

Characterization of Class A Low-Level Radioactive Waste 1986-1990

Appendix F

Prepared by
J-C Dehmel, D. Loomis, J. Mauro/SC&A
M. Kaplan/ERG

S. Cohen & Associates, Inc.

Eastern Research Group, Inc.

Prepared for
U.S. Nuclear Regulatory Commission

AVAILABILITY NOTICE

Availability of Reference Materials Cited in NRC Publications

Most documents cited in NRC publications will be available from one of the following sources:

1. The NRC Public Document Room, 2120 L Street, NW., Lower Level, Washington, DC 20555-0001
2. The Superintendent of Documents, U.S. Government Printing Office, Mail Stop SSOP, Washington, DC 20402-9328
3. The National Technical Information Service, Springfield, VA 22161

Although the listing that follows represents the majority of documents cited in NRC publications, it is not intended to be exhaustive.

Referenced documents available for inspection and copying for a fee from the NRC Public Document Room include NRC correspondence and internal NRC memoranda; NRC bulletins, circulars, information notices, inspection and investigation notices; licensee event reports; vendor reports and correspondence; Commission papers; and applicant and licensee documents and correspondence.

The following documents in the NUREG series are available for purchase from the GPO Sales Program: formal NRC staff and contractor reports, NRC-sponsored conference proceedings, international agreement reports, grant publications, and NRC booklets and brochures. Also available are regulatory guides, NRC regulations in the *Code of Federal Regulations*, and *Nuclear Regulatory Commission Issuances*.

Documents available from the National Technical Information Service include NUREG-series reports and technical reports prepared by other Federal agencies and reports prepared by the Atomic Energy Commission, forerunner agency to the Nuclear Regulatory Commission.

Documents available from public and special technical libraries include all open literature items, such as books, journal articles, and transactions. *Federal Register* notices, Federal and State legislation, and congressional reports can usually be obtained from these libraries.

Documents such as theses, dissertations, foreign reports and translations, and non-NRC conference proceedings are available for purchase from the organization sponsoring the publication cited.

Single copies of NRC draft reports are available free, to the extent of supply, upon written request to the Office of Administration, Distribution and Mail Services Section, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001.

Copies of industry codes and standards used in a substantive manner in the NRC regulatory process are maintained at the NRC Library, 7920 Norfolk Avenue, Bethesda, Maryland, for use by the public. Codes and standards are usually copyrighted and may be purchased from the originating organization or, if they are American National Standards, from the American National Standards Institute, 1430 Broadway, New York, NY 10018.

DISCLAIMER NOTICE

This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, or any of their employees, makes any warranty, expressed or implied, or assumes any legal liability of responsibility for any third party's use, or the results of such use, of any information, apparatus, product or process disclosed in this report, or represents that its use by such third party would not infringe privately owned rights.

Characterization of Class A Low-Level Radioactive Waste 1986-1990

Appendix F

Manuscript Completed: September 1993
Date Published: January 1994

Prepared by
J-C Dehmel, D. Loomis, J. Mauro, S. Cohen & Associates, Inc.
M. Kaplan, Eastern Research Group, Inc.

S. Cohen & Associates, Inc.
1355 Beverly Road, Suite 250
McLean, VA 22101

Subcontractor:
Eastern Research Group, Inc.
110 Hartwell Avenue
Lexington, MA 02173

Prepared for
Division of Regulatory Applications
Office of Nuclear Regulatory Research
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001
NRC FIN D2053

FOREWORD

This report characterizes Class A Low Level waste shipped for disposal from 1986 through 1990. It was developed as part of a Nuclear Regulatory Commission (NRC) sponsored study to develop a technical information base useful to persons and organizations involved in the management and disposal of Low-Level radioactive waste and in the regulation of these activities.

This NUREG report is not a substitute for NRC regulations, and compliance is not required. The approaches and/or methods described in this NUREG are provided for information only. Publication of this report does not necessarily constitute NRC approval or agreement with the information contained herein.



Donald A. Cool, Chief
Radiation Protection and Health
Effects Branch
Division of Regulatory Applications
Office of Nuclear Regulatory Research

ABSTRACT

Under contract to the U.S. Nuclear Regulatory Commission, Office of Nuclear Regulatory Research, the firms of S. Cohen & Associates, Inc. (SC&A) and Eastern Research Group (ERG) have compiled a report that describes the physical, chemical, and radiological properties of Class-A low-level radioactive waste. The report also presents information characterizing various methods and facilities used to treat and dispose non-radioactive waste.

The characterization of Class-A low-level waste is based primarily on information contained in the Manifest Information Management System (MIMS), an electronic database compiled by the National Low-Level Waste Management Program. The Program is managed by EG&G Idaho, Inc. for the Department of Energy. Supplementary sources of information include reports and studies conducted under the auspices of the Nuclear Regulatory Commission, Department of Energy, regional low-level waste Compacts and unaffiliated States, and trade organizations. The database characterizes low-level waste shipped for disposal from 1986 to 1990.

A database management program was developed for use in accessing, sorting, analyzing, and displaying the electronic data provided by EG&G. The program was used to present and aggregate data characterizing the radiological, physical, and chemical properties of the waste from descriptions contained in shipping manifests. The data thus retrieved are summarized in tables, histograms, and cumulative distribution curves presenting radionuclide concentration distributions in Class-A waste as a function of waste streams, by category of waste generators, and regions of the United States.

The report also provides information characterizing methods and facilities used to treat and dispose non-radioactive waste, including industrial, municipal, and hazardous waste regulated under Subparts C and D of the Resource Conservation and Recovery Act (RCRA). The information includes a list of disposal options, the geographical locations of the processing and disposal facilities, and a description of the characteristics of such processing and disposal facilities.

Volume 1 contains the Executive Summary, Volume 2 presents the Class-A waste database, Volume 3 presents the information characterizing non-radioactive waste management practices and facilities, and Volumes 4 through 7 contain Appendices A through P with supporting information.

VOLUME 5 APPENDIX

Appendix F presents additional information for the Executive Summary (Vol. 1) and Main Report (Vol. 2 and 3).

Contents

<u>Appendix</u>	<u>Page</u>
F Waste Radionuclide Concentrations by Compact Regions and States - Shipment-level Analyses: All Disposal Sites and Non-Brokered Wastes Aggregate Practices 1986-1990	F-1
<u>Exhibit</u>	
F-1 Data Summary - Analyses at the Shipment Level - Northwest - Government	F-2
F-2 Data Summary - Analyses at the Shipment Level - Northwest - Academic	F-5
F-3 Data Summary - Analyses at the Shipment Level - Northwest - Medical	F-8
F-4 Data Summary - Analyses at the Shipment Level - Northwest - Industrial	F-11
F-5 Data Summary - Analyses at the Shipment Level - Rocky Mountain - Government	F-14
F-6 Data Summary - Analyses at the Shipment Level - Rocky Mountain - Academic	F-17
F-7 Data Summary - Analyses at the Shipment Level - Rocky Mountain - Medical	F-20
F-8 Data Summary - Analyses at the Shipment Level - Rocky Mountain - Industrial	F-23
F-9 Data Summary - Analyses at the Shipment Level - Central - Government	F-26
F-10 Data Summary - Analyses at the Shipment Level - Central - Academic	F-29
F-11 Data Summary - Analyses at the Shipment Level - Central - Medical	F-32
F-12 Data Summary - Analyses at the Shipment Level - Central - Industrial	F-35

Contents (continued)

<u>Exhibit</u>	<u>Page</u>
F-13 Data Summary - Analyses at the Shipment Level - Midwest - Government	F-45
F-14 Data Summary - Analyses at the Shipment Level - Midwest - Academic	F-48
F-15 Data Summary - Analyses at the Shipment Level - Midwest - Medical	F-51
F-16 Data Summary - Analyses at the Shipment Level - Midwest - Industrial	F-54
F-17 Data Summary - Analyses at the Shipment Level - Central Midwest - Government	F-76
F-18 Data Summary - Analyses at the Shipment Level - Central Midwest - Academic	F-79
F-19 Data Summary - Analyses at the Shipment Level - Central Midwest - Medical	F-82
F-20 Data Summary - Analyses at the Shipment Level - Central Midwest - Industrial	F-85
F-21 Data Summary - Analyses at the Shipment Level - Southeast - Government	F-88
F-22 Data Summary - Analyses at the Shipment Level - Southeast - Academic	F-129
F-23 Data Summary - Analyses at the Shipment Level - Southeast - Medical	F-160
F-24 Data Summary - Analyses at the Shipment Level - Southeast - Industrial	F-163
F-25 Data Summary - Analyses at the Shipment Level - Northeast - Government	F-220
F-26 Data Summary - Analyses at the Shipment Level - Northeast - Government	F-223
F-27 Data Summary - Analyses at the Shipment Level - Northeast - Medical	F-260
F-28 Data Summary - Analyses at the Shipment Level - Northeast - Industrial	F-263

Contents (continued)

<u>Exhibit</u>	<u>Page</u>
F-29 Data Summary - Analyses at the Shipment Level - Appalachian - Government	F-266
F-30 Data Summary - Analyses at the Shipment Level - Appalachian - Academic	F-281
F-31 Data Summary - Analyses at the Shipment Level - Appalachian - Medical	F-284
F-32 Data Summary - Analyses at the Shipment Level - Appalachian - Industrial	F-287
F-33 Data Summary - Analyses at the Shipment Level - Southwest - Government	F-381
F-34 Data Summary - Analyses at the Shipment Level - Southwest - Academic	F-404
F-35 Data Summary - Analyses at the Shipment Level - Southwest - Medical	F-439
F-36 Data Summary - Analyses at the Shipment Level - Southwest - Industrial	F-473
F-37 Data Summary - Analyses at the Shipment Level - District of Columbia - Government	F-519
F-38 Data Summary - Analyses at the Shipment Level - District of Columbia - Academic	F-522
F-39 Data Summary - Analyses at the Shipment Level - District of Columbia - Medical	F-525
F-40 Data Summary - Analyses at the Shipment Level - District of Columbia - Industrial	F-528
F-41 Data Summary - Analyses at the Shipment Level - Maine - Government	F-531
F-42 Data Summary - Analyses at the Shipment Level - Maine - Academic	F-534

Contents (continued)

<u>Exhibit</u>	<u>Page</u>
F-43 Data Summary - Analyses at the Shipment Level - Maine - Medical	F-537
F-44 Data Summary - Analyses at the Shipment Level - Maine - Industrial	F-540
F-45 Data Summary - Analyses at the Shipment Level - Massachusetts - Government	F-543
F-46 Data Summary - Analyses at the Shipment Level - Massachusetts - Academic	F-546
F-47 Data Summary - Analyses at the Shipment Level - Massachusetts - Medical	F-549
F-48 Data Summary - Analyses at the Shipment Level - Massachusetts - Industrial	F-552
F-49 Data Summary - Analyses at the Shipment Level - New Hampshire - Government	F-579
F-50 Data Summary - Analyses at the Shipment Level - New Hampshire - Academic	F-582
F-51 Data Summary - Analyses at the Shipment Level - New Hampshire - Medical	F-585
F-52 Data Summary - Analyses at the Shipment Level - New Hampshire - Industrial	F-588
F-53 Data Summary - Analyses at the Shipment Level - New York - Government	F-591
F-54 Data Summary - Analyses at the Shipment Level - New York - Academic	F-594
F-55 Data Summary - Analyses at the Shipment Level - New York - Medical	F-612
F-56 Data Summary - Analyses at the Shipment Level - New York - Industrial	F-615
F-57 Data Summary - Analyses at the Shipment Level - Rhode Island - Government	F-662
F-58 Data Summary - Analyses at the Shipment Level - Rhode Island - Academic	F-665

Contents (continued)

<u>Exhibit</u>	<u>Page</u>
F-59 Data Summary - Analyses at the Shipment Level - Rhode Island - Medical	F-668
F-60 Data Summary - Analyses at the Shipment Level - Rhode Island - Industrial	F-671
F-61 Data Summary - Analyses at the Shipment Level - Texas - Government	F-674
F-62 Data Summary - Analyses at the Shipment Level - Texas - Academic	F-677
F-63 Data Summary - Analyses at the Shipment Level - Texas - Medical	F-680
F-64 Data Summary - Analyses at the Shipment Level - Texas - Industrial	F-683
F-65 Data Summary - Analyses at the Shipment Level - Vermont - Academic	F-686
F-66 Data Summary - Analyses at the Shipment Level - Vermont - Medical	F-689
F-67 Data Summary - Analyses at the Shipment Level - Vermont - Industrial	F-692

VOLUMES 4, 6 AND 7 APPENDICES

Volume 4:

- A Sample Shipping Manifest Forms
- B Low-Level Waste Data Manager Program Description
- C Waste Forms and Radionuclide Concentrations Compacts
Unaffiliated States - Analyses at the container level
Non-Brokered Waste: Aggregate Practices 1988-1990
- D Waste Forms and Radionuclide concentrations - Analyses
at the container level for Selected Waste Forms; Beatty
and Richland 1988-1990
- E Radionuclide concentrations by Compact Regions and
States - Shipment-level Analyses: All Disposal Sites
Aggregate Practices 1986-1990

Volume 6:

- G Location of Major Waste Generators and Compact Regions
and States Population Distributions
- H Fuel Fabrication Facilities - Shipment-level Analyses
for Selected Radionuclides and States: Aggregate
Practices from 1986 to 1990
- I Utility Waste Forms and Radionuclide Concentrations -
Container-level Analyses for Selected Waste Forms:
Beatty and Richland 1988 to 1990
- J Utility Waste Radionuclide Concentrations - Shipment
Level Analyses: 1989 Barnwell and Richland

Volume 7:

- K Processed and Brokered Wastes - Selected Waste Forms
and Radionuclides: Container-level Analyses Aggregate
Practices from 1988 to 1990
- L Population Information Pertaining to RCRA Subparts C and D
Facilities
- M Municipal Solid Waste Landfills in 1986 Survey
- N State Comments on Landfill Capacity
- O Municipal Solid Waste Landfills - 1992 Listing
- P Cross-Reference List of Geographical Locations for Treatment
and Disposal Facilities

PREFACE

Section 10 of the Low-Level Radioactive Waste Policy Amendments Act (LLRWPA) of 1985 directed the Commission to develop criteria and procedures to act upon petitions "to exempt specific radioactive waste streams from regulations ... due to the presence of radionuclides ... in sufficiently low concentrations or quantities as to be below regulatory concern." The Commission responded to this statutory provision by issuing a policy statement on August 29, 1986 (51 FR 30839) that contained criteria for evaluating such petitions. On December 2, 1986 (51 FR 43367), the commission published an advance notice of proposed rulemaking (ANPR) entitled "Radioactive Waste Below Regulatory Concern: Generic Rulemaking" (RIN 3150-AC35). In July 1990, the Commission issued a second policy statement addressing the below regulatory concern issue, "General Statement of Policy on Below Regulatory Concern," July 3, 1990 (55 FR 27522).

In July 1988, the NRC's Office of Nuclear Regulatory Research contracted S. Cohen & Associates (SC&A) to develop technical information concerning Class A low-level radioactive waste which could be used to support NRC technical evaluations of petitions for exempt waste streams. In May 1990, the contract was modified to include the development of information which could be used in establishing a basis for a generic NRC rule governing the disposal of radioactive waste determined to be Below Regulatory Concern (BRC).

In October 1992, the congress enacted the energy Policy Act of 1992. Section 2901 of the Act revoked the Commission's 1986 and 1990 BRC Policy Statements, and in August 1993, the Commission formally withdrew the two BRC Policy Statements. The Commission also terminated the rulemaking action that was initiated to implement the 1986 BRC Policy and withdrew the December 2, 1986 ANPR.

Although it effectively revoked the 1986 BRC Policy Statement, Section 2901 of the energy Policy Act did not either (1) explicitly remove the Commission's obligation under Section 10 of the Low-Level Radioactive Waste Policy Amendments Act of 1985 to develop criteria and procedures for evaluating exemption requests for specific radioactive waste streams on an expedited basis, or (2) revoke the Commission's authority under the Atomic Energy Act to exempt classes of materials from licensing.

By early 1993, SC&A had already accumulated a substantial amount of information concerning Class A low-level waste. Since the information contained in this report should be useful to the NRC staff and others involved in the regulation or disposal of low-level radioactive waste, the NRC, in July 1993, authorized SC&A to compile and present this information in a NUREG/CR report.

ACKNOWLEDGEMENTS

S. Cohen & Associates, Inc. would like to take this opportunity to acknowledge the efforts and participation of the Nuclear Regulatory Commission staff, namely Messrs. Robert Meck, James Malaro, Paul Kovach, and Steve Klementowicz.

In addition, we would like to thank Mr. Ronald Fuchs and Ms. Miriam Muneta of EG&G Idaho, Inc. for their assistance in generating the low-level waste database for this project.

APPENDIX F

Waste Radionuclide Concentrations by Compact Regions and States
(Shipment Level Analyses - Aggregate Practices 1986 - 1990)
(All Disposal Sites and Non-brokered Wastes)

Exhibit F-1
Data Summary - Analyses at the Shipment Level
 (Aggregate Practices for non-brokered waste: 1986 to 1990)

	<u>Data or Parameters</u>
Compact or unaffiliated state:	Northwest
Waste generator class:	Government
Total number of waste generators:	23
Total associated waste volume (m ³):	1,646
Total associated waste activity (Ci):	364
Waste class:	A-Unstable and A-Stable
Identified waste generators for this analysis:	
Number:	5
Percent of total(%):	22
Total number of shipping records:	87
Number of shipping records <u>with</u> container data:	87
Number of waste containers:	2,468
Weight of shipments (kg):	688,300
Total waste volume (m ³):	1,600
Fractional waste volume (%): (this analysis/total)	97
Total waste activity (Ci):	91
Fractional waste activity (%): (this analysis/total)	25

Exhibit F-1 (Continued)

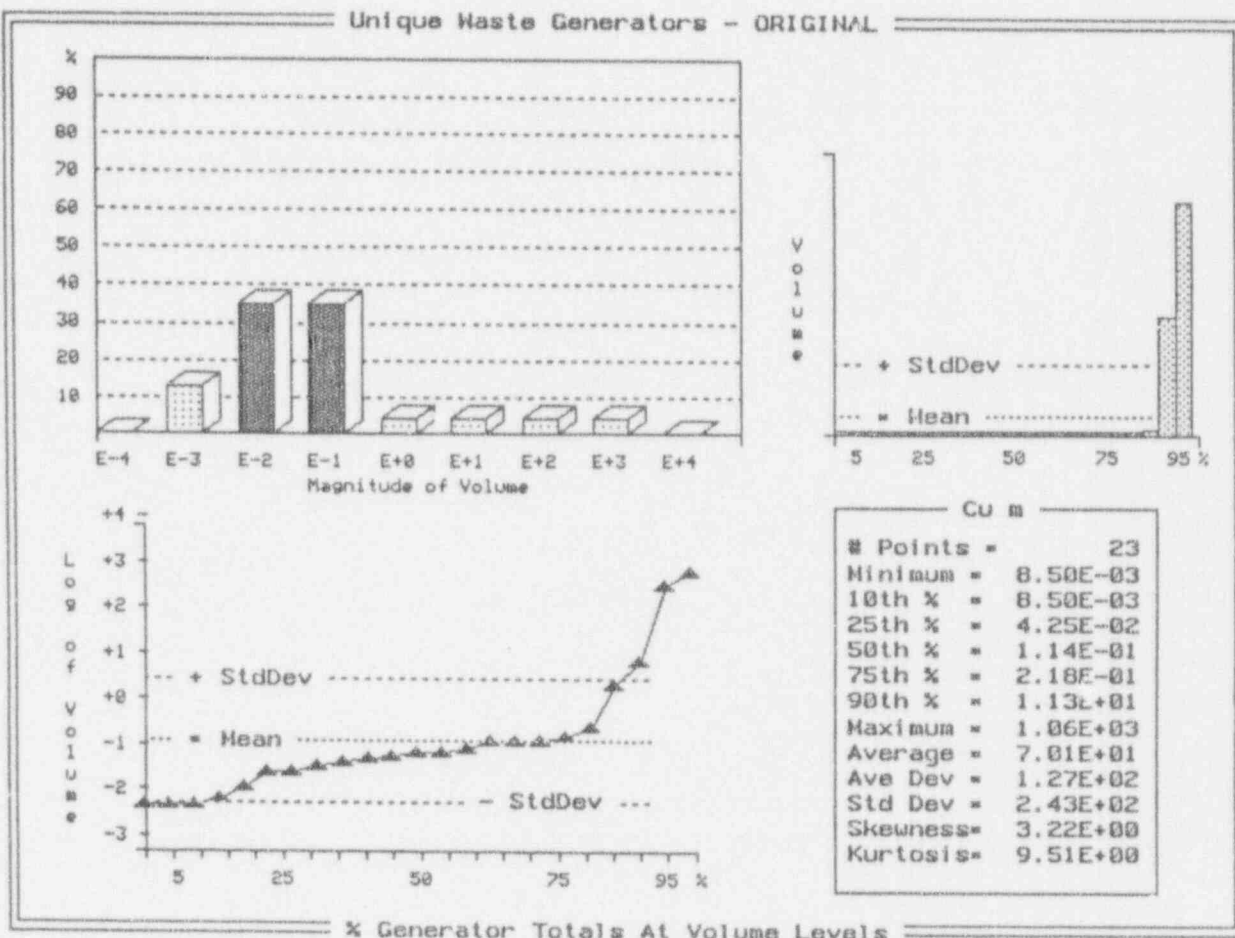


Exhibit F-1 (Continued)

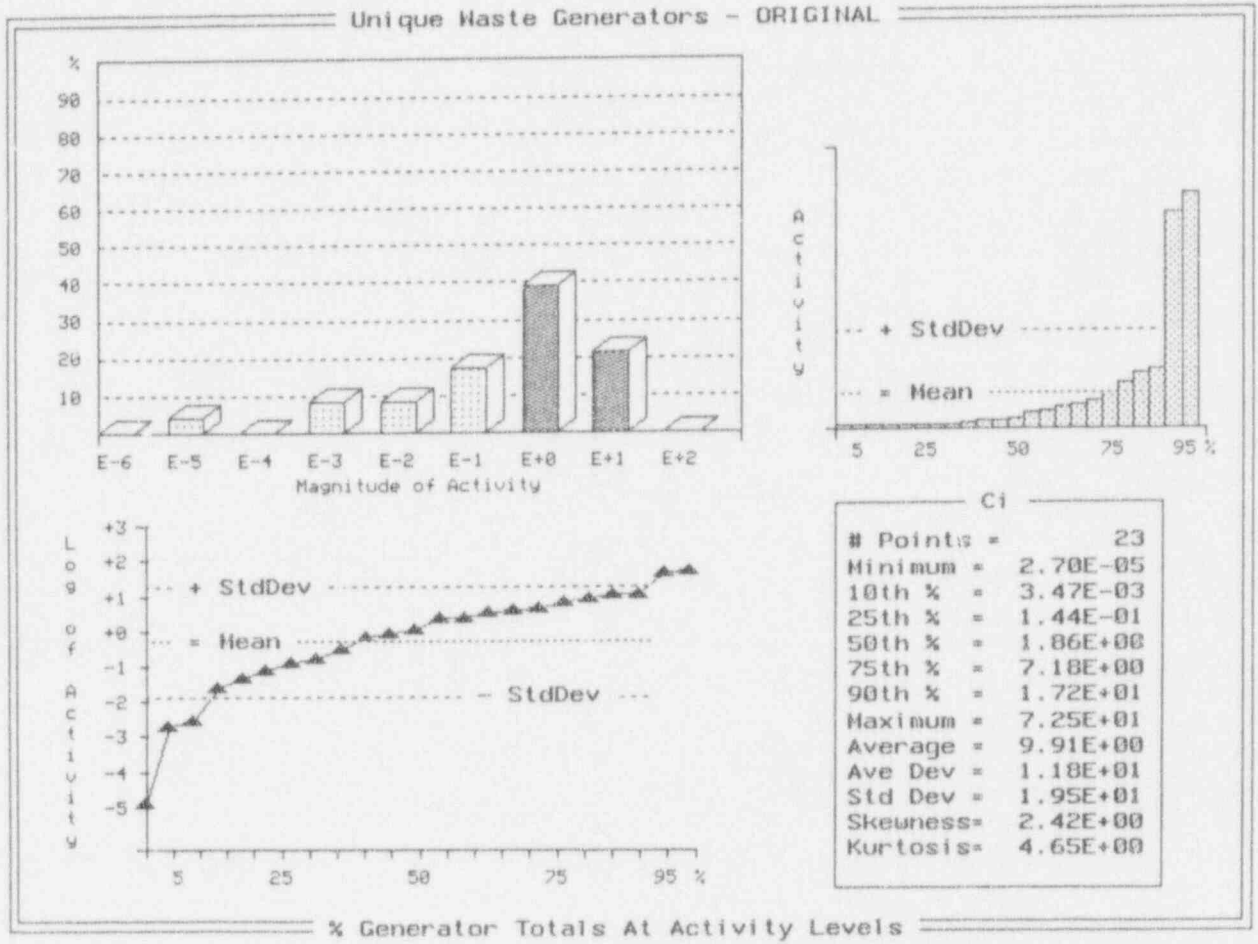


Exhibit F-2
Data Summary - Analyses at the Shipment Level
 (Aggregate Practices for non-brokered waste: 1986 to 1990)

	<u>Data or Parameters</u>
Compact or unaffiliated state:	Northwest
Waste generator class:	Academic
Total number of waste generators:	21
Total associated waste volume (m ³):	333
Total associated waste activity (Ci):	57.2
Waste class:	A-Unstable and A-Stable
Identified waste generators for this analysis:	
Number:	8
Percent of total(%):	38
Total number of shipping records:	27
Number of shipping records <u>with</u> container data:	11
Number of waste containers:	1,679
Weight of shipments (kg):	145,500
Total waste volume (m ³):	256
Fractional waste volume (%): (this analysis/total)	77
Total waste activity (Ci):	39
Fractional waste activity (%): (this analysis/total)	68

Exhibit F-2 (Continued)

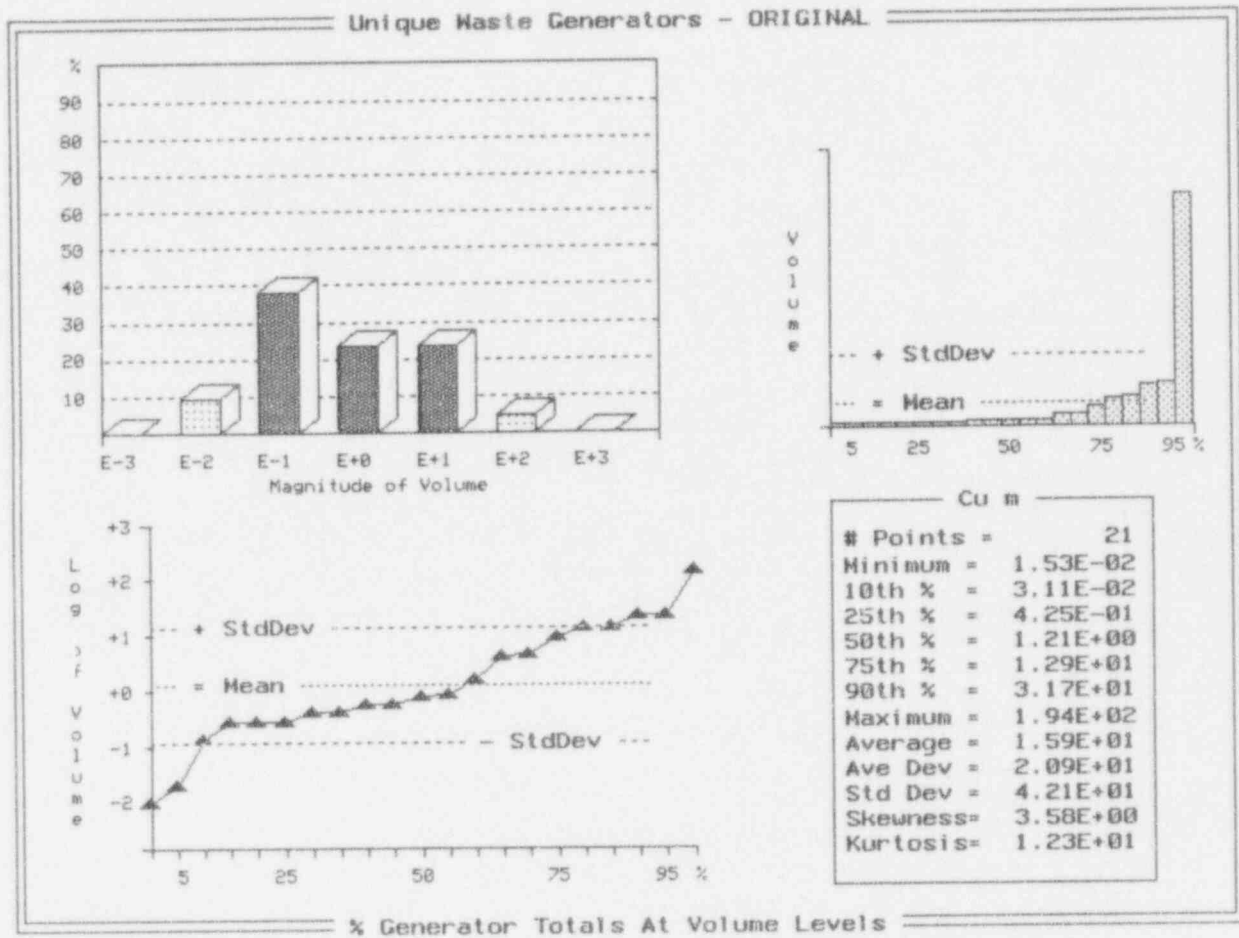


Exhibit F-2 (Continued)

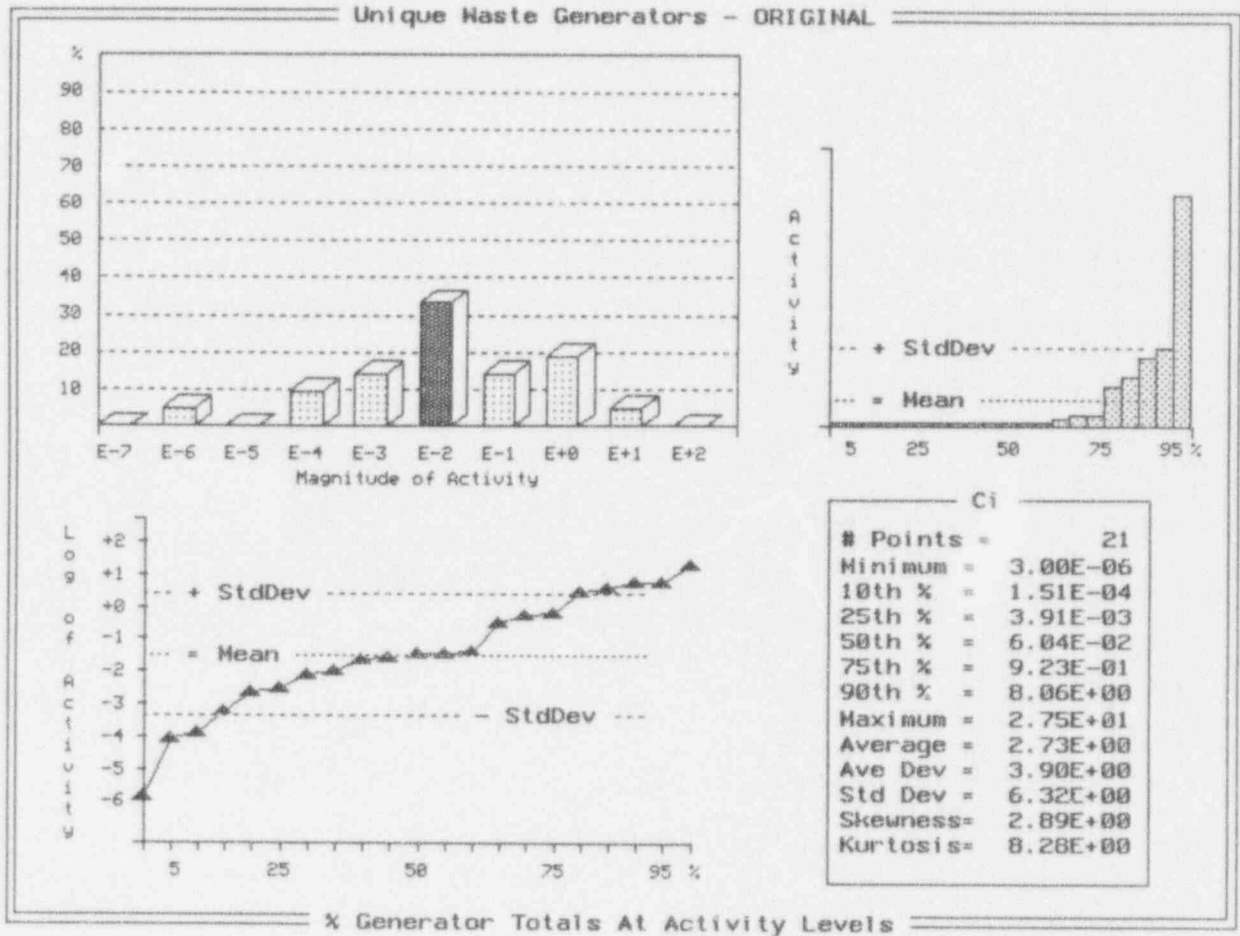


Exhibit F-3
Data Summary - Analyses at the Shipment Level
 (Aggregate Practices for non-brokered waste: 1986 to 1990)

	<u>Data or Parameters</u>
Compact or unaffiliated state:	Northwest
Waste generator class:	Medical
Total number of waste generators:	21
Total associated waste volume (m ³):	103
Total associated waste activity (Ci):	2.1
Waste class:	A-Unstable and A-Stable
Identified waste generators for this analysis:	
Number:	9
Percent of total(%):	41
Total number of shipping records:	50
Number of shipping records <u>with</u> container data:	0
Number of waste containers:	0
Weight of shipments (kg):	29,880
Total waste volume (m ³):	38.6
Fractional waste volume (%): (this analysis/total)	37
Total waste activity (Ci):	0.97
Fractional waste activity (%): (this analysis/total)	44

Exhibit F-3 (Continued)

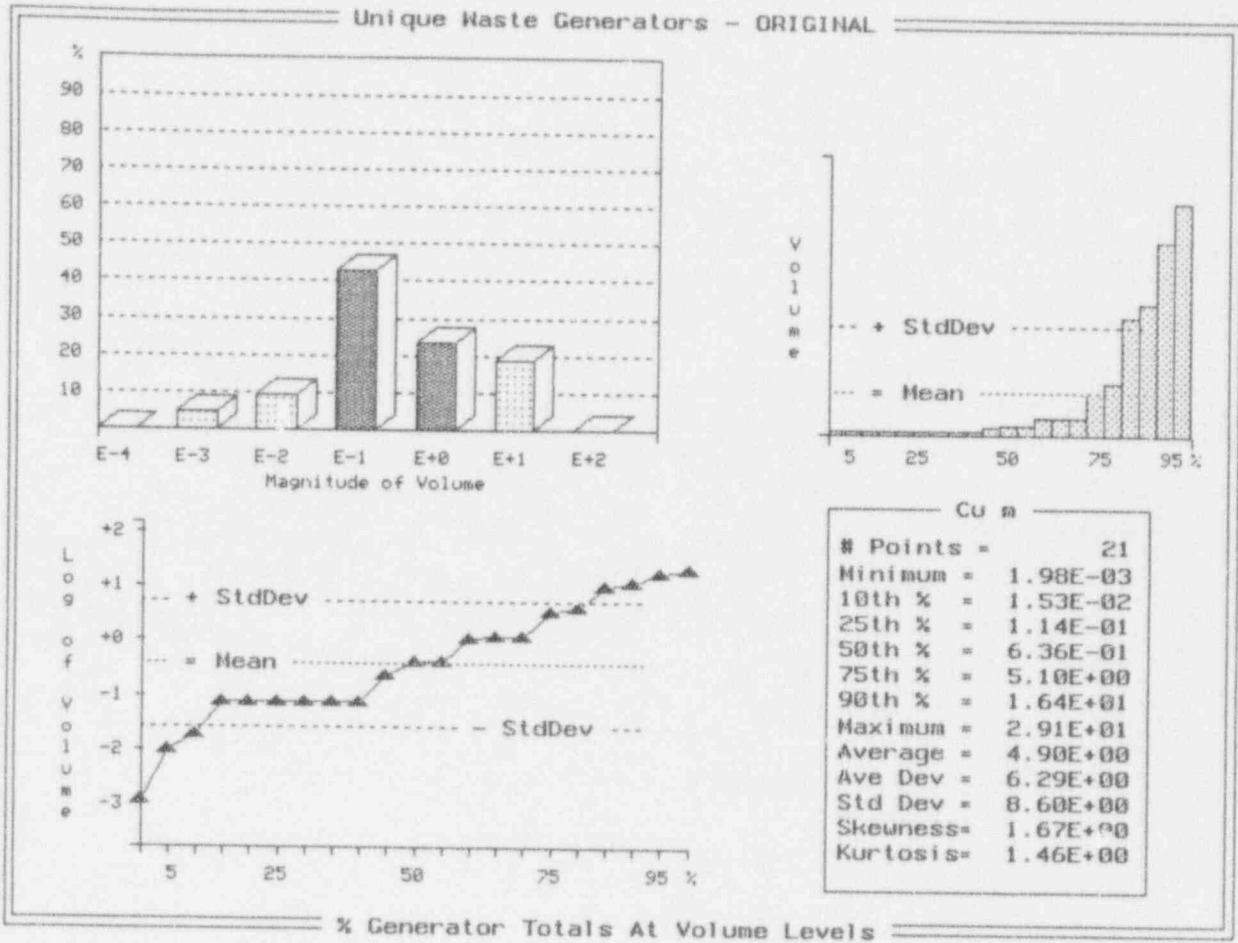


Exhibit F-3 (Continued)

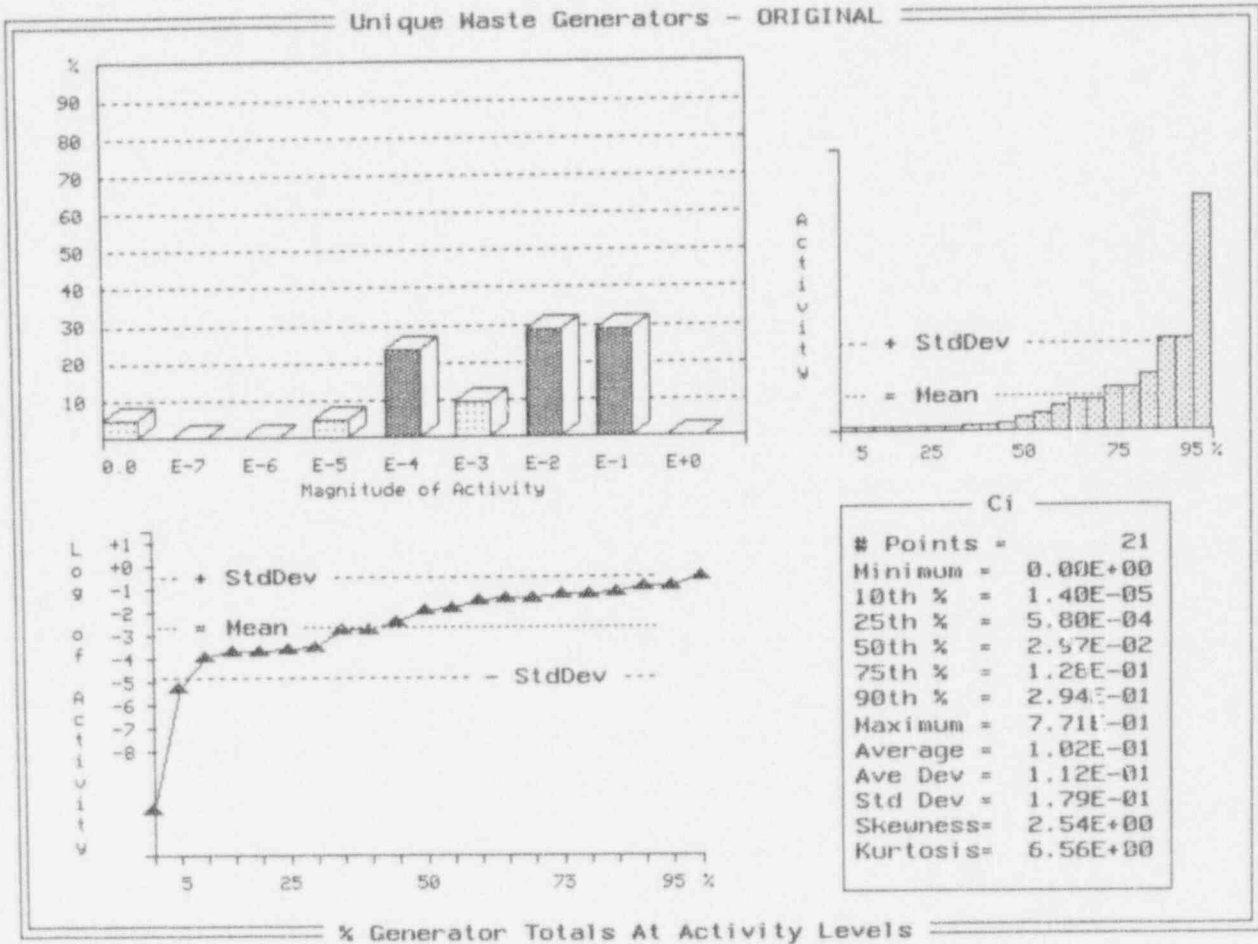


Exhibit F-4
Data Summary - Analyses at the Shipment Level
 (Aggregate Practices for non-brokered waste: 1986 to 1990)

	<u>Data or Parameters</u>
Compact or unaffiliated state:	Northwest
Waste generator class:	Industrial
Total number of waste generators:	91
Total associated waste volume (m ³):	12,820
Total associated waste activity (Ci):	553
Waste class:	A-Unstable and A-Stable
Identified waste generators for this analysis:	
Number:	31
Percent of total(%):	34
Total number of shipping records:	
Number of shipping records <u>with</u> container data:	51
Number of waste containers:	1,181
Weight of shipments (kg):	1,395,000
Total waste volume (m ³):	1,364
Fractional waste volume (%): (this analysis/total)	11
Total waste activity (Ci):	24.4
Fractional waste activity (%): (this analysis/total)	4.4

Exhibit F-4 (Continued)

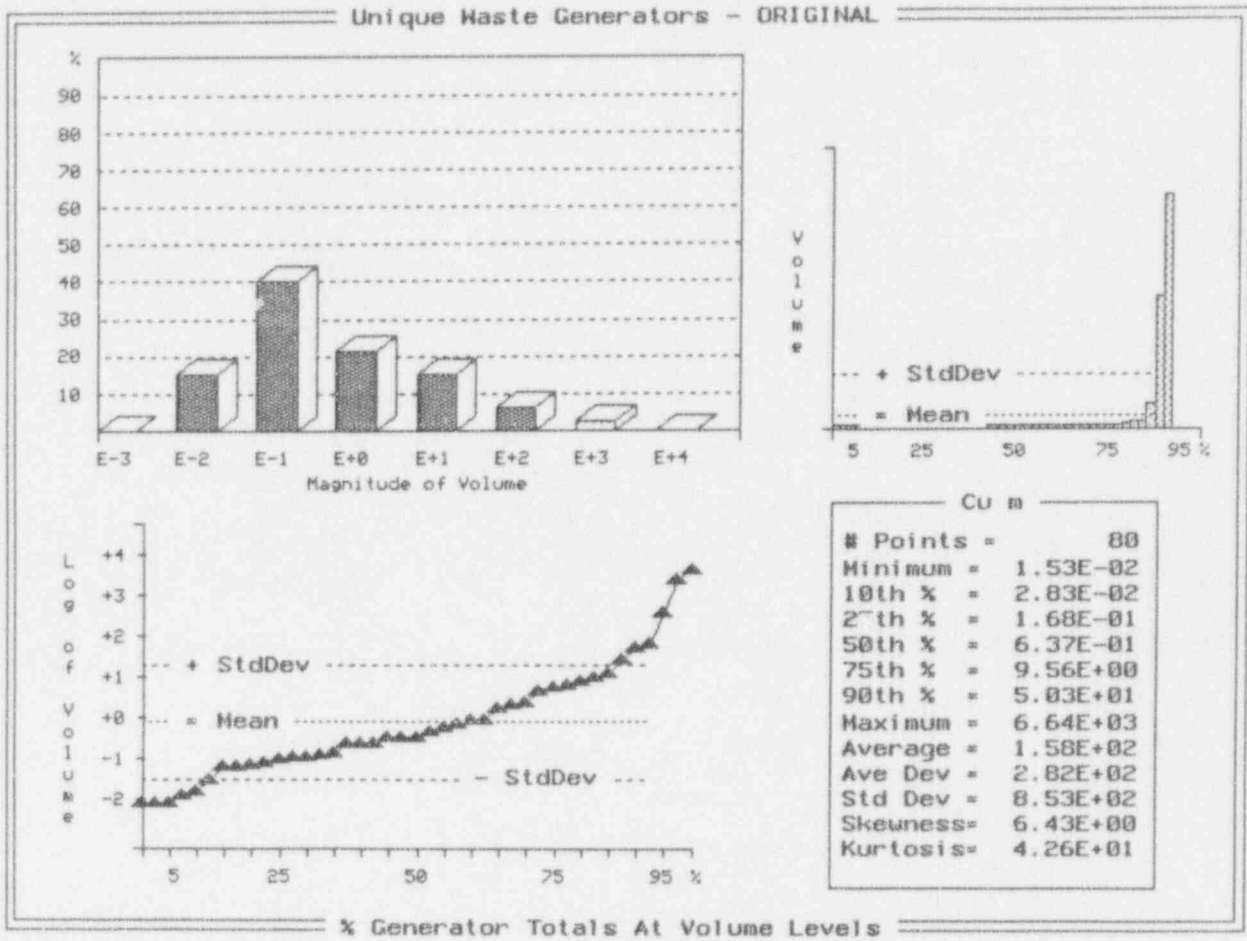


Exhibit F-4 (Continued)

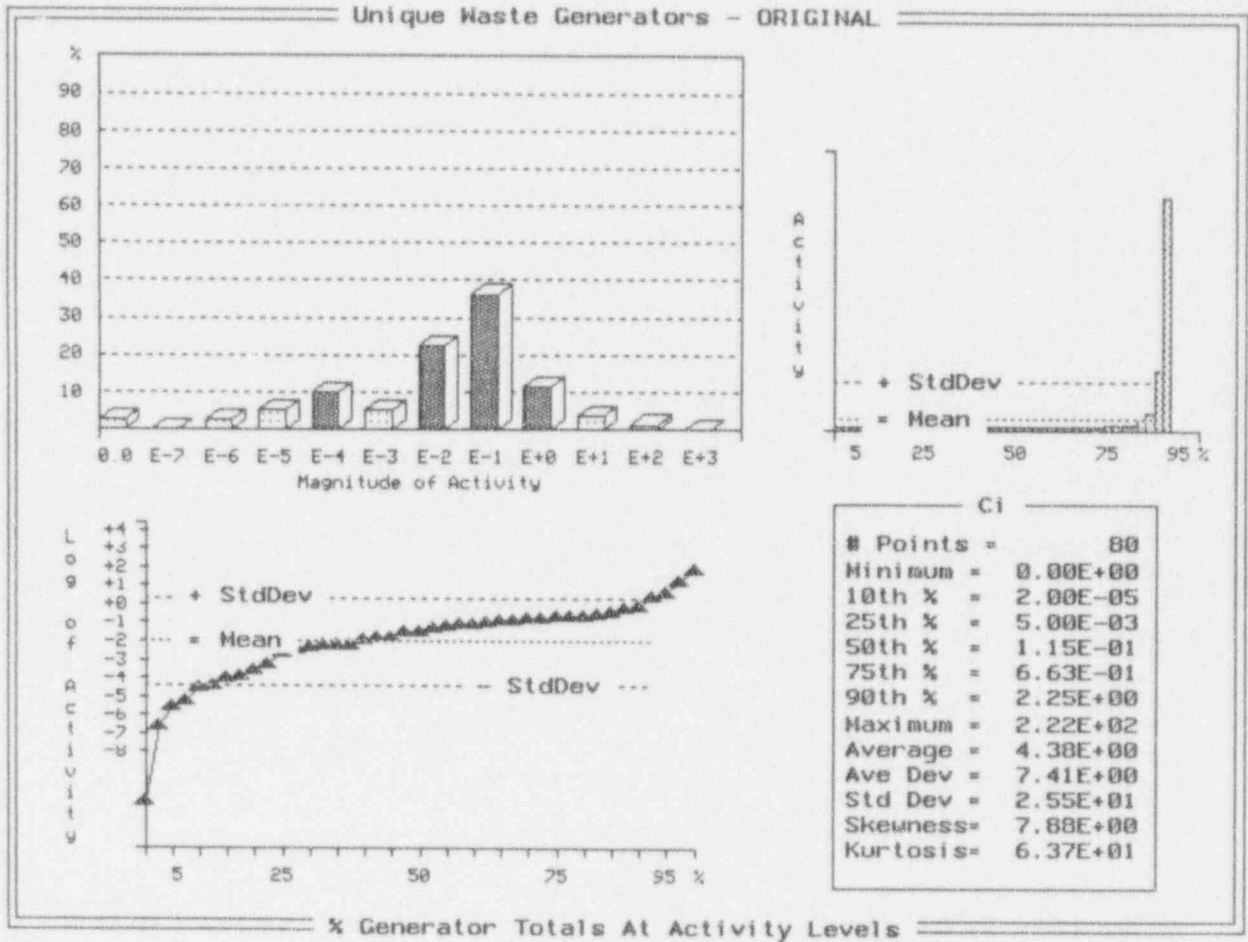


Exhibit F-5
Data Summary - Analyses at the Shipment Level
 (Aggregate Practices for non-brokered waste: 1986 to 1990)

	<u>Data or Parameters</u>
Compact or unaffiliated state:	Rocky Mountain
Waste generator class:	Government
Total number of waste generators:	15
Total associated waste volume (m ³):	10.0
Total associated waste activity (Ci):	1,888
Waste class:	A-Unstable and A-Stable
Identified waste generators for this analysis:	
Number:	no data
Percent of total(%):	--
Total number of shipping records:	--
Number of shipping records <u>with</u> container data:	--
Number of waste containers:	--
Weight of shipments (kg):	--
Total waste volume (m ³):	--
Fractional waste volume (%): (this analysis/total)	--
Total waste activity (Ci):	--
Fractional waste activity (%): (this analysis/total)	--

Exhibit F-5 (Continued)

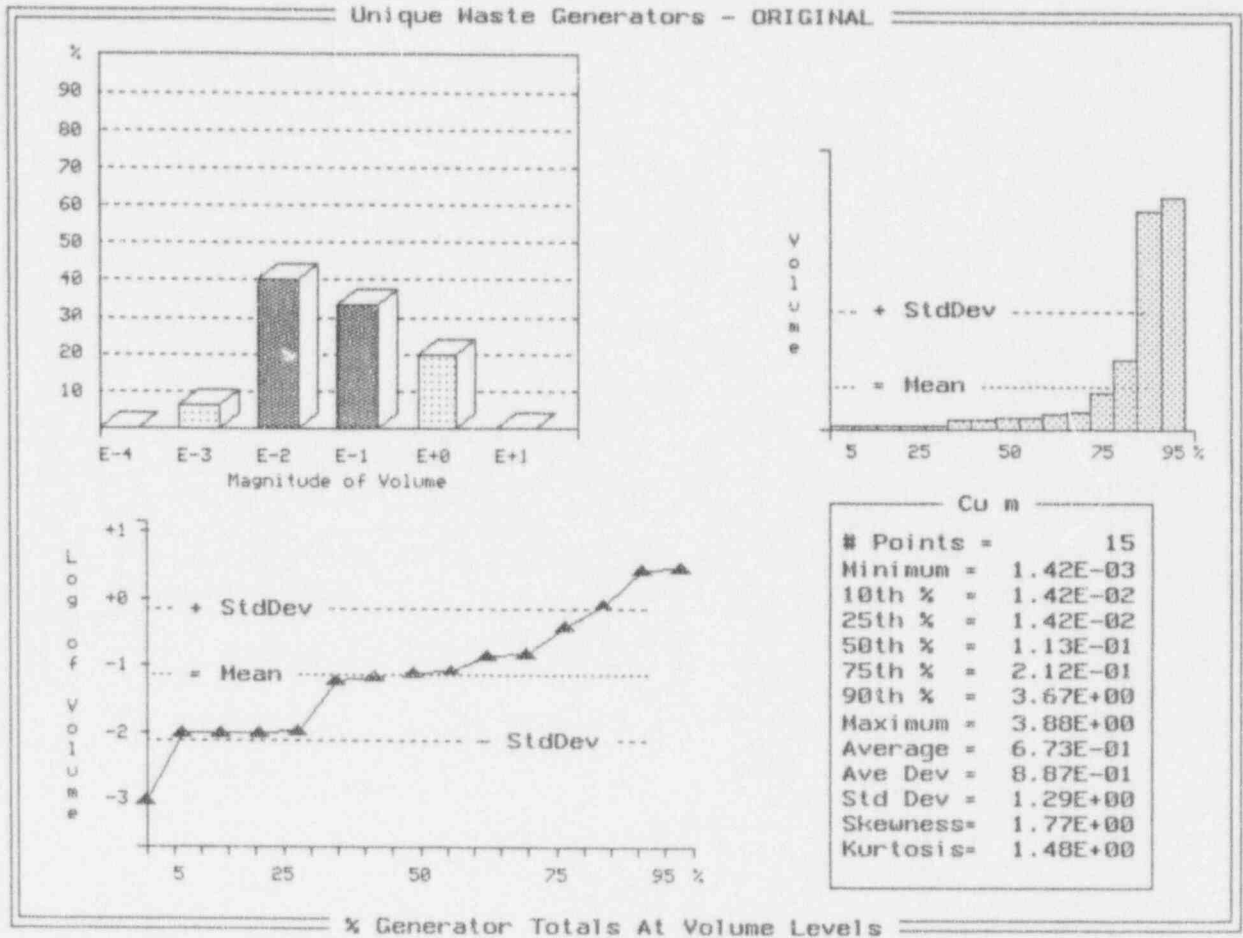


Exhibit F-5 (Continued)

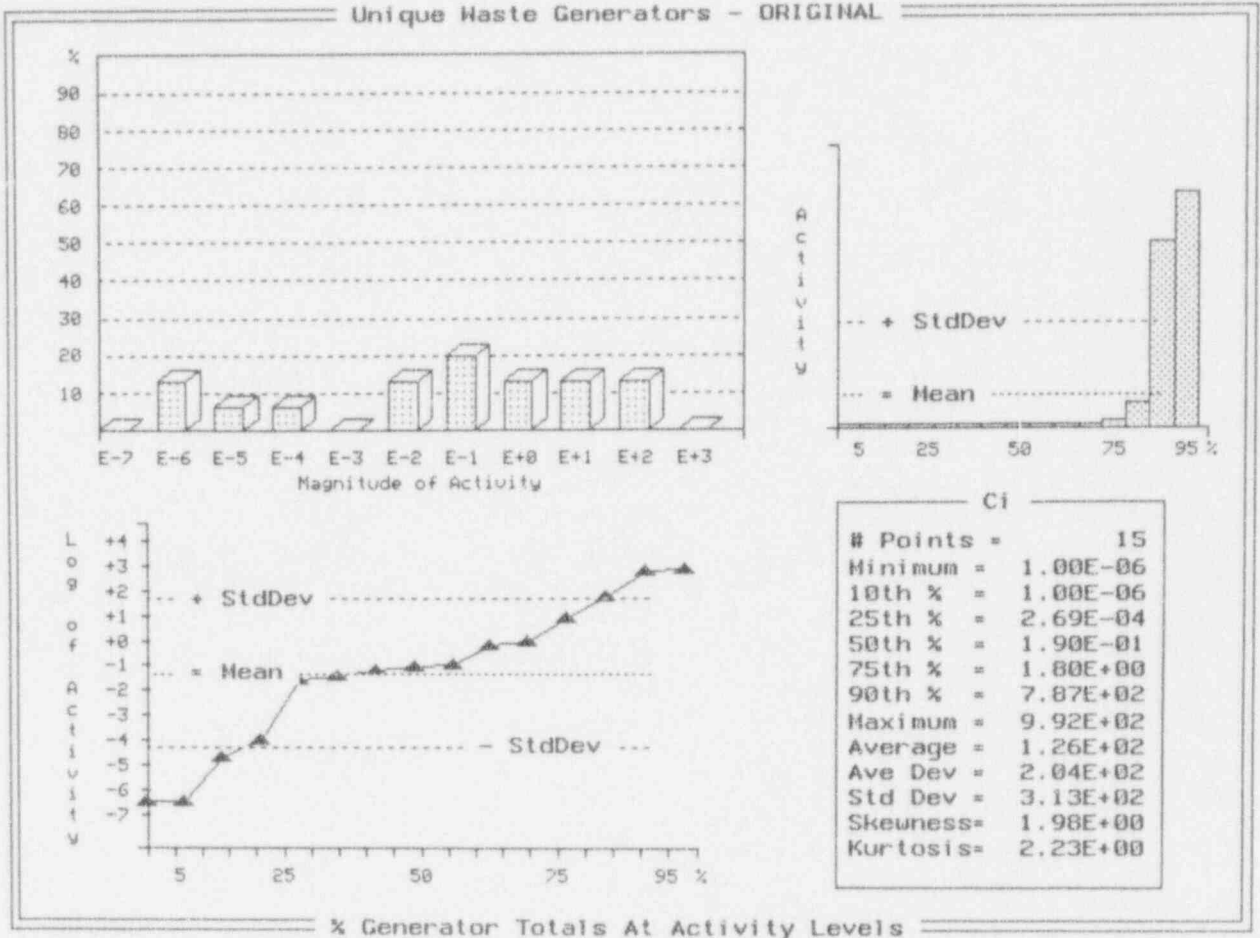


Exhibit F-6
Data Summary - Analyses at the Shipment Level
 (Aggregate Practices for non-brokered waste: 1986 to 1990)

	<u>Data or Parameters</u>
Compact or unaffiliated state:	Rocky Mountain
Waste generator class:	Academic
Total number of waste generators:	13
Total associated waste volume (m ³):	278
Total associated waste activity (Ci):	537
Waste class:	A-Unstable and A-Stable
Identified waste generators for this analysis:	
Number:	1
Percent of total(%):	8
Total number of shipping records:	3
Number of shipping records <u>with</u> container data:	2
Number of waste containers:	167
Weight of shipments (kg):	45,000
Total waste volume (m ³):	64.2
Fractional waste volume (%): (this analysis/total)	23
Total waste activity (Ci):	1.5
Fractional waste activity (%): (this analysis/total)	0.3

Exhibit F-6 (Continued)

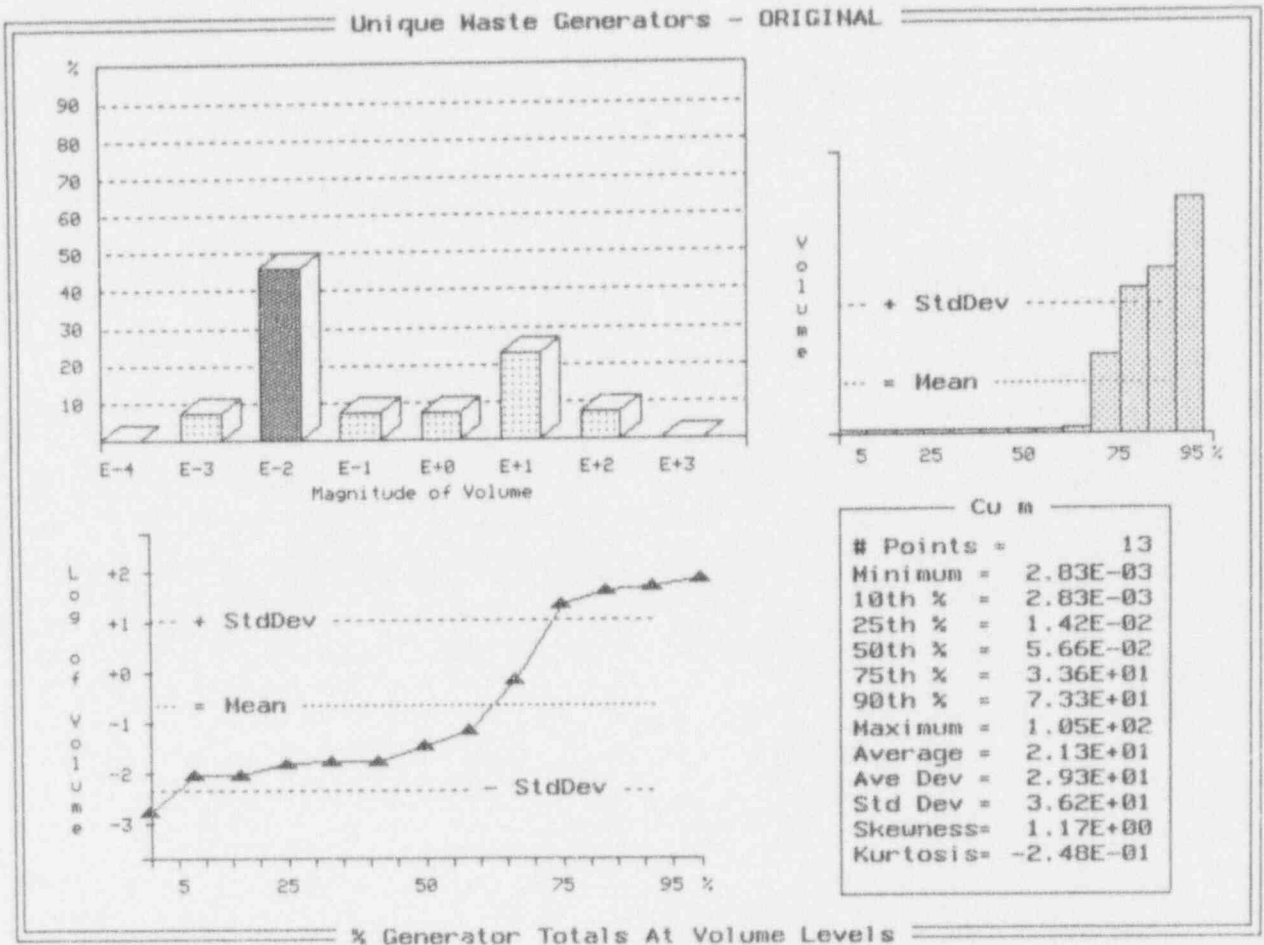


Exhibit F-6 (Continued)

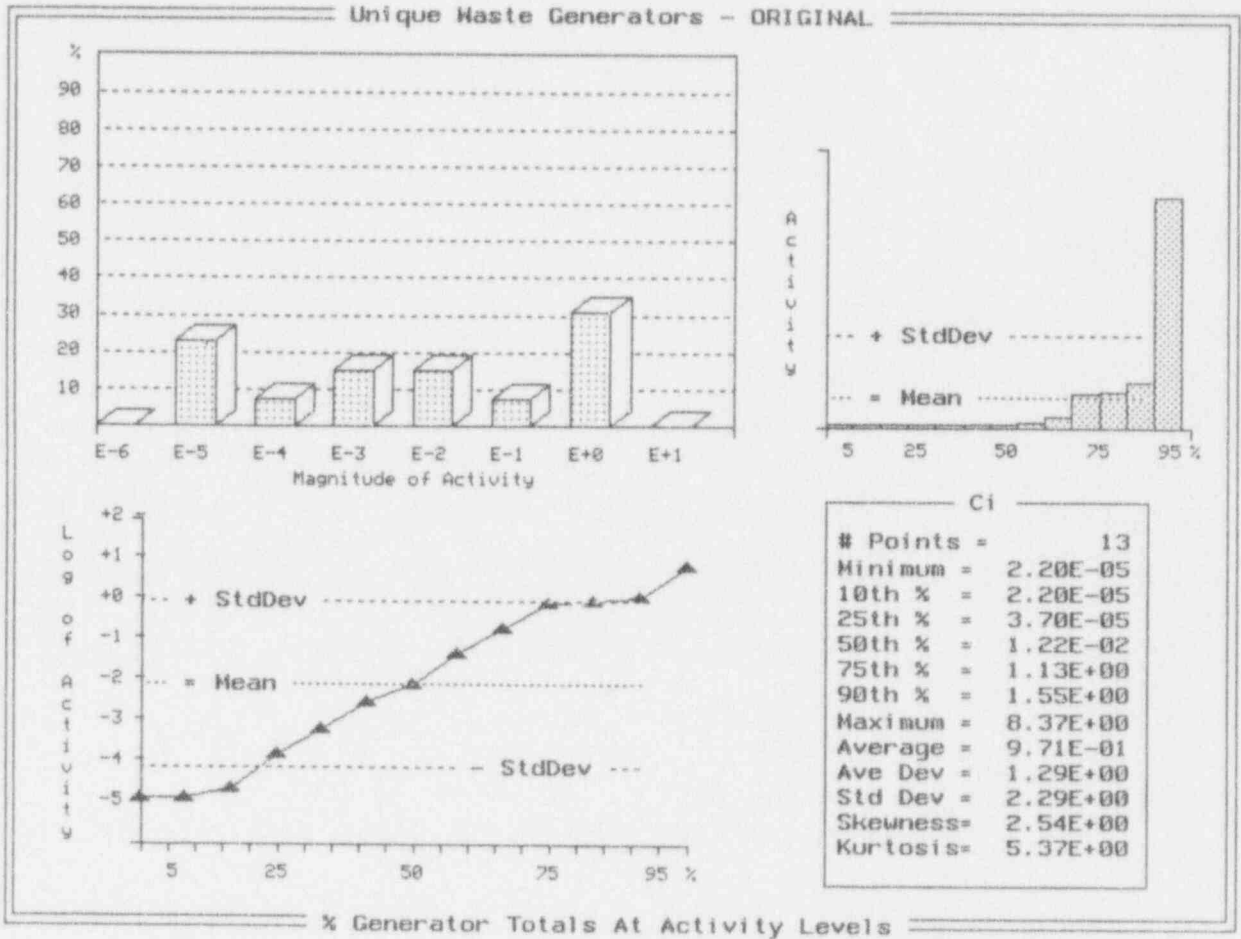


Exhibit F-7
Data Summary - Analyses at the Shipment Level
 (Aggregate Practices for non-brokered waste: 1986 to 1990)

	<u>Data or Parameters</u>
Compact or unaffiliated state:	Rocky Mountain
Waste generator class:	Medical
Total number of waste generators:	16
Total associated waste volume (m ³):	9.9
Total associated waste activity (Ci):	0.66
Waste class:	A-Unstable and A-Stable
Identified waste generators for this analysis:	
Number:	no data
Percent of total(%):	--
Total number of shipping records:	--
Number of shipping records <u>with</u> container data:	--
Number of waste containers:	--
Weight of shipments (kg):	--
Total waste volume (m ³):	--
Fractional waste volume (%): (this analysis/total)	--
Total waste activity (Ci):	--
Fractional waste activity (%): (this analysis/total)	--

Exhibit F-7 (Continued)

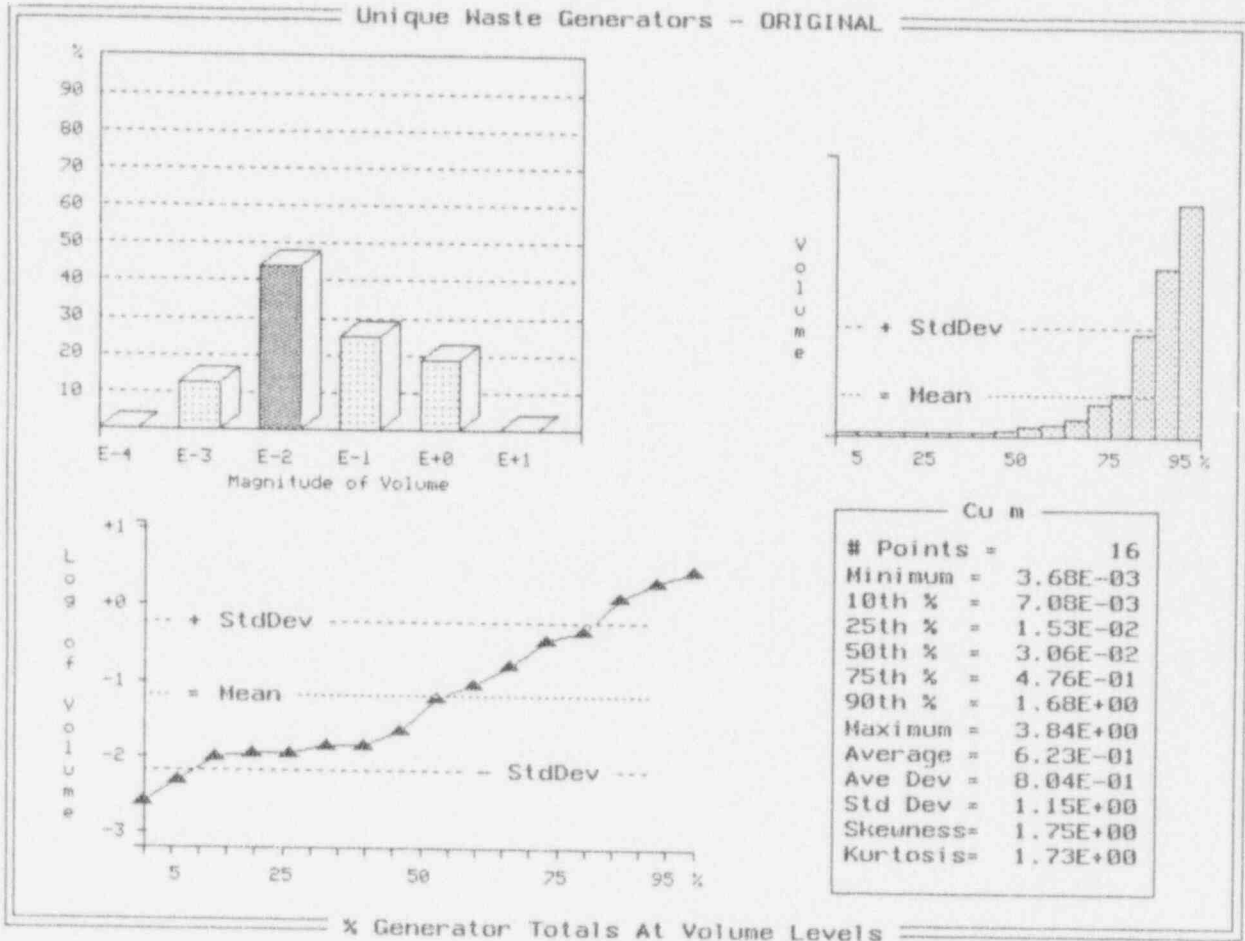


Exhibit F-7 (Continued)

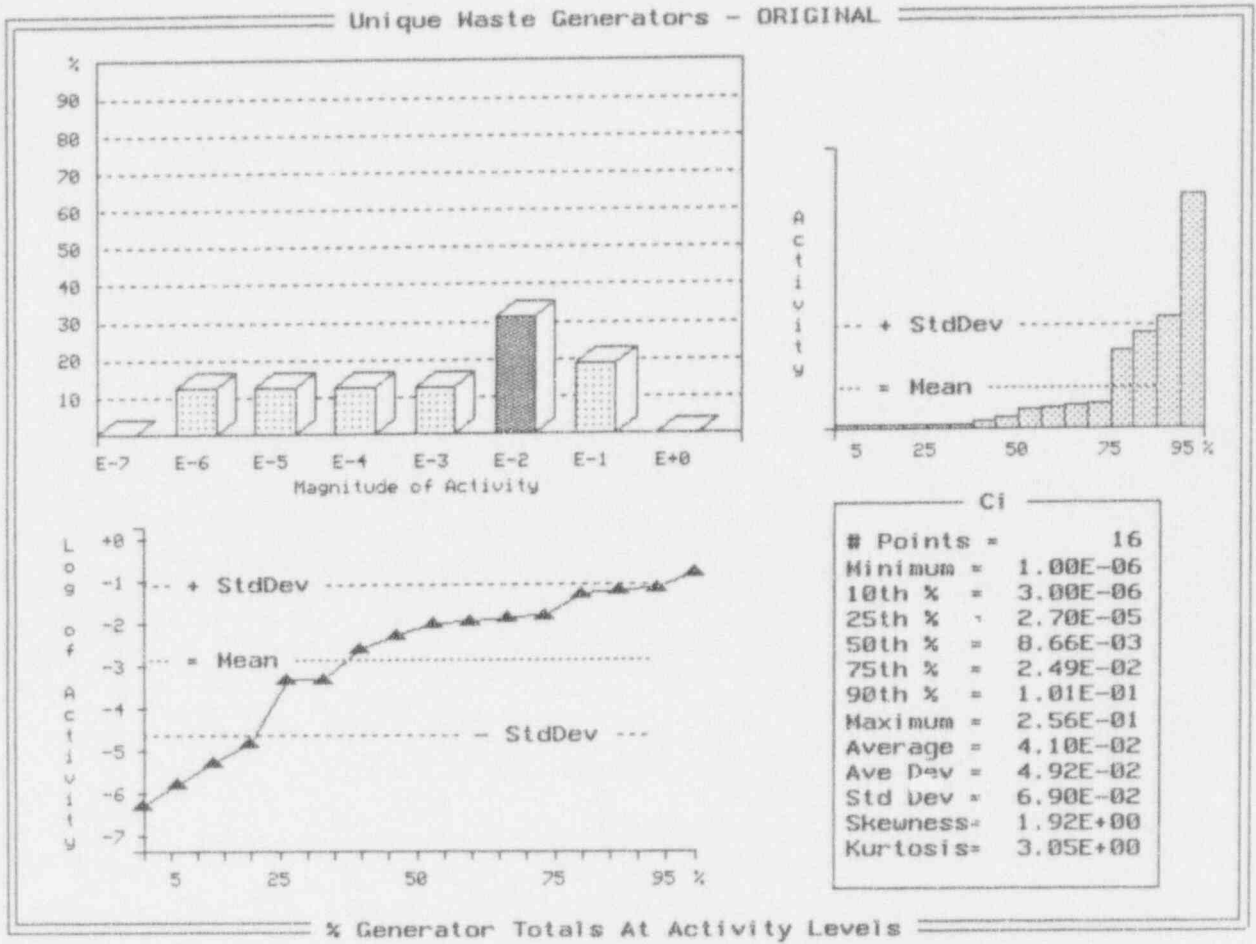


Exhibit F-8
Data Summary - Analyses at the Shipment Level
 (Aggregate Practices for non-brokered waste: 1986 to 1990)

	<u>Data or Parameters</u>
Compact or unaffiliated state:	Rocky Mountain
Waste generator class:	Industrial
Total number of waste generators:	68
Total associated waste volume (m ³):	296
Total associated waste activity (Ci):	3,395
Waste class:	A-Unstable and A-Stable
Identified waste generators for this analysis:	
Number:	4
Percent of total (%):	6
Total number of shipping records:	6
Number of shipping records <u>with</u> container data:	1
Number of waste containers:	84
Weight of shipments (kg):	56,050
Total waste volume (m ³):	55
Fractional waste volume (%): (this analysis/total)	18
Total waste activity (Ci):	0.8
Fractional waste activity (%): (this analysis/total)	0.02

Exhibit F-8 (Continued)

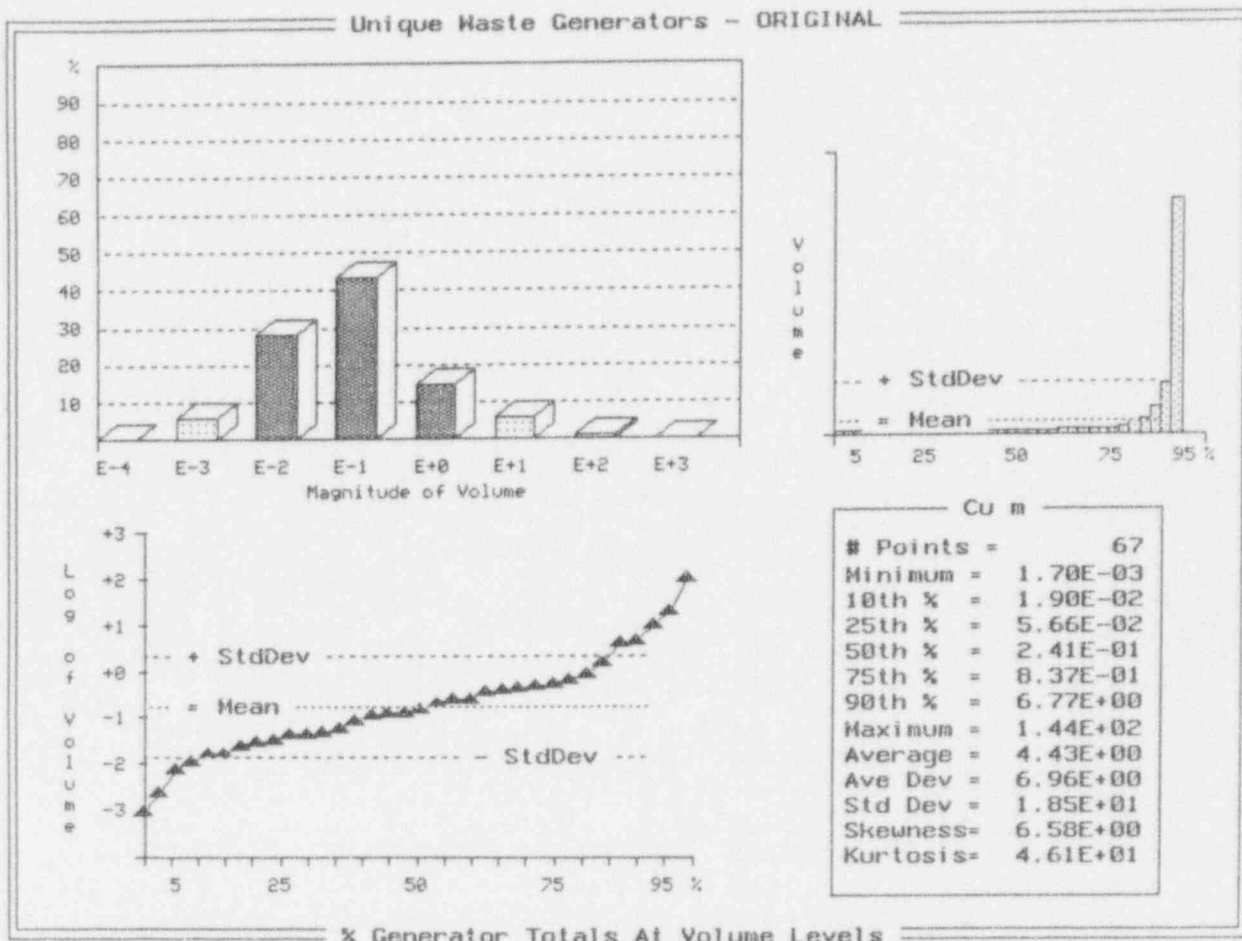


Exhibit F-8 (Continued)

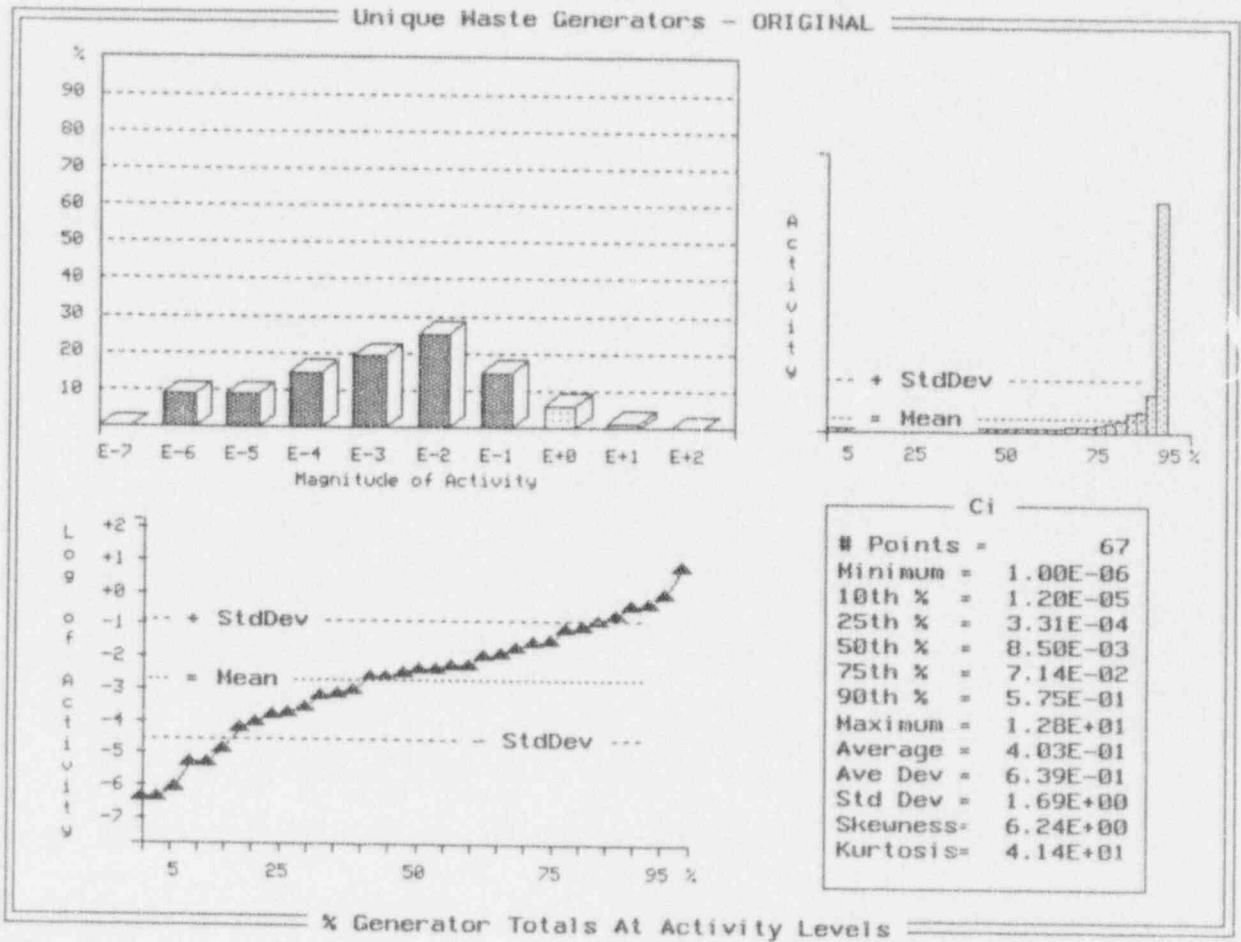


Exhibit F-9
Data Summary - Analyses at the Shipment Level
 (Aggregate Practices for non-brokered waste: 1986 to 1990)

	<u>Data or Parameters</u>
Compact or unaffiliated state:	Central
Waste generator class:	Government
Total number of waste generators:	12
Total associated waste volume (m ³):	362
Total associated waste activity (Ci):	489
Waste class:	A-Unstable and A-Stable
Identified waste generators for this analysis:	
Number:	1
Percent of total(%):	8
Total number of shipping records:	1
Number of shipping records <u>with</u> container data:	0
Number of waste containers:	0
Weight of shipments (kg):	5,896
Total waste volume (m ³):	8.4
Fractional waste volume (%): (this analysis/total)	2
Total waste activity (Ci):	0.02
Fractional waste activity (%): (this analysis/total)	<0.01

Exhibit F-9 (Continued)

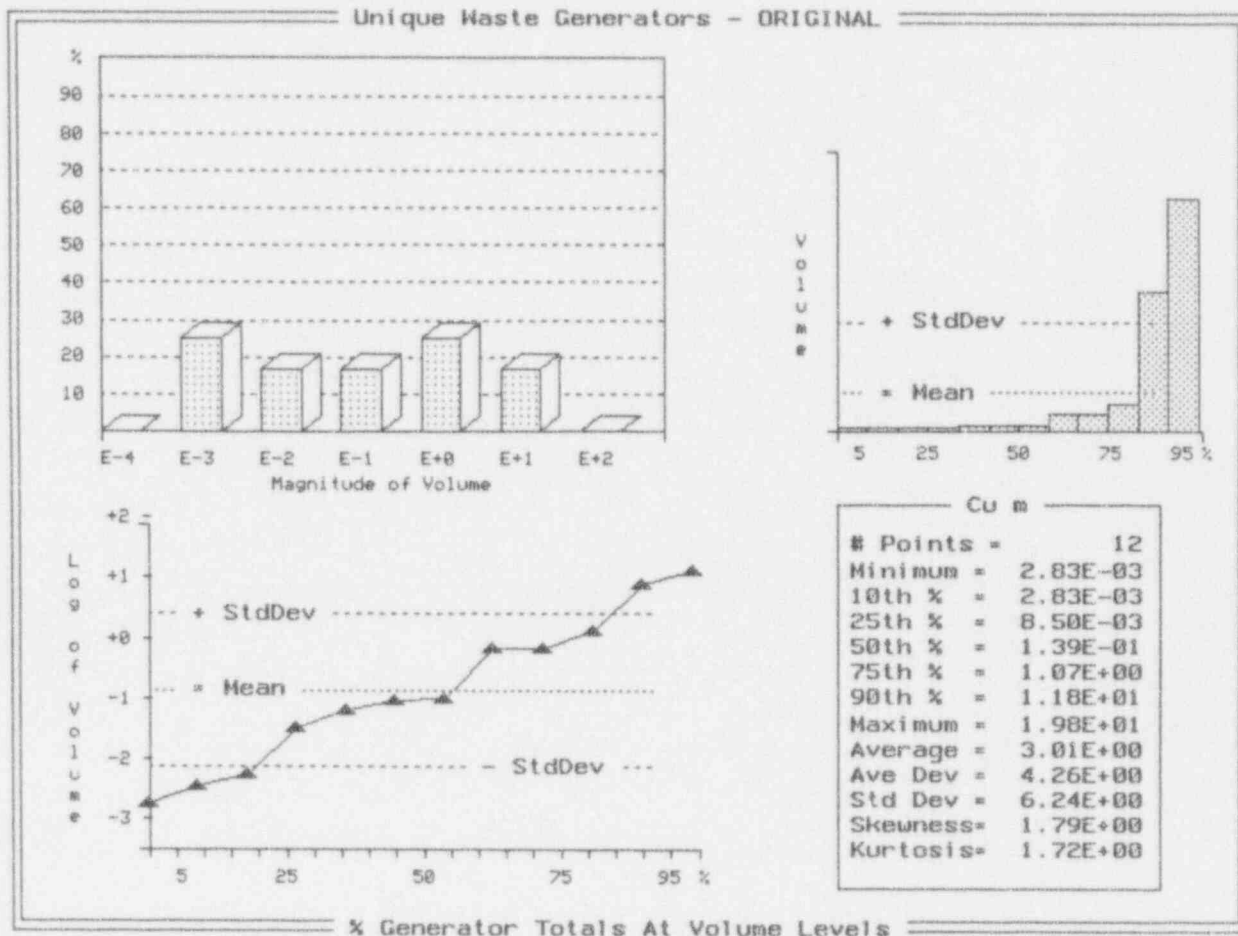


Exhibit F-9 (Continued)

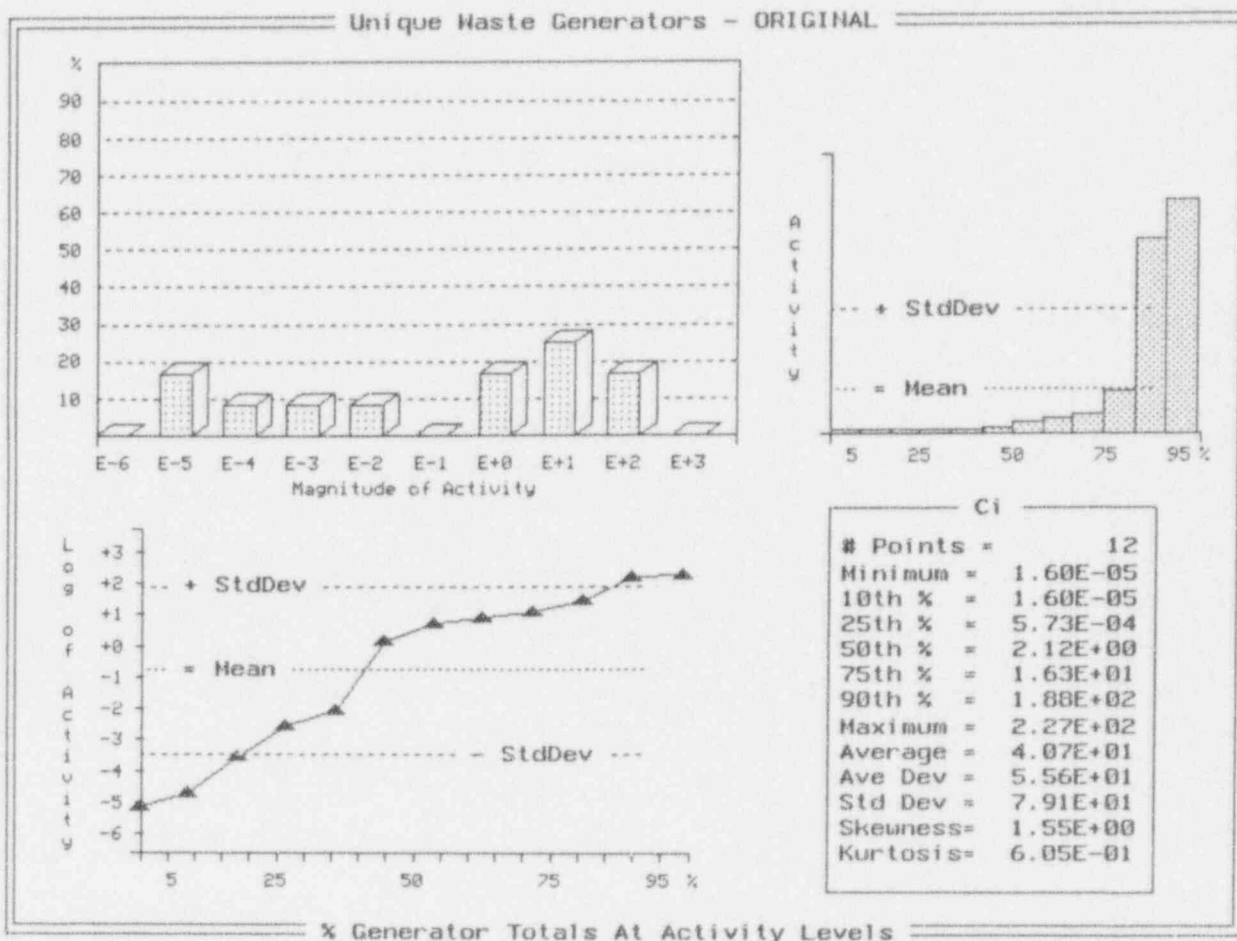


Exhibit F-10
Data Summary - Analyses at the Shipment Level
 (Aggregate Practices for non-brokered waste: 1986 to 1990)

	<u>Data or Parameters</u>
Compact or unaffiliated state:	Central
Waste generator class:	Academic
Total number of waste generators:	14
Total associated waste volume (m ³):	334
Total associated waste activity (Ci):	5.5
Waste class:	A-Unstable and A-Stable
Identified waste generators for this analysis:	
Number:	1
Percent of total(%):	7
Total number of shipping records:	1
Number of shipping records <u>with</u> container data:	0
Number of waste containers:	0
Weight of shipments (kg):	1,086
Total waste volume (m ³):	1.9
Fractional waste volume (%): (this analysis/total)	0.6
Total waste activity (Ci):	0.45
Fractional waste activity (%): (this analysis/total)	8.2

Exhibit F-10 (Continued)

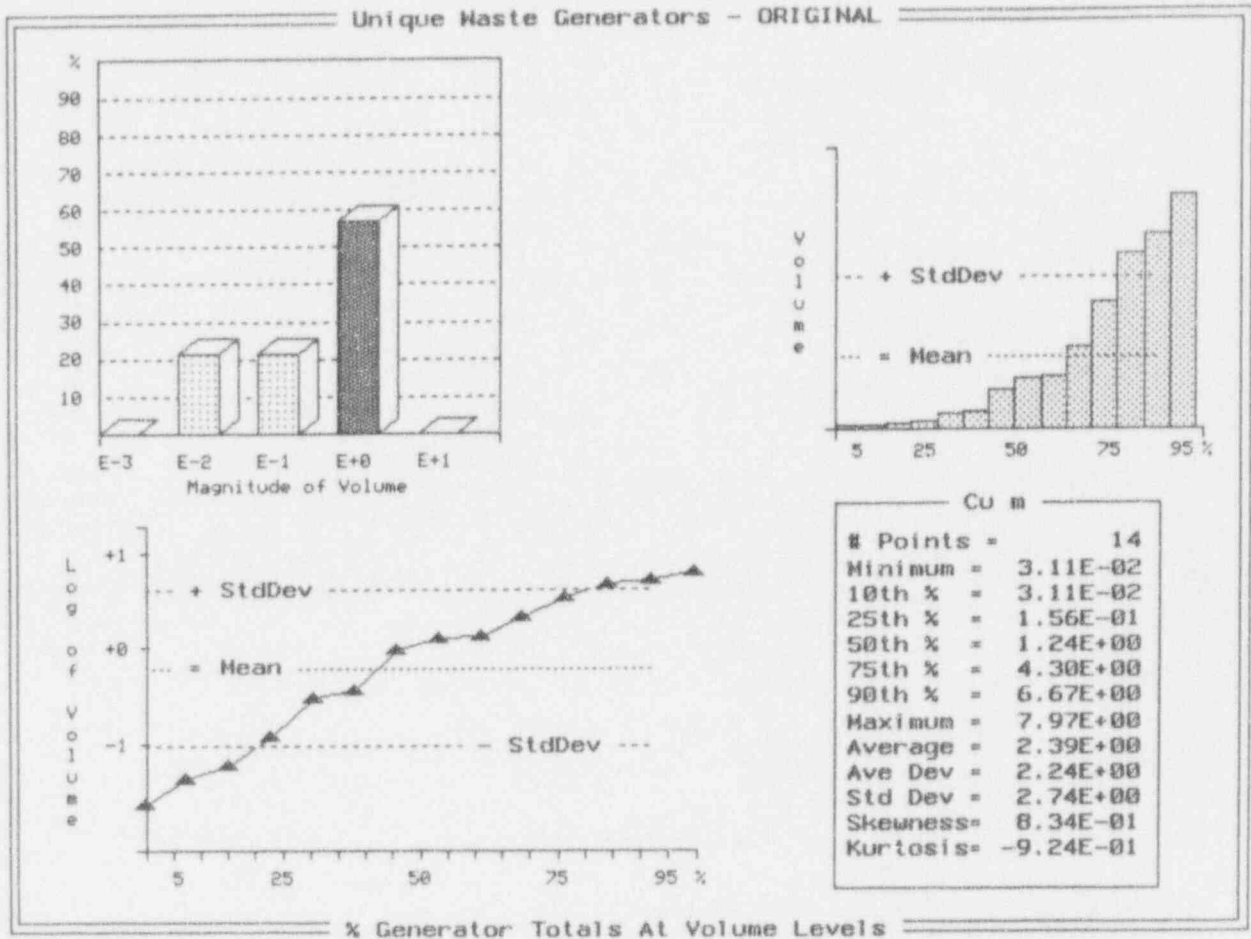


Exhibit F-10 (Continued)

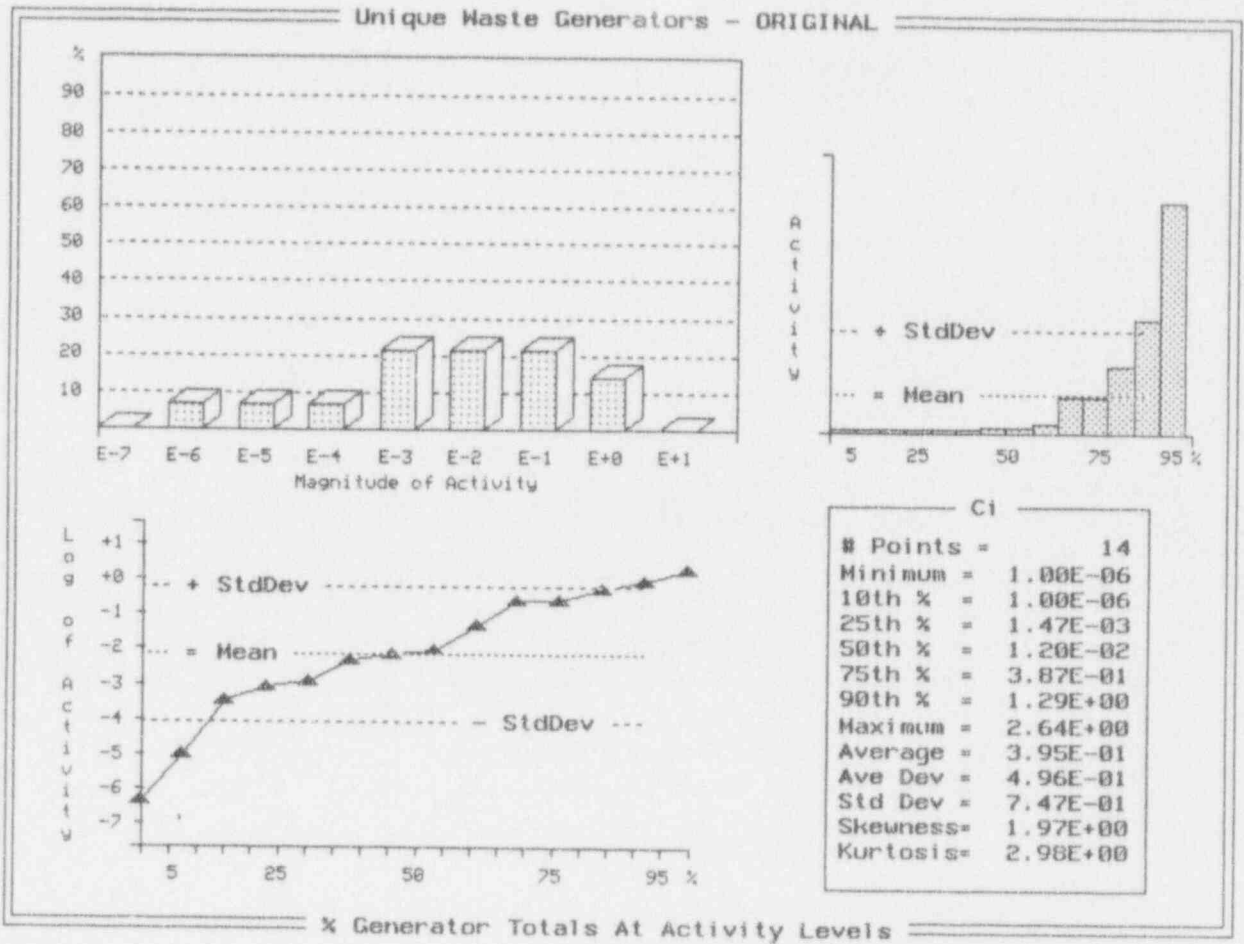


Exhibit F-11
Data Summary - Analyses at the Shipment Level
 (Aggregate Practices for non-brokered waste: 1986 to 1990)

	<u>Data or Parameters</u>
Compact or unaffiliated state:	Central
Waste generator class:	Medical
Total number of waste generators:	16
Total associated waste volume (m ³):	9.0
Total associated waste activity (Ci):	2.57
Waste class:	A-Unstable and A-Stable
Identified waste generators for this analysis:	
Number:	no data
Percent of total(%):	--
Total number of shipping records:	--
Number of shipping records <u>with</u> container data:	--
Number of waste containers:	--
Weight of shipments (kg):	--
Total waste volume (m ³):	--
Fractional waste volume (%): (this analysis/total)	--
Total waste activity (Ci):	--
Fractional waste activity (%): (this analysis/total)	--

Exhibit F-11 (Continued)

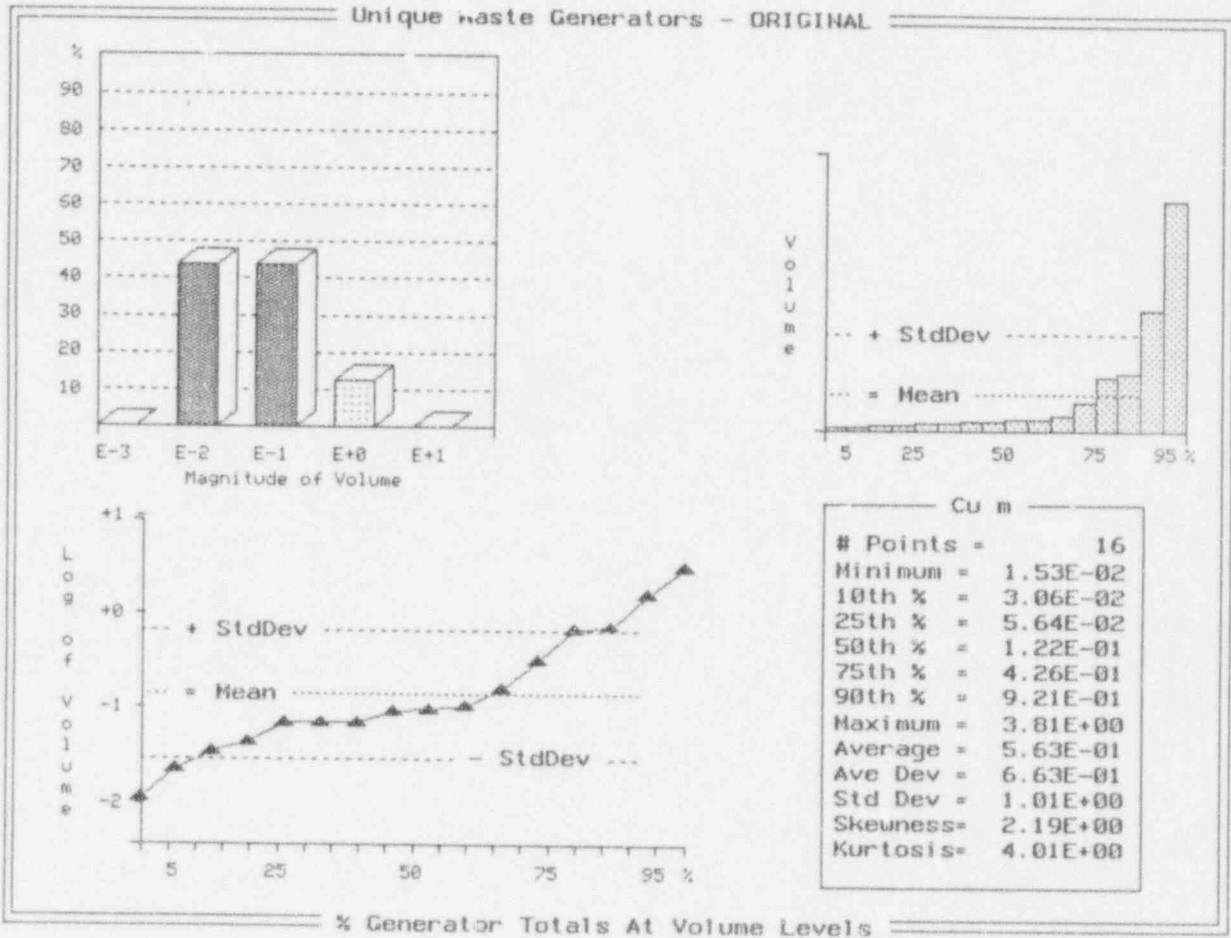


Exhibit F-11 (Continued)

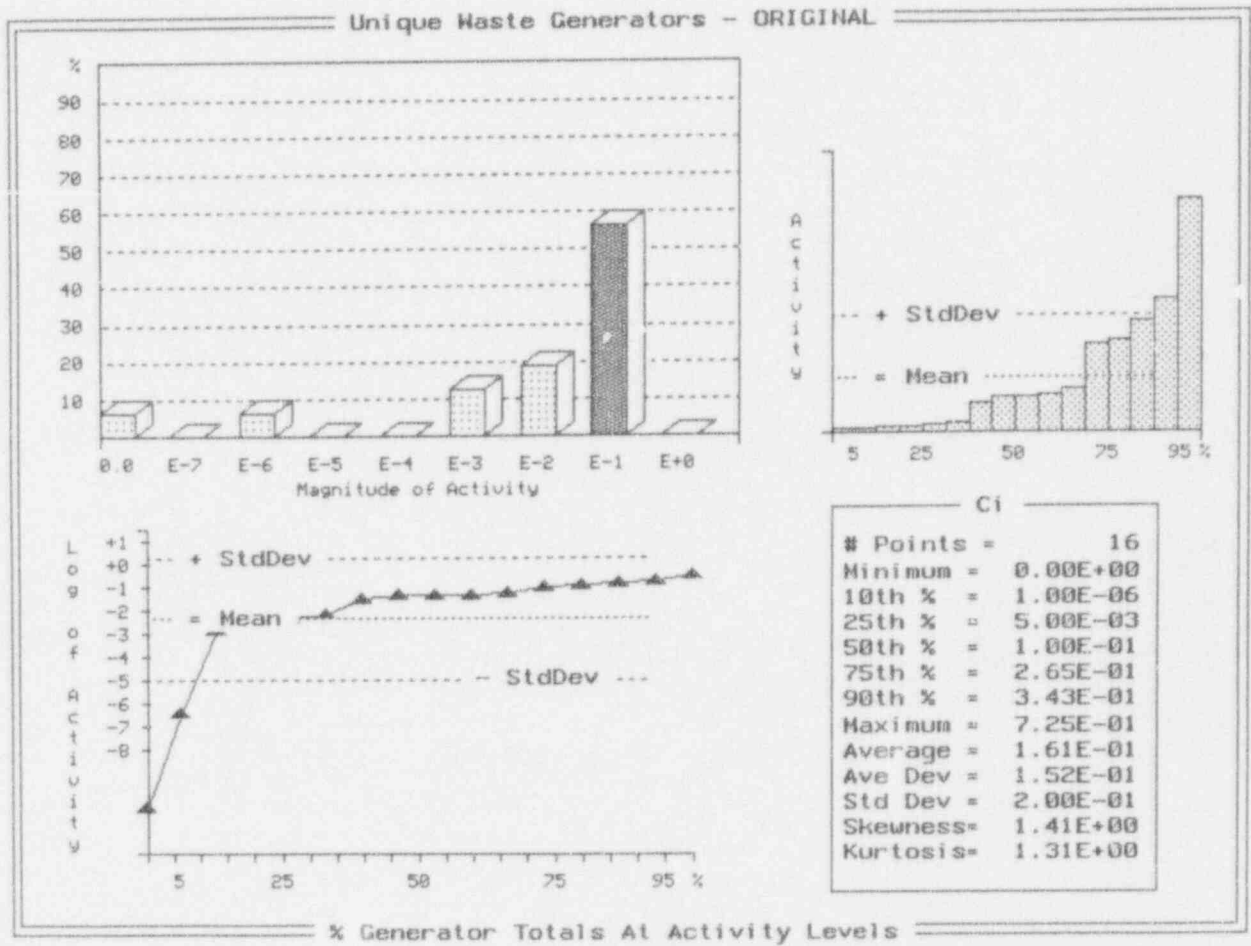


Exhibit F-12
Data Summary - Analyses at the Shipment Level
 (Aggregate Practices for non-brokered waste: 1986 to 1990)

	<u>Data or Parameters</u>
Compact or unaffiliated state:	Central
Waste generator class:	Industrial
Total number of waste generators:	28
Total associated waste volume (m ³):	5,975
Total associated waste activity (Ci):	54
Waste class:	A-Unstable and A-Stable
Identified waste generators for this analysis:	
Number:	6
Percent of total (%):	21
Total number of shipping records:	452
Number of shipping records <u>with</u> container data:	13
Number of waste containers:	869
Weight of shipments (kg):	5,713,000
Total waste volume (m ³):	5,584
Fractional waste volume (%): (this analysis/total)	93
Total waste activity (Ci):	24
Fractional waste activity (%): (this analysis/total)	44

Exhibit F-12 (Continued)

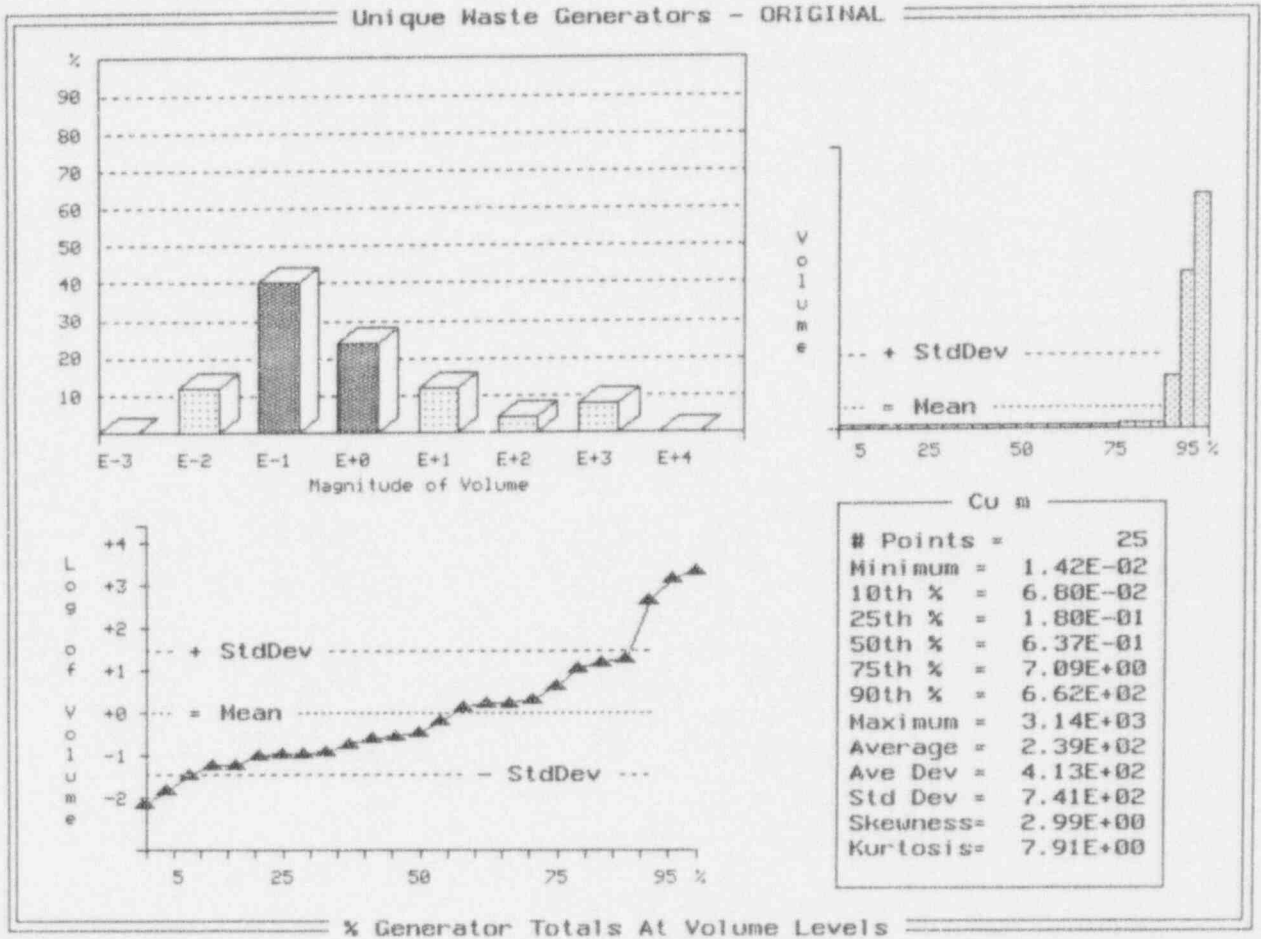


Exhibit F-12 (Continued)

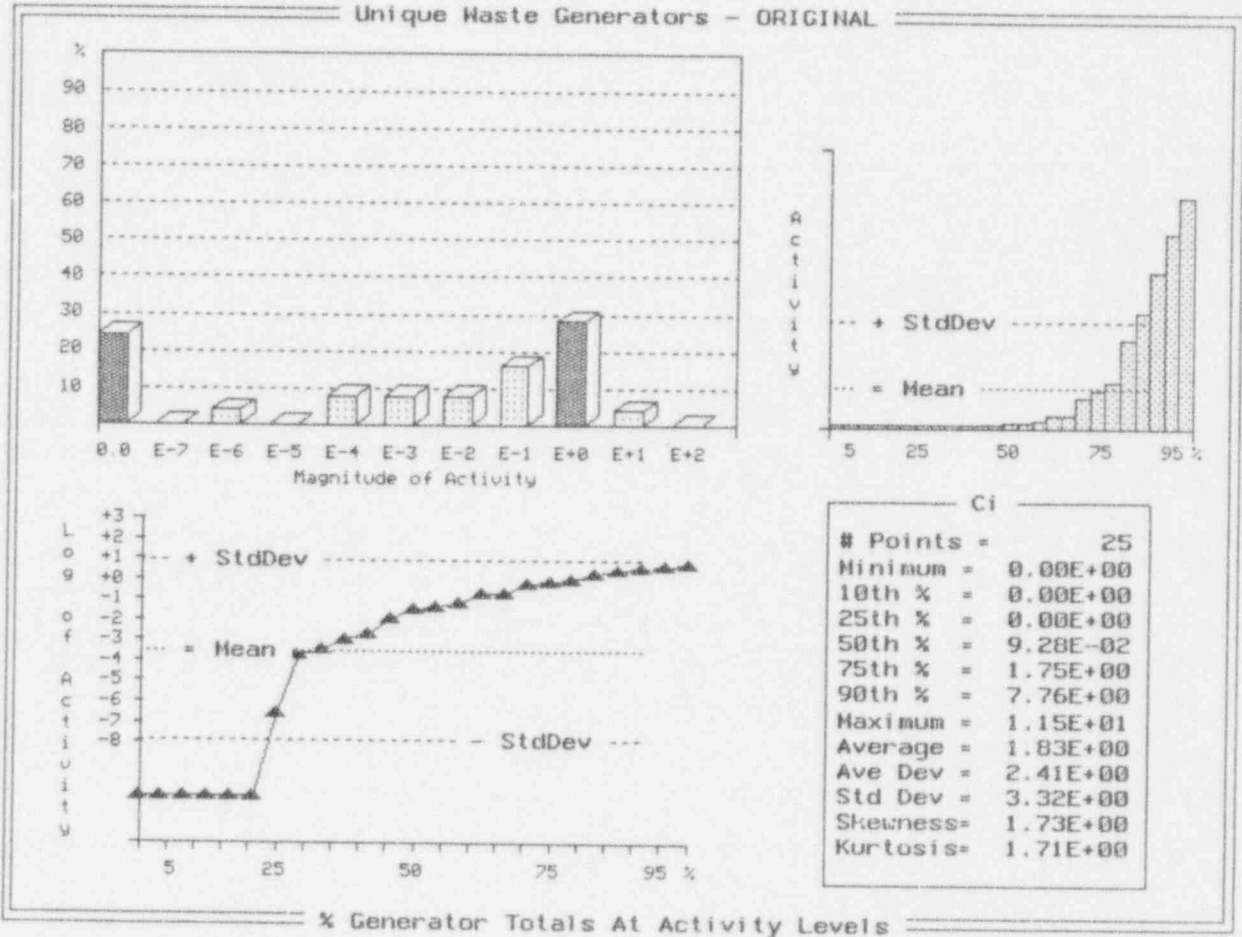


Exhibit F-12 (Continued)

Shipping-Level Stats - ORIGINAL

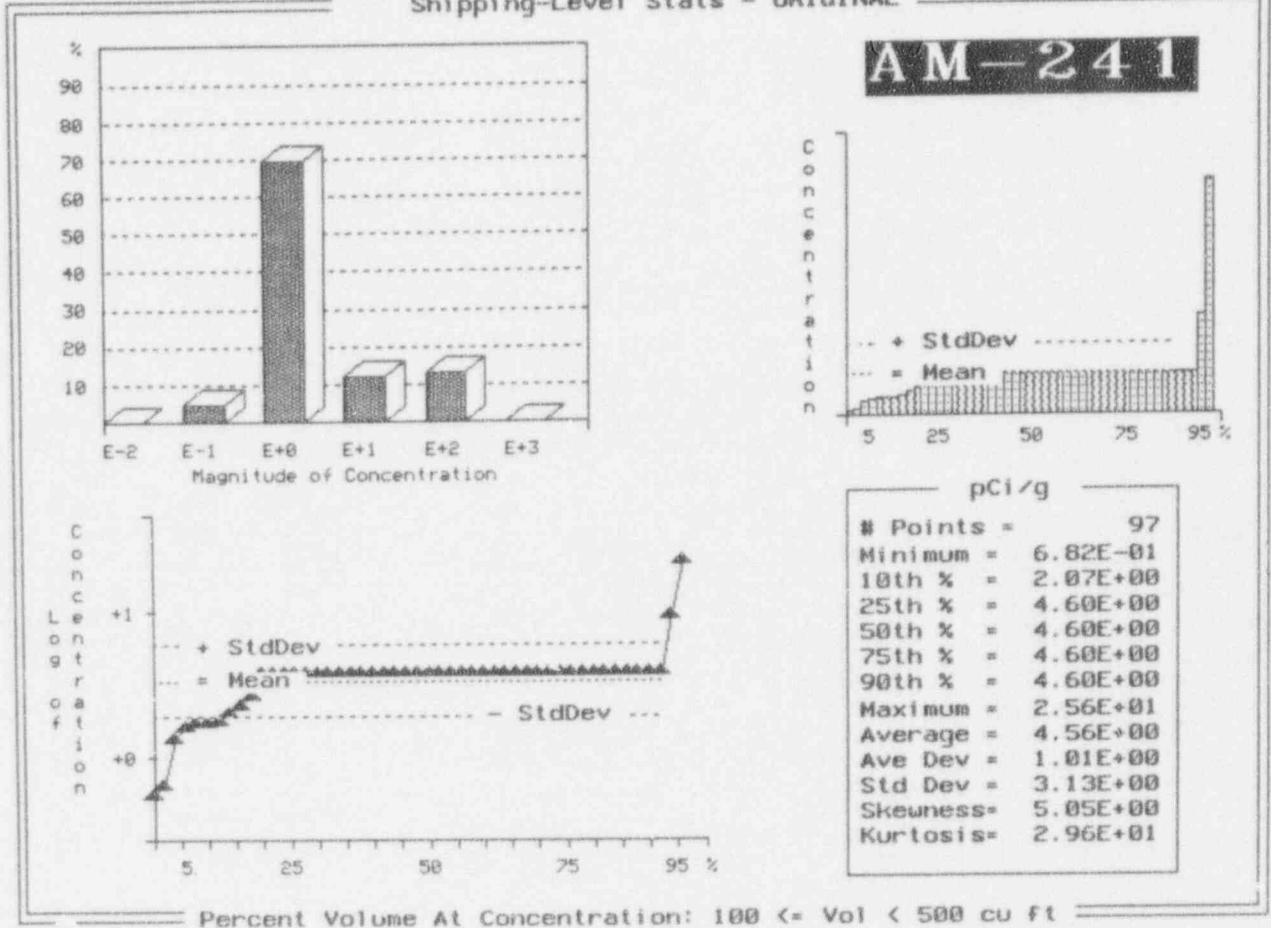


Exhibit F-12 (Continued)

Shipping-Level Stats - ORIGINAL

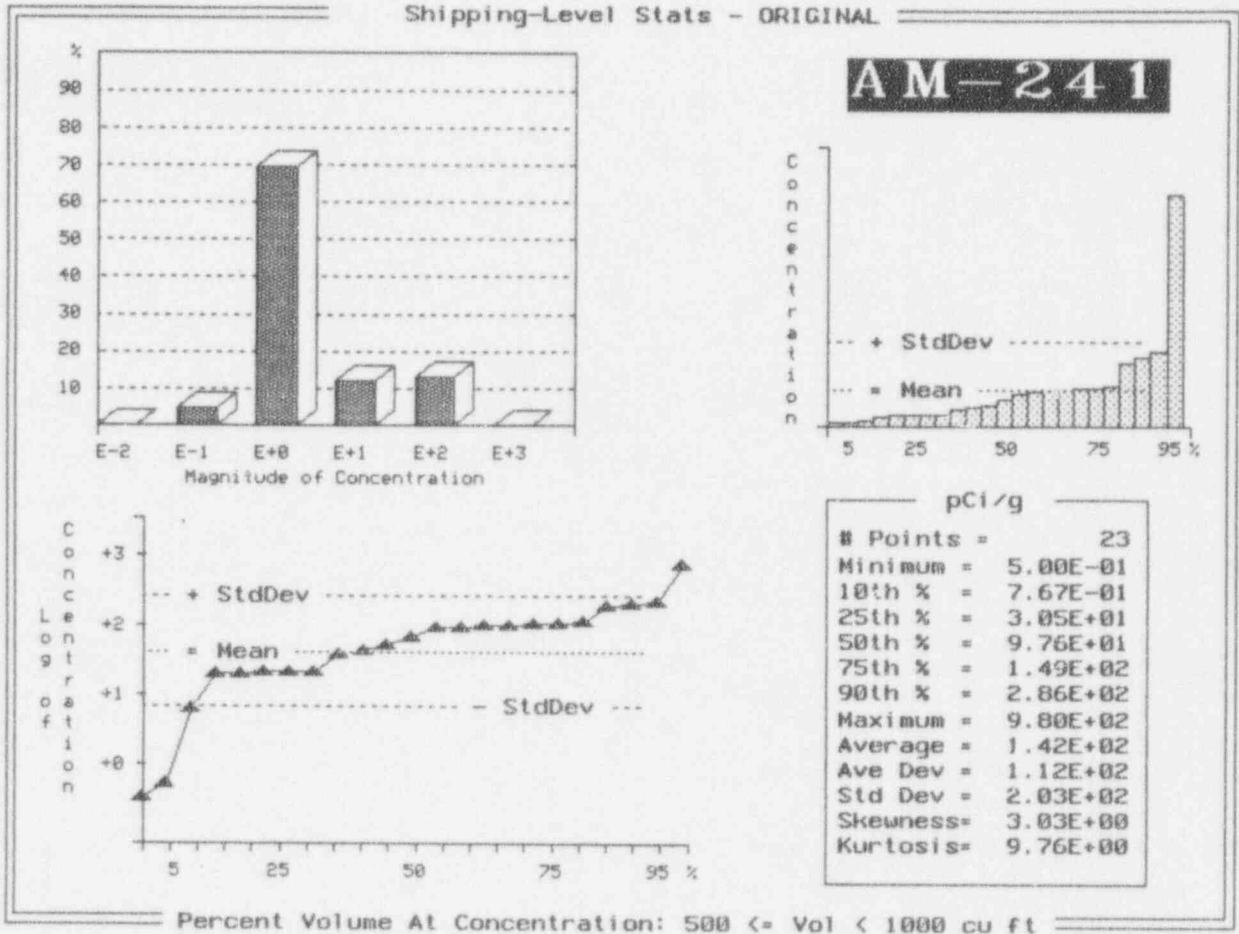


Exhibit F-12 (Continued)

Shipping-Level Stats - ORIGINAL

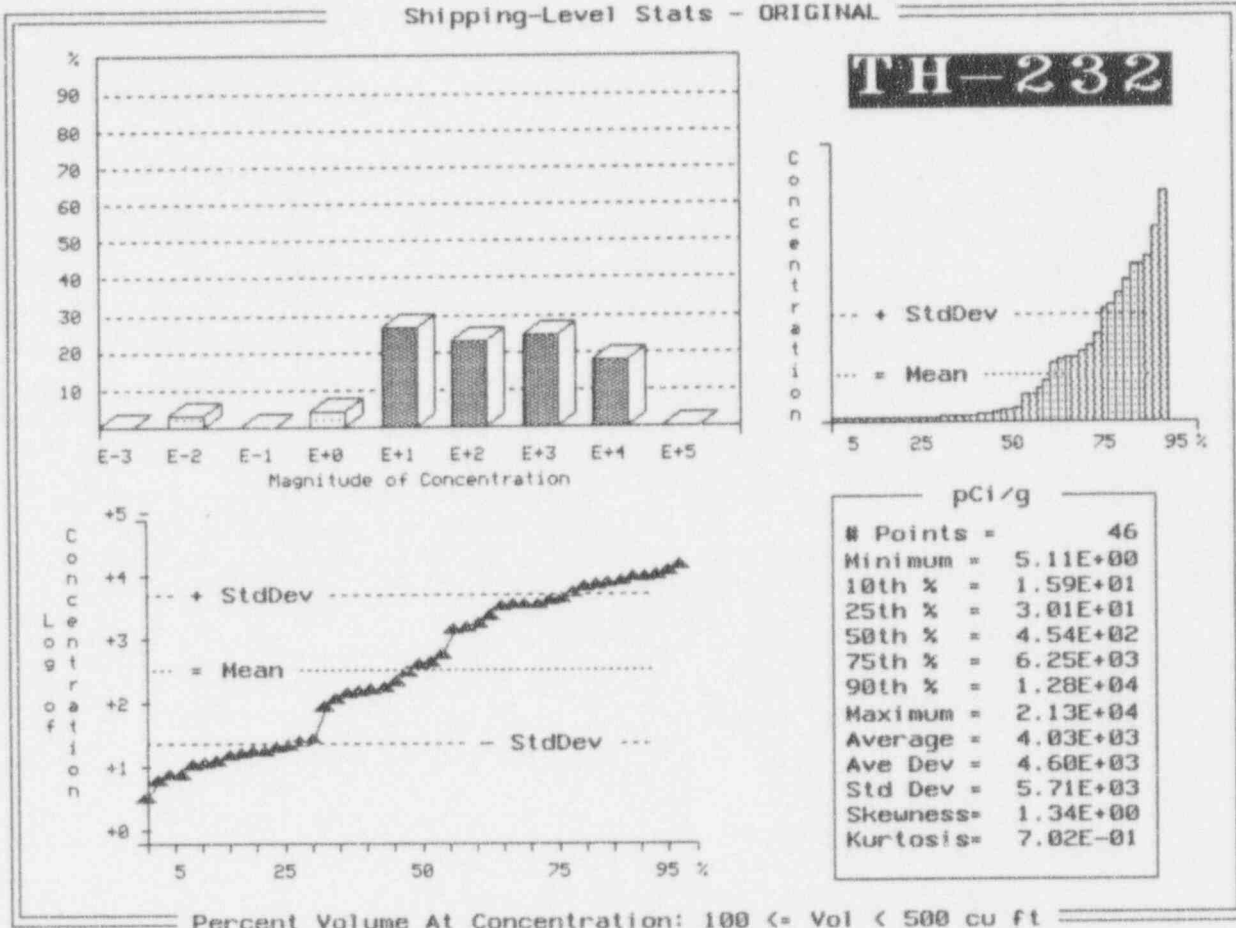


Exhibit F-12 (Continued)

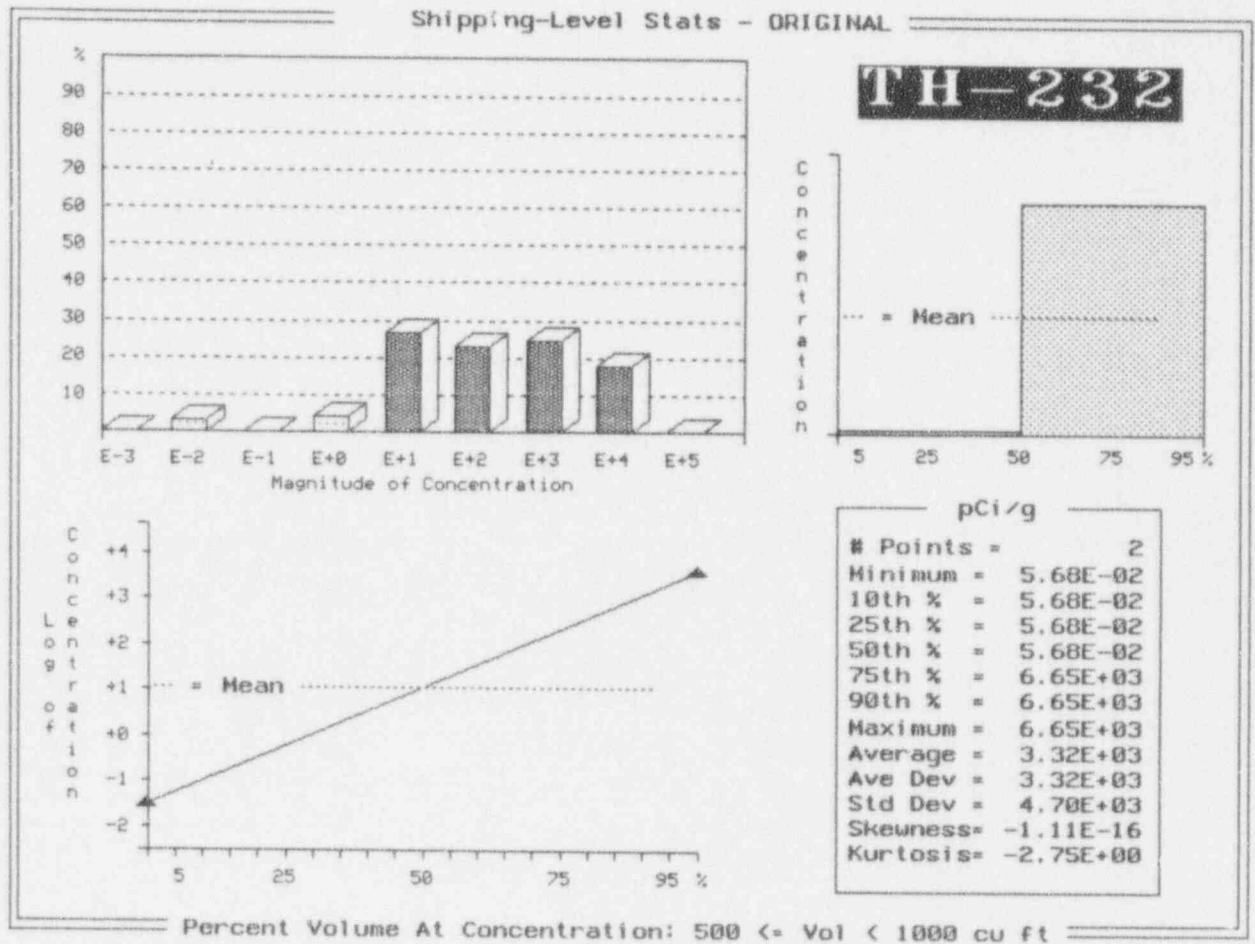


Exhibit F-12 (Continued)

Shipping-Level Stats - ORIGINAL

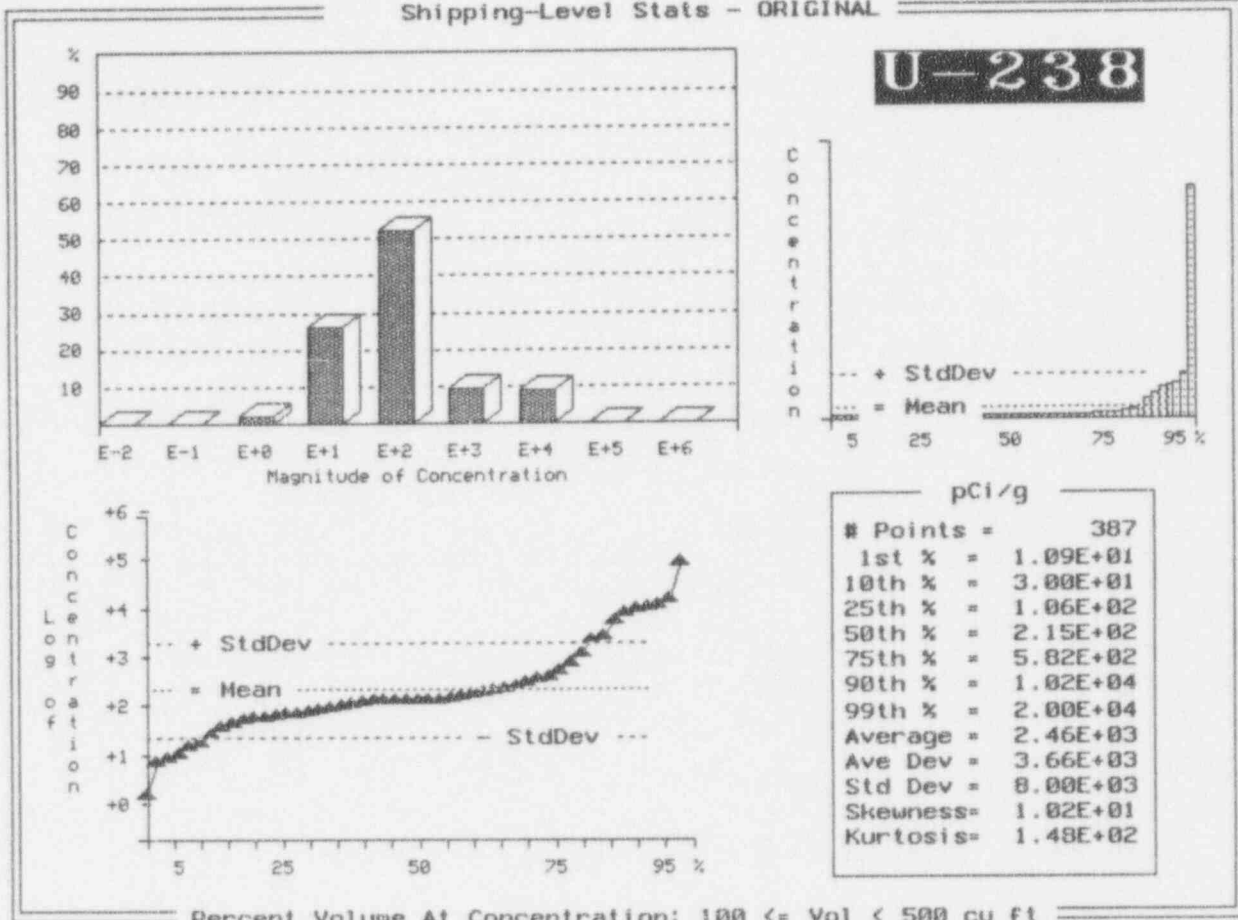


Exhibit F-12 (Continued)

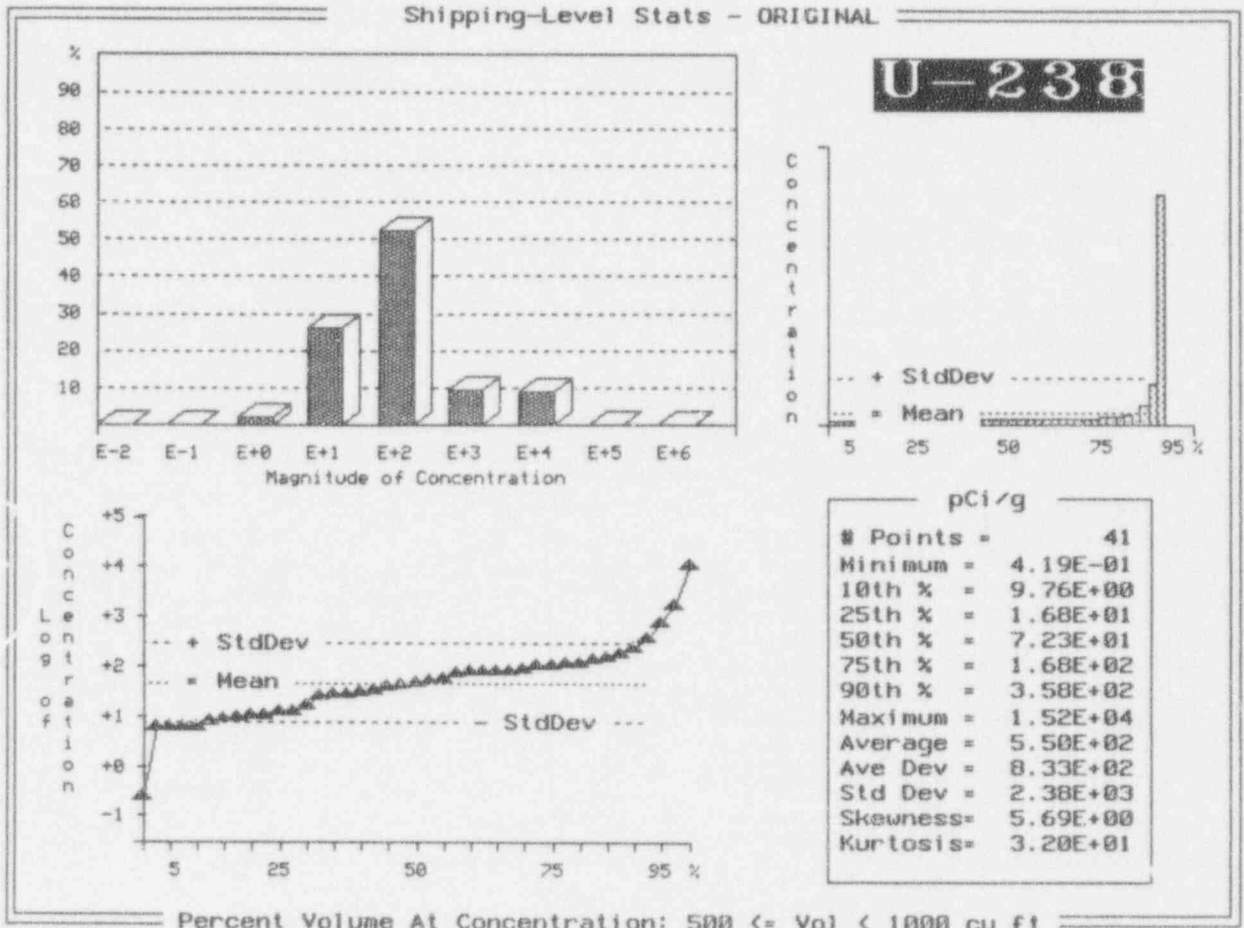


Exhibit F-12 (Continued)

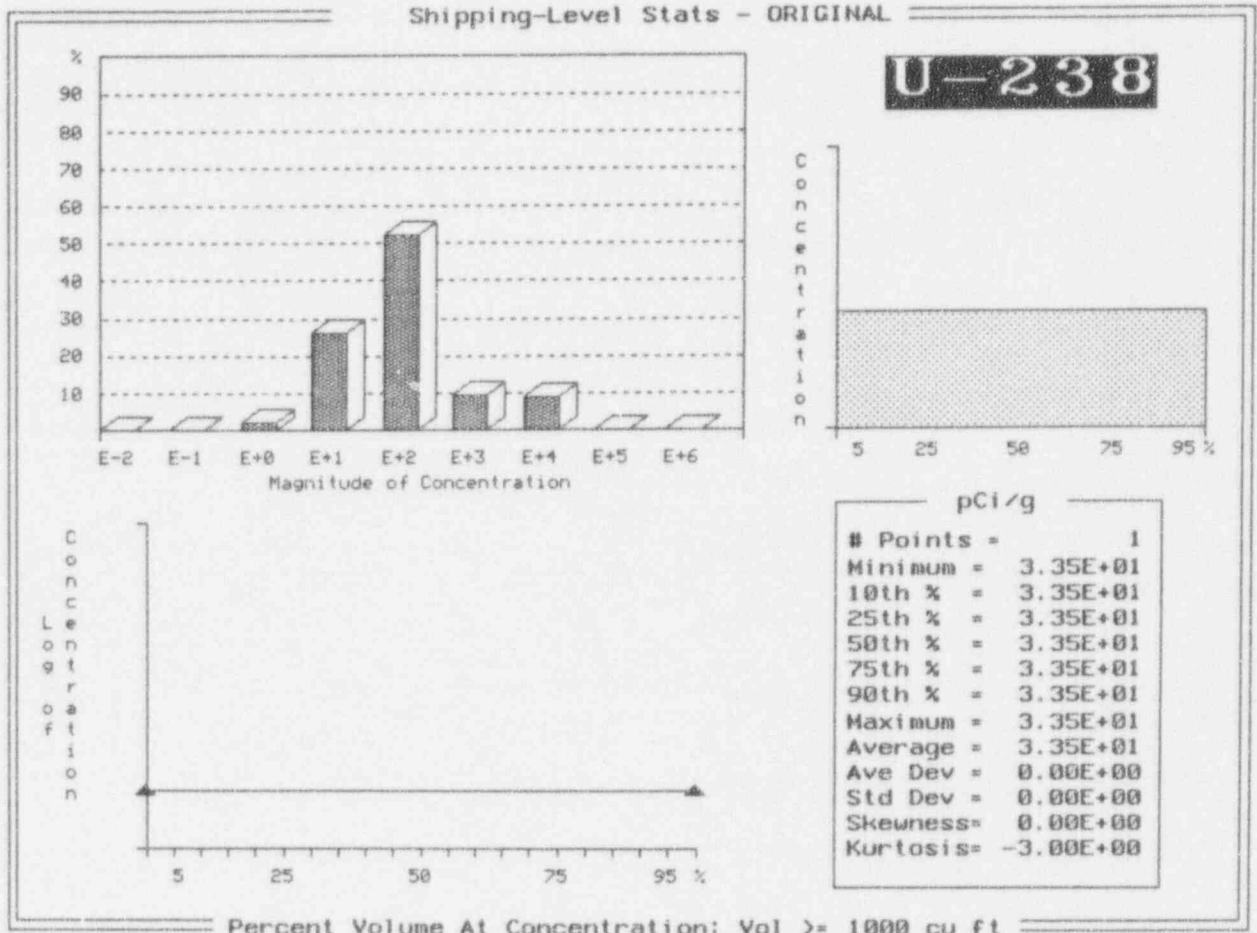


Exhibit F-13
Data Summary - Analyses at the Shipment Level
 (Aggregate Practices for non-brokered waste: 1986 to 1990)

	<u>Data or Parameters</u>
Compact or unaffiliated state:	Midwest
Waste generator class:	Government
Total number of waste generators:	31
Total associated waste volume (m ³):	915
Total associated waste activity (Ci):	494
Waste class:	A-Unstable and A-Stable
Identified waste generators for this analysis:	
Number:	4
Percent of total(%):	13
Total number of shipping records:	4
Number of shipping records <u>with</u> container data:	0
Number of waste containers:	0
Weight of shipments (kg):	30,490
Total waste volume (m ³):	43.5
Fractional waste volume (%): (this analysis/total)	4.8
Total waste activity (Ci):	4.7
Fractional waste activity (%): (this analysis/total)	0.9

Exhibit F-13 (Continued)

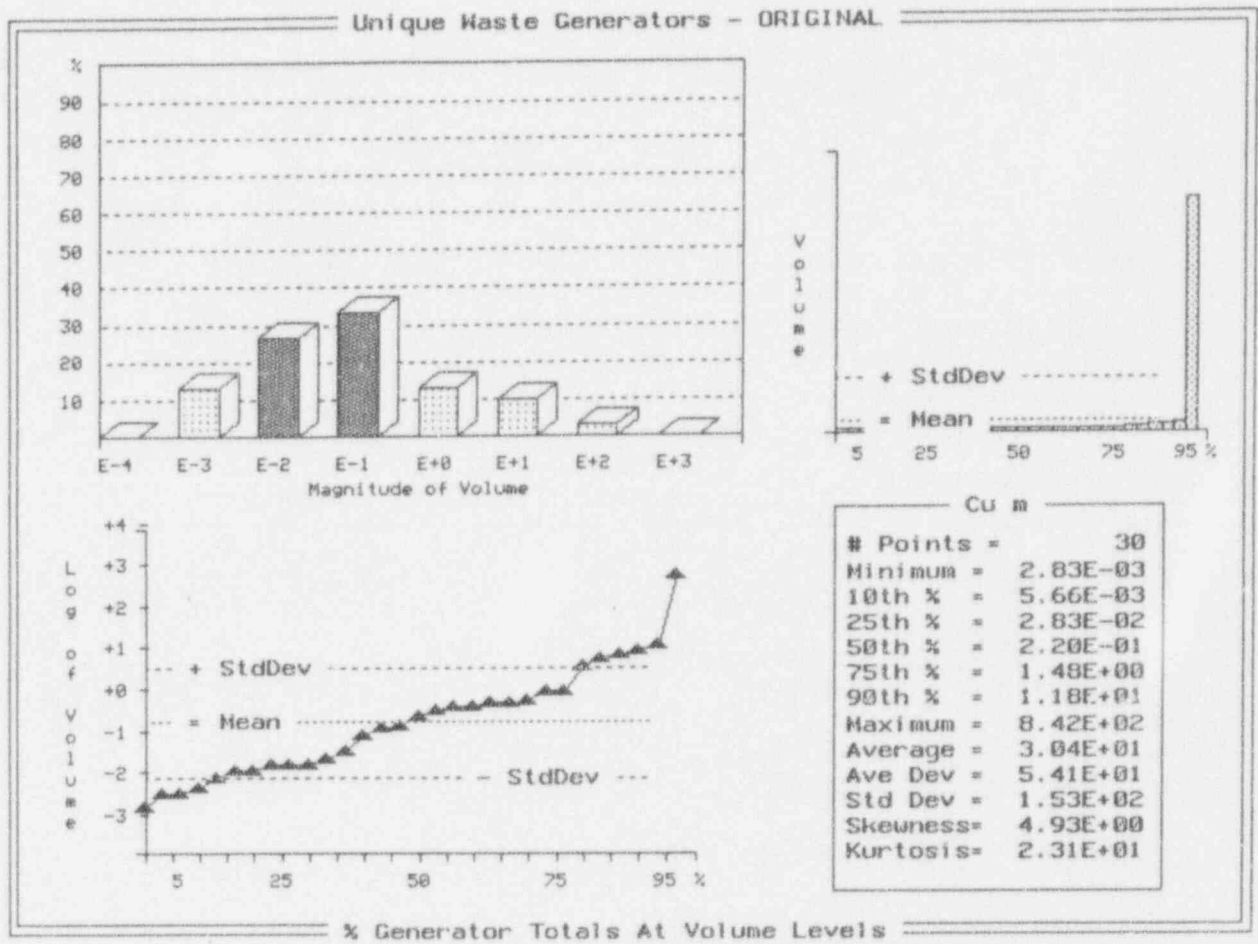


Exhibit F-13 (Continued)

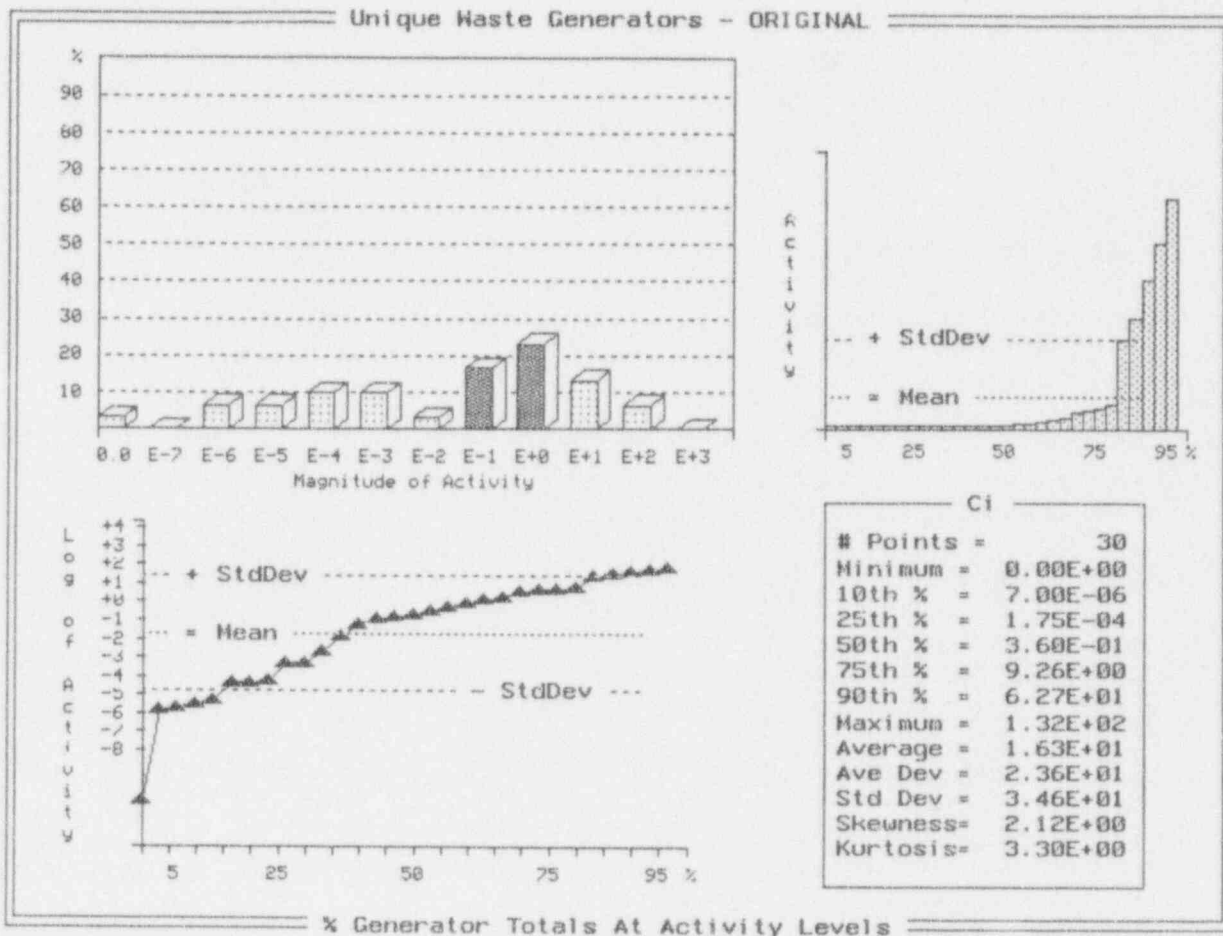


Exhibit F-14
Data Summary - Analyses at the Shipment Level
 (Aggregate Practices for non-brokered waste: 1986 to 1990)

	<u>Data or Parameters</u>
Compact or unaffiliated state:	Midwest
Waste generator class:	Academic
Total number of waste generators:	65
Total associated waste volume (m ³):	927
Total associated waste activity (Ci):	296
Waste class:	A-Unstable and A-Stable
Identified waste generators for this analysis:	
Number:	8
Percent of total(%):	12
Total number of shipping records:	9
Number of shipping records <u>with</u> container data:	0
Number of waste containers:	0
Weight of shipments (kg):	21,960
Total waste volume (m ³):	38.7
Fractional waste volume (%): (this analysis/total)	4.2
Total waste activity (Ci):	3.5
Fractional waste activity (%): (this analysis/total)	1.2

Exhibit F-14 (Continued)

Unique Waste Generators - ORIGINAL

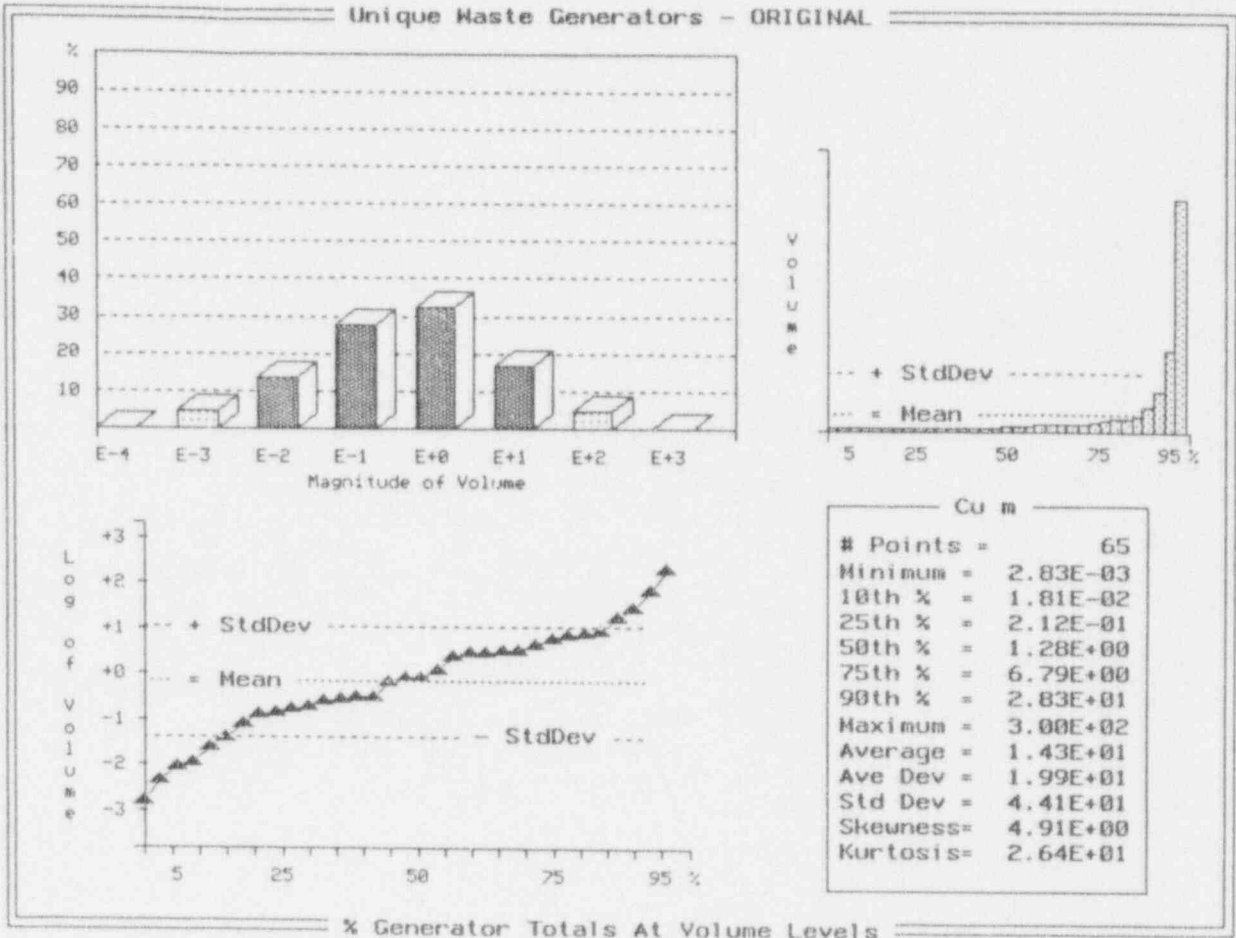


Exhibit F-14 (Continued)

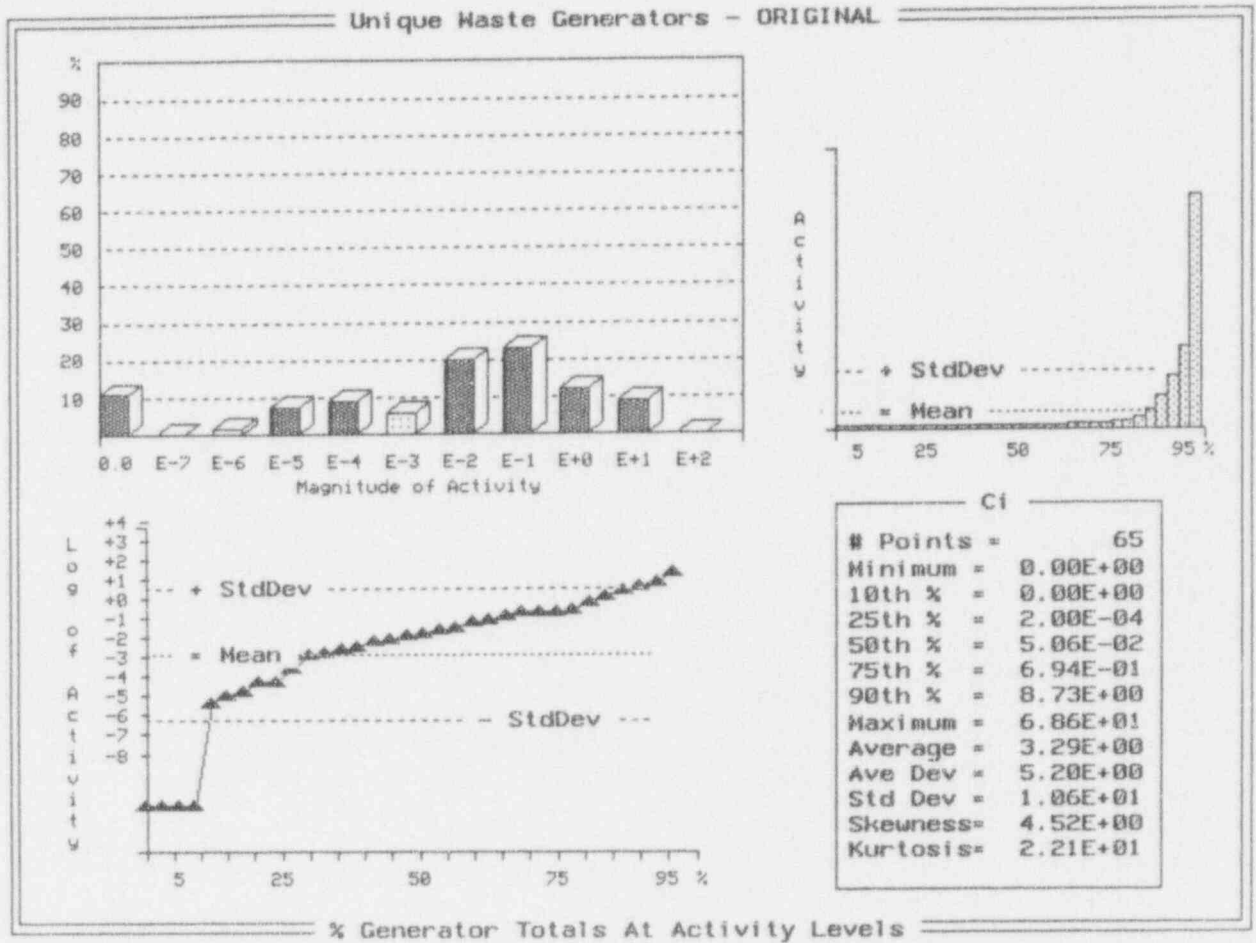


Exhibit F-15
Data Summary - Analyses at the Shipment Level
 (Aggregate Practices for non-brokered waste: 1986 to 1990)

	<u>Data or Parameters</u>
Compact or unaffiliated state:	Midwest
Waste generator class:	Medical
Total number of waste generators:	91
Total associated waste volume (m ³):	438
Total associated waste activity (Ci):	76.9
Waste class:	A-Unstable and A-Stable
Identified waste generators for this analysis:	
Number:	5
Percent of total(%):	5
Total number of shipping records:	11
Number of shipping records <u>with</u> container data:	1
Number of waste containers:	109
Weight of shipments (kg):	122,000
Total waste volume (m ³):	157.4
Fractional waste volume (%): (this analysis/total)	36
Total waste activity (Ci):	13.2
Fractional waste activity (%): (this analysis/total)	17

Exhibit F-15 (Continued)

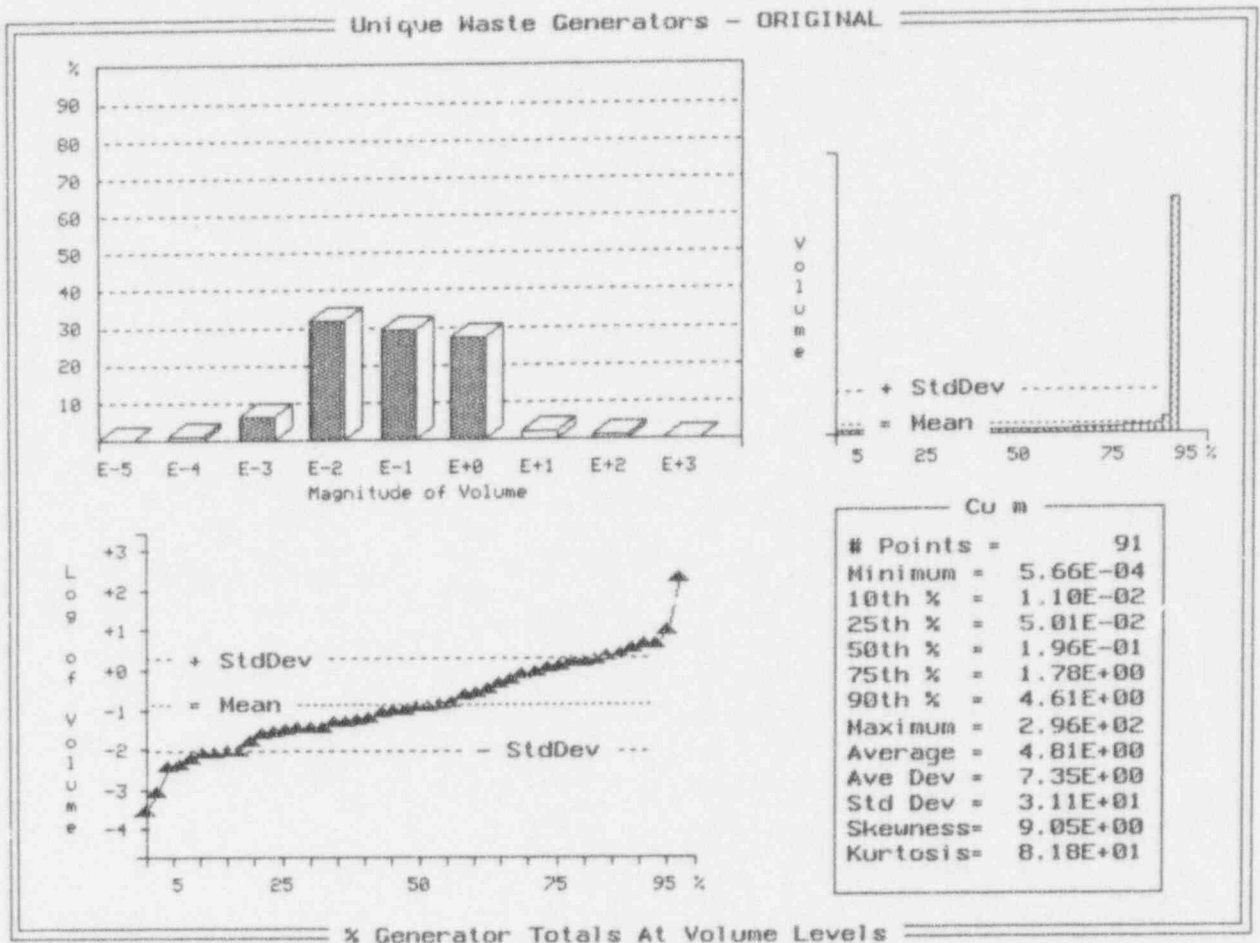


Exhibit F-15 (Continued)

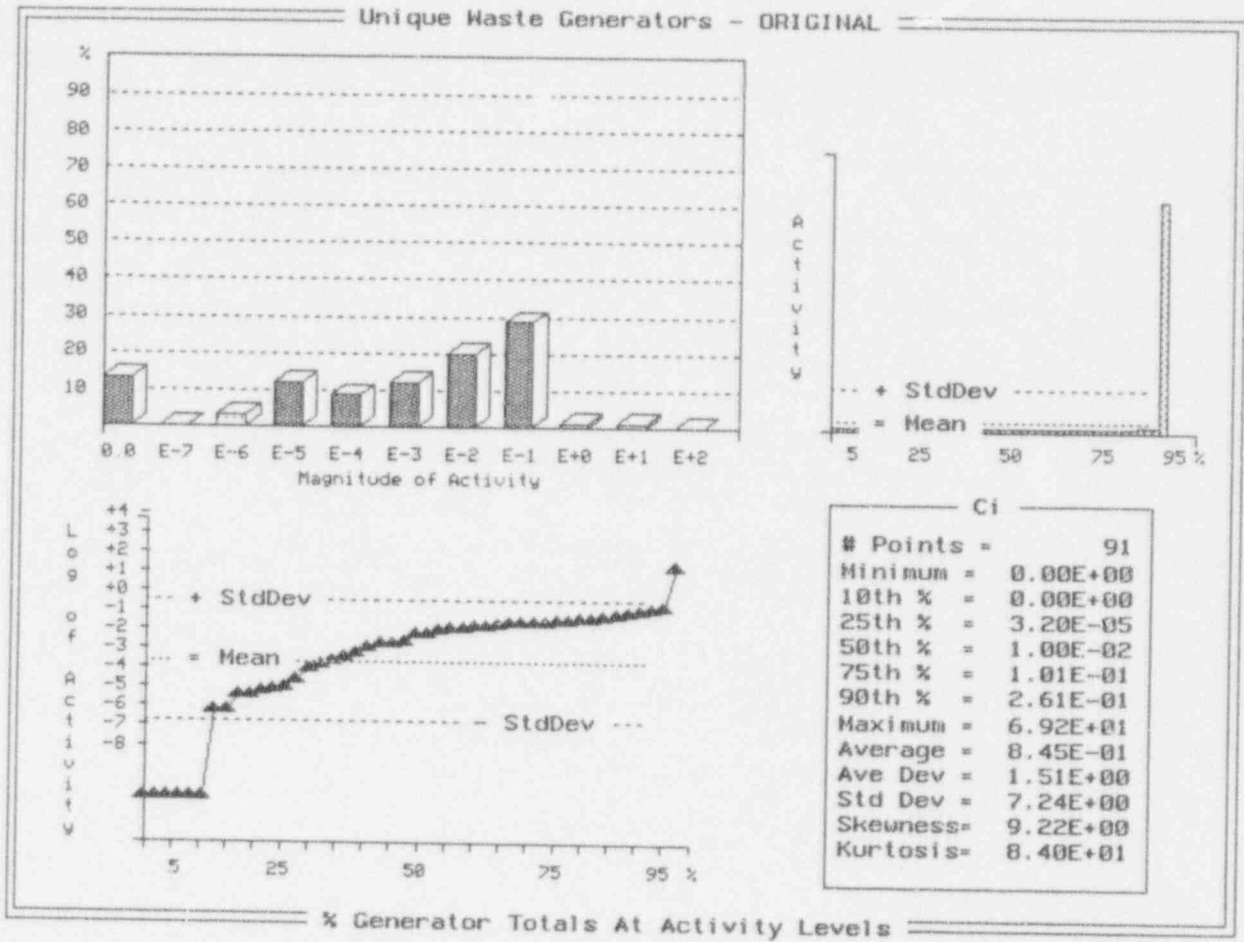


Exhibit F-16
Data Summary - Analyses at the Shipment Level
 (Aggregate Practices for non-brokered waste: 1986 to 1990)

	<u>Data or Parameters</u>
Compact or unaffiliated state:	Midwest
Waste generator class:	Industrial
Total number of waste generators:	242
Total associated waste volume (m ³):	4,484
Total associated waste activity (Ci):	5,586
Waste class:	A-Unstable and A-Stable
Identified waste generators for this analysis:	
Number:	45
Percent of total (%):	19
Total number of shipping records:	284
Number of shipping records <u>with</u> container data:	63
Number of waste containers:	1,435
Weight of shipments (kg):	1,133,000
Total waste volume (m ³):	3,588
Fractional waste volume (%): (this analysis/total)	80
Total waste activity (Ci):	373
Fractional waste activity (%): (this analysis/total)	7

Exhibit F-16 (Continued)

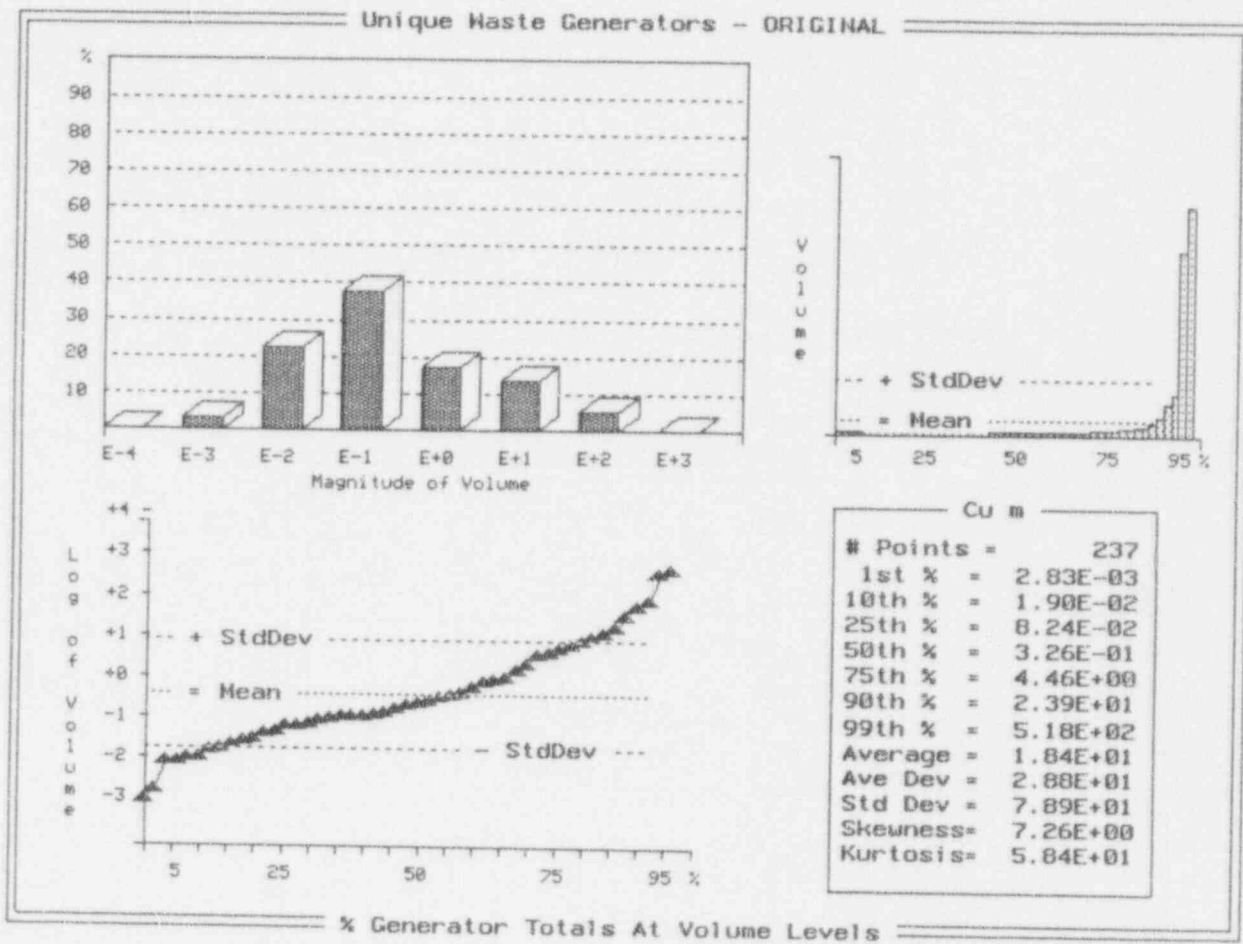


Exhibit F-16 (Continued)

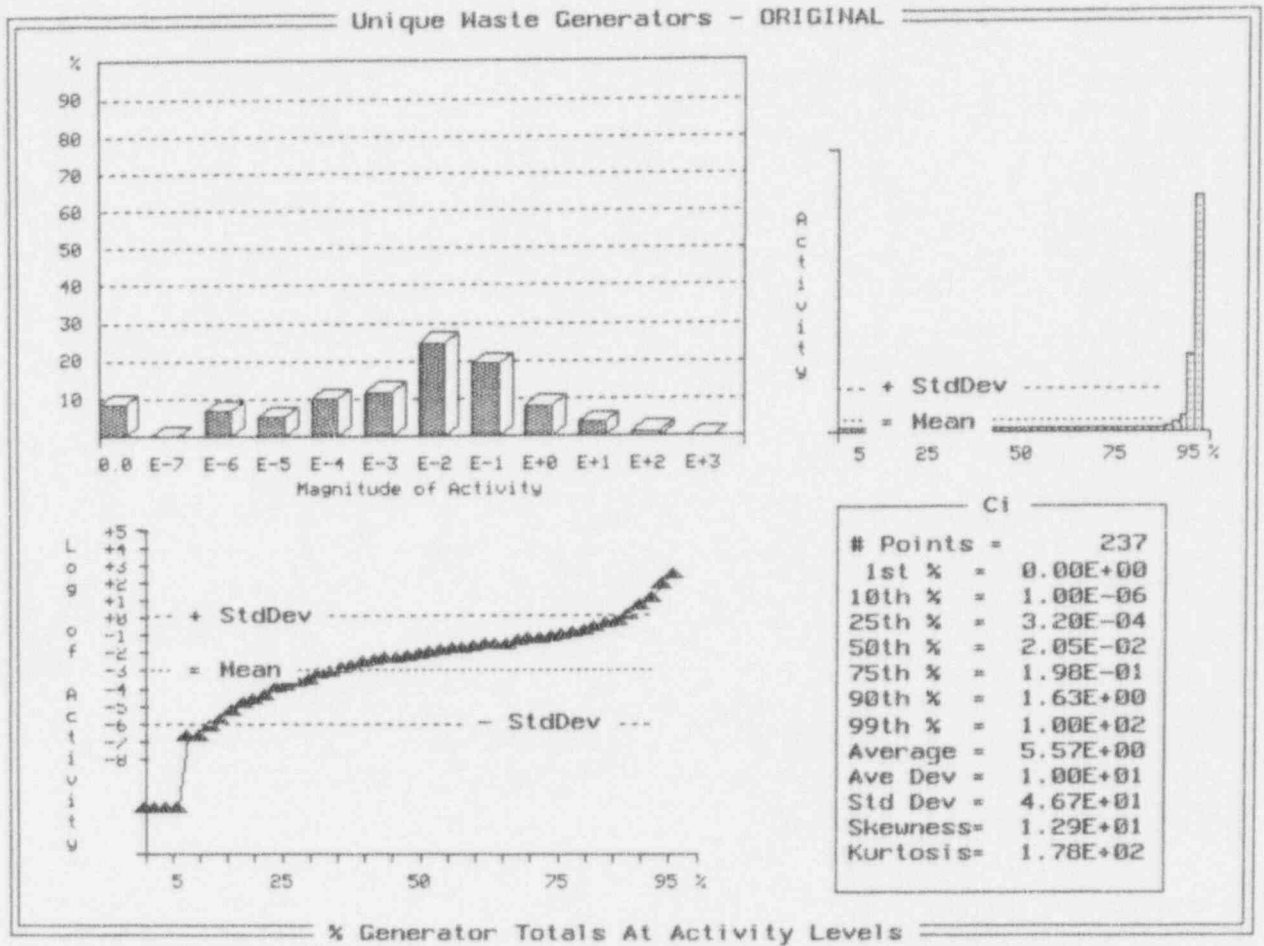


Exhibit F-16 (Continued)

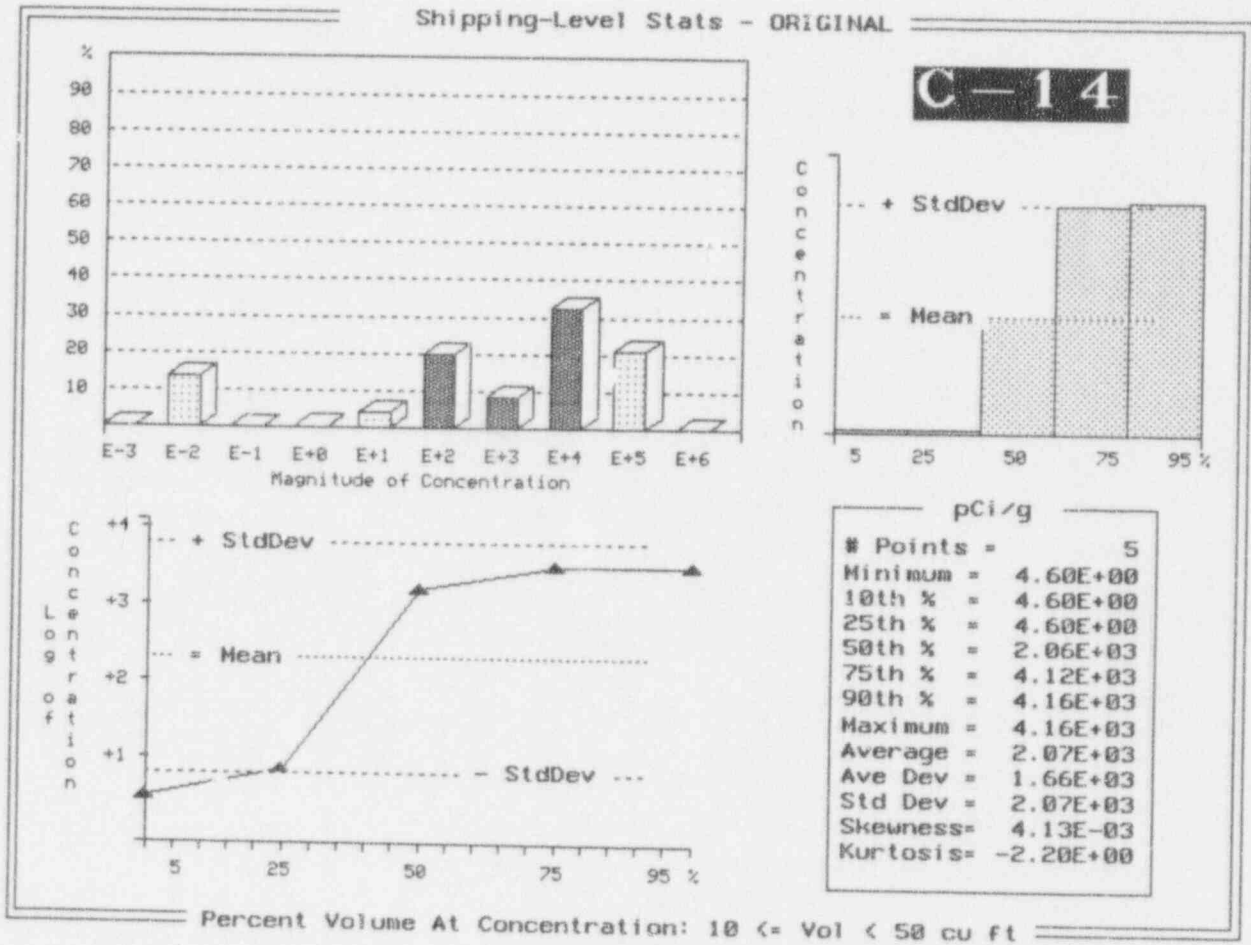


Exhibit F-16 (Continued)

Shipping-Level Stats - ORIGINAL

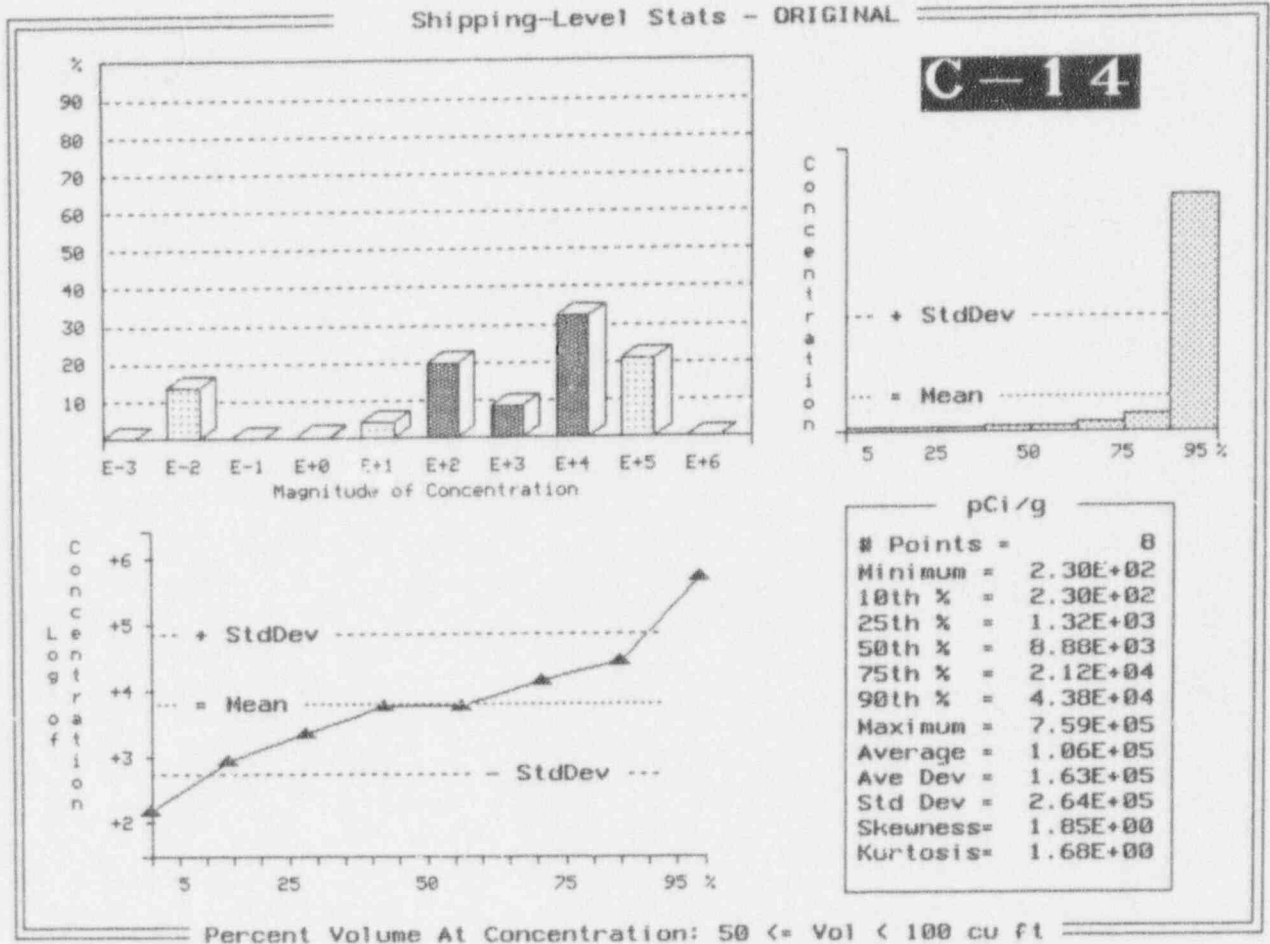
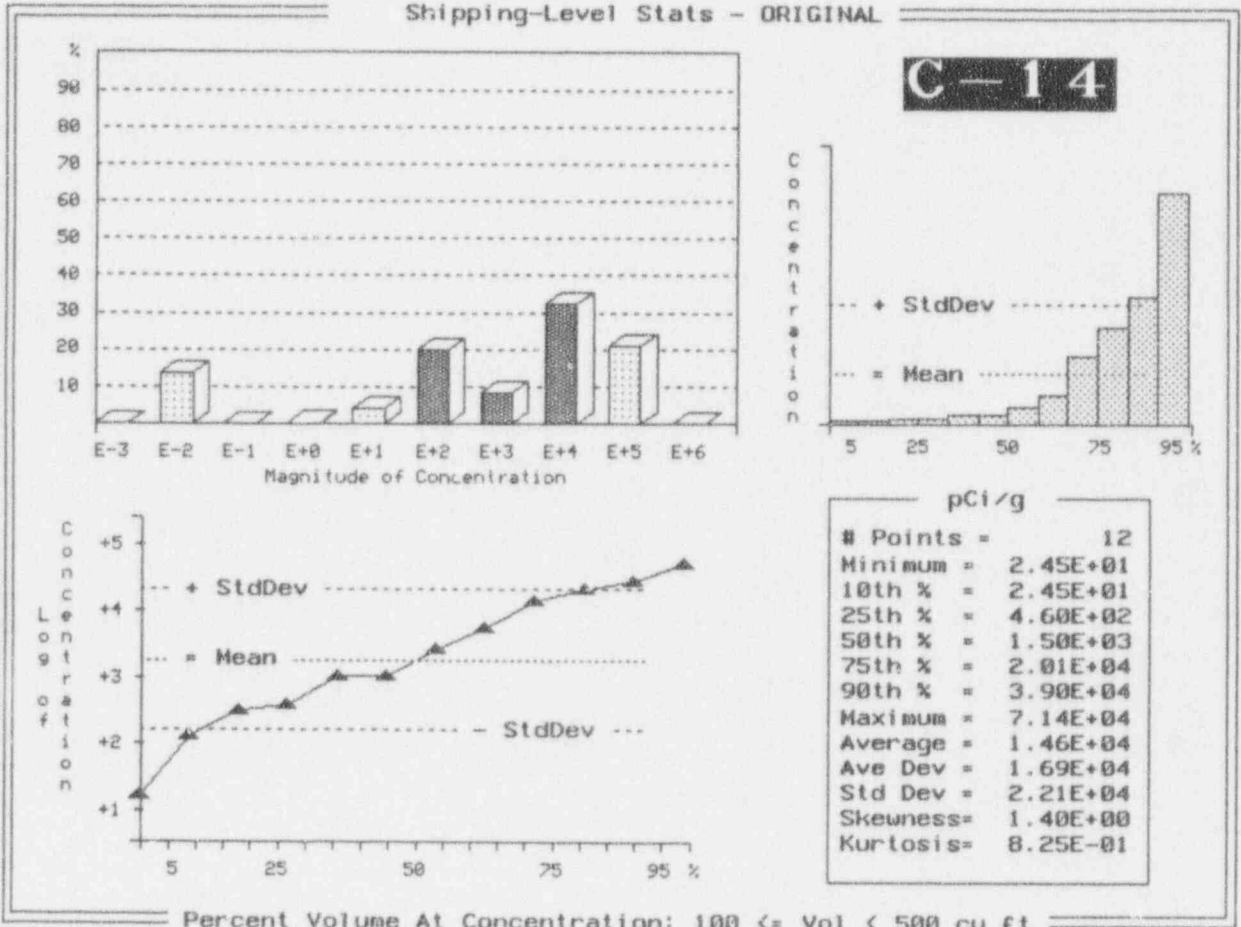


Exhibit F-16 (Continued)

Shipping-Level Stats - ORIGINAL



Percent Volume At Concentration: 100 <= Vol < 500 cu ft

Exhibit F-16 (Continued)

Shipping-Level Stats - ORIGINAL

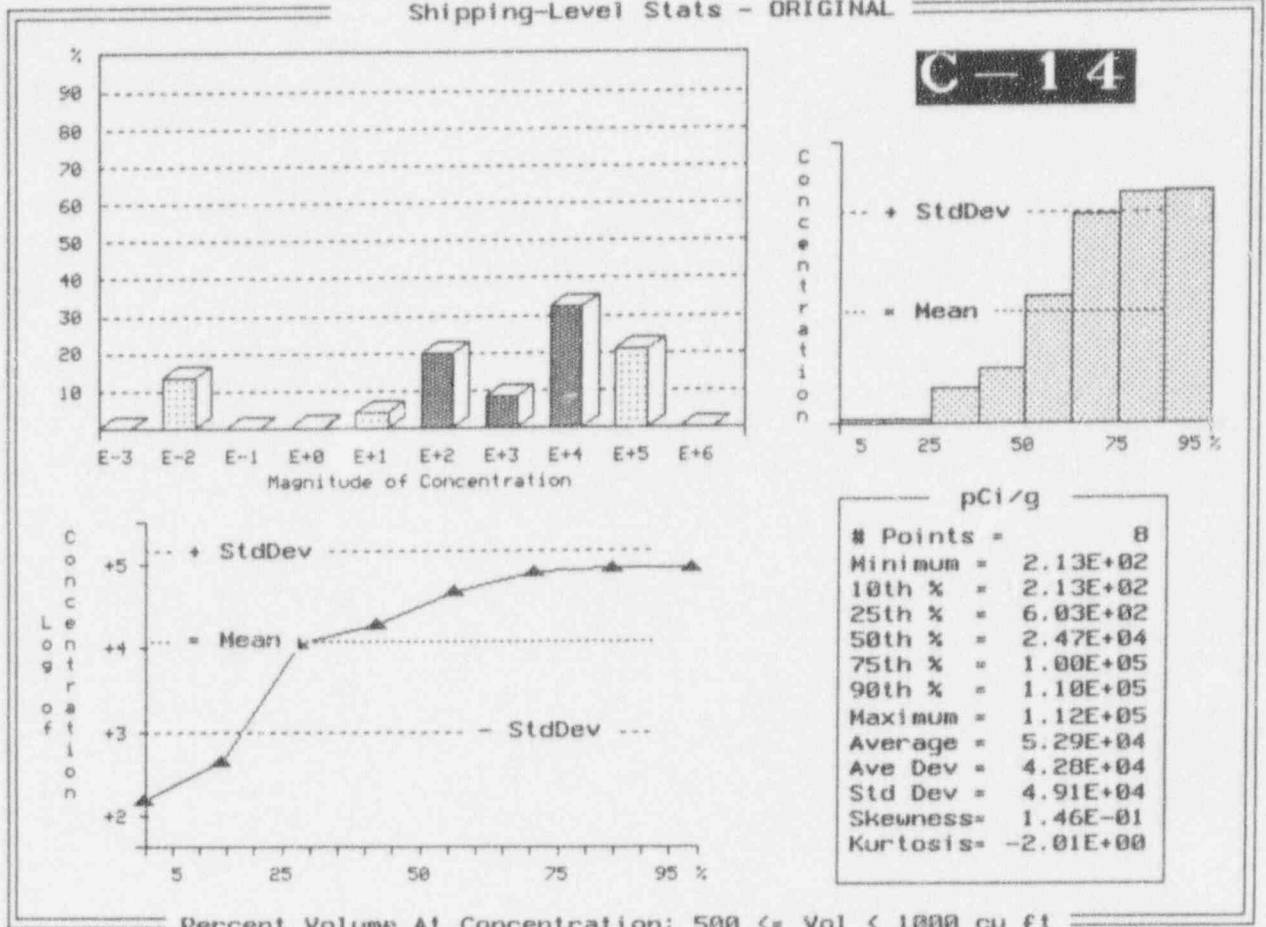


Exhibit F-16 (Continued)

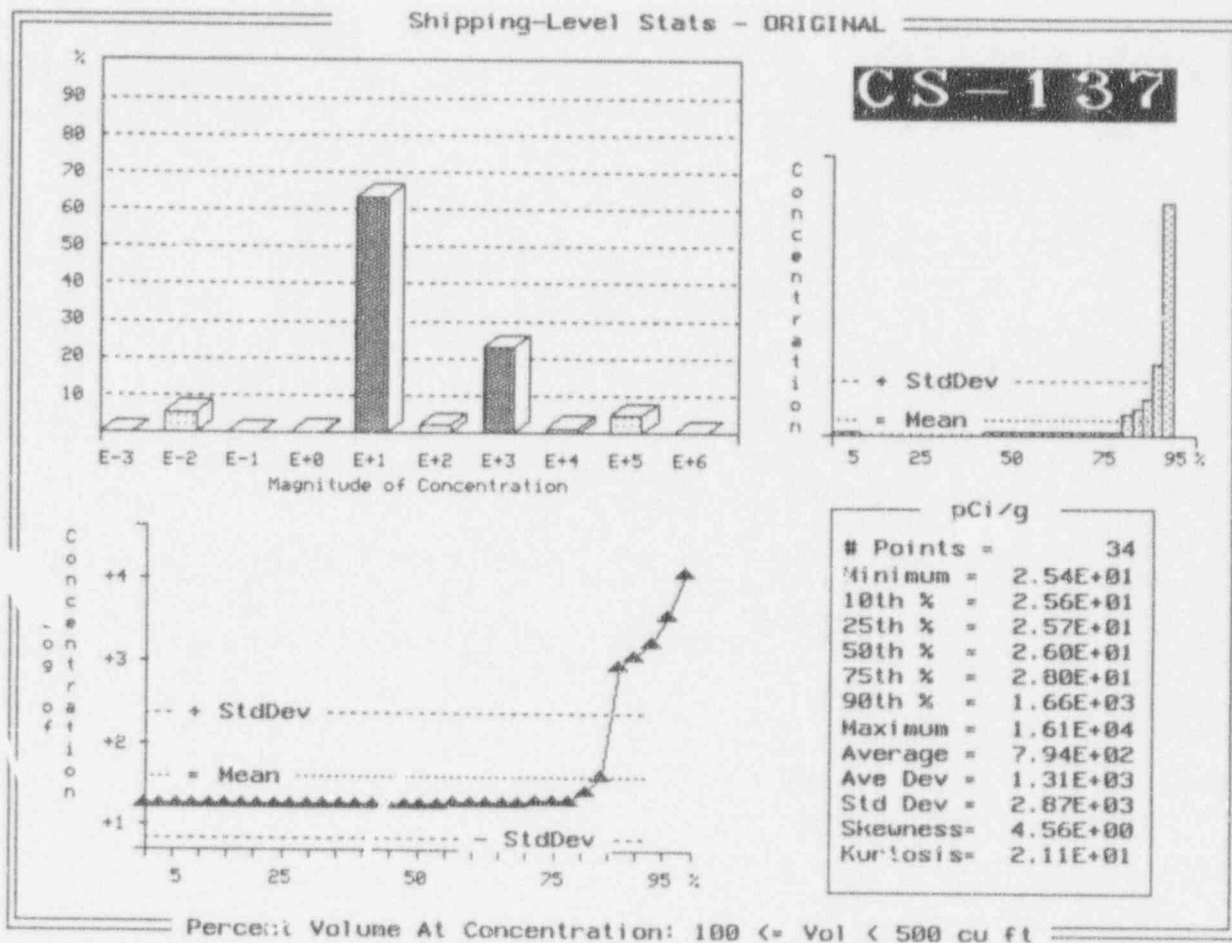


Exhibit F-16 (Continued)

Shipping-Level Stats - ORIGINAL

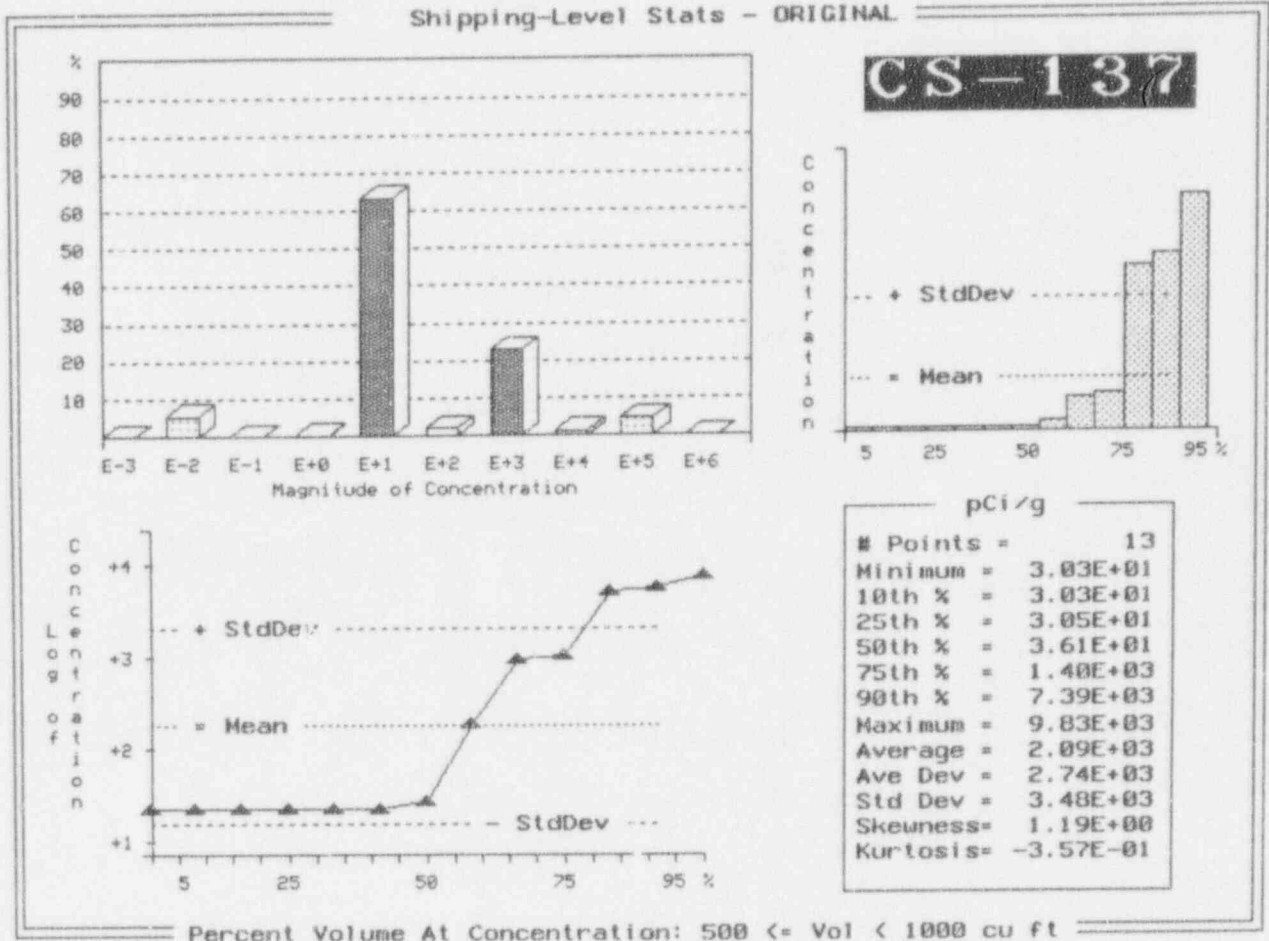


Exhibit F-16 (Continued)

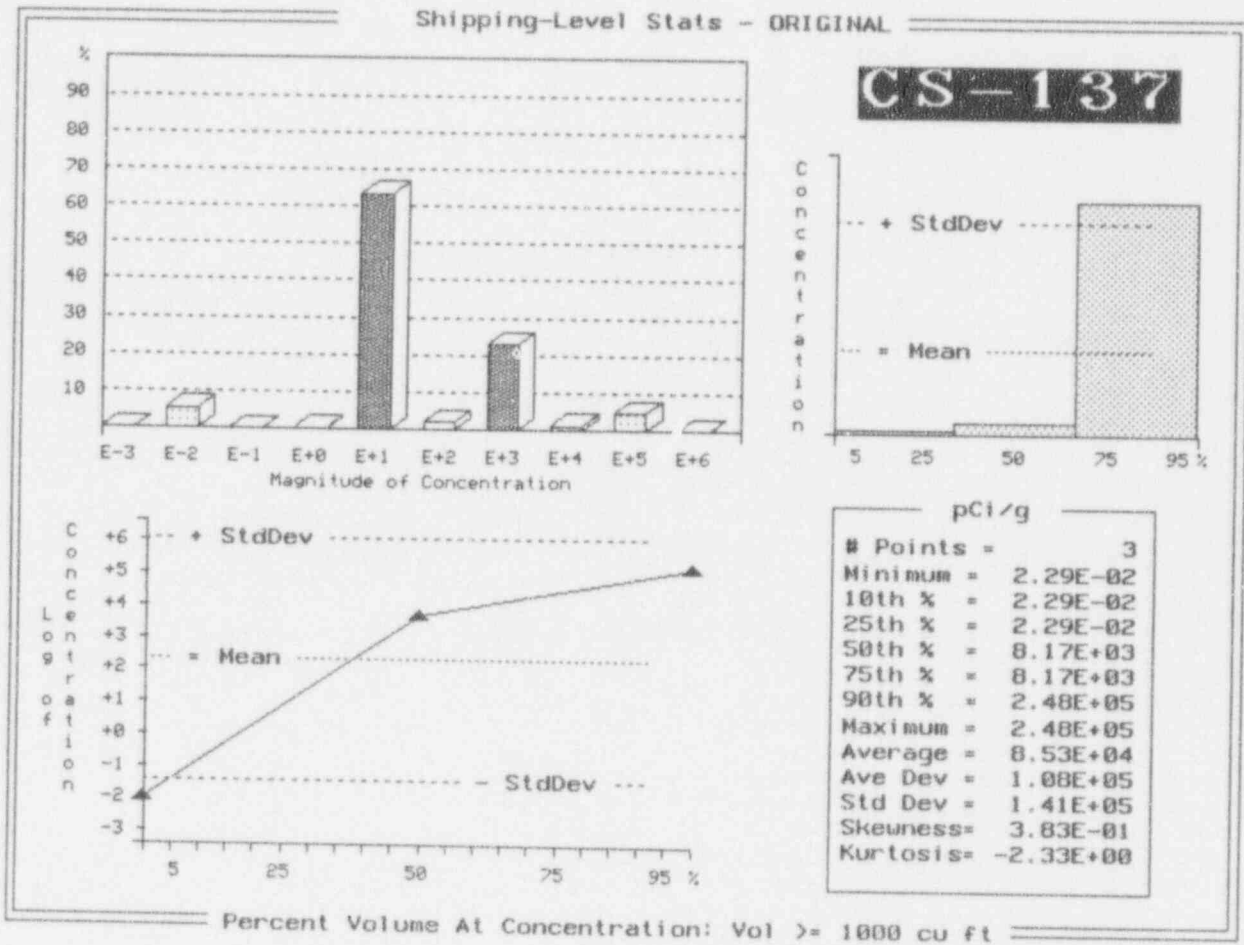


Exhibit F-16 (Continued)

Shipping-Level Stats - ORIGINAL

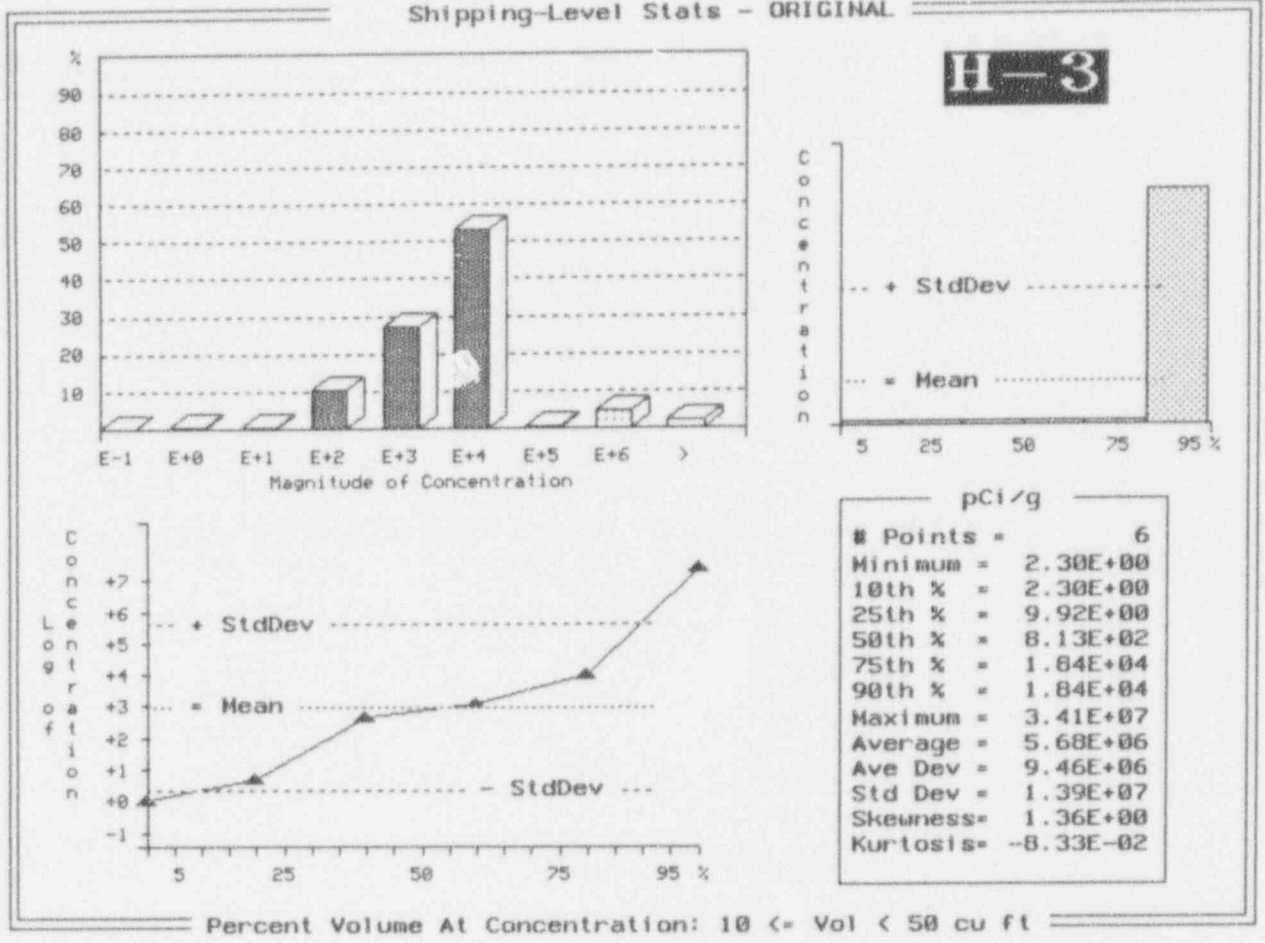


Exhibit F-16 (Continued)

Shipping-Level Stats - ORIGINAL

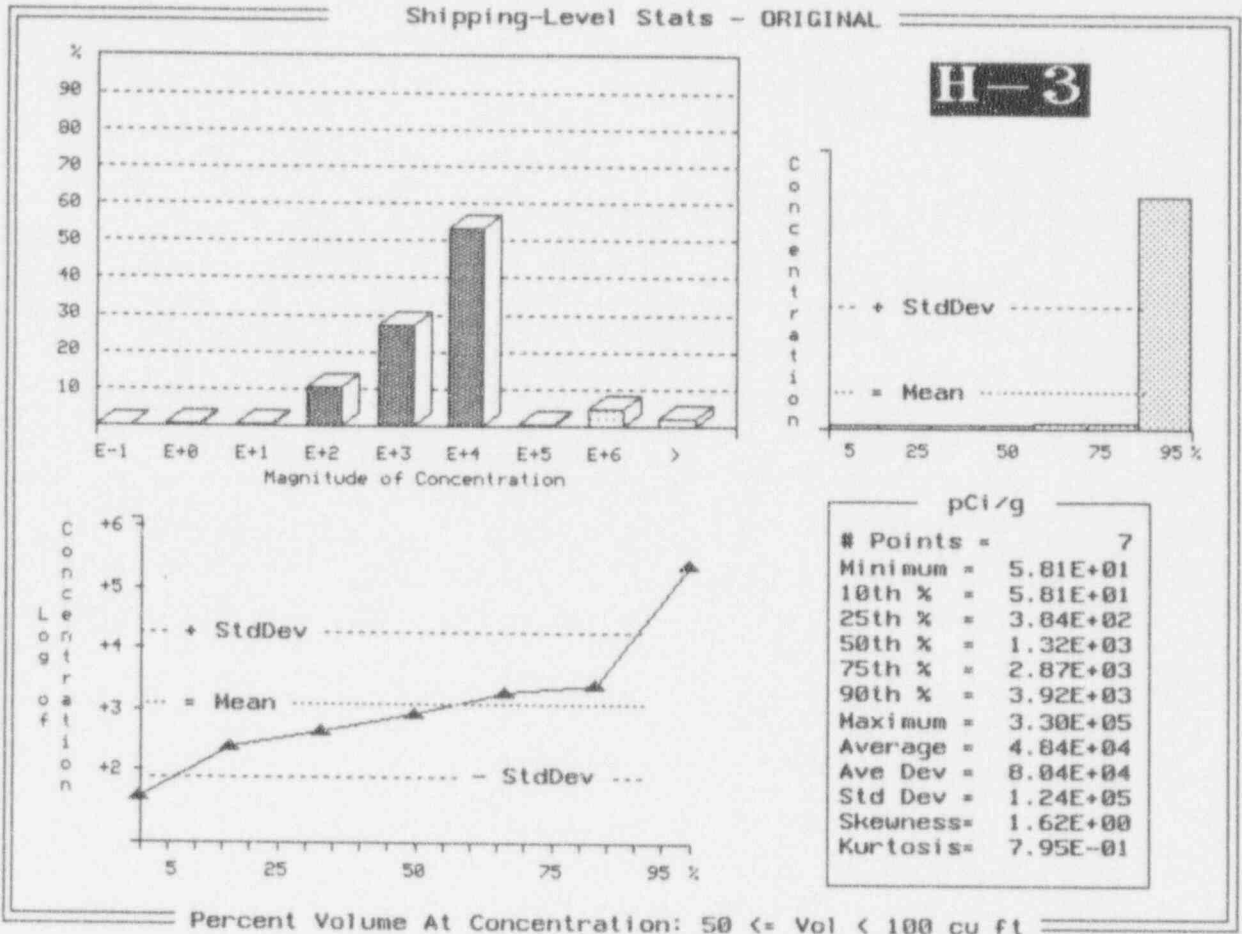


Exhibit F-16 (Continued)

Shipping-Level Stats - ORIGINAL

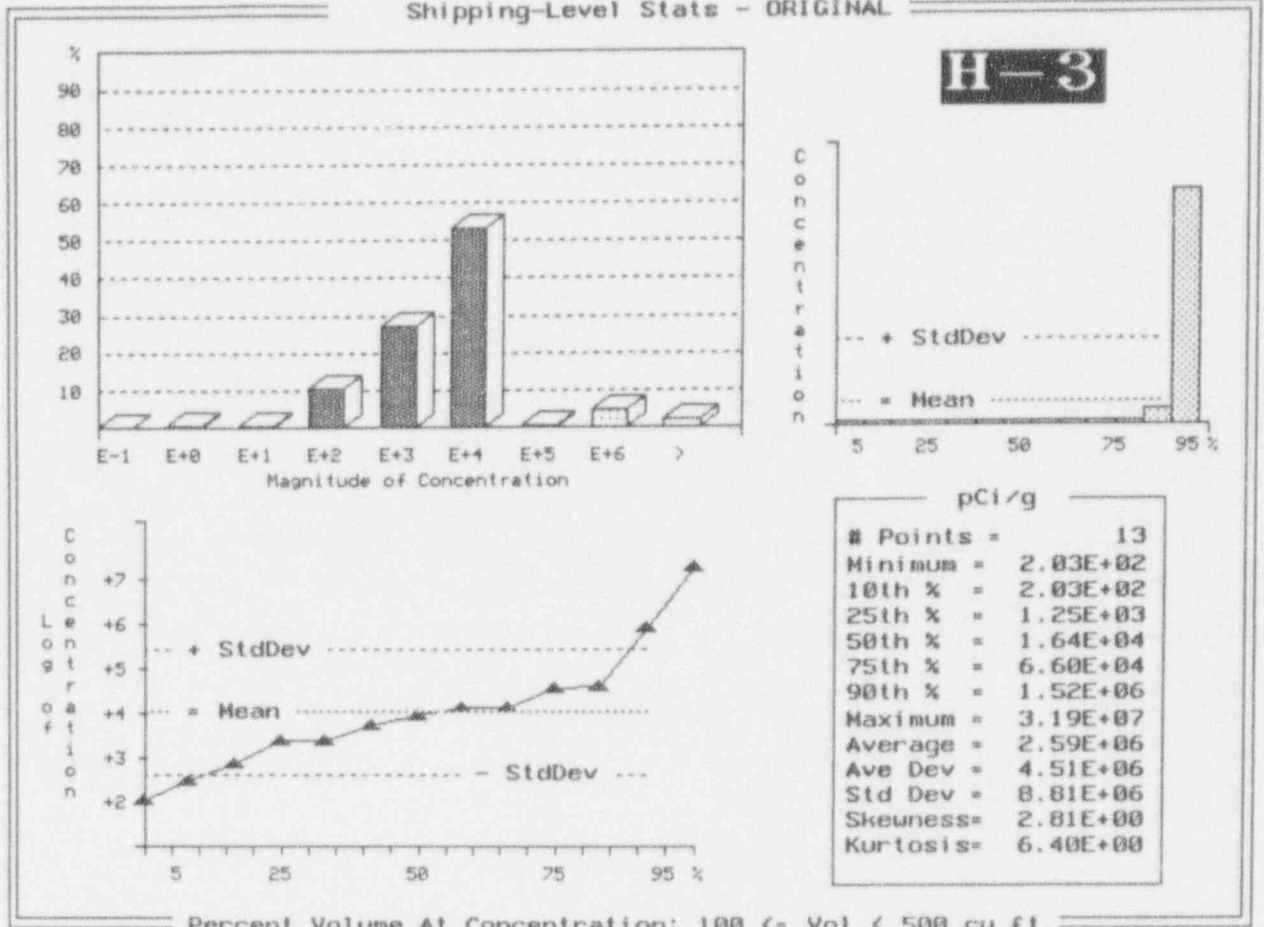


Exhibit F-16 (Continued)

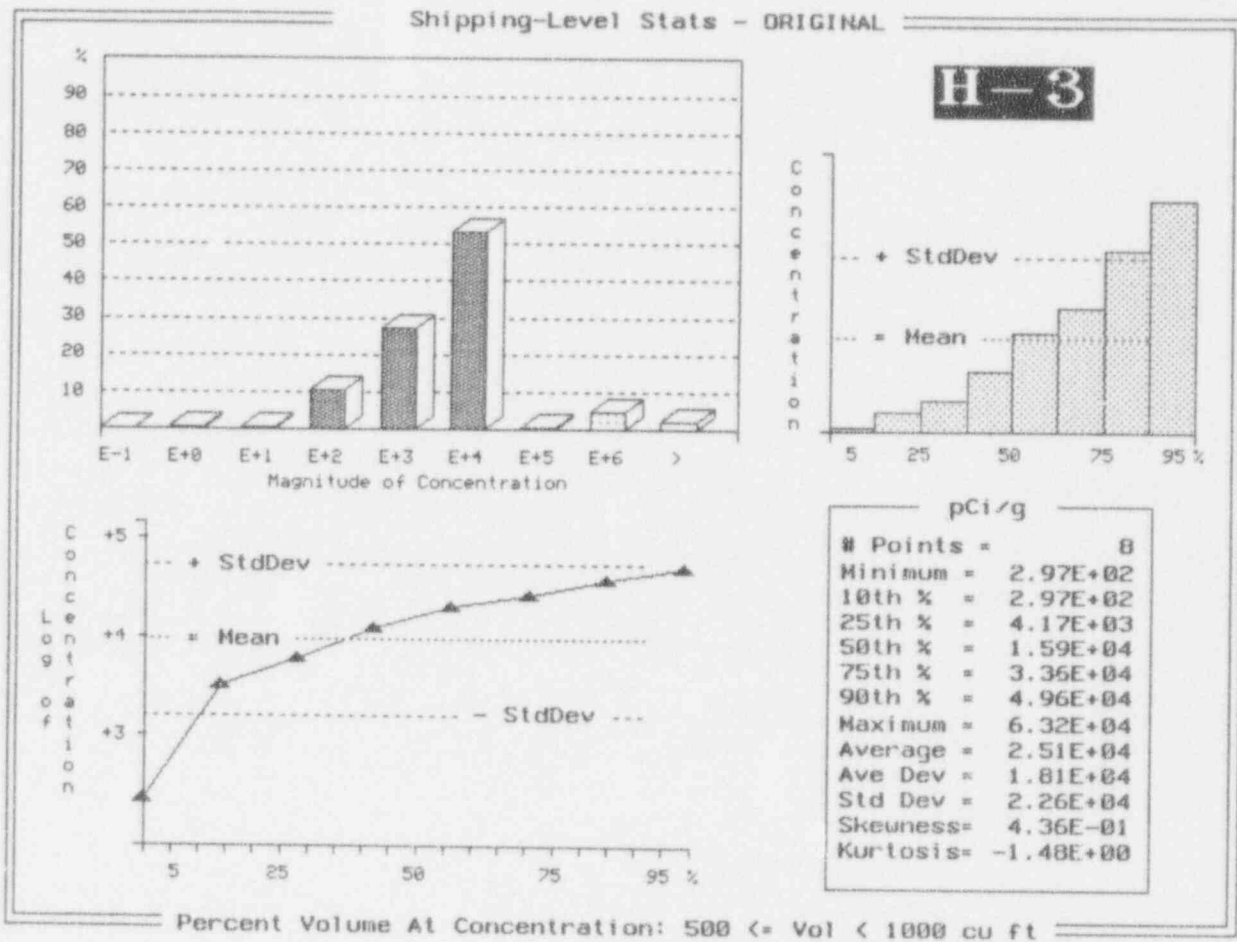


Exhibit F-16 (continued)

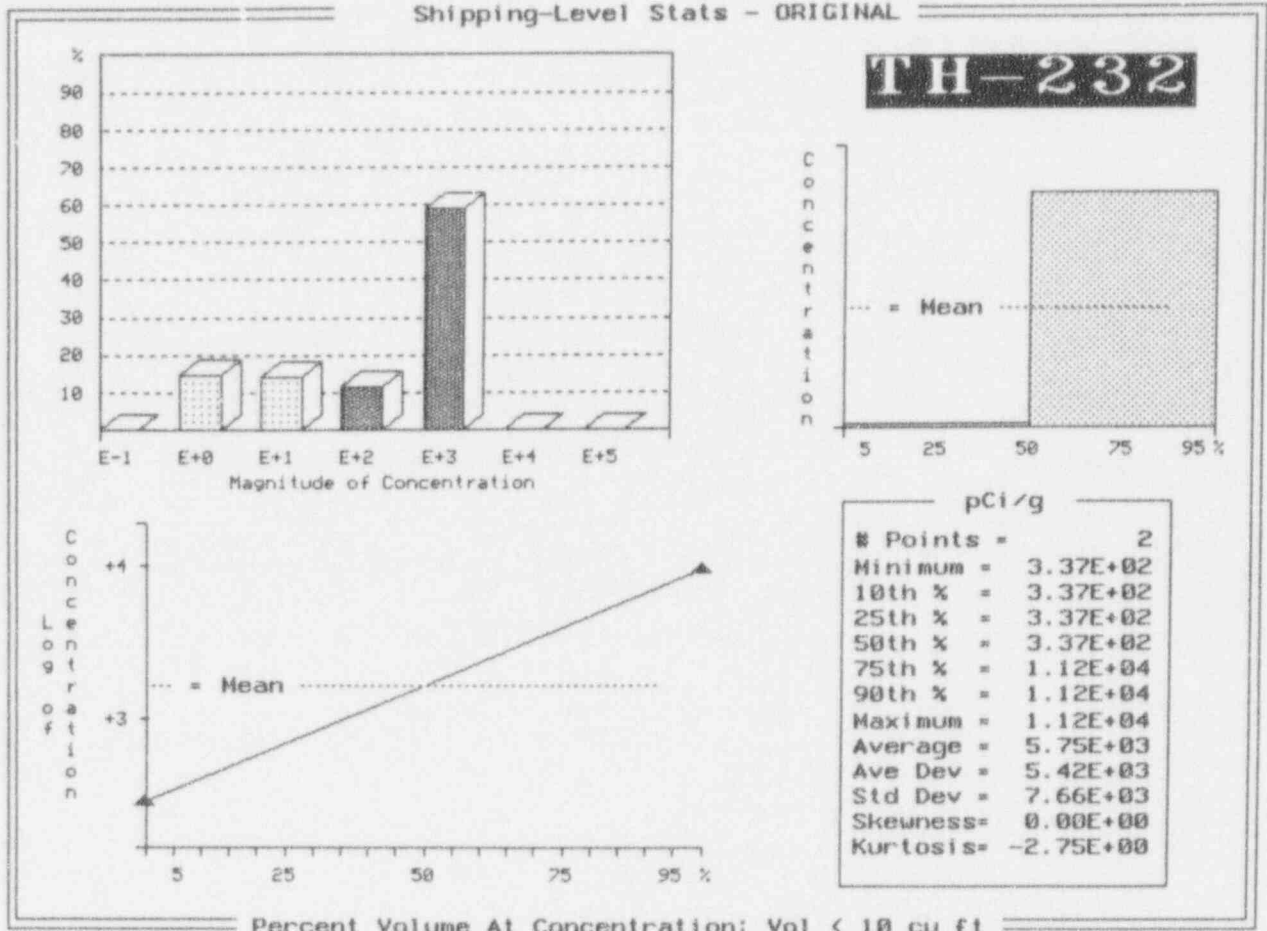


Exhibit F-16 (Continued)

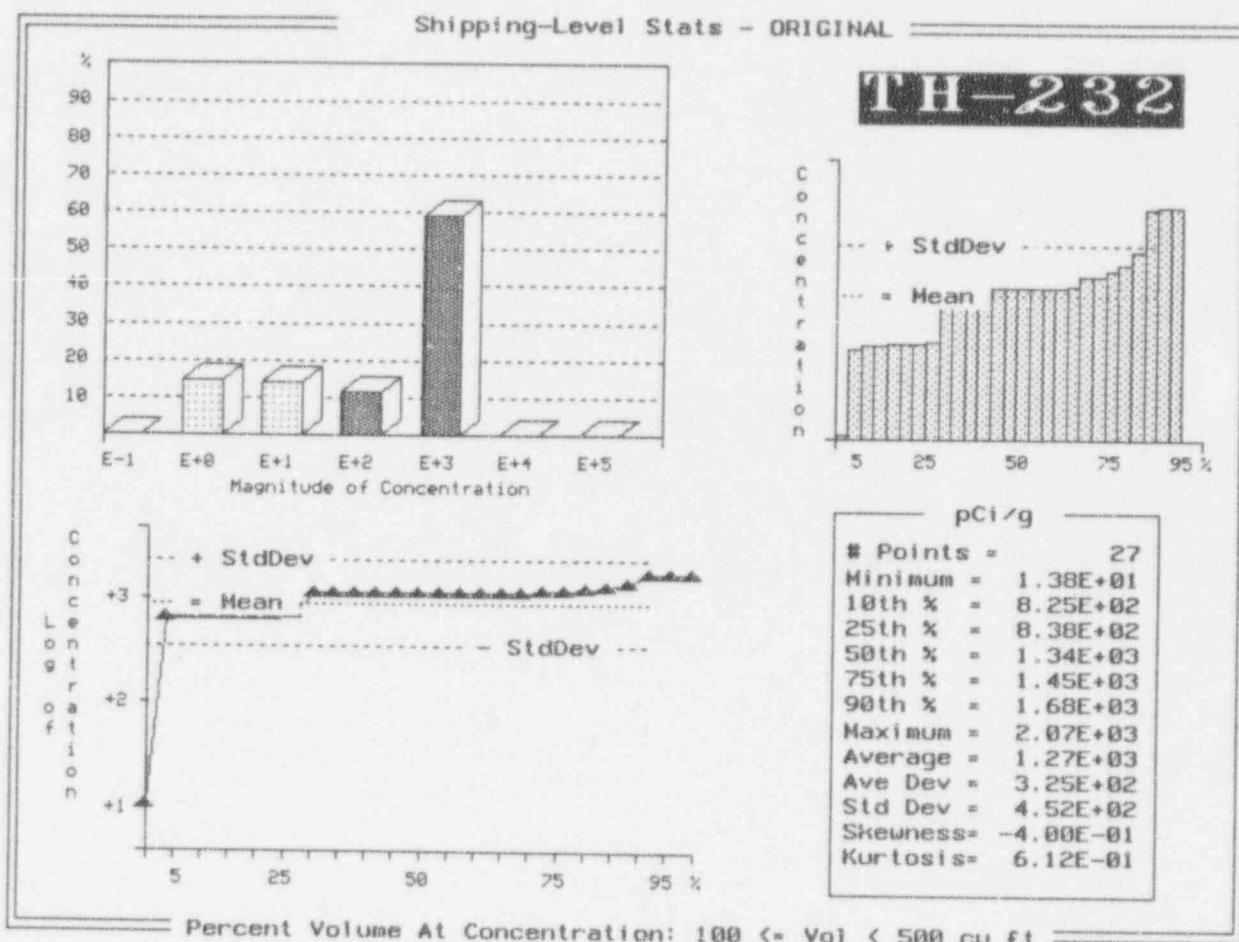


Exhibit F-16 (Continued)

Shipping-Level Stats - ORIGINAL

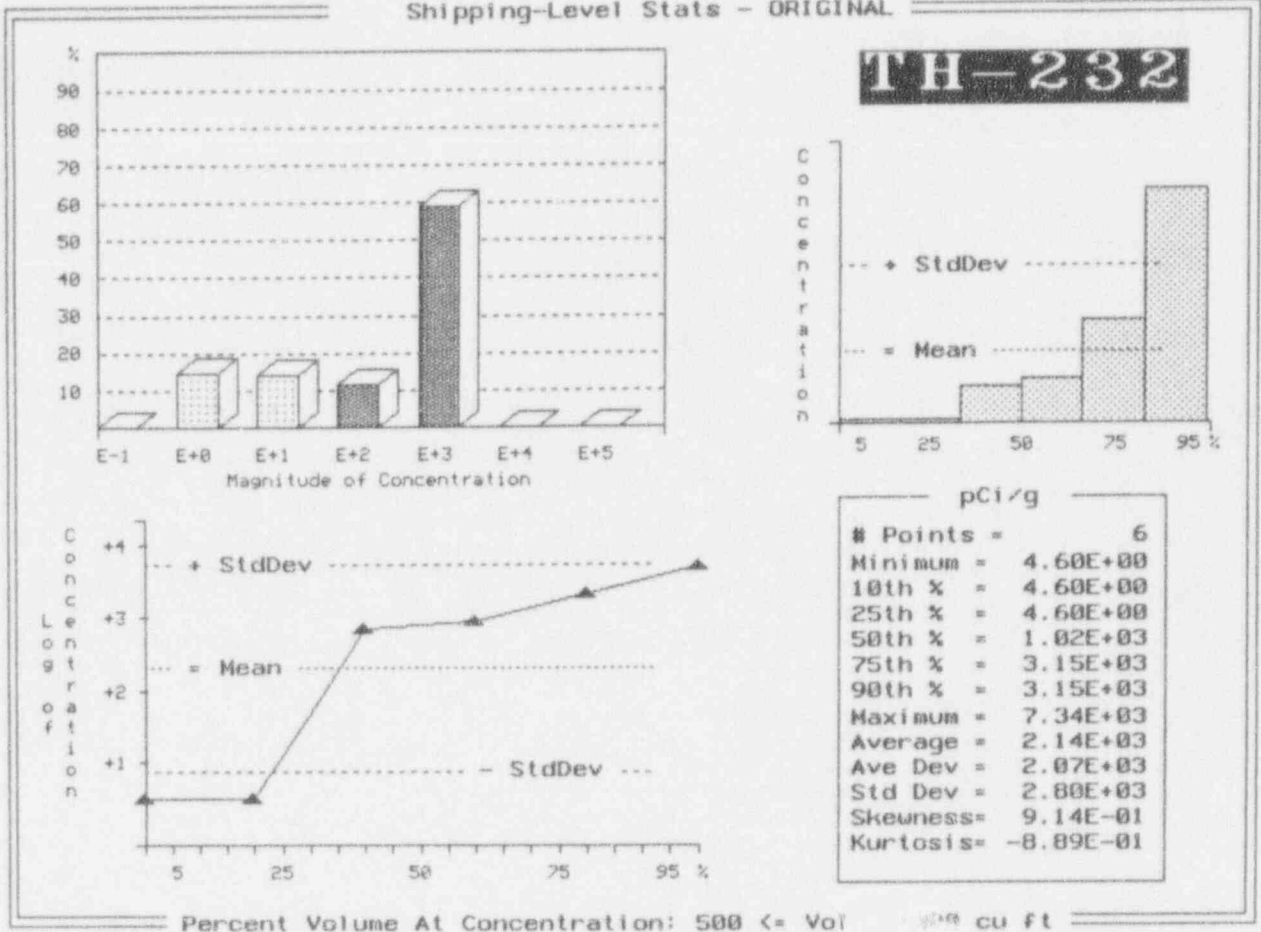


Exhibit F-16 (Continued)

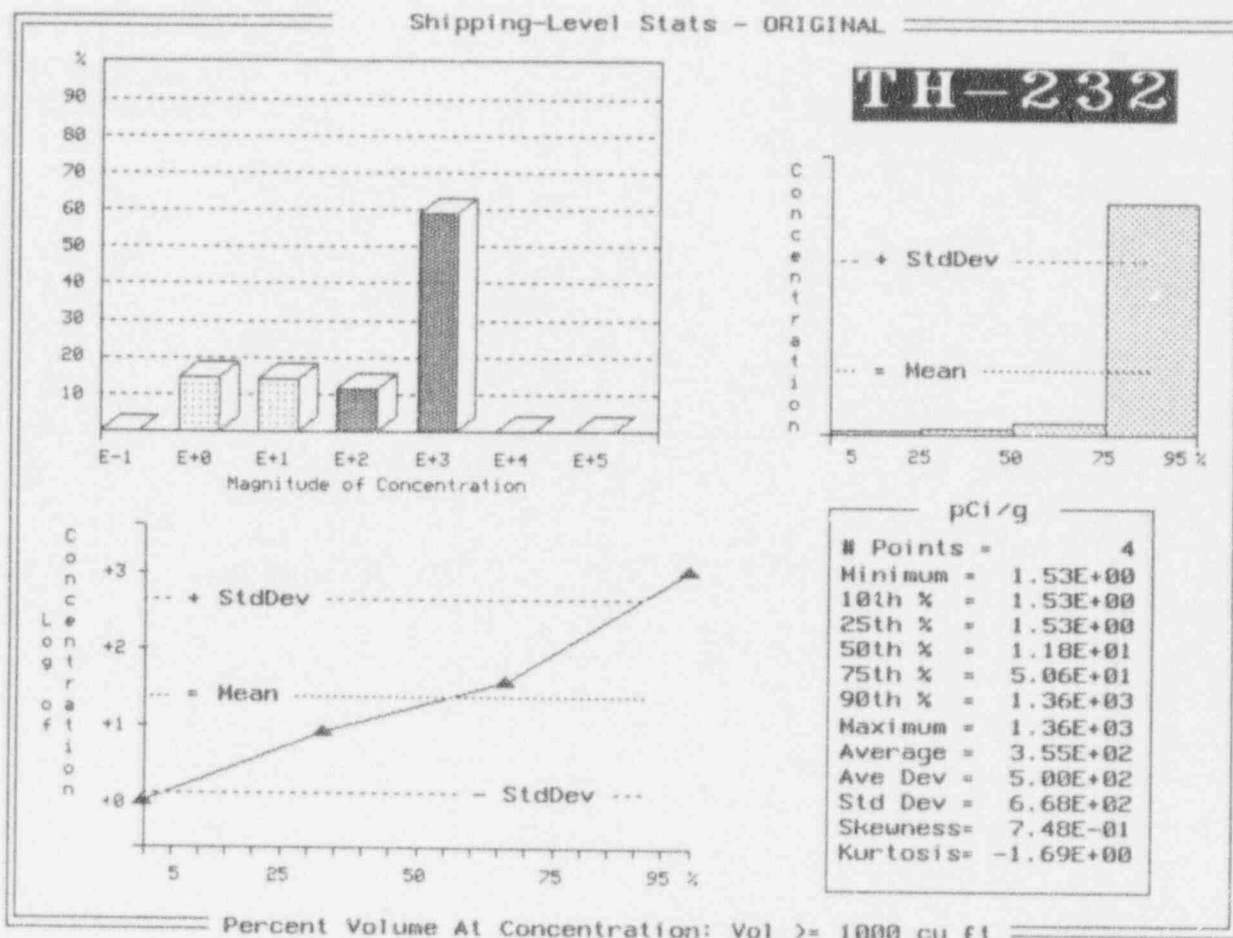


Exhibit F-16 (Continued)

Shipping-Level Stats - ORIGINAL

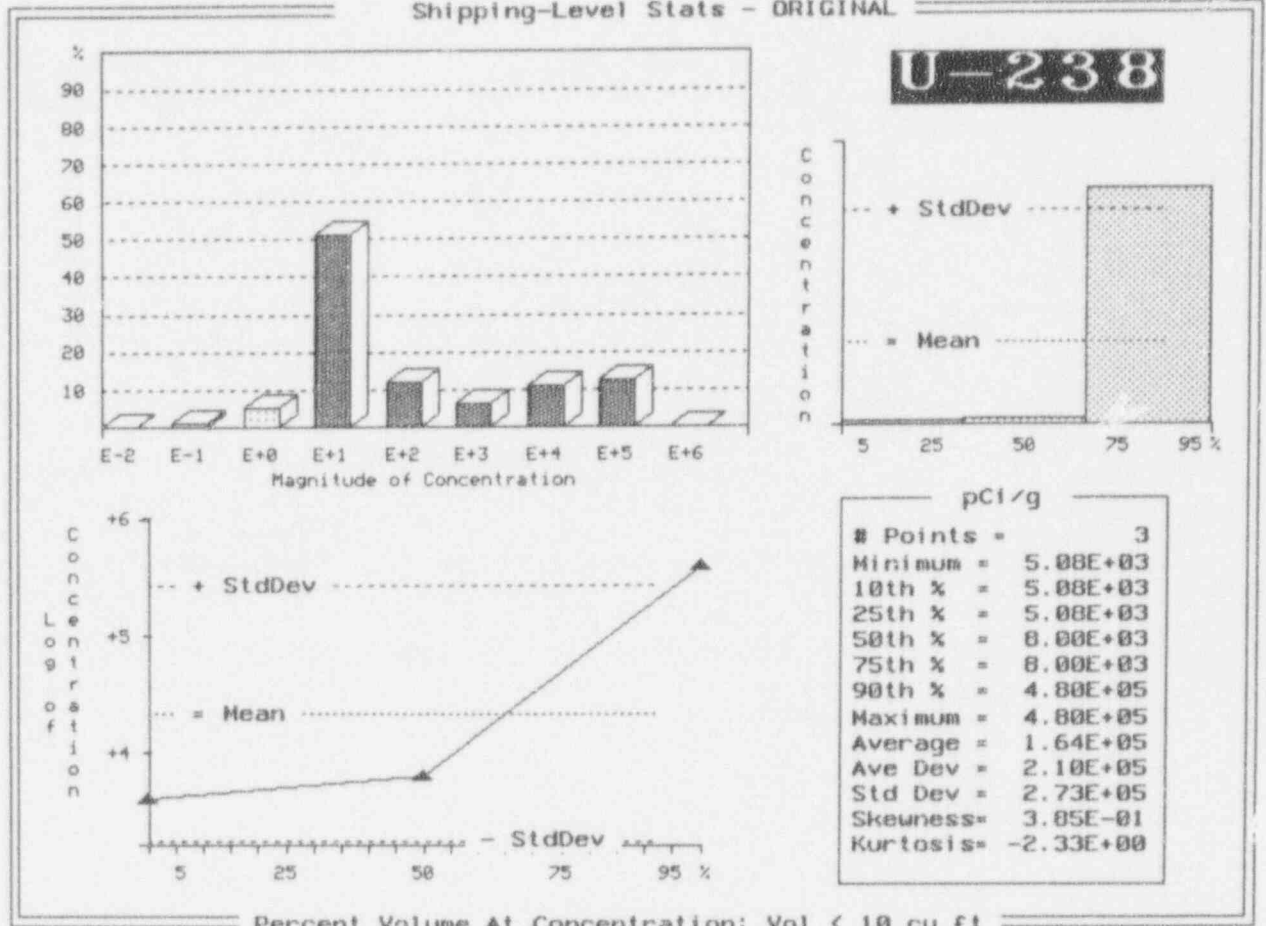


Exhibit F-16 (Continued)

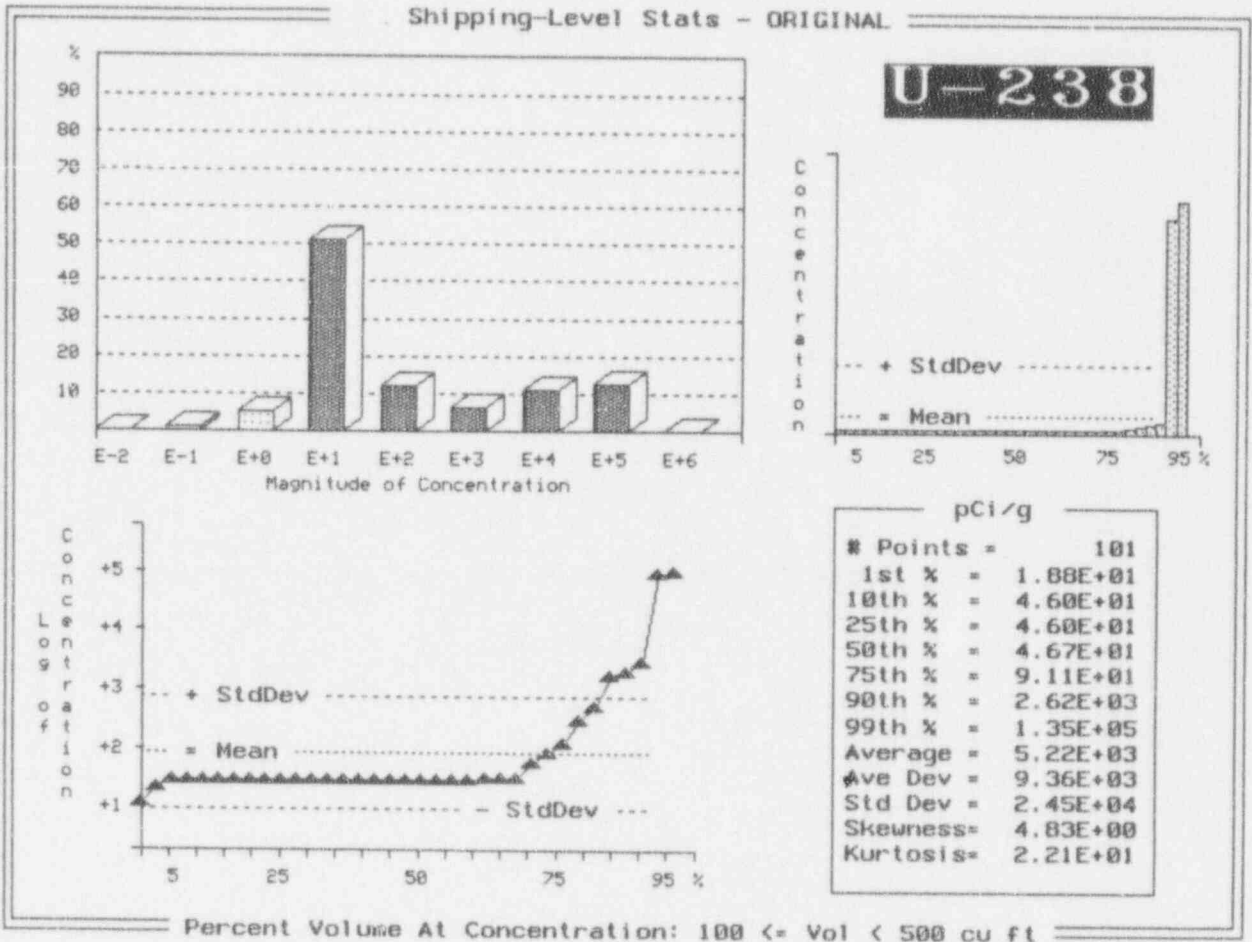


Exhibit F-16 (Continued)

Shipping-Level Stats - ORIGINAL

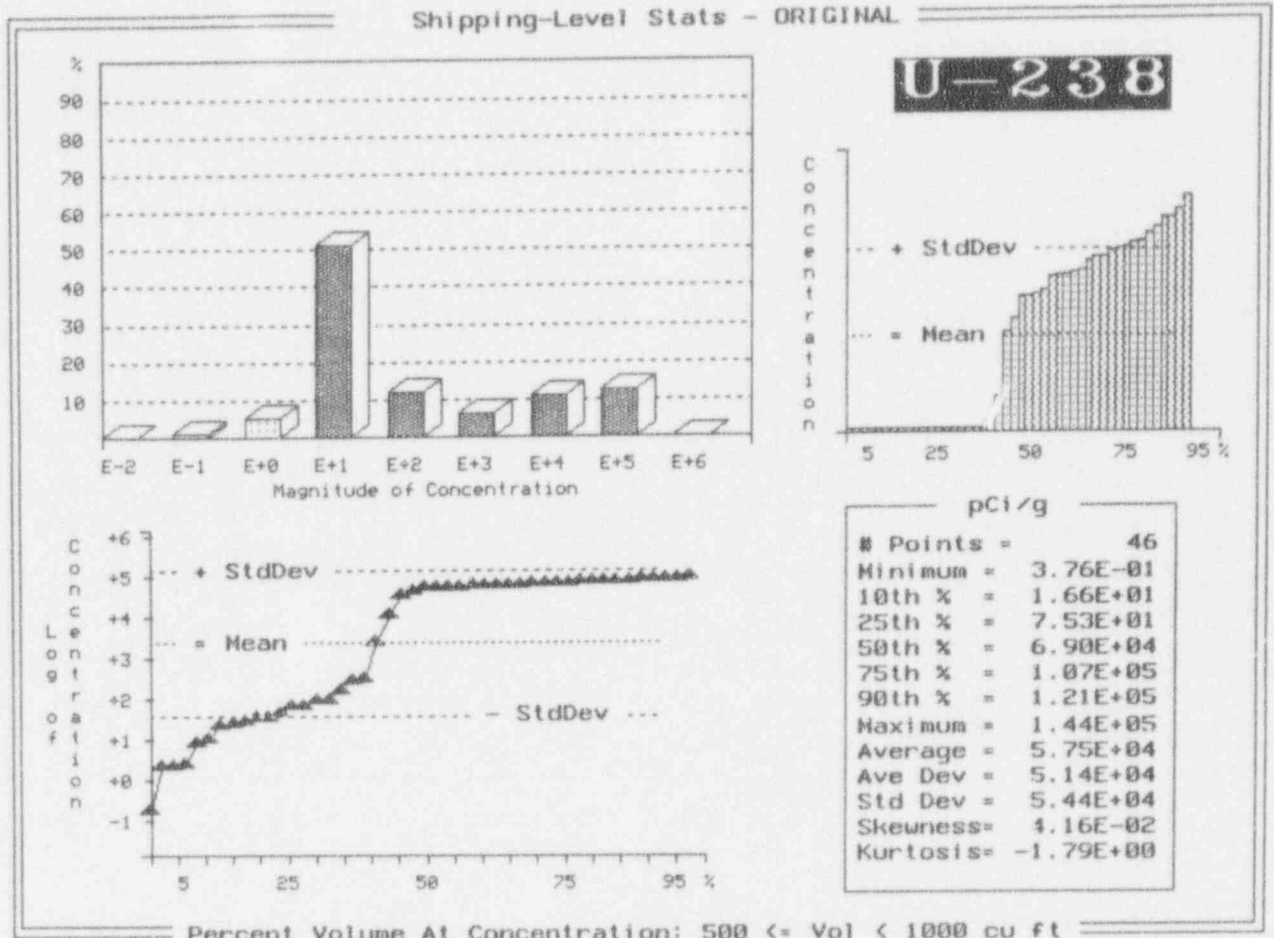


Exhibit F-16 (Continued)

Shipping-Level Stats - ORIGINAL

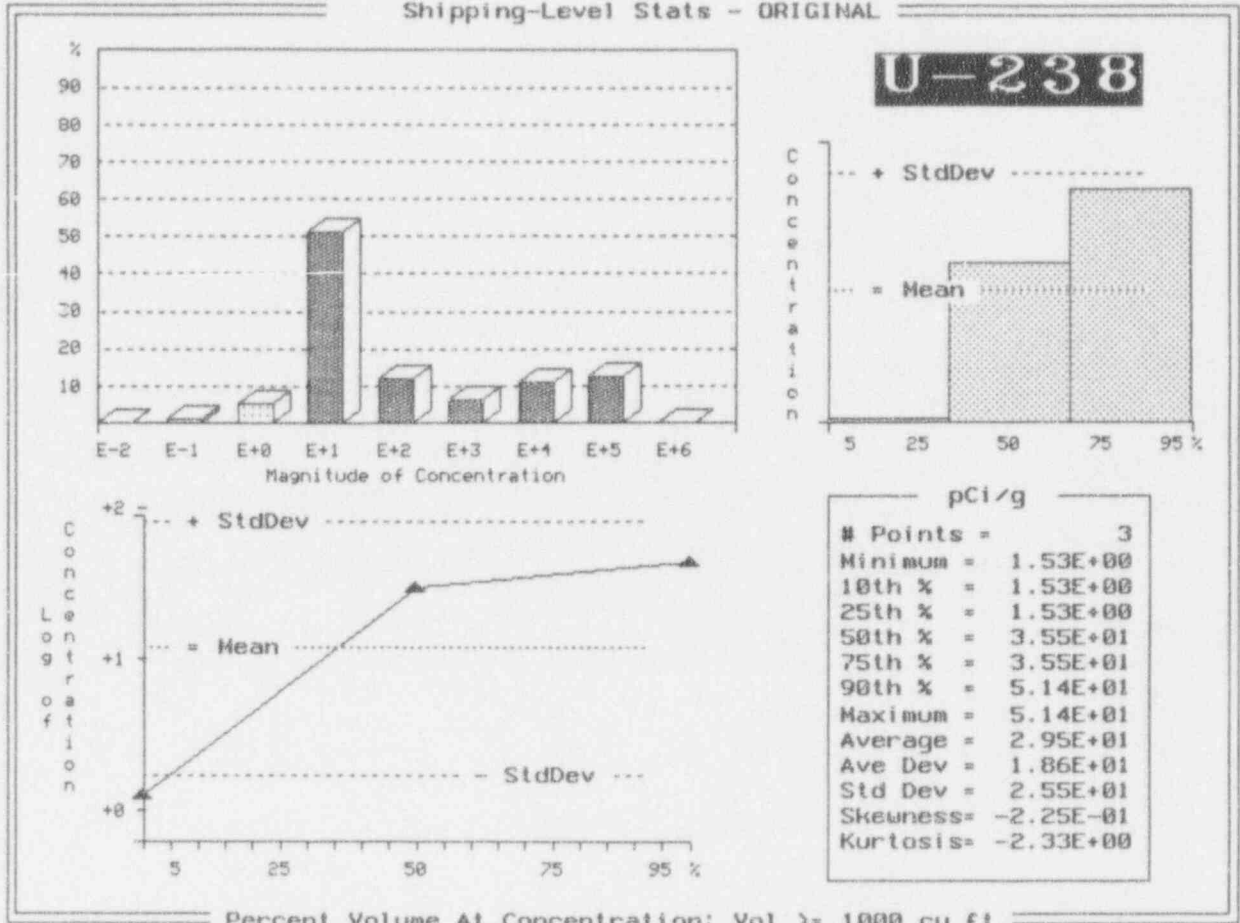


Exhibit F-17
Data Summary - Analyses at the Shipment Level
 (Aggregate Practices for non-brokered waste: 1986 to 1990)

	<u>Data or Parameters</u>
Compact or unaffiliated state:	Central Midwest
Waste generator class:	Government
Total number of waste generators:	18
Total associated waste volume (m ³):	211
Total associated waste activity (Ci):	1,898
Waste class:	A-Unstable and A-Stable
Identified waste generators for this analysis:	
Number:	3
Percent of total(%):	17
Total number of shipping records:	7
Number of shipping records <u>with</u> container data:	0
Number of waste containers:	0
Weight of shipments (kg):	42,990
Total waste volume (m ³):	61.3
Fractional waste volume (%): (this analysis/total)	29
Total waste activity (Ci):	575
Fractional waste activity (%): (this analysis/total)	30

Exhibit F-17 (Continued)

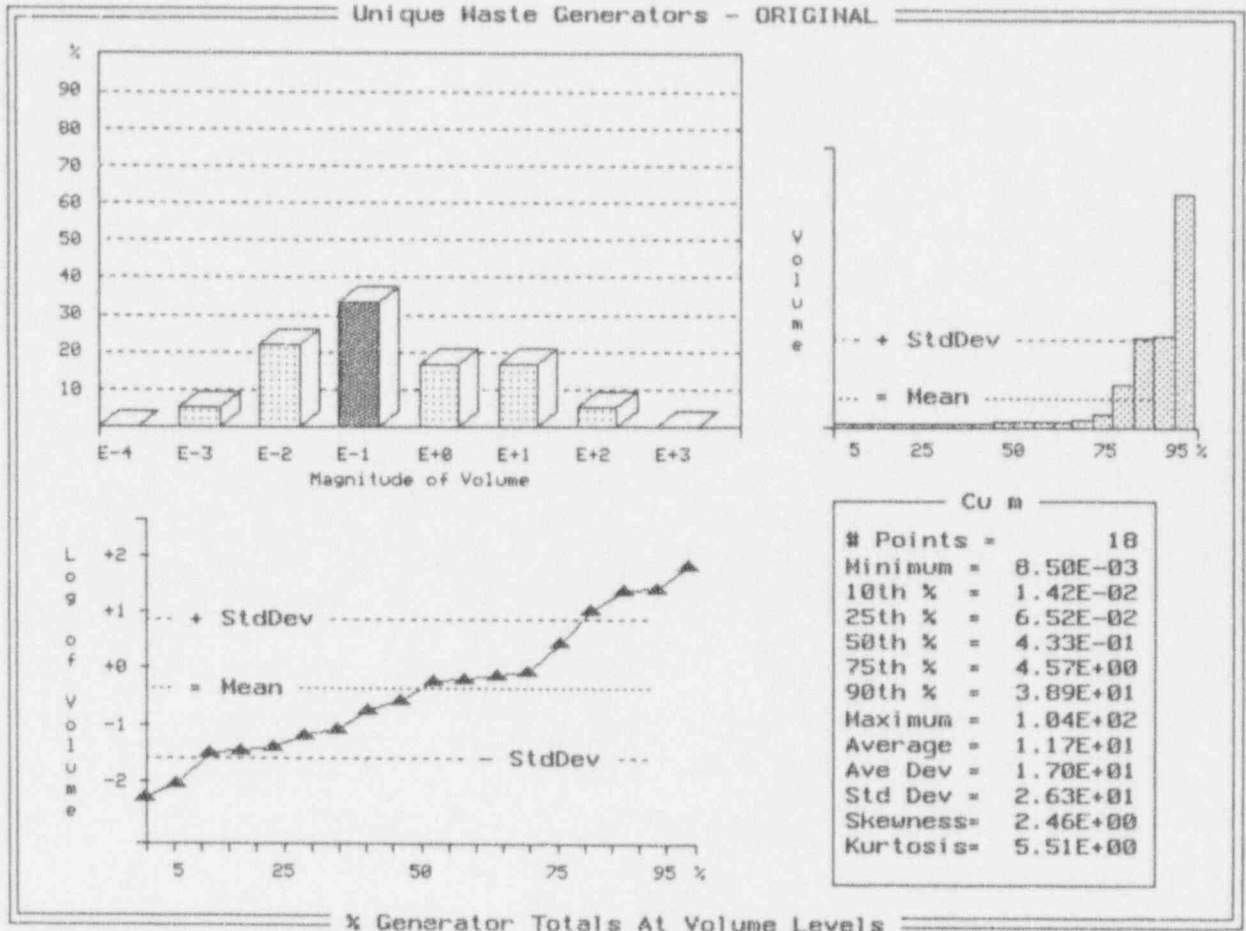


Exhibit F-17 (Continued)

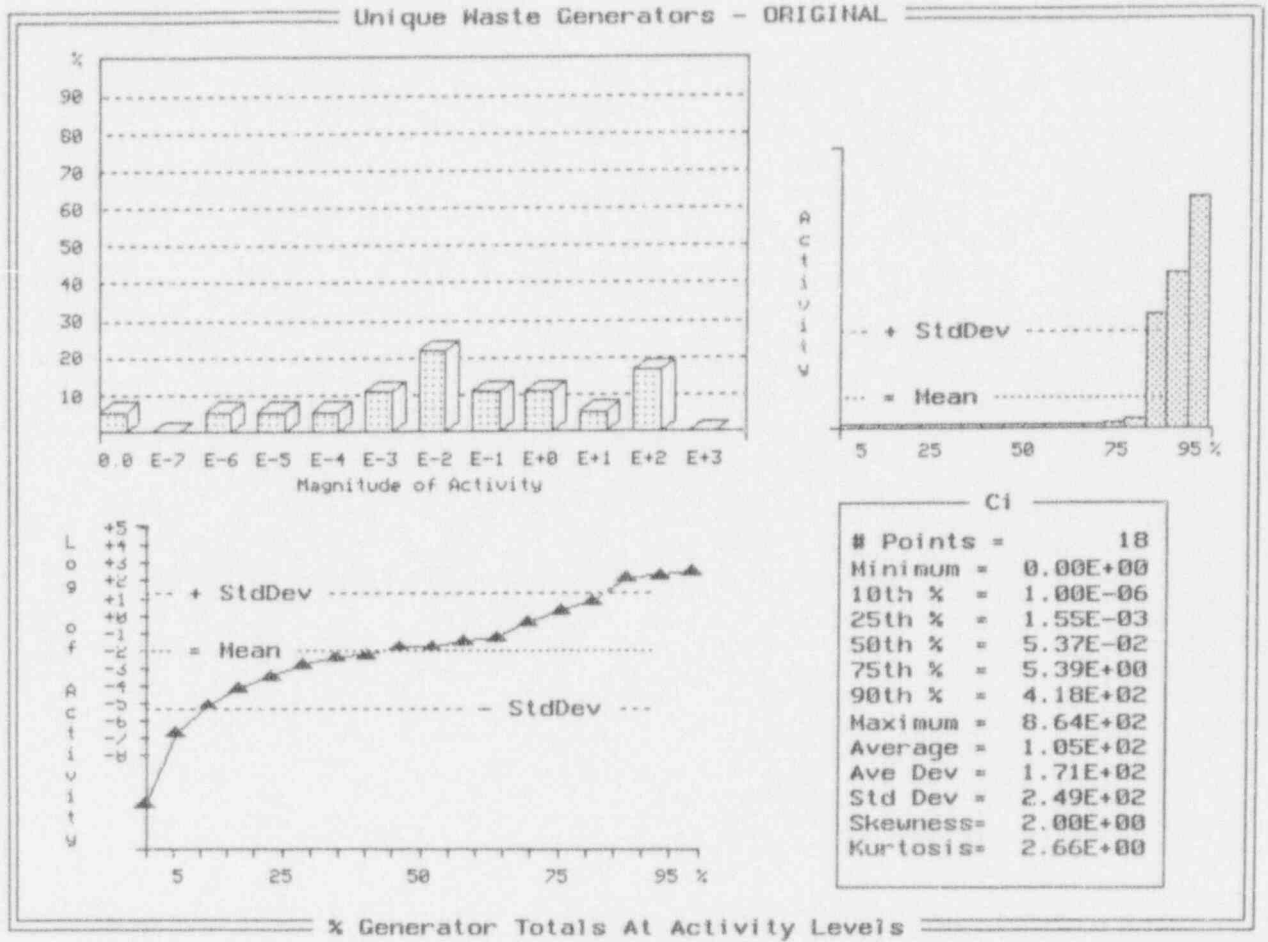


Exhibit F-18
Data Summary - Analyses at the Shipment Level
 (Aggregate Practices for non-brokered waste: 1986 to 1990)

	<u>Data or Parameters</u>
Compact or unaffiliated state:	Central Midwest
Waste generator class:	Academic
Total number of waste generators:	28
Total associated waste volume (m ³):	242
Total associated waste activity (Ci):	16.0
Waste class:	A-Unstable and A-Stable
Identified waste generators for this analysis:	
Number:	2
Percent of total(%):	7
Total number of shipping records:	3
Number of shipping records <u>with</u> container data:	0
Number of waste containers:	0
Weight of shipments (kg):	12,060
Total waste volume (m ³):	21.2
Fractional waste volume (%): (this analysis/total)	8.8
Total waste activity (Ci):	0.37
Fractional waste activity (%): (this analysis/total)	2.5

Exhibit F-18 (Continued)

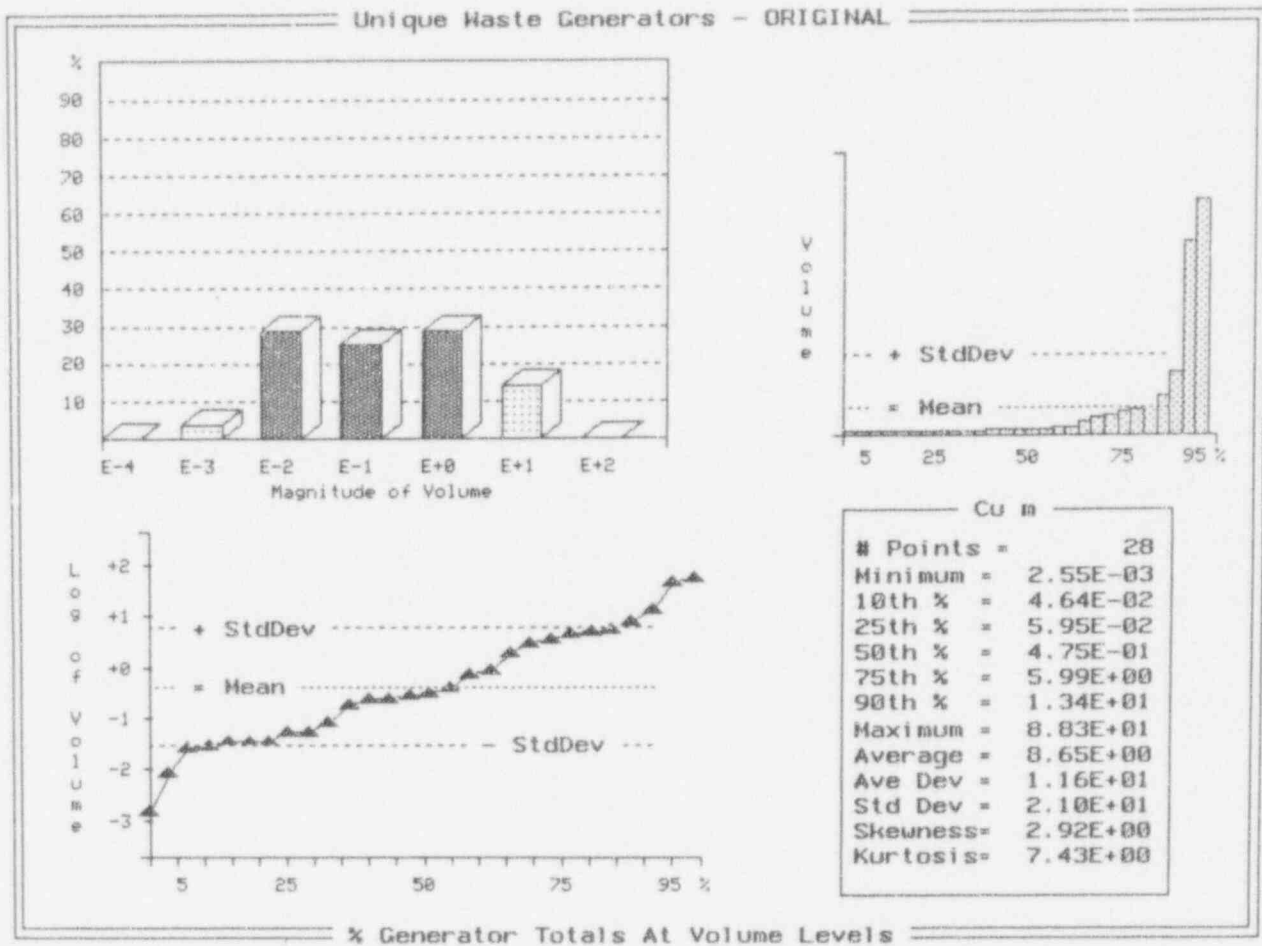


Exhibit F-18 (Continued)

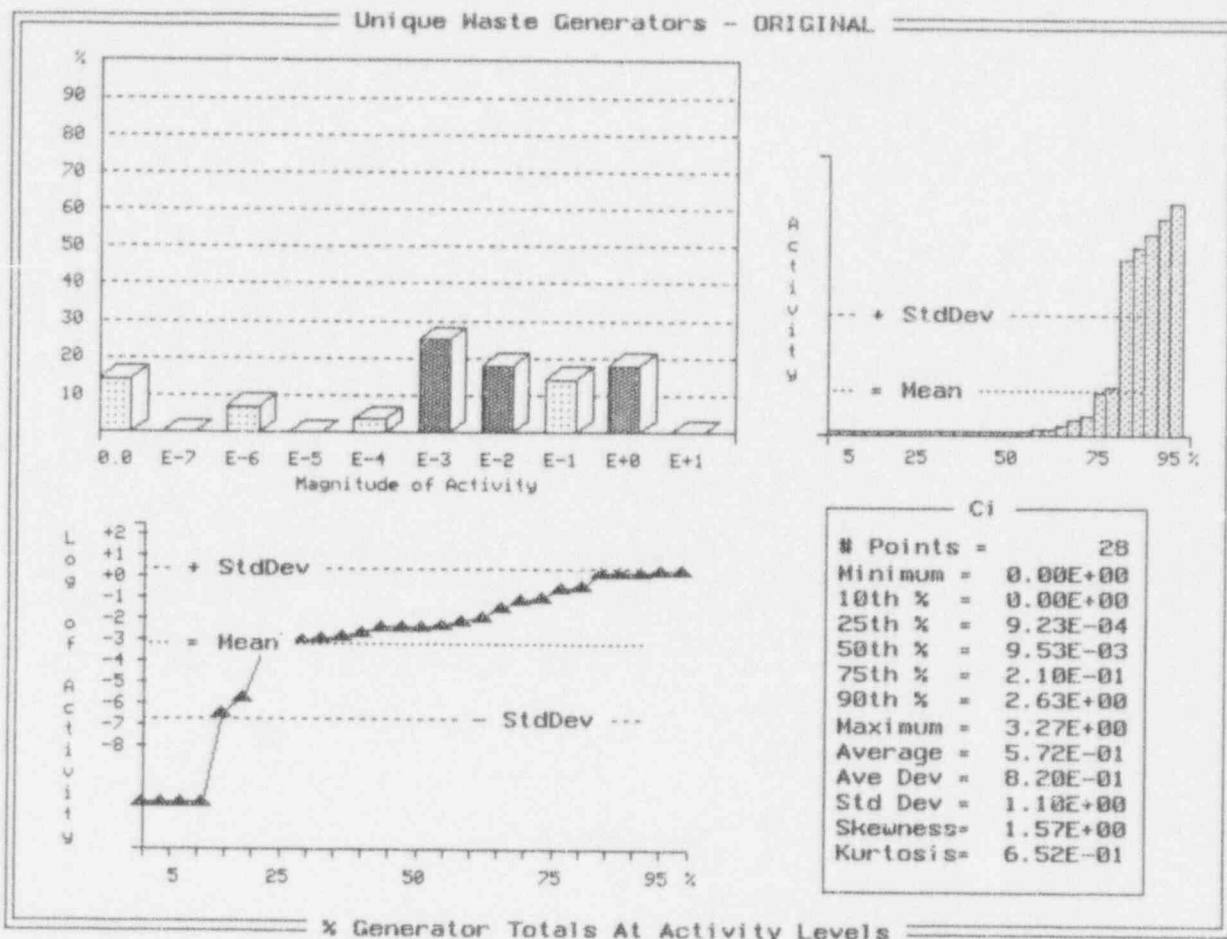


Exhibit F-19
Data Summary - Analyses at the Shipment Level
 (Aggregate Practices for non-brokered waste: 1986 to 1990)

	<u>Data or Parameters</u>
Compact or unaffiliated state:	Central Midwest
Waste generator class:	Medical
Total number of waste generators:	50
Total associated waste volume (m ³):	177
Total associated waste activity (Ci):	7.4
Waste class:	A-Unstable and A-Stable
Identified waste generators for this analysis:	
Number:	2
Percent of total (%):	4
Total number of shipping records:	3
Number of shipping records <u>with</u> container data:	0
Number of waste containers:	0
Weight of shipments (kg):	1,405
Total waste volume (m ³):	1.8
Fractional waste volume (%): (this analysis/total)	1
Total waste activity (Ci):	0.003
Fractional waste activity (%): (this analysis/total)	0.04

Exhibit F-19 (Continued)

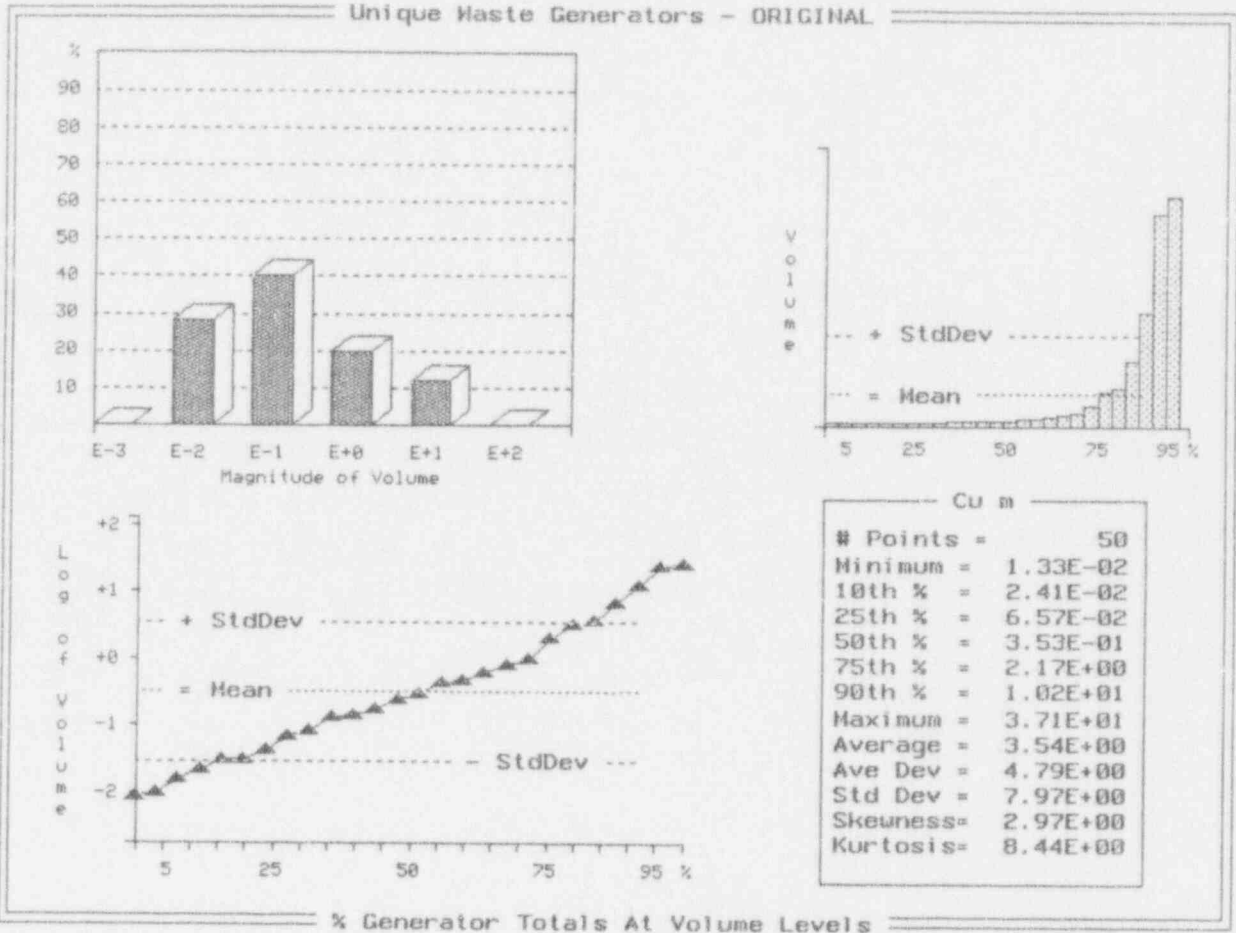


Exhibit F-19 (Continued)

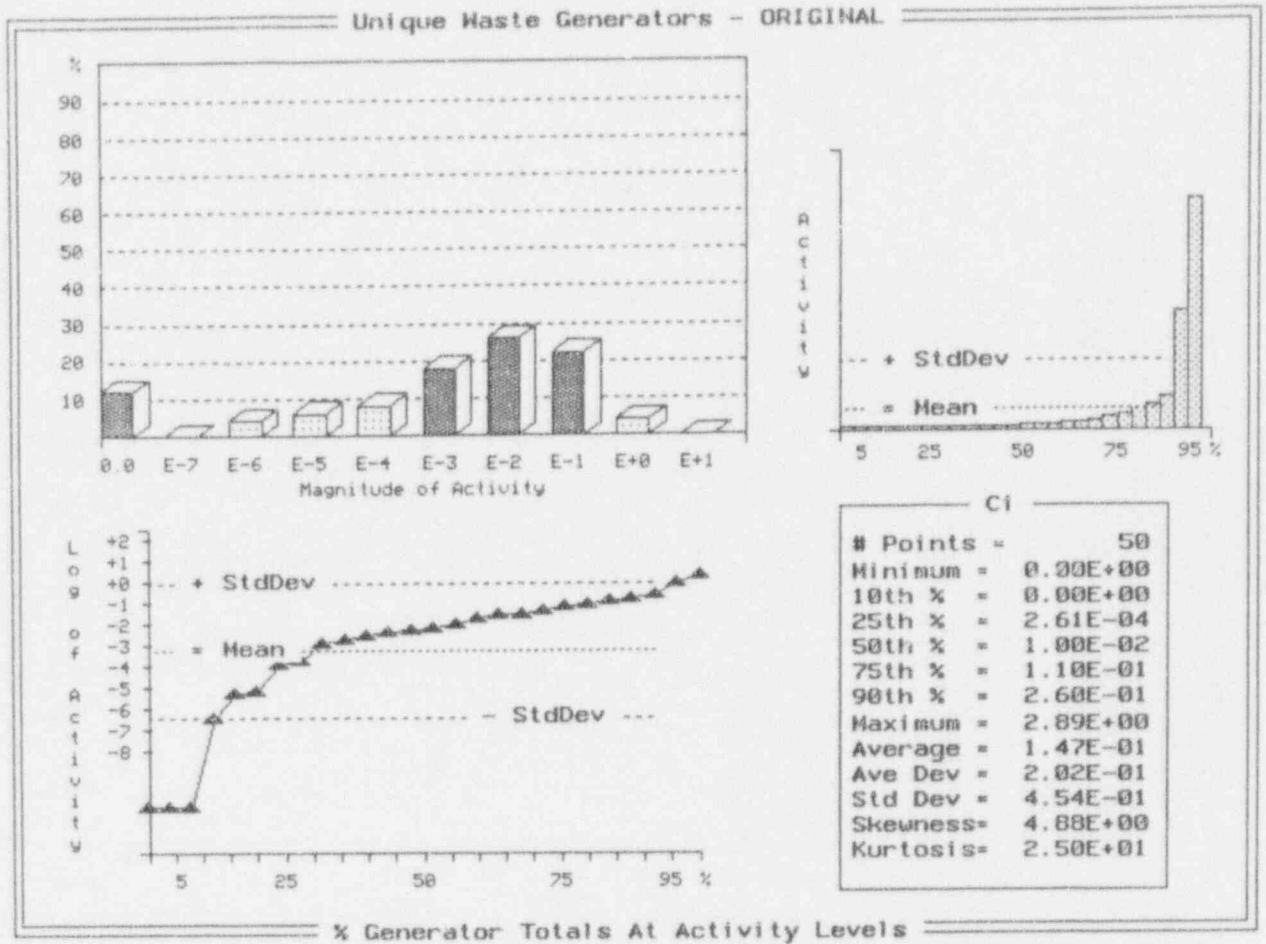


Exhibit F-20
Data Summary - Analyses at the Shipment Level
 (Aggregate Practices for non-brokered waste: 1986 to 1990)

	<u>Data or Parameters</u>
Compact or unaffiliated state:	Central Midwest
Waste generator class:	Industrial
Total number of waste generators:	99
Total associated waste volume (m ³):	2,696
Total associated waste activity (Ci):	171
Waste class:	A-Unstable and A-Stable
Identified waste generators for this analysis:	
Number:	18
Percent of total(%):	18
Total number of shipping records:	55
Number of shipping records <u>with</u> container data:	12
Number of waste containers:	630
Weight of shipments (kg):	615,900
Total waste volume (m ³):	602
Fractional waste volume (%): (this analysis/total)	22
Total waste activity (Ci):	14
Fractional waste activity (%): (this analysis/total)	8

Exhibit F-20 (Continued)

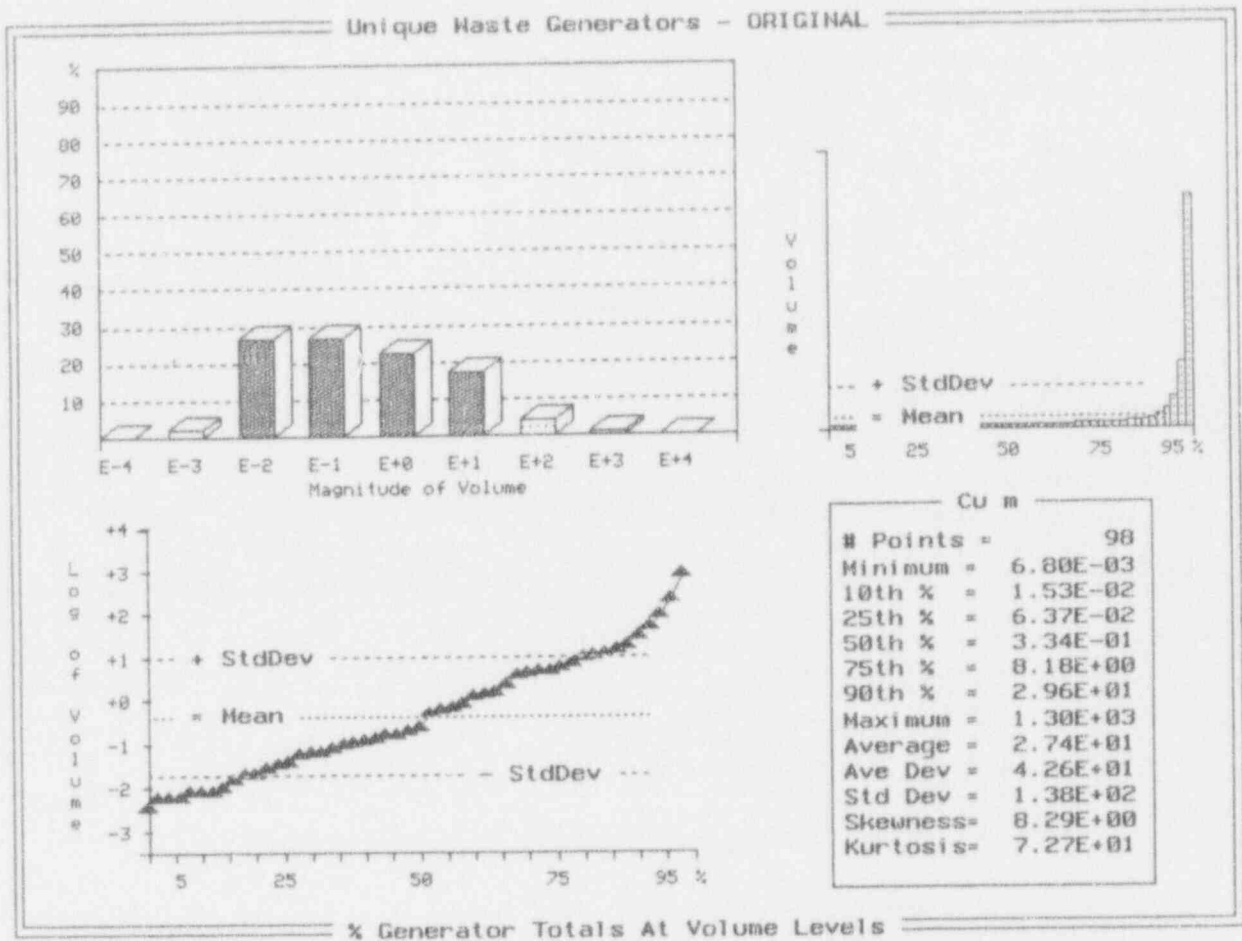


Exhibit F-20 (Continued)

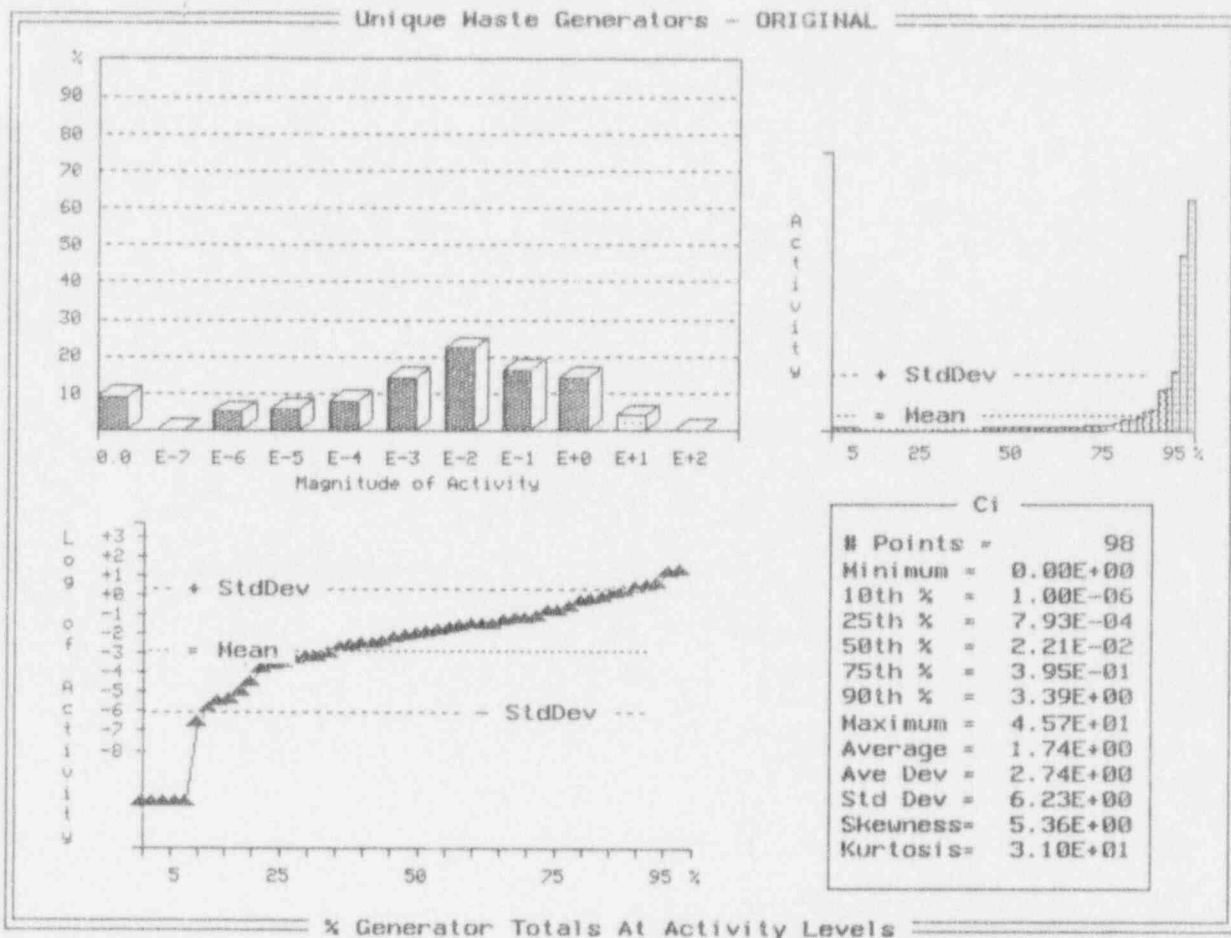


Exhibit F-21
Data Summary - Analyses at the Shipment Level
 (Aggregate Practices for non-brokered waste: 1986 to 1990)

	<u>Data or Parameters</u>
Compact or unaffiliated state:	Southeast
Waste generator class:	Government
Total number of waste generators:	49
Total associated waste volume (m ³):	4,950
Total associated waste activity (Ci):	11,800
Waste class:	A-Unstable and A-Stable
Identified waste generators for this analysis:	
Number:	14
Percent of total(%):	29
Total number of shipping records:	183
Number of shipping records <u>with</u> container data:	0
Number of waste containers:	0
Weight of shipments (kg):	2,478,000
Total waste volume (m ³):	3,534
Fractional waste volume (%): (this analysis/total)	71
Total waste activity (Ci):	49.5
Fractional waste activity (%): (this analysis/total)	0.4

Exhibit F-21 (Continued)

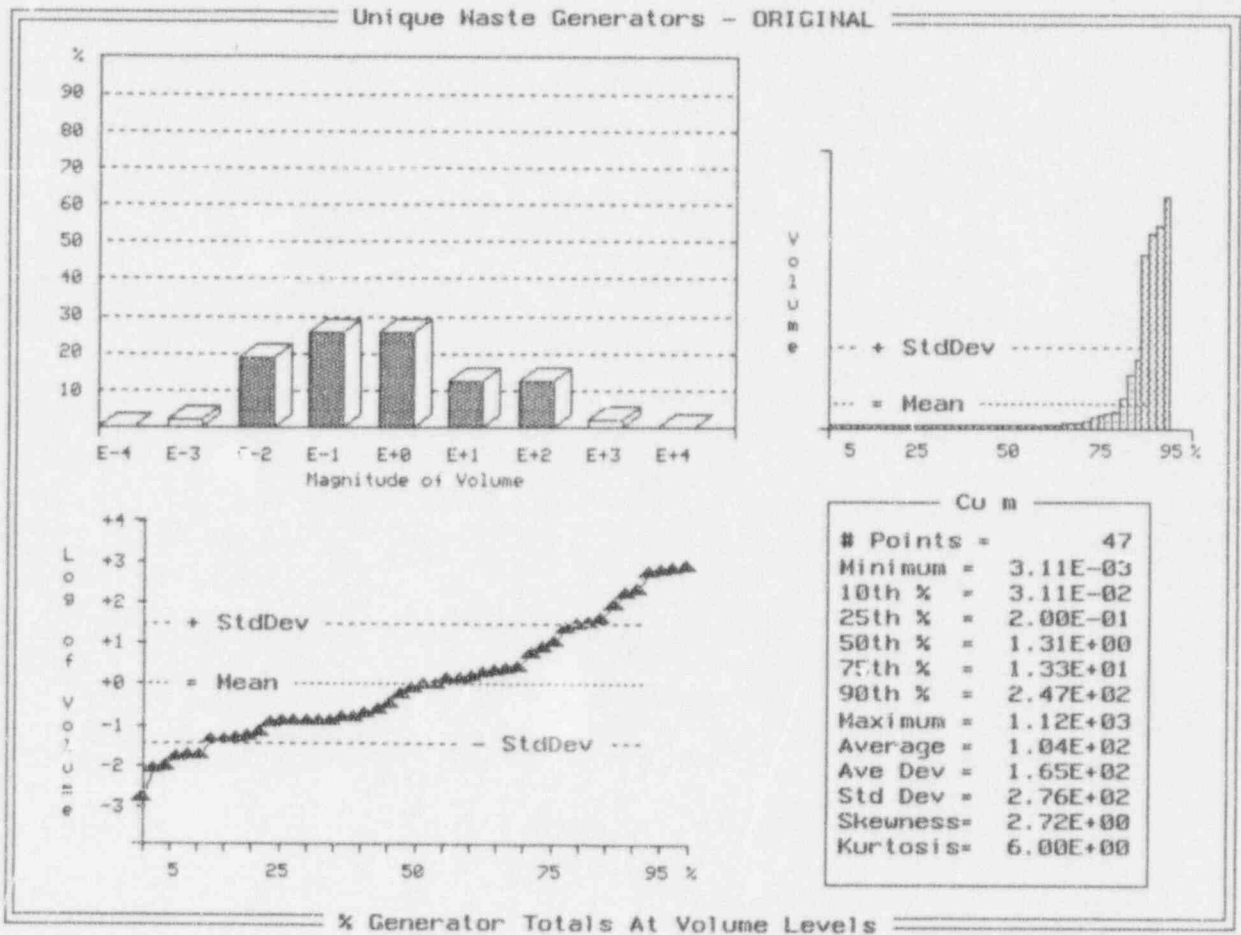


Exhibit F-21 (Continued)

