LOWENSTEIN SANDLER PC
Attorneys at Law

CHRISTOPHER D. HOPKINS
Associate

Tel 973.422.6414 Fax 973.422.6415
chopkins@lowenstein.com

April 29, 2003

VIA FEDERAL EXPRESS

Ms. Kedari Reddy, Assistant Regional Counsel
Office of Regional Counsel - Region II
US Environmental Protection Agency
290 Broadway - 17th Floor
New York, NY 10007-1866

Re: Passaic River Study Area
Request for Information Pursuant to 42 U.S.C. §9601, *et seq.*

Dear Ms. Reddy:

Enclosed please find The Newark Group, Inc.'s, formerly known as Newark Boxboard Co., ("The Newark Group") response to the United States Environmental Protection Agency's CERCLA 104(e) Request for Information regarding the Lower Passaic River Site of the Diamond Alkali Superfund Site in New Jersey.

As indicated in the enclosure, The Newark Group reserves the right to amend and supplement these answers as appropriate. Should you have any questions regarding the enclosed materials, please do not hesitate to contact me.

Very truly yours,

Christopher D. Hopkins

CDH:ab

N4780/33
04/29/03 1369110.01

Enclosure(s)

cc: David Ascher, Esq. (w/ enc., via regular mail)
Norman W. Spindel, Esq. (w/enc.)
Benedict M. Kohl, Esq. (w/enc.)

850930001

Response of The Newark Group, Inc. to the
USEPA Request for Information Pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. Section 9601, et seq.
re: Lower Passaic River Site

INTRODUCTION

The Newark Group, Inc., formerly known as Newark Boxboard Co., ("The Newark Group" of the "Company") located at 17 Blanchard Street, Newark, New Jersey (the "Subject Facility"), submits this response to the CERCLA §104(e) request dated February 27, 2003 from the United States Environmental Protection Agency ("EPA") regarding the Lower Passaic River Site of the Diamond Alkali Superfund Site in New Jersey (the "Site"). The Newark Group reserves the right to supplement this response should any additional responsive information be discovered.

The Newark Group has endeavored to answer the questions in EPA's letter to the extent feasible in a reasonable, timely, and responsive manner based on a diligent review of available records and interviews of potentially knowledgeable current and former employees. The enclosed information is being submitted in an effort to cooperate with EPA; however, nothing in this response is intended to be, nor should it be deemed, an admission of any liability or responsibility on the part of The Newark Group concerning the Site. The Newark Group reserves all rights and defenses available to it under the law.

GENERAL OBJECTIONS

The Newark Group objects to the Request as overly broad, not reasonably relevant, unduly burdensome, and beyond the scope of authority granted EPA under CERCLA §104(e)(2). Without limiting this objection, examples of the objectionable portions of EPA's Request include questions related to The Newark Group's federal permits (No. 2); its analyses performed on any waste stream (No. 6(a)(v)); the total amount of hazardous substances generated annually since The Newark Group has operated the Subject Facility (No. 7(a)); the results of sampling performed by The Newark Group or anyone else at the Subject Facility (Nos. 8(a) & 12(b)); The Newark Group's relationship with other business entities that may have owned and/or operated the Subject Facility (No. 13(c)); and general information about The Newark Group, its corporate organization, corporate history, officers and employees (No. 14).

The Newark Group also objects to this request as beyond the scope of the authority granted in §104(e), overly broad and unduly burdensome to the extent that it seeks information or documents concerning any of its facilities other than the Subject Facility and to the extent that it attempts to impose an indefinite continuing duty to search, update and further respond to these requests.

Despite the fact that The Newark Group believes that many aspects of the request are objectionable as set forth above and below, it has made a diligent, good faith effort to answer EPA's questions, and believes its response demonstrates that The Newark Group is not a potentially responsible party with regard to any conditions in the Site.

These General Objections apply to and are incorporated by reference with respect to each of the questions that follow, unless otherwise noted, and are not waived notwithstanding the further

responses provided by The Newark Group below. Subject to and without waiving these objections, The Newark Group responds as follows.

GENERAL SCOPE OF RESPONSE

EPA's request for information was addressed to Newark Boxboard Co. Through a series of mergers, the Subject Facility is now owned and operated by The Newark Group. In the trade however, the operator of the Subject Facility also is known by the name Newark Boxboard Co. This response is provided by The Newark Group for operations at the Subject Facility from 1968, the year the Subject Facility was acquired by a predecessor of the Newark Group, to the present.

REQUEST FOR INFORMATION

1. **How long has your company operated at the facility? If your company no longer operates at this facility, during what years did your company operate at the facility?**

The Subject Facility was acquired by a predecessor of the Newark Group on September 13, 1968 and is presently operated by The Newark Group.

2. **(a) Does your company have or has it in the past had a permit or permits issued pursuant to the Resource Conservation and Recovery Act, 42 U.S.C. §6901, et seq.? If "yes", please provide the years that your company held such a permit and its EPA identification number.**

The Subject Facility has a generator ID number - EPA ID# NJD000556837.

(b) Does your company have or has it in the past had a permit or permits issued pursuant to the Federal Water Pollution Control Act, 33 U.S.C. §1251, et seq.? If "yes", please provide the years that your company held such a permit.

The Subject Facility has a Sewer Connection Permit (#20402400), dated July 27, 1981 ("PVSC Permit"), for discharge of wastewater to the Passaic Valley Sewerage Commission ("PVSC"). Connection to the PVSC is the sole point of discharge from the Subject Facility. The Company has always been in compliance with its PVSC Permit.

3. **Did your company receive, utilize, manufacture, discharge, release, store or dispose of any materials containing the following substances.**

	Yes	No
2,3,7,8 tetrachlorodibenzo-p-dioxin		x
2.4-Dichlorophenoxy acetic acid (2,4-D)		x
2,4,5-Trichlorophenoxy acetic acid (3,4,5-T)		x
2.4,5-Trichlorophenol (2,4,5-TCP)		x
or other dioxin compounds		x

850930003

Dichlorodiphenyl-trichloroethate (DDT)		x
Benzene		x
Ethyl benzene		x
Total Petroleum Hydrocarbons (TPH)	x	
Polyaromatic Hydrocarbons (PAH)		x
If "yes", please list specific compounds		
Toluene	x	
Xylene	x	
PCBs	x	
Antimony	x	
Argon	x	
Arsenic	x	
Cadmium	x	
Chlorine	x	
Chromium	x	
Copper	x	
Iron	x	
Lead	x	
Mercury	x	
Nickel	x	
Silver	x	
Sulfur		x
Titanium	x	
Vanadium		x
Zinc	x	
Cyanide		x
Acetone		x
Acetylene	x	
Acetylene tetrabromide		x
2 butoxy ethanol		x
Bis (2-ethylhexyl) pthalate		x
Chlorodifluromethane		x
Chloropentafluoromethane		x
Chlorotrifluoronethane		x
Dibutyl phthalate		x
Dichlorodifluoromethane		x
Naphtha		x

850930004

Silver nitrate		x
Sodium bisulfide		x
Sodium hydroxide		x
Sodium nitrate		x
Tungston		x

4. (a) Provide a description of the manufacturing processes for which all hazardous substances, including but not limited to, the substances listed in response to item (3), were a product or by-product.

The Subject Facility produces recycled paperboard in various caliper ranges. The facility recycles approximately 42,000 tons per year of old newspapers, old corrugated containers and municipal curbside collection papers ("feed stock"). Grades produced are plain chip, laminating chip, partition chip and lined chip.

The Subject Facility's finished product contains de minimis concentrations of the hazardous substances identified in Question (3) due to the presence of such substances in the paper coatings and ink of the feed stock that is recycled to make paperboard. The Subject Facility's finished product has been deemed suitable for food contact as most test results for heavy metals, dioxins, PCBs, microbiological agents, and pesticides were below detectable limits. See Exhibit A.

The paperboard manufacturing process begins with the feed stock being fed into the pulper. Hot water is added to the pulper which blends and defibers the paper stock into a pulp slurry which is then extracted through ¼" holes in the bottom of the pulper. Undesirable materials (plastic, styrofoam, staples, rubber bands, etc.) found in the stock slurry are removed through centrifugal separation and mechanical screening. High density articles (such as sand, glass and staples) are removed by passing the slurry through a high density cleaner which separates them from the paper fiber. The stock slurry is then put through a fine-mesh screen (0.062" holes) to "collect" smaller sized objectionable material. These materials are then screened again to maximize the recovery of acceptable fibers. Recovered stock fiber is pumped back to the pulper and again passes through the primary screen. All rejected articles are collected and sent through a compactor for dewatering. This material is disposed of at a licensed landfill.

The stock then is thickened over a set of five screens to approximately a 4% consistency and put into the dump chest. Stock is pumped from the dump chest to a refiner to mechanically fibrillate the fibers. After refining the stock, the slurry is conveyed to the machine chest where it is passed through a 0.014" screen and then conveyed to the paper machine. The rejected stock is sent to the reject handling system described above for reprocessing. The stock is diluted with water, pumped over a "making board" and into the vat containing a rotating cylinder covered with a wire mesh. The water drains through the wire mesh and into the center of the cylinder leaving a mat of fiber on the mesh surface. As the cylinder rotates, the mat rides up and is pressed against

850930005

felt by pressure from a couch roll. The paper sticks to the felt. The felt and web of paper continue to the next cylinder where the process is repeated.

The remainder of the process is designed to remove the water in the web of paper and to dry the paper. The web of paper passes through six presses to remove water; each press removing residual water from the web. The webs of paper are then dried and calendered through a set of five chilled iron rolls to improve the smoothness. Surface treatments, such as starch, may be added at this point. From the calender, the web of paper is fed onto a reel which winds the paper into roll form. When the paper roll reaches a design thickness, it is transferred to the winder which cuts the rolls to the customers required width. Rolls are then placed into the warehouse where they are loaded onto trucks for delivery.

Water reuse is maximized throughout the process to minimize fresh water usage. Excess (non-reusable) water is conveyed to and stored in a central collection tank, and ultimately discharged to the PVSC.

(b) During what parts of the manufacturing processes identified in the response to items (4)(a) above, were hazardous substances, including, but not limited to, the substances listed in response to item (3), generated?

See response to Question 4(a).

(i) Describe the chemical composition of these hazardous substances.

See Response to Question 4(b)(ii)

(ii) For each process, what amount of hazardous substances was generated per volume of finished product?

In response to a change in PVSC reporting requirements instituted in approximately 1997, the Company began reporting metals in its effluent (Arsenic, Cadmium, Copper, Lead, Mercury, Nickel, Zinc). From 1997 to 2002, the Subject Facility's average total daily wastewater flows ranged from 47,419 gallons to 91,332 gallons. From 1997 to 2002, annual paperboard production at the Subject Facility ranged from 73,426,000 lbs. to 79,788,000 lbs. From 1997 to 2002, the annual range of metals discharged to the PVSC (expressed as pounds of metal per pound of product) by the Subject Facility was:

Arsenic: 7×10^{-9} to 2×10^{-7}
Cadmium: 2×10^{-10} to 3×10^{-8}
Copper: 9×10^{-8} to 6×10^{-7}
Lead: from 1×10^{-8} to 4×10^{-8}
Mercury: from 0 to 3×10^{-9}
Nickel: from 2×10^{-9} to 2×10^{-7}
Zinc: from 3.4×10^{-1} to 5.6×10^{-1}

850930006

(iii) Were these hazardous substances combined with wastes from other processes? If so, wastes from what processes?

Wastewater discharges are not combined with other waste streams.

5. Describe the methods of collection, storage, treatment, and disposal of all hazardous substances, including, but not limited to the substances listed in response to item (3) and (4). Include information on the following:

(a) Identify all persons who arranged for and managed the processing, treatment, storage and disposal of hazardous substances.

Harold De Groat – VP General Manager - (deceased)
Frank Emerson – VP Engineering - (deceased)
Joe McAllister – Production Manager - (deceased)
Bob Dinan – Production Manager - (former employee - location unknown)
Ralph Morgan – Quality and Env. Manager - (former employee - location unknown)
Jeff Peebles – Quality and Env. Manager - (former employee - location unknown)
Mark McCabe – Quality and Env. Manager - (former employee - location unknown)
Alan Lamparella – Quality and Env. Manager - (former employee - location unknown)
Patrick Fulton – Assistant Production Superintendent (presently employed at the Subject Facility)

(b) If hazardous substances were taken off-site by a hauler or transporter, provide the names and addresses of the waste haulers and the disposal site locations.

See Responses to Question 4. In addition, hazardous materials not directly resulting from the manufacturing process described in the Responses to Question 4 have been generated and disposed of off-site.

APTUS, Transformer Service, Inc. and A. Serzans disposed of PCB-containing transformers removed from the Subject Facility in 1988. APTUS disposed of the transformers at its own facility. APTUS is a licensed TSDF located at P.O. Box 935, Highway 169N, Coffeyville, KS 67337. SJ Transportation Company, a transporter, is located at P.O. Box 169, 655 Route 40, Woodstown, NJ 08098. SJ Transportation Company transported the transformers to Transformer Service, Inc., a licensed TSDF located at Regional Drive, P.O. Box 1077, Concord, NH 03301-1077. The Newark Group has no information or documents pertaining to the disposal of transformers by A. Serzans.

Waste oil from the Subject Facility was removed one time by Pat Perretti Freight Services, Inc., 73 Greenpond Road, Rockaway, NJ 07866. The waste oil was brought to RecOil, 280 East Street, York, PA 17403.

850930007

In June 1991, in connection with an underground storage tank removal, petroleum hydrocarbon saturated soil was excavated for off-site disposal by Thermo Process Systems Inc. ("TPS"), 2070 South Orange Blossom Trail, Apopka, Florida 32703. The soil was recycled at TPS's permitted regional recycling facility in Chester, Virginia.

(c) Describe all storage practices employed by your company with respect to all hazardous substances from the time operations commenced until the present. Include all on-site and off-site storage activities.

(i) If drums were stored outside, were the drums stored on the ground or were they stored on areas that had been paved with asphalt or concrete? Please provide a complete description of these storage areas.

All on-site storage is in compliance with applicable existing regulations. Sealed drums and tanks stored inside the production building are stored on a concrete floor with internal collection points leading to a central collection tank where it is re-used in the papermaking process. All outside storage is located in covered areas, and/or on concrete and asphalt pads pitched to direct run-off to a concrete condensate pit/catch basin which pumps run-off to a central collection tank where it is re-used in the papermaking process.

(ii) When drums were stored outside, were empty drums segregated from the full drums?

Yes.

(d) What processes do you use to treat your waste? What do you do with the waste after it is treated?

No treatment of wastewater; discharge to PVSC. No on-site treatment of wastes identified in Response to Question 5(b).

6. (a) For process waste waters generated at the facility which contained any hazardous substances, including, but not limited to, the substances listed in response to items (3) and (4):

(i) Where was the waste water discharged and during what years?

During the Company's ownership of the Subject Facility (1968 to present), manufacturing process wastewater has been discharged to the PVSC (sanitary sewer). The Subject Facility is in compliance with its PVSC Permit.

From 1968 to approximately 1980, the Subject Facility discharged non-contact cooling water and boiler blow down wastewater to the Morris Canal storm sewer line located on Blanchard Street at a rate of approximately 1000 gallons a day. Cooling water was drawn from a groundwater production well at the Subject Facility and was also purchased from the City of Newark. This

850930008

water was used to cool process liquids; no intermingling of the cooling and process waters occurred. The Newark Group has no information regarding the chemical composition of these waters. Upon information and belief, the Morris Canal storm sewer ultimately discharged into the Passaic River.

In approximately 1980, the Subject Facility repiped the cooling water and boiler blow down to discontinue its discharge to the Morris Canal storm sewer. These waters were discharged to the PVSC. Currently the connection to the storm sewer is sealed.

(ii) Was the waste water discharged into a sanitary sewer and if so, during what years?

See Response to Question 6(a)(i).

(iii) Was the waste water treated before being discharged to the sanitary sewer and if so how?

No.

(iv) If the waste waters were not discharged to the sanitary sewer, where were they disposed and during what years?

See Response to Question 6(a)(i)

(v) Please provide the results of any analyses performed on any waste process streams generated at the facility.

The Newark Group performed irregular analyses of its wastewater discharge prior to recording monthly wastewater discharge sampling as required by the PVSC in 1997. Test results are contained in monthly discharge monitoring reports ("DMRs") submitted to the PVSC.

Attached hereto as Exhibit B is a summary of wastewater discharge sample results submitted to PVSC.

(b) For floor drains or other disposal drains at the facility:

(i) Did the drains connect to a sanitary sewer and if so, during what years?

Floor drains in collection areas and process areas return excess water to a central collection tank where it is re-used in the papermaking process. Excess water that is not reused is discharged to the PVSC.

(ii) If the floor drains or other disposal drains at the facility were not discharged to the sanitary sewer, where did they discharge and during what years?

850930009

See Response to Question 6(b)(i) above.

(c) (i) Did any storm sewers, catch basins or lagoons exist at any time at the facility and if so, during what years?

During The Newark Group's ownership/operation of the Subject Facility, no storm sewers, or lagoons existed at the Subject Facility. A concrete condensate pit/catch basin has existed at the Subject Facility for over thirty years. See Response to Question 5(c)(i) above.

(ii) If catch basins or lagoons existed, were they lined or unlined?

See Response to Question 5(c)(i) above.

(iii) What was stored in the lagoons?

Not applicable. See Response to Question 6(c)(i) above.

(iv) Where was the discharge from any of these structures released and during what years? Was this discharge treated before its release and if so, how and during what years? What was the chemical composition of any waste waters released?

See Response to Question 6(c)(i) above.

(d) Please supply diagrams of any waste water collection, transport or disposal systems on the property.

The Newark Group does not have a diagram of the wastewater collection, transport or disposal system.

7. (a) For each hazardous substance, including, but not limited to, the substances listed in response to item (3) or identified in the responses to item (4) above, provide the total amount generated during the operation of the facility on an annual basis.

See Exhibit C.

(b) Were any hazardous substances, including, but not limited to, the substances listed in response to item (3) or identified in the responses to item (4) above, disposed of in the Passaic River or discharged to the Passaic River? If yes, identify the hazardous substances, estimate the amount of material discharged to or disposed of in the Passaic River and the frequency with which this discharge or disposal occurred. Also please include any sampling of the river which you might have done after any discharge or disposal.

850930010

See Response to Question 6(a)(i) above.

8. **Please identify any leaks, spills, explosions, fires, or other incidents of accidental material discharge that occurred at the facility during which or as a result of which any hazardous substances, including, but not limited to, the substances listed in response to item (3) or (4), were released on the property, into the waste water or storm drainage system at the facility or to the Passaic River. Provide any documents or information relating to these incidents, including the ultimate disposal of any contaminated materials.**

In the early 1990's, a 30,000 gallon #6 heating oil underground storage tank ("#6 Oil UST") was discovered to be leaking and removed from service at the Subject Facility. This action discovered petroleum hydrocarbon saturated soils and free product on the water table. Over one thousand tons of petroleum hydrocarbon impacted soil was excavated for off-site disposal by TPS. See Response to Question 5(b). Following this removal no further remedial action was taken. See Exhibit D for the New Jersey Department of Environmental Protection's ("NJDEP") determination that no further corrective action was required in response to this discharge. No hazardous substances were released into the Subject Facility's wastewater or discharged to the Passaic River.

(a) Please provide the results of any sampling of the soil, water, air or other media after any such incident and before and after clean-up. Please provide in this information all sampling performed for or by NJDEP.

Sampling results for the #6 Oil UST corrective action are available in NJDEP's files for Case # 90-03-20-1101.

9. **(a) Was your facility ever subject to flooding. If so, was the flooding due to:**

(i) overflow from sanitary or storm sewer back-up and/or

Sanitary sewer back-flow has periodically occurred during The Newark Group's ownership of the Subject Facility. Upon information and belief, the back-flow results from the discharge from area industrial users which exceeds the capacity of the sewer lines in the area of the Subject Facility. However, this back-flow has been contained in the cellar of the Subject Facility, which is twenty feet deep, and outlets back to the sanitary sewer. There are no storm sewers located at the Subject Facility.

(ii) flood overflow from the Passaic River?

Upon information and belief, overflow of the Passaic River has never reached the Subject Facility which is located one half mile away.

(b) Please provide the date and duration of each flood event.

850930011

Not applicable. See Response to Question 9(a).

10. Please provide a detailed description of any civil, criminal or administrative proceedings against your company for violations of any local, State or federal laws or regulations relating to water pollution or hazardous waste generation, storage, transport or disposal. Provide copies of all pleadings and depositions or other testimony given in these proceedings.

There have been no civil, criminal or administrative proceedings against The Newark Group for violations of any local, state, or federal laws or regulations relating to water pollution or hazardous waste generation, storage, transport or disposal associated with the Subject Facility.

11. Provide a copy of each document which relates to the generation, purchase, use, handling, hauling, and/or disposal of all hazardous substances, including, but not limited to, the substances listed in response to item (3) or (4). If you are unable to provide a copy of any document, then identify the document by describing the nature of the document (e.g. letter, file memo, invoice, inventory form, billing record, hazardous waste manifest, etc.). Describe the relevant information contained therein. Identify by name and job title the person who prepared the document. If the document is not readily available, state where it is stored, maintained, or why it is unavailable.

See Exhibit E for DMRs and PCB and contaminated soil disposal manifests.

12. (a) Did you or anyone else sample the soil, ground water, surface water, ambient air or other environmental media at the facility for purposes other than those identified in questions above?

Deleet Merchandising Corporation ("Deleet"), in connection with the delineation of groundwater contamination at its property located across Blanchard Street from the Subject Facility, hired Enviro-Sciences Inc. to conduct groundwater sampling at the Subject Facility in 1994. In connection with that delineation, and in an effort to confirm Enviro-Science's results, The Newark Group hired Vectre Corporation ("Vectre") to conduct limited independent soil and groundwater sampling at the Subject Facility.

(b) If so, please provide all other document pertaining to the results of these analyses.

Documentation of Enviro-Science's field work is part of the public record found in the NJDEP's files, Case # 90-03-20-1101, UST# 0106607. Vectre's sampling is attached hereto as Exhibit F.

13. (a) Has your company owned the facility at the location designed above? If so, from whom did your company purchase the property and in what year? If your company subsequently sold the property, to whom did your company sell it and in what year? Please provide copies of any deeds and documents of sale.

850930012

The Newark Group purchased the Subject Facility from R.W. Lewis on September 13, 1968. See Certificate of Ownership attached hereto as Exhibit G.

(b) If your company did not own the facility, from whom did your company rent the facility and for what years? Please provide copies of any rental agreements.

See Response to Question 13(b) above.

(c) To the extent that you know please provide the names of all parties who owned or operated the facility during the period 1940 through the present. Describe the relationship, if any, of each of those parties with your company.

1940 - 1968:	Margaret Lewis & R.W. "Dick" Lewis (no relationship to The Newark Group)
1968:	R.W. "Dick" Lewis - (no relationship to The Newark Group)
1968 - Present:	The Newark Group, formerly known as the Newark Boxboard Company

14. Answer the following questions regarding your business or company. In identifying a company that no longer exists, provide all the information requested, except for the agent for service of process. If your company did business under more than one name, list each name.

(a) State the legal name of your company.

The Newark Group, Inc.

(b) State the name and address of the president or the chairman of the board, or other presiding officers of your company.

Robert H. Mullen
President & COO

Fred G. von Zuben
Chairman of the Board & CEO

Messrs. Mullen and von Zuben's business address is The Newark Group, Inc., 20 Jackson Drive Cranford, NJ 07016

(c) State the number of people employed by your company.

The Subject Facility employs 45 hourly employees and approximately 12 other employees.

(d) Identify the state of incorporation of your company and your company's agent for service of process in the state of incorporation and in New Jersey.

State of Incorporation: New Jersey

850930013

Agent for Service of Process: Lowenstein Sandler PC
c/o Benedict M. Kohl, Esq.
65 Livingston Ave
Roseland, NJ 07068

(e) Provide a copy of your company's "Certificate of Incorporation" and any amendments thereto.

See Exhibit H.

(f) If your company is a subsidiary or affiliate of another company, or has subsidiaries or is a successor to another company, identify these related companies. For each related company, describe the relationship to your company, indicate the date and manner in which each relationship was established.

The Newark Group, Inc. is not a subsidiary or affiliate of another company and itself owns/operates the Subject Facility. The Newark Group, Inc. is the successor to Newark Group Industries, Inc., which is the successor to the Newark Boxboard Company.

(g) Identify any predecessor organization and the dates that such company became part of your company.

None which owned or operated the Subject Facility.

(h) Identify any other companies which were acquired by your company or merged with your company.

Book Covers, Inc., a New Jersey corporation incorporated on October 19, 1960, was merged into Newark Group Industries, Inc. on May 2, 1988. BCI Newark formerly operated at the Subject Facility and is now a separate division of The Newark Group. During the time it operated at the Subject Facility, no hazardous substances, other than those contained in "over-the-counter" cleaners and similar products generally available to the consuming public and in their original packaging, were used, generated, stored, disposed or otherwise handled in its manufacturing process.

(i) Identify the date of incorporation, state of incorporation, agents for service of process in the state of incorporation and New Jersey, and nature of business activity for each company identified in the responses to items (14)(e), (f), and (g) above.

See Response to Questions 4(a) and 14(d) & (f).

(j) Identify all previous owners or parent companies, address(es), and the date change in ownership occurred.

850930014

See Responses to Questions 13 and 14 (a) - (i).

15. Provide the name, address, telephone number, title and occupation of the person(s) answering this "Request for Information: and state whether such person(s) has personal knowledge of the responses. In addition, identify each person who assisted in any way in responding to the "Request for Information" and specify the question to which each person assisted in responding. Please include the names and addresses of former employees who were contacted to respond to any of the questions.

The following individuals assisted in the preparation of the above responses:

Edward K. Mullen
Vice Chairman of the Board
The Newark Group, Inc.
20 Jackson Drive
(908) 276-4000

David M. Ascher, Esq.
Vice President, General Counsel & Secretary
The Newark Group, Inc.
20 Jackson Drive
Cranford, NJ 07016
(908) 276-4000

Richard J. Theriault, Environmental Manager
Haverhill Paperboard Corporation
100 South Kimball Avenue
Bradford, MA 01835
(978) 373-4111

Mike Farrell, Plant Manager
Newark Boxboard Co.
17 Blanchard Street
Newark, NJ 07105
(973) 589-0424

Patrick Fulton, Assistant Production Superintendent
Newark Boxboard Co.
17 Blanchard Street
Newark, NJ 07105
(973) 589-0424

Richard Johnson, Regional Engineer
Newark Boxboard Co.

850930015

17 Blanchard Street
Newark, NJ 07105
(973) 589-0424

Norman W. Spindel, Esq.
Christopher D. Hopkins, Esq.
Lowenstein Sandler PC
65 Livingston Avenue
Roseland, NJ 07068
(973) 597-2500

850930016

CERTIFICATION OF ANSWERS TO REQUEST FOR INFORMATION

State of New Jersey

County of Union

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document (response to EPA Request for Information) and all documents submitted herewith, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete, and that all documents submitted herewith are complete and authentic unless otherwise indicated. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. I am also aware that my company is under a continuing obligation to supplement its response to EPA's Request for Information if any additional information relevant to the matters addressed in EPA's Request for Information of the company's response thereto should become known or available to the company.

Robert H. Mullen
NAME (type or print)

President and COO
TITLE (type or print)

Robert H. Mullen
SIGNATURE

Sworn to before me on
this 28TH day of April, 2003

Mary Rapolas

MARY RAPOLAS
NOTARY PUBLIC OF NEW JERSEY
My Commission Expires Jan. 24, 2006

Exhibit A

850930018

ACTS TESTING LABS

PREMIUM TEST REPORT

To:	Mr. Ralph Morgan	Date:	MAR 13 93
Company:	NEWARK BOXBOARD	Report #:	3B-02367
Promotion:	na	Age Label:	na
Sample ID:	BOXBOARD STOCK		
Vendor:	NEWARK BOXBOARD	Phase:	FEASIBILITY
Production:	na	Int/Smpl #:	na
Sampled:	na	Machine #:	na
Date Rcv'd:	MAR 9 93	Test Site:	Buffalo
Obsv Cart #s:	na	Smpl Size:	6
Last Cart #:	na	Clnt Ref #:	n/a

HEAVY METAL ANALYSIS PASS

ELEMENT	RESULT		PASS/FAIL
Tot. LEAD:	LT 0.0010	%	PASS
Tot. BARIUM:	0.0010	%	PASS
Tot. CADMIUM:	LT 0.0001	%	PASS
Tot. ARSENIC:	LT 0.0005	%	PASS
Tot. MERCURY:	LT 0.0024	%	PASS
Tot. SELENIUM:	LT 0.0010	%	PASS
Tot. CHROMIUM:	0.0005	%	PASS
Tot. ANTIMONY:	LT 0.0010	%	PASS
Tot. (Cd+As+Hg+Se):	LT 0.0040	%	PASS

Results are reported as percent by weight of the total nonvolatile content. LT = Less Than

LIMITS	Lead	Barium	Cadmium	Arsenic	Mercury	Selenium	Chromium	Antimony	Cd+As+Hg+Se
TOTAL (%)	0.060	-	0.060	0.060	0.060	0.060	-	-	0.060
SOLUBLE (%)	-	0.050	0.010	0.010	0.010	-	0.025	0.025	-

COMMENTS:

The sample was prepared according to EN 71, Part 3, 1988.

850930019 A1

ACTS TESTING LABS

PREMIUM TEST REPORT

To:	Mr. Ralph Morgan	Date:	MAR 12 93
Company:	NEWARK BOXBOARD	Report #:	3B-02367
Promotion:	na	Age Label:	na
Sample ID:	BOXBOARD STOCK		
Vendor:	NEWARK BOXBOARD	Phase:	FEASIBILITY
Production:	na	Int/Smpl #:	na
Sampled:	na	Machine #:	na
Date Rcv'd:	MAR 9 93	Test Site:	Buffalo
Obsv Cart #s:	na	Smpl Size:	6
Last Cart #:	na	Clnt Ref #:	n/a

FDA FOOD SIMULATING SOLVENT EXTRACTIVES — PASS

PAPER AND PAPERBOARD

TEST	LIMIT	RESULT
Extractives using Distilled Water, mg/in sq	0.5	0.30
Extractives using Heptane, mg/in sq	0.5	LT 0.10

LT = Less Than
The results are reported in milligrams per square inch of food contact surface.

ACTS TESTING LABS, INC.
25 Anderson Road
Buffalo, NY 14225-4928
Tel (716)897-3300
Fax (716)897-0876

SUMMARY TEST REPORT

To:	Mr. Jeff Peebles	Date:	JAN 3 94
Company:	NEWARK BOXBOARD COMPANY	Report #:	3B-12232
Promotion:	NEWARK GROUP PAPER TESTING PROGRAM	Age Grade:	n/a
Sample ID:	PLAIN CHIP PAPERBOARD		
Vendor:	NEWARK BOXBOARD COMPANY	Phase:	FINAL PRODUCT
Production:	NOV 17 93	Int #:	NB-1
Sampled:	n/a	Machine #	n/a
Date Rcv'd:	NOV 22 93	Test Site:	Buffalo
Obsv Cart #s:	n/a	Smpl Size:	45
Last Cart #:	n/a	Clnt Ref #:	01158

TESTS CONDUCTED	RESULTS	DATE REPORTED
Heavy Metal Content	PASS	NOV 29 93
Microbiological	PASS	DEC 1 93
FDA Food Simulating Solvent Extractives	PASS	NOV 30 93
Pesticide Residue	PASS	DEC 9 93
PCB Content	PASS	DEC 9 93
Dioxin	PASS	JAN 3 94

850930021 A3

Our reports and letters are for the exclusive use of the client to whom/which they are addressed. Communication of ACTS Testing Labs, Inc. reports and letters to any others and/or use of the name of ACTS Testing Labs, Inc. requires our prior written approval. Our letters and reports are limited solely (i) to standards and procedures identified in them and (ii) to the sample(s) tested. Test results are not necessarily indicative nor representative (i) of the quality of the lot from which the sample was taken or (ii) of apparently similar or identical products. Unless otherwise stated, it is the responsibility of the client to insure the representativeness of the samples submitted to ACTS Testing Labs, Inc.

ACTS TESTING LABS

PREMIUM TEST REPORT

To:	Mr. Jeff Peebles	Date:	NOV 29 93
Company:	NEWARK BOXBOARD COMPANY	Report #:	3B-12232
Promotion:	NEWARK GROUP PAPER TESTING PROGRAM	Age Label:	n/a
Sample ID:	PLAIN CHIP PAPERBOARD		
Vendor:	NEWARK BOXBOARD COMPANY	Phase:	FINAL PRODUCT
Production:	NOV 17 93	Int/Smpl #:	NB-1
Sampled:	n/a	Machine #:	n/a
Date Rcv'd:	NOV 22 93	Test Site:	Buffalo
Obsv Cart #s:	n/a	Smpl Size:	45
Last Cart #:	n/a	Clnt Ref #:	01158

HEAVY METAL ANALYSIS PASS

ELEMENT	RESULT		PASS/FAIL
Tot. LEAD:	LT 0.0003	%	PASS
Tot. BARIUM:	0.0010	%	PASS
Tot. CADMIUM:	LT 0.0001	%	PASS
Tot. ARSENIC:	LT 0.0005	%	PASS
Tot. MERCURY:	LT 0.0005	%	PASS
Tot. SELENIUM:	LT 0.0010	%	PASS
Tot. CHROMIUM:	0.0002	%	PASS
Tot. ANTIMONY:	LT 0.0005	%	PASS
Tot. (Cd+As+Hg+Se):	LT 0.0021	%	PASS

Results are reported as percent by weight of the total nonvolatile content. LT = Less Than

LIMITS	Lead	Barium	Cadmium	Arsenic	Mercury	Selenium	Chromium	Antimony	Cd+As+Hg+Se
TOTAL (%)	0.060	-	0.060	0.060	0.060	0.060	-	-	0.060
SOLUBLE (%)	-	0.050	0.010	0.010	0.010	-	0.025	0.025	-

850930022

A4

ACTS TESTING LABS

PREMIUM TEST REPORT

To:	Mr. Jeff Peebles	Date:	DEC 1 93
Company:	NEWARK BOXBOARD COMPANY	Report #:	3B-12232
Promotion:	NEWARK GROUP PAPER TESTING PROGRAM	Age Grade:	n/a
Sample ID:	PLAIN CHIP PAPERBOARD		
Vendor:	NEWARK BOXBOARD COMPANY	Phase:	FINAL PRODUCT
Production:	NOV 17 93	Int #:	NB-1
Sampled:	n/a	Machine #	n/a
Date Rcv'd:	NOV 22 93	Test Site:	Buffalo
Obsv Cart #s:	n/a	Smpl Size:	45
Last Cart #:	n/a	Clnt Ref #:	01158

MICROBIOLOGICAL: PASS

COLLECTION METHOD: Surface Wash Test

TEST	LIMIT	RESULT
Mean Total Plate Count, cfu/pre	LT 50/8 in ^{2}	1 cfu/8 in ^{2}
E. coli	Negative	Negative
Salmonella	Negative	Negative
Coagulase positive Staphylococcus	Negative	Negative
Listeria monocytogenes	Negative	Negative

cfu/pre = colony forming units/premium
LT = Less Than
MPN/pre = Most Probable Number/premium

ACTS TESTING LABS

PREMIUM TEST REPORT

To:	Mr. Jeff Peebles	Date:	NOV 30 93
Company:	NEWARK BOXBOARD COMPANY	Report #:	3B-12232
Promotion:	NEWARK GROUP PAPER TESTING PROGRAM	Age Label:	n/a
Sample ID:	PLAIN CHIP PAPERBOARD		
Vendor:	NEWARK BOXBOARD COMPANY	Phase:	FINAL PRODUCT
Production:	NOV 17 93	Int/Smpl #:	NB-1
Sampled:	n/a	Machine #:	n/a
Date Rcv'd:	NOV 22 93	Test Site:	Buffalo
Obsv Cart #s:	n/a	Smpl Size:	45
Last Cart #:	n/a	Clnt Ref #:	01158

FDA FOOD SIMULATING SOLVENT EXTRACTIVES PASS

SAMPLE ID: PLAIN CHIP PAPERBOARD

PAPER AND PAPERBOARD

TEST	LIMIT	RESULT
Extractives using Distilled Water, mg/in sq	0.5	0.3
Extractives using Heptane, mg/in sq	0.5	0.1

LT = Less Than
The results are reported in milligrams per square inch of food contact surface.

ACTS TESTING LABS

PREMIUM TEST REPORT

To:	Mr. Jeff Peebles	Date:	DEC 9 93
Company:	NEWARK BOXBOARD COMPANY	Report #:	3B-12232
Promotion:	NEWARK GROUP PAPER TESTING PROGRAM	Age Grade:	n/a
Sample ID:	PLAIN CHIP PAPERBOARD		
Vendor:	NEWARK BOXBOARD COMPANY	Phase:	FINAL PRODUCT
Production:	NOV 17 93	Int #:	NB-1
Sampled:	n/a	Machine #:	n/a
Date Rcv'd:	NOV 22 93	Test Site:	Buffalo
Obsv Cart #s:	n/a	Smpl Size:	45
Last Cart #:	n/a	Client Ref#:	01158

POLYCHLORINATED BIPHENYLS (PCB) PASS

COMPONENT	RESULT
Plain Chip Paperboard	LT 0.25 ppm
LIMIT	LT 10 ppm

LT=Less than
PPM= Parts per million

ACTS TESTING LABS

PREMIUM TEST REPORT

To:	Mr. Jeff Peebles	Date:	DEC 9 93
Company:	NEWARK BOXBOARD COMPANY	Report #:	3B-12232
Promotion:	NEWARK GROUP PAPER TESTING PROGRAM	Age Grade:	n/a
Sample ID:	PLAIN CHIP PAPERBOARD		
Vendor:	NEWARK BOXBOARD COMPANY	Phase:	FINAL PRODUCT
Production:	NOV 17 93	Int #:	NB-1
Sampled:	n/a	Machine #:	n/a
Date Rcv'd:	NOV 22 93	Test Site:	Buffalo
Obsv Cart #s:	n/a	Smpl Size:	45
Last Cart #:	n/a	Client Ref#:	01158

PESTICIDE RESIDUE — PASS

PARAMETERS	RESULT
Alpha-BHC	LT 0.25 mg/g
Beta-BHC	LT 0.25 mg/g
Delta BHC	LT 0.25 mg/g
Gamma-BHC (Lindane)	LT 0.25 mg/g
Heptachlor	LT 0.25 mg/g
Aldrin	LT 0.50 mg/g
Heptachlorepoxide	LT 0.25 mg/g
Endosulfan I	LT 0.25 mg/g
Dieldrin	LT 0.25 mg/g
4.4 -DDE	LT 0.25 mg/g
Endrin	LT 0.25 mg/g
Endosulfan II	LT 0.25 mg/g
4.4-DDD	LT 0.25 mg/g
Endrin Aldehyde	LT 0.50 mg/g
Endosulfan Sulfate	LT 0.25 mg/g
4.4-DDT	LT 0.50 mg/g
Methoxychlor	LT 0.25 mg/g
Toxaphene	LT 1.0 mg/g
Chlordane	LT 1.0 mg/g

LT=Less than

ACTS TESTING LABS

PREMIUM TEST REPORT

To:	Mr. Jeff Peebles	Date:	JAN 3 94
Company:	NEWARK BOXBOARD COMPANY	Report #:	3B-12649
Promotion:	NEWARK GROUP PAPER TESTING PROGRAM	Age Grade:	n/a
Sample ID:	PLAIN CHIP PAPERBOARD		
Vendor:	NEWARK BOXBOARD COMPANY	Phase:	FINAL PRODUCT
Production:	NOV 17 93	Int #:	NB-1
Sampled:	n/a	Machine #:	n/a
Date Rcv'd:	NOV 22 93	Test Site:	Buffalo
Obsv Cart #s:	n/a	Smpl Size:	45
Last Cart #:	n/a	Client Ref#:	01158

DIOXINS 2,3,7,8 - TCDD — PASS

COMPONENT	RESULT
Plain Chip Paperboard	LT 2 ppt
LIMIT	LT 2 ppt

LT=Less than
PPT = Parts per trillion

ACTS TESTING LABS, INC.
25 Anderson Road
Buffalo, NY 14225-4928
Tel (716) 897-3300
Fax (716) 897-0876

SUMMARY TEST REPORT

To:	The Newark Group	Date:	JAN 19 94
Company:	THE FOCAP TEAM	Report #:	3B-12233
Promotion:	NEWARK GROUP PAPER TESTING PROGRAM	Age Grade:	n/a
Sample ID:	OLD NEWSPAPER		
Vendor:	NEWARK BOXBOARD COMPANY	Phase:	RAW MATERIALS
Production:	n/a	Int #:	n/a
Sampled:	n/a	Machine #	n/a
Date Rcv'd:	NOV 22 93	Test Site:	Buffalo
Obsv Cart #s:	n/a	Smpl Size:	45
Last Cart #:	n/a	Clnt Ref #:	01158

TESTS CONDUCTED	RESULTS	DATE REPORTED
Heavy Metal Content	PASS	NOV 30 93
Microbiological	PASS	DEC 1 93
Pesticide Residue	PASS	DEC 9 93
PCB Content	PASS	DEC 9 93
Dioxin	SEE REPORT	JAN 19 94

cc:
Newark Boxboard Company: Jeff Peebles
Natick Paperboard Corporation: Thomas Smith
Haverhill Paperboard Corporation: John Glasier
Newark Atlantic Paperboard Corporation: Paula Foley

850930028

A10

Our reports and letters are for the exclusive use of the client to whom/which they are addressed. Communication of ACTS Testing Labs, Inc. reports and letters to any other party

ACTS TESTING LABS

PREMIUM TEST REPORT

To:	The Newark Group	Date:	NOV 30 93
Company:	THE FOCAP TEAM	Report #:	3B-12233
Promotion:	NEWARK GROUP PAPER TESTING PROGRAM	Age Label:	n/a
Sample ID:	OLD NEWSPAPER		
Vendor:	NEWARK BOXBOARD COMPANY	Phase:	RAW MATERIALS
Production:	n/a	Int/Smpl #:	n/a
Sampled:	n/a	Machine #:	n/a
Date Rcv'd:	NOV 22 93	Test Site:	Buffalo
Obsv Cart #s:	n/a	Smpl Size:	45
Last Cart #:	n/a	Clnt Ref #:	01158

HEAVY METAL ANALYSIS PASS

ELEMENT	RESULT		PASS/FAIL
Tot. LEAD:	LT 0.0003	%	PASS
Tot. BARIUM:	0.0006	%	PASS
Tot. CADMIUM:	LT 0.0001	%	PASS
Tot. ARSENIC:	LT 0.0005	%	PASS
Tot. MERCURY:	LT 0.0005	%	PASS
Tot. SELENIUM:	LT 0.0010	%	PASS
Tot. CHROMIUM:	0.0002	%	PASS
Tot. ANTIMONY:	LT 0.0005	%	PASS
Tot. (Cd+As+Hg+Se):	LT 0.0021	%	PASS

Results are reported as percent by weight of the total nonvolatile content. LT = Less Than

LIMITS	Lead	Barium	Cadmium	Arsenic	Mercury	Selenium	Chromium	Antimony	Cd+As+Hg+Se
TOTAL (%)	0.060	-	0.060	0.060	0.060	0.060	-	-	0.060
SOLUBLE (%)	-	0.050	0.010	0.010	0.010	-	0.025	0.025	-

COMMENTS:
The sample was prepared according to EN-71, Part 3, 1988.

cc:
Newark Boxboard Company: Jeff Peebles
Natick Paperboard Corporation: Thomas Smith
Haverhill Paperboard Corporation: John Glasier
Newark Atlantic Paperboard Corporation: Paula Foley

