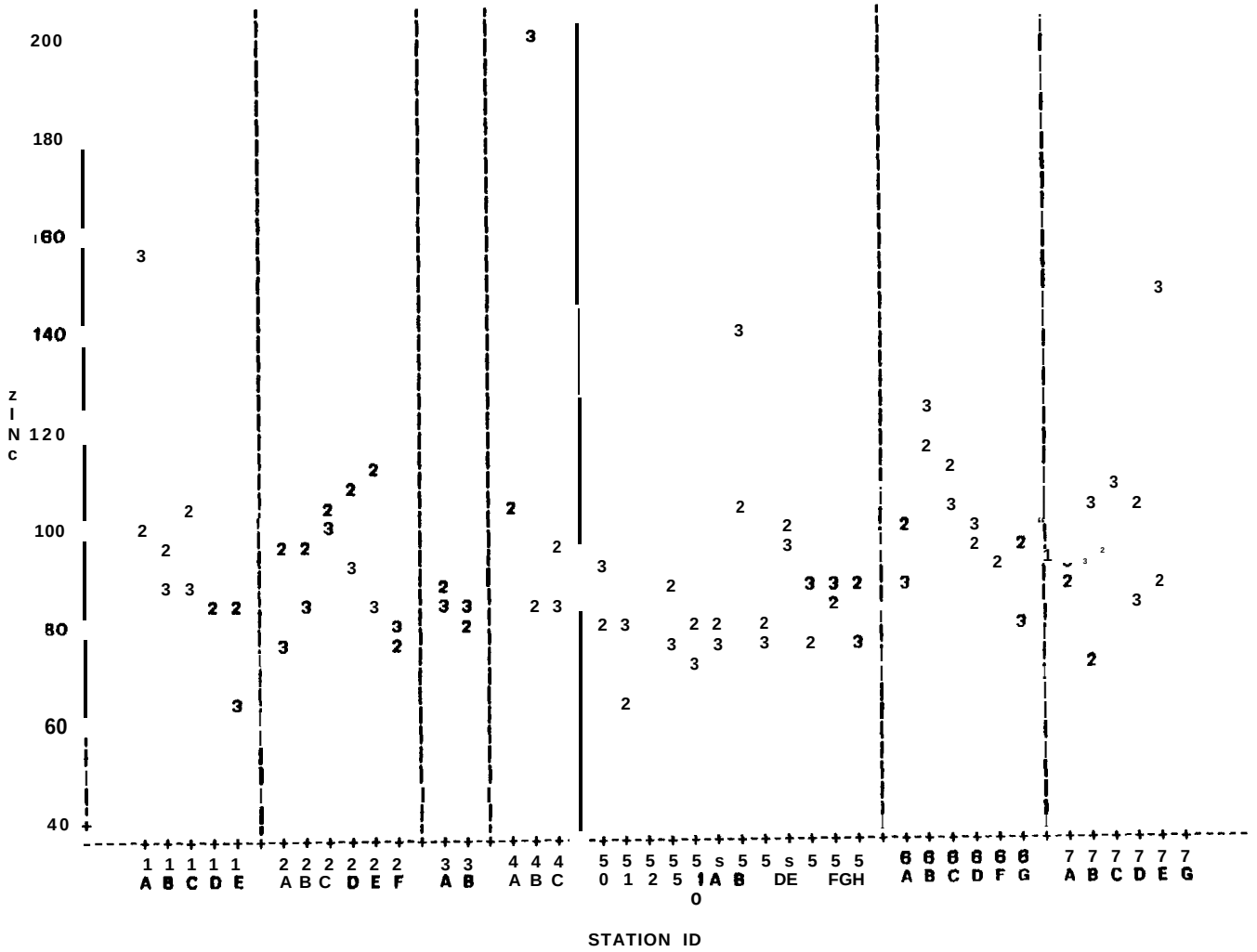
STATION ID

NOTE: 3 OBS HIDDEN

BEAUFORT SEA MONITORING PROGRAM
PLOT OF YEARLY GEOMETRIC MEANS FOR MARINE STATIONS

TYPE OF SEDIMENT: FINE

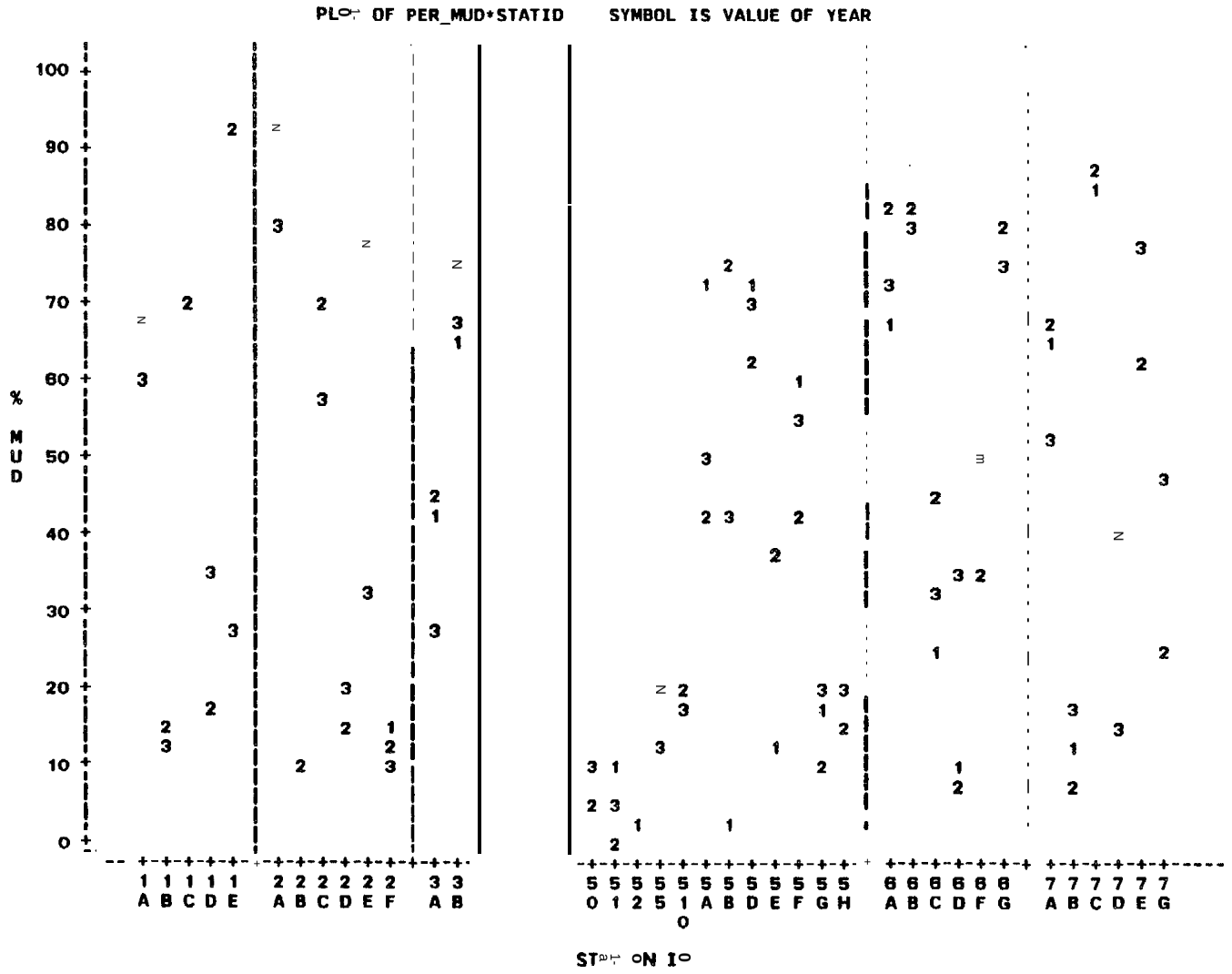
PLOT OF ZN+STATID SYMBOL IS VALUE OF YEAR



NOTE: 3 OBS HIDDEN

BEAUFORT SEA MONITORING PROGRAM
PLOT OF YEARLY GEOMETRIC MEANS FOR MARINE STATIONS

TYPE OF SEDIMENT: BULK

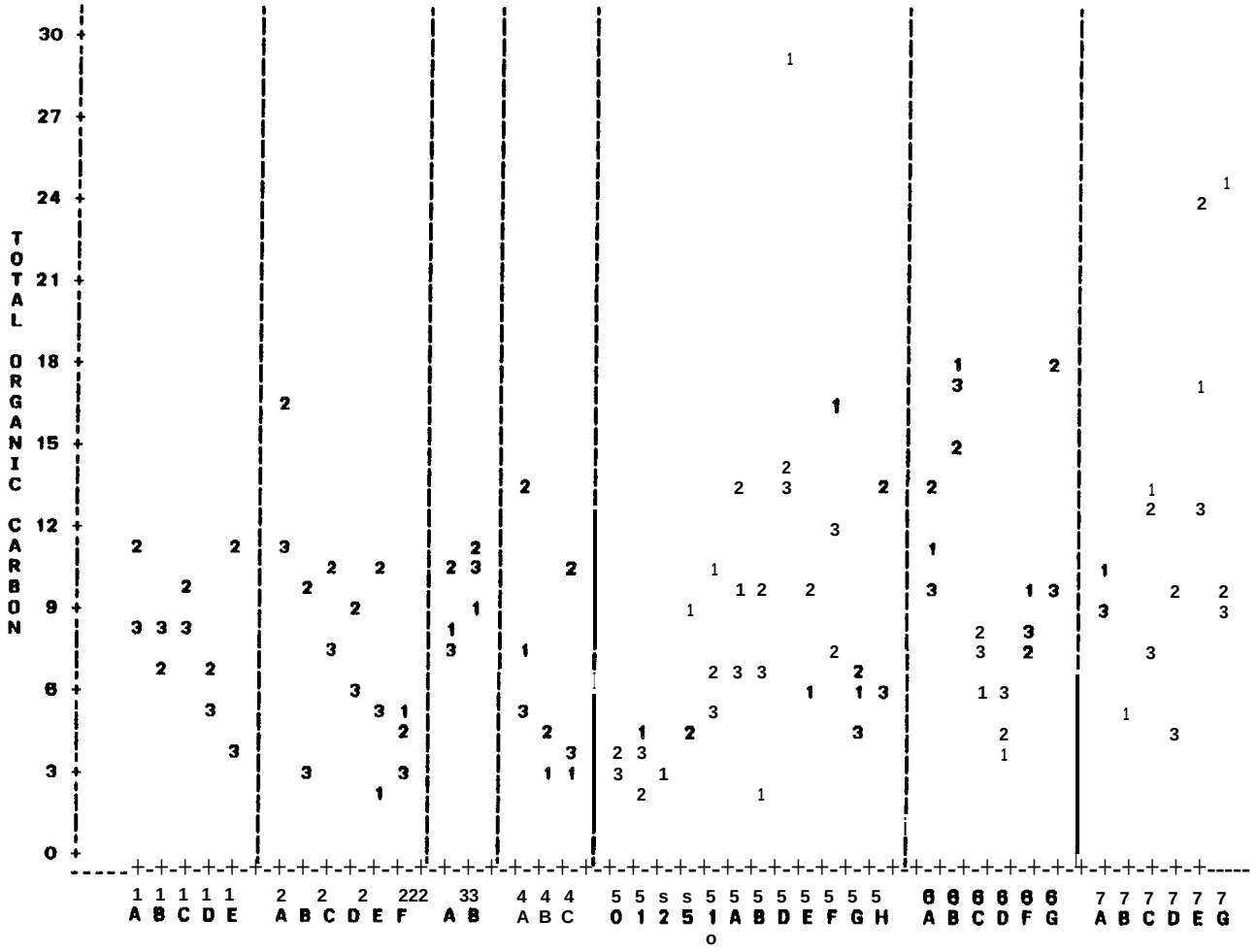


NOTE: 8 OBS HIDDEN

BEAUFORT SEA MONITORING PROGRAM
PLOT OF YEARLY GEOMETRIC MEANS FOR MARINE STATIONS

TYPE OF SEDIMENT: BULK

PLOT OF TOC*STATID SYMBOL IS VALUE OF YEAR

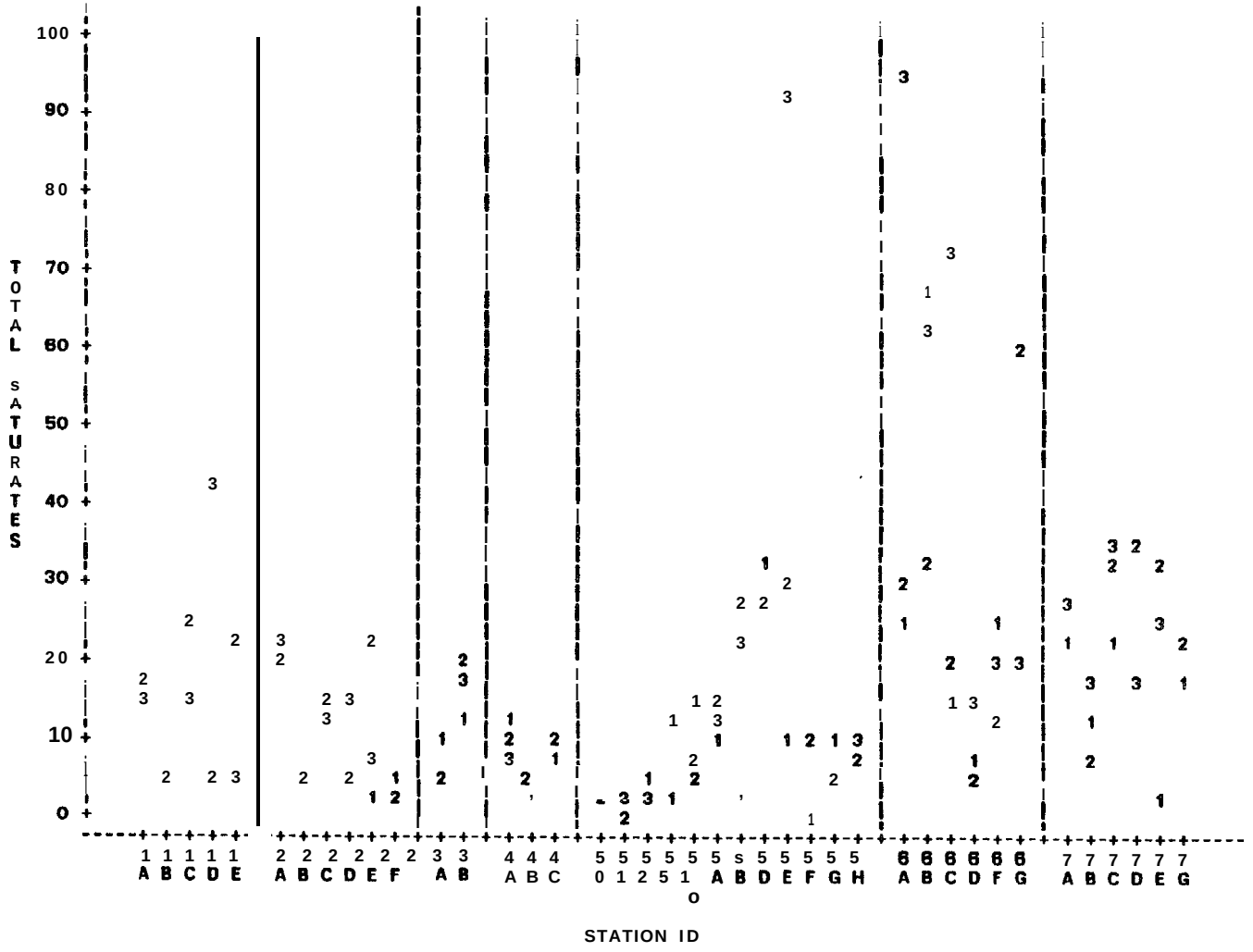


NOTE : 6 OBS HIDDEN

BEAUFORT SEA MONITORING PROGRAM
PLOT OF YEARLY GEOMETRIC MEANS FOR MARINE STATIONS

TYPE OF SEDIMENT: BULK

PLOT OF TOT*STATID SYMBOL IS VALUE OF YEAR

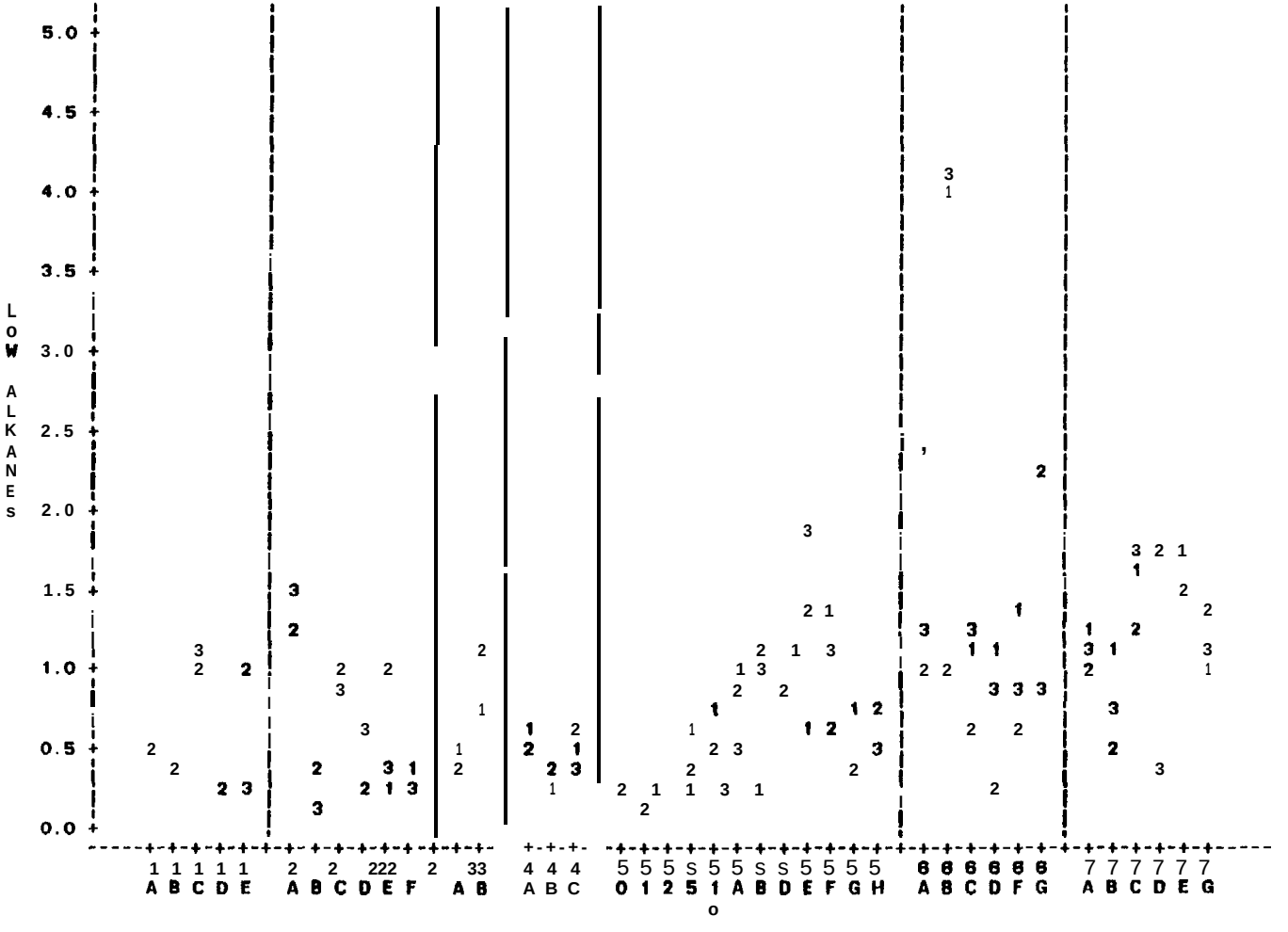


NOTE : 14 OBS HIDDEN

BEAUFORT SEA MONITORING PROGRAM
PLOT OF YEARLY GEOMETRIC MEANS FOR MARINE STATIONS

TYPE OF SEOIMENT: BULK

PLOT OF LALK*STATID SYMBOL IS VALUE OF YEAR



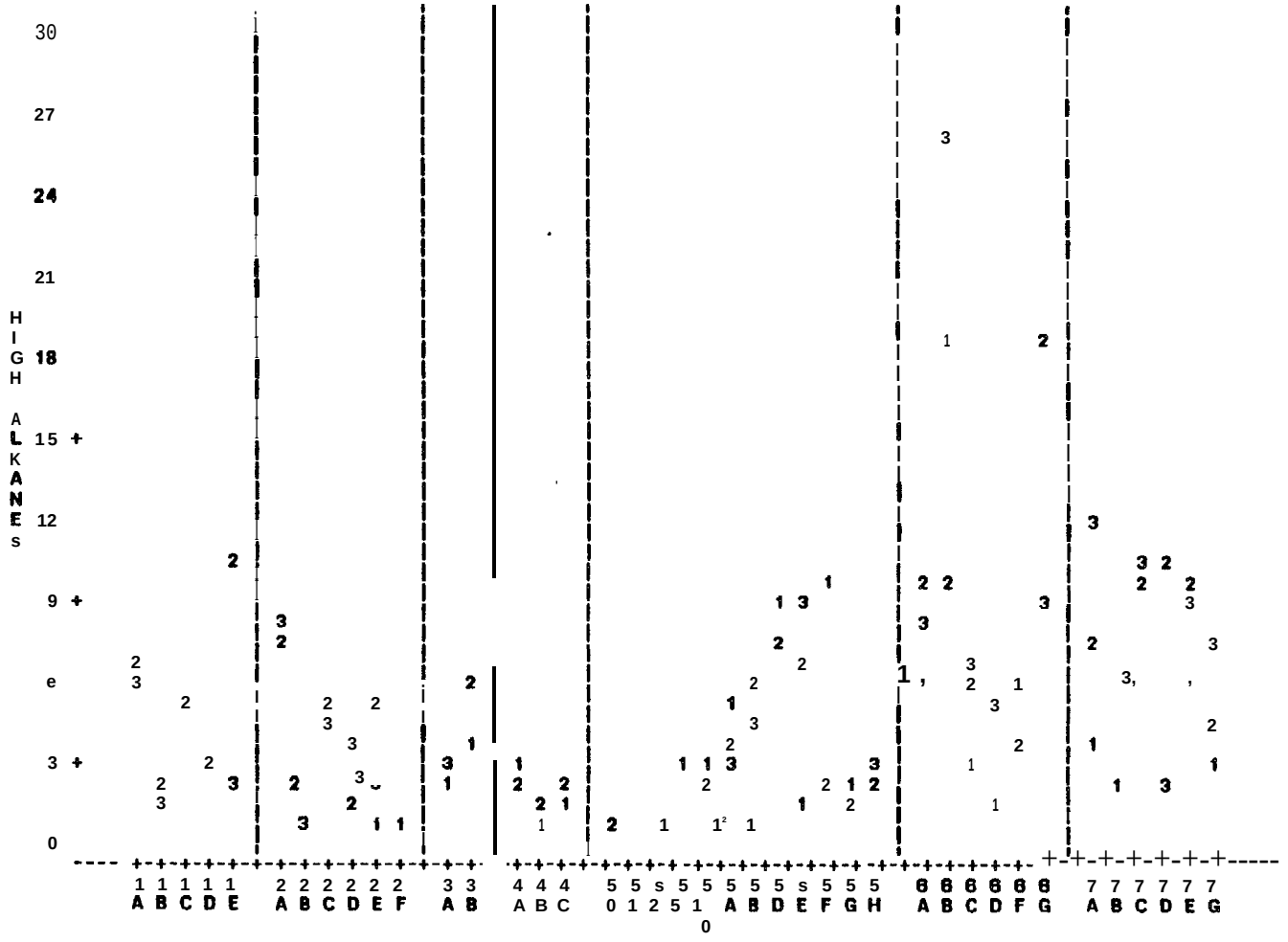
STATION 10

NOTE : 14 OBS HIDDEN

BEAUFORT SEA MONITORING PROGRAM
PLOT OF YEARLY GEOMETRIC MEANS FOR MARINE STATIONS

TYPE OF SEDIMENT: BULK

PLOT OF HALK*STATID SYMBOL IS VALUE OF YEAR

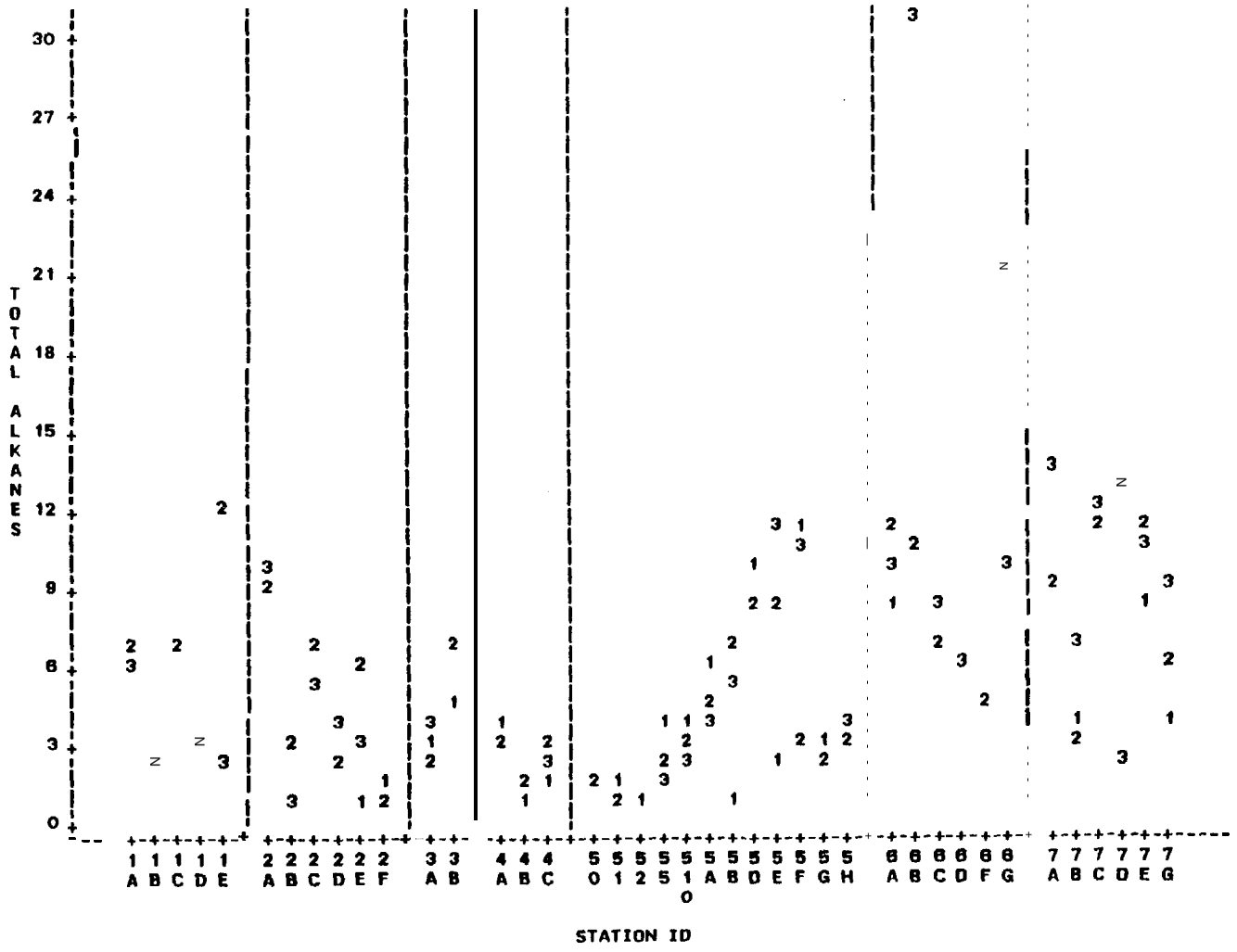


NOTE : 20 OBS HIDDEN

BEAUFORT SEA MONITORING PROGRAM
PLOT OF YEARLY GEOMETRIC MEANS FOR MARINE STATIONS

TYPE OF SEDIMENT: BULK

PLOT OF TALK*STATID SYMBOL IS VALUE YE[illegible]

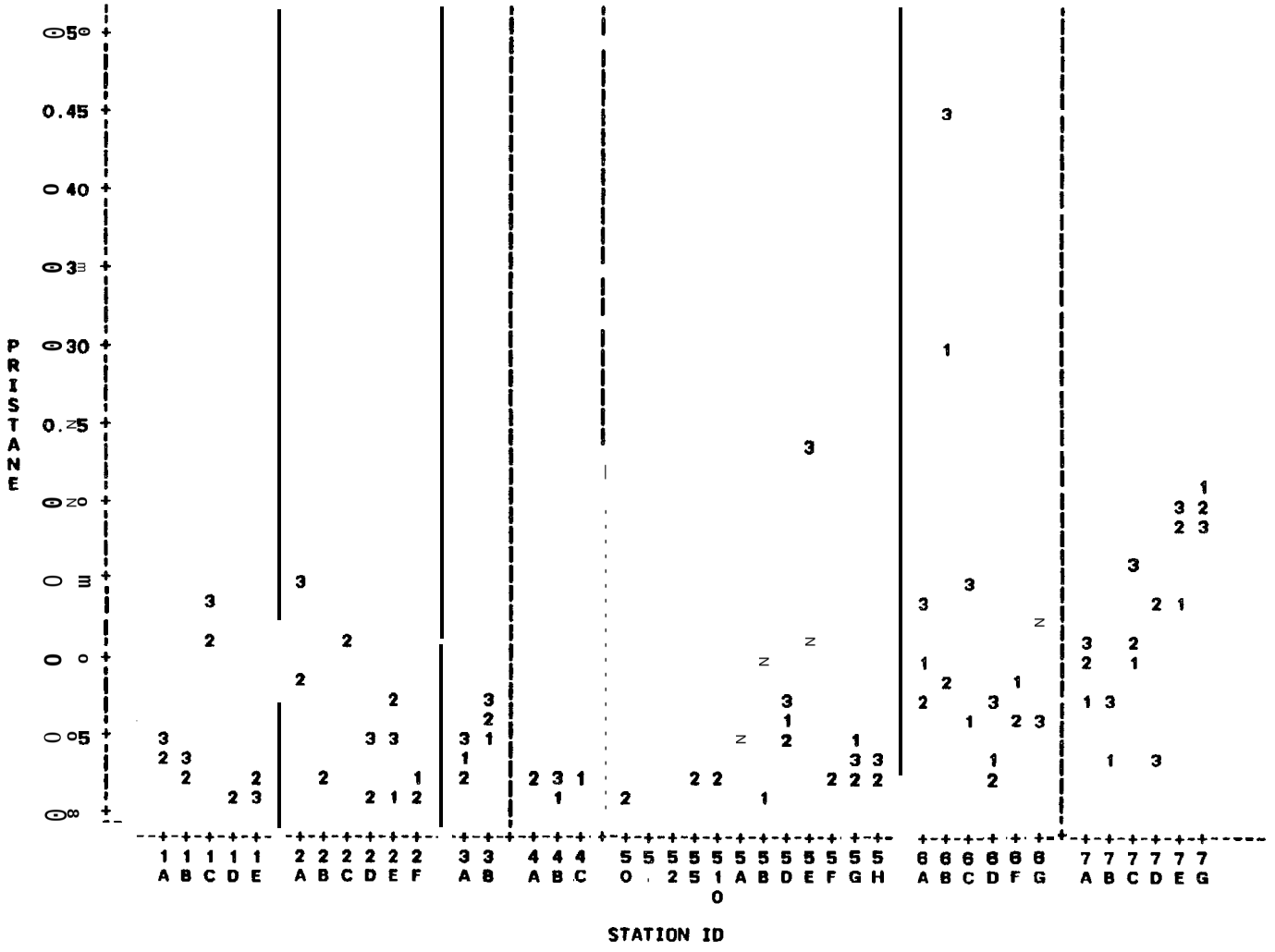


NOTE: 13 OBS HIDDEN

BEAUFORT SEA MONITORING PROGRAM
PLOT OF YEARLY GEOMETRIC MEANS FOR MARINE STATIONS

TYPE OF SEDIMENT: BULK

PLOT OF PRIS*STATID SYMBOL IS VALUE OF YEAR

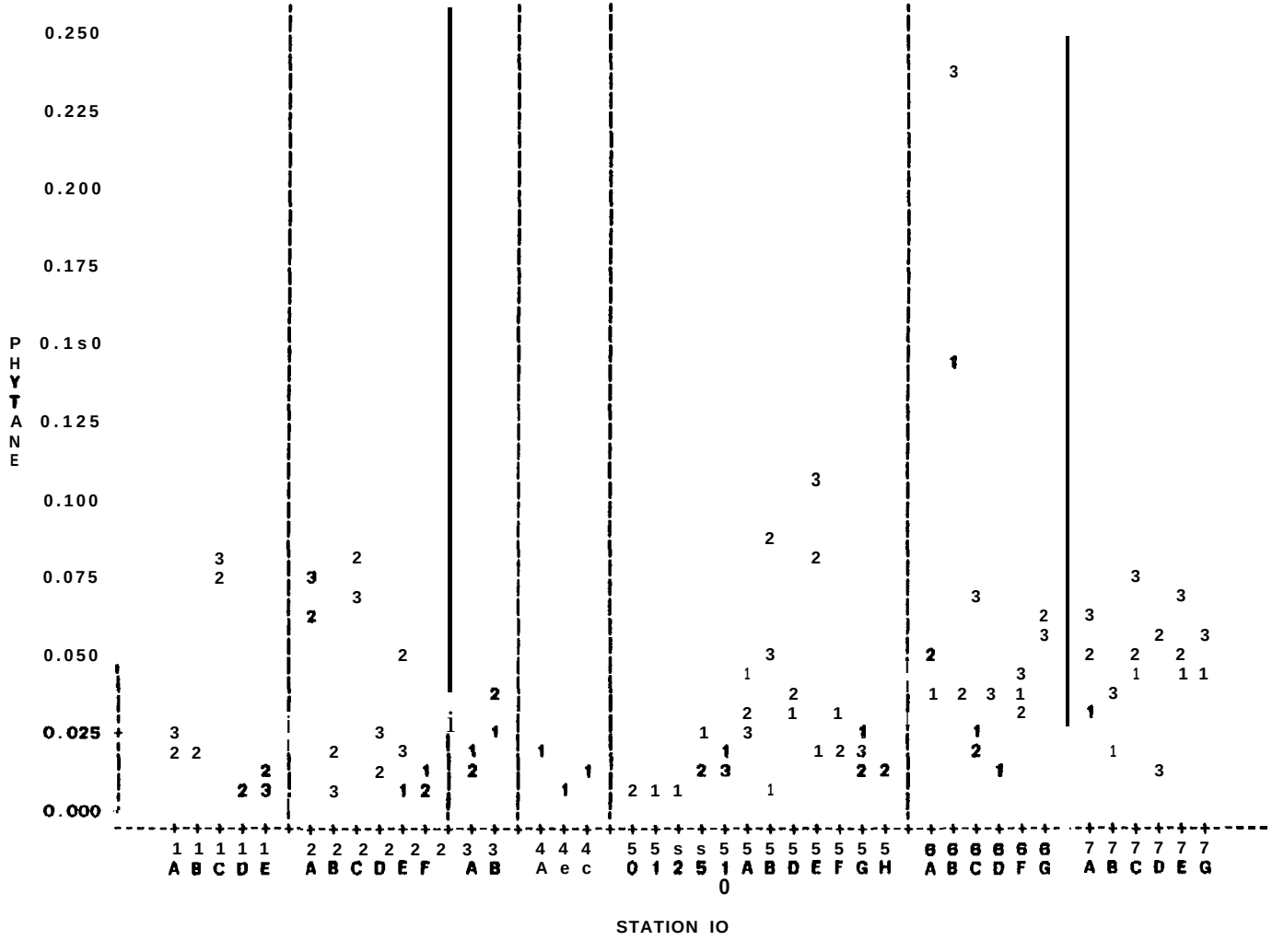


NOTE: 19 OBS HIDDEN

BEAUFORT SEA MONITORING PROGRAM
PLOT OF **YEARLY** GEOMETRIC MEANS FOR MARINE **STATIONS**

TYPE OF **SEDIMENT**: BULK

PLOT OF **PHYT*STATID** SYMBOL IS VALUE OF **YEAR**

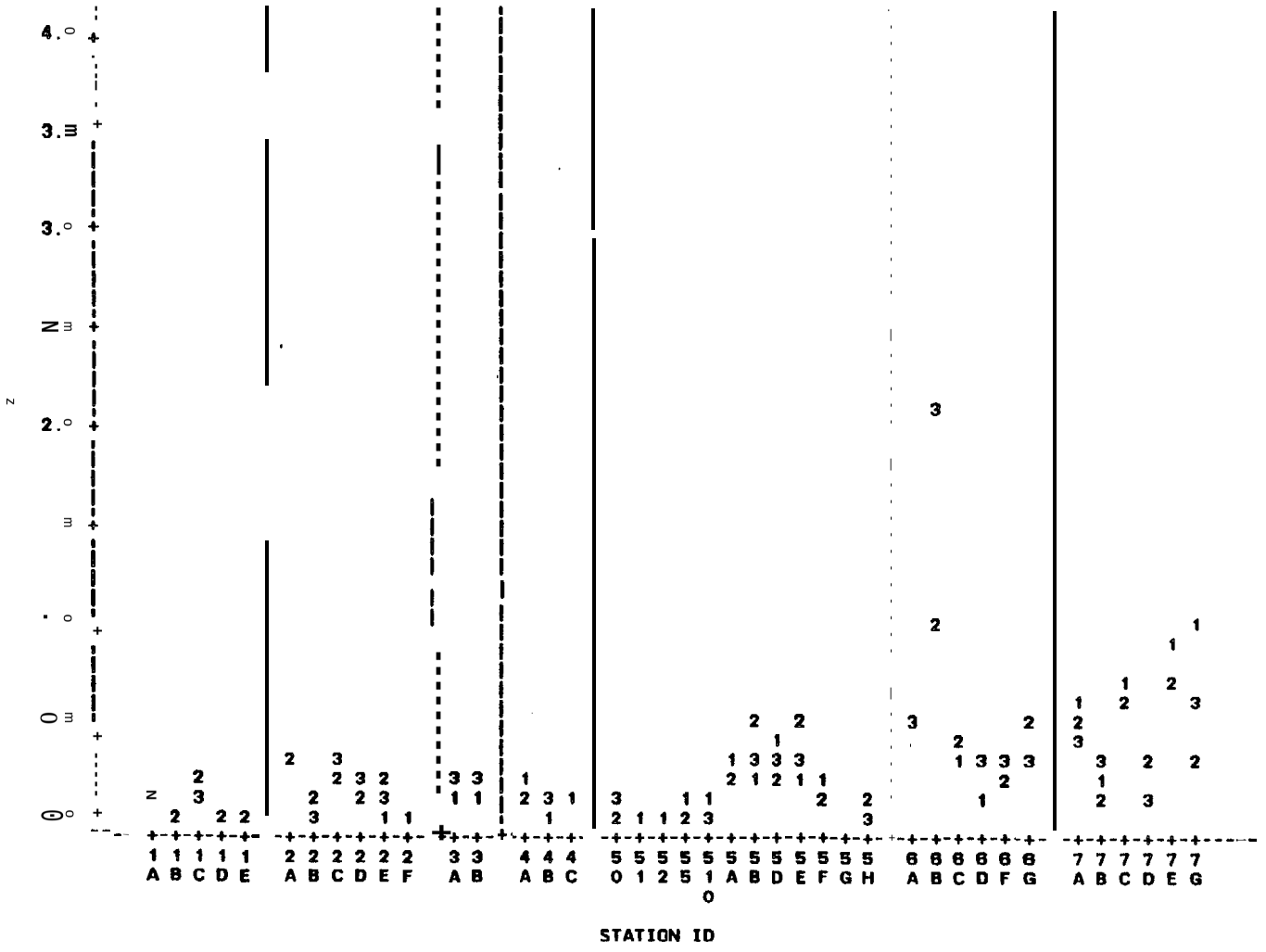


NOTE : 23 00S **HIDDEN**

BEAUFORT SEA MONITORING PROGRAM
PLOT OF YEARLY GEOMETRIC MEANS FOR MARINE STATIONS

TYPE OF SEDIMENT: BULK

PLOT OF N*STATID SYMBOL IS VALUE OF YEAR

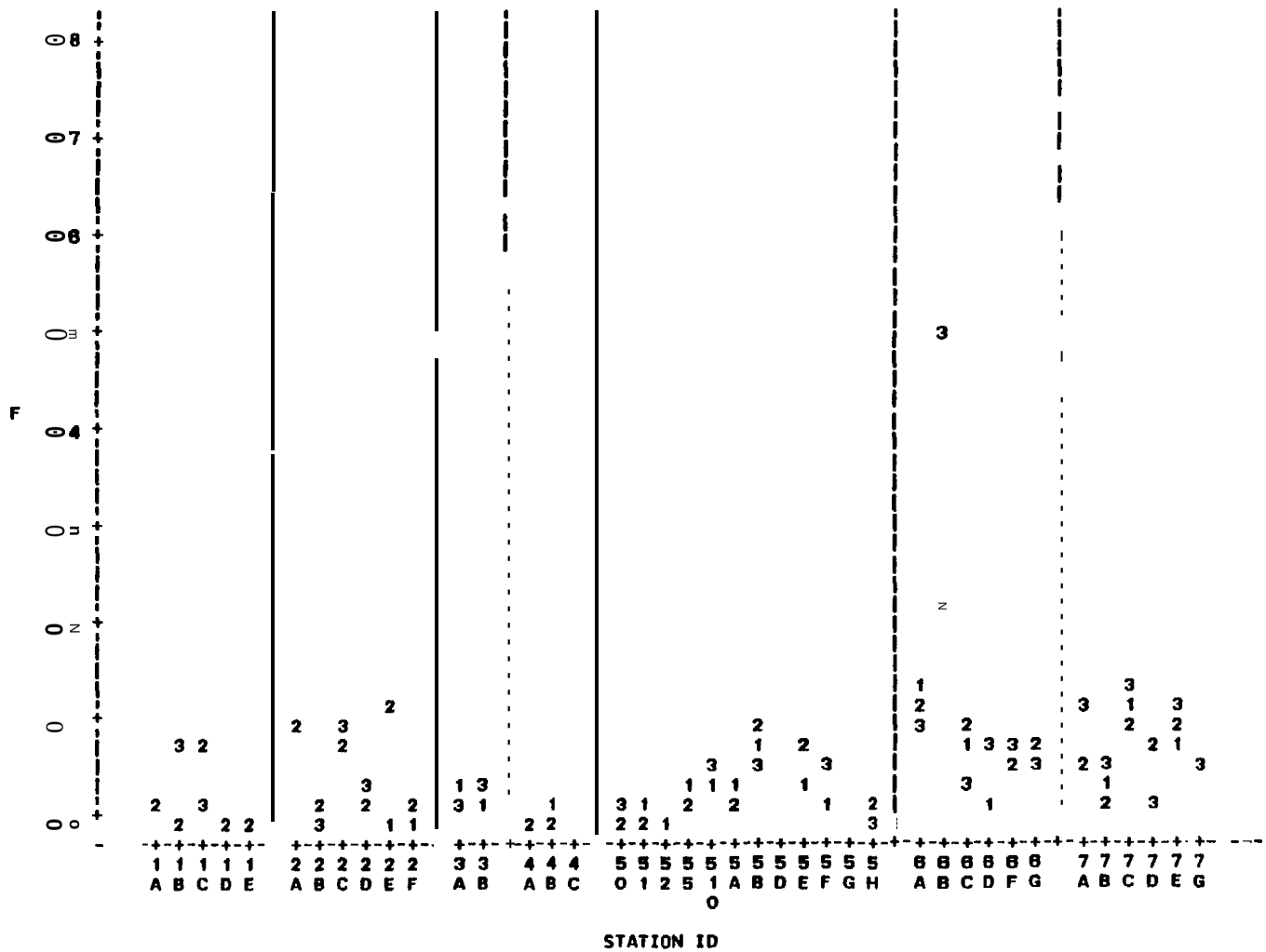


NOTE: 26 OBS HIDDEN

BEAUFORT SEA MONITORING PROGRAM
PLOT OF YEARLY GEOMETRIC MEANS FOR MARINE STATIONS

TYPE SEDIMENT: BULK

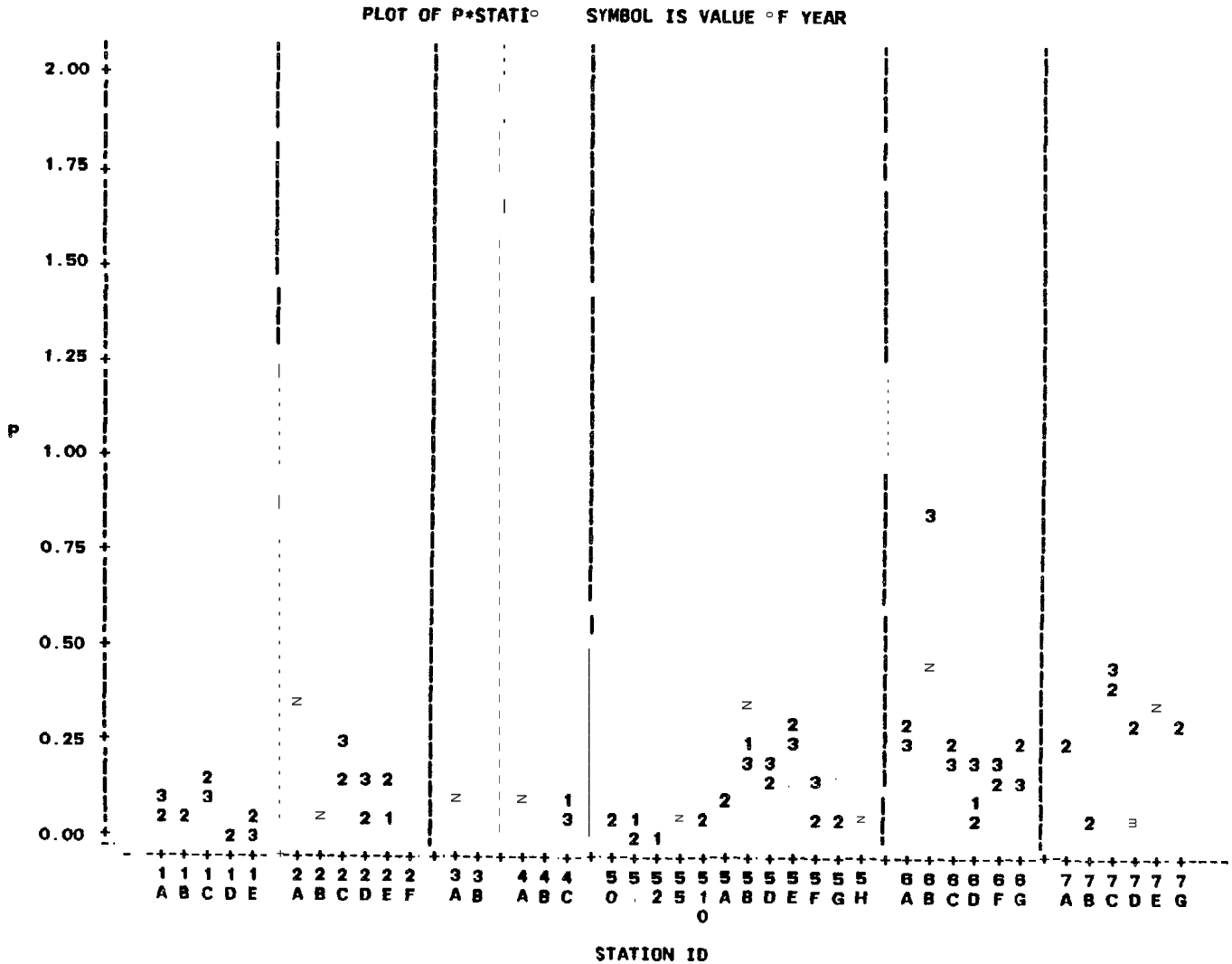
PLOT OF F*STATID SYMBOL IS VALUE YEAR



NOTE: 24 OBS HIDDEN

BEAUFORT SEA MONITORING PROGRAM
PLOT OF YEARLY GEOMETRIC MEANS FOR MARINE STATIONS

TYPE OF SEDIMENT: BULK

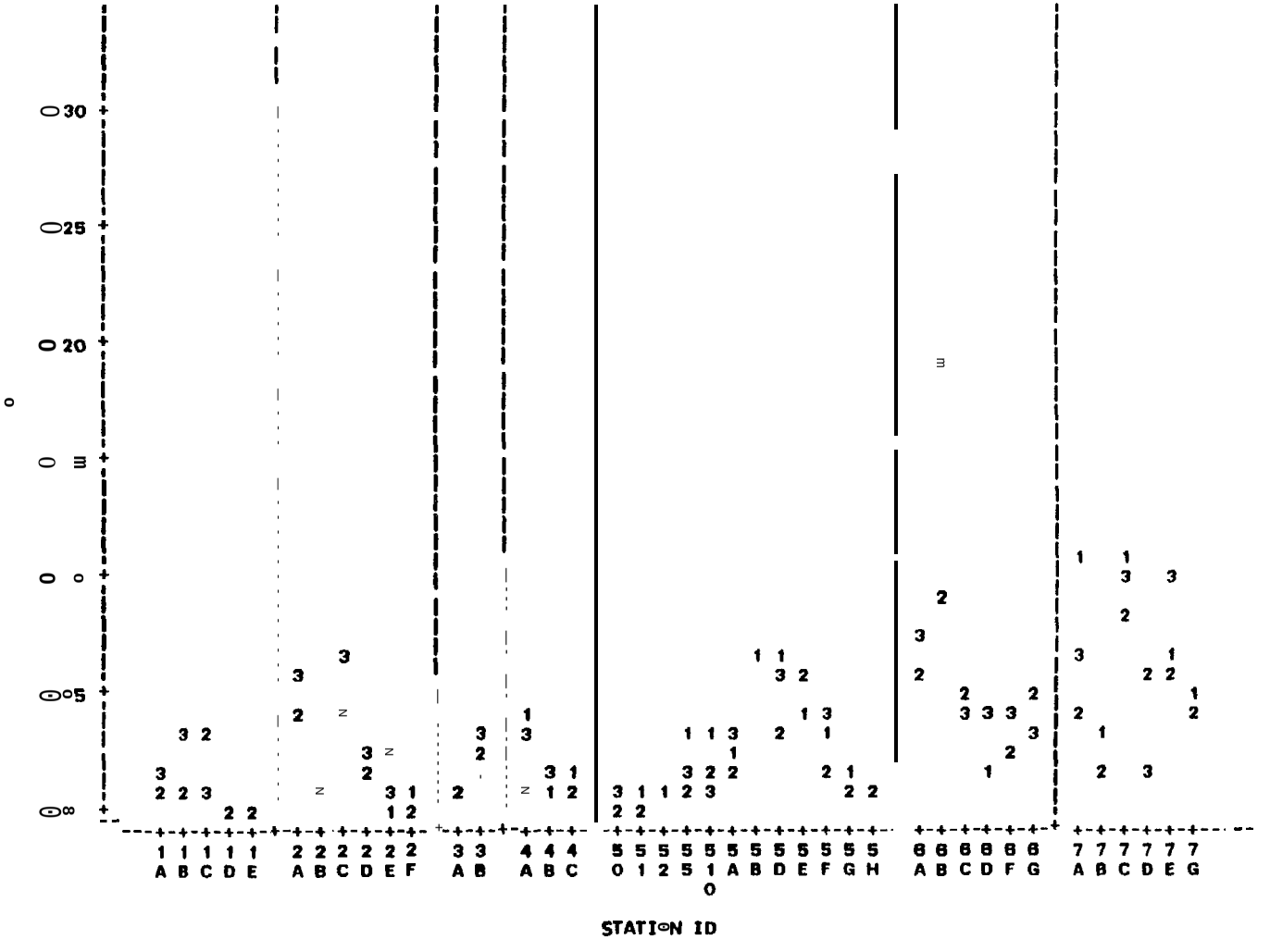


NOTE: 25 OBS HIDDEN

BEAUFORT SEA MONITORING PROGRAM
PLOT OF YEARLY GEOMETRIC MEANS FOR MARINE STATIONS

TYPE OF SEDIMENT: SILT

PLOT OF D*STATID SYMBOL IS VALUE OF YEAR

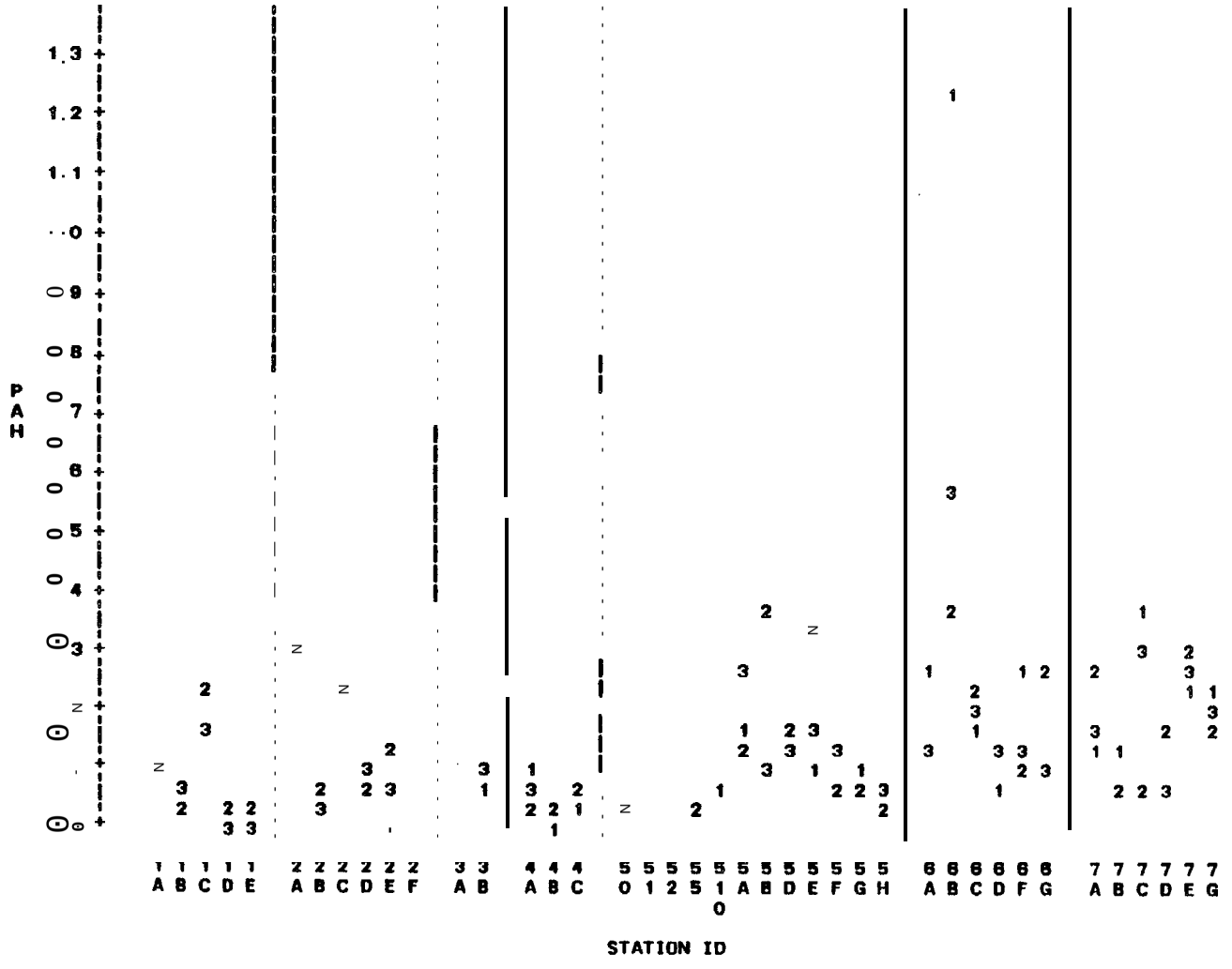


NOTE: 6 OBS HIDDEN

BEAUFORT SEA MONITORING PROGRAM
PLOT OF YEARLY GEOMETRIC MEANS FOR MARINE STATIONS

TYPE OF SEDIMENT: BULK

PLOT OF PAH*STATID SYMBOL IS VALUE OF YEAR

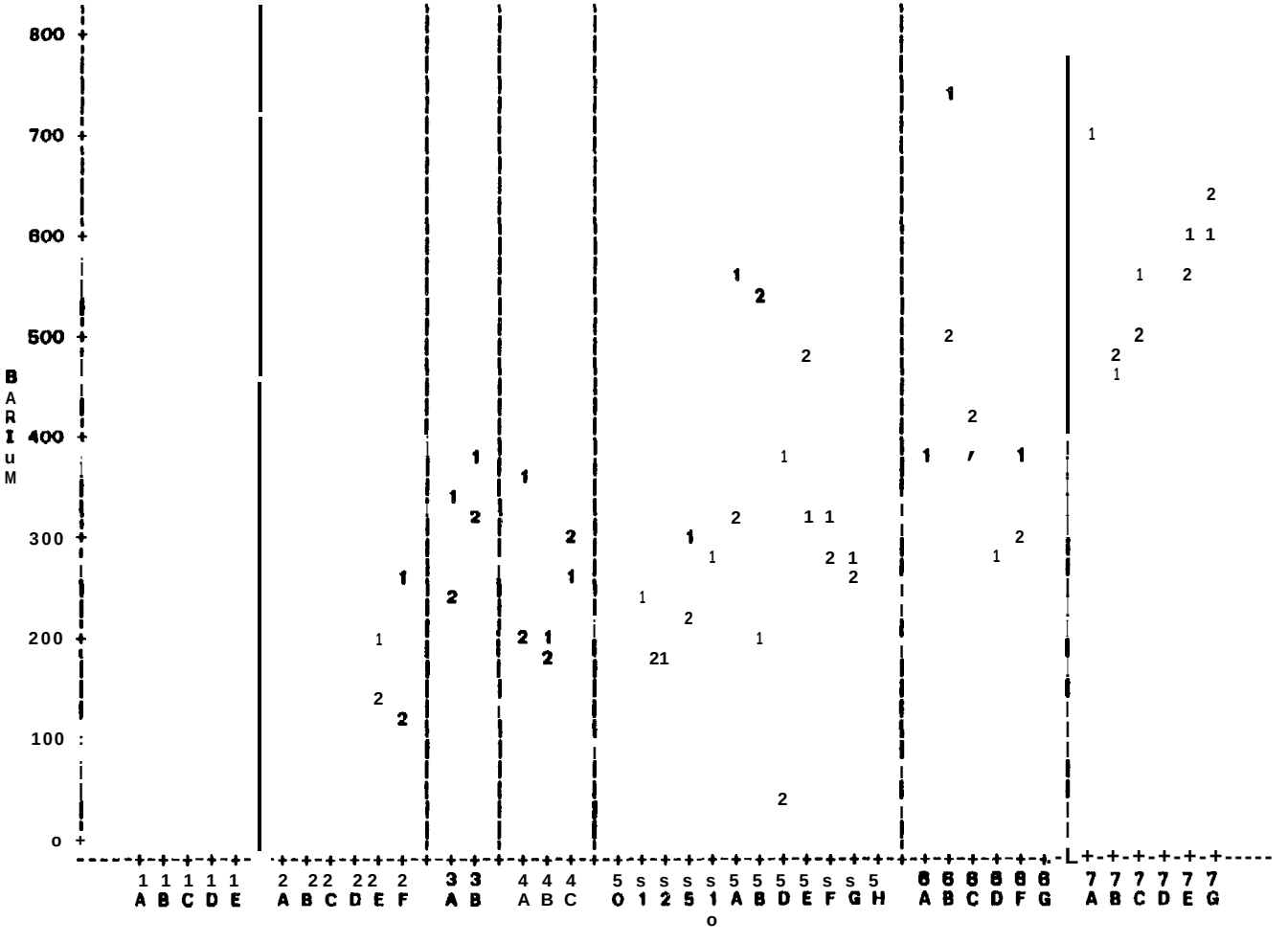


NOTE: 20 OBS HIDDEN

BEAUFORT SEA MONITORING PROGRAM
PLOT OF YEARLY GEOMETRIC MEANS FOR MARINE STATIONS

TYPE OF SEDIMENT: BULK

PLOT OF BA*STATID SYMBOL IS VALUE OF YEAR

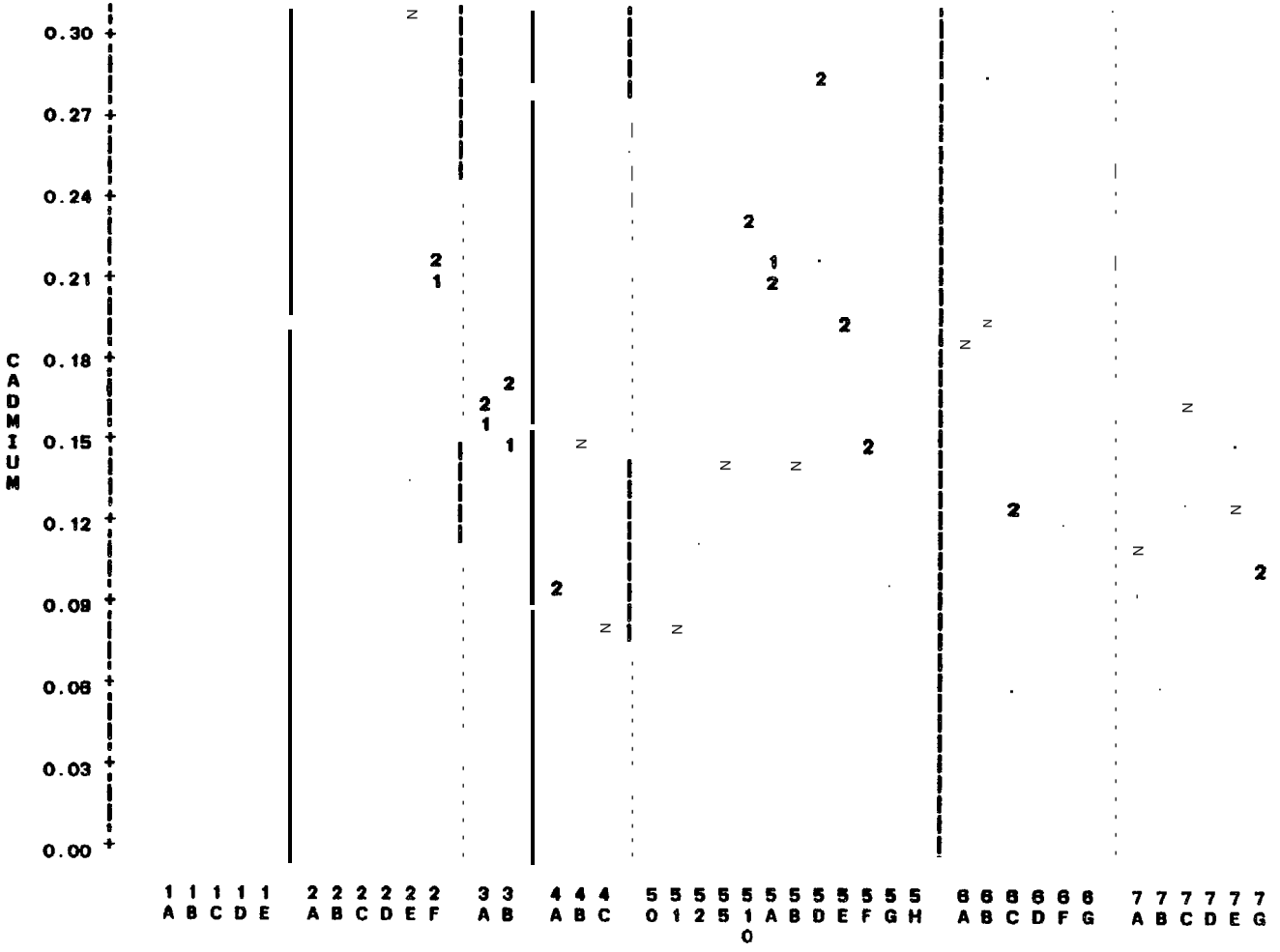


NOTE : 52 OBS HAD MISSING VALUES OR WERE OUT OF RANGE 3 OBS HIDDEN

BEAUFORT SEA MONITORING PROGRAM
PLOT OF YEARLY GEOMETRIC MEANS FOR MARINE STATIONS

TYPE SEDIMENT: BULK

PLOT OF CD*STATID SYMBOL IS VALUE OF YEAR

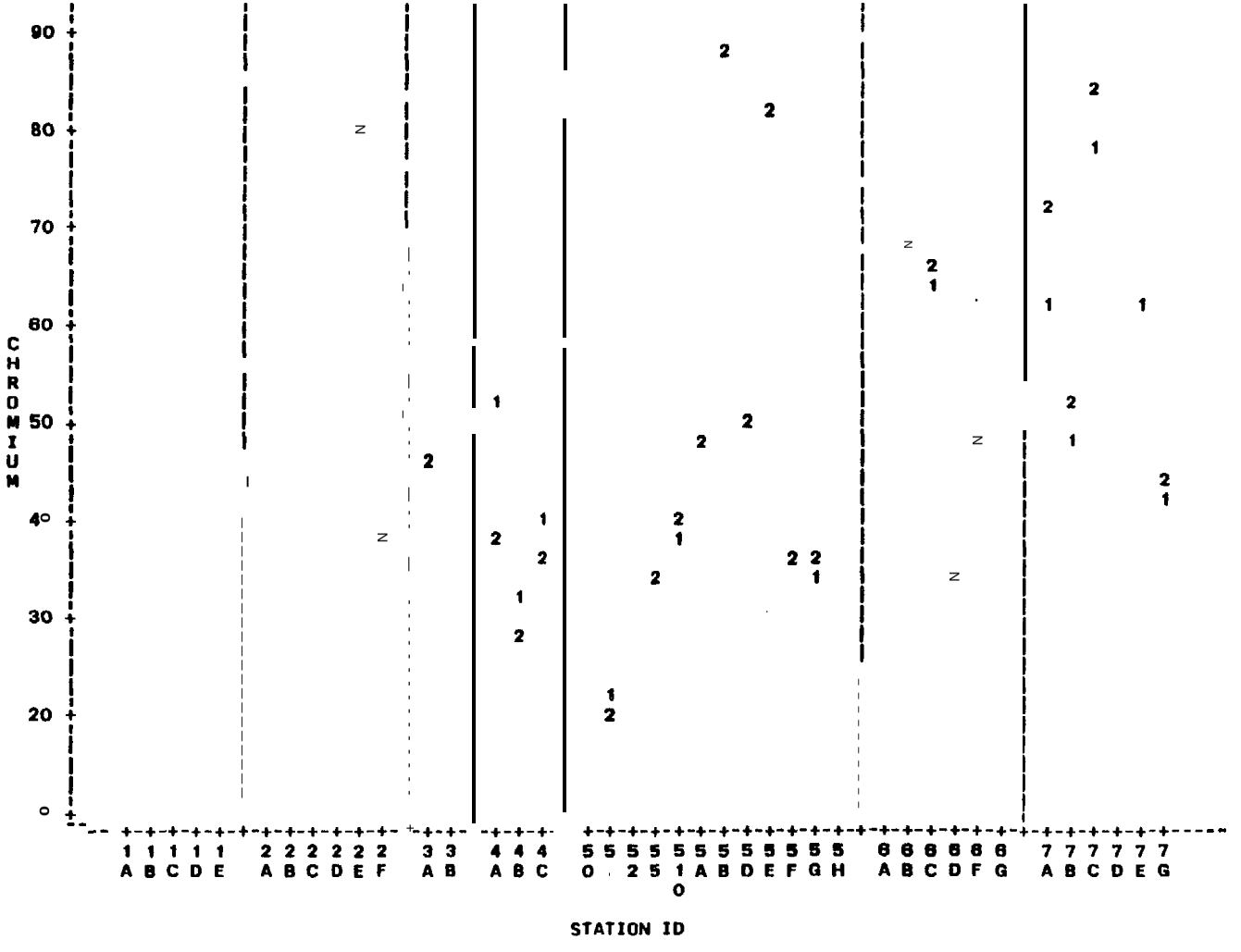


NO : 52 OBS HAD MISSING VALUES OR WERE OUT OF RANGE 4 OBS HIDDEN

BEAUFORT SEA MONITORING PROGRAM
PLOT OF YEARLY GEOMETRIC MEANS FOR MARINE STATIONS

TYPE OF SEDIMENT: BULK

PLOT OF CR*STATID SYMBOL IS VALUE OF YEAR

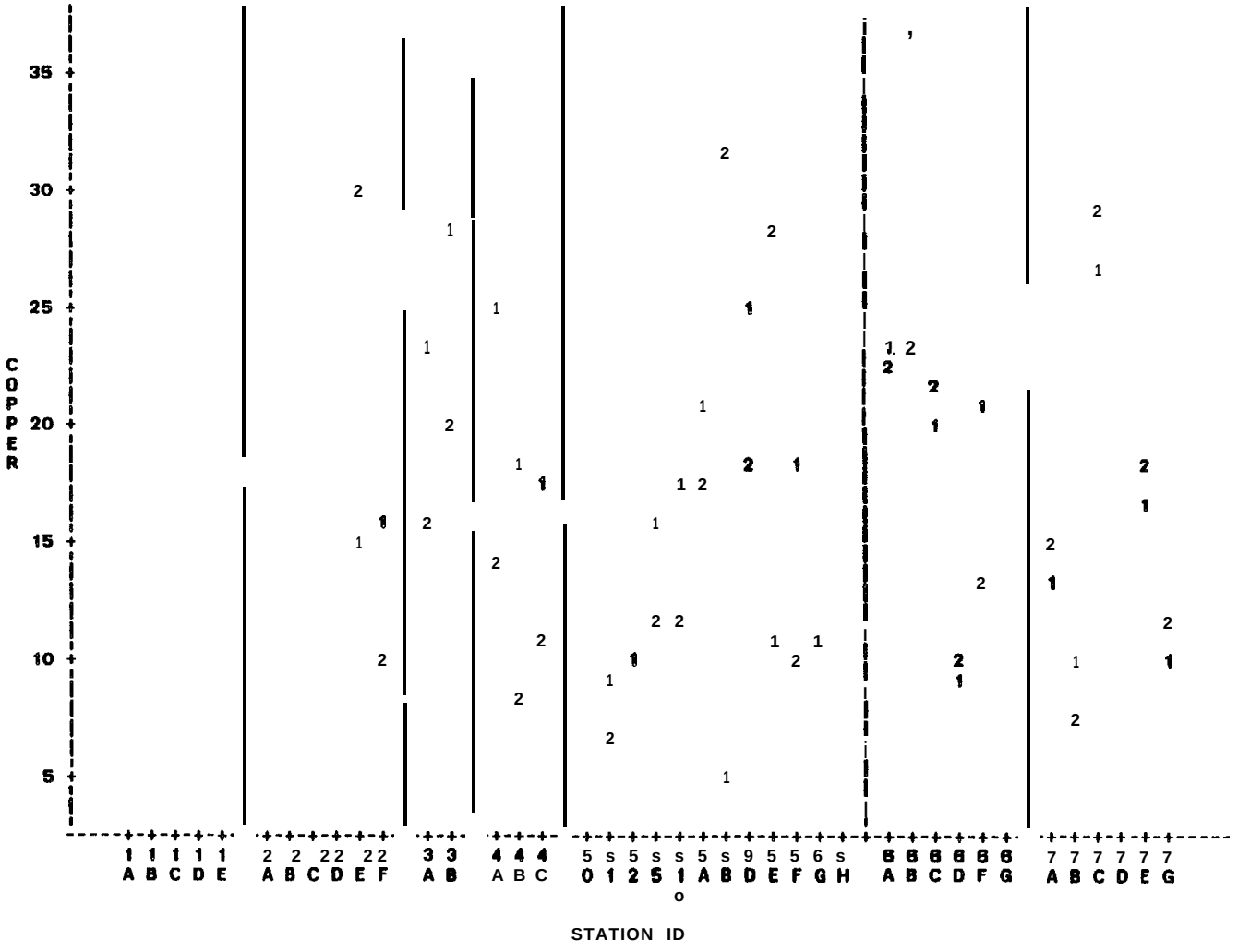


NOTE: 52 OBS HAD MISSING VALUES OR WERE OUT OF RANGE 3 OBS HIDDEN

BEAUFORT SEA MONITORING PROGRAM
PLOT OF YEARLY GEOMETRIC MEANS FOR MARINE STATIONS

TVPE OF SEDIMENT: BULK

PLOT OF CU*STATID SYMBOL IS VALUE OF VEAR

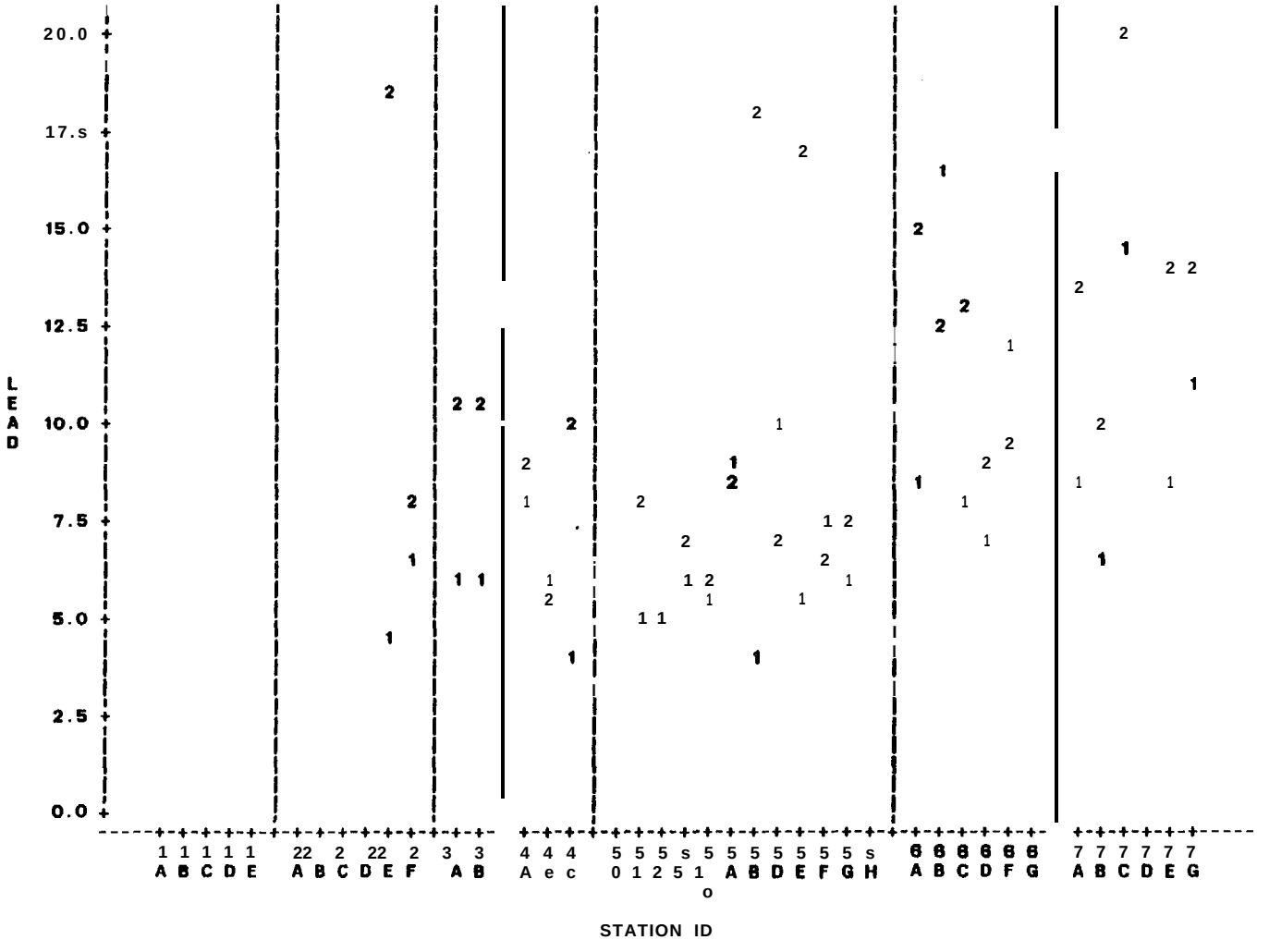


NOTE: 52 OBS HAD MISSING VALUES OR WERE OUT OF RANGE 1 OBS HIDDEN

BEAUFORT SEA MONITORING PROGRAM
PLOT OF YEARLY GEOMETRIC MEANS FOR MARINE STATIONS

TYPE OF SEDIMENT: BULK

PLOT OF PB*STATID SYMBOL IS VALUE OF YEAR

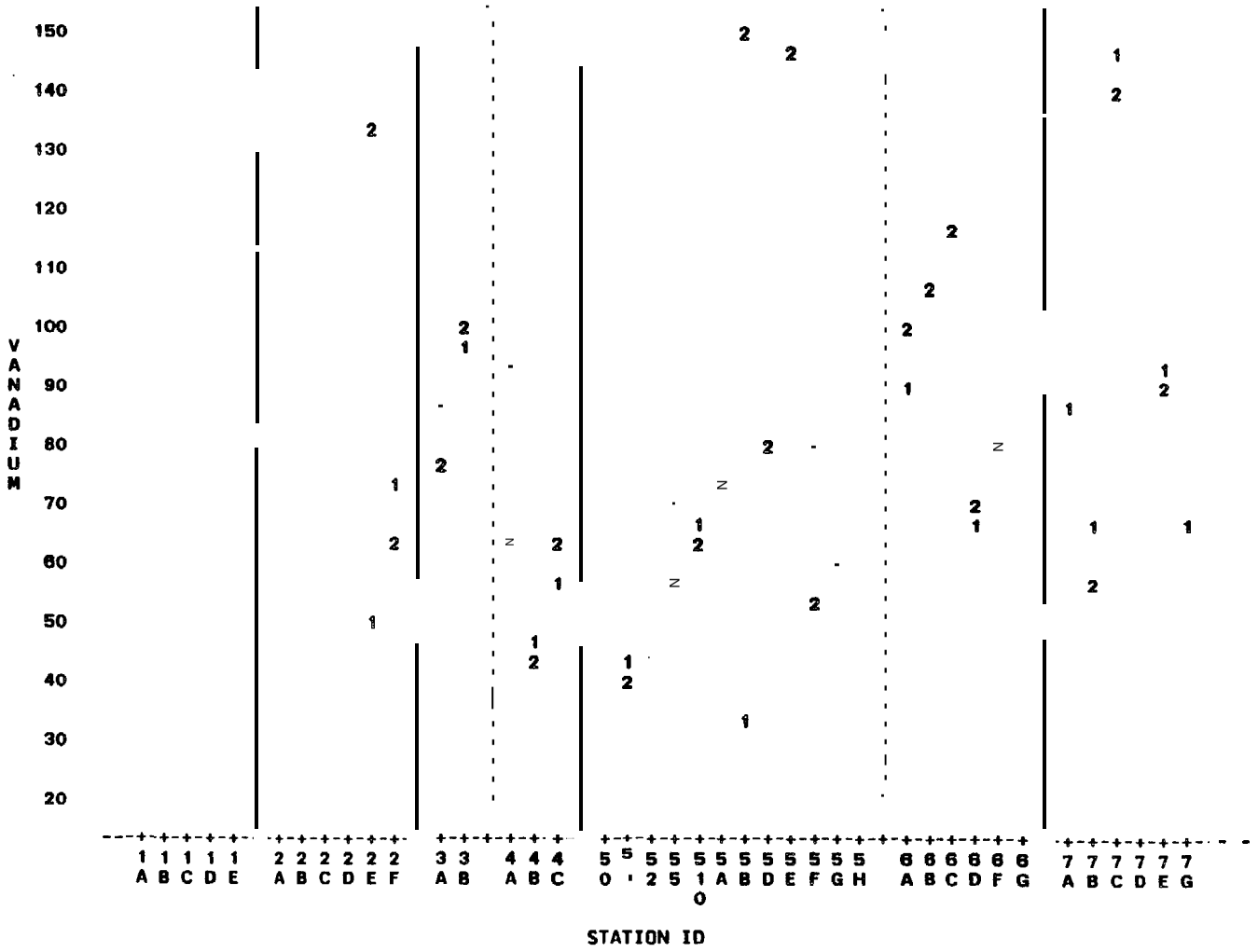


NOTE: 52 OBS HAD MISSING VALUES OR WERE OUT OF RANGE

BEAUFORT SEA MONITORING PROGRAM
PLOT OF YEARLY GEOMETRIC MEANS FOR MARINE STATIONS

TYPE OF SEDIMENT: BULK

PLOT V*STATID SYMBOL IS VALUE YEAR

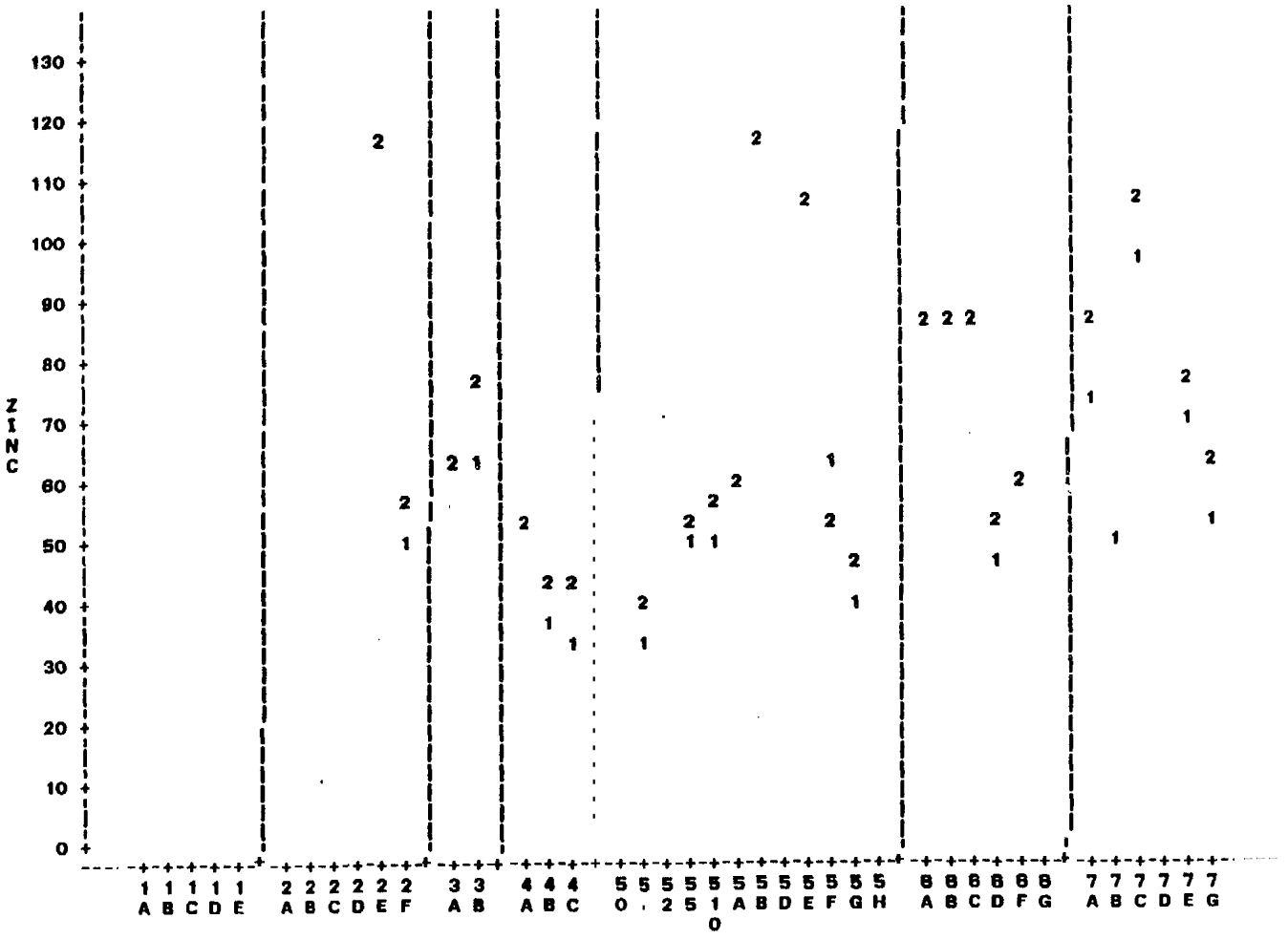


NOTE: 52 OBS HAD MISSING VALUES OR WERE OUT OF RANGE 3 OBS HIDDEN

BEAUFORT SEA MONITORING PROGRAM
PLOT OF YEARLY GEOMETRIC MEANS FOR MARINE STATIONS

TYPE OF SEDIMENT: BULK

PLOT OF ZN*STATID SYMBOL IS VALUE OF YEAR

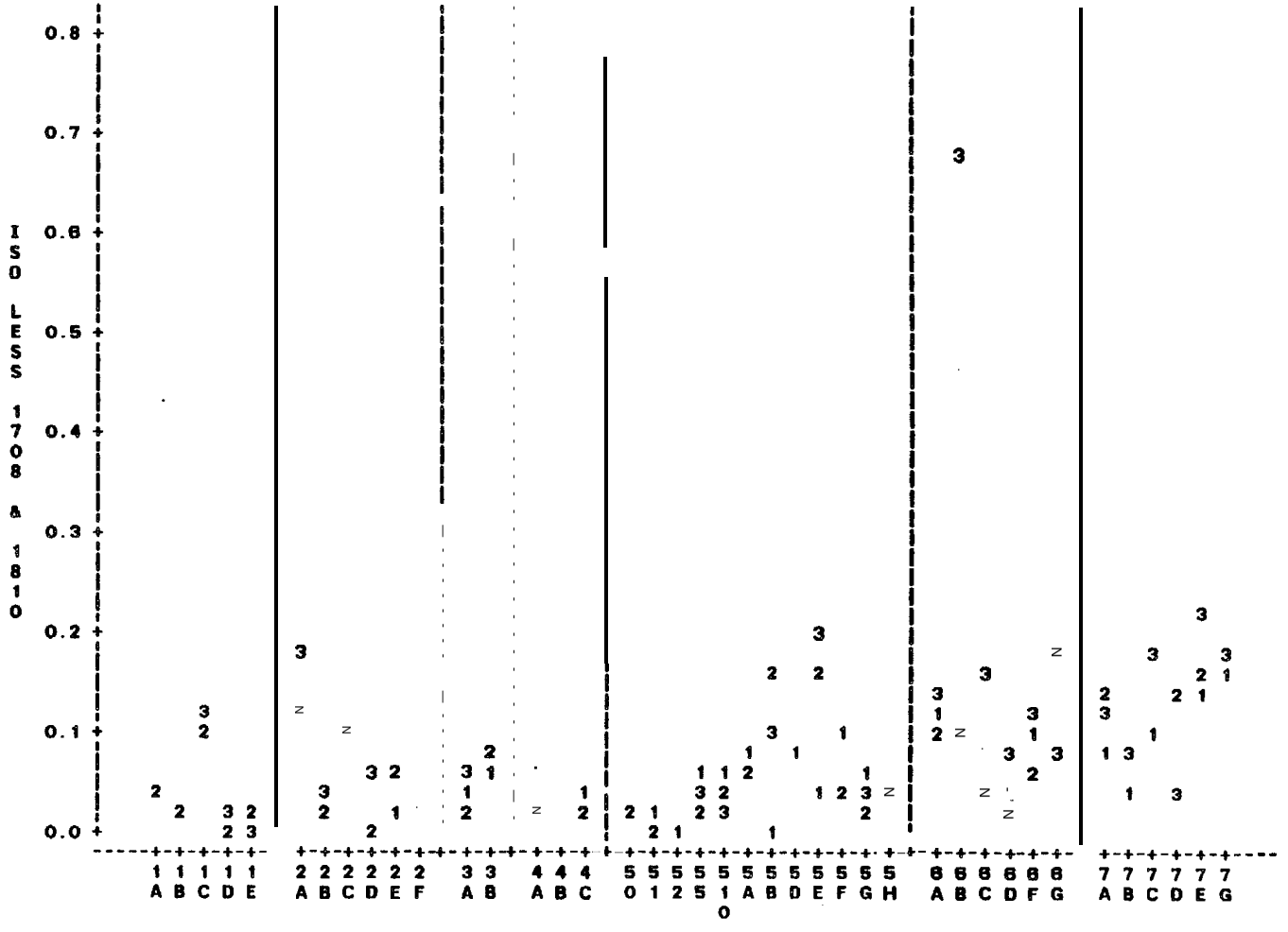


NOTE: 52 OBS HAD MISSING VALUES OR WERE OUT OF RANGE 2 OBS HIDDEN

BEAUFORT SEA MONITORING PROGRAM
PLOT OF YEARLY GEOMETRIC MEANS FOR MARINE STATIONS

TYPE OF SEDIMENT: BULK

PLOT OF ISODIFF*STATID SYMBOL IS VALUE YEAR



NOTE: 21 OBS HIDDEN

SECTION 3

GEOMETRIC MEAN CONCENTRATIONS OF EACH ANALYTE AMONG ALL REGIONS IN THE STUDY AREA

BEAUFORT SEA MONITORING PROGRAM-- DESCRIPTIVE STATISTICS
FOR CHEMICAL CONCENTRATIONS BY REGIoN

DATA FOR HYDROCARBONS AND AUX VARS ARE FROM BULK SEDIMENTS, YEARS 1,2,3
OATA FOR METALS ARE FROM FINE SEDIMENTS, YEARS 2,3

REGION=CAMDEN BAY AREA

TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 95% CONF. LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
N	3	0.05	1.46	0,02	0.11
F	3	0.014	1.49	0.006	0.030
P	3	0.08	1.16	0.06	0.08
D	3	0.008	1.31	0.005	0.014
PAH	3	0.04	1.s0	0.02	0.10
PHYT	3	0.014	1.4s	0.007	0.029
PRIS	3	0.029	1.38	0.016	0.052
LALK	3	0.43	1.18	0.31	0.00
TALK	3	2.42	1.s3	1.0s	5.54
TOT	3	7.s1	1.36	4.08	13.81
BA	2	318	1.22	214	473
co	2	0.18	1.20	0.11	0.24
CR	2	81	1.08	72	90
w	2	24.8	1.10	20.8	29.5
PB	2	15.5	1.09	13.0	18.3
v	2	114	1.04	10G	123
ZN	2	92	1.04	86	99
TOC	3	9.78	1.31	3.40	9.81
MUD	3	22.5	1.44	11.0	40.2
FFPI	3	75	1.04	70	81
ISO/ALK	3	0.411	1.05	0.371	o. 4s0
LALK/TAL	3	0.178	1.20	0.107	0.296
PRIS/PHY	3	2.0	1.10	1.7	2.4
N/P	3	0.8	1.26	0 . 5	1.3
P/D	3	8.2	1.11	8.0	10.1
PAH/TOC	3	0.008	1.14	0.008	0.010
TOT/TOC	3	1.3	1.18	1.0	1.9
BA/CR	2	3.9	1.29	2.4	6.s
BA/V	2	2.8	1.18	2.0	3.8

BEAUFORT SEA MONITORING PROGRAM-- DESCRIPTIVE STATISTICS
FOR CHEMICAL CONCENTRATIONS BY REGION

DATA FOR HYDROCARBONS AND AUX VARS ARE FRON BULK SEDIMENTS, YEARS 1,2,3
DATA FOR METALS ARE FROM FINE SEDIMENTS, YEARS 2,3

REGION=FOGGY ISLAND BAY AREA

TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STO ERR OF GEOM. MEAN	LOWER 95% CONF. LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
N	3	0.09	1.08	0.08	0.10
F	3	0.019	1.17	0.014	0.026
P	3	0.09	1.14	0.07	0.11
D	3	0.014	1.31	0.000	0.024
PAN	3	0.0s	1.0s	0.02	0.07
PHYT	3	0.016	1.04	0.015	0.017
PRIS	3	0.034	1.11	0. 02B	0.041
LALK	3	0.50	1.06	0.45	0.57
TALK	3	2.73	1.06	2.44	3.05
TOT	3	8.19	1.04	7.02	8.81
9A	2	330	1.04	30s	358
CO	2	0. 19	1.04	0.17	0.20
CR	2	75	1.07	05	85
CU	2	20.8	1.03	19.5	22.2
PB	2	11.2	1.17	B.2	15.3
v	2	113	1.02	110	117
ZN	2	87	1.01	86	89
TOC	3	6.50	1.21	4.49	9.42
MUD	3	21.2	1.08	18.2	24.7
FFPI	3	77	4.03	73	81
ISO/ALK	3	0.425	$.02	0.411	0.441
LALK/TAL	3	0.184	1.11	0.151	0.225
PRIS/PHY	3	2.1	1.08	1.8	2.5
N/P	3	1.0	1.08	0.9	1.2
P/D	3	6.2	1.24	4.0	9.4
PAH/TOC	3	0.009	1.24	0.006	0.014
TOT/TOC	3	1.2	1.22	0.8	1.6
BA/CR	2	4.4	1.03	4.2	4.7
BA/V	2	2.9	1.02	2.8	3.1

BEAUFORT SEA MONITORING PROGRAM-- DESCRIPTIVE STATISTICS
FOR CHEMICAL CONCENTRATIONS BY REGION

DATA FOR HYDROCARBONS ANO AUX VARS ARE FROM BULK SEDIMENTS, YEARS 1,2.3
DATA FOR METALS ARE FROM FINE SEDIMENTS, YEARS 2,3

REGION=KUPARUK RIVER BAY AREA

TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 95% CONF LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
N	3	0.23	1.04	0.22	0.25
F	3	0.044	1.04	0.040	0.048
P	3	0.19	1.16	0.14	0.25
D	3	0.040	1.12	0.032	0.050
PAH	3	0.15	1.10	0.13	0.18
PHYT	3	0.033	1.28	0.020	0.053
PRIS	3	0.003	1.24	0.041	0.097
LALK	3	0.89	1.09	0.75	1.05
TALK	3	5.61	1.18	4.07	7.72
TOT	3	14.0s	1.53	0.13	32.20
BA	2	207	1.23	177	404
CD	2	0.19	1.11	0.15	0.23
CR	2	76	1.12	61	95
w	2	20.3	1.01	19.8	20.8
PB	2	10.1	1.08	8.6	11.7
v	2	112	1.04	103	121
ZN	2	90	1.03	85	95
TOC	3	0.00	1.05	8.70	10.72
MUD	3	40.1	1.24	20.2	61.4
FFPI	3	79	1.03	72	80
ISO/ALK	3	0.407	1.04	0.436	0.500
LALK/TAL	3	0.158	1.09	o. 13s	0.187
PRIS/PHY	3	1.9	1.17	1.4	2.6
N/P	3	1.2	1.14	0.9	1.6
P/D	3	4.7	1.14	3.7	0.1
PAH/TOC	3	0.017	1.17	0.013	0.023
TOT/TOC	3	1.6	1.37	0.9	2.8
BA/CR	2	3.5	1.10	2.9	4.2
BA/V	2	2.4	1.18	1.7	3.3

BEAUFORT SEA MONITORING PROGRAM-- DESCRIPTIVE STATESTICS
FOR CHEMICAL CONCENTRATIONS BY REGION

DATA FOR HYDROCARBONS AND AUX VARS ARE FROM BULK SEDIMENTS, YEARS 1,2,3
DATA FOR METALS ARE FROM FINE SEDIMENTS, YEARS 2,3