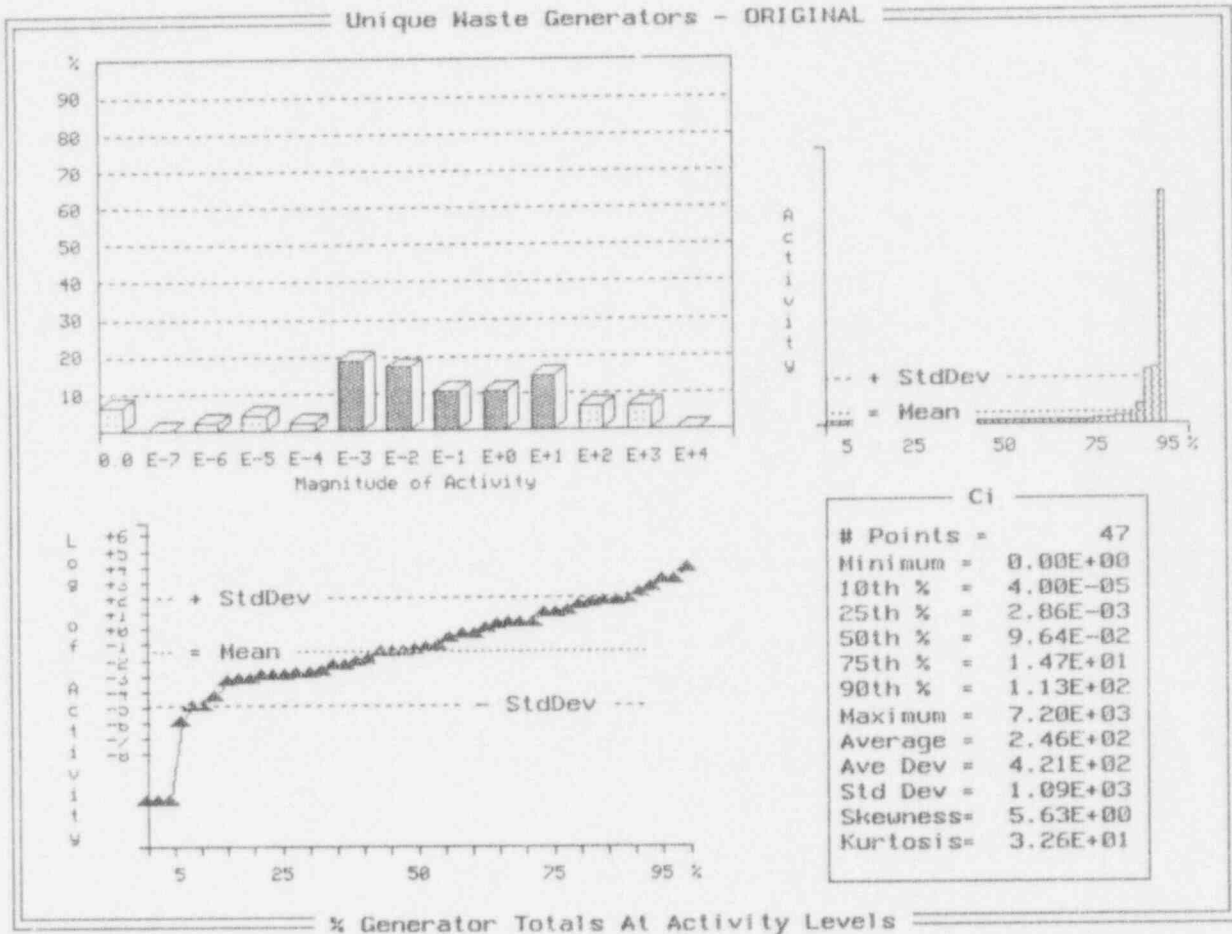


Exhibit F-21 (Continued)

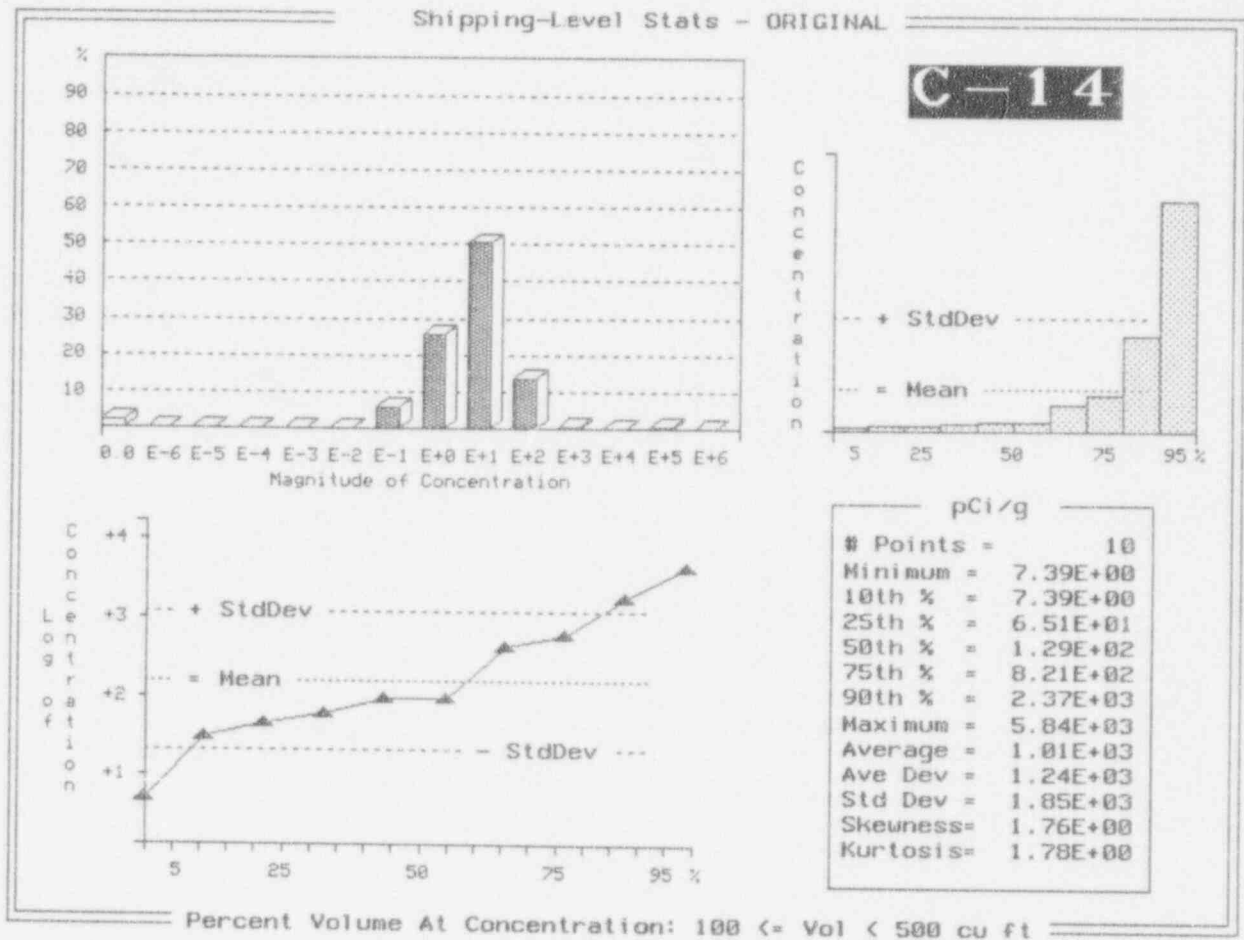


Exhibit F-21 (Continued)

Shipping-Level Stats - ORIGINAL

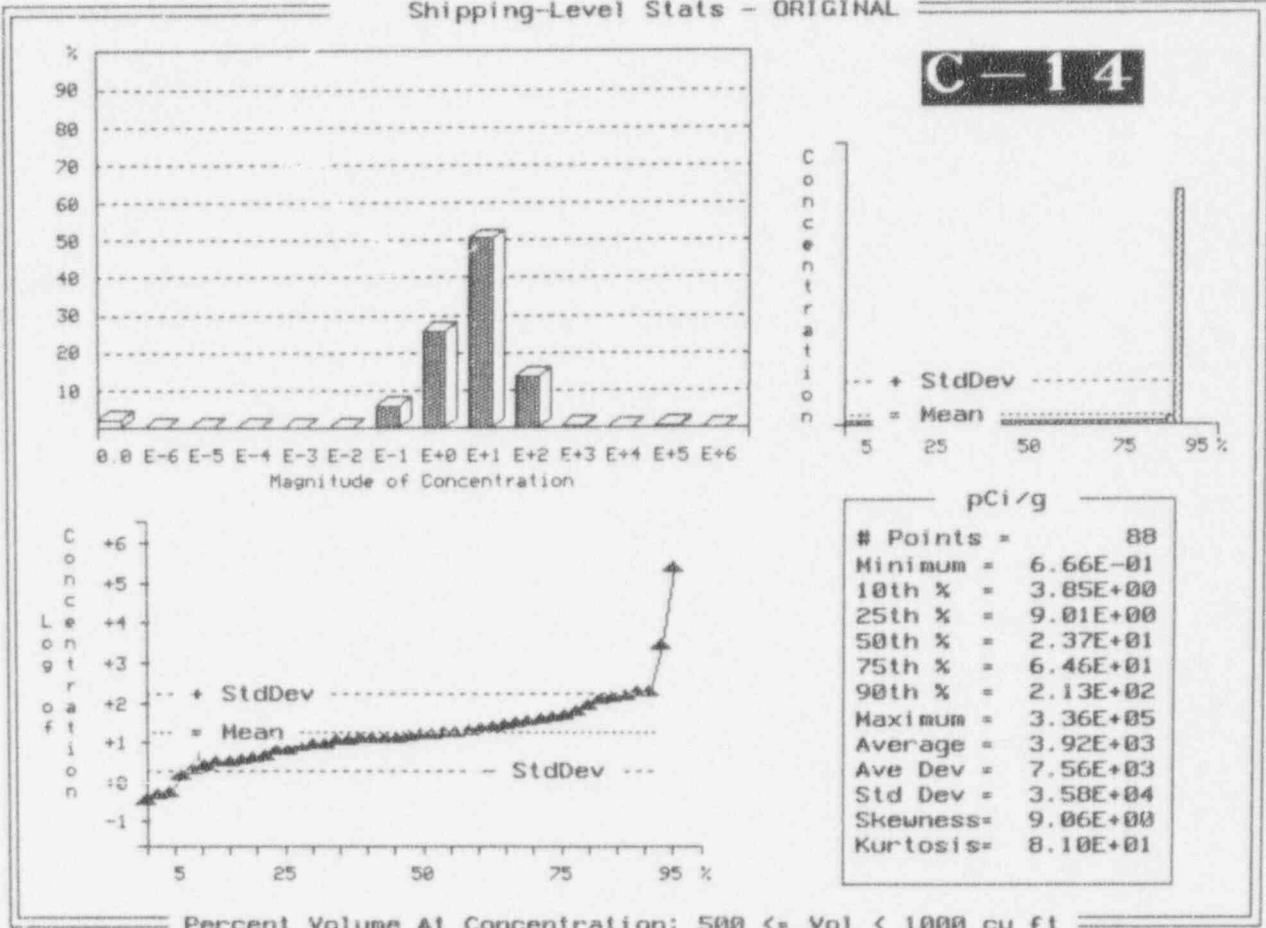
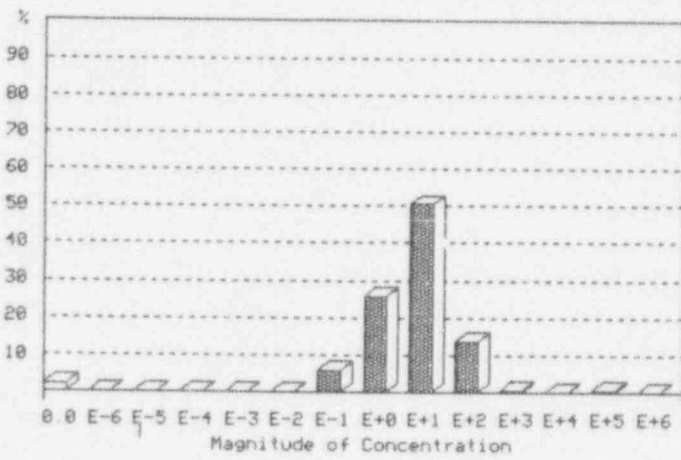
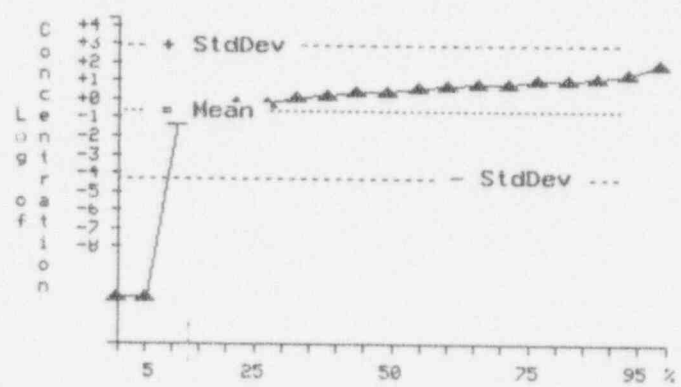
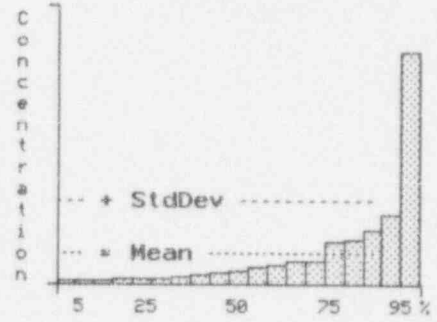


Exhibit F-21 (Continued)

Shipping-Level Stats - ORIGINAL



C-14



pCi/g	
# Points =	19
Minimum =	0.00E+00
10th % =	0.00E+00
25th % =	1.98E+00
50th % =	8.04E+00
75th % =	1.67E+01
90th % =	4.27E+01
Maximum =	1.95E+02
Average =	2.36E+01
Ave Dev =	2.58E+01
Std Dev =	4.47E+01
Skeuness =	2.96E+00
Kurtosis =	8.52E+00

Percent Volume At Concentration: Vol >= 1000 cu ft

Exhibit F-21 (Continued)

Shipping-Level Stats - ORIGINAL

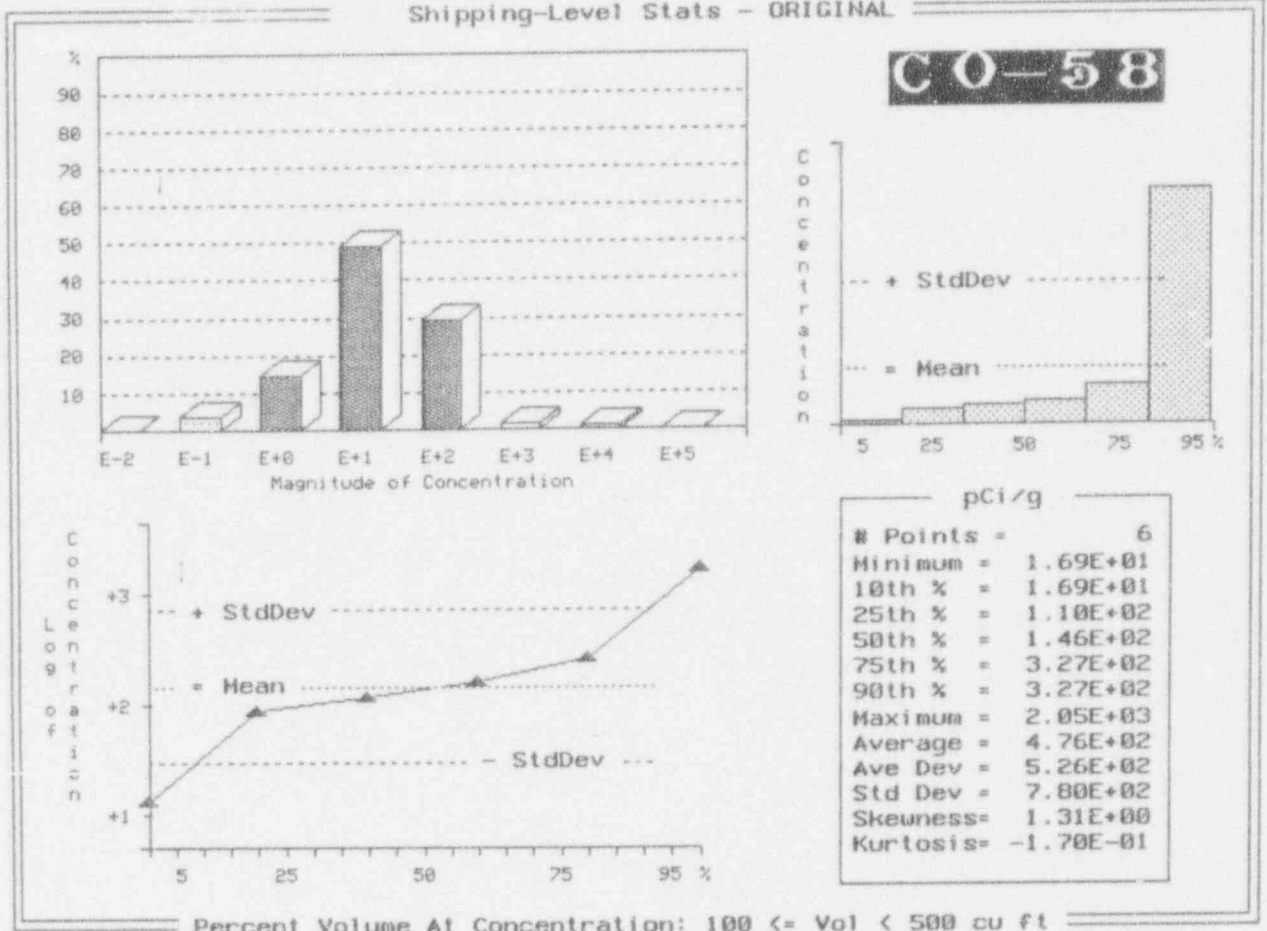


Exhibit F-21 (Continued)

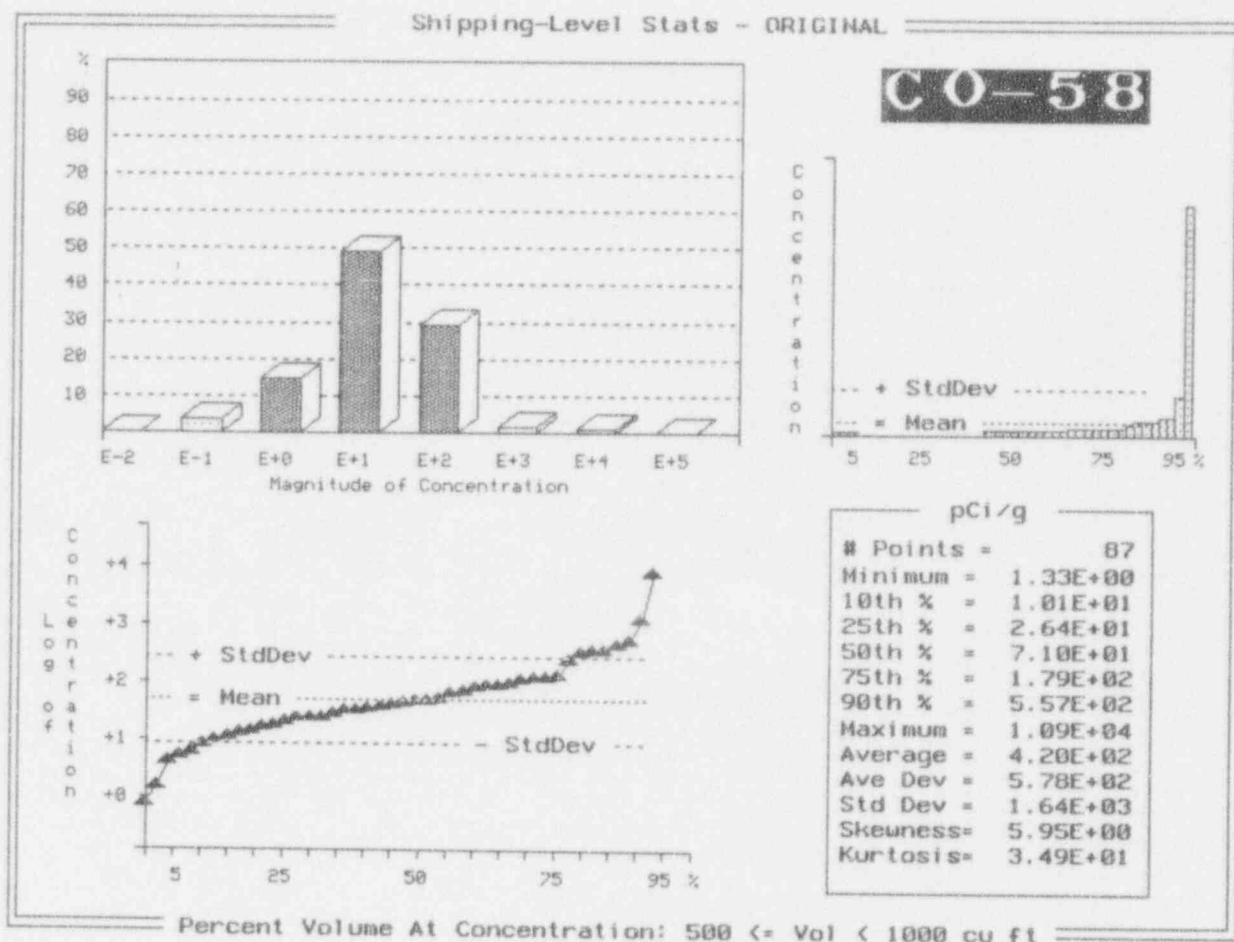


Exhibit F-21 (Continued)

Shipping-Level Stats - ORIGINAL

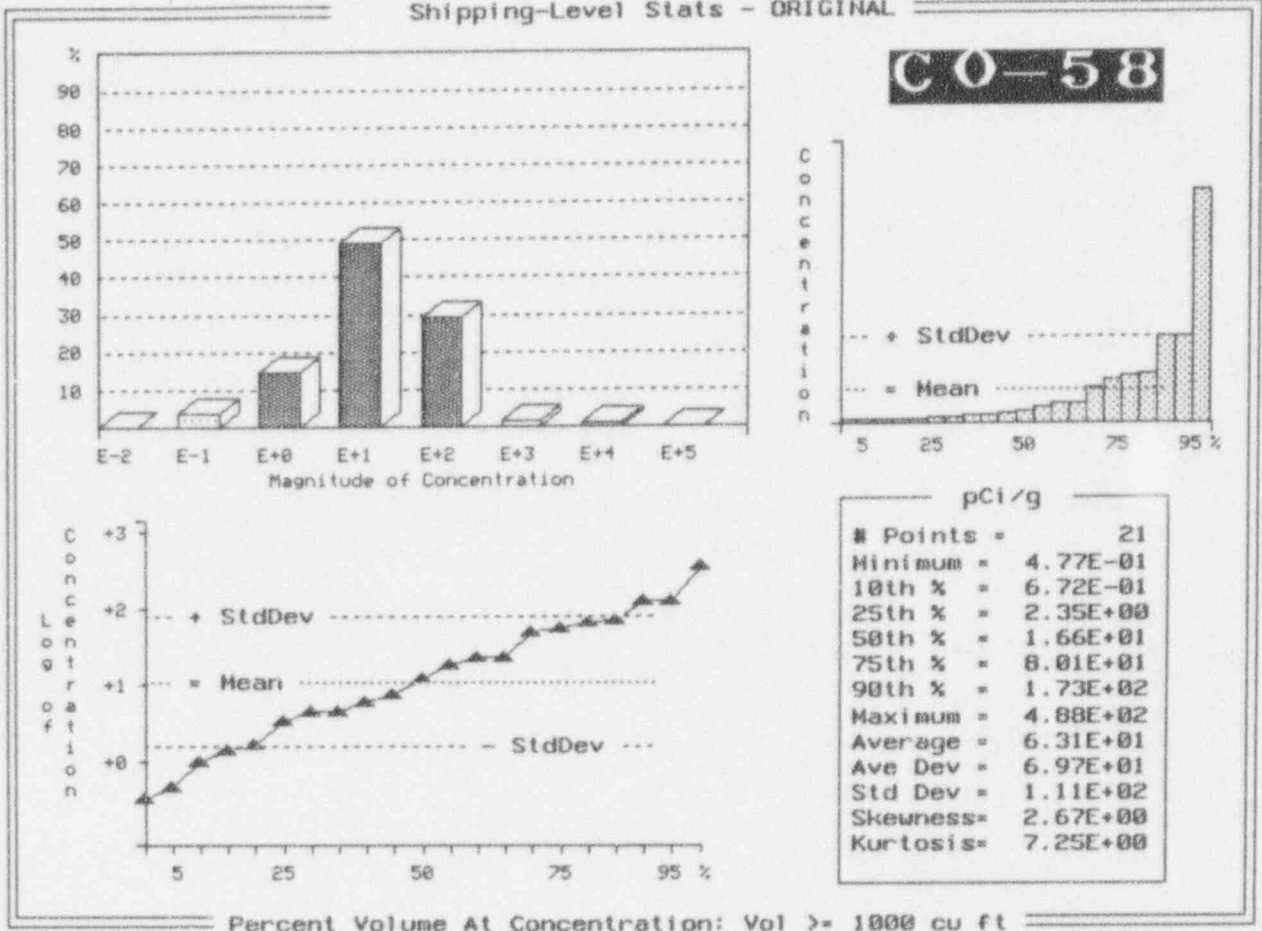


Exhibit F-21 (Continued)

Shipping-Level Stats - ORIGINAL

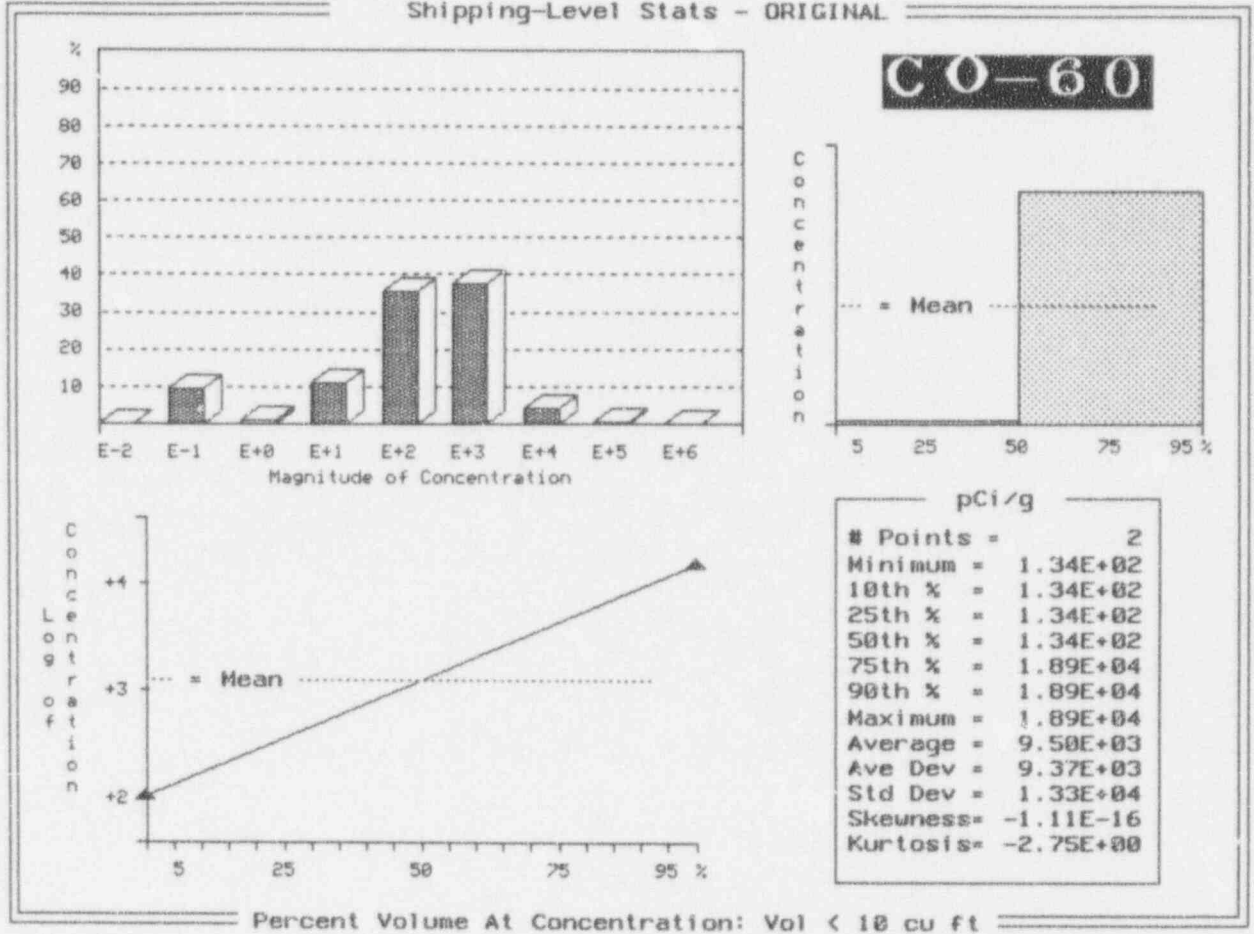


Exhibit F-21 (Continued)

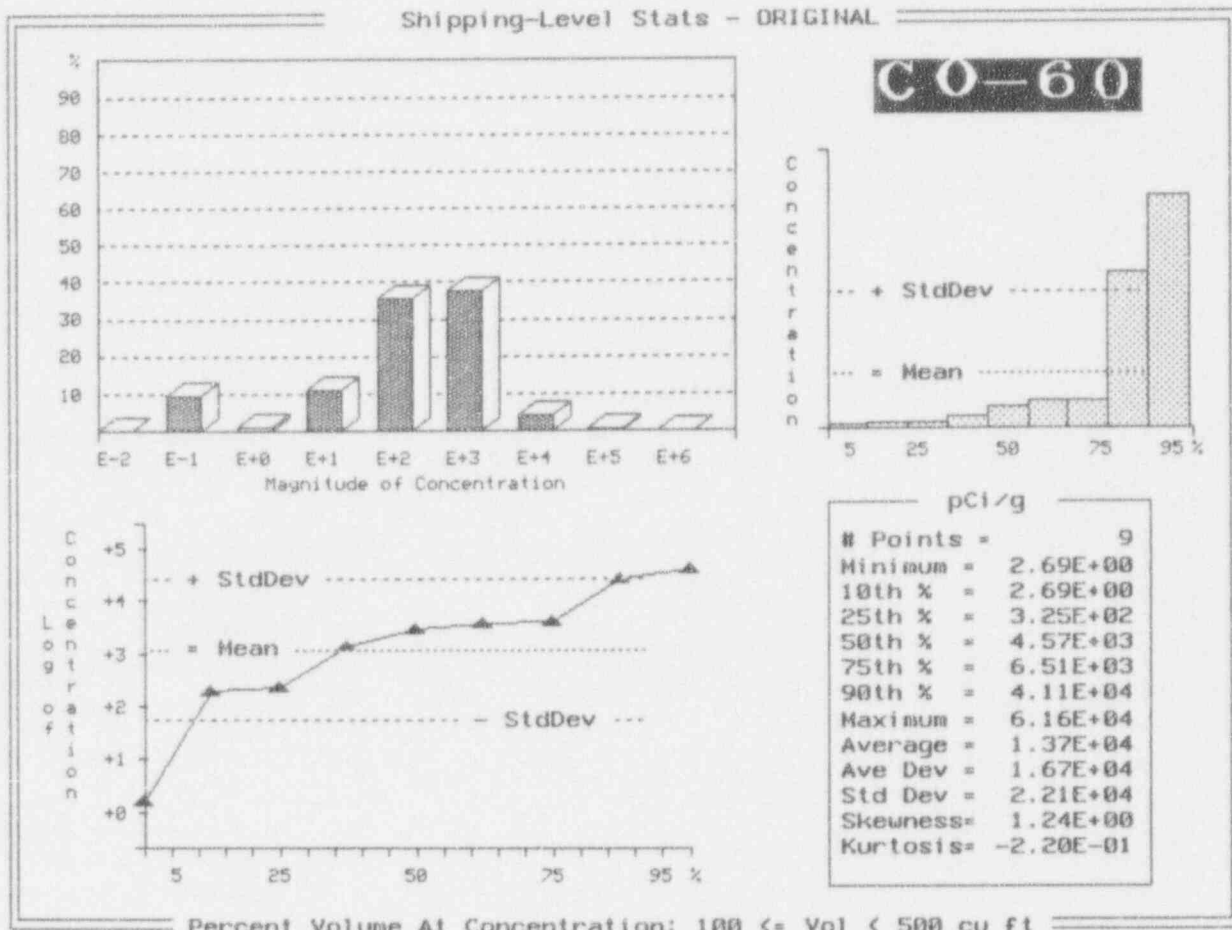


Exhibit F-21 (Continued)

Shipping-Level Stats - ORIGINAL

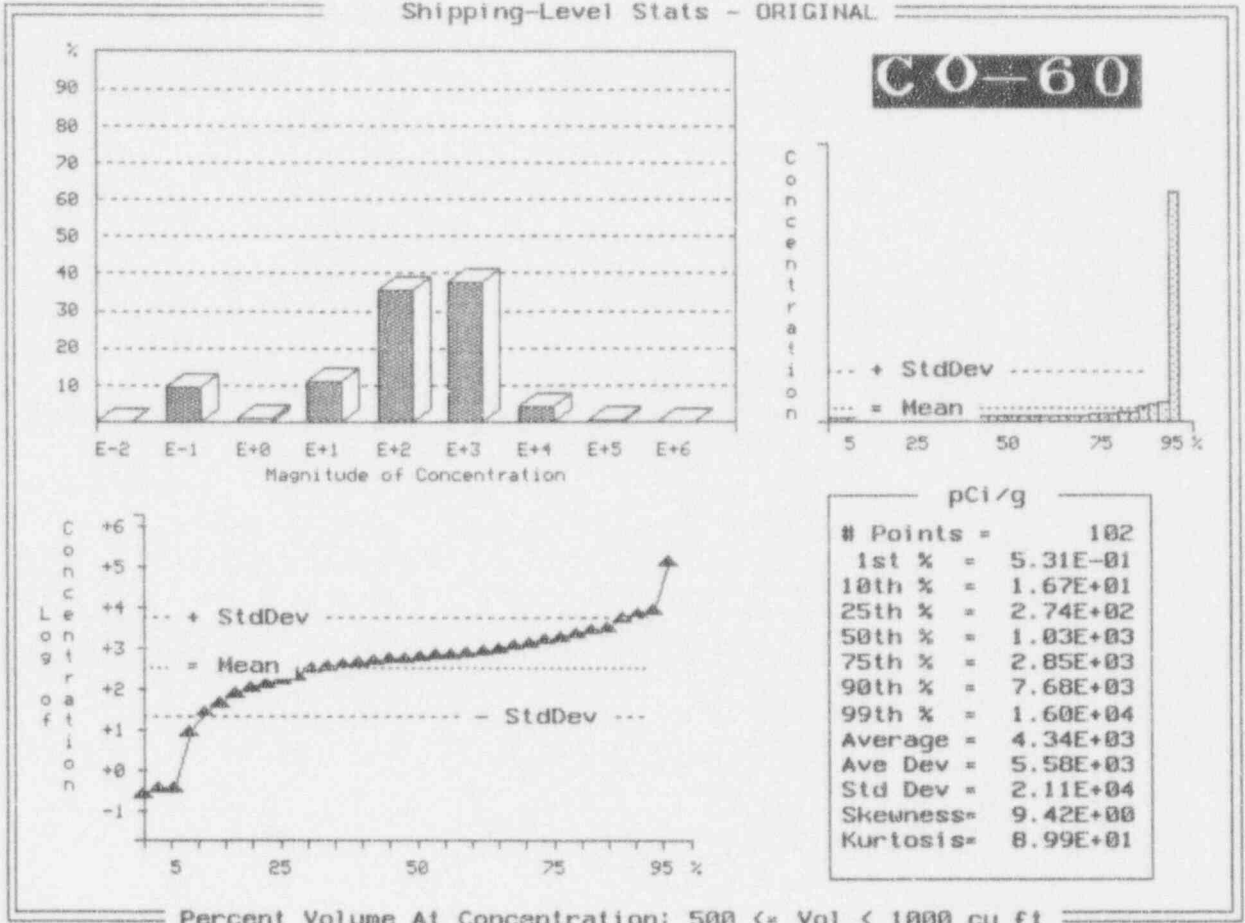


Exhibit F-21 (Continued)

Shipping-Level Stats - ORIGINAL

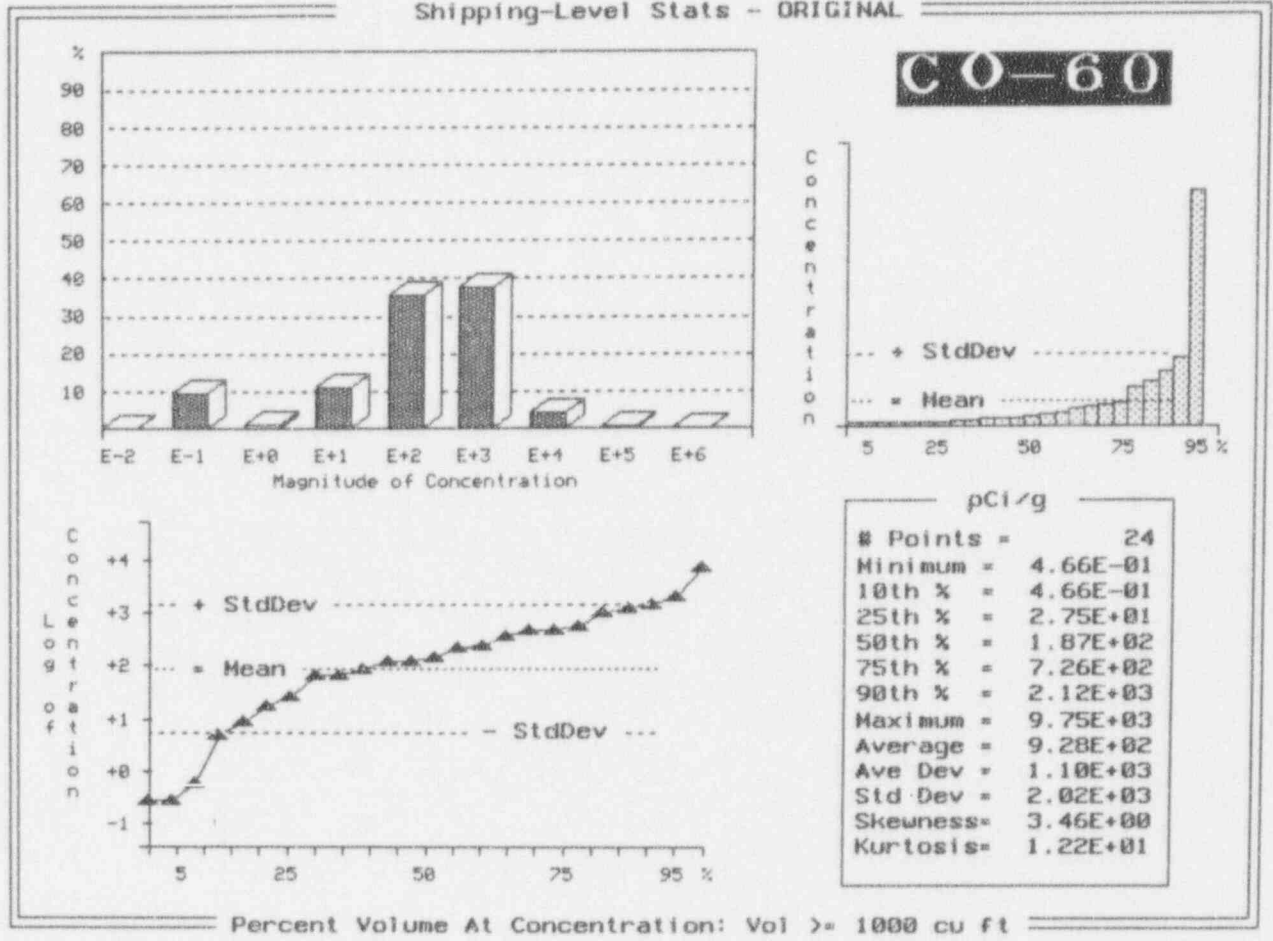


Exhibit F-21 (Continued)

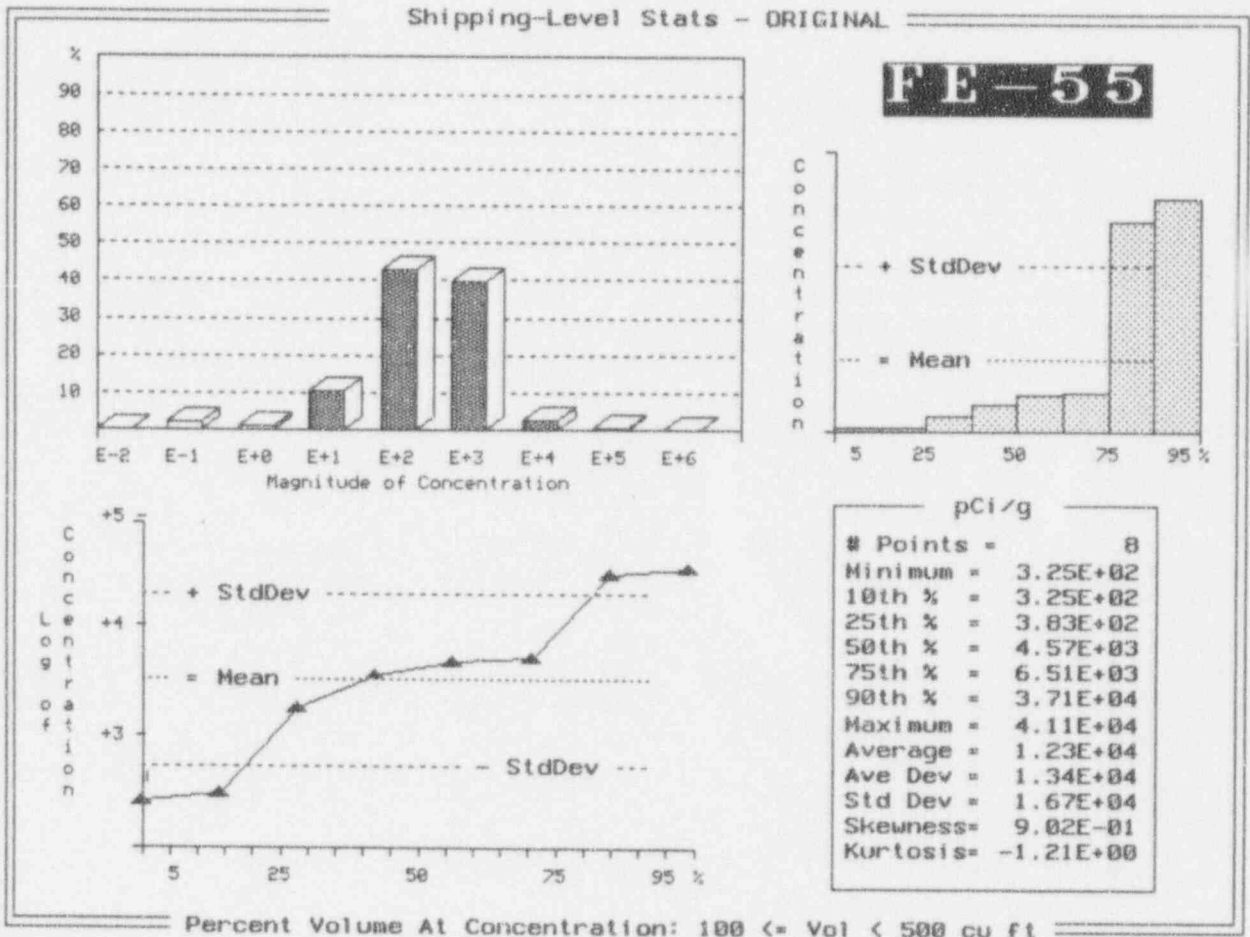


Exhibit F-21 (Continued)

Shipping-Level Stats - ORIGINAL

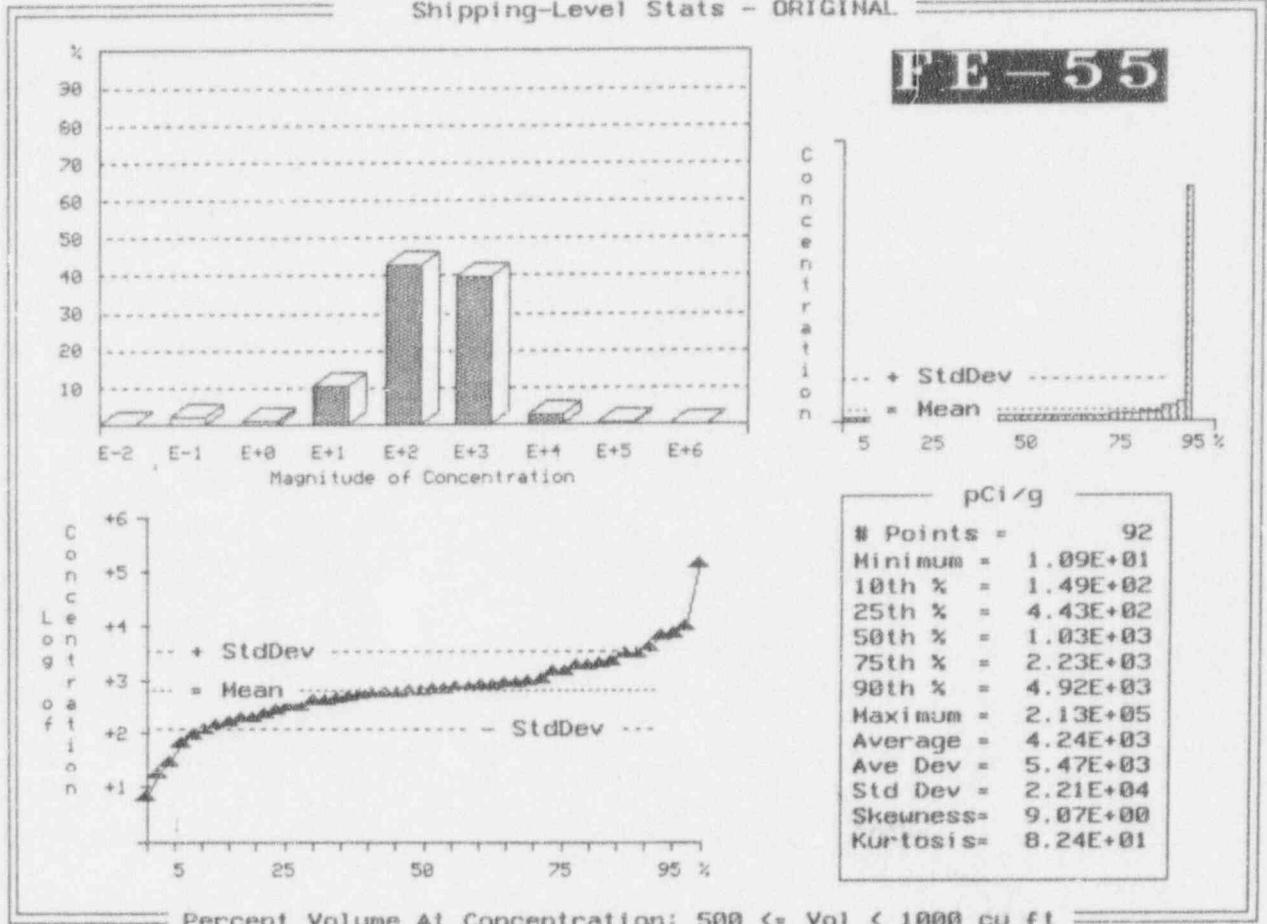


Exhibit F-21 (Continued)

Shipping-Level Stats - ORIGINAL

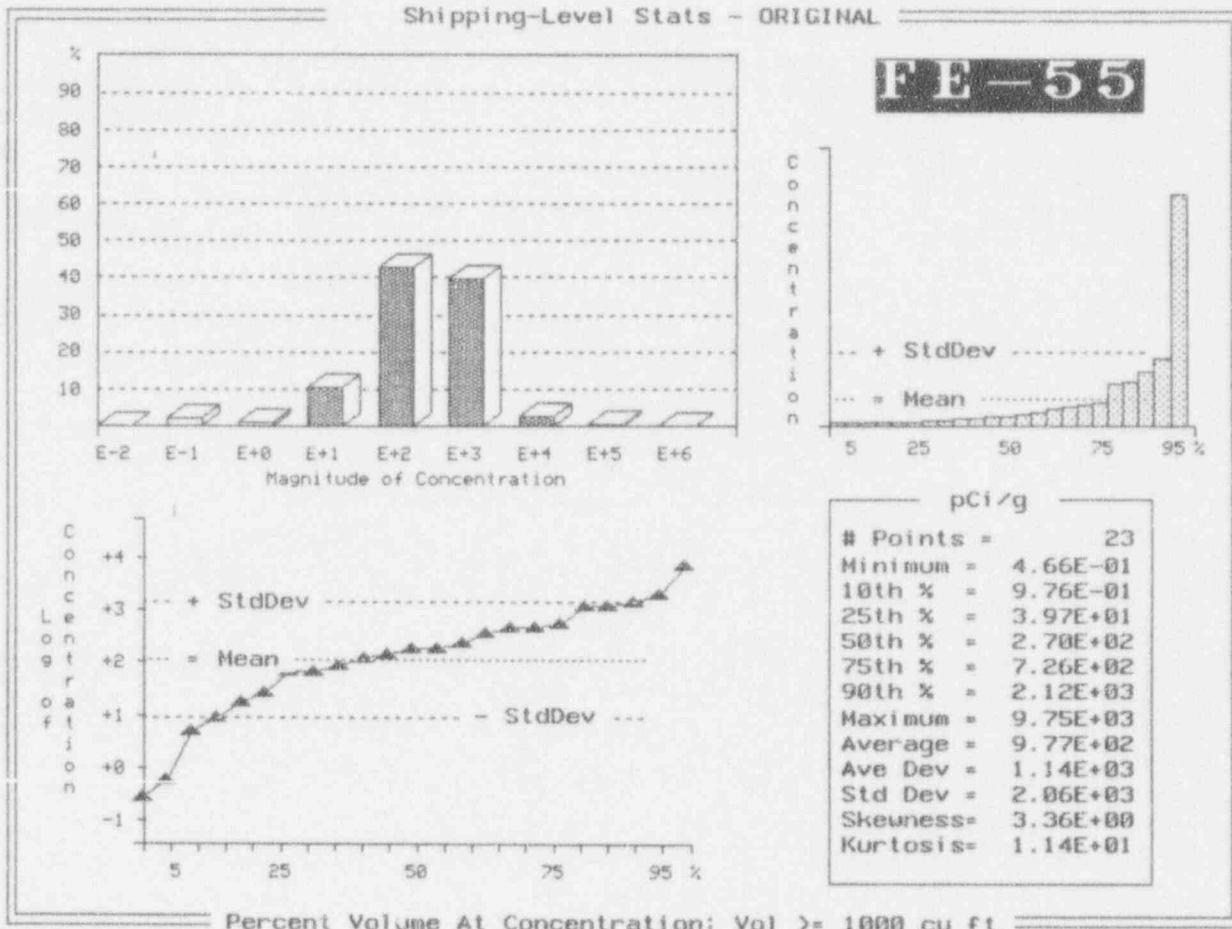


Exhibit F-21 (Continued)

Shipping-Level Stats - ORIGINAL

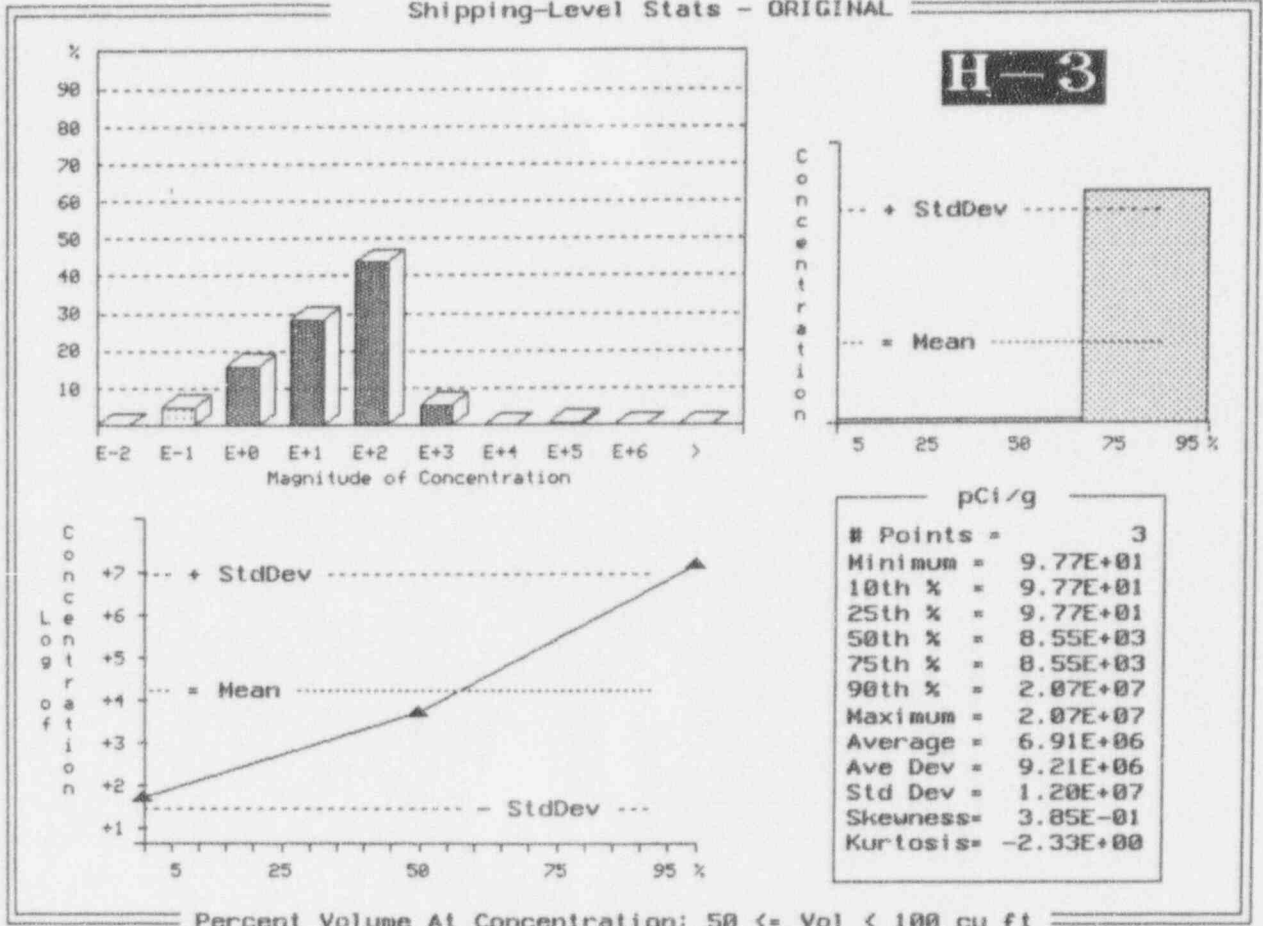


Exhibit F-21 (Continued)

Shipping-Level Stats - ORIGINAL

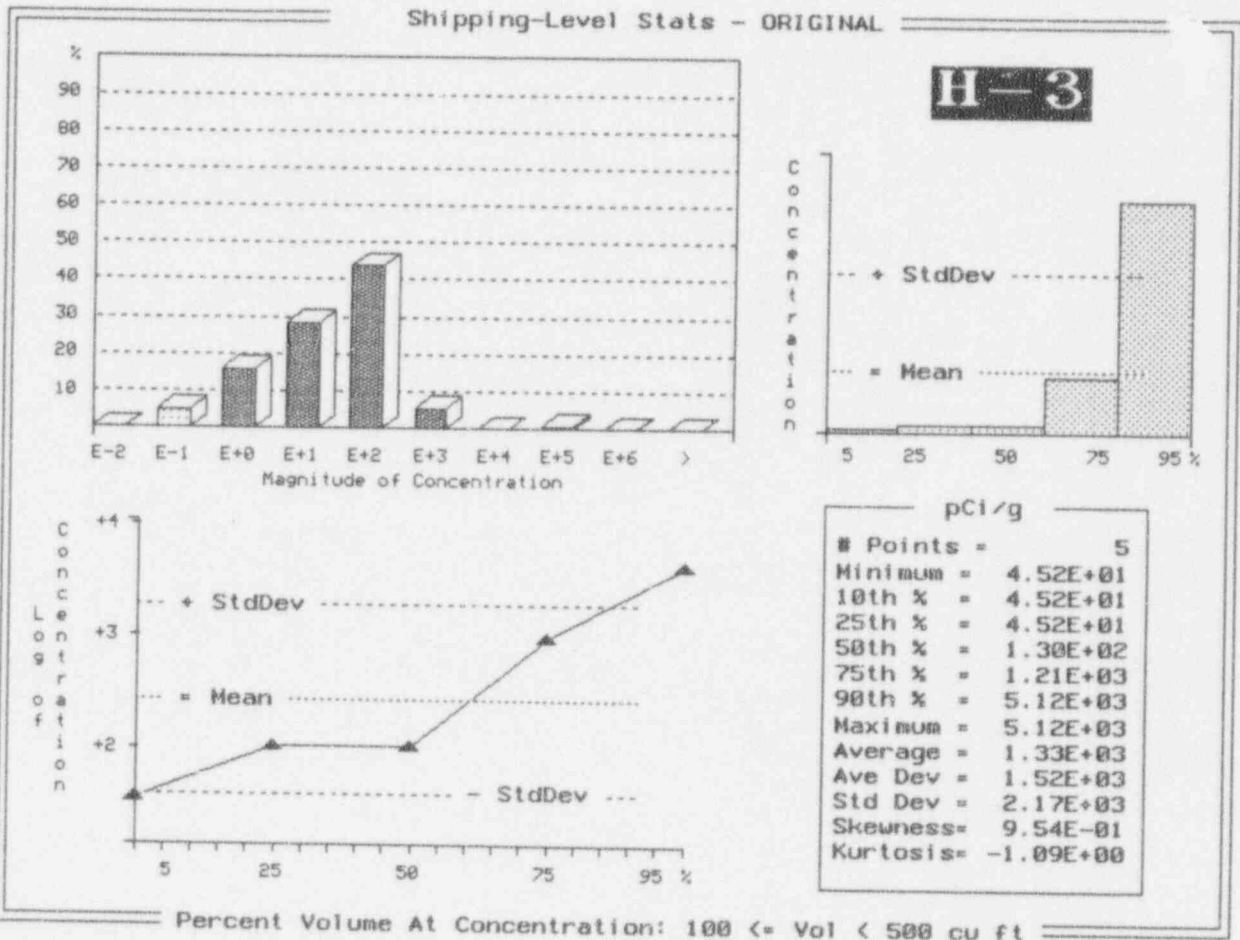


Exhibit F-21 (Continued)

Shipping-Level Stats - ORIGINAL

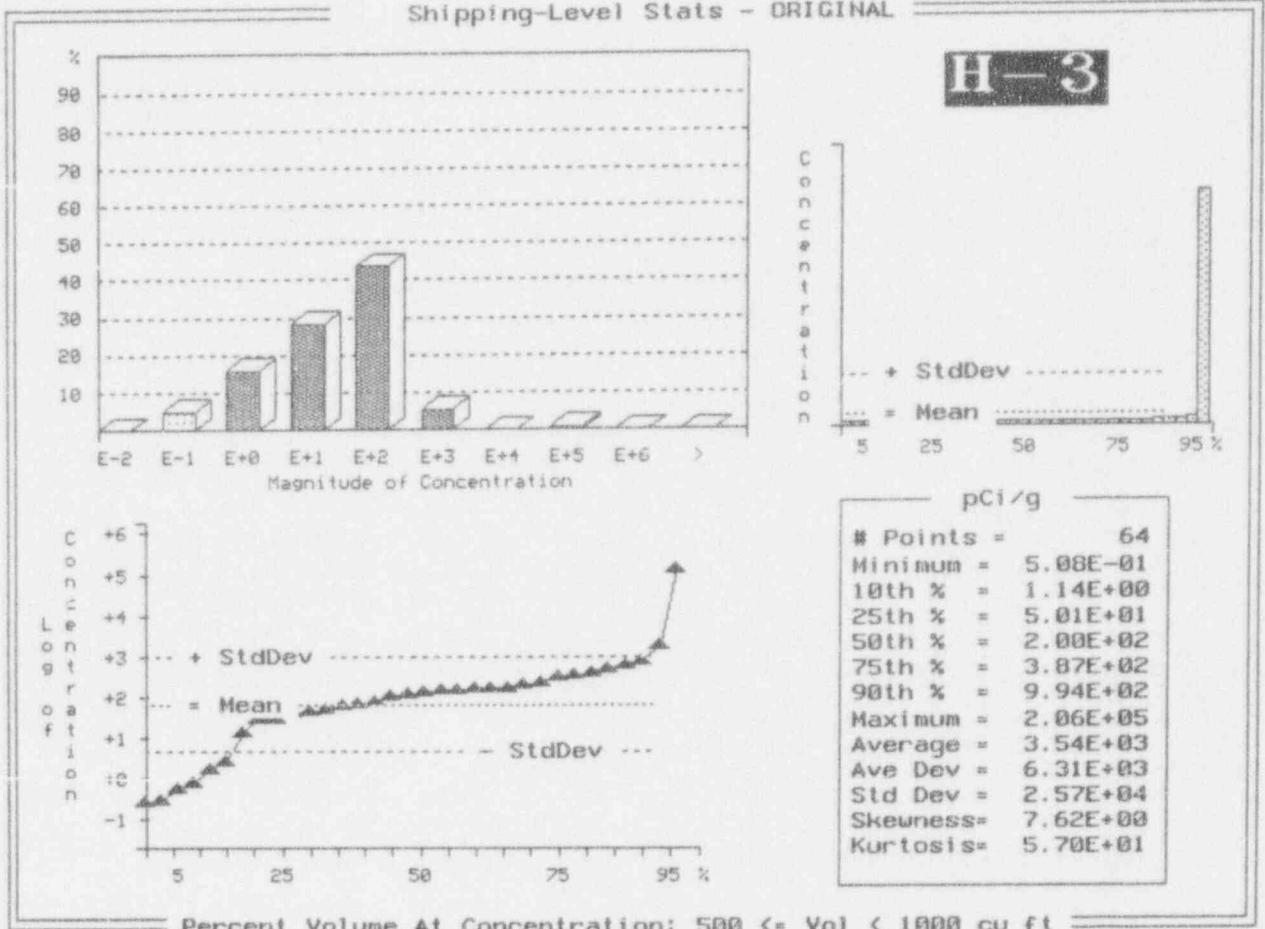


Exhibit F-21 (Continued)

Shipping-Level Stats - ORIGINAL

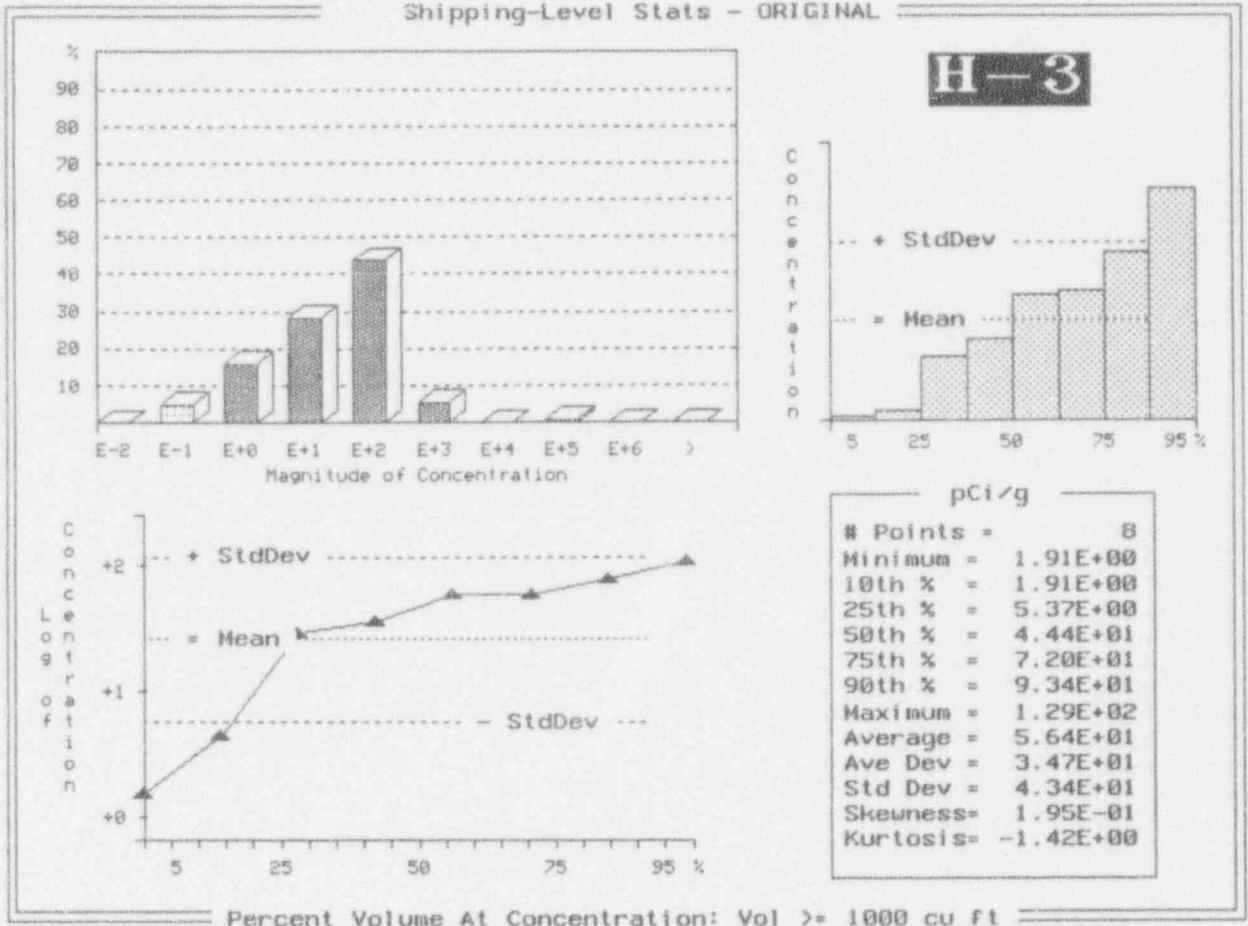


Exhibit F-21 (Continued)

Shipping-Level Stats - ORIGINAL

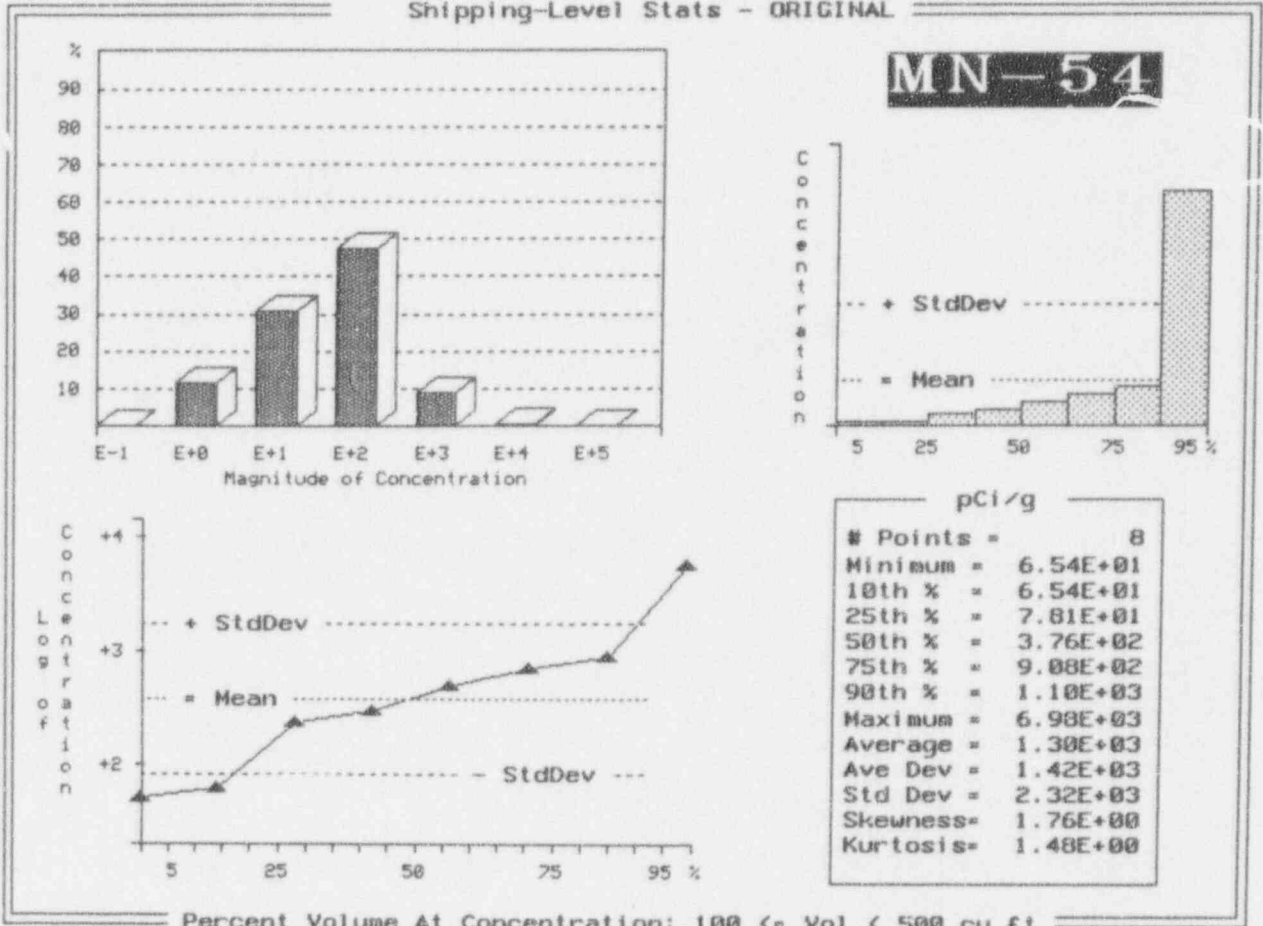


Exhibit F-21 (Continued)

Shipping-Level Stats - ORIGINAL

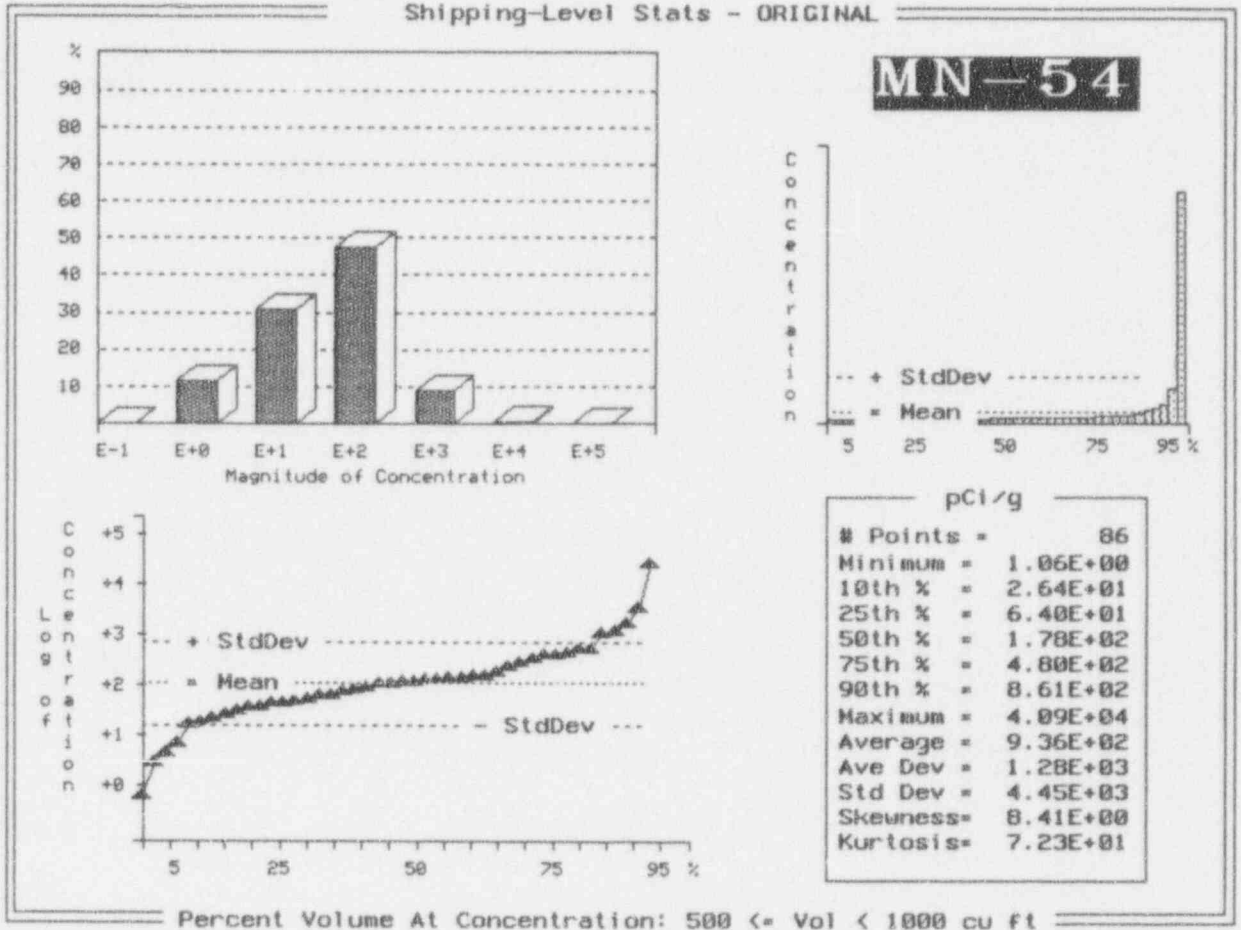


Exhibit F-21 (Continued)

Shipping-Level Stats - ORIGINAL

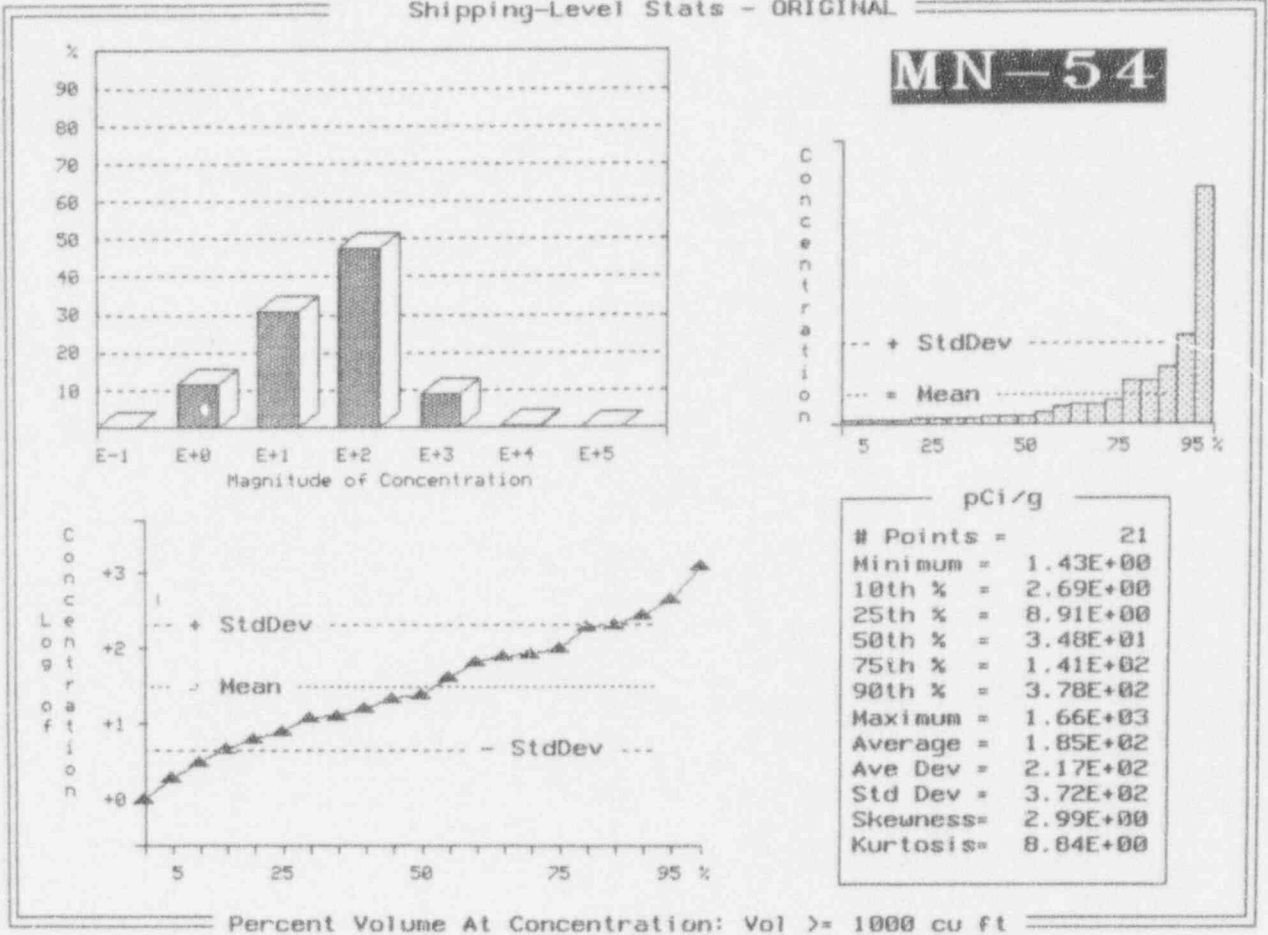


Exhibit F-21 (Continued)

Shipping-Level Stats - ORIGINAL

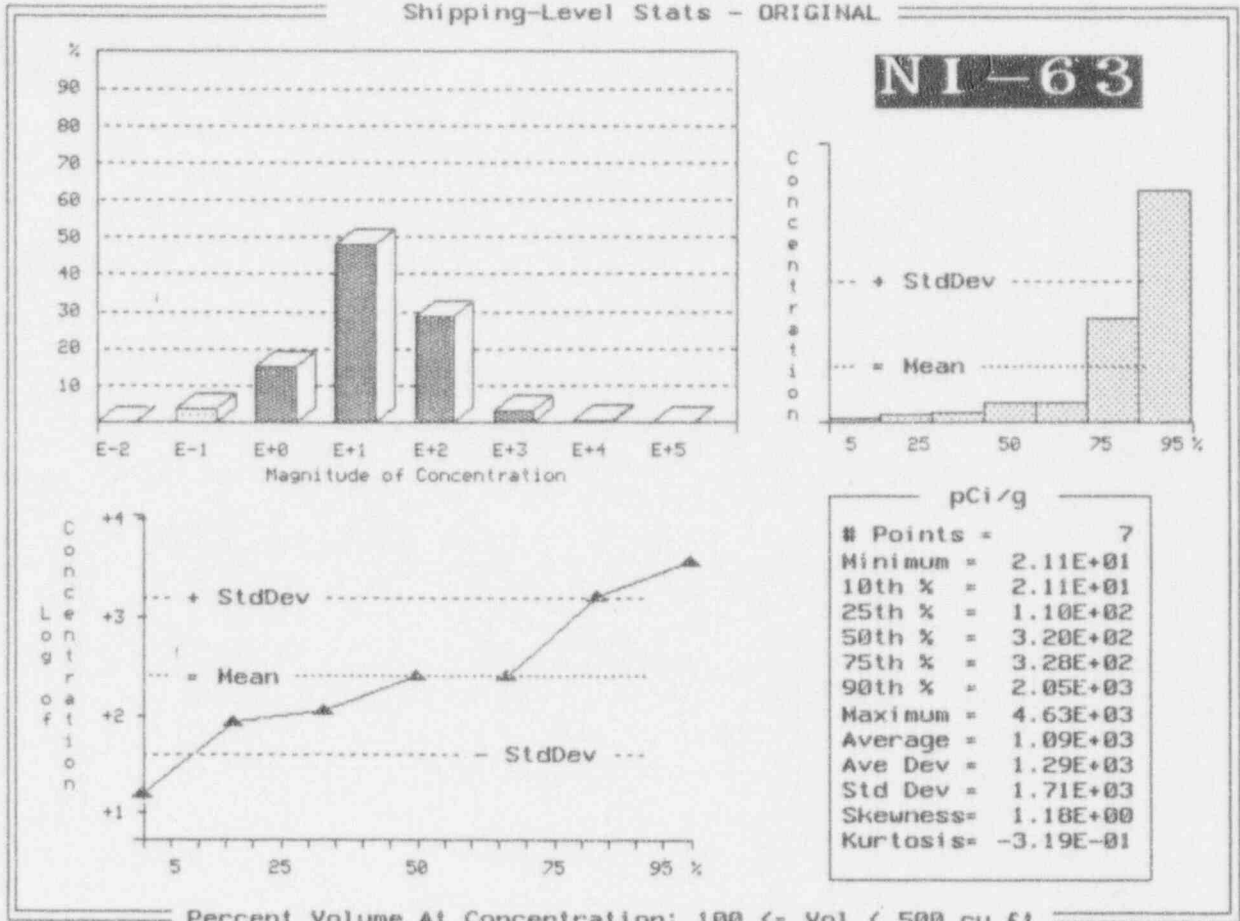


Exhibit F-21 (Continued)

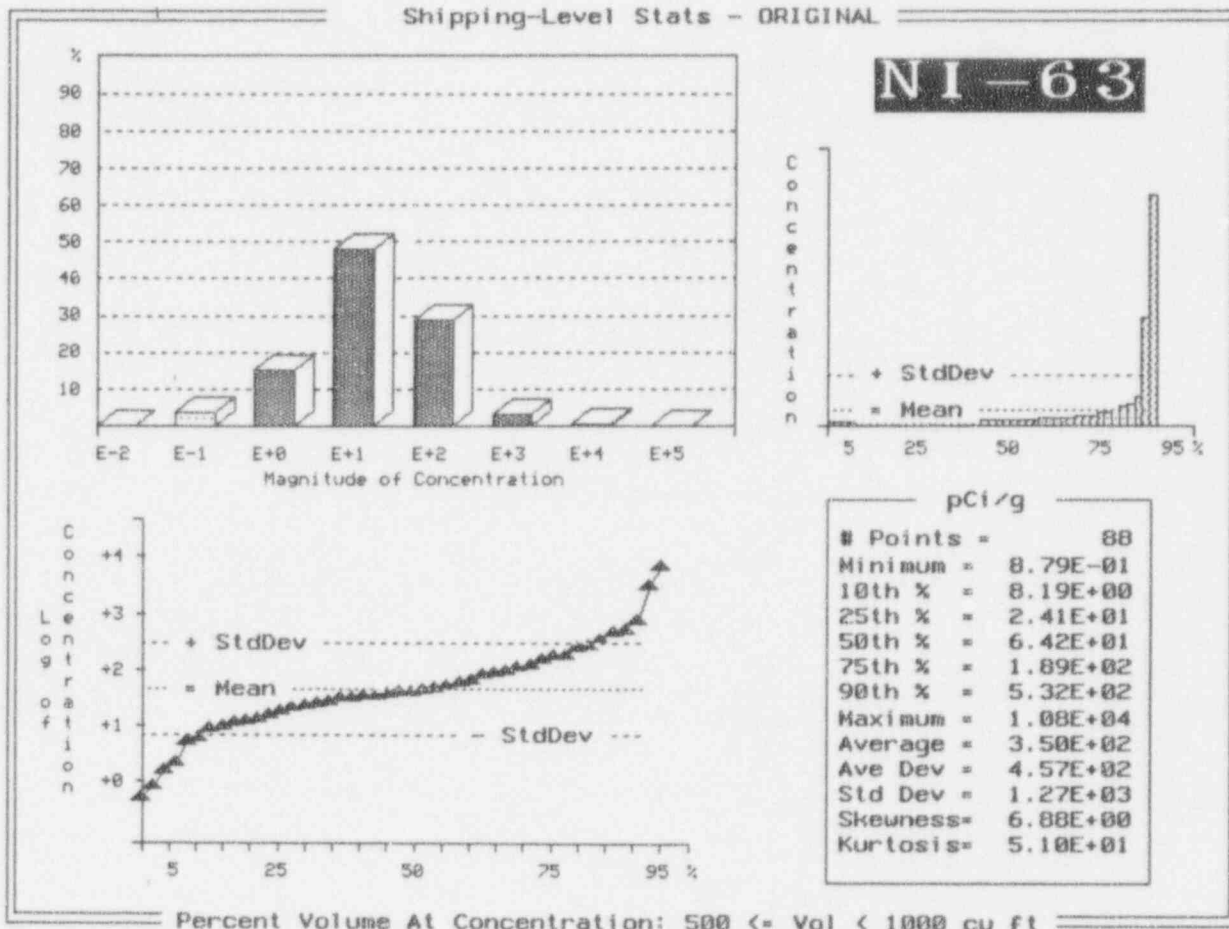


Exhibit F-21 (Continued)

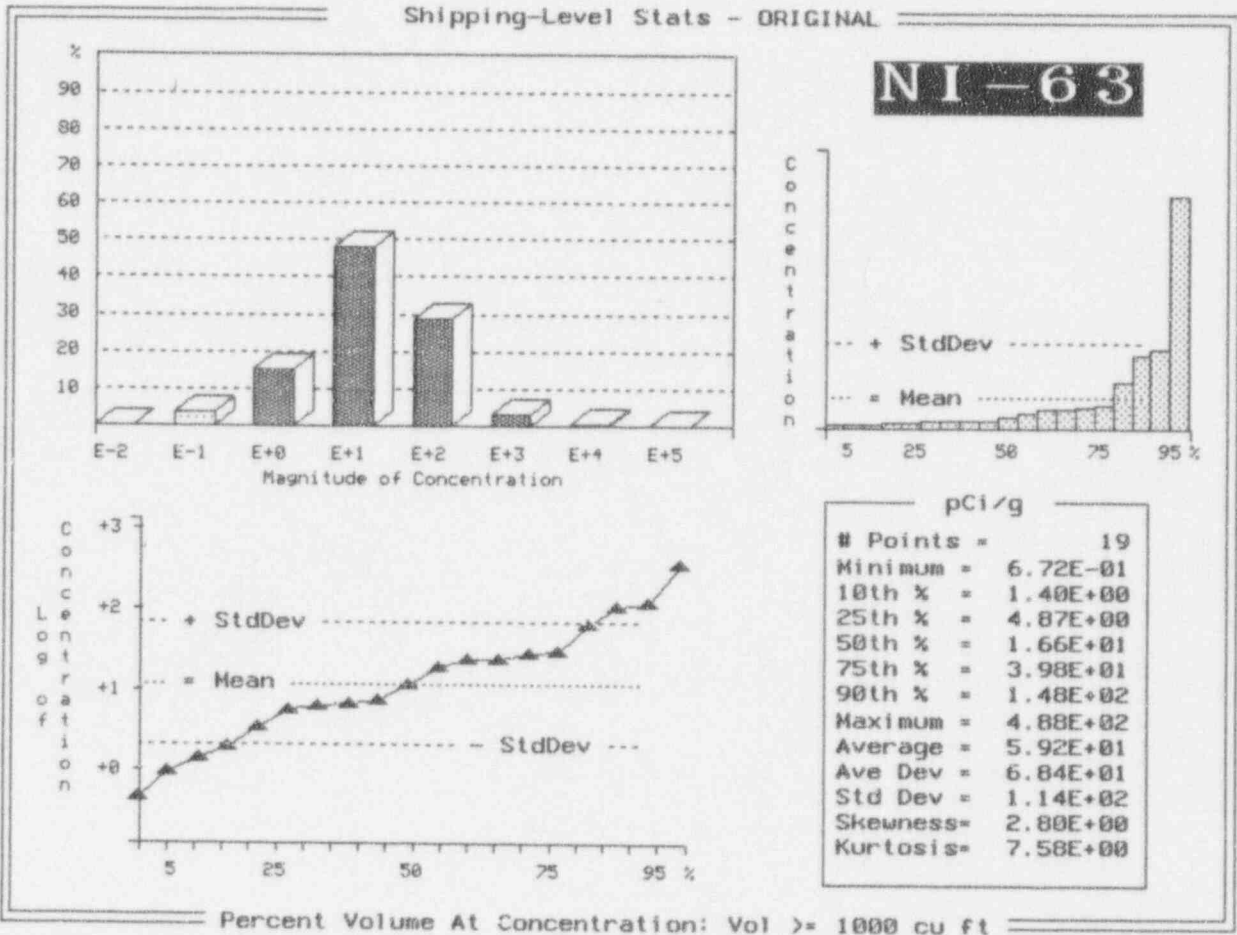


Exhibit F-21 (Continued)

Shipping-Level Stats - ORIGINAL

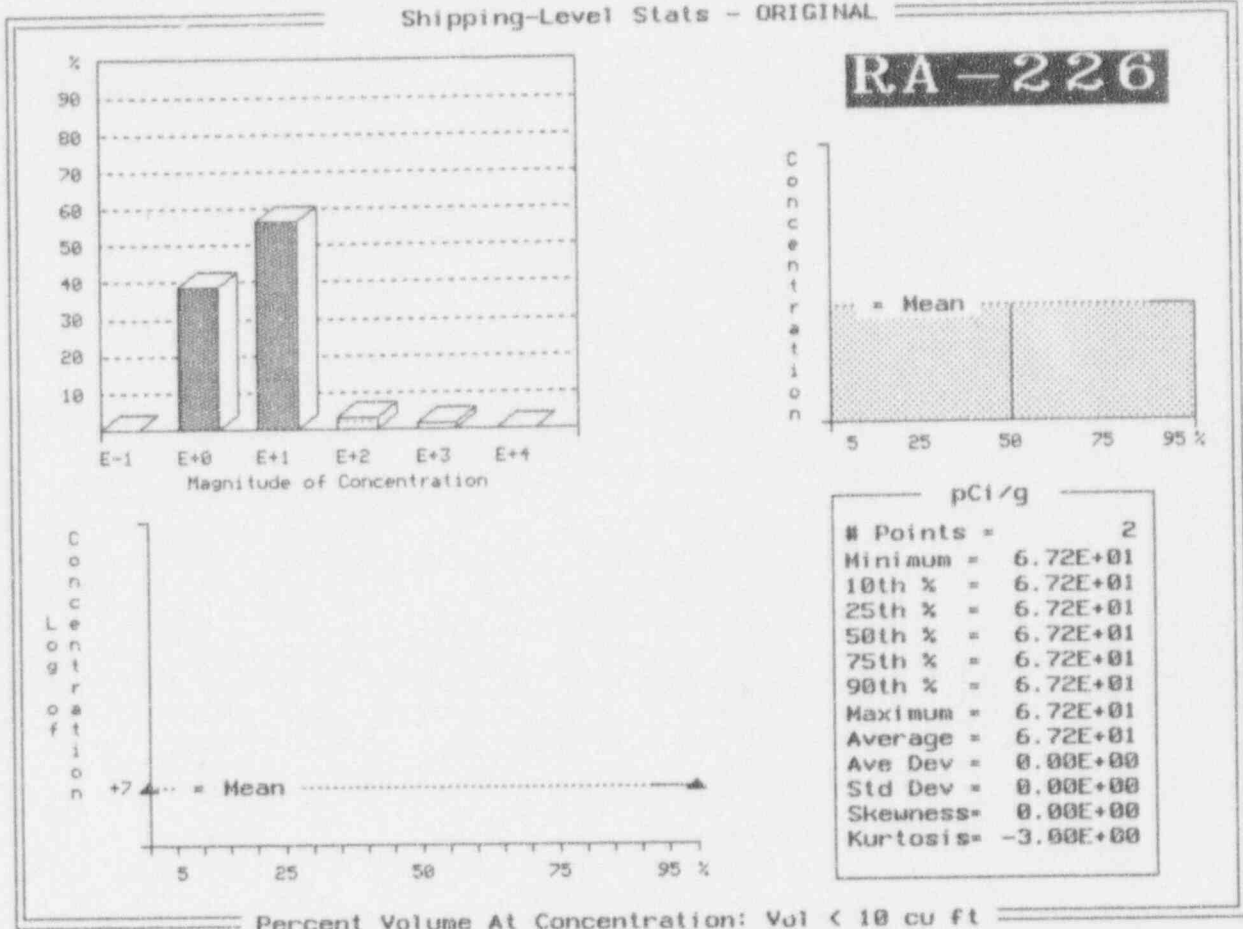


Exhibit F-21 (Continued)

Shipping-Level Stats - ORIGINAL

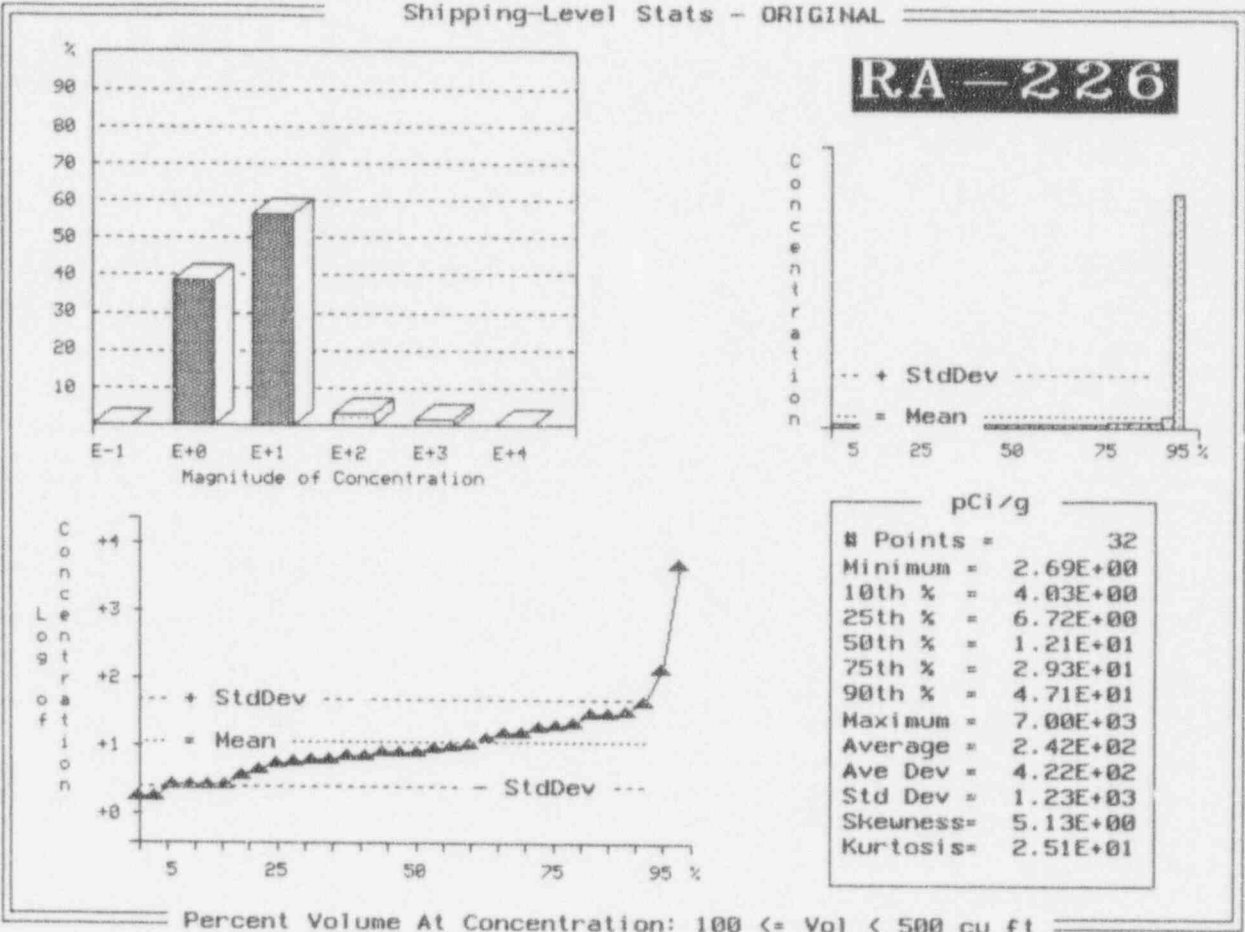


Exhibit F-21 (Continued)

Shipping-Level Stats - ORIGINAL

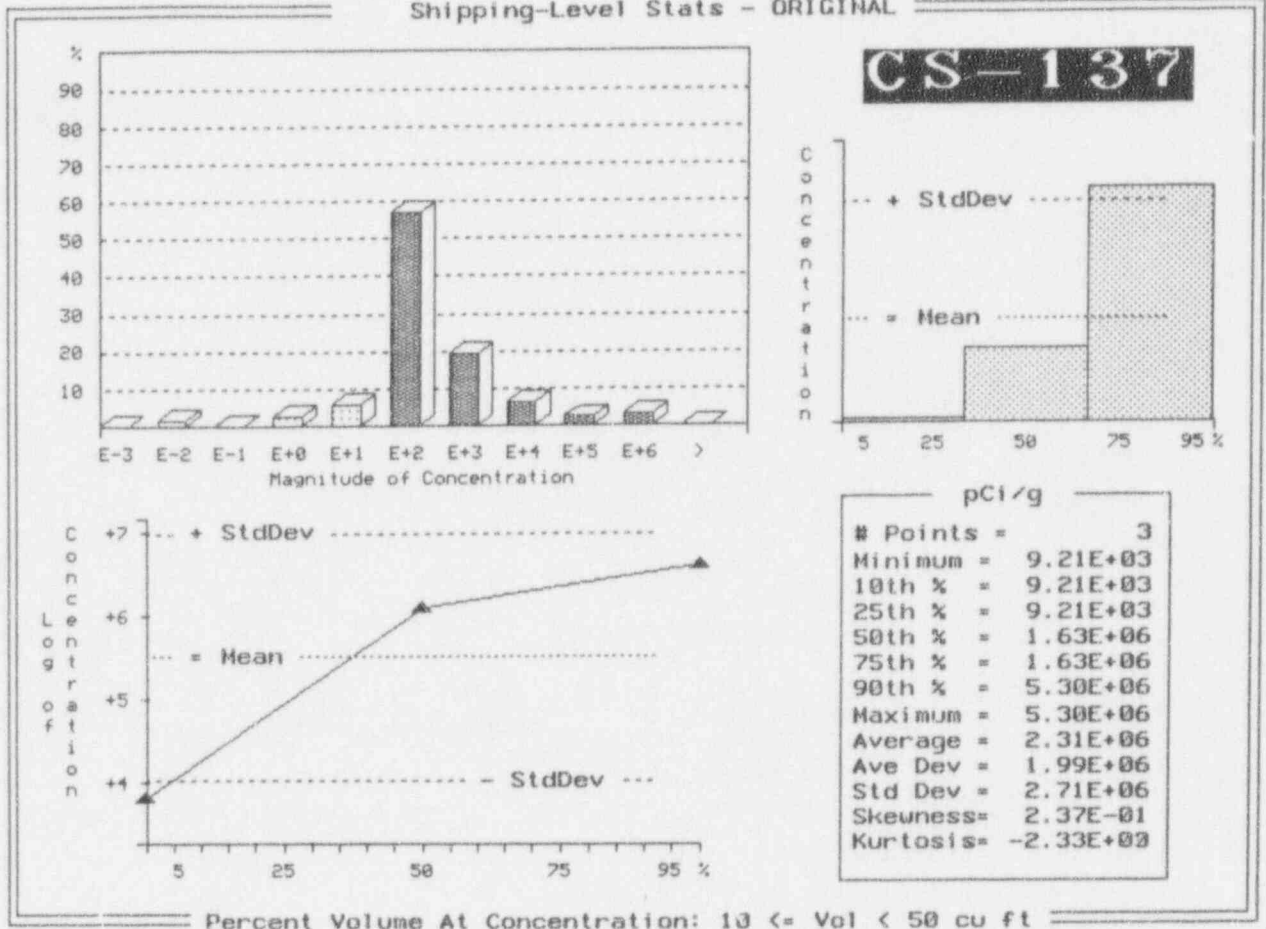


Exhibit F-21 (Continued)

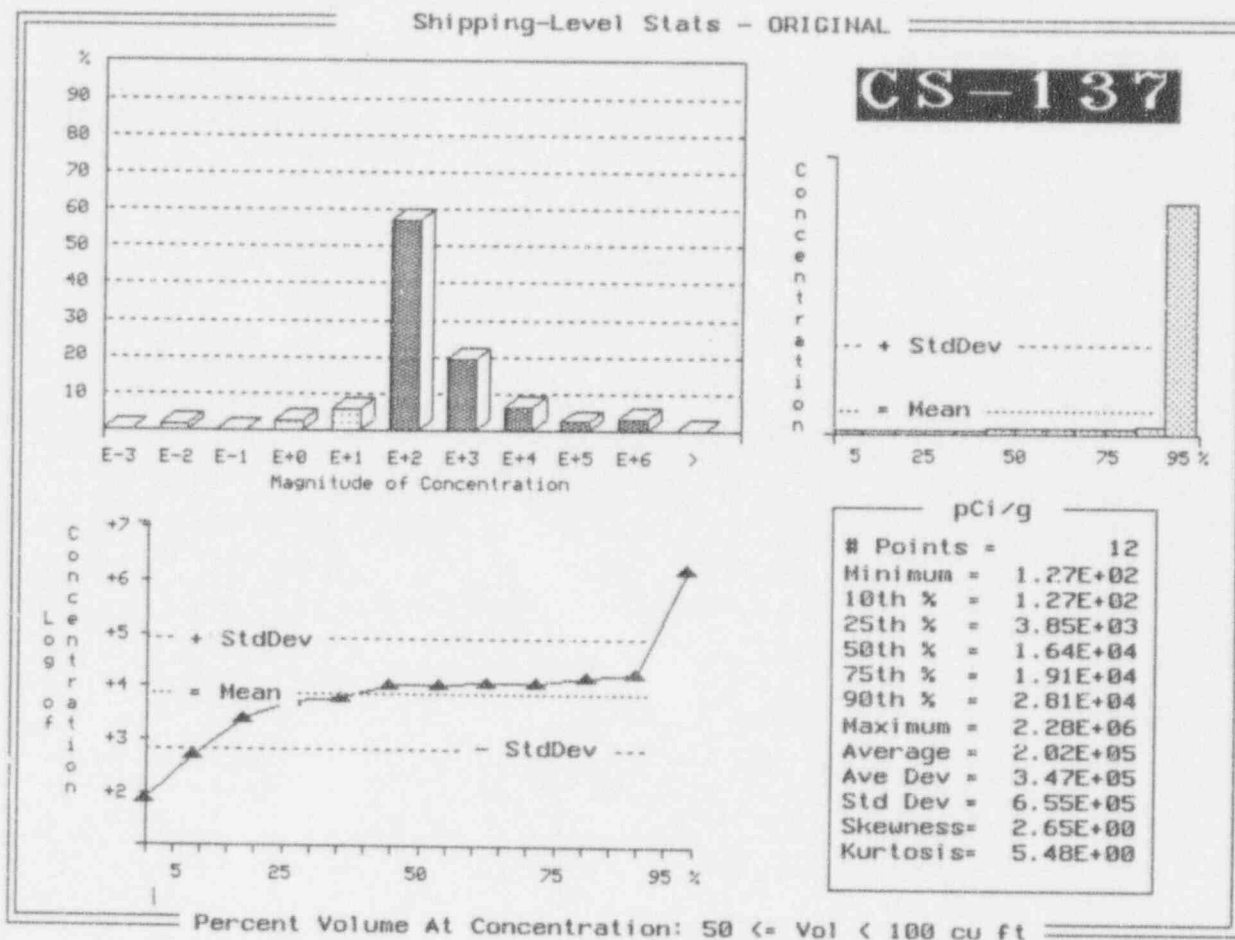


Exhibit F-21 (Continued)

Shipping-Level Stats - ORIGINAL

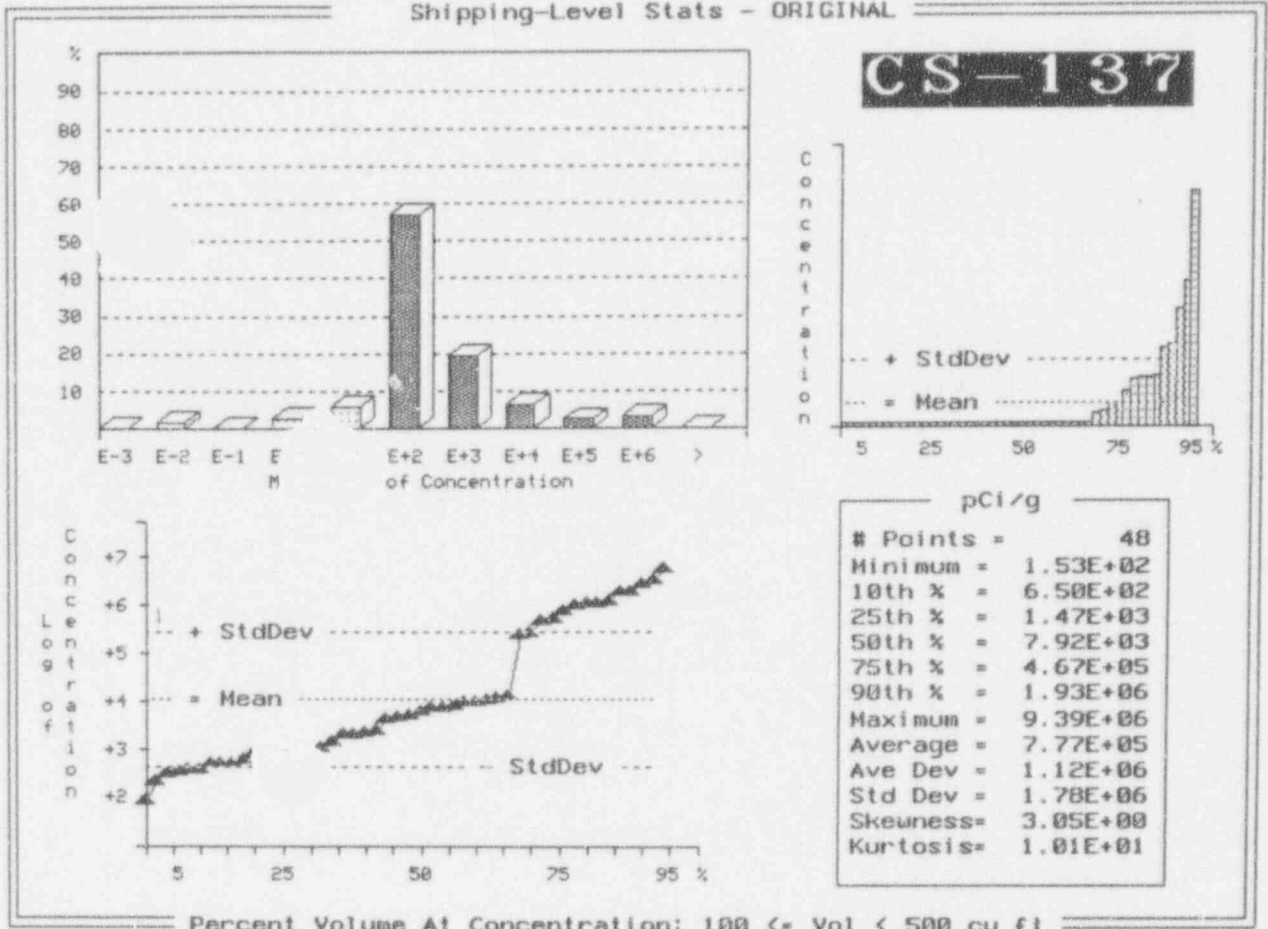


Exhibit F-21 (Continued)

Shipping-Level Stats - ORIGINAL

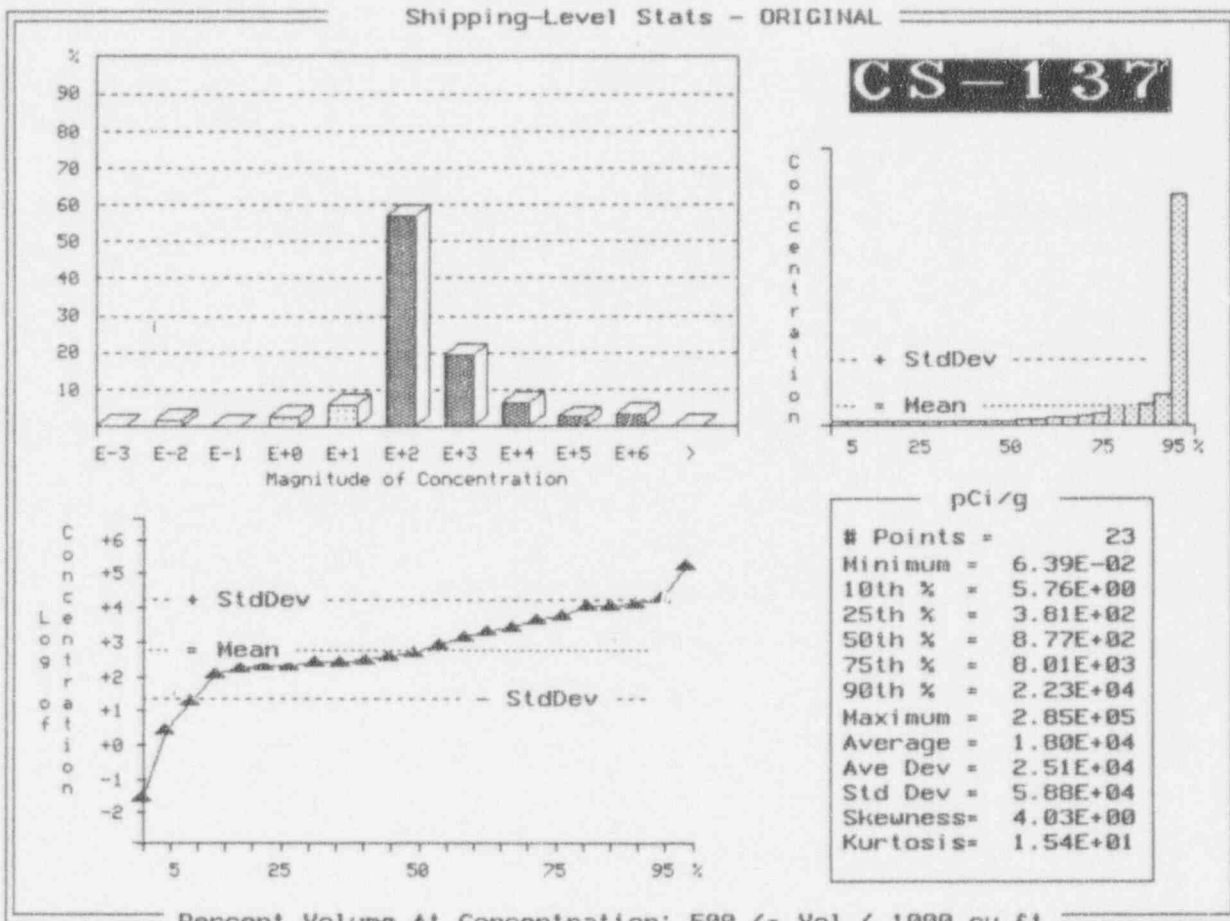


Exhibit F-21 (Continued)

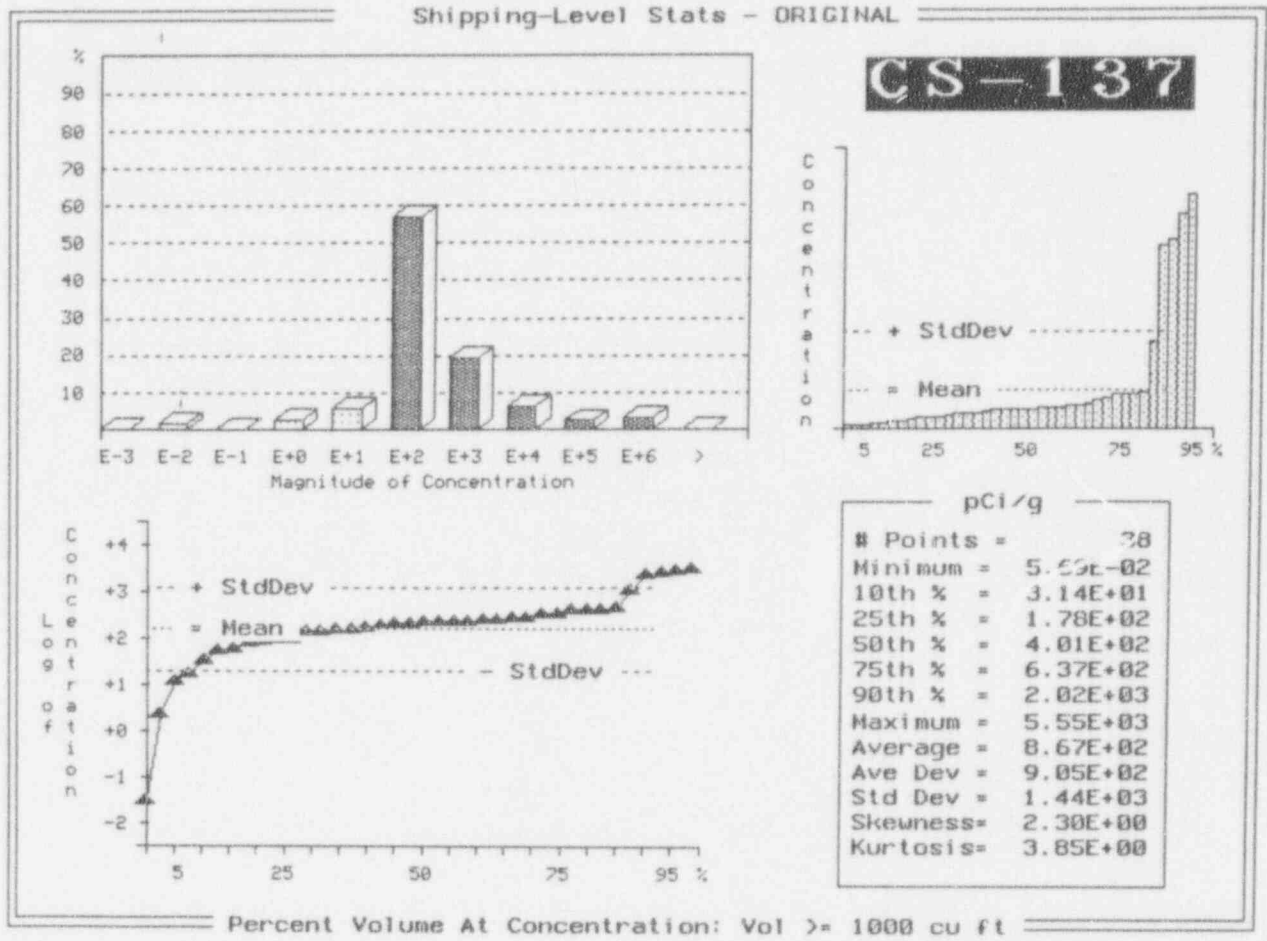


Exhibit F-21 (Continued)

Shipping-Level Stats - ORIGINAL

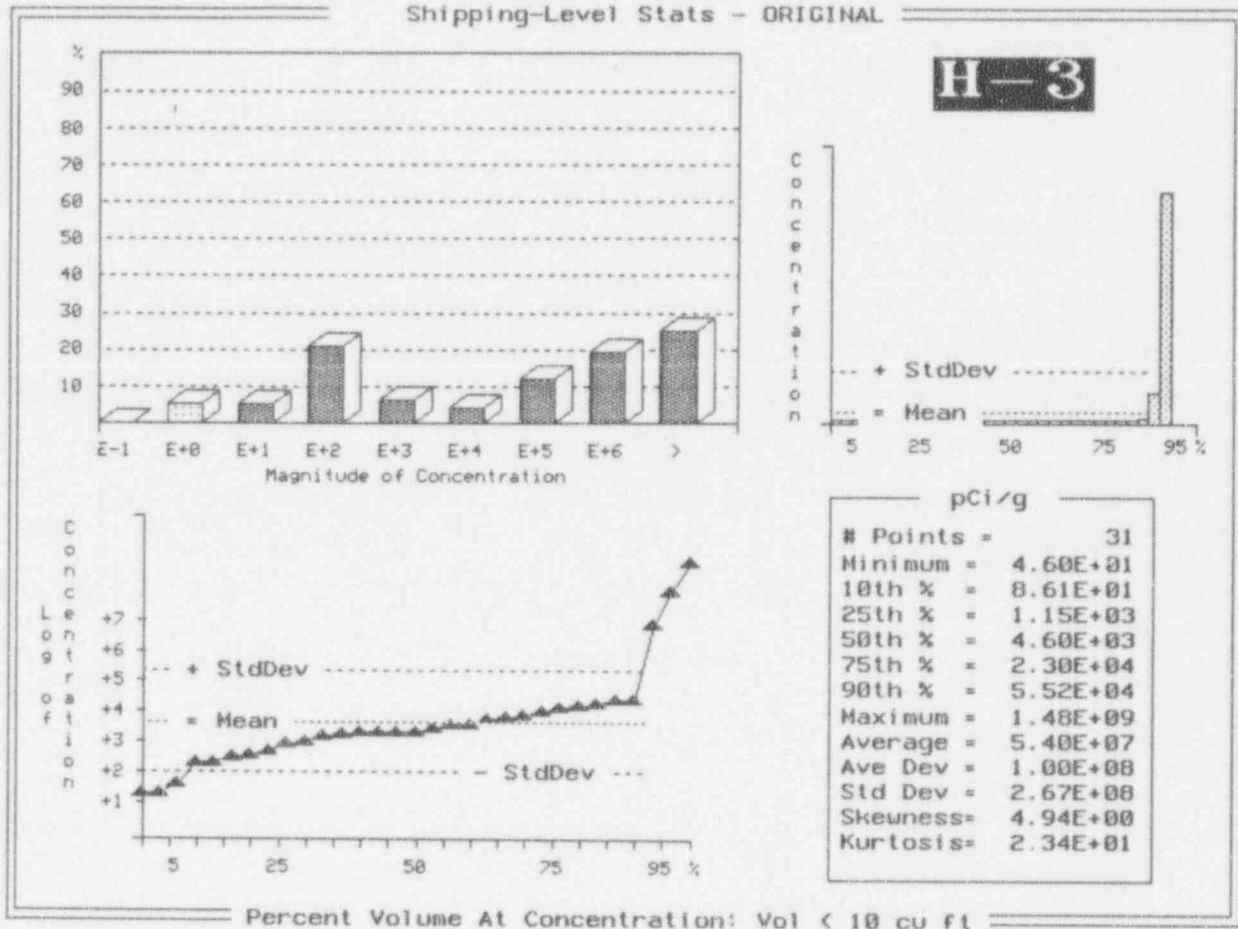


Exhibit F-21 (Continued)

Shipping-Level Stats - ORIGINAL

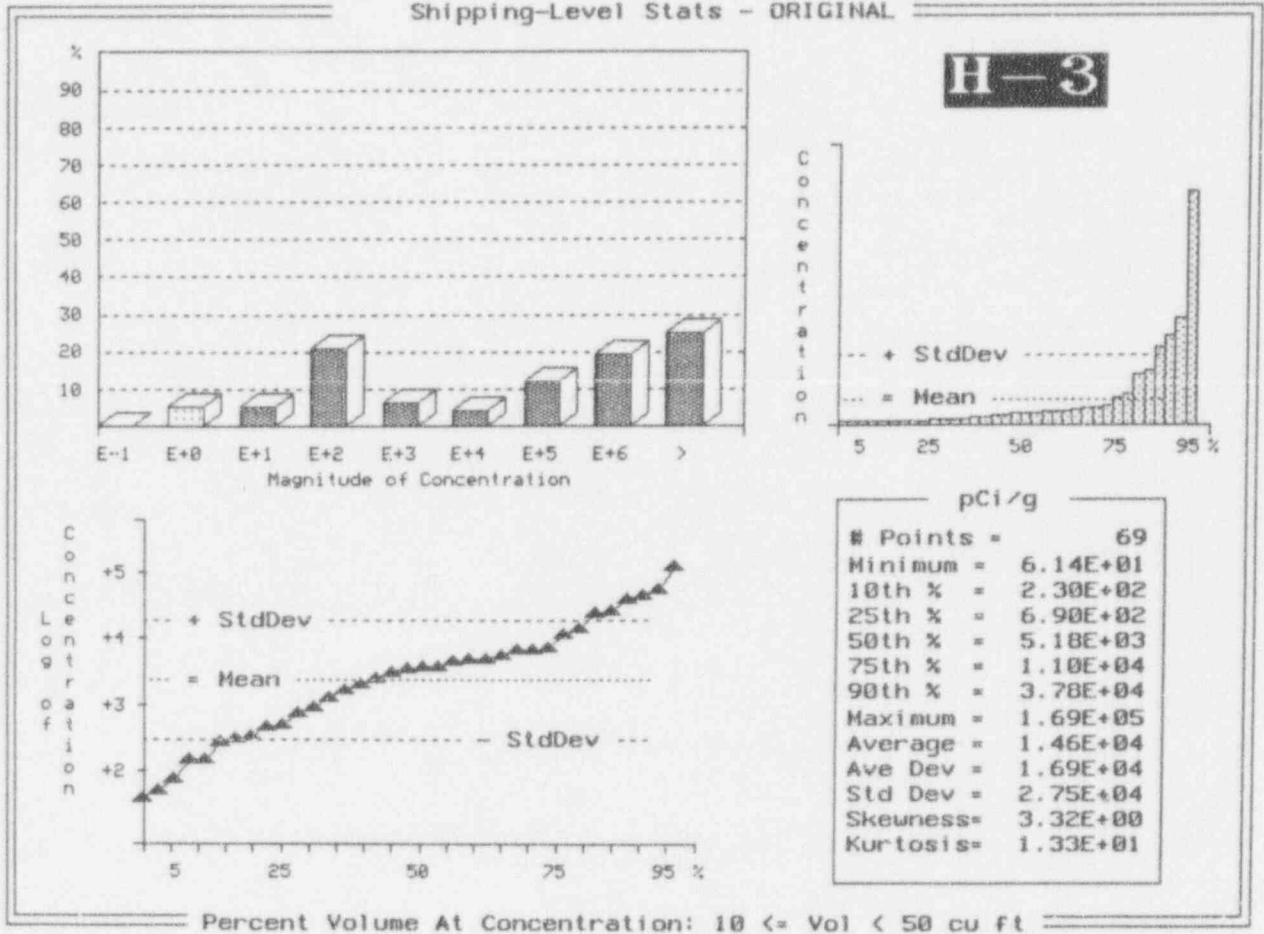


Exhibit F-21 (Continued)

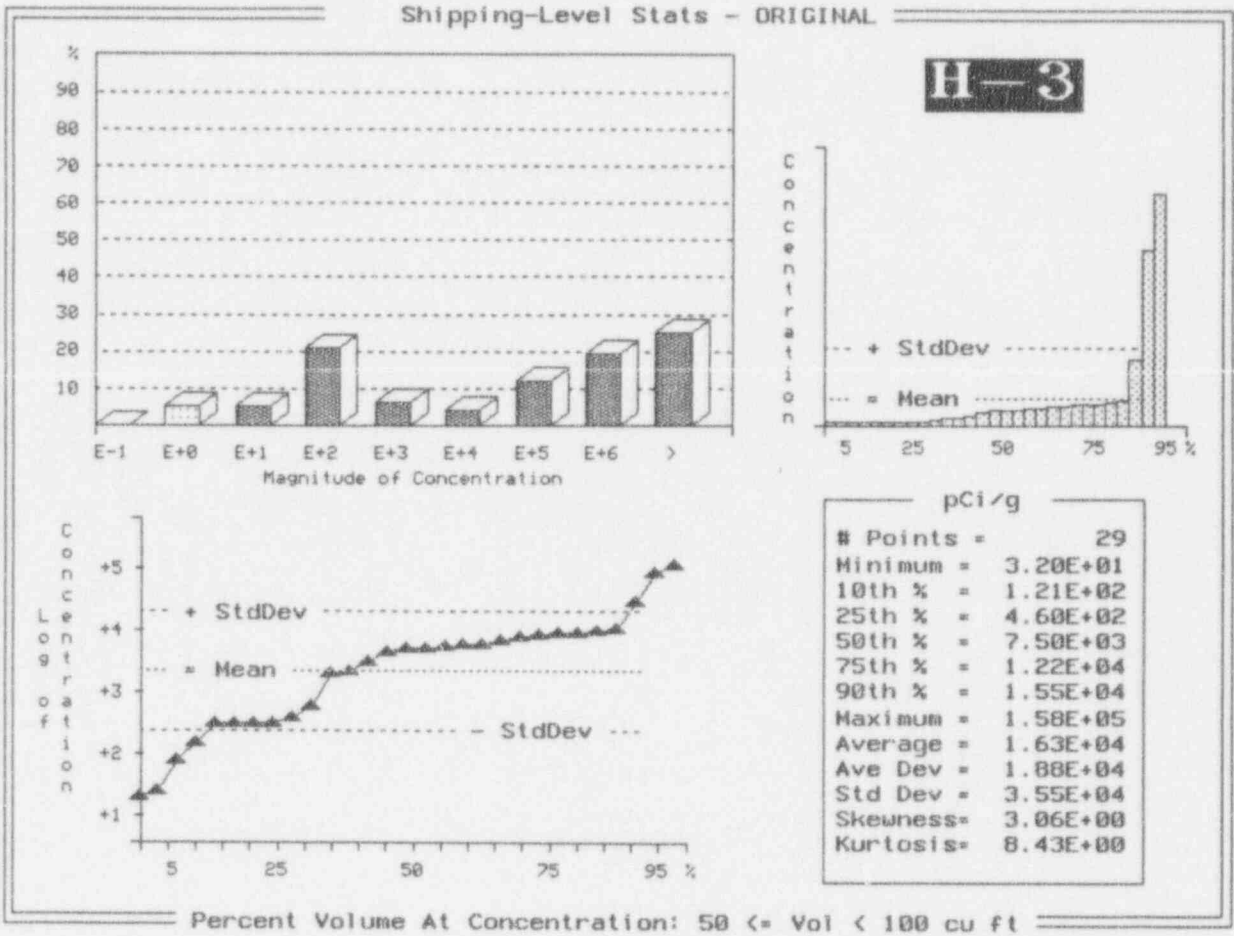
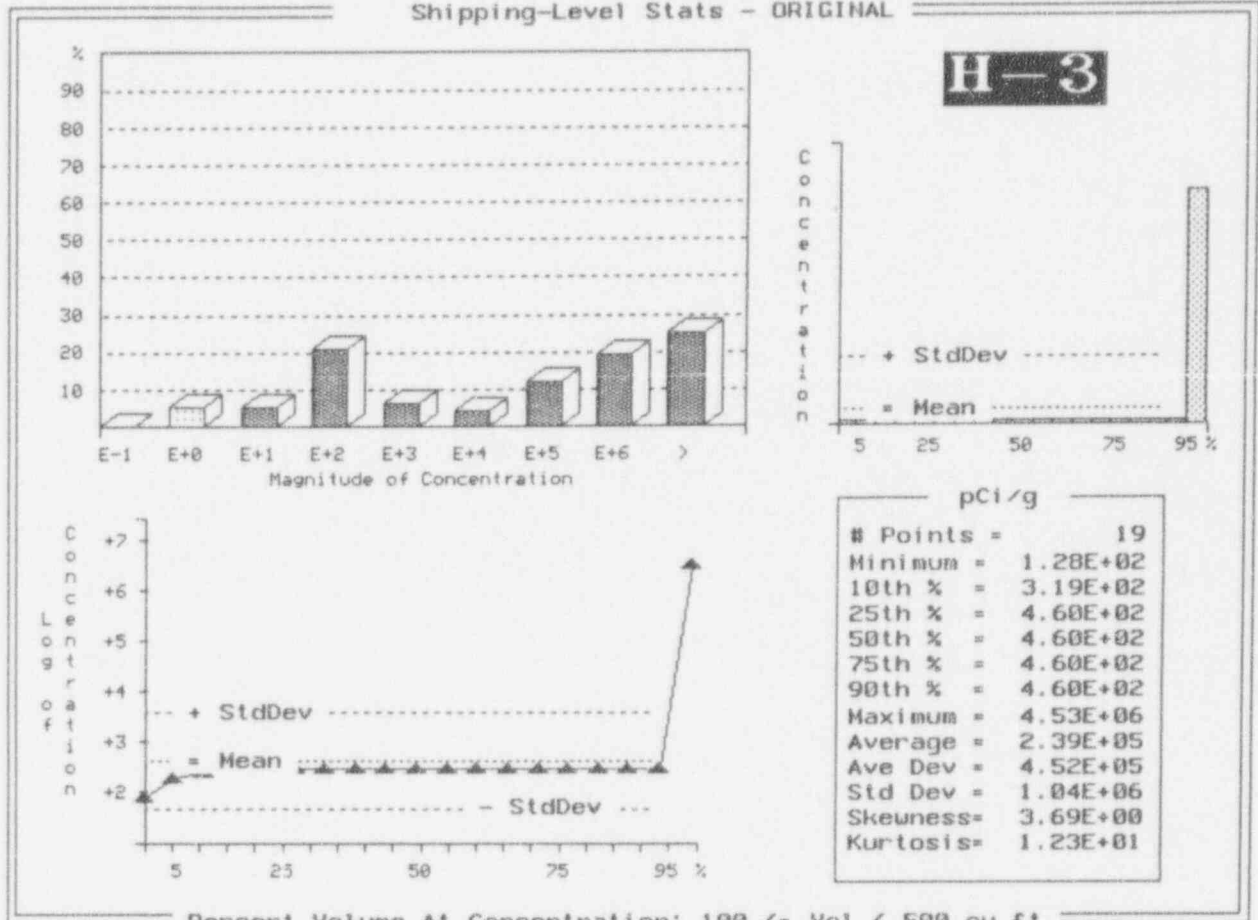


Exhibit F-21 (Continued)

Shipping-Level Stats - ORIGINAL



Percent Volume At Concentration: 100 <= Vol < 500 cu ft

Exhibit F-21 (Continued)

Shipping-Level Stats - ORIGINAL

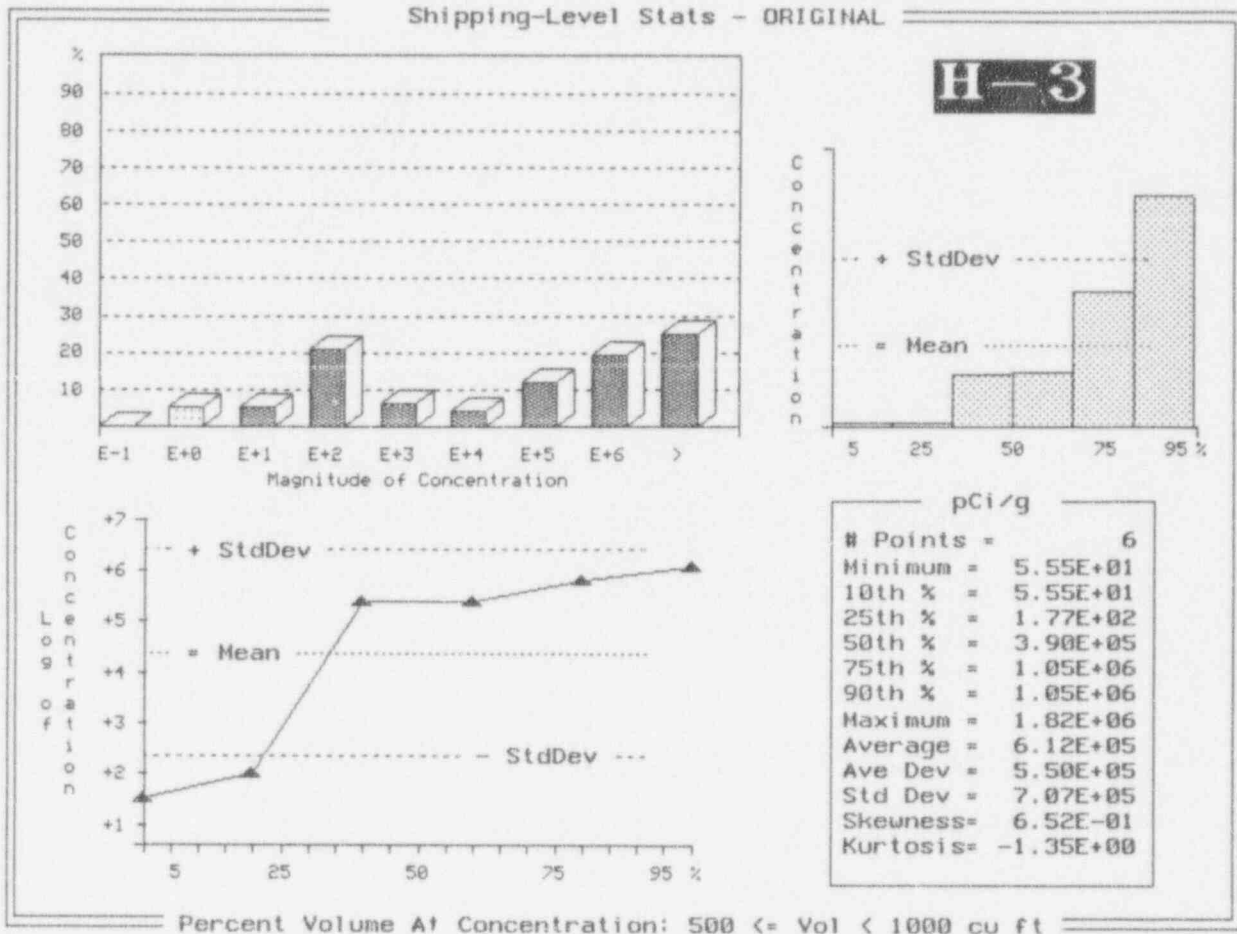


Exhibit F-21 (Continued)

Shipping-Level Stats - ORIGINAL

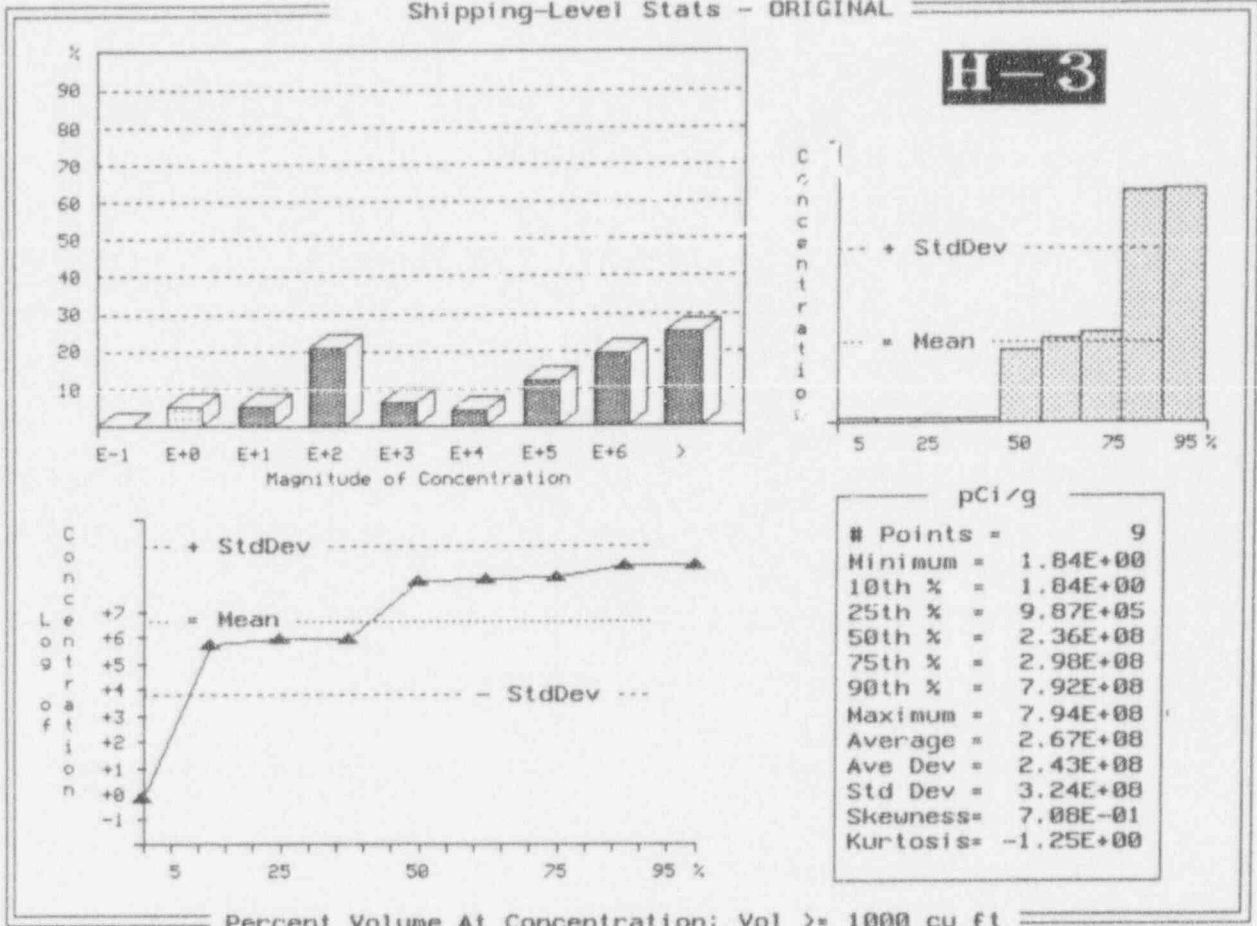


Exhibit F-21 (Continued)

Shipping-Level Stats - ORIGINAL

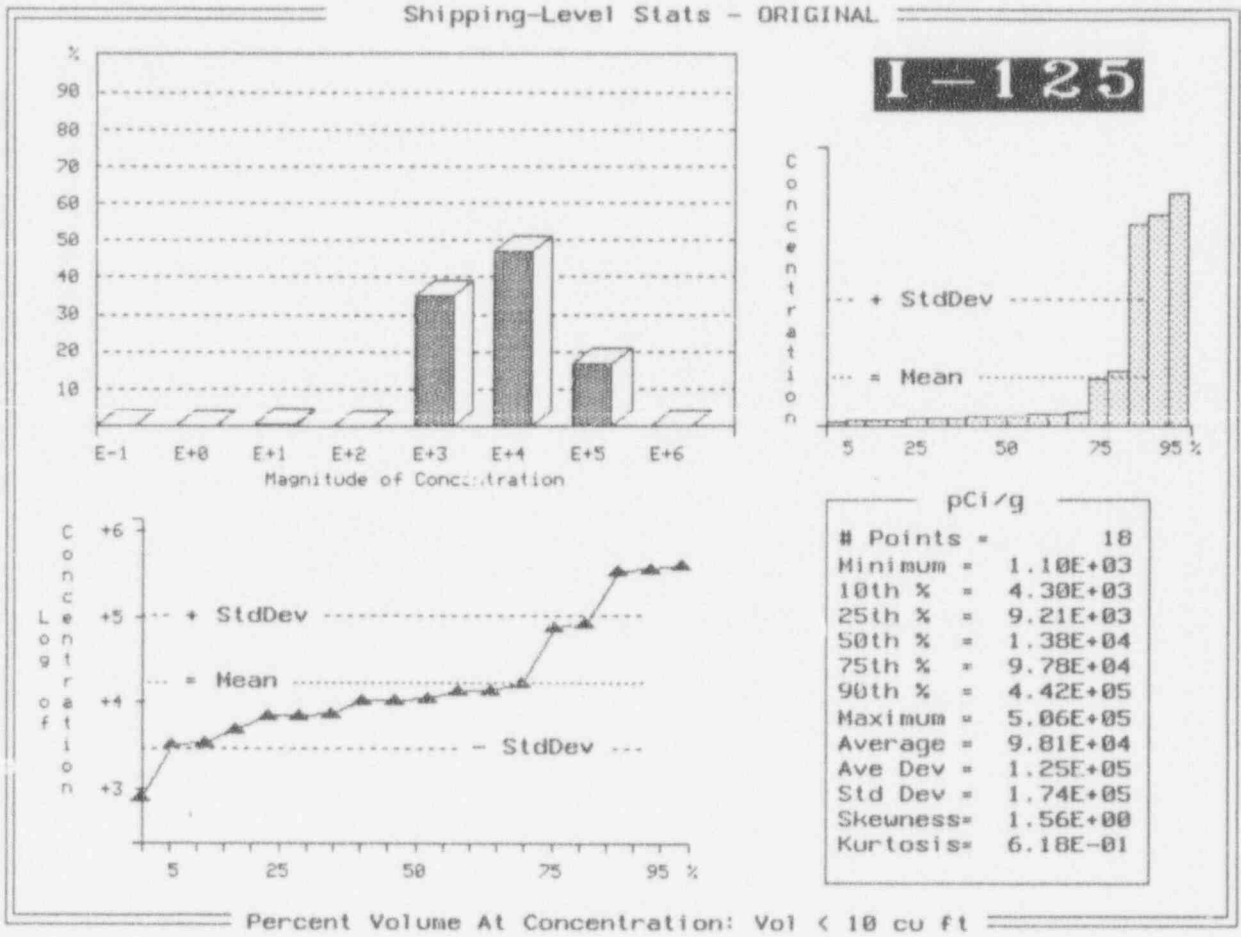


Exhibit F-21 (Continued)

Shipping-Level Stats - ORIGINAL

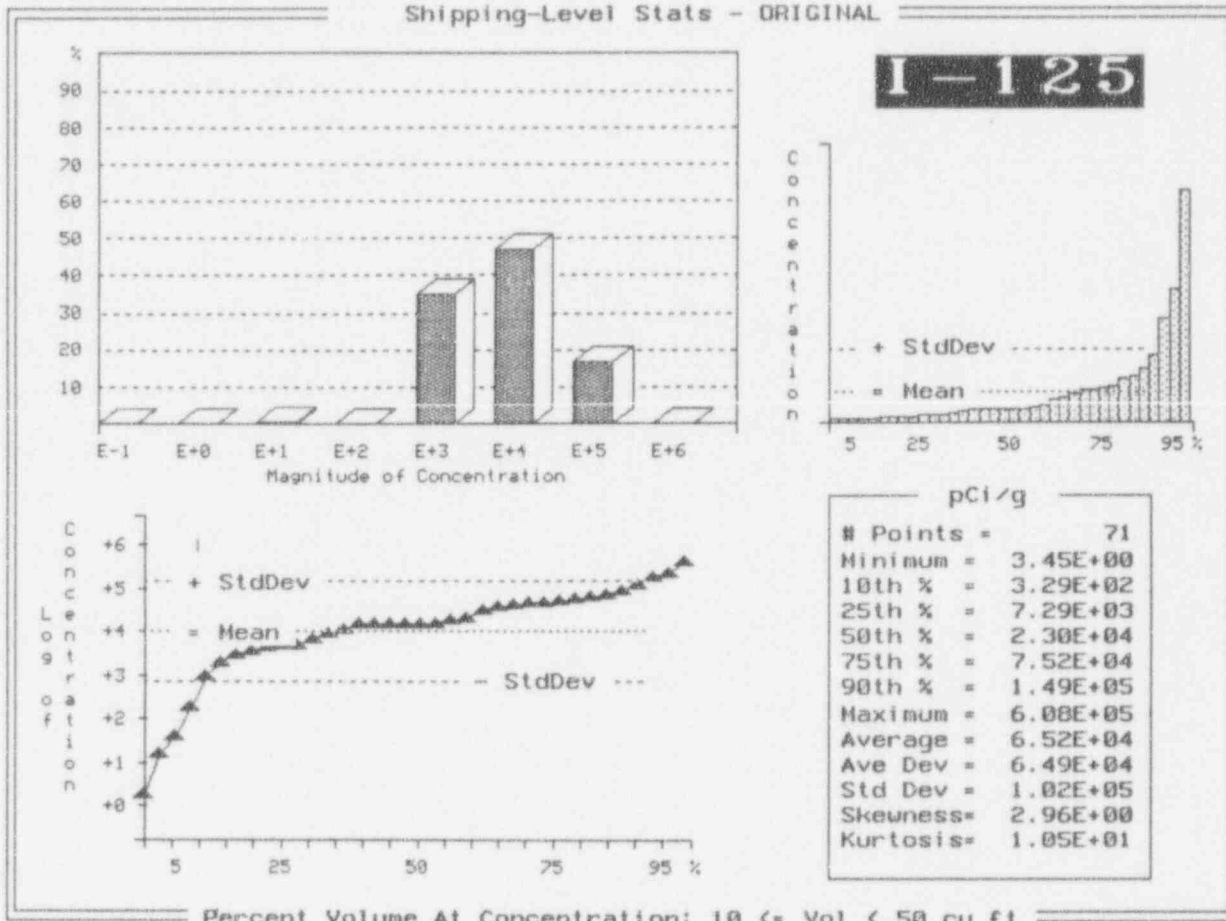


Exhibit F-22
Data Summary - Analyses at the Shipment Level
 (Aggregate Practices for non-brokered waste: 1986 to 1990)

	<u>Data or Parameters</u>
Compact or unaffiliated state:	Southeast
Waste generator class:	Academic
Total number of waste generators:	75
Total associated waste volume (m ³):	1,212
Total associated waste activity (Ci):	1,246
Waste class:	A-Unstable and A-Stable
Identified waste generators for this analysis:	
Number:	31
Percent of total(%):	41
Total number of shipping records:	140
Number of shipping records <u>with</u> container data:	0
Number of waste containers:	0
Weight of shipments (kg):	515,600
Total waste volume (m ³):	908
Fractional waste volume (%): (this analysis/total)	75
Total waste activity (Ci):	53
Fractional waste activity (%): (this analysis/total)	4

Exhibit F-22 (Continued)

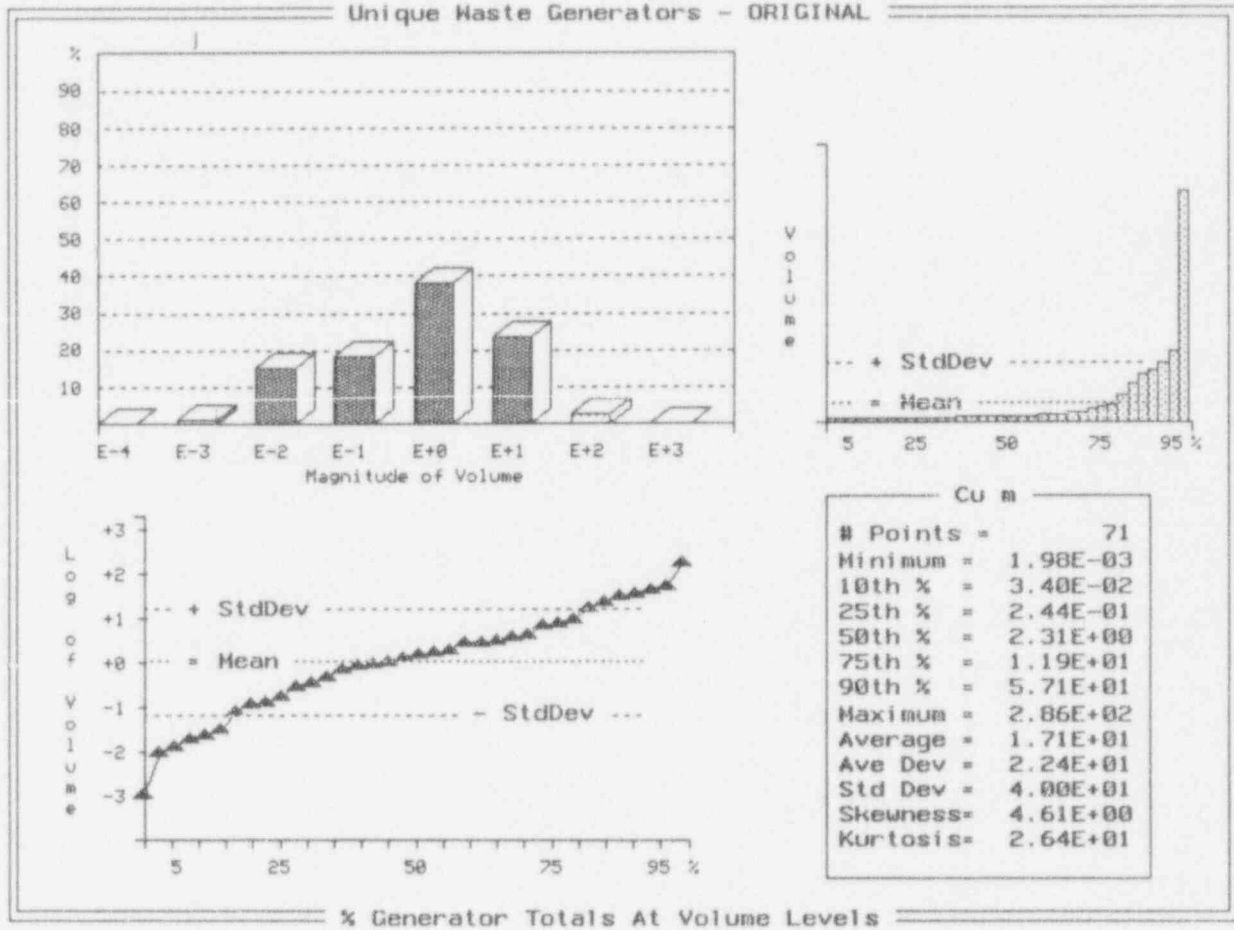


Exhibit F-22 (Continued)

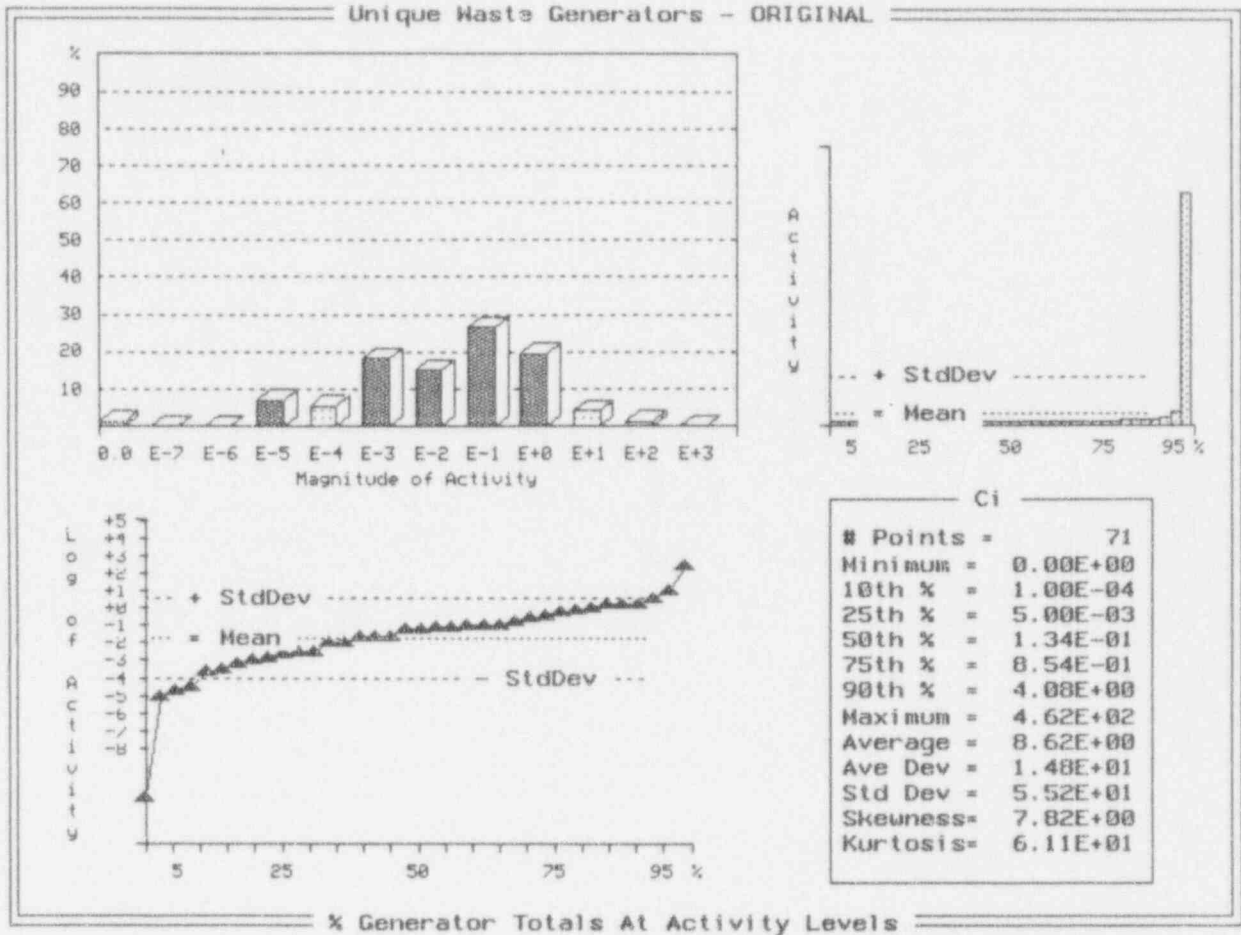


Exhibit F-22 (Continued)

Shipping-Level Stats - ORIGINAL

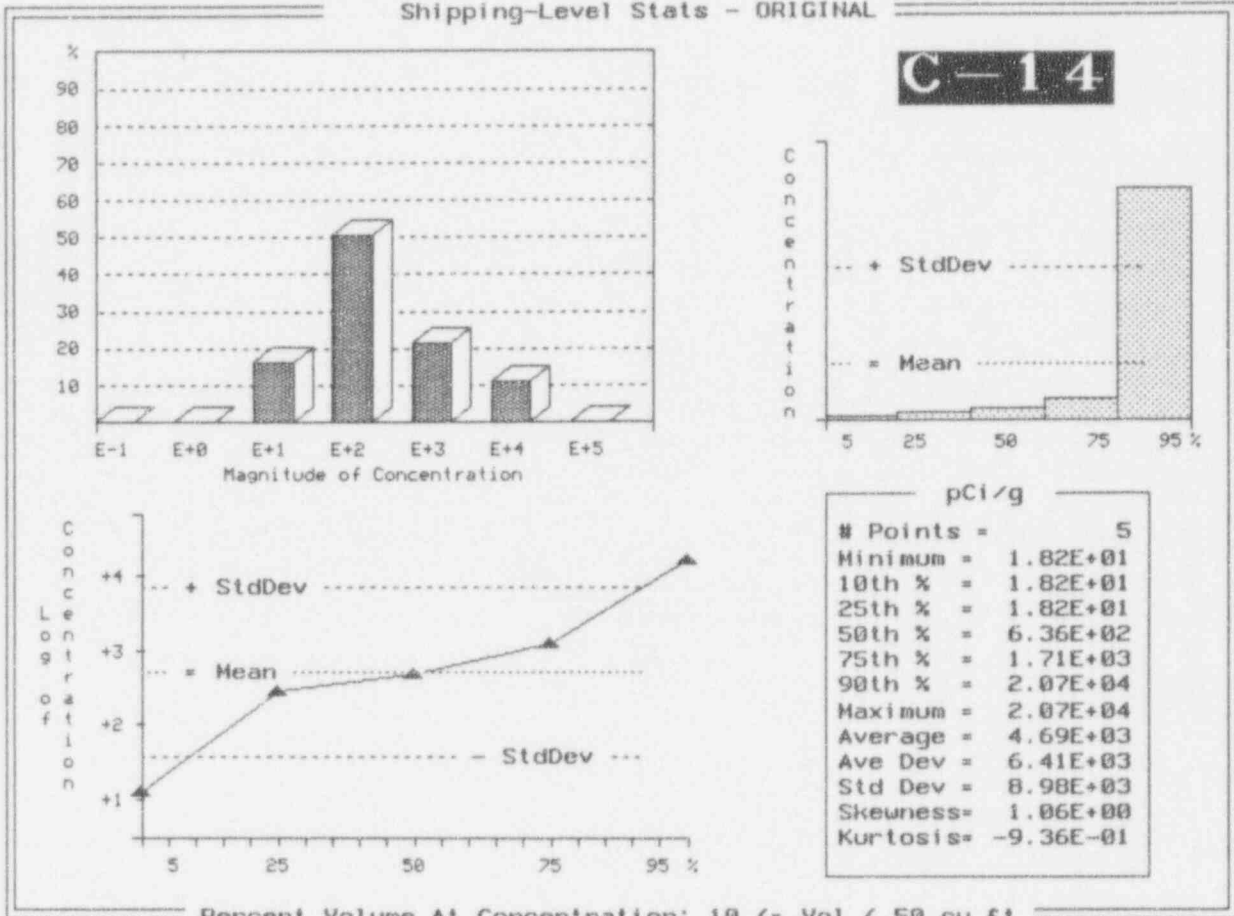
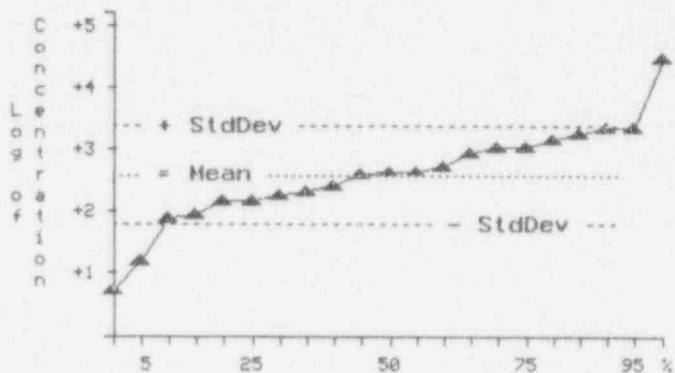
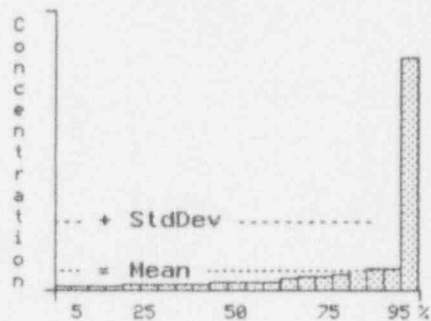
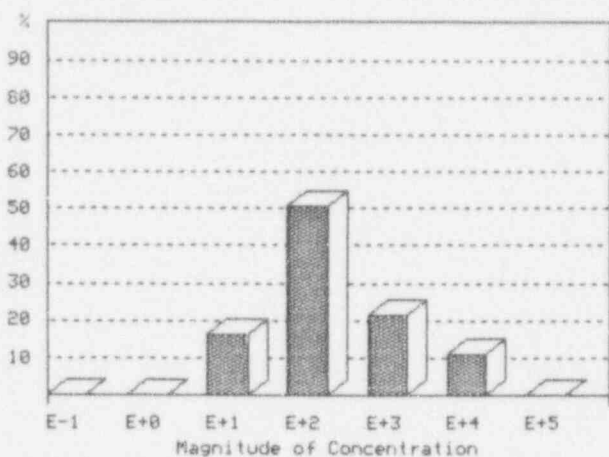


Exhibit F-22 (Continued)

Shipping-Level Stats - ORIGINAL

C-14



pCi/g	
# Points =	21
Minimum =	8.29E+00
10th % =	2.37E+01
25th % =	2.12E+02
50th % =	6.24E+02
75th % =	1.60E+03
90th % =	3.20E+03
Maximum =	4.14E+04
Average =	2.93E+03
Ave Dev =	3.73E+03
Std Dev =	8.89E+03
Skewness =	3.86E+00
Kurtosis =	1.38E+01

Percent Volume At Concentration: 50 <= Vol < 100 cu ft

Exhibit F-22 (Continued)

Shipping-Level Stats - ORIGINAL

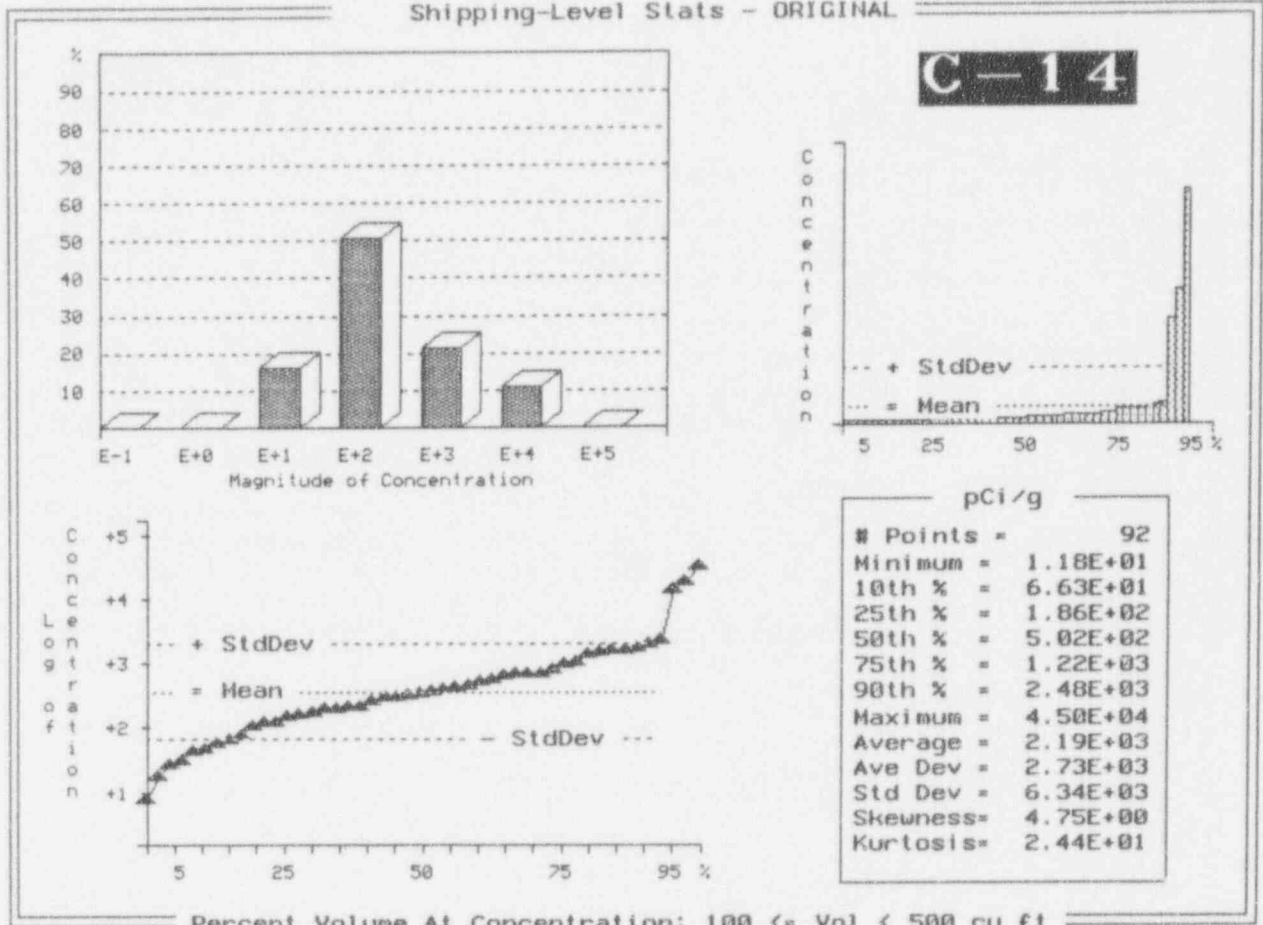


Exhibit F-22 (Continued)

Shipping-Level Stats - ORIGINAL

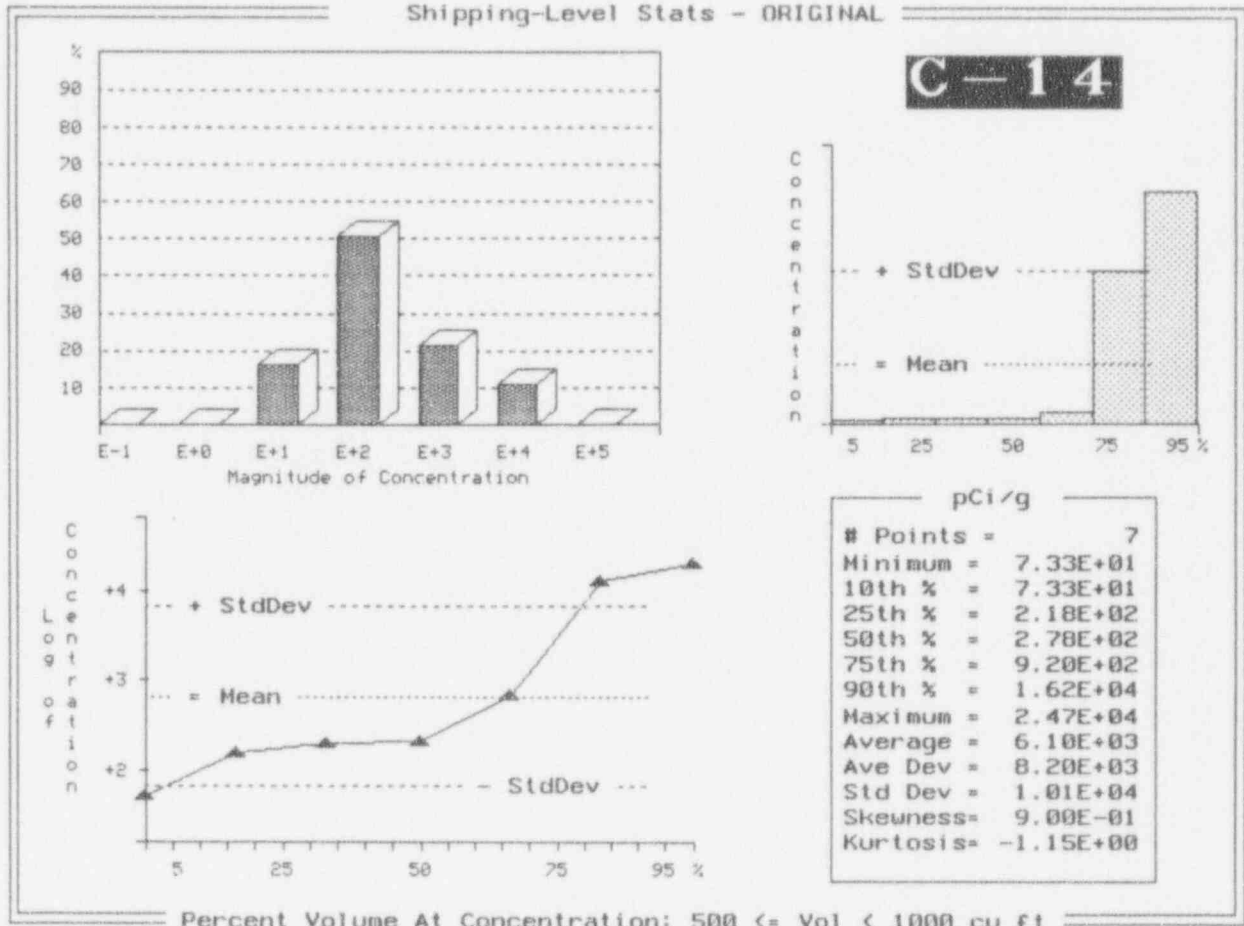


Exhibit F-22 (Continued)

Shipping-Level Stats - ORIGINAL

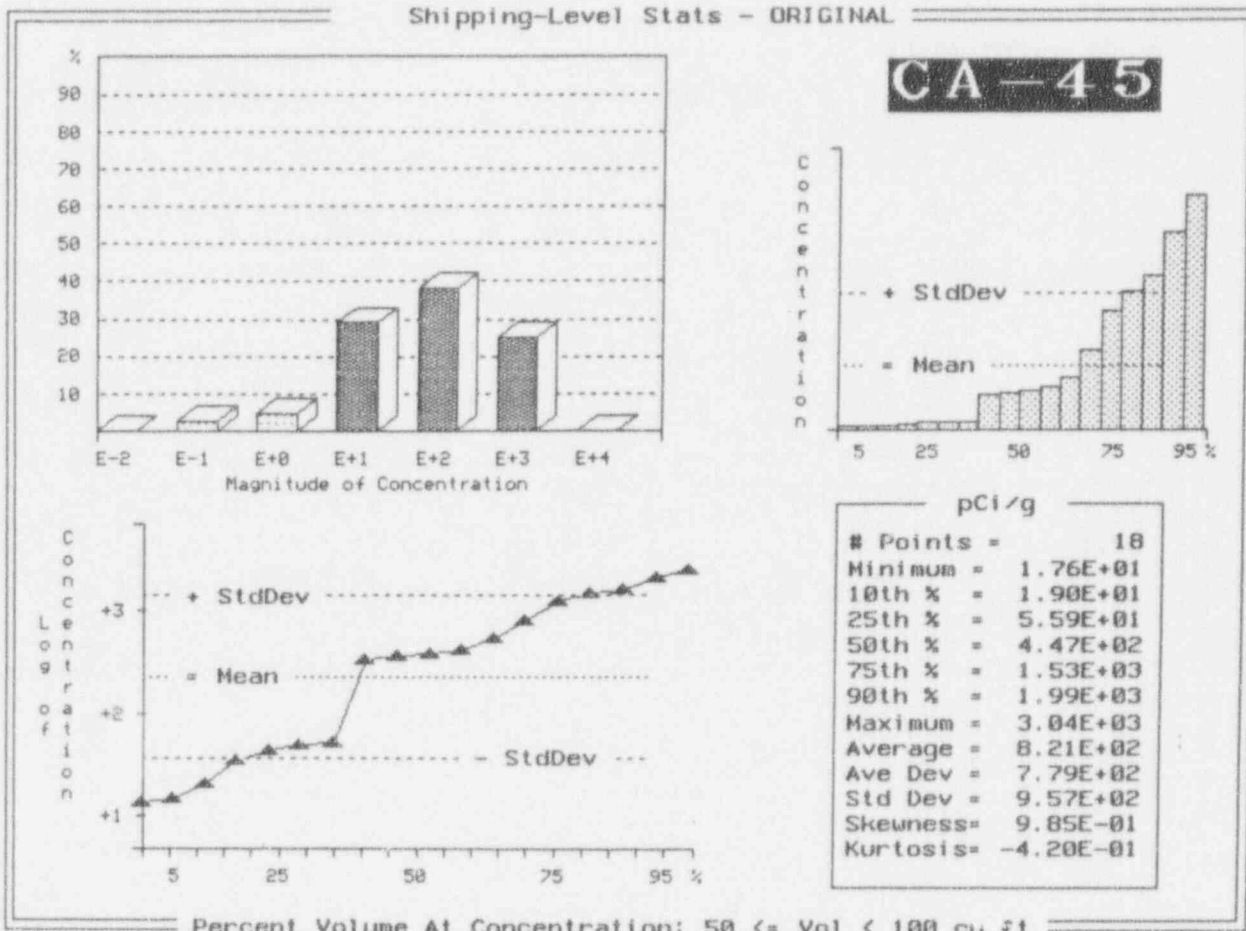
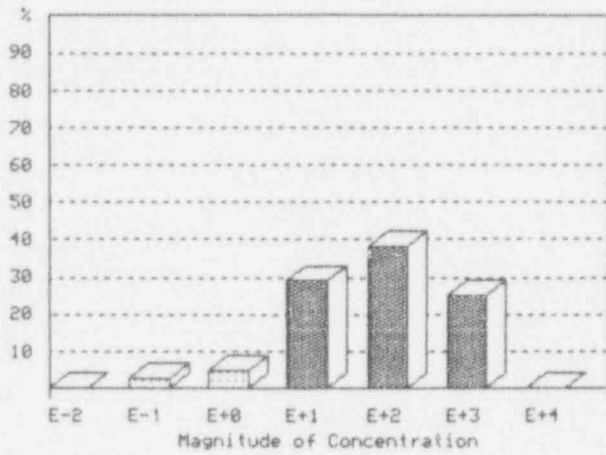
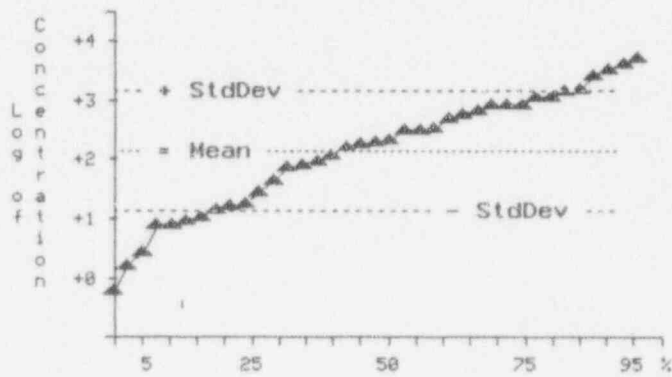
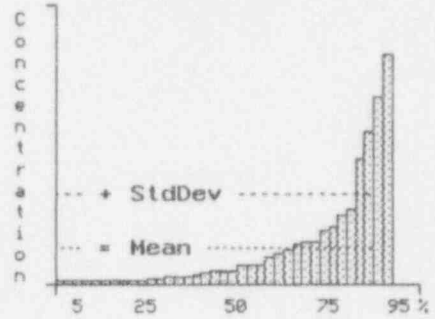


Exhibit F-22 (Continued)

Shipping-Level Stats - ORIGINAL



CA-45



pci/g	
# Points =	37
Minimum =	9.87E-01
10th % =	1.24E+01
25th % =	2.67E+01
50th % =	3.14E+02
75th % =	1.27E+03
90th % =	2.30E+03
Maximum =	7.27E+03
Average =	1.06E+03
Ave Dev =	1.17E+03
Std Dev =	1.72E+03
Skewness =	2.16E+00
Kurtosis =	4.05E+00

Percent Volume At Concentration: 100 <= Vol < 500 cu ft

Exhibit F-22 (Continued)

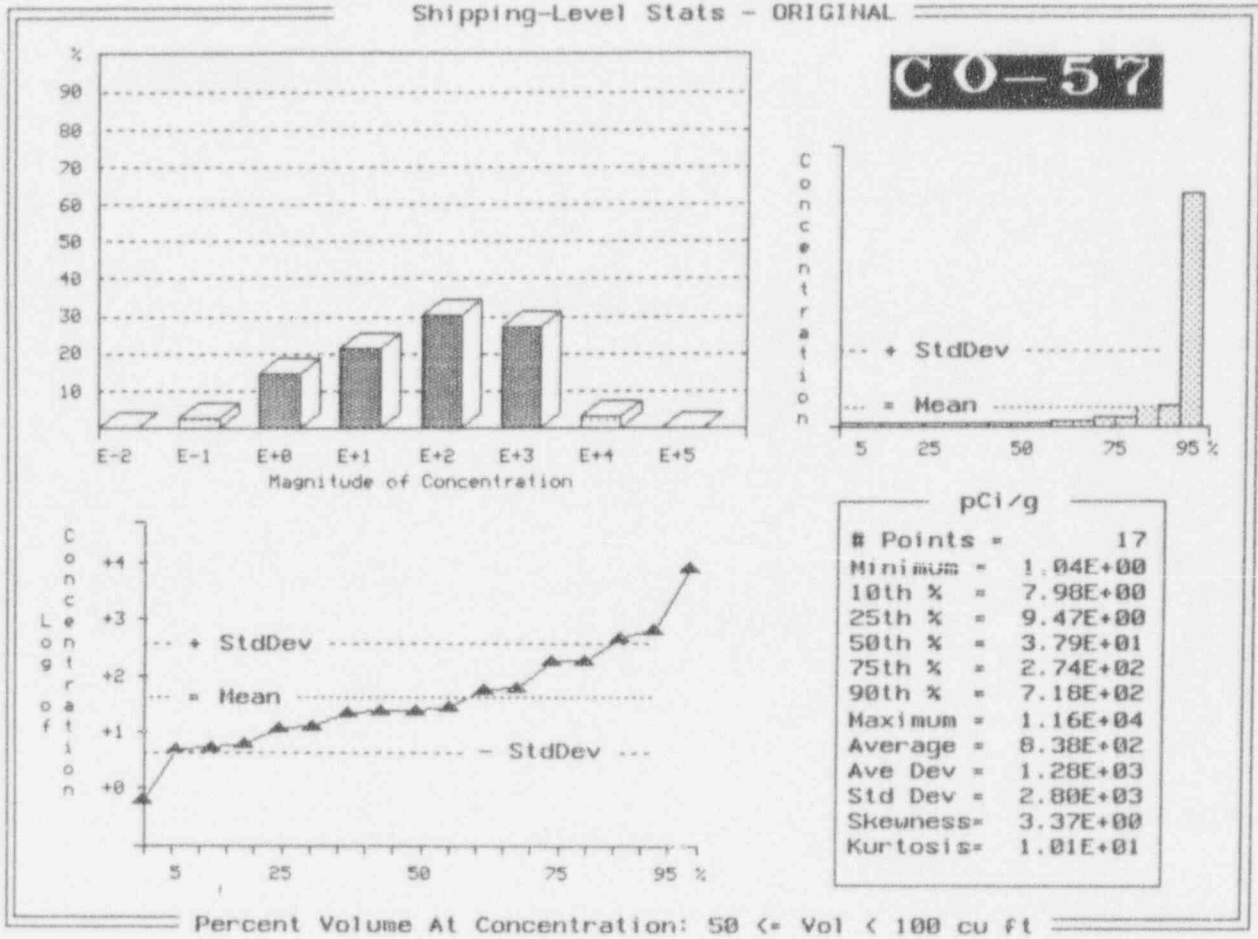


Exhibit F-22 (Continued)

Shipping-Level Stats - ORIGINAL

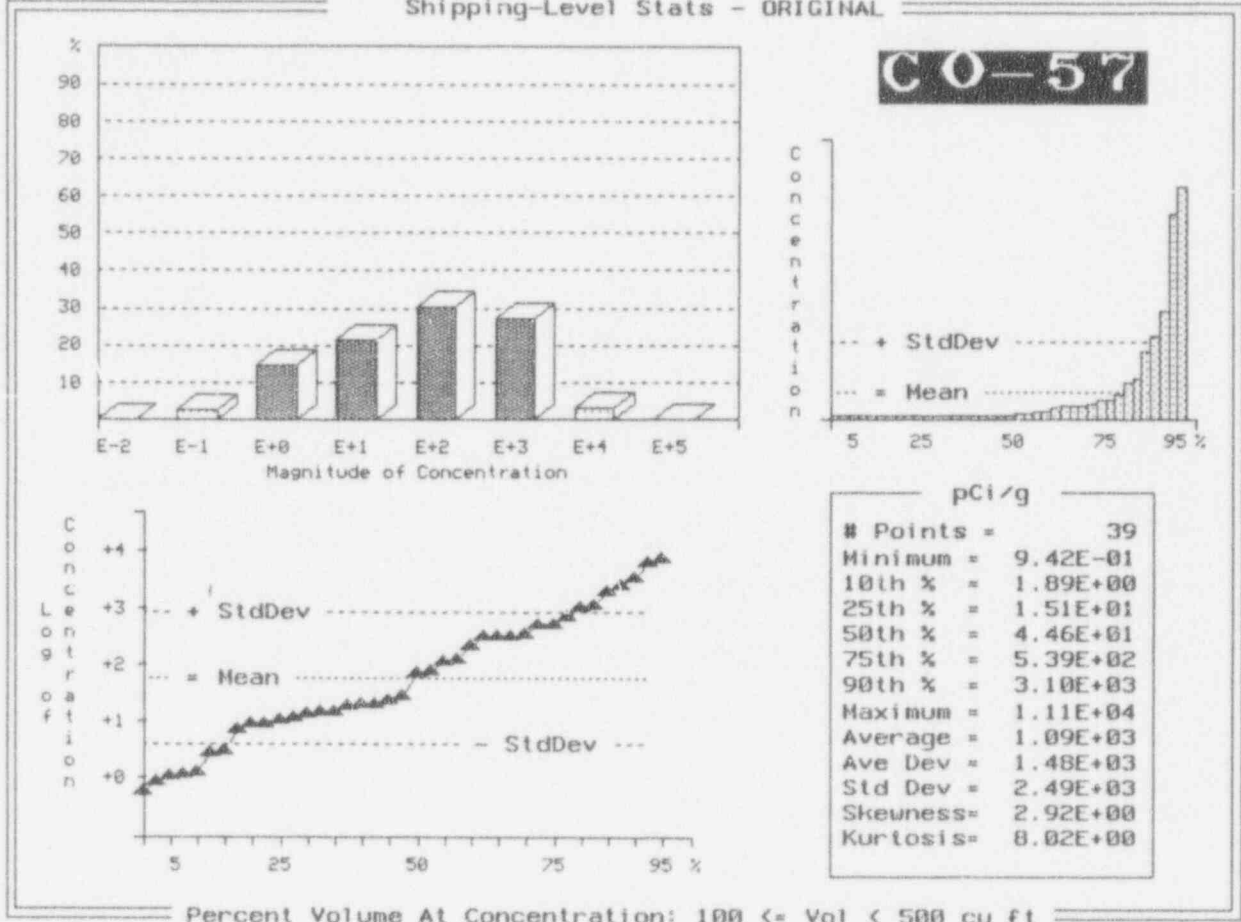


Exhibit F-22 (Continued)

Shipping-Level Stats - ORIGINAL

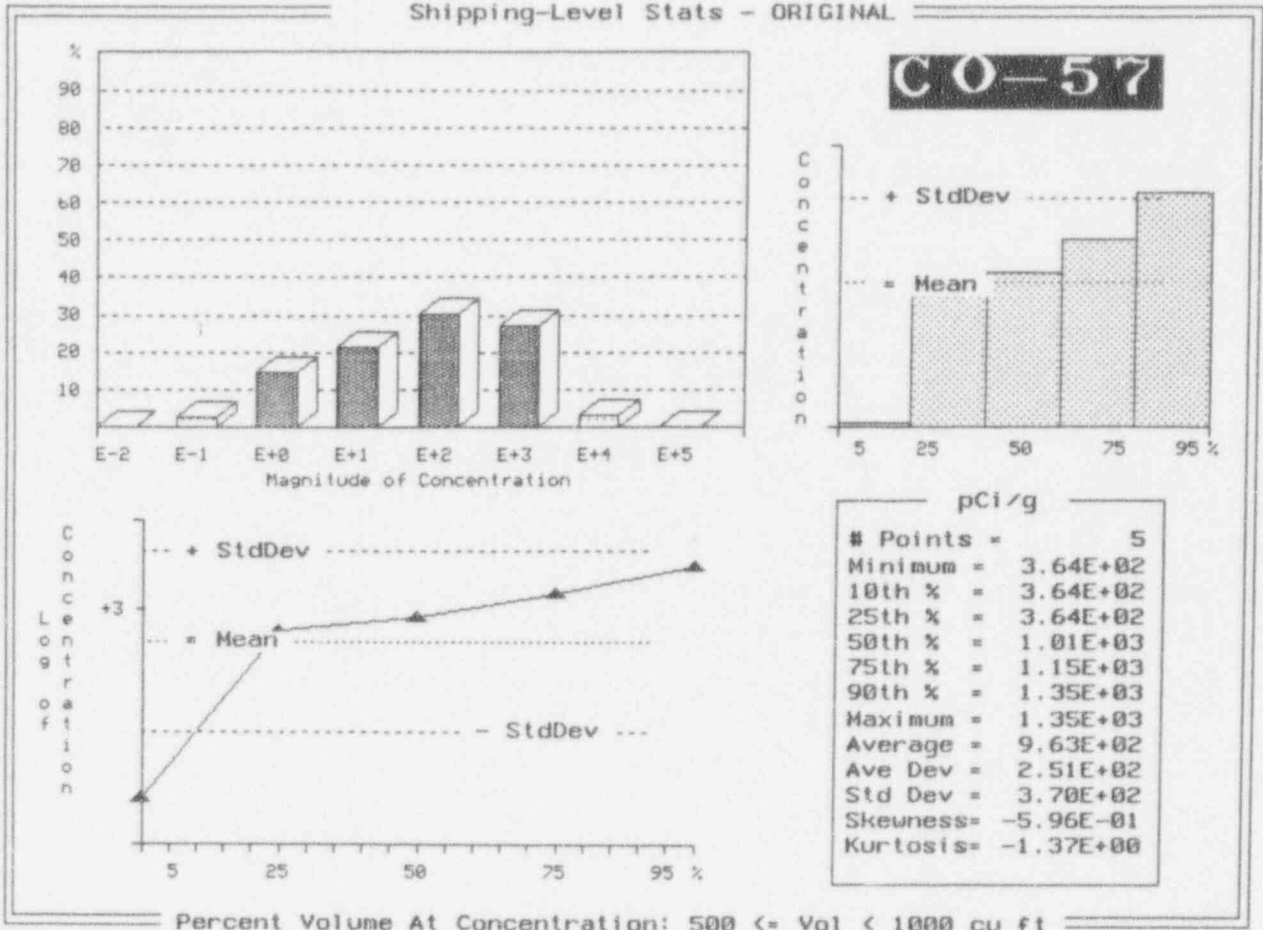
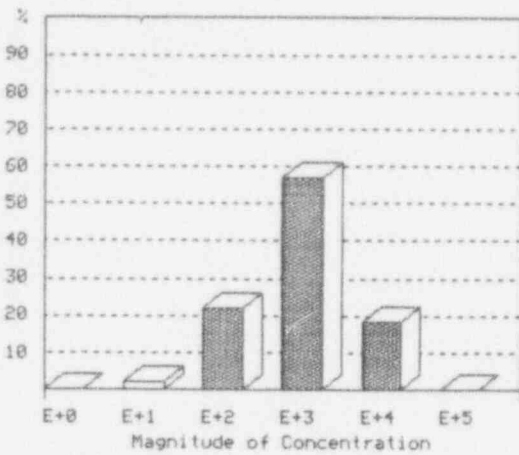
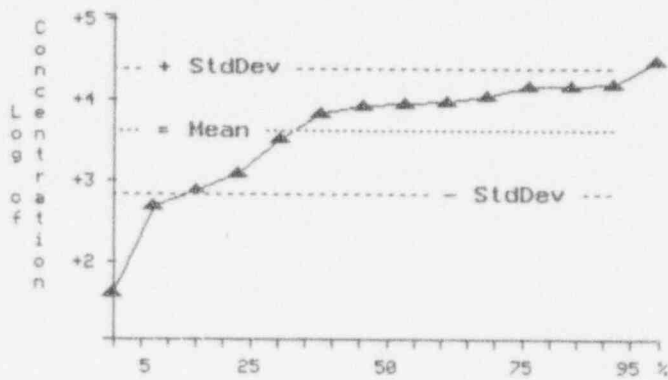
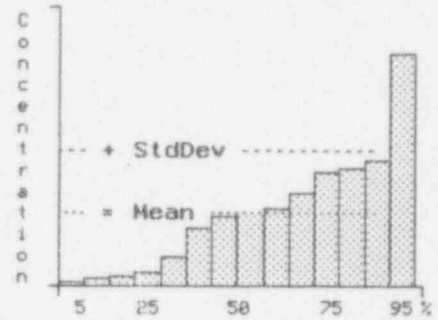


Exhibit F-22 (Continued)

Shipping-Level Stats - ORIGINAL



CR-51



pCi/g	
# Points =	14
Minimum =	5.92E+01
10th % =	5.92E+01
25th % =	1.67E+03
50th % =	1.13E+04
75th % =	1.90E+04
90th % =	2.07E+04
Maximum =	3.89E+04
Average =	1.19E+04
Ave Dev =	7.83E+03
Std Dev =	1.07E+04
Skewness =	9.05E-01
Kurtosis =	3.39E-01

Percent Volume At Concentration: 50 <= Vol < 100 cu ft

Exhibit F-22 (Continued)

Shipping-Level Stats - ORIGINAL

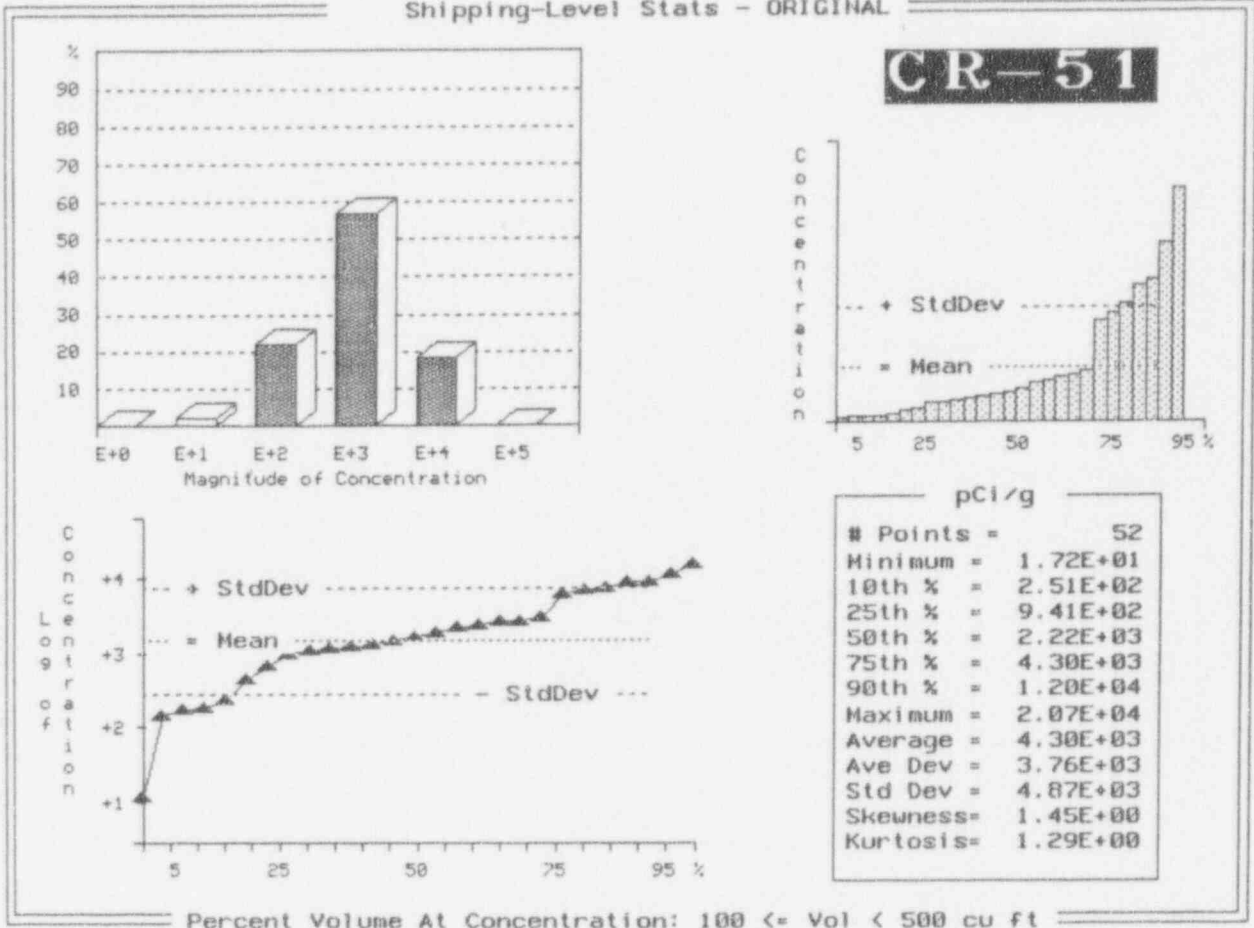
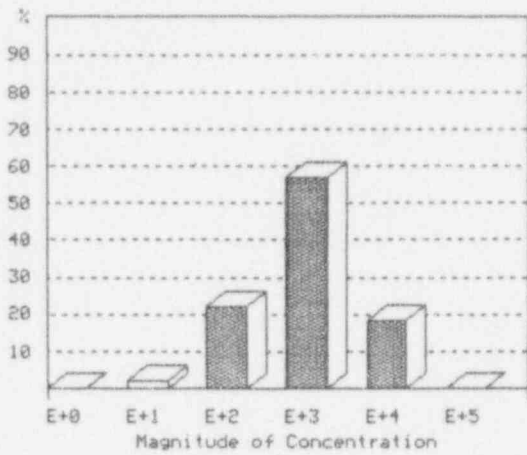
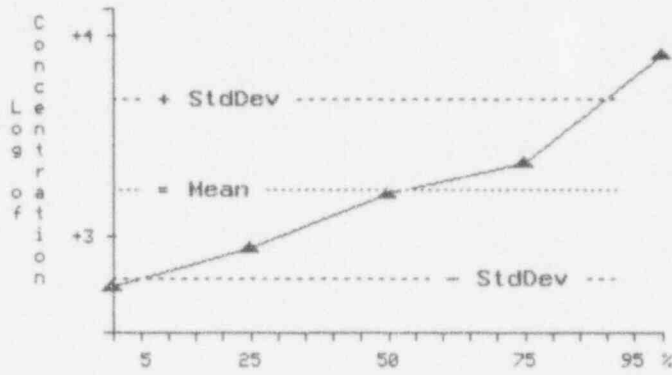
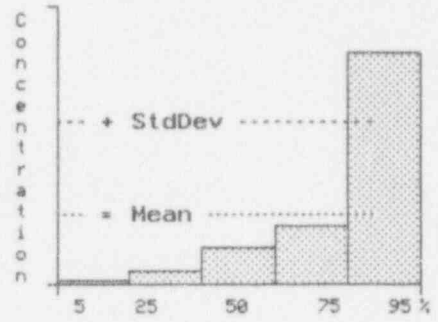


Exhibit F-22 (Continued)

Shipping-Level Stats - ORIGINAL



CR-51



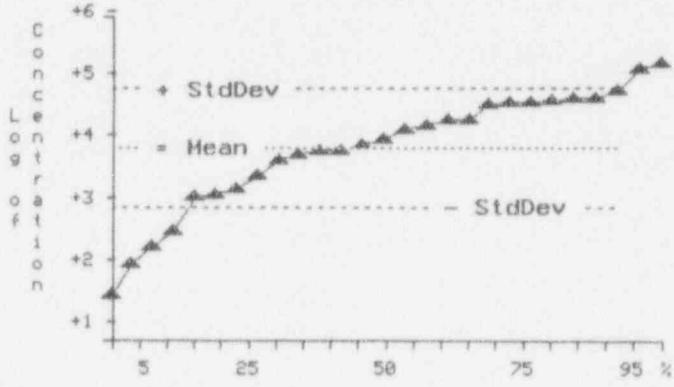
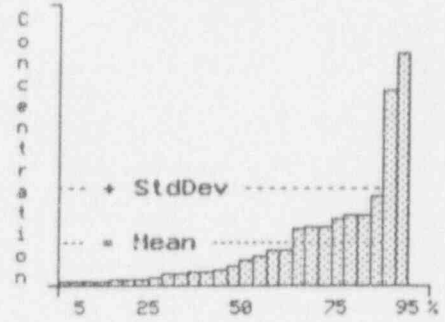
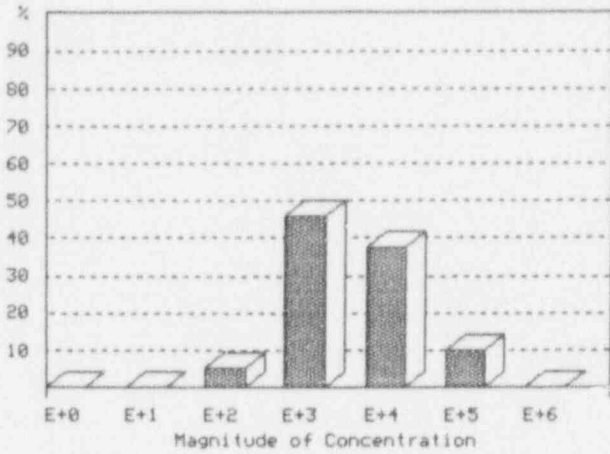
pCi/g	
# Points =	5
Minimum =	6.53E+02
10th % =	6.53E+02
25th % =	6.53E+02
50th % =	1.88E+03
75th % =	2.67E+03
90th % =	9.10E+03
Maximum =	9.10E+03
Average =	3.06E+03
Ave Dev =	2.42E+03
Std Dev =	3.47E+03
Skewness =	9.41E-01
Kurtosis =	-1.08E+00

Percent Volume At Concentration: 500 <= Vol < 1000 cu ft

Exhibit F-22 (Continued)

Shipping-Level Stats - ORIGINAL

H-3



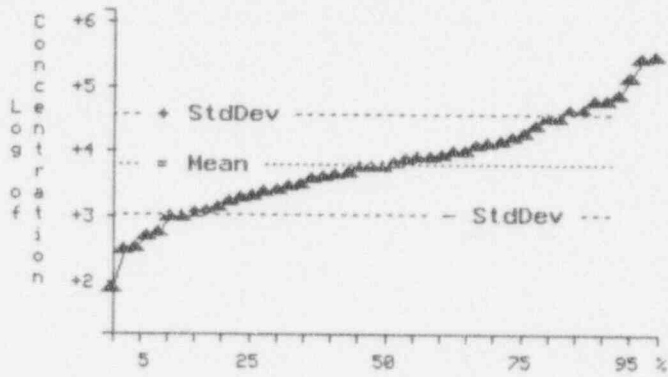
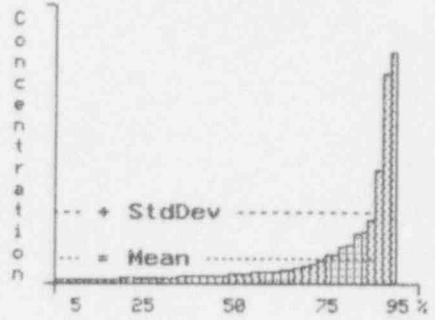
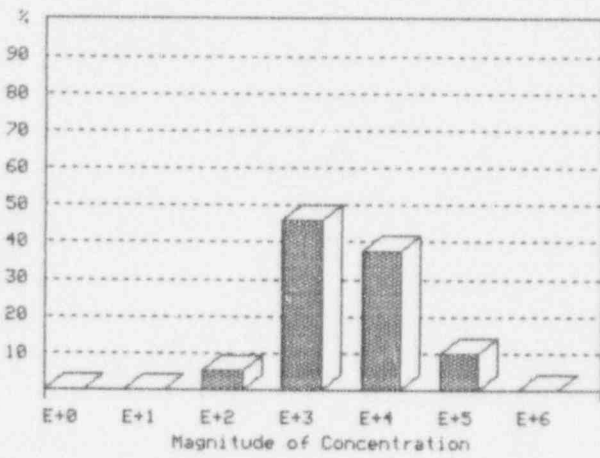
pCi/g	
# Points =	27
Minimum =	4.14E+01
10th % =	2.37E+02
25th % =	2.03E+03
50th % =	1.25E+04
75th % =	4.63E+04
90th % =	5.80E+04
Maximum =	1.99E+05
Average =	3.34E+04
Ave Dev =	3.31E+04
Std Dev =	4.84E+04
Skewness =	2.14E+00
Kurtosis =	4.16E+00

Percent Volume At Concentration: 50 <= Vol < 100 cu ft

Exhibit F-22 (Continued)

Shipping-Level Stats - ORIGINAL

H-3



pCi/g	
# Points =	93
Minimum =	1.19E+02
10th % =	8.64E+02
25th % =	3.05E+03
50th % =	8.98E+03
75th % =	2.85E+04
90th % =	9.09E+04
Maximum =	4.42E+05
Average =	3.91E+04
Ave Dev =	4.72E+04
Std Dev =	8.57E+04
Skewness =	3.57E+00
Kurtosis =	1.26E+01

Percent Volume At Concentration: 100 <= Vol < 500 cu ft

Exhibit F-22 (Continued)

Shipping-Level Stats - ORIGINAL

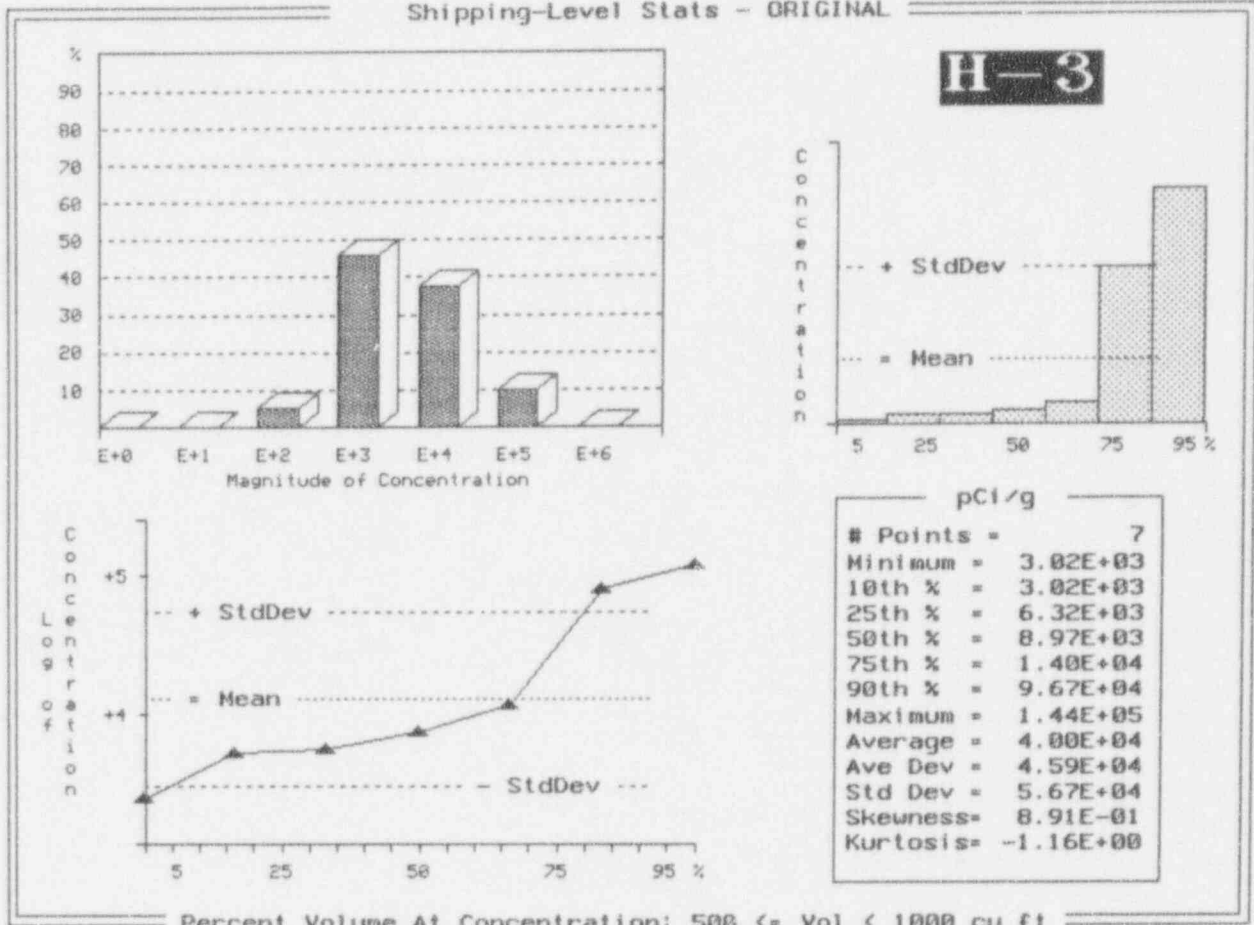


Exhibit F-22 (Continued)

Shipping-Level Stats - ORIGINAL

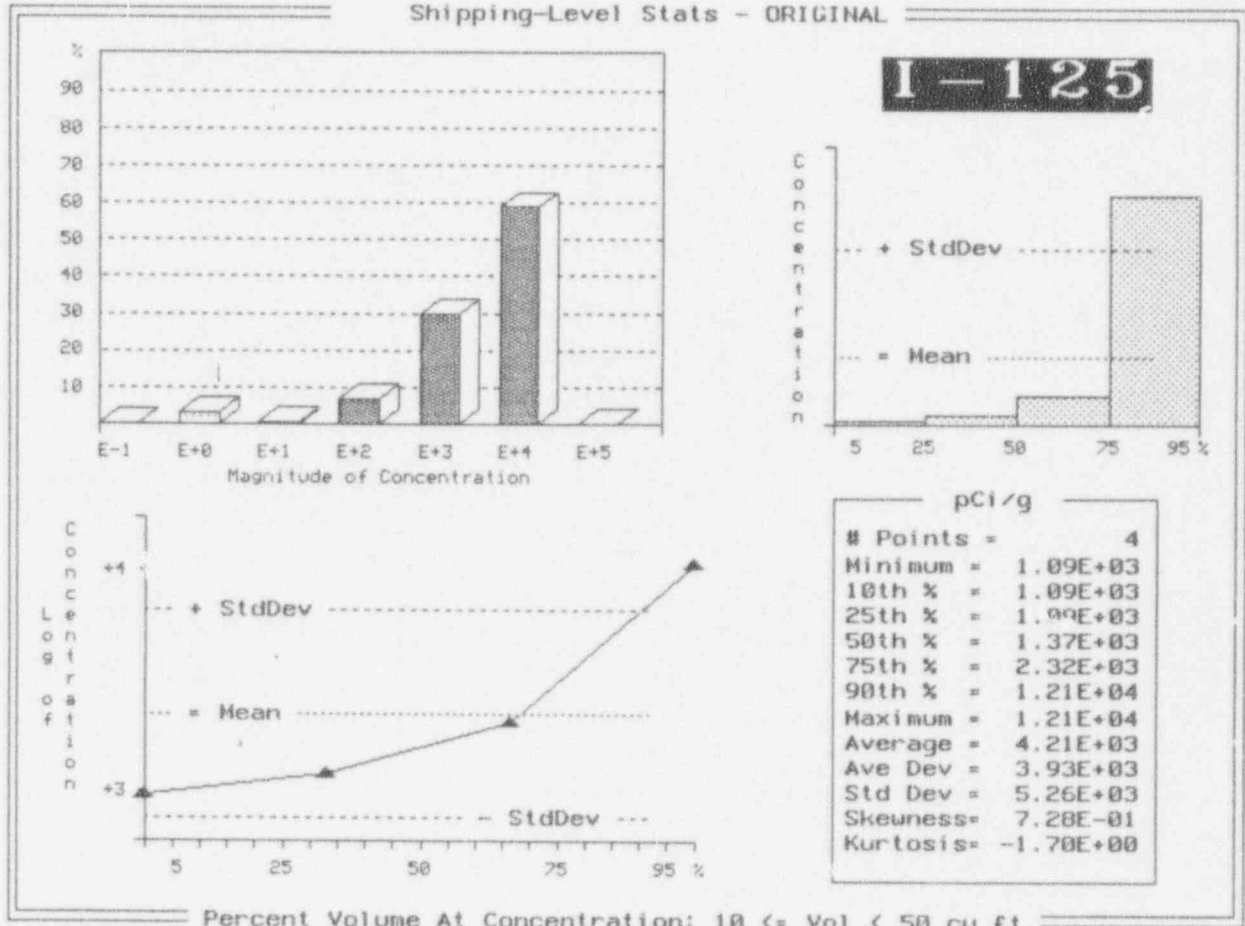


Exhibit F-22 (Continued)

Shipping-Level Stats - ORIGINAL

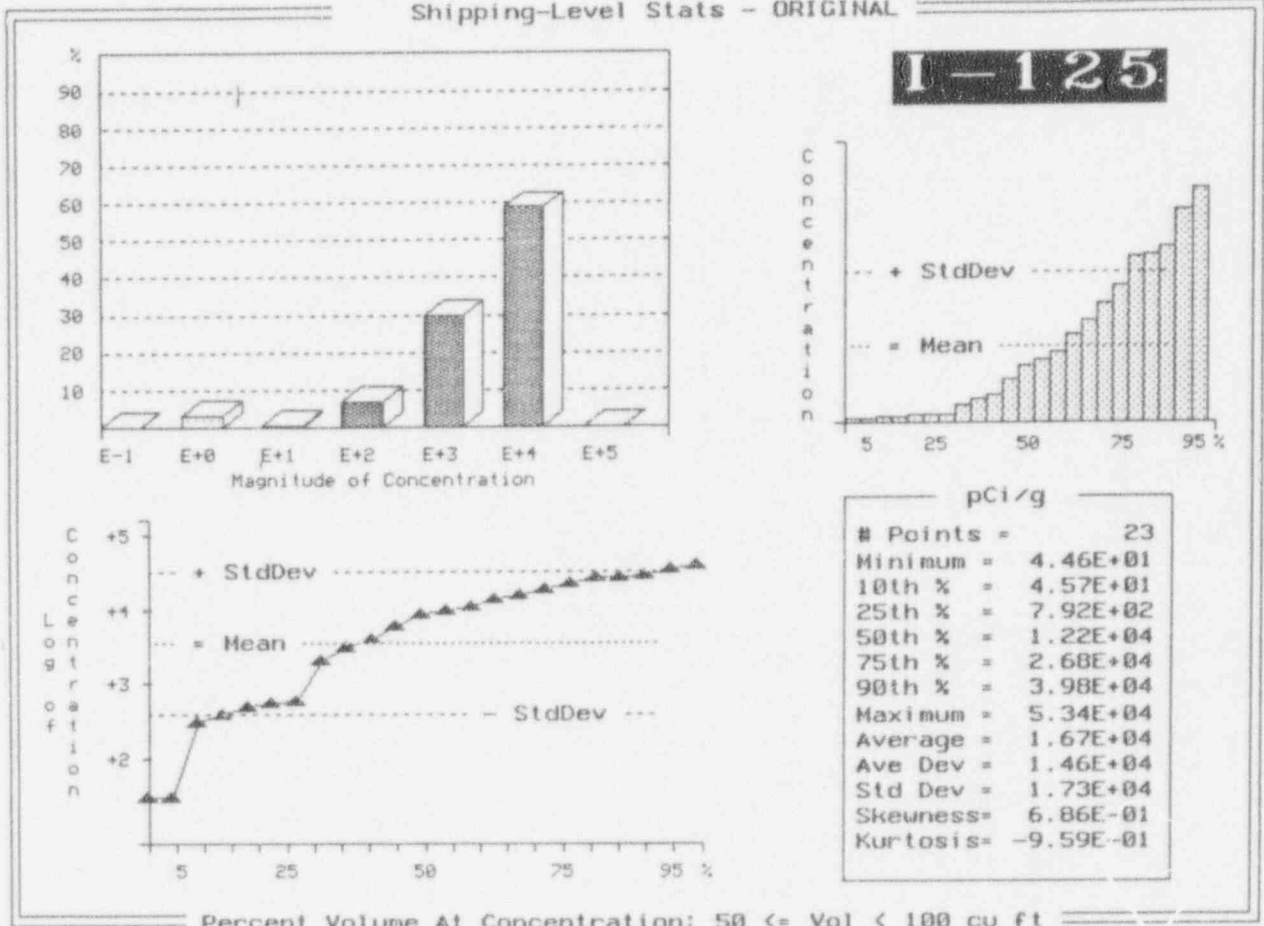


Exhibit F-22 (Continued)

Shipping-Level Stats - ORIGINAL

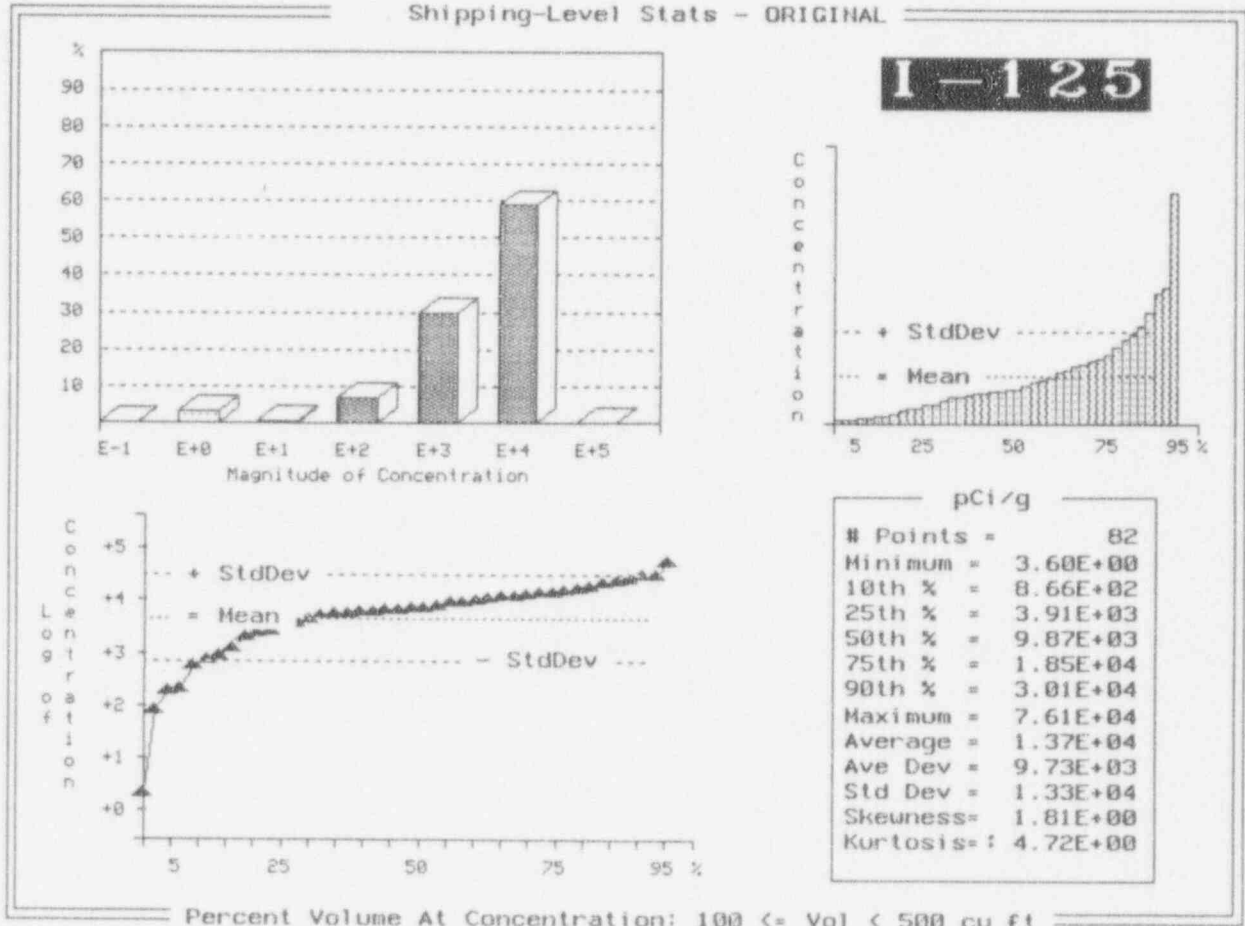


Exhibit F-22 (Continued)

Shipping-Level Stats - ORIGINAL

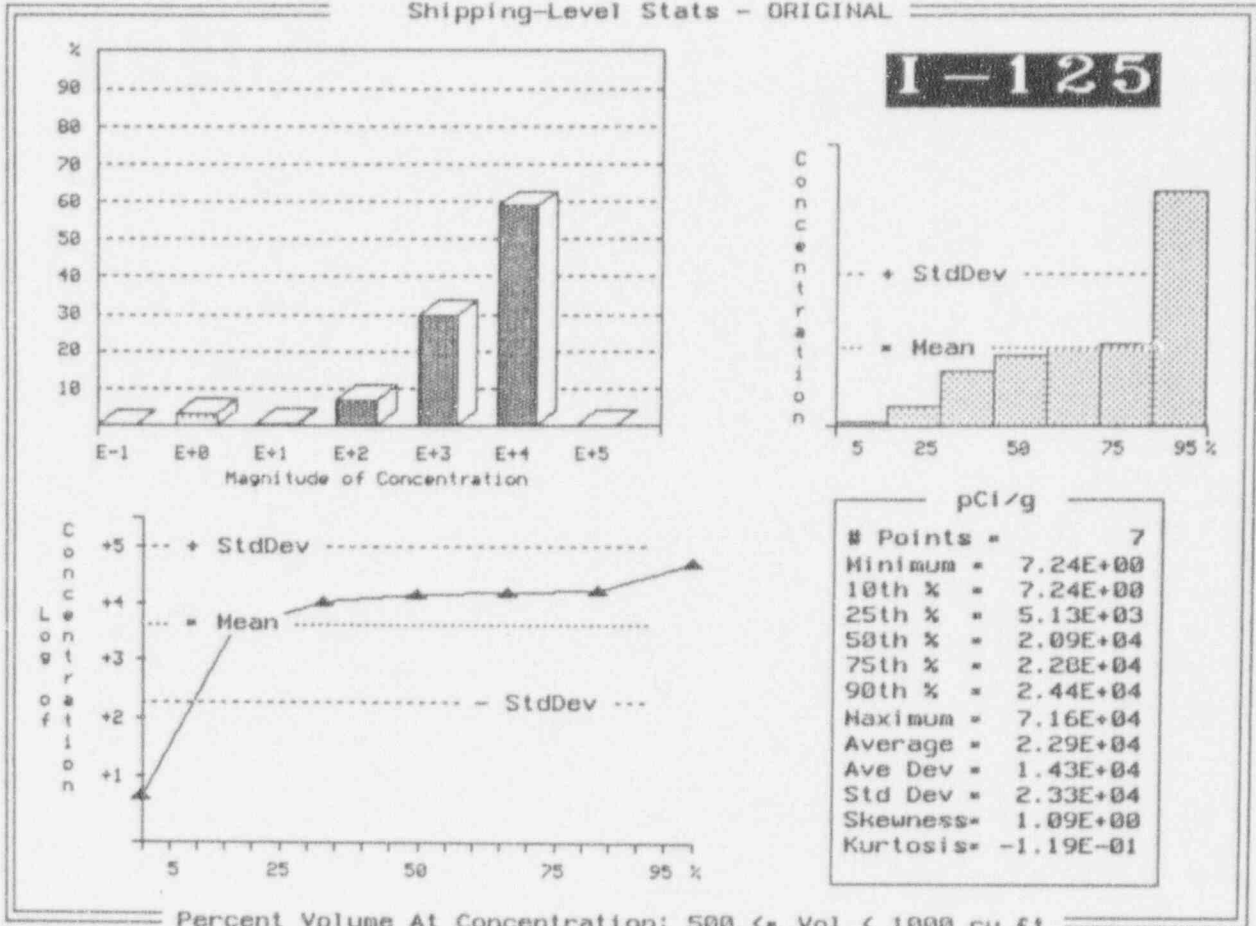
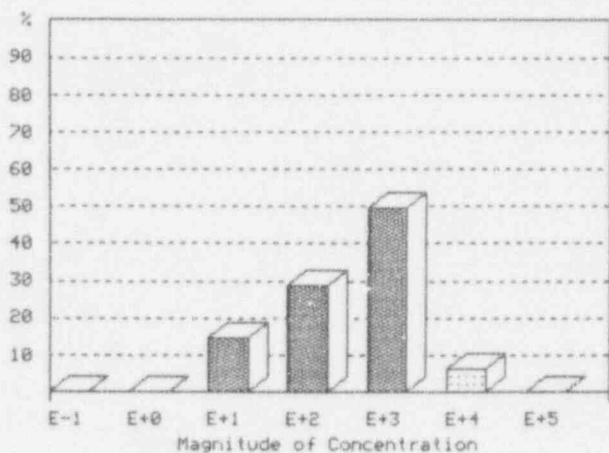
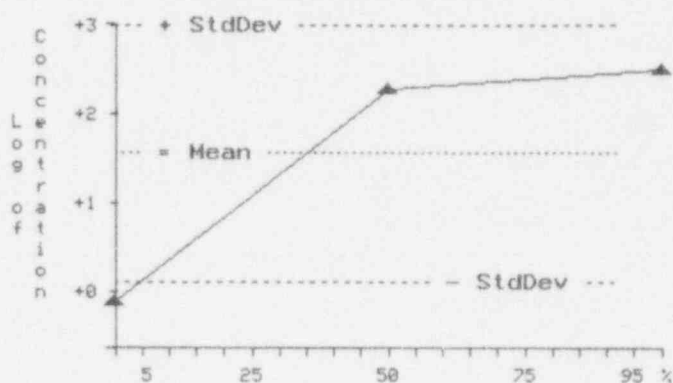
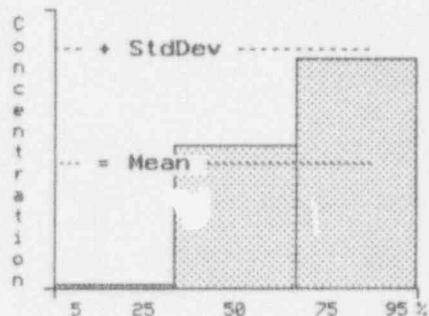


Exhibit F-22 (Continued)

Shipping-Level Stats - ORIGINAL



I-131



pCi/g	
# Points =	3
Minimum =	1.04E+00
10th % =	1.04E+00
25th % =	1.04E+00
50th % =	2.42E+02
75th % =	2.42E+02
90th % =	3.94E+02
Maximum =	3.94E+02
Average =	2.12E+02
Ave Dev =	1.41E+02
Std Dev =	1.98E+02
Skewness =	-1.48E-01
Kurtosis =	-2.33E+00

Percent Volume At Concentration: 50 <= Vol < 100 cu ft

Exhibit F-22 (Continued)

Shipping-Level Stats - ORIGINAL

Rec: 9 of 9

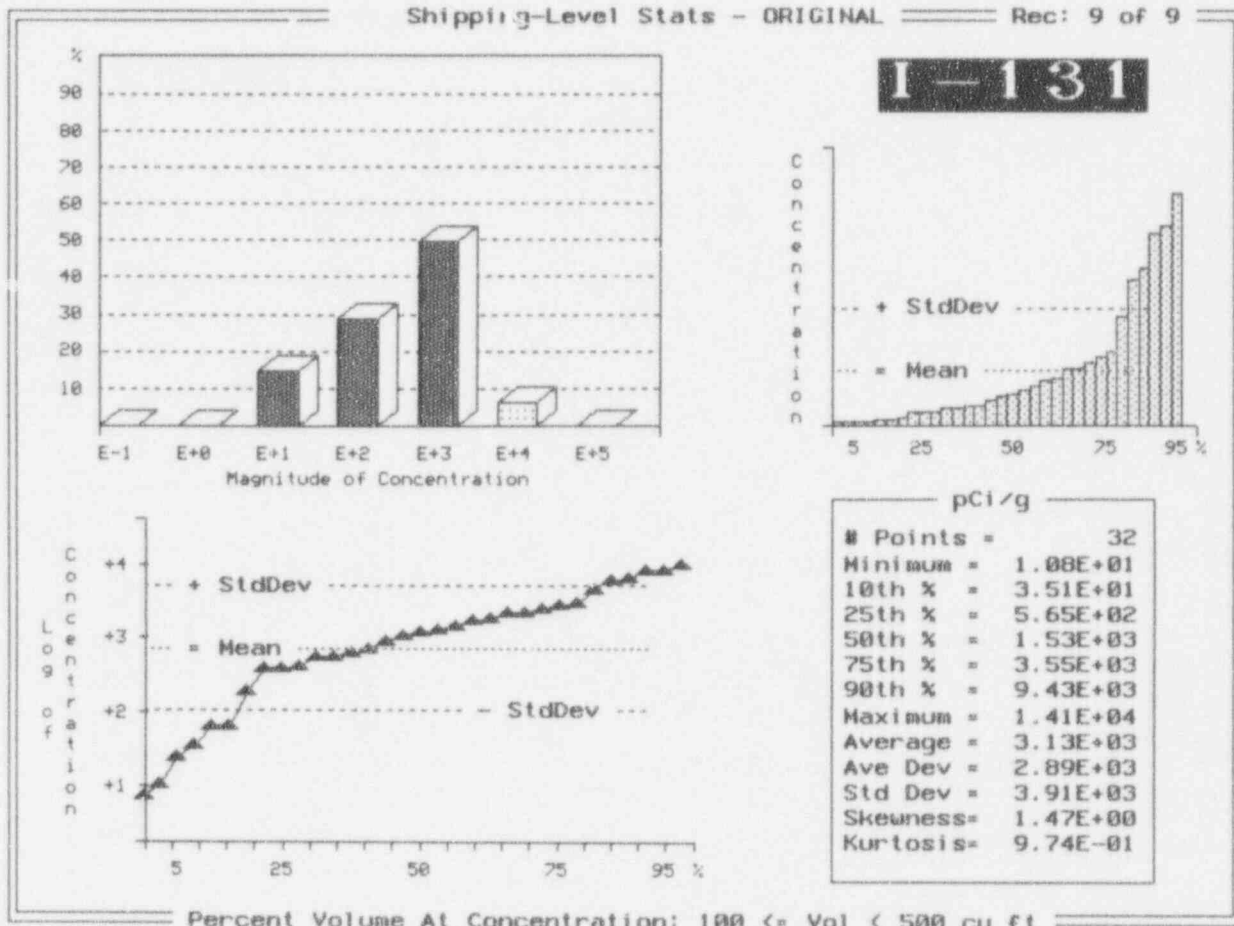
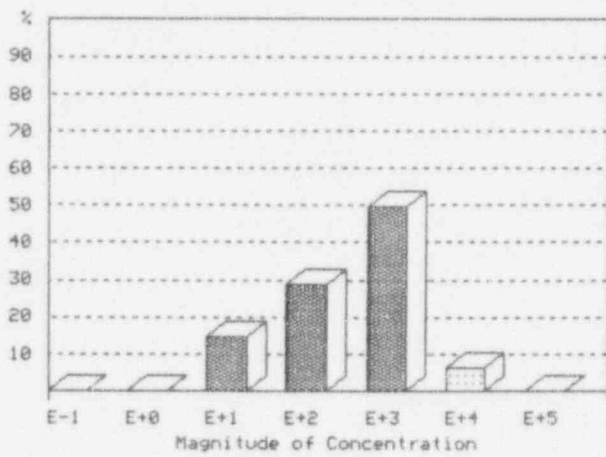
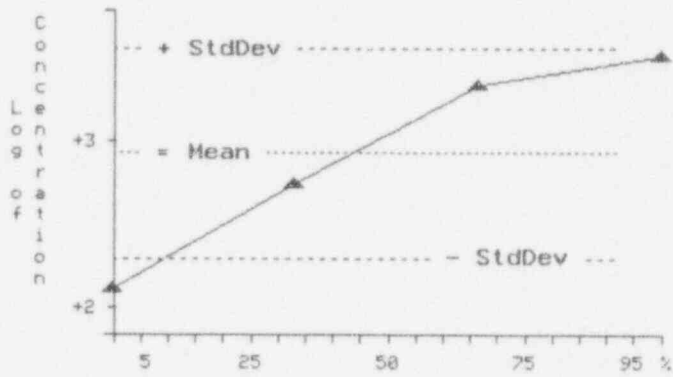
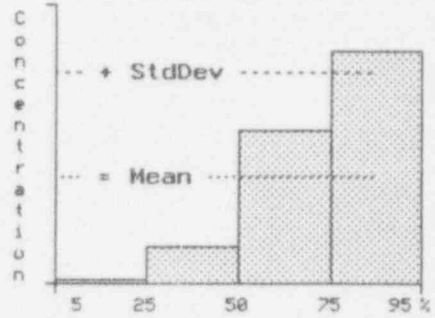


Exhibit F-22 (Continued)

Shipping-Level Stats - ORIGINAL



I-131



pci/g	
# Points =	4
Minimum =	1.55E+02
10th % =	1.55E+02
25th % =	1.55E+02
50th % =	6.64E+02
75th % =	2.54E+03
90th % =	3.82E+03
Maximum =	3.82E+03
Average =	1.80E+03
Ave Dev =	1.39E+03
Std Dev =	1.70E+03
Skewness =	1.47E-01
Kurtosis =	-2.21E+00

Percent Volume At Concentration: 500 <= Vol < 1000 cu ft

Exhibit F-22 (Continued)

Shipping-Level Stats - ORIGINAL

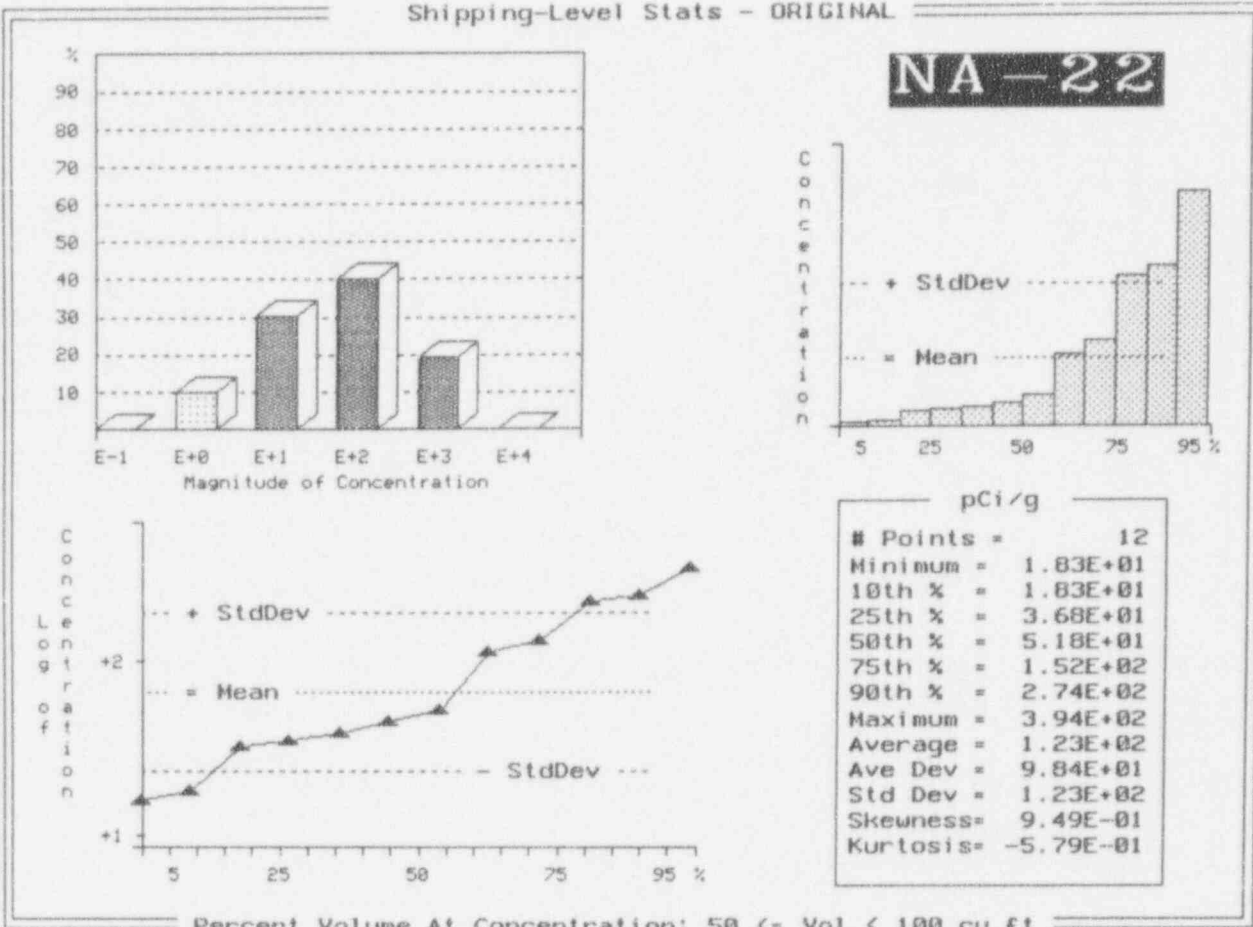


Exhibit F-22 (Continued)

Shipping-Level Stats - ORIGINAL

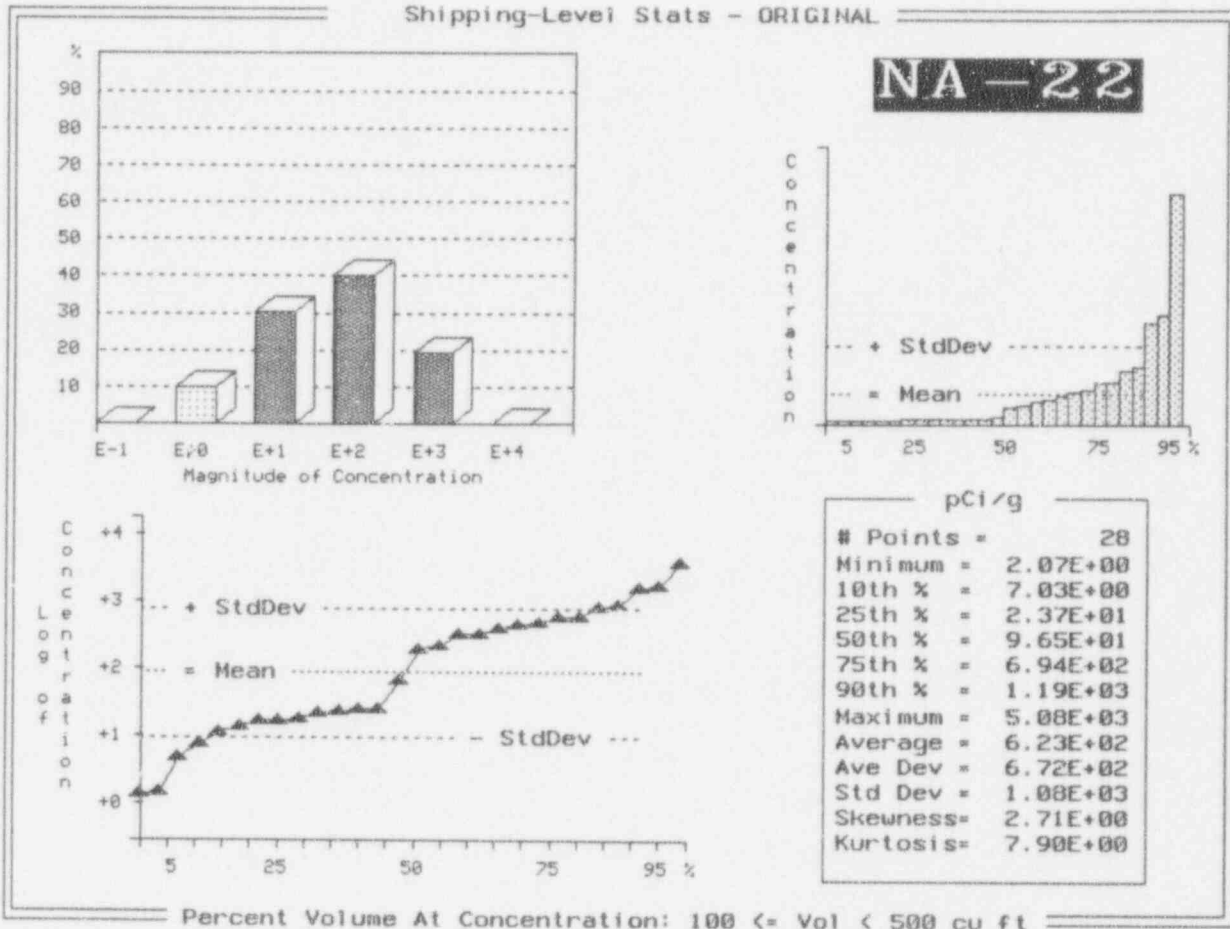


Exhibit F-22 (Continued)

Shipping-Level Stats - ORIGINAL

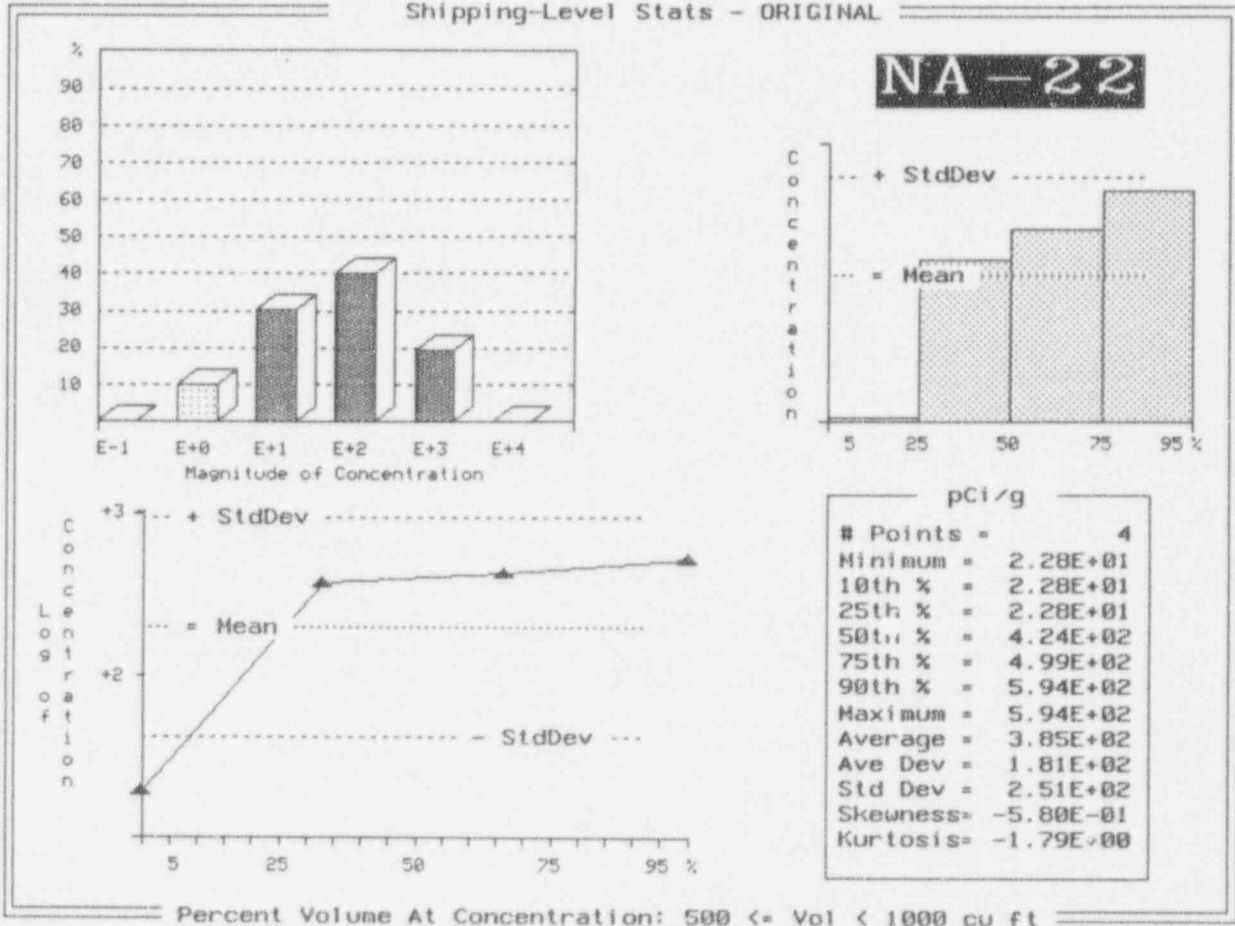
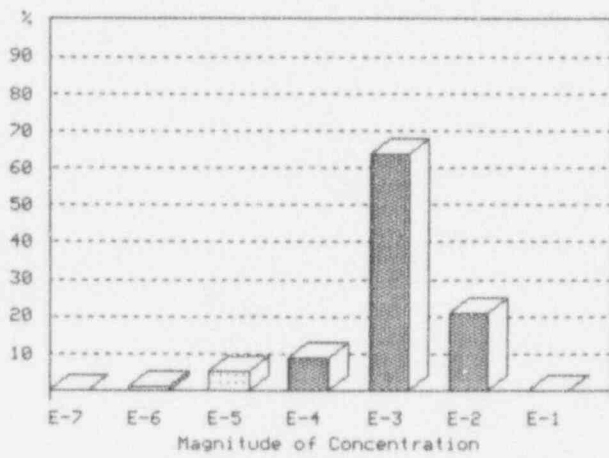
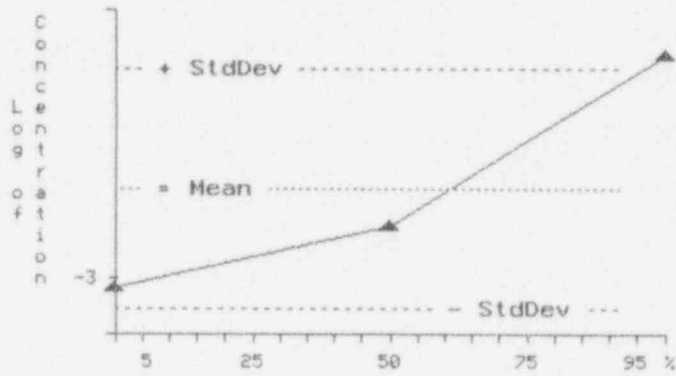
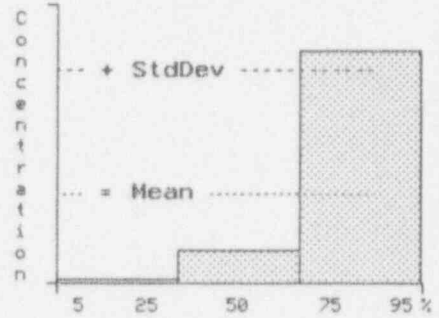


Exhibit F-22 (Continued)

Shipping-Level Stats - ORIGINAL Rec: 10 of 10



S-35



Ci/cu m	
# Points =	3
Minimum =	1.02E-03
10th % =	1.02E-03
25th % =	1.02E-03
50th % =	1.61E-03
75th % =	1.61E-03
90th % =	5.55E-03
Maximum =	5.55E-03
Average =	2.72E-03
Ave Dev =	1.88E-03
Std Dev =	2.46E-03
Skewness =	3.61E-01
Kurtosis =	-2.33E+00

Percent Volume At Concentration: 10 <= Vol < 50 cu ft

Exhibit F-22 (Continued)

Shipping-Level Stats - ORIGINAL Rec: 10 of 10

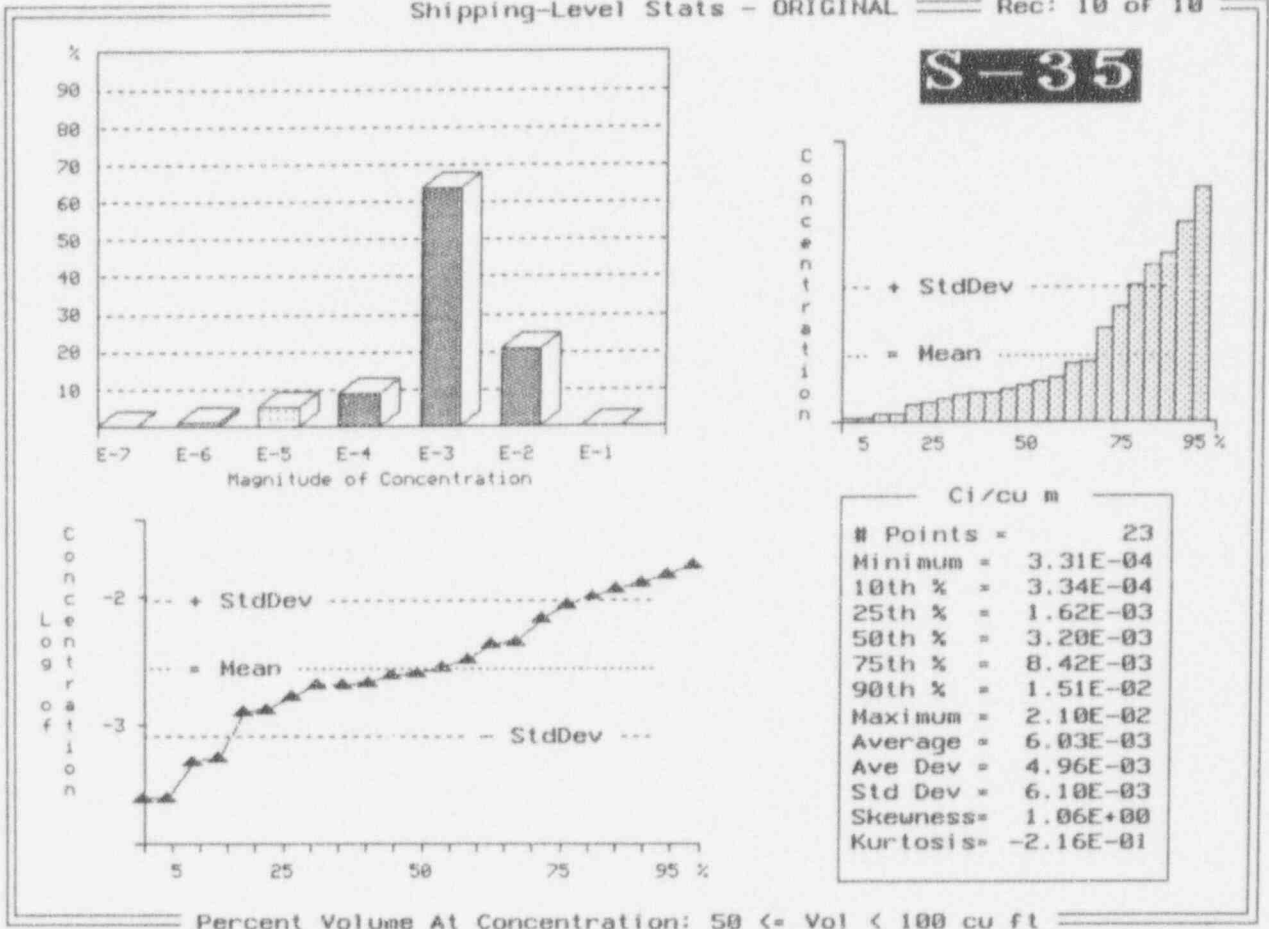
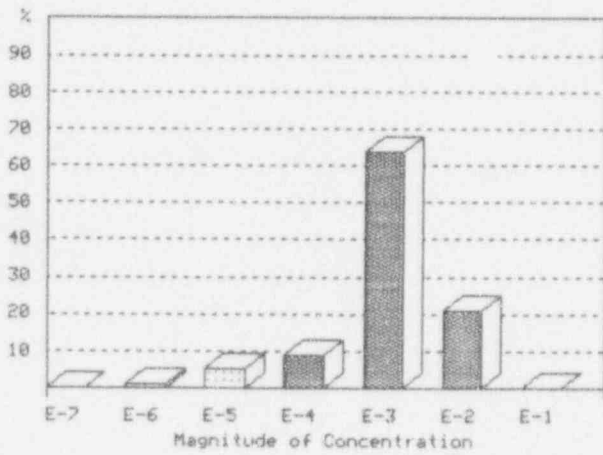
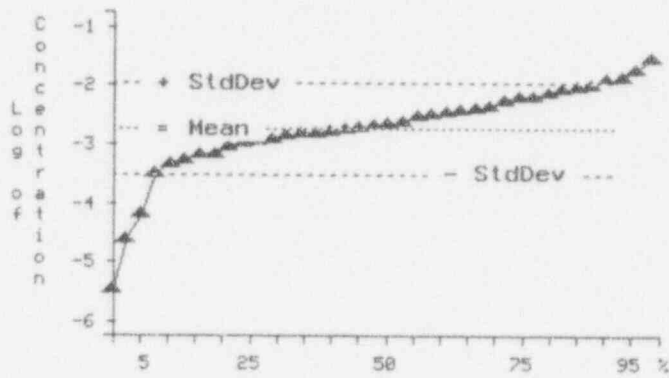
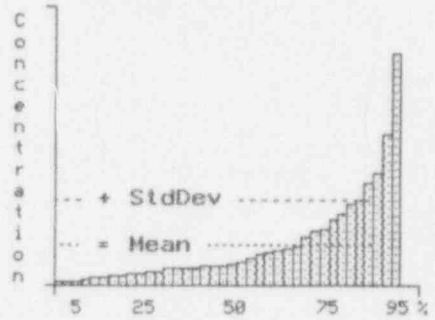


Exhibit F-22 (Continued)

Shipping-Level Stats - ORIGINAL Rec: 10 of 10



S-35



Ci/cu m	
# Points =	75
Minimum =	5.61E-06
10th % =	5.38E-04
25th % =	1.54E-03
50th % =	3.16E-03
75th % =	8.43E-03
90th % =	1.52E-02
Maximum =	4.18E-02
Average =	6.50E-03
Ave Dev =	5.66E-03
Std Dev =	7.95E-03
Skewness =	2.17E+00
Kurtosis =	5.24E+00

Percent Volume At Concentration: 100 <= Vol < 500 cu ft

Exhibit F-23
Data Summary - Analyses at the Shipment Level
 (Aggregate Practices for non-brokered waste: 1986 to 1990)

	<u>Data or Parameters</u>
Compact or unaffiliated state:	Southeast
Waste generator class:	Medical
Total number of waste generators:	49
Total associated waste volume (m ³):	59.1
Total associated waste activity (Ci):	4.5
Waste class:	A-Unstable and A-Stable
Identified waste generators for this analysis:	
Number:	3
Percent of total(%):	6
Total number of shipping records:	3
Number of shipping records <u>with</u> container data:	0
Number of waste containers:	0
Weight of shipments (kg):	13,830
Total waste volume (m ³):	18
Fractional waste volume (%): (this analysis/total)	30
Total waste activity (Ci):	0.7
Fractional waste activity (%): (this analysis/total)	16

Exhibit F-23 (Continued)

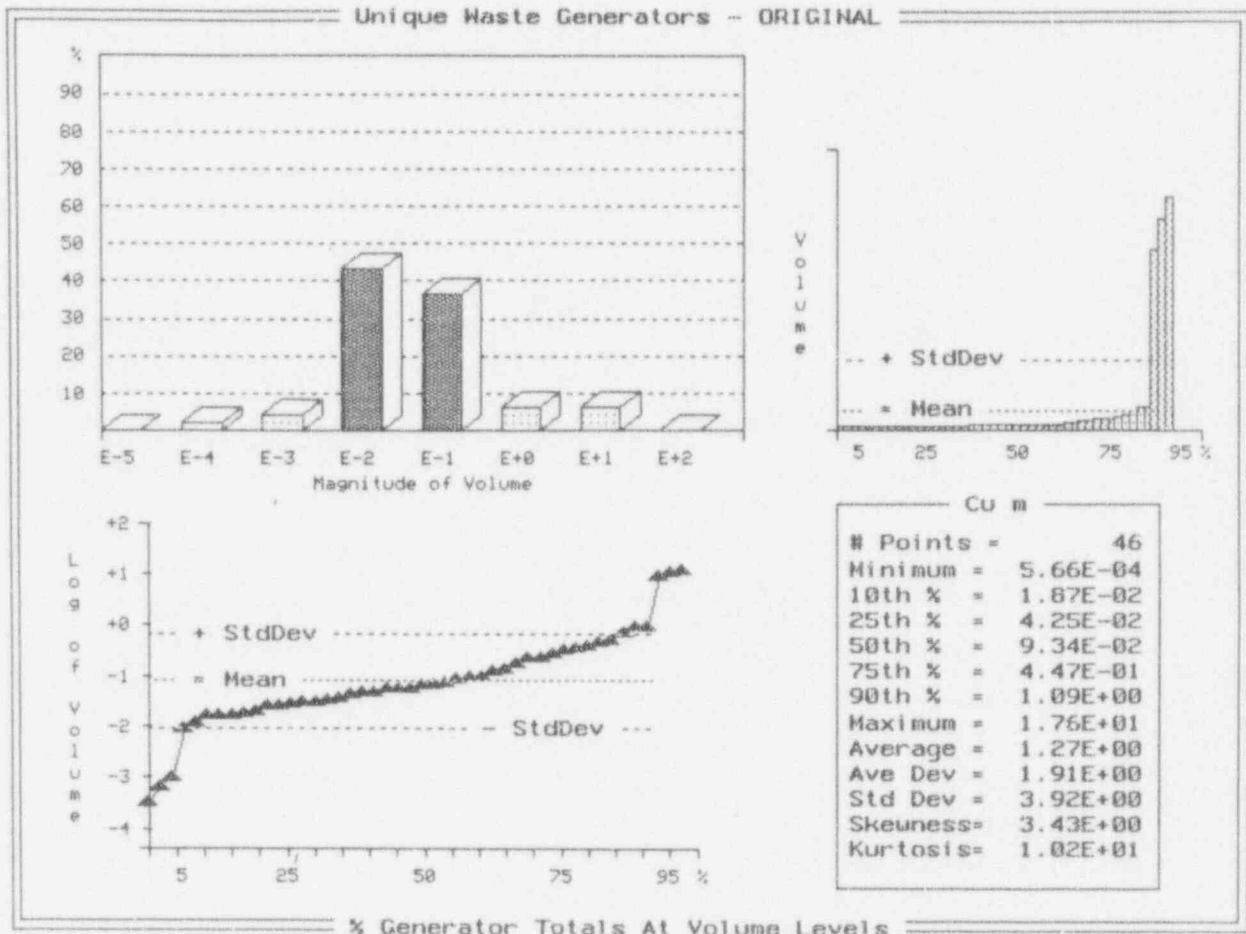


Exhibit F-23 (Continued)

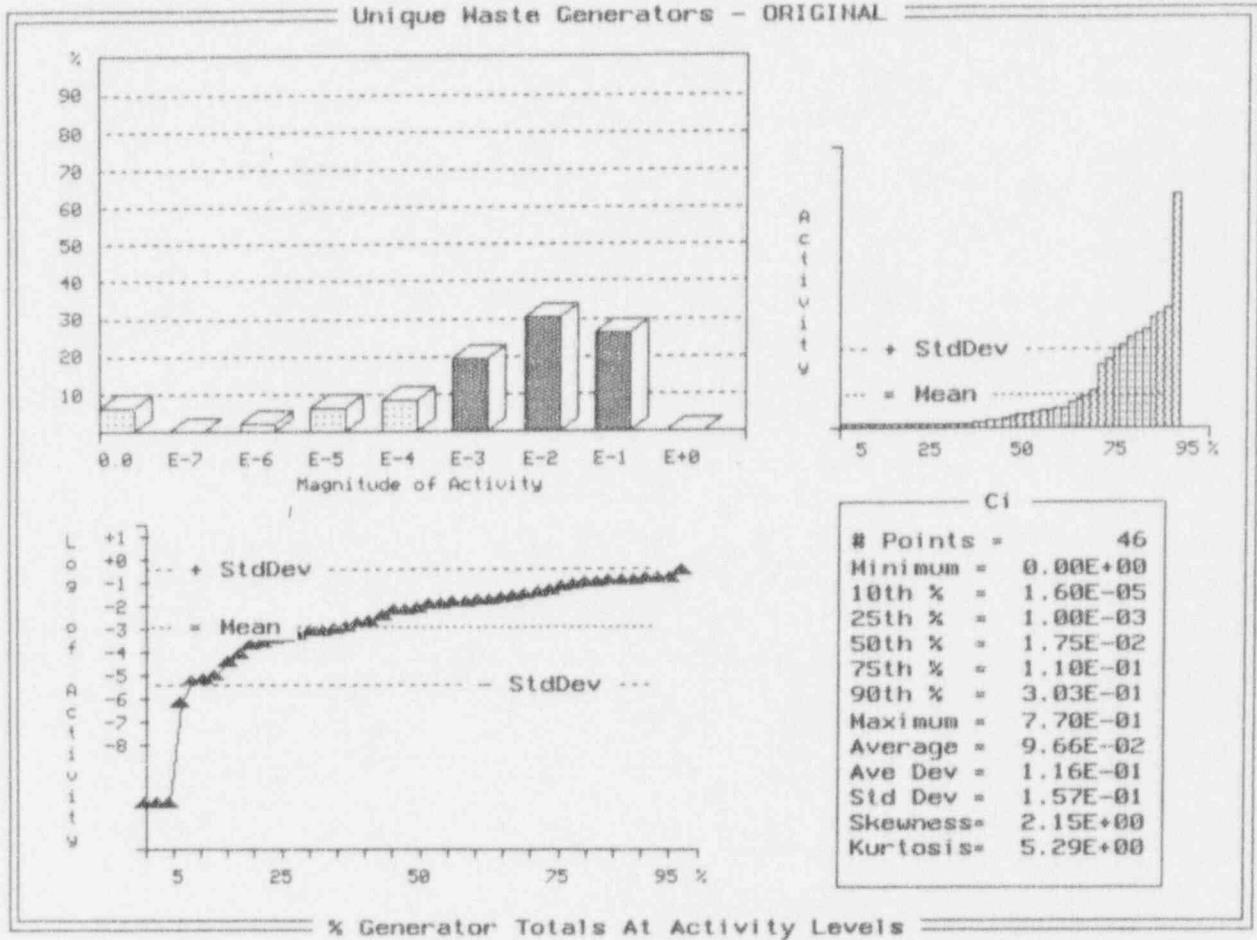


Exhibit F-24
Data Summary - Analyses at the Shipment Level
 (Aggregate Practices for non-brokered waste: 1986 to 1990)

	<u>Data or Parameters</u>
Compact or unaffiliated state:	Southeast
Waste generator class:	Industrial
Total number of waste generators:	224
Total associated waste volume (m ³):	23,310
Total associated waste activity (Ci):	3,320
Waste class:	A-Unstable and A-Stable
Identified waste generators for this analysis:	
Number:	95
Percent of total(%):	42
Total number of shipping records:	1,147
Number of shipping records <u>with</u> container data:	3
Number of waste containers:	81
Weight of shipments (kg):	15,340,000
Total waste volume (m ³):	14,990
Fractional waste volume (%): (this analysis/total)	64
Total waste activity (Ci):	2,176
Fractional waste activity (%): (this analysis/total)	65

Exhibit F-24 (Continued)

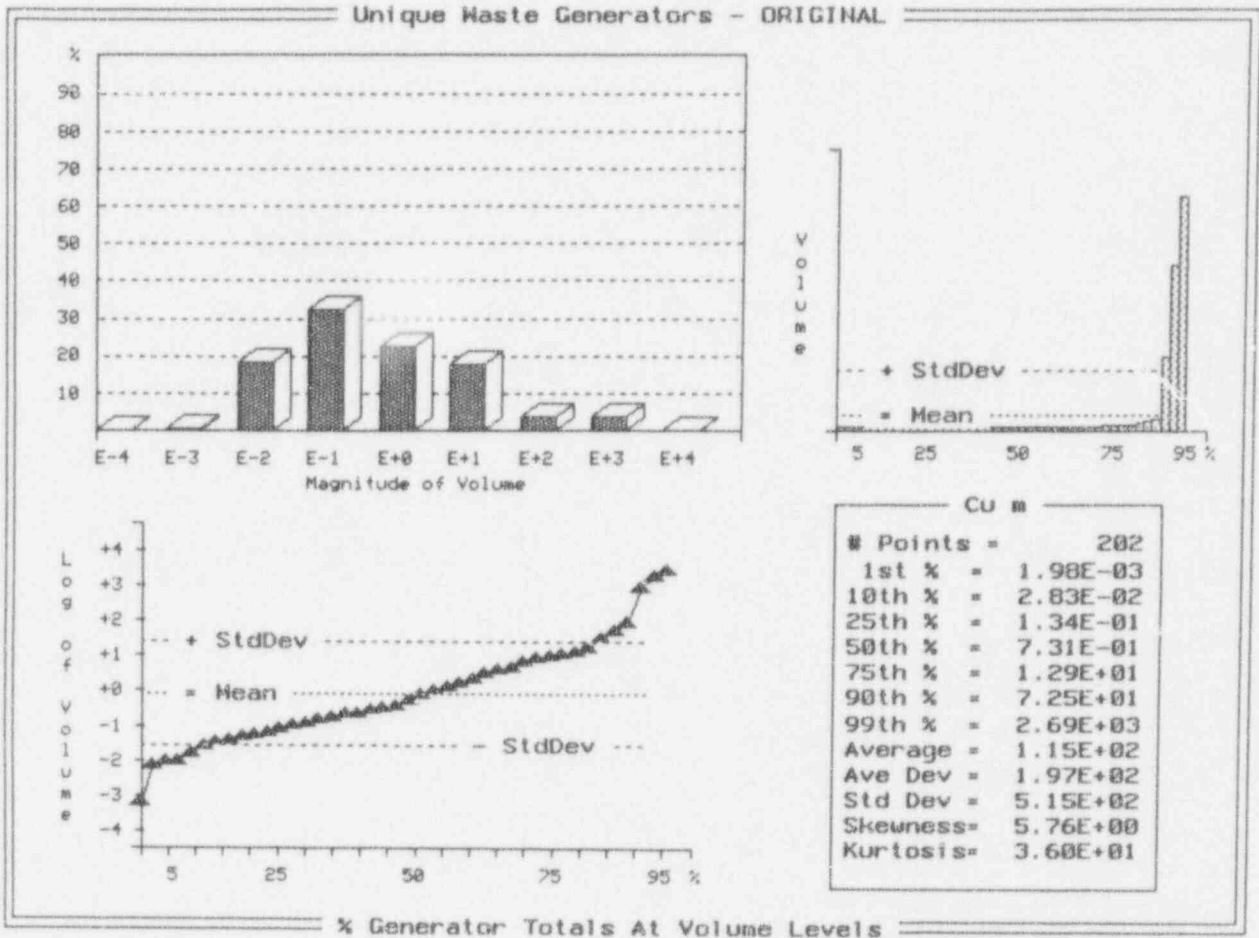
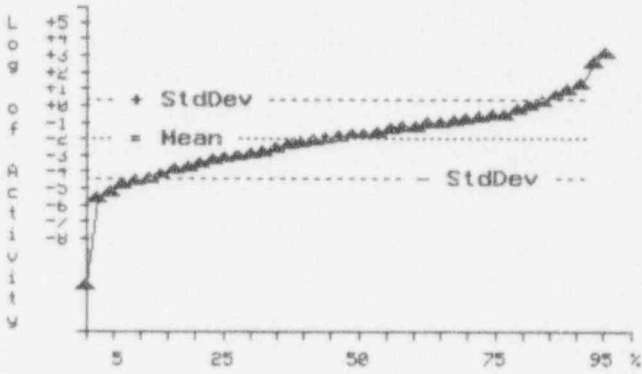
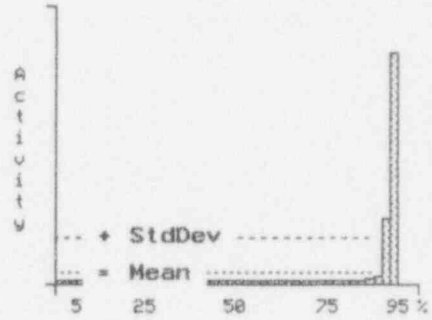
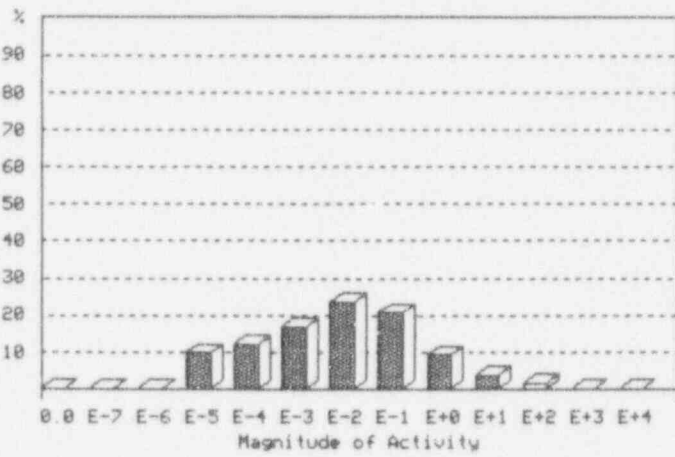


Exhibit F-24 (Continued)

Unique Waste Generators - ORIGINAL



Ci	
# Points =	202
1st % =	1.00E-05
10th % =	6.00E-05
25th % =	1.33E-03
50th % =	2.87E-02
75th % =	2.93E-01
90th % =	3.37E+00
99th % =	2.64E+02
Average =	1.50E+01
Ave Dev =	2.74E+01
Std Dev =	1.24E+02
Skewness =	1.20E+01
Kurtosis =	1.54E+02

% Generator Totals At Activity Levels

Exhibit F-24 (Continued)

Shipping-Level Stats - ORIGINAL

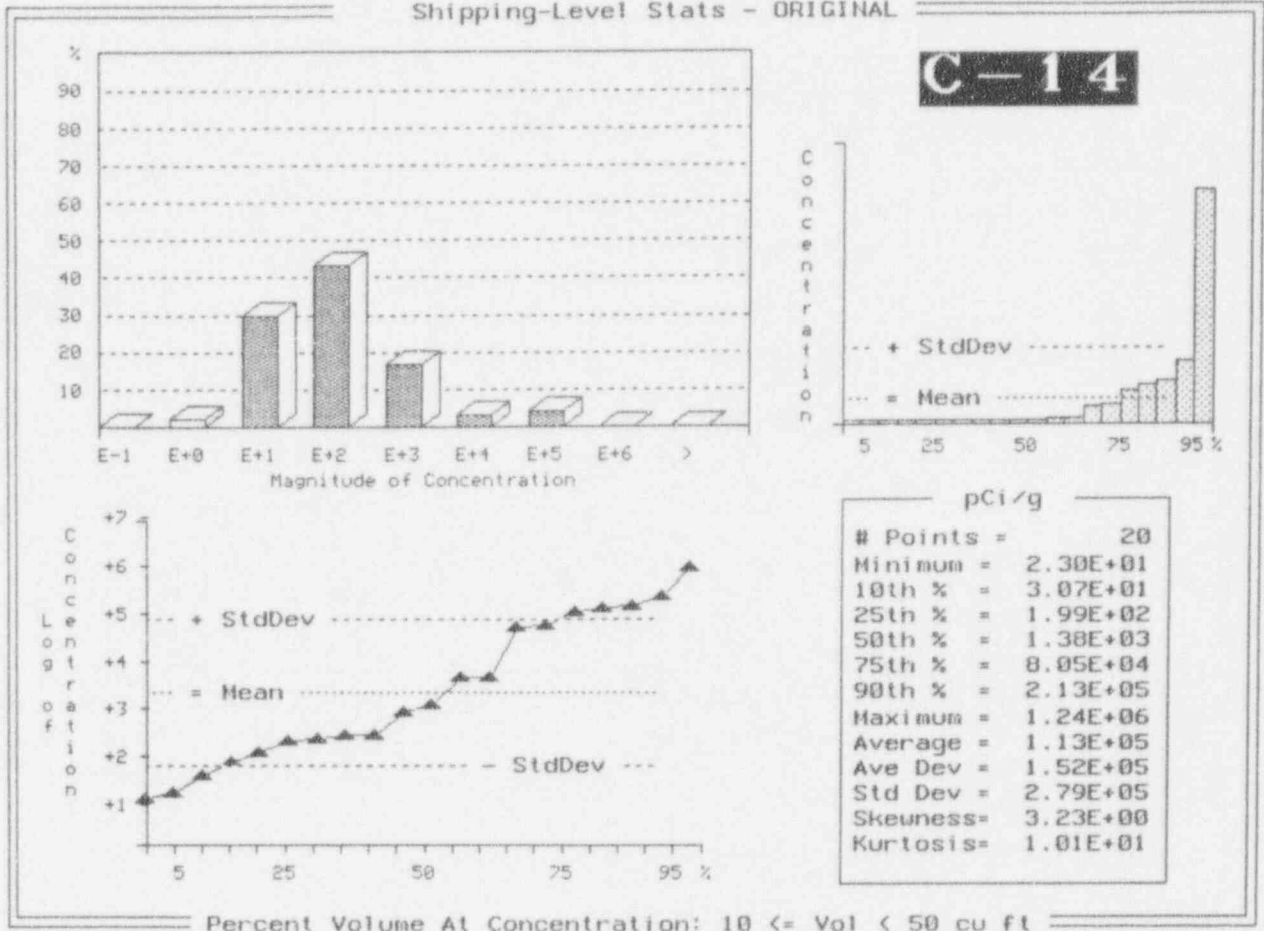


Exhibit F-24 (Continued)

Shipping-Level Stats - ORIGINAL

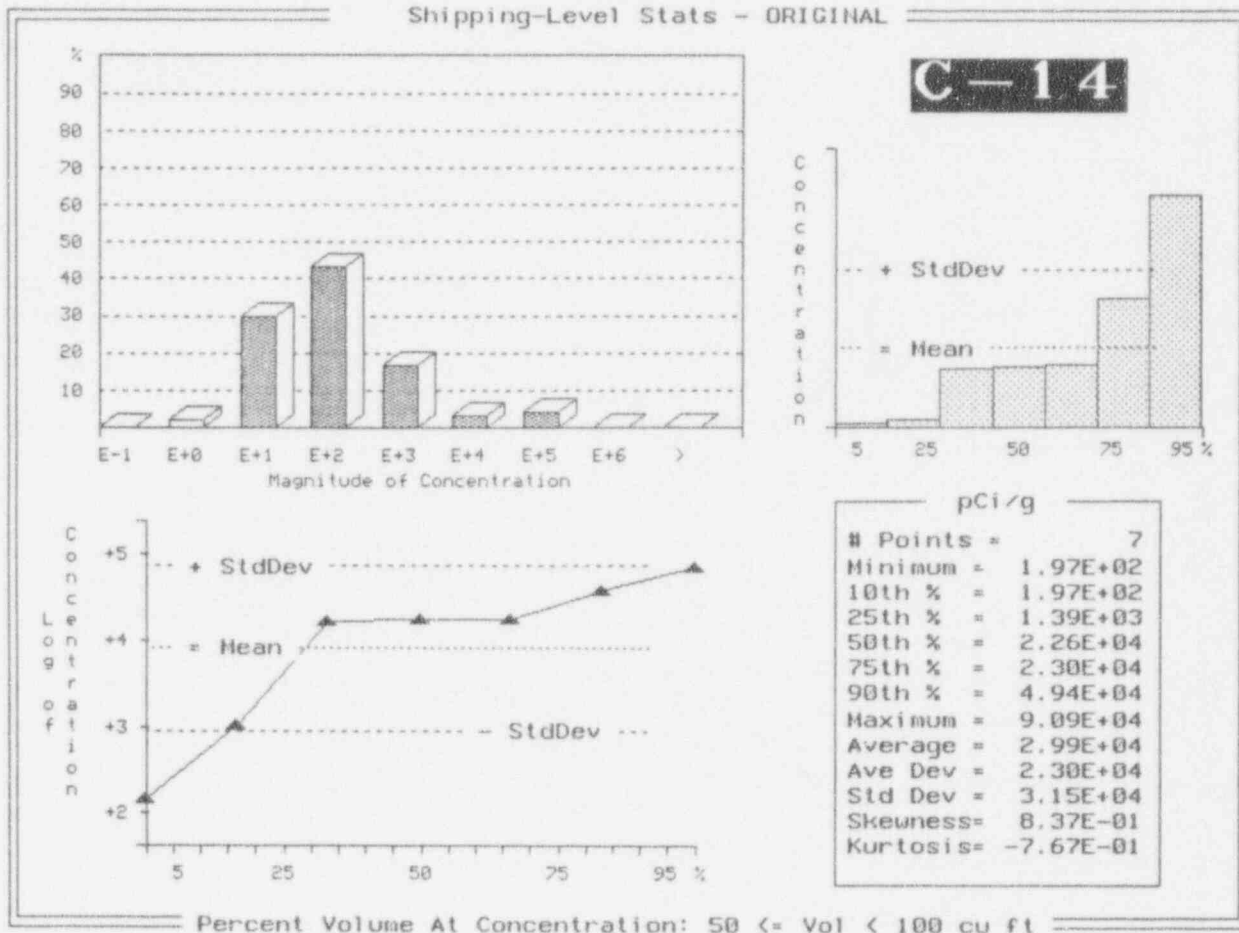


Exhibit F-24 (Continued)

Shipping-Level Stats - ORIGINAL

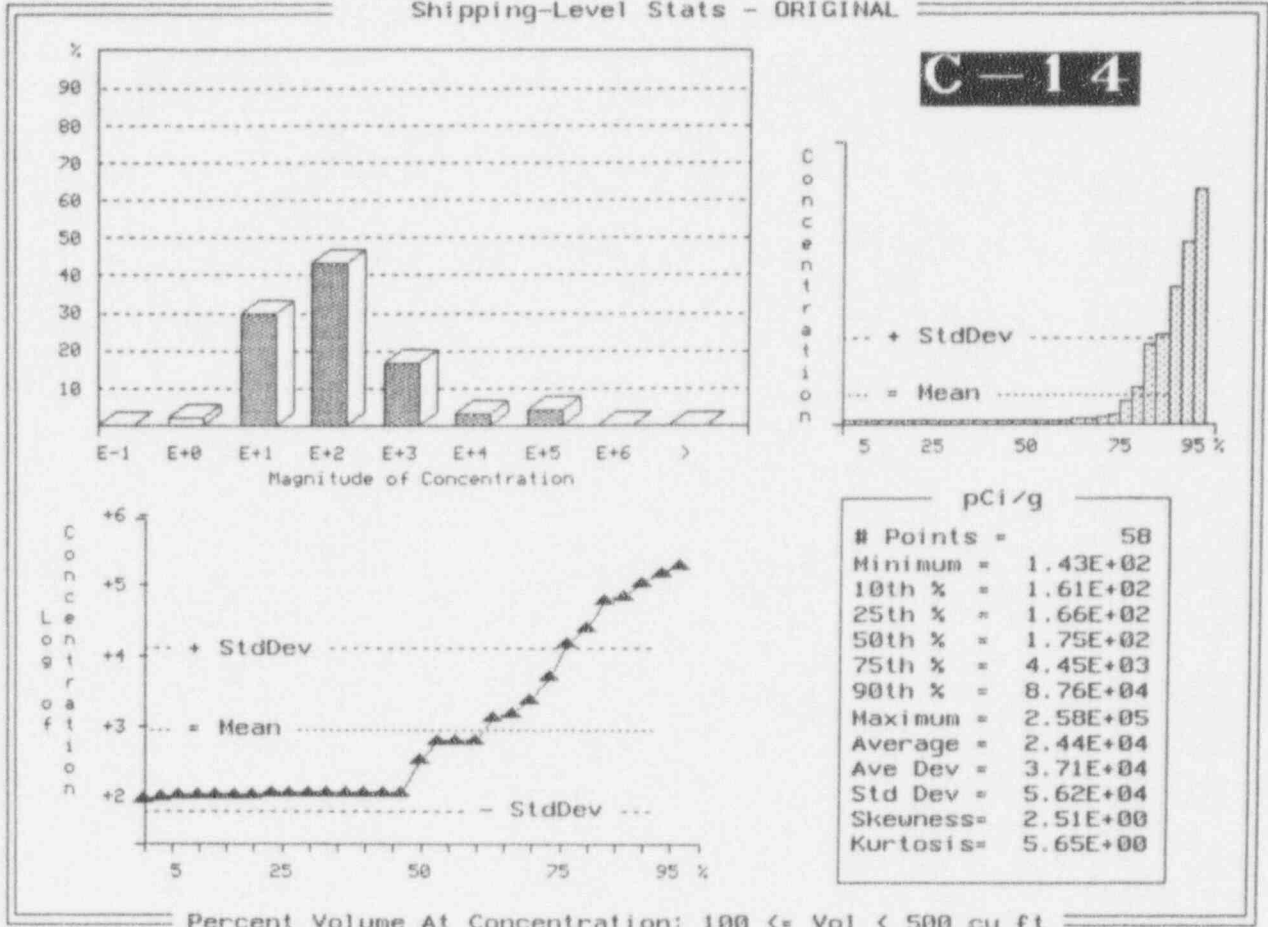
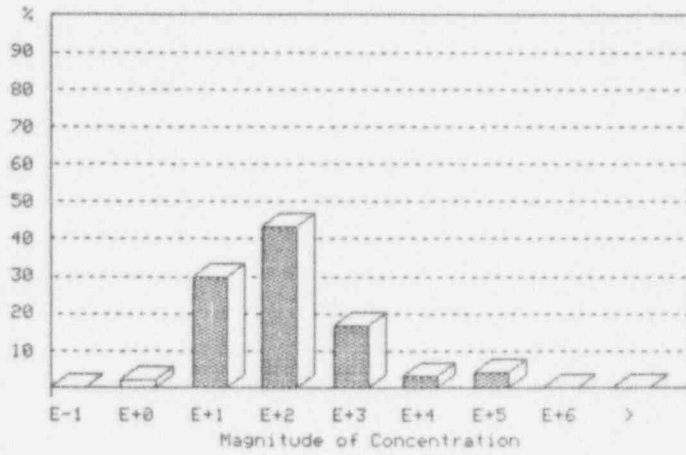
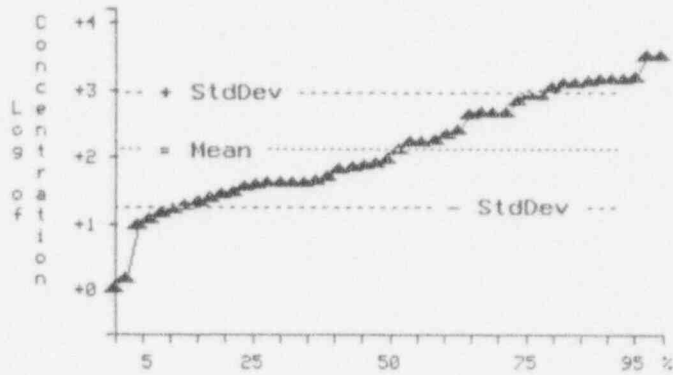
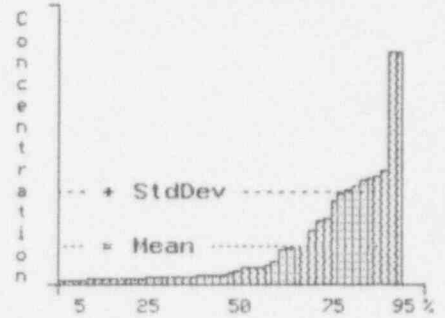


Exhibit F-24 (Continued)

Shipping-Level Stats - ORIGINAL



C-14

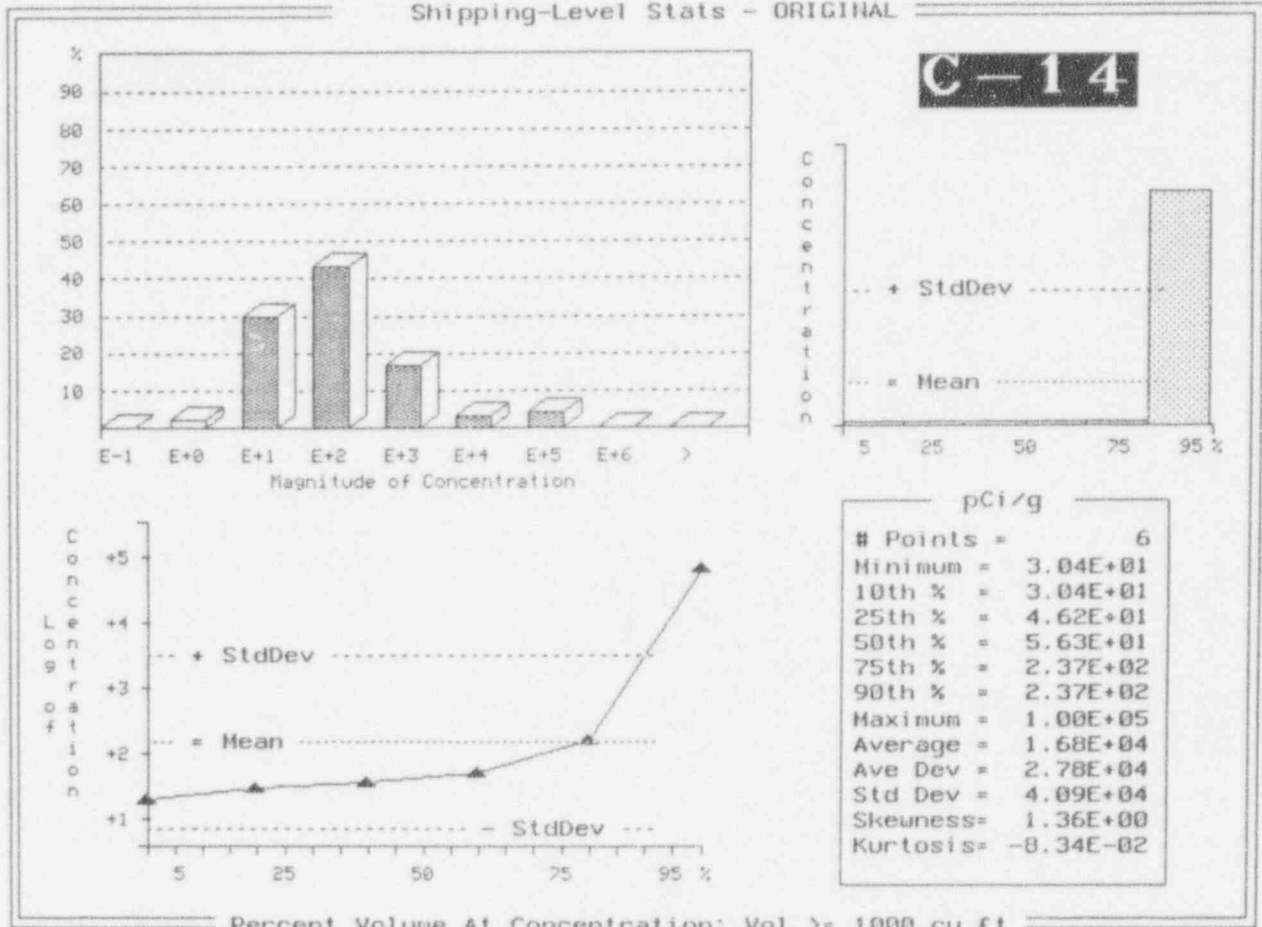


pci/g	
# Points =	47
Minimum =	1.64E+00
10th % =	2.19E+01
25th % =	5.31E+01
50th % =	1.44E+02
75th % =	***E+02
90th % =	2.04E+03
Maximum =	4.60E+03
Average =	7.24E+02
Ave Dev =	8.03E+02
Std Dev =	1.09E+03
Skewness =	2.04E+00
Kurtosis =	4.14E+00

Percent Volume At Concentration: 500 <= Vol < 1000 cu ft

Exhibit F-24 (Continued)

Shipping-Level Stats - ORIGINAL



Percent Volume At Concentration: Vol >= 1000 cu ft

Exhibit F-24 (Continued)

Shipping-Level Stats - ORIGINAL

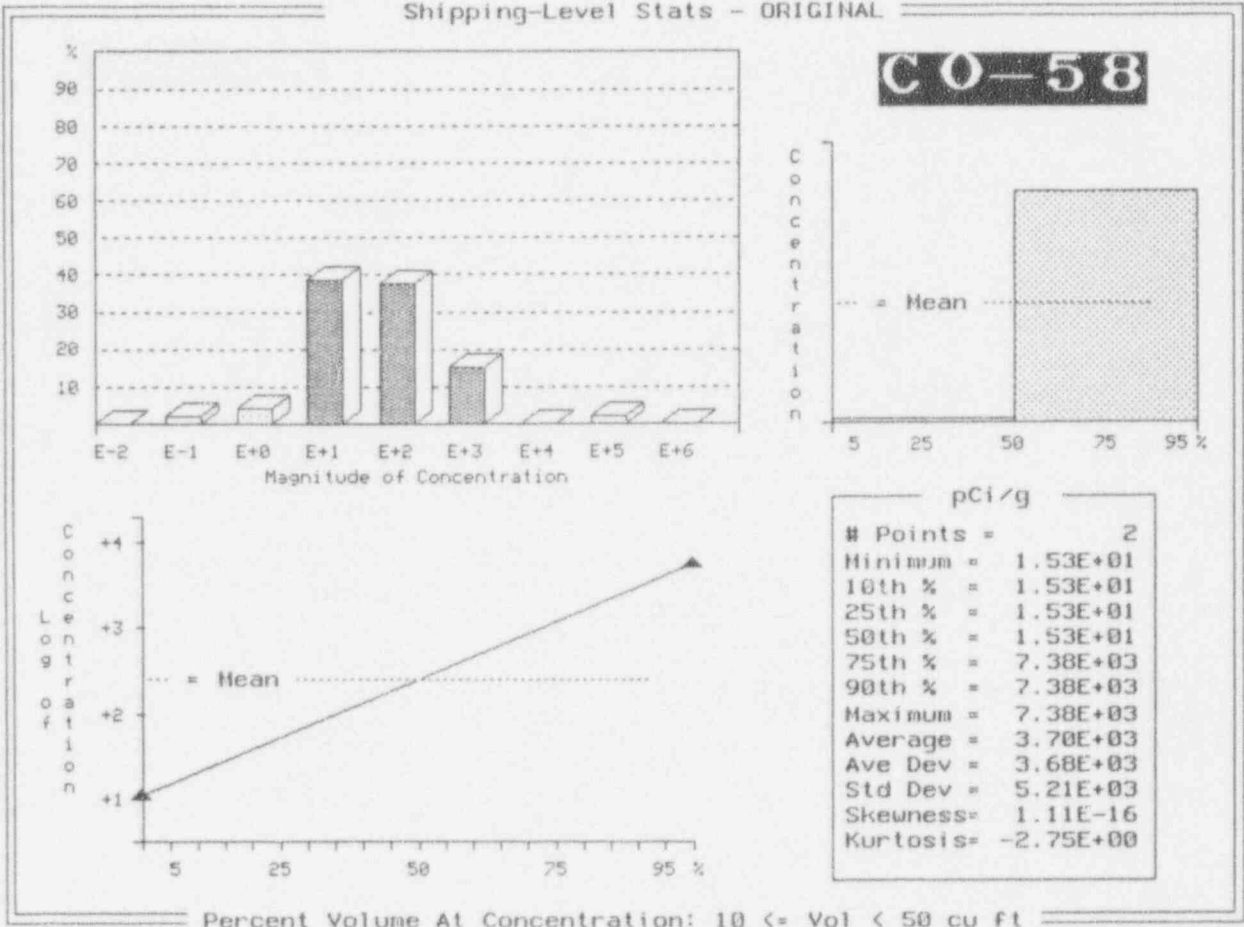


Exhibit F-24 (Continued)