850930029

All

ACTS TESTING LABS

PREMIUM TEST REPORT

To:	THE FOCAP TEAM	Date:	DEC 1 93
Company:	THE NEWARK GROUP	Report #:	3B-12233
Promotion:	NEWARK GROUP PAPER TESTING PROGRAM	Age Grade:	n/a
Sample ID:	OLD NEWSPAPER		
Vendor:	NEWARK BOXBOARD COMPANY	Phase:	RAW MATERIALS
Production:	n/a	Int #:	n/a
Sampled:	n/a	Machine #	n/a
Date Rcv'd:	NOV 22 93	Test Site:	Buffalo
Obsv Cart #s:	n/a	Smpl Size:	45
Last Cart #:	n/a	Clnt Ref #:	01158

MICROBIOLOGICAL: PASS

COLLECTION METHOD: Surface Wash Test

TEST	LIMIT	RESULT
Mean Total Plate Count, cfu/pre	LT 50/8 in ^{2}	1 cfu/8 in ^{2}
E. coli	Negative	Negative
Salmonella	Negative	Negative
Coagulase positive Staphylococcus	Negative	Negative
Listeria monocytogenes	Negative	Negative

cfu/pre = colony forming units/premium
LT = Less Than
MPN/pre = Most Probable Number/premium

cc:
Newark Boxboard Company: Jeff Peebles
Natick Paperboard Corp.: Thomas Smith
Haverhill Paperboard Corp.: John Glasier
Newark Atlantic Paperboard Corp.: Paula Foley

850930030

A12

ACTS TESTING LABS

PREMIUM TEST REPORT

To:	THE FOCAP TEAM	Date:	DEC 9 93
Company:	THE NEWARK GROUP	Report #:	3B-12233
Promotion:	NEWARK GROUP PAPER TESTING PROGRAM	Age Grade:	n/a
Sample ID:	OLD NEWSPAPER		
Vendor:	NEWARK BOXBOARD COMPANY	Phase:	RAW MATERIALS
Production:	n/a	Int #:	n/a
Sampled:	n/a	Machine #:	n/a
Date Rcv'd:	NOV 22 93	Test Site:	Buffalo
Obsv Cart #s:	n/a	Smpl Size:	45
Last Cart #:	n/a	Client Ref#:	01158

POLYCHLORINATED BIPHENYLS (PCB) PASS

COMPONENT	RESULT
Old Newspaper	LT 0.25 ppm
LIMIT	LT 10 ppm

LT=Less than
PPM= Parts per million

cc:
Newark Boxboard Company: Jeff Peebles
Natick Paperboard Corp.: Thomas Smith
Haverhill Paperboard Corp.: John A. Glasier
Newark Atlantic Paperboard Corp.: Paula Foley

ACTS TESTING LABS

PREMIUM TEST REPORT

To:	THE FOCAP TEAM	Date:	DEC 9 93
Company:	THE NEWARK GROUP	Report #:	3B-12233
Promotion:	NEWARK GROUP PAPER TESTING PROGRAM	Age Grade:	n/a
Sample ID:	OLD NEWSPAPER		
Vendor:	NEWARK BOXBOARD COMPANY	Phase:	RAW MATERIALS
Production:	n/a	Int #:	n/a
Sampled:	n/a	Machine #:	n/a
Date Rcv'd:	NOV 22 93	Test Site:	Buffalo
Obsv Cart #s:	n/a	Smpl Size:	45
Last Cart #:	n/a	Client Ref#:	01158

PESTICIDE RESIDUE — PASS

PARAMETERS	RESULT
Alpha-BHC	LT 0.05 mg/g
Beta-BHC	LT 0.05 mg/g
Delta BHC	LT 0.05 mg/g
Gamma-BHC (Lindane)	LT 0.05 mg/g
Heptachlor	LT 0.05 mg/g
Aldrin	LT 0.15 mg/g
Heptachlorepoxide	LT 0.05 mg/g
Endosulfan I	LT 0.1 mg/g
Dieldrin	LT 0.1 mg/g
4.4 -DDE	LT 0.05 mg/g
Endrin	LT 0.05 mg/g
Endosulfan II	LT 0.1 mg/g
4.4-DDD	LT 0.05 mg/g
Endrin Aldehyde	LT 0.05 mg/g
Endosulfan Sulfate	LT 0.1 mg/g
4.4-DDT	LT 0.05 mg/g
Methoxychlor	LT 0.05 mg/g
Toxaphene	LT 1.0 mg/g
Chlordane	LT 1.0 mg/g

LT=Less than

cc:
The Newark Boxboard Company: Jeff Peebles
Natick Paperbaord Corp.: Thomas Smith
Haverhill Paperboard Corp.: John A. Glasier
Newark Atlantic Paperboard Corp.: Paula Foley

ACTS TESTING LABS

PREMIUM TEST REPORT

To:	The Newark Group	Date:	FEB 2 94
Company:	THE FOCAP TEAM	Report #:	3B-12233R
Promotion:	NEWARK GROUP PAPER TESTING PROGRAM	Age Grade:	n/a
Sample ID:	OLD NEWSPAPER		
Vendor:	NEWARK BOXBOARD COMPANY	Phase:	RAW MATERIALS
Production:	n/a	Int #:	n/a
Sampled:	n/a	Machine #:	n/a
Date Rcv'd:	NOV 22 93	Test Site:	Buffalo
Obsv Cart #s:	n/a	Smpl Size:	45
Last Cart #:	n/a	Client Ref#:	01158

DIOXINS 2,3,7,8 - TCDD *

COMPONENT	RESULT
Old Newspaper	LT 4.3 ppt*
LIMIT	LT 2 ppt

LT=Less than
PPT = Parts per trillion

*High Detection Limit due to matrix interferences.

cc:
Newark Boxboard Company: Jeff Peebles
Natick Paperboard Corporation: Thomas Smith
Haverhill Paperboard Corporation: John Glasier
Newark Atlantic Paperboard Corporation: Paula Foley

850930033

A15

ACTS TESTING LABS

SUMMARY TEST REPORT

To:	The Newark Group	Date:	MAY 3 94
Company:	THE FOCAP TEAM	Report #:	4B-04174
Promotion:	NEWARK GROUP PAPER TESTING PROGRAM	Age Grade:	n/a
Sample ID:	OLD CORRUGATED CUTS		
Vendor:	NEWARK BOXBOARD CORP.	Phase:	RAW MATERIALS
Production:	n/a	Int #:	n/a
Sampled:	MAR 25 94	Machine #:	n/a
Date Rcv'd:	MAR 31 94	Test Site:	Buffalo
Obsv Cart #'s:	n/a	Smpl Size:	3
Last Cart #:	n/a	Client Ref #:	01159

TESTS CONDUCTED	RESULTS	DATE REPORTED
Heavy Metal Analysis	PASS	APR 6 94
PCB	PASS	APR 28 94
Pesticide Residue	PASS	APR 28 94
Microbiological	PASS	APR 26 94

cc: Natick Paperboard Corp: Tom Smith
Newark Atlantic Paperboard Corp.: Paula Foley
Haverhill Paperboard Corp.: John Glasier
Newark Boxboard Corp.: Jeff Peebles

850930034

A16

ACTS TESTING LABS

PREMIUM TEST REPORT

To:	The Newark Group	Date:	APR 6 94
Company:	THE FOCAP TEAM	Report #:	4B-04174
Promotion:	NEWARK GROUP PAPER TESTING PROGRAM	Age Label:	n/a
Sample ID:	OLD CORRUGATED CUTS		
Vendor:	NEWARK BOXBOARD CORP.	Phase:	RAW MATERIALS
Production:	n/a	Int/Smpl #:	n/a
Sampled:	3/25/94	Machine #:	n/a
Date Rcv'd:	MAR 31 94	Test Site:	Buffalo
Obsv Cart #s:	n/a	Smpl Size:	3
Last Cart #:	n/a	Clnt Ref #:	01159

HEAVY METAL ANALYSIS PASS

ELEMENT	RESULT		PASS/FAIL
Tot. LEAD:	LT 0.0003	%	PASS
Tot. BARIUM:	0.0015	%	PASS
Tot. CADMIUM:	LT 0.0001	%	PASS
Tot. ARSENIC:	LT 0.0005	%	PASS
Tot. MERCURY:	LT 0.0005	%	PASS
Tot. SELENIUM:	LT 0.0012	%	PASS
Tot. CHROMIUM:	0.0002	%	PASS
Tot. ANTIMONY:	LT 0.0005	%	PASS
Tot. (Cd+As+Hg+Se):	LT 0.0023	%	PASS

Results are reported as percent by weight of the total nonvolatile content. LT = Less Than

LIMITS	Lead	Barium	Cadmium	Arsenic	Mercury	Selenium	Chromium	Antimony	Cd+As+Hg+Se
TOTAL (%)	0.060	-	0.060	0.060	0.060	0.060	-	-	0.060
SOLUBLE (%)	-	0.050	0.010	0.010	0.010	-	0.025	0.025	-

cc:
Natick Paperboard Corp: Tom Smith
Newark Atlantic Paperboard Corp.: Paula Foley
Haverhill Paperboard Corp.: John Glasier
Newark Boxboard Corp.: Jeff Peebles

850930035

A17

ACTS TESTING LABS

PREMIUM TEST REPORT

To:	The FOCAP Team	Date:	APR 28 94
Company:	THE NEWARK GROUP	Report #:	4B-04147
Promotion:	NEWARK GROUP PAPER TESTING PROGRAM	Age Grade:	n/a
Sample ID:	OLD CORRUGATED CUTS		
Vendor:	Newark Boxboard Corporation	Phase:	RAW MATERIAL
Production:	n/a	Int #:	n/a
Sampled:	MAR 25 94	Machine #:	n/a
Date Rcv'd:	MAR 30 94	Test Site:	Buffalo
Obsv Cart #'s:	n/a	Smpl Size:	3
Last Cart #:	n/a	Client Ref #:	01159

POLYCHLORINATED BIPHENYLS (PCB) PASS

COMPONENT	RESULT
Old Corrugated Cuts	LT 0.25 ppm
LIMIT	LT 10 ppm

LT = Less Than
ppm = Parts per Million

cc: Newark Boxboard Corporation: Jeff Peebles
Haverhill Paperboard: John Glasier
Natick Paperboard Corporation: Tom Smith
Newark Atlantic Paperboard: Paula Foley

850930036

A18

ACTS TESTING LABS

PREMIUM TEST REPORT

To:	The FOCAP Team	Date:	APR 28 94
Company:	THE NEWARK GROUP	Report #:	4B-04174
Promotion:	NEWARK GROUP PAPER TESTING PROGRAM	Age Grade:	n/a
Sample ID:	OLD CORRUGATED CUTS		
Vendor:	Newark Boxboard Corporation	Phase:	RAW MATERIALS
Production:	n/a	Int #:	n/a
Sampled:	MAR 25 94	Machine #:	n/a
Date Rcv'd:	MAR 30 94	Test Site:	Buffalo
Obsv Cart #'s:	n/a	Smpl Size:	3
Last Cart #:	n/a	Client Ref #:	n/a

PESTICIDE RESIDUE — PASS

PARAMETERS	RESULT
Alpha-BHC	LT 0.05 ug/g
Beta-BHC	LT 0.05 ug/g
Delta-BHC	LT 0.05 ug/g
Gamma-BHC (Lindane)	LT 0.05 ug/g
Heptachlor	LT 0.05 ug/g
Aldrin	LT 0.05 ug/g
Heptachlorepoxide	LT 0.05 ug/g
Endosulfan I	LT 0.05 ug/g
Dieldrin	LT 0.05 ug/g
4.4 -DDE	LT 0.05 ug/g
Endrin	LT 0.05 ug/g
Endosulfan II	LT 0.05 ug/g
4.4 -DDD	LT 0.05 ug/g
Endrin Aldehyde	LT 0.05 ug/g
Endosulfan Sulfate	LT 0.05 ug/g
4.4 -DDT	LT 0.05 ug/g
Methoxychlor	LT 0.05 ug/g
Toxaphene	LT 0.05 ug/g
Chlordane	LT 0.05 ug/g

LT = Less Than
ug/g = micrograms per gram

cc: Newark Boxboard Corporation: Jeff Peebles
Haverhill Paperboard: John Glasier
Natick Paperboard Corporation: Tom Smith
Newark Atlantic Paperboard: Paula Foley

ACTS TESTING LABS

PREMIUM TEST REPORT

To:	The FOCAP Team	Date:	APR 26 94
Company:	THE NEWARK GROUP	Report #:	4B-04174
Promotion:	NEWARK GROUP PAPER TESTING PROGRAM	Age Grade:	n/a
Sample ID:	OLD CORRUGATED CUTS		
Vendor:	Newark Boxboard Corporation	Phase:	RAW MATERIALS
Production:	n/a	Int #:	n/a
Sampled:	MAR 25 94	Machine #:	n/a
Date Rcv'd:	MAR 30 94	Test Site:	Buffalo
Obsv Cart #'s:	n/a	Smpl Size:	3
Last Cart #:	n/a	Client Ref #:	01159

MICROBIOLOGICAL PASS

COLLECTION METHOD: Surface Wash Test

TEST	LIMIT	RESULT
Mean Total Plate Count, cfu	LT 50 cfu/8 in^2	1 cfu/8 in^2
E. coli	Negative	Negative
Salmonella	Negative	Negative
Coagulase Positive Staphylococcus	Negative	Negative
Listeria monocytogenes	Negative	Negative

cfu = colony forming units
MPN = Most Probable Number
LT = Less Than
GT = Greater Than

cc: Newark Boxboard Corporation: Jeff Peebles
Haverhill Paperboard: John Glasier
Natick Paperboard Corporation: Tom Smith
Newark Atlantic Paperboard: Paula Foley

ACTS TESTING LABS

SUMMARY TEST REPORT

To:	The Newark Group	Date:	MAY 3 94
Company:	THE FOCAP TEAM	Report #:	4B-04174
Promotion:	NEWARK GROUP PAPER TESTING PROGRAM	Age Grade:	n/a
Sample ID:	OLD CORRUGATED CUTS		
Vendor:	NEWARK BOXBOARD CORP.	Phase:	RAW MATERIALS
Production:	n/a	Int #:	n/a
Sampled:	MAR 25 94	Machine #:	n/a
Date Rcv'd:	MAR 31 94	Test Site:	Buffalo
Obsv Cart #'s:	n/a	Smpl Size:	3
Last Cart #:	n/a	Client Ref #:	01159

TESTS CONDUCTED	RESULTS	DATE REPORTED
Heavy Metal Analysis	PASS	APR 6 94
PCB	PASS	APR 28 94
Pesticide Residue	PASS	APR 28 94
Microbiological	PASS	APR 26 94

cc: Natick Paperboard Corp: Tom Smith
Newark Atlantic Paperboard Corp.: Paula Foley
Haverhill Paperboard Corp.: John Glasier
Newark Boxboard Corp.: Jeff Peebles

850930039

A21

ACTS TESTING LABS

PREMIUM TEST REPORT

To:	The Newark Group	Date:	APR 6 94
Company:	THE FOCAP TEAM	Report #:	4B-04174
Promotion:	NEWARK GROUP PAPER TESTING PROGRAM	Age Label:	n/a
Sample ID:	OLD CORRUGATED CUTS		
Vendor:	NEWARK BOXBOARD CORP.	Phase:	RAW MATERIALS
Production:	n/a	Int/Smpl #:	n/a
Sampled:	3/25/94	Machine #:	n/a
Date Rcv'd:	MAR 31 94	Test Site:	Buffalo
Obsv Cart #s:	n/a	Smpl Size:	3
Last Cart #:	n/a	Clnt Ref #:	01159

HEAVY METAL ANALYSIS PASS

ELEMENT	RESULT		PASS/FAIL
Tot. LEAD:	LT 0.0003	%	PASS
Tot. BARIUM:	0.0015	%	PASS
Tot. CADMIUM:	LT 0.0001	%	PASS
Tot. ARSENIC:	LT 0.0005	%	PASS
Tot. MERCURY:	LT 0.0005	%	PASS
Tot. SELENIUM:	LT 0.0012	%	PASS
Tot. CHROMIUM:	0.0002	%	PASS
Tot. ANTIMONY:	LT 0.0005	%	PASS
Tot. (Cd+As+Hg+Se):	LT 0.0023	%	PASS

Results are reported as percent by weight of the total nonvolatile content. LT = Less Than

LIMITS	Lead	Barium	Cadmium	Arsenic	Mercury	Selenium	Chromium	Antimony	Cd+As+Hg+Se
TOTAL (%)	0.060	-	0.060	0.060	0.060	0.060	-	-	0.060
SOLUBLE (%)	-	0.050	0.010	0.010	0.010	-	0.025	0.025	-

cc:
Natick Paperboard Corp: Tom Smith
Newark Atlantic Paperboard Corp.: Paula Foley
Haverhill Paperboard Corp.: John Glasier
Newark Boxboard Corp.: Jeff Peebles

850930040

A22

ACTS TESTING LABS

PREMIUM TEST REPORT

To:	The FOCAP Team	Date:	APR 28 94
Company:	THE NEWARK GROUP	Report #:	4B-04147
Promotion:	NEWARK GROUP PAPER TESTING PROGRAM	Age Grade:	n/a
Sample ID:	OLD CORRUGATED CUTS		
Vendor:	Newark Boxboard Corporation	Phase:	RAW MATERIAL
Production:	n/a	Int #:	n/a
Sampled:	MAR 25 94	Machine #:	n/a
Date Rcv'd:	MAR 30 94	Test Site:	Buffalo
Obsv Cart #'s:	n/a	Smpl Size:	3
Last Cart #:	n/a	Client Ref #:	01159

POLYCHLORINATED BIPHENYLS (PCB) PASS

COMPONENT	RESULT
Old Corrugated Cuts	LT 0.25 ppm
LIMIT	LT 10 ppm

LT = Less Than
ppm = Parts per Million

cc: Newark Boxboard Corporation: Jeff Peebles
Haverhill Paperboard: John Glasier
Natick Paperboard Corporation: Tom Smith
Newark Atlantic Paperboard: Paula Foley

850930041

A23

ACTS TESTING LABS

PREMIUM TEST REPORT

To:	The FOCAP Team	Date:	APR 28 94
Company:	THE NEWARK GROUP	Report #:	4B-04174
Promotion:	NEWARK GROUP PAPER TESTING PROGRAM	Age Grade:	n/a
Sample ID:	OLD CORRUGATED CUTS		
Vendor:	Newark Boxboard Corporation	Phase:	RAW MATERIALS
Production:	n/a	Int #:	n/a
Sampled:	MAR 25 94	Machine #:	n/a
Date Rcv'd:	MAR 30 94	Test Site:	Buffalo
Obsv Cart #'s:	n/a	Smpl Size:	3
Last Cart #:	n/a	Client Ref #:	n/a

PESTICIDE RESIDUE — PASS

PARAMETERS	RESULT
Alpha-BHC	LT 0.05 ug/g
Beta-BHC	LT 0.05 ug/g
Delta-BHC	LT 0.05 ug/g
Gamma-BHC (Lindane)	LT 0.05 ug/g
Heptachlor	LT 0.05 ug/g
Aldrin	LT 0.05 ug/g
Heptachlorepoxide	LT 0.05 ug/g
Endosulfan I	LT 0.05 ug/g
Dieldrin	LT 0.05 ug/g
4.4 -DDE	LT 0.05 ug/g
Endrin	LT 0.05 ug/g
Endosulfan II	LT 0.05 ug/g
4.4 -DDD	LT 0.05 ug/g
Endrin Aldehyde	LT 0.05 ug/g
Endosulfan Sulfate	LT 0.05 ug/g
4.4 -DDT	LT 0.05 ug/g
Methoxychlor	LT 0.05 ug/g
Toxaphene	LT 0.05 ug/g
Chlordane	LT 0.05 ug/g

LT = Less Than
ug/g = micrograms per gram

cc: Newark Boxboard Corporation: Jeff Peebles
Haverhill Paperboard: John Glasier
Natick Paperboard Corporation: Tom Smith
Newark Atlantic Paperboard: Paula Foley

850930042

A24

ACTS TESTING LABS

PREMIUM TEST REPORT

To:	The FOCAP Team	Date:	APR 26 94
Company:	THE NEWARK GROUP	Report #:	4B-04174
Promotion:	NEWARK GROUP PAPER TESTING PROGRAM	Age Grade:	n/a
Sample ID:	OLD CORRUGATED CUTS		
Vendor:	Newark Boxboard Corporation	Phase:	RAW MATERIALS
Production:	n/a	Int #:	n/a
Sampled:	MAR 25 94	Machine #:	n/a
Date Rcv'd:	MAR 30 94	Test Site:	Buffalo
Obsv Cart #'s:	n/a	Smpl Size:	3
Last Cart #:	n/a	Client Ref #:	01159

MICROBIOLOGICAL PASS

COLLECTION METHOD: Surface Wash Test

TEST	LIMIT	RESULT
Mean Total Plate Count, cfu	LT 50 cfu/8 in^2	1 cfu/8 in^2
E. coli	Negative	Negative
Salmonella	Negative	Negative
Coagulase Positive Staphylococcus	Negative	Negative
Listeria monocytogenes	Negative	Negative

cfu = colony forming units
MPN = Most Probable Number
LT = Less Than
GT = Greater Than

cc: Newark Boxboard Corporation: Jeff Peebles
Haverhill Paperboard: John Glasier
Natick Paperboard Corporation: Tom Smith
Newark Atlantic Paperboard: Paula Foley

850930043

A25

Exhibit B

850930044

WASTEWATER ANALYSIS

	Chlorine	Copper	Iron	Lead	Titanium	Arsenic	Cadmium	Chromium	Mercury	Nickel	Zinc	TPH
1974	75											
1975		0.2	0.2	0.2	2.03							
1980		0.316		0.942		0.007	0.018	0.312	0.0016	0.012	1.42	
1981									0.001			4.9
1986		0.12		0.063				0.015		0.063	0.413	
1994		0.64		0.0097		0.0113	0.0006	0.0086	0.001	0.04	0.2	
1997		0.042		0.0198		0.06	8.4 (E)		0.0002	0.02	0.45	
1998		0.15		0.0103		0.003	0.0003			0.0009	0.6	
1999		0.23		0.01		0.002	0.0001			0.002	0.36	
2000		0.1		0.004		0.008	0.0007		0.001	0.08	0.42	
2001		0.22		0.004		0.004	0.0006		0.0009	0.08	0.3	
2002		0.1		0.014		0.004	0.014		0.0001	0.06	0.43	

Note: Concentrations equal the average ppm for each year indicated

Exhibit C

850930046

	POUNDS GENERATED PER YEAR IN WASTEWATER										
	Copper	Lead	Iron	Titanium	TPEH	Mercury	Zinc	Nickel	Chromium	Arsenic	Cadmium
1975	283.3	283.3	283.3	2,875.54							
1981					2,064.91	0.421					
1986	38.75	20.35					133.38	20.35	4.84		
1991					4,690.22						
1994	352.21	5.32				0.55	114.47	22.01	4.73	6.237	0.3119
1997	6.5	3.05				0.026	68.95	3.07		9.3	0.01
1998	22.51	1.53				0	86.66	0.14		0.51	0.06
1999	63.14	2.7				0	99.51	0.47		0.59	0.04
2000	15.63	0.97				0.17	60.99	3.26		1.2	0.1
2001	48.51	1				0.22	66.78	18.66		0.8	0.14
2002	15.94	2.4				0.2	71.8	9.77		0.6	2.3

Exhibit D

850930048

State of New Jersey
Department of Environmental Protection and Energy
Division of Responsible Party Site Remediation
CN 029
Trenton, NJ 08625-0029
Tel. # 609-984-3156
Fax. # 609-292-5604

Scott A. Weiner
Commissioner

Karl J. Delaney
Director

MAR 12 1992

Herb Treible
Newark Box Board Co.
17 Blanchard Street
Newark, New Jersey 07150

CERTIFIED
RETURN RECEIPT REQUESTED

RE: Newark Box Board Company; 17 Blanchard Street
Newark City, Essex County
Case #90-03-20-1101 UST #0106607

Dear Mr. Treible:

On November 21, 1990 the New Jersey Department of Environmental Protection and Energy (the Department) received a report from your company. This report documents the corrective action measures undertaken in response to the discharge from your underground storage tank system.

Based on our review of the information submitted, we find that you have complied with the Department's existing requirements regarding corrective action for the investigated underground storage tank system (s). Therefore, no further corrective action will be required at this time. Should the Department have further requirements in the future, you will be contacted at that time.

In addition, you are required to properly seal all abandoned wells. Therefore, all monitoring wells installed as part of the investigation and corrective action of the discharge at your facility that you no longer plan to use for ground water monitoring must be sealed properly in accordance with the requirements of N.J.A.C. 7:9-9.1 et seq. by a licensed well driller certified to seal wells. The well abandonment forms must be completed and submitted to the Bureau of Water Allocation.

Thank you for your cooperation in this matter.

Very truly yours,

Helen Burton per

Joseph A. Miller
Section Chief
Tank Management Section
Bureau of Underground Storage Tanks

c: Joseph McGinley, Newark Division of Health
Richard Kropp, Bureau of Water Allocation

850930050

D2

Exhibit E

850930051

PRETREATMENT MONITORING REPORT

Corrected Copy

Name NEWARK BOXBOARD Co.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E / 430.266 SUBPART Z Outlet # 20401401 43900 02

Contact Offical MARK J. McCABE Telephone # 201-589-6853 Ext. 1

Monitoring Period					
7	1	97	7	31	97
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (If applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	73,048	179,100
Total Flow-gal/day	73,048	179,100

Method used Total Flow Metered ÷ by 31 Days in July

DURING THIS MONITORING PERIOD, NO CHANGE HAS BEEN MADE TO THE PLOT PLAN

SUBMITTED TO PVSC ON 2/21/97

Parameter		Mass Limit or Concentration Average	Maximum	Units	No. of Samples	Sample type Comp./grab
ARSENIC	Sample measurement	<.005		PPM	1	Comp
	Permit requirement	.19		"		
Cadmium	Sample measurement	.0005		"	1	Comp
	Permit requirement	.19		"		
Copper	Sample measurement			"	1	Comp
	Permit requirement	3.0		"		
Mercury	Sample measurement	<.001		"	1	Comp
	Permit requirement	.08		"		
Nickel	Sample measurement	<.01		"	1	Comp
	Permit requirement	5.9		"		
Lead	Sample measurement	<.001		"	1	Comp
	Permit requirement	.54		"		
Zinc	Sample measurement	.02		"	1	Comp
	Permit requirement	1.67		"		
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

RECEIVED
INDUSTRIAL DEPARTMENT

Corrected Copy

PRETREATMENT MONITORING REPORT

Name NEWARK BOXBOARD Co.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E / 430.266 SUBPART Z Outlet # 20401401 43900 02C

Contact Offical Mark J. McCABE Telephone # 201-589-6853 ext 1

Monitoring Period					
8	1	97	8	31	97
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (if applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	41,677	104,310
Total Flow-gal/day	41,677	104,310

Method used Total flow metred ÷ by 31 Days in August.

DURING THIS MONITORING PERIOD, NO CHANGE HAS BEEN MADE TO THE PLOT PLAN

SUBMITTED TO PVSC ON 2/21/97

Parameter		Mass Limit or Concentration Average	Maximum	Units	No. of Samples	Sample type Comp./grab
ARSENIC	Sample measurement	<.005		PPM	1	Comp
	Permit requirement	.15		"	1	
CADMIUM	Sample measurement	<.0065		PPM	1	comp
	Permit requirement	.19		"		
COPPER	Sample measurement	<.01		PPM	1	Comp
	Permit requirement	3.02		"		
MERCURY	Sample measurement			PPM	1	Comp.
	Permit requirement	.08		"		
NICKEL	Sample measurement	.06		PPM	1	Comp
	Permit requirement	5.9		"		
LEAD	Sample measurement	.019		PPM	1	Comp.
	Permit requirement	.54		"		
ZINC	Sample measurement	.09		PPM	1	Comp
	Permit requirement	1.67		"		
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

RECEIVED
INDUSTRIAL DEPARTMENT

PVSC Form MR-1 Rev. 4 6/87 P1

850930053

E2

PRETREATMENT MONITORING REPORT Corrected Copy.

Name NEWARK BOXBOARD Co.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E / 430.266 SUBPART Z Outlet # 20401401 43900 02

Contact Offical Mark J. McCABE Telephone # 201-589-6853 Ext. 13

Monitoring Period					
9	01	97	9	30	97
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (If applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	59,540	73,420
Total Flow-gal/day	59,540	73,420

Method used Total Flow metered ÷ by 30 Days in September.

DURING THIS MONITORING PERIOD, NO CHANGE HAS BEEN MADE TO THE PLOT PLAN

SUBMITTED TO PVSC ON 2/21/97

Parameter		Mass Limit or Concentration Average	Maximum	Units	No. of Samples	Sample type Comp./grab
ARSENIC	Sample measurement	L.005		PPM	1	Comp
	Permit requirement	.15		"		
CADMIUM	Sample measurement	L.0005		PPM	1	Comp
	Permit requirement	.19		"		
Copper	Sample measurement	.2		PPM	1	Comp
	Permit requirement	3.07		"		
Mercury	Sample measurement	L.001		PPM	1	Comp
	Permit requirement					
Nickel	Sample measurement	.05		PPM	1	Comp
	Permit requirement	5.9				
LEAD	Sample measurement	.039		PPM	1	Comp
	Permit requirement	.54				
ZINC	Sample measurement	1.3		PPM	1	Comp
	Permit requirement	1.67				
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

RECEIVED INDUSTRIAL DEPARTMENT

PVSC Form MR-1 Rev. 4 6/87 P1

850930054

E3

PRETREATMENT MONITORING REPORT

Name NEWARK BOXBOARD Co.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E 430.266 SUBPART Z Outlet # 20401401 43900 02

Contact Offical MARK J. McCABE Telephone # 201-589-6853 Ext. 13

Monitoring Period					
10	1	97	10	31	97
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (If applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	35,641	49,780
Total Flow-gal/day	35,641	49,780

Method used Total Flow Metred ÷ by 31 Days in October.

DURING THIS MONITORING PERIOD, NO CHANGE HAS BEEN MADE TO THE PLOT PLAN

SUBMITTED TO PVSC ON 2/21/97

Parameter		Mass Limit or Concentration Average	Maximum	Units	No. of Samples	Sample type Comp./grab
Arsenic	Sample measurement	.262		ppm	1	Comp
	Permit requirement	.15		"		
Cadmium	Sample measurement	<.0005		"	1	Comp
	Permit requirement	.19		"		
Copper	Sample measurement	<.01		"	1	Comp
	Permit requirement	3.02		"		
Mercury	Sample measurement	<.001		"	1	Comp
	Permit requirement	.08		"		
Nickel	Sample measurement	.01		"	1	Comp
	Permit requirement	5.9		"		
Lead	Sample measurement	.047		"	1	Comp
	Permit requirement	.54		"		
Zinc	Sample measurement	1.		"	1	Comp
	Permit requirement	1.67		"		
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

RECEIVED
NOV 2 . 1997
INDUSTRIAL DEPARTMENT

PVSC Form MR-1 Rev. 4 6/87 P1

850930055

E4

PRETREATMENT MONITORING REPORT

Maureen 12/19/97

Name NEWARK BOXBOARD Co.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E 430.266 SUBPART Z Outlet# 20401401 43900 020

Contact Offical Mark J. McCabe Telephone# 201-589-6853 Ext 13

Monitoring Period					
11	1	97	11	30	97
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (if applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	59,576	102,990
Total Flow-gal/day	59,576	102,990

Method used Total Flow Metered; Divided 30 Days in November

DURING THIS MONITORING PERIOD, NO CHANGE HAS BEEN MADE TO THE PLOT PLAN SUBMITTED TO PVSC ON 2/21/97

Parameter		Mass Limit or Concentration Average	Maximum	Units	No. of Samples	Sample type Comp./grab
ARSENIC	Sample measurement	.048		PPM	1	Comp.
	Permit requirement	.15		PPM		
CADMIUM	Sample measurement	<.0005		PPM	1	Comp
	Permit requirement	.19		PPM		
COPPER	Sample measurement	<.01		PPM	1	Comp.
	Permit requirement	3.02		PPM		
MERCURY	Sample measurement	<.001		PPM	1	Comp.
	Permit requirement	.08		PPM		
Nickel	Sample measurement	<.01		PPM	1	Comp.
	Permit requirement	5.9		PPM		
LEAD	Sample measurement	.009		PPM	1	Comp
	Permit requirement	.54		PPM		
ZINC	Sample measurement	.10		PPM	1	Comp.
	Permit requirement	1.67		PPM		
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

PVSC Form MR-1 Rev. 4 6/87 P1

850930056

E5

PRETREATMENT MONITORING REPORT

NAME Newark Boxboard Co.

MAILING ADDRESS 17 Blanchard St. Newark, NJ 07105

FACILITY LOCATION 17 Blanchard St. Newark, NJ

CATEGORY & SUBPART 430.56 subpart E 430.266 subpart Z OUTLET = 20401401 43900 0201

CONTACT OFFICIAL Mark J. McCabe TELEPHONE # 201-589-6853 ext. 13

MONITORING PERIOD					
12	1	97	12	31	97
MO.	DAY	YR.	MO.	DAY	YR.
START			END		

For Reporting Period

	Average	Maximum
Regulated Flow-gal/day	52,679	94,510
Total Flow-gal/day	52,679	94,510

Method used Total Flow Metered ÷ By 31 Days in December

Production rate (if applicable) During this Monitoring Period, No Change has been Made to the Plot Plan Submitted to PVSC on 2/21/97

PARAMETER		MASS LIMIT OR CONCENTRATION			# OF SAMPLES	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS		COMP/GRAB
Arsenic	Sample Measurement	.051		ppm	1	Comp
	Permit Requirement	.15		ppm		
Cadmium	Sample Measurement	<.0005		ppm	1	Comp
	Permit Requirement	.19		ppm		
Copper	Sample Measurement	<.01		ppm	1	Comp
	Permit Requirement	3.02		ppm		
Mercury	Sample Measurement	<.001		ppm	1	Comp
	Permit Requirement	.08		ppm		
Nickel	Sample Measurement	<.01		ppm	1	Comp
	Permit Requirement	5.9		ppm		
Lead	Sample Measurement	.005		ppm	1	Comp
	Permit Requirement	.54		ppm		
Zinc	Sample Measurement	.09		ppm	1	Comp
	Permit Requirement	1.67		ppm		
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					

RECEIVED JAN 21 1998 INDUSTRIAL DEPARTMENT

PVSC Form MR-1 Rev: 4 6/87 P1

850930057

EG

PRETREATMENT MONITORING REPORT

NAME Newark Boxboard Co.

MAILING ADDRESS 17 Blanchard St. Newark, NJ 07105

FACILITY LOCATION 17 Blanchard St. Newark, NJ

CATEGORY & SUBPART 430.56 Subpart E 430.266 Subpart Z OUTLET # 20401401 43900 0201

CONTACT OFFICIAL Mark J. McCabe TELEPHONE # 201-589-6853 ext. 13

MONITORING PERIOD					
1	1	98	1	31	98
MO.	DAY	YR.	MO.	DAY	YR.
START			END		

For Reporting Period

	Average	Maximum
Regulated Flow-gal/day	42,956	56,820
Total Flow-gal/day	42,956	56,820

Method used Total Flow Metered ÷ by 31 Days in January

Production rate (if applicable) During this Monitoring Period, No Change has been Made to the Plot Plan Submitted to PVSC on 2/21/97

PARAMETER		MASS LIMIT OR CONCENTRATION			# OF SAMPLES	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS		COMP/GRAB
Aesenic	Sample Measurement	<.005		PPM	1	Comp.
	Permit Requirement	.15				
Cadmium	Sample Measurement	.0008		PPm	1	Comp
	Permit Requirement	.19				
Copper	Sample Measurement	.01		PPm	1	Comp
	Permit Requirement	3.02				
Mercury	Sample Measurement	<.001		PPm	1	Comp
	Permit Requirement	.08				
Nickel	Sample Measurement	<.01		PPm	1	Comp
	Permit Requirement	5.9				
Lead	Sample Measurement	<.001		PPm	1	Comp
	Permit Requirement	.54				
Zinc	Sample Measurement	.08		PPm	1	Comp
	Permit Requirement	1.67				
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					

RECEIVED FEB 1998

RECEIVED FEB 17 1998 INDUSTRIAL DEPARTMENT

PVSC Form MR-1 Rev: 4 6/87 P1

850930058

E7

PRETREATMENT MONITORING REPORT

NAME Newark Cardboard Co.

MAILING ADDRESS 17 Blanchard St. Newark, NJ 07105

FACILITY LOCATION 17 Blanchard St. Newark, NJ

CATEGORY & SUBPART 430.56 Subpart E 430.266 Subpart Z OUTLET # 20401401 43900 0201

CONTACT OFFICIAL Mark J. McCabe TELEPHONE # 201-589-6853 ext. 13

MONITORING PERIOD					
3	1	98	3	31	98
MO.	DAY	YR.	MO.	DAY	YR.
START			END		

For Reporting Period

	Average	Maximum
Regulated Flow-gal/day	31,710	53,480
Total Flow-gal/day	31,710	53,480

Method used Total Flow Metered Divided by 31 Days in march.

Production rate (if applicable) During this Monitoring Period, No Change has been Made to the Plot Plan Submitted to PVSC on 2/21/97

PARAMETER		MASS LIMIT OR CONCENTRATION			# OF SAMPLES	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS		COMP/GRAB
Aresenic	Sample Measurement	<.005		PPM	1	Comp.
	Permit Requirement	.15		PPM		
Cadmium	Sample Measurement	.0023		PPM	1	Comp
	Permit Requirement	.19		PPM		
Copper	Sample Measurement	.03		PPM	1	Comp
	Permit Requirement	3.02		PPM		
Mercury	Sample Measurement	<.001		PPM	1	Comp
	Permit Requirement	.08		PPM		
Nickel	Sample Measurement	<.01		PPM	1	Comp
	Permit Requirement	5.9		PPM		
Lead	Sample Measurement	.001		PPM	1	Comp
	Permit Requirement	.54		PPM		
Zinc	Sample Measurement	.13		PPM	1	Comp.
	Permit Requirement	1.67		PPM		
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					

PVSC Form MR-1 Rev: 4 6/87 P1

RECEIVED APR 2 0 1998 ENFORCEMENT

850930059

PRETREATMENT MONITORING REPORT

NAME Newark Boxboard Co.

MAILING ADDRESS 17 Blanchard St. Newark, NJ 07105

FACILITY LOCATION 17 Blanchard St. Newark, NJ

CATEGORY & SUBPART 430.56 subpart E 430.266 subpart Z OUTLET # 20401401 43900 0201

CONTACT OFFICIAL Mark J. McCabe TELEPHONE # 201-589-6853 ext. 13

MONITORING PERIOD					
02	01	98	02	28	98
MO.	DAY	YR.	MO.	DAY	YR.
START			END		

For Reporting Period

	Average	Maximum
Regulated Flow-gal/day	39,308	82,810
Total Flow-gal/day	39,308	82,810

Method used Total Flow Metered ÷ 28 Days in February 1998

Production rate (if applicable) During This Monitoring Period, No Change has been Made to the Plot Plan Submitted to PVSC on 2/21/97

PARAMETER		MASS LIMIT OR CONCENTRATION			# OF SAMPLES	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS		COMP/GRAB
Arsenic	Sample Measurement	<.005		PPM	1	Comp
	Permit Requirement	.15				
Cadmium	Sample Measurement	<.0005		PPM	1	Comp
	Permit Requirement	.19				
Copper	Sample Measurement	.06		PPM	1	Comp.
	Permit Requirement	3.02				
Mercury	Sample Measurement	<.001		PPM	1	Comp
	Permit Requirement	.08				
Nickel	Sample Measurement	<.01		PPM	1	Comp
	Permit Requirement	5.9				
Lead	Sample Measurement	.001		PPM	1	Comp.
	Permit Requirement	.54				
Zinc	Sample Measurement	1.50		PPM	1	Comp
	Permit Requirement	1.67				
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					

PVSC Form MR-1 Rev: 4 6/87 P1

850930060

E9

PRETREATMENT MONITORING REPORT

NAME Newark Boxboard Co.

MAILING ADDRESS 17 Blanchard St. Newark, NJ 07105

FACILITY LOCATION 17 Blanchard St. Newark, NJ

CATEGORY & SUBPART 430.56 Subpart E 430.266 Subpart Z OUTLET # 20401401 43900 0201

CONTACT OFFICIAL Mark J. McCabe TELEPHONE # 201-589-6853 ext. 13

MONITORING PERIOD					
4	1	98	4	30	98
MO.	DAY	YR.	MO.	DAY	YR.
START			END		

For Reporting Period

	Average	Maximum
Regulated Flow-gal/day	30,158	75,980
Total Flow-gal/day	30,158	75980

Method used Total Flow metered ÷ by 30 Days in April.

Production rate (if applicable) During this Monitoring Period, No Change has been made to the Plot Plan Submitted to PVSC on 2/21/97

PARAMETER		MASS LIMIT OR CONCENTRATION			# OF SAMPLES	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS		COMP/GRAB
Arsenic	Sample Measurement	<.005		ppm	1	Comp
	Permit Requirement	.15		"		
Cadmium	Sample Measurement	<.0005		ppm	1	Comp
	Permit Requirement	.19		"		
Copper	Sample Measurement	1.4		ppm	1	Comp
	Permit Requirement	3.02		"		
Mercury	Sample Measurement	<.001		ppm	1	Comp
	Permit Requirement	.08		"		
Nickel	Sample Measurement	<.01		ppm	1	Comp
	Permit Requirement	5.9		"		
Lead	Sample Measurement	.087		ppm	1	Comp
	Permit Requirement	.54		"		
Zinc	Sample Measurement	~~3.5~~ 1.85	3.3	ppm	4	Comp
	Permit Requirement	1.67	1.67	"		
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					

PVSC Form MR-1 Rev: 4 6/87 P1

PVSC 98 AUG 21 P 5:46

850930061

E10

PVSC '98 MAY 21 P 1:56

PRETREATMENT MONITORING REPORT

NAME Newark Boxboard Co.

MAILING ADDRESS 17 Blanchard St. Newark, NJ 07105

FACILITY LOCATION 17 Blanchard St. Newark, NJ

CATEGORY & SUBPART 430.56 subpart E / 430.266 subpart Z OUTLET # 20401401 43900 0201

CONTACT OFFICIAL Mark J. McCabe TELEPHONE # 201-589-6853 ext. 13

MONITORING PERIOD					
5	1	98	5	31	98
MO.	DAY	YR.	MO.	DAY	YR.
START			END		

For Reporting Period

	Average	Maximum
Regulated Flow-gal/day	43,251	
Total Flow-gal/day	43,251	

Method used Total Flow metered - by 31 Days in May

Production rate (if applicable) During this Monitoring Period, No Change has been Made to the Plot Plan Submitted to PVSC on 2/21/97

PARAMETER		MASS LIMIT OR CONCENTRATION			# OF SAMPLES	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS		COMP/GRAB
Arsenic	Sample Measurement	<.005		ppm	1	Comp
	Permit Requirement	.15				
Cadmium	Sample Measurement	<.0005		ppm	1	Comp
	Permit Requirement	.19				
Copper	Sample Measurement	0.03		ppm	1	Comp
	Permit Requirement	3.02				
Mercury	Sample Measurement	<.001		ppm	1	Comp
	Permit Requirement	.08				
Nickel	Sample Measurement	<.01			1	Comp
	Permit Requirement	5.9		ppm	1	
Lead	Sample Measurement	<.00		ppm	1	Comp
	Permit Requirement	.54				
Zinc	Sample Measurement	.58	1.7	ppm	5	Comp
	Permit Requirement	1.67				
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					

PVSC Form MR-1 Rev: 4 6/87 P1

850930062

E11

PRETREATMENT MONITORING REPORT

NAME Newark Boxboard Co.