REGION=EAST HARRISON BAY AREA

TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 95% CONF LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
N	3	0.41	1.09	0.34	0.49
F	3	0.091	1.08	0.078	0.107
P	3	0.27	$.21	0.19	0.39
D	3	0.059	1.23	0.039	0.088
PAN	3	0.20	1.11	0.16	0.24
PHYT	3	0.043	1.25	0.020	0.067
PRIS	3	0.090	1.21	0.081	0.131
LALK	3	1.19	1.28	0.73	1.94
TALK	3	7.85	1.14	6.12	10.07
TOT	3	25.42	1.20	17.83	38.22
BA	2	315	1.01	309	320
CD	2	0.16	1.12	0.13	0.20
CR	2	90	1.12	72	113
CU	2	24.9	1.01	24.5	25.4
PB	2	13.1	1.09	11.0	15.5
v	2	130	1.02	125	130
ZN	2	100	1.02	95	104
TOC	3	9.18	1.04	8.43	9.99
MUD	3	44.7	1.10	30.8	54.3
FFPI	3	80	1.01	78	82
ISO/ALK	3	0.495	1.03	0.470	0.522
LALK/TAL	3	0.152	1.33	0.087	0.268
PRIS/PHY	3	2.1	1.07	1.8	2.4
N/P	3	1.5	1.14	1.2	2.0
P/D	3	4.s	1.04	4.3	5.0
PAH/TOC	3	0.021	1.12	0.017	0.026
TOT/TOC	3	2.6	1.19	1.9	3.7
BA/CR	2	3.5	1.11	2.8	4.3
BA/V	2	2.4	1.01	2.4	2.5

BEAUFORT SEA MONITORING PROGRAM-- DESCRIPTIVE STATISTICS
FOR CHEMICAL CONCENTRATIONS BY REGION

DATA FOR HYDROCARBONS AND AUX VARS ARE FROM BULK SEDIMENTS, YEARS 1,2,3
DATA FOR METALS ARE FROM FINE SEDIMENTS, YEARS 2.3

REGION=WEST HARRISON BAY AREA

TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 95% CONF LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
N	3	0.44	1.16	0.32	0.59
F	3	0.060	1.09	0.051	0.071
P	3	0.28	1.21	0.19	0.41
D	3	0.054	1.14	0.042	0.069
PAH	3	0.17	1.10	0.14	0.21
PHYT	3	0.040	1.11	0.033	0.050
PRIS	3	0.107	1.04	0.099	0. 116
LALK	3	1.14	1.09"	0.96	1.36
TALK	3	6.95	1.14	5.38	9.00
TOT	3	18.53	1.24	12.24	28.06
BA	2	518	1.23	344	779
CD	2	0.13	1.13	0.10	0.17
CR	2	112	1.25	72	173
CU	2	21.1	1.15	16.1	27.5
PB	2	11.8	1.11	9.6	14.4
v	2	110	1.11	95	141
ZN	2	93	1.10	77	113
TOC	3	10.10	1.17	7.43	13.73
MUD	3	37.5	1.05	34.0	41.3
FFPI	3	82	1.01	80	84
ISO/ALK	3	0.547	1.03	0.516	0.500
LALK/TAL	3	0.164	1.24	0.108	0.250
PRIS/PHY	3	2.7	1.08	2.3	3.1
N/P	3	1.6	1.09	1.3	1.8
P/D	3	5.3	1.13	4.2	6.8
PAH/TOC	3	0.017	1.16	0.013	0.023
TOT/TOC	3	1.8	1.47	0.8	3.8
BA/CR	2	4.6	1.54	2.0	10.8
BA/V	2	4.5	1.36	2.4	8 2

BEAUFORT SEA MONITORING PROGRAM-- DESCRIPTIVE STATISTICS
FOR CHEMICAL CONCENTRATIONS BY REGION

OATA FOR HYDROCARBONS AND AUX VARS ARE FROM BULK SEDIMENTS, YEARS 1,2,3
OATA FOR METALS ARE FROM FINE SEDIMENTS, YEARS 2,3

REGION=ENOICOTT FIELD

TVPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 95% CONF LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
N	3	0.0s	1.38	0.03	0.10
F	3	0.014	1.28	0.009	0.023
P	3	0.05	1.48	0.03	0.12
D	3	0.011	1.57	0.004	0. 026
PAN	3	0.04	1.32	0.03	0.08
PHVT	3	0.010	1.23	0.007	0.015
PRIS	3	0.023	1.29	0.014	0.037
LALK	3	0.34	1.24	0.22	0.s2
TALK	3	1.73	1.20	1.20	2.47
TOT	3	4.89	1.40	2.54	9.41
BA	2	290	1.09	243	348
co	2	0.23	1.09	0.19	0.27
CR	2	68	1.09	58	80
CU	2	18.0	1.04	10.7	19.4
PB	2	9.6	1.08	8.3	11.2
v	2	97	1.04	90	104
ZN	2	78	1.02	75	81
TOC	3	5.02	1.22	3.40	7.42
MUD	3	11.1	1.43	5.5	22.2
FFPI	3	74	1.03	70	79
ISO/ALK	3	0.408	1.09	0.342	0.485
LALK/TAL	3	0.198	1.04	0.184	0.212
PRIS/PHY	3	2.1	1.00	1.9	2.4
N/P	3	1.0	1.10	0.8	1.2
P/D	3	5.1	1.15	3.8	8.7
PAH/TOC	3	0.00$	1.05	0.008	0.009
TOT/TOC	3	0.9	1.09	0.8	1.1
BA/CR	2	4.3	1.01	4.2	4.3
BA/V	2	3.0	1.08	2.7	3.3

BEAUFORT SEA MONITORING PROGRAM-- GEOMETRIC MEANS
FOR CHEMICAL CONCENTRATIONS BY REGIoN AND YEAR

DATA FOR HYDROCARBONS AND AUX VARs ARE FRoN BULK SEDIMENTS, YEARS 1,2,3
DATA FOR METALS ARE FROM FINE SEDIMENTS, YEARS 2.3

REGION=CAMDEN BAY AREA

TYPE OF CONCENTRATION	GEOMETRIC MEAN YEAR 1	GEOMETRIC MEAN YEAR 2	GEOMETRIC MEAN YEAR 3
N	0.03	0.08	0.07
F	0.006	0.023	0.021
P	0.06	0.07	0.07
o	0.005	0.010 ,	0.012
Pan	0.03	0.08	0.05
PHYT	0.009	0.021	0.019
PRIS	0.022	0.037	0.041
LALK	0.36	0.58	0.4s
TALK	1.29	4.2S	3.14
TOT	5.06	9.75	10.74
BA		389	260
co		0.20	0.14
CR		70	85
a l		27.0	22.5
Pa		16.9	14.2
v		118	110
ZN		96	89
TOC	3.81	9.21	5.79
MUD	10.9	3s.s	29.5
FFPI			75
ISO/ALK	0.4::	0.3::	0.400
LALK/TAL	0.283	0.132	0.144
PRIS/PHY	2.s	1.7	2.0
N/P	0.5	1.1	1.0
P/D	11.9	7.7	6.8
PAH/TOC	0.009	0.009	0.009
TOT/TOC	1.1	1.1	1.9
BA/CR		5.1	3.1
BA/V		3.3	2.4

BEAUFORT SEA MONITORING PROGRAM--GEOMETRIC MEANS
FOR CHEMICAL CONCENTRATIONS BY REGION AND YEAR

DATA FOR HYDROCARBONS AND AUX VARS ARE FRON BULK SEDIMENTS, YEARS 1,2,3
DATA FOR METALS ARE FROM FINE SEDIMENTS, YEARS 2,3

REGION=FOGGY ISLAND BAY AREA

TYPE OF CONCENTRATION	GEOMETRIC MEAN YEAR 1	GEOMETRIC MEAN YEAR 2	GEOMETRIC MEAN YEAR 3
N	0.13	0.08	0.09
F	0.030	0.015	0.022
P	0.15	0.08	0.08
D	0.02s	0.008	0.017
PAN	0.08	0.06	0.07
PHYT	0.018	0.015	0.017
PRIS	0.042	0.028	0.039
LALK	0.63	0.s4	0.44
TALK	3.24	2.8S	2.90
TOT	11.18	7.71	8.15
BA		317	344
co		0.18	0.19
CR		70	80
w		21.8	20.1
PB		13.1	9.5
v		111	115
ZN		88	87
TOC	5.47	0.48	5.31
MUD	22.3	18.2	23.5
FFPI	81	7s	74
ISO/ALK	0. 435	0.418	0.418
LALK/TAL	0.195	0.187	0. 153
PRIS/PHY	2.3	1.8	2.3
N/P	0.9	1.0	1.2
P/D	5.8	9.3	4.5
PAH/TOC	0.010	0.008	0.013
TOT/TOC	1.5	0.8	1.5
BA/CR		4.6	4.3
BA/V		2.8	3.0

BEAUFORT SEA MONITORING PROGRAM-- GEOMETRIC MEANS
FOR CHEMICAL CONCENTRATIONS BY REGION AND YEAR

DATA FOR HYDROCARBONS ANO AUX VARS ARE FROM BULK SEDIMENTS, YEARS 1,2,3
DATA FOR METALS ARE FROM FINE SEDIMENTS, YEARS 2,3

REGION=KUPARUK RIVER BAY AREA

TYPE OF CONCENTRATION	GEOMETRIC MEAN YEAR 1	GEOMETRIC MEAN YEAR 2	GEOMETRIC MEAN YEAR 3
N	0.29	0.22	0.24
F	0.045	0.041	0.048
P	0.32	0.18	0.17
D	0.055	0.032	0.040
PAN	0.19	0.17	0.13
PHYT	0.020	0.043	0.042
PRIS	0.055	0.090	0.094
LALK	0.90	0.94	0.99
TALK	6.47	5.00	7.20
TOT	14.26	19.74	23.20
BA		217	330
CD		0.21	0.17
CR		68	85
w		20.0	20.5
PB		10.0	9.3
V		107	110
ZN		88	92
TDC	9.00	10.71	9.34
MUD	2S.3	50.1	49.6
FFPI		72	79
ISO/ALK	0.4::	0.500	0.453
LALK/TAL	0.139	0.161	0.136
PRIS/PHY	2.1	1.4	2.3
N/P	0.9	1.4	1.4
P/D	5.8	5.0	3.7
PAN/Toe	0.013	0.016	0.014
TOT/TOC	1.0	1.8	2.5
BA/CR		3.2	3.9
BA/V		2.0	2.0

BEAUFORT SEA MONITORING PROGRAM-- GEOMETRIC MEANS
FOR CHEMICAL CONCENTRATIONS BY REG1ON ANO YEAR

DATA FOR HYDROCARBONS AND AUX VARS ARE FROM BULK SEDIMENTS, YEARS 1,2,3
DATA FOR METALS ARE FROM FINE SEDIMENTS, YEARS 2,3

REGION=EAST HARRISON BAY AREA

TYPE OF CONCENTRATION	GEOMETRIC MEAN YEAR 1	GEOMETRIC MEAN YEAR 2	GEOMETRIC MEAN YEAR 3
N	0.22	0.34	0.44"
F	0. 04s	0.078	0.097
P	0.21	0.20	0.25
D	0.048	0.042	0.058
PAN	0. 13	0.19	0.17
PHYT	0.023	0.032	0.067
PRIS	0.058	0.055	0.126
LALK	1.30	0.7s	1.28
TALK	3.93	7.25	10.07
TOT	13.41	20.84	3e. 46
BA		312	317
CD		0.18	0.14
CR		80	101
CU		24.7	25.2
PB		14.2	12.0
v		127	133
ZN		102	97
TOC	8.S0	9.87	9.17
MUD	38.3	43.3	53.8
FFPI	79		81
ISO/ALK	0.472	0.4::	0.522
LALK/TAL	0.331	0.103	0.127
PRIS/PHY	2.4	2.0	1.9
N/P	1.1	1.7	1.8
P/D	4.8	4.9	4.3
PAH/TOC	0.021	0.019	0.019
TOT/TOC	2.3	2.1	4.0
BA/CR		3.9	3.1
BA/V		2.4	2.4

BEAUFORT SEA MONITORING PROGRAM-- GEOMETRIC MEANS
FOR CHEMICAL CONCENTRATIONS BY REGION AND YEAR

DATA FOR HYDROCARBONS AND AUX VARS ARE FROM BULK SEDIMENTS, YEARS 1,2,3
DATA FOR METALS ARE FROM FINE SEDIMENTS, YEARS 2,3

REGION=WEST HARRISON BAY AREA

TYPE OF CONCENTRATION	GEOMETRIC MEAN YEAR 1	GEOMETRIC MEAN YEAR 2	GEOMETRIC MEAN VEAR 3
N	0.s8	0.38	0.40
F	0.087	0.054	0.070
P	0.42	0.24	0.22
D	0.005	0.044	0.052
PAN	0.17	0.15	0.17
PHYT	0.031	0.043	0. 04'?
PRIS	0.085	0.114	0.109
LALK	1.28	1.13	0.98
TALK	5.28	7.94	7.92
TOT	18.07	22.55	23.25
BA		637	420
CD		0.15	0.12
CR		88	140
CU		18.6	24.1
PB		13.1	10.B
v		10s	128
ZN		88	103
ToC	12.80	11.21	7.51
MUD	34.4	37.8	40.8
FFPI	85	81	81
ISO/ALK	0. 562	0.528	0.536
LALK/TAL	0.244	0.142	O. 124
PRIS/PHY	2.8	2.7	2.3
N/P	1.4	1.s	1.8
P/D	5.8	5.4	4.2
PAH/TOC	0.014	0.014	0.023
TOT/TOC	1.3	2.2	3.1
BA/CR		7.2	3.0
BA/V		8.1	3.3

BEAUFORT SEA MONITORING PROGRAM-- GEOMETRIC MEANS
FOR CHEMICAL CONCENTRATIONS BY REGION AND YEAR

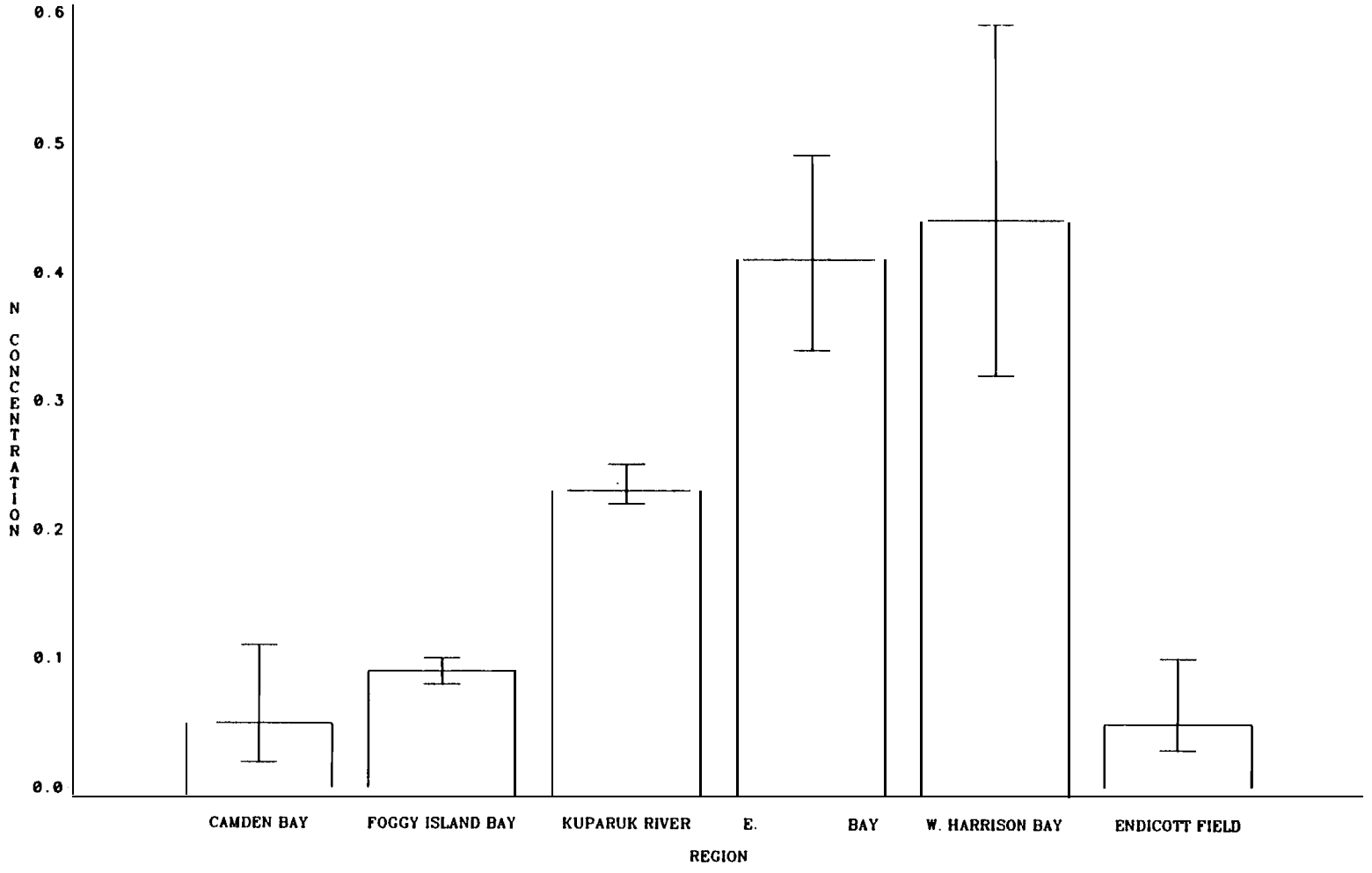
DATA FOR Hydrocarbons ANO AU% VARS ARE FROM BULK SEDIMENTS, YEARS 1,2,3
DATA FOR METALS ARE FROM FINE SEDIMENTS, YEARS 2,3

REGION=ENDICOTT FIELD

TYPE OF CONCENTRATION	GEOMETRIC MEAN YEAR 1	GEOMETRIC MEAN YEAR 2	GEOMETRIC MEAN YEAR 3
N	0.09	0.03	0.05
F	0.023	0.012	0.012
P	0.11	0.03	0.05
D	0.023	0.005	0.012
PAH	0.08	0.03	0.03
PHYT	0.015	0.008	0.008
PRIS	0.038	0.015	0.020
LALK	0.52	0.29	0.26
TALK	2.49	1.46	1.41
TOT	9.53	3.43	3.S8
BA		265	321
CD		0.25	0.21
CR		92	74
CU		18.7	17.6
PB		10.4	9.1
v		93	101
ZN		77	79
TOC	7.47	4.21	4.02
MUD	21.0	6.7	9.3
FFPI	76	71	77
ISO/ALK	0.486	0.382	0. 3e4
LALK/TAL	0.209	0.200	O. 185
PRIS/PHY	2.4	1.9	2.1
N/P	0.8	1.0	1.1
P/D	5.0	6.5	4.0
PAH/TOC	0.009	0. 008	0.009
TOT/TOC	1.1	0.8	0.9
BA/CR		4.2	4.3
BA/V		2.8	3.2

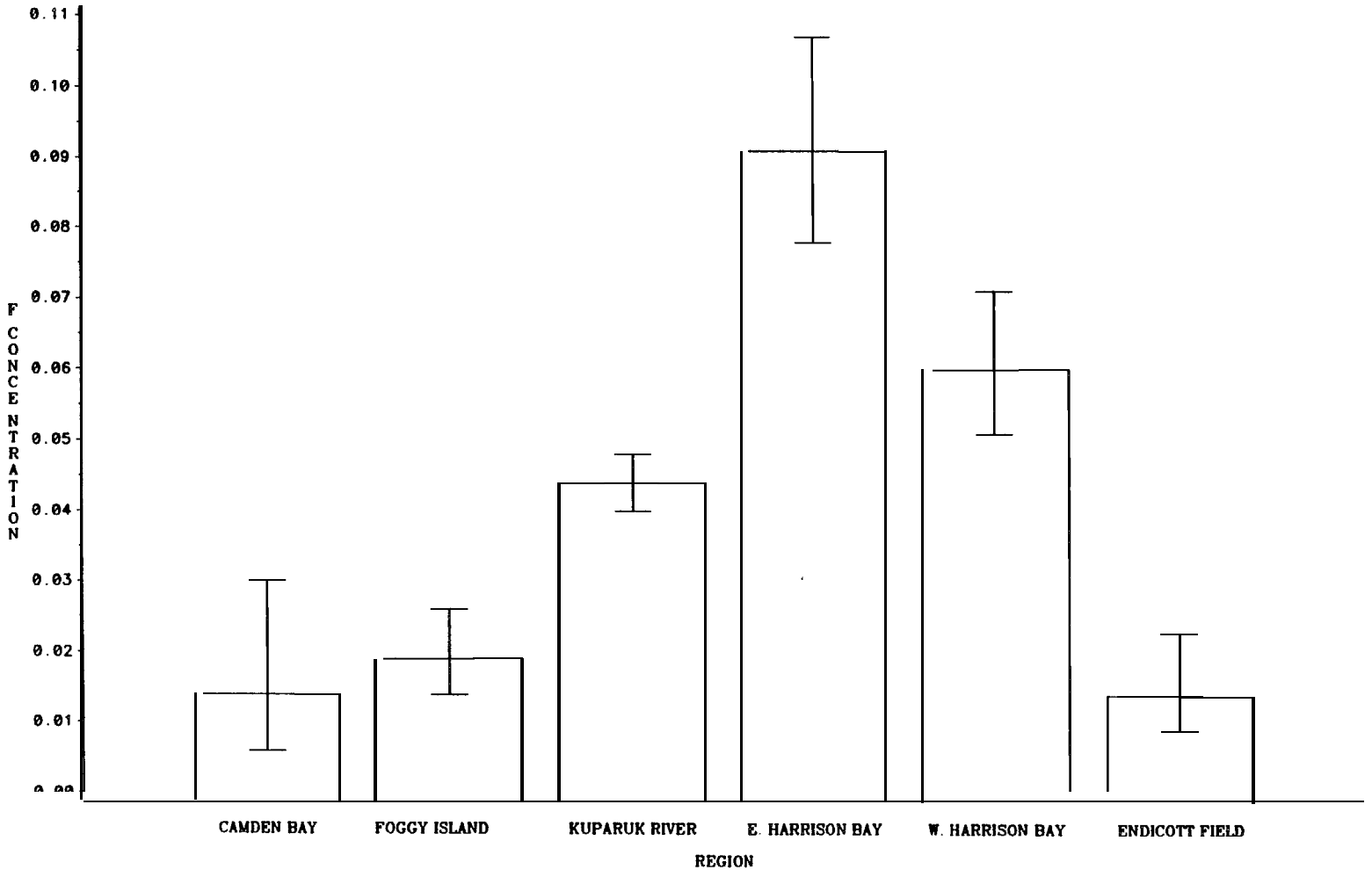
BEAUFORT SEA MONITORING PROGRAM-- SUMMARY STATISTICS BY REGION

BAR HEIGHTS ARE GEOMETRIC MEAN N CONCENTRATIONS
BRACKETS REPRESENT 95% CONFIDENCE LIMITS



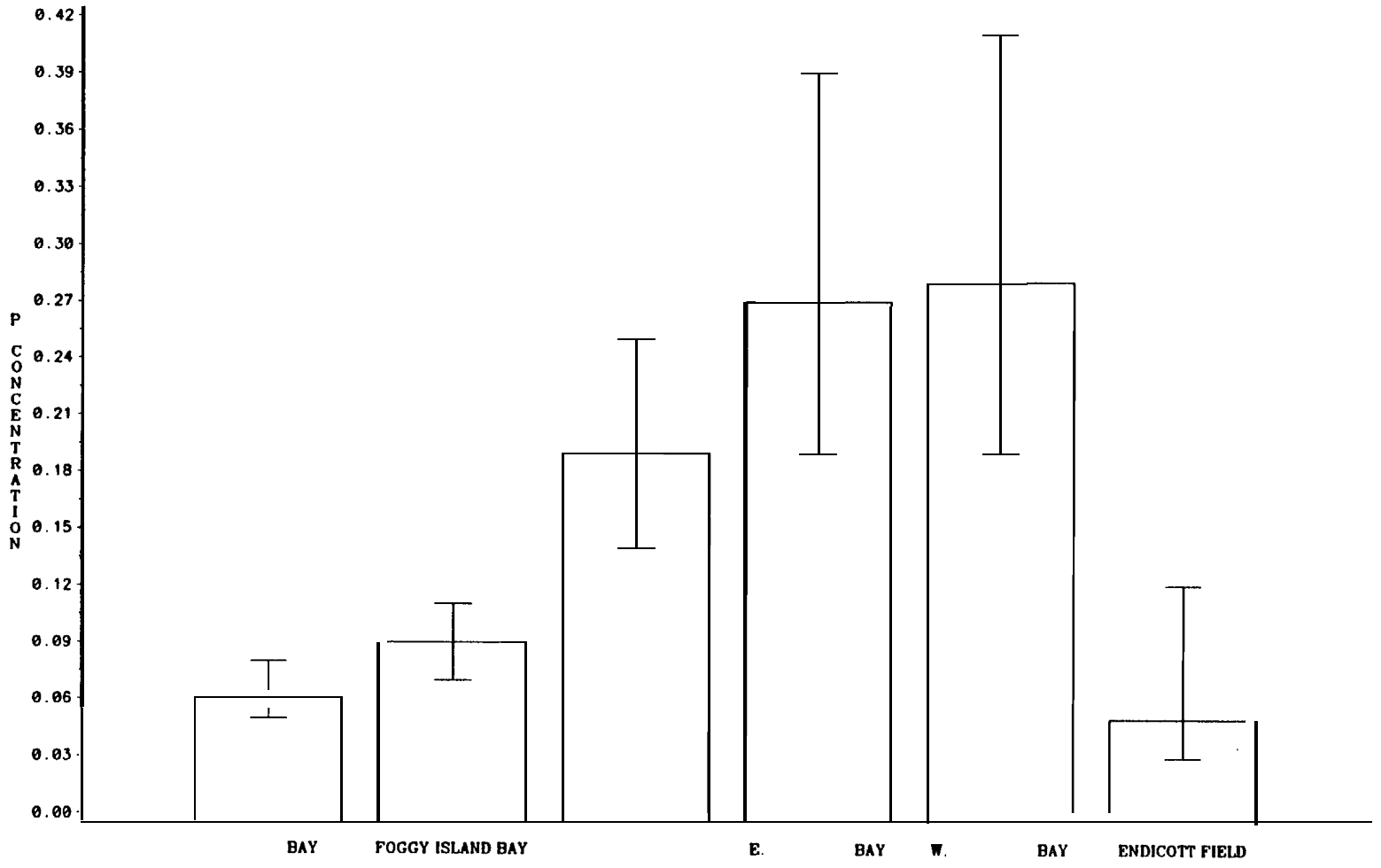
BEAUFORT SEA MONITORING PROGRAM– SUMMARY STATISTICS BY REGION

BAR HEIGHTS ARE GEOMETRIC MEAN F CONCENTRATIONS
BRACKETS REPRESENT 95% CONFIDENCE LIMITS



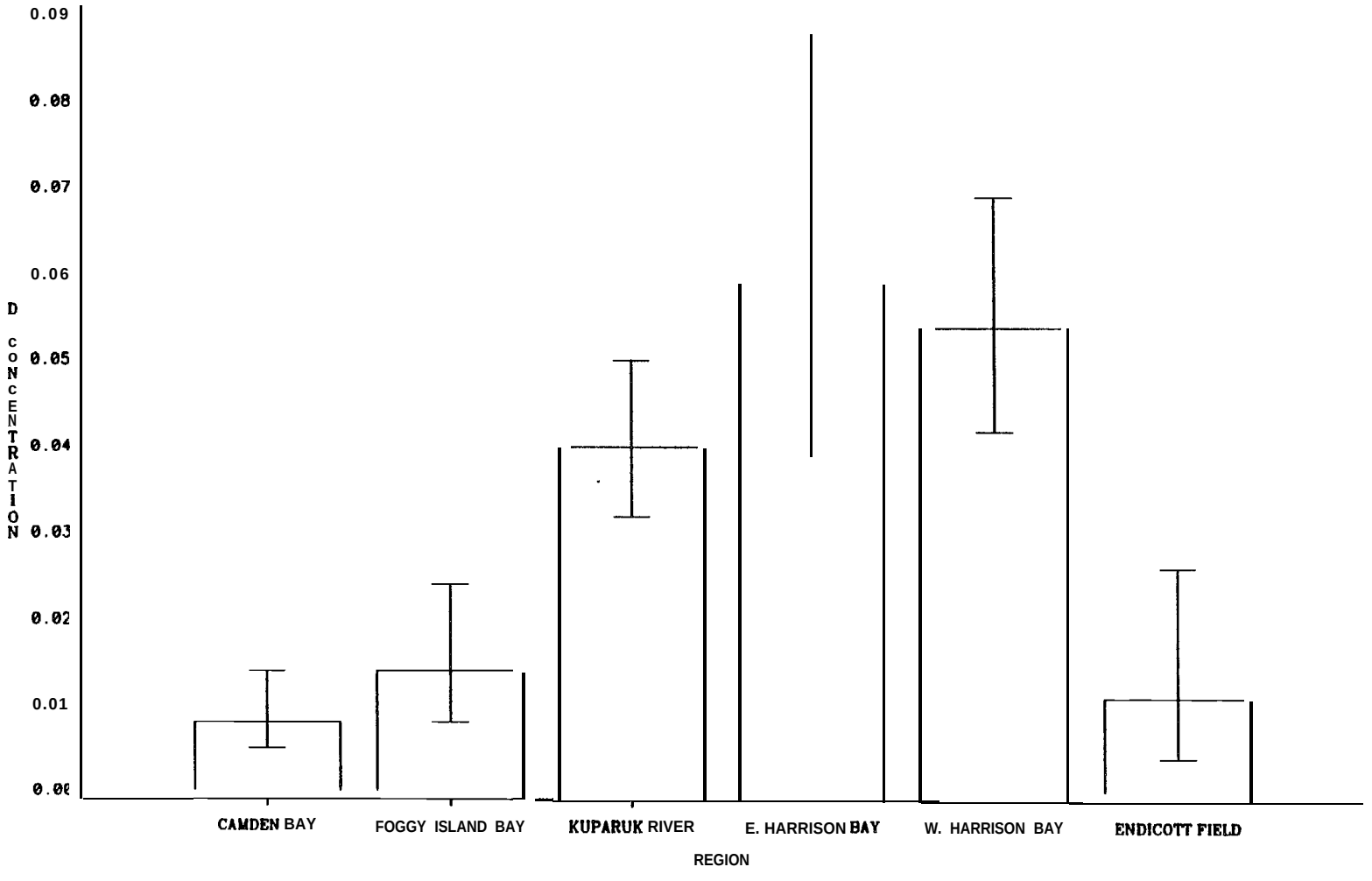
BEAUFORT SEA MONITORING PROGRAM-- SUMMARY STATISTICS BY REGION

BAR HEIGHTS ARE GEOMETRIC MEAN P CONCENTRATIONS
BRACKETS REPRESENT 95% CONFIDENCE LIMITS



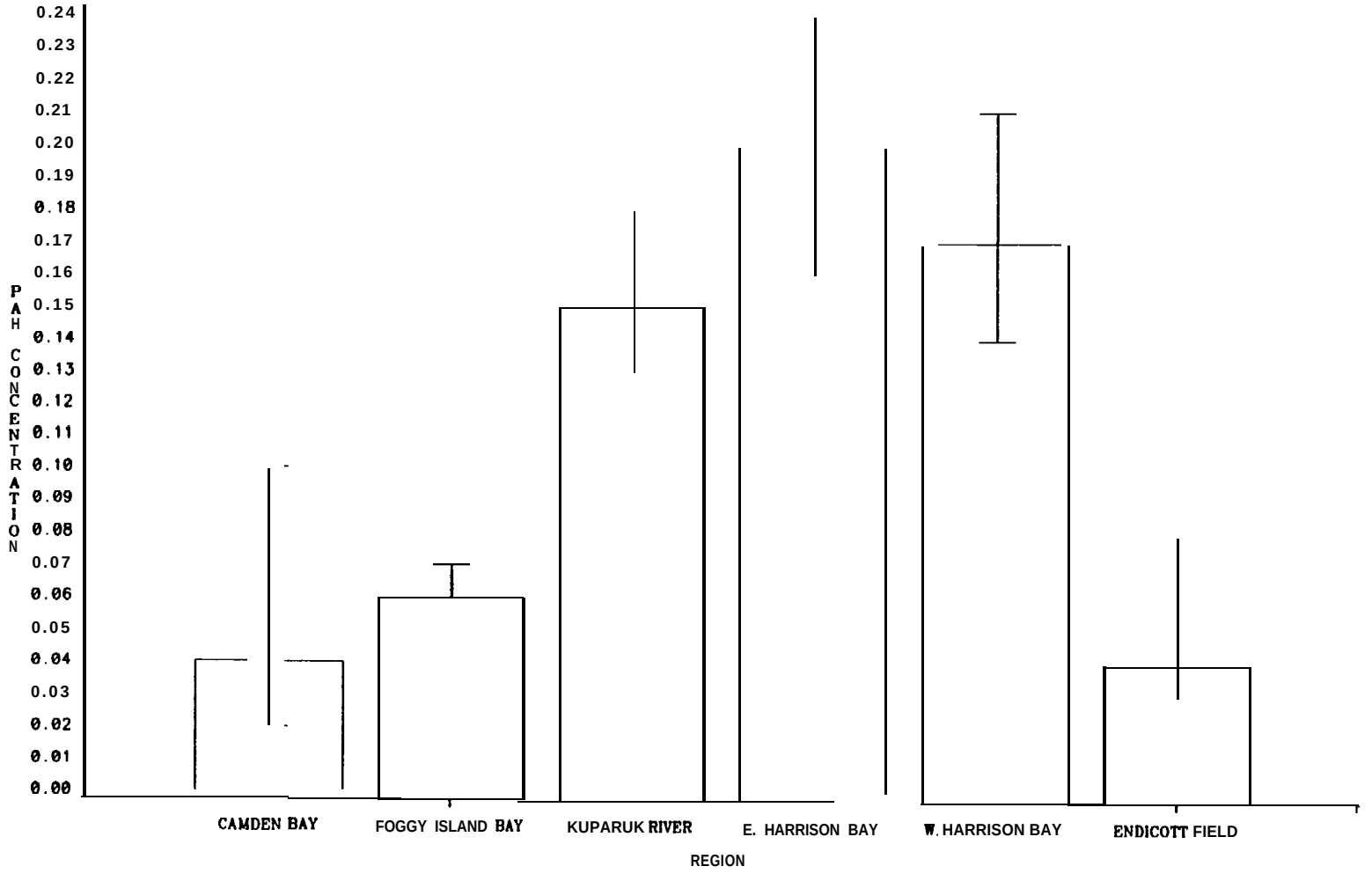
B EAUFORT SEA MONITORING PROCRAM -- SUMMARY STATISTICS BY REG1ON

BAR HEIGHTS ARE GEOMETRIC MEAN D CONCENTRATIONS
BRACKETS REPRESENT 95% CONFIDENCE LIMITS



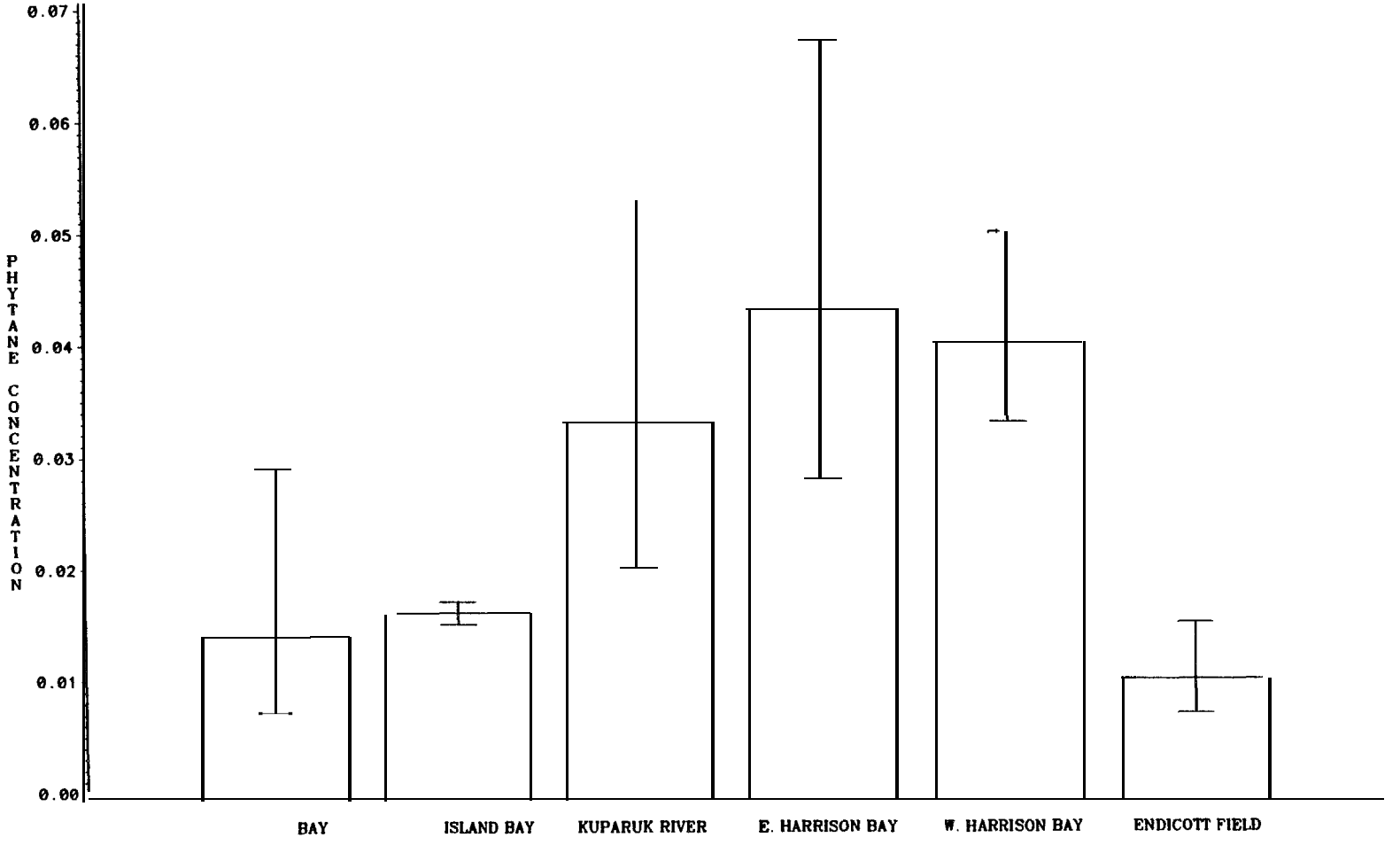
BEAUFORT SEA MONITORING PROGRAM-- SUMMARY STATISTICS BY REGION

BAR HEIGHTS ARE GEOMETRIC MEAN PAH CONCENTRATIONS
BRACKETS REPRESENT 95% CONFIDENCE LIMITS



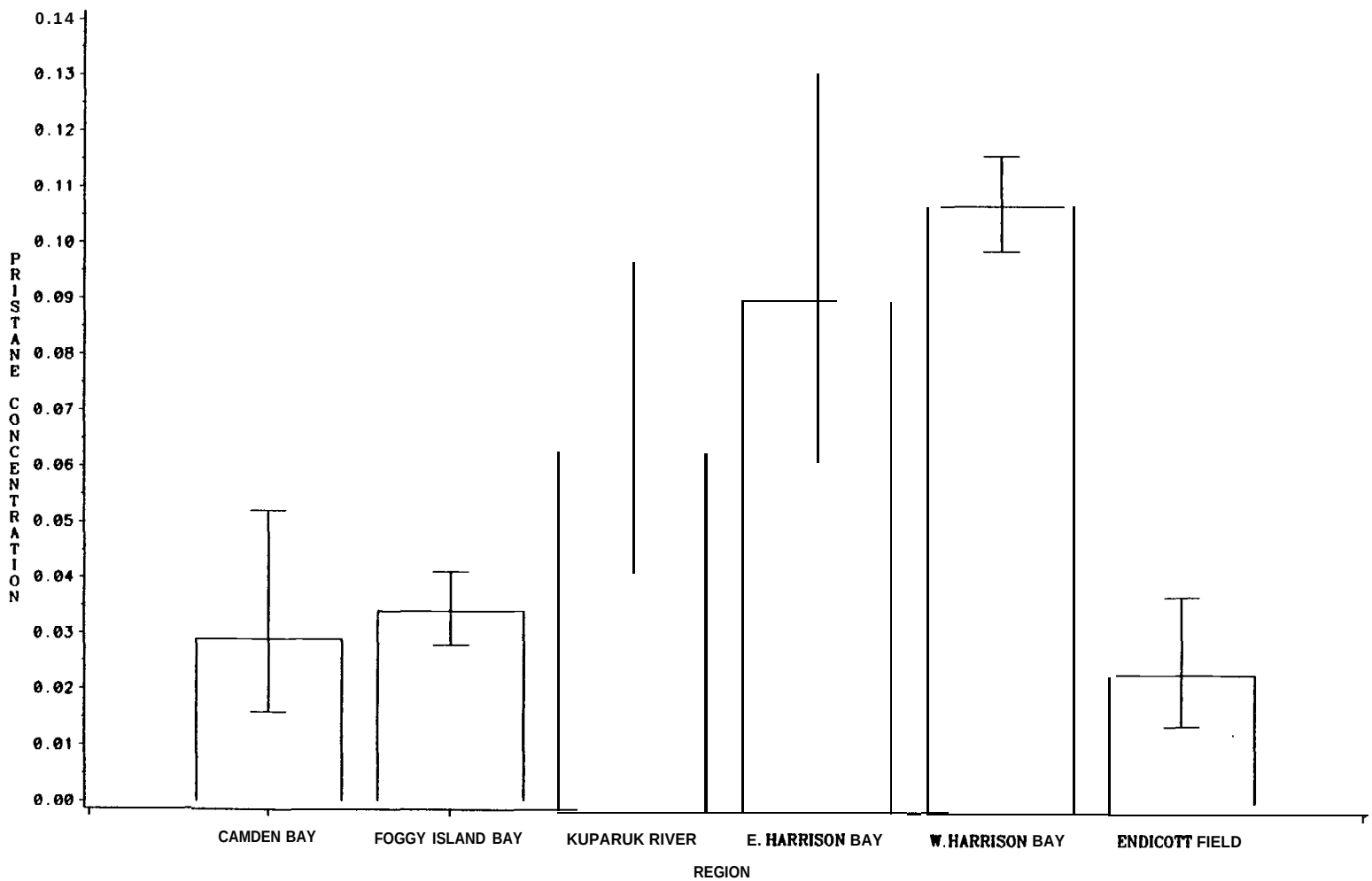
BEAUFORT SEA MONITORING PROGRAM-- SUMMARY STATISTICS BY REGION

BAR HEIGHTS ARE GEOMETRIC MEAN PHYTANE CONCENTRATIONS
BRACKETS REPRESENT 95% CONFIDENCE LIMITS



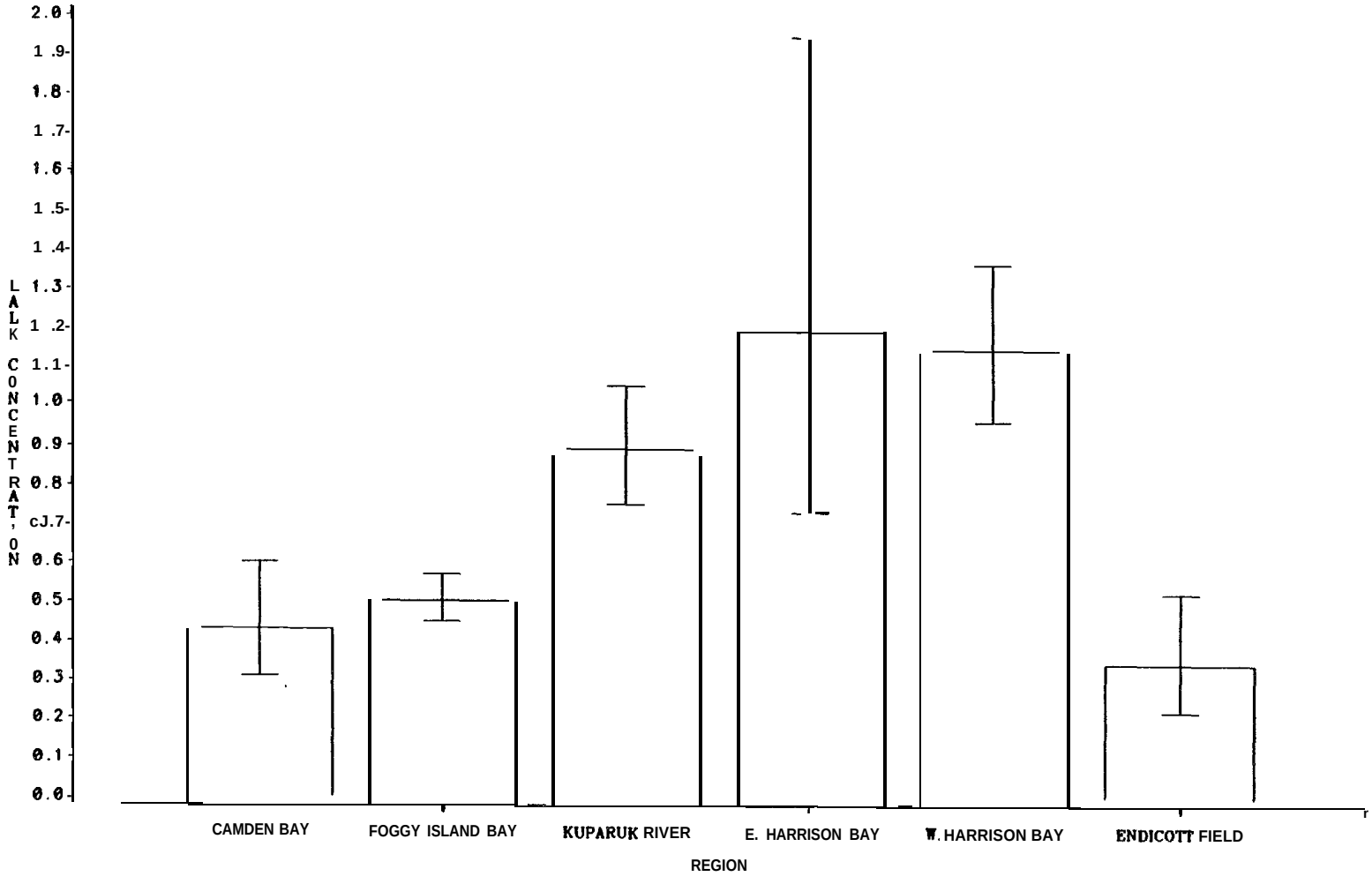
BEAUFORT SEA MONITORING PROGRAM -- SUMMARY STATISTICS BY REGION

BAR HEIGHTS ARE GEOMETRIC MEAN PRISTANE CONCENTRATIONS
BRACKETS REPRESENT 95% CONFIDENCE LIMITS



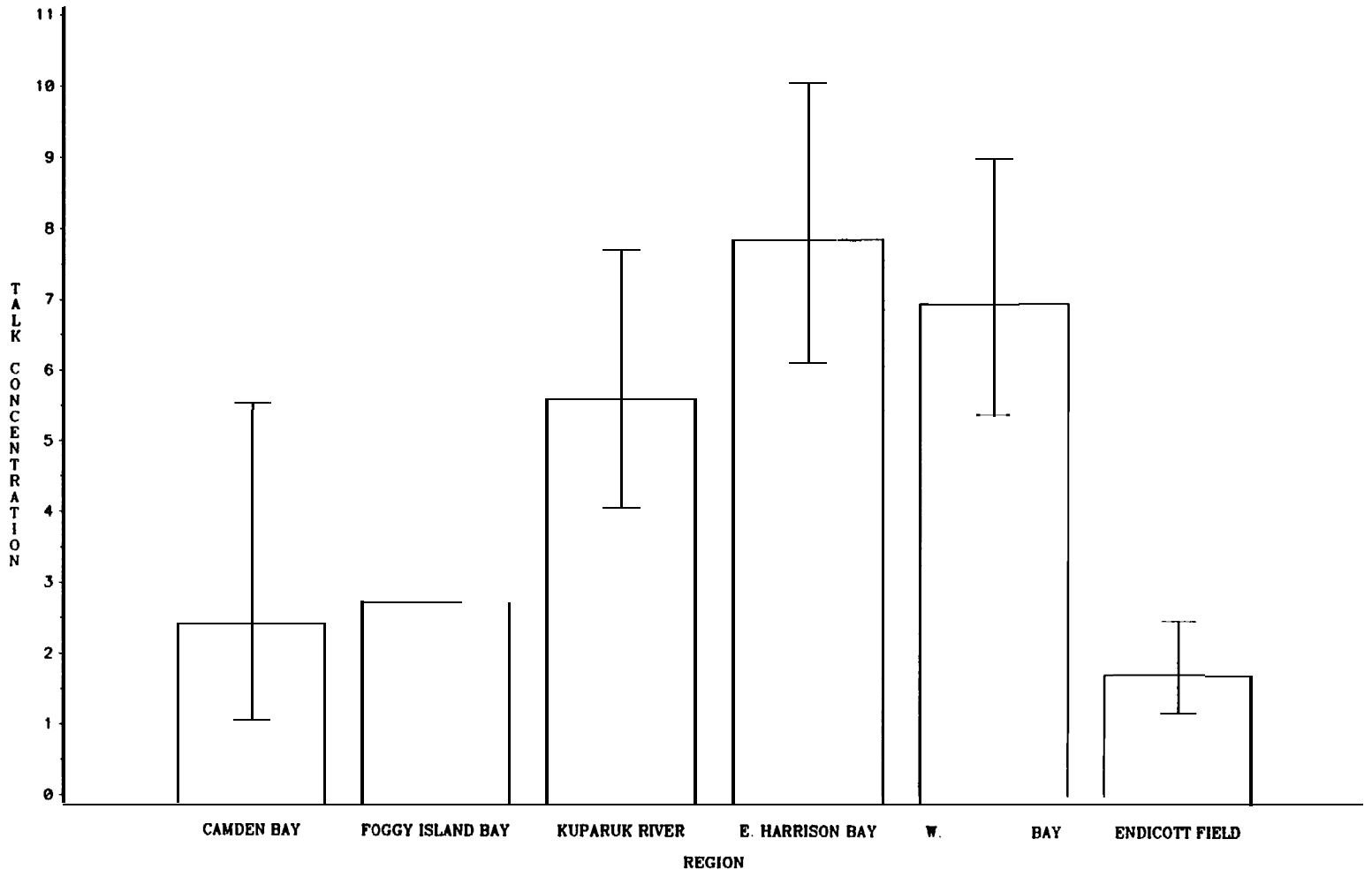
BEAUFORT SEA MONITORING PROGRAM-- SUMMARY STATISTICS BY REG1ON

BAR HEIGHTS ARE GEOMETRIC MEAN LALK CONCENTRATIONS
BRACKETS REPRESENT 95% CONFIDENCE LIMITS



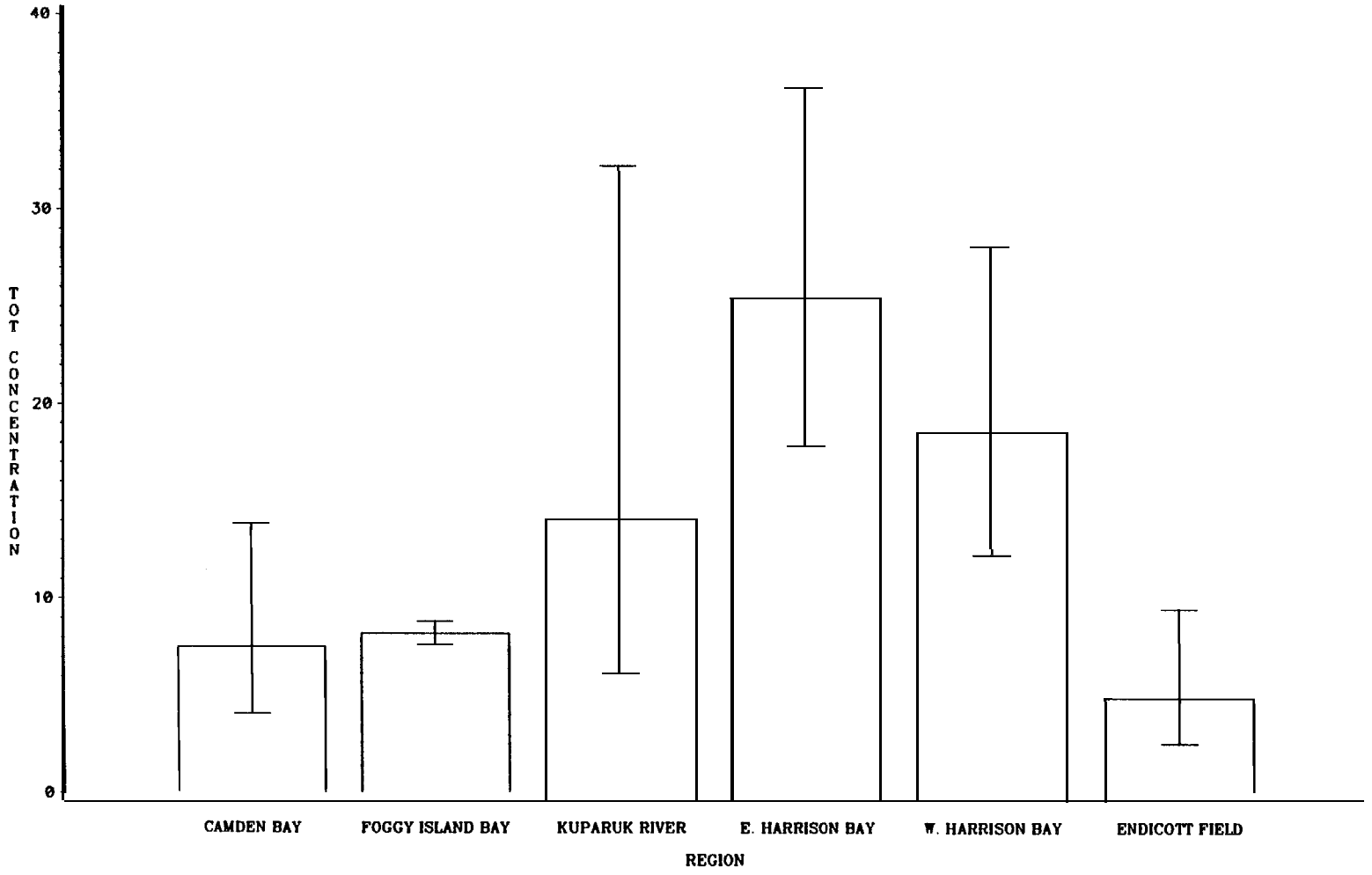
BEAUFORT SEA MONITORING PROGRAM-- SUMMARY STATISTICS BY REGION

BAR HEIGHTS ARE GEOMETRIC MEAN TALK CONCENTRATIONS
BRACKETS REPRESENT 95% CONFIDENCE LIMITS



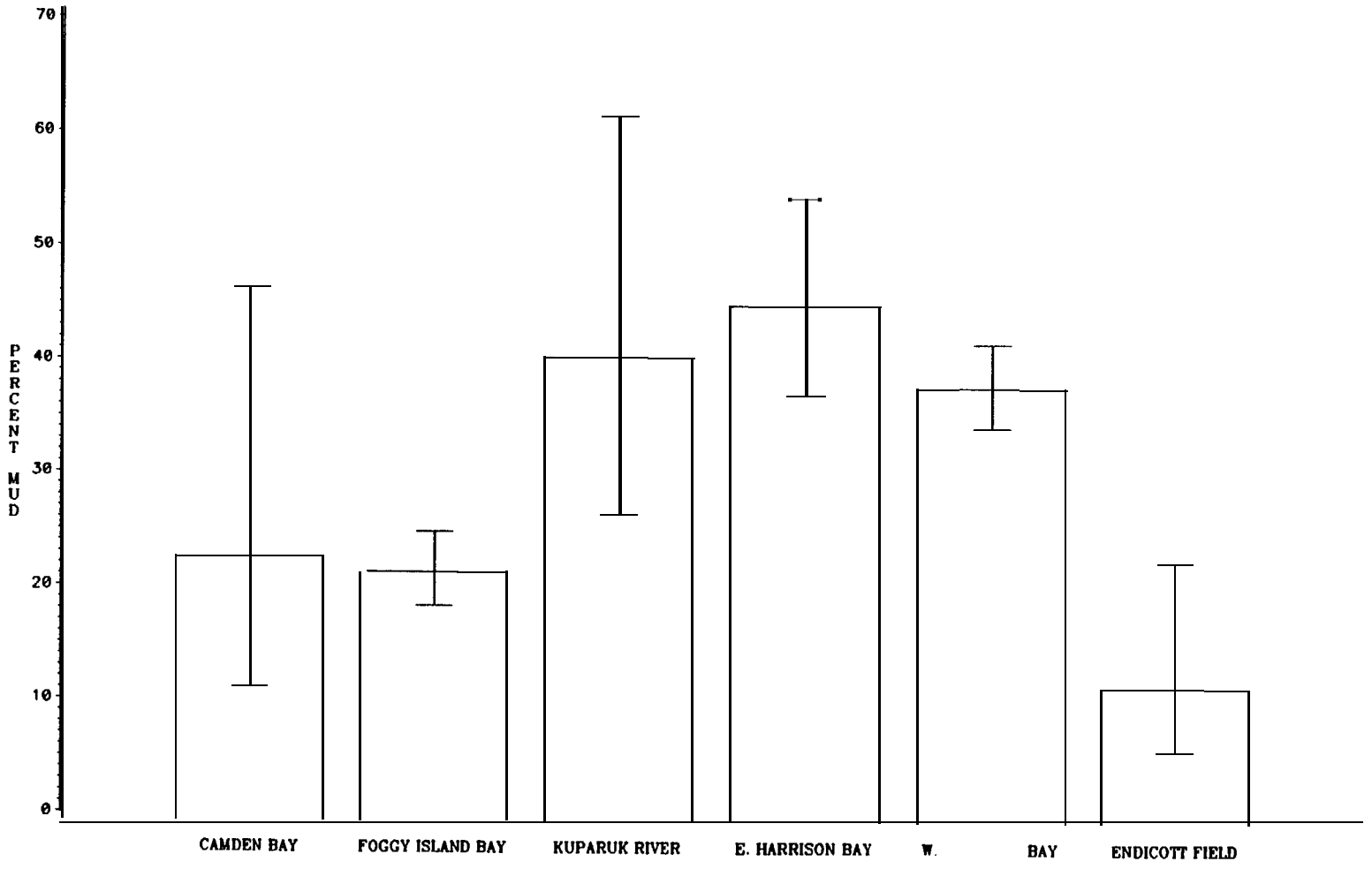
BEAUFORT SEA MONITORING PROGRAM-- SUMMARY STATISTICS BY REGION

BAR HEIGHTS ARE GEOMETRIC MEAN TOT CONCENTRATIONS
BRACKETS REPRESENT 95% CONFIDENCE LIMITS



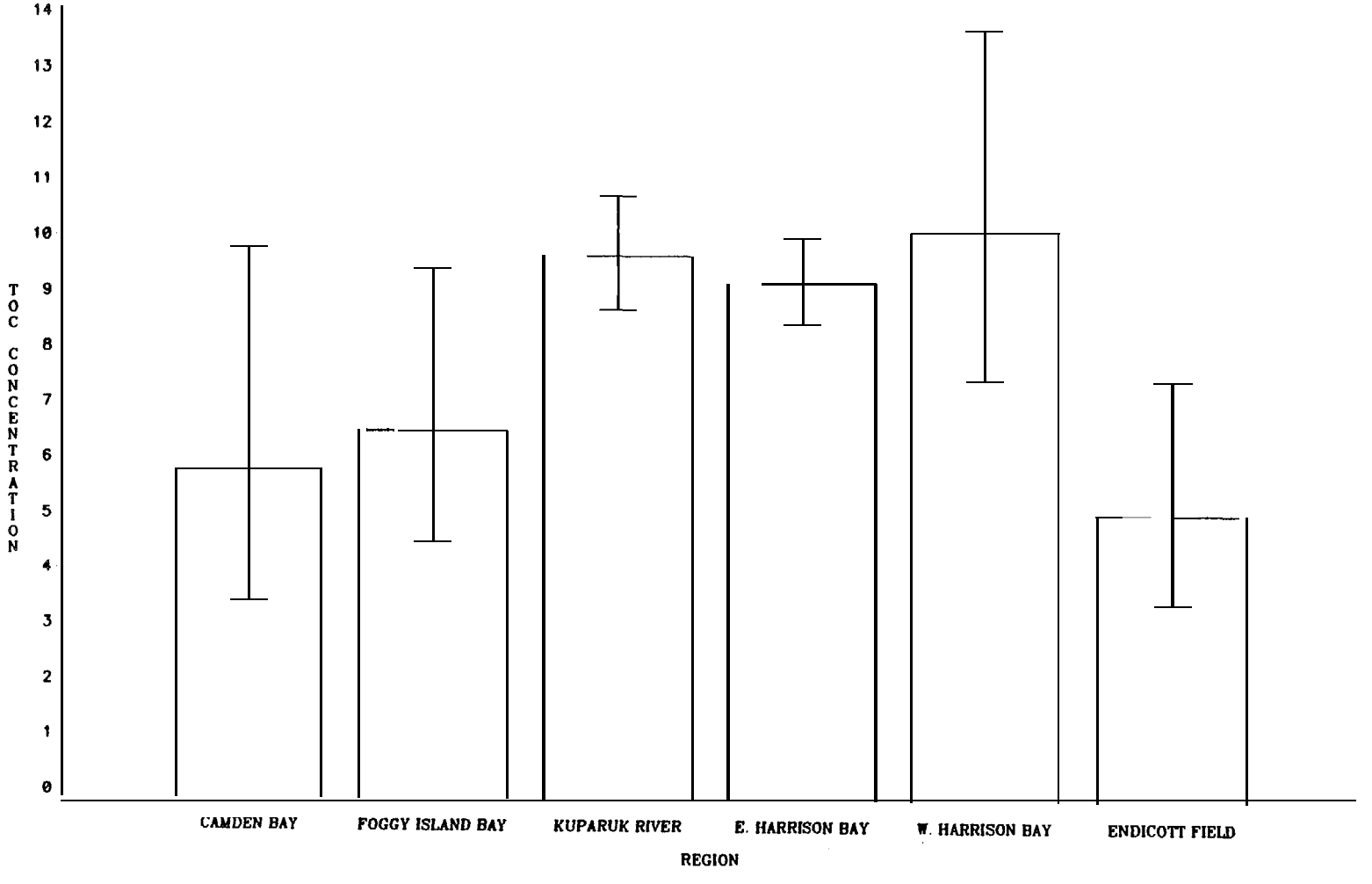
SEA PROGRAM-- SUMMARY STATISTICS BY REGION

BAR HEIGHTS ARE GEOMETRIC MEANS OF PERCENT MUD
BRACKETS REPRESENT 95% CONFIDENCE LIMITS



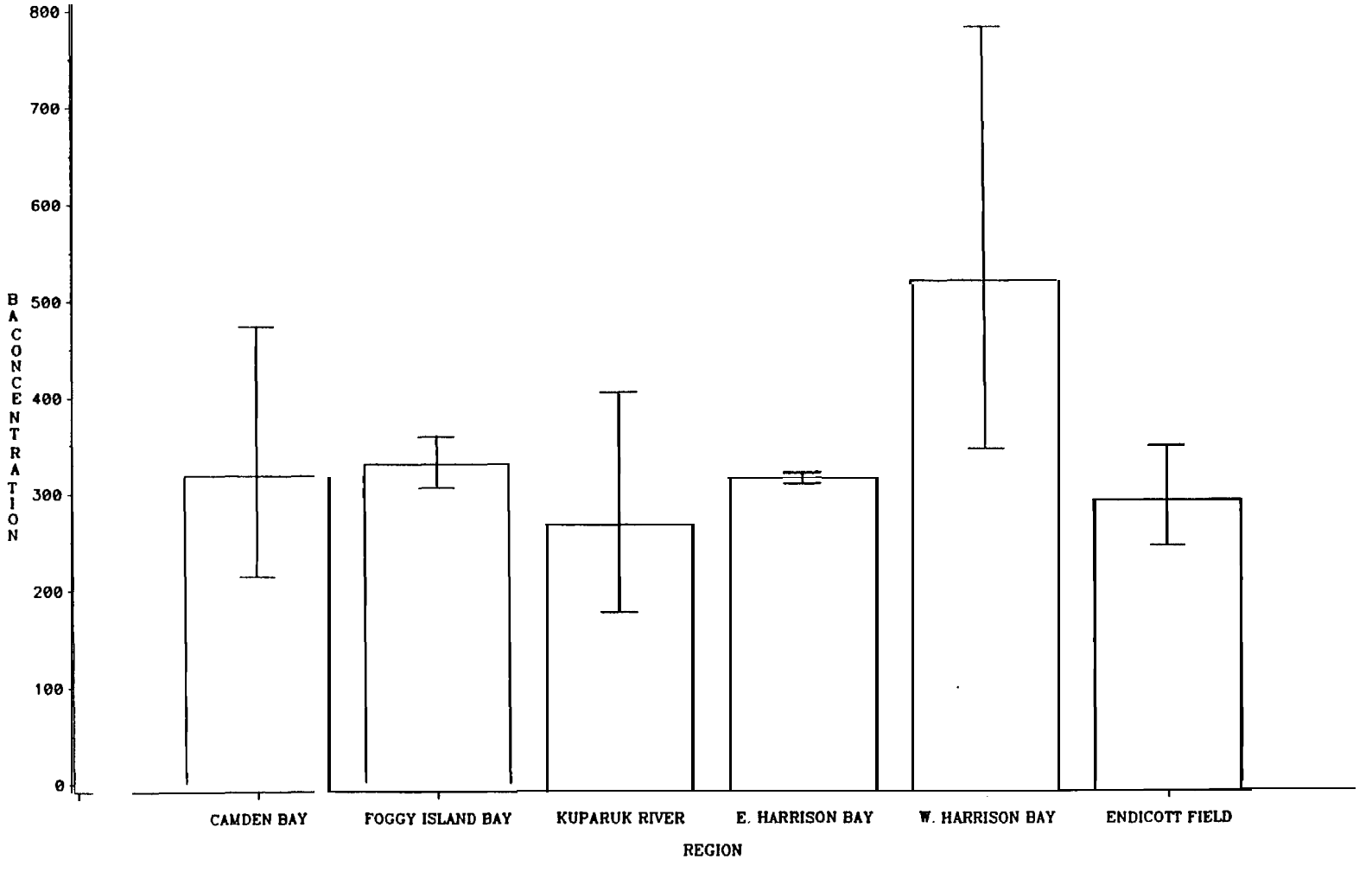
BEAUFORT SEA MONITORING PROGRAM-- SUMMARY STATISTICS BY REGION

BAR HEIGHTS ARE GEOMETRIC MEAN TOC CONCENTRATIONS
BRACKETS REPRESENT 95% CONFIDENCE LIMITS



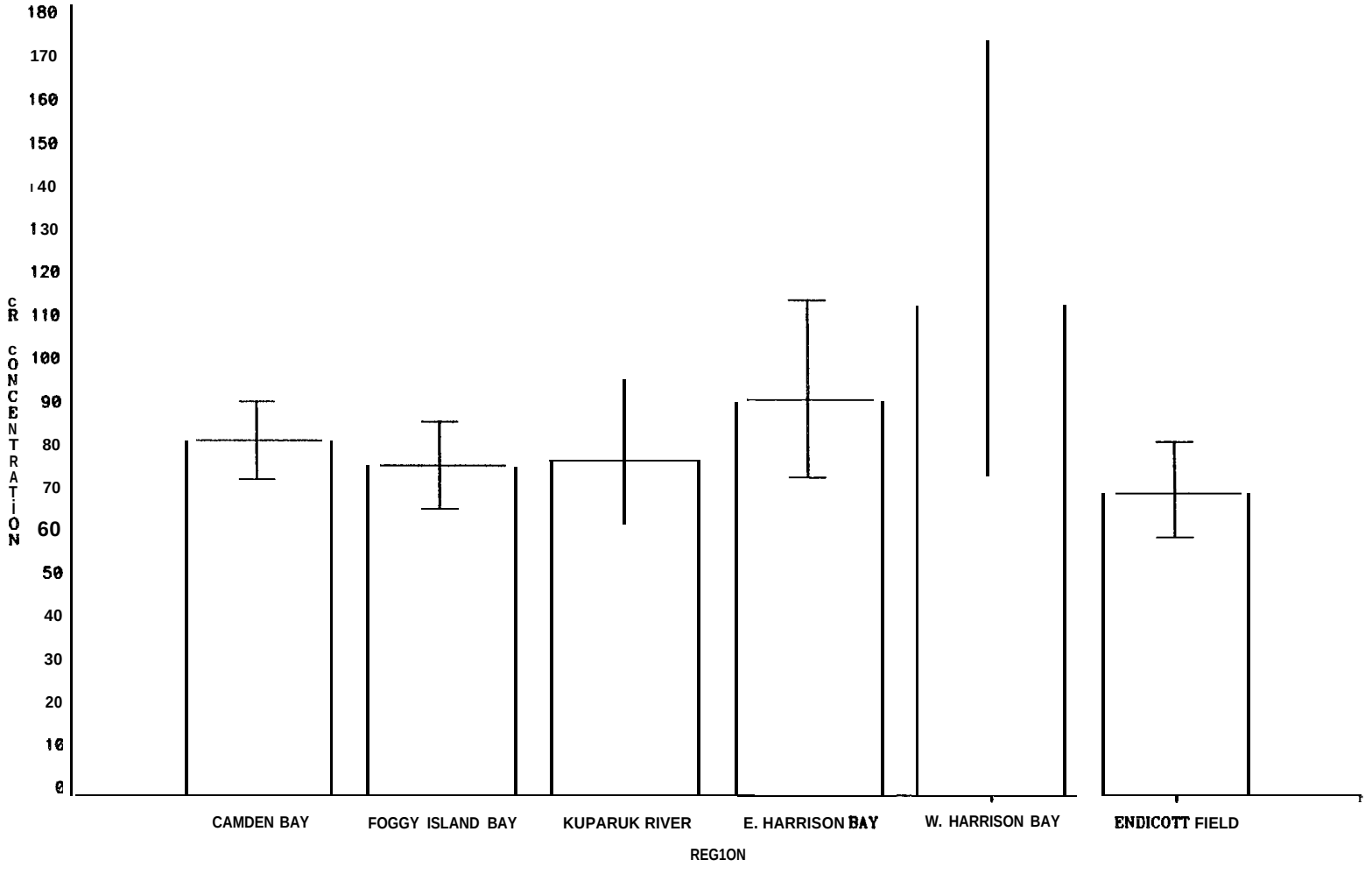
BEAUFORT SEA MONITORING PROGRAM-- SUMMARY STATISTICS BY REGION

BAR HEIGHTS ARE GEOMETRIC MEAN BA CONCENTRATIONS
BRACKETS REPRESENT 95% CONFIDENCE LIMITS



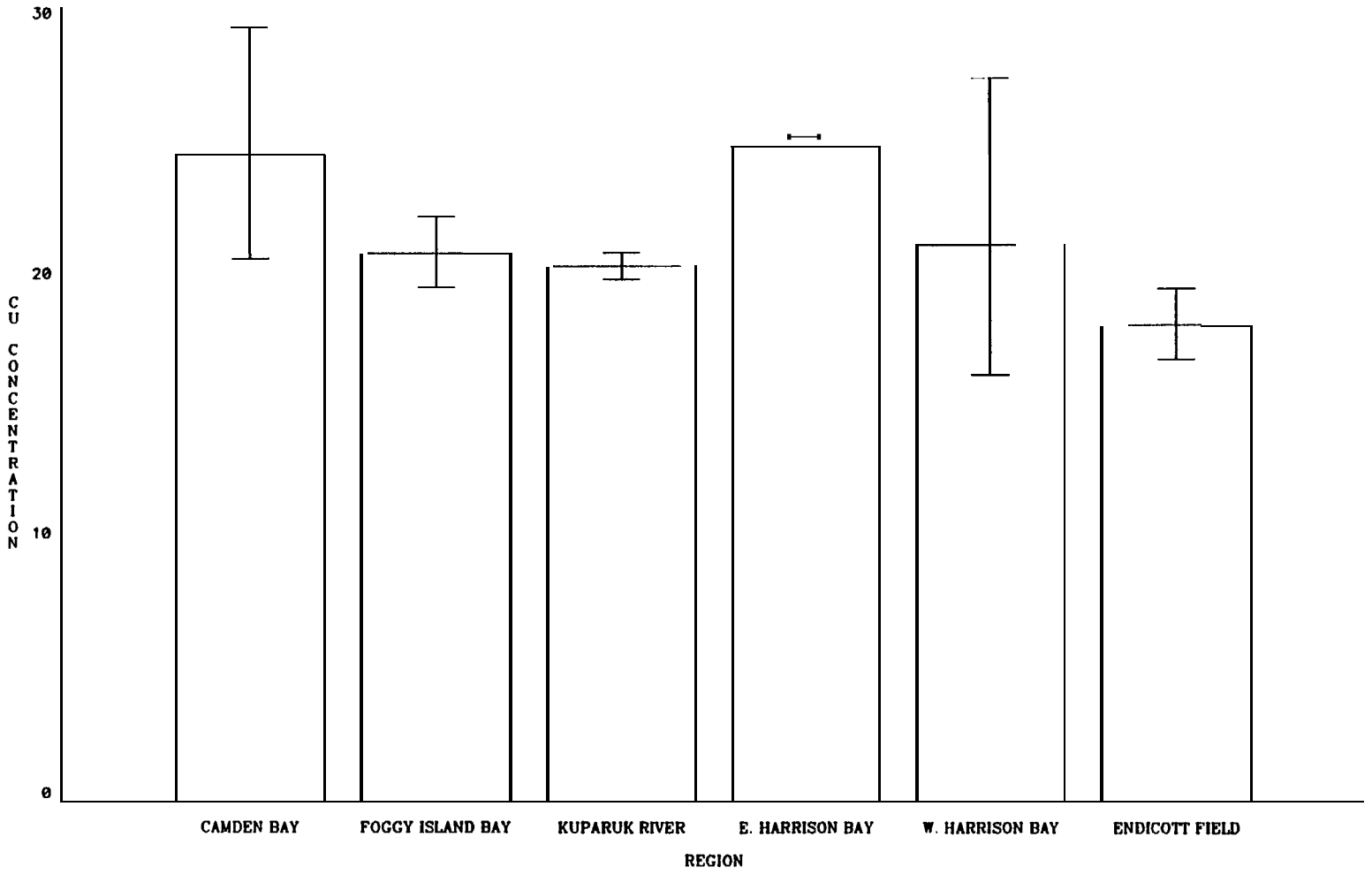
BEAUFORT SEA MONITORING PROGRAM-- SUMMARY STATISTICS BY REGION

BAR HEIGHTS ARE GEOMETRIC MEAN CR CONCENTRATIONS
BRACKETS REPRESENT 95% CONFIDENCE LIMITS



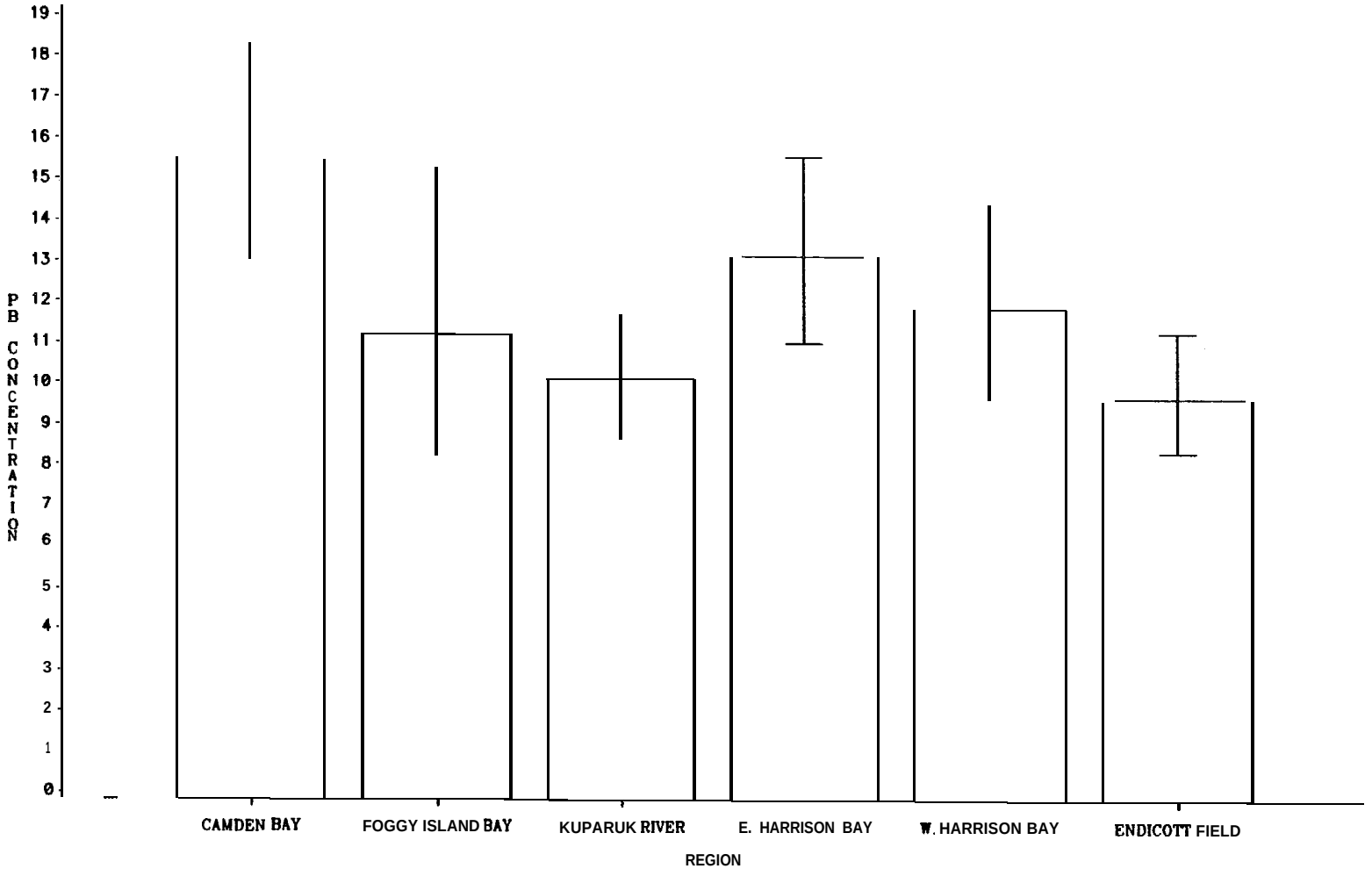
BEAUFORT SEA MONITORING PROGRAM – SUMMARY STATISTICS BY REGION

BAR HEIGHTS ARE GEOMETRIC MEAN <U CONCENTRATIONS
BRACKETS REPRESENT ≅5% CONFIDENCE LIMITS



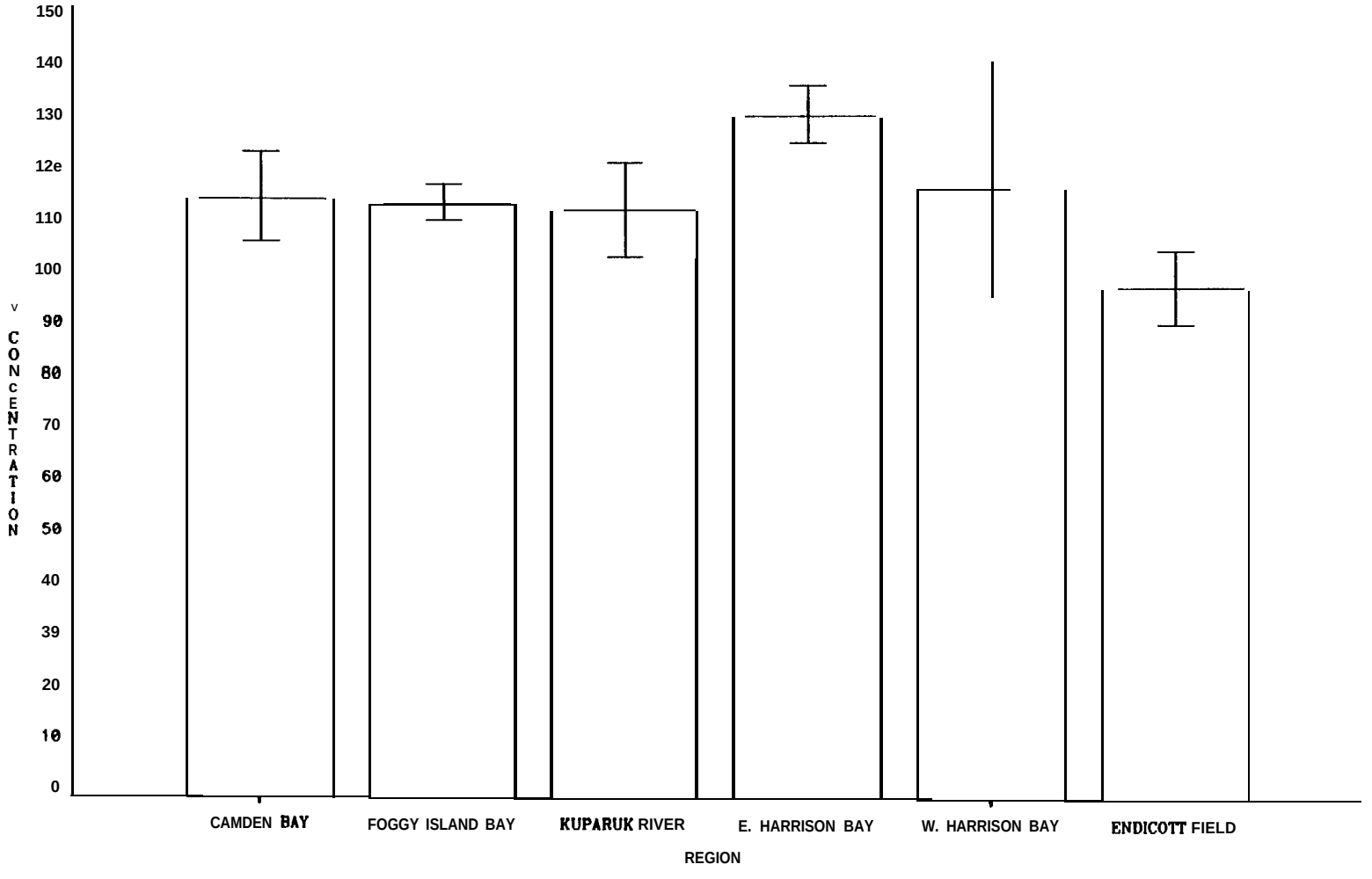
BEAUFORT SEA MONITORING PROGRAM-- SUMMARY STATISTICS BY REGION

BAR HEIGHTS ARE GEOMETRIC MEAN PB CONCENTRATIONS
BRACKETS REPRESENT 95% CONFIDENCE LIMITS



BEAUFORT SEA MONITORING PROCRAM -- SUMMARY STATISTICS BY REGION

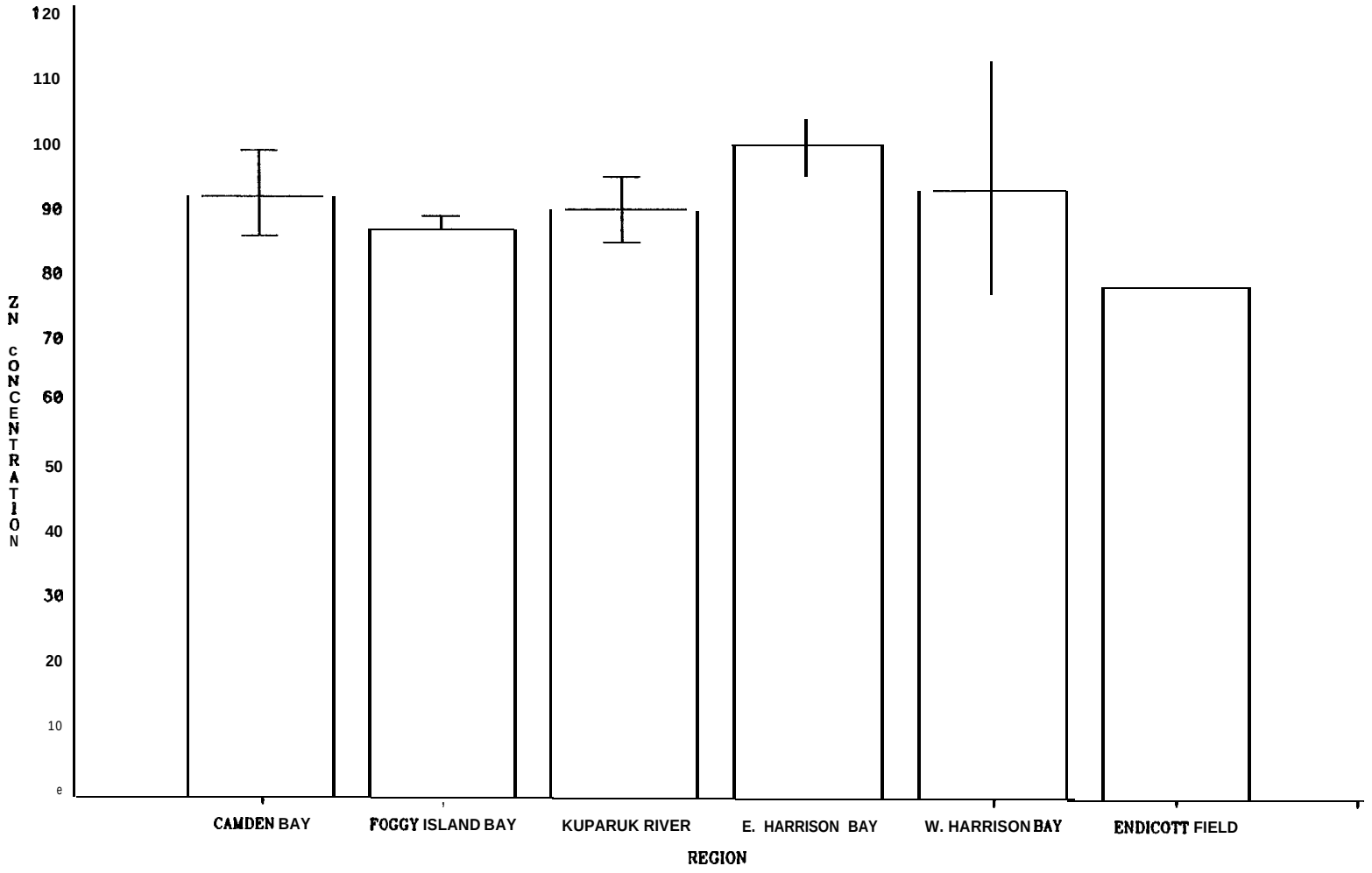
BAR HEIGHTS ARE GEOMETRIC MEAN V CONCENTRATIONS
BRACKETS REPRESENT 95% CONFIDENCE LIMITS



BEAUFORT SEA MONITORING PROGRAM-- SUMMARY STATISTICS BY REGION

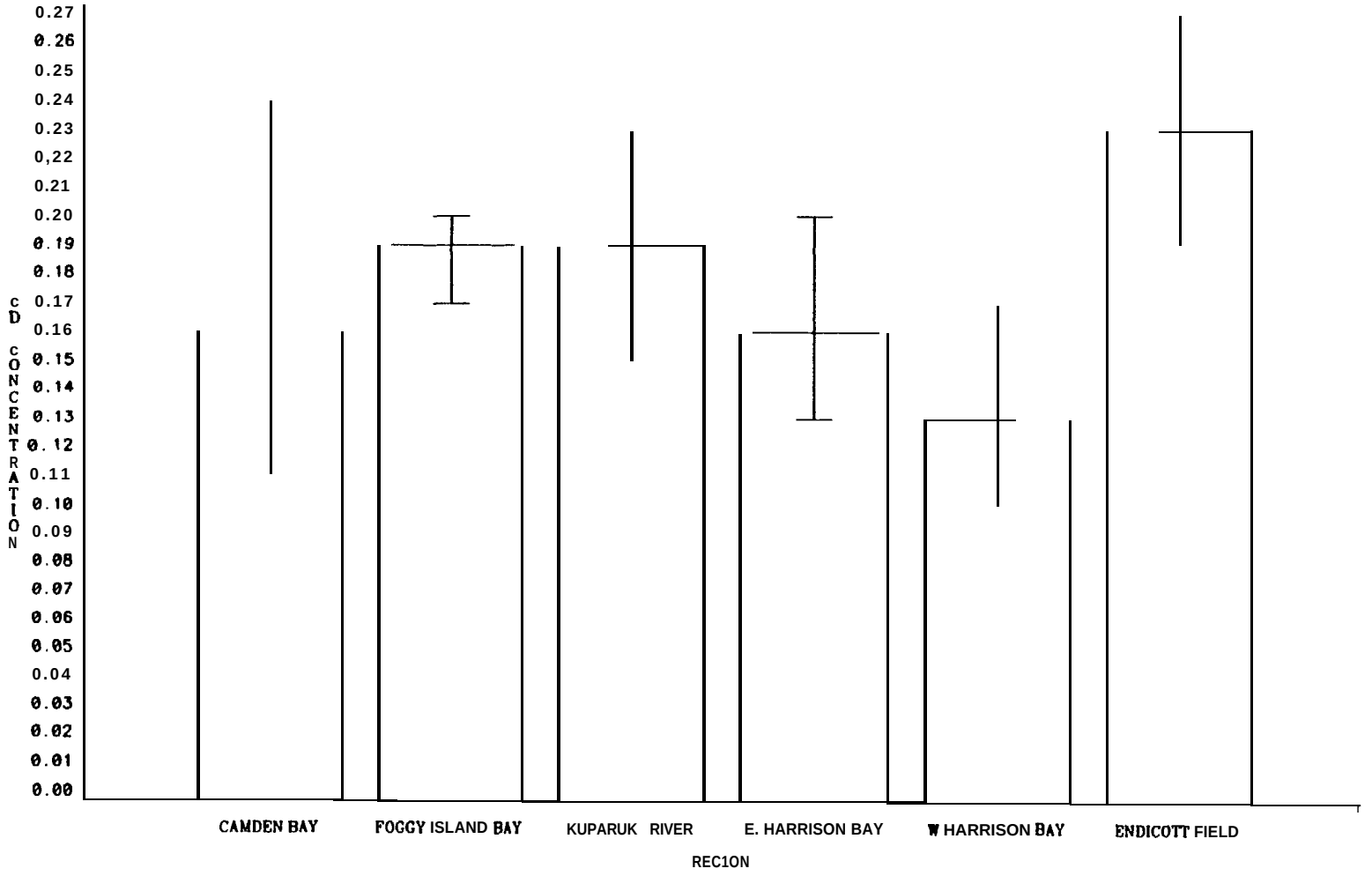
BAR HEIGHTS ARE GEOMETRIC MEAN ZN CONCENTRATIONS

BRACKETS REPRESENT 95% CONFIDENCE LIMITS



BEAUFORT SEA MONITORING PROGRAM-- SUMMARY STATISTICS BY REC1ON

BAR HEIGHTS ARE GEOMETRIC MEAN CD CONCENTRATIONS
BRACKETS REPRESENT 95% CONFIDENCE LIMITS



SECTION 4

ANALYTE CONCENTRATIONS FOR INDIVIDUAL REPLICATES AND COMPOSITES FOR EACH STATION AND YEAR

BEAUFORT SEA MONITORING PROGRAM-- BULK SEDIMENT SAMPLE OATA
RAW OATA LISTING FOR HYDROCARBON CONCENTRATIONS

TYPE OF SEDIMENT = BULK

YEAR=1 SITETYPE=OCEANIC

STATION	SAMPLE	N	F	P	o	PAN	PHYTANE	PRISTANE	LALK	TALK	TOT
2E	100	0.02	0.006	0.03	0.004	0.01	0.004	0.009	o.2a	0.80	2.94
2E	100										
2E	100										
2E	100										
2E	100										
2E	100										
2F	100	0.05	0.019	0.09	0.009	0.04	0.013	0: 02a	0.47	1.63	6.38
2F	100	0.03	0.010	0.07	0.007	0.04	0.010	0.027	0.40	1.29	5.33
2F	100	0.02	0.004	0.05	0.002	0.03	0.010	0. 02a	o.3a	1.39	S.30
2F	100	0.01	0.001	0.04	.	0.02	0.008	0.024	0.33	1.03	4.38
2F	100	0.04	0.010	0.07	0.007	0.04	0.010	0.028	0.36	1.41	5.6s
2F	100	0.04	0.009	0.08	0.007	0.04	0.012	0.024	0.41	1.76	6.49
3A	100	0.14	0.037	0.18	0.021	0.08	0.017	0. 03s	0.49	2.79	9.91
3A	100										
3A	100										
3A	100										
3A	100										
3A	100										
3B	100	0.08	0:020	0.08	0.013	0.01	0.018	0.040	0.67	3.62	11.33
3B	100	0.12	0.024	0.15	0.017	0.09	0.016	0.032	0.5s	3.01	0.04
3B	100	0.19	0.044	0.19	0.020	0.07	0.024	0.047	0.77	4.54	14.90
3B	100	0.18	0.028	0.20	0.021	0.11	0.027	0. 0s6	1.02	5.s8	10.84
3B	100	0.20	0.025	0.18	0.018	0.08	0.032	0.0s8	1.18	6.12	18.44
3B	100	0.14	0.035	0.10	0.020	0.13	0.020	0.040	0.73	3.90	12.0s
4A	100	0.20	0.047	0.21	0.045	0.10	0.024	0.044	0.s7	3.10	10.70
4A	100	0.16	0. 02s	0.17	0. 03s	0.10	0.018	0.040	0.6s	3.05	14.14
4A	100	0.18	0.0s3	0.18	0.047	0.09	0.018	0.048	0.61	3.1s	14.50
4A	100	0.19	o. 056	0.17	0.040	0.09	0.018	0.0s1	0.62	3.79	13.0s
4A	100	0.16	0.049	0.18	0.042	0.10	0.017	0.04s	0.65	3.42	11.17
4A	100	0.16	0.041	0.17	0.030	0.10	0.018	0.040	0.s9	3.18	10.98
4B	100	0.04	0.010	0.04	0.011	0.01	0.007	0.016	0.24	0.s2	3.62
4B	100										
40	100										
4B	100										
40	100										
4B	100										
4C	100	0.07	0.021	0.08	0.020	0.05	0.012	0:028	0.51	1.86	6.87
4C	100										
4C	100										
4C	100										
4C	100										
4C	100										
510	100										
510	100	0:13	0:030	0:16	0.033	0.08	0.018	0:053	0.71	3.59	13.98
510	100										
510	100										
510	100										
510	100										
51	100	0.04	0.010	0.05	0.011	0.04	0.007	0.016	0.30	1.23	4.67
51	100										
51	100										

BEAUFORT SEA MONITORING PROGRAM-- BULK SEDIMENT SANPLE OATA
RAW OATA LISTING FOR HYDROCARBON CONCENTRATIONS

TYPE OF SEDIMENT • SULK

YEAR=1 SITETYPE=OCEANIC

STATION	SANPLE	N	F	P	0	PAH	PHYTANE	PRISTANE	LALK	TALK	TOT
51	100										
51	100										
51	100										
51	100										
52	100	0.01	0.002	0.02	0.006	0.01	0.003	0.008	0.27	0.68	2.69
52	100										
52	100										
52	100										
52	100										
52	100										
55	100	0:13	0:032	0.17	0.032	0:13	0:027	O: 055	0.67	3.48	13.27
5s	100										
5s	100										
55	100										
55	100										
55	100										
5A	100	0.29	0:033	0.28	0:028	0: 16	0.041	0.085	1.00	5.92	10.58
5A	100										
6A	100										
5A	100										
5A	100										
5A	100										
5B	100	0.22	0.085	0.28	0.067	o: 15	0.004	0.010	0.28	0.77	2.78
5B	100										
5B	100										
5B	100										
5B	100										
5B	100										
5D	100	0.38	0:040	0.34	o: 0ss	0:17	0.041	0: 087	1.40	12.65	39:24
SD	100	0.40	0. 055	0.42	0.078	0.20	0.038	0.081	1.42	13.10	42.23
5D	too	0.4s	o. 056	0.39	0.070	0.$7	0.041	0. 08s	1.42	12.30	39.46
5D	100	0.31	0.050	0.40	0.0s9	0.22	0. 039	0.063	1.23	13.53	47.08
5D	100	0.31	0.038	0.44	0.064	0.31	0.015	0.030	0.60	4.44	16.06
SD	100	0.30	0.053	0.3B	0.073	0.37	0.030	0.053	0.89	8.48	28.98
5E	100	0. 16	0.045	0.37	0.039	0.08	0.01s	0.044	0.61	2.35	9.01
5E	100										
SE	100										
5E	100										
5E	100										
SE	100										
SE	100										
SF	100	0.20	0.024	0:22	0:034	0.23	0.032	0:072	1.32	11.43	0:92
5F	100										
SF	100										
SF	100										
5F	100										
SF	100										
5G	100	0.13	0.018	0:13	0.018	0.09	0.022	0: 056	0.7s	2.97	10.93
5G	100										
5G	100										
5G	100										

BEAUFORT SEA MONITORING PROSRAM-- BULK SEDIMENT SAMPLE DATA
RAW DATA LISTING FOR HYDROCARBON CONCENTRATIONS

TYPE OF SEDIMENT = BULK

YEAR=1 SITETYPE=OCEANIC

STATION	SANPLE	N	F	P	0	PAN	PHYTANE	PRISTANE	LALK	TALK	TOT
5G	100										
5G	100	.		.	.	.	.	.	.		
6A	100	0.44	0:139	0.40	0.129	0.27	0.039	0.096	2.43	S:47	2s :38
6A	100										
6A	100										
6A	100										
6A	100										
6A	100	.	.	.		.			.		
6B	100	3.50	0.818	1.97	0: 326	1.25	o: 144	o: 30s	4.02	22: 7s	es: 63
6B	100										
6B	100										
6B	100										
6B	100										
6B	100	.		.	.	.	.	.	.	.	.
6C	100	0.97	0:204	0.76	0.253	0.09	0.023	0.062	1.15	3.32	12.92
6C	100	.	.	.		.	0.020	0.049	1.02	3.04	12.0s
6C	100	0.25	0.066	0.23	0:058	0.18	0.023	0. 0s4	1.08	3.32	12.78
6C	100	0.43	0.074	0.4s	0.089	0.31	0.08s	0.125	2.06	7.01	28.49
6C	100	0.20	0.0s8	0.28	0.0s1	0.18	0.024	0. 0s8	0.98	3.57	13.51
6C	100	0.19	0.040	0.21	0.041	0.12	0. 02s	0.052	0.94	3.68	14.7s
60	100	0.05	0.008	0.0s	0.012	0.05	0.009	0.022	1.s3	2.34	0.74
6D	100	0.06	0.014	0.07	0.017	0.06	0.013	0.034	2.90	4.19	10.s4
6D	100	0.08	0.010	0.0s	0.014	0.04	0.011	0.028	0.73	1.91	5.56
60	100	0.14	0.016	0.12	0.019	0.08	0.018	0.040	0.s5	2.43	11.18
6D	100	0.07	0.010	0.07	0.012	0.04	0.011	0.027	0.82	1.s1	5.76
6D	100	0.09	0.027	0.11	0.024	0.07	0.015	0. 036	1.07	2.33	6.71
6F	100	0.47	0.11s	0.41	0.082	0.26	0.037	0.091	1.39	7.2S	24.21
6F	100										
6F	100										
6F	100										
6F	100										
6F	100			.		.	.		.	.	.
7A	100	0:12		0.09	.	0.25	0.011	0: 028	0.56	2.00	20.74
7A	100	0.13	.	0.00	0.019	0.00	0.032	0.085	1.50	6.01	20.24
7A	100	2.32	0.280	1.34	0.340	0.24	0. 026	o. 05s	0.91	3.93	14.61
7A	100	0.72	0.135	0.s7	0.110	0.38	0.035	0.004	1.50	6.81	24.0$
7A	100	0.8s	0. 110	0.63	0.101	0.41	0.044	0.128	2.00	9.74	31.69
7A	100	1.64	o. 17s	1.s3	0.243	0.25	0. 03s	0.08s	1.3s	6.08	1s.3s
70	100	0.19	0.042	0.17	0.037	0.13	0.016	0.043	1.17	3.6s	11.39
70	100										
70	100										
7B	100										
7B	100										
7B	100	.		.		.			.	.	.
7C	100	0.69	0:124	0.61	0:107	0.36	o: 04s	0:099	1.65	7.33	23.71
7C	100										
7C	100										
7C	100										
7C	100										
7C	100	.	.	.		.	.	.	.	.	.
7E	100	0.89	0.071	0.50	0:069	0.24	0.041	0.142	1.72	7.94	2.60

BEAUFORT SEA MONITORING PROGRAM-- BULK SEDIMENT SAMPLE DATA
RAW DATA LISTING FOR HYDROCARBON CONCENTRATIONS

TYPE OF SEDIMENT = BULK

YEAR=1 SITETYPE=OCEANIC

STATION	SAMPLE	N	F	P	D	PAN	PHYTANE	PRISTANE	LALK	TALK	TOT
7E	100					.					
7E	100					.					
7E	100								.		
7E	100										
7E	100		.	.	.	.		.	.	.	.
7G	100	0.99	0.012	0.53	0.048	0.23	0. 04s	0.214	1.05	3.99	17.68
7G	100										
7G	100										
7G	100										
7G	100										
7G	100						.				