Shipping-Level Stats - ORIGINAL

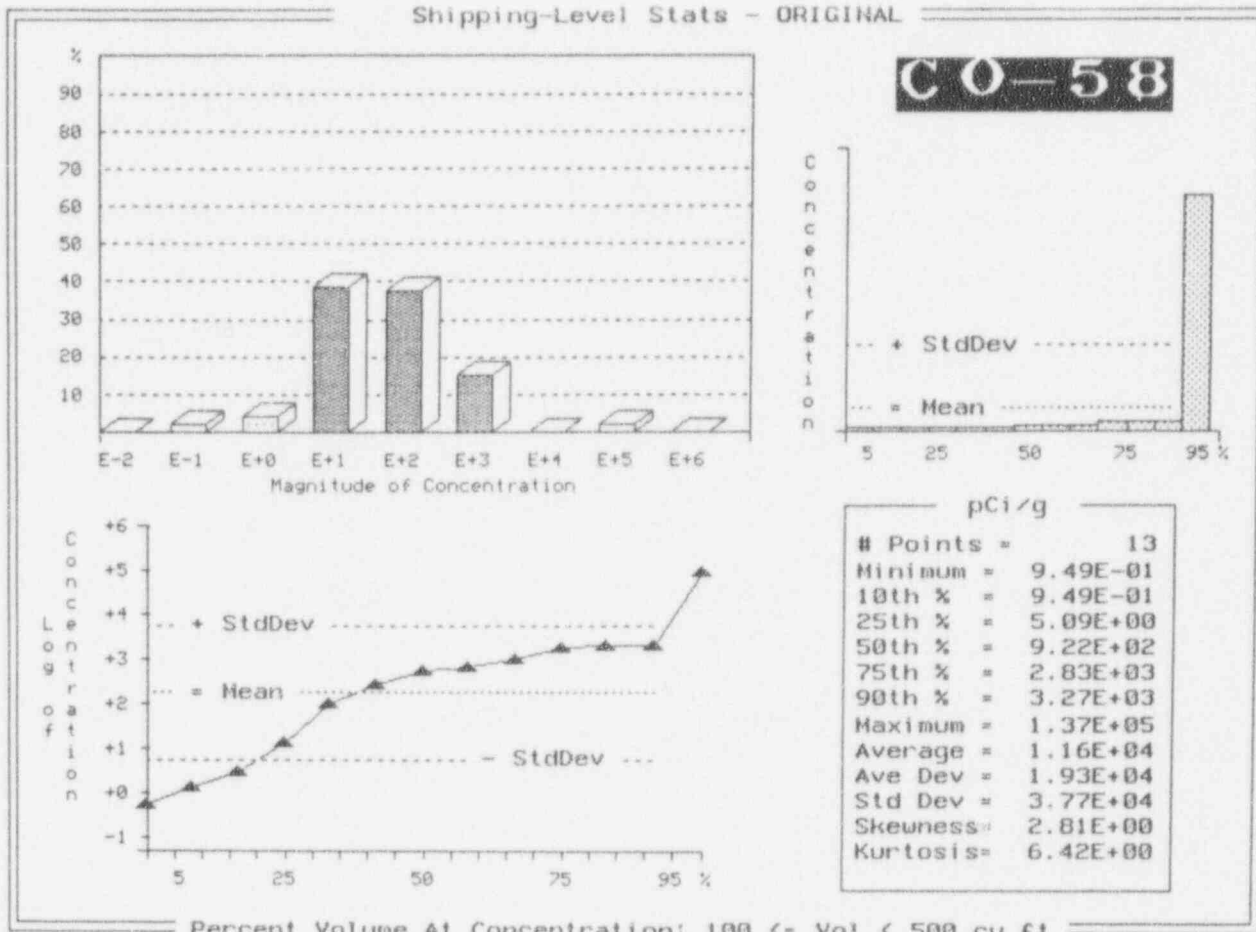
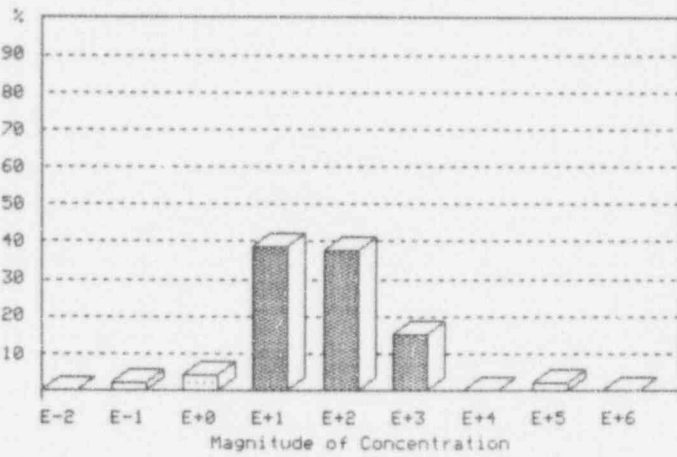
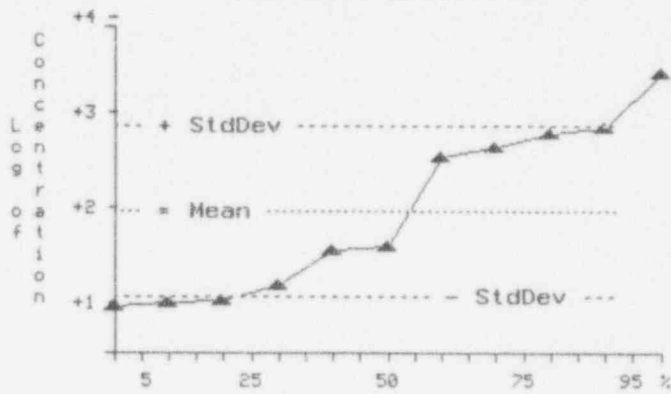
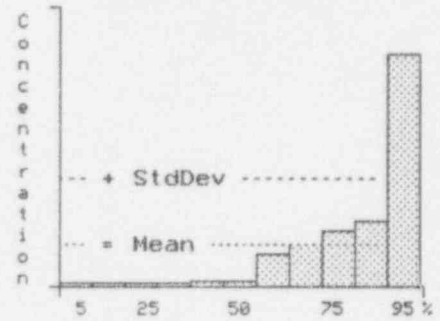


Exhibit F-24 (Continued)

Shipping-Level Stats - ORIGINAL



CO-58



pCi/g	
# Points =	11
Minimum =	1.21E+01
10th % =	1.21E+01
25th % =	1.39E+01
50th % =	5.12E+01
75th % =	5.71E+02
90th % =	9.32E+02
Maximum =	3.38E+03
Average =	5.70E+02
Ave Dev =	6.16E+02
Std Dev =	9.94E+02
Skewness =	1.97E+00
Kurtosis =	2.88E+00

Percent Volume At Concentration: 500 <= Vol < 1000 cu ft

Exhibit F-24 (Continued)

Shipping-Level Stats - ORIGINAL

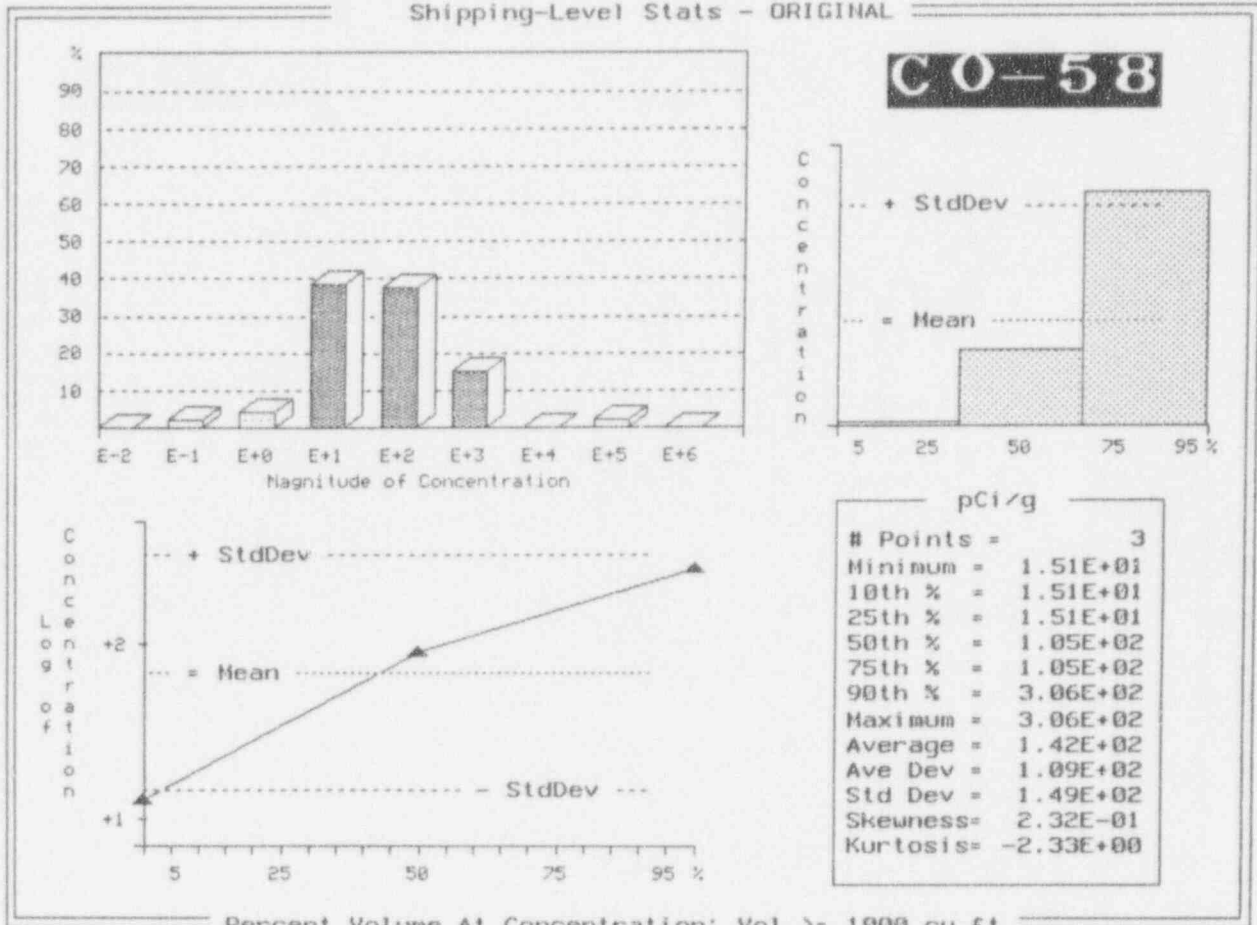


Exhibit F-24 (Continued)

Shipping-Level Stats - ORIGINAL

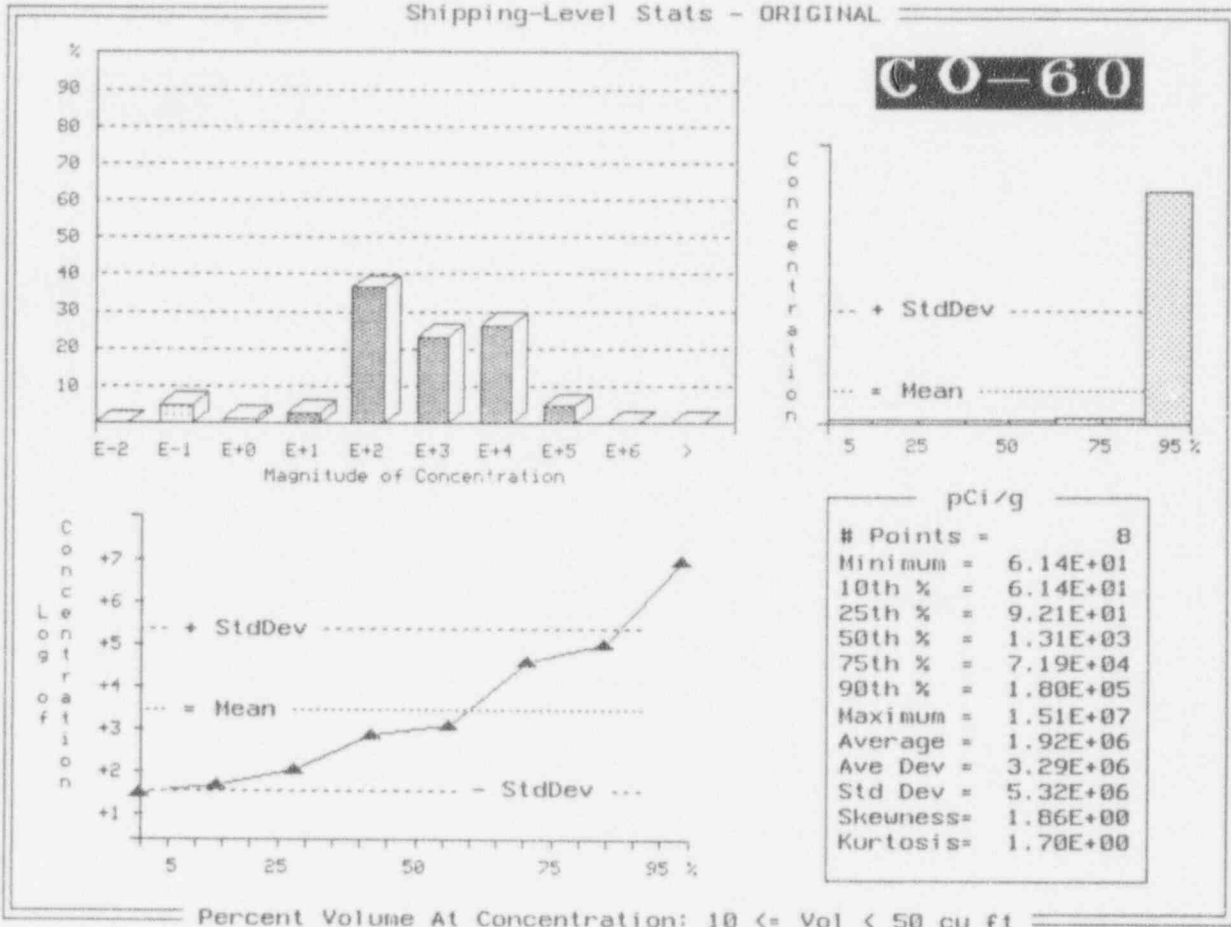


Exhibit F-24 (Continued)

Shipping-Level Stats - ORIGINAL

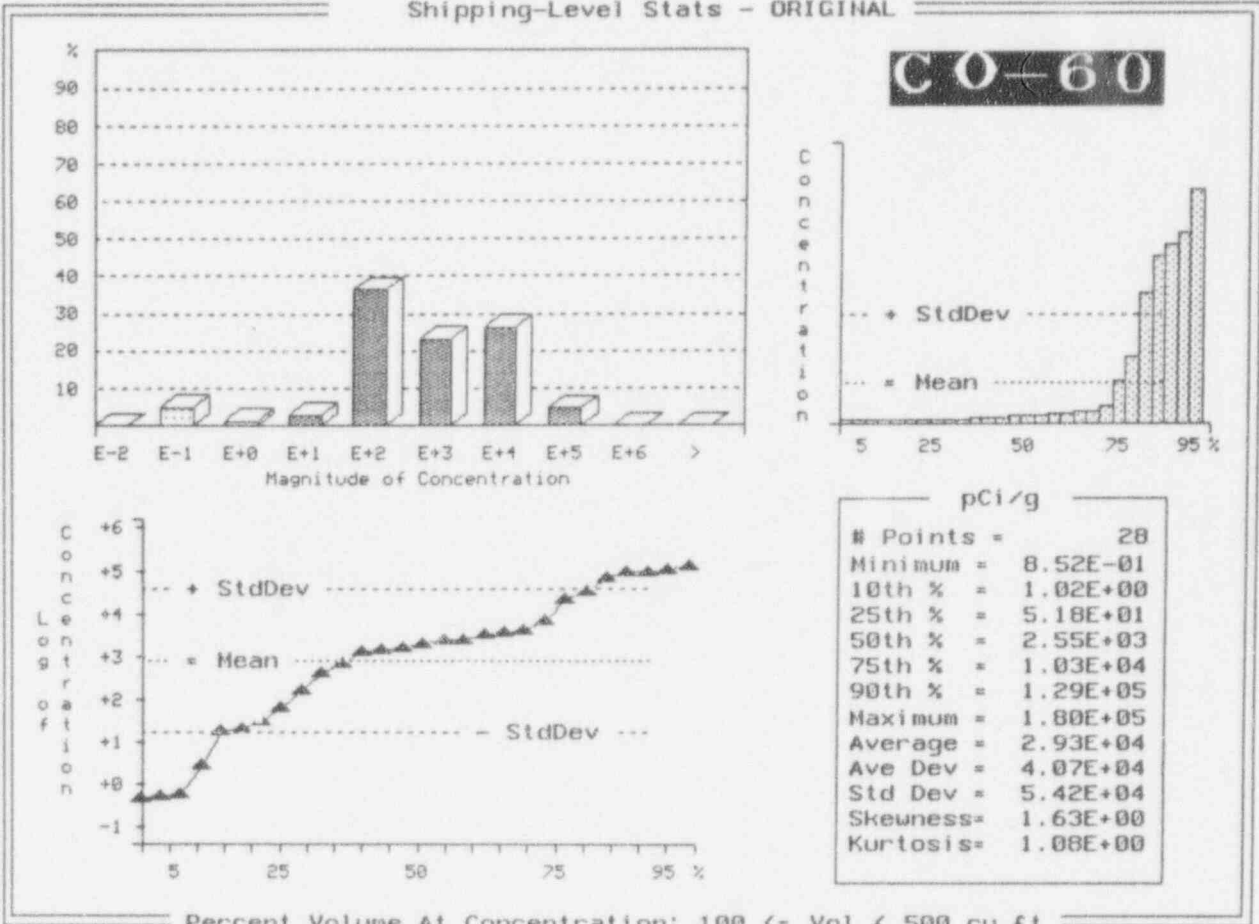
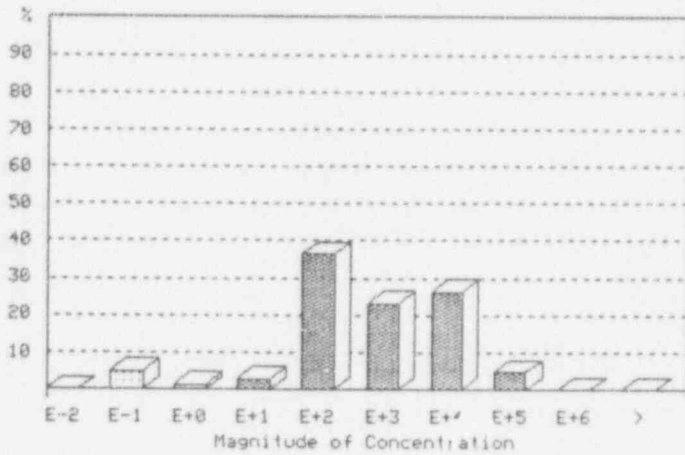
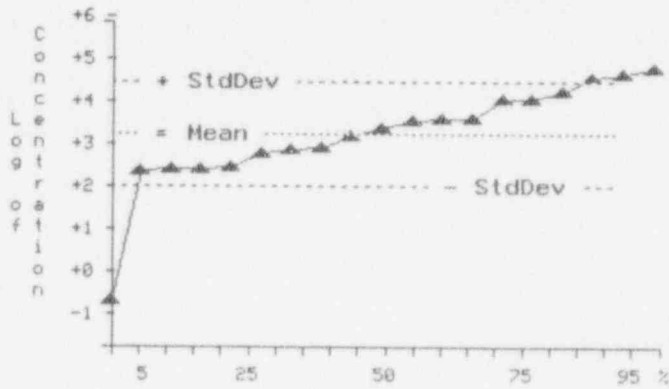
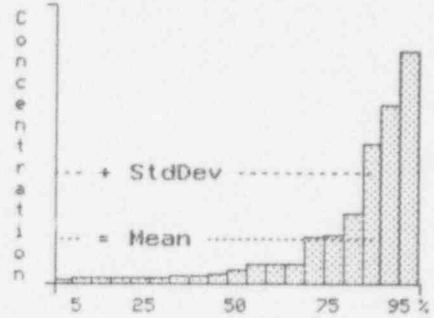


Exhibit F-24 (Continued)

Shipping-Level Stats - ORIGINAL



CO-60



pCi/g	
# Points =	19
Minimum =	3.89E-01
10th % =	3.90E+02
25th % =	4.80E+02
50th % =	3.78E+03
75th % =	1.73E+04
90th % =	5.43E+04
Maximum =	9.07E+04
Average =	1.61E+04
Ave Dev =	1.89E+04
Std Dev =	2.64E+04
Skewness =	1.69E+00
Kurtosis =	1.55E+00

Percent Volume At Concentration: 500 <= Vol < 1000 cu ft

Exhibit F-24 (Continued)

Shipping-Level Stats - ORIGINAL

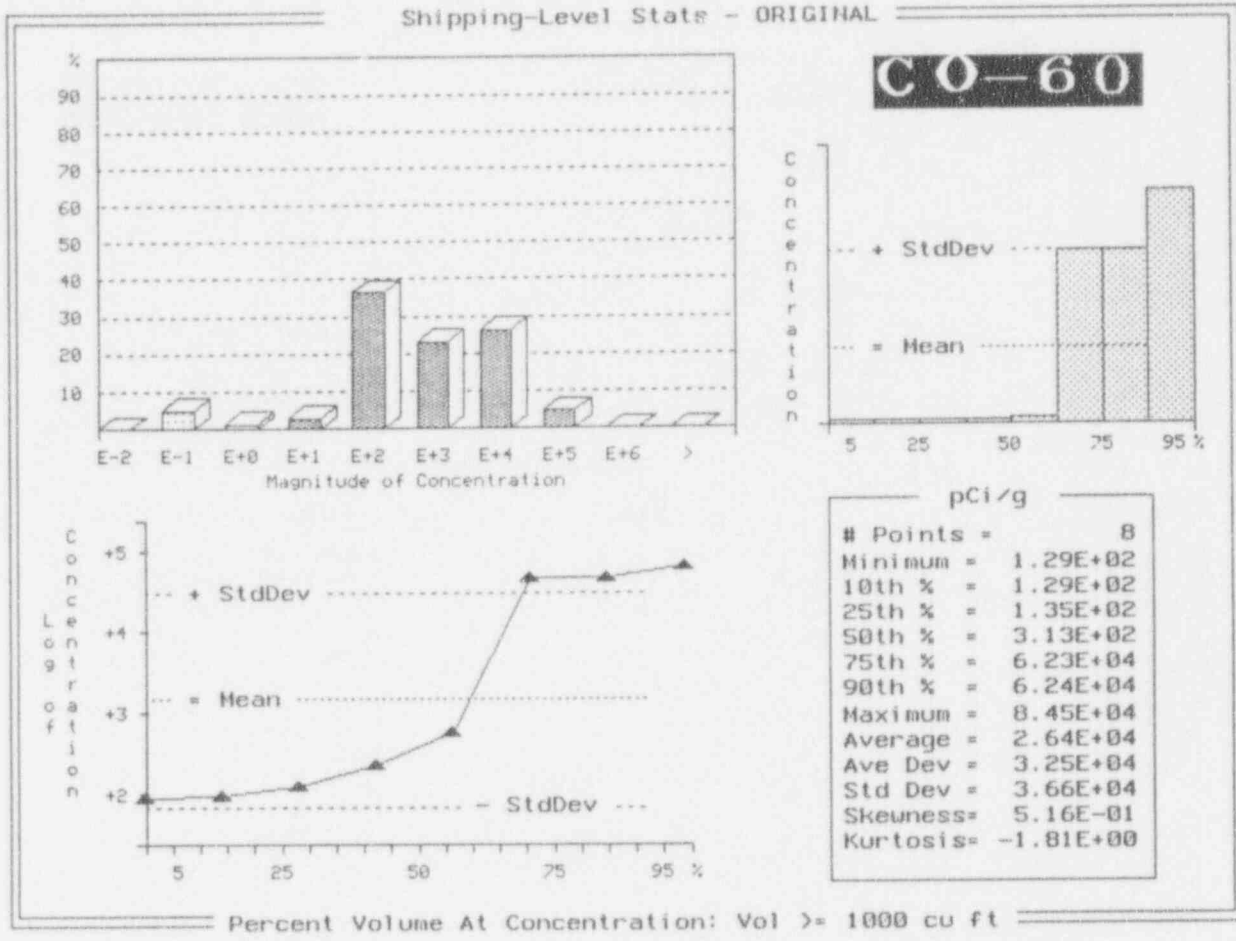


Exhibit F-24 (Continued)

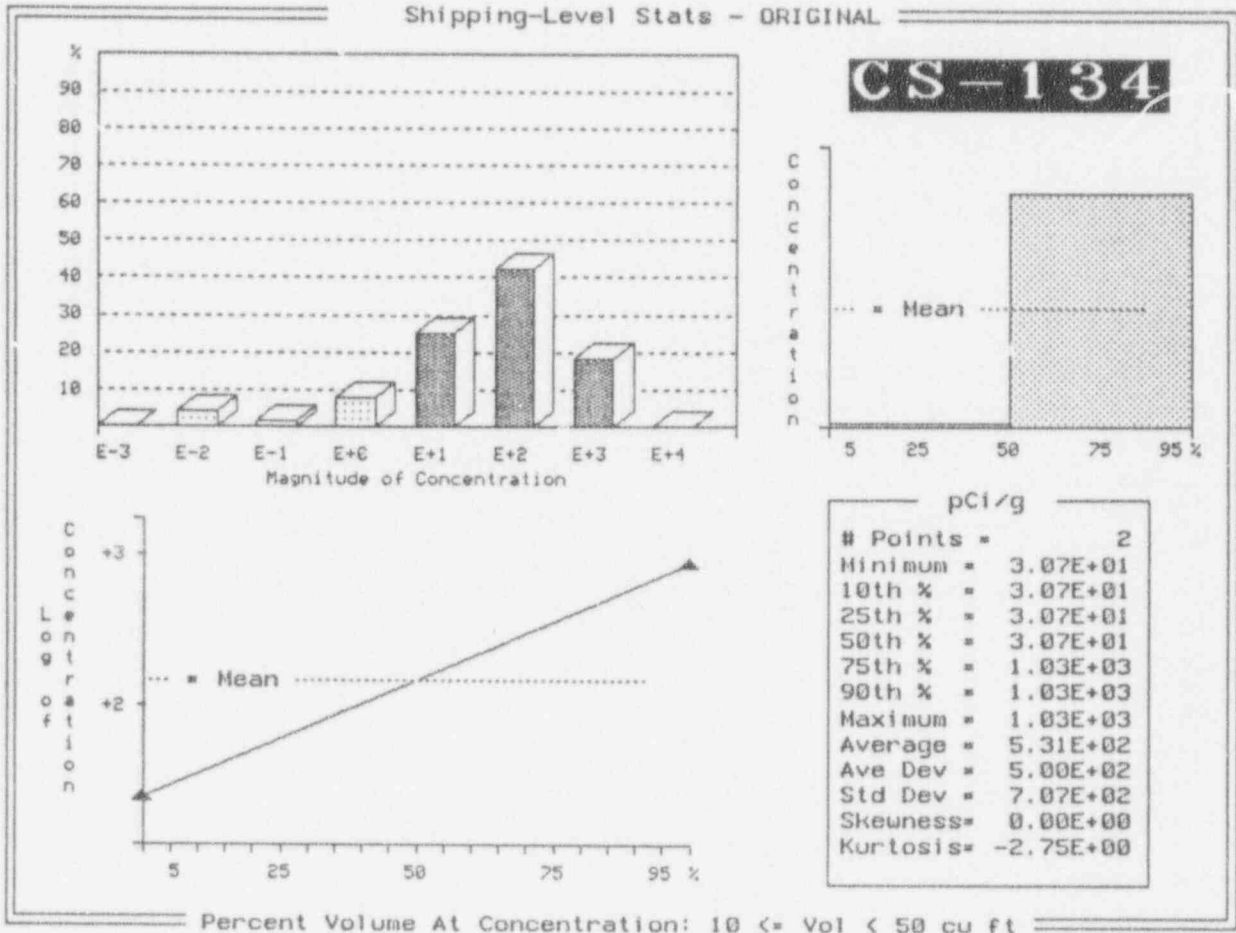


Exhibit F-24 (Continued)

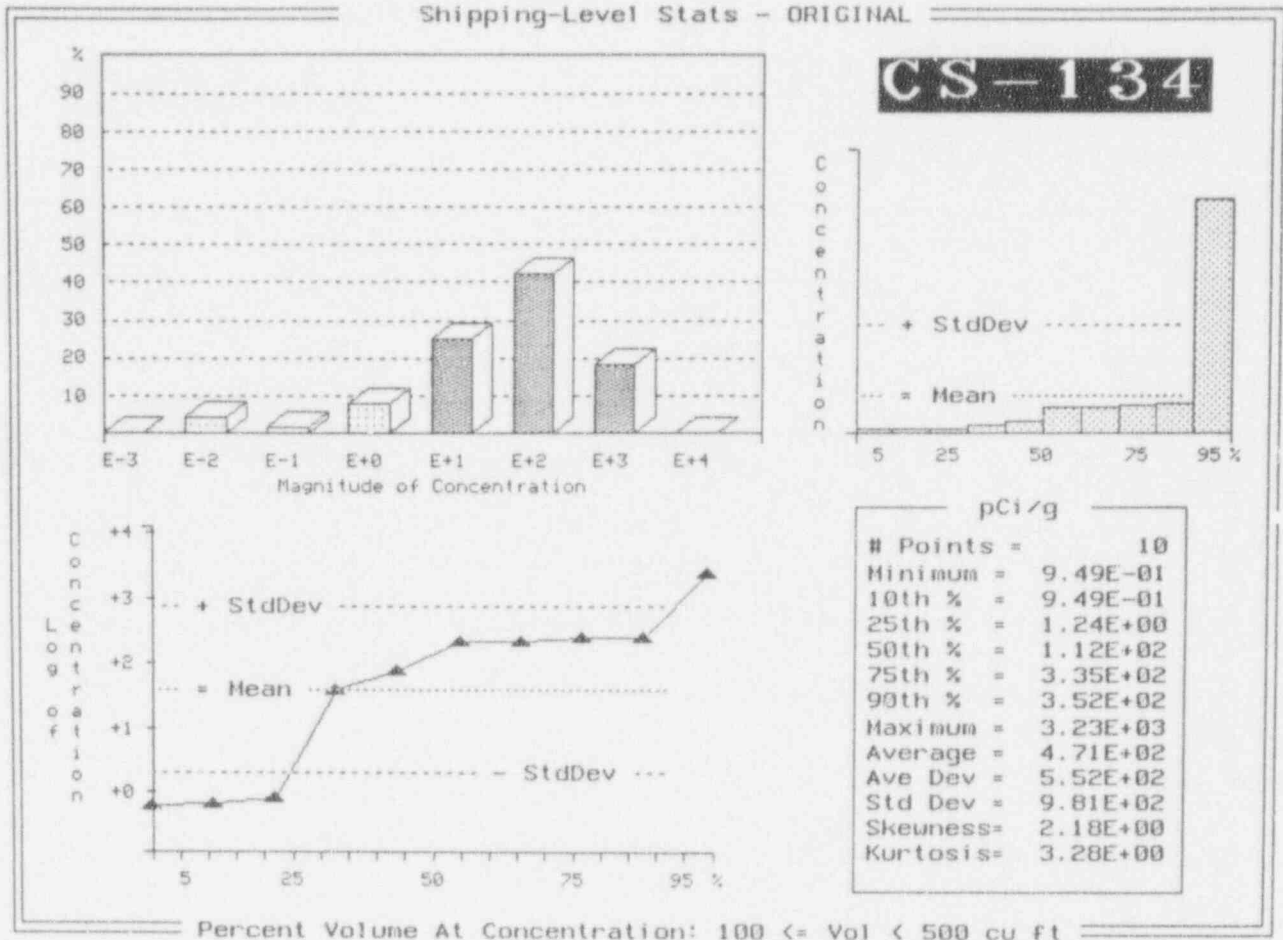
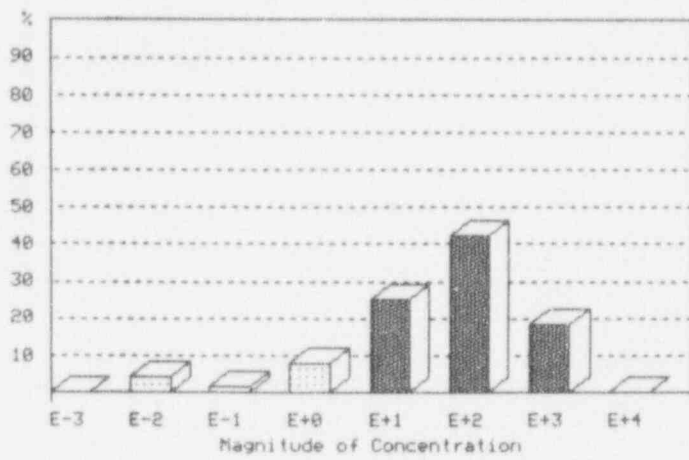


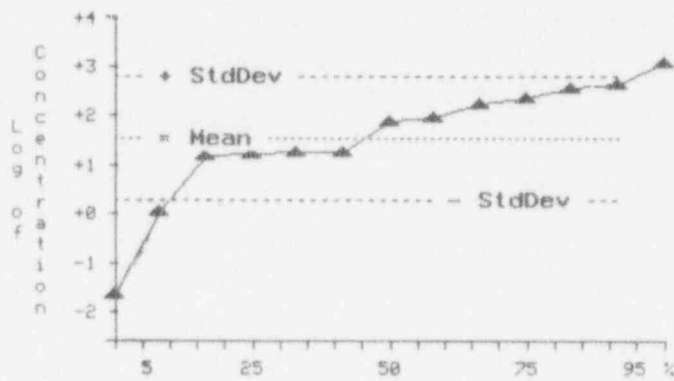
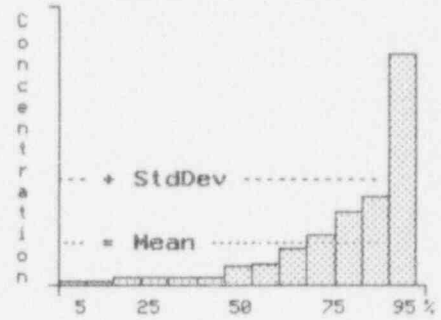
Exhibit F-24 (Continued)

Shipping-Level Stats - ORIGINAL

Rec: 4 of 6



CS-134



pCi/g	
# Points =	13
Minimum =	3.89E-02
10th % =	3.89E-02
25th % =	2.46E+01
50th % =	1.19E+02
75th % =	3.53E+02
90th % =	6.54E+02
Maximum =	1.75E+03
Average =	3.02E+02
Ave Dev =	3.22E+02
Std Dev =	4.86E+02
Skewness =	1.99E+00
Kurtosis =	3.20E+00

Percent Volume At Concentration: 500 (<= Vol < 1000 cu ft

Exhibit F-24 (Continued)

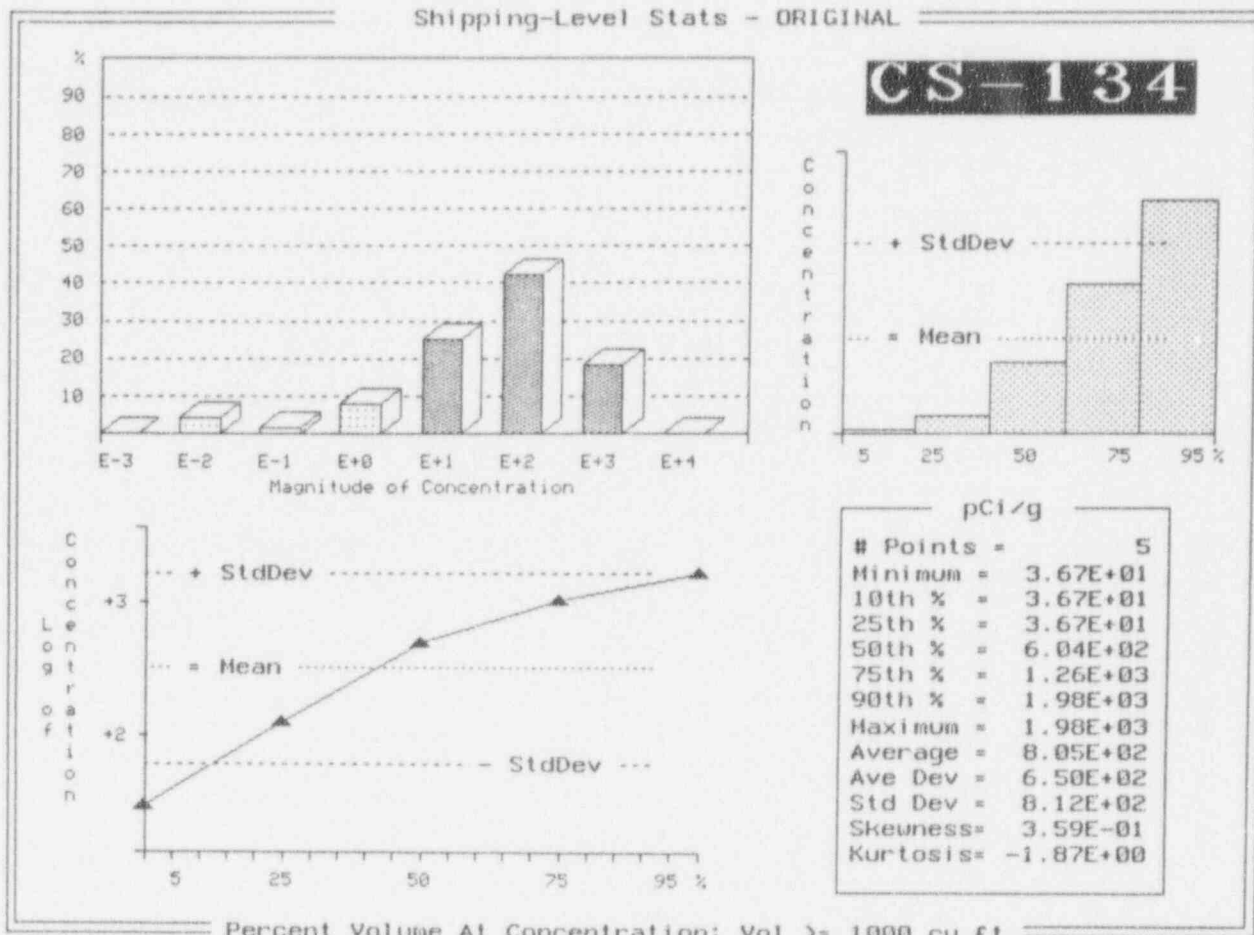
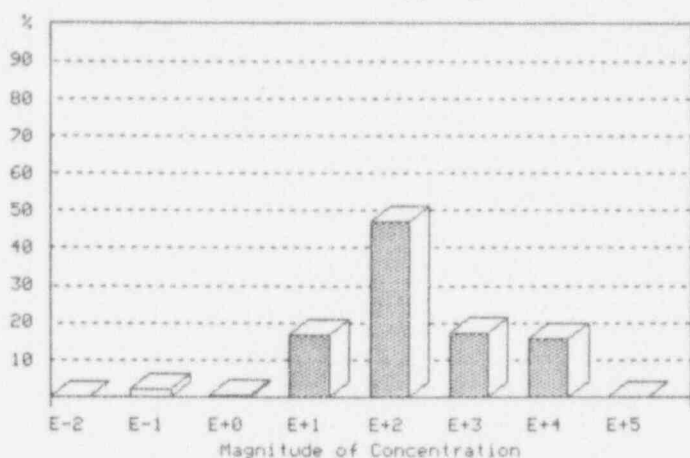
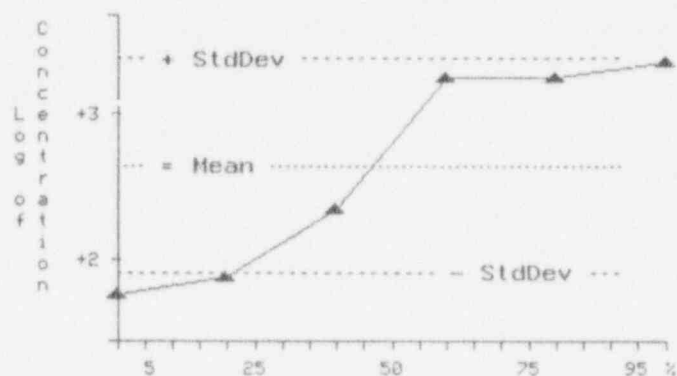
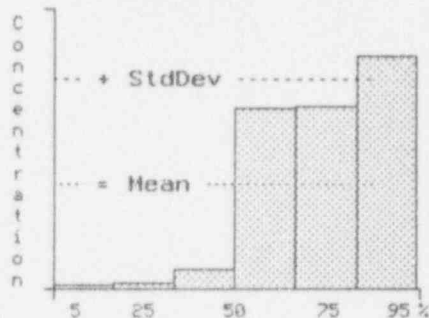


Exhibit F-24 (Continued)

Shipping-Level Stats - ORIGINAL



CS-137



pCi/g	
# Points =	6
Minimum =	6.90E+01
10th % =	6.90E+01
25th % =	9.21E+01
50th % =	2.68E+02
75th % =	2.21E+03
90th % =	2.21E+03
Maximum =	2.80E+03
Average =	1.27E+03
Ave Dev =	1.13E+03
Std Dev =	1.26E+03
Skewness =	6.53E-02
Kurtosis =	-2.20E+00

Percent Volume At Concentration: 10 <= Vol < 50 cu ft

Exhibit F-24 (Continued)

Shipping-Level Stats - ORIGINAL

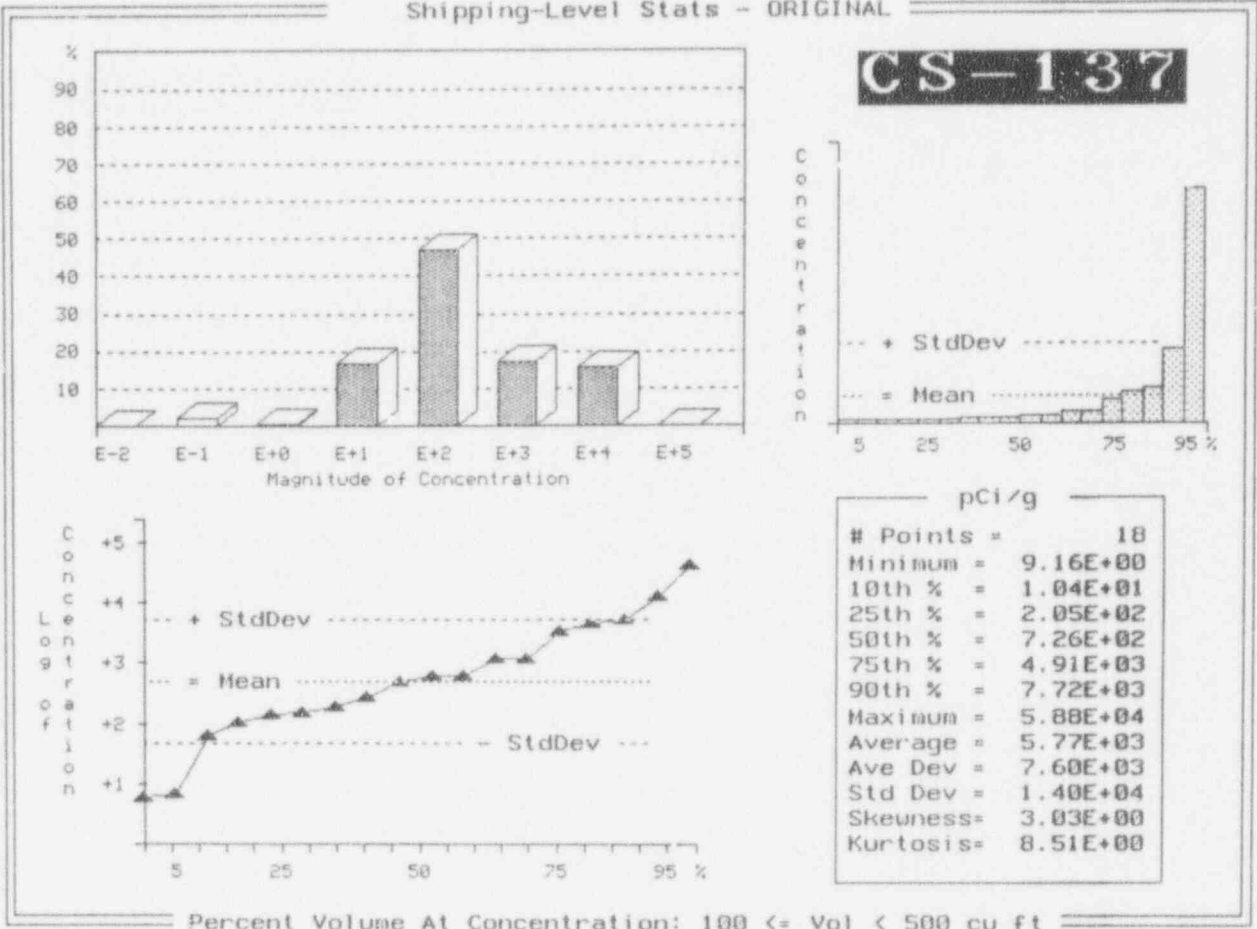
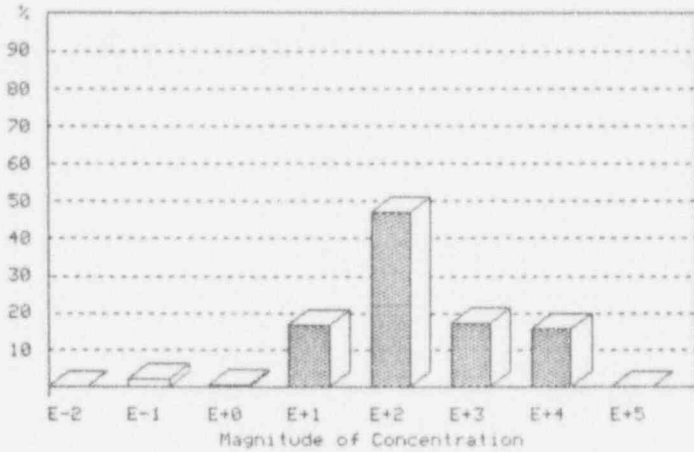
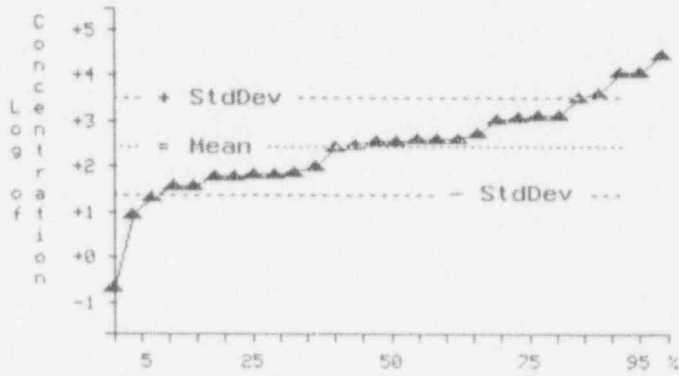
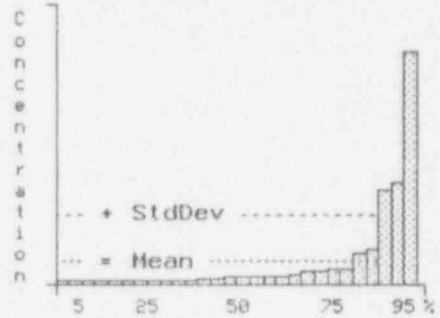


Exhibit F-24 (Continued)

Shipping-Level Stats - ORIGINAL



CS-137



pCi/g	
# Points =	28
Minimum =	3.89E-01
10th % =	3.76E+01
25th % =	1.18E+02
50th % =	6.28E+02
75th % =	2.14E+03
90th % =	6.77E+03
Maximum =	4.89E+04
Average =	4.19E+03
Ave Dev =	5.78E+03
Std Dev =	1.02E+04
Skewness =	3.23E+00
Kurtosis =	1.05E+01

Percent Volume At Concentration: 500 <= Vol < 1000 cu ft

Exhibit F-24 (Continued)

Shipping-Level Stats - ORIGINAL

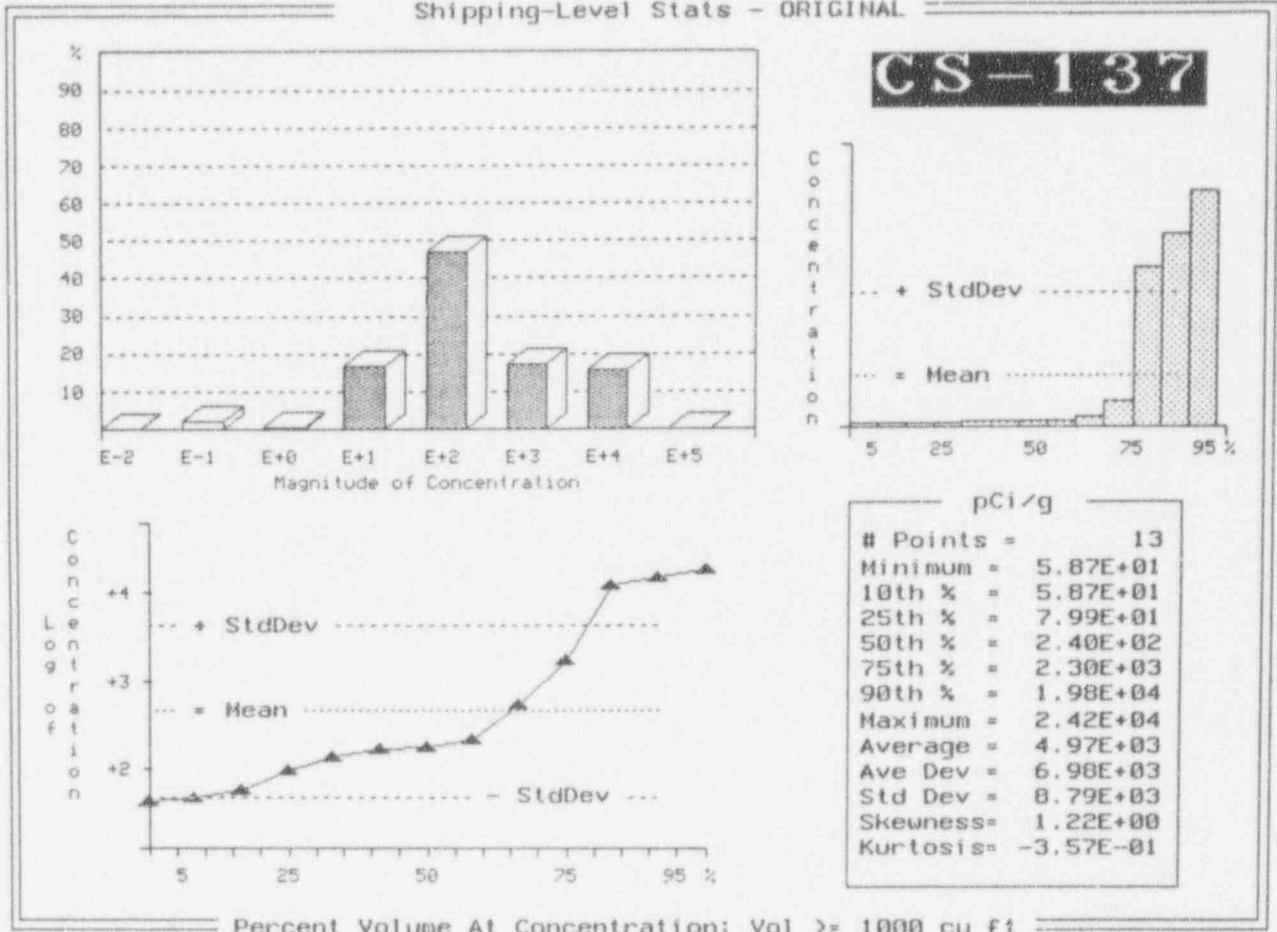
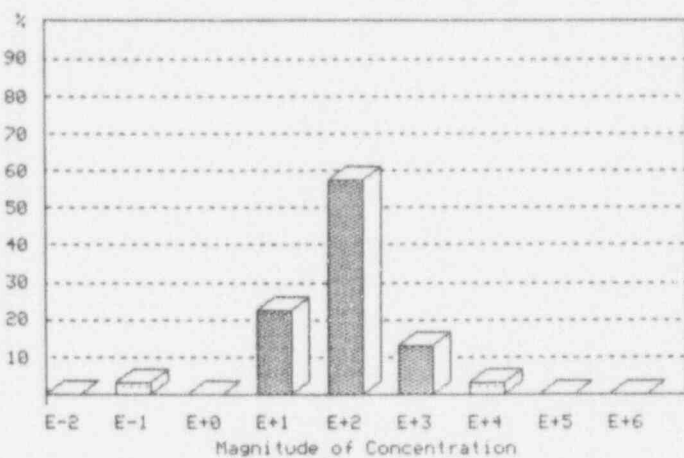
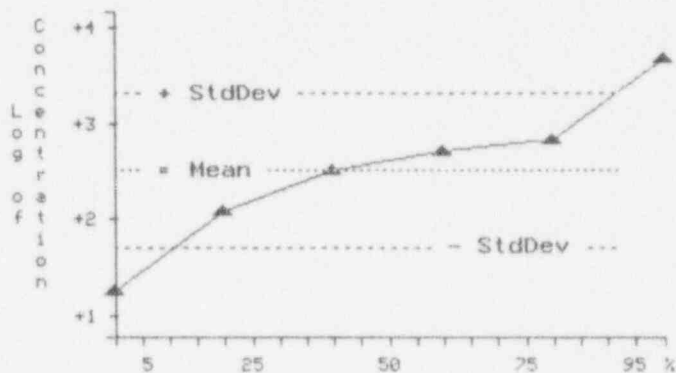
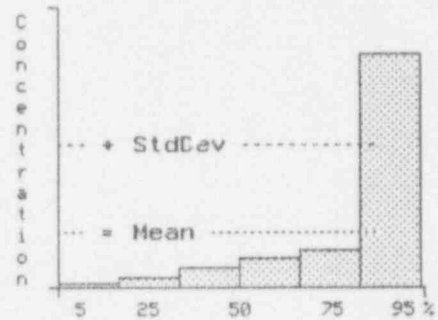


Exhibit F-24 (Continued)

Shipping-Level Stats - ORIGINAL



FE-55



pCi/g	
# Points =	6
Minimum =	2.42E+01
10th % =	2.42E+01
25th % =	1.60E+02
50th % =	4.12E+02
75th % =	8.81E+02
90th % =	8.81E+02
Maximum =	6.01E+03
Average =	1.36E+03
Ave Dev =	1.55E+03
Std Dev =	2.30E+03
Skewness =	1.30E+00
Kurtosis =	-1.77E-01

Percent Volume At Concentration: 100 <= Vol < 500 cu ft

Exhibit F-24 (Continued)

Shipping-Level Stats - ORIGINAL

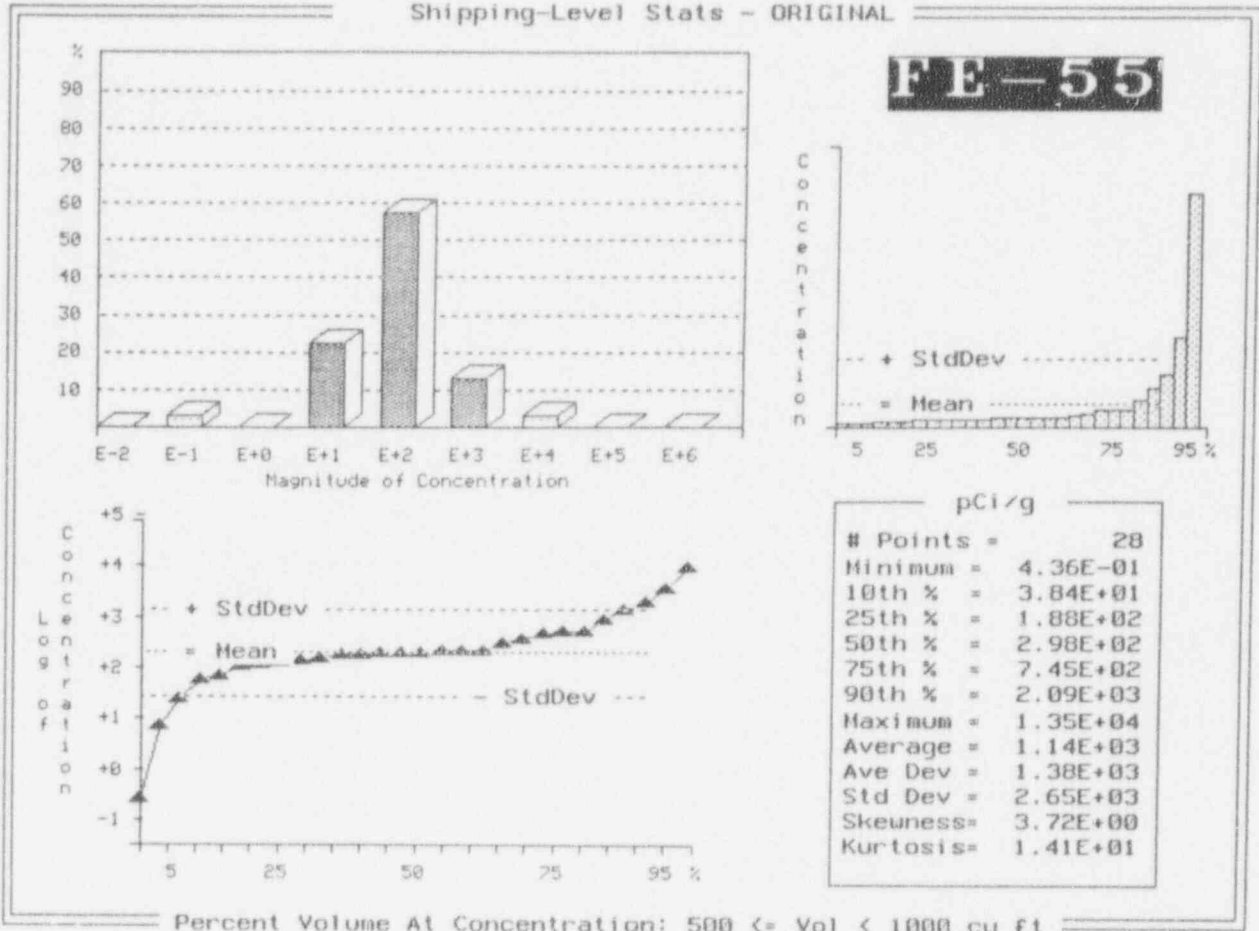


Exhibit F-24 (Continued)

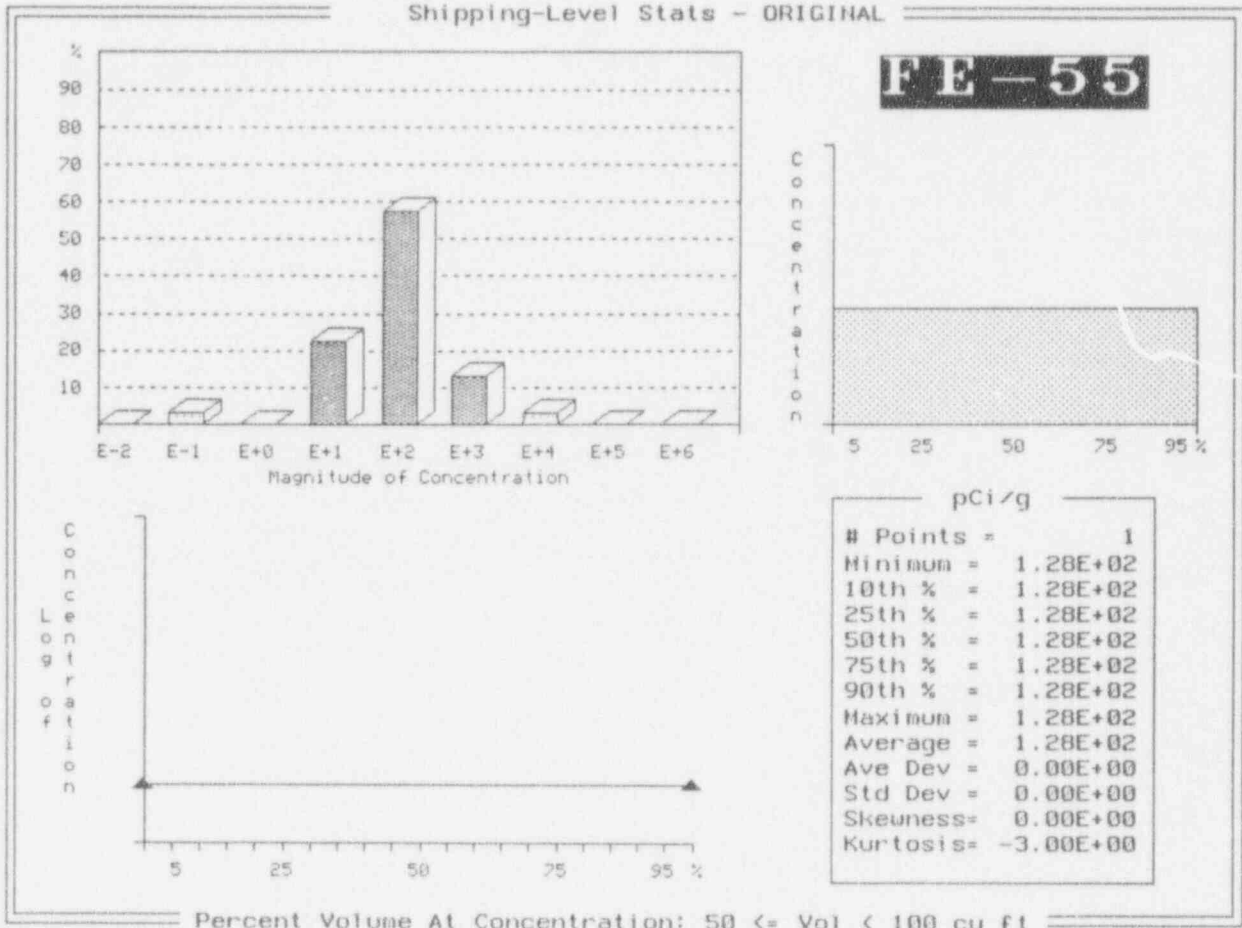


Exhibit F-24 (Continued)

Shipping-Level Stats - ORIGINAL

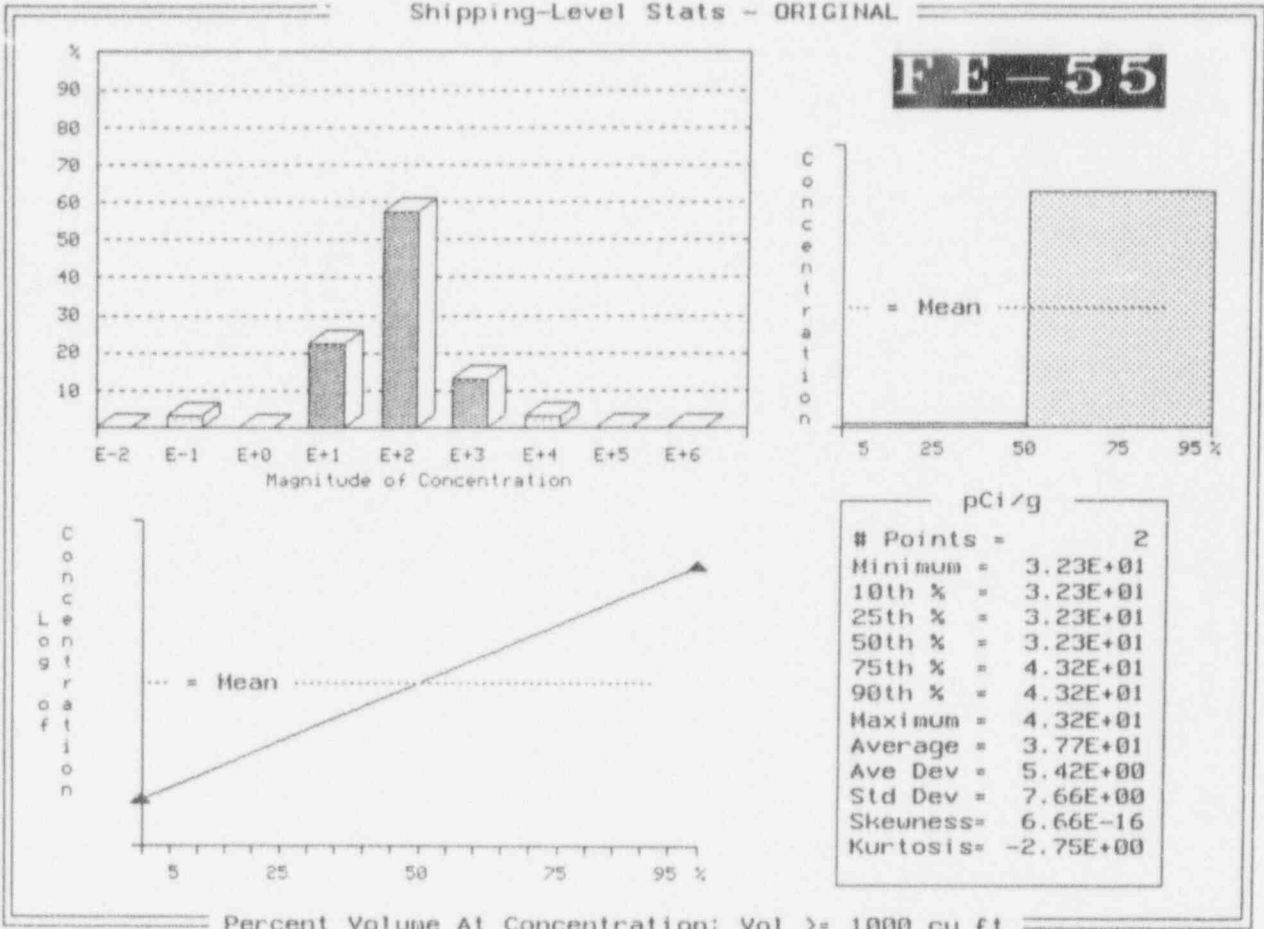


Exhibit F-24 (Continued)

Shipping-Level Stats - ORIGINAL

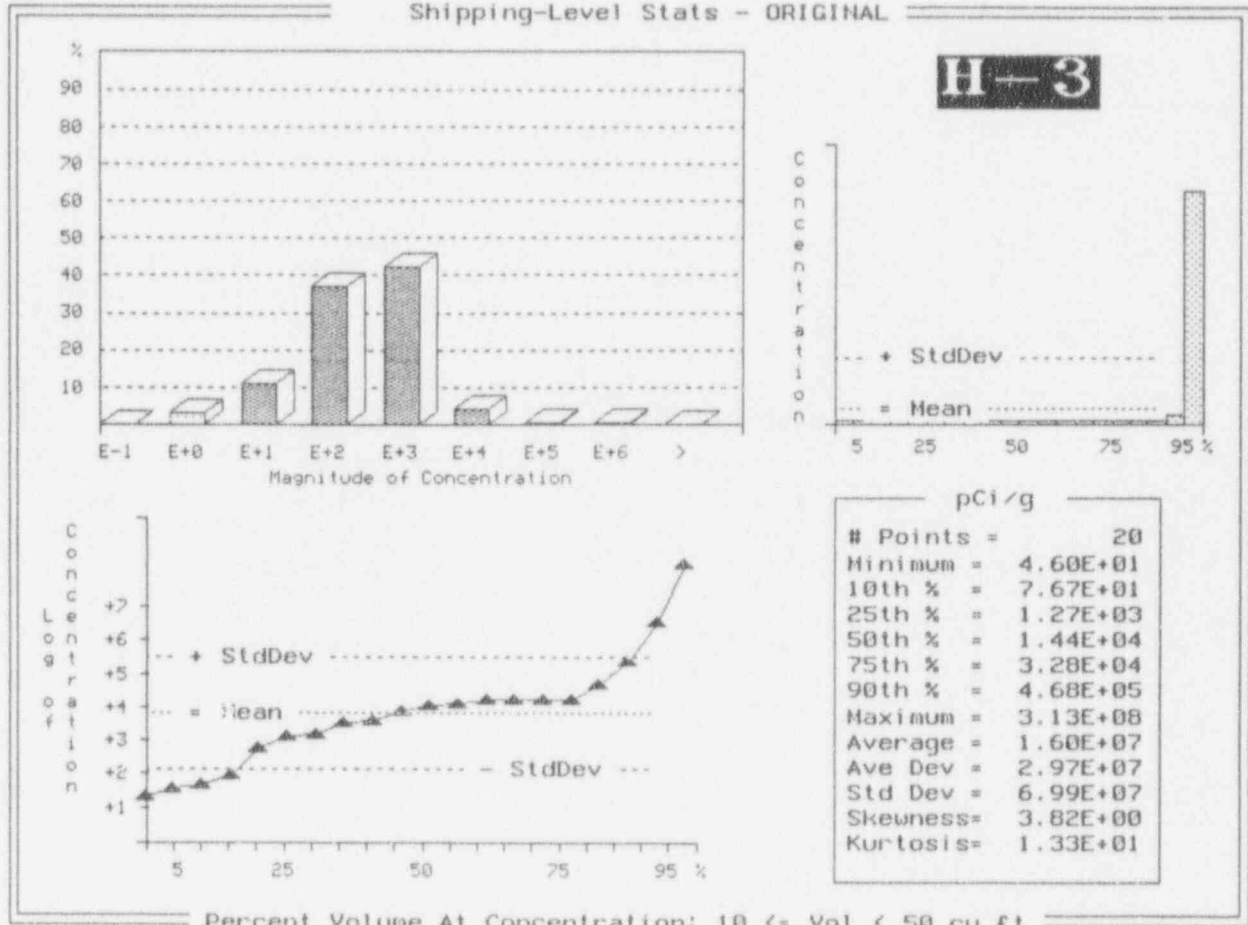
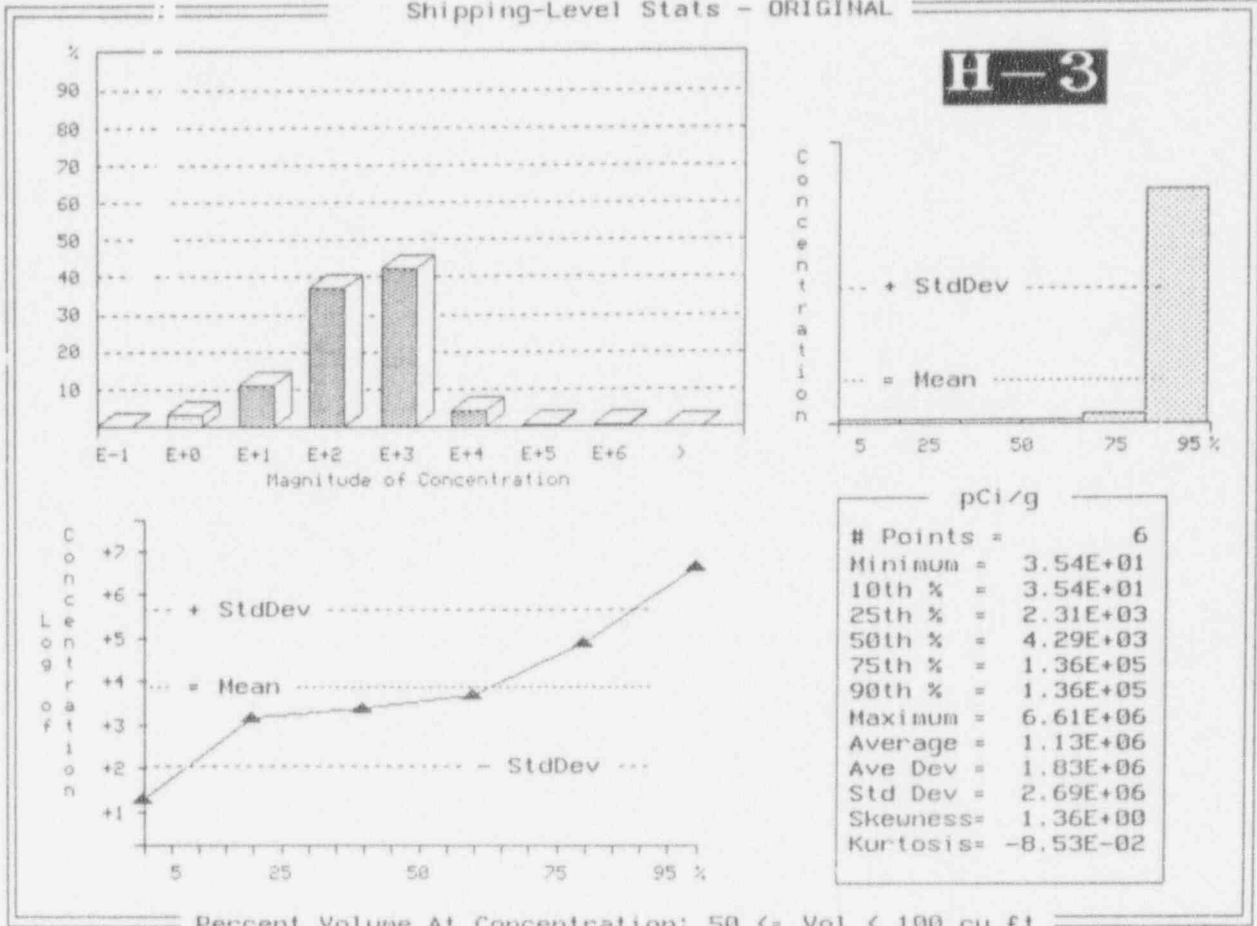


Exhibit F-24 (Continued)

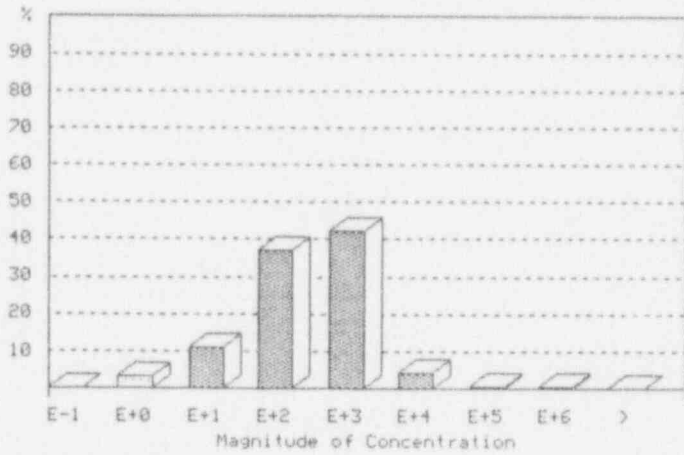
Shipping-Level Stats - ORIGINAL



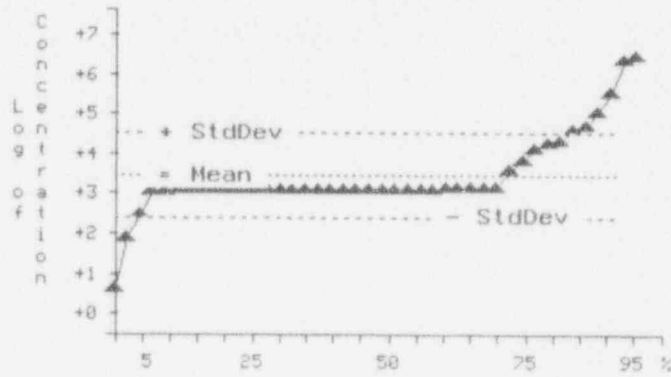
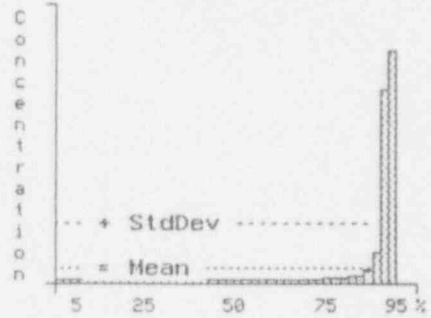
Percent Volume At Concentration: 50 <= Vol < 100 cu ft

Exhibit F-24 (Continued)

Shipping-Level Stats - ORIGINAL



H-3



pCi/g	
# Points =	42
Minimum =	8.75E+00
10th % =	2.27E+03
25th % =	2.49E+03
50th % =	2.55E+03
75th % =	7.58E+03
90th % =	9.48E+04
Maximum =	5.19E+06
Average =	2.55E+05
Ave Dev =	4.47E+05
Std Dev =	1.03E+06
Skeuness =	4.09E+00
Kurtosis =	1.55E+01

Percent Volume At Concentration: 100 <= Vol < 500 cu ft

Exhibit F-24 (Continued)

Shipping-Level Stats - ORIGINAL

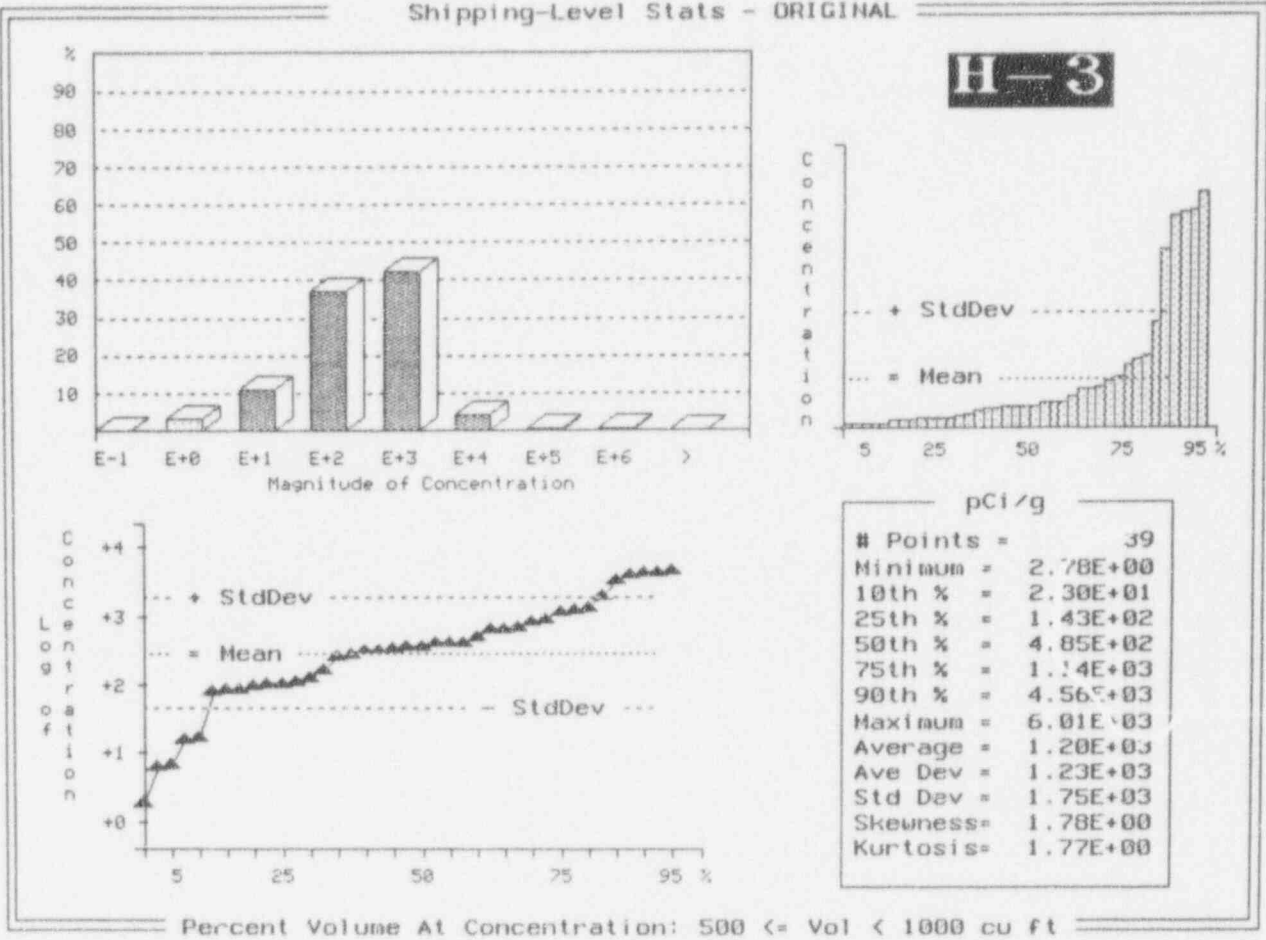


Exhibit F-24 (Continued)

Shipping-Level Stats - ORIGINAL

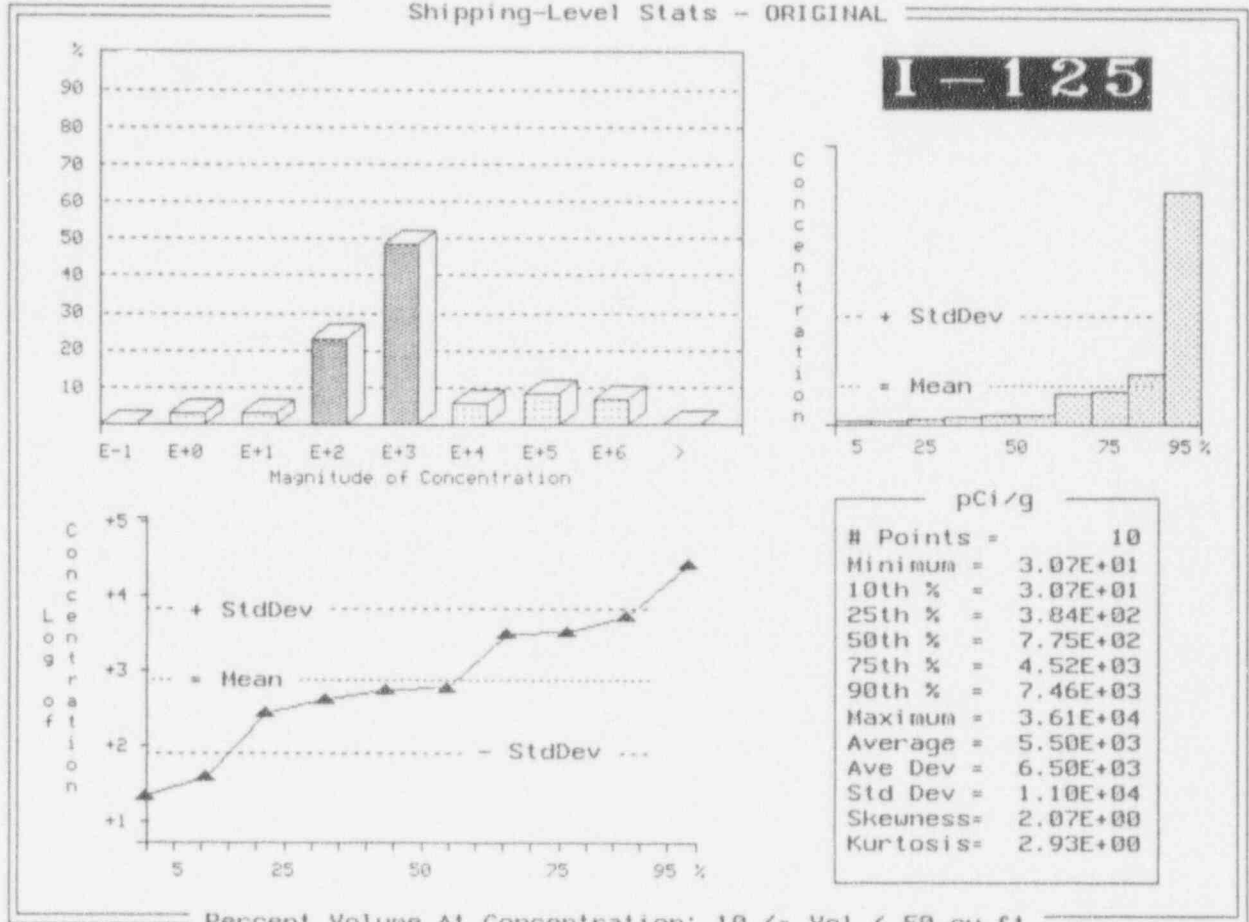


Exhibit F-24 (Continued)

Shipping-Level Stats - ORIGINAL

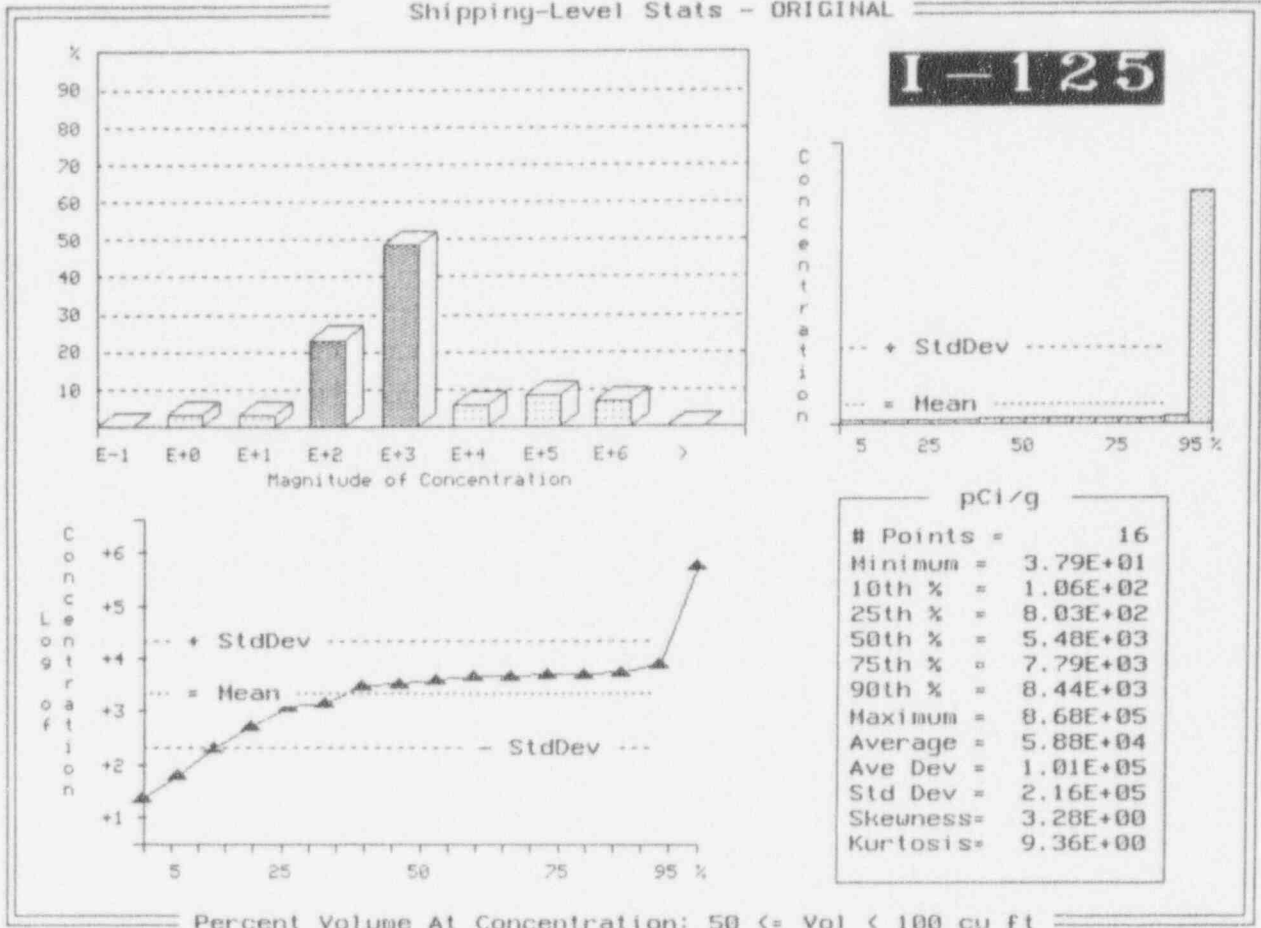
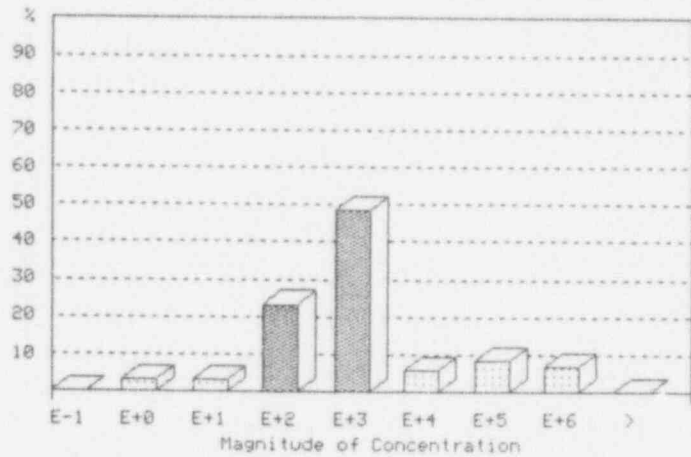
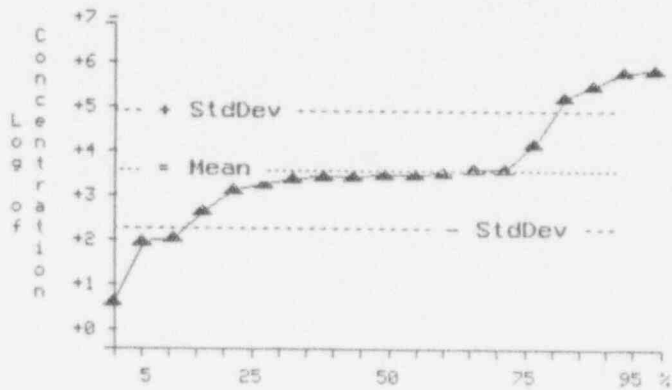
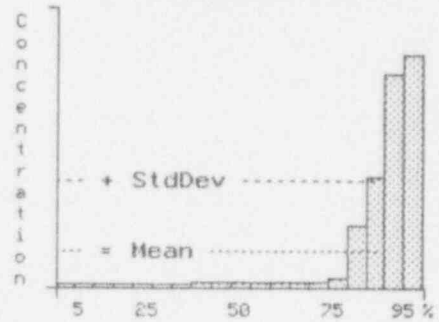


Exhibit F-24 (Continued)

Shipping-Level Stats - ORIGINAL



I-125



pCi/g	
# Points =	19
Minimum =	7.67E+00
10th % =	1.67E+02
25th % =	2.42E+03
50th % =	5.34E+03
75th % =	7.61E+03
90th % =	5.37E+05
Maximum =	1.15E+06
Average =	1.64E+05
Ave Dev =	2.50E+05
Std Dev =	3.57E+05
Skewness =	1.92E+00
Kurtosis =	2.19E+00

Percent Volume At Concentration: 100 <= Vol < 500 cu ft

Exhibit F-24 (Continued)

Shipping-Level Stats - ORIGINAL

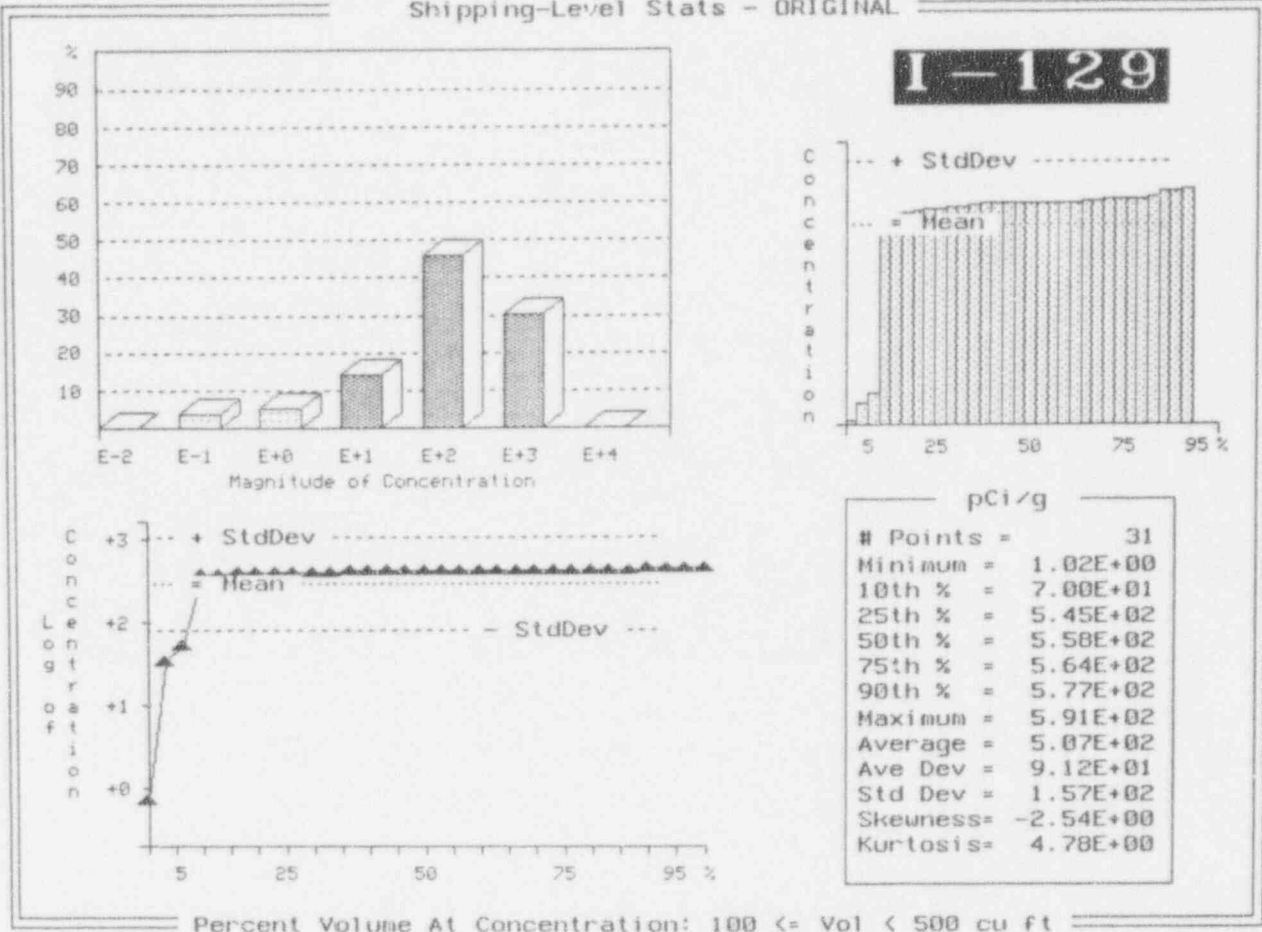
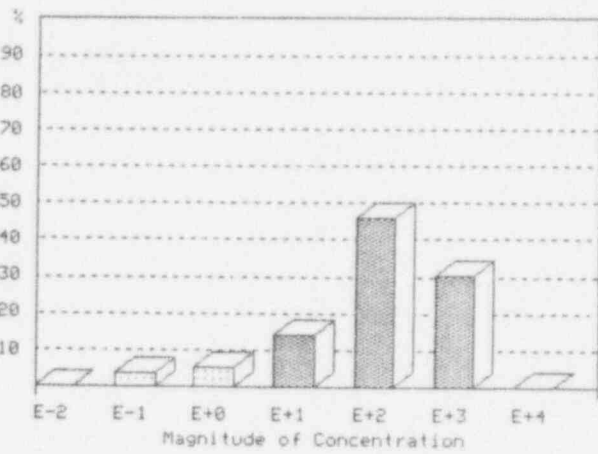
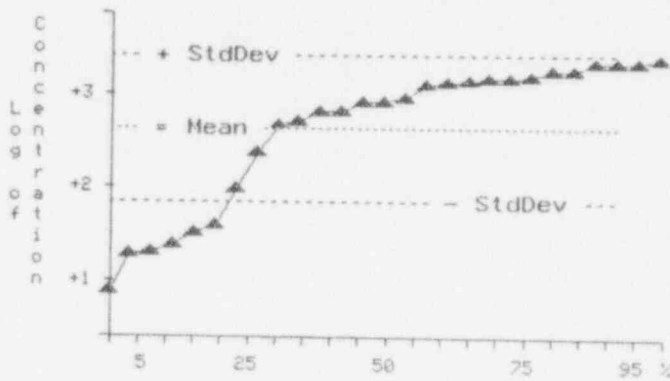
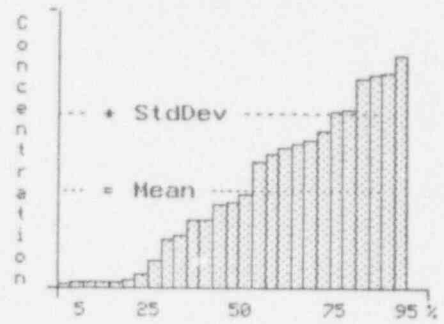


Exhibit F-24 (Continued)

Shipping-Level Stats - ORIGINAL



I-129



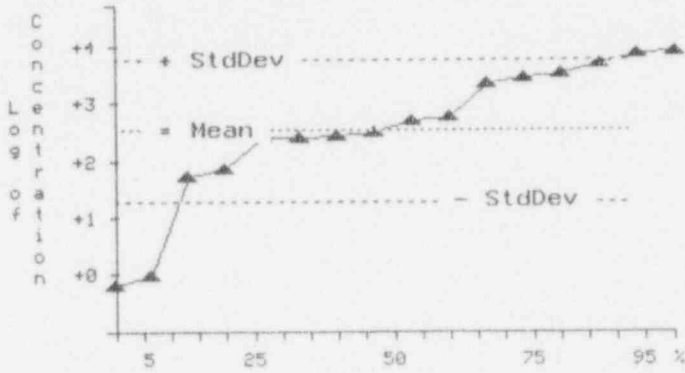
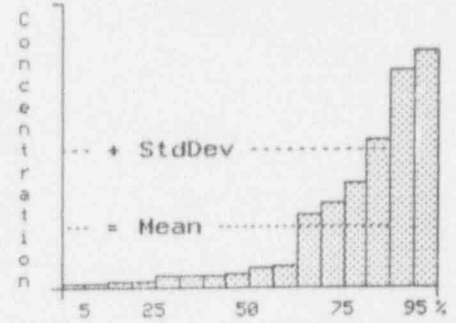
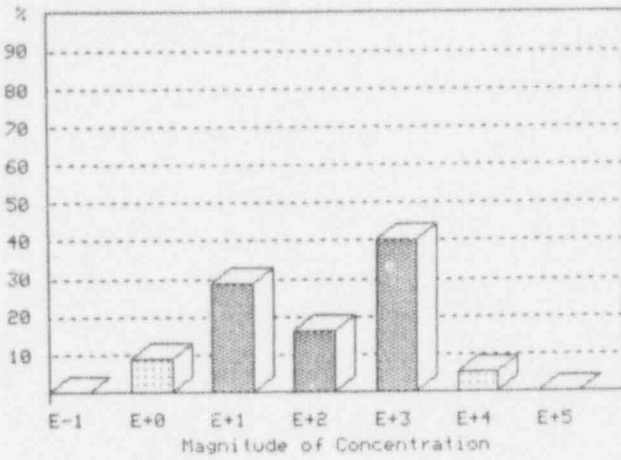
pCi/g	
# Points =	27
Minimum =	1.04E+01
10th % =	2.74E+01
25th % =	1.27E+02
50th % =	1.07E+03
75th % =	1.89E+03
90th % =	2.70E+03
Maximum =	3.01E+03
Average =	1.25E+03
Ave Dev =	8.73E+02
Std Dev =	1.01E+03
Skeuiness =	2.13E-01
Kurtosis =	-1.40E+00

Percent Volume At Concentration: 500 <= Vol < 1000 cu ft

Exhibit F-24 (Continued)

Shipping-Level Stats - ORIGINAL

MN-54



pCi/g	
# Points =	16
Minimum =	1.02E+00
10th % =	1.51E+00
25th % =	1.10E+02
50th % =	5.16E+02
75th % =	4.30E+03
90th % =	7.62E+03
Maximum =	1.23E+04
Average =	3.00E+03
Ave Dev =	3.30E+03
Std Dev =	4.12E+03
Skeuness=	1.15E+00
Kurtosis=	-1.43E-01

Percent Volume At Concentration: 100 <= Vol < 500 cu ft

Exhibit F-24 (Continued)

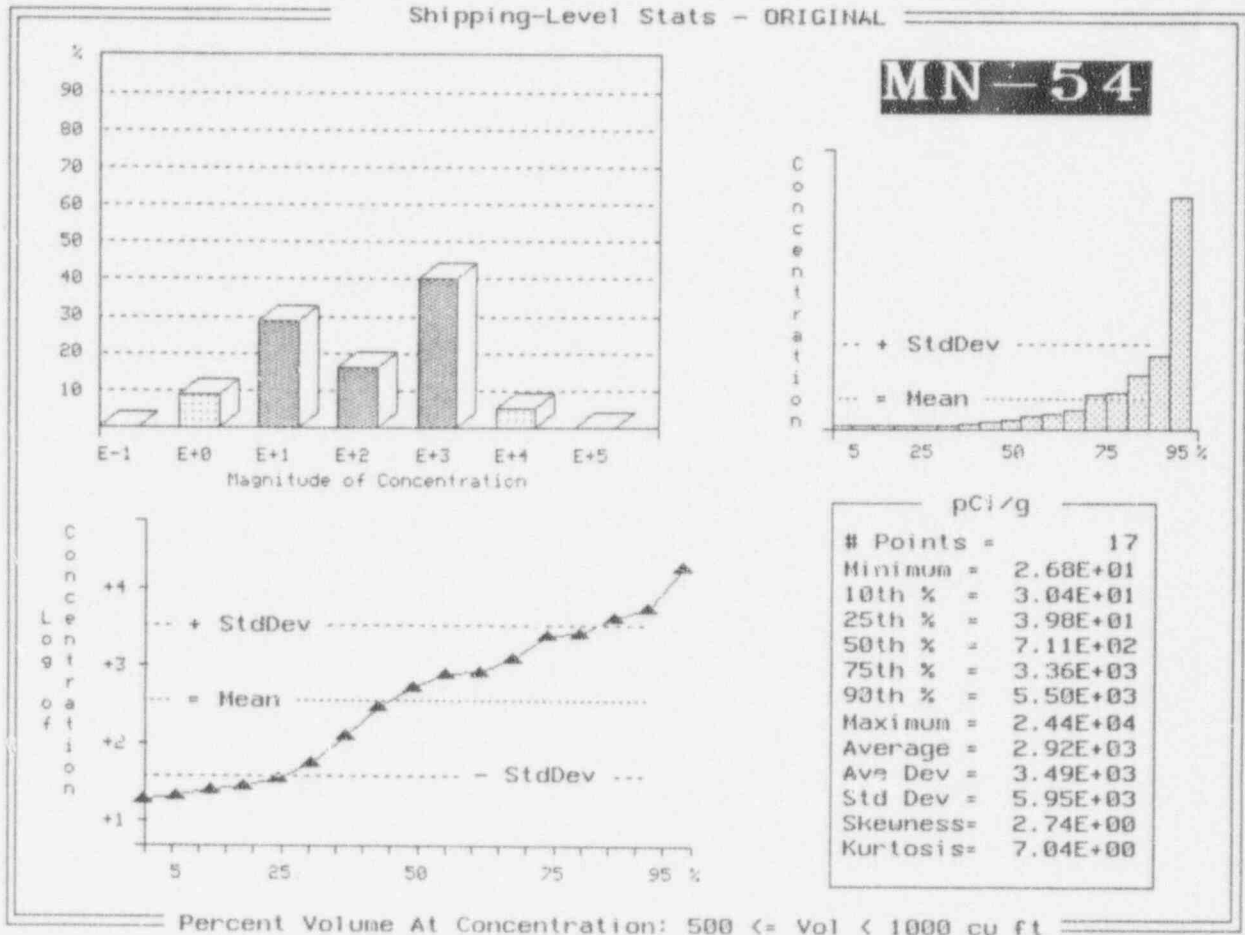


Exhibit F-24 (Continued)

Shipping-Level Stats - ORIGINAL

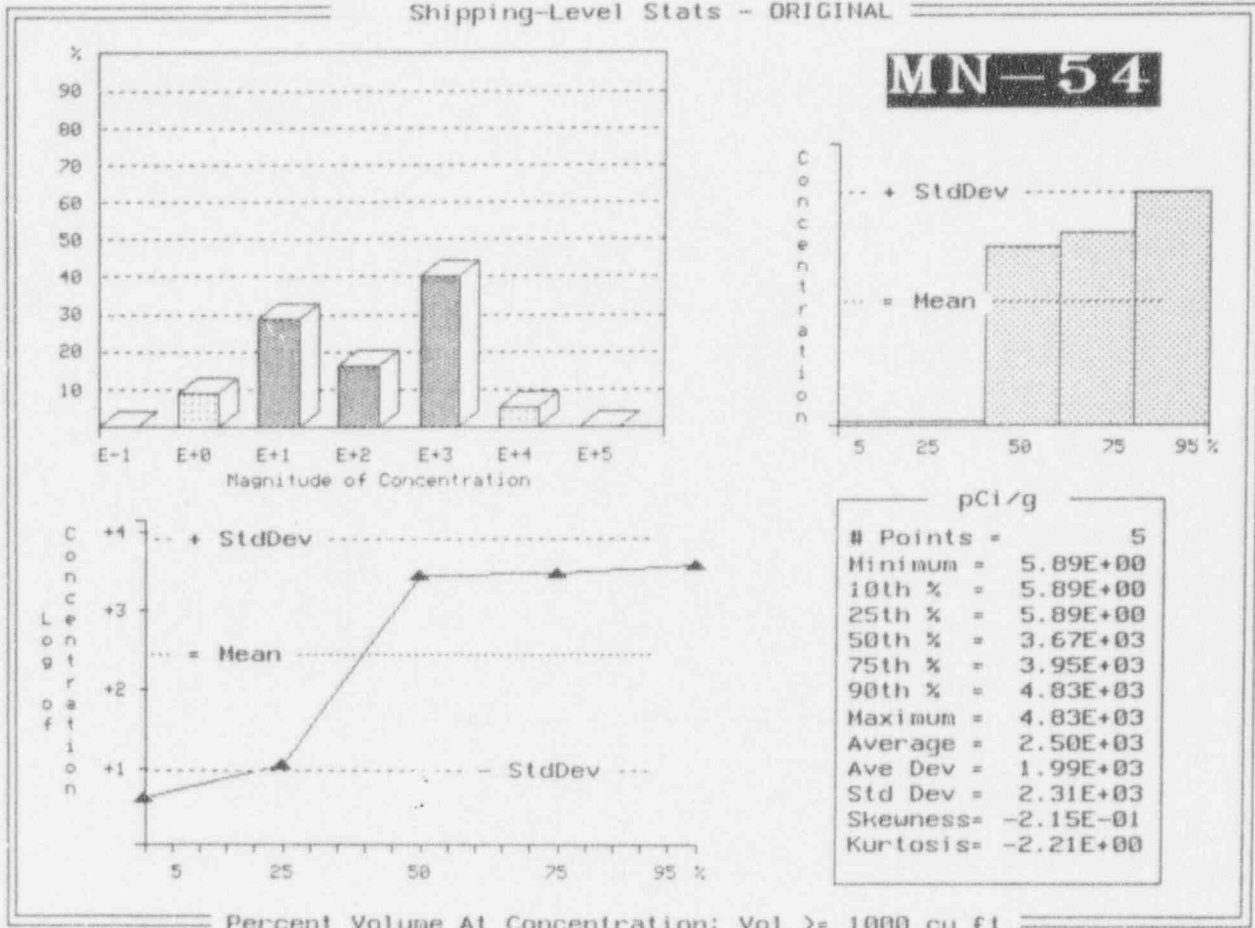


Exhibit F-24 (Continued)

Shipping-Level Stats - ORIGINAL

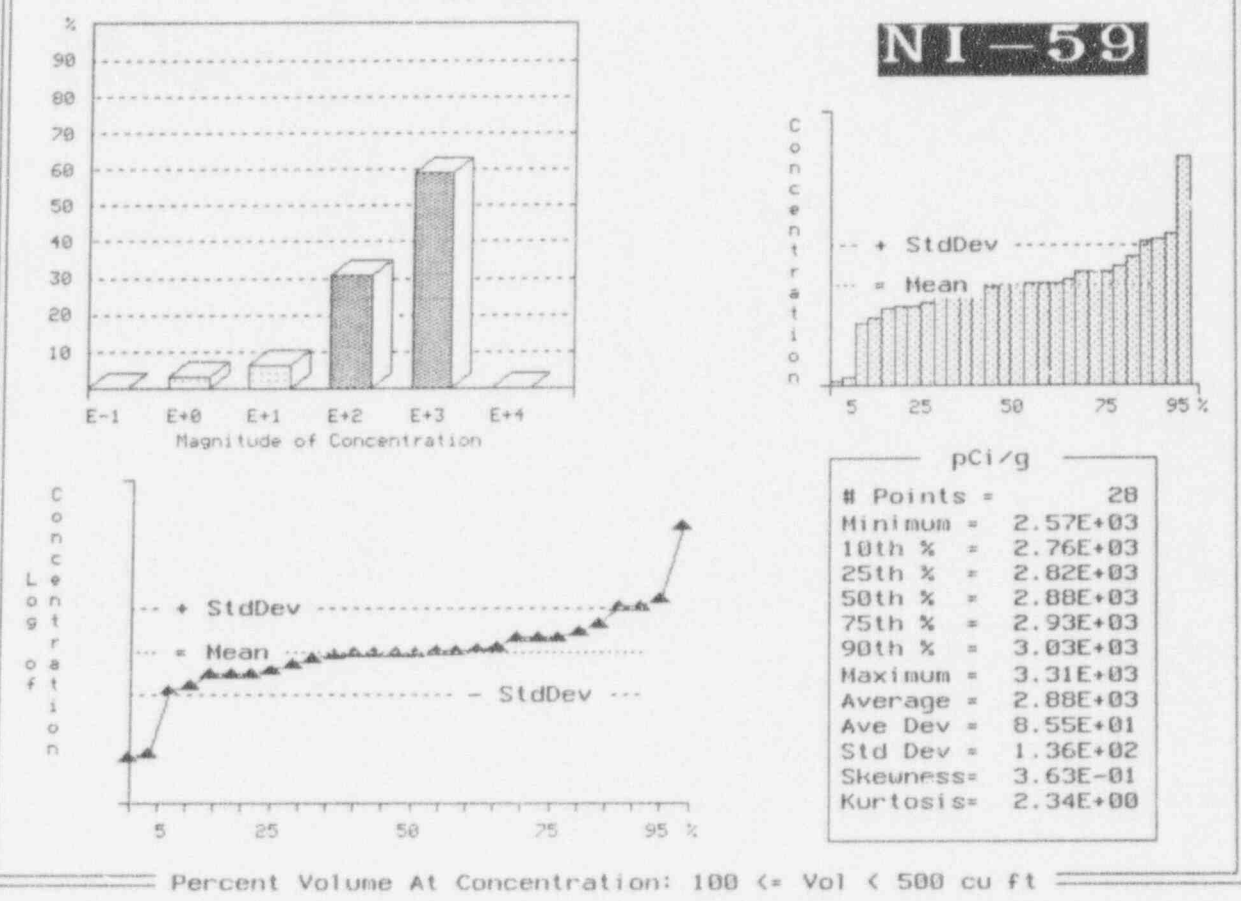


Exhibit F-24 (Continued)

Shipping-Level Stats - ORIGINAL

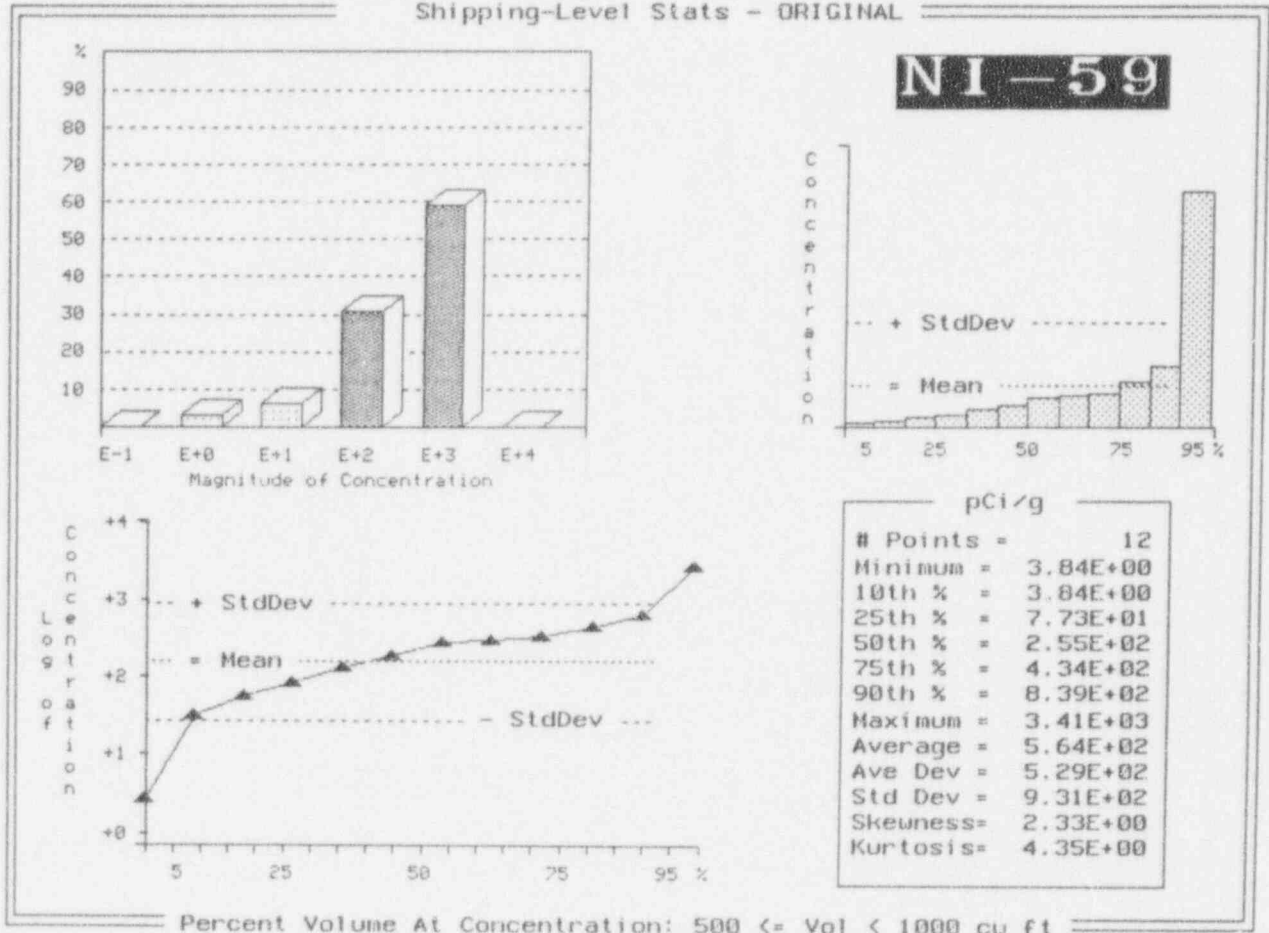


Exhibit F-24 (Continued)

Shipping-Level Stats - ORIGINAL

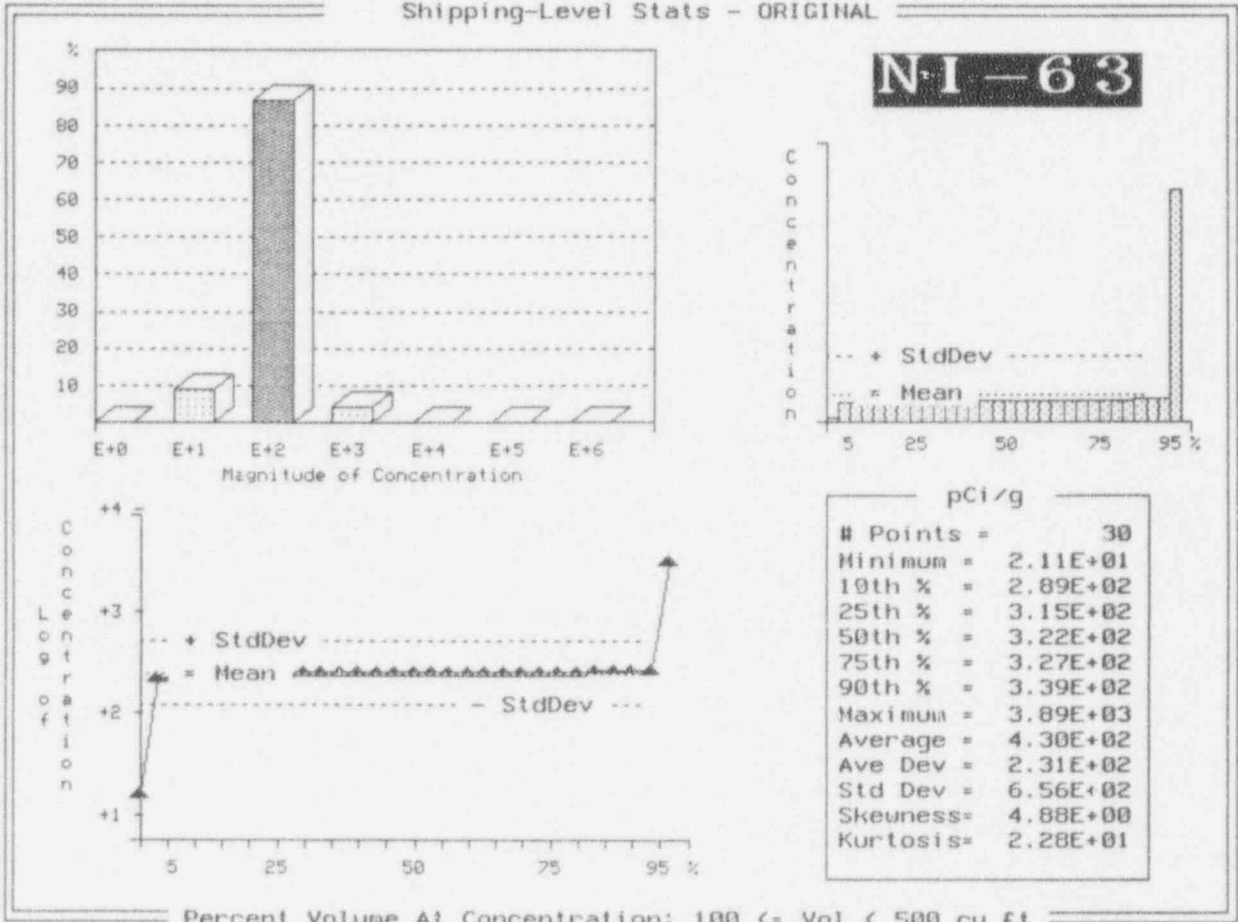


Exhibit F-24 (Continued)

Shipping-Level Stats - ORIGINAL

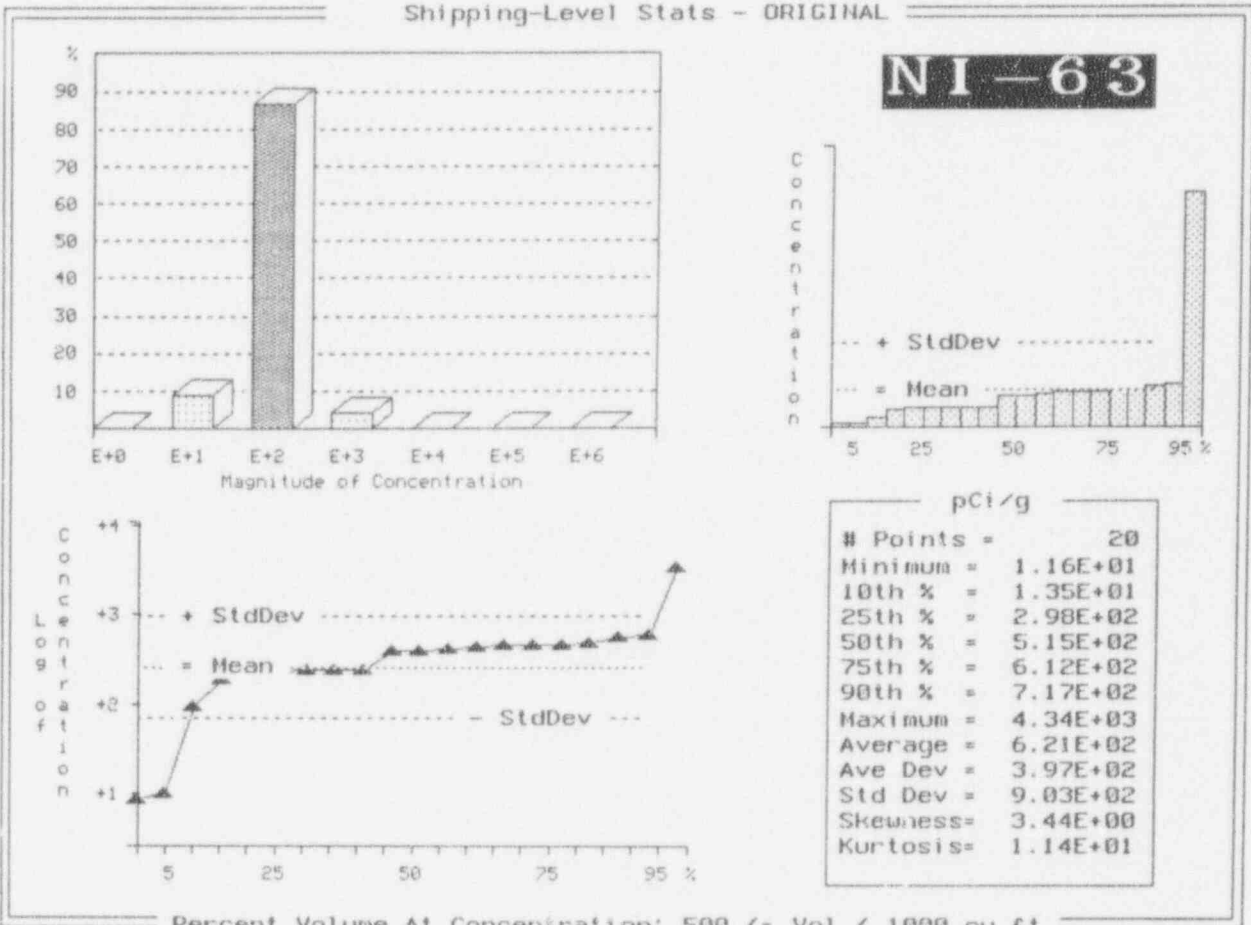
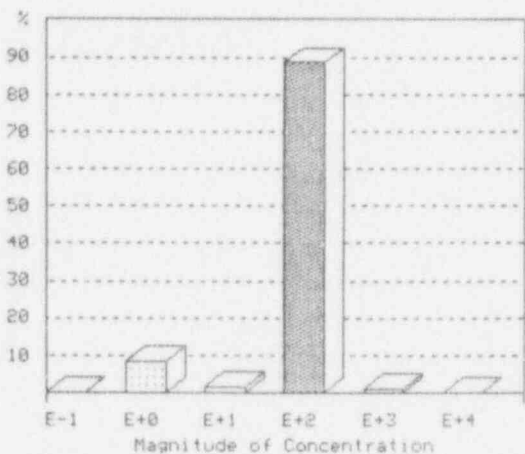
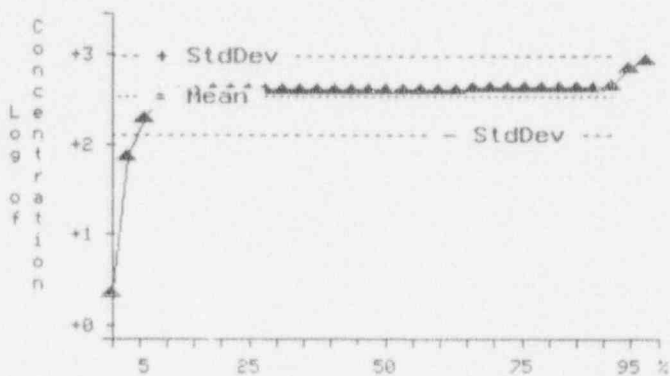
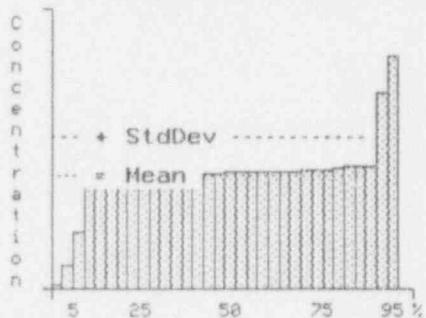


Exhibit F-24 (Continued)

Shipping-Level Stats - ORIGINAL



SR-90



pCi/g	
# Points =	32
Minimum =	3.05E+00
10th % =	2.50E+02
25th % =	5.22E+02
50th % =	5.41E+02
75th % =	5.51E+02
90th % =	5.70E+02
Maximum =	1.10E+03
Average =	5.29E+02
Ave Dev =	8.41E+01
Std Dev =	1.84E+02
Skeuness=	4.08E-02
Kurtosis=	3.94E+00

Percent Volume At Concentration: 100 <= Vol < 500 cu ft

Exhibit F-24 (Continued)

Shipping-Level Stats - ORIGINAL

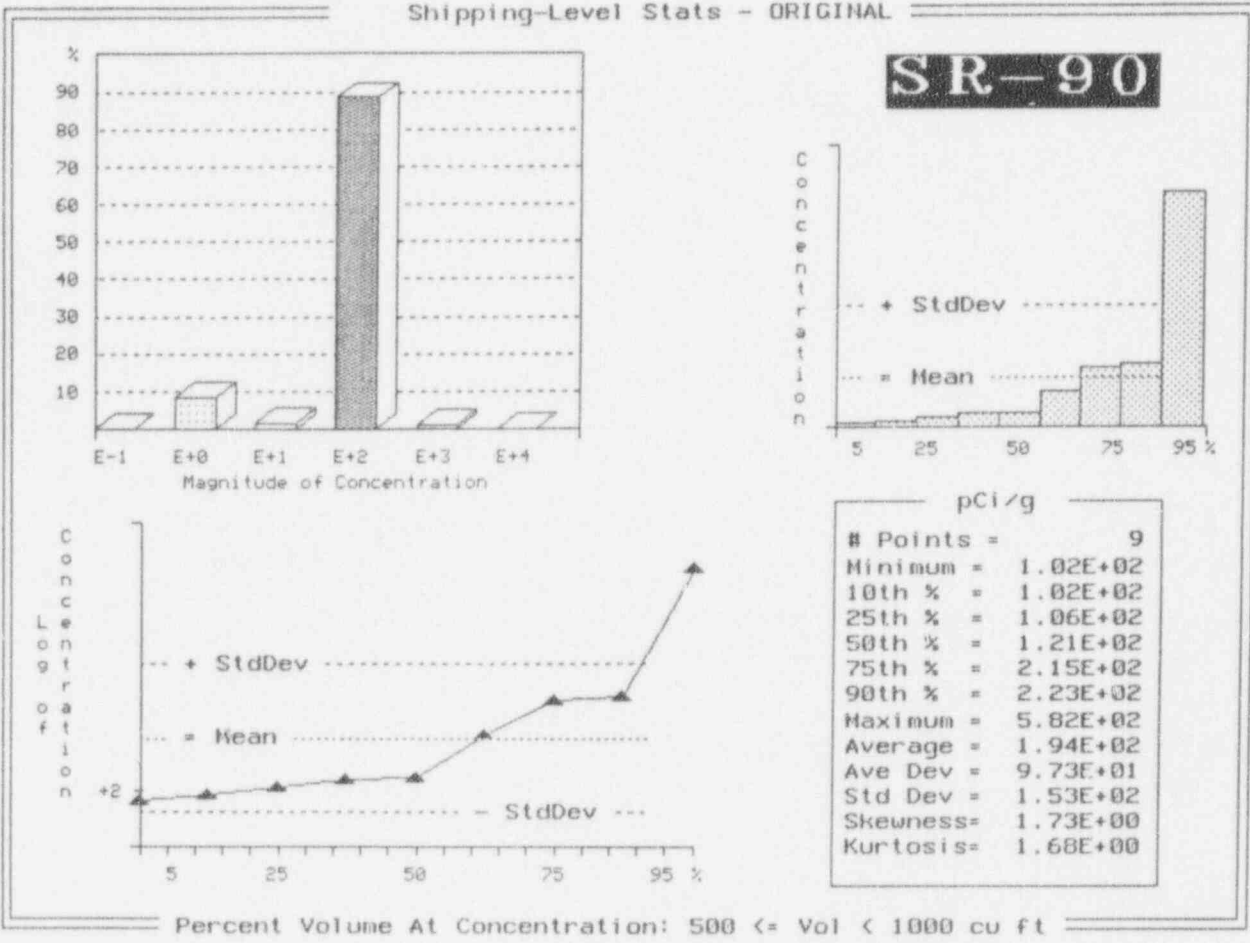


Exhibit F-24 (Continued)

Shipping-Level Stats - ORIGINAL

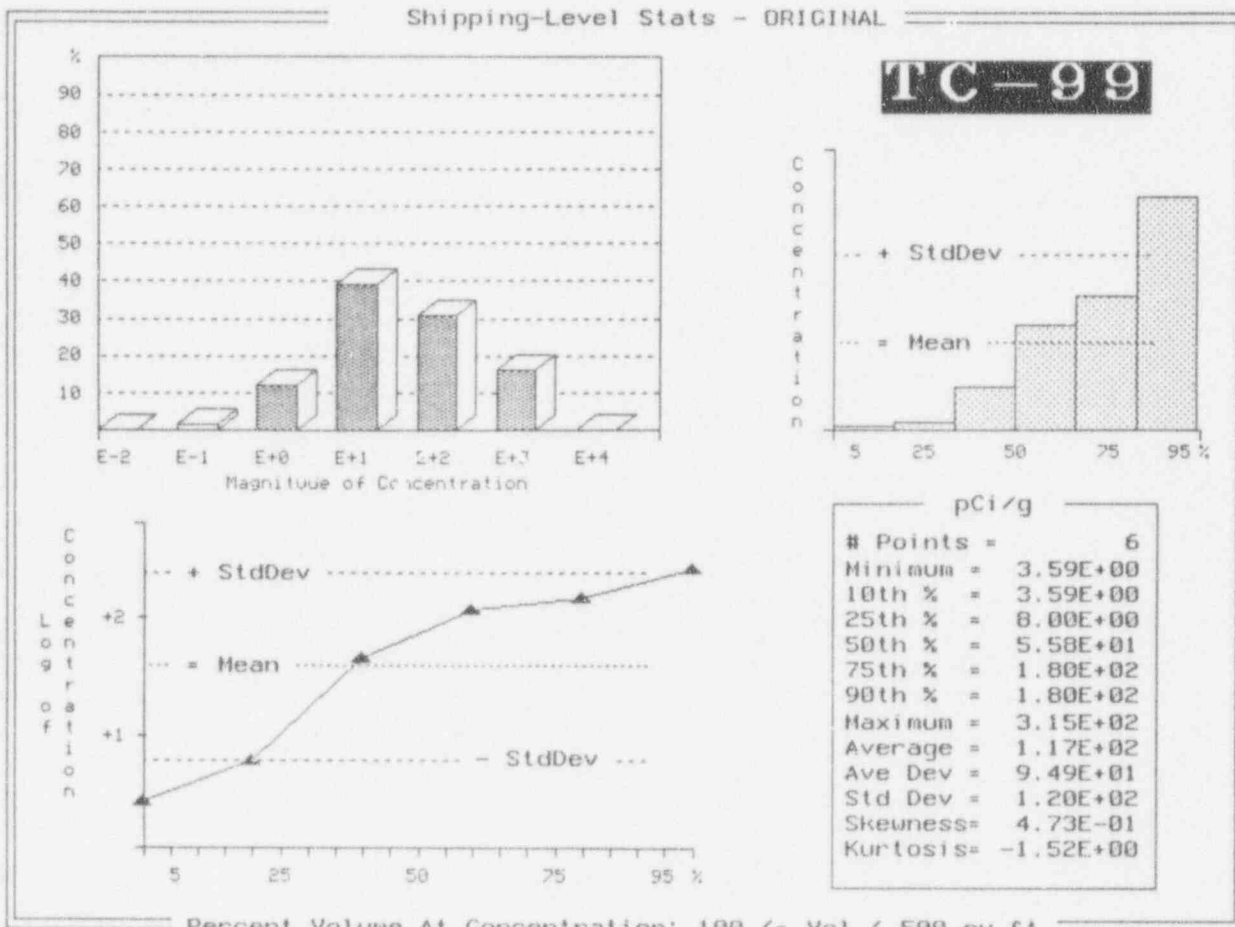


Exhibit F-24 (Continued)

Shipping-Level Stats - ORIGINAL

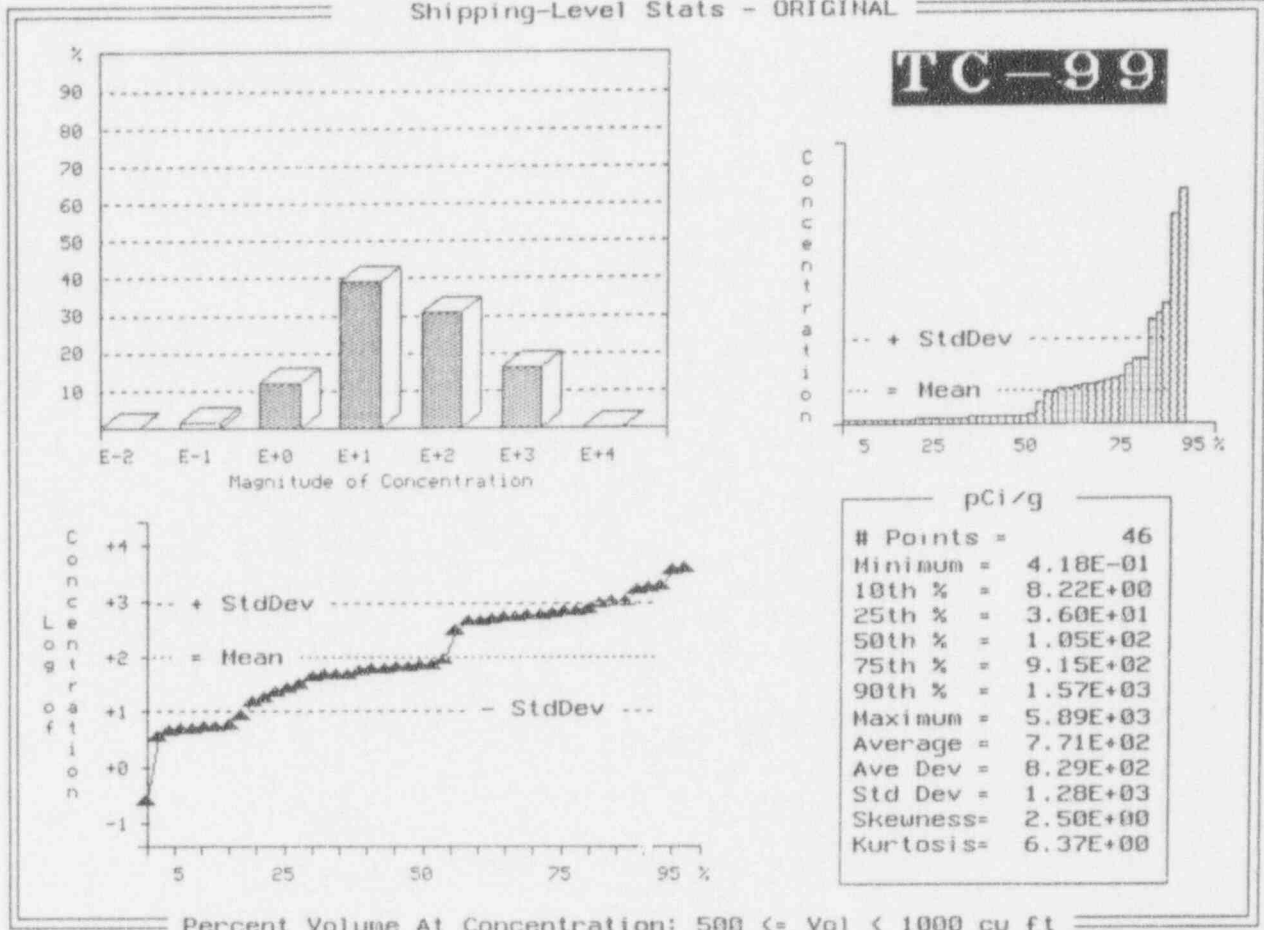


Exhibit F-24 (Continued)

Shipping-Level Stats - ORIGINAL

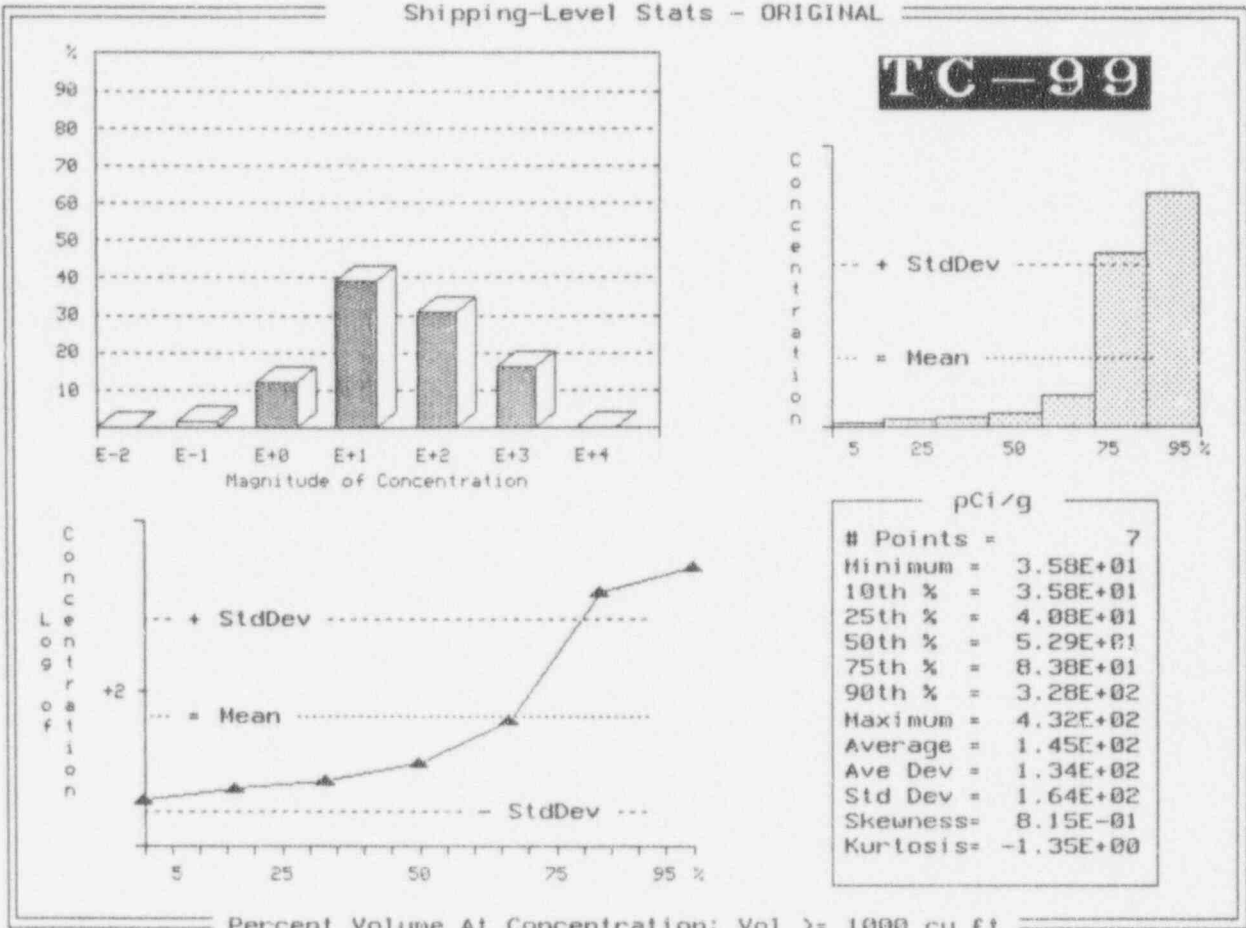


Exhibit F-24 (Continued)

Shipping-Level Stats - ORIGINAL

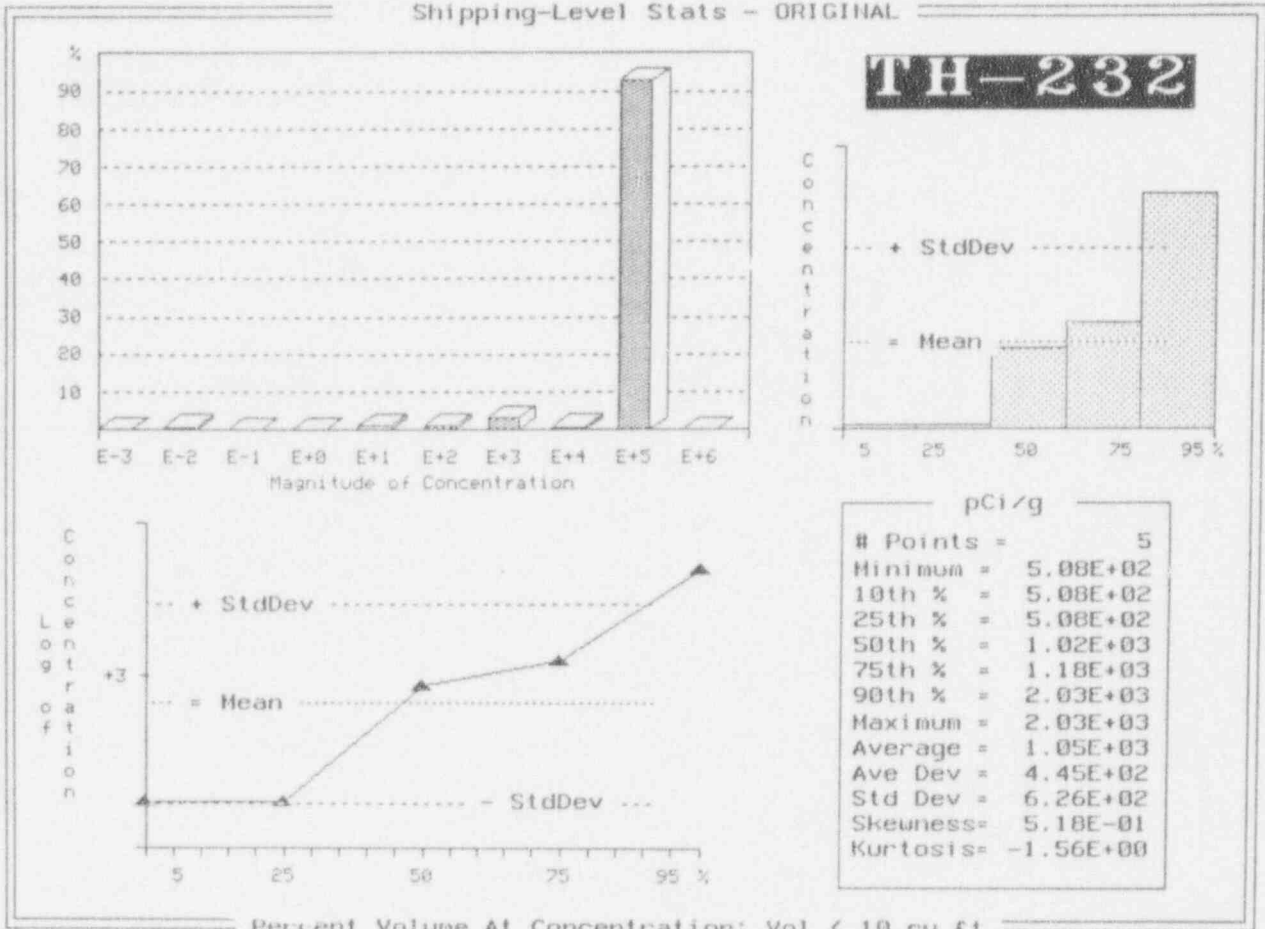
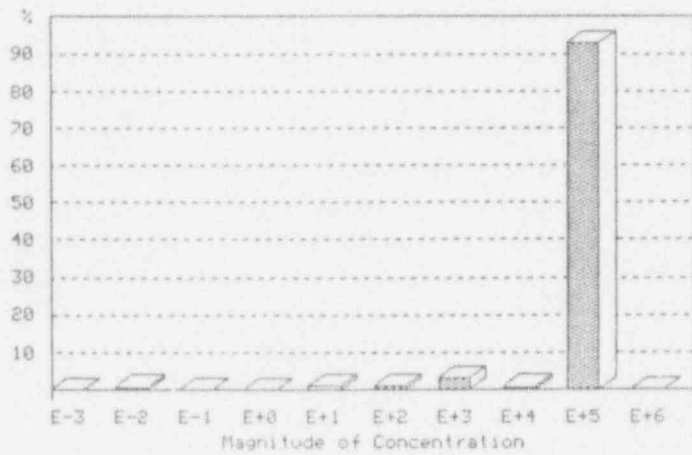
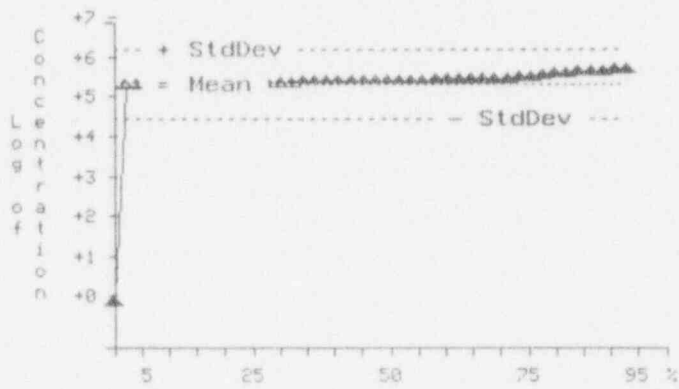
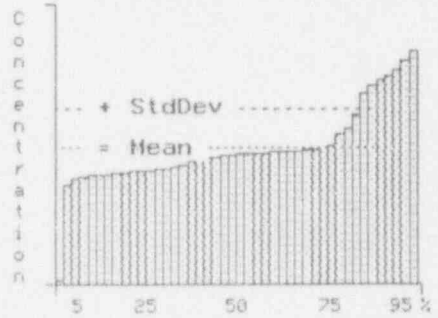


Exhibit F-24 (Continued)

Shipping-Level Stats - ORIGINAL



TH-232



pCi/g	
# Points =	254
1st % =	3.89E+03
10th % =	3.46E+05
25th % =	3.61E+05
50th % =	4.10E+05
75th % =	4.34E+05
90th % =	6.45E+05
99th % =	7.22E+05
Average =	4.28E+05
Ave Dev =	7.86E+04
Std Dev =	1.20E+05
Skewness =	2.62E-01
Kurtosis =	2.48E+00

Percent Volume At Concentration: 100 <= Vol < 500 cu ft

Exhibit F-24 (Continued)

Shipping-Level Stats - ORIGINAL

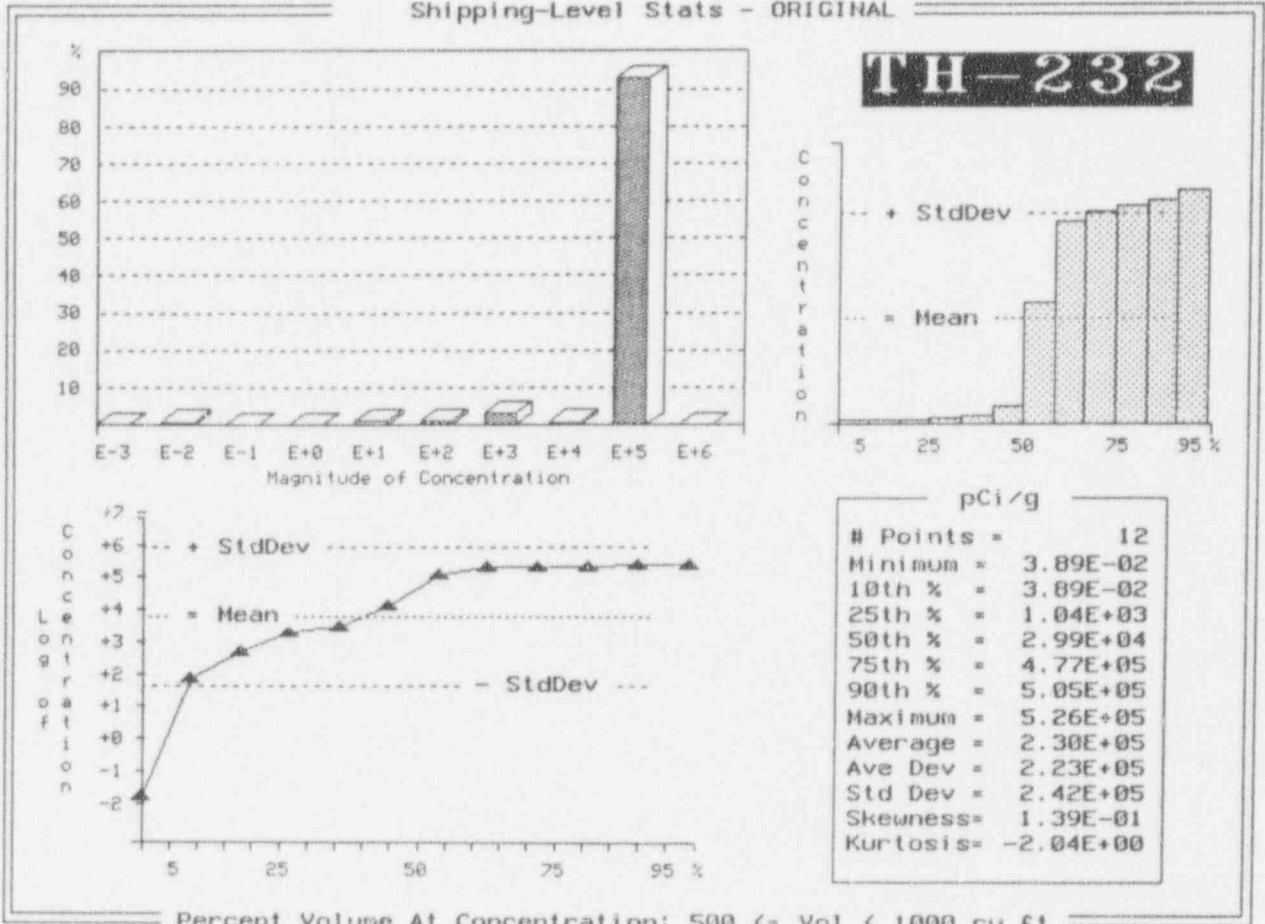
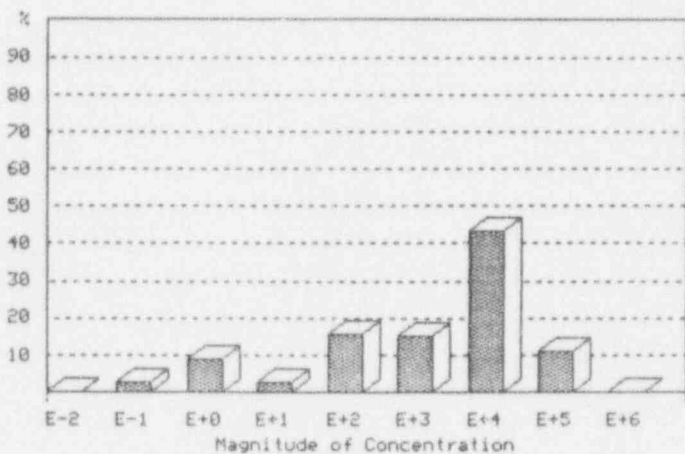
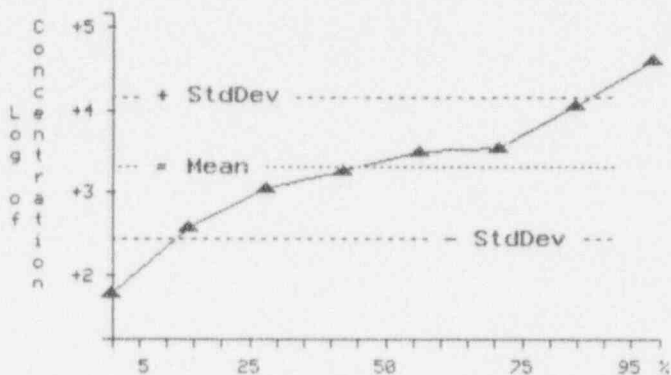
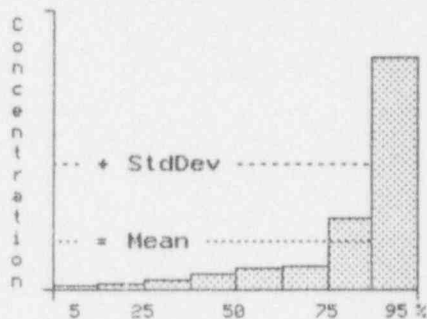


Exhibit F-24 (Continued)

Shipping-Level Stats - ORIGINAL



U-238



pCi/g	
# Points =	8
Minimum =	8.42E+01
10th % =	8.42E+01
25th % =	5.08E+02
50th % =	2.47E+03
75th % =	4.49E+03
90th % =	1.50E+04
Maximum =	5.08E+04
Average =	9.86E+03
Ave Dev =	1.15E+04
Std Dev =	1.72E+04
Skewness =	1.61E+00
Kurtosis =	1.04E+00

Percent Volume At Concentration: Vol < 10 cu ft

Exhibit F-24 (Continued)

Shipping-Level Stats - ORIGINAL

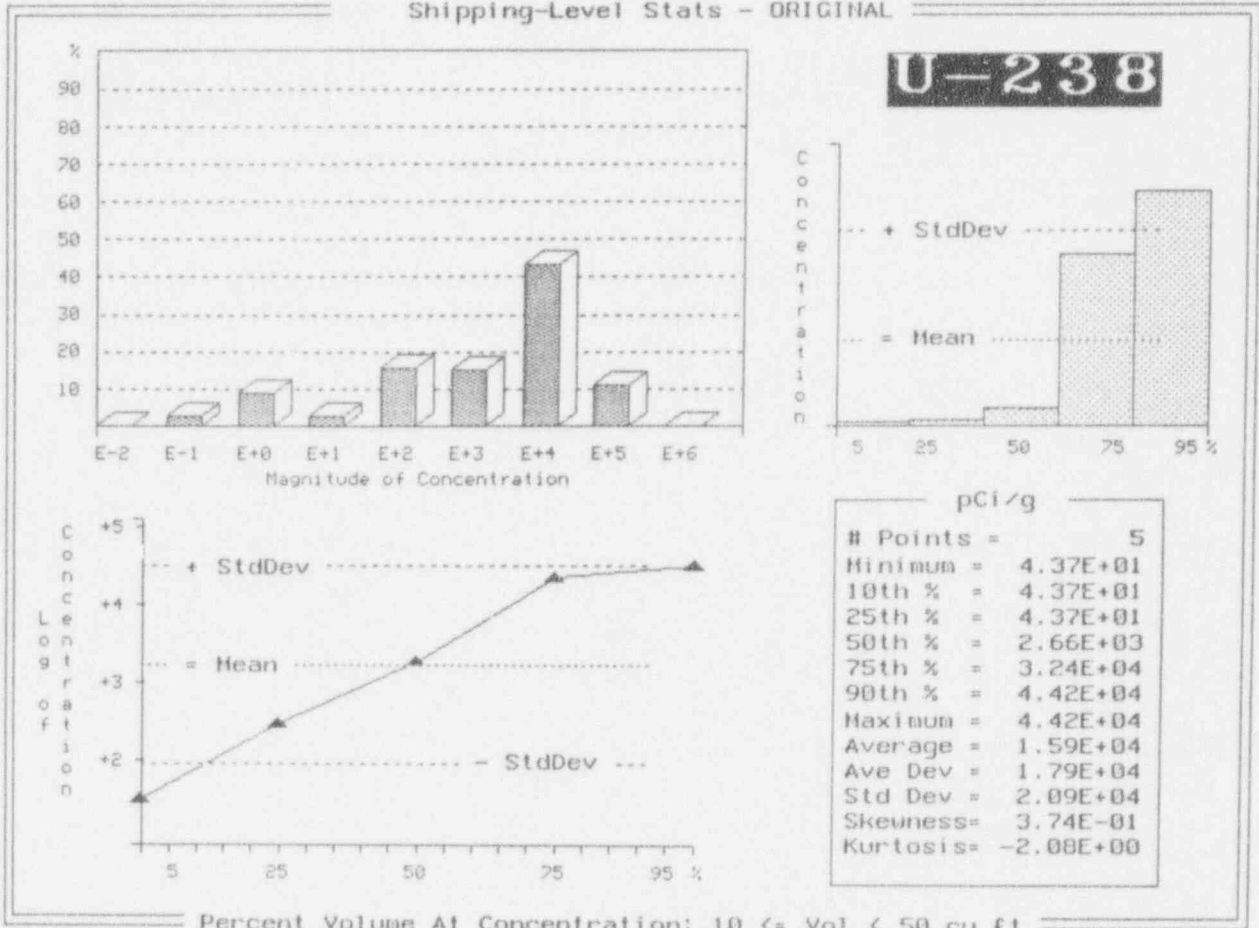


Exhibit F-24 (Continued)

Shipping-Level Stats - ORIGINAL

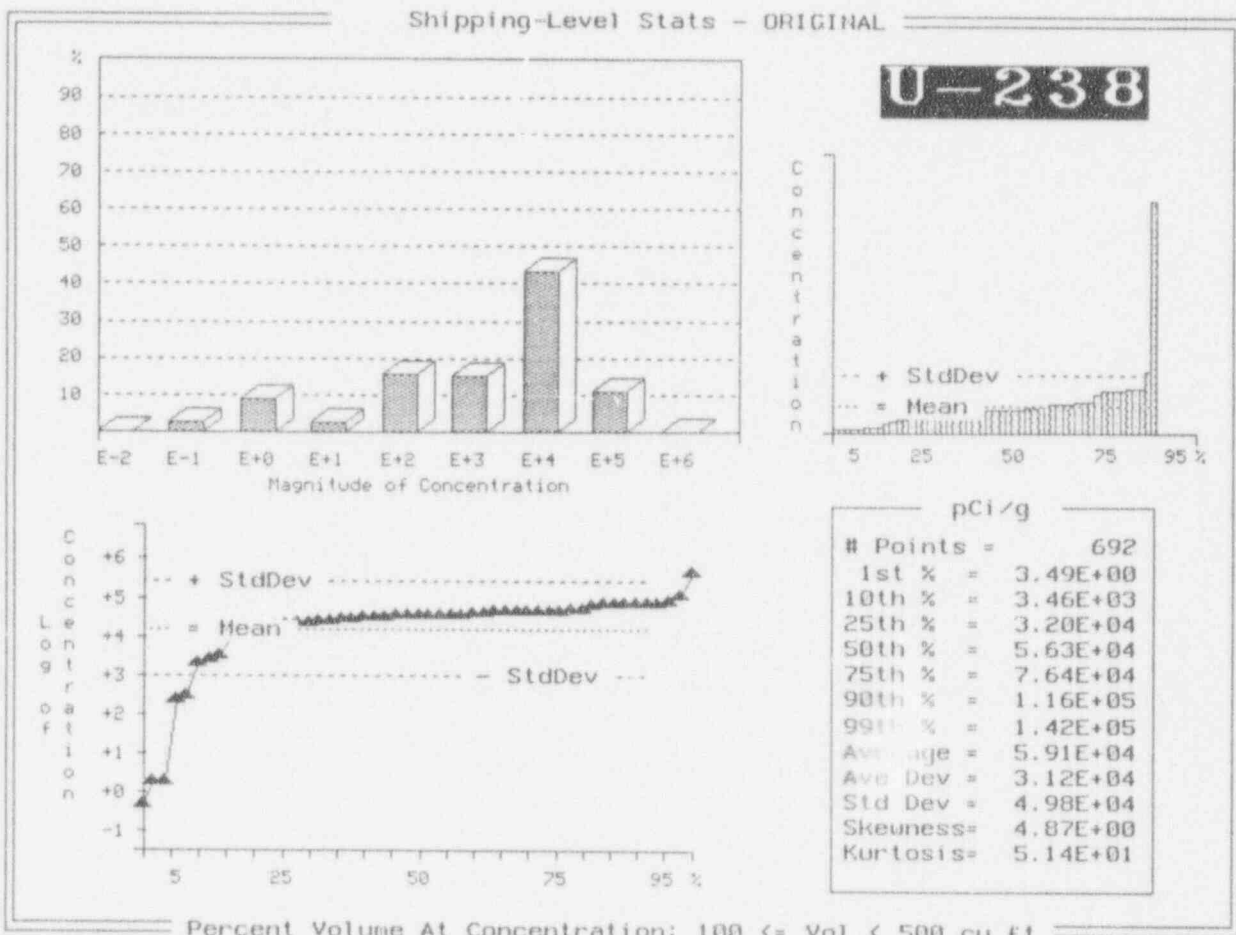
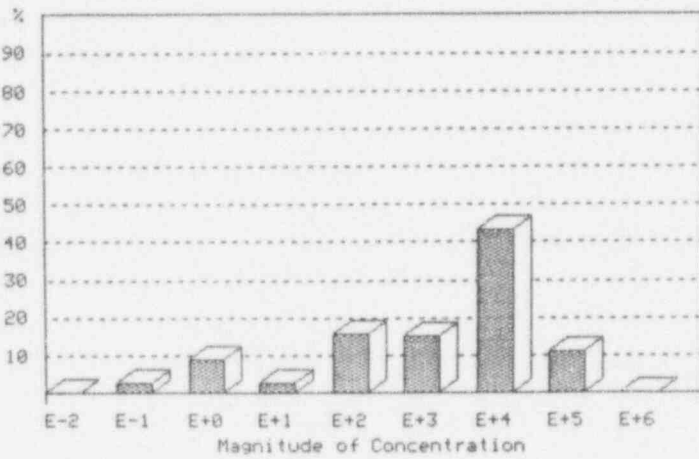
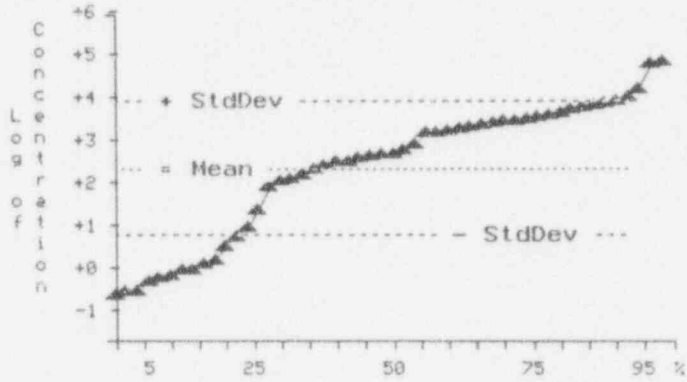
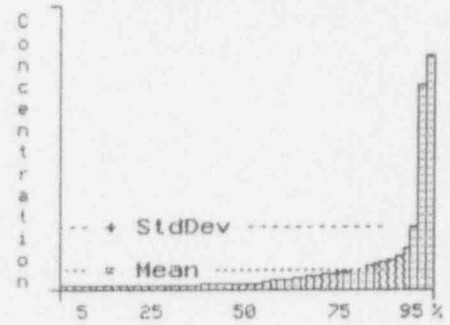


Exhibit F-24 (Continued)

Shipping-Level Stats - ORIGINAL



U-238

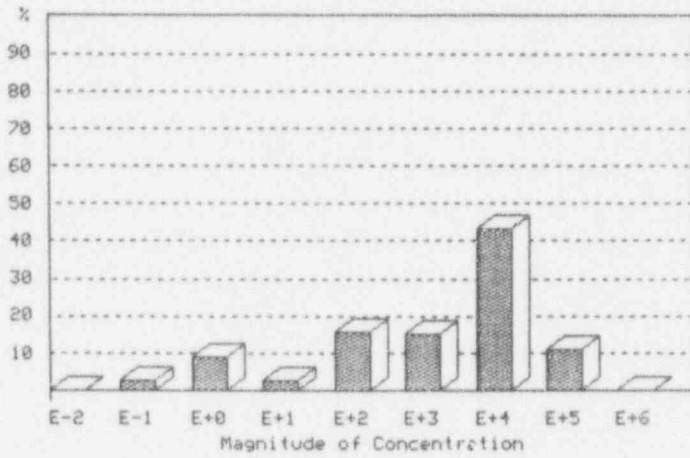


pCi/g	
# Points =	196
1st % =	4.55E-01
10th % =	1.25E+00
25th % =	1.63E+01
50th % =	7.71E+02
75th % =	4.65E+03
90th % =	1.06E+04
99th % =	8.58E+04
Average =	5.54E+03
Ave Dev =	6.75E+03
Std Dev =	1.46E+04
Skewness =	4.66E+00
Kurtosis =	2.23E+01

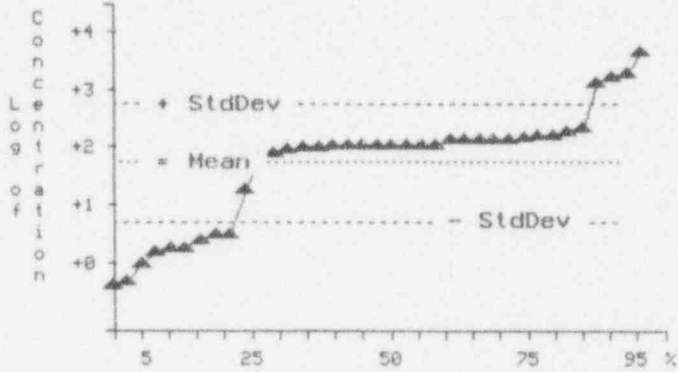
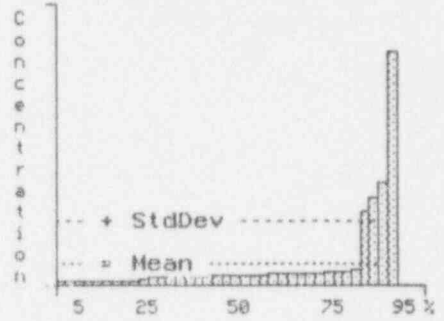
Percent Volume At Concentration: 500 <= Vol < 1000 cu ft

Exhibit F-24 (Continued)

Shipping-Level Stats - ORIGINAL



U-238



pCi/g	
# Points =	37
Minimum =	6.89E-01
10th % =	2.53E+00
25th % =	5.05E+00
50th % =	1.67E+02
75th % =	2.08E+02
90th % =	3.38E+02
Maximum =	6.44E+03
Average =	4.88E+02
Ave Dev =	6.30E+02
Std Dev =	1.19E+03
Skewness =	3.71E+00
Kurtosis =	1.45E+01

Percent Volume At Concentration: Vol >= 1000 cu ft

Exhibit F-25
Data Summary - Analyses at the Shipment Level
 (Aggregate Practices for non-brokered waste: 1986 to 1990)

	<u>Data or Parameters</u>
Compact or unaffiliated state:	Northeast
Waste generator class:	Government
Total number of waste generators:	11
Total associated waste volume (m ³):	176
Total associated waste activity (Ci):	1,907
Waste class:	A-Unstable and A-Stable
Identified waste generators for this analysis:	
Number:	5
Percent of total(%):	45
Total number of shipping records:	6
Number of shipping records <u>with</u> container data:	0
Number of waste containers:	0
Weight of shipments (kg):	52,010
Total waste volume (m ³):	74
Fractional waste volume (%): (this analysis/total)	42
Total waste activity (Ci):	0.9
Fractional waste activity (%): (this analysis/total)	0.05

Exhibit F-25 (Continued)

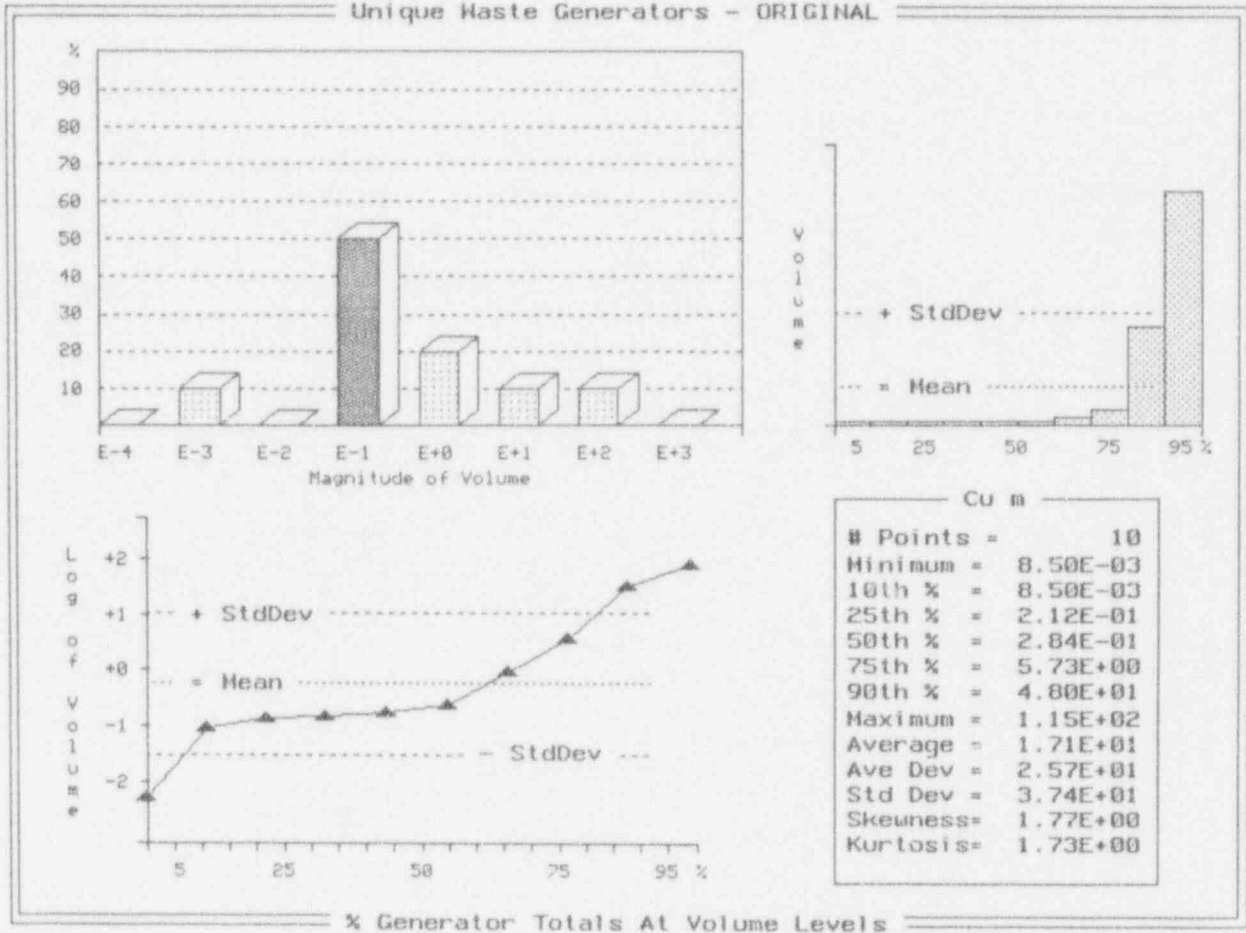


Exhibit F-25 (Continued)

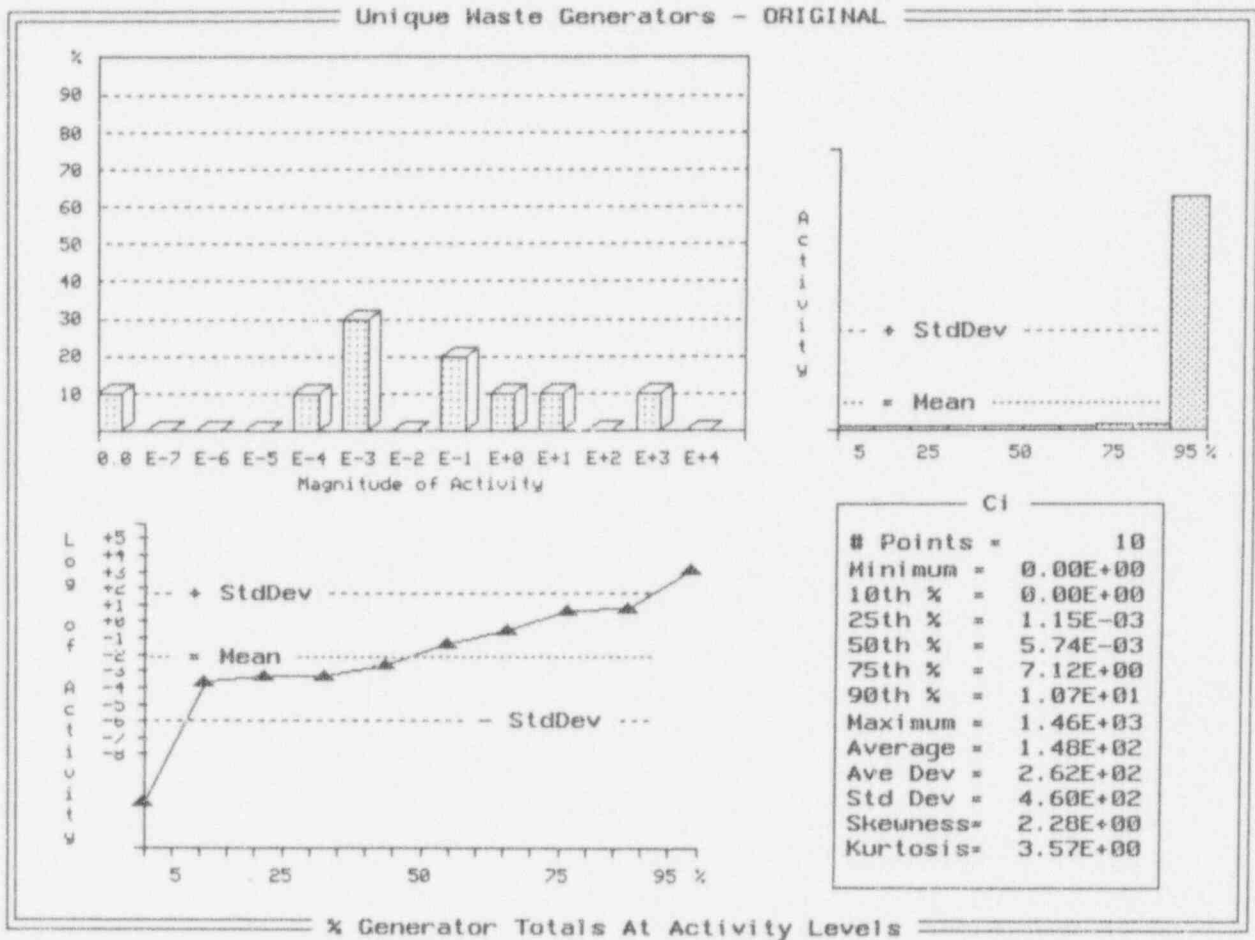


Exhibit F-26
Data Summary - Analyses at the Shipment Level
 (Aggregate Practices for non-brokered waste: 1986 to 1990)

	<u>Data or Parameters</u>
Compact or unaffiliated state:	Northeast
Waste generator class:	Academic
Total number of waste generators:	24
Total associated waste volume (m ³):	890
Total associated waste activity (Ci):	50
Waste class:	A-Unstable and A-Stable
Identified waste generators for this analysis:	
Number:	10
Percent of total(%):	42
Total number of shipping records:	127
Number of shipping records <u>with</u> container data:	0
Number of waste containers:	0
Weight of shipments (kg):	294,400
Total waste volume (m ³):	518
Fractional waste volume (%): (this analysis/total)	58
Total waste activity (Ci):	11.8
Fractional waste activity (%): (this analysis/total)	23

Exhibit F-26 (Continued)

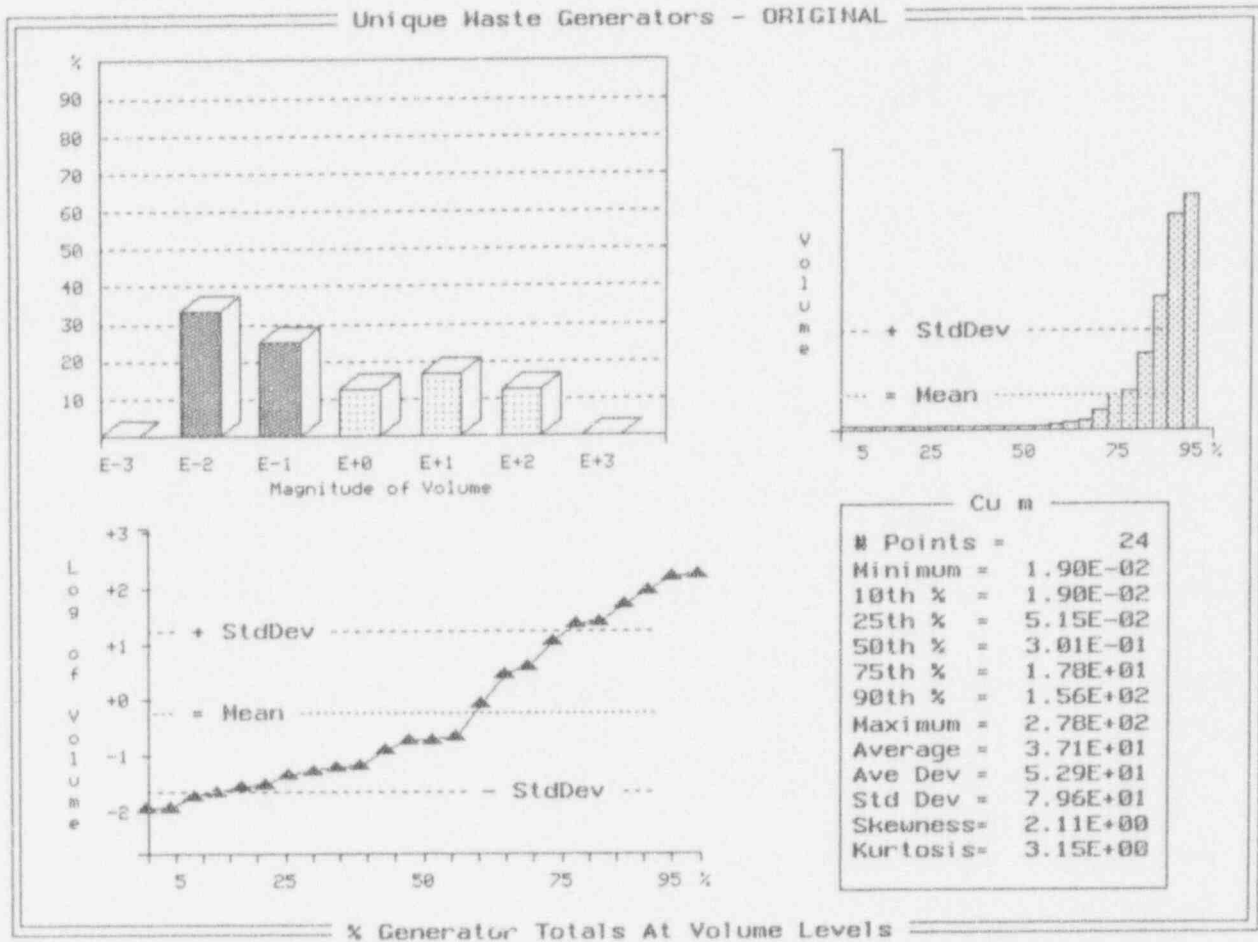
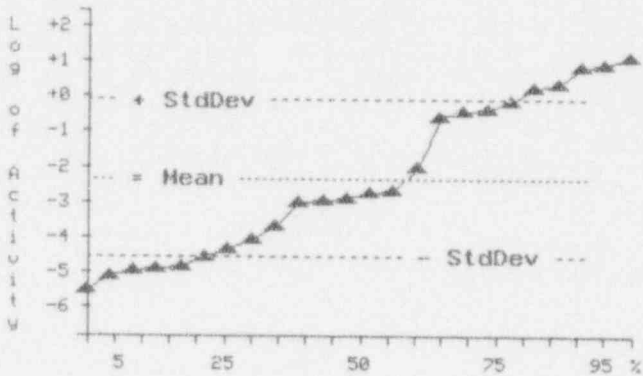
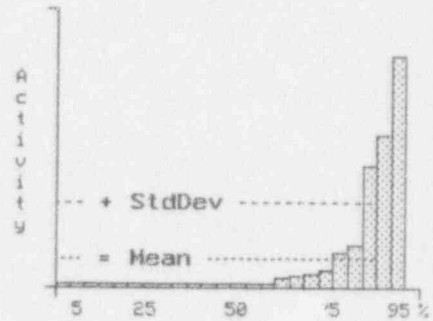
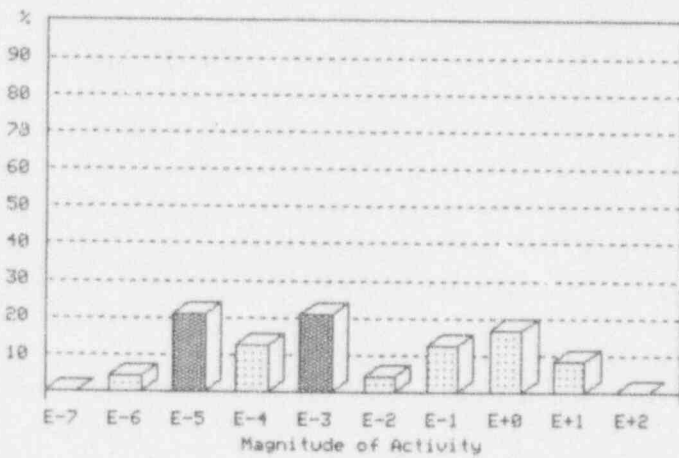


Exhibit F-26 (Continued)

Unique Waste Generators - ORIGINAL



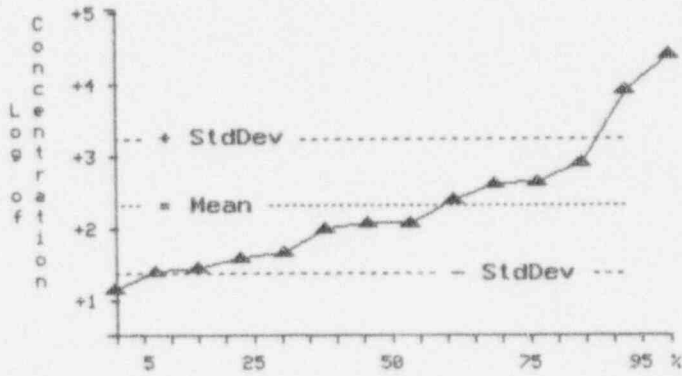
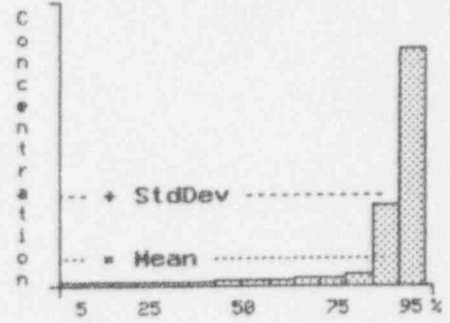
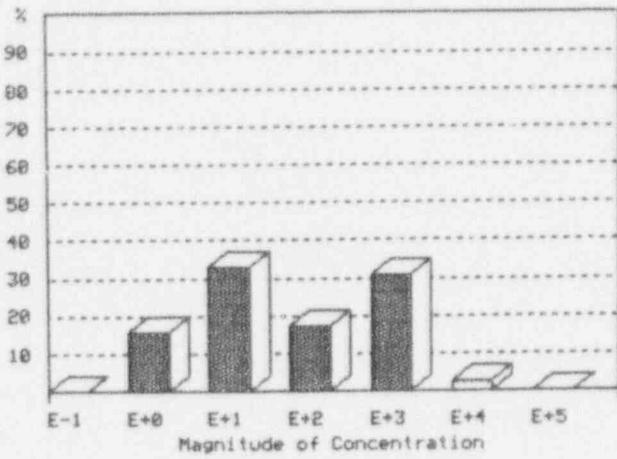
Ci	
# Points =	24
Minimum =	7.00E-06
10th % =	1.70E-05
25th % =	5.70E-05
50th % =	2.20E-03
75th % =	7.13E-01
90th % =	9.93E+00
Maximum =	1.90E+01
Average =	2.10E+00
Ave Dev =	3.08E+00
Std Dev =	4.81E+00
Skewness =	2.37E+00
Kurtosis =	4.62E+00

% Generator Totals At Activity Levels

Exhibit F-26 (Continued)

Shipping-Level Stats - ORIGINAL

C-14



pCi/g	
# Points =	14
Minimum =	2.07E+01
10th % =	2.07E+01
25th % =	5.67E+01
50th % =	1.66E+02
75th % =	6.32E+02
90th % =	1.16E+04
Maximum =	3.46E+04
Average =	3.54E+03
Ave Dev =	5.58E+03
Std Dev =	9.43E+03
Skeuness =	2.55E+00
Kurtosis =	5.43E+00

Percent Volume At Concentration: 10 <= Vol < 50 cu ft

Exhibit F-26 (Continued)

Shipping-Level Stats - ORIGINAL

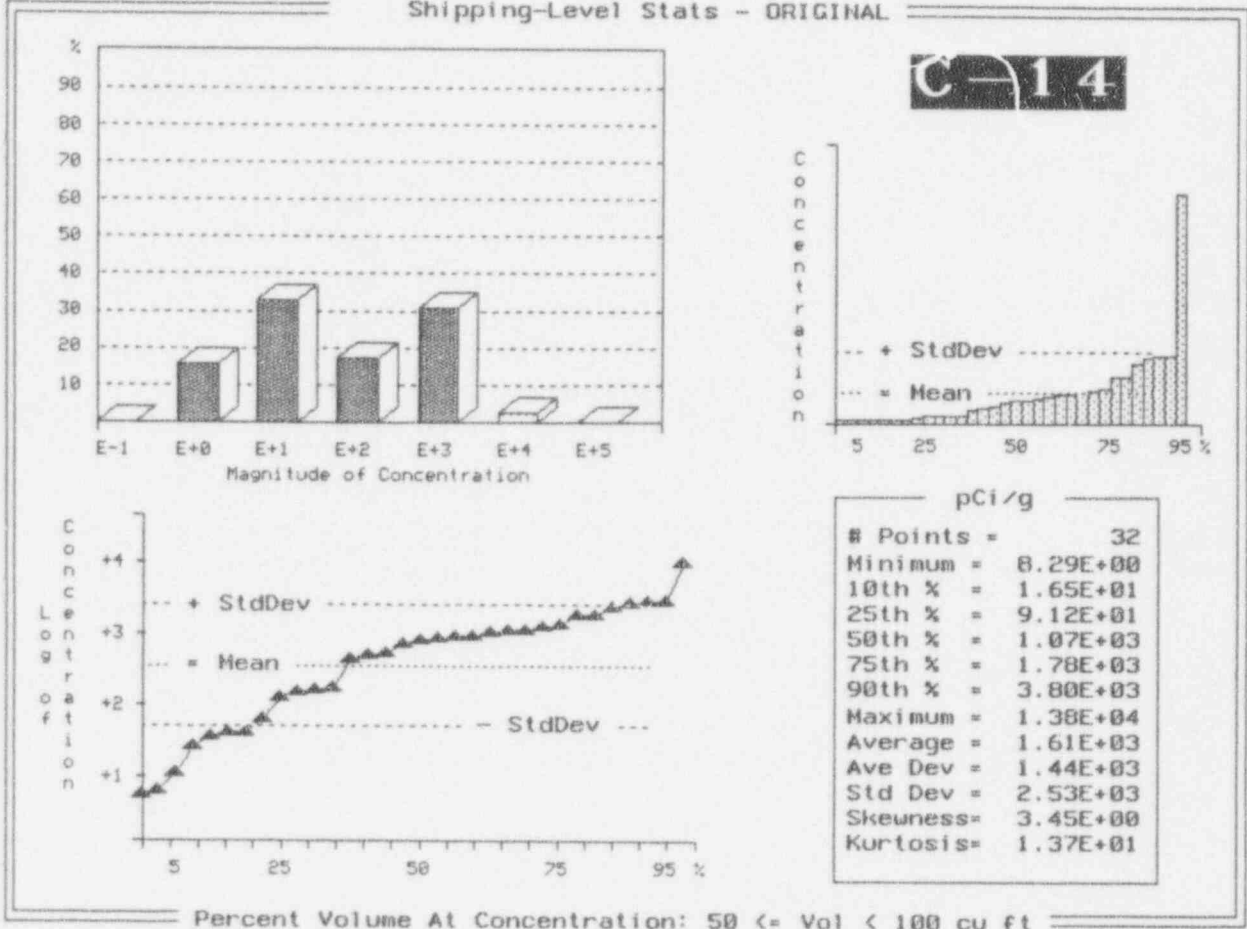
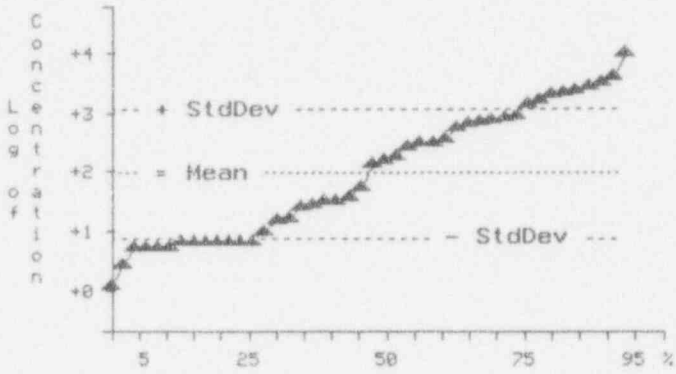
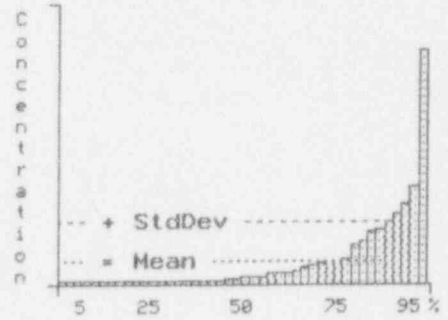
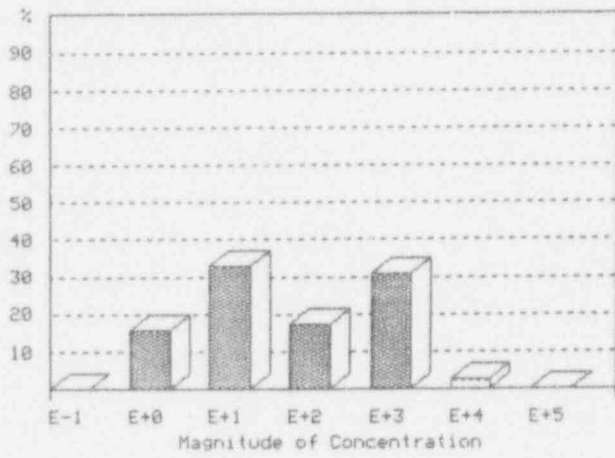


Exhibit F-26 (Continued)

Shipping-Level Stats - ORIGINAL

C-14



pCi/g	
# Points =	44
Minimum =	1.92E+00
10th % =	8.64E+00
25th % =	1.04E+01
50th % =	8.45E+01
75th % =	1.15E+03
90th % =	3.45E+03
Maximum =	1.38E+04
Average =	1.17E+03
Ave Dev =	1.43E+03
Std Dev =	2.40E+03
Skewness =	3.56E+00
Kurtosis =	1.50E+01

Percent Volume At Concentration: 100 <= Vol < 500 cu ft

Exhibit F-26 (Continued)

Shipping-Level Stats - ORIGINAL

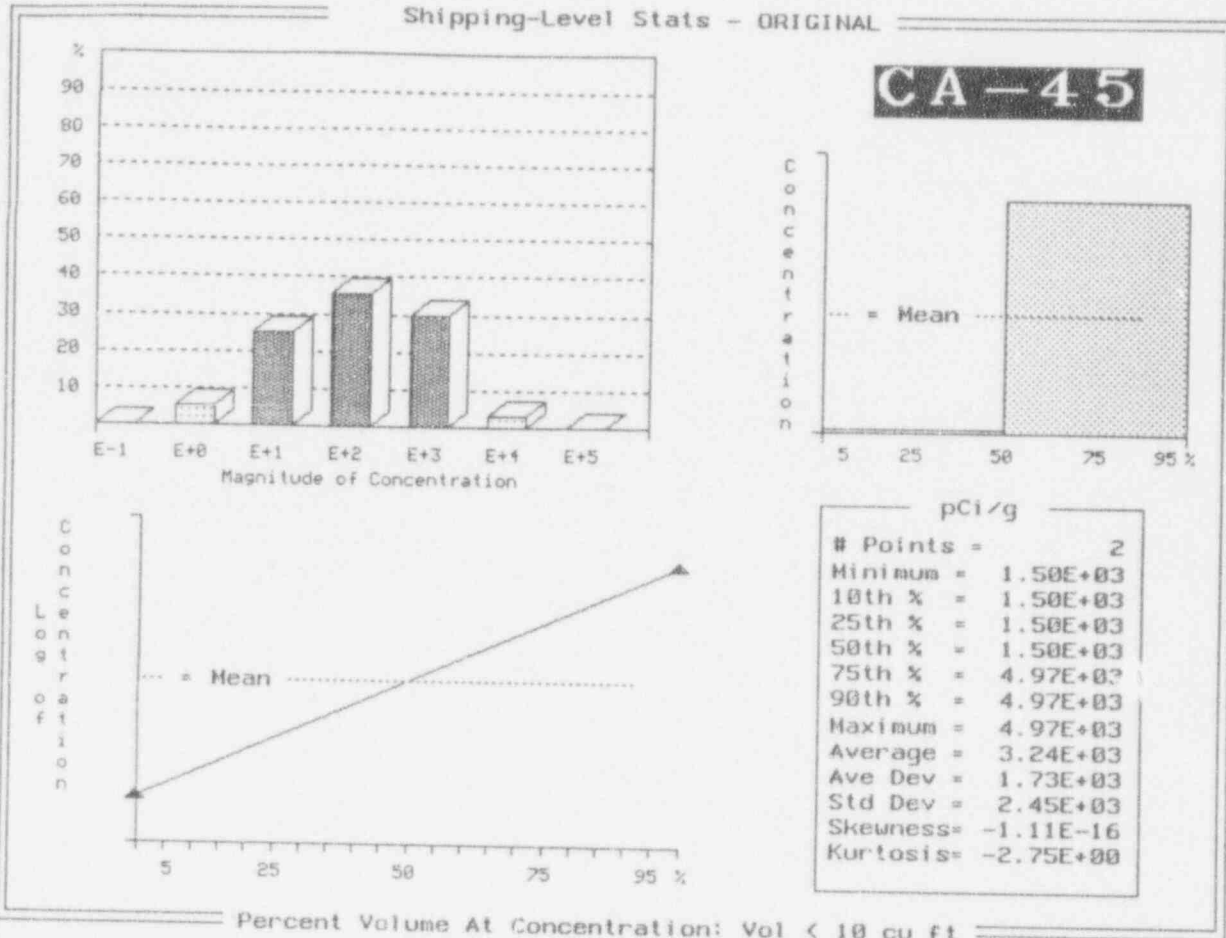


Exhibit F-26 (Continued)

Shipping-Level Stats - ORIGINAL

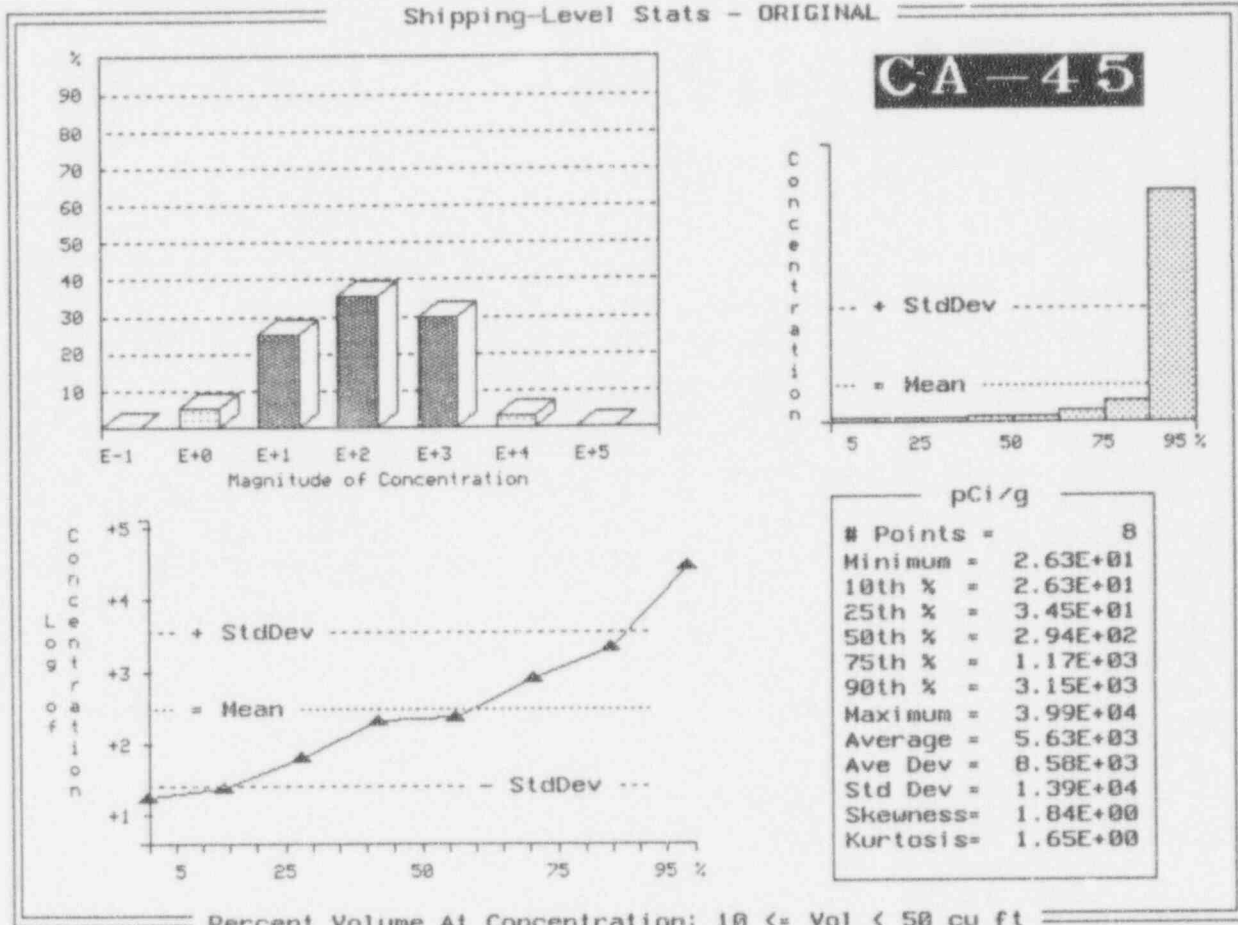
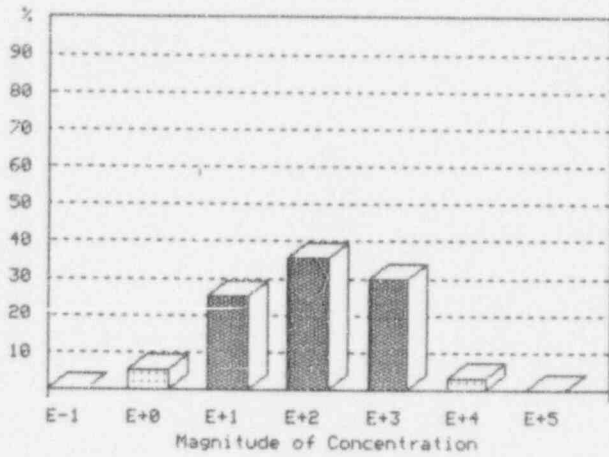
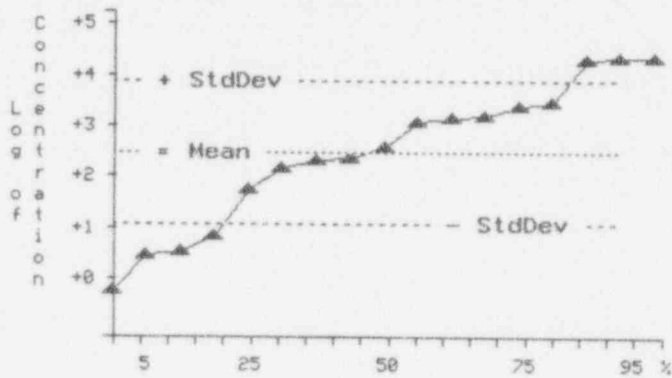
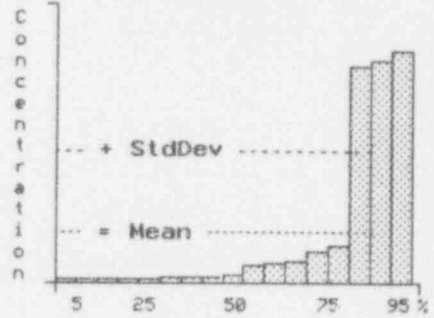


Exhibit F-26 (Continued)

Shipping-Level Stats - ORIGINAL



CA-45



pCi/g	
# Points =	17
Minimum =	1.04E+00
10th % =	5.01E+00
25th % =	1.14E+01
50th % =	6.45E+02
75th % =	4.03E+03
90th % =	3.19E+04
Maximum =	3.42E+04
Average =	6.86E+03
Ave Dev =	9.24E+03
Std Dev =	1.26E+04
Skewness =	1.51E+00
Kurtosis =	3.77E-01

Percent Volume At Concentration: 50 <= Vol < 100 cu ft

Exhibit F-26 (Continued)

Shipping-Level Stats - ORIGINAL

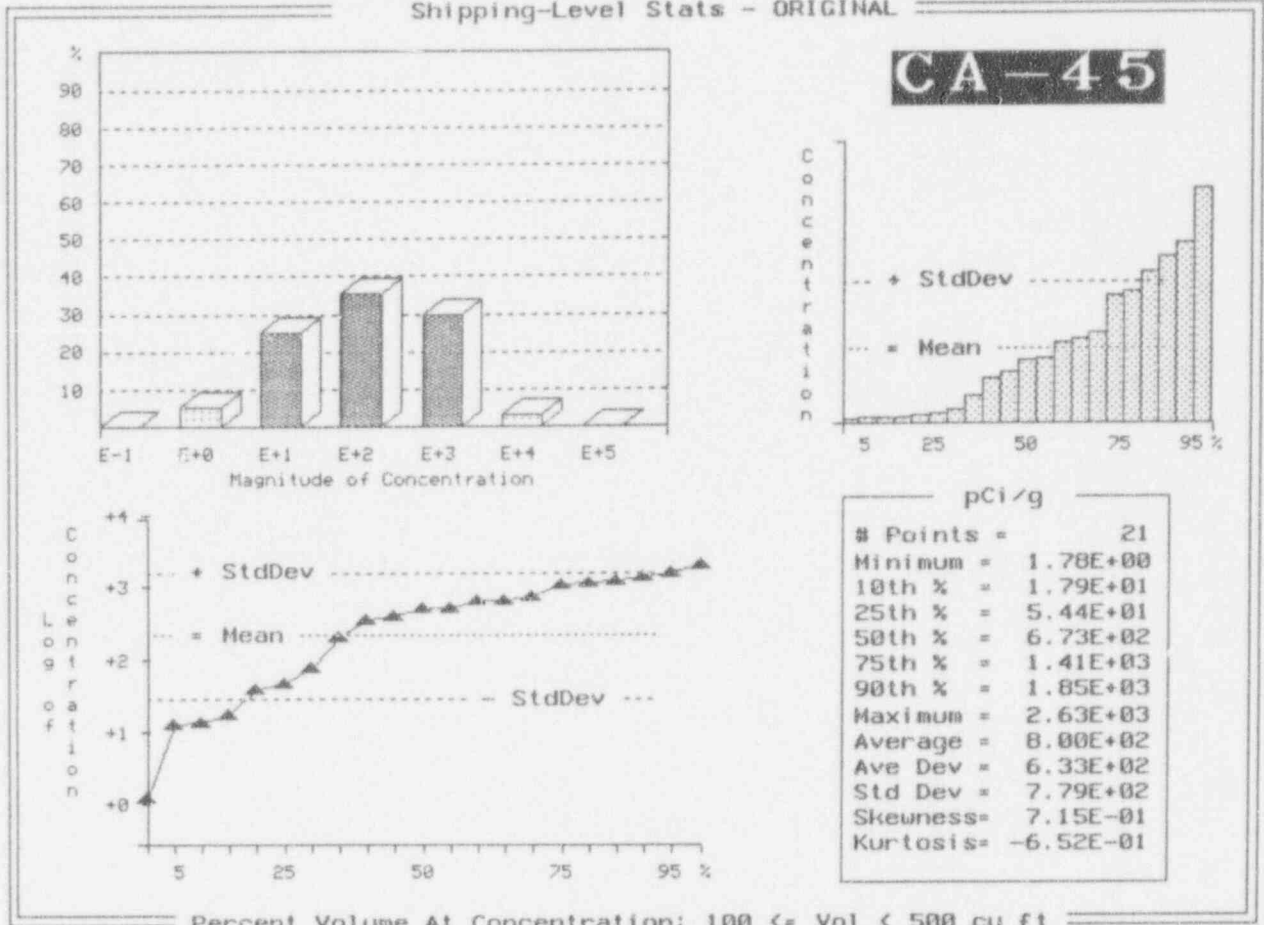
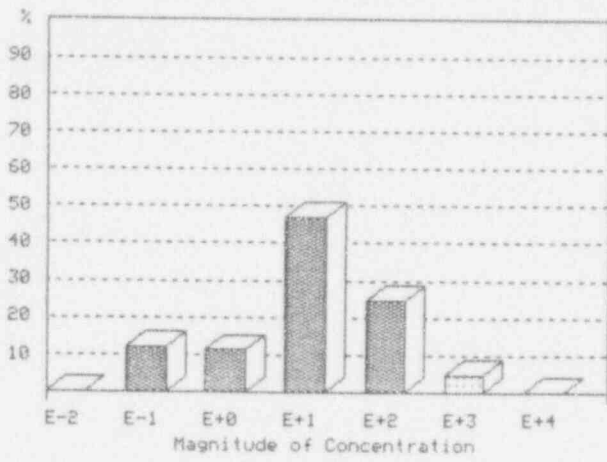
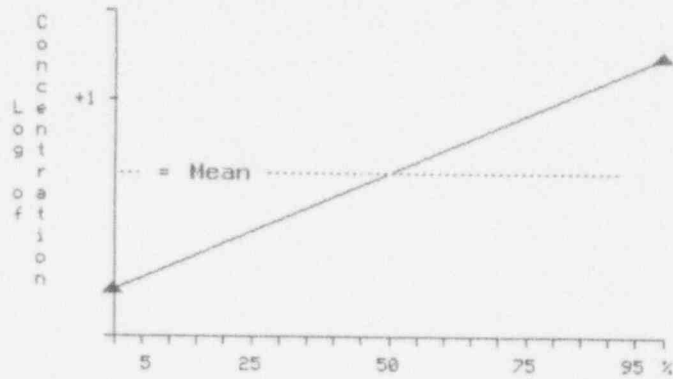
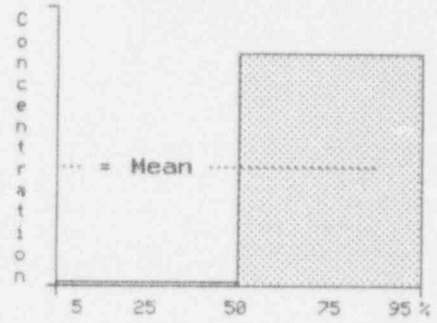


Exhibit F-26 (Continued)

Shipping-Level Stats - ORIGINAL



CL-36



pCi/g	
# Points =	2
Minimum =	3.14E+00
10th % =	3.14E+00
25th % =	3.14E+00
50th % =	3.14E+00
75th % =	1.42E+01
90th % =	1.42E+01
Maximum =	1.42E+01
Average =	8.67E+00
Ave Dev =	5.52E+00
Std Dev =	7.81E+00
Skeuness =	1.11E-16
Kurtosis =	-2.75E+00

Percent Volume At Concentration: 10 <= Vol < 50 cu ft

Exhibit F-26 (Continued)

Shipping-Level Stats - ORIGINAL

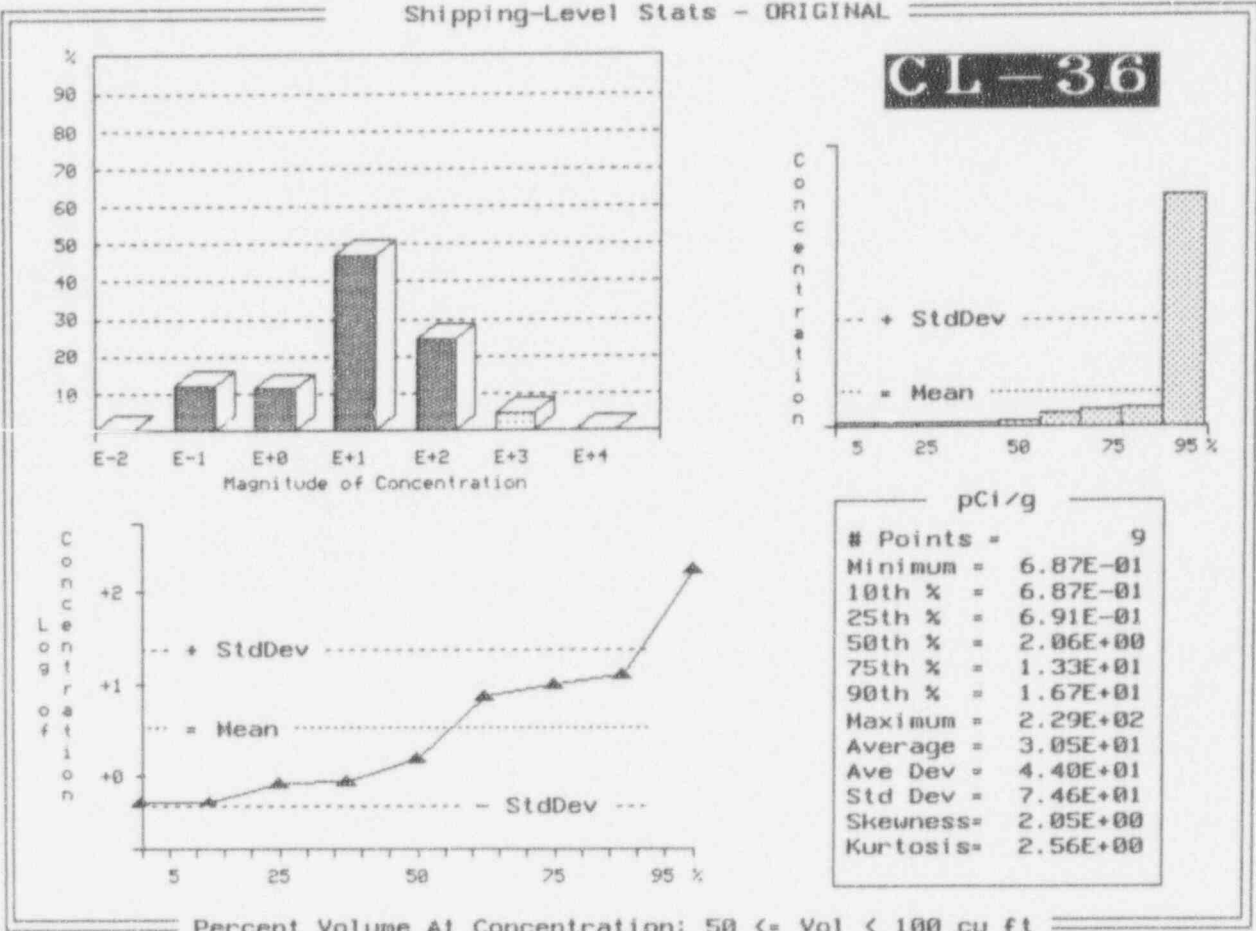


Exhibit F-26 (Continued)

Shipping-Level Stats - ORIGINAL

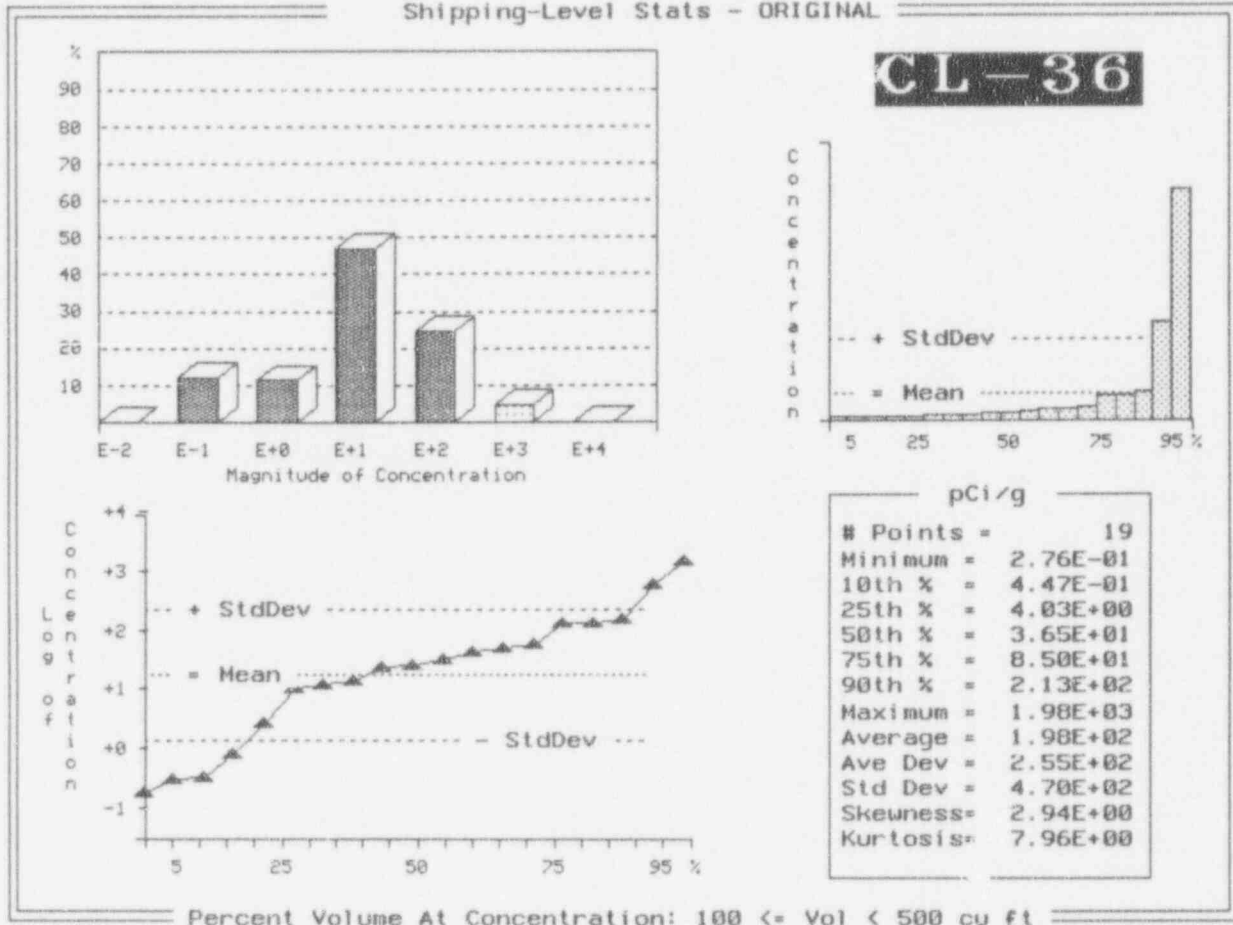


Exhibit F-26 (Continued)

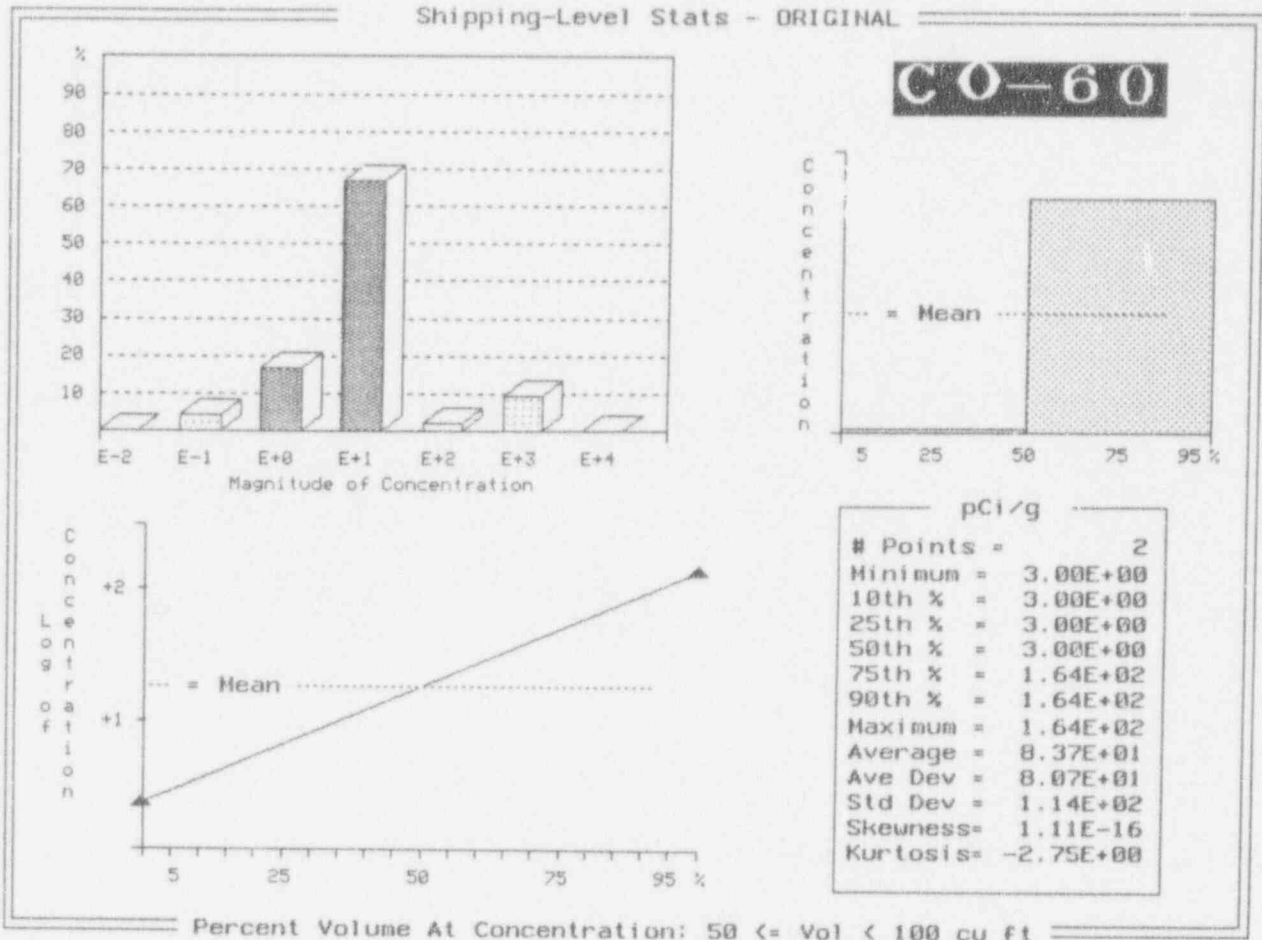


Exhibit F-26 (Continued)

Shipping-Level Stats - ORIGINAL

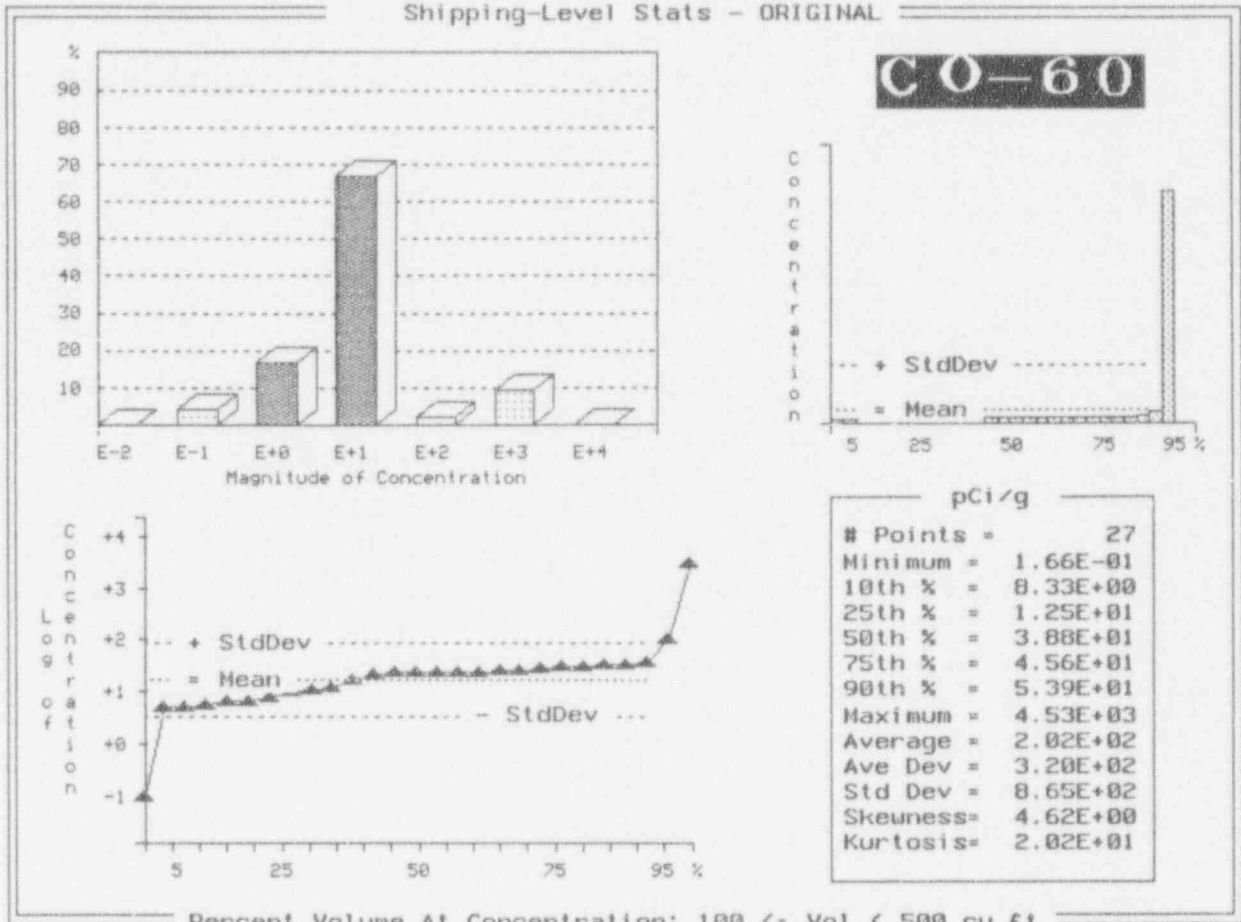


Exhibit F-26 (Continued)

Shipping-Level Stats - ORIGINAL

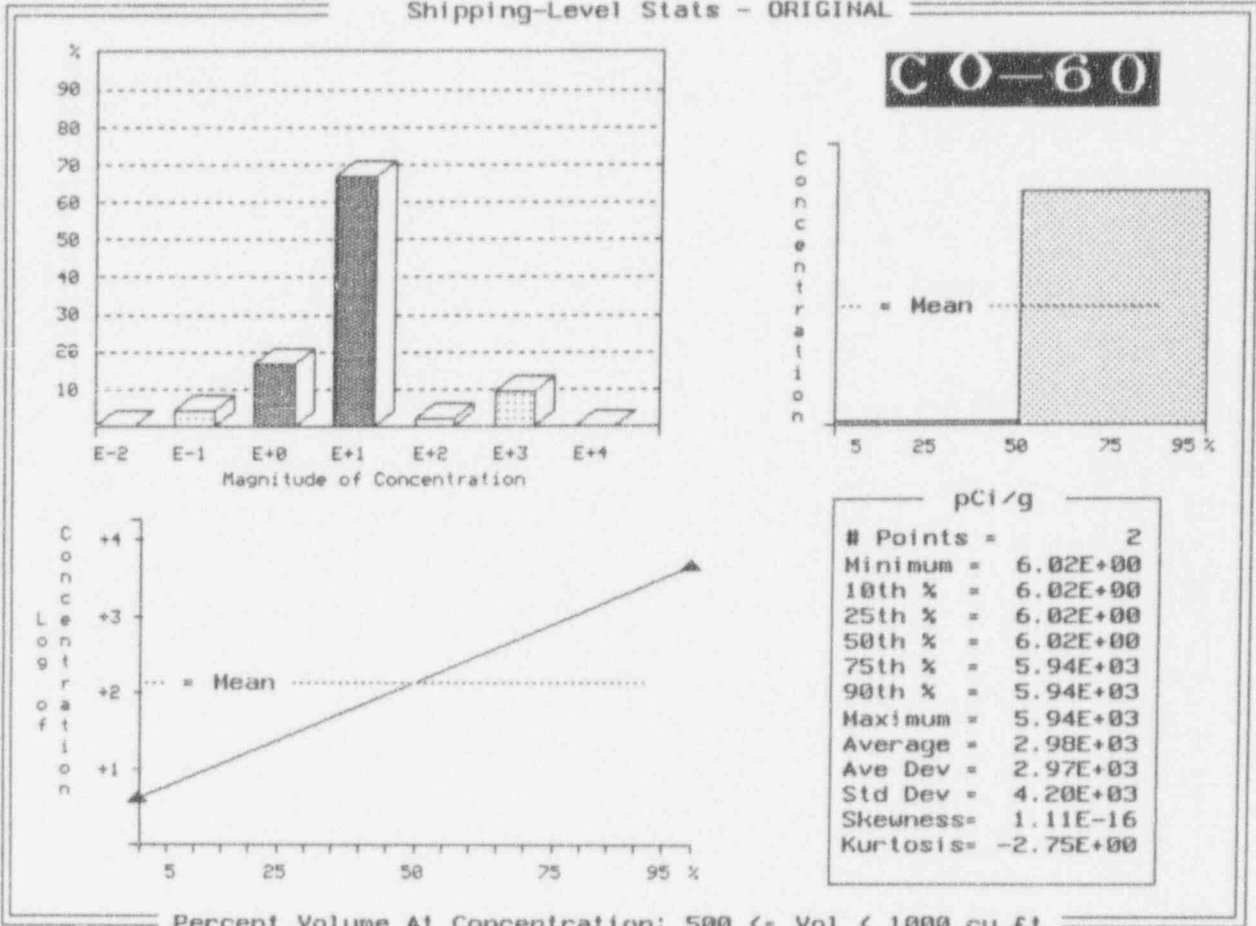
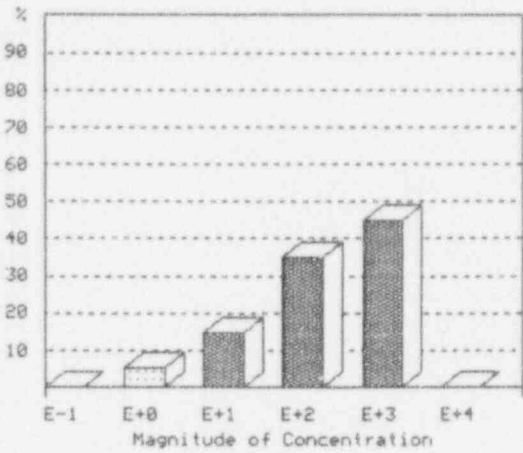
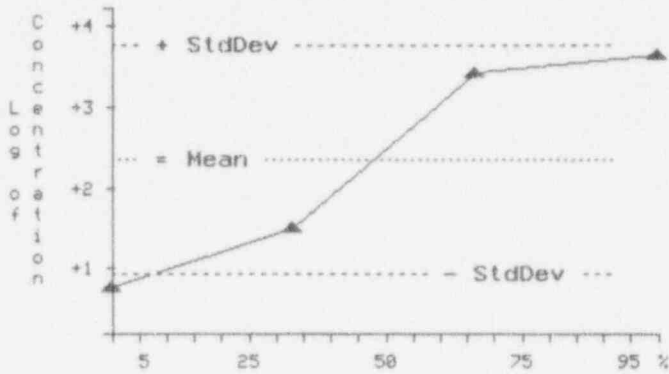
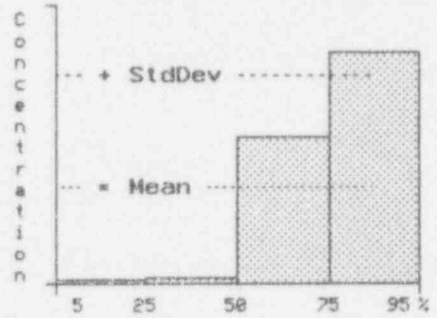


Exhibit F-26 (Continued)

Shipping-Level Stats - ORIGINAL



CR-51



pCi/g	
# Points =	4
Minimum =	8.29E+00
10th % =	8.29E+00
25th % =	8.29E+00
50th % =	4.64E+01
75th % =	3.73E+03
90th % =	5.93E+03
Maximum =	5.93E+03
Average =	2.43E+03
Ave Dev =	2.40E+03
Std Dev =	2.91E+03
Skewness =	1.76E-01
Kurtosis =	-2.24E+00

Percent Volume At Concentration: 10 <= Vol < 50 cu ft

Exhibit F-26 (Continued)

Shipping-Level Stats - ORIGINAL

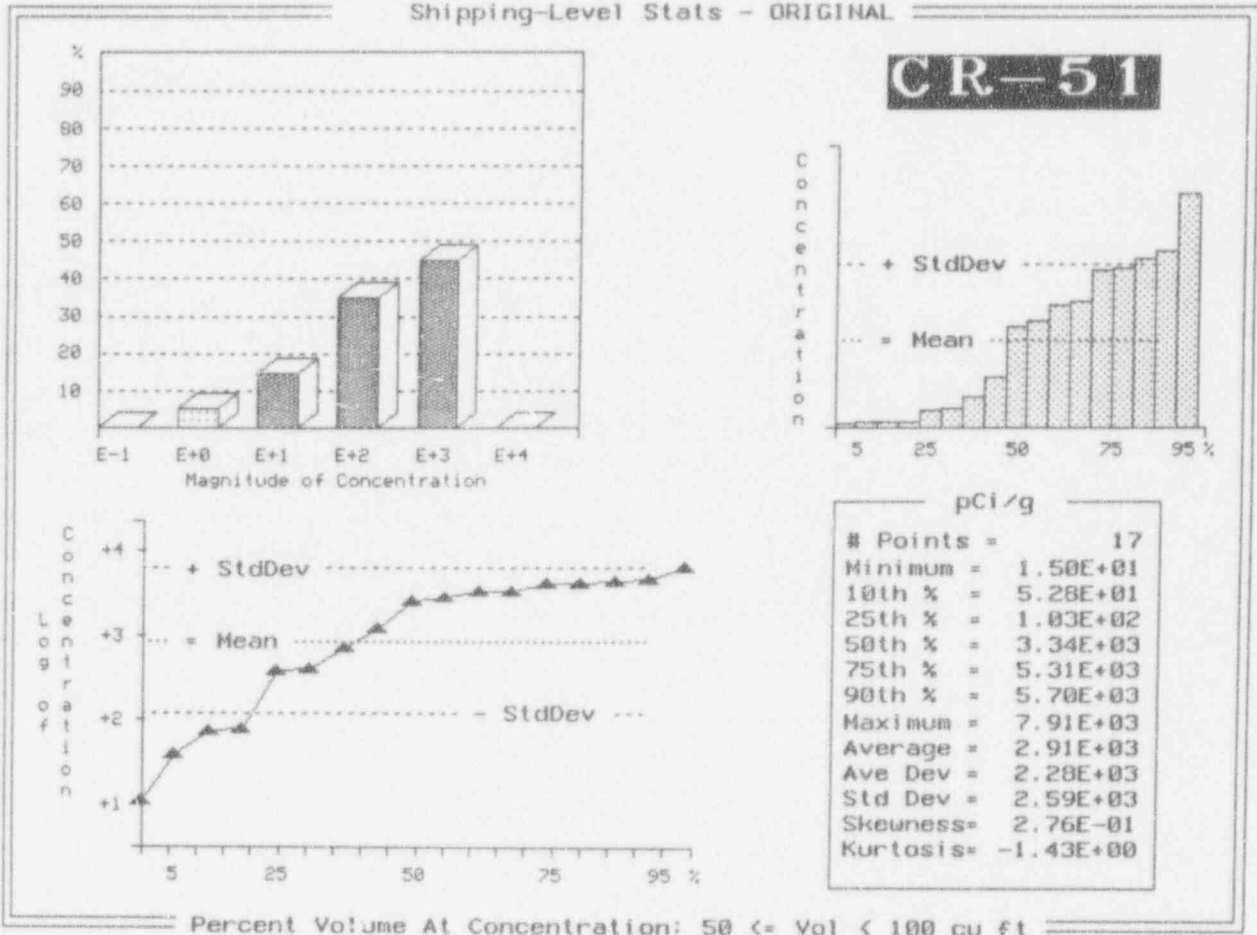


Exhibit F-26 (Continued)

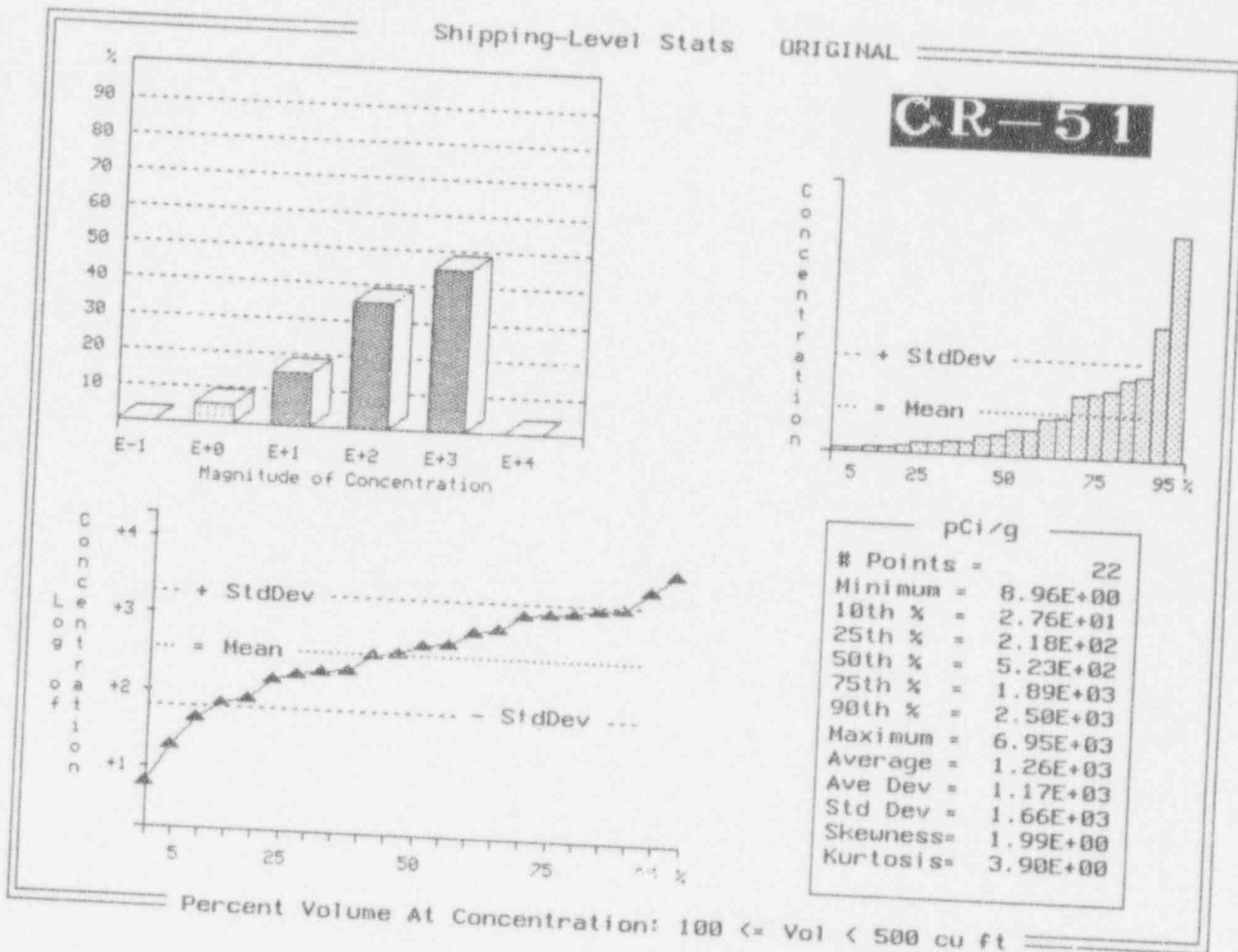


Exhibit F-26 (Continued)

Shipping-Level Stats - ORIGINAL

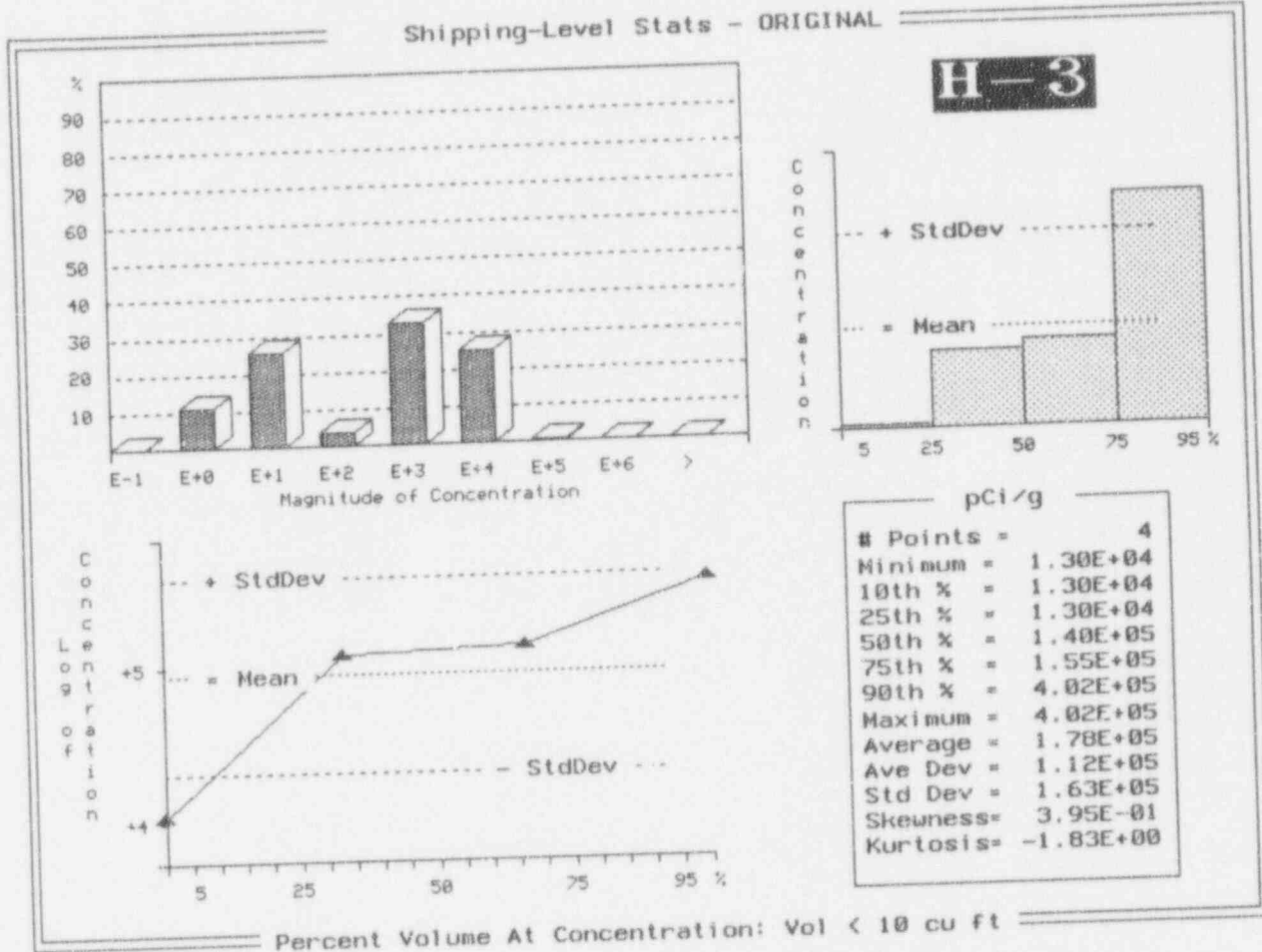
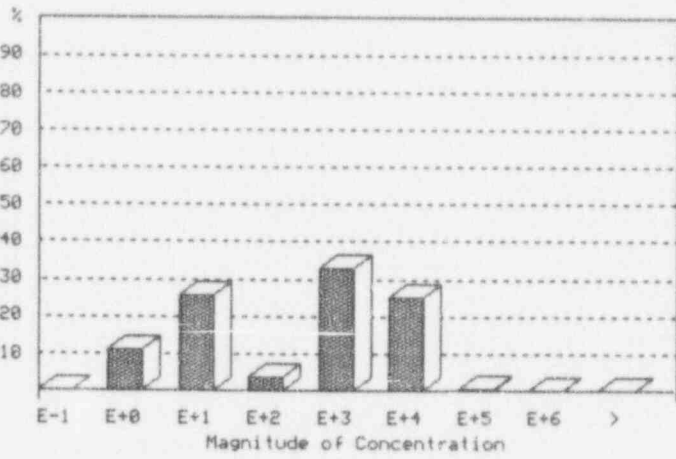
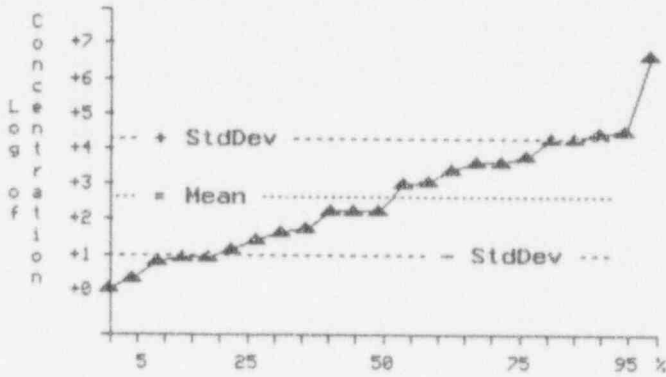
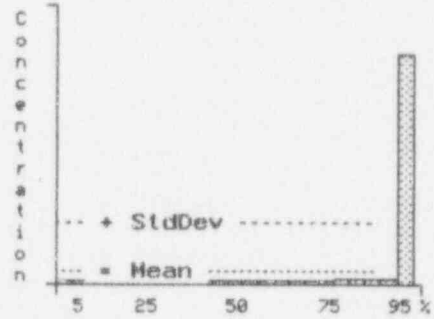


Exhibit F-26 (Continued)

Shipping-Level Stats - ORIGINAL



H-3



pCi/g	
# Points =	23
Minimum =	2.30E+00
10th % =	4.14E+00
25th % =	2.76E+01
50th % =	3.32E+02
75th % =	7.39E+03
90th % =	4.58E+04
Maximum =	6.42E+06
Average =	2.88E+05
Ave Dev =	5.34E+05
Std Dev =	1.34E+06
Skewness =	4.19E+00
Kurtosis =	1.63E+01

Percent Volume At Concentration: 10 <= Vol < 50 cu ft

Exhibit F-26 (Continued)

Shipping-Level Stats - ORIGINAL

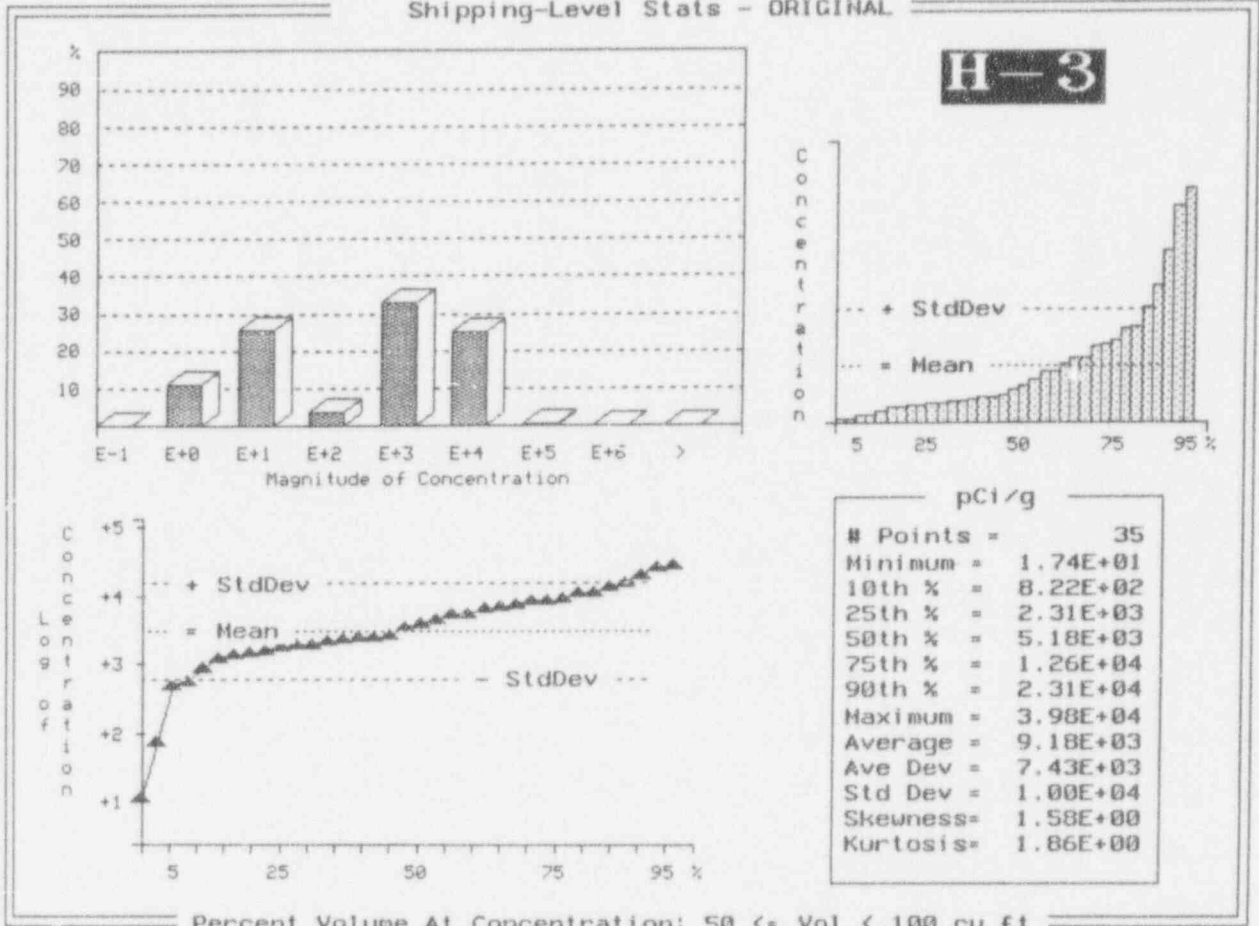


Exhibit F-26 (Continued)

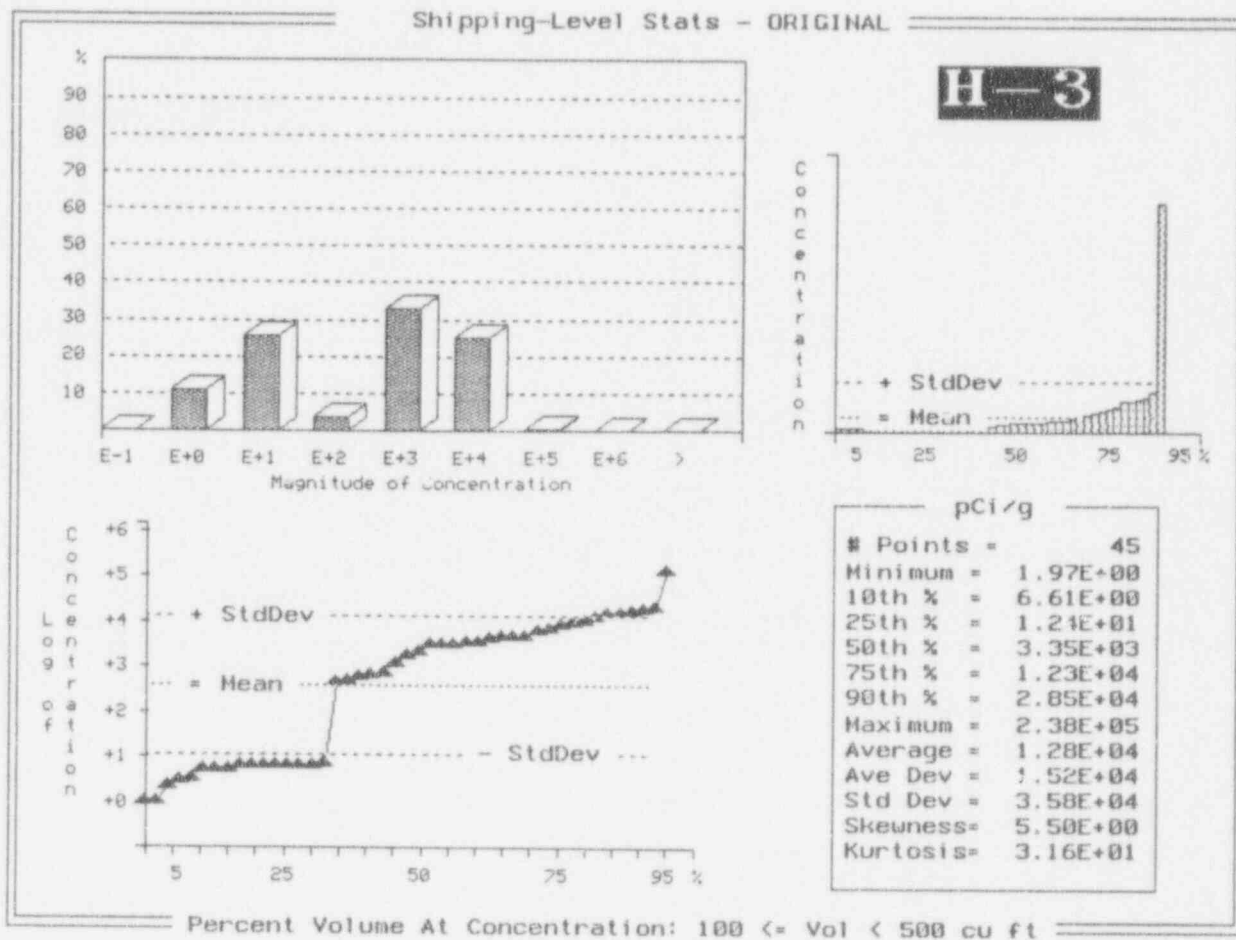


Exhibit F-26 (Continued)

Shipping-Level Stats - ORIGINAL

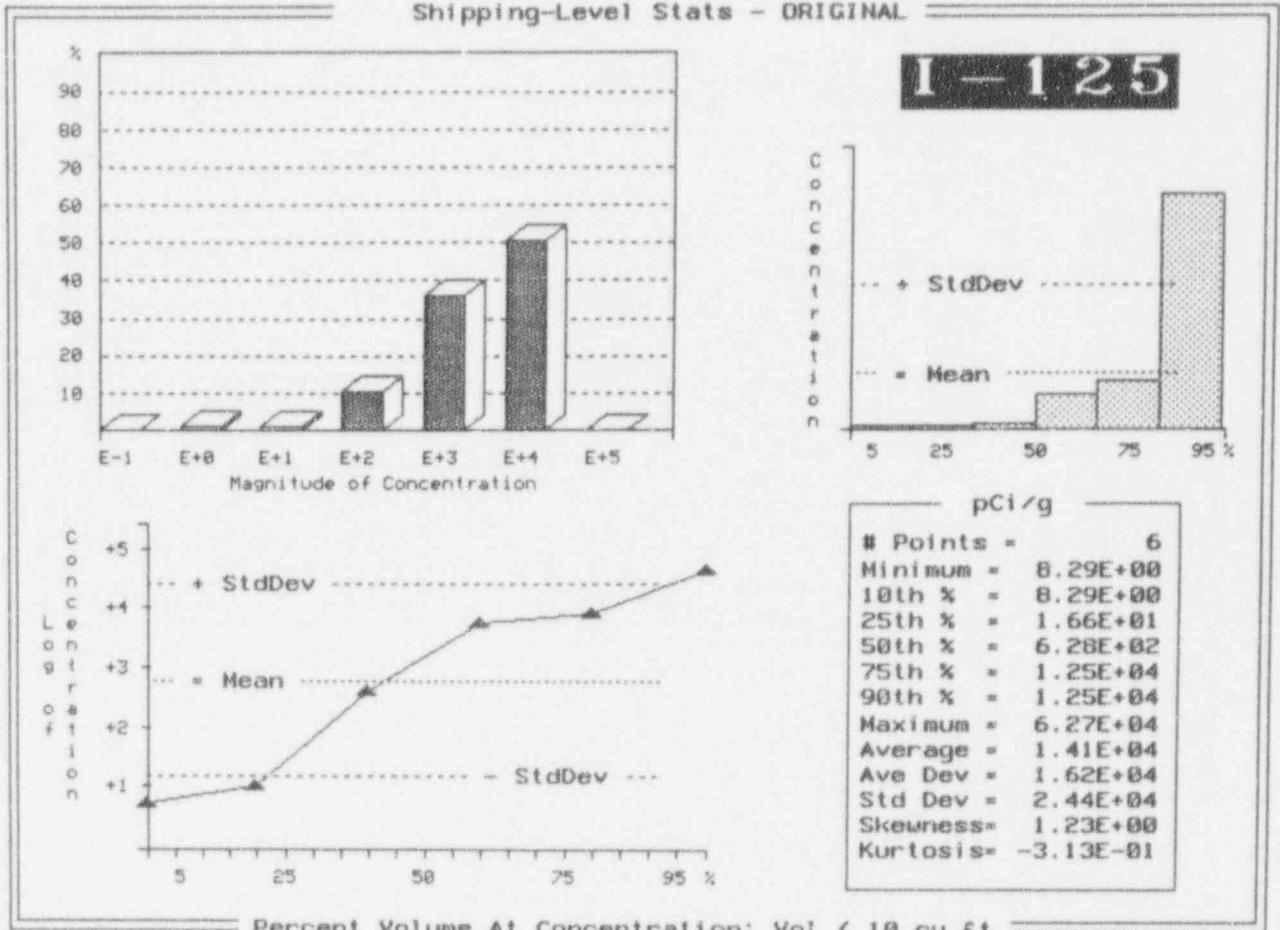
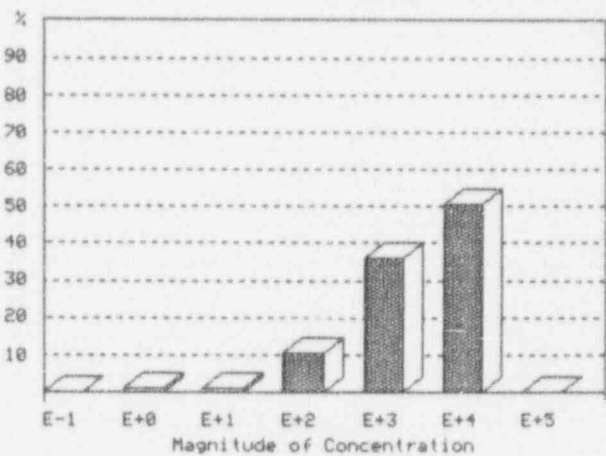
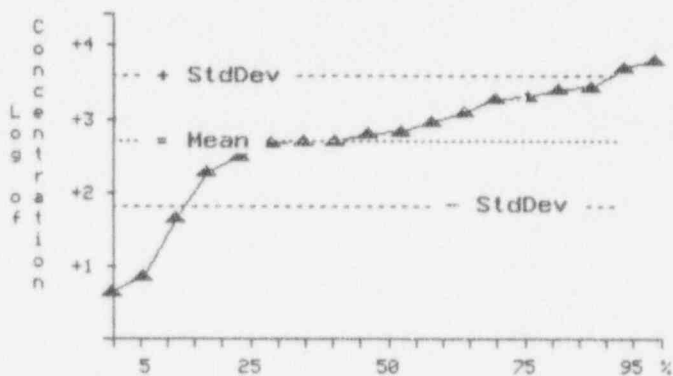
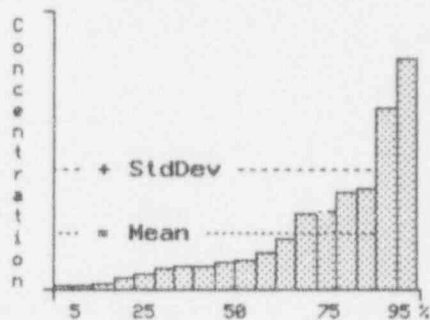


Exhibit F-26 (Continued)

Shipping-Level Stats - ORIGINAL



I-125



pCi/g	
# Points =	18
Minimum =	6.77E+00
10th % =	1.08E+01
25th % =	4.40E+02
50th % =	8.79E+02
75th % =	2.72E+03
90th % =	3.56E+03
Maximum =	8.36E+03
Average =	1.94E+03
Ave Dev =	1.74E+03
Std Dev =	2.32E+03
Skewness =	1.48E+00
Kurtosis =	1.25E+00

Percent Volume At Concentration: 10 <= Vol < 50 cu ft

Exhibit F-26 (Continued)

Shipping-Level Stats - ORIGINAL

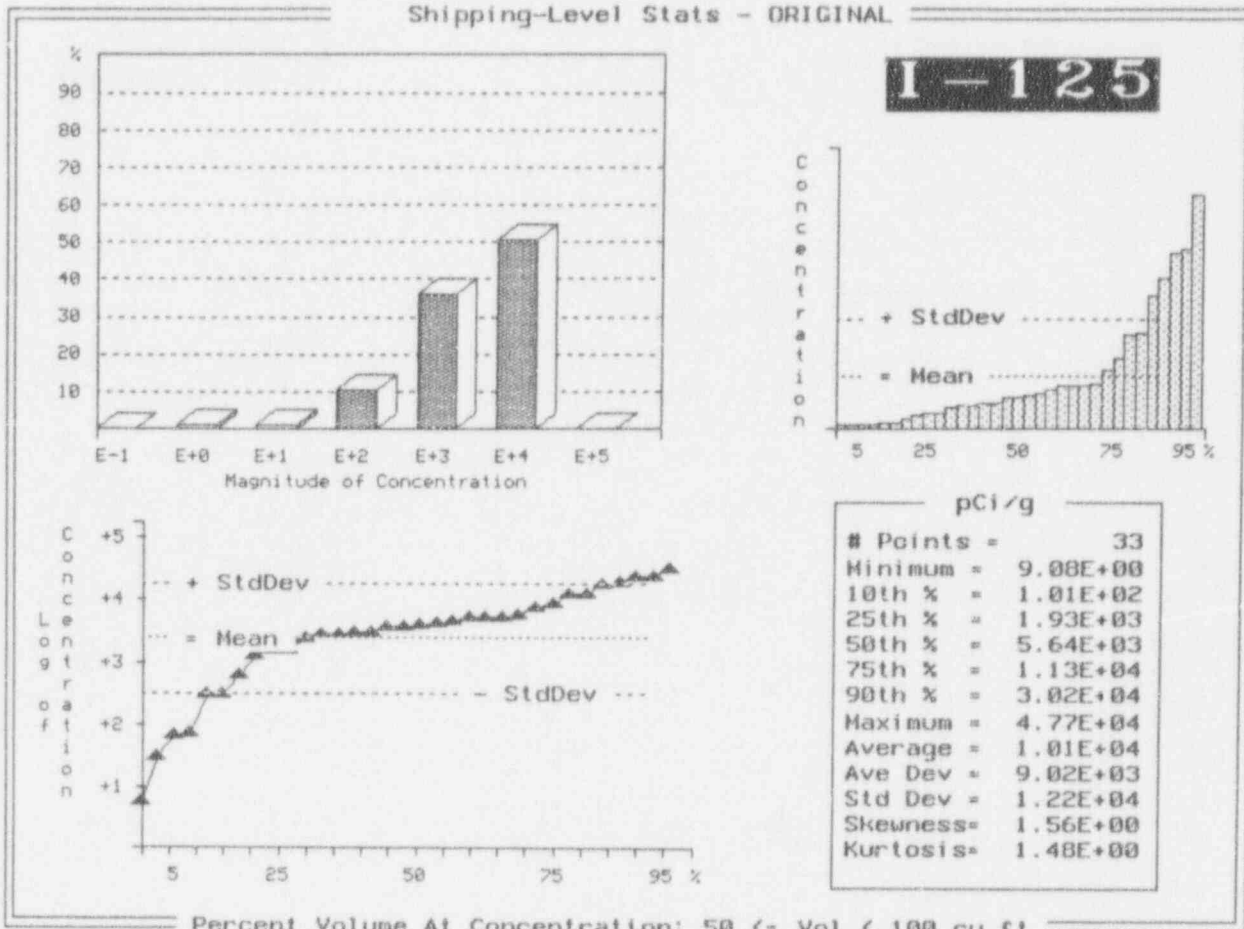
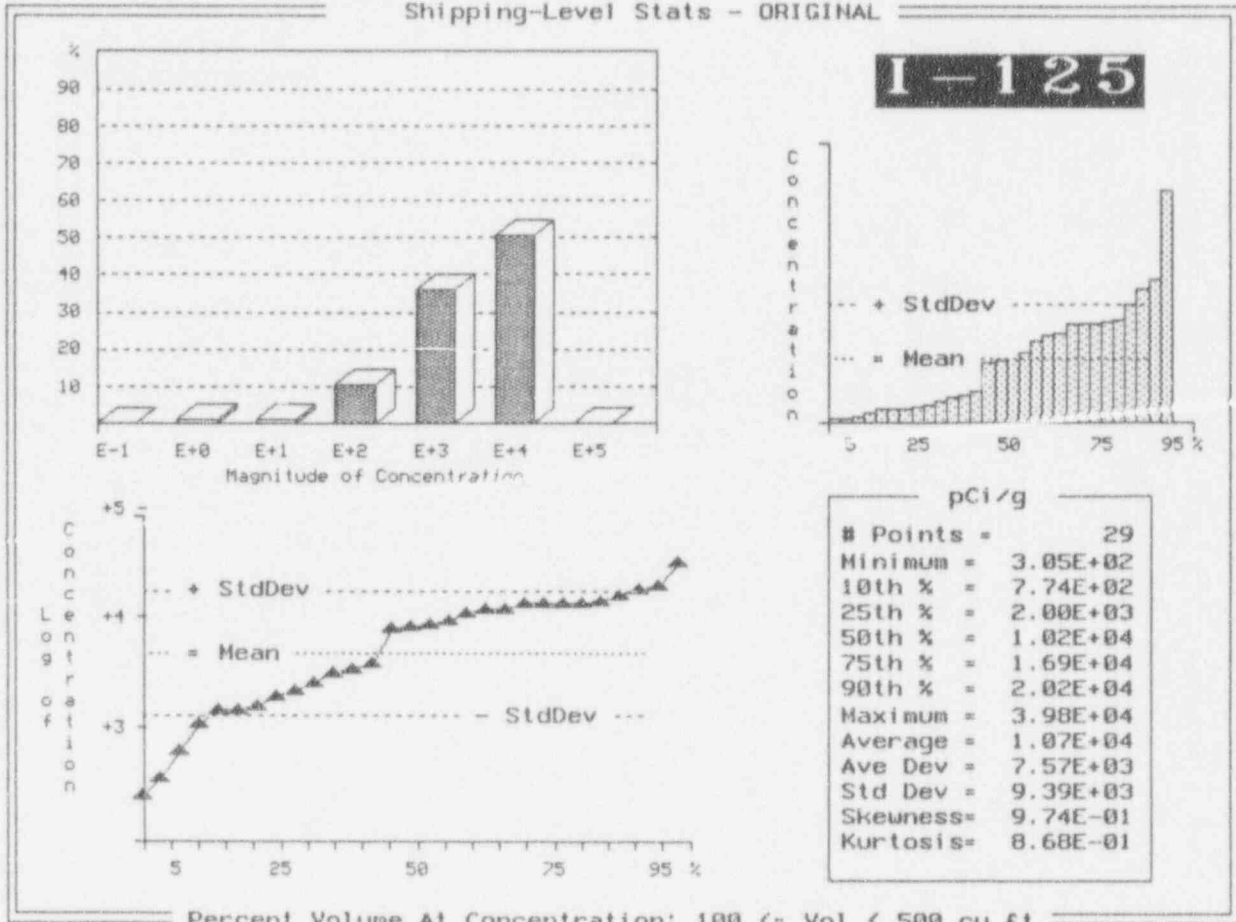


Exhibit F-26 (Continued)

Shipping-Level Stats - ORIGINAL



Percent Volume At Concentration: 100 <= Vol < 500 cu ft

Exhibit F-26 (Continued)

Shipping-Level Stats - ORIGINAL

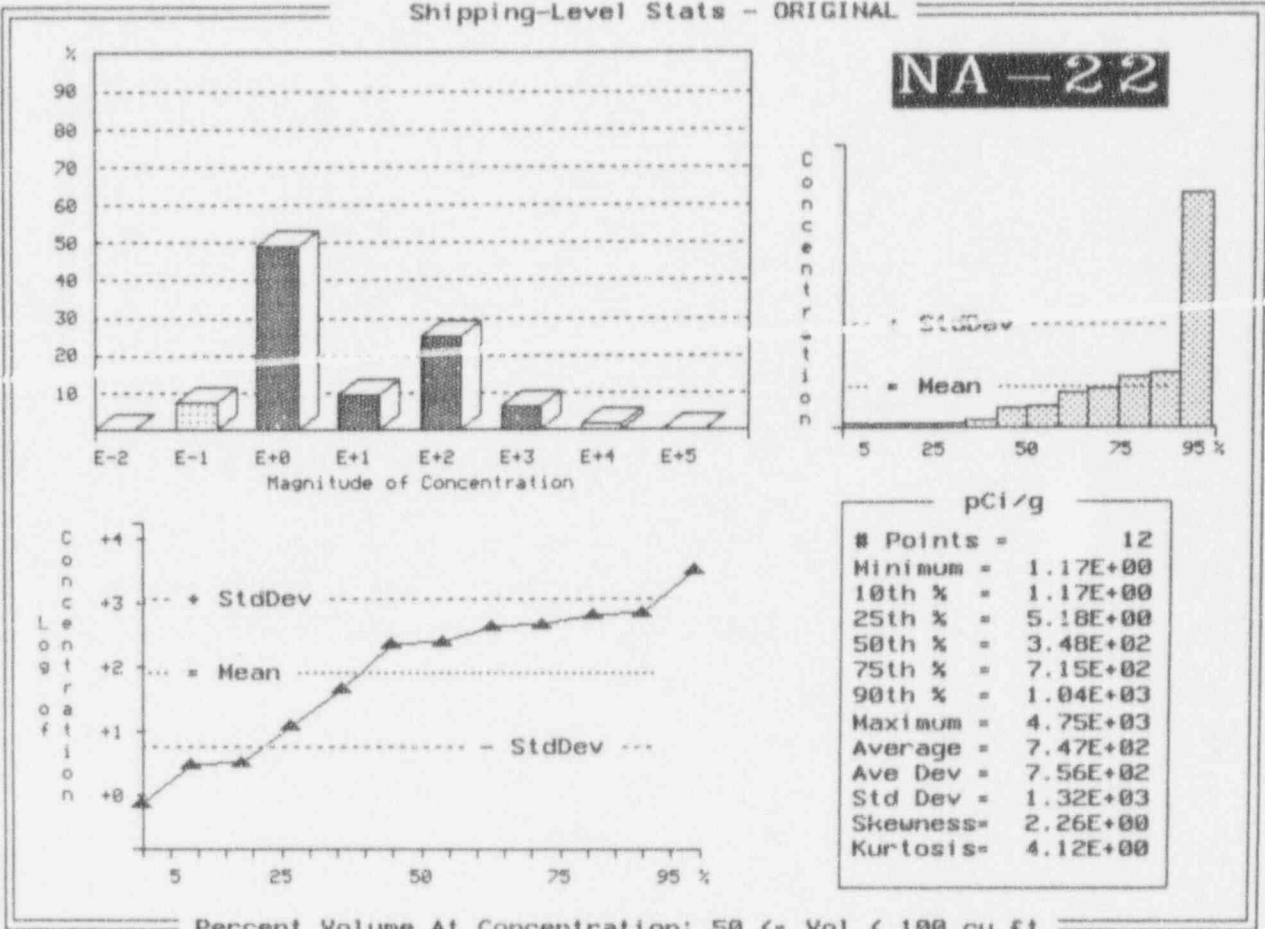
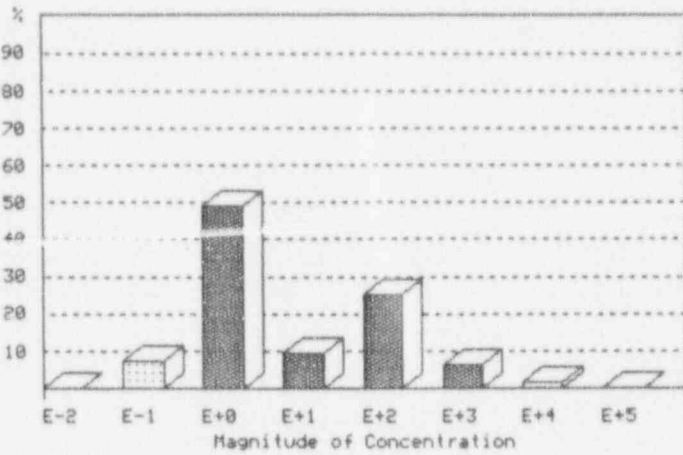
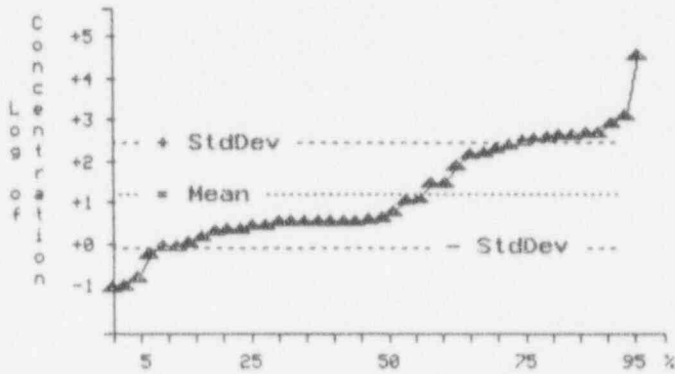
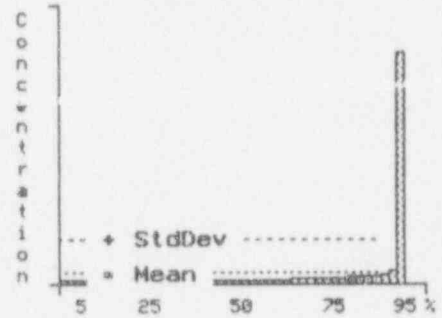


Exhibit F-26 (Continued)

Shipping-Level Stats - ORIGINAL



NA-22



pCi/g	
# Points =	42
Minimum =	1.74E-01
10th % =	1.06E+00
25th % =	4.14E+00
50th % =	6.83E+00
75th % =	4.27E+02
90th % =	7.67E+02
Maximum =	5.34E+04
Average =	1.51E+03
Ave Dev =	2.50E+03
Std Dev =	8.21E+03
Skewness =	6.00E+00
Kurtosis =	3.49E+01

Percent Volume At Concentration: 100 <= Vol < 500 cu ft

Exhibit F-26 (Continued)

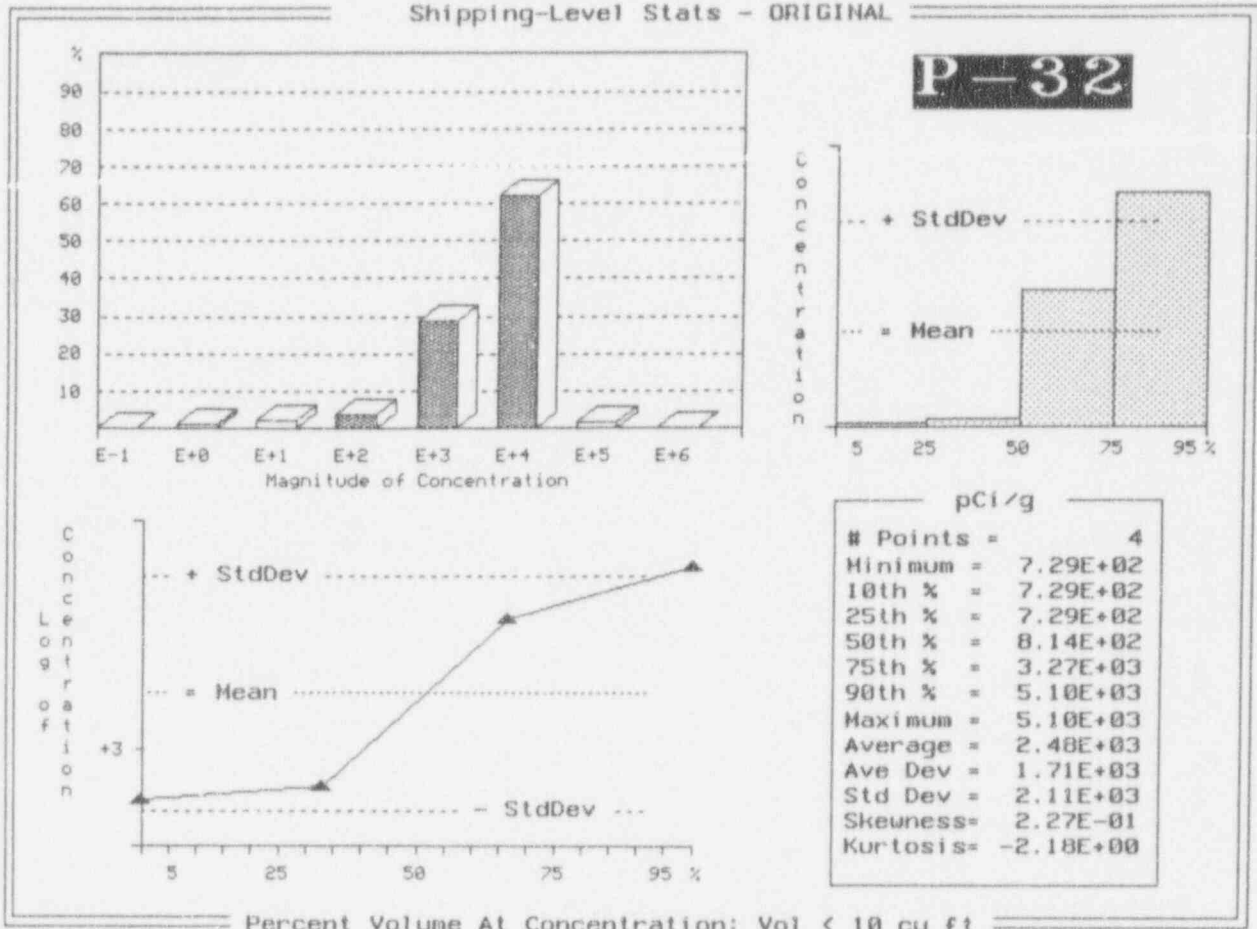


Exhibit F-26 (Continued)

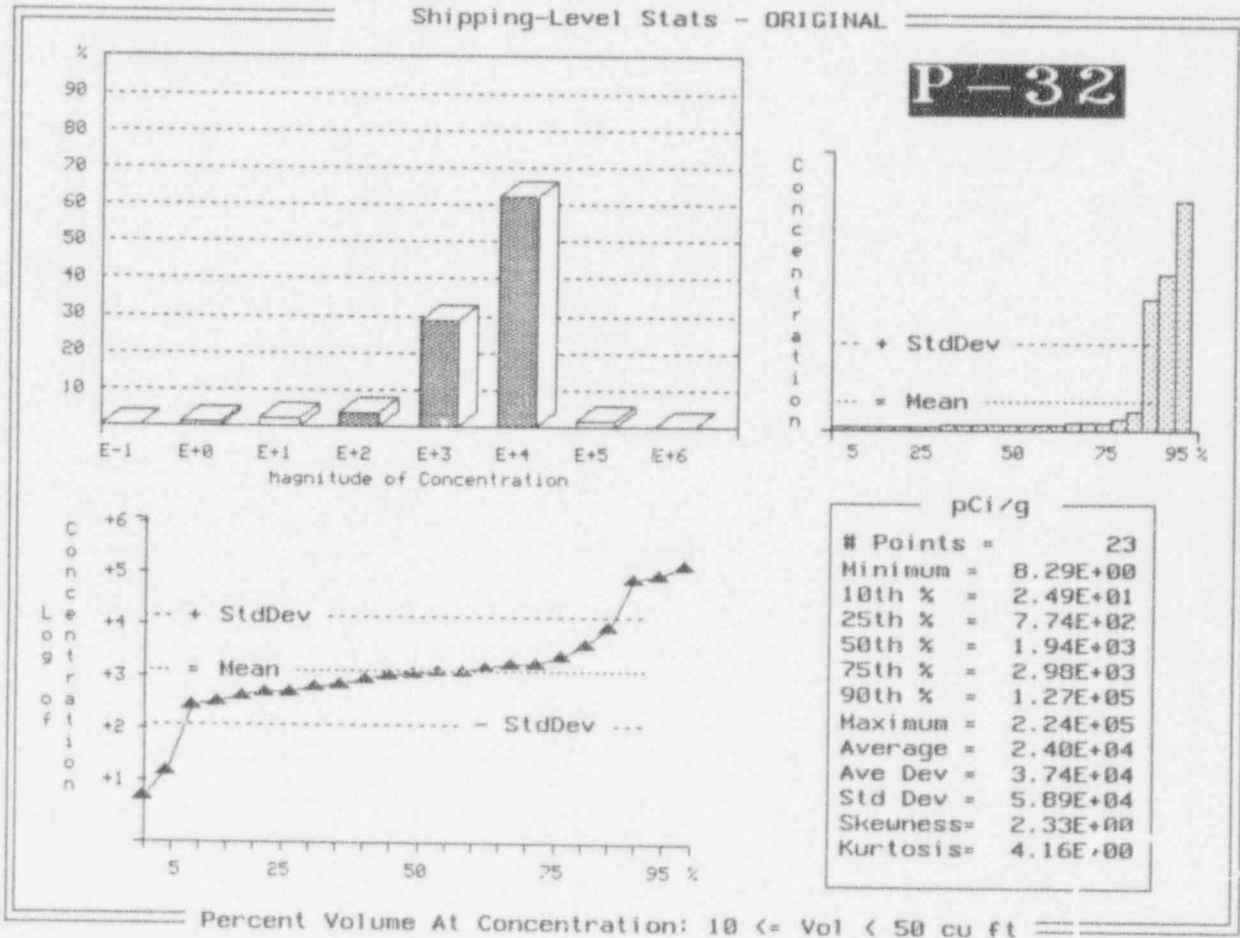


Exhibit F-26 (Continued)

Shipping-Level Stats - ORIGINAL

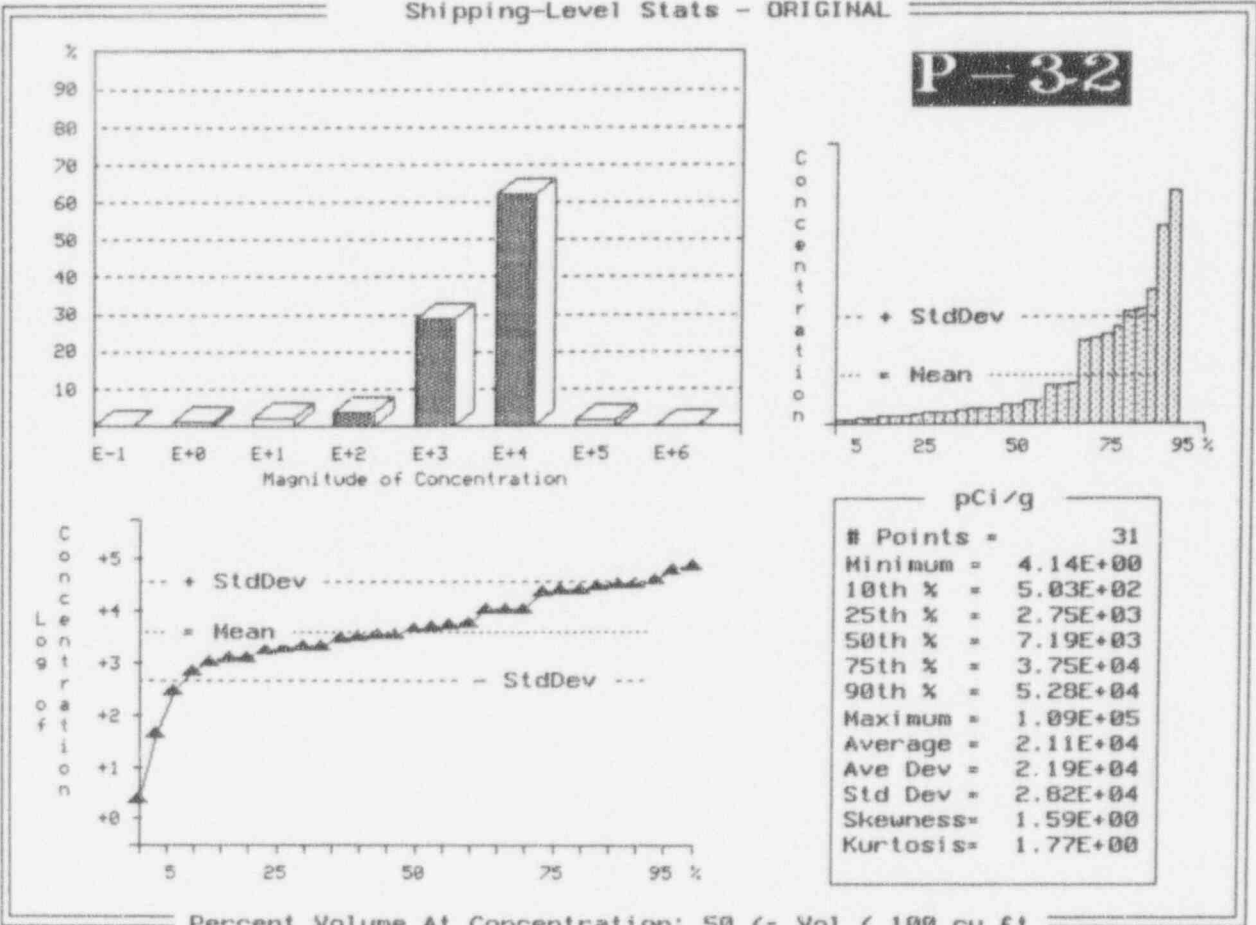


Exhibit F-26 (Continued)