MAILING ADDRESS 17 Blanchard St. Newark, NJ 07105

FACILITY LOCATION 17 Blanchard St. Newark, NJ

CATEGORY & SUBPART 430.56 subpart E / 430.266 subpart Z OUTLET # 20401401 43900 0201

CONTACT OFFICIAL Mark J. McCabe TELEPHONE # 201-589-6853 ext. 13

MONITORING PERIOD					
7	1	98	7	31	98
MO.	DAY	YR.	MO.	DAY	YR.
START			END		

For Reporting Period

	Average	Maximum
Regulated Flow-gal/day	50,492	75,960
Total Flow-gal/day	50,492	75,960

Method used Total Flow Metered - By 31 Days in July

Production rate (if applicable) During this Monitoring Period, No Change has been Made to the Plot Plan Submitted to PVSC on 2/21/97

PARAMETER		MASS LIMIT OR CONCENTRATION			# OF SAMPLES	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS		COMP/GRAB
Arsenic	Sample Measurement	<.005		PPM	1	Comp
	Permit Requirement	.15				
Cadmium	Sample Measurement	<.005	.0005	PPM	8	Comp
	Permit Requirement	.19				
Copper	Sample Measurement	<.024	.06	PPM	8	Comp
	Permit Requirement	3.02				
Mercury	Sample Measurement	<.001	<.001	PPM	8	Comp
	Permit Requirement	.05				
Nickel	Sample Measurement	<.01	.02	PPM	8	Comp
	Permit Requirement	5.9				
Lead	Sample Measurement	<.001	.001	PPM	8	Comp
	Permit Requirement	.54				
Zinc	Sample Measurement	.09	.15	PPM	8	Comp
	Permit Requirement	1.67				
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					

PVSC Form MR-1 Rev: 4 6/87 P1

850930063

PVSC 98 FEB 24 P 6:31

E12

PRETREATMENT MONITORING REPORT

Name NEWARK BOXBOARD Co.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E / 430.266 SUBPART Z Outlet # 20401401 43900 02

Contact Offical Mark MCCABE Telephone # 201-589-6853 ext 1

Monitoring Period					
8	1	98	8	31	98
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (if applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	55,296	88,150
Total Flow-gal/day	55,296	88,150

Method used Total Flow METERED by 31 DAYS in August

DURING THIS MONITORING PERIOD, NO CHANGE HAS BEEN MADE TO THE PLOT PLAN SUBMITTED TO PVSC ON 2/21/97

Parameter		Mass Limit or Concentration Average	Maximum	Units	No. of Samples	Sample type Comp./grab
ARSENIC	Sample measurement	.012		PPM	1	Comp
	Permit requirement	.15				
CADMIUM	Sample measurement	.0005		PPM	1	Comp
	Permit requirement	.19				
COPPER	Sample measurement	.09		PPM	1	Comp
	Permit requirement	3.02				
MERCURY	Sample measurement	<.0001		PPM	1	Comp
	Permit requirement	.08				
NICHEL	Sample measurement	<.01		PPM	1	Comp
	Permit requirement					
LEAD	Sample measurement	.015		PPM	1	Comp
	Permit requirement	.54				
ZINC	Sample measurement	1.5		PPM	1	Comp
	Permit requirement	1.67				
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

PVSC Form MR-1 Rev. 4 6/87 P1

850930064

E13

PVSC '98 OCT 20 P 5:39

PRETREATMENT MONITORING REPORT

NAME Newark Boxboard Co.

MAILING ADDRESS 17 Blanchard St. Newark, NJ 07105

FACILITY LOCATION 17 Blanchard St. Newark, NJ

CATEGORY & SUBPART 430.56 subpart E 430.266 subpart Z OUTLET # 20401401 43900 0201

CONTACT OFFICIAL Mark J. McCabe TELEPHONE # 201-589-6853 ext. 13

MONITORING PERIOD					
9	1	98	9	30	98
MO.	DAY	YR.	MO.	DAY	YR.
START			END		

For Reporting Period

	Average	Maximum
Regulated Flow-gal/day	65,963	105,890
Total Flow-gal/day	65,963	105,890

Method used Total Flow Metered ÷ by 30 Days in September

Production rate (if applicable) During this Monitoring Period, No Change has been Made to the Plot Plan Submitted to PVSC on 2/21/97

PARAMETER		MASS LIMIT OR CONCENTRATION			# OF SAMPLES	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS		COMP/GRAB
Arsenic	Sample Measurement	.020		ppm	1	Comp
	Permit Requirement	.15				
Cadmium	Sample Measurement	<.0005		ppm	1	Comp
	Permit Requirement	.19				
Copper	Sample Measurement	<.01		ppm	1	Comp
	Permit Requirement	3.02				
Mercury	Sample Measurement	<.001		ppm	1	Comp
	Permit Requirement	.08				
Nickel	Sample Measurement	<.01		ppm	1	Comp
	Permit Requirement	5.9				
Lead	Sample Measurement	0.004		ppm	1	Comp
	Permit Requirement	.54				
Zinc	Sample Measurement	0.20		ppm	1	comp
	Permit Requirement	1.67				
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					

PVSC Form MR-1 Rev: 4 6/87 P1

850930065

F14

PRETREATMENT MONITORING REPORT

NAME Newark Cardboard Co.

MAILING ADDRESS 17 Blanchard St. Newark, NJ 07105

FACILITY LOCATION 17 Blanchard St. Newark, NJ

CATEGORY & SUBPART 430.56 subpart E / 430.266 subpart Z OUTLET # 20401401 43900 0201

CONTACT OFFICIAL Mark J. McCabe TELEPHONE # 201-589-6853 ext. 13

MONITORING PERIOD					
10	1	98	10	31	98
MO.	DAY	YR.	MO.	DAY	YR.
START			END		

For Reporting Period

	Average	Maximum
Regulated Flow-gal/day	46,724	96,640
Total Flow-gal/day	46,724	96,640

Method used Total Flow is METERED ÷ by 31 Days in October.

Production rate (if applicable) During This Monitoring Period, No Change has been made to the Plot Plan Submitted to PVSC on 2/21/97

PARAMETER		MASS LIMIT OR CONCENTRATION			# OF SAMPLES	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS		COMP/GRAB
Arsenic	Sample Measurement	0.006		ppm	1	Comp
	Permit Requirement	0.15				
Cadmium	Sample Measurement	0.0008		ppm	1	Comp
	Permit Requirement	0.19				
Copper	Sample Measurement	0.05		ppm	1	comp
	Permit Requirement	3.02				
Mercury	Sample Measurement	<0.001		ppm	1	comp
	Permit Requirement	0.08				
Nickel	Sample Measurement	<0.01		ppm	1	Comp
	Permit Requirement	5.9				
Lead	Sample Measurement	0.005		ppm	1	Comp
	Permit Requirement	0.54				
Zinc	Sample Measurement	0.26		ppm	1	Comp
	Permit Requirement	1.67				
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					

PVSC Form MR-1 Rev: 4 6/87 P1

PVSC 98 MAR 20 P 4:07

850930066

E15

PVSC 97 AUG 21 P 5:34

PRETREATMENT MONITORING REPORT

NAME Newark Boxboard Co.

MAILING ADDRESS 17 Blanchard St. Newark, NJ 07105

FACILITY LOCATION 17 Blanchard St. Newark, NJ

CATEGORY & SUBPART 430.56 subpart E 430.266 subpart Z OUTLET # 20401401 43900 0201

CONTACT OFFICIAL Mark J. McCabe TELEPHONE # 201-589-6853 ext. 13

MONITORING PERIOD					
11	1	98	11	30	98
MO.	DAY	YR.	MO.	DAY	YR.
START			END		

For Reporting Period

	Average	Maximum
Regulated Flow-gal/day	73,649	169,520
Total Flow-gal/day	73,649	169,520

Method used Total Flow Metered ÷ 30 Days in November.

Production rate (if applicable) During this Monitoring Period, No Change has been Made to the Plot Plan Submitted to PVSC on 2/21/97

PARAMETER		MASS LIMIT OR CONCENTRATION			# OF SAMPLES	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS		COMP/GRAB
Arsenic	Sample Measurement	<.005		PPM	1	Comp
	Permit Requirement	0.15		"	"	
Cadmium	Sample Measurement	<.0005		"	1	"
	Permit Requirement	0.19		"		
Copper	Sample Measurement	.01		"	1	"
	Permit Requirement	3.02		"		
Mercury	Sample Measurement	<.001		"	1	"
	Permit Requirement	0.08		"		
Nickel	Sample Measurement	<.01		"	1	"
	Permit Requirement	5.9		"		
Lead	Sample Measurement	<.001		"	1	"
	Permit Requirement	0.54		"		
Zinc	Sample Measurement	0.20		"	1	"
	Permit Requirement	1.67		"		
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					

PVSC Form MR-1 Rev: 4 6/87 P1

RECD 12 PM 97 AUG 21

850930067

E16

PRETREATMENT MONITORING REPORT

NAME Newark Boxboard Co.

MAILING ADDRESS 17 Blanchard St. Newark, NJ 07105

FACILITY LOCATION 17 Blanchard St. Newark, NJ

CATEGORY & SUBPART 430.56 subpart E 430.266 subpart Z OUTLET # 20401401 43900 0201

CONTACT OFFICIAL Mark J. McCabe TELEPHONE # 201-589-6853 ext. 13

MONITORING PERIOD					
12	01	98	12	31	98
MO.	DAY	YR.	MO.	DAY	YR.
START			END		

For Reporting Period

	Average	Maximum
Regulated Flow-gal/day	59,110	99,430
Total Flow-gal/day	59,110	99,430

Method used Total flow metered ÷ by 31 Days in December 1998.

Production rate (if applicable) During this Monitoring Period, No Change has been Made to the Plot Plan Submitted to PVSC on 2/21/97

PARAMETER		MASS LIMIT OR CONCENTRATION			# OF SAMPLES	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS		COMP/GRAB
Arsenic	Sample Measurement	<.005		ppm	1	Comp
	Permit Requirement	.15				
Cadmium	Sample Measurement	<.0005		PPM	1	Comp
	Permit Requirement	.19				
Copper	Sample Measurement	<.01		PPM	1	Comp
	Permit Requirement	3.02				
Mercury	Sample Measurement	<.001		PPM	1	Comp
	Permit Requirement	.08				
Nickel	Sample Measurement	0.01		PPM	1	Comp
	Permit Requirement	5.9				
Lead	Sample Measurement	0.001		PPM	1	Comp
	Permit Requirement	.54				
Zinc	Sample Measurement	0.15		ppm	1	comp
	Permit Requirement	1.67				
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					

PVSC Form MR-1 Rev: 4 6/87 P1

PVSC 97 MAR 21 P 4:20

850930068

E17

PRETREATMENT MONITORING REPORT

NAME Newark Boxboard Co.

MAILING ADDRESS 17 Blanchard St. Newark, NJ 07105

FACILITY LOCATION 17 Blanchard St. Newark, NJ

CATEGORY & SUBPART 430.56 Subpart E 430.266 Subpart Z OUTLET = 20401401 43900 0201

CONTACT OFFICIAL Mark J. McCabe TELEPHONE # 201-589-6853 ext. 13

MONITORING PERIOD					
01	01	99	01	31	99
MO.	DAY	YR.	MO.	DAY	YR.
START			END		

For Reporting Period

	Average	Maximum
Regulated Flow-gal/day	58,729	100,830
Total Flow-gal/day	58,729	100,830

Method used Total Flow metered ÷ by 31 Days in January 1999.

Production rate (if applicable) During this Monitoring Period, No Change has been Made to the Plo
Plan Submitted to PVSC on 2/21/97

PARAMETER		MASS LIMIT OR CONCENTRATION			# OF SAMPLES	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS		COMP/GRAB
ARSENIC	Sample Measurement	<.005		PPM	1	Comp.
	Permit Requirement	.15				
CADMIUM	Sample Measurement	<.0005		PPM	1	Comp.
	Permit Requirement	.19				
Copper	Sample Measurement	<.01		PPM	1	Comp
	Permit Requirement	3.02				
Mercury	Sample Measurement	<.001		PPM	1	Comp
	Permit Requirement	.08				
Nickel	Sample Measurement	<.01		PPM	1	Comp
	Permit Requirement	5.9				
LEAD	Sample Measurement	0.006		PPM	1	Comp
	Permit Requirement	.54				
ZINC	Sample Measurement	0.20		PPM	1	Comp
	Permit Requirement	1.67				
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					

PVSC Form MR-1 Rev: 4 6/87 P1

850930069

E18

PRETREATMENT MONITORING REPORT

NAME Newark Boxboard Co.

MAILING ADDRESS 17 Blanchard St. Newark, NJ 07105

FACILITY LOCATION 17 Blanchard St. Newark, NJ

CATEGORY & SUBPART 430.56 subpart E 430.266 subpart Z OUTLET # 20401401 43900 0201

CONTACT OFFICIAL Mark J. McCabe TELEPHONE # 201-589-6853 ext. 13

MONITORING PERIOD					
02	01	99	02	28	99
MO.	DAY	YR.	MO.	DAY	YR.
START			END		

For Reporting Period

	Average	Maximum
Regulated Flow-gal/day	57,906	142,020
Total Flow-gal/day	57,906	142,020

Method used Total Flow metered, Divided by 28 Days in February 1999

Production rate (if applicable) During this Monitoring Period, No Change has been Made to the Plot Plan Submitted to PVSC on 2/21/97

PARAMETER		MASS LIMIT OR CONCENTRATION			# OF SAMPLES	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS		COMP/GRAB
Arsenic	Sample Measurement	<.005		ppm	1	Comp
	Permit Requirement	.15				
Cadmium	Sample Measurement	.0005		ppm	1	Comp
	Permit Requirement	.19				
Copper	Sample Measurement	.72		ppm	1	Comp
	Permit Requirement	3.02				
Mercury	Sample Measurement	<.001		ppm	1	Comp
	Permit Requirement	.08				
Nickel	Sample Measurement	<.01		ppm	1	Comp
	Permit Requirement	5.9				
Lead	Sample Measurement	.033		ppm	1	Comp
	Permit Requirement	.54				
Zinc	Sample Measurement	.18		ppm	1	Comp
	Permit Requirement	1.67				
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					

PVSC Form MR-1 Rev: 4 6/87 P1

850930070

E19

PRETREATMENT MONITORING REPORT

NAME Newark Boxboard Co.

MAILING ADDRESS 17 Blanchard St. Newark, NJ 07105

FACILITY LOCATION 17 Blanchard St. Newark, NJ

CATEGORY & SUBPART 430.56 Subpart E 430.266 Subpart Z OUTLET # 20401401 43900 0201

CONTACT OFFICIAL Mark J. McCabe TELEPHONE # 201-589-6853 ext. 13

MONITORING PERIOD					
03	01	99	03	31	99
MO.	DAY	YR.	MO.	DAY	YR.
START			END		

For Reporting Period

	Average	Maximum
Regulated Flow-gal/day	88,873	435,040
Total Flow-gal/day	88,873	435,040

Method used Total Flow metered ÷ by 31 Days in March

Production rate (if applicable) During This Monitoring Period, No Change has been Made to the Plot Plan Submitted to PVSC on 2/21/97

PARAMETER		MASS LIMIT OR CONCENTRATION			# OF SAMPLES	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS		COMP/GRAB
Arsenic	Sample Measurement	<.005		ppm	1	Comp
	Permit Requirement	.15		"		
Cadmium	Sample Measurement	<.0005		ppm	1	Comp
	Permit Requirement	.19		"		
Copper	Sample Measurement	<.01		ppm	1	Comp
	Permit Requirement	3.02		"		
Mercury	Sample Measurement	<.001		ppm	1	Comp
	Permit Requirement	.08		"	5	
Nickel	Sample Measurement	<.01		ppm	1	Comp
	Permit Requirement	5.9		"		
Lead	Sample Measurement	~~.007~~ → 0.007		ppm	1	Comp
	Permit Requirement	.54		"		
Zinc	Sample Measurement	0.73		ppm	1	Comp
	Permit Requirement	1.67		"		
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					

PVSC Form MR-1 Rev: 4 6/87 P1

850930071

E20

PRETREATMENT MONITORING REPORT

NAME: Newark Boxboard Co.

MAILING ADDRESS: 17 Blanchard St. Newark, NJ 07105

FACILITY LOCATION: 17 Blanchard St. Newark, NJ

CATEGORY & SUBPART: 430.56 subpart E 430.266 subpart Z OUTLET #: 20401401 43900 0201

CONTACT OFFICIAL: Mark J. McCabe TELEPHONE #: 201-589-6853 ext. 13

MONITORING PERIOD					
04	01	99	04	30	99
MO.	DAY	YR.	MO.	DAY	YR.
START			END		

For Reporting Period

	Average	Maximum
Regulated Flow-gal/day	43,163	70,720
Total Flow-gal/day	43,163	70,720

Method used: Total Flow Metered ÷ by 30 Days in April

Production rate (if applicable) During This Monitoring Period, No Change has been Made to the Plo
Plan Submitted to PVSC on 2/21/97

PARAMETER		MASS LIMIT OR CONCENTRATION			# OF SAMPLES	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS		COMP/GRAB
Arsenic	Sample Measurement	<.005		PPM	1	Comp
	Permit Requirement	.15				
Cadmium	Sample Measurement	0.0006		PPM	1	Comp
	Permit Requirement	.19				
Copper	Sample Measurement	0.06		PPM	1	Comp
	Permit Requirement	3.02				
Mercury	Sample Measurement	<.001		PPM	1	Comp
	Permit Requirement	.03				
Nickel	Sample Measurement	<.01		PPM	1	Comp
	Permit Requirement	5.9				
Lead	Sample Measurement	0.012		PPM	1	Comp
	Permit Requirement	.54				
Zinc	Sample Measurement	0.30		PPM	1	Comp
	Permit Requirement	1.67				
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					

PVSC Form MR-1 Rev: 4 6/87 P1

850930072

E21

PVSC '97 MAR 21 P 6:05

PRETREATMENT MONITORING REPORT

NAME Newark Boxboard Co.

MAILING ADDRESS 17 Blanchard St. Newark, NJ 07105

FACILITY LOCATION 17 Blanchard St. Newark, NJ

CATEGORY & SUBPART 430.56 Subpart E 430.266 Subpart Z OUTLET # 20401401 43900 0201

CONTACT OFFICIAL Mark J. McCabe TELEPHONE # 201-589-6853 ext. 13

MONITORING PERIOD					
05	01	99	05	31	99
MO.	DAY	YR.	MO.	DAY	YR.
START			END		

For Reporting Period

	Average	Maximum
Regulated Flow-gal/day	139 576	395 910
Total Flow-gal/day	130,576	395910

Method used Total Flow Metered ÷ by 31 Days in May

Production rate (if applicable) During This Monitoring Period, No Change has been Made to the Plo Plan Submitted to PVSC on 2/21/97

PARAMETER		MASS LIMIT OR CONCENTRATION			# OF SAMPLES	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS		COMP/GRAB
Arsenic	Sample Measurement	<.005		ppm	1	Comp.
	Permit Requirement	.15				
Cadmium	Sample Measurement	<.0005		ppm	1	Comp
	Permit Requirement	.11				
Copper	Sample Measurement	<.01		ppm	1	Comp
	Permit Requirement	3.02				
Mercury	Sample Measurement	<.001		ppm	1	Comp
	Permit Requirement	.08				
Nickel	Sample Measurement	0.02		ppm	1	Comp
	Permit Requirement	5.9				
Lead	Sample Measurement	0.010		ppm	1	Comp
	Permit Requirement	.54				
Zinc	Sample Measurement	0.14		ppm	1	Comp
	Permit Requirement	1.67				
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					

PVSC Form MR-1 Rev: 4 6/87 P1

PVSC '97 MAR 21 P 6:05

850930073

E22

PRETREATMENT MONITORING REPORT

NAME: Newark Boxboard Co.

MAILING ADDRESS: 17 Blanchard St. Newark, NJ 07105

FACILITY LOCATION: 17 Blanchard St. Newark, NJ

CATEGORY & SUBPART: 430.56 subpart E 430.266 subpart Z OUTLET #: 20401401 43900 0201

CONTACT OFFICIAL: Mark J. McCabe TELEPHONE #: 201-589-6853 ext. 13

MONITORING PERIOD					
06	01	99	06	30	99
MO.	DAY	YR.	MO.	DAY	YR.
START			END		

For Reporting Period

	Average	Maximum
Regulated Flow-gal/day	132,164	662,890
Total Flow-gal/day	132,164	662,890

Method used: Total Flow Metered, Divided by 30 Days in June 1999

Production rate (if applicable) During this Monitoring Period, No Change has been Made to the Plot Plan Submitted to PVSC on 2/21/97

PARAMETER		MASS LIMIT OR CONCENTRATION			# OF SAMPLES	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS		COMP/GRAB
Arsenic	Sample Measurement	<.005		ppm	1	Comp
	Permit Requirement	.15				
Cadmium	Sample Measurement	<.0005		ppm	1	Comp
	Permit Requirement	.19				
Copper	Sample Measurement	<.01		ppm	1	Comp
	Permit Requirement	3.02				
Mercury	Sample Measurement	<.001		ppm	1	Comp
	Permit Requirement	.08				
Nickel	Sample Measurement	<.01		ppm	1	Comp
	Permit Requirement	5.9				
Lead	Sample Measurement	0.022		ppm	1	Comp
	Permit Requirement	.54				
Zinc	Sample Measurement	0.39		ppm	1	Comp
	Permit Requirement	1.67				
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					

PVSC Form MR-1 Rev: 4 6/87 P1 3-21-99 850930074

PVSC 17:41

E23

PRETREATMENT MONITORING REPORT

NAME Newark Cardboard Co.

MAILING ADDRESS 17 Blanchard St. Newark, NJ 07105

FACILITY LOCATION 17 Blanchard St. Newark, NJ

CATEGORY & SUBPART 430.56 subpart E 430.266 subpart Z OUTLET # 20401401 43900 0201

CONTACT OFFICIAL Mark J. McCabe TELEPHONE # 973 - 589-6853 ext. 13

MONITORING PERIOD					
07	01	99	07	31	99
MO.	DAY	YR.	MO.	DAY	YR.
START			END		

For Reporting Period

	Average	Maximum
Regulated Flow-gal/day	125,991	314,110
Total Flow-gal/day	125,991	314,110

Method used Total Flow metered ÷ by 31 Days in July.

Production rate (if applicable) During this Monitoring Period, No Change has been Made to the Plot Plan Submitted to PVSC on 2/21/97

PARAMETER		MASS LIMIT OR CONCENTRATION			# OF SAMPLES	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS		COMP/GRAB
Arsenic	Sample Measurement	<.005		ppm	1	Comp
	Permit Requirement	.15				
Cadmium	Sample Measurement	<.0005		ppm	1	Comp
	Permit Requirement	.19				
Copper	Sample Measurement	<.01		ppm	1	Comp
	Permit Requirement	3.02				
Mercury	Sample Measurement	<.001		ppm	1	Comp
	Permit Requirement	.08				
Nickel	Sample Measurement	<.01		ppm	1	Comp
	Permit Requirement	5.9				
Lead	Sample Measurement	0.001		ppm	1	comp
	Permit Requirement	.54				
Zinc	Sample Measurement	0.11		ppm	1	Comp
	Permit Requirement	1.67				
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					

PVSC Form MR-1 Rev: 4 6/87 P1

850930075

Bill Schaf 10:00 AM 8-21-99

E24

PRETREATMENT MONITORING REPORT

NAME Newark Boxboard Co.

MAILING ADDRESS 17 Blanchard St. Newark, NJ 07105

FACILITY LOCATION 17 Blanchard St. Newark, NJ

CATEGORY & SUBPART 430.56 subpart E 430.266 subpart Z OUTLET # 20401401 43900 0201

CONTACT OFFICIAL Mark J. McCabe TELEPHONE # 201-589-6853 ext. 13

MONITORING PERIOD					
08	01	99	08	31	97
MO.	DAY	YR.	MO.	DAY	YR.
START			END		

For Reporting Period

	Average	Maximum
Regulated Flow-gal/day	74,326	104,320
Total Flow-gal/day	74,326	104,320

Method used Total Flow Metered Divided by 31 Days in August

Production rate (if applicable) During this Monitoring Period, No Change has been Made to the Plan Submitted to PVSC on 2/21/97

PARAMETER		MASS LIMIT OR CONCENTRATION			# OF SAMPLES	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS		COMP/GRAB
Arsenic	Sample Measurement	<.005		ppm	1	Comp
	Permit Requirement	.15				
Cadmium	Sample Measurement	<.0005		ppm	1	Comp
	Permit Requirement	.19				
Copper	Sample Measurement	<.01		ppm	1	Comp
	Permit Requirement	3.02				
Mercury	Sample Measurement	<.001		ppm	1	Comp
	Permit Requirement	.03				
Nickel	Sample Measurement	<.01		ppm	1	Comp
	Permit Requirement	5.9				
Lead	Sample Measurement	0.009		ppm	1	Comp
	Permit Requirement	.54				
Zinc	Sample Measurement	<.01		ppm	1	Comp
	Permit Requirement	1.67				
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					

PVSC Form MR-1 Rev: 4 6/87 P1

850930076

E26

Name NEWARK BOXBOARD Co.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E 430.266 SUBPART Z Outlet # 20401401 43900 0

Contact Offical Mark J. McCABE Telephone # 973-589-6853

Monitoring Period					
09	01	99	09	30	99
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

REVISED

Production rate (If applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	52,551	203,060
Total Flow-gal/day	52,551	203,060

Method used Total Flow metered

Divided by 30 Days in September

DURING THIS MONITORING PERIOD, NO CHANGE HAS BEEN MADE TO THE PLOT PLA

SUBMITTED TO PVSC ON 2/21/97

Parameter		Mass Limit or Concentration Average	Maximum	Units	No. of Samples	Sample type Comp./grab
ARSENIC	Sample measurement	<.005		PPM	1	Comp
	Permit requirement	.15				
CADMIUM	Sample measurement	0.0007		PPM	1	Comp
	Permit requirement	.19				
Copper	Sample measurement	2.0		PPM	1	Comp
	Permit requirement	3.02				
Mercury	Sample measurement	<.001		PPM	1	Comp
	Permit requirement	.08				
Nickel	Sample measurement	<.01		PPM	1	Comp
	Permit requirement	5.9				
LEAD	Sample measurement	0.019		PPM	1	Comp
	Permit requirement	.54				
Zinc	Sample measurement	1.49	7.0	PPM	5	Comp
	Permit requirement	1.67				
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

PVSC Form MR-1 Rev. 4 8/87 P1

850930077

E26

PRETREATMENT MONITORING REPORT

Name NEWARK BOXBOARD Co.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E 430.266 SUBPART Z Outlet # 20401401 43900 02

Contact Official Mark J. McCabe Telephone # 201-589-6853

Monitoring Period					
10	01	99	10	31	99
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (if applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	144,096	530,000
Total Flow-gal/day	144,096	530,000

Method used Total Flow METERED ÷ by 31 Days in October

DURING THIS MONITORING PERIOD, NO CHANGE HAS BEEN MADE TO THE PLOT PLA

SUBMITTED TO PVSC ON 2/21/97

Parameter		Mass Limit or Concentration Average	Maximum	Units	No. of Samples	Sample type Comp./grab
Arsenic	Sample measurement	<.005		PPM	1	Comp
	Permit requirement	.15				
Cadmium	Sample measurement	<.0005		PPM	1	Comp
	Permit requirement	.19				
Copper	Sample measurement	0.03		PPM	1	Comp
	Permit requirement	3.02				
Mercury	Sample measurement	<.001		PPM	1	Comp
	Permit requirement	.08				
Nickel	Sample measurement	<.01		PPM	1	Comp
	Permit requirement	5.9				
Lead	Sample measurement	<.001		PPM	1	Comp
	Permit requirement	.54				
Zinc	Sample measurement	0.48		PPM	1	Comp
	Permit requirement	1.67				
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

PVSC Form MR-1 Rev. 4 6/87 P1

850930078

E27

PRETREATMENT MONITORING REPORT

NAME Newark Boxboard Co.

MAILING ADDRESS 17 Blanchard St. Newark, NJ 07105

FACILITY LOCATION 17 Blanchard St. Newark, NJ

CATEGORY & SUBPART 430.56 subpart E 430.266 subpart Z OUTLET # 20401401 43900 0201

CONTACT OFFICIAL ALAN LAMPARELLA TELEPHONE # 973-589-6853 ext. 13

MONITORING PERIOD					
11	01	99	11	30	99
MO.	DAY	YR.	MO.	DAY	YR.
START			END		

For Reporting Period

	Average	Maximum
Regulated Flow-gal/day	66480	275,090
Total Flow-gal/day	66480	275,090

Method used TOTAL FLOW METERED ÷ 30 DAYS IN NOVEMBER

Production rate (if applicable) During this Monitoring Period, No Change has been Made to the Pl
Plan Submitted to PVSC on 2/21/97

PARAMETER		MASS LIMIT OR CONCENTRATION			# OF SAMPLES	SAMPLE TYP
		AVERAGE	MAXIMUM	UNITS		COMP/GRAB
ARSENIC	Sample Measurement	0.026		PPM	1	COMPOSITE
	Permit Requirement	0.15				
CADMIUM	Sample Measurement	< .0005		PPM	1	COMPOSITE
	Permit Requirement	0.19				
COPPER	Sample Measurement	< .01		PPM	1	COMPOSITE
	Permit Requirement	3.02				
MERCURY	Sample Measurement	< 0.001		PPM	1	COMPOSITE
	Permit Requirement	0.08				
NICKEL	Sample Measurement	< 0.01		PPM	1	COMPOSITE
	Permit Requirement	5.9				
LEAD	Sample Measurement	< 0.001		PPM	1	COMPOSITE
	Permit Requirement	0.54				
ZINC	Sample Measurement	0.25		PPM	1	COMPOSITE
	Permit Requirement	1.67				
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					

PVSC Form MR-1 Rev: 4 6/87 P1

850930079

E28

PRETREATMENT MONITORING REPORT

NAME Newark Bleached Co.

MAILING ADDRESS 17 Blanchard St. Newark, NJ 07105

FACILITY LOCATION 17 Blanchard St. Newark, NJ

CATEGORY & SUBPART 430.56 subpart E 430.266 subpart Z OUTLET # 20401401 43900 0201

CONTACT OFFICIAL ALAN LAMPARELLA TELEPHONE # 973-589-6853 ext. 13

MONITORING PERIOD					
12	01	99	12	31	99
MO.	DAY	YR.	MO.	DAY	YR.
START			END		

For Reporting Period

	Average	Maximum
Regulated Flow-gal/day	107,783	436,510
Total Flow-gal/day	107,783	436,510

Method used TOTAL FLOW METERED ÷ 31 DAYS IN DECEMBER

Production rate (if applicable) During this Monitoring Period, No Change has been Made to the Pl
Plan Submitted to PVSC on 2/21/97

PARAMETER		MASS LIMIT OR CONCENTRATION			# OF SAMPLES	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS		COMP/GRAB
ARSENIC	Sample Measurement	<0.005		PPM	1	COMPOSITE
	Permit Requirement	0.15				
CADMIUM	Sample Measurement	<0.0005		PPM	1	COMPOSITE
	Permit Requirement	0.19				
COPPER	Sample Measurement	<0.01		PPM	1	COMPOSITE
	Permit Requirement	3.02				
MERCURY	Sample Measurement	<0.001		PPM	1	COMPOSITE
	Permit Requirement	0.08				
NICKEL	Sample Measurement	<0.01		PPM	1	COMPOSITE
	Permit Requirement	5.9				
LEAD	Sample Measurement	<0.001		PPM	1	COMPOSITE
	Permit Requirement	0.54				
ZINC	Sample Measurement	0.04		PPM	1	COMPOSITE
	Permit Requirement	1.67				
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					

PVSC Form MR-1 Rev: 4 6/87 P1

850930080

E29

PRETREATMENT MONITORING REPORT

NAME Newark Cardboard Co.

MAILING ADDRESS 17 Blanchard St. Newark, NJ 07105

FACILITY LOCATION 17 Blanchard St. Newark, NJ

CATEGORY & SUBPART 430.56 subpart E 430.266 subpart Z OUTLET # 20401401 43900 0201

CONTACT OFFICIAL ALAN LAMPARELLA TELEPHONE # 973-589-6853 ext. 13

MONITORING PERIOD					
1	1	00	1	31	00
MO.	DAY	YR.	MO.	DAY	YR.
START			END		

For Reporting Period

	Average	Maximum
Regulated Flow-gal/day	40600	104330
Total Flow-gal/day	40600	104330

Method used TOTAL FLOW METERED ÷ 31 DAYS IN JANUARY

Production rate (if applicable) During this Monitoring Period, No Change has been Made to the Pl Plan Submitted to PVSC on 2/21/97

PARAMETER		MASS LIMIT OR CONCENTRATION			# OF SAMPLES	SAMPLE TYP
		AVERAGE	MAXIMUM	UNITS		COMP/GRAB
ARSENIC	Sample Measurement	0.040		PPM	1	COMPOSITE
	Permit Requirement	0.15				
CADMIUM	Sample Measurement	0.0022		PPM	1	COMPOSITE
	Permit Requirement	0.19				
COPPER	Sample Measurement	0.71		PPM	1	COMPOSITE
	Permit Requirement	3.03				
MERCURY	Sample Measurement	0.004		PPM	1	COMPOSITE
	Permit Requirement	0.07				
NICKEL	Sample Measurement	<.01		PPM	1	COMPOSITE
	Permit Requirement	5.1				
LEAD	Sample Measurement	<.001		PPM	1	COMPOSITE
	Permit Requirement	0.54				
ZINC	Sample Measurement	1.3		PPM	1	COMPOSITE
	Permit Requirement	1.67				
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					

PVSC Form MR-1 Rev: 4 6/87 P1

850930081

E30

PRETREATMENT MONITORING REPORT

NAME Newark Boxboard Co.

MAILING ADDRESS 17 Blanchard St. Newark, NJ 07105

FACILITY LOCATION 17 Blanchard St. Newark, NJ

CATEGORY & SUBPART 430.56 subpart E 430.266 subpart Z OUTLET # 20401401 43900 0201

CONTACT OFFICIAL Alan Lamparella TELEPHONE # 973-589-6853 ext. 13

MONITORING PERIOD					
02	01	00	02	29	00
MO.	DAY	YR.	MO.	DAY	YR.
START			END		

For Reporting Period

	Average	Maximum
Regulated Flow-gal/day	51,050	63,264
Total Flow-gal/day	51,050	63,264

Method used TOTAL FLOW METERED ÷ 29 DAYS IN FEBRUARY

Production rate (if applicable) During this Monitoring Period, No Change has been made to the P
Plan Submitted to PVSC ON 2/21/97

PARAMETER		MASS LIMIT OR CONCENTRATION			# OF SAMPLES	SAMPLE TYP
		AVERAGE	MAXIMUM	UNITS		COMP/GRAI
ARSENIC	Sample Measurement	< .005		PPM	1	COMPOSITE
	Permit Requirement	0.15				
CADMIUM	Sample Measurement	0.0007		PPM	1	COMPOSITE
	Permit Requirement	0.19				
COPPER	Sample Measurement	0.01		PPM	1	COMPOSITE
	Permit Requirement	3.02				
MERCURY	Sample Measurement	0.001		PPM	1	COMPOSITE
	Permit Requirement	0.08				
NICKEL	Sample Measurement	< .01		PPM	1	COMPOSITE
	Permit Requirement	5.9				
LEAD	Sample Measurement	0.018		PPM	1	COMPOSITE
	Permit Requirement	0.54				
ZINC	Sample Measurement	0.50		PPM	1	COMPOSITE
	Permit Requirement	1.67				
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					

PVSC Form MR-1 Rev: 4 6/87 P1

850930082

E31

PRETREATMENT MONITORING REPORT

RECEIVED
APR 19 2000
INDUSTRIAL DEPARTMENT

NAME Newark Boxboard Co.

MAILING ADDRESS 17 Blanchard St. Newark, NJ 07105

FACILITY LOCATION 17 Blanchard St. Newark, NJ

CATEGORY & SUBPART 430.56 subpart E 430.266 subpart Z OUTLET # 20401401 43900 0201

CONTACT OFFICIAL Alan Lamparella TELEPHONE # 973-589-6853 ext. 13

MONITORING PERIOD					
03	01	00	03	31	00
MO.	DAY	YR.	MO.	DAY	YR.
START			END		

For Reporting Period

	Average	Maximum
Regulated Flow-gal/day	~~48~~ 55,063	96,210
Total Flow-gal/day	~~48~~ 55063	96,210

Method used Total flow Meter(s) ÷ 31 Days in March

Production rate (if applicable) During This Monitoring Period, No Change has been Made to the Pl
Plan Submitted to PVSC on 2/21/97

PARAMETER		MASS LIMIT OR CONCENTRATION			# OF SAMPLES	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS		COMP/GRAB
Arsenic	Sample Measurement	<.005		ppm	1	Comp
	Permit Requirement	.15		"		
Cadmium	Sample Measurement	<.0005		"	1	Comp
	Permit Requirement	.19		"		
Copper	Sample Measurement	0.03		"	1	Comp
	Permit Requirement	3.02		"		
Mercury	Sample Measurement	~~<.001~~ <.001		"	1	Comp
	Permit Requirement	.08		"		
Nickel	Sample Measurement	0.04		"	1	Comp
	Permit Requirement	5.9		"		
Lead	Sample Measurement	0.006		"	1	Comp
	Permit Requirement	.54		"		
Zinc	Sample Measurement	0.16		"	1	Comp
	Permit Requirement	1.67		"		
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					

PVSC Form MR-1 Rev: 4 6/87 P1

850930083

E32

PRETREATMENT MONITORING REPORT

NAME: NEWARK BOXBOARD COMPANY

MAILING ADDRESS: 17 BLANCHARD STREET NEWARK, NJ 07105

FACILITY LOCATION: 17 BLANCHARD STREET NEWARK, NJ 07105

CATEGORY & SUBPART: 430 OUTLET #: 1

CONTACT OFFICIAL: ALAN LAMPARELLA TELEPHONE: 9735896853

NEW CUSTOMER ID / OUTLET ID: 20200033 - 1 OLD OUTLET DESIGNATION: 20401401

MONITORING PERIOD

Start			End		
4	1	00	4	30	00
MO	DAY	YR	MO	DAY	YR

	Average	Maximum
Regulated Flow-gal/day	40383	116,860
Total Flow-gal/day	40383	116,860

Method Used: TOTAL FLOW METERED ÷ 30 DAYS IN APRIL

Production Rate (if applicable) DURING THIS MONITERING PERIOD, NO CHANGE HAS BEEN MADE TO THE PLOT PLAN SUBMITTED TO PVSC ON 2/21/97

PARAMETER		MASS OR CONCENTRATION			# OF	SAMPLE TYPE
		MON AVG	MAXIMUM	UNITS	SAMPLES	COMP/GRAB
ARSENIC	Sample Measurement	< 0.005		PPM	1	COMPOSITE
	Permit Requirement	0.15				
CADMIUM	Sample Measurement	< 0.0005		PPM	1	COMPOSITE
	Permit Requirement	0.19				
COPPER	Sample Measurement	0.01		PPM	1	COMPOSITE
	Permit Requirement	3.02				
MERCURY	Sample Measurement	< 0.001		PPM	1	COMPOSITE
	Permit Requirement	0.08				
NICKEL	Sample Measurement	< 0.01		PPM	1	COMPOSITE
	Permit Requirement	5.9				
LEAD	Sample Measurement	< 0.001		PPM	1	COMPOSITE
	Permit Requirement	0.54				
ZINC	Sample Measurement	0.22		PPM	1	COMPOSITE
	Permit Requirement	1.67				
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					

12:01 PM 07 MAY 2002

OSAd

PVSC FORM MR-1 REV: 4 6/87 P 1

850930084

E33

PRETREATMENT MONITORING REPORT

RECEIVED
JUN 20 200
INDUSTRIAL DEPA

NAME: NEWARK BOXBOARD COMPANY

MAILING ADDRESS: 17 BLANCHARD STREET NEWARK, NJ 07105

FACILITY LOCATION: 17 BLANCHARD STREET NEWARK, NJ 07105

CATEGORY & SUBPART: 430 OUTLET #: 1

CONTACT OFFICIAL: ALAN LAMPARELLA TELEPHONE: 9735896853

NEW CUSTOMER ID / OUTLET ID: 20200033 - 1 OLD OUTLET DESIGNATION: 20401401

MONITORING PERIOD

Start			End		
5	1	00	5	31	00
MO	DAY	YR	MO	DAY	YR

	Average	Maximum
Regulated Flow-gal/day	57,220	140 930
Total Flow-gal/day	57 220	140 930

Method Used: TOTAL FLOW METERED ÷ 31 DAYS IN MAY

Production Rate (if applicable) DURING THIS MONITERING PERIOD, NO CHANGE HAS BEEN MADE TO THE PLOT PLAN SUBMITTED TO PVSC ON 2/21/97

PARAMETER		MASS OR CONCENTRATION			# OF	SAMPLE TYPE
		MON AVG	MAXIMUM	UNITS	SAMPLES	COMP/GRAB
ARSENIC	Sample Measurement	0.008		SPM	1	COMPOSITE
	Permit Requirement	0.15				
CADMIUM	Sample Measurement	0.0005		PPM	1	COMPOSITE
	Permit Requirement	0.19				
COPPER	Sample Measurement	0.01		PPM	1	COMPOSITE
	Permit Requirement	3.02				
MERCURY	Sample Measurement	0.001		PPM	1	COMPOSITE
	Permit Requirement	0.08				
NICKEL	Sample Measurement	0.01		PPM	1	COMPOSITE
	Permit Requirement	5.7				
LEAD	Sample Measurement	0.002		PPM	1	COMPOSITE
	Permit Requirement	0.54				
ZINC	Sample Measurement	0.03		PPM	1	COMPOSITE
	Permit Requirement	1.67				
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					

850930085

E34

PRETREATMENT MONITORING REPORT

21 2000

NAME: NEWARK BOXBOARD COMPANY

MAILING ADDRESS: 17 BLANCHARD STREET NEWARK, NJ 07105

FACILITY LOCATION: 17 BLANCHARD STREET NEWARK, NJ 07105

CATEGORY & SUBPART: 430 OUTLET #: 1

CONTACT OFFICIAL: ALAN LAMPARELLA TELEPHONE: 9735896853

NEW CUSTOMER ID / OUTLET ID: 20200033 - 1 OLD OUTLET DESIGNATION: 20401401

MONITORING PERIOD

Start			End		
06	01	00	06	30	00
MO	DAY	YR	MO	DAY	YR

	Average	Maximum
Regulated Flow-gal/day	43,120	102,680
Total Flow-gal/day	43,120	102,680

Method Used: TOTAL FLOW ÷ 30 DAYS IN JUNE

Production Rate (if applicable) DURING THIS MONITERING PERIOD, NO CHANGE HAS BEEN MADE TO THE PLOT PLAN SUBMITTED TO PVSC ON 2/21/97

PARAMETER		MASS OR CONCENTRATION			# OF	SAMPLE TYPE
		MON AVG	MAXIMUM	UNITS	SAMPLES	COMP/GRAB
ARSENIC	Sample Measurement	0.005		PPM	1	COMPOSITE
	Permit Requirement	0.15				
CADMIUM	Sample Measurement	0.0005		PPM	1	COMPOSITE
	Permit Requirement	0.19				
COPPER	Sample Measurement	0.01		PPM	1	COMPOSITE
	Permit Requirement	3.02				
MERCURY	Sample Measurement	0.001		PPM	1	COMPOSITE
	Permit Requirement	0.08				
NICKEL	Sample Measurement	0.05		PPM	1	COMPOSITE
	Permit Requirement	5.9				
LEAD	Sample Measurement	0.002		PPM	1	COMPOSITE
	Permit Requirement	0.54				
ZINC	Sample Measurement	0.05		PPM	1	COMPOSITE
	Permit Requirement	1.67				
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					

PVSC FORM MR-1 REV: 4 6/87 P 1

850930086

E35

PRETREATMENT MONITORING REPORT

RECEIVED
AUG 2 1 20
INDUSTRIAL DEPARTMEN

NAME: NEWARK BOXBOARD COMPANY

MAILING ADDRESS: 17 BLANCHARD STREET NEWARK, NJ 07105

FACILITY LOCATION: 17 BLANCHARD STREET NEWARK, NJ 07105

CATEGORY & SUBPART: 430 OUTLET #: 1

CONTACT OFFICIAL: ALAN LAMPARELLA TELEPHONE: 9735896853

NEW CUSTOMER ID / OUTLET ID: 20200033 - 1 OLD OUTLET DESIGNATION: 20401401

MONITORING PERIOD

Start			End		
07	01	00	07	31	00
MO	DAY	YR	MO	DAY	YR

	Average	Maximum
Regulated Flow-gal/day	21,350	55450
Total Flow-gal/day	21350	55,450

Method Used: TOTAL FLOW ÷ 31 DAYS IN JULY

Production Rate (if applicable) DURING THIS MONITERING PERIOD, NO CHANGE HAS BEEN MADE TO THE PLOT PLAN SUBMITTED TO PVSC ON 2/21/97

PARAMETER		MASS OR CONCENTRATION			# OF SAMPLES	SAMPLE TYPE
		MON AVG	MAXIMUM	UNITS		COMP/GRAB
ARSENIC	Sample Measurement	0.003		PPM	1	COMPOSITE
	Permit Requirement	0.15				
CADMIUM	Sample Measurement	0.0005		PPM	1	COMPOSITE
	Permit Requirement	0.19				
COPPER	Sample Measurement	0.01		PPM	1	COMPOSITE
	Permit Requirement	3.02				
MERCURY	Sample Measurement	0.001		PPM	1	COMPOSITE
	Permit Requirement	0.08				
NICKEL	Sample Measurement	0.02		PPM	1	COMPOSITE
	Permit Requirement	5.9				
LEAD	Sample Measurement	0.013		PPM	1	COMPOSITE
	Permit Requirement	0.54				
ZINC	Sample Measurement	0.15		PPM	1	COMPOSITE
	Permit Requirement	1.67				
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					

PVSC FORM MR-1 REV: 4 6/87 P 1

850930087

E36

PRETREATMENT MONITORING REPORT

RECEIVED
[illegible] 2 1 2000
INDUSTRIAL DEPARTMEN

NAME: NEWARK BOXBOARD COMPANY

MAILING ADDRESS: 17 BLANCHARD STREET NEWARK, NJ 07105

FACILITY LOCATION: 17 BLANCHARD STREET NEWARK, NJ 07105

CATEGORY & SUBPART: 430 OUTLET #: 1

CONTACT OFFICIAL: ALAN LAMPARELLA TELEPHONE: 9735896853

NEW CUSTOMER ID / OUTLET ID: 20200033 - 1 OLD OUTLET DESIGNATION: 20401401

MONITORING PERIOD

Start			End		
08	01	00	08	31	00
MO	DAY	YR	MO	DAY	YR

	Average	Maximum
Regulated Flow-gal/day	14,853	28,190
Total Flow-gal/day	14,953	28,190

Method Used: TOTAL FLOW ÷ 31 DAYS IN AUGUST.