BEAUFORT SEA MONITORING PROGRAM-- BULK SEDIMENT SAMPLE OATA
RAW OATA LISTING FOR HYDROCARBON CONCENTRATIONS

TYPE OF SEDIMENT = BULK

YEAR=2 SITETYPE=OCEANIC

STATION	SAMPLE	N	F	P	0	PAN	PHYTANE	PRISTANE	LALK	TALK	TOT
1A	AI86P	0.07	0.010	0.05	0.011	0.09	0.019	0.036	o.4e	0.30	14.73
1A	AI88P	0.0s	0.008	0.07	0.009	0.10	0.018	0.032	0.44	5.34	12.27
1A	AI90P	0.07	0.019	0.07	0.016	0.11	0.024	0.042	0.60	10.44	2s.0s
1B	AI95P	0.04	0.012	0.04	0.008	0.04	0.017	0.030	0.30	2.62	4.87
1B	A107P	0.02	0.005	0.03	0.004	0.02	0.014	0.027	0.77	2.s8	S.18
1B	AI99P	0.05	0.016	0.04	0.007	0.0s	0.016	0.030	0.30	2.47	4.23
1C	AI62P	0.21	0.078	0.17	0.040	o. 2s	0.079	0.117	1.03	6.93	2s.7s
1C	AI64P	0.21	0.070	0. 1s	0. 039	0.21	0.070	0. toe	1.13	0.37	2s. se
1C	AI66P	0.23	0.008	0.18	0.032	0.24	0.068	0.105	0.85	5.90	21.89
to	AI70P	0.01	.	0.01	0.001	0.01	0.002	0.005	0.08	0.94	1.28
1D	AI72P	0.04	0.002	0.03	0.002	0.04	0.011	0.024	0.37	6.69	11.9s
1D	AI 74P	0.03	0.002	0.02	0.001	0.02	0.007	0.01s	0.20	4.10	7.20
1E	AI78P	0.04	0.000	0.03	0.002	0.03	0.013	o. 02s	1.0s	11.84	18.88
1E	AI80P	0.05	0.012	0.04	0.004	0.04	0.016	0.028	1.03	11.11	24. 4S
1E	AI82P	0.04	0.007	0.04	0.003	0.04	0.014	0.025	0.99	12.56	24.83
2A	AJ08P	o.2e	0.073	0.30	0.031	0.27	0.0s0	0.115	1.69	17.81	36.21
2A	AJ10P	0.33	0.099	0.41	0.044	0.38	0.074	0.083	1.06	7.97	20.47
2A	AJ12P	0.30	0.120	0.39	0.050	0.28	0.051	0.080	0.98	6.07	12.60
20	AJ16P	0.04	0.007	0.04	0.003	0.04	0.010	0.019	0.24	1.70	2.9s
2B	AJ18P	0. 1s	0.049	0.14	0.023	0.14	0. 0s0	0.073	0.78	8.50	22. 56
20	AJ20P	0.05	0.01s	0.04	0.008	0.0s	0.009	0.018	0.21	1.s4	2.00
2C	AI 64P	0.27	0.091	0.19	0. 04e	0.23	0.088	0.142	1.2s	7.44	14.86
2C	AI56P	0.19	0.084	0. 15	0.033	0.22	0.08s	0.103	0.8S	0.34	1s.40
2C	AI58P	0.24	0.083	0.10	0.037	0.22	0.0ss	0.101	0.91	5.79	12.S7
2D	AJ26P	0.13	0.037	0.17	0.034	0.11	0.018	0.032	0.54	8.10	16.97
20	AJ28P	0.23	0.031	0.03	.	0.09	0.010	0.018	0.29	1.s3	s. 17
20	AJ30P	0.01	0.007	0.03	0.006	0.04	0.00s	0.009	0.11	0.85	2.4S
2E	AJ34P	0.05	0.137	0.07	0.014	0.11	0.030	0. 06s	0.67	4.83	17.7s
2E	AJ36P	0.s7	0. 160	0.30	0.022	0.28	0.0s4	0.109	1.46	toes	34. 4s
2E	AJ38P	0.19	0.089	0.14	0.033	0.0s	0.045	0.0s1	1.18	4.96	17.14
2F	AI34P	0.02	.	0.0s	.	0.02	0.008	0.011	0.31	0.82	1.33
2F	AX 36P	0.08	0.014	0.07	0.003	0.03	0.007	0.014	0.44	1.18	2.00
2F	AI 38P	0.07	0.009	0.0s	0.001	0.02	0.006	0.012	0.3s	1.00	1.69
3A	AI22P	0.04	0.040	0.07	0.014	0.06	0.013	0.02s	0.33	2.85	9.67
3A	AI24P	0.20	0.038	0.11	0.021	0.13	0.013	o. 02a	0.38	2.81	4.46
3A	AI26P	0.14	0.021	0.13	0.008	0.09	0.011	0.022	0.31	2.21	4.09
3B	AI 14P	0.10	0.030	0. 18	0.027	0.09	0.034	0.0s0	1.12	0.88	20.37
30	AI 16P	0.08	0. 02s	o. 1s	0.022	0.07	0.036	0.0s3	0.s8	6.58	20.81
3B	AI 18P	0.09	0.02s	0.18	0.019	0.00	0.041	0.0s2	1.16	7.30	21.22
4A	A108P	0.10	0.008	0.07	0.005	0.03	0.014	0.024	0.60	2.62	7.65
4A	AI08P	0.08	0.007	0.08	0.007	0.0s	0.020	0.031	0.69	3.4e	11.32
4A	AI IOP	0.11	0.012	0.09	0.010	0.07	0.018	0.028	0.32	3.42	10.15
4B	AH97P	0.07	0.021	0.08	0.008	0.05	0.010	0.018	0.s2	2.2B	6.08
4B	AH99P	0.03	.	0.08	0.003	0.03	0.00s	0.013	0.39	1.45	2.80
40	AI01P	0.05	0.002	0.03	0. 006	0.04	0.008	0.013	0.39	1.23	3.62
4C	AJ42P	0.13	0.029	0.11	0.018	0.11	0.022	0. 036	0.84	4.09	11.88
4C	AJ44P	0.07	0.01s	0.08	0.005	0.08	0.013	0.024	0.58	2.65	7.98
4C	AJ46P	0.09	0.016	0.0s	0.009	0.07	0.013	0.023	0.52	2.47	7.S2
50	AG41P	0.02		0.02	0.002	0.02	o. ooe	0.011	0.19	0.s3	1.78
50	AG43P	0.04	0:008	0.04	0.003	0.06	0.011	0.021	0.36	1.83	6.17
50	AG45P	0.02	0.008	0.02	0. ooe	0,03	0.007	0.01s	0.32	1.4s	3.24

BEAUFORT SEA MONITORING PROGRAM -- BULK SEDIMENT SAMPLE DATA
RAW DATA LISTING FOR HYDROCARBON CONCENTRATIONS

TVPE OF SEDIMENT = BULK

YEAR=2 SITETYPE=OCEANIC

STATION	SAMPLE	N	F	P	0	PAN	PHYTANE	PRISTANE	LALK	TALK	TOT
510	AG17P	0.07	o. 02s	0.0s	0.016	0.05	0.016	0.029	0.50	2.82	7.S6
510	AG 19P	0.11	0.036	0.0s	0.022	0.0s	0.016	0.029	0.47	2.73	7.77
510	AG21P	0.07	0.027	0.07	0.014	0.05	0.017	0.030	o.4a	2.79	8.46
51	AG33P	0.03	0.003	0.03	0.002	0.03	0.002	0.004	0.09	0.40	0.83
51	AG35P	0.00	.	0.01	0.001	0.01	0.002	0.004	0.11	0.3s	0.72
51	AG37P	0.03	0.006	0.02	0.004	0.03	0.007	0.014	0.23	1.17	2.23
5s	AG2SP	0.04	0.010	0.04	0.008	0.04	0.010	0.021	0.s1	2.2s	5.08
55	AG27P	0.08	0.014	0.0s	0.013	0.0s	0.014	0.027	o.4a	2.70	7.19
55	AG2SP	0.00	.	0.01	0.001	0.01	0.008	0.014	0.2s	1.7s	3.ss
5A	AG49P	0.22	0.023	0.12	0.01s	0. 15	0.037	0.046	0.71	4.4s	17.34
5A	AGS 1P	0. 18	0.020	0.08	0.013	0.11	0.031	0.051	0.85	4.75	18.04
SA	AG55P	0.14	0.020	0.12	0.017	0.11	0.024	0.053	1.27	S.07	8.39
5B	AG57P	0.50	0. 135	0.3s	0.072	0.38	0. 07s	0.097	1.08	7.14	28.22
5B	AG59P	0.43	0.0s3	0.34	0. 0s4	0.37	0.081	0.098	1.12	6.60	27.41
5B	AG61P	0.48	0.095	0.36	0.084	0.37	0.097	0.104	1.1s	7.17	30.s1
5D	AG09P	0.22	0.052	0.17	0.042	0.1s	0.040	0.044	0.88	8.67	31.16
60	AGI 1P	0. 18	0.073	0.12	0.028	0.14	0.027	0. 0s0	0.9s	9.05	22.67
50	AG 13P	0.21	0.026	0.17	0.037	0. 19	0.042	0.047	0.86	7.13	27.22
5E	AG65P	o.4a	0.084	0.31	0.071	0.34	0.076	0.0s3	1.23	6.64	2S .24
SE	AG67P	0.4s	0.077	0.32	0.04s	0.34	0.079	0.098	1.18	6.s0	27.08
SE	AG69P	0.45	0.090	0.32	0.055	0.3s	0.083	0. 16s	1.72	11.71	3s.00
SF	AH86P	0.05	0.007	0.05	0.011	0.07	0.017	0.030	0.60	2.82	8.47
5F	AH88P	0.07	0.017	0.0s	0.016	0.08	0.021	0.030	0.65	3.S2	11.22
5F	AH90P	0.07	0.017	0.08	0.023	0.0s	0.020	0. 026	0.s3	3.04	9.97
5G	AI46P	0.09	0.01s	0.0s	0.009	0.08	0.015	0.029	0.38	2.28	7.07
5G	AI48P	0.04	0.00s	0.04	0.002	0.04	0.011	0.022	0.34	1.07	4.s7
5G	AI50P	0. 10	0.014	0.0s	0.00s	0.0s	0.013	0.026	0.40	2.00	6.67
5H	AJ50P	0.07	0.010	0.05	0.007	0.0s	0.013	0.026	0.s4	2.70	7.08
5H	AJ52P	0.05	0.014	0.09	0.009	0.03	0.01s	0.028	0.6s	2.87	8.48
5H	AJ54P	0.08	0.01s	0. 0s	0.007	0.0s	0.018	0.036	t.07	4.30	10.89
6A	AG73P	0.36	0.304	0.27	0.04$	0.26	0.047	0.082	1.18	11.91	23. 9a
6A	AG75P	0.42	0.117	0.24	0.050	0.2s	0. 05s	0.072	1.12	9.84	28.73
6A	AG77P	o.4a	0.147	0.31	0.057	0.27	0.048	0.080	0.88	11.37	35.84
6B	AGa 1P	0.90	0. 208	0.42	0.087	0.38	0.068	0.084	0.89	8.s2	28.77
6B	AG83P	1.07	0.244	0.45	0. 101	0.35	0.072	0.090	0.90	10.40	33. 4s
6B	AG85P	1. 17	0.221	0.43	0.080	0.40	0. 00s	0.108	1.04	13.24	39.44
6C	AG89P	0.21	0.057	0.14	0.031	0.17	0.00s	0. 046	0.38	4.s7	16.28
6C	AG9 1P	0.43	0.136	0.30	0.083	0.31	o. 04s	0.074	0.63	8.01	23.22
6C	AG93P	0.48	0. 13s	0.28	0.057	0.22	0.048	0.076	0.80	7.22	24.32
6D	AG97P	0.04	0.009	0.03	0.012	0.04	0.007	0.008	0.09	1.32	3.62
60	AG99P	0.08	0.007	0.05	0.007	0.04	0.011	0.022	0.23	1.25	2.24
6D	AHO1P	0.33	0.076	0.23	0.046	0.22	0.035	0.052	0.43	4.95	16.79
6F	AHI 1P	0.21	0. 055	0.14	0.020	0.12	0.039	0.0s3	0.74	4.92	13.67
6F	AH18P	0.24	0.071	0. Is	0.028	0.11	0.030	0.0s3	0.74	5.12	14.1s
6F	AH20P	0.22	0.052	o. 13	0.025	0.09	0.025	0.048	o.5a	4.08	11.99
6G	AH75P	0.48	0.064	0.27	0.047	o.2a	0.069	0.134	2.2s	21.85	64. 56
6G	AH77P	0.49	0.092	o.2a	0.052	0.26	0.082	0.127	2.42	21.47	61.80
6G	AH81P	0.50	0.100	0.27	0. 0s4	0.22	0.0s0	0.111	2.01	18.60	s4. e2
7A	AH67P	0.52	0.06S	0.25	0.043	0.28	0.049	0.120	1.13	11.S6	31.16
7A	AH69P	o.3a	o. 05s	0.21	0.037	0.2s	0.080	0.092	0.89	6.92	21.02
7A	AH71P	0.50	0.089	0.22	0.045	0.23	0, 04s	0.096	1.02	8.27	17.22

BEAUFORT SEA MONITORING PROGRAM-- BULK SEDIMENT SAMPLE DATA
RAW DATA LISTING FOR HYDROCARBON CONCENTRATIONS

TYPE OF SEDIMENT = BULK

YEAR=2 SITETYPE=OCEANIC

STATION	SAMPLE	N	F	P	D	PAM	PHYTANE	PRISTANE	LALK	TALK	TOT
7B	AHSOP	0.14	0. 02s	0.08	0.013	0.06	0.019	0.044	0.8s	3.31	8.34
70	AH52P	0.10	0.012	0.08	0.016	0,0s	0.01s	0.037	0.43	2.77	5.76
7B	AHS4P	0.11	0.01s	0.0s	0.01s	0.07	0.018	0.040	o.4e	3.13	8.76
7C	AH41P	0.95	0.088	0.82	0.130	0.02	0.047	0.102	1.16	0.8s	28.22
7C	AH43P	0.5?	0.137	0.40	0.094	0.13	0. 0s9	0.130	1.59	14.0s	38.15
7C	AH45P	0.46	0.072	0.26	0. 0s3	0.23	0.049	0.099	1.17	10.00	28.77
70	AH33P	0.21	0.058	0.24	0.040	0. 13	0.051	0. 158	1.77	10.74	37.89
70	AH35P	0.33	0.090	0.39	0.082	0.21	0.073	0.135	2.10	1s. 14	3s . S2
70	AH37P	.		.		.	0.050	0.116	1.30	11.91	30.03
7E	AH59P	0.88	0:138	0.44	0:080	0.37	0.080	0.228	1.65	12.41	38.43
7E	AH61P	0.62	0.084	0.32	0.04%	0.28	0. 04s	0.148	1.30	10.7s	31.80
7E	AH63P	0.72	0. 086	0.34	o. 05s	0.25	0.0s1	0.181	1.41	10.73	30.84
7G	AH24P	.		.		.	0.034	0.144	1.00	4.78	18.48
7G	AH26P	0.26	0:032	0.31	o: 036	0.16	0. 04s	0.200	1.46	0.42	22.42
7G	AH28P	0.30	0.02s	0.34	0.043	0.18	0.081	0.281	1.68	7.07	31.70

YEAR=2 SITETYPE=PEAT

STATION	SAMPLE	N	F	P	D	PAH	PHYTANE	PRISTANE	LALK	TALK	TOT
1F	AJ06	0.08	0.01s	0.09	0.023	0.41	0.000	0.01s	11.63	263. S3	S31.80
2G	AI44P	0.04	0.013	0.05	0.011	0.0s	0.008	0.021	0.81	38. 99	4s .00
2H	AJ05	0.09	0.016	0.08	0.018	0.21	0.043	0.086	2.69	63.6s	111.60
3D	AI31P	.		0.01	0.009	0.10	0.040	0.071	3.49	228.99	386.40
5K	AH94P	0.00	:	0.03		0.01	0.022	0.034	1.23	82.84	163.80
6J	AH07P	0.02		0.01		0.10	0.000	0. 026	S.8S	240.75	743.00
7H	AH32	0. 1s	O: 32S	0.12	0:032	0.04	0.023	0.042	1.63	40.99	60. 7s
7J	AH79P	0.01	.	0.03		0.01	0. 07s	2. 655	13.80	694. 80	1701.00

YEAR=2 SITETYPE=RIVER

STATION	SAMPLE	N	F	P	D	PAN	PHYTANE	PRISTANE	LALK	TALK	TOT
5J	AG07P	0.07	0.009	0.06	0.008	0.0s	0.020	0. 02s	1.04	8.61	15.93
6H	AH09P	0.28	0.019	0.18	0.022	0.22	0.038	0.095	0.99	10.40	2S .28

BEAUFORT SEA MONITORING PROGRAM-- SULK SEDIMENT SANPLE DATA
RAW DATA LISTING FOR HYDROCARBON CONCENTRATIONS

TYPE OF SEDIMENT = BULK

YEAR=3 SITETYPE=OCEANIC

STATION	SANPLE	N	F	P	0	PAN	PHYTANE	PRISTANE	LALK	TALK	TOT
1A	FB25P	o. 1s	0.042	0.12	0.024	0.09	0.020	o. 0s2	0.s8	7.02	1s.17
1A	FB27P	0.16	0.017	0.13	0.015	0.12	0.026	0.057	0.s0	6.90	1s.43
1A	FB29P	0.14	0.032	0.10	0.012	0.0s	0.020	0.043	0.4s	S o l	11.14
1B	FB33P	0.01		0.02		0.04	0.008	0.018	0.19	1.0s	2.3S
1B	FB35P	0.01	.	0.02		0.0s	0.013	0.026	0.19	1.69	3.s0
1B	FB37P	0.22	0.071	0.17	0:030	0.17	0. 0s2	0.107	0.9s	0.0s	13.s7
1C	FB49P	0.03	0.002	0.04	0.002	0.08	o. 08s	0.141	1.14	6.62	20.30
1C	FB51P	0.23	0.078	0. 18	0.044	0. 19	0.081	0.139	1.1s	S.8S	14.3s
1C	FB53P	0.33	0.058	0.14	.	0.23	0.001	0. 135	0.s1	5.70	14.01
1D	FB09P	0.02	0.009	0,02	0.001	0.01	0.00s	0.011	0.2s	3.11	6.82
1D	FB11P	0.03	0.008	0.02	0.003	0.01	0.007	0.01s	0.33	4.04	134.s0
10	FB13P	0.05	.	0.02	0.001	0.00	0.005	0.012	0.30	2.99	S2 .44
1E	FB17P	0.01	0.002	0.01	0.003	0.00	0.005	0.010	0.21	2.37	6.16
1E	FB19P	0.01	0.002	0.02	0.003	0.01	0.005	0.011	0.24	2.46	4.27
1E	FB21P	0.00		0.01	.	0.01	0.00s	0.009	0.22	2.28	6.35
2A	FB41P	0.31	0: 076	0.34	0.041	0.24	0.0s2	0.119	1.24	9.12	2S.34
2A	FB43P	0.31	O. 123	0.42	0. 0s9	0.30	0.080	0. 1ss	1.65	9.47	22.49
2A	FB45P	0.31	o. 105	0.34	0.066	0.30	0.085	0.108	1.73	10.20	21.30
2B	FB65P	0. 16	0.044	0.12	0.031	0.11	0.023	0.049	0.4s	3.9s	18.71
2B	FB67P	0.03	0.00s	0.03	0.006	0.03	0.000	0.016	0.17	0.49	4.88
2B	FB69P	0.02	0.003	0.02	0.002	0.02	0.004	0.016	0.07	0.s7	0.86
2C	FB57P	0.30	0. 0s8	0.21	0. 0s7	0.20	0.073	o. 11s	0.s9	B.43	13.41
2C	FB59P	0.38	0.109	0.28	0.081	0.28	0.0s4	0.107	0.82	6.62	13.47
2C	FB61P	0.37	0.094	0.23	0.068	0.18	0.0s8	0.112	0.90	6.49	13.40
20	FB73P	0.17	0. 03s	0.13	0.022	0.00	0.026	0.059	0.8s	5.75	22.74
20	FB75P	0. 19	0.036	0.15	0.024	0.10	0.030	0.053	0.60	3.89	8.80
2D	FB77P	0.13	0.032	0.13	0.019	0.09	0.020	0.042	0.43	2.82	20.69
2E	FD90P	0.04	0.012	0.0s	0.010	0.0s	0.015	0.033	0.32	1.89	6.12
2E	F092P	0.07	0.021	0.07	0.011	0.07	0.018	0.040	0.38	2.3S	7.s1
2E	FD94P	0.05	0.003	0.08	0.006	0.07	0.031	0.038	0.68	4.22	12.21
2F	FB01P	0.01		0.02		0.03	0.010	0.020	0.28	0.73	9.45
2F	FB03P	0.01	.	0.02	.	0.01	0.011	0.020	0.24	0.s3	10.2s
2F	FB05P	0.05	0.011	0.05	0.005	0.02	0.010	0.021	0.20	0.s3	1.70
3A	FE13P	0.15	0.031	0.12	0.020	0.07	0.022	0.049	0.49	3.57	8.41
3A	FE15P	0.15	0.023	0.10	0.027	0.08	0.021	0.047	0.46	3.2S	10. Is
3A	FE 17P	0.15	0.036	0.12	0.029	0.11	0.021	0.047	0.47	3.73	11.62
30	FD98P	0.13	0.027	0.11	0.023	0.11	0.031	0.0ss	0.07	4.76	14.66
3B	FE07P	0.13	0.040	0.11	0.027	0. 10	0.035	0.081	0.s2	7.00	16.21
3B	FE09P	0.28	0.052	0.19	0.04s	0.13	0.03s	0.092	0.s3	8.09	1s.29
4A	FE29P	0.20	0.071	0.21	0.047	0.11	0.027	0.002	0.62	3.63	8.27
4A	FE31P	0.15	0.053	0.10	0.033	0.08	0.033	0.09s	0.97	4.30	12.0s
4A	FE33P	0.04	0.017	0.0s	0.027	0.03	0.011	0.024	0.31	1.95	5.82
4B	FE21P	0.08	0.018	0.04	0.021	0.04	0.007	0.01s	0.20	1.07	2.42
4B	FE23P	0.07	0.017	0.0s	0.018	0.04	0.008	0.021	0.27	1.s2	3.50
4B	FE25P	0.07	0.012	0.0s	0.008	0.0s	0.012	0.027	0.32	2.22	9.74
4C	FE45P	0.14	0.032	0.09	0.028	0.0s	0.018	0.042	0.40	3.07	7.35
4C	FE47P	0.04	0.015	0.04	0.010	0.04	0.010	0.022	0.28	1.88	6.65
4C	FE49P	0.05	0.018	0.0s	0.012	0.05	0.012	0.027	0.33	1.88	6.68
50	FE61P	0.03	0.008	0.03	0. 00s	0.01	0. 00s	0.012	0.16	0.s7	0.8S
50	FE63P	0.10	0.027	0.0s	0.022	0.07	0.012	0.029	0.38	2.34	4.39
50	FE65P	0.0s	0.014	0.05	0.015	0.04	0.008	0.018	0.20	1.64	3.24

BEAUFORT SEA MONITORING PROGRAM-- BULK SEDIMENT SAMPLE DATA
RAW DATA LISTING FOR HYDROCARBON CONCENTRATIONS

TYPE OF SEDIMENT = BULK

YEAR=3 SITETYPE=OCEANIC

STATION	SAMPLE	N	F	P	D	PAN	PHYTANE	PRISTANE	LALK	TALK	TOT
510	FD68P	0.03	0.009	0.04	0.009	0.05	0.009	0.020	0.21	1.46	e. 18
510	FD68P	0.08	0.013	0.0s	0.011	0.06	0.01s	0.027	0.22	3.22	1s.0s
510	FD70P	0.05	0.010	0.0s	0.011	0.0s	0.014	0.020	0.49	2.36	6.87
51	FE53P	0.03	0.018	0.04	0.021	0.03	0.013	0.02s	0.5s	1.2s	3.95
51	FE55P	0.03	0.004	0.02	0.007	0.02	0.000	0.010	o. 1s	0.4s	0.03
51	FE57	0.03	0.005	0.03	0.008	0.02	0.004	0.008	0.10	0.63	1.24
55	FD82P	0.03	.	0.03	0.003	0.08	0.017	0.031	0.33	1.77	s. 18
55	FD84P	0.25	0.023	0. 1s	0.041	0.01	0.012	0.027	0.28	1.93	6.22
5s	FD86P	0.10	0.027	0.08	0.02s	0.08	0.012	0.028	0.36	1.86	5.5s
5A	FD50P	0.20	0.043	0.14	0.040	0.10	0.024	0.052	0.s4	4.09	14.08
5A	FD52P	0.20	0.039	0.12	0.035	0.08	0.022	0.048	0.s0	3.56	9.73
5A	FD54P	0.13	0.040	0.07	0.020	0.12	0.024	0.0s3	0.s3	4.0s	14.02
5B	FC92P	0.37	0.080	0.27	0.072	0.09	0.091	0.188	1.04	8.6S	7s.S2
5B	FC94P	0.47	0.118	0.32	0.096	0.16	0.0s2	0.119	1.07	5.97	19.77
5B	FC96P	0.17	0.034	0.12	0.030	0.07	0.020	0.049	0.51	2.04	8.16
5D	FE69P	0.23	0.043	0.17	0.049	0.11	0.028	0.069	0.78	e e l	26.26
so	FE71P	0.27	0. 03s	0.19	0.056	0.14	0.032	0.081	0.07	8.14	26.63
SD	FE75P	0.30	0.037	0.18	0.064	0.18	0.033	0.078	0.95	10.s1	31.88
SE	FC84P	0.18	0.010	0.20	0.020	0.28	0.126	0.30s	2.47	12.38	102. 10
SE	FC86P	0.32	0.088	0.2s	0.071	0.17	0.114	0.238	1.s4	11.44	10s.40
5E	FC88P	0.33	0.001	0.2s	0.084	0.11	0.080	0.198	1.73	9.41	72.2S
SF	FD58P	0.20	0. 0s7	0.17	0.042	0.$7	0. 03s	0.077	1.00	11.38	5.55
5F	FD60P	0.2s	o. 056	0.18	0.042	0.15	0.030	0.070	0.87	0.23	24.0s
SF	FDB2P	0.20	0.049	0.11	0.041	0.08	0. 03s	0.080	1.00	11.28	5.67
5G	FD76P	0.05	0.014	0.05	0.000	0.07	0.013	0.028	0.28	1.8S	4.94
5G	FD78P	0.00	0.015	0.04	0.005	0.06	0.01s	0.032	0.34	2.4S	10.30
5G	FD80P	0.08	0.01s	0.0s	0.014	0.07	0.020	0.048	0.50	1.56	4.24
5H	FE37P	0.02	0.002	0.03	0.002	0.04	0.017	0.037	0.48	6.71	17.22
5H	FE39P	0.07	0.023	0.07	0.016	0.08	0.01s	0.032	0.02	3.1s	8.67
5H	FE41P	0.07	0.022	0.0s	0.014	0.07	0.013	0.030	0.41	2.s8	7.81
6A	FC76P	1.02	0. 146	0.33	0.122	0.14	0.054	0. 12s	1.27	10.36	82.S1
6A	FC78P	0.60	0.080	0.29	0.080	0.07	0.048	0.120	1.20	8.70	102.60
6A	FC80P	0.24	0.0s8	0.18	0.045	0.21	0.050	0.156	1.24	9.18	102.30
6B	FC52P	1.80	0.40s	0.76	0.161	0.50	0.238	0.41s	3.87	24.98	68. 98
6B	FC54P	1.78	0.426	0.77	0.162	0.56	0.218	0.435	4.34	2s. 59	64.77
6B	FC56P	2.89	0.749	1.08	0.267	0.04	0. 2s2	0. S02	4.13	44.86	S2 .68
6C	FC68P	0.55	0. 0s7	0.28	0.078	0.12	o. 07s	o. 1s9	1.17	7.96	71.34
6C	FC70P	0.24	0.072	0. l*	0.040	0.12	0.081	0.137	1.21	7.07	47. 8S
6C	FC72P	0.16	0.009	o. ls	0.022	0.47	0.076	0.104	1.56	8.92	108.00
6D	FC60P	0.27	0.070	0.15	0.048	0.08	0.028	0.063	0.6s	3.ss	12.13
6D	FC62P	0.44	0.0s4	0.22	0.051	0.21	0.0s7	o. lie	1.12	16.50	46. 98
6D	FC64P	0.31	0.088	0. 1s	0.037	0.11	0.033	0.073	0.75	4.37	6.40
6F	FC36P	0.53	0.188	0.30	0.081	0.15	0.090	0.944	1.42	22.22	48.04
6F	FC38P	0.33	0.088	0.20	0.051	0.21	0.042	0.079	0.84	5.1s	1S.80
6F	FC40P	0.17	0.038	0.0s	0.017	0.08	0.026	0.0s0	0.61	3.20	9.28
6G	FC44P	0.24	0.050	0.1s	0.038	0.11	0.044	0.073	1.ss	9.2s	4.14
6G	FC46P	0.26	0.030	0.16	0.043	0.07	0.072	0.054	0.58	9.18	39. 75
6G	FC48P	0.25	0.082	0. 16	0.030	0.13	0.057	0.061	0.75	11.88	40.43
7A	FC28P	0.39	0. 124	0.20	0.088	0.10	0. 0s7	0.116	1.20	9.89	24.10
7A	FC30P	0.47	0.143	0.24	0.001	0.13	0.049	0. 0s5	0.68	12.92	41.73
7A	FC32P	0.47	0.121	0.28	0.068	0.34	0.079	O. 18S	1.74	17.98	22.03

BEAUFORT SEA MONITORING PROGRAM-- BULK SEDIMENT SAMPLE DATA
RAW DATA LISTING FOR HYDROCARBON CONCENTRATIONS

TYPE OF SEDIMENT = BULK

YEAR=3 SITETYPE=OCEANIC

STATION	SANPLE	N	F	P	D	PAN	PHYTANE	PRISTANE	LALK	TALK	TOT
7B	FC04P	0.21	0.037	0.11	0.024	0.09	0.028	0.030	0.63	3.93	10.74
7B	FC06P	0.28	0. 0ss	0.16	0.039	0.11	0.037	0.071	0.84	5.13	11.s1
7B	FC08P	0.31	0.052	0.18	0. 03s	0.20	0.0s3	0.088	0.88	14.85	35.22
7C	FB95P	0.58	0.837	0.38	0.103	0.35	0.072	0.162	1.67	10.02	30.89
7C	FB97P	0.89	0. 185	0.ss	0. 103	0.22	0.079	0.163	1.67	12.45	40. S2
7C	FB99P	0.s7	0.133	0.38	0.101	0.3s	0. 07s	0. 166	1.82	12.72	34. 95
70	FB87P	0.08	0.009	0.04	0.013	0.04	0.010	0.022	0.22	1.49	55 .34
70	FB89P	0.20	0.037	0.15	0.045	0.16	0.027	0.068	0.s0	S.22	13.83
7D	FB91P	0.07	0.011	0.0s	0.011	0.05	0.012	0.028	0.27	2.0s	7.61
7E	FC12P	0.s9	0. 07s	0.28	0.059	0.19	0.0s2	0. 161	1.21	8.03	17.25
7E	FC 14P	0.92	0.129	0.40	0.082	0.35	o. 076	o. 197	1.s2	10.66	28. 43
7E	FC16P	1. 16	0. 149	0.s0	0.209	0.32	o. 085	0.231	1.96	13.ss	34.73
7G	FC20P	0.67	0.081	0.28	0. 0s7	0.24	0.052	0. 20s	1.39	9.51	21.2s
7G	FC22P	0.s2	0.058	0.22	o. 0s0	0. Is	0. 03s	O. 132	0.74	4.64	10.08
7G	FC24P	0.76	0.074	0.40	o. 04s	0.23	0.092	0.249	1.25	1S.24	43.18

YEAR=3 SITETYPE=RIVER

STATION	SANPLE	N	F	P	D	PAN	PHYTANE	PRI STANE	LALK	TALK	TOT
2J1	FE04	0.09	0.024	0.08	0.010	0.03	0.016	0.034	0.44	1.38	2.s1
2J2	FE05	0.0s	0.013	0.0s	0.010	0.02	0.012	0.027	0.35	0.96	2.ss
5L1	FB81	0.13	0.01s	0.10	0. 04s	0.07	0. 04s	0. 0s8	1.64	20.14	52. 69
5L2	FB82	0.21	0.043	0. 16	0.078	0.13	0.032	0.0s2	1.38	12.21	26. 13
5L3	FB83	0,15	0.01s	0.12	0.040	0.07	0.032	0.043	1.03	8.s4	17.78
5M1	FB84	0.01	0.001	0.01	0.004	0.02	0.00s	0.008	0.64	4.41	10.21
5M2	FB85	0.01	0.001	0.01	0.003	0.04	0.006	0.014	1.10	6.37	14.ss
5M3	FB86	0.00		0.00		0.01	0.002	0.005	0.4s	1.42	2.s8
6K1	FE01	0.24	0.043	0.21	0.048	0.23	0.050	0. 10B	0.98	9.13	19.96
6K2	FE02	0.30	0.034	0.18	0. 04s	0.18	0.040	0.108	0.98	10.s3	21.48
6K3	FE03	0.16	0. 02s	0.11	o. 026	0. 15	0.03s	0.053	0.s4	5.26	11.32

BEAUFORT SEA MONITORING PROGRAM-- BULK SEDIMENT SAMPLE DATA
RAW OATA LISTING FOR METAL CONCENTRATIONS ANO ANCILLARY VARIABLES

TYPE OF SEDIMENT = BULK

YEAR=1 SITETYPE=OCEANIC

STATION	SAMPLE	BA	CD	CR	a l	PB	v	ZN	BA/CR	BA/V	TOC	% MUD
2E	100	178	0.00	33	14.0	4.2	44	31	S.4	4.0	2.00	9.3
2E	100	198	0.16	33	13.0	5.0	53	32	6.0	3.7	2.70	9.3
2E	100	208	0.16	39	23.0	5.0	54	3s	S.3	3.9	2.50	5.8
2E	100	191	0.14	40	14.0	4.s	51	32	4.8	3.7	2.40	7.2
2E	100	188	0.14	39	13.0	4.6	4B	32	4.8	3.9	2.30	8.7
2E	100	198	0.11	39	1s.0	5.0	53	33	5.1	3.7	2.40	8.7
2F	100	263	0.22	46	15.0	6.7	71	52	5.7	3.7	3.90	12.0
2F	100	260	0.22	48	17.0	6.2	72	53	S.7	3.6	6.20	14.s
2F	100	248	0.23	44	16.0	6.7	71	so	5.6	3.5	5.00	16.7
2F	100	267	0.22	47	18.0	6.7	74	33	S.7	3.6	5.60	12.7
2F	100	263	0. 18	48	16.0	6.7	72	53	5.7	3.7	6.50	21.6
2F	100	268	0.20	4a	13.7	7.1	79	60	5.8	3.4	6.30	13.4
3A	100	30B	0.14	51	24.0	7.6	61	53	6.0	3.8	8.80	42.1
3A	100	356	0.13	56	24.0	5.9	91	60	6.4	3.9	8.80	42.1
3A	too	358	0.20	56	23.0	5.9	89	60	6.4	4.0	8.10	40.1
3A	100	346	0. 16	53	21.0	5.6	90	58	6.5	3.8	7.50	40.1
3A	100	363	0.18	56	23.0	6.6	90	59	6.5	4.0	8.20	43.6
3A	100	34a	0.$4	43	23.0	S.3	89	59	8.1	3.9	9.00	43.s
3B	100	358	0.10	56	24.0	6.3	92	59	6.4	3.9	8.60	02.7
3B	100	37s	0.13	58	34.0	4.9	94	60	6.5	4.0	8.80	0s.7
30	100	388	0.10	60	36.0	6.6	100	73	6.5	3.9	9.90	S5.7
3B	100	385	0.14	58	24.0	6.6	96	65	6.9	4.0	9.10	62.3
3B	100	363	0.13	60	30.0	6.3	99	65	6.4	3.9	8.00	62.3
3B	100	40B	0.10	59	24.0	5.9	100	65	6.9	4.0	9.80	70.3
4A	100	360	0.16	51	23.0	8.9	92	63	7.1	3.9	0.70	28.4
4A	100	370	0. 16	55	28.0	7.6	99	65	6.7	3.7	8.60	28.4
4A	100	361	0.16	61	30.0	6.9	94	66	7.1	3.8	6.90	29.2
4A	100	364	0.11	51	22.0	7.9	87	61	7.1	4.2	S.70	18.6
4A	100	365	0.11	50	23.0	S.2	92	64	7.3	4.0	7.40	66.8
4A	100	380	0. 14	53	24.0	8.9	97	65	7.2	3.9	7.90	26.2
4B	100	213	0.23	39	22.0	5.9	58	43	5.5	3.7	4.20	10.1
4B	100	194	0.18	32	18.0	6.9	48	31	6.1	4.0	2.40	5.2
4B	100	193	0.14	34	24.0	6.6	49	37	S.7	3.9	3.00	5.2
4B	100	198	0.20	29	17.0	6.6	47	37	6.8	4.2	3.60	11.8
48	100	189	0.11	31	18.0	6.3	47	35	6.1	4.0	2.70	3.5
4B	100	178	0.20	28	14.0	4.3	39	30	6.4	4.6	1.s0	3.5
4C	100	288	0.0s	4s	19.0	5.1	70	44	6.4	4.1	6.00	27.7
4C	100	323	0.09	44	28.0	4.6	74	45	7.3	4.4	1.60	9.9
4C	100	233	0.05	37	16.0	4.8	49	30	6.3	4.8	2.30	9.9
4C	100	202	0.04	31	12.0	2.6	39	2s	6.s	6.2	3.20	12.4
4C	100	251	0.04	46	24.0	3.0	62	29	5.5	4.0	1.90	18.2
4C	100	228	0.05	34	14.0	4.6	47	2s	6.7	4.9	3.30	18.2
510	100	284	0.26	39	21.1	S.4	68	48	7.3	4.2	5.00	3s.7
610	100	288	0.26	38	17.8	S.2	64	50	7.6	4.5	22.00	26.7
510	100	294	0.28	39	16.6	0.1	B7	48	7.5	4.4	26.90	26.7
510	100	288	0.26	39	17.6	6.1	68	4s	7.4	4.2	8.00	S5.2
510	100	275	0.20	35	13.0	4.8	60	47	7.s	4.6	8.80	22.0
510	100	286	0.22	39	16.0	5.4	67	50	7.3	4.3	5.60	3s.7
51	100	229	0.20	26	10.9	4.8	48	37	8.8	4.8	4.70	13.8
51	100			.	.				.	.	.	8.7
51	100	261	0: la	27	11.3	s: 1	49	3s	9.7	5.3	5.00	8.7

BEAUFORT SEA MONITORING PROGRAM-- BULK **SEDIMENT SAMPLE** OATA
RAW OATA LISTING FOR METAL CONCENTRATIONS AND **ANCILLARY** VARIABLES

TVPE OF SEDIMENT = BULK

YEAR=1 SITETYPE=OCEANIC

STATION	SAMPLE	BA	co	CR	w	PB	v	ZN	BA/CR	BA/V	TOC	% MUD
51	100	221	0.14	2s	9.9	4.s	44	3s	S.8	5.0	5.00	11.2
51	100	232	0. 16	27	12.9	s. 1	4a	3s	8.6	4.8	5.60	11.2
51	100	2s2	0.10	23	8.s	6.4	42	31	11.0	6.0	3.20	6.2
51	100	223	0.14	12	4.0	4.s	39	3s	18.6	5.7	3.s0	0.2
52	100	176	0.10	22	9.3	5.8	43	98	8.0	4.1	1.90	4.8
52	100	176	0.14	22	9.3	5.4	43	101	8.0	4.1	2.20	3.4
52	100	179	0. 14	22	10.6	5.4	44	98	8.1	4.1	3.00	3.4
52	100	194	0.14	22	9.9	4.1	4s	36	8.5	4.3	6.50	4.1
52	100	194	0.12	22	9.9	6.4	43	36	8.8	4.s	2.00	4.1
52	100	198	0.0s	25	10.4	5.4	46	100	7.9	4.3	3.10	2.0
55	100	286	0.20	39	15.1	6.4	68	4s	7.3	4.2	6.40	36.9
5s	100	28s	0.18	3s	1s.3	6.1	67	49	7.s	4.3	6.70	38.7
55	100	291	0.2s	37	14.2	s. 1	64	47	7.s	4.s	9.00	38.7
5s	100	311	0.24	44	17.9	6.1	74	54	7.1	4.2	18.40	32.0
55	100	303	0.22	42	1s.1	5.8	71	53	7.2	4.3	11.00	38.0
55	100	289	0.22	38	1s.s	6.7	68	49	7.6	4.3	6.90	38.0
SA	100	665	0. 1s	56	20.6	10.s	99	68	11.9	6.7	10.20	62.3
5A	100	620	0.22	56	20.1	9.6	97	67	11.1	6.4	10.30	81.6
6A	100	546	0.22	55	20.s	9.3	97	69	9.9	5.6	9.70	81.6
5A	100	474	0.20	51	19.9	8.9	90	57	9.3	5.3	10.20	65.2
5A	100	522	0.26	St	1s.7	8.0	90	63	10.2	5.8	10.20	6s.2
5A	100	498	0.24	59	22.s	8.6	100	70	8.4	5.0	9.70	80.4
5B	100	1s4	0.04	16	6.2	4.s	32	16	12.1	6.1	1.s0	3.3
5B	100	183	0.04	16	4.4	4.1	31	18	11.4	5.9	2.20	2.4
5B	100	192	0.04	17	4.s	4.s	33	24	11.3	S.8	2.70	2.s
5B	100	203	0.04	20	4.6	3.s	36	18	10.1	5.6	2.00	2.6
5B	100	191	0.04	17	5.4	2.2	33	19	11.2	5.8	1.s0	4.6
5B	100	192	0.04	17	4.2	4.s	32	17	11.3	6.0	1.80	4.6
so	100	381	0.22	56	2s.1	10.2	93	77	6.8	4.1	29.80	70.7
so	100	377	0.22	56	2s.1	9.9	93	7s	6.7	4.1	28.40	70.7
so	100	379	0.20	58	2S.3	9.9	93	77	6.8	4.1	30.20	71.0
50	100	376	0.24	53	25.3	10.2	91	76	7.1	4.1	31.s0	71.0
SD	100	368	0.22	57	26.1	10.2	93	77	6.5	4.0	2s .20	78.0
SD	100	3ss	0.22	52	22.0	8.9	88	73	6.8	4.0	25.60	73.5
SE	100	2S7	0.0s	17	7.s	4.1	33	18	15.1	7.8	2.10	4.3
SE	100		.	.	.	.	.	.	.	.	.	4.3
SE	100	392	0.08	38	12.6	4.8	76	46	10.3	5.2	100	23.3
SE	100	368	0.04	34	11.3	4.8	65	37	10.8	5.7	3.00	21.2
SE	100	231	0.10	20	7.1	4.s	39	22	11.s	5.9	2.50	5.6
SE	100	2ss	0.04	19	7.1	4.1	36	20	13.4	7.1	2.10	6.6
SE	100	578	0.10	87	31.1	16.6	16s	108	6.6	3.5	12.00	$2.2
SF	100 .	331	0.22	51	18.7	8.0	80	65	6.5	4.1	14.90	6s.8
SF	100	331	0.24	49	17.6	7.0	so	84	6.8	4.1	14.90	85.8
5F	100	300	0.20	52	18.6	7.3	78	58	5.9	4.0	16.40	55.6
SF	100	33s	0.16	49	18.6	7.0	80	53	6.8	4.2	18.70	55.6
5F	100	320	0.20	44	17.6	9.3	77	67	7.5	4.3	16.60	62.6
5F	100	34s	0.22	49	17.6	8.0	82	66	7.1	4.2	20.40	82.s
5G	100	258	0.10	31	9.5	6.8	55	3s	S.3	4.7	4.00	29.7
5G	100	275	0.12	34	10.2	6.4	so	38	8.1	4.0	6.60	20.0
5G	100	298	0.08	34	10.2	5.8	64	39	8.8	4.7	8.90	14.4
5G	100	28s	0.10	3s	11.s	6.1	65	41	7.8	4.4	7.20	14.4

BEAUFORT SEA MONITORING PROGRAM-- BULK SEDIMENT SAMPLE OATA
RAW OATA LISTING FOR METAL CONCENTRATIONS AND ANCILLARY VARIABLES

TYPE OF SEDIMENT = BULK

YEAR=1 SITETYPE=OCEANIC

STATION	SAMPLE	BA	co	CR	CU	PB	v	ZN	BA/CR	BA/V	TOC	% MUD
5G	too	34a	0.18	41	13.0	7.7	76	49	8.4	4.6	6.80	17.3
5G	100	255	0.08	31	9.5	6.1	51	35	8.2	5.0	4.70	17.3
6A	100	393	0.16	64	26.0	9.6	96	70	6.1	4.1	13.80	67.5
6A	100	383	0.13	58	23.0	9.6	so	70	6.6	4.3	9.90	67.6
6A	100	373	0.13	57	23.0	e.4	88	70	6.5	4.2	11.80	67.6
6A	100	373	0.11	55	22.0	8.7	87	6a	6.8	4.3	10.80	eo.8
6A	100	393	0. 16	60	24.0	8.0	94	70	6.s	4.2	11.s0	70.0
6A	100	39a	0.07	64	23.0	9.6	94	73	6.2	4.2	11.00	a s s
6B	100	788	0.27	90	3s.0	1s.0	1s4	11s	8.8	5.1	18.20	84.7
6B	100	768	0.29	94	37.0	16.7	1s7	116	8.2	4.9	18.30	e4.7
6B	100	738	0.23	87	38.0	I s a	134	99	8.5	5.5	16.60	98.3
6B	100	668	0.32	98	30.0	18.3	161	116	6.8	4.1	18.30	S2.4
6B	100	7e3	0.32	89	3s.0	10.7	157	11s	8.6	4.9	18.60	92.4
6B	100	743	0.29	91	36.0	17.0	155	113	8.2	4.0	18.10	79.1
6C	100	348	0.0s	61	20.0	8.0	86	7s	5.7	4.0	7.10	21.0
6C	100	273	0.07	46	16.0	6.1	68	44	5.9	4.0	4.70	16.6
6C	100	603	0.04	97	27.o	7.1	138	9s	a.2	4.4	S.20	16.6
6C	100	483	0.0s	71	24.0	12.2	131	82	6.8	3.7	8.60	5e.4
6C	100	338	0.07	61	20.0	9.3	84	se	5.5	4.0	5.80	32.0
6C	100	343	0.07	S4	17.0	7.7	84	55	6.4	4.1	5.60	27.6
6D	100	258	0.0s	3s	7.0	6.4	58	42	7.4	4.4	2.60	12.0
6D	100	316	0.05	39	11.0	7.1	71	49	6.1	4.s	4.90	12.0
6D	too	270	0.05	36	8.0	6.8	64	46	7.s	4.2	3.60	15.9
6D	100	300	0.07	44	9.6	8.0	7s	4s	6.8	4.0	5.20	1s.9
6D	100	2e4	0.0s	35	8.0	6.4	58	42	7.s	4.6	2.90	4.6
6D	100	286	0.11	41	11.0	7.4	72	49	7.0	4.0	3.40	4.6
6F	100	429	0.09	60	20.0	12.2	10s	71	.7.1	4.0	12.20	44.7
6F	100	394	0.14	51	17.0	9.3	89	63	7.7	4.4	9.20	44.7
6F	100	500	0.18	71	2s.0	1s.4	129	63	7.0	3.9	12.40	8s.6
6F	100	519	0.14	so	28.0	10.7	139	90	6.5	3.7	13.00	81.7
6F	100	135	0.07	55	13.0	6.1	71	46	2.s	1.9	4.10	28.7
6F	100	468	0.14	64	24.0	1s.1	122	83	7.3	3.8	12.10	e3.4
7A	100	706	0.09	63	13.0	9.0	87	70	11.2	8.1	7.80	70.2
7A	100	722	0.14	es	13.0	6.8	89	73	11.1	8.1	12.20	71.4
7A	100	693	0.09	57	11.0	e.4	83	77	12.2	8.3	e.30	66.1
7A	100	686	0.11	67	16.0	9.0	90	83	10.2	7.6	7.90	e e l
7A	100	731	0.13	59	17.0	8.4	88	76	12.4	8.3	18.40	60.0
7A	100	e50	0.0s	67	13.0	9.3	8s	70	9.7	7.6	13.80	59.3
7B	100	476	0.07	47	10.0	7.1	70	52	10.1	6.8	5.60	17.7
70	100	474	0.07	so	10.0	7.4	69	62	9.s	6.9	4.s0	13.9
70	100	4eo	0.05	53	8.0	6.1	67	51	8.7	6.9	6.90	9.0
7B	100	44e	0.0s	48	10.0	6.4	71	53	9.3	6.3	S.40	9.4
7B	100 "	439	0.0s	4a	9.0	6.5	65	53	9.1	6.8	S.30	10.3
7B	100	443	0.05	47	11.0	6.4	es	45	9.4	6.8	6.00	19.6
7C	100	577	0.11	81	28.0	1s.1	150	99	7.1	3.8	13.10	83.S
7C	100	569	0.13	77	27.0	1s.1	144	96	7.4	4.0	14.10	86.6
7C	100	574	0.14	7a	27.0	14.5	149	97	7.4	3.8	14.00	86.6
7C	100	5s8	0.13	76	26.0	12.9	140	97	7.3	4.0	12.80	82.6
7C	100	574	0.11	76	20.0	1s.4	144	97	7.6	4.0	13.s0	82.6
7C	100	554	0.18	77	28.0	1s.1	144	96	7.2	3.8	12.70	85.6
7E	100	596	0.14	59	17.0	9.0	90	70	10.1	6.6	17.80	a3.3

BEAUFORT SEA MONITORING PROGRAM-- SULK SEDIMENT SAMPLE OATA
RAW DATA LISTING FOR METAL CONCENTRATIONS ANO ANCILLARY VARIABLES

TYPE OF SEDIMENT = BULK

YEAR=1 SITETYPE=OCEANIC

STATION	SAMPLE	BA	co	CR	CU	PB	v	ZN	BA/CR	BA/V	TOC	% MUD
7E	100	624	0.18	61	17.0	8.4	93	72	10.2	e.7	1s. 10	71.6
7E	100	607	0. la	71	19.0	8.0	100	75	8.5	6.1	16.80	71.6
7E	100	596	O t t	60	1s.0	8.4	so	69	9.8	6.6	17.70	69.7
7E	100	617	0.16	as	17.0	7.7	83	70	8.S	6.6	20.30	66.5
7E	100	591	0.13	58	16.0	8.4	89	70	10.2	6.6	15.90	66.s
7G	100	s 10	0.0s	36	8.0	10.9	62	51	16.9	9.8	42.00	8.9
7G	100	SS8	0.0S	36	7.0	10.3	82	54	1s.s	9.0	1s.40	11.5
7G	100	591	0.05	36	7.0	11.9	61	St	18.4	9.7	20.20	10.2
7a	100	S98	0.0S	48	16.0	10.6	7s	55	12.4	7.9	20.80	10.2
7G	100	613	0.09	42	8.0	11.3	es	62	14.6	9.4	18.70	9.4
7G	100	67s	0.08	S2	23.0	11.6	86	SS	13.0	7.8	36.80	10.2

BEAUFORT SEA MONITORING PROGRAM-- BULK SEDIMENT SAMPLE DATA
RAW DATA LISTING FOR METAL CONCENTRATIONS ANO ANCILLARY VARIABLES

TYPE OF SEDIMENT = BULK

YEAR=2 SITETYPE=OCEANIC

STATION	SAMPLE	6A	co	CR	CU	PB	v	ZN	BA/CR	BA/V	TOC	% MUD
1A	AI86P										11.s0	04.4
1A	AI88P										9.80	60.0
1A	AI90P										13.80	81.6
1B	AI95P										8.20	19.9
1B	AI97P										5.50	9.2
1B	AI99P										8.00	15.7
1C	AI62P										10.40	72.S
1C	AI64P										8.90	70.7
1C	AI66P										9.s0	66.6
ID	Al '70P										3.80	11.0
10	AI72P										0.s0	21.5
10	AI74P										7.80	18.2
1E	AI78P										11.70	93.3
1E	Al 80P										10.20	95.2
1E	AI82P										13.10	89.9
2A	AJ08P										22.70	93.1
2A	AJ10P										17.20	00.s
2A	AJ 12P										10.00	91.6
2B	AJ16P										7.00	4.0
2B	AJ18P										13.30	63.8
2B	AJ20P										10.40	5.2
2C	AI54P										12.20	70.3
2C	AI56P										9.10	70.s
2C	AI58P										10.00	72.5
2D	AJ26P										18.60	82.7
2D	AJ28P										6.20	1s.4
20	AJ30P										6.40	2.8
2E	AJ34P	126	0.29	77	28.2	16.4	133	113	1.6	0.9	12.00	80.s
2E	AJ36P	141	0.29	82	30.s	16.9	138	121	1.7	1.0	11.70	90.1
2E	AJ38P	134	0.34	82	31.6	22.8	134	114	1.6	1.0	8.20	62.1
2F	AI34P	94	0.22	38	9.0	6.s	61	57	2.5	1.s	4.80	13.8
2F	AI36P	99	0.21	37	10.9	0.7	62	58	2.7	1.6	S.20	1s.4
2F	Al 38P	172	0.22	37	10.6	8.1	64	57	4.0	2.7	4.10	10.7
3A	AI22P	233	0.17	49	15.0	10.0	75	62	4.8	3.1	10.s0	46.6
3A	AI24P	2s0	0.15	46	18.3	10.6	83	66	S.3	3.s	11.10	46.1
3A	Al 26P	197	0.17	45	15.4	9.5	76	64	4.4	2.6	10.40	45.s
30	Al 14P	289	0.17	58	18.1	10.3	99	79	5.0	2.9	11.00	7s.s
3B	Al 16P	318	0.16	61	19.4	10.5	101	71	8.2	3.1	11.50	70.8
3B	AI ISP	340	0.19	53	21.8	10.6	102	78	6.4	3.3.	11.20	76.1
4A	A106P	331	0.08	31	12.6	8.2	57	49	10.7	5.8	18.20	22.s
4A	Al 08P	61	0.0s	33	12.0	8.0	59	52	1.6	1.0	12.30	43.5
4A	Al 10P	382	0.14	52	18.9	12.0	81	65	7.3	4.7	10.60	35.8
4B	AH97P	381	0.18	32	8.8	4.9	48	46	11.9	7.9	6.00	8.0
48	AH99P	144	0.14	20	8.0	7.2	42	40	5.s	3.4	4.00	4.6
40	AI01P	99	0.16	29	9.2	5.3	43	42	3.4	2.3	4.00	5.8
4C	AJ42P	311	0.09	40	11.5	10.5	70	51	7.8	4.4	10.60	9.4
4C	AJ44P	277	0.07	29	11.2	8.8	59	39	9.6	4.7	11.40	0.4
4C	AJ46P	284	0.09	38	10.2	10.6	59	44	7.5	4.8	9.s0	3.1
50	AG41 P										3.40	4.0
50	AG43P										3.60	13.0
50	AG45P										4.80	2.0

BEAUFORT SEA MONITORING PROGRAM-- BULK SEDIMENT SANPLE DATA
RAW OATA LISTING FOR METAL CONCENTRATIONS AND ANCILLARY VARIABLES

TYPE OF SEDIMENT = BULK

YEAR=2 SITETYPE=OCEANIC

STATION	SAMPLE	BA	CD	CR	CU	PB	v	ZN	BA/CR	BA/V	TOC	% MUD
510	AG17P	129	0.23	30	11.8	6.6	64	58	3.3	2.0	8.70	21.7
510	AG19P	41	0.24	38	11.7	5.7	61	60	1.1	0.7	6.80	16.8
510	AG21P	54	0.23	42	11.3	6.4	61	57	1.3	0.8	5.60	22.9
St	AG33P	186	0.0s	19	6.0	7.8	36	38	9.8	6.2	2.40	0.8
51	AG35P	175	0.0s	19	6.0	7.8	38	33	9.2	4.6	2.00	1.2
51	AG37P	194	0.11	25	7.0	8.7	45	46	7.8	4.3	3.40	0.9
55	AG25P	255	o. 16	37	12.3	7.3	62	71	6.9	4.1	6.40	11.5
55	AG27P	ı 86	0.21	41	13.6	7.7	66	56	4.s	2.8	S.70	36.7
55	AG29P	239	0.0s	26	9.3	6.0	48	35	8.2	5.0	2.70	22.4
5A	AG49P	274	0.21	51	17.0	8.2	74	59	5.4	3.7	11.40	43.s
5A	AG51P	289	0.19	46	14.5	7.9	es	67	6.4	4.4	12.70	3s.4
5A	AG55P	378	0.24	4s	20.4	9.0	70	65	7.7	4.8	16.70	49.9
5B	AG57P	567	0.12	87	30.7	18.0	1s0	116	6.5	3.8	10.40	SS.8
5B	AG59P	539	0.15	87	31.6	17.5	150	117	6.2	3.6	9.80	81.4
5B	AG61P	498	0.15	87	31.5	18.4	1s0	114	S.7	3.3	10.00	93.7
50	AG09P	72	0.2s	50	19.6	7.3	76	73	1.4	0.9	19.20	65.8
5D	AGI 1P	37	0.28	49	16.8	6.6	82	83	0.8	0.s	12.40	55.2
50	AG 13P	32	0.29	49	17.5	7.6	80	77	0.7	0.4	12.20	63.9
5E	AG65P	381	0.20	85	2s.6	18.1	144	116	4.s	2.s	9.40	44.6
5E	AG67P	591	0.19	84	32.4	16.3	151	102	7.0	3.9	9.40	23.3
5E	AG69P	464	0.20	79	27.3	17.0	144	107	5.9	3.2	10.40	62.8
5F	AH86P	275	0.16	31	10.1	6.6	51	49	8.9	6.4	7.80	44.3
SF	AH88P	202	0.18	40	11.2	6.9	58	es	7.3	5.0	9.00	42.8
SF	AH90P	272	0.12	37	8.7	6.6	65	52	7.4	4.8	6.10	39.3
5G	AI46P	276	0.0s	36	11.3	7.s	63	46	7.7	4.4	7.s0	8.2
5G	AI48P	232	o. 10	35	10.2	S.8	54	44	6.6	4.3	5.90	11.7
5G	AI50P	268	0.10	38	12.0	8.9	68	50	7.1	3.9	6.40	13.6
5H	AJ50P										6.90	14.6
5H	AJ52P										30.20	17.8
5H	AJ54P	.	.	.	.	.	.	.		.	11.60	14.6
6A	AG73P	396	0.15	53	20.1	13.7	90	80	7.5	4.4	12.00	86.8
6A	AG75P	385	0.20	58	21.9	13.8	98	87	6.6	3.9	12.30	83.3
6A	AG77P	346	0.22	70	24.6	17.3	112	99	4.8	3.1	15.90	7s.0
6B	AG81P	534	0.20	62	24.5	12.3	110	79	8.6	4.8	11.80	78.7
6B	AG83P	416	0.18	71	21.s	13.1	108	92	5.9	3.8	12.s0	60.7
6B	AG85P	556	0.21	70	23.9	11.s	10s	90	7.9	5.2	23.30	81.6
6C	AG89P	378	0.09	54	17.4	11.1	96	72	7.0	3.8	6.80	26.6
6C	AG91P	426	0. 16	74	24.2	14.3	128	86	5.8	3.3	9.80	62.3
ec	AG93P	471	0.94	73	24.6	13.6	128	94	6.5	3.7	8.70	59.3
6D	AG97P	247	0.05	32	7.8	7.7	57	4a	7.7	4.3	3.30	4.4
6D	AG99P	236	0.05	23	7.1	7.s	67	4s	10.4	4.2	3.50	2.0
6D	AH01P.	379	0. 10	54	17.4	12.s	101	74	7.0	3.8	6.30	4a.4
6F	AH11P	258	0.12	44	13.1	9.7	81	60	5.9	3.2	6.20	43.7
6F	AH18P	329	0.12	50	13.7	9.7	80	63	6.6	4.1	11.20	34.s
6F	AH20P	289	0.11	48	12.6	9.1	75	57	6.0	3.9	S.40	30.7
6G	AH75P										17.60	80.6
6G	AH77P										18.70	70.s
6G	AH81P				.	.	.	.	.	.	18.80	77.0
7A	AH67P	73i	0:12	7s	17.8	13.0	92	88	9.8	8.0	11.40	72.4
7A	AH69P	680	0.09	71	12.2	12.4	87	84	9.6	7.8	11.50	72.1
7A	AH71P	717	0.12	68	14.3	15.9	86	8a	10.5	8.3	8.60	S7.8

BEAUFORT SEA MONITORING PROGRAM-- BULK SEDIMENT SANPLE DATA
RAW DATA LISTING FOR METAL CONCENTRATIONS ANO ANCILLARY VARIABLES

TYPE OF SEDIMENT = BULK

YEAR=2 SITETYPE=OCEANIC

STATION	SAMPLE	BA	co	CR	CU	PB	v	ZN	BA/CR	BA/V	TOC	% MUD
7B	AH50P	610	0.08	so	8.1	9.6	60	52	10.2	8.5	5.40	6.9
7B	AH52P	459	0.04	56	6.3	10.s	56	48	8.2	8.2	4.00	10.2
7B	AH54P		.		.	.			.	.	.	5.8
7C	AH41P	475	0.17	73	23.4	15.7	118	94	6.5	4.0	11.50	83.1
7C	AH43P	534	0.19	94	34.6	22.8	160	123	5.7	3.3	1s.90	07.1
7C	AH45P	493	0.13	88	30.2	23.0	147	107	5.6	3.4	12.30	86.0
7D	AH33P										9.60	21.6
7D	AH35P										8.10	63.6
70	AH37P		.	.	.	.	.		.	.	12.00	46.3
7E	AH59P	488	0.16	56	18.0	12.8	87	75	8.7	5.6	20. 90	74.5
7E	AH61P	602	0.11	66	19.6	1s.1	95	7s	9.1	6.3	17.60	53.1
7E	AH63P	698	0.11	64	18.6	13.s	93	78	9.2	6.4	36.70	63.7
7G	AH24P	666	0.10	47	11.9	13.9	69	67	14.2	0.7	16.00	38.6
7G	AH26P	619	0.08	47	11.5	14.3	68	61	13.2	9.1	5.60	32.1
7G	AH28P	e23	0.10	41	12.1	13.S	67	61	1s.2	9.3	9.80	13.0

YEAR=2 SITETYPE=PEAT

STATION	SAMPLE	BA	CO	CR	CU	PB	v	ZN	BA/CR	BA/V	TOC	% Muo
1F	AJ06	471	0.28	65	24.2	13.8	104	59	7.2	4.5	95.30	87.1
2G	AI44P	539	0.23	71	23.6	13.0	108	88	7.s	4.0	42.20	68.3
2H	AJ05	391	0.20	52	19.3	10.s	80	67	7.s	4.9	170.4	73.4
30	AI31P	526	0.24	15	9.4	2.0	26	21	3s.1	20.2	228	44.8
SK	AH94P	43s	0.24	59	24.5	7.s	86	97	7.4	5.1	93.40	66.2
6J	AH07P	so	0.49	14	11.2	1.6	20	16	3.0	2.5	261.1	69.1
7H	AH32	593	0.20	31	17.8	14.4	62	51	19.1	9.6	22.90	8.0
7J	AH79P	25e	0.34	29	53.4	14.1	50	60	8.8	5.1	294.6	80.5

YEAR=2 SITETYPE=RIVER

STATION	SAMPLE	BA	co	CR	CU	PB	v	ZN	BA/CR	BA/V	TOC	% MUD
5J	AG07P	102	0.29	41	15.0	e.3	59	62	2.8	1.7	12.80	15,5
6H	AH09P	612	0.15	46	40.9	8.7	62	60	13.3	9.9	65.50	1s.4

BEAUFORT SEA MONITORING PROGRAM-- BULK SEDIMENT SAMPLE DATA
RAW DATA LISTING FOR METAL CONCENTRATIONS AND, Ancillary VARIABLES

TYPE OF SEDIMENT = BULK

YEAR=3 SITETYPE=OCEANIC

STAT ION	SANPLE	BA	CU	PB	V	ZN	BA/CR	BA/V	TOC	% MUD
1A	FB25P								9.00	63.6
1A	FB27P								8.70	64.0
1A	FB29P								6.60	64.1
1B	FB33P								23.00	7.4
1B	FB35P								3.10	8.4
1B	FB37P								7.40	28.4
1C	FB49P								7.70	68.6
1C	FB51P								9.00	62.7
1C	FB53P								8.40	79.6
ID	FB09P								4.60	30.3
10	FBI 1P								6.50	49.8
1D	FB13P								4.00	20.9
1E	FB 17P								3.60	31.4
1E	FB19P								4.6o	29.6
1E	FB21P								'3. so	20.0
2A	FB41P								11.30	82.9
2A	FB43P								11.40	76.9
2A	FB45P								10.40	80.4
2B	FB65P								5.60	23.2
2B	FB67P								2.00	8.9
2B	FB69P								2.00	4.6
2C	FB57P								7.60	52.7
2C	FB59P								7.00	67.S
2C	FB61P								7.40	61.6
2D	FB73P								8.40	14.s
2D	FB75P								6.40	17.9
20	FB77P								4.90	30.6
2E	FD90P								3.60	23.S
2E	FD92P								4.80	30.5
2E	FD94P								7.60	47.0
2F	FB01P								3.60	9.9
2F	FB03P								3.30	12.5
2F	FB05P								2.60	9.8
3A	FE13P								8.40	17.8
3A	FE 15P								6.20	36.3
3A	FE17P								7.00	34.7
30	FD98P								9.00	e3.4
3B	FE07P								10.30	66.3
3B	FE09P								12.00	75.5
4A	FE29P								6.30	72.3
4A	FE31P								5.70	31.7
4A	FE33P								3.40	9.4
4B	FE21P								2.50	8.1
40	FE23P								3.20	14.6
4B	FE25P								3.30	16.6
4C	FE45P								6.60	16.4
4C	FE47P								2.90	13.7
4C	FE49P								3.20	13.2
50	FE61P								2.00	3.s
50	FE63P								4.30	22.1
so	FE65P								2.90	9.0

BEAUFORT SEA MONITORING PROGRAM-- BULK SEDIMENT SAMPLE OATA
RAW OATA LISTING FOR METAL CONCENTRATIONS AND ANCILLARY VARIABLES

TYPE OF SEDIMENT = BULK

YEAR=3 SITETYPE=OCEANIC

STATION	SAMPLE	BA	CD	CR	CU	PB	v	ZN	BA/CR	BA/V	TOC	% MUD
510	FD66P										3.80	14.s
510	FD68P										5.70	17.5
510	FD70P										6.20	17.0
51	FE53P										1.90	4.3
51	FE55P										1.80	3.6
51	FE57										17.00	4.2
55	FD82P										4.80	14.8
55	FD84P										4.30	9.6
55	FD86P										4.30	13.2
5A	FD50P										7.30	45.7
6A	FD52P										6.70	4s.3
6A	FD54P										8.60	56.2
5B	FC92P										6.60	73.3
5B	FC94P										8.60	77.s
5B	FC96P										S.80	14.7
so	FE69P										8.90	69.3
so	FE71P										14.30	74.6
so	FE75P										20.00	84.3
5E	FC84P										9.70	43.7
5E	FC86P										12.20	40.1
SE	FC88P										7.10	29.6
5F	FD58P										12.30	55.6
SF	FD60P										11.30	64.4
SF	FD62P										13.30	S2.7
5G	FD76P										4.s0	10.7
5G	FD78P										4.70	17.4
5G	FD80P										3.90	26.7
5H	FE37P										10.30	27.8
5H	FE39P										S.20	17.8
5H	FE41P										4.70	18.8
6A	FC76P										10.70	74.3
6A	FC78P										8.90	6s.3
6A	FC80P										8.70	7s.3
6B	FC52P										16.70	7s.3
6B	FC54P										17.10	82.2
6B	FC56P										17.00	82.S
6C	FC68P										8.60	42.3
6C	FC70P										6.80	25.2
6C	FC72P										8.10	33.6
6D	FC60P										5.40	45.7
6D	FC62P										8.00	3?.7
6D	FC64P										5.10	2s.s
6F	FC36P										13.40	88.8
6F	FC38P										8.s0	65.2
6F	FC40P										4.80	20.0
6G	FC44P										10.80	78.5
6G	FC46P										0.20	71.5
6G	FC48P										.	74.1
7A	FC28P										7.30	64.1
7A	FC30P										7.60	47.1
7A	FC32P										14.10	50.6

BEAUFORT SEA MONITORING PROGRAM-- BULK SEDIMENT SAMPLE DATA
RAW DATA LISTING FOR METAL CONCENTRATIONS AND ANCILLARY VARIABLES

TYPE SEDIMENT = BULK

YEAR=3 SITETYPE=OCEANIC

STATION	SAMPLE	BA	CD	CR	CU	PB	V	ZN	BA/CR	BA/V	TOC	% MUD
7B	FC04P	.	.	.	.	.	.	.	.	.	5.00	19.1
7B	FC06P	.	.	.	.	.	.	.	.	.	5.30	20.2
7B	FC08P	.	.	.	.	.	.	.	.	.	5.50	13.2
7C	FB95P	.	.	.	.	.	.	.	.	.	5.70	86.0
7C	FB97P	.	.	.	.	.	.	.	.	.	5.90	84.3
7C	FB99P	.	.	.	.	.	.	.	.	.	12.20	89.3
7D	FB87P	.	.	.	.	.	.	.	.	.	2.60	7.1
7D	FB89P	.	.	.	.	.	.	.	.	.	6.20	43.0
7D	FB91P	.	.	.	.	.	.	.	.	.	4.40	12.6
7E	FC12P	.	.	.	.	.	.	.	.	.	10.60	77.8
7E	FC14P	.	.	.	.	.	.	.	.	.	12.90	73.5
7E	FC16P	.	.	.	.	.	.	.	.	.	15.70	81.3
7G	FC20P	.	.	.	.	.	.	.	.	.	10.80	36.0
7G	FC22P	.	.	.	.	.	.	.	.	.	6.60	54.4
7G	FC24P	.	.	.	.	.	.	.	.	.	11.30	54.3

YEAR=3 SITETYPE=RIVER

STATION	SAMPLE	BA	CD	CR	CU	PB	V	ZN	BA/CR	BA/V	TOC	% MUD
2J1	FE04	.	.	.	.	.	.	.	.	.	42.00	15.2
2J2	FE05	.	.	.	.	.	.	.	.	.	40.00	11.9
5L1	FB81	.	.	.	.	.	.	.	.	.	193	32.9
5L2	FB82	.	.	.	.	.	.	.	.	.	242	77.0
5L3	FB83	.	.	.	.	.	.	.	.	.	120	60.1
5M1	FB84	.	.	.	.	.	.	.	.	.	47.00	8.6
5M2	FB85	.	.	.	.	.	.	.	.	.	55.00	12.3
5M3	FB86	.	.	.	.	.	.	.	.	.	26.00	5.3
6K1	FE01	.	.	.	.	.	.	.	.	.	68.00	29.4
6K2	FE02	.	.	.	.	.	.	.	.	.	166	47.6
6K3	FE03	.	.	.	.	.	.	.	.	.	45.00	25.0

BEAUFORT SEA MONITORING PROGRAM-- BULK SEDIMENT SAMPLE DATA
RAW DATA LISTING FOR RATIO VARIABLES

TYPE OF SEDIMENT = BULK

YEAR= SITETYPE=OCEANIC

STATION	SAMPLE	FFPI	ISO/ALK	LALK/TALK	PRIS/PHYT	N/P	P/D	PAH/TOC	TOT/TOC
2E	00	83	0.437	0.321	2.2	0.6	7.8	0.006	.5
2E	00	.	.	.	.	.	.	.	.
2E	00	.	.	.	.	.	.	.	.
2E	00	.	.	.	.	.	.	.	.
2E	00	.	.	.	.	.	.	.	.
2E	00	.	.	.	.	.	.	.	.
2F	00	81	0.439	0.289	2.1	0.5	10.6	0.011	1.6
2F	00	77	0.476	0.308	2.7	0.4	10.3	0.006	0.9
2F	100	72	0.481	0.263	2.7	0.4	27.0	0.006	1.1
2F	100	.	0.523	0.324	3.1	0.4	.	0.004	0.8
2F	100	77	0.493	0.255	2.8	0.5	10.7	0.006	0.9
2F	100	76	0.439	0.233	2.1	0.5	11.7	0.007	1.0
3A	100	80	0.448	0.178	2.1	0.8	8.4	0.011	1.1
3A	100	.	.	.	.	.	.	.	.
3A	100	.	.	.	.	.	.	.	.
3A	100	.	.	.	.	.	.	.	.
3A	00	.	.	.	.	.	.	.	.
3A	00	.	.	.	.	.	.	.	.
3B	00	93	0.444	0.185	2.2	1.0	6.3	0.002	1.3
3B	00	77	0.432	0.186	2.1	0.8	8.6	0.011	1.1
3B	00	86	0.431	0.170	2.0	1.0	7.3	0.008	1.5
3B	00	79	0.432	0.182	2.1	0.9	9.5	0.012	1.9
3B	00	83	0.442	0.192	2.2	1.1	10.2	0.010	2.1
3B	00	76	0.434	0.188	2.0	0.7	7.5	0.013	1.2
4A	00	74	0.479	0.183	1.8	1.0	4.7	0.027	1.6
4A	00	79	0.405	0.170	2.2	0.8	5.0	0.012	1.6
4A	00	84	0.386	0.194	2.6	1.0	3.9	0.013	2.1
4A	00	83	0.435	0.163	2.8	1.1	3.7	0.016	2.3
4A	00	81	0.420	0.189	2.8	0.9	4.4	0.014	1.5
4A	00	80	0.437	.186	2.6	0.9	4.8	0.013	1.4
4B	00	86	0.442	.265	2.4	1.0	3.4	0.004	0.9
4B	00	.	.	.	.	.	.	.	.
4B	00	.	.	.	.	.	.	.	.
4B	00	.	.	.	.	.	.	.	.
4B	00	.	.	.	.	.	.	.	.
4C	00	80	0.429	.272	2.3	0.8	4.1	0.008	.
4C	00	.	.	.	.	.	.	.	.
4C	00	.	.	.	.	.	.	.	.
4C	00	.	.	.	.	.	.	.	.
4C	00	.	.	.	.	.	.	.	.
4C	00	.	.	.	.	.	.	.	.
510	00	.	.	.	.	.	.	.	.
510	00	82	0.474	.196	2.9	0.9	4.7	0.004	0.6
510	00	.	.	.	.	.	.	.	.
510	00	.	.	.	.	.	.	.	.
510	00	.	.	.	.	.	.	.	.
510	00	.	.	.	.	.	.	.	.
51	00	73	0.464	.243	2.2	0.8	5.0	0.009	0
51	00	.	.	.	.	.	.	.	.
51	00	.	.	.	.	.	.	.	.

BEAUFORT SEA MONITORING PROGRAM-- BULK SEDIMENT SAMPLE DATA
RAW DATA LISTING FOR RATIO VARIABLES

TYPE SEDIMENT = BULK

YEAR= SITET PE=OCEANIC

STATION	SAMPLE	FFPI	ISO/ALK	LALK/TALK	PRIS/PHYT	N/P	P/D	PAH/TOC	TOT/TOC
51	00	.	.				.	.	
51	00	.	.				.	.	
51	00	.	.				.	.	
51	00	.	.				.	.	
52	00	75	0.389	3.2	2.4	.6	3.8	.008	1.4
52	00	.	.				.	.	
52	100	.	.				.	.	
52	100	.	.				.	.	
52	100	.	.				.	.	
52	100	.	.				.	.	
55	100	74	0.22	92	2.	.8	5.2	0.02	2.1
55	100	.	.				.	.	
55	100	.	.				.	.	
55	100	.	.			.	.	.	
55	100	.	.				.	.	
55	100	.	.				.	.	
5A	100	80	0.517	69	2	.1	9.4	.015	0
5A	100	.	.			.	.	.	
5A	100	.	.				.	.	
5A	100	.	.				.	.	
5A	100	.	.				.	.	
5A	100	.	.				.	.	
5 B	100	81	0.446	.361	2.4	.	3.8	.08 *	1.5
5 B	100	.	.		.		.	.	.
5 B	100	.	.		.		.	.	.
5 B	100	.	.		.		.	.	.
5 B	100	.	.		.		.	.	.
5 B	100	.	.		.		.	.	.
5 D	100	83	0.411	0.111	2.1	1.0	6.3	0.006	1.3
5 D	100	82	0.399	0.108	2.1	0.9	5.4	0.007	1.5
5 D	100	86	0.418	0.115	2.1	1.2	5.6	0.006	1.3
5D	100	79	0.417	0.091	2.1	0.8	5.8	0.007	1.5
5D	100	73	0.417	0.112	1.9	0.7	6.8	0.011	0.5
5D	100	68	0.425	0.105	2.1	0.8	5.2	0.015	1.1
5 E	100	83	0.454	0.262	2.3	0.9	4.5	0.040	4.3
5 E	100	.	.	.	.	.	.	.	
5 E	100	.	.	.	.	.	.	.	
5 E	100	.	.	.	.	.	.	.	
5 E	100	.	.	.	.	.	.	.	
5 E	100	.	.	.	.	.	.	.	
5 E	100	.	.	.	.	.	.	.	
5 F	100	87	0.415	0.115	2.2	0.9	6.6	0.018	0
5F	100	.	.	.	.	.	.	.	
5F	100				.	.	.	.	
5F	100				.	.	.	.	
5F	100				.	.	.	.	
5F	100	.	.		.	.	.	.	
5G	100	77	0.465	0.25	2.	0.9	7.4	0.022	2.
5G	100	.	.		.	.	.	.	.
5G	100	.	.		.	.	.	.	.
5G	100	.	.		.	.	.	.	.

BEAUFORT SEA MONITORING PROGRAM-- BULK SEDIMENT SAMPLE OATA
RAW DATA LISTING FOR RATIO VARIABLES

TYPE OF SEDIMENT = SULK

YEAR=1 SITETYPE=OCEANIC

STATION	SAMPLE	FFPI	ISO/ALK	LALK/TALK	PRIS/PHYT	N/P	P/o	PAH/TOC	TOT/TOC
5G	100								
5G	100	.	.	.	.	.	.	.	.
6A	100	81	0.494	0.287	2.4	1.1	3.1	0.019	1.8
8A	100								
6A	100								
6A	100								
6A	100								
6A	100	.	.		.	.	.	.	.
6B	100	84	0.508	0:177	2.1	1.8	6.1	0.069	3.8
6B	100								
6B	100								
6B	100								
6B	100								
6B	100	.			.	.	.	.	
6C	100	98	o: 493	0:347	2.7	1.3	3.0	0.013	1.8
6C	100		o. 483	0. 33e	2.s				2.6
6C	100	77	0.469	0.330	2.4	1.1	3.9	0: 03s	2.s
6C	100	78	0.482	0.203	1.9	0.9	5.5	0.036	3.3
6C	100	76	0.467	0.274	2.4	0.8	4.3	0.032	2.3
6C	100	80	0.482	0.2S7	2.1	0.9	5.0	0.022	2.6
6D	100	71	0.473	o. 8s4	2.s	1.0	4.4	0.020	2.6
60	100	7s	0.458	0.691	2.s	0.8	4.4	0.012	2.2
6D	100	82	0.468	0.383	2.5	1.2	4.6	0.010	1.5
6D	100	78	0.474	o. 225	2.6	1.1	0.4	0.016	2.1
6D	100	78	0. 465	O.4S2	2.5	1.0	5.7	0.016	2.0
6D	100	77	0.474	0.400	2.4	0.8	4.6	0.022	2.0
6F	100	80	0. 4s9	0.102	2.4	1.1	5.0	0.022	2.0
6F	100								
6F	100								
6F	100								
6F	100						.		
6F	100		.		.	.			.
7A	100		0.470	0:280	2.5	1.4	.	0:032	2.7
7A	100	.	0.538	0.249	2.7	1.5	4.5	0.000	1.7
7A	100	95	0.556	0.230	2.2	1.7	3.9	0.029	1.8
7A	100	80	0.547	0.229	2.6	1.3	5.2	0.040	3.1
7A	100	81	0.591	0.21s	2.9	1.3	6.2	0.022	1.7
7A	100	94	0.573	0.224	2.s	1.1	6.3	0.018	1.4
70	100	78	0.451	0.322	2.7	1.1	4.6	0.022	2.0
70	100								
7B	100								
7B	100								
7B	100								
7B	100								
7C	100	81	0.470	0.225	2.2	1.1	5.7	0.028	1.8
7C	100								
7C	100								
7C	100								
7C	100								
7C	100	.	.	.	.	.	.	.	.
7E	100	86	0.617	0.217	3.5	1.8	7.3	0.013	0.1

BEAUFORT SEA MONITORING PROGRAM-- BULK SEDIMENT SAMPLE OATA
RAW OATA LISTING FOR RATIO VARIABLES

TYPE OF SEDIMENT = BULK

YEAR=1 SITETYPE=OCEANIC

STATION	SAMPLE	FFPI	ISO/ALK	LALK/TALK	PRIS/PHYT	N/P	P/o	PAH/TOC	TOT/TOC
7E	100		.			.			
7E	100						.	.	
7E	100	.	.					.	.
7E	100								
7E	100	.	.		.	.	.	.	.
7G	100	87	0.923	0: 263	4.7	1.9	11.0	0.006	0.4
7G	100				.		.	.	
7G	100								.
7G	100								.
7G	100					.			
7G	100						.		.