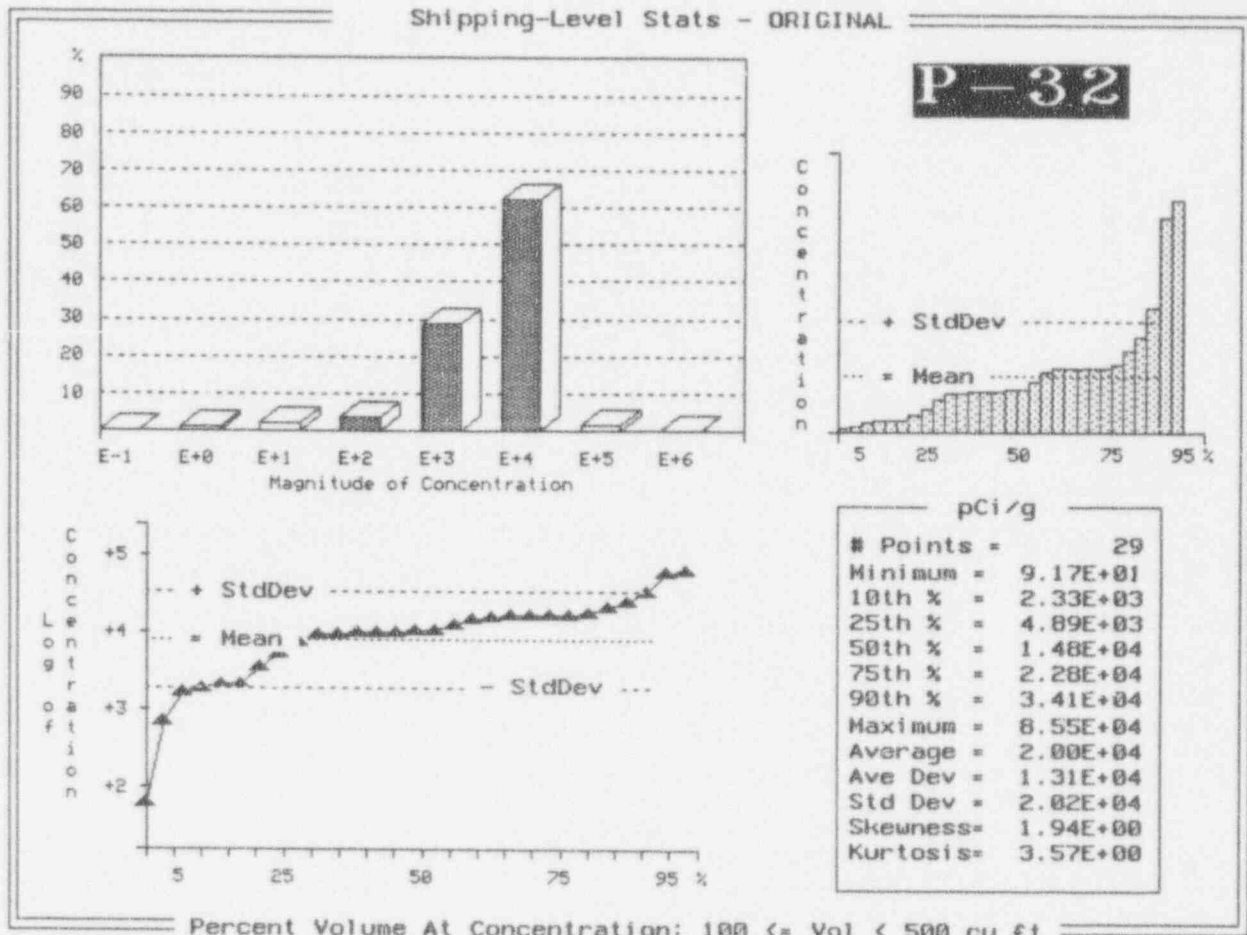


Exhibit F-26 (Continued)

Shipping-Level Stats - ORIGINAL

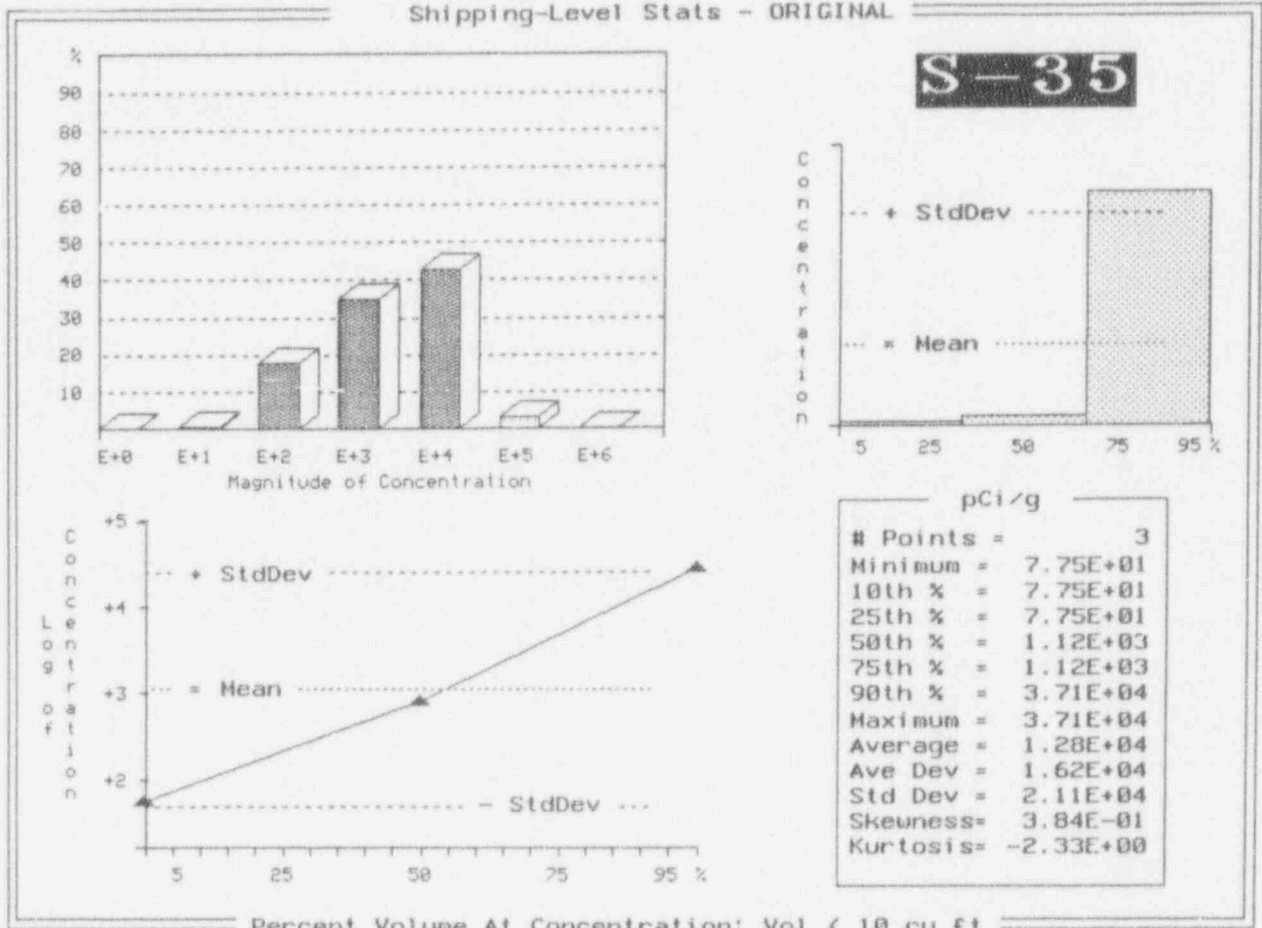


Exhibit F-26 (Continued)

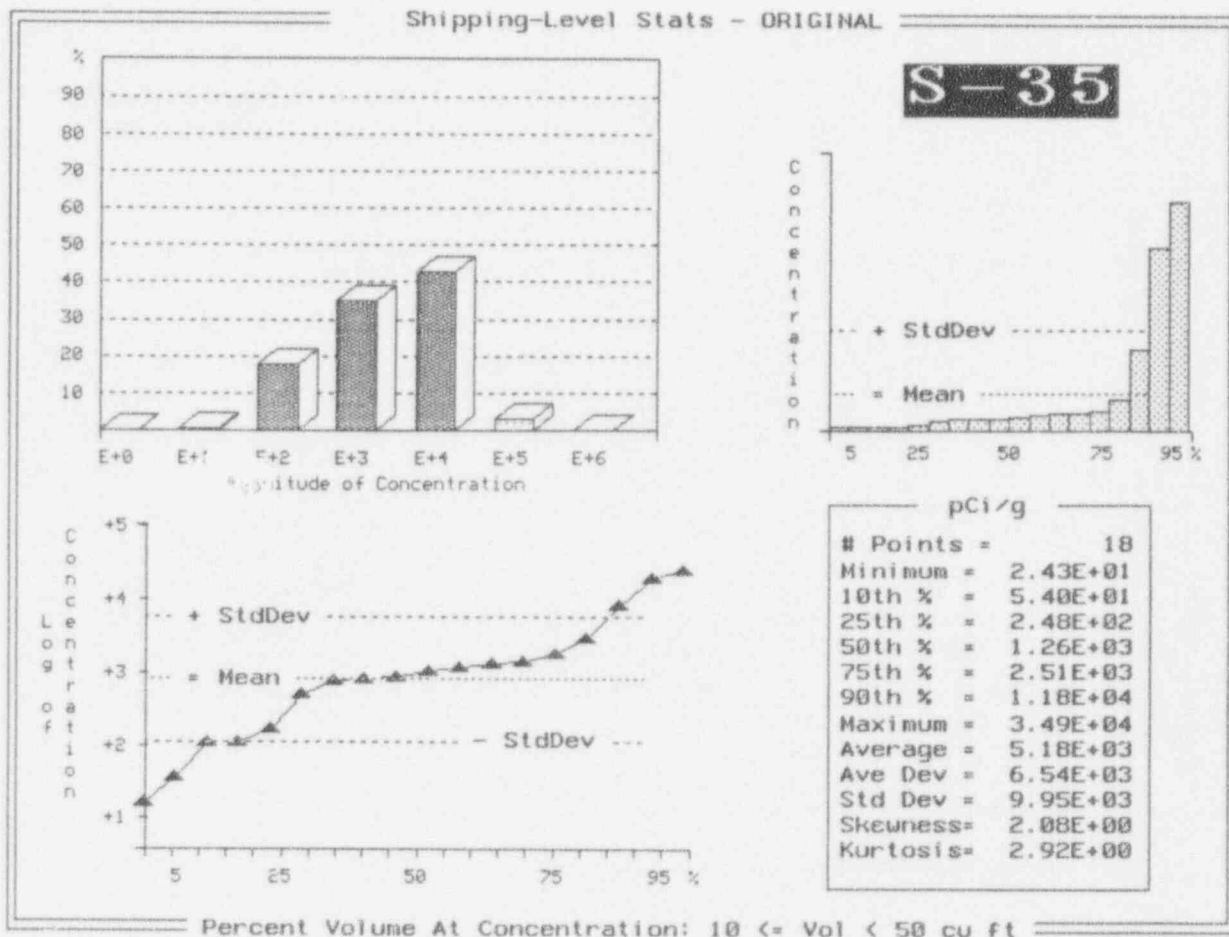


Exhibit F-26 (Continued)

Shipping-Level Stats - ORIGINAL

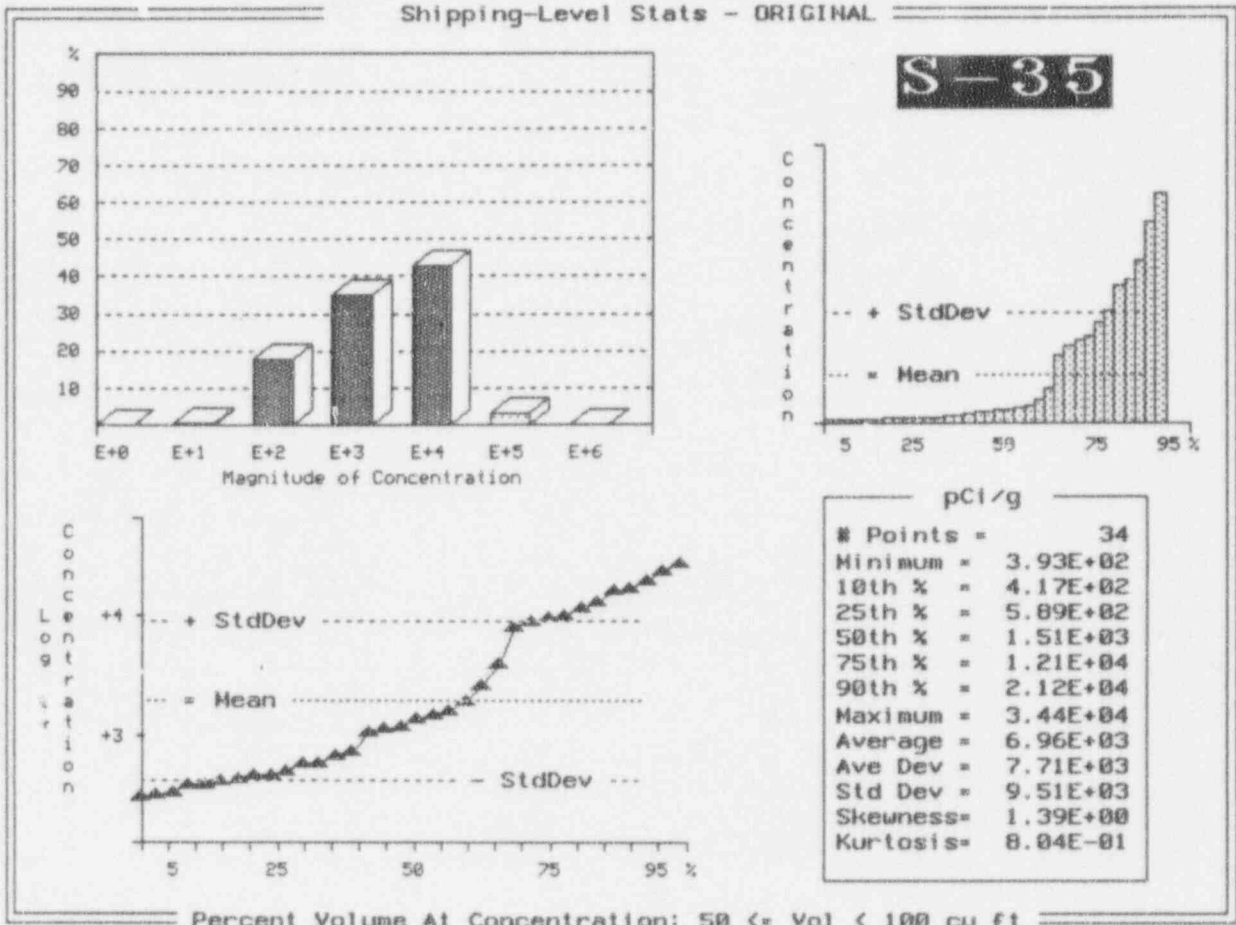


Exhibit F-26 (Continued)

Shipping-Level Stats - ORIGINAL

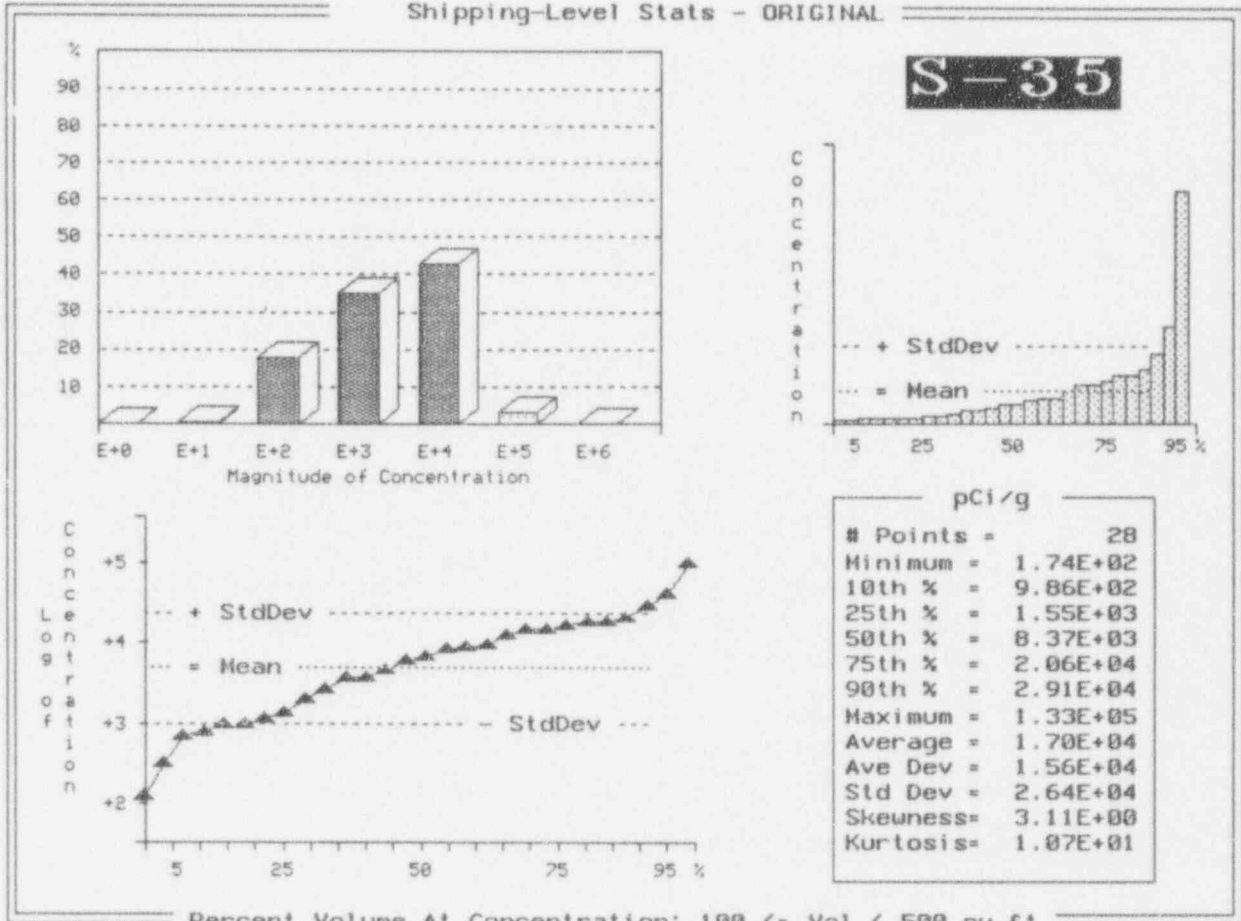


Exhibit F-27
Data Summary - Analyses at the Shipment Level
 (Aggregate Practices for non-brokered waste: 1986 to 1990)

	<u>Data or Parameters</u>
Compact or unaffiliated state:	Northeast
Waste generator class:	Medical
Total number of waste generators:	56
Total associated waste volume (m ³):	461
Total associated waste activity (Ci):	22.8
Waste class:	A-Unstable and A-Stable
Identified waste generators for this analysis:	
Number:	27
Percent of total(%):	48
Total number of shipping records:	121
Number of shipping records <u>with</u> container data:	0
Number of waste containers:	0
Weight of shipments (kg):	101,600
Total waste volume (m ³):	131
Fractional waste volume (%): (this analysis/total)	28
Total waste activity (Ci):	9.8
Fractional waste activity (%): (this analysis/total)	43

Exhibit F-27 (Continued)

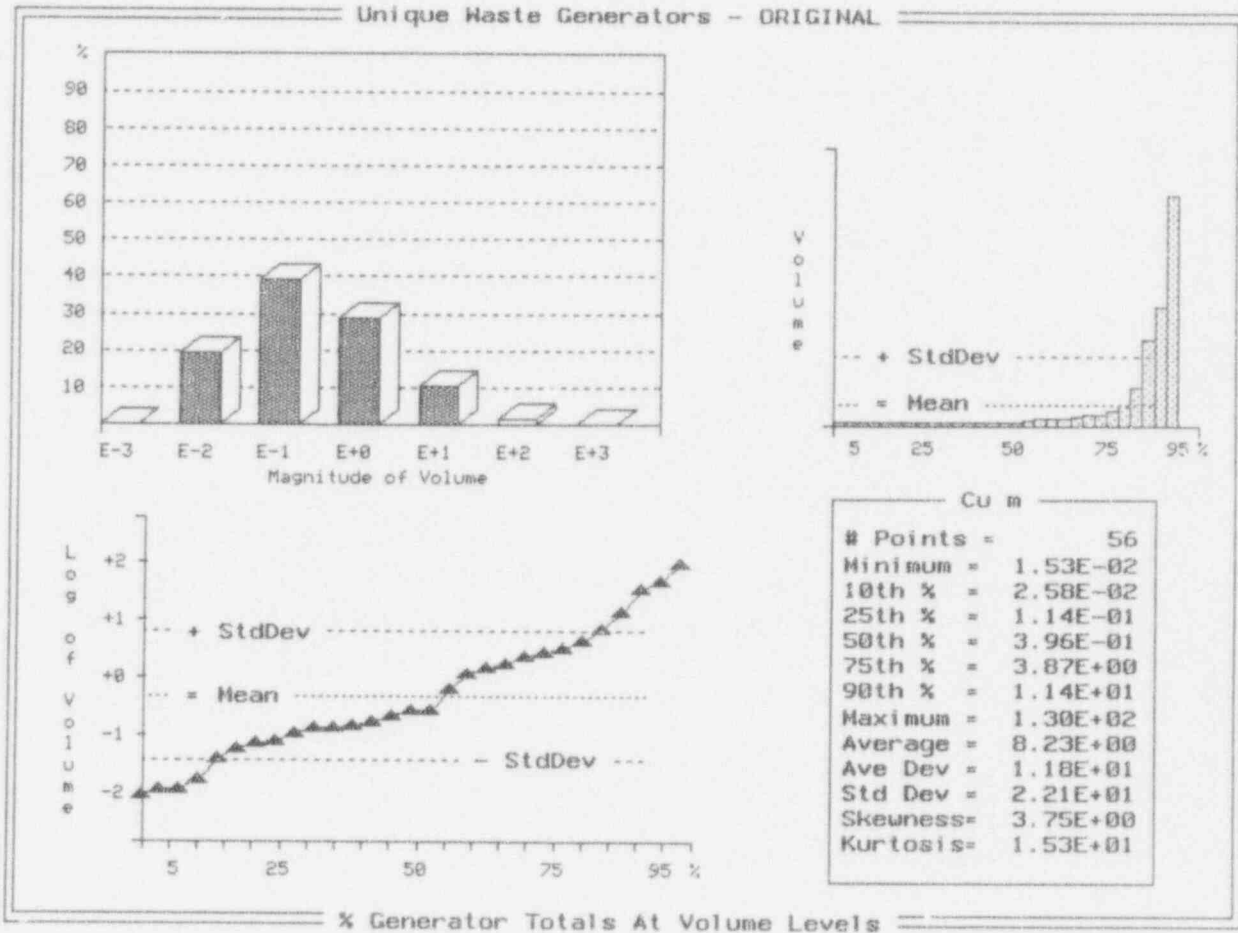


Exhibit F-27 (Continued)

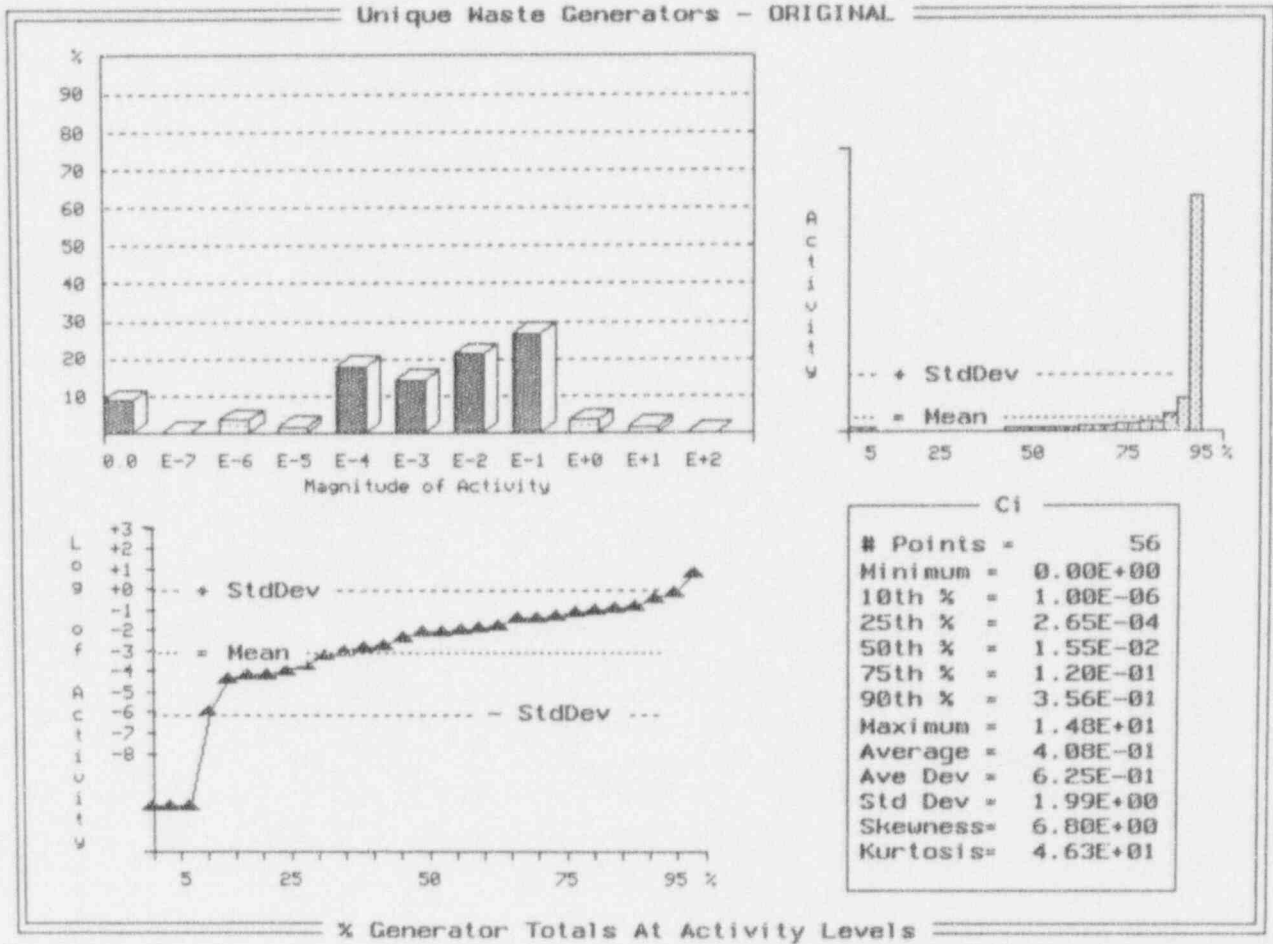


Exhibit F-28
Data Summary - Analyses at the Shipment Level
(Aggregate Practices for non-brokered waste: 1986 to 1990)

	<u>Data or Parameters</u>
Compact or unaffiliated state:	Northeast
Waste generator class:	Industrial
Total number of waste generators:	202
Total associated waste volume (m ³):	3,774
Total associated waste activity (Ci):	27,700
Waste class:	A-Unstable and A-Stable
Identified waste generators for this analysis:	
Number:	90
Percent of total(%):	44
Total number of shipping records:	376
Number of shipping records <u>with</u> container data:	7
Number of waste containers:	252
Weight of shipments (kg):	1,428,000
Total waste volume (m ³):	1,396
Fractional waste volume (%): (this analysis/total)	37
Total waste activity (Ci):	271
Fractional waste activity (%): (this analysis/total)	0.9

Exhibit F-28 (Continued)

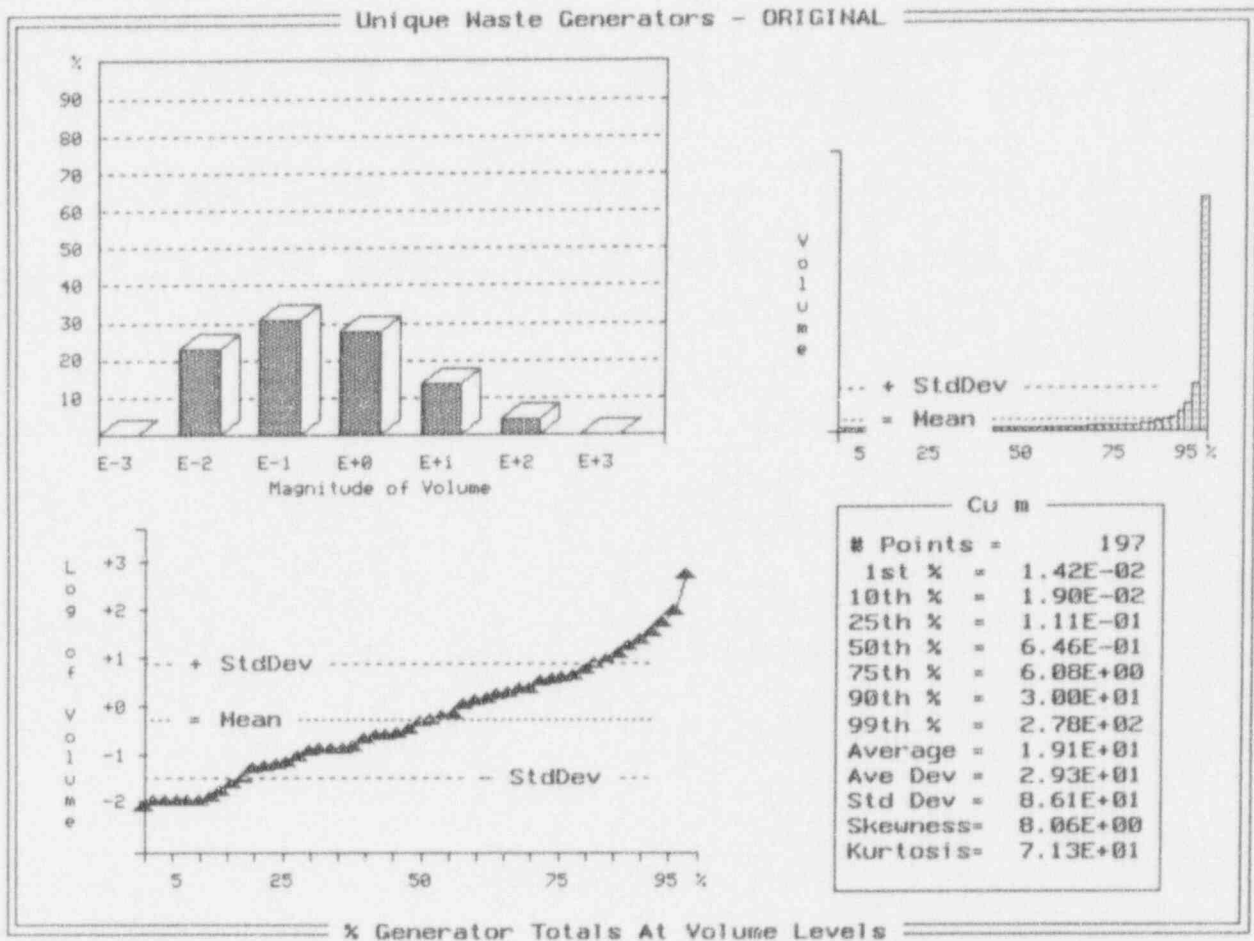
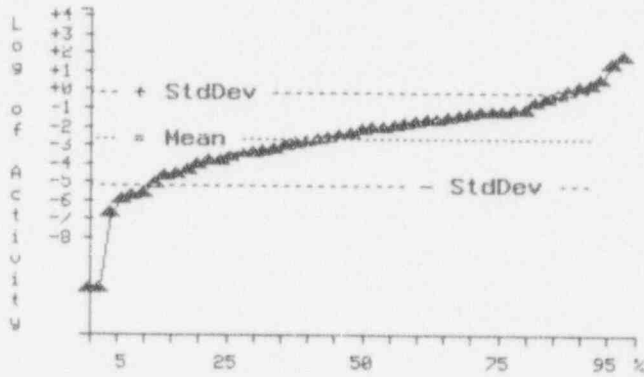
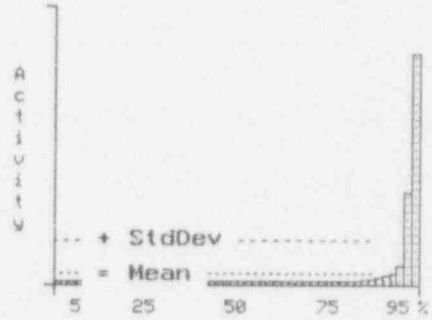
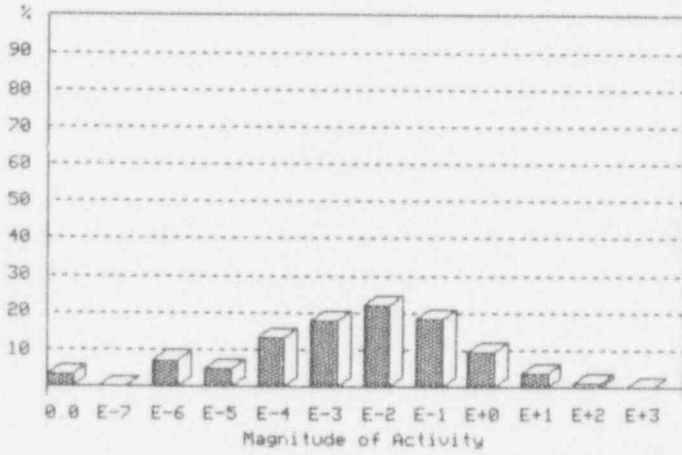


Exhibit F-28 (Continued)

Unique Waste Generators - ORIGINAL



Ci	
# Points =	197
1st % =	0.00E+00
10th % =	8.00E-06
25th % =	5.90E-04
50th % =	1.61E-02
75th % =	1.84E-01
90th % =	2.38E+00
99th % =	9.36E+01
Average =	3.45E+00
Ave Dev =	5.96E+00
Std Dev =	1.80E+01
Skewness =	6.90E+00
Kurtosis =	5.05E+01

% Generator Totals At Activity Levels

Exhibit F-29
Data Summary - Analyses at the Shipment Level
 (Aggregate Practices for non-brokered waste: 1986 to 1990)

	<u>Data or Parameters</u>
Compact or unaffiliated state:	Appalachian
Waste generator class:	Government
Total number of waste generators:	31
Total associated waste volume (m ³):	1,941
Total associated waste activity (Ci):	17,430
Waste class:	A-Unstable and A-Stable
Identified waste generators for this analysis:	
Number:	5
Percent of total(%):	16
Total number of shipping records:	41
Number of shipping records <u>with</u> container data:	0
Number of waste containers:	0
Weight of shipments (kg):	287,900
Total waste volume (m ³):	411
Fractional waste volume (%): (this analysis/total)	21
Total waste activity (Ci):	22.3
Fractional waste activity (%): (this analysis/total)	0.1

Exhibit F-29 (Continued)

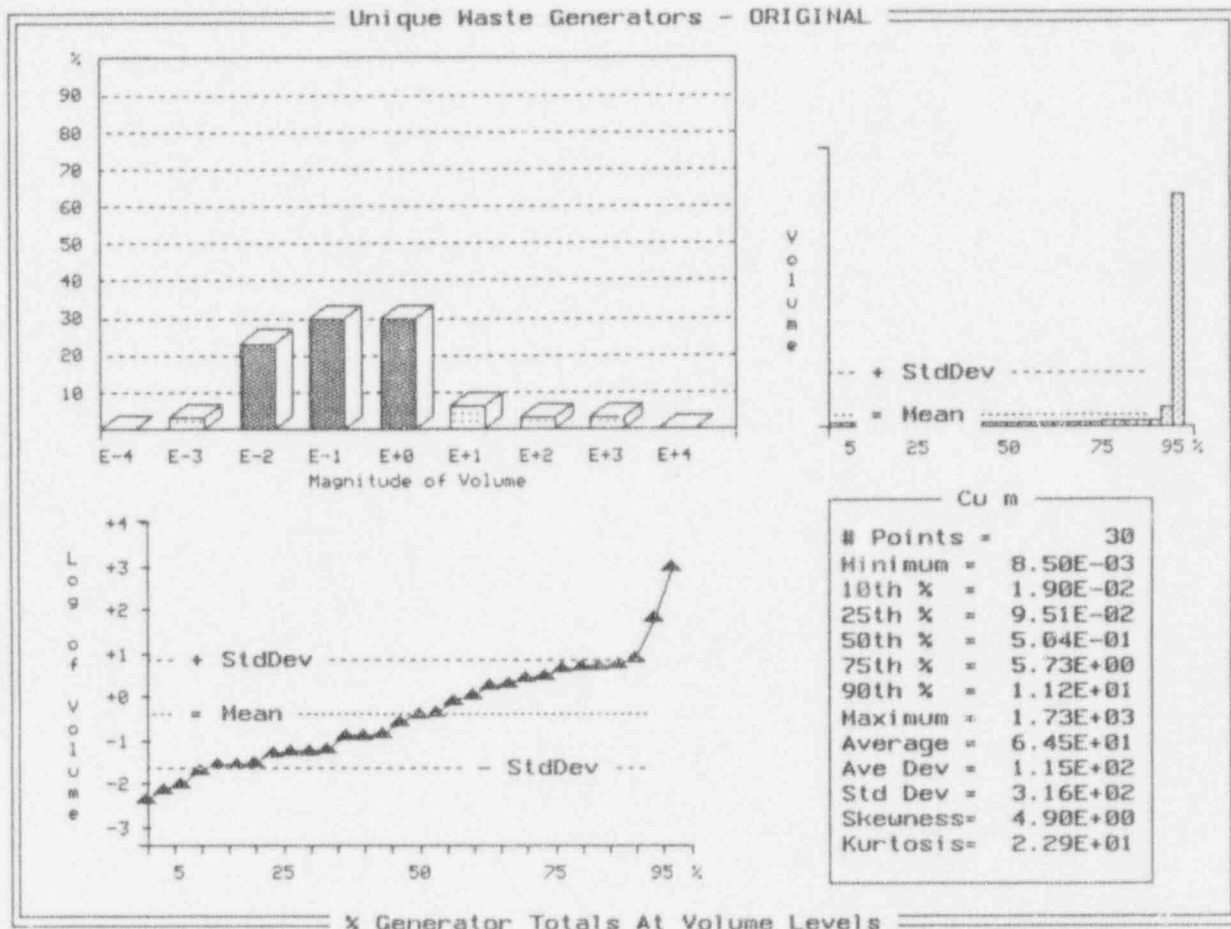


Exhibit F-29 (Continued)

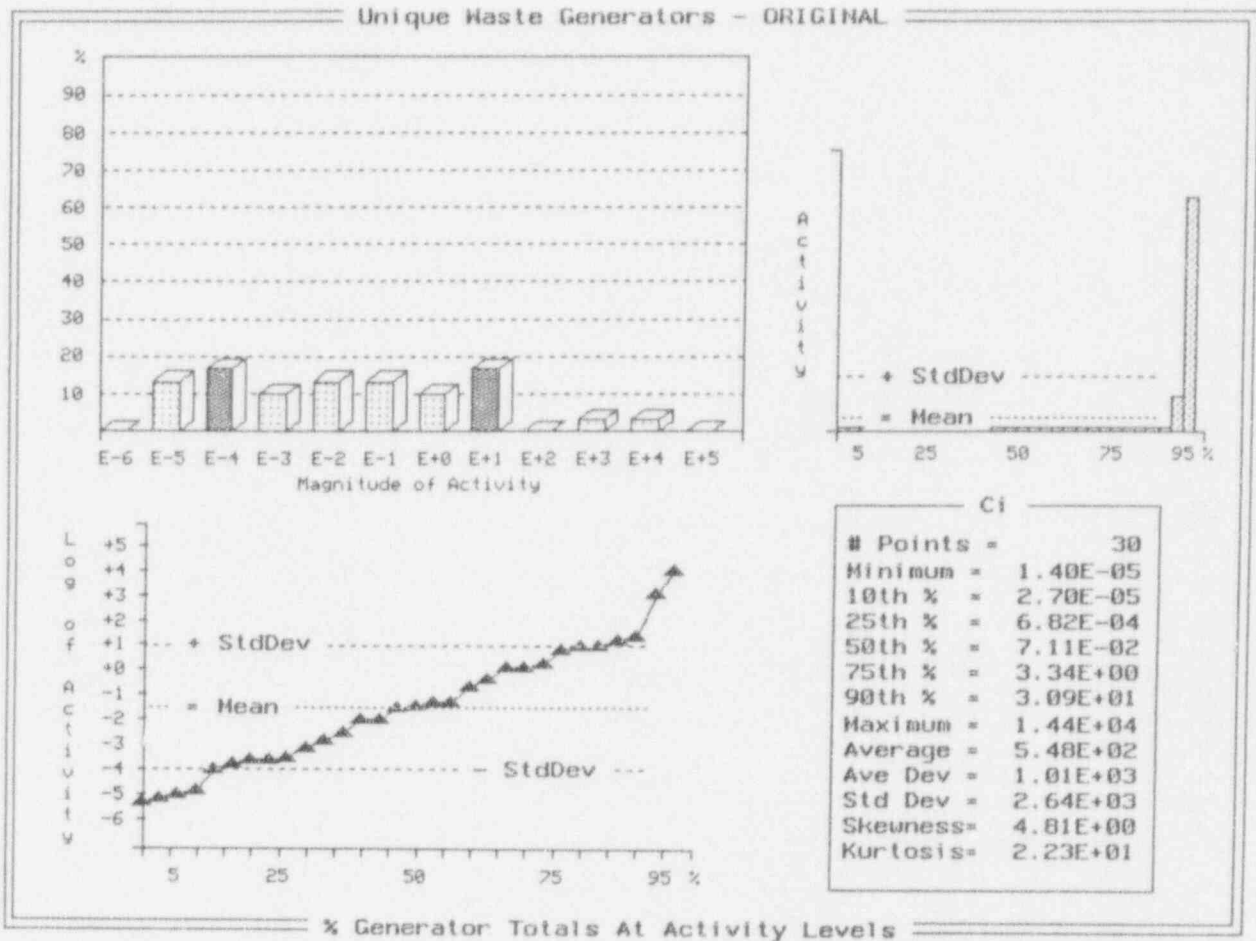
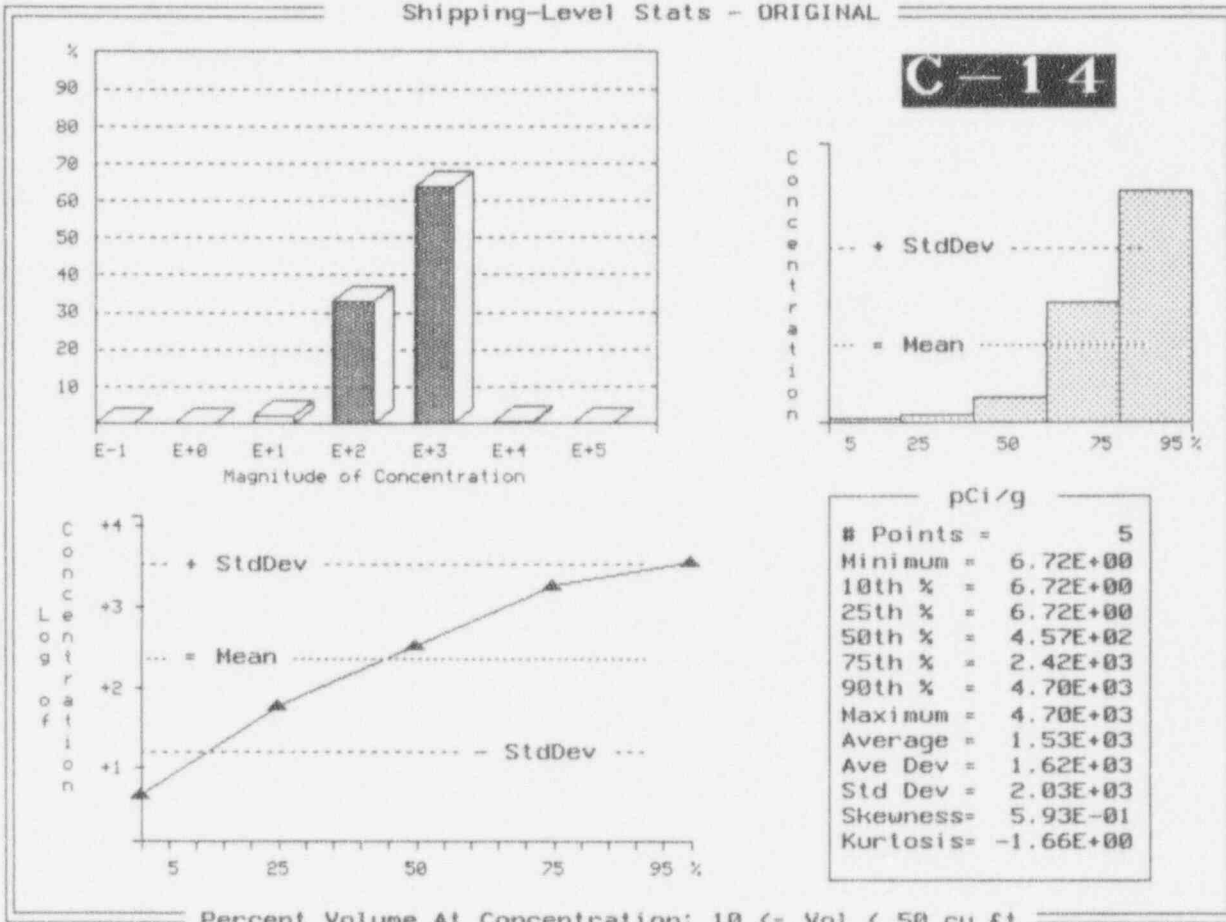


Exhibit F-29 (Continued)

Shipping-Level Stats - ORIGINAL



Percent Volume At Concentration: 10 <= Vol < 50 cu ft

Exhibit F-29 (Continued)

Shipping-Level Stats - ORIGINAL

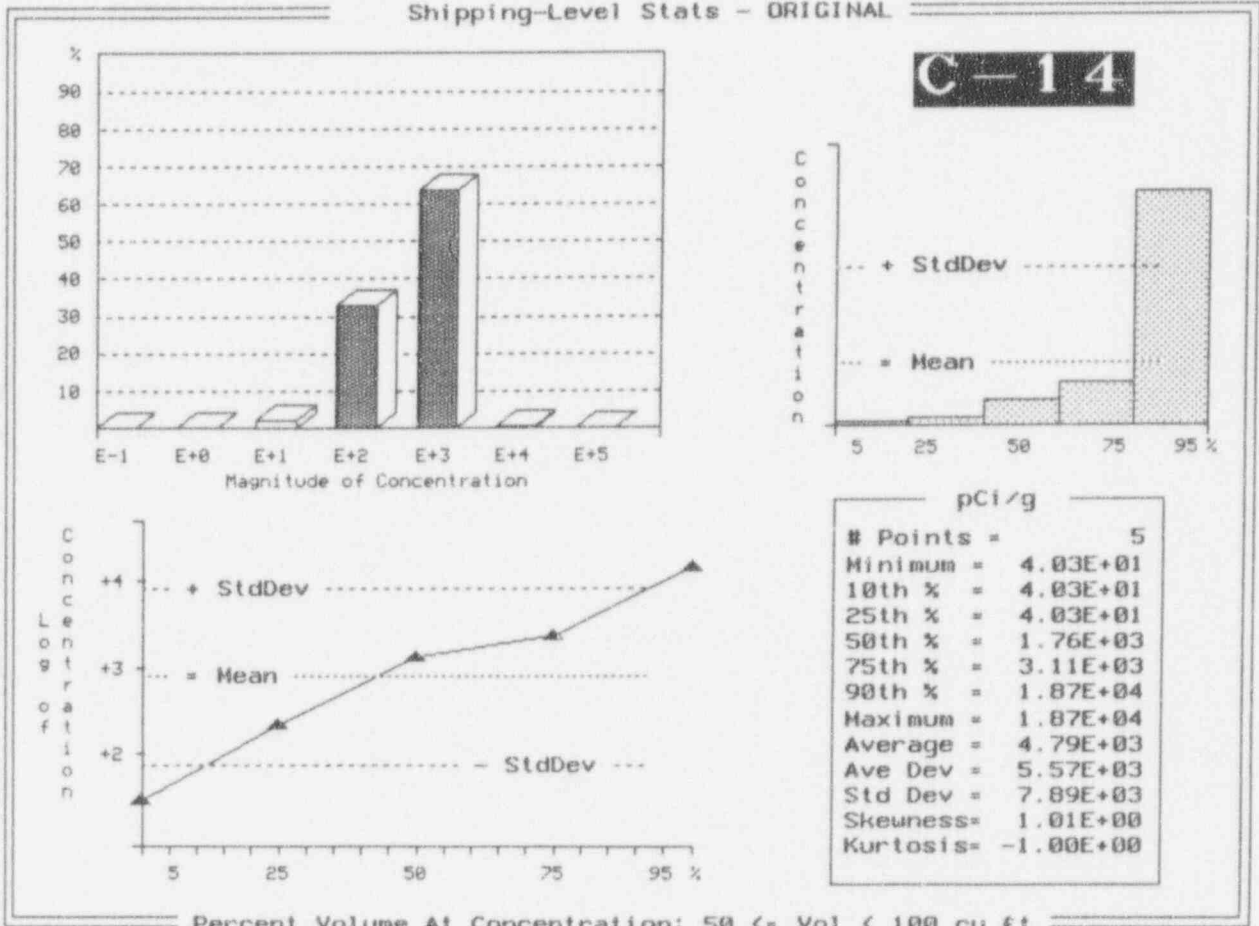
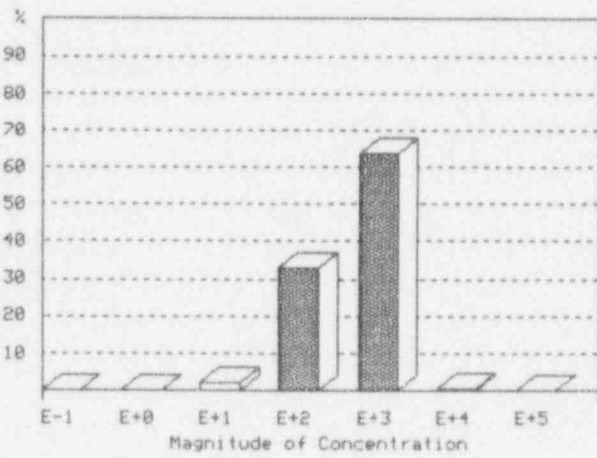
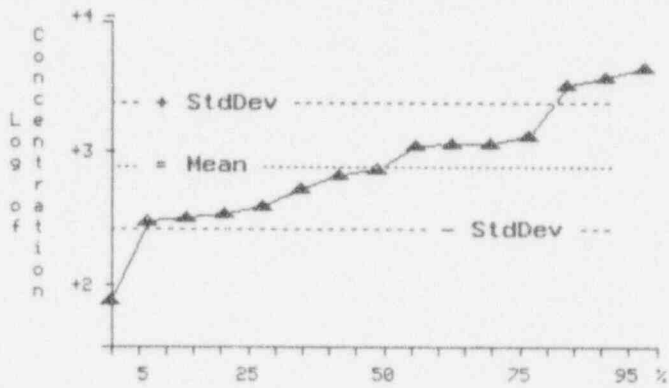
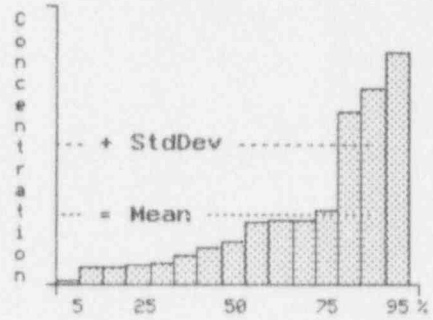


Exhibit F-29 (Continued)

Shipping-Level Stats - ORIGINAL



C-14



pCi/g	
# Points =	15
Minimum =	9.40E+01
10th % =	3.67E+02
25th % =	4.12E+02
50th % =	8.85E+02
75th % =	1.36E+03
90th % =	4.16E+03
Maximum =	4.94E+03
Average =	1.49E+03
Ave Dev =	1.11E+03
Std Dev =	1.51E+03
Skeuness =	1.18E+00
Kurtosis =	-1.44E-01

Percent Volume At Concentration: 100 <= Vol < 500 cu ft

Exhibit F-29 (Continued)

Shipping-Level Stats - ORIGINAL

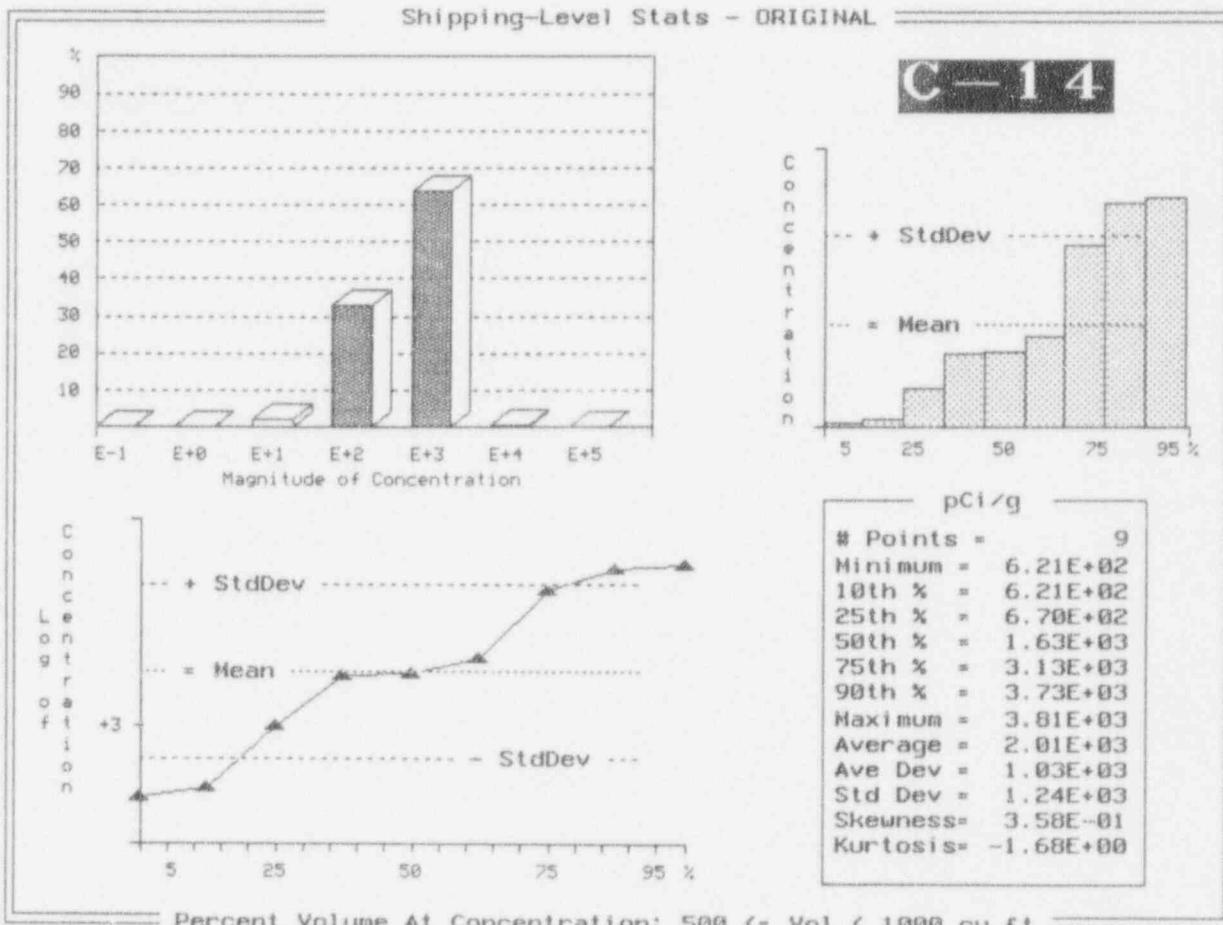


Exhibit F-29 (Continued)

Shipping-Level Stats - ORIGINAL

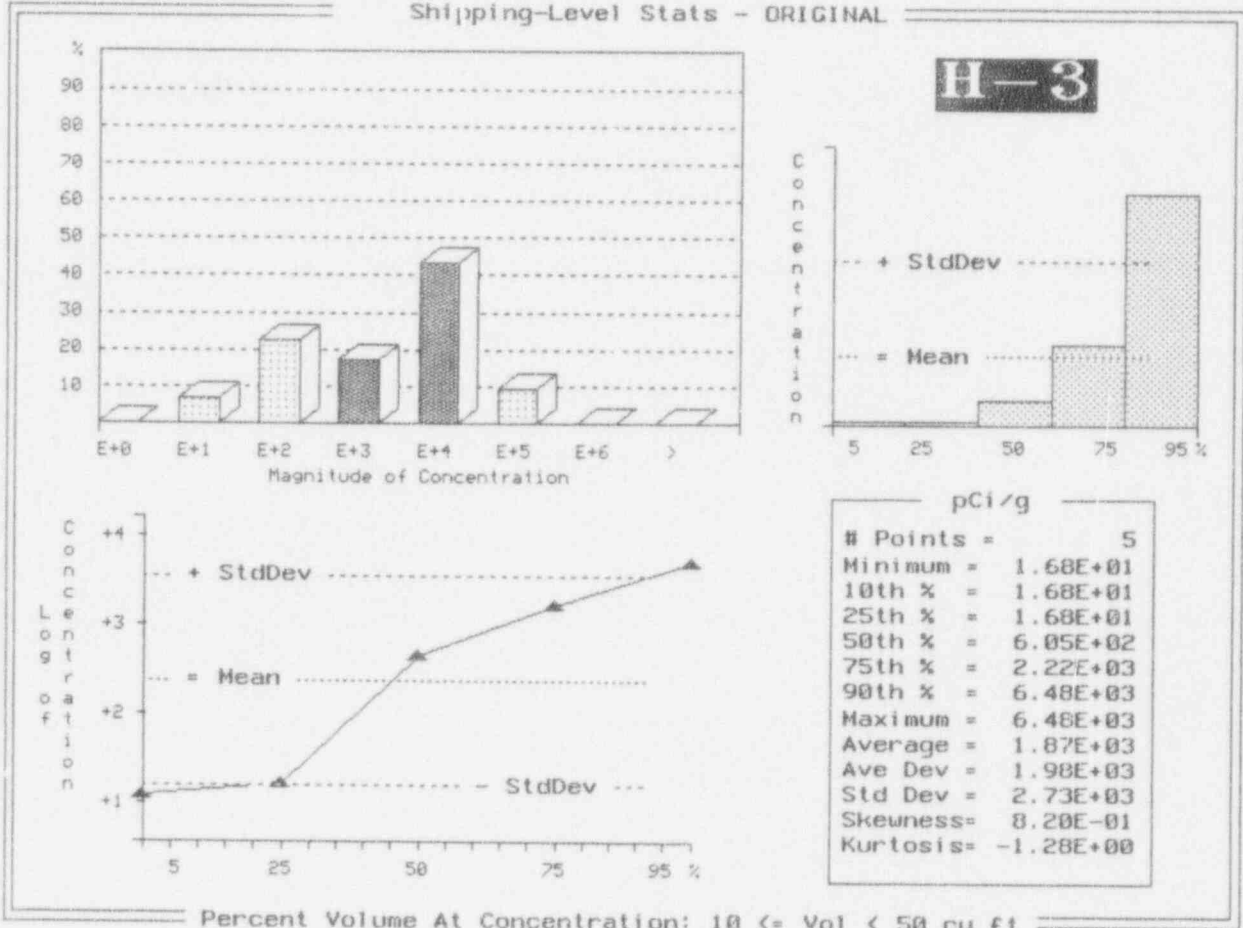


Exhibit F-29 (Continued)

Shipping-Level Stats - ORIGINAL

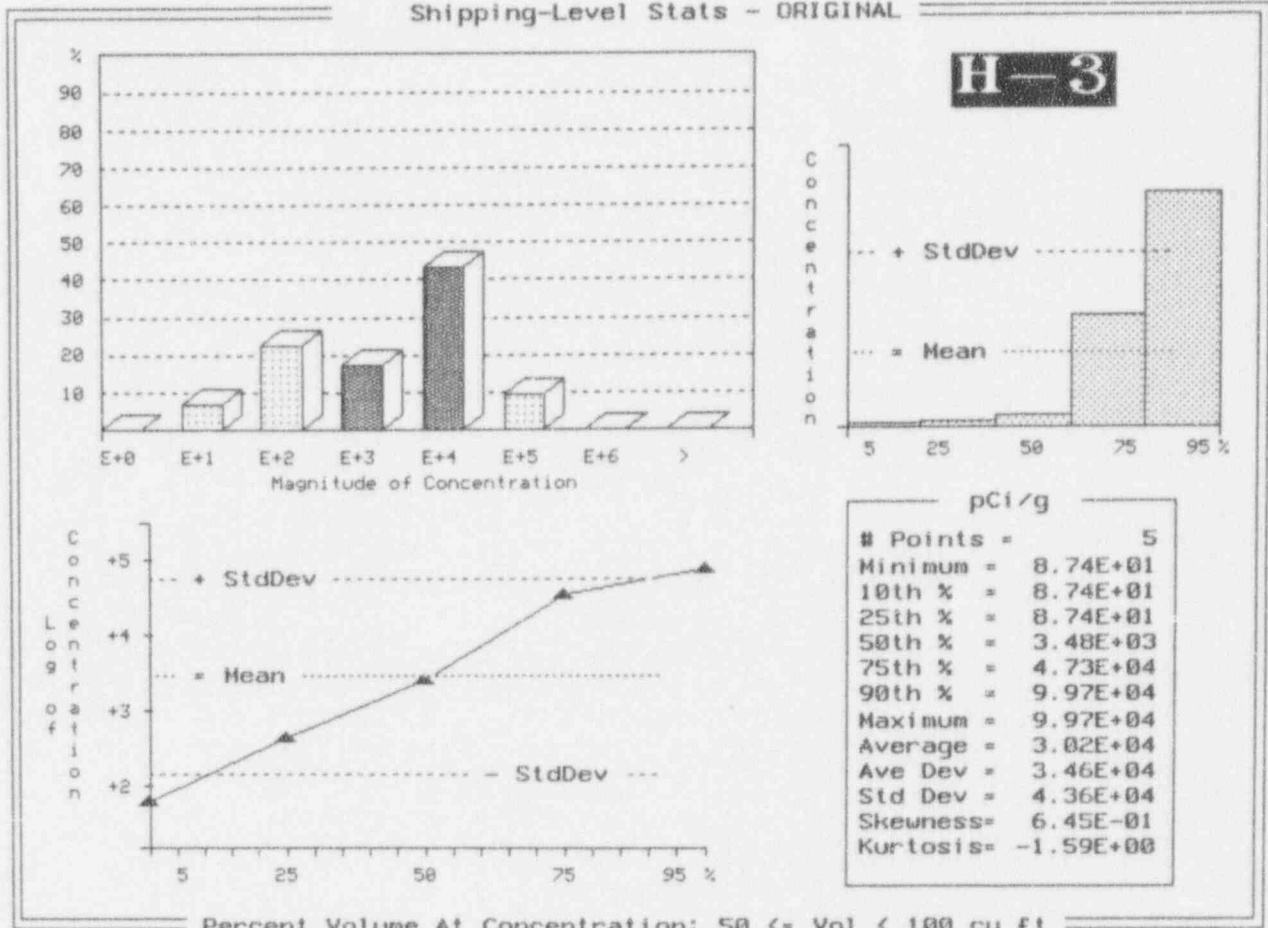
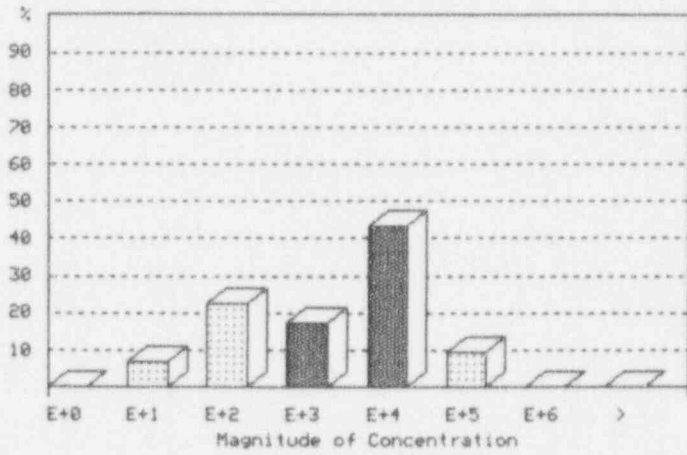
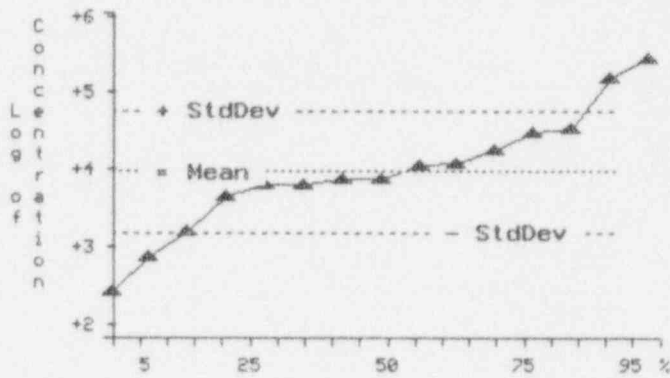
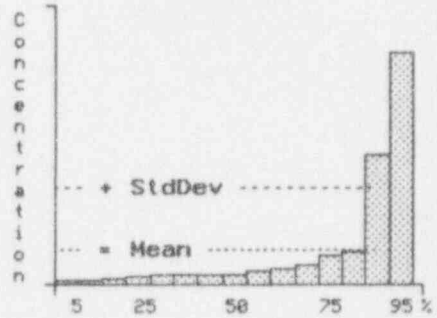


Exhibit F-29 (Continued)

Shipping-Level Stats - ORIGINAL



H=3



pCi/g	
# Points =	15
Minimum =	3.67E+02
10th % =	1.00E+03
25th % =	6.12E+03
50th % =	1.05E+04
75th % =	2.44E+04
90th % =	2.01E+05
Maximum =	3.63E+05
Average =	5.03E+04
Ave Dev =	6.18E+04
Std Dev =	9.98E+04
Skewness =	2.22E+00
Kurtosis =	3.79E+00

Percent Volume At Concentration: 100 <= Vol < 500 cu ft

Exhibit F-29 (Continued)

Shipping-Level Stats - ORIGINAL

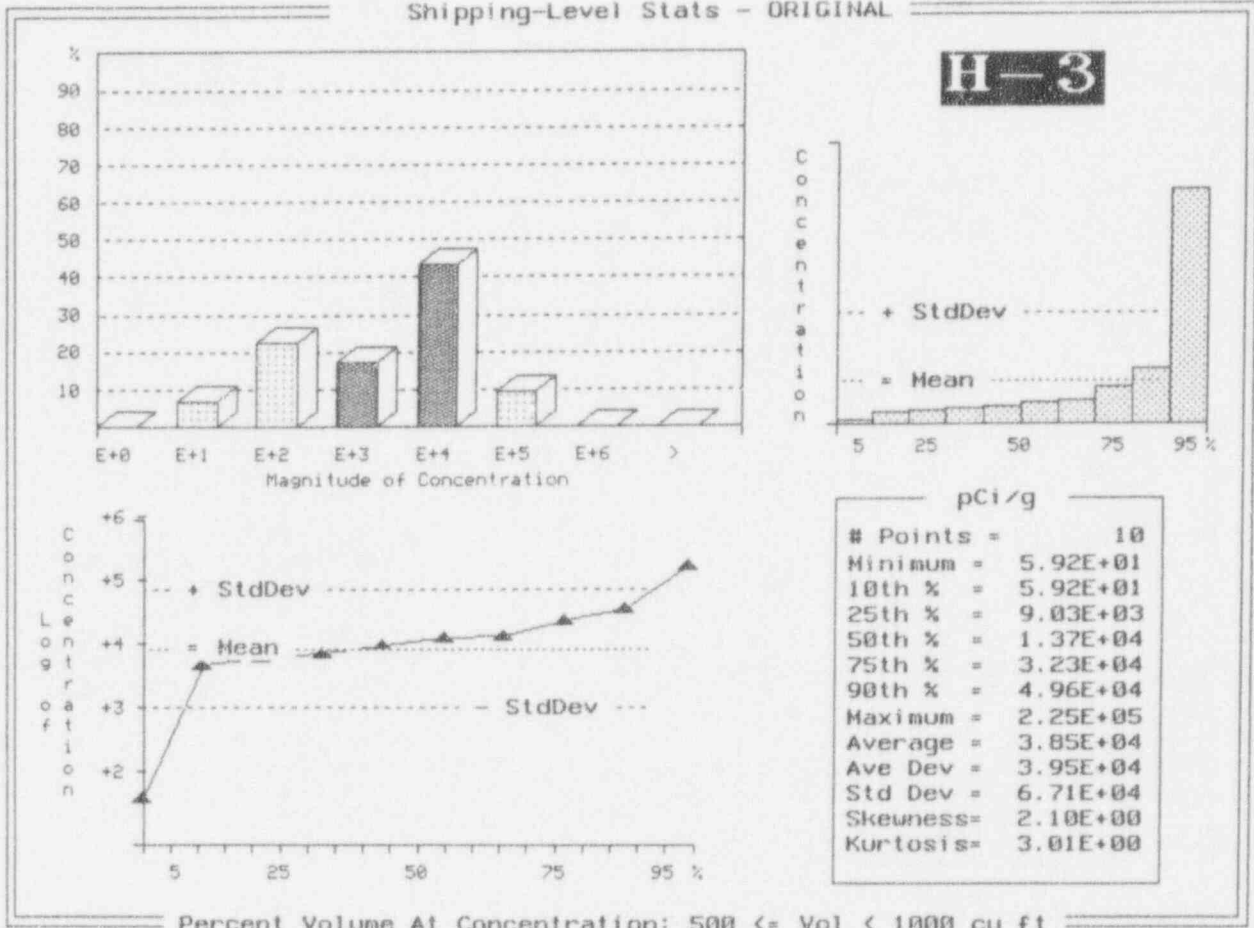


Exhibit F-29 (Continued)

Shipping-Level Stats - ORIGINAL

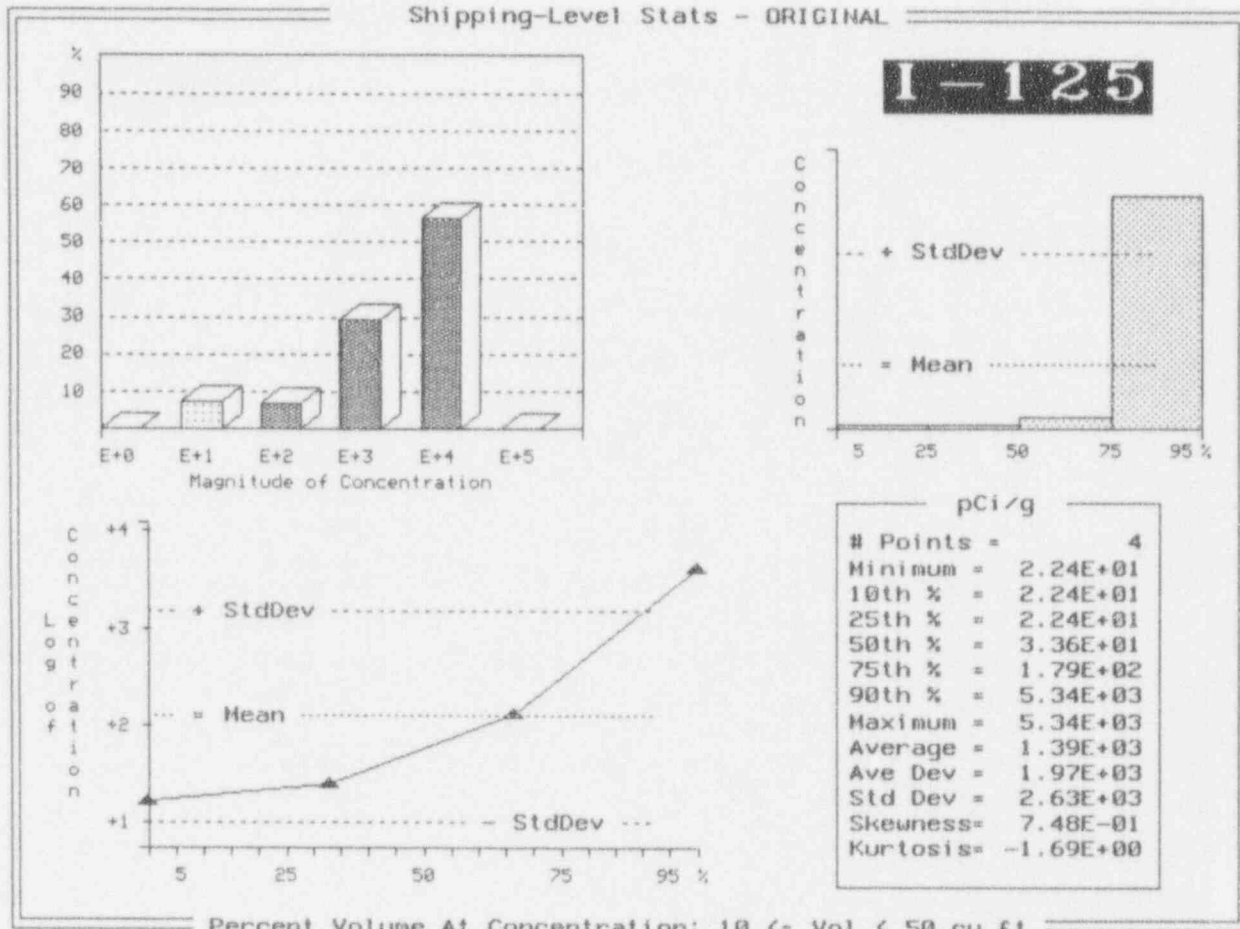


Exhibit F-29 (Continued)

Shipping-Level Stats - ORIGINAL

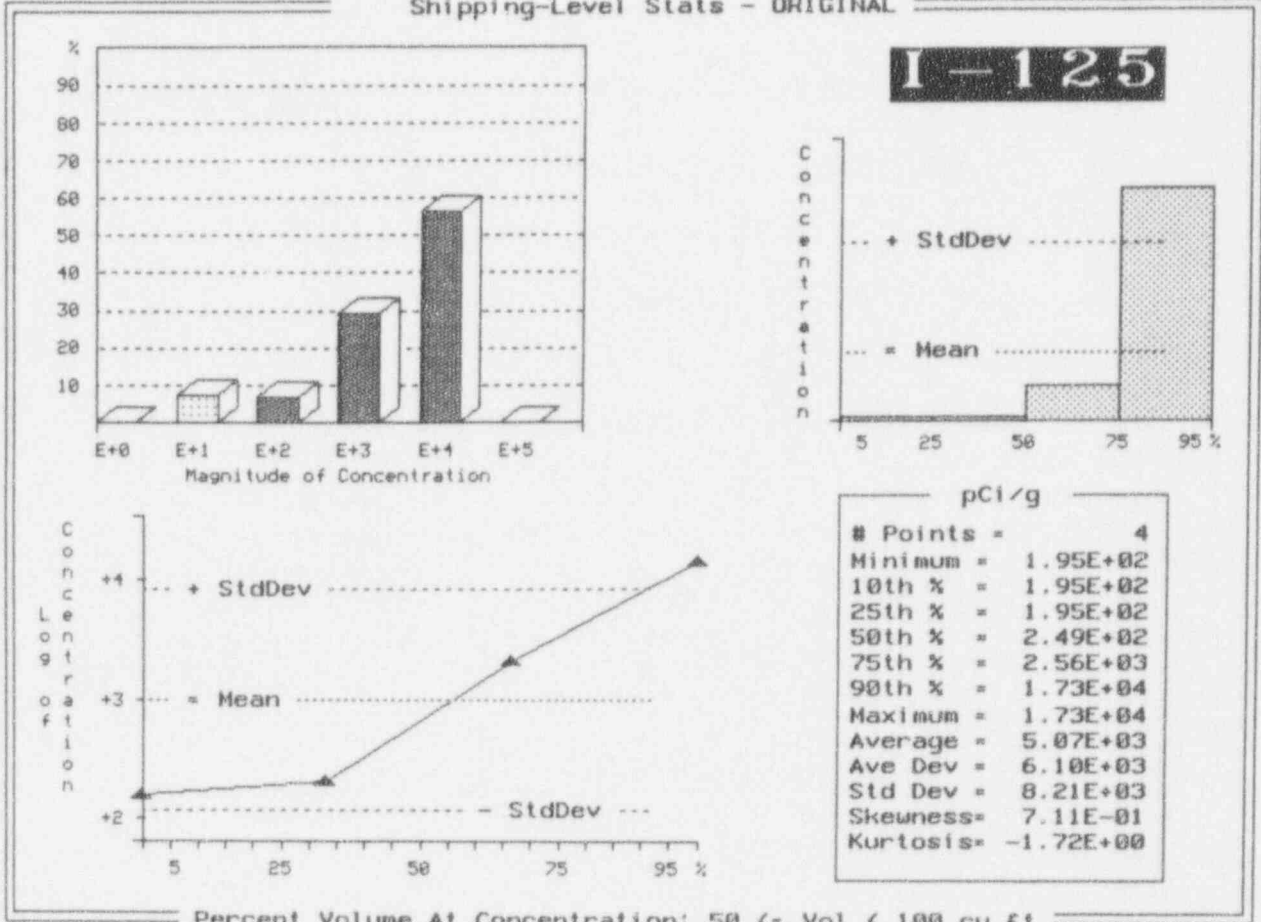


Exhibit F-29 (Continued)

Shipping-Level Stats - ORIGINAL

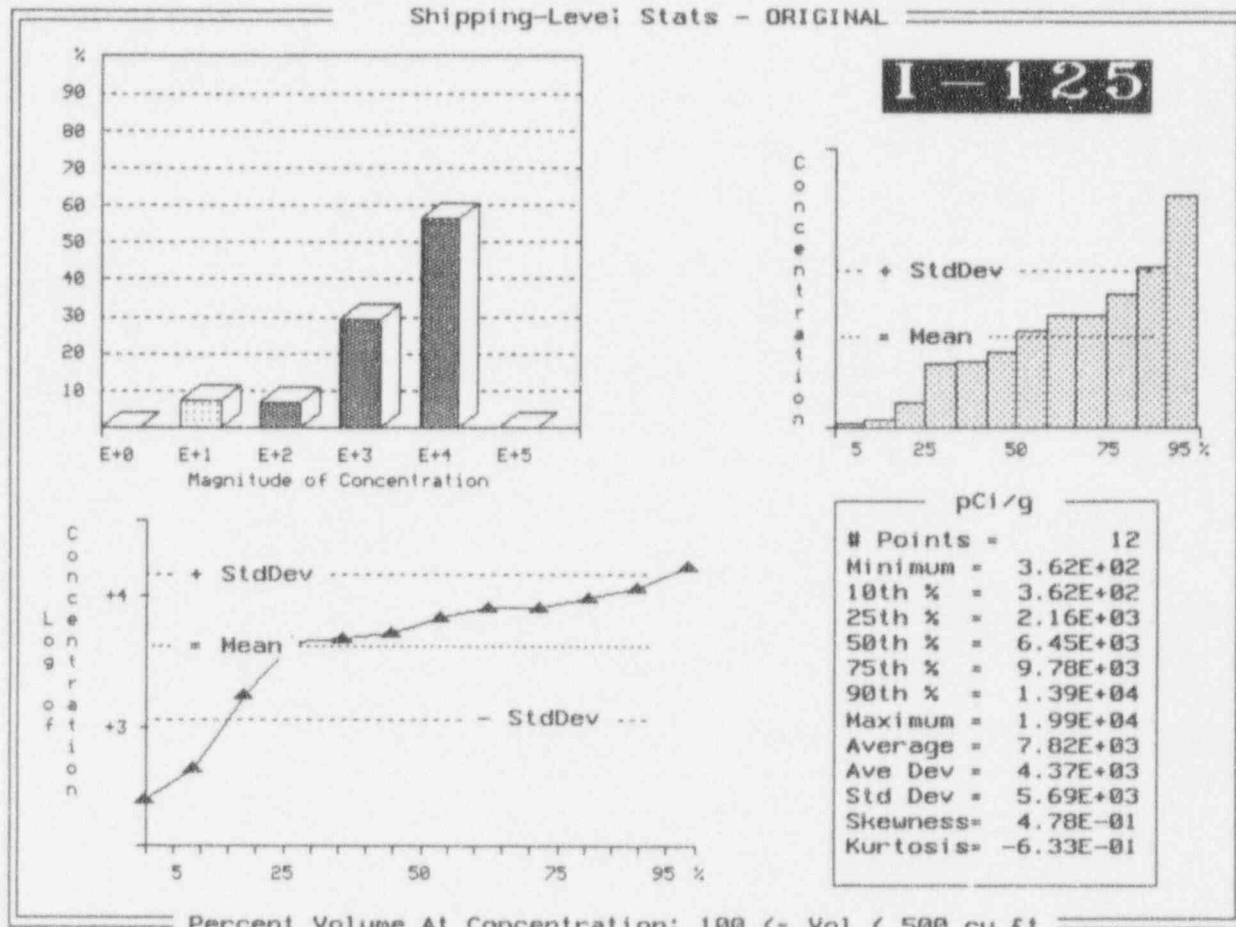


Exhibit F-29 (Continued)

Shipping-Level Stats - ORIGINAL

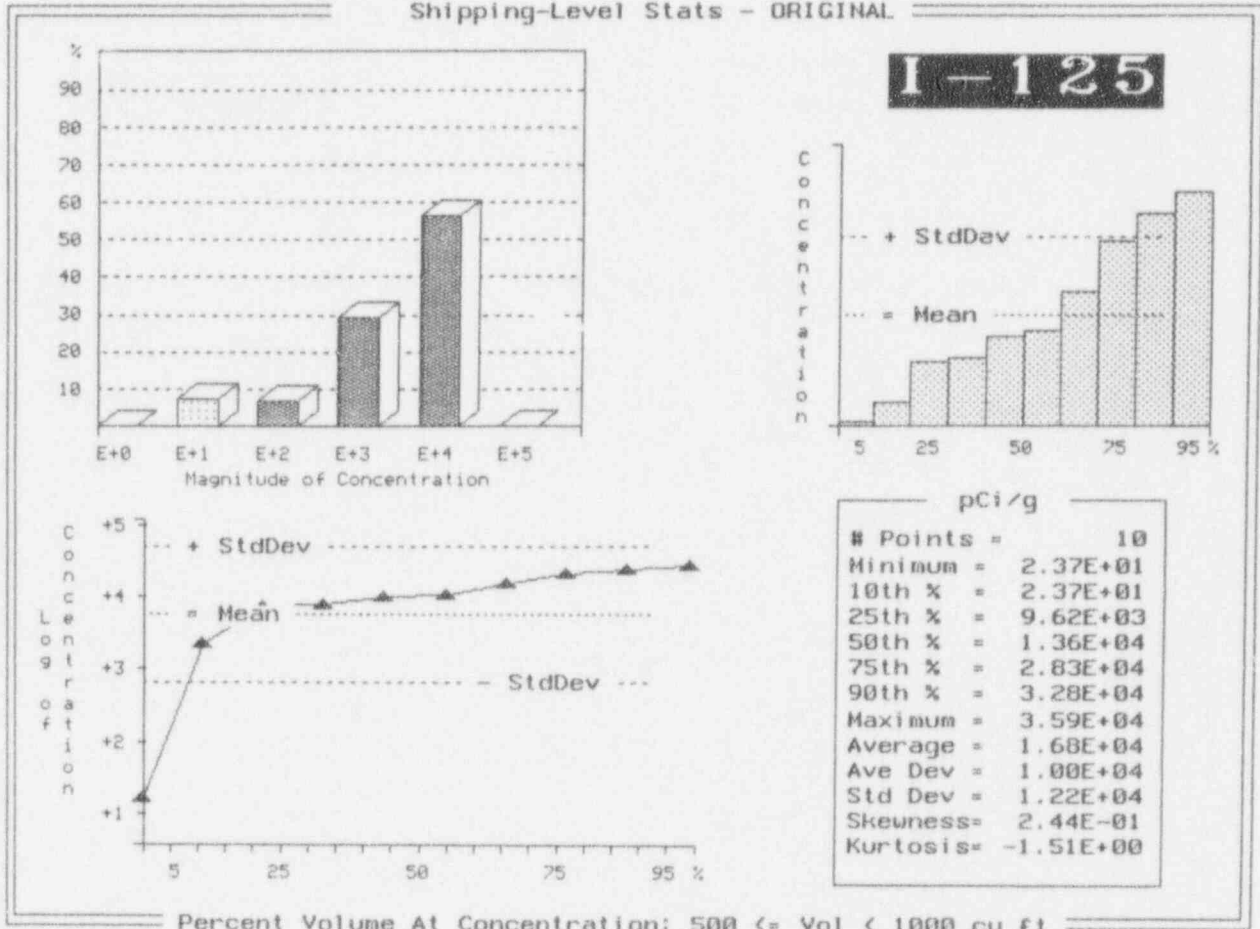


Exhibit F-30
Data Summary - Analyses at the Shipment Level
 (Aggregate Practices for non-brokered waste: 1986 to 1990)

Data or Parameters

Compact or unaffiliated state:	Appalachian
Waste generator class:	Academic
Total number of waste generators:	46
Total associated waste volume (m ³):	382
Total associated waste activity (Ci):	34.5
Waste class:	A-Unstable and A-Stable
Identified waste generators for this analysis:	
Number:	10
Percent of total(%):	22
Total number of shipping records:	31
Number of shipping records <u>with</u> container data:	0
Number of waste containers:	0
Weight of shipments (kg):	31,760
Total waste volume (m ³):	56
Fractional waste volume (%): (this analysis/total)	15
Total waste activity (Ci):	4.0
Fractional waste activity (%): (this analysis/total)	12

Exhibit F-30 (Continued)

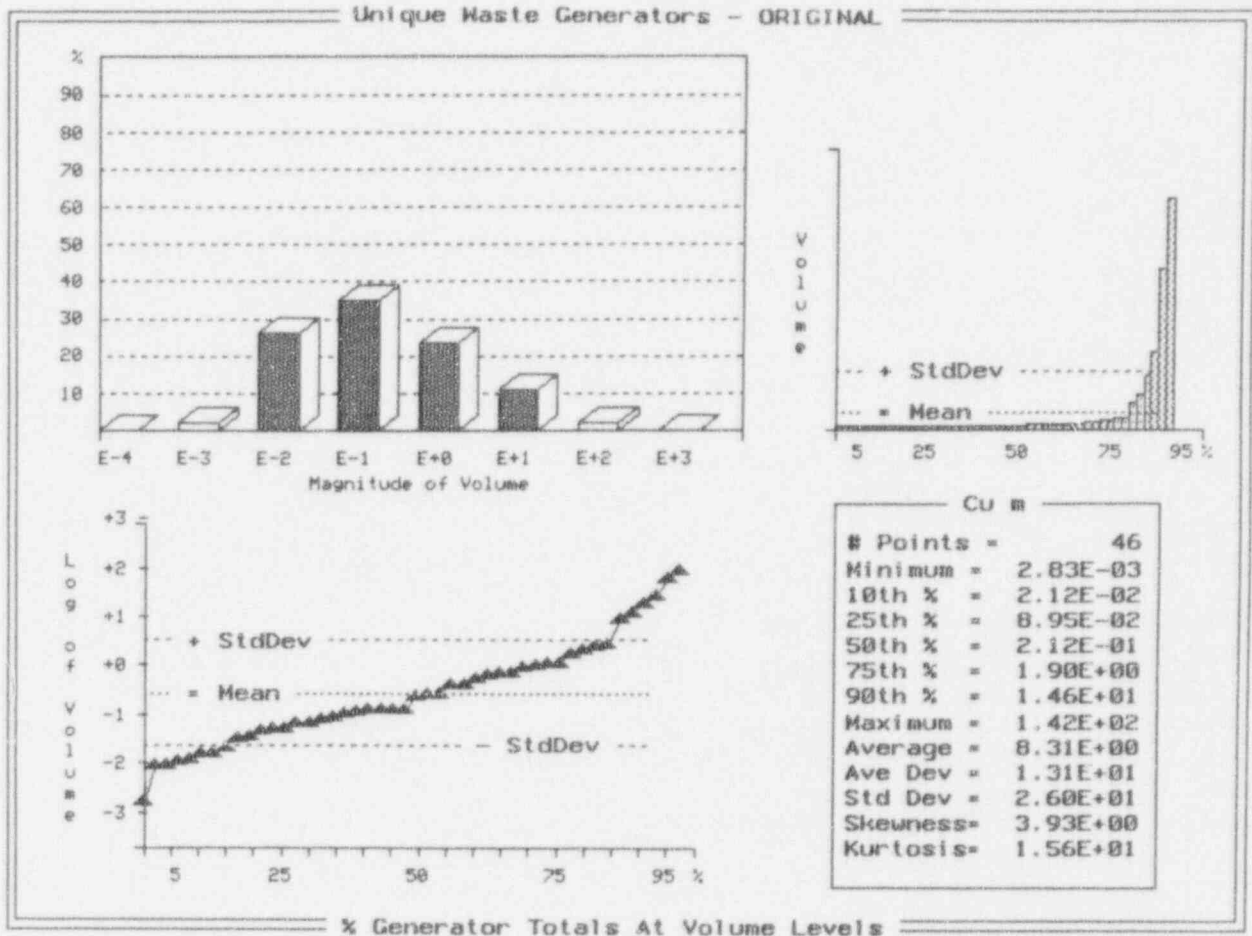


Exhibit F-30 (Continued)

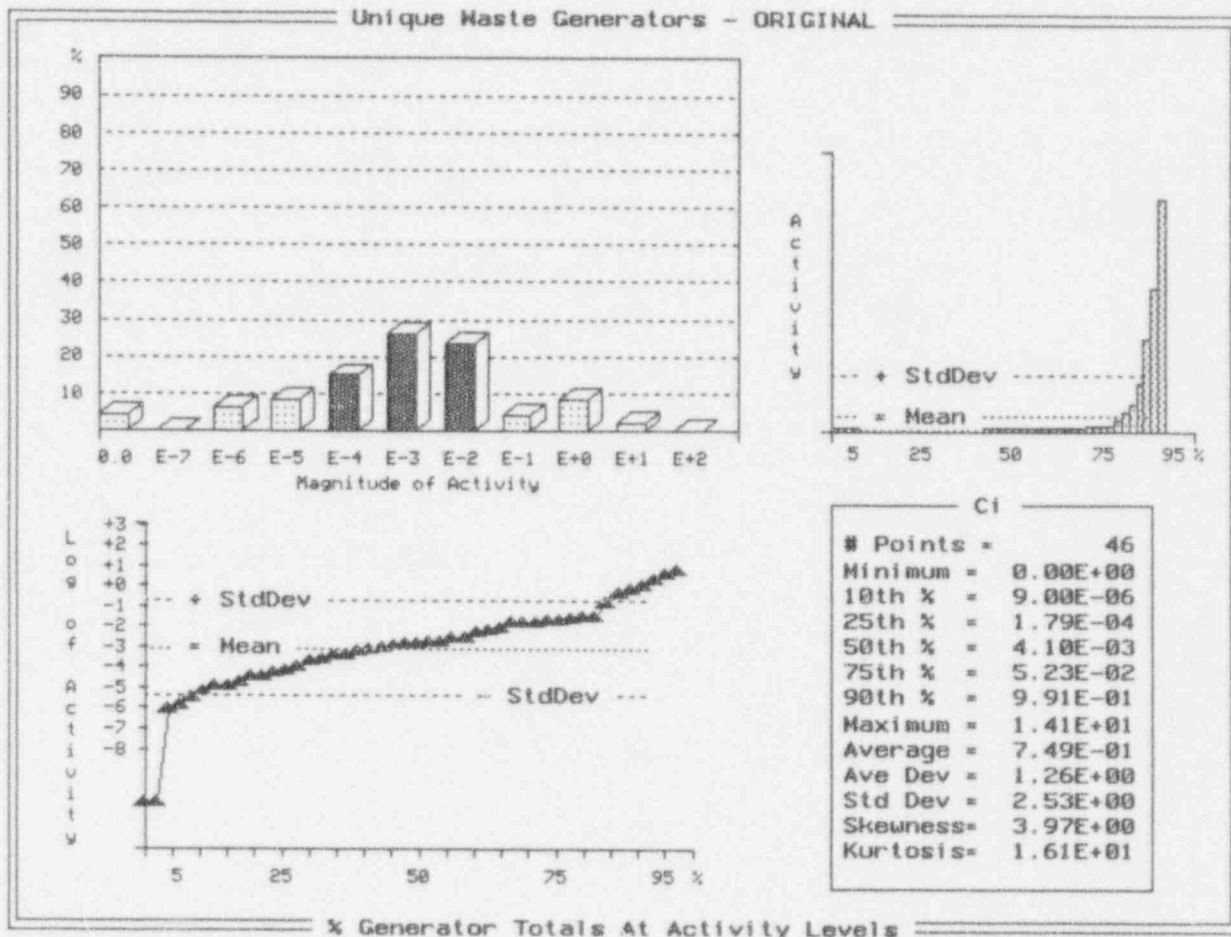


Exhibit F-31
Data Summary - Analyses at the Shipment Level
 (Aggregate Practices for non-brokered waste: 1986 to 1990)

	<u>Data or Parameters</u>
Compact or unaffiliated state:	Appalachian
Waste generator class:	Medical
Total number of waste generators:	72
Total associated waste volume (m ³):	360
Total associated waste activity (Ci):	15.6
Waste class:	A-Unstable and A-Stable
Identified waste generators for this analysis:	
Number:	22
Percent of total(%):	31
Total number of shipping records:	193
Number of shipping records <u>with</u> container data:	0
Number of waste containers:	0
Weight of shipments (kg):	95,210
Total waste volume (m ³):	123
Fractional waste volume (%): (this analysis/total)	34
Total waste activity (Ci):	3.0
Fractional waste activity (%): (this analysis/total)	19

Exhibit F-31 (Continued)

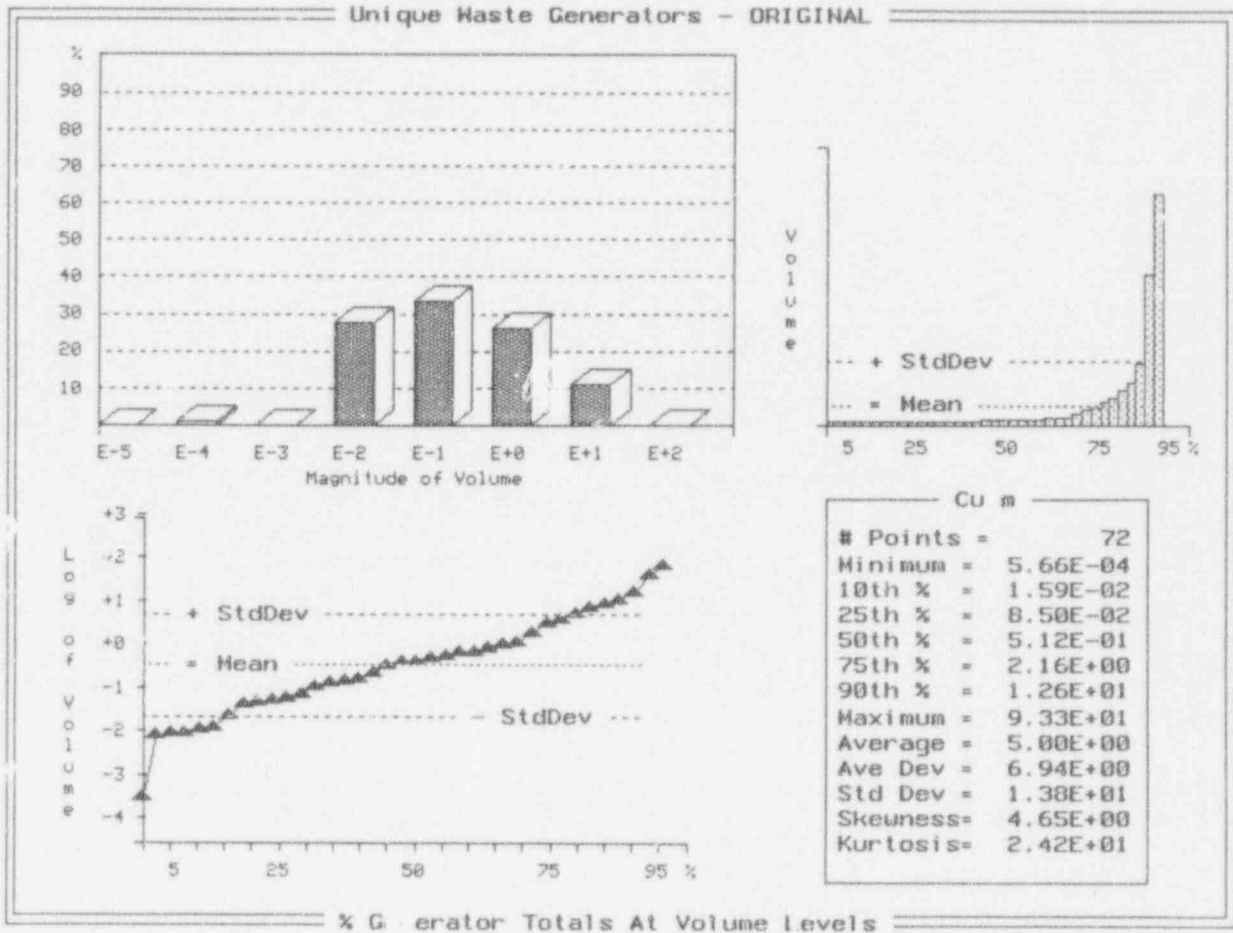


Exhibit F-31 (Continued)

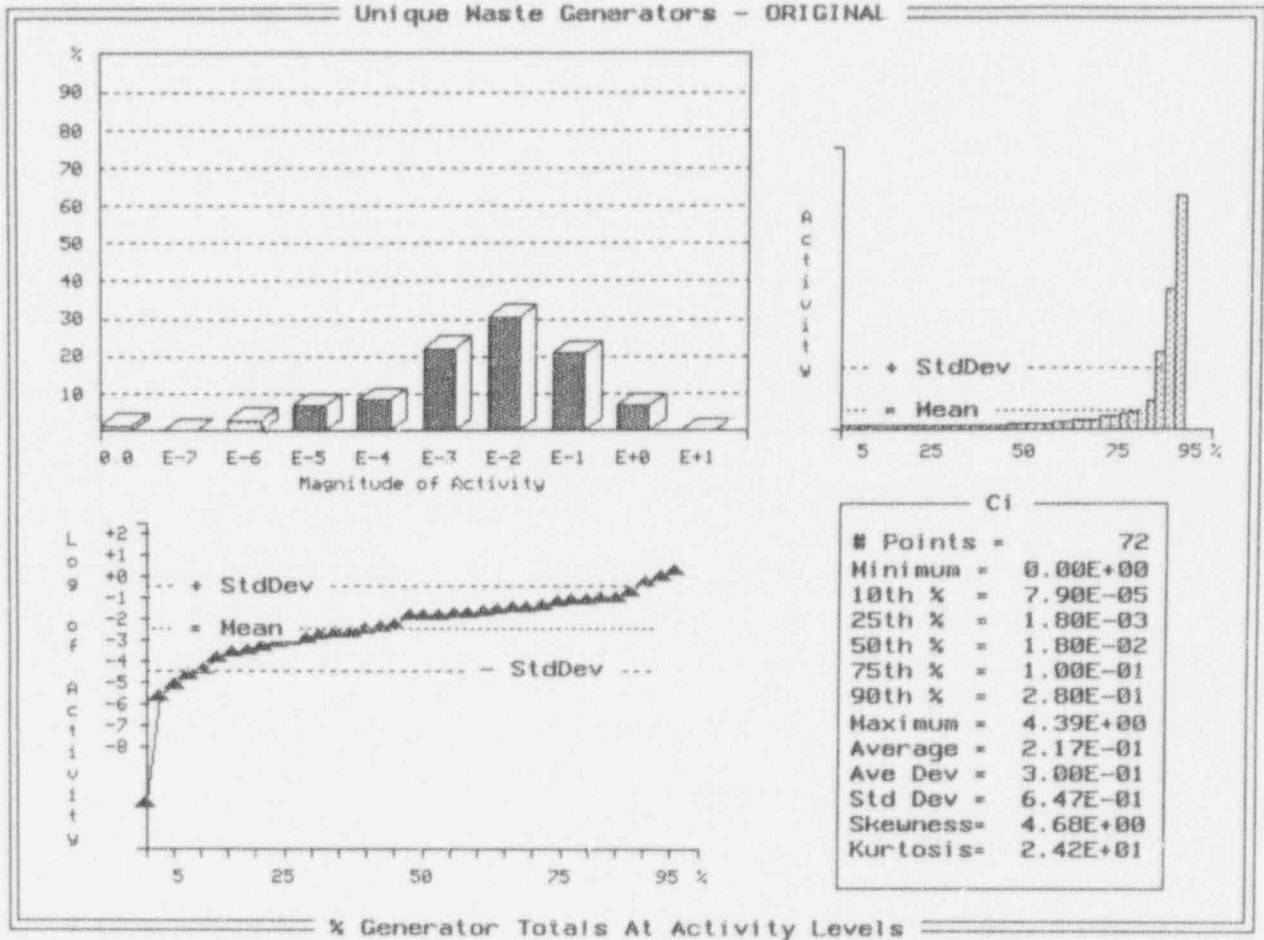


Exhibit F-32
Data Summary - Analyses at the Shipment Level
(Aggregate Practices for non-brokered waste: 1986 to 1990)

Data or Parameters

Compact or unaffiliated state:	Appalachian
Waste generator class:	Industrial
Total number of waste generators:	205
Total associated waste volume (m ³):	4,992
Total associated waste activity (Ci):	23,580
Waste class:	A-Unstable and A-Stable
Identified waste generators for this analysis:	
Number:	55
Percent of total(%):	27
Total number of shipping records:	420
Number of shipping records with container data:	13
Number of waste containers:	208
Weight of shipments (kg):	3,101,000
Total waste volume (m ³):	3,032
Fractional waste volume (%): (this analysis/total)	61
Total waste activity (Ci):	460
Fractional waste activity (%): (this analysis/total)	2

Exhibit F-32 (Continued)

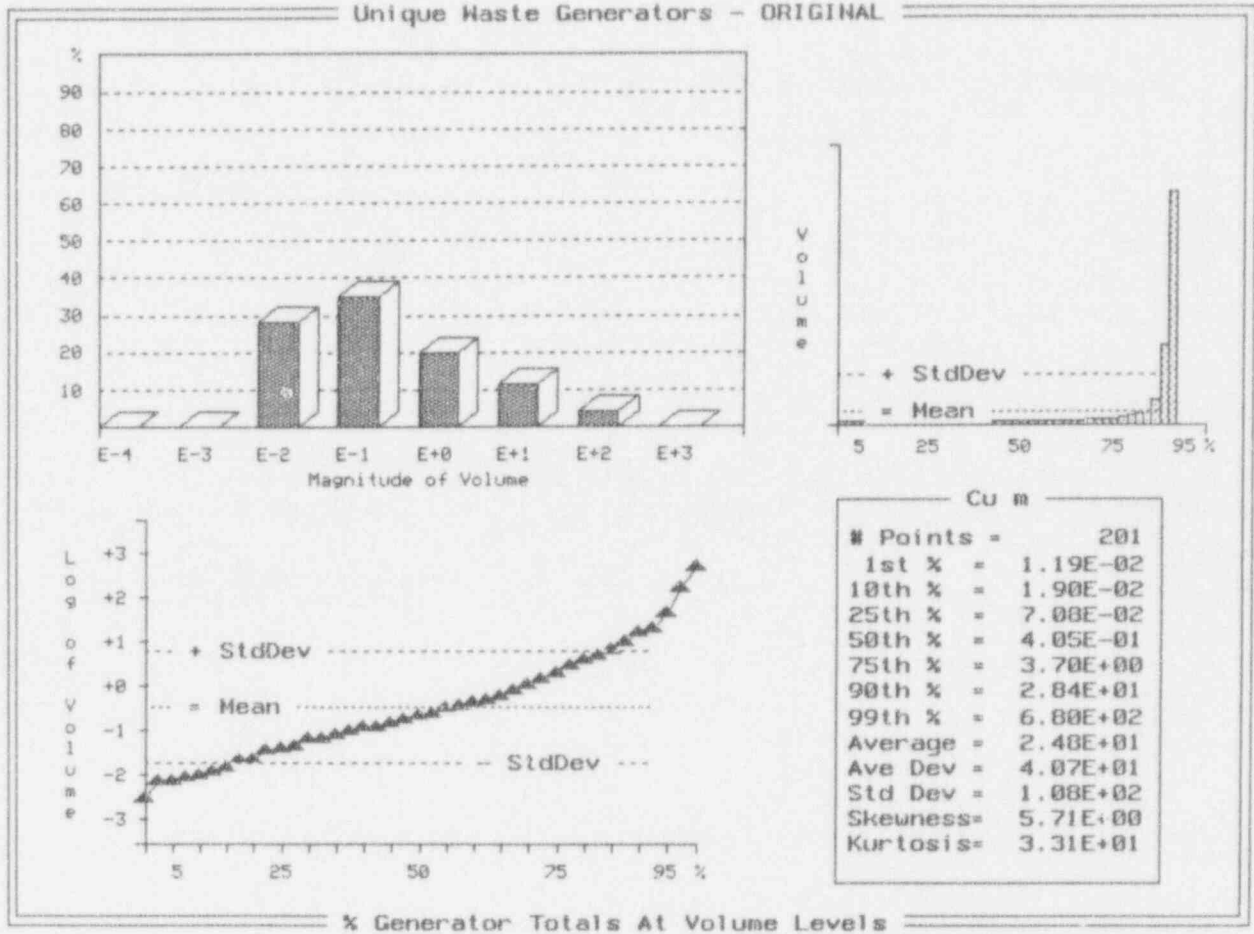


Exhibit F-32 (Continued)

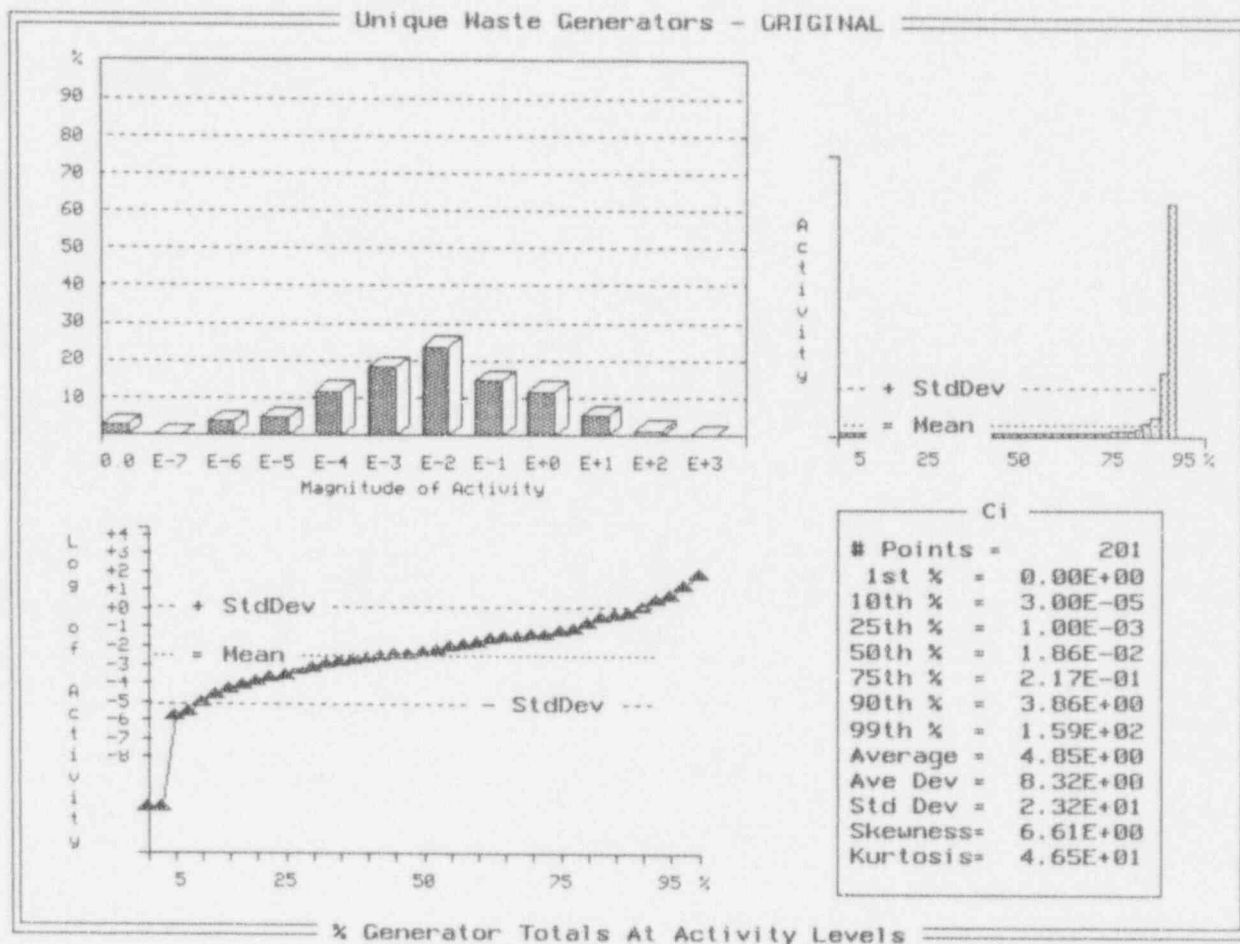


Exhibit F-32 (Continued)

Shipping-Level Stats - ORIGINAL

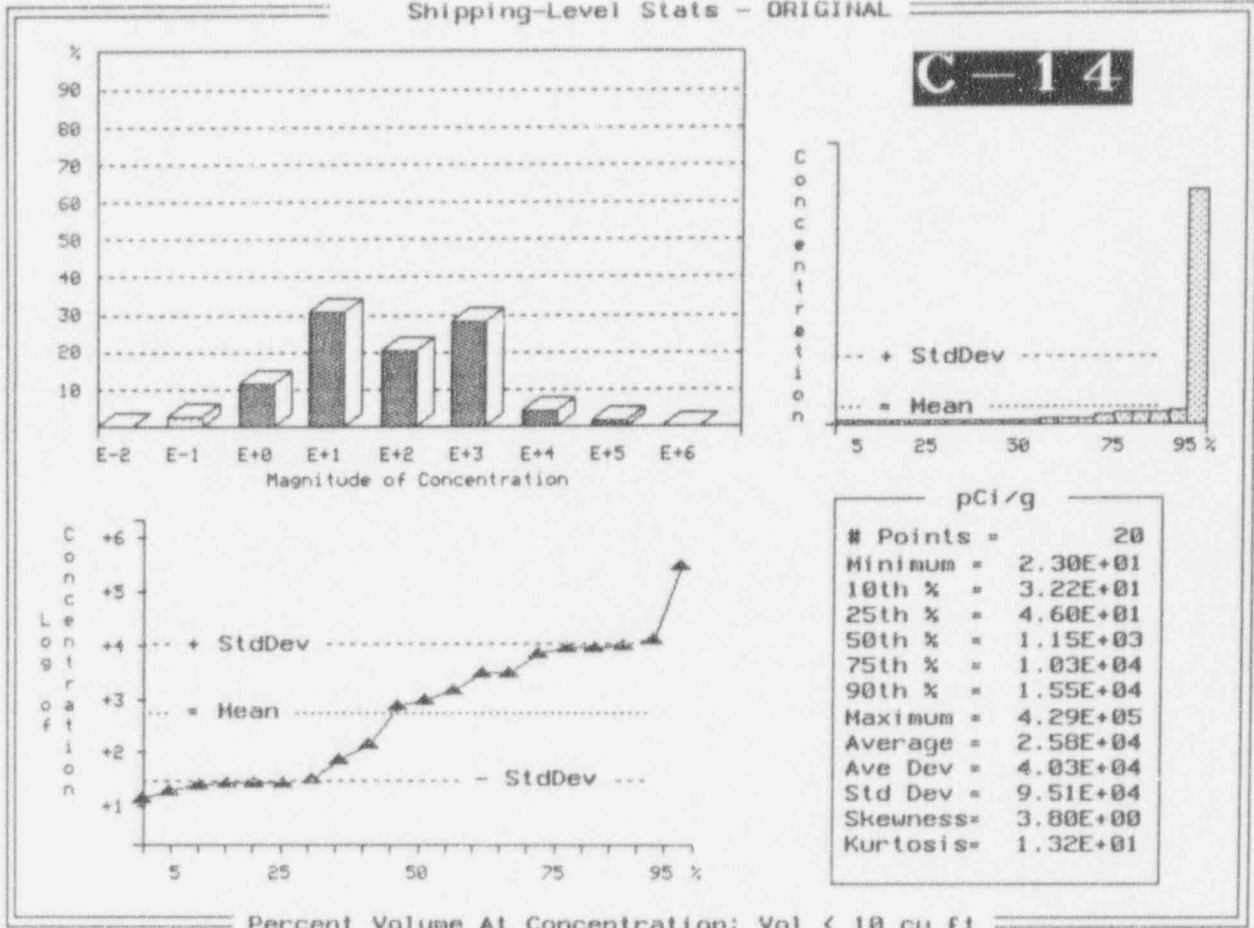


Exhibit F-32 (Continued)

Shipping-Level Stats - ORIGINAL

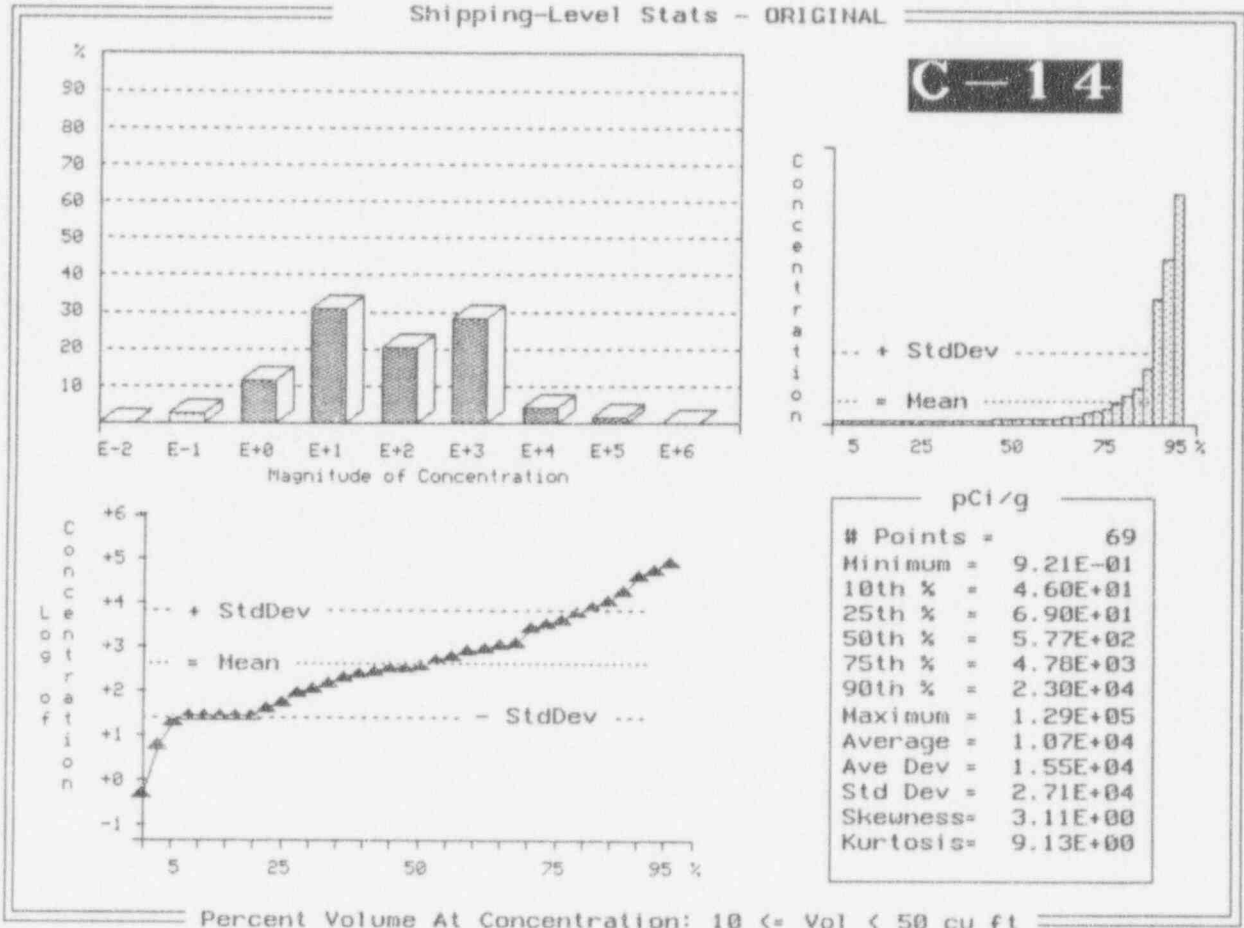


Exhibit F-32 (Continued)

Shipping-Level Stats - ORIGINAL

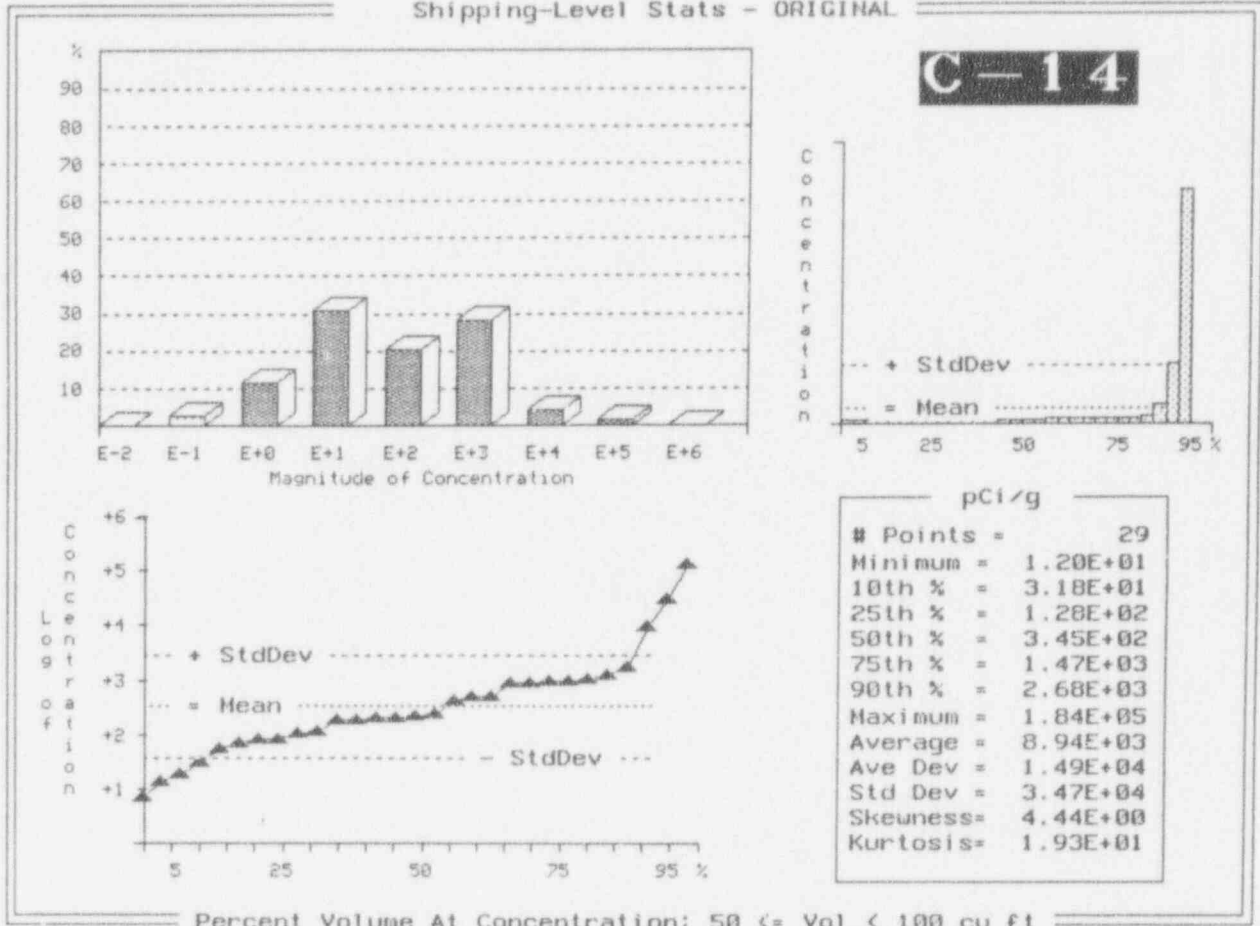
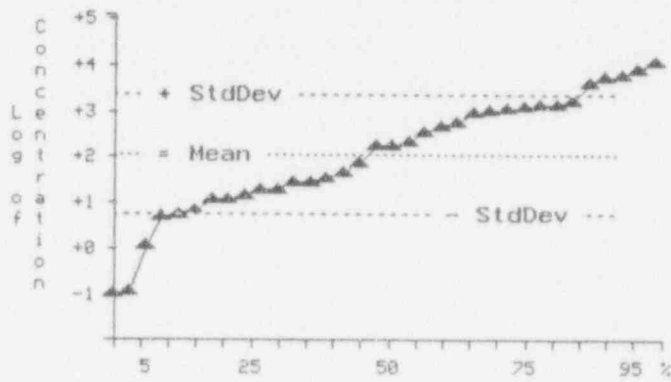
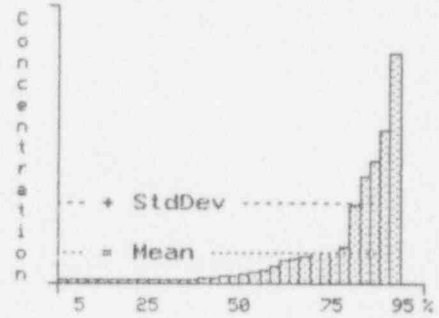
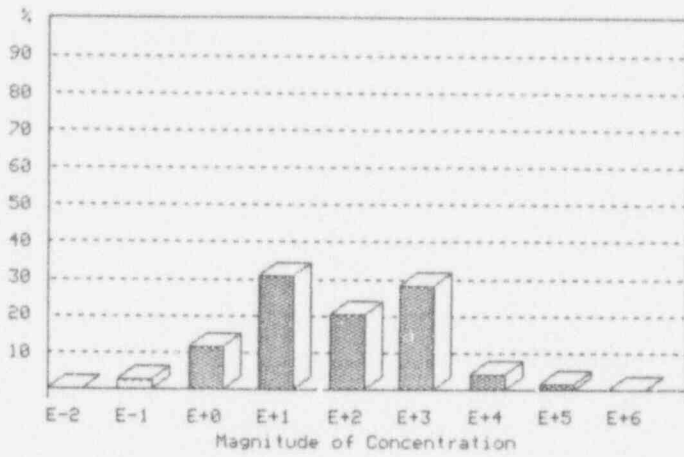


Exhibit F-32 (Continued)

Shipping-Level Stats - ORIGINAL

C-14



pCi/g	
# Points =	34
Minimum =	2.03E-01
10th % =	2.24E+00
25th % =	2.48E+01
50th % =	2.94E+02
75th % =	2.14E+03
90th % =	8.58E+03
Maximum =	1.87E+04
Average =	2.18E+03
Ave Dev =	2.67E+03
Std Dev =	4.20E+03
Skewness =	2.43E+00
Kurtosis =	5.53E+00

Percent Volume At Concentration: 100 <= Vol < 500 cu ft

Exhibit F-32 (Continued)

Shipping-Level Stats - ORIGINAL

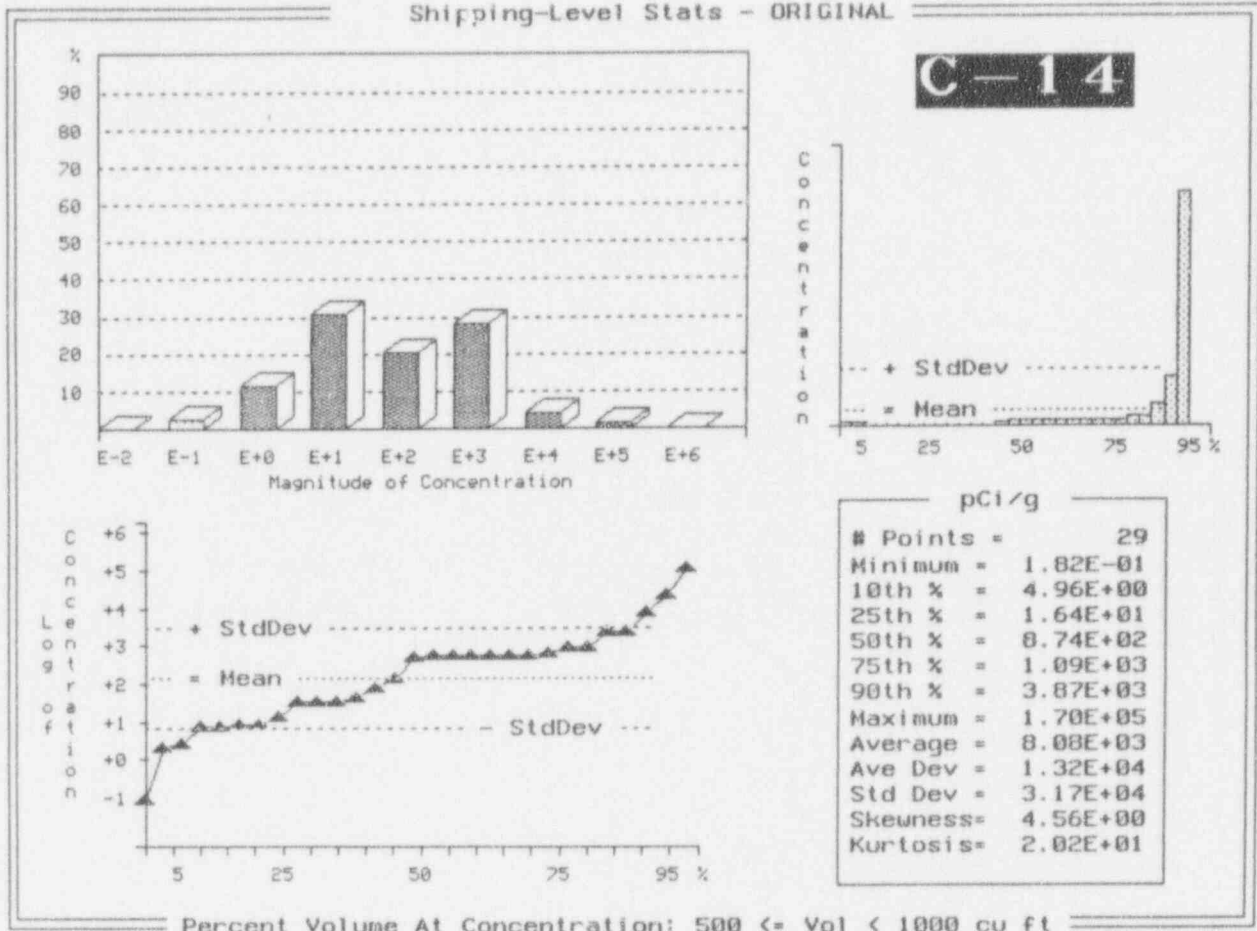
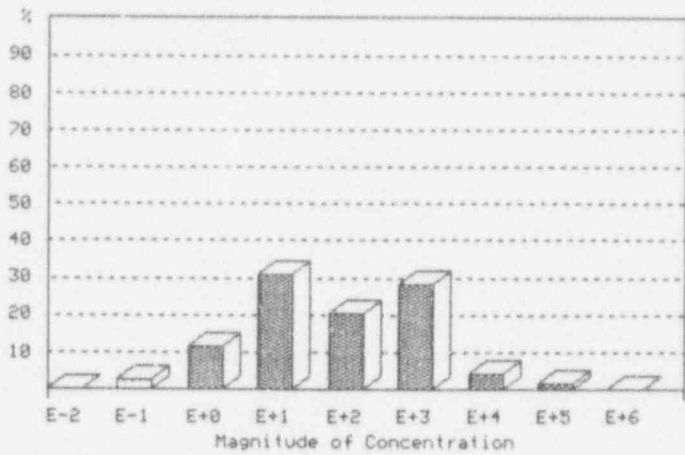
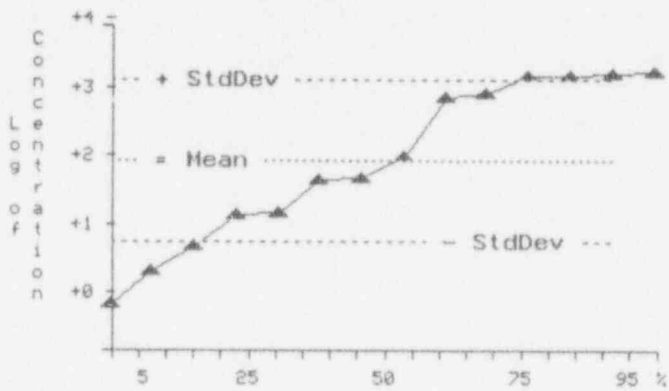
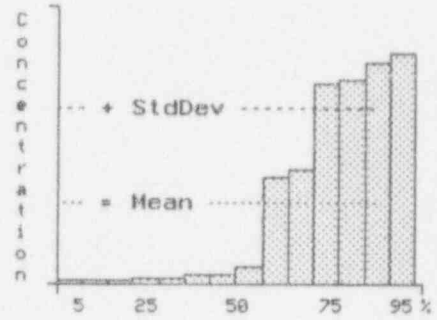


Exhibit F-32 (Continued)

Shipping-Level Stats - ORIGINAL



C-14



pCi/g	
# Points =	14
Minimum =	1.02E+00
10th % =	1.02E+00
25th % =	2.02E+01
50th % =	6.57E+01
75th % =	1.98E+03
90th % =	2.19E+03
Maximum =	2.27E+03
Average =	7.77E+02
Ave Dev =	8.43E+02
Std Dev =	9.49E+02
Skeuness =	5.47E-01
Kurtosis =	-1.61E+00

Percent Volume At Concentration: Vol >= 1000 cu ft

Exhibit F-32 (Continued)

Shipping-Level Stats - ORIGINAL

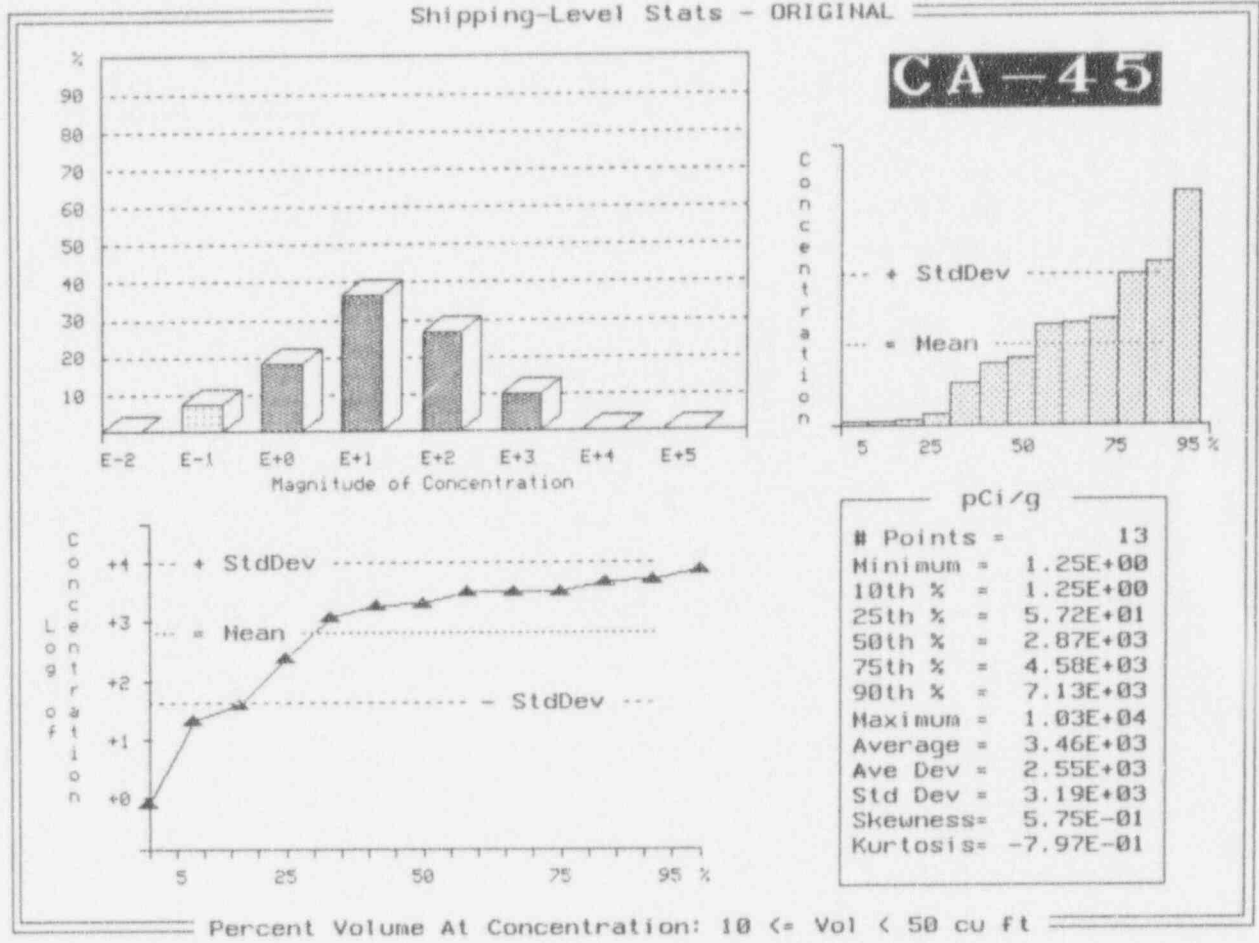


Exhibit F-32 (Continued)

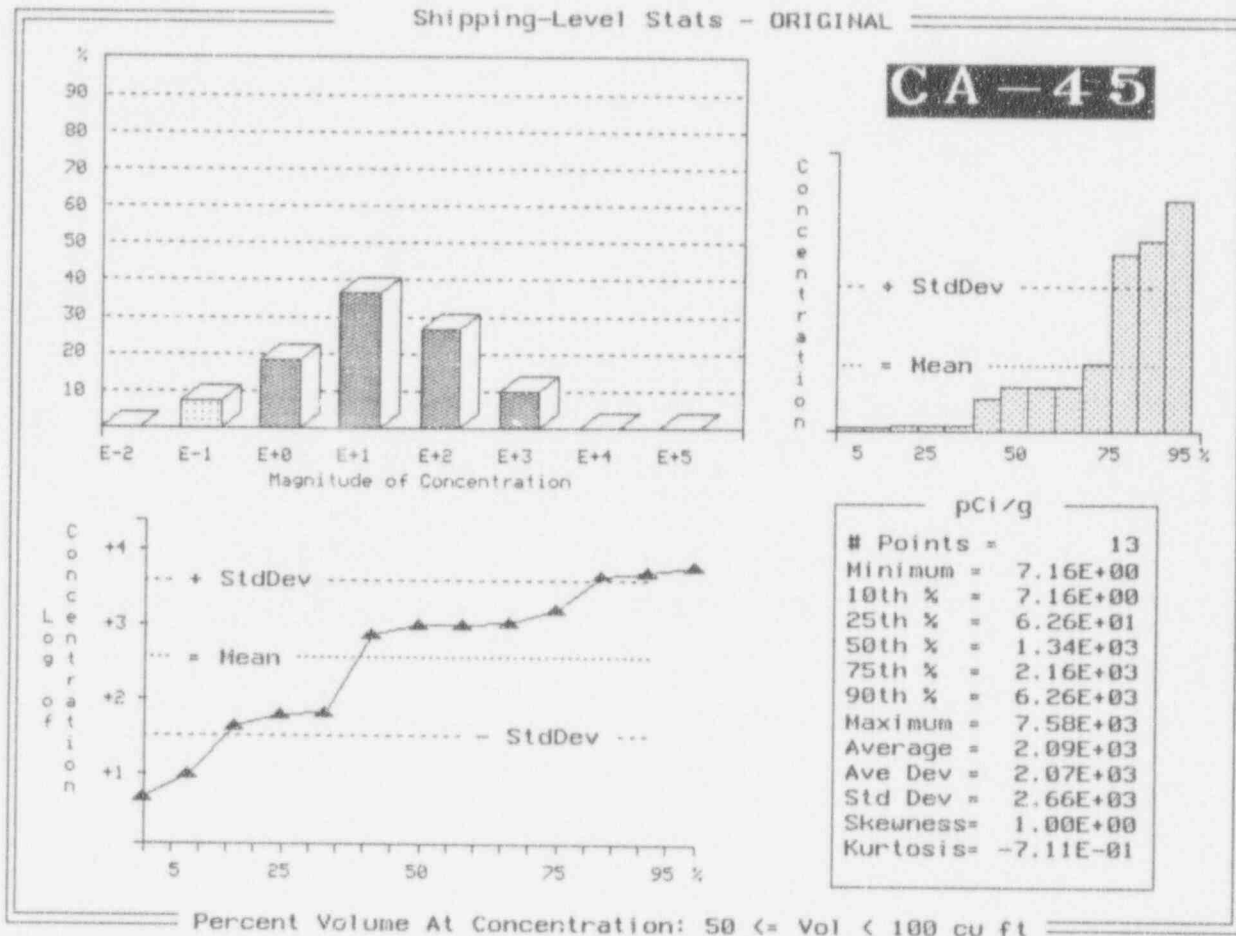


Exhibit F-32 (Continued)

Shipping-Level Stats - ORIGINAL

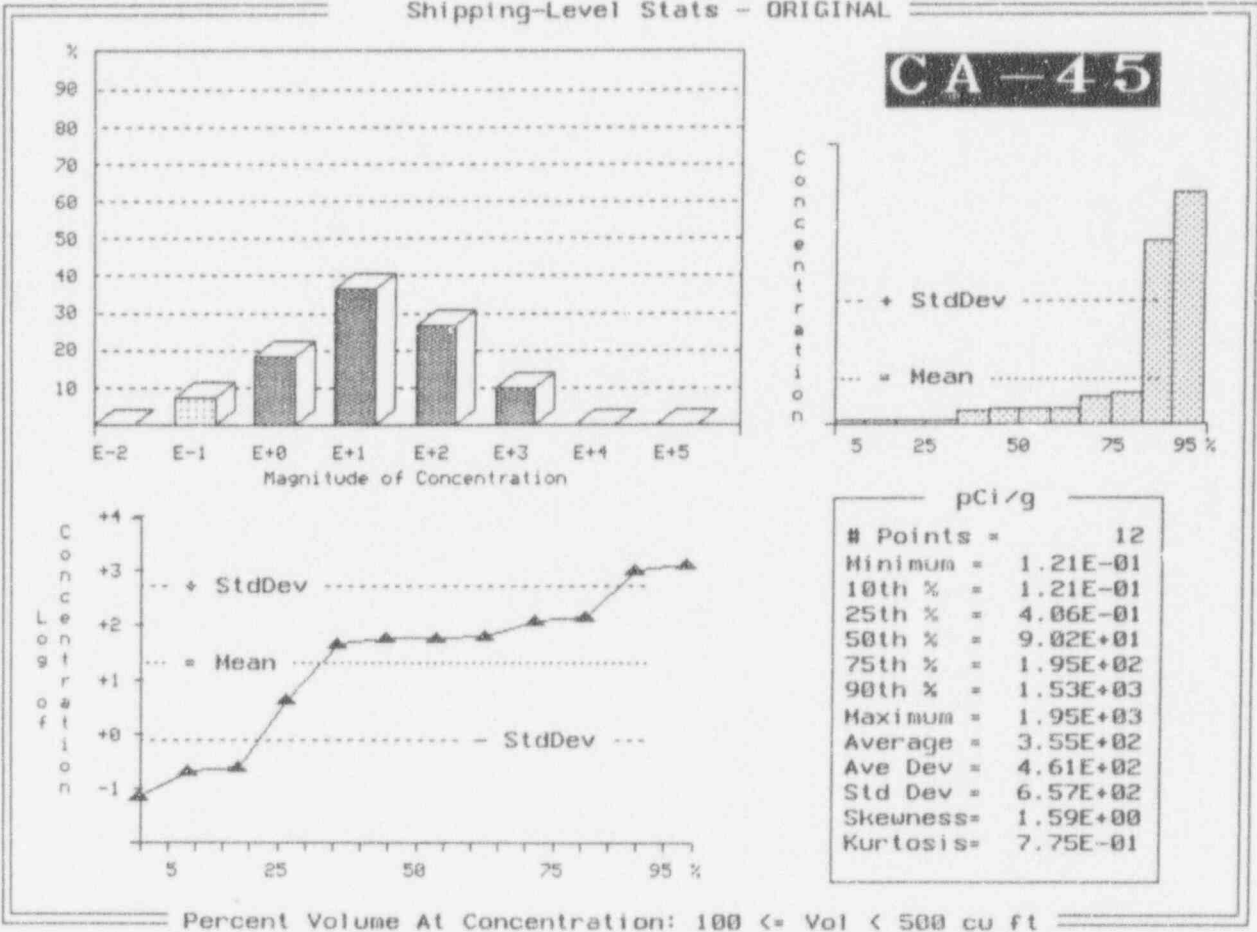


Exhibit F-32 (Continued)

Shipping-Level Stats - ORIGINAL

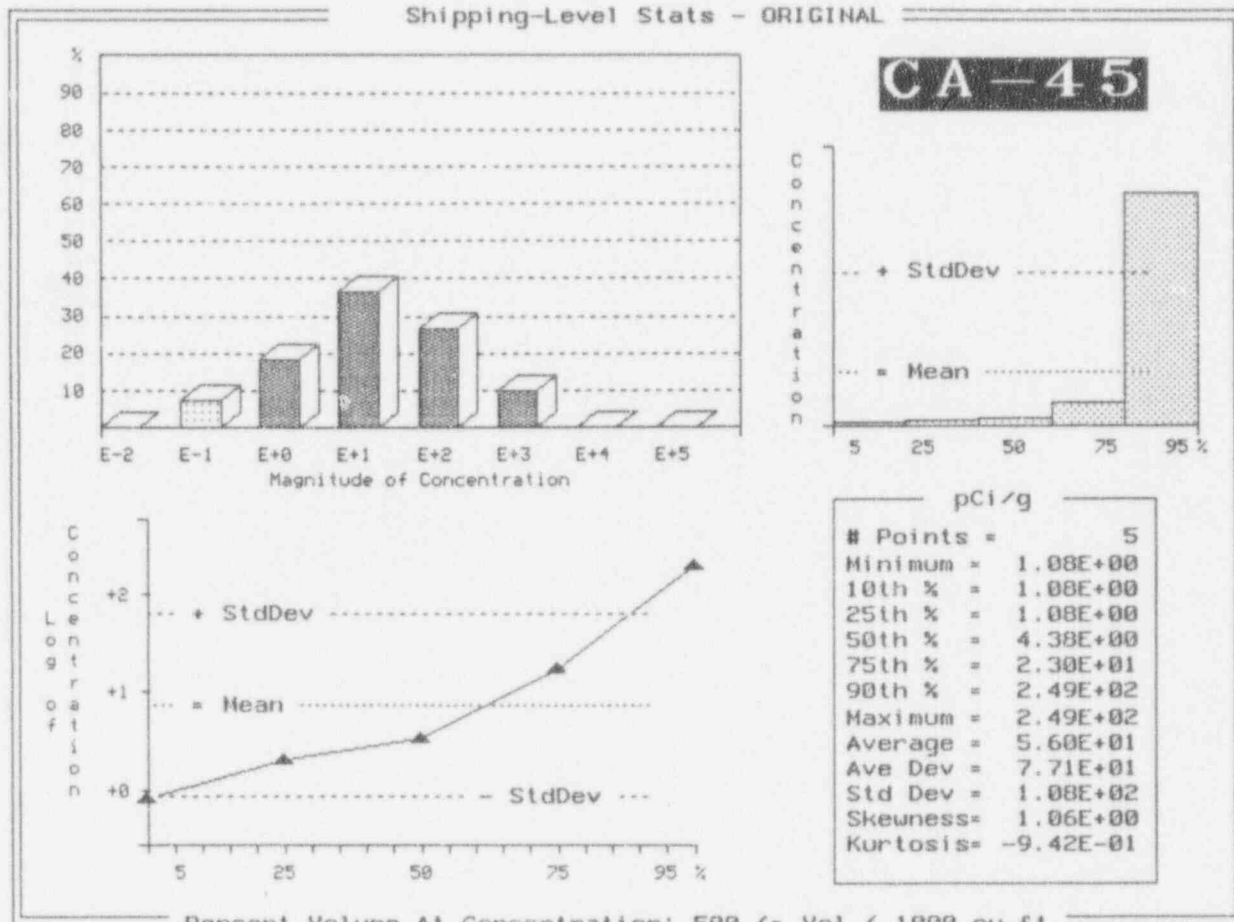


Exhibit F-32 (Continued)

Shipping-Level Stats - ORIGINAL

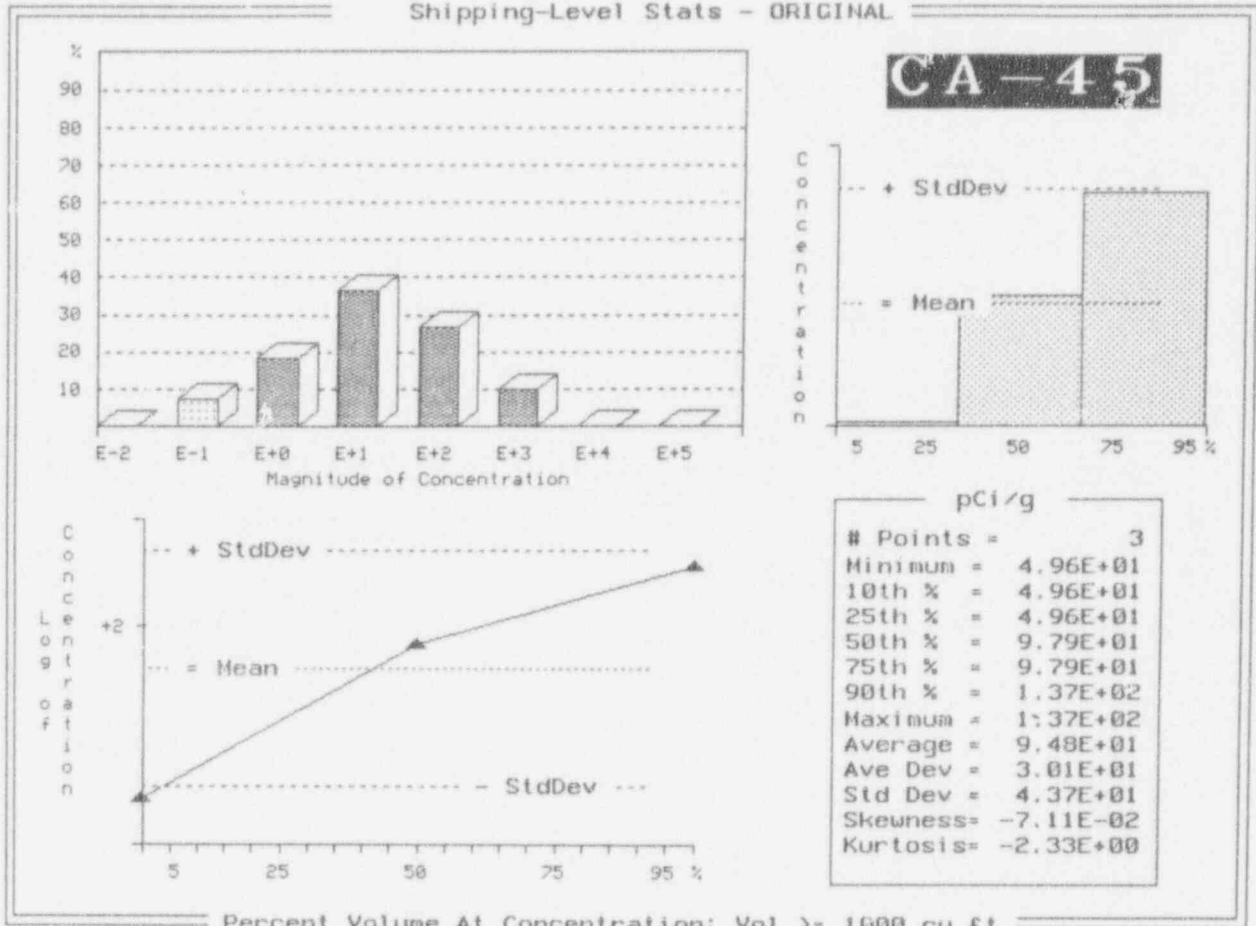
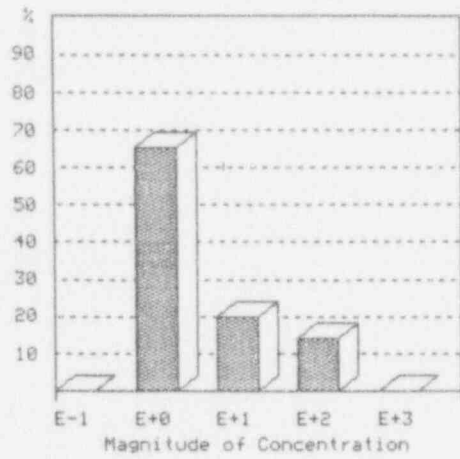
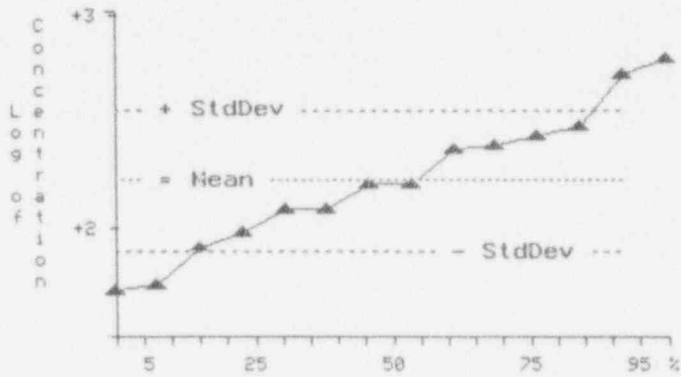
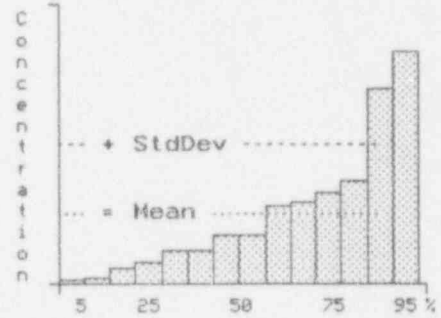


Exhibit F-32 (Continued)

Shipping-Level Stats - ORIGINAL



CE-141



pCi/g	
# Points =	14
Minimum =	5.83E+01
10th % =	5.83E+01
25th % =	1.07E+02
50th % =	1.84E+02
75th % =	3.07E+02
90th % =	6.06E+02
Maximum =	7.05E+02
Average =	2.47E+02
Ave Dev =	1.45E+02
Std Dev =	1.96E+02
Skeuness=	1.15E+00
Kurtosis=	1.35E-01

Percent Volume At Concentration: 10 <= Vol < 50 cu ft

Exhibit F-32 (Continued)

Shipping-Level Stats - ORIGINAL

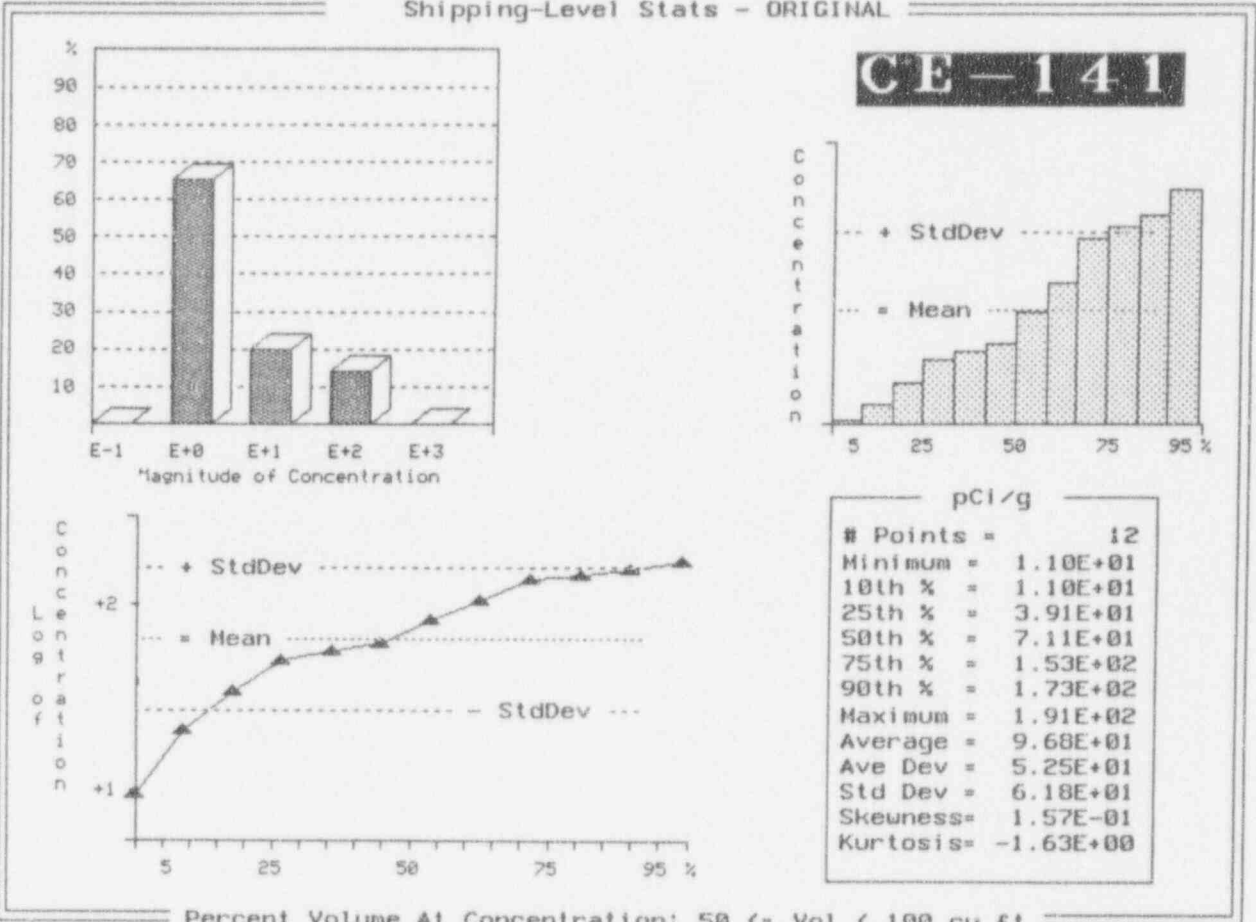
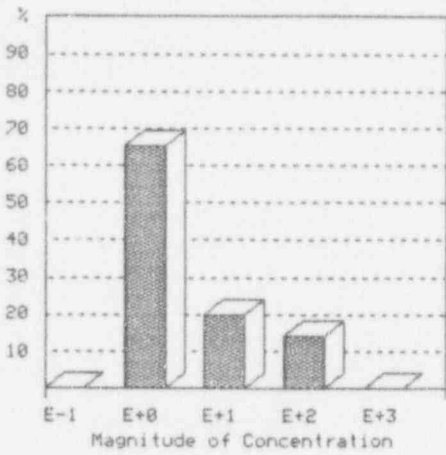
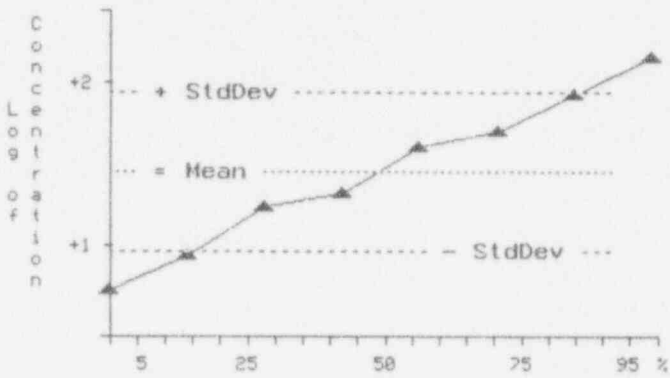
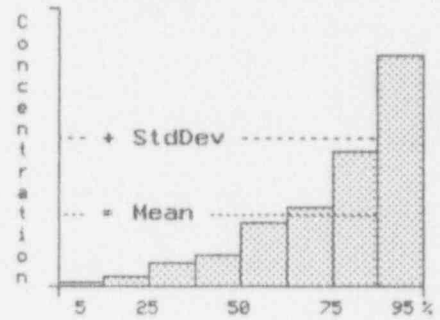


Exhibit F-32 (Continued)

Shipping-Level Stats - ORIGINAL



CE-141



pCi/g	
# Points =	8
Minimum =	6.39E+00
10th % =	6.39E+00
25th % =	1.04E+01
50th % =	2.46E+01
75th % =	5.89E+01
90th % =	9.82E+01
Maximum =	1.64E+02
Average =	5.38E+01
Ave Dev =	4.00E+01
Std Dev =	5.39E+01
Skewness =	9.44E-01
Kurtosis =	-5.85E-01

Percent Volume At Concentration: 100 <= Vol < 500 cu ft

Exhibit F-32 (Continued)

Shipping-Level Stats - ORIGINAL

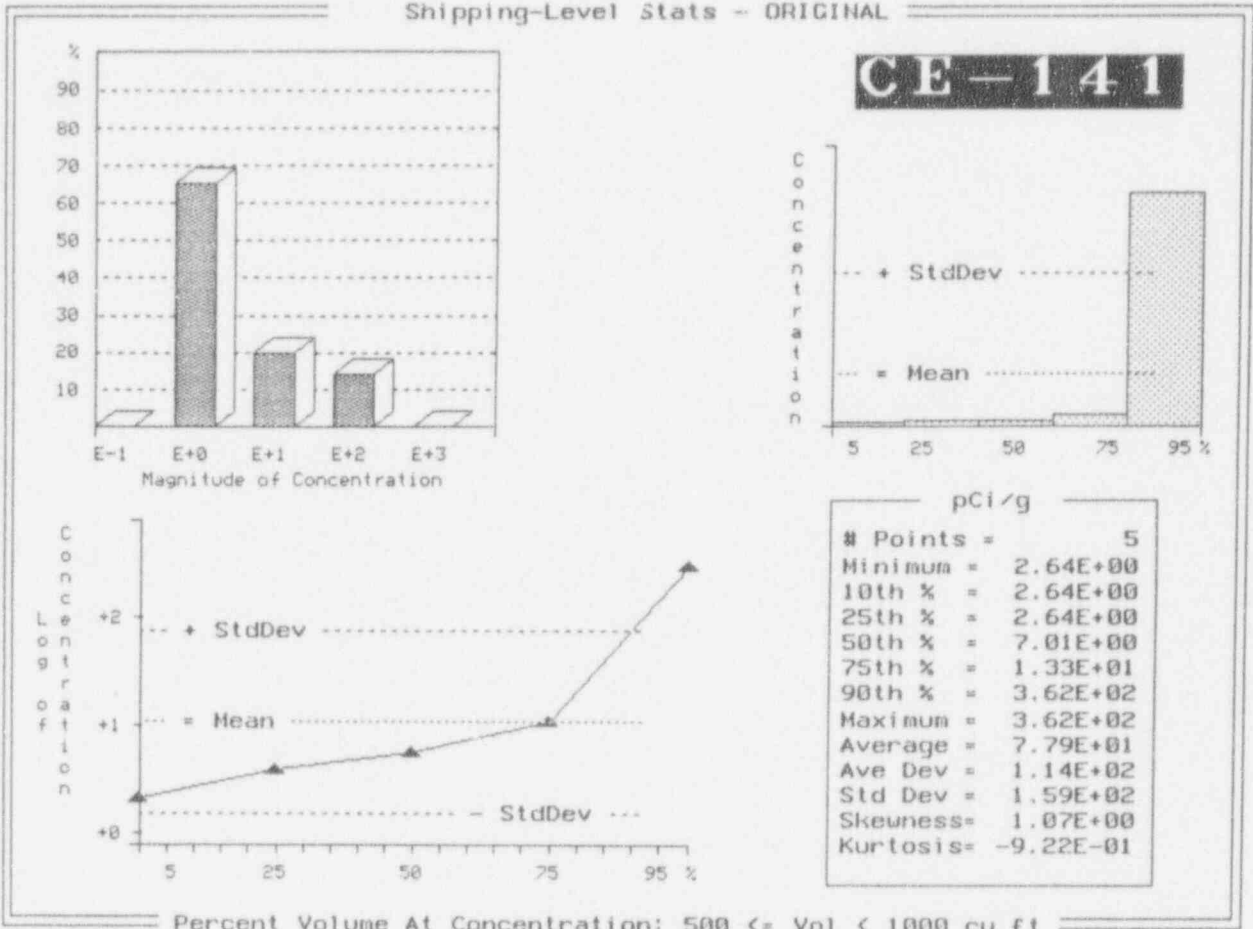
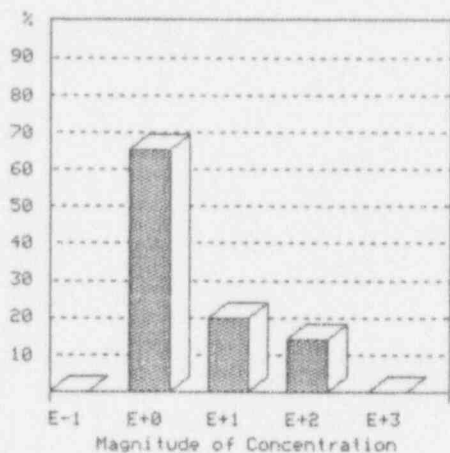
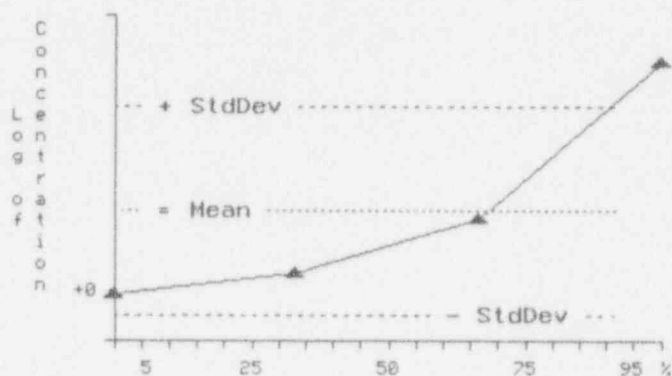
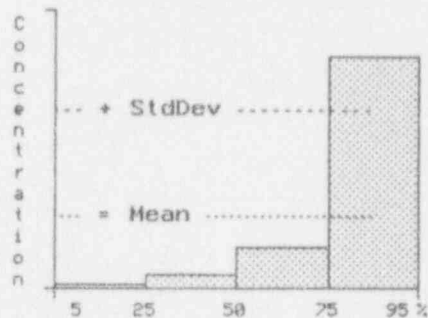


Exhibit F-32 (Continued)

Shipping-Level Stats - ORIGINAL



CE-141



pCi/g	
# Points =	4
Minimum =	1.06E+00
10th % =	1.06E+00
25th % =	1.06E+00
50th % =	1.25E+00
75th % =	1.87E+00
90th % =	6.14E+00
Maximum =	6.14E+00
Average =	2.58E+00
Ave Dev =	1.78E+00
Std Dev =	2.40E+00
Skewness =	7.04E-01
Kurtosis =	-1.72E+00

Percent Volume At Concentration: Vol >= 1000 cu ft

Exhibit F-32 (Continued)

Shipping-Level Stats - ORIGINAL

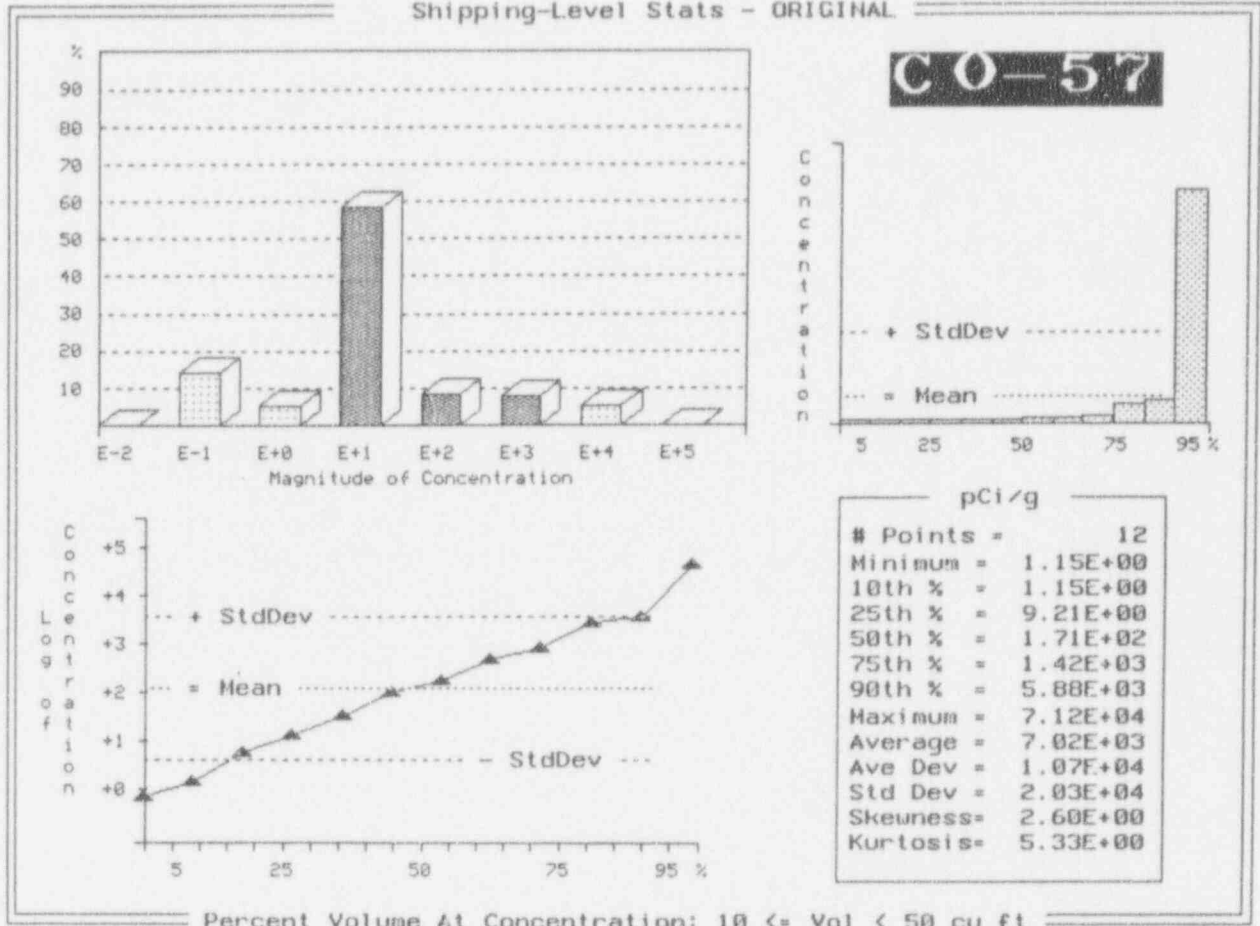
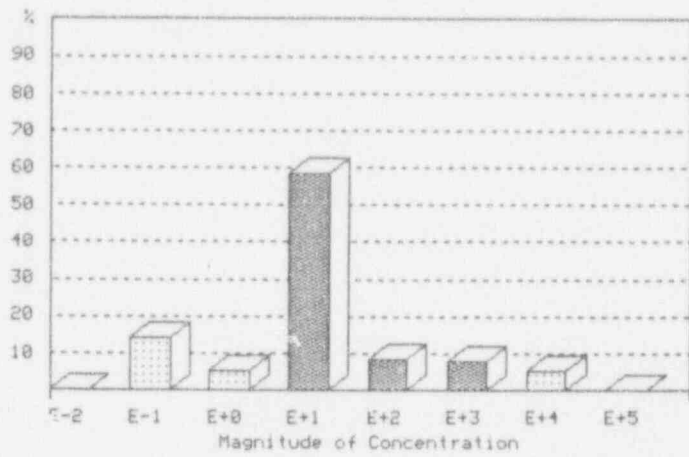
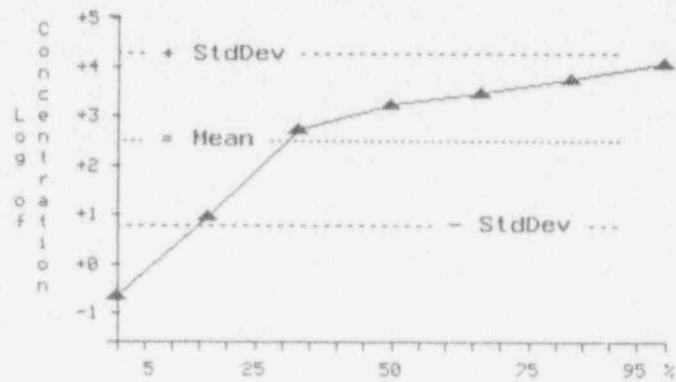
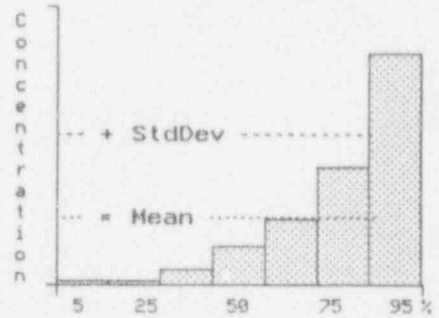


Exhibit F-32 (Continued)

Shipping-Level Stats - ORIGINAL



CO-57



pCi/g	
# Points =	7
Minimum =	3.84E-01
10th % =	3.84E-01
25th % =	1.44E+01
50th % =	2.69E+03
75th % =	4.81E+03
90th % =	8.90E+03
Maximum =	1.77E+04
Average =	4.99E+03
Ave Dev =	4.75E+03
Std Dev =	6.44E+03
Skewness =	9.51E-01
Kurtosis =	-6.89E-01

Percent Volume At Concentration: 50 <= Vol < 100 cu ft

Exhibit F-32 (Continued)

Shipping-Level Stats - ORIGINAL

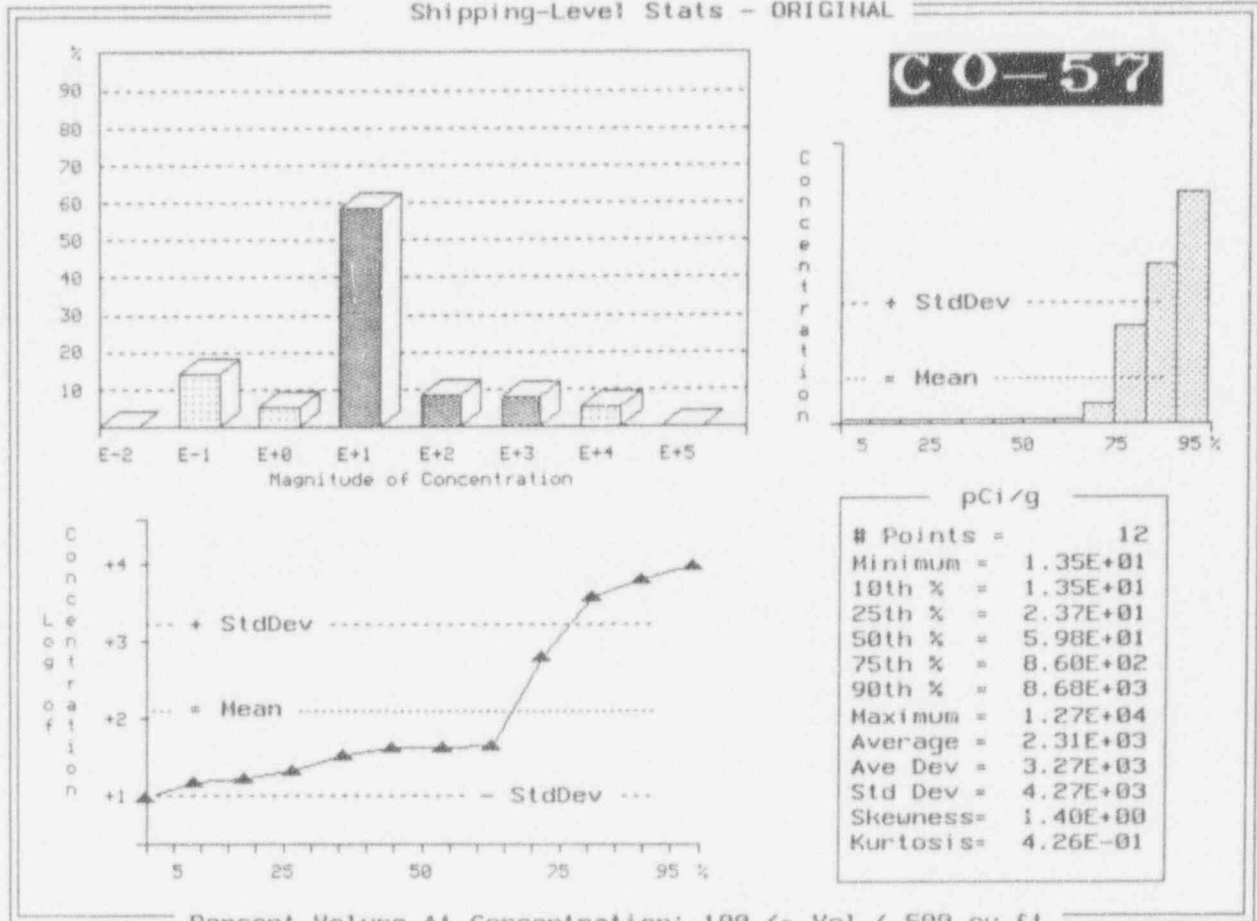


Exhibit F-32 (Continued)

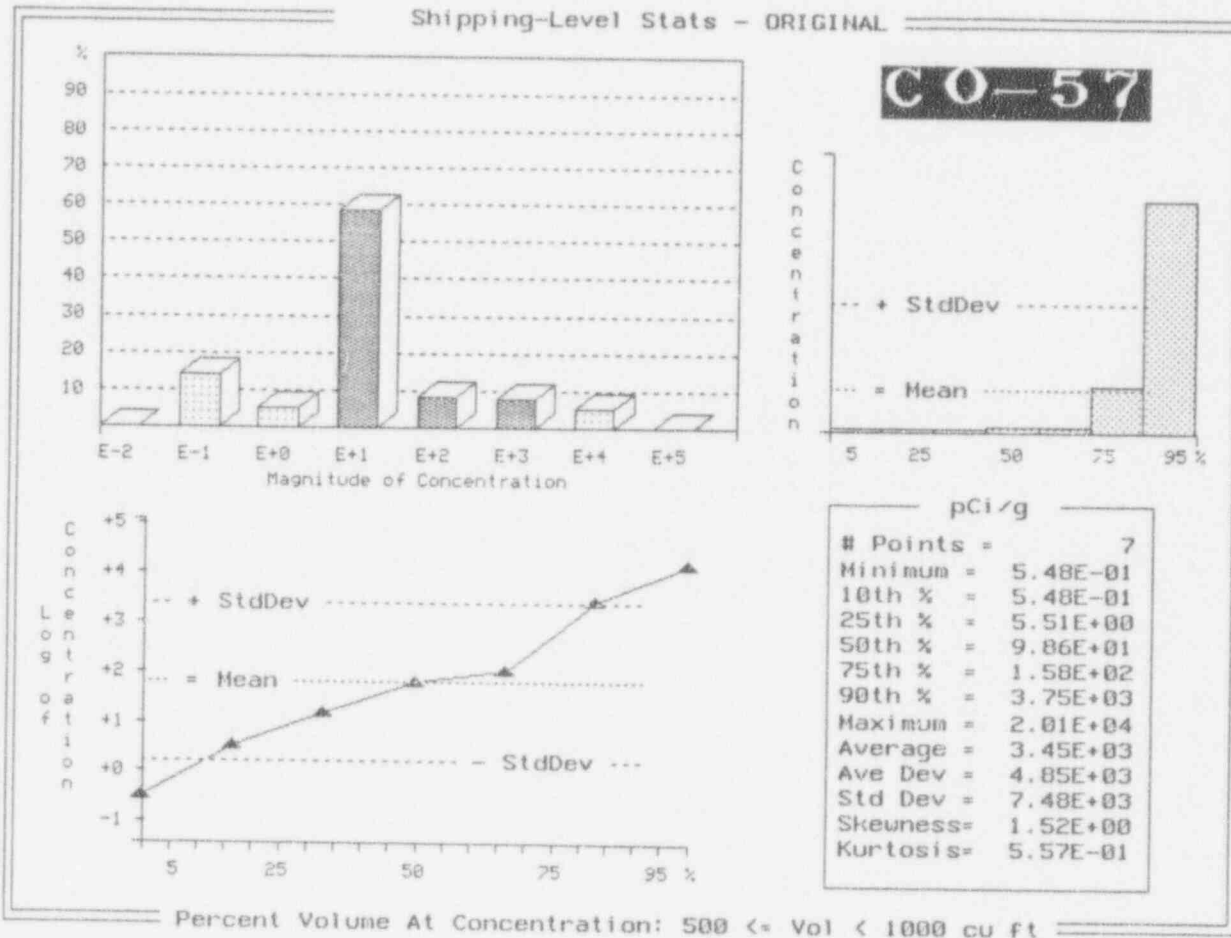


Exhibit F-32 (Continued)

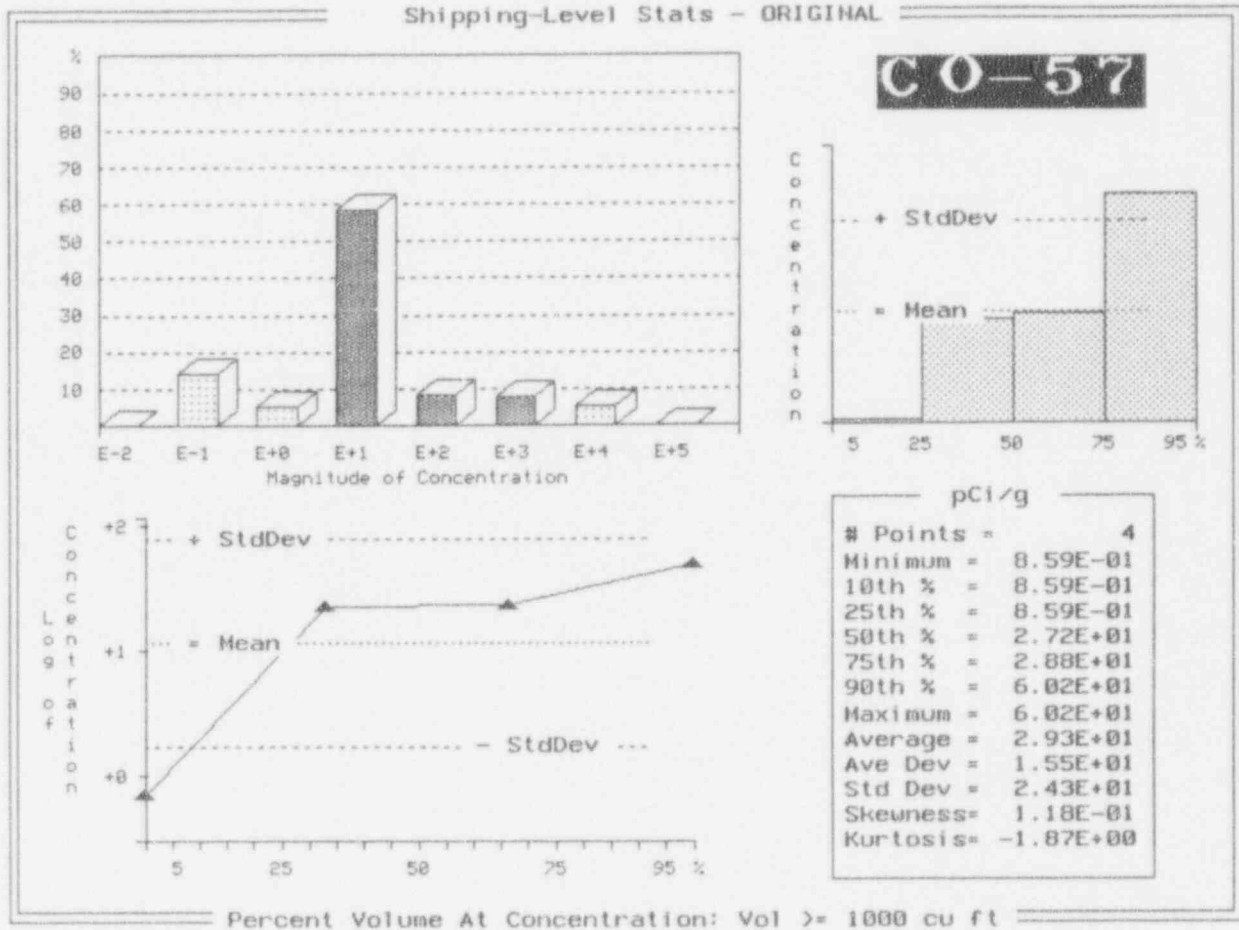


Exhibit F-32 (Continued)

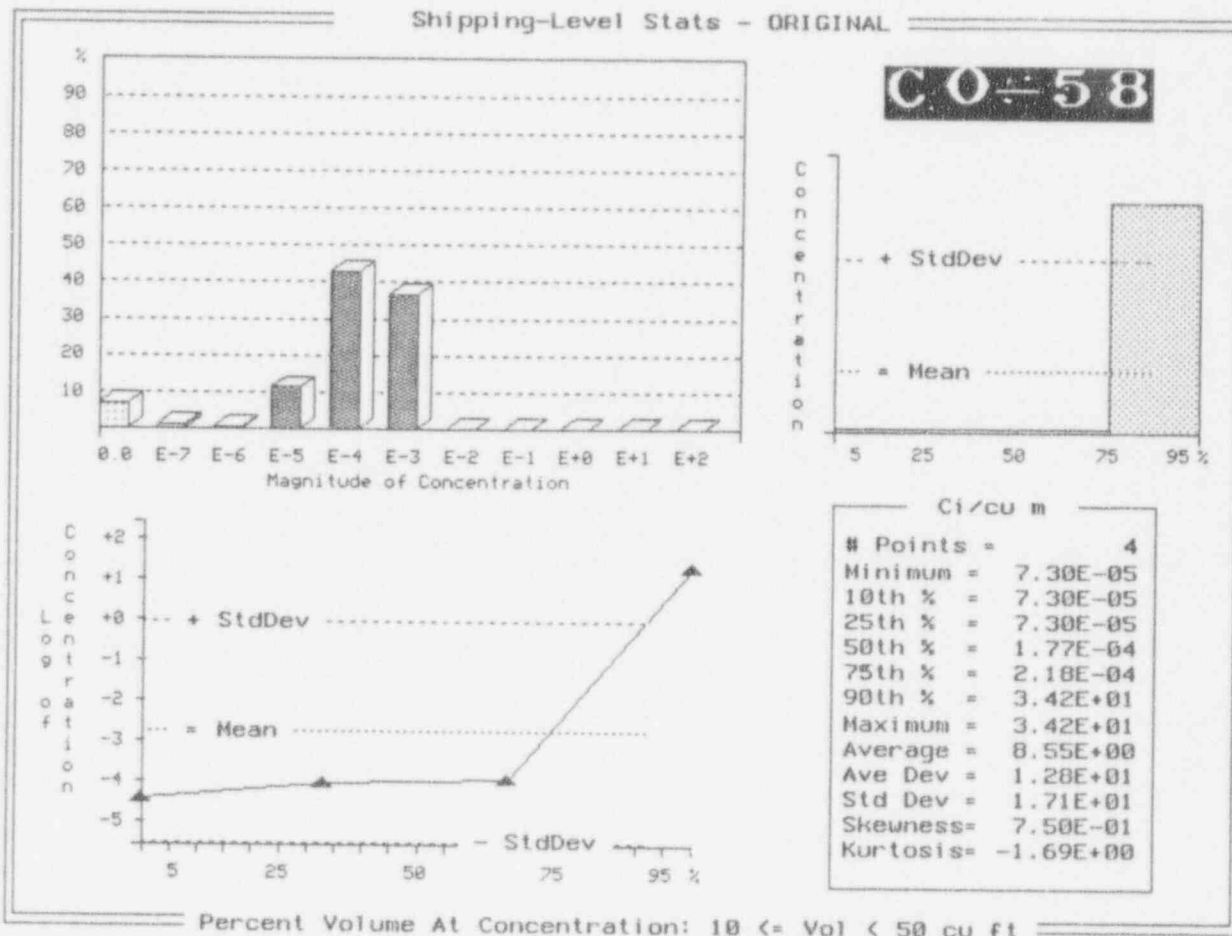


Exhibit F-32 (Continued)

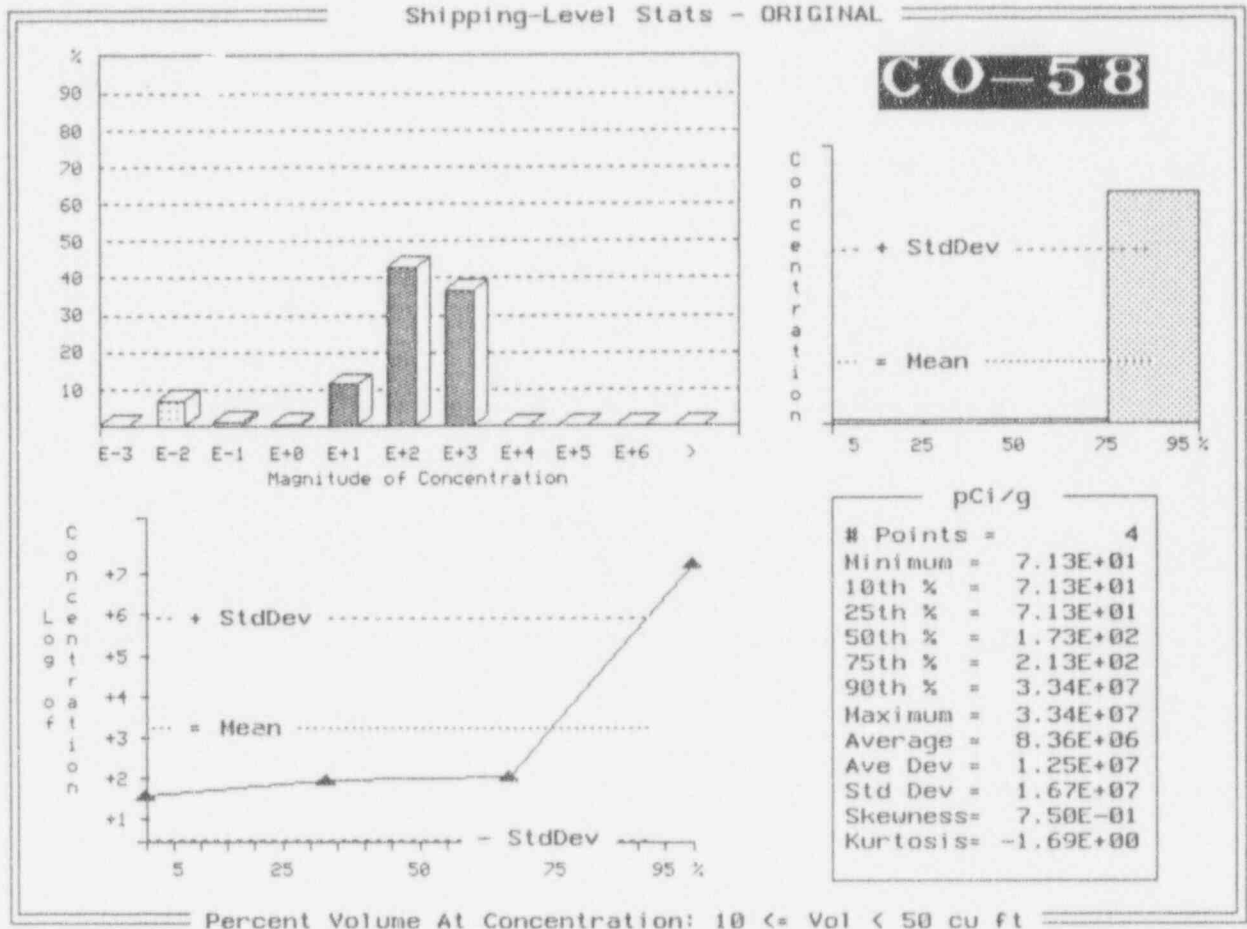


Exhibit F-32 (Continued)

Shipping-Level Stats - ORIGINAL

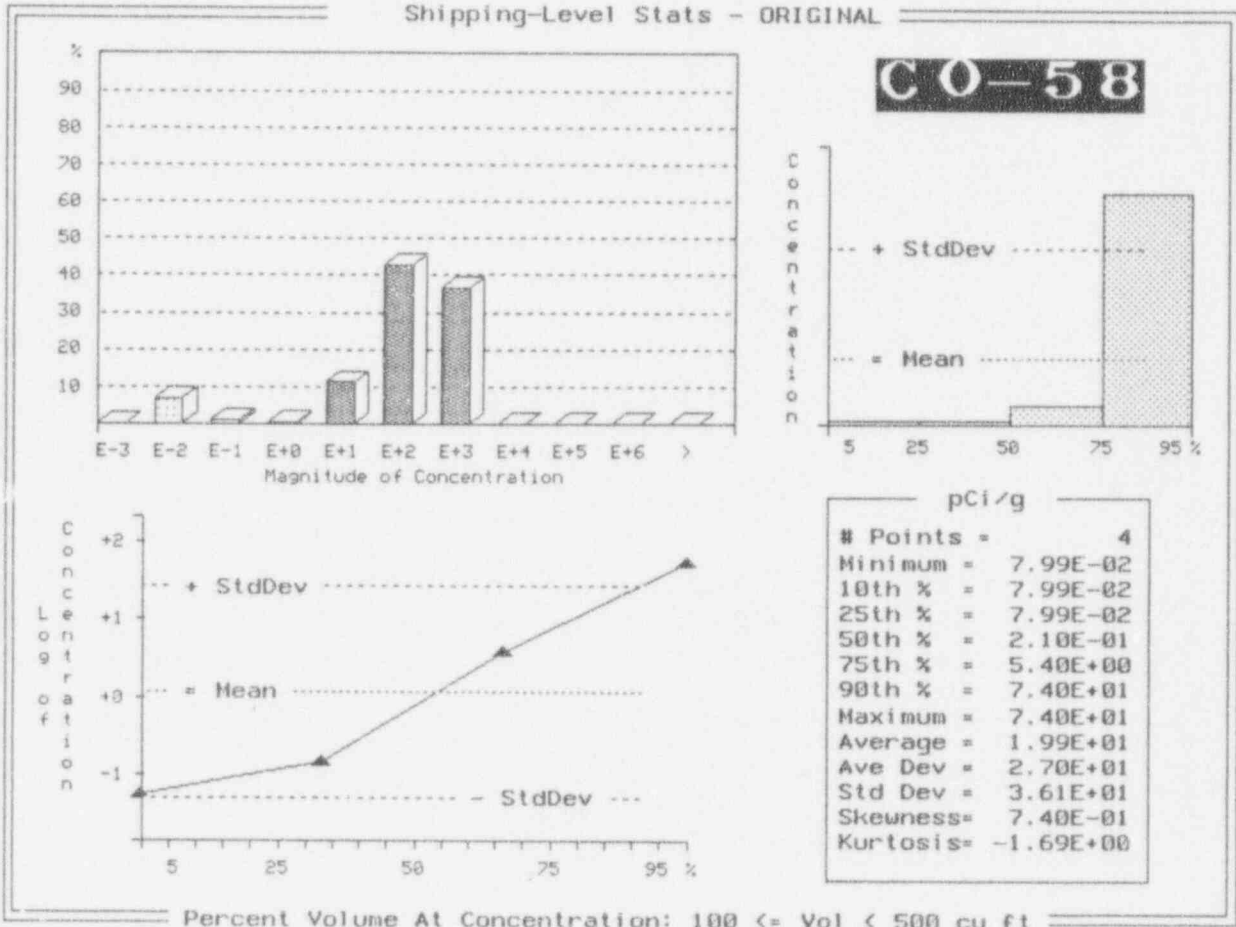


Exhibit F-32 (Continued)

Shipping-Level Stats - ORIGINAL

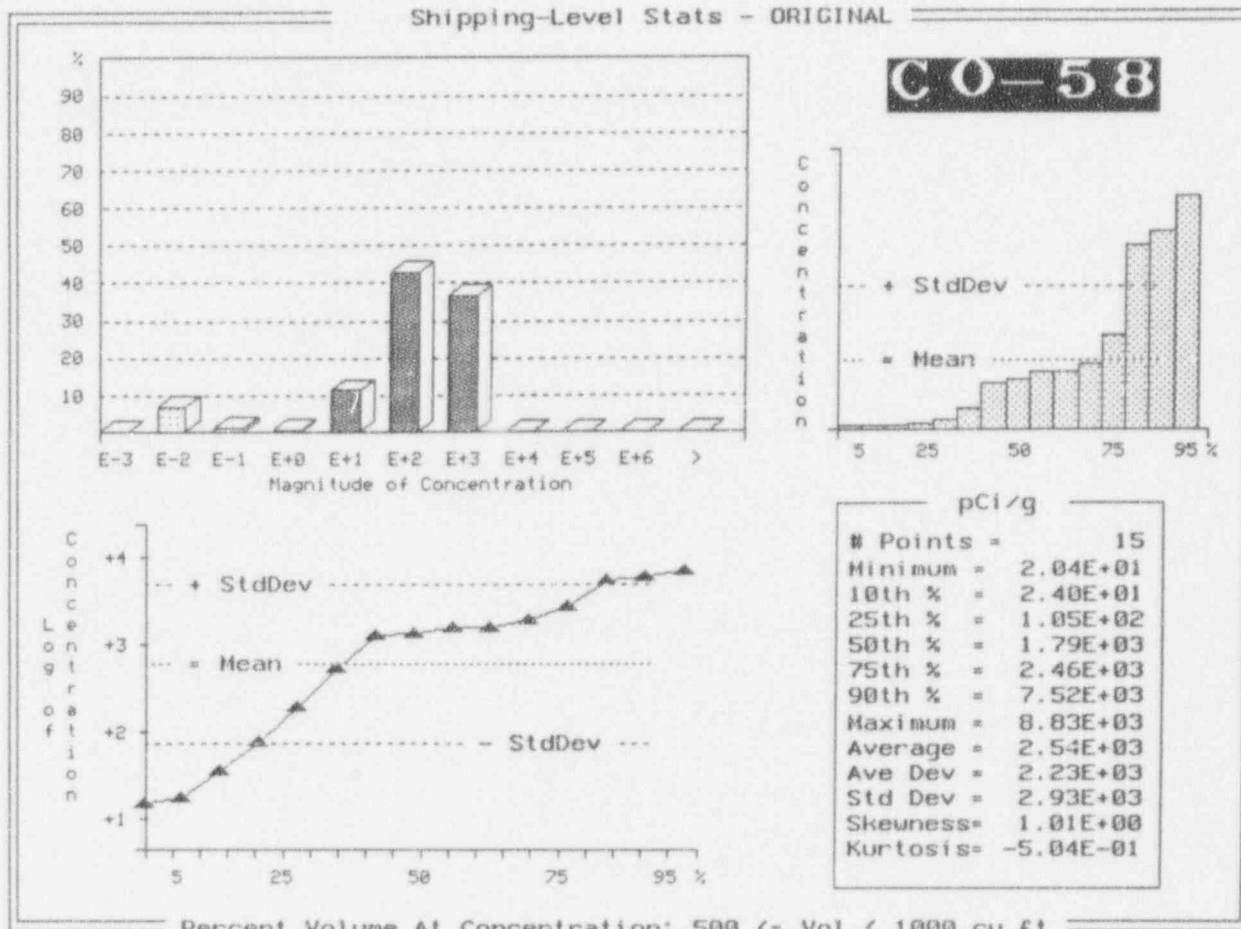


Exhibit F-32 (Continued)

Shipping-Level Stats - ORIGINAL

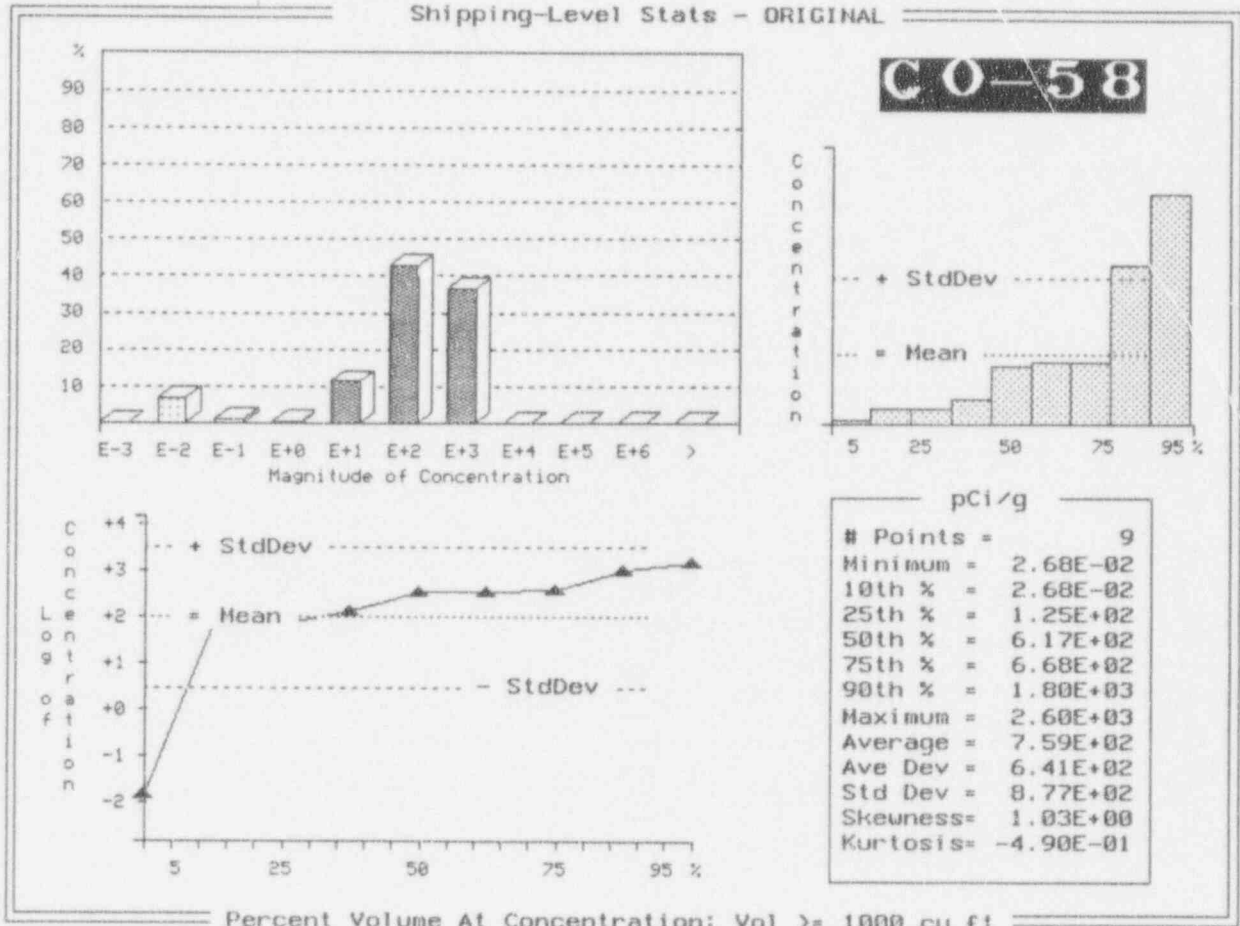


Exhibit F-32 (Continued)

Shipping-Level Stats - ORIGINAL

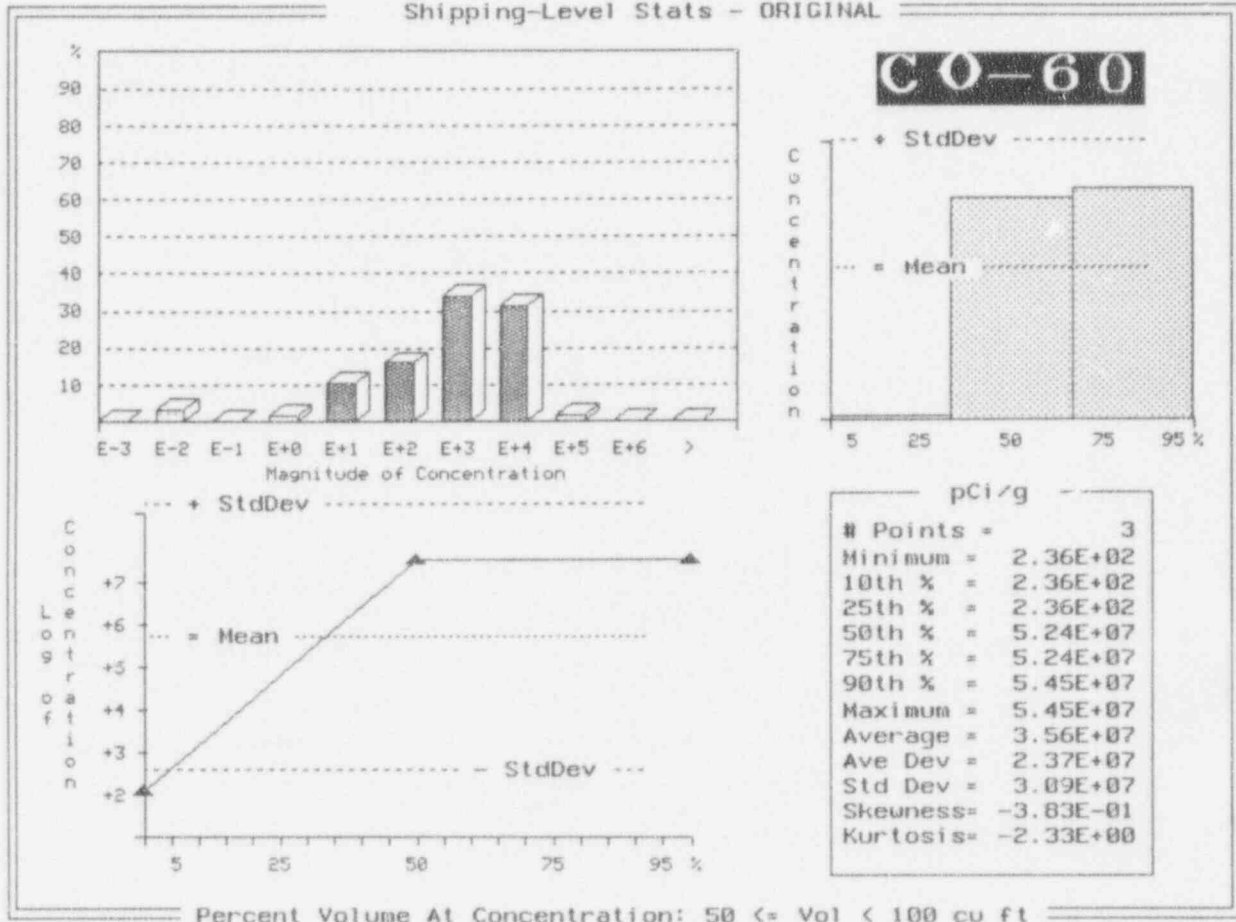


Exhibit F-32 (Continued)

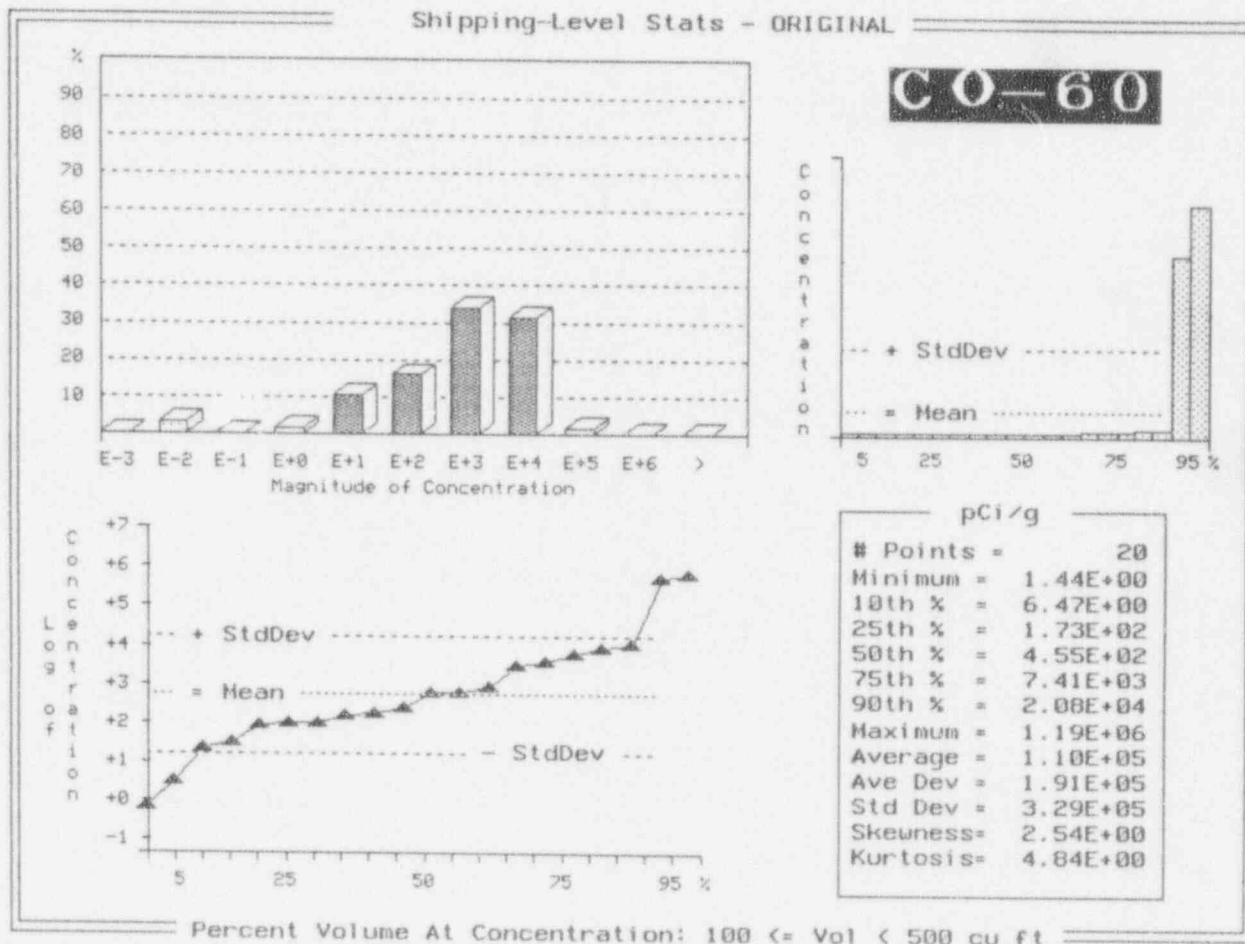


Exhibit F-32 (Continued)

Shipping-Level Stats - ORIGINAL

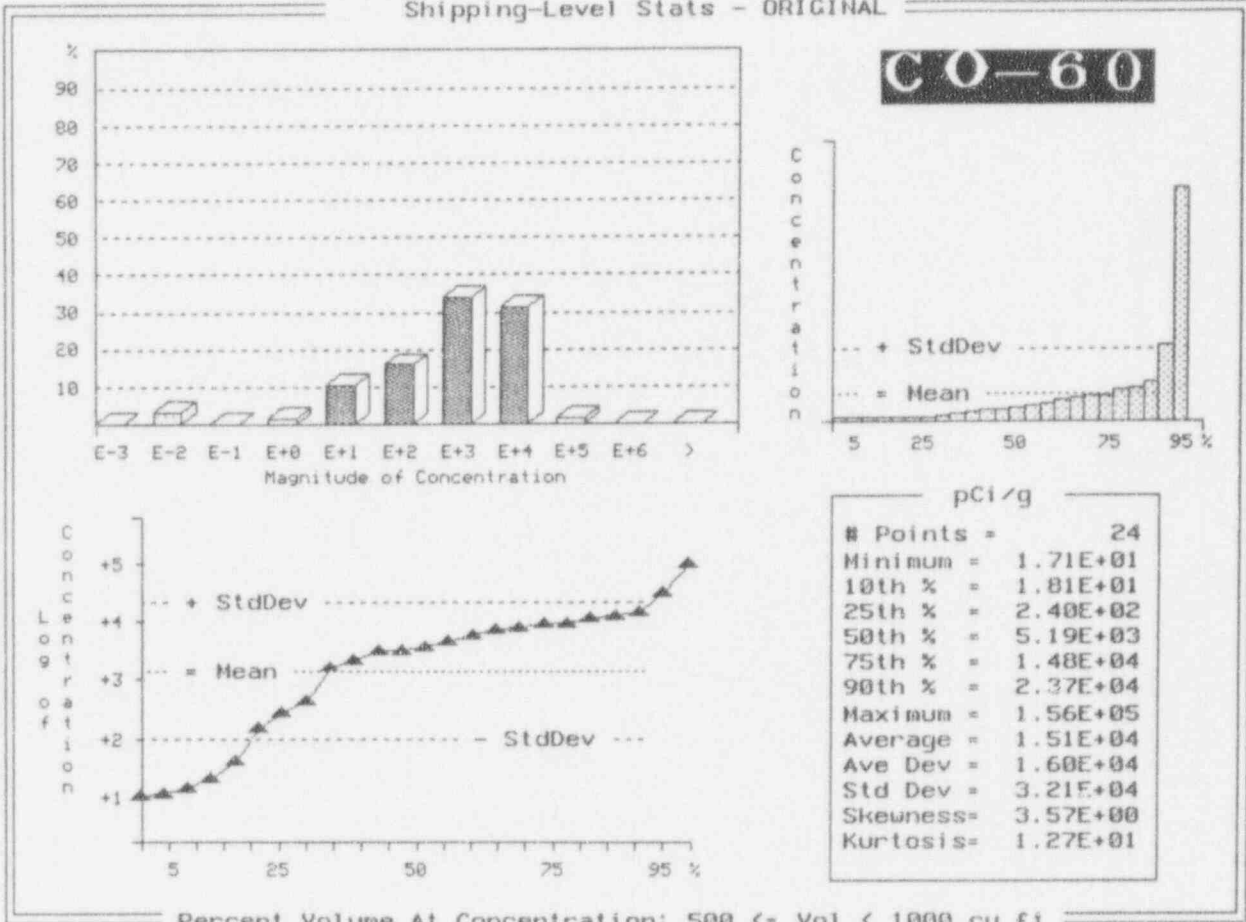


Exhibit F-32 (Continued)

Shipping-Level Stats - ORIGINAL

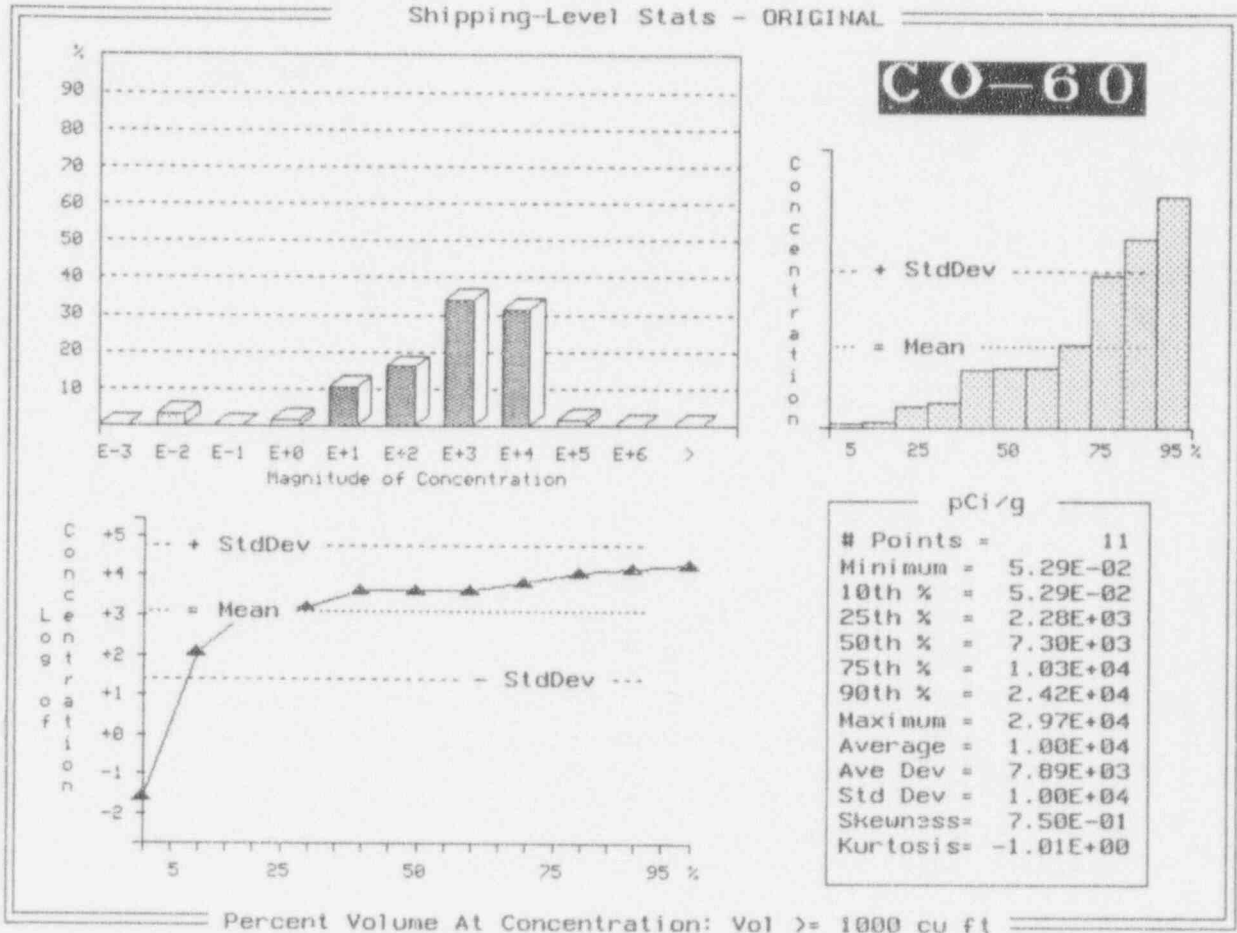


Exhibit F-32 (Continued)

Shipping-Level Stats - ORIGINAL

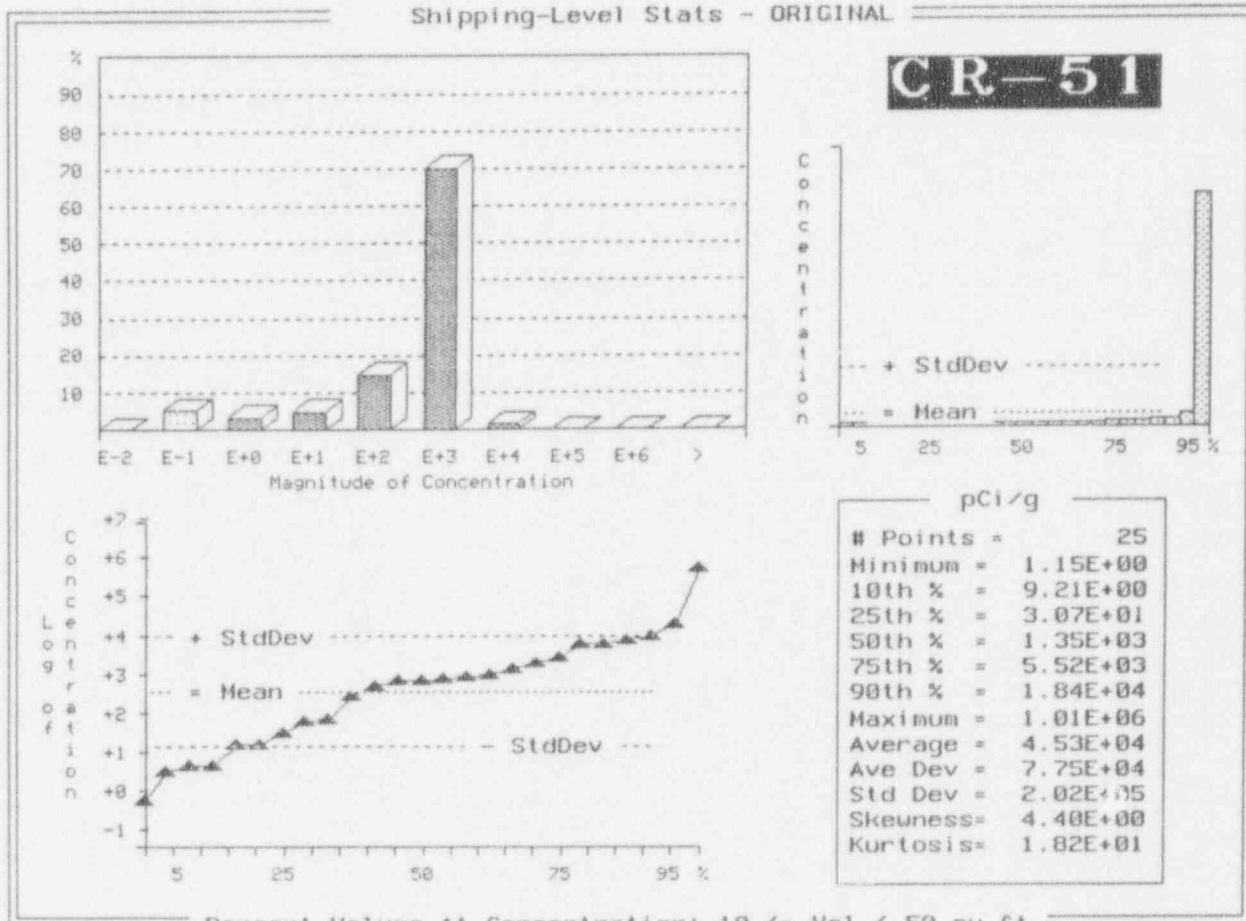


Exhibit F-32 (Continued)

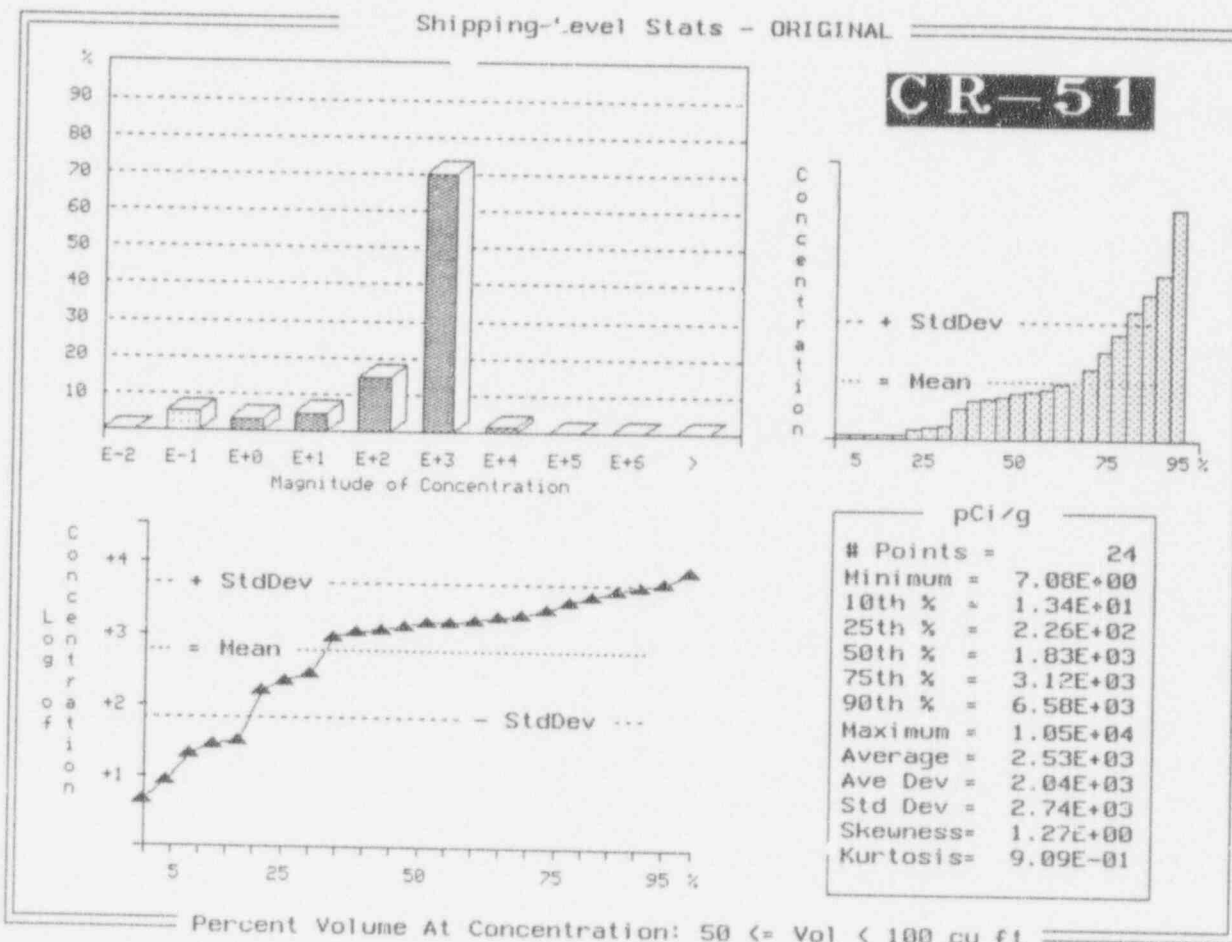


Exhibit F-32 (Continued)

Shipping-Level Stats - ORIGINAL

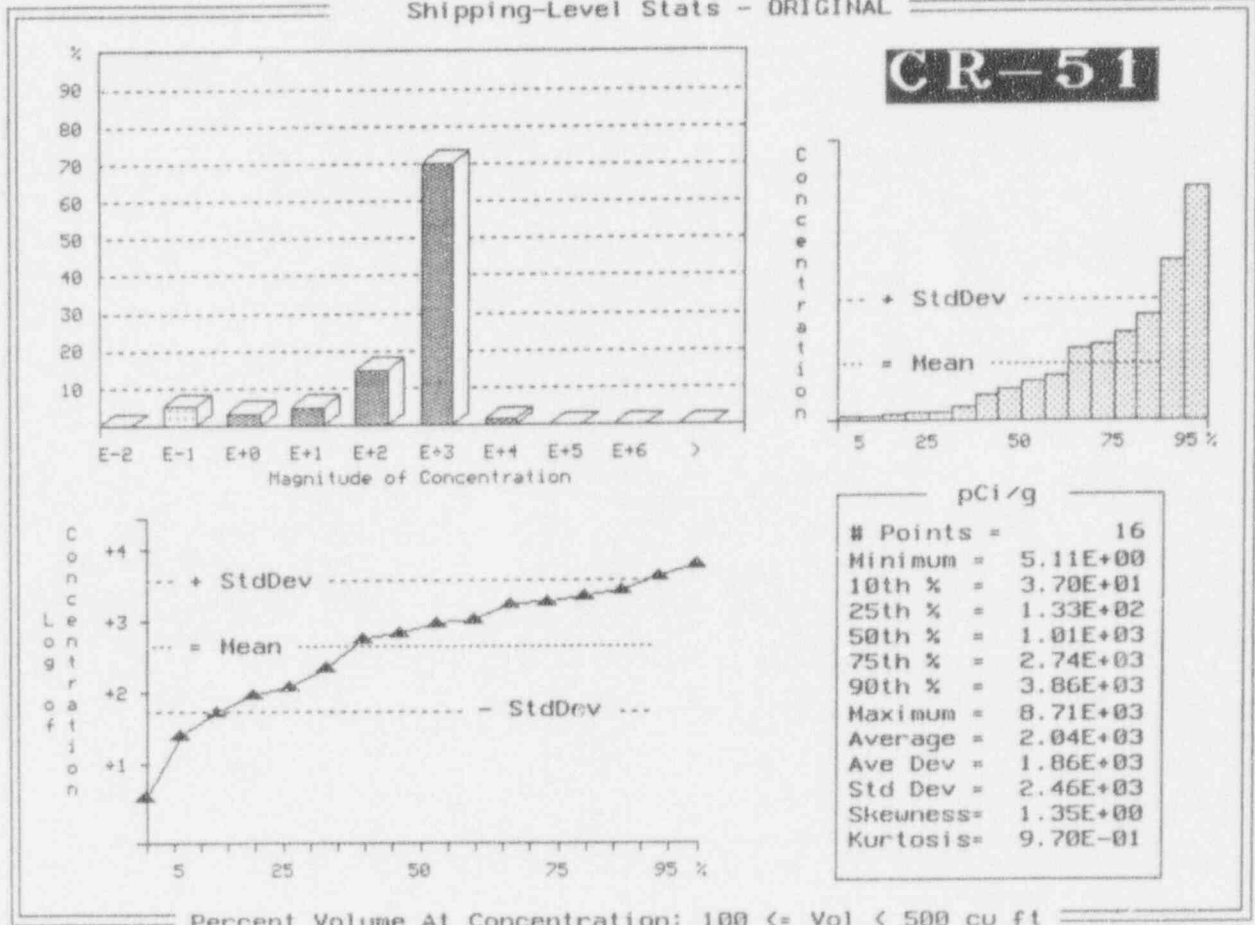
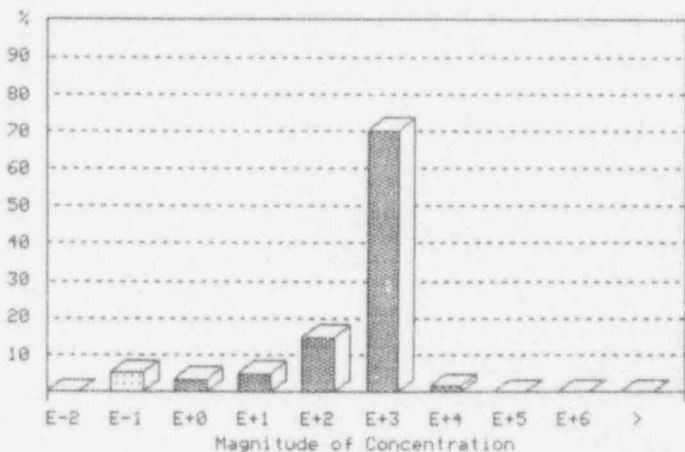
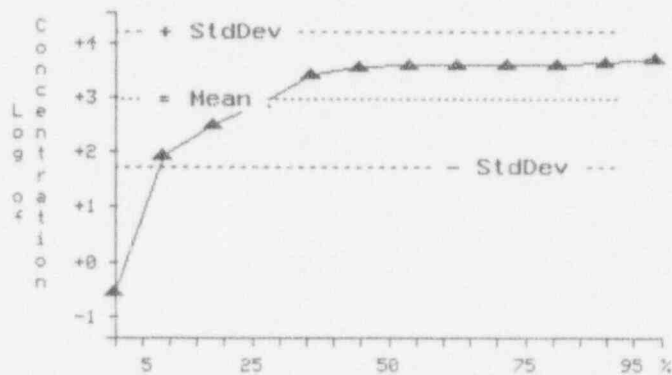
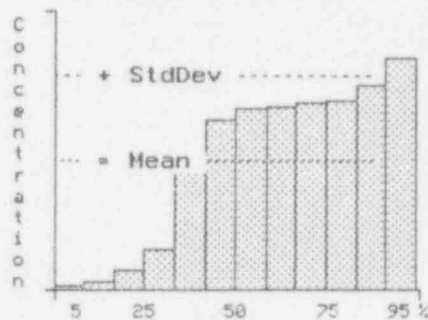


Exhibit F-32 (Continued)

Shipping-Level Stats - ORIGINAL



CR-51



pCi/g	
# Points =	12
Minimum =	4.54E-01
10th % =	4.54E-01
25th % =	4.45E+02
50th % =	5.11E+03
75th % =	5.69E+03
90th % =	6.24E+03
Maximum =	7.03E+03
Average =	3.87E+03
Ave Dev =	2.31E+03
Std Dev =	2.67E+03
Skewness =	-4.53E-01
Kurtosis =	-1.69E+00

Percent Volume At Concentration: 500 <= Vol < 1000 cu ft

Exhibit F-32 (Continued)

Shipping-Level Stats - ORIGINAL

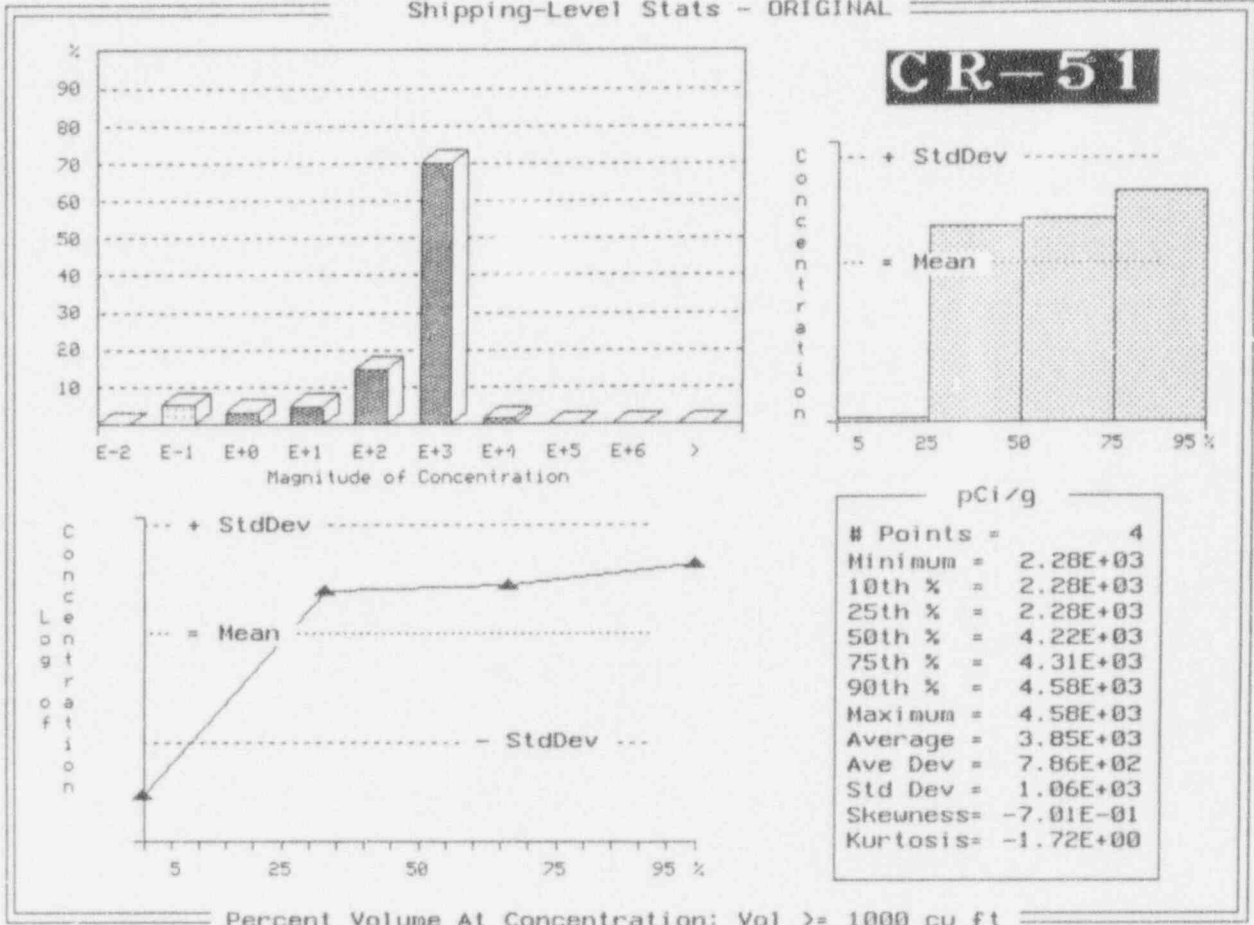
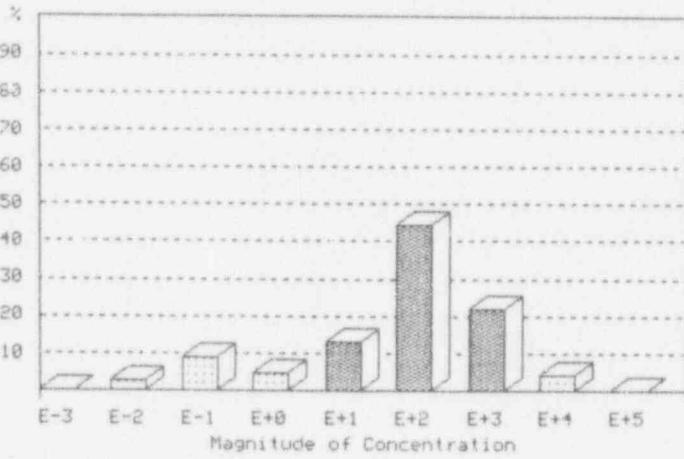
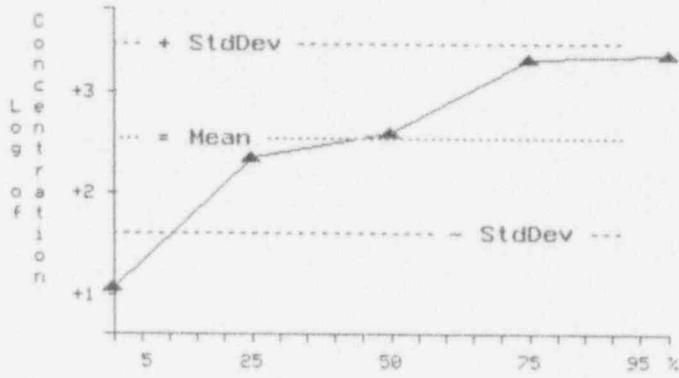
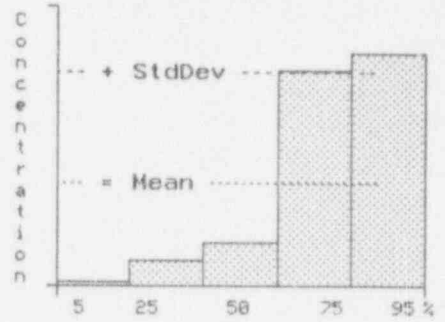


Exhibit F-32 (Continued)

Shipping-Level Stats - ORIGINAL



CS-137



pCi/g	
# Points =	5
Minimum =	1.53E+01
10th % =	1.53E+01
25th % =	1.53E+01
50th % =	5.09E+02
75th % =	2.74E+03
90th % =	2.96E+03
Maximum =	2.96E+03
Average =	1.30E+03
Ave Dev =	1.24E+03
Std Dev =	1.42E+03
Skewness =	2.66E-01
Kurtosis =	-2.22E+00

Percent Volume At Concentration: 10 <= Vol < 50 cu ft

Exhibit F-32 (Continued)

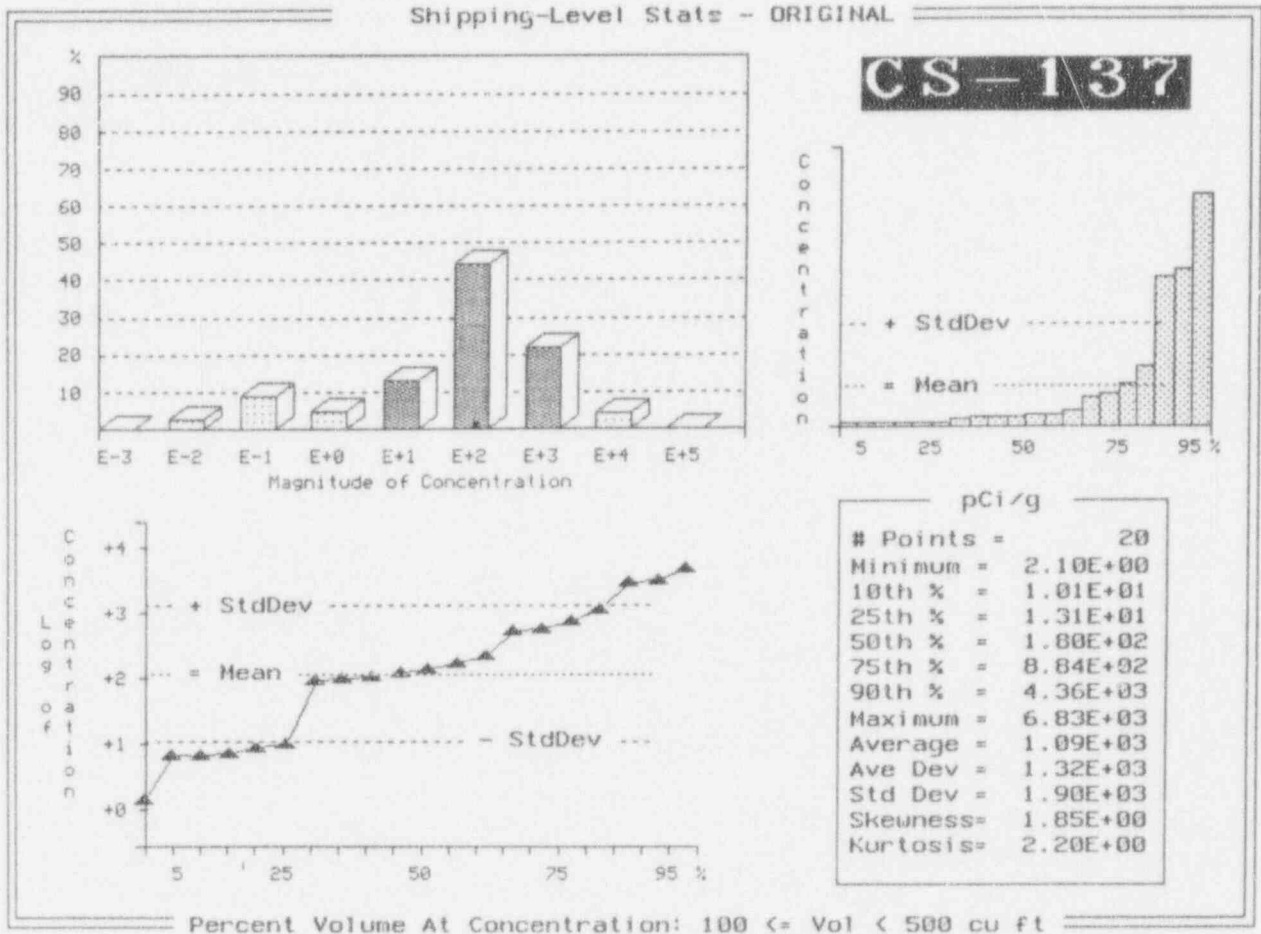
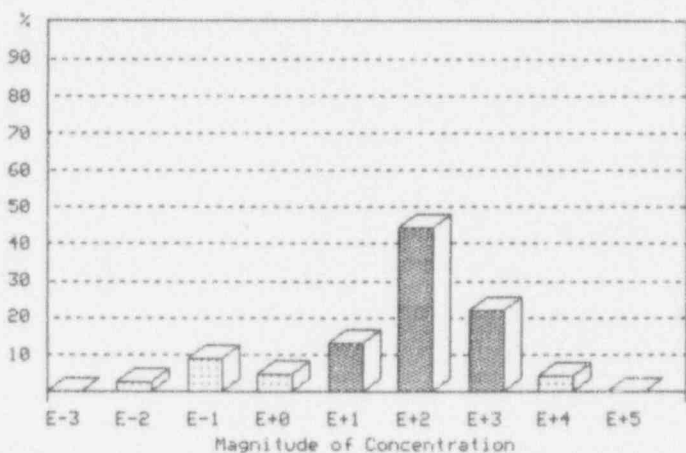
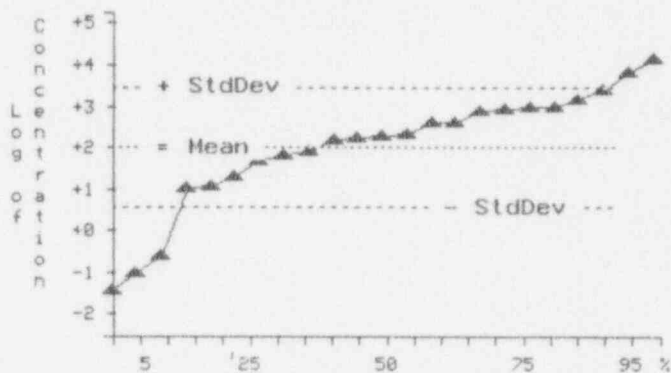
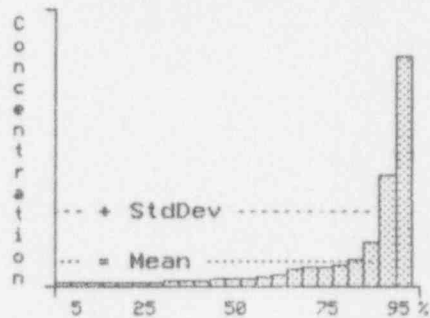


Exhibit F-32 (Continued)

Shipping-Level Stats - ORIGINAL



CS-137



pCi/g	
# Points =	23
Minimum =	7.13E-02
10th % =	1.82E-01
25th % =	3.64E+01
50th % =	3.70E+02
75th % =	1.65E+03
90th % =	4.59E+03
Maximum =	2.50E+04
Average =	2.36E+03
Ave Dev =	3.03E+03
Std Dev =	5.58E+03
Skewness =	3.11E+00
Kurtosis =	9.29E+00

Percent Volume At Concentration: 500 <= Vol < 1000 cu ft

Exhibit F-32 (Continued)

Shipping-Level Stats - ORIGINAL

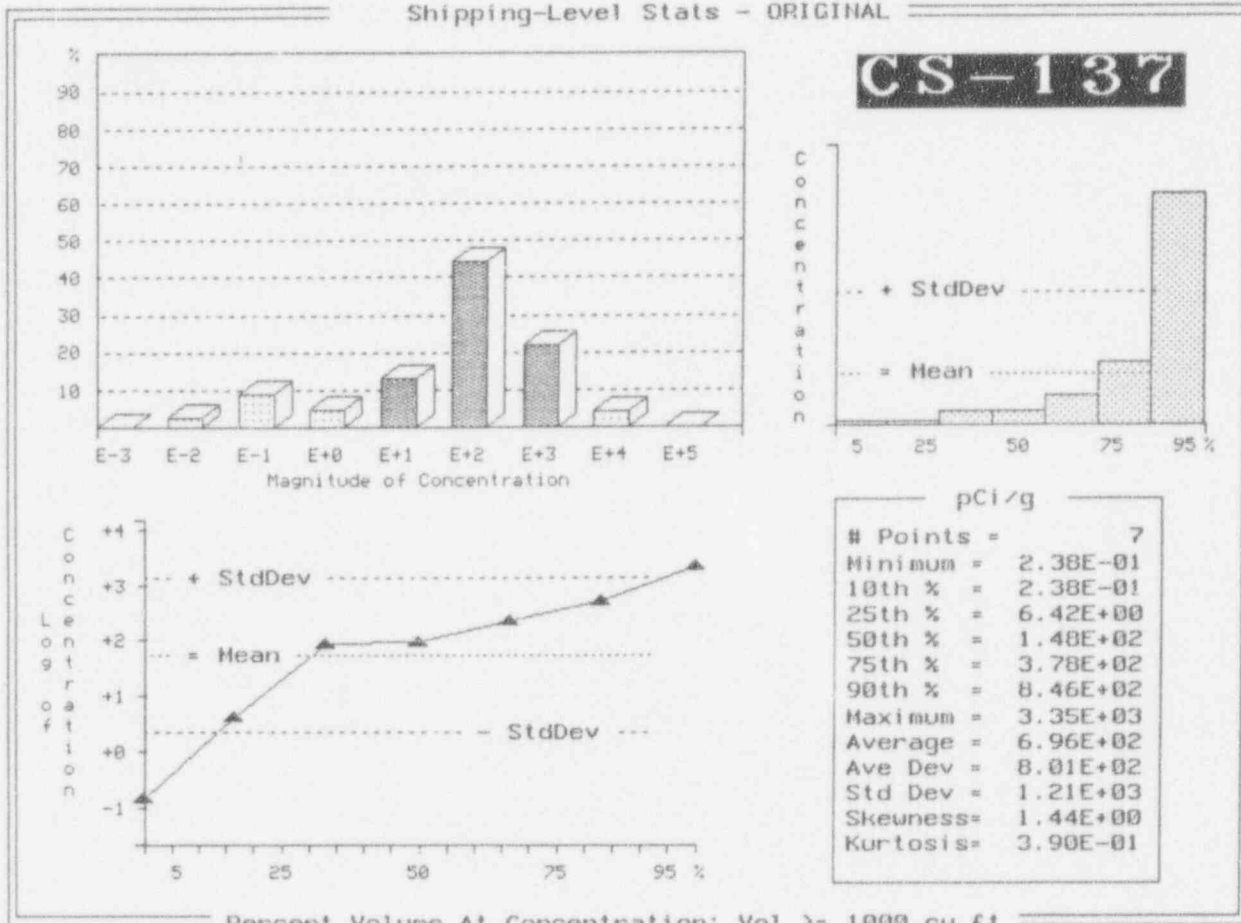


Exhibit F-32 (Continued)

Shipping-Level Stats - ORIGINAL

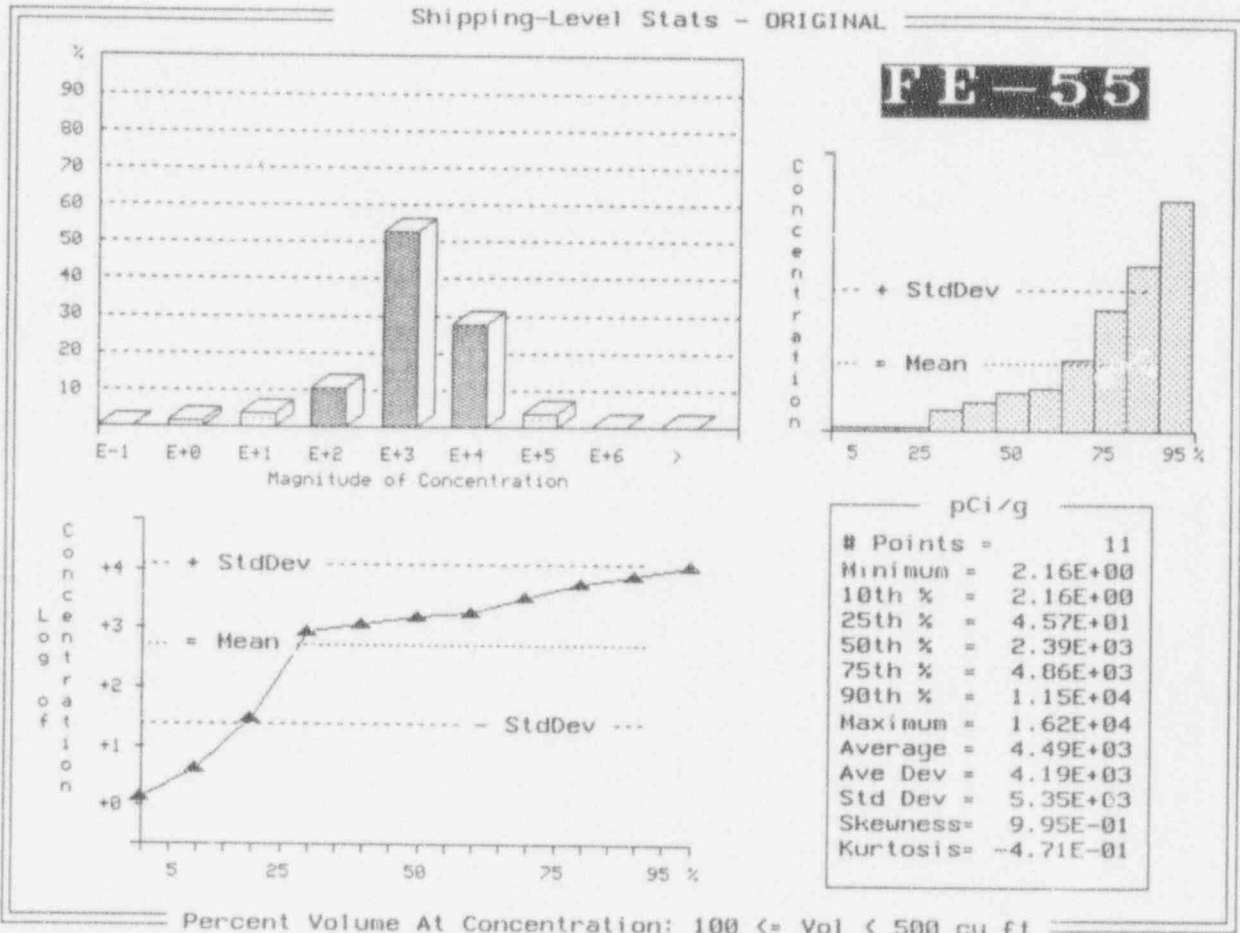


Exhibit F-32 (Continued)

Shipping-Level Stats - ORIGINAL

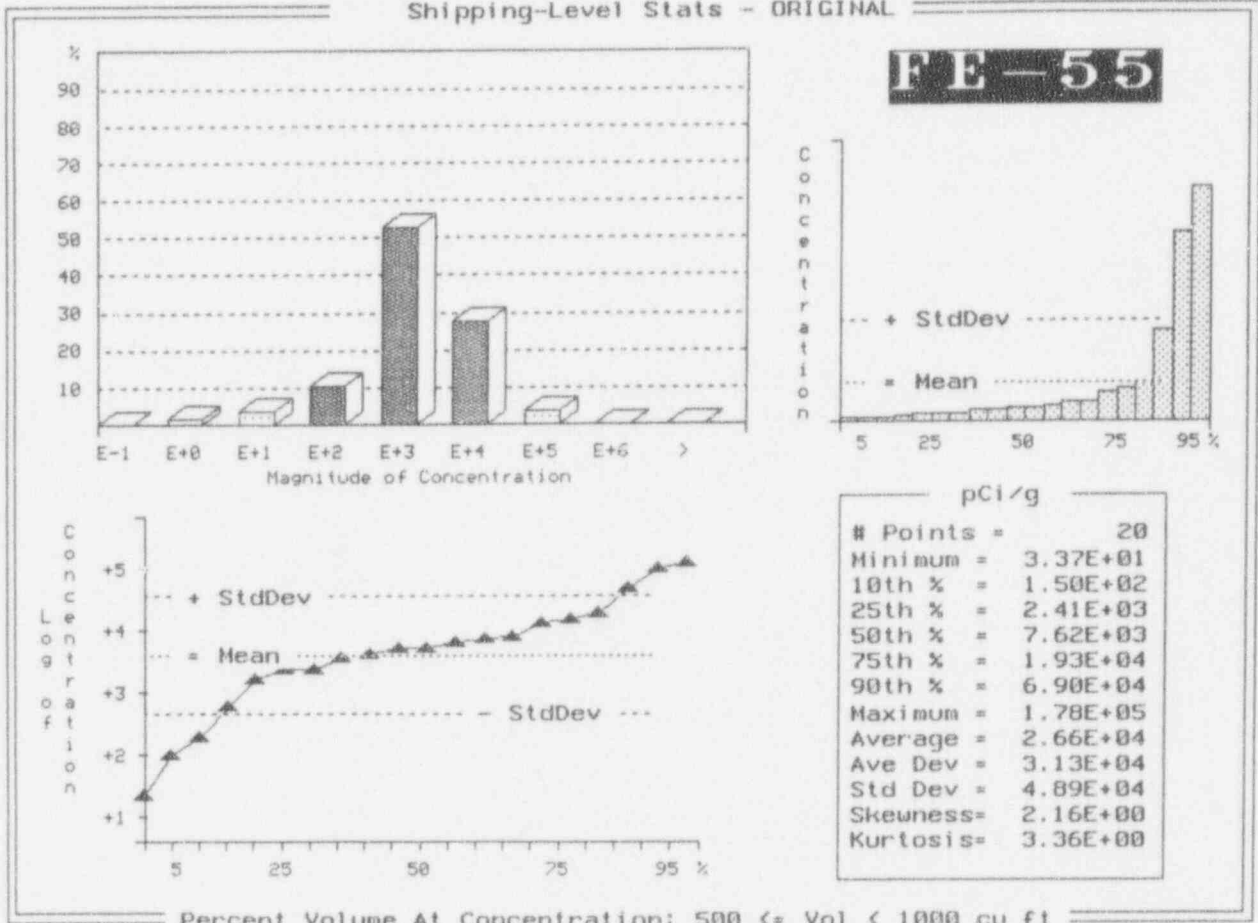


Exhibit F-32 (Continued)

Shipping-Level Stats - ORIGINAL

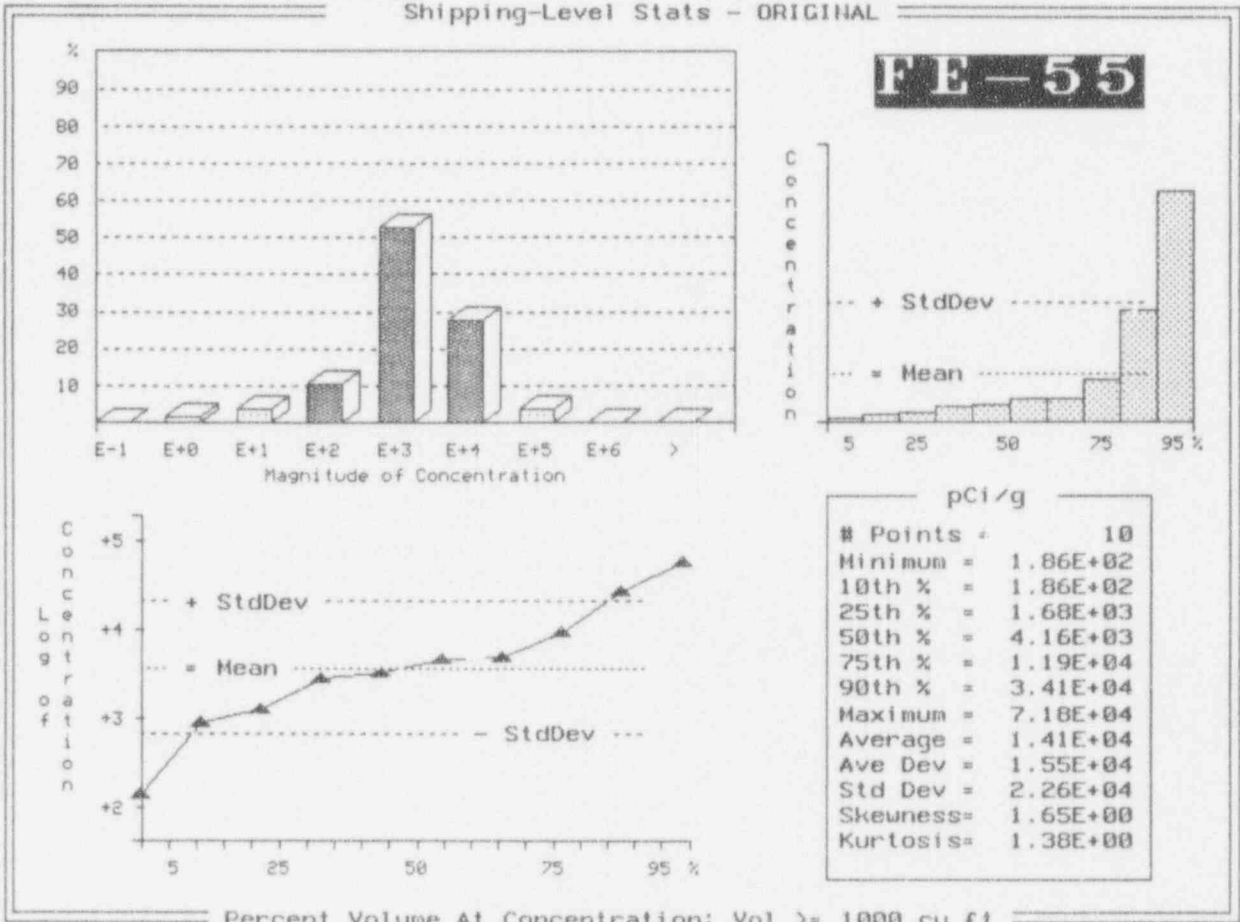


Exhibit F-32 (Continued)

Shipping-Level Stats - ORIGINAL

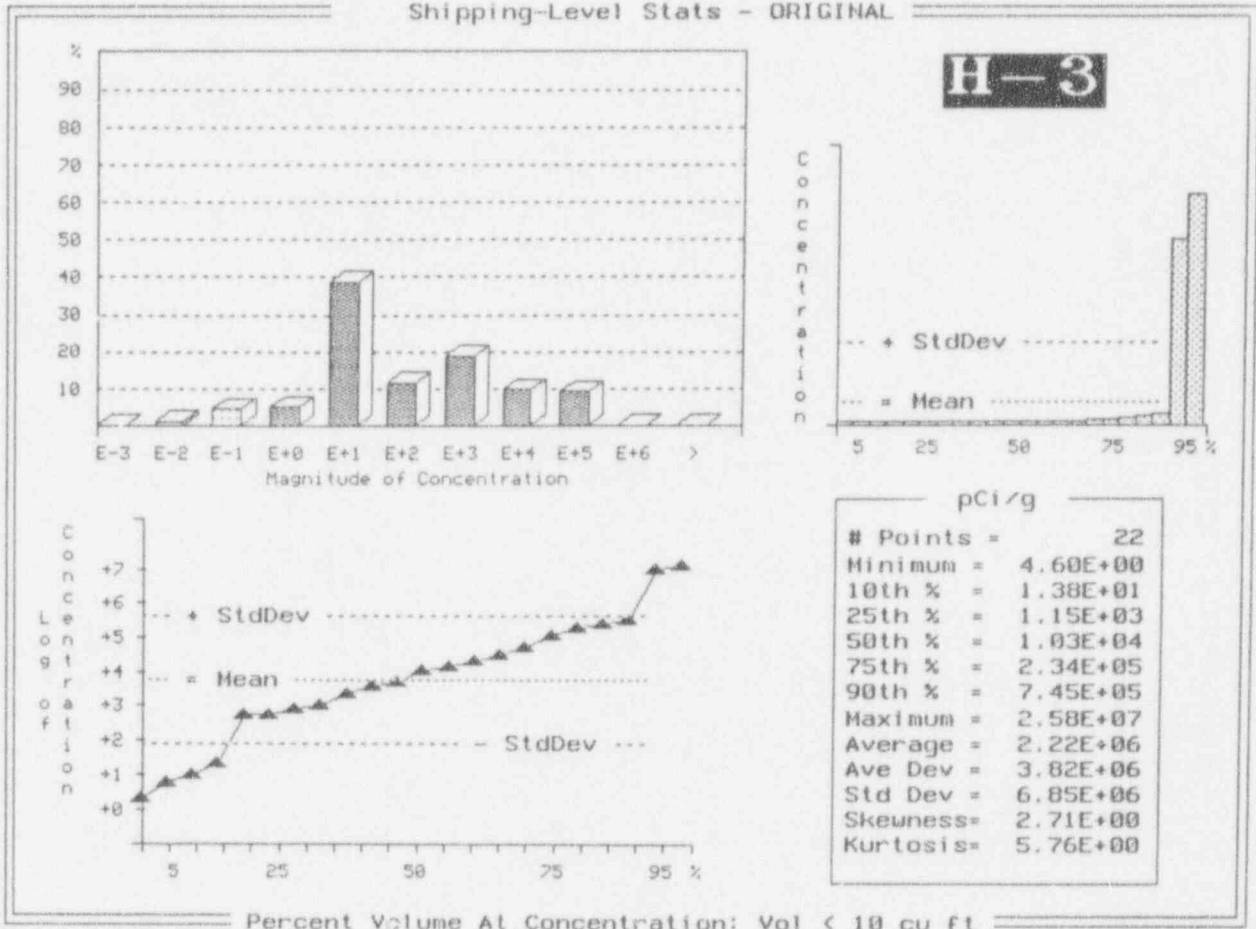


Exhibit F-32 (Continued)

Shipping-Level Stats - ORIGINAL

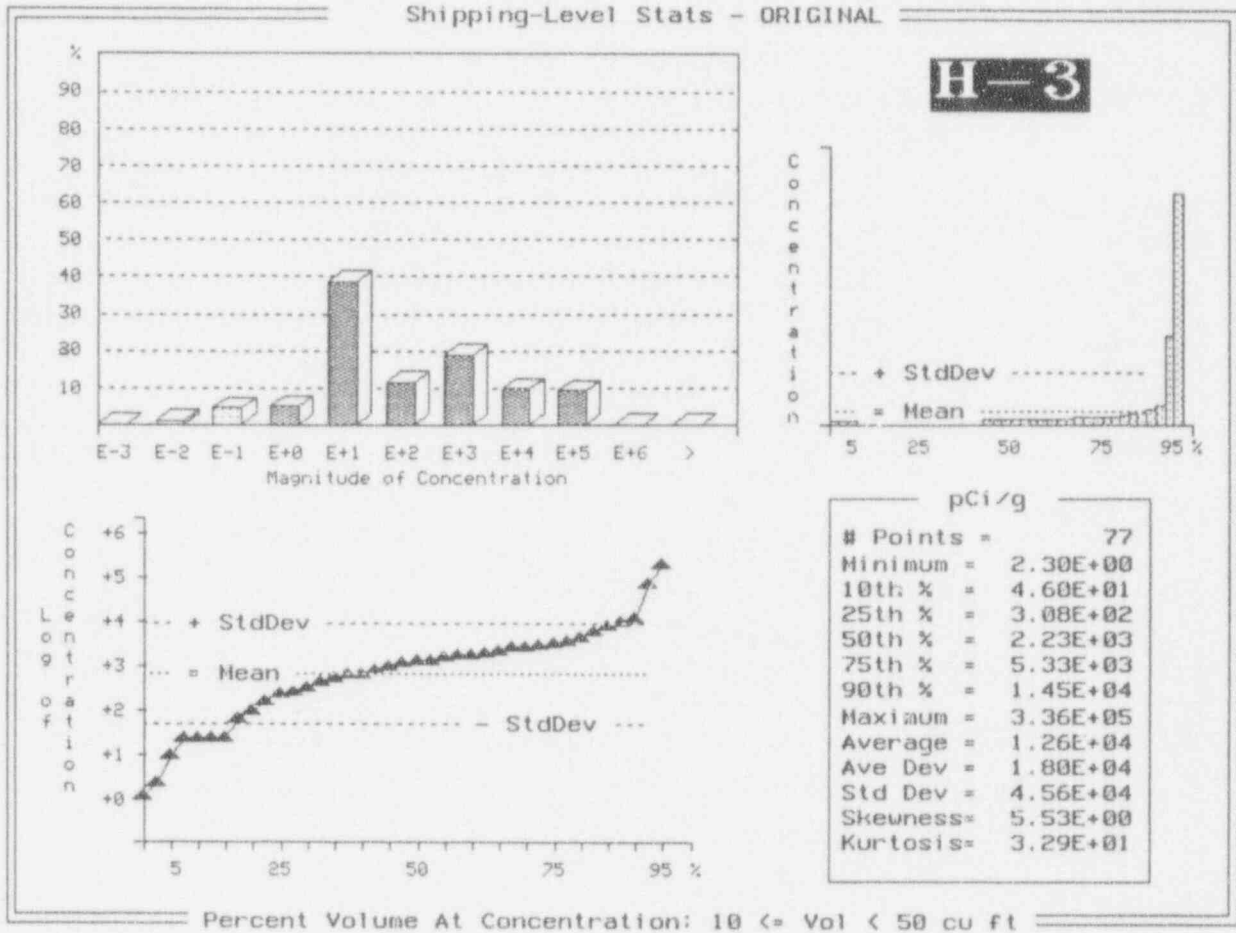


Exhibit F-32 (Continued)

Shipping-Level Stats - ORIGINAL

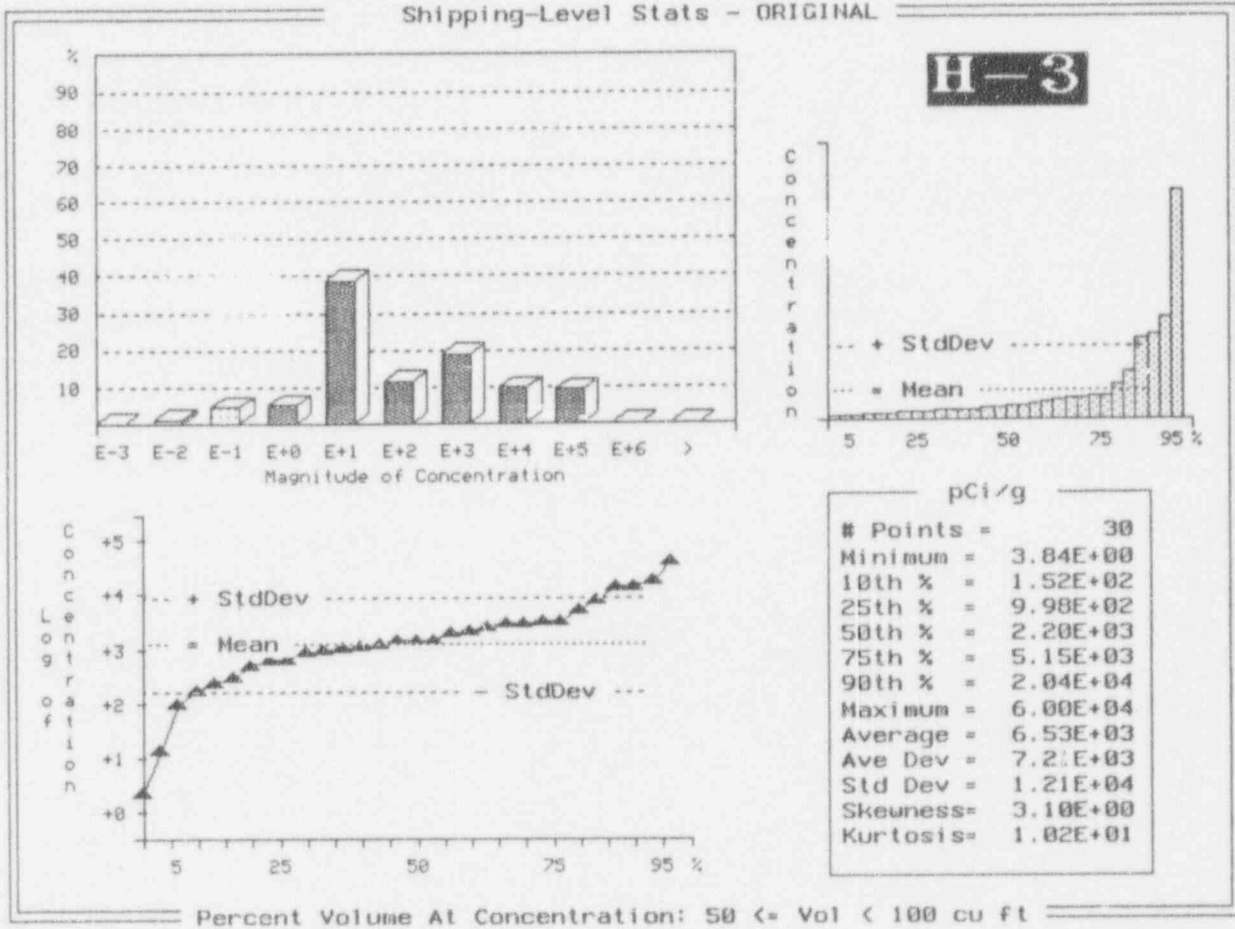


Exhibit F-32 (Continued)

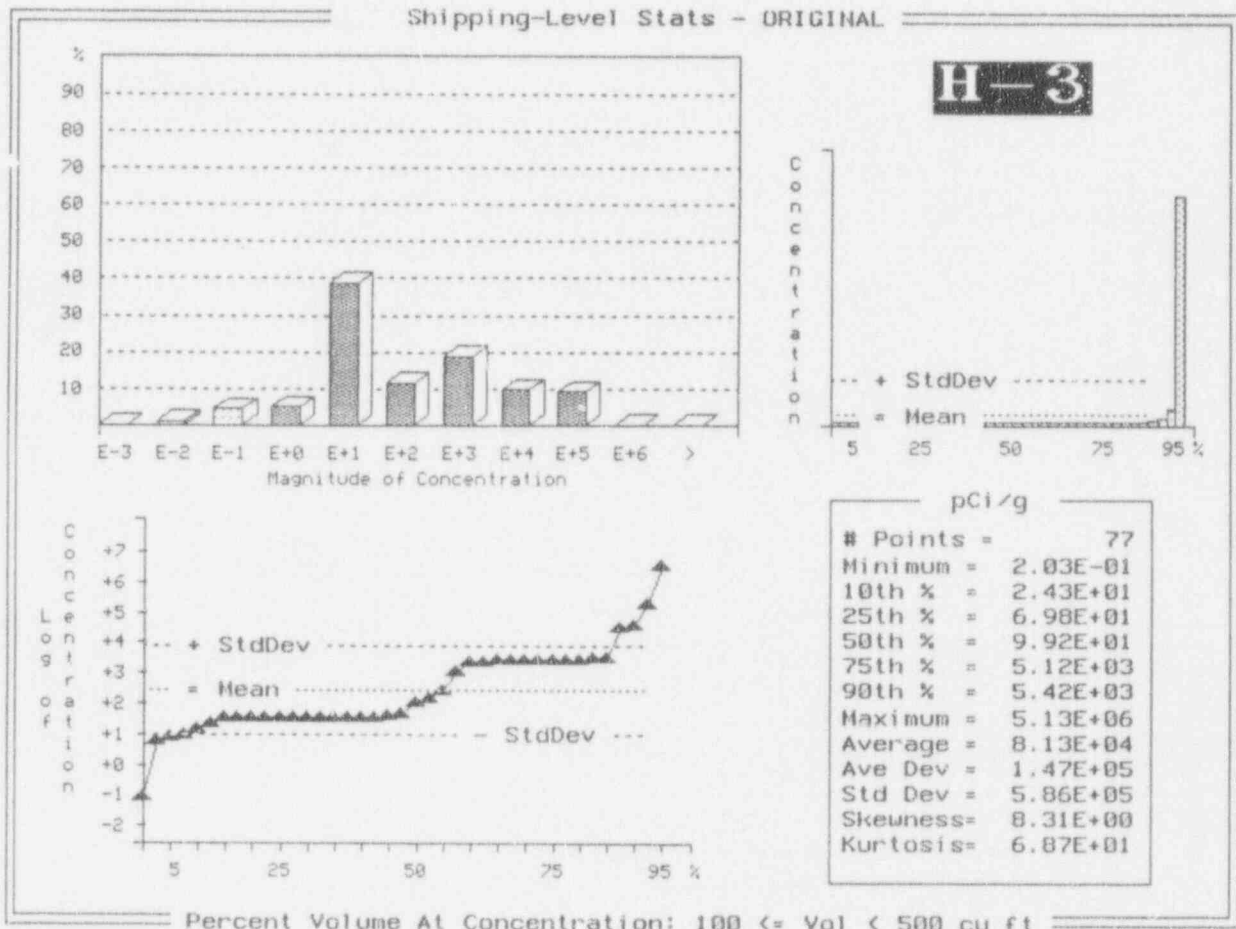
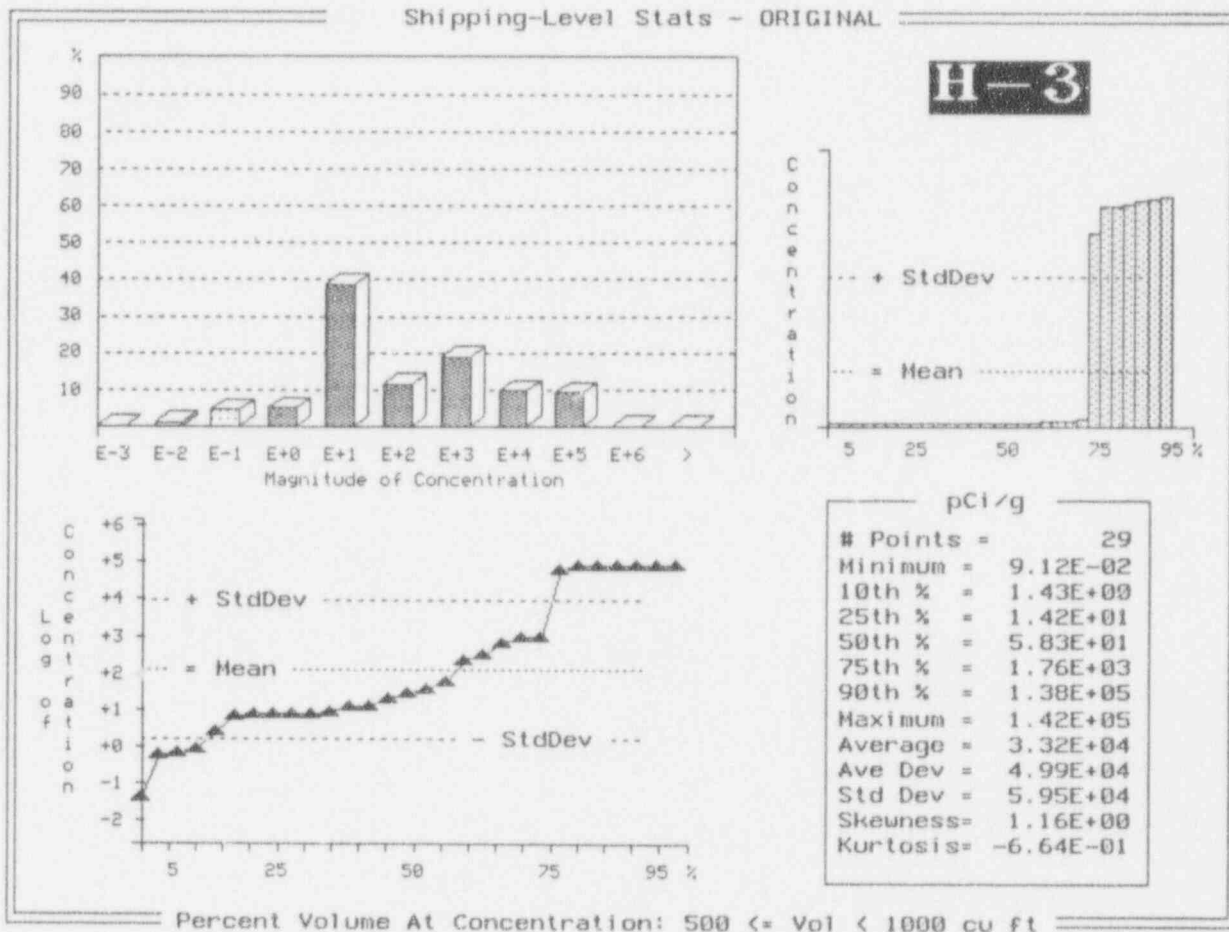
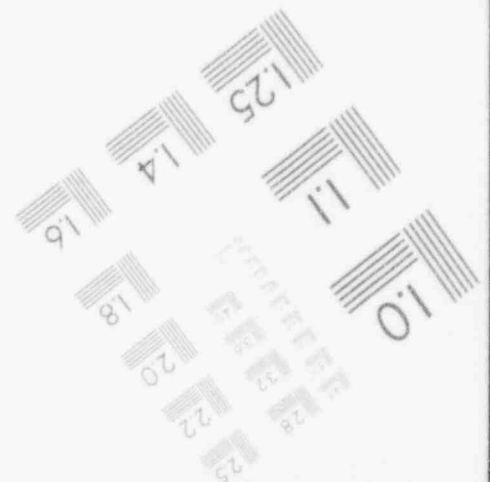
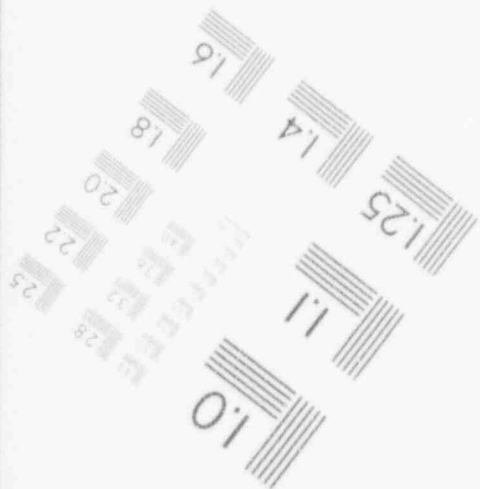
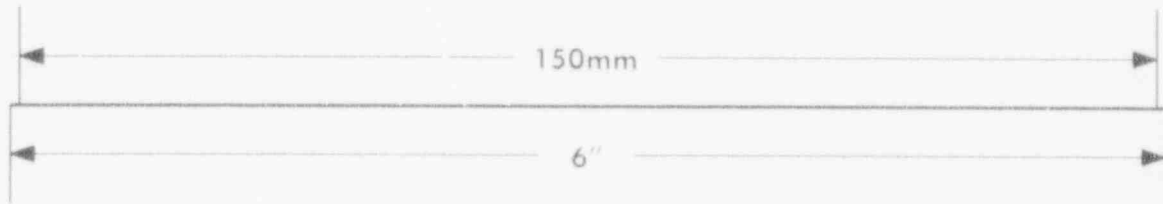
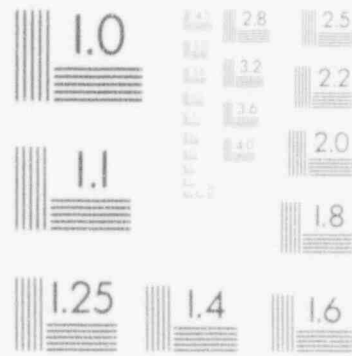
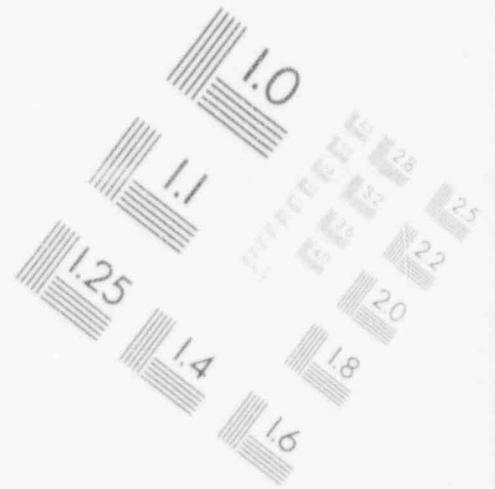
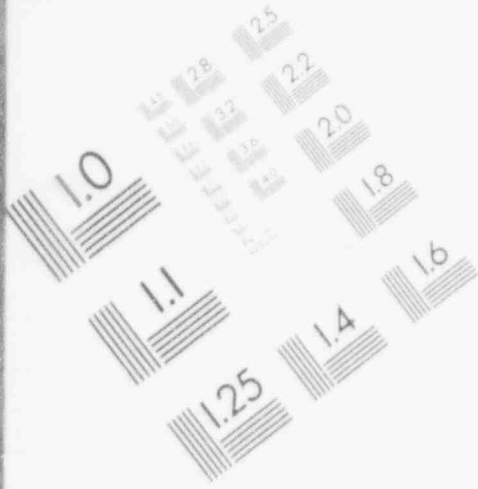


Exhibit F-32 (Continued)



2

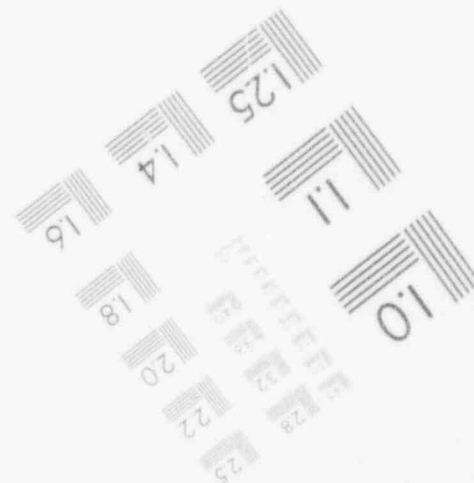
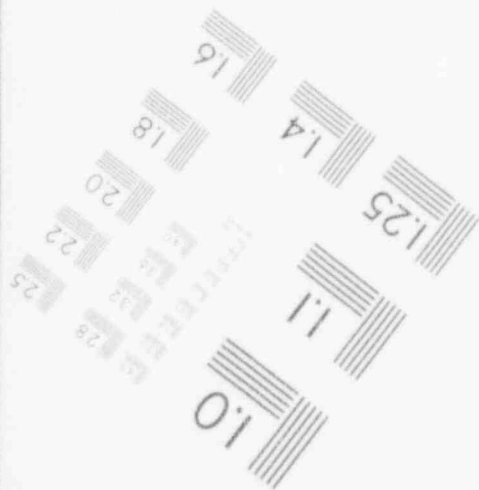
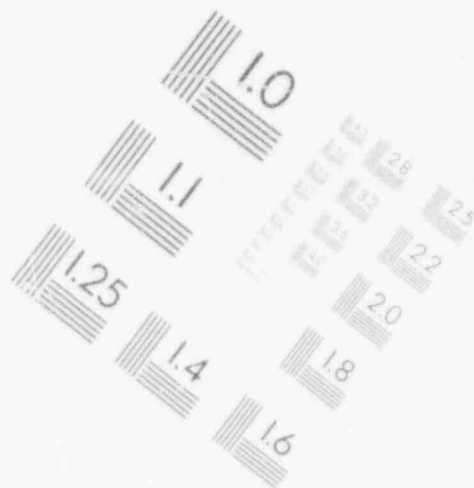
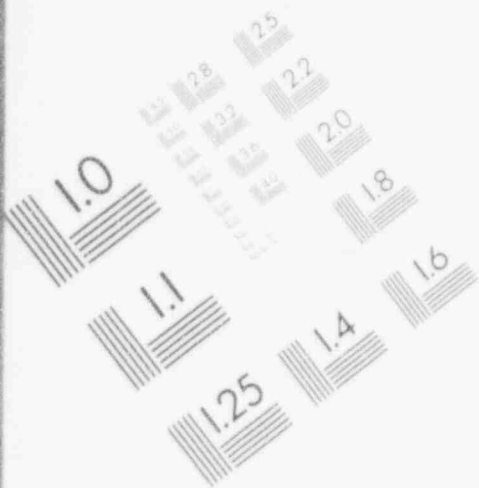
IMAGE EVALUATION TEST TARGET (MT-3)



PHOTOGRAPHIC SCIENCES CORPORATION
770 BASKET ROAD
P.O. BOX 338
WEBSTER, NEW YORK 14580
(716) 265-1600

2

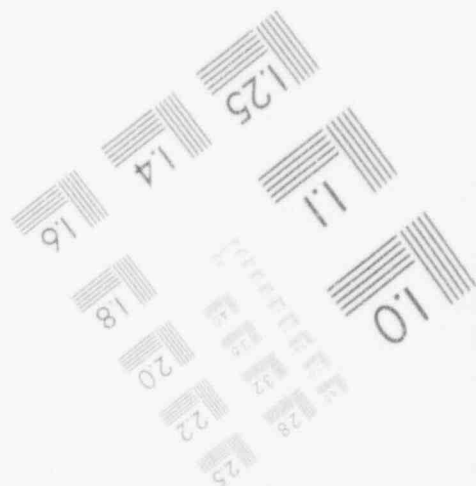
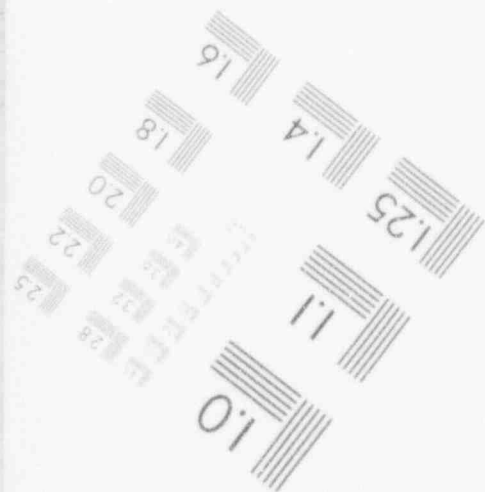
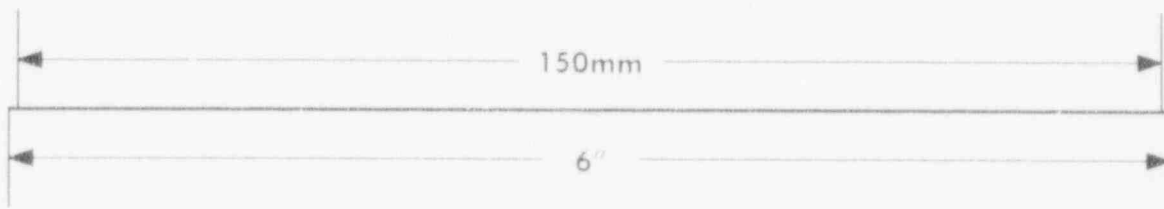
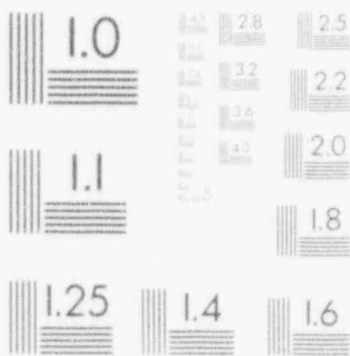
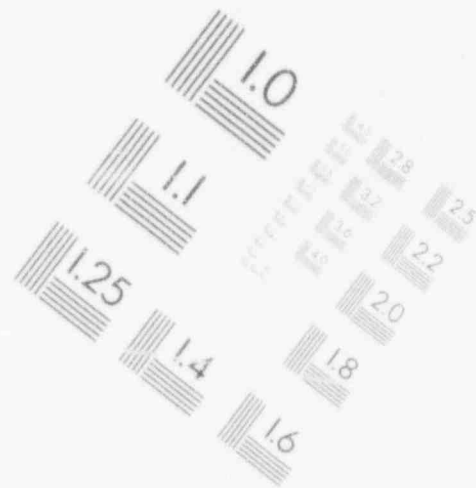
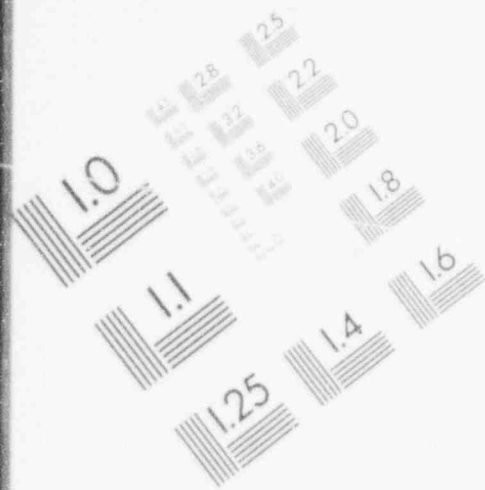
IMAGE EVALUATION TEST TARGET (MT-3)