Production Rate (if applicable) DURING THIS MONITERING PERIOD, NO CHANGE HAS BEEN MADE TO THE PLOT PLAN SUBMITTED TO PVSC ON 2/21/97

PARAMETER		MASS OR CONCENTRATION			# OF	SAMPLE TYPE
		MON AVG	MAXIMUM	UNITS	SAMPLES	COMP/GRAB
ARSENIC	Sample Measurement	0.009		PPM	1	COMPOSITE
	Permit Requirement	0.15				
CADMIUM	Sample Measurement	0.0005		PPM	1	COMPOSITE
	Permit Requirement	0.19				
COPPER	Sample Measurement	0.03		PPM	1	COMPOSITE
	Permit Requirement	3.02				
MERCURY	Sample Measurement	0.001		PPM	1	COMPOSITE
	Permit Requirement	0.08				
NICKEL	Sample Measurement	0.02		PPM	1	COMPOSITE
	Permit Requirement	5.9				
LEAD	Sample Measurement	0.004		PPM	1	COMPOSITE
	Permit Requirement	0.54				
ZINC	Sample Measurement	1.6		PPM	1	COMPOSITE
	Permit Requirement	1.67				
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					

PVSC FORM MR-1 REV: 4 6/87 P 1

850930088

E37

PRETREATMENT MONITORING REPORT

NAME: NEWARK BOXBOARD COMPANY PVSC

MAILING ADDRESS: 17 BLANCHARD STREET NEWARK, NJ 07105 2000 OCT 21 PM 1:43

FACILITY LOCATION: 17 BLANCHARD STREET NEWARK, NJ 07105

CATEGORY & SUBPART: 430 OUTLET #: 1

CONTACT OFFICIAL: ALAN LAMPARELLA TELEPHONE: 9735896853

NEW CUSTOMER ID / OUTLET ID: 20200033 - 1 OLD OUTLET DESIGNATION: 20401401

MONITORING PERIOD

Start			End		
09	01	00	09	30	00
MO	DAY	YR	MO	DAY	YR

	Average	Maximum
Regulated Flow-gal/day	48,077	95,765
Total Flow-gal/day	43,077	95765

Method Used: TOTAL FLOW ÷ 30 DAYS IN SEPTEMBER

Production Rate (if applicable) DURING THIS MONITERING PERIOD, NO CHANGE HAS BEEN MADE TO THE PLOT PLAN SUBMITTED TO PVSC ON 2/21/97

PARAMETER		MASS OR CONCENTRATION			# OF	SAMPLE TYPE
		MON AVG	MAXIMUM	UNITS	SAMPLES	COMP/GRAB
ARSENIC	Sample Measurement	0.015		PPM	1	COMPOSITE
	Permit Requirement	0.15				
CADMIUM	Sample Measurement	0.0010		PPM	1	COMPOSITE
	Permit Requirement	0.19				
COPPER	Sample Measurement	0.12		PPM	1	COMPOSITE
	Permit Requirement	3.02				
MERCURY	Sample Measurement	0.001		PPM	1	COMPOSITE
	Permit Requirement	0.08				
NICKEL	Sample Measurement	0.03		PPM	1	COMPOSITE
	Permit Requirement	5.9				
LEAD	Sample Measurement	0.015		PPM	1	COMPOSITE
	Permit Requirement	0.54				
ZINC	Sample Measurement	0.26		PPM	1	COMPOSITE
	Permit Requirement	1.67				
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					

PVSC FORM MR-1 REV: 4 6/87 P 1

850930089

E38

PRETREATMENT MONITORING REPORT

NAME: NEWARK BOXBOARD COMPANY

MAILING ADDRESS: 17 BLANCHARD STREET NEWARK. NJ 07105

FACILITY LOCATION: 17 BLANCHARD STREET NEWARK. NJ 07105

CATEGORY & SUBPART: 430 OUTLET #: 1

CONTACT OFFICIAL: ALAN LAMPARELLA TELEPHONE: 9735896853

NEW CUSTOMER ID / OUTLET ID: 20200033 - 1 OLD OUTLET DESIGNATION: 20401401

MONITORING PERIOD

Start			End		
10	01	00	10	31	00
MO	DAY	YR	MO	DAY	YR

	Average	Maximum
Regulated Flow-gal/day	81,197	268,567
Total Flow-gal/day	81,197	268,567

Method Used: TOTAL FLOW ÷ 31 DAYS IN OCTOBER.

Production Rate (if applicable) DURING THIS MONITERING PERIOD, NO CHANGE HAS BEEN MADE TO THE PLOT PLAN SUBMITTED TO PVSC ON 2/21/97

PARAMETER		MASS OR CONCENTRATION			# OF SAMPLES	SAMPLE TYPE
		MON AVG	MAXIMUM	UNITS		COMP/GRAB
ARSENIC	Sample Measurement	0.004		PPM	1	COMPOSITE
	Permit Requirement	0.15				
CADMIUM	Sample Measurement	0.0014		PPM	1	COMPOSITE
	Permit Requirement	0.19				
COPPER	Sample Measurement	0.32		PPM	1	COMPOSITE
	Permit Requirement	3.02				
MERCURY	Sample Measurement	0.001		PPM	1	COMPOSITE
	Permit Requirement	0.08				
NICKEL	Sample Measurement	0.02		PPM	1	COMPOSITE
	Permit Requirement	5.9				
LEAD	Sample Measurement	0.017		PPM	1	COMPOSITE
	Permit Requirement	0.54				
ZINC	Sample Measurement	0.45		PPM	1	COMPOSITE
	Permit Requirement	1.67				
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					

PVSC FORM MR-1 REV: 4 6/87 P 1

850930090

E39

PRETREATMENT MONITORING REPORT

RECEIVED
DEC 29 2000
INDUSTRIAL DEPARTMENT

NAME: NEWARK BOXBOARD COMPANY

MAILING ADDRESS: 17 BLANCHARD STREET NEWARK, NJ 07105

FACILITY LOCATION: 17 BLANCHARD STREET NEWARK, NJ 07105

CATEGORY & SUBPART: 430 OUTLET #:

CONTACT OFFICIAL: ALAN LAMPARELLA TELEPHONE: 9735896853

NEW CUSTOMER ID / OUTLET ID: 20200033 - 1 OLD OUTLET DESIGNATION: 20401401

MONITORING PERIOD

Start			End		
11	01	00	11	30	00
MO	DAY	YR	MO	DAY	YR

	Average	Maximum
Regulated Flow-gal/day	55,197	115,500
Total Flow-gal/day	55,197	115,500

Method Used: TOTAL FLOW ÷ 30 DAYS IN NOVEMBER

Production Rate (if applicable) DURING THIS MONITERING PERIOD, NO CHANGE HAS BEEN MADE TO THE PLOT PLAN SUBMITTED TO PVSC ON 2/21/97

PARAMETER		MASS OR CONCENTRATION			# OF	SAMPLE TYPE
		MON AVG	MAXIMUM	UNITS	SAMPLES	COMP/GRAB
ARSENIC	Sample Measurement	0.007		PPM	1	COMPOSITE
	Permit Requirement	0.15				
CADMIUM	Sample Measurement	0.0005		PPM	1	COMPOSITE
	Permit Requirement	0.19				
COPPER	Sample Measurement	0.01		PPM	1	COMPOSITE
	Permit Requirement	3.02				
MERCURY	Sample Measurement	0.001		PPM	1	COMPOSITE
	Permit Requirement	0.02				
NICKEL	Sample Measurement	0.03		PPM	1	COMPOSITE
	Permit Requirement	5.9				
LEAD	Sample Measurement	0.001		PPM	1	COMPOSITE
	Permit Requirement	0.54				
ZINC	Sample Measurement	0.19		PPM	1	COMPOSITE
	Permit Requirement	1.67				
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					

PVSC FORM MR-1 REV: 4 6/87 P 1

850930091

E40

PRETREATMENT MONITORING REPORT

NAME: NEWARK BOXBOARD COMPANY

MAILING ADDRESS: 17 BLANCHARD STREET NEWARK, NJ 07105

FACILITY LOCATION: 17 BLANCHARD STREET NEWARK, NJ 07105

CATEGORY & SUBPART: 430 OUTLET #: 1

CONTACT OFFICIAL: ALAN LAMPARELLA TELEPHONE: 9735896853

NEW CUSTOMER ID / OUTLET ID: 20200033 - 1 OLD OUTLET DESIGNATION: 20401401

MONITORING PERIOD

Start			End		
12	01	00	12	31	00
MO	DAY	YR	MO	DAY	YR

	Average	Maximum
Regulated Flow-gal/day	61,616	123900
Total Flow-gal/day	61,616	123900

Method Used: TOTAL FLOW METERED ÷ 31 DAYS IN DECEMBER

Production Rate (if applicable) DURING THIS MONITERING PERIOD, NO CHANGE HAS BEEN MADE TO THE PLOT PLAN SUBMITTED TO PVSC ON 2/21/97

PARAMETER		MASS OR CONCENTRATION			# OF	SAMPLE TYPE
		MON AVG	MAXIMUM	UNITS	SAMPLES	COMP/GRAB
ARSENIC	Sample Measurement	0.007		PPM	1	COMPOSITE
	Permit Requirement	0.15				
CADMIUM	Sample Measurement	0.0005		PPM	1	COMPOSITE
	Permit Requirement	0.19				
COPPER	Sample Measurement	0.01		PPM	1	COMPOSITE
	Permit Requirement	3.02				
MERCURY	Sample Measurement	0.001		PPM	1	COMPOSITE
	Permit Requirement	0.03				
NICKEL	Sample Measurement	0.03		PPM	1	COMPOSITE
	Permit Requirement	5.9				
LEAD	Sample Measurement	0.005		PPM	1	COMPOSITE
	Permit Requirement	0.54				
ZINC	Sample Measurement	0.08		PPM	1	COMPOSITE
	Permit Requirement	1.67				
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					

2001 JAN 21 P1:29 PVSC

PVSC FORM MR-1 REV: 4 6/87 P 1

850930092

E41

PRETREATMENT MONITORING REPORT

NAME: NEWARK BOXBOARD COMPANY

MAILING ADDRESS: 17 BLANCHARD STREET NEWARK, NJ 07105

FACILITY LOCATION: 17 BLANCHARD STREET NEWARK, NJ 07105

FEB 2 0 2001

INDUSTRIAL DEPARTMENT

CATEGORY & SUBPART: 430 OUTLET #: 1

CONTACT OFFICIAL: ALAN LAMPARELLA TELEPHONE: 9735896853

NEW CUSTOMER ID / OUTLET ID: 20200033 - 1 OLD OUTLET DESIGNATION: 20401401

MONITORING PERIOD

Start			End		
01	01	01	01	31	01
MO	DAY	YR	MO	DAY	YR

	Average	Maximum
Regulated Flow-gal/day	54,293	130,900.
Total Flow-gal/day	54,293	130,900.

Method Used: TOTAL FLOW METERED ÷ 31 DAYS IN JANUARY.

Production Rate (if applicable) DURING THIS MONITERING PERIOD, NO CHANGE HAS BEEN MADE TO THE PLOT PLAN SUBMITTED TO PVSC ON 2/21/97

PARAMETER		MASS OR CONCENTRATION			# OF	SAMPLE TYPE
		MON AVG	MAXIMUM	UNITS	SAMPLES	COMP/GRAB
ARSENIC	Sample Measurement	0.003		PPM	1	COMPOSITE
	Permit Requirement	0.15				
CADMIUM	Sample Measurement	0.0006		PPM	1	COMPOSITE
	Permit Requirement	0.19				
COPPER	Sample Measurement	0.01		PPM	1	COMPOSITE
	Permit Requirement	3.02				
MERCURY	Sample Measurement	0.001		PPM	1	COMPOSITE
	Permit Requirement	0.03				
NICKEL	Sample Measurement	0.02		PPM	1	COMPOSITE
	Permit Requirement	5.9				
LEAD	Sample Measurement	0.023		PPM	1	COMPOSITE
	Permit Requirement	0.54				
ZINC	Sample Measurement	0.16		PPM	1	COMPOSITE
	Permit Requirement	1.67				
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					

PVSC FORM MR-1 REV: 4 6/87 P 1

850930093

E42

PRETREATMENT MONITORING REPORT

NAME: NEWARK BOXBOARD COMPANY

MAILING ADDRESS: 17 BLANCHARD STREET NEWARK, NJ 07105

FACILITY LOCATION: 17 BLANCHARD STREET NEWARK, NJ 07105

CATEGORY & SUBPART: 430 OUTLET #: 1

CONTACT OFFICIAL: ALAN LAMPARELLA TELEPHONE: 9735896853

NEW CUSTOMER ID / OUTLET ID: 20200033 - 1 OLD OUTLET DESIGNATION: 20401401

MONITORING PERIOD

Start			End		
02	01	01	02	28	01
MO	DAY	YR	MO	DAY	YR

	Average	Maximum
Regulated Flow-gal/day	66,504	116,300
Total Flow-gal/day	66,504	116,300

Method Used: TOTAL FLOW METERED ÷ 28 DAYS IN FEBRUARY

Production Rate (if applicable) DURING THIS MONITERING PERIOD, NO CHANGE HAS BEEN MADE TO THE PLOT PLAN SUBMITTED TO PVSC ON 2/21/97

PARAMETER		MASS OR CONCENTRATION			# OF	SAMPLE TYPE
		MON AVG	MAXIMUM	UNITS	SAMPLES	COMP/GRAB
ARSENIC	Sample Measurement	0.003		PPM	1	COMPOSITE
	Permit Requirement	0.15				
CADMIUM	Sample Measurement	0.0005		PPM	1	COMPOSITE
	Permit Requirement	0.19				
COPPER	Sample Measurement	0.12		PPM	1	COMPOSITE
	Permit Requirement	3.02				
MERCURY	Sample Measurement	0.003		PPM	1	COMPOSITE
	Permit Requirement	0.03				
NICKEL	Sample Measurement	0.22		PPM	1	COMPOSITE
	Permit Requirement	5.7				
LEAD	Sample Measurement	0.001		PPM	1	COMPOSITE
	Permit Requirement	0.54				
ZINC	Sample Measurement	0.16		PPM	1	COMPOSITE
	Permit Requirement	1.67				
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					

PVSC FORM MR-1 REV: 4 6/87 P 1

850930094

E43

PRETREATMENT MONITORING REPORT

RECEIVED
APR 2 0 2001
INDUSTRIAL DEPARTM

NAME: NEWARK BOXBOARD COMPANY

MAILING ADDRESS: 17 BLANCHARD STREET NEWARK, NJ 07105

FACILITY LOCATION: 17 BLANCHARD STREET NEWARK, NJ 07105

CATEGORY & SUBPART: 430 OUTLET #: 1

CONTACT OFFICIAL: ALAN LAMPARELLA TELEPHONE: 9735896853

NEW CUSTOMER ID / OUTLET ID: 20200033 - 1 OLD OUTLET DESIGNATION: 20401401

MONITORING PERIOD

Start			End		
03	01	01	03	31	01
MO	DAY	YR	MO	DAY	YR

	Average	Maximum
Regulated Flow-gal/day	69,900	117,500
Total Flow-gal/day	69,900	117,500

Method Used: TOTAL FLOW METERED ÷ 31 DAYS IN MARCH.

Production Rate (if applicable) DURING THIS MONITERING PERIOD, NO CHANGE HAS BEEN MADE TO THE PLOT PLAN SUBMITTED TO PVSC ON 2/21/97

PARAMETER		MASS OR CONCENTRATION			# OF	SAMPLE TYPE
		MON AVG	MAXIMUM	UNITS	SAMPLES	COMP/GRAB
ARSENIC	Sample Measurement	0.011		PPM	1	COMPOSITE
	Permit Requirement	0.15				
CADMIUM	Sample Measurement	0.0005		PPM	1	COMPOSITE
	Permit Requirement	0.19				
COPPER	Sample Measurement	0.01		PPM	1	COMPOSITE
	Permit Requirement	3.02				
MERCURY	Sample Measurement	0.001		PPM	1	COMPOSITE
	Permit Requirement	0.08				
NICKEL	Sample Measurement	0.05		PPM	1	COMPOSITE
	Permit Requirement	5.7				
LEAD	Sample Measurement	0.002		PPM	1	COMPOSITE
	Permit Requirement	0.54				
ZINC	Sample Measurement	0.26		PPM	1	COMPOSITE
	Permit Requirement	1.67				
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					

PVSC FORM MR-1 REV: 4 6/87 P 1

850930095

E49

PRETREATMENT MONITORING REPORT

NAME: NEWARK BOXBOARD COMPANY

MAILING ADDRESS: 17 BLANCHARD STREET NEWARK, NJ 07105

FACILITY LOCATION: 17 BLANCHARD STREET NEWARK, NJ 07105

CATEGORY & SUBPART: 430 OUTLET #: 1

CONTACT OFFICIAL: ALAN LAMPARELLA TELEPHONE: 9735896853

NEW CUSTOMER ID / OUTLET ID: 20200033 - 1 OLD OUTLET DESIGNATION: 20401401

MONITORING PERIOD

Start			End		
04	01	01	04	30	01
MO	DAY	YR	MO	DAY	YR

	Average	Maximum
Regulated Flow-gal/day	67,425	91,300
Total Flow-gal/day	67425	91,300

Method Used: TOTAL FLOW METERED ÷ 30 DAYS IN APRIL

Production Rate (if applicable) DURING THIS MONITERING PERIOD, NO CHANGE HAS BEEN MADE TO THE PLOT PLAN SUBMITTED TO PVSC ON 2/21/97

PARAMETER		MASS OR CONCENTRATION			# OF	SAMPLE TYPE
		MON AVG	MAXIMUM	UNITS	SAMPLES	COMP/GRAB
ARSENIC	Sample Measurement	0.003		PPM	1	COMPOSITE
	Permit Requirement	0.15				
CADMIUM	Sample Measurement	0.0003		PPM	1	COMPOSITE
	Permit Requirement	0.19				
COPPER	Sample Measurement	0.01		PPM	1	COMPOSITE
	Permit Requirement	3.02				
MERCURY	Sample Measurement	0.001		PPM	1	COMPOSITE
	Permit Requirement	0.03				
NICKEL	Sample Measurement	0.01		PPM	1	COMPOSITE
	Permit Requirement	5.1				
LEAD	Sample Measurement	0.003		PPM	1	
	Permit Requirement	0.54				
ZINC	Sample Measurement	0.05		PPM	1	COMPOSITE
	Permit Requirement	1.67				
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement		OSAd			

PVSC FORM MR-1 REV: 4 6/87 P 1

850930096

E46

PRETREATMENT MONITORING REPORT

NAME: NEWARK BOXBOARD COMPANY

MAILING ADDRESS: 17 BLANCHARD STREET NEWARK, NJ 07105 PVSC

FACILITY LOCATION: 17 BLANCHARD STREET NEWARK, NJ 07105 JUN 21 P 5:21

CATEGORY & SUBPART: 430 OUTLET #: 1

CONTACT OFFICIAL: ALAN LAMARELLA TELEPHONE: 9735896853

NEW CUSTOMER ID / OUTLET ID: 20200033 - 1 OLD OUTLET DESIGNATION: 20401401

MONITORING PERIOD

Start			End		
05	01	01	05	31	01
MO	DAY	YR	MO	DAY	YR

	Average	Maximum
Regulated Flow-gal/day	67,668.	96,600.
Total Flow-gal/day	67,668.	96,600.

Method Used: TOTAL FLOW METERED ÷ 31 DAYS IN MAY

Production Rate (if applicable) DURING THIS MONITORING PERIOD, NO CHANGE HAS BEEN MADE TO THE PLOT PLAN SUBMITTED TO PVSC ON 2/21/97

PARAMETER		MASS OR CONCENTRATION			# OF	SAMPLE TYPE
		MON AVG	MAXIMUM	UNITS	SAMPLES	COMP/GRAB
ARSENIC	Sample Measurement	0.003		PPM	1	COMPOSITE
	Permit Requirement	0.15				
CADMIUM	Sample Measurement	2.2005		PPM	1	COMPOSITE
	Permit Requirement	0.19				
COPPER	Sample Measurement	0.13		PPM	1	COMPOSITE
	Permit Requirement	3.07				
MERCURY	Sample Measurement	0.001		PPM	1	COMPOSITE
	Permit Requirement	0.03				
NICKEL	Sample Measurement	0.06		PPM	1	COMPOSITE
	Permit Requirement	5.9				
LEAD	Sample Measurement	0.001		PPM	1	COMPOSITE
	Permit Requirement	0.54				
ZINC	Sample Measurement	0.27		PPM	1	COMPOSITE
	Permit Requirement	1.67				
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement		12:5 PM	12 JUN 1997		
	Permit Requirement					

PVSC FORM MR-1 REV: 4 6/87 P 1

850930097

E46

PRETREATMENT MONITORING REPORT

NAME: NEWARK BOXBOARD COMPANY

MAILING ADDRESS: 17 BLANCHARD STREET NEWARK, NJ 07105

FACILITY LOCATION: 17 BLANCHARD STREET NEWARK, NJ 07105

CATEGORY & SUBPART: 430 OUTLET #: 1

CONTACT OFFICIAL: ALAN LAMPARELLA TELEPHONE: 9735896353

NEW CUSTOMER ID / OUTLET ID: 20200033 - 1 OLD OUTLET DESIGNATION: 20401401

MONITORING PERIOD

Start			End		
06	01	01	06	30	01
MO	DAY	YR	MO	DAY	YR

	Average	Maximum
Regulated Flow-gal/day	84 327	117,500
Total Flow-gal/day	84 327	117,500

Method Used: TOTAL FLOW METERED ÷ 30 DAYS IN JUNE

Production Rate (if applicable) DURING THIS MONITERING PERIOD, NO CHANGE HAS BEEN MADE TO THE PLOT PLAN SUBMITTED TO PVSC ON 2/21/97

PARAMETER		MASS OR CONCENTRATION			# OF SAMPLES	SAMPLE TYPE
		MON AVG	MAXIMUM	UNITS		COMP/GRAB
ARSENIC	Sample Measurement	0.005		PPM	1	COMPOSITE
	Permit Requirement	0.15				
CADMIUM	Sample Measurement	0.0005		PPM	1	COMPOSITE
	Permit Requirement	0.19				
COPPER	Sample Measurement	0.01		PPM	1	COMPOSITE
	Permit Requirement	3.02				
MERCURY	Sample Measurement	0.001		PPM	1	COMPOSITE
	Permit Requirement	0.03				
NICKEL	Sample Measurement	0.02		PPM	1	COMPOSITE
	Permit Requirement	5.9				
LEAD	Sample Measurement	0.001		PPM	1	COMPOSITE
	Permit Requirement	0.54				
ZINC	Sample Measurement	0.23		PPM	1	COMPOSITE
	Permit Requirement	1.67				
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					

PVSC FORM MR-1 REV: 4 6/87 P 1

850930098

E47

PRETREATMENT MONITORING REPORT

RECEIVED
SEP 20 2001
INDUSTRIAL DEPARTMENT

NAME: NEWARK BOXBOARD COMPANY

MAILING ADDRESS: 17 BLANCHARD STREET NEWARK, NJ 07105

FACILITY LOCATION: 17 BLANCHARD STREET NEWARK, NJ 07105

CATEGORY & SUBPART: 430 OUTLET #: 1

CONTACT OFFICIAL: ALAN LAMPARELLA TELEPHONE: 9735896853

NEW CUSTOMER ID / OUTLET ID: 20200033 - 1 OLD OUTLET DESIGNATION: 20401401

MONITORING PERIOD

Start			End		
8	1	01	8	31	01
MO	DAY	YR	MO	DAY	YR

	Average	Maximum
Regulated Flow-gal/day	120,096	
Total Flow-gal/day	120 096	

Method Used: TOTAL FLOW METERED ÷ 31 DAYS IN August

Production Rate (if applicable) DURING THIS MONITERING PERIOD, NO CHANGE HAS BEEN MADE TO THE PLOT PLAN SUBMITTED TO PVSC ON 2/21/97

PARAMETER		MASS OR CONCENTRATION			# OF	SAMPLE TYPE
		MON AVG	MAXIMUM	UNITS	SAMPLES	COMP/GRAB
ARSENIC	Sample Measurement	0.012		PPM	1	Comp
	Permit Requirement	.15				
Cadmium	Sample Measurement	0.0005		PPM	1	Comp
	Permit Requirement	.19				
Copper	Sample Measurement	1.94		PPM	1	Comp
	Permit Requirement	3.02				
Mercury	Sample Measurement	0.001		PPM	1	Comp
	Permit Requirement	.05				
Nickel	Sample Measurement	0.22		PPM	1	Comp
	Permit Requirement	5.9				
LEAD	Sample Measurement	0.001		PPM	1	Comp
	Permit Requirement	.54				
ZINC	Sample Measurement	0.3	2.0	PPM	4	Comp
	Permit Requirement	1.67				
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					

850930099

E48

PRETREATMENT MONITORING REPORT

NAME: NEWARK BOXBOARD COMPANY

MAILING ADDRESS: 17 BLANCHARD STREET NEWARK, NJ 07105 (PVSC)

FACILITY LOCATION: 17 BLANCHARD STREET NEWARK, NJ 07105 OCT 22 PM 3:21

CATEGORY & SUBPART: 430 OUTLET #: 1

CONTACT OFFICIAL: ALAN LAMPARELLA TELEPHONE: 9735896853

NEW CUSTOMER ID / OUTLET ID: 20200033 - 1 OLD OUTLET DESIGNATION: 20401401

MONITORING PERIOD

Start			End		
09	01	97	09	30	97
MO	DAY	YR	MO	DAY	YR

	Average	Maximum
Regulated Flow-gal/day	60 870	90 100
Total Flow-gal/day	60 870	90 100

Method Used: TOTAL FLOW METERED ÷ 30 DAYS IN SEPTEMBER.

Production Rate (if applicable) DURING THIS MONITERING PERIOD, NO CHANGE HAS BEEN MADE TO THE PLOT PLAN SUBMITTED TO PVSC ON 2/21/97

PARAMETER		MASS OR CONCENTRATION			# OF	SAMPLE TYPE
		MON AVG	MAXIMUM	UNITS	SAMPLES	COMP/GRAB
ARSENIC	Sample Measurement	0.005		PPM	1	COMPOSITE
	Permit Requirement	0.15				
CADMIUM	Sample Measurement	0.0000		PPM	1	COMPOSITE
	Permit Requirement	0.19				
COPPER	Sample Measurement	0.07		PPM	1	COMPOSITE
	Permit Requirement	3.02				
MERCURY	Sample Measurement	0.001		PPM	1	COMPOSITE
	Permit Requirement	0.08				
NICKEL	Sample Measurement	0.03		PPM	1	COMPOSITE
	Permit Requirement	3.98				
LEAD	Sample Measurement	0.005		PPM	1	COMPOSITE
	Permit Requirement	0.57				
ZINC	Sample Measurement	0.13		PPM	1	COMPOSITE
	Permit Requirement	1.67				
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					

850930100

E 49

PRETREATMENT MONITORING REPORT

NAME: NEWARK BOXBOARD COMPANY

MAILING ADDRESS: 17 BLANCHARD STREET NEWARK, NJ 07105

FACILITY LOCATION: 17 BLANCHARD STREET NEWARK, NJ 07105

CATEGORY & SUBPART: 430 OUTLET #: 1

CONTACT OFFICIAL: ALAN LAMPARELLA TELEPHONE: 9735896853

NEW CUSTOMER ID / OUTLET ID: 20200033 - 1 OLD OUTLET DESIGNATION: 20401401

MONITORING PERIOD

Start			End		
10	1	01	10	31	01
MO	DAY	YR	MO	DAY	YR

	Average	Maximum
Regulated Flow-gal/day	62 290	165 400
Total Flow-gal/day	62 290	165 400

Method Used: TOTAL FLOW METERED ÷ 31 DAYS IN OCTOBER 2001

Production Rate (if applicable) DURING THIS MONITORING PERIOD, NO CHANGE HAS BEEN MADE TO THE SLUG PLAN SUBMITTED TO PVSC ON 2/2/97

PARAMETER		MASS OR CONCENTRATION			# OF SAMPLES	SAMPLE TYPE
		MON AVG	MAXIMUM	UNITS		COMP/GRAB
	Sample Measurement	< 0.03		PPM		
MERCURY	Permit Requirement	.15				Comp
	Sample Measurement	0.0009		PPM	1	
CADMIUM	Permit Requirement	.69				Comp
	Sample Measurement	< .01		PPM	1	
COPPER	Permit Requirement	3.02				Comp
	Sample Measurement	0.001		PPM	1	
MERCURY	Permit Requirement	.08				Comp
	Sample Measurement	0.06		PPM	1	
NICKEL	Permit Requirement	5.9				Comp
	Sample Measurement	< .02		PPM	1	
LEAD	Permit Requirement	.69		[illegible]	1	Comp
	Sample Measurement	0.03		PPM	1	
ZINC	Permit Requirement	1.67				Comp
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					

PVSC FORM MR-1 REV: 4 6/87 P 1

850930101

E60

PRETREATMENT MONITORING REPORT

NAME: NEWARK BOXBOARD COMPANY

MAILING ADDRESS: 17 BLANCHARD STREET NEWARK, NJ 07105

FACILITY LOCATION: 17 BLANCHARD STREET NEWARK, NJ 07105

CATEGORY & SUBPART: 430 OUTLET #: 1

CONTACT OFFICIAL: ALAN LAMPARELLA TELEPHONE: 9735896853

NEW CUSTOMER ID / OUTLET ID: 20200033 - 1 OLD OUTLET DESIGNATION: 20401401

MONITORING PERIOD

Start			End		
11	01	01	11	30	01
MO	DAY	YR	MO	DAY	YR

	Average	Maximum
Regulated Flow-gal/day	72,873	221,300
Total Flow-gal/day	72,873	221,300

Method Used: TOTAL FLOW METERED ÷ 30 DAYS IN NOVEMBER 2001

Production Rate (if applicable) DURING THIS MONITORING PERIOD NO CHANGE HAS BEEN MADE TO THE DEP PLAN SUBMITTED TO PVSC ON 2/2/17

PARAMETER		MASS OR CONCENTRATION			# OF	SAMPLE TYPE
		MON AVG	MAXIMUM	UNITS	SAMPLES	COMP GRAB
ARSENIC	Sample Measurement	0.003		PPM	1	Comp
	Permit Requirement	.15				
Cadmium	Sample Measurement	0.0009		PPM	1	Comp
	Permit Requirement	.19				
Copper	Sample Measurement	0.07		PPM	1	Comp
	Permit Requirement	3.32				
Mercury	Sample Measurement	0.001		PPM	1	Comp
	Permit Requirement	.08				
Nickel	Sample Measurement	0.09		PPM	1	Comp
	Permit Requirement	5.9				
LEAD	Sample Measurement	0.001		PPM	1	Comp
	Permit Requirement	.54				
Zinc	Sample Measurement	0.61		PPM		Comp
	Permit Requirement	1.67				
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement	1:17 PM 12/27				
	Sample Measurement					
	Permit Requirement	COSA				

PVSC FORM MR-1 REV: 4 6/87 P 1

850930102

E51

PRETREATMENT MONITORING REPORT

NAME: NEWARK BOXBOARD COMPANY

MAILING ADDRESS: 17 BLANCHARD STREET, NEWARK, NJ 07105

FACILITY LOCATION: 17 BLANCHARD STREET, NEWARK, NJ 07105

CATEGORY & SUBPART: 430 OUTLET #: 1

CONTACT OFFICIAL: ALAN LAMPARELLA TELEPHONE: 9735896853

NEW CUSTOMER ID / OUTLET ID: 20200033 - 1 OLD OUTLET DESIGNATION: 20401401

MONITORING PERIOD

Start			End		
12	1	01	12	31	01
MO	DAY	YR	MO	DAY	YR

	Average	Maximum
Regulated Flow-gal/day	58,435	122,500
Total Flow-gal/day	58,435	122,500

Method Used: TOTAL FLOW METERED ÷ 31 DAYS IN December 2001

Production Rate (if applicable) DURING THIS MONITERING PERIOD, NO CHANGE HAS BEEN MADE TO THE PLOT PLAN SUBMITTED TO PVSC ON 2/21/97

PARAMETER		MASS OR CONCENTRATION MON AVG	MAXIMUM	UNITS	# OF SAMPLES	SAMPLE TYPE COMP/GRAB
Arsenic	Sample Measurement	<.003		PPM	1	Comp
	Permit Requirement	.15				
Cadmium	Sample Measurement	0.0014		PPM	1	Comp
	Permit Requirement	.19				
Copper	Sample Measurement	0.04		PPM	1	Comp
	Permit Requirement	3.02				
Mercury	Sample Measurement	<.001		PPM	1	Comp
	Permit Requirement	.08				
Nickel	Sample Measurement	0.10		PPM	1	Comp
	Permit Requirement	5.9				
Lead	Sample Measurement	0.008		PPM	1	Comp
	Permit Requirement	.54				
Zinc	Sample Measurement	0.48		PPM	1	Comp
	Permit Requirement	1.09				
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					

PVSC FORM MR-1 REV: 4 6/87 P 1

850930103

E52

PRETREATMENT MONITORING REPORT

NAME: NEWARK BOXBOARD COMPANY

MAILING ADDRESS: 17 BLANCHARD STREET NEWARK, NJ 07105

FACILITY LOCATION: 17 BLANCHARD STREET NEWARK, NJ 07105

CATEGORY & SUBPART: 430 OUTLET #: 1

CONTACT OFFICIAL: M. McCABE TELEPHONE: 9735896853

NEW CUSTOMER ID / OUTLET ID: 20200033 - 1 OLD OUTLET DESIGNATION: 20401401

MONITORING PERIOD

Start			End		
1	1	02	1	31	02
MO	DAY	YR	MO	DAY	YR

	Average	Maximum
Regulated Flow-gal/day	52,271	136,491
Total Flow-gal/day	52,271	136,491

Method Used: TOTAL FLOW METERED ÷ 31 DAYS IN JANUARY 2002

Production Rate (if applicable) DURING THIS MONITERING PERIOD, NO CHANGE HAS BEEN MADE TO THE PLOT PLAN SUBMITTED TO PVSC ON 2/21/97

PARAMETER		MASS OR CONCENTRATION			# OF SAMPLES	SAMPLE TYPE
		MON AVG	MAXIMUM	UNITS		COMP/GRAB
ARSENIC	Sample Measurement	0.015		PPM	1	Comp
	Permit Requirement	.15				
CADMIUM	Sample Measurement	0.0015		PPM	1	Comp
	Permit Requirement	.19				
COPPER	Sample Measurement	0.10		PPM	1	Comp
	Permit Requirement	3.02				
MERCURY	Sample Measurement	<.001		PPM	1	Comp
	Permit Requirement	.08				
NICKEL	Sample Measurement	0.04		PPM	1	Comp
	Permit Requirement	5.9				
LEAD	Sample Measurement	0.002		PPM	1	Comp
	Permit Requirement	.54				
ZINC	Sample Measurement	0.40		PPM	1	Comp
	Permit Requirement	1.67				
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					

PVSC FORM MR-1 REV: 4 6/87 P 1

850930104

E53

PRETREATMENT MONITORING REPORT

NAME: NEWARK BOXBOARD COMPANY

MAILING ADDRESS: 17 BLANCHARD STREET NEWARK, NJ 07105

FACILITY LOCATION: 17 BLANCHARD STREET NEWARK, NJ 07105

CATEGORY & SUBPART: 430 OUTLET #: 1

CONTACT OFFICIAL: Mark S. McCabe TELEPHONE: 9735896353

NEW CUSTOMER ID / OUTLET ID: 20200033 - 1 OLD OUTLET DESIGNATION: 20401401

MONITORING PERIOD

Start			End		
2	1	02	2	28	02
MO	DAY	YR	MO	DAY	YR

	Average	Maximum
Regulated Flow-gal/day	43,439	157,500
Total Flow-gal/day	43,439	157,500

Method Used: TOTAL FLOW METERED FOR 28 DAYS IN FEBRUARY 2002

Production Rate (if applicable) DURING THIS MONITORING PERIOD, NO CHANGE HAS BEEN MADE TO THE PLOT PLAN SUBMITTED TO PVSC ON 2/21/97

PARAMETER		MASS OR CONCENTRATION			# OF	SAMPLE TYPE
		MON AVG	MAXIMUM	UNITS	SAMPLES	COMP GRAB
ARSENIC	Sample Measurement	0.03		ppm	1	Comp
	Permit Requirement	.5				
CADMIUM	Sample Measurement	0.003		ppm	1	Comp
	Permit Requirement	.19				
COPPER	Sample Measurement	0.02		ppm	1	Comp
	Permit Requirement	3.02				
MERCURY	Sample Measurement	<0.001		ppm	1	Comp
	Permit Requirement	.09				
NICKEL	Sample Measurement	0.09		ppm	1	Comp
	Permit Requirement	5.9				
LEAD	Sample Measurement	<0.001		ppm	1	Comp
	Permit Requirement	.54		~~ppm~~	—	
ZINC	Sample Measurement	0.56		ppm	1	Comp
	Permit Requirement	1.67				
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					

PVSC FORM MR-1 REV: 4 6/87 P 1

850930105

E54

PRETREATMENT MONITORING REPORT

NAME: NEWARK BOXBOARD COMPANY

MAILING ADDRESS: 17 BLANCHARD STREET NEWARK, NJ 07105

FACILITY LOCATION: 17 BLANCHARD STREET NEWARK, NJ 07105

CATEGORY & SUBPART: 430 OUTLET #: 1

CONTACT OFFICIAL: ALAN LAMPARELLA TELEPHONE: 9735896853

NEW CUSTOMER ID / OUTLET ID: 20200033 - 1 OLD OUTLET DESIGNATION: 20401401

MONITORING PERIOD

Start			End		
3	1	02	3	31	02
MO	DAY	YR	MO	DAY	YR

	Average	Maximum
Regulated Flow-gal/day	51,896	80,300
Total Flow-gal/day	51,896	80,300

Method Used: Total Flow METERED ÷ 31 Days in March 2002

Production Rate (if applicable) DURING THIS MONITERING PERIOD, NO CHANGE HAS BEEN MADE TO THE PLOT PLAN SUBMITTED TO PVSC ON 2/21/97

PARAMETER		MASS OR CONCENTRATION			# OF SAMPLES	SAMPLE TYPE
		MON AVG	MAXIMUM	UNITS		COMP/GRAB
ARSENIC	Sample Measurement	0.004		PPM	1	Comp
	Permit Requirement	.15				
CADMIUM	Sample Measurement	0.002		PPM	1	Comp
	Permit Requirement	.19				
COPPER	Sample Measurement	0.15		PPM	1	Comp
	Permit Requirement	3.02				
MERCURY	Sample Measurement	<.0005		PPM	1	Comp
	Permit Requirement	.08				
NICKEL	Sample Measurement	0.11		PPM	1	Comp
	Permit Requirement	5.9				
LEAD	Sample Measurement	0.001		PPM	1	Comp
	Permit Requirement	.54				
ZINC	Sample Measurement	0.39		PPM	1	Comp
	Permit Requirement	1.67				
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					

PVSC FORM MR-1 REV: 4 6/87 P 1

850930106

E55

(41)

NAME: NEWARK BOXBOARD COMPANY

MAILING ADDRESS: 17 BLANCHARD STREET NEWARK, NJ 07105 (PVSC)

FACILITY LOCATION: 17 BLANCHARD STREET NEWARK, NJ 07105 MAY 21 PM 1:44

CATEGORY & SUBPART: 430 OUTLET #: 1

CONTACT OFFICIAL: ALAN LAMPARELLA TELEPHONE: 9735896853

NEW CUSTOMER ID / OUTLET ID: 20200033 - 1 OLD OUTLET DESIGNATION: 20401401

MONITORING PERIOD

Start			End		
4	1	02	4	30	02
MO	DAY	YR	MO	DAY	YR

	Average	Maximum
Regulated Flow-gal/day	48,950	91,700
Total Flow-gal/day	48,950	91,700

Method Used: TOTAL FLOW METERED ÷ 30 DAYS IN APRIL 2002

Production Rate (if applicable) DURING THIS MONITERING PERIOD, NO CHANGE HAS BEEN MADE TO THE PLOT PLAN SUBMITTED TO PVSC ON 2/21/97