BEAUFORT SEA MONITORING PROGRAM-- BULK SEDIMENT SAMPLE DATA
RAW DATA LISTING FOR RATIO VARIABLES

TYPE OF SEDIMENT = BULK

YEAR=2 SITETYPE=OCEANIC

STATION	SAMPLE	FFPI	ISO/ALK	LALK/TALK	PRIS/PHYT	N/P	P/o	PAH/TOC	TOT/TOC
1A	AI86P	60	0.383	0.070	1.9	1.2	6.2	0.008	1.3
1A	AI88P	60	0.397	0.0B3	1.s	0.s	7.9	0.010	1.3
1A	AI90P	62	0.367	o. 0ss	1.8	1.0	4.6	0.008	1.8
1B	A105P	69	0.471	0.116	1.7	1.1	4.6	0.00s	0.6
1B	AI97P	73	0.434	0.300	1.9	0.7	7.3	0.004	0.8
1B	AI99P	71	0.483	0.120	1.8	1.s	5.3	0.008	0.7
1C	AI62P	67	0.645	0. 14s	1.s	1.2	4.3	0.024	2.s
1C	AI64P	70	0.531	0.177	1.4	1.3	4.0	0.023	2.9
1C	AI66P	68	0.564	0.144	1.5	1.3	5.6	0.02s	2.3
1D	AI70P	.	0. 265	0.087	2.6	1.3	6.0	0.004	0.3
1D	AI72P	64	0.318	0. 0ss	2.2	1.2	17.0	0.00s	1.3
1D	AI74P	67	0.2S3	0.0s1	2.2	1.6	18.0	0.003	0.9
1E	AI78P	73	0.118	0.089	1.9	1.1	17.5	0.003	1.6
1E	AI80P	71	0.132	0.093	1.8	1.1	10.B	0.004	2.4
1E	AI82P	71	0.128	0.078	1.8	1.1	13.0	0.003	1.9
2A	AJ08P	71	0. 3s4	0.09s	1.9	0.9	9.7	0.012	1.6
2A	AIJ1OP	70	o. 4s0	0.133	I.*	0.8	9.3	0.022	1.2
2A	AJ12P	76	o. 451	0.103	1.6	0.8	7.9	0.020	1.2
2B	AJ16P	70	0.413	0.139	1.9	1.0	12.7	0.006	0.4
2B	AJ 18P	71	0.s00	0.091	1.5	1.0	6.2	0.011	1.7
2B	AJ20P	64	0.421	0. 13s	2.0	1.2	5.0	0.006	0.3
2C	AI54P	72	0.543	O.168	1.6	1.5	4.1	0.019	1.2
2C	AI56P	66	0. 6S8	0. 1ss	1.2	1.2	4.6	0.02s	1.7
2C	AI58P	70	0.s31	0.167	1.s	1.3	5.0	0.022	1.3
2D	AJ26P	77	0.244	0.089	1.8	0.8	5.0	0.006	0.9
20	AJ28P	.	0.387	0.188	1.6	7.4		0.01s	0.6
20	AJ30P	56	0.419	0.131	1.6	0.4	S:o	0.007	0.4
2E	AJ34P	71	0.339	0.138	1.8	0.7	6.1	0.009	1.5
2E	AJ36P	79	0.460	0.137	1.7	1.9	13.8	0.024	2.9
2E	AJ38P	88	0.43s	0. 23B	1.4	1.4	4.2	0.007	2.1
2F	A134P	.	0.443	0.381	1.9	0.3	.	0.004	0.3
2F	AI36P	83	0.442	0.376	2.0	1.1	22.3	0.000	0.4
2F	AI38P	84	0.434	0.345	1.9	1.4	48.0	0.006	0.4
3A	AI22P	74	0.443	0.123	1.s	0.6	S.2	0.005	0.s
3A	AI 24P	74	0.450	0.137	1.9	1.9	5.2	0.012	0.4
3A	AI 26P	76	0. 4s3	0.141	1.9	1.1	22.0	0.009	0.4
3B	AI 14P	79	0.411	0.163	1.8	0.6	6.6	0.008	1.9
3B	AI 16P	80	0.422	0.140	1.8	0.s	6.6	0.006	1.8
3B	AI 18P	79	0.440	0. 159	1.s	0.6	8.1	0.007	1.9
4A	AI06P	86	0.378	0.227	1.7	1.4	14.4	0.002	0.4
4A	AI08P	77	0. 3s4	0.201	1.s	1.1	10.9	0.004	0.0
4A	AI 10P	7s	0.417	0.09s	1.6	1.2	9.2	0.007	1.0
4B	AH97P	76	0.428	0.22s	1.8	1.2	9.5	0.008	1.0
48	AH99P		0.41s	0.287	2.0	0.6	19.7	0.007	0.7
4B	AI01P	70	0.428	0.320	1.7	1.6	5.2	0.008	0.9
4C	AJ42P	73	0. 367	0.208	1.6	1.1	6.4	0.010	1.1
4C	AJ44P	74	0.414	0.211	1.9	0.8	16.4	0. 00s	0.7
4C	AJ46P	73	0.459	0.211	1.7	1.5	7.2	0.007	0.8
50	AG41 P	.	0.377	0.208	2.0	1.1	8.5	0.006	0.s
50	AG43P	63	0.424	0.198	1.9	0.9	14.3	0.016	1.4
50	AG45P	68	0.417	0.220	2.0	1.0	3.7	0. 006	0.7

BEAUFORT SEA MONITORING PROGRAM-- BULK SEDIMENT SAMPLE OATA
RAW DATA LISTING FOR RATIO VARIABLES

TYPE OF SEDIMENT = BULK

YEAR=2 SITETYPE=OCEANIC

STATION	SAMPLE	FFPI	ISO/ALK	LALK/TALK	PRIS/PHYT	N/P	P/D	PAH/TOC	TOT/TOC
510	AG17P	74	o. 438	o. 176	1.8	1.2	3.7	0.007	0.9
s 10	AG19P	80	0.437	0.171	1.8	1.8	2.7	0.008	1.1
510	AG21 P	77	0.396	0.174	1.8	1.0	5.1	0.010	1.5
51	AG33P	68	0.361	0.22s	1.9	1.1	15,5	0.014	0.3
51	AG35P	.	0.304	0.330	2.0	0.4	13.6	0.004	0.4
51	AG37P	67	0.397	0.198	1.9	1.3	5.8	0.009	0.7
55	AG25P	71	0.2s1	0.226	2.0	1.2	4.9	0.007	0.8
55	AG27P	73	0.417	0.178	1.9	1.3	4.8	0.011	1.3
55	AG29P		0.42S	0.148	1.8	0.3	9.0	0.003	1.4
5A	AG49P	72	o. 5s5	0.160	1.2	1.8	6.4	0.013	1.s
5A	AG51P	72	0.s06	0.479	1.6	2.1	6.3	0.00s	1.4
5A	AG55P	74	0.430	0. 2s0	2.2	1.2	7.0	0.006	0.5
5B	AG57P	7s	0.603	0.1s1	1.2	1.4	4.9	0.035	2.7
5B	AG59P	71	0. 592	0.169	1.2	1.3	5.2	0.038	2.8
5B	AG61P	73	0.622	0.161	1.1	1.3	5.6	0.037	3.1
SD	AG09P	77	0.491	0.102	1.1	1.3	4.1	0.008	1.6
5D	AG11P	74	0.390	0.108	1.9	1.s	4.2	0.011	1.8
5D	AG13P	69	0-636	0.121	1.1	1.2	4.6	0.016	2.2
5E	AG65P	74	0.486	0. 185	1.2	1.6	4.4	o. 03e	2.7
SE	AG67P	73	0. 588	o. 171	1.2	1.5	6.6	0.036	2.9
5E	AG69P	73	0.482	0.$47	2.0	1.4	5.9	0.034	3.4
5F	AH86P	62	0.432	0.213	1.8	1.0	4,4	0.009	1.1
SF	AH88P	es	0.463	0. 18s	1.4	1.1	3.9	0.009	1.2
SF	AH90P	74	0.429	0.$74	1.3	1.1	2.8	0.010	1.6
5G	AI46P	68	0.427	0. 16s	2.0	1.4	7.0	0.011	0.9
5G	AI48P	68	0.443	0.203	1.9	1.0	21.0	0.007	0.8
5G	AI50P	77	0.433	0.198	2.0	1.6	13.0	0.009	0.9
5H	AJ50P	69	0.307	0.499	2.0	1.5	6.9	0.009	1.0
5H	AJ52P	8s	0.389	0..22s	1.9	0.6	10.0	0.001	0.3
5H	AJ54P	73	0.421	0.249	2.0	1.1	7.4	0.004	0.9
6A	AG73P	76	0.478	0.099	2.0	1.4	5.6	0.021	2.0
6A	AG75P	76	0. 505	0.114	1.3	1.7	4.9	0.021	2.3
6A	AG77P	79	0. S24	0.07s	1.7	1.5	4.7	0.017	2.3
6B	AG81P	81	0.610	o. 105	9.2	2.2	4.8	0.032	2.3
6B	AG83P	84	0.S82	0.066	1.3	2.4	4.5	0.028	2.7
6B	AG85P	83	0.450	0.070	11.4	2.7	5.4	0.017	1.7
6C	AG89P	72	0. 508	0.082	10.0	1.5	4.5	0.02s	2.4
6C	AG91P	75	0. S72	0.079	1.7	1.4	4.7	0.031	2.4
6C	AG93P	81	0.441	0.111	1.6	1.7	4.2	0.026	2.8
6D	AG97P	68	0.581	0.070	1.1	1.3	2.7	0.014	1.1
6D	AG99P	78	0.468	0.$85	2.1	1.4	6.7	0.010	0.6
6D	AH01P	7s	0.802	0.080	1.5	1.4	s. 1	0. 03s	2.7
6F	AH11P	79	0.496	0.$50	1.6	1.s	6.4	0.019	2.2
6F	AH18P	82	0.428	0. 144	2.1	1.6	5.5	0.010	1.3
6F	AH20P	82	0.429	o. 142	1.s	1.6	6.2	0.017	2.2
6G	AH75P	7s	0.421	0.103	1.9	1.7	6.7	0.016	3.7
6G	AH77P	78	0. 38s	0.113	2.1	1.7	5.s	0.014	3.3
6G	AH81P	80	0.368	0.107	1.9	1.8	5.0	0,012	2.s
7A	AH67P	76	0.496	0. 098	2.4	2.1	5.8	0. 02s	2.7
7A	AH69P	74	0.s01	0.128	1.5	1.8	6.7	0.021	1.8
7A	AH71P	79	0.910	0.124	2.1	2.2	5.0	0.027	2.0

BEAUFORT SEA MONITORING PROGRAM-- BULK SEDIMENT SAMPLE DATA
RAW DATA LISTING FOR RATIO VARIABLES

TYPE OF SEDIMENT = BULK

YEAR=2 SITETYPE=OCEANIC

STATION	SAMPLE	FFPI	ISO/ALK	LALK/TALK	PRIS/PHYT	N/P	P/D	PAH/TOC	TOT/TOC
7B	AH50P	82	0.422	0.166	2.3	1.8	6.2	0.011	1.5
7B	AH52P	74	0.434	0. 1s4	2.4	1.6	3.7	0.014	1.3
7B	AH54P	75	0.444	0.147	2.2	1.8	4.3	.	.
7C	AH41P	99	0.454	0.118	2.2	1.8	4.0	0.002	2.5
7C	AH43P	90	0.427	0.113	2.2	1.4	4.3	0.008	2.4
7C	AH45P	79	0.432	0.117	2.0	1.8	5.0	0.019	2.3
7D	AH33P	81	0.482	0.165	3.1	0.9	6.0	0.013	3.9
7D	AH35P	81	0. 453	0.943	1.8	0.s	4.8	0.026	4.4
70	AH37P	.	o. 4e4	0.109	2.3	.		.	2.s
7E	AH59P	81	0.854	0.133	3.8	2.0	5.1	0.018	1.8
7E	AH61P	79	0.563	0.121	3.3	1.9	6.6	0.010	1.8
7E	AH63P	83	0.615	0.132	3.6	2.1	6.2	0.007	0.8
7G	AH24P		o. 696	0.210	4.2	.	.		1.2
7G	AH26P	80	0.742	0.227	4.3	0.9	8.6	0:028	4.0
7G	AH28P	79	0.798	0.238	4.6	0.9	7.8	0.019	3.2

YEAR=2 SITETYPE=PEAT

STATION	SANPLE	FFPI	ISO/ALK	LALK/TALK	PRIS/PHYT	N/P	P/D	PAH/TOC	TOT/TOC
1F	AJ06	34	0.022	0.044	.	0.9	3.9	0.004	5.6
2G	AI44P	70	0.202	0.021	2.6	0.7	5.0	0.001	1.2
2H	AJ05	48	0. 116	0.032	1.6	1.1	4.3	0.001	0.7
3D	AI31P		0.148	0.015	1.8	.	1.1	0.001	1.7
5K	AH94P		0. 24e	0.015	1.s	0.1	.	0.000	1.6
6J	AH07P	.	0.033	0.024		1.8	.	0.001	2.8
7H	AN32	95	0.103	0.040	1.8	1.s	3.8	0.002	2.2
7J	AH79P		0.400	0.023	35.2	0.2	.	0.000	5.8

YEAR=2 SITETYPE=RIVER

STAT 10N	SANPLE	FFP1	ISO/ALK	LALK/TALK	PRIS/PHYT	N/P	P/D	PAH/TOC	TOT/TOC
5J	AG07P	72	0.213	0.120	1.2	1.0	8.1	0.004	1.2
6H	AH09P	69	0.4s3	0.095	2.s	1.4	8.2	0.003	0.4

BEAUFORT SEA Monitoring PROGRAM-- BULK SEDIMENT SAMPLE DATA
RAW DATA LISTING FOR RATIO VARIABLES

TYPE OF SEDIMENT = BULK

---------- YEAR=3 SITETYPE=OCEANIC ----------

STATION	SAMPLE	FFPI	ISO/ALK	LALK/TALK	PRIS/PHYT	N/P	P/o	PAH/TOC	TOT/TOC
1A	FB25P	79	0.400	0.0s2	2.0	1.2	5.1	0.010	1.7
1A	FB27P	73	0.433	0.073	2.2	1.2	8.6	0.013	1.8
1A	FB29P	83	0.400	0.0ss	2.1	1.5	S.2	0.009	1.7
1B	FB33P		0.379	0.181	2.1	0.6		0.002	0.1
1B	FB35P	.	0.552	0.112	2.0	0.6	.	0.01s	1.3
1B	FB37P	75	0.511	0.158	2.0	1.3	5.8	0.023	1.8
1C	FB49P	47	o. 533	0.134	1.6	0.8	23.1	0.011	2.s
1C	FB51P	74	0.613	0.202	1.7	1.3	4.2	0.022	1.6
1C	FB53P		0.724	0. 1s1	1.7	2.3	.	0.028	1.7
10	FB09P	89	0.201	O. OBO	2.4	1.0	19.0	0.001	1.5
10	FB11P	82	0.21s	0.081	2.2	1.1	7.7	0.002	20.7
10	FB13P	.	o. 175	0.101	2.1	1.9	24.0	0.001	17.2
1E	FB17P	85	0.190	0.089	2.3	1.7	3.0	0.001	1.7
1E	FB19P	79	0.102	0.097	2.3	0.7	5.3	0.002	0.9
1E	FB21P	.	0.180	0. 0ss	2.0	0.4	.	0.003	1.4
2A	FB41P	78	0.442	o. 13s	1.9	0.9	8.3	0.021	2.2
2A	FB43P	70	0. 4s9	0.174	1.8	0.7	7.2	0.034	2.0
2A	FB45P	73	0.443	0.170	2.0	0.9	5.1	0.029	2.0
2B	FB65P	77	0.453	0.114	2.1	1.3	4.0	0.019	3.3
2B	FB67P	71	0. 157	0. 3ss	.	1.0	5.5	0.01s	2.4
2B	FB69P	70	1.511	o. 12s	4.0	1.1	9.5	0.009	0.4
2C	FB57P	77	o. 582	o. 164	1.8	1.4	3.s	0.026	1.8
2C	FB59P	7s	0.659	o. 146	1.7	9.4	3.s	0.041	1.9
2C	FB61P	81	0. Sso	o. 164	1.6	1.6	3.4	0. 02s	1.8
20	FB73P	81	o. 26s	0.147	2.2	1.2	6.1	0.010	2.7
20	FB75P	80	0.s43	0. 1ss	1.8	1.3	6.1	0.019	1.6
2D	FB77P	77	0.4s1	0.462	2.1	1.0	6.9	0.019	4.2
2E	FD90P	67	o. 48s	0.170	2.2	0.7	5.4	0.016	1.4
2E	FD92P	71	0.491	0. 1s0	2.2	1.0	6.1	0.014	1.6
2E	FD94P	66	0.483	0.162	2.2	0.6	12.8	0.009	1.6
2F	FB01P		0.370	0.381	2.0	0.5		0.007	2.7
2F	FB03P	.	0.400	0. 2ss	1.9	0.6	.	0.003	3.1
2F	FB05P	87	0.4s1	0.3s3	2.0	1.1	10.4	0.00s	0.7
3A	FE13P	82	o. 44s	0.138	2.2	1.3	5.8	0.009	1.0
3A	FE15P	78	0.459	0.140	2.2	1.4	3.s	0.013	1.6
3A	FE17P	7s	0.4s3	0. 126	2.3	1.3	4.1	0.016	1.7
3B	FD98P	73	0.441	0.$40	2.1	1.2	4.9	0.012	1.6
3B	FE07P	7s	0.437	0.115	2.3	1.2	4.2	0.010	1.s
3B	FE09P	81	0. 43s	0. 115	2.4	1.4	3.9	0.011	1.6
4A	FE29P	83	0.428	o. 170	2.3	1.0	4.4	0.017	1.0
4A	FE31P	B2	0. 4ss	0.227	2.9	0.9	4.8	0.015	2.1
4A	FE33P	82	0.404	0.961	2.2	0.9	1.s	0.009	1.7
48	FE21P	81	0.390	0. 183	2.2	2.2	1.9	0.016	1.0
40	FE23P	79	0.408	O. 180	2.2	1.4	3.1	0.014	1.1
40	FE25P	72	0.363	o. 14s	2.3	1.1	7.2	0.017	3.0
4C	FE45P	76	0.436	o. 130	2.3	1.s	3.3	0.014	1.1
4C	FE47P	70	0. 37s	0.108	2.3	1.2	3.8	0.016	2.3
4C	FE49P	72	o. 40s	0. 17s	2.3	1.0	4.1	0.016	2.1
so	FE61P	87	0.377	0.244	2.4	1.2	6.2	o. 005	0.4
50	FE63P	76	0.400	0.162	2.3	1.3	3.6	0.017	1.0
50	FE65P	79	0.379	0. 1s0	2.3	1.2	3.s	0.013	1.1

BEAUFORT SEA MONITORING PROGRAM-- BULK SEDIMENT SAMPLE DATA
RAW DATA LISTING FOR RATIO VARIABLES

TYPE OF SEDIMENT = BULK

YEAR=3 SITETYPE=OCEANIC

STATION	SAMPLE	FFPI	ISO/ALK	LALK/TALK	PRIS/PHYT	N/P	P/D	PAH/TOC	TOT/TOC
510	FD66P	83	0.44s	0.140	2.2	0.9	4.6	0.014	1.6
510	FD68P	69	0.478	0.08s	1.8	1.0	6.7	0.011	2.6
510	FD70P	67	0.442	0.205	2.2	1.0	4.7	0.010	1.1
51	FE53P	77	0.123	0.442	1.9	0.8	1.9	0.017	2.1
51	FE55P	76	0.264	0.333	.	1.4	3.0	0.011	0.4
51	FES7	78	0. 3s7	0. 1s7	2.2	1.2	3.3	0.001	0.1
5s	FD82P	.	0.443	o. 18s	1.8	1.0	10.3	0.012	1.1
55	FD84P	98	0.449	o. 1s2	2.3	1.7	3.0	0.003	1.4
55	FD86P	79	0.440	0.193	2.3	1.3	3.1	0.014	1.3
6A	FD50P	81	0.442	0.133	2.2	1.4	3.s	0.014	1.9
5A	FD52P	81	0.434	0.140	2.2	1.6	3.s	0.016	1.7
6A	FD54P	69	0. 4ss	0.131	2.2	1.8	3.6	0.01s	2.1
5B	FC92P	90	0.478	0.100	2.1	1.4	3.8	0.013	11.4
5B	FC94P	87	0.406	0.180	1.0	1.5	3.4	0.018	2.3
5B	FC96P	83	0.428	0.172	2.4	1.4	3.4	0.013	1.4
5D	FE69P	81	0.415	0.116	2.s	1.3	3.5	0.013	2.9
5D	FE71P	80	0.430	0.110	2.s	1.4	3.s	0.010	1.9
5D	FE75P	78	0.427	0.090	2.4	1.7	2.8	0.000	1.6
5E	FC84P	59	0. 499	0.199	2.4	0.9	9.9	0.030	10. s
SE	FC86P	81	0.500	0.135	2.1	1.3	3.6	0.014	8.7
SE	FC88P	87	0. 476	0.184	2.2	1.3	4.0	0.01s	10.2
SF	FD58P	73	0.416	0.140	2.2	1.2	4.1	0.014	0.5
SF	FD60P	76	0. 43a	0.094	2.3	1.7	3.6	0.014	2.1
5F	FD62P	83	0.431	0.089	2.3	1.8	2.8	0.006	0.4
5G	FD76P	63	0.443	o. 159	2.2	0.9	6.0	0.017	1.1
5G	FD78P	67	0. 4s0	O. 138	2.1	1.5	6.4	0.013	2.2
5G	FD80P	71	0.418	0.323	2.4	1.3	4.4	0.018	1.1
5H	FE37P	S8	0.394	0.071	2.2	0.7	20.3	0.004	1.7
5H	FE39P	69	0.416	0. 195	2.2	1.0	4.1	0.01s	1.7
5H	FE41P	70	0.31s	0.160	2.3	1.0	4.6	0.015	1.7
6A	FC76P	02	0.466	0.123	2.3	3.1	2.7	0.013	7.7
6A	FC78P	93	0.470	0.137	2.6	1.7	3.6	0.008	11.5
6A	FC80P	72	0. 49s	0. 136	3.1	1.3	4.0	0.024	11. a
6B	FC52P	86	0.611	o. 159	1.8	2.4	4.7	0.030	4.1
6B	FC54P	85	0.609	0.170	2.0	2.3	4.7	0.033	3.8
6B	FC56P	89	0.619	0.092	2.0	2.7	4.1	0.038	3.1
6C	FC68P	90	0.486	0. 148	2.1	1.9	3.7	0.014	8.3
6C	FC70P	B2	0.468	0.171	2.3	1.3	4.6	0.018	7.0
6C	FC72P	42	0.462	0.174	2.2	1.0	7.1	o. 0ss	13.4
6D	FC60P	86	0.482	0.184	2.2	1.7	3.2	0.017	2.2
6D	FC62P	79	0.644	0. 06B	1.7	2.0	4.4	0.027	5.9
6D	FC64P	8S	0. 43s	0.171	2.2	1.7	4.8	0.021	1.3
OF	FC36P	88	0.ss0	0.064	1.6	1.8	4.9	0.011	3.6
6F	FC38P	76	0.s54	0.163	1.8	1.7	3.9	0.024	1.9
6F	FC40P	80	0.505	0.190	2.3	1.8	5.4	0.017	1.9
6G	FC44P	81	0.469	0.178	1.7	1.5	4.2	0.011	0.4
6G	FC46P	88	0.693	0.063	0.7	1.6	3.8	0.008	4.3
6G	FC48P	79	0.s49	0.063	1.1	1.6	5.2	.	
7A	FC28P	89	0.506	0.121	2.0	1.9	2.9	0.014	3.3
7A	FC30P	88	0.S27	0.0s3	1.1	2.0	3.s	0.017	5.5
7A	FC32P	73	o. 509	o. 097	2.5	1.7	4.1	0.024	1.6

BEAUFORT SEA MONITORING PROGRAM-- BULK SEDIMENT SAMPLE DATA
RAW OATA LISTING FOR RATIO VARIABLES

TYPE OF SEDIMENT = BULK

YEAR=3 SITETYPE=OCEANIC

STATION	SANPLE	FFPI	ISO/ALK	LALK/TALK	PRIS/PHYT	N/P	P/D	PAH/TOC	TOT/TOC
7B	FC04P	81	0.468	0.161	2.3	1.8	4.8	0.017	2.1
7B	FC08P	82	0.482	0.163	1.9	1.7	4.2	0.022	2.2
7B	FC08P	74	0.502	0.0s9	1.4	1.7	5.1	0.037	6.4
7C	FB95P	78	0.466	o. 153	2.3	1.6	3.6	0.061	S.4
7C	FB97P	89	0.472	o. 134	2.1	1.6	5.4	0.0318	6.9
7C	FB99P	77	0.482	o. 143	2.2	1.5	3.7	0.028	2.9
70	FB87P	76	0.407	0.950	2.3	1.8	3.2	0.017	21.3
7D	FB89P	74	0.421	0. 1s3	2.5	1.4	3.3	0.025	2.2
7D	FB91P	73	0.478	0. 129	2.4	1.3	4.s	0.013	1.7
7E	FC12P	84	0.612	o. 1s1	3.1	2.3	4.4	0.018	1.6
7E	FC14P	81	0.820	0.142	2.6	2.3	4.9	0.027	2.0
7E	FC16P	86	0.554	0.146	2.7	2.3	2.4	0.021	2.2
7G	FC20P	82	0. 840	0. 147	3.3	2.4	5.0	0.022	2.0
7G	FC22P	8S	o.696	o. 160	3.8	2.3	4.6	0.023	1.7
7G	FC24P	85	o. 866	0.082	2.7	1.9	8.7	0.020	3.8

YEAR=3 SITETYPE=RIVER

STATION	SAMPLE	FFPI	ISO/ALK	LALK/TALK	PRIS/PHYT	N / P	P/D	PAH/TOC	TOT/TOC
2J1	FE04	88	0.404	0.321	2.2	1.1	8.0	0.001	0. 1
2J2	FE05	90	0.413	0.300	2.2	0.9	6.2	0.000	0.1
5L1	FB81	81	0.211	0.081	?.3	1.3	2.2"	0.000	0.3
5L2	FB82	80	0.228	0.111	1.6	1.3	2.1	0.001	0.1
SL3	F883	82	0.263	0.121	1.4	1.3	3.1	0.001	o: t
5M1	FB84	58	0.190	0.146	1.7	0.8	3.0	0.000	0.2
5M2	FB85	42	0.179	0.173	2.3	0.7	4.7	0.001	0.3
5M3	FB86		0.239	0.31s	2.0	0.6	.	0.000	0. 1
6K1	FE01	70	0.605	0.107	2.2	1.1	4.4	0.003	0.3
6K2	FE02	76	0. 550	0.094	2.7	1.7	3.9	0.001	0. 1
6K3	FE03	68	o. 555	0. 122	1.8	1.4	4.2	0.003	0.3

BEAUFORT SEA MONITORING PROGRAM-- FINE SEDIMENT SAMPLE DATA
RAW DATA LISTING FOR HYDROCARBON CONCENTRATIONS

TYPE OF SEDIMENT = FINE

YEAR= SITETYPE=OCEANIC

STATION	AMP	N	F	P	D	PAH	PHYTANE	PRISTANE	LALK	T	K	TOT
2E	00	.	.	.	.	.	.	.	.			.
2E	00		.	.	.	.	.	.	.			
2E	00		.	.	.	.	.	.	.			
2E	00	.	.	.	.	.	.	.	.			
2E	00		.	.	.	.	.	.	.			
2E	00		.	.	.	.	.	.	.			
2F	00	.	.	.	.	.	.	.	.			.
2F	100		.	.	.	.	.	.	.			.
2F	100		.	.	.	.	.	.	.			.
2F	100	.	.	.	.	.	.	.	.			.
2F	100		.	.	.	.	.	.	.			.
2F	100		.	.	.	.	.	.	.			.
3A	100	.	.	.	.	.	.	.	.			.
3A	100		.	.	.	.	.	.	.			.
3A	100		.	.	.	.	.	.	.			.
3A	100	.	.	.	.	.	.	.	.			.
3A	100		.	.	.	.	.	.	.			.
3A	100		.	.	.	.	.	.	.			.
3B	100	.	.	.	.	.	.	.	.			.
3B	100		.	.	.	.	.	.	.			.
3B	100		.	.	.	.	.	.	.			.
3B	100	.	.	.	.	.	.	.	.			.
3B	100	.	.	.	.	.	.	.	.			.
3B	100	.	.	.	.	.	.	.	.			.
3B	100	.	.	.	.	.	.	.	.			.
4A	100	.	.	.	.	.	.	.	.			.
4A	100	.	.	.	.	.	.	.	.			.
4A	100	.	.	.	.	.	.	.	.			.
4A	100	.	.	.	.	.	.	.	.			.
4A	100	.	.	.	.	.	.	.	.			.
4A	100	.	.	.	.	.	.	.	.			.
4B	100	.	.	.	.	.	.	.	.			.
4B	100	.	.	.	.	.	.	.	.			.
4B	00	.	.	.	.	.	.	.	.			.
4B	00	.	.	.	.	.	.	.	.			.
4B	00	.	.	.	.	.	.	.	.			.
4B	00	.	.	.	.	.	.	.	.			.
4C	00	.	.	.	.	.	.	.	.			.
4C	00	.	.	.	.	.	.	.	.			.
4C	00	.	.	.	.	.	.	.	.			.
4C	00	.	.	.	.	.	.	.	.			.
4C	100	.	.	.	.	.	.	.	.			.
4C	100	.	.	.	.	.	.	.	.			.
510	100	.	.	.	.	.	.	.	.			.
510	100	.	.	.	.	.	.	.	.			.
510	100	.	.	.	.	.	.	.	.			.
510	100	.	.	.	.	.	.	.	.			.
510	100	.	.	.	.	.	.	.	.			.
510	100	.	.	.	.	.	.	.	.			.
51	00	.	.	.	.	.	.	.	.			.
51	00	.	.	.	.	.	.	.	.			.
51	00	.	.	.	.	.	.	.	.			.

BEAUFORT SEA MONITORING PROGRAM-- FINE SEDIMENT SAMPLE DATA
RAW DATA LISTING FOR HYDROCARBON CONCENTRATIONS

TYPE OF SEDIMENT = FINE

YEAR= SITETYPE=OCEANIC

STATION	SAMPLE	N	F	P	D	PAH	PHYTANE	PRISTANE	LALK	TALK	TOT
5											
51	100	.	.	.	.	.	.	.	.	.	.
51	100	.	.	.	.	.	.	.	.	.	.
51	100	.	.	.	.	.	.	.	.	.	.
51	100	.	.	.	.	.	.	.	.	.	.
52	100	.	.	.	.	.	.	.	.	.	.
52	100	.	.	.	.	.	.	.	.	.	.
52	100	.	.	.	.	.	.	.	.	.	.
52	100	.	.	.	.	.	.	.	.	.	.
52	00	.	.	.	.	.	.	.	.	.	.
52	00	.	.	.	.	.	.	.	.	.	.
55	00	.	.	.	.	.	.	.	.	.	.
55	00	.	.	.	.	.	.	.	.	.	.
55	00	.	.	.	.	.	.	.	.	.	.
55	00	.	.	.	.	.	.	.	.	.	.
55	00	.	.	.	.	.	.	.	.	.	.
55	00	.	.	.	.	.	.	.	.	.	.
5A	00	.	.	.	.	.	.	.	.	.	.
5A	00	.	.	.	.	.	.	.	.	.	.
5A	00	.	.	.	.	.	.	.	.	.	.
5A	00	.	.	.	.	.	.	.	.	.	.
5A	00	.	.	.	.	.	.	.	.	.	.
5A	00	.	.	.	.	.	.	.	.	.	.
5B	00	.	.	.	.	.	.	.	.	.	.
5B	00	.	.	.	.	.	.	.	.	.	.
5B	00	.	.	.	.	.	.	.	.	.	.
5B	00	.	.	.	.	.	.	.	.	.	.
5B	00	.	.	.	.	.	.	.	.	.	.
5B	00	.	.	.	.	.	.	.	.	.	.
5D	00	.	.	.	.	.	.	.	.	.	.
5D	00	.	.	.	.	.	.	.	.	.	.
5D	00	.	.	.	.	.	.	.	.	.	.
5D	00	.	.	.	.	.	.	.	.	.	.
5D	00	.	.	.	.	.	.	.	.	.	.
5D	00	.	.	.	.	.	.	.	.	.	.
5E	00	.	.	.	.	.	.	.	.	.	.
5E	00	.	.	.	.	.	.	.	.	.	.
5E	00	.	.	.	.	.	.	.	.	.	.
5E	00	.	.	.	.	.	.	.	.	.	.
5E	00	.	.	.	.	.	.	.	.	.	.
5E	00	.	.	.	.	.	.	.	.	.	.
5F	00	.	.	.	.	.	.	.	.	.	.
5F	00	.	.	.	.	.	.	.	.	.	.
5F	00	.	.	.	.	.	.	.	.	.	.
5F	00	.	.	.	.	.	.	.	.	.	.
5F	00	.	.	.	.	.	.	.	.	.	.
5G	00	.	.	.	.	.	.	.	.	.	.
5G	00	.	.	.	.	.	.	.	.	.	.
5G	00	.	.	.	.	.	.	.	.	.	.
5G	00	.	.	.	.	.	.	.	.	.	.

BEAUFORT SEA MONITORING PROGRAM-- FINE SEDIMENT SAMPLE °ATA
RAW DATA LISTING FOR HYDROCARBON CONCENTRATIONS

TYPE OF SEDIMENT = FINE

YEAR=1 SITETYPE=OCEANIC

STATION	SAMPLE	N	F	P	D	PAH	PHYTANE	PRISTANE	LALK	TALK	TOT
5G	00	.	.	.	.	.	.	.	.	.	.
5G	00	.	.	.	.	.	.	.	.	.	.
6A	00	.	.	.	.	.	.	.	.	.	.
6A	00	.	.	.	.	.	.	.	.	.	.
6A	00	.	.	.	.	.	.	.	.	.	.
6A	00	.	.	.	.	.	.	.	.	.	.
6A	00	.	.	.	.	.	.	.	.	.	.
6A	00	.	.	.	.	.	.	.	.	.	.
6B	00	.	.	.	.	.	.	.	.	.	.
6B	00	.	.	.	.	.	.	.	.	.	.
6B	00	.	.	.	.	.	.	.	.	.	.
6B	00	.	.	.	.	.	.	.	.	.	.
6B	00	.	.	.	.	.	.	.	.	.	.
6B	00	.	.	.	.	.	.	.	.	.	.
6C	00	.	.	.	.	.	.	.	.	.	.
6C	00	.	.	.	.	.	.	.	.	.	.
6C	00	.	.	.	.	.	.	.	.	.	.
6C	00	.	.	.	.	.	.	.	.	.	.
6C	00	.	.	.	.	.	.	.	.	.	.
6C	00	.	.	.	.	.	.	.	.	.	.
6D	00	.	.	.	.	.	.	.	.	.	.
6D	00	.	.	.	.	.	.	.	.	.	.
6D	00	.	.	.	.	.	.	.	.	.	.
6D	00	.	.	.	.	.	.	.	.	.	.
6D	00	.	.	.	.	.	.	.	.	.	.
6D	00	.	.	.	.	.	.	.	.	.	.
6F	00	.	.	.	.	.	.	.	.	.	.
6F	00	.	.	.	.	.	.	.	.	.	.
6F	00	.	.	.	.	.	.	.	.	.	.
6F	00	.	.	.	.	.	.	.	.	.	.
6F	00	.	.	.	.	.	.	.	.	.	.
6F	00	.	.	.	.	.	.	.	.	.	.
7A	00	.	.	.	.	.	.	.	.	.	.
7A	00	.	.	.	.	.	.	.	.	.	.
7A	00	.	.	.	.	.	.	.	.	.	.
7A	00	.	.	.	.	.	.	.	.	.	.
7A	00	.	.	.	.	.	.	.	.	.	.
7A	00	.	.	.	.	.	.	.	.	.	.
7B	00	.	.	.	.	.	.	.	.	.	.
7B	00	.	.	.	.	.	.	.	.	.	.
7B	00	.	.	.	.	.	.	.	.	.	.
7B	00	.	.	.	.	.	.	.	.	.	.
7B	00	.	.	.	.	.	.	.	.	.	.
7B	00	.	.	.	.	.	.	.	.	.	.
7C	00	.	.	.	.	.	.	.	.	.	.
7C	00	.	.	.	.	.	.	.	.	.	.
7C	00	.	.	.	.	.	.	.	.	.	.
7C	00	.	.	.	.	.	.	.	.	.	.
7C	00	.	.	.	.	.	.	.	.	.	.
7C	00	.	.	.	.	.	.	.	.	.	.
7E	00	.	.	.	.	.	.	.	.	.	.

BEAUFORT SEA MONITORING PROGRAM--FINE SEDIMENT SAMPLE DATA
RAW DATA LISTING FOR HYDROCARBON CONCENTRATIONS

TYPE OF SEDIMENT = FINE

YEAR=1 SITETYPE=OCEANIC

STATION	SAMPLE	N	F	P	D	PAN	PHYTANE	PRISTANE	LALK	TALK	TOT
7E	100	.	.	.	.						
7E	100	.	.	.	.						
7E	100	.	.	.	.						
7E	100	.	.	.	.						
7E	100	.	.	.	.					.	
7G	100	.	.	.	.						
7G	100	.	.	.	.						
7G	100	.	.	.	.						
7G	100	.	.	.	.						
7G	100	.	.	.	.						.
7G	100	.	.	.	.						

BEAUFORT SEA MONITORING PROGRAM-- FINE SEDIMENT SAMPLE DATA
RAW DATA LISTING FOR HYDROCARBON CDNCENTRATIONS

TYPE OF SEDIMENT = FINE

YEAR=2 SITETYPE=OCEANIC

STATION	SAMPLE	N	F	P	D	PAH	PHYTANE	PRISTANE	LALK	TALK	TOT
1A	AJ94	0.15	0.055	0.13	0.025	0.27	o. 0s0	0.089	1.15	22.03	24.79
1A	AJ95	0.14	0.049	0.13	0.021	0.21	0.040	0.072	1.02	0.63	19.s1
1A	AJ98	0.1s	0.052	0.14	0.026	0.22	0.065	0.081	1.23	14.60	37.22
1B	AI95P					. .			.		
1B	AI97P										
1B	AI99P										
1C	AI62P										
1C	AI64P										
1C	AI66P										
1D	AI70P										
10	AI72P										
1D	AI74P										
1E	AI78P										
1E	AI80P										
1E	AI82P										
2A	AJ08P										
2A	AJ10P										
2A	AJ12P										
20	AJ16P										
2B	AJ18P										
2B	AJ20P										
2C	AI54P										
2C	AI 66P										
2C	AI58P										
20	AJ26P										
2D	AJ28P										
20	AJ30P										
2E	AJ34P										
2E	AJ36P										
2E	AJ38P										
2F	AI 34P										
2F	AI36P										
2F	AI38P										
3A	AI22P										
3A	AI24P										
3A	AI26P										
30	AI 14P										
3B	AI 16P										
3B	AI 16P										
4A	AI06P										
4A	A109P										
4A	AI 10P										
4B	AH97P										
4B	AH99P										
4B	AI01P										
4C	AJ42P										
4C	AJ44P										
4C	AJ46P										
50	AG41P										
50	AG43P										
50	AG45P										

BEAUFORT SEA MONITORING PROGRAM-- FINE SEDIMENT SAMPLE OATA
RAW DATA LISTING FOR HYDROCARBON CONCENTRATIONS

TYPE OF SEDIMENT = FINE

YEAR=2 SITETYPE=OCEANIC

STATION	SANPLE	N	F	P	D	PAH	PHYTANE	PRISTANE	LALK	TALK	TOT
510	AG17P										
s 10	AG19P										
510	AG21P										
51	AG33P										
51	AG35P										
51	AG37P										
55	AJ97	0.34	0.087	0.25	0.033	0.33	0.072	0:$48	2.54	14.49	24: 85
55	AJ98	0.40	0.102	0.31	0.052	0.30	0.064	0. 115	1.76	10. 18	17.66
55	AJ99	0.20	0.083	0.22	0.019	0.33	0.082	0.132	2.46	12.48	20.78
5A	AG49P										
5A	AG51P										
5A	AG55P										
5B	AG57P										
se	AG59P										
5B	AG61P										
so	AG09P										
5D	AG11P										
5D	AG13P										
5E	AG65P										
5E	AG67P										
SE	AG69P										
5F	AH86P										
5F	AH88P										
5F	AH90P										
5G	AI46P										
5G	AI48P										
5G	AI50P										
5H	AJ50P										
5H	AJ52P										
5H	AJ54P										
6A	AG73P										
6A	AG75P										
6A	AG77P										
6B	AG81P										
6B	AG83P										
6B	AG85P										
6C	AG89P										
6C	AG81 P										
6C	AG93P										
60	EFOO	0.74	0:131	0.53	0.077	0.58	0: 135	0.280	3.94	17.20	30; 63
6D	EFO1	0.56	0.120	0.37	0.041	0.59	O.138	0.274	3.39	15.88	30. 0s
00	EF02	0.80	0.217	0.61	0.$22	0.67	0.150	0.221	2.77	17.12	45.31
6F	AH11P										
6F	AH18P										
6F	AH20P										
6G	AH75P										
6G	AH77P										
6G	AH81P										
7A	AH67P										
7A	AH69P										
7A	AH71P										

BEAUFORT SEA MONITORING PROGRAM-- FINE SEDIMENT SAMPLE DATA
RAW DATA LISTING FOR HYDROCARBON CONCENTRATIONS

TYPE OF SEDIMENT = FINE

YEAR=2 SITETYPE=OCEANIC

STATION	SAMPLE	N	F	P	D	PAH	PHYTANE	PRISTANE	LALK	TALK	TOT
7B	AH50P	.	.	.	.	.	.	.	.	.	.
7B	AH52P	.	.	.	.	.	.	.	.	.	.
7B	AH54P	.	.	.	.	.	.	.	.	.	.
7C	AH41P	.	.	.	.	.	.	.	.	.	.
7C	AH43P	.	.	.	.	.	.	.	.	.	.
7C	AH45P	.	.	.	.	.	.	.	.	.	.
7D	AH33P	.	.	.	.	.	.	.	.	.	.
7D	AH35P	.	.	.	.	.	.	.	.	.	.
7D	AH37P	.	.	.	.	.	.	.	.	.	.
7E	AH59P	.	.	.	.	.	.	.	.	.	.
7E	AH61P	.	.	.	.	.	.	.	.	.	.
7E	AH63P	.	.	.	.	.	.	.	.	.	.
7G	AH24P	.	.	.	.	.	.	.	.	.	.
7G	AH26P	.	.	.	.	.	.	.	.	.	.
7G	AH28P	.	.	.	.	.	.	.	.	.	.

YEAR=2 SITETYPE=PEAT

STATION	SAMPLE	N	F	P	D	PAH	PHYTANE	PRISTANE	LALK	TALK	TOT
1F	AJ06	.	.	.	.	.	.	.	.	.	.
2G	AI44P	.	.	.	.	.	.	.	.	.	.
2H	AJ05	.	.	.	.	.	.	.	.	.	.
3D	AI31P	.	.	.	.	.	.	.	.	.	.
5K	AH94P	.	.	.	.	.	.	.	.	.	.
6J	AH07P	.	.	.	.	.	.	.	.	.	.
7H	AH32	.	.	.	.	.	.	.	.	.	.
7J	AH79P	.	.	.	.	.	.	.	.	.	.

YEAR=2 SITETYPE=RIVER

STATION	SAMPLE	N	F	P	D	PAH	PHYTANE	PRISTANE	LALK	TALK	TOT
5J	AG07P	.	.	.	.	.	.	.	.	.	.
6H	AH09P	.		.	.	.	.	.	.	.	.

BEAUFORT SEA MONITORING PROGRAM-- FINE SEDIMENT SAMPLE DATA
RAW DATA LISTING FOR HYDROCARBON CONCENTRATIONS

TYPE OF SEDIMENT = FINE

YEAR=3 SITETYPE=OCEANIC

STATION	SAMPLE	N	F	a	a	PAH	PHYTANE	PRISTANE	LALK	TALK	TOT
1A	FB25P	.	.	.	.	.	.	.	.	.	.
1A	FB27P	.	.	.	.	.	.	.	.	.	.
1A	FB29P	.	.	.	.	.	.	.	.	.	.
1B	FB33P	.	.	.	.	.	.	.	.	.	.
1B	FB35P	.	.	.	.	.	.	.	.	.	.
1B	FB37P	.	.	.	.	.	.	.	.	.	.
1C	FB49P	.	.	.	.	.	.	.	.	.	.
1C	FB51P	.	.	.	.	.	.	.	.	.	.
1C	FB53P	.	.	.	.	.	.	.	.	.	.
1D	FB09P	.	.	.	.	.	.	.	.	.	.
1D	FB11P	.	.	.	.	.	.	.	.	.	.
1D	FB13P	.	.	.	.	.	.	.	.	.	.
1E	FB17P	.	.	.	.	.	.	.	.	.	.
1E	FB19P	.	.	.	.	.	.	.	.	.	.
1E	FB21P	.	.	.	.	.	.	.	.	.	.
2A	FB41P	.	.	.	.	.	.	.	.	.	.
2A	FB43P	.	.	.	.	.	.	.	.	.	.
2A	FB45P	.	.	.	.	.	.	.	.	.	.
2B	FB65P	.	.	.	.	.	.	.	.	.	.
2B	FB67P	.	.	.	.	.	.	.	.	.	.
2B	FB69P	.	.	.	.	.	.	.	.	.	.
2C	FB57P	.	.	.	.	.	.	.	.	.	.
2C	FB59P	.	.	.	.	.	.	.	.	.	.
2C	FB61P	.	.	.	.	.	.	.	.	.	.
2D	FB73P	.	.	.	.	.	.	.	.	.	.
2D	FB75P	.	.	.	.	.	.	.	.	.	.
2D	FB77P	.	.	.	.	.	.	.	.	.	.
2E	FD90P	.	.	.	.	.	.	.	.	.	.
2E	FD92P	.	.	.	.	.	.	.	.	.	.
2E	FD94P	.	.	.	.	.	.	.	.	.	.
2F	FB01P	.	.	.	.	.	.	.	.	.	.
2F	FB03P	.	.	.	.	.	.	.	.	.	.
2F	FB05P	.	.	.	.	.	.	.	.	.	.
3A	FE13P	.	.	.	.	.	.	.	.	.	.
3A	FE15P	.	.	.	.	.	.	.	.	.	.
3A	FE17P	.	.	.	.	.	.	.	.	.	.
3B	FD98P	.	.	.	.	.	.	.	.	.	.
3B	FE07P	.	.	.	.	.	.	.	.	.	.
3B	FE09P	.	.	.	.	.	.	.	.	.	.
4A	FE29P	.	.	.	.	.	.	.	.	.	.
4A	FE31P	.	.	.	.	.	.	.	.	.	.
4A	FE33P	.	.	.	.	.	.	.	.	.	.
4B	FE21P	.	.	.	.	.	.	.	.	.	.
4B	FE23P	.	.	.	.	.	.	.	.	.	.
4B	FE25P	.	.	.	.	.	.	.	.	.	.
4C	FE45P	.	.	.	.	.	.	.	.	.	.
4C	FE47P	.	.	.	.	.	.	.	.	.	.
4C	FE49P	.	.	.	.	.	.	.	.	.	.
5O	FE61P	.	.	.	.	.	.	.	.	.	.
5O	FE63P	.	.	.	.	.	.	.	.	.	.
5O	FE65P	.	.	.	.	.	.	.	.	.	.

BEAUFORT SEA MONITORING PROGRAM-- FINE SEDIMENT SAMPLE DATA
RAW DATA LISTING FOR HYDROCARBON CONCENTRATIONS

TYPE OF SEDIMENT = FINE

YEAR=3 SITETYPE=OCEANIC

STATION	SANPLE	N	F	P	D	PAH	PHYTANE	PRISTANE	LALK	TALK	TOT
510	FD66P				.						
510	FD68P				.						
510	FD70P				.						
51	FE53P				.						
51	FE55P				.						
51	FE67				.						
55	FD82P				.						
55	FD84P				.						
55	FD86P				.						
5A	FOSOP				.						
5A	FD52P				.						
5A	FD54P				.						
5B	FC92P				.						
5B	FC94P				.						
5B	FC96P				.						
5D	FE69P				.						
5D	FE71P				.						
5D	FE75P				.						
SE	FC84P				.						
5E	FC86P				.						
5E	FC88P				.						
SF	FD58P				.						
SF	FD60P				.						
5F	FD62P				.						
5G	FD76P				.						
5G	FD78P				.						
5G	FD80P				.						
5H	FE37P				.						
5H	FE39P				.						
5H	FE41P				.						
6A	FC76P				.						
6A	FC78P				.						
6A	FC80P				.						
6B	FC52P				.						
6B	FC54P				.						
6B	FC56P				.						
6C	FC68P				.						
6C	FC70P				.						
6C	FC72P				.						
6D	FC60P				.						
60	FC62P				.						
6D	FC64P				.						
6F	FC36P				.						
6F	FC38P				.						
6F	FC40P				.						
6G	FC44P				.						
6G	FC46P				.						
6G	FC48P				.						
7A	FC28P				.						
7A	FC30P				.						
7A	FC32P				.						

BEAUFORT SEA MONITORING PROGRAM-- FINE SEDIMENT SAMPLE DATA
RAW DATA LISTING FOR HYDROCARBON CONCENTRATIONS

TYPE SEDIMENT = FINE

YEAR=3 SITETYPE=OCEANIC

STATION	SAMPLE	N	F	P	D	PAH	PHYTANE	PRISTANE	LALK	TALK	TOT
7B	FC04P	.	.	.	.	.	.	.	.	.	.
7B	FC06P	.	.	.	.	.	.	.	.	.	.
7B	FC08P	.	.	.	.	.	.	.	.	.	.
7C	FB95P	.	.	.	.	.	.	.	.	.	.
7C	FB97P	.	.	.	.	.	.	.	.	.	.
7C	FB99P	.	.	.	.	.	.	.	.	.	.
7D	FB87P	.	.	.	.	.	.	.	.	.	.
7D	FB89P	.	.	.	.	.	.	.	.	.	.
7D	FB91P	.	.	.	.	.	.	.	.	.	.
7E	FC12P	.	.	.	.	.	.	.	.	.	.
7E	FC14P	.	.	.	.	.	.	.	.	.	.
7E	FC16P	.	.	.	.	.	.	.	.	.	.
7G	FC20P	.	.	.	.	.	.	.	.	.	.
7G	FC22P	.	.	.	.	.	.	.	.	.	.
7G	FC24P	.	.	.	.	.	.	.	.	.	.

YEAR=3 SITETYPE=RIVER

STATION	SAMPLE	N	F	P		PAH	PHYTANE	PRISTANE	LALK	TALK	TOT
2J1	FE04	.	.	.	.	.	.	.	.	.	.
2J2	FE05	.	.	.	.	.	.	.	.	.	.
5L1	FB81	.	.	.	.	.	.	.	.	.	.
5L2	FB82	.	.	.	.	.	.	.	.	.	.
5L3	FB83	.	.	.	.	.	.	.	.	.	.
5M1	FB84	.	.	.	.	.	.	.	.	.	.
5M2	FB85	.	.	.	.	.	.	.	.	.	.
5M3	FB86	.	.	.	.	.	.	.	.	.	.
6K1	FE01	.	.	.	.	.	.	.	.	.	.
6K2	FE02	.	.	.	.	.	.	.	.	.	.
6K3	FE03	.	.	.	.	.	.	.	.	.	.

BEAUFORT SEA MONITORING PROGRAM-- FINE SEDIMENT SANPLE DATA
RAW OATA LISTING FOR METAL CONCENTRATIONS ANO ANCILLARY VARIABLES

TYPE OF SEDIMENT = FINE

YEAR=1 SITETYPE=OCEANIC

STATION	SAMPLE	0A	co	CR	CU	PB	v	ZN	BA/CR	BA/V	TOC	% MUD
2E	100										2.00	9.3
2E	100										2.70	9.3
2E	100										2.50	5.8
2E	100										2.40	7.2
2E	100										2.30	8.7
2E	100										2.40	8.7
2F	100										3.00	12.0
2F	100										6.20	14.5
2F	100										5.00	16.7
2F	100										5.60	12.7
2F	100										8.50	21.6
2F	100										6.30	13.4
3A	100										8.80	42.1
3A	100										8.80	42.1
3A	100										8.10	40.1
3A	100										7.s0	40.1
3A	100										8.20	43.6
3A	100										9.00	43.0
3B	100										8.60	62.7
3B	100										8.80	55.7
3B	100										9.90	65.7
3B	100										9.10	62.3
3B	100										8.90	62.3
36	100										9.80	70.3
4A	100										0.70	28.4
4A	100										8.60	28.4
4A	100										6.90	29.2
4A	100										5.70	18.6
4A	100										7.40	66.8
4A	100										7.90	2s.2
40	100										4.20	10.1
40	100										2.40	6.2
40	100										3.00	6.2
40	100										3.00	11.8
4B	100										2.70	3.s
4B	100										1.90	3.5
4C	100										6.00	27.7
4C	100										1.60	9.9
4C	100										2.30	8.S
4C	100										3.20	12.4
4C	100										1.90	18.2
4C	100										3.30	18.2
510	" 100										5.00	35.7
510	100										22.00	26.7
510	100										26.90	2S.7
510	100										9.00	55.2
510	100										8.80	22.0
510	100										5.60	3s.7
51	100										4.70	13.8
51	100										.	8.7
51	100										5.00	8.7

BEAUFORT SEA MONITORING PROGRAM-- FINE SEDIMENT SAMPLE DATA
RAW DATA LISTING FOR METAL CONCENTRATIONS AND ANCILLARY VARIABLES

TYPE SEDIMENT = FINE

Y≤AR= SIT≤TYPE=OCEANIC

STATION	SAMPLE	BA	CD			PB	V	ZN	BA/CR	BA/V	TOC	MUD
51	.00	.	.	.	.	.	.	.	.	.	5.00	11.2
51	00	.	.	.	.	.		.	.	.	5.80	11.2
51	00	.	.	.	.	.	.	.	.	.	3.20	6.2
51	·00	.	.	.	.	.		.	.	.	3.50	6.2
52	00	.	.	.	.	.	.	.	.	.	1.90	4.8
52	00	.	.	.	.	.		.	.	.	2.20	3.4
52	·00	.	.	.	.	.	.	.	.	.	3.00	3.4
52	00	.	.	.	.	.		.	.	.	6.50	4.1
52	.00	.	.	.	.	.	.	.	.	.	2.00	4.1
52	·00	.	.	.	.	.	.	.	.	.	3.10	2.0
55	00	.	.	.	.	.		.	.	.	6.40	36.9
55	.00	.	.	.	.	.	.	.	.	.	6.70	36.7
55	00	.	.	.	.	.		.	.	.	9.00	36.7
55	00	.	.	.	.	.	.	.	.	.	18.40	32.0
55	100	.	.	.	.	.		.	.	.	11.00	38.0
55	100	.	.	.	.	.	.	.	.	.	6.90	38.0
5A	100	.	.	.	.	.		.	.	.	10.20	62.3
5A	100	.	.	.	.	.	.	.	.	.	10.30	81.6
5A	100	.	.	.	.	.		.	.	.	9.70	81.6
5A	100	.	.	.	.	.	.	.	.	.	10.20	65.2
5A	100	.	.	.	.	.		.	.	.	10.20	65.2
5A	100	.	.	.	.	.	.	.	.	.	9.70	80.4
5B	100	.	.	.	.	.	.	.	.	.	1.80	3.3
5B	100	.	.	.	.	.	.	.	.	.	2.20	2.4
5B	100	.	.	.	.	.	.	.	.	.	2.70	2.5
5B	00	.	.	.	.	.	.	.	.	.	2.00	2.6
5B	00	.	.	.	.	.	.	.	.	.	1.90	4.6
5B	00	.	.	.	.	.	.	.	.	.	1.80	4.6
5D	00	.	.	.	.	.	.	.	.	.	29.80	70.7
5D	00	.	.	.	.	.	.	.	.	.	28.40	70.7
5D	100	.	.	.	.	.	.	.	.	.	30.20	71.0
5D	100	.	.	.	.	.	.	.	.	.	31.90	71.0
5D	100	.	.	.	.	.	.	.	.	.	29.20	78.0
5D	100	.	.	.	.	.	.	.	.	.	25.60	73.5
5E	100										2.10	4.3
5E	100	.	.	.	.	.	.	.	.	.	.	4.3
5E	100	.	.	.	.	.	.	.	.	.	100	23.3
5E	100	.	.	.	.	.	.	.	.	.	3.00	21.2
5E	00	.	.	.	.	.	.	.	.	.	2.50	5.6
5E	00	.	.	.	.	.	.	.	.	.	2.10	5.6
5E	100	.	.	.	.	.	.	.	.	.	12.00	92.2
5F	100	.	.	.	.	.	.	.	.	.	14.90	65.8
5F	100	.	.	.	.	.	.	.	.	.	14.90	65.8
5F	100	.	.	.	.	.	.	.	.	.	16.40	55.6
5F	00	.	.	.	.	.	.	.	.	.	18.70	55.6
5F	00	.	.	.	.	.	.	.	.	.	16.60	62.6
5F	00	.	.	.	.	.	.	.	.	.	20.40	62.6
5G	00	.	.	.	.	.	.	.	.	.	4.00	21.7
5G	00	.	.	.	.	.	.	.	.	.	6.60	20.0
5G	00	.	.	.	.	.	.	.	.	.	8.90	14.4
5G	00	.	.	.	.	.	.	.	.	.	7.20	14.4

BEAUFORT SEA MONITORING PROGRAM-- FINE SEDIMENT SAMPLE DATA
RAW OATA LISTING FOR METAL CONCENTRATIONS ANO ANCILLARY VARIABLES

TYPE OF SEDIMENT = FINE

YEAR=1 SITETYPE=OCEANIC

STATION	SAMPLE	BA	CD	CR	CU	PB	v	ZN	BA/CR	BA/V	TOC	% MUD
5G	100										6.80	17.3
5G	100										4.70	17.3
6A	100										13.80	67.5
6A	100										0.90	67.0
6A	100										11.80	67.6
6A	100										10.80	60.8
6A	100										11 .s0	70.0
6A	100										11.00	65.5
6B	100										18.20	S4.7
6B	100										18.30	S4.7
6B	100										16.60	98.3
6B	100										18.30	92.4
6B	100										18.60	92.4
6B	100										18.10	7s.1
6C	100										7.10	21.s
6C	100										4.70	t e e
6C	100										S.20	16.8
6C	100										8.60	S6.4
6C	100										5.80	32.0
6C	100										5.60	27.6
60	100										2.60	12.0
60	100										4.90	12.0
6D	100										3.60	1s.s
60	100										5.20	15.9
60	100										2.00	4.6
60	100										3.40	4.6
6F	100										12.20	44.7
6F	100										9.20	44.7
6F	100										12.40	85.6
6F	100										13.00	01.7
6F	100										4.10	28.7
6F	100										12.10	83.4
7A	100										7.80	70.2
7A	100										12.20	71.4
7A	100										8.30	e e l
7A	100										7.90	e e l
7A	100										18.40	60.0
7A	100										13.60	59.3
70	100										5.60	17.7
7B	100										4.50	13.9
70	100										6.90	9.0
70	100										5.40	9.4
7B	100										S.30	10.3
7B	100										6.00	19.6
7C	100										13.10	83.s
7C	100										14.10	86.6
7C	100										14.00	86.6
7C	100										12.80	82.6
7C	100										13.50	82.6
7C	100										12.70	85.6
7E	100										17.80	63.3

BEAUFORT SEA MONITORING PROGRAM-- FINE SEDIMENT SAMPLE DATA
RAW DATA LISTING FOR METAL CONCENTRATIONS AND ANCILLARY VARIABLES

TYPE OF SEDIMENT = FINE

YEAR=1 SITETYPE=OCEANIC

STATION	SAMPLE	AL	CD	CR	CU	PB	V	ZN	BA/CR	BA/V	TOC	% MUD
7E	8	.	.	.	.	.	.	.	.	.	15.10	71.6
7E	8	.	.	.	.	.	.	.	.	.	16.80	71.6
7E	8	.	.	.	.	.	.	.	.	.	17.70	69.7
7E	8	.	.	.	.	.	.	.	.	.	20.30	66.5
7E	8	.	.	.	.	.	.	.	.	.	15.90	66.5
7G	8	.	.	.	.	.	.	.	.	.	42.00	8.9
7G	8	.	.	.	.	.	.	.	.	.	19.40	11.5
7G	8	.	.	.	.	.	.	.	.	.	20.20	10.2
7G	8	.	.	.	.	.	.	.	.	.	20.90	10.2
7G	8	.	.	.	.	.	.	.	.	.	18.70	9.4
7G	8	.	.	.	.	.	.	.	.	.	36.80	10.2

BEAUFORT SEA MONITORING PROGRAM-- FINE SEDIMENT SAMPLE DATA
RAW DATA LISTING FOR METAL CONCENTRATIONS ANO ANCILLARY VARIABLES

TYPE OF SEDIMENT = FINE

YEAR=2 SITETYPE=OCEANIC

STATION	SAMPLE	BA	CD	CR	CU	PB	v	ZN	BA/CR	BA/V	TOC	% MUD
1A	AJ94	404	0.22	81	28.1	18.8	123	97	5.0	3.3	11.s0	e4.4
1A	AJ95	405	0.18	61	30.3	17.6	119	95	5.0	3.4	9.80	60.0
1A	AJ96	437	o.2e	82	32.0	23.3	126	10s	5.3	3.5	13.80	81.6
1B	AI95P	616	0.10	79	28.4	15.5	134	98	7.8	4.s	8.20	18.9
1B	AI97P	621	0.11	75	26.6	15.6	118	89	6.9	4.4	5.50	9.2
1B	AI99P	603	0.$0	83	28.7	17.7	129	97	7.3	4.7	6.00	1s.7
1C	AI62P	545	0.15	81	26.6	17.7	147	102	e.7	3.7	10.40	72.5
1C	AI64P	487	0.17	93	27.3	19.1	144	120	6.2	3.4	8.80	70.7
1C	AI66P	469	0. 16	77	23.4	18.5	138	96	6.1	3.4	9.50	66.6
1D	AI70P	374	0.$5	57	19.0	11.7	86	68	6.6	4.3	3.80	11.0
1D	AI72P	384	0.22	77	32.2	17.9	116	98	5.0	3.3	9.50	21.s
ID	AI74P	674	0.22	77	29.9	16.8	114	90	7.s	5.0	7.80	18.2
1E	AI78P	519	0.14	67	27.6	23.0	93	86	7.7	5.6	11.70	93.3
1E	AI80P	470	0.13	es	23.2	20.3	90	83	7.2	5.2	10.20	9s.2
1E	AI82P	466	0.14	64	2e.2	21.4	92	83	7.3	6.1	13.10	89.9
2A	AJ08P	634	0.24	82	38.5	18.7	140	108	6.5	3.8	22.70	03.1
2A	AJ 10P	484	0.18	72	27.2	17.6	1 Is	98	6.7	4.2	17.20	90.6
2A	AJ12P	441	0.18	a3	19.7	13. t	91	79	7.0	4.0	10.90	91.6
20	AJ16P	290	0.17	74	2S.5	1s.9	118	93	3.9	2.s	7.00	4.0
2B	AJ18P	283	o.2e	85	3S.2	17.4	142	108	3.3	2.0	13.30	63.8
2B	AJ20P	S02	0.17	77	26.1	14.3	122	89	6.5	4.1	10.40	5.2
2C	AI54P	576	0.14	80	28.4	18.6	136	100	7.2	4.2	12.20	70.3
2C	AI56P	401	0.18	86	27.3	18.0	145	109	4.7	2.8	0.10	70.s
2C	AI58P	599	0. 1s	81	2S.3	20.8	145	106	7.4	4.1	10.00	72.S
20	AJ26P	284	0.37	91	38.s	24.4	134	126	3.1	2.1	18.60	82.7
2D	AJ28P	427	0.21	79	20.7	15.4	129	10B	5.4	3.3	e.20	15.4
2D	AJ30P	294	0.30	71	25.5	18.2	117	0s	4.1	2.s	6.40	2.8
2E	AJ34P	143	0.27	79	30.0	15.2	132	111	1.8	1.1	12.00	80.5
2E	AJ36P	214	o.2e	77	29.4	15.6	132	113	2.8	1.6	11.70	90.1
2E	AJ38P	129	0.36	81	30.0	17.1	132	110	1.6	1.0	8.20	62.1
2F	AI34P	232	0.29	78	2e.4	9.8	86	77	3.0	2.7	4.80	13.8
2F	AI 36P	3s3	0.24	69	18.6	11.6	92	79	5.1	3.8	e.20	15.4
2F	AI38P	252	o.2e	66	16.5	11.4	87	71	3.8	2.9	4.10	10.7
3A	A122P	452	o. 15	69	20.4	17.7	104	8S	6.6	4.3	10. 90	46.6
3A	AI24P	449	0.14	66	23.2	11.6	111	84	6.8	4.0	11.10	46.1
3A	AI26P	459	0. 16	68	24.2	14.2	108	91	6.8	4.3	40.40	4s.s
3B	AI14P	382	0.16	68	18.7	11.4	107	81	5.6	3.6	11.00	7s.0
3B	AI 16P	302	0.15	68	19.2	11.3	100	78	5.6	3.8	11.s0	70.8
3B	AI 18P	390	0. 16	64	19.5	11.1	108	81	e.2	3.7	11.20	76.1
4A	A106P	276	o.2e	81	26.4	14.s	127	108	3.4	2.2	18.20	22.s
4A	AI08P	2a 1	0.23	76	28.2	14.2	126	102	3.7	2.2	12.30	4 3 a
4A	AI 10P.	281	0.22	77	27.4	14.6	133	10s	3.6	2.1	10.60	35.6
40	AH97P	361	0.19	62	20.6	10.3	100	77	5.8	3.6	6.00	8.0
4B	AH99P	144	0.21	63	1s.3	11.0	99	95	2.7	1.s	4.00	4.6
40	AI01P	334	0.19	60	18.9	10.s	94	76	5.6	3.6	4.00	5.8
4C	AJ42P	525	0.24	76	23.2	1s.9	123	95	6.9	4.3	10.60	9.4
4C	AJ44P	644	0.12	7s	24.7	16.7	121	80	7.3	4.5	11.40	6.4
4C	AJ46P	41E	0.18	83	23.1	19.4	124	98	5.0	3.3	9.80	3.1
50	AG41P	167	0.29	50	22.4	10.1	98	85	3.3	1.7	3.40	4.0
50	AG43P	284	0.21	54	16.8	9.6	95	77	6.3	3.0	3.60	13.0
50	AG45P	194	0. 19	49	17.7	8.S	92	73	4.0	2.1	4.80	2.0

BEAUFORT SEA MONITORING PROGRAM-- FINE SEDIMENT SAMPLE DATA
RAW DATA LISTING FOR METAL CONCENTRATIONS ANO ANCILLARY VARIABLES

TYPE OF SEDIMENT = FINE

YEAR=2 SITETYPE=OCEANIC

STATION	SAMPLE	BA	co	CR	CU	PB	v	ZN	BA/CR	BA/V	TOC	% MUD
510	AG17P	12s	0.23	59	17.3	9.7	94	77	2.2	1.4	S.70	21.7
510	AG19P	37s	0.22	82	20.4	10.4	103	so	6.0	3.6	6.80	16.8
510	AG21P	434	0.39	66	18.5	8.7	96	79	6.6	4.5	5.60	22.9
51	AG33P	156	2.1s	72	11.1	10.s	61	57	2.2	2.6	2.40	0.9
51	AG35P	245	0.1s	67	19.7	10.2	73	59	3.7	3.4	2.00	1.2
51	AG37P	294	0.18	68	18.7	13.0	100	81	4.3	2.9	3.40	0.9
55	AJ97	44s	0.21	74	21.8	11.1	103	8S	6.0	4.3	e.40	11.5
55	AJ98	244	0.23	69	21.2	11.8	11s	92	3.5	2.1	S.70	36.7
55	AJ99	505	0.20	66	20.s	10.3	102	82	7.7	5.0	2.70	22.4
5A	AG49P	304	0.23	64	18.3	11.4	100	78	4.8	3.0	11.40	43.5
5A	AGS 1P	477	0.$7	63	1s.s	10.6	95	78	7.6	5.0	12.70	3s.4
5A	AG55P	412	0.20	64	18.6	12.0	105	8S	6.4	3.9	16.70	49.9
5B	AG57P	403	0.12	82	27.7	15.8	13s	101	4.8	2.9	10.40	55.8
5B	AG59P	420	0.14	82	27.S	16.9	136	104	5.1	3.1	S.80	81.4
5B	AG61P	219	0.14	82	2s.1	16.8	149	107	2.7	1.5	10.00	$3.7
50	AG09P	415	0.2s	67	16.7	7.4	87	80	6.2	4.8	19.20	65.s
SD	AG11P	108	0.30	58	16.6	S.4	82	80	1.8	1.3	12.40	55.2
so	AG 13P	85	9.29	60	18.5	8.9	94	85	1.4	0.9	12.20	63.9
SE	AG65P	191	0.22	77	2S.3	15.8	148	101	2.5	1.3	9.40	44.6
SE	AG67P	415	0.22	83	30.9	16.6	148	101	5.0	2.8	9.40	23.3
5E	AG69P	443	0.1s	78	27.2	1s.3	13s	103	5.7	3.2	10.40	52.8
5F	AH86P	180	0.27	56	11.8	5.4	80	72	2.9	2.0	7.80	44.3
5F	AH88P	44	0.2s	S7	12.4	6.6	77	72	0.8	0.6	9.00	42.9
5F	AH90P	53	0.22	56	12.7	6.9	61	79	0.s	0.7	6.10	39.3
5G	AI46P	107	0.1s	73	18.3	13.1	117	81	1.s	0.9	7.s0	8.2
5G	AI 48P	47s	0.14	87	18.3	13.7	111	78	5.5	4.3	5.90	11.7
5G	AI50P	418	0.16	77	1s.3	14.6	109	82	6.4	3.8	6.40	13.6
5H	AJ50P	1ss	0.22	61	21.0	11.3	110	88	2.6	1.4	6.90	14.6
5H	AJ52P	148	0.22	61	20.7	11.1	110	87	2.4	1.3	30.20	17.9
5H	AJ54P	283	0.23	66	21.0	12.0	106	88	4.3	2.7	11.60	14.8
6A	AG73P	3s7	0.16	72	21.1	15.2	111	08	5.0	3.2	12.00	86.8
6A	AG75P	391	0.16	73	22.9	14.2	113	89	6.4	3.s	12.30	83.3
6A	AG77P	31s	0.19	82	2s.6	13.9	119	103	3.9	2.7	15.90	75.0
6B	AG81P	492	0.25	92	32.3	16.8	147	118	5.3	3.3	11.80	78.7
6B	AG83P	504	0.22	88	31.5	14.6	14s	117	5.7	3.5	12.50	90.7
6B	AG85P	S72	0.28	90	31.8	14.7	136	115	6.4	4.2	23.30	81.6
6C	AG89P	216	0.16	95	33.7	16.9	1ss	116	2.3	1.4	6.s0	26.6
6C	AG91 P	514	0.15	79	26.9	1S.8	139	10s	6.5	3.7	8.60	62.3
6C	AG93P	577	0.19	93	31.3	16.7	1s7	116	6.2	3.7	8.70	59.3
6D	EFOO	298	0.1s	82	24.4	12.6	130	82	3.6	2.3	3.30	4.4
6D	EF01	3s7	0.14	75	21.1	13.3	122	89	4.s	2.9	3.50	2.0
60	EF02	443	0.1s	82	28.3	16.4	149	107	5.4	3.0	6.30	4e.4
6F	AH11P"	513	0.46	86	21.0	1s.2	131	92	6.0	3.s	e.20	43.7
6F	AH18P	t56	0. 14	90	21.2	13.s	130	93	1.7	1.2	11.20	34.s
6F	AH20P	157	0.14	90	21.7	13.7	122	92	1.7	1.3	S.40	30.7
6G	AH75P	198	0.2s	63	1s.0	13.7	96	96	3.2	2.1	17.60	80.0
6G	AH77P	123	0.23	60	18.5	10.s	100	87	2.0	1.2	18.70	79.6
6G	AH81P	132	0.23	es	20.s	10.3	111	10s	2.0	1.2	18.S0	77.0
7A	AH67P	S43	0.14	88	16.3	11.3	9s	8S	9.6	8.9	11.40	72.4
7A	AH69P	745	0.09	87	13.2	10.3	99	se	8.6	7.s	11.50	72.1
7A	AH71P	749	0.10	96	13.5	13.1	97	88	7.8	7.7	8.60	57.8

BEAUFORT SEA MONITORING PROGRAM-- FINE SEDIMENT SAMPLE DATA
RAW DATA LISTING FOR METAL CONCENTRATIONS ANO ANCILLARY VARIABLES

TVPE OF SEDIMENT = FINE

YEAR=2 SITETYPE=OCEANIC

STATION	SAMPLE	BA	CD	CR	CU	PB	v	ZN	BA/CR	BA/V	TOC	% MUD
7B	AH50P	510	0.10	93	1s.s	12.7	98	78	5.s	5.2	6.40	6.9
7B	AH52P	824	0.10	133	13.9	11.6	87	65	6.2	9.5	4.00	10.2
7B	AH54P		.	.	.	.		.	.	.	.	5.8
7C	AH41P	423	0.17	58	17.1	13.8	102	80	7.3	4.1	11.50	83.1
7C	AH43P	517	0.13	84	29.8	18.0	143	10s	6.2	3.6	15.90	97.1
7C	AH45P	526	0.63	81	27.8	18.6	134	99	6.5	3.9	12.30	80.0
7D	AH33P	438	0.15	83	28.2	14.1	122	105	5.3	3.6	9.80	21.6
7D	AH35P	486	0.14	87	31.4	1s.1	134	107	5.6	3.6	8.10	83.6
7D	AH37P	633	0.19	79	2S.7	13.8	123	98	6.7	4.3	12.00	4s.3
7E	AH59P	744	0.19	82	16.0	14.4	103	8s	9.1	7.2	20.90	74.s
7E	AH61P	853	0.12	110	21.1	16.0	113	87	7.8	7.5	17.60	63.1
7E	AH63P	757	0.12	91	19.9	12.9	112	89	5.3	6.8	36.70	e3.7
7G	AH24P	748	0.22	82	16.1	11.2	88	77	9.1	8.5	16.00	38.6
7G	AH26P	741	0.12	97	13.s	11.s	85	72	7.6	8.7	5.60	32.1
7G	AH28P	686	0.10	92	12.7	0.4	80	67	7.s	8.6	9.80	13.0

YEAR=2 SITETYPE=PEAT

STATION	SAMPLE	BA	CD	CR	CU	PB	v	ZN	BA/CR	BA/V	TOC	% MUD
IF	AJ06	521	0.24	66	17.8	16.6	103	63	7.9	s. 1	95 .30	87.1
2G	AI44P	Sos	0.24	79	29.s	9.5	123	99	7.7	4.9	42.20	S8.3
2H	AJ05	491	0.20	61	20.3	11.2	94	74	8.0	6.2	170.4	73.4
3D	AI31P	322	0.2s	56	19.5	7.1	67	34	5.8	4.8	228	44.6
SK	AH94P	613	0.30	72	24.0	9.3	107	116	7.1	4.8	83.40	sa.2
6J	AH07P	355	0.30	36	11.8	2.4	33	23	9.9	10.8	261.1	59.1
7H	AH32	394	0.40	87	3$.1	17.2	134	10s	4.5	2.9	22.90	8.0
7J	AH78P	383	0.21	64	21.6	9.7	76	78	6.0	5.0	294.6	80.s

YEAR=2 SITETYPE=RIVER

STATION	SAMPLE	6A	co	CR	CU	PB	v	ZN	BA/CR	BA/V	TOC	% MUD
5J	AG07P	181	0.40	56	19.4	7.1	84	91	3.4	2.3	12.80	1s.s
6H	AH09P	953	0.27	101	24.0	13.1	117	10s	9.4	5.1	es. so	15.4

BEAUFORT SEA MONITORING PROGRAM--FINE SEDIMENT SAMPLE OATA
RAW OATA LISTING FOR METAL CONCENTRATIONS AND ANCILLARY VARIABLES

TYPE OF SEDIMENT = FINE

YEAR=3 SITETYPE=OCEANIC

STATION	SANPLE	BA	co	CR	CU	PB	v	ZN	BA/CR	BA/V	TOC	% MUD
1A	FB25P	308	0. 1s	91	27.5	13.4	129	130	3.4	2.4	9.00	63.s
1A	FB27P	341	0.19	96	32.0	14.6	ı3a	233	3.s	2.s	8.70	64.0
1A	FB29P	209	0.17	107	28.5	12.8	133	12s	2.0	1.8	6.60	54.1
in	FB33P	181	0.14	84	21.6	14.5	128	84	2.2	1.4	23.00	7.4
1B	FB35P	266	0.11	88	23.8	1s.0	130	so	3.0	2.0	3.10	8.4
1B	FB37P	249	0.11	97	29.6	19.4	153	88	2.6	1.6	7.40	28.4
1C	FB49P	353	0.08	93	2s.3	19.7	14B	91	3.8	2.4	7.70	68.6
1C	FB51P	310	0.08	85	22.7	17.2	136	88	3.7	2.3	9.00	e2.7
1C	FB53P	277	0.0s	8s	23.2	1s.4	140	90	3.3	2.0	0.40	79.6
10	FB09P	525	0.12	B4	26.5	26.0	9s	89	6.3	5.5	4.60	30.3
10	FB11P	514	0.14	80	2s. 1	25.4	91	90	6.5	8.7	6.50	49.8
10	FB13P	4s3	0.$2	79	2S.3	23.S	93	79	6.2	5.3	4.80	28.9
1E	FB17P	330	0.14	67	19.7	12.3	76	68	4.s	4.4	3.s0	31.4
1E	FB19P	346	0.12	69	1s.4	11.1	78	57	5.0	4.s	4.60	29.6
1E	FB21P	351	0.08	68	17.9	15.2	73	70	8.2	4.8	3.90	20.0
2A	FB41P	326	0.22	96	2s.2	14.s	117	7B	3.4	2.8	11.30	82.9
2A	FB43P	292	0.16	90	22.3	12.3	107	72	3.3	2.7	11.40	76.9
2A	FB45P	346	0.1s	9s	25.s	17.1	119	80	3.s	2.9	10.40	80.4
2B	FB65P	319	o. 19	88	27.S	16.8	134	92	3.6	2.4	5.60	23.2
2B	FB67P	232	0.17	75	20.s	12.3	111	81	3.1	2.1	2.00	8.9
2B	FB69P	243	0.16	68	17.7	9.6	82	76	3.6	3.0	2.00	4.8
2C	FB57P	274	0.08	81	21.s	12.1	125	113	3.4	2.2	7.60	52.7
2C	FB59P	283	0.11	88	2s.0	20.2	141	104	3.2	2.0	7.00	57.5
2C	FB61P	305	0.11	89	23.1	17.3	137	89	3.4	2.2	7.40	61.6
20	FB73P	334	0.22	85	31.0	17.0	12s	10B	3.9	2.7	8.40	14.s
20	FB75P	324	0.46	89	26.4	14.2	126	92	3.6	2.6	S.40	17.9
20	FB77P	350	0. 16	83	17.s	10.3	92	77	4.2	3.8	4.90	30.6
2E	FD90P	400	0.22	74	1s.7	12.2	107	77	8.4	3.7	3.s0	23.9
2E	FD92P	416	0.25	74	18.2	12.8	105	82	5.6	4.0	4.80	30.s
2E	FD94P	372	0.25	77	41.0	11.s	115	91	4.9	3.2	7.s0	47.0
2F	FB01P	24	0.08	105	12.2	5.0	75	87	0.2	0.3	3.50	9.9
2F	FB03P	39	0.05	82	12.1	7.6	76	86	0.4	0.s	3.30	12.5
2F	FB05P	38	0.08	112	12.7	8.1	75	85	0.3	0.5	2.50	9.8
3A	FE13P	397	0. 19	76	19.6	12.8	114	78	5.2	3.s	B.40	17.8
3A	FE15P	325	0.19	80	19.5	10.8	107	102	4.1	3.0	6.20	36.3
3A	FE17P	377	0. 16	75	17.7	10.3	10s	73	5.0	3.6	7.00	34.7
3B	FD98P	413	o. 17	77	18.3	11.6	112	81	5.4	3.7	9.00	63.4
3B	FE07P	348	0.20	B3	21.6	11.1	119	75	4.2	2.s	10.30	66.3
3B	FE09P	345	0.18	81	22.3	11.1	121	105	4.2	2.9	12.00	75.5
4A	FE29P	404	0.41	88	26.9	12.1	137	127	4.6	2.8	6.30	72.3
4A	FE31P	3s4	0.36	84	28.2	8.1	130	105	4.7	3.0	5.70	31.7
4A	FE33P	360	0.28	79	20.2	11.6	112	84	4.6	3.2	3.40	9.4
4B	FE21P'	32S	0.1s	74	20.0	6.9	108	77	4.5	3.0	2.50	8.1
4B	FE23P	332	0.17	74	18.8	8.1	10s	87	4.5	3.2	3.20	14.s
4B	FE25P	381	0.22	76	19.1	11.s	113	119	5.0	3.4	3.30	t e e
4C	FE45P	277	0.14	78	21.5	6.8	12s	83	3.s	2.2	6.80	16.4
4C	FE47P	305	0.40	82	20.3	6.2	118	81	3.7	2.6	2.90	13.7
4C	FE49P	319	0.16	85	20.7	7.4	123	84	3.8	2.6	3.20	13.2
50	FE61P	248	0.27	68	17.8	7.8	91	97	3.6	2.7	2.00	3.9
50	FE63P	317	0.29	78	20.4	9.s	109	03	4.1	2.9	4.30	22.1
50	FE65P	270	0.31	72	21.0	9.2	106	87	3.8	2.s	2.90	9.0

BEAUFORT SEA MONITORING PROGRAM-- FINE SEDIMENT SAMPLE DATA
RAW DATA LISTING FOR METAL CONCENTRATIONS AND ANCILLARY VARIABLES

TYPE OF SEDIMENT = FINE

YEAR=3 SITETYPE=OCEANIC

STATION	SAMPLE	8A	CD	CR	CU	PB	v	ZN	BA/CR	BA/V	TOC	% MUD
510	FD66P	360	0.14	72	14.2	9.2	88	61	5.0	4.1	3.90	14.5
510	FD68P	453	o. Is	74	18.1	10.7	104	73	e. 1	4.4	5.70	17.5
S1O	FD70P	37s	0.16	77	17.8	8.S	104	83	4.9	3.6	6.20	17.0
51	FE53P	282	0.25	71	1s.1	7.4	S8	72	4.0	2.9	1.s0	4.3
51	FE55P	276	0.2s	67	13.s	6.7	87	86	4.2	3.2	1.80	3.6
51	FES7	.	.		.	.	.	.	.	.	17.00	4.2
55	FD82P	338	0.22	82	18.7	9.9	109	85	4.1	3.1	4.80	14.8
55	FD84P	333	0.18	82	1s.4	11.7	111	74	4.1	3.0	4.30	9.6
55	FD86P	331	0. Is	78	19.2	11.0	111	71	4.3	3.0	4.30	13.2
5A	FD50P	398	o. 16	83	20.0	9.8	113	73	4.8	3.s	7.30	45.7
5A	FD52P	410	0.17	81	19.4	10.4	114	84	5.0	3.0	S.70	45.3
5A	FD54P	405	0.22	78	20.0	10.9	109	74	5.2	3.7	6.60	56.2
5B	FC92P	283	0. 17	84	24.S	12.8	138	81	3.4	2.1	6.60	73.3
5B	FC94P	329	0.12	90	27.0	13.4	149	198	3.6	2.2	8.60	77.s
5B	FC96P	376	0.16	10s	30.1	9.9	1S8	176	3.5	2.4	S.80	14.7
50	FE69P	296	0.16	85	16.0	5.0	93	78	3.5	3.2	8.90	6s.3
60	FE71P	323	0.19	81	15.1	7.8	91	77	4.0	3.0	14.30	74.6
5D	FE75P	308	0.19	87	15.9	3.8	82	71	3.s	3.4	20.00	e4.3
5E	FC84P	293	0.16	91	28.1	12.s	1s1	112	3.2	1.9	9.70	43.7
SE	FC86P	312	0.10	90	27.4	12.9	148	90	3.s	2.1	12.20	40.1
5E	FC88P	293	0.14	92	27.0	12.3	149	86	3.2	2.0	7.10	28.0
5F	FD58P	354	0.19	79	10.0	9.7	97	84	4.5	3.7	12.30	5s.0
5F	FD60P	33s	0.2s	81	19.7	9.2	86	82	4.2	3.s	11.30	54.4
5F	FD62P	276	0.15	74	1s.7	6.6	90	93	3.7	3.1	13.30	S2.7
5G	FD76P	307	0.14	91	19.3	9.3	118	86	3.4	2.6	4.50	16.7
5G	FD78P	274	0. Is	88	18.9	12.1	122	78	3.1	2.2	4.70	17.4
5G	FD80P	313	0.17	83	17.3	8.9	112	97	3.8	2.8	3.90	26.7
5H	FE37P	362	0.2s	79	21.6	6.3	114	79	4.6	3.2	10.30	27.6
5H	FE39P	348	0.19	72	16.4	9.7	98	68	4.8	3.6	S.20	17.8
5H	FE41P	359	0.19	75	18.5	12.8	110	81	4.8	3.3	4.70	18.8
6A	FC76P	277	0.22	91	19.6	8.7	105	105	3.0	2.6	10.70	74.3
6A	FC78P	334	0.14	99	18.9	10.4	112	73	3.4	3.0	8.80	65.3
6A	FC80P	389	0.30	90	19.9	8.7	108	88	4.3	3.6	8.70	7s.3
6B	FC52P	459	0.24	109	37.0	14.2	1S8	129	4.2	2.s	16.70	7s.3
6B	FC54P	527	0.22	108	37.1	14.8	161	112	4.8	3.3	17.10	82.2
6B	FC56P	432	0.19	109	30.7	13.6	134	137	4.0	3.2	17.00	82.5
6C	FC68P	273	0.10	96	28.5	14.4	156	127	2.9	1.8	8.60	42.3
6C	FC70P	2B8	0.14	99	28.S	14.6	154	84	2.7	1.7	6.80	2s.2
6C	FC72P	195	0.11	96	27.8	15.1	153	93	2.0	1.3	8.10	33.6
6D	FC60P	341	0.07	104	28.1	14.8	156	101	3.3	2.2	5.40	4s.7
00	FC62P	284	0.07	93	25.6	14.1	146	80	3.1	1.9	B.00	37.7
6D	FC64P	300	0.12	80	26.0	12.9	153	112	3.0	2.0	5.10	25.S
6F	FC36P	337	0.1s	97	27.8	14.2	143	88	3.5	2.4	13.40	88.8
6F	FC38P	26a	0.14	109	28.8	14.6	155	84	2.5	1.7	8.S0	65.2
6F	FC40P	312	0.14	133	28.7	14.5	148	86	2.3	2.1	4.80	20.0
6G	FC44P	298	0.15	97	17.9	7.4	101	79	3.1	3.0	10.80	78.s
6G	FC46P	295	0.10	100	17.1	8.0	99	89	2.9	3.0	0.20	71.5
6G	FC48P	276	0.14	95	1s.8	6.2	94	72	2.9	2.9	.	74.1
7A	FC28P	653	0.09	158	21.2	9.3	116	82	4.1	5.6	7.30	64.1
7A	FC30P	573	0.08	149	25.8	11.0	128	83	3.8	4.s	7.60	47.1
7A	FC32P	6s5	0.13	129	29.0	12.2	132	107	5.1	5.0	14.10	50.6

BEAUFORT SEA MONITORING PROGRAM-- FINE SEDIMENT SAMPLE DATA
RAW OATA LISTING FOR METAL CONCENTRATIONS AND ANCILLARY VARIABLES

TYPE OF SEDIMENT = FINE

YEAR=3 SITETYPE=OCEANIC

STATION	SAMPLE	BA	co	CR	CU	PB	v	ZN	BA/CR	BA/V	TOC	% MUD
7B	FCO4P	388	0.08	17s	24.9	10.6	133	94	2.2	2.9	5.00	19.1
7B	FCO6P	278	0.08	1s7	27.6	11.1	141	114	1.8	2.0	5.30	20.2
7B	FCO8P	318	0.08	1s0	2a.3	11.2	140	104	2.1	2.3	5.50	13.2
7C	FB95P	275	0.14	99	27.1	12.3	1s0	107	2.8	1.8	5.70	86.0
7C	FB97P	271	0.17	97	28.6	12.8	15s	116	2.8	1.7	5.90	84.3
7C	FB99P	313	0.14	95	26.8	12.9	141	100	3.3	2.2	12.20	89.3
70	FB87P	374	0.10	144	16.1	8.6	103	86	2.8	3.6	2.60	7.1
70	FB89P	304	0.13	107	27.1	12.2	139	87	2.6	2.2	6.20	43.0
7D	FB91P	428	0.19	135	19.0	9.7	101	76	3.2	4.2	4.40	12.6
7E	FC12P		0.08	163	19.7	7.4	115	374	3.0	6.1	10.60	77a
7E	FC14P	266	0.11	107	2a.3	12.0	150	91	2.S	1.8	12.90	73.s
7E	FC16P	448	0.14	136	24.3	11.s	125	98	3.3	3.6	15.70	81.3
7G	FC20P	541	0.12	182	26.5	10.2	132	99	3.0	4.1	10.80	30.0
7G	FC22P	684	0.12	223	21.s	8.6	117	85	3.1	5.8	0.s0	54.4
7G	FC24P	68	0.16	179	18.9	9.7	06	00	3.0	6.4	11.30	64.3

YEAR=3 SITETYPE=RIVER

STATION	SAMPLE	BA	CD	CR	CU	PB	v	ZN	BA/CR	BA/V	TOC	% MUD
2J1	FE04	es	0.24	72	23.8	4.9	93	10s	0.9	0.7	42.00	15.2
2J2	FEOS	00	0.21	70	20.1	6.7	8a	70	0.9	0.7	40.00	11.9
5L1	FB81	7	0.33	65	18.6	8.6	74	146	0.1	0.1	193	32.9
SL2	FB82	2Be	0.30	79	19.8	12.3	94	89	3.0	3.0	242	77.0
5L3	FB83		0. Is	82	1s,3	10.9	81	86	3.1	3.2	120	60.1
5M1	FB84	490	0.30	91	21.6	9.2	91	92	0.4	5.4	47.00	8.6
SM2	FB85	Sos	0.33	111	20.9	10.0	97	113	4.6	0.3	0s.00	12.3
5M3	FB86	4ao	0.30	12s	18.3	6.9	99	101	3.9	5.0	20.00	5.3
6K1	FEO1	870	0.30	156	27.6	12.7	89	90	5.6	9.9	en. 00	29.4
eK2	FE02	845	0.64	171	20.1	8.1	109	108	4.9	7.8	166	47.0
6K3	FE03	841	0.22	178	24.8	8.8	119	92	4.7	7.1	45.00	2s.0

BEAUFORT SEA MONITORING PROGRAM-- FINE SEDIMENT SAMPLE DATA
RAW DATA LISTING FOR RATIO VARIABLES

TYPE OF SEDIMENT = FINE

YEAR=1 SITETYPE=OCEANIC

STATION	SAMPLE	FFPI	ISO/ALK	LALK/TALK	,PRIS/PHYT	N/P	P/o	PAH/TOC	TOT/TOC
2E	100								
2E	100								
2E	100								
2E	100								
2E	100								
2E	100						.		
2F	100								
2F	100							.	
2F	100								
2F	100								
2F	100						.		
2F	100								
3A	100								
3A	100								
3A	100						.		
3A	100		.				.		.
3A	100	.							
3A	100		.						
3B	100								
3B	100								
3B	100					.			
30	100		.						
3B	100						.		
3B	100		.						
4A	100								
4A	100								
4A	100								.
4A	100						.		
4A	100								
4A	100		.						
4B	100								
4B	100								
4B	100		.						
4B	100								
4B	100								
4B	100								
4C	100								
4C	100								
4C	too								
4C	100								
4C	100		.						
510	100								
510	100								
510	100								
510	100								
510	100								
510	100								
51	100								
51	100								
51	100								

BEAUFORT SEA MONITORING PROGRAM-- FINE SEDIMENT SAMPLE DATA
RAW DATA LISTING FOR RATIO VARIABLES

TYPE OF SEDIMENT = FINE

YEAR=1 SITETYPE=OCEANIC

STATION	SAMPLE	FFPI	ISO/ALK	LALK/TALK	PRIS/PHYT	N/P	P/D	PAH/TOC	TOT/TOC
51	100	.	.	.	.	.	.	.	.
51	100	.	.	.	.	.	.	.	.
51	100	.	.	.	.	.	.	.	.
51	100	.	.	.	.	.	.	.	.
52	100	.	.	.	.	.	.	.	.
52	100	.	.	.	.	.	.	.	.
52	100	.	.	.	.	.	.	.	.
52	100	.	.	.	.	.	.	.	.
52	100	.	.	.	.	.	.	.	.
52	100	.	.	.	.	.	.	.	.
52	100	.	.	.	.	.	.	.	.
55	100	.	.	.	.	.	.	.	.
55	100	.	.	.	.	.	.	.	.
55	100	.	.	.	.	.	.	.	.
55	100	.	.	.	.	.	.	.	.
55	100	.	.	.	.	.	.	.	.
55	100	.	.	.	.	.	.	.	.
55	100	.	.	.	.	.	.	.	.
55	100	.	.	.	.	.	.	.	.
5A	100	.	.	.	.	.	.	.	.
5A	100	.	.	.	.	.	.	.	.
5A	100	.	.	.	.	.	.	.	.
5A	100	.	.	.	.	.	.	.	.
5A	100	.	.	.	.	.	.	.	.
5A	100	.	.	.	.	.	.	.	.
5A	100	.	.	.	.	.	.	.	.
5B	100	.	.	.	.	.	.	.	.
5B	100	.	.	.	.	.	.	.	.
5B	100	.	.	.	.	.	.	.	.
5B	100	.	.	.	.	.	.	.	.
5B	100	.	.	.	.	.	.	.	.
5B	100	.	.	.	.	.	.	.	.
5D	100	.	.	.	.	.	.	.	.
5D	100	.	.	.	.	.	.	.	.
5D	100	.	.	.	.	.	.	.	.
5D	100	.	.	.	.	.	.	.	.
5D	100	.	.	.	.	.	.	.	.
5D	100	.	.	.	.	.	.	.	.
5D	100	.	.	.	.	.	.	.	.
5E	100	.	.	.	.	.	.	.	.
5E	100	.	.	.	.	.	.	.	.
5E	100	.	.	.	.	.	.	.	.
5E	100	.	.	.	.	.	.	.	.
5E	100	.	.	.	.	.	.	.	.
5E	100	.	.	.	.	.	.	.	.
5E	100	.	.	.	.	.	.	.	.
5F	100	.	.	.	.	.	.	.	.
5F	100	.	.	.	.	.	.	.	.
5F	100	.	.	.	.	.	.	.	.
5F	100	.	.	.	.	.	.	.	.
5F	100	.	.	.	.	.	.	.	.
5F	100	.	.	.	.	.	.	.	.
5G	100	.	.	.	.	.	.	.	.
5G	100	.	.	.	.	.	.	.	.
5G	100	.	.	.	.	.	.	.	.

BEAUFORT SEA MONITORING PROGRAM-- FINE SEDIMENT SAMPLE DATA
RAW OATA LISTING FOR RATIO VARIABLES

TYPE OF SEDIMENT = FINE

YEAR=1 SITETYPE=OCEANIC

STATION	SAMPLE	FFPI	ISO/ALK	LALK/TALK	PRIS/PHYT	N/P	P/D	PAH/TOC	TOT/TOC
5G	100						.		
5G	100						.		
6A	100								
6A	too								
8A	100								
6A	100								
6A	100								
6A	100								
6B	100								
6B	100								
6B	100								
6B	100								
6B	100								
6B	100								
6C	100								
6C	100								
6C	100								
6C	100								
6C	100					.			
6C	100								
6D	100								
6D	100								
6D	100								
6D	100						.		
6D	100								
6D	100								
6F	too								
6F	100								
6F	100						.		
6F	100								
6F	100								
6F	100								
7A	100								
7A	100								
7A	100								
7A	100								
7A	100								
7A	100								
7B	100								
7B	100								
70	100								
7B	100								
70	100								
7B	100								
7C	100								
7C	100								
7C	100								
7C	100								
7C	100								
7C	100								
7E	100								

BEAUFORT SEA MONITORING PROGRAM-- FINE SEDIMENT SAMPLE OATA
RAW DATA LISTING FOR RATIO VARIABLES

TYPE OF SEDIMENT = FINE

YEAR=1 SITETYPE=OCEANIC

STATION	SAMPLE	FFPI	ISO/ALK	LALK/TALK	PRIS/PHYT	N/P	P/D	PAH/TOC	TOT/TOC
7E	100								
7E	100						.		
7E	100								
7E	100						.		
7E	100								
7G	100								.
7G	100								
7G	100								
7G	100								
7G	100						.		.
7G	100						.		

BEAUFORT SEA MONITORING PROGRAM-- FINE SEDIMENT SAMPLE DATA
RAW DATA LISTING FOR RATIO VARIABLES

TYPE OF SEDIMENT = FINE

YEAR=2 SIT≤TYPE=OCEANIC

STATION	SAMPLE	FFPI	ISO/ALK	LALK/TALK	PRIS/PHYT	N/P	[illegible]/D	PAH/TOC	T°T/T°C
1A	AJ94	59	.397	.052	1.8	1.[illegible]	5.[illegible]	0.023	2.2
1A	AJ95	62	.408	.106	1.6	1.[illegible]	6.[illegible]	0.021	2.0
1A	AJ96	6.	.438	.084	1.3	1.[illegible]	5.[illegible]	0.0.6	2.7
1B	AI95P	.	.	.	.	.	.	.	.
1B	AI97P	.	.	.	.	.	.	.	.
1B	AI99P	.	.	.	.	.	.	.	.
1C	AI62P	.	.	.	.	.	.	.	.
1C	AI64P	.	.	.	.	.	.	.	.
1C	AI66P	.	.	.	.	.	.	.	.
1D	AI70P	.	.	.	.	.	.	.	.
1D	AI72P	.	.	.	.	.	.	.	.
1D	AI74P	.	.	.	.	.	.	.	.
1E	AI78P	.	.	.	.	.	.	.	.
1E	AI80P	.	.	.	.	.	.	.	.
1E	AI82P	.	.	.	.	.	.	.	.
2A	AJ08P	.	.	.	.	.	.	.	.
2A	AJ10P	.	.	.	.	.	.	.	.
2A	AJ12P	.	.	.	.	.	.	.	.
2B	AJ16P	.	.	.	.	.	.	.	.
2B	AJ18P	.	.	.	.	.	.	.	.
2B	AJ20P	.	.	.	.	.	.	.	.
2C	AI54P	.	.	.	.	.	.	.	.
2C	AI56P	.	.	.	.	.	.	.	.
2C	AI58P	.	.	.	.	.	.	.	.
2D	AJ26P	.	.	.	.	.	.	.	.
2D	AJ28P	.	.	.	.	.	.	.	.
2D	AJ30P	.	.	.	.	.	.	.	.
2E	AJ34P	.	.	.	.	.	.	.	.
2E	AJ36P	.	.	.	.	.	.	.	.
2E	AJ38P	.	.	.	.	.	.	.	.
2F	AI34P	.	.	.	.	.	.	.	.
2F	AI36P	.	.	.	.	.	.	.	.
2F	AI38P	.	.	.	.	.	.	.	.
3A	AI22P	.	.	.	.	.	.	.	.
3A	AI24P	.	.	.	.	.	.	.	.
3A	AI26P	.	.	.	.	.	.	.	.
3B	AI14P	.	.	.	.	.	.	.	.
3B	AI16P	.	.	.	.	.	.	.	.
3B	AI18P	.	.	.	.	.	.	.	.
4A	AI06P	.	.	.	.	.	.	.	.
4A	AI08P	.	.	.	.	.	.	.	.
4A	AI10P	.	.	.	.	.	.	.	.
4B	AH97P	.	.	.	.	.	.	.	.
4B	AH99P	.	.	.	.	.	.	.	.
4B	AI01P	.	.	.	.	.	.	.	.
4C	AJ42P	.	.	.	.	.	.	.	.
4C	AJ44P	.	.	.	.	.	.	.	.
4C	AJ46P	.	.	.	.	.	.	.	.
50	AG41P	.	.	.	.	.	.	.	.
50	AG43P	.	.	.	.	.	.	.	.
50	AG45P	.	.	.	.	.	.	.	.

BEAUFORT SEA MONITORING PROGRAM- FINE SEDIMENT SAMPLE DATA
RAW DATA LISTING FOR RATIO VARIABLES

TYPE OF SEDIMENT = FINE

YEAR=2 SITETYPE=OCEANIC

STATION	SAMPLE	FFPI	ISO/ALK	LALK/TALK	PRIS/PHYT	N/P	P/D	PAH/TOC	Tot/Toe
510	AG17P	.							
510	AG19P	.					.		.
510	AG21P	.							
51	AG33P	.				.			
51	AG35P	.							
51	AG37P	.	.	.	.	.	.	.	.
55	AJ97	67	0.388	0.17s	2.1	1.4	7.5	0.0s2	3.9
55	AJ98	74	0.420	0.373	1.8	1.3	6.0	0.0S3	3.1
55	AJ99	64	0.386	0. 1s7	2.1	1.3	11.4	0.122	7.7
5A	AG49P	.							
5A	AG51P	.						.	
5A	AG55P	.							
5B	AG57P	.							.
5B	AG59P	.	.						
5B	AG61P	.	.					.	.
SD	AG09P	.							
5D	AGI 1P	.					.	.	.
SD	AG 13P	.			.				
SE	AG65P	.				.	.	.	.
SE	AG67P	.					.		
5E	AG69P	.					.	.	
SF	AH86P	.							
SF	AH88P	.						.	
SF	AH90P	.						.	.
5G	AI 46P	.				.		.	.
5G	AI48P	.						.	
5G	AI50P	.							
5H	AJ50P	.							
5H	AJ52P	.						.	
5H	AJ54P	.						.	
6A	AG73P	.							
6A	AG75P	.							
6A	AG77P	.							
6B	AG81P	.							
6B	AG83P	.					.		
S0	AG85P	.							
6C	AG89P	.							.
6C	AG91P	.							
6C	AG93P	.	.	.		.	.	.	.
6D	EF00	72	0.430	0.229	2.1	1.4	6.8	0.169	9.3
6D	EF01	65	0. 436	0.214	2.0	1.s	8.0	0.170	8.6
00	EF02	72	O. 4B0	0. 1B2	1.5	1.3	5.0	0.107	7.2
6F	AH11P	.							
6F	AH18P	.							
6F	AH20P	.							
6G	AH75P	.							
6G	AH77P	.							
6G	AH81P	.							
7A	AH87P	.							
7A	AH89P	.							
7A	AH71P	.							