PHOTOGRAPHIC SCIENCES CORPORATION
770 BASKET ROAD
P.O. BOX 338
WEBSTER, NEW YORK 14580
(716) 265-1600

2

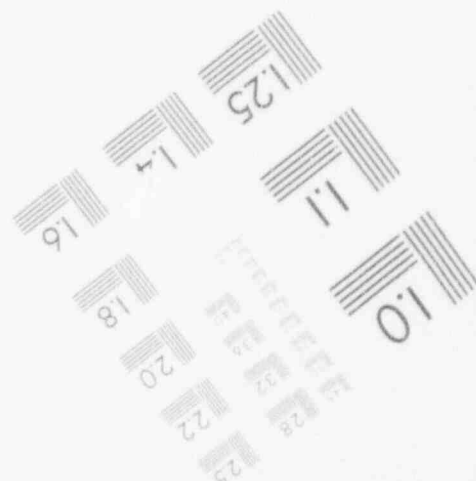
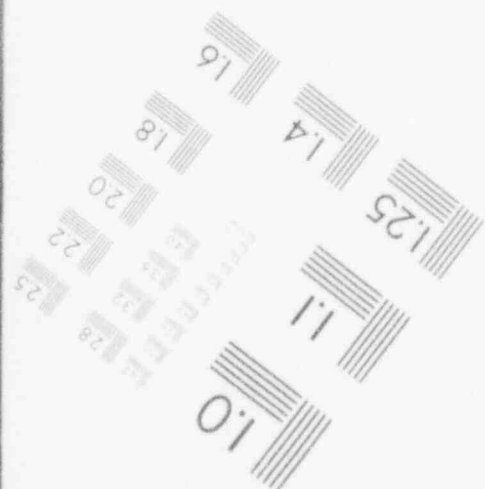
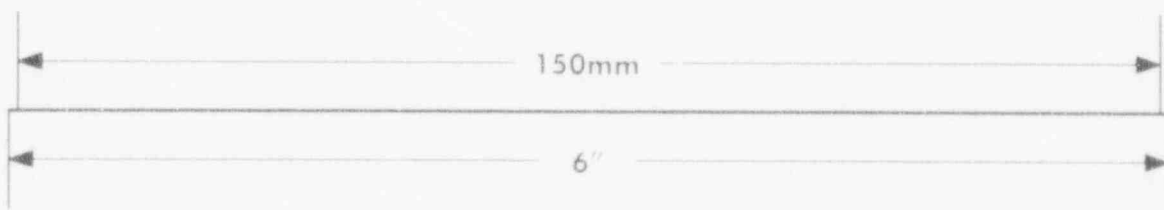
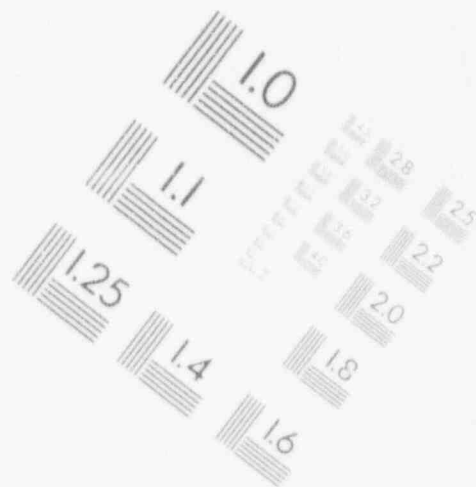
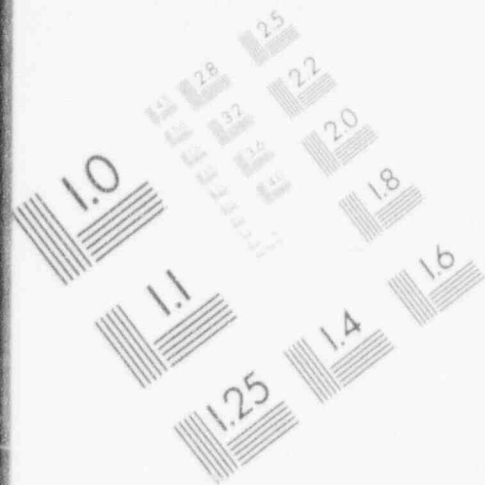
IMAGE EVALUATION TEST TARGET (MT-3)



PHOTOGRAPHIC SCIENCES CORPORATION
770 BASKET ROAD
P.O. BOX 338
WEBSTER, NEW YORK 14580
(716) 265-1600

2

IMAGE EVALUATION TEST TARGET (MT-3)



PHOTOGRAPHIC SCIENCES CORPORATION
770 BASKET ROAD
P.O. BOX 338
WEBSTER, NEW YORK 14580
(716) 265-1600

Exhibit F-32 (Continued)

Shipping-Level Stats - ORIGINAL

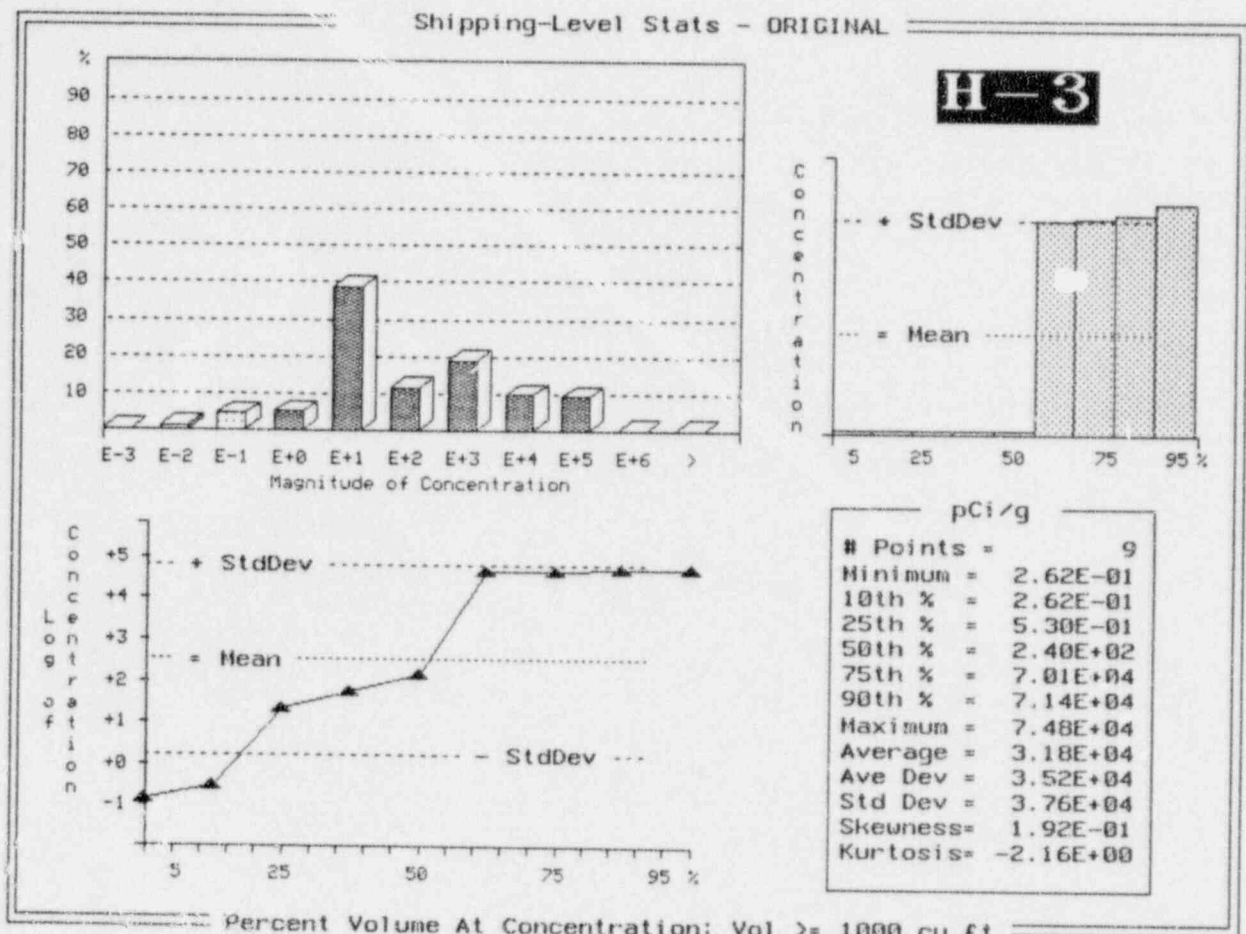


Exhibit F-32 (Continued)

Shipping-Level Stats - ORIGINAL

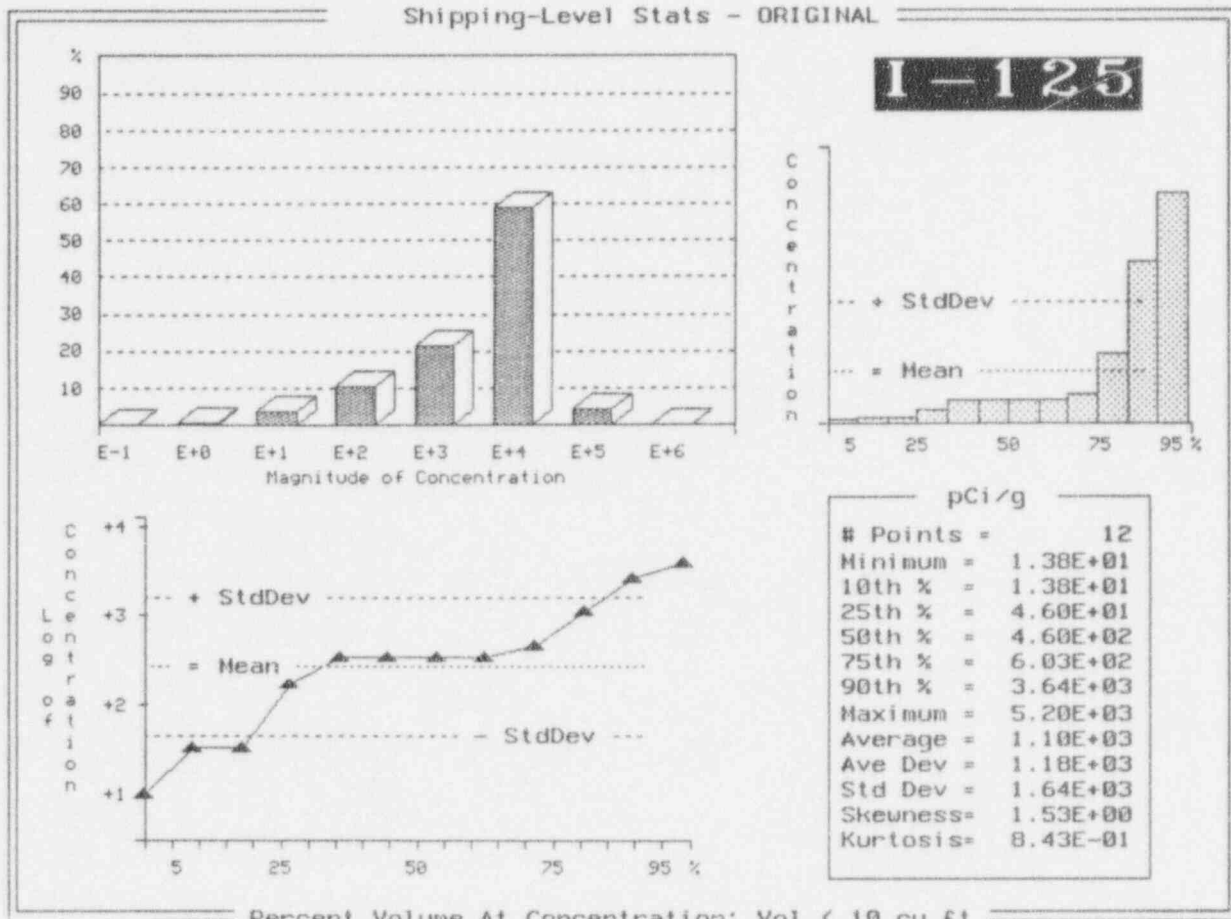


Exhibit F-32 (Continued)

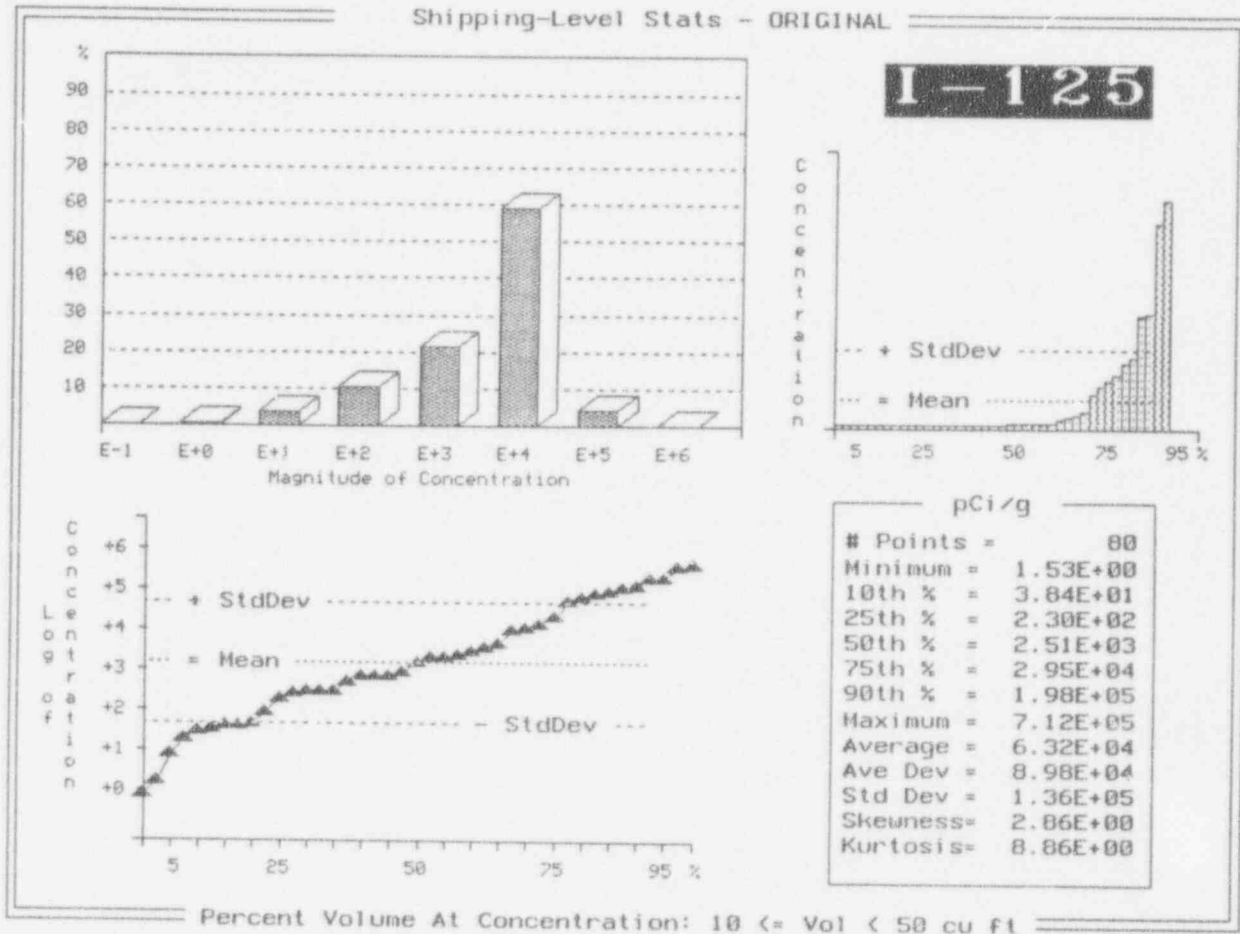


Exhibit F-32 (Continued)

Shipping-Level Stats - ORIGINAL

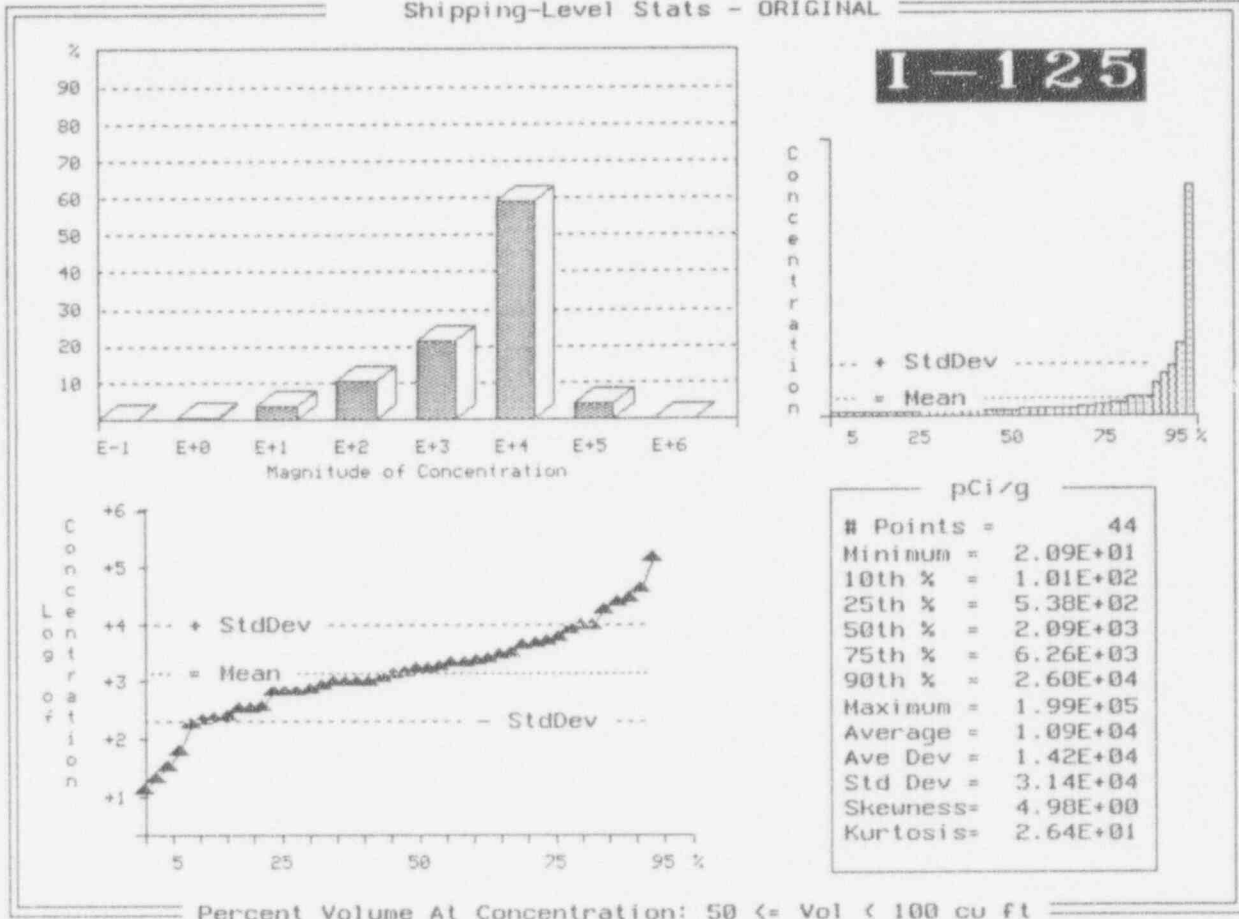


Exhibit F-32 (Continued)

Shipping-Level Stats - ORIGINAL

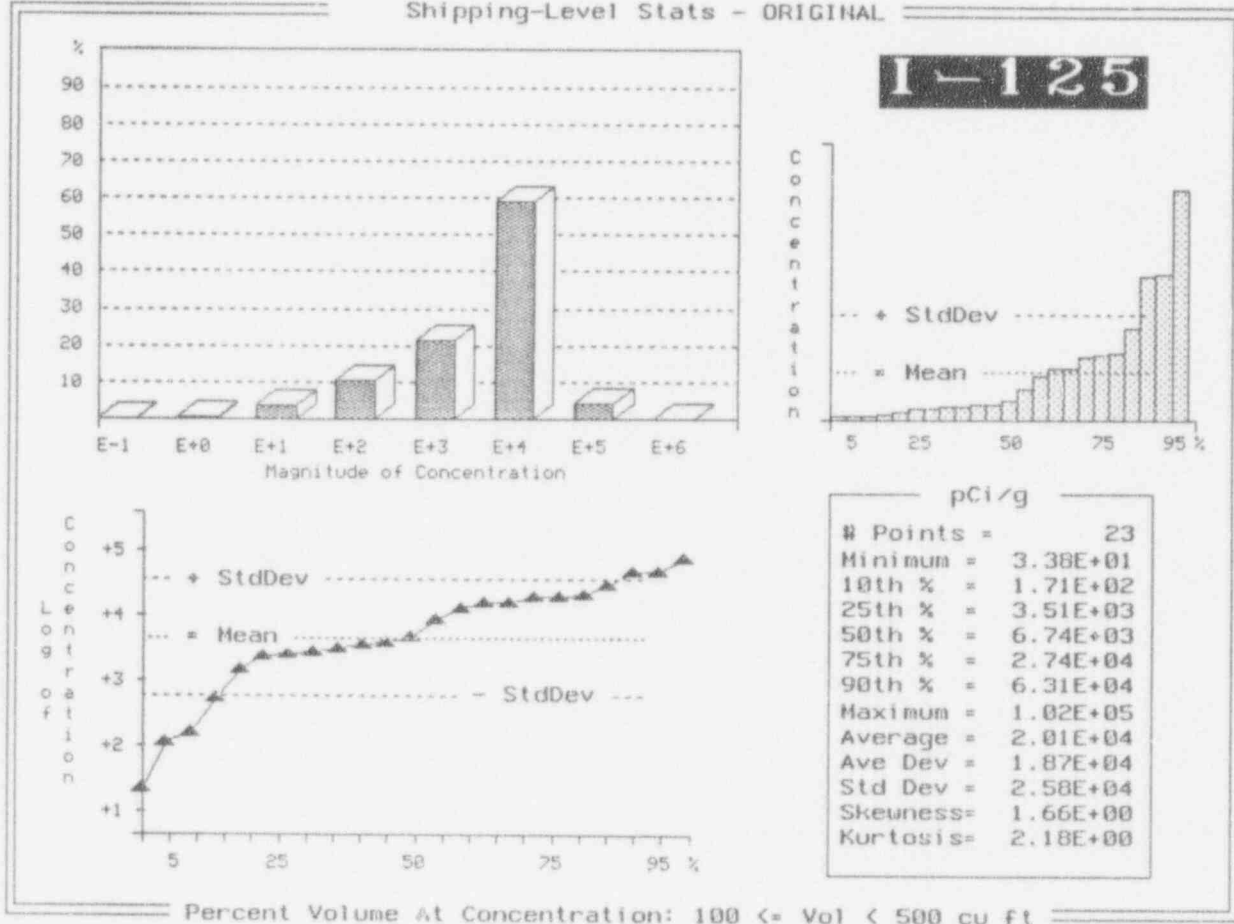


Exhibit F-32 (Continued)

Shipping-Level Stats - ORIGINAL

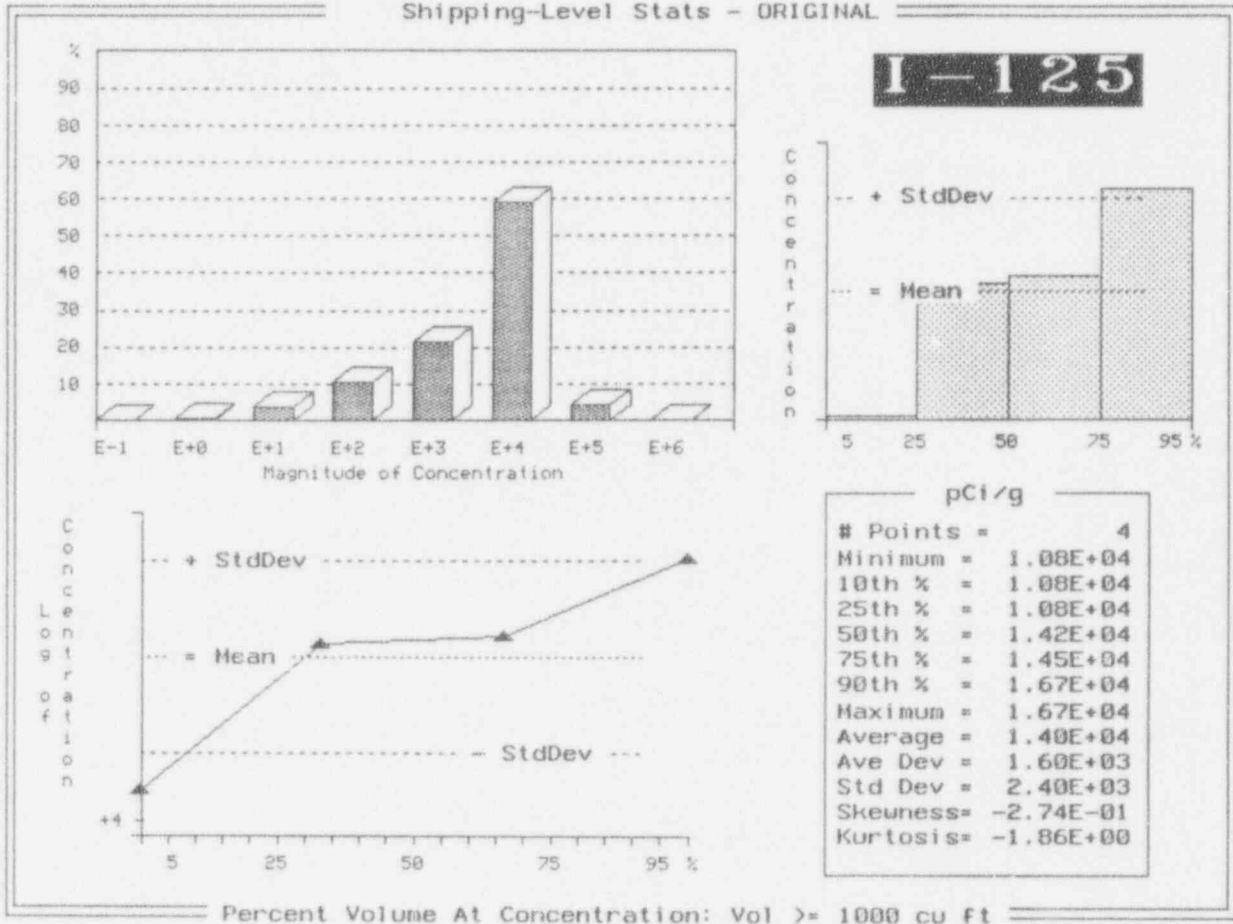


Exhibit F-32 (Continued)

Shipping-Level Stats - ORIGINAL

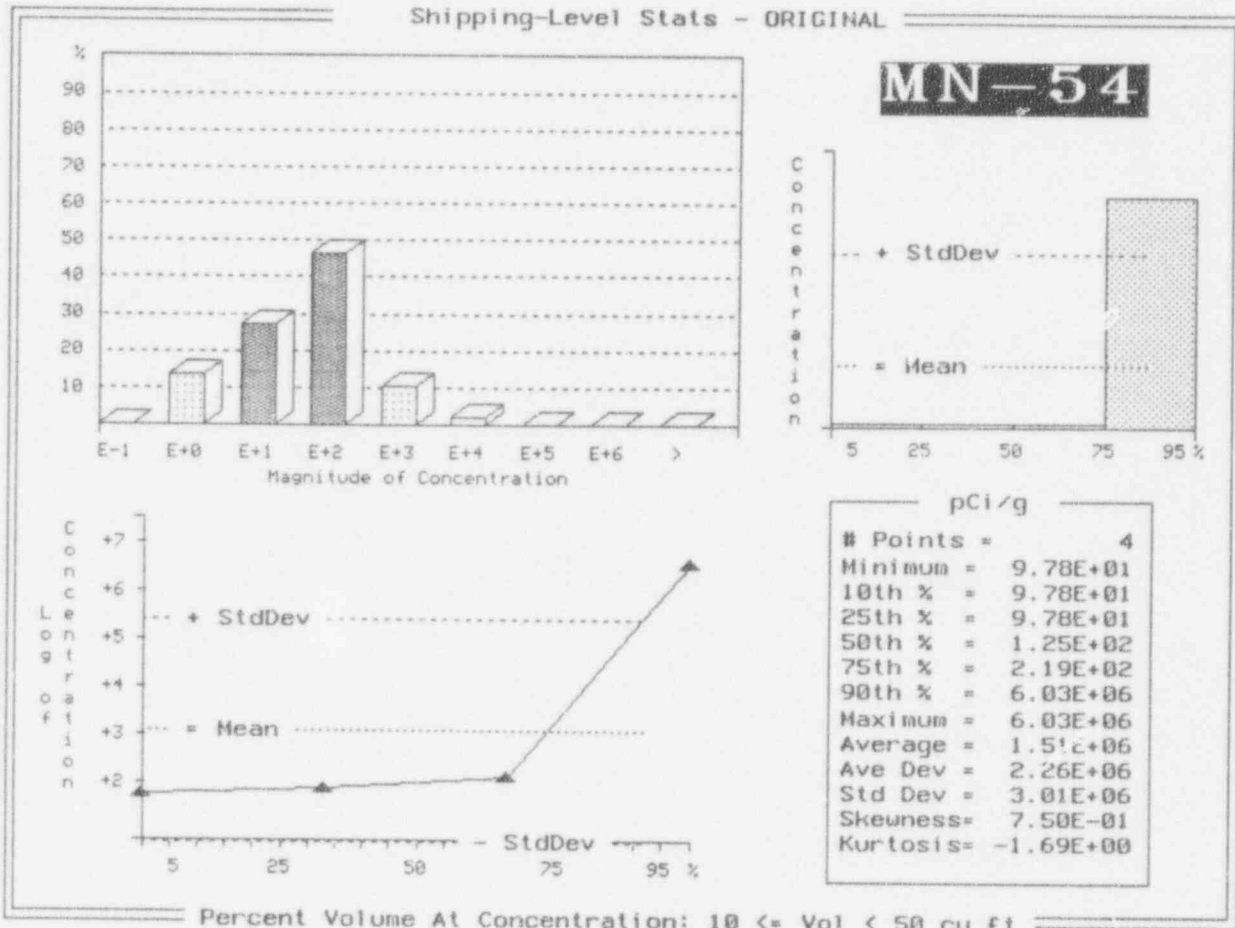


Exhibit F-32 (Continued)

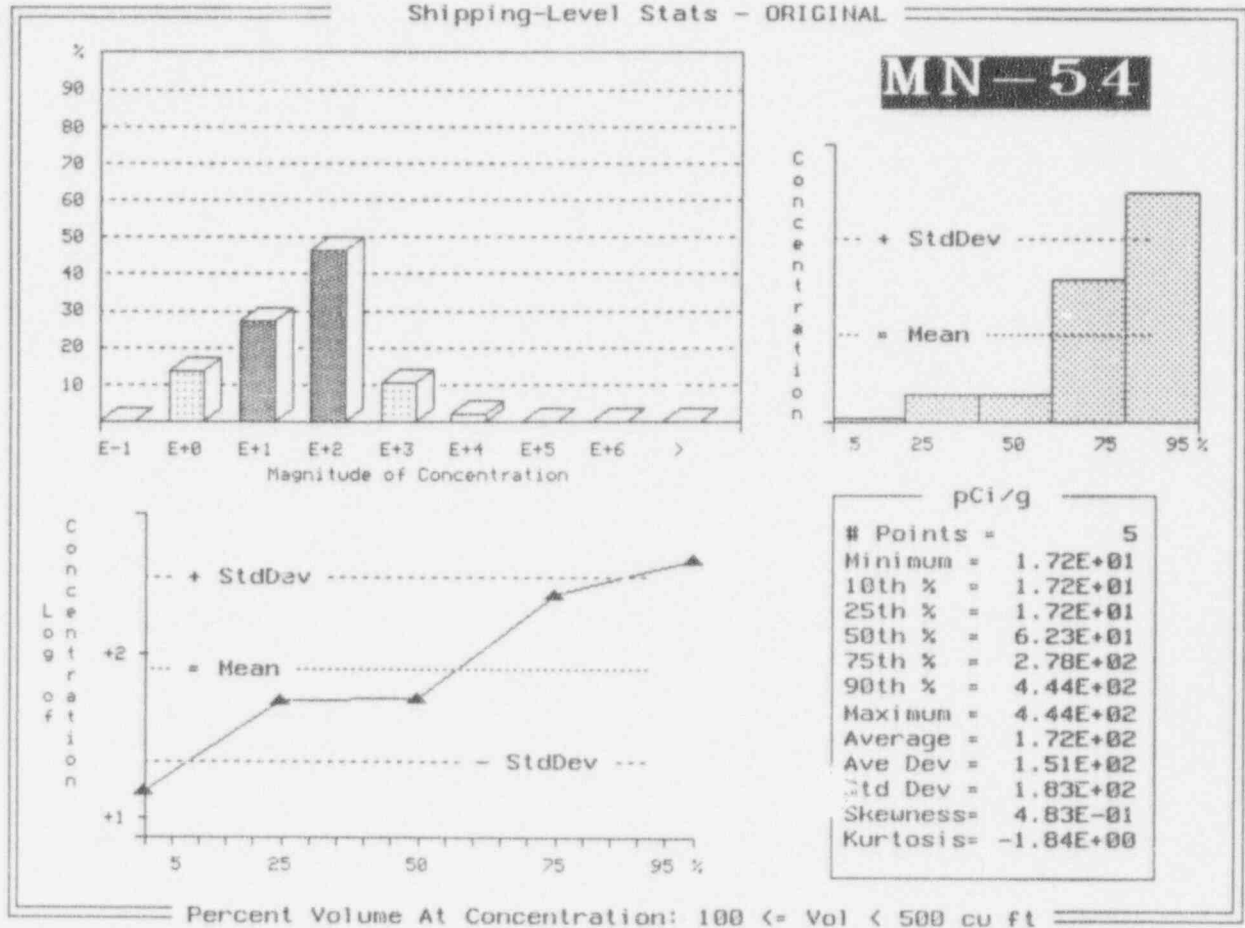


Exhibit F-32 (Continued)

Shipping-Level Stats - ORIGINAL

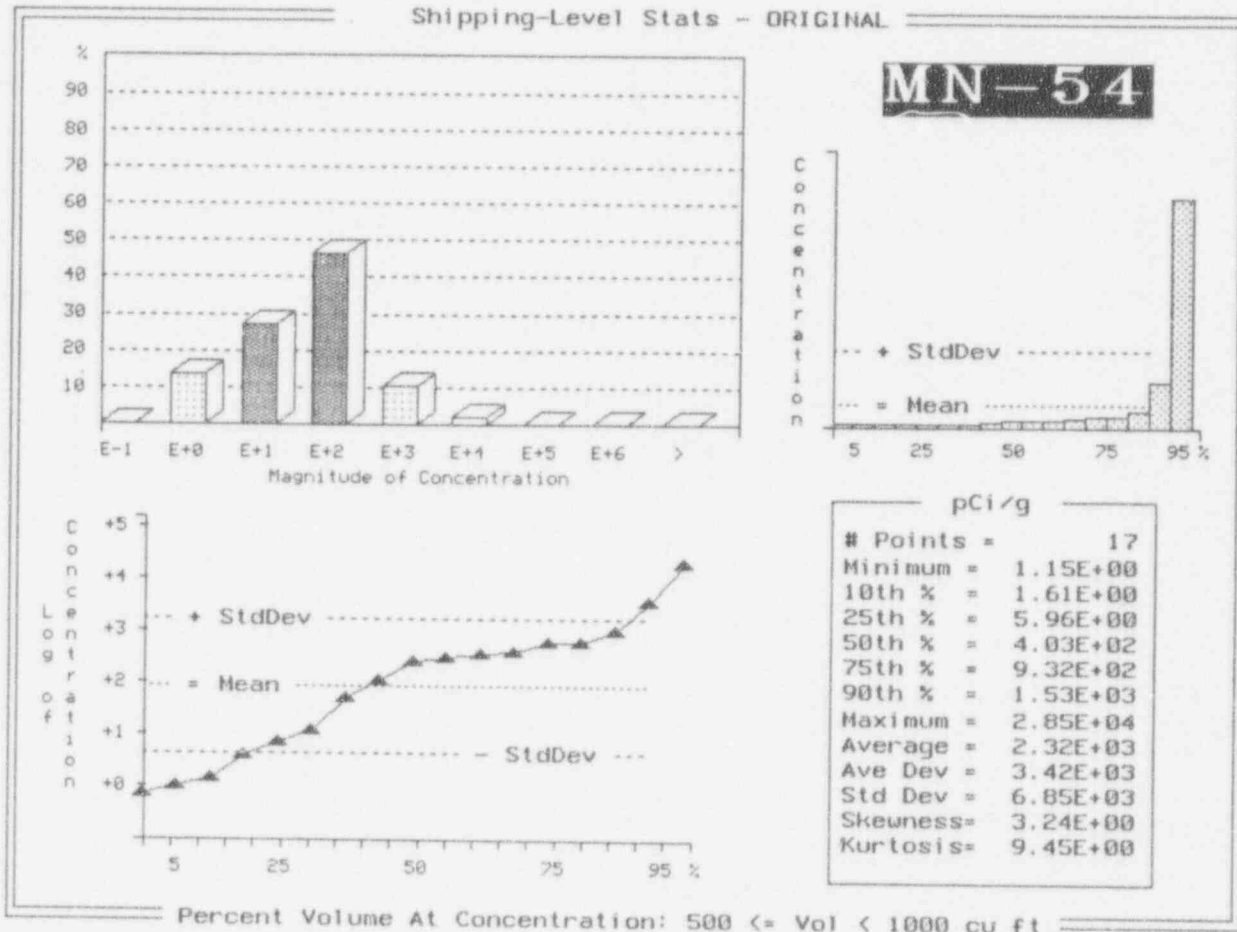


Exhibit F-32 (Continued)

Shipping-Level Stats - ORIGINAL

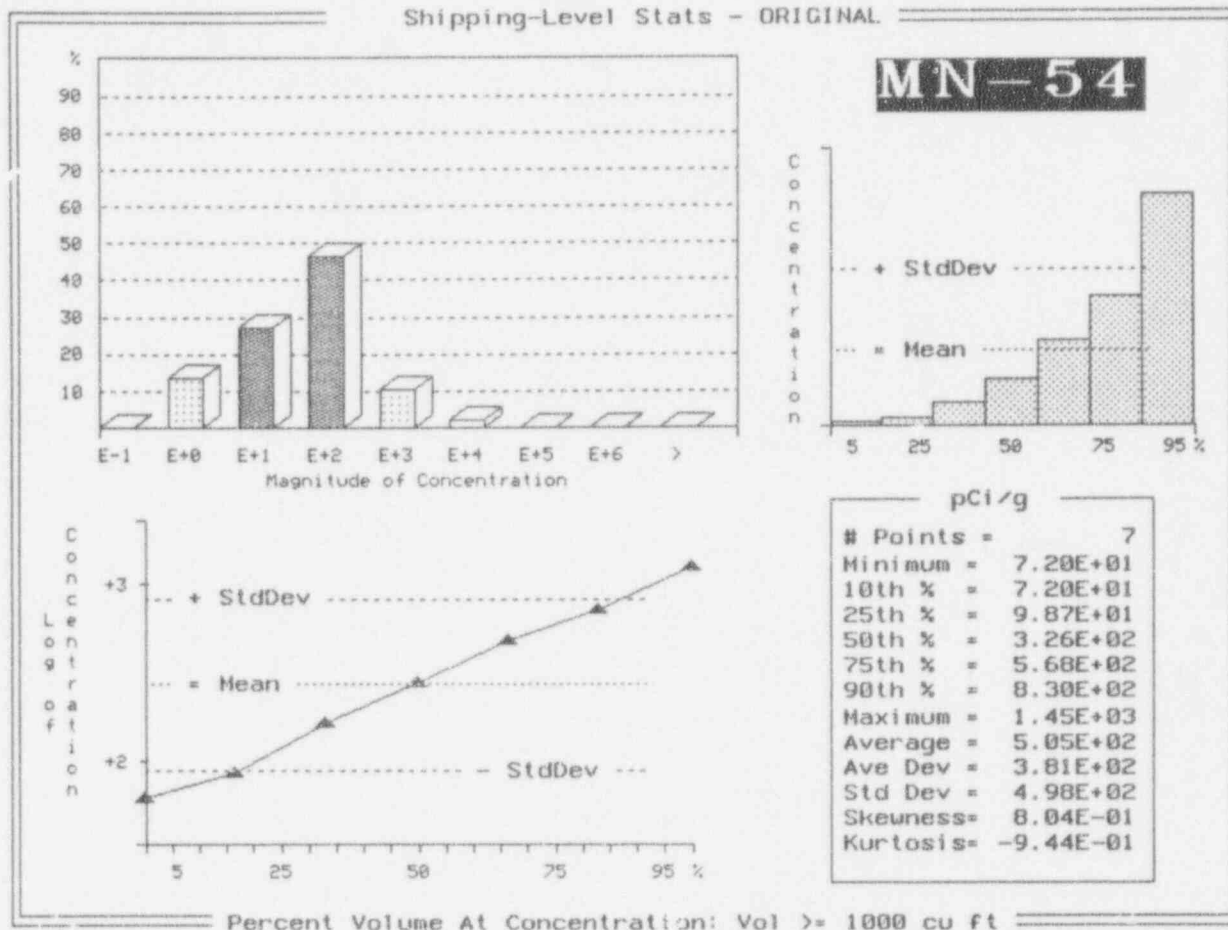


Exhibit F-32 (Continued)

Shipping-Level Stats - ORIGINAL

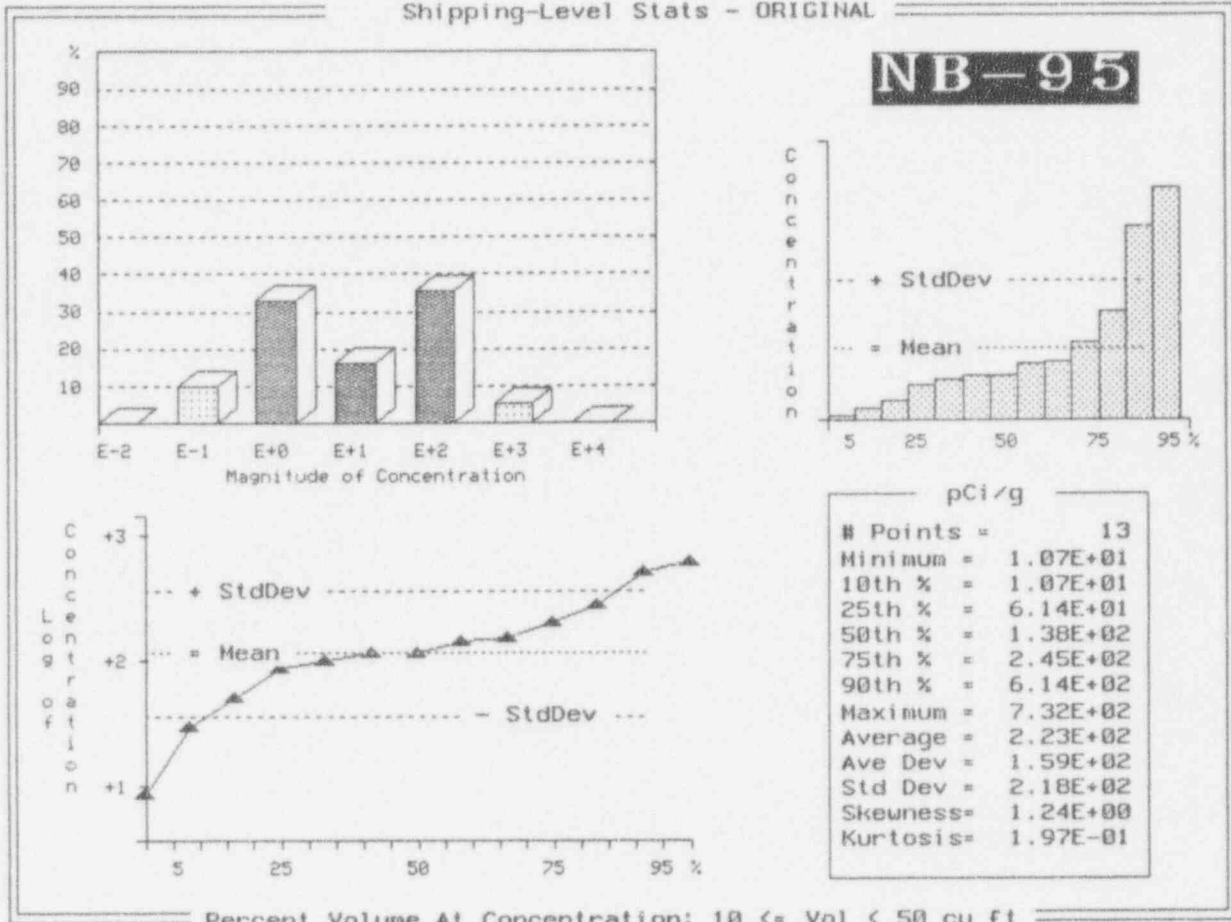


Exhibit F-32 (Continued)

Shipping-Level Stats - ORIGINAL

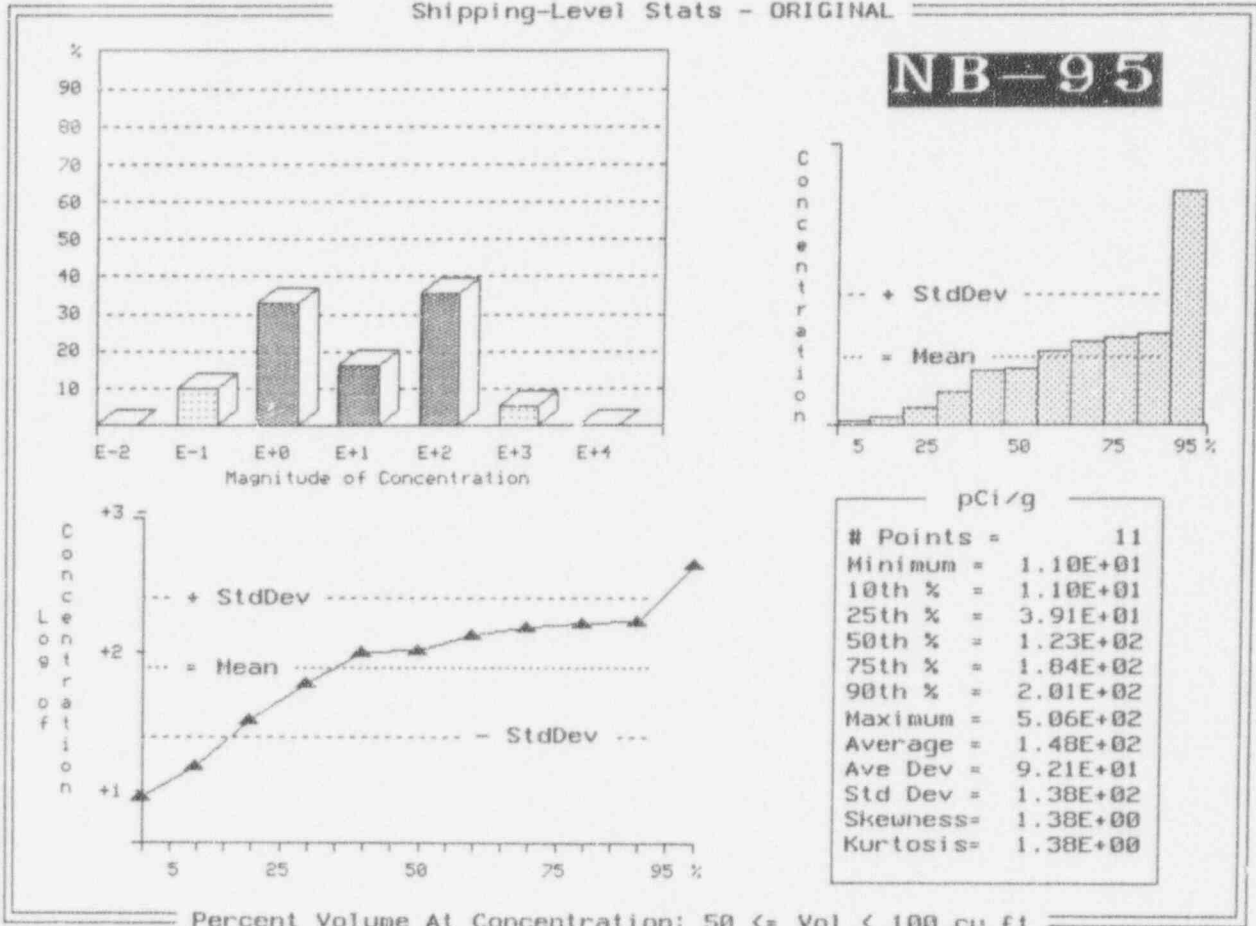


Exhibit F-32 (Continued)

Shipping-Level Stats - ORIGINAL

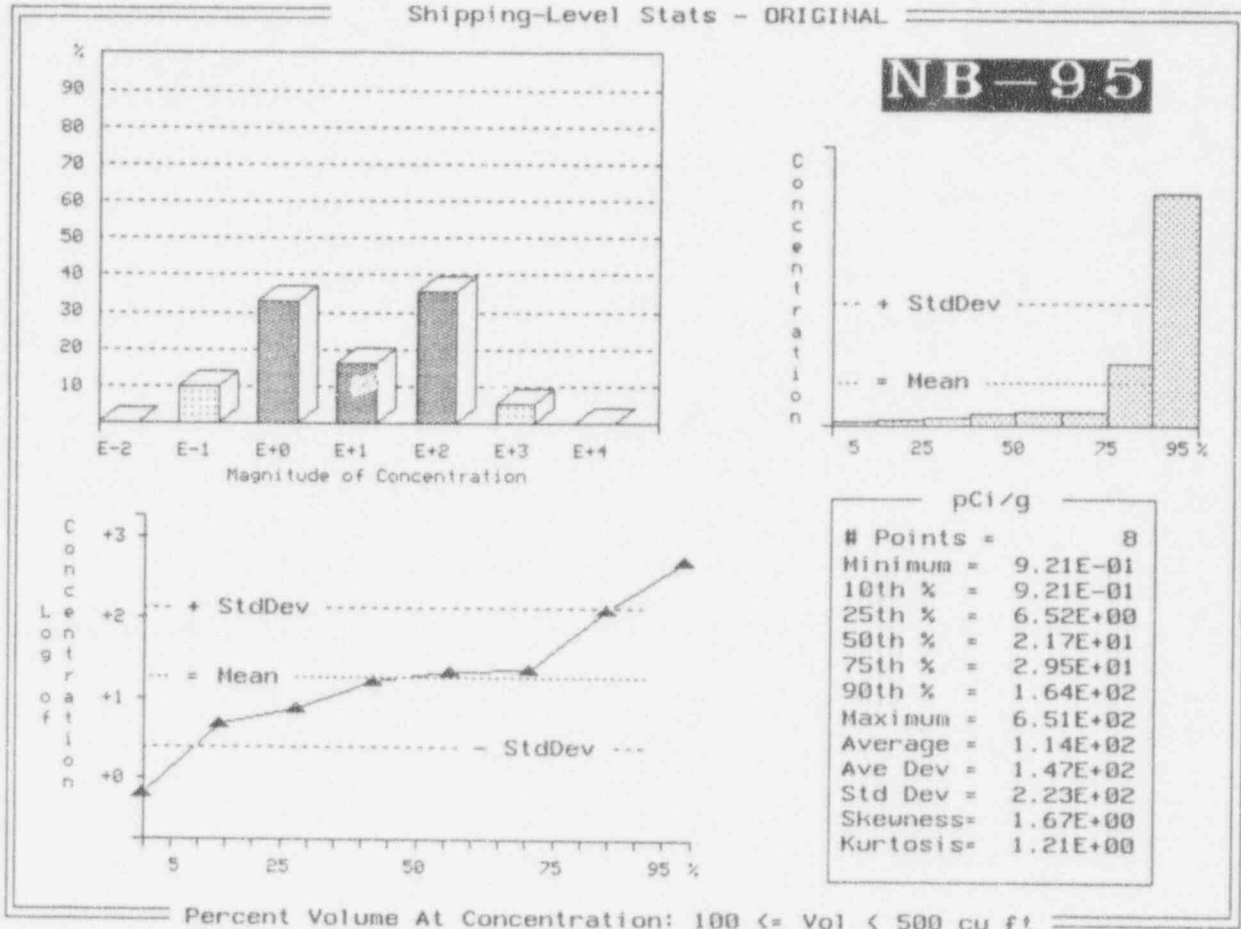


Exhibit F-32 (Continued)

Shipping-Level Stats - ORIGINAL

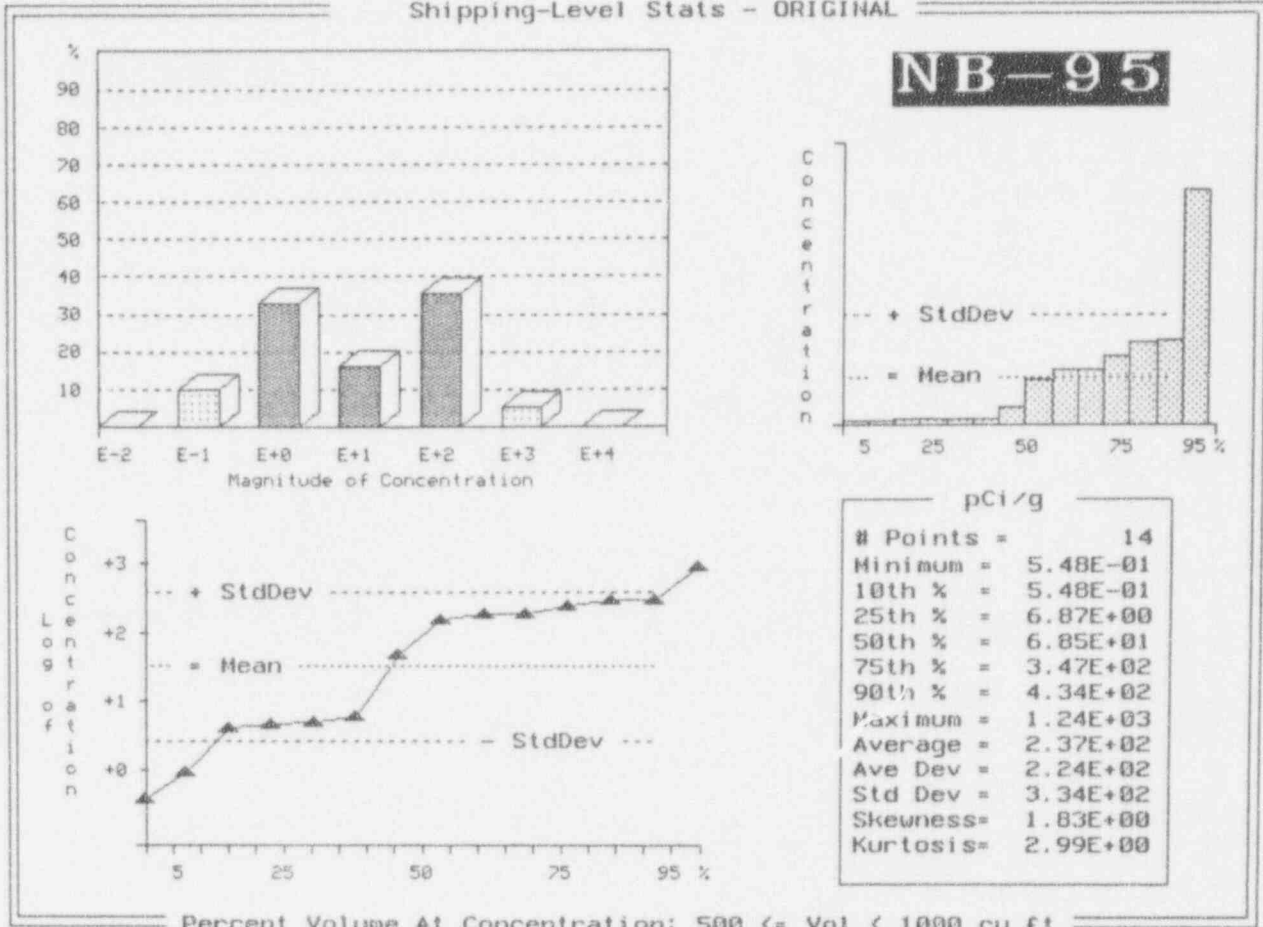
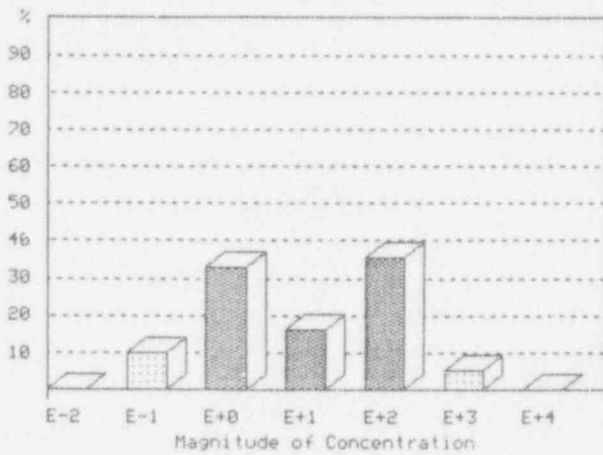
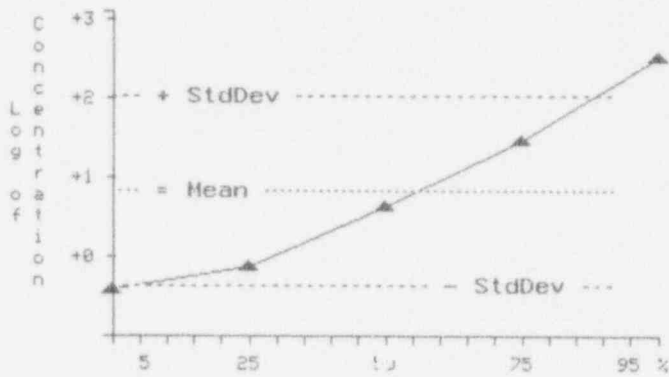
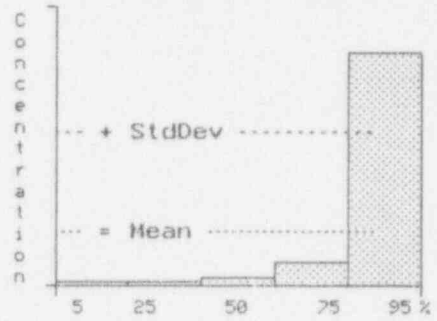


Exhibit F-32 (Continued)

Shipping-Level Stats - ORIGINAL



NB-95



pCi/g	
# Points =	5
Minimum =	5.32E-01
10th % =	5.32E-01
25th % =	5.32E-01
50th % =	6.14E+00
75th % =	4.03E+01
90th % =	4.44E+02
Maximum =	4.44E+02
Average =	9.84E+01
Ave Dev =	1.38E+02
Std Dev =	1.94E+02
Skewness =	1.05E+00
Kurtosis =	-9.44E-01

Percent Volume At Concentration: Vol >= 1000 cu ft

Exhibit F-32 (Continued)

Shipping-Level Stats - ORIGINAL

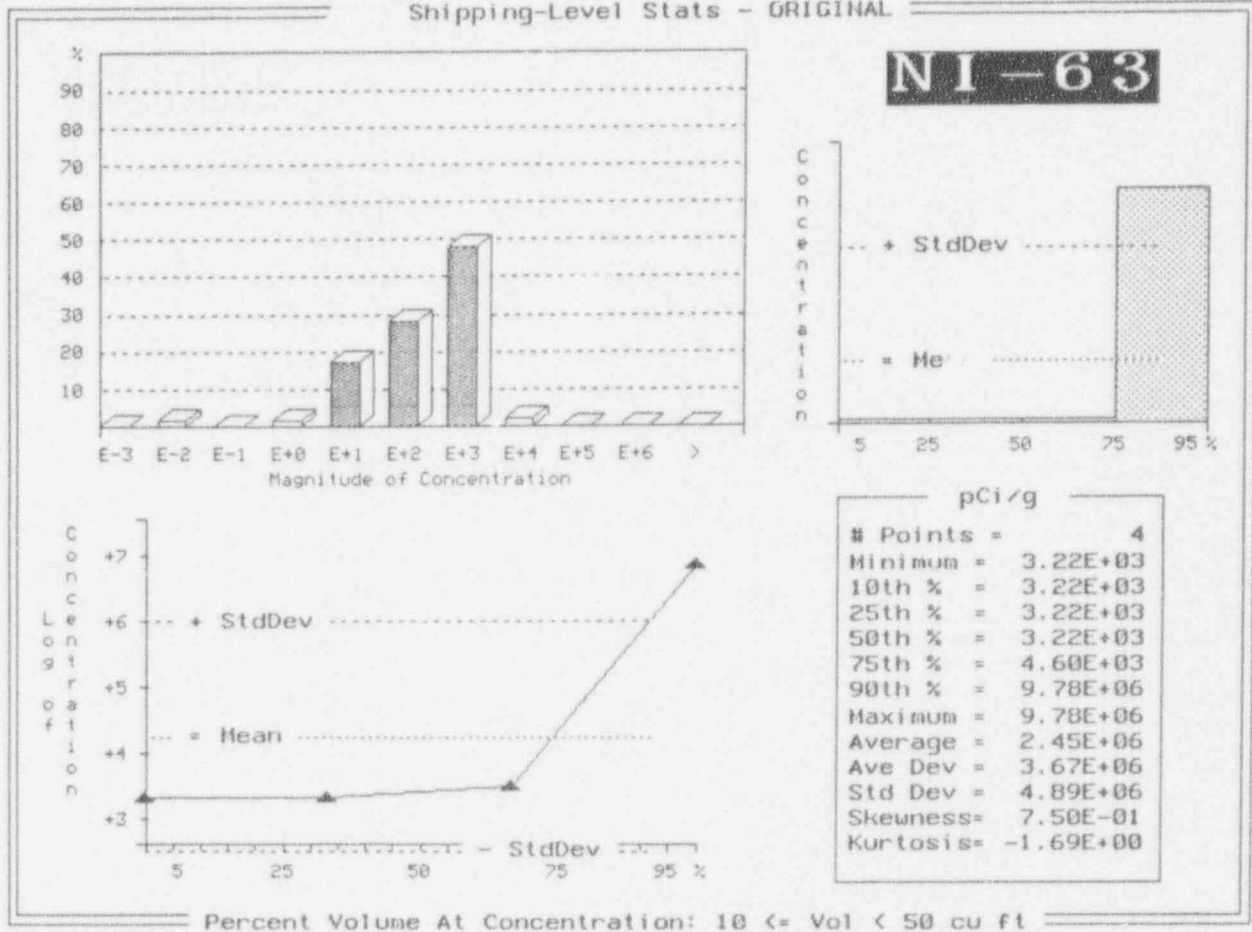


Exhibit F-32 (Continued)

Shipping-Level Stats - ORIGINAL

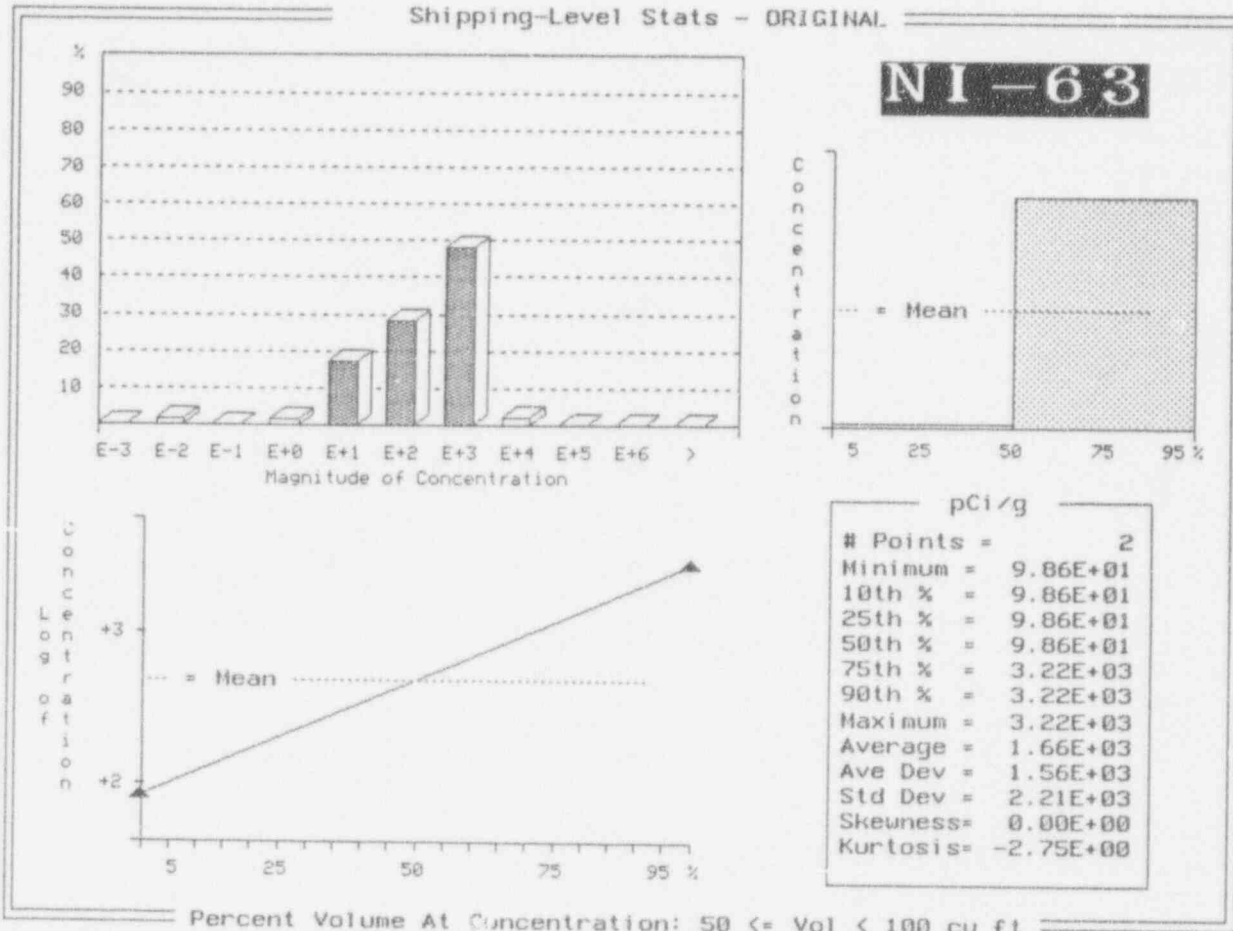


Exhibit F-32 (Continued)

Shipping-Level Stats - ORIGINAL

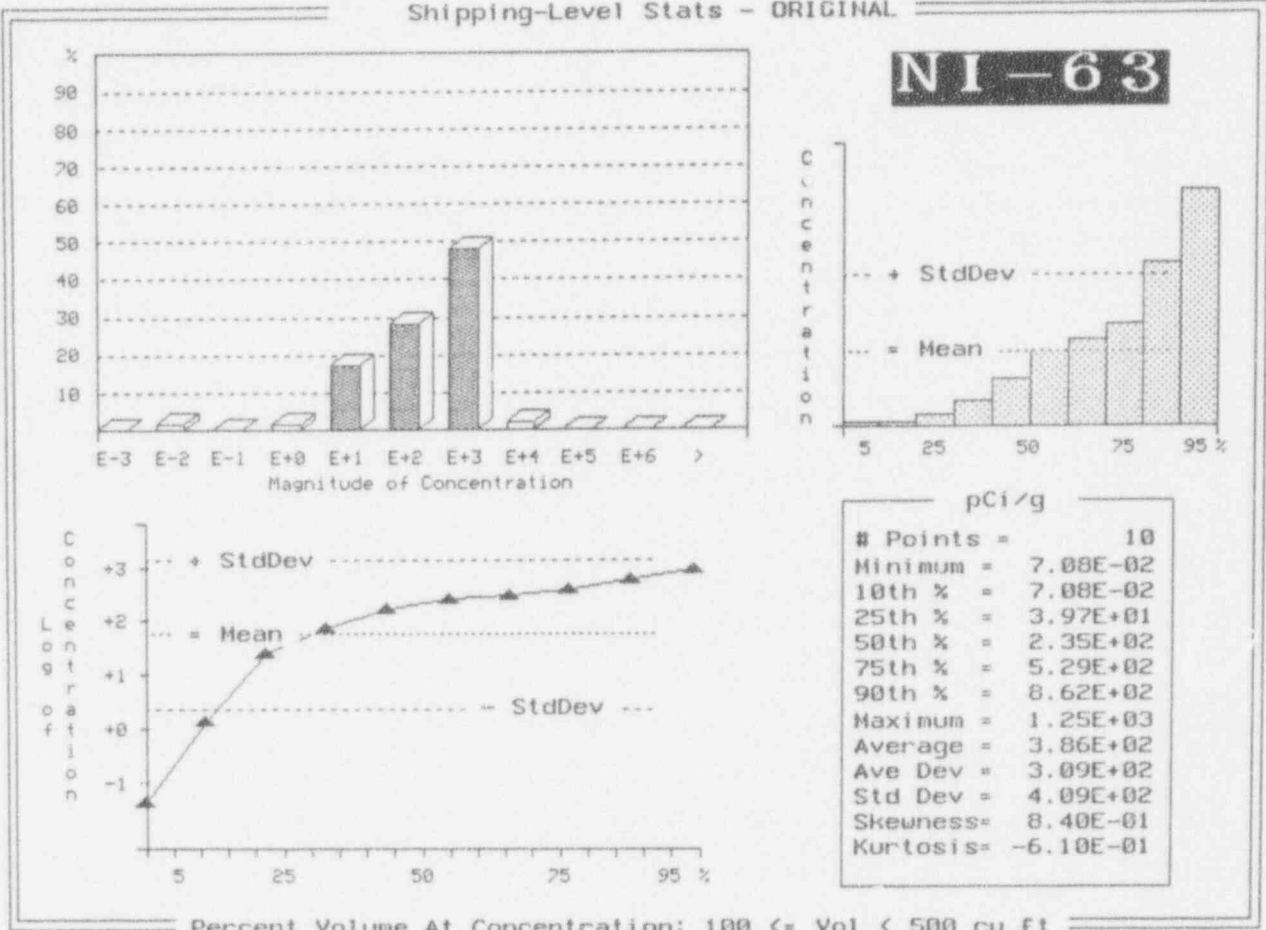


Exhibit F-32 (Continued)

Shipping-Level Stats - ORIGINAL

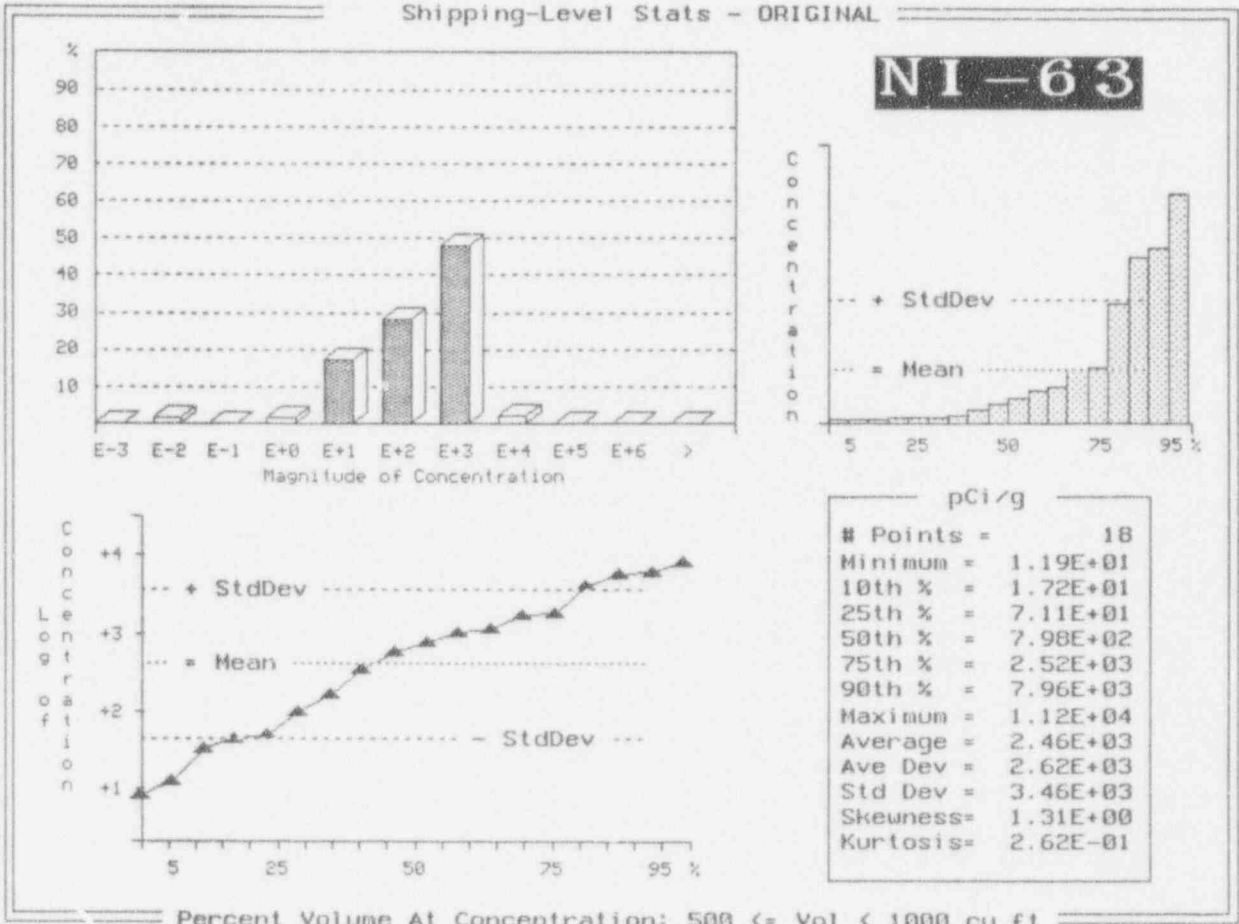


Exhibit F-32 (Continued)

Shipping-Level Stats - ORIGINAL

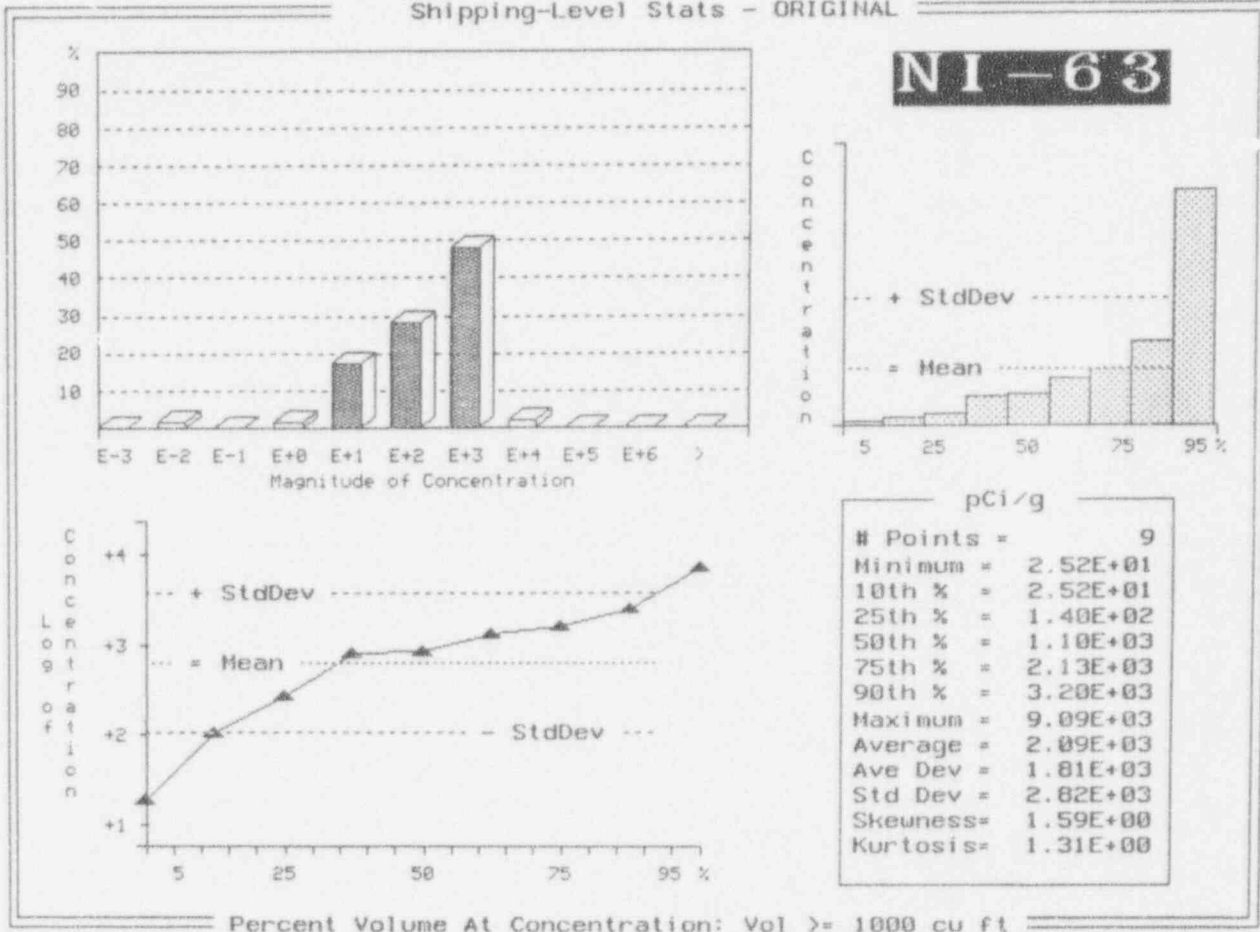
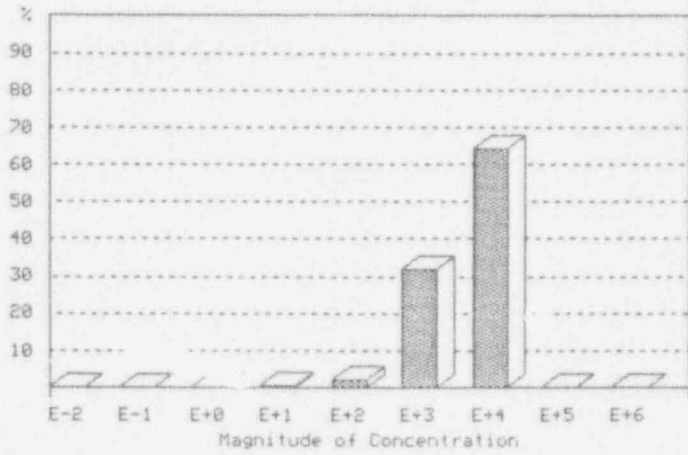
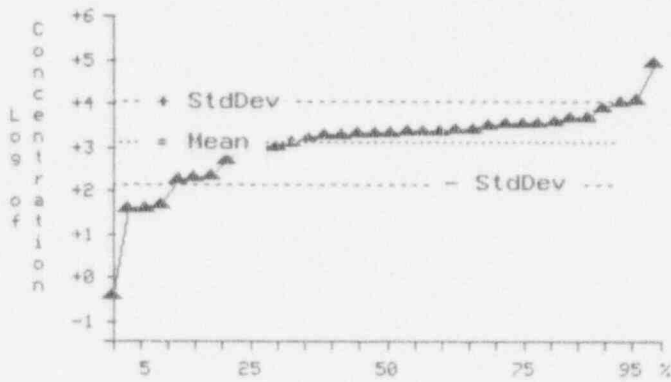
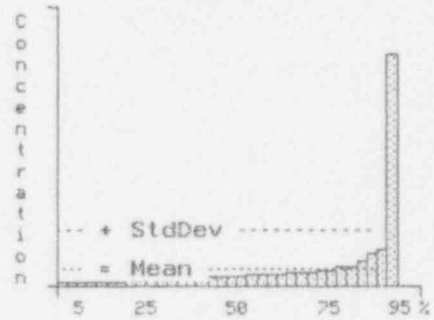


Exhibit F-32 (Continued)

Shipping-Level Stats - ORIGINAL



P-32



pCi/g	
# Points =	34
Minimum =	7.67E-01
10th % =	7.67E+01
25th % =	1.61E+03
50th % =	3.88E+03
75th % =	6.52E+03
90th % =	1.38E+04
Maximum =	1.48E+05
Average =	9.04E+03
Ave Dev =	9.76E+03
Std Dev =	2.51E+04
Skeuness =	5.02E+00
Kurtosis =	2.49E+01

Percent Volume At Concentration: 10 <= Vol < 50 cu ft

Exhibit F-32 (Continued)

Shipping-Level Stats - ORIGINAL

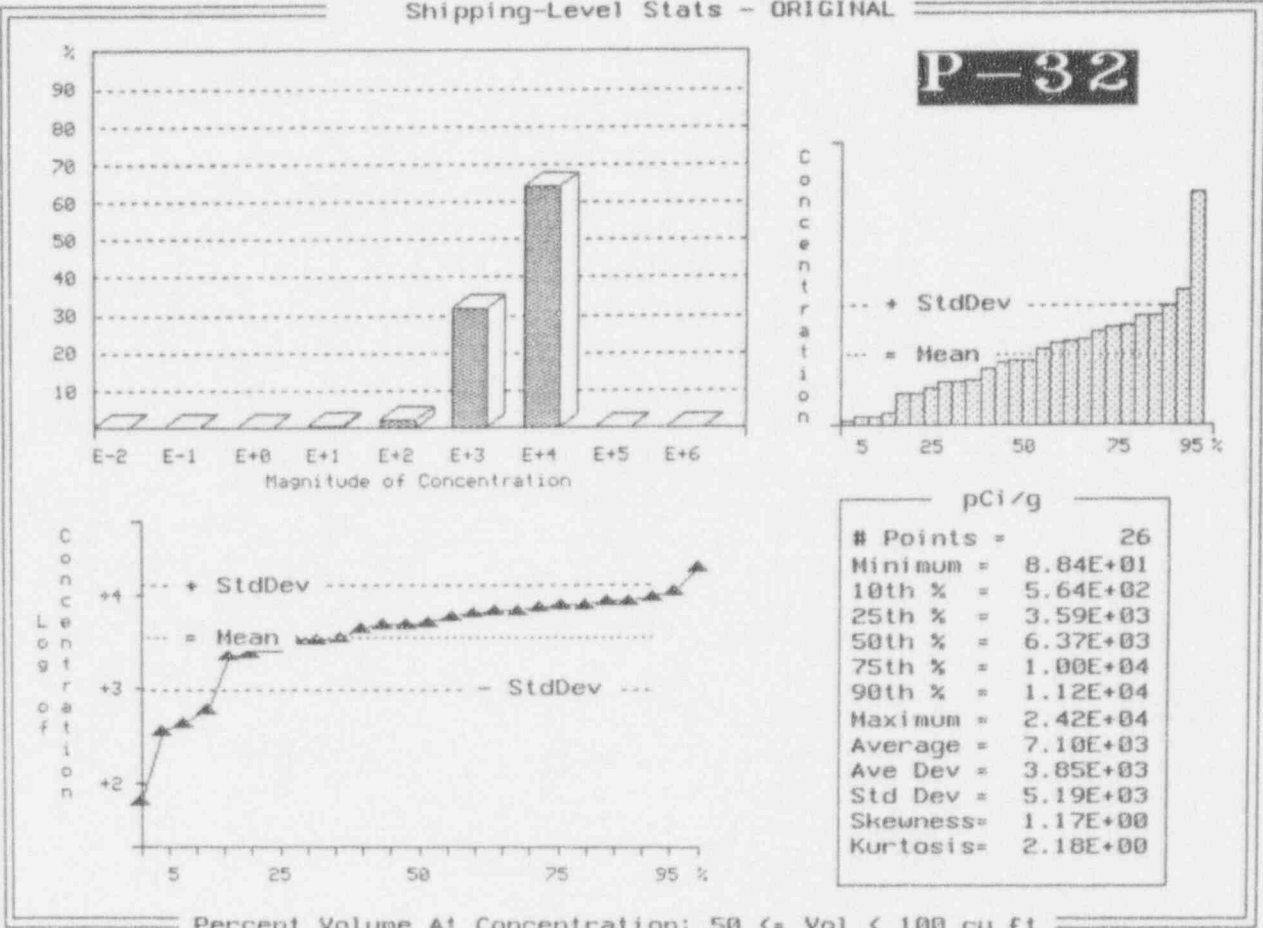
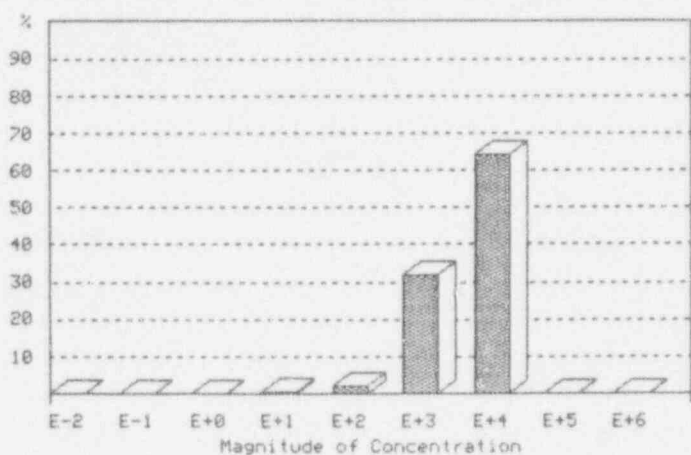
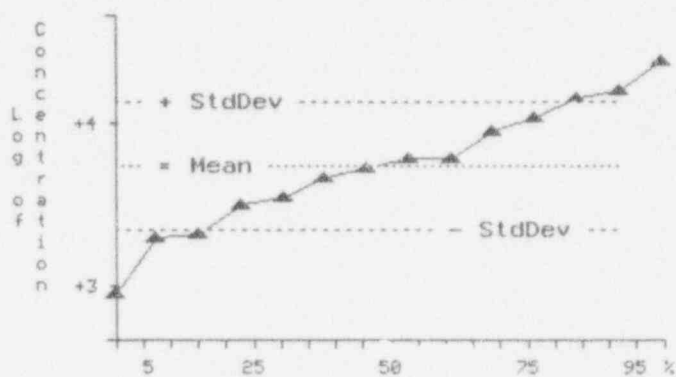
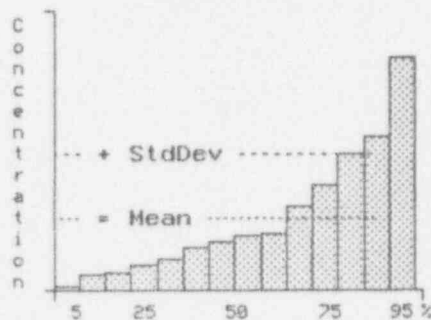


Exhibit F-32 (Continued)

Shipping-Level Stats - ORIGINAL



P-32



pCi/g	
# Points =	14
Minimum =	1.06E+03
10th % =	1.06E+03
25th % =	3.68E+03
50th % =	6.37E+03
75th % =	1.29E+04
90th % =	1.87E+04
Maximum =	2.80E+04
Average =	9.03E+03
Ave Dev =	5.92E+03
Std Dev =	7.64E+03
Skewness =	1.09E+00
Kurtosis =	1.81E-01

Percent Volume At Concentration: 100 <= Vol < 500 cu ft

Exhibit F-32 (Continued)

Shipping-Level Stats - ORIGINAL

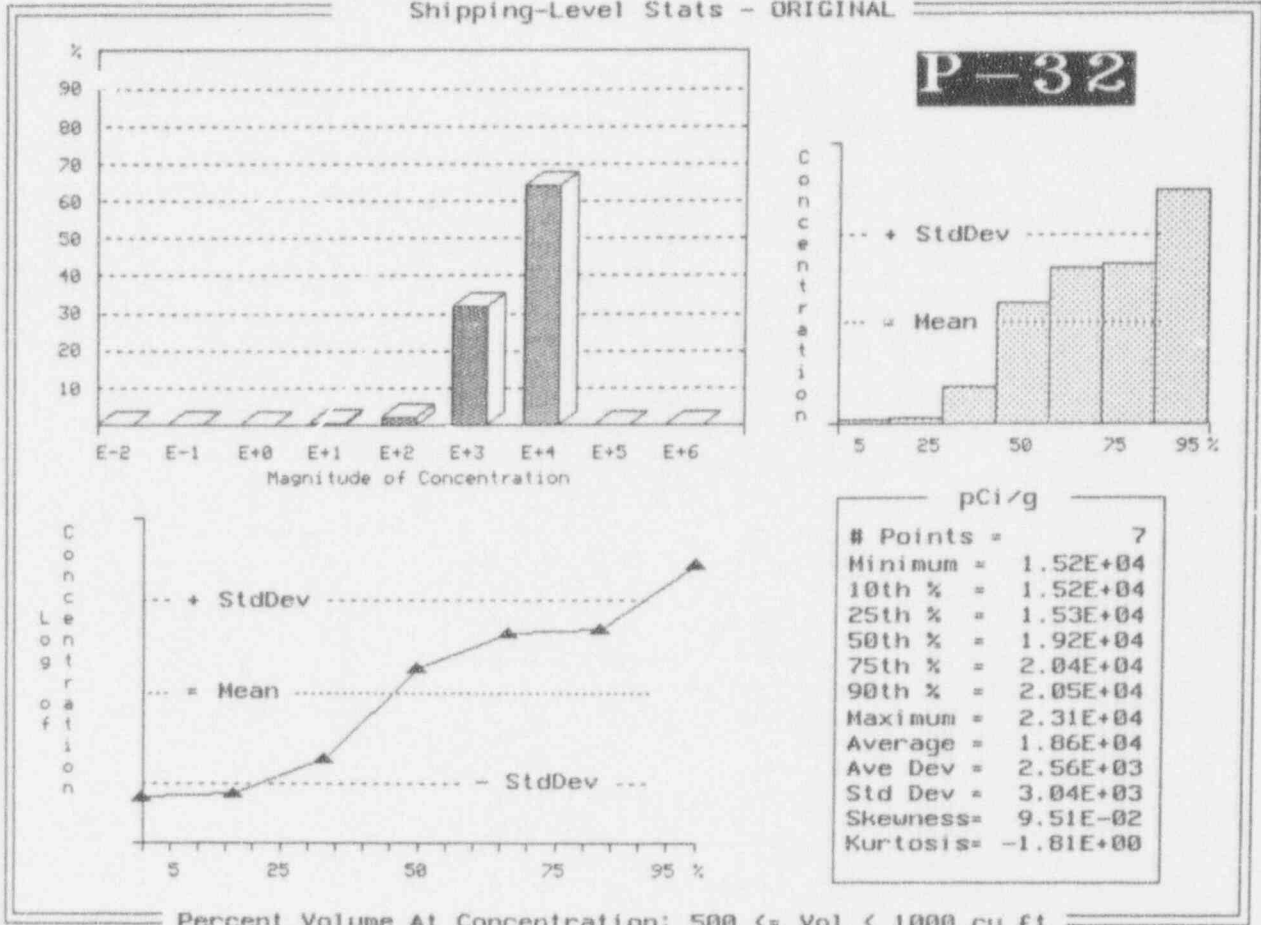


Exhibit F-32 (Continued)

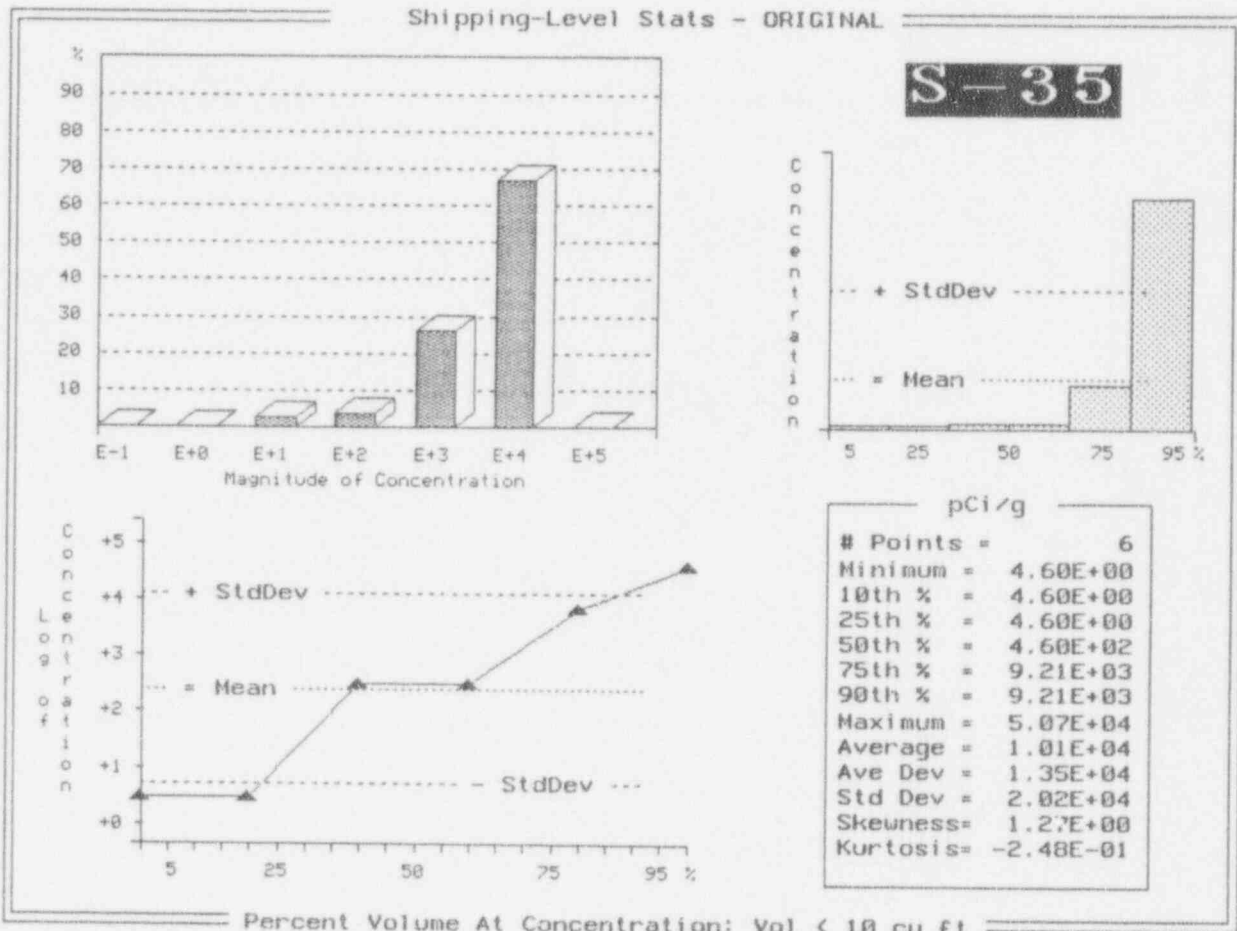


Exhibit F-32 (Continued)

Shipping-Level Stats - ORIGINAL

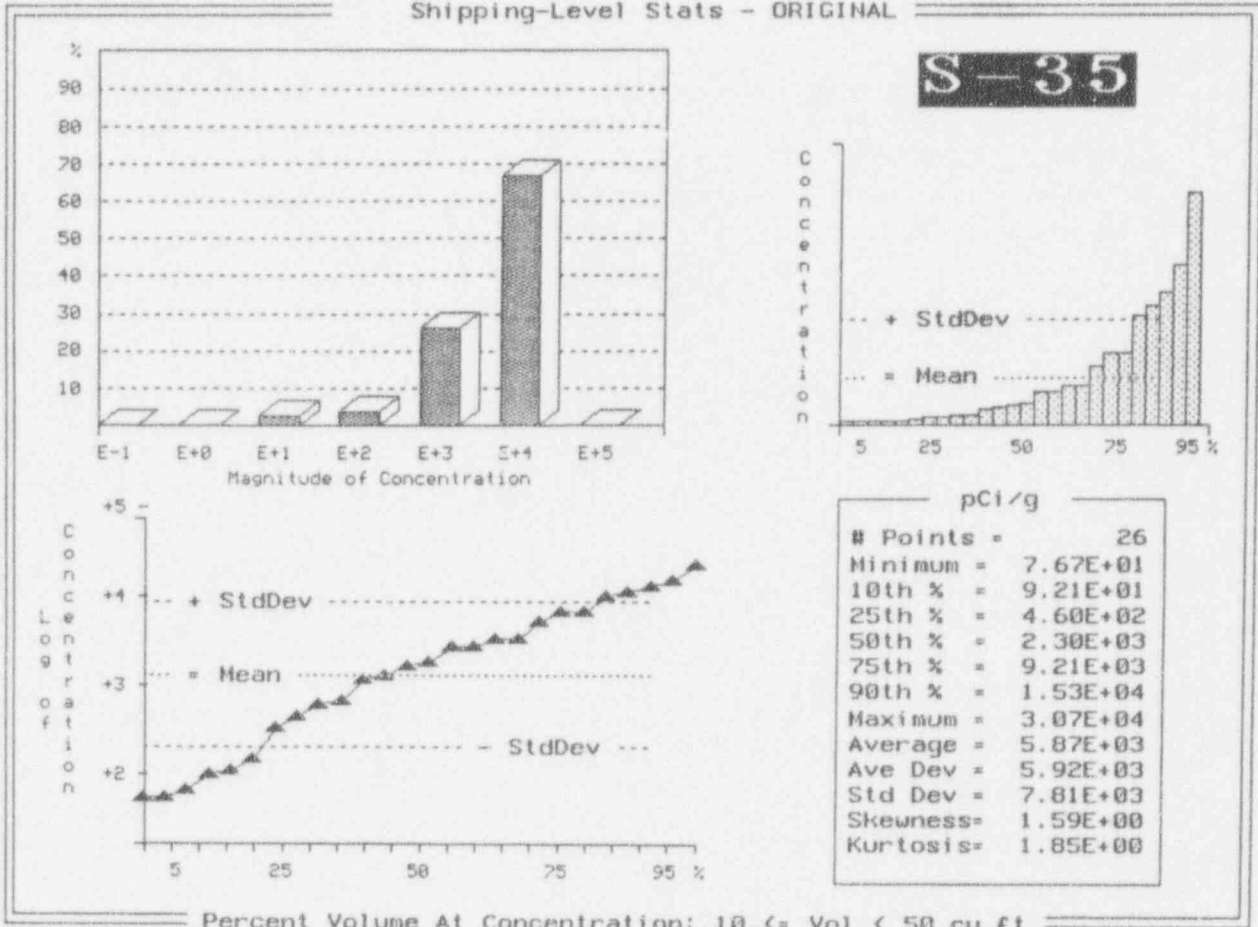


Exhibit F-32 (Continued)

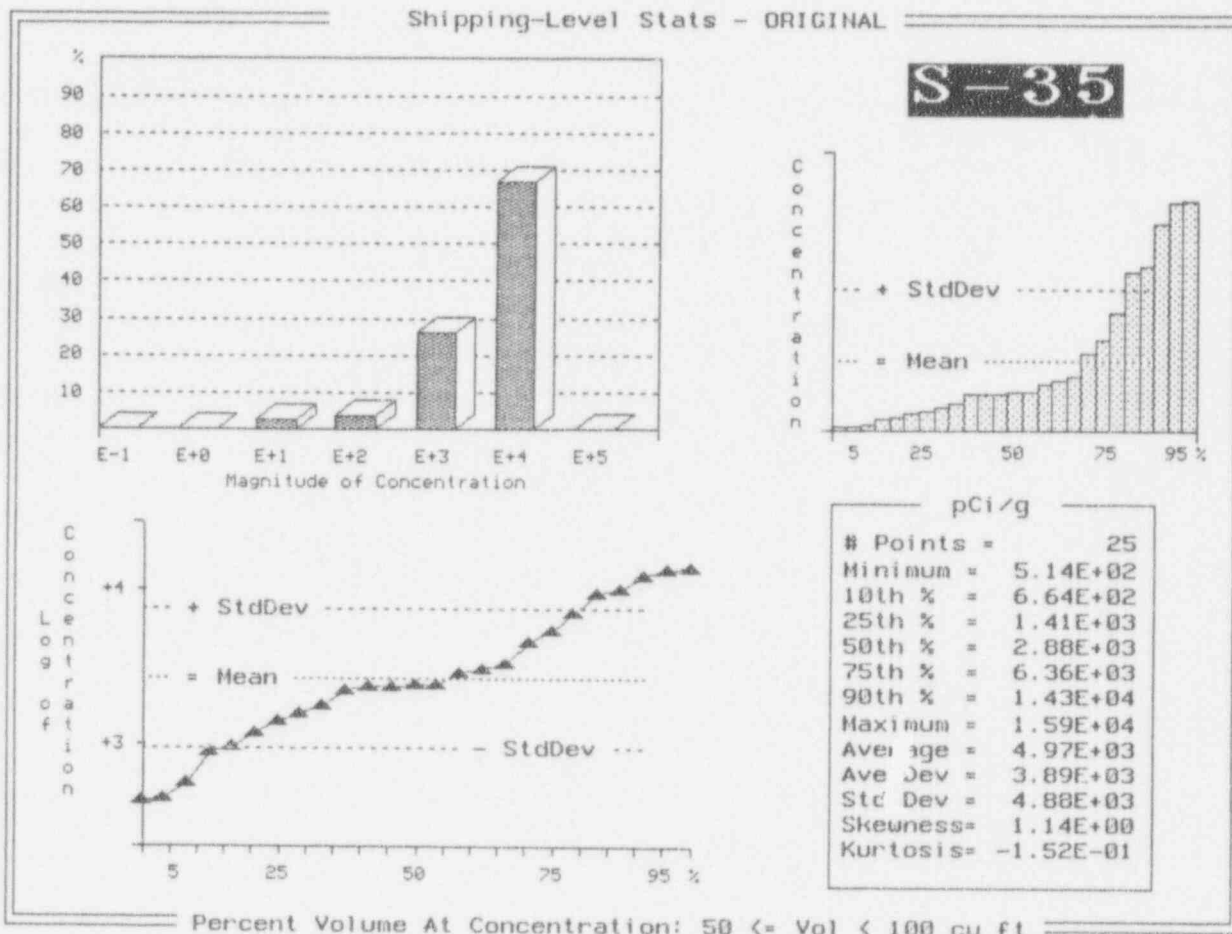


Exhibit F-32 (Continued)

Shipping-Level Stats - ORIGINAL

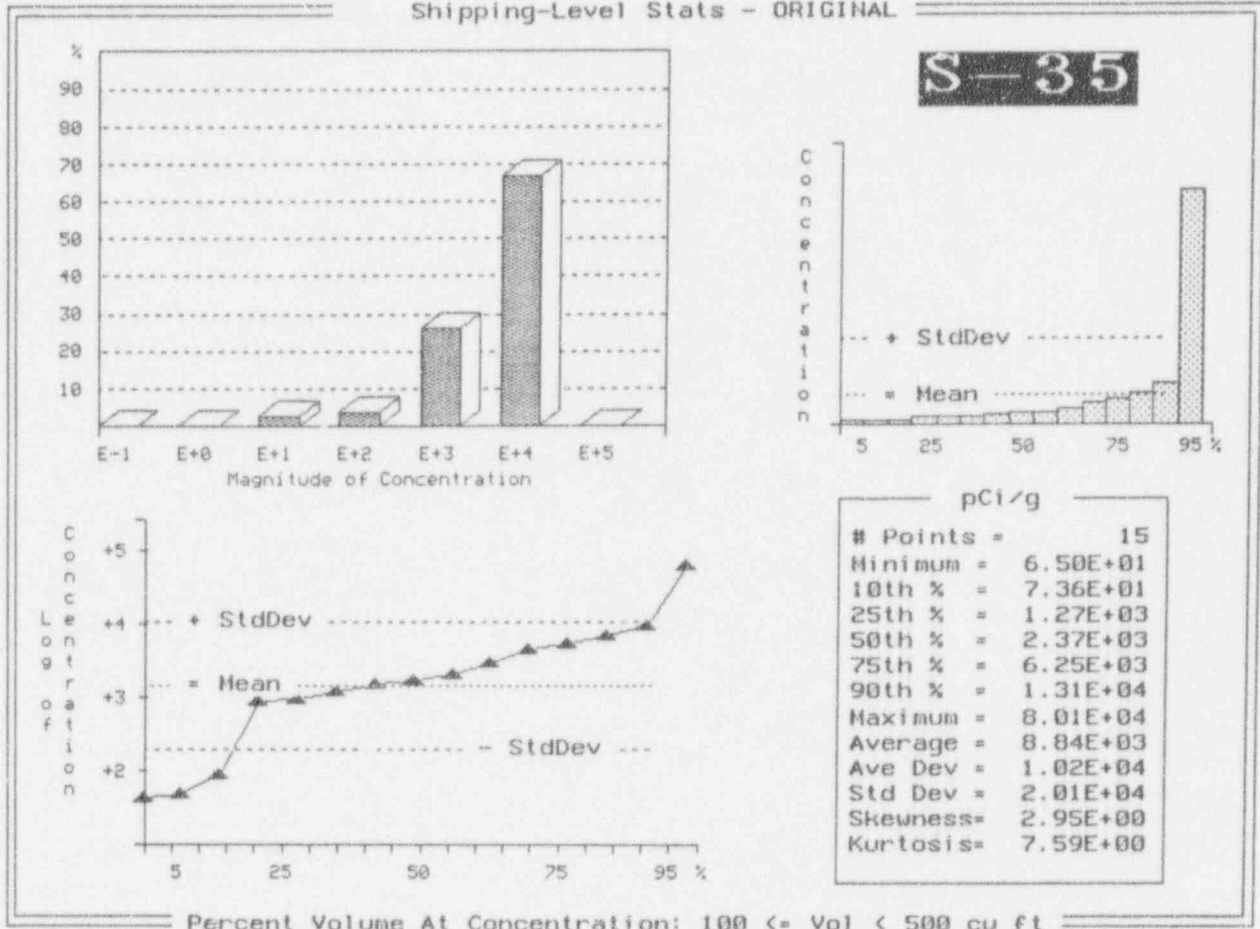


Exhibit F-32 (Continued)

Shipping-Level Stats - ORIGINAL

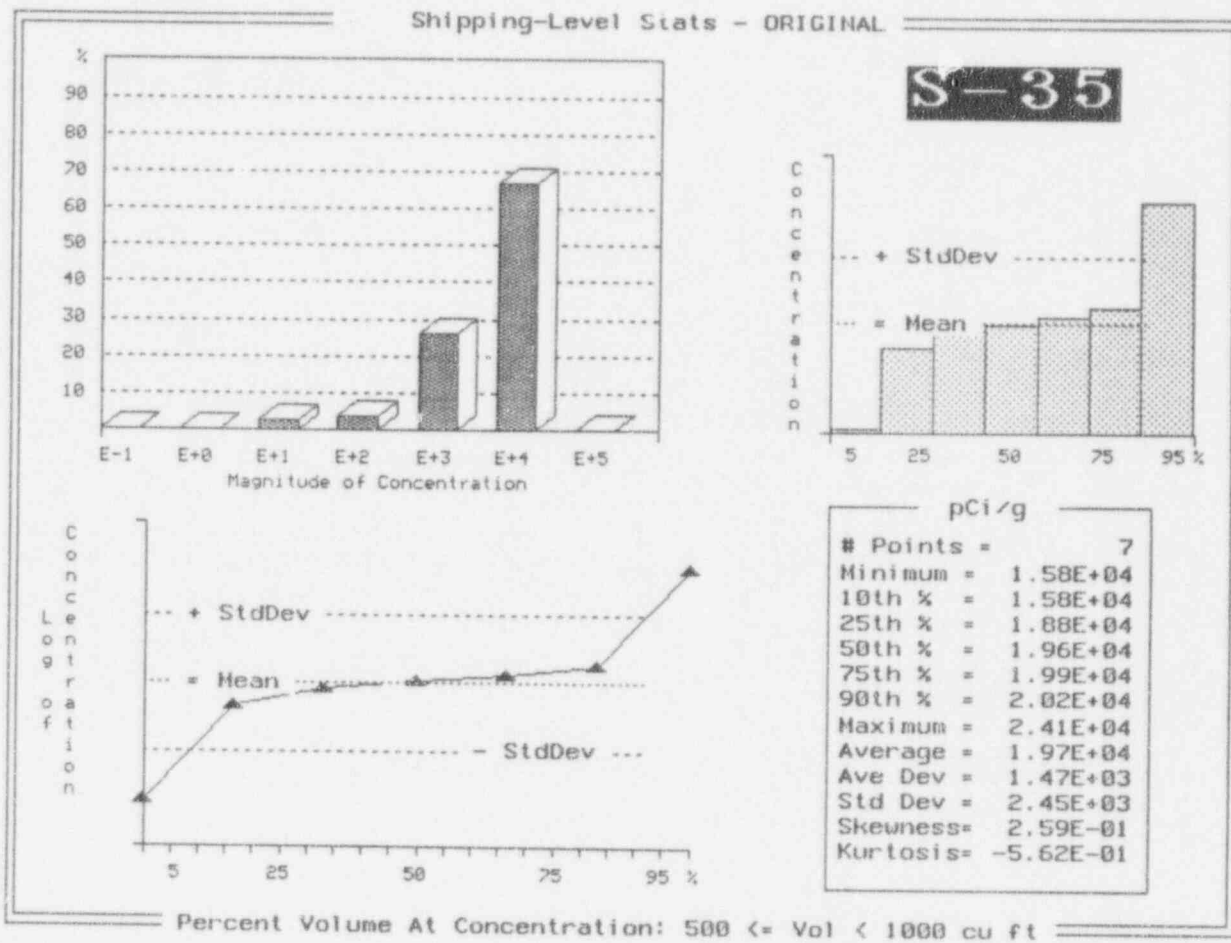


Exhibit F-32 (Continued)

Shipping-Level Stats - ORIGINAL

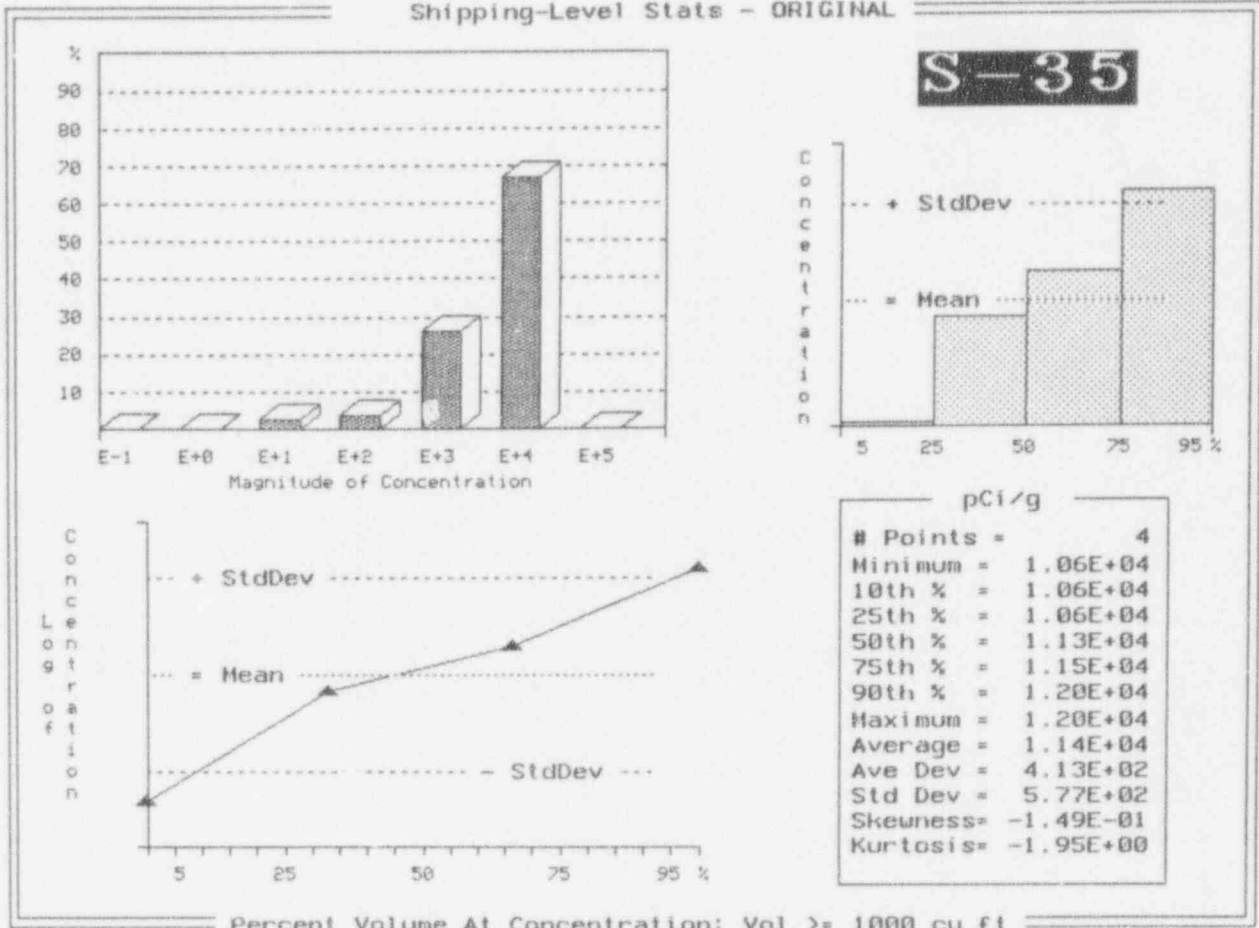
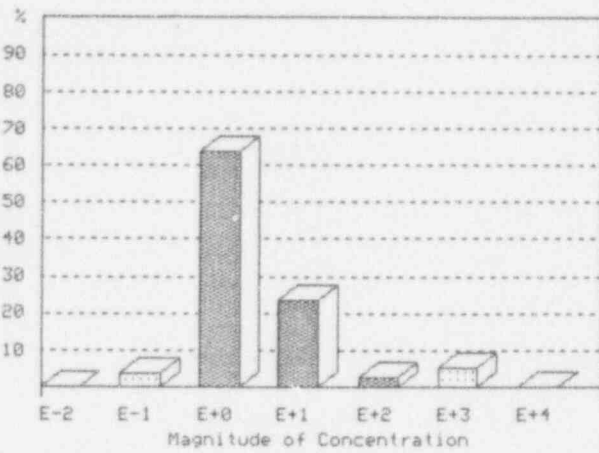
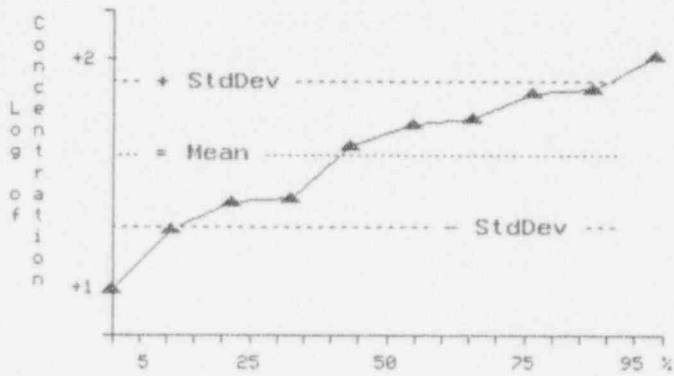
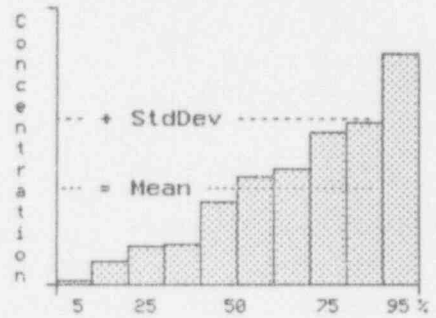


Exhibit F-32 (Continued)

Shipping-Level Stats - ORIGINAL



SC-46

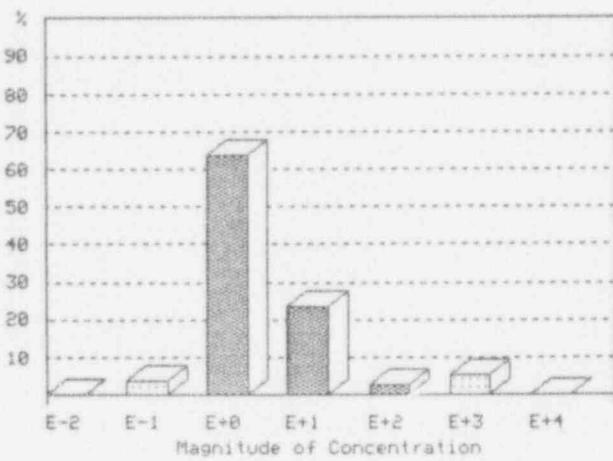


pci/g	
# Points =	10
Minimum =	1.10E+01
10th % =	1.10E+01
25th % =	2.63E+01
50th % =	4.60E+01
75th % =	7.79E+01
90th % =	8.22E+01
Maximum =	1.13E+02
Average =	5.23E+01
Ave Dev =	2.61E+01
Std Dev =	3.23E+01
Skewness =	3.88E-01
Kurtosis =	-1.21E+00

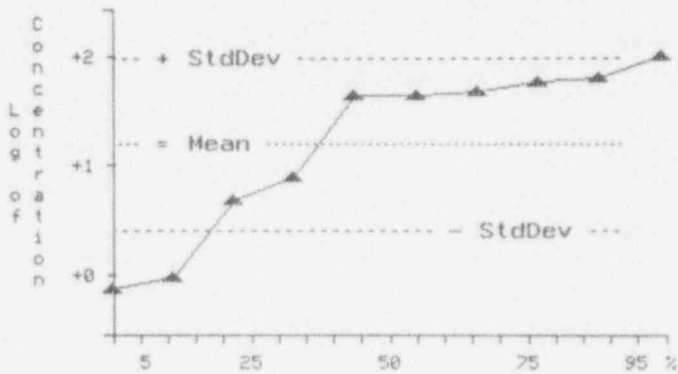
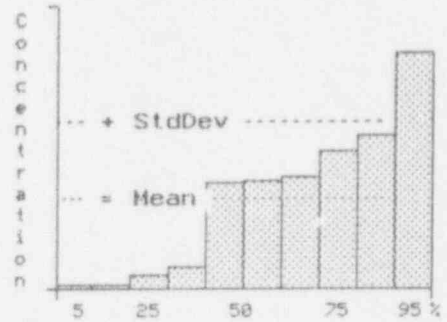
Percent Volume At Concentration: 50 <= Vol < 100 cu ft

Exhibit F-32 (Continued)

Shipping-Level Stats - ORIGINAL



SC-46



pCi/g	
# Points =	10
Minimum =	9.58E-01
10th % =	9.58E-01
25th % =	6.14E+00
50th % =	5.59E+01
75th % =	7.36E+01
90th % =	8.18E+01
Maximum =	1.26E+02
Average =	4.73E+01
Ave Dev =	3.41E+01
Std Dev =	4.18E+01
Skewness =	3.13E-01
Kurtosis =	-1.24E+00

Percent Volume At Concentration: 100 <= Vol < 500 cu ft

Exhibit F-32 (Continued)

Shipping-Level Stats - ORIGINAL

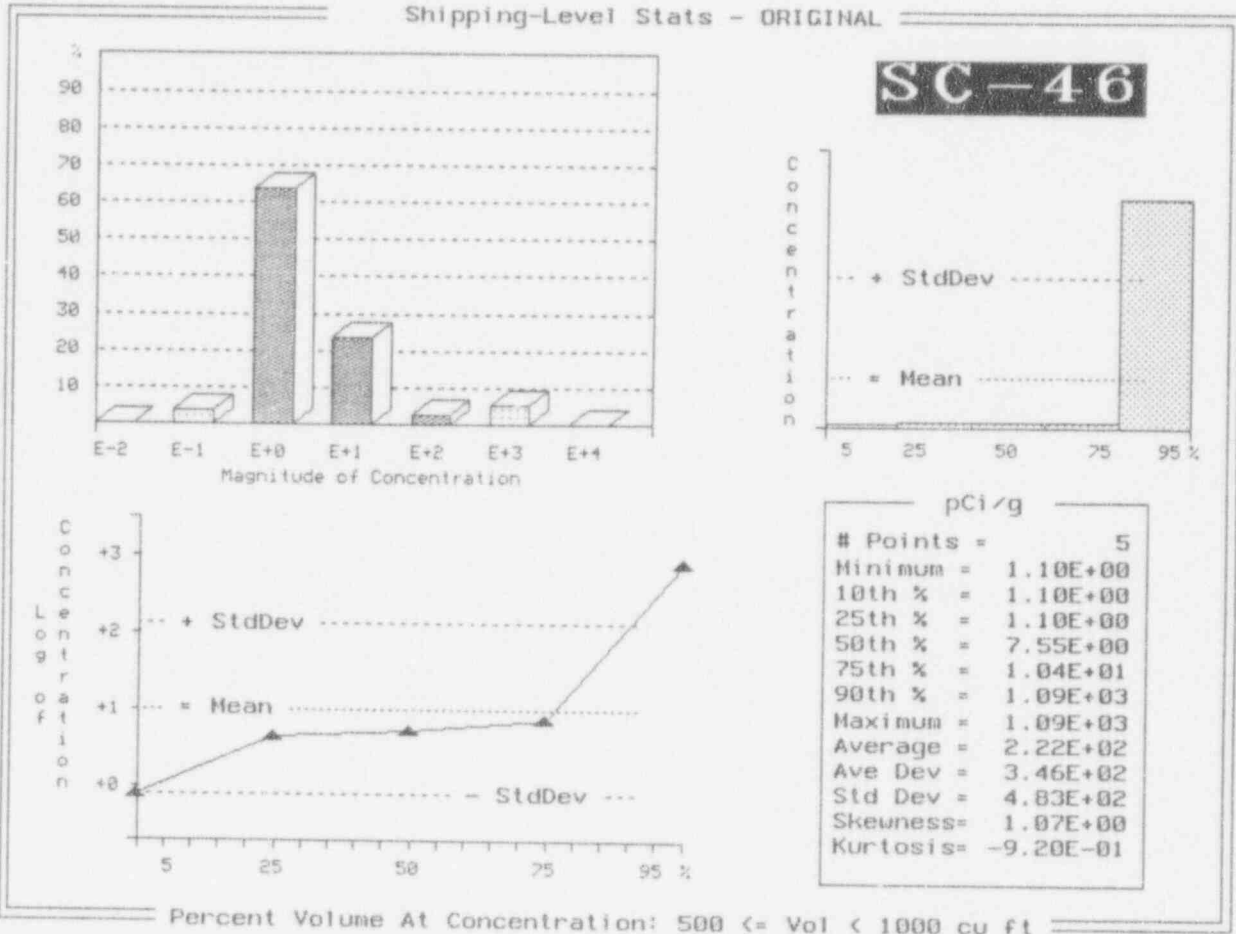


Exhibit F-32 (Continued)

Shipping-Level Stats - ORIGINAL

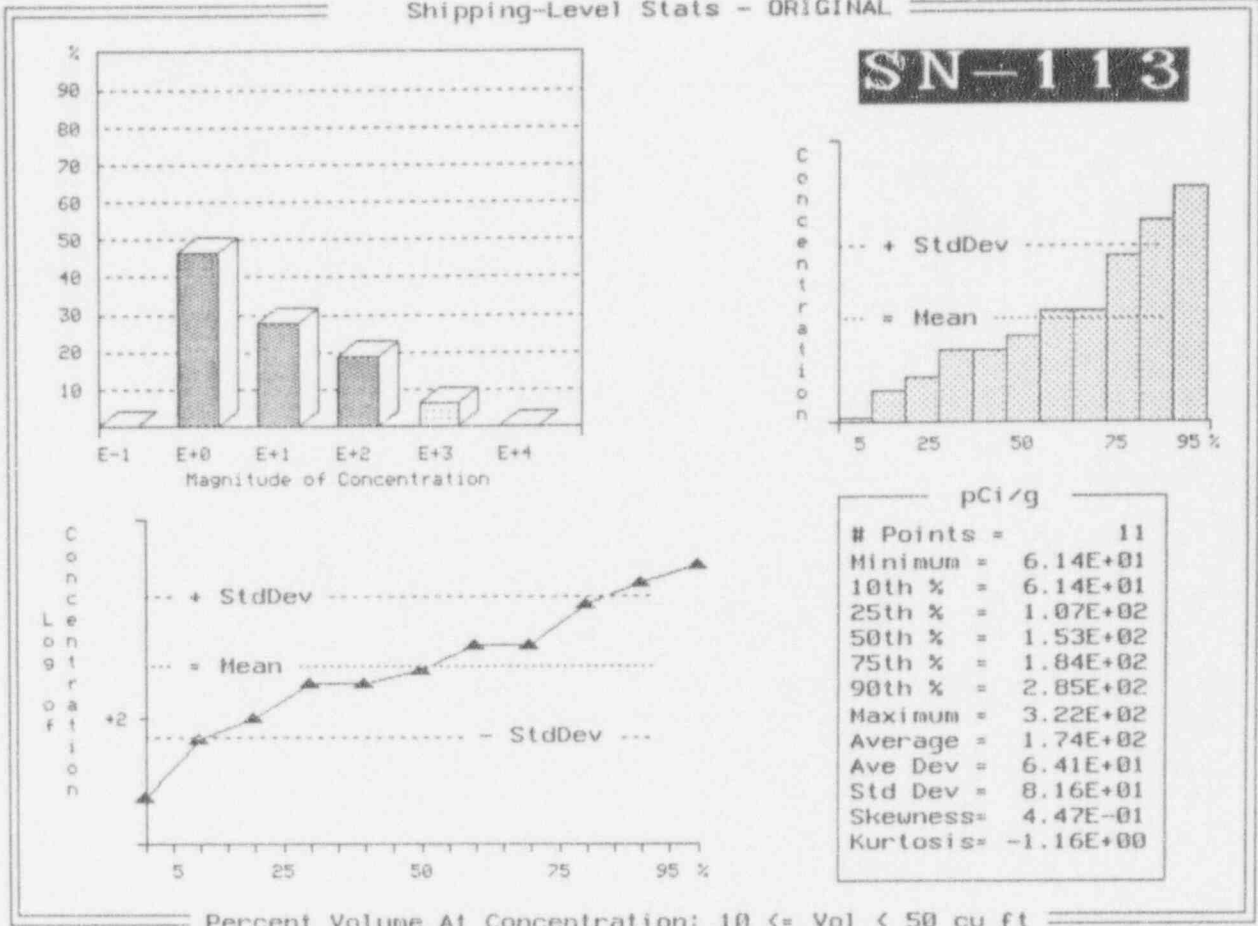
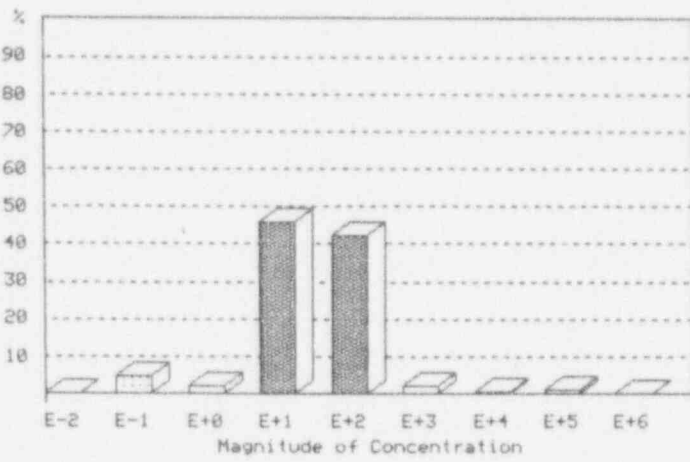
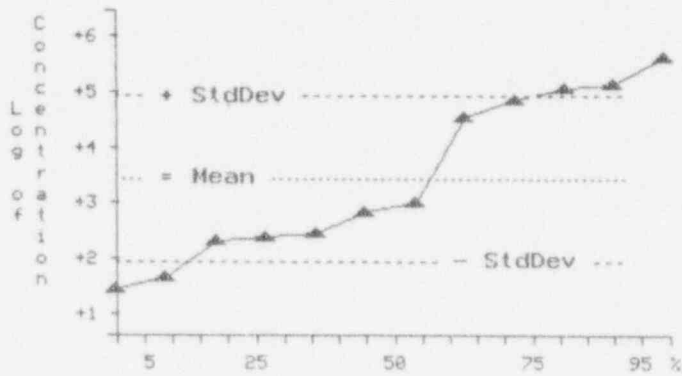
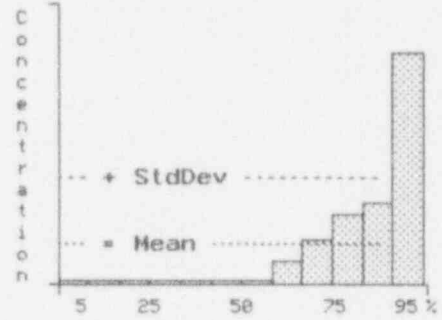


Exhibit F-33 (Continued)

Shipping-Level Stats - ORIGINAL



CO-58



pCi/g	
# Points =	12
Minimum =	4.39E+01
10th % =	4.39E+01
25th % =	3.20E+02
50th % =	1.01E+03
75th % =	****E+04
90th % =	1.90E+05
Maximum =	5.62E+05
Average =	8.88E+04
Ave Dev =	1.09E+05
Std Dev =	1.64E+05
Skewness =	1.94E+00
Kurtosis =	2.85E+00

Percent Volume At Concentration: 100 <= Vol < 500 cu ft

Exhibit F-33 (Continued)

Shipping-Level Stats - ORIGINAL

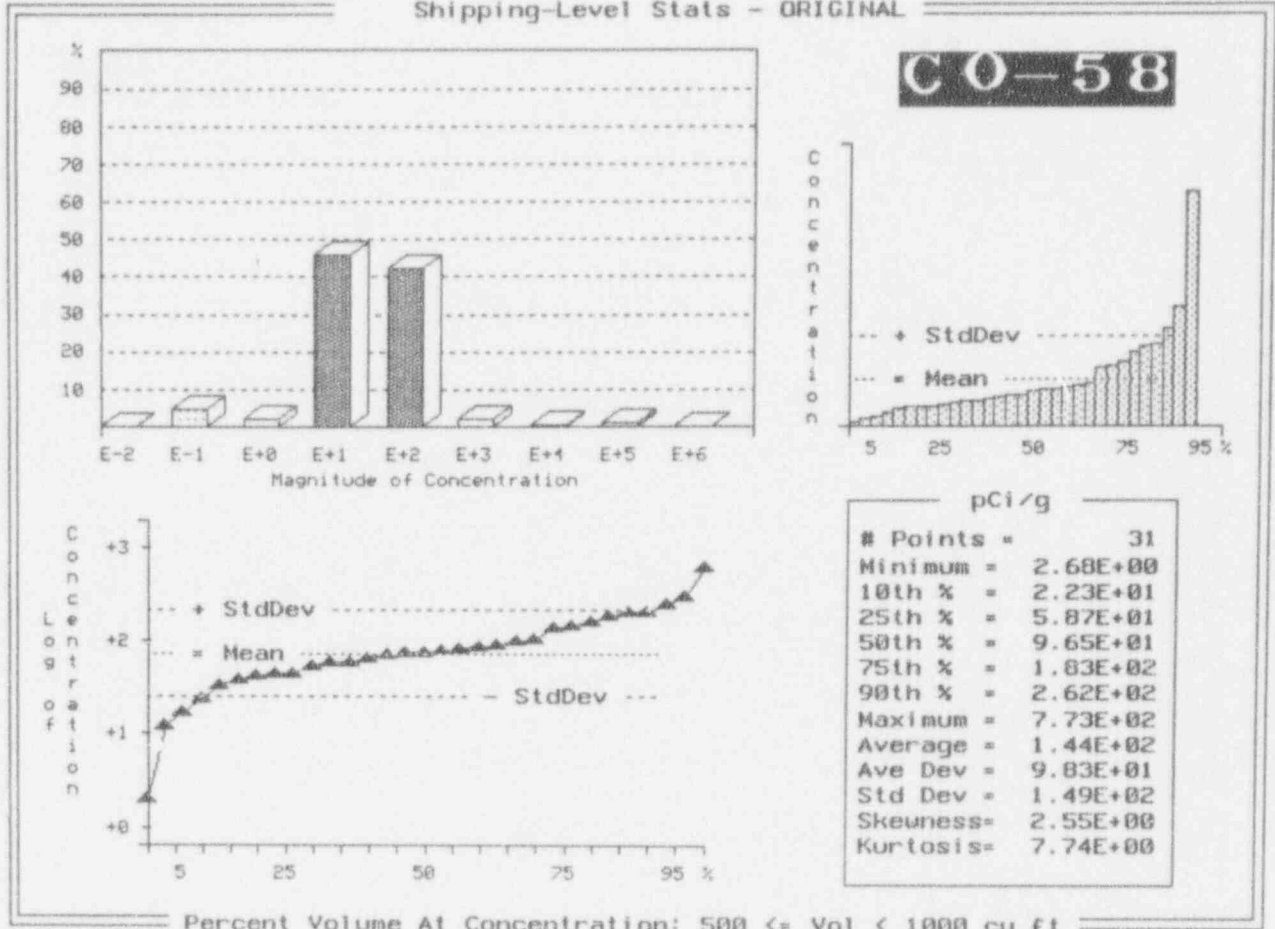


Exhibit F-33 (Continued)

Shipping-Level Stats - ORIGINAL

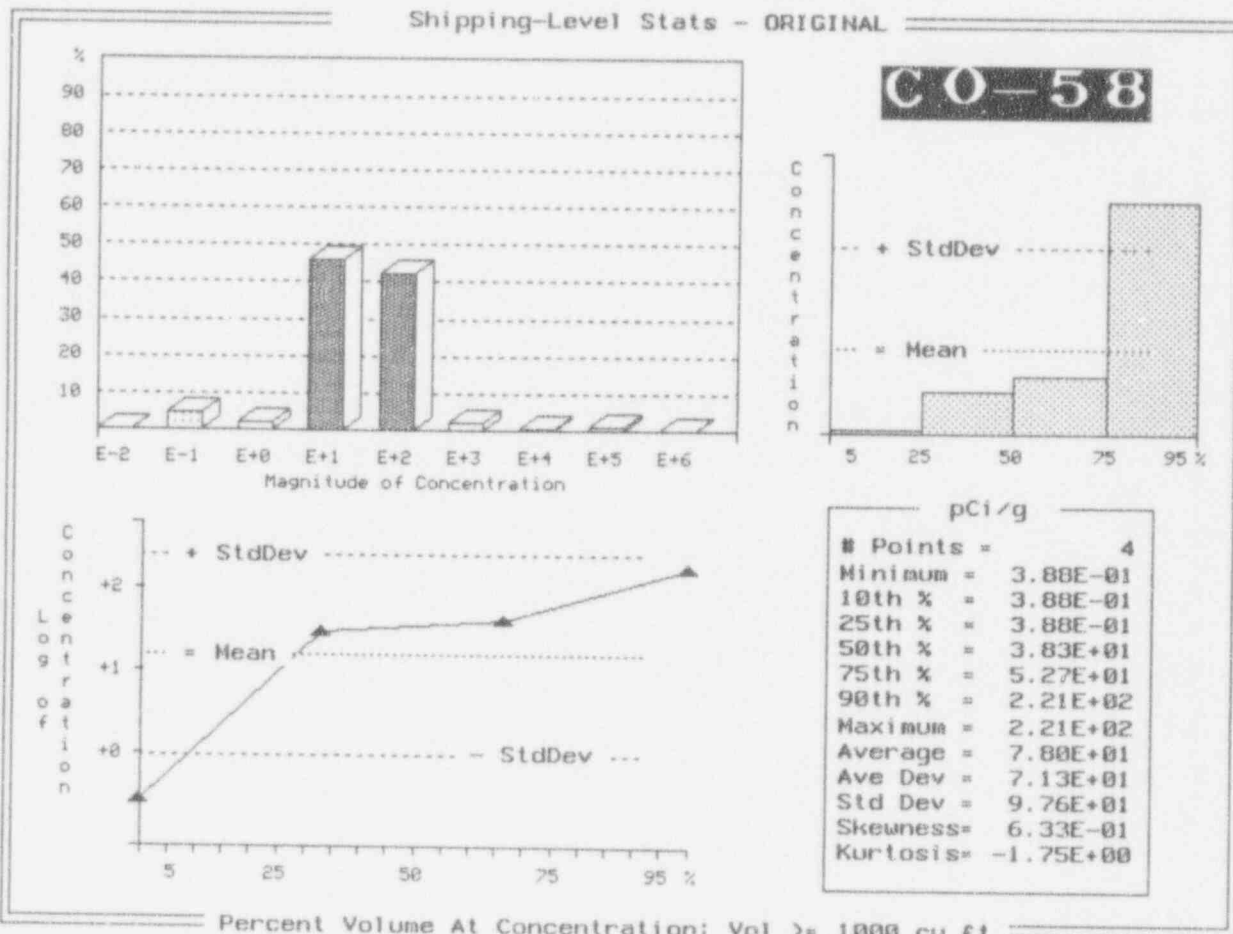


Exhibit F-33 (Continued)

Shipping-Level Stats - ORIGINAL

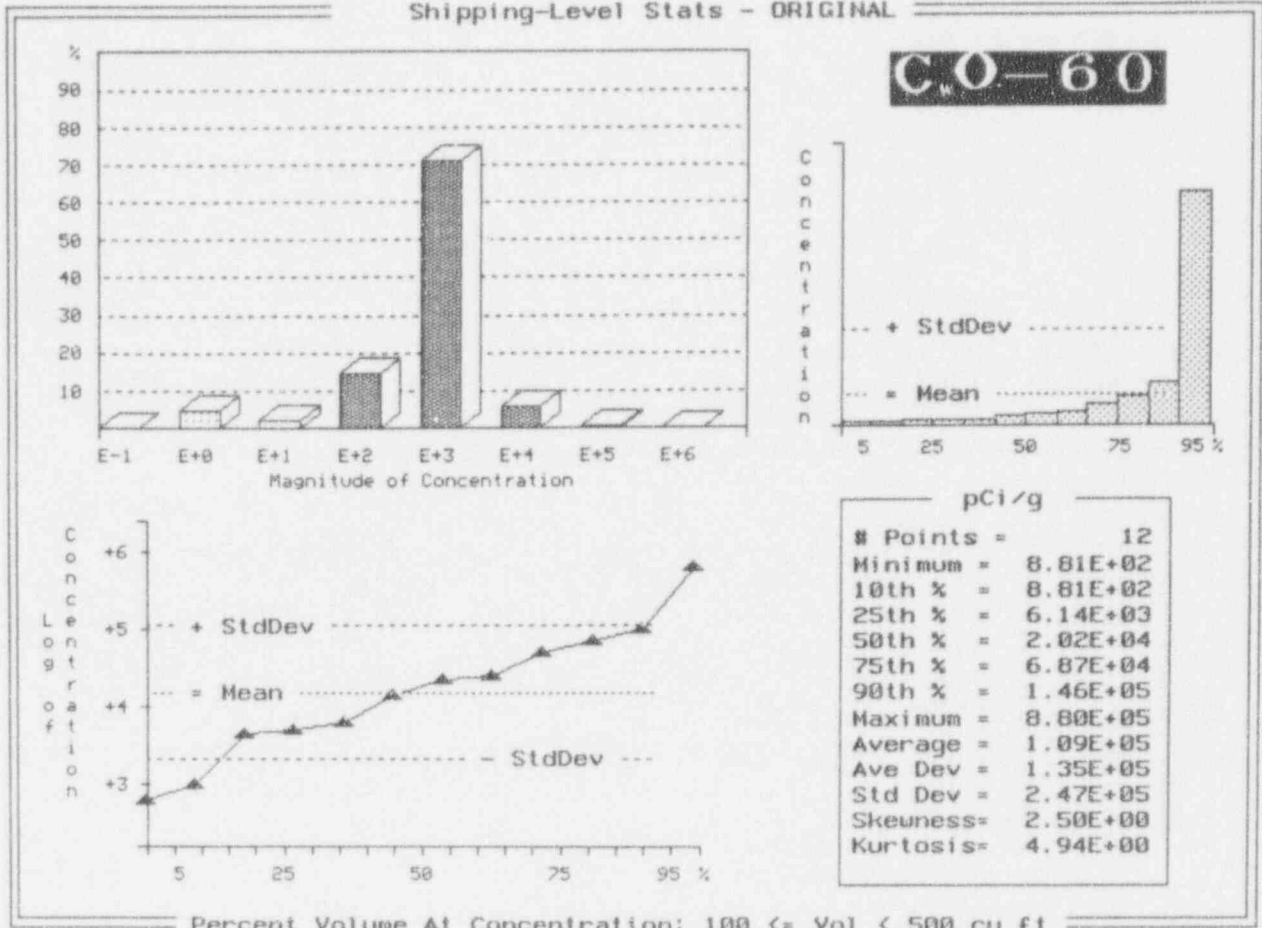
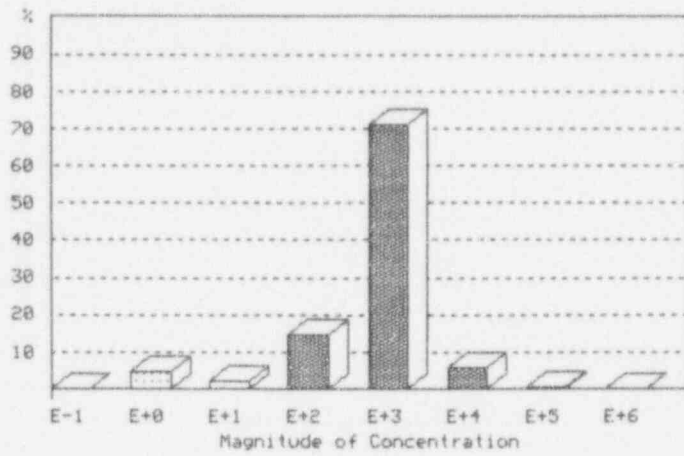
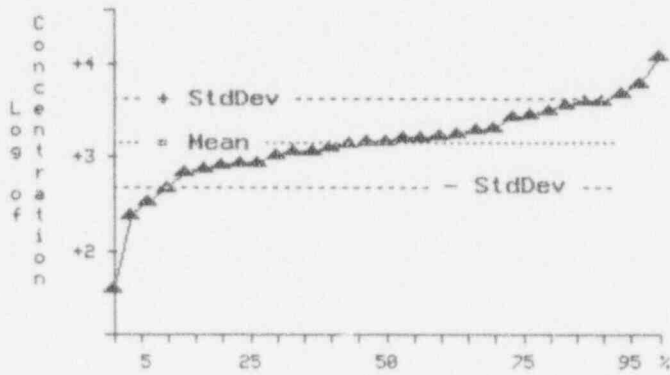
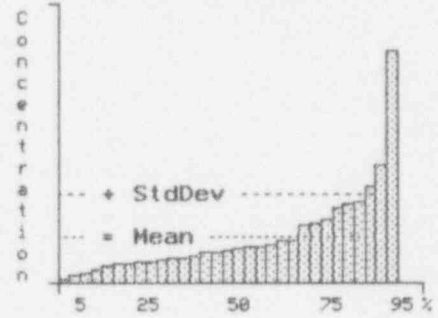


Exhibit F-33 (Continued)

Shipping-Level Stats - ORIGINAL



CO-60



pCi/g	
# Points =	31
Minimum =	5.36E+01
10th % =	4.43E+02
25th % =	1.18E+03
50th % =	1.93E+03
75th % =	3.64E+03
90th % =	5.23E+03
Maximum =	1.54E+04
Average =	2.87E+03
Ave Dev =	1.96E+03
Std Dev =	2.97E+03
Skewness=	2.53E+00
Kurtosis=	7.66E+00

Percent Volume At Concentration: 500 <= Vol < 1000 cu ft

Exhibit F-33 (Continued)

Shipping-Level Stats - ORIGINAL

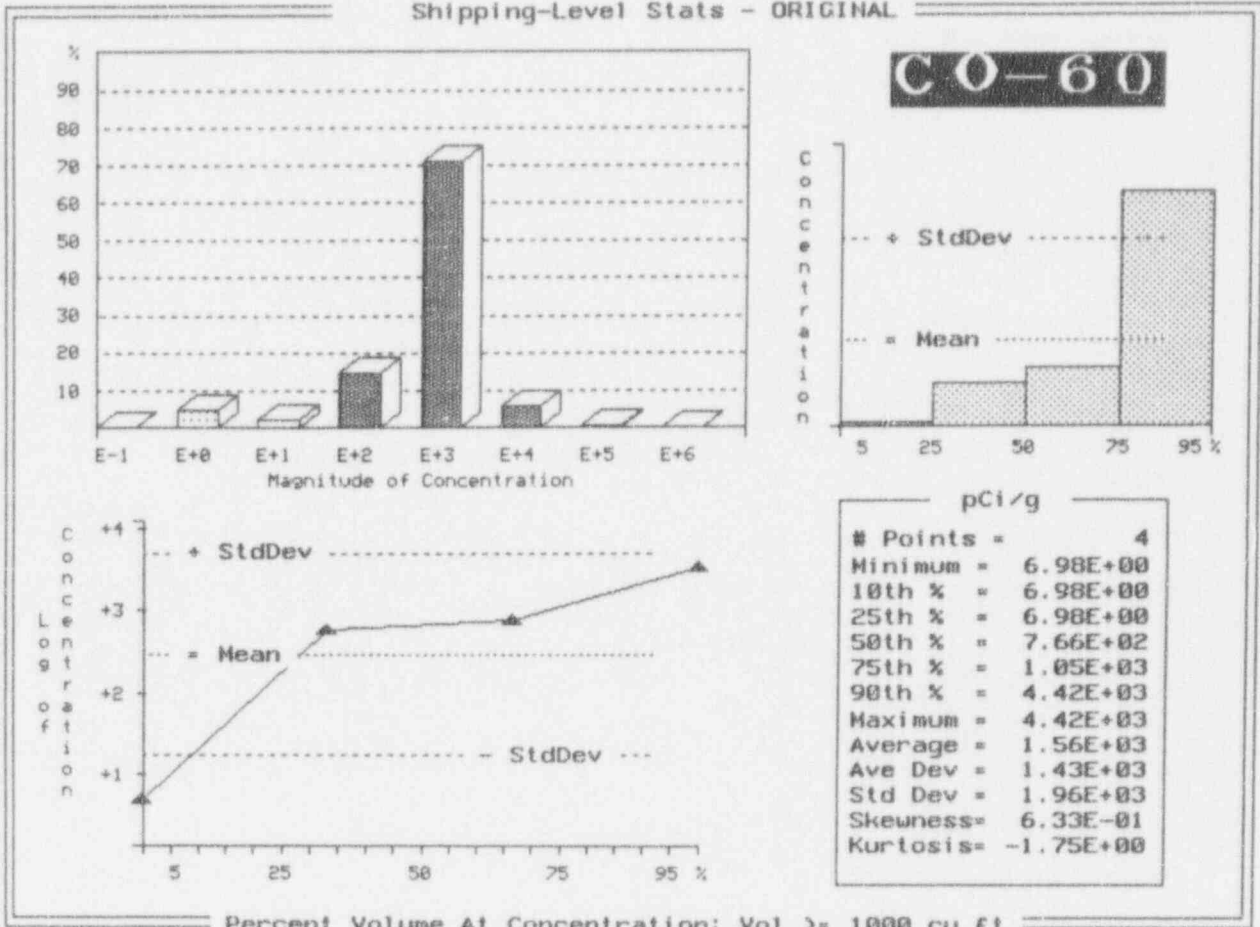


Exhibit F-33 (Continued)

Shipping-Level Stats - ORIGINAL

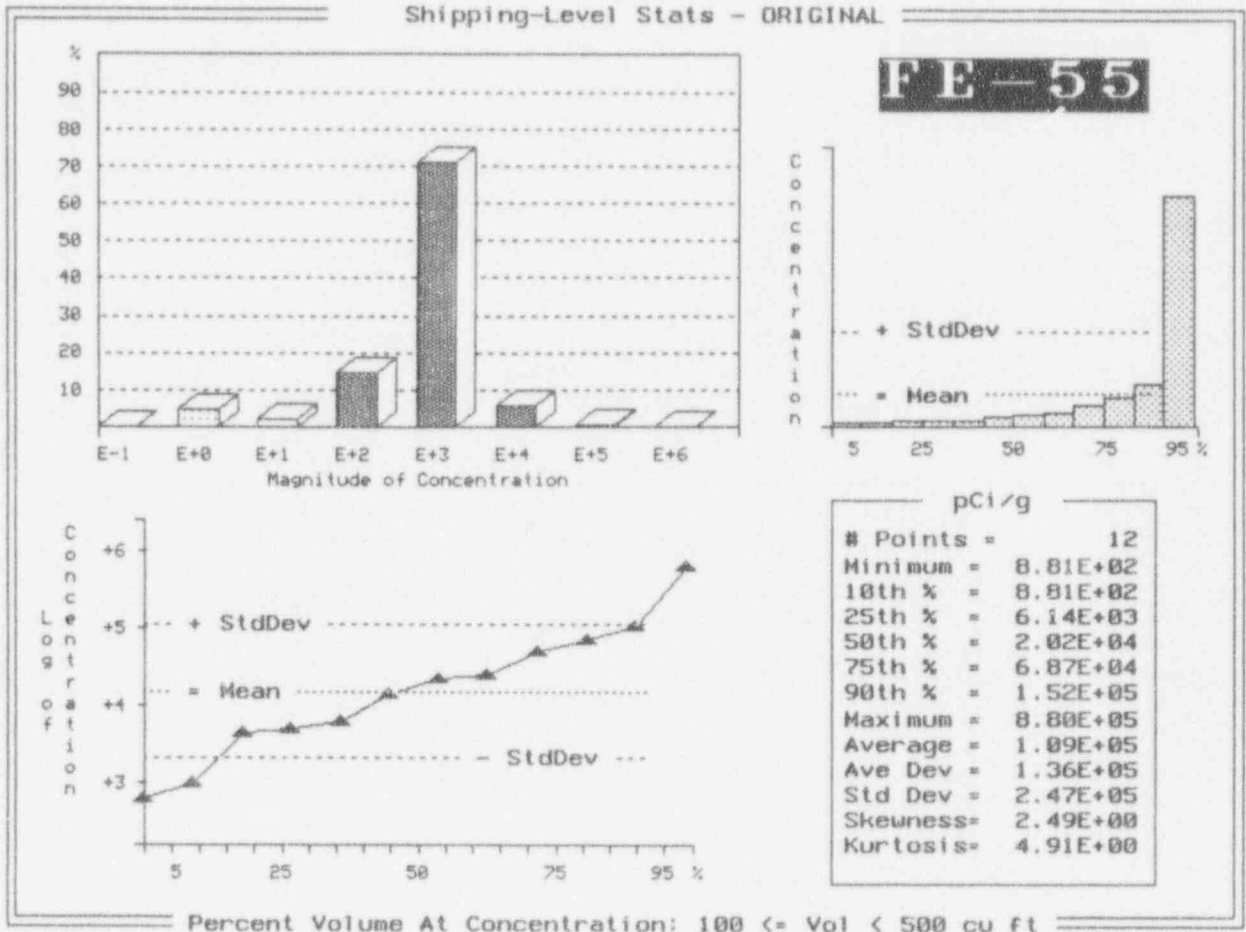


Exhibit F-33 (Continued)

Shipping-Level Stats - ORIGINAL

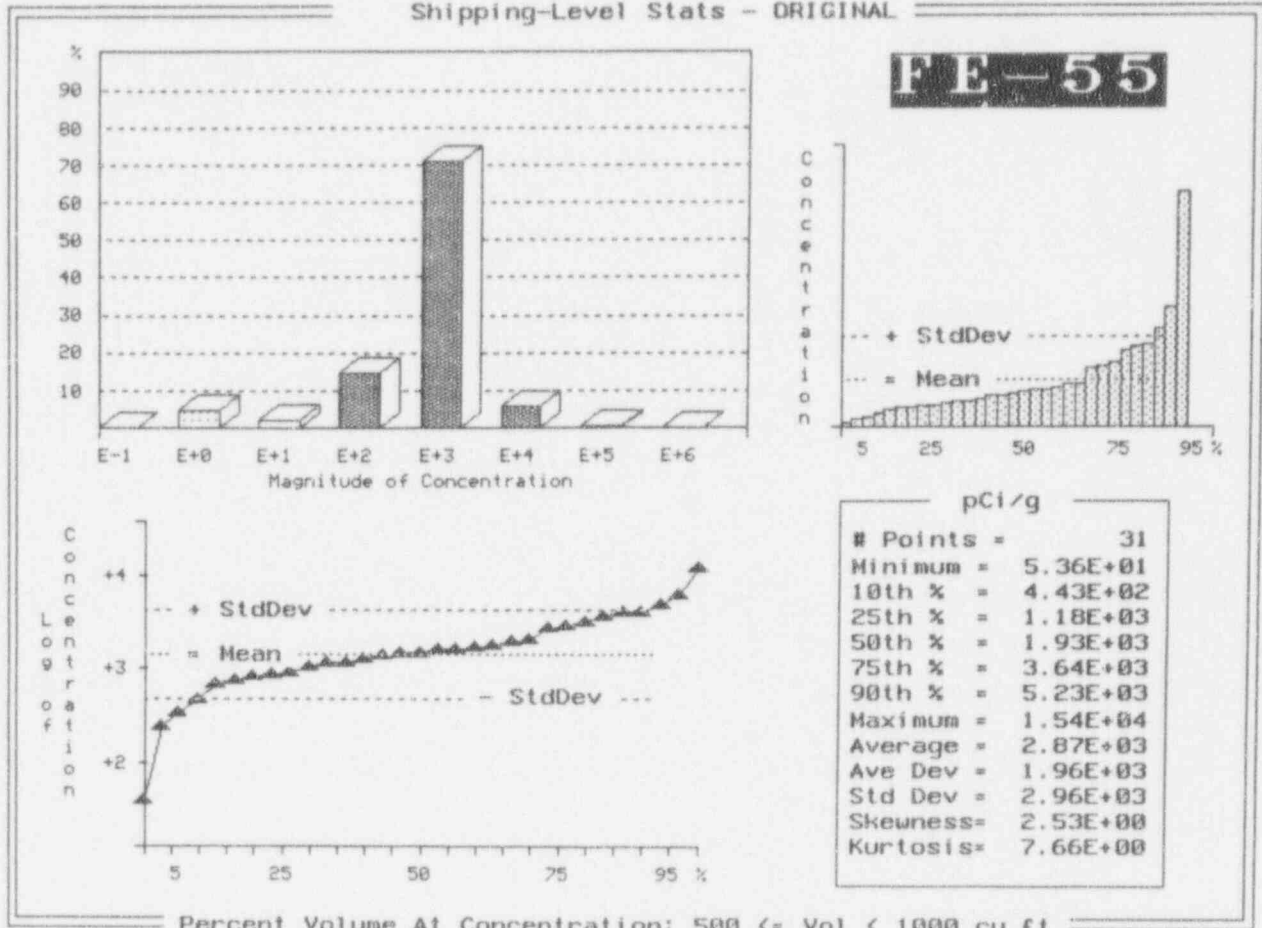


Exhibit F-33 (Continued)

Shipping-Level Stats - ORIGINAL

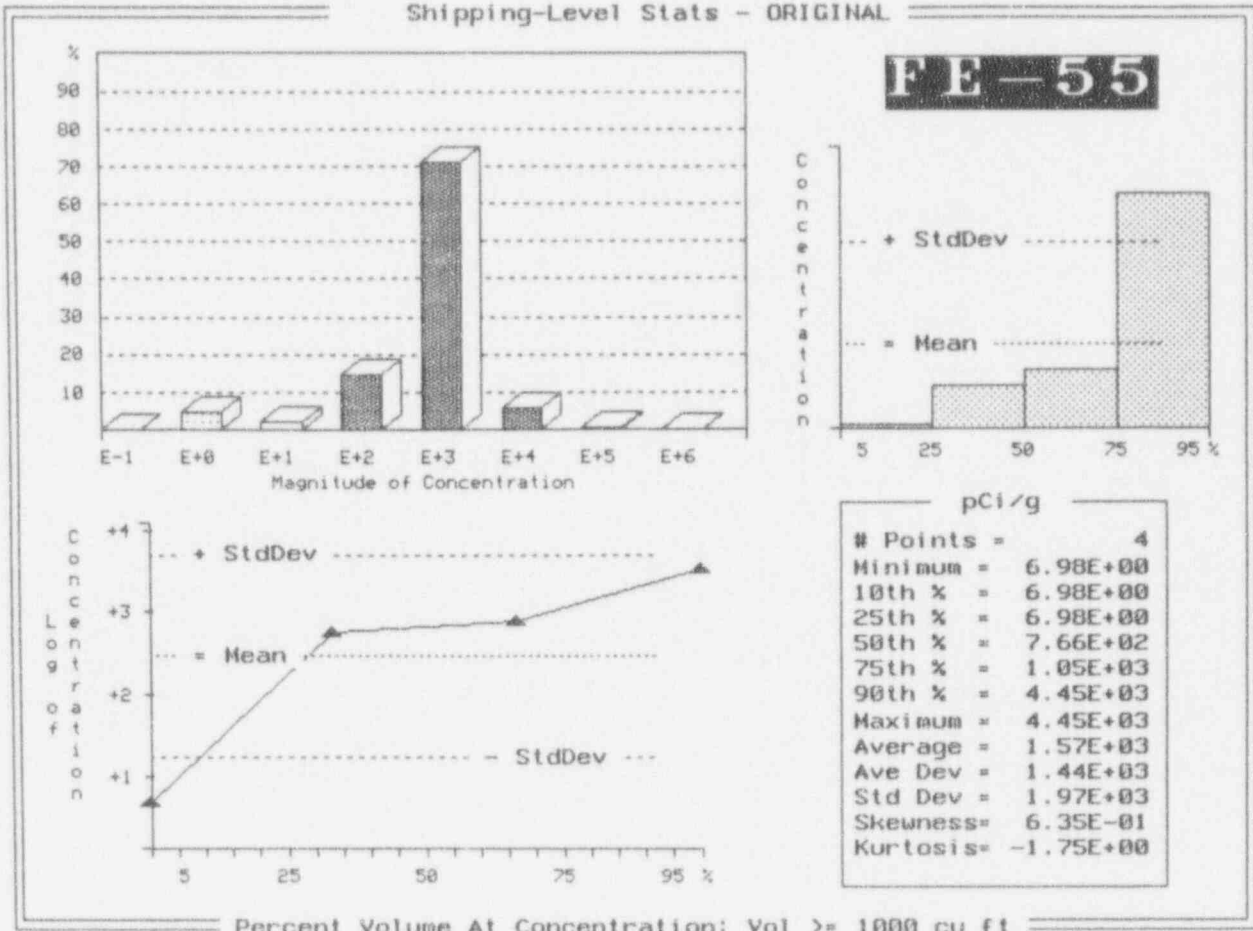


Exhibit F-33 (Continued)

Shipping-Level Stats - ORIGINAL

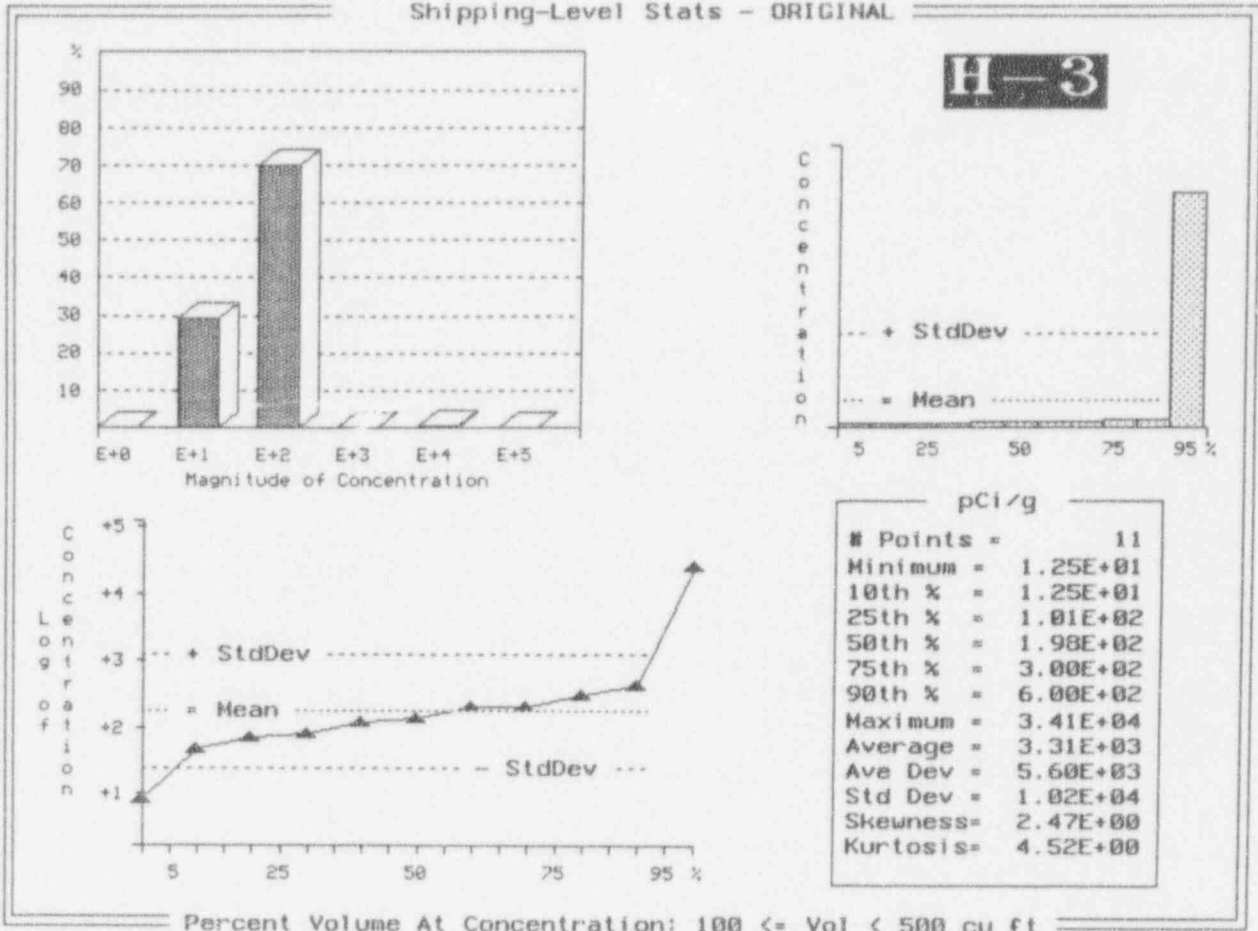


Exhibit F-33 (Continued)

Shipping-Level Stats - ORIGINAL

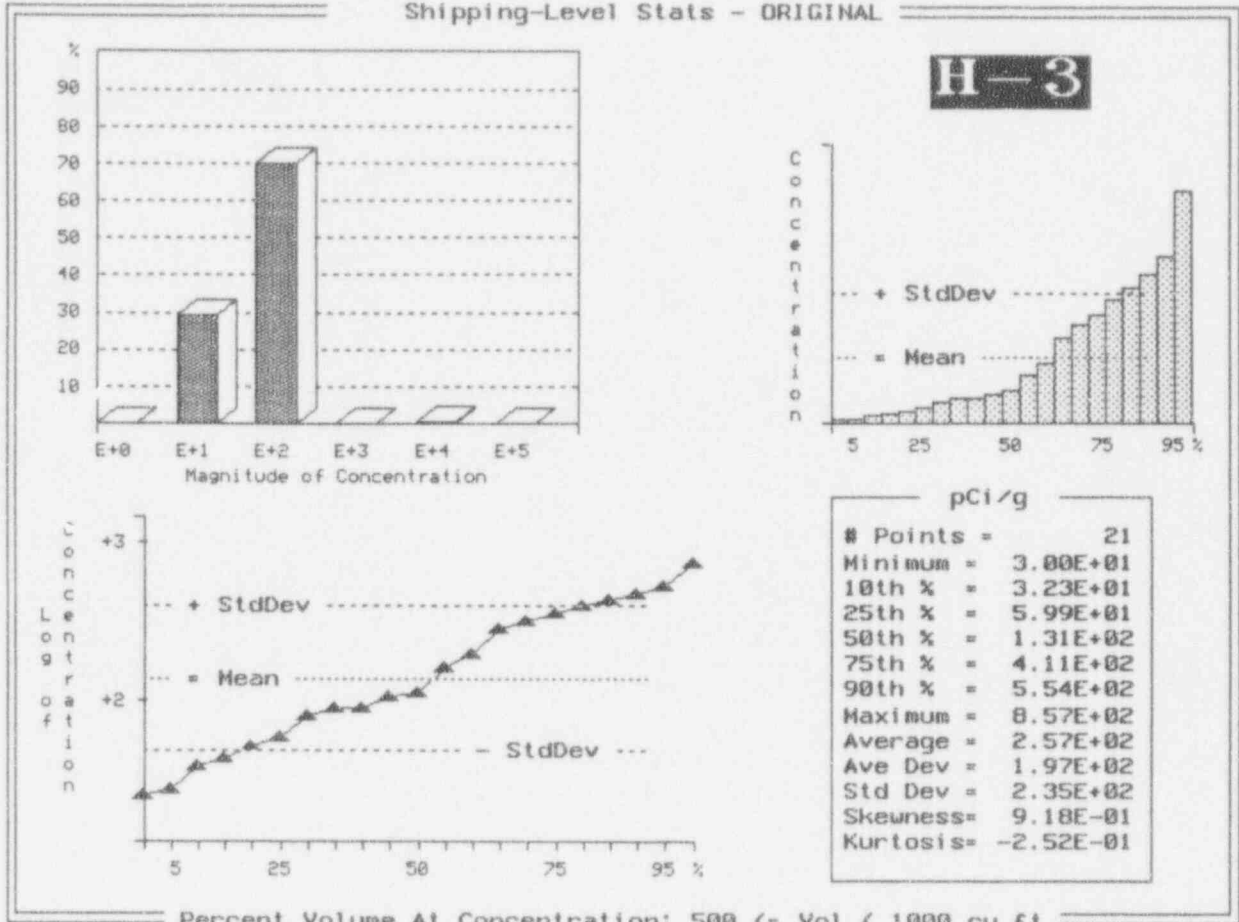


Exhibit F-33 (Continued)

Shipping-Level Stats - ORIGINAL

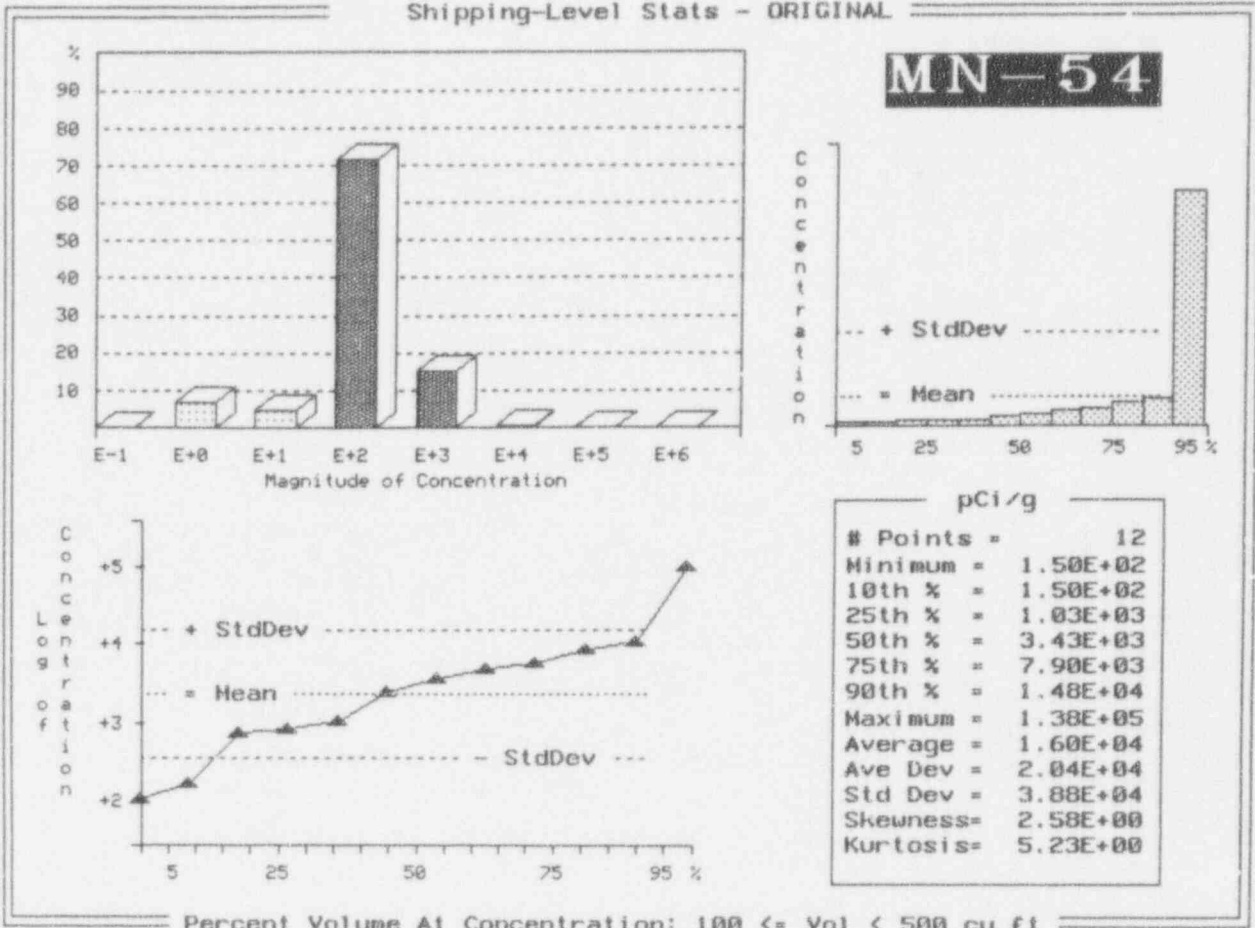


Exhibit F-33 (Continued)

Shipping-Level Stats - ORIGINAL

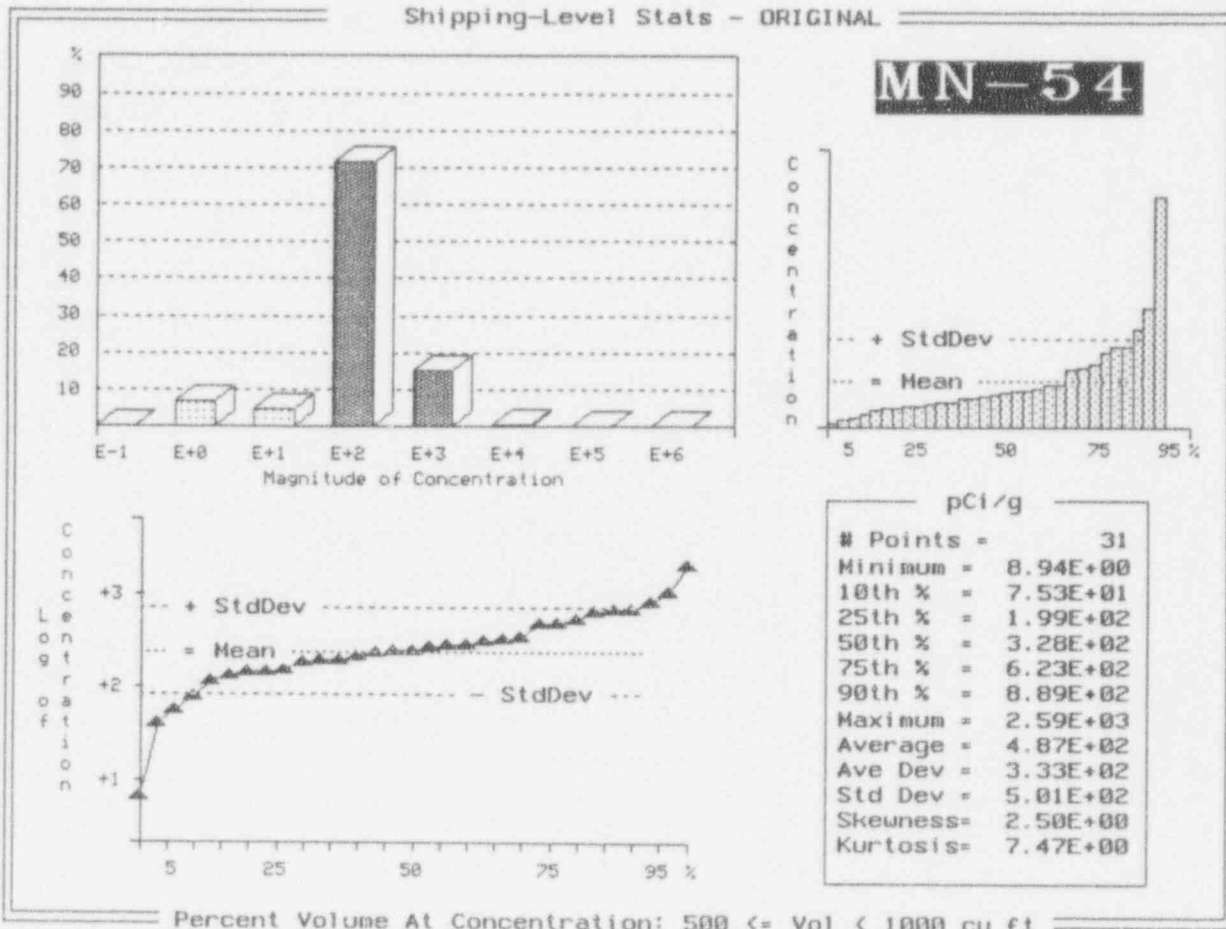


Exhibit F-33 (Continued)

Shipping-Level Stats - ORIGINAL

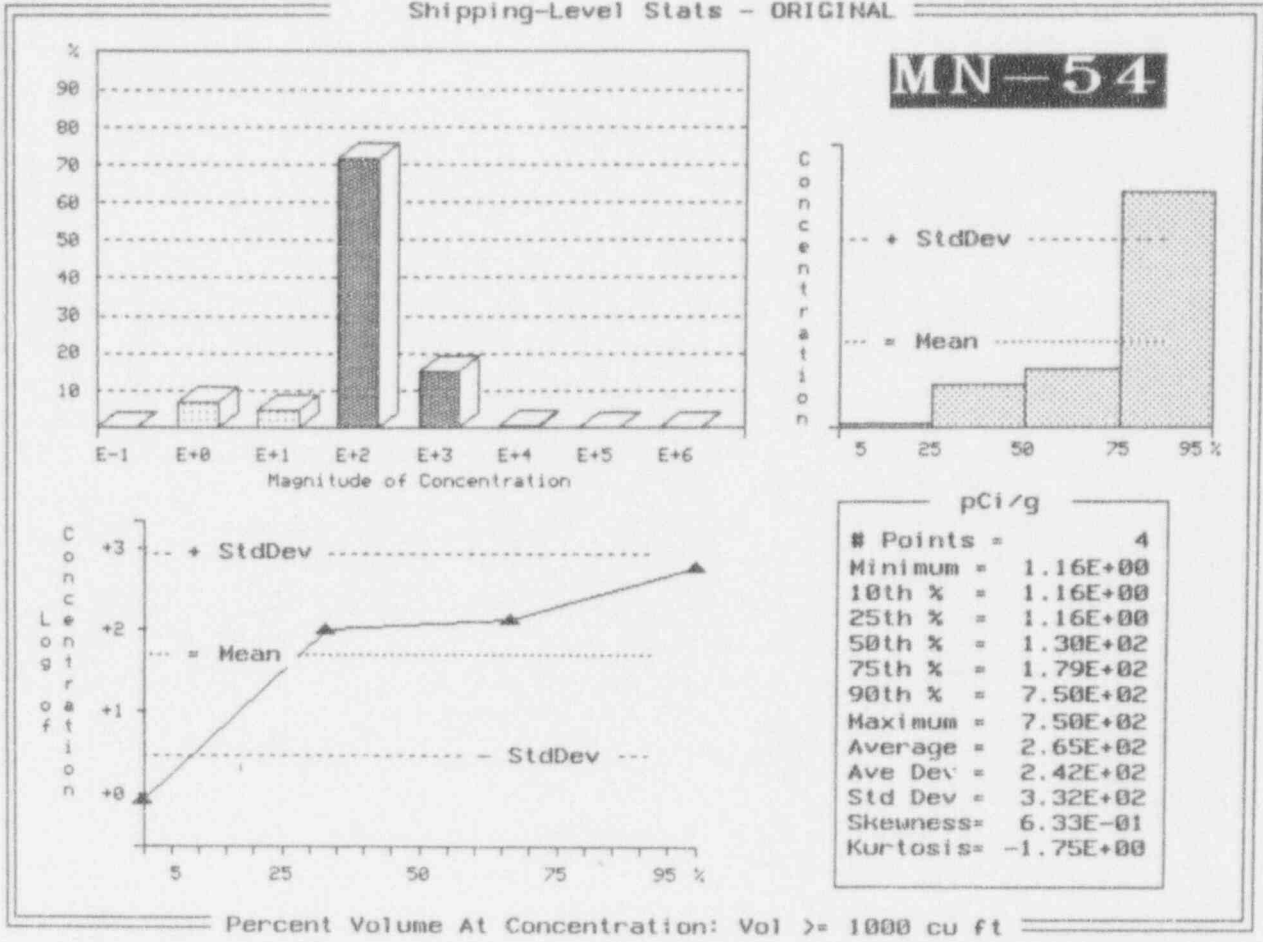


Exhibit F-33 (Continued)

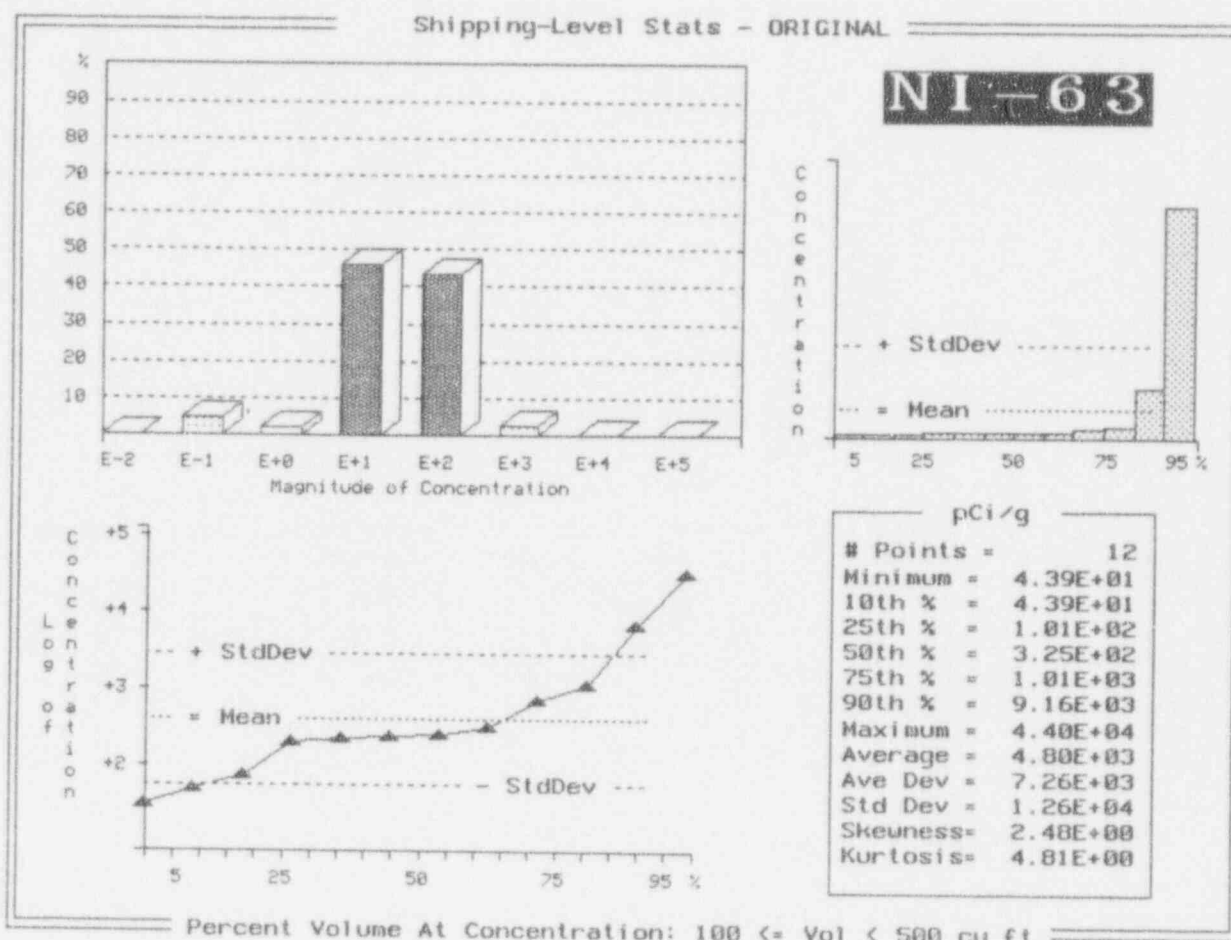


Exhibit F-33 (Continued)

Shipping-Level Stats - ORIGINAL

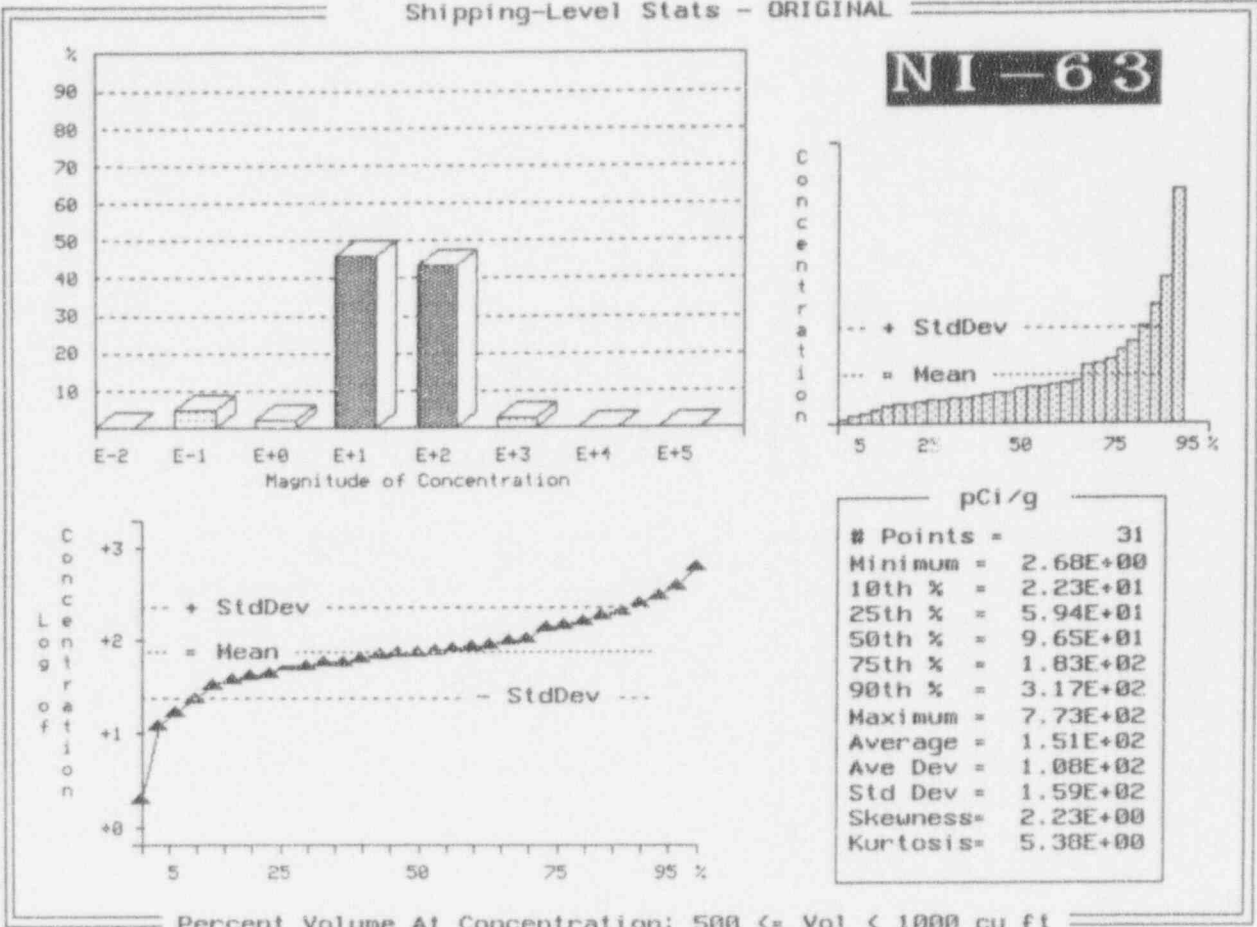


Exhibit F-33 (Continued)

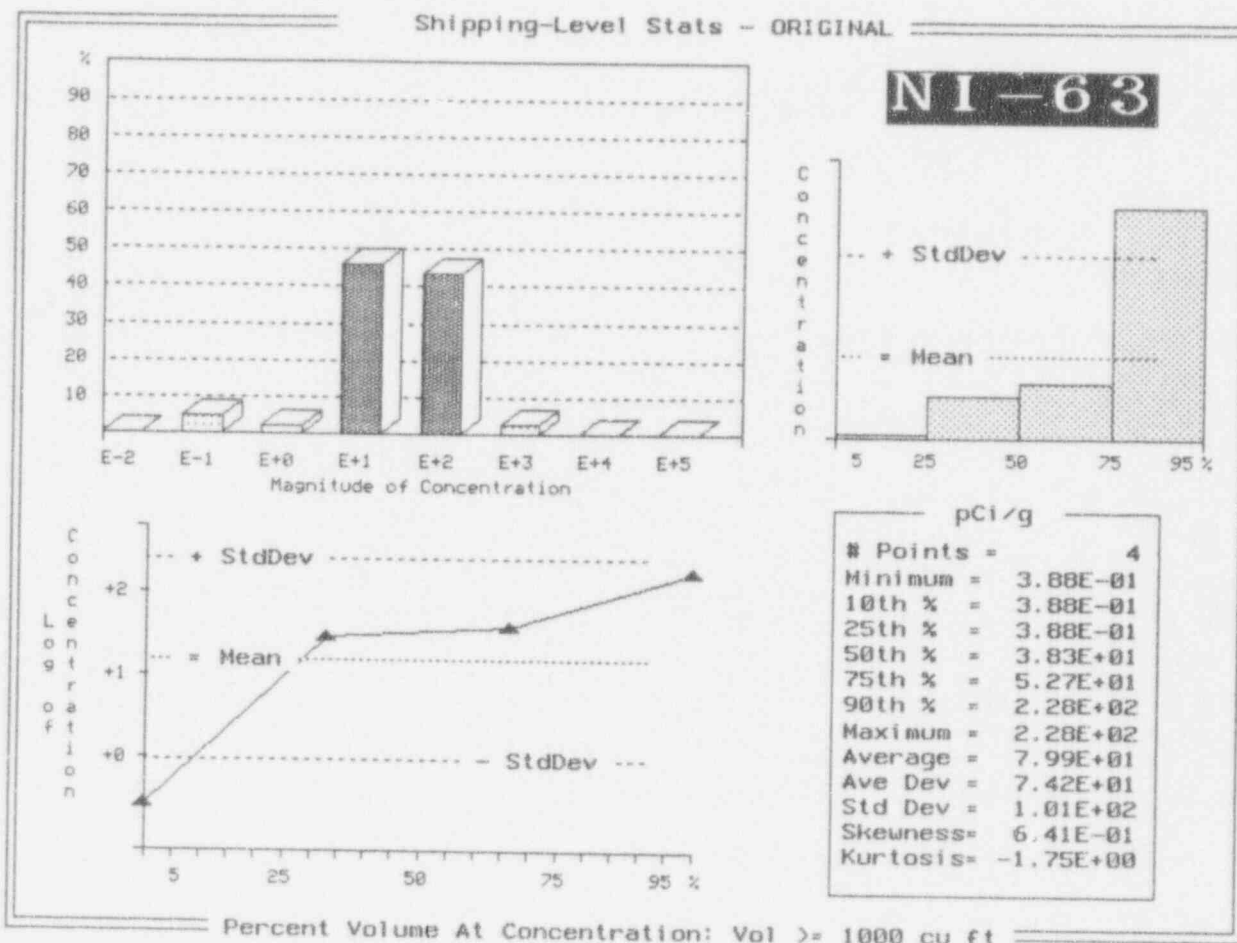


Exhibit F-34
Data Summary - Analyses at the Shipment Level
(Aggregate Practices for non-brokered waste: 1986 to 1990)

	<u>Data or Parameters</u>
Compact or unaffiliated state:	Southwest
Waste generator class:	Academic
Total number of waste generators:	74
Total associated waste volume (m ³):	1,957
Total associated waste activity (Ci):	200
Waste class:	A-Unstable and A-Stable
Identified waste generators for this analysis:	
Number:	18
Percent of total(%):	24
Total number of shipping records:	88
Number of shipping records <u>with</u> container data:	10
Number of waste containers:	643
Weight of shipments (kg):	282,500
Total waste volume (m ³):	497
Fractional waste volume (%): (this analysis/total)	25
Total waste activity (Ci):	31
Fractional waste activity (%): (this analysis/total)	15

Exhibit F-34 (Continued)

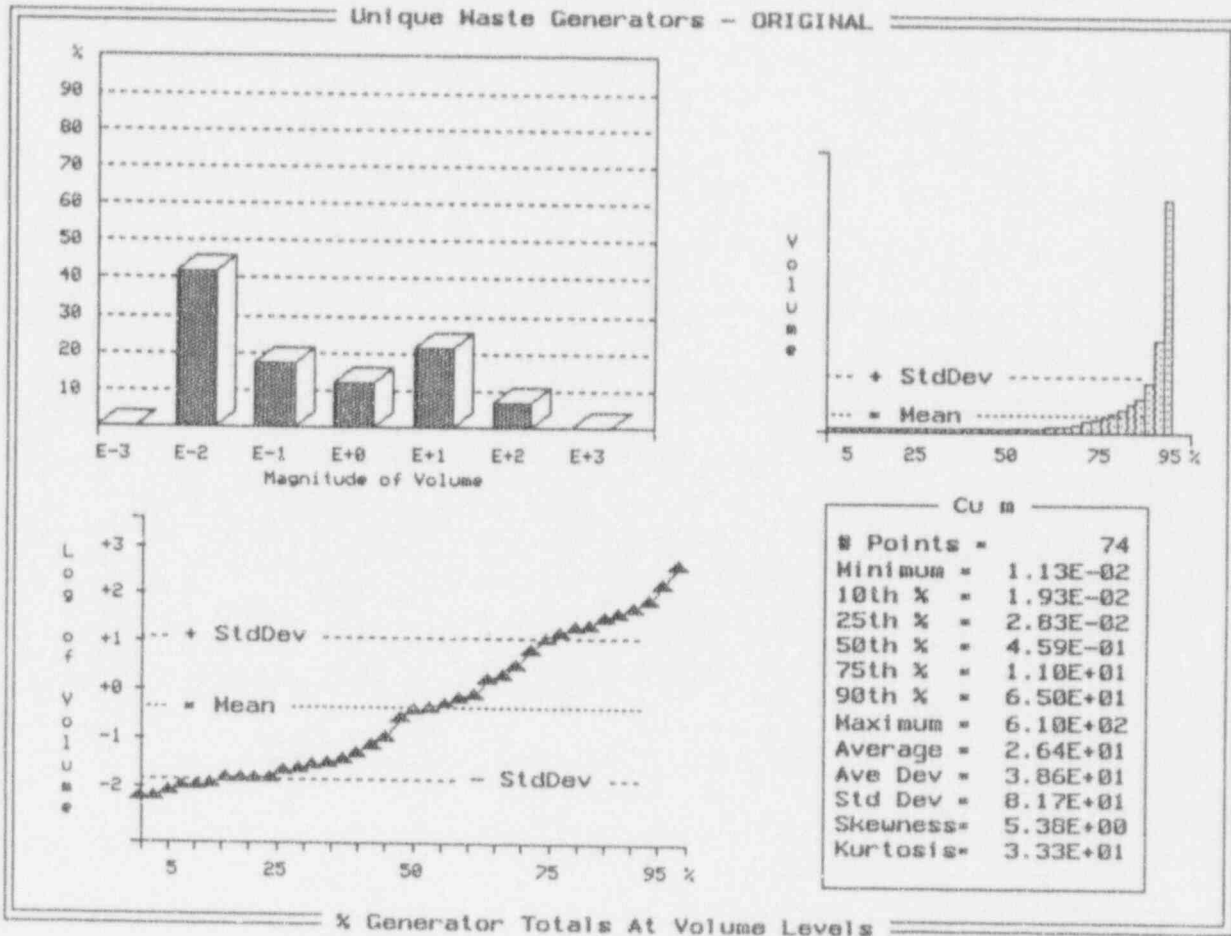


Exhibit F-34 (Continued)

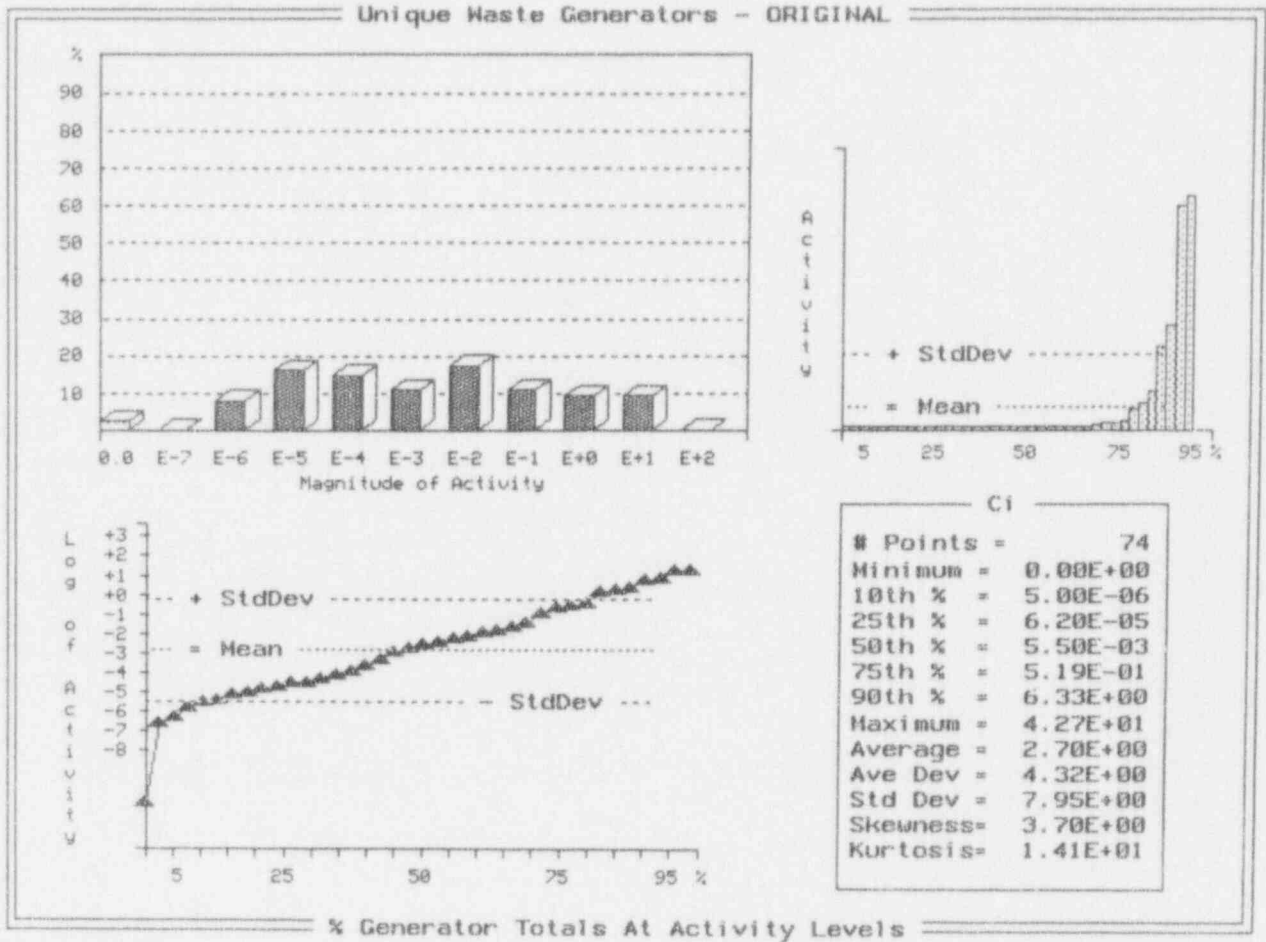


Exhibit F-34 (Continued)

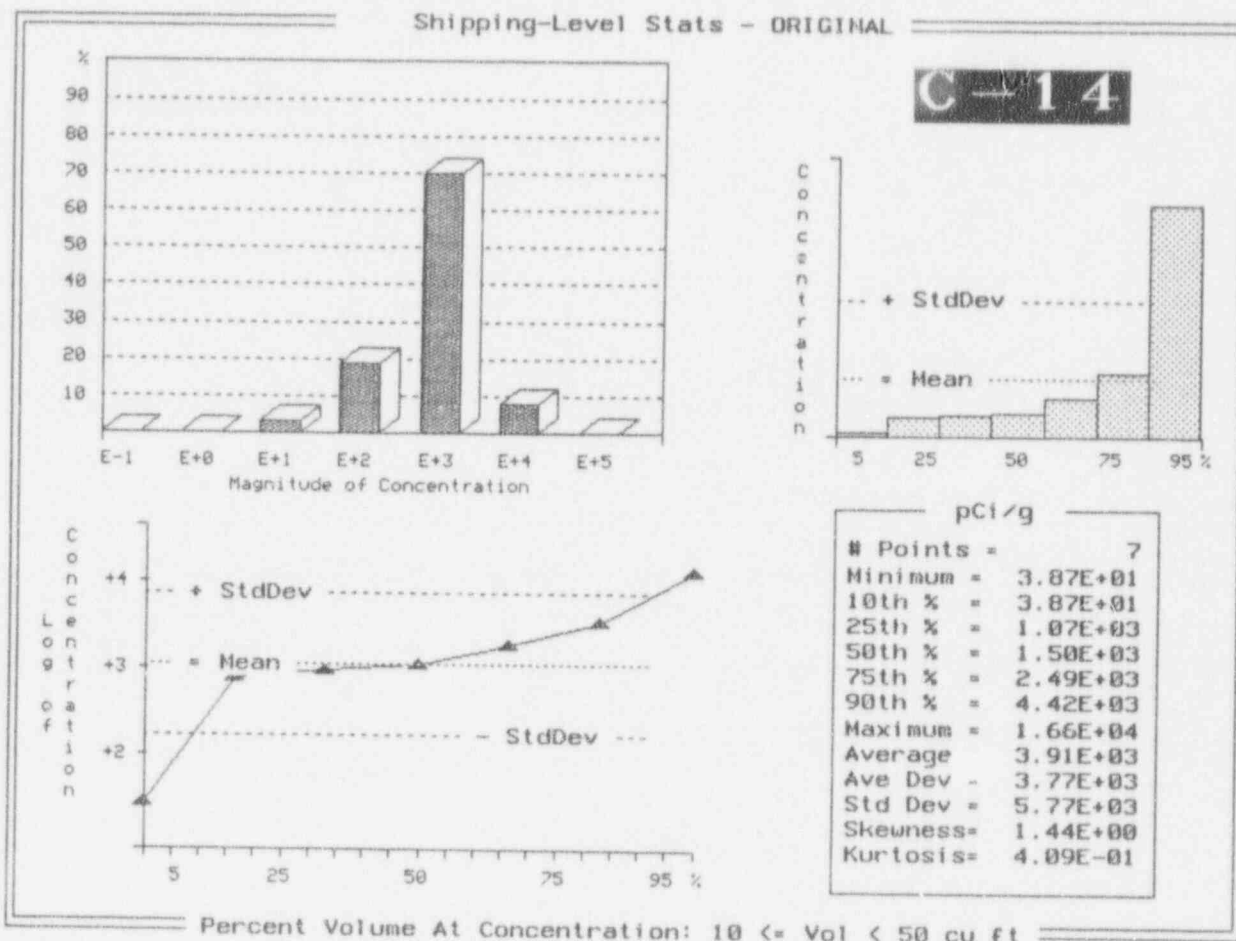


Exhibit F-34 (Continued)

Shipping-Level Stats - ORIGINAL

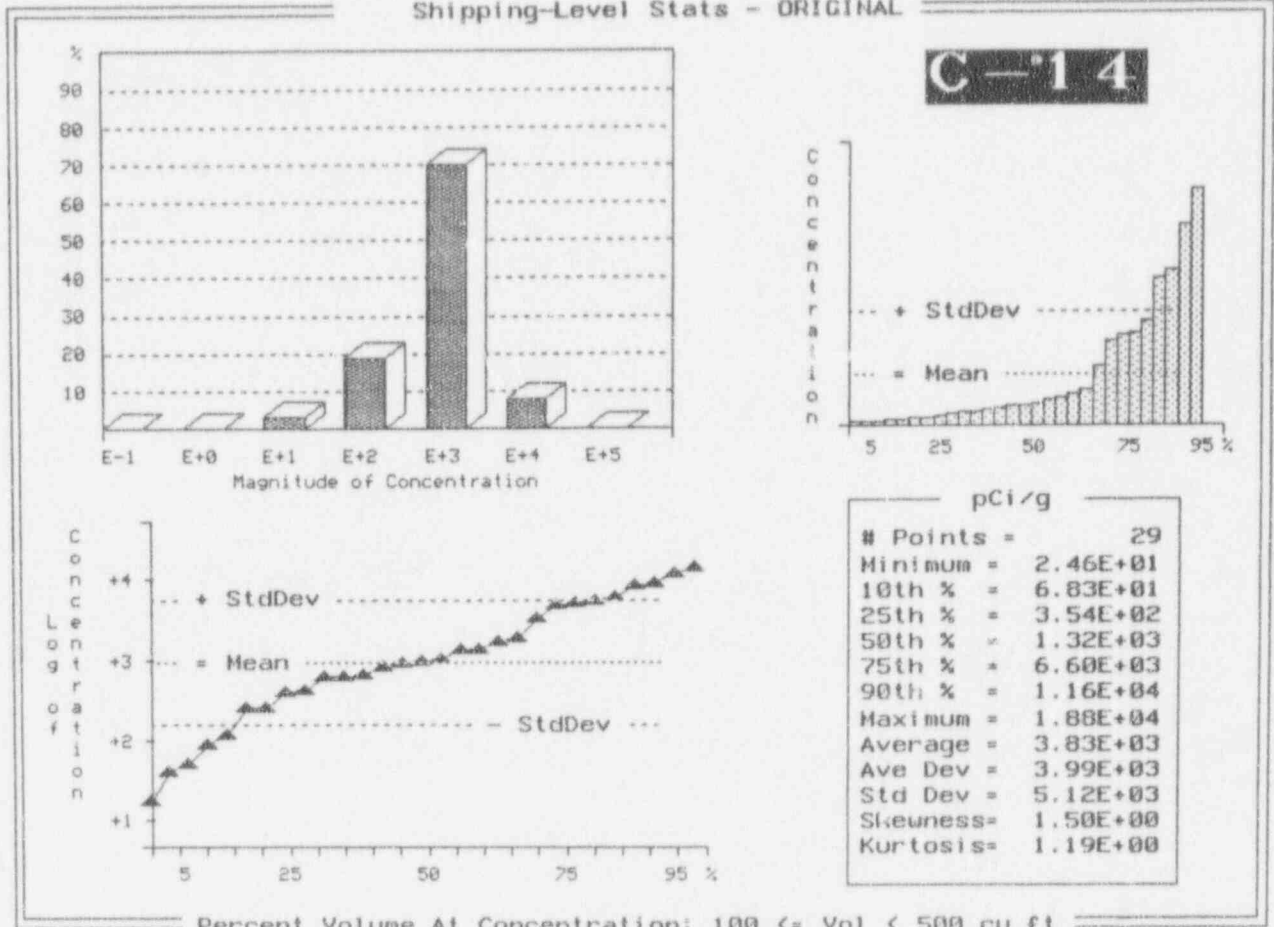
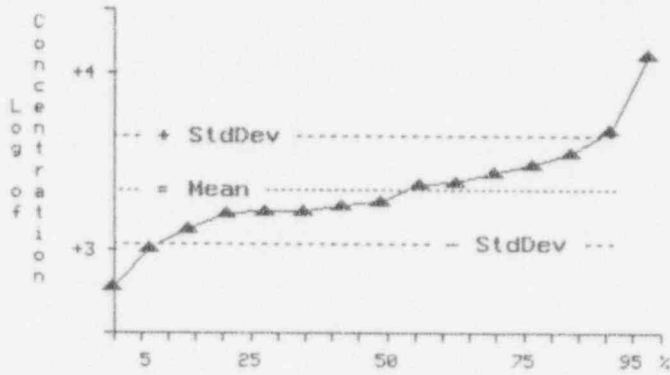
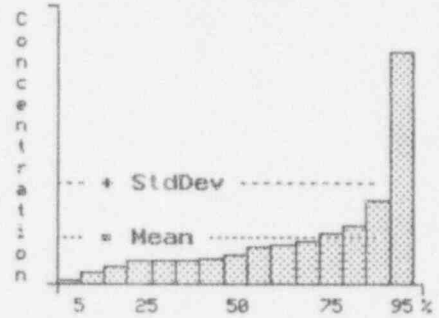
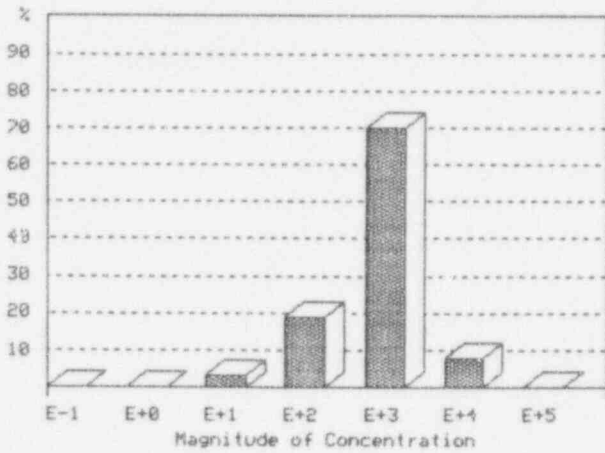


Exhibit F-34 (Continued)

Shipping-Level Stats - ORIGINAL

C-14



pCi/g	
# Points =	15
Minimum =	7.22E+02
10th % =	1.18E+03
25th % =	1.86E+03
50th % =	2.20E+03
75th % =	3.12E+03
90th % =	5.45E+03
Maximum =	1.44E+04
Average =	3.28E+03
Ave Dev =	1.89E+03
Std Dev =	3.29E+03
Skewness =	2.49E+00
Kurtosis =	5.67E+00

Percent Volume At Concentration: 500 <= Vol < 1000 cu ft

Exhibit F-34 (Continued)

Shipping-Level Stats - ORIGINAL

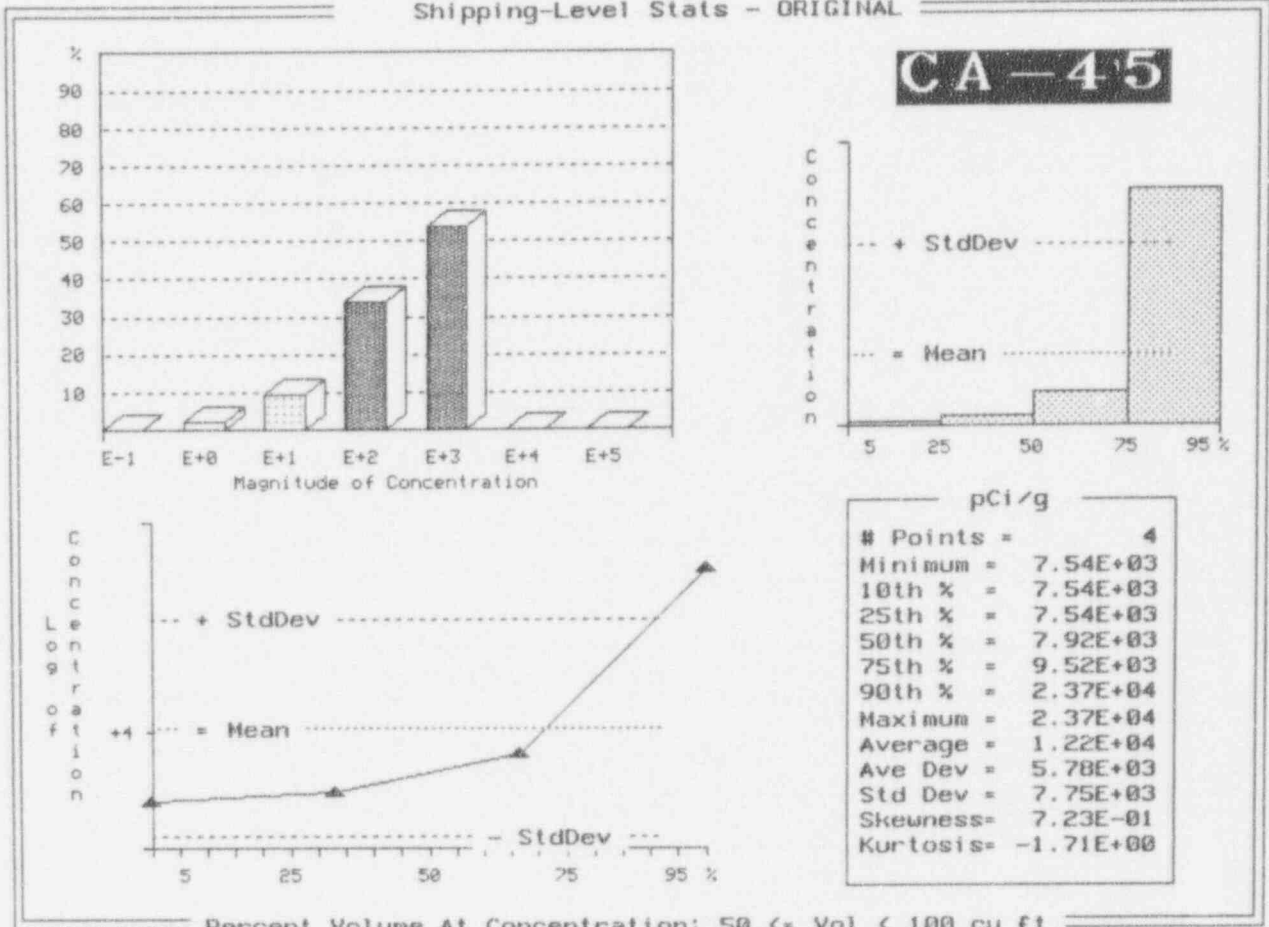


Exhibit F-34 (Continued)

Shipping-Level Stats - ORIGINAL

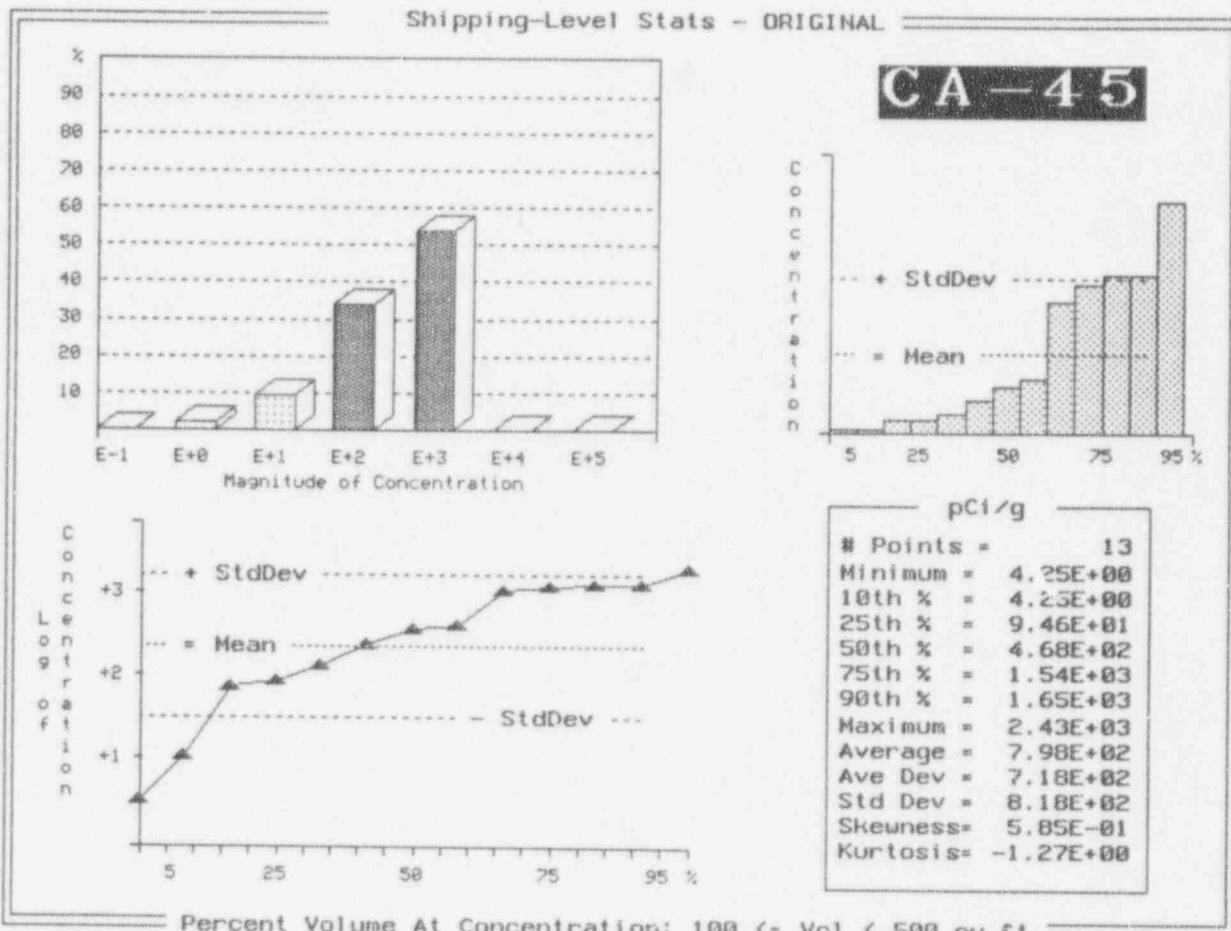


Exhibit F-34 (Continued)

Shipping-Level Stats - ORIGINAL

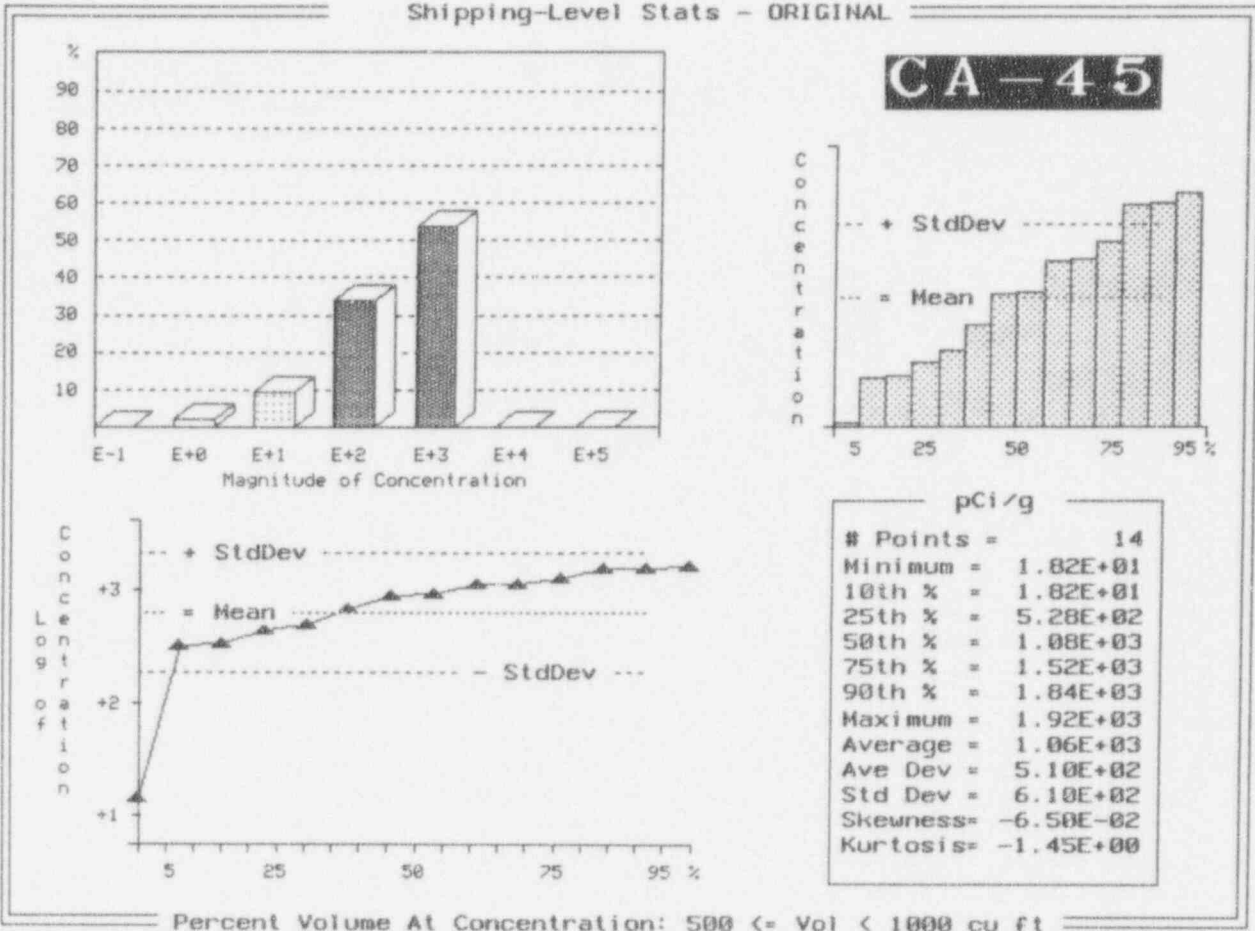


Exhibit F-34 (Continued)

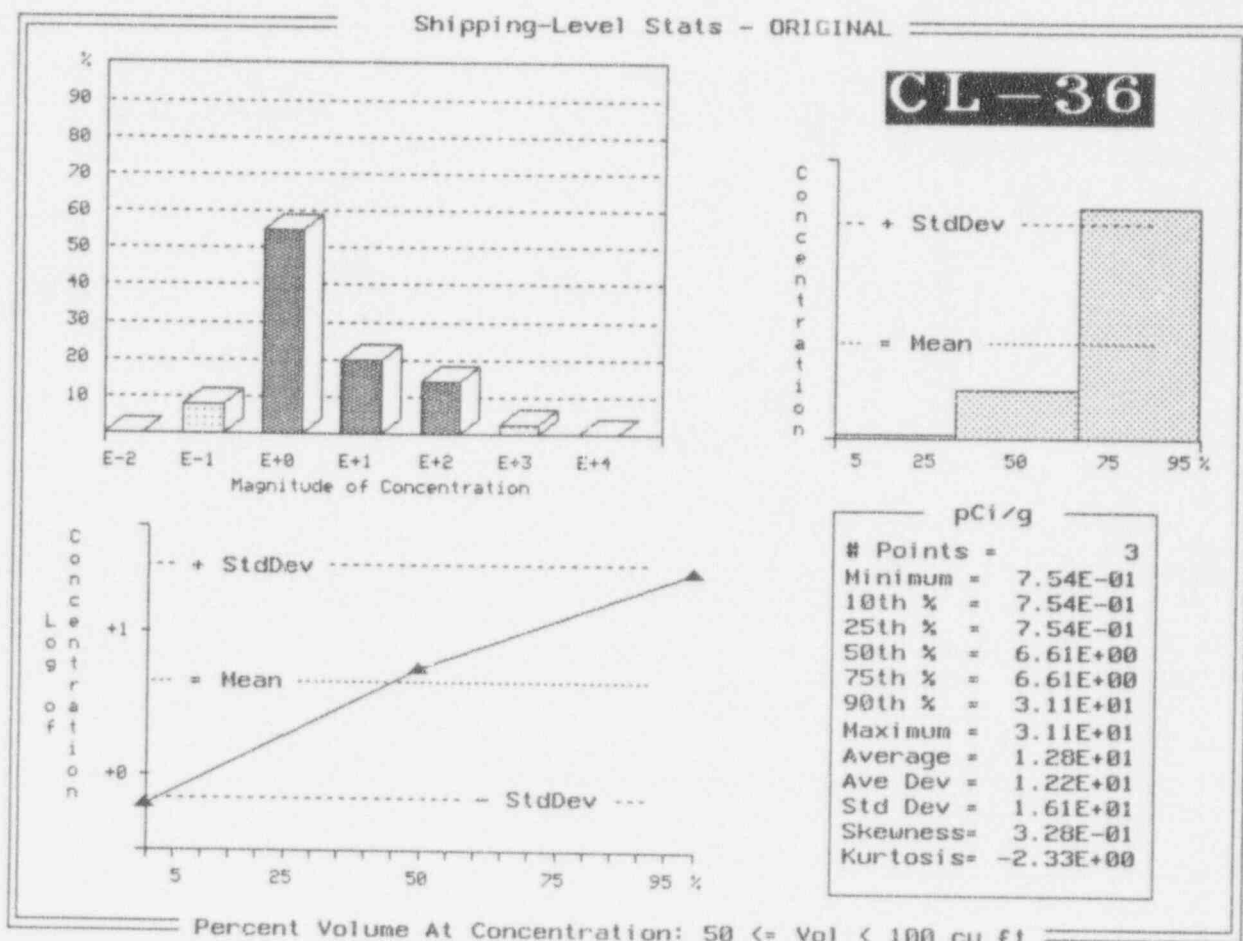


Exhibit F-34 (Continued)

Shipping-Level Stats - ORIGINAL

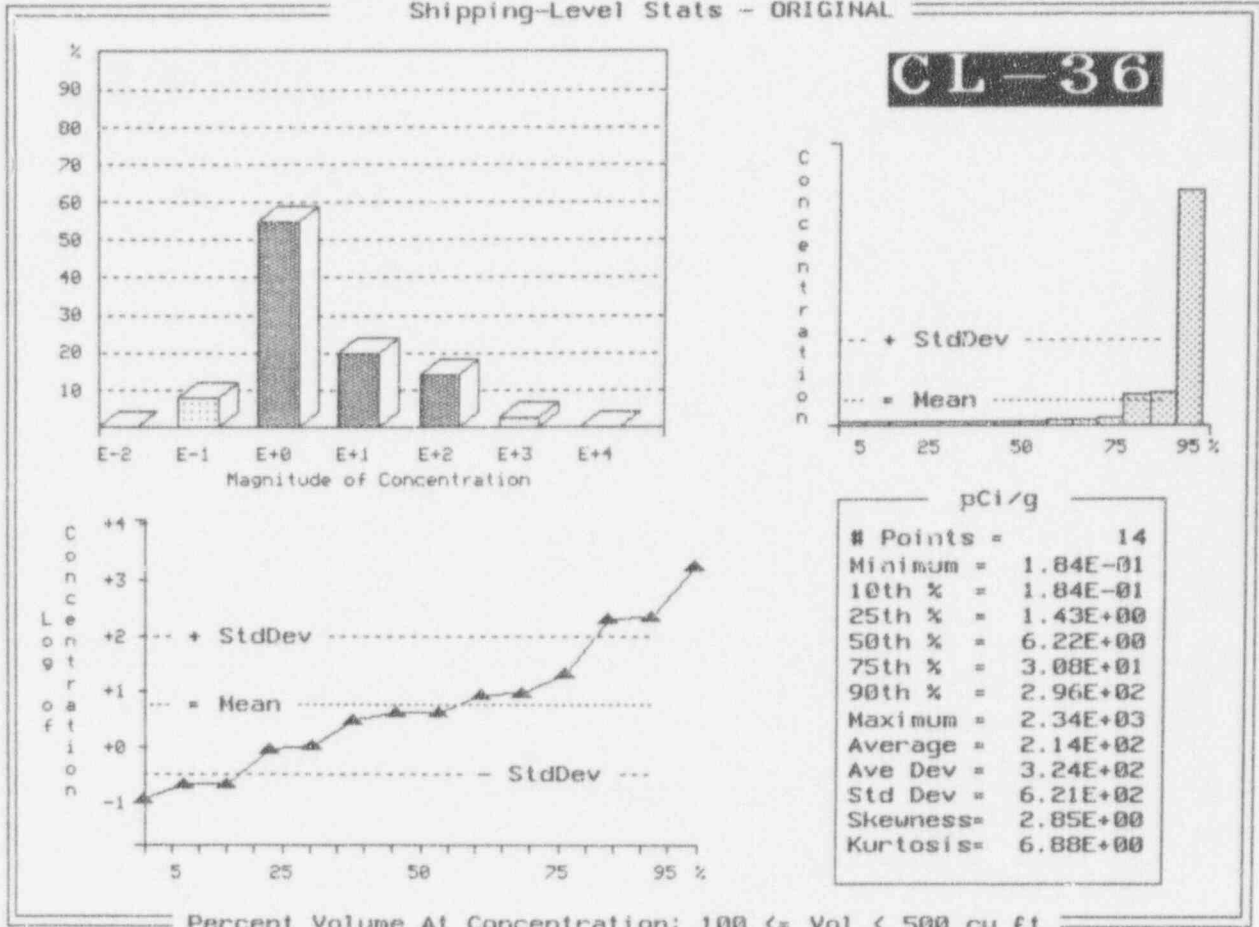


Exhibit F-34 (Continued)

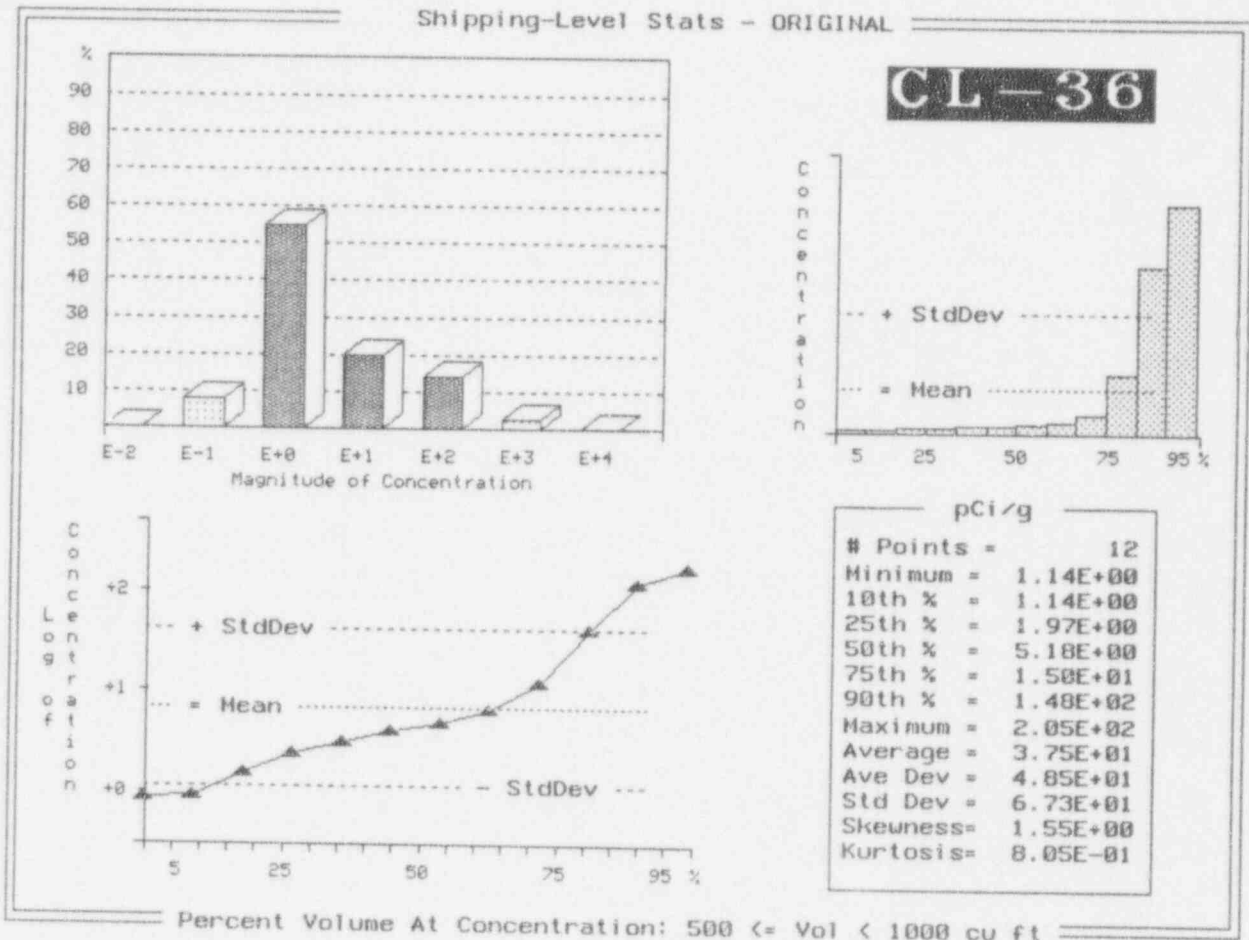
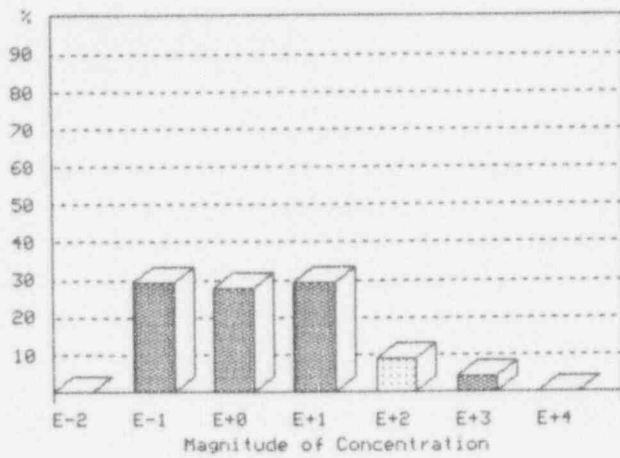
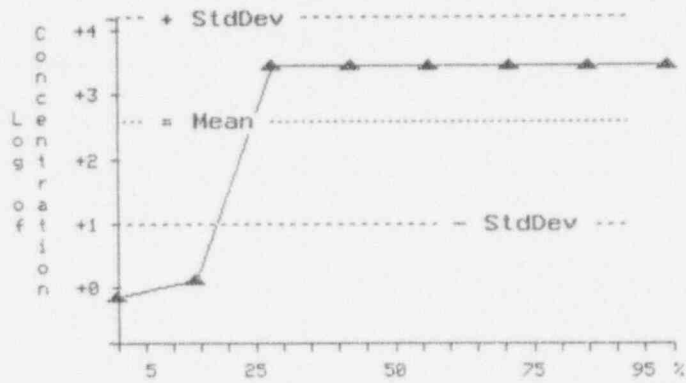
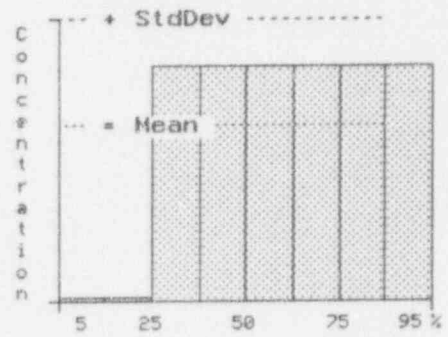


Exhibit F-34 (Continued)

Shipping-Level Stats - ORIGINAL



CO-57



pCi/g	
# Points =	8
Minimum =	1.04E+00
10th % =	1.04E+00
25th % =	1.98E+00
50th % =	4.14E+03
75th % =	4.14E+03
90th % =	4.14E+03
Maximum =	4.14E+03
Average =	3.11E+03
Ave Dev =	1.55E+03
Std Dev =	1.92E+03
Skewness =	-9.45E-01
Kurtosis =	-1.21E+00

Percent Volume At Concentration: 50 <= Vol < 100 cu ft

Exhibit F-34 (Continued)

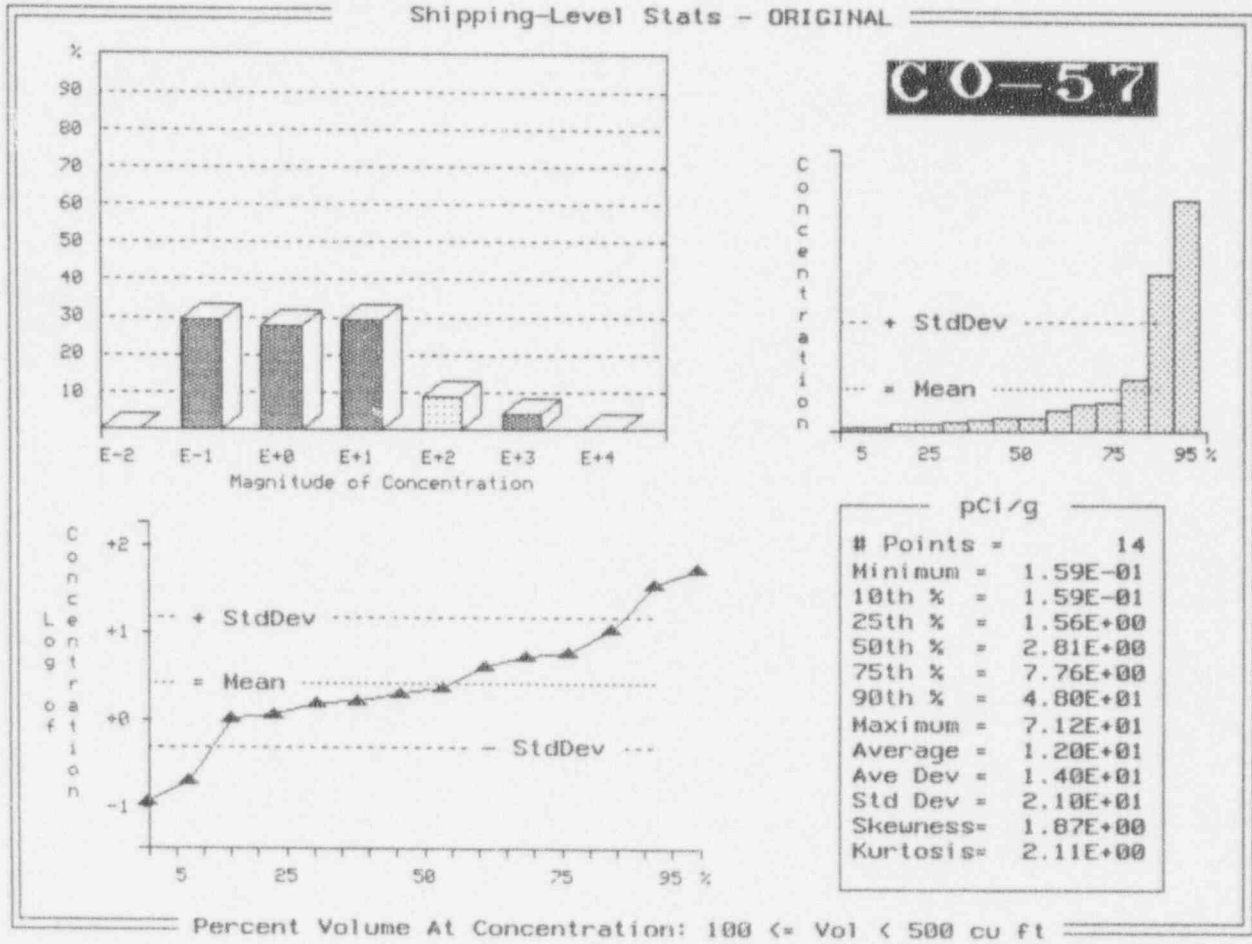


Exhibit F-34 (Continued)

Shipping-Level Stats - ORIGINAL

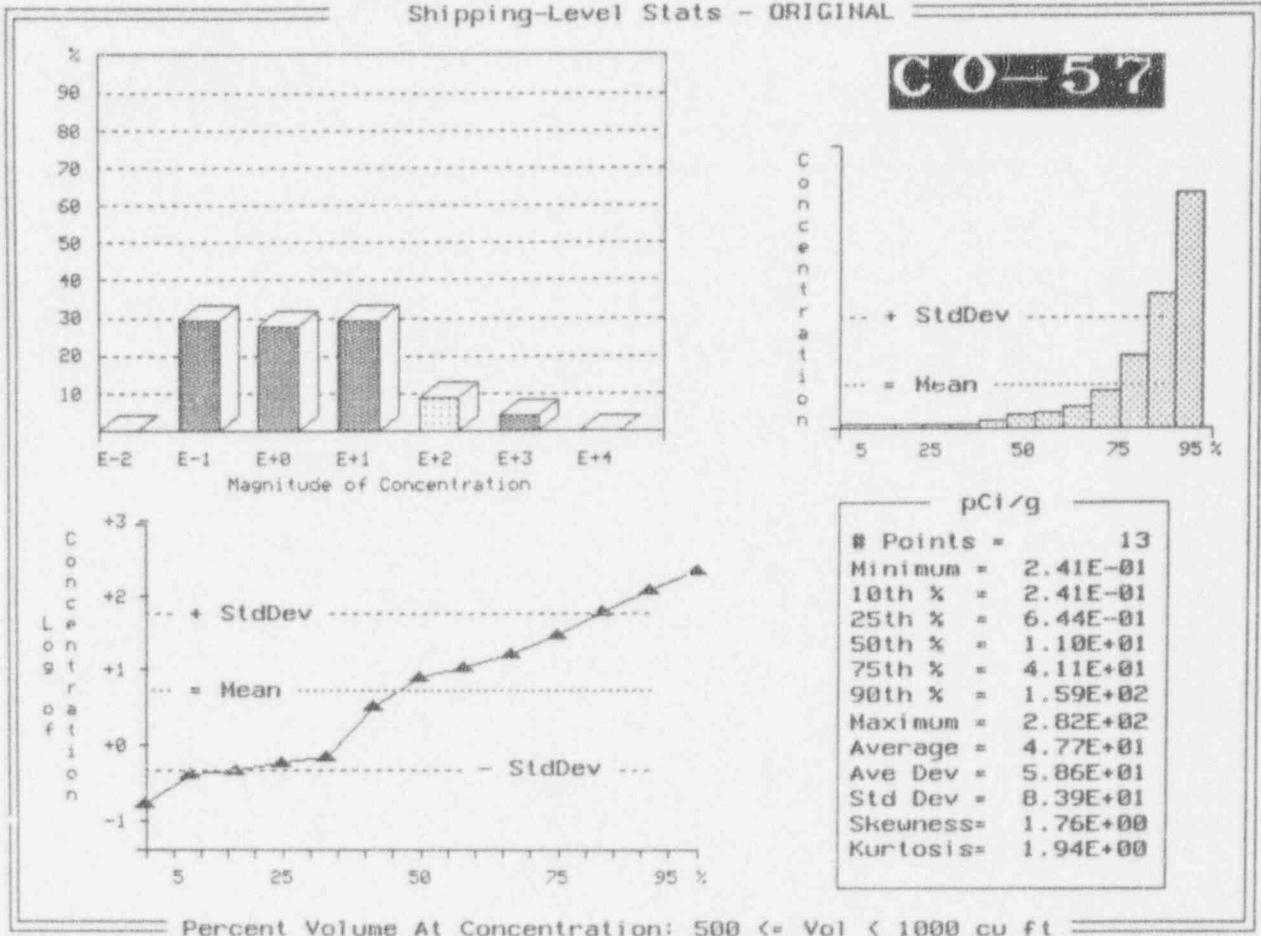


Exhibit F-34 (Continued)

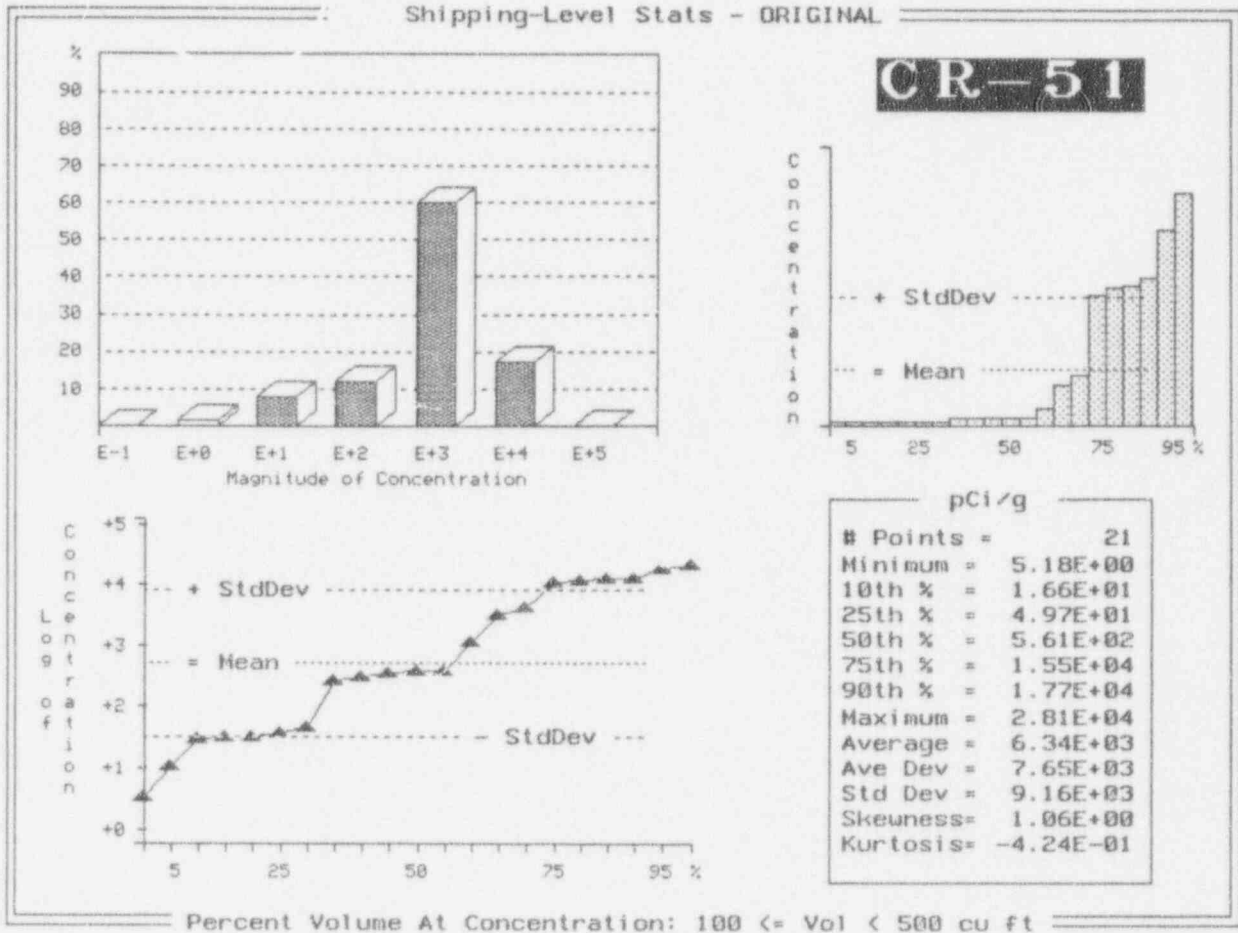


Exhibit F-34 (Continued)

Shipping-Level Stats - ORIGINAL

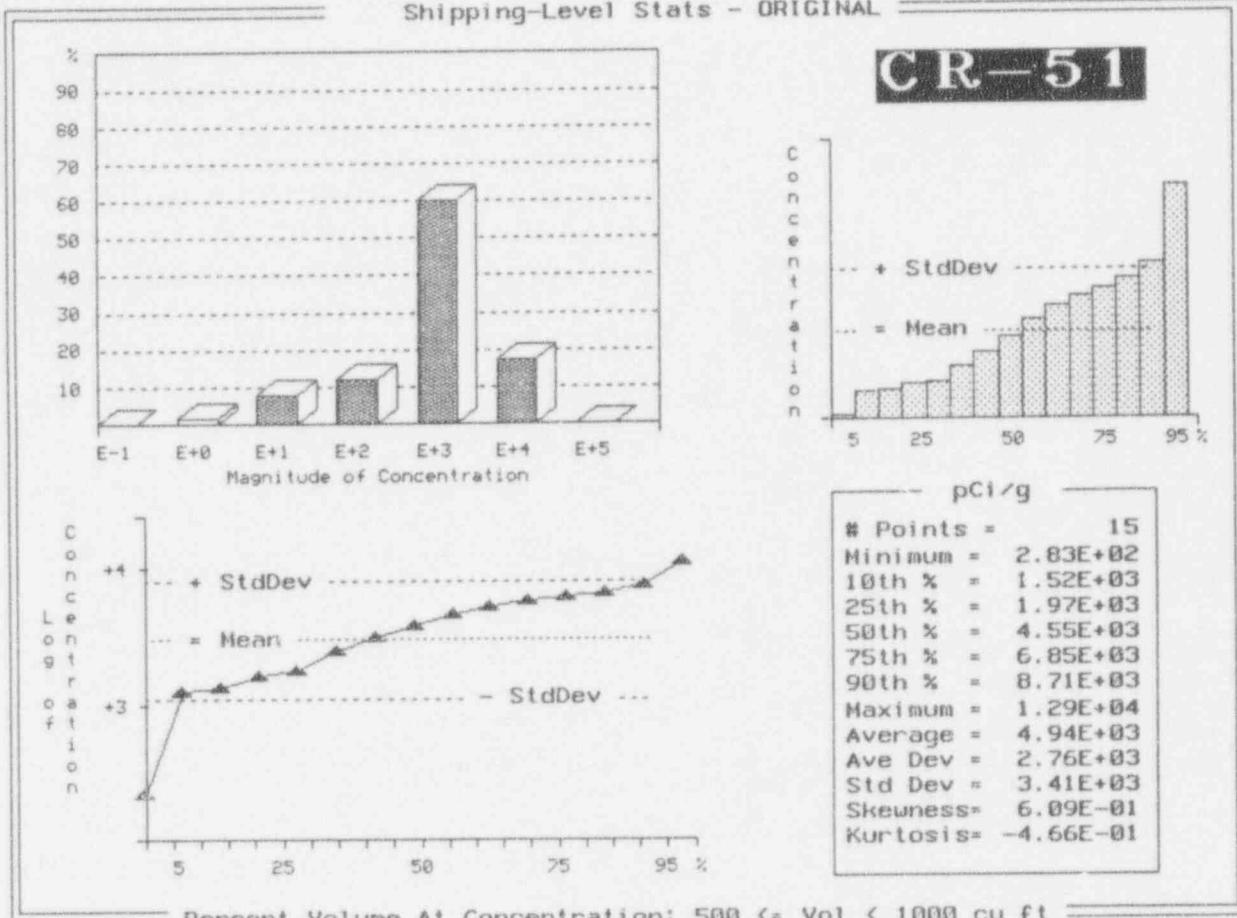
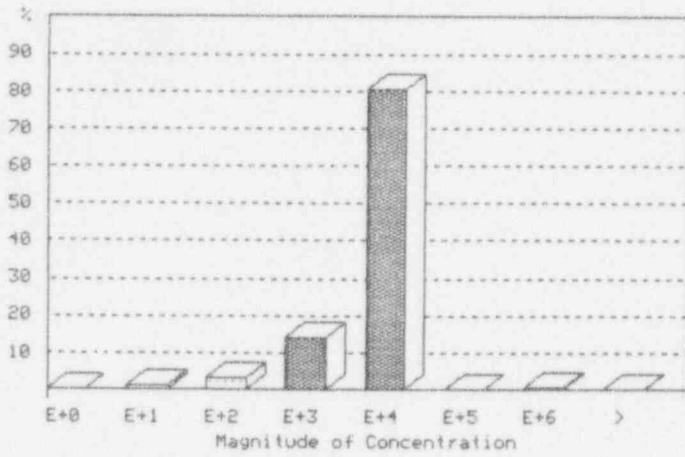
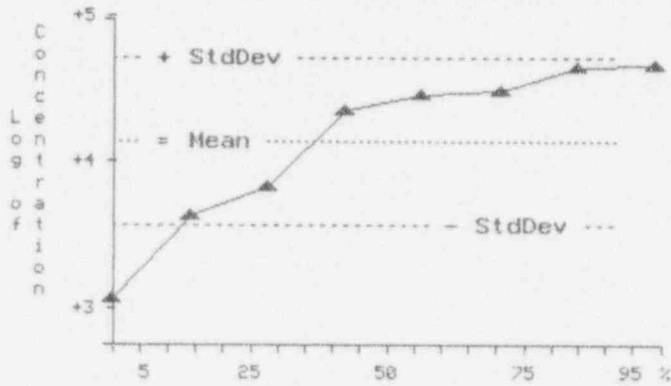
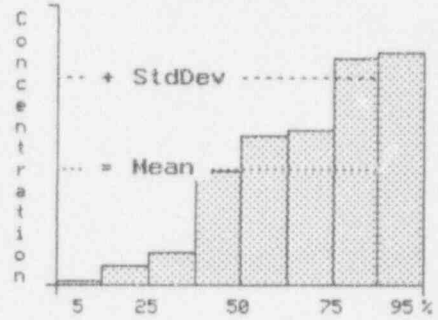


Exhibit F-34 (Continued)

Shipping-Level Stats - ORIGINAL



H-3



pCi/g	
# Points =	8
Minimum =	1.40E+03
10th % =	1.40E+03
25th % =	5.09E+03
50th % =	2.69E+04
75th % =	3.63E+04
90th % =	5.25E+04
Maximum =	5.37E+04
Average =	2.73E+04
Ave Dev =	1.69E+04
Std Dev =	2.07E+04
Skewness =	-1.03E-03
Kurtosis =	-1.82E+00

Percent Volume At Concentration: 10 <= Vol < 50 cu ft

Exhibit F-34 (Continued)

Shipping-Level Stats - ORIGINAL

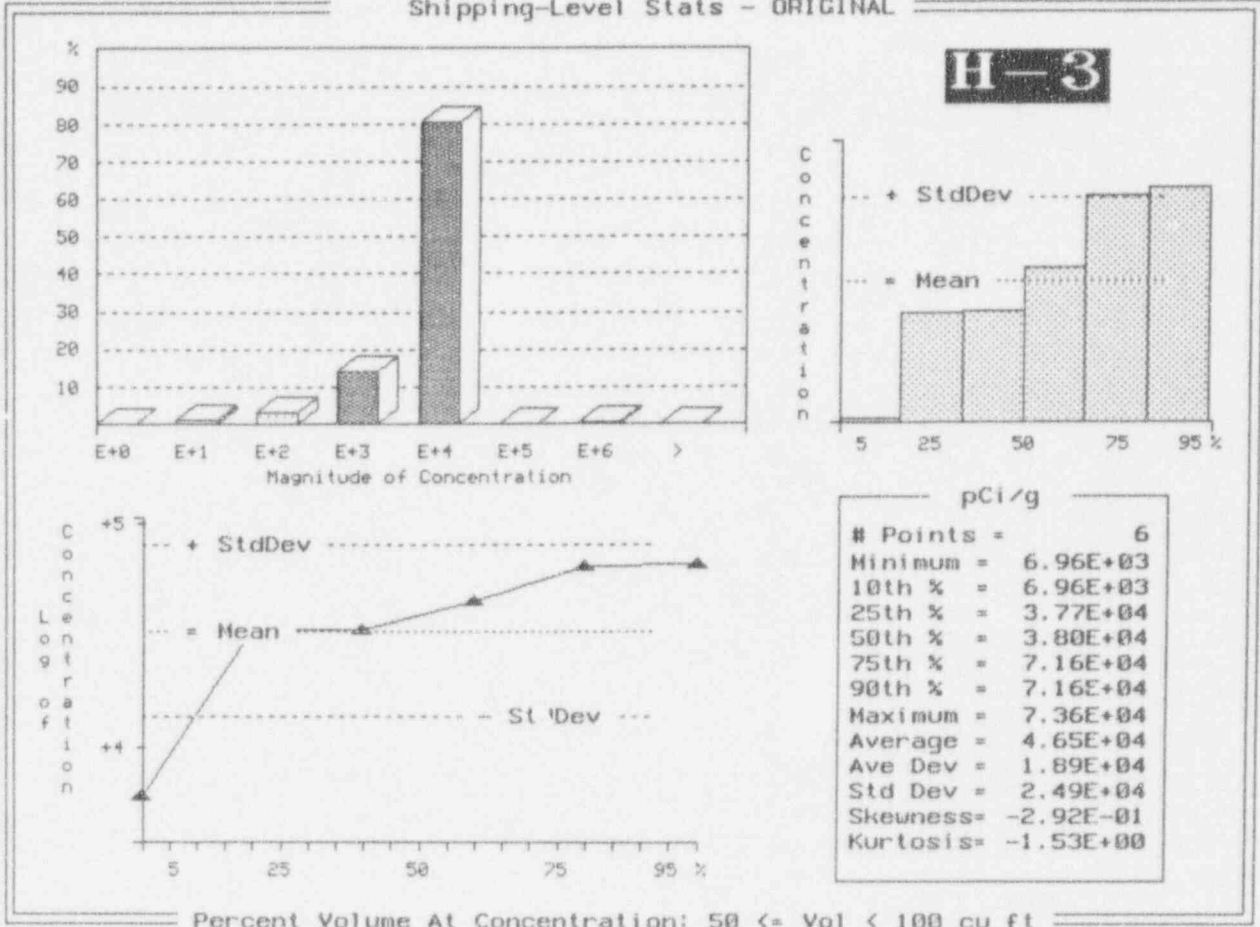
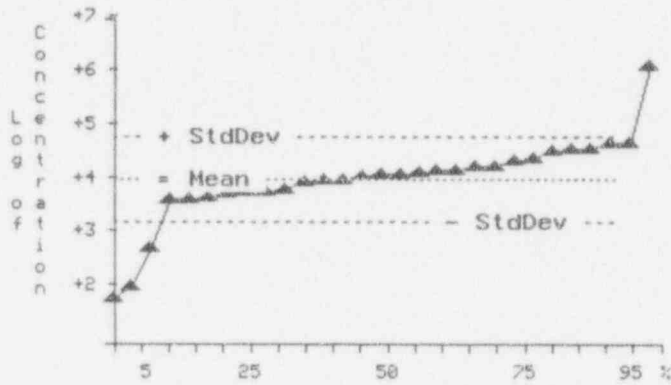
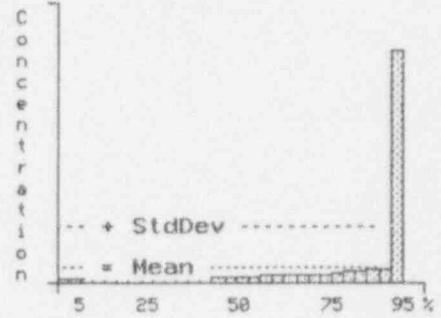
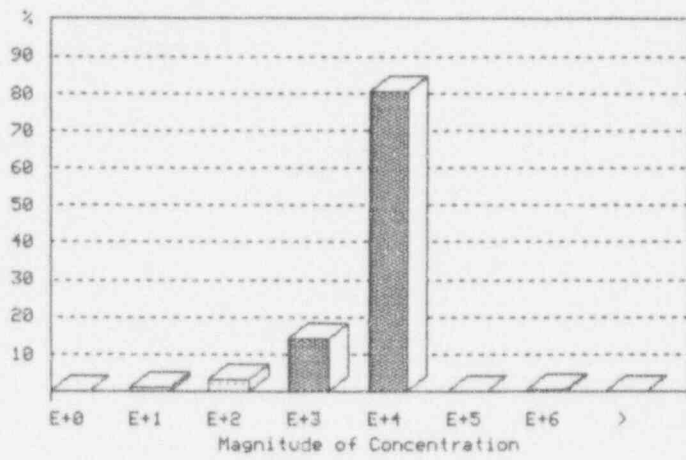


Exhibit F-34 (Continued)

Shipping-Level Stats - ORIGINAL

H-3



pCi/g	
# Points =	29
Minimum =	9.56E+01
10th % =	7.71E+02
25th % =	7.64E+03
50th % =	1.69E+04
75th % =	2.99E+04
90th % =	4.97E+04
Maximum =	1.66E+06
Average =	7.78E+04
Ave Dev =	1.09E+05
Std Dev =	3.05E+05
Skewness =	4.81E+00
Kurtosis =	2.20E+01

Percent Volume At Concentration: 100 <= Vol < 500 cu ft

Exhibit F-34 (Continued)

Shipping-Level Stats - ORIGINAL

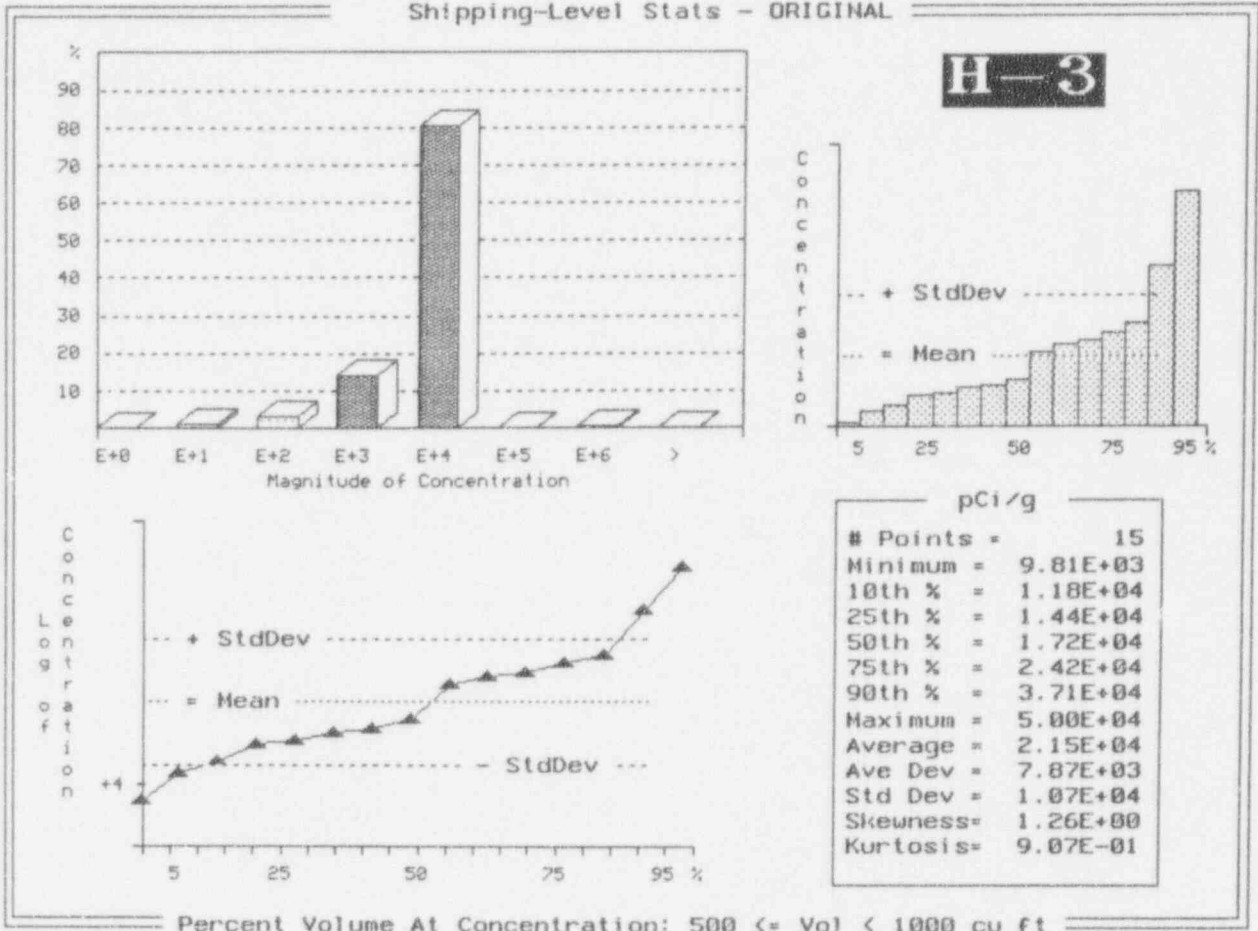


Exhibit F-34 (Continued)

Shipping-Level Stats - ORIGINAL

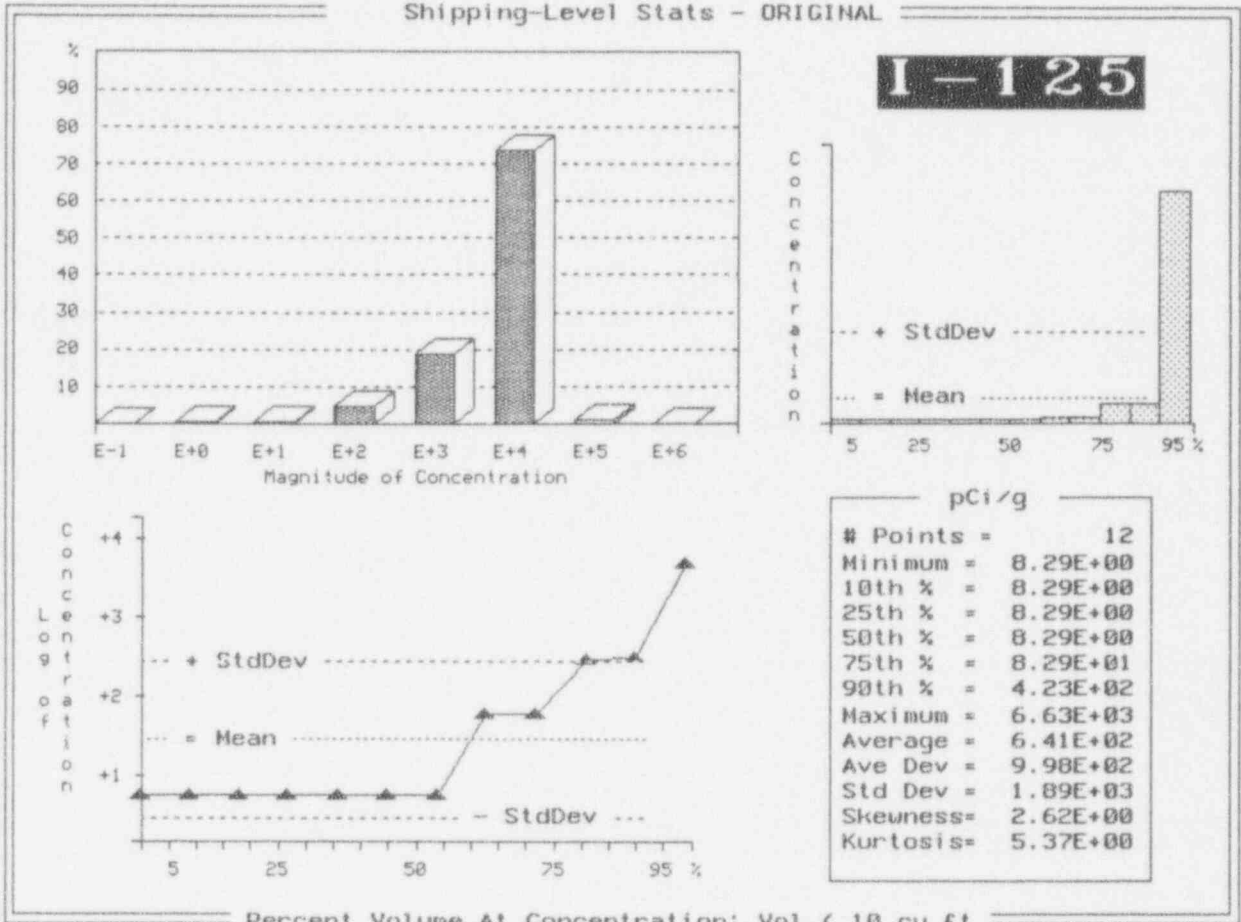


Exhibit F-34 (Continued)

Shipping-Level Stats - ORIGINAL

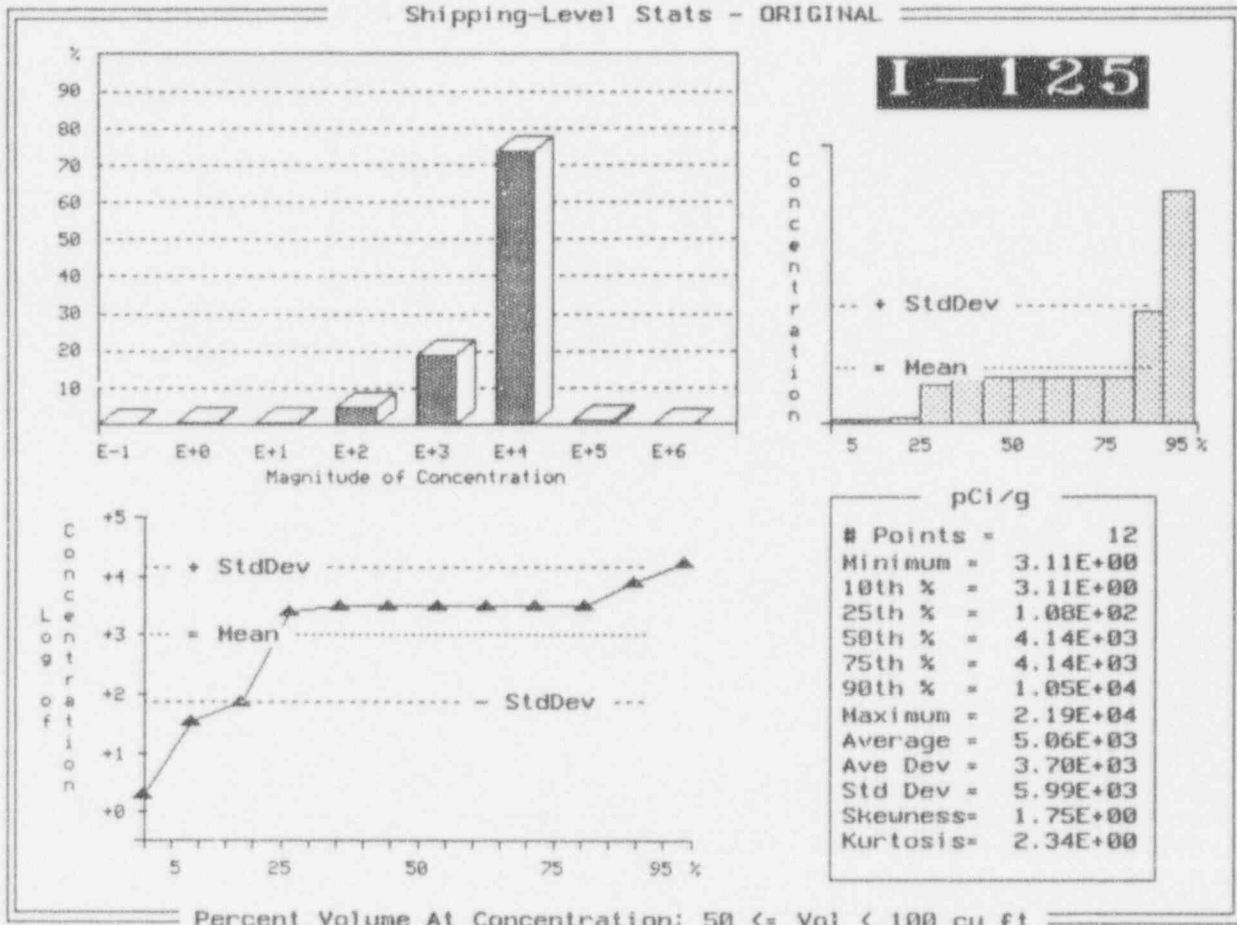
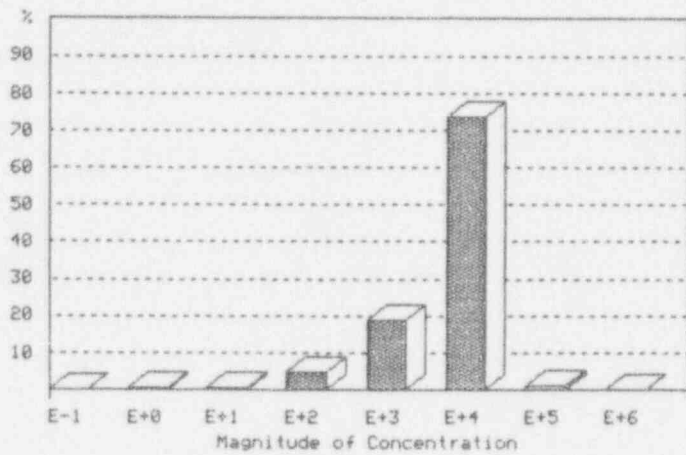
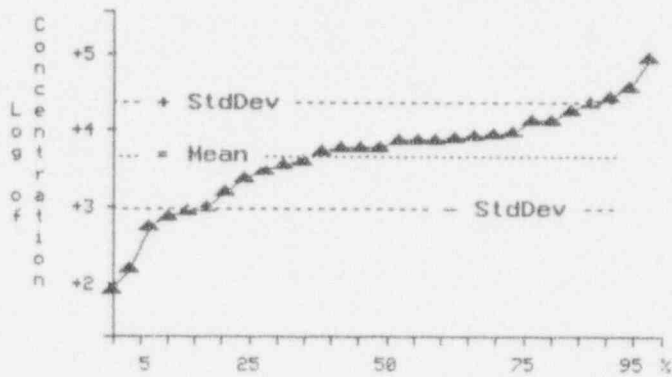
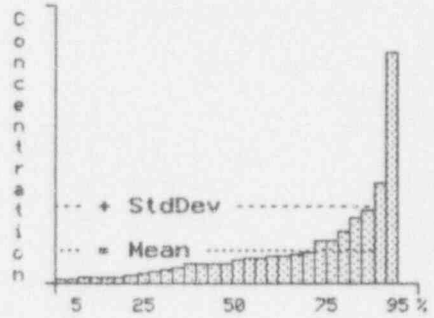


Exhibit F-34 (Continued)

Shipping-Level Stats - ORIGINAL



I-125



pCi/g	
# Points =	29
Minimum =	1.18E+02
10th % =	7.83E+02
25th % =	2.22E+03
50th % =	8.23E+03
75th % =	1.32E+04
90th % =	3.07E+04
Maximum =	1.13E+05
Average =	1.46E+04
Ave Dev =	1.28E+04
Std Dev =	2.20E+04
Skeuness=	3.15E+00
Kurtosis=	1.09E+01

Percent Volume At Concentration: 100 < Vol < 500 cu ft

Exhibit F-34 (Continued)

Shipping-Level Stats - ORIGINAL

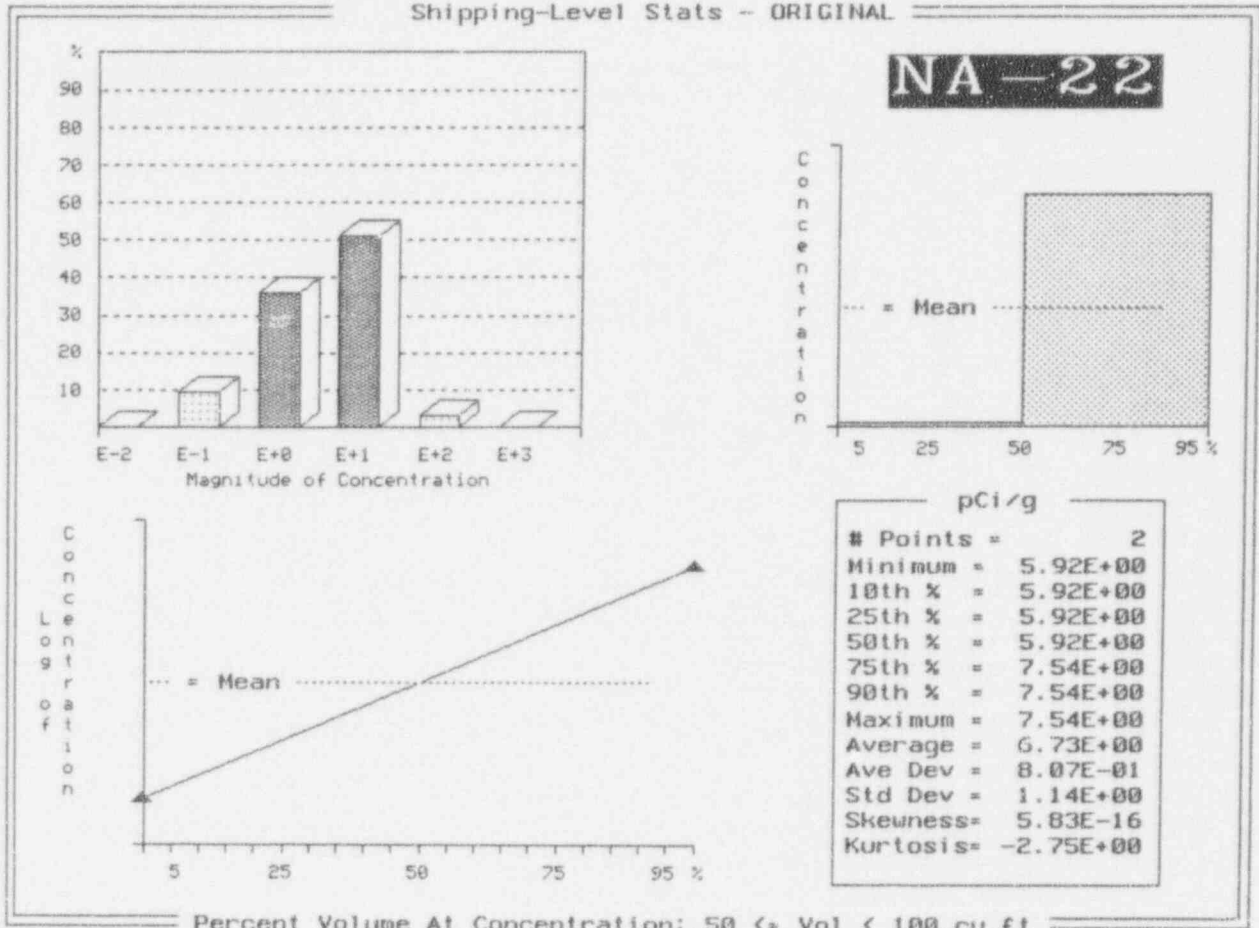


Exhibit F-34 (Continued)

Shipping-Level Stats - ORIGINAL

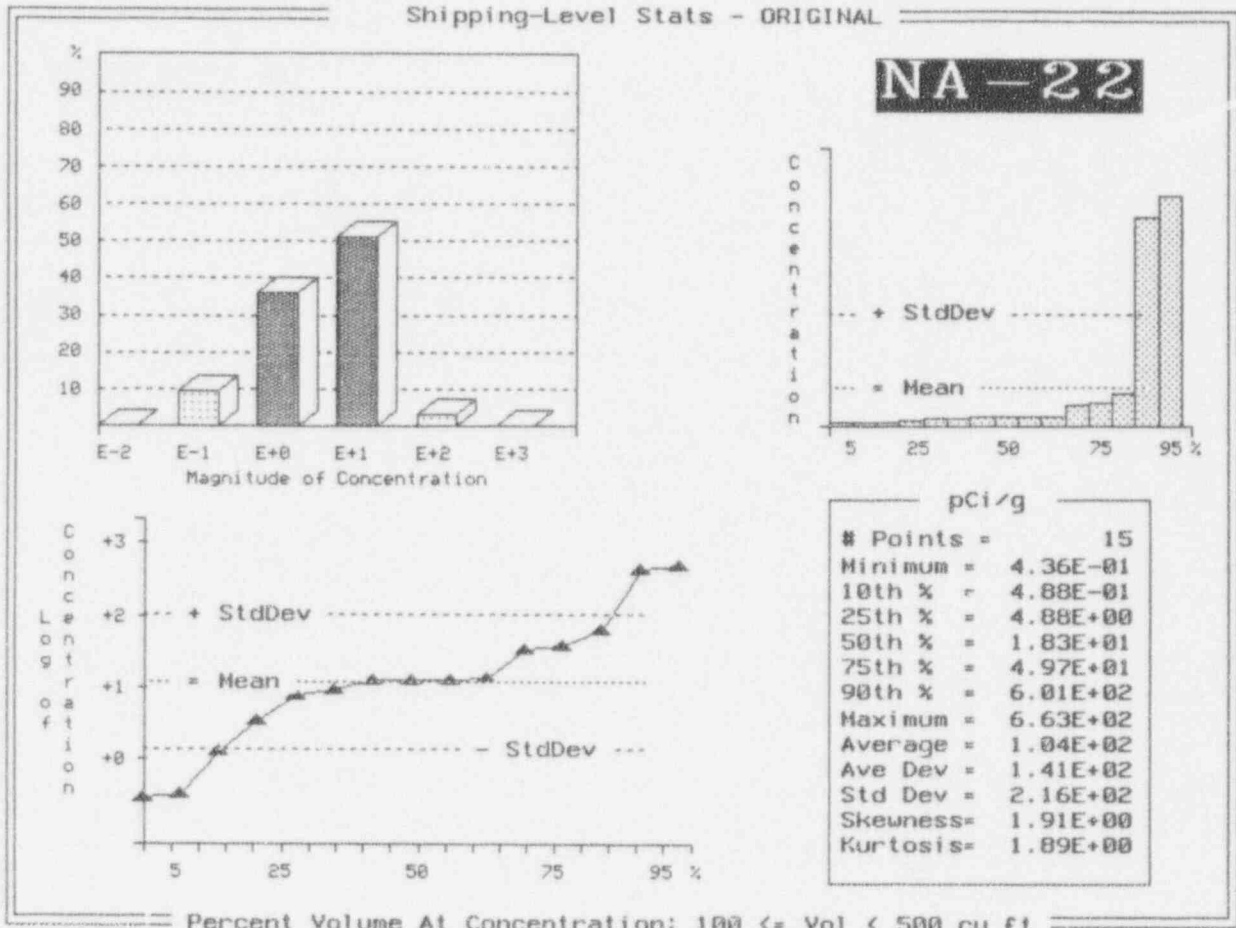
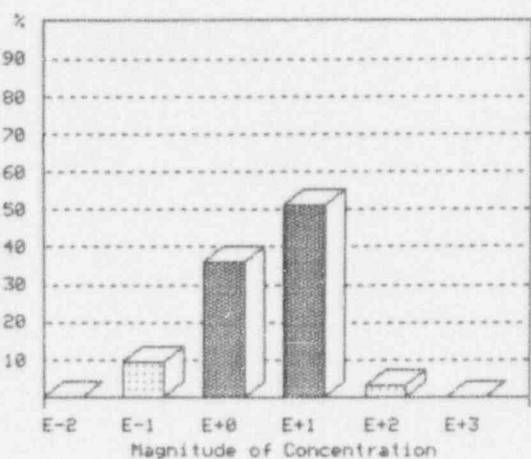
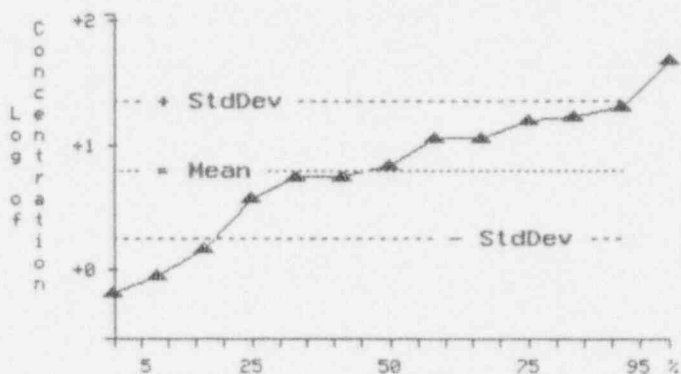
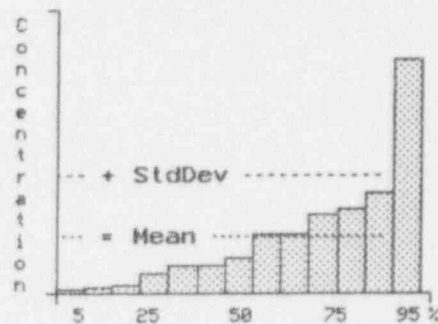


Exhibit F-34 (Continued)

Shipping-Level Stats - ORIGINAL



NA-22

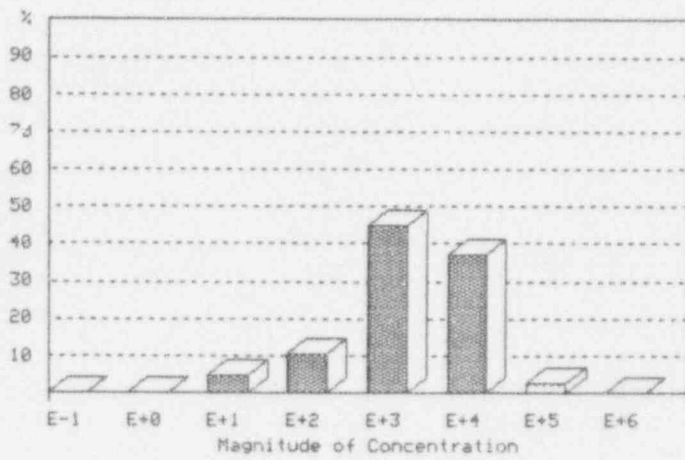


pCi/g	
# Points =	13
Minimum =	8.28E-01
10th % =	8.28E-01
25th % =	1.91E+00
50th % =	8.68E+00
75th % =	1.94E+01
90th % =	2.48E+01
Maximum =	5.83E+01
Average =	1.41E+01
Ave Dev =	1.04E+01
Std Dev =	1.54E+01
Skewness =	1.68E+00
Kurtosis =	2.34E+00