PARAMETER		MASS OR CONCENTRATION			# OF	SAMPLE TYPE
		MON AVG	MAXIMUM	UNITS	SAMPLES	COMP/GRAB
ARSENIC	Sample Measurement	<0.003		PPM	1	Comp
	Permit Requirement	0.15				
CADMIUM	Sample Measurement	0.008		PPM	1	Comp
	Permit Requirement	0.19				
COPPER	Sample Measurement	0.08		PPM	1	Comp
	Permit Requirement	3.02				
MERCURY	Sample Measurement	<0.0005		PPM	1	Comp
	Permit Requirement	.08				
NICKEL	Sample Measurement	0.04		PPM	1	Comp
	Permit Requirement	5.9				
LEAD	Sample Measurement	<0.001		PPM	1	Comp
	Permit Requirement	0.54				
ZINC	Sample Measurement	0.33		PPM	1	Comp
	Permit Requirement	1.67				
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					

850930107

NAME: NEWARK BOXBOARD COMPANY

MAILING ADDRESS: 17 BLANCHARD STREET NEWARK, NJ 07105

FACILITY LOCATION: 17 BLANCHARD STREET NEWARK, NJ 07105

CATEGORY & SUBPART: 430 OUTLET #: 1

CONTACT OFFICIAL: ALAN LAMPARELLA / R JOHNSON TELEPHONE: 9735896853

NEW CUSTOMER ID / OUTLET ID: 20200033 - 1 OLD OUTLET DESIGNATION: 20401401

MONITORING PERIOD

Start			End		
5	1	02	5	31	02
MO	DAY	YR	MO	DAY	YR

	Average	Maximum
Regulated Flow-gal/day	57,523	77,800
Total Flow-gal/day	57,523	77,800

Method Used: TOTAL METERED FLOW ÷ 31 DAY IN MAY 2002

Production Rate (if applicable) DURING THIS MONITERING PERIOD, NO CHANGE HAS BEEN MADE TO THE PLOT PLAN SUBMITTED TO PVSC ON 2/21/97

PARAMETER		MASS OR CONCENTRATION			# OF	SAMPLE TYPE
		MON AVG	MAXIMUM	UNITS	SAMPLES	COMP/GRAB
ARSENIC	Sample Measurement	<0.003		PPM	1	Comp
	Permit Requirement	.15				
CADMIUM	Sample Measurement	0.04		PPM	1	Comp
	Permit Requirement	.19				
COPPER	Sample Measurement	0.14		PPM	1	Comp
	Permit Requirement	3.02				
MERCURY	Sample Measurement	<.0005		PPM	1	Comp
	Permit Requirement	.08				
NICKEL	Sample Measurement	0.07		PPM	1	Comp
	Permit Requirement	5.9				
LEAD	Sample Measurement	0.023		PPM	1	Comp
	Permit Requirement	.54				
ZINC	Sample Measurement	0.42		PPM	1	Comp
	Permit Requirement	1.67				
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement		RALPH			
	Permit Requirement		Ralph 8/21/02			
	Sample Measurement		1505			
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					

PVSC FORM MR-1 REV: 4 6/87 2P 1

850930108

PRETREATMENT MONITORING REPORT

P # 5

NAME: NEWARK BOXBOARD COMPANY

MAILING ADDRESS: 17 BLANCHARD STREET NEWARK, NJ 07105

FACILITY LOCATION: 17 BLANCHARD STREET NEWARK, NJ 07105

CATEGORY & SUBPART: 430 OUTLET #: 1

CONTACT OFFICIAL: ALAN LAMPARELLA TELEPHONE: 9735896853

NEW CUSTOMER ID / OUTLET ID: 20200033 - 1 OLD OUTLET DESIGNATION: 20401401

MONITORING PERIOD

Start			End		
6	01	92	6	30	92
MO	DAY	YR	MO	DAY	YR

	Average	Maximum
Regulated Flow-gal/day	56,363	
Total Flow-gal/day	1690900	

Method Used:

Production Rate (if applicable) DURING THIS MONITERING PERIOD, NO CHANGE HAS BEEN MADE TO THE PLOT PLAN SUBMITTED TO PVSC ON 2/21/97

PARAMETER		MASS OR CONCENTRATION			# OF SAMPLES	SAMPLE TYPE
		MON AVG	MAXIMUM	UNITS		COMP/GRAB
ARSENIC	Sample Measurement	<0.003		PPM	1	Comp
	Permit Requirement	.15				
CADMIUM	Sample Measurement	0.02		PPM	1	Comp
	Permit Requirement	.19				
COPPER	Sample Measurement	0.02		PPM	1	Comp
	Permit Requirement	3.07				
MERCURY	Sample Measurement	0.0006		PPM	1	Comp
	Permit Requirement	.08				
NICKEL	Sample Measurement	<0.03		PPM	1	Comp
	Permit Requirement	5.9				
LEAD	Sample Measurement	0.000		PPM	1	Comp
	Permit Requirement	.54				
ZINC	Sample Measurement	0.06		PPM	1	Comp
	Permit Requirement	1.67				
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					

PVSC FORM MR-1 REV: 4 6/87 SP 1

850930109

E58

#10

NAME: NEWARK BOXBOARD COMPANY

MAILING ADDRESS: 17 BLANCHARD STREET NEWARK, NJ 07105

FACILITY LOCATION: 17 BLANCHARD STREET NEWARK, NJ 07105

CATEGORY & SUBPART: 430 OUTLET #: 1

CONTACT OFFICIAL: PATRICK FULTON TELEPHONE: 9735896353

NEW CUSTOMER ID / OUTLET ID: 20200033 - 1 OLD OUTLET DESIGNATION: 20401401

MONITORING PERIOD

Start			End		
7	1	02	7	31	02
MO	DAY	YR	MO	DAY	YR

	Average	Maximum
Regulated Flow-gal/day	49,555	78,100
Total Flow-gal/day	1,536,300	

Method Used:

Production Rate (if applicable) DURING THIS MONITERING PERIOD, NO CHANGE HAS BEEN MADE TO THE PLOT PLAN SUBMITTED TO PVSC ON 2/21/97

PARAMETER		MASS OR CONCENTRATION			# OF	SAMPLE TYPE
		MON AVG	MAXIMUM	UNITS	SAMPLES	COMP/GRAB
ARSENIC	Sample Measurement	<0.003		PPM	1	Comp
	Permit Requirement	.15				
CADMIUM	Sample Measurement	0.034		PPM	1	Comp
	Permit Requirement	.19				
COPPER	Sample Measurement	0.07		PPM	1	Comp
	Permit Requirement	3.02				
MERCURY	Sample Measurement	<0.0005		PPM	1	Comp
	Permit Requirement	.05				
NICKEL	Sample Measurement	0.08		PPM	1	Comp
	Permit Requirement	5.9				
LEAD	Sample Measurement	0.026		PPM	1	Comp
	Permit Requirement	.54				
ZINC	Sample Measurement	0.39		PPM	1	Comp
	Permit Requirement	1.67				
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					

PVSC FORM MR-1 REV: 4/87 P 1

850930110

E59

NAME: NEWARK BOXBOARD COMPANY

MAILING ADDRESS: 17 BLANCHARD STREET NEWARK, NJ 07105

FACILITY LOCATION: 17 BLANCHARD STREET NEWARK, NJ 07105

CATEGORY & SUBPART: 430 OUTLET #: 1

CONTACT OFFICIAL: PATRICK FULTON TELEPHONE: 9735896853

NEW CUSTOMER ID / OUTLET ID: 20200033 - 1 OLD OUTLET DESIGNATION: 20401401

MONITORING PERIOD

Start			End		
8	01	02	8	31	02
MO	DAY	YR	MO	DAY	YR

	Average	Maximum
Regulated Flow-gal/day	66,461	105,300
Total Flow-gal/day	2,060,300	

Method Used:

Production Rate (if applicable) DURING THIS MONITERING PERIOD, NO CHANGE HAS BEEN MADE TO THE PLOT PLAN SUBMITTED TO PVSC ON 2/21/97

PARAMETER		MASS OR CONCENTRATION			# OF	SAMPLE TYPE
		MON AVG	MAXIMUM	UNITS	SAMPLES	COMP/GRAB
ARSENIC	Sample Measurement	0.009		PPM	1	Comp
	Permit Requirement	.15				
CADMIUM	Sample Measurement	0.026		PPM	1	Comp
	Permit Requirement	.19				
COPPER	Sample Measurement	0.10		PPM	1	Comp
	Permit Requirement	3.02				
MERCURY	Sample Measurement	0.0007		PPM	1	Comp
	Permit Requirement	.08				
NICKEL	Sample Measurement	0.04		PPM	1	Comp
	Permit Requirement	5.9				
LEAD	Sample Measurement	0.046		PPM	1	Comp
	Permit Requirement	.54				
ZINC	Sample Measurement	0.38		PPM	1	Comp
	Permit Requirement	1.67				
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					

PVSC FORM MR-1 REV: 4/87 3P1

850930111

E60

#11

NAME: NEWARK BOXBOARD COMPANY

MAILING ADDRESS: 17 BLANCHARD STREET NEWARK, NJ 07105

FACILITY LOCATION: 17 BLANCHARD STREET NEWARK, NJ 07105

PVSC
02 OCT -8 PM 2:06

CATEGORY & SUBPART: 430 OUTLET #:

CONTACT OFFICIAL: PATRICK FULTON TELEPHONE: 9735896853

NEW CUSTOMER ID / OUTLET ID: 20200033 - 1 OLD OUTLET DESIGNATION: 20401401

MONITORING PERIOD

Start			End		
9	01	02	9	30	02
MO	DAY	YR	MO	DAY	YR

	Average	Maximum
Regulated Flow-gal/day	61,077	108,400
Total Flow-gal/day	1,832,300	

Method Used:

Production Rate (if applicable) DURING THIS MONITERING PERIOD, NO CHANGE HAS BEEN MADE TO THE PLOT PLAN SUBMITTED TO PVSC ON 2/21/97

PARAMETER		MASS OR CONCENTRATION			# OF	SAMPLE TYPE
		MON AVG	MAXIMUM	UNITS	SAMPLES	COMP/GRAB
ARSENIC	Sample Measurement	0.001		PPM	1	Comp
	Permit Requirement	.15				
CADMIUM	Sample Measurement	0.008		PPM	1	Comp
	Permit Requirement	.19				
COPPER	Sample Measurement	0.03		PPM	1	Comp
	Permit Requirement	3.02				
MERCURY	Sample Measurement	<0.0005		PPM	1	Comp
	Permit Requirement	.08				
NICKEL	Sample Measurement	0.09		PPM	1	Comp
	Permit Requirement	5.9				
LEAD	Sample Measurement	0.002		PPM	1	Comp
	Permit Requirement	.54				
ZINC	Sample Measurement	0.49		PPM	1	Comp
	Permit Requirement	1.67				
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					

PVSC FORM MR-1 REV: 4 6/87 3P 1

850930112

E61

NAME: NEWARK BOXBOARD COMPANY

MAILING ADDRESS: 17 BLANCHARD STREET NEWARK, NJ 07105

FACILITY LOCATION: 17 BLANCHARD STREET NEWARK, NJ 07105

CATEGORY & SUBPART: 430 OUTLET #: 1

CONTACT OFFICIAL: PATRICK FULTON TELEPHONE: 9735896853

NEW CUSTOMER ID / OUTLET ID: 20200033 - 1 OLD OUTLET DESIGNATION: 20401401

MONITORING PERIOD

Start			End		
10	01	02	10	31	02
MO	DAY	YR	MO	DAY	YR

	Average	Maximum
Regulated Flow-gal/day	58,422	252,400
Total Flow-gal/day	1,811,100	

Method Used:

Production Rate (if applicable) DURING THIS MONITERING PERIOD, NO CHANGE HAS BEEN MADE TO THE PLOT PLAN SUBMITTED TO PVSC ON 2/21/97

PARAMETER		MASS OR CONCENTRATION			# OF	SAMPLE TYPE
		MON AVG	MAXIMUM	UNITS	SAMPLES	COMP/GRAB
ARSENIC	Sample Measurement	0.001		PPM	1	Comp
	Permit Requirement	.15				
CADMIUM	Sample Measurement	0.0082		PPM	1	Comp
	Permit Requirement	.19				
COPPER	Sample Measurement	0.06		PPM	1	Comp
	Permit Requirement	3.02				
MERCURY	Sample Measurement	<0.0005		PPM	1	Comp
	Permit Requirement	.05				
NICKEL	Sample Measurement	0.038		PPM	1	Comp
	Permit Requirement	5.9				
LEAD	Sample Measurement	0.031		PPM	1	Comp
	Permit Requirement	.54				
ZINC	Sample Measurement	0.52		PPM	1	Comp
	Permit Requirement	1.67				
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					

2000 NOV 15 PM 3:27 PVSC

PVSC FORM MR-1 REV: 4/87 P 1

850930113

E62

NAME: NEWARK BOXBOARD COMPANY (15)

MAILING ADDRESS: 17 BLANCHARD STREET NEWARK, NJ 07105

FACILITY LOCATION: 17 BLANCHARD STREET NEWARK, NJ 07105

CATEGORY & SUBPART: 430 OUTLET #: 1

CONTACT OFFICIAL: PATRICK FULTON TELEPHONE: 9735896853

NEW CUSTOMER ID / OUTLET ID: 20200033 - 1 OLD OUTLET DESIGNATION: 20401401

MONITORING PERIOD

Start			End		
11	01	02	11	30	02
MO	DAY	YR	MO	DAY	YR

	Average	Maximum
Regulated Flow-gal/day	51,497	93,300
Total Flow-gal/day		

Method Used:

Production Rate (if applicable) DURING THIS MONITERING PERIOD, NO CHANGE HAS BEEN MADE TO THE PLOT PLAN SUBMITTED TO PVSC ON 2/21/97

PARAMETER		MASS OR CONCENTRATION MON AVG	MAXIMUM	UNITS	# OF SAMPLES	SAMPLE TYPE COMP/GRAB
ARSENIC	Sample Measurement	0.001		PPM	1	Comp
	Permit Requirement	0.15				
CADMIUM	Sample Measurement	.0084		PPM	1	Comp
	Permit Requirement	0.19				
COPPER	Sample Measurement	0.17		PPM	1	Comp
	Permit Requirement	3.02				
MERCURY	Sample Measurement	<.0005		PPM	1	Comp
	Permit Requirement	.08				
NICKEL	Sample Measurement	0.075		PPM	1	Comp
	Permit Requirement	5.9				
LEAD	Sample Measurement	0.032		PPM	1	Comp
	Permit Requirement	.54				
ZINC	Sample Measurement	0.6		PPM	1	Comp
	Permit Requirement	1.67				
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					

2002 DEC 10 PM 3:14 PVSC

PVSC FORM MR-1 REV: 4 6/87 SP 1

850930114

E63

8

NAME: NEWARK BOXBOARD COMPANY

MAILING ADDRESS: 17 BLANCHARD STREET NEWARK, NJ 07105

FACILITY LOCATION: 17 BLANCHARD STREET NEWARK, NJ 07105

CATEGORY & SUBPART: 430 OUTLET #: 1

CONTACT OFFICIAL: PATRICK FULTON TELEPHONE: 9735896853

NEW CUSTOMER ID / OUTLET ID: 20200033 - 1 OLD OUTLET DESIGNATION: 20401401

MONITORING PERIOD

Start			End		
12	01	02	12	31	02
MO	DAY	YR	MO	DAY	YR

	Average	Maximum
Regulated Flow-gal/day	64,241	131,600
Total Flow-gal/day	1,991,500	

Method Used:

Production Rate (if applicable) DURING THIS MONITERING PERIOD, NO CHANGE HAS BEEN MADE TO THE PLOT PLAN SUBMITTED TO PVSC ON 2/21/97

PARAMETER		MASS OR CONCENTRATION			# OF	SAMPLE TYPE
		MON AVG	MAXIMUM	UNITS	SAMPLES	COMP/GRAB
ARSENIC	Sample Measurement	0.005		PPM	1	Comp
	Permit Requirement	.15				
CADMIUM	Sample Measurement	0.0012		PPM	1	Comp
	Permit Requirement	.19				
COPPER	Sample Measurement	0.19		PPM	1	Comp
	Permit Requirement	3.02				
MERCURY	Sample Measurement	<0.0005		PPM	1	Comp
	Permit Requirement	.08				
NICKEL	Sample Measurement	0.028		PPM	1	Comp
	Permit Requirement	5.9				
LEAD	Sample Measurement	<0.001		PPM	1	Comp
	Permit Requirement	.54				
ZINC	Sample Measurement	0.160		PPM	1	Comp
	Permit Requirement	1.67				
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					
	Sample Measurement					
	Permit Requirement					

2003 JAN 13 PM 4:08 PVSC

PVSC FORM MR-1 REV: 4 6/87 2P 1

850930115

E64

CORRECTED COPY

PRETREATMENT MONITORING REPORT

Name NEWARK BOXBOARD CO.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E / 430.266 SUBPART Z. Outlet# 20401401 43900 0201

Contact Offical _____ Telephone# 201-589-6853

Monitoring Period					
11	1	93	11	30	93
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (If applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	180,417	294,450
Total Flow-gal/day	180,417	294,450

Method used FLOWMETER ÷ 30 DAYS FOR AVERAGE FLOW

Parameter		Mass Limit or Concentration Average	Maximum	Units	No. of Samples	Sample type Comp./grab
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

FEB 1984 RECEIVED INDUSTRIAL DEPARTMENT

PVSC Form MR-1 Rev. 4 6/87 P1

PERIODIC MONITORING REPORT

Name NEWARK BOXBOARD CO.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E / 430.266 SUBPART Z. Outlet # 20401401 43900 0201

Contact Official _____ Telephone # 201-589-6853

Monitoring Period					
11	1	93	11	30	93
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (if applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	180,417	294,450
Total Flow-gal/day	180,417	294,450

Method used FLOW METER ÷ 30 DAYS FOR AVERAGE FLOW

Parameter		Mass Limit or Concentration			No. of Samples	Sample type Comp./grab
		Average	Maximum	Units		
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

RECEIVED INDUSTRIAL DEPARTMENT 1983

PVSC Form MR-1 Rev. 4 6/87 P1

850930117

EGG

PRETREATMENT MONITORING REPORT

PH

11-20-93

Name NEWARK BOXBOARD CO.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E 430.66 SUBPART Z. Outlet # 20401401 43900 0201

Contact Offical _____ Telephone # 201-589-6853

Monitoring Period					
10	1	93	10	31	93
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (If applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	175,890	314,170
Total Flow-gal/day	175,890	314,170

Method used FLOW METER ÷ 31 DAYS FOR AVERAGE FLOW

Parameter		Mass Limit or Concentration			No. of Samples	Sample type Comp./grab
		Average	Maximum	Units		
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

PVSC Form MR-1 Rev. 4 6/87 P1

850930118

EG7

PRETREATMENT MONITORING REPORT

Name NEWARK BOXBOARD CO.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E / 430.266 SUBPART Z Outlet# 20401401 43900 0201

Contact Offical Edward Melton Telephone# 201-589-6853

Monitoring Period					
9	1	93	9	30	93
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (if applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	184,523	319,100
Total Flow-gal/day	184,523	319,100

Method used FLOW METER ÷ 30 DAYS FOR AVERAGE FLOW

Parameter		Mass Limit or Concentration			No. of Samples	Sample type Comp./grab
		Average	Maximum	Units		
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

RECEIVED OCT 1993 INDUSTRIAL DEPARTMENT

PVSC Form MR-1 Rev. 4 6/87 P1

850930119

EC8

PRETREATMENT MONITORING REPORT

Name NEWARK BOXBOARD CO.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E / 430.266 SUBPART Z Outlet# 20401401 43900 0201

Contact Offical Edward Melton Telephone# 201-589-6853

Monitoring Period					
8	1	93	8	31	93
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (if applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	153,490	271,800
Total Flow-gal/day	153,490	271,800

Method used FLOW METER ÷ 31 DAYS FOR AVERAGE FLOW

Parameter		Mass Limit or Concentration			No. of Samples	Sample type Comp./grab
		Average	Maximum	Units		
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

SEP 1983 RECEIVED INDUSTRIAL DEPARTMENT

PVSC Form MR-1 Rev. 4 6/87 P1

850930120

E69

PRETREATMENT MONITORING REPORT

Name NEWARK BOXBOARD Co.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E / 430.266 SUBPART Z Outlet # 20401401 43900 0201

Contact Offical ED MELTON Telephone # 201-589-6853

Monitoring Period					
7	1	93	7	31	93
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (if applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	164,774	609,100
Total Flow-gal/day	164,774	609,100

Method used FLOW METER = 30 DAYS FOR AVERAGE FLOW

Parameter		Mass Limit or Concentration			No. of Samples	Sample type Comp./grab
		Average	Maximum	Units		
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

RECEIVED AUG 1993 INDUSTRIAL DEPARTMENT

PVSC Form MR-1 Rev. 4 6/87 P1

850930121

E70

PRETREATMENT MONITORING REPORT

Name NEWARK BOXBOARD CO.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E / 430.266 SUBPART Z Outlet # 20401401 43900 02

Contact Offical BOB DINAN Telephone # 201-589-6853

Monitoring Period					
6	1	93	6	30	93
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (if applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	123,697	285,600
Total Flow-gal/day	123,697	285,600

Method used FLOWMETER - 30 DAYS FOR AVERAGE FLOW

Parameter		Mass Limit or Concentration			No. of Samples	Sample type Comp./grab
		Average	Maximum	Units		
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

PVSC Form MR-1 Rev. 4 6/87 P1

850930122

E71

PRETREATMENT MONITORING REPORT

Name NEWARK BOXBOARD Co.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E / 430.266 SUBPART Z. Outlet# 20401401 43900 0201

Contact Offical BOB DINAN Telephone# 201-589-6853

Monitoring Period					
5	1	93	5	31	93
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (If applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	86,745	233,500
Total Flow-gal/day	86,745	232,500

Method used FLOWMETER - 31 DAYS FOR AVERAGE FLOW

Parameter		Mass Limit or Concentration Average	Maximum	Units	No. of Samples	Sample type Comp./grab
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

PVSC Form MR-1 Rev. 4 6/87 P1

BA 128N

850930123

E72

PRETREATMENT MONITORING REPORT

Name NEWARK BOX BOARD CO.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E / 430.266 SUBPART Z Outlet# 20401401 43900 0201

Contact Offical BOB DINAN Telephone# 201-589-6853

Monitoring Period					
4	1	93	4	30	93
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (if applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	100,827	155,700
Total Flow-gal/day	100,827	155,700

Method used FLOWMETER ÷ 30 DAYS FOR AVERAGE FLOW

Parameter		Mass Limit or Concentration Average	Maximum	Units	No. of Samples	Sample type Comp./grab
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

RECEIVED MAY 1993 PVS Industrial Dept.

PVSC Form MR-1 Rev. 4 6/87 P1

PRETREATMENT MONITORING REPORT

Name NEWARK BOXBOARD Co.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E / 430.266 SUBPART Z. Outlet # 20401401 43900 020

Contact Offical BOB DINAN Telephone # 201-589-6853

Monitoring Period					
3	1	93	3	31	93
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

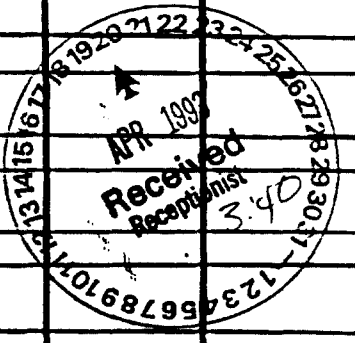
Production rate (if applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	131,410	327,200
Total Flow-gal/day	131,410	327,200

Method used FLOWMETER ÷ 31 DAYS FOR AVERAGE FLOW

Parameter		Mass Limit or Concentration Average	Maximum	Units	No. of Samples	Sample type Comp./grab
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					



PVSC Form MR-1 Rev. 4 6/87 P1

850930125

E74

PRETREATMENT MONITORING REPORT

Name NEWARK BOXBOARD CO.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E / 430.266 SUBPART Z Outlet# 20401401 43900 020

Contact Offical BOB DINAN Telephone# 201-589-6853

Monitoring Period					
2	1	93	2	28	93
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (if applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	145,725	248,600
Total Flow-gal/day	145,725	248,600

Method used FLOW METER ÷ 28 DAYS FOR AVERAGE FLOW

Parameter		Mass Limit or Concentration Average	Maximum	Units	No. of Samples	Sample type Comp./grab
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

MAY 1993 Received PVSC Industrial Dept.

PVSC Form MR-1 Rev. 4 6/87 P1

850930126

E75

PRETREATMENT MONITORING REPORT

Name NEWARK BOXBOARD CO.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E / 430.266 SUBPART Z Outlet# 20401401 43900 0201

Contact Offical BOB DINAN Telephone# 201-589-6853

Monitoring Period					
1	1	93	1	31	93
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (if applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	122,474	180,500
Total Flow-gal/day	122,474	180,500

Method used FLOW METER ÷ 31 DAYS FOR AVERAGE FLOW

Parameter		Mass Limit or Concentration Average	Maximum	Units	No. of Samples	Sample type Comp./grab
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

PVSC Form MR-1 Rev. 4 6/87 P1

850930127

E76

PRETREATMENT MONITORING REPORT

Name NEWARK BOXBOARD Co.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E / 430.266 SUBPART Z Outlet# 20401401 43900 020

Contact Offical BOB DINAN Telephone# 201-589-6853

Monitoring Period					
12	1	92	12	31	92
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (if applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	127,681	301,200
Total Flow-gal/day	127,681	301,200

Method used FLOW METER ÷ 31 DAYS FOR AVERAGE FLOW

Parameter		Mass Limit or Concentration Average	Maximum	Units	No. of Samples	Sample type Comp./grab
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

PVSC Form MR-1 Rev. 4 6/87 P1

850930128

E77

PRETREATMENT MONITORING REPORT

Name NEWARK BOXBOARD Co.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E 430.266 SUBPART Z Outlet# 20401401 43900 0201

Contact Offical BOB DINAN Telephone# 201-589-6853

Monitoring Period					
11	1	92	11	30	92
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (if applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	143,417	201,800
Total Flow-gal/day	143,417	201,800

Method used FLOW METER = 30 DAYS FOR AVERAGE FLOW

Parameter		Mass Limit or Concentration Average	Maximum	Units	No. of Samples	Sample type Comp./grab
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

Received Industrial Dept PVSC DEC 1992

PVSC Form MR-1 Rev. 4 6/87 P1

850930129

E78

PRETREATMENT MONITORING REPORT

Name NEWARK BOX BOARD CO.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E / 430.266 SUBPART Z Outlet# 20401401 43900 0201

Contact Offical BOB DINAN Telephone# 201-589-6853

Monitoring Period					
10	1	92	10	31	92
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (if applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	112,503	208,600
Total Flow-gal/day	112,503	208,600

Method used FLOW METER ÷ 31 DAYS FOR AVERAGE FLOW.

Parameter		Mass Limit or Concentration Average	Maximum	Units	No. of Samples	Sample type Comp./grab
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

PVSC Form MR-1 Rev. 4 6/87 P1

Received NOV 1992 PVSC Industrial Dept.

850930130

E79

PRETREATMENT MONITORING REPORT

Name NEWARK BOXBOARD Co.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E / 430.266 SUBPART Z Outlet# 20401401 43900 0201

Contact Offical BOB DINAN Telephone# 201-589-6853

Monitoring Period					
9	1	92	9	30	92
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (if applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	129,047	225,800
Total Flow-gal/day	129,047	225,800

Method used FLOW METER ÷ 30 DAYS FOR AVERAGE FLOW

Parameter		Mass Limit or Concentration Average	Maximum	Units	No. of Samples	Sample type Comp./grab
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

OCT 1992
Received
PVSC
Industrial Dept.

PVSC Form MR-1 Rev. 4 6/87 P1

850930131

E80

PRETREATMENT MONITORING REPORT

Name NEWARK BOXBOARD CO.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E / 430.266 SUBPART Z Outlet# 20401401 43900 0201

Contact Offical BOB DINAN Telephone# 201-589-6853

Monitoring Period					
8	1	92	8	31	92
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (if applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	91,871	141,850
Total Flow-gal/day	91,871	141,850

Method used FLOW METER ÷ 31 DAYS FOR AVERAGE FLOW

Parameter		Mass Limit or Concentration Average	Maximum	Units	No. of Samples	Sample type Comp./grab
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

PVSC Form MR-1 Rev. 4 6/87 P1

850930132

E81

PRETREATMENT MONITORING REPORT

Name NEWARK BOXBOARD CO.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E / 430.266 SUBPART Z Outlet# 20401401 43900 0201

Contact Offical BOB DINAN Telephone# 201-589-6853

Monitoring Period					
7	1	92	7	31	92
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (if applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	87,916	161,100
Total Flow-gal/day	87,916	161,100

Method used FLOWMETER ÷ 31 DAYS FOR AVERAGE FLOW

Parameter		Mass Limit or Concentration Average	Maximum	Units	No. of Samples	Sample type Comp./grab
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

PVSC Form MR-1 Rev. 4 6/87 P1

850930133

E82

PRETREATMENT MONITORING REPORT

Name NEWARK BOXBOARD Co.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E / 430.266 SUBPART Z Outlet# 20401401 43900 0201

Contact Offical BOB DINAN Telephone# 201-589-6853

Monitoring Period					
6	1	92	6	30	92
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (if applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	94,563	162,200
Total Flow-gal/day	94,563	162,200

Method used FLOWMETER ÷ 30 DAYS FOR AVERAGE FLOW

Parameter		Mass Limit or Concentration			No. of Samples	Sample type Comp./grab
		Average	Maximum	Units		
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

PVSC Form MR-1 Rev. 4 6/87 P1

850930134

E83

PRETREATMENT MONITORING REPORT

Name NEWARK BOXBOARD Co.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E / 430.266 SUBPART Z Outlet# 20401401 43900 0201

Contact Offical BOB DINAN Telephone# 201-589-6853

Monitoring Period					
5	1	92	5	31	92
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (if applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	116,519	221,900
Total Flow-gal/day	116,519	221,900

Method used FLOWMETER ÷ 31 DAYS FOR AVERAGE FLOW

Parameter		Mass Limit or Concentration Average	Maximum	Units	No. of Samples	Sample type Comp./grab
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

PVSC Form MR-1 Rev. 4 6/87 P1

850930135

E84

PRETREATMENT MONITORING REPORT

Name NEWARK BOX BOARD Co.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E / 430.266 SUBPART Z Outlet# 20401401 43900 0201

Contact Offical BOB DINAN Telephone# 201-589-6853

Monitoring Period					
4	1	92	4	30	92
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (if applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	126,727	201,000
Total Flow-gal/day	126,727	201,000

Method used FLOWMETER ÷ 30 DAYS FOR AVERAGE FLOW

Parameter		Mass Limit or Concentration Average	Maximum	Units	No. of Samples	Sample type Comp./grab
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

PVSC Form MR-1 Rev. 4 6/87 P1

850930136

E85

PRETREATMENT MONITORING REPORT

Name NEWARK BOXBOARD CO.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E / 430.266 SUBPART Z Outlet # 20401401 43900 020

Contact Offical Mark J. McCabe Telephone # 201-589-6853

Monitoring Period					
6	1	97	6	30	97
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (if applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	62,737	113,450
Total Flow-gal/day	62,737	113,450

Method used Total Flow Metered ÷ by 30 Days in June

DURING THIS MONITORING PERIOD, NO CHANGE HAS BEEN MADE TO THE PLOT PLAN SUBMITTED TO PVSC ON 2/21/97

Parameter		Mass Limit or Concentration Average	Maximum	Units	No. of Samples	Sample type Comp./grab
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

JUL 1997 RECEIVED INDUSTRIAL DEPARTMENT

PVSC Form MR-1 Rev. 4 6/87 P1

850930137

E8

PRETREATMENT MONITORING REPORT

Name NEWARK BOXBOARD Co.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E / 430.266 SUBPART Z Outlet # 20401401 43900 0201

Contact Offical Mark J. McCabe Telephone # 201-589-6853 Ext. 13

Monitoring Period					
5	1	97	5	31	97
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (if applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	54,793	132,140
Total Flow-gal/day	54,793	132,140

Method used Total METERED Flow ÷ by 31 Days in May

DURING THIS MONITORING PERIOD, NO CHANGE HAS BEEN MADE TO THE PLOT PLAN SUBMITTED TO PVSC ON 2/21/97

Parameter		Mass Limit or Concentration			No. of Samples	Sample type Comp./grab
		Average	Maximum	Units		
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

RECEIVED INDUSTRIAL DEPARTMENT JUN 1997

850930138

PVSC Form MR-1 Rev. 4 6/87 P1

E87

PRETREATMENT MONITORING REPORT

Name NEWARK BOX BOARD CO.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E / 430.266 SUBPART Z Outlet # 20401401 43900 020

Contact Offical Mark J. McCABE Telephone # 201-589-6853 Ext. 13

Monitoring Period					
4	1	97	4	30	97
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (if applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	43,690	87,310
Total Flow-gal/day	43,690	87,310

Method used Total metered Flow ÷ 61 30 Days in April

DURING THIS MONITORING PERIOD, NO CHANGE HAS BEEN MADE TO THE PLOT PLAN SUBMITTED TO PVSC ON 2/21/97

Parameter		Mass Limit or Concentration Average	Maximum	Units	No. of Samples	Sample type Comp./grab
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

MAY 1997 RECEIVED INDUSTRIAL DEPARTMENT

PVSC Form MR-1 Rev. 4 6/87 P1

850930139

E88

PRETREATMENT MONITORING REPORT

Name NEWARK BOXBOARD Co.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E 430.266 SUBPART Z Outlet # 20401401 43900 020

Contact Offical Mark J. McCabe Telephone # 201-589-6853 Ext 13

Monitoring Period					
3	1	97	3	31	97
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (if applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	44,955	107,840
Total Flow-gal/day	44,955	107,840

Method used Total METERED Flow ÷ by 31 Days in March

DURING THIS MONITORING PERIOD, NO CHANGE HAS BEEN MADE TO THE PLOT PLAN SUBMITTED TO PVSC ON 2/21/97

Parameter		Mass Limit or Concentration			No. of Samples	Sample type Comp./grab
		Average	Maximum	Units		
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

APR 1997 RECEIVED INDUSTRIAL DEPARTMENT

PVSC Form MR-1 Rev. 4 6/87 P1

850930140

E89

PRETREATMENT MONITORING REPORT

Name NEWARK BOXBOARD CO.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E / 430.266 SUBPART Z Outlet # 20401401 43900 020

Contact Offical MARK J. McCABE Telephone # 201-589-6853

Monitoring Period					
2	1	97	2	28	97
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (if applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	38,887	121,300
Total Flow-gal/day	38,887	121,300

Method used Total Metered Flow ÷ by 28 Days in February 1997

DURING THIS MONITORING PERIOD, NO CHANGE HAS BEEN MADE TO THE PLOT PLAN SUBMITTED TO PVSC ON 2/2/97

Parameter		Mass Limit or Concentration Average	Maximum	Units	No. of Samples	Sample type Comp./grab
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

MAR 1997
RECEIVED
INDUSTRIAL
DEPARTMENT

PVSC Form MR-1 Rev. 4 6/87 P1

850930141

E90

PRETREATMENT MONITORING REPORT

Name NEWARK BOXBOARD Co.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E / 430.266 SUBPART Z Outlet # 20401401 43900 020

Contact Offical MARK J. McCABE Telephone # 201-589-6853 ext 13

Monitoring Period					
1	1	97	1	31	97
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (If applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	40,073	85,660
Total Flow-gal/day	40,073	85,660

Method used Total metered Flow ÷ by 31 Days in January.

PLEASE NOTE PLOT PLAN REFLECTING NEW LOCATION OF SANITARY FLOW METER #3 WHICH WAS RELOCATED DURING THIS MONITORING PERIOD.

Parameter		Mass Limit or Concentration Average	Maximum	Units	No. of Samples	Sample type Comp./grab
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

PVSC Form MR-1 Rev. 4 6/87 P1

850930142

E91

PRETREATMENT MONITORING REPORT

Name NEWARK BOX BOARD Co.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E / 430.266 SUBPART Z Outlet # 20401401 43900 0201

Contact Offical MARK J. McCABE Telephone # 201-589-6853

Monitoring Period					
12	1	96	12	31	96
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	50,601 gal	85,820 gal
Total Flow-gal/day	50,601 gal	85,820 gal

Method used Total metered Flow ÷ by 31 Days in December

Production rate (If applicable)

DURING THIS MONITORING PERIOD, NO CHANGE HAS BEEN MADE TO THE PLOT PLAN

SUBMITTED TO PVSC ON 7/20/94

Parameter		Mass Limit or Concentration Average	Maximum	Units	No. of Samples	Sample type Comp./grab
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

RECEIVED 1994 INDUSTRIAL DEPARTMENT

PVSC Form MR-1 Rev. 4 6/87 P1

850930143

E92

PRETREATMENT MONITORING REPORT

Name NEWARK BOX BOARD Co.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E 430.266 SUBPART Z Outlet # 20401401 43900 020

Contact Offical Mark J. McCABE Telephone # 201-589-6853

Monitoring Period					
11	1	96	11	30	96
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (if applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	51,176	107,750
Total Flow-gal/day	51,176	107,750

Method used Total Metered Flow ÷ by 30 Days in November

DURING THIS MONITORING PERIOD, NO CHANGE HAS BEEN MADE TO THE PLOT PLAN

SUBMITTED TO PVSC ON 12/6/94

Parameter		Mass Limit or Concentration Average	Maximum	Units	No. of Samples	Sample type Comp./grab
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

DEC 1996 RECEIVED INDUSTRIAL DEPARTMENT

PVSC Form MR-1 Rev. 4 6/87 P1

850930144

E93

PRETREATMENT MONITORING REPORT

Name NEWARK BOXBOARD Co.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E / 430.266 SUBPART Z Outlet # 20401401 43900 020

Contact Offical Mark J. McCabe Telephone # 201-589-6853

Monitoring Period					
10	1	96	10	31	96
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (If applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	61,629	80,140
Total Flow-gal/day	61,629	80,140

Method used Total Flow ÷ by 31 Days in October

DURING THIS MONITORING PERIOD, NO CHANGE HAS BEEN MADE TO THE PLOT PLAN SUBMITTED TO PVSC ON 7/20/94

Parameter		Mass Limit or Concentration Average	Maximum	Units	No. of Samples	Sample type Comp./grab
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

NOV 1996 RECEIVED INDUSTRIAL DEPARTMENT

PVSC Form MR-1 Rev. 4 6/87 P1

850930145

E94

PRETREATMENT MONITORING REPORT

Name NEWARK BOXBOARD CO.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E / 430.266 SUBPART Z Outlet# 20401401 43900 0201

Contact Offical Mark J. McCABE Telephone# 201-589-6853

Monitoring Period					
9	1	96	9	30	96
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (If applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	63,303	95,210
Total Flow-gal/day	63,303	95,210

Method used Total Metered Flow ÷ 64

30 DAYS IN Sept

No Change has been made to the Plot Plan Submitted to PVSC on 7/26/94

Parameter		Mass Limit or Concentration Average	Maximum	Units	No. of Samples	Sample type Comp./grab
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

PVSC Form MR-1 Rev. 4 6/87 P1

850930146

E95

PRETREATMENT MONITORING REPORT

Name NEWARK BOXBOARD CO.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E / 430.266 SUBPART Z Outlet # 20401401 43900 0201

Contact Offical _____ Telephone # 201-589-6853

Monitoring Period					
8	1	96	8	31	96
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (If applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	83,641	135,000
Total Flow-gal/day	83,641	135,000

Method used Total Metered Flow ÷ by 31 Days in August.

During this monitoring period, No changes have been made to the plot Plan submitted to PVSC on: 7/20/94

Parameter		Mass Limit or Concentration Average	Maximum	Units	No. of Samples	Sample type Comp./grab
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

RECEIVED SEP 1996 INDUSTRIAL DEPARTMENT

PVSC Form MR-1 Rev. 4 6/87 P1

850930147

E96

PRETREATMENT MONITORING REPORT

Name NEWARK BOXBOARD Co.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E
430.266 SUBPART Z. Outlet # 20401401 43900 0201

Contact Offical MARK J. McCABE Telephone # 201-589-6853

Monitoring Period					
7	1	96	7	31	96
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (if applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	85,642	139,270
Total Flow-gal/day	85,642	139,270

Method used Total Volume Discharged During Period Divided by 31 Days in July '96

DURING THIS MONITORING PERIOD, NO CHANGE HAS BEEN MADE TO THE PLOT PLAN SUBMITTED TO PVSC ON 7/20/94

Parameter		Mass Limit or Concentration Average	Maximum	Units	No. of Samples	Sample type Comp./grab
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

AUG 1996
RECEIVED
INDUSTRIAL
DEPARTMENT

PVSC Form MR-1 Rev. 4 6/87 P1

850930148

E97

PRETREATMENT MONITORING REPORT

Name NEWARK BOXBOARD Co.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E / 430.266 SUBPART Z Outlet # 20401401 43900 020

Contact Offical MARK J. McCABE Telephone # 201-589-6853

Monitoring Period					
6	1	96	6	30	96
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (if applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	68,151.3	166,710
Total Flow-gal/day	68,151.3	166,710

Method used Total metered Flow ÷ 30 Days in June for Avg Flow per Day.

During this Monitoring Period, no change has been made to the Plot Plan Submitted to PVSC on 7/20/94

Parameter		Mass Limit or Concentration Average	Maximum	Units	No. of Samples	Sample type Comp./grab
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

RECEIVED JUL 1996 INDUSTRIAL DEPARTMENT

PVSC Form MR-1 Rev. 4 6/87 P1

850930149

E98

PRETREATMENT MONITORING REPORT

Name NEWARK BOX BOARD Co.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E / 430.266 SUBPART Z Outlet # 20401401 43900 020

Contact Offical Mark J. McCABE Telephone # 201-589-6853

Monitoring Period					
5	1	96	5	31	96
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (If applicable)

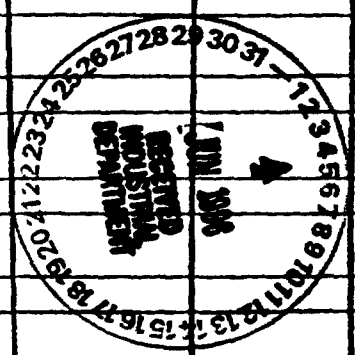
For Reporting Period

	AVG	MAX
Regulated flow-gal/day	47,514	97,740
Total Flow-gal/day	47,514	97,740

Method used Total Metered Flow Divided By 31 Days in May.

DURING THIS MONITORING PERIOD, NO CHANGE HAS BEEN MADE TO THE PLOT PLAN SUBMITTED TO PVSC ON 7/2096

Parameter		Mass Limit or Concentration			No. of Samples	Sample type Comp./grab
		Average	Maximum	Units		
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					



PVSC Form MR-1 Rev. 4 6/87 P1

850930150

E99

PRETREATMENT MONITORING REPORT

Name NEWARK BOX BOARD CO.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E / 430.266 SUBPART Z Outlet # 20401401 43900 020

Contact Offical MARK J. MCCABE Telephone # 201-589-6853

Monitoring Period					
4	1	96	4	30	96
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (If applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	101,935	140,300
Total Flow-gal/day	101,935	140,300

Method used Total flow from meter ÷ 30 DAYS for Average Flow in gal/day.

DURING THIS MONITORING PERIOD, NO CHANGE HAS BEEN MADE TO THE PLOT PLAN SUBMITTED TO PVSC ON 7/20/94

Parameter		Mass Limit or Concentration Average	Maximum	Units	No. of Samples	Sample type Comp./grab
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

PVSC Form MR-1 Rev. 4 6/87 P1

850930151

E/0

PRETREATMENT MONITORING REPORT

Name NEWARK BOX BOARD Co.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E / 430.266 SUBPART Z Outlet# 20401401 43900 020

Contact Offical MARK J. McCABE Telephone# 201-589-6853

Monitoring Period					
3	1	96	3	31	96
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (If applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	56,039	99,410
Total Flow-gal/day	56,034	99,410

Method used Total Flow ÷ 31 Days to Determine Avg. Flow/Day.