BEAUFORT SEA MONITORING PROGRAM-- FINE SEDIMENT SAMPLE DATA
RAW DATA LISTING FOR RATIO VARIABLES

TVPE OF SEDIMENT = FINE

YEAR=2 SITETYPE=OCEANIC

STATION	SAMPLE	FFPI	ISO/ALK	LALK/TALK	PRIS/PHYT	N/P	P/o	PAH/TOC	TOT/TOC
78	AH50P								
7B	AH52P						.		
7B	AH54P								
7C	AH41P								
7C	AH43P								
7C	AH45P								
7D	AH33P								
70	AH35P								
7D	AH37P								
7E	AH59P								.
7E	AHSIP								
7E	AH63P								
7G	AH24P								
7G	AH26P						.		
7G	AH28P								

YEAR=2 SITETYPE=PEAT

STATION	SANPLE	FFPI	ISO/ALK	LALK/TALK	PRIS/PHYT	N/P	P/D	PAH/TOC	TOT/TOC
1F	AJ06								
2G	AI44P						.		
2H	AJ05								
30	AI31P								.
5K	AH94P								
6J	AH07P								
7H	AH32								
7J	AH79P								

YEAR=2 SITETYPE=RIVER

STATION	SANPLE	FFPI	ISO/ALK	LALK/TALK	PRIS/PHYT	N/P	P/o	PAH/TOC	TOT/TOC
5J	AG07P	.							
6H	AH09P	.							

BEAUFORT SEA MONITORING PROGRAM-- FINE SEDIMENT SAMPLE DATA
RAW DATA LISTING FOR RATIO VARIABLES

TYPE OF SEDIMENT = FINE

YEAR=3 SITETYPE=OCEANIC

STATION	SANPLE	FFPI	ISO/ALK	LALK/TALK	PRIS/PHYT	N/P	P/o	PAH/TOC	TOT/TOC
1A	FB25P								
1A	FB27P					.	.		
1A	FB29P								
l a	FB33P					.			.
l a	FB35P							.	
18	FB37P							.	.
1C	FB49P								
1C	FB51P						.		.
1C	FB53P			.				.	.
10	FB09P								
10	FB11P								
10	FB13P		.					.	
1E	FB17P							.	
1E	FB19P	.						.	
1E	FB21P						.		.
2A	FB41P	.			.			.	.
2A	FB43P								
2A	FB45P		.			.			.
2B	FB65P			.					.
2B	FB67P								.
2B	FB69P						.		
2C	FB57P					.			
2C	FB59P								
2C	FB61P					.	.		.
2D	FB73P						.		
20	FB75P								
20	FB77P							.	
2E	FD90P								
2E	FD92P								.
2E	FD94P								
2F	FBO 1P					.			
2F	FB03P								
2F	FB05P								
3A	FE13P								
3A	FE15P				.				
3A	FE17P								
3B	FD98P								. .
3B	FE07P								
36	FE09P								
4A	FE29P								
4A	FE31P								
4A	FE33P								
40	FE21P								
40	FE23P								
4B	FE25P								
4C	FE4SP								
4C	FE47P								
4C	FE49P								
50	FE61P								
50	FE63P								
50	FE65P								

BEAUFORT SEA MONITORING PROGRAM-- FINE SEDIMENT SAMPLE DATA
RAW DATA LISTING FOR RATIO VARIABLES

TYPE OF SEDIMENT = FINE

YEAR=3 SITETYPE=OCEANIC

STATION	SAMPLE	FFPI	ISO/ALK	LALK/TALK	PRIS/PHYT	N/P	P/D	PAH/TOC	TOT/TOC
510	FD66P	.	.	.	.	.	.	.	.
510	FD68P	.	.	.	.		.	.	.
510	FD70P	.	.	.	.		.	.	.
51	FE53P	.	.	.	.		.	.	.
51	FE55P	.	.	.	.	.	.	.	.
51	FE57	.	.	.	.	.	.	.	.
55	FD82P	.	.	.	.	.	.	.	.
55	FD84P	.	.	.	.	.	.	.	.
55	FD86P	.	.	.	.	.	.	.	.
5A	FD50P	.	.	.	.	.	.	.	.
5A	FD52P	.	.	.	.	.	.	.	.
5A	FD54P	.	.	.	.	.	.	.	.
5B	FC92P	.	.	.	.	.	.	.	.
5B	FC94P	.	.	.	.	.	.	.	.
5B	FC96P	.	.	.	.	.	.	.	.
5D	FE69P	.	.	.	.	.	.	.	.
5D	FE71P	.	.	.	.	.	.	.	.
5D	FE75P	.	.	.	.	.	.	.	.
5E	FC84P	.	.	.	.	.	.	.	.
5E	FC86P	.	.	.	.	.	.	.	.
5E	FC88P	.	.	.	.	.	.	.	.
5F	FD58P	.	.	.	.	.	.	.	.
5F	FD60P	.	.	.	.	.	.	.	.
5F	FD62P	.	.	.	.	.	.	.	.
5G	FD76P	.	.	.	.	.	.	.	.
5G	FD78P	.	.	.	.	.	.	.	.
5G	FD80P	.	.	.	.	.	.	.	.
5H	FE37P	.	.	.	.	.	.	.	.
5H	FE39P	.	.	.	.	.	.	.	.
5H	FE41P	.	.	.	.	.	.	.	.
6A	FC76P	.	.	.	.	.	.	.	.
6A	FC78P	.	.	.	.	.	.	.	.
6A	FC80P	.	.	.	.	.	.	.	.
6B	FC52P	.	.	.	.	.	.	.	.
6B	FC54P	.	.	.	.	.	.	.	.
6B	FC56P	.	.	.	.	.	.	.	.
6C	FC68P	.	.	.	.	.	.	.	.
6C	FC70P	.	.	.	.	.	.	.	.
6C	FC72P	.	.	.	.	.	.	.	.
6D	FC60P	.	.	.	.	.	.	.	.
6D	FC62P	.	.	.	.	.	.	.	.
6D	FC64P	.	.	.	.	.	.	.	.
6F	FC36P	.	.	.	.	.	.	.	.
6F	FC38P	.	.	.	.	.	.	.	.
6F	FC40P	.	.	.	.	.	.	.	.
6G	FC44P	.	.	.	.	.	.	.	.
6G	FC46P	.	.	.	.	.	.	.	.
6G	FC48P	.	.	.	.	.	.	.	.
7A	FC28P	.	.	.	.	.	.	.	.
7A	FC30P	.	.	.	.	.	.	.	.
7A	FC32P	.				.			

AU SEA MONITORING PROGRAM-- FINE SEDIMENT SAMPLE DATA
RAW DATA LISTING FOR RATIO VARIABLES

TYPE OF SEDIMENT = FINE

YEAR=3 SITETYPE=OCEANIC

STATION	AMP	FFPI	ISO/ALK	LALK/TALK	PRIS/PHYT	N/P	P/D	PAH/TOC	TOT/TOC
7B	FC04P	.	.	.	.	.	.	.	.
7B	FC06P	.	.	.	.	.	.	.	.
7B	FC08P	.	.	.	.	.	.	.	.
7C	FB95P	.	.	.	.	.	.	.	.
7C	FB97P	.	.	.	.	.	.	.	.
7C	FB99P	.	.	.	.	.	.	.	.
7D	FB87P	.	.	.	.	.	.	.	.
7D	FB89P	.	.	.	.	.	.	.	.
7D	FB91P	.	.	.	.	.	.	.	.
7E	FC12P	.	.	.	.	.	.	.	.
7E	FC14P	.	.	.	.	.	.	.	.
7E	FC16P	.	.	.	.	.	.	.	.
7G	FC20P	.	.	.	.	.	.	.	.
7G	FC22P	.	.	.	.	.	.	.	.
7G	FC24P	.	.	.	.	.	.	.	.

YEAR=3 SITETYPE=RIVER

STATION	AM	FFPI	ISO/ALK	LALK/TALK	PRIS/PHYT	N/P	P/D	PAH/TOC	TOT/TOC
2J1	FE04	.	.	.	.	.	.	.	.
2J2	FE05	.	.	.	.	.	.	.	.
5L1	FB81	.	.	.	.	.	.	.	.
5L2	FB82	.	.	.	.	.	.	.	.
5L3	FB83	.	.	.	.	.	.	.	.
5M1	FB84	.	.	.	.	.	.	.	.
5M2	FB85	.	.	.	.	.	.	.	.
5M3	FB86	.	.	.	.	.	.	.	.
6K1	FE01	.	.	.	.	.	.	.	.
6K2	FE02	.	.	.	.	.	.	.	.
6K3	FE03	.	.	.	.	.	.	.	.

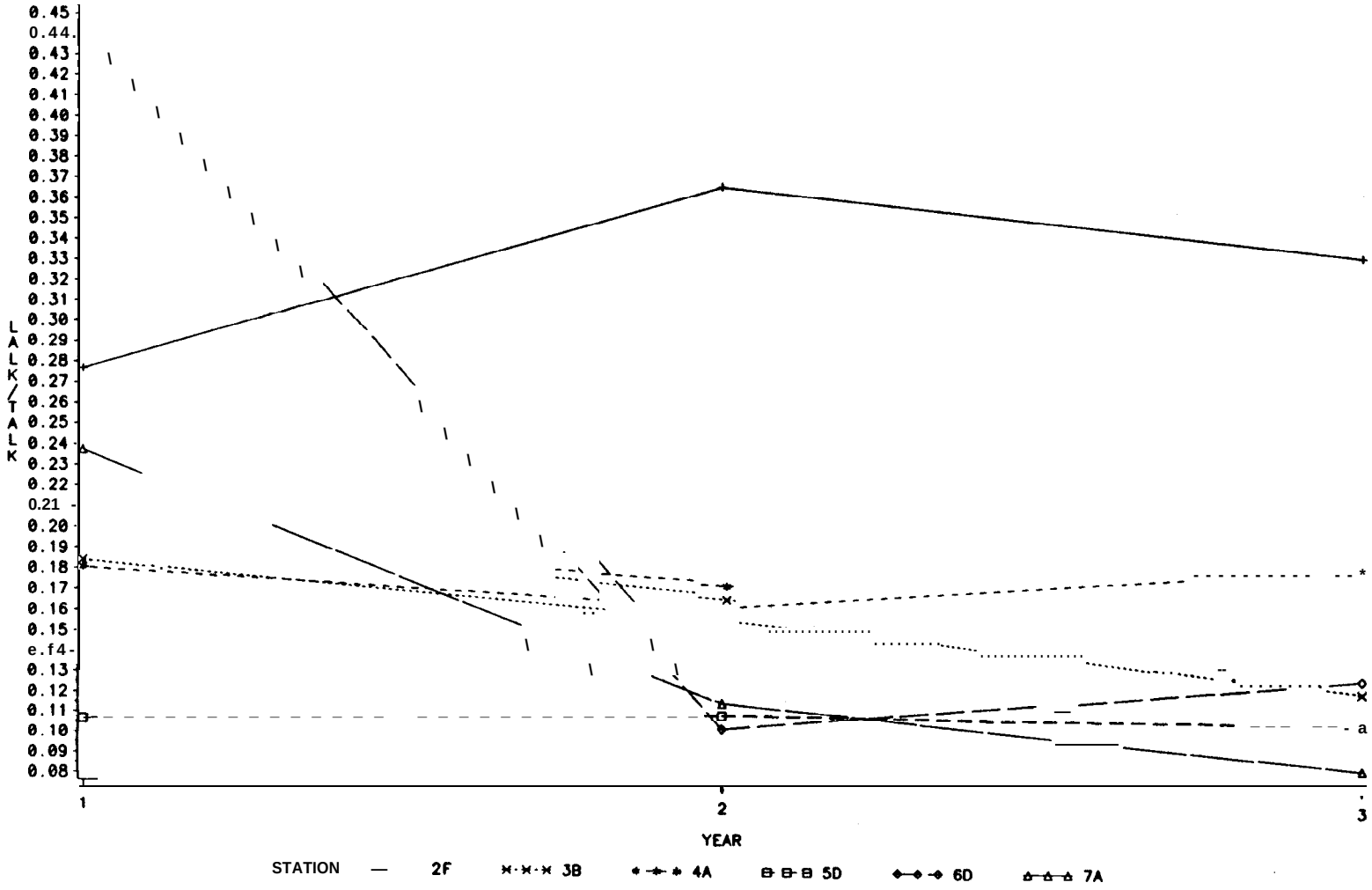
SECTION 5

ANNUAL GEOMETRIC MEAN

CONCENTRATIONS OF EIGHT ANALYTE RATIOS

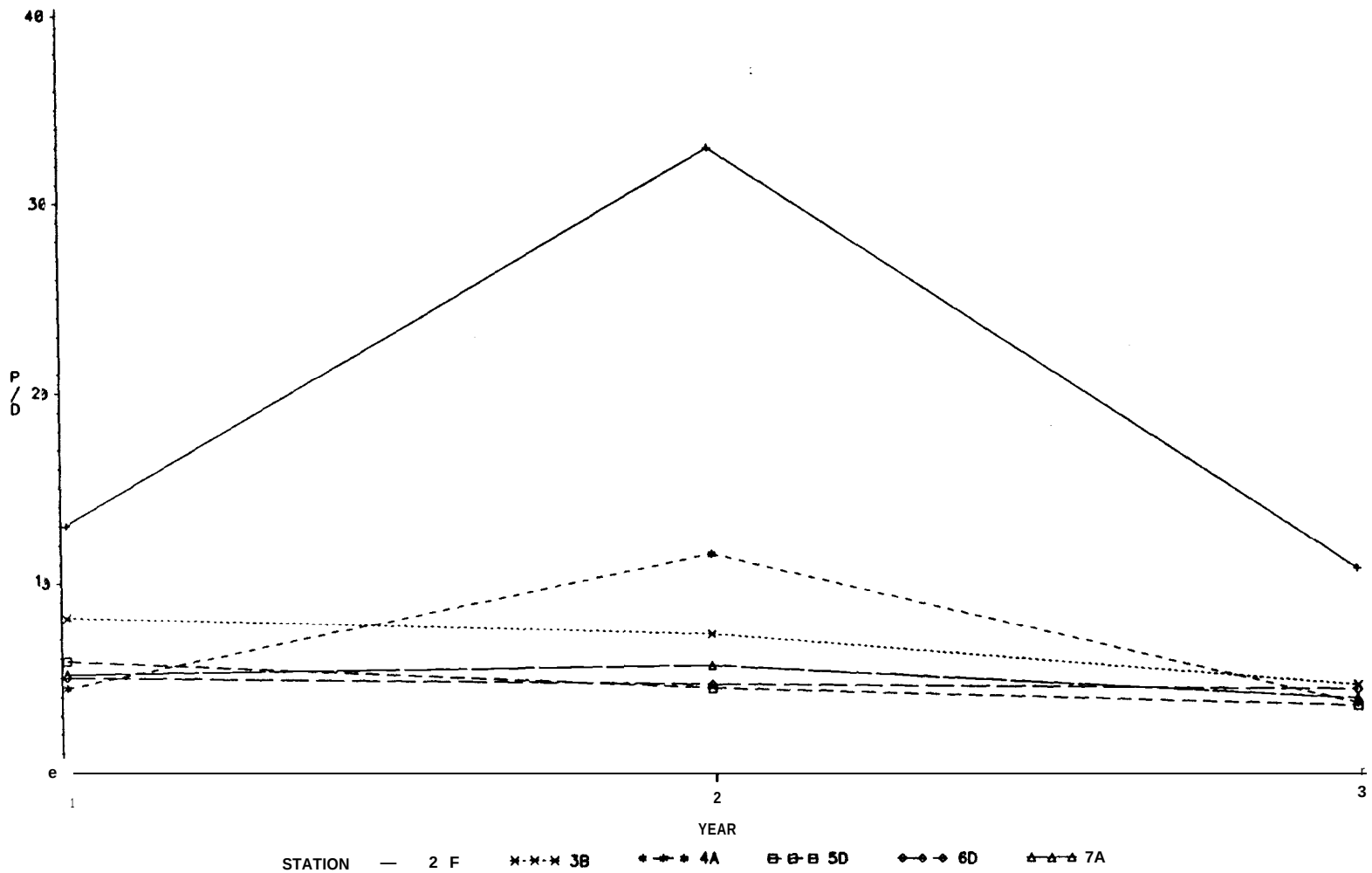
BEAUFORT SEA MONITORING PROGRAM
PLOT OF YEARLY GEOMETRIC MEANS

TYPE OF SEDIMENT BULK



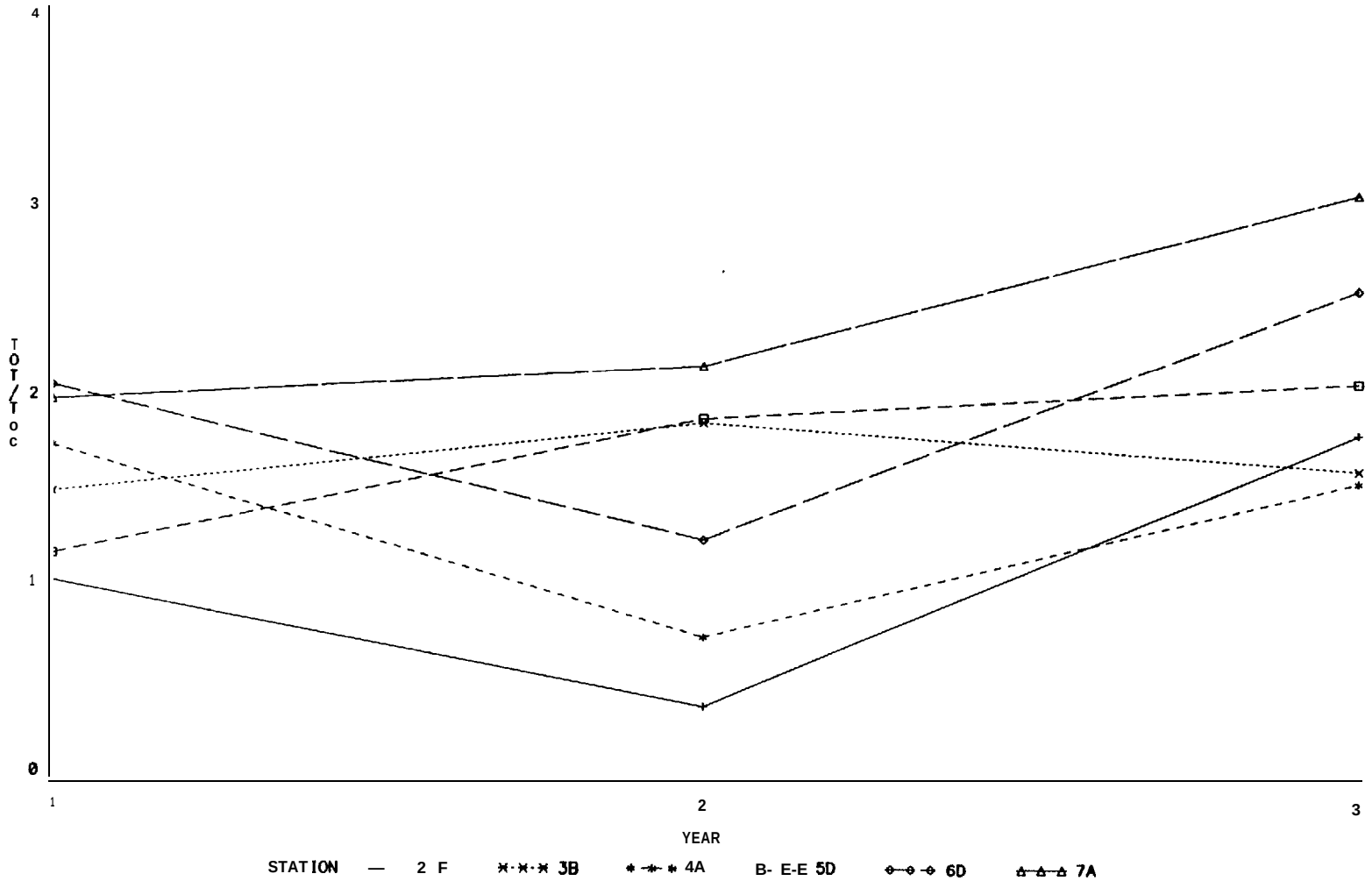
BEAUFORT SEA MONITORING PROCRAM
PLOT OF YEARLY GEOMETRIC MEANS

TYPE OF SEDIMENT: BULK



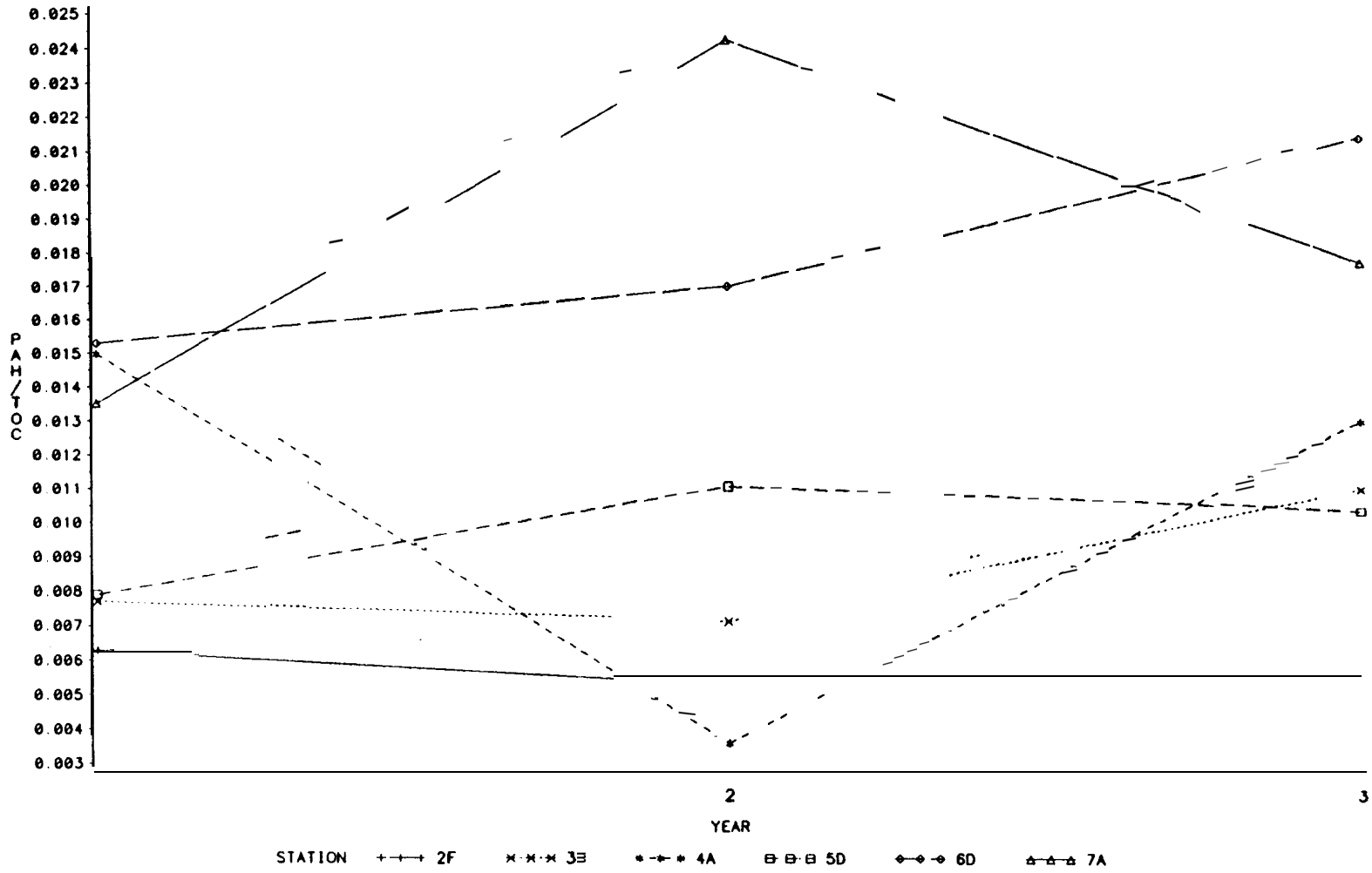
BEAUFORT SEA MONITORING PROGRAM
PLOT OF YEARLY GEOMETRIC MEANS

TYPE OF SEDIMENT: BULK



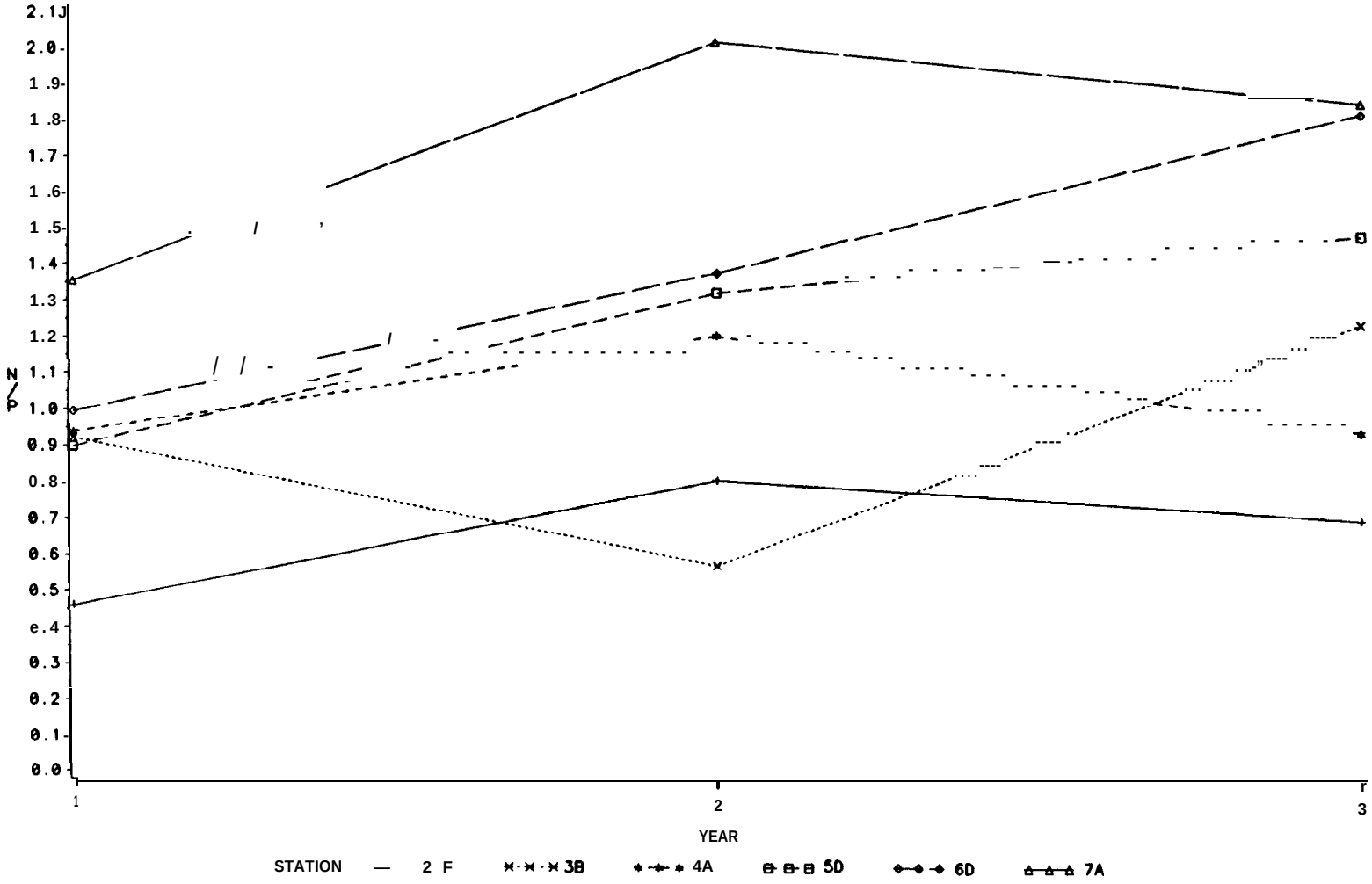
BEAUFORT SEA MONITORING PROGRAM
PLOT OF YEARLY GEOMETRIC MEANS

TYPE OF SEDIMENT: BULK



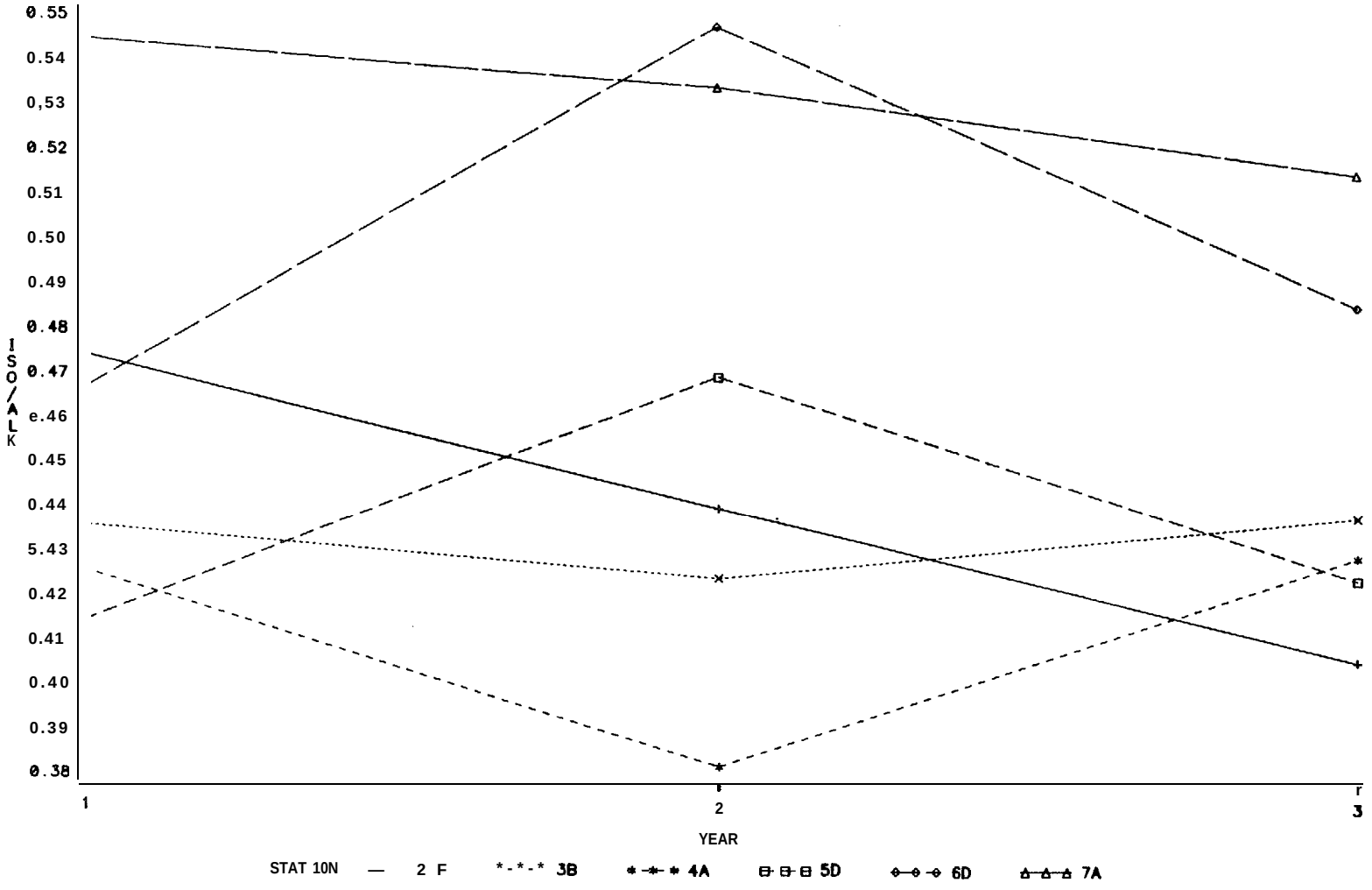
BEAUFORT SEA MONITORING PROGRAM
PLOT OF YEARLY GEOMETRIC MEANS

TYPE OF SEDIMENT BULK



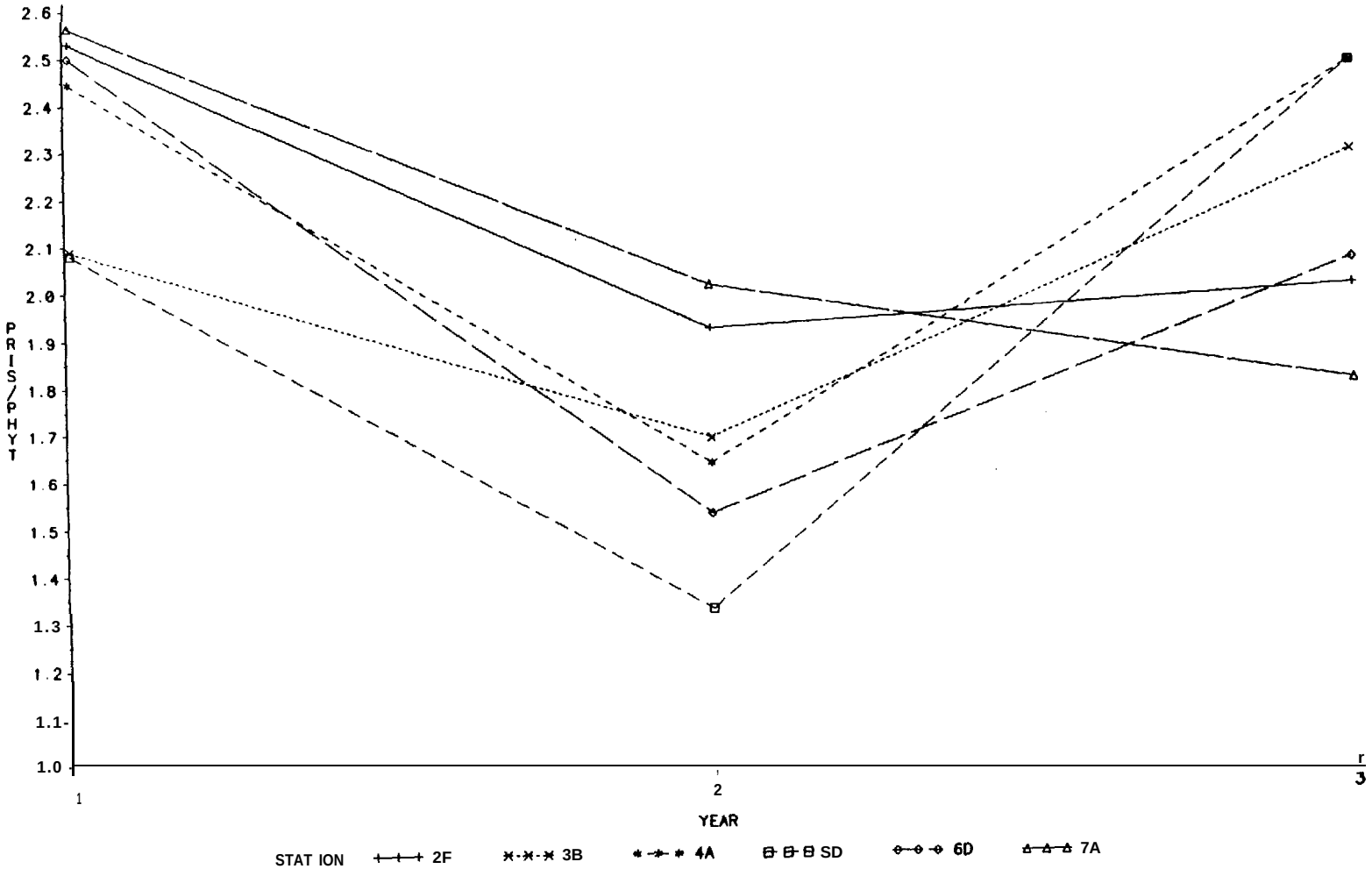
BEAUFORT SEA MONITORING PROGRAM
PLOT OF YEARLY GEOMETRIC MEANS

TYPE OF SEDIMENT BULK



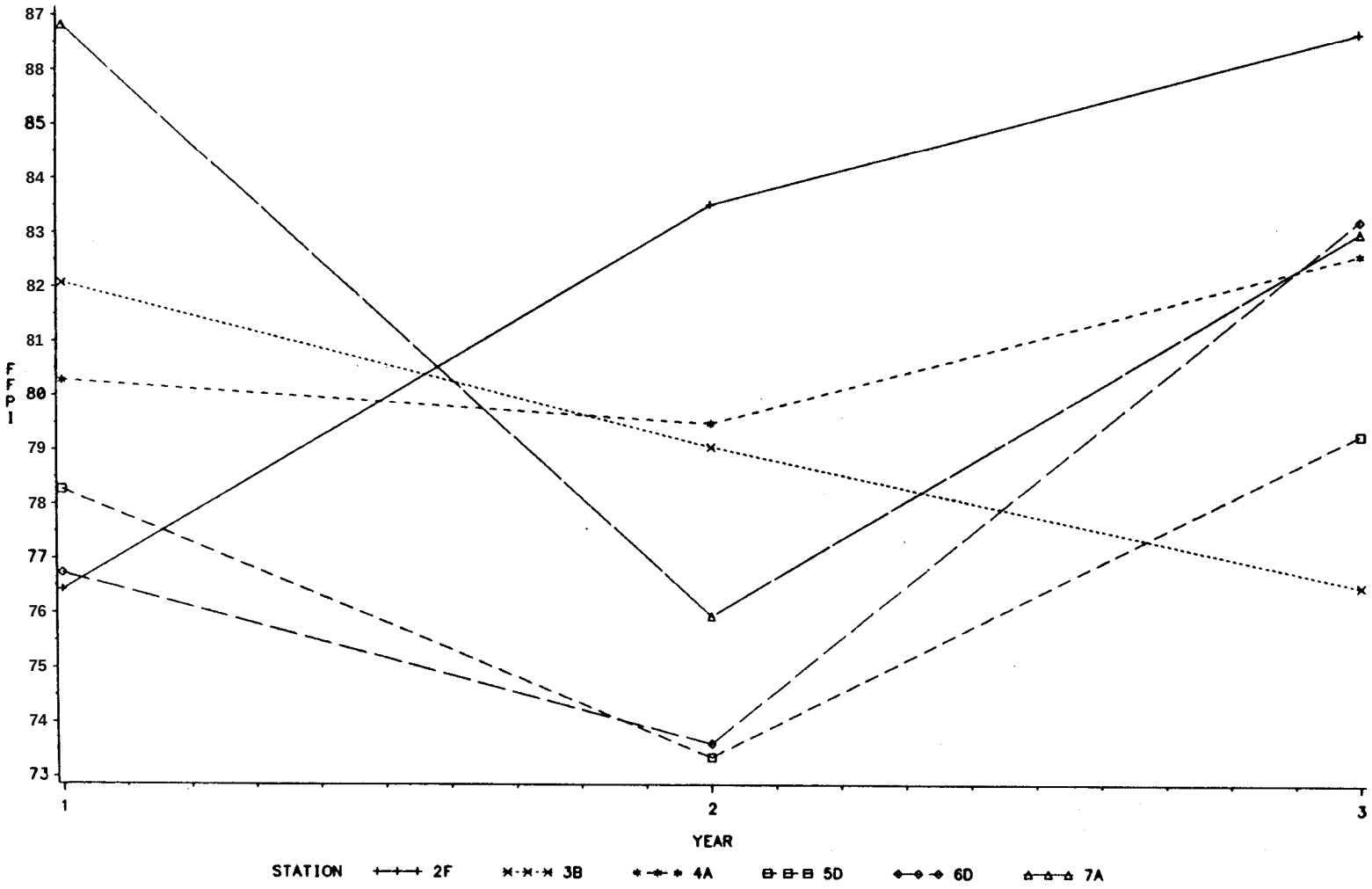
BEAUFORT SEA MONITORING PROGRAM
PLOT OF YEARLY GEOMETRIC MEANS

TYPE OF SEDIMENT' BULK



BEAUFORT SEA MONITORING PROGRAM
PLOT OF YEARLY GEOMETRIC MEANS

TYPE OF SEDIMENT: BULK

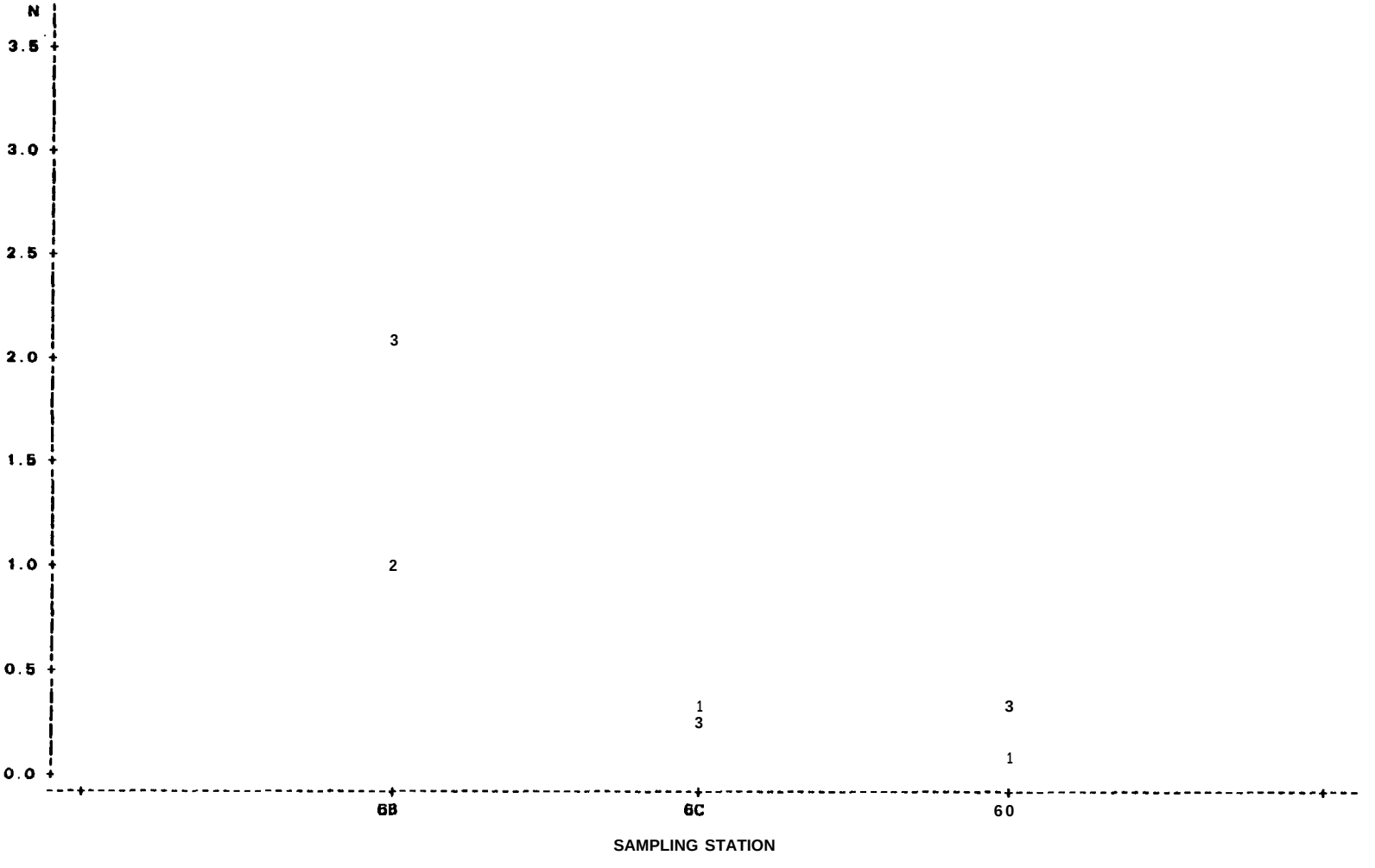


SECTION 6

GRAPHICAL REPRESENTATION OF GRADIENT EFFECTS AT STATIONS 6A, 6B, AND 6D

HYDROCARBONS IN BULK SEDIMENTS (YEARS 1-3) AND METALS IN
FINE SEDIMENTS (YEARS 2,3) FROM STATIONS 6B,6C,6D
INVESTIGATION OF GRADIENT EFFECTS
PLOT OF GEOMETRIC MEANS FOR EACH SAMPLING YEAR

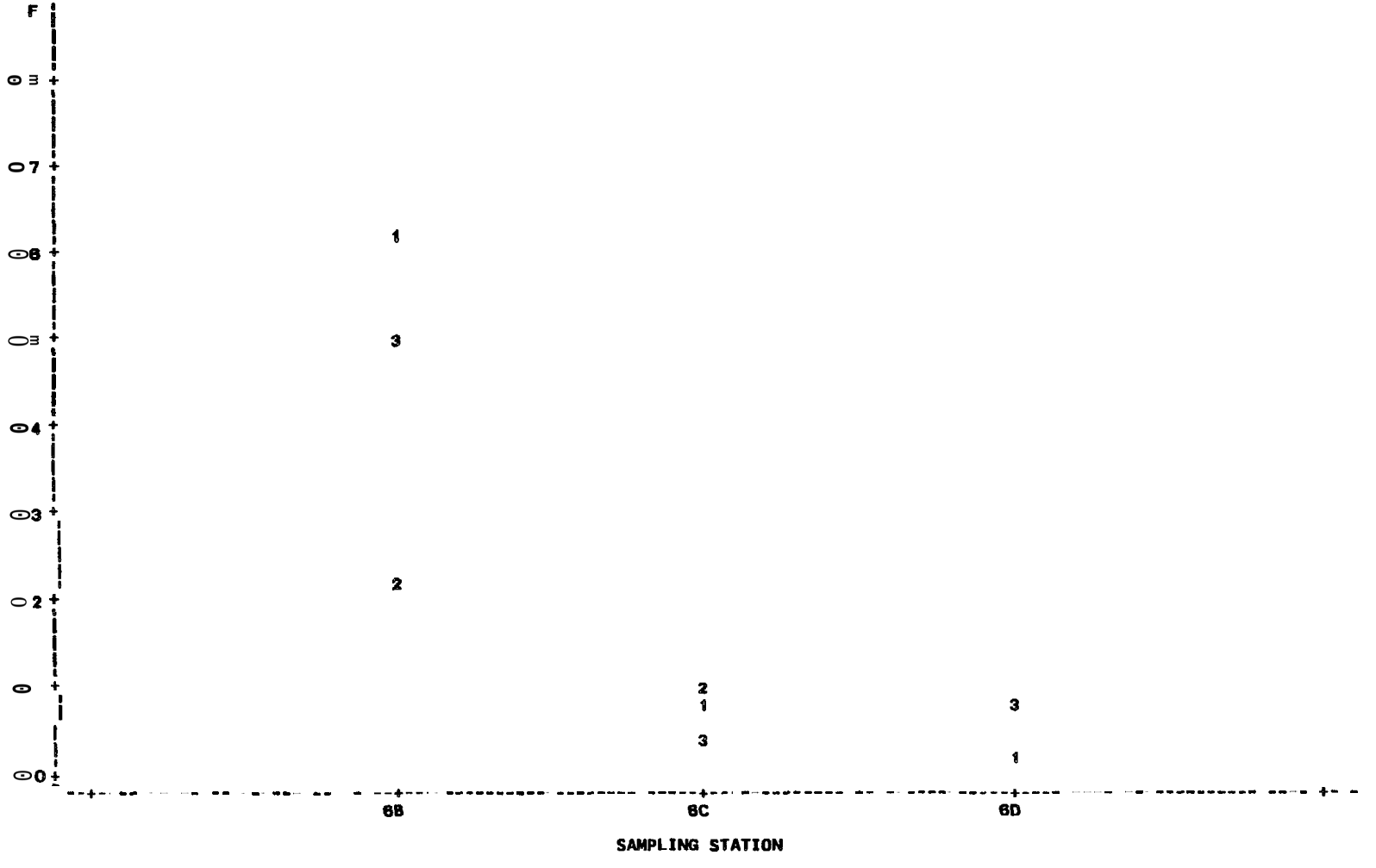
PLOT OF N*STATIO SYMBOL IS VALUE OF YEAR



NOTE: 2 06S HIDDEN

HYDROCARBONS IN BULK SEDIMENTS (YEARS 1-3) AND METALS IN
FINE SEDIMENTS (YEARS 2,3) FROM STATIONS 6B, 6C, 6D
INVESTIGATION OF GRADIENT EFFECTS
PLOT OF GEOMETRIC MEANS FOR EACH SAMPLING YEAR

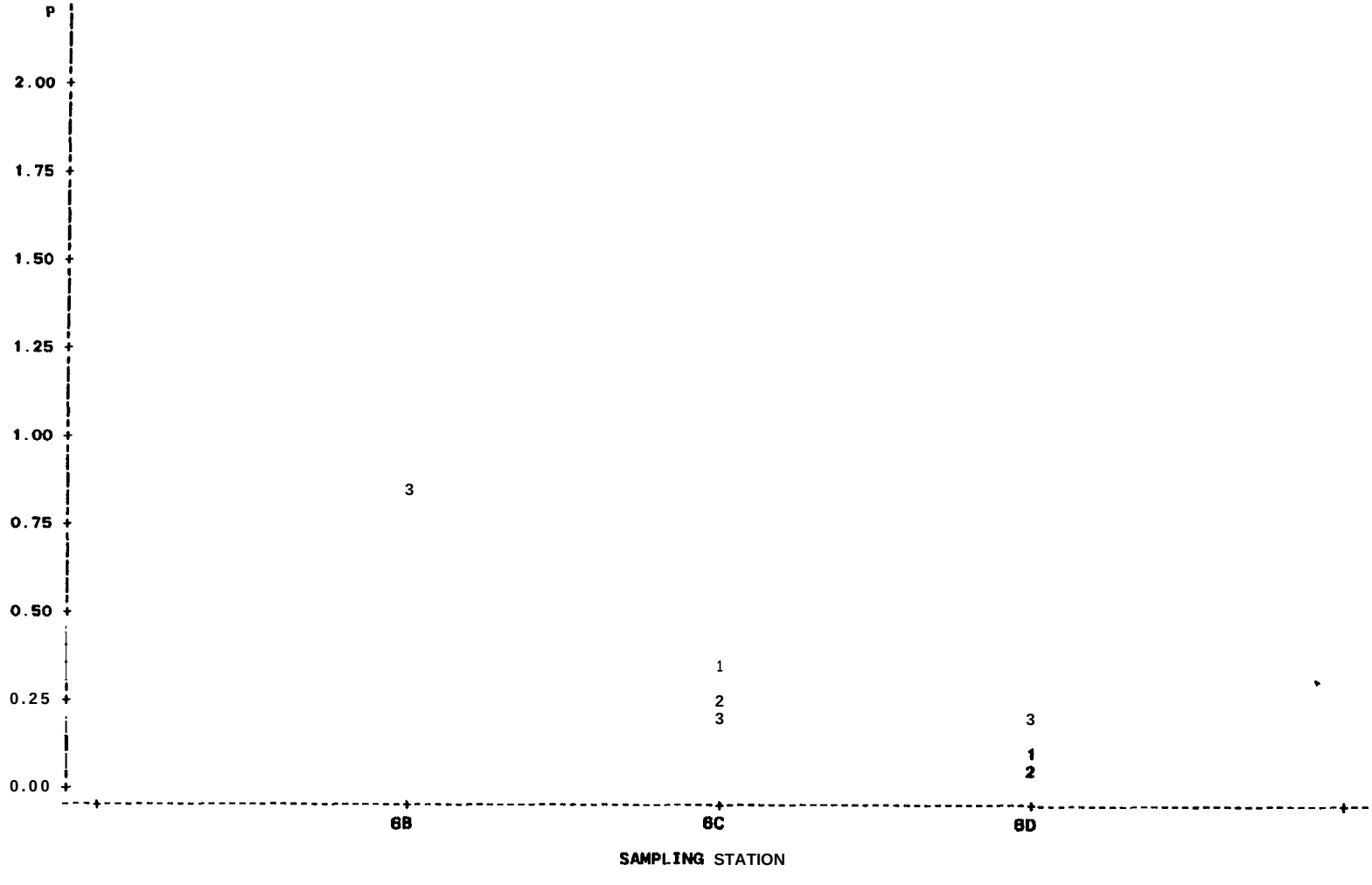
PLOT OF F*STATID SYMBOL IS VALUE OF YEAR



NO OBS HIDDEN

HYDROCARBONS IN BULK SEDIMENTS (YEARS 1-3) AND METALS IN
FINE SEDIMENTS (YEARS 2,3) FROM STATIONS 6B,6C, 6D
INVESTIGATION OF GRADIENT EFFECTS
PLOT OF GEOMETRIC MEANS FOR EACH SAMPLING YEAR

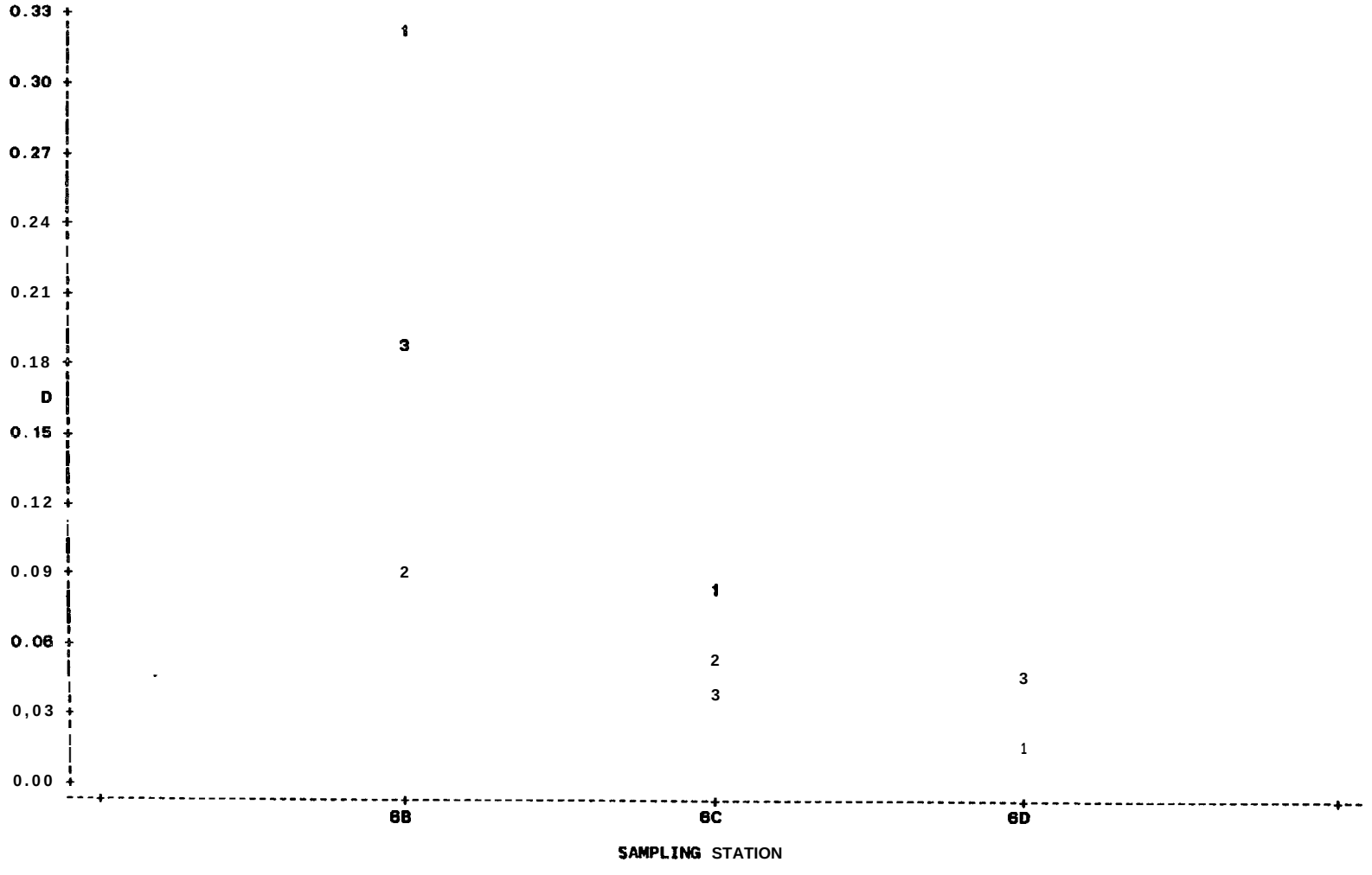
PLOT OF P*STATID SYMBOL IS VALUE OF YEAR



HYDROCARBONS IN BULK SEDIMENTS (YEARS 1-3) AND METALS IN FINE SEDIMENTS (YEARS 2,3) FROM STATIONS 6B,6C,6D
INVESTIGATION OF GRADIENT EFFECTS
PLOT OF GEOMETRIC MEANS FOR EACH SAMPLING YEAR

B

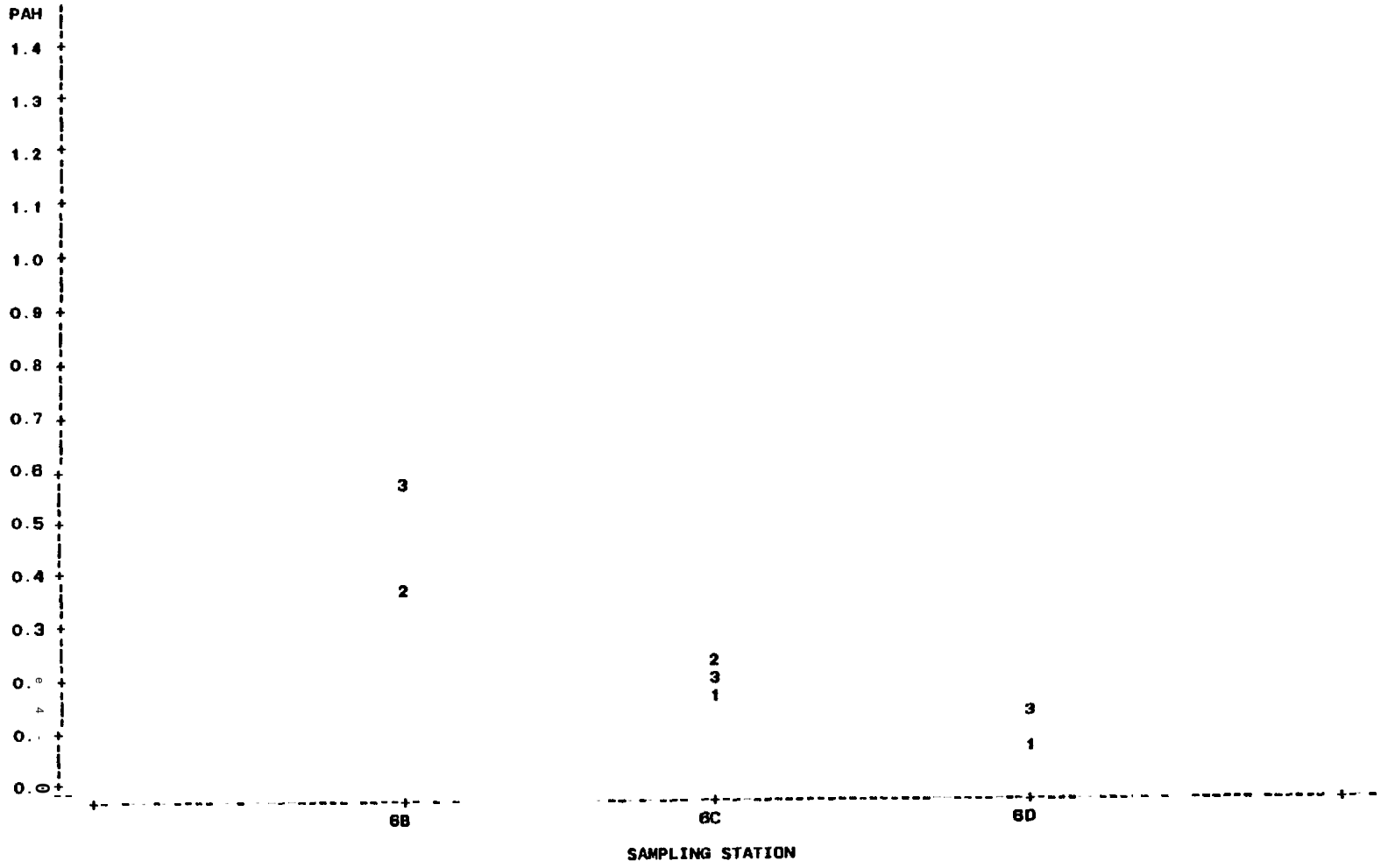
PLOT OF D*STATID SYMBOL IS VALUE OF YEAR



NOTE: 1 OBS HIDDEN

HYDROCARBONS IN BULK SEDIMENTS (YEARS 1-3) AND METALS IN
FINE SEDIMENTS (YEARS 2,3) FROM STATIONS 6B, 6C, 6D
INVESTIGATION OF GRADIENT EFFECTS
PLOT OF GEOMETRIC MEANS FOR EACH SAMPLING YEAR

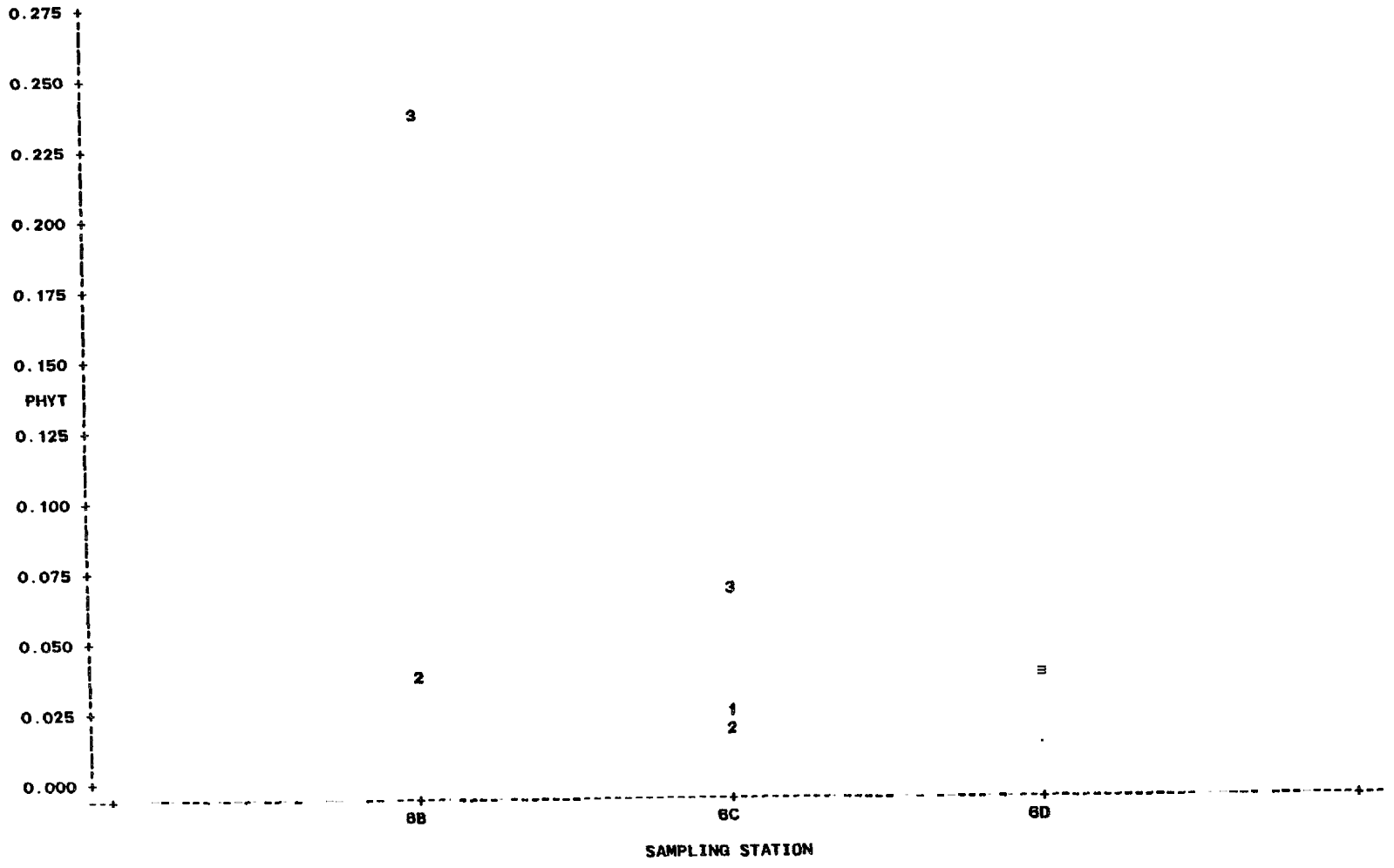
PLOT OF PAH*STATID SYMBOL IS VALUE OF YEAR



NOTE: 1 OBS

HYDROCARBONS IN BULK SEDIMENTS (YEARS 1-3) AND METALS IN
FINE SEDIMENTS (YEARS 2,3) FROM STATIONS 6B, 6C, 6D
INVESTIGATION OF GRADIENT EFFECTS
PLOT OF GEOMETRIC MEANS FOR EACH SAMPLING YEAR

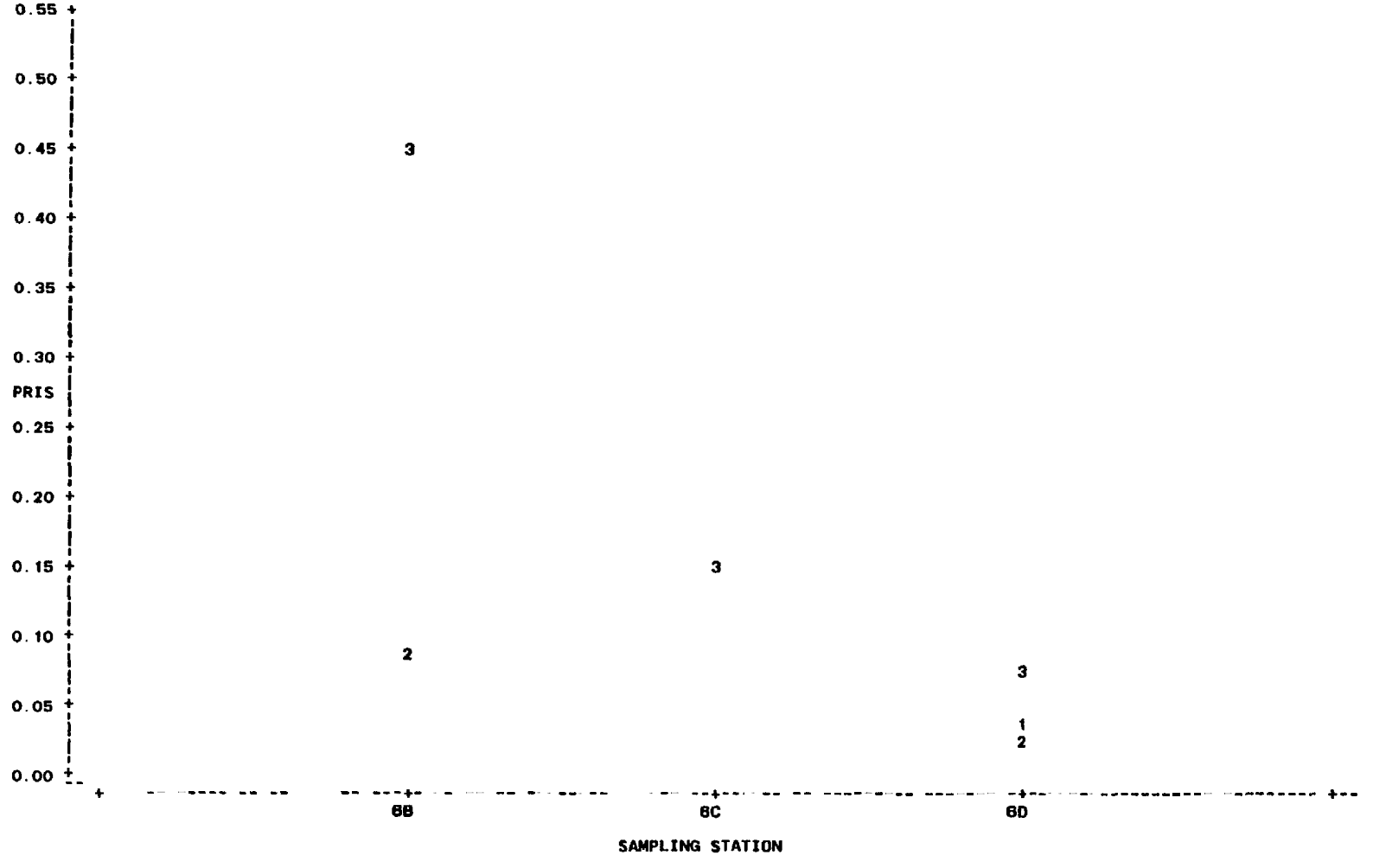
PLOT OF PHYT*STATID SYMBOL IS VALUE OF YEAR



NOTE: 1 OBS HIDDEN

HYDROCARBONS IN BULK SEDIMENTS (YEARS 1-3) AND METALS IN
FINE SEDIMENTS (YEARS 2,3) FROM STATIONS 6B, 6C, 6D
INVESTIGATION OF GRADIENT EFFECTS
PLOT OF GEOMETRIC MEANS FOR EACH SAMPLING YEAR

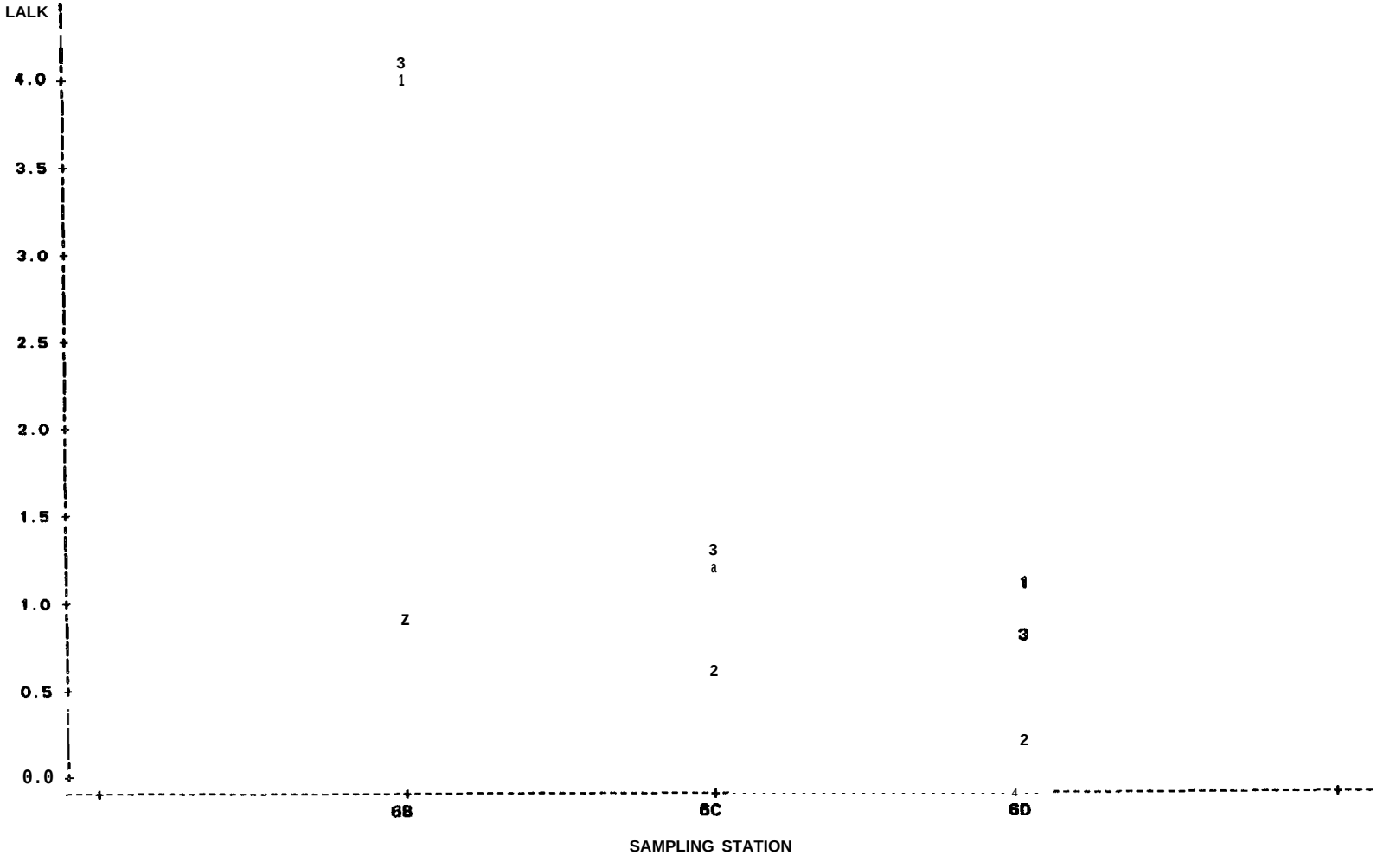
PLOT OF PRIS*STATID SYMBOL IS VALUE OF YEAR



NOTE: OBS HIDDEN

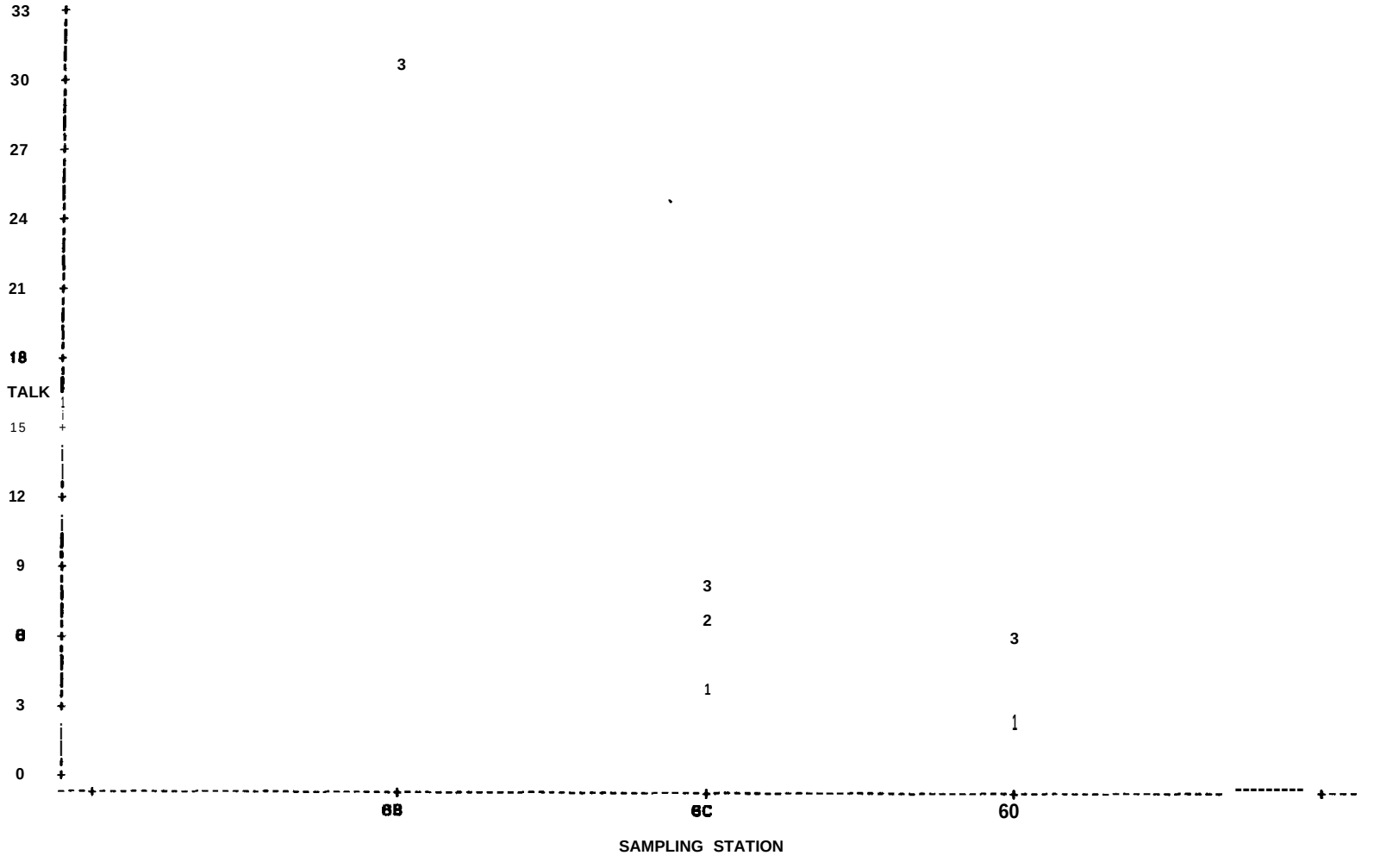
HYDROCARBONS IN BULK SEDIMENTS (YEARS 1-3) ANO METALS IN
FINE SEDIMENTS (YEARS 2,3) FROM STATIONS 6B, 6C, 60
INVESTIGATION OF GRADIENT EFFECTS
PLOT OF GEOMETRIC MEANS FOR EACH SAMPLING YEAR

PLOT OF LALK*STATID SYMBOL IS VALUE OF YEAR



HYDROCARBONS IN BULK SEDIMENTS (YEARS 1-3) ANO METALS IN
FINE SEDIMENTS (YEARS 2,3) FROM STATIONS 69, 6C,6D
INVESTIGATION OF GRADIENT EFFECTS
PLOT OF GEOMETRIC MEANS FoR EACH SAMPLING YEAR

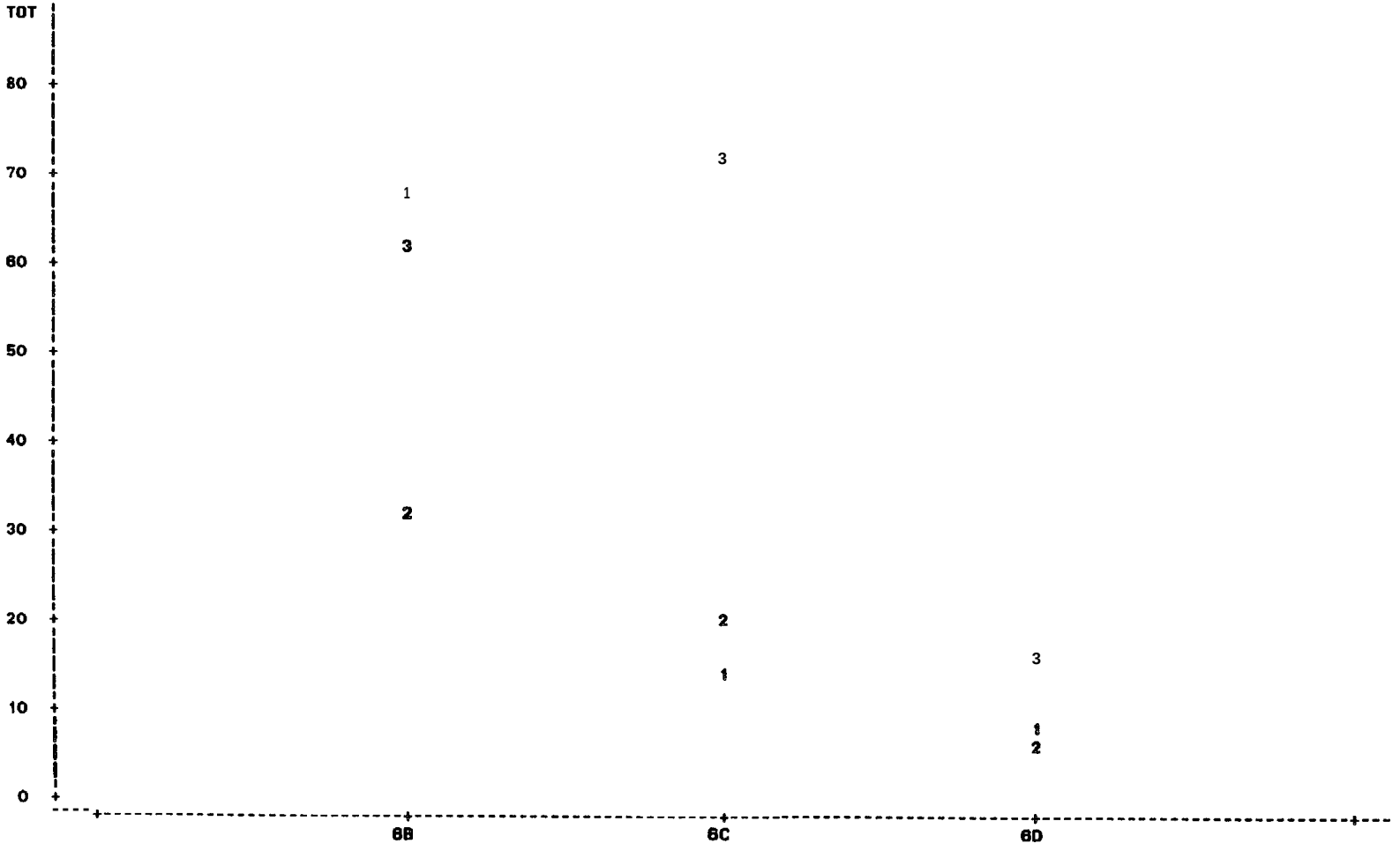
PLOT OF TALK*STATID SYMBOL IS VALUE OF YEAR



NOTE: 1 08S HIDDEN

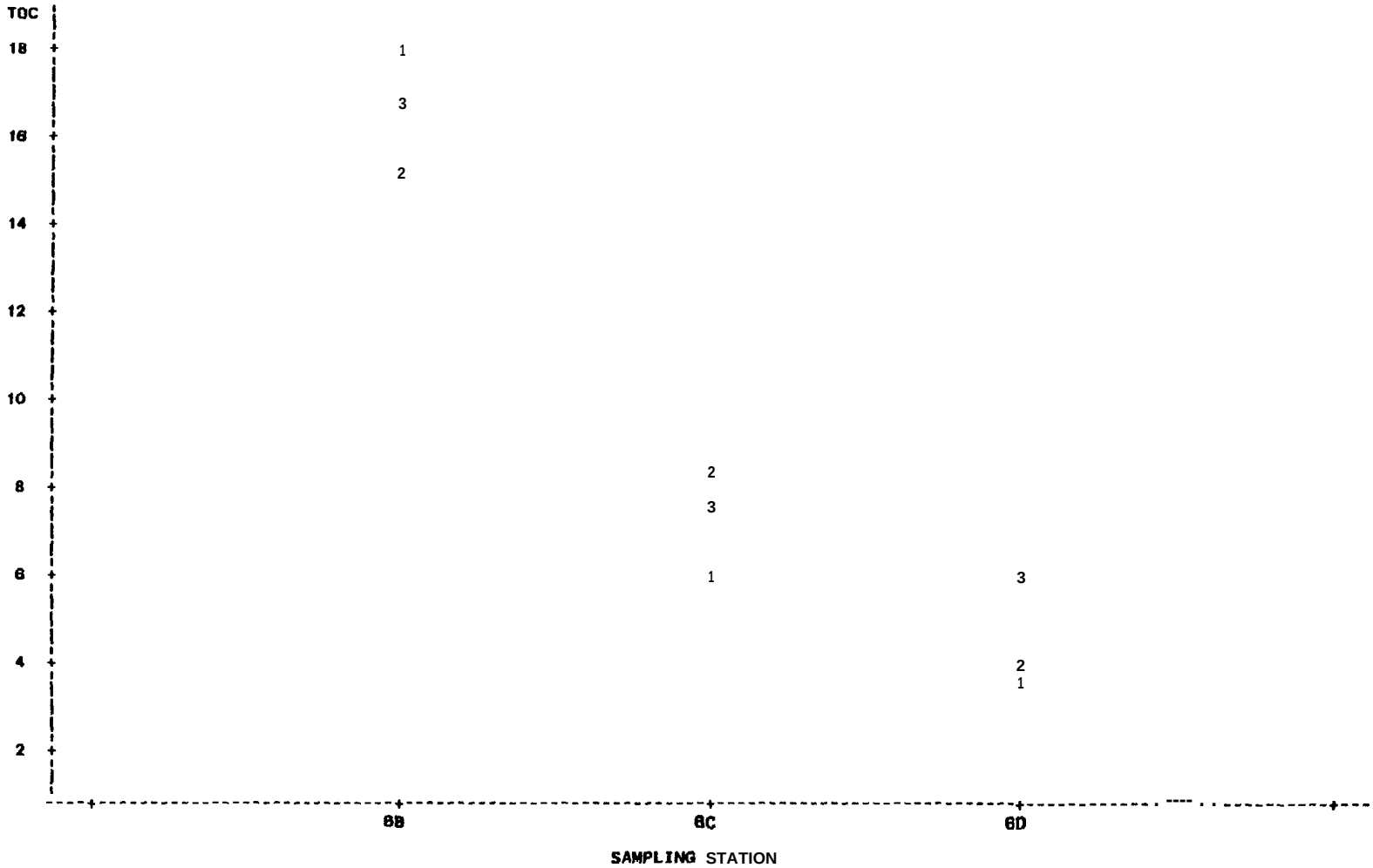
HYDROCARBONS IN BULK SEDIMENTS (YEARS 1-3) ANO METALS IN
FINE SEDIMENTS (YEARS 2,3) FROM STATIONS 6B, 6C, 60
INVESTIGATION OF GRADIENT EFFECTS
PLO? OF GEOMETRIC MEANS FOR EACH SAMPLING YEAR

PLOT OF TOT*STATID SYMBOL IS VALUE OF YEAR



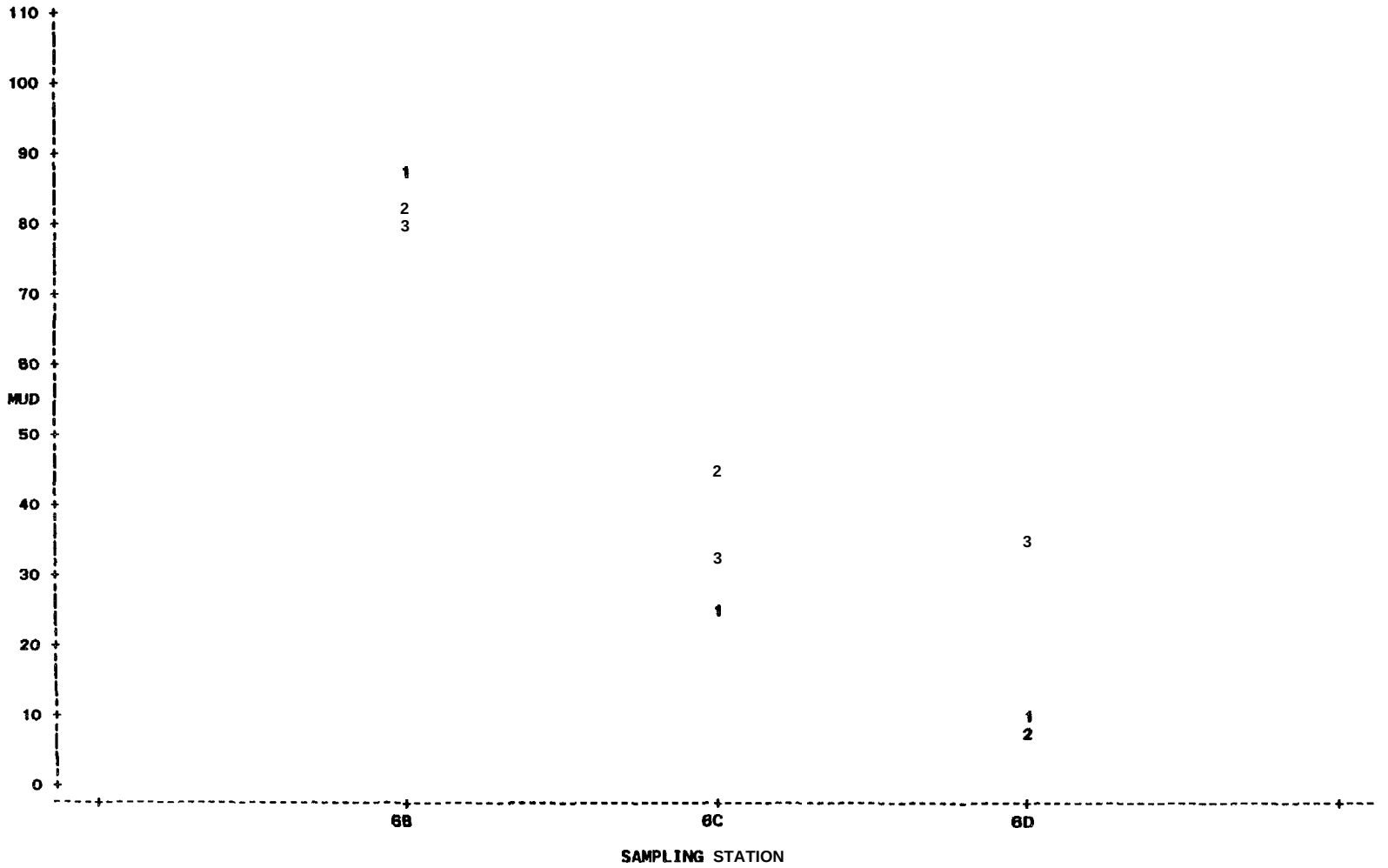
HYDROCARBONS IN BULK SEDIMENTS (YEARS i-3) AND METALS IN
FINE SEDIMENTS (YEARS 2.3) FROM STATIONS 88. 6C, 6D
INVESTIGATION OF GRADIENT EFFECTS
PLOT OF GEOMETRIC MEANS FOR EACH SAMPLING YEAR

PLOT OF TOC*STATID SYMBOL 2S VALUE OF YEAR



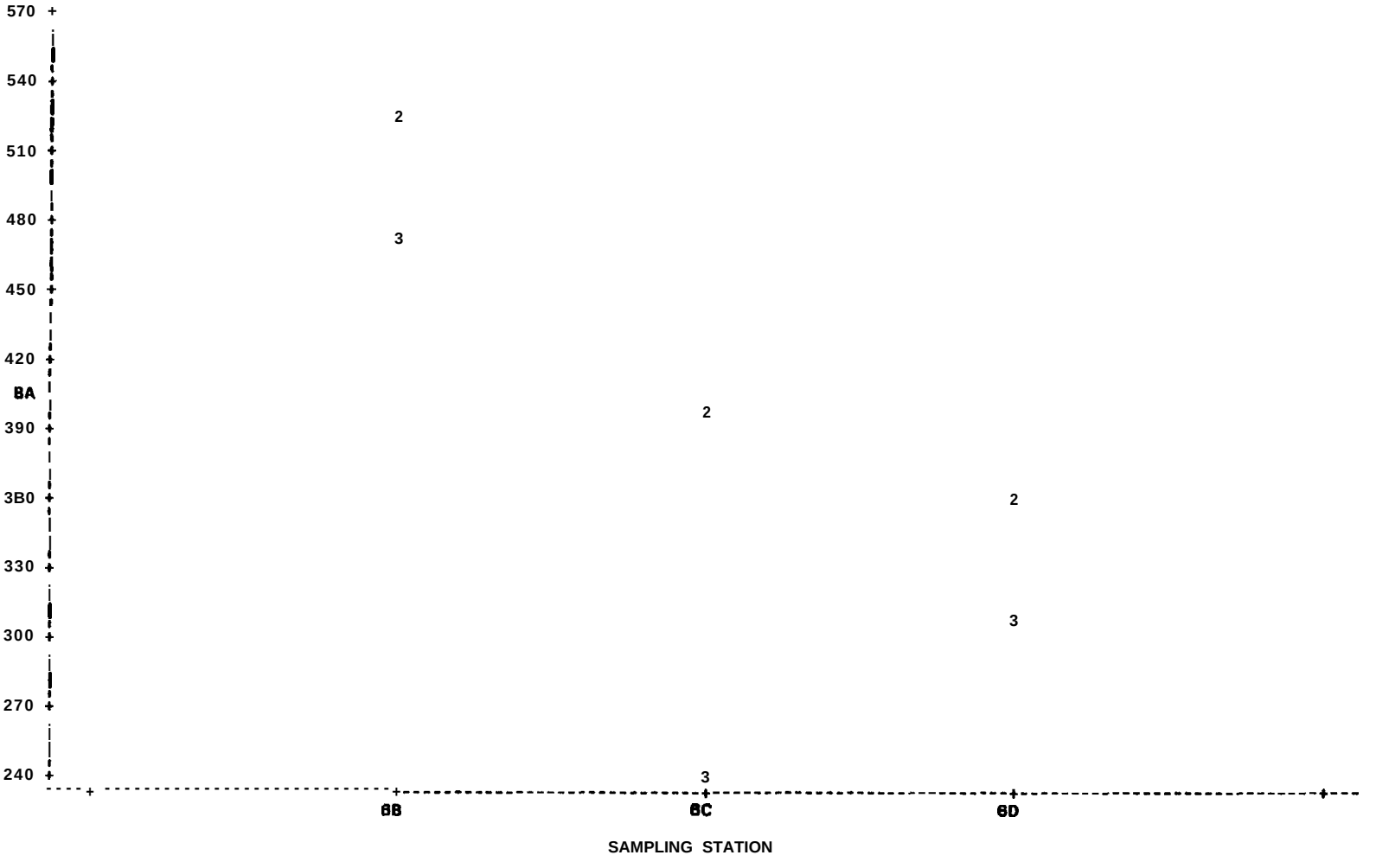
HYDROCARBONS IN BULK SEDIMENTS (YEARS 1-3) AND METALS IN
FINE SEDIMENTS (YEARS 2,3) FROM STATIONS 6B,6C,6D
INVESTIGATION OF GRADIENT EFFECTS
PLOT OF GEOMETRIC MEANS FOR EACH SAMPLING YEAR

PLOT OF MUD*STATID SYMBOL IS VALUE OF YEAR



HYDROCARBONS IN BULK SEDIMENTS (YEARS 1-3) AND METALS IN
FINE SEDIMENTS (YEARS 2,3) FROM STATIONS 6B,6C, 60
INVESTIGATION OF GRADIENT EFFECTS
PLOT OF GEOMETRIC MEANS FOR EACH SAMPLING YEAR