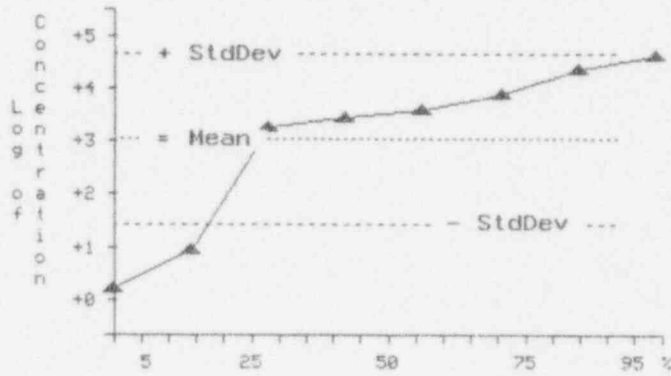
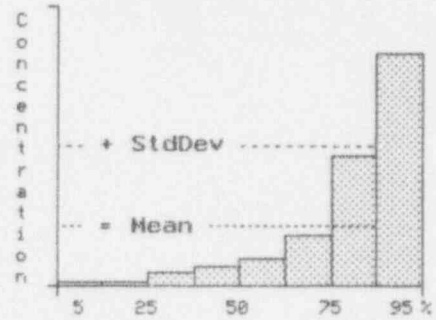
Percent Volume At Concentration: 500 <= Vol < 1000 cu ft

Exhibit F-34 (Continued)

Shipping-Level Stats - ORIGINAL



P-32



pCi/g	
# Points =	8
Minimum =	2.76E+00
10th % =	2.76E+00
25th % =	1.38E+01
50th % =	4.42E+03
75th % =	1.24E+04
90th % =	3.41E+04
Maximum =	6.19E+04
Average =	1.52E+04
Ave Dev =	1.64E+04
Std Dev =	2.19E+04
Skewness =	1.16E+00
Kurtosis =	-2.72E-01

Percent Volume At Concentration: 10 <= Vol < 50 cu ft

Exhibit F-34 (Continued)

Shipping-Level Stats - ORIGINAL

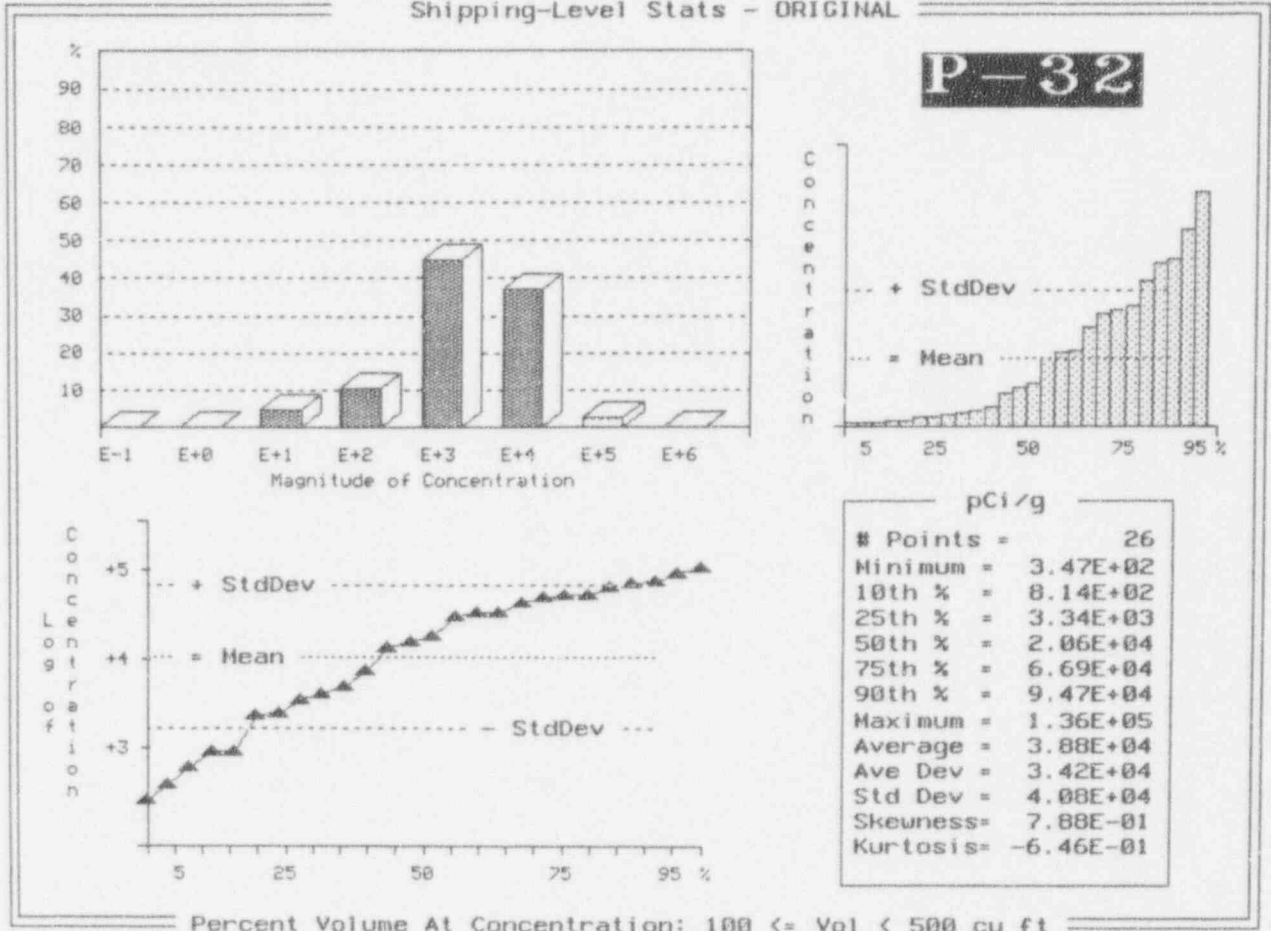
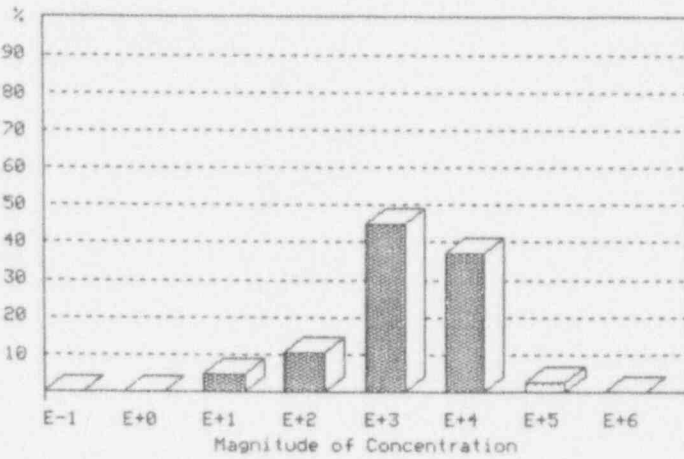
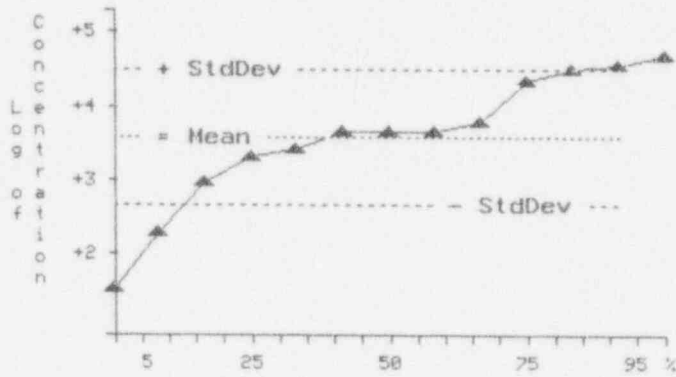
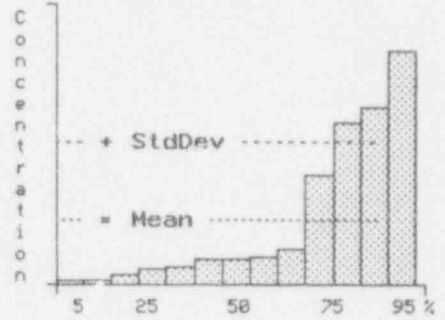


Exhibit F-34 (Continued)

Shipping-Level Stats - ORIGINAL



P-32



pCi/g	
# Points =	13
Minimum =	5.03E+01
10th % =	5.03E+01
25th % =	1.35E+03
50th % =	6.22E+03
75th % =	2.92E+04
90th % =	4.77E+04
Maximum =	6.31E+04
Average =	1.69E+04
Ave Dev =	1.79E+04
Std Dev =	2.15E+04
Skewness =	9.89E-01
Kurtosis =	-7.00E-01

Percent Volume At Concentration: 500 <= Vol < 1000 cu ft

Exhibit F-34 (Continued)

Shipping-Level Stats - ORIGINAL

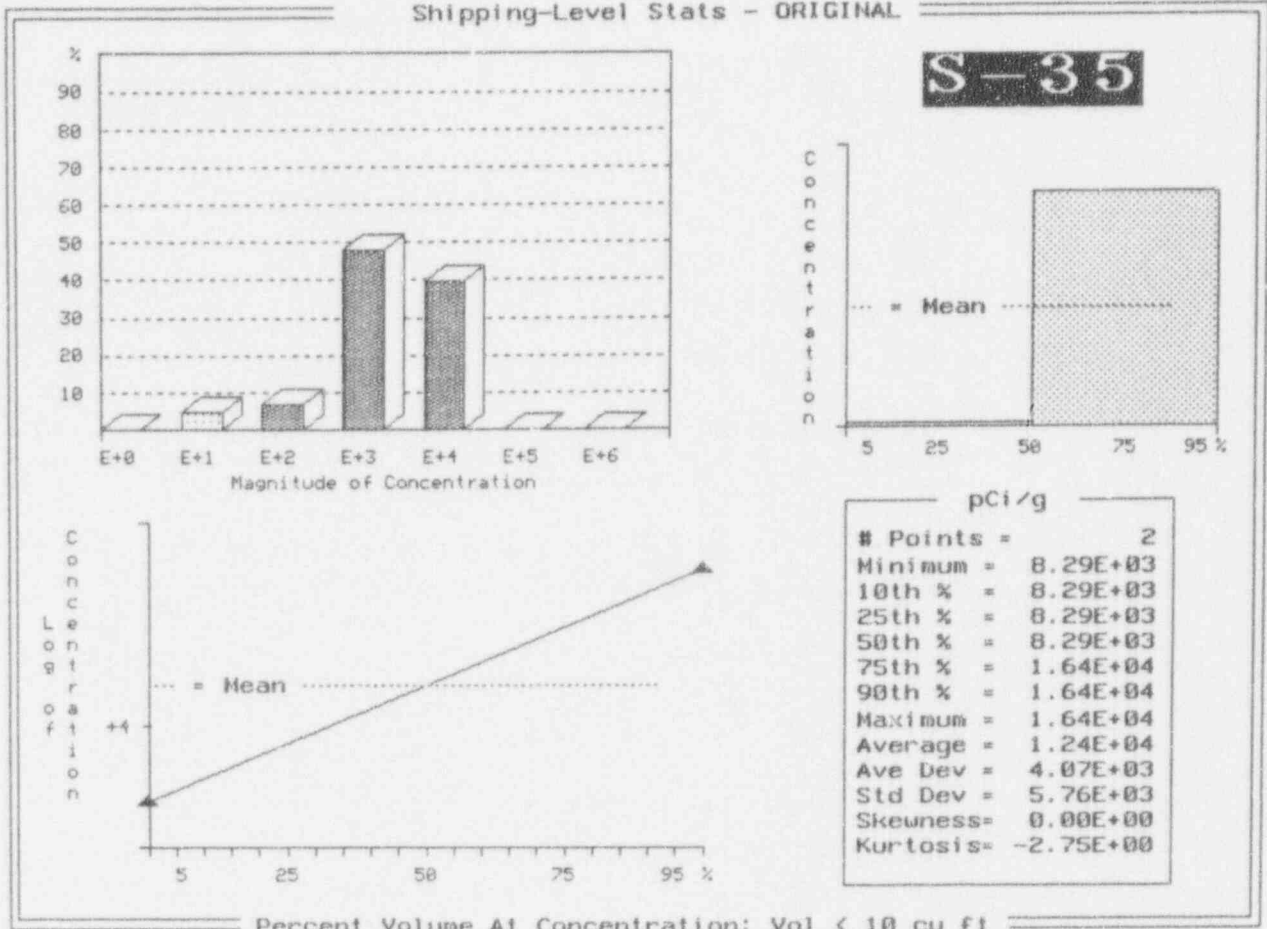
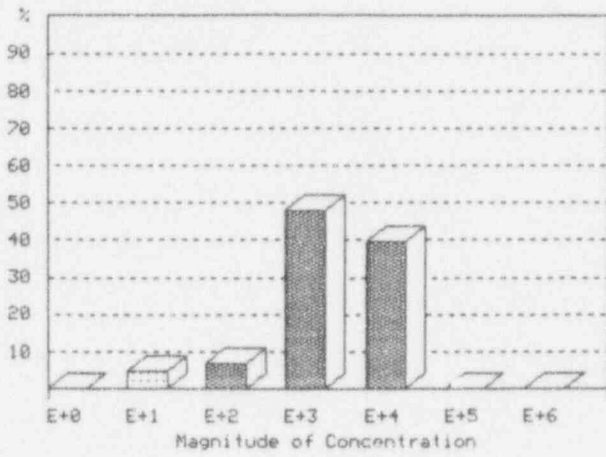
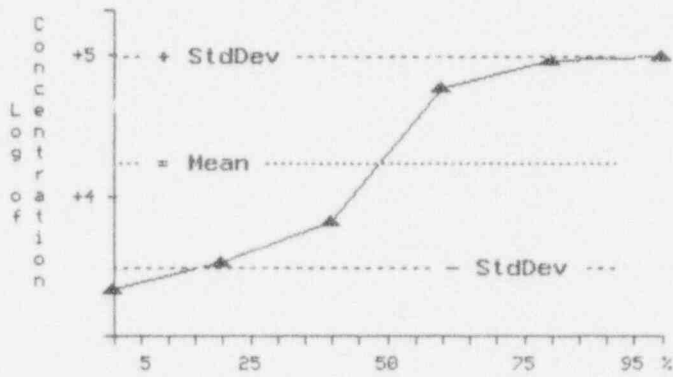
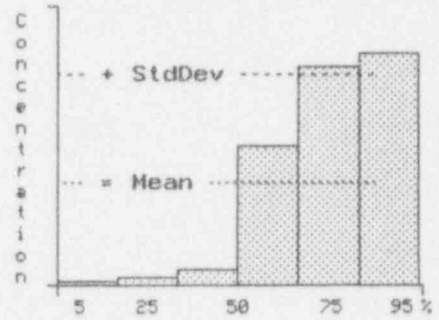


Exhibit F-34 (Continued)

Shipping-Level Stats - ORIGINAL



S-35



pCi/g	
# Points =	6
Minimum =	2.76E+03
10th % =	2.76E+03
25th % =	4.28E+03
50th % =	8.29E+03
75th % =	1.11E+05
90th % =	1.11E+05
Maximum =	1.16E+05
Average =	5.21E+04
Ave Dev =	4.70E+04
Std Dev =	5.38E+04
Skewness =	1.66E-01
Kurtosis =	-2.14E+00

Percent Volume At Concentration: 10 <= Vol < 50 cu ft

Exhibit F-34 (Continued)

Shipping-Level Stats - ORIGINAL

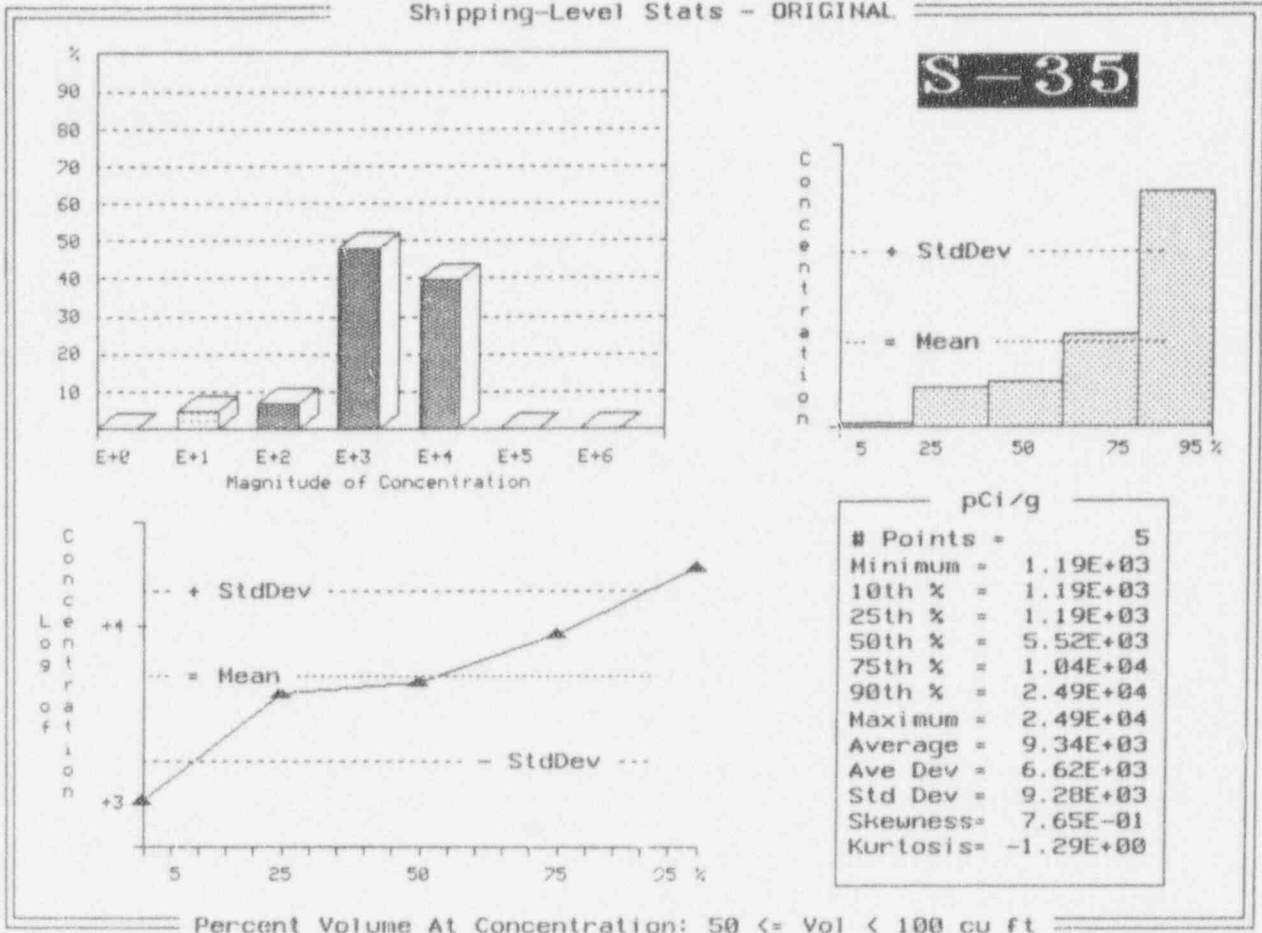
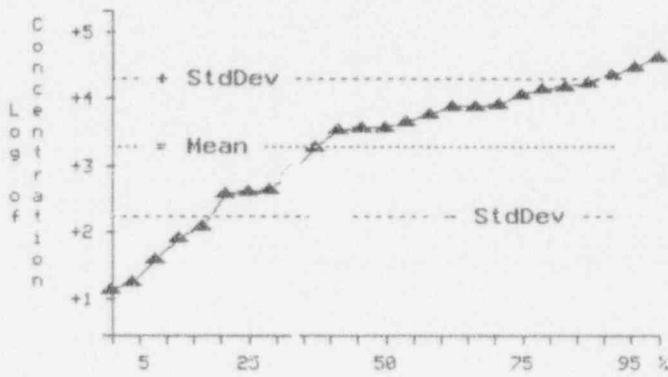
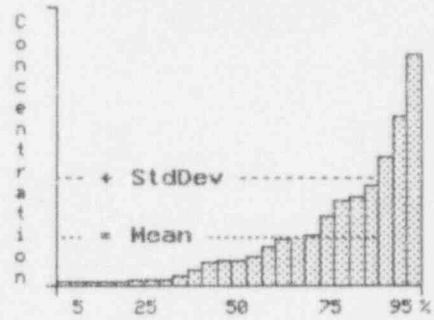
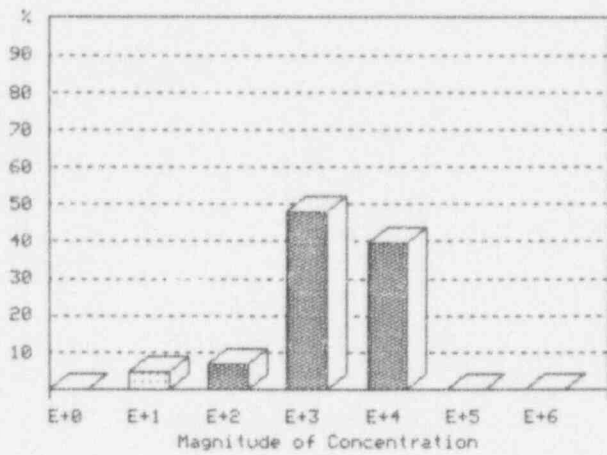


Exhibit F-34 (Continued)

Shipping-Level Stats - ORIGINAL

S-35



pCi/g	
# Points =	25
Minimum =	2.04E+01
10th % =	5.68E+01
25th % =	5.33E+02
50th % =	5.25E+03
75th % =	1.59E+04
90th % =	3.10E+04
Maximum =	5.54E+04
Average =	1.10E+04
Ave Dev =	1.04E+04
Std Dev =	1.42E+04
Skewness =	1.58E+00
Kurtosis =	1.93E+00

Percent Volume At Concentration: 100 <= Vol < 500 cu ft

Exhibit F-34 (Continued)

Shipping-Level Stats - ORIGINAL

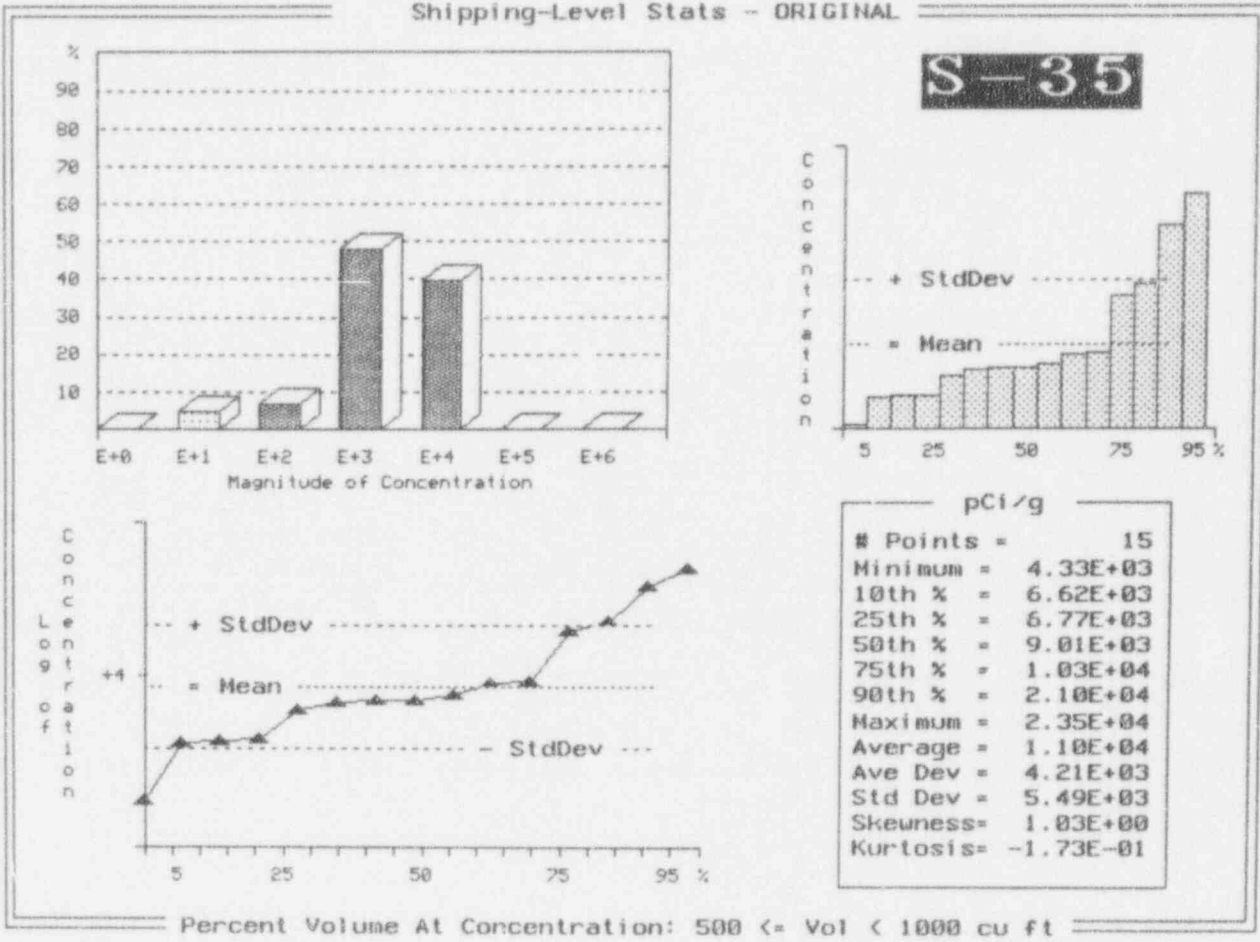


Exhibit F-35
Data Summary - Analyses at the Shipment Level
 (Aggregate Practices for non-brokered waste: 1986 to 1990)

	<u>Data or Parameters</u>
Compact or unaffiliated state:	Southwest
Waste generator class:	Medical
Total number of waste generators:	103
Total associated waste volume (m ³):	805
Total associated waste activity (Ci):	136
Waste class:	A-Unstable and A-Stable
Identified waste generators for this analysis:	
Number:	26
Percent of total(%):	25
Total number of shipping records:	135
Number of shipping records <u>with</u> container data:	0
Number of waste containers:	0
Weight of shipments (kg):	137,300
Total waste volume (m ³):	242
Fractional waste volume (%): (this analysis/total)	30
Total waste activity (Ci):	9.4
Fractional waste activity (%): (this analysis/total)	7

Exhibit F-35 (Continued)

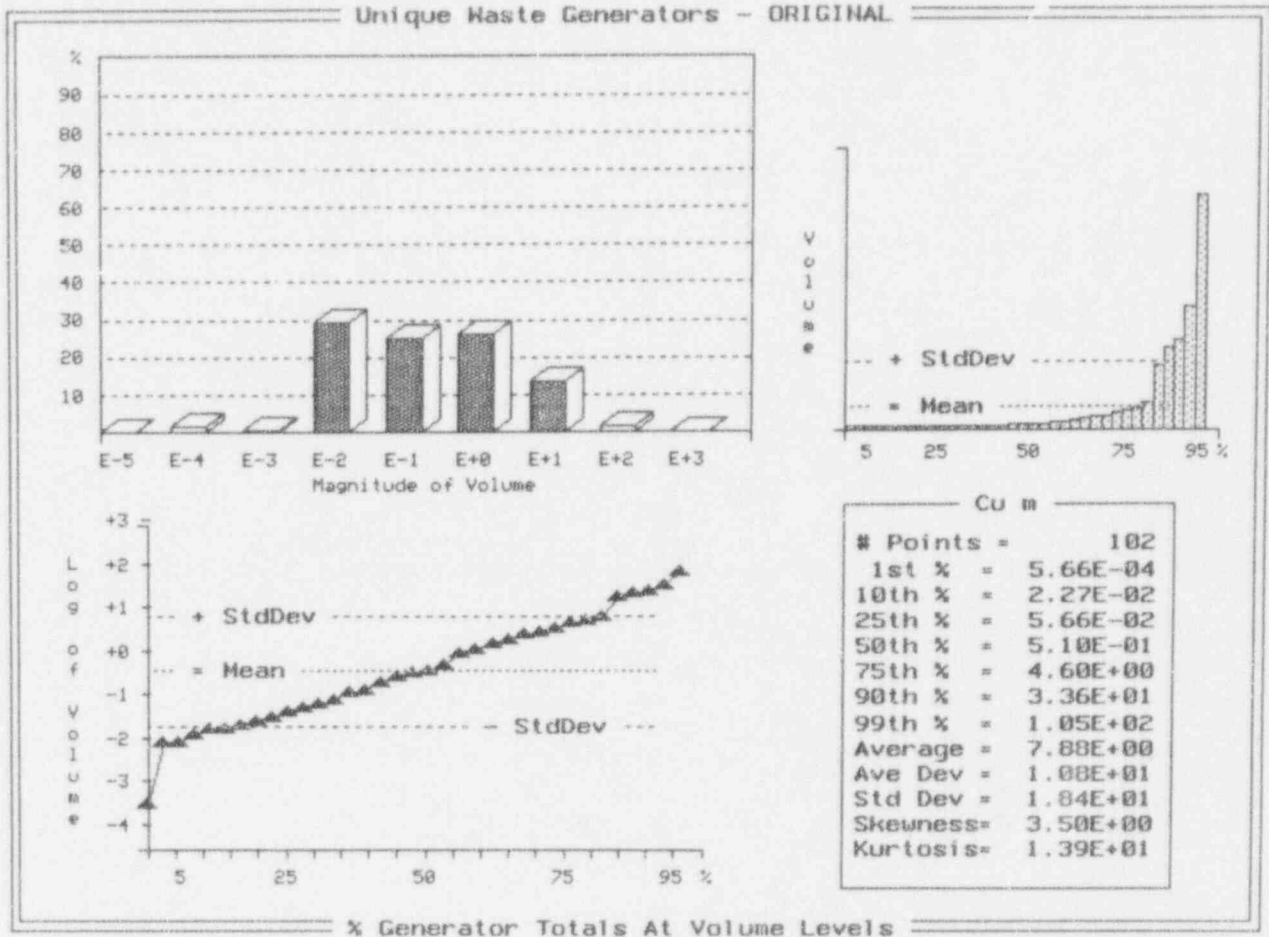


Exhibit F-35 (Continued)

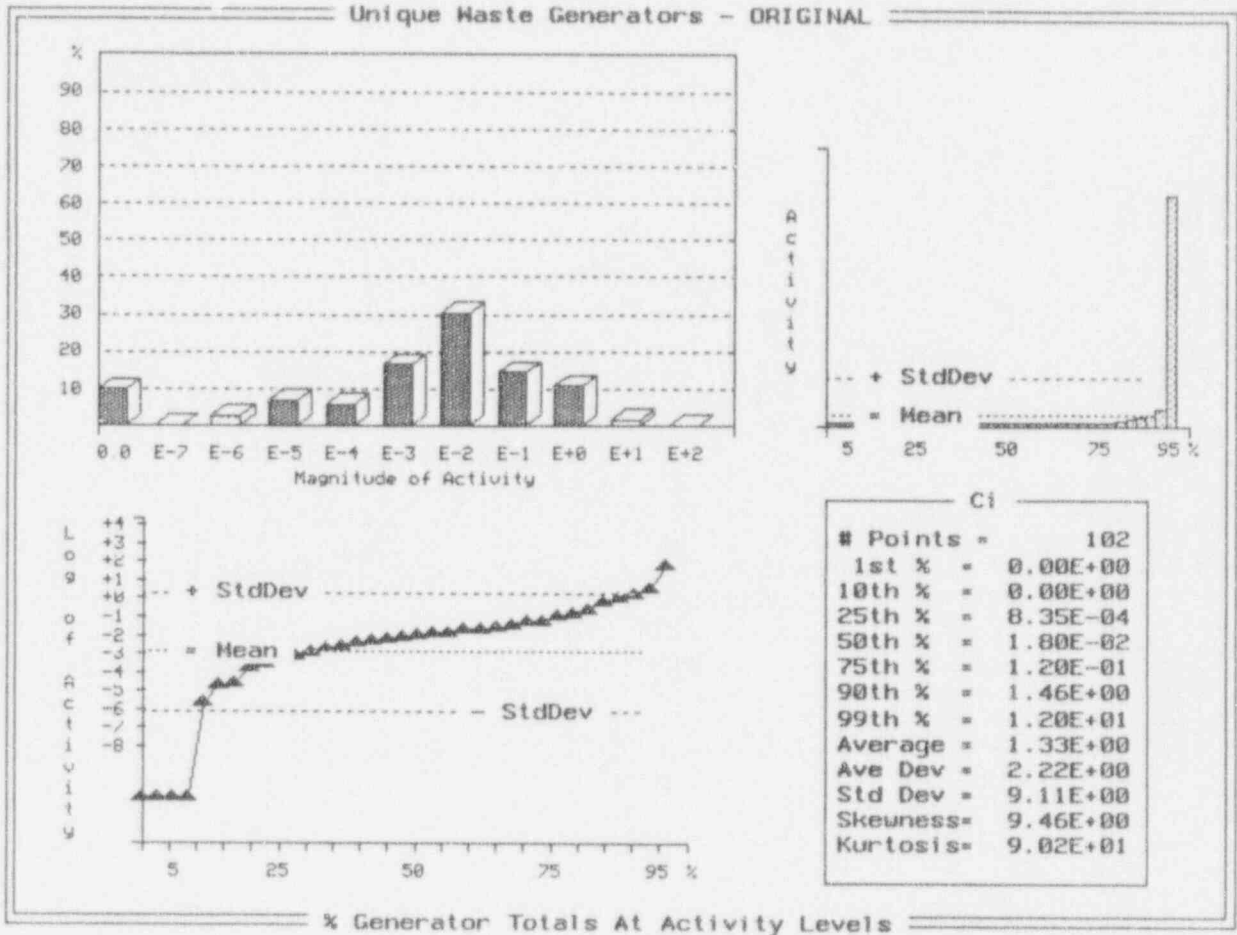


Exhibit F-35 (Continued)

Shipping-Level Stats - ORIGINAL

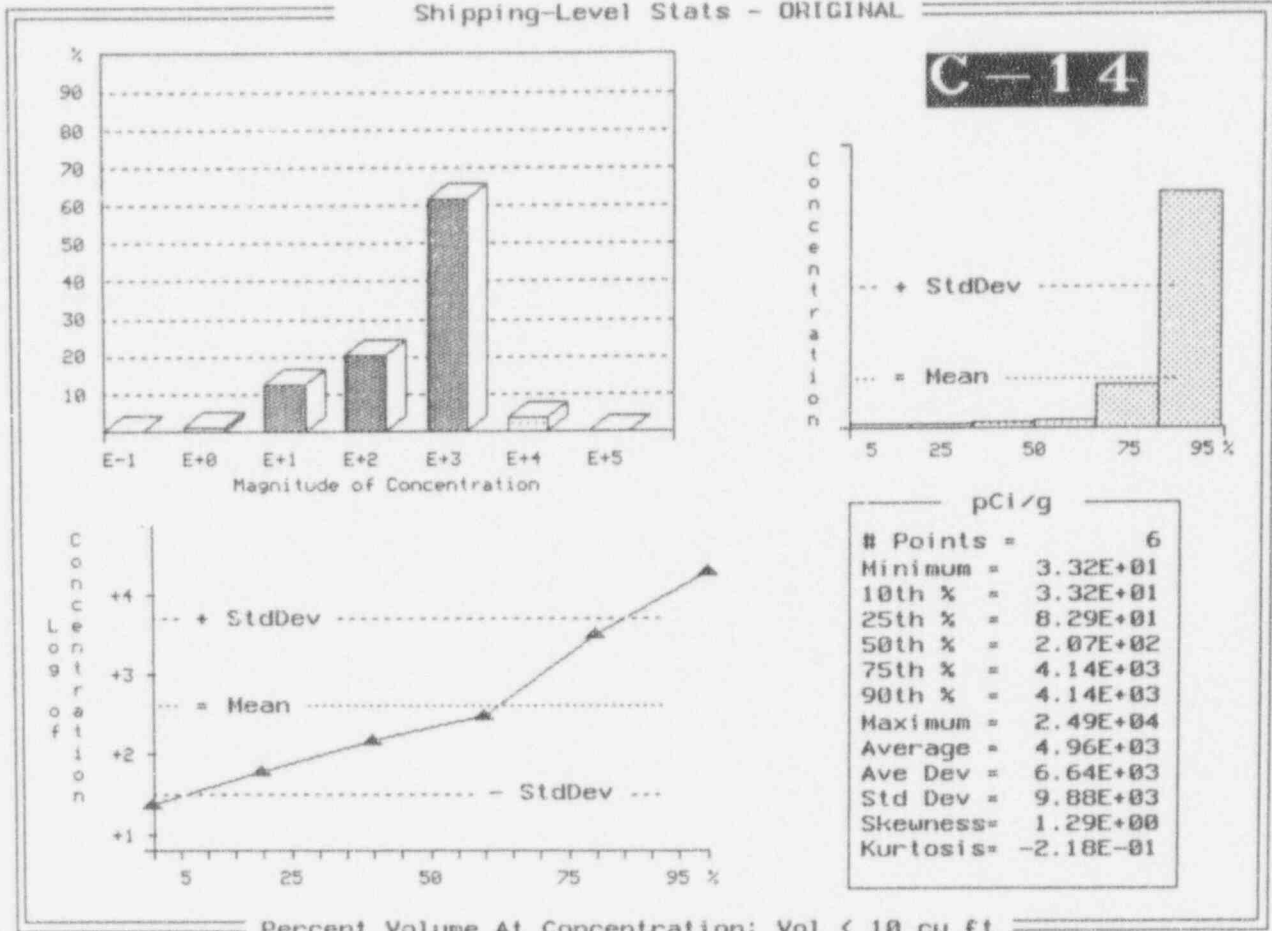


Exhibit F-35 (Continued)

Shipping-Level Stats - ORIGINAL

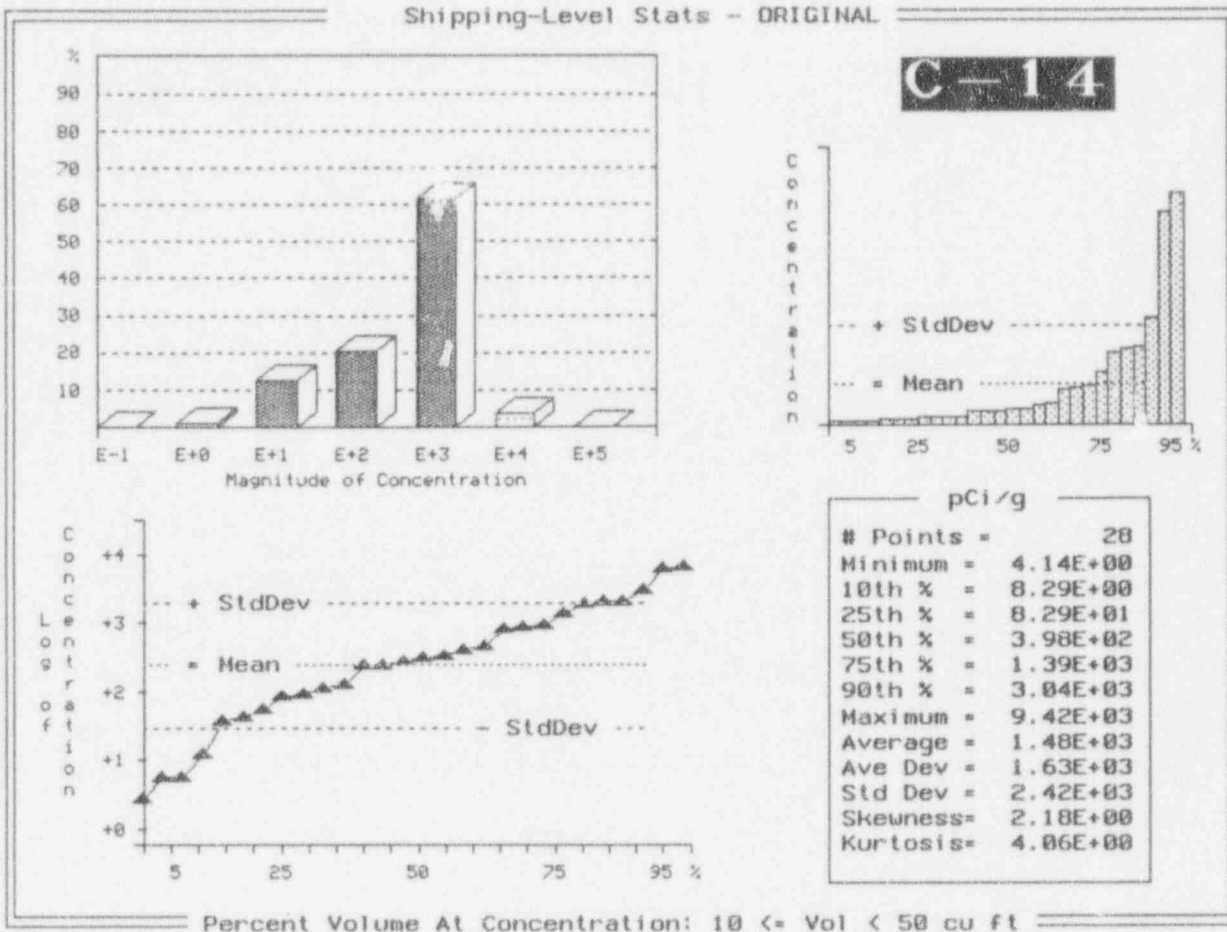


Exhibit F-35 (Continued)

Shipping-Level Stats - ORIGINAL

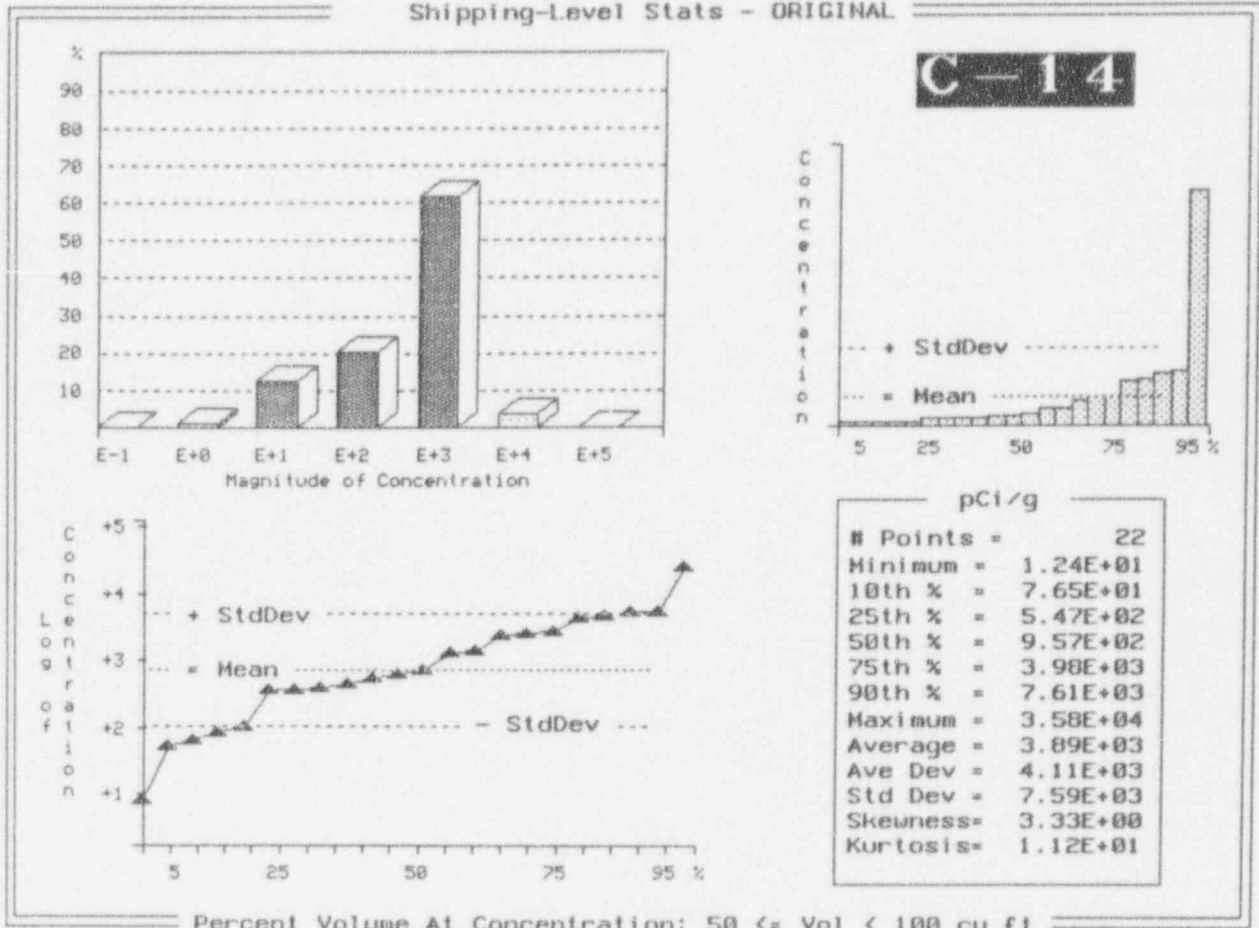


Exhibit F-35 (Continued)

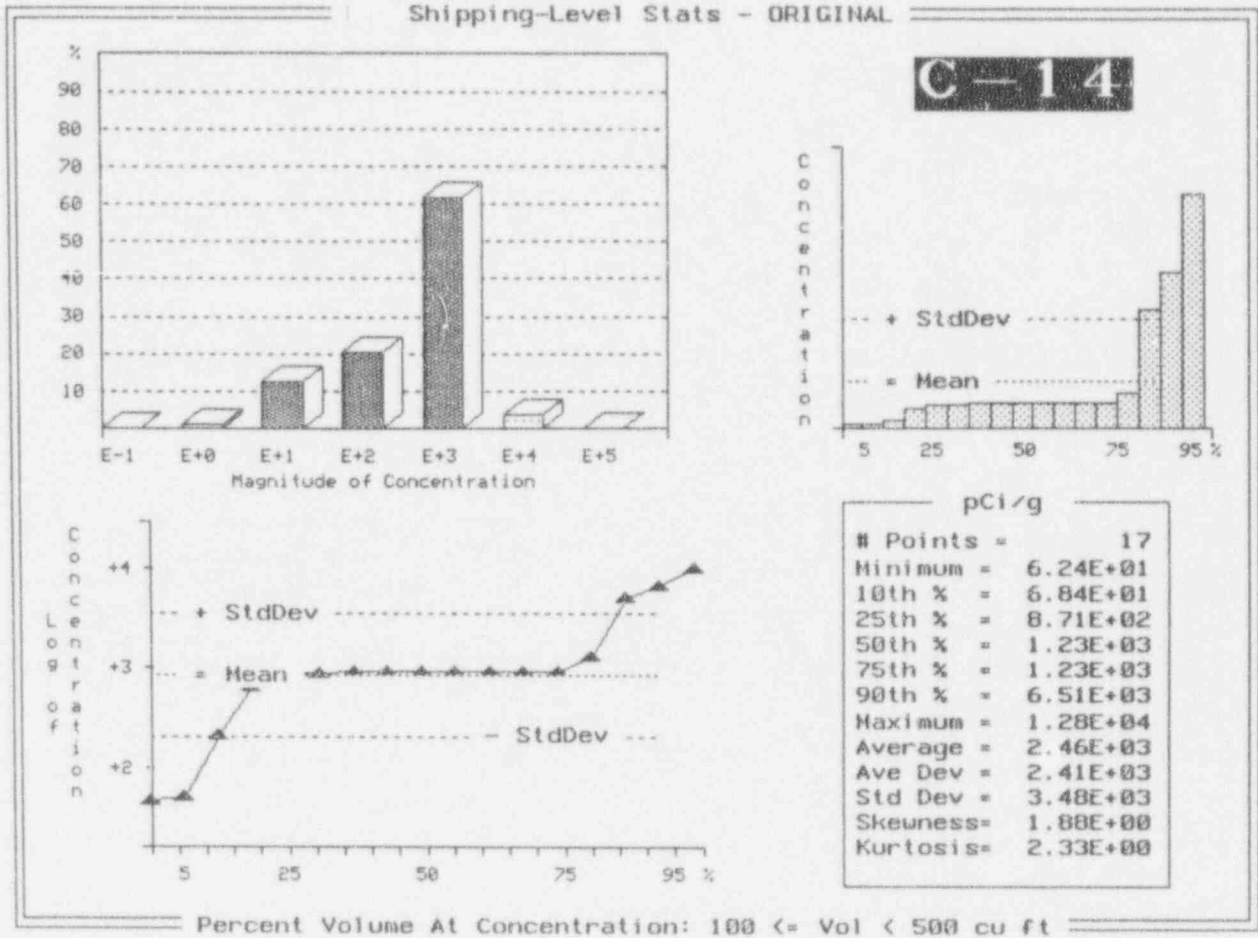
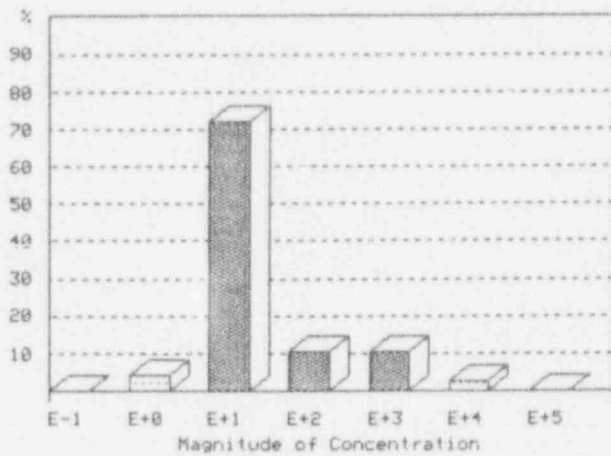
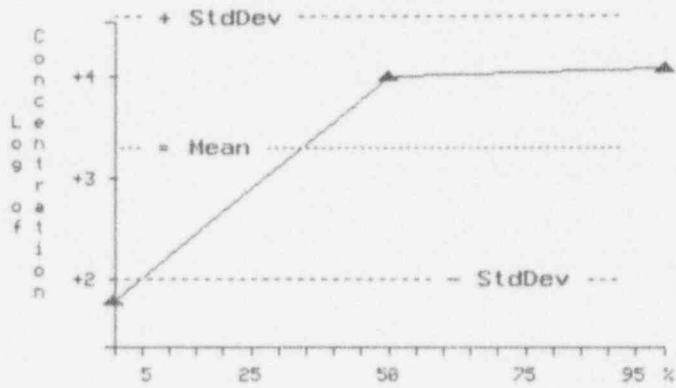
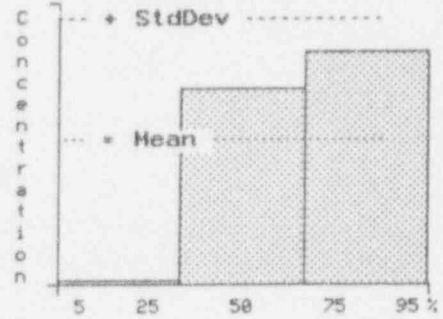


Exhibit F-35 (Continued)

Shipping-Level Stats - ORIGINAL



CO-57



pCi/g	
# Points =	3
Minimum =	8.29E+01
10th % =	8.29E+01
25th % =	8.29E+01
50th % =	1.24E+04
75th % =	1.24E+04
90th % =	1.49E+04
Maximum =	1.49E+04
Average =	9.15E+03
Ave Dev =	6.04E+03
Std Dev =	7.95E+03
Skewness =	-3.43E-01
Kurtosis =	-2.33E+00

Percent Volume At Concentration: Vol < 10 cu ft

Exhibit F-35 (Continued)

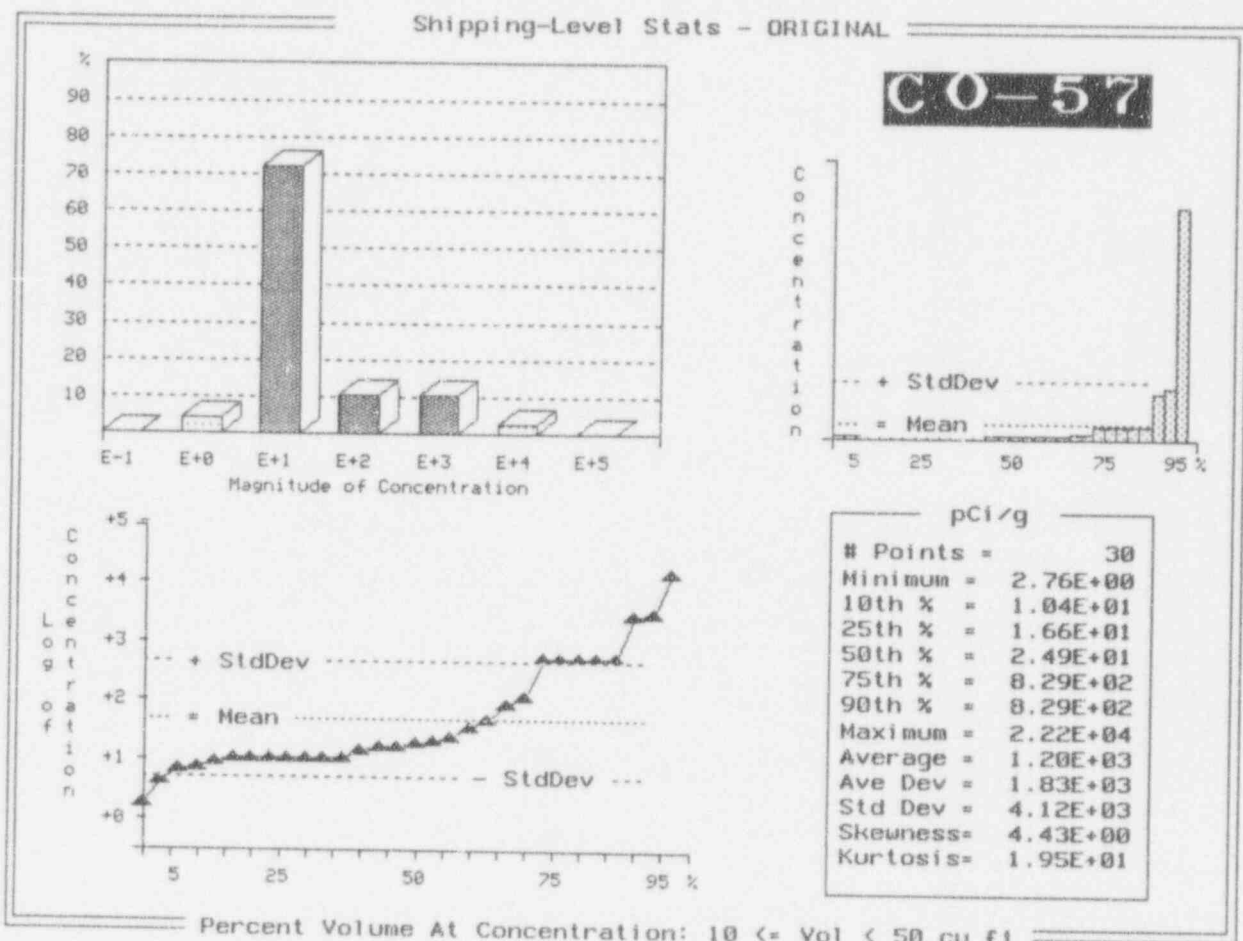


Exhibit F-35 (Continued)

Shipping-Level Stats - ORIGINAL

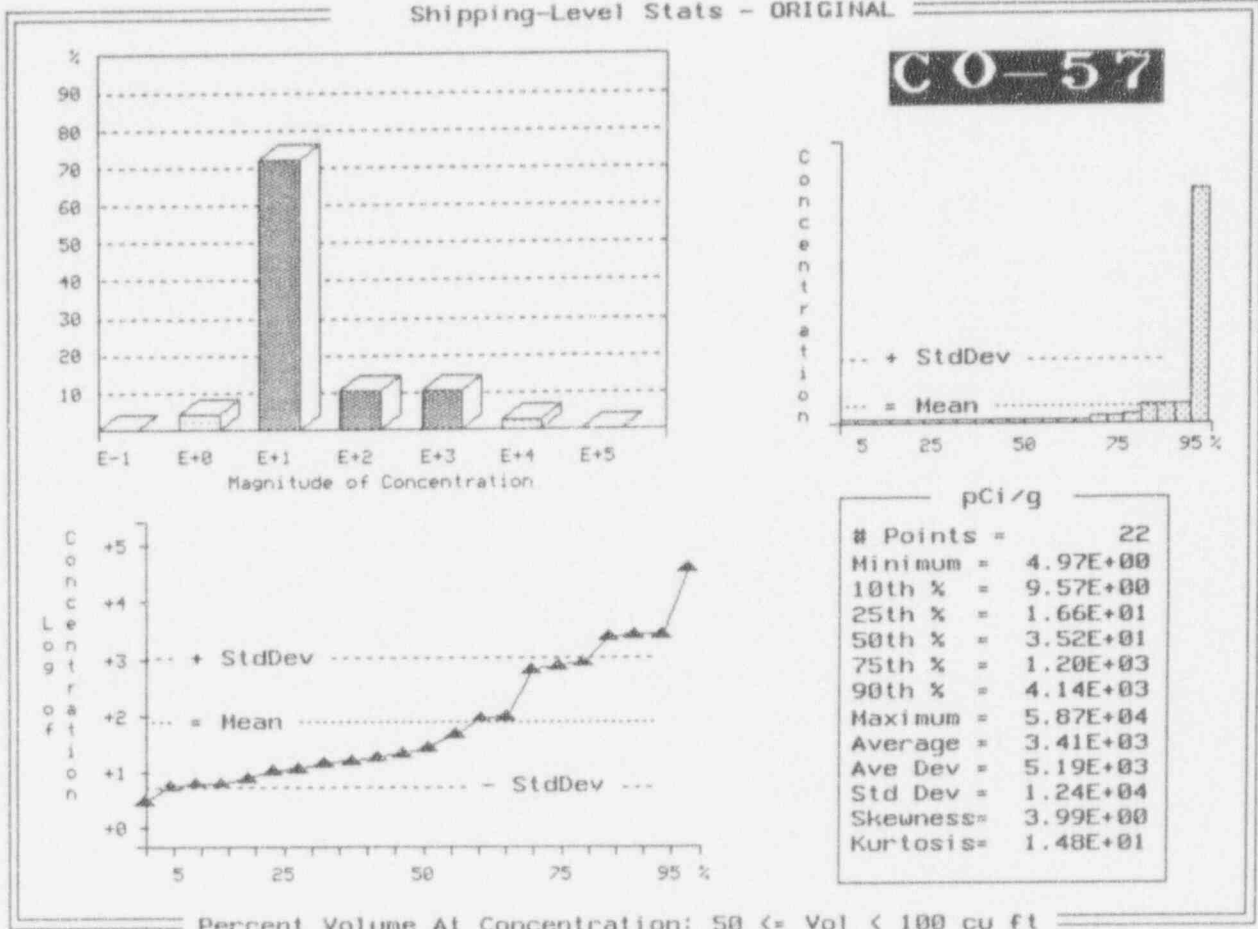
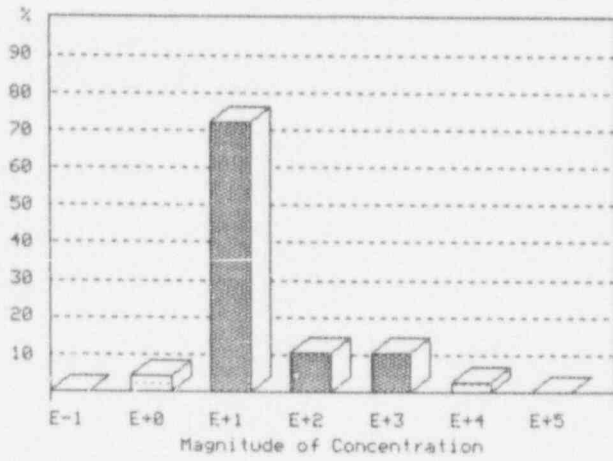
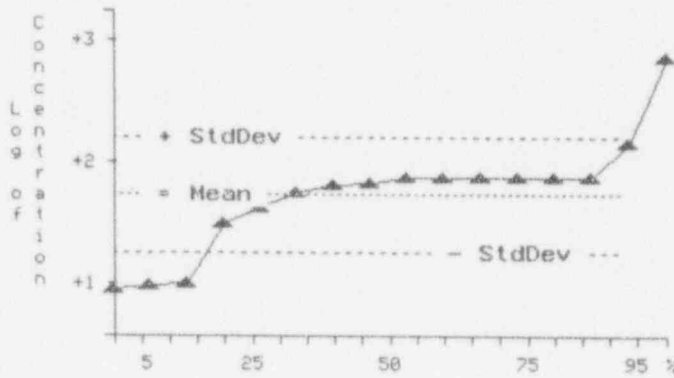
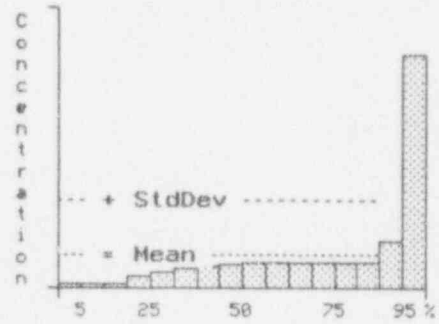


Exhibit F-35 (Continued)

Shipping-Level Stats - ORIGINAL



CO-57



pCi/g	
# Points =	16
Minimum =	1.13E+01
10th % =	1.22E+01
25th % =	3.85E+01
50th % =	8.36E+01
75th % =	9.12E+01
90th % =	9.12E+01
Maximum =	8.66E+02
Average =	1.21E+02
Ave Dev =	9.97E+01
Std Dev =	2.03E+02
Skewness =	3.06E+00
Kurtosis =	8.39E+00

Percent Volume At Concentration: 100 <= Vol < 500 cu ft

Exhibit F-35 (Continued)

Shipping-Level Stats - ORIGINAL

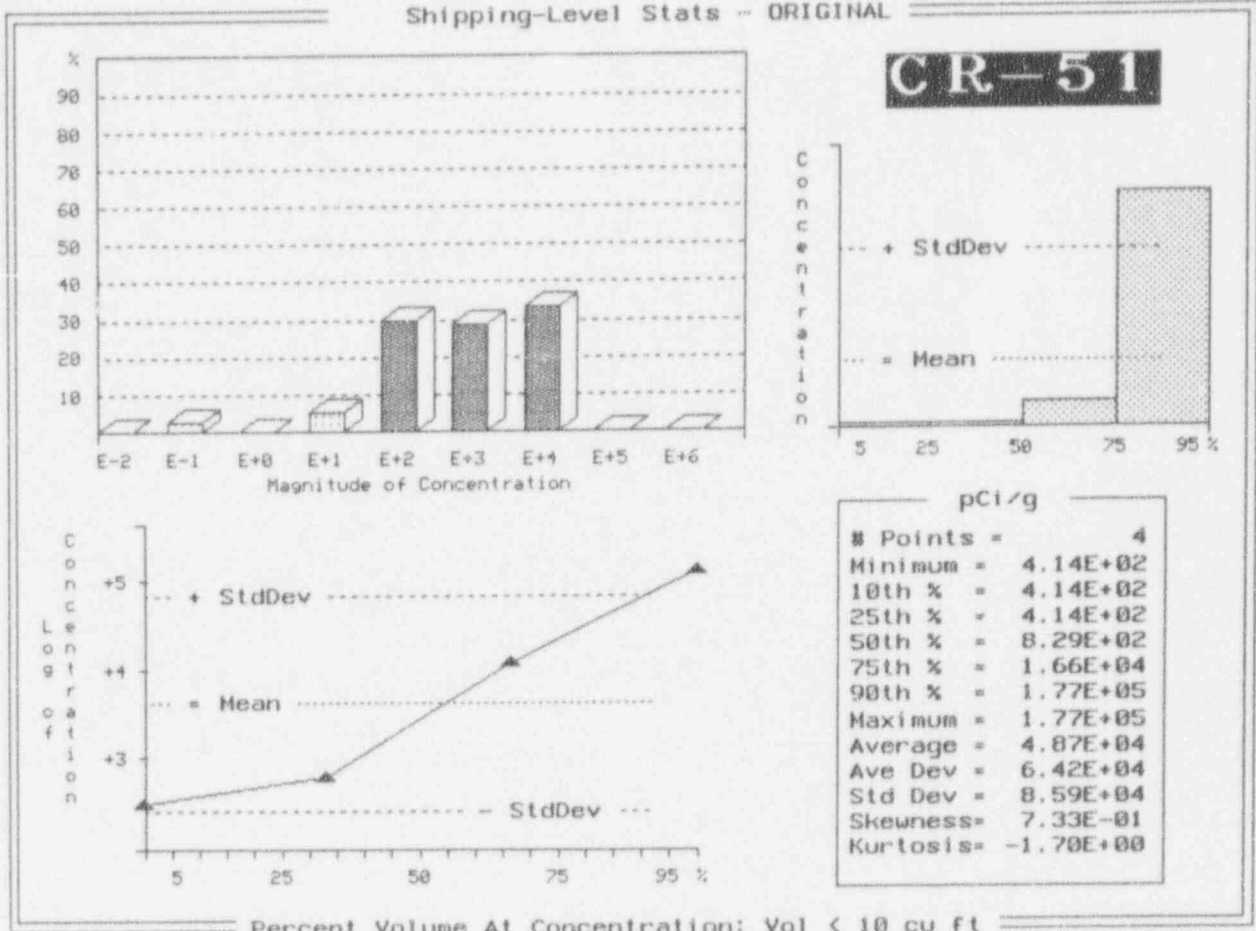


Exhibit F-35 (Continued)

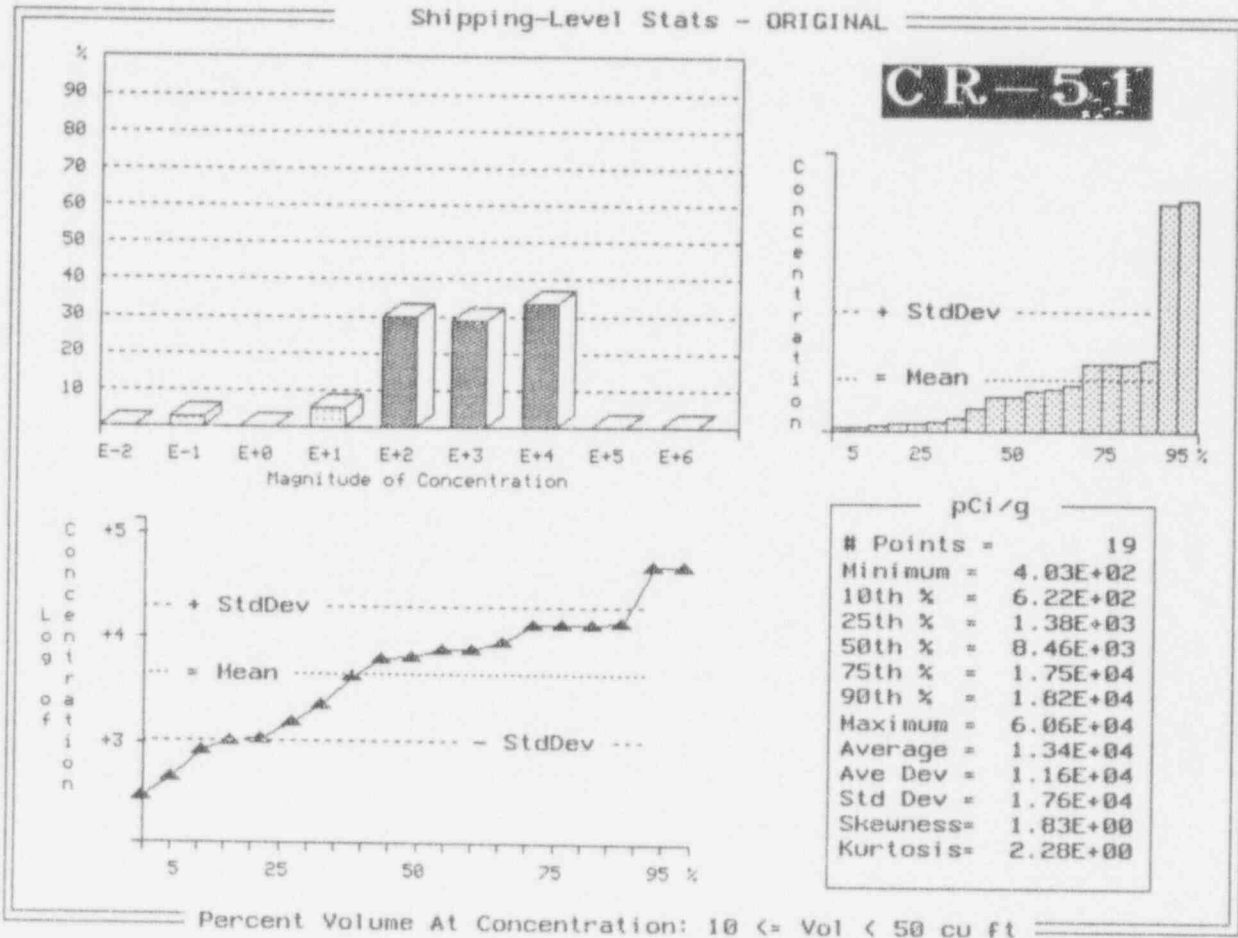


Exhibit F-35 (Continued)

Shipping-Level Stats - ORIGINAL

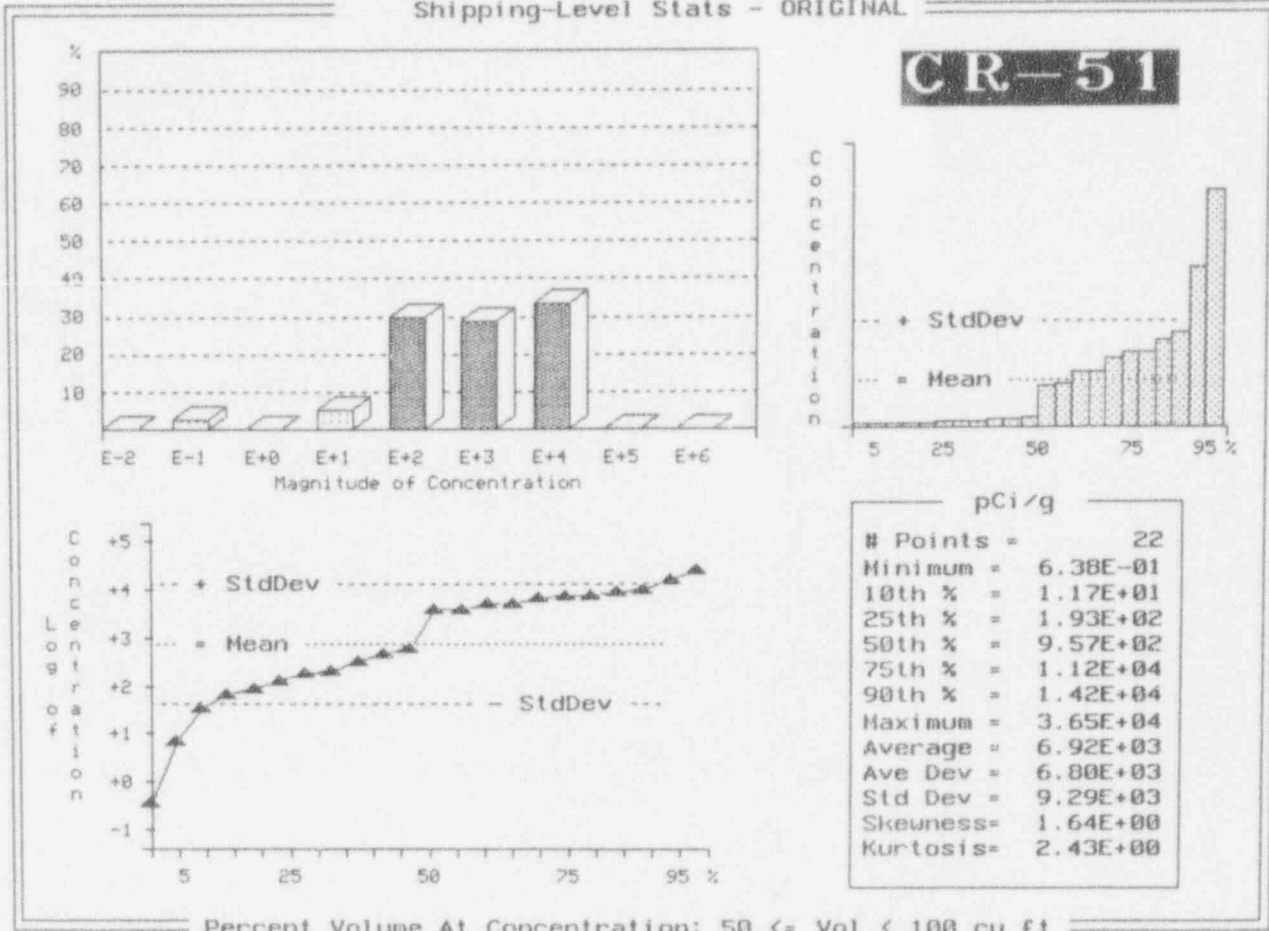
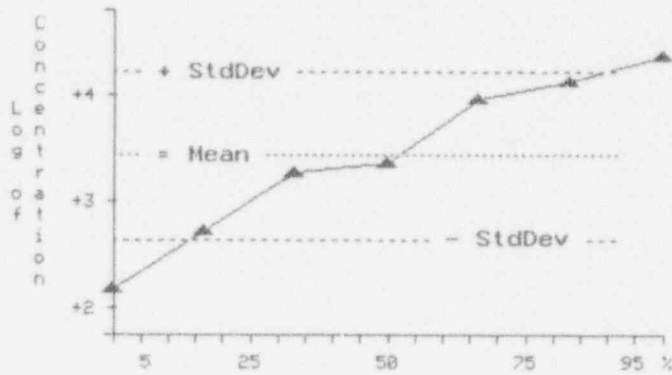
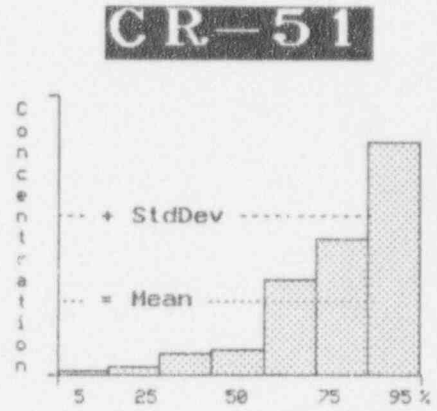
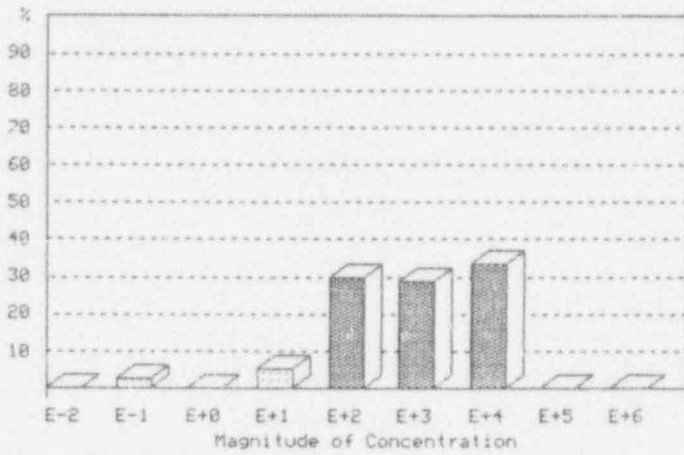


Exhibit F-35 (Continued)

Shipping-Level Stats - ORIGINAL



pCi/g	
# Points =	7
Minimum =	1.96E+02
10th % =	1.96E+02
25th % =	6.81E+02
50th % =	3.00E+03
75th % =	1.17E+04
90th % =	1.67E+04
Maximum =	2.89E+04
Average =	9.08E+03
Ave Dev =	8.59E+03
Std Dev =	1.07E+04
Skeuness =	7.44E-01
Kurtosis =	-1.14E+00

Percent Volume At Concentration: 100 <= Vol < 500 cu ft

Exhibit F-35 (Continued)

Shipping-Level Stats - ORIGINAL

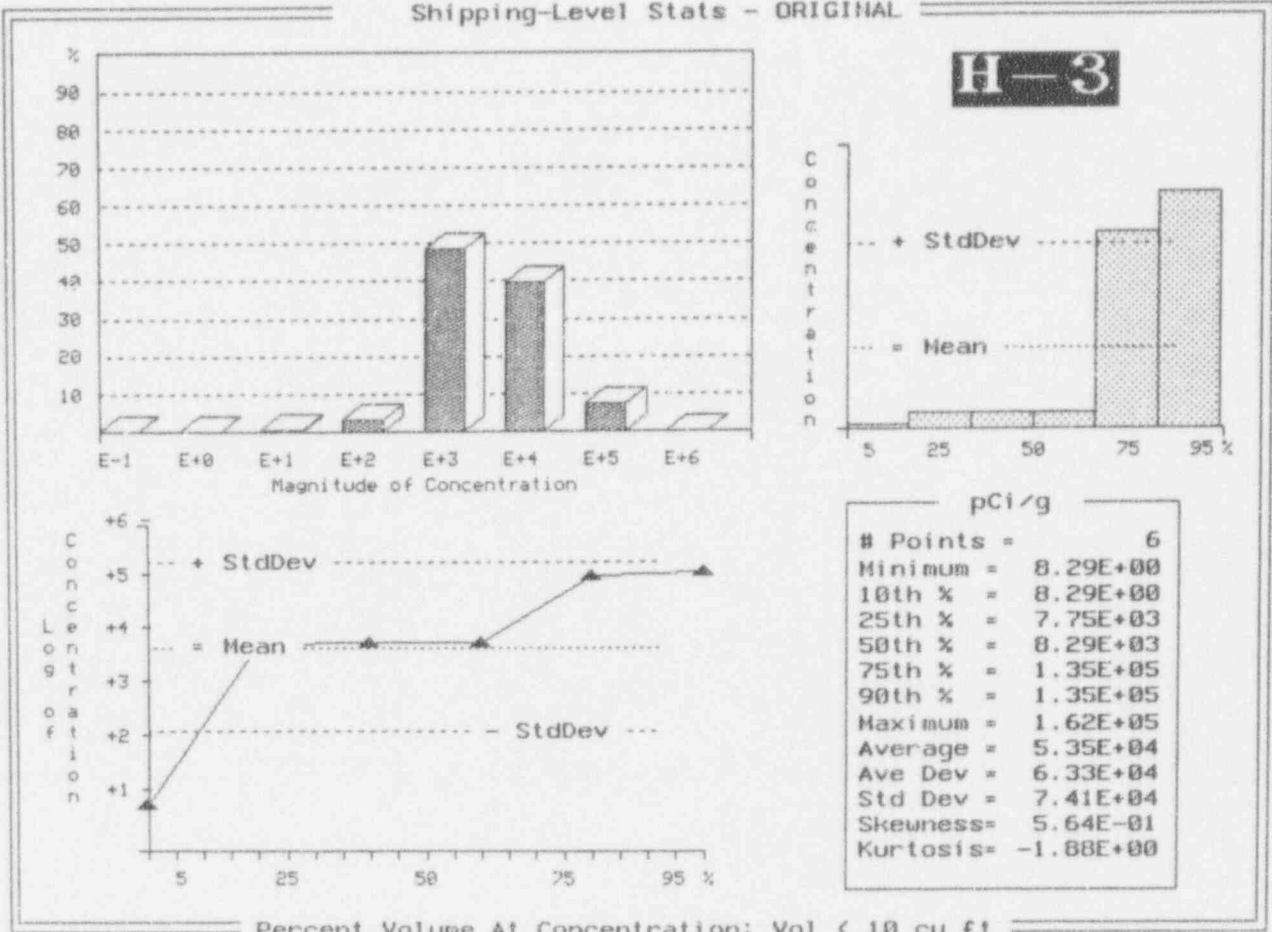
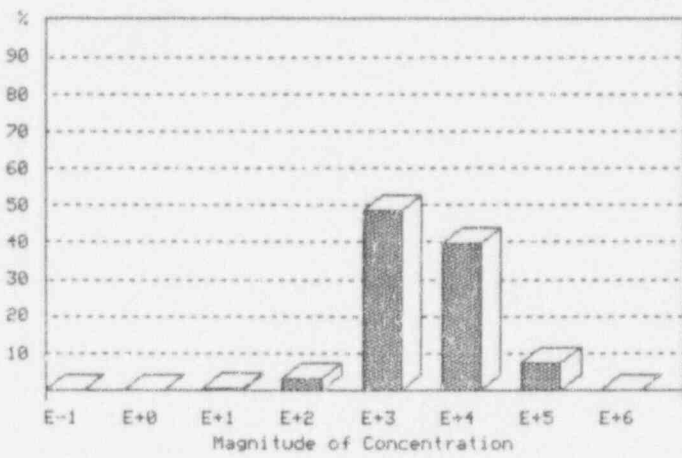
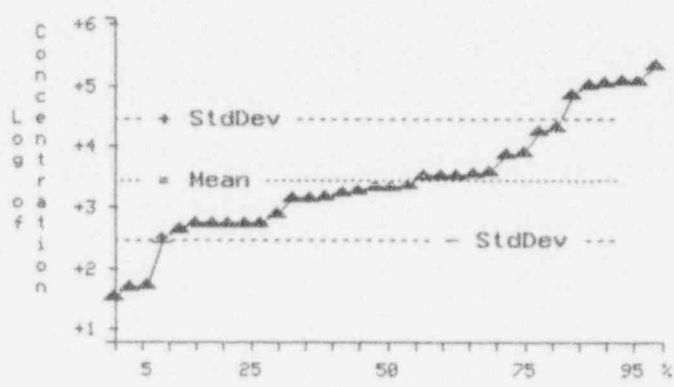
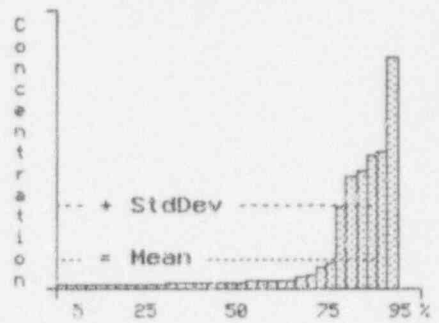


Exhibit F-35 (Continued)

Shipping-Level Stats - ORIGINAL



H-3



pci/g	
# Points =	34
Minimum =	5.39E+01
10th % =	8.29E+01
25th % =	8.29E+02
50th % =	3.33E+03
75th % =	1.21E+04
90th % =	1.63E+05
Maximum =	3.22E+05
Average =	3.70E+04
Ave Dev =	5.29E+04
Std Dev =	7.62E+04
Skewness =	2.19E+00
Kurtosis =	4.11E+00

Percent Volume At Concentration: 10 <= Vol < 50 cu ft

Exhibit F-35 (Continued)

Shipping-Level Stats - ORIGINAL

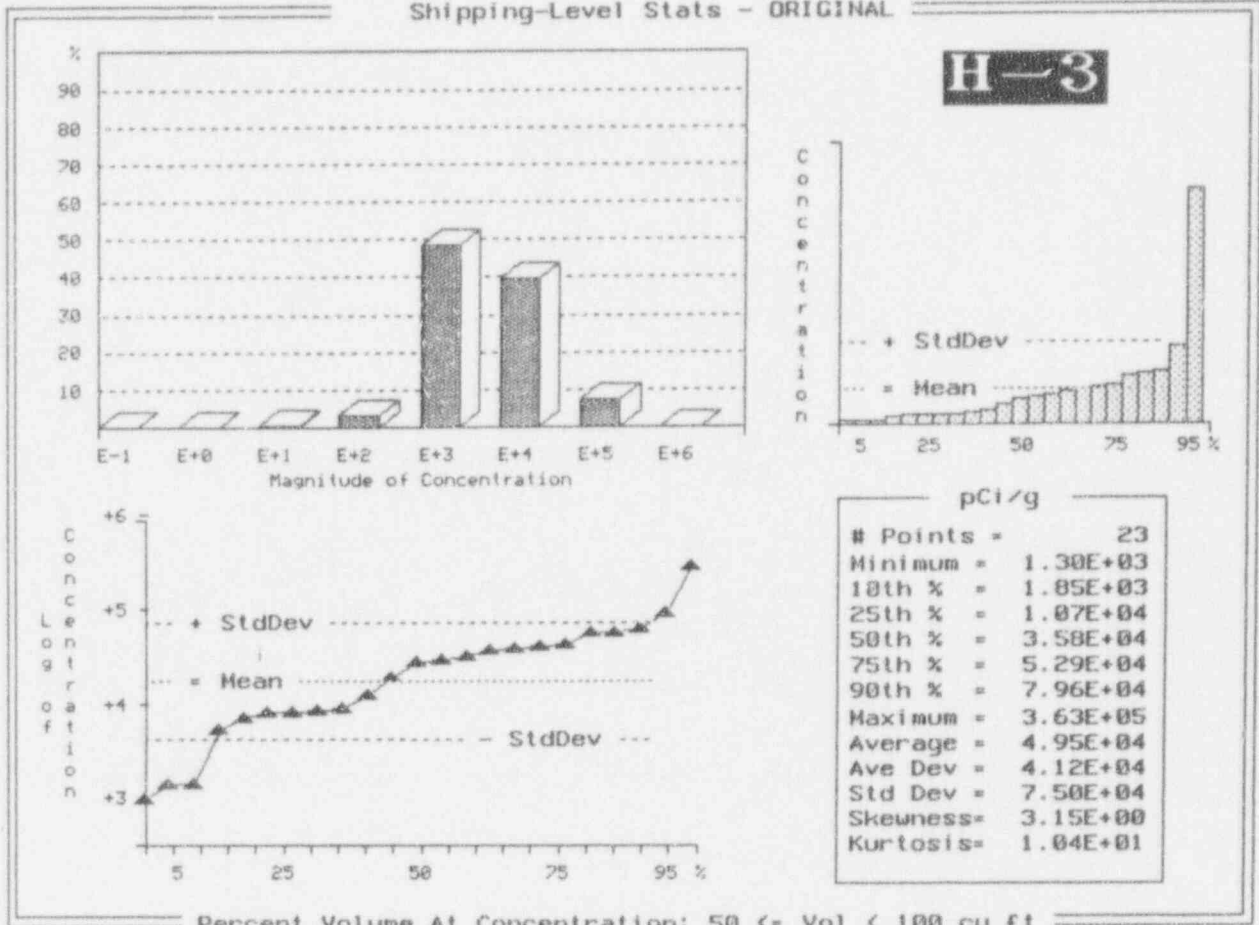


Exhibit F-35 (Continued)

Shipping-Level Stats - ORIGINAL

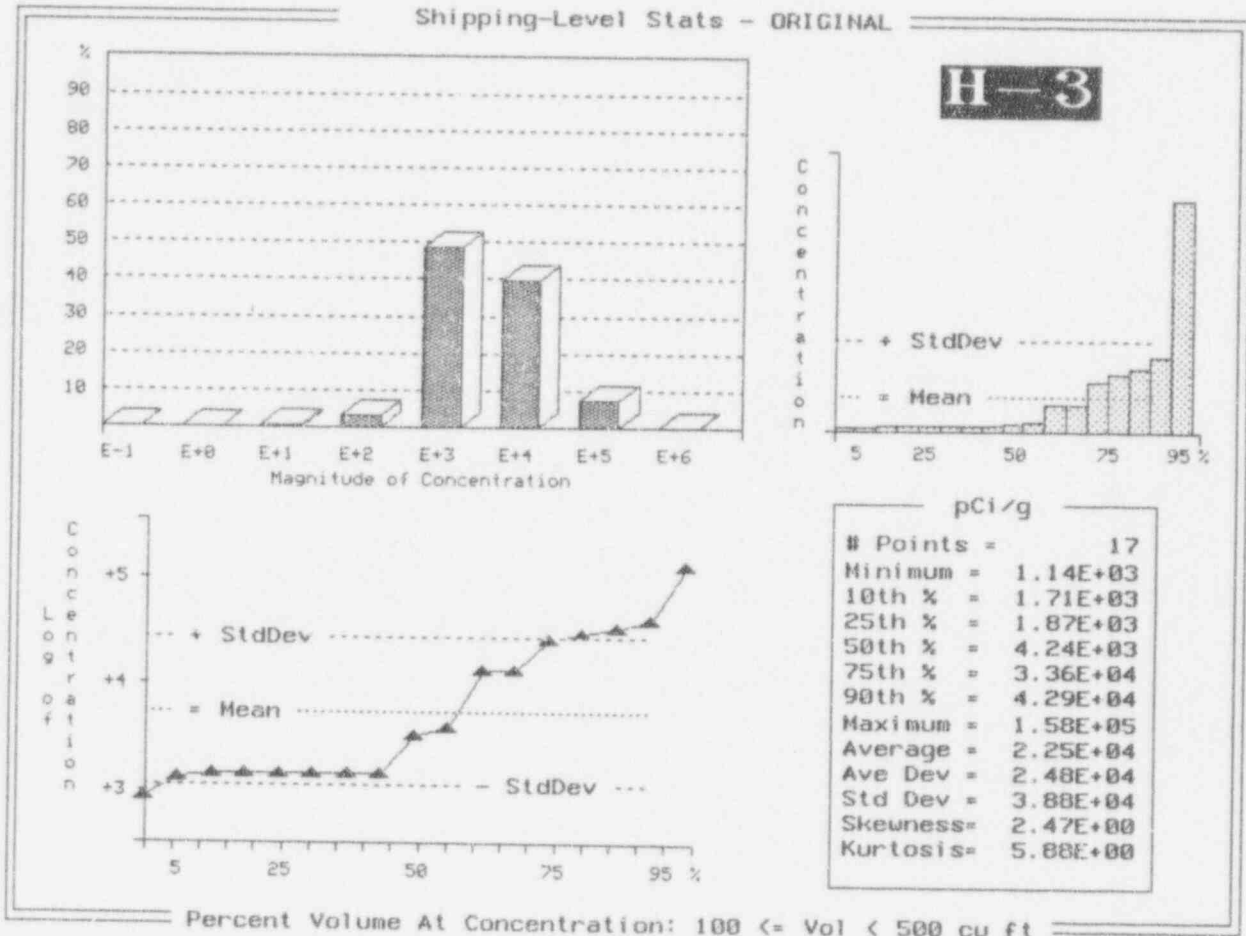


Exhibit F-35 (Continued)

Shipping-Level Stats - ORIGINAL

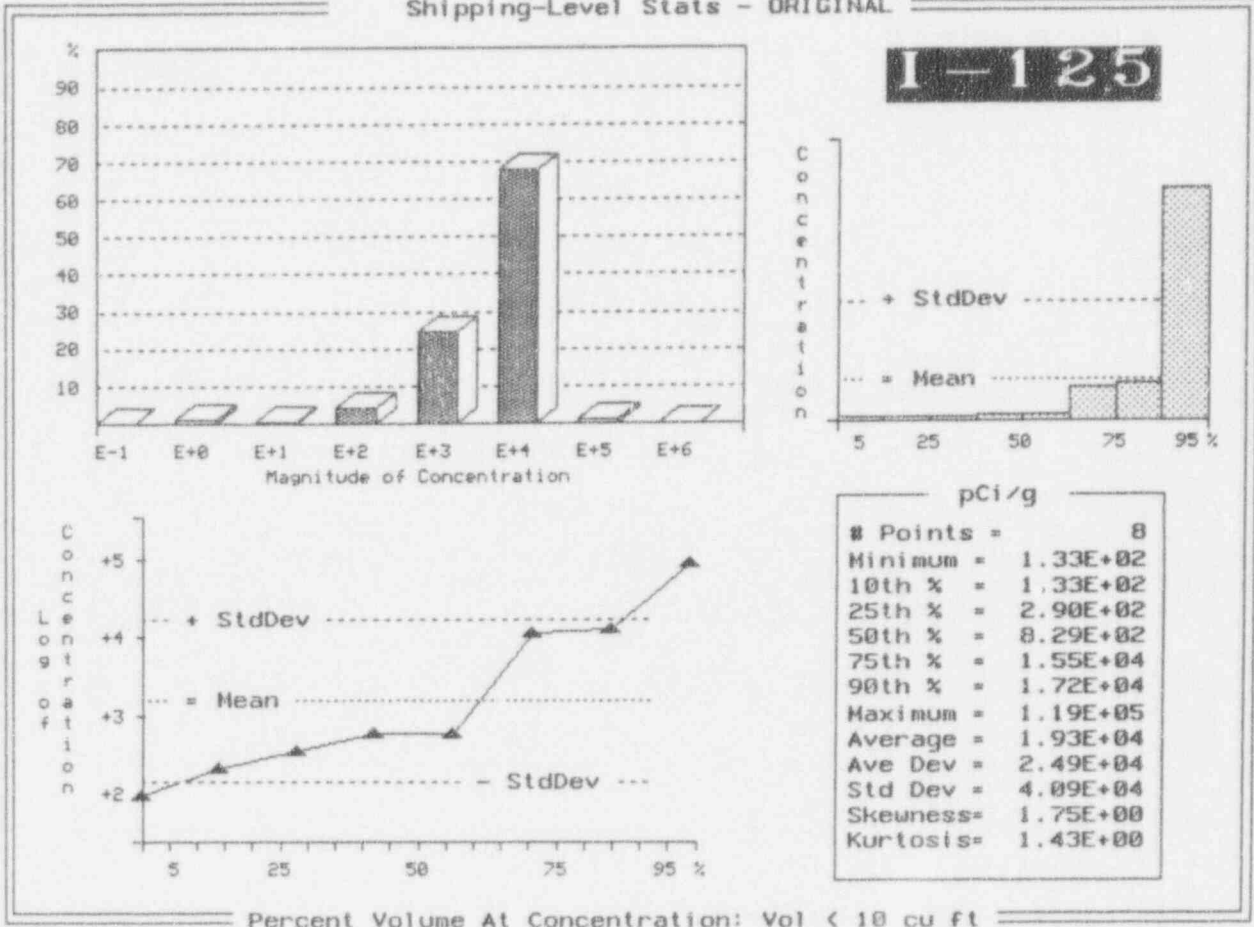


Exhibit F-35 (Continued)

Shipping-Level Stats - ORIGINAL

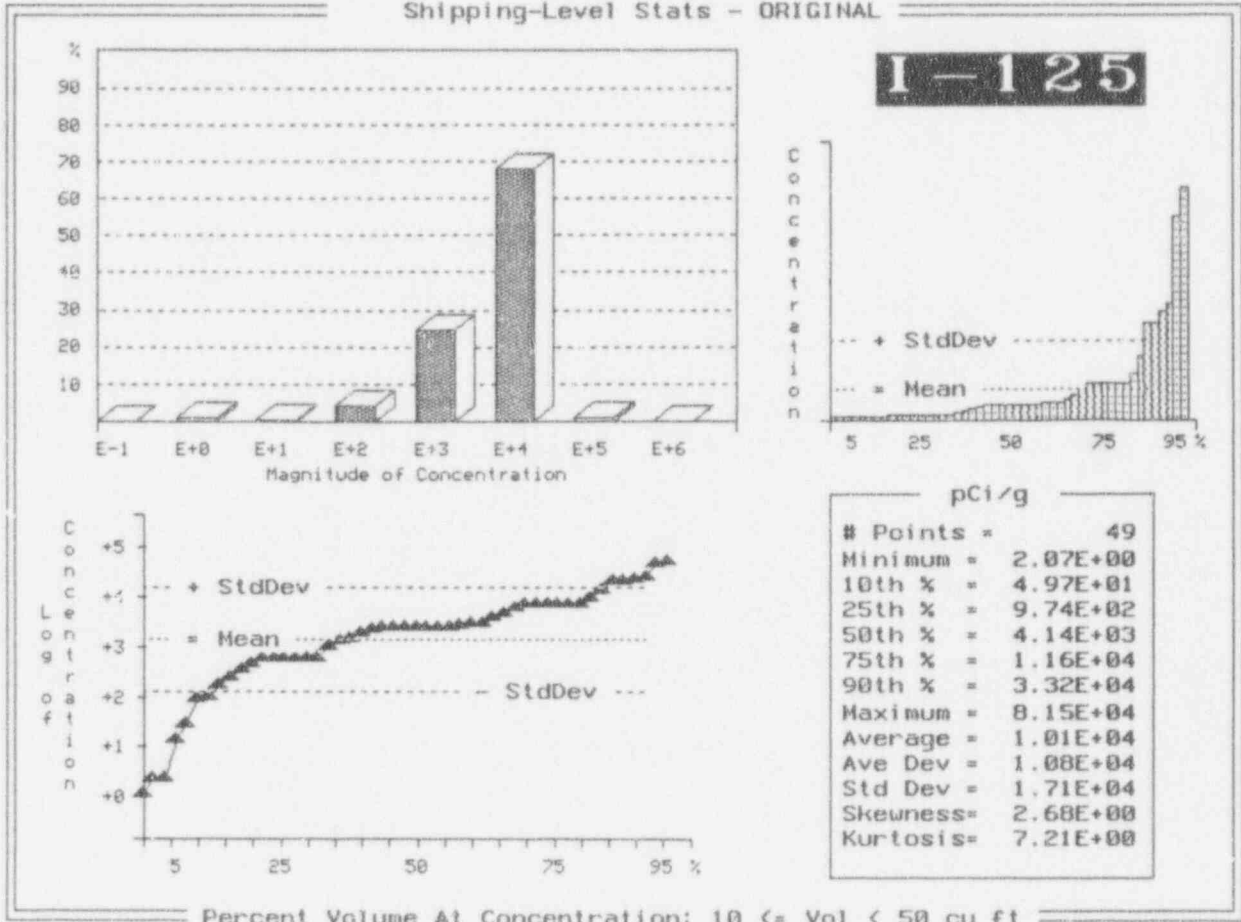


Exhibit F-35 (Continued)

Shipping-Level Stats - ORIGINAL

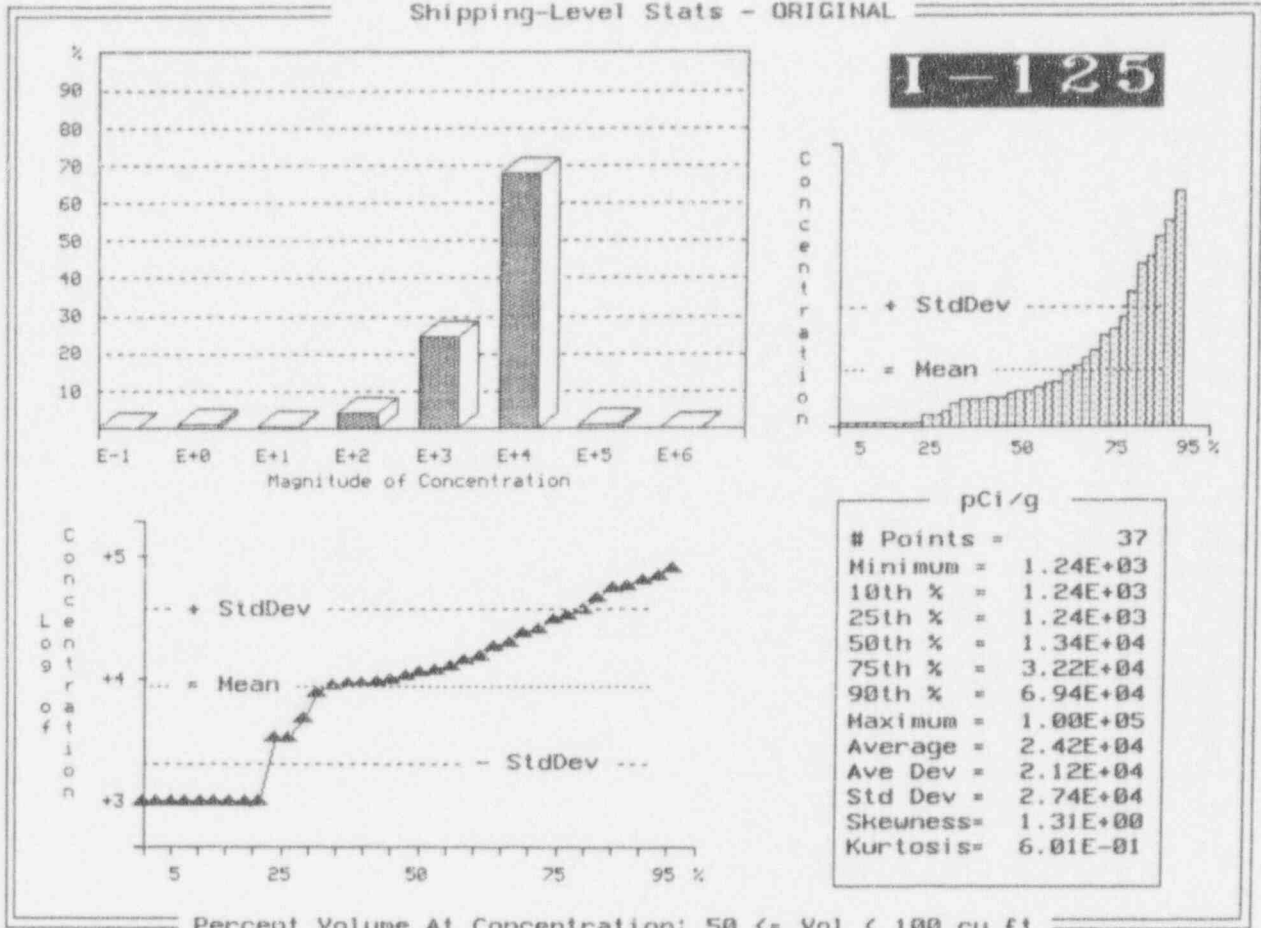
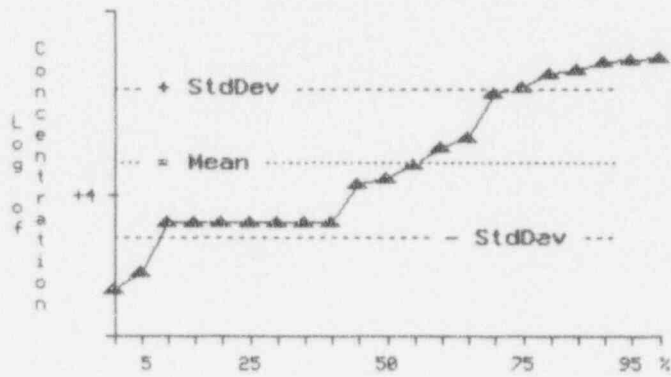
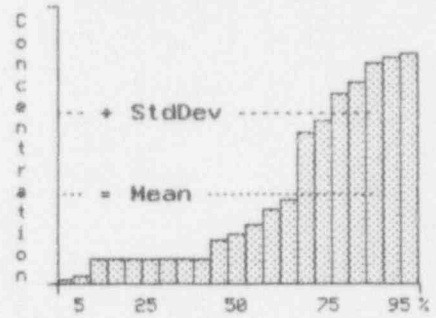
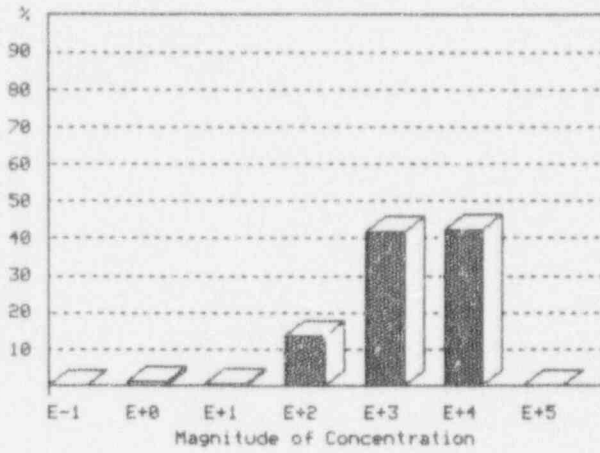


Exhibit F-35 (Continued)

Shipping-Level Stats - ORIGINAL

Rec: 9 of 9

I-125



pCi/g	
# Points =	21
Minimum =	3.95E+03
10th % =	4.80E+03
25th % =	8.51E+03
50th % =	1.41E+04
75th % =	3.93E+04
90th % =	5.24E+04
Maximum =	5.43E+04
Average =	2.30E+04
Ave Dev =	1.61E+04
Std Dev =	1.84E+04
Skewness =	6.26E-01
Kurtosis =	-1.38E+00

Percent Volume At Concentration: 100 <= Vol < 500 cu ft

Exhibit F-35 (Continued)

Shipping-Level Stats - ORIGINAL

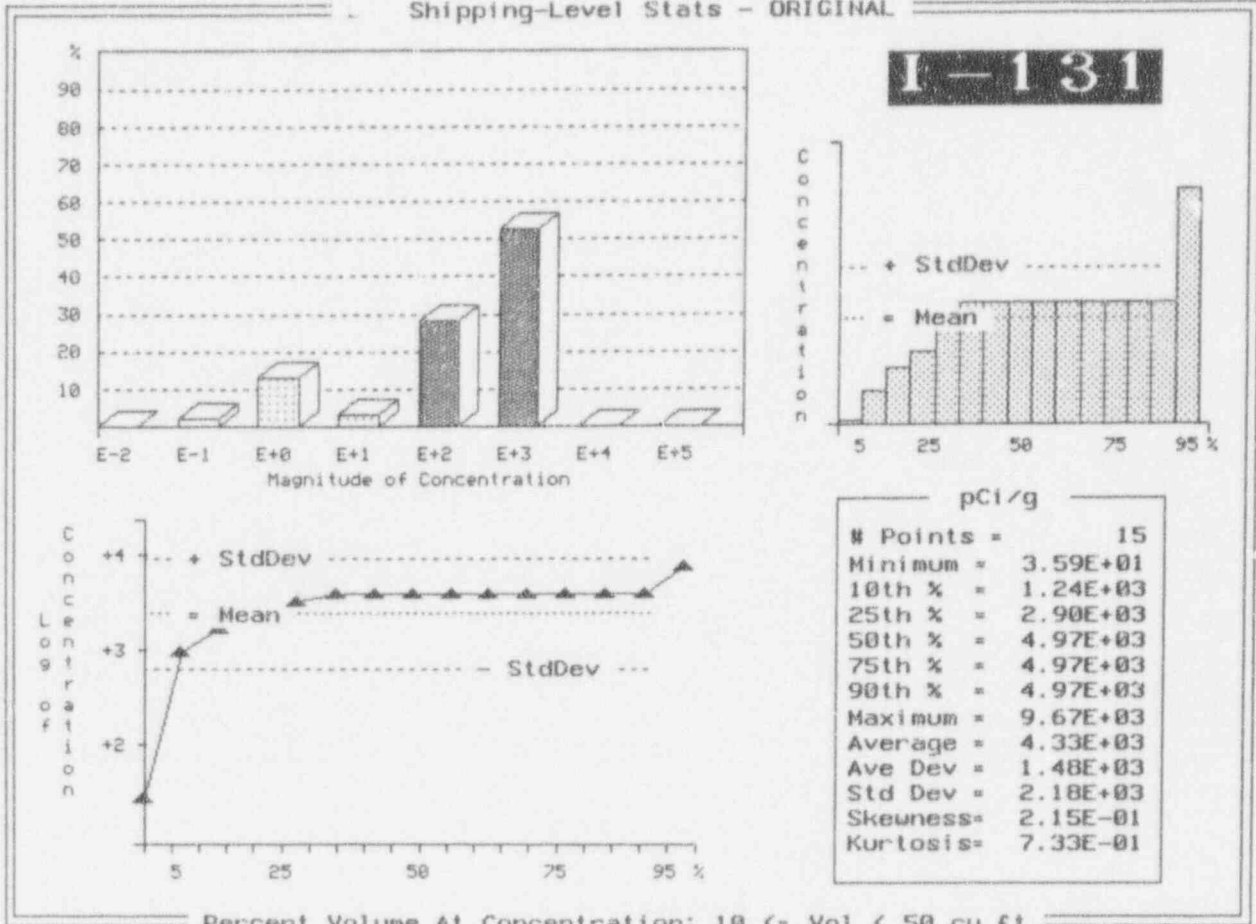


Exhibit F-35 (Continued)

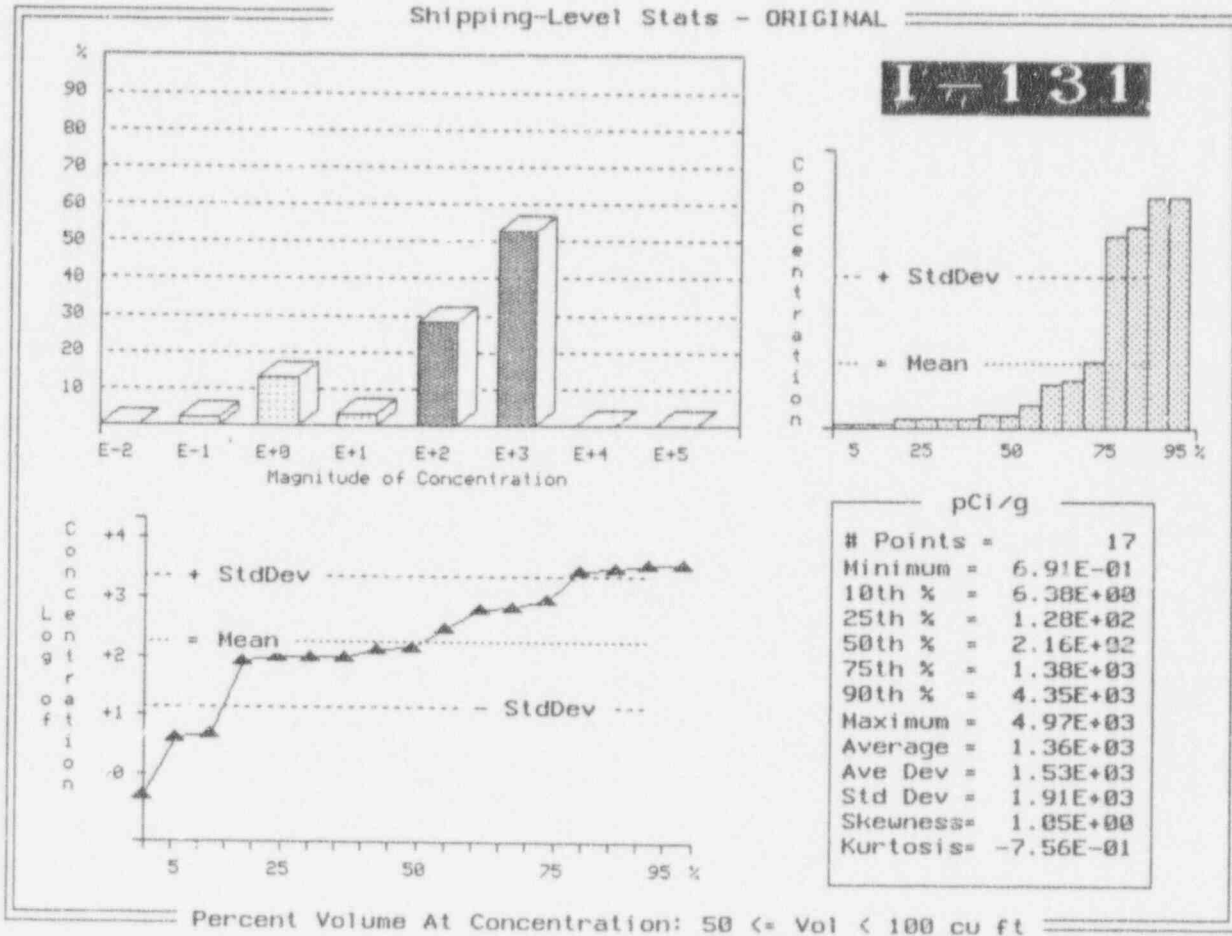
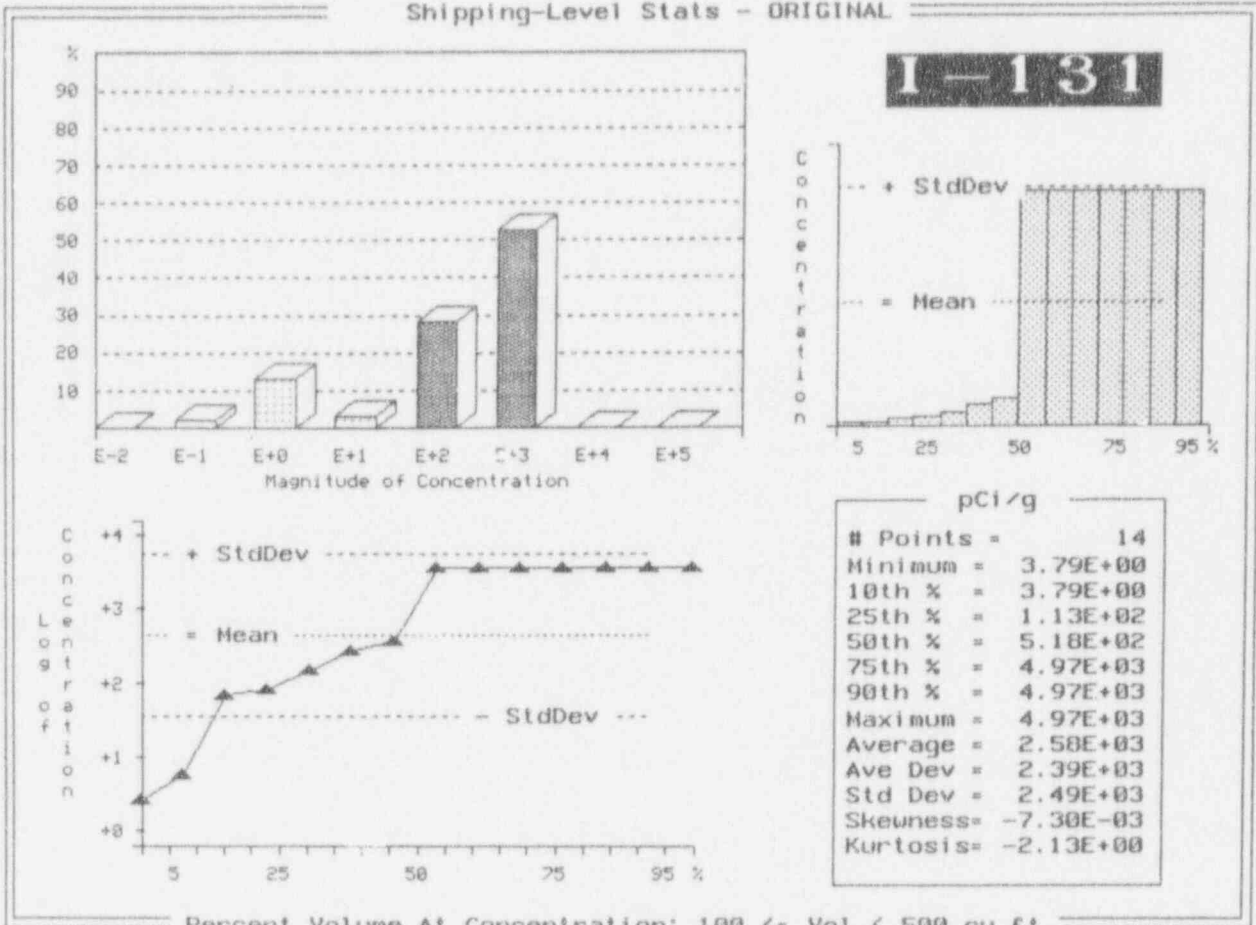


Exhibit F-35 (Continued)

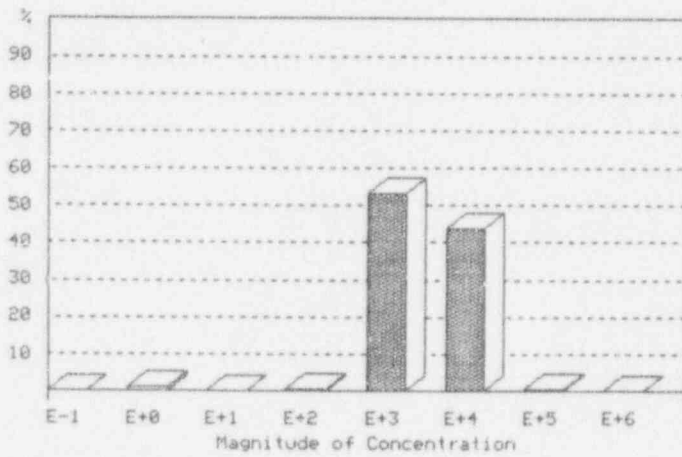
Shipping-Level Stats - ORIGINAL



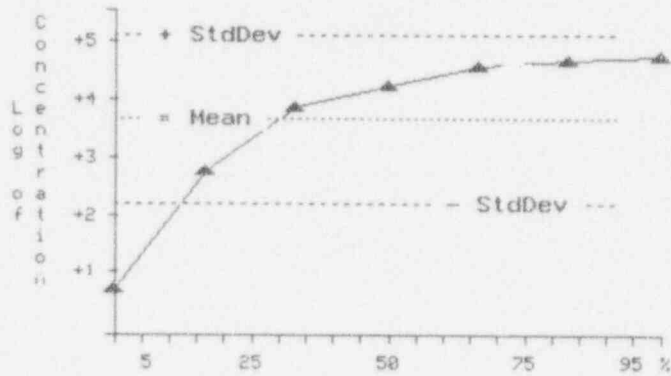
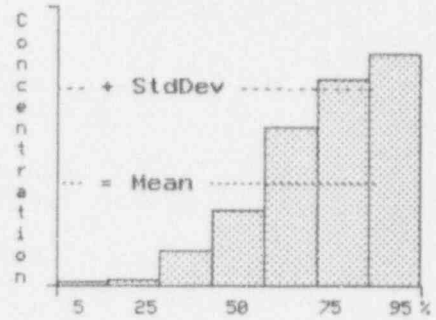
Percent Volume At Concentration: 100 <= Vol < 500 cu ft

Exhibit F-35 (Continued)

Shipping-Level Stats - ORIGINAL



P-32



pCi/g	
# Points =	7
Minimum =	8.29E+00
10th % =	8.29E+00
25th % =	8.95E+02
50th % =	2.49E+04
75th % =	5.39E+04
90th % =	7.05E+04
Maximum =	7.88E+04
Average =	3.42E+04
Ave Dev =	2.87E+04
Std Dev =	3.32E+04
Skewness =	2.05E-01
Kurtosis =	-1.97E+00

Percent Volume At Concentration: Vol < 10 cu ft

Exhibit F-35 (Continued)

Shipping-Level Stats - ORIGINAL

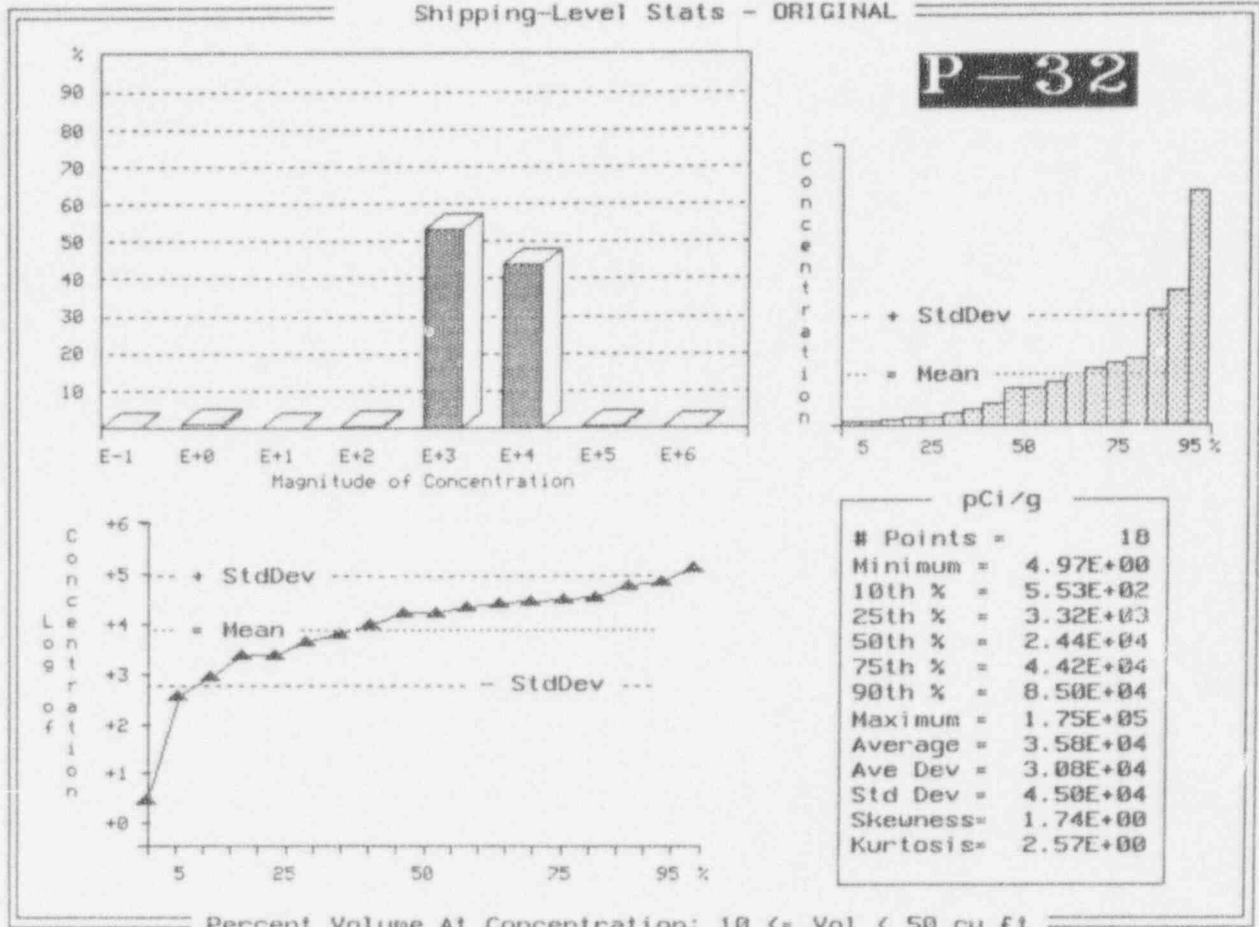


Exhibit F-35 (Continued)

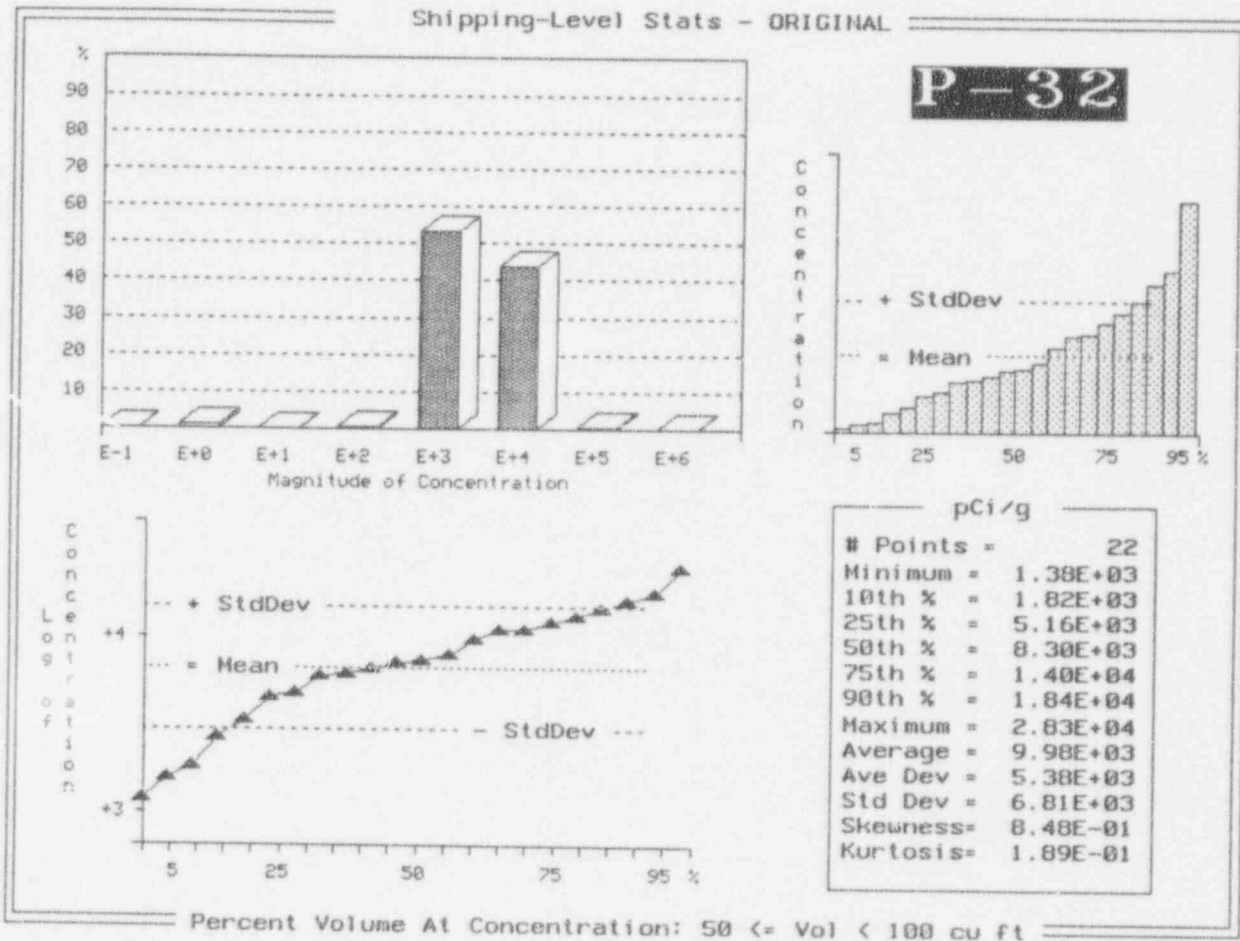


Exhibit F-35 (Continued)

Shipping-Level Stats - ORIGINAL

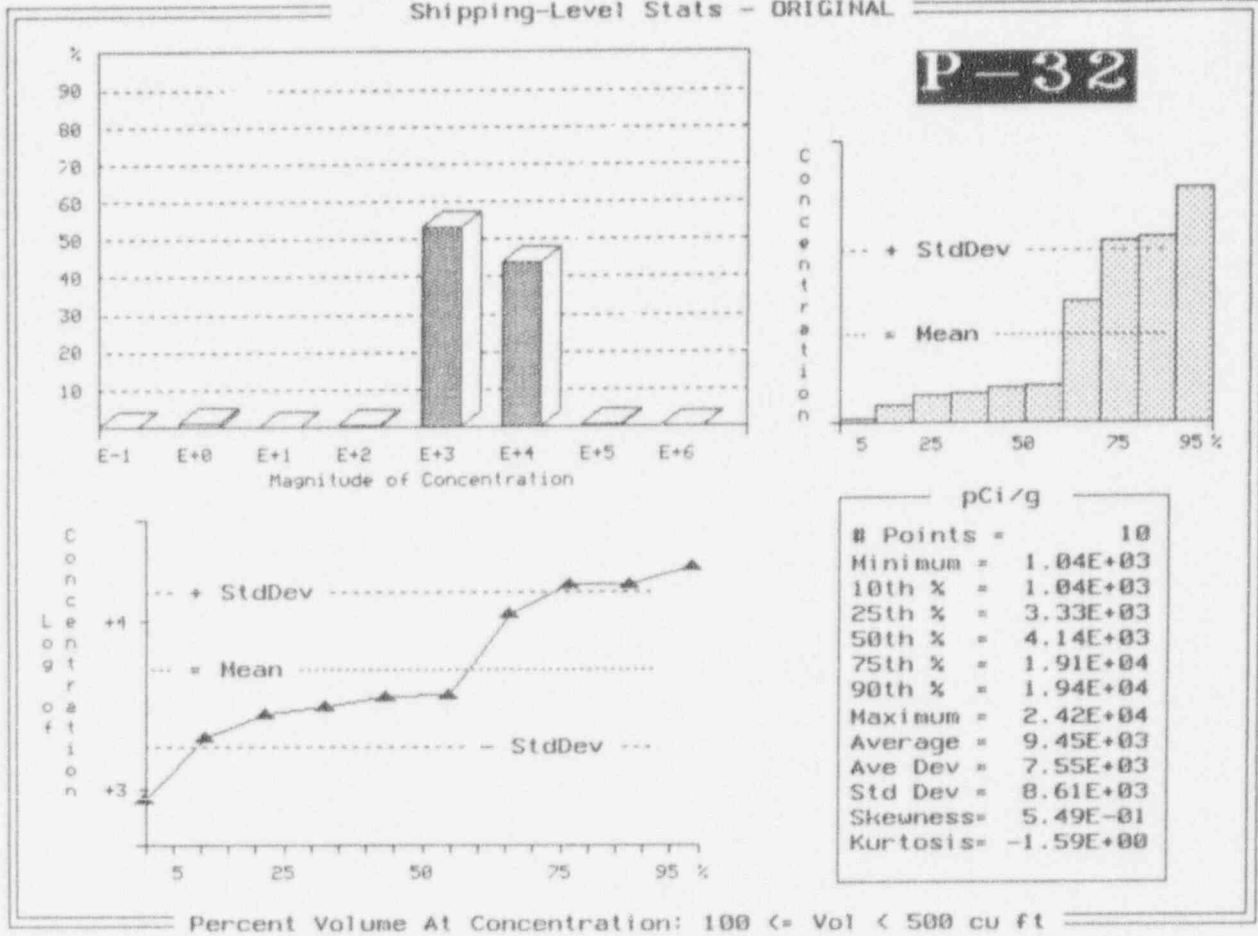
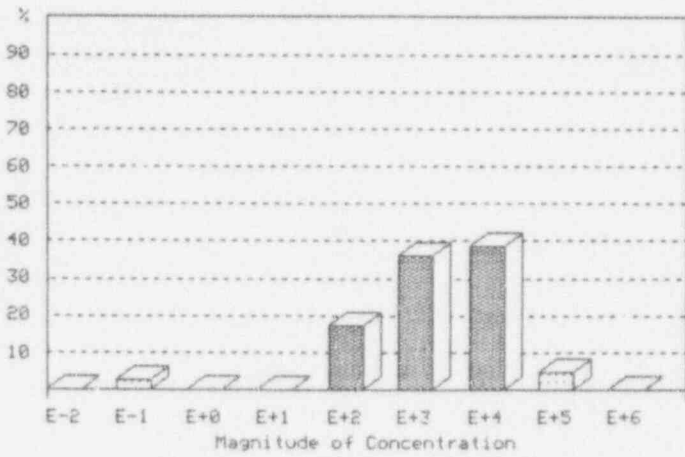
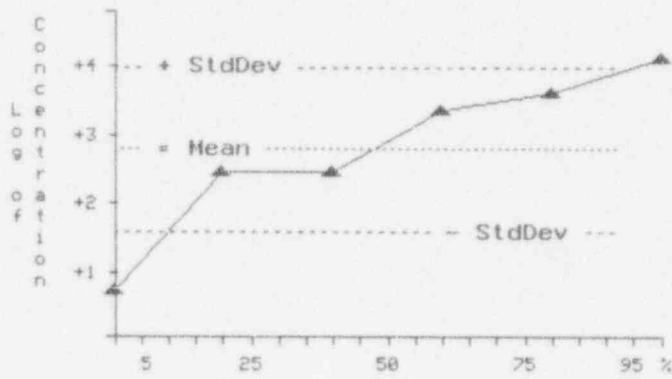
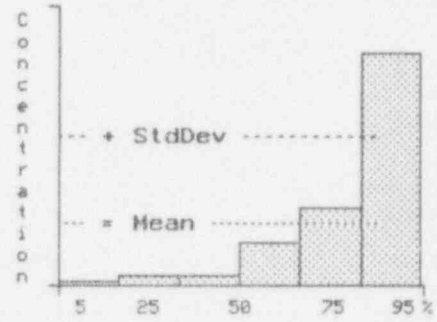


Exhibit F-35 (Continued)

Shipping-Level Stats - ORIGINAL



S-35



pCi/g	
# Points =	6
Minimum =	8.29E+00
10th % =	8.29E+00
25th % =	4.14E+02
50th % =	4.14E+02
75th % =	6.22E+03
90th % =	6.22E+03
Maximum =	1.91E+04
Average =	4.91E+03
Ave Dev =	5.16E+03
Std Dev =	7.34E+03
Skewness =	1.07E+00
Kurtosis =	-6.06E-01

Percent Volume At Concentration: Vol < 10 cu ft

Exhibit F-35 (Continued)

Shipping-Level Stats - ORIGINAL

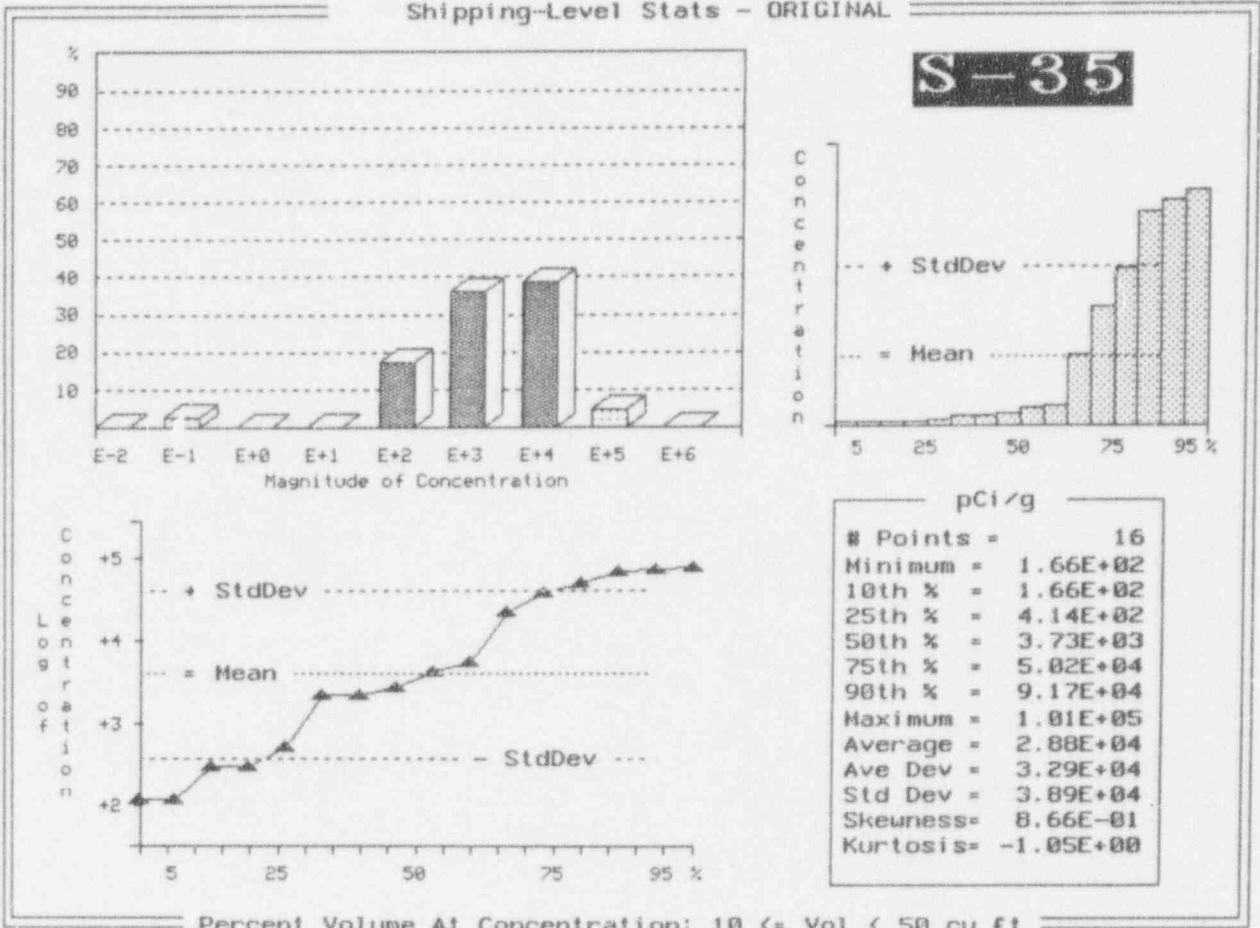
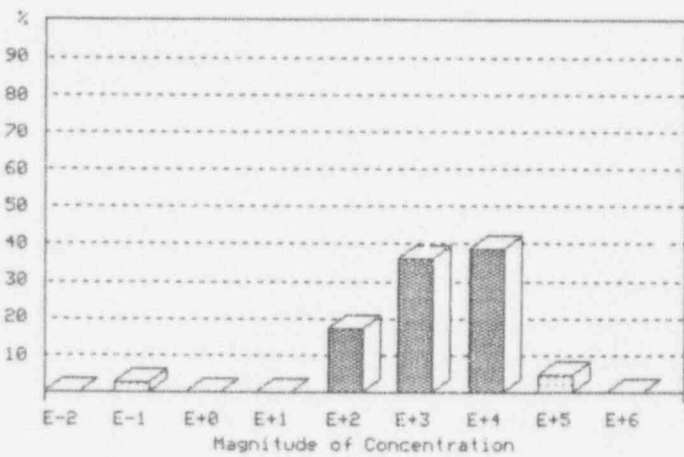
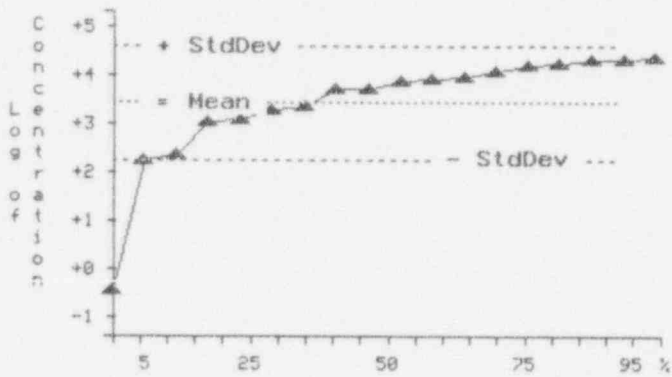
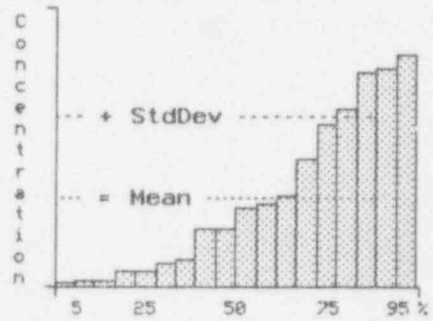


Exhibit F-35 (Continued)

Shipping-Level Stats - ORIGINAL



S-35



pci/g	
# Points =	18
Minimum =	6.38E-01
10th % =	3.19E+02
25th % =	2.02E+03
50th % =	9.77E+03
75th % =	2.85E+04
90th % =	3.78E+04
Maximum =	4.07E+04
Average =	1.52E+04
Ave Dev =	1.20E+04
Std Dev =	1.44E+04
Skewness =	5.51E-01
Kurtosis =	-1.29E+00

Percent Volume At Concentration: 50 <= Vol < 100 cu ft

Exhibit F-35 (Continued)

Shipping-Level Stats - ORIGINAL

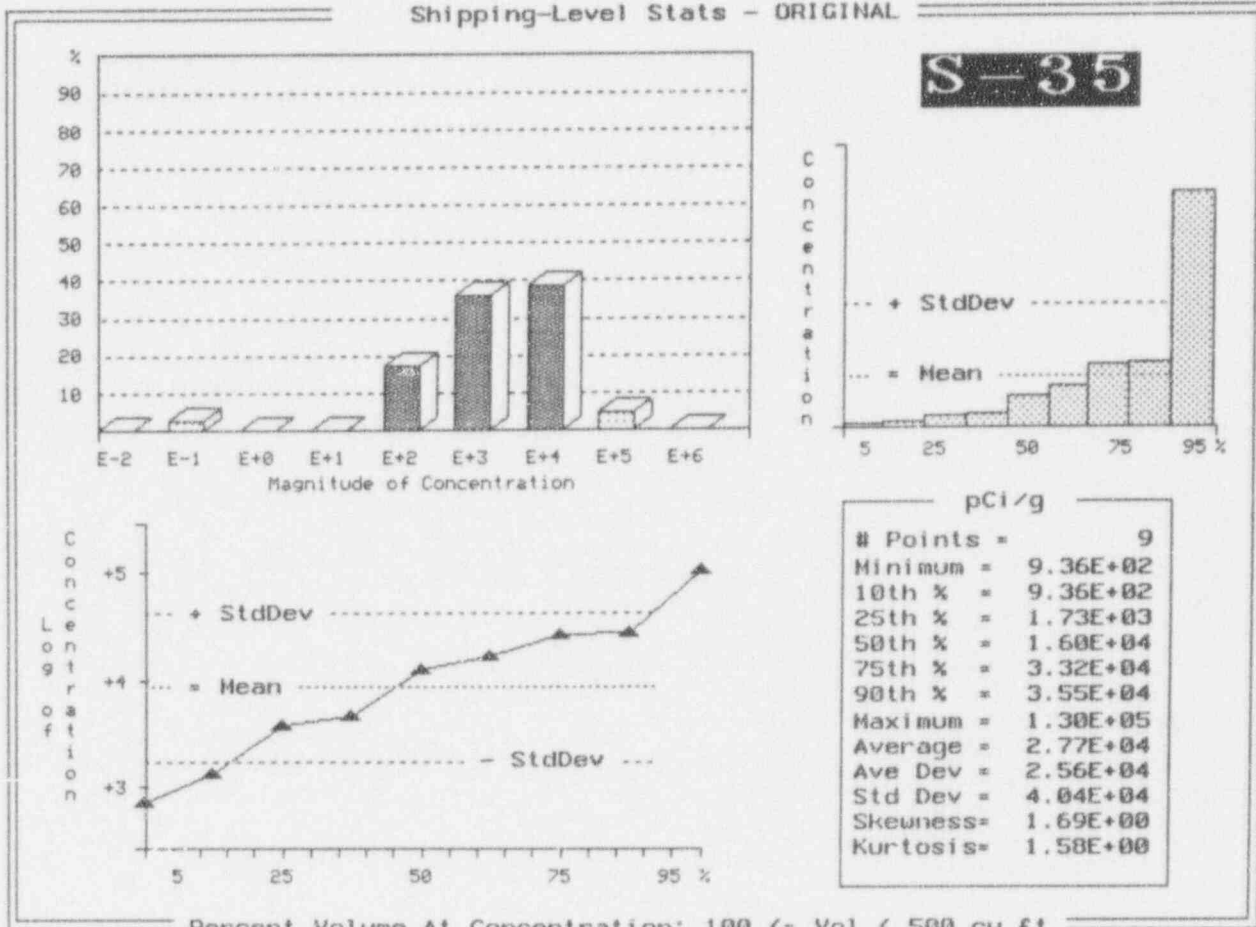


Exhibit F-36
Data Summary - Analyses at the Shipment Level
(Aggregate Practices for non-brokered waste: 1986 to 1990)

	<u>Data or Parameters</u>
Compact or unaffiliated state:	Southwest
Waste generator class:	Industrial
Total number of waste generators:	405
Total associated waste volume (m ³):	5,360
Total associated waste activity (Ci):	90,300
Waste class:	A-Unstable and A-Stable
Identified waste generators for this analysis:	
Number:	71
Percent of total(%):	18
Total number of shipping records:	381
Number of shipping records with container data:	73
Number of waste containers:	1,777
Weight of shipments (kg):	3,109,000
Total waste volume (m ³):	3,039
Fractional waste volume (%): (this analysis/total)	57
Total waste activity (Ci):	74,520
Fractional waste activity (%): (this analysis/total)	82

Exhibit F-36 (Continued)

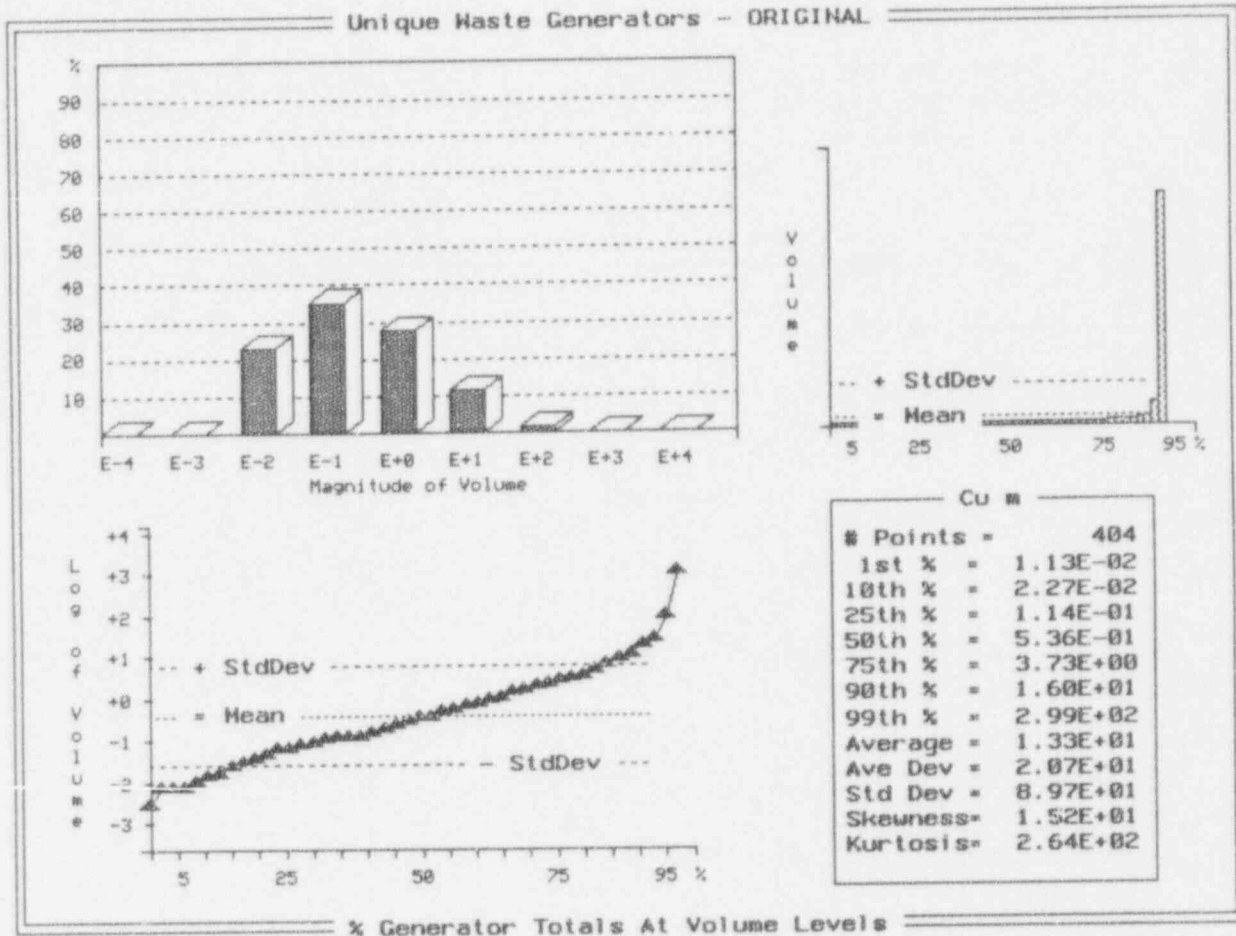


Exhibit F-36 (Continued)

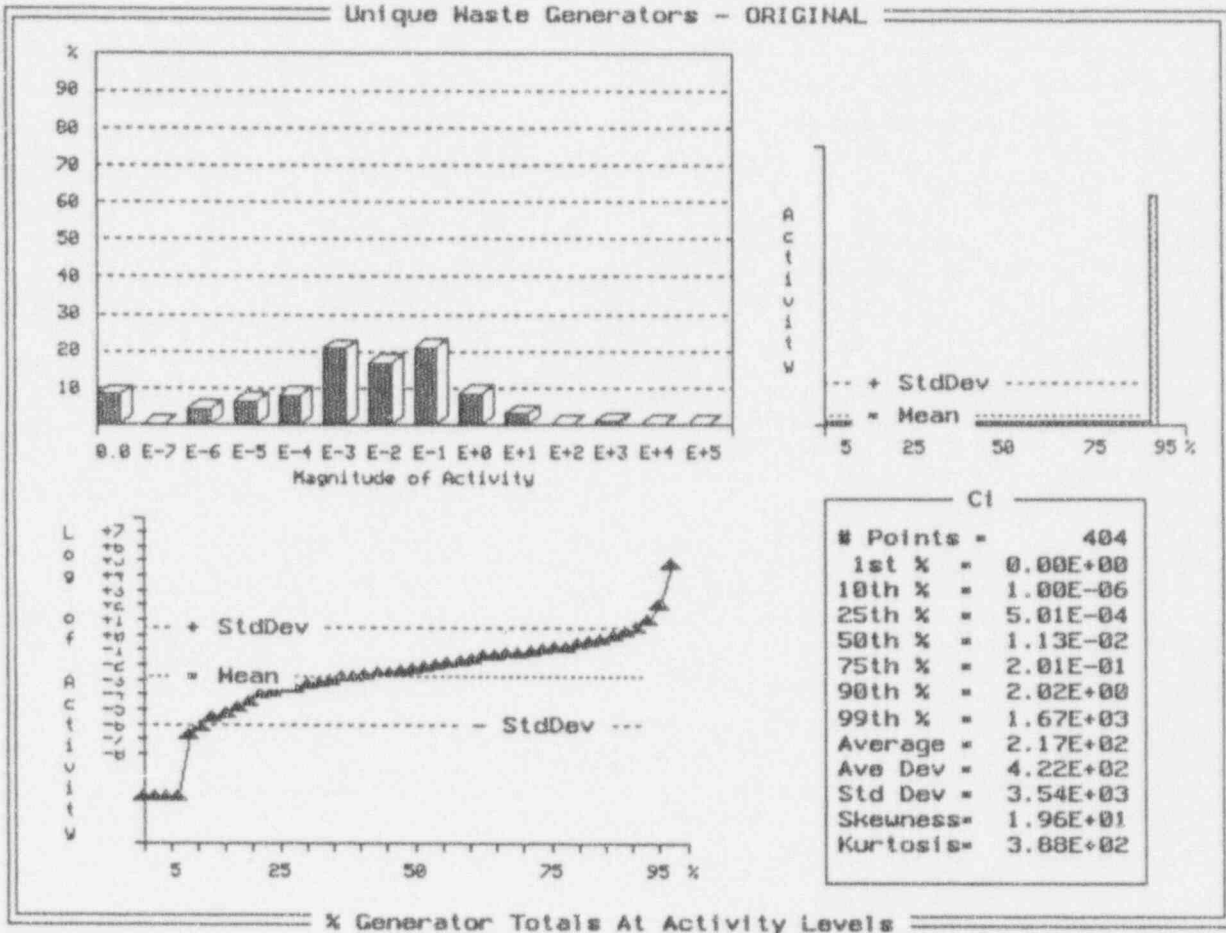


Exhibit F-36 (Continued)

Shipping-Level Stats - ORIGINAL

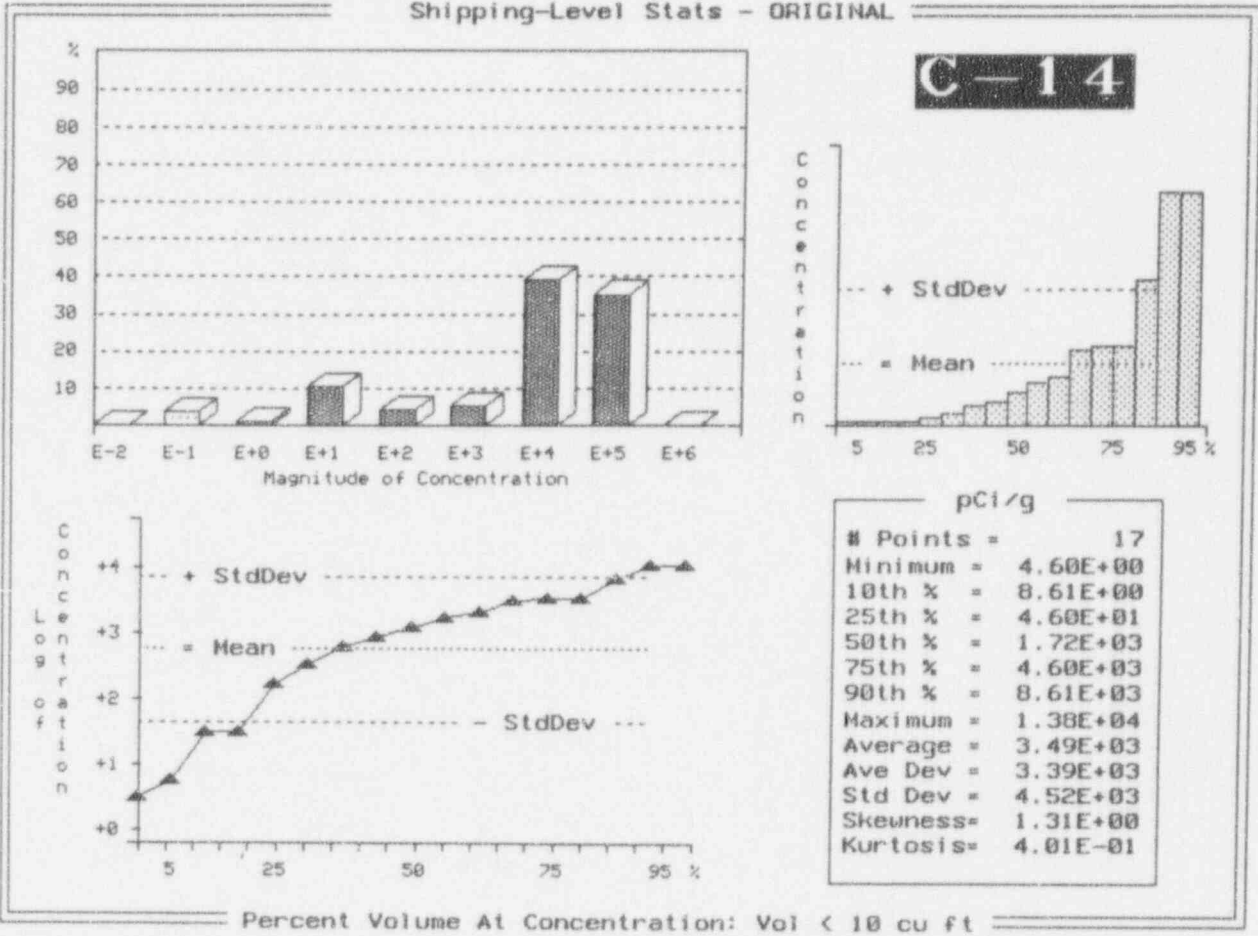


Exhibit F-36 (Continued)

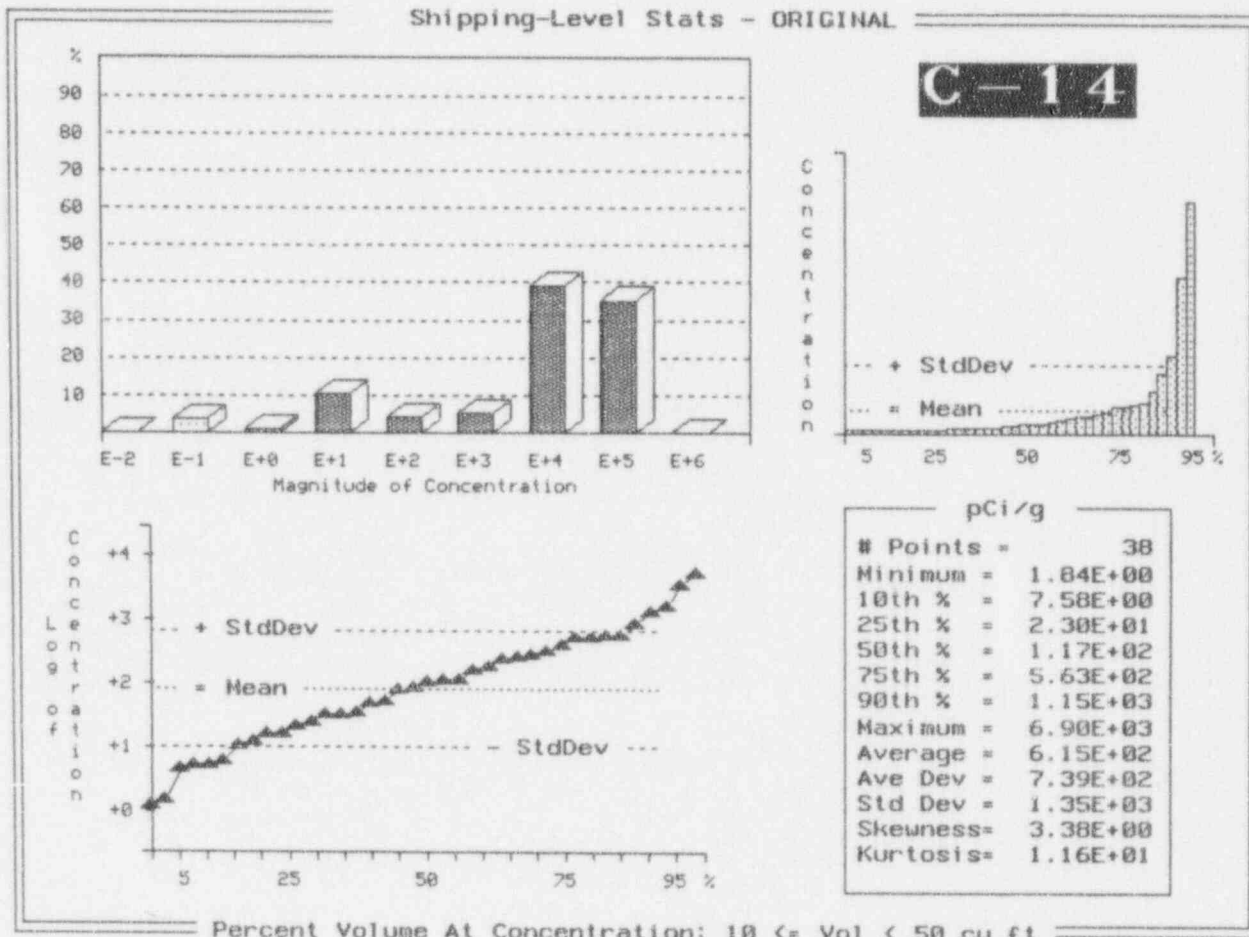
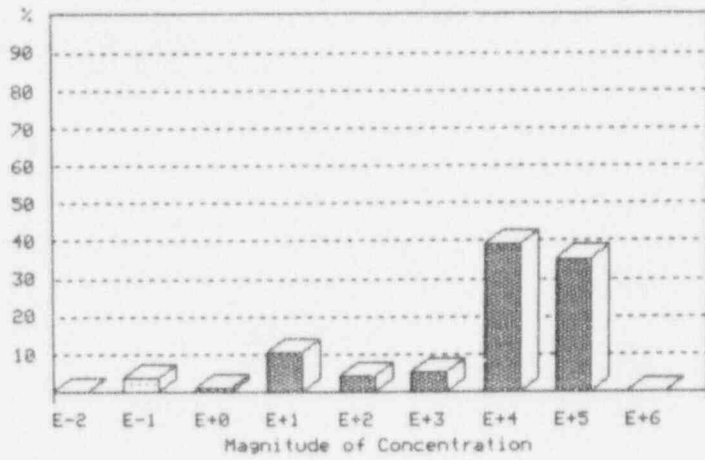
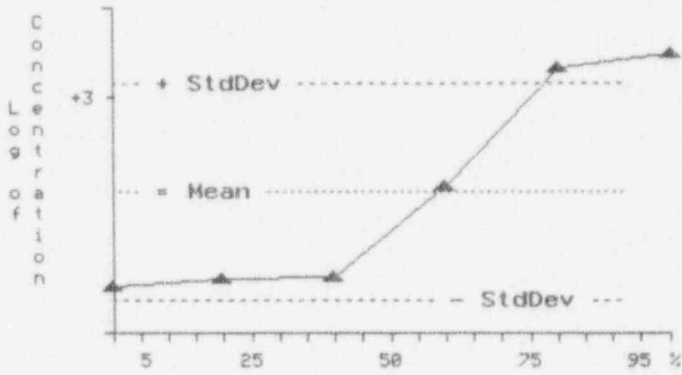
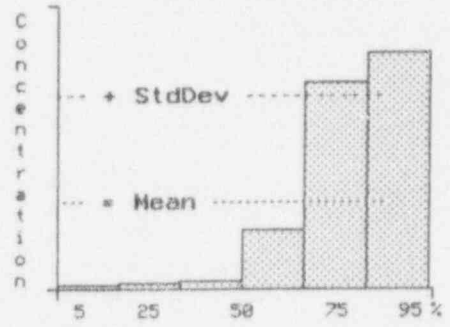


Exhibit F-36 (Continued)

Shipping-Level Stats - ORIGINAL



C-14



pCi/g	
# Points =	6
Minimum =	2.48E+02
10th % =	2.48E+02
25th % =	2.63E+02
50th % =	2.65E+02
75th % =	1.38E+03
90th % =	1.38E+03
Maximum =	1.53E+03
Average =	7.06E+02
Ave Dev =	5.01E+02
Std Dev =	5.95E+02
Skewness =	4.76E-01
Kurtosis =	-1.94E+00

Percent Volume At Concentration: 50 <= Vol < 100 cu ft

Exhibit F-36 (Continued)

Shipping-Level Stats - ORIGINAL

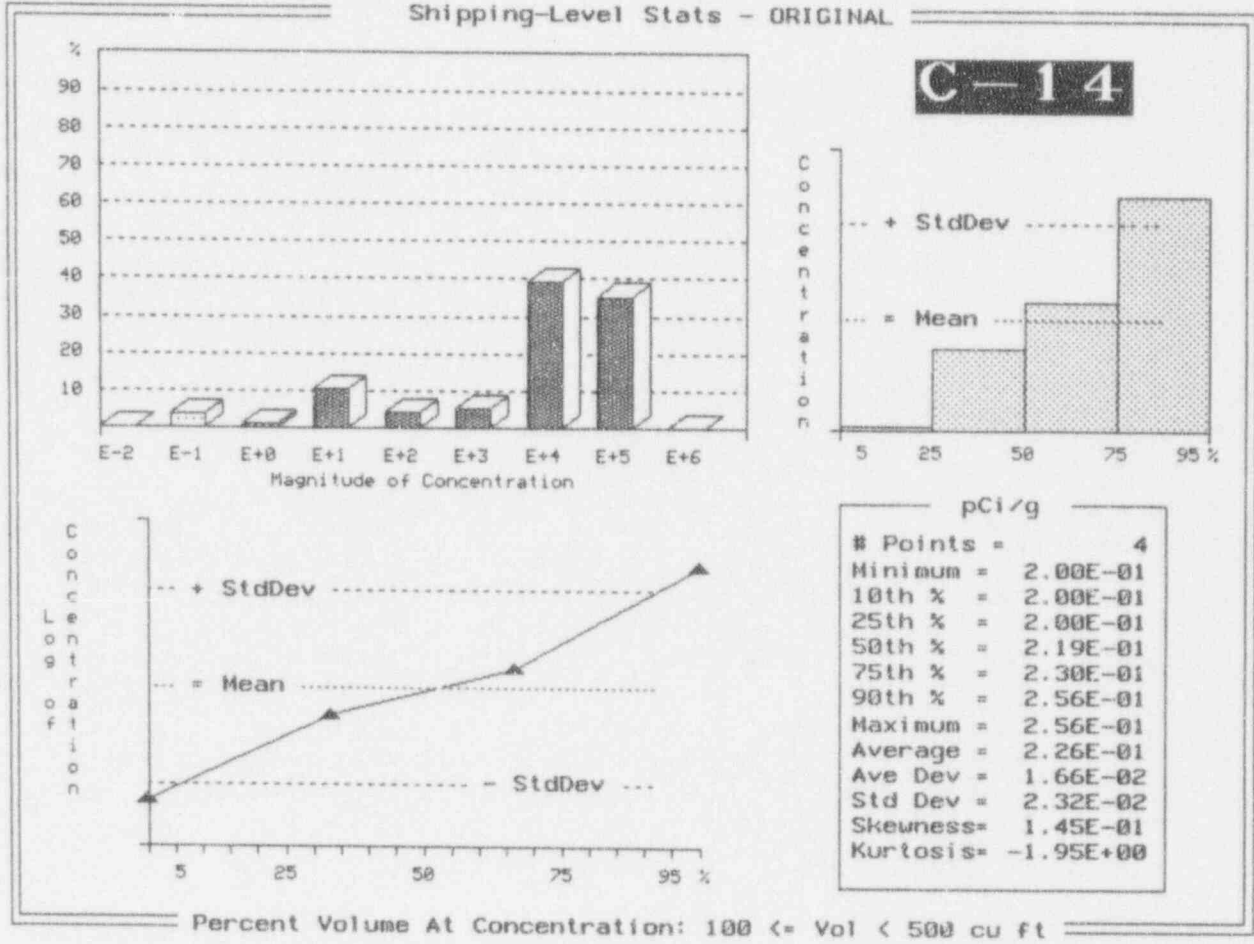
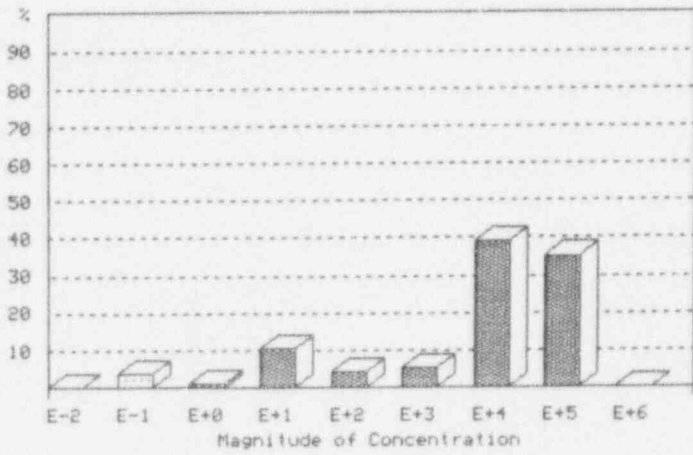
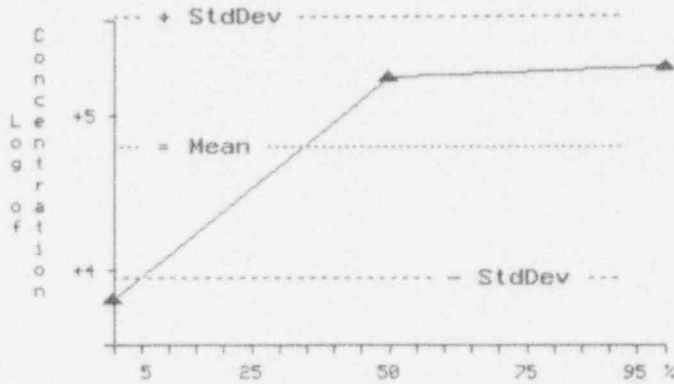
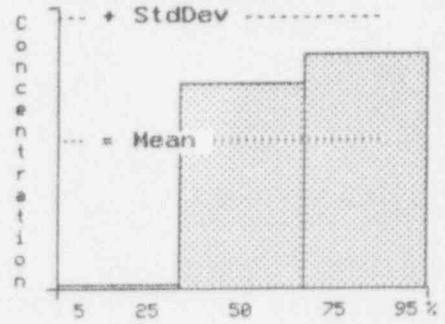


Exhibit F-36 (Continued)

Shipping-Level Stats - ORIGINAL



C-14

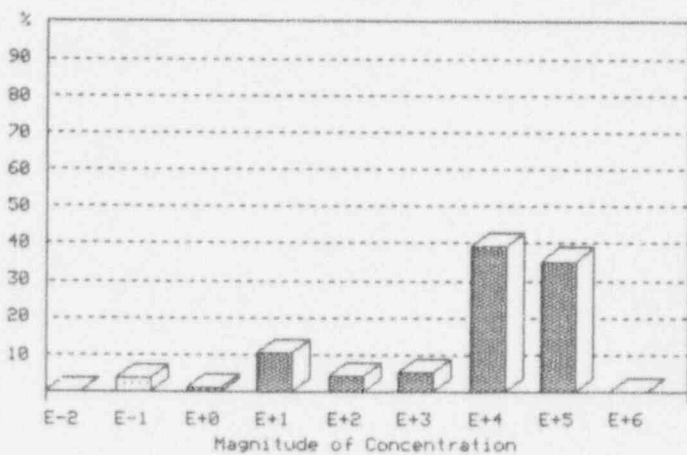


pCi/g	
# Points =	3
Minimum =	7.76E+03
10th % =	7.76E+03
25th % =	7.76E+03
50th % =	2.08E+05
75th % =	2.08E+05
90th % =	2.35E+05
Maximum =	2.35E+05
Average =	1.50E+05
Ave Dev =	9.51E+04
Std Dev =	1.24E+05
Skewness =	-3.64E-01
Kurtosis =	-2.33E+00

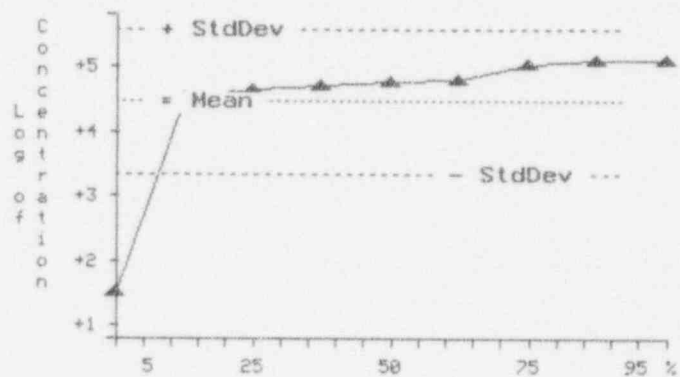
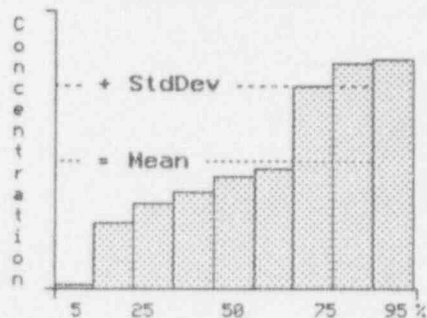
Percent Volume At Concentration: 500 <= Vol < 1000 cu ft

Exhibit F-36 (Continued)

Shipping-Level Stats - ORIGINAL



C-14



pCi/g	
# Points =	9
Minimum =	4.97E+01
10th % =	4.97E+01
25th % =	5.09E+04
50th % =	8.82E+04
75th % =	1.63E+05
90th % =	1.00E+05
Maximum =	1.85E+05
Average =	1.00E+05
Ave Dev =	5.03E+04
Std Dev =	6.30E+04
Skewness =	7.53E-02
Kurtosis =	-1.49E+00

Percent Volume At Concentration: Vol >= 1000 cu ft

Exhibit F-36 (Continued)

Shipping-Level Stats - ORIGINAL

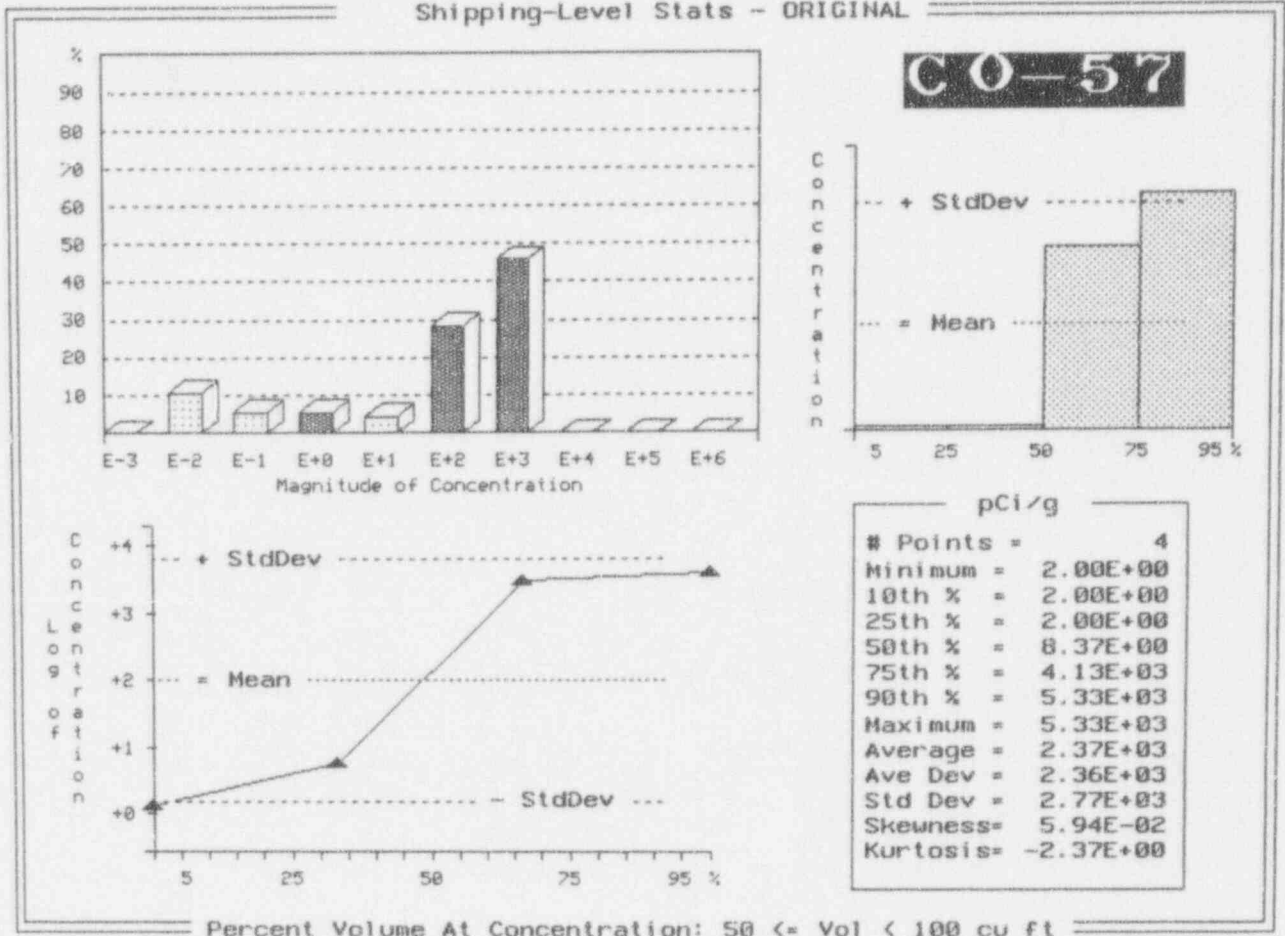


Exhibit F-36 (Continued)

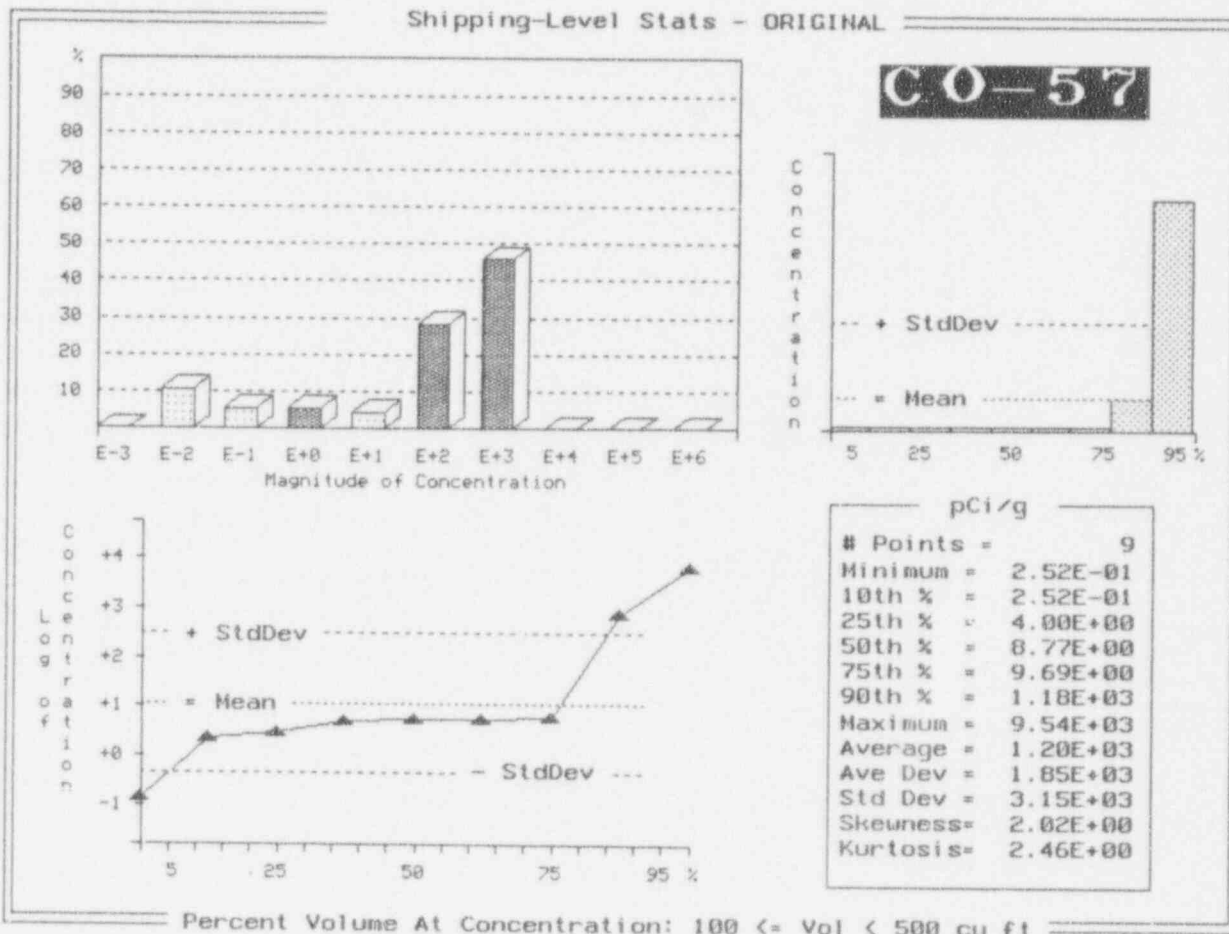


Exhibit F-36 (Continued)

Shipping-Level Stats - ORIGINAL

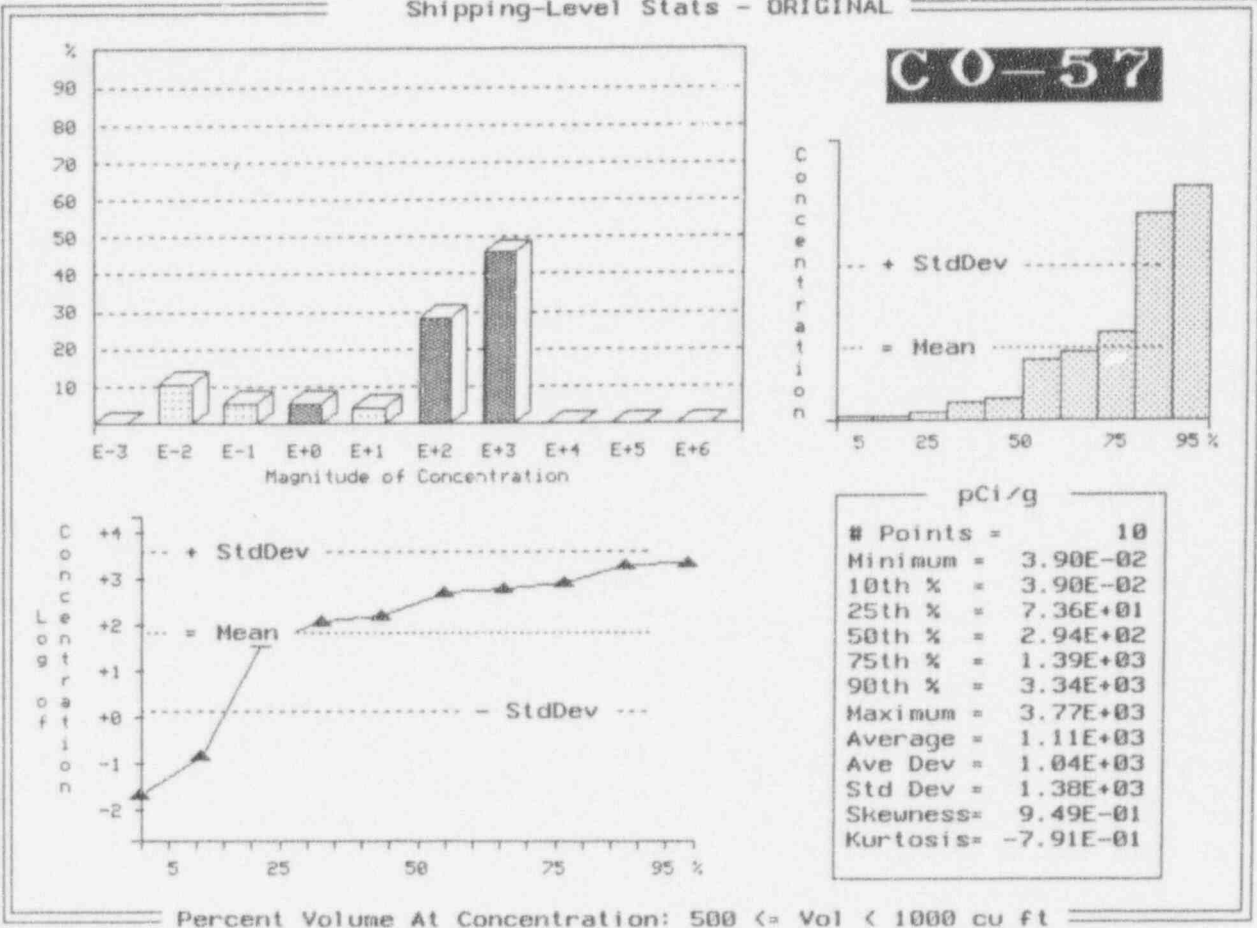
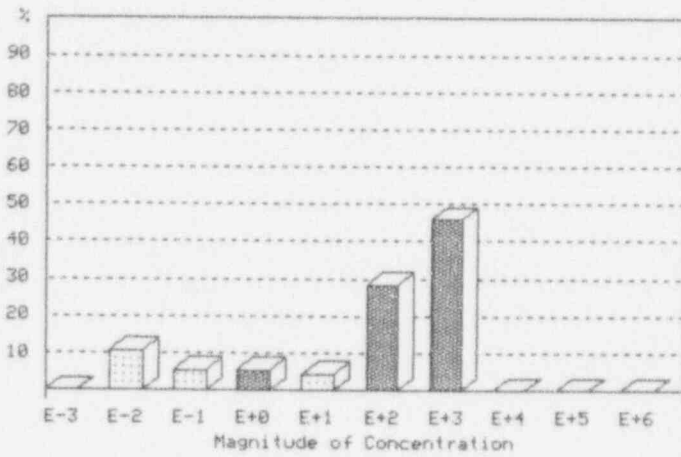
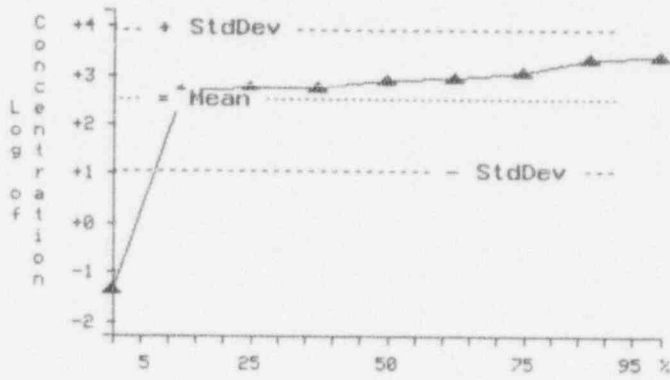
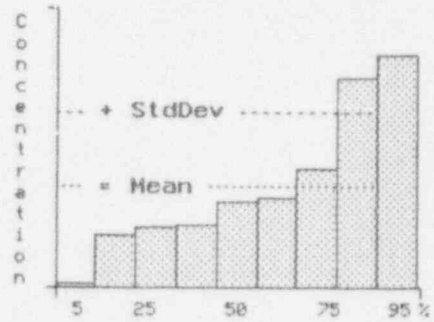


Exhibit F-36 (Continued)

Shipping-Level Stats - ORIGINAL



CO-57



pCi/g	
# Points =	9
Minimum =	7.68E-02
10th % =	7.68E-02
25th % =	6.99E+02
50th % =	1.15E+03
75th % =	1.64E+03
90th % =	2.95E+03
Maximum =	3.28E+03
Average =	1.40E+03
Ave Dev =	8.18E+02
Std Dev =	1.07E+03
Skewness =	6.23E-01
Kurtosis =	-1.11E+00

Percent Volume At Concentration: Vol >= 1000 cu ft

Exhibit F-36 (Continued)

Shipping-Level Stats - ORIGINAL

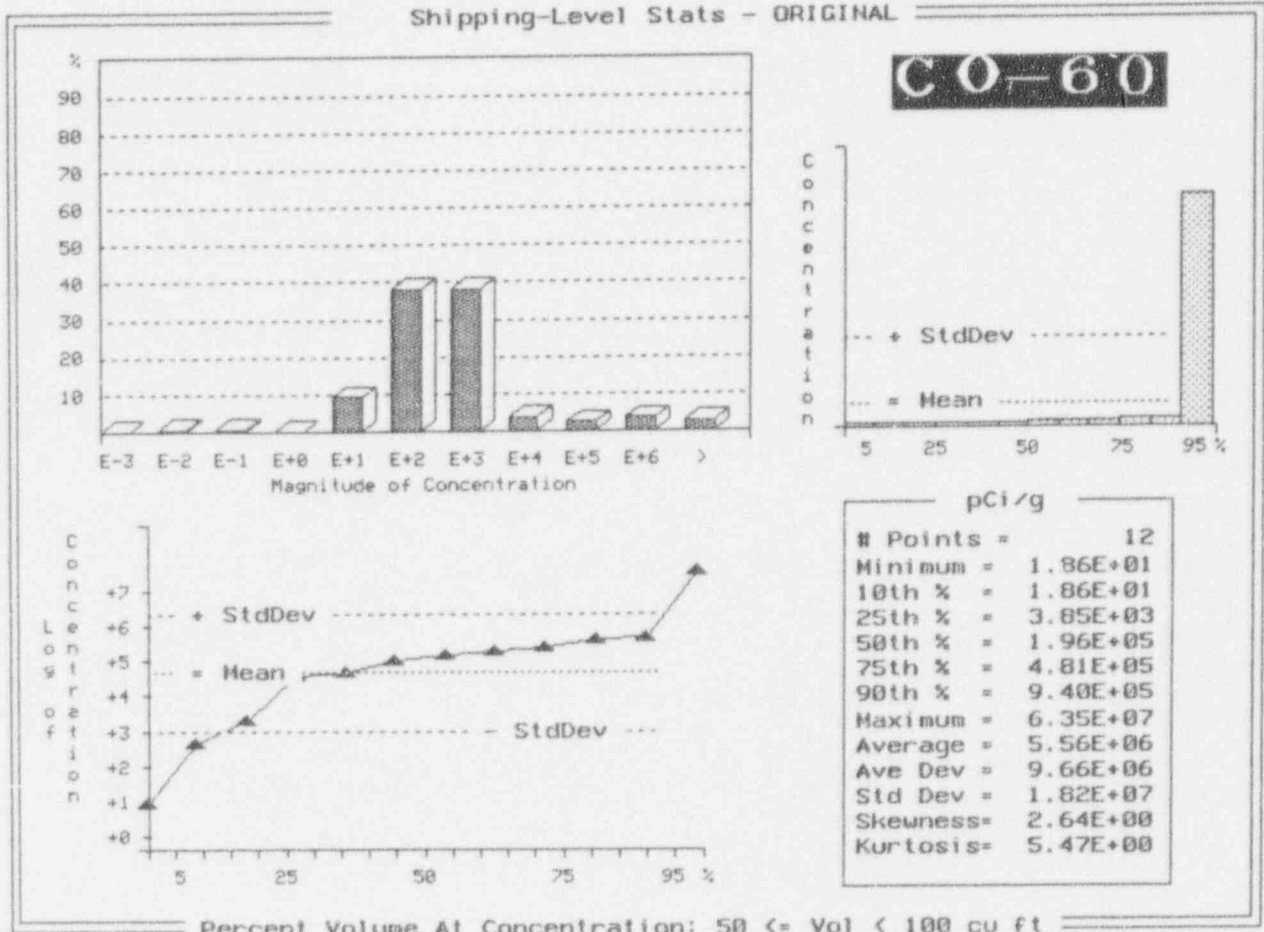
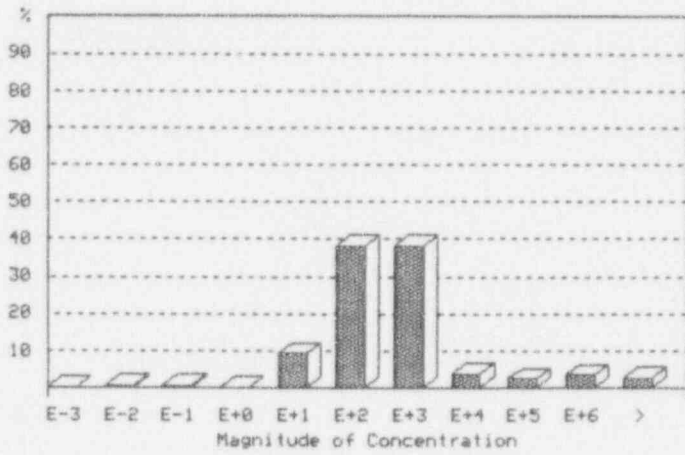
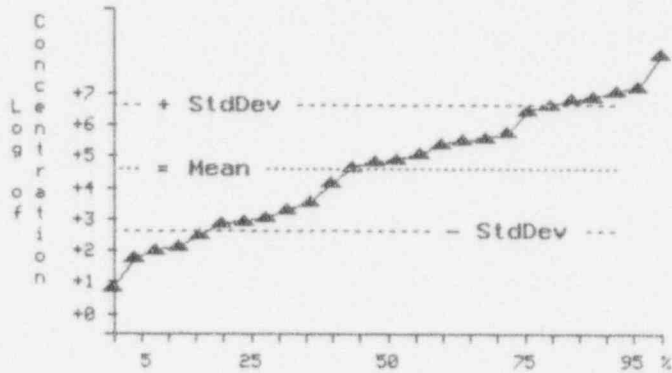
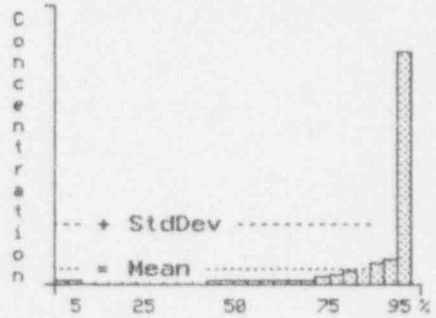


Exhibit F-36 (Continued)

Shipping-Level Stats - ORIGINAL



CO-60



pCi/g	
# Points =	51
Minimum =	1.59E+01
10th % =	2.27E+02
25th % =	1.98E+03
50th % =	1.47E+05
75th % =	1.25E+06
90th % =	1.82E+07
Maximum =	2.99E+08
Average =	9.78E+06
Ave Dev =	1.47E+07
Std Dev =	4.20E+07
Skewness =	6.37E+00
Kurtosis =	4.00E+01

Percent Volume At Concentration: 100 <= Vol < 500 cu ft

Exhibit F-36 (Continued)

Shipping-Level Stats - ORIGINAL

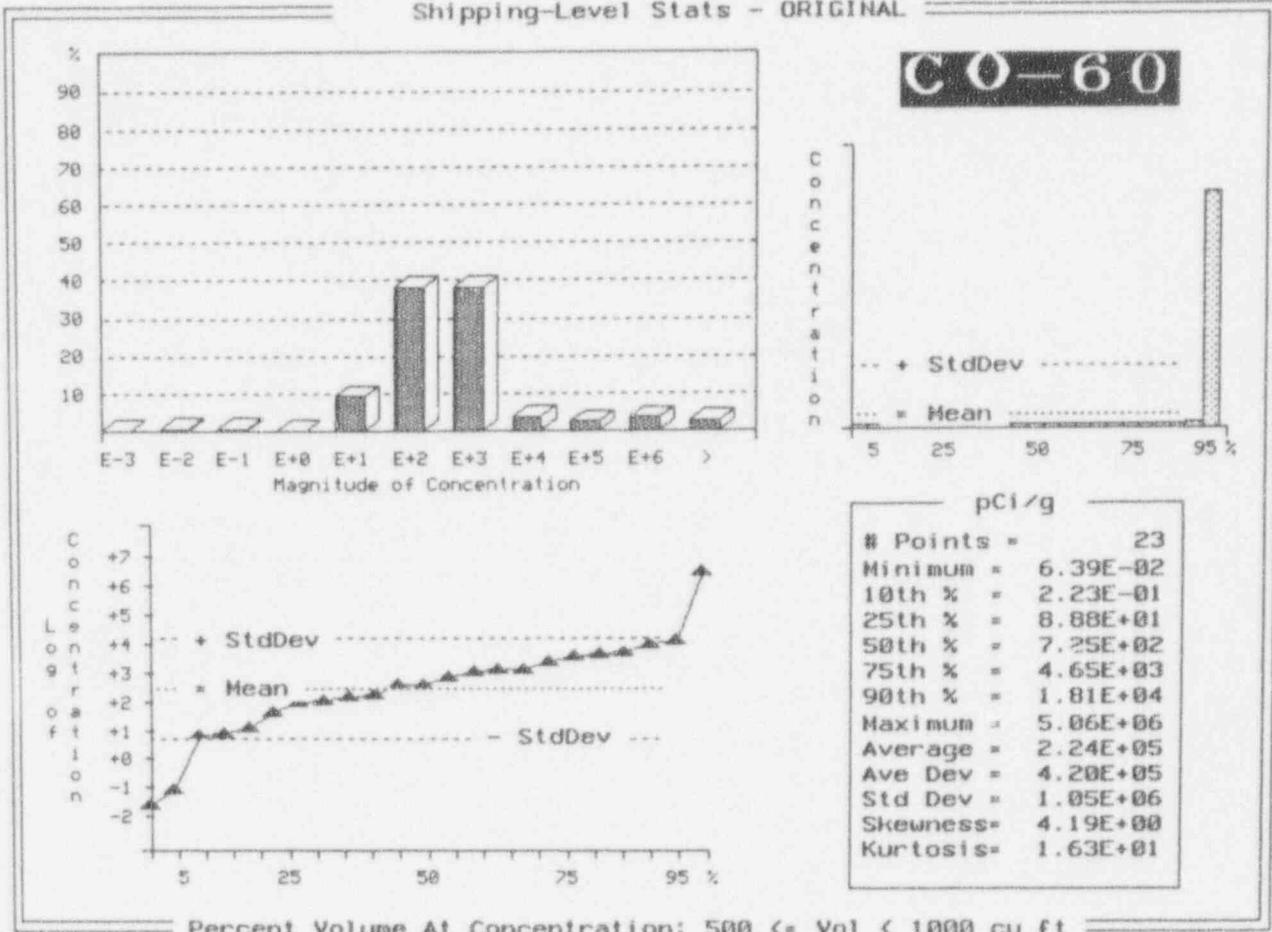


Exhibit F-36 (Continued)

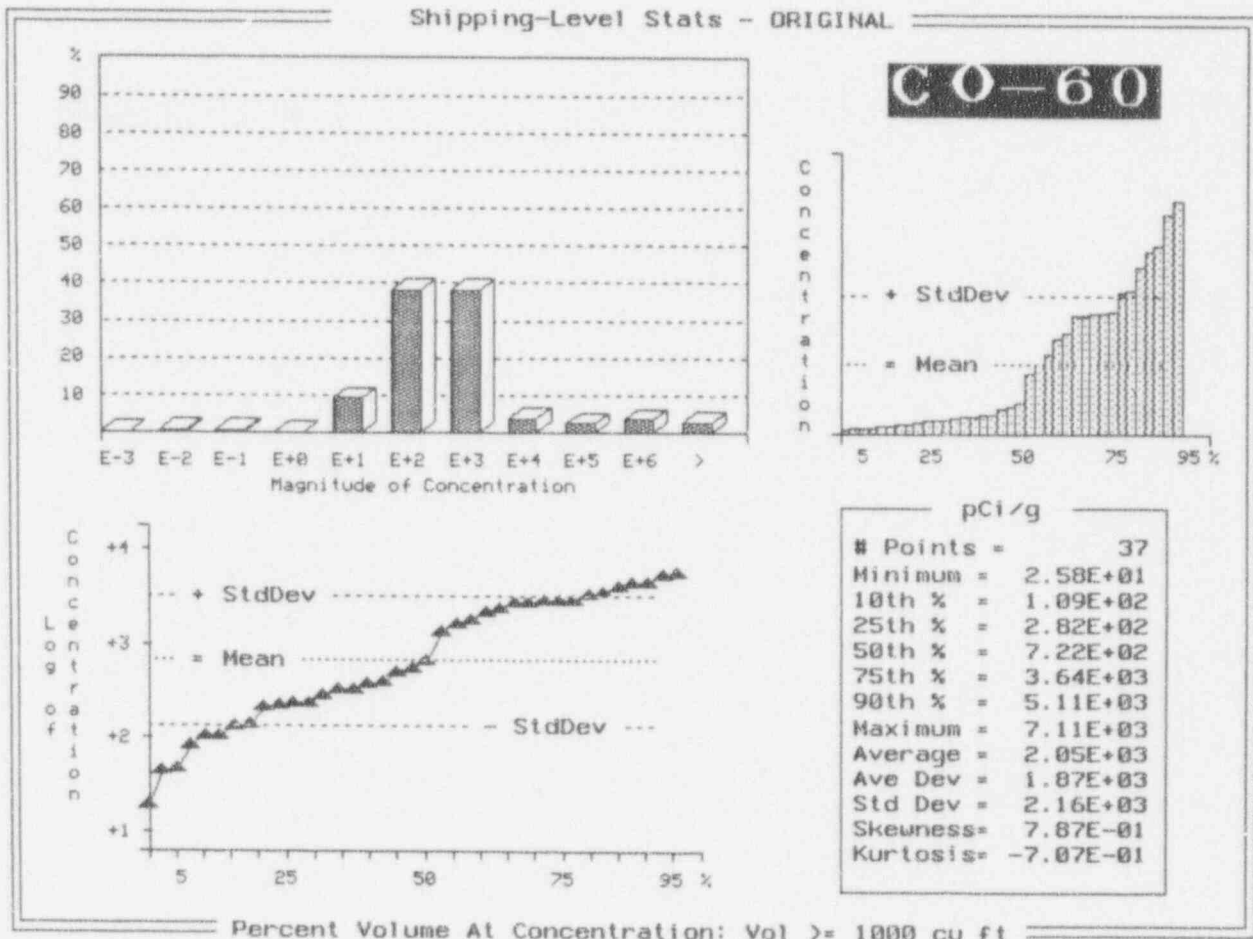


Exhibit F-36 (Continued)

Shipping-Level Stats - ORIGINAL

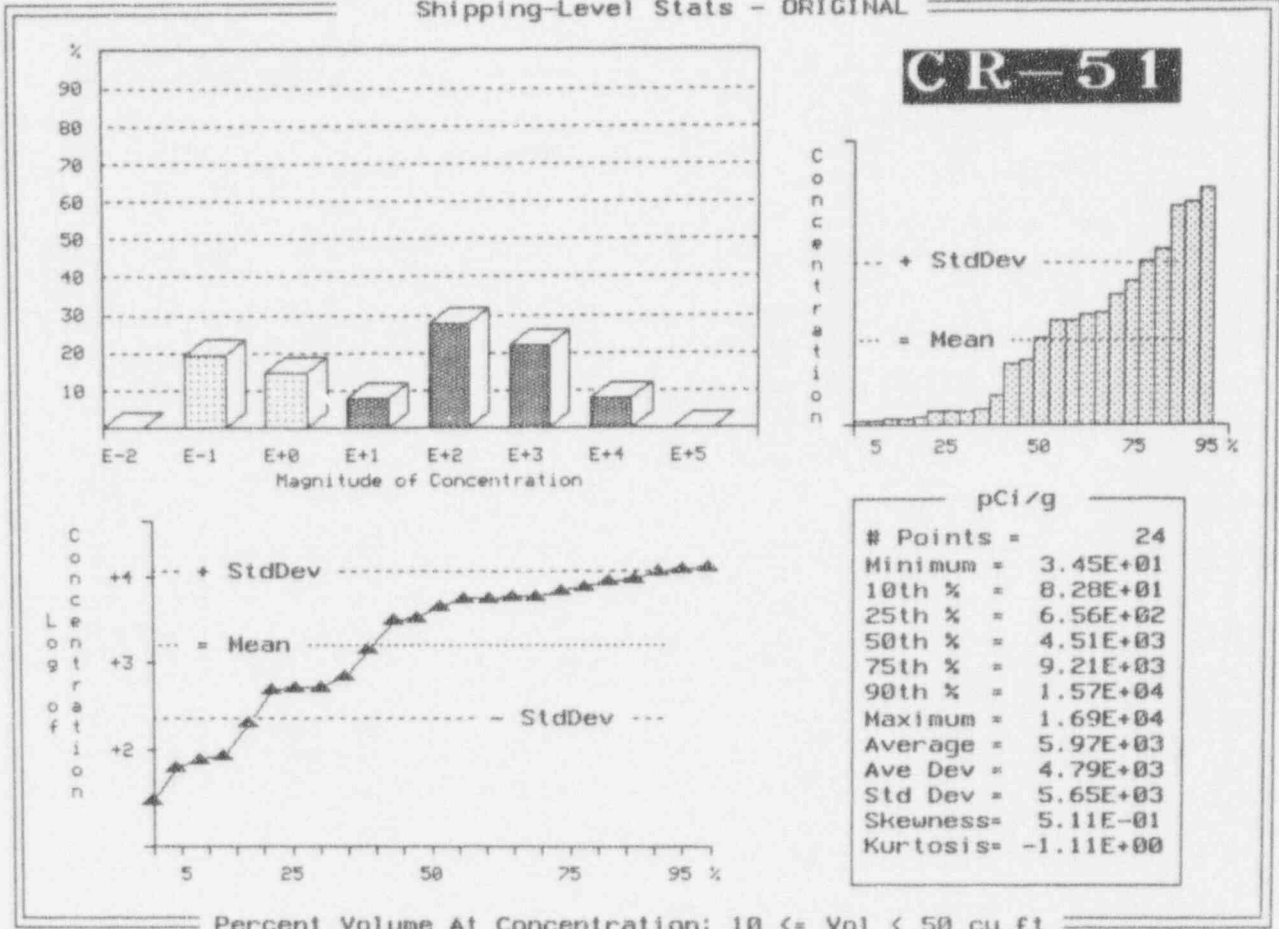


Exhibit F-36 (Continued)

Shipping-Level Stats - ORIGINAL

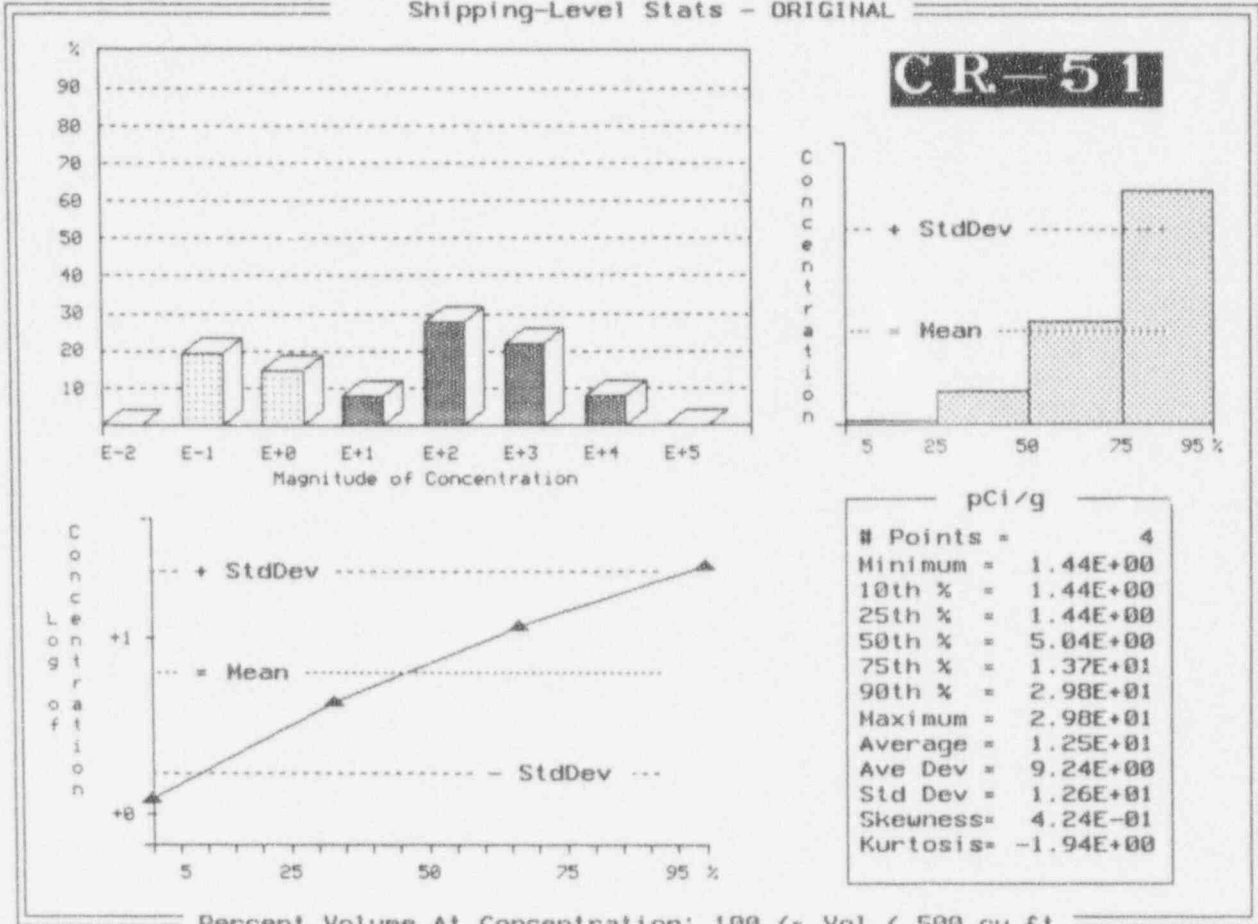


Exhibit F-36 (Continued)

Shipping-Level Stats - ORIGINAL

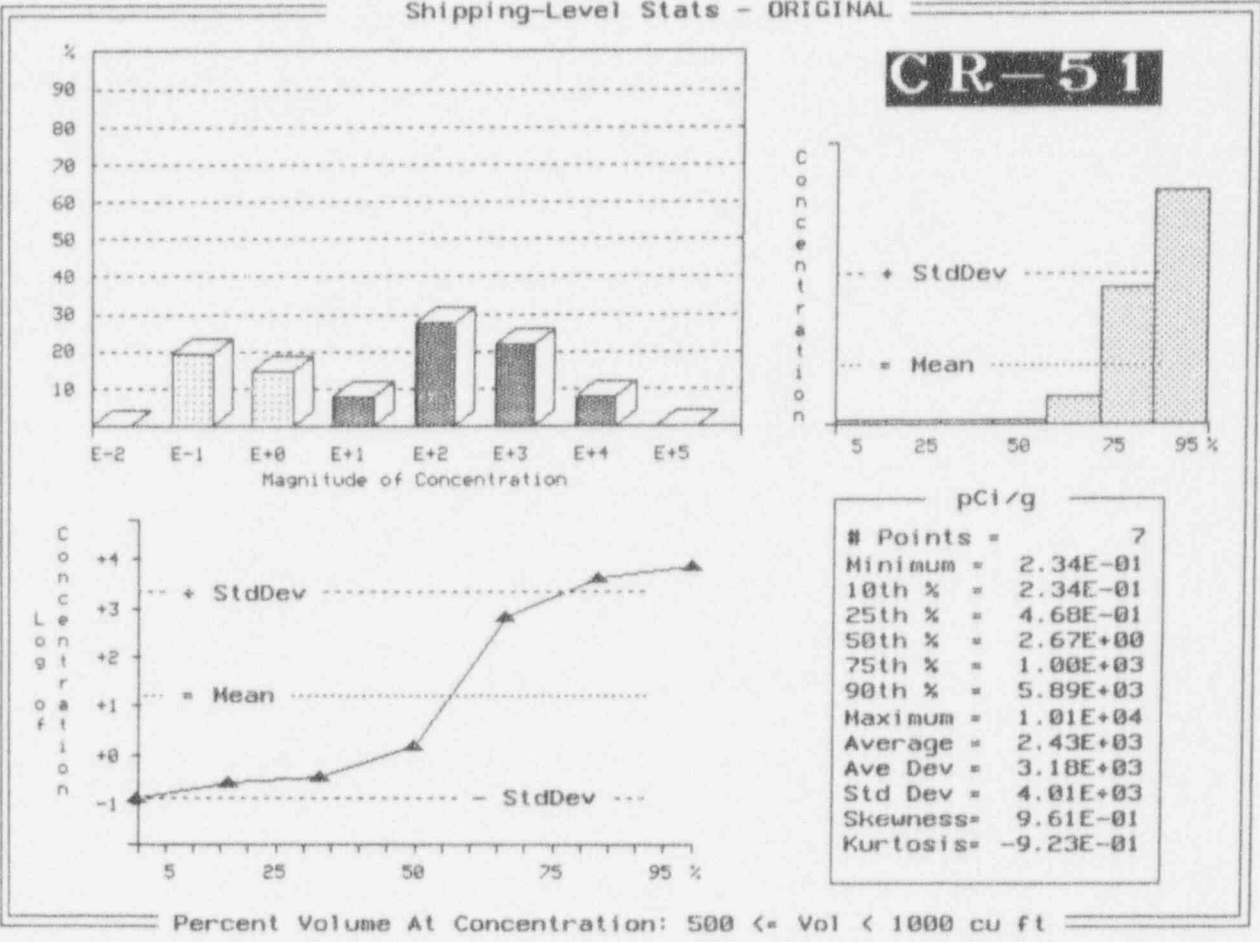
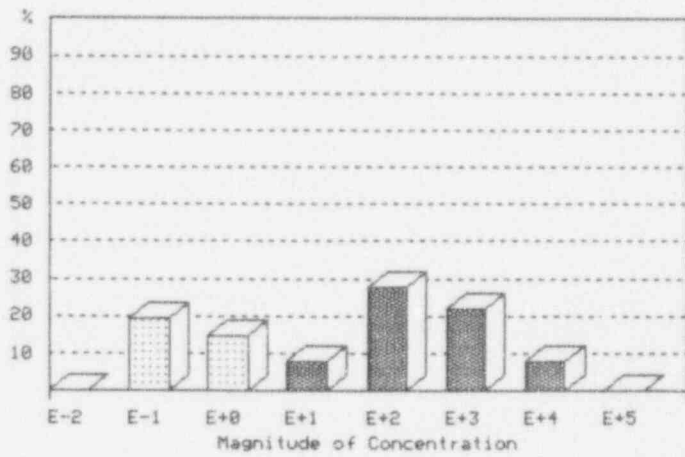
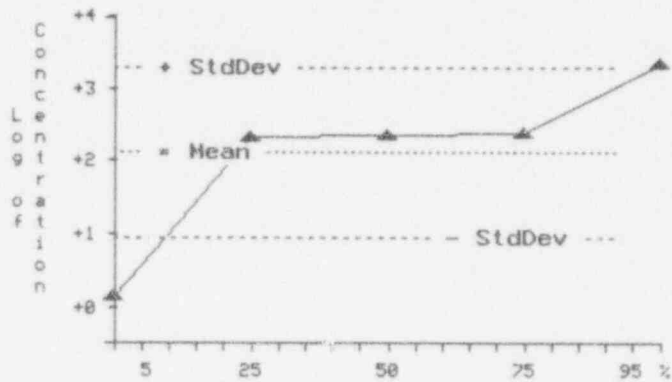
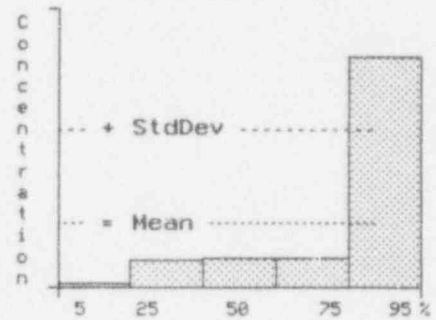


Exhibit F-36 (Continued)

Shipping-Level Stats - ORIGINAL



CR-51

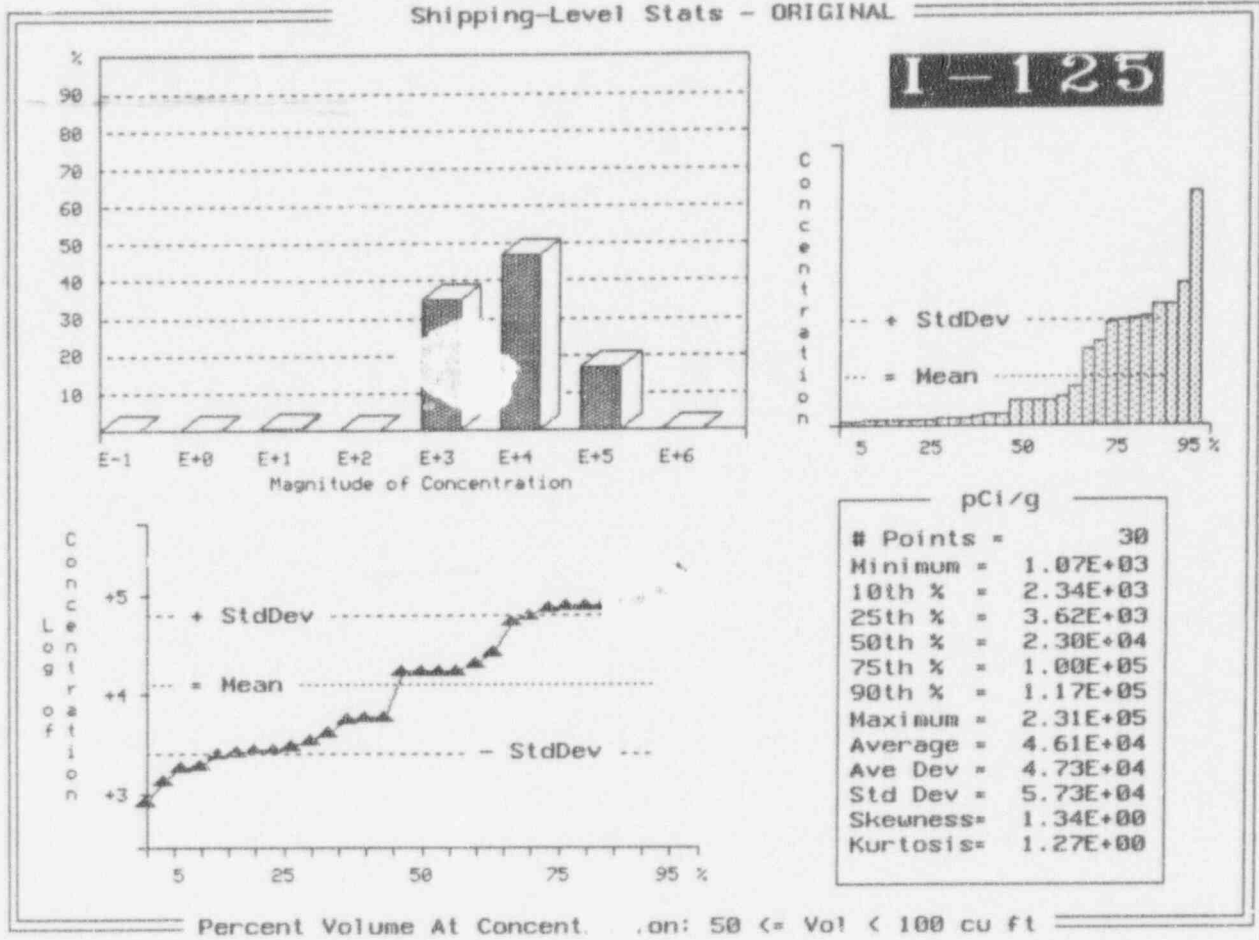


pCi/g	
# Points =	5
Minimum =	2.08E+00
10th % =	2.08E+00
25th % =	2.08E+00
50th % =	3.20E+02
75th % =	3.25E+02
90th % =	2.94E+03
Maximum =	2.94E+03
Average =	7.75E+02
Ave Dev =	8.65E+02
Std Dev =	1.22E+03
Skewness =	1.04E+00
Kurtosis =	-9.57E-01

Percent Volume At Concentration: Vol >= 1000 cu ft

Exhibit F-36 (Continued)

Shipping-Level Stats - ORIGINAL



Percent Volume At Concent. on: 50 <= Vol < 100 cu ft

Exhibit F-36 (Continued)

Shipping-Level Stats - ORIGINAL

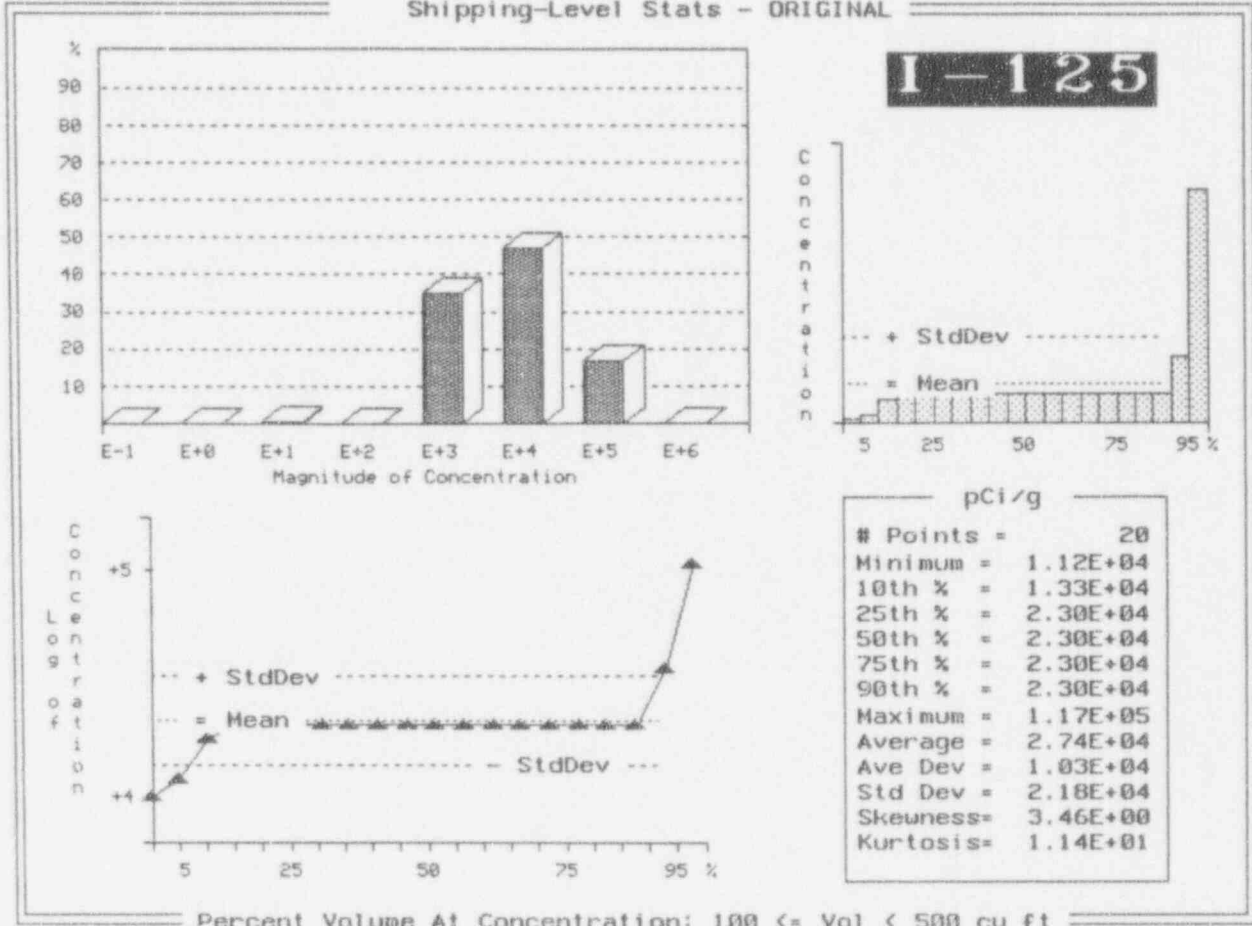


Exhibit F-36 (Continued)

Shipping-Level Stats - ORIGINAL

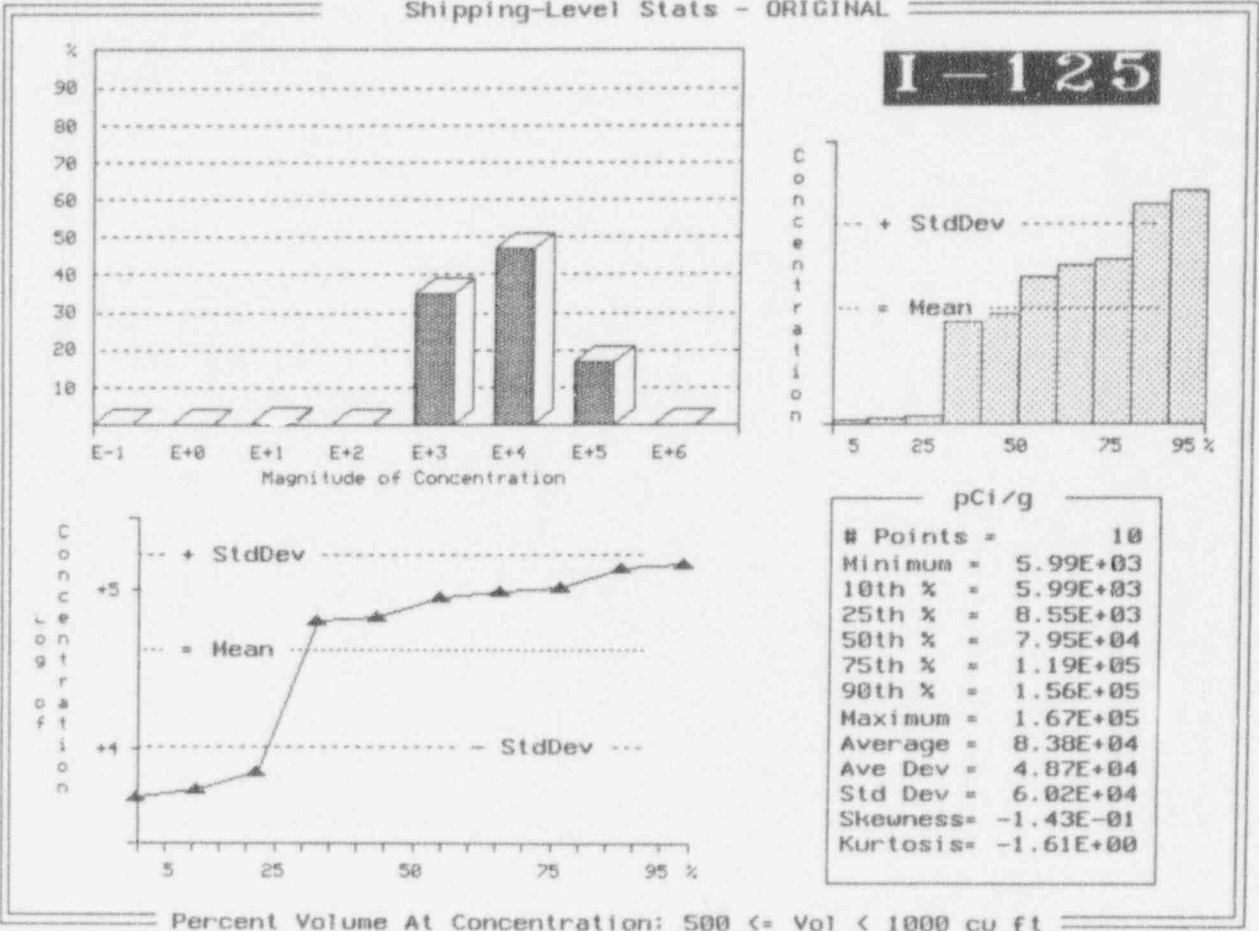


Exhibit F-36 (Continued)

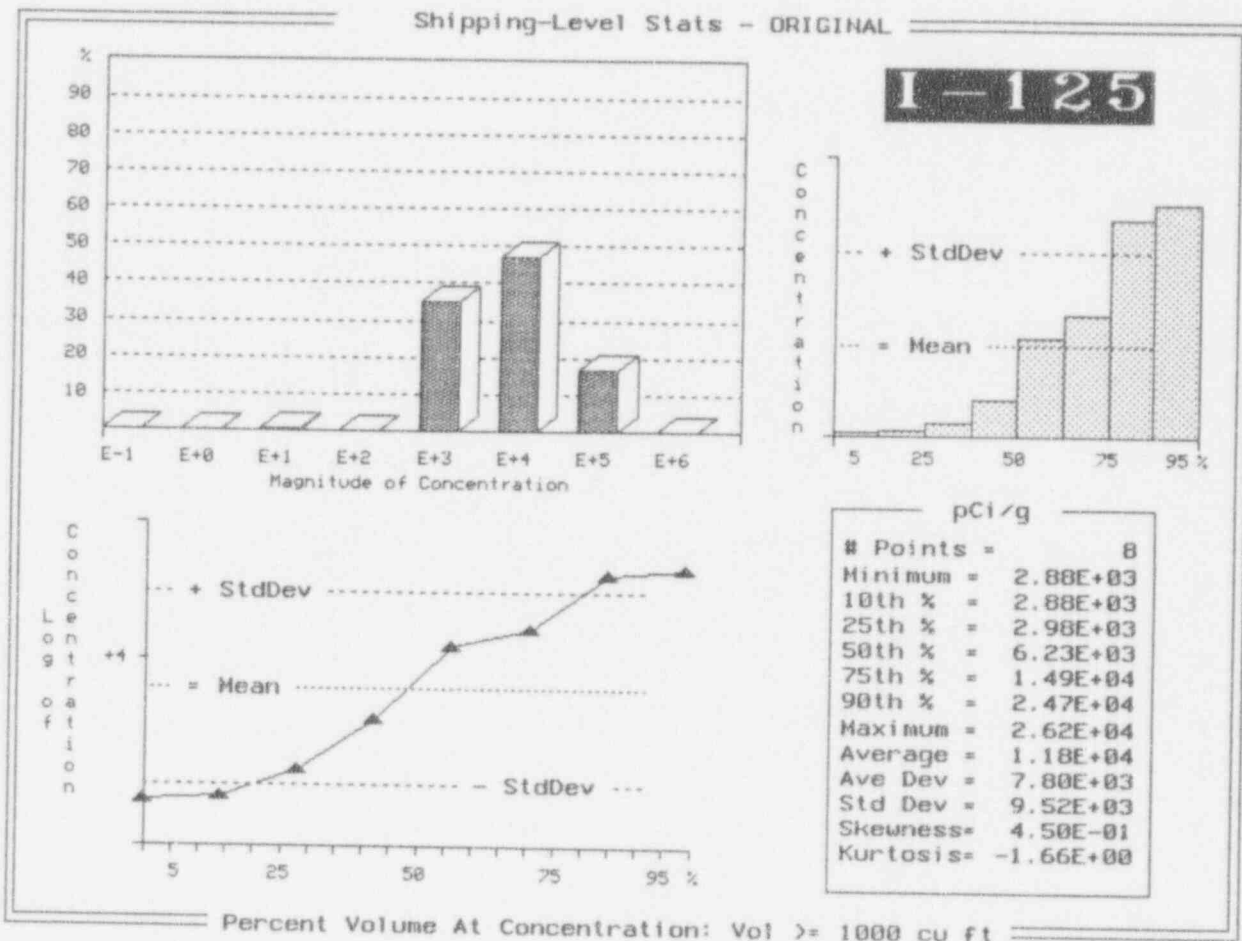
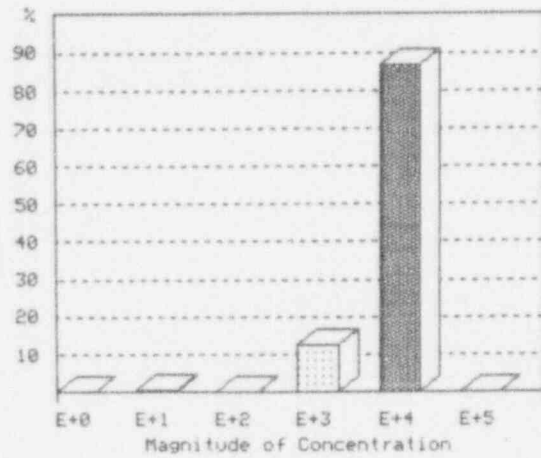
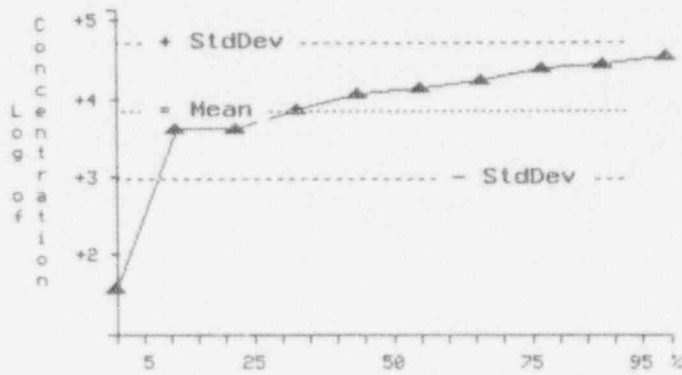
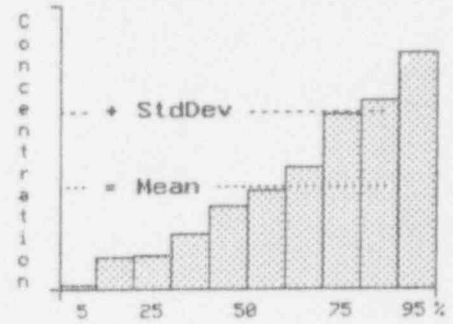


Exhibit F-36 (Continued)

Shipping-Level Stats - ORIGINAL



KR-85

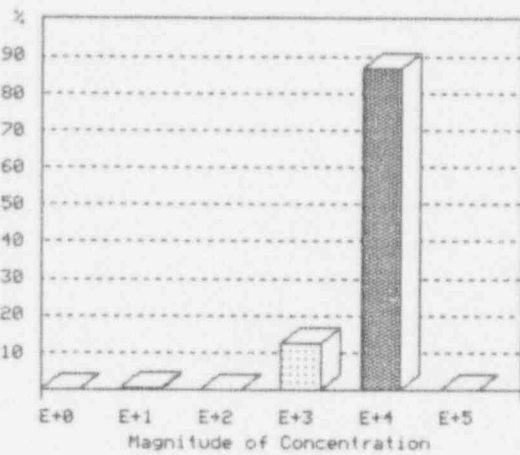


pCi/g	
# Points =	10
Minimum =	5.17E+01
10th % =	5.17E+01
25th % =	5.84E+03
50th % =	1.57E+04
75th % =	3.41E+04
90th % =	3.71E+04
Maximum =	4.64E+04
Average =	1.98E+04
Ave Dev =	1.24E+04
Std Dev =	1.54E+04
Skewness =	3.58E-01
Kurtosis =	-1.43E+00

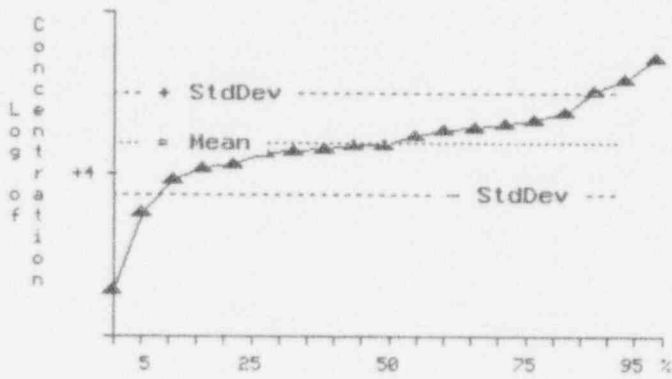
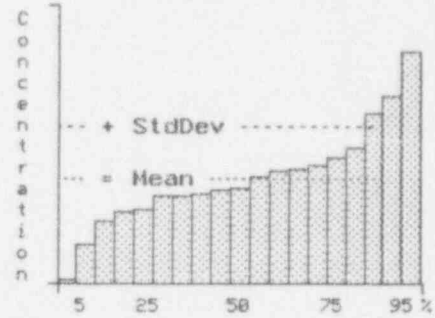
Percent Volume At Concentration: Vol < 10 cu ft

Exhibit F-36 (Continued)

Shipping-Level Stats - ORIGINAL



KR-85



pCi/g	
# Points =	19
Minimum =	4.19E+03
10th % =	8.02E+03
25th % =	1.19E+04
50th % =	1.42E+04
75th % =	1.68E+04
90th % =	2.25E+04
Maximum =	2.93E+04
Average =	1.54E+04
Ave Dev =	4.10E+03
Std Dev =	5.73E+03
Skewness =	5.08E-01
Kurtosis =	2.51E-01

Percent Volume At Concentration: 10 <= Vol < 50 cu ft

Exhibit F-36 (Continued)

Shipping-Level Stats - ORIGINAL

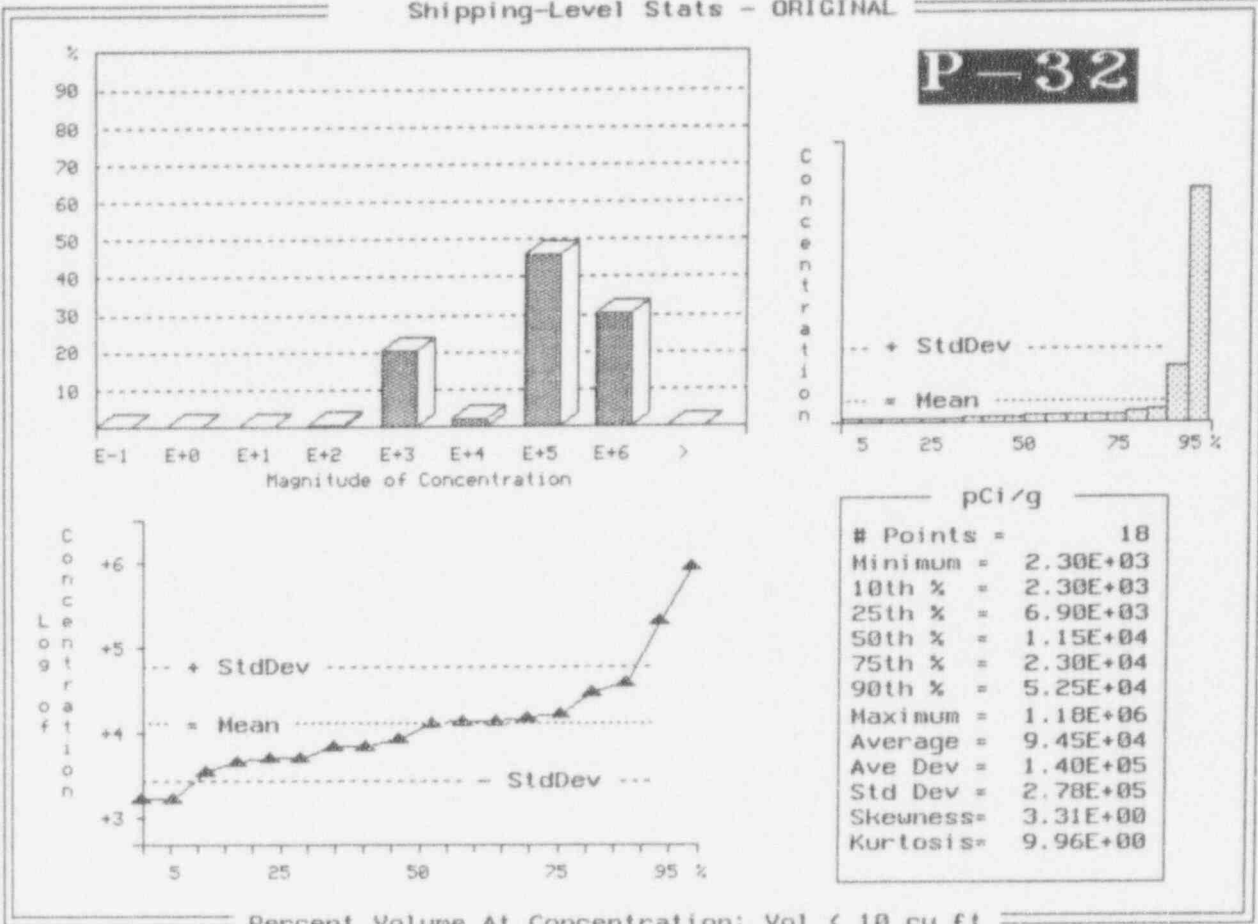
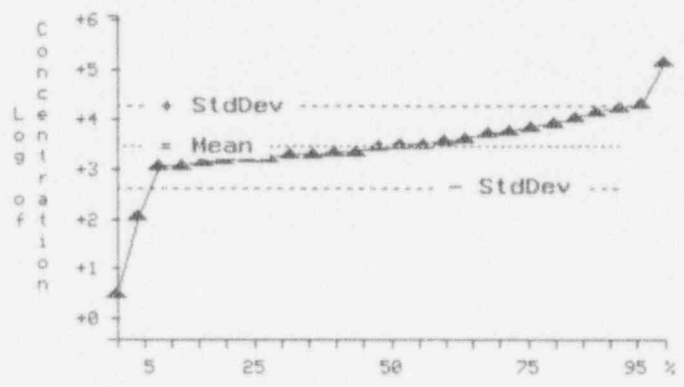
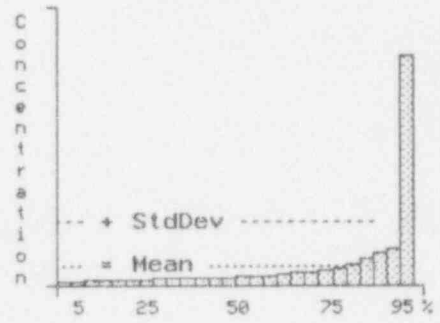
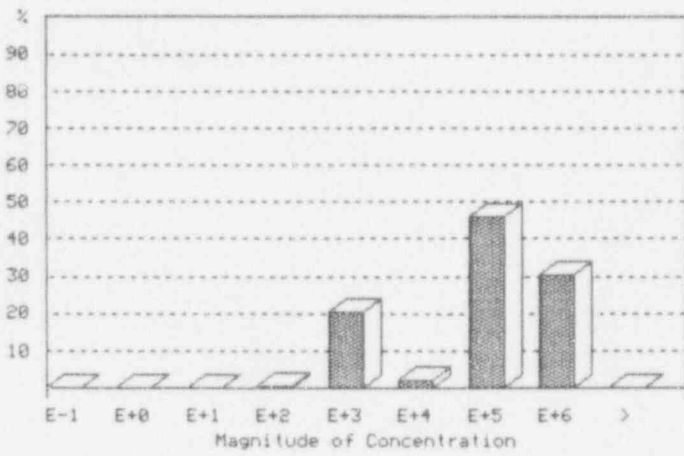


Exhibit F-36 (Continued)

Shipping-Level Stats - ORIGINAL

P-32



pCi/g	
# Points =	51
Minimum =	5.66E+00
10th % =	1.96E+03
25th % =	2.72E+03
50th % =	4.57E+03
75th % =	1.01E+04
90th % =	2.45E+04
Maximum =	2.31E+05
Average =	1.32E+04
Ave Dev =	1.38E+04
Std Dev =	3.29E+04
Skewness =	5.74E+00
Kurtosis =	3.49E+01

Percent Volume At Concentration: 10 <= Vol < 50 cu ft

Exhibit F-36 (Continued)

Shipping-Level Stats - ORIGINAL

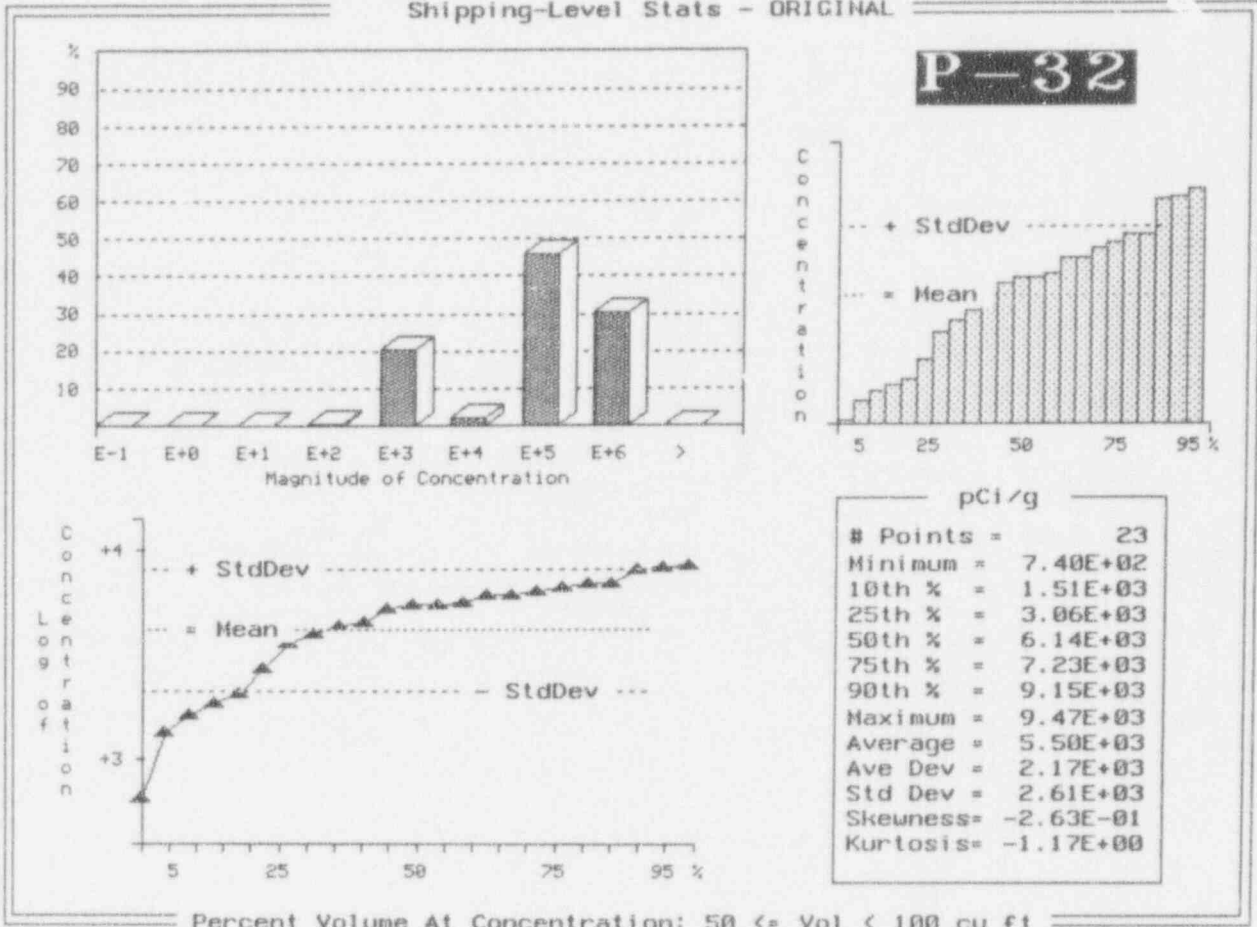
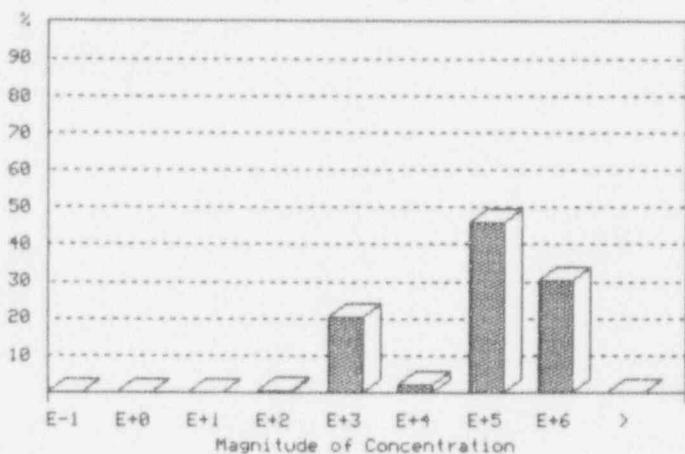
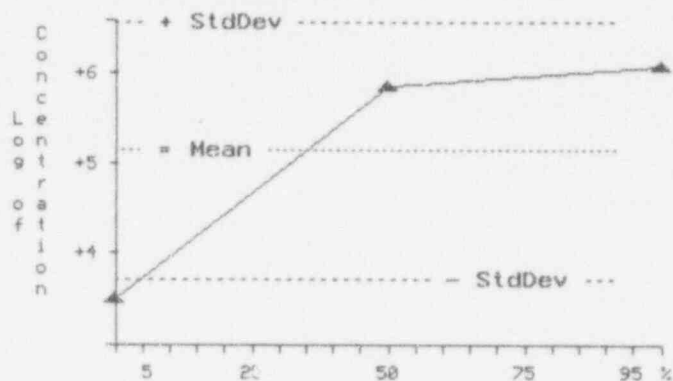
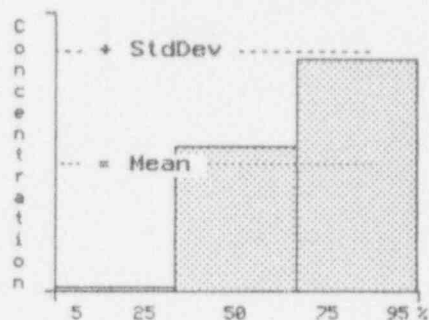


Exhibit F-36 (Continued)

Shipping-Level Stats - ORIGINAL



P-32



pCi/g	
# Points =	3
Minimum =	4.21E+03
10th % =	4.21E+03
25th % =	4.21E+03
50th % =	9.37E+05
75th % =	9.37E+05
90th % =	1.51E+06
Maximum =	1.51E+06
Average =	8.19E+05
Ave Dev =	5.43E+05
Std Dev =	7.62E+05
Skewness =	-1.52E-01
Kurtosis =	-2.33E+00

Percent Volume At Concentration: 500 <= Vol < 1000 cu ft

Exhibit F-36 (Continued)

Shipping-Level Stats - ORIGINAL

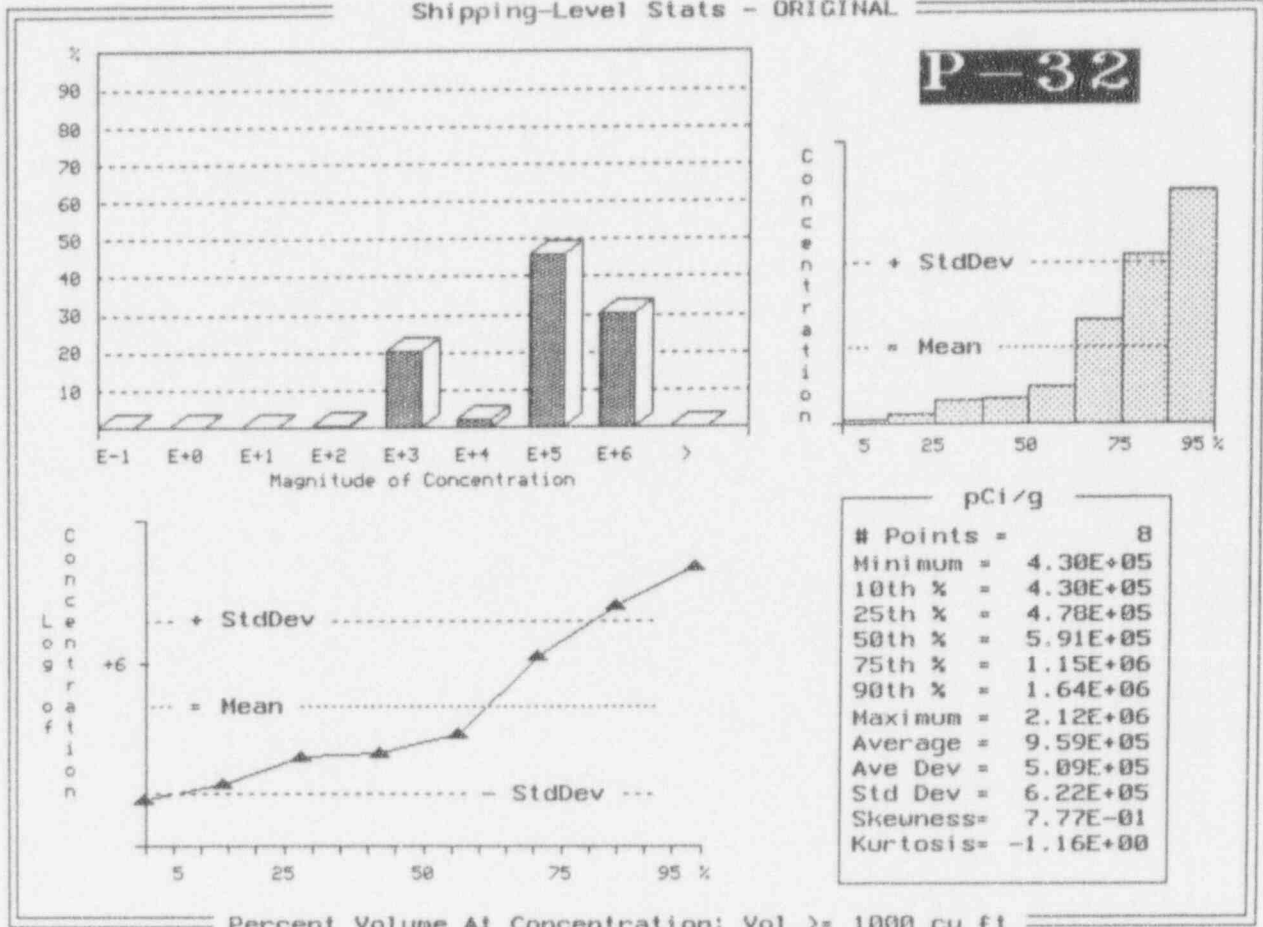


Exhibit F-36 (Continued)

Shipping-Level Stats - ORIGINAL

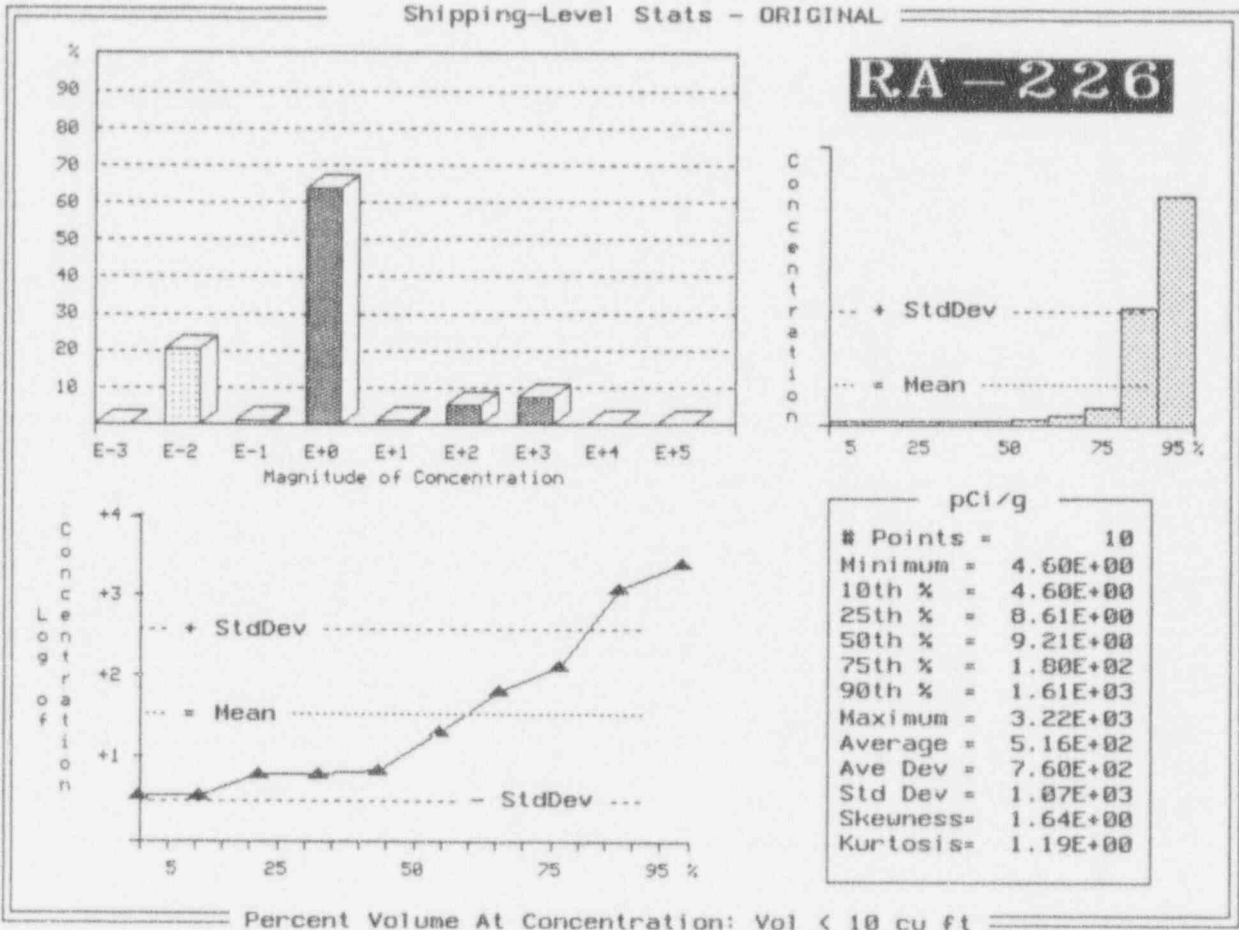


Exhibit F-36 (Continued)

Shipping-Level Stats - ORIGINAL

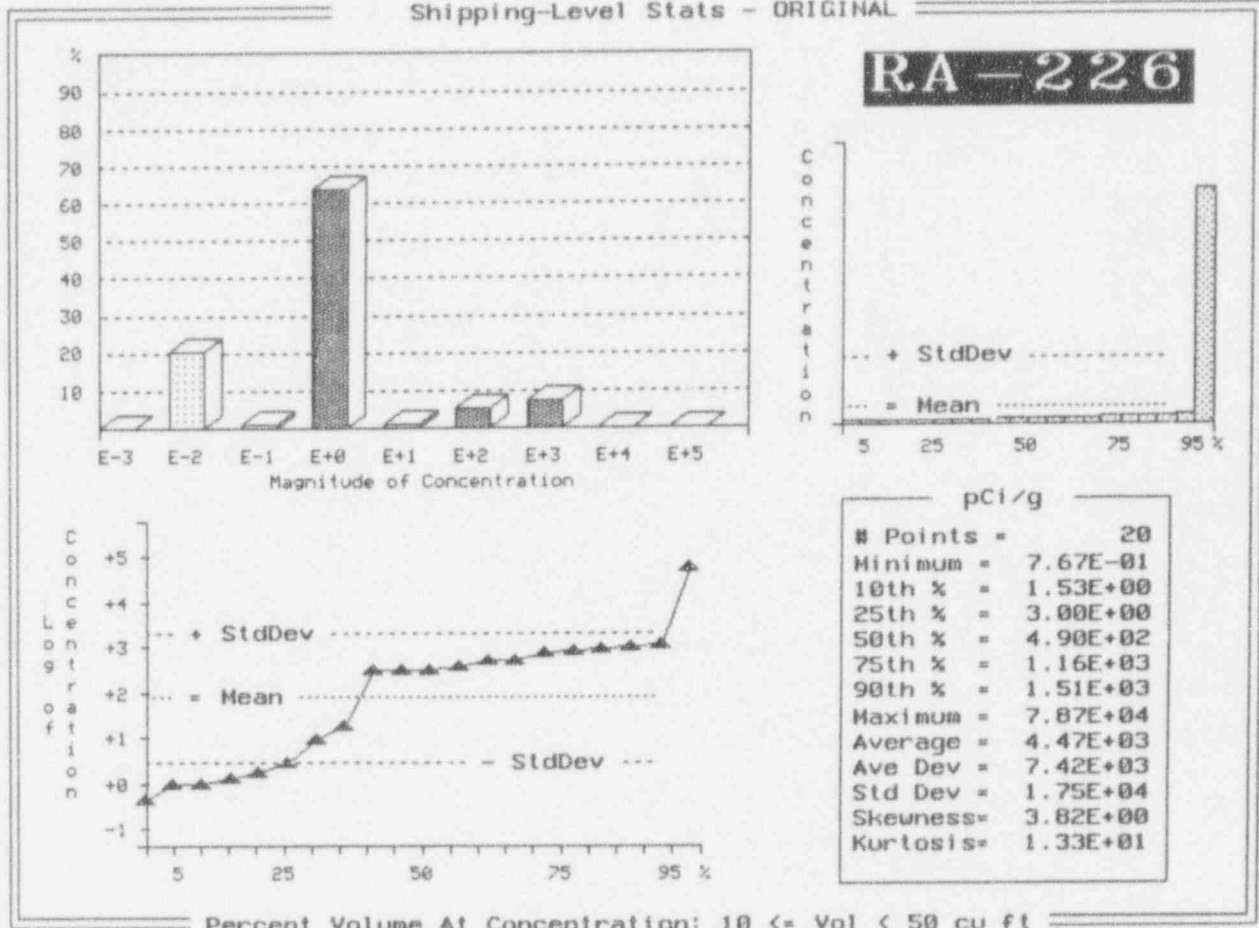


Exhibit F-36 (Continued)

Shipping-Level Stats - ORIGINAL

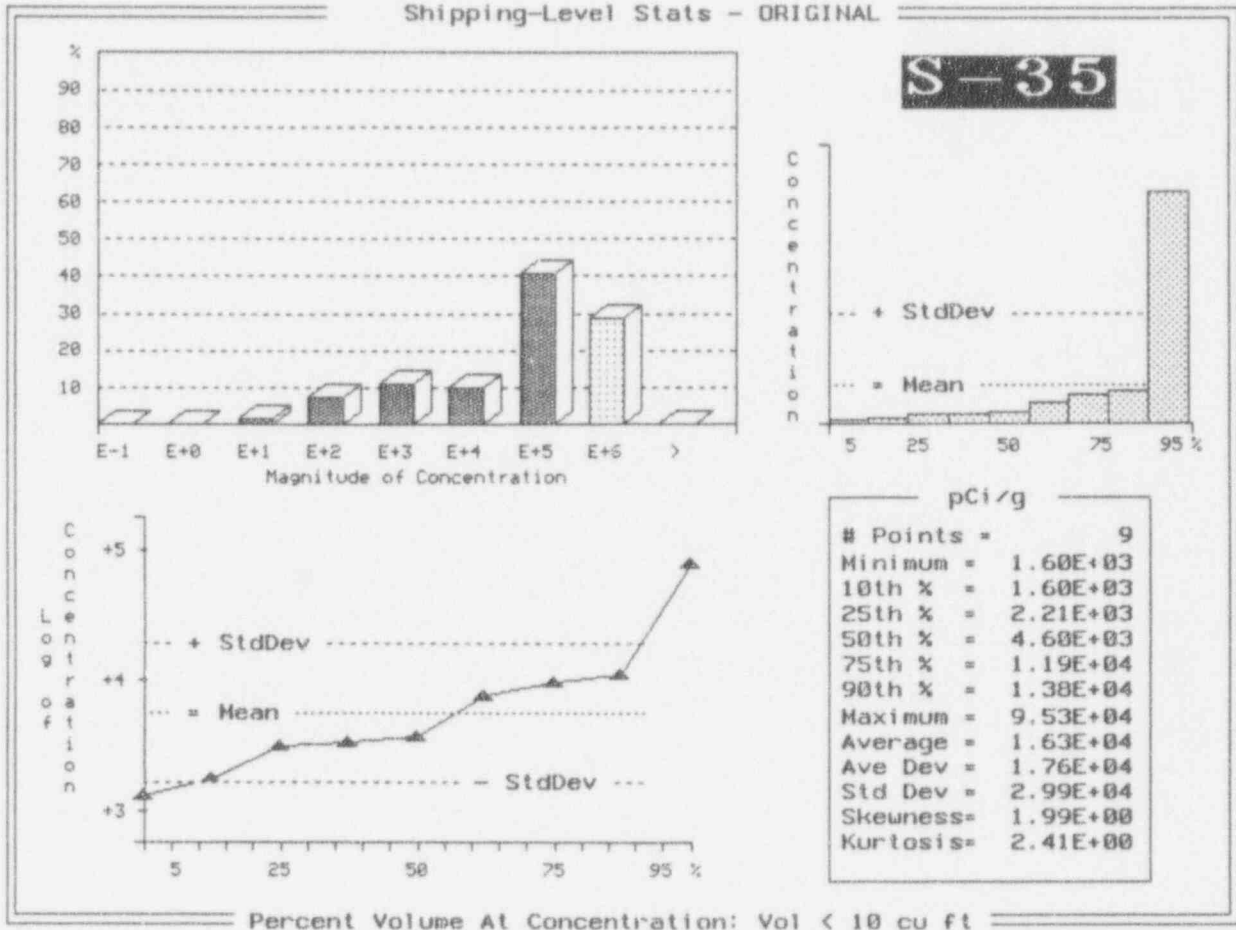


Exhibit F-36 (Continued)

Shipping-Level Stats - ORIGINAL

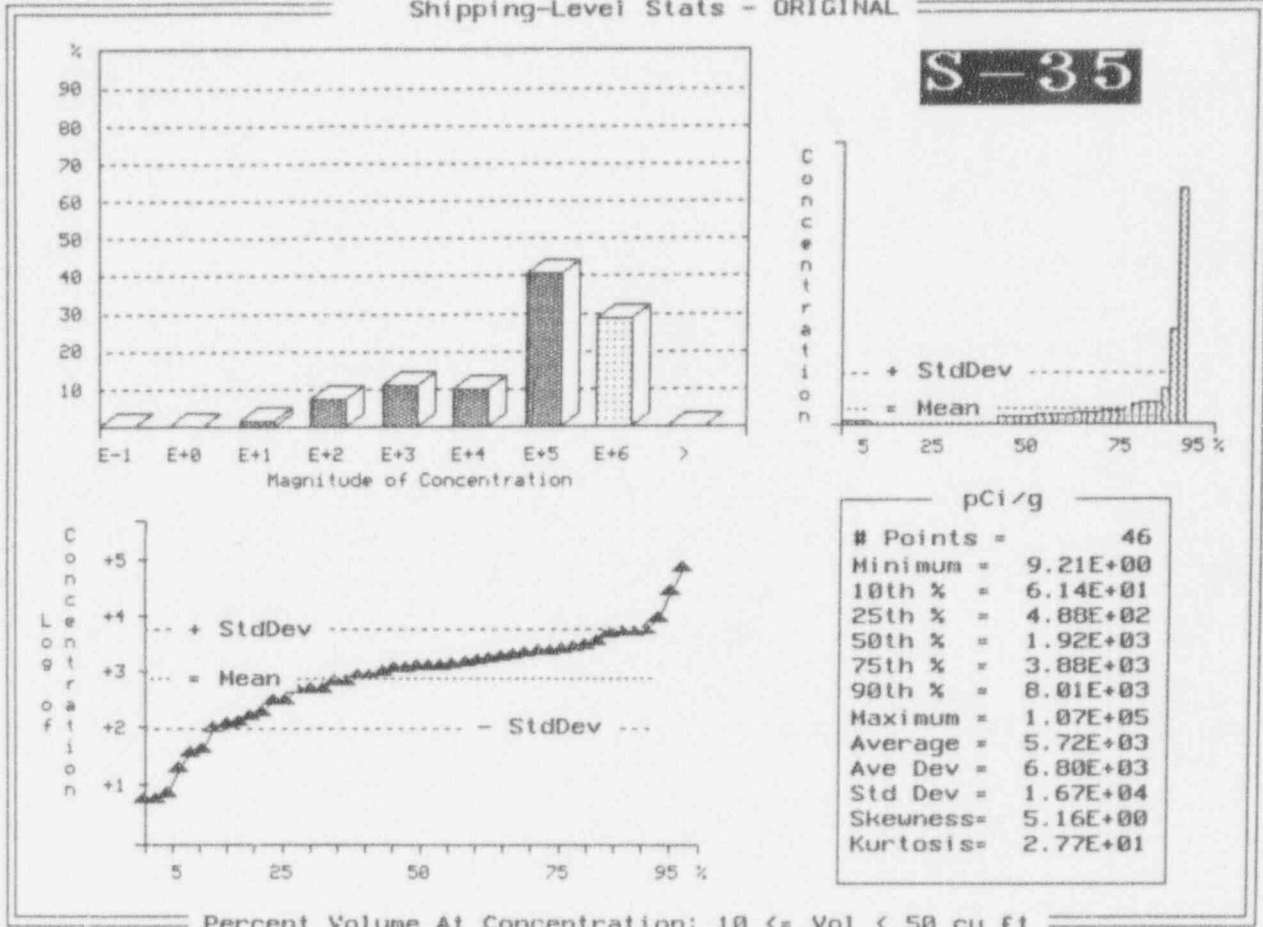


Exhibit F-36 (Continued)

Shipping-Level Stats - ORIGINAL

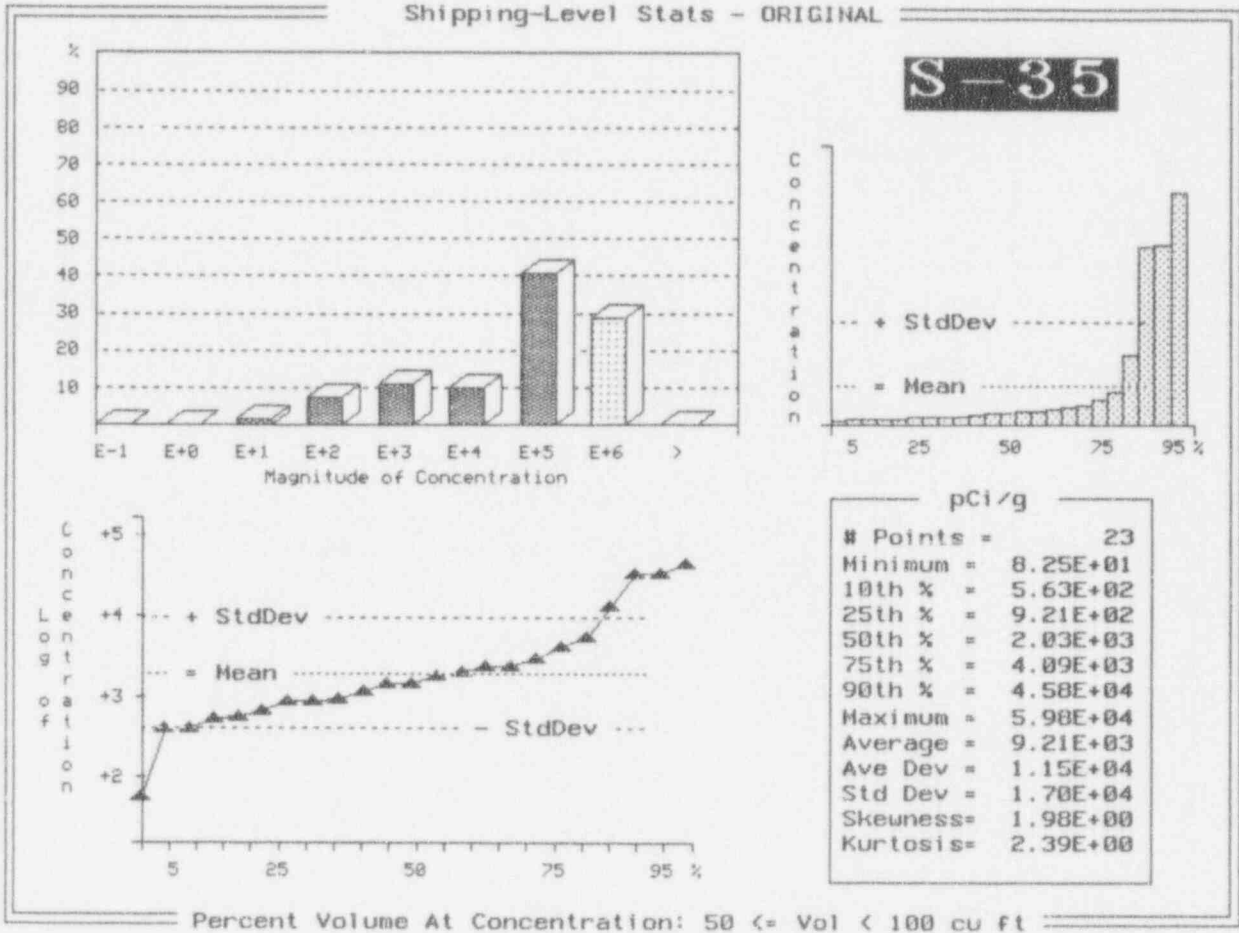


Exhibit F-36 (Continued)

Shipping-Level Stats - ORIGINAL

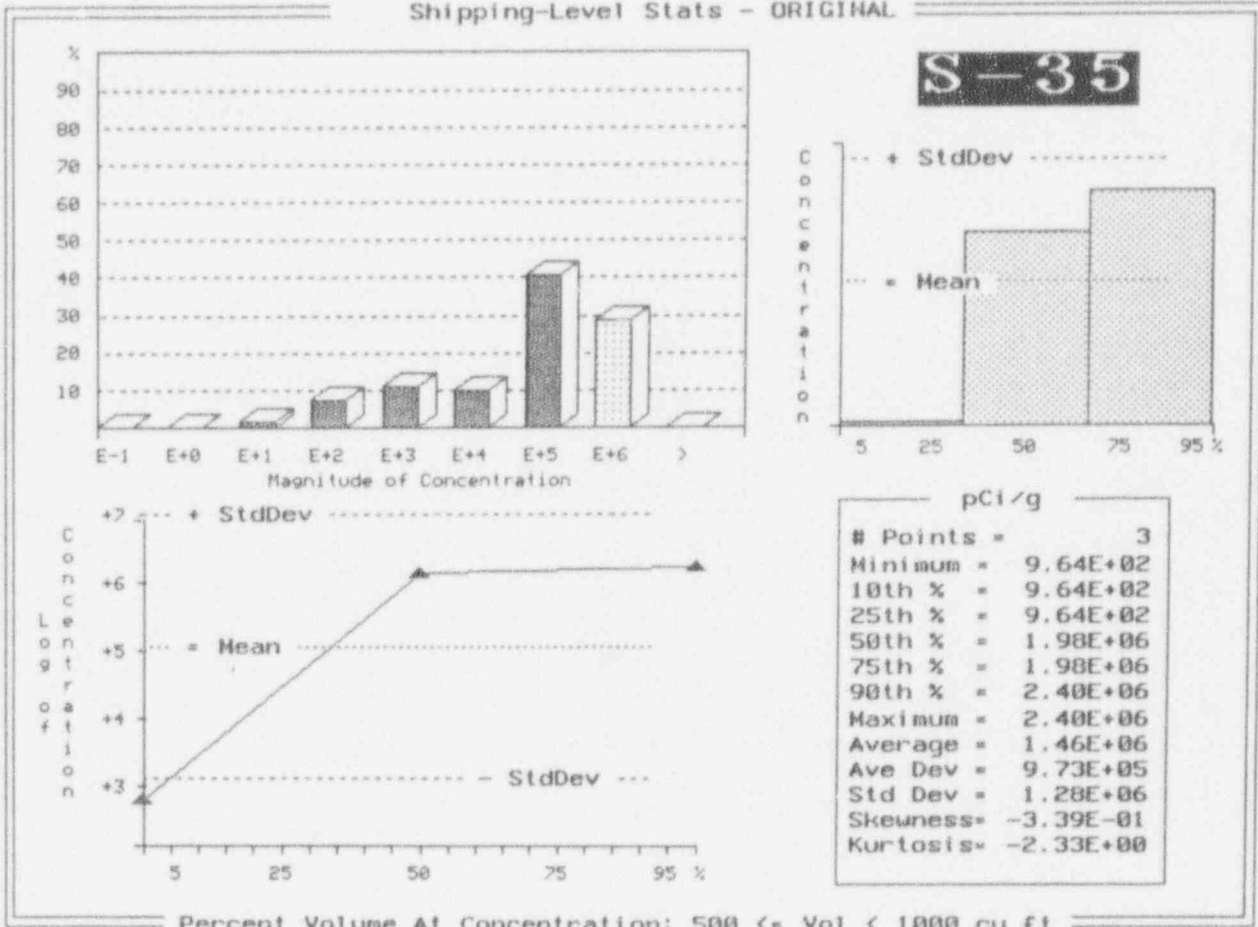


Exhibit F-36 (Continued)

Shipping-Level Stats - ORIGINAL

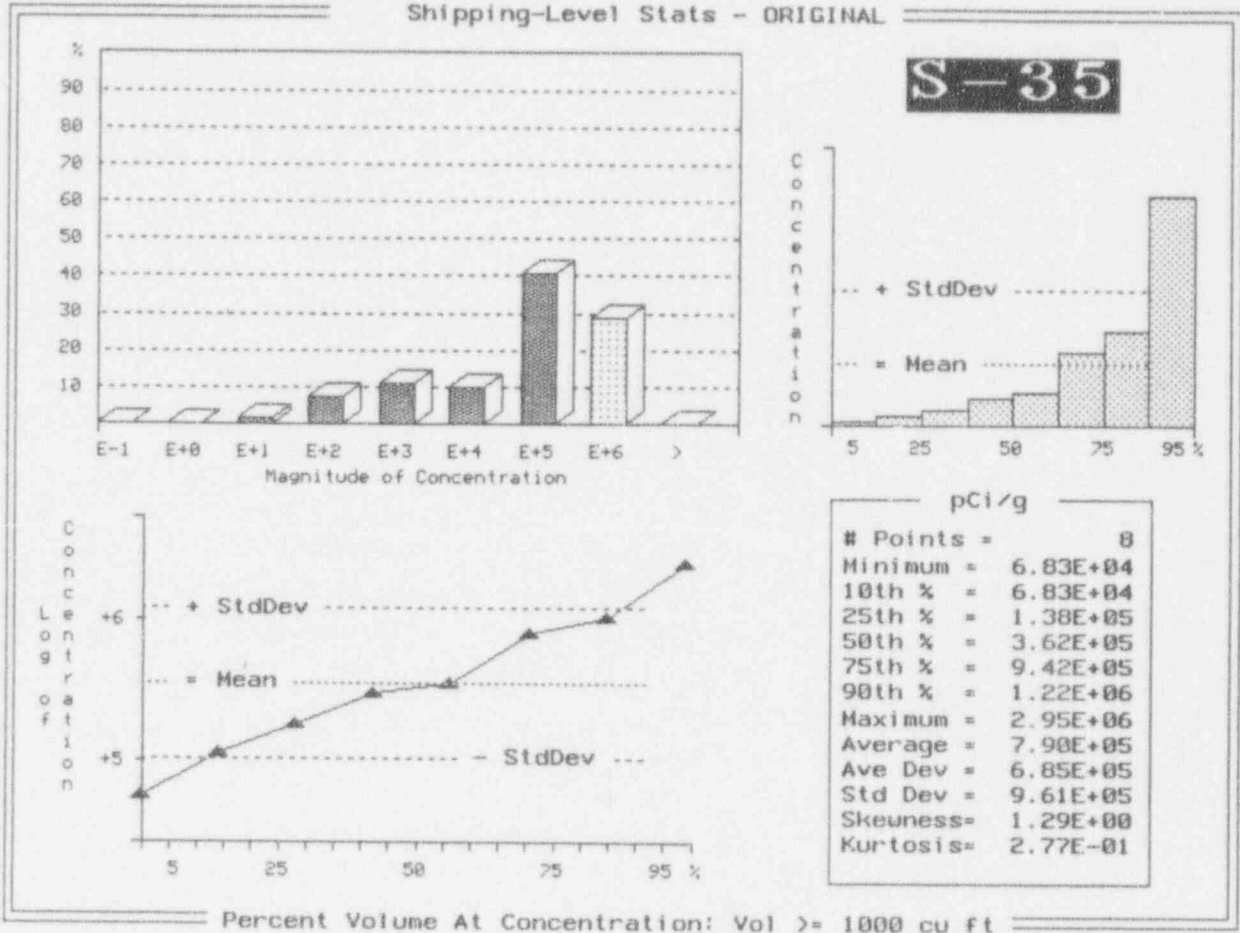


Exhibit F-36 (Continued)

Shipping-Level Stats - ORIGINAL

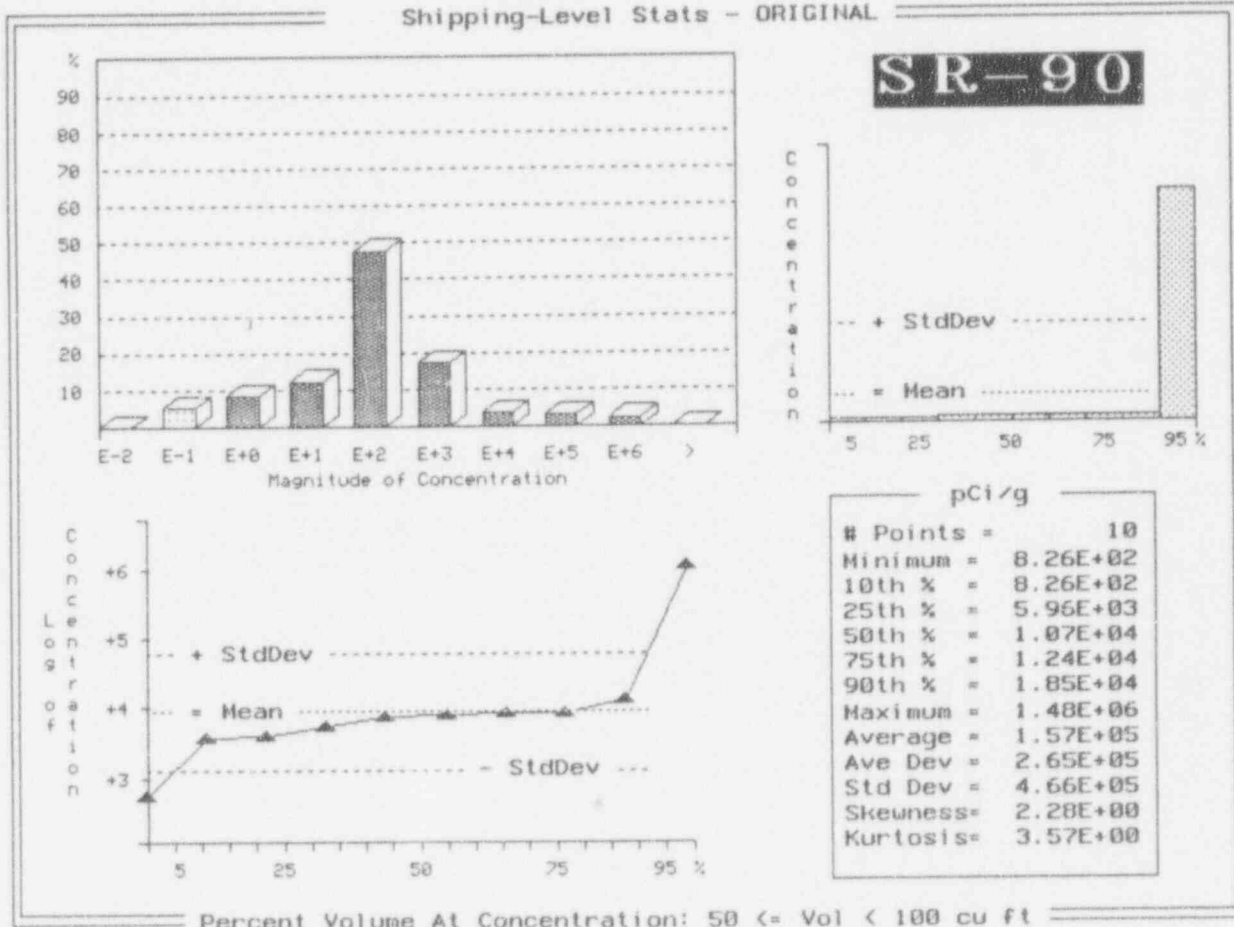


Exhibit F-36 (Continued)

Shipping-Level Stats - ORIGINAL

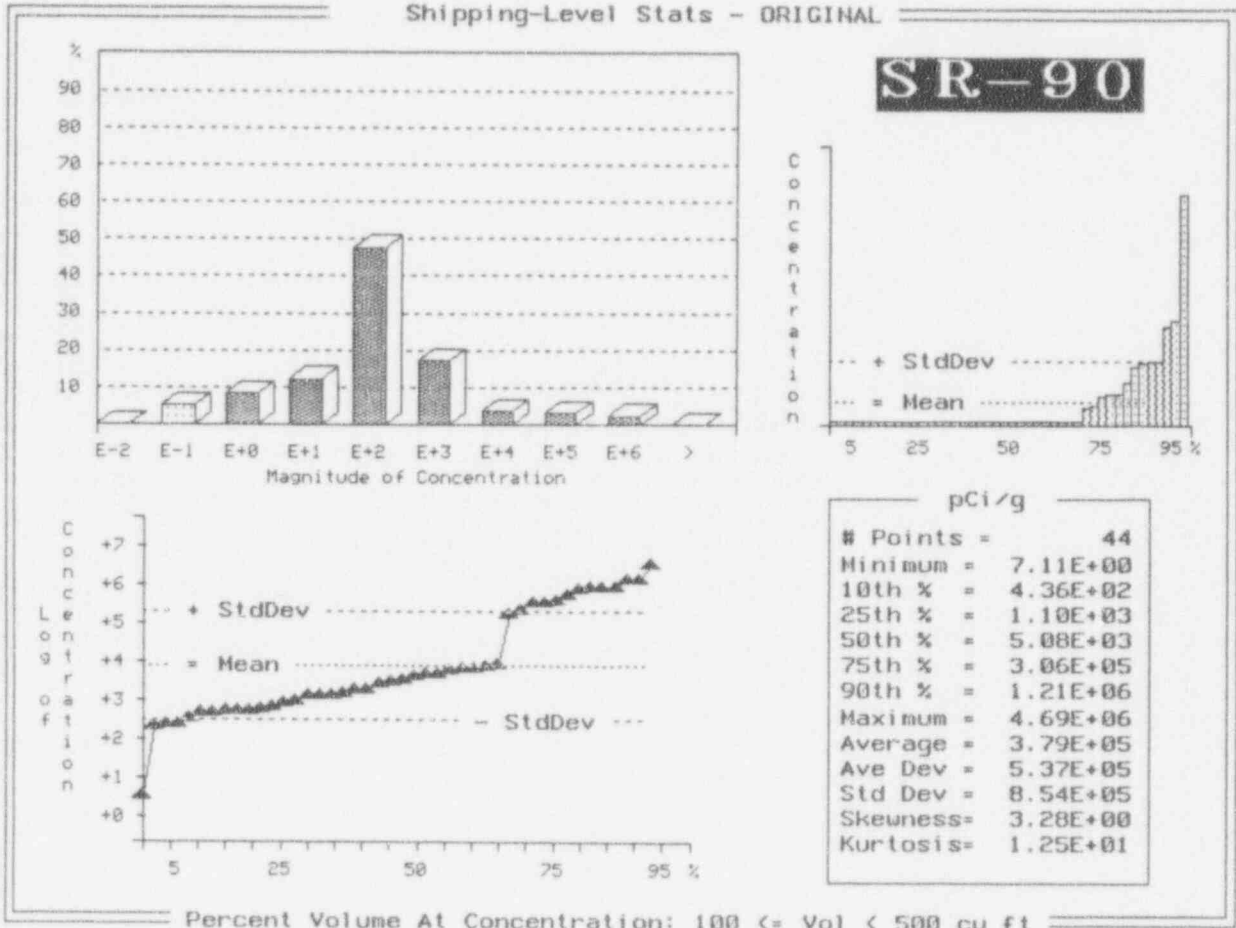


Exhibit F-36 (Continued)