DURING THIS MONITORING PERIOD, NO CHANGE HAS BEEN MADE TO THE PLOT PLAN SUBMITTED TO PVSC ON 7/22/94

Parameter		Mass Limit or Concentration Average	Maximum	Units	No. of Samples	Sample type Comp./grab
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

PVSC Form MR-1 Rev. 4 6/87 P1

850930152

E101

PRETREATMENT MONITORING REPORT

Name NEWARK BOXBOARD Co.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E / 430.266 SUBPART Z. Outlet # 20401401 43900 02C

Contact Offical MARK J. McCABE Telephone # 201-589-6853 ext. 13

Monitoring Period					
2	1	96	2	29	96
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (If applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	67,519	92,985
Total Flow-gal/day	67,519	92,985

Method used Flow Meter ÷ by 29 Days For Average Flow

DURING THIS MONITORING PERIOD, NO CHANGE HAS BEEN MADE TO THE PLOT PLAN

SUBMITTED TO PVSC ON 7/20/94

Parameter		Mass Limit or Concentration Average	Maximum	Units	No. of Samples	Sample type Comp./grab
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

RECEIVED INDUSTRIAL DEPARTMENT

PVSC Form MR-1 Rev. 4 6/87 P1

850930153

E102

PRETREATMENT MONITORING REPORT

Name NEWARK BOXBOARD CO.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E / 430.266 SUBPART Z Outlet # 20401401 43900 0201

Contact Official MARK J. McCABE Telephone # 201-589-6853

Monitoring Period					
1	1	96	1	31	96
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (if applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	58,227	88,270
Total Flow-gal/day	58,227	88,270

Method used Flow meter ÷ by 31 Days for Average Flow

DURING THIS MONITORING PERIOD, NO CHANGE HAS BEEN MADE TO THE PLOT PLAN SUBMITTED TO PVSC ON 7/20/94

Parameter		Mass Limit or Concentration Average	Maximum	Units	No. of Samples	Sample type Comp./grab
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

PVSC Form MR-1 Rev. 4 6/87 P1

850930154

E103

Name NEWARK BOXBOARD CO.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E / 430.266 SUBPART Z Outlet# 20401400 439000201

Contact Offical BOB DINAN Telephone# 201-589 6853 X-203

Monitoring Period					
12	1	91	12	31	91
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (if applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	145,181	217,800
Total Flow-gal/day	146,441	219,060

Method used FLOW METER TOTAL ÷ 31 DAYS FOR AVERAGE DAILY FLOW

Parameter		Mass Limit or Concentration Average	Maximum	Units	No. of Samples	Sample typ Comp./grat
N/A	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

PVSC Form MR-1 Rev. 4 6/87 P1

850930155

E104

Name NEWARK BOXBOARD Co.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E / 430.266 SUBPART Z Outlet# 20401400-439000201

Contact Offical BOB DINAN Telephone# 201-589-6853 X-203

Monitoring Period					
11	1	91	11	30	91
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (if applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	137580	277400
Total Flow-gal/day	138840	278660

Method used FLOW METER ÷ 30 DA. FOR AVERAGE FLOW

Parameter		Mass Limit or Concentration Average	Maximum	Units	No. of Samples	Sample typ Comp./gra
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

PVSC Form MR-1 Rev. 4 6/87 P1

850930156

E105

Name NEWARK BOXBOARD CO.

Mailing Address 17 BLANCHARD ST. NEWARK NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E / 430.266 SUBPART Z Outlet# 20401400-43900-020

Contact Offical BOB DINAN Telephone# 201 589 6853 X-20

Monitoring Period					
10	1	91	10	31	91
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (if applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	164248	268200
Total Flow-gal/day	165508	269460

Method used FLOWMETER ÷ 31 DAYS FOR AVERAGE FLOW

Parameter		Mass Limit or Concentration Average	Maximum	Units	No. of Samples	Sample typ Comp./grab
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

COPY P. 3 & INSERT — A. GAMMARO

UNREG. AVG → 1260 FROM 165,508

PVSC Form MR-1 Rev. 4 6/87 P1

850930157

E106

Name NEWARK BOX BOARD CO

Mailing Address 17 BLANCHARD ST. NEWARK NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E / 430.266 SUBPART Z Outlet# 20401400-43900-020

Contact Offical BOB DINAN Telephone# 201 5896853 EXT 20

Monitoring Period					
9	1	91	9	30	91
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (if applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	126,543	294,200
Total Flow-gal/day	127 803	295,460

Method used C/DW METER ÷ 30 DAYS FOR AVERAGE FLOW

Parameter		Mass Limit or Concentration Average	Maximum	Units	No. of Samples	Sample Comp.
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

PVSC Form MR-1 Rev. 4 6/87 P1

850930158

E107

Name NEWARK BOXBOARD CO.

Mailing Address 17 BLANCHARD ST. NEWARK NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E / 430.266 SUBPART Z Outlet# 20401400-43900-020

Contact Offical [illegible] Telephone# 201-589-6853 EXT. 20

Monitoring Period					
8	1	91	8	31	91
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (if applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	125196	192300
Total Flow-gal/day	125196	192300

Method used FLOWMETER ÷ 31 DAYS FOR AVERAGE

AVG 126456 MAX 205,000

Parameter		Mass Limit or Concentration			No. of Samples	Sample Comp./
		Average	Maximum	Units		
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

PVSC Form MR-1 Rev. 4 6/87 P1

850930159

E108

NEWARK FIBERBOARD CO

Mailing Address 17 BLANCHARD ST NEWARK NJ 07105

Facility Location 17 BLANCHARD ST

Category & Subpart 430.56 SUBPART E / 430.266 SUBPART Z **Outlet#** 20401400/43900/0201

Contact Offical BOB DINAN **Telephone#** 201-589-6853 EXT. 203

Monitoring Period					
7	1	91	7	31	91
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (if applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	134,426	239,800
Total Flow-gal/day	134,426	239,800

Method used FLOWMETER ÷ 31 DAYS FOR AVERAGE

AVG TOTAL = 135686

MAX TOTAL = 250000

Parameter		Mass Limit or Concentration Average	Maximum	Units	No. of Samples	Sample ty Comp./gr
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					O
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

PVSC Form MR-1 Rev. 4 6/87 P1

850930160 E109

Name Newark Boxboard Co.

Mailing Address 17 Blanchard st Newark N.J.

Facility Location 17 Blanchard st

Category & Subpart 430.266 subpart Z 430.56 subpart E Outlet# 204014004390000201

Contact Offical Robert Dinan Telephone# 201-589-6853 ex 203

Monitoring Period					
1	1	91	6	30	91
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (if applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	194375	341900
Total Flow-gal/day	195635	343160

Method used Flowmeter ÷ 181 days for average.

Parameter		Mass Limit or Concentration Average	Maximum	Units	No. of Samples	Sample t Comp./g
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

PVSC Form MR-1 Rev. 4 6/87 P1

850930161

E110

Name Newark Boxboard Co.

Mailing Address 17 Blanchard st. Newark, N.J.

Facility Location 17 Blanchard st.

Category & Subpart 430.266 subpart Z
430.56 supart E

Outlet # 204014004390020 1

Contact Offical Robert Dinan Telephone # 201-589-6853 (ex 203)

Monitoring Period					
7	1	90	12	31	90
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (if applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	231325	351300
Total Flow-gal/day	232585	352560

Method used FLOWMETER ÷ 184 DAYS FOR AVG.

Parameter & Number		Mass Limit or Concentration			No. of Samples	Sample Comp./G
		Average	Maximum	Units		
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

PVSC Form MR-1 Rev. 3 1/86 P1

850930162

E111

Name NEWARK BOXBOARD Co.

Mailing Address 17 BLANCHARD ST. NEWARK N.J. 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.266 SUBPART Z
430.56 SUBPART E

Outlet # 204014004390000201

Contact Offical ROBERT DINAN

Telephone # 201-589 6853 (X-203)

Monitoring Period					
1	1	90	6	30	90
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (if applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	219,447	307 200
Total Flow-gal/day	220,747	308 500

Method used FLOWMETER READING ÷ 181 DAY

Parameter & Number		Mass Limit or Concentration Average	Maximum	Units	No. of Samples	Sample ty Comp./gr
N/A	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

RE-SUBMITTED
8-6-90
W/ CHANGES
AS NOTED
B.D.

PVSC Form MR-1 Rev. 3 1/86 P1

850930163

E112

Name NEWARK BOXBOARD CO.

Mailing Address 17 BLANCHARD ST. NEWARK N.J. 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.266 SUBPART Z 430.56 SUBPART E Outlet # 2040140043900020

Contact Offical _____ Telephone # 201-589-6853

Monitoring Period					
7	1	89	12	31	89
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (if applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	168,556	298,300
Total Flow-gal/day	168,556	298,300

Method used FLOW METER

Parameter & Number		Mass Limit or Concentration Average	Maximum	Units	No. of Samples	Sample t Comp./g
N/A	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

PVSC Form MR-1 Rev. 3 1/86 P1

850930164

E113

Name NEWARK BOXBOARD Co.

Mailing Address 17 BLANCHARD ST. NEWARK NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.266 SUBPART Z 430.56 SUBPART E Outlet# 2040140043900020

Contact Offical BOB DINAN Telephone# 201 589 6853

Monitoring Period					
7	1	88	12	31	88
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (if applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	161425	238400
Total Flow-gal/day	161425	238400
Method used	FLOWMETER	

Parameter & Number		Mass Limit or Concentration			No. of Samples	Sample ty Comp./gr
		Average	Maximum	Units		
N/A	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

PVSC Form MR-1 Rev. 3 1/86 P1

850930165

E114

Name NEWARK BOXBOARD Co.

Mailing Address 17 BLANCHARD ST NEWARK NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.266 SUBPART Z
430.56 SUBPART E

Outlet# 204014004390002C

Contact Offical BOB DINAN

Telephone# 201 589 6853

Monitoring Period					
7	1	87	12	31	87
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (if applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	124972	2094
Total Flow-gal/day	124972	2094

Method used FLOWMETER

Parameter		Mass Limit or Concentration			No. of Samples	Sample Comp.
		Average	Maximum	Units		
N/A	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	[redacted] measurement					
	[redacted] requirement					
	[redacted] measurement					
	[redacted] requirement					
	Sample measurement					
	Permit requirement					

PVSC Form MR-1 Rev. 4 6/87 P1

850930166

E115

PRETREATMENT MONITORING REPORT

Name NEWARK BOXBOARD Co

Mailing Address 17 BLANCHARD ST NEWARK, N.J. 07105

Facility Location 17 BLANCHARD ST

Category & Subpart 430.266 SUBPART Z
430.56 SUBPART E Outlet# 2040140043900020

Contact Offical BOB DINAN Telephone# 201-589-6853

Monitoring Period					
7	1	86	12	31	86
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (if applicable)

For Reporting Period

Avg. flow gal/day 106,093
Max. Flow gal/day 231,300
Method used FLOWMETER

Parameter & Number		Mass Limit or Concentration			No. of Samples	Sample ty
		Average	Maximum	Units		Comp./gr
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

PVSC Form MR-1 Rev. 3 1/86 P1

850930167

E116

NAME NEWARK BOARD OF Co.

ADDRESS 17 BLANCHARD ST

NEWARK, N.J. 07105

FACILITY LOCATION SAME

2040/400

PERMIT NUMBER

850930168 E11

For Reporting Period
Average Flow (Gal/Day) 122,273 gal. OCR FLOW METER
Maximum on day Flow (Cal/Day) 200,000 gal.

MONITORING PERIOD

FROM				TO		
1	7	85		31	12	85
DATE	MO	YEAR		DATE	MO	YEAR

PARAMETER & NUMBER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				FREQ. OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS		
PENTACHLOROPHENOL	SAMPLE MEASUREMENT									[illegible]
	PERMIT REQUIREMENT									
TRICHLOROPHENOL	SAMPLE MEASUREMENT									[illegible]
	PERMIT REQUIREMENT									
	SAMPLE MEASUREMENT									
	PERMIT REQUIREMENT									
	SAMPLE MEASUREMENT									
	PERMIT REQUIREMENT									
	SAMPLE MEASUREMENT									
	PERMIT REQUIREMENT									
	SAMPLE MEASUREMENT									
	PERMIT REQUIREMENT									

Use reverse side to explain actions being taken to meet pretreatment standards.

NJSC FORM MR-1 Rev. 11/84

SIGNATURE OF PRINCIPAL EXECUTIVE OR AUTHORIZED AGENT	ROBERT E. DINAN ASST. SUPT. TYPE NAME AND TITLE	201 589 6853 TELEPHONE NO.	1-9-86 DATE

DISCHARGE MONITORING REPORT

COPY

Name NEWARK BOX BOARD Co.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E / 430.266 SUBPART Z. Outlet# 20401401 43900 0201

Contact Official _____ Telephone# 201-589-6853

Monitoring Period					
12	1	93	12	31	93
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (if applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	266,165	415,200
Total Flow-gal/day	266,165	415,200

Method used FLOWMETER - 31 DAYS FOR AVERAGE FLOW

Parameter		Mass Limit or Concentration			No. of Samples	Sample type Comp./grab
		Average	Maximum	Units		
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

FEB 1984 RECEIVED INDUSTRIAL DEPARTMENT

PVSC Form MR-1 Rev. 4 6/87 P1

850930169

PRETREATMENT MONITORING REPORT

Name NEWARK BOXBOARD Co.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E / 430.266 SUBPART Z Outlet# 20401401 43900 0201

Contact Offical _____ Telephone# 201-589-6853

Monitoring Period					
12	1	93	12	31	93
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (if applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	266,165	415,200
Total Flow-gal/day	266,165	415,200

Method used FLOW METER ÷ 31 DAYS FOR AVERAGE FLOW

Parameter		Mass Limit or Concentration			No. of Samples	Sample type Comp./grab
		Average	Maximum	Units		
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

PVSC Form MR-1 Rev. 4 6/87 P1

850930170

E119

PRETREATMENT MONITORING REPORT

Name NEWARK BOXBOARD CO.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E / 430.266 SUBPART Z Outlet# 20401401 43900 02C

Contact Offical BOB DINAN Telephone# 201-589-6853

Monitoring Period					
3	1	92	3	31	92
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (if applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	102,797	185200
Total Flow-gal/day	102,797	185200

Method used FLOWMETER TOTAL ÷ 31 DAYS FOR AVERAGE FLOW

Parameter		Mass Limit or Concentration Average	Maximum	Units	No. of Samples	Sample type Comp./grab
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

PVSC Form MR-1 Rev. 4 6/87 P1

850930171

E120

PRETREATMENT MONITORING REPORT

Name NEWARK BOX BOARD Co.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E / 430.266 SUBPART Z Outlet# 20401401 43900 02

Contact Offical BOB DINAN Telephone# 201-589-6853

Monitoring Period					
2	1	92	2	29	92
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (if applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	130107	199,200
Total Flow-gal/day	130107	199,200

Method used FLOWMETER TOTAL ÷ 29 DAYS FOR AVERAGE

Parameter		Mass Limit or Concentration Average	Maximum	Units	No. of Samples	Sample type Comp./grab
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

PVSC Form MR-1 Rev. 4 6/87 P1

850930172

E121

Name NEWARK BOXBOARD Co.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E 430.266 SUBPART Z Outlet# 20401401 439000201

Contact Offical BOB DINAN Telephone# 201-589 6853 EXT-20

Monitoring Period					
1	1	92	1	31	92
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (if applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	150,839	248 500
Total Flow-gal/day	150,839	248 500

Method used FLOW METER TOTAL ÷ 31 DAYS FOR AVERAGE FLOW

Parameter		Mass Limit or Concentration			No. of Samples	Sample ty Comp./gr
		Average	Maximum	Units		
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

PVSC Form MR-1 Rev. 4 6/87 P1

850930173

E122

PRETREATMENT MONITORING REPORT

Name NEWARK BOX BOARD Co.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E / 430.266 SUBPART Z Outlet # 20401401 43900 020

Contact Offical JEFF PEEBLES Telephone # 201-589-6853

Monitoring Period					
12	1	94	12	31	94
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (if applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	173,068	294,800
Total Flow-gal/day	173,068	294,800

Method used FLOWMETER ÷ 31 DAYS FOR AVERAGE FLOW

DURING THIS MONITORING PERIOD, NO CHANGE HAS BEEN MADE TO THE PLOT PLAN SUBMITTED TO PVSC ON 1/20/95

Parameter		Mass Limit or Concentration Average	Maximum	Units	No. of Samples	Sample type Comp./grab
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

PVSC Form MR-1 Rev. 4 6/87 P1

850930174

E123

PRETREATMENT MONITORING REPORT

Name NEWARK BOXBOARD CO.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E / 430.266 SUBPART Z Outlet# 20401401 43900 020

Contact Offical JEFF PEEBLES Telephone# 201-589-6853

Monitoring Period					
11	1	94	11	30	94
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (if applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	134,290	226,700
Total Flow-gal/day	134,290	226,700

Method used FLOWMETER - 30 DAYS FOR AVERAGE FLOW

DURING THIS MONITORING PERIOD, NO CHANGE HAS BEEN MADE TO THE PLOT PLAN SUBMITTED TO PVSC ON 12/19/94

Parameter		Mass Limit or Concentration Average	Maximum	Units	No. of Samples	Sample type Comp./grab
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

DEC 1994

ENVIRONMENT

PVSC Form MR-1 Rev. 4 6/87 P1

850930175

E124

PRETREATMENT MONITORING REPORT

Name NEWARK BOXBOARD CO.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E / 430.266 SUBPART Z Outlet # 20401401 43900 0201

Contact Offical JEFF PEEBLES Telephone # 201-589-6853

Monitoring Period					
10	1	94	10	31	94
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (if applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	160,943	316,583
Total Flow-gal/day	160,943	316,583

Method used Flow meter ÷ 31 DAYS FOR AVERAGE FLOW (THIS MONTH USED LAST 6 MONTH AV C

During this monitoring period, no change has been made to the plot plan submitted to PVSC on 10/20/94.

Parameter		Mass Limit or Concentration Average	Maximum	Units	No. of Samples	Sample type Comp./grab
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

PVSC Form MR-1 Rev. 4 6/87 P1

850930176

E125

PRETREATMENT MONITORING REPORT

Name NEWARK BOX BOARD CO.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E / 430.266 SUBPART Z Outlet# 20401401 43900 020

Contact Offical JEFF PEEBLES Telephone# 201-589-6853

Monitoring Period					
9	1	94	9	30	94
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (If applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	187,835	299,700
Total Flow-gal/day	187,835	299,700

Method used FLOWMETER ÷ 30 DAYS FOR AVERAGE FLOW

DURING THIS MONITORING PERIOD, NO CHANGE HAS BEEN MADE TO THE PLOT PLAN SUBMITTED TO PVSC ON 10/20/94.

Parameter		Mass Limit or Concentration Average	Maximum	Units	No. of Samples	Sample type Comp./grab
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

PVSC Form MR-1 Rev. 4 6/87 P1

850930177

E126

PRETREATMENT MONITORING REPORT

Name NEWARK BOXBOARD Co.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E / 430.266 SUBPART Z Outlet # 20401401 43900 02

Contact Offical JEFF PEEBLES Telephone # 201-589-6853

Monitoring Period					
8	1	94	8	31	94
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	162,161	368,000
Total Flow-gal/day	162,161	368,000

Method used Flowmeter - 31 DAYS FOR AVERAGE FLOW

Production rate (if applicable)

During this monitoring period, no change has been made to the plot plan submitted to PVSC on 9/

Parameter		Mass Limit or Concentration Average	Maximum	Units	No. of Samples	Sample type Comp./grab
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

PVSC Form MR-1 Rev. 4 6/87 P1

850930178

E127

PRETREATMENT MONITORING REPORT

CORRECTED COPY

Name NEWARK BOXBOARD CO.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E / 430.266 SUBPART Z Outlet # 20401401 43900 0201

Contact Offical JEFF PEEBLES Telephone # 201-589-6853

Monitoring Period					
7	1	94	7	31	94
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (If applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	135,058	302,300
Total Flow-gal/day	135,058	302,300

Method used FLOWMETER ÷ 31 DAYS FOR AVERAGE FLOW

DURING THIS MONITORING PERIOD, NO CHANGE HAS BEEN MADE TO THE PLOT PLAN, SUBMITTED TO PVSC ON 10/20/94.

Parameter		Mass Limit or Concentration Average	Maximum	Units	No. of Samples	Sample type Comp./grab
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

PVSC Form MR-1 Rev. 4 6/87 P1

850930179

E128

PRETREATMENT MONITORING REPORT

Name NEWARK BOXBOARD CO.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E 430.266 SUBPART Z Outlet# 20401401 43900 020

Contact Offical JEFF PEEBLES Telephone# 201-589-6853

Monitoring Period					
7	1	94	8	1	94
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (If applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	135,058	302,300
Total Flow-gal/day	135,058	302,300

Method used FLOWMETER ÷ 31 DAYS FOR AVERAGE FLOW

DURING THIS MONITORING PERIOD, NO CHANGE HAS BEEN MADE TO THE PLOT PLAN SUBMITTED TO PVSC ON 7/20/94.

Parameter		Mass Limit or Concentration Average	Maximum	Units	No. of Samples	Sample type Comp./grab
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

AUG 1994 RECEIVED INDUSTRIAL DEPARTMENT

PVSC Form MR-1 Rev. 4 6/87 P1

850930180

E129

PRETREATMENT MONITORING REPORT

Name NEWARK BOXBOARD CO.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E / 430.266 SUBPART Z Outlet # 20401401 43900 020

Contact Offical JEFF PEEBLES Telephone # 201-589-6853

Monitoring Period					
6	1	94	6	30	94
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (If applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	186,560	328,300
Total Flow-gal/day	186,560	328,300

Method used FLOWMETER ÷ 30 DAYS FOR AVERAGE FLOW

Parameter		Mass Limit or Concentration Average	Maximum	Units	No. of Samples	Sample type Comp./grab
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

RECEIVED JUL 1994 ENVIRONMENTAL DEPARTMENT

PVSC Form MR-1 Rev. 4 6/87 P1

850930181

E130

PRETREATMENT MONITORING REPORT

Name NEWARK BOXBOARD Co.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E / 430.266 SUBPART Z Outlet # 20401401 43900 0201

Contact Offical _____ Telephone # 201-589-6853

Monitoring Period					
5	1	94	5	31	94
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (If applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	127,048	290,400
Total Flow-gal/day	127,048	290,400

Method used FLOWMETER ÷ 31 DAYS FOR AVERAGE FLOW

Parameter		Mass Limit or Concentration Average	Maximum	Units	No. of Samples	Sample type Comp./grab
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

PVSC Form MR-1 Rev. 4 6/87 P1

850930182

E131

REVISED COPY

PRETREATMENT MONITORING REPORT

Name NEWARK BOXBOARD CO.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E / 430.266 SUBPART Z Outlet # 20401401 43900 020

Contact Offical JEFF PEEBLES Telephone # 201-589-6853

Monitoring Period					
5	1	94	5	31	94
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (if applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	129,046	290,400
Total Flow-gal/day	189,046	290,400

Method used FLOWMETER – 31 DAYS FOR AVERAGE FLOW

Parameter		Mass Limit or Concentration Average	Maximum	Units	No. of Samples	Sample type Comp./grab
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

PVSC Form MR-1 Rev. 4 6/87 P1

850930183

E132

REVISED COPY

PRETREATMENT MONITORING REPORT

Name NEWARK BOX BOARD Co.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E / 430.266 SUBPART Z. Outlet# 20401401 43900 0201

Contact Offical JEFF PEEBLES Telephone# 201-589-6853

Monitoring Period					
4	1	94	4	30	94
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (if applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	164,993	307,100
Total Flow-gal/day	164,993	307,100

Method used FLOWMETER ÷ 30 DAYS FOR AVERAGE FLOW

Parameter		Mass Limit or Concentration Average	Maximum	Units	No. of Samples	Sample type Comp./grab
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

PVSC Form MR-1 Rev. 4 6/87 P1

850930184

E133

PRETREATMENT MONITORING REPORT

Name NEWARK BOXBOARD CO.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E / 430.266 SUBPART Z. Outlet# 20401401 43900 0201

Contact Offical _____ Telephone# 201-589-6853

Monitoring Period					
4	1	94	4	30	94
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (If applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	164,993	307,100
Total Flow-gal/day	164,993	307,100

Method used FLOWMETER ÷ 30 DAYS FOR AVERAGE FLOW

Parameter		Mass Limit or Concentration			No. of Samples	Sample type Comp./grab
		Average	Maximum	Units		
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

PVSC Form MR-1 Rev. 4 6/87 P1

850930185

E134

PRETREATMENT MONITORING REPORT

Name NEWARK BOXBOARD CO.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E 430.266 SUBPART Z. Outlet # 20401401 43900 0201

Contact Offical _____ Telephone # 201-589-6853

Monitoring Period					
3	1	94	3	31	94
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (if applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	166,474	303,400
Total Flow-gal/day	166,474	303,400

Method used FLOWMETER ÷ 31 DAYS FOR AVERAGE FLOW.

Parameter		Mass Limit or Concentration Average	Maximum	Units	No. of Samples	Sample type Comp./grab
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

RECEIVED INDUSTRIAL PRETREATMENT

PVSC Form MR-1 Rev. 4 6/87 P1

850930186

E135

MONITORING REPORT P.H.

Name NEWARK BOXBOARD CO.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E / 430.266 SUBPART Z. Outlet# 20401401 43900 0201

Contact Official _____ Telephone# 201-589-6853

Monitoring Period					
2	1	94	2	28	94
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (if applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	272,771	361,100
Total Flow-gal/day	272,771	361,100

Method used FLOWMETER ÷ 28 DAYS FOR AVERAGE FLOW

Parameter		Mass Limit or Concentration Average	Maximum	Units	No. of Samples	Sample type Comp./grab
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

PVSC Form MR-1 Rev. 4 6/87 P1

850930187

E136

PRETREATMENT MONITORING REPORT

PVSC '95 FE 20 P 3:02

Name NEWARK BOX BOARD Co.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E / 430.266 SUBPART Z Outlet # 20401401 43900 0201

Contact Offical JEFF PEEBLES Telephone # 201-589-6853

Monitoring Period					
1	1	95	1	31	95
Mo. Start	Day	Yr.	Mo. End	Day	Yr.

Production rate (If applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	170,274	242,400
Total Flow-gal/day	170,274	242,400

Method used FLOWMETER - 31 DAYS FOR AVERAGE FLOW

DURING THIS MONITORING PERIOD, NO CHANGE HAS BEEN MADE TO THE PLOT PLAN SUBMITTED TO PVSC ON 2/20/95

Parameter		Mass Limit or Concentration Average	Maximum	Units	No. of Samples	Sample type Comp./grab
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

PVSC Form MR-1 Rev. 4 6/87 P1

850930188

E137

PRETREATMENT MONITORING REPORT

Name NEWARK BOXBOARD CO.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E / 430.266 SUBPART Z Outlet # 20401401 43900 020

Contact Offical JEFF PEEBLES Telephone # 201-589-6853

Monitoring Period					
2	1	95	2	28	95
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (if applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	228,300	290,200
Total Flow-gal/day	228,300	290,200

Method used FLOWMETER ÷ 26 DAYS FOR AVERAGE FLOW

DURING THIS MONITORING PERIOD, NO CHANGE HAS BEEN MADE TO THE PLOT PLAN SUBMITTED TO PVSC ON 3/20/95

Parameter		Mass Limit or Concentration Average	Maximum	Units	No. of Samples	Sample type Comp./grab
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

MAR 1995 RECEIVED INDUSTRIAL DIVISION

PVSC Form MR-1 Rev. 4 6/87 P1

850930189

E138

PRETREATMENT MONITORING REPORT

Name NEWARK BOXBOARD Co.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E / 430.266 SUBPART Z Outlet# 20401401 43900 0201

Contact Offical JEFF PEEBLES Telephone# 201-589-6853

Monitoring Period					
3	1	95	3	31	95
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (if applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	201,442	344,700
Total Flow-gal/day	201,442	344,700

Method used FLOWMETER ÷ 31 DAYS FOR AVERAGE FLOW

DURING THIS MONITORING PERIOD, NO CHANGE HAS BEEN MADE TO THE PLOT PLAN SUBMITTED TO PVSC ON 3/15/95

Parameter		Mass Limit or Concentration Average	Maximum	Units	No. of Samples	Sample type Comp./grab
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

1995 RECEIVED INDUSTRIAL DEPARTMENT

PVSC Form MR-1 Rev. 4 6/87 P1

850930190

PRETREATMENT MONITORING REPORT

Name NEWARK BOX BOARD Co.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E 430.266 SUBPART Z Outlet# 20401401 43900 020

Contact Offical JEFF PEEBLES Telephone# 201-589-6853

Monitoring Period					
4	1	95	4	30	95
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (If applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	67,109	107,882
Total Flow-gal/day	67,109	107,882

Method used FLOWMETER ÷ 30 DAYS FOR AVERAGE FLOW

DURING THIS MONITORING PERIOD, NO CHANGE HAS BEEN MADE TO THE PLOT PLAN SUBMITTED TO PVSC ON 5/19/95

Parameter		Mass Limit or Concentration Average	Maximum	Units	No. of Samples	Sample type Comp./grab
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

RECEIVED MAY 1995 INDUSTRIAL DEPARTMENT

PVSC Form MR-1 Rev. 4 6/87 P1

850930191

F140

PRETREATMENT MONITORING REPORT

Name NEWARK BOXBOARD CO.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E 430.266 SUBPART Z Outlet# 20401401 43900 020

Contact Offical JEFF PEEBLES Telephone# 201-589-6853

Monitoring Period					
5	1	95	5	31	95
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (If applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	68,333	135,457
Total Flow-gal/day	68,333	135,457

Method used FLOWMETER ÷ 31 DAYS FOR AVERAGE FLOW.

DURING THIS MONITORING PERIOD, NO CHANGE HAS BEEN MADE TO THE PLOT PLAN

SUBMITTED TO PVSC ON 6/19/95

Parameter		Mass Limit or Concentration Average	Maximum	Units	No. of Samples	Sample type Comp./grab
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

JUN 1995 RECEIVED INDUSTRIAL DEPARTMENT

PVSC Form MR-1 Rev. 4 6/87 P1

850930192

E141

PRETREATMENT MONITORING REPORT

Name NEWARK BOXBOARD CO.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E / 430.266 SUBPART Z Outlet# 20401401 43900 020

Contact Offical JEFF PEEBLES Telephone# 201-589-6853

Monitoring Period					
6	1	95	6	30	95
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (If applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	73,503	91,380
Total Flow-gal/day	73,503	91,380

Method used FLOWMETER ÷ 30 DAYS FOR AVERAGE FLOW

DURING THIS MONITORING PERIOD, NO CHANGE HAS BEEN MADE TO THE PLOT PLAN SUBMITTED TO PVSC ON 7/20/95.

Parameter		Mass Limit or Concentration Average	Maximum	Units	No. of Samples	Sample type Comp./grab
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

PVSC Form MR-1 Rev. 4 6/87 P1

850930193

E142

FOR JULY 1995
EFFluent METER READING

		bath	bas	elect	cafe
16aug		911380	2296720	199410	2345280
	1	905220	2296720	111210	2287720
diff		6160	0	88200	57560
gal/day		131.0638	0	1876.596	1224.681
gal july		4062.979	0	58174.47	37965.11
aug reading		909283	2296720	169384.5	2325685

aug 17 5:30 pm	29935690	29935690
1	57000	29878690
2	57000	29821690
3	55000	29766690
4	77876	29688814
5	92921	29595893
6	20848	29575045
7	49678	29525367
8	25500	29499867
9	39463	29460404
10	33989	29426415
11	60331	29366084
12	50923	29315161
13	41249	29273912
14	41648	29232264
15	50214	29182050
16	62058	29119992

PRETREATMENT MONITORING REPORT

Name NEWARK BOXBOARD CO.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E / 430.266 SUBPART Z Outlet # 20401401 43900 020

Contact Offical JEFF PEEBLES Telephone # 201-589-6853

Monitoring Period					
7	1	95	7	31	95
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (if applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	59,521	162,300
Total Flow-gal/day	59,521	162,300

Method used FLOWMETER ÷ 31 DAYS FOR AVERAGE FLOW

DURING THIS MONITORING PERIOD, NO CHANGE HAS BEEN MADE TO THE PLOT PLAN SUBMITTED TO PVSC ON 8/17/95.

Parameter		Mass Limit or Concentration Average	Maximum	Units	No. of Samples	Sample type Comp./grab
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

PVSC Form MR-1 Rev. 4 6/87 P1

850930195

E144

PRETREATMENT MONITORING REPORT SEP 20 P 4:29

Name NEWARK BOX BOARD CO.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E 430.266 SUBPART Z Outlet# 20401401 43900 020

Contact Offical JEFF PEEBLES Telephone# 201-589-6853

Monitoring Period					
8	1	95	8	31	95
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (if applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	52,434	92,921
Total Flow-gal/day	52,434	92,921

Method used FLOWMETER ÷ 31 DAYS FOR AVERAGE FLOW

DURING THIS MONITORING PERIOD, NO CHANGE HAS BEEN MADE TO THE PLOT PLAN SUBMITTED TO PVSC ON 9/20/95.

Parameter		Mass Limit or Concentration Average	Maximum	Units	No. of Samples	Sample type Comp./grab
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

PVSC Form MR-1 Rev. 4 6/87 P1

PVSC SEP 20 P 4:29

850930196

E145

PRETREATMENT MONITORING REPORT

Name NEWARK BOXBOARD CO.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E / 430.266 SUBPART Z. Outlet # 20401401 43900 02

Contact Offical JEFF PEEBLES Telephone # 201-589-6853

Monitoring Period					
9	1	95	9	30	95
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (If applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	64,834	106,000
Total Flow-gal/day	64,834	106,000

Method used FLOWMETER ÷30 DAYS FOR AVERAGE FLOW

DURING THIS MONITORING PERIOD, NO CHANGE HAS BEEN MADE TO THE PLOT PLAN SUBMITTED TO PVSC ON 10/20/95.

Parameter		Mass Limit or Concentration Average	Maximum	Units	No. of Samples	Sample type Comp./grab
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

PVSC Form MR-1 Rev. 4 6/87 P1

850930197

E146

PRETREATMENT MONITORING REPORT

Name NEWARK BOXBOARD CO.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E / 430.266 SUBPART Z Outlet# 20401401 43900 02C

Contact Official JEFF PEEBLES Telephone# 201-589-6853

Monitoring Period					
10	1	95	10	31	95
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (if applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	92,377	153,680
Total Flow-gal/day	92,377	153,680

Method used FLOWMETER ÷ 31 DAYS FOR AVERAGE FLOW

DURING THIS MONITORING PERIOD, NO CHANGE HAS BEEN MADE TO THE PLOT PLAN SUBMITTED TO PVSC ON 11/20/95.

Parameter		Mass Limit or Concentration Average	Maximum	Units	No. of Samples	Sample type Comp./grab
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

PVSC Form MR-1 Rev. 4 6/87 P1

850930198

E147

PRETREATMENT MONITORING REPORT

Name NEWARK BOXBOARD CO.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E / 430.266 SUBPART Z. Outlet # 20401401 43900 02

Contact Offical JEFF PEEBLES Telephone # 201-589-6853

Monitoring Period					
11	1	95	11	30	95
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (If applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	57,589	156,249
Total Flow-gal/day	57,589	156,249

Method used FLOWMETER ÷ 30 DAYS FOR AVERAGE FLOW.

DURING THIS MONITORING PERIOD, NO CHANGE HAS BEEN MADE TO THE PLOT PLAN SUBMITTED TO PVSC ON 12/19/95.

Parameter		Mass Limit or Concentration			No. of Samples	Sample type Comp./grab
		Average	Maximum	Units		
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

PVSC Form MR-1 Rev. 4 6/87 P1

850930199

E148

PRETREATMENT MONITORING REPORT

Name NEWARK BOX BOARD Co.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E / 430.266 SUBPART Z. Outlet # 20401401 43900 02

Contact Offical JEFF PEEBLES Telephone # 201-589-6853

Monitoring Period					
12	1	95	12	31	95
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (If applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	78,318	120,007
Total Flow-gal/day	78,318	120,007

Method used FLOWMETER ÷ 31 DAYS FOR AVERAGE FLOW

DURING THIS MONITORING PERIOD, NO CHANGE HAS BEEN MADE TO THE PLOT PLAN SUBMITTED TO PVSC ON 1/12/96

Parameter		Mass Limit or Concentration Average	Maximum	Units	No. of Samples	Sample type Comp./grab
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

PVSC Form MR-1 Rev. 4 6/87 P1

850930200

E149

USER CHARGE SELF MONITORING REPORT

NAME NEWARK BOXBOARD Co.

ADDRESS 17 BLANCHARD ST. NEWARK, NJ 07105

FACILITY LOCATION 17 BLANCHARD ST.

OUTLET DESIGNATION (17 DIGITS) 20401400 - 43900 - 0201

MONITORING PERIOD					
11	1	91	11	30	91
MO.	DAY	YR	MO.	DAY	YR
START			END		

VOL DISCHARGED THIS PERIOD
4,127,400 GALS
CU. FT. X 7.48 = GALLONS
1270159
EFFLUENT METER READING LAST DAY THIS PERIOD

DATE	BOD 0310	TSS 0530		DATE	BOD 0310	TSS 0530	
11-7	1370	1350					
11-21	1410	1840					

SIGNATURE OF PRINCIPAL OR AUTHORIZED AGENT	TYPE NAME AND TITLE	TELEPHONE
Robert E Dinan	ROBERT E. DINAN	201 589 6853
	PLANT SUP'T.	EXT. 203
		DATE 12-18-91

PVSC FORM MR-2 REV.2. 1/86

850930201

E150

INDIVIDUAL DISCHARGE MONITORING REPORT

NAME: NEWARK BOXBOARD Co.

ADDRESS: 17 BLANCHARD ST.

FACILITY LOCATION: NEWARK, N.J. 07105

OUTLET DESGINATION (17 DIGITS)	MONITORING PERIOD START: MON.	DAY	YR.	MONITORING PERIOD END: MON.	DAY	YR.	(CU. FT. X 7.48 = GALS.) VOL. DISCHARGED THIS PERIOD
— —	1	1	82	3	31	82	1,543,304 CU. FT. 11,543,913 GAL.

DATE		1/21/82	1/22/82	1/26/82	1/27/82	2/3/82	2/10/82	2/18/82	2/25/82	3/4/82	3/11/82	3/18/82	3/25/82					
BOD (mg/L)	0310	560	1365	597	697	1641	1728	780	2162	2438	1226	1239	1679					
TSS (mg/L)	0530	728	1544	1476	992	2540	2595	2088	1680	1320	944	1810	2025					
		ALL FIGURES ABOVE ARE TEST RESULTS AS REPORTED BY NEW YORK TESTING																
		LABORATORIES OBTAINED FROM 24 HR COMPOSITE SAMPLES SUBMITTED WEEKLY.																
		COPIES OF REPORTS OF TESTS ARE ATTACHED.																

DATE		1/27/82	2/3/82	2/16/82	3/23/82	3/3/82	3/23/82											
BOD (mg/L)	0310	548	713	900	780	NO DISCH.	990											
TSS (mg/L)	0530	904	1900	2430	970	1240	916											
		TEST RESULTS ABOVE AS REPORTED TO US BY P.V.S.C.																

850930202

E151

SIGNATURE OF PRINCIPAL	ROBERT DINAN ASST. SUPT.	589 6853	4/12/82

E: NEWARK BOXBOARD CO.

RESS: 17 BLANCHARD ST.

ILITY LOCATION: NEWARK NJ 07105

OUTLET DESGINATION (17 DIGITS)	MONITORING PERIOD START (MON. / DAY / YR.)	MONITORING PERIOD END (MON. / DAY / YR.)	(CU. FT. X 7.48 = GALS.)
— —	10 / 1 / 81	12 / 31 / 81	* 1,273,601 CU. FT. VOL. DISCHARGED THIS PERIOD

								11/12				12/10		12/14					
mg/l)	0310							780				787							
mg/l)	0530							812				590		1472					

mg/l)	0310																		
mg/l)	0530																		

850930203

E152

CIPAL

Bob Dinan, Asst. Supt. | 589 6853 | 2/19/82

E: NEWARK BOXBOARD CO.

RESS: 17 BLANCHARD ST.

ILITY LOCATION: NEWARK NJ 07105

OUTLET DESGINATION (17 DIGITS)	MONITORING PERIOD START (MON. / DAY / YR.)	MONITORING PERIOD END (MON. / DAY / YR.)	(CU. FT. X 7.48 = GALS.)
— —	10 / 1 / 81	12 / 31 / 81	* 1,273,601 CU. FT.
			VOL. DISCHARGED THIS PERIOD

								11/12				12/10		12/14						
mg/l)	0310							780				787								
mg/l)	0530							812				590		1472						
mg/l)	0310																			
mg/l)	0530																			

850930204

E153

CIPAL

Bob Dinan, Asst. Supt. | 589 6853 | 2/19/82

USER CHARGE SELF MONITORING REPORT

NAME NEWARK BOXBOARD Co.

ADDRESS 17 BLANCHARD ST. NEWARK, NJ 07105

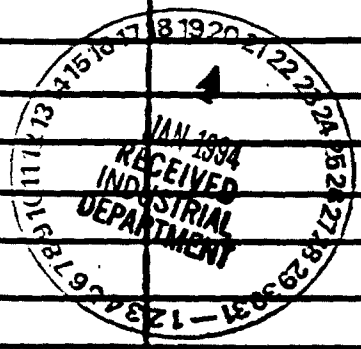
FACILITY LOCATION 17 BLANCHARD ST.

OUTLET DESIGNATION (17 DIGITS) 20401401 43900 0201

MONITORING PERIOD					
12	1	93	12	31	93
MO.	DAY	YR	MO.	DAY	YR
START			END		

VOL DISCHARGED THIS PERIOD
8,251,100 GALS
CU. FT. X 7.48 = GALLONS
2,195,436
EFFLUENT METER READING LAST DAY THIS PERIOD

DATE	BOD 0310	TSS 0530		DATE	BOD 0310	TSS 0530	
12/2/93	614	238C					
12/16/93	247	433					



SIGNATURE OF PRINCIPAL OR AUTHORIZED AGENT	TYPE NAME AND TITLE	TELEPHONE NO
[signature]	Edward McHale	201-589-6853
	General Manager + VP	
		DATE 1/19/94

PVSC FORM MR-1 REV. 2 1/86

850930205

E154

USER CHARGE SELF MONITORING REPORT

NAME NEWARK BOXBOARD Co.

ADDRESS 17 BLANCHARD ST. NEWARK, NJ 07105

FACILITY LOCATION 17 BLANCHARD ST.

OUTLET DESIGNATION (17 DIGITS) 20401401 43900 0201

MONITORING PERIOD					
11	1	93	11	30	93
MO.	DAY	YR	MO.	DAY	YR
START			END		

VOL DISCHARGED THIS PERIOD
5,412,500 GALS
CU. FT. X 7.48 = GALLONS
2,112,925
EFFLUENT METER READING LAST DAY THIS PERIOD

DATE	BOD 0310	TSS 0530		DATE	BOD 0310	TSS 0530	
11/4/93	2720	5900					
11/18/93	994	9690					

RECEIVED INDUSTRIAL DEPARTMENT

SIGNATURE OF PRINCIPAL OR AUTHORIZED AGENT	TYPE NAME AND TITLE	TELEPHONE NO
Edward M. Melton	Edward M. Melton	201-5896853
	VP + General Manager	
		DATE 12/20/93

PVSC FORM MR-1 REV. 2 1/86

850930206

E155

USER CHARGE SELF MONITORING REPORT

FM
11-20-93

NAME NEWARK BOXBOARD Co.