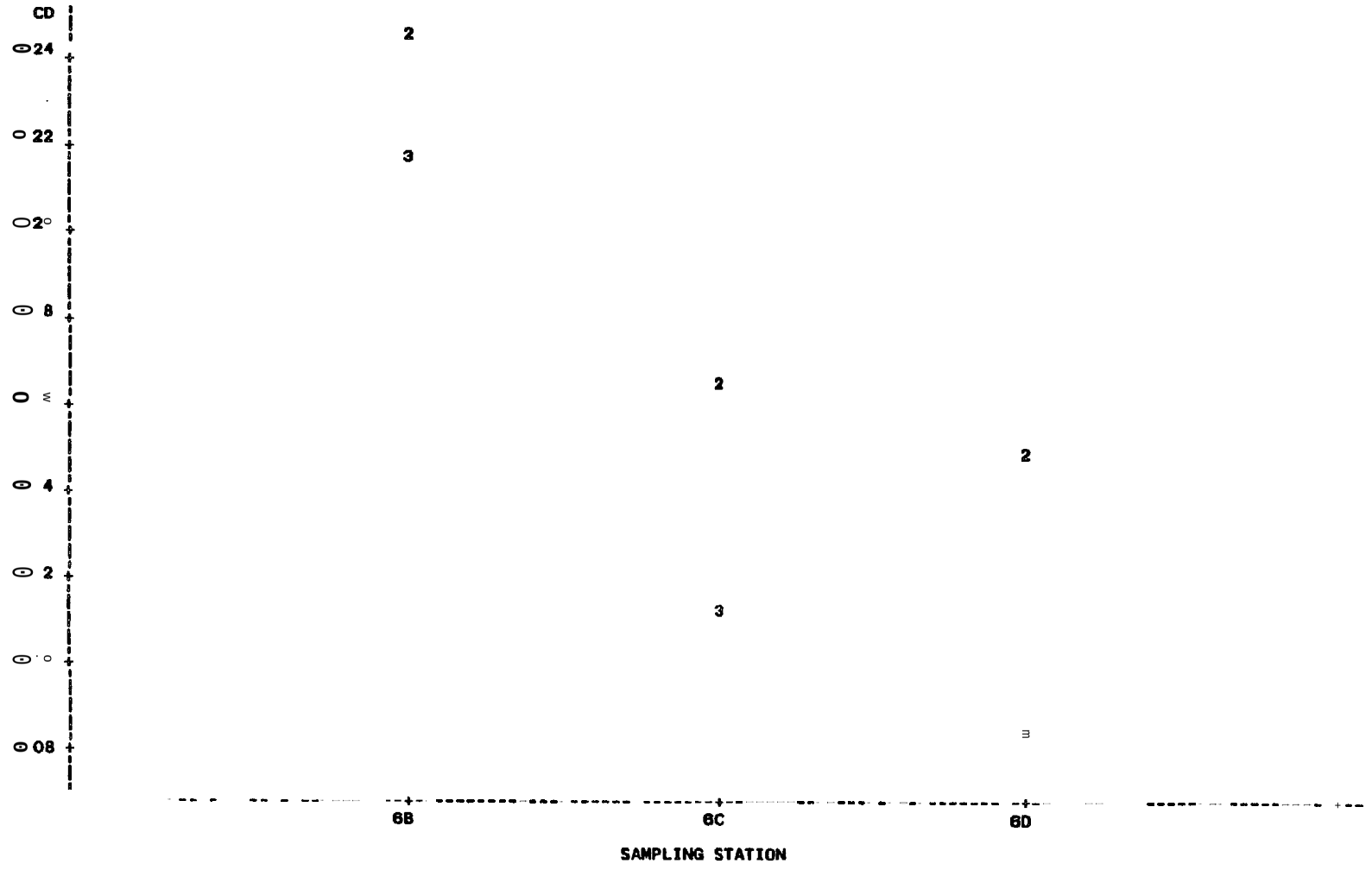
PLOT OF BA*STATID SYMBOL IS VALUE OF YEAR



NOTE : 3 OBS HAO MISSING VALUES OR WERE OUT OF RANGE

HYDROCARBONS IN BULK SEDIMENTS (YEARS 1-3) AND METALS
FINE SEDIMENTS (YEARS 2,3) FROM STATIONS 6B, 6C, 6D
INVESTIGATION OF GRADIENT EFFECTS
PLOT OF GEOMETRIC MEANS FOR EACH SAMPLING YEAR

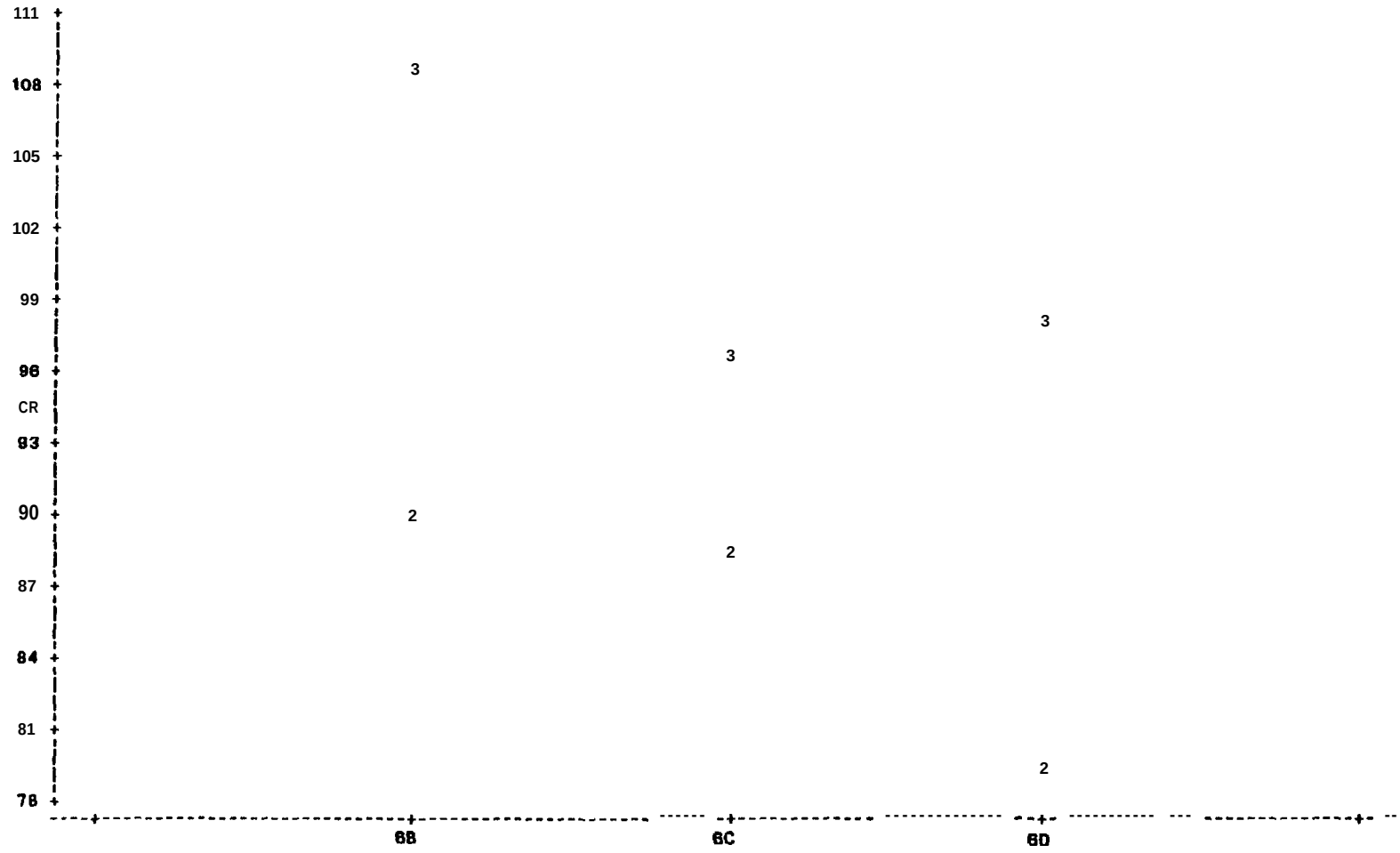
PLOT OF SYMBOL IS VALUE OF YEAR



NOTE: 3 OBS HAD MISSING VALUES OR WERE OUT OF RANG

HYDROCARBONS IN BULK SEDIMENTS (YEARS 1-3) AND METALS IN
FINE SEDIMENTS (YEARS 2,3) FROM STATIONS 6B,6C, 6D
INVESTIGATION OF GRADIENT EFFECTS
PLOT OF GEOMETRIC MEANS FOR EACH SAMPLING YEAR

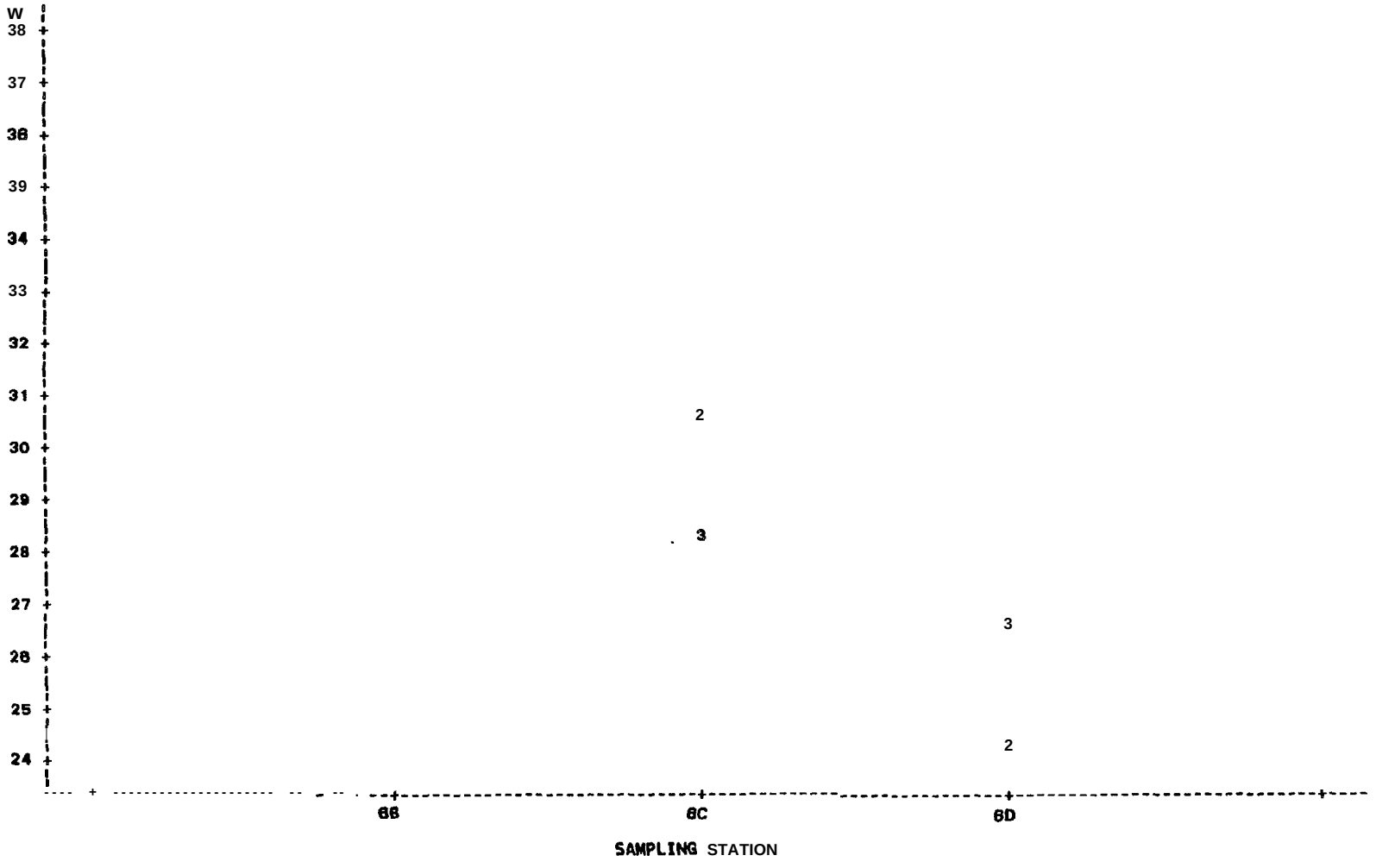
PLOT OF CR* STAT ID SYMBOL IS VALUE OF YEAR



NOTE: 3 OBS HAO MISSING VALUES OR WERE OUT OF RANGE

HYDROCARBONS IN BULK SEDIMENTS (YEARS 1-3) AND METALS IN
FINE SEDIMENTS (YEARS 2,3) FROM STATIONS 6B,6C,6D
INVESTIGATION OF GRADIENT EFFECTS
PLOT OF GEOMETRIC MEANS FOR EACH SAMPLING YEAR

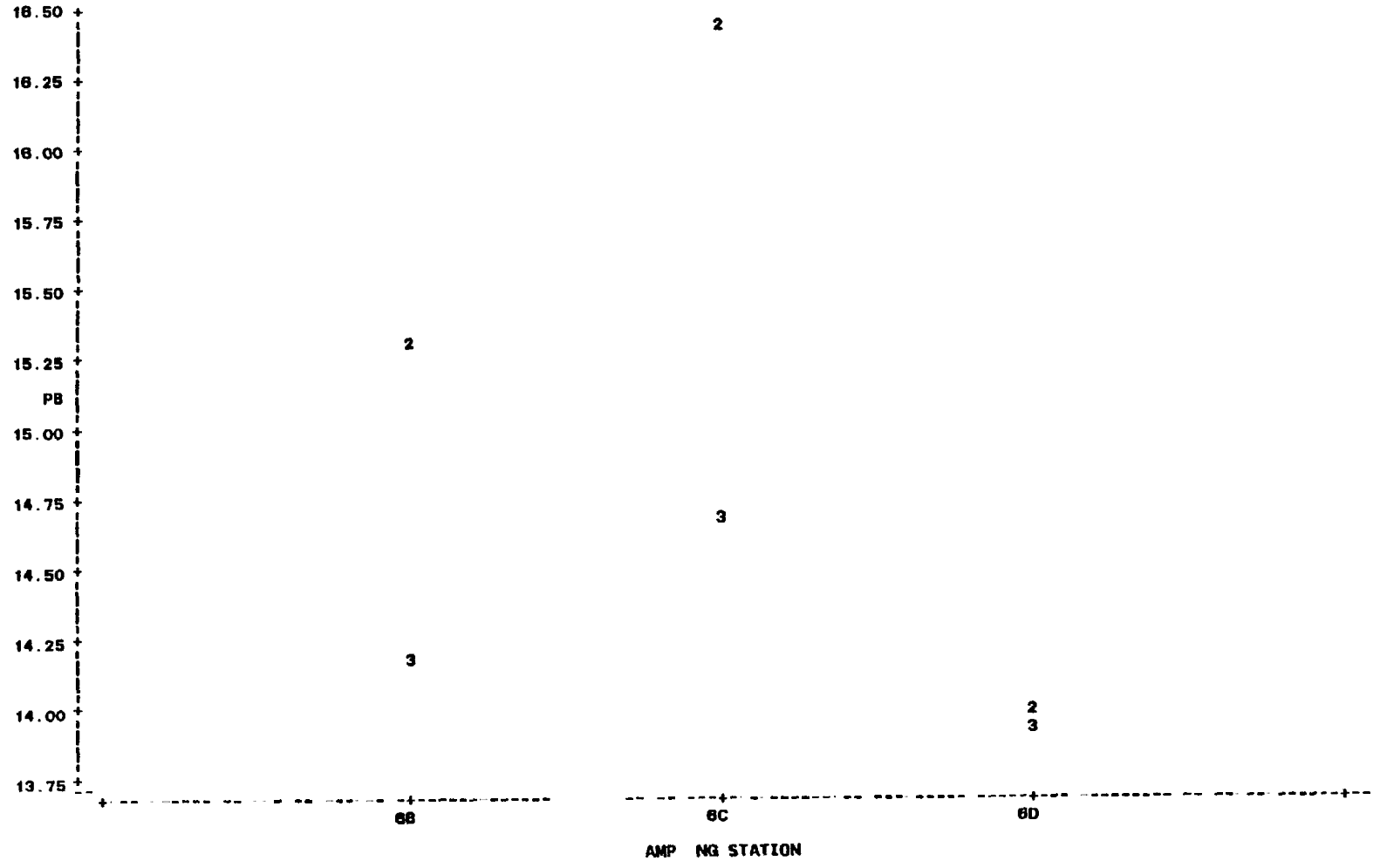
PLoT OF CU*STATID SYMBOL IS VALUE OF YEAR



NOTE: 3 OBS HAD MISSING VALUES OR WERE OUT OF RANGE

HYDROCARBONS IN BULK SEDIMENTS (YEARS 1-3) AND METALS IN
FINE SEDIMENTS (YEARS 2,3) FROM STATIONS 6B, 6C, 6D
INVESTIGATION OF GRADIENT EFFECTS
PLOT OF GEOMETRIC MEANS FOR EACH SAMPLING YEAR

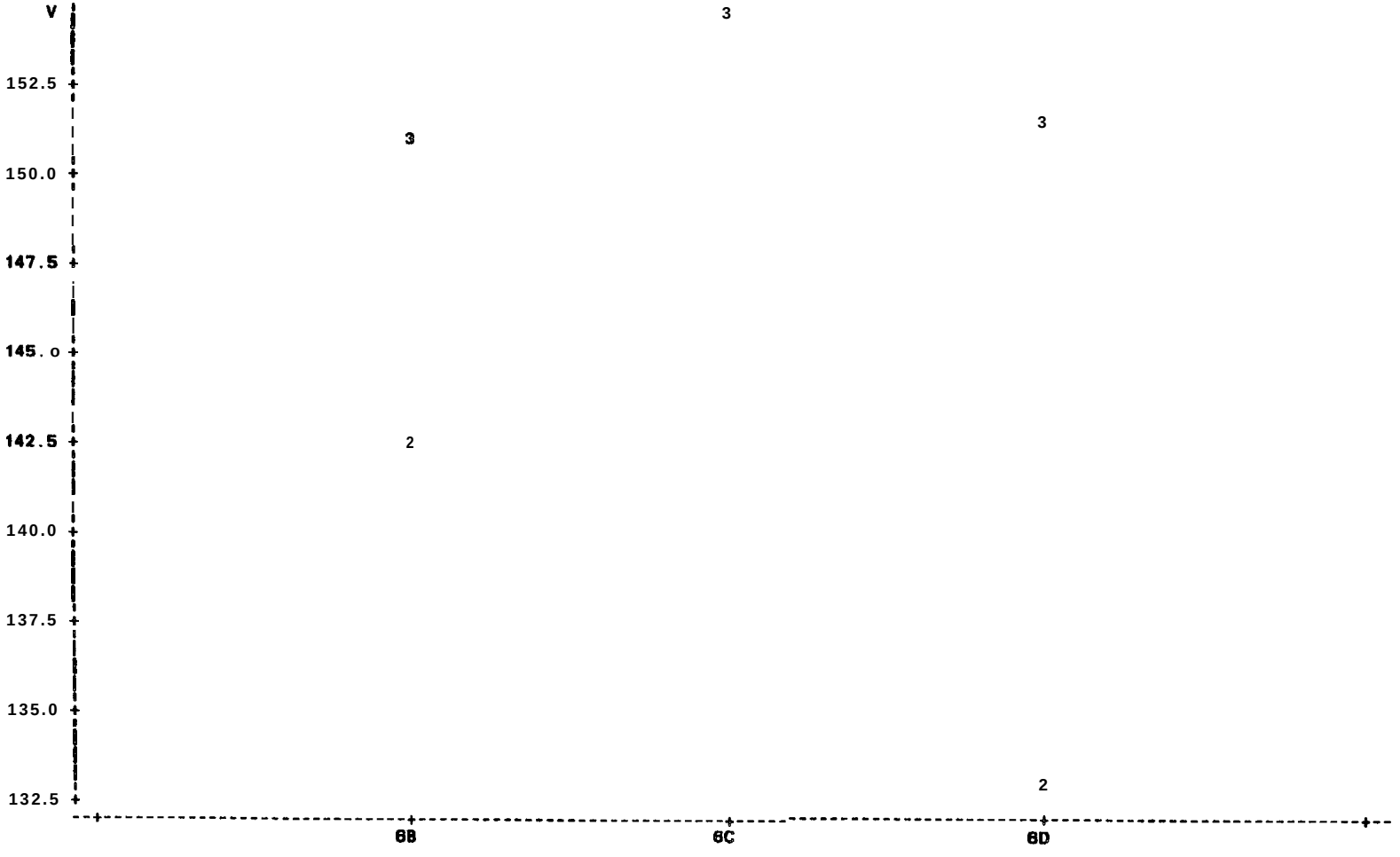
PLOT OF PB*STATID MB IS VALUE OF YEAR



NOTE OBS HAD MISSING VALUES OR WERE OUT OF RANGE

HYDROCARBONS IN SULK SEDIMENTS (YEARS 1-3) ANO METALS IN
FINE SEDIMENTS (YEARS 2,3) FROM STATIONS 6B,6C, 60
INVESTIGATION OF GRADIENT EFFECTS
PLOT OF GEOMETRIC MEANS FOR EACH SAMPLING YEAR

PLOT OF V*STATID SYMBOL IS VALUE OF YEAR

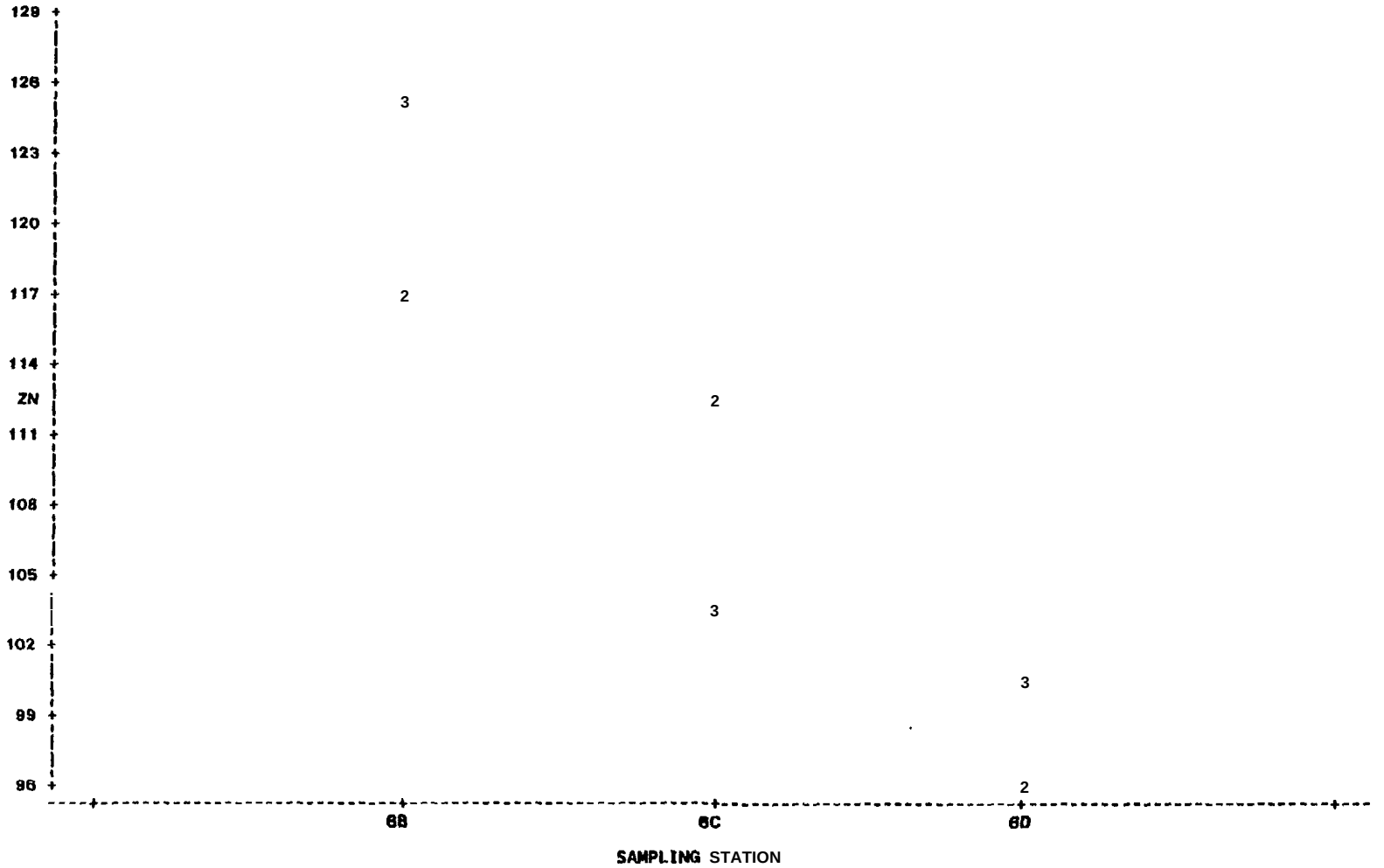


SAMPLING STATION

NOTE: 3 OBS HAO MISSING VALUES OR MERE OUT OF RANGE

HYDROCARBONS IN BULK SEDIMENTS (YEARS 1-3) AND METALS IN FINE SEDIMENTS (YEARS 2,3) FROM STATIONS 6B, 6C, 6D
INVESTIGATION OF GRADIENT EFFECTS
PLOT OF GEOMETRIC MEANS FOR EACN SAMPLING YEAR

PLOT OF ZN*STATID SYMBOL IS VALUE OF YEAR



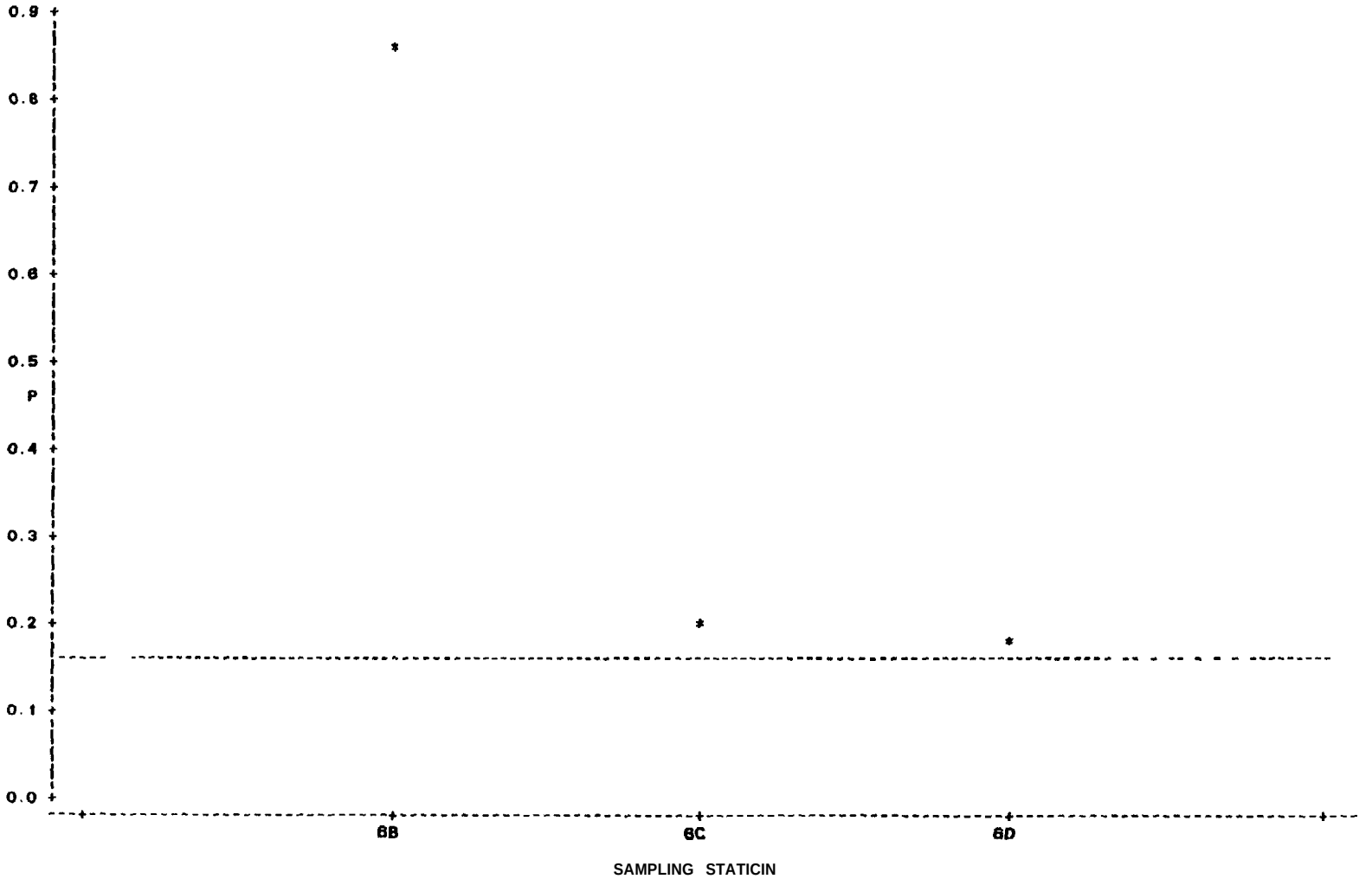
NOTE: 3 OBS HAD MISSING VALUES OR WERE OUT OF RANGE

SECTION 7

GRAPHICAL REPRESENTATION OF GRADIENT EFFECTS: GEOMETRIC MEANS OF HYDROCARBON AND METAL RATIOS AT STATIONS 6B, 6C, 6D, AND 6K

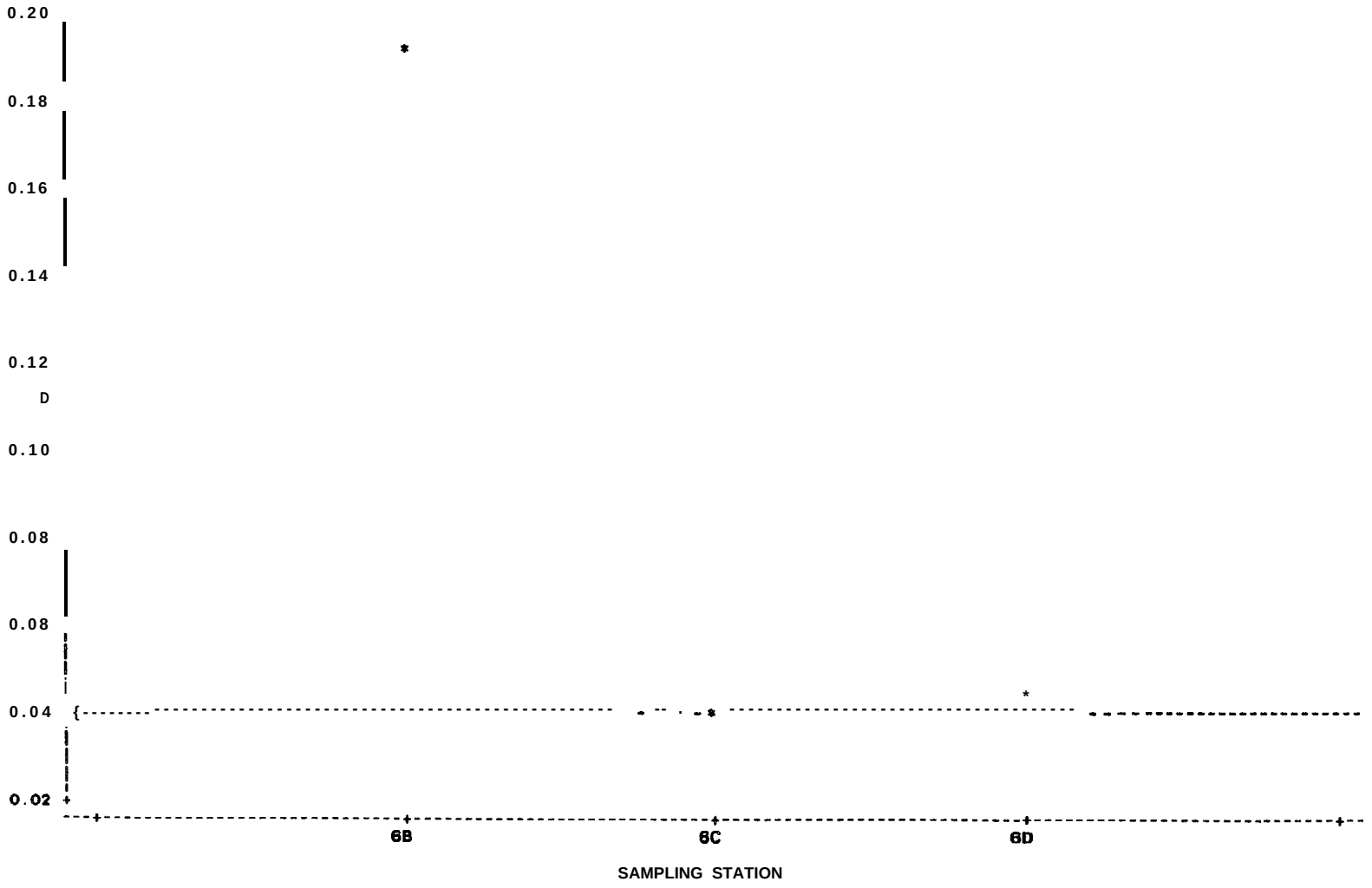
SELECTED HYDROCARBON RATIOS FROM BULK SEDIMENTS AND METAL RATIOS FROM
FROM FINE SEDIMENTS FROM STATIONS 6B,6C,6D,6K DURING YEAR 3
PLOT OF GEOMETRIC MEANS USING STATION 6K AS REFERENCE LINE

PLOT OF P*STATID SYMBOL USEO IS *



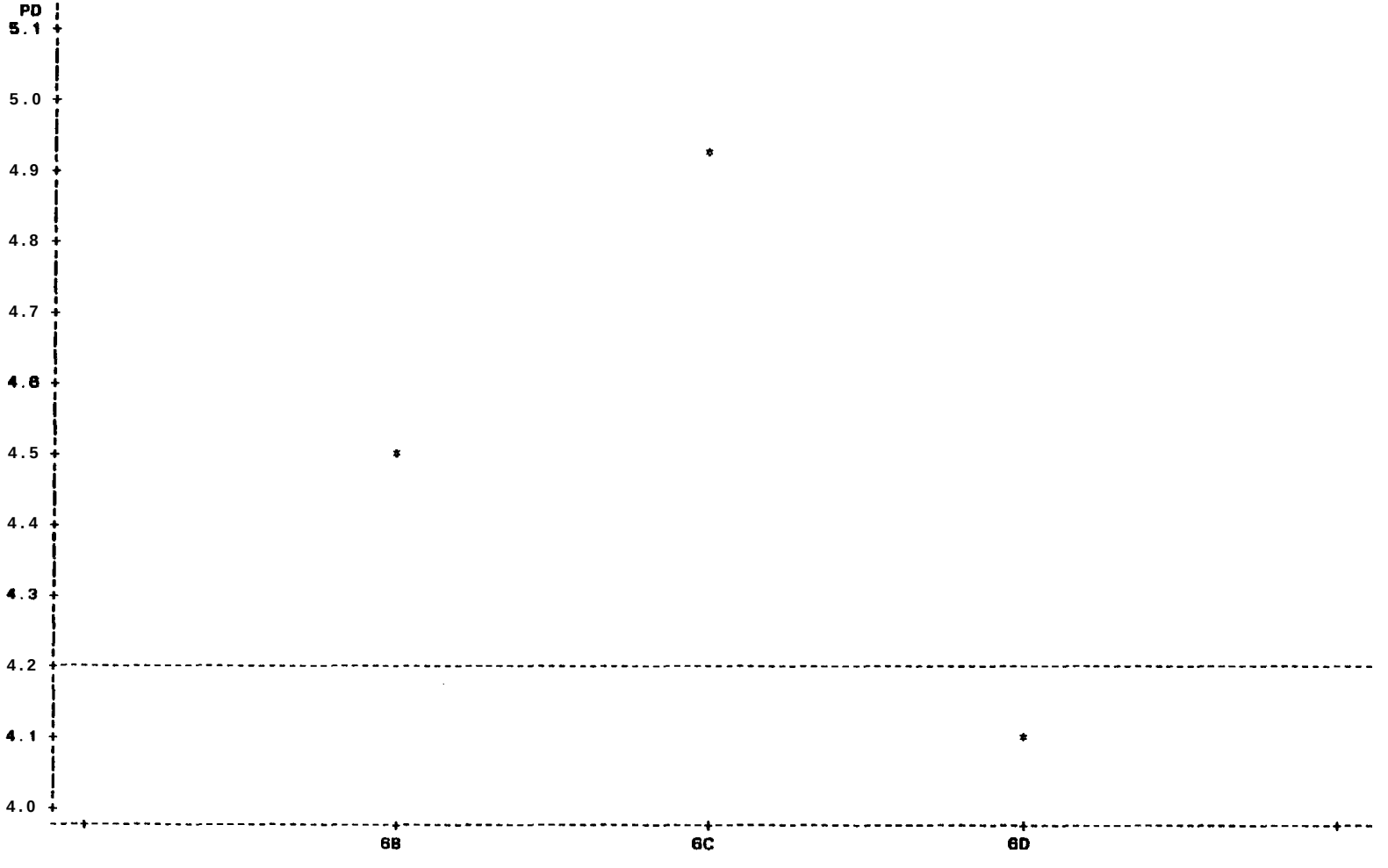
SELECTED HYDROCARBON RATIOS FROM BULK SEDIMENTS AND METAL RATIOS FROM
FROM FINE SEDIMENTS FROM STATIONS 6B,6C,6D,6K DURING YEAR 3
PLOT OF GEOMETRIC MEANS USING STATION 6K AS REFERENCE LINE

PLOT OF O* STATID SYMBOL USED 1S *



SELECTED HYDROCARBON RATIOS FROM BULK SEDIMENTS ANO METAL RATIOS FROM
FROM FINE SEDIMENTS FROM STATIONS 6B, 6C, 60, 6K DURING YEAR 3
PLOT OF GEOMETRIC MEANS USING STATION 6K AS REFERENCE LINE

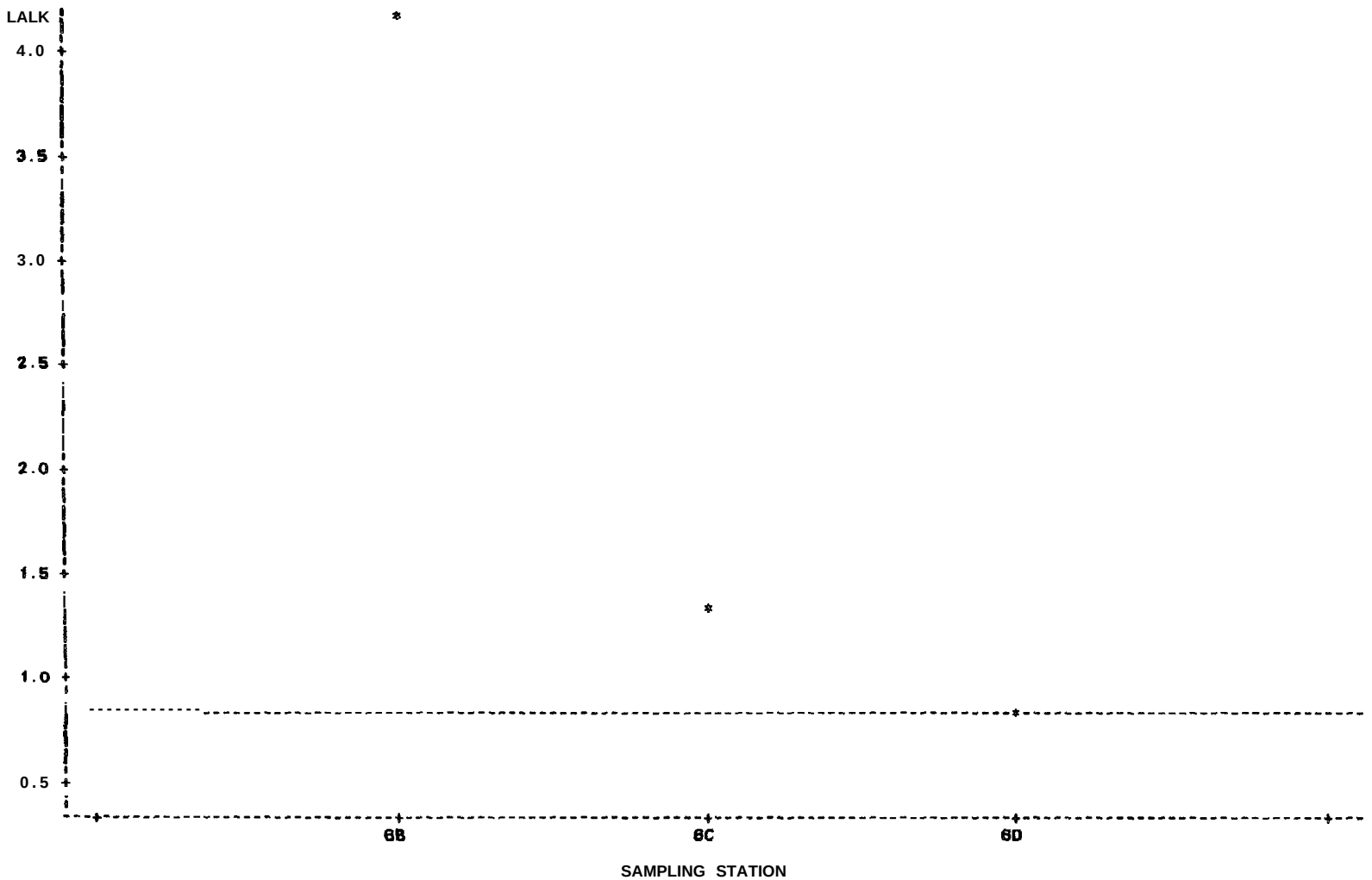
PLOT OF PD*STATID SYMBOL USED IS *



SAMPLING STATION

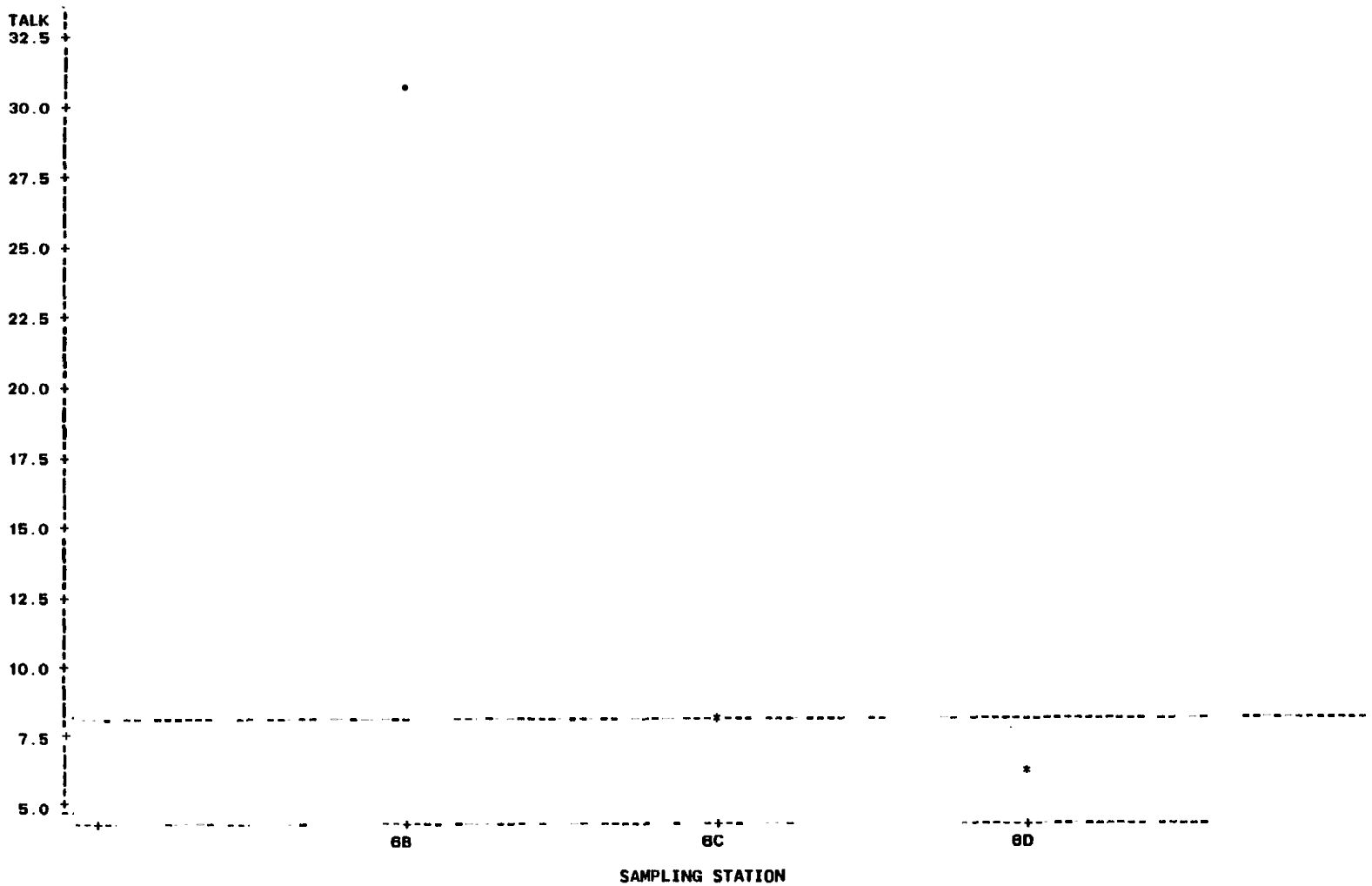
SELECTED HYDROCARBON RATIOS FROM BULK SEDIMENTS AND METAL RATIOS FROM
FROM FINE SEDIMENTS FROM STATIONS 6B,6C,6D,6K DURING YEAR 3
PLOT OF GEOMETRIC MEANS USING STATION 6K AS REFERENCE LINE

PLOT OF LALK*STATID SYMBOL USED IS *



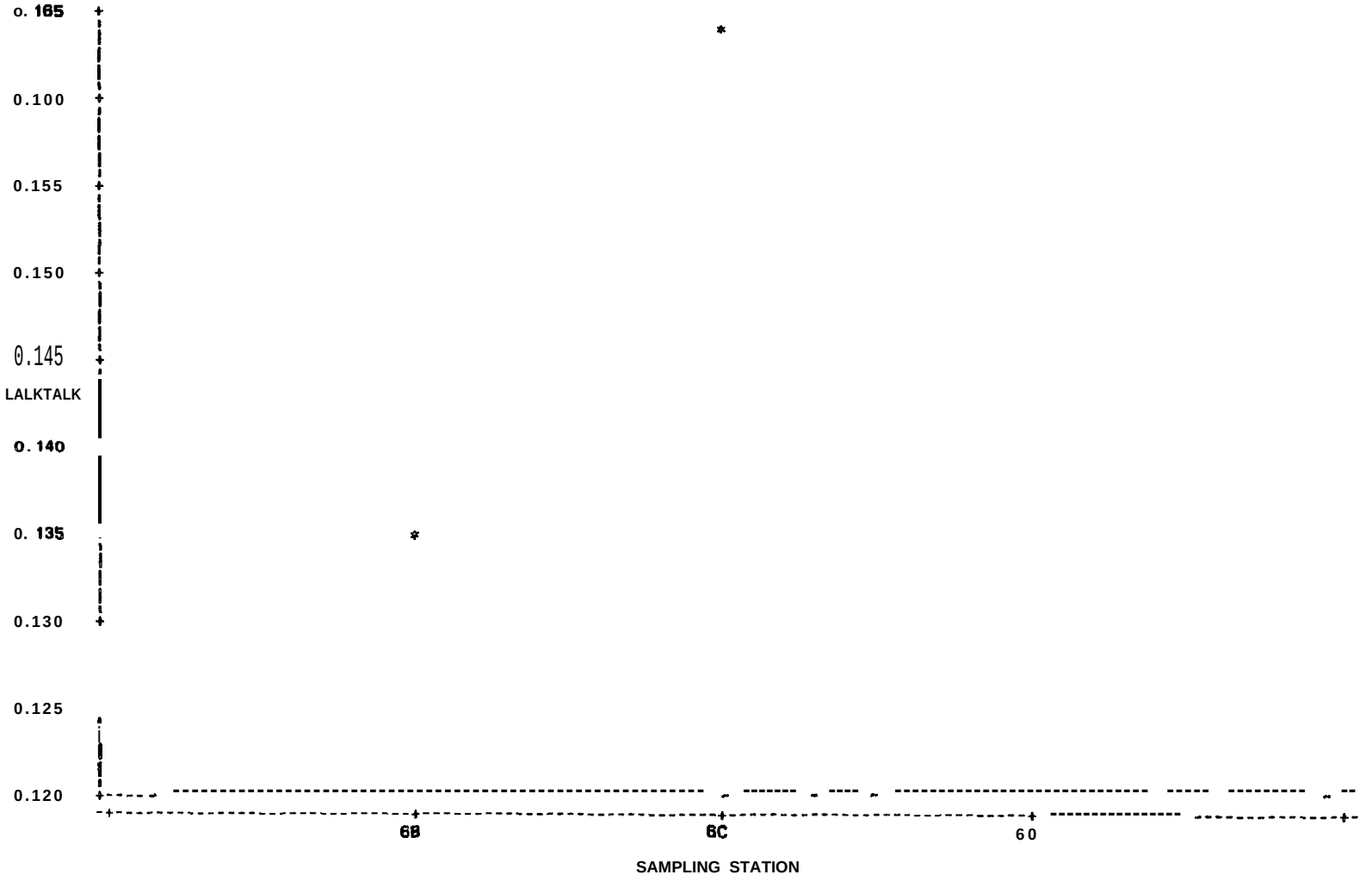
SELECTED HYDROCARBON RATIOS FROM BULK SEDIMENTS AND METAL RATIOS FROM
FROM FINE SEDIMENTS FROM STATIONS 6B,6C,6D,6K DURING YEAR 3
PLOT OF GEOMETRIC MEANS USING STATION 6K AS REFERENCE LINE

PLOT OF TALK*STATID SYMBOL USED IS *



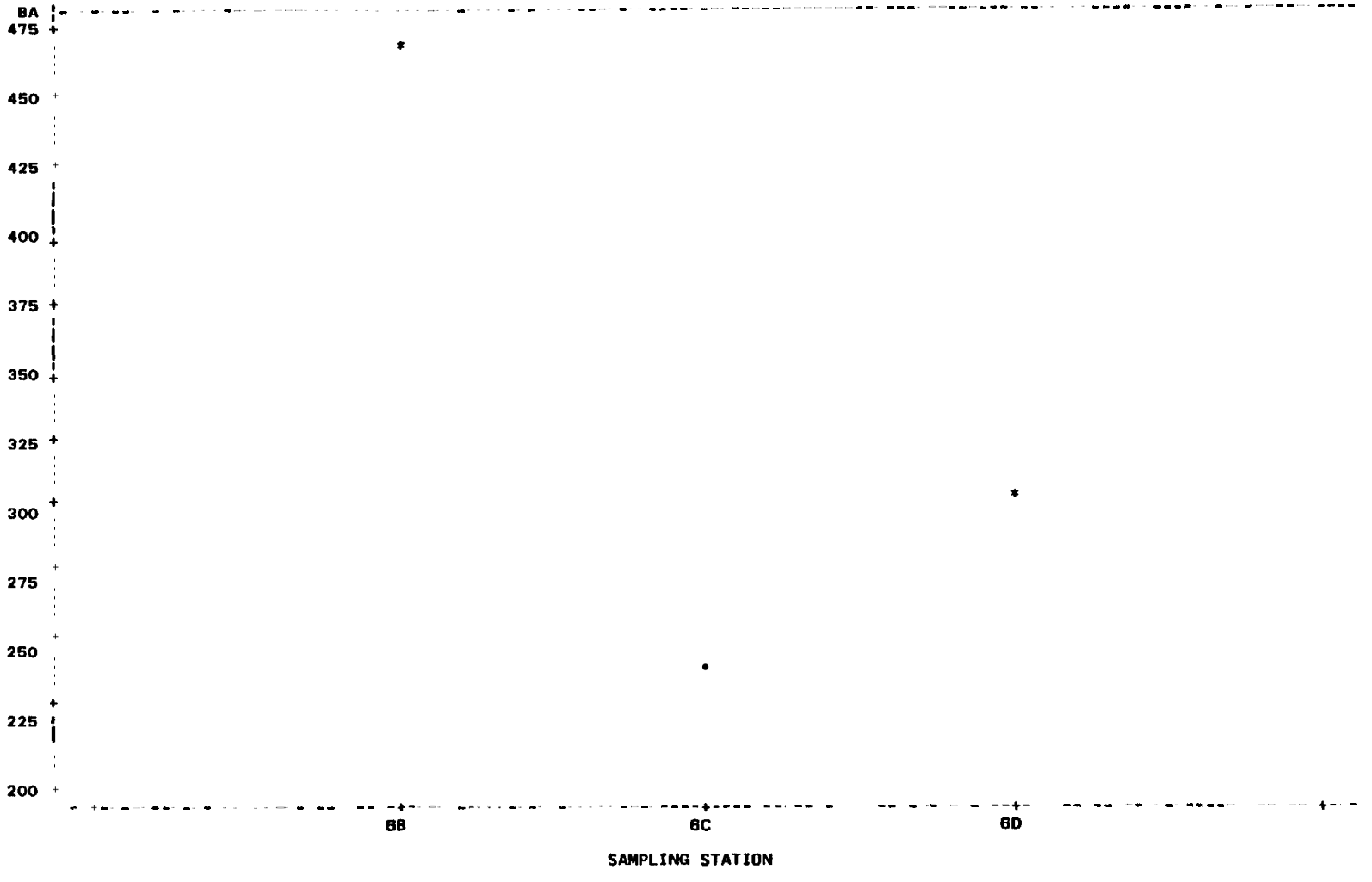
SELECTED HYDROCARBON RATIOS FROM BULK SEDIMENTS AND NETAL RATIOS FROM
FROM FINE SEDIMENTS FROM STATIONS 6B,6C,6D,6K DURING YEAR 3
PLOT OF GEOMETRIC MEANS USING STATION SK AS REFERENCE LINE

PLOT OF LALKTALK*STATID SYMBOL USED 1S *



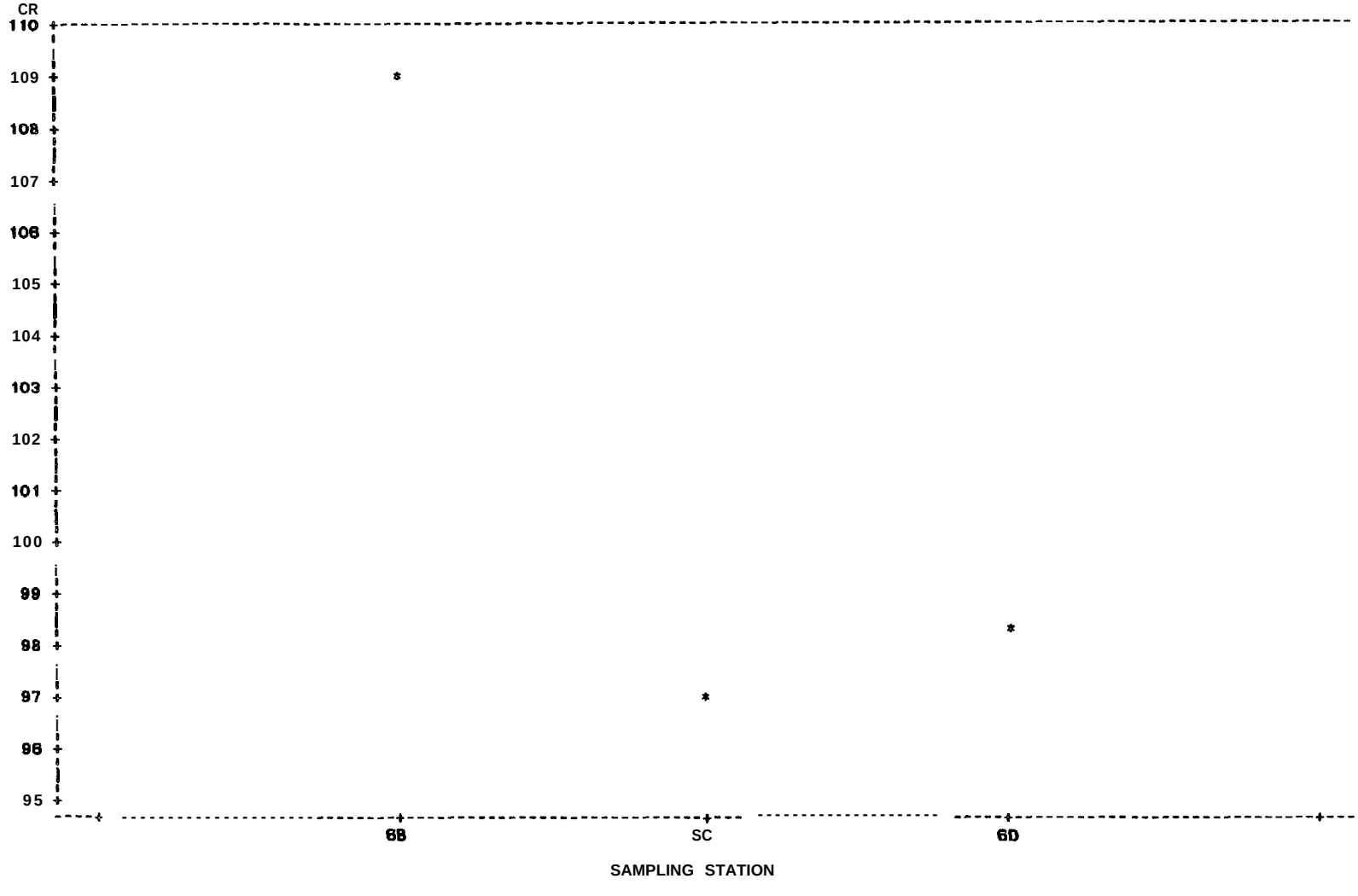
SELECTED HYDROCARBON RATIOS FROM BULK SEDIMENTS AND METAL RATIOS FROM
FROM FINE SEDIMENTS FROM STATIONS 6B,6C,6D,6K DURING YEAR 3
PLOT OF GEOMETRIC MEANS USING STATION 6K AS REFERENCE LINE

PLOT OF BA*STATID SYMBOL USED IS *



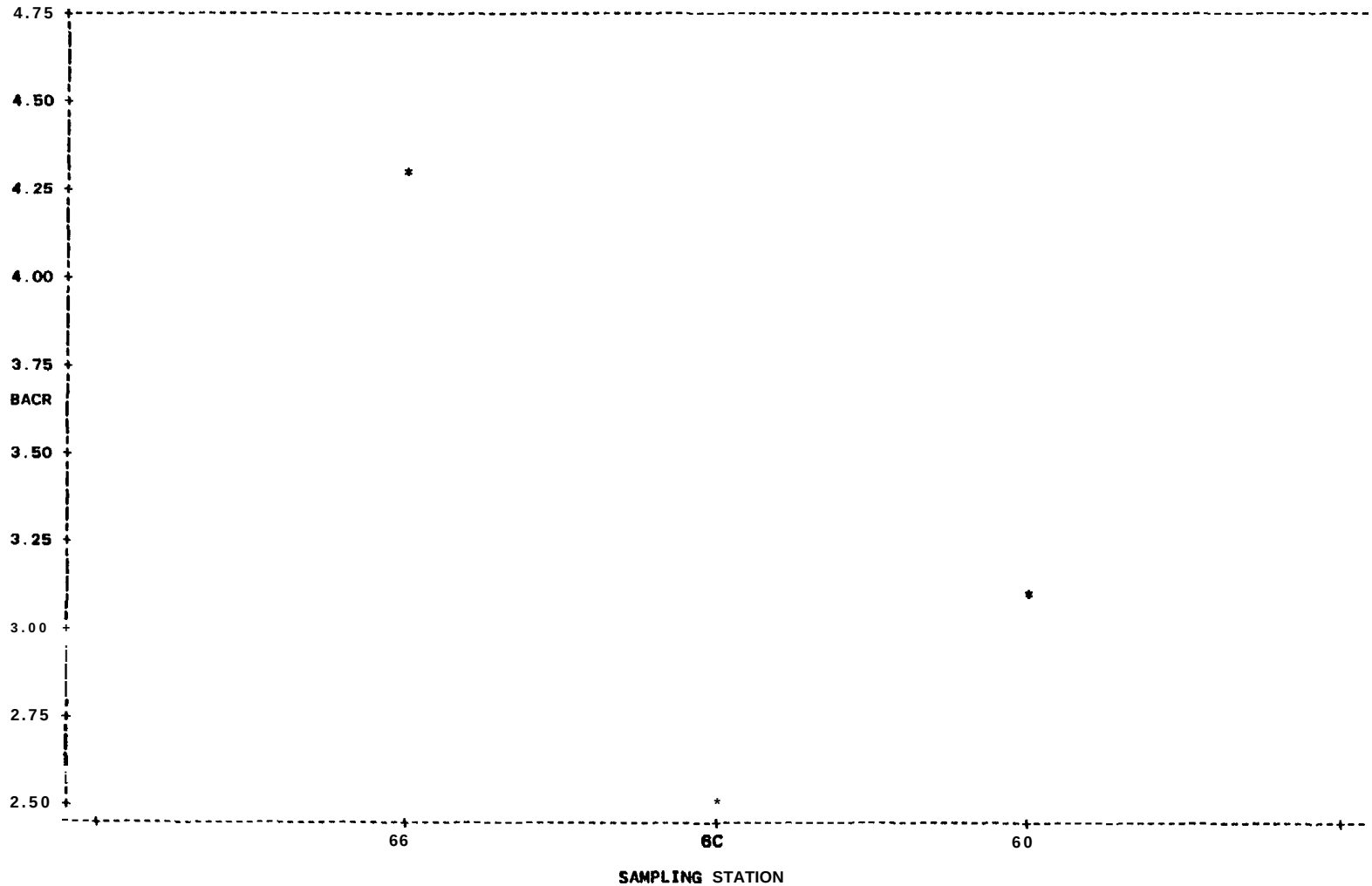
SELECTED HYDROCARBON RATIOS FROM BULK SEDIMENTS ANO METAL RATIOS FROM
FROM FINE SEDIMENTS FROM STATIONS 6B,6C,6D,6K DURING YEAR 3
PLOT OF GEOMETRIC MEANS USING STATION 6K AS REFERENCE LINE

PLOT OF CR*STATID SYMBOL USED IS *



SELECTED HYDROCARBON RATIOS FROM BULK SEDIMENTS AND METAL RATIOS FROM FROM FINE SEDIMENTS FROM STATIONS 6B, 6C, 60. 6K DURING YEAR 3 PLOT OF GEOMETRIC MEANS USING STATION 6K AS REFERENCE LINE

PLOT OF BACR*STATID SYMBOL USED IS *



SECTION 8

TRACE METAL AND HYDROCARBON DATA

FOR ANIMAL TISSUES, LISTED BY SPECIES

BEAUFORT SEA MONITORING PROGRAM-- TISSUE ANALYSES OATA
METAL CONCENTRATIONS

SPECIES=AMPHIPODS

STATION	YEAR	SAMPLE	REP	BA	CO	CR	CU	PB	V	ZN	BA/CR	BA/V
1A	3	FD02	1	.	.	.			.	.		
1A	3	FD02	2	.	.	.			.	.		
1A	3	FO02	3	.	.	.			.	.		
1B	3	FD07	1	.	.	.			.	.		
1B	3	FD07	2	.	.	.			.	.		
1B	3	FO07	3	.	.	.			.	.		

SPECIES=ANONYX

STATION	YEAR	SAMPLE	REP	0A	CO	CR	CU	PB	V	ZN	BA/CR	BA/V
1E	2	AJ03	1	35	0.73	3.04	99	0.42	3.8	0	11.5	9.2
2F	2	143		38	0.45	1.95	78	0.00	0.0	0	18.5	.
2F	2	I43		36	0.49	2.42	78	0.00	1.2	0	14.9	30.0
2F	2	143		38	0.78	2.22	79	0.00	0.9	0	16.2	40.0
2F	2	I43		3s	0.61	1.62	74	0.00	0.0	0	21.6	.
3A	2	I30		21	1.53	0.98	178	0.00	0.7	0	21.4	30.0
3A	2	I30		21	1.53	1.76	182	0.00	0.0	0	11.9	.
3A	2	130		23	1.53	0.88	165	0.00	0.4	0	26.1	57.5
3A	2	130		23	1.s3	0.s1	180	0.00	0.7	0	25.3	32.9
4B	2	A105	1	22	0.09	0.50	136	0.00	0.0	0	44.0	.
5H	2	J24		25	0.83	2.78	132	0.00	1.3	0	9.0	19.2
5H	2	J24		16	1.67	0.85	127	0.00	0.0	0	18.8	.
5H	2	J24		23	1.77	1.69	130	0.00	1.2	0	13.6	19.2
5H	2	J24		28	1.15	2.S8	127	0.00	2.3	0	10.9	12.2
5H	3	FD17	0		.	.	.		.		.	.
6G	2	AH85	1	60	0.27	1.49	63	0:19	0.7	0	40.3	85.7
6G	2	AH85	2	61	0. 18	1.57	69	0.17	0.7	0	38.9	87.1
6G	2	AH85	3	80	0.27	1.47	67	0.31	0.5	0	40.8	120
6G	2	AH85	4	58	0.27	1.56	67	0. 18	1.0	0	37.2	58.0
70	3	FD1O	1									
7B	3	FD1O	2									
7B	3	FO1O	3		.	.	.	.	.		.	.
7C	2	AH49	1	30	0.72	2.71	149	0.00	1.9	0	11.1	15.8
7C	3	FD09	0		.	.	.	.	.		.	
7E	2	AH14	1	52	0.27	0.77	99	0.00	0.4	0	67.5	130
7E	3	FD11	1									
7E	3	FD11	2									
7E	3	FD11	3									
7E	3	FD11	4									

BEAUFORT SEA MONITORING PROGRAM-- TISSUE ANALYSES DATA
METAL CONCENTRATIONS

SPECIES=ASTARTE

STATION	YEAR	SAMPLE	REP	BA	CD	CR	CU	PB	V	ZN	BA/CR	6A/v
1A	2	A194	1	22	23.89	2.72	13	0.37	2.5	O	8.1	8.8
1A	3	FD04	0									
1B	3	FD08	1									
16	3	FD08	2									
18	3	FD08	3									
2F	3	FD01	1									
2F	3	FD01	2									
2F	3	FD01	3									
2F	3	FD01	4		.	.	.		.		.	.
3A	1	210	1	7	0.59	1.50	10		1.4	O	4.5	4.9
3A	2	Al 32	1	17	5.68	2.59	15	0.28	4.2	O	6.6	4.0
3A	3	FD15	t	10	8.60	2.43	12	0.52	1.8	0	4.2	5.7
3A	3	FD15	2	12	8.80	2.40	11	0.48	2.5	0	6.0	4.7
3A	3	FD15	3	13	10.50	2.16	12	0.46	2.1	0	6.1	6.3
3A	3	FD15	4		.	.	.		.		.	.
5H	2	AJ58	1	2 i	8.55	1.40	11	0.00	1.4	0	17.1	17.1
5H	2	AJ58	2	22	10.33	1.67	9	0.17	1.6	0	13.2	13.8
5H	2	AJ58	3	12	11.68	1.47	13	0.00	1.1	0	8.2	10.9
5H	2	AJ58	4	11	16.38	2.19	11	0.26	0.8	0	5.0	13.8
5H	3	FD16	1									
5H	3	FD16	2									
5H	3	FD16	3									
51	3	FD18	1									
51	3	FD18	2		.	.			.		.	.
6D	1	210	1	26	0.73	2.50	28		5.0	0	10.4	5.2
6D	1	210	2	26	0.73	2.60	26		5.0	0	9.3	5.2
6D	1	210	3	37	0.94	2.60	27		5.6	0	14.2	6.4
6D	1	210	4		.	.		.			.	.
6D	2	AHos	1	39	11.73	3.49	30	1.31	9.4	0	11.2	4.1
6D	3	FD13	1	29	12.90	3.19	26	0.82	6.0	0	8.1	4.8
6D	3	FD13	2	36	12.50	3.98	24	0.92	7.0	0	9.0	5.1
6D	3	FD13	3	34	12.80	4.23	27	1.00	8.1	0	8.1	4.2

SPECIES=CYRTODARIA

STATION	YEAR	SAMPLE	REP	6A	CD	CR	CU	PB	V	ZN	BA/CR	6A/v
5F	1	230	1	13	0.50	1.80	16		2.9	0	7.2	4.5
5F	1	230	2	17	0.38	2.50			3.8	0	6.6	4.5
SF	1	230	3	16	0.60	2.20	18		3.1	0	7.3	5.2
5F	1	230	4	13	0.42	1.50	16		2.4	0	8.7	5.4
SF	1	230	5	25	0.59	2.90	15	.	4.5	0	8.6	S.6
5F	2	AH15	1	26	1.62	2.03	26	0.50	6.9	0	12.8	3.8
5F	2	AH15	2	21	1.53	3.18	23	0.37	4.9	0	6.6	4.3
5F	2	AH15	3	33	1.35	2.81	24	0.72	8.2	0	11.7	4.0
SF	2	AH15	4	22	1.44	3.56	24	0.48	6.1	0	6.2	3.6
5F	3	FD14	1	20	1.57	2.63	14	0.88	5.2	0	7.1	3.8
SF	3	FD14	2	19	1.45	2.85	14	o.7t	4.9	0	6.6	3.8
6F	3	F014	3	17	1.59	2.37	14	0.60	4.3	0	7.1	3.9
5F	3	FD14	4								.	.
6G	2	AH16	1	25	1.53	1.86	21	0.62	5.3	0	13.4	4.7
6G	3	FD12	1									

BEAUFORT SEA MONITORING PROGRAM-- TISSUE ANALYSES DATA
METAL CONCENTRATIONS

SPECIES=CYRTODARIA

STATION	YEAR	SAMPLE	REP	6A	CO	CR	CU	PB	V	ZN	BA/CR	BA/V
6G	3	F012	2	.	.	.	.	.	.	.		
6G	3	FD12	3	.	.	.	.	.	.	.		
6G	3	FO12	4	.	.	.	.	.	.	.		

SPECIES=MACOMA

STATION	YEAR	SAMPLE	REP	BA	co	CR	CU	PB	v	ZN	BA/CR	BA/V
60	1	220	1									
6D	1	220	2		.	.	.	.	.		.	.
6D	2	AH06	1	126	0.30	9.79	18	3.24	21.8	0	12.9	5.8
6D	2	AH06	2	95	17.75	7.64	19	2.73	19.0	0	12.4	5.0

SPECIES=PORTLANOIA

STATION	YEAR	SAMPLE	REP	BA	co	CR	CU	PB	v	ZN	BA/CR	BA/V
1A	2	AJ04	1	96	7.30"	12.22	34	4.89	22.3	0	7.9	4.3
1A	2	AJ04	2	98	7.s3	11.99	35	5.14	22.1	0	8.2	4.4
1A	2	AJ04	3	102	6.95	13.29	35	6.4B	23.3	0	7.7	4.4
1A	2	AJ04	4	97	8,31	12.5s	37	5.7s	23.1	0	7.7	4.2
1A	3	FD03	1									
1A	3	FO03	2									
1A	3	FO03	3									
1A	3	F D03	4									

BEAUFORT SEA MONITORING PROGRAM-- TISSUE ANALYSES DATA
HYDROCARBON CONCENTRATIONS

SPECIES=AMPHIPODS

STATION	YEAR	SAMPLE	REP	N	F	P	o	PAN	PHYTANE	PRISTANE	LALK	TALK	TOT
1A	3	FO02	1	0.006	0.000	0.0000	0.000	0.000	0	0.72	0.32	2.68	3.2
1A	3	FO02	2	0.017	0.000	0.0000	0.000	0.000	0	0.86	0.25	2.13	3.6
1A	3	FD02	3	0.016	0.000	0.0000	0.000	0.000	0	0.98	0.36	5.70	8.7
1B	3	FO07	1	0.001	0.000	0.0000	0.000	0.000	0	3.88	0.12	1.19	4.3
1B	3	FO07	2	0.000	0.000	0.0000	0.000	0.000	0	3.32	0.10	1.52	4.6
1B	3	FD07	3	0.007	0.000	0.0000	0.000	0.000	0	4.65	0.38	0.69	4.6

SPECIES=ANONYX

STATION	YEAR	SAMPLE	REP	N	F	P	0	PAH	PHYTANE	PRISTANE	LALK	TALK	TOT
1E	2	AJ03	1	0.029	0.000	0.0000	0.000	0.000	o	1.23	1.83	9.49	42.6
2F	2	143											
2F	2	143											
2F	2	143											
2F	2	143											
3A	2	130											
3A	2	130											
3A	2	130											
3A	2	I30		.	.			.			.	.	.
4B	2	AI05	1	0.015	0.000	0:0000	0:000	0.001	0	1.30	0.65	9.14	78.3
5H	2	J24											
5H	2	J24											
5H	2	J24											
5H	2	J24		.	.	.		.			.	.	.
5H	3	FD17	0	0.000	0.000	0.0000	0:000	0.000	0	7.98	0.33	0.86	24.2
6G	2	AH85	1	0.012	0.000	0.0020	0.000	0.000	0	12.63	1.39	1.93	17.6
6G	2	AH85	2	0.009	0.000	0.0000	0.000	0.000	0	12.04	1.46	2.64	18.0
6G	2	AH8S	3	0.000	0.000	0.0000	0.000	0.000	0	12.97	1.37	2.58	22.2
6G	2	AH8S	4	0.015	0.000	0.0010	0.000	0.000	0	10.63	1.9s	2.47	15.4
7a	3	FD1O	1	0.000	0.000	0.0000	0.000	0.000	0	0.42	0.09	0.55	1.4
7B	3	FD10	2	0.000	0.000	0.0000	0.000	0.000	0	0.26	0.05	1.40	4.5
7B	3	FD1O	3	0.016	0.000	0.0002	0.000	0.000	0	0.41	0.12	0.28	0.4
7C	2	AH49	1	0.004	0.000	0.0000	0.000	0.000	0	20.69	3.01	6.55	39.8
7C	3	FD09	0	0.000	0.000	0.0000	0.000	0.000	0	0.57	0.42	0.96	30.3
7E	2	AH14	1	0.008	0.000	0.0010	0.000	0.000	0	32.23	3.78	6.04	50.9
7E	3	FD11	1	0.018	0.000	0.0000	0.000	0.032	0	0.73	0.24	1.46	2.0
7E	3	FD11	2	0.007	0.000	0.0000	0.000	0.000	0	0.79	0.19	1.29	2.3
7E	3	FD11	3	0.012	0.000	0.0000	0.000	0.000	0	0.76	0.20	0.78	1.9
7E	3	FD11	4	0.013	0.000	0.0000	0.000	0.000	0	0.42	0.13	0.52	0.9

BEAUFORT SEA MONITORING PROGRAM-- TISSUE ANALYSES DATA
HYDROCARBON CONCENTRATIONS

SPECIES=ASTARTE

STATION	YEAR	SAMPLE	REP	N	F	P	D	PAH	PHYTANE	PRISTANE	LALK	TALK	TOT
1A	2	AI94	1	0.014	0.014	0. 00s0	0.002	0.007	0	0.09	2.66	4.96	10.3
1A	3	FD04	0	0.010	0.000	0.0000	0.000	0.002	0	0.02	0.29	1.05	2.1
1B	3	FD08	1	0.014	0.000	0.0000	0.000	0.000	0	0.01	0.10	0.63	1.3
1B	3	FD08	2	0.000	0.000	0.0000	0.000	0.000	0	0.02	0.10	0.90	2.0
1B	3	FD08	3	0.000	0.000	0.0000	0.000	0.000	0	0.01	0.02	0.58	1.6
2F	3	FD01	1	0.006	0.000	0.0010	0.000	0.000	0	11.93	0.18	3.22	34.1
2F	3	FD01	2	0.010	0.000	0.0010	0.000	0.000	0	4.28	0.17	0.s1	5.9
2F	3	FD01	3	0.004	0.000	0.0000	0.000	0.000	0	0.24	0.19	1.15	12.3
2F	3	FD01	4	0.009	0.000	0.0000	0.155	0.000	0	3.70	0.24	1.63	5.9
3A	1	210	1	0.000	0.000	0.0000	0.000	0.000	0	0.00	0.32	7.36	72.9
3A	2	AI32	1	0.003	0.002	0.0030	0.000	0.001	0	0.09	2.02	3.44	7.8
3A	3	FD15	1	0.000	0.000	0.0010	0.000	0.031	0	0.00	0.03	0.06	1.0
3A	3	FD15	2	0.002	0.000	0.0000	0.000	0.002	0	0.00	0.03	3.75	5.1
3A	3	FD15	3	0.000	0.000	0.0000	0.000	0.000	0	0.00	0.08	0.96	1.5
3A	3	F015	4	0.007	0.000	0.0000	0.000	0.002	0	0.05	0.07	0.26	0.3
5H	2	AJ58	1	0.001	0.001	0.0010	0.000	0.001	0	0.00	0.21	0.62	2.0
5H	2	AJ58	2	0.001	0.002	0.0000	0.000	0.001	0	0.00	0.22	0.58	2.0
5H	2	AJ58	3	0.006	0.003	0.0020	0.000	0.004	0	0.04	0.27	7.17	11.4
5H	2	AJ58	4	0.001	0.003	0.0040	0.000	0.002	0	0.03	0.22	0.64	2.1
5H	3	F016	1	0.006	0.000	0.0000	0.000	0.000	0	0.00	10.08	12.67	7.7
5H	3	FD16	2	0.001	0.000	0.0020	0.000	0.000	0	0.02	o. 14	1.93	16.0
5H	3	FD16	3	0.005	0.000	0.0000	0.000	0.003	0	0.01	0.09	1.05	7.4
51	3	FD18	1	0.003	0.000	0.0000	0.000	0.000	0	0.01	0.10	1.67	8.8
51	3	FD18	2	0.019	0.000	0.0000	0.000	0.001	0	0.03	0.10	0.64	0.7
60	1	210	1	0.000	0.000	0.0000	0.000	0.000	0	0.00	1.70	26.24	113.3
6D	1	210	2	0.000	0.000	0.0000	0.000	0.000	0	0.00	1.31	2.11	81.4
6D	1	210	3	0.000	0.000	0.0000	0.000	0.000	0	0.00	0.70	4.05	26.5
6D	1	210	4	0.000	0.000	0.0000	0.000	0.000	0	0.02	3.27	4.56	92.4
60	2	AH05	1	0.007	0.002	0.0040	0.002	0.019	0	0.02	0.52	1.19	4.0
60	3	FD13	1	0.025	0.000	0.0000	0.000	0.000	0	0.0s	0.12	0.63	0.6
60	3	FD13	2	0.012	0.000	0.0020	0.000	0.004	0	0.04	0.08	1.23	1.7
6D	3	FO13	3	0.005	0.000	0.0010	0.000	0.000	0	0.05	0.09	0.58	1.2

SPECIES=CYRTOOARIA

STATION	YEAR	SAMPLE	REP	N	F	P	0	PAH	PHYTANE	PRISTANE	LALK	TALK	TOT
5F	1	230	1	0.000	0.000	0.0000	0.000	0.000	0	0.00	0.41	1.27	30.7
5F	1	230	2	0.000	0.000	0.0020	0.000	0.000	0	0.00	0.01	0.69	12.5
5F	1	230	3	0.000	0.000	0.0000	0.000	0.000	0	0.00	0,34	0.77	35.6
5F	1	230	4	0.000	0.005	0.0000	0.000	0.000	0	0.00	0.03	0.25	89.1
5F	1	230	5	0.000	0.000	0.0010	0.000	0.000	0	0.00	0.30	453.1	20.6
5F	2	AH15	1	0.003	0.000	0.0030	0.000	0.002	0	0.01	0.31	0.62	2.8
5F	2	AH15	2	0.002	0.000	0.0020	0.000	0.003	0	0.01	0.33	1.57	7.7
5F	2	AH15	3	0.003	0.001	0.0030	0.000	0.003	0	0.04	0.33	11.28	61.2
5F	2	AH15	4	0.002	0.001	0.0010	0.000	0.001	0	0.02	0.37	1.22	6.4
5F	3	FD14	1	0.026	0.001	0.0130	0.005	0.008	0	0.02	0.04	1.04	8.0
5F	3	FD14	2	0.010	0.002	0.0110	0.002	0.011	0	0.03	0.10	0.47	10.6
5F	3	FD14	3	0.007	0.003	0.0160	0.005	0.003	0	0.03	0.10	0.63	13.5
5F	3	FD14	4	0.018	0.000	0.0000	0.000	0.000	0	0.02	0.16	0.76	1.2
6G	2	AH16	1	0.004	0.000	0.0050	0.000	0.005	0	0.09	1.23	2.96	19.3
6G	3	FD12	1	0.003	0.000	0.0030	0.000	0.005	0	O a t	0.04	0.44	0.1

BEAUFORT SEA MONITORING PROGRAM-- TISSUE ANALYSES DATA
HYDROCARBON CONCENTRATIONS

SPECIES=CYRTOOARIA

STATION	YEAR	SAMPLE	REP	N	F	P	D	PAN	PHYTANE	PRISTANE	LALK	TALK	TOT
6G	3	F012	2	0.010	0.000	0.0070	0.000	0.009	0	0.01	0.03	0.58	2.1
6G	3	FD12	3	0.006	0.000	0.0040	0.000	0.000	0	0.02	0.10	0.63	1.2
6G	3	FD12	4	0.000	0.000	0.0000	0.000	0,000	0	0.00	0.10	0.50	0.7

SPECIES=MACOMA

STATION	YEAR	SAMPLE	REP	N	F	P	D	PAN	PHYTANE	PRISTANE	LALK	TALK	TOT
SD	1	220	1	26.370	4.569	5.7950	1.194	0.021	o	0.00	0.30	2.93	36.8
6D	1	220	2	0.000	0.000	0.0000	0.000	0.000	0	0.02	1.04	13.71	48.6
6D	2	AH06	1	0.006	0.000	0.0000	0.000	0.002	0	0.04	0.30	1.64	4.6
6D	2	AH06	2	0.064	0.051	0.0040	0.002	0.013	0	0.15	1.20	24.02	82.1

SPECIES=PORTLANDIA

STATION	YEAR	SAMPLE	REP	N	F	P	D	PAH	PHYTANE	PRISTANE	LALK	TALK	TOT
1A	2	AJ04	1	0.010	0.007	0.0100	0.000	0.000	0	0.05	0.17	1.78	8.2
1A	2	AJ04	2	0.009	0.001	0.0100	0.002	0.048	0	0.05	0.26	5.80	11.6
1A	2	AJ04	3	0.010	0.004	0.0130	0.001	0.008	0	0.00	0.16	2.14	7.9
1A	2	AJ04	4	0.009	0.000	0.0050	0.000	0.007	0	0.07	0.61	17.45	119.3
1A	3	FO03	1	0.027	0.000	0.0030	0.000	0.000	0	0.05	0.21	3.12	6.7
1A	3	FD03	2	0.027	0.000	0.0100	0.000	0.008	0	0.05	0.20	2.95	13.8
1A	3	FO03	3	0.000	0.000	0.0000	0.000	0.000	0	0.05	0.21	3.82	13.5
1A	3	FD03	4	0.008	0.000	0.0000	0.000	0.000	0	0.05	0.16	2.65	4.2

BEAUFORT SEA MONITORING PROGRAM-- TISSUE ANALYSES OATA
RATIO VARIABLES

SPECIES=AMPHIPODS

STAT 10N	YEAR	SAMPLE	REP	FFP1	ISO/ALK	LALK/TALK	PRIS/PHYT	N/P	P/D
1A	3	FO02	1	.	3.9	0.12			
1A	3	FO02	2	.	5.2	0.12			
1A	3	FO02	3	.	4.4	0.06			
1B	3	FO07	1	.	45.1	0.10			
1B	3	FO07	2	.	48.3	0.06			
1B	3	FO07	3	.	16.7	0.56			

SPECIES=ANONYX

STATION	YEAR	SAMPLE	REP	FFP1	ISO/ALK	LALK/TALK	PRIS/PHYT	N/P	P/D
1E	2	AJ03	1		1,6	0.19			
2F	2	143							
2F	2	143							
2F	2	143							
2F	2	143							
3A	2	I 30							
3A	2	I 30							
3A	2	I30							
3A	2	I30	.		.	.			
40	2	AI05	1	94	5.3	0.07			
5H	2	J24							
5H	2	J24							
5H	2	J24							
5H	2	J24			.				
5H	3	FD17	o		29.7	0.39		.	
6G	2	AH85	1		10.5	0.72		6.0	
6G	2	AH85	2		9.5	0.56			
6G	2	AH85	3		10.9 "	0.53		.	
6G	2	AH85	4		8.9	0.7s		15.0	
7B	3	FO1O	1		8.0	0.17			
70	3	FD1O	2		8.4	0.04		.	
7B	3	FD1O	3		8.1	0.42		91.5	
7C	2	AH49	1		8.1	0.46			
7C	3	FO09	0		11.9	0.43		.	
7E	2	AH14	1		9.6	0.63		8.0	
7E	3	FD11	1	36	5.0	0.17			
7E	3	FD11	2		6.6	0.15			
7E	3	FD11	3		5.5	0.25			
7E	3	FD11	4		5.6	0.2s			

BEAUFORT SEA MONITORING PROGRAM-- TISSUE ANALYSES OATA
RATIO VARIABLES

SPECIES=ASTARTE

STATION	YEAR	SAMPLE	REP	FFPI	ISO/ALK	LALK/TALK	PRIS/PHYT	N/P	P/D
1A	2	AI94	1	83	0.3	0.54		2.8	2.5
1A	3	FD04	0	83	0.2	0.28			
1B	3	FD08	1		0.3	0.15			
1B	3	FD08	2		0.3	0.11			
1B	3	FD08	3		0.7	0.04		.	
2F	3	FDO1	1		111.2	0.06		6.0	
2F	3	FDOI	2		42.4	0.34		10.0	
2F	3	FDO1	3		2.4	0.17			.
2F	3	Fool	4		27.5	0.15			0.0
3A	1	210	1	.	0.0	0.04		.	
3A	2	AI32	1	89	0.3	0.59		1.0	
3A	3	FD15	1	3	0.6	0.05		0.0	
3A	3	FD15	2	50	.	0.01			
3A	3	F015	3		0.0	0.07			
3A	3	FD15	4	79	1.8	0.27		.	
5H	2	AJ58	1	7s	0.2	0.35		1.0	
5H	2	AJ58	2	75	0.1	0.38		.	
5H	2	AJ58	3	73	0.5	0.04		3.0	
5H	2	AJ58	4	80	0.4	0.34		0.3	
5H	3	FD16	1		0.7	0.80		.	
5H	3	FD16	2	.	0.6	0.07		0.5	
5H	3	FD16	3	63	1.3	0.08			
51	3	FD18	1		2.4	0.06			
51	3	FD18	2	96	0.9	0.19			
6D	1	210	1		0.0	0.06			
60	1	210	2		0.0	0.62			
6D	1	210	3		0.2	0.19			
6D	1	210	4		0.2	0.71		.	.
60	2	AH05	1	44	0.4	0.44		1.8	2.0
60	3	FD13	1		0.8	0. 1s		.	
6D	3	FD13	2	78	1.1	0.06		6.0	
6D	3	FO13	3		0.9	0.15		5.0	

SPECIES=CYRTOOARIA

STATION	YEAR	SAMPLE	REP	FFPI	ISO/ALK	LALK/TALK	PRIS/PHYT	N/P	P/D
5F	1	230	1		0.0	0.32		.	
SF	1	230	2		0.0	0.02		0.0	:
SF	1	230	3		0.0	0.44			
5F	1	230	4		0.0	0.12	.	.	.
SF	1	230	5		0.0	0.00	.	0.0	.
SF	2	AH15	1	75	0.3	0.50	.	1.0	.
5F	2	AH15	2	57	0.3	0.21		1.0	.
5F	2	AH15	3	70	0.6	0.03		1 .	0
5F	2	AH15	4	80	0.3	0.30		2.0	.
5F	3	F014	1	85	1.4	0.04		2.2	2.6
5F	3	FD14	2	69	1.2	0.22		0.9	5.5
5F	3	FD14	3	91	2.2	0.16		0.4	3.2
5F	3	FD14	4		0.9	0.21	.	.	.
6G	2	AH16	1	64	0.8	0.42	.	0.8	.
6G	3	FO12	1	55	0.5	0.09	.	1.0	.