: Shipping-Level Stats - ORIGINAL

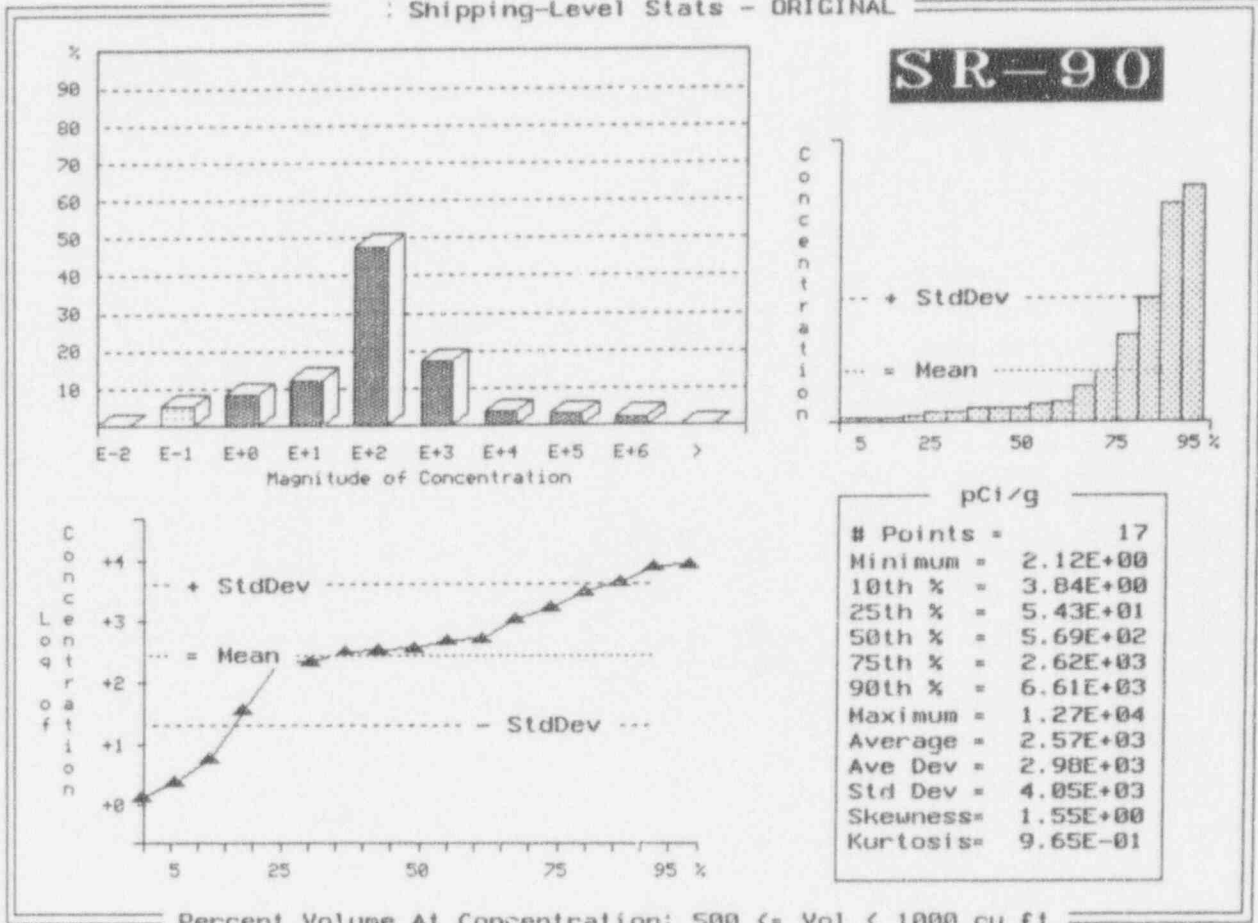


Exhibit F-36 (Continued)

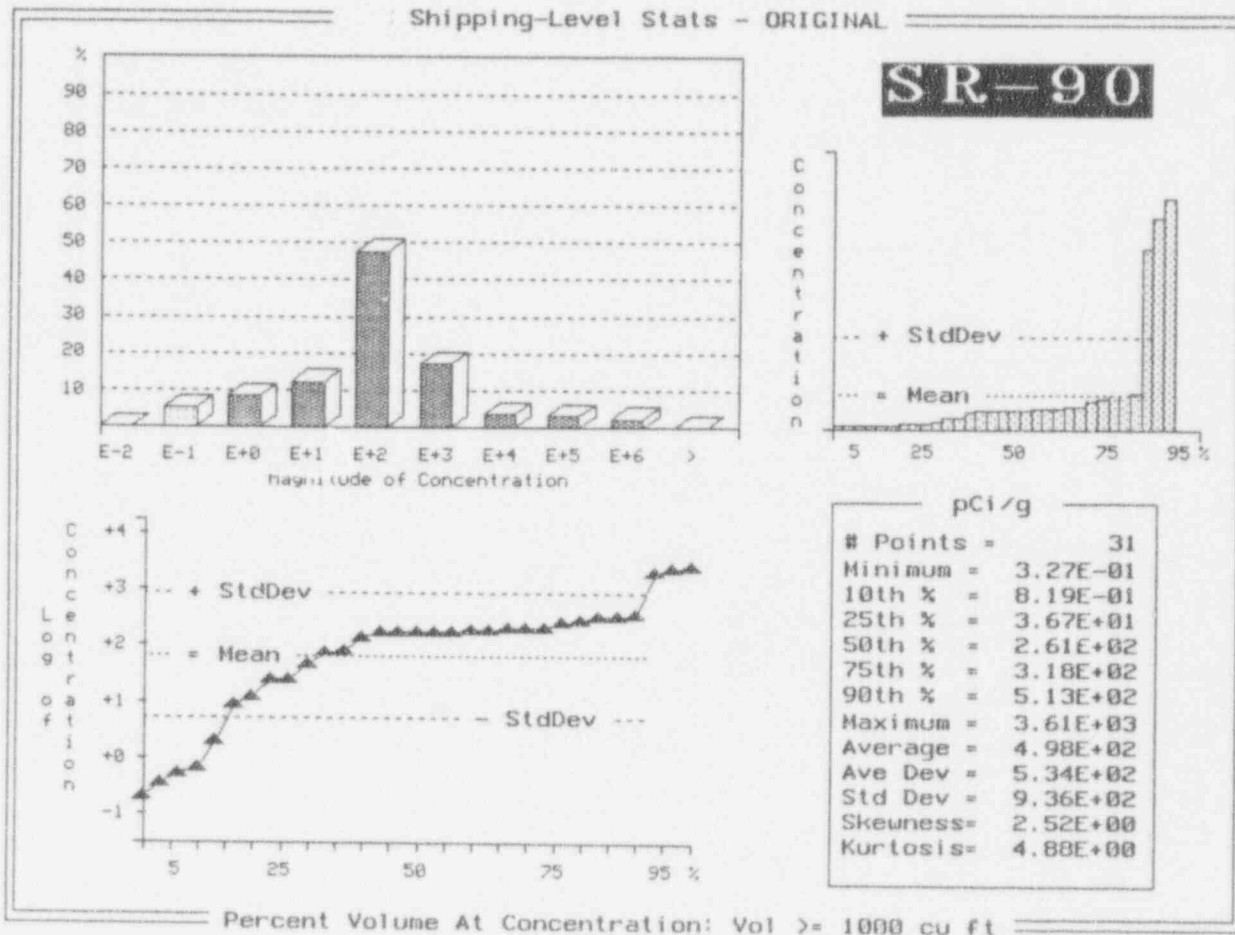


Exhibit F-36 (Continued)

Shipping-Level Stats - ORIGINAL

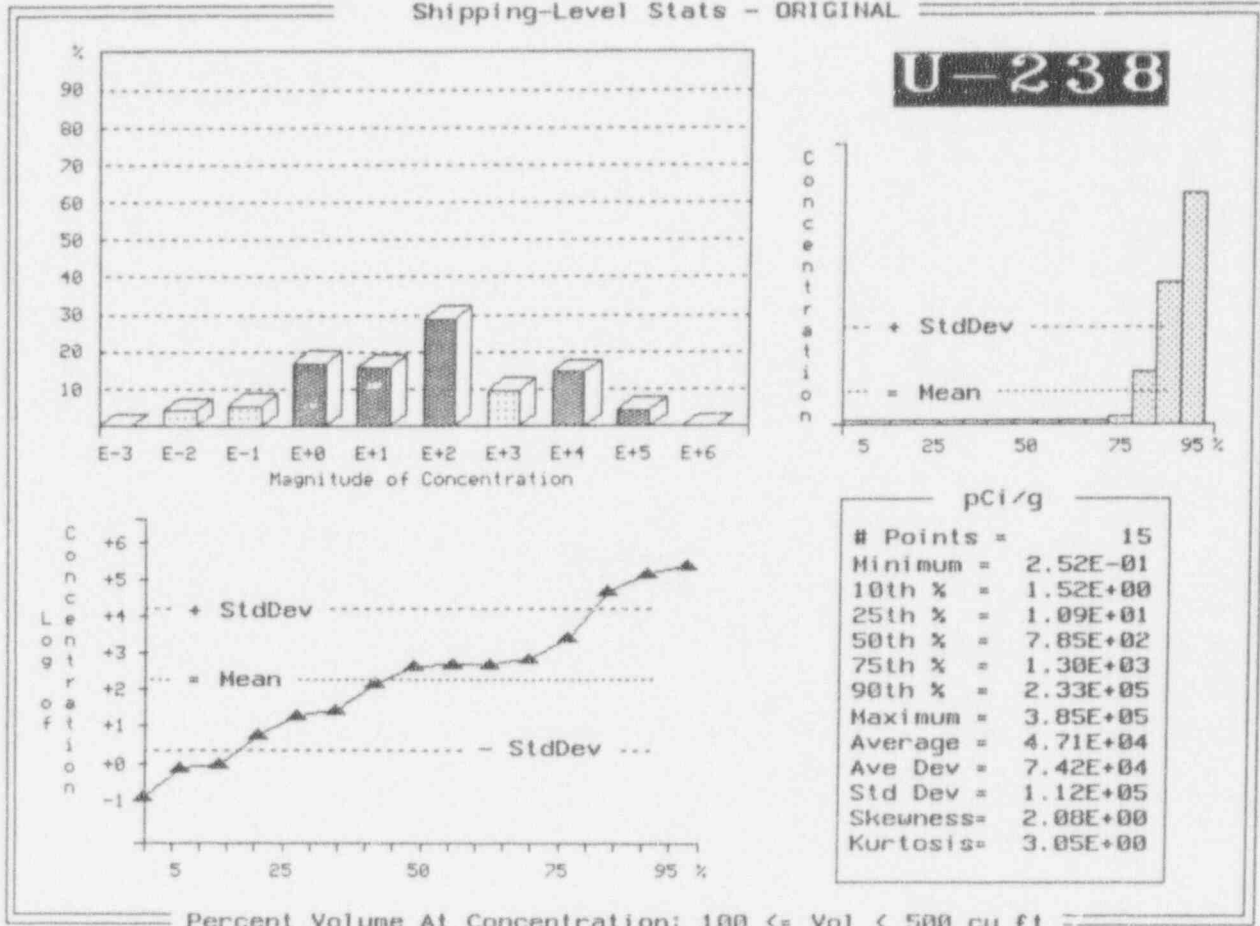
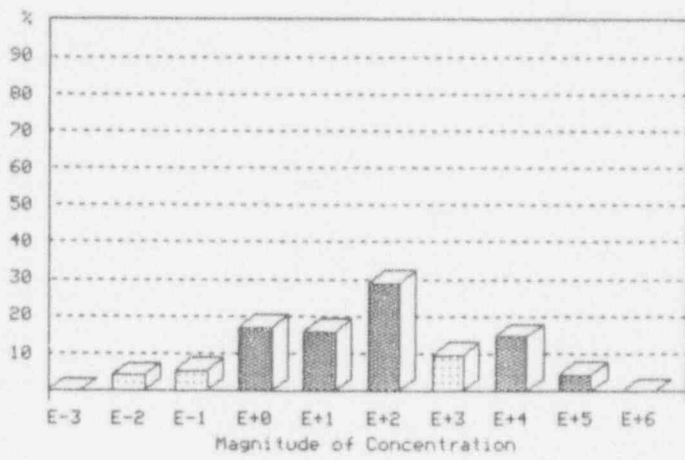
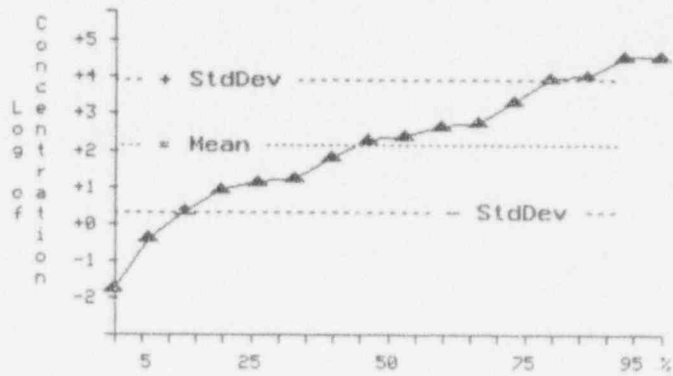
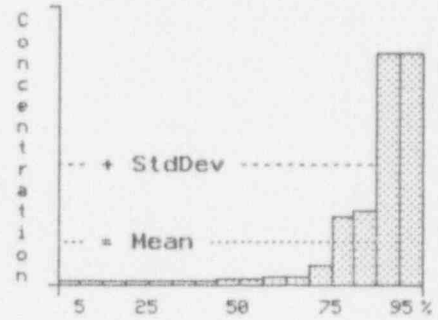


Exhibit F-36 (Continued)

Shipping-Level Stats - ORIGINAL



U-238



pCi/g	
# Points =	16
Minimum =	3.81E-02
10th % =	8.30E-01
25th % =	1.55E+01
50th % =	3.34E+02
75th % =	3.69E+03
90th % =	1.67E+04
Maximum =	5.45E+04
Average =	9.21E+03
Ave Dev =	1.30E+04
Std Dev =	1.85E+04
Skewness =	1.77E+00
Kurtosis =	1.57E+00

Percent Volume At Concentration: 500 <= Vol < 1000 cu ft

Exhibit F-36 (Continued)

Shipping-Level Stats - ORIGINAL

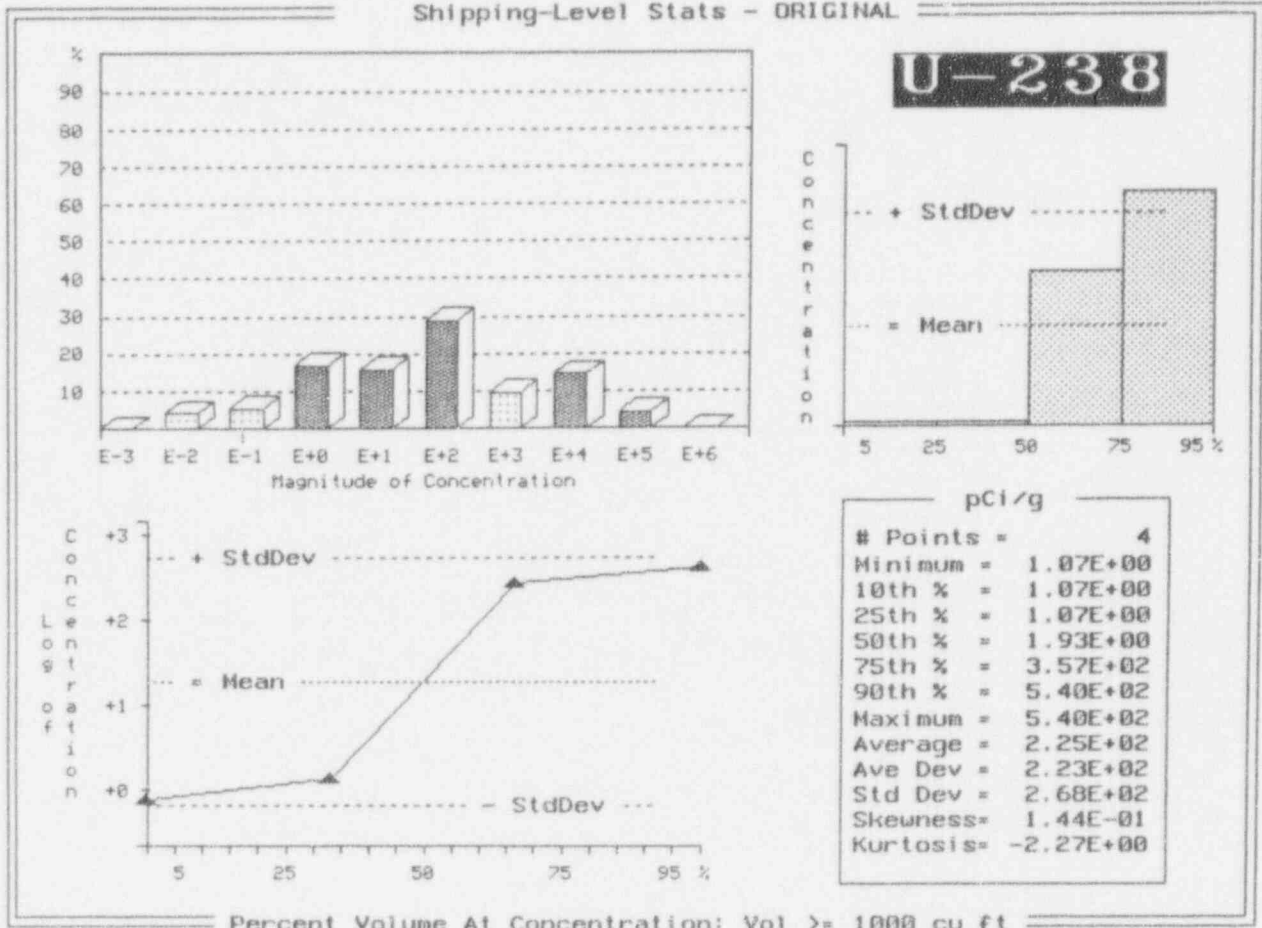


Exhibit F-37
Data Summary - Analyses at the Shipment Level
 (Aggregate Practices for non-brokered waste: 1986 to 1990)

	<u>Data or Parameters</u>
Compact or unaffiliated state:	District of Columbia
Waste generator class:	Government
Total number of waste generators:	6
Total associated waste volume (m ³):	29.2
Total associated waste activity (Ci):	14.8
Waste class:	A-Unstable and A-Stable
Identified waste generators for this analysis:	
Number:	no data
Percent of total(%):	--
Total number of shipping records:	--
Number of shipping records <u>with</u> container data:	--
Number of waste containers:	--
Weight of shipments (kg):	--
Total waste volume (m ³):	--
Fractional waste volume (%): (this analysis/total)	--
Total waste activity (Ci):	--
Fractional waste activity (%): (this analysis/total)	--

Exhibit F-37 (Continued)

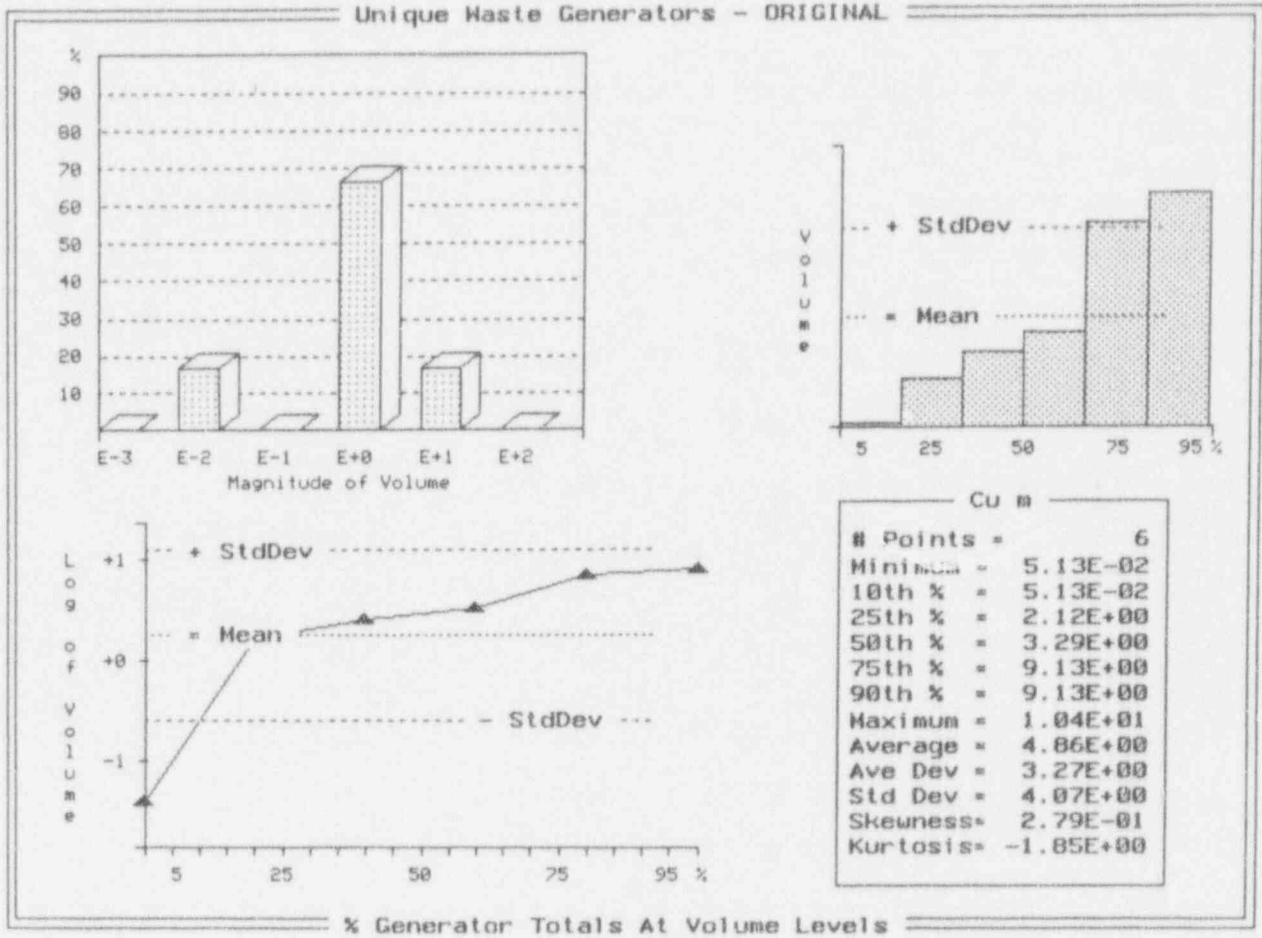


Exhibit F-37 (Continued)

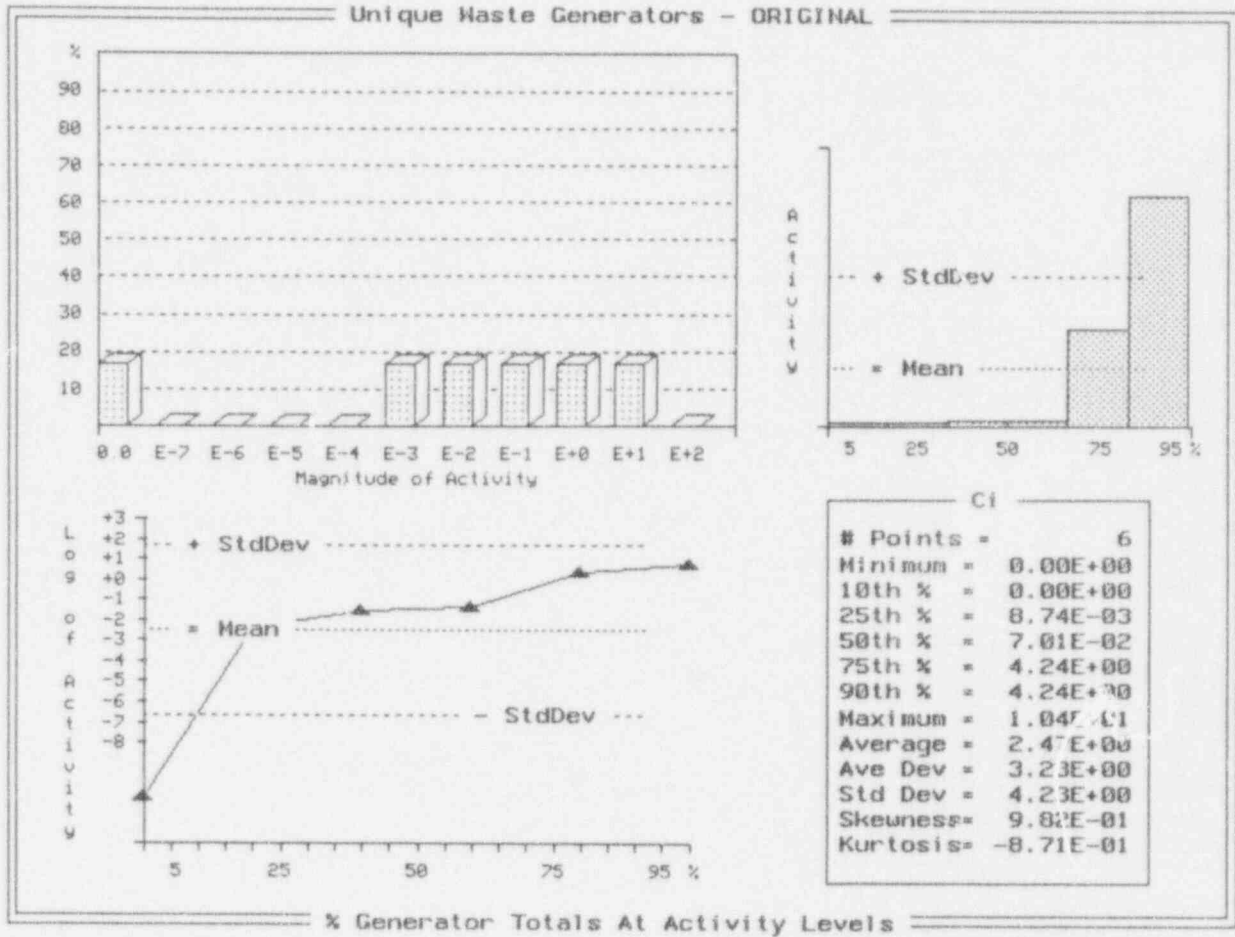


Exhibit F-38
Data Summary - Analyses at the Shipment Level
 (Aggregate Practices for non-brokered waste: 1986 to 1990)

	<u>Data or Parameters</u>
Compact or unaffiliated state:	District of Columbia
Waste generator class:	Academic
Total number of waste generators:	7
Total associated waste volume (m ³):	14.2
Total associated waste activity (Ci):	1.3
Waste class:	A-Unstable and A-Stable
Identified waste generators for this analysis:	
Number:	2
Percent of total(%):	29
Total number of shipping records:	6
Number of shipping records <u>with</u> container data:	0
Number of waste containers:	0
Weight of shipments (kg):	2,654
Total waste volume (m ³):	4.7
Fractional waste volume (%): (this analysis/total)	33
Total waste activity (Ci):	1.0
Fractional waste activity (%): (this analysis/total)	77

Exhibit F-38 (Continued)

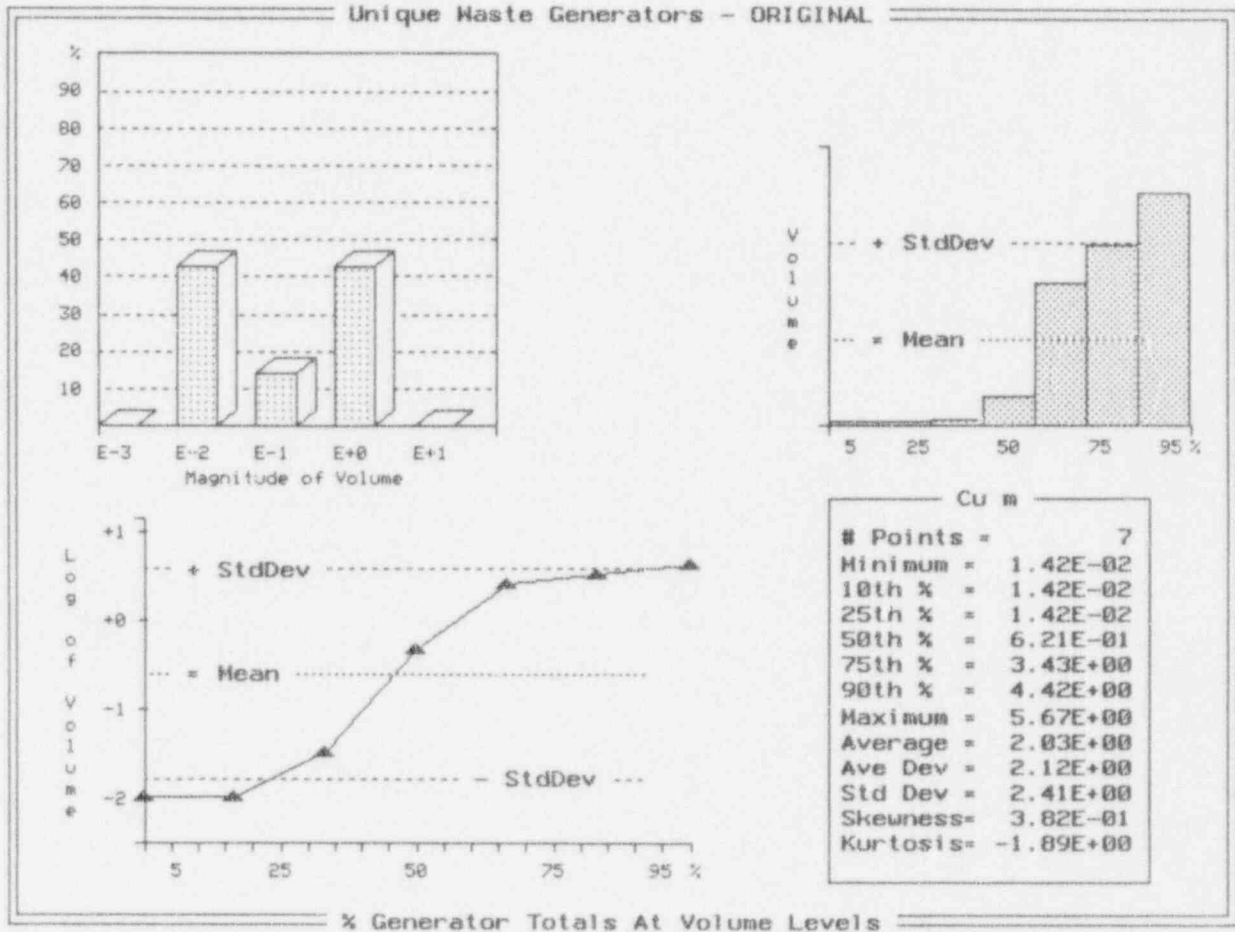


Exhibit F-38 (Continued)

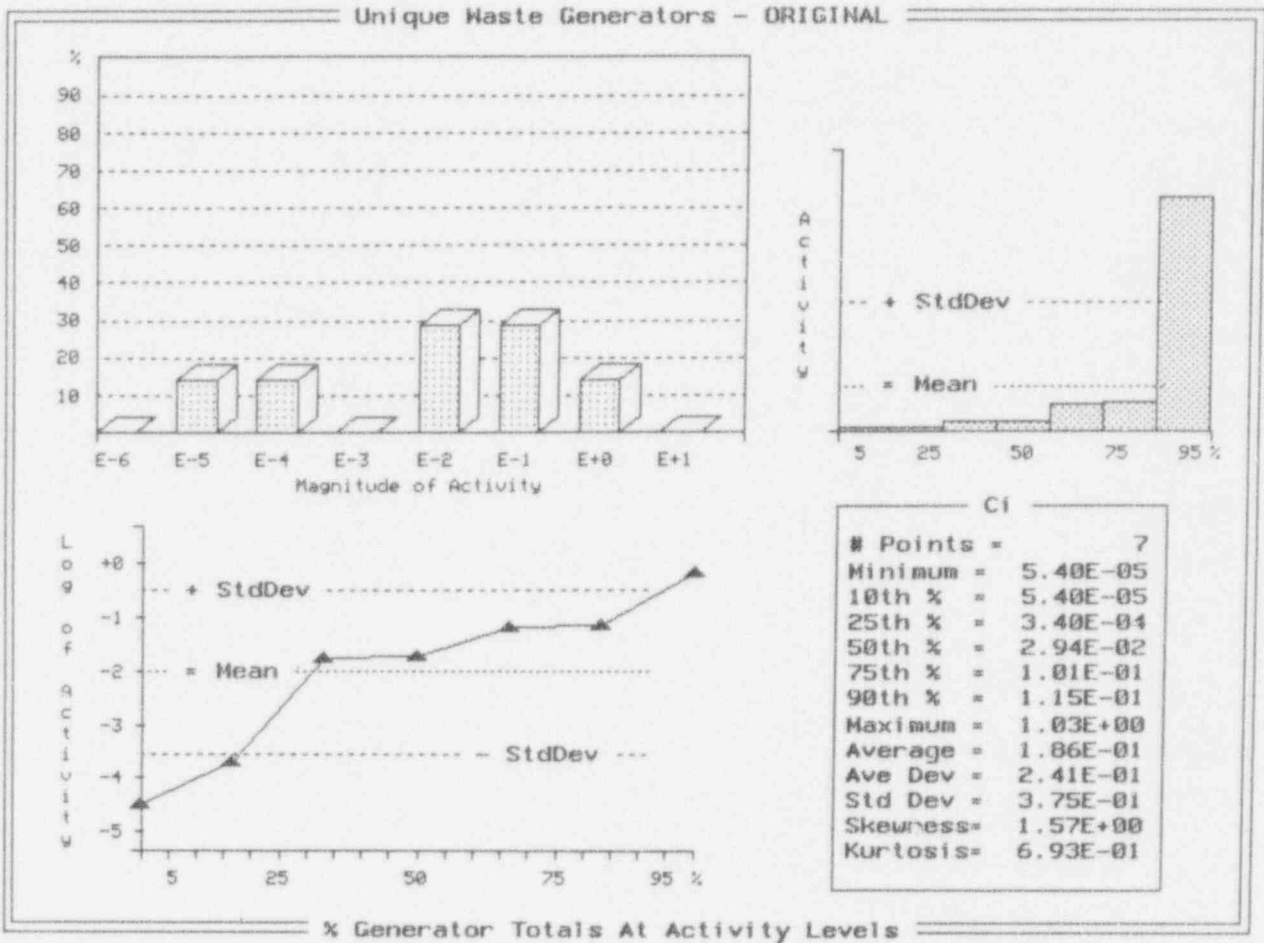


Exhibit F-39
Data Summary - Analyses at the Shipment Level
 (Aggregate Practices for non-brokered waste: 1986 to 1990)

	<u>Data or Parameters</u>
Compact or unaffiliated state:	District of Columbia
Waste generator class:	Medical
Total number of waste generators:	11
Total associated waste volume (m ³):	25.8
Total associated waste activity (Ci):	0.87
Waste class:	A-Unstable and A-Stable
Identified waste generators for this analysis:	
Number:	1
Percent of total(%):	9
Total number of shipping records:	1
Number of shipping records <u>with</u> container data:	0
Number of waste containers:	0
Weight of shipments (kg):	1,646
Total waste volume (m ³):	2.1
Fractional waste volume (%): (this analysis/total)	8
Total waste activity (Ci):	0.005
Fractional waste activity (%): (this analysis/total)	0.6

Exhibit F-39 (Continued)

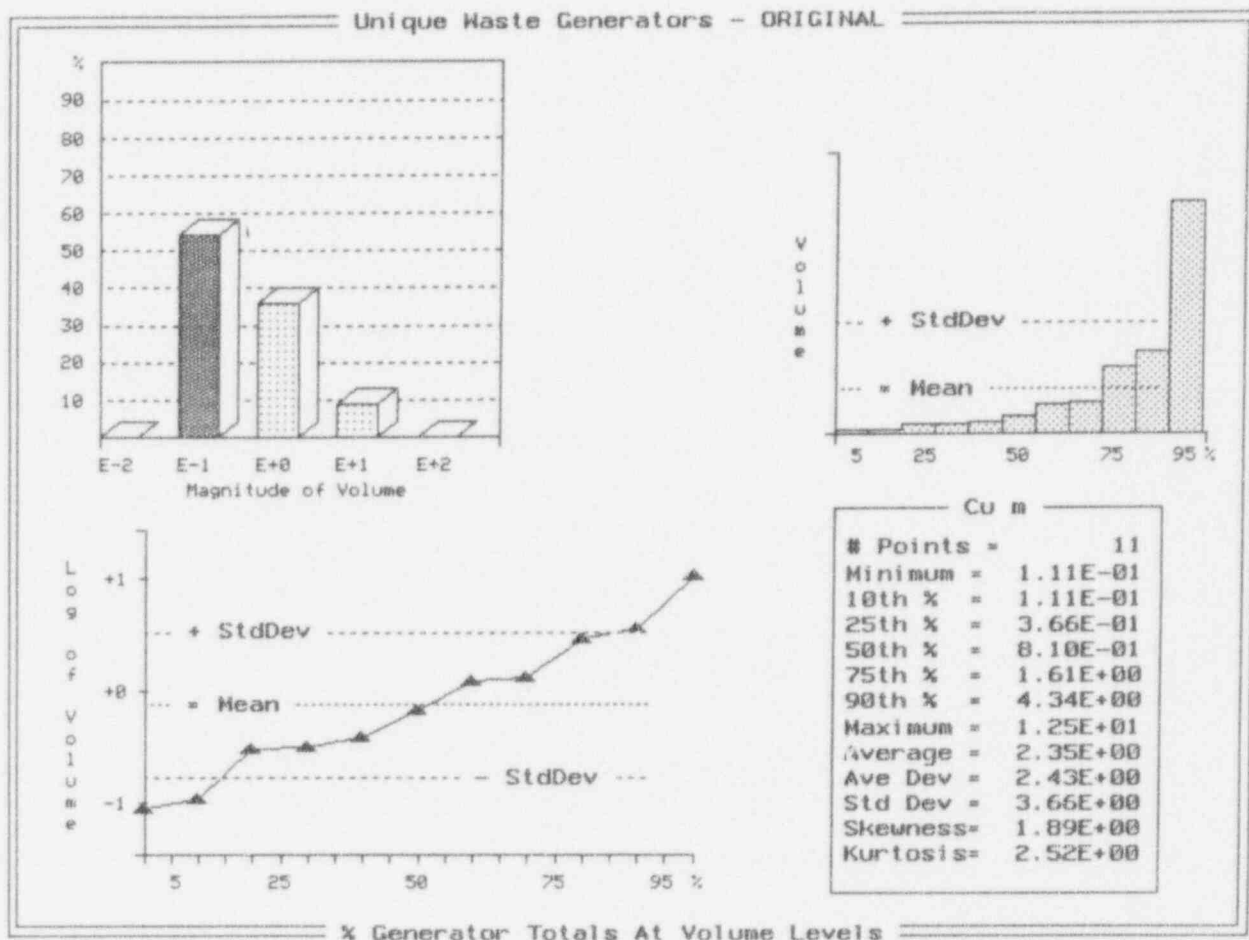


Exhibit F-39 (Continued)

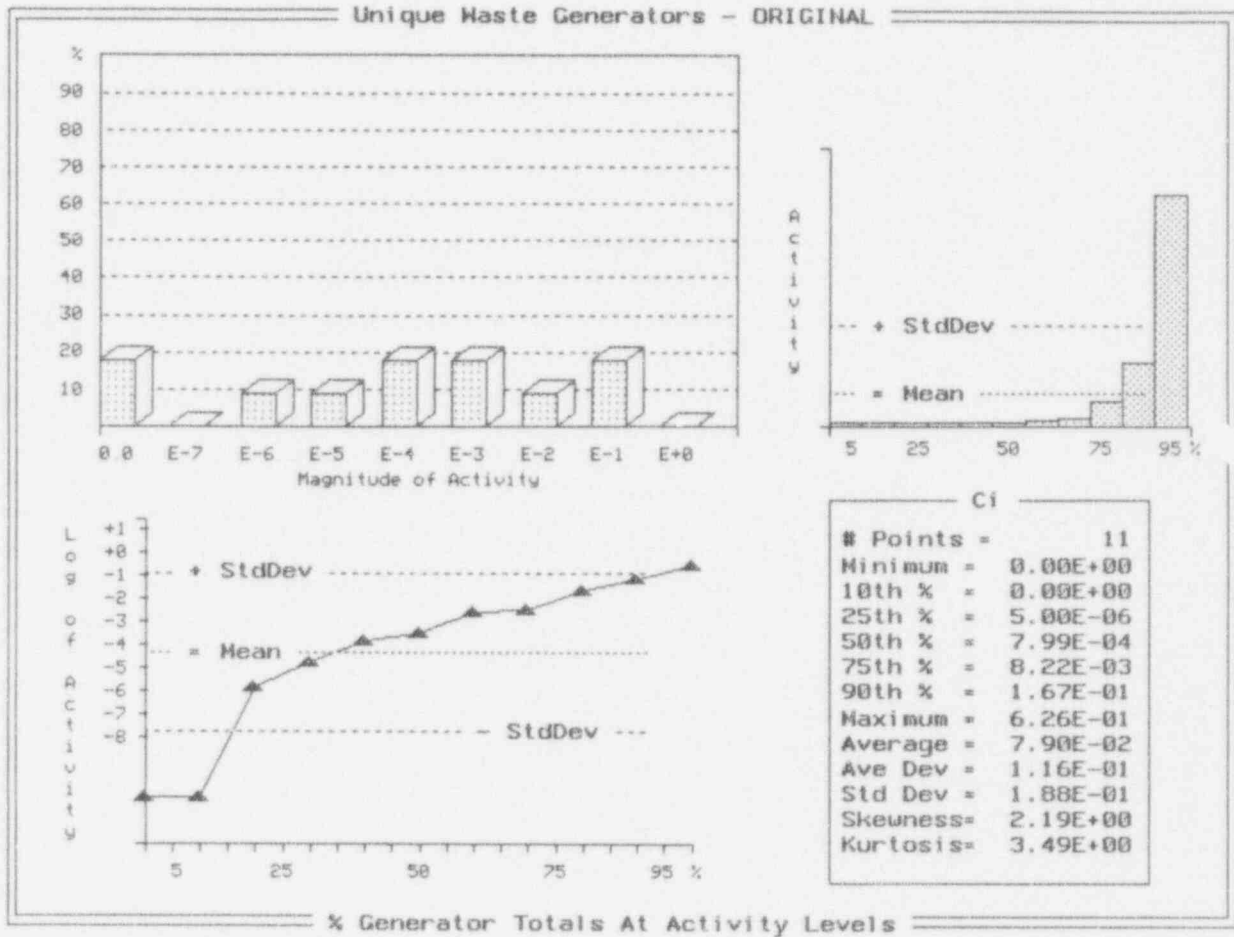
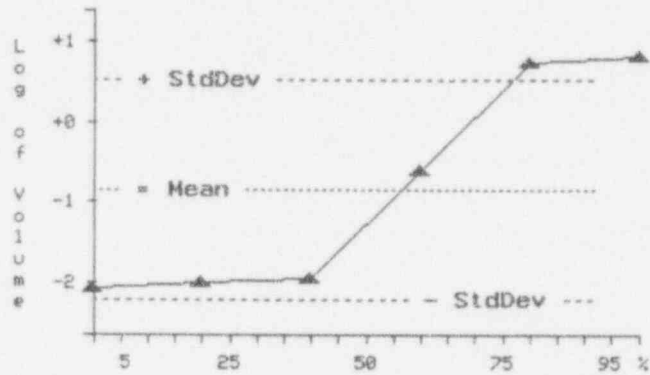
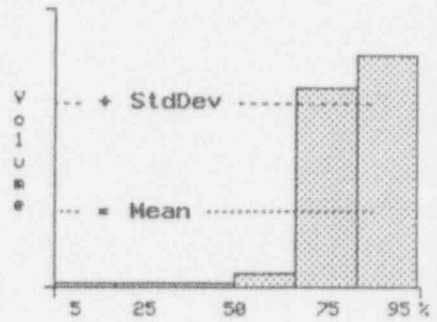
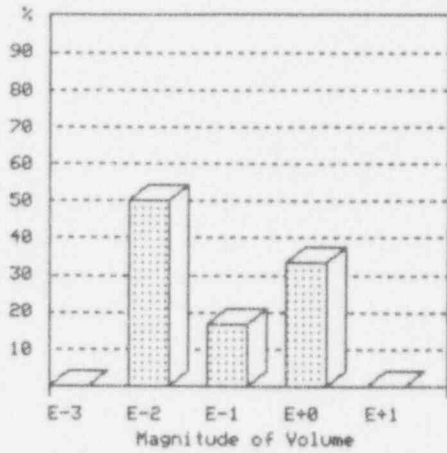


Exhibit F-40
Data Summary - Analyses at the Shipment Level
 (Aggregate Practices for non-brokered waste: 1986 to 1990)

	<u>Data or Parameters</u>
Compact or unaffiliated state:	District of Columbia
Waste generator class:	Industrial
Total number of waste generators:	6
Total associated waste volume (m ³):	16.2
Total associated waste activity (Ci):	24.2
Waste class:	A-Unstable and A-Stable
Identified waste generators for this analysis:	
Number:	2
Percent of total(%):	33
Total number of shipping records:	4
Number of shipping records <u>with</u> container data:	0
Number of waste containers:	0
Weight of shipments (kg):	3,607
Total waste volume (m ³):	3.5
Fractional waste volume (%): (this analysis/total)	22
Total waste activity (Ci):	16.4
Fractional waste activity (%): (this analysis/total)	68

Exhibit F-40 (Continued)

Unique Waste Generators - ORIGINAL



Cum	
# Points =	6
Minimum =	1.19E-02
10th % =	1.19E-02
25th % =	1.42E-02
50th % =	1.53E-02
75th % =	7.29E+00
90th % =	7.29E+00
Maximum =	8.51E+00
Average =	2.70E+00
Ave Dev =	3.47E+00
Std Dev =	4.05E+00
Skewness =	5.57E-01
Kurtosis =	-1.90E+00

% Generator Totals At Volume Levels

Exhibit F-40 (Continued)

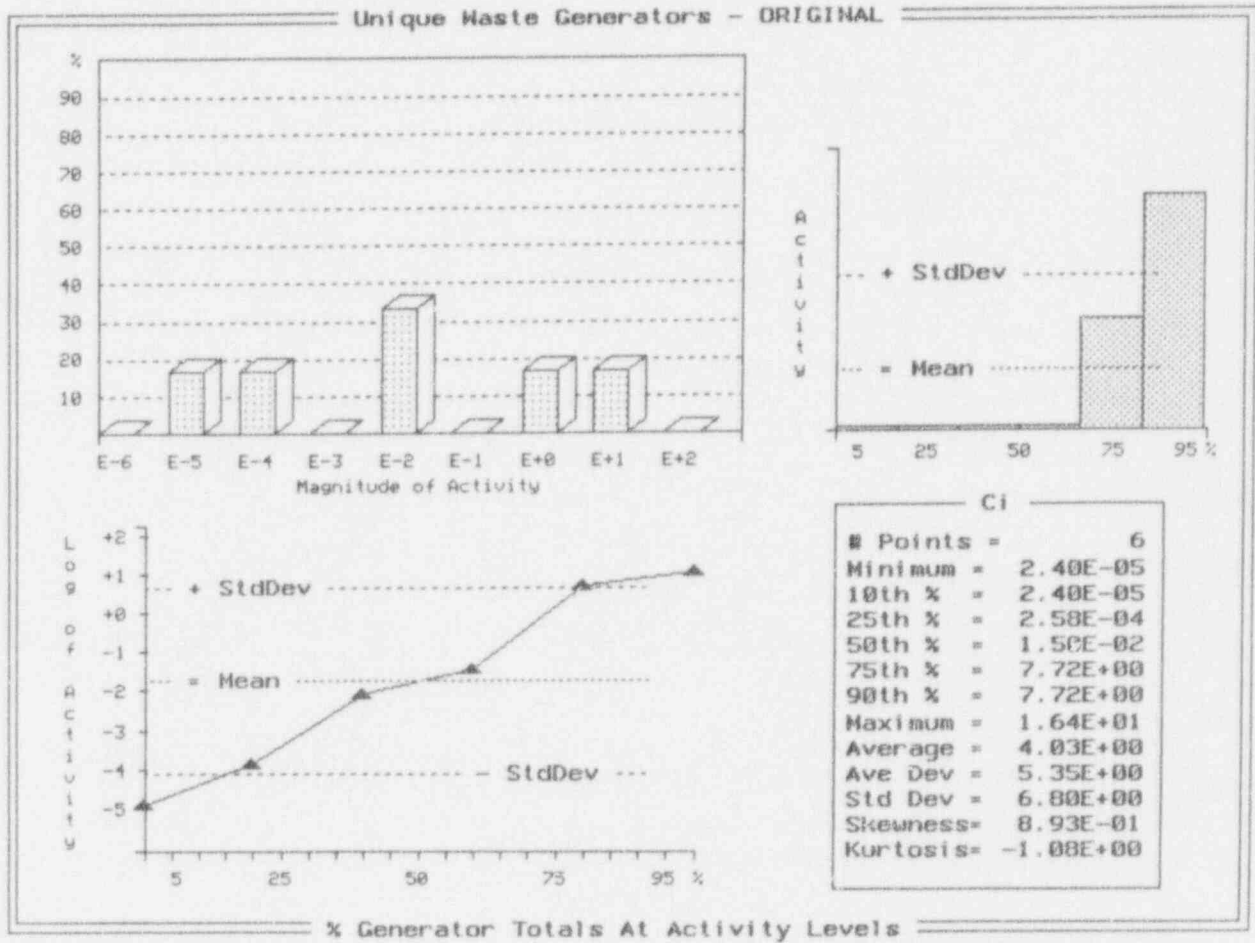


Exhibit F-41
Data Summary - Analyses at the Shipment Level
 (Aggregate Practices for non-brokered waste: 1986 to 1990)

	<u>Data or Parameters</u>
Compact or unaffiliated state:	Maine
Waste generator class:	Government
Total number of waste generators:	3
Total associated waste volume (m ³):	368
Total associated waste activity (Ci):	19.5
Waste class:	A-Unstable and A-Stable
Identified waste generators for this analysis:	
Number:	1
Percent of total(%):	33
Total number of shipping records:	
Number of shipping records with container data:	0
Number of waste containers:	0
Weight of shipments (kg):	201,100
Total waste volume (m ³):	287
Fractional waste volume (%): (this analysis/total)	78
Total waste activity (Ci):	2.0
Fractional waste activity (%): (this analysis/total)	10

Exhibit F-41 (Continued)

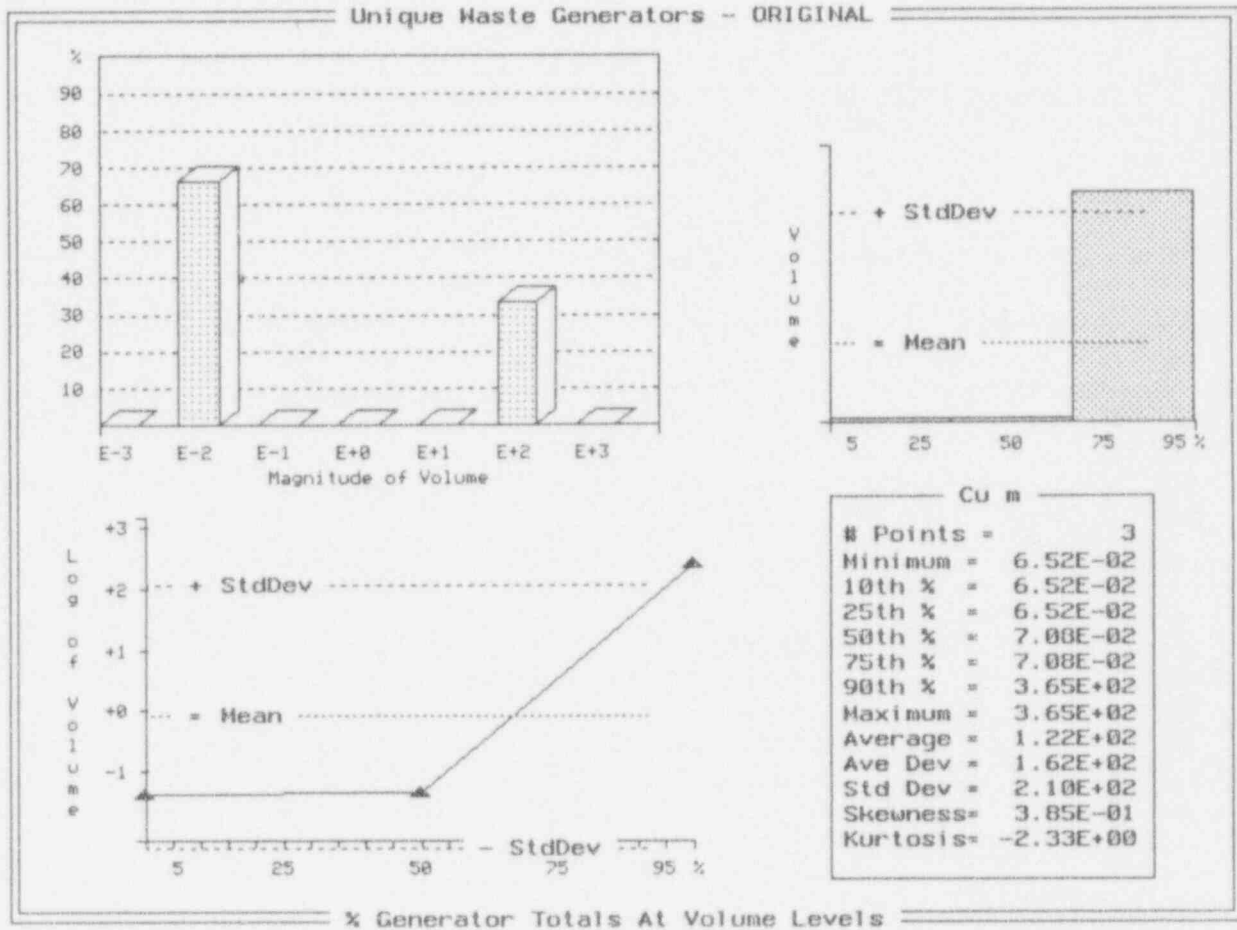


Exhibit F-41 (Continued)

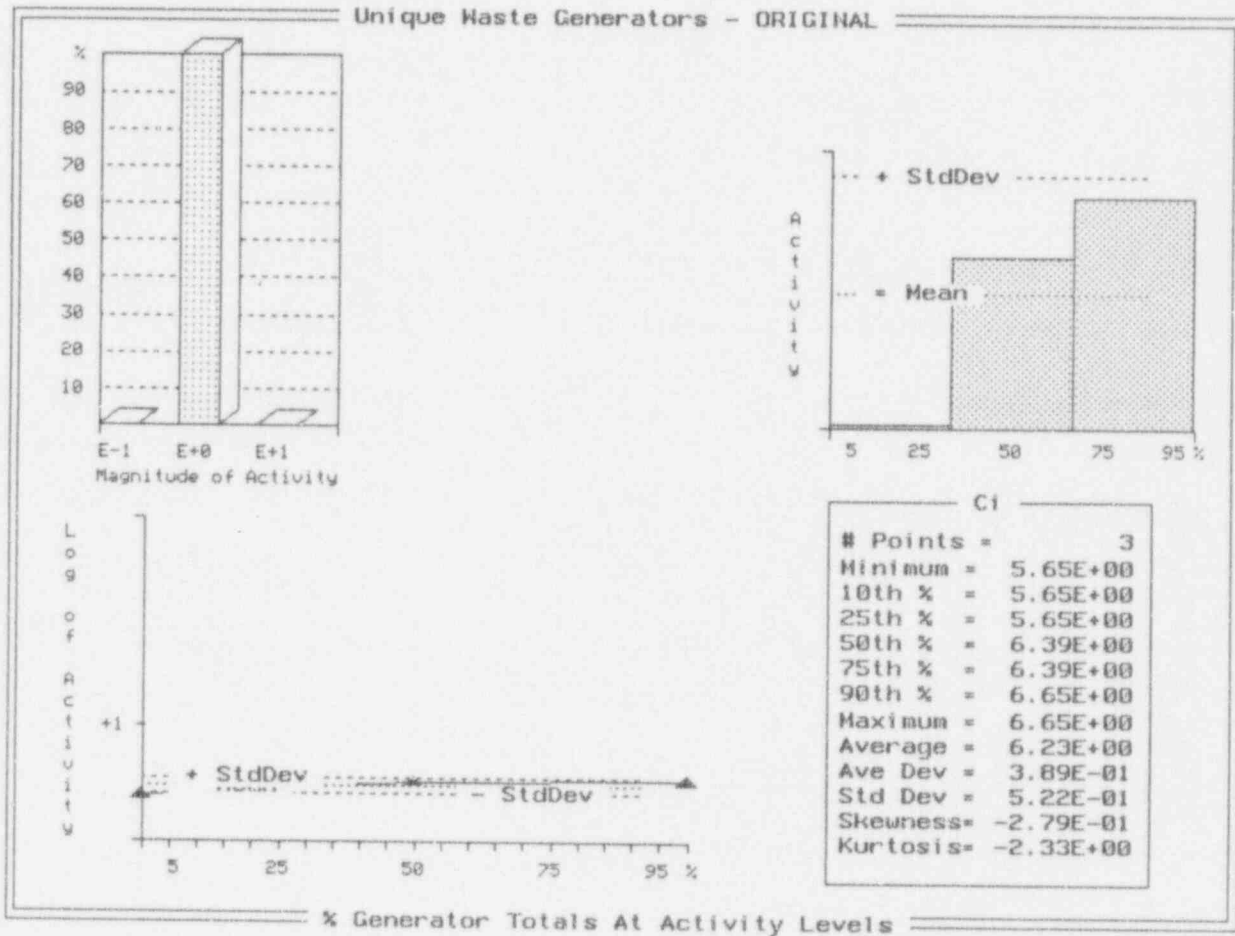


Exhibit F-42
Data Summary - Analyses at the Shipment Level
 (Aggregate Practices for non-brokered waste: 1986 to 1990)

	<u>Data or Parameters</u>
Compact or unaffiliated state:	Maine
Waste generator class:	Academic
Total number of waste generators:	2
Total associated waste volume (m ³):	3.7
Total associated waste activity (Ci):	0.1
Waste class:	A-Unstable and A-Stable
Identified waste generators for this analysis:	
Number:	1
Percent of total(%):	50
Total number of shipping records:	1
Number of shipping records <u>with</u> container data:	0
Number of waste containers:	0
Weight of shipments (kg):	2,051
Total waste volume (m ³):	3.6
Fractional waste volume (%): (this analysis/total)	97
Total waste activity (Ci):	0.093
Fractional waste activity (%): (this analysis/total)	93

Exhibit F-42 (Continued)

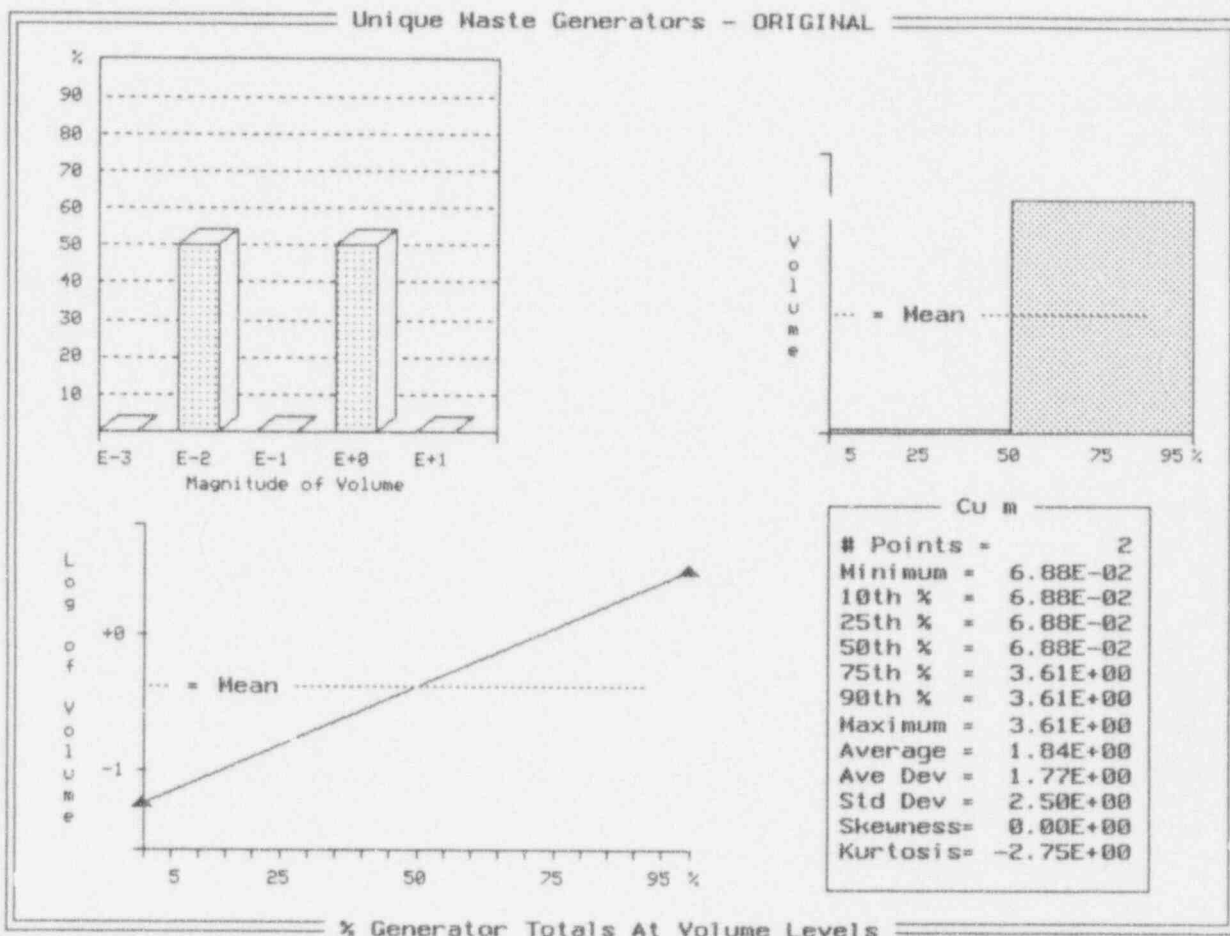


Exhibit F-42 (Continued)

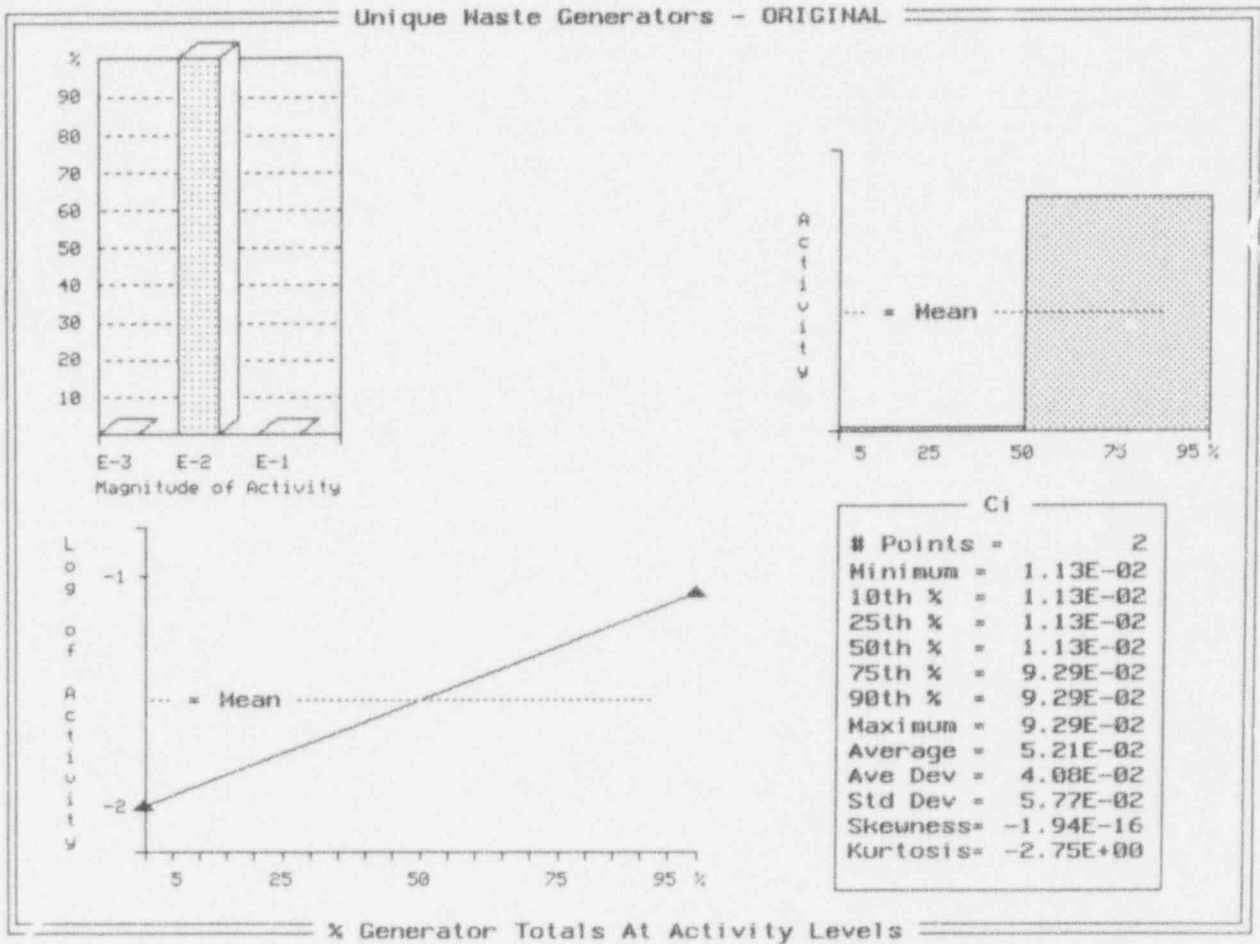


Exhibit F-43
Data Summary - Analyses at the Shipment Level
 (Aggregate Practices for non-brokered waste: 1986 to 1990)

	<u>Data or Parameters</u>
Compact or unaffiliated state:	Maine
Waste generator class:	Medical
Total number of waste generators:	1
Total associated waste volume (m ³):	0.21
Total associated waste activity (Ci):	0.36
Waste class:	A-Unstable and A-Stable
Identified waste generators for this analysis:	
Number:	no data
Percent of total(%):	--
Total number of shipping records:	--
Number of shipping records <u>with</u> container data:	--
Number of waste containers:	--
Weight of shipments (kg):	--
Total waste volume (m ³):	--
Fractional waste volume (%): (this analysis/total)	--
Total waste activity (Ci):	--
Fractional waste activity (%): (this analysis/total)	--

Exhibit F-43 (Continued)

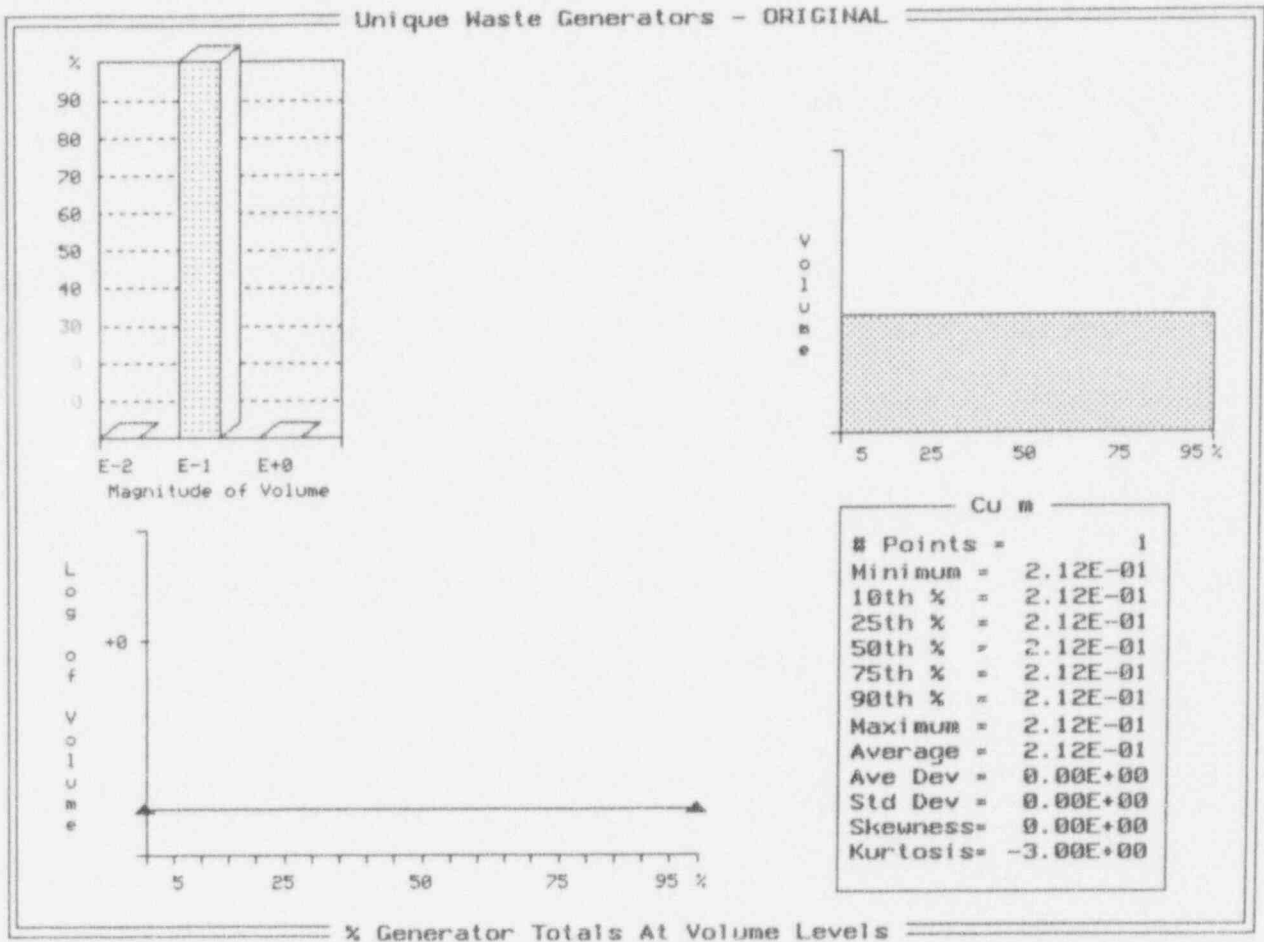


Exhibit F-43 (Continued)

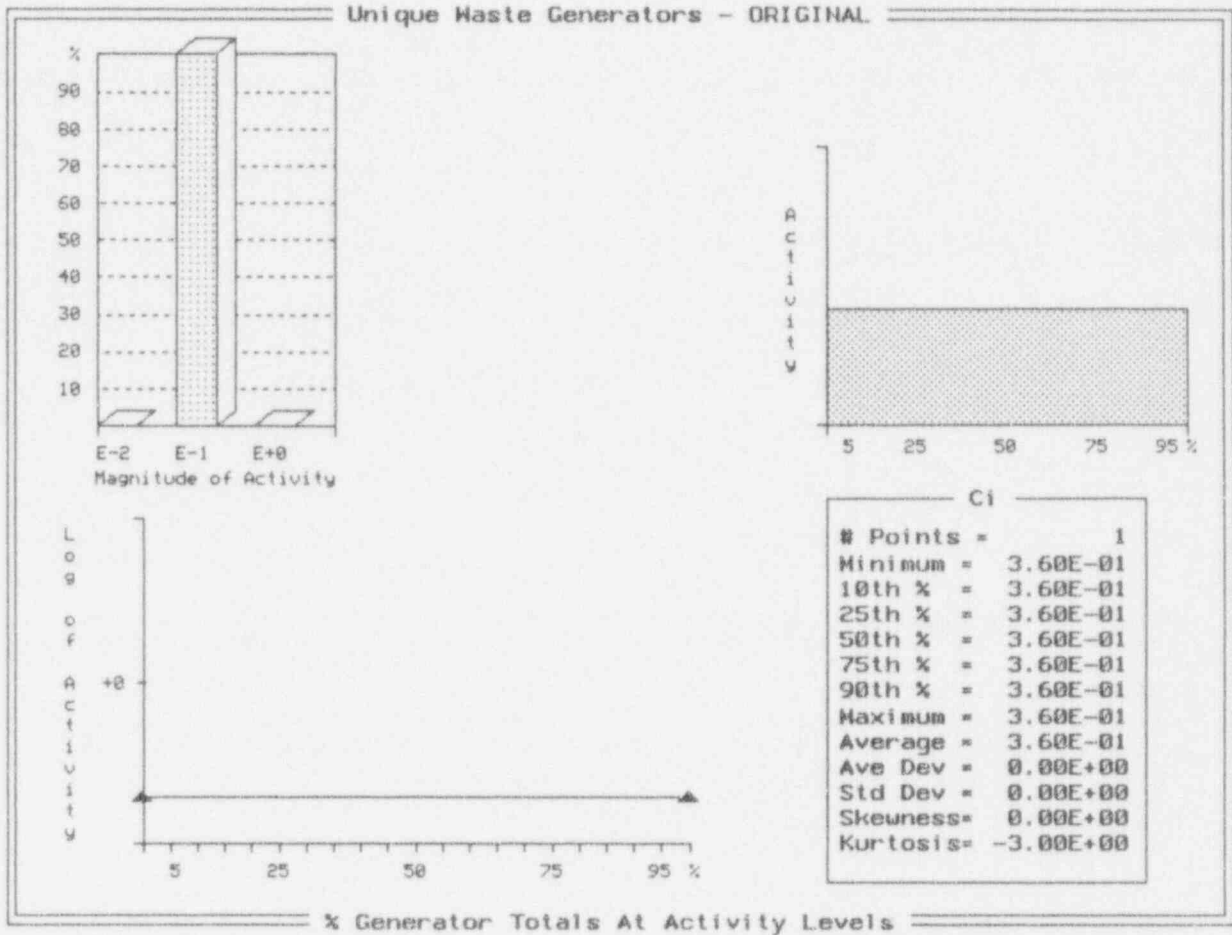


Exhibit F-44
Data Summary - Analyses at the Shipment Level
 (Aggregate Practices for non-brokered waste: 1986 to 1990)

	<u>Data or Parameters</u>
Compact or unaffiliated state:	Maine
Waste generator class:	Industrial
Total number of waste generators:	12
Total associated waste volume (m ³):	14.3
Total associated waste activity (Ci):	1.4
Waste class:	A-Unstable and A-Stable
Identified waste generators for this analysis:	
Number:	4
Percent of total(%):	33
Total number of shipping records:	4
Number of shipping records <u>with</u> container data:	0
Number of waste containers:	0
Weight of shipments (kg):	8,508
Total waste volume (m ³):	8.3
Fractional waste volume (%): (this analysis/total)	58
Total waste activity (Ci):	0.5
Fractional waste activity (%): (this analysis/total)	36

Exhibit F-44 (Continued)

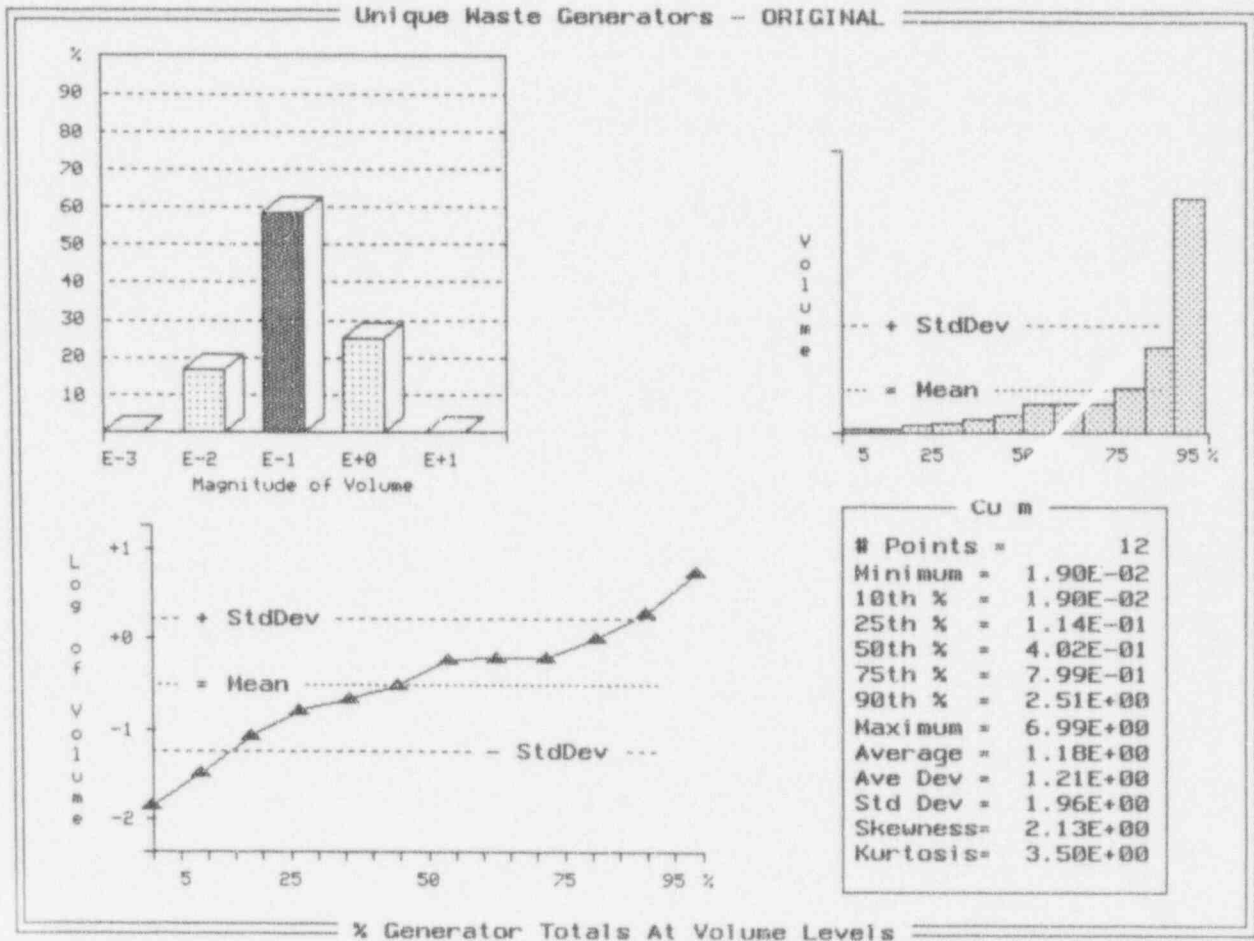


Exhibit F-44 (Continued)

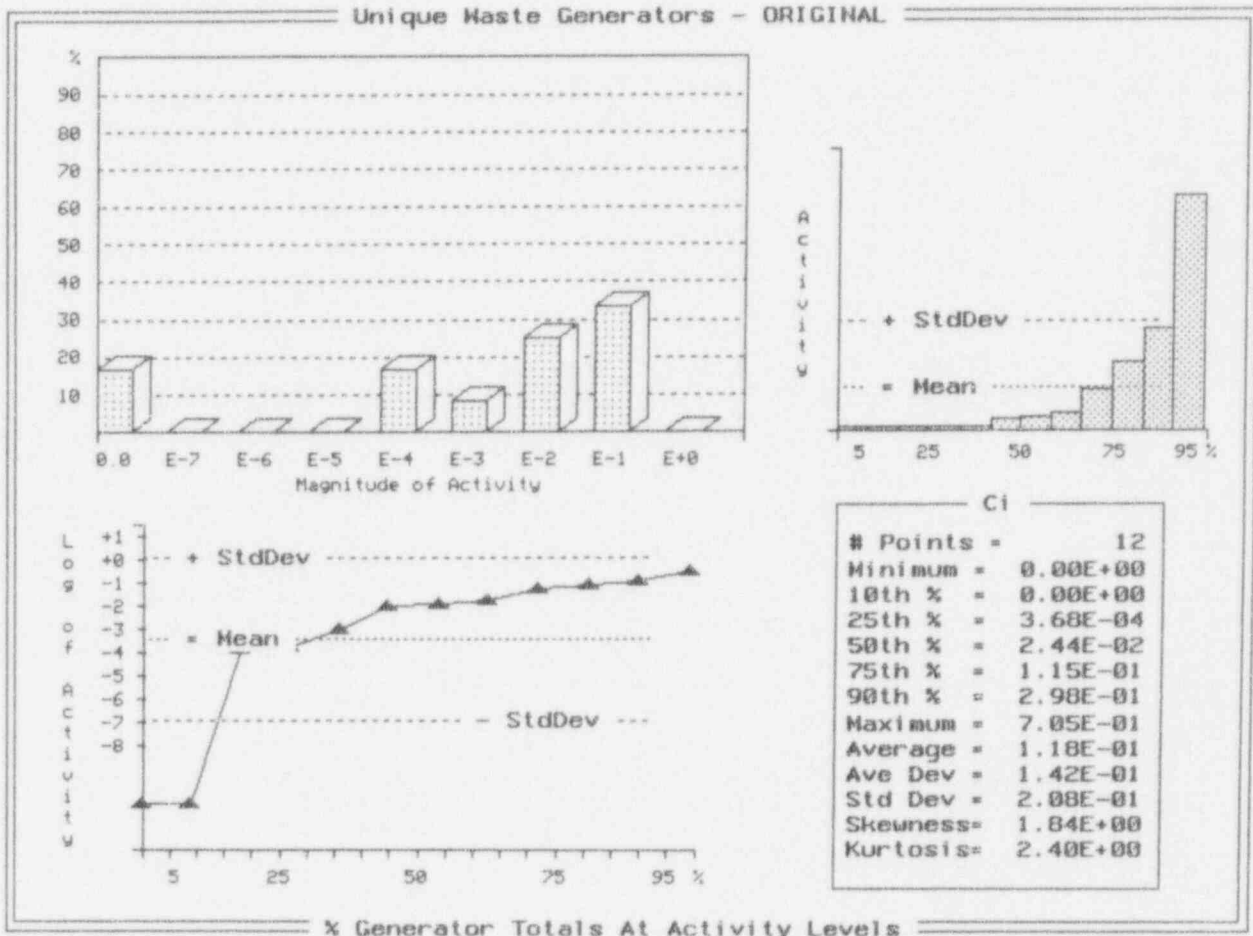


Exhibit F-45
Data Summary - Analyses at the Shipment Level
 (Aggregate Practices for non-brokered waste: 1986 to 1990)

	<u>Data or Parameters</u>
Compact or unaffiliated state:	Massachusetts
Waste generator class:	Government
Total number of waste generators:	5
Total associated waste volume (m ³):	179
Total associated waste activity (Ci):	145
Waste class:	A-Unstable and A-Stable
Identified waste generators for this analysis:	
Number:	2
Percent of total(%):	40
Total number of shipping records:	13
Number of shipping records <u>with</u> container data:	0
Number of waste containers:	0
Weight of shipments (kg):	117,800
Total waste volume (m ³):	168
Fractional waste volume (%): (this analysis/total)	94
Total waste activity (Ci):	8.3
Fractional waste activity (%): (this analysis/total)	5.7

Exhibit F-45 (Continued)

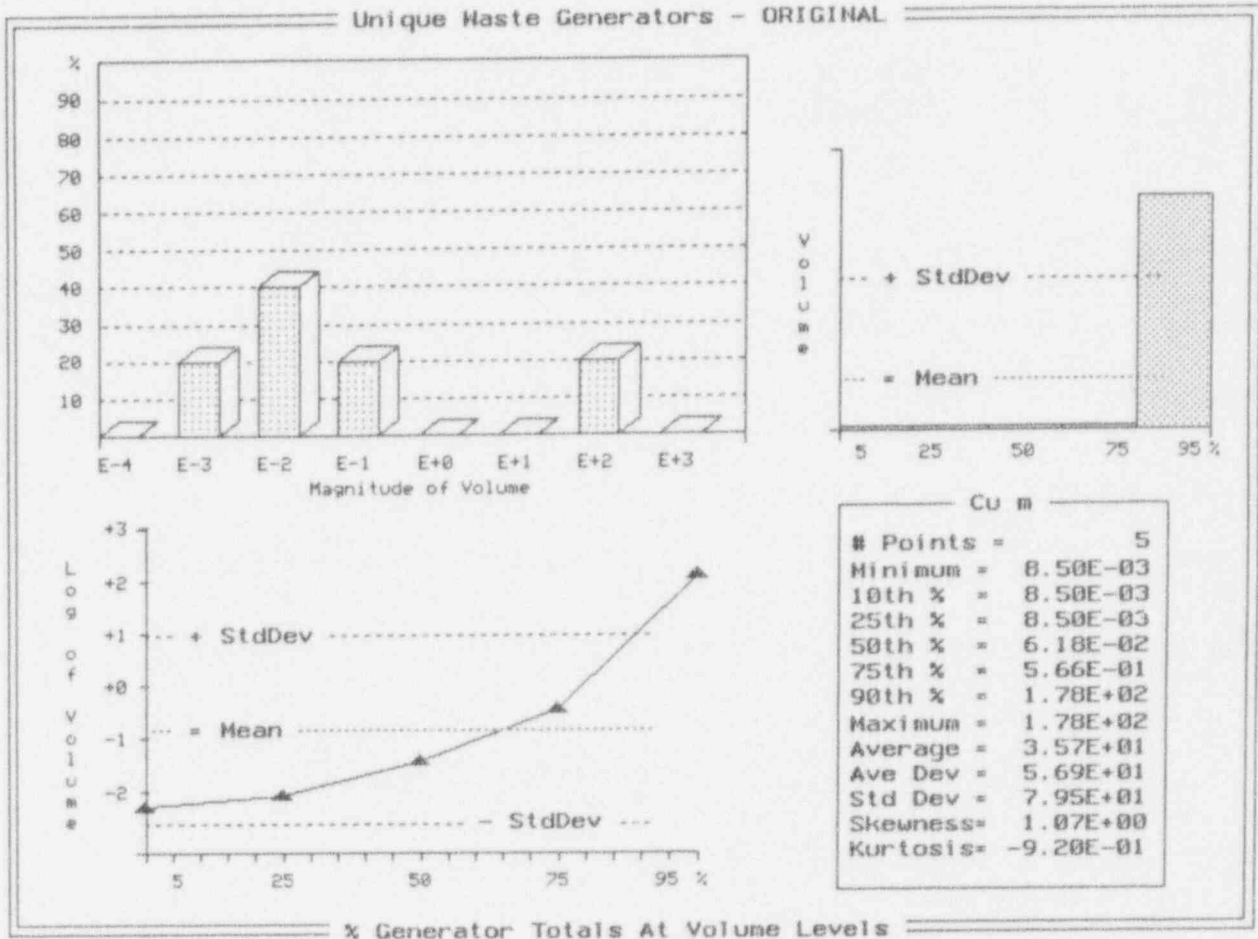


Exhibit F-45 (Continued)

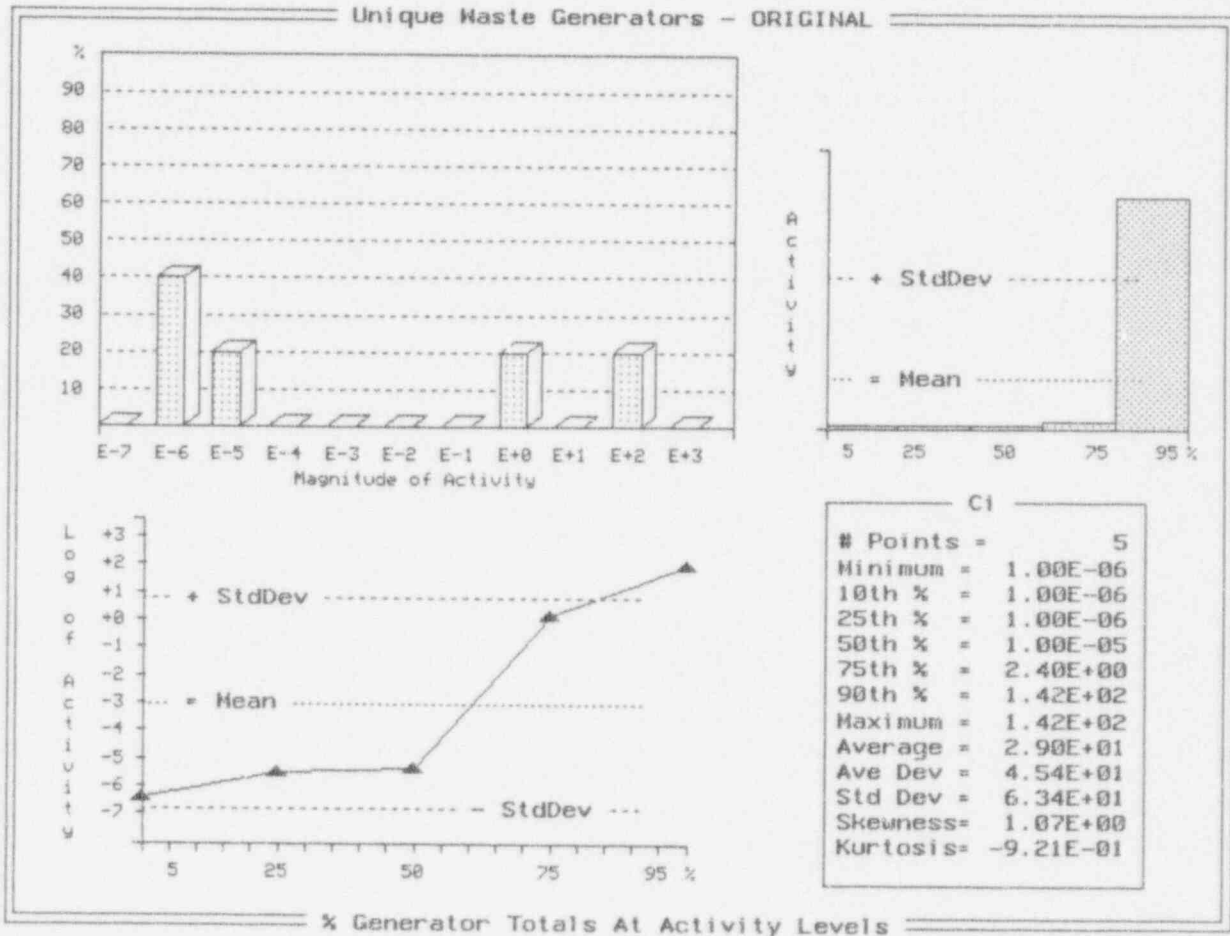


Exhibit F-46
Data Summary - Analyses at the Shipment Level
 (Aggregate Practices For non-brokered waste: 1986 to 1990)

	<u>Data or Parameters</u>
Compact or unaffiliated state:	Massachusetts
Waste generator class:	Academic
Total number of waste generators:	19
Total associated waste volume (m ³):	113
Total associated waste activity (Ci):	86.7
Waste class:	A-Unstable and A-Stable
Identified waste generators for this analysis:	
Number:	7
Percent of total(%):	37
Total number of shipping records:	25
Number of shipping records <u>with</u> container data:	0
Number of waste containers:	0
Weight of shipments (kg):	16,290
Total waste volume (m ³):	28.7
Fractional waste volume (%): (this analysis/total)	25
Total waste activity (Ci):	25.6
Fractional waste activity (%): (this analysis/total)	29

Exhibit F-46 (Continued)

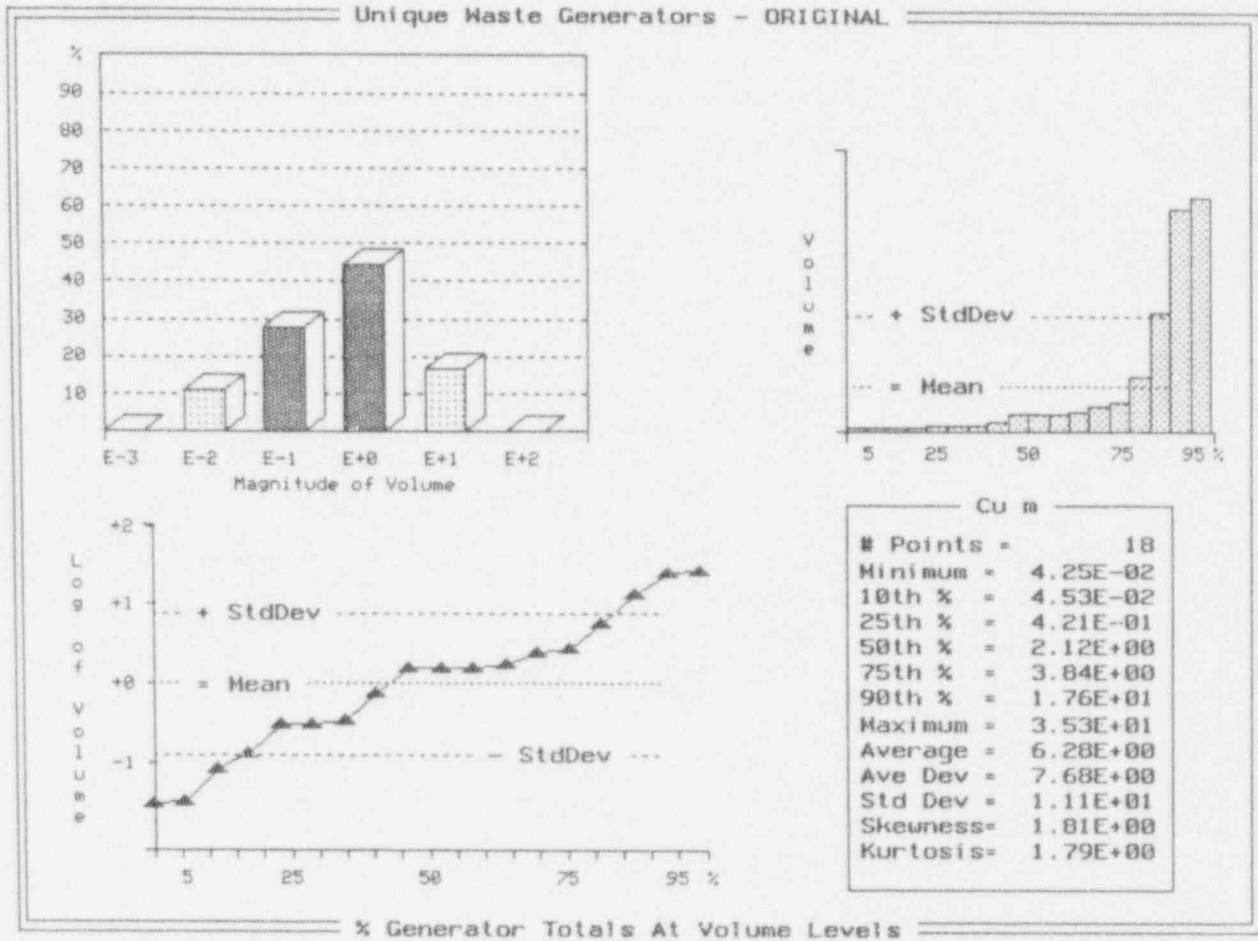


Exhibit F-46 (Continued)

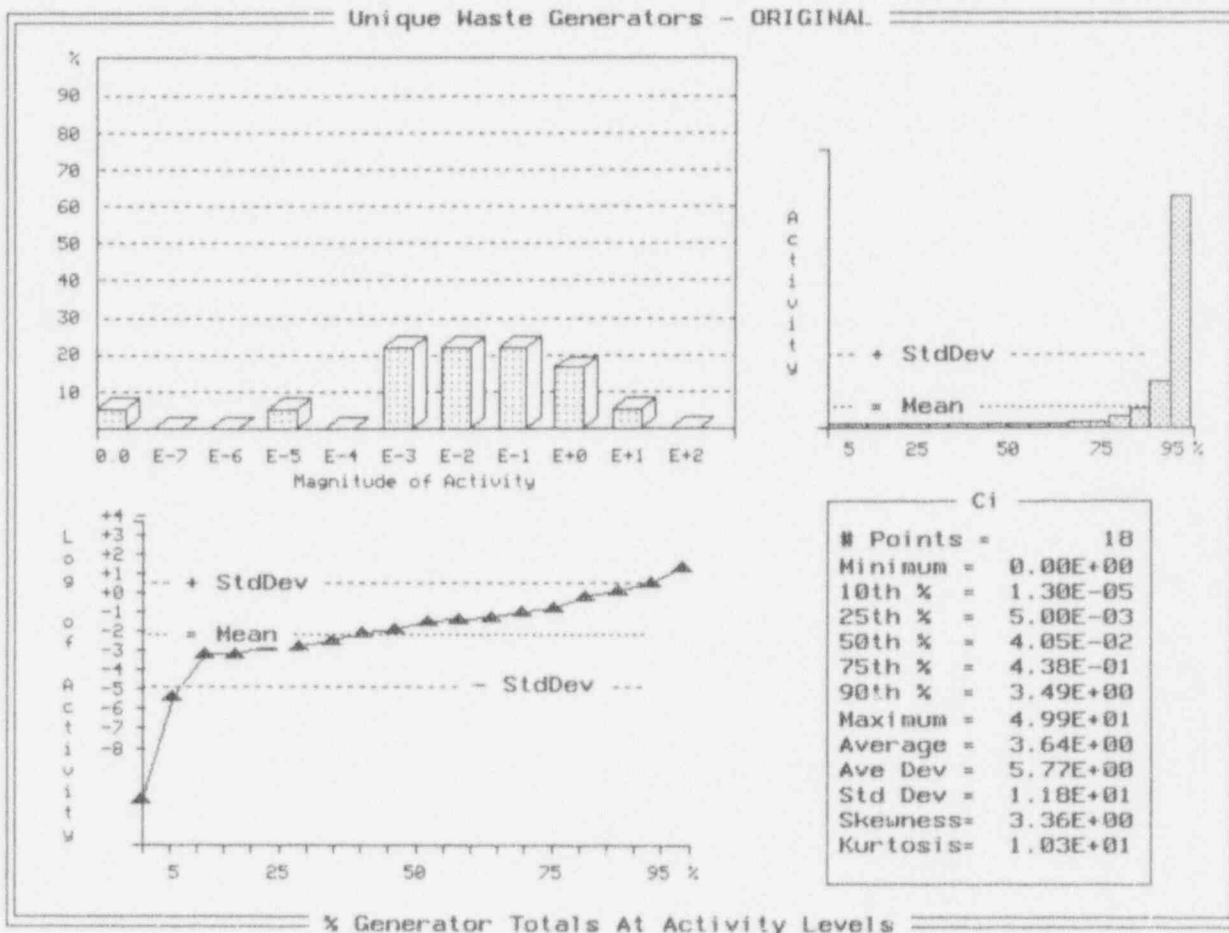


Exhibit F-47
Data Summary - Analyses at the Shipment Level
 (Aggregate Practices for non-brokered waste: 1986 to 1990)

<u>Data or Parameters</u>	
Compact or unaffiliated state:	Massachusetts
Waste generator class:	Medical
Total number of waste generators:	35
Total associated waste volume (m ³):	130
Total associated waste activity (Ci):	15.2
Waste class:	A-Unstable and A-Stable
Identified waste generators for this analysis:	
Number:	5
Percent of total (%):	14
Total number of shipping records:	20
Number of shipping records <u>with</u> container data:	0
Number of waste containers:	0
Weight of shipments (kg):	26,610
Total waste volume (m ³):	34.3
Fractional waste volume (%): (this analysis/total)	26
Total waste activity (Ci):	0.5
Fractional waste activity (%): (this analysis/total)	3.2

Exhibit F-47 (Continued)

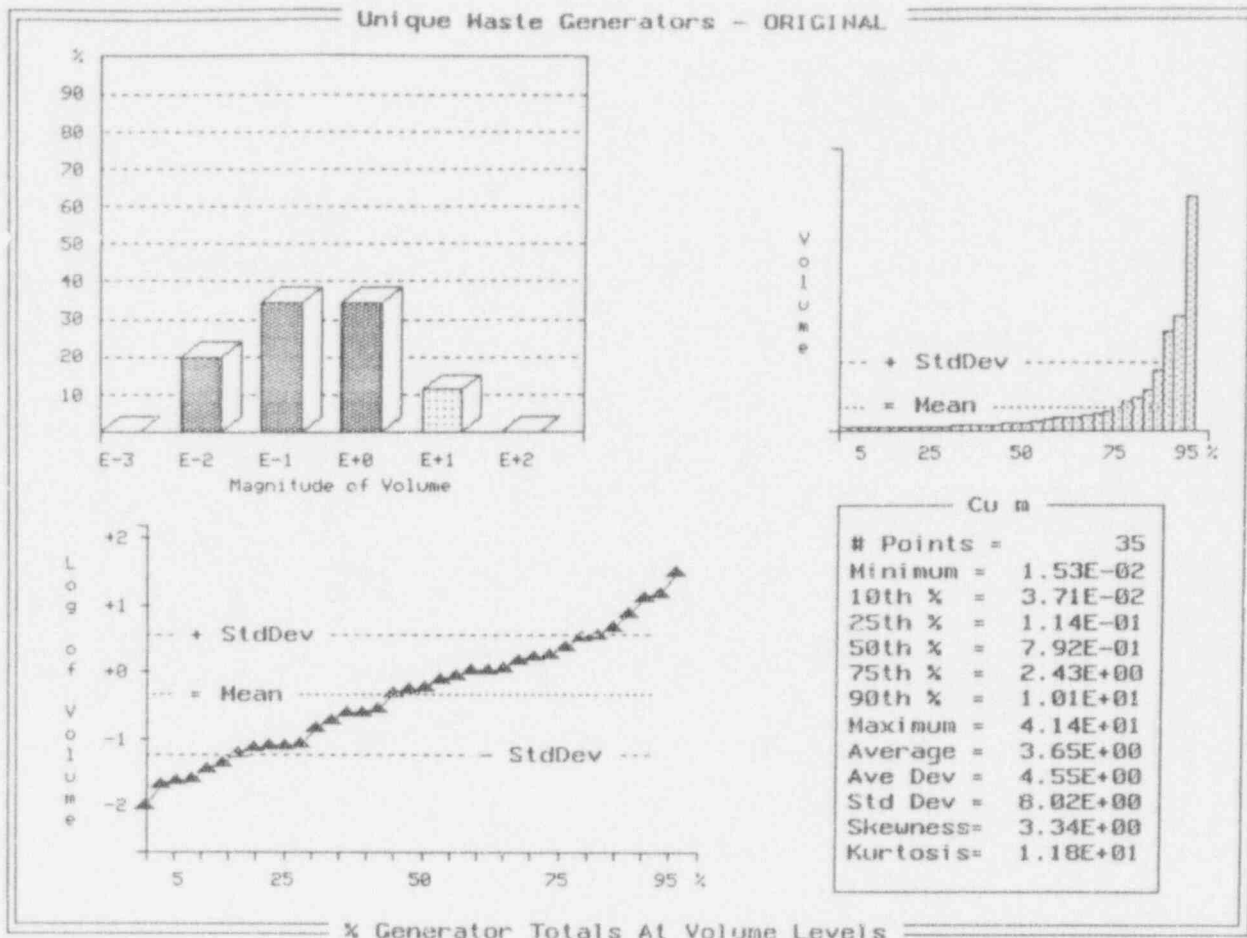


Exhibit F-47 (Continued)

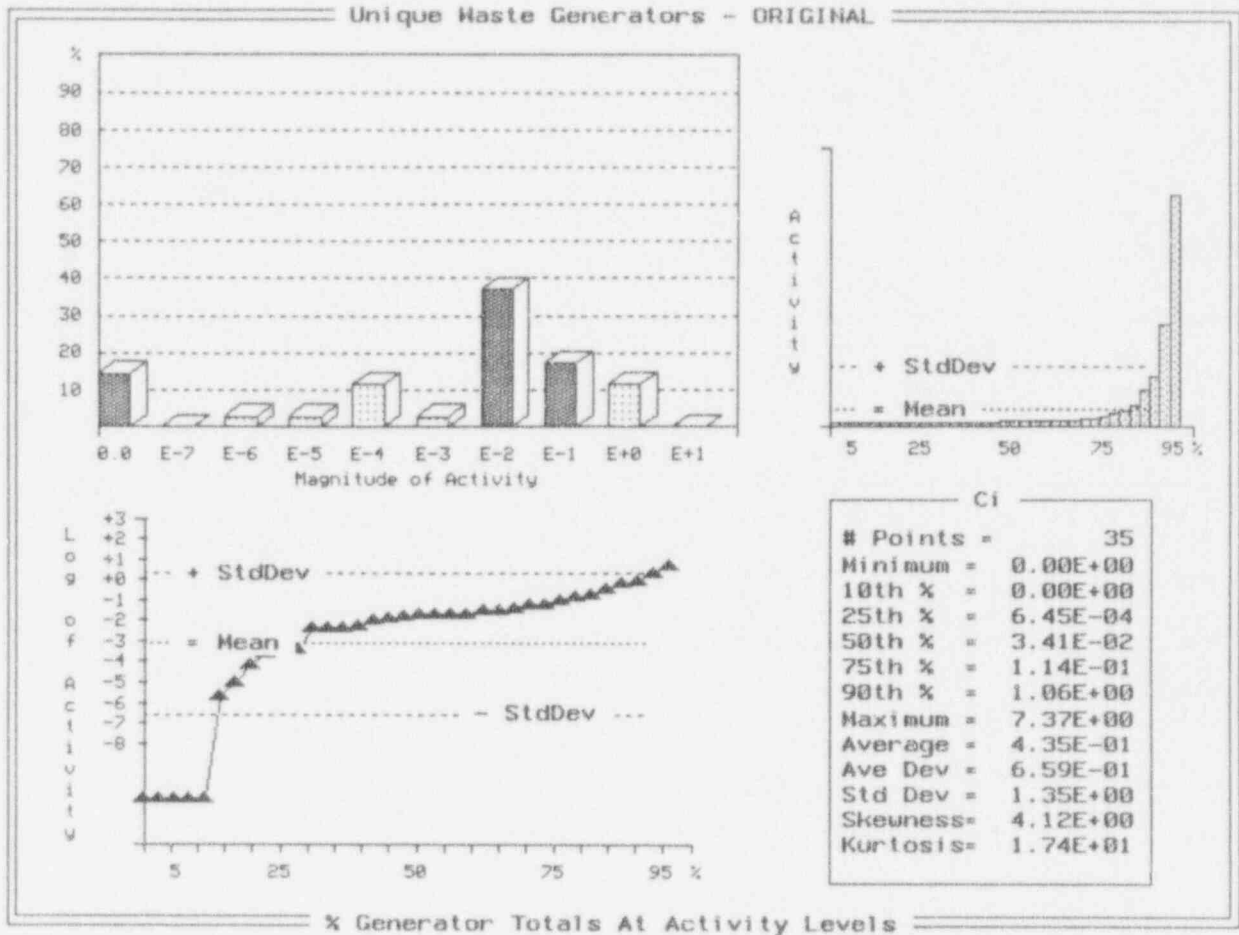


Exhibit F-48
Data Summary - Analyses at the Shipment Level
 (Aggregate Practices for non-brokered waste: 1986 to 1990)

	<u>Data or Parameters</u>
Compact or unaffiliated state:	Massachusetts
Waste generator class:	Industrial
Total number of waste generators:	121
Total associated waste volume (m ³):	4,606
Total associated waste activity (Ci):	132,500
Waste class:	A-Unstable and A-Stable
Identified waste generators for this analysis:	
Number:	42
Percent of total(%):	35
Total number of shipping records:	462
Number of shipping records <u>with</u> container data:	61
Number of waste containers:	3,770
Weight of shipments (kg):	3,792,000
Total waste volume (m ³):	3,707
Fractional waste volume (%): (this analysis/total)	80
Total waste activity (Ci):	14,180
Fractional waste activity (%): (this analysis/total)	11

Exhibit F-48 (Continued)

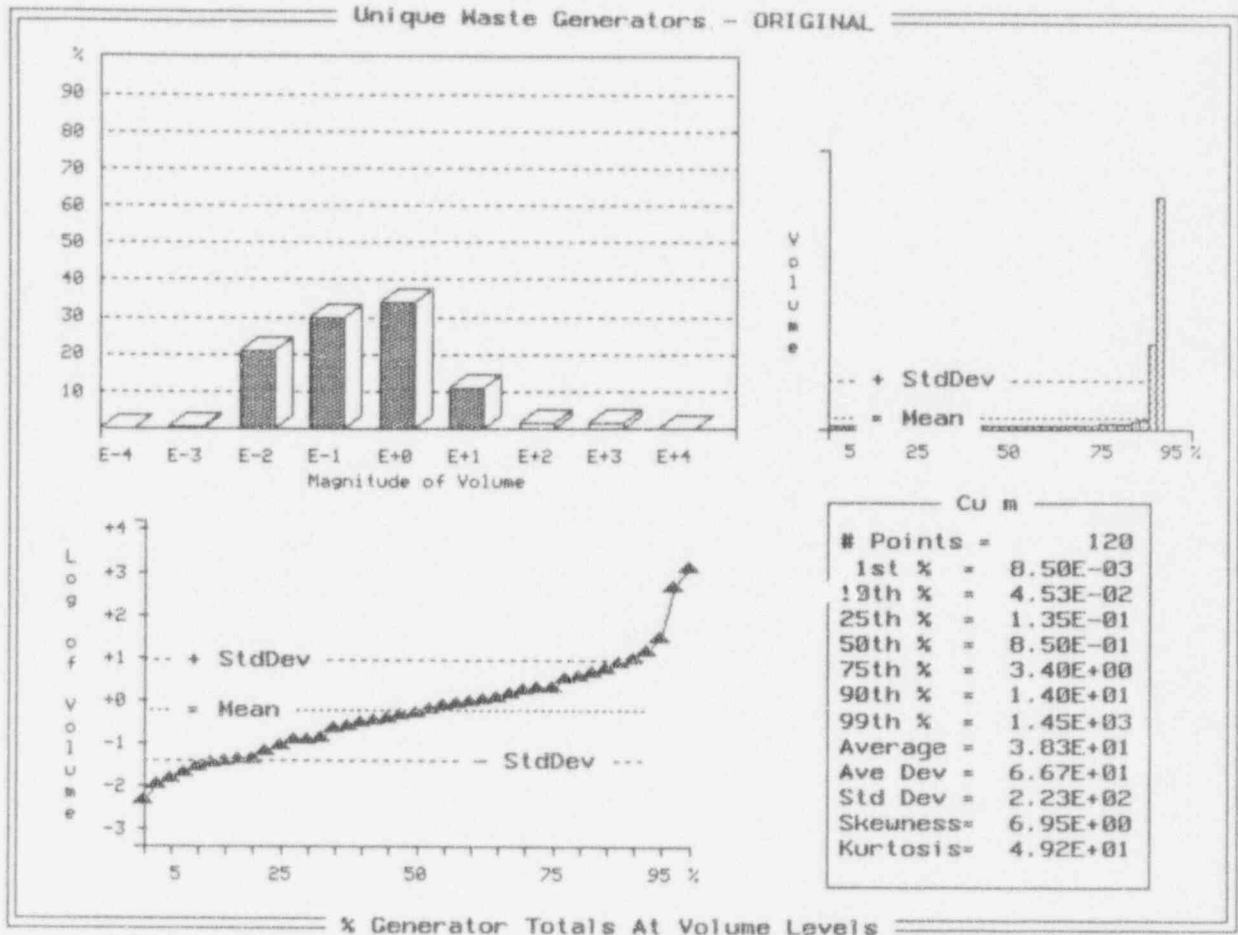


Exhibit F-48 (Continued)

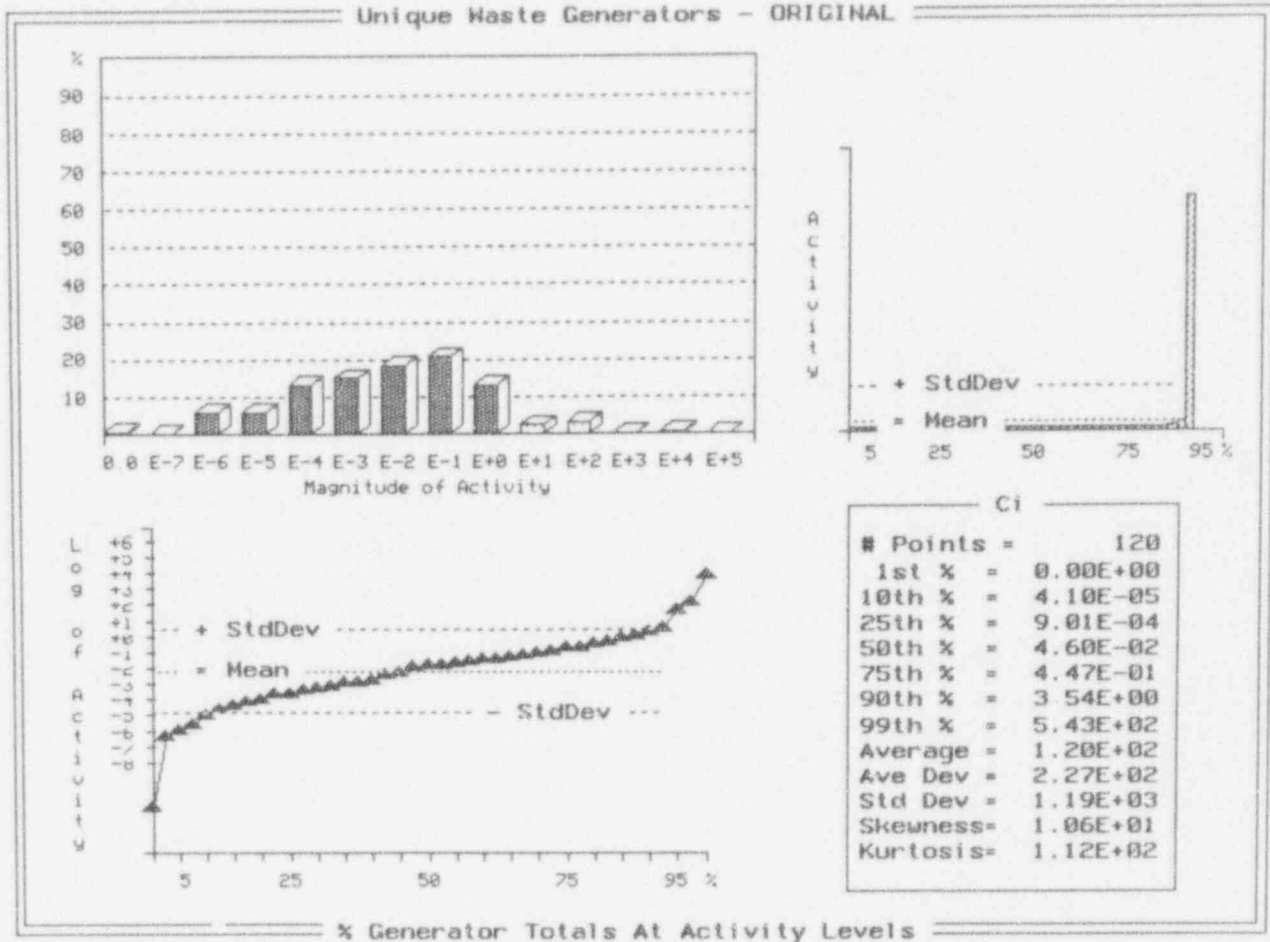


Exhibit F-48 (Continued)

Shipping-Level Stats - ORIGINAL

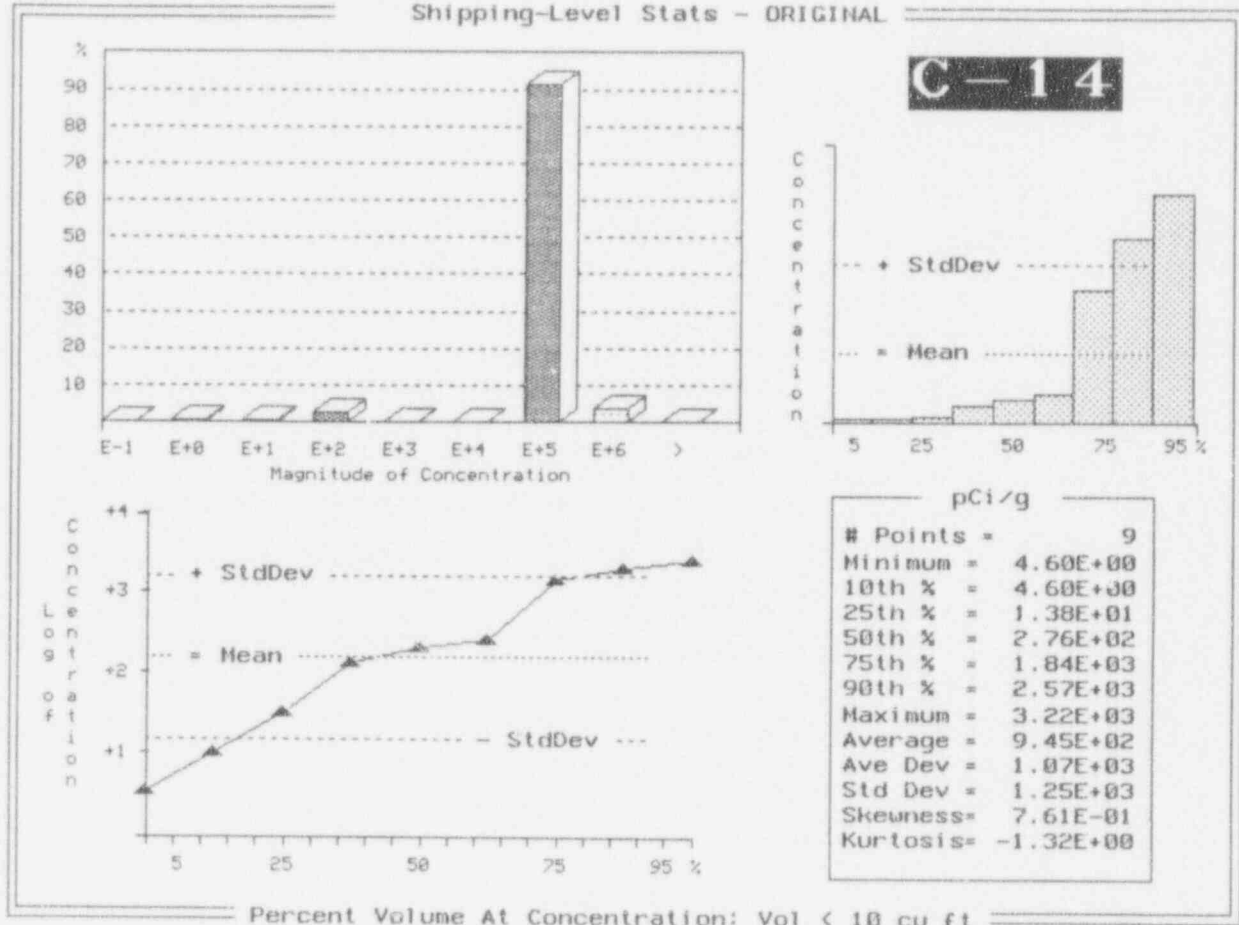


Exhibit F-48 (Continued)

Shipping-Level Stats - ORIGINAL

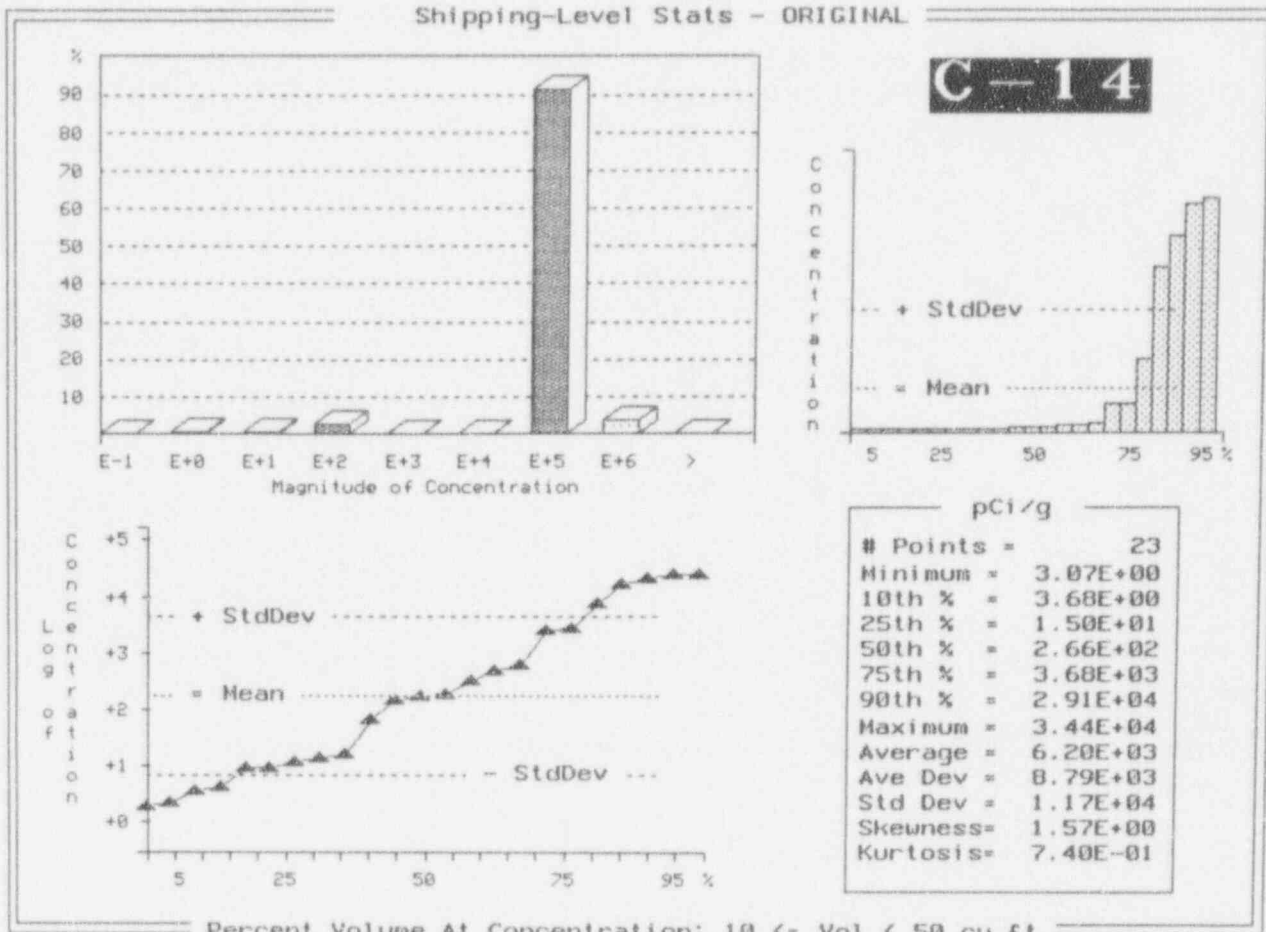


Exhibit F-48 (Continued)

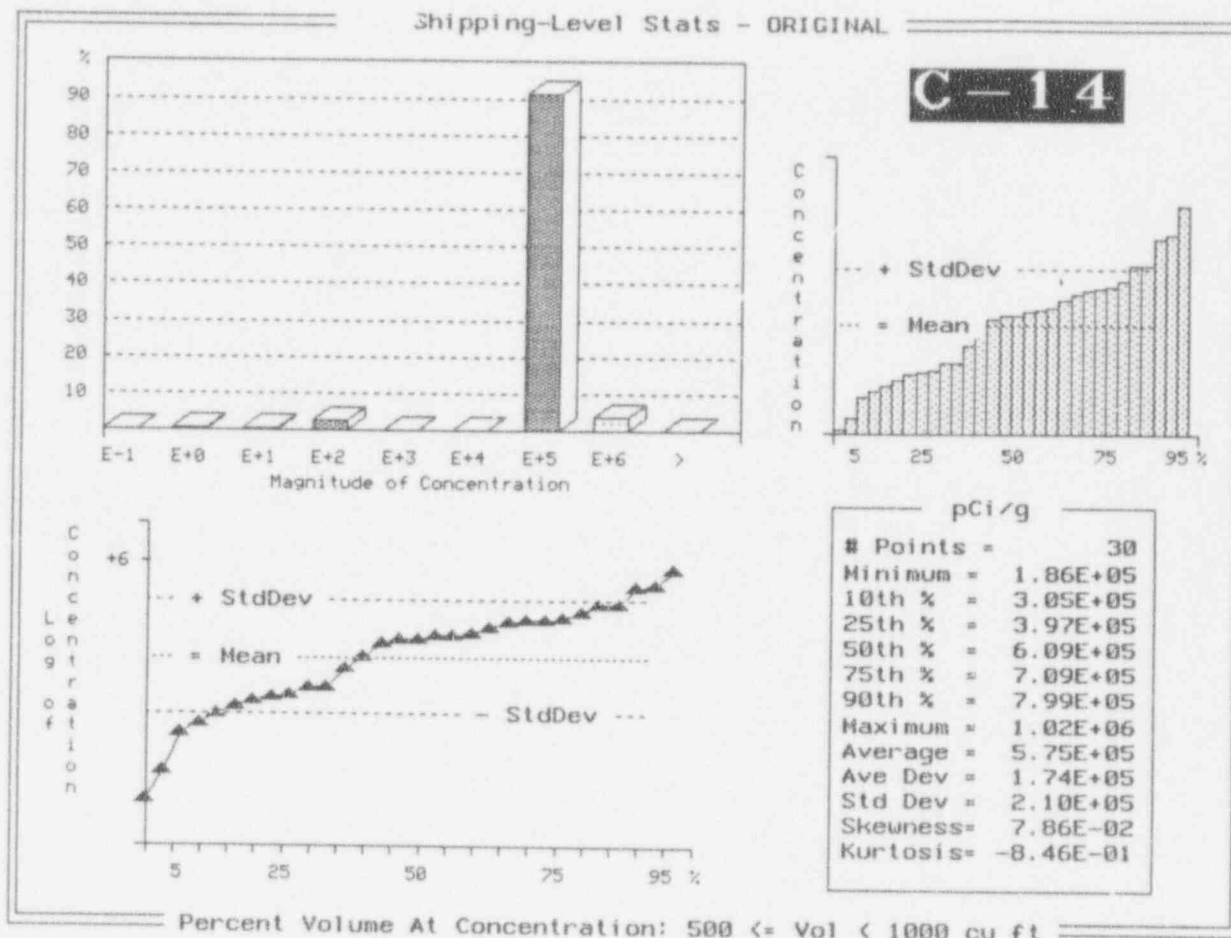


Exhibit F-48 (Continued)

Shipping-Level Stats - ORIGINAL

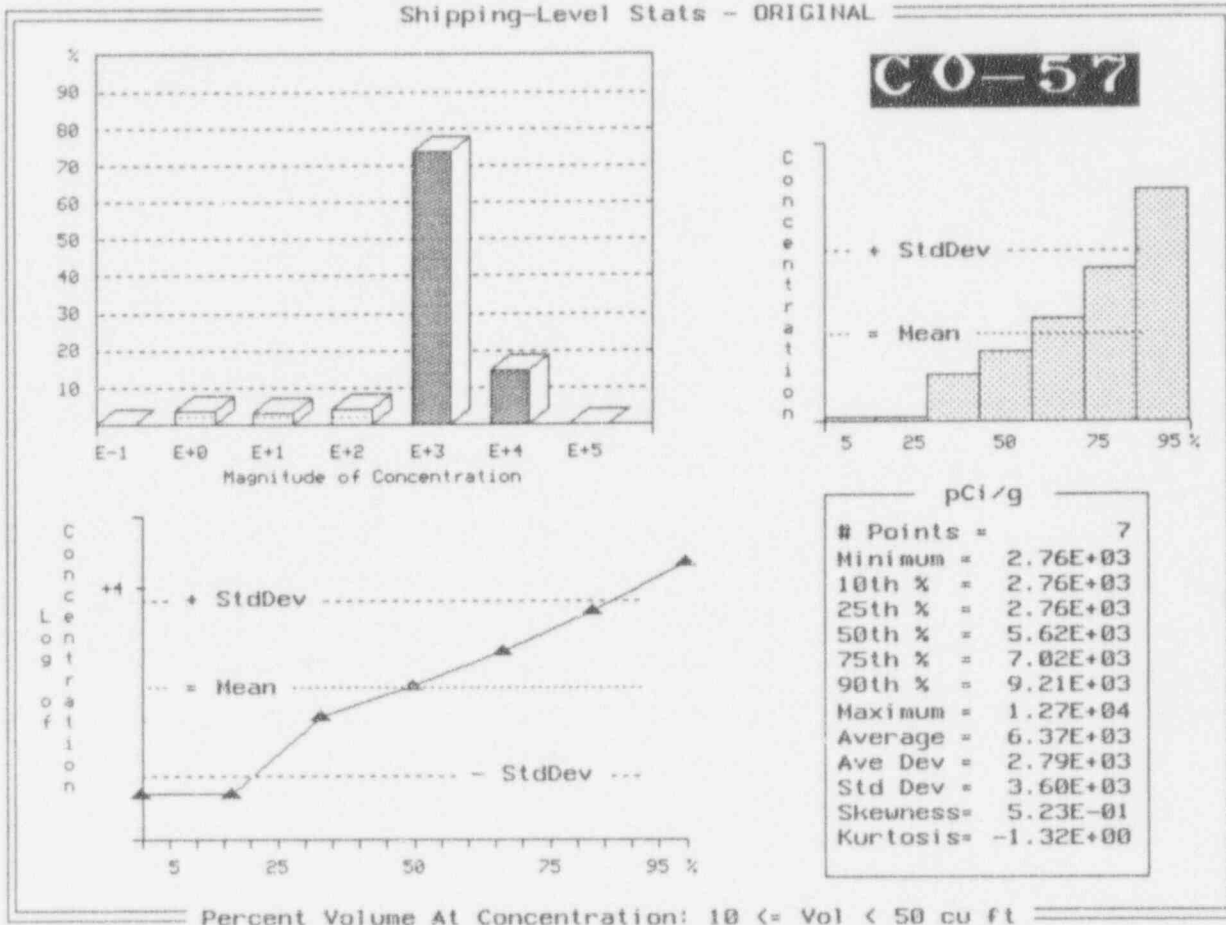


Exhibit F-48 (Continued)

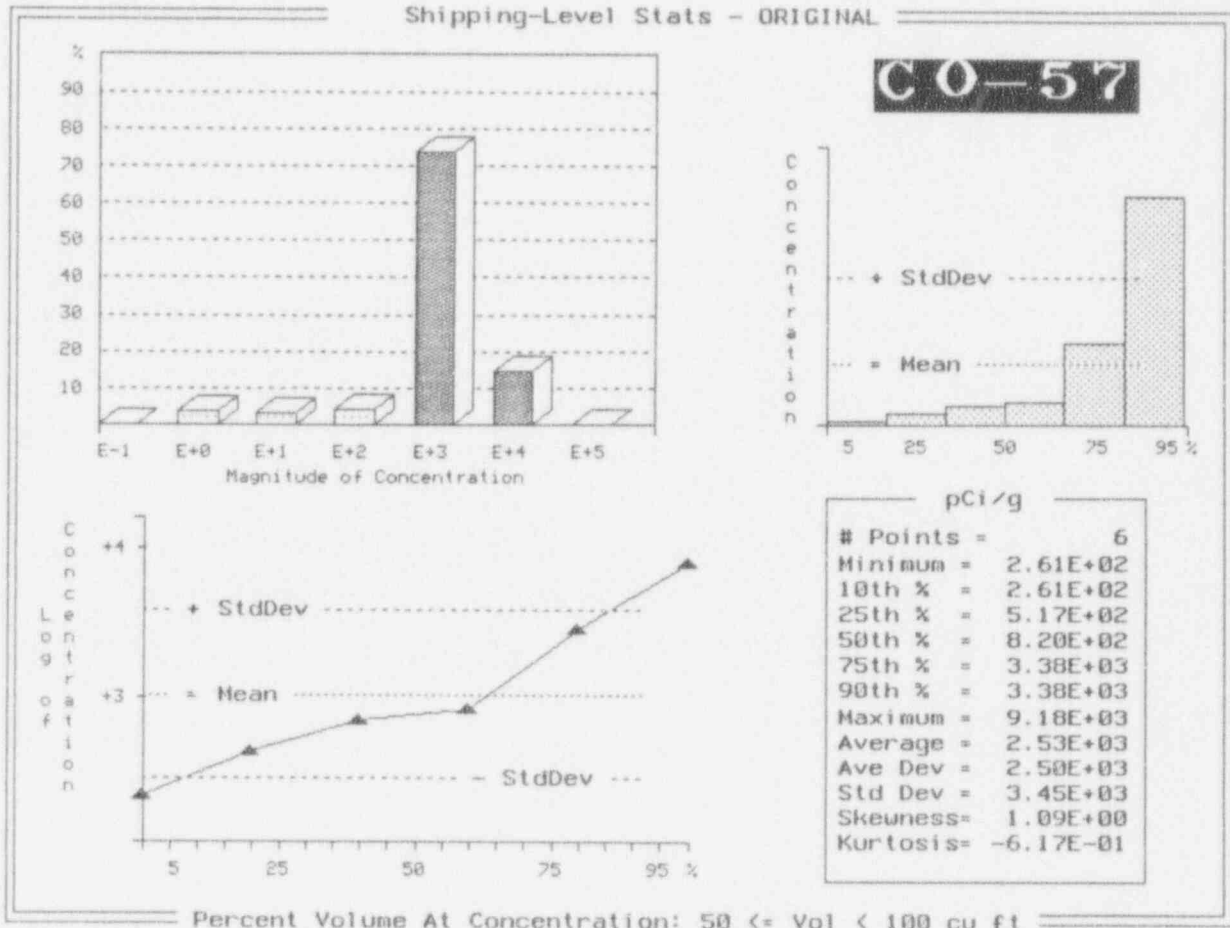
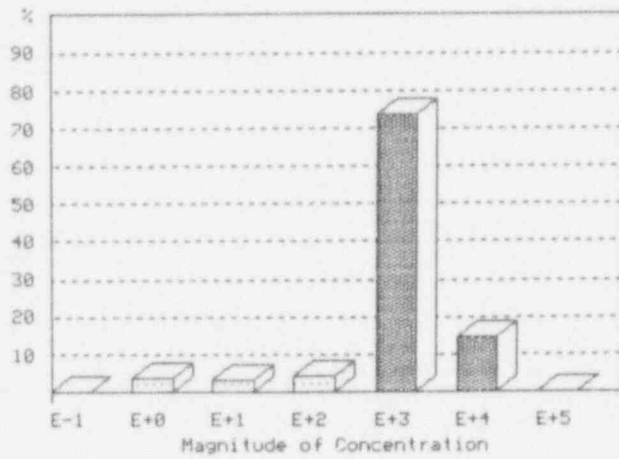
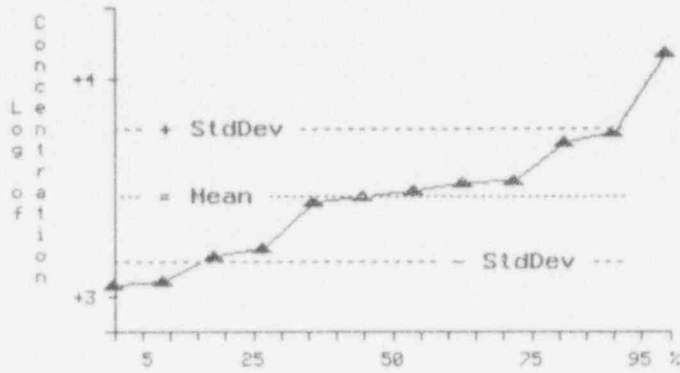
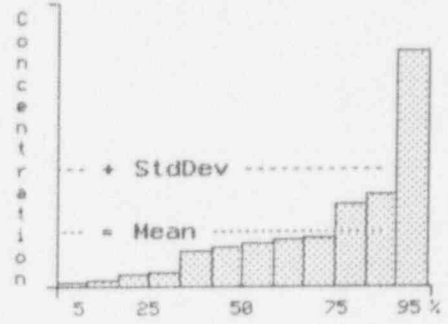


Exhibit F-48 (Continued)

Shipping-Level Stats - ORIGINAL



C0-57

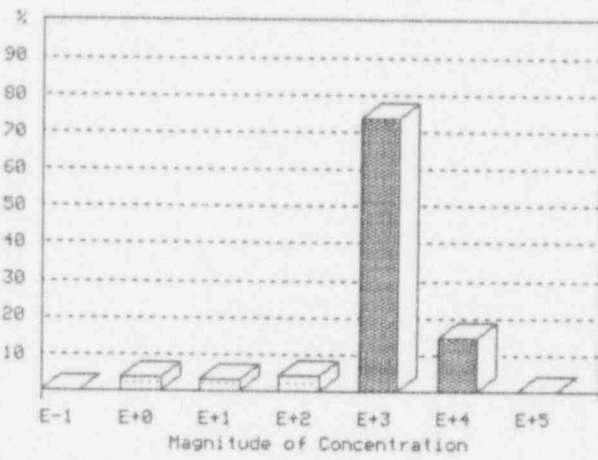


pci/g	
# Points =	12
Minimum =	1.28E+03
10th % =	1.28E+03
25th % =	1.72E+03
50th % =	3.23E+03
75th % =	3.84E+03
90th % =	6.32E+03
Maximum =	1.44E+04
Average =	4.15E+03
Ave Dev =	2.32E+03
Std Dev =	3.59E+03
Skeuiness =	1.81E+00
Kurtosis =	2.59E+00

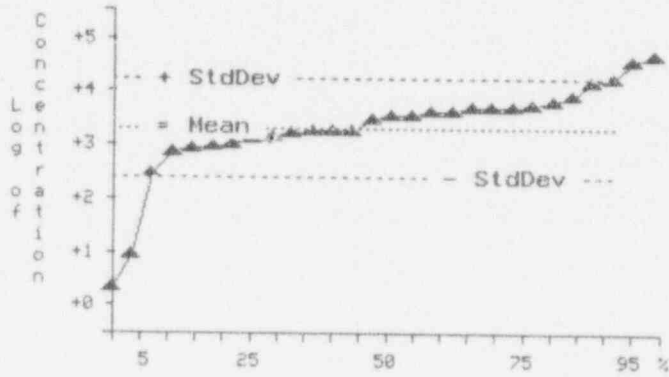
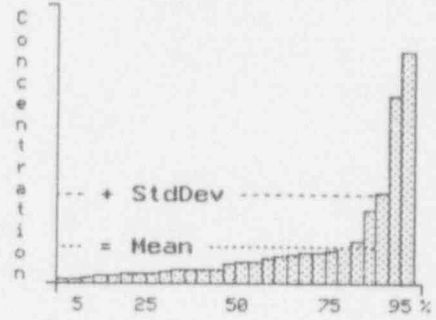
Percent Volume At Concentration: 100 <= Vol < 500 cu ft

Exhibit F-48 (Continued)

Shipping-Level Stats - ORIGINAL



CO-57



pCi/g	
# Points =	28
Minimum =	3.56E+00
10th % =	4.54E+02
25th % =	1.48E+03
50th % =	4.33E+03
75th % =	7.38E+03
99th % =	1.97E+04
Maximum =	6.37E+04
Average =	9.17E+03
Ave Dev =	8.91E+03
Std Dev =	1.49E+04
Skeuness=	2.57E+00
Kurtosis=	5.90E+00

Percent Volume At Concentration: 500 <= Vol < 1000 cu ft

Exhibit F-48 (Continued)

Shipping-Level Stats - ORIGINAL

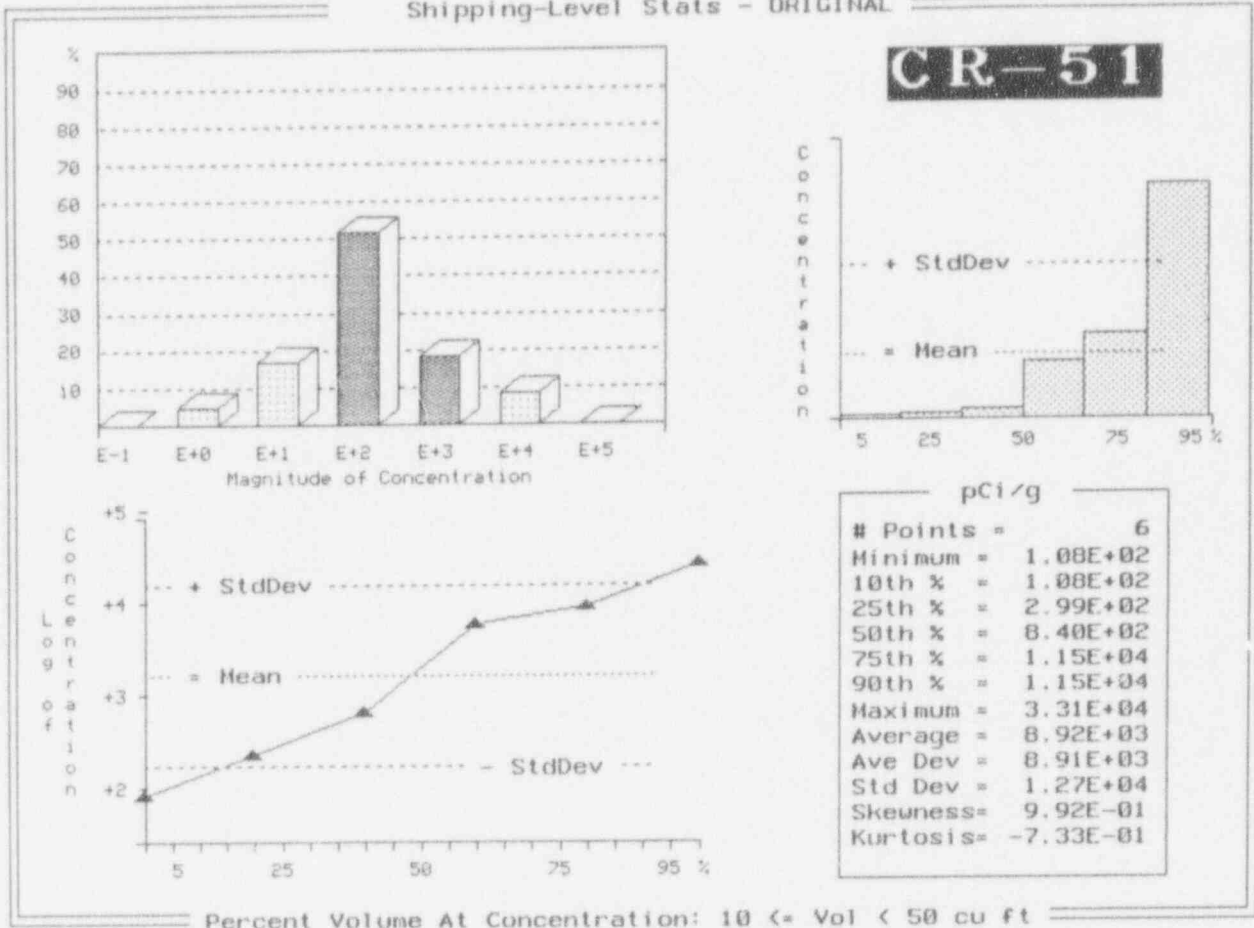


Exhibit F-48 (Continued)

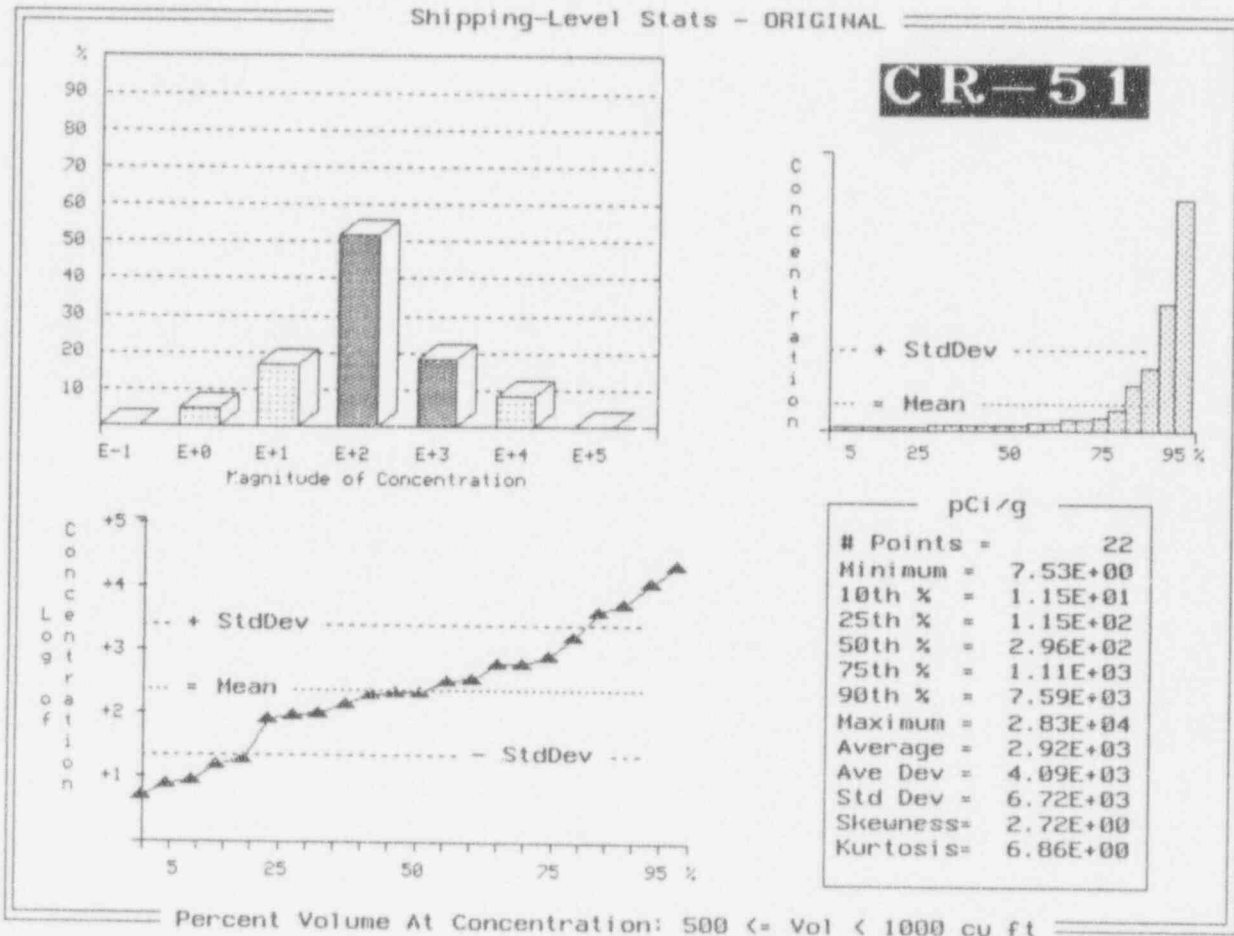


Exhibit F-48 (Continued)

Shipping-Level Stats - ORIGINAL

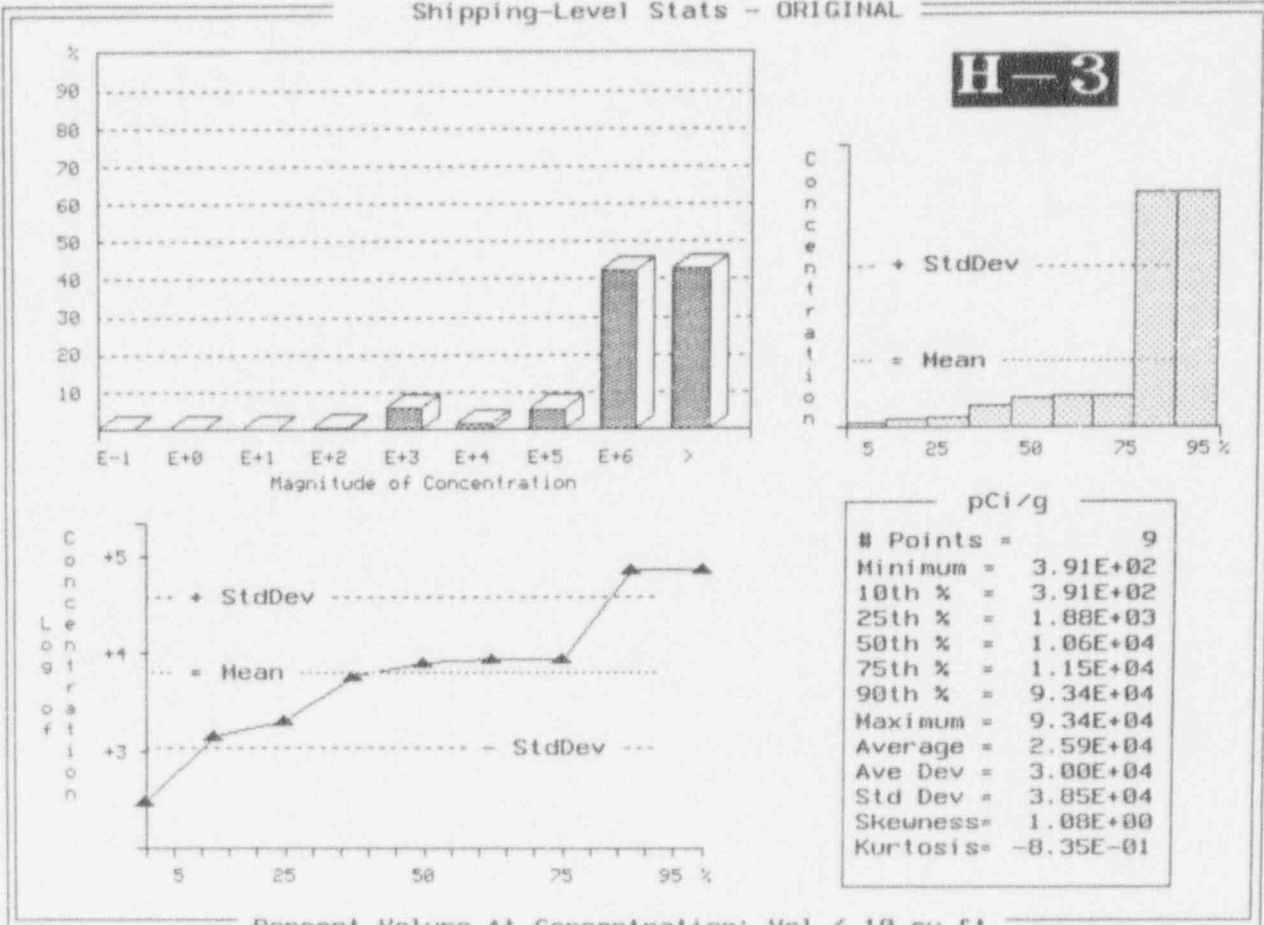


Exhibit F-48 (Continued)

Shipping-Level Stats - ORIGINAL

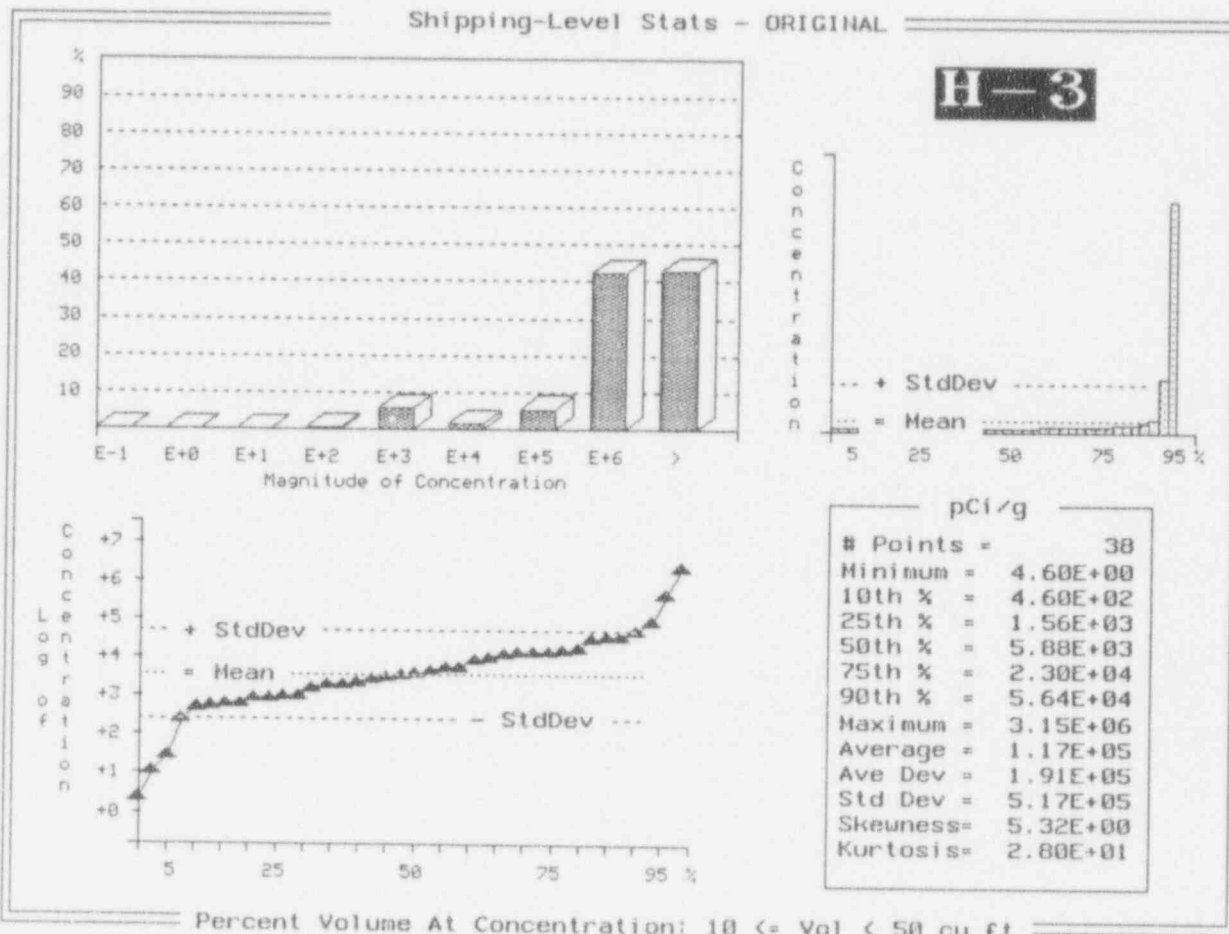


Exhibit F-48 (Continued)

Shipping-Level Stats - ORIGINAL

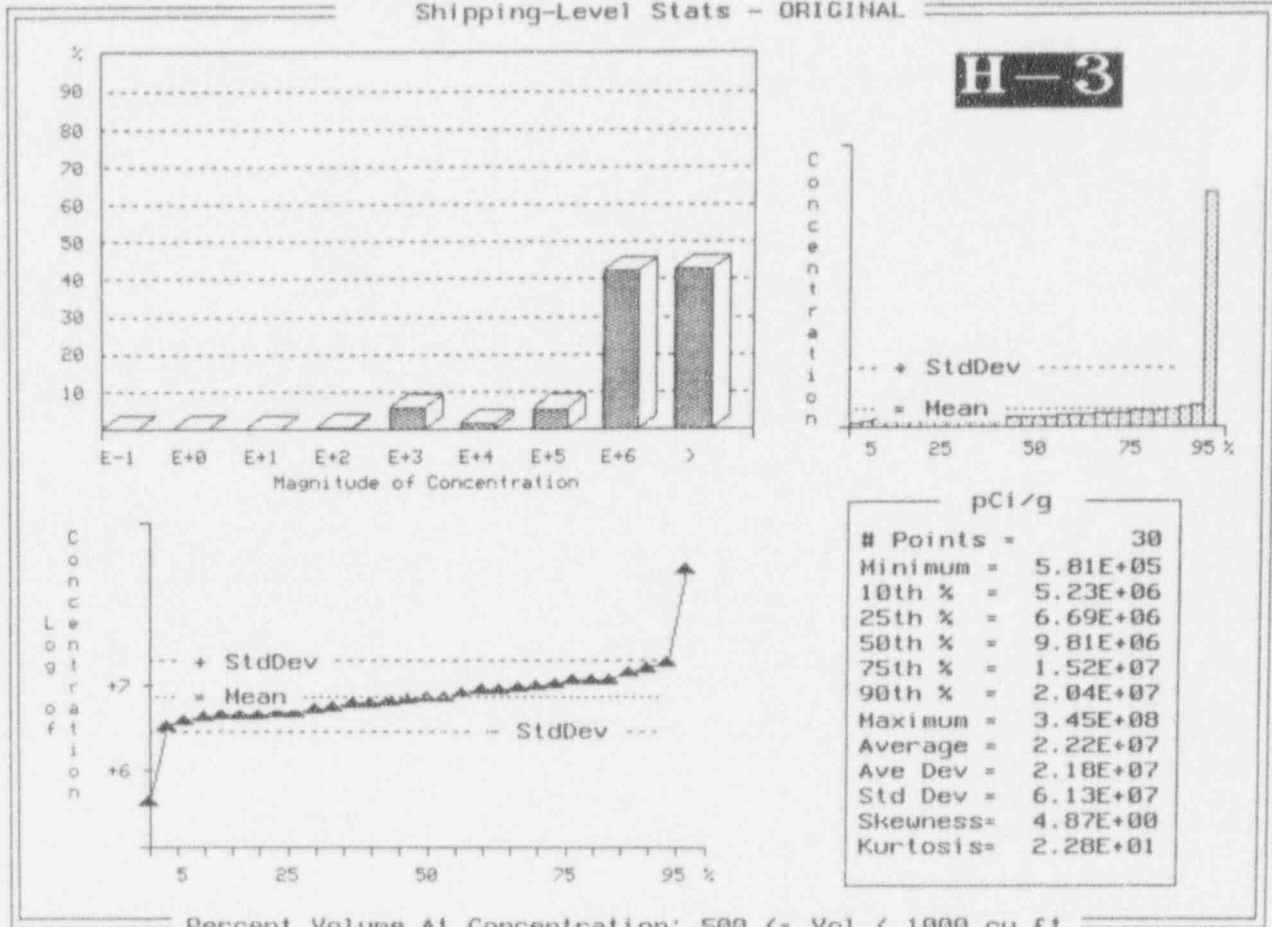


Exhibit F-48 (Continued)

Shipping-Level Stats - ORIGINAL

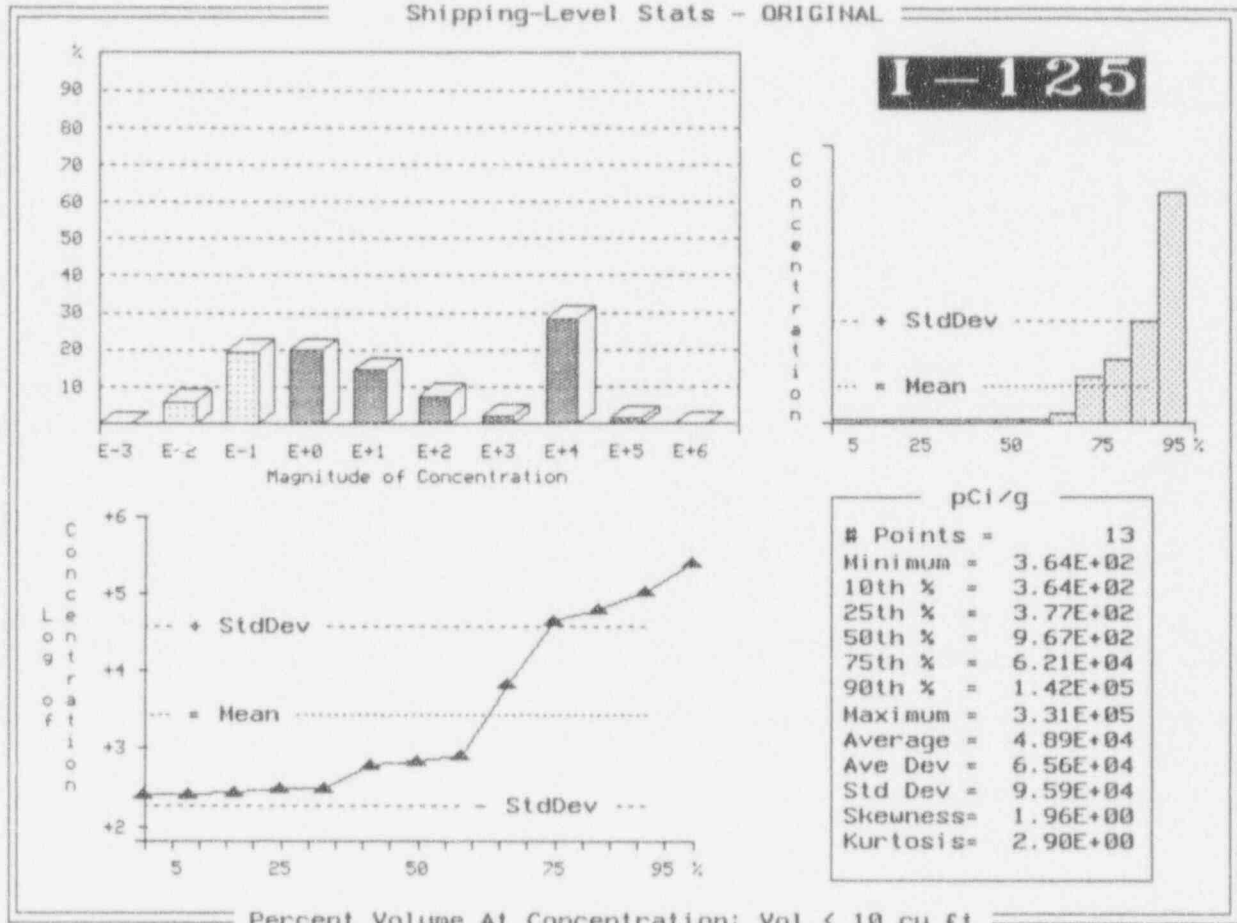


Exhibit F-48 (Continued)

Shipping-Level Stats - ORIGINAL

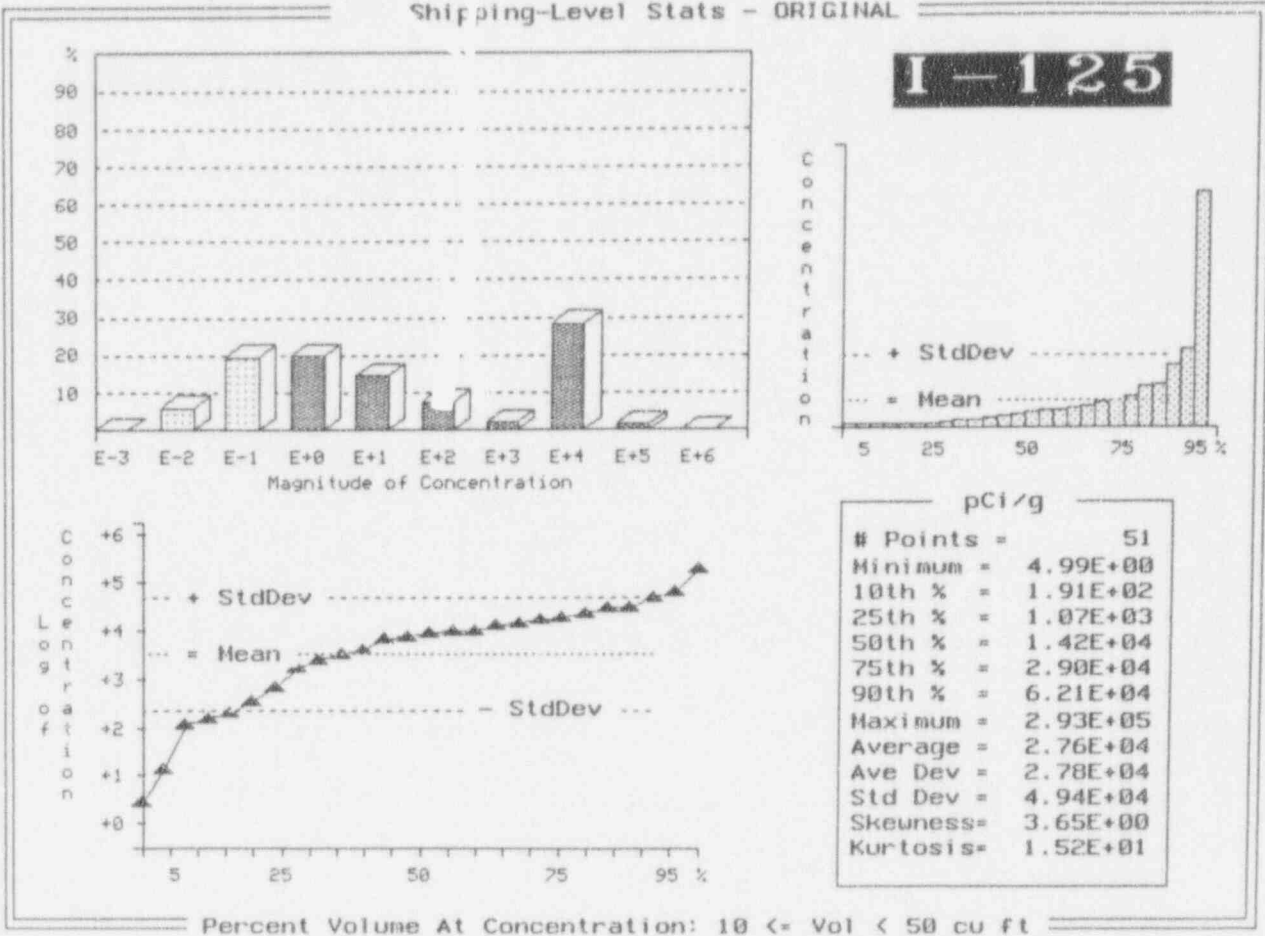
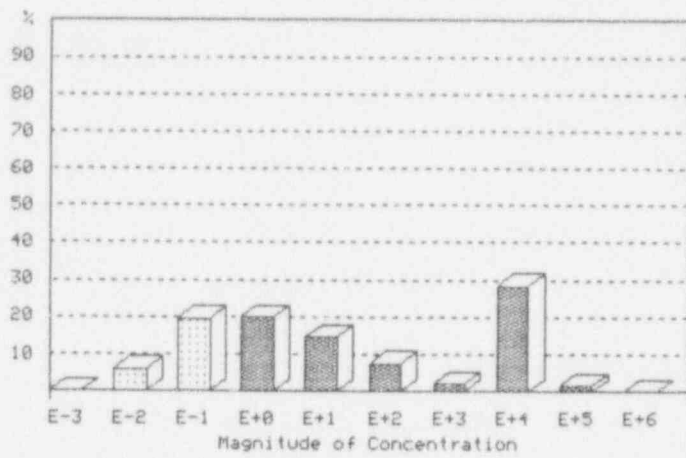
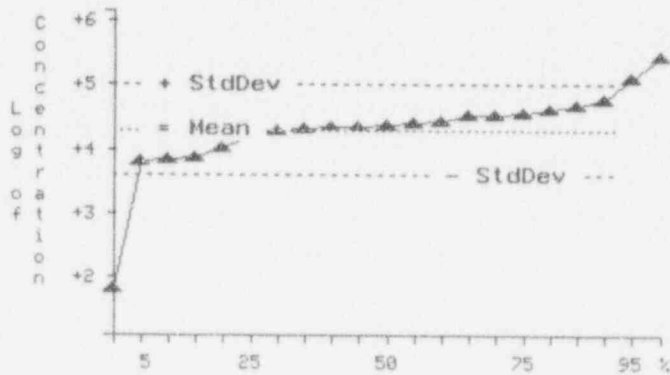
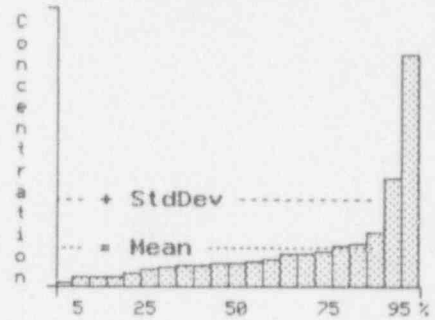


Exhibit F-48 (Continued)

Shipping-Level Stats - ORIGINAL



I-125



pci/g	
# Points =	21
Minimum =	9.84E+01
10th % =	9.86E+03
25th % =	1.58E+04
50th % =	3.48E+04
75th % =	5.47E+04
90th % =	8.95E+04
Maximum =	4.01E+05
Average =	6.06E+04
Ave Dev =	4.79E+04
Std Dev =	8.71E+04
Skeuness =	2.92E+00
Kurtosis =	8.36E+00

Percent Volume At Concentration: 50 <= Vol < 100 cu ft

Exhibit F-48 (Continued)

Shipping-Level Stats - ORIGINAL

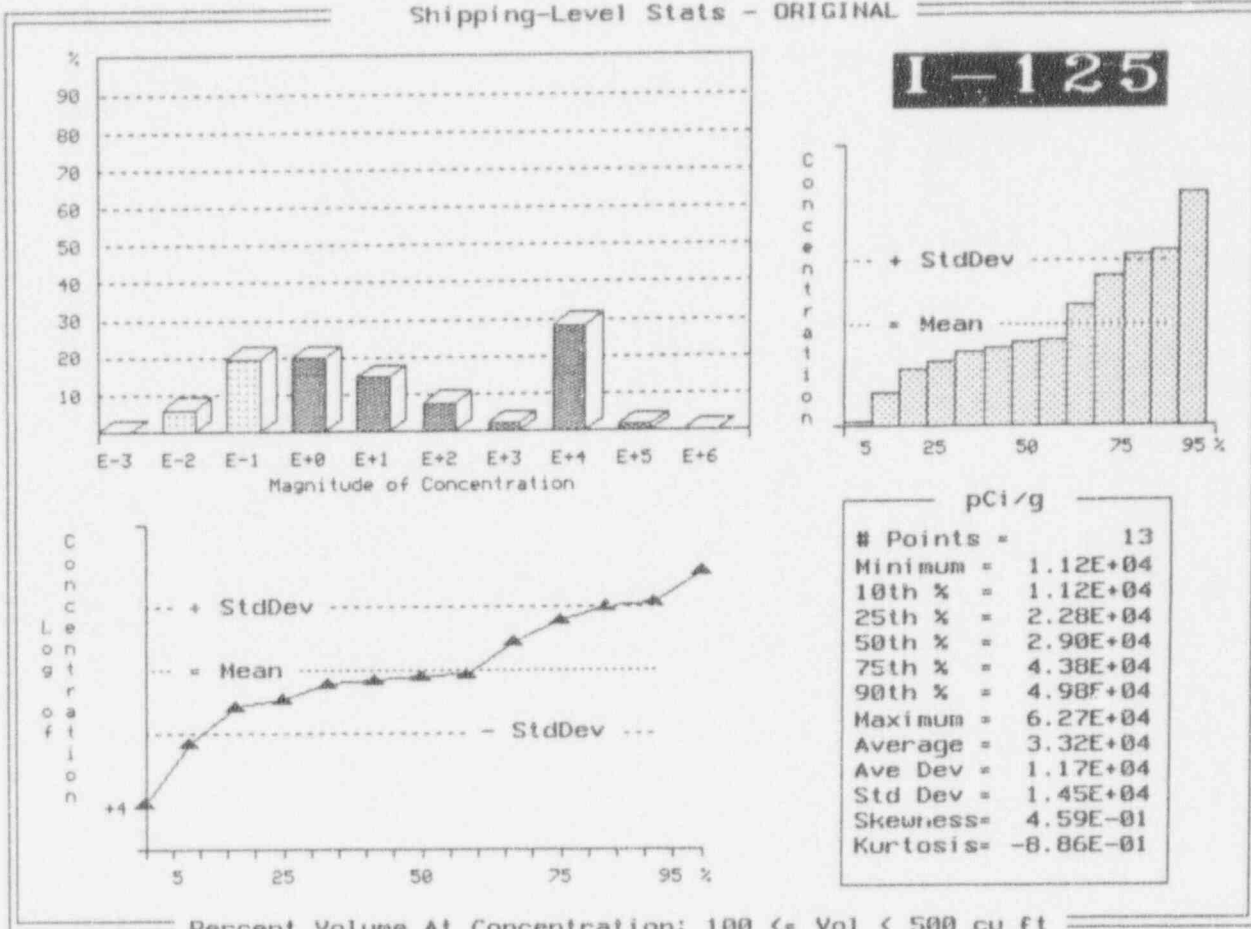


Exhibit F-48 (Continued)

Shipping-Level Stats - ORIGINAL

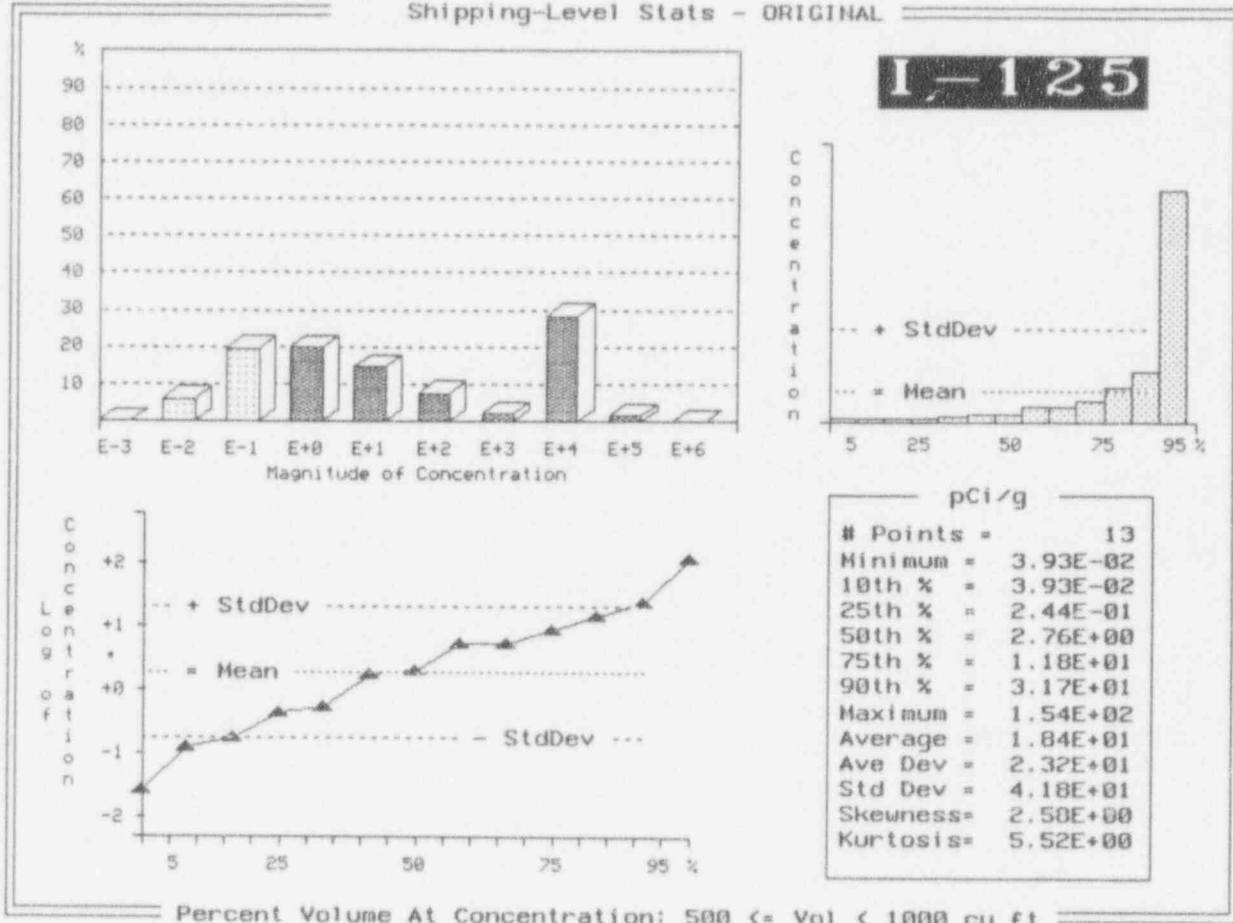


Exhibit F-48 (Continued)

Shipping-Level Stats - ORIGINAL

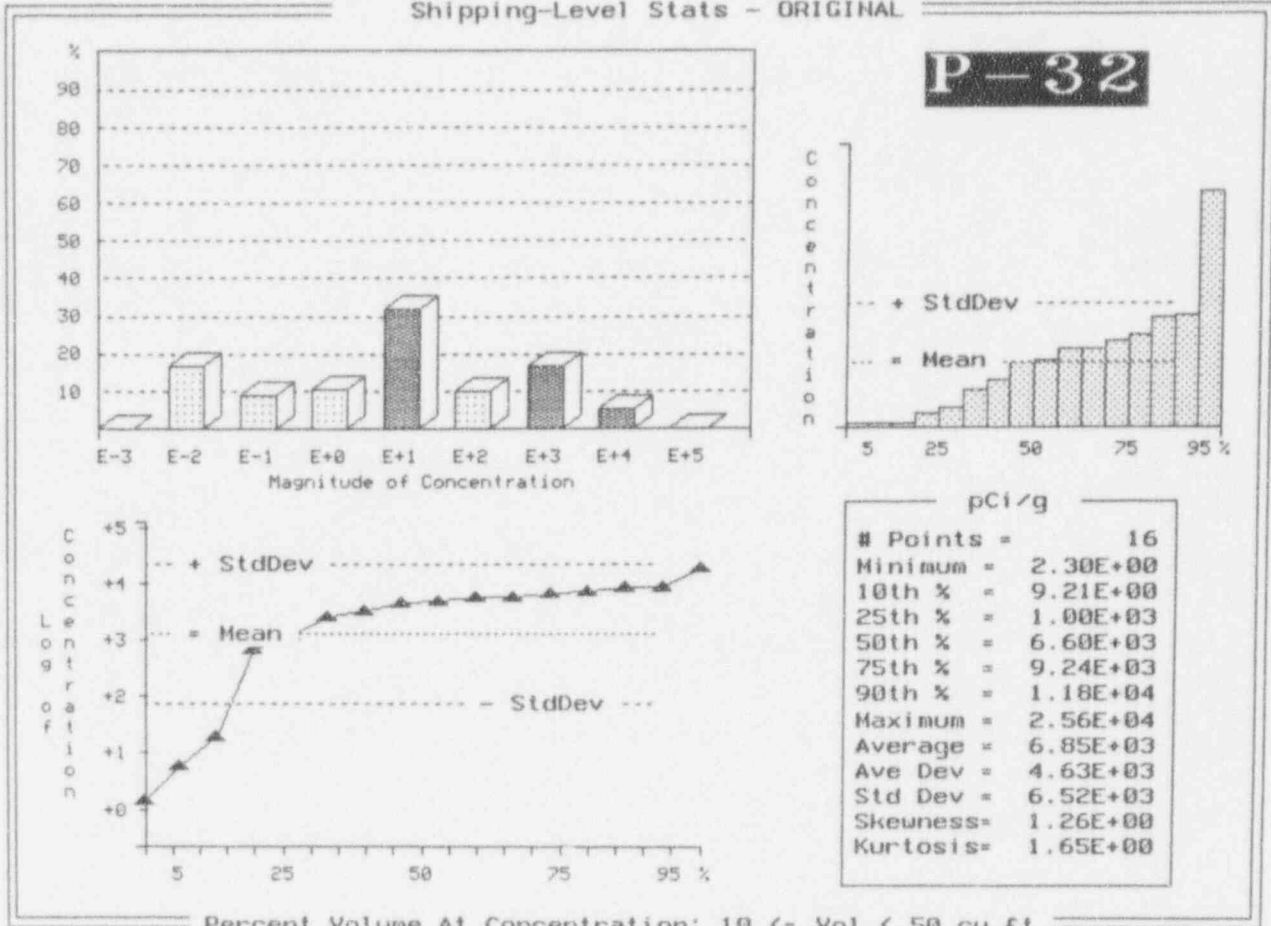


Exhibit F-48 (Continued)

Shipping-Level Stats - ORIGINAL

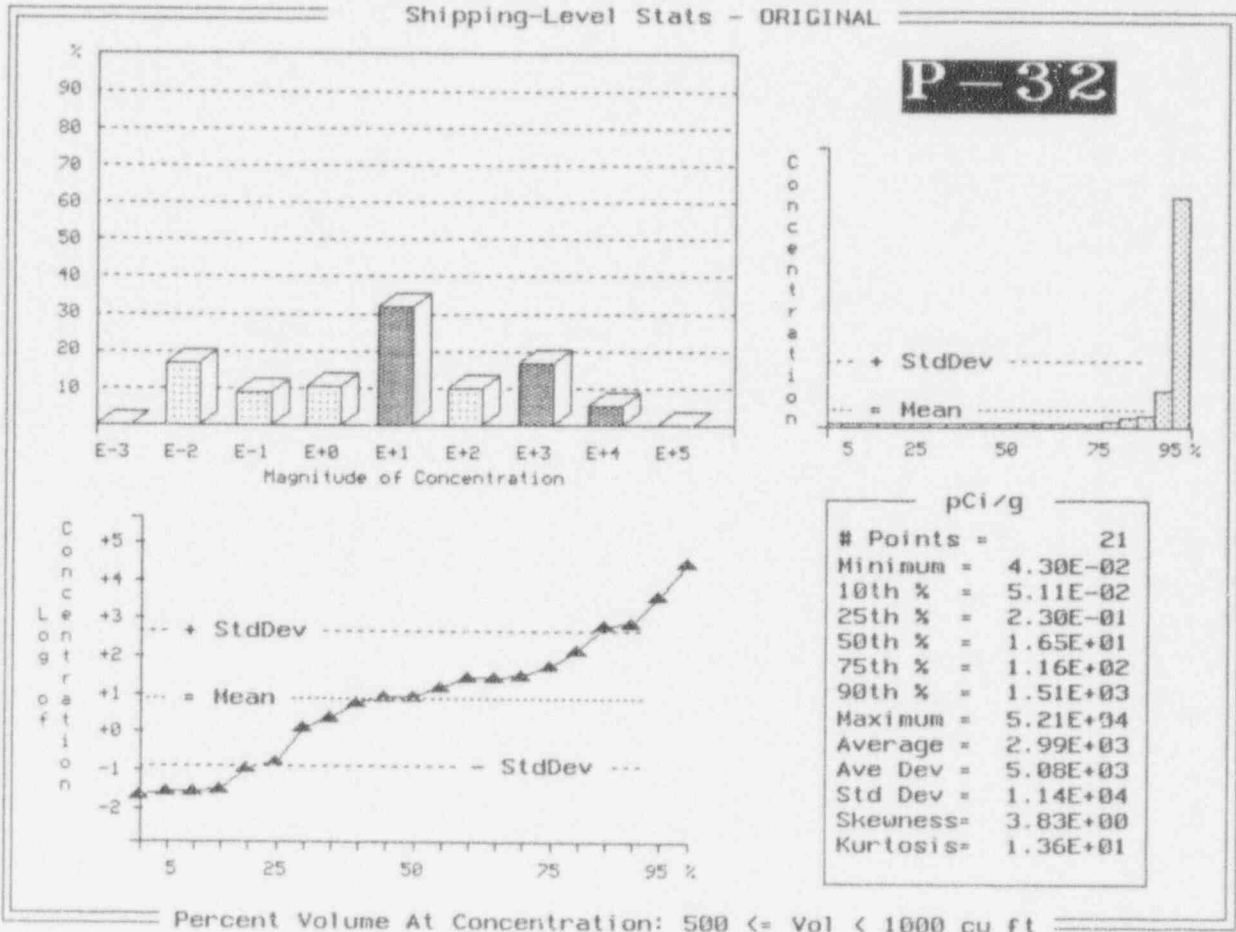


Exhibit F-48 (Continued)

Shipping-Level Stats - ORIGINAL

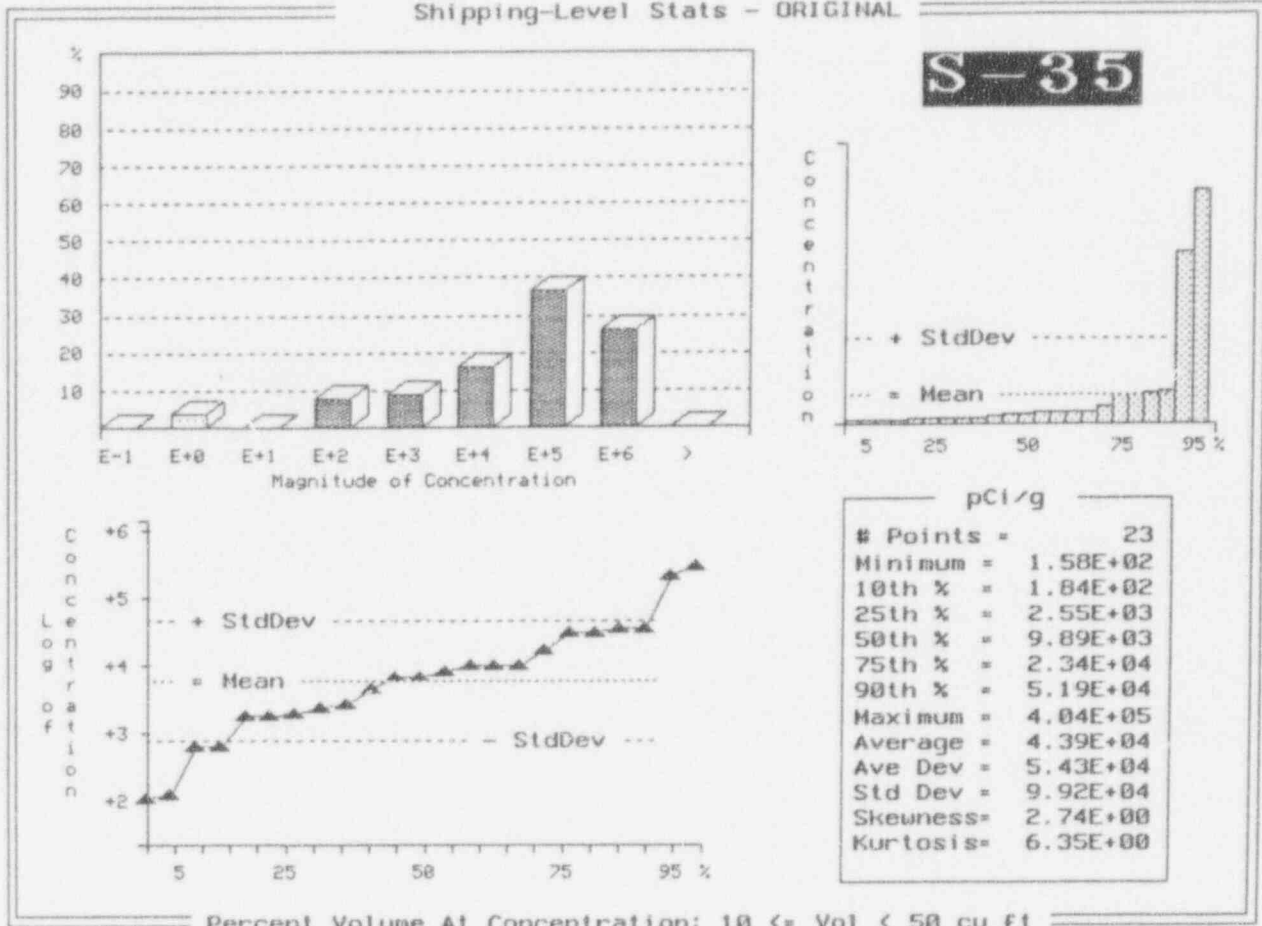


Exhibit F-48 (Continued)

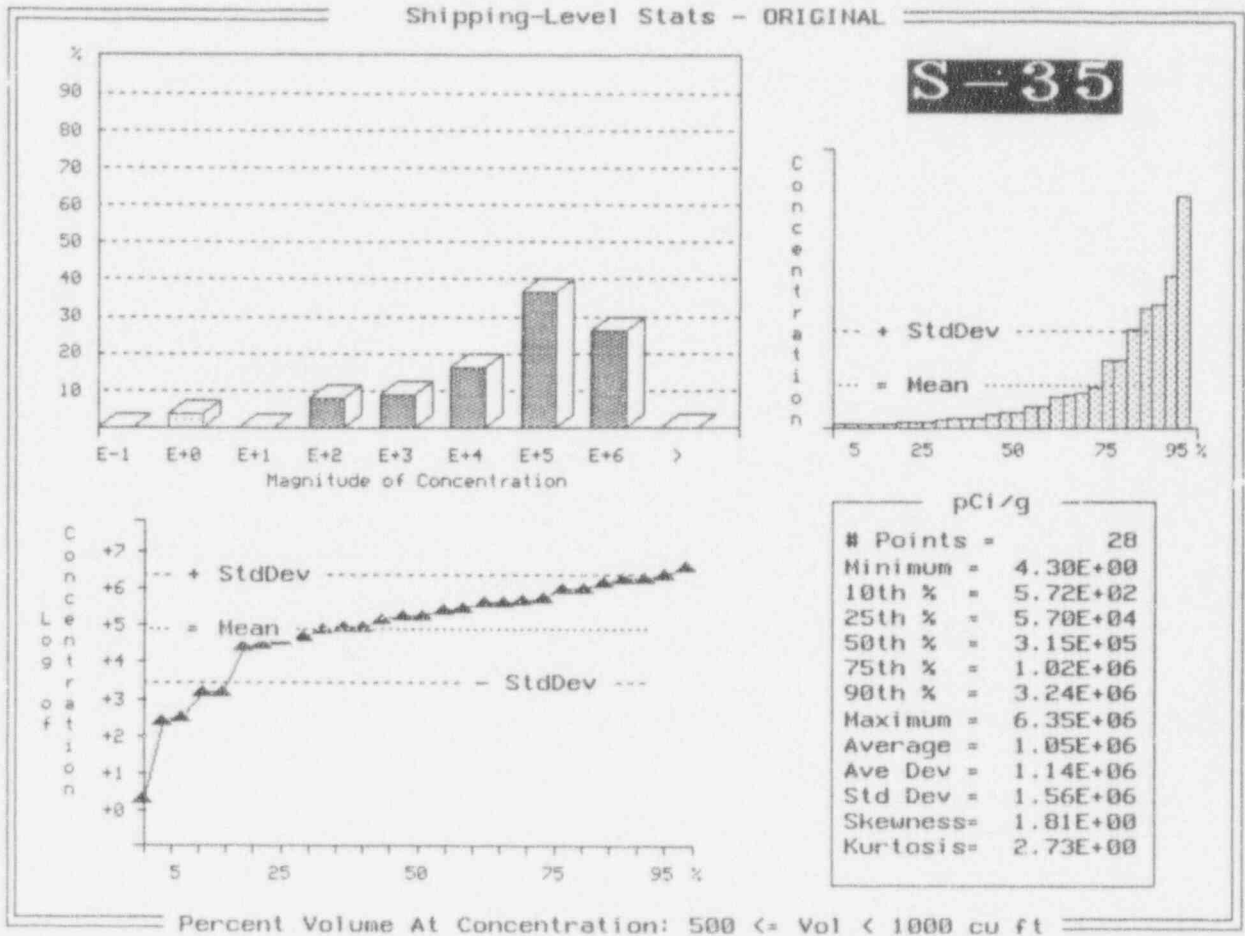


Exhibit F-48 (Continued)

Shipping-Level Stats - ORIGINAL

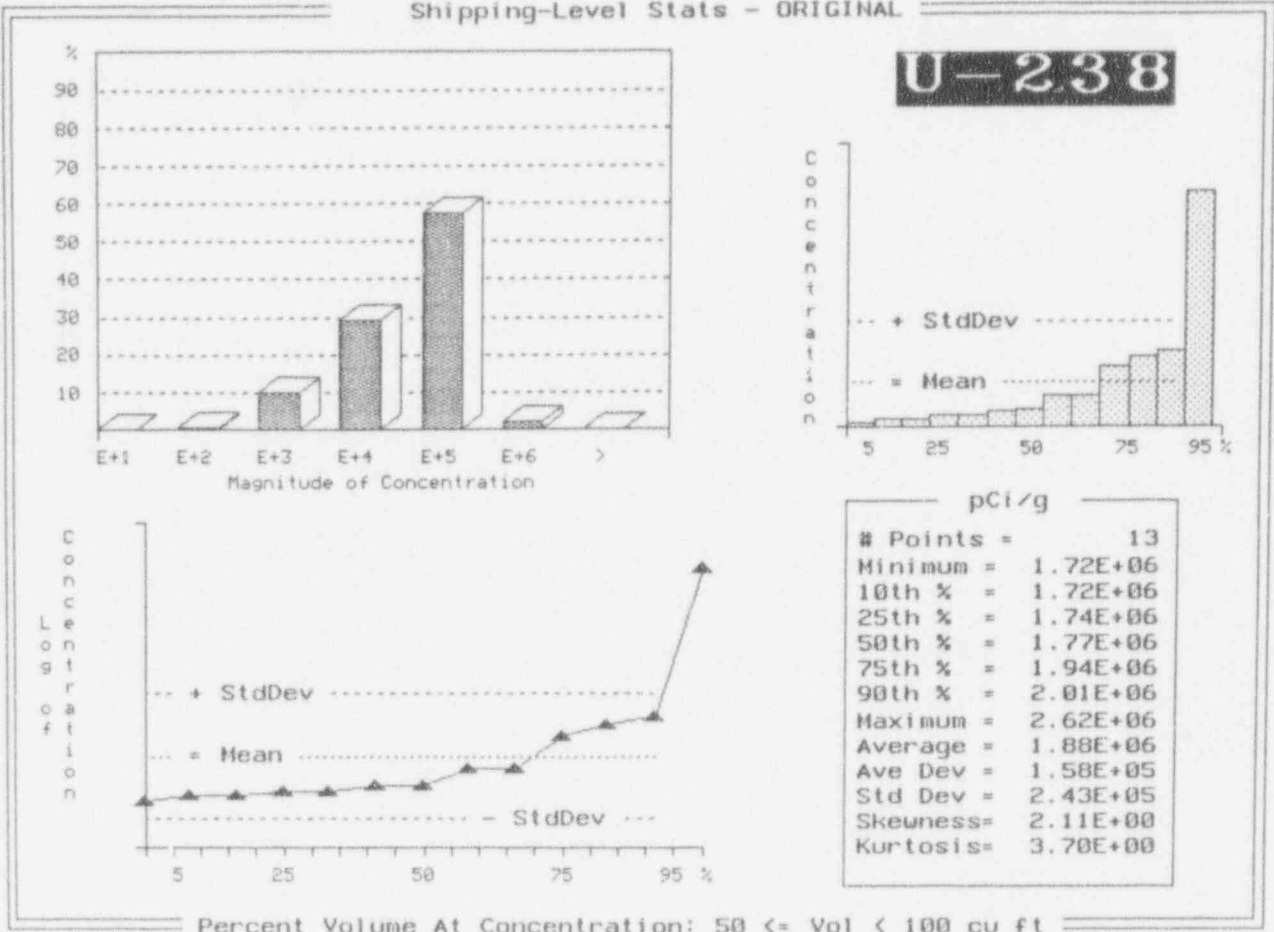


Exhibit F-48 (Continued)

Shipping-Level Stats -- ORIGINAL

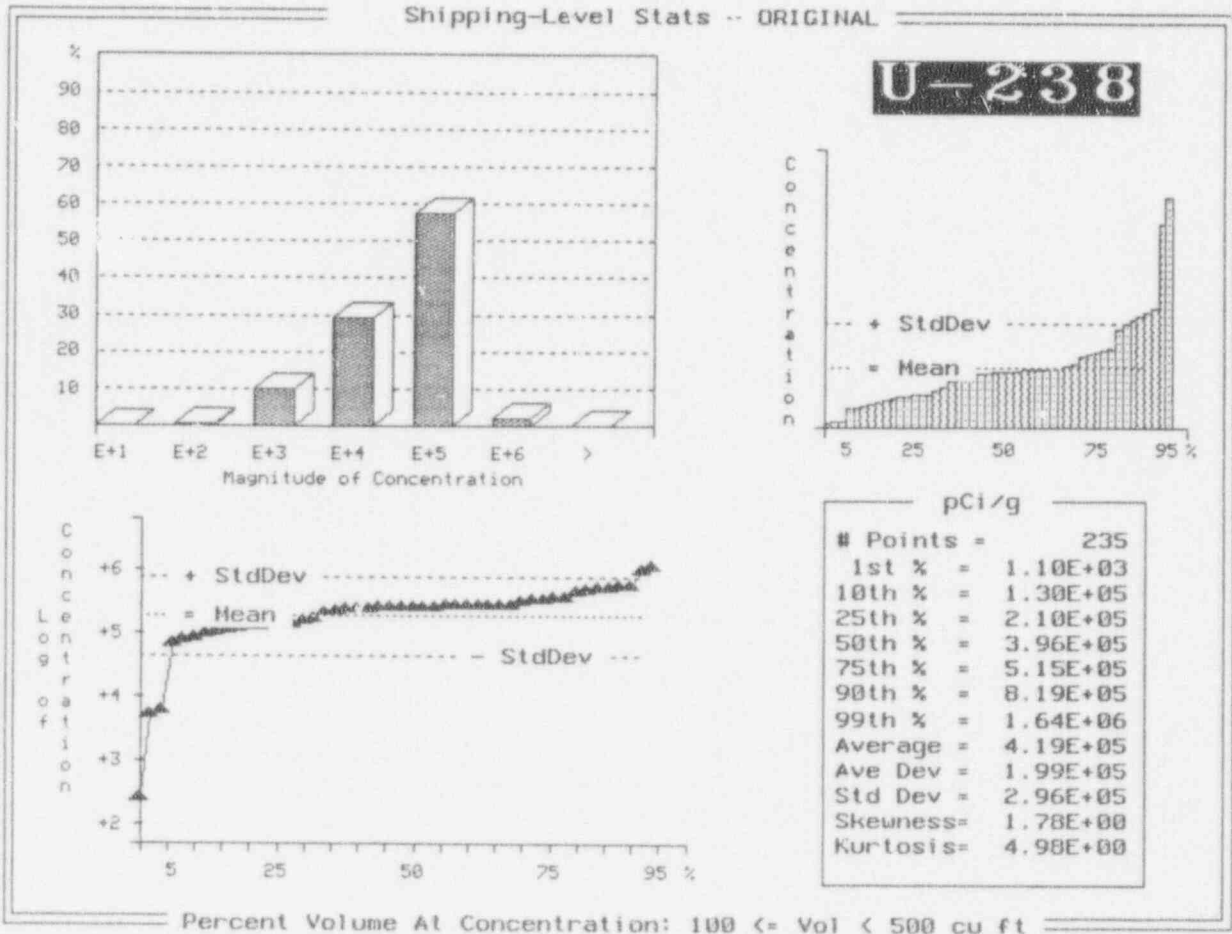


Exhibit F-48 (Continued)

Shipping-Level Stats - ORIGINAL

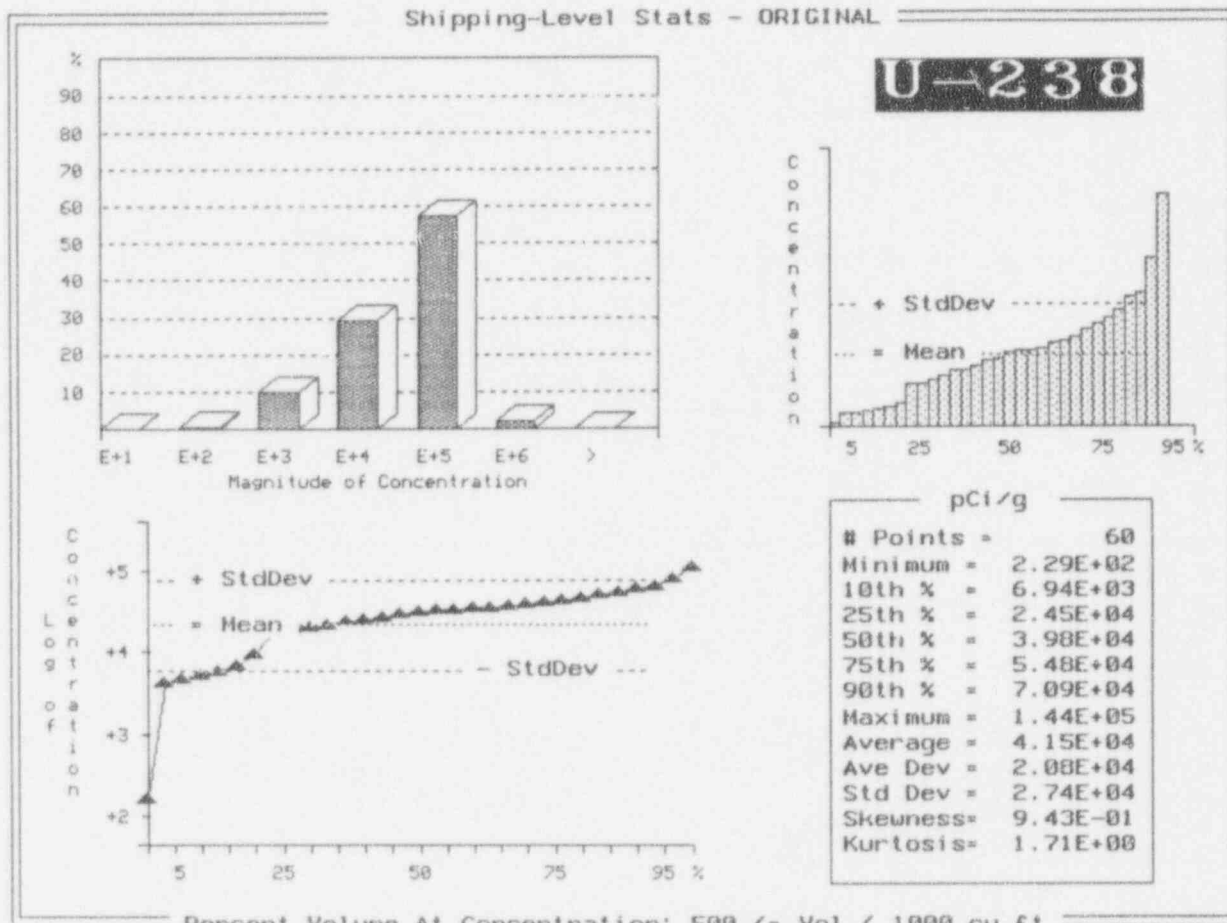


Exhibit F-49
Data Summary - Analyses at the Shipment Level
 (Aggregate Practices for non-brokered waste: 1986 to 1990)

	Data or Parameters
Compact or unaffiliated state:	New Hampshire
Waste generator class:	Government
Total number of waste generators:	1
Total associated waste volume (m ³):	0.15
Total associated waste activity (Ci):	11.23
Waste class:	A-Unstable and A-Stable
Identified waste generators for this analysis:	
Number:	no data
Percent of total(%):	--
Total number of shipping records:	--
Number of shipping records <u>with</u> container data:	--
Number of waste containers:	--
Weight of shipments (kg):	--
Total waste volume (m ³):	--
Fractional waste volume (%): (this analysis/total)	--
Total waste activity (Ci):	--
Fractional waste activity (%): (this analysis/total)	--

Exhibit F-49 (Continued)

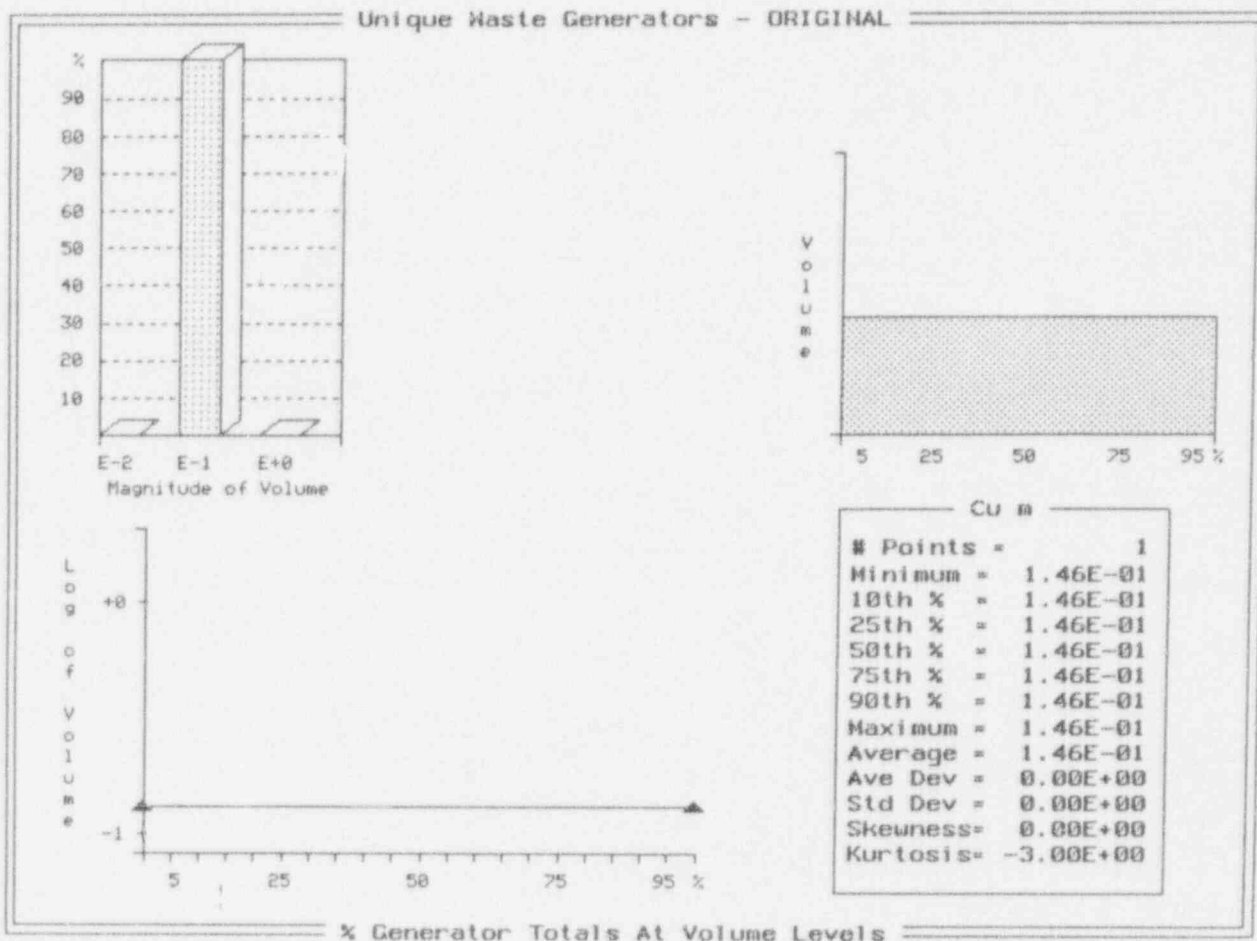


Exhibit F-49 (Continued)

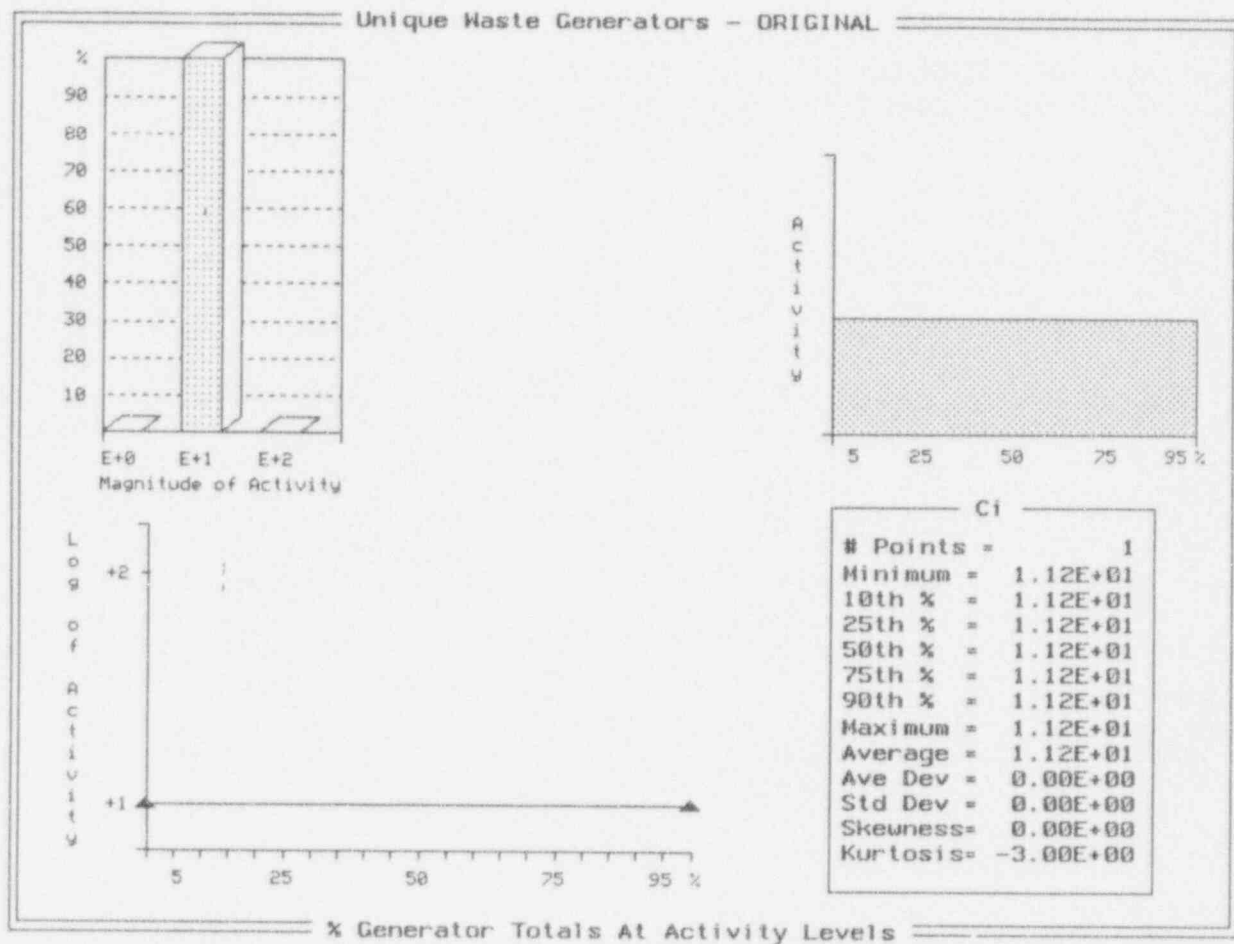


Exhibit F-50
Data Summary - Analyses at the Shipment Level
 (Aggregate Practices for non-brokered waste: 1986 to 1990)

Data or Parameters

Compact or unaffiliated state:	New Hampshire
Waste generator class:	Academic
Total number of waste generators:	1
Total associated waste volume (m ³):	3.5
Total associated waste activity (Ci):	57.1
Waste class:	A-Unstable and A-Stable
Identified waste generators for this analysis:	
Number:	1
Percent of total(%):	100
Total number of shipping records:	1
Number of shipping records <u>with</u> container data:	0
Number of waste containers:	0
Weight of shipments (kg):	724
Total waste volume (m ³):	1.3
Fractional waste volume (%): (this analysis/total)	37
Total waste activity (Ci):	0.001
Fractional waste activity (%): (this analysis/total)	<0.01

Exhibit F-50 (Continued)

Unique Waste Generators - ORIGINAL

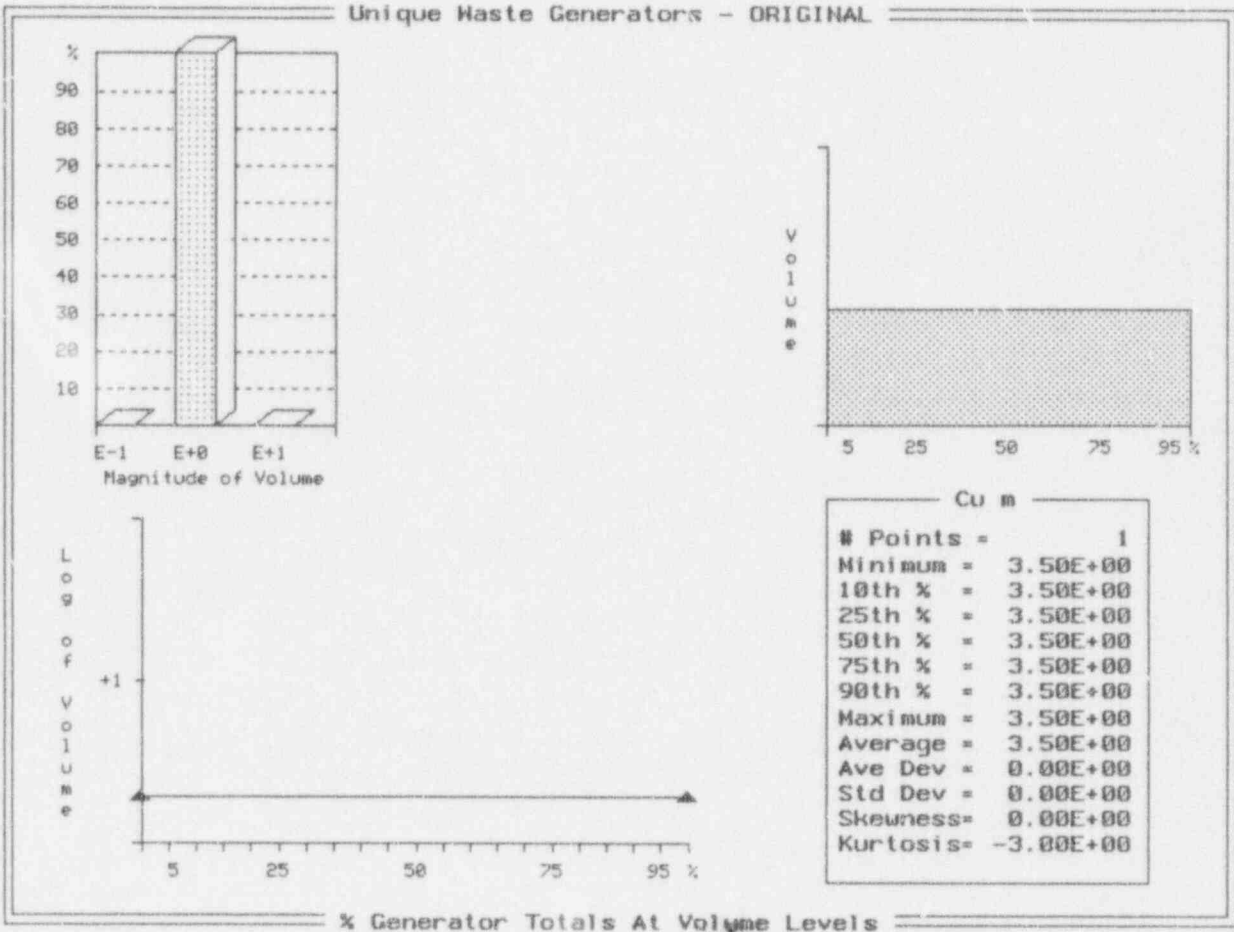


Exhibit F-50 (Continued)

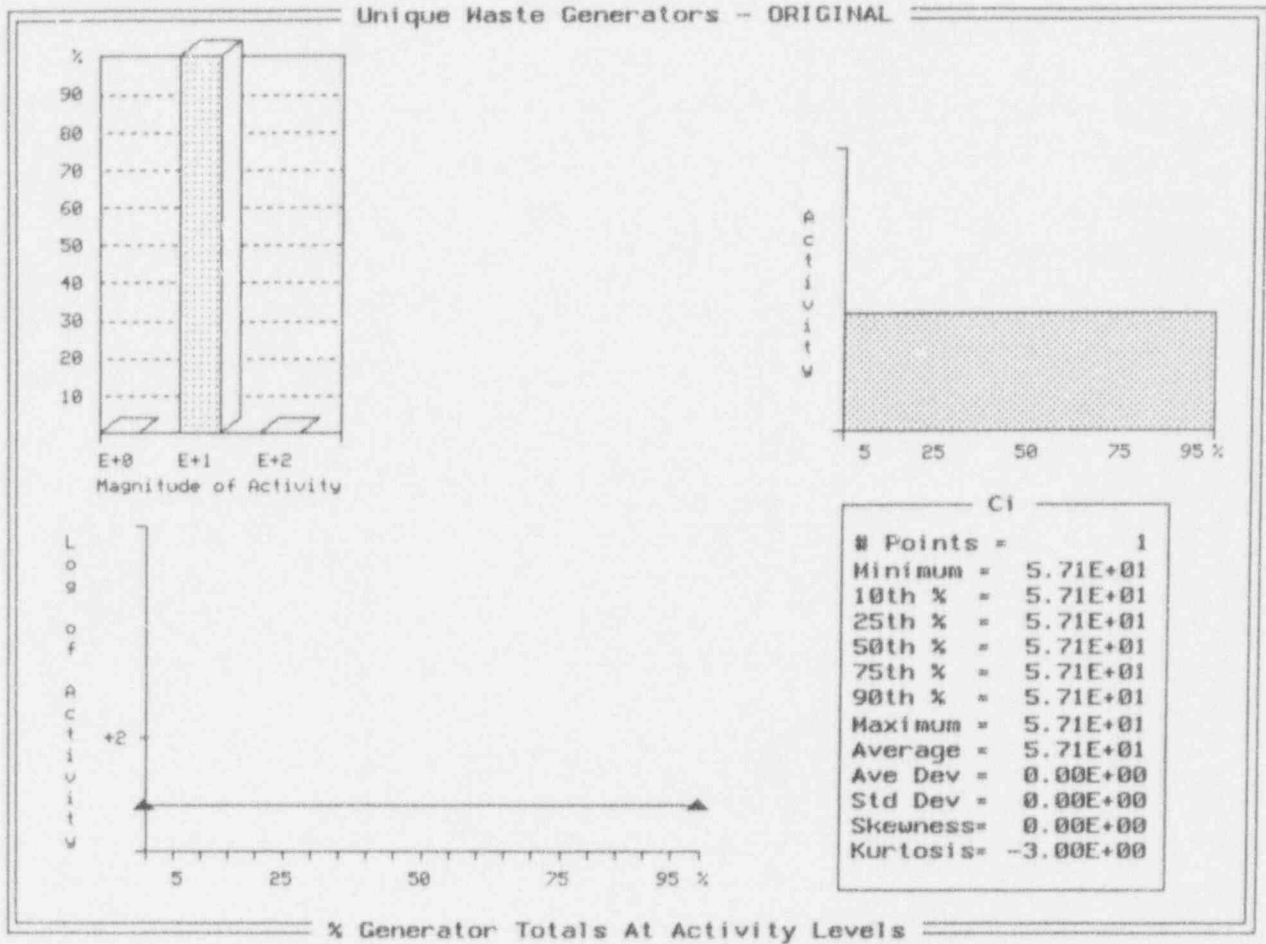


Exhibit F-51
Data Summary - Analyses at the Shipment Level
 (Aggregate Practices for non-brokered waste: 1986 to 1990)

	<u>Data or Parameters</u>
Compact or unaffiliated state:	New Hampshire
Waste generator class:	Medical
Total number of waste generators:	2
Total associated waste volume (m ³):	0.15
Total associated waste activity (Ci):	0.25
Waste class:	A-Unstable and A-Stable
Identified waste generators for this analysis:	
Number:	no data
Percent of total(%):	--
Total number of shipping records:	--
Number of shipping records <u>with</u> container data:	--
Number of waste containers:	--
Weight of shipments (kg):	--
Total waste volume (m ³):	--
Fractional waste volume (%): (this analysis/total)	--
Total waste activity (Ci):	--
Fractional waste activity (%): (this analysis/total)	--

Exhibit F-51 (Continued)

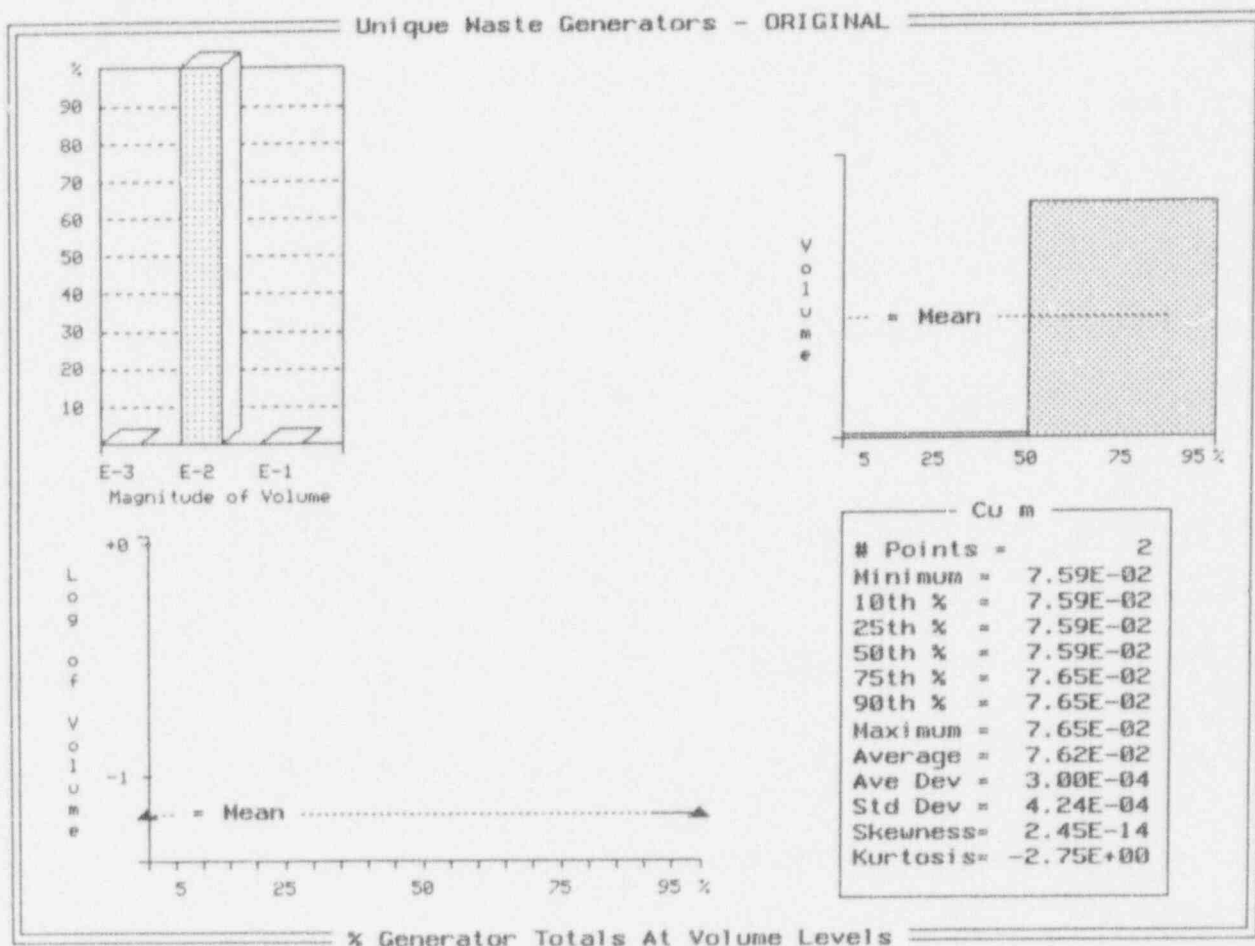


Exhibit F-51 (Continued)

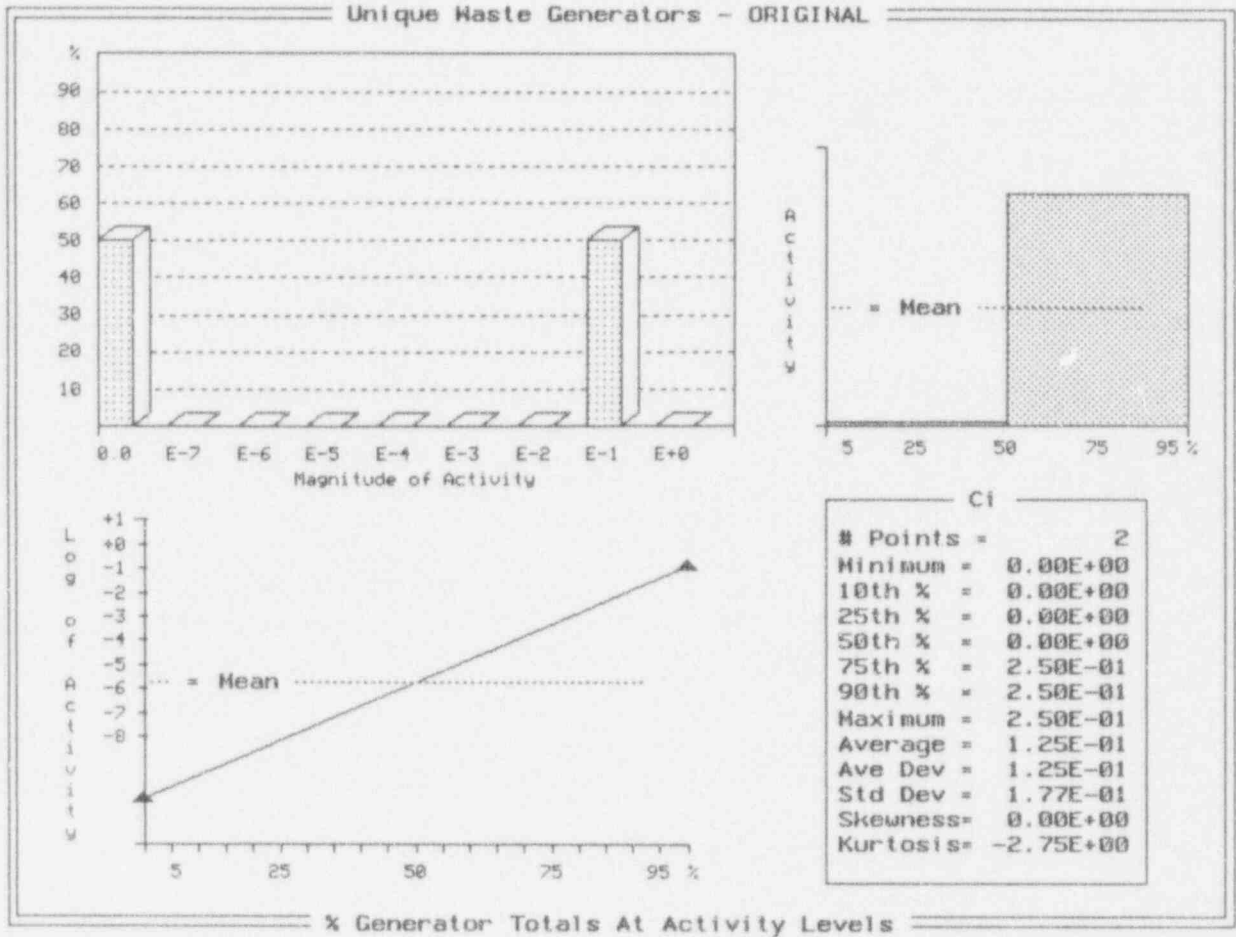


Exhibit F-52
Data Summary - Analyses at the Shipment Level
 (Aggregate Practices for non-brokered waste: 1986 to 1990)

	<u>Data or Parameters</u>
Compact or unaffiliated state:	New Hampshire
Waste generator class:	Industrial
Total number of waste generators:	7
Total associated waste volume (m ³):	80
Total associated waste activity (Ci):	3.3
Waste class:	A-Unstable and A-Stable
Identified waste generators for this analysis:	
Number:	2
Percent of total(%):	29
Total number of shipping records:	6
Number of shipping records <u>with</u> container data:	0
Number of waste containers:	0
Weight of shipments (kg):	75,000
Total waste volume (m ³):	0.9
Fractional waste volume (%): (this analysis/total)	1
Total waste activity (Ci):	2.6
Fractional waste activity (%): (this analysis/total)	79

Exhibit F-52 (Continued)

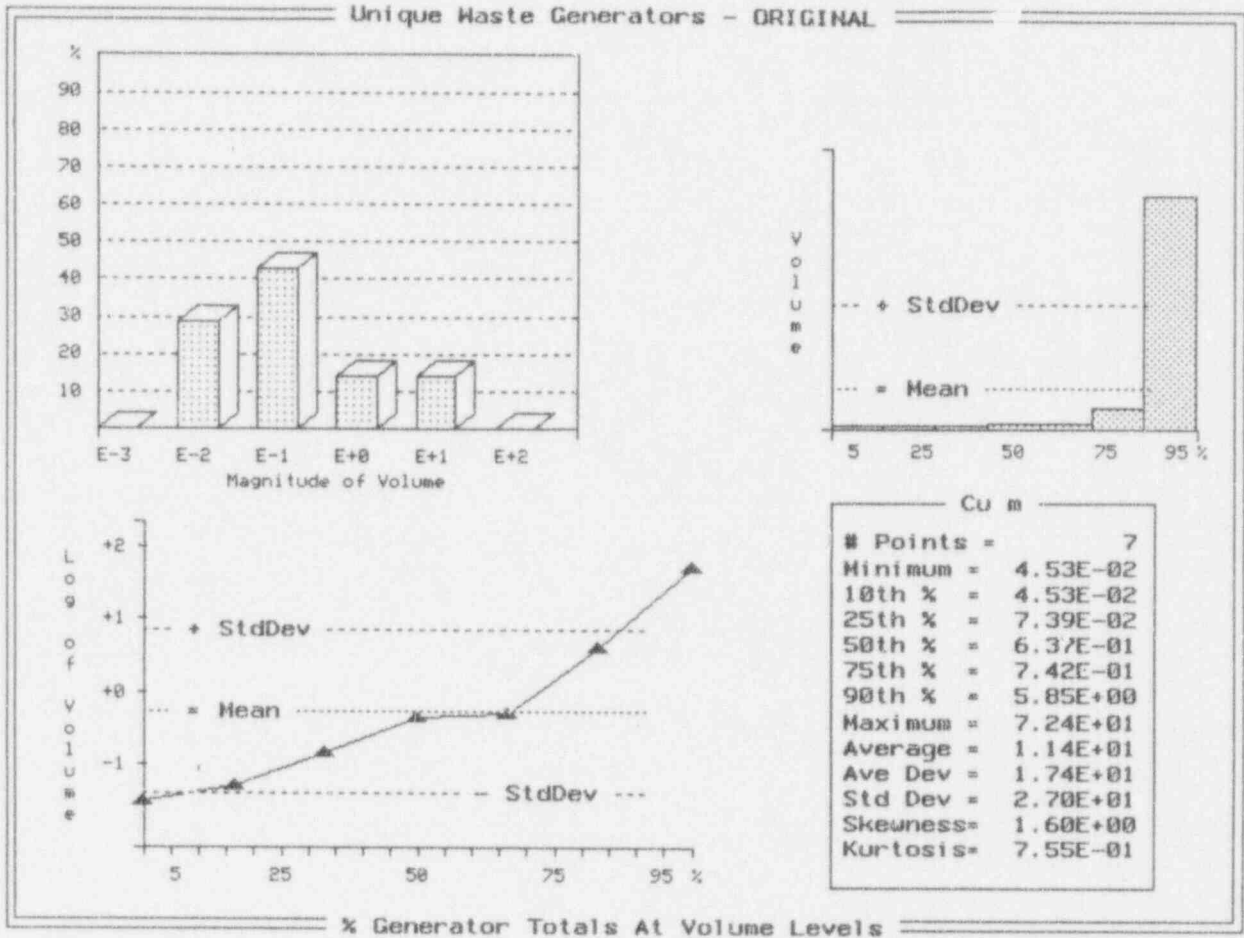


Exhibit F-52 (Continued)

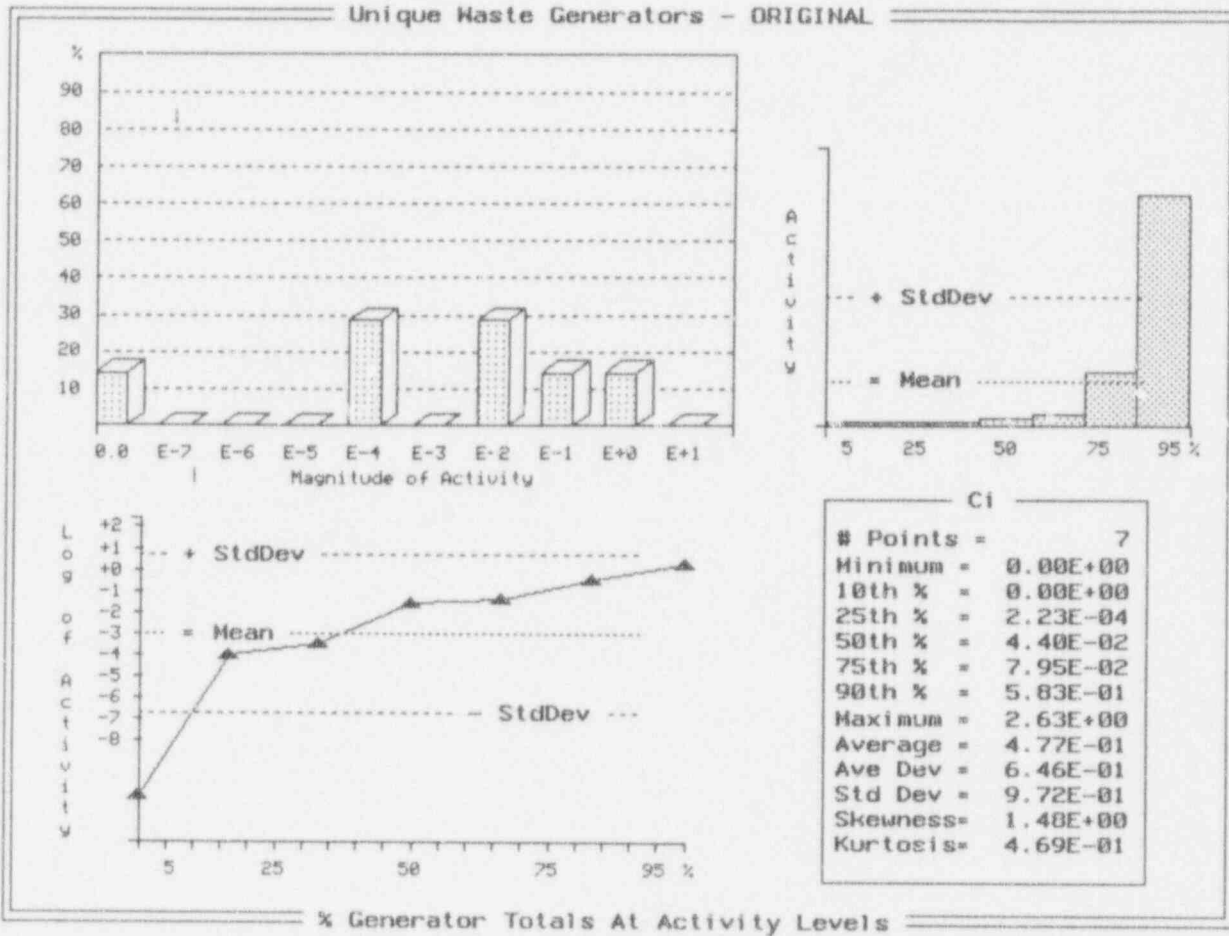


Exhibit F-53
Data Summary - Analyses at the Shipment Level
 (Aggregate Practices for non-brokered waste: 1986 to 1990)

	<u>Data or Parameters</u>
Compact or unaffiliated state:	New York
Waste generator class:	Government
Total number of waste generators:	21
Total associated waste volume (m ³):	279
Total associated waste activity (Ci):	530
Waste class:	A-Unstable and A-Stable
Identified waste generators for this analysis:	
Number:	3
Percent of total(%):	14
Total number of shipping records:	5
Number of shipping records <u>with</u> container data:	0
Number of waste containers:	0
Weight of shipments (kg):	26,470
Total waste volume (m ³):	37.8
Fractional waste volume (%): (this analysis/total)	13
Total waste activity (Ci):	0.18
Fractional waste activity (%): (this analysis/total)	0.03

Exhibit F-53 (Continued)

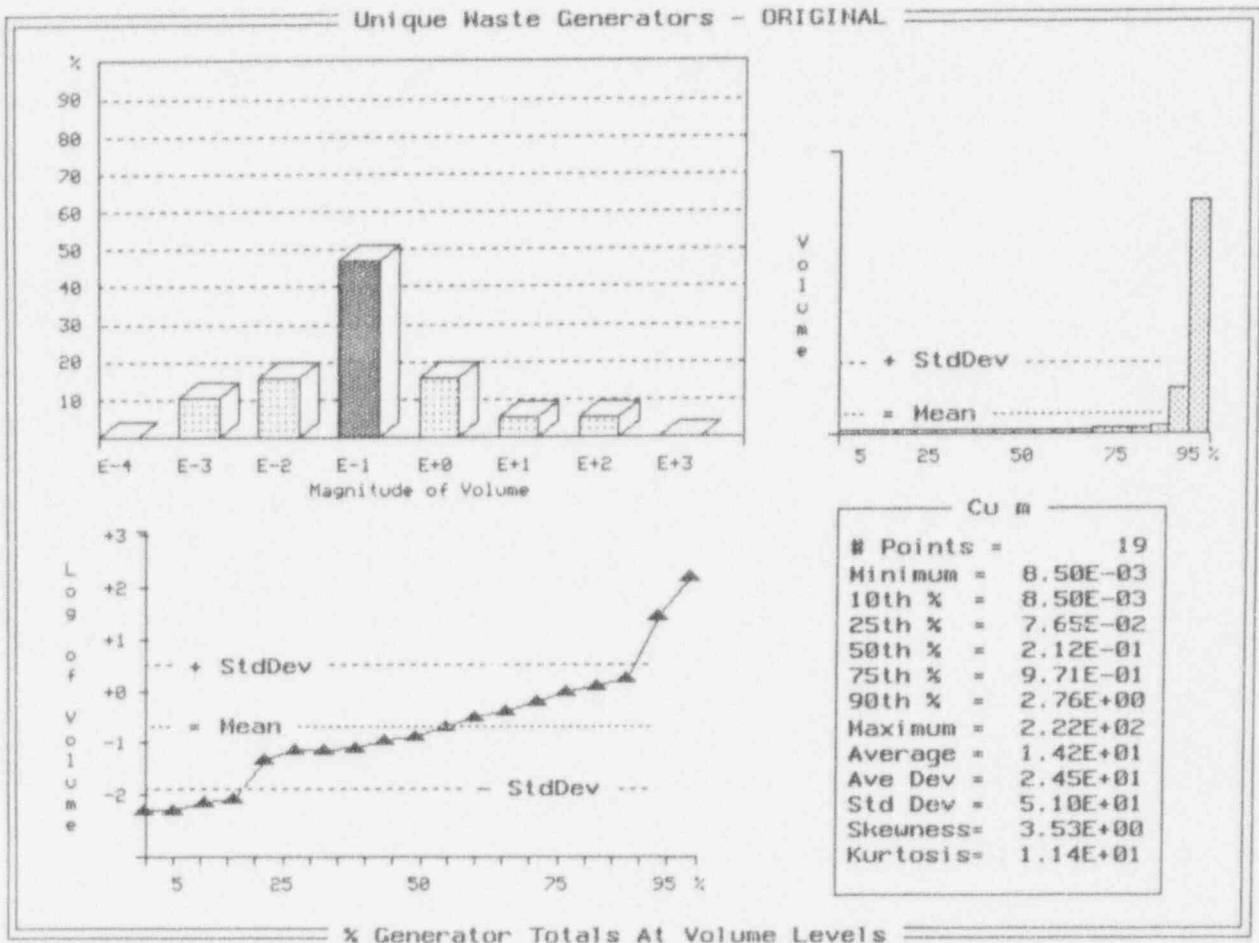


Exhibit F-53 (Continued)

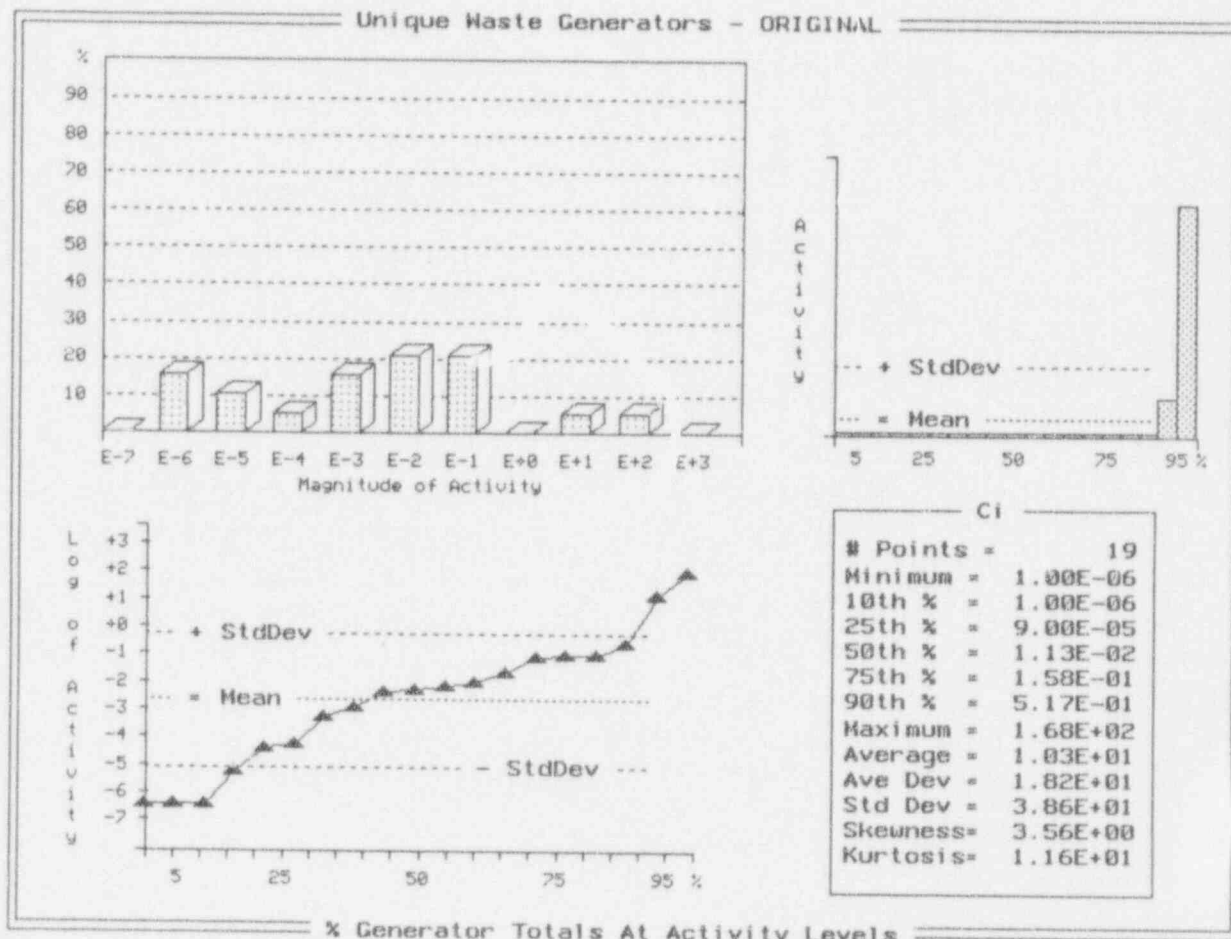


Exhibit F-54
Data Summary - Analyses at the Shipment Level
 (Aggregate Practices for non-brokered waste: 1986 to 1990)

	<u>Data or Parameters</u>
Compact or unaffiliated state:	New York
Waste generator class:	Academic
Total number of waste generators:	86
Total associated waste volume (m ³):	410
Total associated waste activity (Ci):	2,640
Waste class:	A-Unstable and A-Stable
Identified waste generators for this analysis:	
Number:	23
Percent of total(%):	27
Total number of shipping records:	89
Number of shipping records <u>with</u> container data:	0
Number of waste containers:	0
Weight of shipments (kg):	33,370
Total waste volume (m ³):	58.8
Fractional waste volume (%): (this analysis/total)	14
Total waste activity (Ci):	18.4
Fractional waste activity (%): (this analysis/total)	0.7

Exhibit F-54 (Continued)

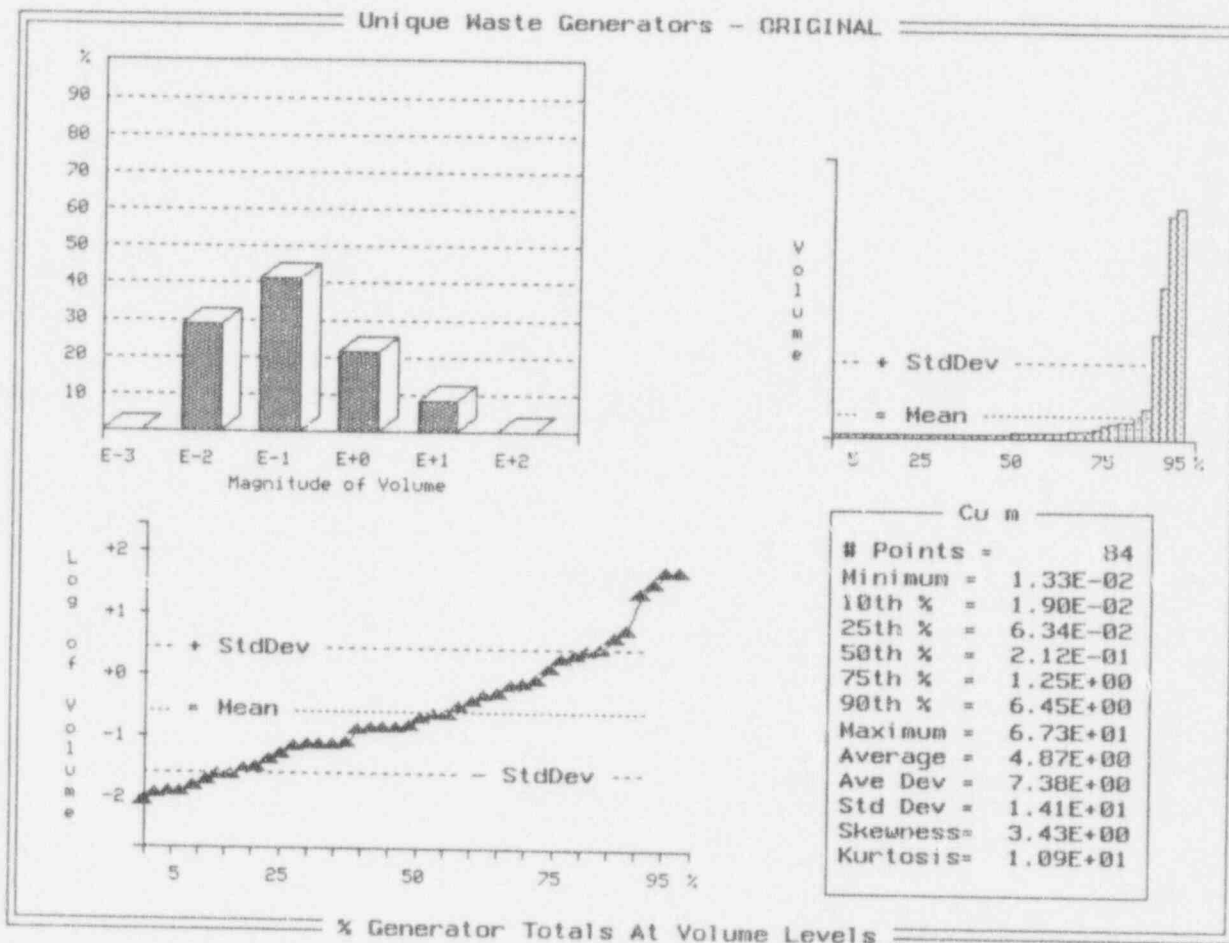


Exhibit F-54 (Continued)

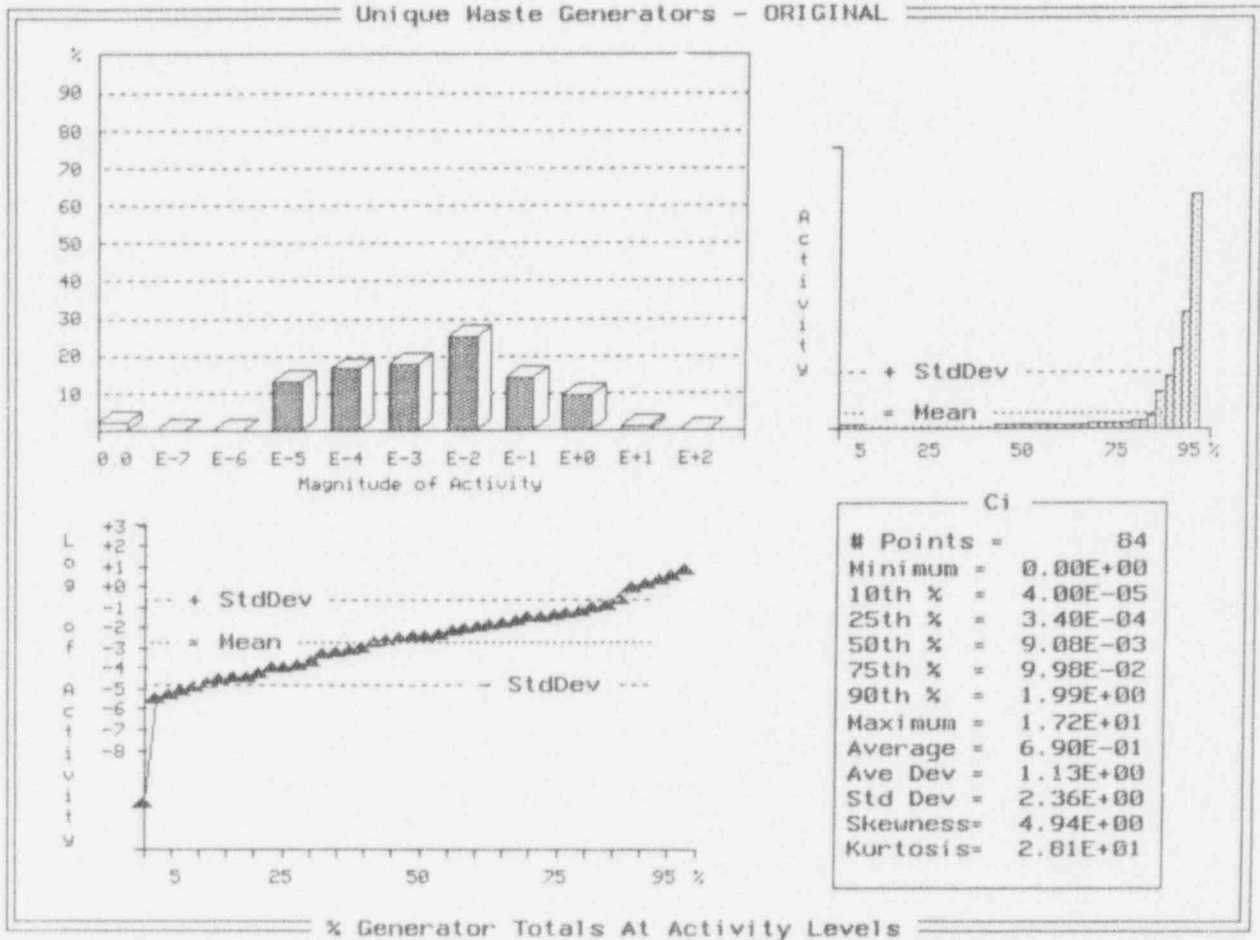


Exhibit F-54 (Continued)

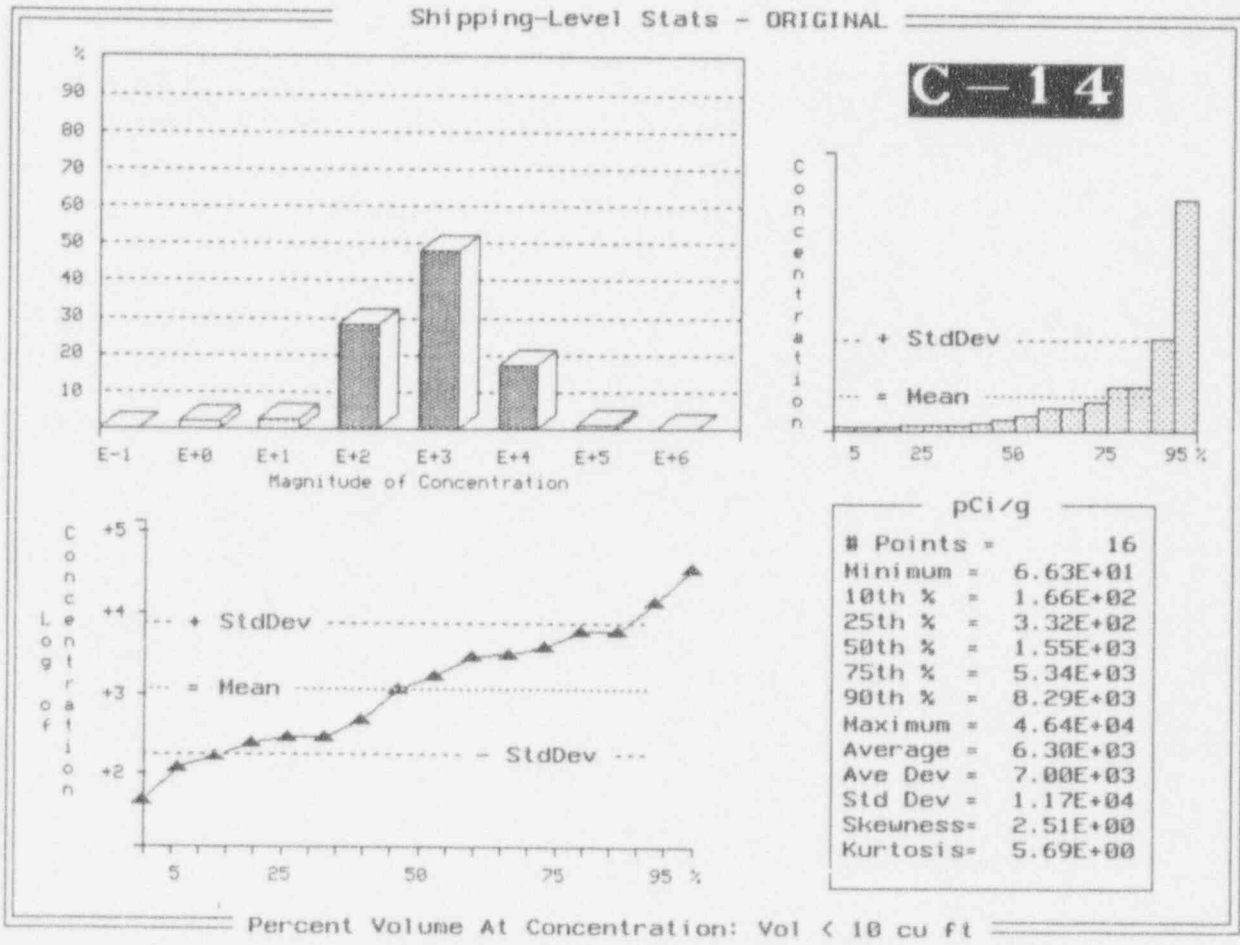


Exhibit F-54 (Continued)

Shipping-Level Stats - ORIGINAL

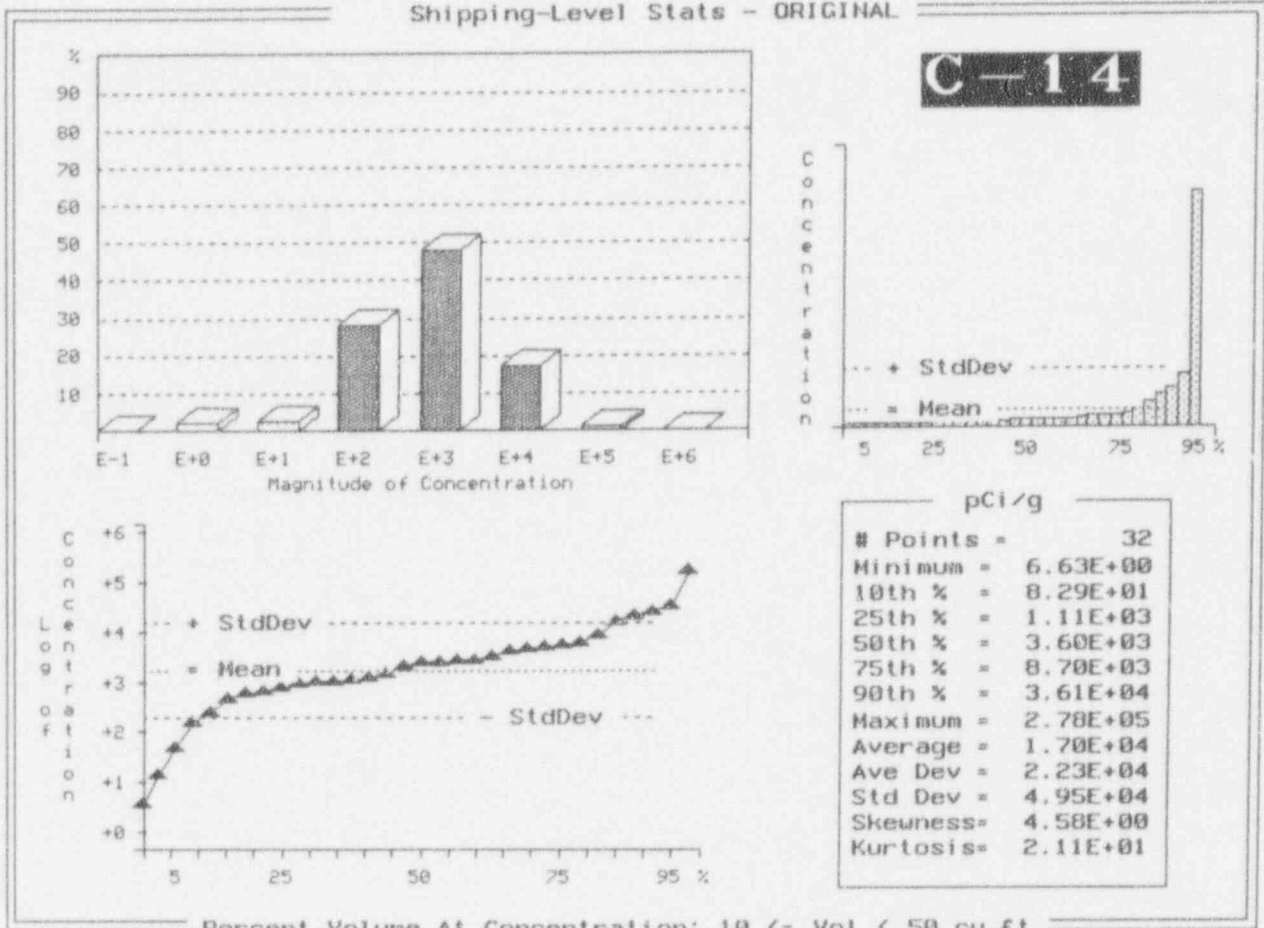


Exhibit F-54 (Continued)

Shipping-Level Stats - ORIGINAL

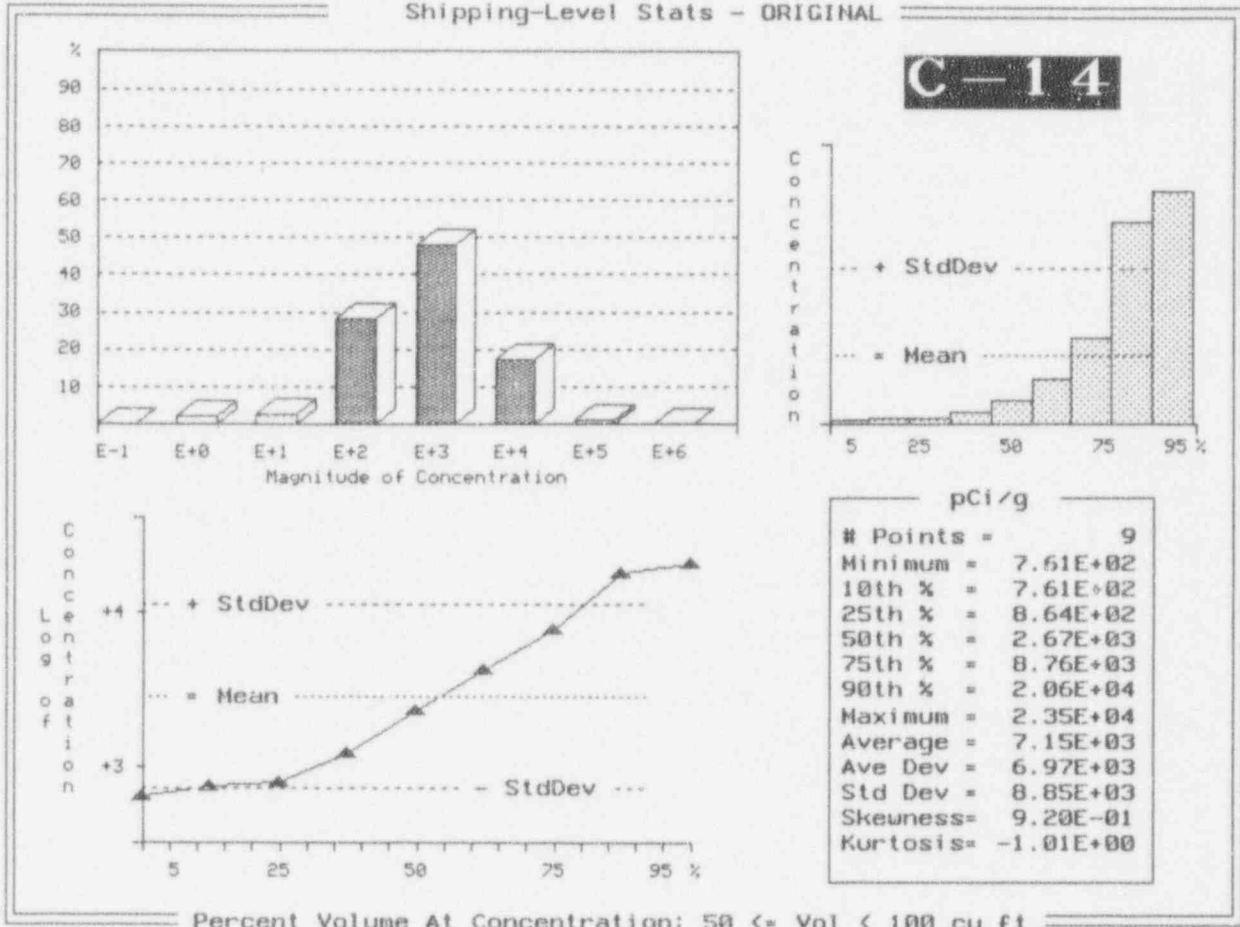


Exhibit F-54 (Continued)

Shipping-Level Stats - ORIGINAL

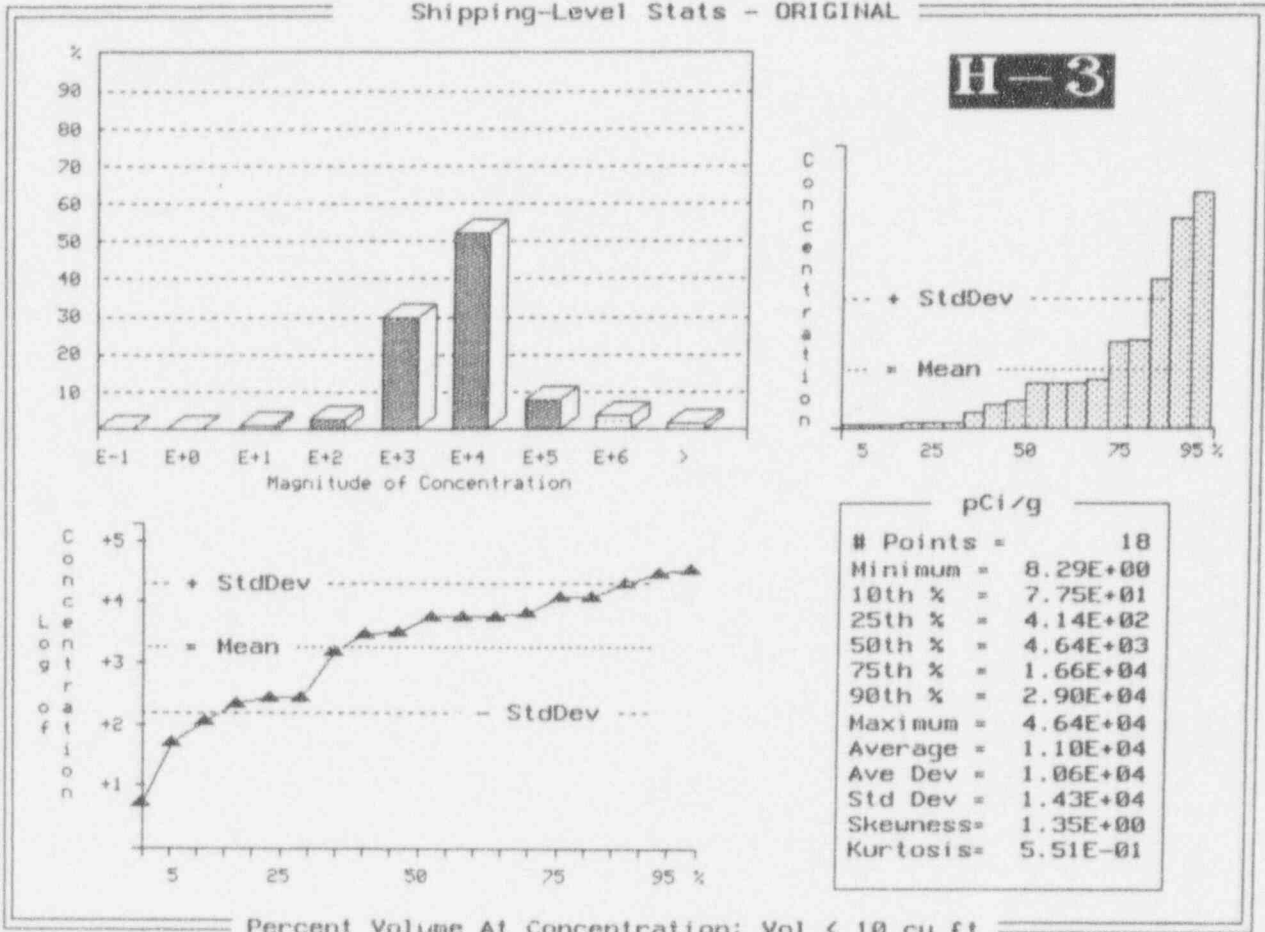


Exhibit F-54 (Continued)

Shipping-Level Stats - ORIGINAL

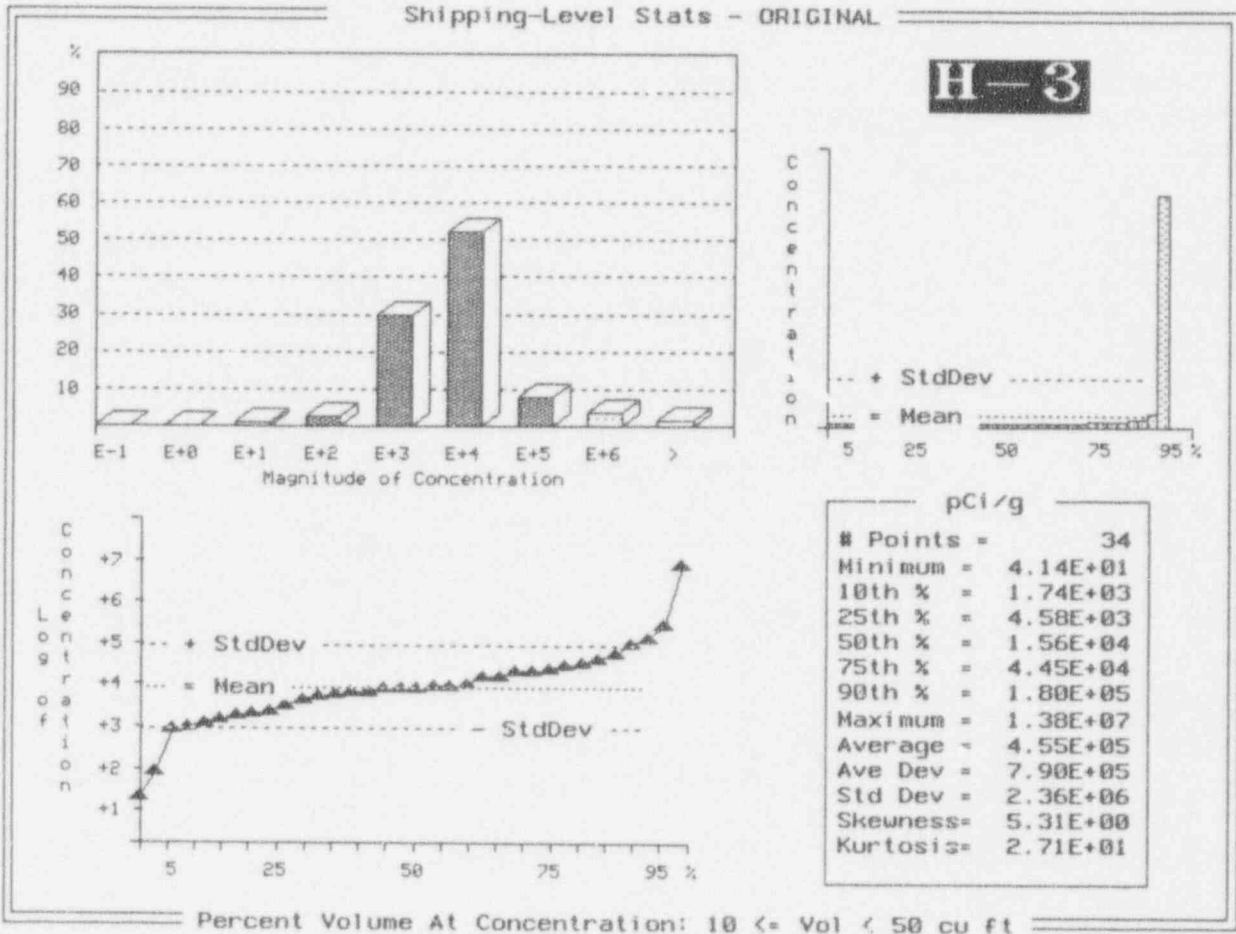


Exhibit F-54 (Continued)

Shipping-Level Stats - ORIGINAL

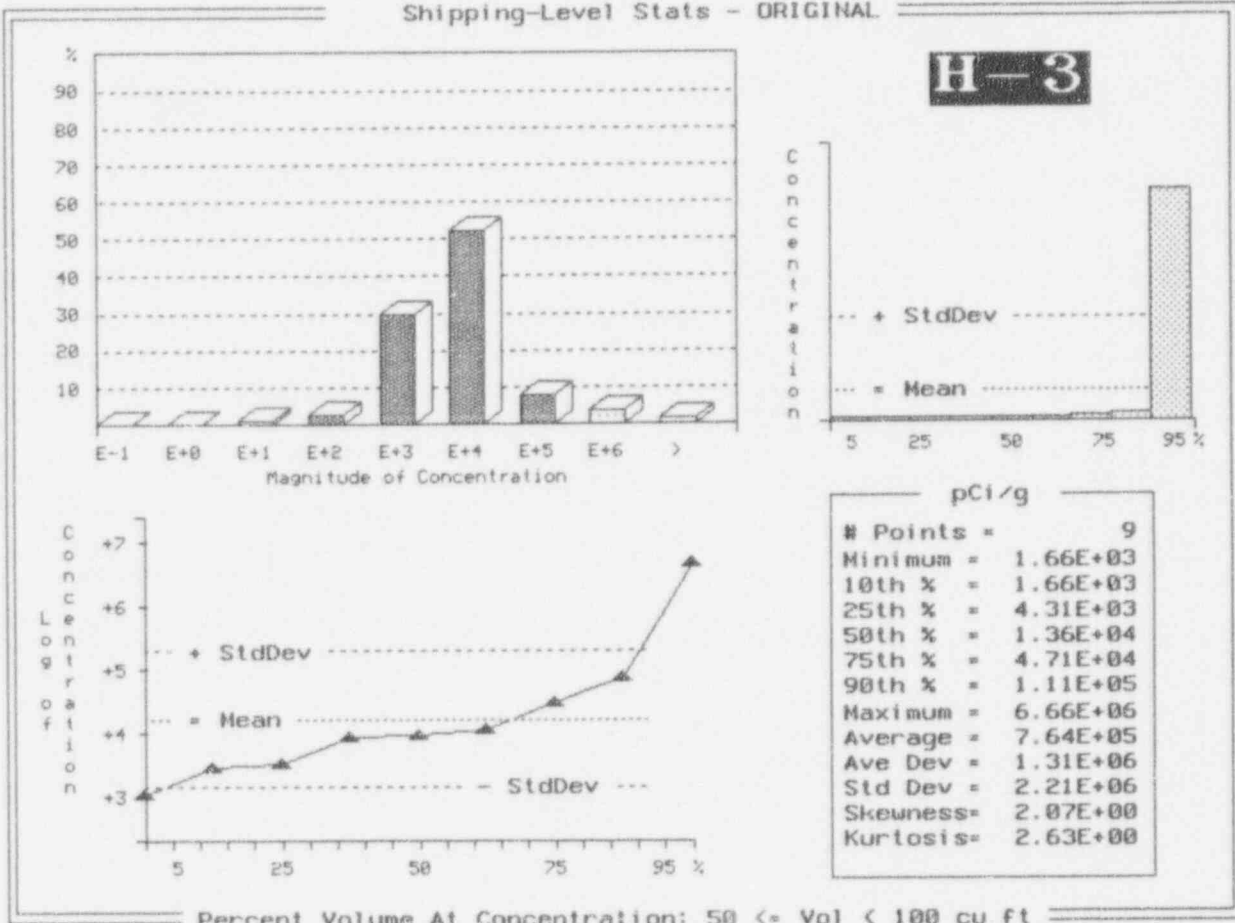
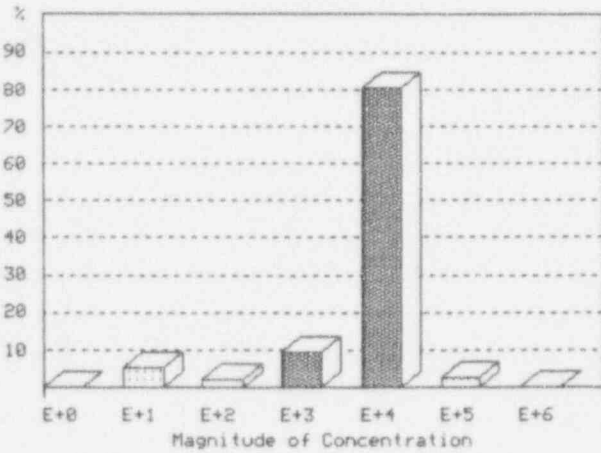
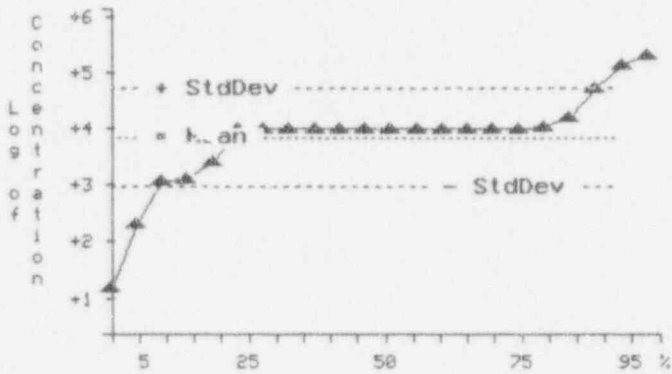
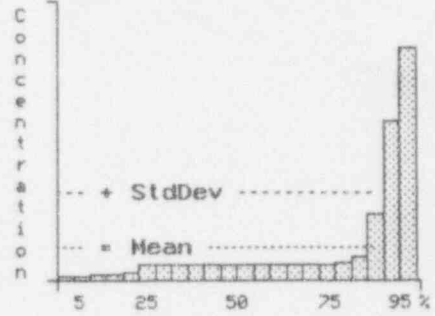


Exhibit F-54 (Continued)

Shipping-Level Stats - ORIGINAL



I-125



pCi/g	
# Points =	22
Minimum =	2.49E+01
10th % =	3.25E+02
25th % =	1.55E+04
50th % =	1.55E+04
75th % =	1.55E+04
90th % =	8.29E+04
Maximum =	3.03E+05
Average =	3.77E+04
Ave Dev =	4.36E+04
Std Dev =	7.37E+04
Skewness =	2.64E+00
Kurtosis =	5.91E+00

Percent Volume At Concentration: Vol < 10 cu ft

Exhibit F-54 (Continued)

Shipping-Level Stats - ORIGINAL

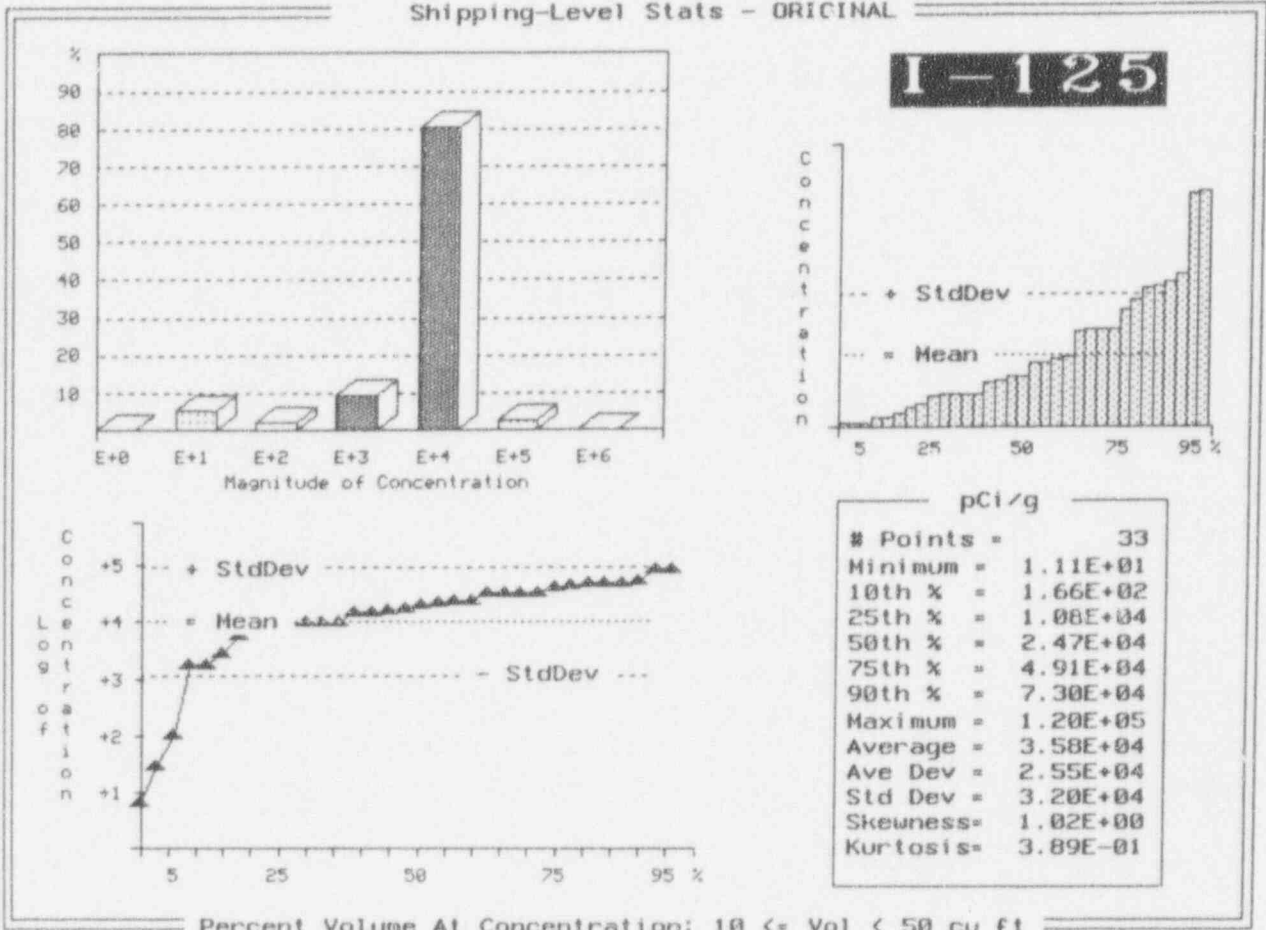


Exhibit F-54 (Continued)

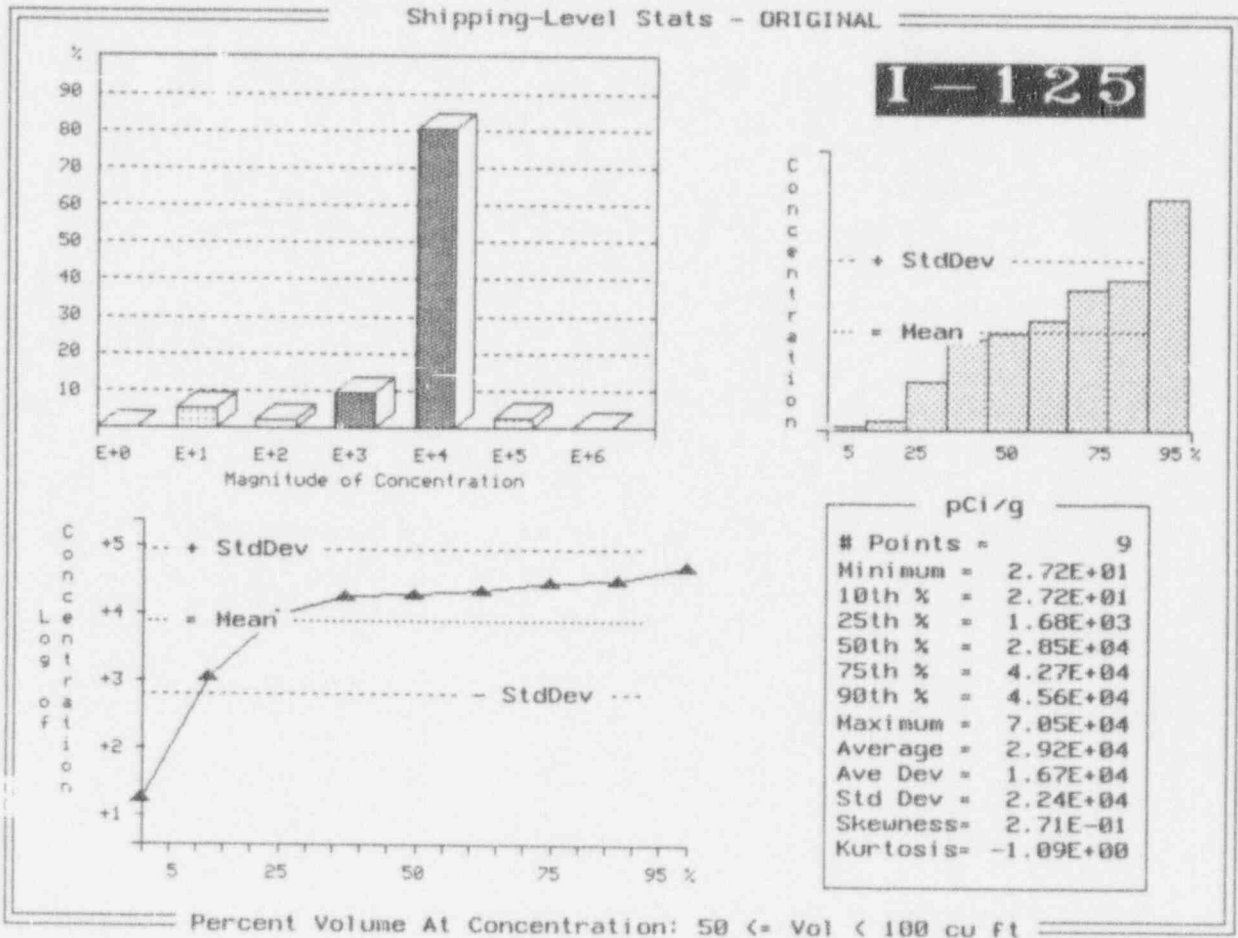
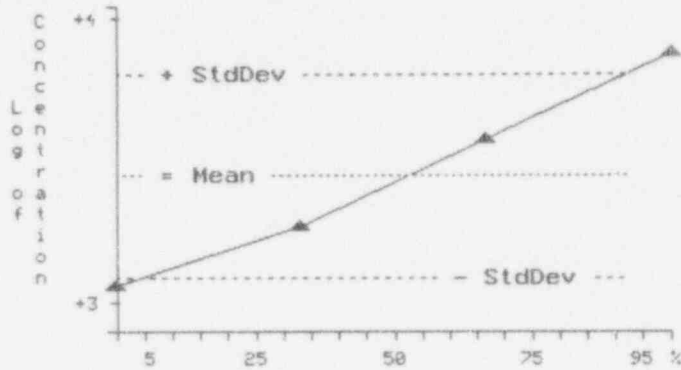
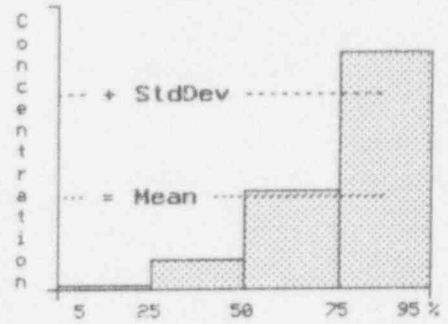
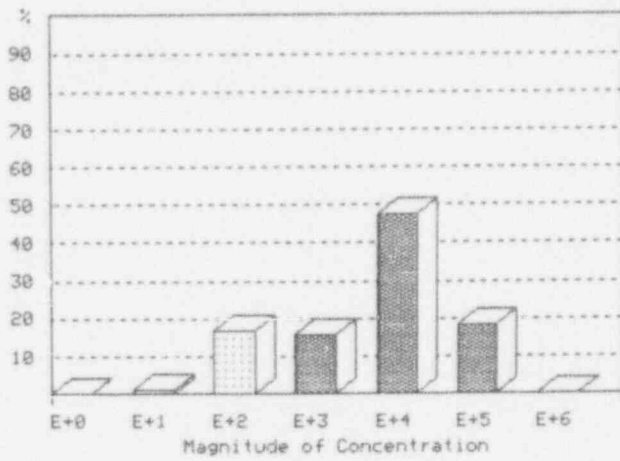