ADDRESS 17 BLANCHARD ST. NEWARK, NJ 07105

FACILITY LOCATION 17 BLANCHARD ST.

OUTLET DESIGNATION (17 DIGITS) 20401401 43900 0201

MONITORING PERIOD					
10	1	93	10	31	93
MO.	DAY	YR	MO.	DAY	YR
START			END		

VOL DISCHARGED THIS PERIOD
5,452,600 GALS
CU. FT. X 7.48 = GALLONS
2058800
EFFLUENT METER READING LAST DAY THIS PERIOD

DATE	BOD 0310	TSS 0530		DATE	BOD 0310	TSS 0530	
10/14/93	1310	520					
10/21/93	792	3100					

SIGNATURE OF PRINCIPAL OR AUTHORIZED AGENT	TYPE NAME AND TITLE	TELEPHONE NO
Edward M Melton	Edward M Melton	
	General Manager	201-5896853
		DATE
		11/19/93

PVSC FORM MR-2 REV. 2 1/86

850930207

E156

USER CHARGE SELF MONITORING REPORT

NAME NEWARK BOXBOARD Co.

ADDRESS 17 BLANCHARD ST. NEWARK, NJ 07105

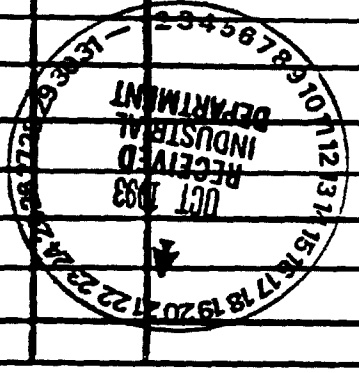
FACILITY LOCATION 17 BLANCHARD ST.

OUTLET DESIGNATION (17 DIGITS) 20401401 43900 0201

MONITORING PERIOD					
9	1	93	9	30	93
MO.	DAY	YR	MO.	DAY	YR
START			END		

VOL DISCHARGED THIS PERIOD
5,535,700 GALS
CU. FT. X 7.48 = GALLONS
2,113,795
EFFLUENT METER READING LAST DAY THIS PERIOD

DATE	BOD 0310	TSS 0530		DATE	BOD 0310	TSS 0530	
9/2	8.3	27					
9/30	1390	3800					



SIGNATURE OF PRINCIPAL OR AUTHORIZED AGENT	TYPE NAME AND TITLE	TELEPHONE NO
E. L. Melton	Edward Melton	201.589.6853
	General Manager	EXT 12
		DATE 10/21/93

PVSC FORM MR-1 REV.2. 1/86

850930208

E157

USER CHARGE SELF MONITORING REPORT

NAME NEWARK BOX BOARD Co.

ADDRESS 17 BLANCHARD ST. NEWARK, NJ 07105

FACILITY LOCATION 17 BLANCHARD ST.

OUTLET DESIGNATION (17 DIGITS) 20401401 43900 0201

MONITORING PERIOD					
8	1	93	8	31	93
MO.	DAY	YR	MO.	DAY	YR
START			END		

VOL DISCHARGED THIS PERIOD
1,758,200 GALS
CU. FT. X 7.48 = GALLONS
2058138
EFFLUENT METER READING LAST DAY THIS PERIOD

DATE	BOD 0310	TSS 0530		DATE	BOD 0310	TSS 0530	
8/5/93	502	345					
8/19/93	418	330					

SIGNATURE OF PRINCIPAL OR AUTHORIZED AGENT	TYPE NAME AND TITLE	TELEPHONE NO
[signature]	Edward Melton	201-589-6853
	General Manager	EXT 12
		DATE 9/20/93

PVSC FORM MR-2 REV. 2. 1/86

850930209

E158

USER CHARGE SELF MONITORING REPORT

NAME NEWARK BOXBOARD Co.

ADDRESS 17 BLANCHARD ST. NEWARK, NJ 07105

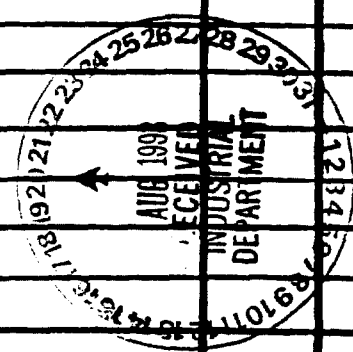
FACILITY LOCATION 17 BLANCHARD ST.

OUTLET DESIGNATION (17 DIGITS) 20401407 43900 0201

MONITORING PERIOD					
7	1	93	7	31	93
MO.	DAY	YR	MO.	DAY	YR
START			END		

VOL DISCHARGED THIS PERIOD
5,108,000 GALS
CU. FT. X 7.48 = GALLONS
2010856
EFFLUENT METER READING LAST DAY THIS PERIOD

DATE	BOD 0310	TSS 0530		DATE	BOD 0310	TSS 0530	
7/2/93	50	60					
7/15/93	1086	150					



SIGNATURE OF PRINCIPAL OR AUTHORIZED AGENT	TYPE NAME AND TITLE	TELEPHONE NO
	Edward Melton	201-5896853
	General Manager	EXT. 12
		DATE 8/21/93

PVSC FORM MR-2 REV. 2. 1/88

850930210

F159

USER CHARGE SELF MONITORING REPORT

CORRECTED COPY

NAME NEWARK BOXBOARD Co.

ADDRESS 17 BLANCHARD ST. NEWARK, NJ 07105

FACILITY LOCATION 17 BLANCHARD ST.

OUTLET DESIGNATION (17 DIGITS) 20401401 43900 0201

MONITORING PERIOD					
6	1	93	6	31	93
MO.	DAY	YR	MO.	DAY	YR
START			END		

VOL DISCHARGED THIS PERIOD
3,716,900 GALS
CU. FT. X 7.48 = GALLONS
1959776
EFFLUENT METER READING LAST DAY THIS PERIOD

DATE	BOD 0310	TSS 0530		DATE	BOD 0310	TSS 0530	
6/3/93	1406	506					
6/17/93	1490	490					

SIGNATURE OF PRINCIPAL OR AUTHORIZED AGENT	TYPE NAME AND TITLE	TELEPHONE NO
	Edward Melton	201-5896853
	General Manager	EXT 12
		DATE 8/23/92

PVSC FORM MR-1 REV. 2. 1/86

850930211

E160

USER CHARGE SELF MONITORING REPORT

NAME NEWARK BOXBOARD Co.

ADDRESS 17 BLANCHARD ST. NEWARK, NJ 07105

FACILITY LOCATION 17 BLANCHARD ST.

OUTLET DESIGNATION (17 DIGITS) 20401401 43900 0201

MONITORING PERIOD					
5	1	93	5	31	93
MO.	DAY	YR	MO.	DAY	YR
START			END		

VOL DISCHARGED THIS PERIOD
2,689,100 GALS
CU. FT. X 7.48 = GALLONS
1922607
EFFLUENT METER READING LAST DAY THIS PERIOD

DATE	BOD 0310	TSS 0530		DATE	BOD 0310	TSS 0530	
5/5/93	990	4070					
5/19/93	2783	5530					

JUN 1993
Received
Industrial Dept

SIGNATURE OF PRINCIPAL OR AUTHORIZED AGENT	TYPE NAME AND TITLE	TELEPHONE NO
Robert E. Dinan	ROBERT E. DINAN	201-5896853
	PLANT SUPERINTENDENT	EXT. 203
		DATE 6/18/93

PVSC FORM MR-2 REV. 2. 1/88

850930212

FILE

USER CHARGE SELF MONITORING REPORT

NAME NEWARK BOXBOARD Co.

ADDRESS 17 BLANCHARD ST. NEWARK, NJ 07105

FACILITY LOCATION 17 BLANCHARD ST.

OUTLET DESIGNATION (17 DIGITS) 20401401 43900 0201

MONITORING PERIOD					
4	1	93	4	30	93
MO.	DAY	YR	MO.	DAY	YR
START			END		

VOL DISCHARGED THIS PERIOD
3,024,800 GALS
CU. FT. X 7.48 = GALLONS
1895716
EFFLUENT METER READING LAST DAY THIS PERIOD

DATE	BOD 0310	TSS 0530		DATE	BOD 0310	TSS 0530	
4/1/93	1690	3780					
4/30/93	1340	2150					

SIGNATURE OF PRINCIPAL OR AUTHORIZED AGENT	TYPE NAME AND TITLE	TELEPHONE NO
Robert E. Dinan	ROBERT E. DINAN	201-5896853
	PLANT SUPERINTENDENT	EXT-203
		DATE 5/17/93

PVSC FORM MR-2 REV. 2. 1/86

850930213

F162

USER CHARGE SELF MONITORING REPORT

NAME NEWARK BOXBOARD Co.

ADDRESS 17 BLANCHARD ST. NEWARK, NJ 07105

FACILITY LOCATION 17 BLANCHARD ST.

OUTLET DESIGNATION (17 DIGITS) 20401401 43900 0201

MONITORING PERIOD					
3	1	93	3	31	93
MO.	DAY	YR	MO.	DAY	YR
START			END		

VOL DISCHARGED THIS PERIOD
4,073,700 GALS
CU. FT. X 7.48 = GALLONS
1865 468
EFFLUENT METER READING LAST DAY THIS PERIOD

DATE	BOD 0310	TSS 0530		DATE	BOD 0310	TSS 0530	
3/3/93	500	640					
3/17/93	760	3980					

APR 1993 Received Receptionist 3:40

SIGNATURE OF PRINCIPAL OR AUTHORIZED AGENT	TYPE NAME AND TITLE	TELEPHONE NO
[signature]	ROBERT E. DINAN	201-5896853
	PLANT SUPERINTENDENT	EXT. 203
		DATE 4/19/93

PVSC FORM MR-2 REV.2. 1/86

850930214

E163

NAME NEWARK BOXBOARD CO

ADDRESS 17 BLANCHARD ST NEWARK NJ 07105

FACILITY LOCATION 17 BLANCHARD ST

OUTLET DESIGNATION (17 DIGITS) 20701400439000201

MONITORING PERIOD					
10	1	90	12	31	90
MO.	DAY	YR	MO.	DAY	YR
START				END	

VOL DISCHARGED THIS PERIOD
22442900 GALS
CU. FT. X 7.48 = GALLONS
70702
EFFLUENT METER READING LAST DAY THIS PERIOD

DATE	BOD 0310	TSS 0530			DATE	BOD 0310	TSS 0530	
10/4	1420	620						
10/18	650	1080						
11/1	820	580						
11/15	370	540						
12/6	550	730						
12/20	980	950						

SIGNATURE OF PRINICPAL OR AUTHORIZED AGENT	TYPE NAME AND TITLE	TELEPHONE NO
[signature]	Robert E Dugan Mill Supt	201-589-68

PVSC FORM MR-2 REV.2. 1/86

850930215

DATE 1-14-91

E164

USER CHARGE SELF MONITORING REPORT

NAME NEWARK BOXBOARD

ADDRESS 17 BLANCHARD ST NEWARK NJ 07105

FACILITY LOCATION 17 BLANCHARD ST

OUTLET DESIGNATION (17 DIGITS) 20401400439000201

MONITORING PERIOD					
7	1	90	9	30	90
MO.	DAY	YR	MO.	DAY	YR
START			END		

VOL DISCHARGED THIS PERIOD
20120900 GALS
CU. FT. X 7.48 = GALLONS
483273
EFFLUENT METER READING LAST DAY THIS PERIOD

DATE	BOD 0310	TSS 0530			DATE	BOD 0310	TSS 0530		
7/5	1010	880							
7/19	1540	1040							
8/2	1710	1060							
8/16	620	53							
9/6	1770	1200							
9/19	590	460							

SIGNATURE OF PRINICPAL OR AUTHORIZED AGENT	TYPE NAME AND TITLE	TELEPHONE NO.
[signature]	ROBERT E DINAN MILL SUPT	201-589-68 (EXT 2
		DATE 10-15-90

PVSC FORM MR-2 REV.2. 1/86

850930216

FIG 5

USER CHARGE SELF MONITORING REPORT

NAME NEWARK BOXBOARD

ADDRESS 17 BLANCHARD ST NEWARK NJ 07105

FACILITY LOCATION 17 BLANCHARD ST

OUTLET DESIGNATION (17 DIGITS) 20401400439000201

MONITORING PERIOD					
7	1	90	9	30	90
MO.	DAY	YR	MO.	DAY	YR
START			END		

VOL DISCHARGED THIS PERIOD
20120900 GALS
CU. FT. X 7.48 = GALLONS
483273
EFFLUENT METER READING LAST DAY THIS PERIOD

DATE	BOD 0310	TSS 0530			DATE	BOD 0310	TSS 0530		
7/5	1010	880							
7/19	1540	1040							
8/2	1210	1060							
8/16	620	53							
9/6	1270	1200							
9/19	590	460							

SIGNATURE OF PRINICPAL OR AUTHORIZED AGENT	TYPE NAME AND TITLE	TELEPHONE NO.
Robt E Dinan	ROBERT E DINAN Mill Supt	201-589-68 (EXT 2

PVSC FORM MR-2 REV.2. 1/86

850930217

DATE 10-15-90

E166

USER CHARGE SELF MONITORING REPORT

NAME NEWARK BOXBARD CO.

ADDRESS 17 BLANCHARD ST NEWARK, NJ 07105

FACILITY LOCATION 17 BLANCHARD ST

OUTLET DESIGNATION (17 DIGITS) 20401400439000201

MONITORING PERIOD					
4	1	90	6	30	90
MO.	DAY	YR	MO.	DAY	YR
START			END		

VOL DISCHARGED THIS PERIOD
21312700 GALS
CU. FT. X 7.48 = GALLONS
282064
EFFLUENT METER READING LAST DAY THIS PERIOD

DATE	BOD 0310	TSS 0530			DATE	BOD 0310	TSS 0530		
4/5	1130	1720							
4/19	730	360							
5/3	940	730							
5/17	770	440							
6/7	890	130							
6/21	730	28							

SIGNATURE OF PRINICPAL OR AUTHORIZED AGENT	TYPE NAME AND TITLE	TELEPHONE NO.
[signature]	ROBERT E DINAN MILL SUP'T.	201-589-685
		DATE 7-24-90

PVSC FORM MR-2 REV.2. 1/86

850930218

E167

NAME NEWARK BOXBOARD CO.

ADDRESS 60 LOCKWOOD ST NEWARK NJ 07105

FACILITY LOCATION 60 LOCKWOOD ST

OUTLET DESIGNATION (17 DIGITS) 20401400239000201

MONITORING PERIOD					
1	1	90	3	31	90
MO.	DAY	YR	MO.	DAY	YR
START			END		

VOL DISCHARGED THIS PERIOD
18642500 GALS
CU. FT. X 7.48 = GALLONS
68937 *
EFFLUENT METER READING LAST DAY THIS PERIOD

DATE	BOD 0310	TSS 0530			DATE	BOD 0310	TSS 0530		
1-4	940	1310							
1-18	1480	330							
2-6	710	720							
2-13	540	790							
3-1	930	970							
3-15	380	280							

SIGNATURE OF PRINICPAL OR AUTHORIZED AGENT	TYPE NAME AND TITLE	TELEPHONE NO.
Robert E Dinan	ROBERT E. DINAN MILL SUPT.	5896853 X-3
		DATE 4-16-90

PVSC FORM MR-2 REV.2. 1/86

* SEE ATTACHED LETER

850930219 E168

USER CHARGE SELF MONITORING REPORT

NAME NEWARK BOX BOARD CO

ADDRESS 17 BLANCHARD ST. NEWARK N.J. 07105

FACILITY LOCATION 17 BLANCHARD ST

OUTLET DESIGNATION (17 DIGITS) 20401400 439000201

MONITORING PERIOD					
10	1	89	12	31	89
MO.	DAY	YR	MO.	DAY	YR
START				END	

VOL DISCHARGED THIS PERIOD
18,311,200 GALS
CU. FT. X 7.48 = GALLONS
273003900
EFFLUENT METER READING LAST DAY THIS PERIOD

DATE	BOD 0310	TSS 0530			DATE	BOD 0310	TSS 0530		
10/5	900	1760							
10/19	1390	2075							
11/2	1310	1870							
11/16	1062	1220							
12/7	900	920							
12/20	420	660							

SIGNATURE OF PRINICPAL OR AUTHORIZED AGENT	TYPE NAME AND TITLE	TELEPHONE NO.
Harold W. De Groot		

PVSC FORM MR-2 REV.2. 1/86

850930220

DATE 1/9/90

E169

USER CHARGE SELF MONITORING REPORT

NAME NEWARK BOXBOARD Co

ADDRESS 17 BLANCHARD ST. NEWARK N.J. 07105

FACILITY LOCATION 17 BLANCHARD ST

OUTLET DESIGNATION (17 DIGITS) 20401400 439000201

MONITORING PERIOD					
7	1	89	9	30	89
MO.	DAY	YR	MO.	DAY	YR
START			END		

VOL DISCHARGED THIS PERIOD
12,703,200 GALS
CU. FT. X 7.48 = GALLONS
254,692,700
EFFLUENT METER READING LAST DAY THIS PERIOD

DATE	BOD 0310	TSS 0530			DATE	BOD 0310	TSS 0530		
7/13	1060	3830							
7/20	1220	4090							
8/3	936	1590							
8/17	806	340							
9/7	930	580							
9/21	1270	3170							

SIGNATURE OF PRINICPAL OR AUTHORIZED AGENT	TYPE NAME AND TITLE	TELEPHONE NO.
Harold W. DeGroat	HAROLD DEGROAT	589-6854
	V.P. & GNRL MGR	9/10/89
		DATE

PVSC FORM MR-2 REV.2. 1/86

850930221

E170

USER CHARGE SELF MONITORING REPORT

NAME Newark Boxboard Co.

ADDRESS 17 Blanchard st. Newark NJ 07105

FACILITY LOCATION 17 Blanchard st.

OUTLET DESIGNATION (17 DIGITS) 20401400 439000201

MONITORING PERIOD					
4	1	89	6	30	89
MO.	DAY	YR	MO.	DAY	YR
START			END		

VOL DISCHARGED THIS PERIOD
19,131,200 GALS
CU. FT. X 7.48 = GALLONS
241989500
EFFLUENT METER READING LAST DAY THIS PERIOD

DATE	BOD 0310	TSS 0530			DATE	BOD 0310	TSS 0530		
4/6	2745	1750							
4/20	620	960							
5/4	880	1110							
5/16	950	1650							
6/1	740	920							
6/15	920	1220							

SIGNATURE OF PRINICPAL OR AUTHORIZED AGENT	TYPE NAME AND TITLE	TELEPHONE NO.
Paul England	Paul England Plant Manager	589-6853
		DATE July 14 89

PVSC FORM MR-2 REV.2. 1/86

850930222

E171

USER CHARGE SELF MONITORING REPORT

NAME NEWARK BOXBOARD CO.

ADDRESS 17 Blanchard st Newark NJ 07105

FACILITY LOCATION 17 Blanchard st.

OUTLET DESIGNATION (17 DIGITS) 20401400 439000201

MONITORING PERIOD					
1	1	89	3	31	89
MO.	DAY	YR	MO.	DAY	YR
START				END	

VOL DISCHARGED THIS PERIOD
17,223,700 GALS
CU. FT. X 7.48 = GALLONS
228858300
EFFLUENT METER READING LAST DAY THIS PERIOD

DATE	BOD 0310	TSS 0530			DATE	BOD 0310	TSS 0530		
1/5	660	3600							
1/19	670	1380							
2/2	340	990							
2/16	820	1070							
3/2	1210	1927							
3/16	530	300							

SIGNATURE OF PRINICPAL OR AUTHORIZED AGENT	TYPE NAME AND TITLE	TELEPHONE NO.
Paul England	Paul England Plant Manager	589-6853
		DATE April 2, 89

PVSC FORM MR-2 REV.2. 1/86

850930223

E172

USER CHARGE SELF MONITORING REPORT

NAME NEWARK BOXBOARD Co.

ADDRESS 17 BLANCHARD ST. NEWARK, NJ 07105

FACILITY LOCATION 17 BLANCHARD ST.

OUTLET DESIGNATION (17 DIGITS) 20401401 43900 0201

MONITORING PERIOD					
1	1	92	1	31	92
MO.	DAY	YR	MO.	DAY	YR
START			END		

VOL DISCHARGED THIS PERIOD
4,676,000 GALS
CU. FT. X 7.48 = GALLONS
1361925
EFFLUENT METER READING LAST DAY THIS PERIOD

DATE	BOD 0310	TSS 0530		DATE	BOD 0310	TSS 0530	
1-16	1190	2000					
1-2	820	2830					

SIGNATURE OF PRINCIPAL OR AUTHORIZED AGENT	TYPE NAME AND TITLE	TELEPHON
Robt E Dinan	ROBERT E. DINAN	201-589685
	PLANT SUPERINTENDENT	EXT-203
		DATE Feb 9, 19

PVSC FORM MR-2 REV.2. 1/86

850930224

E173

USER CHARGE SELF MONITORING REPORT

NAME NEWARK BOXBOARD Co.

ADDRESS 17 BLANCHARD ST. NEWARK, N.J. 07105

FACILITY LOCATION 17 BLANCHARD ST.

OUTLET DESIGNATION (17 DIGITS) 20401402 43900 0201

MONITORING PERIOD					
1	1	92	1	31	92
MO.	DAY	YR	MO.	DAY	YR
START			END		

VOL DISCHARGED THIS PERIOD
98,430 GALS
CU. FT. X 7.48 = GALLONS
SEE ATTACHED SHEET
EFFLUENT METER READING LAST DAY THIS PERIOD

3175.16 Per day?

DATE	BOD 0310	TSS 0530		DATE	BOD 0310	TSS 0530	

SIGNATURE OF PRINCIPAL OR AUTHORIZED AGENT	TYPE NAME AND TITLE	TELEPHONE
Robert E Dinan	ROBERT E. DINAN	201-589-6
	PLANT SUPERINTENDENT	EXT-203
		DATE Feb 9, 19

PVSC FORM MR-2 REV.2. 1/86

850930225

E174

Name NEWARK BOXBOARD Co.

Mailing Address 17 BLANCHARD ST. NEWARK, NJ 07105

Facility Location 17 BLANCHARD ST.

Category & Subpart 430.56 SUBPART E / 430.266 SUBPART Z Outlet# 204014014390000201

Contact Offical BOB DINAN Telephone# 201-589 6853 EXT-20

Monitoring Period					
1	1	92	1	31	92
Mo.	Day	Yr.	Mo.	Day	Yr.
Start			End		

Production rate (if applicable)

For Reporting Period

	AVG	MAX
Regulated flow-gal/day	150,839	248 500
Total Flow-gal/day	150,839	248,500

Method used FLOW METER TOTAL ÷ 31 DAYS FOR AVERAGE FLOW

Parameter		Mass Limit or Concentration			No. of Samples	Sample ty Comp./gra
		Average	Maximum	Units		
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					
	Sample measurement					
	Permit requirement					

PVSC Form MR-1 Rev. 4 6/87 P1

850930226

E175

USER CHARGE SELF MONITORING REPORT

NAME NEWARK BOXBOARD Co.

ADDRESS 17 BLANCHARD ST. NEWARK, NJ 07105

FACILITY LOCATION 17 BLANCHARD ST.

OUTLET DESIGNATION (17 DIGITS) 20401401 43900 0201

MONITORING PERIOD					
2	1	93	2	28	93
MO.	DAY	YR	MO.	DAY	YR
START			END		

VOL DISCHARGED THIS PERIOD
4,080,300 GALS
CU. FT. X 7.48 = GALLONS
1824731
EFFLUENT METER READING LAST DAY THIS PERIOD

DATE	BOD 0310	TSS 0530		DATE	BOD 0310	TSS 0530	
2/3/93	950	1070					
2/17/93	660	3890					

Received MAR 1993 PVSC Industrial Dept

SIGNATURE OF PRINCIPAL OR AUTHORIZED AGENT	TYPE NAME AND TITLE	TELEPHONE NO
Robert E. Dinan	ROBERT E. DINAN	201-5896853
	PLANT SUPERINTENDENT	EXT. 203
		DATE 3/18/93

PVSC FORM MR-2 REV. 2. 1/86

850930227

E176

USER CHARGE SELF MONITORING REPORT

NAME NEWARK BOXBOARD Co.

ADDRESS 17 BLANCHARD ST. NEWARK, NJ 07105

FACILITY LOCATION 17 BLANCHARD ST.

OUTLET DESIGNATION (17 DIGITS) 20401401 43900 0201

MONITORING PERIOD					
1	1	93	1	31	93
MO.	DAY	YR	MO.	DAY	YR
START			END		

VOL DISCHARGED THIS PERIOD
3 796,700 GALS
CU. FT. X 7.48 = GALLONS
1783928
EFFLUENT METER READING LAST DAY THIS PERIOD

DATE	BOD 0310	TSS 0530		DATE	BOD 0310	TSS 0530	
1/7/93	890	5480					
1/21/93	1190	3180					

Received FEB 1993 Industrial Dept PVSC

SIGNATURE OF PRINCIPAL OR AUTHORIZED AGENT	TYPE NAME AND TITLE	TELEPHONE NO
	Edward Melton	201-5896853
	General Manager	EXT 12 !
		DATE 2/9/93

PVSC FORM MR-1 REV.2. 1/86

850930228

E177

USER CHARGE SELF MONITORING REPORT

NAME NEWARK BOXBOARD Co.

ADDRESS 17 BLANCHARD ST. NEWARK, NJ 07105

FACILITY LOCATION 17 BLANCHARD ST.

OUTLET DESIGNATION (11 DIGITS) 20401401 43900 0201

MONITORING PERIOD					
12	1	92	12	31	92
MO.	DAY	YR	MO.	DAY	YR
START			END		

VOL DISCHARGED THIS PERIOD
3,958,100 GALS
CU. FT. X 7.48 = GALLONS
1745961
EFFLUENT METER READING LAST DAY THIS PERIOD

DATE	BOD 0310	TSS 0530		DATE	BOD 0310	TSS 0530	
12/3/92	1380	3350					
12/17/92	950	2800					

SIGNATURE OF PRINCIPAL OR AUTHORIZED AGENT	TYPE NAME AND TITLE	TELEPHONE NO
[signature]	ROBERT E. DINAN	201-5896853
	PLANT SUPERINTENDENT	EXT. 203
		DATE 1/21/93

PVSC FORM MR-2 REV. 2. 1/86

850930229

E178

USER CHARGE SELF MONITORING REPORT

NAME NEWARK BOXBOARD Co.

ADDRESS 17 BLANCHARD ST. NEWARK, NJ 07105

FACILITY LOCATION 17 BLANCHARD ST.

OUTLET DESIGNATION (17 DIGITS) 20401401 43900 0201

MONITORING PERIOD					
11	1	92	11	30	92
MO.	DAY	YR	MO.	DAY	YR
START			END		

VOL DISCHARGED THIS PERIOD
4,302,500 GALS
CU. FT. X 7.48 = GALLONS
1706350
EFFLUENT METER READING LAST DAY THIS PERIOD

DATE	BOD 0310	TSS 0530		DATE	BOD 0310	TSS 0530	
11/5/92	900	1980					
11/19/92	1430	2350					

Received PVSC Industrial Dept DEC 15 1992

SIGNATURE OF PRINCIPAL OR AUTHORIZED AGENT	TYPE NAME AND TITLE	TELEPHONE NO
Robert E Dinan	ROBERT E. DINAN	201-589-6853
	PLANT SUPERINTENDENT	EXT-203
		DATE 12/21/92

PVSC FORM MR-2 REV. 2. 1/86

850930230

E179

USER CHARGE SELF MONITORING REPORT

NAME NEWARK BOXBOARD Co.

ADDRESS 17 BLANCHARD ST. NEWARK, NJ 07105

FACILITY LOCATION 17 BLANCHARD ST.

OUTLET DESIGNATION (17 DIGITS) 20401401 43900 0201

MONITORING PERIOD					
10	1	92	10	31	92
MO.	DAY	YR	MO.	DAY	YR
START			END		

VOL DISCHARGED THIS PERIOD
3,487,600 GALS
CU. FT. X 7.48 = GALLONS
1663355
EFFLUENT METER READING LAST DAY THIS PERIOD

DATE	BOD 0310	TSS 0530		DATE	BOD 0310	TSS 0530	
10/1/92	840	3590					
10/5/92	1300	6310					

NOV 1992 received PVSC Industrial Dept.

SIGNATURE OF PRINCIPAL OR AUTHORIZED AGENT	TYPE NAME AND TITLE	TELEPHONE NO
Robert E. Dinan	ROBERT E. DINAN	201-5896853
	PLANT SUPERINTENDENT	EXT. 203
		DATE 11/17/92

PVSC FORM MR-2 REV. 2. 1/86

850930231

E180

USER CHARGE SELF MONITORING REPORT

NAME NEWARK BOXBOARD Co.

ADDRESS 17 BLANCHARD ST. NEWARK, NJ 07105

FACILITY LOCATION 17 BLANCHARD ST.

OUTLET DESIGNATION (17 DIGITS) 20401401 43900 0201

MONITORING PERIOD					
9	1	92	9	30	92
MO.	DAY	YR	MO.	DAY	YR
START			END		

VOL DISCHARGED THIS PERIOD
3,871,400 GALS
CU. FT. X 7.48 = GALLONS
1628479
EFFLUENT METER READING LAST DAY THIS PERIOD

DATE	BOD 0310	TSS 0530		DATE	BOD 0310	TSS 0530	
9-2-92	660	2320					
9-16-92	860	2490					

OCT 1992
Received
PVSC
Industrial Dept

SIGNATURE OF PRINCIPAL OR AUTHORIZED AGENT	TYPE NAME AND TITLE	TELEPHONE NO
Robert E. Dinan	ROBERT E. DINAN	201-5896853
	PLANT SUPERINTENDENT	EXT-203
		DATE 10/15/92

PVSC FORM MR-2 REV.2. 1/86

850930232

E181

USER CHARGE SELF MONITORING REPORT

NAME NEWARK BOXBOARD Co.

ADDRESS 17 BLANCHARD ST. NEWARK, NJ 07105

FACILITY LOCATION 17 BLANCHARD ST.

OUTLET DESIGNATION (17 DIGITS) 20401401 43900 0201

MONITORING PERIOD					
8	1	92	8	31	92
MO.	DAY	YR	MO.	DAY	YR
START			END		

VOL DISCHARGED THIS PERIOD
2,848,000 GALS
CU. FT. X 7.48 = GALLONS
1589765
EFFLUENT METER READING LAST DAY THIS PERIOD

DATE	BOD 0310	TSS 0530		DATE	BOD 0310	TSS 0530	
8-5-92	1860	3260					
8-19-92	720	3160					

SIGNATURE OF PRINCIPAL OR AUTHORIZED AGENT	TYPE NAME AND TITLE	TELEPHONE NO
Robert E Dinan	ROBERT E. DINAN	201-5896853
	PLANT SUPERINTENDENT	EXT. 203
		DATE 9/21/92

PVSC FORM MR-1 REV. 2. 1/86

850930233

E182

USER CHARGE SELF MONITORING REPORT

NAME NEWARK BOXBOARD Co.

ADDRESS 17 BLANCHARD ST. NEWARK, NJ 07105

FACILITY LOCATION 17 BLANCHARD ST.

OUTLET DESIGNATION (17 DIGITS) 20401401 43900 0201

MONITORING PERIOD					
7	1	92	7	31	92
MO.	DAY	YR	MO.	DAY	YR
START			END		

VOL DISCHARGED THIS PERIOD
2,725,400 GALS
CU. FT. X 7.48 = GALLONS
1561285
EFFLUENT METER READING LAST DAY THIS PERIOD

DATE	BOD 0310	TSS 0530		DATE	BOD 0310	TSS 0530	
7-1-92	1310	160					
7-15-92	2540	1340					

SIGNATURE OF PRINCIPAL OR AUTHORIZED AGENT	TYPE NAME AND TITLE	TELEPHONE NO
[signature]	ROBERT E. DINAN	201-5896853
	PLANT SUPERINTENDENT	EXT. 203
		DATE 8/14/92

PVSC FORM MR-2 REV. 2. 1/86

850930234

E183

USER CHARGE SELF MONITORING REPORT

NAME NEWARK BOXBOARD Co.

ADDRESS 17 BLANCHARD ST. NEWARK, NJ 07105

FACILITY LOCATION 17 BLANCHARD ST.

OUTLET DESIGNATION (17 DIGITS) 20401401 43900 0201

MONITORING PERIOD					
6	1	92	6	30	92
MO.	DAY	YR	MO.	DAY	YR
START			END		

VOL DISCHARGED THIS PERIOD
2,836,900 GALS
CU. FT. X 7.48 = GALLONS
1534031
EFFLUENT METER READING LAST DAY THIS PERIOD

DATE	BOD 0310	TSS 0530		DATE	BOD 0310	TSS 0530	
6-3-92	2000	2090					
6-17-92	1520	160					

SIGNATURE OF PRINCIPAL OR AUTHORIZED AGENT	TYPE NAME AND TITLE	TELEPHONE NO
[signature]	ROBERT E. DINAN	201-589-6853
	PLANT SUPERINTENDENT	EXT. 203
		DATE 7/16/92

PVSC FORM MR-2 REV.2. 1/86

850930235

E184

USER CHARGE SELF MONITORING REPORT

NAME NEWARK BOXBOARD Co.

ADDRESS 17 BLANCHARD ST. NEWARK, NJ 07105

FACILITY LOCATION 17 BLANCHARD ST.

OUTLET DESIGNATION (17 DIGITS) 20401401 43900 0201

MONITORING PERIOD					
5	1	92	5	31	92
MO.	DAY	YR	MO.	DAY	YR
START			END		

VOL DISCHARGED THIS PERIOD
3,612,100 GALS
CU. FT. X 7.48 = GALLONS
1505662
EFFLUENT METER READING LAST DAY THIS PERIOD

DATE	BOD 0310	TSS 0530		DATE	BOD 0310	TSS 0530	
5-6-92	810	3000					
5-20-92	1240	40					

SIGNATURE OF PRINCIPAL OR AUTHORIZED AGENT	TYPE NAME AND TITLE	TELEPHONE NO
	ROBERT E. DINAN	201-5896853
	PLANT SUPERINTENDENT	EXT. 203
		DATE 6-18-92

PVSC FORM MR-1 REV. 2 1/86

850930236

E185

USER CHARGE SELF MONITORING REPORT

NAME NEWARK BOXBOARD Co.

ADDRESS 17 BLANCHARD ST. NEWARK, NJ 07105

FACILITY LOCATION 17 BLANCHARD ST.

OUTLET DESIGNATION (17 DIGITS) 20401401 43900 0201

MONITORING PERIOD					
4	1	92	4	30	92
MO.	DAY	YR	MO.	DAY	YR
START			END		

VOL DISCHARGED THIS PERIOD
3,801,800 GALS
CU. FT. X 7.48 = GALLONS
1469541
EFFLUENT METER READING LAST DAY THIS PERIOD

DATE	BOD 0310	TSS 0530		DATE	BOD 0310	TSS 0530	
4-1-92	1620	1900					
4-16-92	940	710					

SIGNATURE OF PRINCIPAL OR AUTHORIZED AGENT	TYPE NAME AND TITLE	TELEPHONE N
Robert E Dinan	ROBERT E. DINAN	201-5896853
	PLANT SUPERINTENDENT	EXT-203
		DATE 5-21-92

PVSC FORM MR-2 REV.2. 1/86

850930237

E186

USER CHARGE SELF MONITORING REPORT

NAME NEWARK BOXBOARD Co.

ADDRESS 17 BLANCHARD ST. NEWARK, NJ 07105

FACILITY LOCATION 17 BLANCHARD ST.

OUTLET DESIGNATION (17 DIGITS) 20401401 43900 0201

MONITORING PERIOD					
3	1	92	3	31	92
MO.	DAY	YR	MO.	DAY	YR
START			END		

VOL DISCHARGED THIS PERIOD
3,186,700 GALS
CU. FT. X 7.48 = GALLONS
1431523
EFFLUENT METER READING LAST DAY THIS PERIOD

DATE	BOD 0310	TSS 0530		DATE	BOD 0310	TSS 0530	
3/5/92	870	2070					
3/19/92	1880	4240					

SIGNATURE OF PRINCIPAL OR AUTHORIZED AGENT	TYPE NAME AND TITLE	TELEPHONE N
Robert E. Dinan	ROBERT E. DINAN	201-5896853
	PLANT SUPERINTENDENT	EXT-203
		DATE 4-20-92

PVSC FORM MR-2 REV.2. 1/86

850930238

USER CHARGE SELF MONITORING REPORT

NAME NEWARK BOXBOARD Co.

ADDRESS 17 BLANCHARD ST. NEWARK, NJ 07105

FACILITY LOCATION 17 BLANCHARD ST.

OUTLET DESIGNATION (17 DIGITS) 20401401 43900 0201

MONITORING PERIOD					
2	1	92	2	29	92
MO.	DAY	YR	MO.	DAY	YR
START			END		

VOL DISCHARGED THIS PERIOD
3,773,100 GALS
CU. FT. X 7.48 = GALLONS
1399656
EFFLUENT METER READING LAST DAY THIS PERIOD

DATE	BOD 0310	TSS 0530		DATE	BOD 0310	TSS 0530	
2/6	1520	3510					
2/20	860	1290					

SIGNATURE OF PRINCIPAL OR AUTHORIZED AGENT	TYPE NAME AND TITLE	TELEPHONE NO
Robert E. Dinan	ROBERT E. DINAN	201-5896853
	PLANT SUPERINTENDENT	EXT-203
		DATE Mar 17, 1992

PVSC FORM MR-2 REV.2. 1/86

850930239

E188

USER CHARGE SELF MONITORING REPORT

NAME NEWARK BOXBOARD Co.

ADDRESS 17 BLANCHARD ST. NEWARK, NJ 07105

FACILITY LOCATION 17 BLANCHARD ST.

OUTLET DESIGNATION (17 DIGITS) 20401401 43900 0201

MONITORING PERIOD					
1	1	92	1	31	92
MO.	DAY	YR	MO.	DAY	YR
START			END		

VOL DISCHARGED THIS PERIOD
4,676,000 GALS
CU. FT. X 7.48 = GALLONS
1361925
EFFLUENT METER READING LAST DAY THIS PERIOD

DATE	BOD 0310	TSS 0530		DATE	BOD 0310	TSS 0530	
1-16	1190	2000					
1-2	820	2830					

SIGNATURE OF PRINCIPAL OR AUTHORIZED AGENT	TYPE NAME AND TITLE	TELEPHONE
Robert E. Dinan	ROBERT E. DINAN	201-589685
	PLANT SUPERINTENDENT	EXT-203
		DATE Feb 9, 199

PVSC FORM MR-2 REV.2. 1/86

850930240

USER CHARGE SELF MONITORING REPORT

NAME NEWARK BOXBOARD Co.

ADDRESS 17 BLANCHARD ST. NEWARK, NJ 07105

FACILITY LOCATION 17 BLANCHARD ST.

OUTLET DESIGNATION (17 DIGITS) 20401400 - 43900 - 0201

MONITORING PERIOD					
11	1	91	11	30	91
MO.	DAY	YR	MO.	DAY	YR
START			END		

138,840

VOL DISCHARGED THIS PERIO
4,165200 GALS
CU. FT. X 7.48 = GALLONS
1270159
EFFLUENT METER READING L DAY THIS PERIOD

DATE	BOD 0310	TSS 0530		DATE	BOD 0310	TSS 0530
11-7	1370	1350				
11-21	1410	1840				

SIGNATURE OF PRINCIPAL OR AUTHORIZED AGENT	TYPE NAME AND TITLE	TELEPH
Robert E Dinan	ROBERT E. DINAN	201 5896
	PLANT SUP'T.	EXT. 20
		DAT
		12-18-

PVSC FORM MR-2 REV.2 1/86

850930241

E190

NAME NEWARK BOX BOARD CO.

ADDRESS 17 BLANCHARD ST NEWARK NJ 07105

FACILITY LOCATION 17 BLANCHARD ST.

OUTLET DESIGNATION (17 DIGITS) 20401400-43900-0201

MONITORING PERIOD					
10	1	91	10	31	91
MO.	DAY	YR	MO.	DAY	YR
START			END		

VOL DISCHARGED THIS PERIOD
5,130,760 GALS *
CU. FT. X 7.48 = GALLONS
1228885
EFFLUENT METER READING LAST DAY THIS PERIOD

DATE	BOD 0310	TSS 0530		DATE	BOD 0310	TSS 0530	
10-3-91	1440	1670					
10-17-91	1510	2890					

SIGNATURE OF PRINCIPAL OR AUTHORIZED AGENT	TYPE NAME AND TITLE	TELEPHONE N
Robert E Dinan	ROBERT E. DINAN	201 589 685.
	PLANT SUPERINTENDENT	EXT-203
		DATE 11-20-91

PVSC FORM MR-2 REV.2. 1/86

* SEE ATTACHED SHEET

850930242

E191

USER CHARGE SELF MONITORING REPORT

NAME NEWARK BOXBOARD CO.

ADDRESS 17 BLANCHARD ST. NEWARK NJ 07105

FACILITY LOCATION 17 BLANCHARD ST.

OUTLET DESIGNATION (17 DIGITS) 20401400-43900-0201

MONITORING PERIOD					
9	1	91	9	30	91
MO.	DAY	YR	MO.	DAY	YR
START			END		

* VOL DISCHARGED THIS PERIOD: 3,834,100 GALS

CU. FT. X 7.48 = GALLONS

1177968

EFFLUENT METER READING LAST DAY THIS PERIOD

DATE	BOD 0310	TSS 0530		DATE	BOD 0310	TSS 0530	
9-5	2364	2040					
9-19	1870	3530					

SIGNATURE OF PRINCIPAL OR AUTHORIZED AGENT	TYPE NAME AND TITLE	TELEPHONE
Robert E. Dinan	ROBERT E. DINAN	201 589 6853
	PLANT SUP'T.	EXT. 203
		DATE 10-18-91

PVSC FORM MR-2 REV.2 1/86

* SEE ATTACHED SHEET

850930243

E192

USER CHARGE SELF MONITORING REPORT

NAME NEWARK BOXBOARD CO.

ADDRESS 17 BLANCHARD ST NEWARK NJ 07105

FACILITY LOCATION 17 BLANCHARD ST.

OUTLET DESIGNATION (17 DIGITS) 20401400-43900-0201

MONITORING PERIOD					
8	1	91	8	31	91
MO.	DAY	YR	MO.	DAY	YR
START			END		

* VOL DISCHARGED THIS PERIOD: 3,920,160 GALS

CU. FT. X 7.48 = GALLONS

EFFLUENT METER READING LAST DAY THIS PERIOD: 1140005

DATE	BOD 0310	TSS 0530		DATE	BOD 0310	TSS 0530	
8/7/91	1900	940					
8/15/91	1400	120					

SIGNATURE OF PRINCIPAL OR AUTHORIZED AGENT	TYPE NAME AND TITLE	TELEPHONE
Robert E Dinan	ROBERT E. DINAN	589-6853
	PLANT SUP'T.	EXT-203
		DATE 9-19-91

PVSC FORM MR-2 REV.2. 1/86

* SEE ATTACHED SHEET

850930244

E193

USER CHARGE SELF MONITORING REPORT

NAME NEWARK BOXBOARD Co.

ADDRESS 17 BLANCHARD ST NEWARK NJ

FACILITY LOCATION 17 BLANCHARD ST.