BEAUFORT SEA MONITORING PROGRAM-- TISSUE ANALYSES OATA
RATIO VARIABLES

SPECIES=CYRTODARIA

STATION	YEAR	SANPLE	REP	FFPI	ISO/ALK	LALK/TALK	PRIS/PHYT	NIP	P/D
6G	3	F012	2	65	2.2	0.05		1.4	.
6G	3	FD12	3	.	0.3	0.17		1.5	.
6G	3	FD12	4		0.3	0.20			

SPECIES=MACOMA

STATION	YEAR	SAMPLE	REP	FFPI	ISO/ALK	LALK/TALK	PRIS/PHYT	NIP	P/D
6D	1	220	1	100	.	0.10		4.6	4.9
60	1	220	2	.	0.2	0.08			
60	2	AH06	1	75	0.4	0.18		.	.
60	2	AH06	2	90	1.0	0.05		16.0	2.0

SPECIES=PORTLANDIA

STAT 10N	YEAR	SAMPLE	REP	FFPI	ISO/ALK	LALK/TALK	PRIS/PHYT	N/P	P/D
1A	2	AJ04	1	.	0.8	0.10		1.0	.
1A	2	AJ04	2	31	0.8	0.05		0.9	5.0
1A	2	AJ04	3	76	0.4	0.07		0.8	13.0
1A	2	AJ04	4	67	0.8	0.03		1.8	.
1A	3	FO03	1		0.7	0.07		9.0	.
1A	3	FO03	2	82	0.8	0.07		2.7	.
1A	3	FO03	3		0.8	0.0s			
1A	3	FO03	4		0.9	0.06			

SECTION 9

GEOMETRIC MEANS AND PERCENT STANDARD ERRORS FOR ALL ANALYTE CONCENTRATIONS FOR WHICH THERE WERE AT LEAST TWO YEARS OF DATA FOR EACH ORGANISM AT A GIVEN LOCATION

BEAUFORT SEA MONITORING PROGRAM-- TISSUE CONCENTRATION DATA
DESCRIPTIVE STATISTICS BY SPECIES AND STATION

SPECIES=ANONYX STATION=7C

TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 95% CONF. LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
BA	1	30		0	
co	1	0.72		0.00	
CR	1	2.71		0.00	
CU	1	149		0	
PB	1	0.00		0.00	
v	1	1.9		0.0	
ZN	1	0		0	
N	2	O w l	8.40	0.000	0.024
F	2	0.000	1.00	0.000	0.000
P	2	0.000	1.00	0.000	0.000
o	2	0.000	1.00	0.000	0.000
PAH	2	0.000	1.00	0.000	0.000
PHYT	2	0	1.00	0	0
PRIS	2	3.42	6.0s	0.10	116.39
LALK	2	1.12	2.69	0.16	7.81
TALK	2	2.s1	2.61	0.38	16.43
TOT	2	34.7	1.15	26.9	45.4
FFPI	0			0	
ISO/ALK	2	9.8	1.22	6.7	14.4
LALK/TAL	2	0.45	1.03	0.42	0.48
PRIS/PHY	0			0.0	
N/P	0			0.0	
P/D	0			0.0	
BA/CR	1	11.1		0.0	
BA/V	1	15.8		0.0	

BEAUFORT SEA MONITORING PROGRAM-- TISSUE CONCENTRATION OATA
DESCRIPTIVE STATISTICS BY SPECIES AND STATION

SPECIES=ANONYX STATION=7E

TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	%STD ERR OF GEOM. MEAN	LOWER 95% CONF. LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
BA	1	52		0	
CD	1	0.27		0.00	
CR	1	0.77		0.00	
CU	1	99		0	
PB	1	0.00		0.00	
v	1	0.4		0.0	
ZN	1	0		0	
N	2	0.010	1.21	0.007	0.014
F	2	0.000	1.00	0.000	0-000
P	2	0.000	3.32	0.000	0.003
D	2	0.000	too	0.000	0.000
PAH	2	0.000	2.06	0.000	0.001
PHYT	2	0	1.00	0	0
PRIS	2	4.59	7.02	0.10	209.26
LALK	2	0.84	4.50	0.04	16.04
TALK	2	2.37	2.54	0.38	14.79
TOT	2	9.2	5.55	0.3	263.8
FFPI	1	36		0	
I SO/ALK	2	7.3	1.30	4.4	12.4
LALK/TAL	2	0.35	1.77	0.12	1.08
PRIS/PHY	0			0.0	
N/P	1	8.0		0.0	
P/D	0			0.0	
BA/CR	1	67.5		0.0	
BA/V	1	130.0		0.0	

BEAUFORT SEA MONITORING PROGRAM-- TISSUE CONCENTRATION DATA
DESCRIPTIVE STATISTICS BY SPECIES AND STATION

SPECIES=ASTARTE STATION=1A

TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 95% CONF. LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
BA	1	22		o	
CD	1	23.89		0.00	
CR	1	2.72		0.00	
CU	1	13		0	
PB	1	0.37		0.00	
v	1	2.5		0.0	
ZN	1	0		0	
N	2	0.012	1.18	0.009	0.016
F	2	0.001	11.87	0.000	0.152
P	2	0.001	7.14	0.000	0.034
D	2	0.000	4.58	0.000	0.009
PAH	2	0.004	1.84	().001	0.013
PHYT	2	0	1.00	o	0
PRIS	2	0.0s	2.00	0.01	0.18
LALK	2	0.89	3.00	0.10	7.64
TALK	2	2.28	2.10	0.s0	10.46
ToT	2	4.7	2.19	1.0	22.0
FFPI	2	83	1.00	83	83
ISO/ALK	2	0.3	1.13	0.2	0.3
LALK/TAL	2	0.39	1.38	0.21	0.73
PRIS/PHY	o			0.0	
N/P	1	2.8		0.0	
P/D	1	2.5		0.0	
BA/CR	1	8.1		0.0	
BA/V	1	8.8		0.0	

BEAUFORT SEA MONITORING PROGRAM-- TISSUE CONCENTRATION DATA
DESCRIPTIVE STATISTICS BY SPECIES AND STATION

SPECIES=ASTARTE STATION=3A

TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 95% CONF. LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
BA	3	11	1.30	7	19
CD	3	3.13	2.34	0.59	16.55
CR	3	2.08	1.18	1.50	2.89
CU	3	12	1.13	9	15
PB	2	0.37	1.32	0.21	0.63
v	3	2.3	1.38	1.2	4.3
ZN	3	0	1.00	0	0
N	3	0.000	2.70	0.000	0.004
F	3	0.000	2.76	0.000	0.002
P	3	0.000	2.88	0.000	0.003
D	3	0.000	1.00	0.000	0.000
PAN	3	0.000	2.47	0.000	0.003
PHYT	3	0	1.00	0	0
PRIS	3	0.00	7.70	0.00	0.09
LALK	3	0.31	2.97	0.04	2.62
TALK	3	2.83	1.85	0.84	9.48
TOT	3	9.0	3.23	0.9	89.3
FFPI	2	45	1.96	12	170
ISO/ALK	3	0.0	10.89	0.0	1.2
LALK/TAL	3	0.11	2.32	0.02	0.57
PRIS/PHY	0			0.0	
N/P	2	0.0	100.00	0.0	83.2
P/D	0			0.0	
BA/CR	3	5.3	1.12	4.3	6.6
BA/V	3	4.8	1.10	4.0	5.7

BEAUFORT SEA Monitoring pROGRAM-- TISSUE CONCENTRATION oATA
DESCRIPTIVE STATISTICS BY SPECIES AND STATION

SPECIES=ASTARTE STATION=5H

TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 95% CONF. LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
BA	1	16		0	
CD	1	11.40		0.00	
CR	1	1.66		0.00	
CU	1	11		0	
PB	1	0.00		0.00	
v	1	1.2		0.0	
ZN	1	0		0	
N	2	0.002	1.39	0.001	0.004
F	2	0.000	4.66	0.000	0.009
P	2	0.000	1.89	0.000	0.002
D	2	0.000	1.00	0.000	0.000
PAH	2	0.001	2.39	0.000	0.004
PHYT	2	0	1.00	0	0
PRIS	2	0.01	1.01	0.01	0.01
LALK	2	0.34	1.48	0.16	0.74
TALK	2	1.83	1.62	0.71	4.68
ToT	2	5.5	1.76	1.8	16.7
FFPI	2	69	1.10	57	83
ISO/ALK	2	0.4	1.82	0.1	1.5
LALK/TAL	2	0.19	1.09	0.16	0.22
PRIS/PHY	0			0.0	
N/P	2	0.7	1.35	0.4	1.2
P/o	0			0.0	
BA/CR	1	9.8		0.0	
BA/V	1	13.7		0.0	

BEAUFORT SEA MONITORING PROGRAM-- TISSUE CONCENTRATION DATA
DESCRIPTIVE STATISTICS BY SPECIES AND STATION

SPECIES=ASTARTE STATION=6D

TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 95% CONF. LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
BA	3	33	1.09	28	39
CD	3	4.92	2.48	0.83	29.28
CR	3	3.26	1.12	2.63	4.04
CU	3	28	1.05	25	30
PB	2	1.09	1.20	0.76	1.56
v	3	7.0	1.18	5.0	9.7
ZN	3	0	1.00	0	0
N	3	0.002	4.52	0.000	0.039
F	3	0.000	2.76	0.000	0.002
P	3	0.001	2.92	0.000	0.005
D	3	0.000	2.76	0.000	0.002
PAH	3	0.001	4.88	0.000	0.019
PHYT	3	0	1.00	0	0
PRIS	3	0.01	4.48	0.00	0.13
LALK	3	0.42	2.27	0.08	2.09
TALK	3	1.73	1.84	0.53	5.68
TOT	3	8.7	3.43	0.6	75.3
FFPI	2	59	1.33	34	102
ISO/ALK	3	0.1	5.20	0.0	2.9
LALK/TAL	3	0.24	1.4s	0.42	0.51
PRIS/PHY	0			0.0	
N/P	2	3.1	1.77	1.0	9.5
P/D	1	2.0		0.0	
BA/CR	3	10.3	1.09	8.7	12.1
BA/V	3	4.8	1.09	4.0	5.6

BEAUFORT SEA MONITORING PROGRAM-- TISSUE CONCENTRATION DATA
DESCRIPTIVE STATISTICS BY SPECIES AND STATION

SPECIES=CYRTODAR STATION=5F

TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STO ERR OF GEOM. MEAN	LOWER 95% CONF. LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
BA	3	20	1.14	15	25
CD	3	1.02	1.47	0.48	2.19
CR	3	2.52	1.09	2.12	3.00
CU	3	18	1.18	13	24
PB	2	0.60	1.20	0.42	0.86
v	3	4.6	1.22	3.2	6.8
ZN	3	0	1.00	0	0
N	3	0.001	4.25	0.000	0.026
F	3	0.000	1.53	0.000	0.001
P	3	0.001	2.18	0.000	0.006
D	3	0.000	2.48	0.000	0.001
PAH	3	0.001	2.82	0.000	0.006
PHYT	3	0	1.00	0	0
PRIS	3	0.00	5.89	0.00	0.11
LALK	3	0.15	1.50	0.07	0.33
TALK	3	1,47	1.46	0.70	3.08
TOT	3	12.1	1.61	4.8	30.7
FFPI	2	76	1.08	65	88
ISO/ALK	3	0.0	19.55	0.0	12.3
LALK/TAL	3	0.10	1.47	0.05	0.22
PRIS/PHY	0			0.0	
N/P	3	0.0	22.00	0.0	20.7
P/o	1	3.6		0.0	
BA/CR	3	7.8	1.07	6.8	8.9
BA/V	3	4.2	1.09	3.6	5.0

BEAUFORT SEA MONITORING PROGRAM-- TISSUE CONCENTRATION DATA
DESCRIPTIVE STATISTICS BY SPECIES AND STATION

SPECIES=CYRTODAR STATION=6G

TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 95% CONF. LIMIT FOR G.M.	UPPER 9S% CONF. LIMIT FOR G.M.
BA	1	25		0	
CD	1	1.53		0.00	
CR	1	1.86		0.00	
CU	1	21		0	
PB	1	0.62		0.00	
v	1	5.3		0.0	
ZN	1	0		0	
N	2	0.003	4.40	0.001	0.006
F	2	0.000	1.00	0.000	0.000
P	2	0.003	1.72	0.001	0.008
D	2	0.000	1.00	0.000	0.000
PAN	2	0,002	2.49	0.000	0.012
PHYT	2	0	1.00	0	0
PRIS	2	0.02	4.99	0.00	0.43
LALK	2	0.27	4.62	0.01	5.36
TALK	2	1.26	2.36	0.23	6.73
TOT	2	3.6	5.33	0.1	96.0
FFPI	2	62	1.04	58	67
ISO/ALK	2	0.7	1.1s	0.5	0.9
LALK/TAL	2	0.21	1.96	0.06	0.80
PRIS/PHY	0			0.0	
N/P	2	1.0	1.27	0.8	1.6
P/D	0			0.0	
BA/CR	1	13.4		0.0	
BA/V	1	4.7		0.0	

BEAUFORT SEA MONITORING PROGRAM-- TISSUE CONCENTRATION DATA
DESCRIPTIVE STATISTICS BY SPECIES ANO STATION

SPECIES=MACOMA STATION=6D

TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 95% CONF. LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
BA	1	109		0	
co	1	2.31		0.00	
CR	1	8.65		0.00	
CU	1	18		0	
PB	1	2.97		0.00	
v	1	20.4		0.0	
ZN	1	0		0	
N	2	0.032	1.61	0.012	0.081
F	2	0.007	3.08	0.001	0.063
P	2	0.004	6.13	0.000	0.137
D	2	0.002	4.88	0.000	0. 0s0
PAH	2	0.003	1.90	0.001	0.010
PHYT	2	0	1.00	0	0
PRIS	2	0.01	7.74	0.00	0.57
LALK	2	0.58	1.04	0.s4	0.62
TALK	2	6.31	1.00	6.26	6.37
TOT	2	28.7	1.47	13.4	61.3
FFPI	2	91	1.10	75	110
ISO/ALK	2	0.3	1.80	0.1	1.1
LALK/TAL	2	0.09	1.04	0.08	0.10
PRIS/PHY	0			0.0	
N/P	2	8.5	1.88	2.5	29.3
P/D	2	3.1	1.56	1.3	7.4
BA/CR	1	12.7		0.0	
BA/V	1	5.4		0.0	

BEAUFORT SEA MONITORING PROGRAM--TISSUE CONCENTRATION DATA
DESCRIPTIVE STATISTICS BY SPECIES ANO STATION

SPECIES=PORTLAND STATION=1A

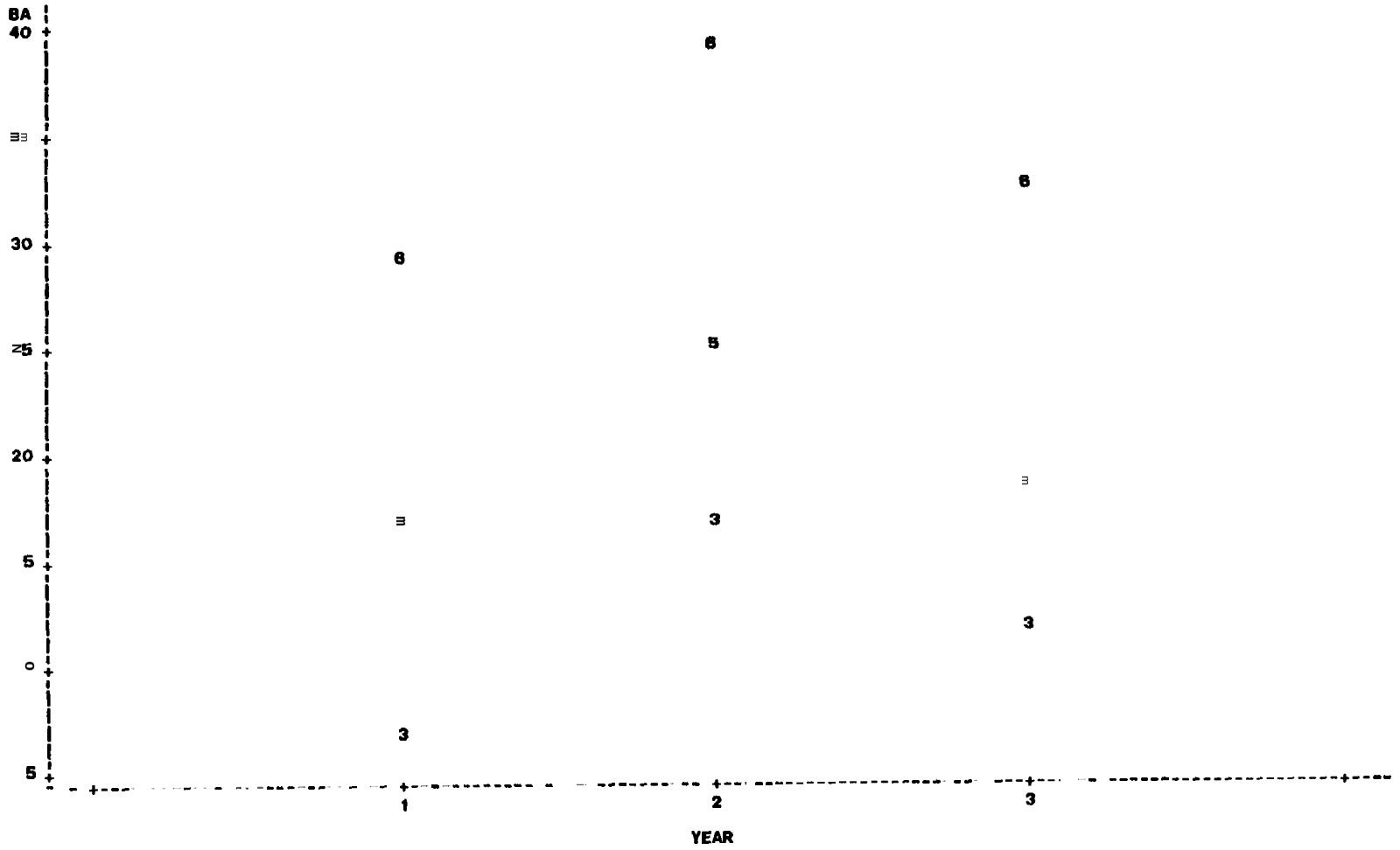
TYPE OF CONCENTRATION	# NONMISSING VALUES	GEOMETRIC MEAN	% STD ERR OF GEOM. MEAN	LOWER 95% CONF. LIMIT FOR G.M.	UPPER 95% CONF. LIMIT FOR G.M.
BA	1	98		0	
CD	1	7.60		0.00	
CR	1	12.50		0.00	
CU	1	35		0	
PB	1	5.53		0.00	
v	1	22.7		0.0	
ZN	1	0		0	
N	2	0.007	1.40	0.003	0.013
F	2	0.000	3.66	0.000	0.005
P	2	0.003	3.49	0.000	0.030
o	2	0.000	1.97	0.000	0.001
PAH	2	0.001	3.69	0.000	0.014
PHYT	2	0	1.00	0	0
PRIS	2	0.04	1.37	0.02	0.07
LALK	2	0.22	1.16	0.17	0.30
TALK	2	3.71	1.19	2.62	5.25
TOT	2	11.7	1.38	6.2	21.9
FFPI	2	67	1.23	4s	100
I S0/ ALK	2	0.7	1.08	0.6	0.9
LALK/TAL	2	0.06	1.03	0.06	0.06
PRIS/PHY	0			0.0	
N/P	2	2.3	2.16	0.5	10.3
P/D	1	8.1		0.0	
BA/CR	1	7.9		0.0	
BA/V	1	4.3		0.0	

SECTION 10

PLOTS OF EACH ANALYTE CONCENTRATION VERSUS YEARS FOR EACH COMBINATION OF STATION AND ORGANISM

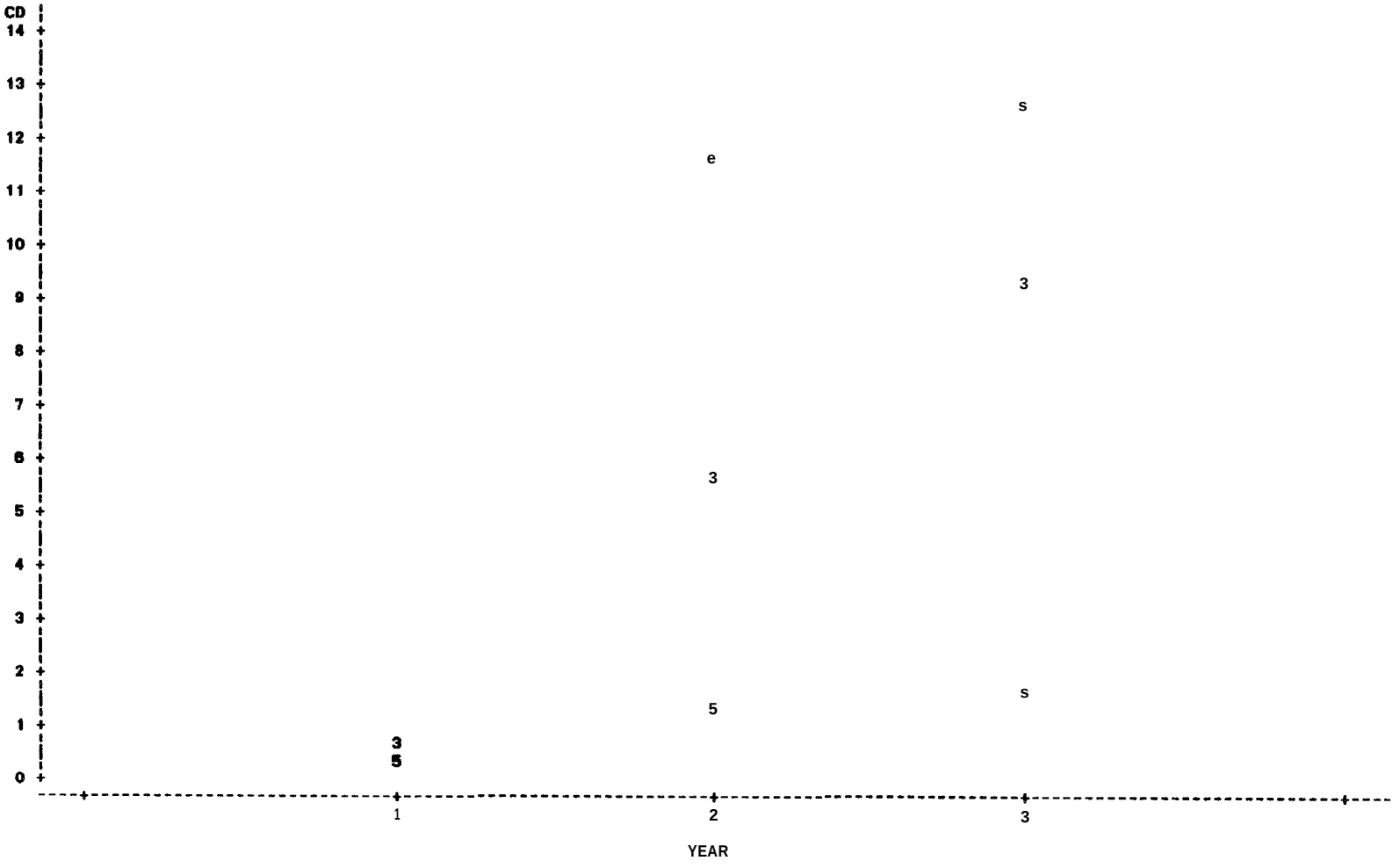
TISSUE DATA ANALYSES FOR SELECTED SPECIES AND SAMPLING STATIONS
PLOT OF GEOMETRIC MEANS FOR EACH DATA SUBSET AND YEAR
SYMBOLS USED ARE: 3=ASTARTE AT 3A
5=CYRTODARIA AT 5F
6=ASTARTE AT 8D

PLOT OF BA*YEAR SYMBOL IS VALUE OF SUBSET



TISSUE DATA ANALYSES FOR SELECTED SPECIES AND SAMPLING STATIONS
PLOT OF GEOMETRIC MEANS FOR EACH DATA SUBSET AND YEAR
SYMBOLS USED ARE: 3=ASTARTE AT 3A
5=CYRTODARIA AT SF
6= ASTARTE AT 8D

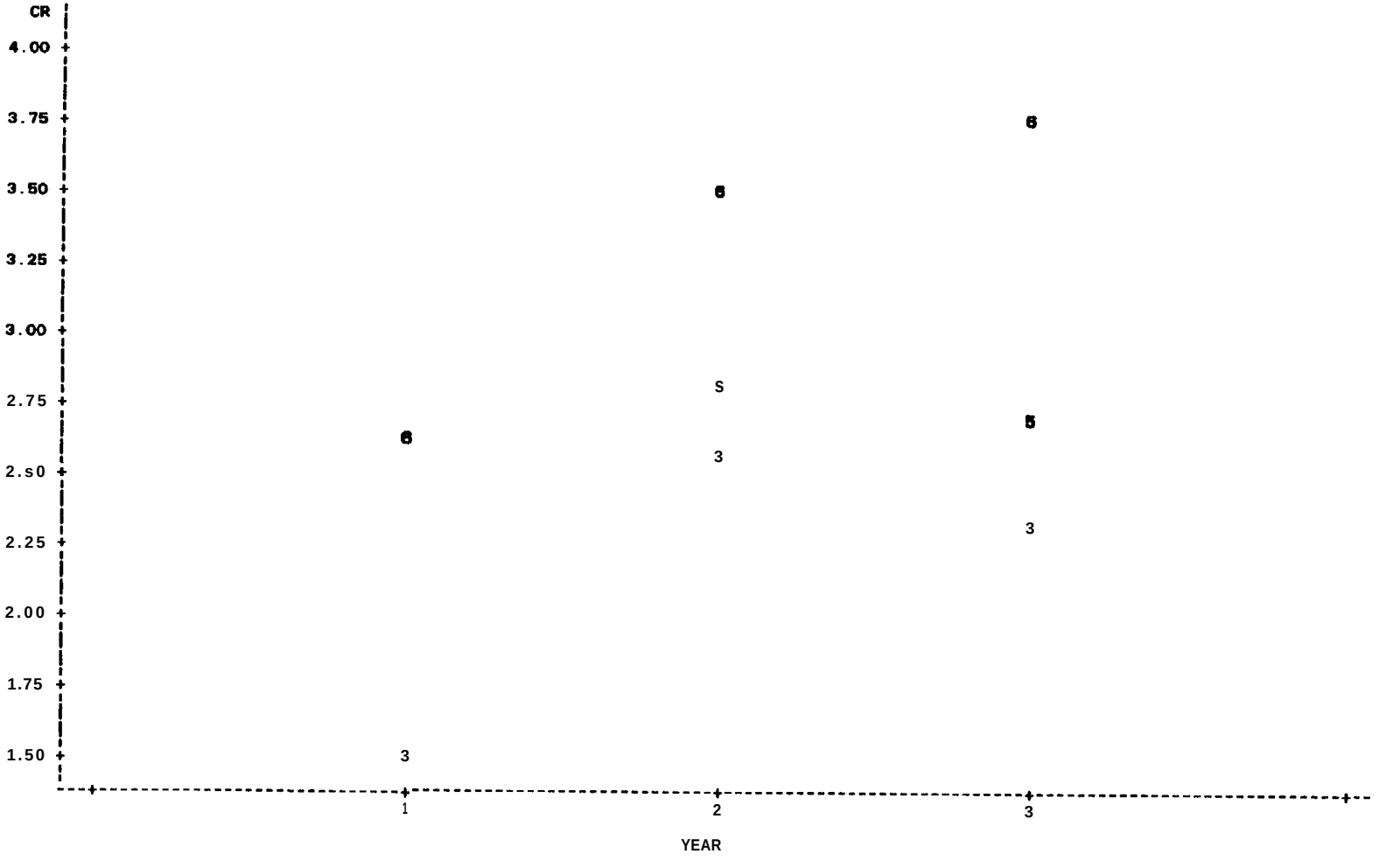
PLOT OF CD*YEAR SYMBOL IS VALUE OF SUBSET



NOTE : 1 OBS HIDDEN

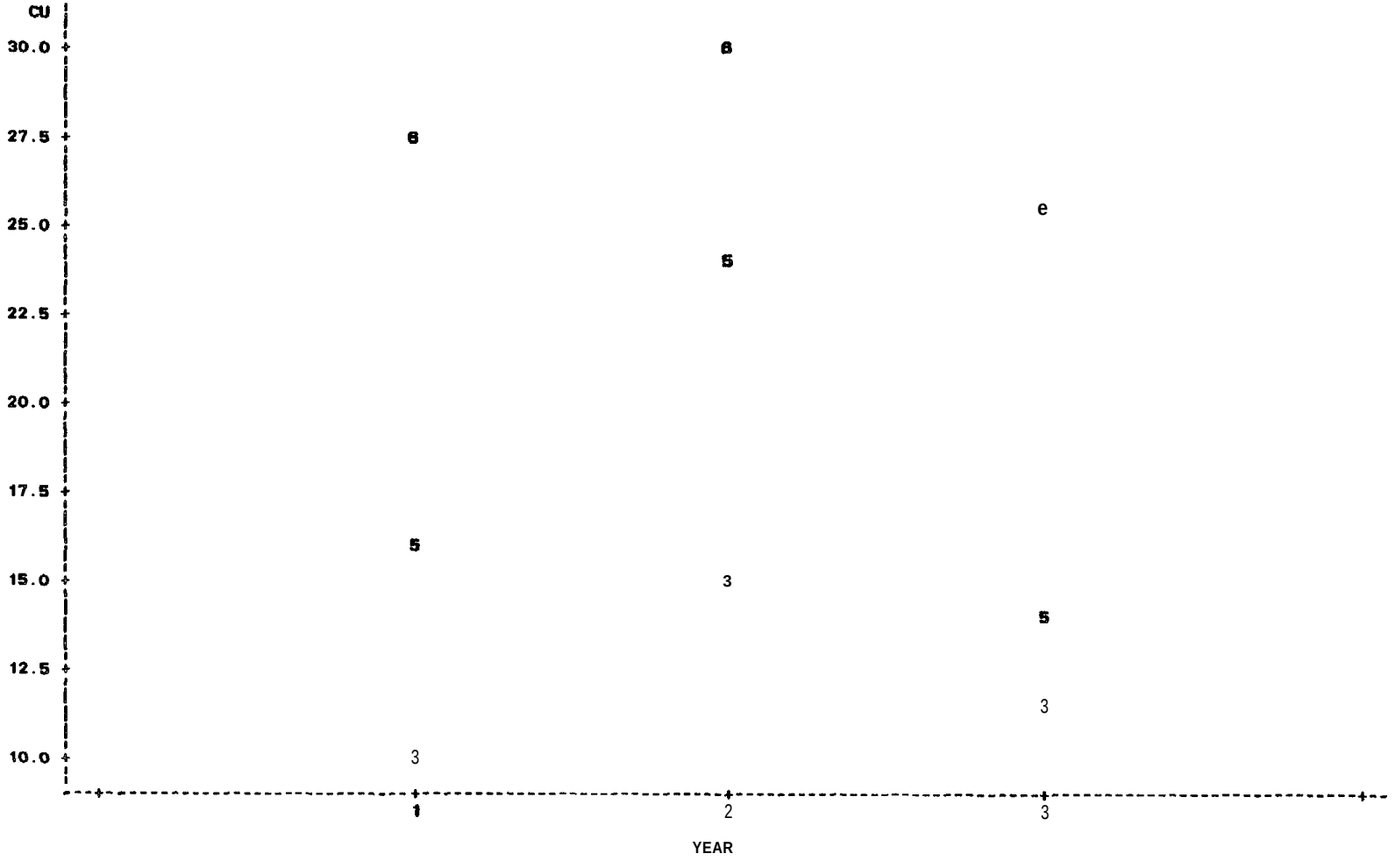
TISSUE DATA ANALYSES FOR SELECTED SPECIES ANO SAMPLING STATIONS
PLDT OF GEOMETRIC MEANS FOR EACH DATA SUBSET AND YEAR
SYMBOLS USED ARE : 3= ASTARTE AT 3A
5= CYRTODARIA AT 5F
6= ASTARTE AT 6D

PLOT OF CR*YEAR SYMBOL IS VALUE OF SUBSET



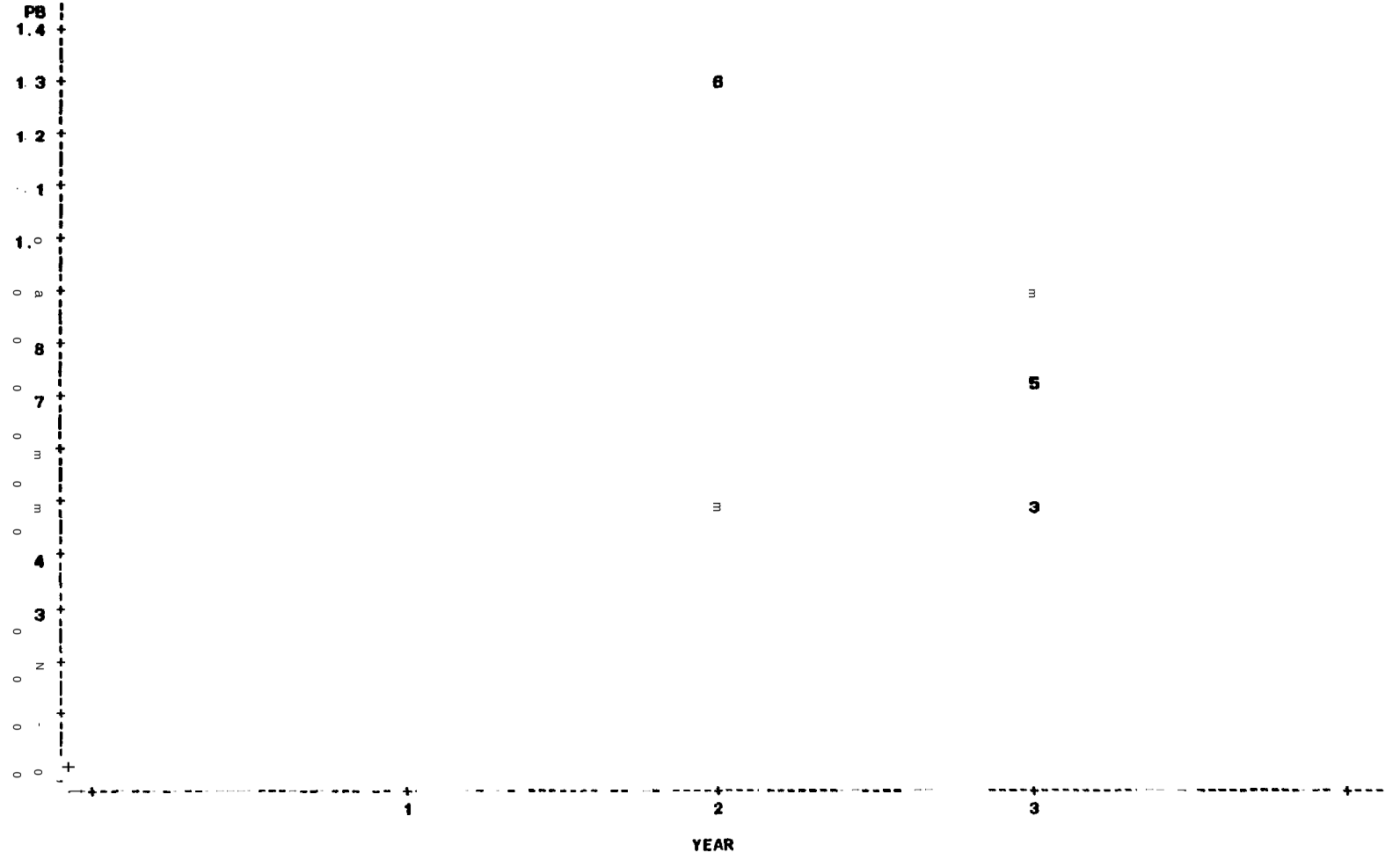
TISSUE DATA ANALYSES FOR SELECTED SPECIES AND SAMPLING STATIONS
PLOT OF GEOMETRIC MEANS FOR EACN OATA SUBSET AND YEAR
SYMBOLS USED ARE: 3=ASTARTE AT 3A
5=CYRTODARIA AT SF
6=ASTARTE AT 6D

PLOT OF CU*YEAR SYMBOL IS VALUE OF SUBSET



TISSUE DATA ANALYSES FOR SELECTED SPECIES AND SAMPLING STATIONS
PLOT OF GEOMETRIC MEANS FOR EACH DATA SUBSET AND YEAR
SYMBOLS USED ARE: 3=ASTARTE AT 3A
5=CYRTODARIA AT 5F
6=ASTARTE AT 6D

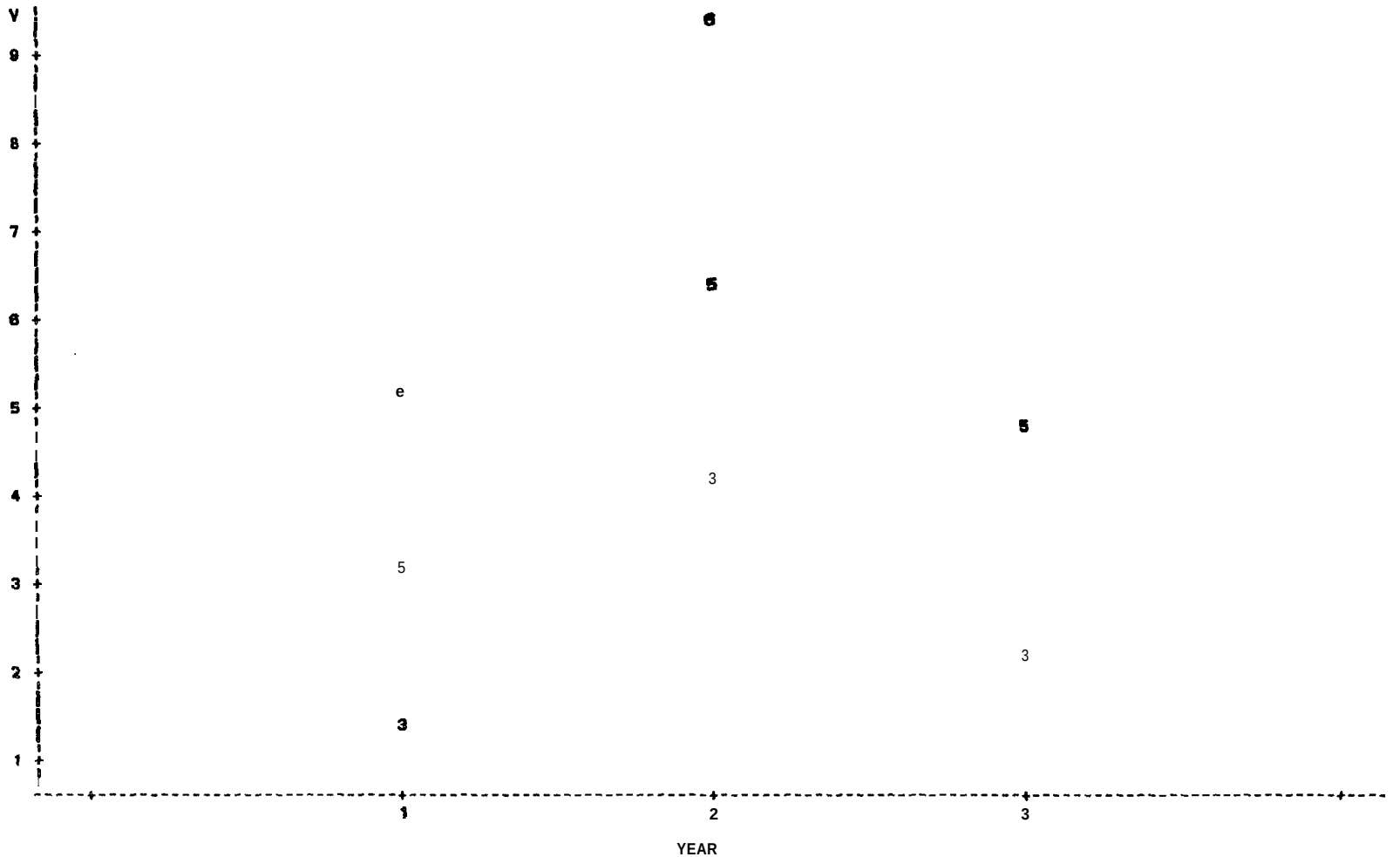
PLOT OF PB*YEAR SYMBOL IS VALUE OF SUBSET



NO 3 OBS HAD MISSING VALUES OR WERE OUT OF RANGE

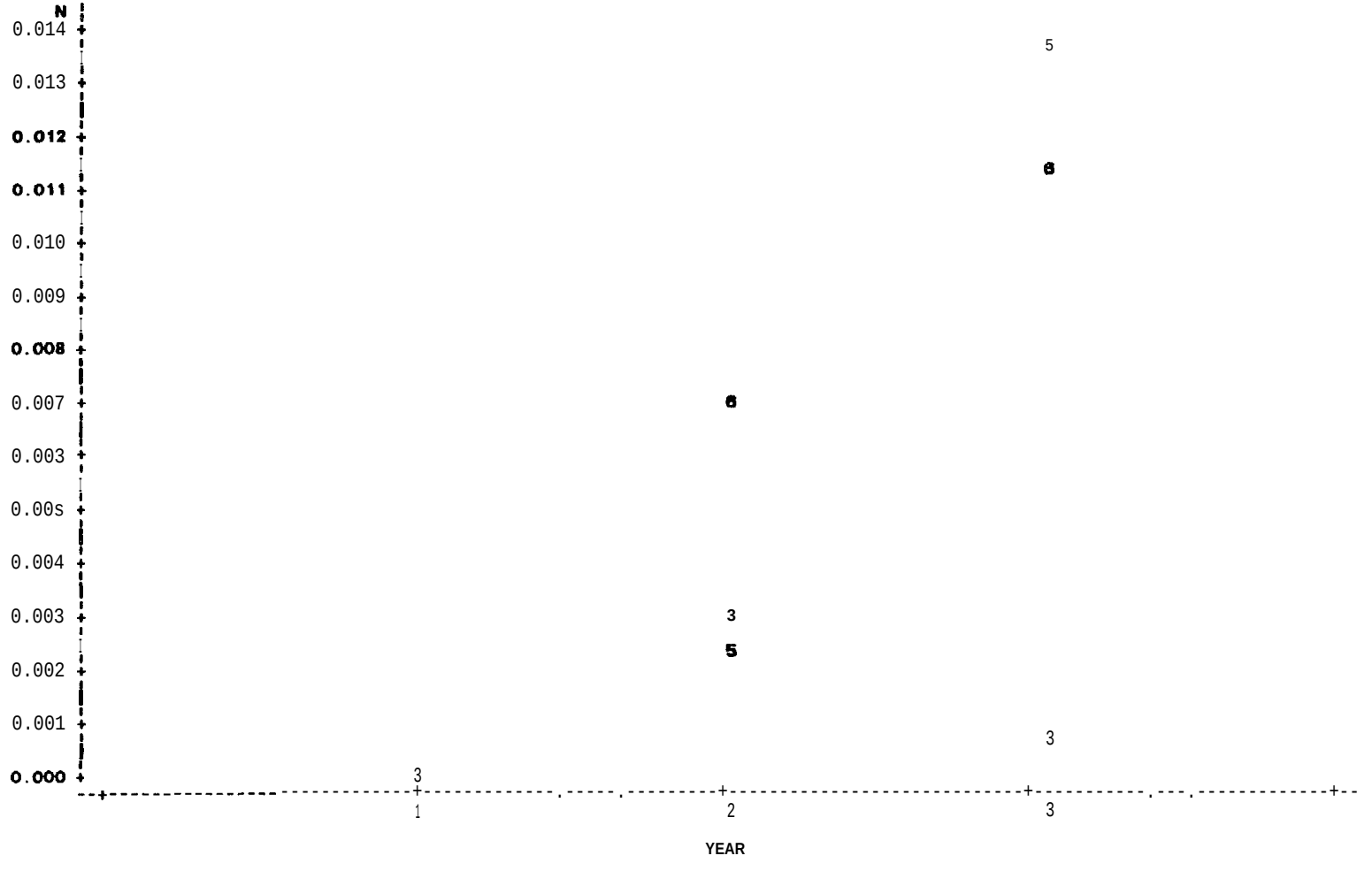
TISSUE OATA ANALYSES FOR SELECTED SPECIES AND SAMPLING STATIONS
PLOT OF GEOMETRIC MEANS FOR EACH OATA SUBSET AND YEAR
SYMBOLS USED ARE: 3=ASTARTE AT 3A
5=CYRTODARIA AT SF
6=ASTARTE AT 6D

PLOT OF V*YEAR SYMBOL IS VALUE OF SUBSET



TISSUE DATA ANALYSES FOR SELECTED SPECIES ANO SAMPLING STATIONS
PLOT OF GEOMETRIC MEANS FOR EACH OATA SUBSET ANO VEAR
SYMBOLS USED ARE: 3=ASTARTE AT 3A
5=CYRTODARIA AT SF
6=ASTARTE AT 6D

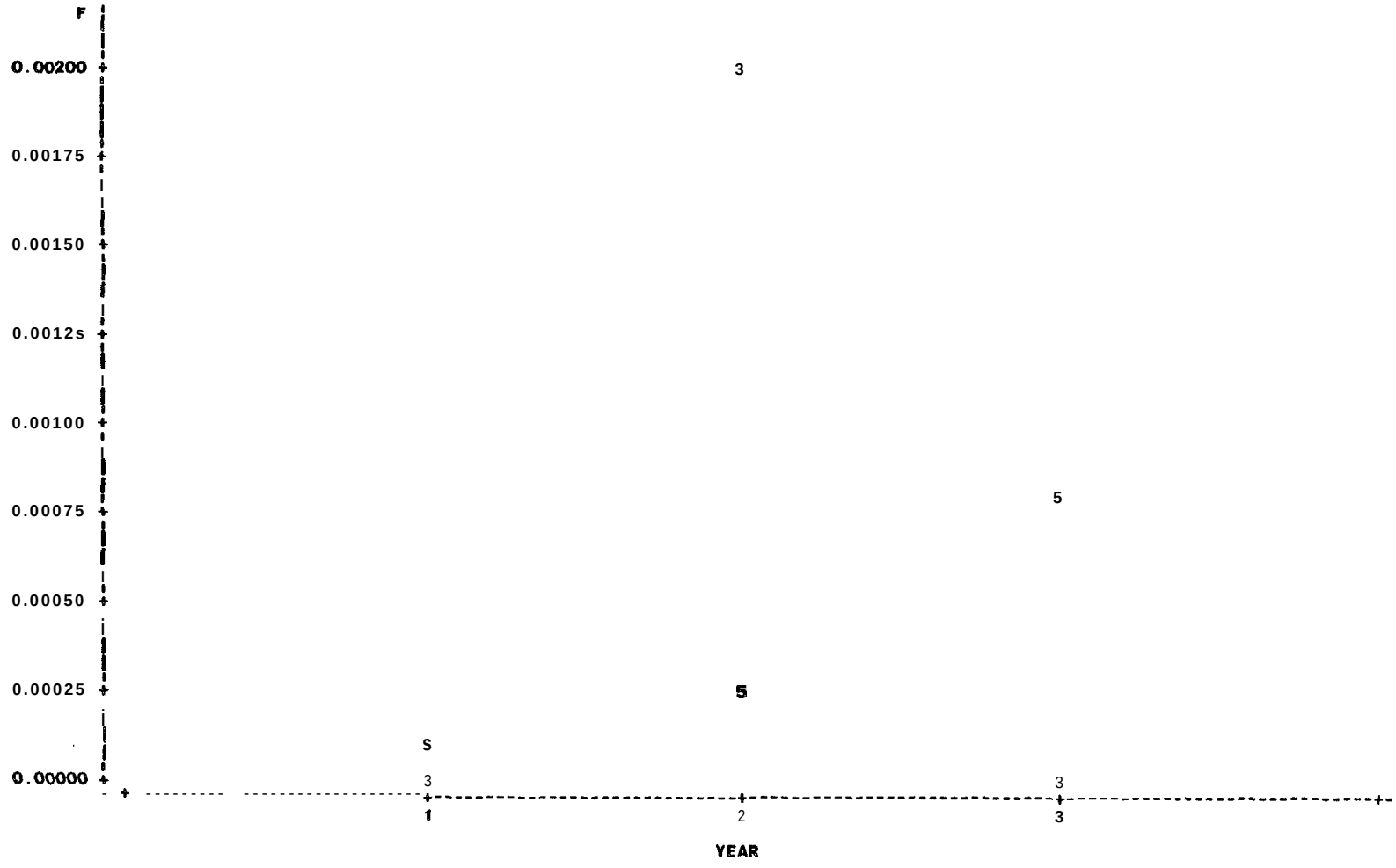
PLOT OF N*YEAR SYMBOL IS VALUE OF SUBSET



NOTE: 2 OBS HIOOEN

TISSUE OATA ANALYSES FOR SELECTED SPECIES AND SAMPLING STATIONS
PLOT OF GEOMETRIC MEANS FOR EACH OATA SUBSET AND YEAR
SYMBOLS USED ARE: 3=ASTARTE AT 3A
5=CYRTODARIA AT 5F
8=ASTARTE AT 8D

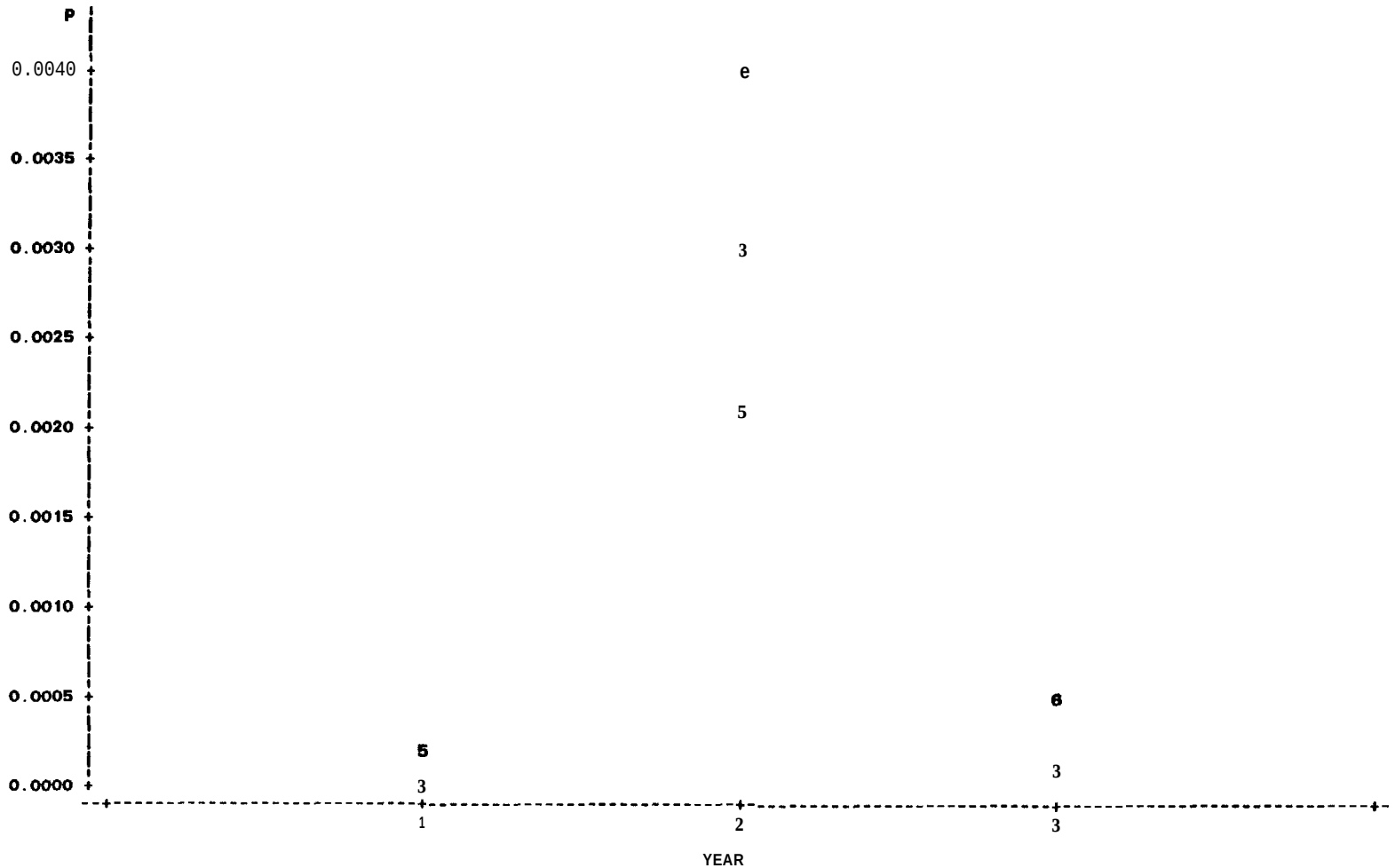
PLOT OF F*YEAR SYMBOL IS VALUE OF SUESET



NOTE: 3 00S HIDDEN

TISSUE DATA ANALYSES FOR SELECTED SPECIES AND SAMPLING STATIONS
PLOT OF GEOMETRIC MEANS FOR EACH OATA SUBSET AND YEAR
SYMBOLS USEO ARE: 3=ASTARTE AT 3A
5=CYRTODARIA AT SF
6=ASTARTE AT 6D

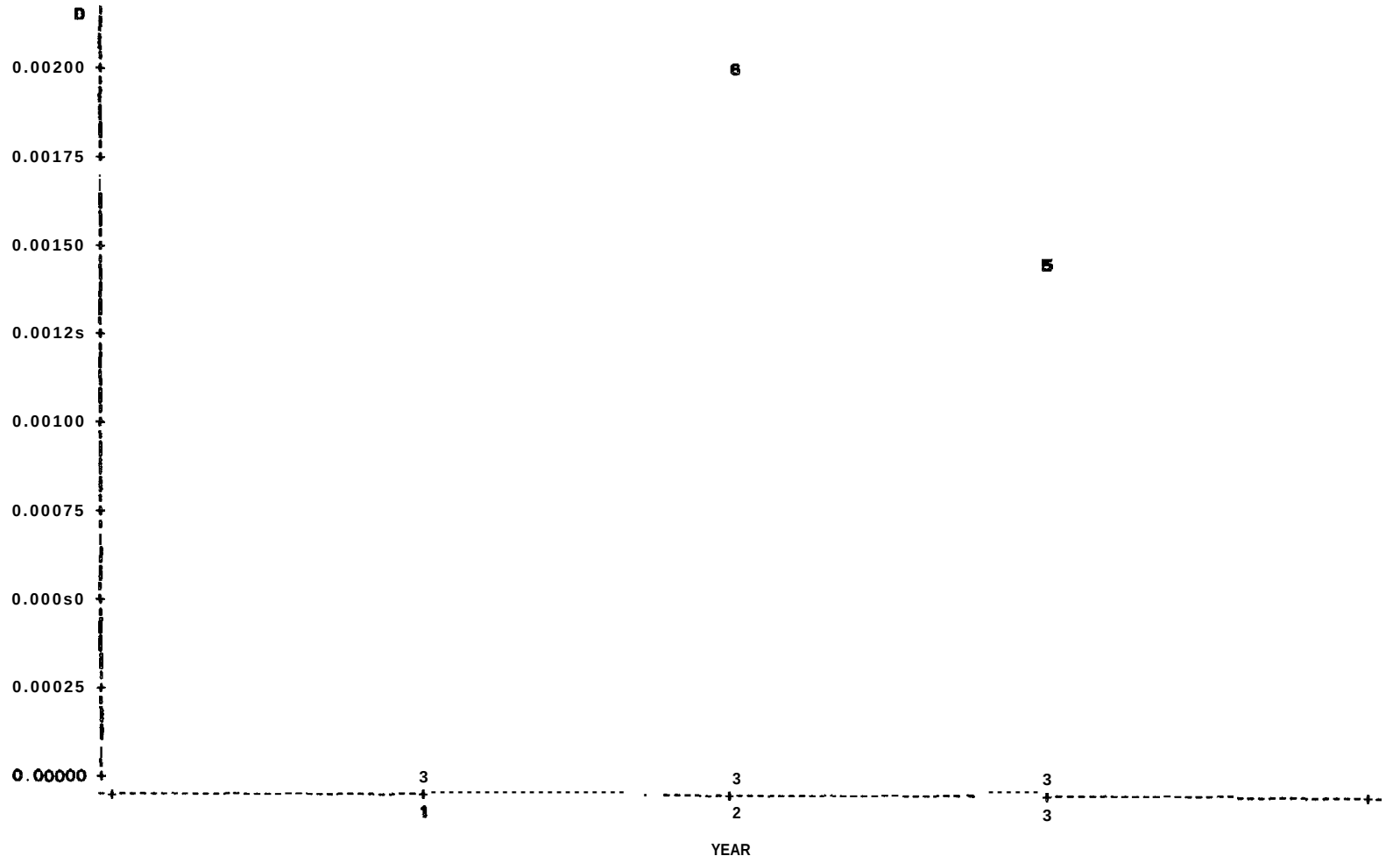
PLOT OF P*YEAR SYMBOL 1S VALUE OF SUBSET



NOTE: 1 OBS HIDDEN

TISSUE DATA ANALYSES FOR SELECTED SPECIES ANO SAMPLING STATIONS
PLOT OF GEOMETRIC MEANS FOR EACH DATA SUBSET AND YEAR
SYMBOLS USED ARE: 3=ASTARTE AT 3A
5=CYRTODARIA AT SF
6= ASTARTE AT 60

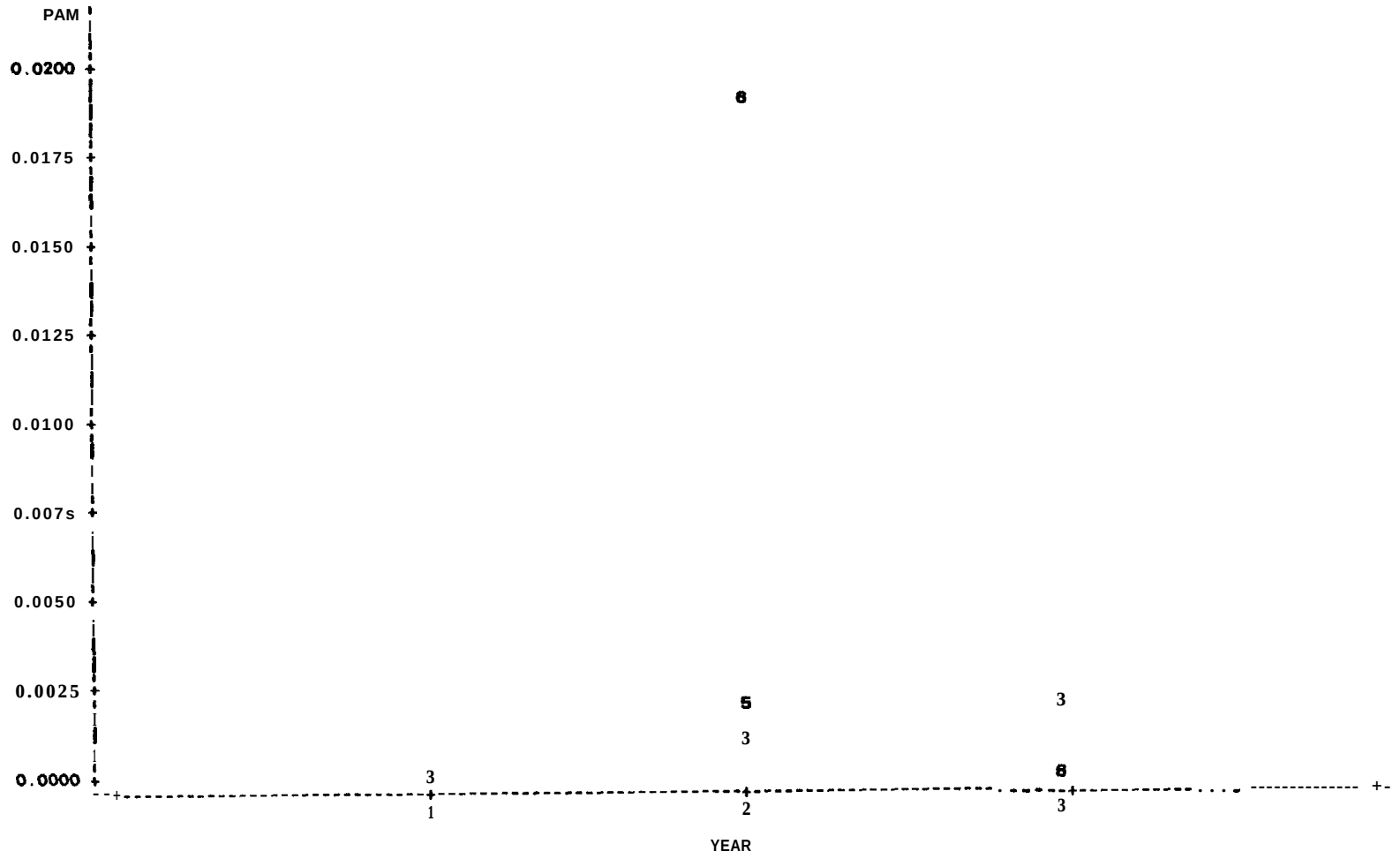
PLOT OF D*YEAR SYMBOL IS VALUE OF SUBSET



NOTE : 4 OBS HIDDEN

TISSUE OATA ANALYSES FOR SELECTED SPECIES AND SAMPLING STATIONS
PLOT OF GEOMETRIC MEANS FOR EACH DATA SUBSET ANO YEAR
SYMBOLS USED ARE: 3=ASTARTE AT 3A
5=CYRTODARIA AT SF
6=ASTARTE AT 60

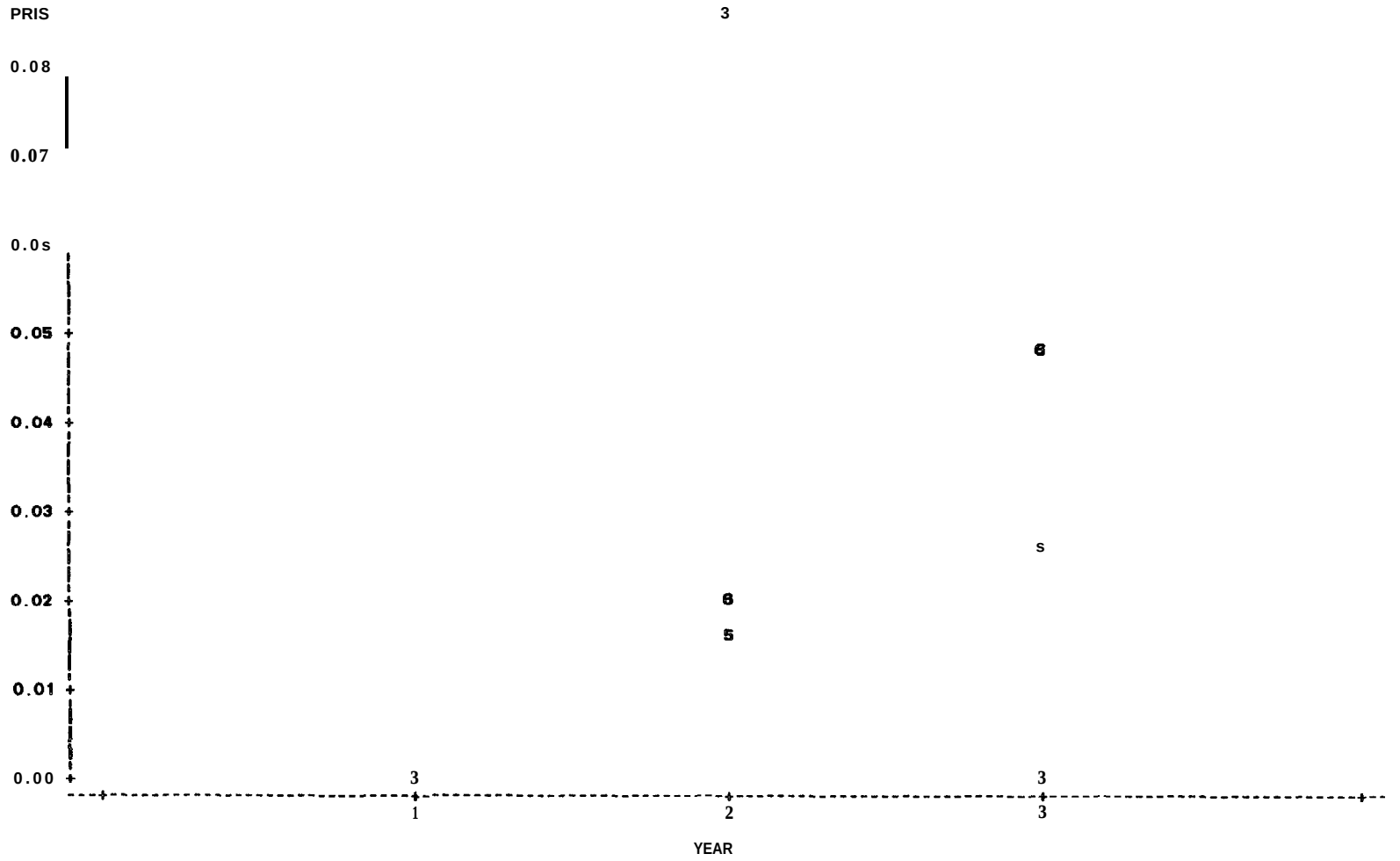
PLOT OF PAH*YEAR SYMBOL IS VALUE OF SUBSET



NOTE: 3 OBS HIDDEN

TISSUE OATA ANALYSES FOR SELECTED SPECIES AND SAMPLING STATIONS
PLOT OF GEOMETRIC MEANS FOR EACH OATA SUBSET ANO YEAR
SYMBOLS USED ARE: 3= ASTARTE AT 3A
5=CYRTODARIA AT SF
6= ASTARTE AT 6D

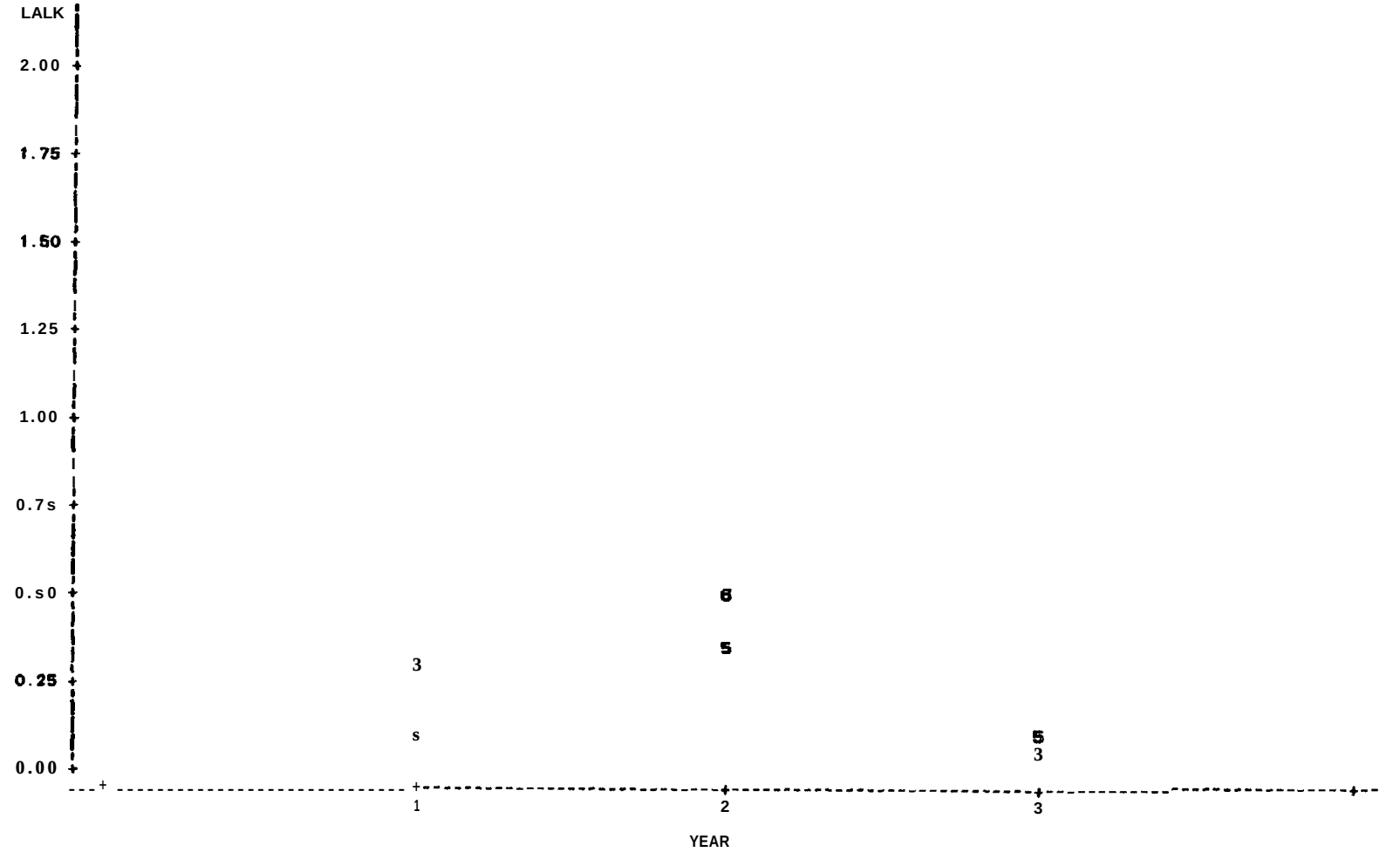
PLOT OF PRIS*YEAR SYMBOL IS VALUE OF SUBSET



NOTE : 2 OBS HIDDEN

TISSUE DATA ANALYSES FOR SELECTED SPECIES AND SAMPLING STATIONS
PLOT OF GEOMETRIC MEANS fOR EACH OATA SUBSET ANO YEAR
SYMBOLS USEO ARE: 3=ASTARTE AT 3A
5=CYRTODARIA AT 5F
6=ASTARTE AT 6D

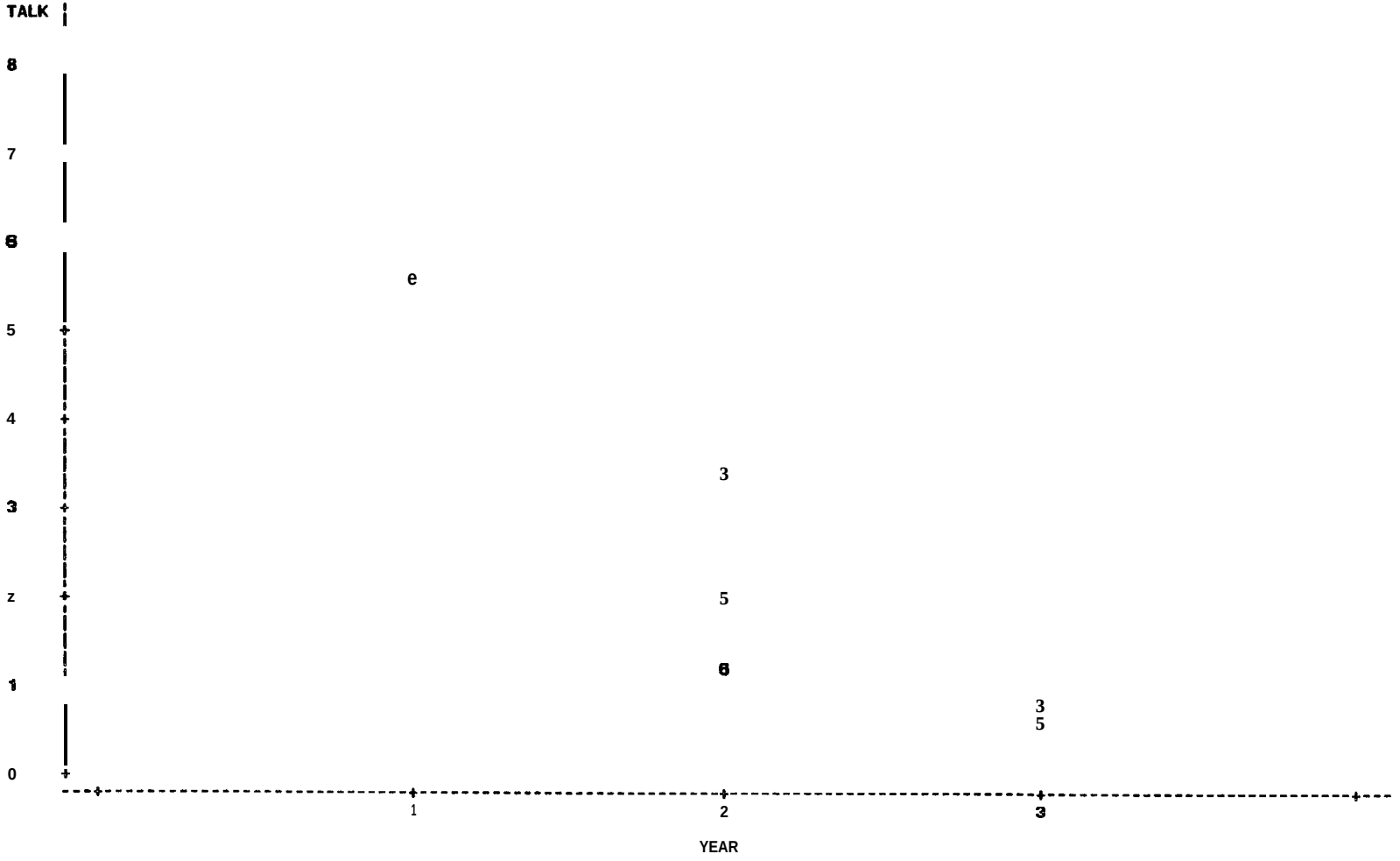
PLOT OF LALK*YEAR SYMBOL IS VALUE OF SUBSET



NOTE: 1 OBS HIDDEN

TISSUE DATA ANALYSES FOR SELECTED SPECIES AND SAMPLING STATIONS
PLOT OF GEOMETRIC MEANS FOR EACH DATA SUBSET AND YEAR
SYMBOLS USED ARE: 3=ASTARTE AT 3A
5= CYRTODARIA AT 5F
6=ASTARTE AT 6D

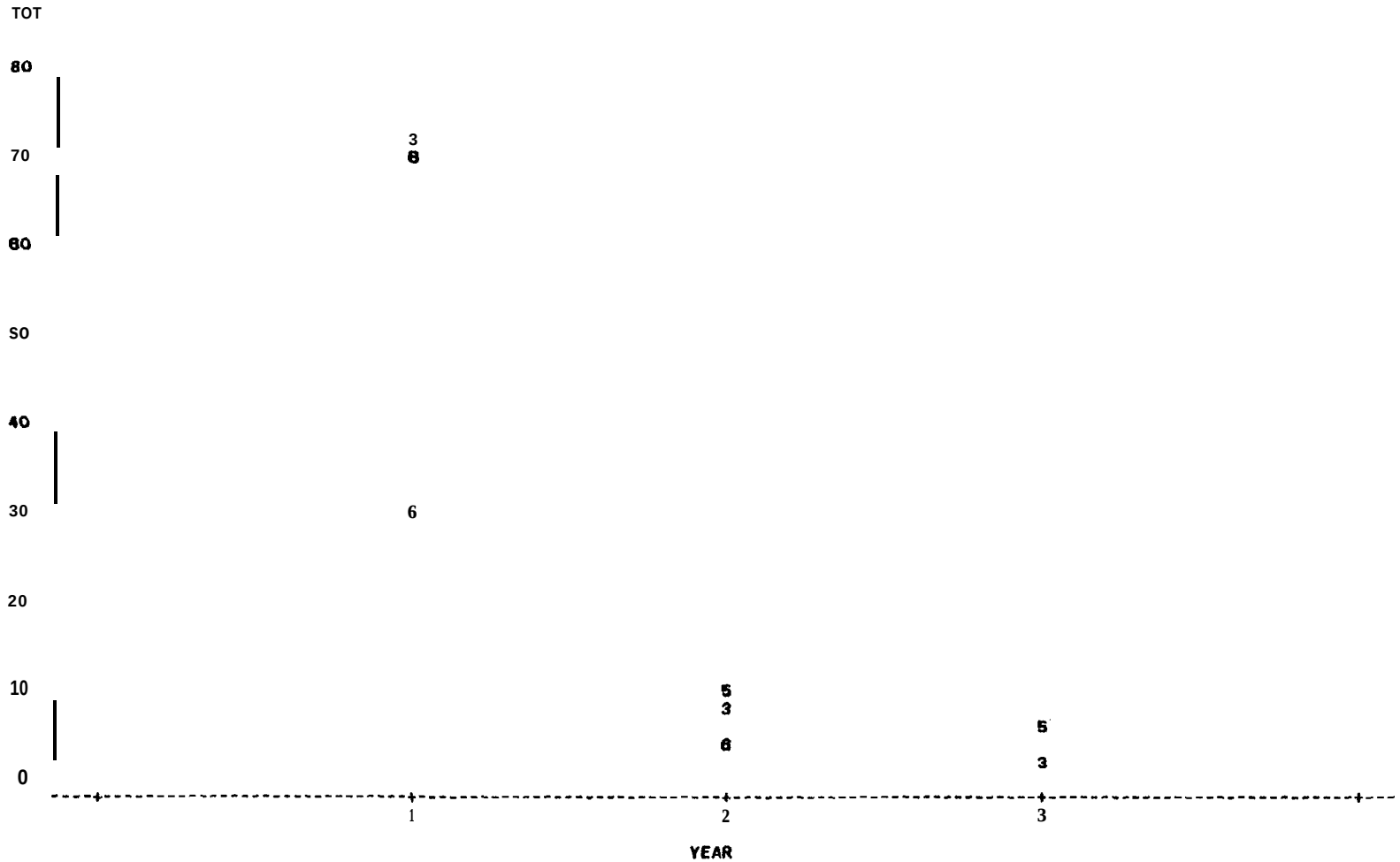
PLOT OF TALK*YEAR SYMBOL IS VALUE OF SUBSET



NOTE : 1 OBS HIDDEN

TISSUE DATA ANALYSES FOR SELECTED SPECIES AND SAMPLING STATIONS
PLOT OF GEOMETRIC MEANS FOR EACH DATA SUBSET AND YEAR
SYMBOLS USED ARE:3=ASTARTE AT 3A
5=CYRTODARIA AT 5F
6=ASTARTE AT 6D

PLOT OF TOT*YEAR SYMBOL IS VALUE OF SUBSET



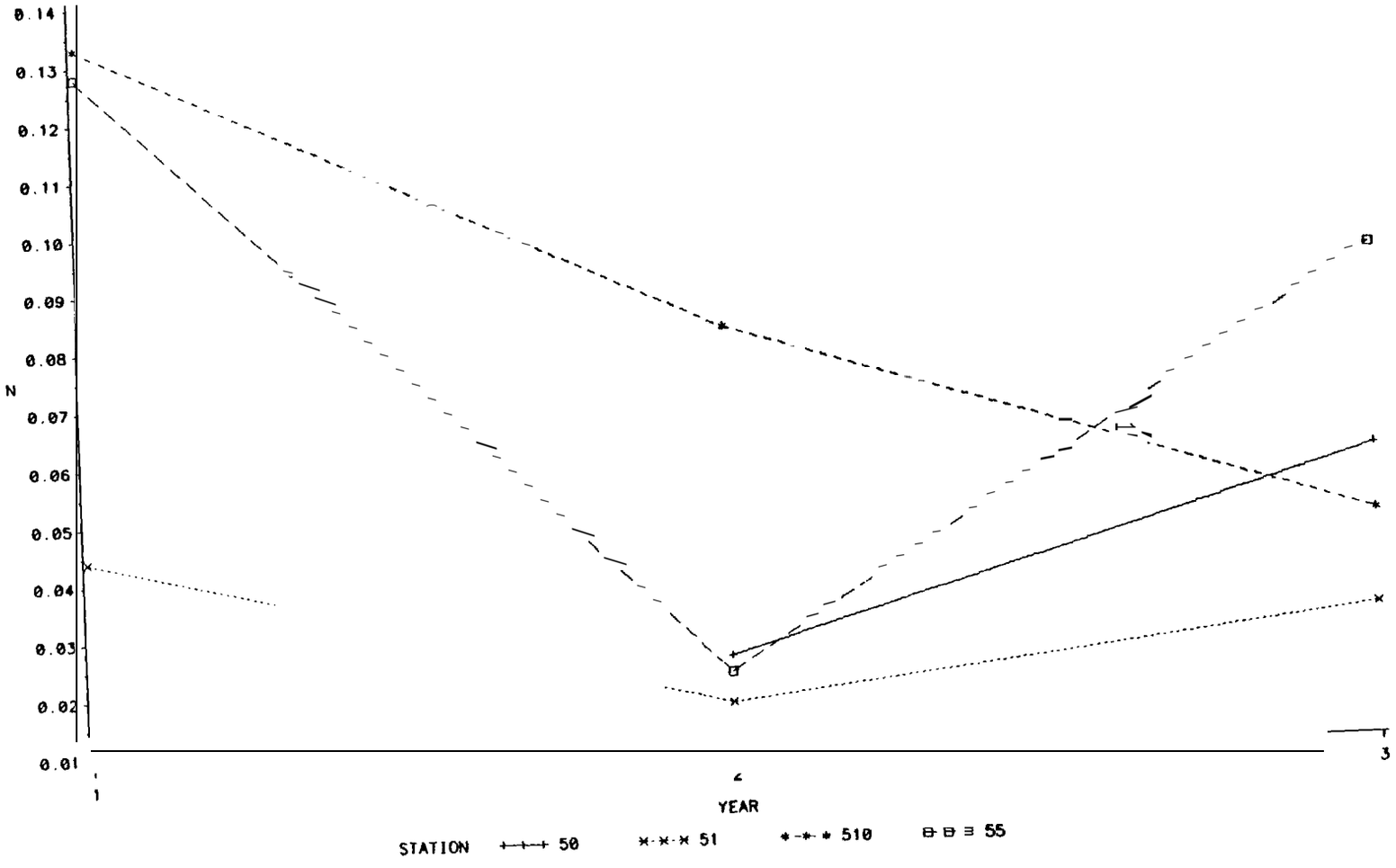
NOTE: 1 OBS HIDDEN

SECTION II

PLOTS OF YEARLY GEOMETRIC MEANS OF THE ENDICOTT STATION SEDIMENT DATA FOR ALL YEARS

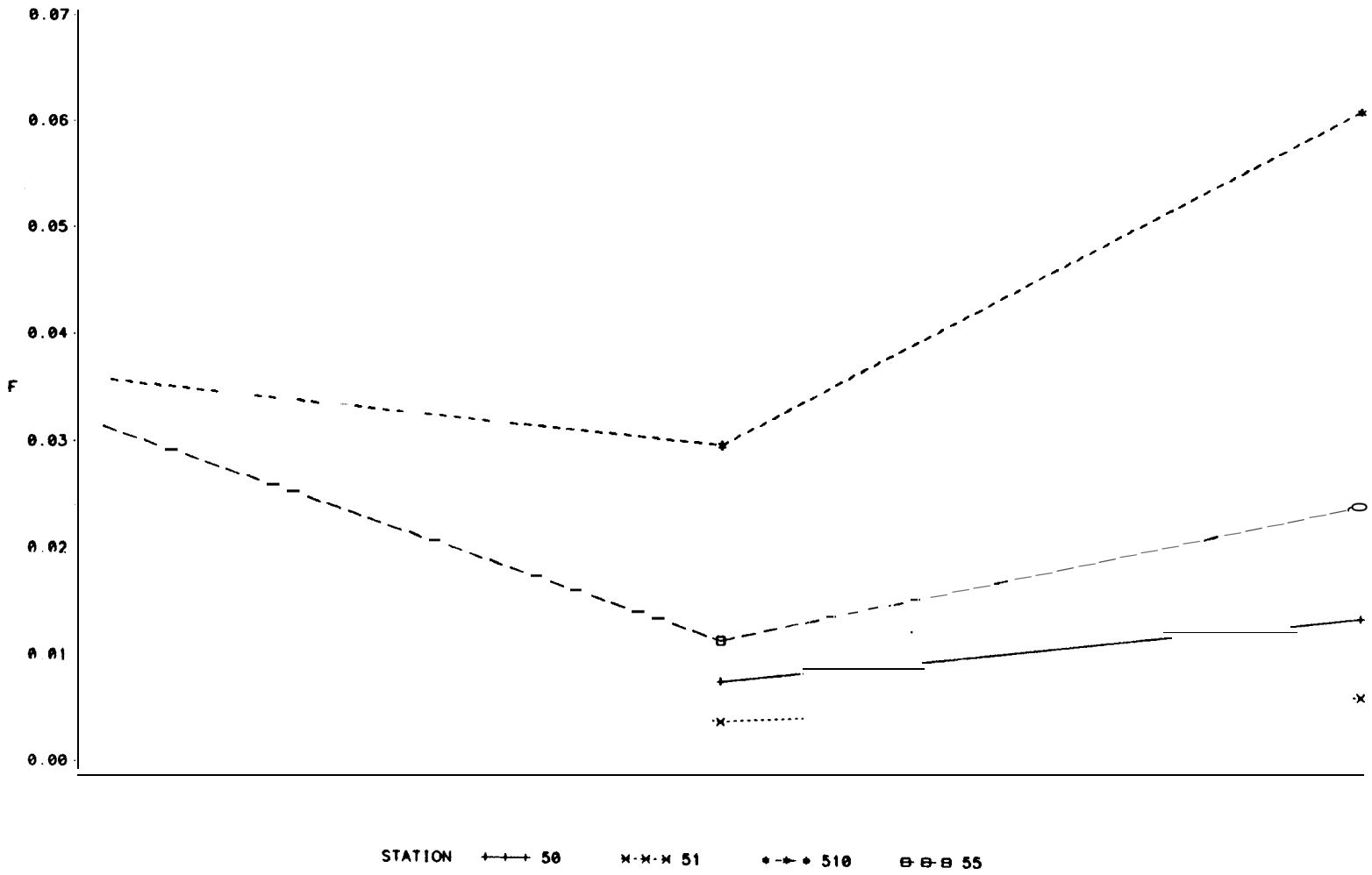
BEAUFORT SEA MONITORING PROGRAM
PLOT OF YEARLY GEOMETRIC MEANS
ENDICOTT STATIONS, ALL YEARS

TYPE OF SEDIMENT: BULK



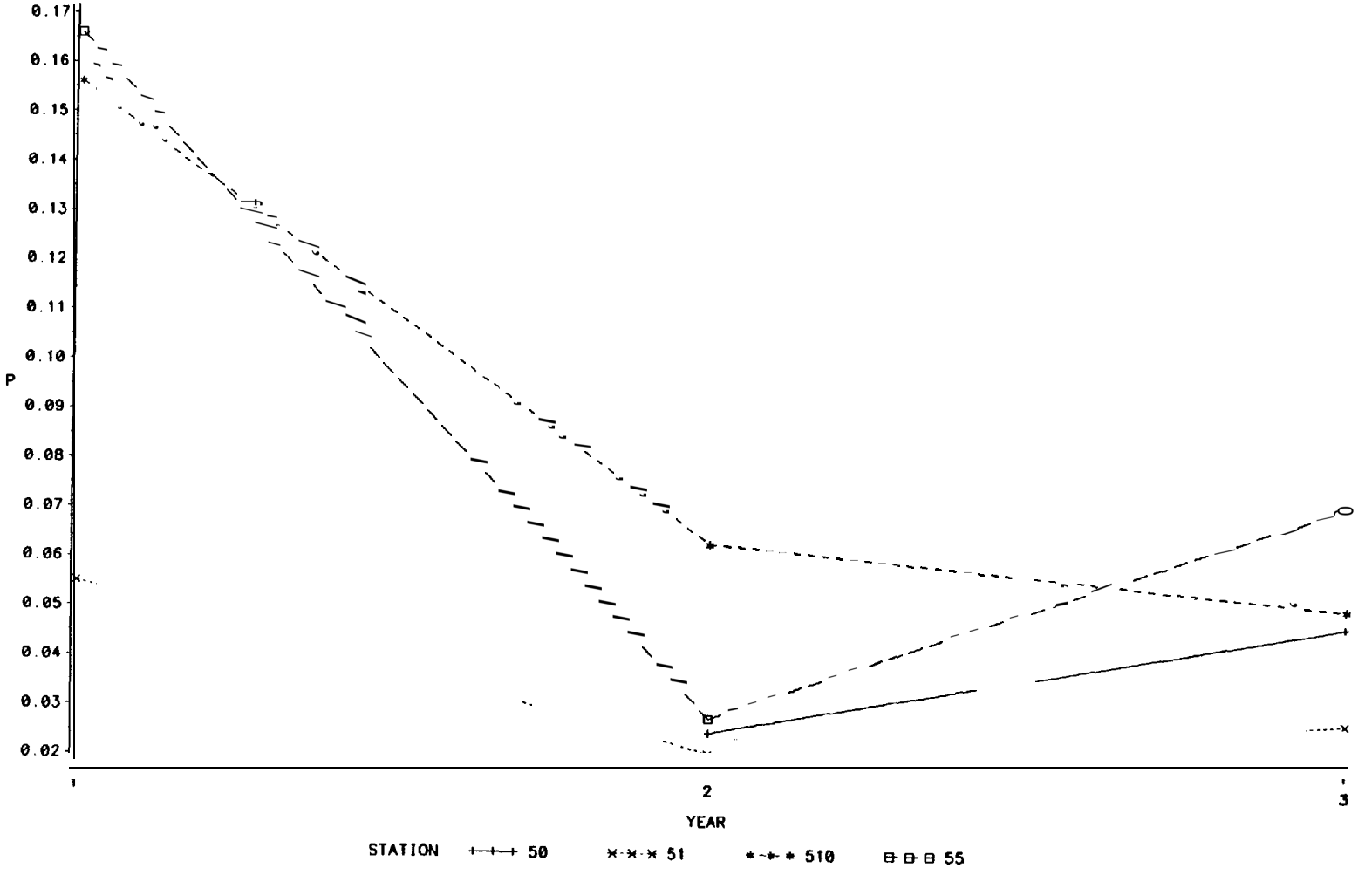
BEAUFORT SEA MONITORING PROGRAM
PLOT OF YEARLY GEOMETRIC MEANS
ENDICOTT STATIONS, ALL YEARS

TYPE OF SEDIMENT: BULK



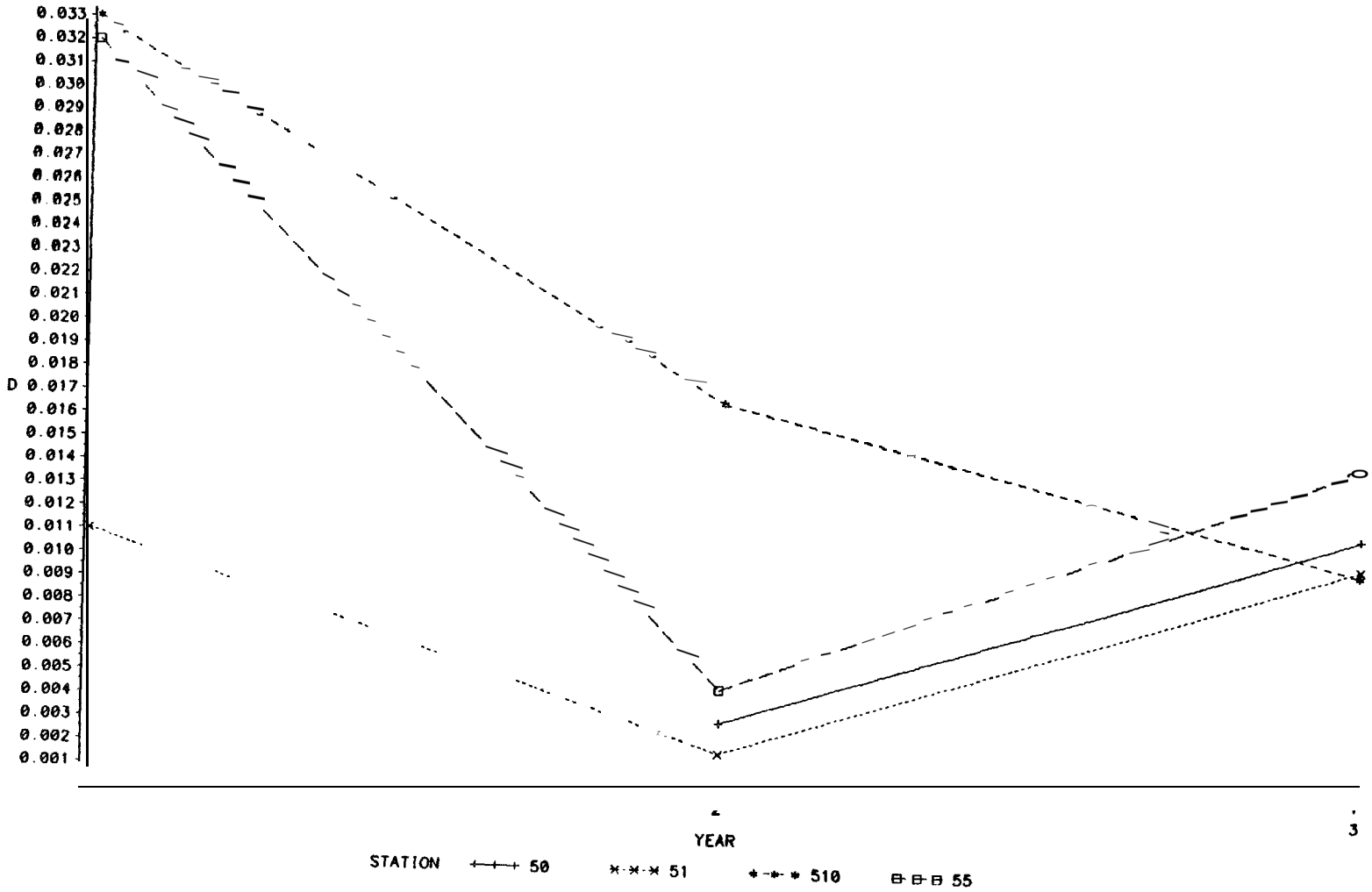
BEAUFORT SEA MONITORING PROGRAM
PLOT OF YEARLY GEOMETRIC MEANS
ENDICOTT STATIONS, ALL YEARS

TYPE OF SEDIMENT: BULK



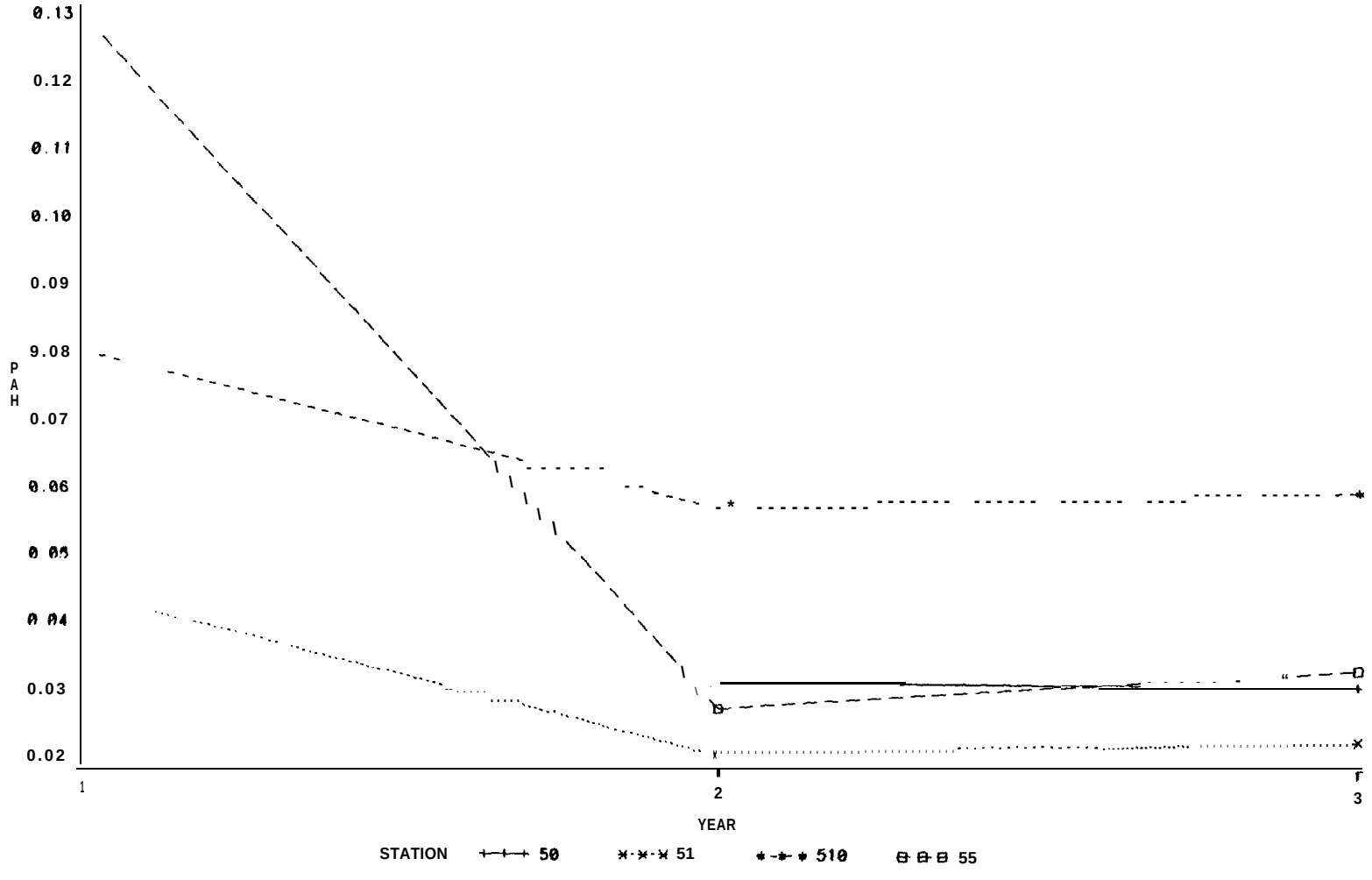
BEAUFORT SEA MONITORING PROGRAM
PLOT OF YEARLY GEOMETRIC MEANS
ENDICOTT STATIONS, ALL YEARS

TYPE OF SEDIMENT: BULK



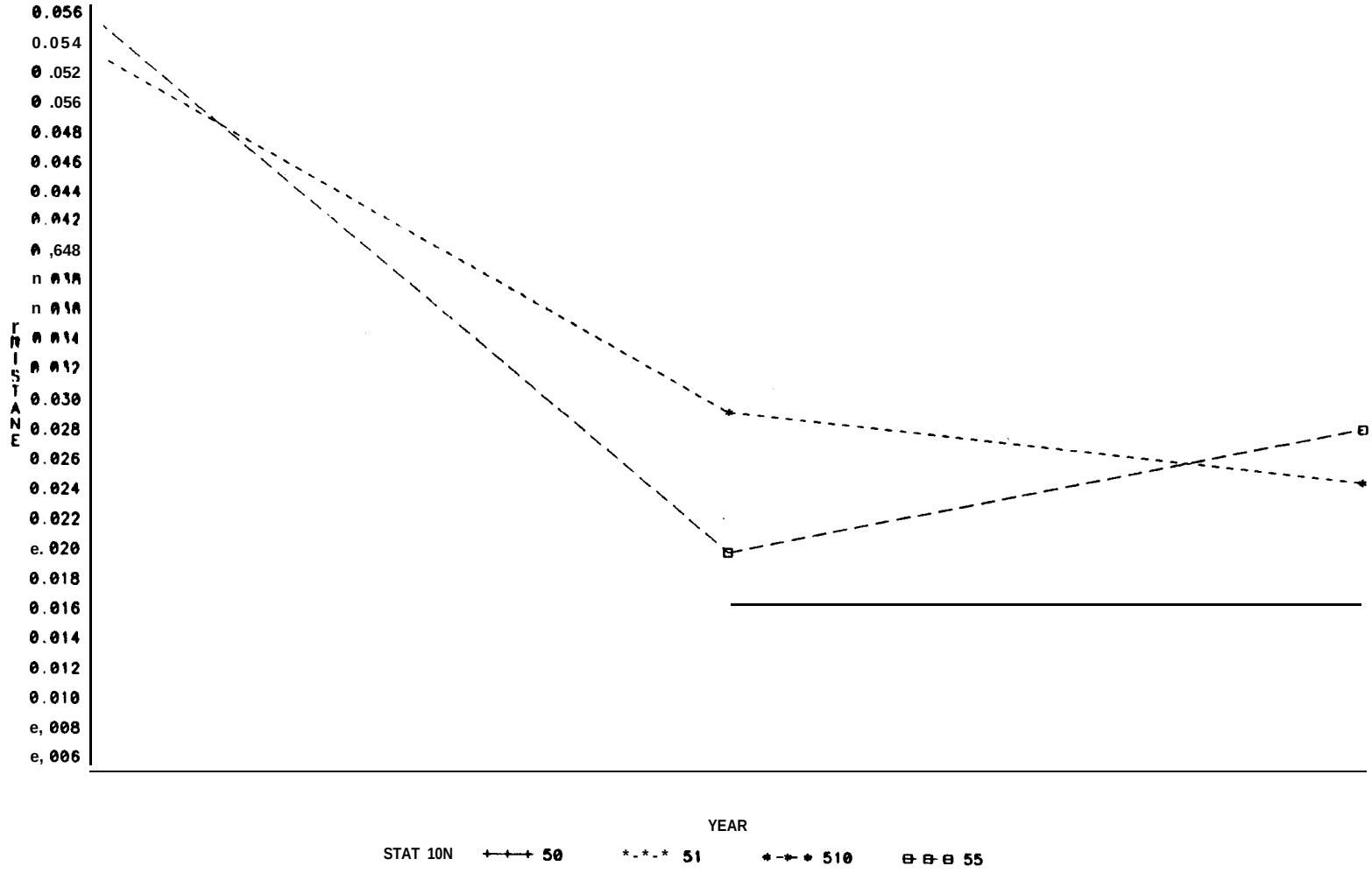
BEAUFORT SEA MONITORING PROGRAM
PLOT OF YEARLY GEOMETRIC MEANS
ENDICOTT STATIONS, ALL YEARS