Exhibit F-54 (Continued)

Shipping-Level Stats - ORIGINAL

P-32



pCi/g	
# Points =	4
Minimum =	1.28E+03
10th % =	1.28E+03
25th % =	1.28E+03
50th % =	2.07E+03
75th % =	4.14E+03
90th % =	8.29E+03
Maximum =	8.29E+03
Average =	3.95E+03
Ave Dev =	2.27E+03
Std Dev =	3.14E+03
Skewness =	4.56E-01
Kurtosis =	-1.92E+00

Percent Volume At Concentration: Vol < 10 cu ft

Exhibit F-54 (Continued)

Shipping-Level Stats - ORIGINAL

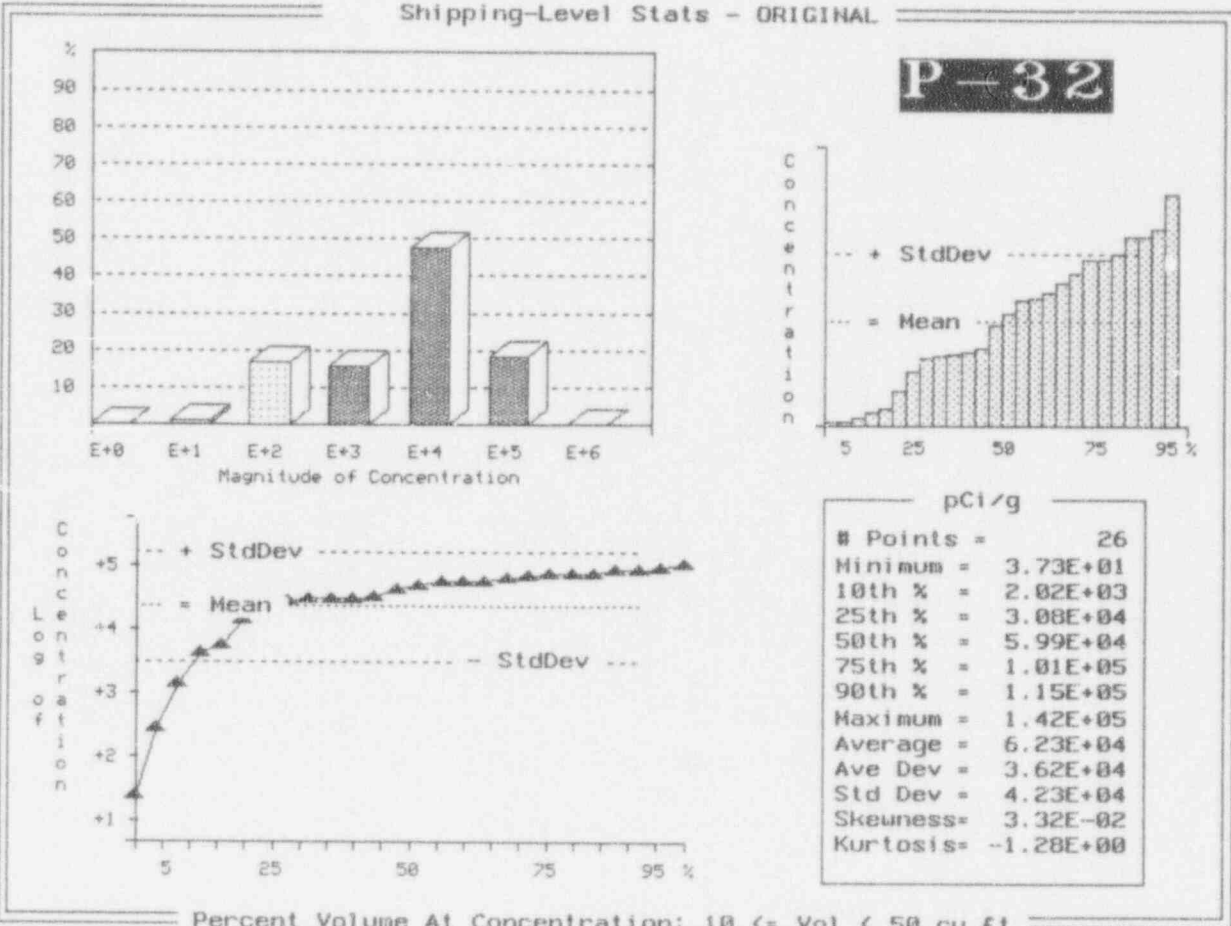
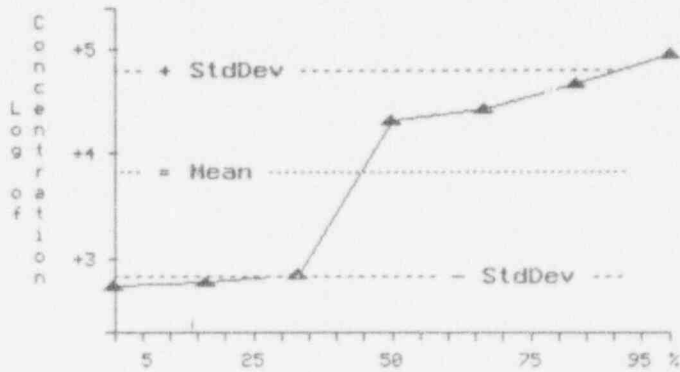
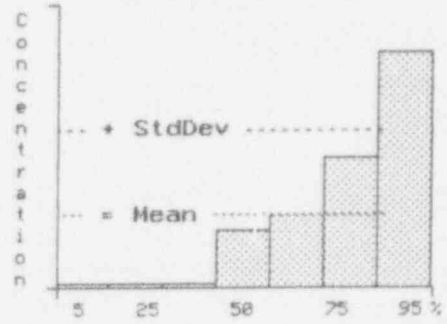
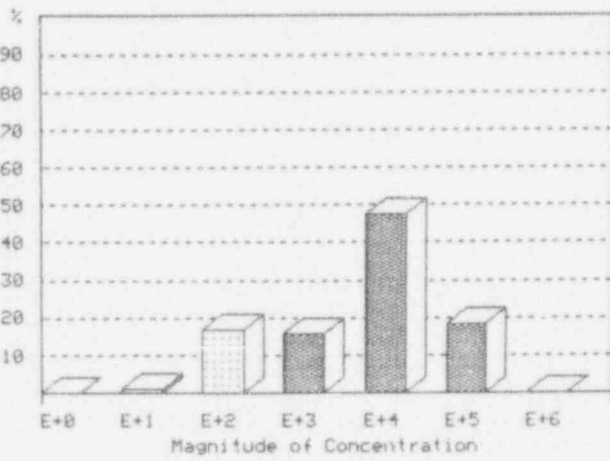


Exhibit F-54 (Continued)

Shipping-Level Stats - ORIGINAL

P-32



pCi/g	
# Points =	7
Minimum =	7.04E+02
10th % =	7.04E+02
25th % =	7.54E+02
50th % =	2.63E+04
75th % =	3.40E+04
90th % =	6.06E+04
Maximum =	1.12E+05
Average =	3.36E+04
Ave Dev =	3.02E+04
Std Dev =	4.10E+04
Skewness =	8.05E-01
Kurtosis =	-9.27E-01

Percent Volume At Concentration: 50 <= Vol < 100 cu ft

Exhibit F-54 (Continued)

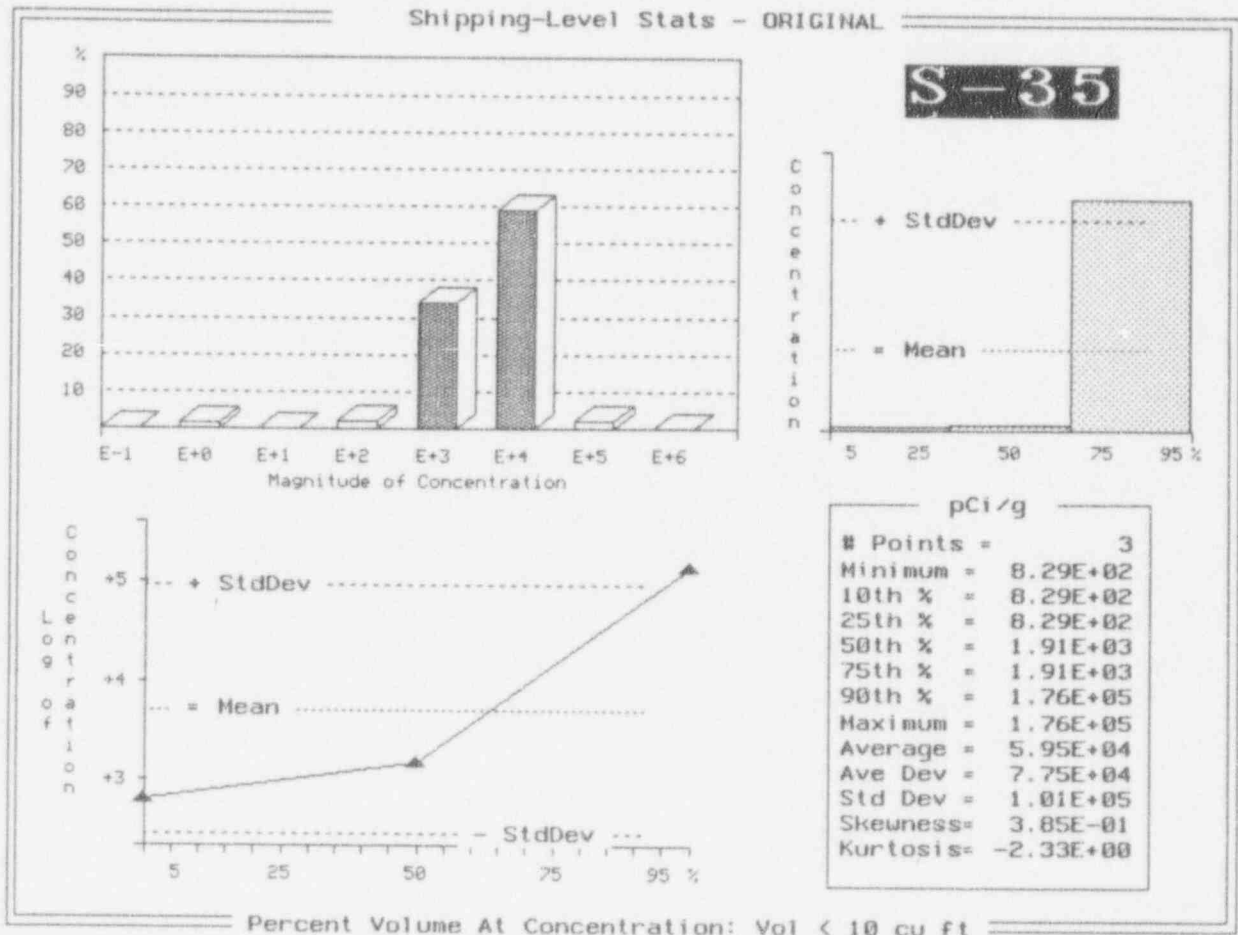


Exhibit F-54 (Continued)

Shipping-Level Stats - ORIGINAL

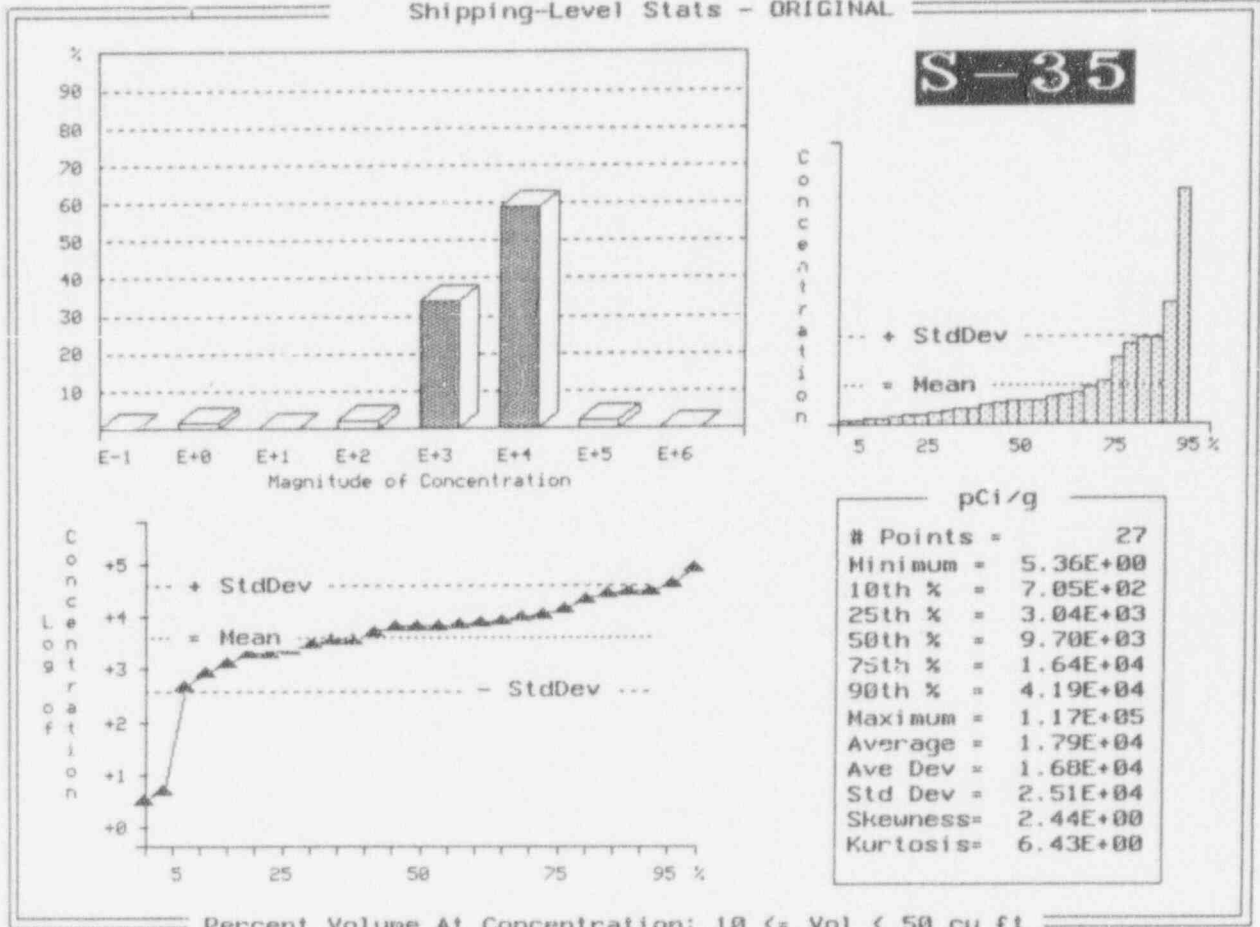
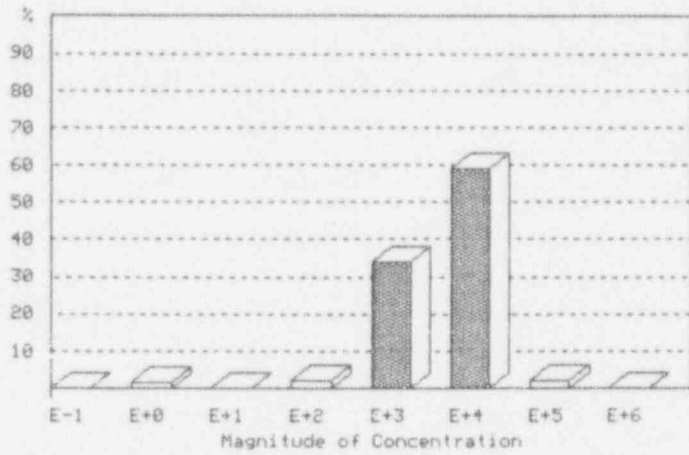
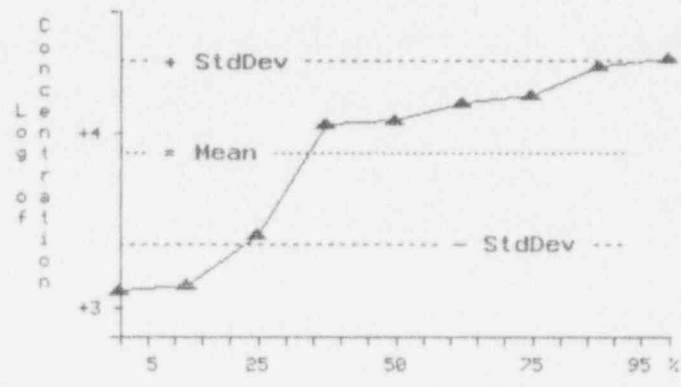
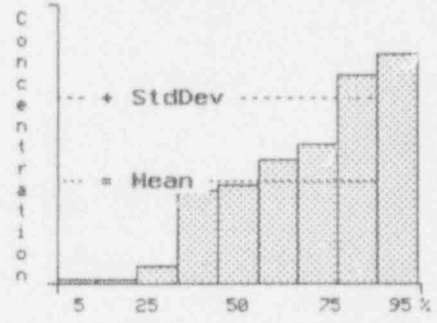


Exhibit F-54 (Continued)

Shipping-Level Stats - ORIGINAL



S-35



pCi/g	
# Points =	9
Minimum =	1.47E+03
10th % =	1.47E+03
25th % =	1.58E+03
50th % =	1.41E+04
75th % =	1.93E+04
90th % =	2.85E+04
Maximum =	3.16E+04
Average =	1.45E+04
Ave Dev =	8.63E+03
Std Dev =	1.11E+04
Skewness =	1.65E-01
Kurtosis =	-1.56E+00

Percent Volume At Concentration: 50 <= Vol < 100 cu ft

Exhibit F-55
Data Summary - Analyses at the Shipment Level
 (Aggregate Practices for non-brokered waste: 1986 to 1990)

	<u>Data or Parameters</u>
Compact or unaffiliated state:	New York
Waste generator class:	Medical
Total number of waste generators:	166
Total associated waste volume (m ³):	1,239
Total associated waste activity (Ci):	46.7
Waste class:	A-Unstable and A-Stable
Identified waste generators for this analysis:	
Number:	77
Percent of total(%):	46
Total number of shipping records:	474
Number of shipping records <u>with</u> container data:	0
Number of waste containers:	0
Weight of shipments (kg):	383,800
Total waste volume (m ³):	495
Fractional waste volume (%): (this analysis/total)	40
Total waste activity (Ci):	12.2
Fractional waste activity (%): (this analysis/total)	26

Exhibit F-55 (Continued)

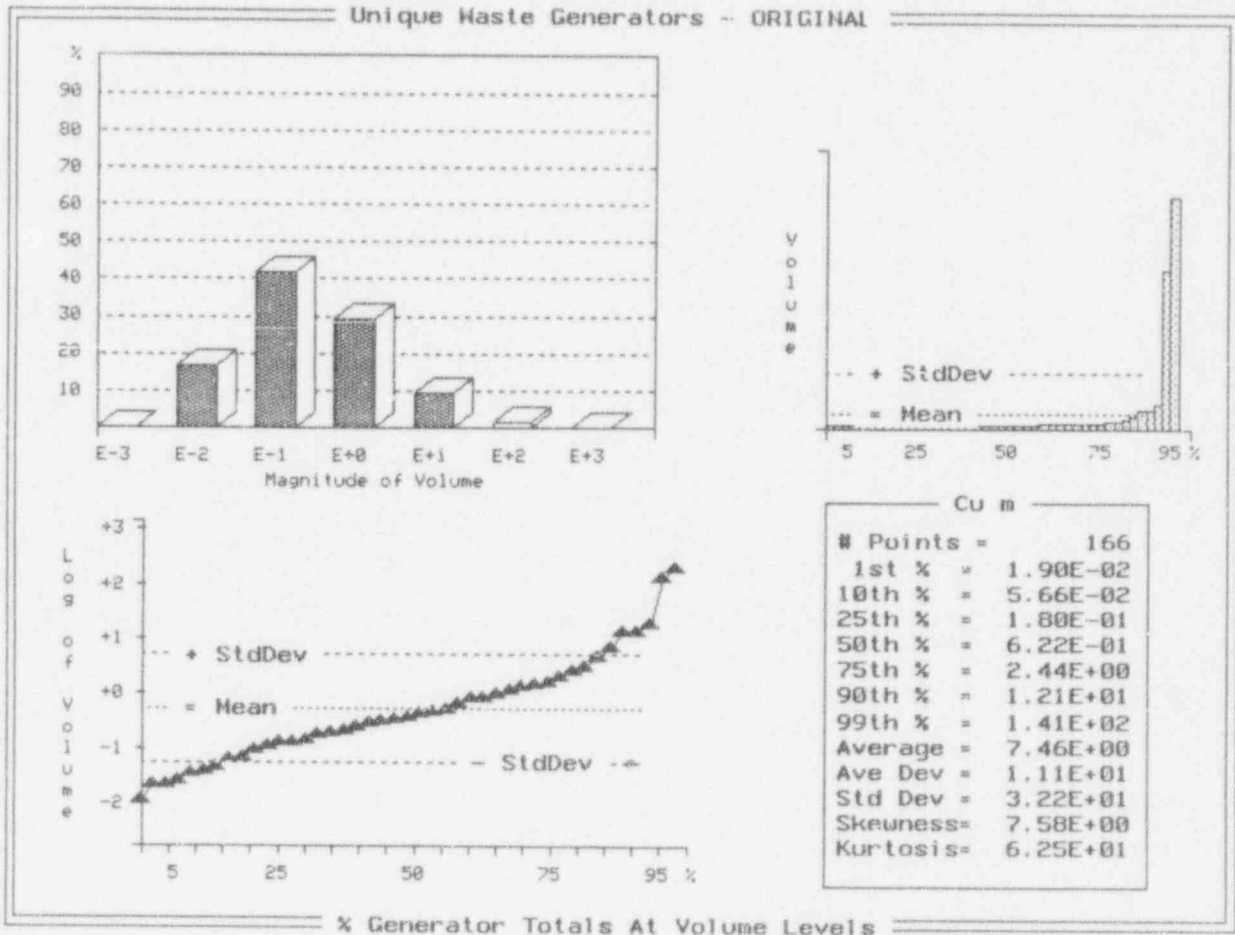


Exhibit F-55 (Continued)

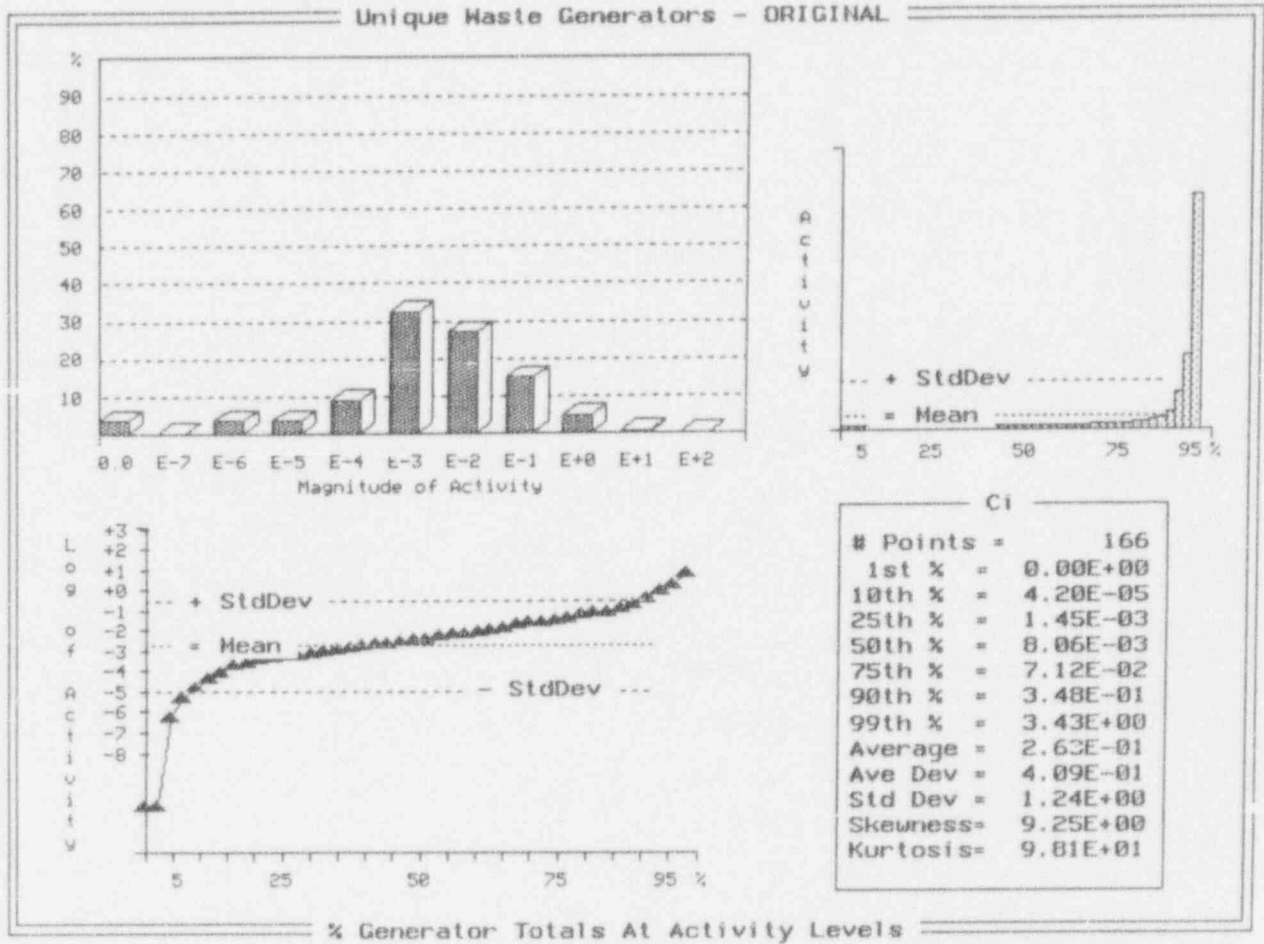


Exhibit 6
Data Summary - Analyses at the Shipment Level
(Aggregate Practices for non-brokered waste: 1986 to 1990)

Data or Parameters

Compact or unaffiliated state:	New York
Waste generator class:	Industrial
Total number of waste generators:	170
Total associated waste volume (m ³):	1,892
Total associated waste activity (Ci):	23,710
Waste class:	A-Unstable and A-Stable
Identified waste generators for this analysis:	
Number:	67
Percent of total(%):	39
Total number of shipping records:	298
Number of shipping records <u>with</u> container data:	0
Number of waste containers:	0
Weight of shipments (kg):	1,308,000
Total waste volume (m ³):	1,279
Fractional waste volume (%): (this analysis/total)	68
Total waste activity (Ci):	379
Fractional waste activity (%): (this analysis/total)	2

Exhibit F-56 (Continued)

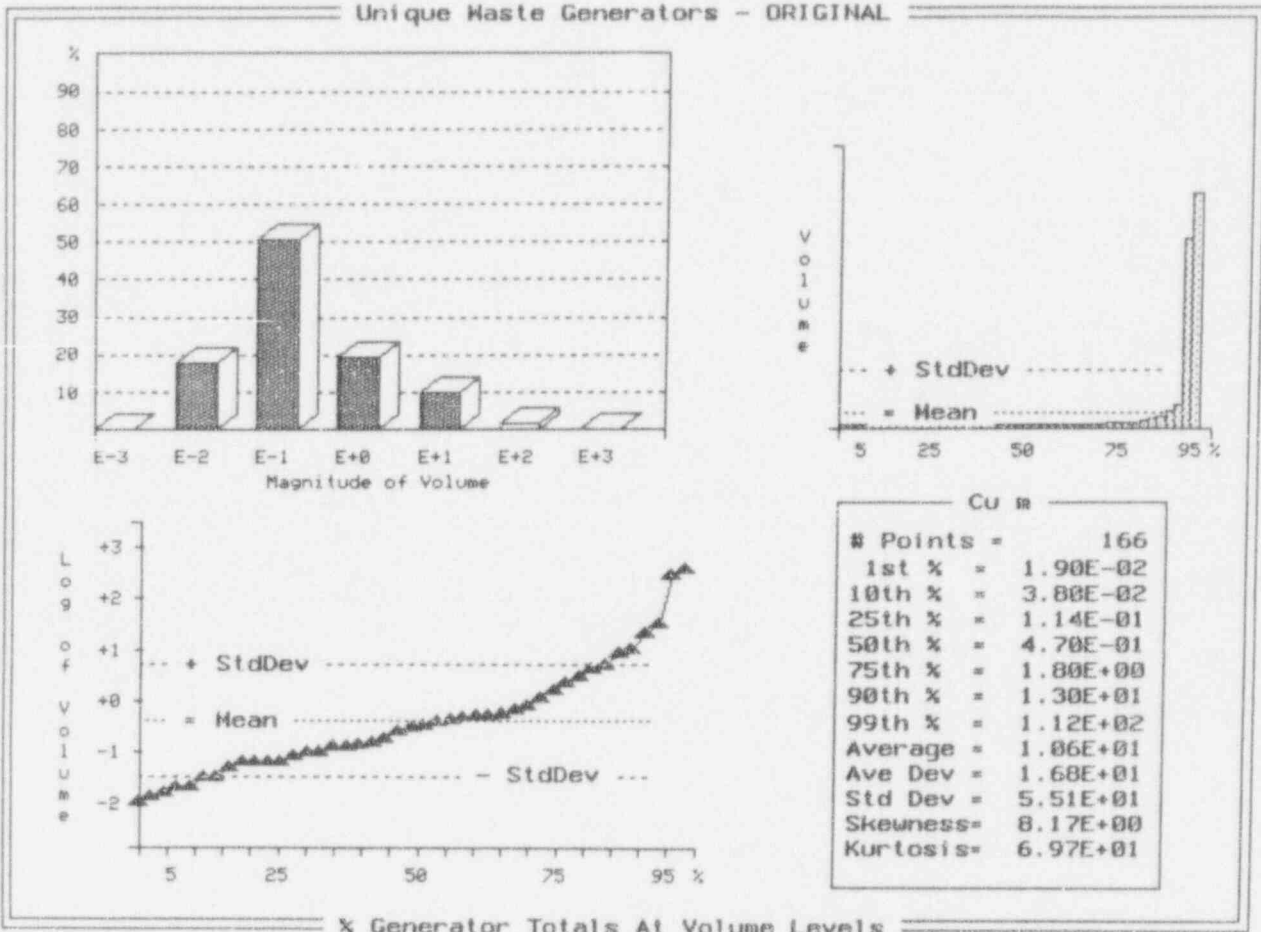


Exhibit F-56 (Continued)

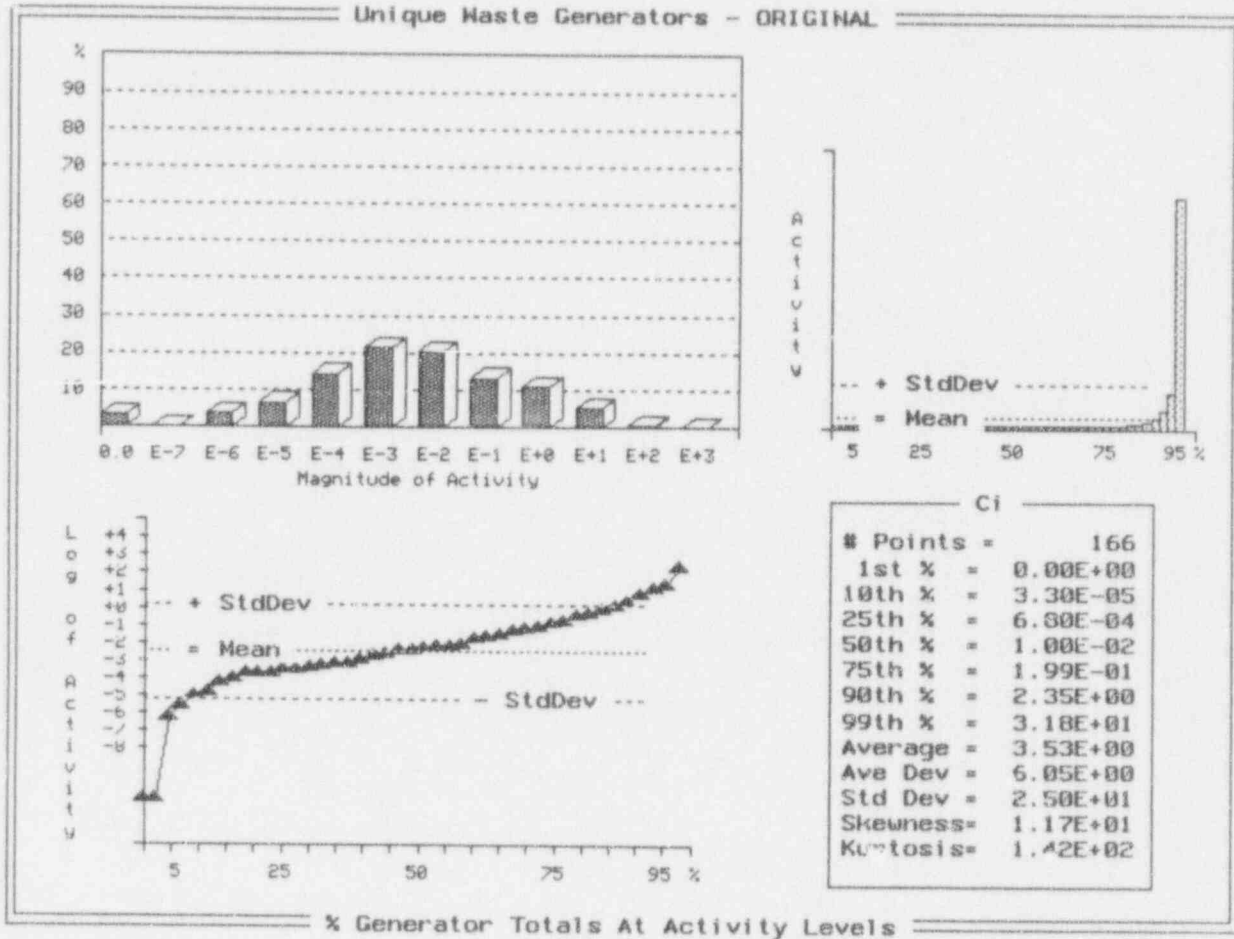
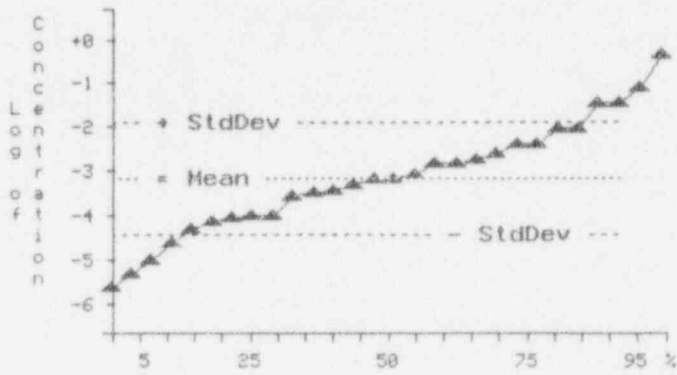
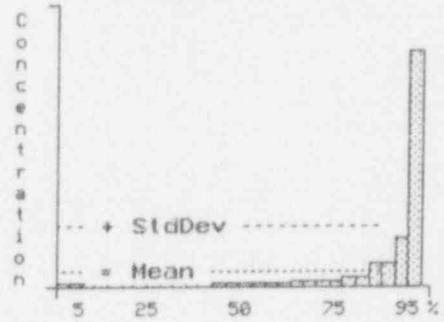
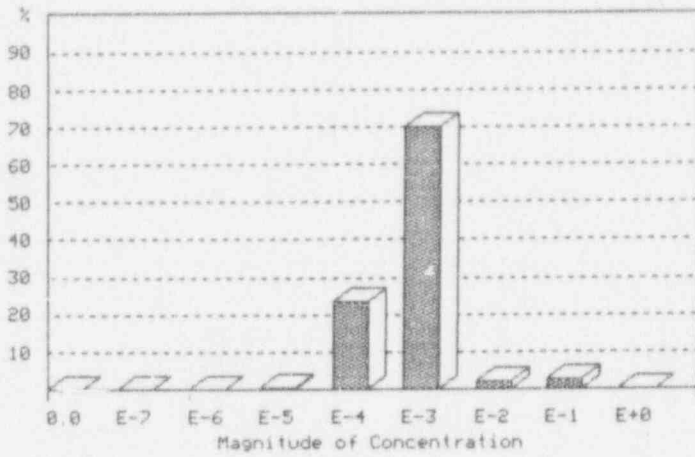


Exhibit F-56 (Continued)

Shipping-Level Stats - ORIGINAL

C-14



C _i /cu m	
# Points =	28
Minimum =	4.71E-06
10th % =	1.08E-05
25th % =	1.58E-04
50th % =	1.18E-03
75th % =	7.05E-03
90th % =	5.77E-02
Maximum =	6.59E-01
Average =	3.46E-02
Ave Dev =	5.47E-02
Std Dev =	1.25E-01
Skeuness =	4.40E+00
Kurtosis =	1.89E+01

Percent Volume At Concentration: Vol < 10 cu ft

Exhibit F-56 (Continued)

Shipping-Level Stats - ORIGINAL

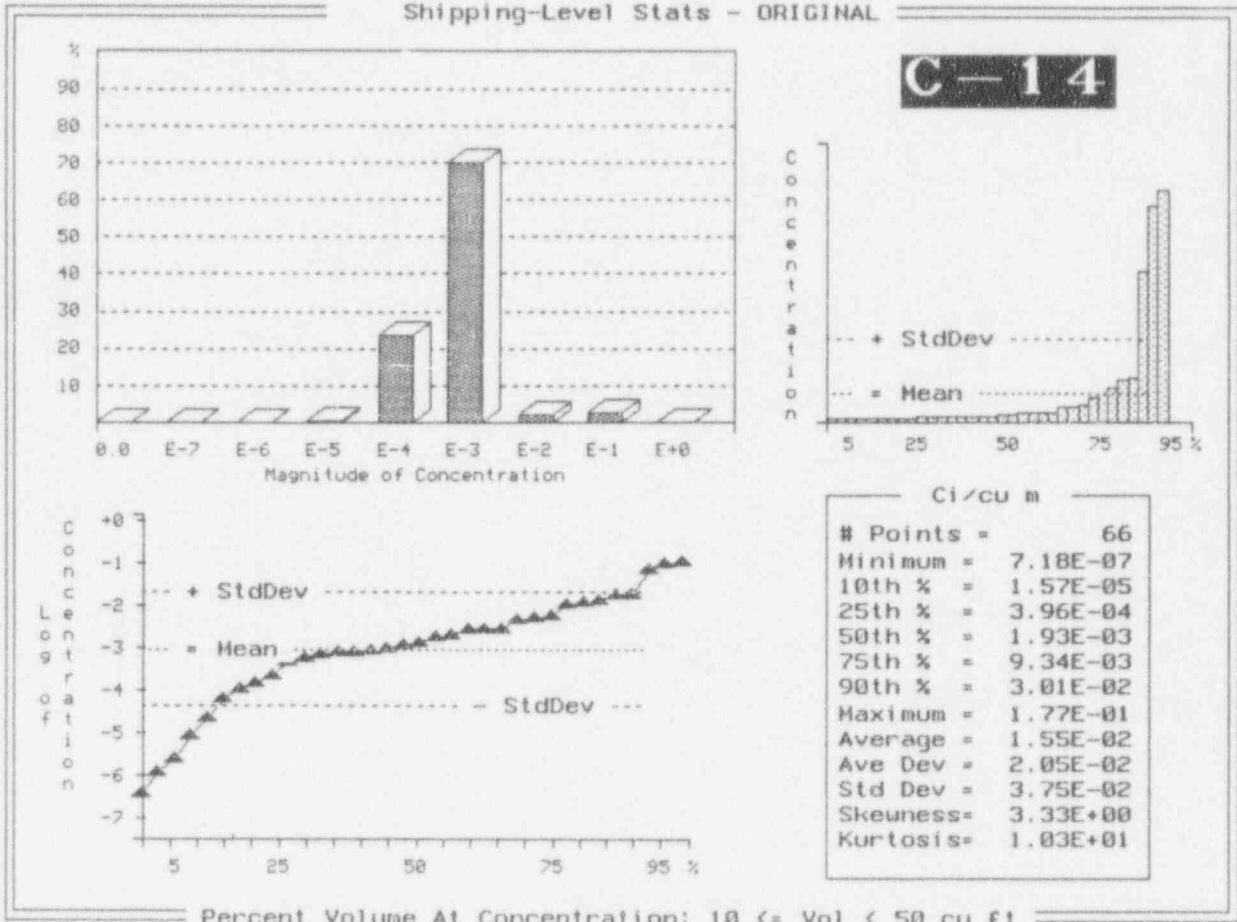


Exhibit F-56 (Continued)

Shipping-Level Stats - ORIGINAL

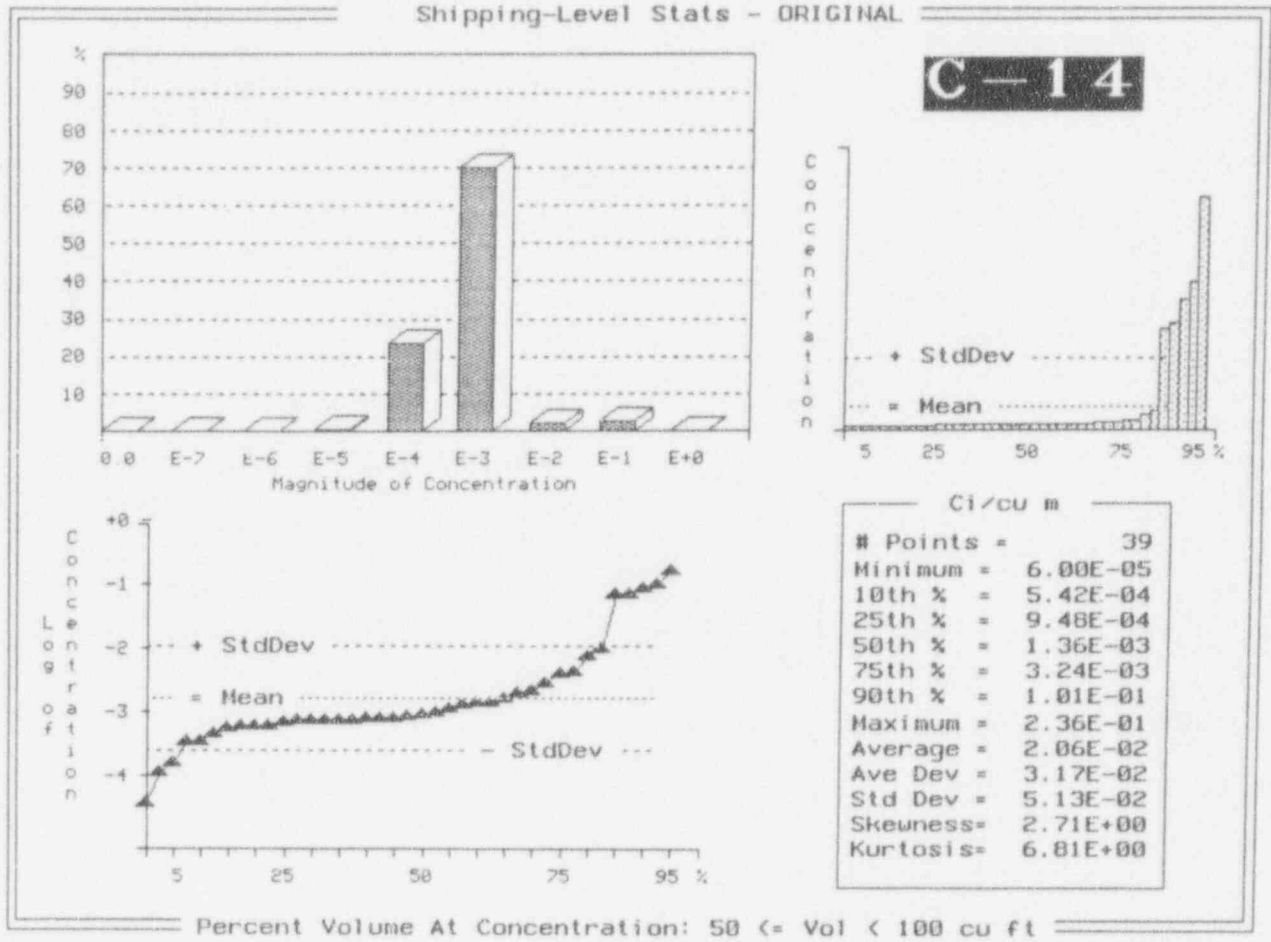


Exhibit F-56 (Continued)

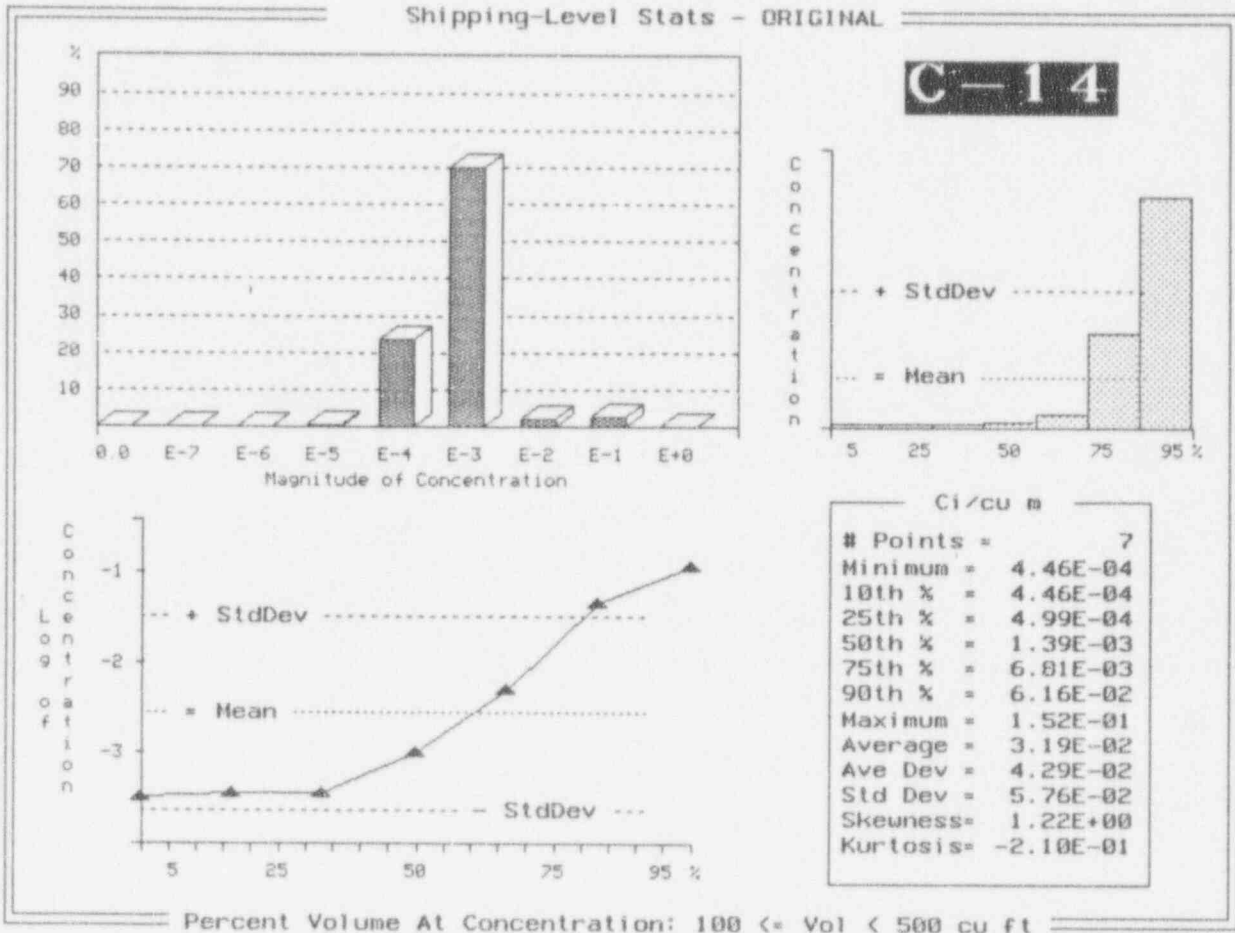


Exhibit F-56 (Continued)

Shipping-Level Stats - ORIGINAL

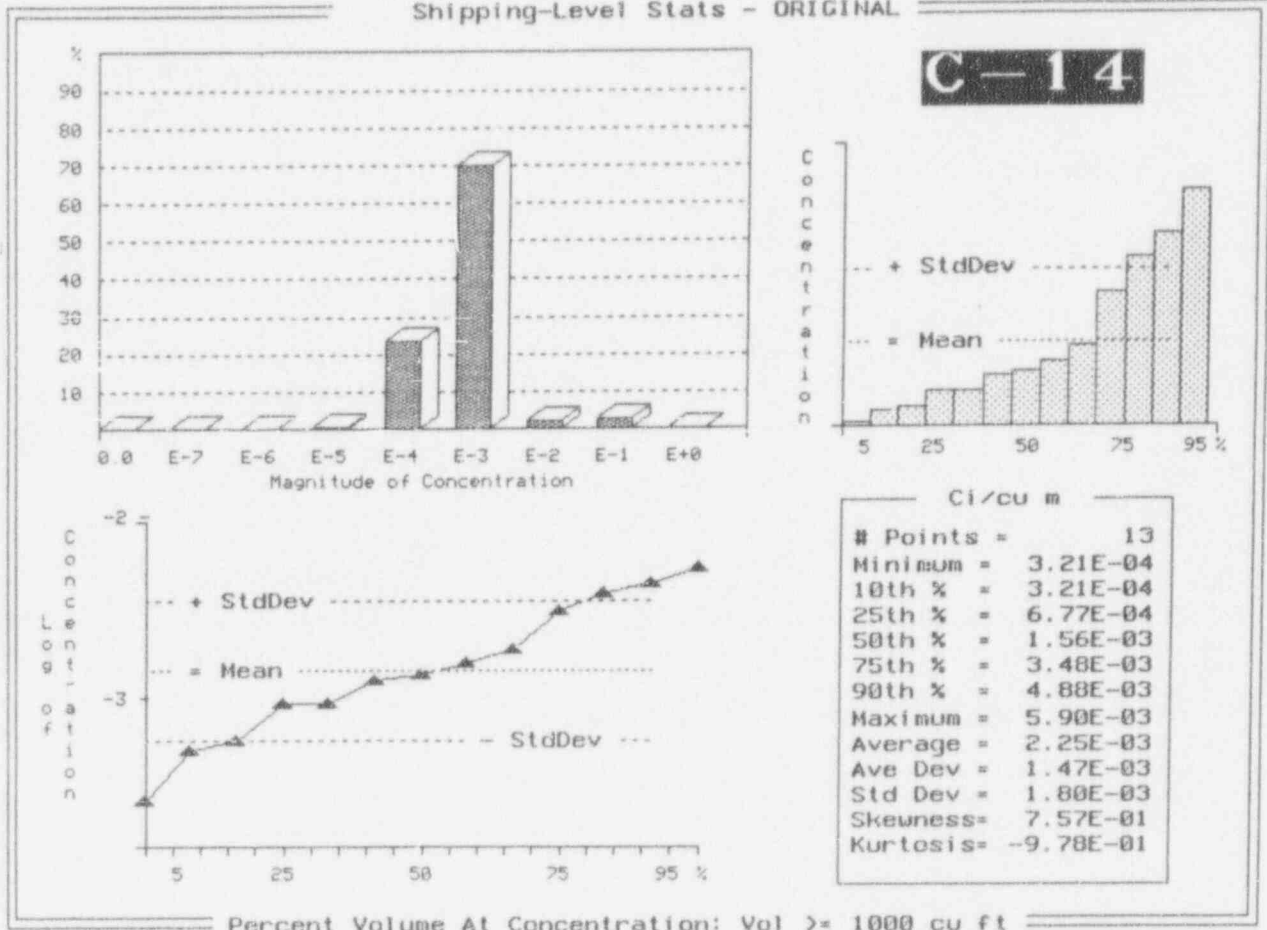


Exhibit F-56 (Continued)

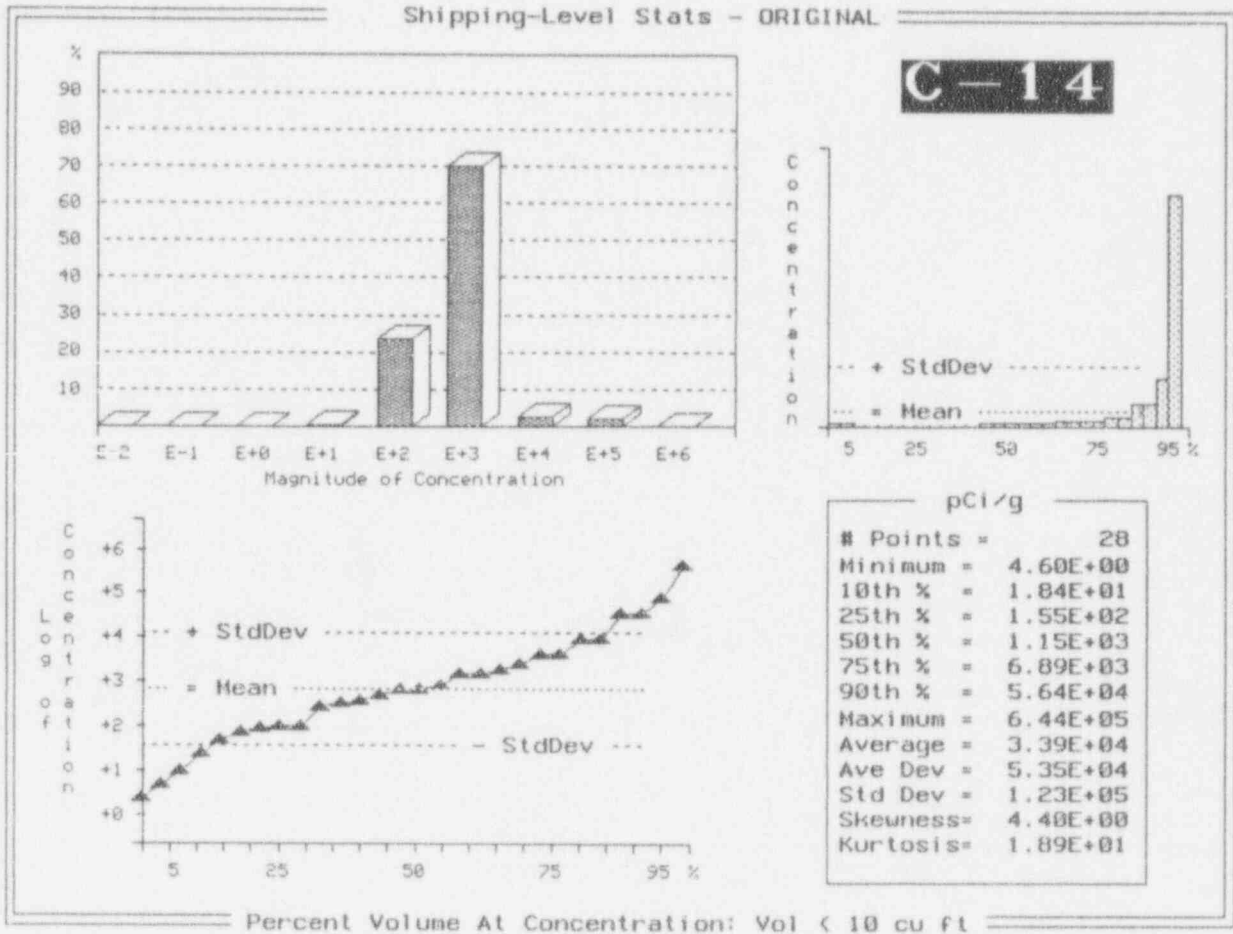


Exhibit F-56 (Continued)

Shipping-Level Stats - ORIGINAL

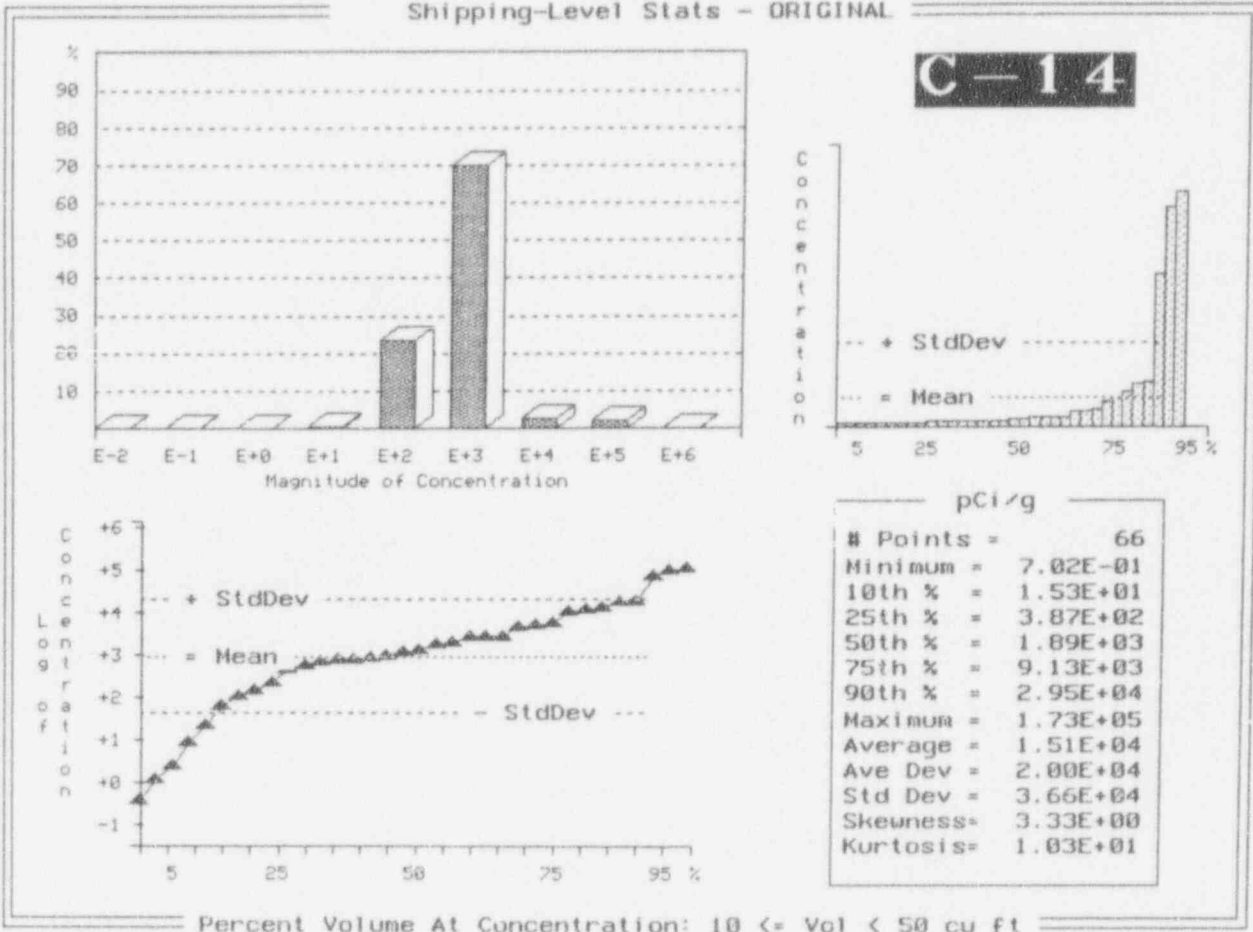


Exhibit F-56 (Continued)

Shipping-Level Stats - ORIGINAL

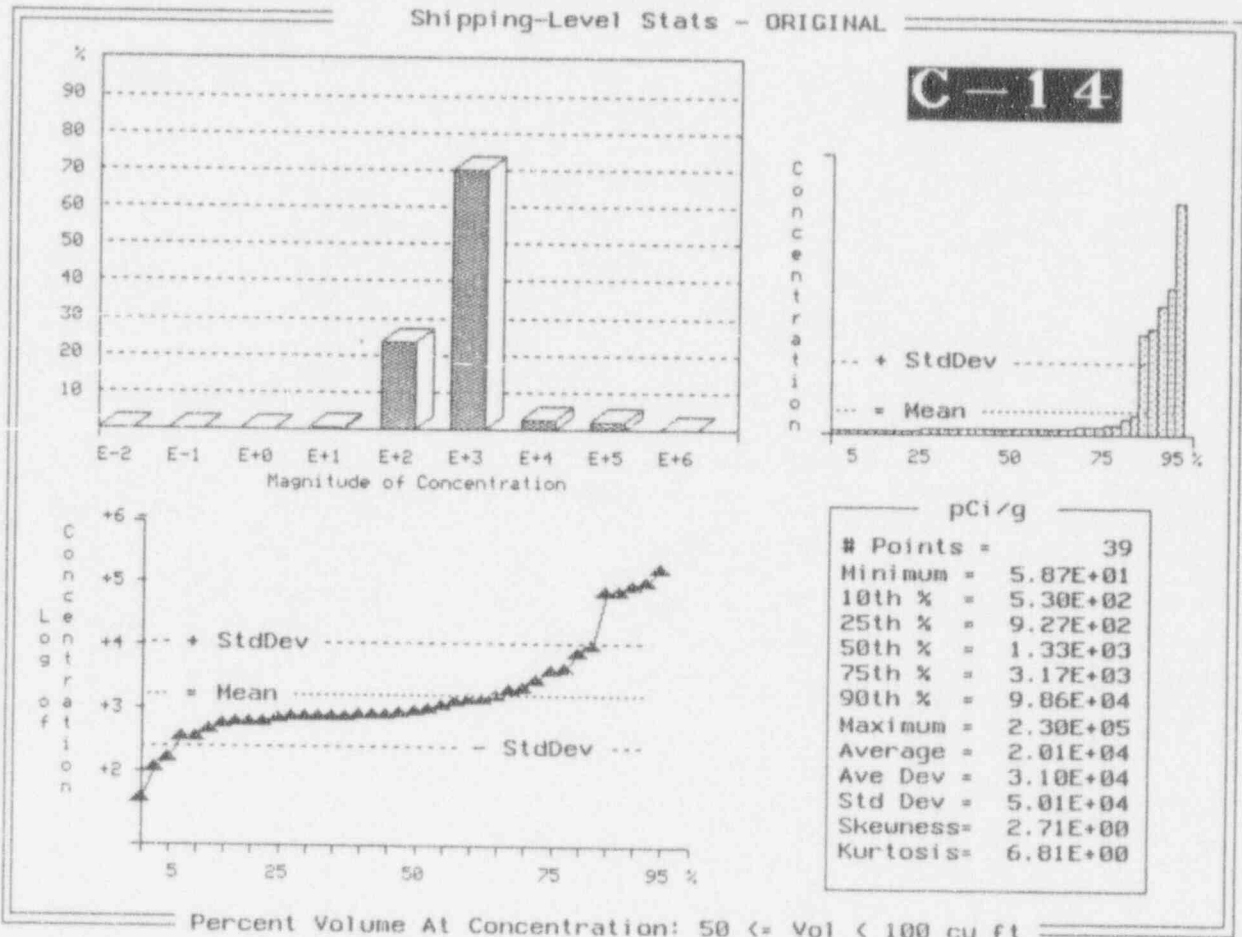


Exhibit F-56 (Continued)

Shipping-Level Stats - ORIGINAL

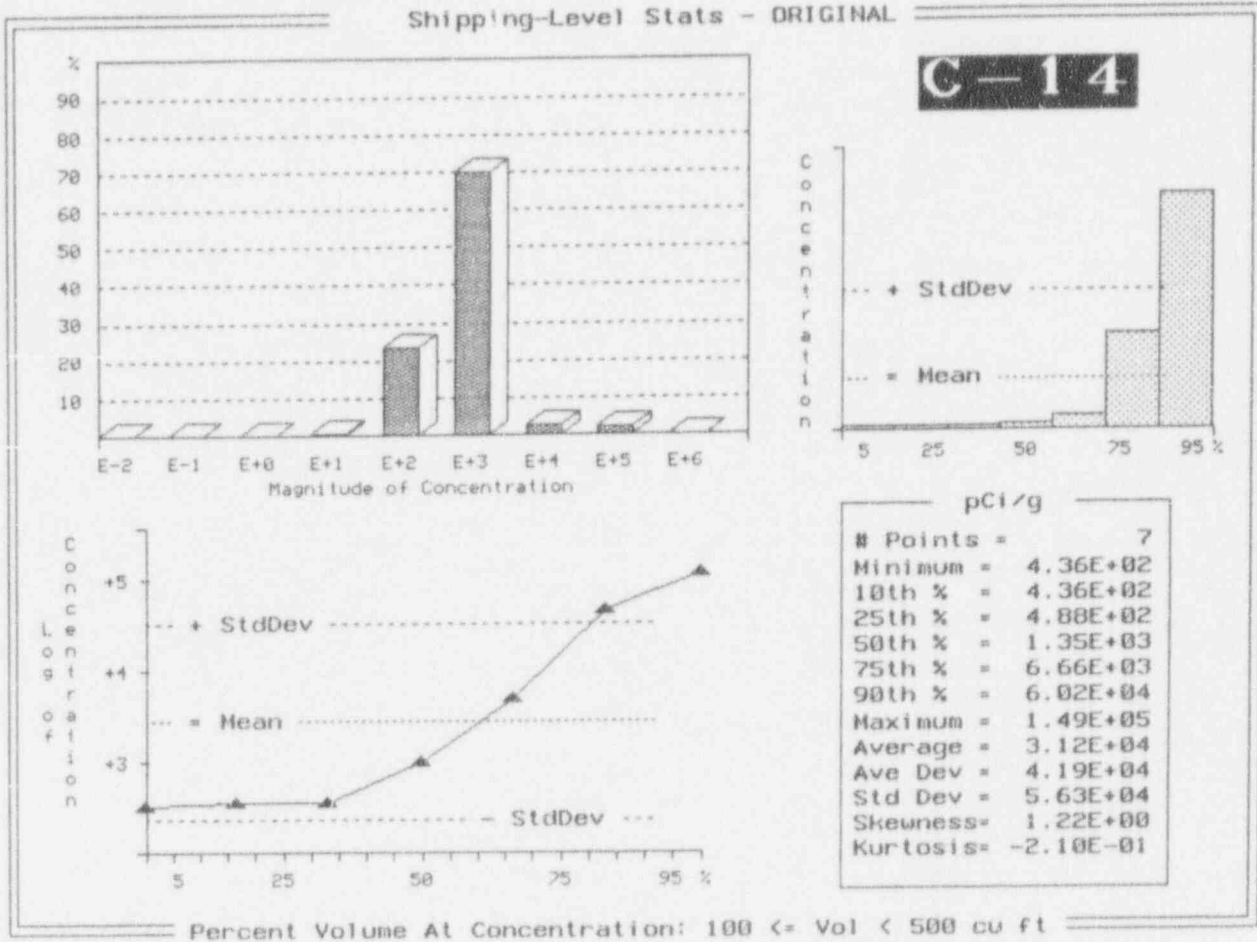


Exhibit F-56 (Continued)

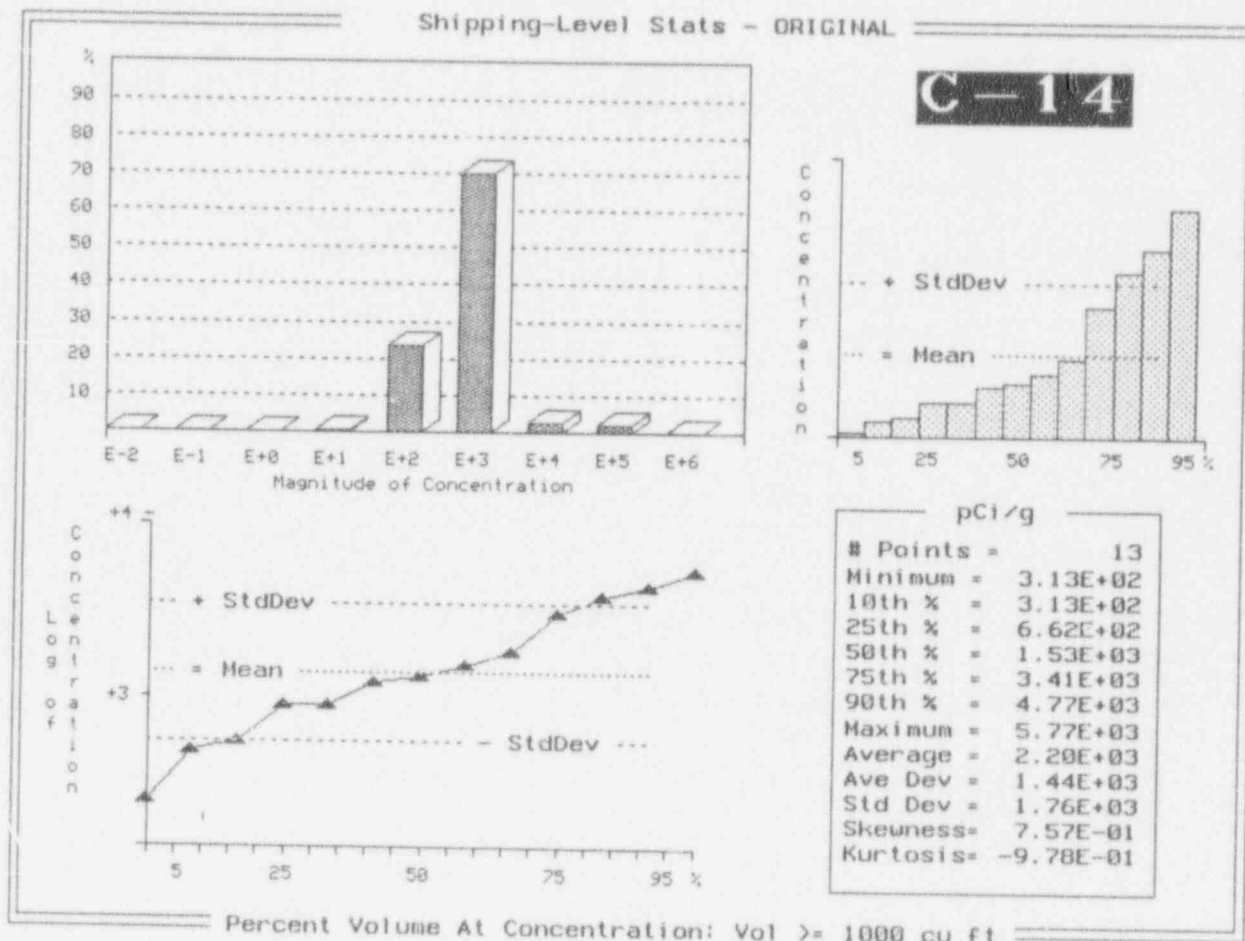


Exhibit F-56 (Continued)

Shipping-Level Stats - ORIGINAL

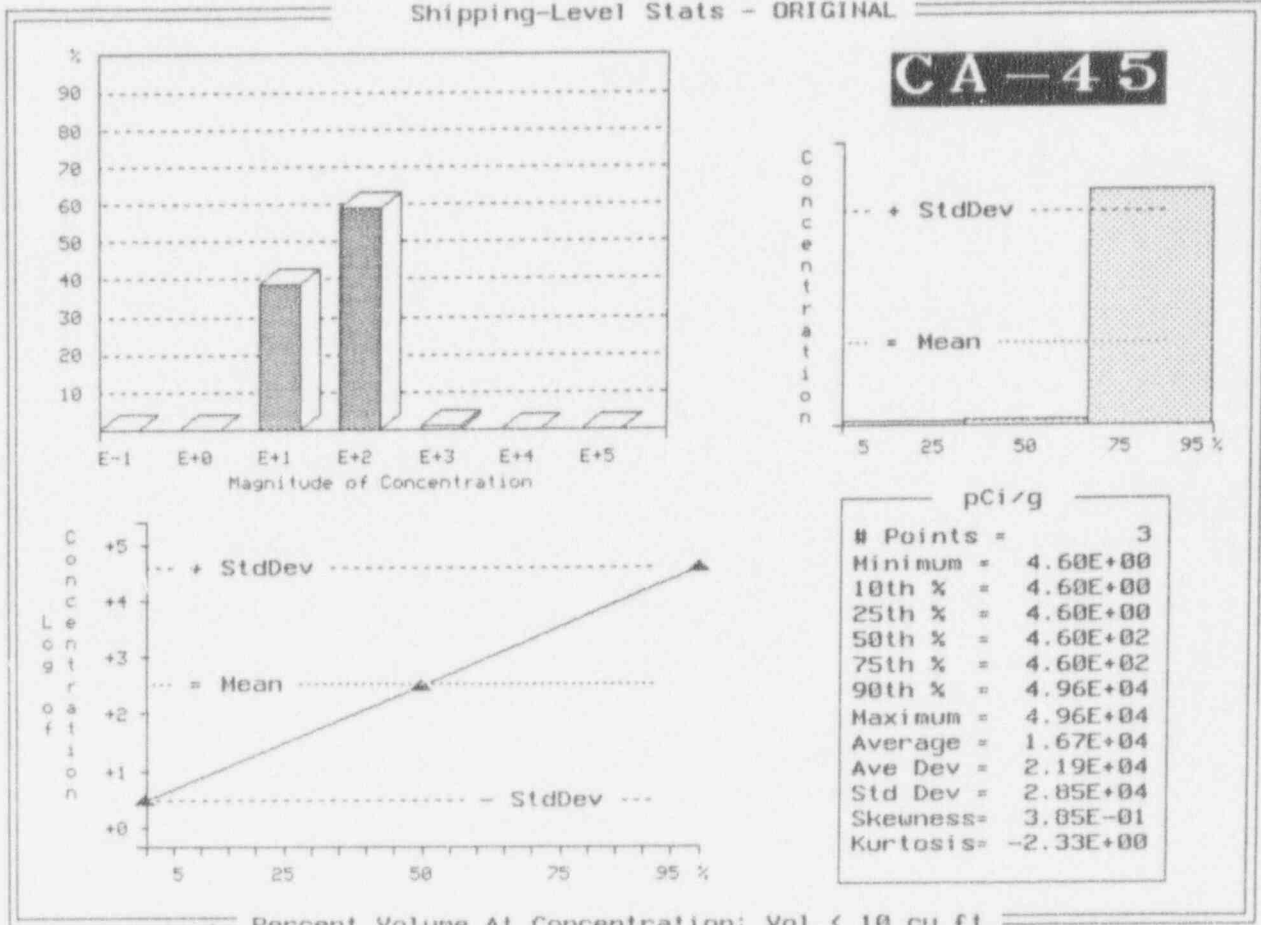
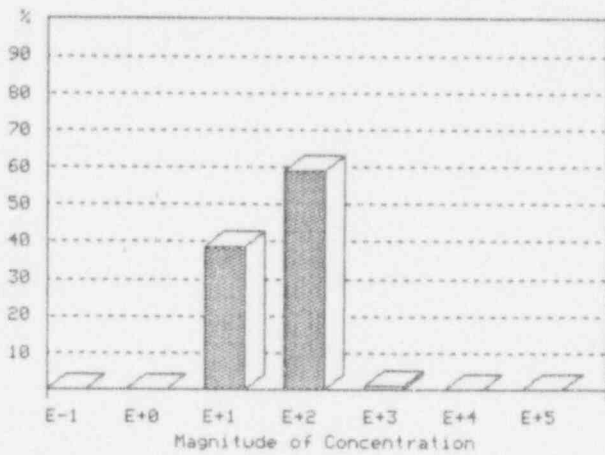
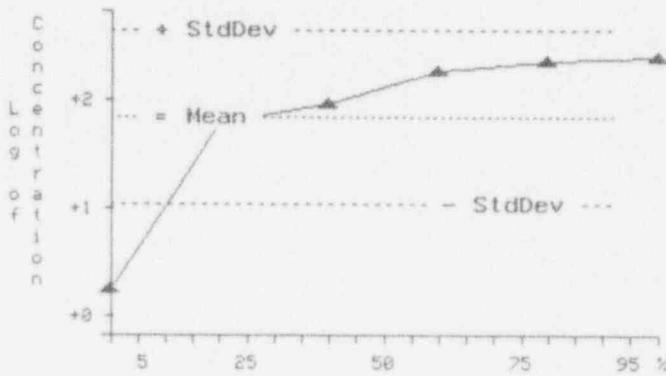
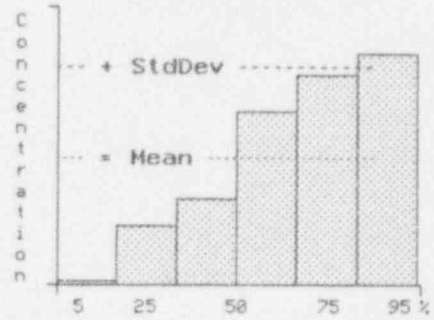


Exhibit F-56 (Continued)

Shipping-Level Stats - ORIGINAL



CA-45



pCi/g	
# Points =	6
Minimum =	2.30E+00
10th % =	2.30E+00
25th % =	7.67E+01
50th % =	1.15E+02
75th % =	2.80E+02
90th % =	2.80E+02
Maximum =	3.07E+02
Average =	1.68E+02
Ave Dev =	1.04E+02
Std Dev =	1.22E+02
Skeuness =	-1.15E-01
Kurtosis =	-1.96E+00

Percent Volume At Concentration: 10 <= Vol < 50 cu ft

Exhibit F-56 (Continued)

Shipping-Level Stats - ORIGINAL

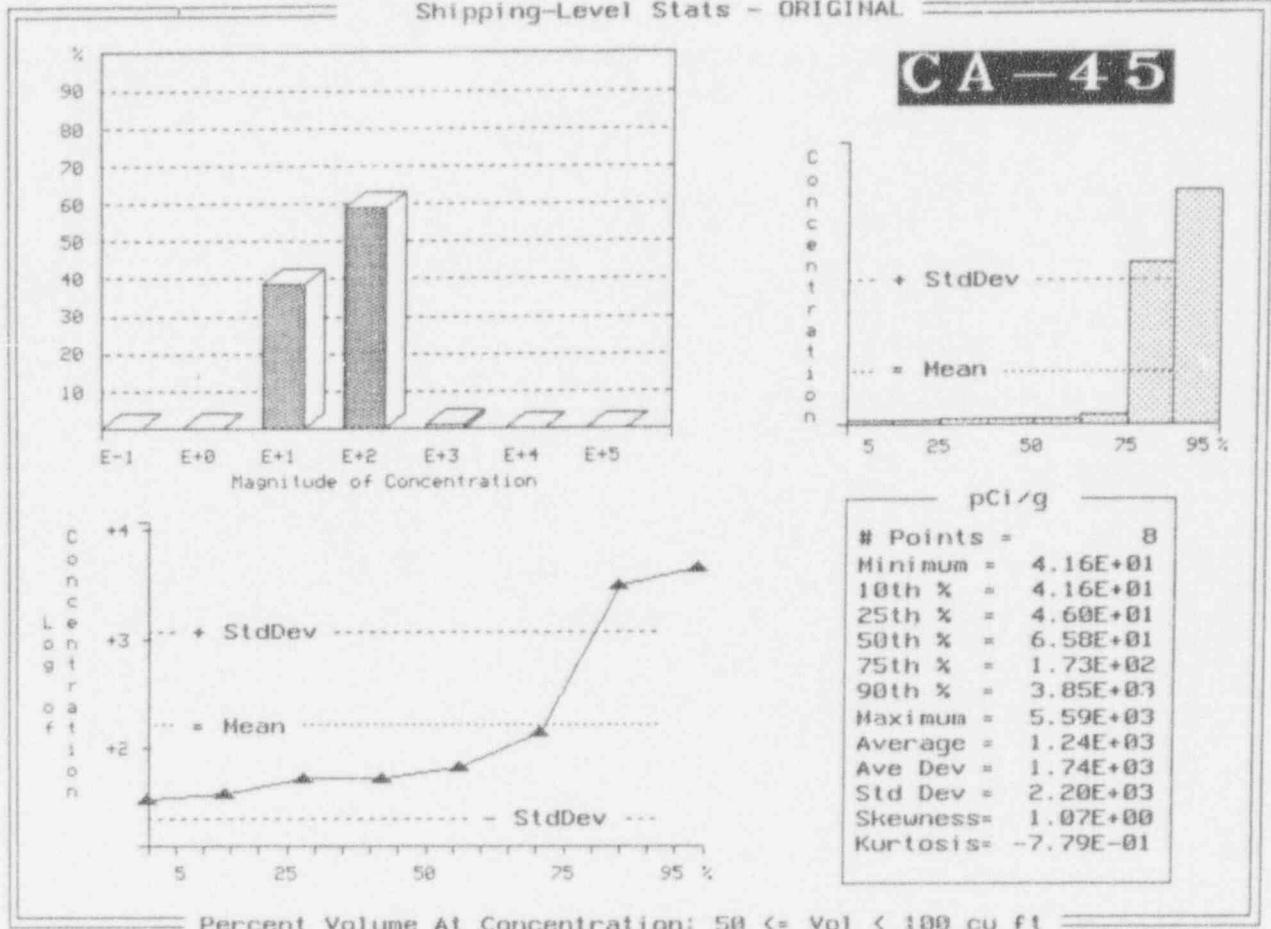


Exhibit F-56 (Continued)

Shipping-Level Stats - ORIGINAL

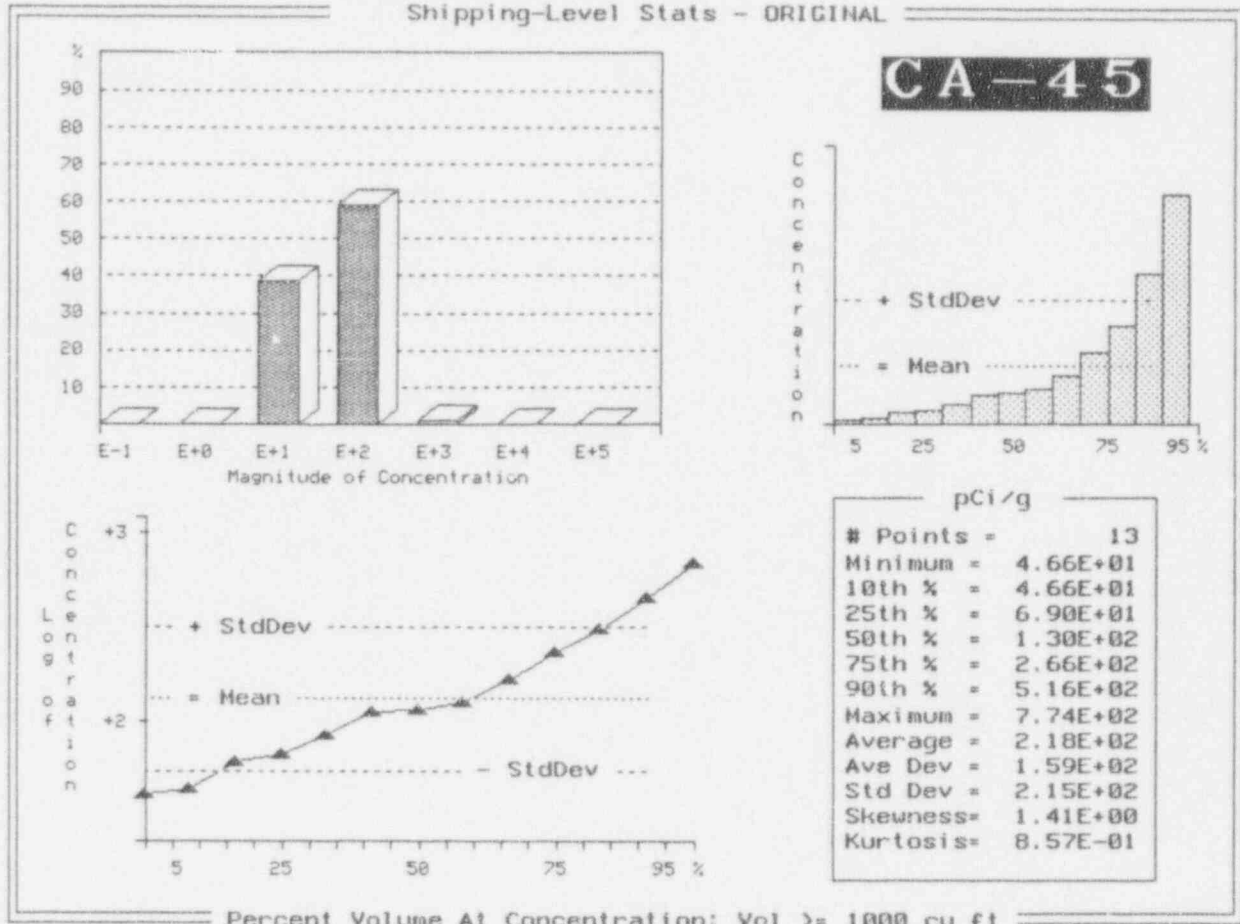


Exhibit F-56 (Continued)

Shipping-Level Stats - ORIGINAL

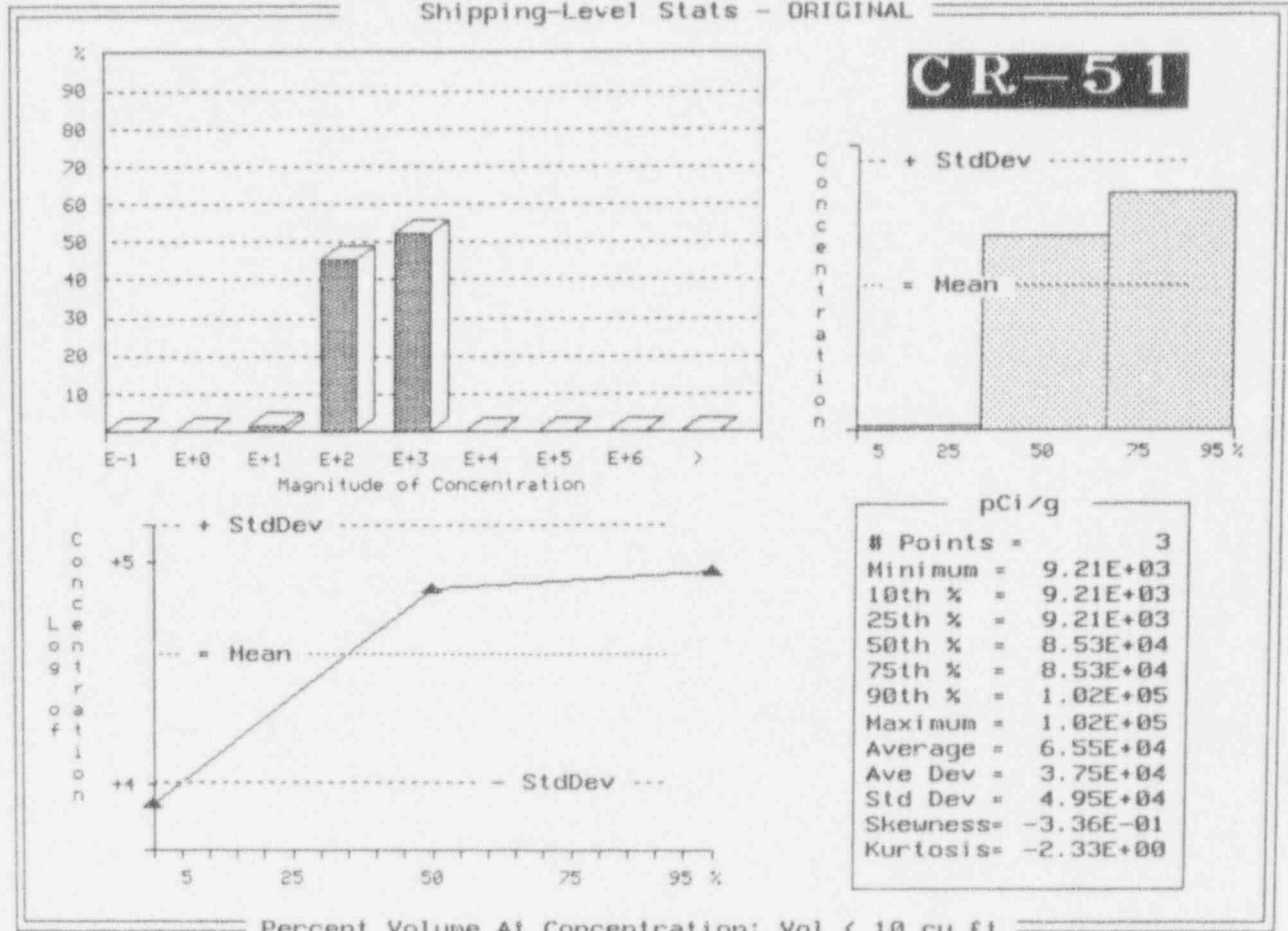
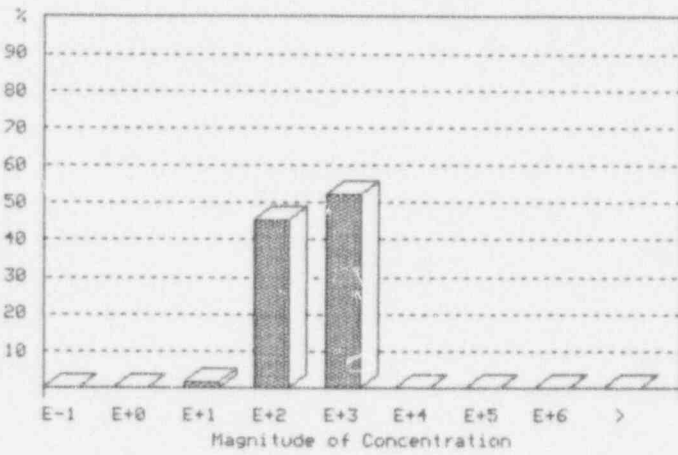
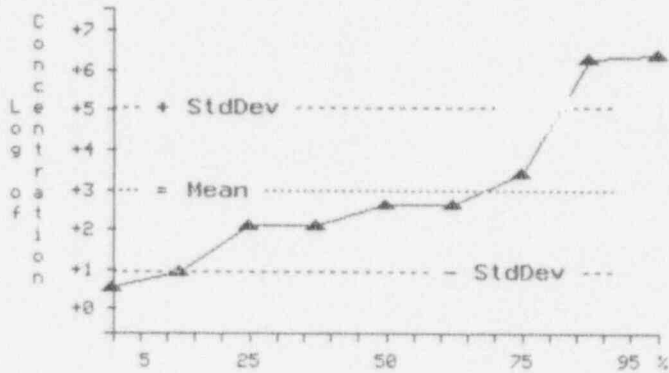
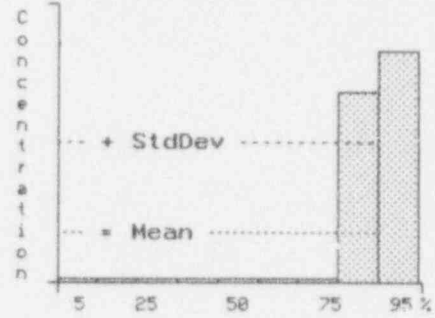


Exhibit F-56 (Continued)

Shipping-Level Stats - ORIGINAL



CR-51

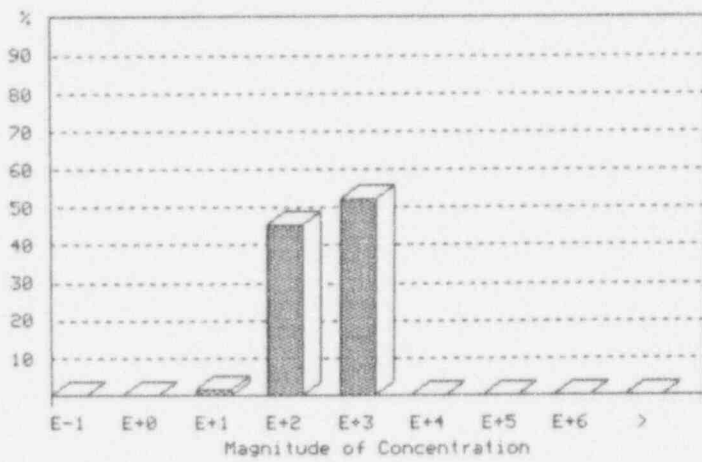


pCi/g	
# Points =	9
Minimum =	6.87E+00
10th % =	6.87E+00
25th % =	1.53E+01
50th % =	7.67E+02
75th % =	4.53E+03
90th % =	3.38E+06
Maximum =	4.10E+06
Average =	8.32E+05
Ave Dev =	1.29E+06
Std Dev =	1.66E+06
Skewness =	1.15E+00
Kurtosis =	-6.60E-01

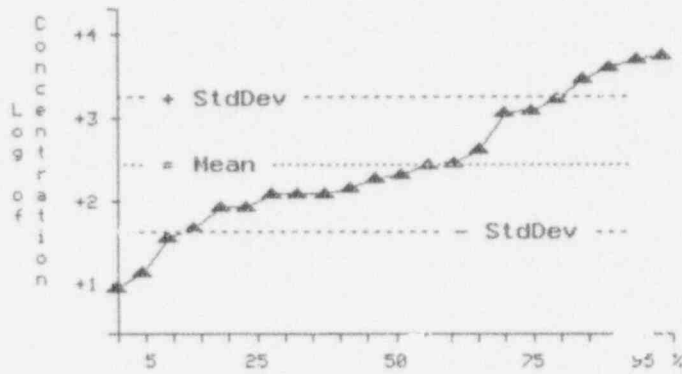
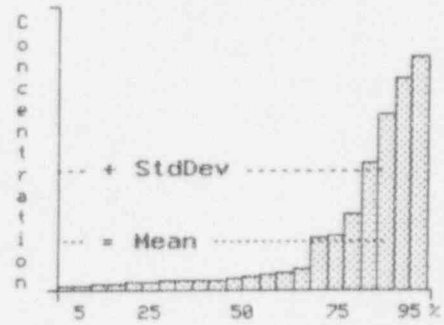
Percent Volume At Concentration: 10 <= Vol < 50 cu ft

Exhibit F-56 (Continued)

Shipping-Level Stats - ORIGINAL



CR-51



pCi/g	
# Points =	22
Minimum =	1.27E+01
10th % =	1.92E+01
25th % =	1.15E+02
50th % =	2.63E+02
75th % =	1.64E+03
90th % =	5.52E+03
Maximum =	7.36E+03
Average =	1.45E+03
Ave Dev =	1.71E+03
Std Dev =	2.28E+03
Skewness =	1.53E+00
Kurtosis =	8.55E-01

Percent Volume At Concentration: 50 ≤ Vol < 100 cu ft

Exhibit F-56 (Continued)

Shipping-Level Stats - ORIGINAL

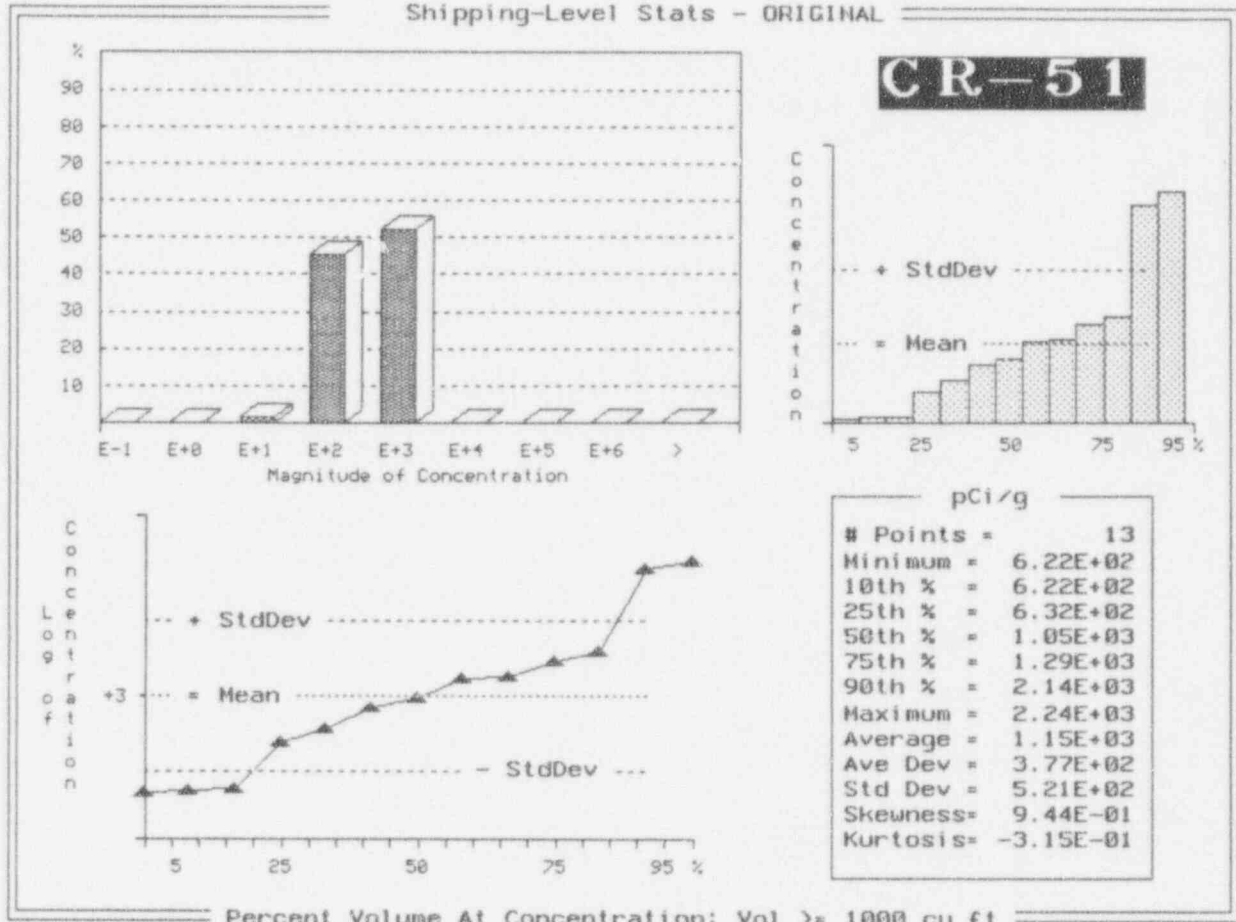


Exhibit F-56 (Continued)

Shipping-Level Stats - ORIGINAL

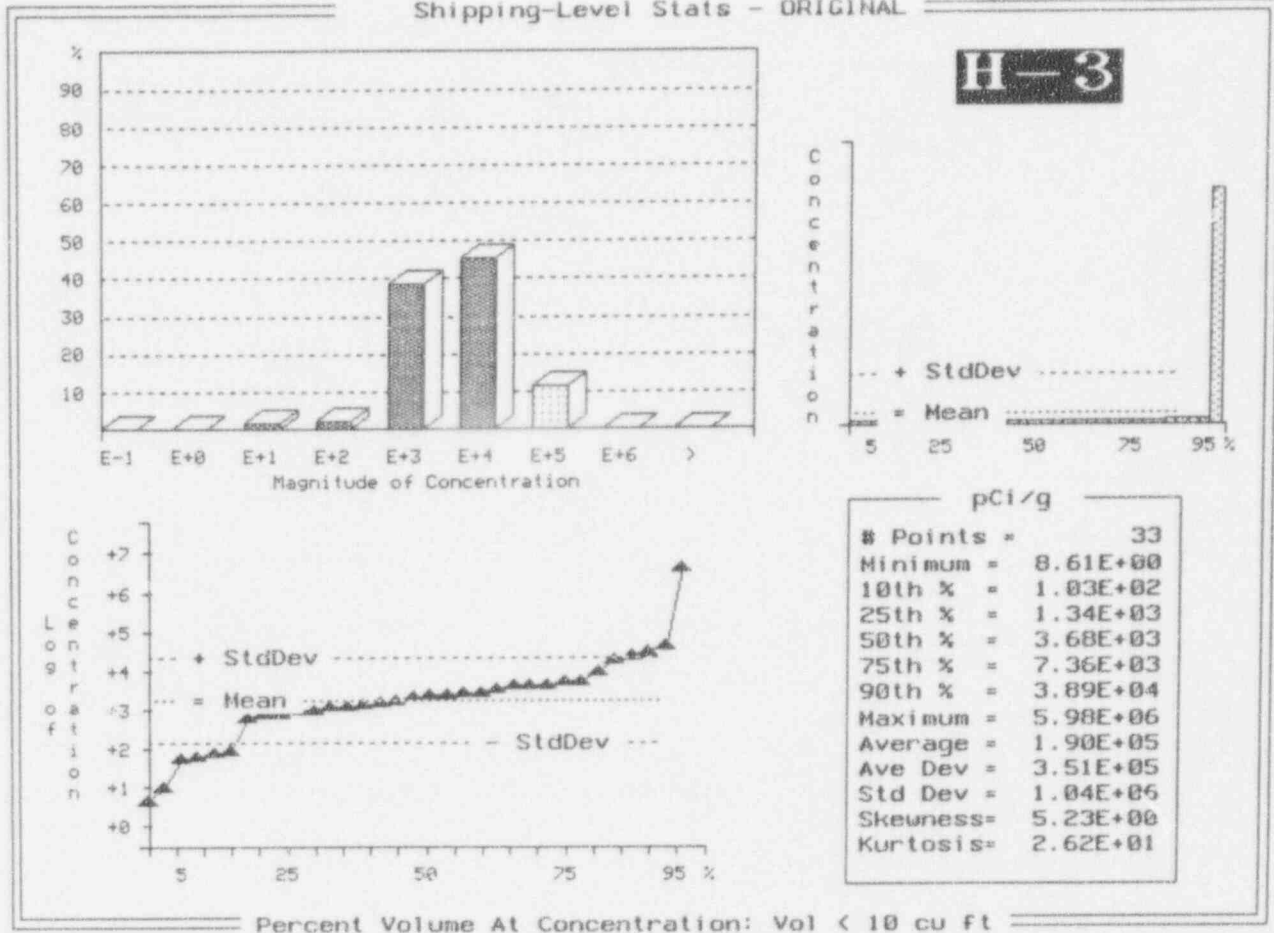


Exhibit F-56 (Continued)

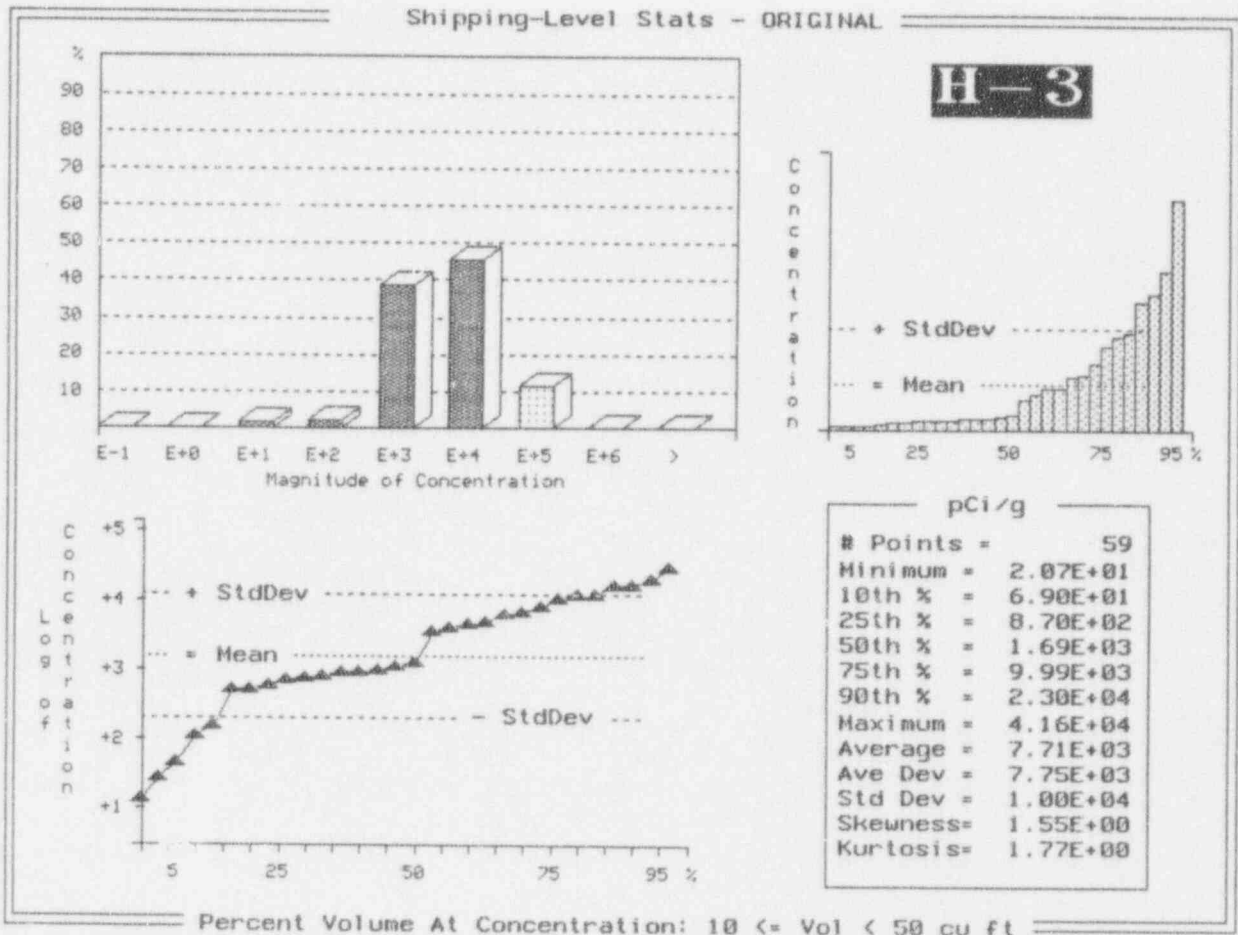
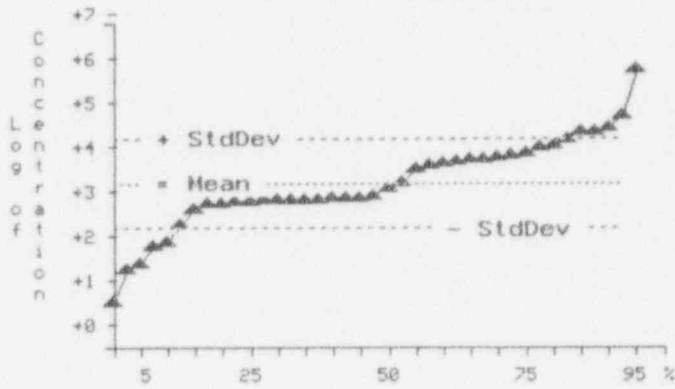
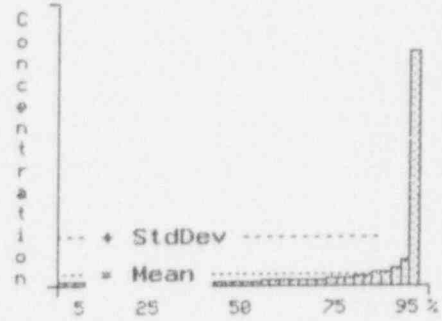
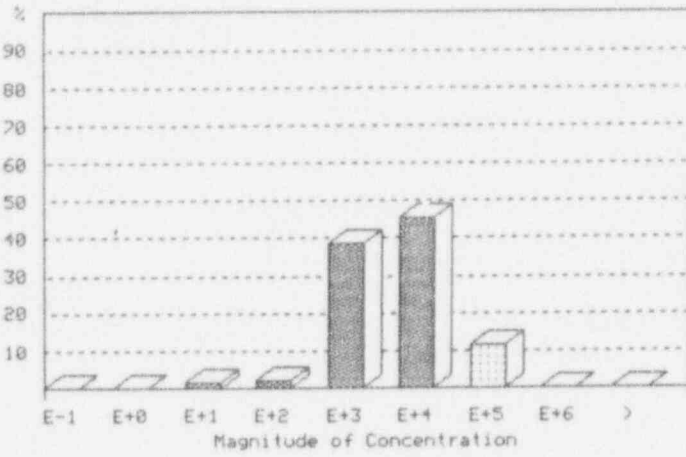


Exhibit F-56 (Continued)

Shipping-Level Stats - ORIGINAL

H-3



pCi/g	
# Points =	39
Minimum =	6.33E+00
10th % =	1.08E+02
25th % =	1.10E+03
50th % =	1.50E+03
75th % =	1.08E+04
90th % =	3.96E+04
Maximum =	9.46E+05
Average =	3.43E+04
Ave Dev =	5.10E+04
Std Dev =	1.51E+05
Skewness =	5.65E+00
Kurtosis =	3.12E+01

Percent Volume At Concentration: 50 <= Vol < 100 cu ft

Exhibit F-56 (Continued)

Shipping-Level Stats - ORIGINAL

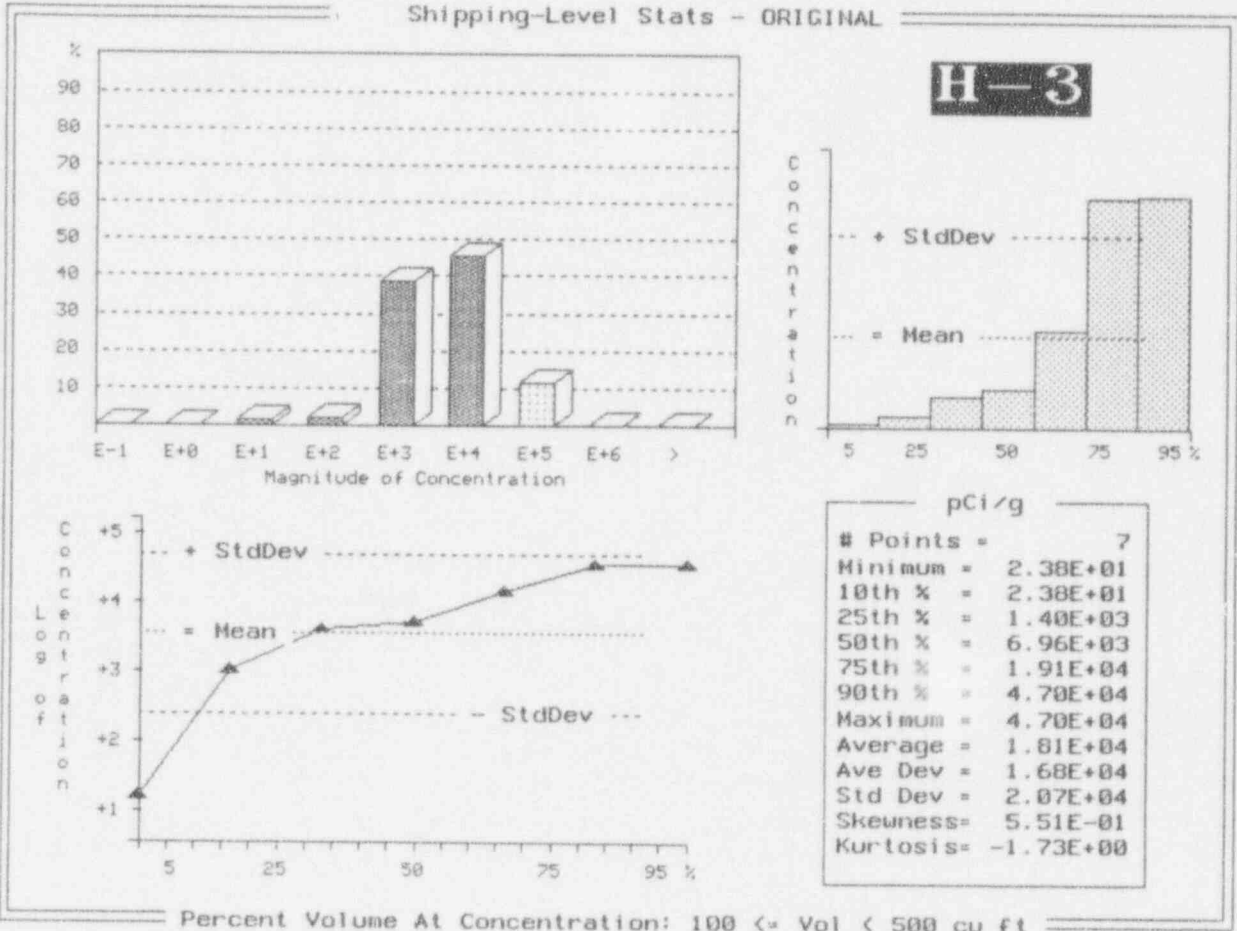
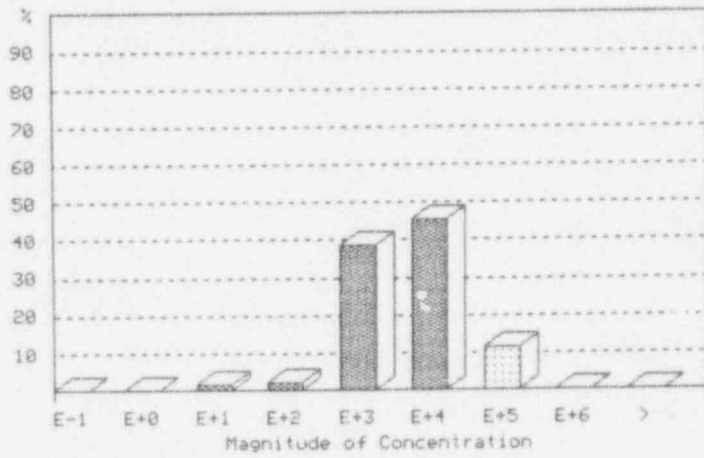
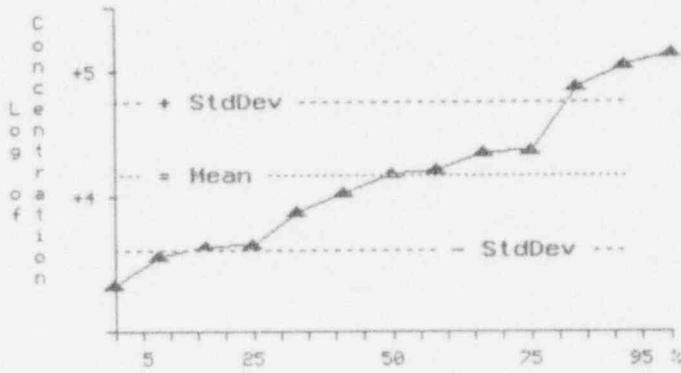
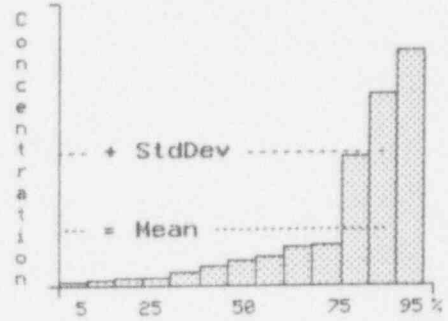


Exhibit F-56 (Continued)

Shipping-Level Stats - ORIGINAL



H-3



pci/g	
# Points =	13
Minimum =	2.43E+03
10th % =	2.43E+03
25th % =	4.81E+03
50th % =	1.89E+04
75th % =	2.93E+04
90th % =	1.41E+05
Maximum =	1.72E+05
Average =	4.19E+04
Ave Dev =	4.35E+04
Std Dev =	5.67E+04
Skewness =	1.29E+00
Kurtosis =	1.10E-02

Percent Volume At Concentration: Vol >= 1000 cu ft

Exhibit F-56 (Continued)

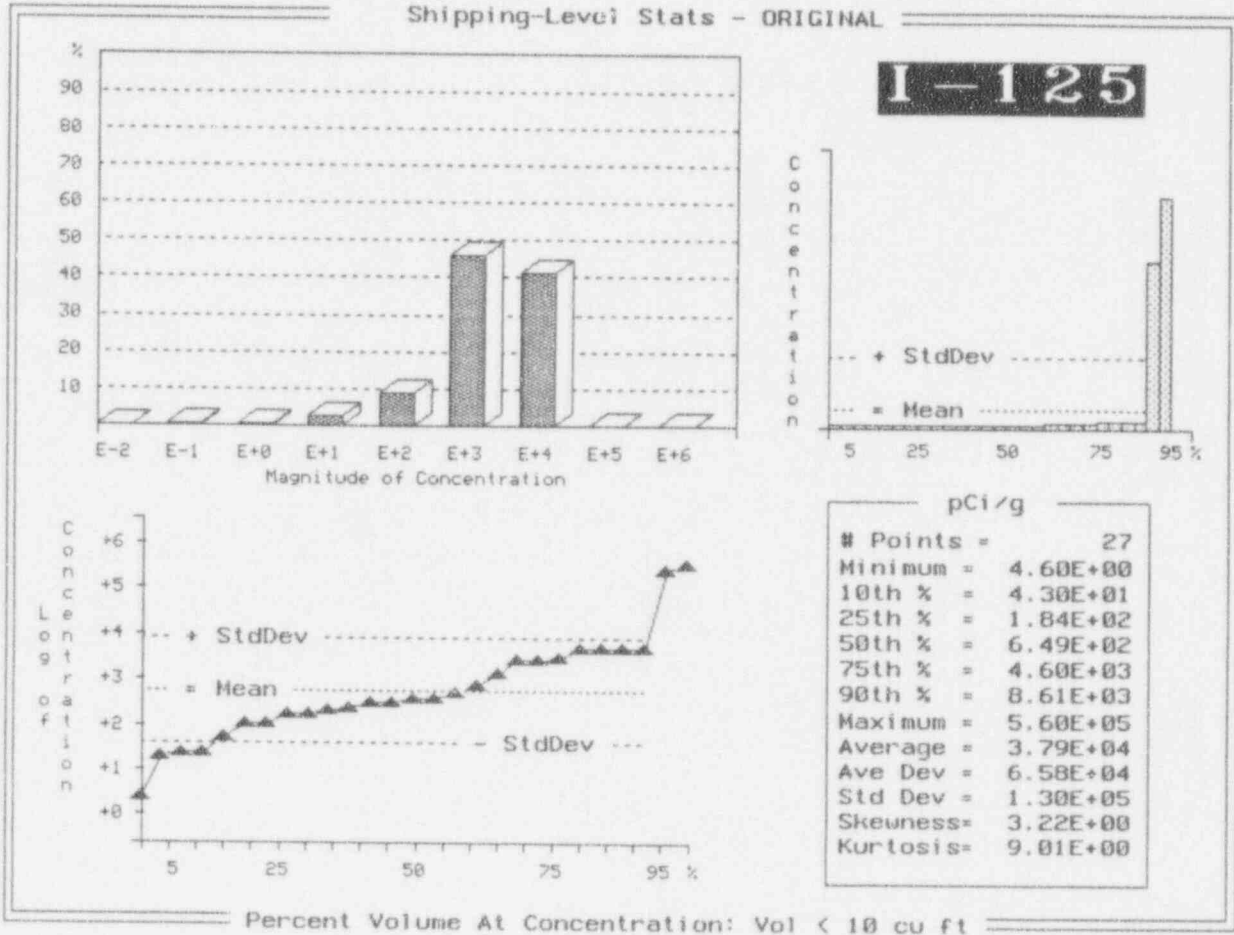


Exhibit F-56 (Continued)

Shipping-Level Stats - ORIGINAL

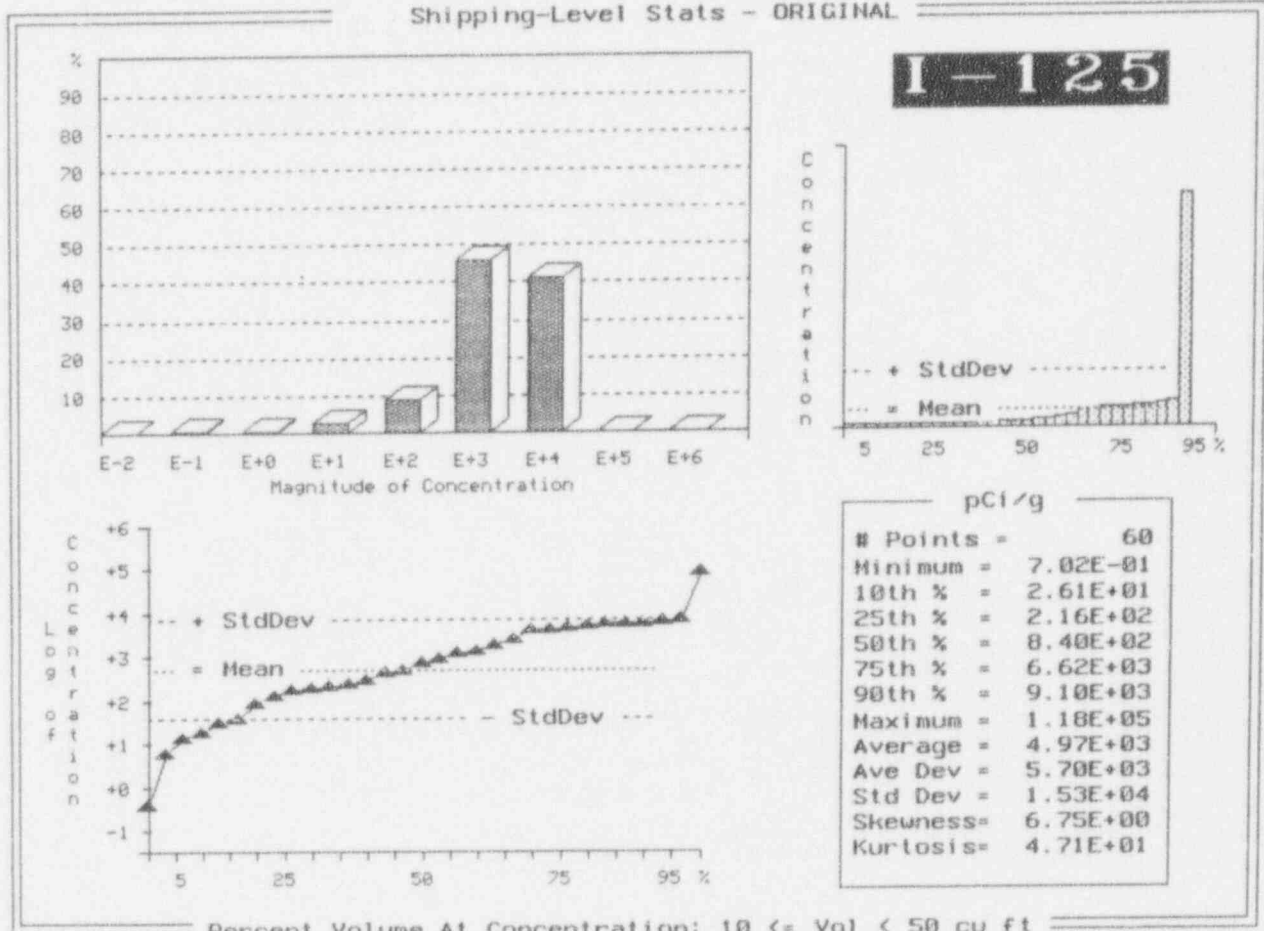


Exhibit F-56 (Continued)

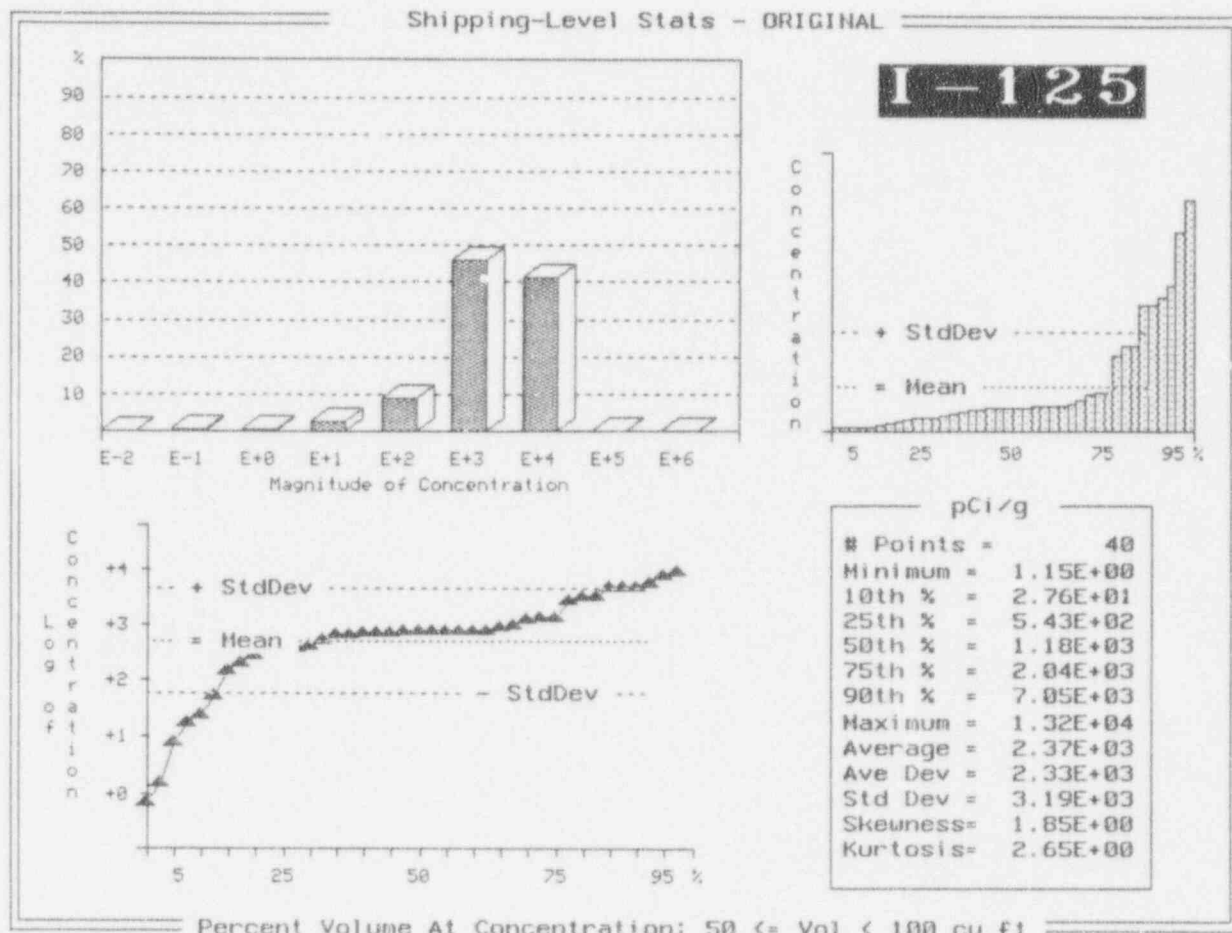


Exhibit F-56 (Continued)

Shipping-Level Stats - ORIGINAL

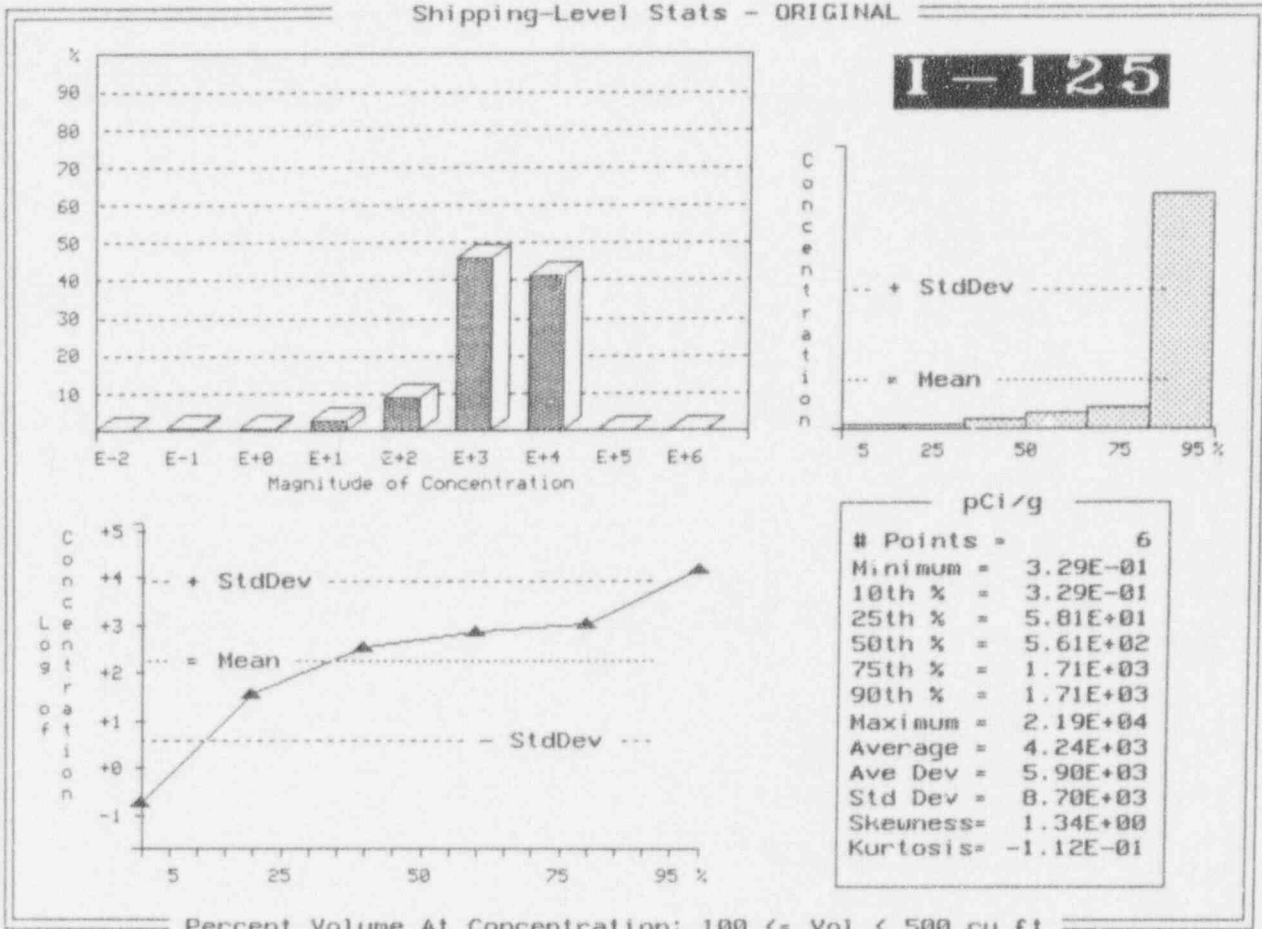
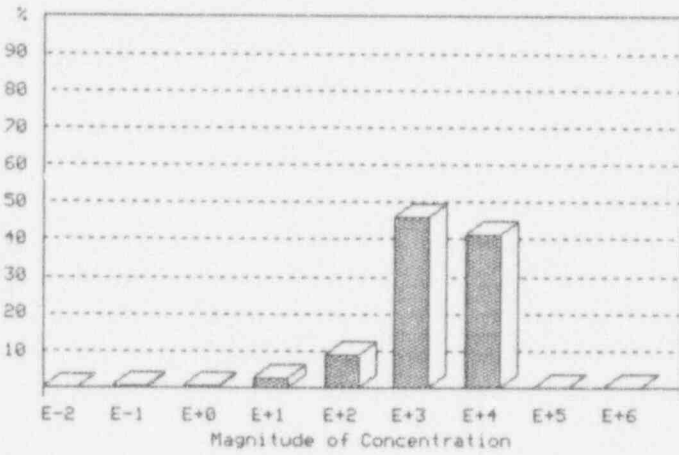
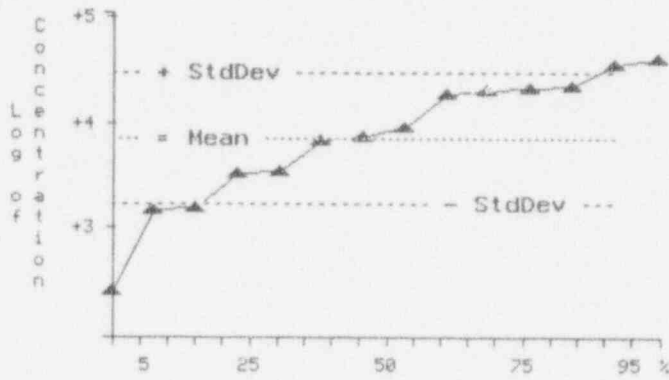
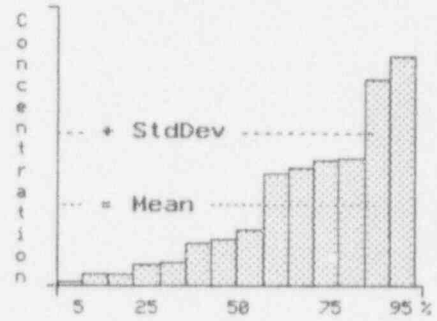


Exhibit F-56 (Continued)

Shipping-Level Stats - ORIGINAL



I-125



pCi/g	
# Points =	14
Minimum =	3.24E+02
10th % =	3.24E+02
25th % =	4.24E+03
50th % =	9.58E+03
75th % =	2.68E+04
90th % =	4.49E+04
Maximum =	5.01E+04
Average =	1.73E+04
Ave Dev =	1.36E+04
Std Dev =	1.62E+04
Skeuness =	7.00E-01
Kurtosis =	-8.88E-01

Percent Volume At Concentration: Vol >= 1000 cu ft

Exhibit F-56 (Continued)

Shipping-Level Stats - ORIGINAL

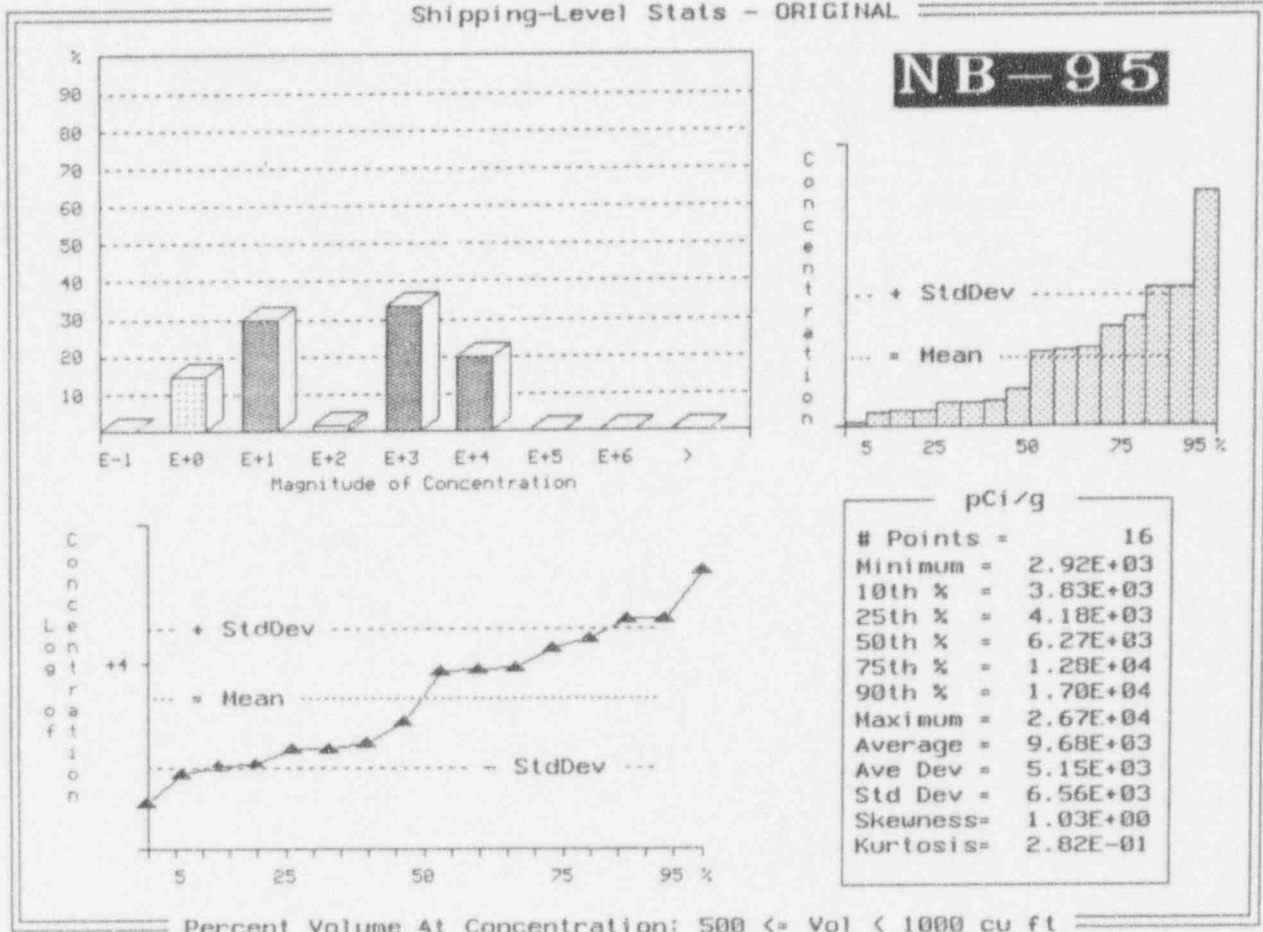


Exhibit F-56 (Continued)

Shipping-Level Stats - ORIGINAL

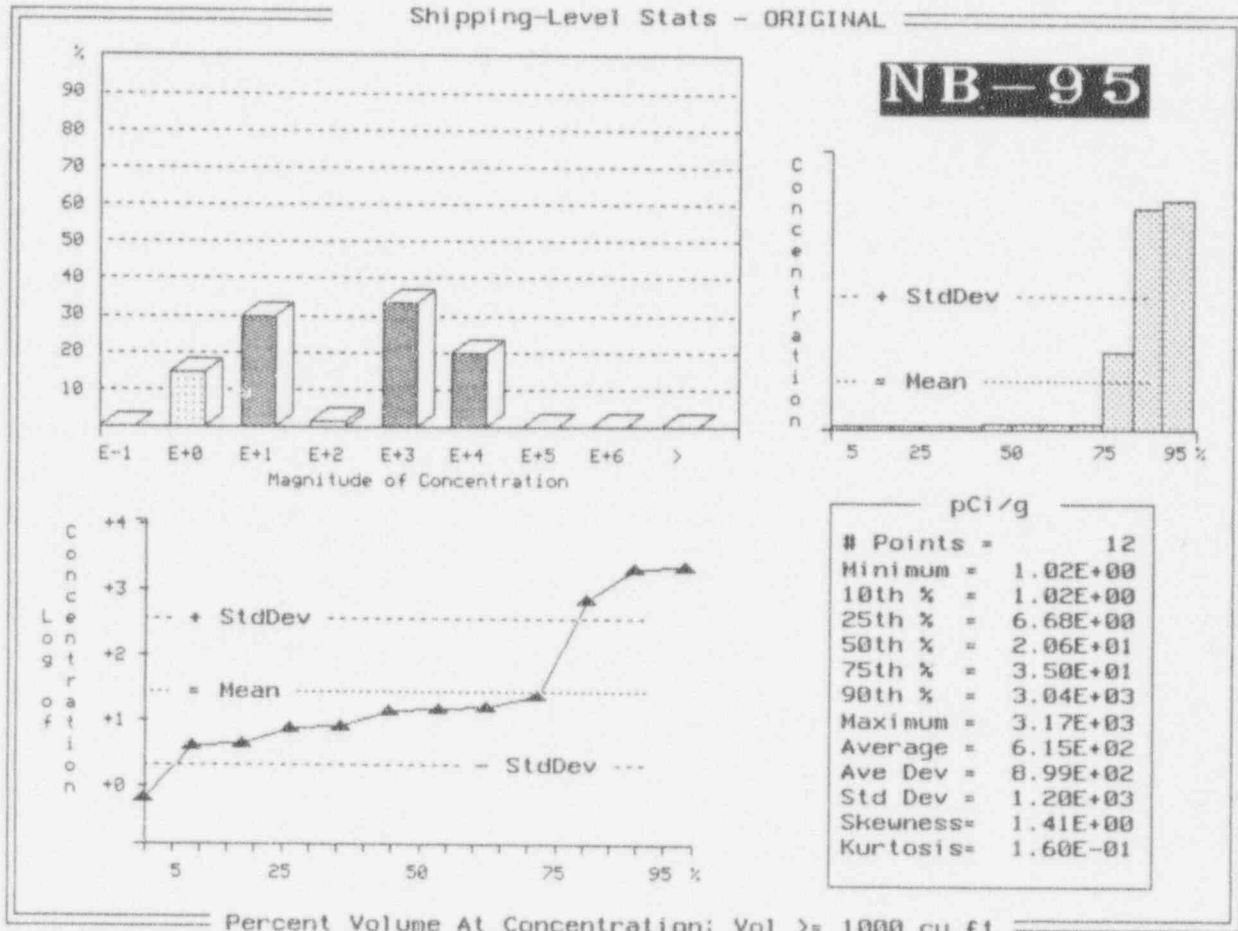


Exhibit F-56 (Continued)

Shipping-Level Stats - ORIGINAL

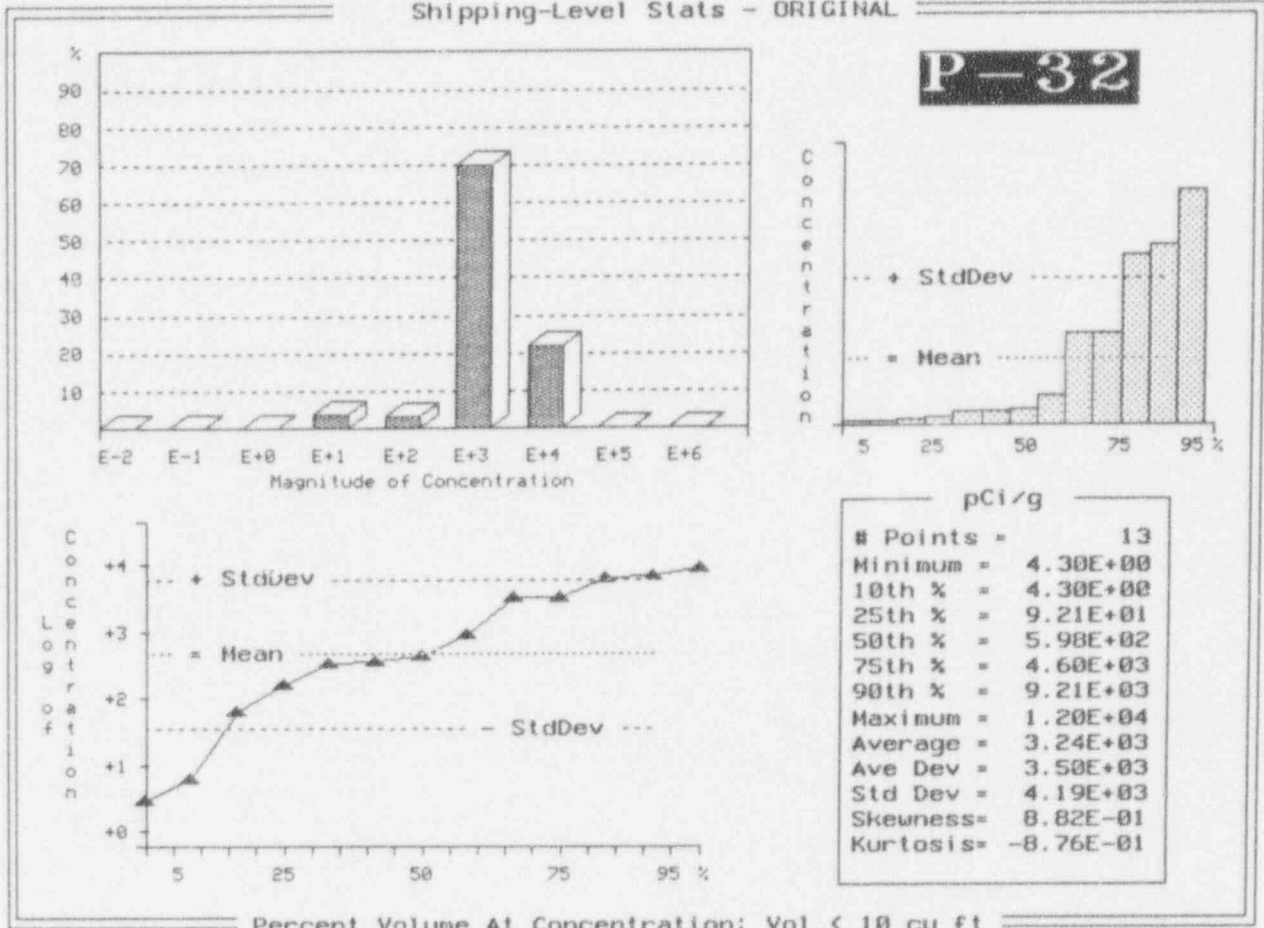


Exhibit F-56 (Continued)

Shipping-Level Stats - ORIGINAL

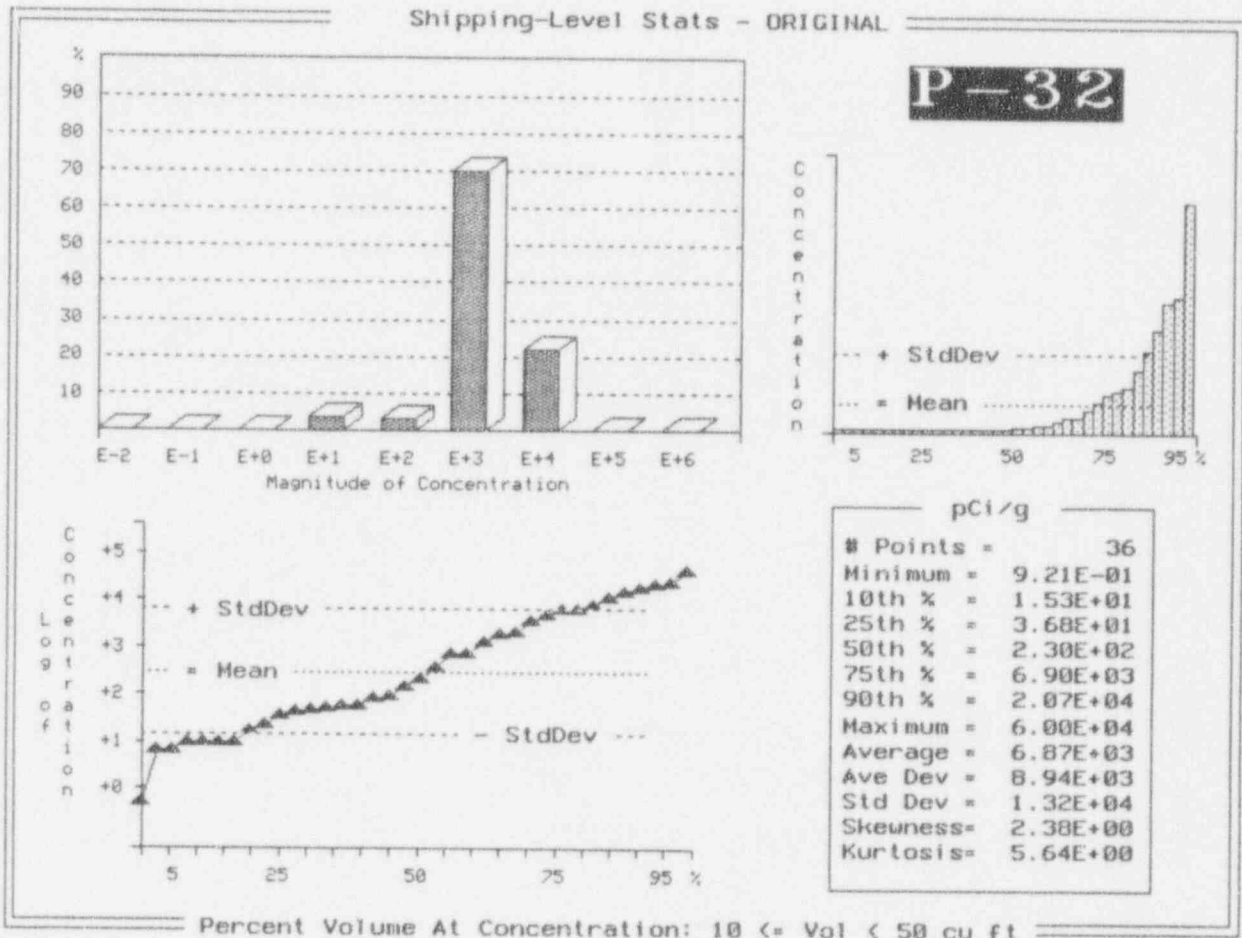
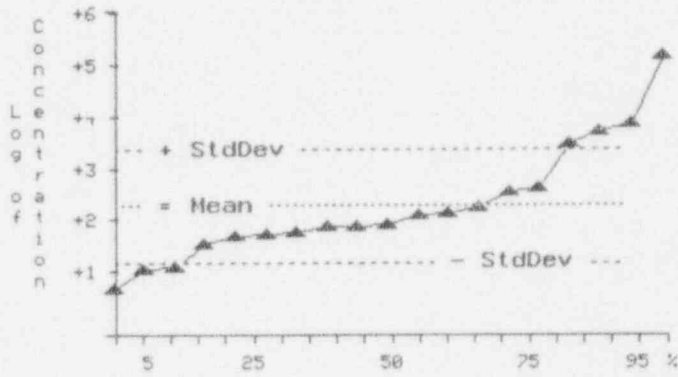
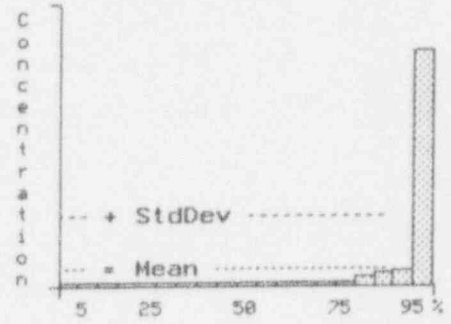
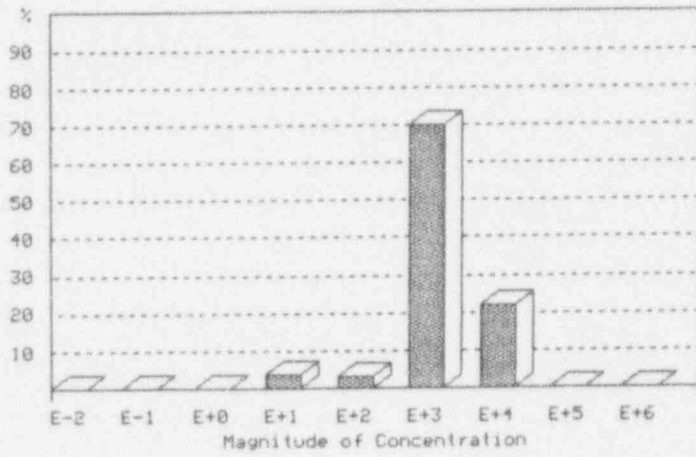


Exhibit F-56 (Continued)

Shipping-Level Stats - ORIGINAL

P-32



pCi/g	
# Points =	19
Minimum =	7.89E+00
10th % =	1.84E+01
25th % =	7.67E+01
50th % =	1.25E+02
75th % =	5.40E+02
90th % =	7.73E+03
Maximum =	2.01E+05
Average =	1.19E+04
Ave Dev =	1.99E+04
Std Dev =	4.60E+04
Skewness =	3.67E+00
Kurtosis =	1.22E+01

Percent Volume At Concentration: 50 <= Vol < 100 cu ft

Exhibit F-56 (Continued)

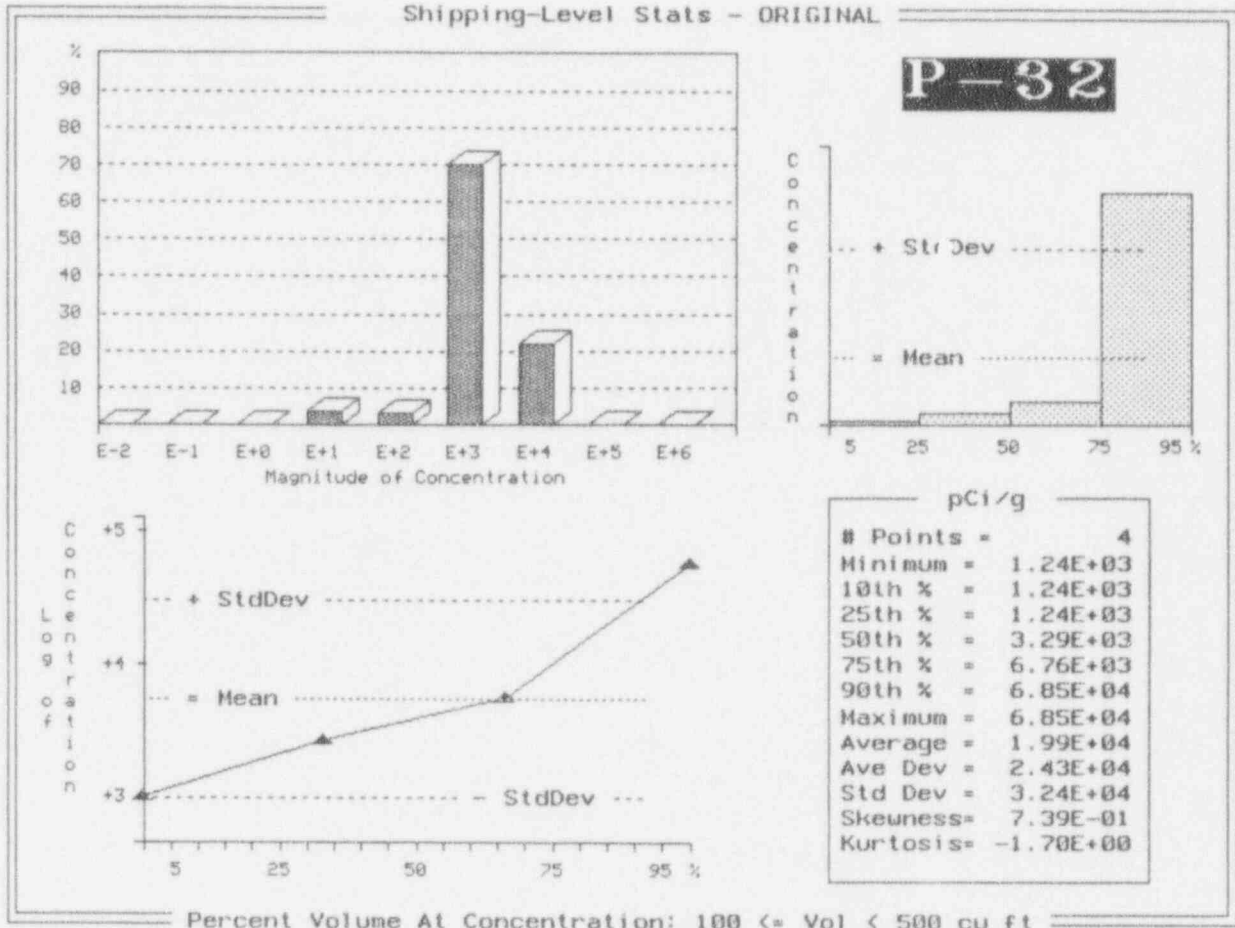


Exhibit F-56 (Continued)

Shipping-Level Stats - ORIGINAL

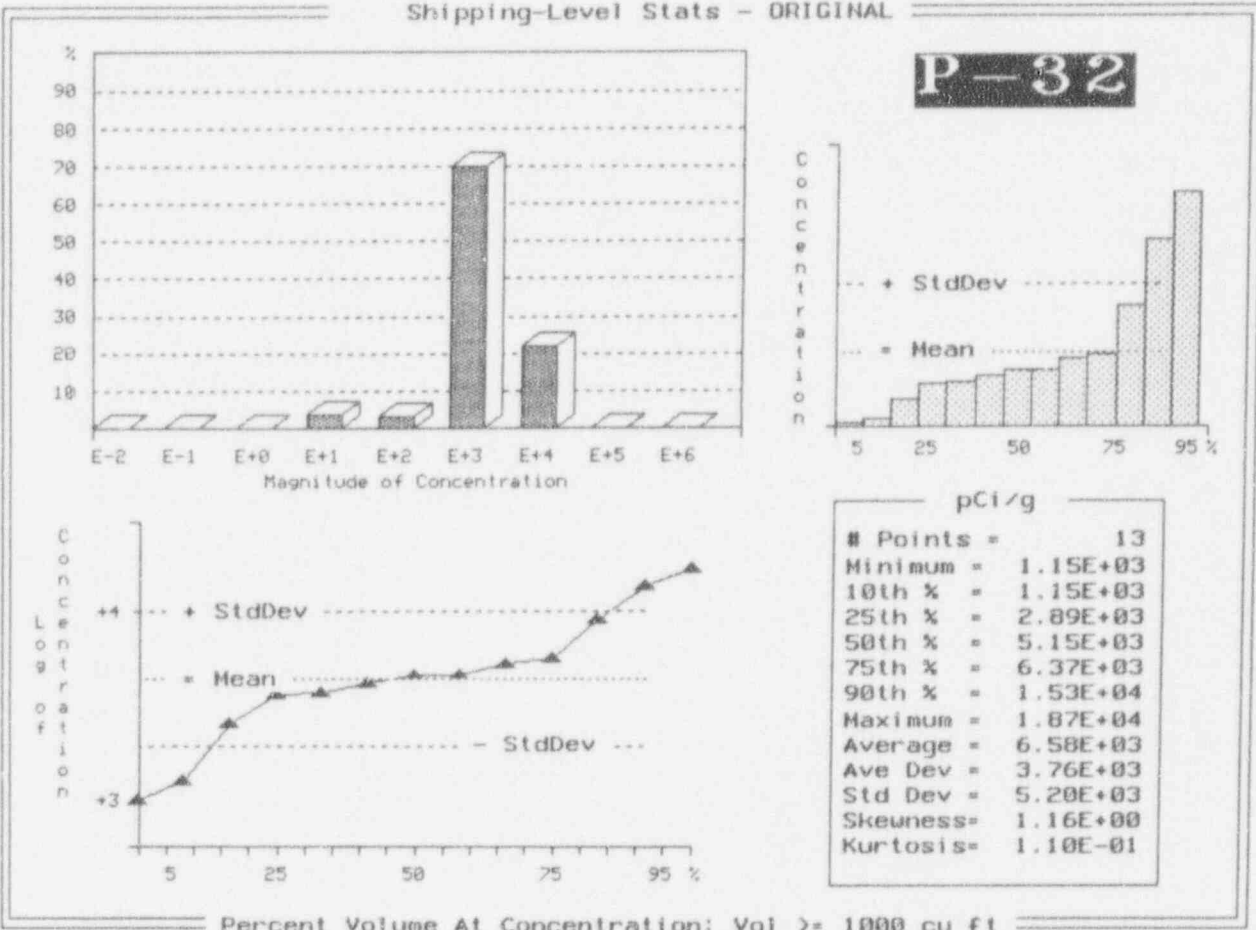


Exhibit F-56 (Continued)

Shipping-Level Stats - ORIGINAL

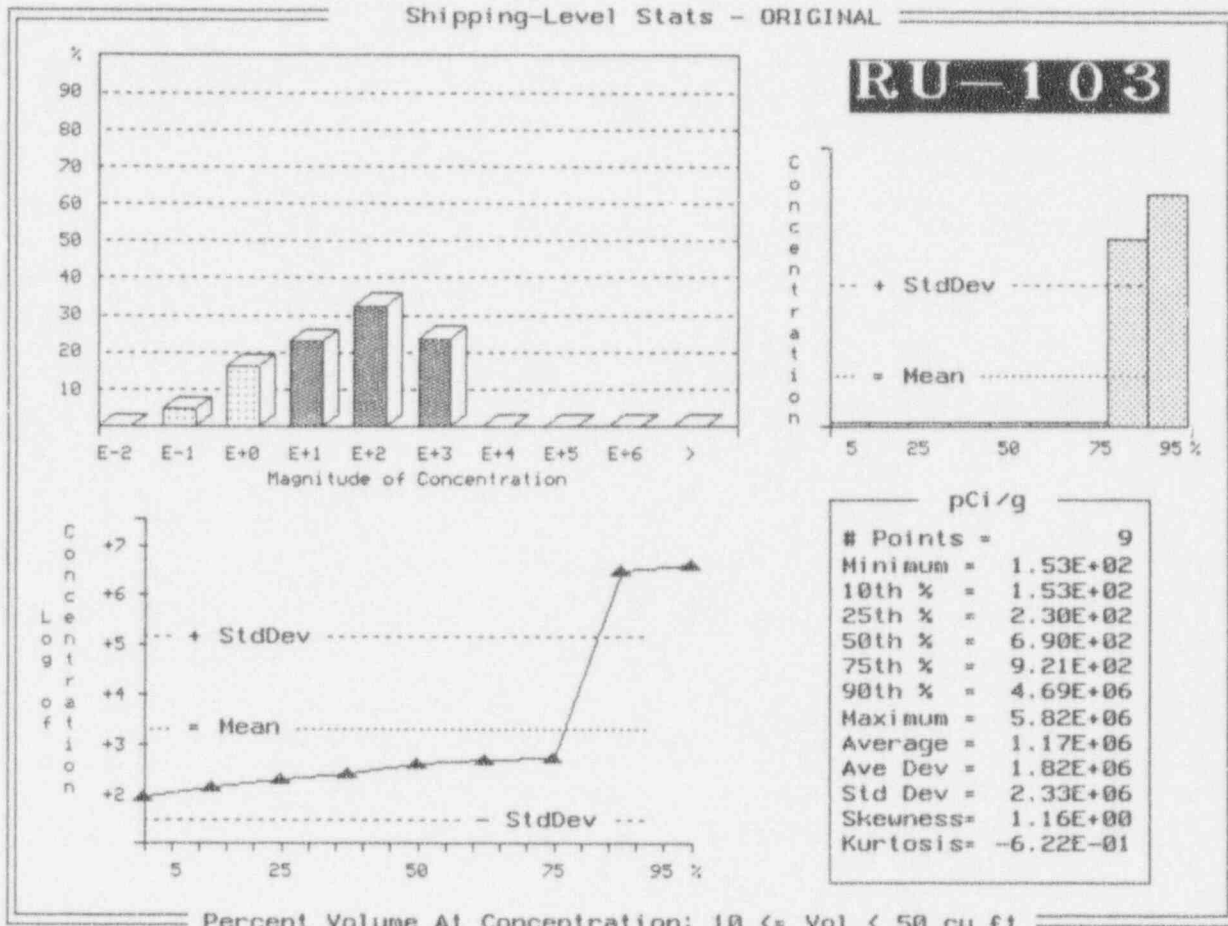


Exhibit F-56 (Continued)

Shipping-Level Stats - ORIGINAL

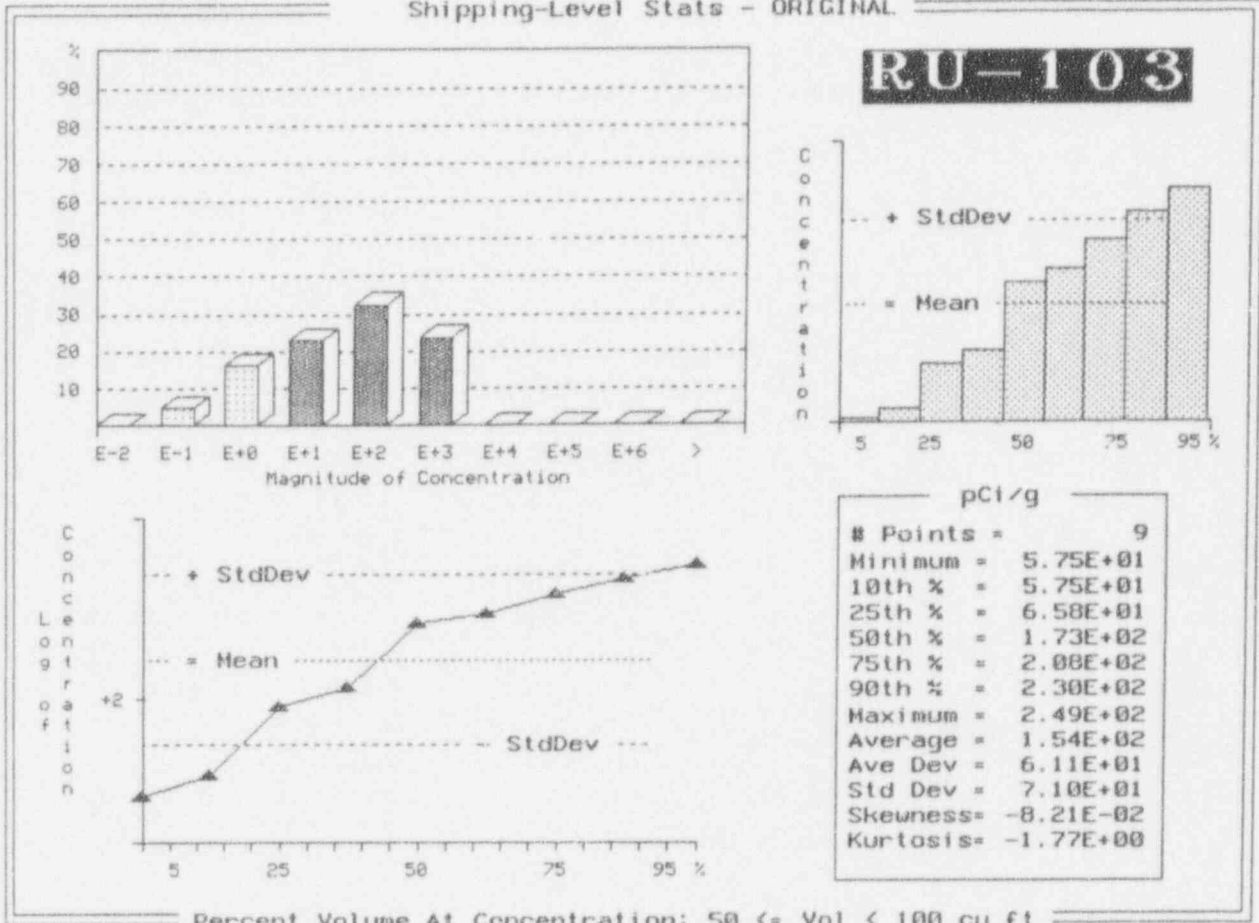


Exhibit F-56 (Continued)

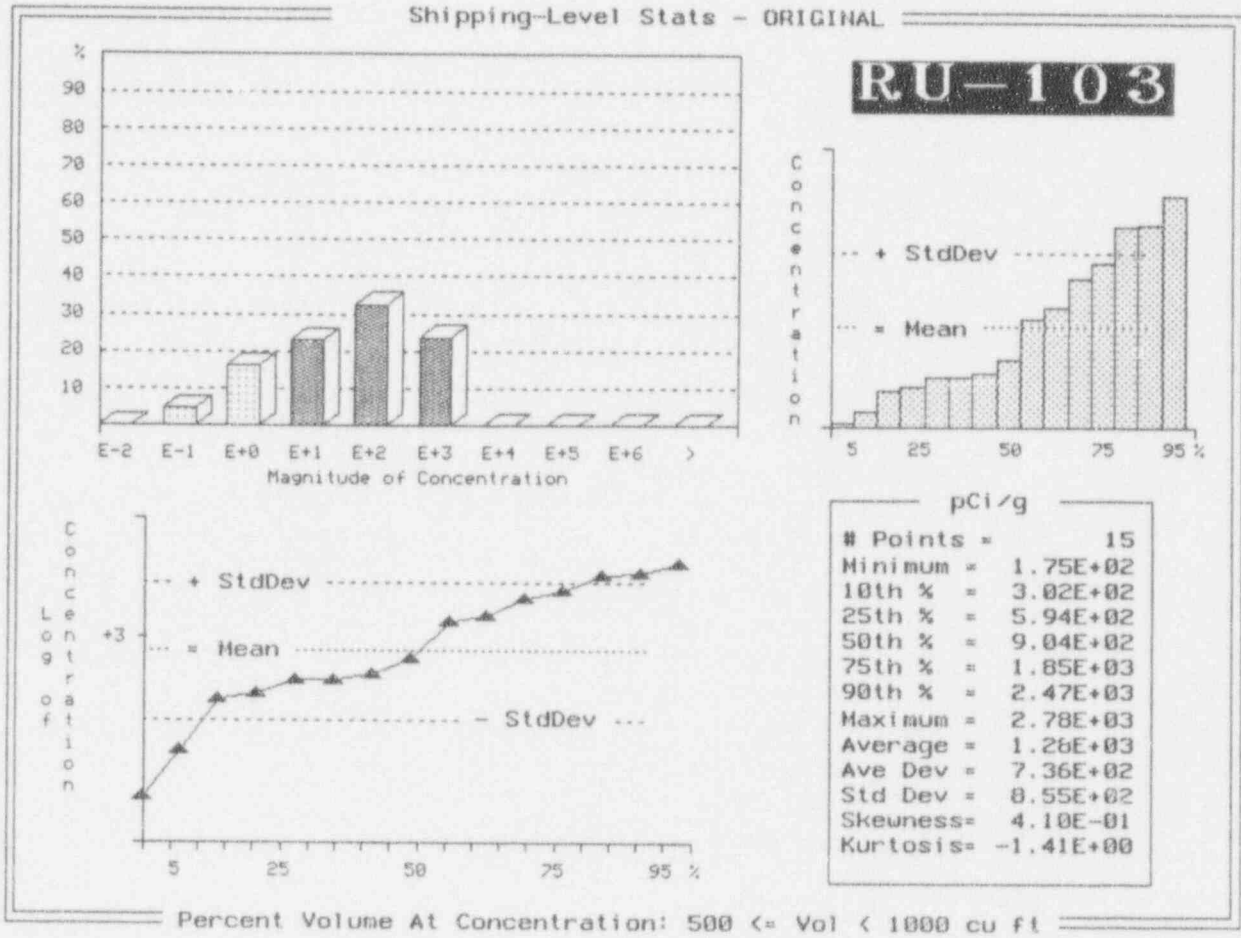
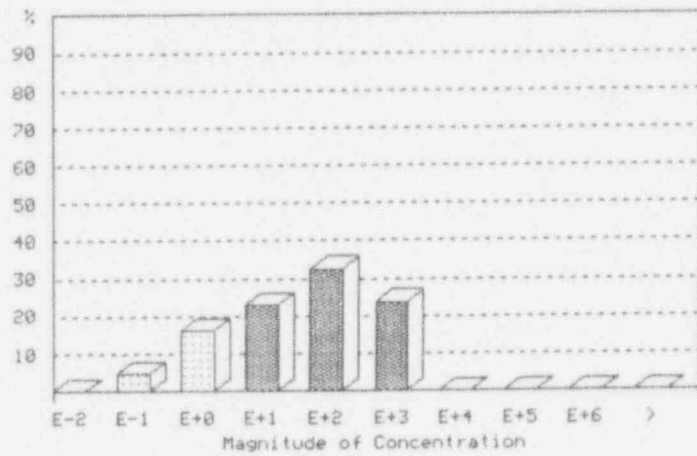
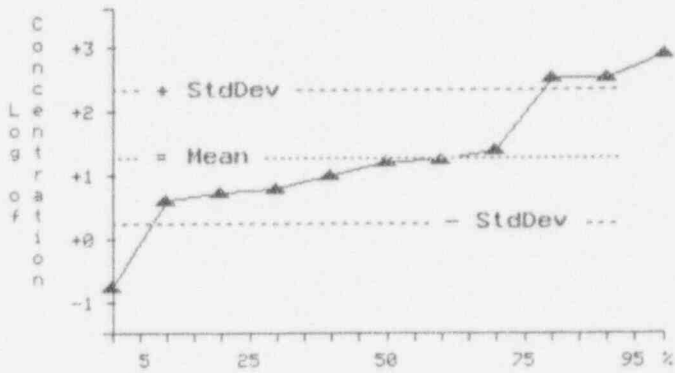
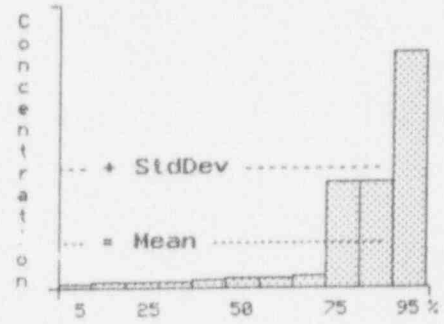


Exhibit F-56 (Continued)

Shipping-Level Stats - ORIGINAL



RU-103



pCi/g	
# Points =	11
Minimum =	2.68E-01
10th % =	2.68E-01
25th % =	7.59E+00
50th % =	2.39E+01
75th % =	3.50E+01
90th % =	4.57E+02
Maximum =	1.03E+03
Average =	1.87E+02
Ave Dev =	2.50E+02
Std Dev =	3.30E+02
Skewness =	1.50E+00
Kurtosis =	9.85E-01

Percent Volume At Concentration: Vol >= 1000 cu ft

Exhibit F-56 (Continued)

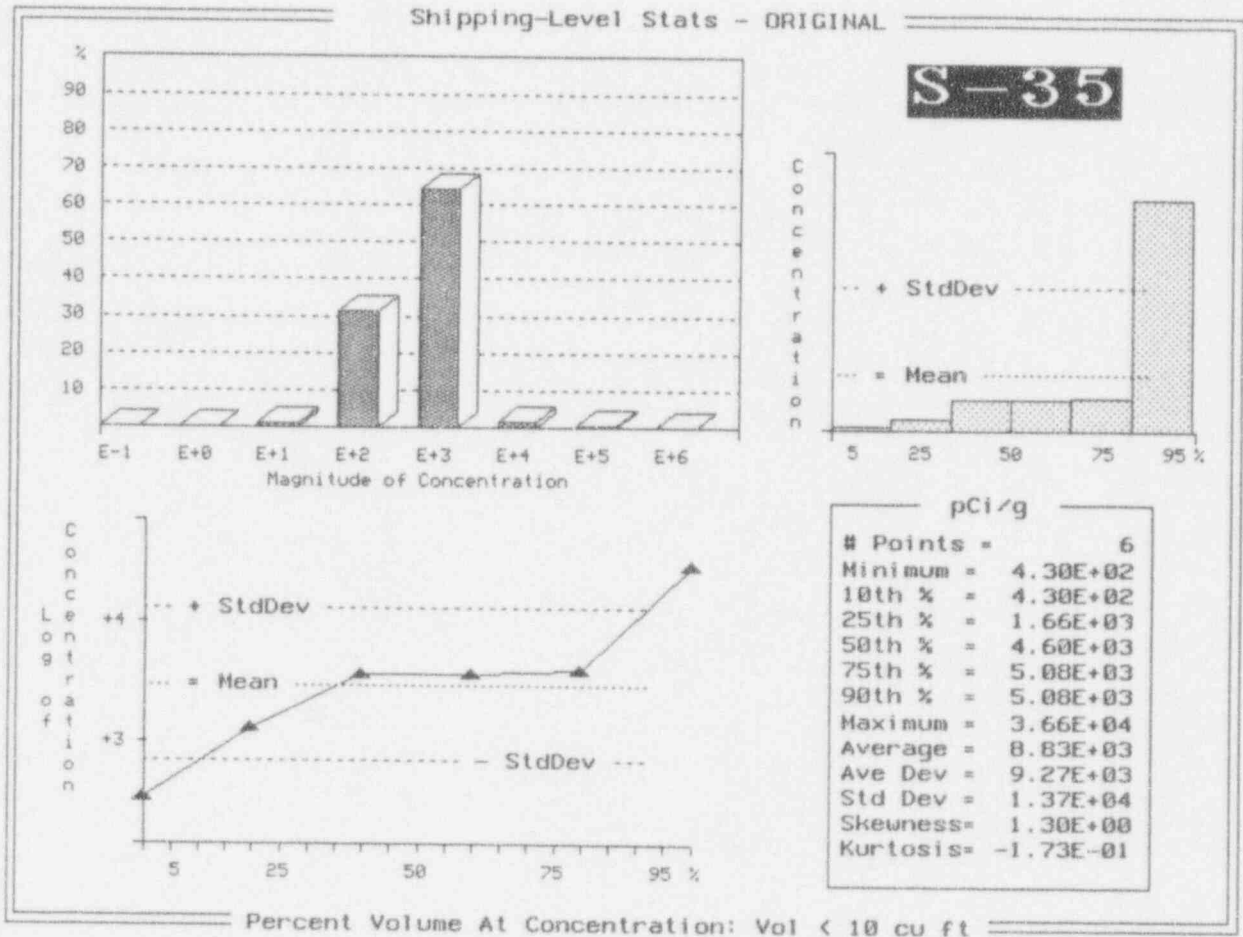


Exhibit F-56 (Continued)

Shipping-Level Stats - ORIGINAL

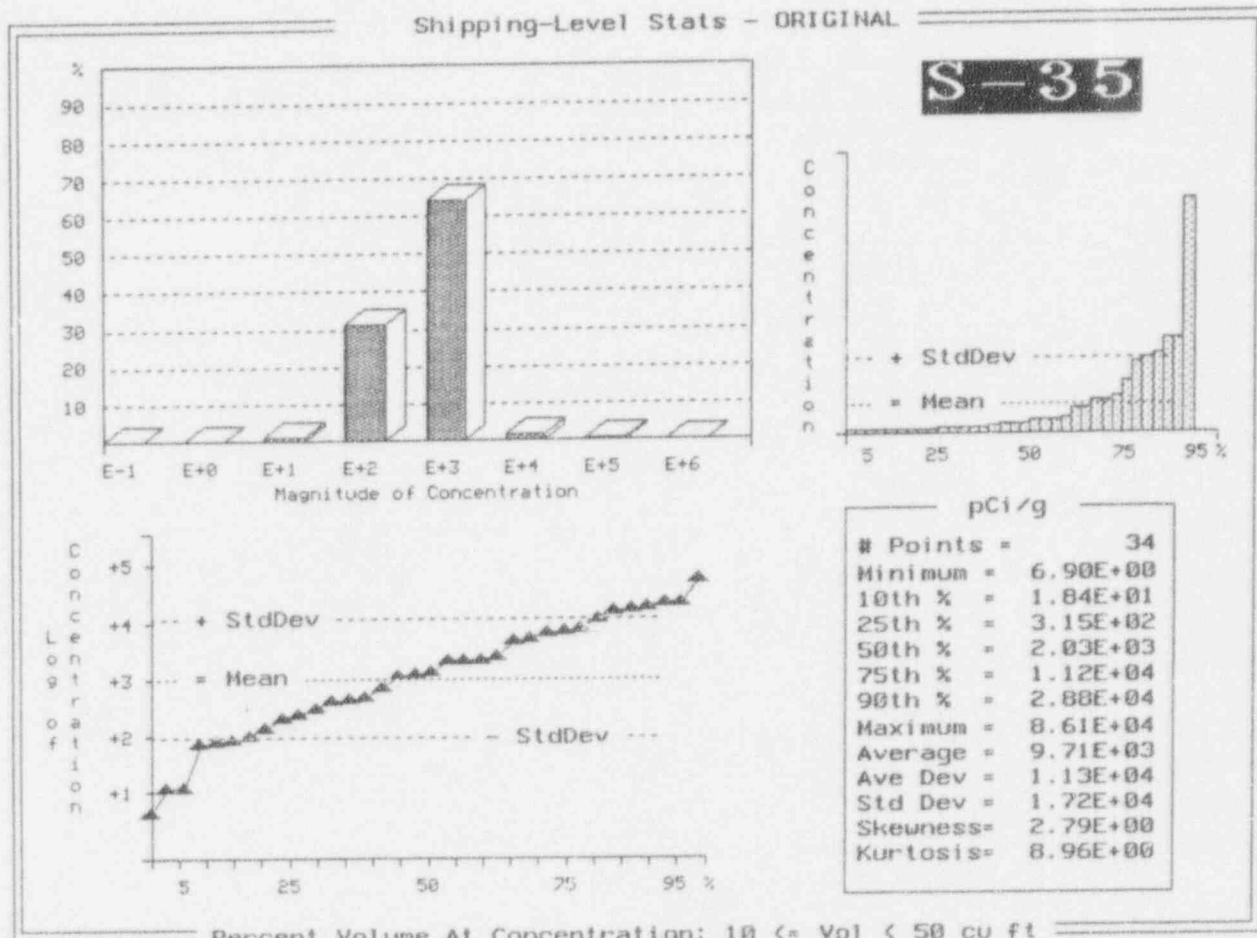


Exhibit F-56 (Continued)

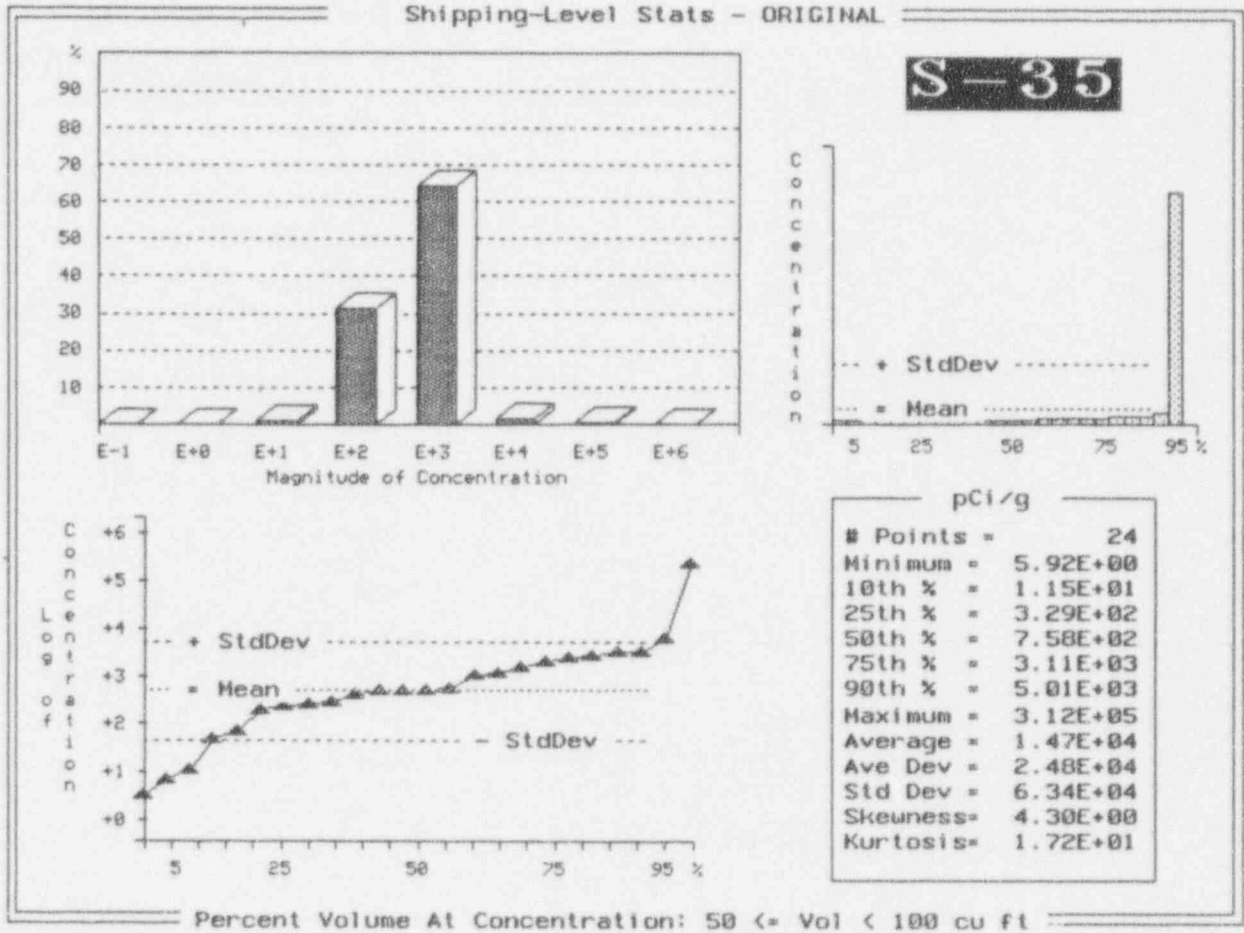


Exhibit F-56 (Continued)

Shipping-Level Stats - ORIGINAL

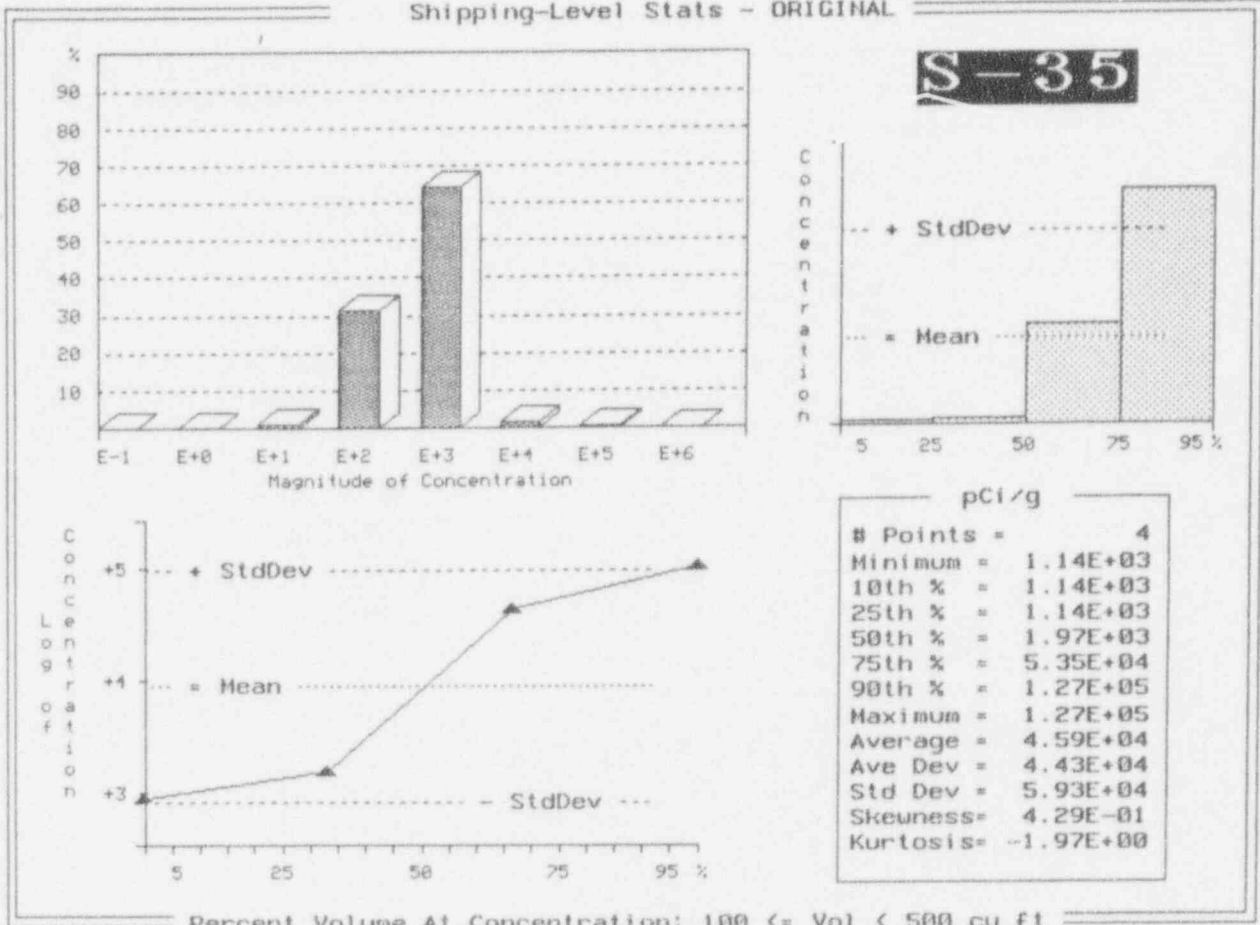
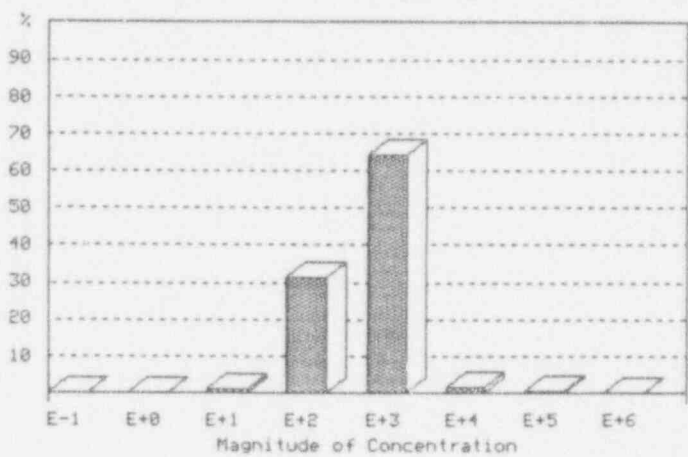
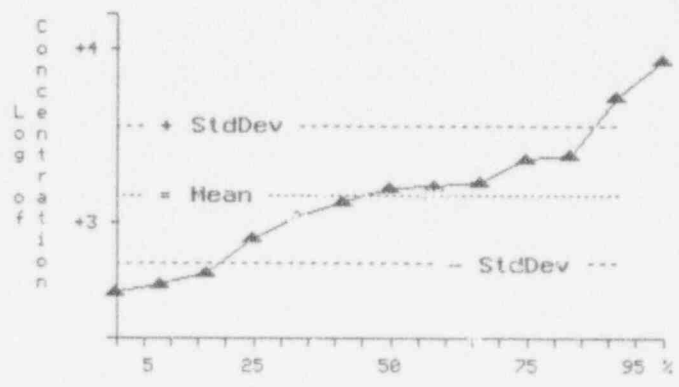
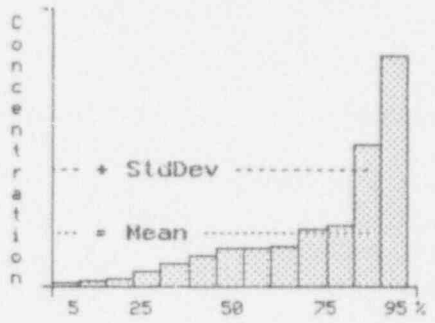


Exhibit F-56 (Continued)

Shipping-Level Stats - ORIGINAL



S-35



pCi/g	
# Points =	13
Minimum =	4.65E+02
10th % =	4.65E+02
25th % =	5.96E+02
50th % =	1.85E+03
75th % =	2.70E+03
90th % =	6.18E+03
Maximum =	9.84E+03
Average =	2.51E+03
Ave Dev =	1.77E+03
Std Dev =	2.66E+03
Skewness =	1.68E+00
Kurtosis =	1.77E+00

Percent Volume At Concentration: Vol >= 1000 cu ft

Exhibit F-57
Data Summary - Analyses at the Shipment Level
(Aggregate Practices for non-brokered waste: 1986 to 1990)

	<u>Data or Parameters</u>
Compact or unaffiliated state:	Rhode Island
Waste generator class:	Government
Total number of waste generators:	2
Total associated waste volume (m ³):	0.9
Total associated waste activity (Ci):	8.5
Waste class:	A-Unstable and A-Stable
Identified waste generators for this analysis:	
Number:	1
Percent of total (%):	50
Total number of shipping records:	1
Number of shipping records <u>with</u> container data:	0
Number of waste containers:	0
Weight of shipments (kg):	596
Total waste volume (m ³):	0.9
Fractional waste volume (%): (this analysis/total)	91
Total waste activity (Ci):	0.0038
Fractional waste activity (%): (this analysis/total)	0.04

Exhibit F-57 (Continued)

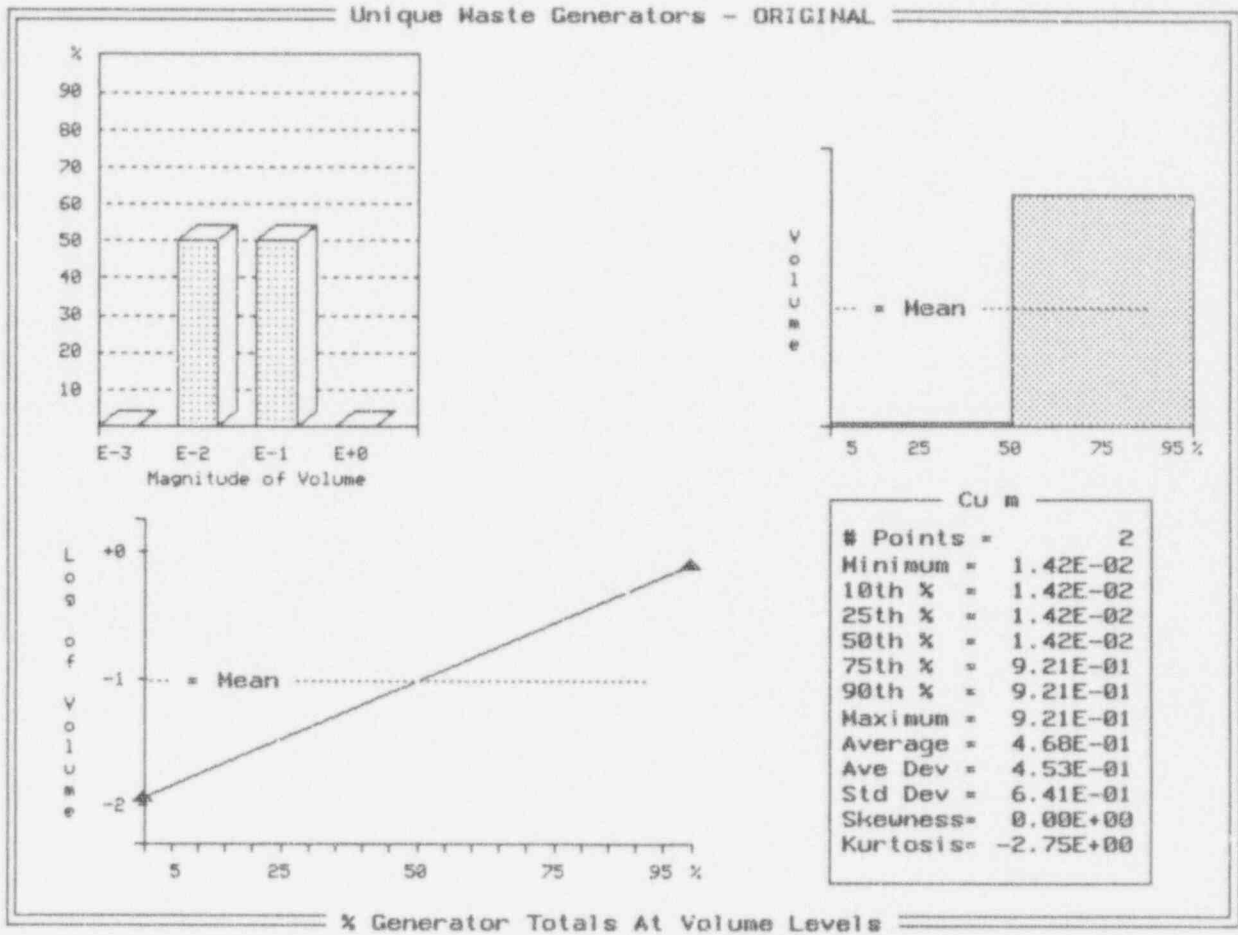


Exhibit F-57 (Continued)

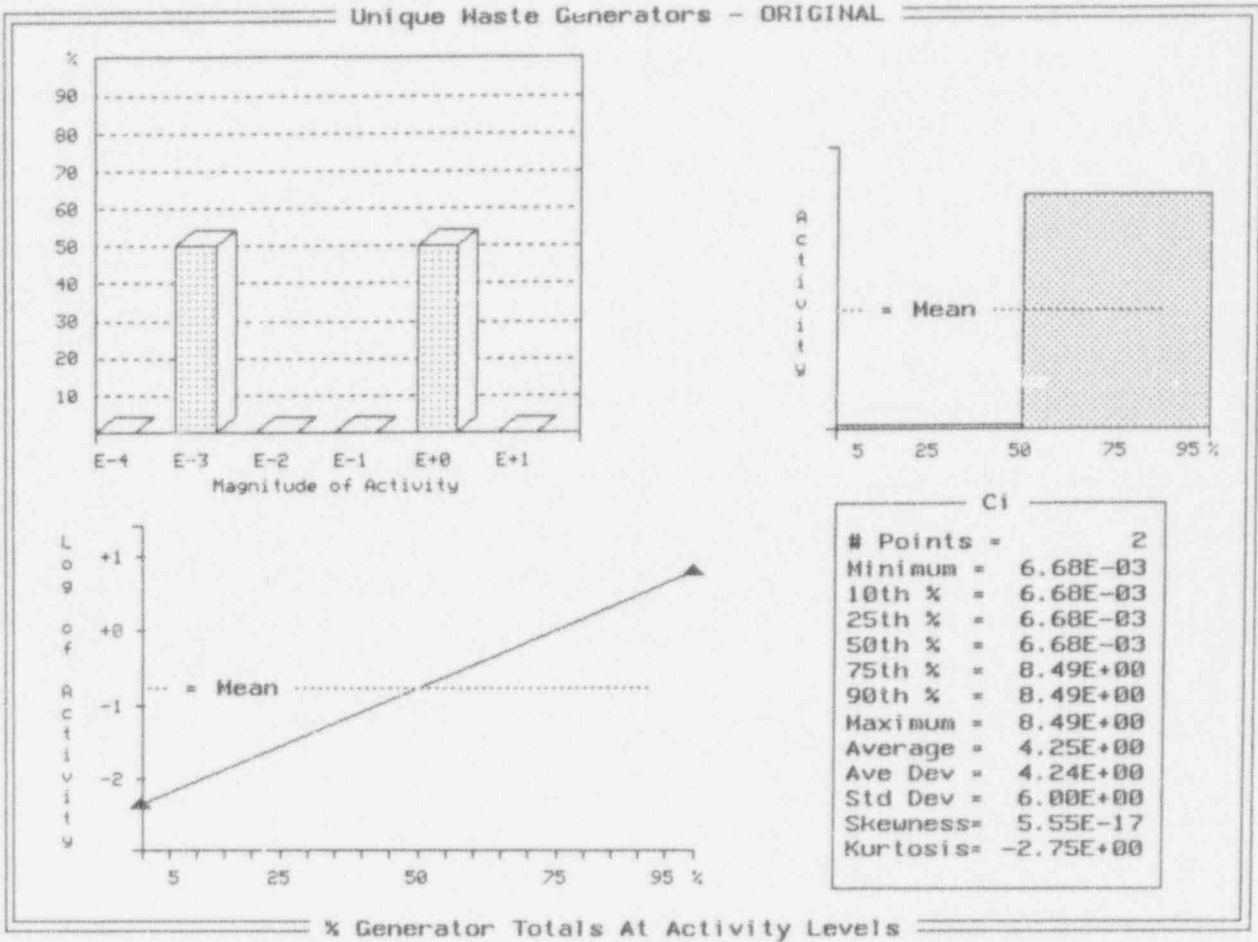


Exhibit F-58
Data Summary - Analyses at the Shipment Level
(Aggregate Practices for non-brokered waste: 1986 to 1990)

<u>Data or Parameters</u>	
Compact or unaffiliated state:	Rhode Island
Waste generator class:	Academic
Total number of waste generators:	5
Total associated waste volume (m ³):	28.1
Total associated waste activity (Ci):	0.9
Waste class:	A-Unstable and A-Stable
Identified waste generators for this analysis:	
Number:	2
Percent of total(%):	40
Total number of shipping records:	9
Number of shipping records <u>with</u> container data:	0
Number of waste containers:	0
Weight of shipments (kg):	5,083
Total waste volume (m ³):	8.9
Fractional waste volume (%): (this analysis/total)	32
Total waste activity (Ci):	0.8
Fractional waste activity (%): (this analysis/total)	85

Exhibit F-58 (Continued)

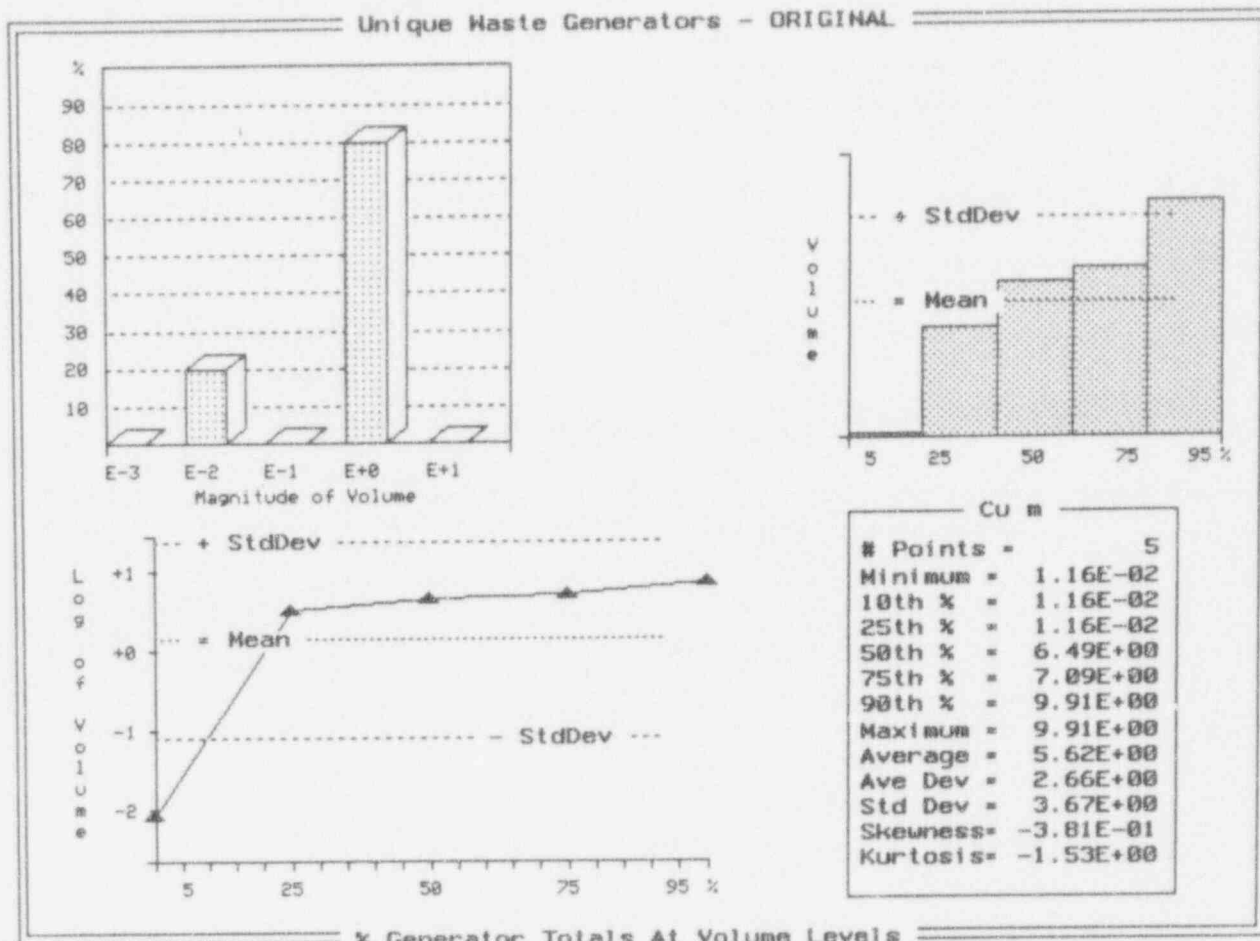


Exhibit F-58 (Continued)

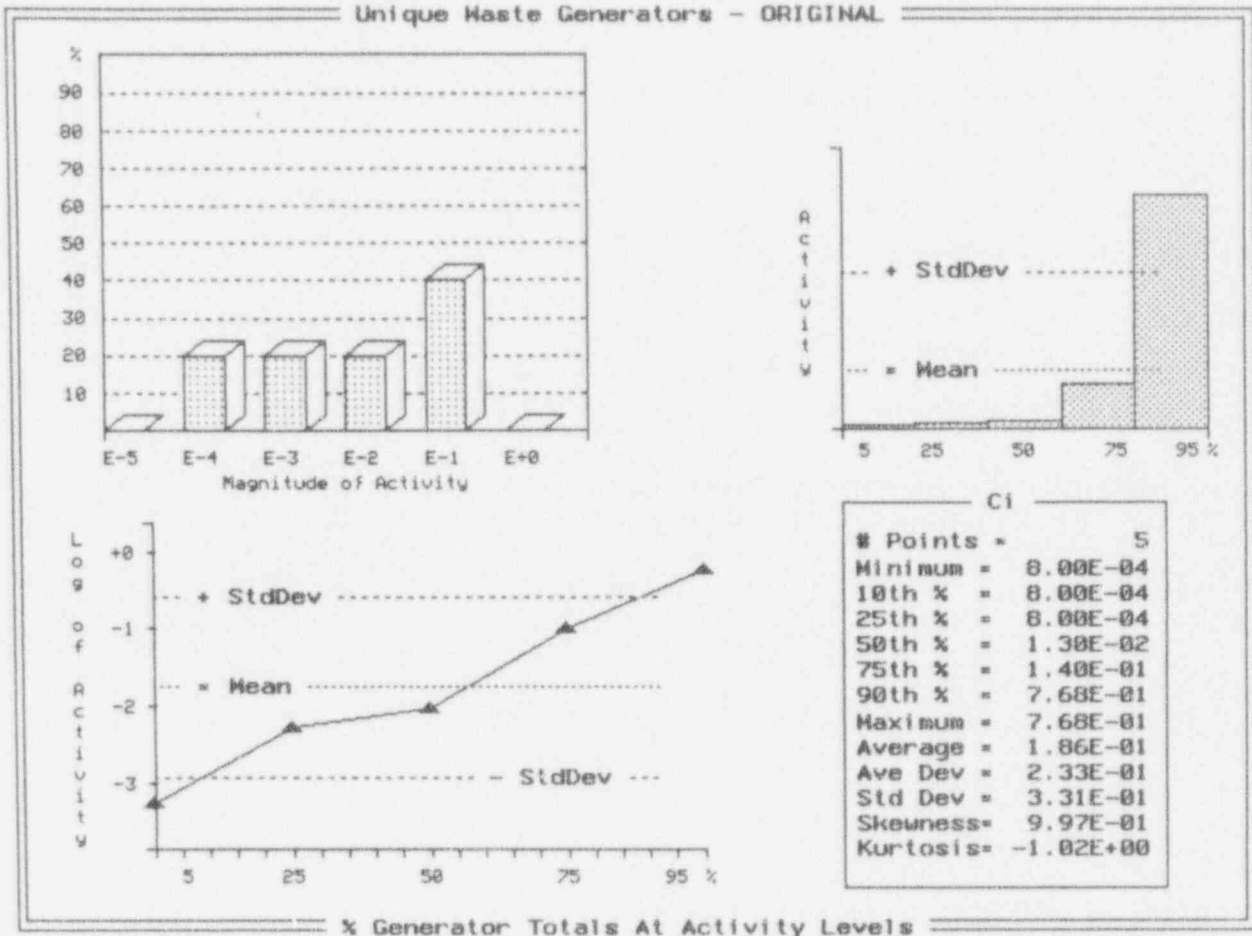


Exhibit F-59
Data Summary - Analyses at the Shipment Level
 (Aggregate Practices for non-brokered waste: 1986 to 1990)

	<u>Data or Parameters</u>
Compact or unaffiliated state:	Rhode Island
Waste generator class:	Medical
Total number of waste generators:	9
Total associated waste volume (m ³):	116
Total associated waste activity (Ci):	2.2
Waste class:	A-Unstable and A-Stable
Identified waste generators for this analysis:	
Number:	5
Percent of total(%):	56
Total number of shipping records:	20
Number of shipping records <u>with</u> container data:	0
Number of waste containers:	0
Weight of shipments (kg):	9,446
Total waste volume (m ³):	12.2
Fractional waste volume (%): (this analysis/total)	11
Total waste activity (Ci):	0.6
Fractional waste activity (%): (this analysis/total)	28

Exhibit F-59 (Continued)

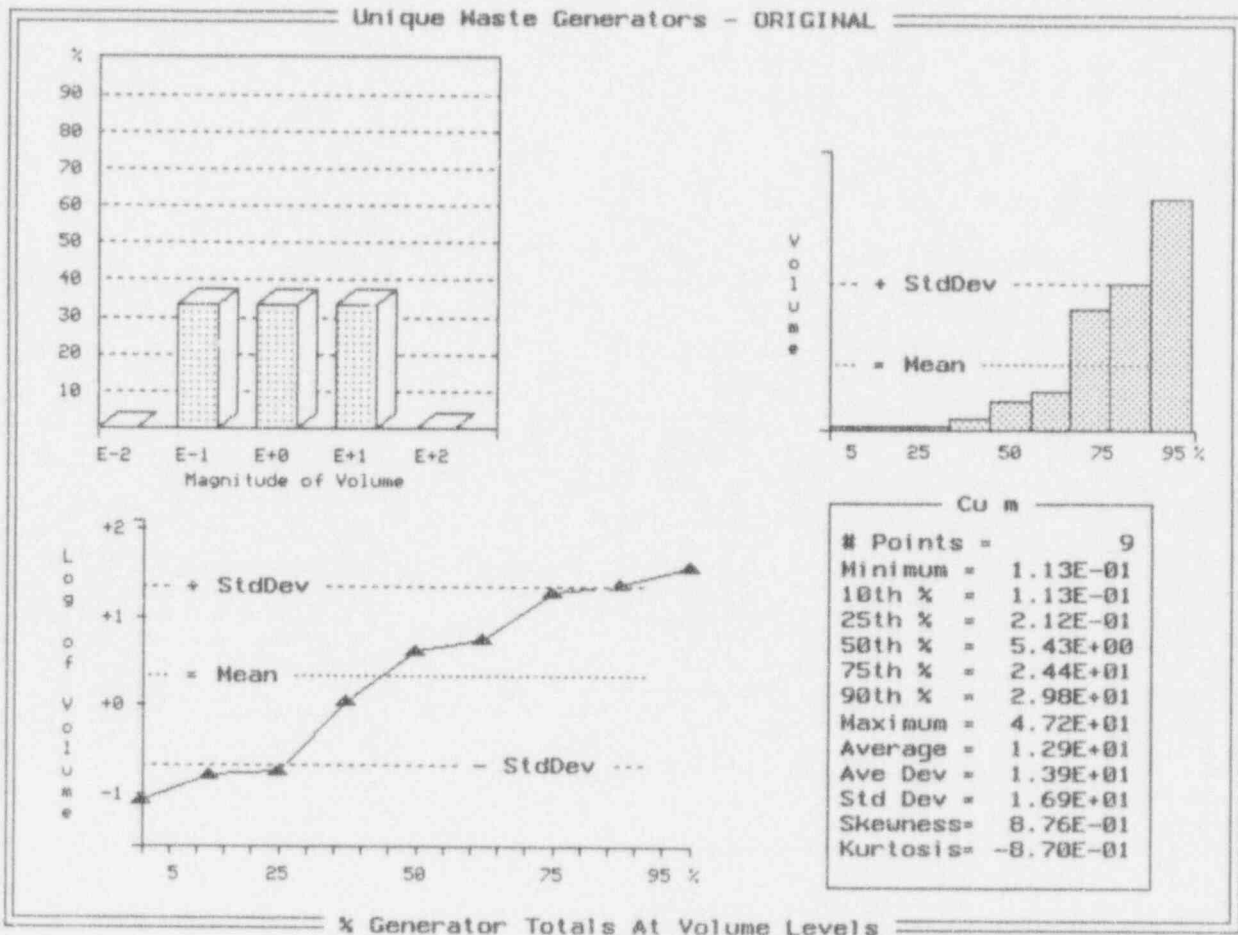


Exhibit F-59 (Continued)

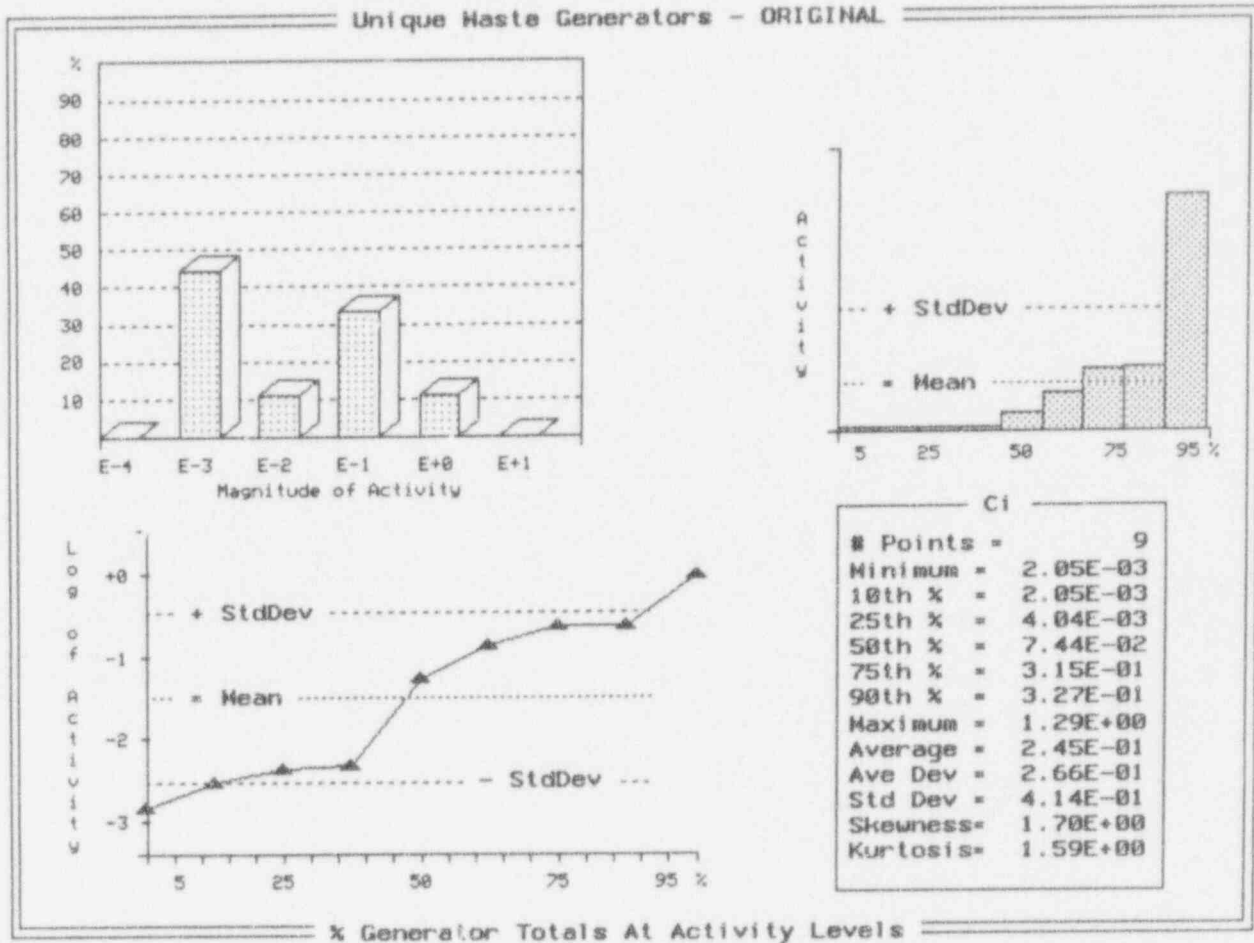


Exhibit F-60
Data Summary - Analyses at the Shipment Level
(Aggregate Practices for non-brokered waste: 1986 to 1990)

	<u>Data or Parameters</u>
Compact or unaffiliated state:	Rhode Island
Waste generator class:	Industrial
Total number of waste generators:	3
Total associated waste volume (m ³):	3.5
Total associated waste activity (Ci):	24.2
Waste class:	A-Unstable and A-Stable
Identified waste generators for this analysis:	
Number:	2
Percent of total(%):	67
Total number of shipping records:	4
Number of shipping records <u>with</u> container data:	0
Number of waste containers:	0
Weight of shipments (kg):	1,861
Total waste volume (m ³):	1.8
Fractional waste volume (%): (this analysis/total)	52
Total waste activity (Ci):	9.0
Fractional waste activity (%): (this analysis/total)	37

Exhibit F-60 (Continued)

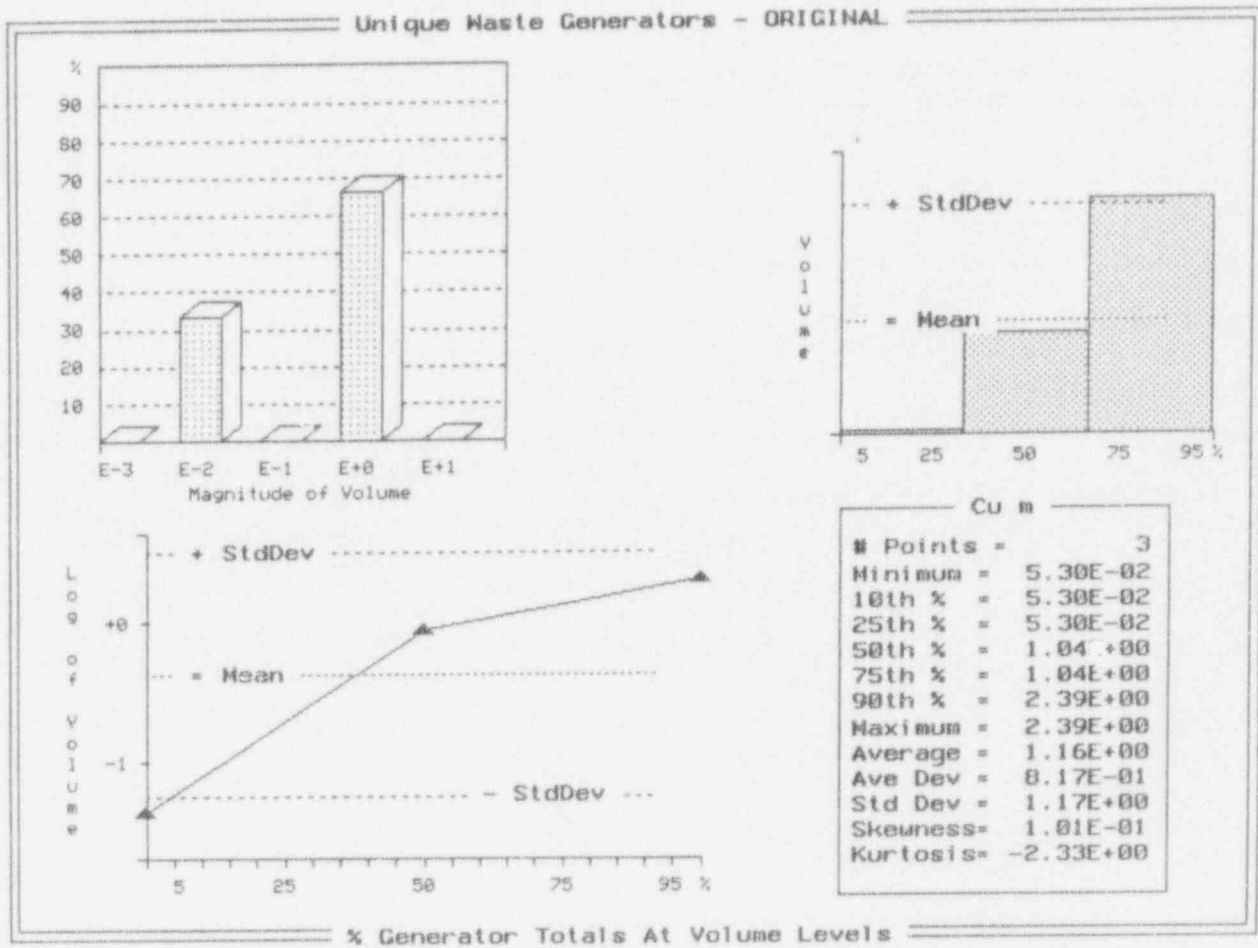


Exhibit F-60 (Continued)

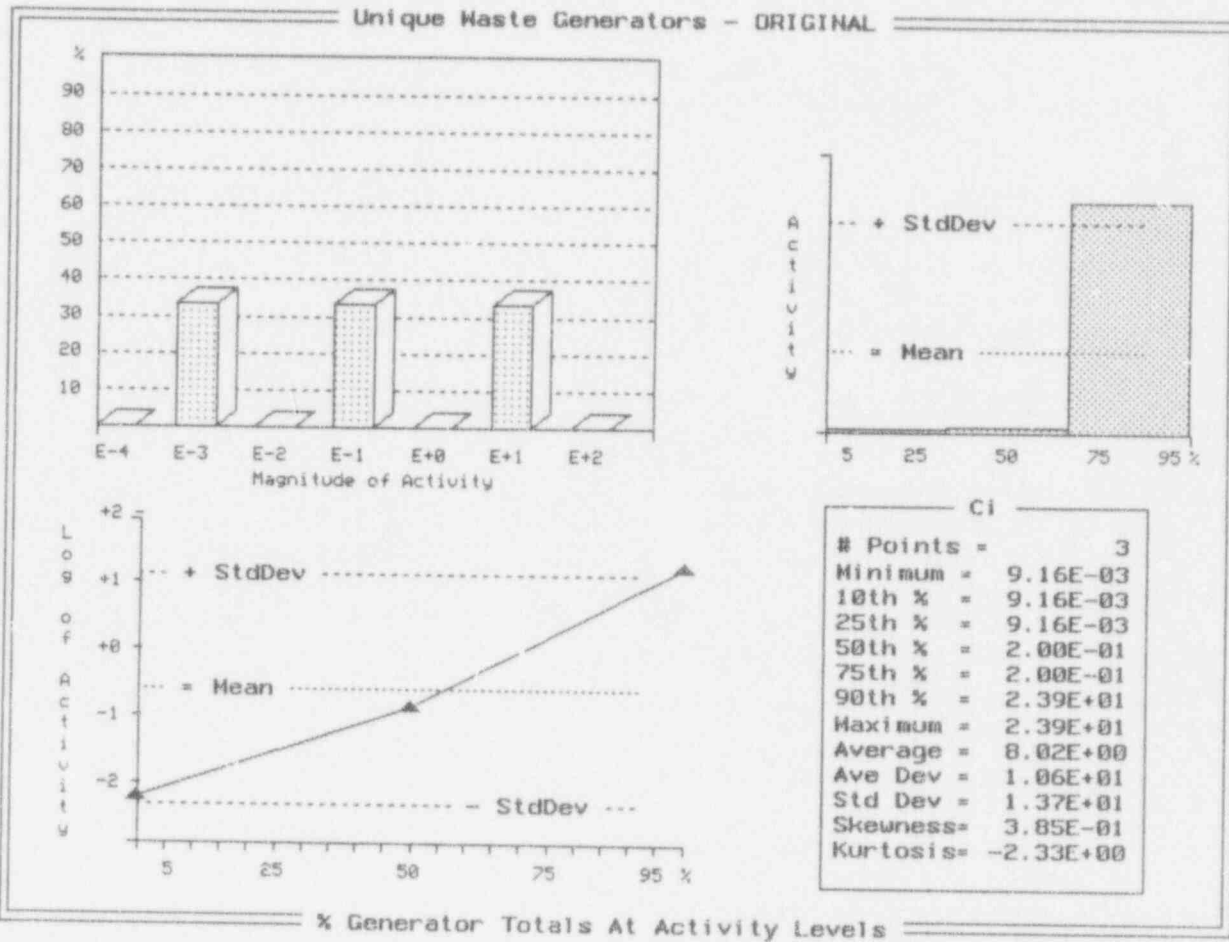


Exhibit F-61
Data Summary - Analyses at the Shipment Level
 (Aggregate Practices for non-brokered waste: 1986 to 1990)

	<u>Data or Parameters</u>
Compact or unaffiliated state:	Texas
Waste generator class:	Government
Total number of waste generators:	7
Total associated waste volume (m ³):	1,806
Total associated waste activity (Ci):	5,031
Waste class:	A-Unstable and A-Stable
Identified waste generators for this analysis:	
Number:	4
Percent of total(%):	57
Total number of shipping records:	128
Number of shipping records <u>with</u> container data:	1
Number of waste containers:	2
Weight of shipments (kg):	1,222,000
Total waste volume (m ³):	1,743
Fractional waste volume (%): (this analysis/total)	97
Total waste activity (Ci):	8.9
Fractional waste activity (%): (this analysis/total)	0.18

Exhibit F-61 (Continued)

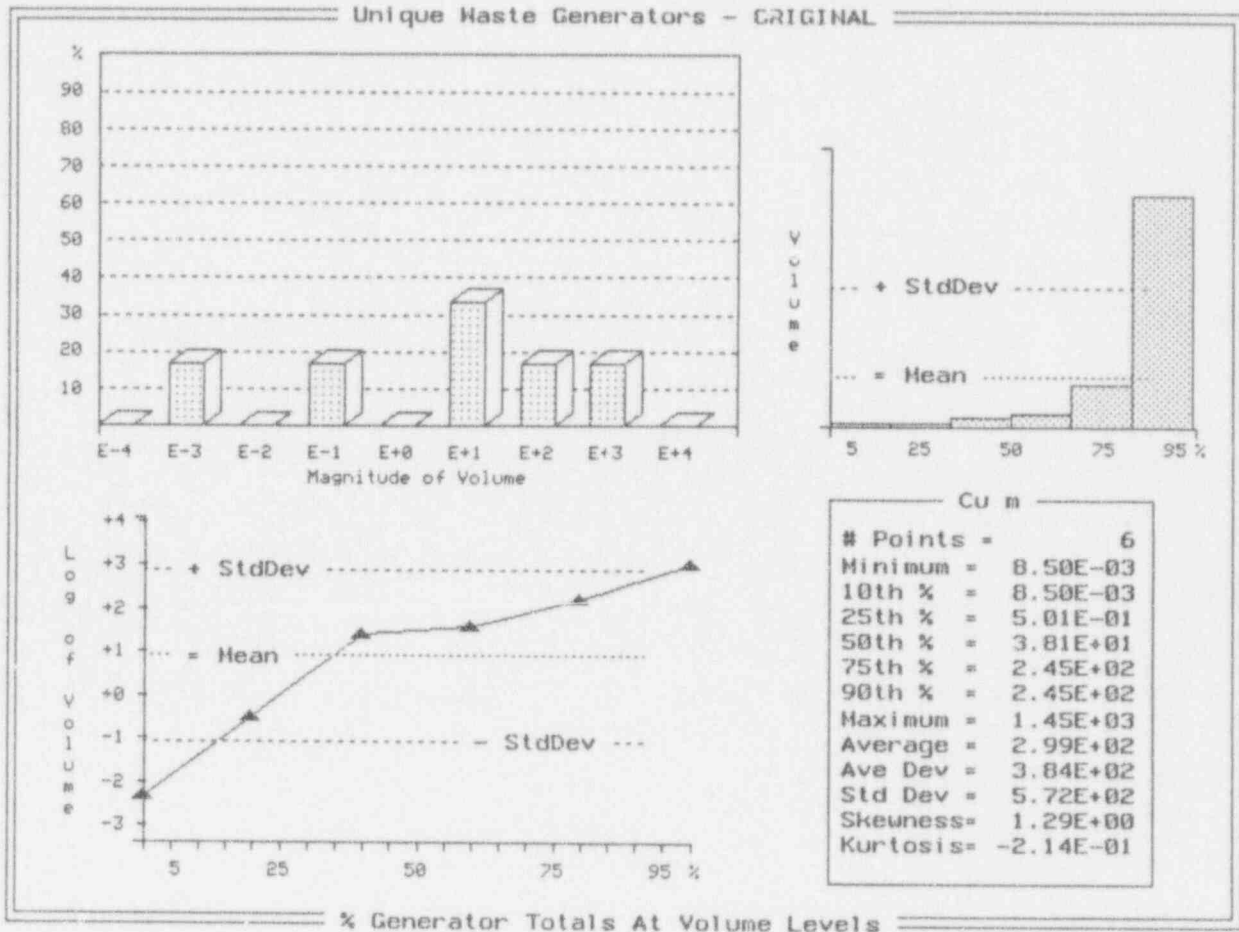


Exhibit F-61 (Continued)

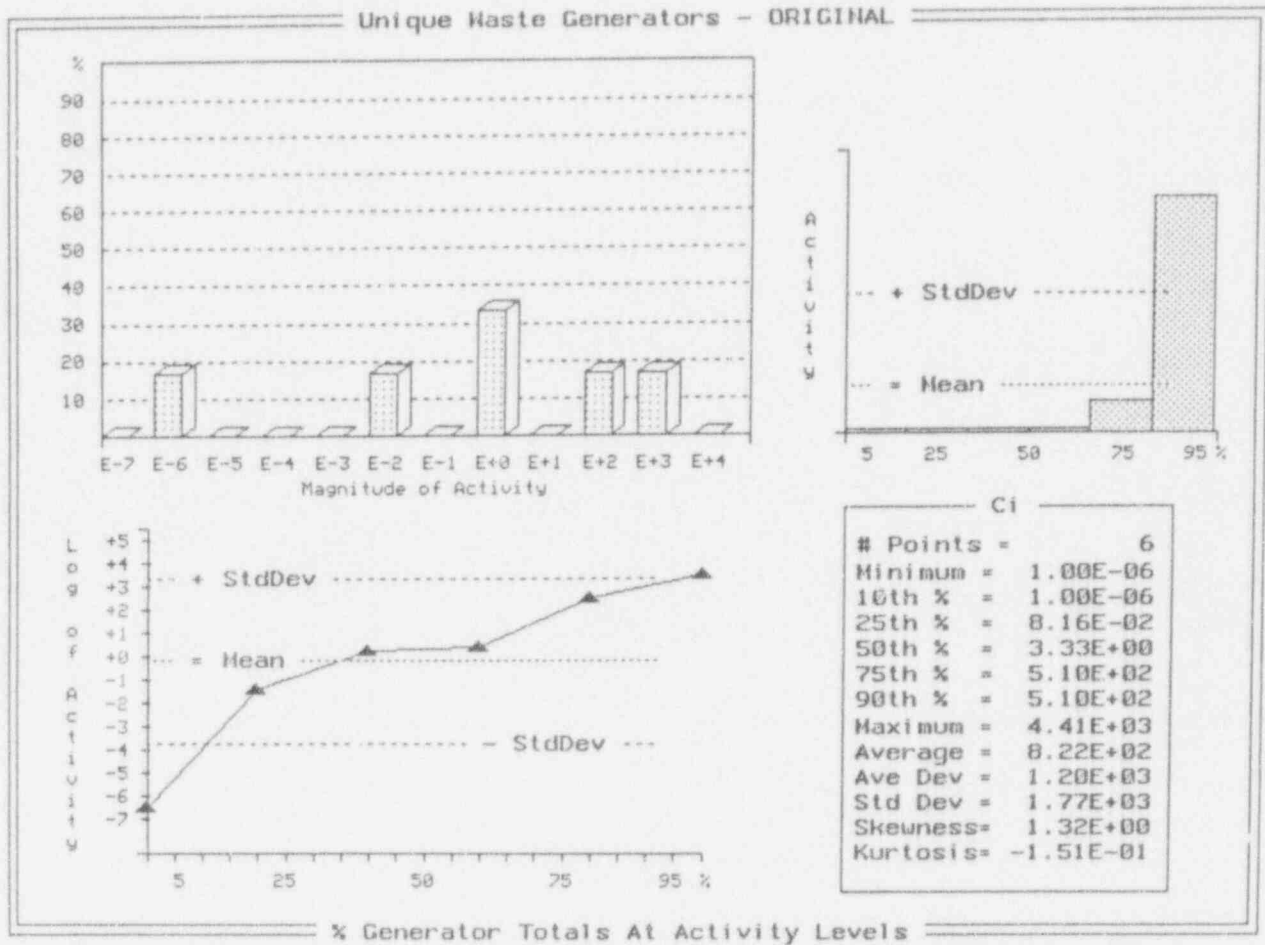


Exhibit F-62
Data Summary - Analyses at the Shipment Level
 (Aggregate Practices for non-brokered waste: 1986 to 1990)

	Data or Parameters
Compact or unaffiliated state:	Texas
Waste generator class:	Academic
Total number of waste generators:	27
Total associated waste volume (m ³):	410
Total associated waste activity (Ci):	73.0
Waste class:	A-Unstable and A-Stable
Identified waste generators for this analysis:	
Number:	no data
Percent of total(%):	--
Total number of shipping records:	--
Number of shipping records <u>with</u> container data:	--
Number of waste containers:	--
Weight of shipments (kg):	--
Total waste volume (m ³):	--
Fractional waste volume (%): (this analysis/total)	--
Total waste activity (Ci):	--
Fractional waste activity (%): (this analysis/total)	--

Exhibit F-62 (Continued)

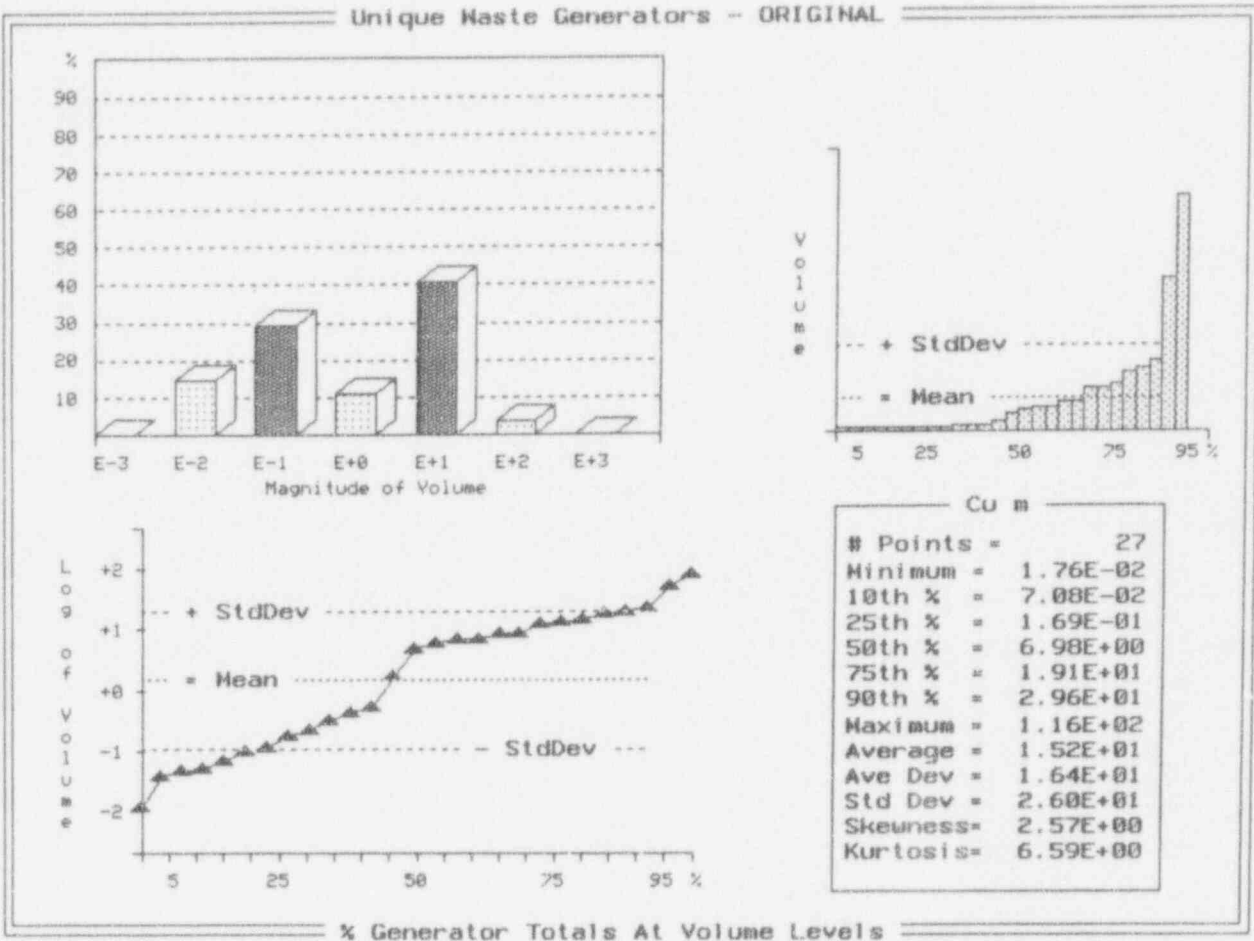


Exhibit F-62 (Continued)

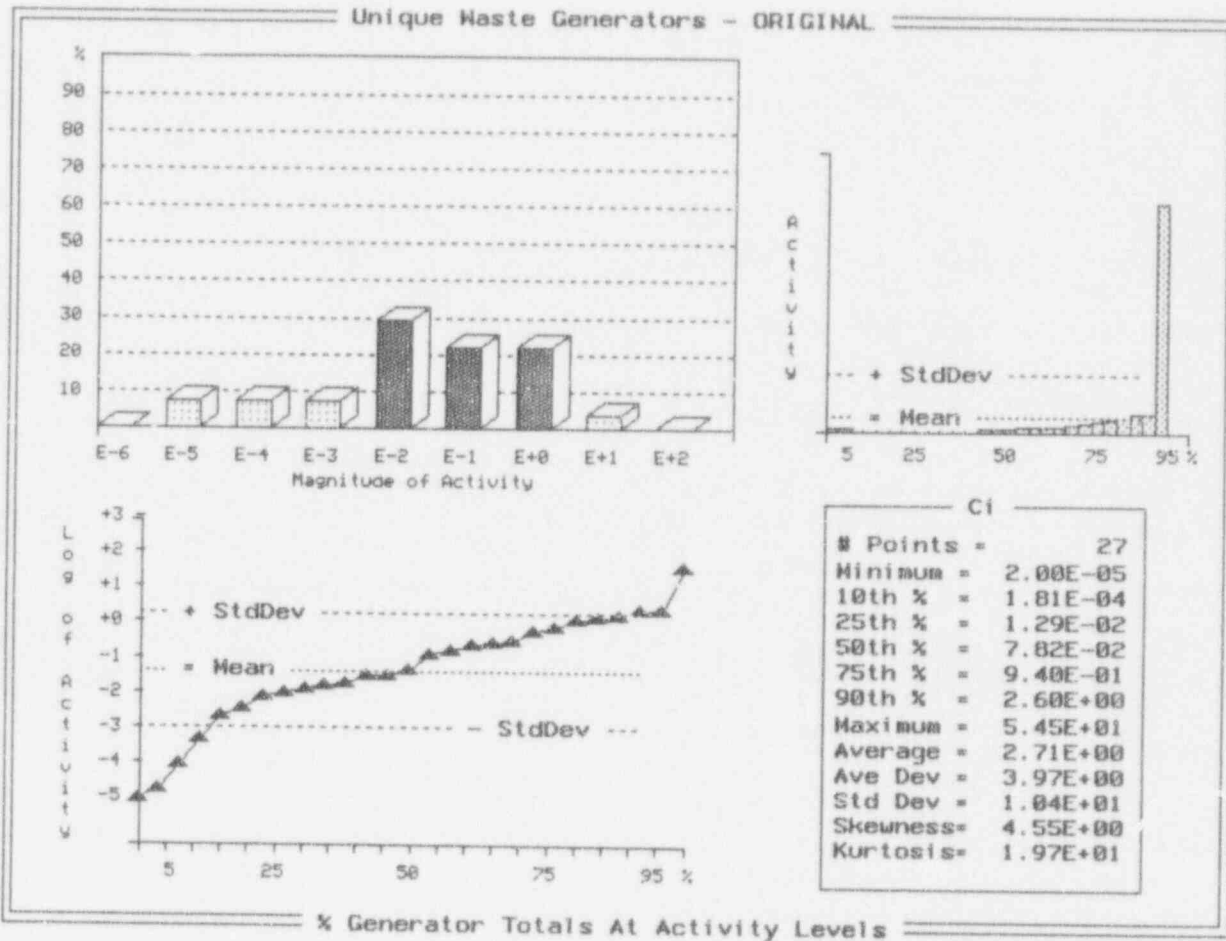


Exhibit F-63
Data Summary - Analyses at the Shipment Level
(Aggregate Practices for non-brokered waste: 1986 to 1990)

Data or Parameters

Compact or unaffiliated state:	Texas
Waste generator class:	Medical
Total number of waste generators:	19
Total associated waste volume (m ³):	45.1
Total associated waste activity (Ci):	5.8
Waste class:	A-Unstable and A-Stable
Identified waste generators for this analysis:	
Number:	no data
Percent of total(%):	--
Total number of shipping records:	--
Number of shipping records with container data:	--
Number of waste containers:	--
Weight of shipments (kg):	--
Total waste volume (m ³):	--
Fractional waste volume (%): (this analysis/total)	--
Total waste activity (Ci):	--
Fractional waste activity (%): (this analysis/total)	--

Exhibit F-63 (Continued)

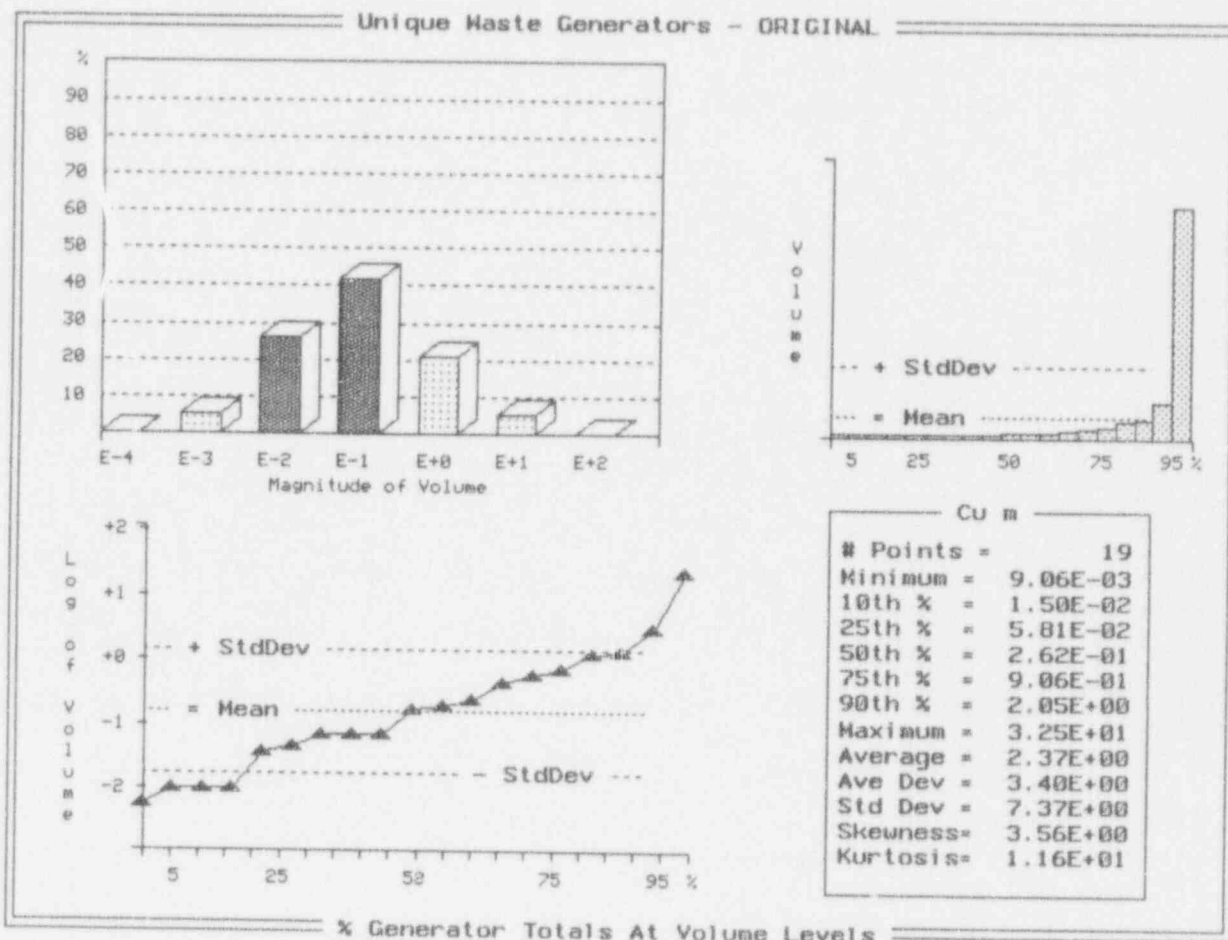


Exhibit F-63 (Continued)

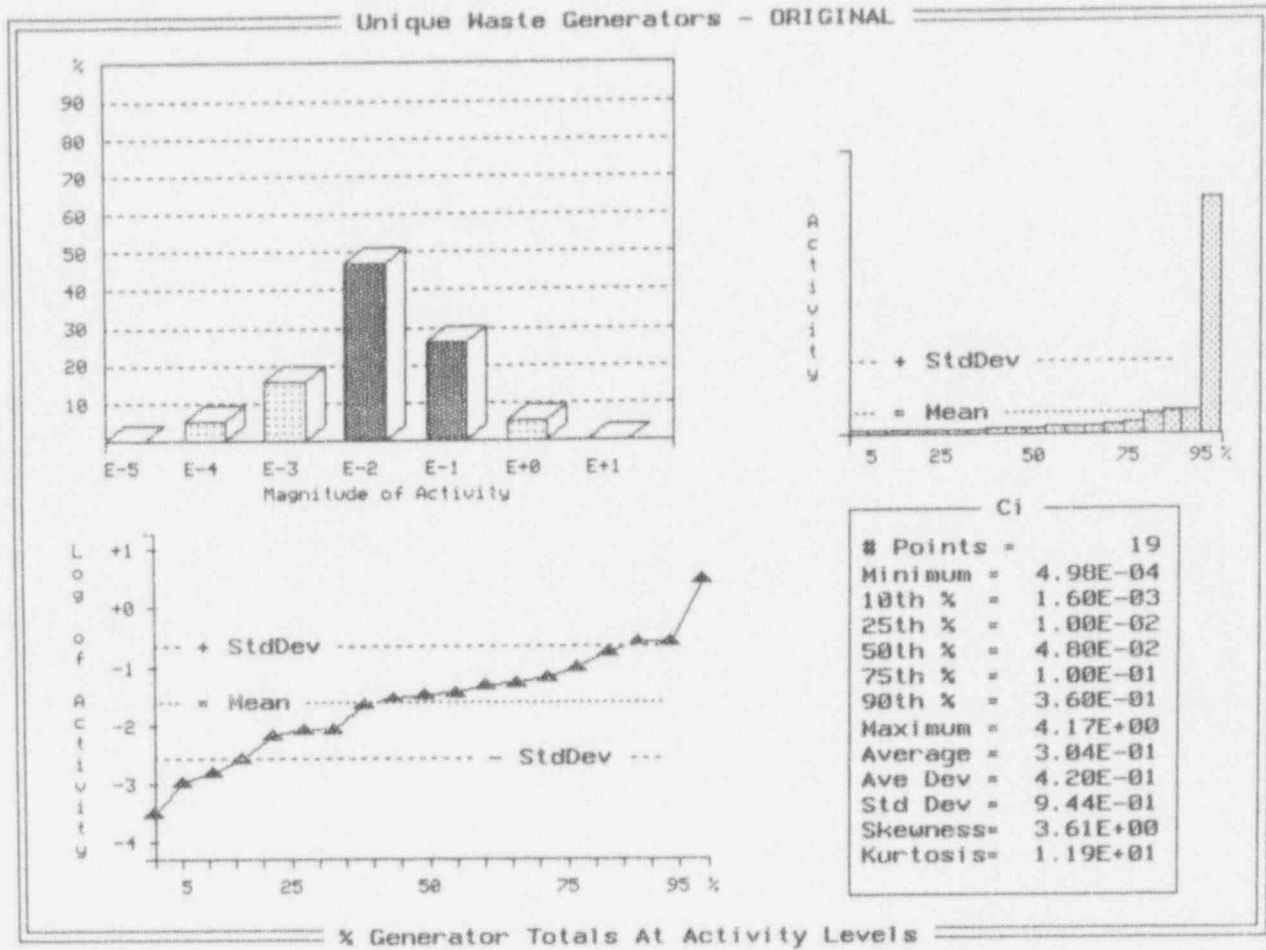


Exhibit F-64
Data Summary - Analyses at the Shipment Level
 (Aggregate Practices for non-brokered waste: 1986 to 1990)

	<u>Data or Parameters</u>
Compact or unaffiliated state:	Texas
Waste generator class:	Industrial
Total number of waste generators:	46
Total associated waste volume (m ³):	892
Total associated waste activity (Ci):	13,310
Waste class:	A-Unstable and A-Stable
Identified waste generators for this analysis:	
Number:	4
Percent of total(%):	9
Total number of shipping records:	51
Number of shipping records <u>with</u> container data:	27
Number of waste containers:	540
Weight of shipments (kg):	67,140
Total waste volume (m ³):	656
Fractional waste volume (%): (this analysis/total)	73
Total waste activity (Ci):	12,100
Fractional waste activity (%): (this analysis/total)	91

Exhibit F-64 (Continued)

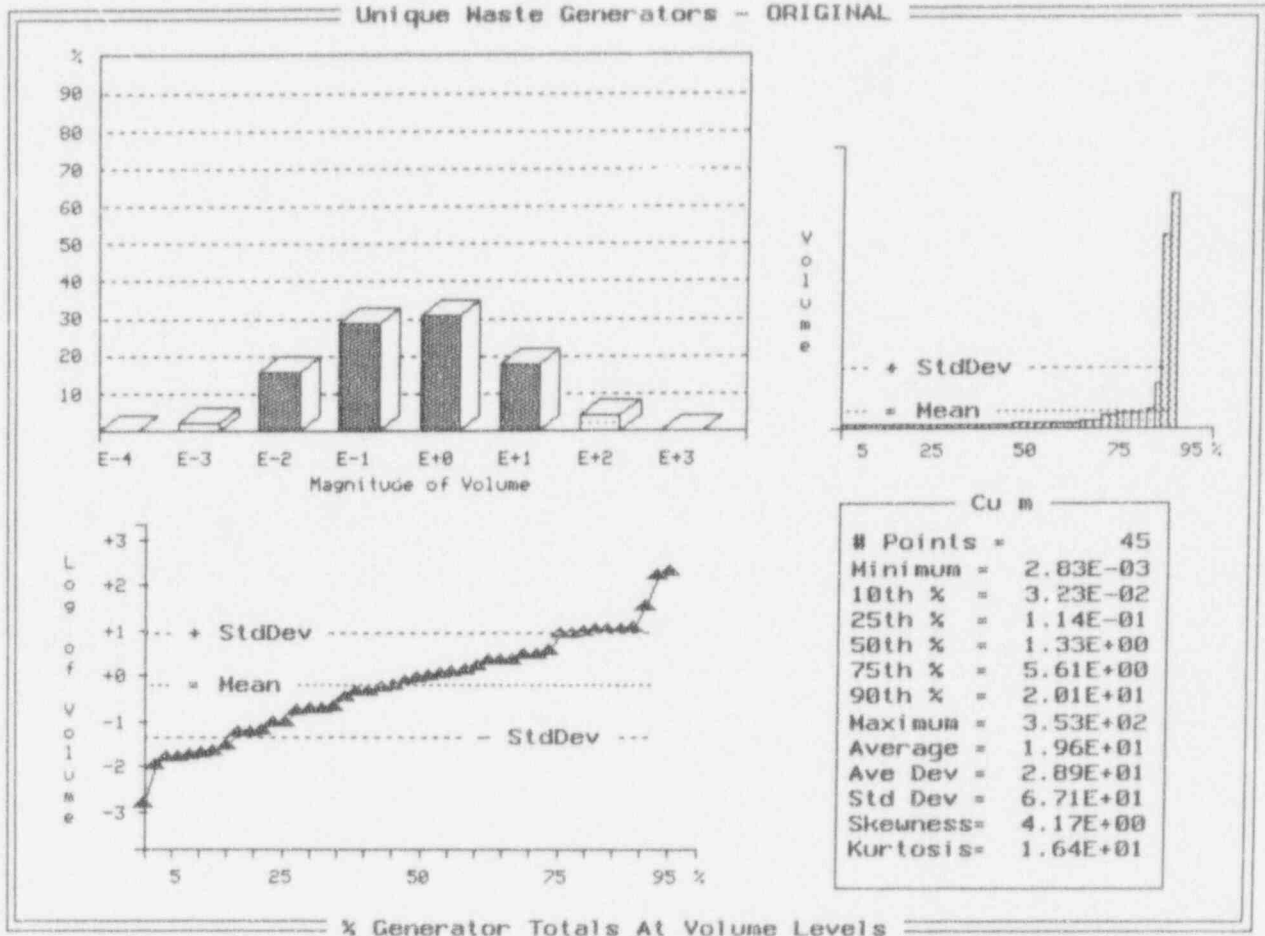


Exhibit F-64 (Continued)

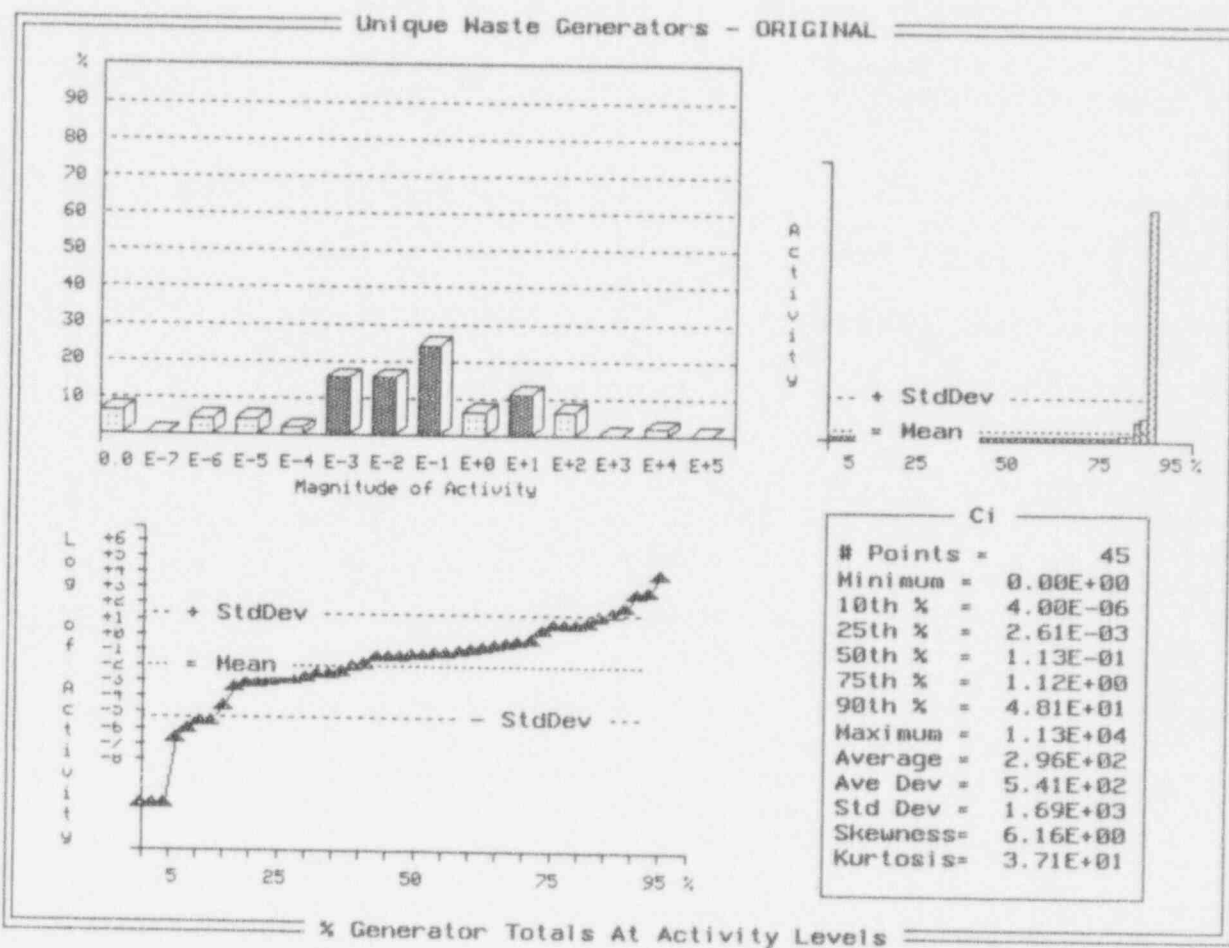


Exhibit F-65
Data Summary - Analyses at the Shipment Level
 (Aggregate Practices for non-brokered waste: 1986 to 1990)

	<u>Data or Parameters</u>
Compact or unaffiliated state:	Vermont
Waste generator class:	Academic
Total number of waste generators:	3
Total associated waste volume (m ³):	34
Total associated waste activity (Ci):	1.0
Waste class:	A-Unstable and A-Stable
Identified waste generators for this analysis:	
Number:	2
Percent of total (%):	67
Total number of shipping records:	5
Number of shipping records <u>with</u> container data:	0
Number of waste containers:	0
Weight of shipments (kg):	10,250
Total waste volume (m ³):	18
Fractional waste volume (%): (this analysis/total)	53
Total waste activity (Ci):	0.7
Fractional waste activity (%): (this analysis/total)	67

Exhibit F-65 (Continued)

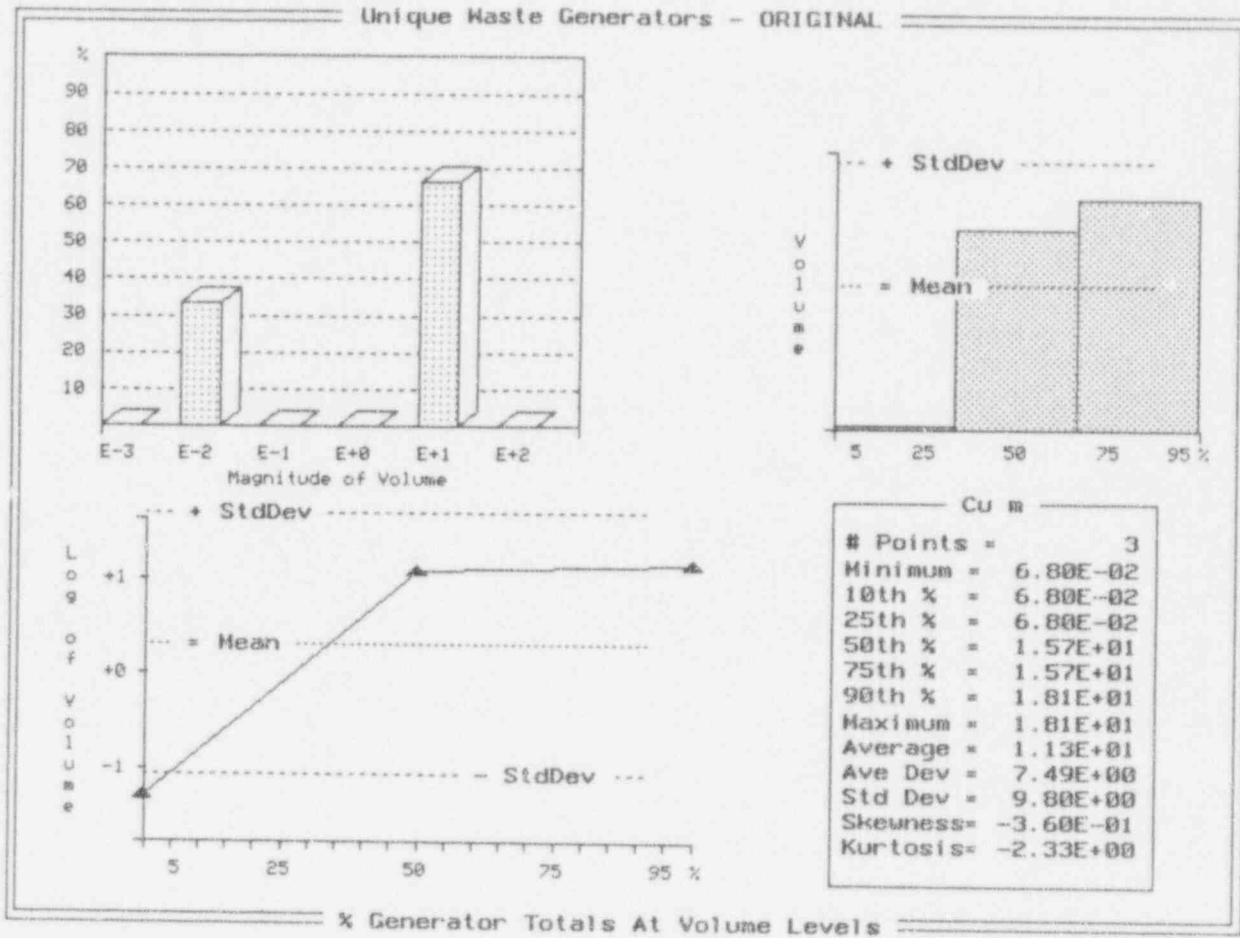


Exhibit F-65 (Continued)

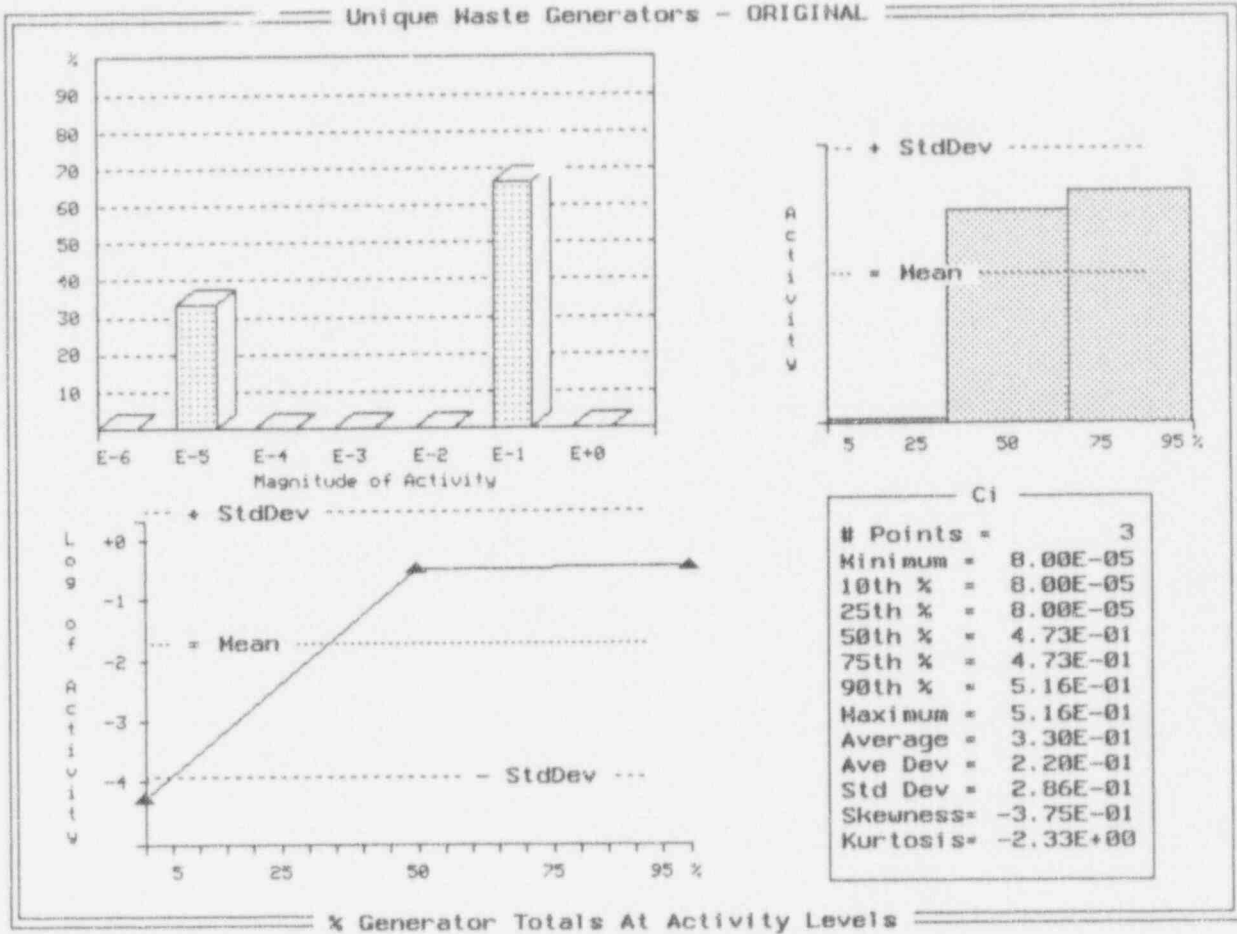


Exhibit F-66
Data Summary - Analyses at the Shipment Level
 (Aggregate Practices for non-brokered waste: 1986 to 1990)

	<u>Data or Parameters</u>
Compact or unaffiliated state:	Vermont
Waste generator class:	Medical
Total number of waste generators:	2
Total associated waste volume (m ³):	0.5
Total associated waste activity (Ci):	0.011
Waste class:	A-Unstable and A-Stable
Identified waste generators for this analysis:	
Number:	1
Percent of total(%):	50
Total number of shipping records:	1
Number of shipping records <u>with</u> container data:	0
Number of waste containers:	0
Weight of shipment: (kg):	329
Total waste volume (m ³):	0.42
Fractional waste volume (%): (this analysis/total)	84
Total waste activity (Ci):	0.01
Fractional waste activity (%): (this analysis/total)	91

Exhibit F-66 (Continued)

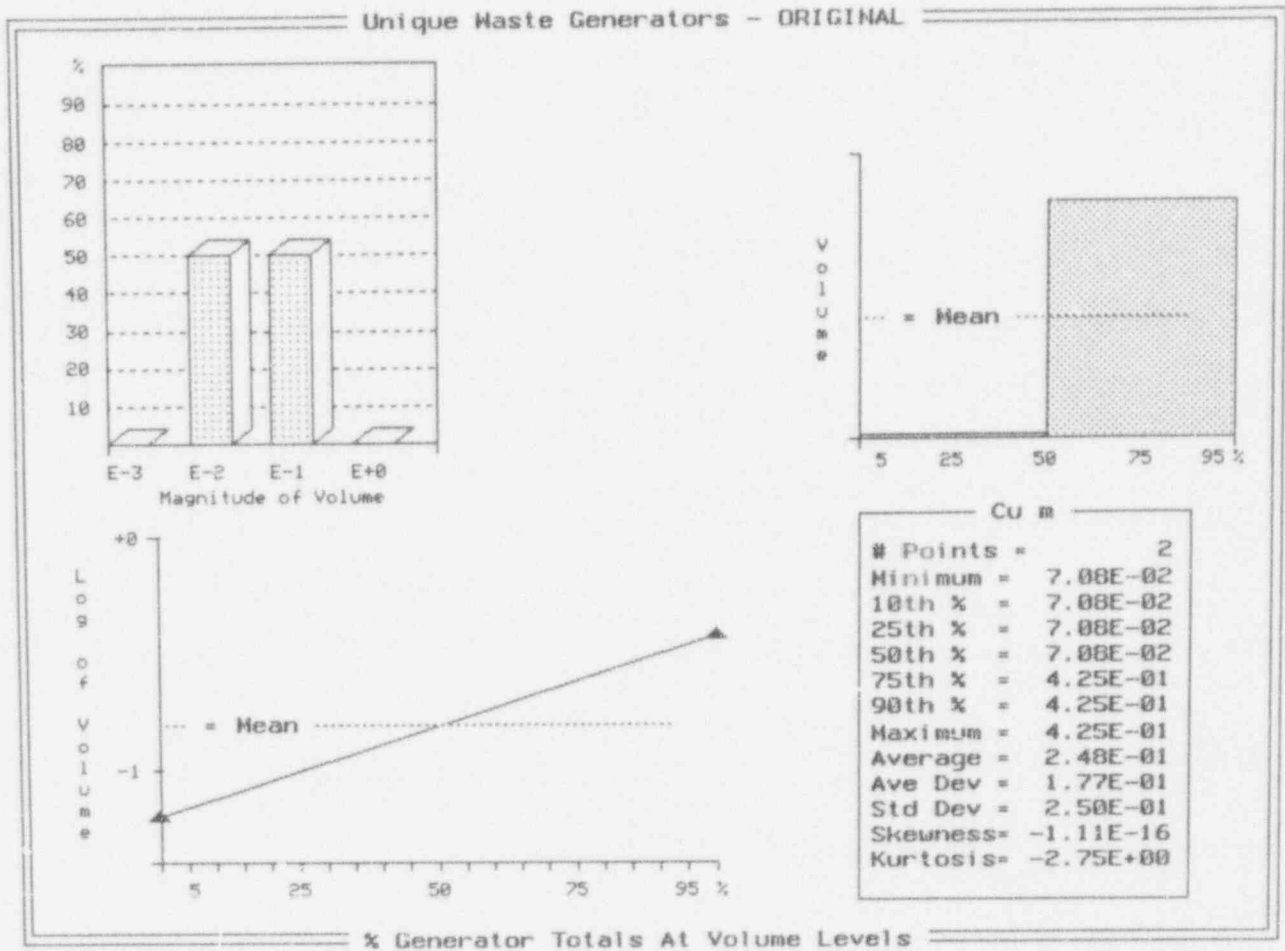


Exhibit F-66 (Continued)

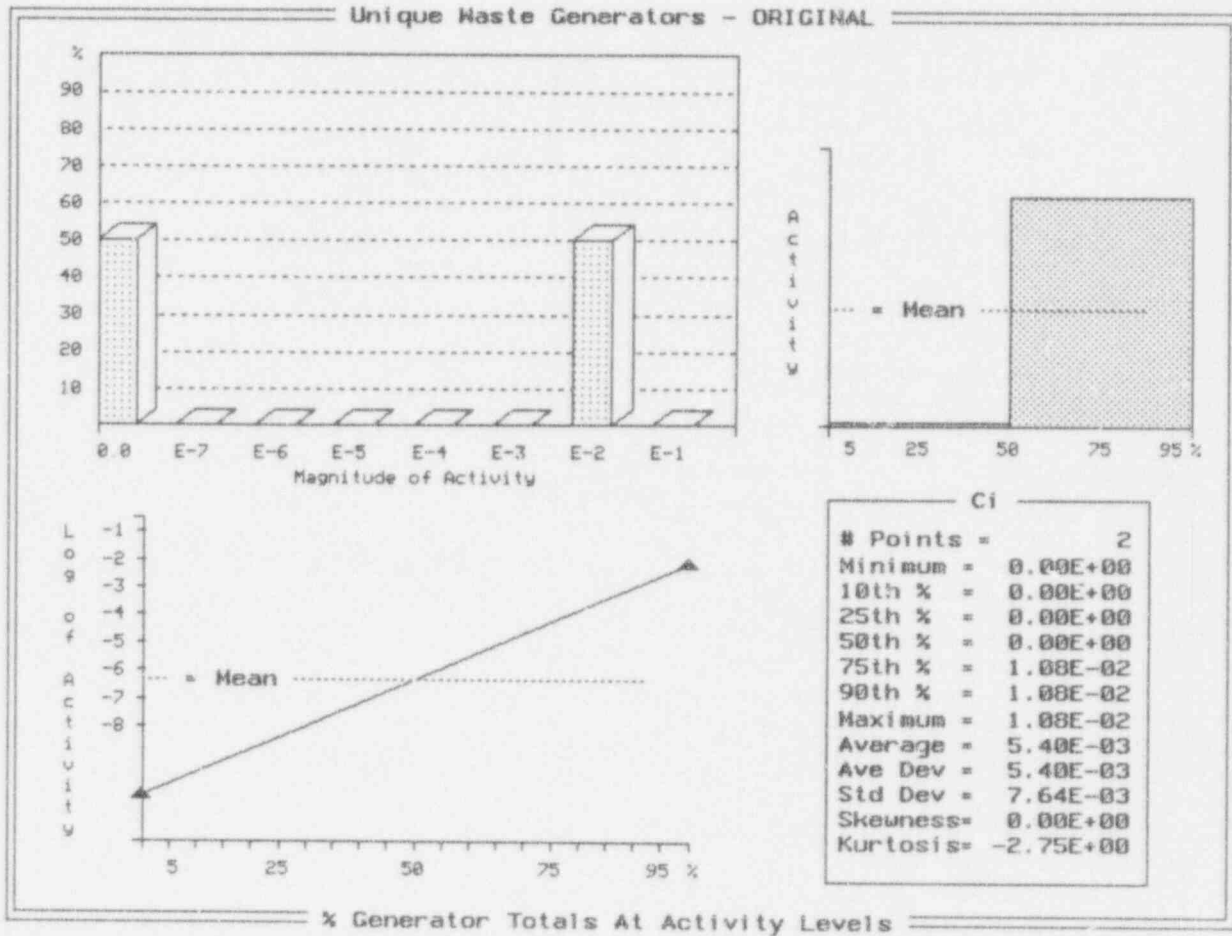


Exhibit F-67
Data Summary - Analyses at the Shipment Level
(Aggregate Practices for non-brokered waste: 1986 to 1990)

<u>Data or Parameters</u>	
Compact or unaffiliated state:	Vermont
Waste generator class:	Industrial
Total number of waste generators:	2
Total associated waste volume (m ³):	0.14
Total associated waste activity (Ci):	0.019
Waste class:	A-Unstable and A-Stable
Identified waste generators for this analysis:	
Number:	2
Percent of total(%):	100
Total number of shipping records:	2
Number of shipping records <u>with</u> container data:	0
Number of waste containers:	0
Weight of shipments (kg):	138
Total waste volume (m ³):	0.14
Fractional waste volume (%): (this analysis/total)	100
Total waste activity (Ci):	0.019
Fractional waste activity (%): (this analysis/total)	100

Exhibit F-67 (Continued)

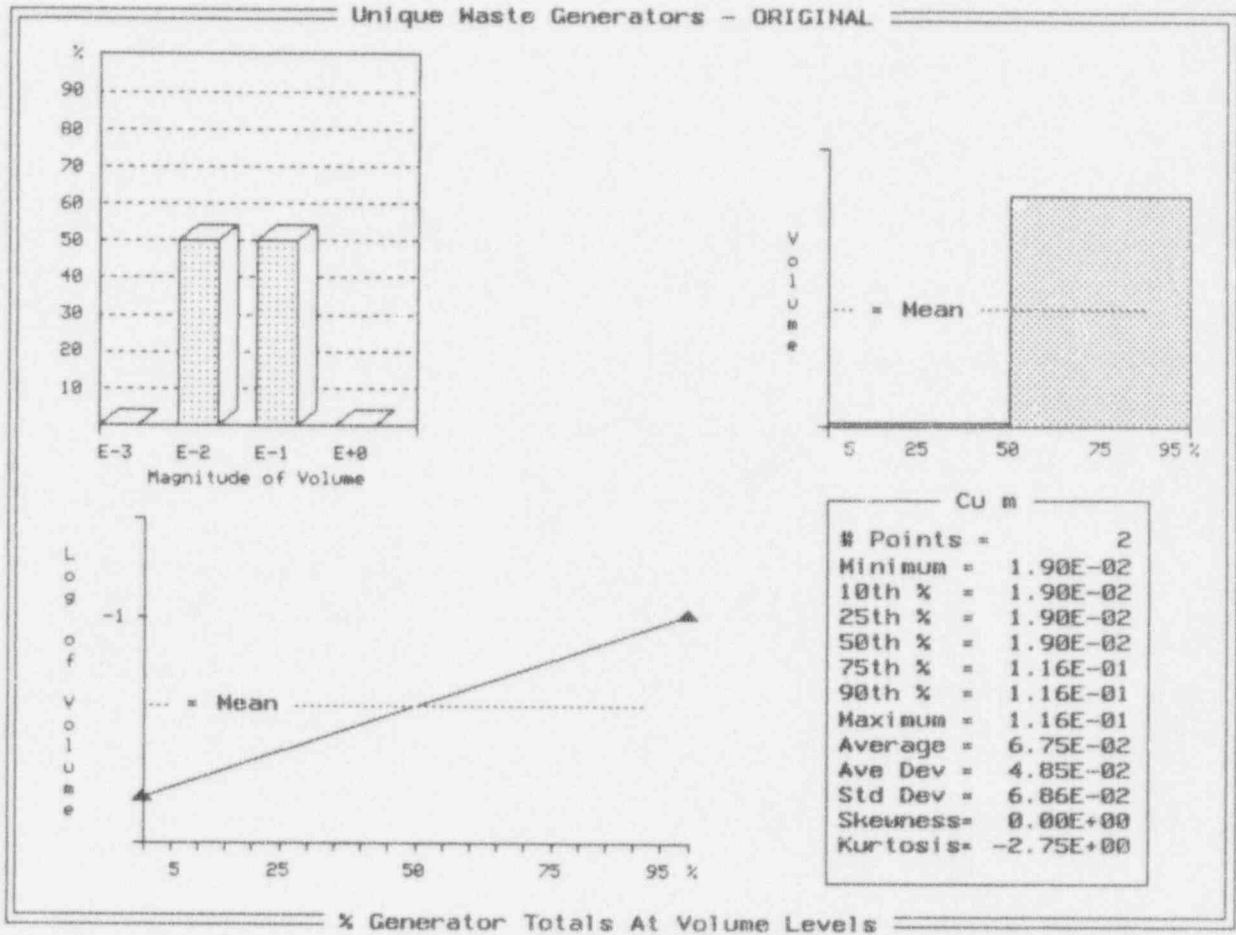
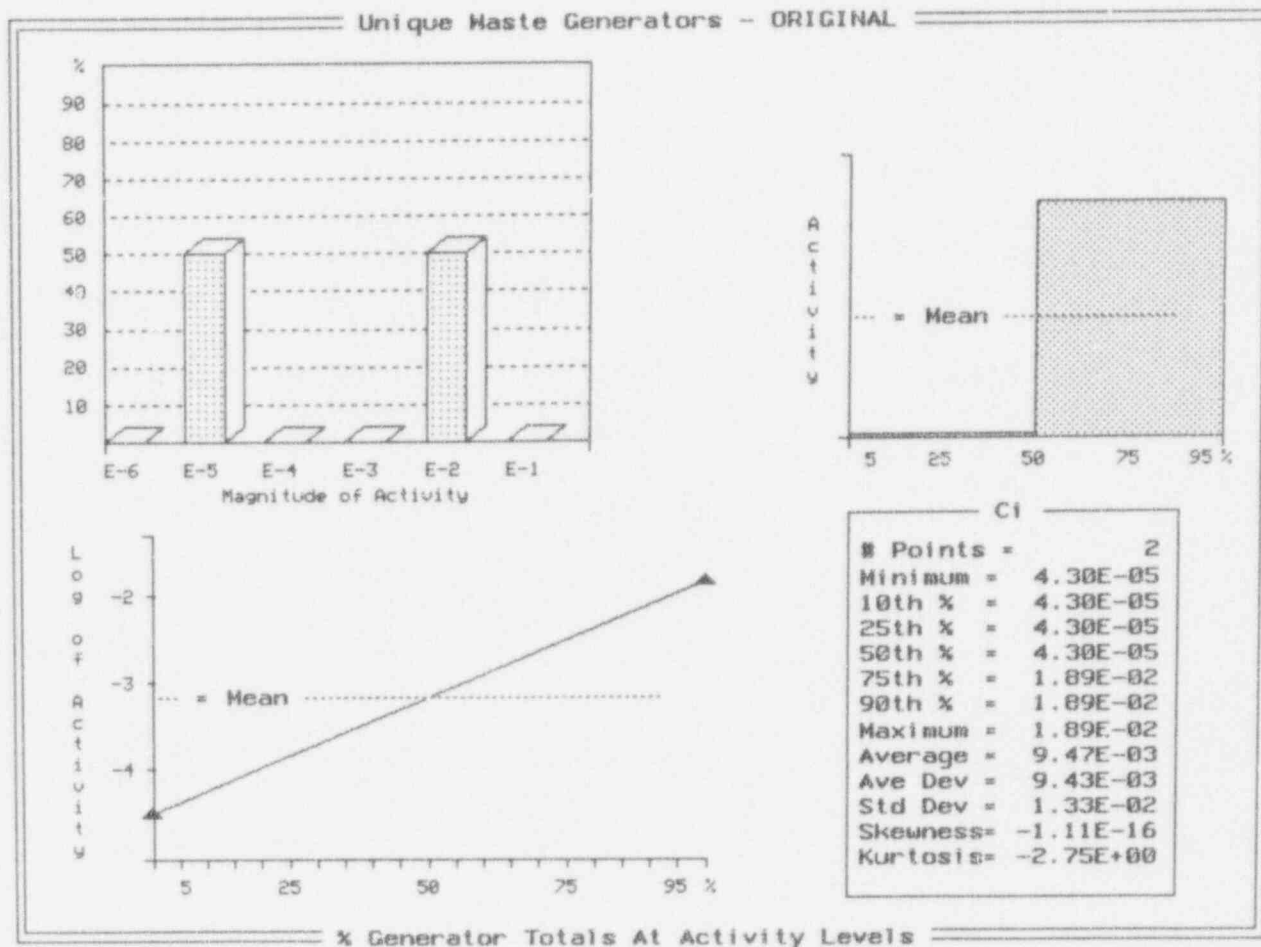


Exhibit F-67 (Continued)



BIBLIOGRAPHIC DATA SHEET

(See instructions on the reverse.)

1. REPORT NUMBER
(Assigned by NRC. Add Vol., Supp., Rev.,
and Addendum Numbers, if any.)

NUREG/CR-6147
Vol. 5

2. TITLE AND SUBTITLE

Characterization of Class A Low-level Radioactive
Waste 1986-1990
Appendix F

3. DATE REPORT PUBLISHED

MONTH | YEAR

January | 1994

4. FIN OR GRANT NUMBER

D2053

5. AUTHOR(S)

J-C Dehmel, D. Loomis, J. Mauro/SC&A
M. Kaplan/ERG

6. TYPE OF REPORT

Technical

7. PERIOD COVERED (Inclusive Dates)

- N/A -

8. PERFORMING ORGANIZATION - NAME AND ADDRESS (If NRC, provide Division, Office or Region, U.S. Nuclear Regulatory Commission, and mailing address; if contractor, provide name and mailing address.)

S. Cohen & Associates, Inc. Subcontractor:
1355 Beverly Road Eastern Research Group, Inc.
McLean, VA 22101 110 Hartnell Avenue
Lexington, MA 02173

9. SPONSORING ORGANIZATION - NAME AND ADDRESS (If NRC, type "Same as above"; if contractor, provide NRC Division, Office or Region, U.S. Nuclear Regulatory Commission, and mailing address.)

Division of Regulatory Applications
Office of Nuclear Regulatory Research
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

10. SUPPLEMENTARY NOTES

- None -

11. ABSTRACT (200 words or less)

This report describes the physical, chemical, and radiological properties of Class A low-level radioactive waste using data contained in the Manifest Information Management System (MIMS). Other sources of information include reports prepared by the NRC, DOE, low-level waste Compacts and States, and trade industries. The database characterizes low-level waste shipped for disposal from 1986 to 1990. A computer program was developed to analyze the data, with the results summarized in tables, histograms, and cumulative distribution curves presenting radionuclide concentration distributions in Class A waste as a function of waste streams, waste generators, and by regions.

The report also provides information characterizing the methods and facilities used to treat and dispose of non-radioactive waste, including industrial, municipal, and hazardous waste regulated under Subparts C and D of RCRA. The information includes a list of disposal options, the geographical locations of such facilities, and a description of such processing and disposal facilities.

12. KEY WORDS/DESCRIPTORS (List words or phrases that will assist researchers in locating the report.)

low-level radioactive waste
Class A waste
radionuclide concentration distributions
waste activity levels
waste volumes
waste generators/sectors
waste Compacts

13. AVAILABILITY STATEMENT

Unlimited

14. SECURITY CLASSIFICATION

(This Page)

Unclassified

(This Report)

Unclassified

15. NUMBER OF PAGES

16. PRICE



Federal Recycling Program

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300

SPECIAL FOURTH-CLASS RATE
POSTAGE AND FEES PAID
USNRC
PERMIT NO. G-67