TYPE OF SEDIMENT: BULK



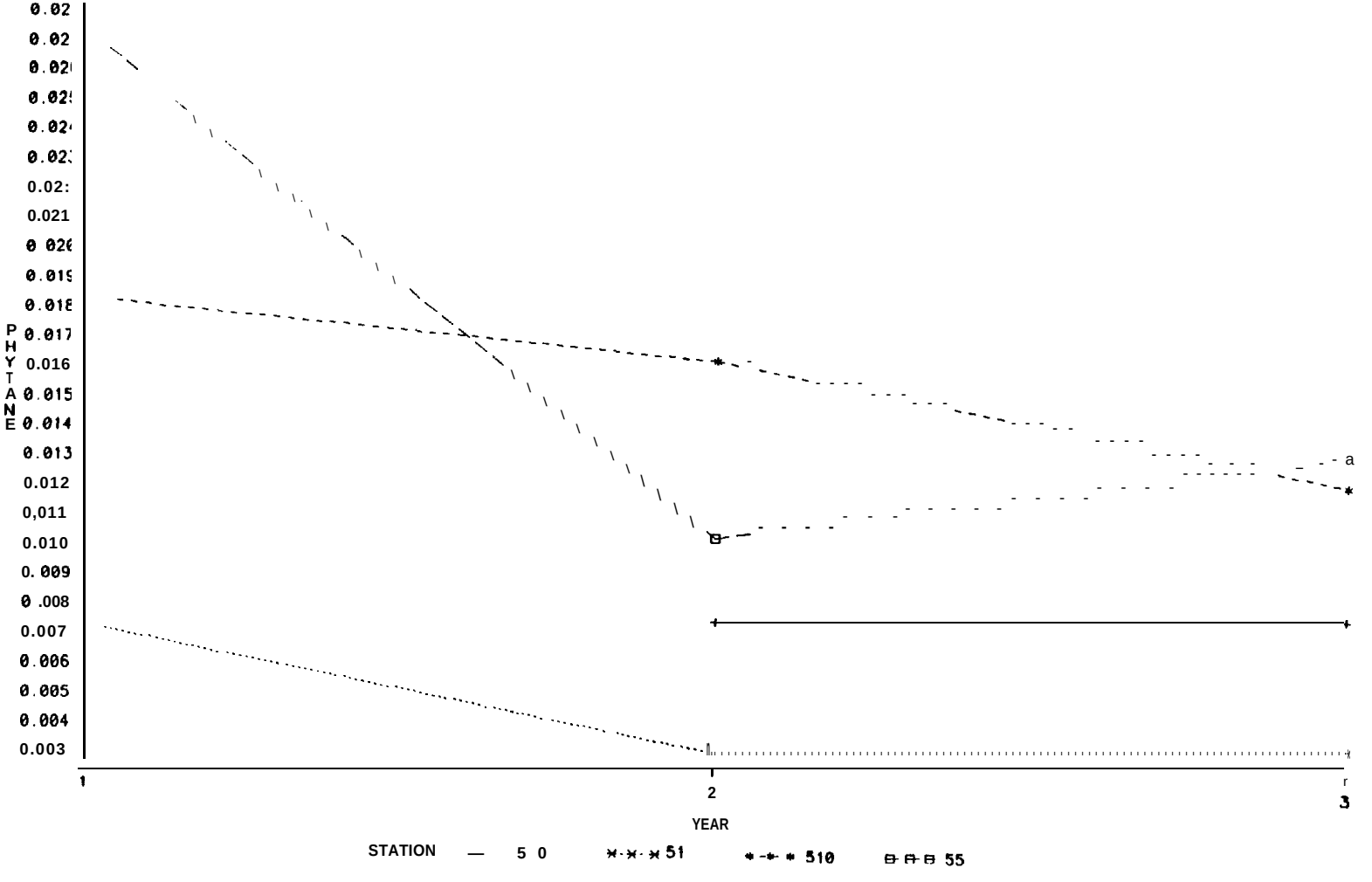
BEAUFORT SEA MONITORING PROGRAM
PLOT OF YEARLY GEOMETRIC MEANS
ENDICOTT STATIONS. ALL YEARS

TYPE OF SEDIMENT: BULK



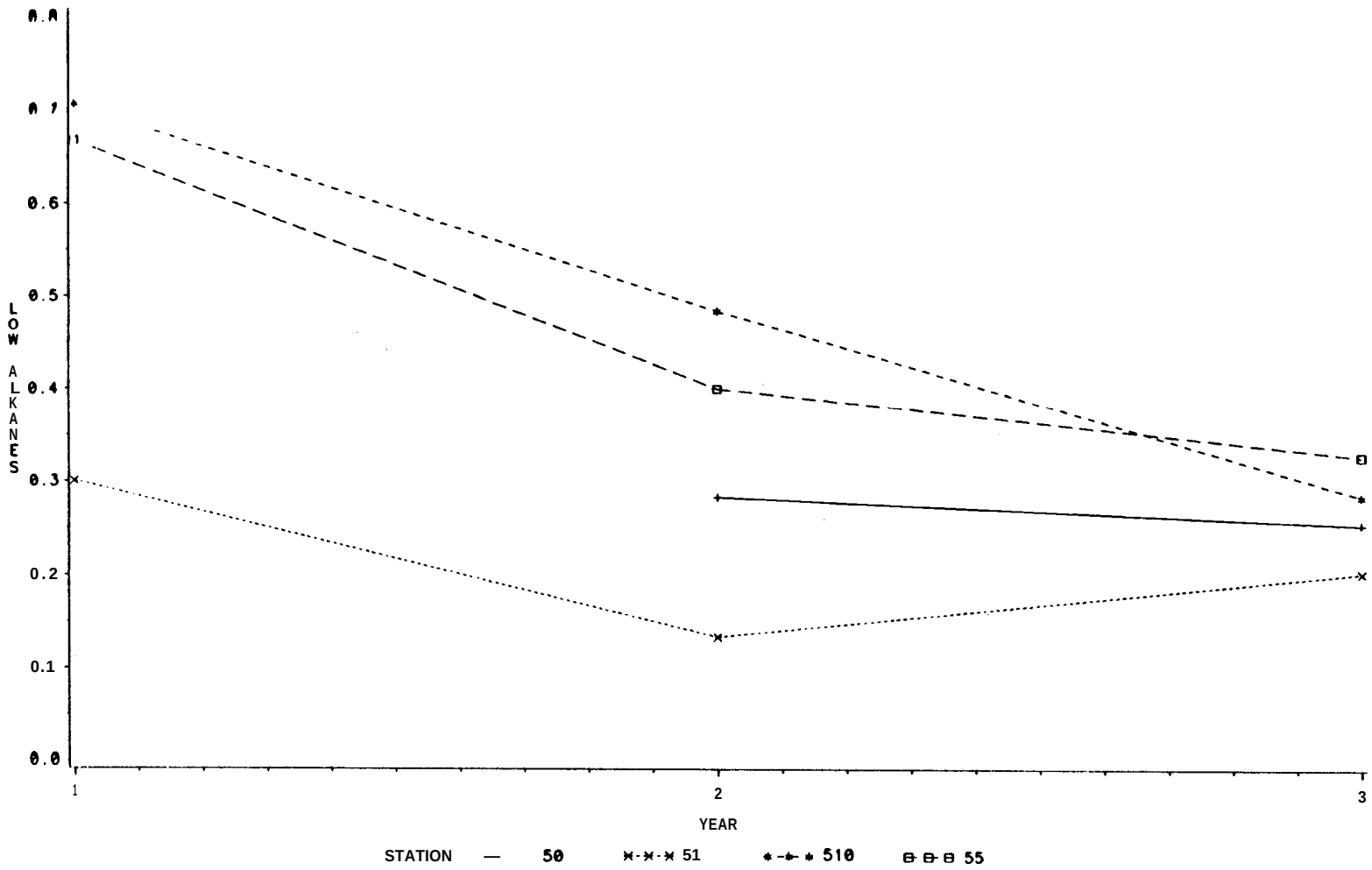
BEAUFORT SEA MONITORING PROGRAM
PLOT OF YEARLY GEOMETRIC MEANS
ENDICOTT STATIONS, ALL YEARS

TYPE OF SEDIMENT: BULK



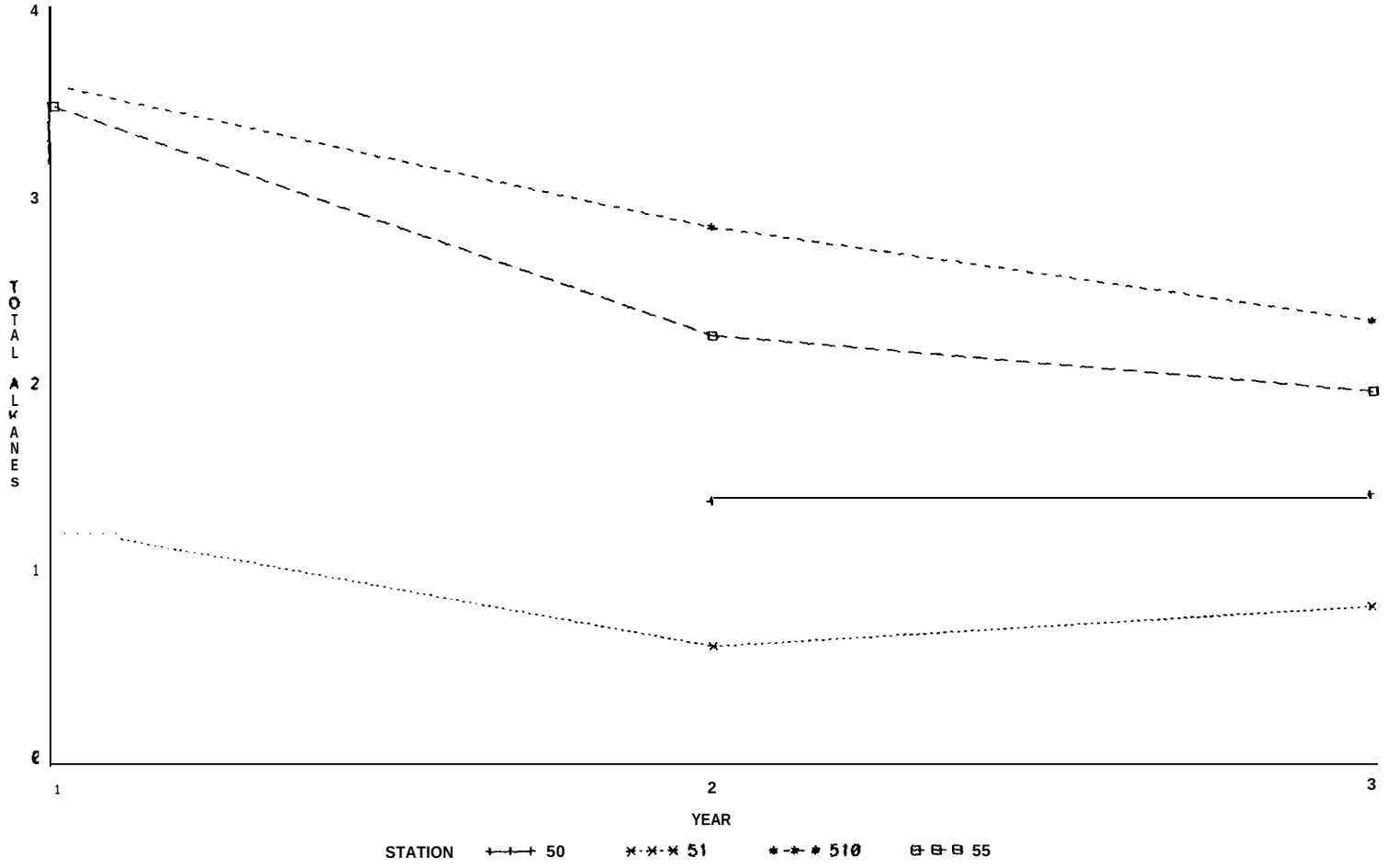
BEAUFORT SEA MONITORING PROGRAM
PLOT OF YEARLY GEOMETRIC MEANS
ENDICOTT STATIONS, ALL YEARS

TYPE OF SEDIMENT: BULK



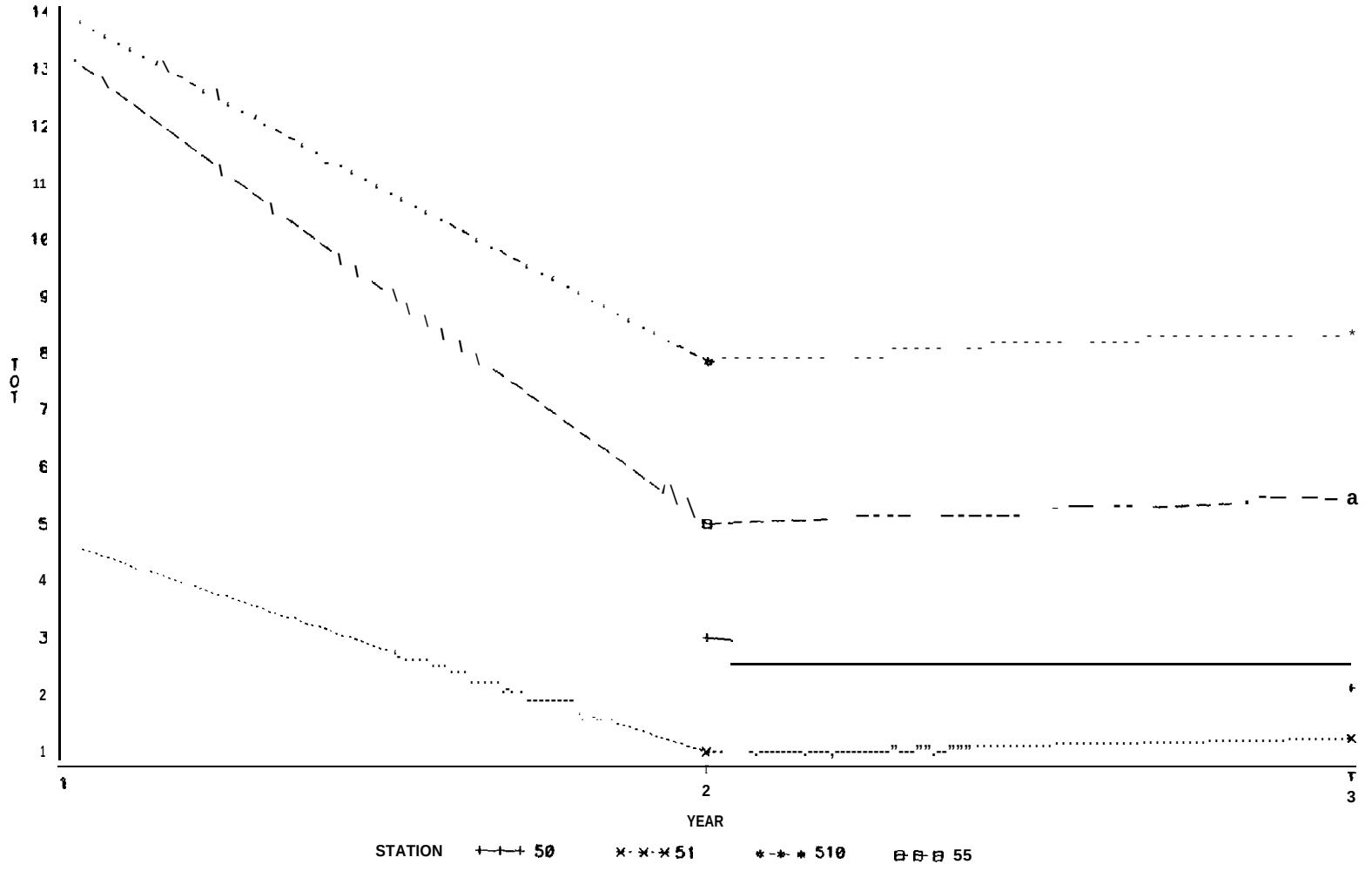
BEAUFORT SEA MONITORING PROGRAM
PLOT OF YEARLY GEOMETRIC MEANS
ENDICOTT STATIONS, ALL YEARS

TYPE OF SEDIMENT BULK



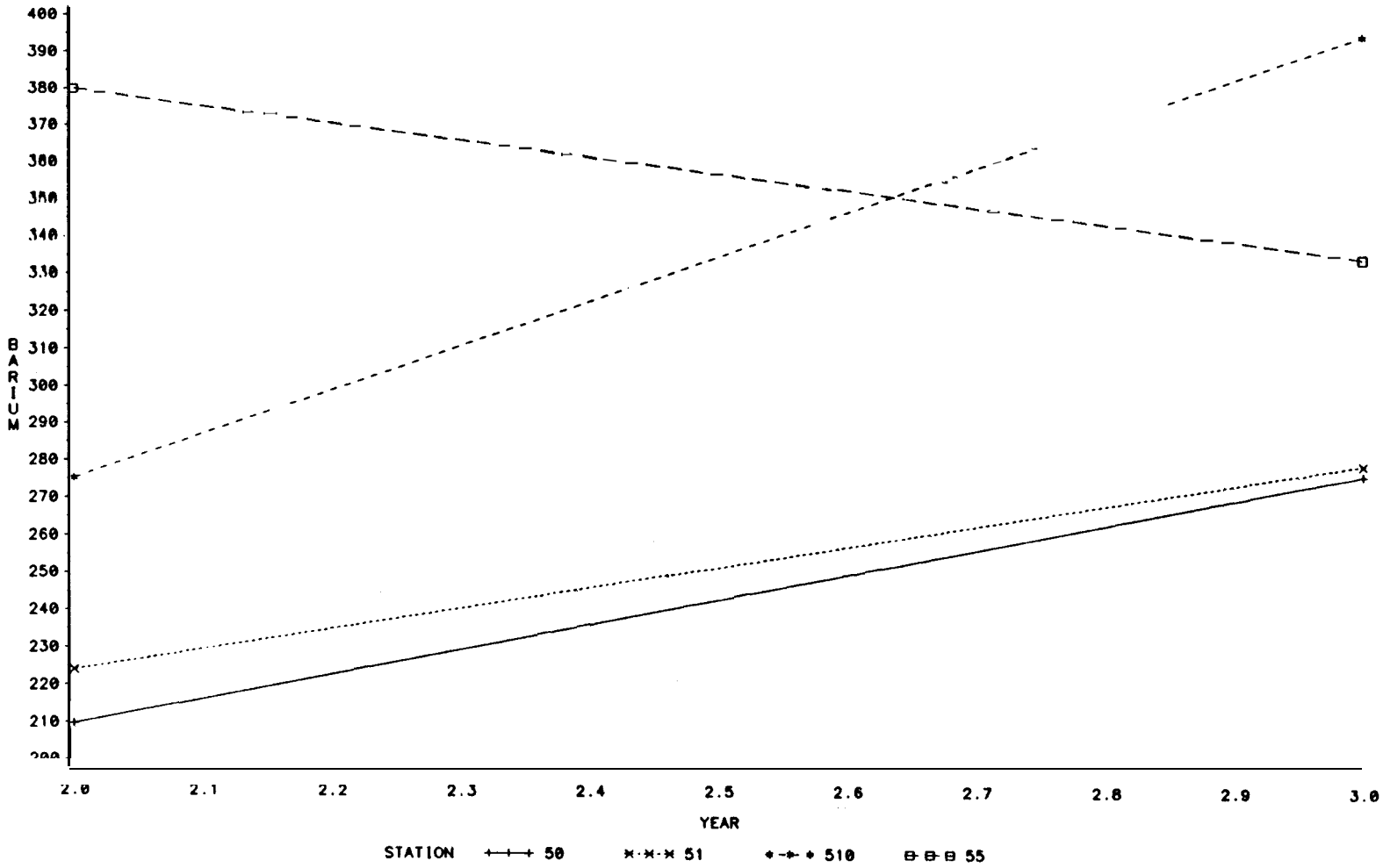
BEAUFORT SEA MONITORING PROGRAM
PLOT OF YEARLY GEOMETRIC MEANS
ENDICOTT STATIONS, ALL YEARS

TYPE OF SEDIMENT: BULK



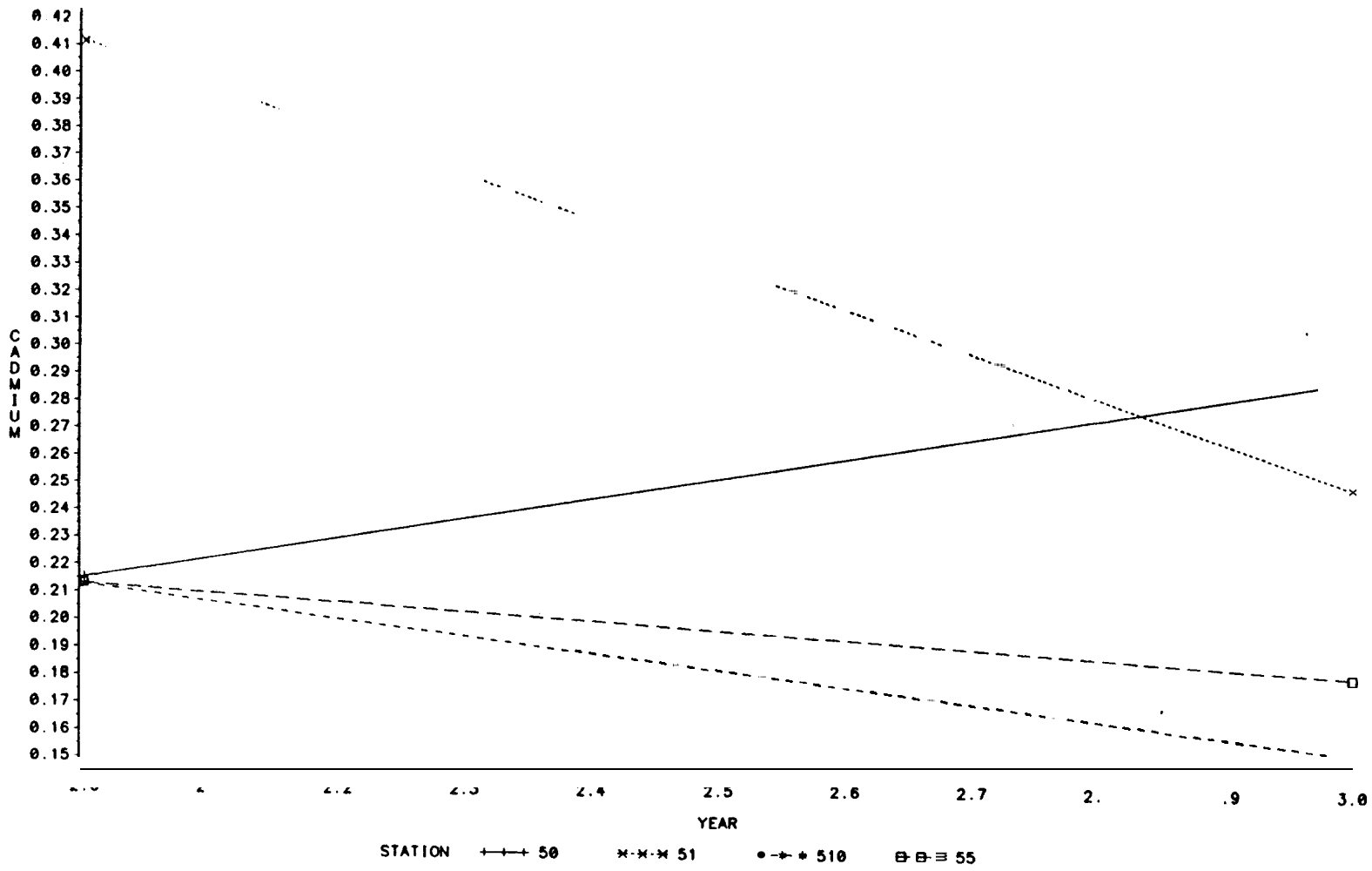
BEAUFORT SEA MONITORING PROGRAM
PLOT OF YEARLY GEOMETRIC MEANS
ENDICOTT STATIONS, YEARS 2 AND 3

TYPE OF SEDIMENT: FINE



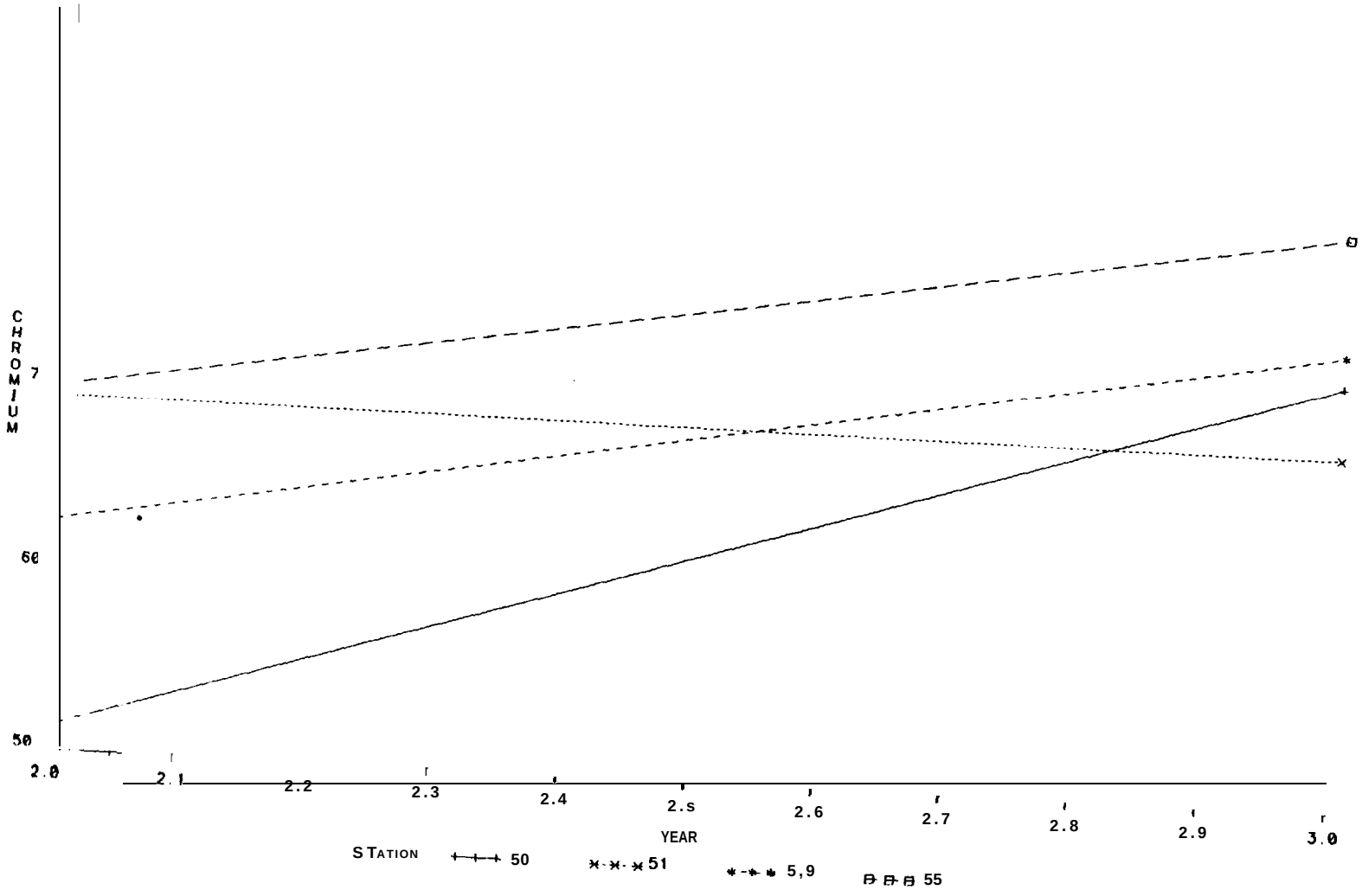
BEAUFORT SEA MONITORING PROGRAM
PLOT OF YEARLY GEOMETRIC MEANS
ENDICOTT STATIONS, YEARS 2 AND 3

TYPE OF SEDIMENT: FINE



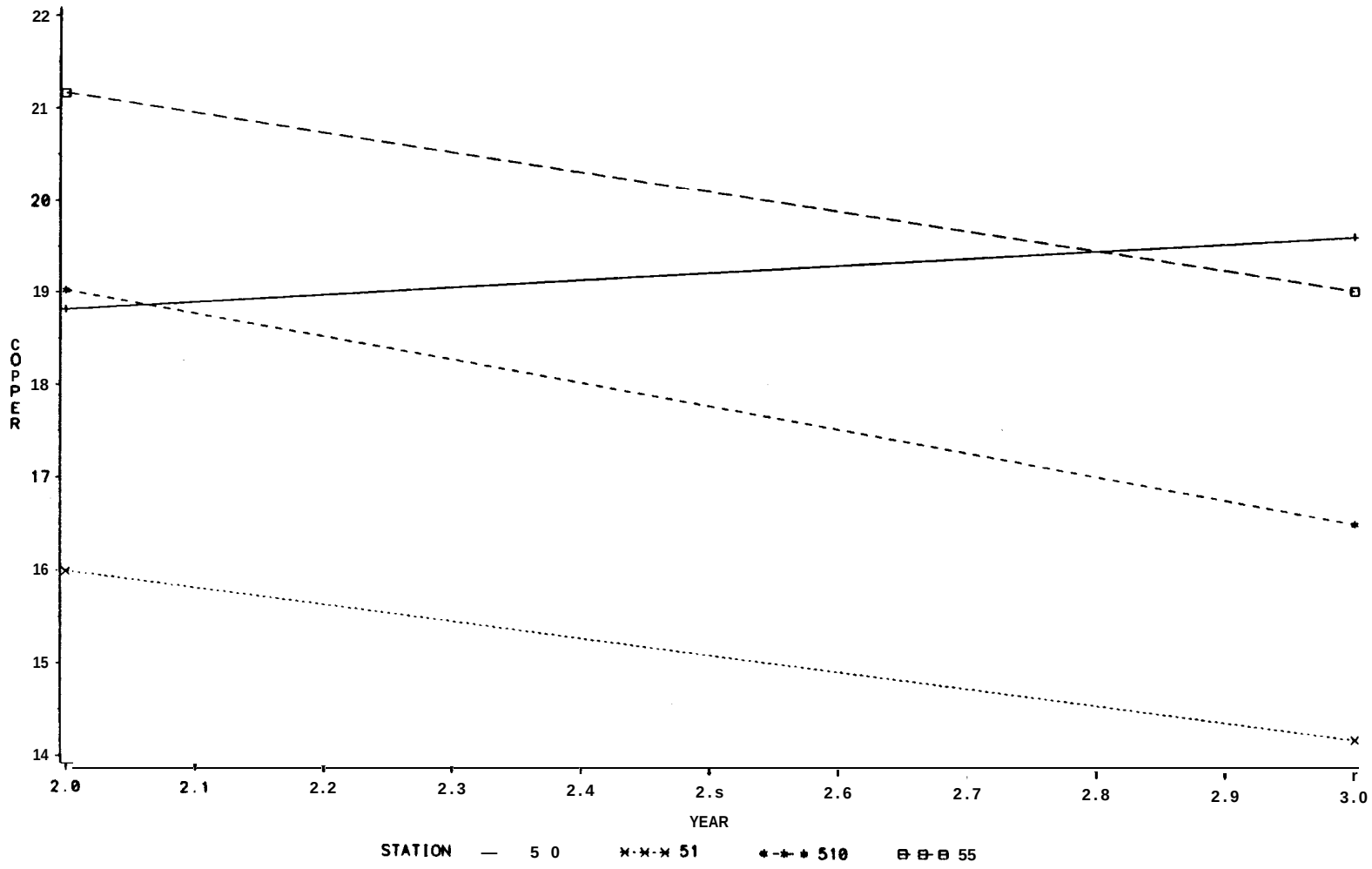
BEAUFORT SEA MONITORING PROGRAM
PLOT OF YEARLY GEOMETRIC MEANS
ENDICOTT STATIONS, YEARS 2 AND 3

TYPE OF SEDIMENT: FINE



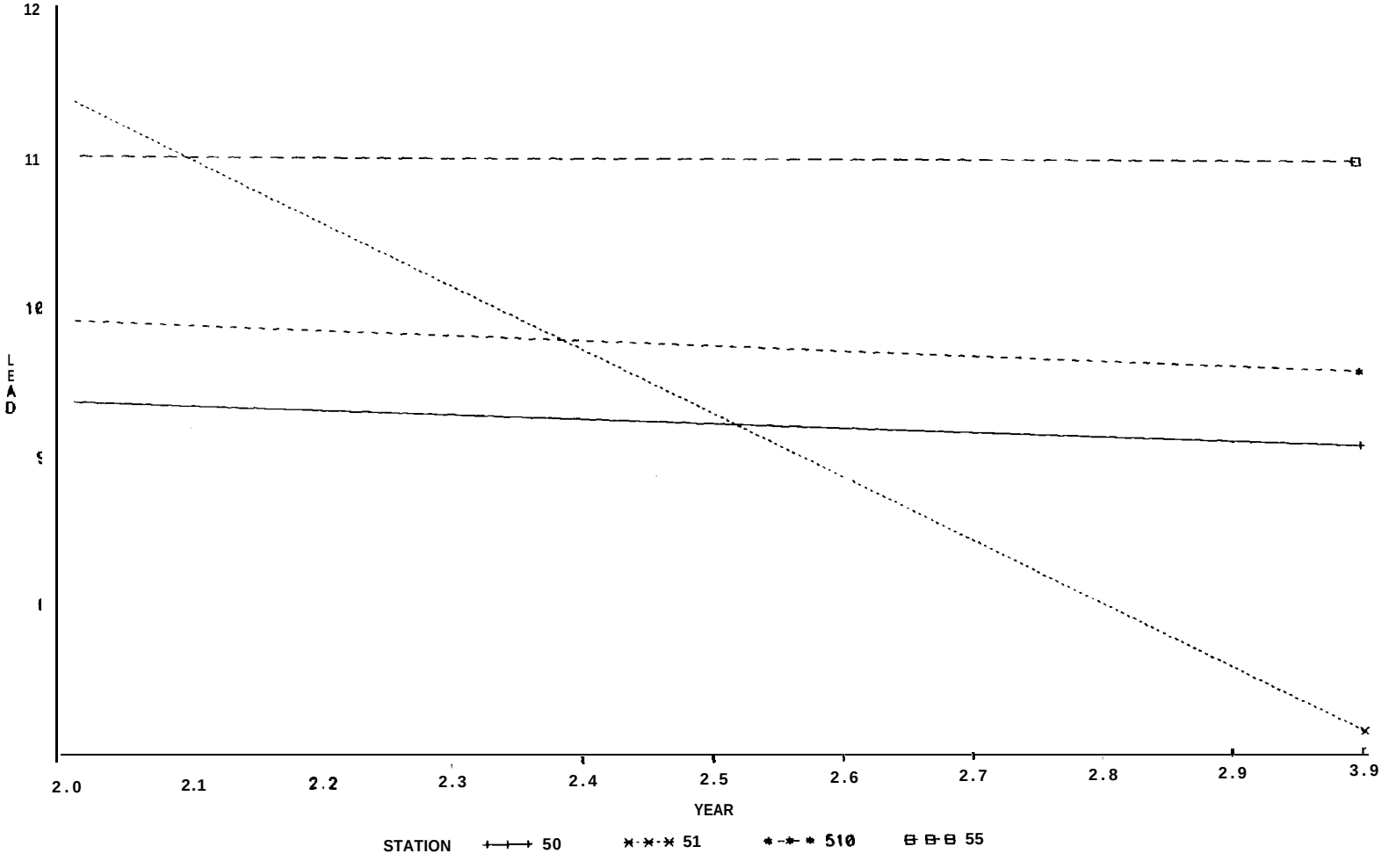
BEAUFORT SEA MONITORING PROCRAM
PIAT OF YEARLY GEOMETRIC MEANS
ENDICOTT STATIONS, YEARS 2 AND 3

TYPE OF SEDIMENT: FINE



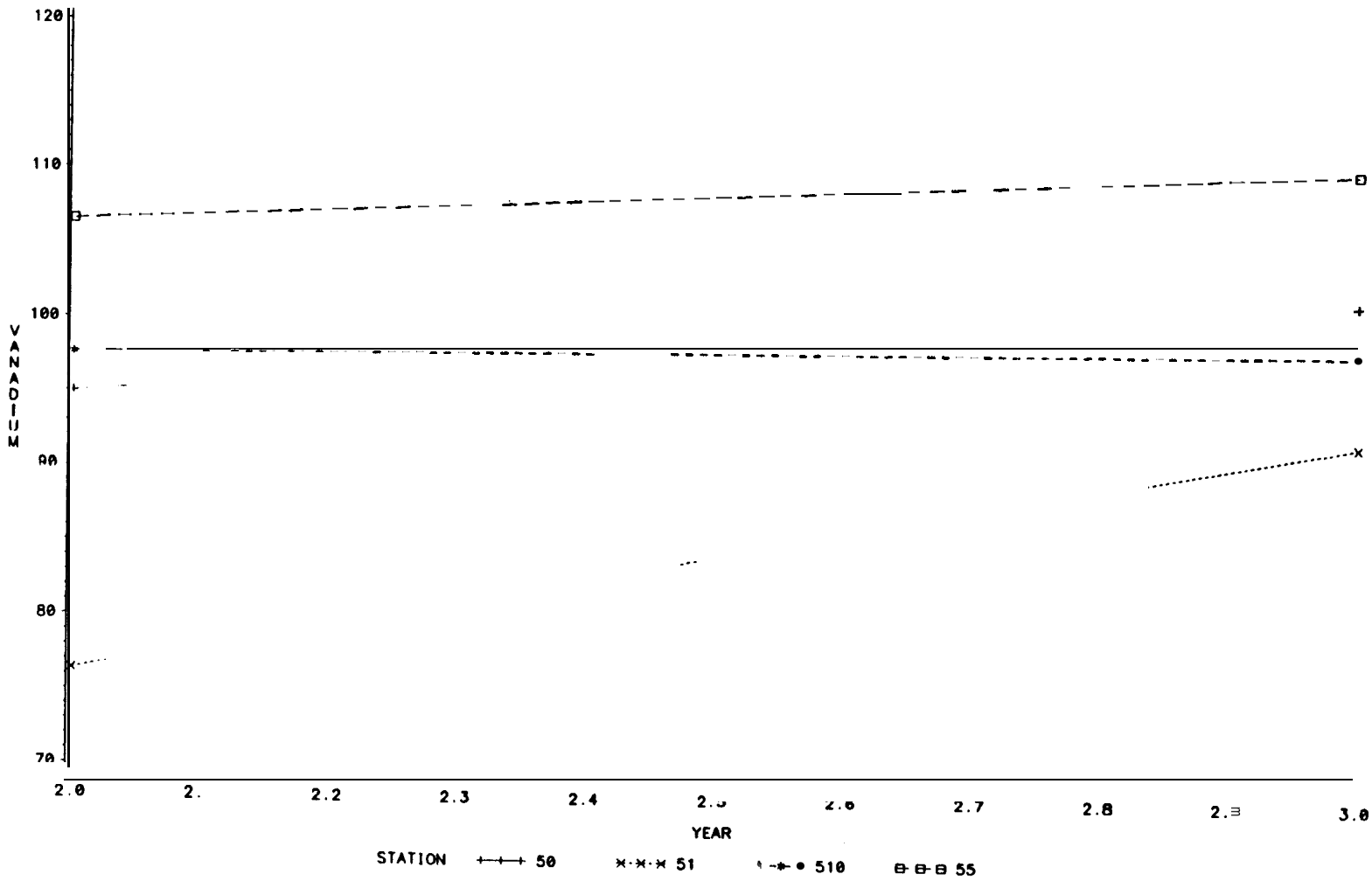
BEAUFORT SEA MONITORING PROGRAM
PLOT OF YEARLY GEOMETRIC MEANS
ENDICOTT STATIONS, YEARS 2 AND 3

TYPE OF SEDIMENT FINE



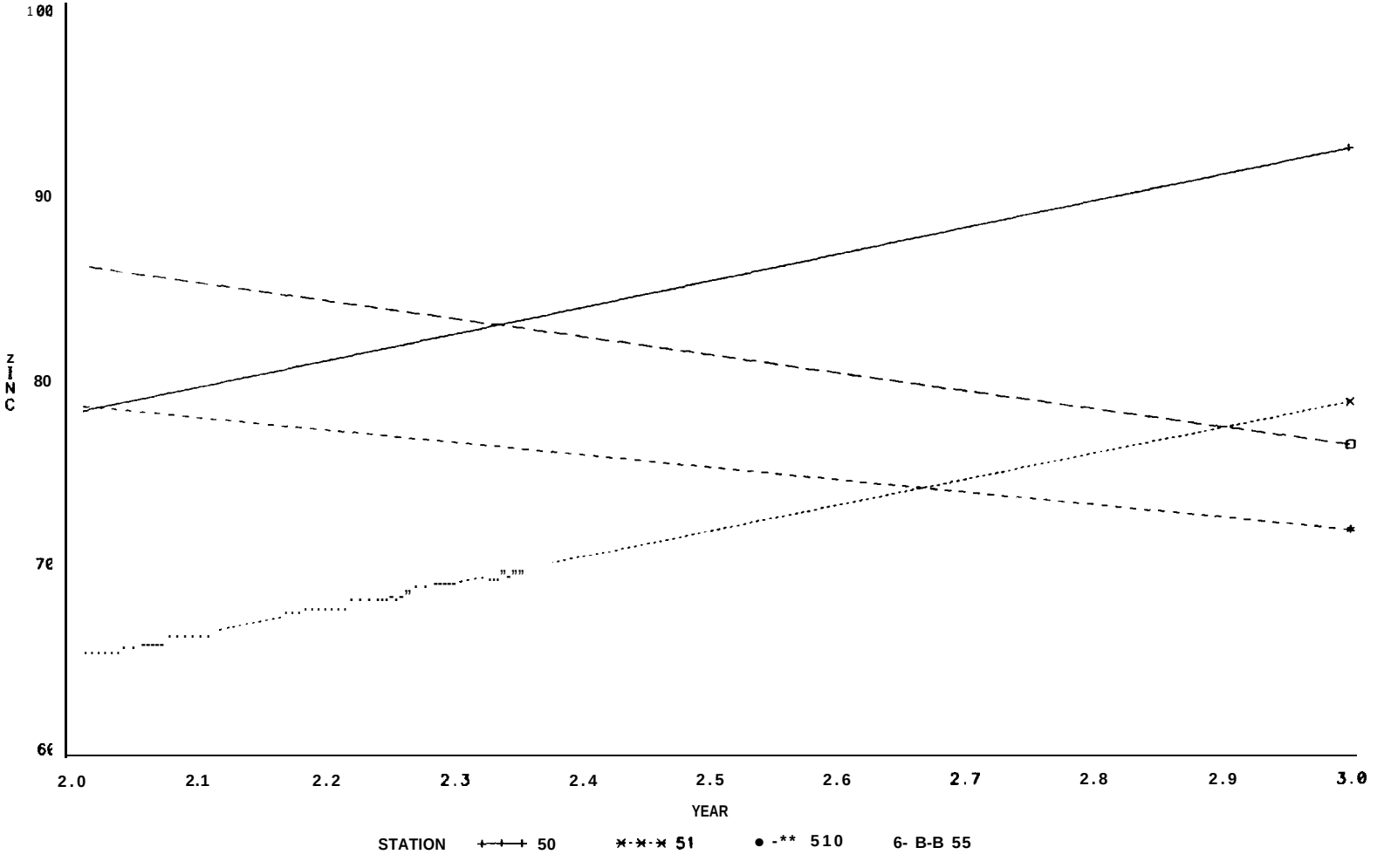
BEAUFORT SEA MONITORING PROGRAM
PLOT OF YEARLY GEOMETRIC MEANS
ENDICOTT STATIONS, YEARS 2 AND 3

TYPE OF SEDIMENT: FINE



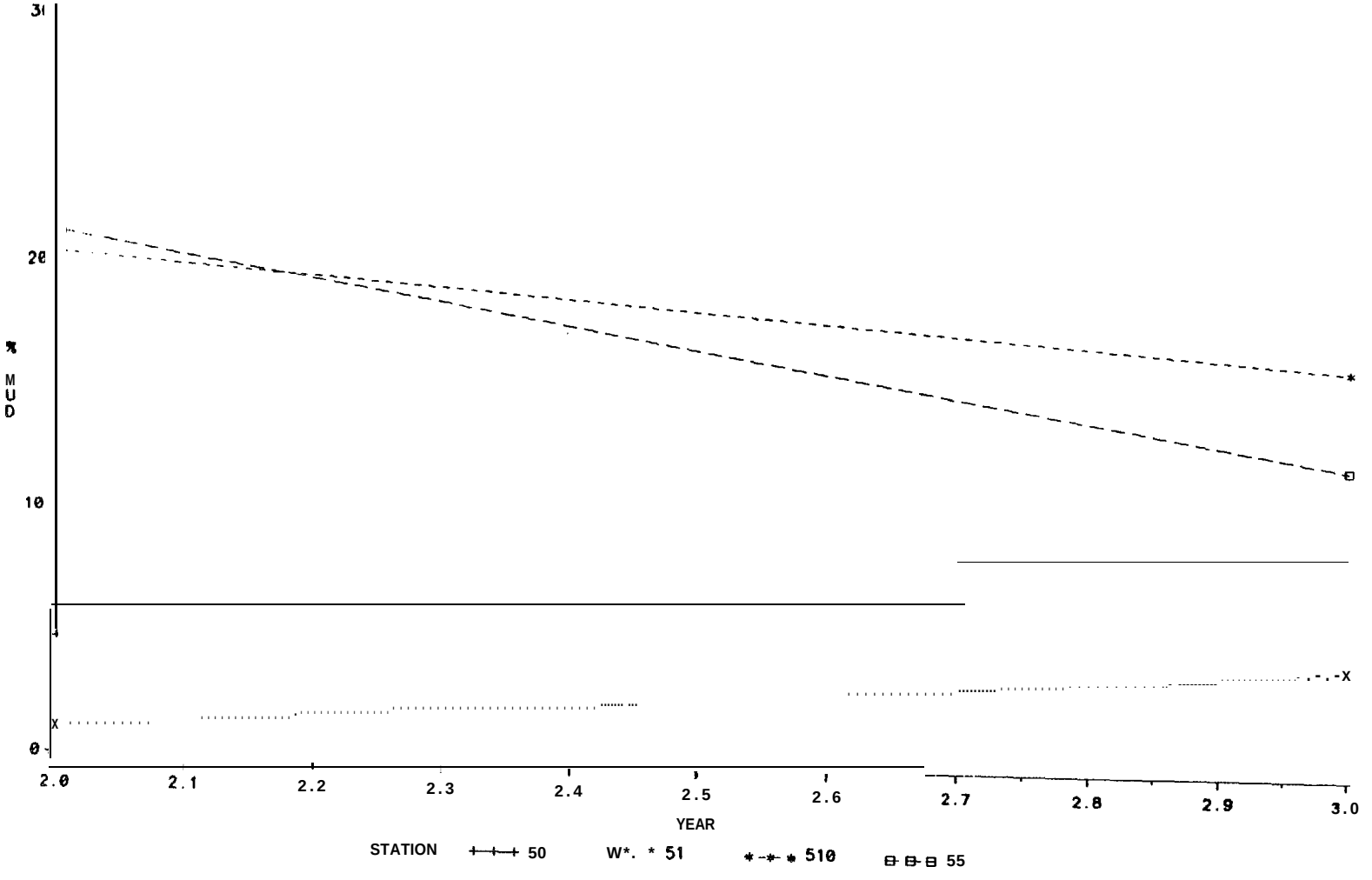
BEAUFORT SEA MONITORING PROGRAM
PLOT OF Y EARLY GEOMETRIC MEANS
ENDICOTT STATIONS, YEARS 2 AND 3

TYPE OF SEDIMENT: FINE



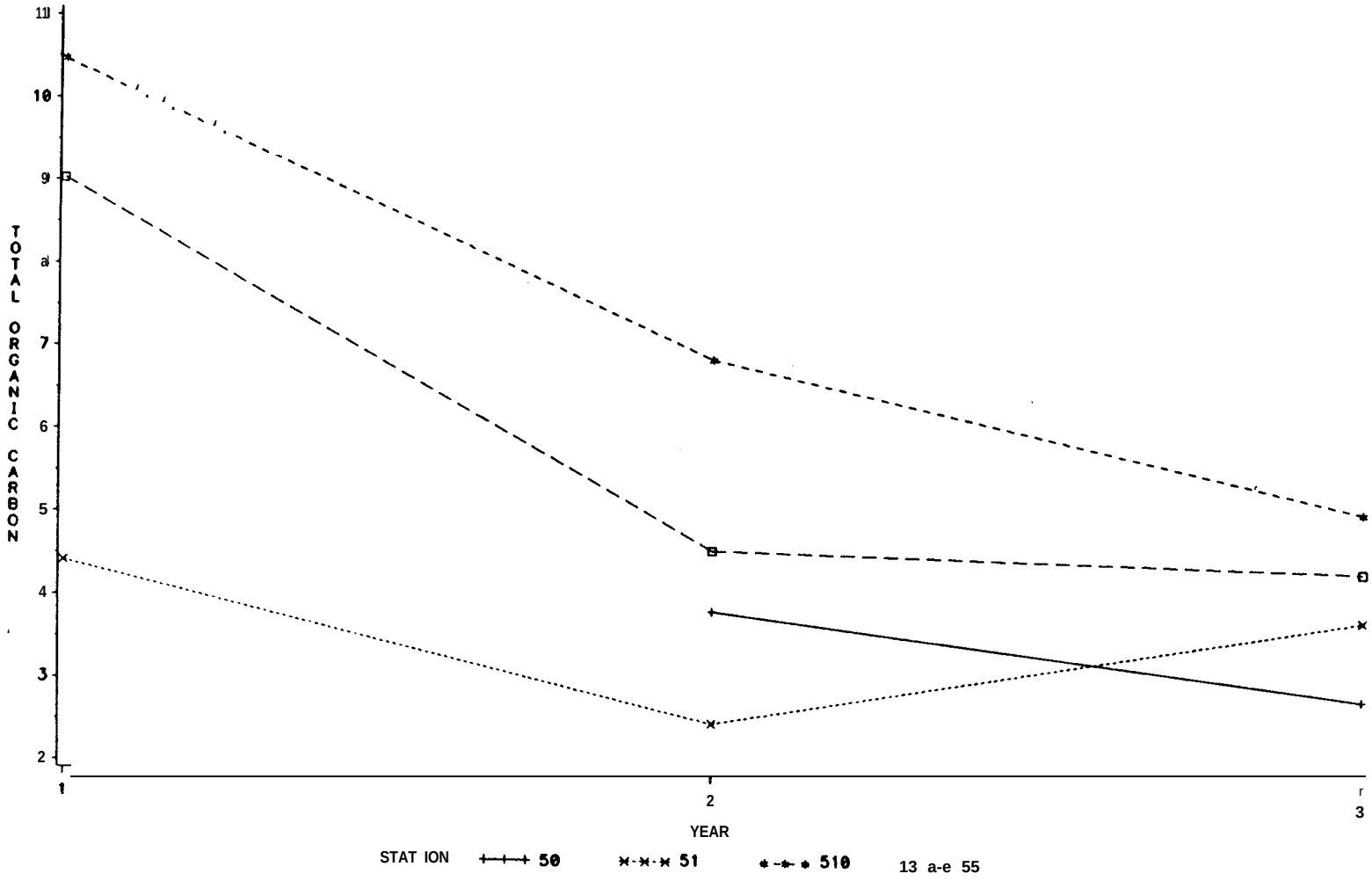
BEAUFORT SEA MONITORING PROGRAM
PLOT OF YEARLY GEOMETRIC MEANS
ENDICOTT STATIONS, YEARS 2 AND 3

TYFE OF SEDIMENT FINE



BEAUFORT SEA MONITORING PROGRAM
PLOT OF YEARLY GEOMETRIC MEANS
ENDICOTT STATIONS, ALL YEARS

TYPE OF SEDIMENT: BULK

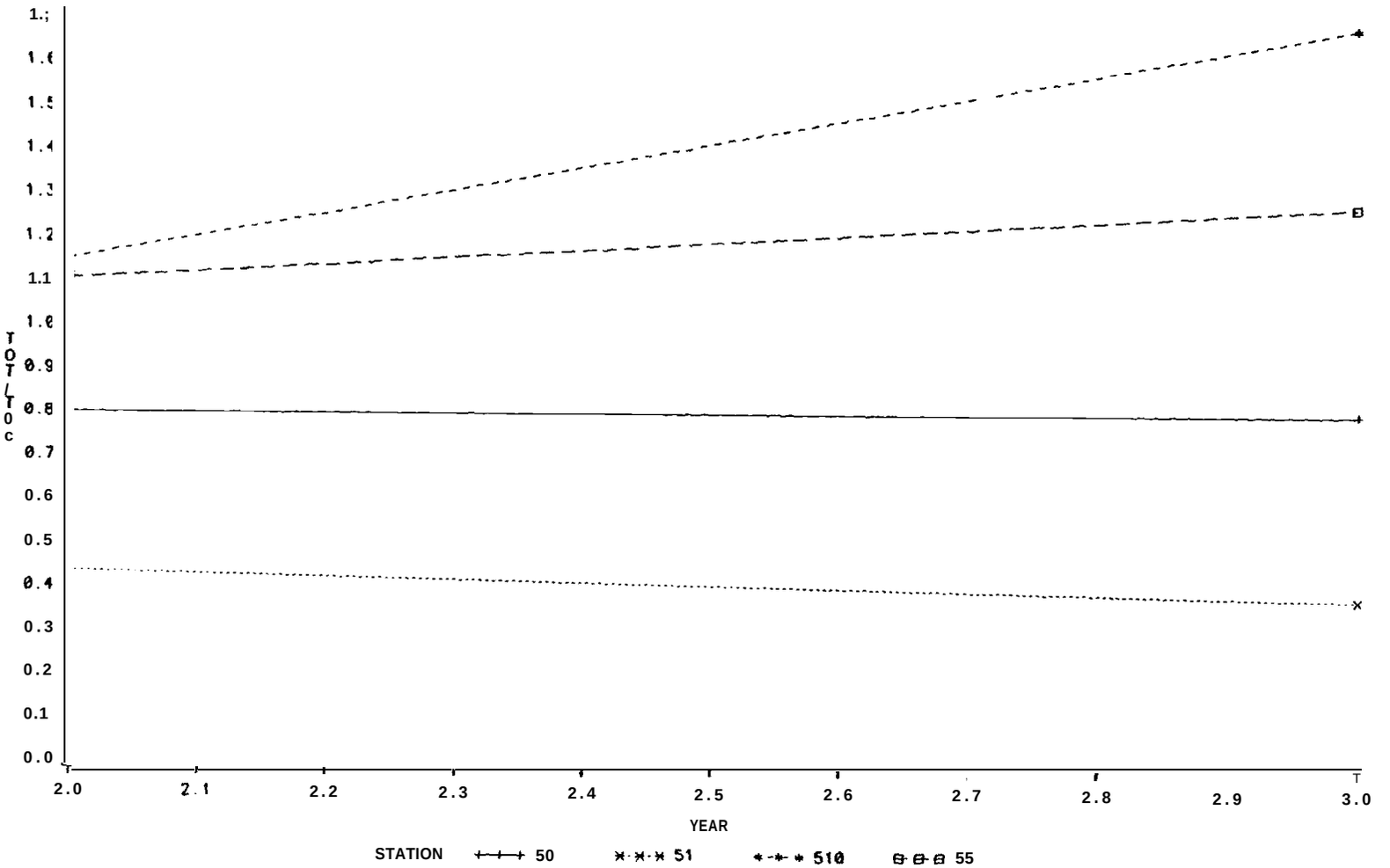


SECTION 12

PLOTS OF GEOMETRIC MEANS OF SELECTED SEDIMENT PARAMETER RATIOS FOR THE ENDICOTT FIELD STATIONS FOR YEAR-2 AND YEAR-3

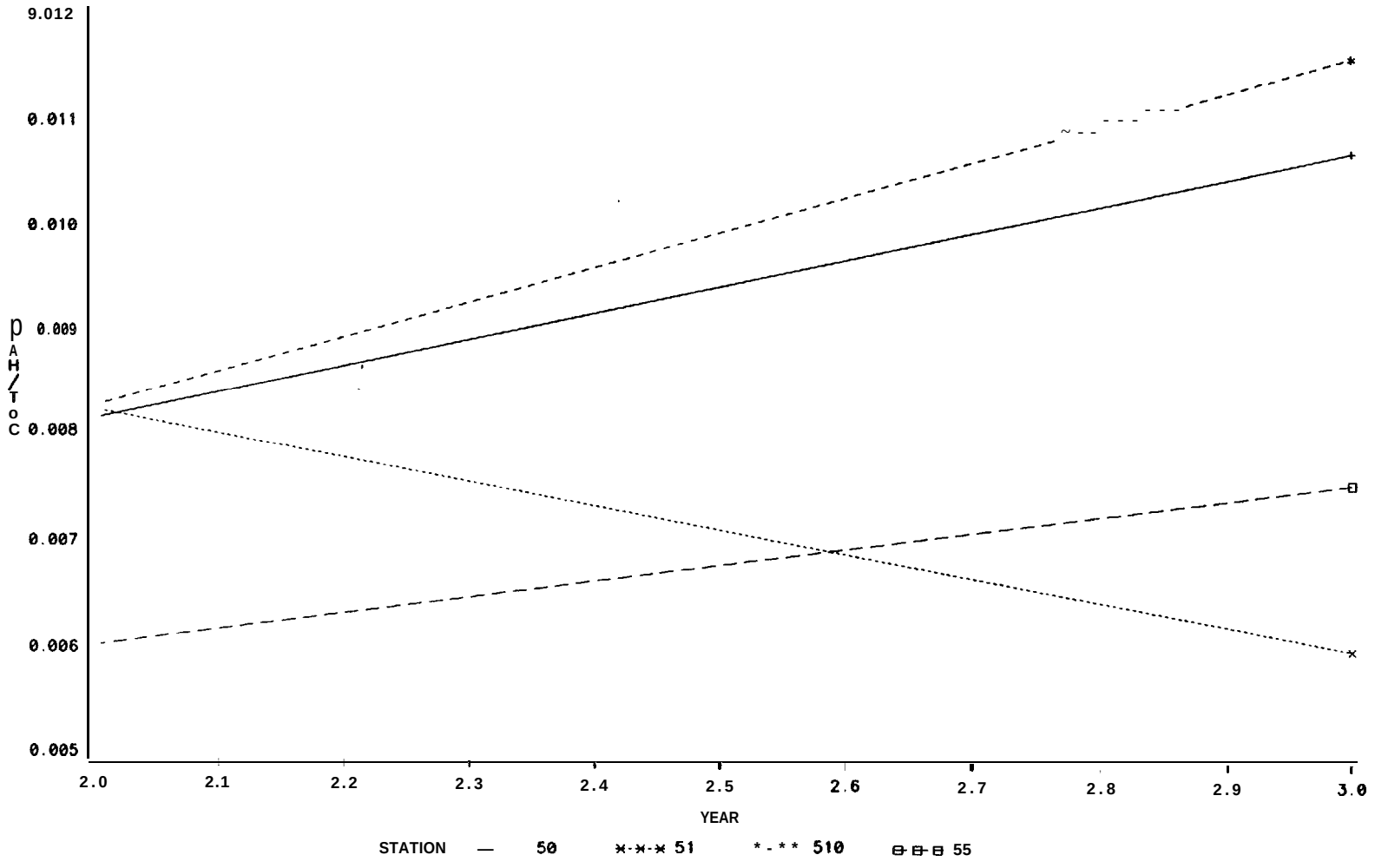
BEAUFORT SEA MONITORING PROGRAM
PLOT OF YEARLY GEOMETRIC MEANS
ENDICOTT STATIONS, YEARS 2 AND 3

TYPE OF SEDIMENT: BULK



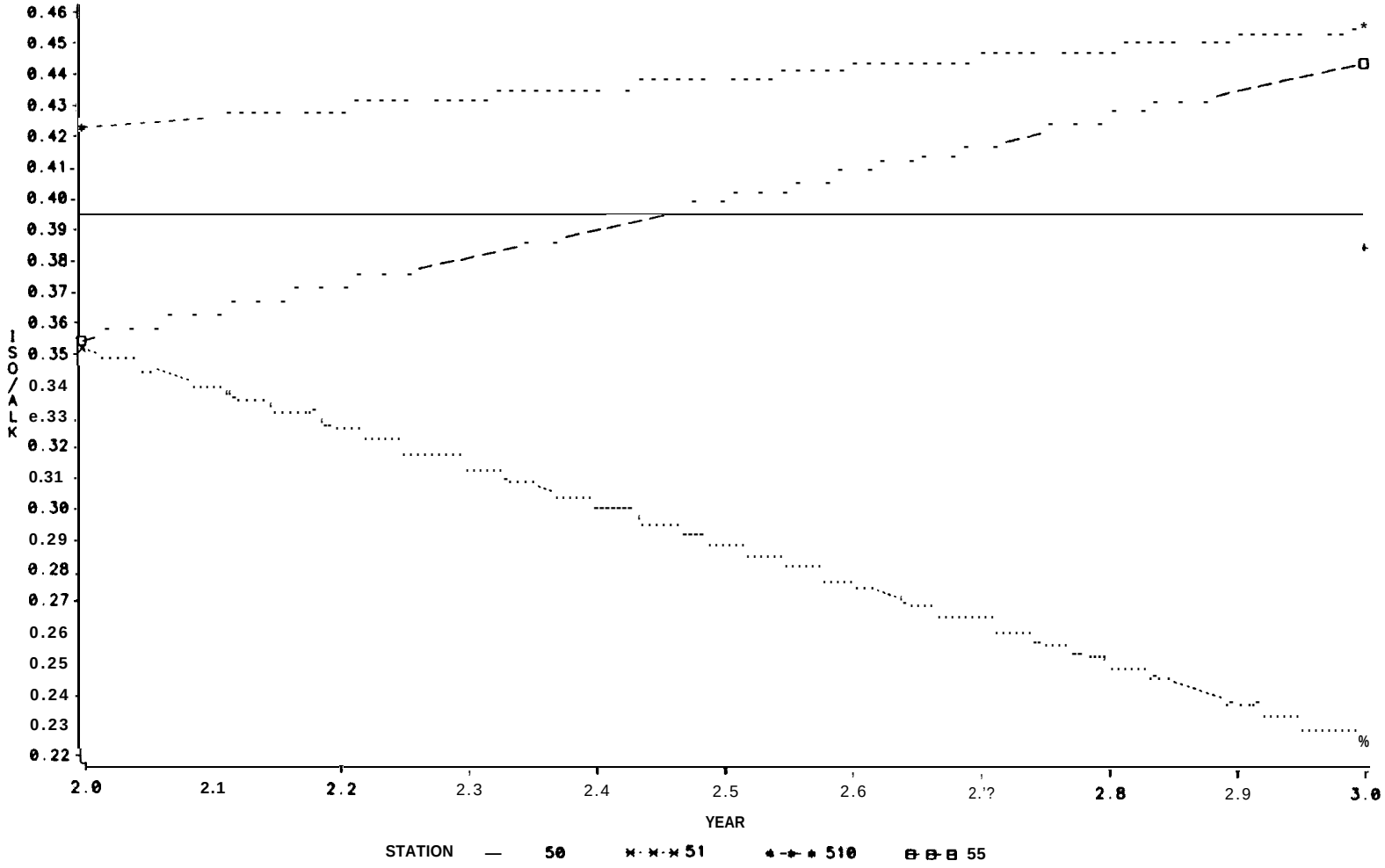
13 EAUFORT SEA MONITORING PROGRAM
PLOT OF YEARLY GEOMETRIC MEANS
ENDICOTT STATIONS, YEARS 2 AND 3

TYPE OF SEDIMENT BULK



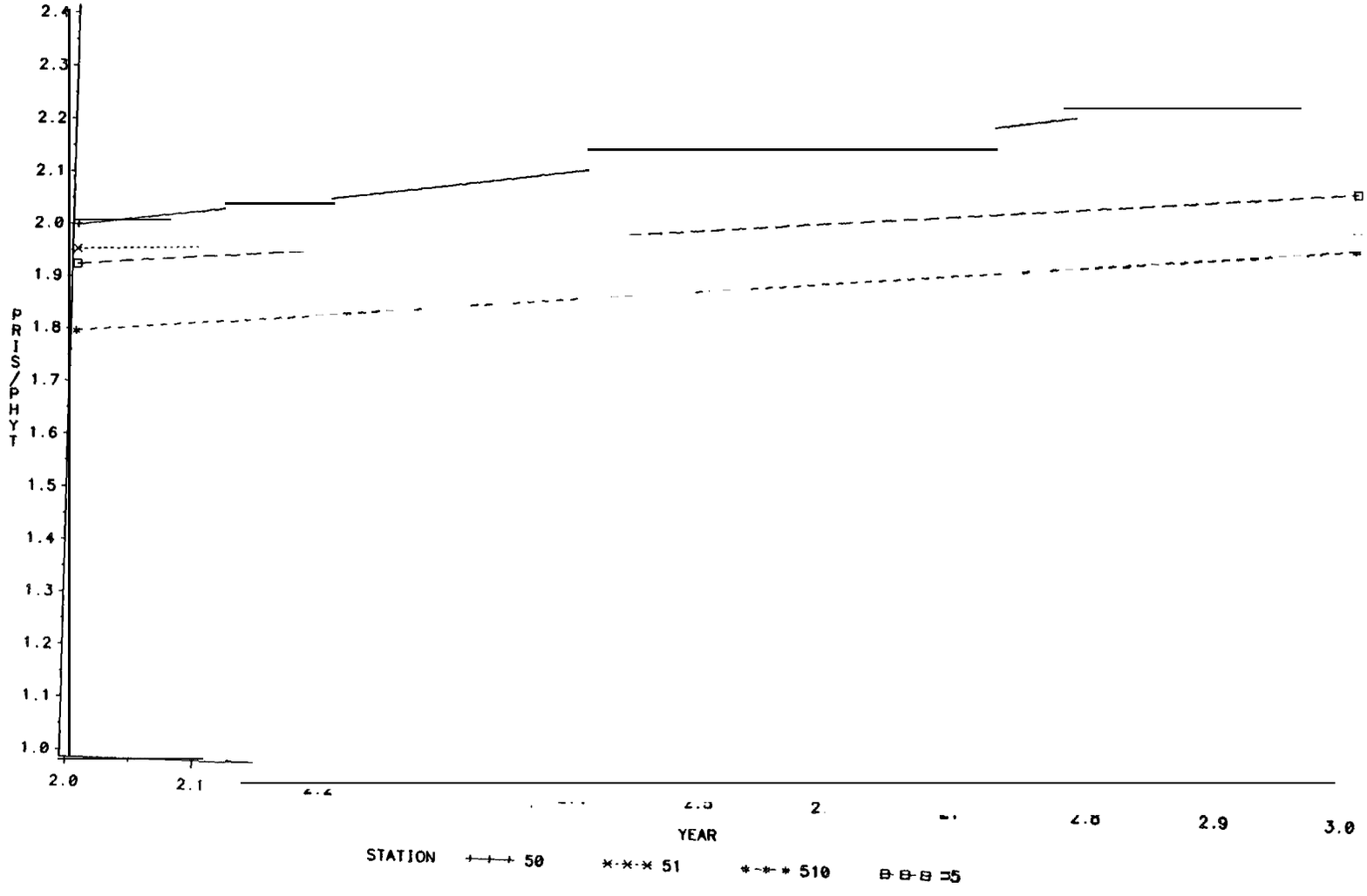
BEAUFORT SEA MONITORING PROCRAM
PLOT OF YEARLY GEOMETRIC MEANS
ENDICOTT STATIONS, YEARS 2 AND 3

TYPE OF SEDIMENT: BULK



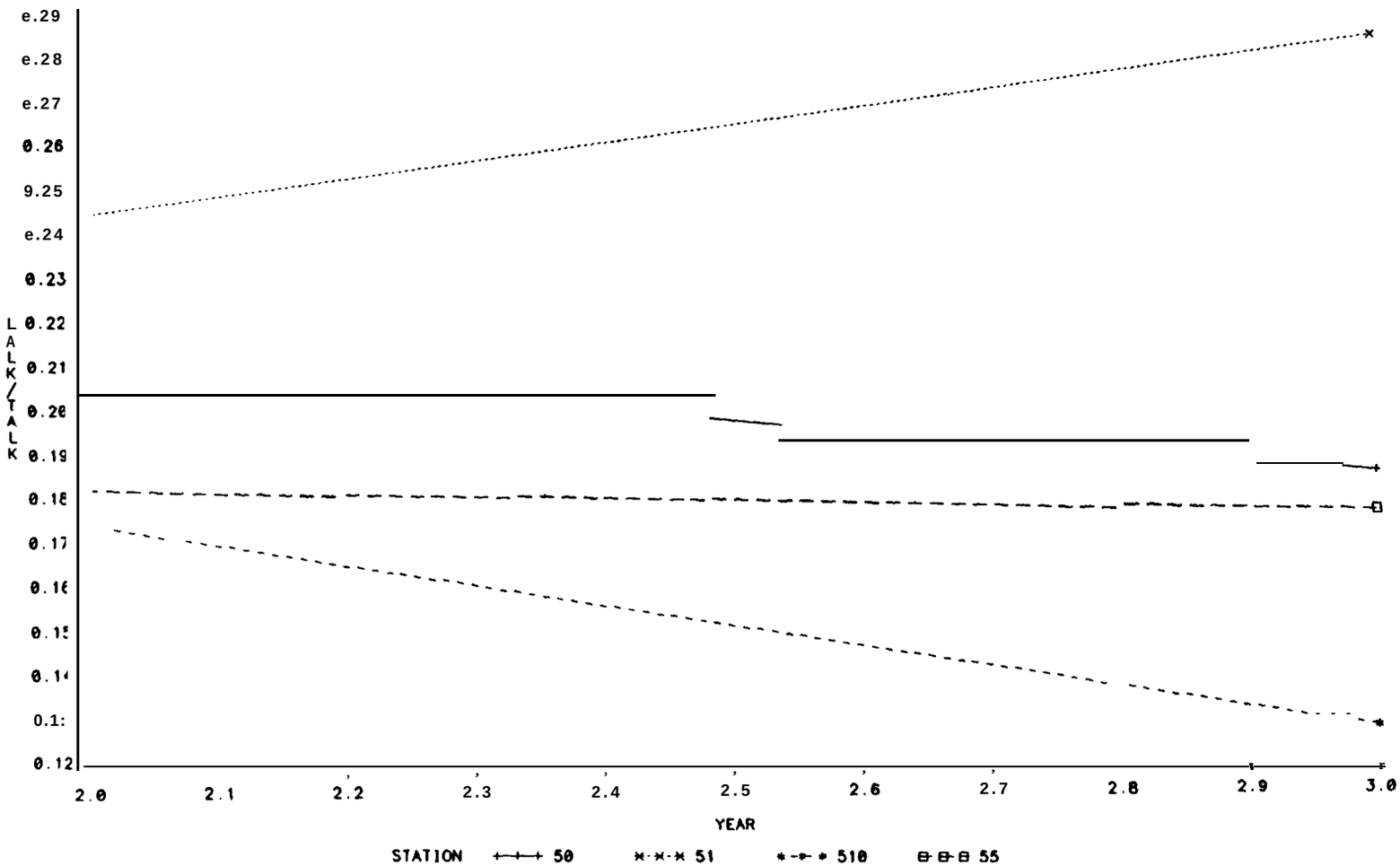
BEAUFORT SEA MONITORING PROGRAM
PLOT OF YEARLY GEOMETRIC MEANS
ENDICOTT STATIONS, YEARS 2 AND 3

TYPE OF SEDIMENT: BULK



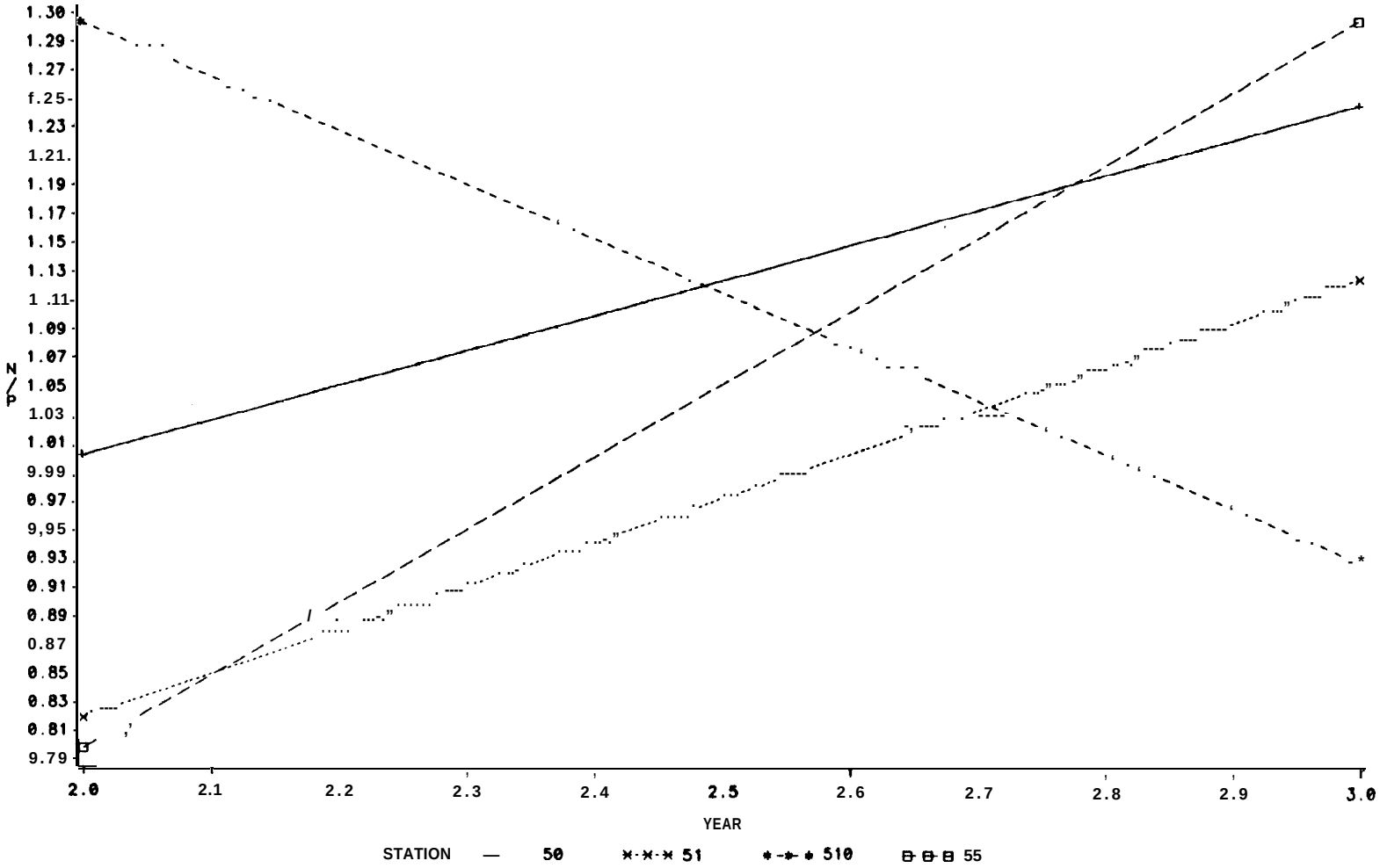
BEAUFORT SEA MONITORING PROGRAM
PLOT OF YEARLY GEOMETRIC MEANS
ENDICOT73YATIONS. YEAR32 AND 3

TYPE OF SEDIMENT: BULK



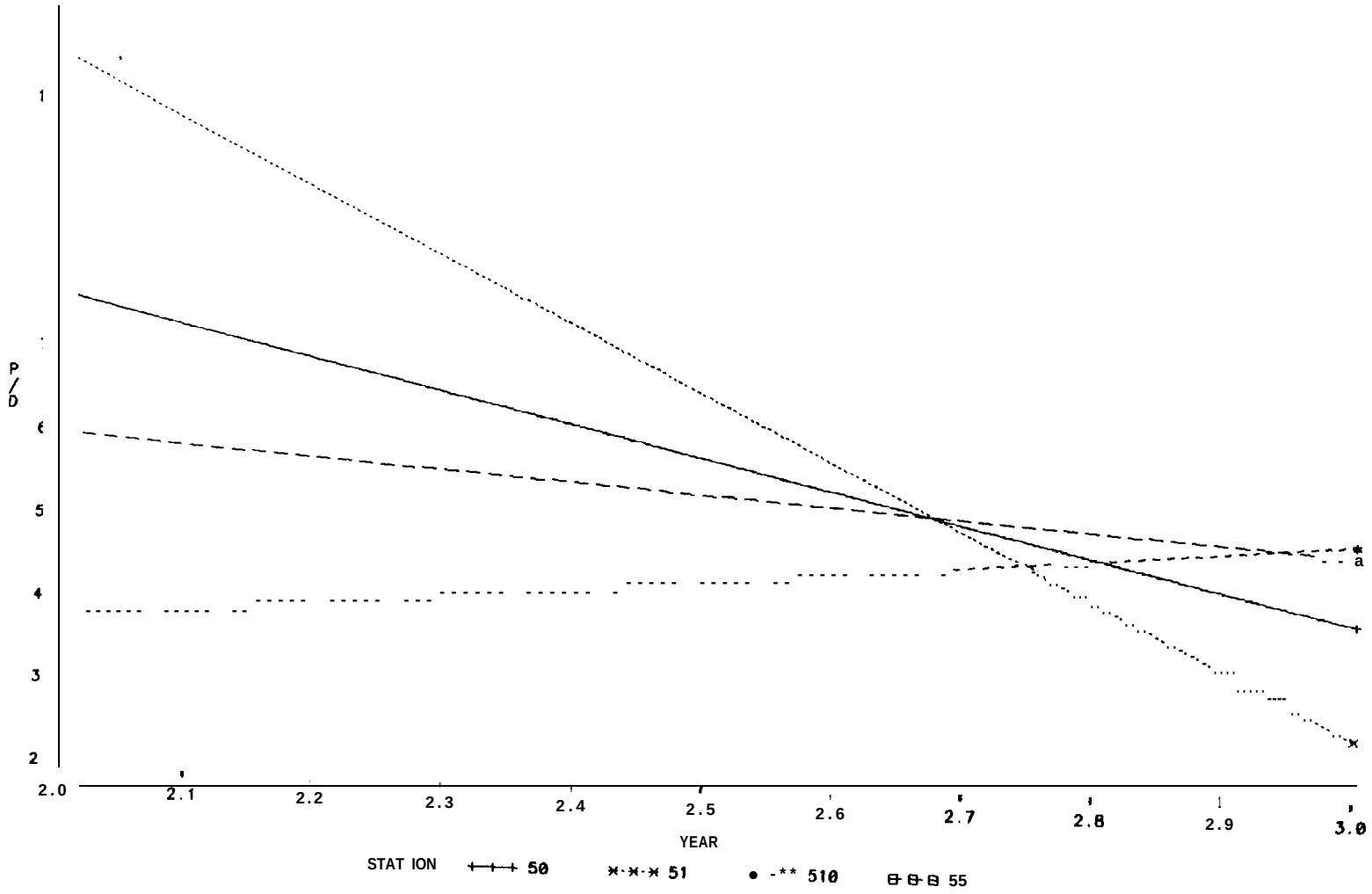
BEAUFORT SEA MONITORING PROGRAM
PLOT OF YEARLY GEOMETRIC MEANS
ENDICOTT STATIONS, YEARS 2 AND 3

TYPE OF SEDIMENT: BULK



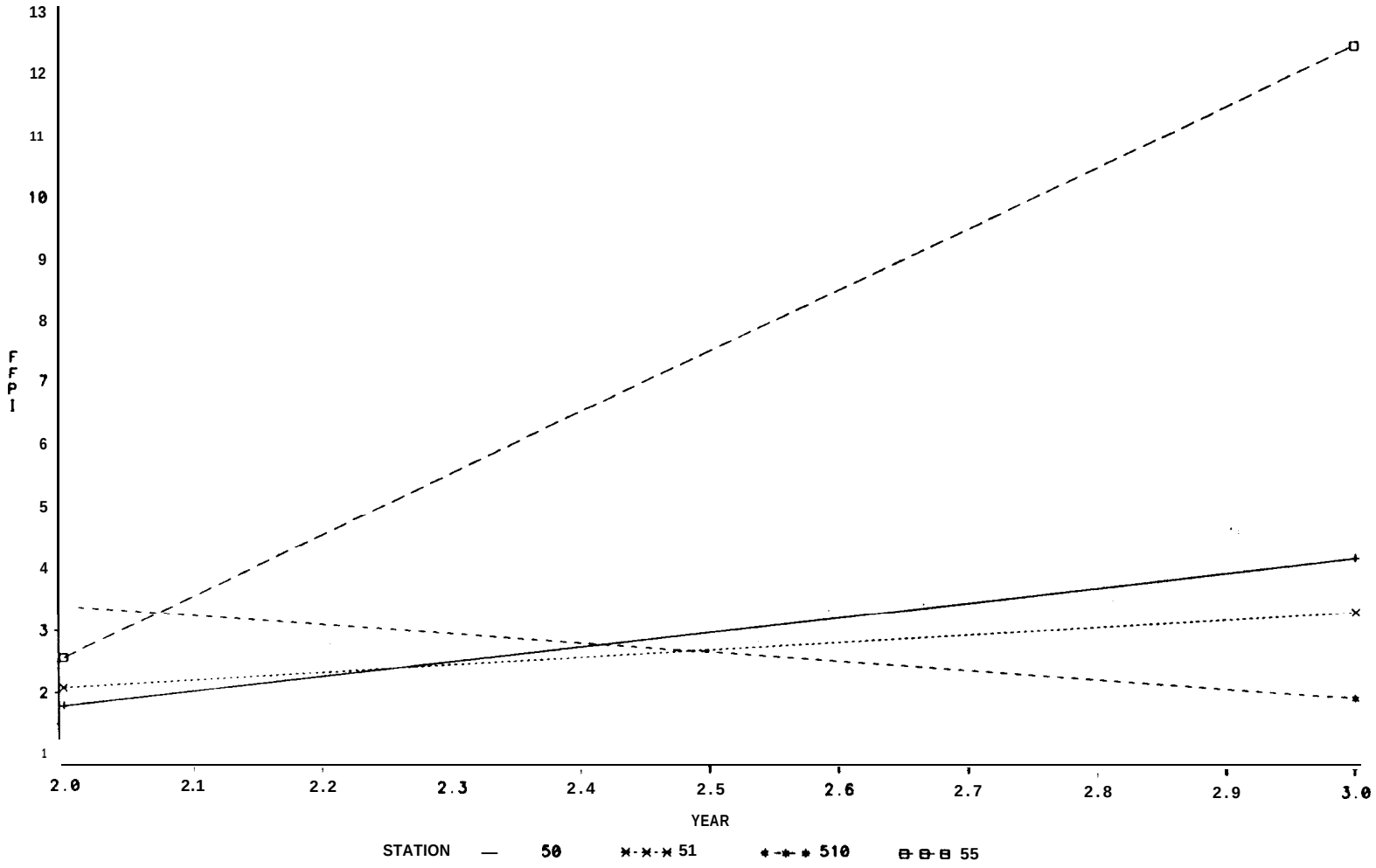
BEAUFORT SEA MONITORING PROGRAM
PLOT' OF YEARLY GEOMETRIC MEANS
ENDICOTT STATIONS, YEARS 2 AND 3

TYPE OF SEDIMENT: BULK



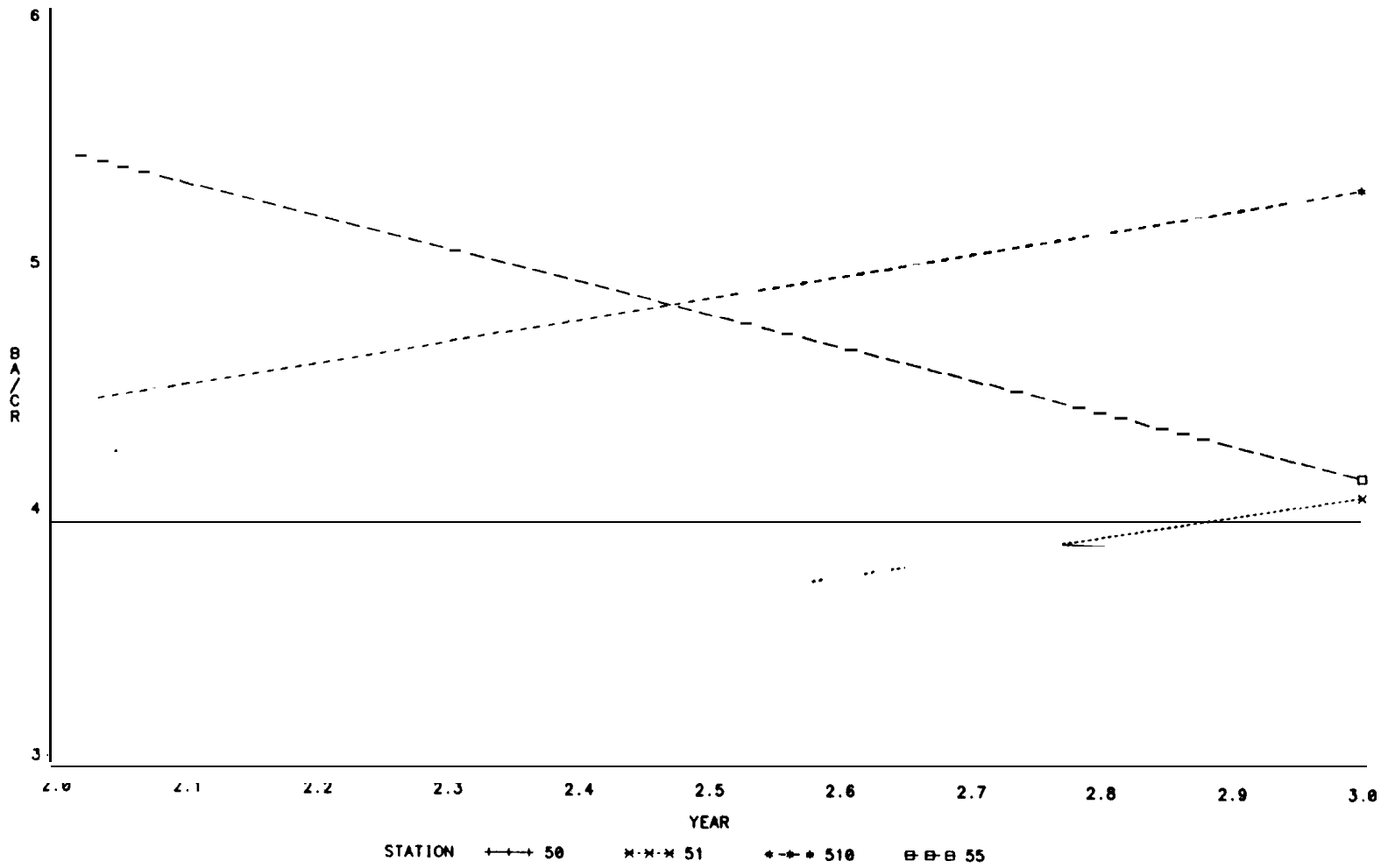
BEAUFORT SEA MONITORING PROCRAM
PLOT OF YEARLY GEOMETRIC MEANS
ENDICOTT STATIONS, YEARS 2 AND 3

TYPE OF SEDIMENT: BULK



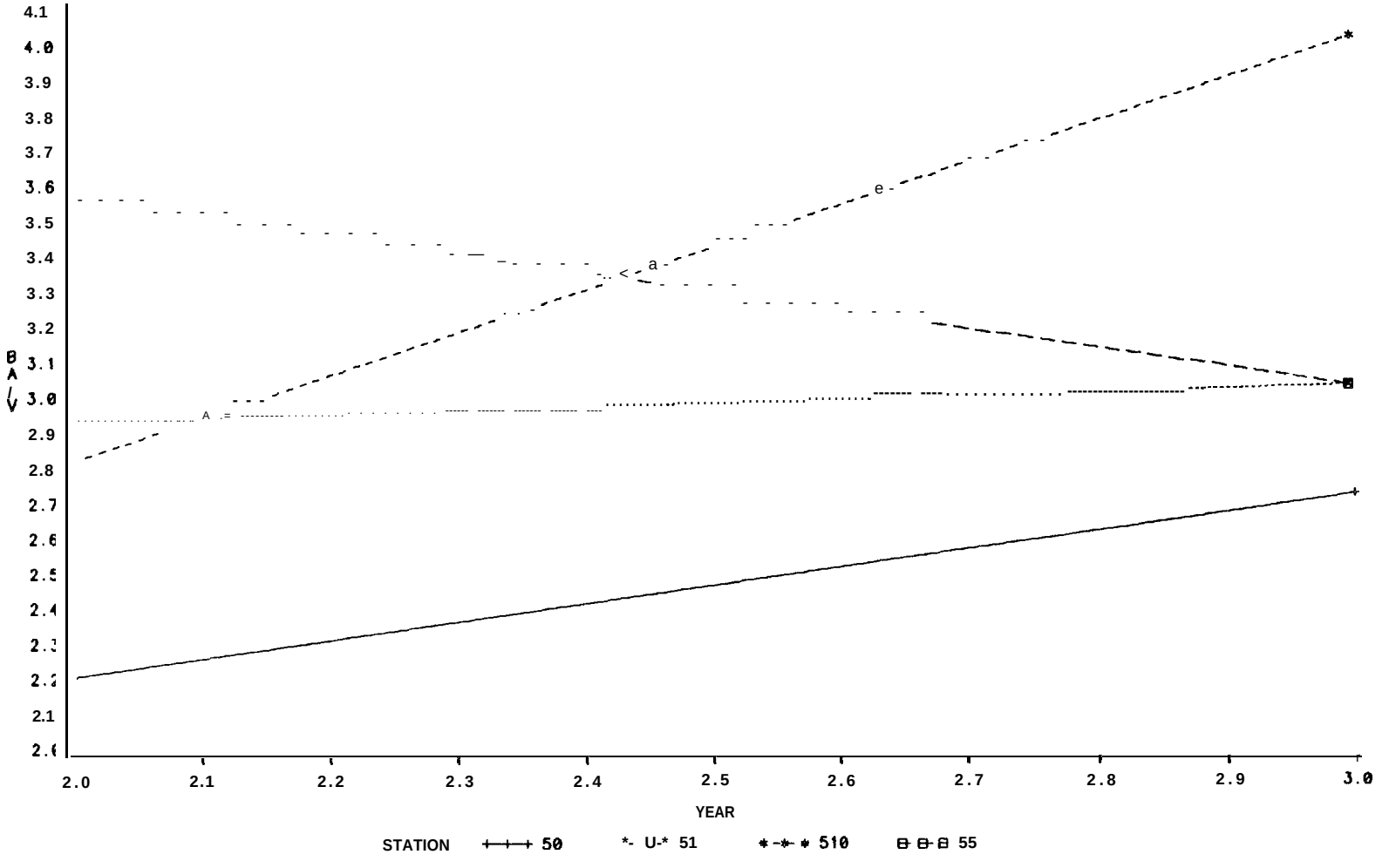
BEAUFORT SEA MONITORING PROGRAM
PLOT OF YEARLY GEOMETRIC MEANS
ENDICOTT STATIONS, YEARS 2 AND 3

TYPE OF SEDIMENT: FINE



BEAUFORT SEA MONITORING PROGRAM
PLOT OF YEARLY GEOMETRIC MEANS
ENDICOTT STATIONS, YEARS 2 AND 3

TYPE OF SEDIMENT FINE



APPENDIX D

DESCRIPTION OF THE PRINCIPAL COMPONENTS ANALYSIS

PRINCIPAL COMPONENT ANALYSIS

Every sediment sample collected during this investigation was analyzed for a specific set of analytes or variables. In other words, each sample can be viewed as a single multivariate observation, and the collection of samples as a multivariate data set.

One goal of multivariate statistical analysis is dimension reduction. If, for example, there were only three analytes of interest during the investigation, there are three separate dimensions of variation. The data could be plotted on three perpendicular (orthogonal) axes in order to view the pattern of variation of these three analytes simultaneously. By looking at these points in three dimensions, a single line (or new axis) could be drawn through them, about which most of the variation could be explained. This new axis can be mathematically described as a linear combination of the three analyte concentrations and the new axis can also be considered a new variable whose values are a weighted sum of the three analytes of interest. When the new axis is determined, the three-dimensional problem is reduced to a one-dimensional problem, hence, the notion of dimension reduction. In four dimensions (i.e., four analytes), the ability to view the data, as in three dimensions, breaks down, but the mathematics do not.

Principal Components Analysis (PCA; Sharaf, et al., 1986) is a statistical method that allows the researcher to reduce an n-dimensional data set (i.e., n analytes per sample) to one, two, or three dimensions. The first Principal Component (PC) is a line or axis in n-dimensional hyperspace about which most of the variation in the multivariate observations is explained. This PC can be used as a new variable whose values are a linear combination or weighted sum of the n-analyte concentrations given as follows:

$$z_{1i} = a_1 x_{1i} + a_2 x_{2i} + \ldots a_n x_{ni}$$

where is the value of the first PC for the ith sample, a_1 through a_n are the weights (often called loadings), and x_{1i} through X_{ni} are n-analyte concentrations.

The second PC is also a weighted sum of the same n analyte concentrations . The second PC is obtained mathematically under the constraint that the first and second PCs describe two

orthogonal axes in the n-dimensional hyperspace. This means that the second PC is a second axis in the multivariate (n) space of the data about which additional variation not accounted for by the first PC is explained. Statistically, this is the same as saying that the correlation between z_1 and z_2 is zero.

Since there are n PCs in an n-dimensional data set, the total amount of variation in the multivariate data set is the sum of the variances of each PC. 'I'hat is:

$$V = Var(z_1) + Var(z_2) + \ldots Var(z_n)$$

where V is often called the total or generalized variance of the data.

Because of the sequential nature of PCA, each PC accounts for a successively lesser amount of the generalized variance. It is often the case that 60 to 80 percent of this variation is accounted for in the first two PCs. This means that if there are any patterns among the multivariate observations in n-space, these patterns are likely to be manifested in the first two PCs.

Pattern recognition is an important goal of PCA and is accomplished, in the Beaufort Sea data analysis, by plotting the values or scores of the first two PCs (score plot). These plots are meant to show in two dimensions what cannot be viewed in n dimensions, namely, patterns among the multivariate observations. Patterns are recognized as groups or clusters of points on the score plot that are all related in some way. For example, if two groups of PC scores were observed in a score plot of the Beaufort Sea sediment data, it may be that all points in one group correspond to stations nearer to drilling rigs while points in the other group may correspond to stations farther away from drilling rigs. Knowing the station identity of each corresponding PC score would help us determine if this is plausible for explaining the observed pattern.

In addition, a plot of the loadings of the first two PCs is also a useful pattern recognition tool. These loadings plots show the researcher which analytes appear to be making the greatest contribution to each PC. Typically, some analytes will have high loading for one PC but low loadings on the other. The score plot and the loadings, coupled with the information on the amount of the generalized variance explained by the first two PCs, are the most important tools for pattern recognition among the Beaufort Sea sediment data.

COMPUTER MEDIA, NOT IMAGED

BEAUFORT SEA MONITORING PROGRAM: Analysis of Trace Metals and Hydrocarbons from Outer Continental Shelf Activities
3-year Chemical & Geochemical Data Set 1984-1987
Contract No. 14-12-0001-30163
for Minerals Management Service - Alaska OCS Region
Anchorage, Alaska 99510
by BATTELLE - Ocean Sciences
397 Washington Street, Duxbury, MA 02332

● 57 COMPUTER MEDIA NOT IMAGED*