OUTLET DESIGNATION (17 DIGITS) 20401400-4390000201

MONITORING PERIOD					
7	1	91	7	31	91
MO.	DAY	YR	MO.	DAY	YR
START			END		

*

VOL DISCHARGED THIS PERIOD
4,206,260 GALS
CU. FT. X 7.48 = GALLONS
1101194
EFFLUENT METER READING LAST DAY THIS PERIOD

DATE	BOD 0310	TSS 0530		DATE	BOD 0310	TSS 0530	
7-17	1550	160					
7-31	1250	1740					

SIGNATURE OF PRINCIPAL OR AUTHORIZED AGENT	TYPE NAME AND TITLE	TELEPHONE
Robert E Dinan	ROBERT E. DINAN	2015896853
	PLANT SUPERINTENDENT	EXT. 203
		DATE 8-20-91

PVSC FORM MR-2 REV.2. 1/86

* SEE ATTACHED SHEET FOR EFFLUENT FLOW DETERMINATION

850930245 E194

USER CHARGE SELF MONITORING REPORT

NAME NEWARK BOXBOARD CO.

ADDRESS 17 BLANCHARD ST. NEWARK N.J. 07105

FACILITY LOCATION 17 BLANCHARD ST. NEWARK

OUTLET DESIGNATION (17 DIGITS) 20401400439000201

MONITORING PERIOD					
4	1	91	6	30	91
MO.	DAY	YR	MO.	DAY	YR
START			END		

VOL DISCHARGED THIS PERIOD
14,213,800 GALS
CU. FT. X 7.48 = GALLONS
1059522
EFFLUENT METER READING LAST DAY THIS PERIOD

DATE	BOD 0310	TSS 0530		DATE	BOD 0310	TSS 0530	
4-3	780	210					
4-17	470	270					
5-1	750	270					
5-15	1050	720					
6-6	650	500					
6-19	1560	1020					

SIGNATURE OF PRINCIPAL OR AUTHORIZED AGENT	TYPE NAME AND TITLE	TELEPHONE
Robert E. Dinan	ROBERT E. DINAN (201)	5836853 X
	MILL SUP'T.	
		DATE 7-16-9

PVSC FORM MR-2 REV.2. 1/86

850930246

E195

USER CHARGE SELF MONITORING REPORT

NAME NEWARK BOXBOARD CO.

ADDRESS 17 BLANCHARD ST. NEWARK, N.J. 07105

FACILITY LOCATION 17 BLANCHARD ST.

OUTLET DESIGNATION (17 DIGITS) 20401400439000201

MONITORING PERIOD					
1	1	91	3	31	91
MO.	DAY	YR	MO.	DAY	YR
START			END		

VOL DISCHARGED THIS PERIOD
20,968,200 GALS
CU. FT. X 7.48 = GALLONS
917384
EFFLUENT METER READING LAST DAY THIS PERIOD

DATE	BOD 0310	TSS 0530		DATE	BOD 0310	TSS 0530	
1-4	480	880					
1-17	620	1690					
2-7	370	190					
2-21	860	550					
3-7	870	130					
3-21	1230	270					

SIGNATURE OF PRINCIPAL OR AUTHORIZED AGENT	TYPE NAME AND TITLE	TELEPHONE
[signature]	ROBERT E. DINAN	201 589 685
	MILL SUP'T.	
		DATE 4-12-9

PVSC FORM MR-2 REV.2. 1/86

850930247

E196

ELDIB ENGINEERING AND RESEARCH, INC.

LABORATORIES AND OFFICES
170 BLANCHARD STREET. NEWARK N. J. 07105

TEL. (201) 344-7676

I. A. ELDIB, PH. D.
PRESIDENT
LICENSED PROFESSIONAL ENGINEER

CLIENT: NEWARK BOXBOARD COMPANY

Address: 17 Blanchard Street

Newark, New Jersey 07105

Attention: Mr. Joseph McAllister

Number of Samples: One (1)

Sample(s) Taken By: W. Gonzalez

Date Sample(s) Taken: 5/4/72 Date Sample(s) Received: 5/4/72

RESULTS OF WASTE EFFLUENT SURVEY FOR PASSAIC VALLEY SEWERAGE COMMISSIONERS

WASTE EFFLUENT CHARACTERISTIC	TEST RESULT	WASTE EFFLUENT CHARACTERISTIC	TEST RESULT
pH	6.7	Metal Ions, mg/l	
Turbidity, units	320	-Antimony - Positive	- 1.0
Temperature, °F	75	-Chromium +3	
Total Solids, mg/l	5860	-Chromium +6	
-Volatile, mg/l	1631	-Copper	
-Mineral, mg/l	4229	-Lead	
Suspended Solids, mg/l	796	-Mercury	
-Volatile, mg/l	308	-Nickel	
-Mineral, mg/l	488	-Vanadium	
Floatable Oils, mg/l	No Apprec.	-Other	
Emulsified Oils, mg/l	0.098	-Aluminum, Positive	- 1.0
Chlorides, mg./l	1930	-	
C.O.D., mg/l	1320	-	
5-Day B.O.D., mg/l	510	Resins, mg/l	--
T.O.C., mg/l	452	-	
Toxic Material, mg/l		-	
- Cyanides	None	-	
-		Flow	
-		-Continuous (C) or Batch (B)	C
Solvents, mg/l	--	-Hrs. (Day Discharge)	24
-		-Time Span of Sample(s)	5/1-5/4
-		-Average Flow, ~~GPD~~ MGD	1.50
-		-Peak Flow, ~~GPD~~ MGD	1.74
-		-Peak Flow, GPH	72,500

Respectfully submitted,

James Goodkind

ELDIB ENGINEERING AND RESEARCH, INC.

850930248

E197

ELDIB ENGINEERING AND RESEARCH, INC.

LABORATORIES AND OFFICES

409 BROAD STREET SUMMIT, N. J. 07901 TEL. (201) 277-3030

I. A. ELDIB, PH. D.
PRESIDENT
LICENSED PROFESSIONAL ENGINEER

4/4/75

CLIENT: NEWARK BOXBOARD COMPANY

850930249

ADDRESS: 17 Blanchard St., Newark, NJ 07105

Attention: Mr. Harold DeGroat, Plant Manager

Sample(s) Taken By: ELDIB No. of Samples: 1

Dates of Sample(s) Taken: 4:15 p.m. on 3/18/75 to 4:20 p.m. on 3/19/7

Date(s) of Sample (s) Received: 3/19/75

RESULTS of WASTE EFFLUENT SURVEY for PASSAIC VALLEY SEWERAGE COMMISSIONERS

WASTE EFFLUENT CHARACTERISTIC	TEST RESULT	WASTE EFFLUENT CHARACTERISTIC	SCAN RESULT
pH	6.66	Scan for Metal Ions: (Semiquantitative)	
Turbidity, units	450		
Temperature, °F	86°F	- - - - - - - - -,ppm	- - - - - -
Total Solids, mg/l	2,357	- - SEE - - - -,ppm	- - - - - -
-Volatile, mg/l	1,691	- - - - - - - - -,ppm	- - - - - -
-Mineral, mg/l	666	- - -A- - - - -,ppm	- - - - - -
Suspended Solids, mg/l	1,163	- - - T - - - -,ppm	- - - - - -
-Volatile, mg/l	763	T	
-Mineral, mg/l	400	- - - - A - - -,ppm	- - - - - -
Floatable Oils, mg/l	0.8	- - - - -C- - -,ppm	- - - - - -
Emulsified Oils, mg/l	30.5	H	
Chlorides, mg.	95	- - - - - -M- -,ppm	- - A - -
C.O.D., mg/l	1,790	E	
5-day B.O.D., mg/l	975	- - - - - - -N-,ppm	- - - - - -
T.O.C., mg/l	812	T	
Toxic material, mg/l	Not Applicable	- - - - - - - -,ppm	- - - - - -
- ----------		Resin, mg/l	Not Applicable
- ----------		-	
- ----------		-	
Solvents, mg/l	Not Applicable	-	
----------		FLOW MEASUREMENTS: Continuous (C) or Batch (B)	Continuous
		Hrs. of discharge	- - - - -
		Time span of Measurements { from	- 3/18 - -
		to	- 3/20 - -
		-average flow, GPD	563,000
		-Peak Flow, GPD	1901,000
		-Peak Flow, GPH - See Attachment B	- 79,200 -

Respectfully submitted,

I. A. Eldib

ELDIB ENGINEERING & RESEARCH, INC.

E198

BEFORE COPYING FORM, ENTER:

SITE NAME Newark Boxboard
17 Blanchard St

EPA ID NO. NJD 000 556 837

FORM **IC**

1991 Hazardous Waste Report

IDENTIFICATION AND CERTIFICATION

INSTRUCTIONS: Read the detailed instructions beginning on page 6 of the 1991 Hazardous Waste Report booklet before completing this form.

SEC. I Site name and location address. Complete items A through H. Check the box ☒ in items A, C, E, F, G, and H if same as label; if different, enter corrections. If label is absent, enter information. Instruction page 6

A. EPA ID No. Same as label ☒ or → NJD 000 556 837

B. County Essex

C. Site/company name Same as label ☐ or → Newark Boxboard

D. Has the site name associated with this EPA ID changed since 1989? ☐ 1 Yes ☒ 2 No

E. Street name and number. If not applicable, enter industrial park, building name or other physical location description. Same as label ☐ or → 17 Blanchard St

F. City, town, village, etc. Same as label ☐ or → Newark

G. State Same as label ☐ NJ

H. Zip Code Same as label ☐ 07105-

SEC. II Mailing address of site. Instruction page 6

A. Is the mailing address the same as the location address? ☒ 1 Yes (SKIP TO SEC. III) ☐ 2 No (GO TO BOX B)

B. Number and street name of mailing address

C. City, town, village, etc.

D. State

E. Zip Code -

SEC. III Name, title, and telephone number of the person who should be contacted if questions arise regarding this report. Instruction page 6

A. Please print: Last name	First name	M.I.	B. Title	C. Telephone
MELTON	EDWARD	M	GEN. MGR	201 589-6853 Extension 201

SEC. IV Enter the Standard Industrial Classification (SIC) Code that describes the principal products, group of products, produced or distributed, or the services rendered at the site's physical location. Enter more than one SIC Code only if no one industry description includes the combined activities of the site. Instruction page 7

A.	B.	C.	D.
2631			

SEC. V "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties under Section 3008 of the Resource Conservation and Recovery Act for submitting false information, including the possibility of fine and imprisonment for knowing violations."

A. Please print: Last name	First name	M.I.	B. Title
MELTON	EDWARD	M	GEN. MANAGER

C. Signature Edward M. Melton

D. Date of signature 02 28 92 (MO. DAY YR.)

OVER →

850930250

E199

FORM IC

850930251

Sec. VI - Generator Status

EPA ID NO. WID 010 515 813

A. 1991 Generator status
Instruction page 7
(CHECK ONE BOX BELOW)

- [X] 1 FRG/LQG
- [ ] 2 FRG
- [ ] 3 SQG

(SKIP TO SEC. VII)

- [ ] 4 Non generator (CONTINUE TO BOX B)

B. Reason for not generating
Page 9
(CHECK ALL THAT APPLY)

- [ ] 1 Never generated
- [ ] 2 Out of business
- [ ] 3 Only excluded or delisted waste
- [ ] 4 Only non-hazardous waste
- [ ] 5 Periodic or occasional generator
- [ ] 6 Waste minimization activity
- [ ] 7 Other (SPECIFY COMMENTS IN BOX BELOW)

Sec. VII - On-Site Waste Management Status

A. Hazardous waste permitted or interim status storage
Instruction page 10
[ ]

B. Hazardous waste permitted or interim status treatment, disposal, or recycling
Page 10
[ ]

C. Hazardous waste-exempt treatment, disposal, or recycling
Page 11
[ ]

Sec. VIII - Waste Minimization Activity during 1990 or 1991

A. Did this site begin or expand a source reduction activity during 1990 or 1991?
Instruction page 11

- [ ] 1 Yes
- [X] 2 No

B. Did this site begin or expand a recycling activity during 1990 or 1991?
Page 12

- [ ] 1 Yes
- [X] 2 No

C. Did this site systematically investigate opportunities for source reduction or recycling during 1990 or 1991?
Page 12

- [ ] 1 Yes
- [X] 2 No

D. Did any of the factors listed below delay or limit this site's ability to initiate new or additional source reduction activities in 1990 or 1991?
Page 12
(CHECK YES OR NO FOR EACH ITEM)

Yes	No		
[ ] 1	[X] 2	a.	Insufficient capital to install new source reduction equipment or implement new source reduction practices
[ ] 1	[X] 2	b.	Lack of technical information on source reduction techniques applicable to the specific production processes
[ ] 1	[X] 2	c.	Source reduction is not economically feasible: cost savings in waste management or production will not recover the capital investment
[ ] 1	[X] 2	d.	Concern that product quality may decline as a result of source reduction
[ ] 1	[X] 2	e.	Technical limitations of the production processes
[ ] 1	[X] 2	f.	Permitting burdens
[ ] 1	[X] 2	g.	Source reduction previously implemented -- additional reduction does not appear to be technically feasible
[ ] 1	[X] 2	h.	Source reduction previously implemented - additional reduction does not appear to be economically feasible
[ ] 1	[X] 2	i.	Source reduction previously implemented - additional reduction does not appear to be feasible due to permitting requirements
[X] 1	[ ] 2	j.	Other (SPECIFY COMMENTS IN BOX BELOW)

E. Did any of the factors listed below delay or limit this site's ability to initiate new or additional on-site or off-site recycling activities during 1990 or 1991?
Page 12
(CHECK YES OR NO FOR EACH ITEM)

Yes	No		
[ ] 1	[X] 2	a.	Insufficient capital to install new recycling equipment or implement new recycling practice
[ ] 1	[X] 2	b.	Lack of technical information on recycling techniques applicable to this site's specific production processes
[ ] 1	[X] 2	c.	Recycling is not economically feasible: cost savings in waste management or production will not recover the capital investment
[ ] 1	[X] 2	d.	Concern that product quality may decline as a result of recycling
[ ] 1	[X] 2	e.	Requirements to manifest wastes inhibit shipments off site for recycling
[ ] 1	[X] 2	f.	Financial liability provisions inhibit shipments off site for recycling
[ ] 1	[X] 2	g.	Technical limitations of production processes inhibit shipments off site for recycling
[X] 1	[ ] 2	h.	Technical limitations of production processes inhibit on-site recycling
[ ] 1	[X] 2	i.	Permitting burdens inhibit recycling
[ ] 1	[X] 2	j.	Lack of permitted off-site recycling facilities
[ ] 1	[X] 2	k.	Unable to identify a market for recyclable materials
[ ] 1	[X] 2	l.	Recycling previously implemented -- additional recycling does not appear to be technically feasible
[ ] 1	[X] 2	m.	Recycling previously implemented -- additional recycling does not appear to be economically feasible
[ ] 1	[X] 2	n.	Recycling previously implemented - additional recycling does not appear to be feasible due to permitting requirements
[ ] 1	[X] 2	o.	Other (SPECIFY COMMENTS IN BOX BELOW)

Comments: Removed No. 6 oil fuel tank. Will purchase steam from Keen Oil Refining Co. instead of using above ground tanks to store fuel

850930252

BEFORE COPYING FORM, ENTER:

SITE NAME Newark Boxboard
17 Blanchard St. Newark NJ

EPA ID NO. NJD 000 551 6 8312

1991 Hazardous Waste Report

FORM **GM**

WASTE GENERATION AND MANAGEMENT

INSTRUCTIONS: Read the detailed instructions beginning on page 13 of the 1991 Hazardous Waste Report booklet before completing this form.

Sec. I

A. Waste description Instruction Page 15: Soil contaminated with No 6 fuel ~~oil~~ oil discovered after the removal of a 30 year old tank

B. EPA hazardous waste code Page 15: N12 | NA | NA | NA | NA | NA

C. State hazardous waste code Page 15: X1215 | NA

D. SIC code Page 16	E. Origin code Page 16 / System type	F. Source code Page 17	G. Point of measurement Page 17	H. Form code Page 17	I. RCRA-radioactive mixed Page 17
26312	2 / M NA	A165	3	B14109	2

J. Reported TRI constituent Page 18: 2

K. CAS numbers Page 18: 1. | 2. | 3. | 4. | 5.

Sec. II

A. Quantity generated in 1990 Instruction Page 18	B. Quantity generated in 1991 Page 18	C. UOM Page 19 / Density	D. Did this site do any of the following to this waste: treat on site, dispose on site, recycle on site, or discharge to a sewer/POTW? Page 19
NA.	101316.1	2 / . 1 lbs/gal 2 sg	1 Yes (CONTINUE TO SYSTEM 1) ☒ 2 No (SKIP TO SEC. III)

ON-SITE SYSTEM 1

On-site system type Page 19	Quantity treated, disposed or recycled on site in 1991
M	.

ON-SITE SYSTEM 2

On-site system type Page 19	Quantity treated, disposed or recycled on site in 1991
M	.

Sec. III

A. Was any of this waste shipped off site in 1991? Instruction Page 20 ☒ 1 Yes (CONTINUE TO BOX B) ☐ 2 No (SKIP TO SEC. IV)

	B. EPA ID No. of facility waste was shipped to Page 20	C. System type shipped to Page 20	D. Off-site availability code Page 21	E. Total quantity shipped in 1991 Page 21
Site 1		M 0143	1	101316.1
Site 2	NA	M		.

Sec. IV

A. Did new activities in 1991 result in minimization of this waste? Instruction Page 22 ☒ 1 Yes (CONTINUE TO BOX B) ☐ 2 No (THIS FORM IS COMPLETE)

B. Activity Page 22	C. Other effects Page 22	D. Quantity recycled in 1991 due to new activities Page 23	E. Activity/production index Page 23	F. 1991 Source reduction quantity Page 24
W19 / W / W / W	☐ 1 Yes ☐ 2 No NA	NA .	NA .	NA .

Comments: Waste was loose soil contaminated with No. 6 fuel oil
Site receiving waste has no EPA ID #. Soil is not considered hazardous in Virginia
Waste was generated from a leaking fuel. The mill no longer has underground storage tanks and purchases steam from a Cogeneration facility

E200

TPS Thermo Process Systems Inc.
TPS Technologies Inc.

2070 South Orange Blossom Trail
Apopka, Florida 32703 U.S.A.

Telephone: (407) 886-2000
FAX: (407) 886-8300

OFFICIAL CERTIFICATE OF RECYCLING

TPS Technologies Inc. does hereby certify that **1,036.14 tons** of petroleum-contaminated soil received from

GENERATOR: **Newark Box Board**
17 Blanchard Street
Newark, NJ 07105

SITE: **Newark Box Board**
17 Blanchard Street
Newark, NJ 07105

under **Manifest/authorization number 02-00069**, has been properly recycled to state clean fill standards at our Regional Recycling Facility in Chester, Virginia.

Dated this 22nd day of October, 1991.

SWORN AND ATTESTED BY:
TPS Technologies Inc.

By: _____
Operations Manager

(Corporate Seal)

	MANIFEST NO.	DATE SHIPPED
1	02-00069-001	9/25/91
2	02-00069-002	9/25/91
3	02-00069-003	9/25/91
4	02-00069-004	9/25/91
5	02-00069-005	9/25/91
6	02-00069-006	9/25/91
7	02-00069-007	9/25/91
8	02-00069-008	9/25/91
9	02-00069-009	9/25/91
0	02-00069-010	9/25/91
1	02-00069-011	9/25/91
2	02-00069-012	9/25/91
3	02-00069-013	9/25/91
4	02-00069-014	9/25/91
5	02-00069-015	9/25/91
6	02-00069-015	9/26/91
7	02-00069-017	9/26/91
8	02-00069-018	9/26/91
9	02-00069-019	9/26/91
0	02-00069-020	9/26/91
1	02-00069-021	9/26/91
2	02-00069-022	9/26/91
3	02-00069-023	9/26/91
4	02-00069-024	9/26/91
5	02-00069-025	9/26/91
6	02-00069-026	9/26/91
7	02-00069-027	9/26/91
8	02-00069-028	9/28/91
9	02-00069-029	9/26/91
0	02-00069-030	9/26/91
1	02-00069-031	9/26/91
2	02-00069-032	9/26/91
3	02-00069-033	9/26/91
4	02-00069-034	9/26/91
5	02-00069-035	9/27/91
6	02-00069-036	9/27/91
7	02-00069-037	9/25/91
8	02-00069-038	9/25/91
9	02-00069-039	9/26/91
0	02-00069-040	9/27/91
1	02-00069-041	9/27/91
2	02-00069-042	9/27/91
3	02-00069-043	9/27/91

BEFORE COPYING FORM, ENTER:

SITE NAME Vellerk Boxboard

12 Blanchard St

EPA ID NO. NJD 0 6 0 5 5 6 3 8 3 2

FORM GM

1991 Hazardous Waste Report

WASTE GENERATION AND MANAGEMENT

INSTRUCTIONS: Read the detailed instructions beginning on page 13 of the 1991 Hazardous Waste Report booklet before completing this form.

Sec. I

A. Waste description Instruction Page 15: Waste oil and water pumped from the bottom of a 30,000 gallon tank long removed from service and excavated for disposal

B. EPA hazardous waste code Page 15: NA | NA | NA | NA | NA

C. State hazardous waste code Page 15: X12126 | NA

D. SIC code Page 16: 2631

E. Origin code Page 16: 2 — System type: M | NA

F. Source code Page 17: A65

G. Point of measurement Page 17: 3

H. Form code Page 17: B12C5

I. RCRA-radioactive mixed Page 17: 2

J. Reported TRI constituent Page 18: 2

K. CAS numbers Page 18: 1. | 2. | 3. | 4. | 5.

Sec. II

A. Quantity generated in 1990 Instruction Page 18: NA.

B. Quantity generated in 1991 Page 18: 25000.0

C. UOM Page 19: 55 — Density: 8.34 — [X] 1 lbs/gal [ ] 2 sg

D. Did this site do any of the following to this waste: treat on site, dispose on site, recycle on site, or discharge to a sewer/POTW? Page 19
[ ] 1 Yes (CONTINUE TO SYSTEM 1)
[X] 2 No (SKIP TO SEC. III)

ON-SITE SYSTEM 1

On-site system type Page 19: M

Quantity treated, disposed or recycled on site in 1991:

ON-SITE SYSTEM 2

On-site system type Page 19: M

Quantity treated, disposed or recycled on site in 1991:

Sec. III

A. Was any of this waste shipped off site in 1991? Instruction Page 20
[X] 1 Yes (CONTINUE TO BOX B)
[ ] 2 No (SKIP TO SEC. IV)

	B. EPA ID No. of facility waste was shipped to Page 20	C. System type shipped to Page 20	D. Off-site availability code Page 21	E. Total quantity shipped in 1991 Page 21
Site 1	NJD 0 6 0 5 5 6 3 8 3 2	M	1	25000.0
Site 2	NA	M NA	NA	NA.

Sec. IV

A. Did new activities in 1991 result in minimization of this waste? Instruction Page 22
[X] 1 Yes (CONTINUE TO BOX B)
[ ] 2 No (THIS FORM IS COMPLETE)

B. Activity Page 22	C. Other effects Page 22	D. Quantity recycled in 1991 due to new activities Page 23	E. Activity/production index Page 23	F. 1991 Source reduction quantity Page 24
W 1 0 W	[ ] 1 Yes [ ] 2 No NA	NA.	NA.	NA.

Comments: FUEL TANK WAS REMOVED FROM SERVICE. WILL NOW PURCHASES SHOWN IN REDESIGNING CO-GENERATION FACILITY

850930255

E203

Attachment

Attach a list of hazardous waste manifests for this form. The list must include the uniform hazardous waste manifest document number and the date of the shipment. The back of Form GM may be used for this purpose.

Example:

Document Number	Date Shipped
NJA123456	1/1/91
NJA123457	12/12/91
PAC 422 6213	6/18/91

850930256

BEFORE COPYING FORM, ENTER:

SITE NAME Newark Boxboard
17 Blanchard St. Newark NJ

EPA ID NO. NJD 000 556 837

FORM **OI**

1991 Hazardous Waste Report

OFF-SITE IDENTIFICATION

INSTRUCTIONS: Read the detailed instructions on the back of this page before completing this form.

Site 1

A. EPA ID No. of off-site installation or transporter: PAD 061 563 839

B. Name of off-site installation or transporter: S+M WASTE OIL INC.

C. Handler type (CHECK ALL THAT APPLY)
- ☐ Generator
- ☒ Transporter
- ☒ TSDR

D. Address of off-site installation
Street: Route 209
City: MILFORD State: PA Zip Code: 18337-

Site 2

A. EPA ID No. of off-site installation or transporter: NA

B. Name of off-site installation or transporter: TPS TECHNOLOGIES INC (at Shoosmith Landfill)

C. Handler type (CHECK ALL THAT APPLY)
- ☐ Generator
- ☒ Transporter
- ☒ TSDR

D. Address of off-site installation
Street: 11710 LEWIS RD
City: CHESTER State: VA Zip Code: 23831-

Site 3

A. EPA ID No. of off-site installation or transporter:

B. Name of off-site installation or transporter:

C. Handler type (CHECK ALL THAT APPLY)
- ☐ Generator
- ☐ Transporter
- ☐ TSDR

D. Address of off-site installation
Street:
City: State: Zip Code: -

Site 4

A. EPA ID No. of off-site installation or transporter:

B. Name of off-site installation or transporter:

C. Handler type (CHECK ALL THAT APPLY)
- ☐ Generator
- ☐ Transporter
- ☐ TSDR

D. Address of off-site installation
Street:
City: State: Zip Code: -

Site 5

A. EPA ID No. of off-site installation or transporter:

B. Name of off-site installation or transporter:

C. Handler type (CHECK ALL THAT APPLY)
- ☐ Generator
- ☐ Transporter
- ☐ TSDR

D. Address of off-site installation
Street:
City: State: Zip Code: -

Comments:

850930257

E204

INSTRUCTIONS FOR COMPLETING

FORM OI - OFF-SITE IDENTIFICATION

Sites required to file the 1991 Hazardous Waste Report must complete Form OI

PURPOSE OF THIS FORM

Form OI documents the names and addresses of off-site installations and transporters.

HOW TO COMPLETE THIS FORM

Form OI is divided into five identical parts. You must complete one part for each off-site installation to which you shipped hazardous waste, each off-site installation from which you received hazardous waste, and each transporter you used during 1991. If these off-site installations and transporters total more than five, you must photocopy and complete additional copies of the form. You do not need to report the address, Box D, for transporters.

Throughout the form, enter "DK" if the information requested is not known or is not available; enter "NA" if the information requested is not applicable. Use the Comments section at the bottom of the form to clarify or continue any entry. Reference the comment by entering the site number and box letter.

ITEM-BY-ITEM INSTRUCTIONS

Complete Boxes A through D for each off-site installation to which you shipped hazardous waste and each off-site installation from which you received hazardous waste during 1991.

Complete Boxes A through C for each transporter you used during the year.

Box A: EPA ID No. of off-site installation or transporter
Enter the 12-digit EPA ID number of the off-site installation to which you shipped hazardous waste or from which you received hazardous waste. Or, enter the EPA ID number of the transporter who shipped hazardous waste to or from your site. Each EPA ID should appear only once. If the off-site installation or transporter did not have an EPA ID number during 1991, enter "NA" in Box A.

Box B: Name of off-site installation or transporter
Enter the name of the off-site installation or transporter reported in Box A.

Box C: Site Type
Check all boxes that apply to describe the handler type of the off-site installation or transporter reported in Box A.

Box D: Address of off-site installation
Enter the address of the off-site installation reported in Box A. If the EPA ID number reported in Box A refers to a transporter, enter "NA" in Box D.

850930258

CONVERSION TABLE

Tons = Gallons (G) x $\frac{8.34}{2000}$

= Pounds (P) divided by 2000

= Cubic Yards (Y) x $\frac{1684.8}{2000}$

= Liters (L) x $\frac{2.203}{2000}$

= Kilograms (K) x $\frac{2.204}{2000}$

If the check attached is for multiple sites, then list below the EPA Identification Number for each site with each site's appropriate fee indicated.

EPA ID No.	FEE
Site 1 _____	$ _____
Site 2 _____	$ _____
Site 3 _____	$ _____
Site 4 _____	$ _____
Site 5 _____	$ _____

Total as recorded on the attached check $_____

850930259

Site Name Newark Boxboard Corp
17 Blanchard St. Newark NJ

EPA ID No. NJD 000 556 832

OFFICIAL USE ONLY	
Ann. Fee	
RA	
Date	
Rec'd By	

1991 FEE VERIFICATION WORKSHEET

INSTRUCTIONS: Complete the below fee category information. If your site is required to submit a fee, then attach the check were indicated.

Attach check here (do not send cash)

Make Payable to: Treasurer State of New Jersey

Mail Report to: NJDEPE, Bureau of Revenue
CN417
428 East State Street
Trenton, NJ 08625-0417
Attention: Manifest Section

Fee Category

☐	No Fee	This site (company) manifested less than 1.33 tons of hazardous waste for the calendar year .
☐	$200.00	This site (company) manifested 1.33 tons or more of hazardous waste but less than 10 tons of hazardous waste during the calendar year.
☐	$300.00	This site (company) manifested 10 tons or more of hazardous waste but less than 100 tons of hazardous waste during the calendar year.
☒	$400.00	This site (company) manifested 100 tons or more of hazardous waste during the calendar year.
☐	$_____	Other, the attached check is for multiple sites as identified on the reverse side of this form.

850930260

E205

WASTE MANAGEMENT DIVISION
Health and Human Services Building
6 Hazen Drive
Concord, NH 03301-6509

850930261

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved OMB No. 2050-0039, Expires 9-30-88

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: NJD000556837 — Manifest Document No.: 00001
2. Page 1 of 1

Information in the shaded areas is not required by Federal law, but may be required by State Law.

3. Generator's Name and Mailing Address: Newark Boxboard, 17 Blanchard St., Newark, N.J. 07105
4. Generator's Phone: 201-589-2005

A. State Manifest Document Number: NH C 0008412
B. State Generator's ID (Location): Same as 9
C. State Transporter's ID: NJD 9PS 217-225
D. Transporter's Phone: 609-769-2741

5. Transporter 1 Company Name: S-J Transportation Co.
6. US EPA ID Number: NJD071629976

7. Transporter 2 Company Name:
8. US EPA ID Number:

E. State Transporter's ID:
F. Transporter's Phone:

9. Designated Facility Name and Site Address: Transformer Service Inc., 74 Regional Dr., Concord, N.H. 03301
10. US EPA ID Number: NHD018902874

G. State Facility's ID: Same as 9
H. Facility's Phone: 603-224-4006

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	Waste No.
a. RQ Waste Hazardous Substance, Solid, N.O.S., ORM-E, NA9188 (Polychlorinated Biphenyls)	001	TP	10670	P	X-387
b. RQ Waste Hazardous Substance, Liquid, N.O.S., ORM-E, NA9188 (Polychlorinated Biphenyls)	009	DM	400	G	X-387
c.					
d.					

J. Additional Descriptions for Materials Listed Above
a. T
b. T——Gals. x 13.5 Lbs.
c.
d.

K. Handling Codes for Wastes Listed Above
a.
b.
c.
d.

15. Special Handling Instructions and Additional Information
Dike and contain.

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: Herbert R. Treible — Signature: Herbert R. Treible — Month Day Year: 4 14 88

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Bill Russell — Signature: Bill Russell — Month Day Year: 04 14 88

18. Transporter 2 Acknowledgement or Receipt of Materials
Printed/Typed Name: — Signature: — Month Day Year:

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: — Signature: — Month Day Year:

GENERATOR — TRANSPORTER — FACILITY

AND THE NH WASTE MANAGEMENT DIVISION (271-2942) TO REPORT AN OIL SPILL, NHWSPCP

EPA Form 8700-22 (Rev. 9-86) Previous Editions are Obsolete

MAILED 4-18-88
E206

WASTE MANAGEMENT DIVISION
Health and Human Services Building
6 Hazen Drive
Concord, NH 03301-6509

850930262

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved OMB No. 2050-0039, Expires 9

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: NHD018902874
Manifest Document No.: 00002
2. Page 1 of 1
Information in the shaded a[illegible] is not required by Federal [illegible] but may be required by State [illegible]

3. Generator's Name and Mailing Address: Transformer Service Inc. (Broker) 74 Regional Dr/ Concord, N.H. 03301
4. Generator's Phone: 603-224-4006

A. State Manifest Document Number: NH-[illegible]
B. State Generator's ID (Location): Same as 3

5. Transporter 1 Company Name: APTUS
6. US EPA ID Number: MND980791321
C. State Transporter's ID:
D. Transporter's Phone: [illegible]

7. Transporter 2 Company Name:
8. US EPA ID Number:
E. State Transporter's ID:
F. Transporter's Phone:

9. Designated Facility Name and Site Address: APTUS P.O. Box 935 Highway 169 N. Coffeyville, Kansas 67337
10. US EPA ID Number: KSD980964993
G. State Facility's ID: Same as 9
H. Facility's Phone: [illegible]

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. RQ Waste Hazardous Substance, Liquid, N.O.S., ORM-E, ~~[illegible]~~ NA9188 (Polychlorinated Biphenyls)	001	TT	EST. 4214	Est G
b.				
c.				
d.				

J. Additional Descriptions for Materials Listed Above
a. T (Transformer Oil over 2000 PPM [illegible] Gallons ([illegible])
b.
c.
d.

K. Handling Codes for Wastes Listed Above
a.
b.
c.
d.

15. Special Handling Instructions and Additional Information
Dike and contain. See enclosed contingency plan.

APTUS DOCUMENT # 632CT

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: A. SERZANS
Signature: A Serzans
Month Day Year: 06 06 8[illegible]

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: HENRY LAFREMIER
Signature: Henry La Fremier
Month Day Year: 06 06 8[illegible]

18. Transporter 2 Acknowledgement or Receipt of Materials
Printed/Typed Name:
Signature:
Month Day Year:

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: Diane Jackson
Signature: Diane Jackson
Month Day Year: 06 10 8[illegible]

GENERATOR / TRANSPORTER / FACILITY

TO REPORT A SPILL, CONTACT: NATIONAL EMERGENCY RESPONSE CENTER (1-800-424-8802), THE N.H. DEPT. OF SAFETY (1-800-852-341[illegible]) AND THE NH WASTE MANAGEMENT DIVISION (271-2942). TO REPORT OIL SPILL: NHWSPCD (271-3440).

EPA Form 8700-22 (Rev. 9-86) Previous Editions are Obsolete

COPY 3: GENERATOR COMPLETED COPY

E207

ALL STATE LEGAL® 800.222.0510

Exhibit F

850930263

VECTRE™
CORPORATION

15 Route 15 South
P.O. Box 930
Lafayette, NJ 07848-0930
973/383-2500
Fax: 973/579-0025

February 27, 1998

Sent Via UPS (Adult Signature Required)

Mr. Edward Melton
Vice President
Newark Box Board
17 Blanchard Street
Newark, NJ 07105

RE: Split Well Sampling - Newark, NJ

Dear Mr. Melton:

On Wednesday, February 4, 1998, Vectre Senior Professional, Ray Tavana, was on-site to collect a split ground water sample from well MW-22. Doug Newmen of EnviroSciences, Inc., collected the ground water sample for Deleet Merchandising.

Field observations determined that sampling was conducted according to the procedures outlined in the NJDEP's 1992 Field Sampling Procedures Manual. No significant petroleum or distinct odors were recognized during the sampling.

Vectre's split ground water sample and an appropriate field and trip blank were submitted to Envirotech Research, Inc., Edison, NJ, a NJDEP Certified environmental laboratory (#12543). Results of the Volatile Organic Analysis reported no targeted compounds above the NJDEP's most stringent ground water cleanup criteria. No tentatively identified volatile organic compounds were identified.

Should you have any questions, please call me at 973-383-2500 or e-mail me at gcd@vectre.com. Thank you.

Sincerely yours,
VECTRE CORPORATION

George Dudkiewicz
Project Manager

enclosure

ENVIROTECH RESEARCH, INC.

777 New Durham Road
Edison, New Jersey 08817
Tel: (732) 549-3900
Fax: (732) 549-3679
www.enviro-lab.com

February 20, 1998

Vectre Corporation
15 Route 15 South
P.O. Box 930
Lafayette, NJ 07848

Attention: Mr. George Dudkiewicz

Re: Job No. B069 - NBB V12

Dear Mr. Dudkiewicz:

Enclosed are the results you requested for the following sample(s) received at our laboratory on February 04, 1998:

Lab No.	Client ID	Analysis Required
42917	MW-22	PP VOA+10
42918	Field_Blank	PP VOA+10
42919	Trip_Blank	PP VOA+10

An invoice for our services is also enclosed. If you have any questions please contact your Project Manager, Bianca Buckwalter, at (732) 549-3900.

Very truly yours,

Michael J. Urban
Laboratory Manager

850930265

TABLE OF CONTENTS

	Section	Page
Analytical Results Summary	1	1
General Information	2	
Chain of Custody		7
Laboratory Chronicles		8
Methodology Review		11
Data Reporting Qualifiers		14
Non-Conformance Summary		15
GC/MS Forms and Data	3	
Results Summary and Chromatograms		17
Tuning Results Summary		29
Method Blank Results Summary		37
Calibration Summary		44
Surrogate Compound Recovery Summary		56
Spike Recovery Summary		57
Internal Standard Area Summary		59

ENVIROTECH RESEARCH, INC.

Client ID: **MW-22**
Site: NBB V12

Lab Sample No: **42917**
Lab Job No: B069

Date Sampled: 02/04/98
Date Received: 02/04/98
Date Analyzed: 02/09/98
GC Column: DB624
Instrument ID: VOAMS7.i
Lab File ID: v7997.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Chloromethane	ND	0.9
Bromomethane	ND	0.3
Vinyl Chloride	ND	0.4
Chloroethane	ND	1.0
Methylene Chloride	ND	1.0
Trichlorofluoromethane	ND	0.2
1,1-Dichloroethene	ND	0.6
1,1-Dichloroethane	ND	0.3
trans-1,2-Dichloroethene	ND	0.3
cis-1,2-Dichloroethene	ND	1.0
Chloroform	ND	0.2
1,2-Dichloroethane	ND	0.2
1,1,1-Trichloroethane	ND	0.2
Carbon Tetrachloride	ND	0.2
Bromodichloromethane	ND	0.2
1,2-Dichloropropane	ND	0.5
cis-1,3-Dichloropropene	ND	0.3
Trichloroethene	ND	0.4
Dibromochloromethane	ND	0.2
1,1,2-Trichloroethane	ND	0.4
Benzene	ND	0.2
trans-1,3-Dichloropropene	ND	0.3
2-Chloroethyl Vinyl Ether	ND	0.5
Bromoform	ND	0.3
Tetrachloroethene	ND	0.1
1,1,2,2-Tetrachloroethane	ND	0.3
Toluene	ND	0.2
Chlorobenzene	ND	0.1
Ethylbenzene	ND	0.2
Xylene (Total)	ND	1.0

ENVIROTECH RESEARCH, INC.

Client ID: **MW-22**
Site: NBB V12

Lab Sample No: **42917**
Lab Job No: B069

Date Sampled: 02/04/98
Date Received: 02/04/98
Date Analyzed: 02/09/98
GC Column: DB624
Instrument ID: VOAMS7.i
Lab File ID: v7997.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
TENTATIVELY IDENTIFIED COMPOUNDS
METHOD 624

	COMPOUND NAME	RT	EST. CONC. ug/l	Q
1.	NO VOLATILE ORGANIC COMPOUNDS FOUND			
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

TOTAL ESTIMATED CONCENTRATION	0.0

850930268

ENVIROTECH RESEARCH, INC.

Client ID: **Field_Blank**
Site: NBB V12

Lab Sample No: **42918**
Lab Job No: B069

Date Sampled: 02/04/98
Date Received: 02/04/98
Date Analyzed: 02/09/98
GC Column: DB624
Instrument ID: VOAMS7.i
Lab File ID: v7996.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Chloromethane	ND	0.9
Bromomethane	ND	0.3
Vinyl Chloride	ND	0.4
Chloroethane	ND	1.0
Methylene Chloride	ND	1.0
Trichlorofluoromethane	ND	0.2
1,1-Dichloroethene	ND	0.6
1,1-Dichloroethane	ND	0.3
trans-1,2-Dichloroethene	ND	0.3
cis-1,2-Dichloroethene	ND	1.0
Chloroform	ND	0.2
1,2-Dichloroethane	ND	0.2
1,1,1-Trichloroethane	ND	0.2
Carbon Tetrachloride	ND	0.2
Bromodichloromethane	ND	0.2
1,2-Dichloropropane	ND	0.5
cis-1,3-Dichloropropene	ND	0.3
Trichloroethene	ND	0.4
Dibromochloromethane	ND	0.2
1,1,2-Trichloroethane	ND	0.4
Benzene	ND	0.2
trans-1,3-Dichloropropene	ND	0.3
2-Chloroethyl Vinyl Ether	ND	0.5
Bromoform	ND	0.3
Tetrachloroethene	ND	0.1
1,1,2,2-Tetrachloroethane	ND	0.3
Toluene	ND	0.2
Chlorobenzene	ND	0.1
Ethylbenzene	ND	0.2
Xylene (Total)	ND	1.0

ENVIROTECH RESEARCH, INC.

Client ID: **Field_Blank**
Site: NBB V12

Lab Sample No: **42918**
Lab Job No: B069

Date Sampled: 02/04/98
Date Received: 02/04/98
Date Analyzed: 02/09/98
GC Column: DB624
Instrument ID: VOAMS7.i
Lab File ID: v7996.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
TENTATIVELY IDENTIFIED COMPOUNDS
METHOD 624

	COMPOUND NAME	RT	EST. CONC. ug/l	Q
1.	NO VOLATILE ORGANIC COMPOUNDS FOUND			
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

TOTAL ESTIMATED CONCENTRATION	0.0

850930270

ENVIROTECH RESEARCH, INC.

Client ID: **Trip_Blank**
Site: NBB V12

Lab Sample No: **42919**
Lab Job No: B069

Date Sampled: 02/03/98
Date Received: 02/04/98
Date Analyzed: 02/09/98
GC Column: DB624
Instrument ID: VOAMS7.i
Lab File ID: v7995.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Chloromethane	ND	0.9
Bromomethane	ND	0.3
Vinyl Chloride	ND	0.4
Chloroethane	ND	1.0
Methylene Chloride	ND	1.0
Trichlorofluoromethane	ND	0.2
1,1-Dichloroethene	ND	0.6
1,1-Dichloroethane	ND	0.3
trans-1,2-Dichloroethene	ND	0.3
cis-1,2-Dichloroethene	ND	1.0
Chloroform	ND	0.2
1,2-Dichloroethane	ND	0.2
1,1,1-Trichloroethane	ND	0.2
Carbon Tetrachloride	ND	0.2
Bromodichloromethane	ND	0.2
1,2-Dichloropropane	ND	0.5
cis-1,3-Dichloropropene	ND	0.3
Trichloroethene	ND	0.4
Dibromochloromethane	ND	0.2
1,1,2-Trichloroethane	ND	0.4
Benzene	ND	0.2
trans-1,3-Dichloropropene	ND	0.3
2-Chloroethyl Vinyl Ether	ND	0.5
Bromoform	ND	0.3
Tetrachloroethene	ND	0.1
1,1,2,2-Tetrachloroethane	ND	0.3
Toluene	ND	0.2
Chlorobenzene	ND	0.1
Ethylbenzene	ND	0.2
Xylene (Total)	ND	1.0

ENVIROTECH RESEARCH, INC.

Client ID: **Trip_Blank**
Site: NBB V12

Lab Sample No: **42919**
Lab Job No: B069

Date Sampled: 02/03/98
Date Received: 02/04/98
Date Analyzed: 02/09/98
GC Column: DB624
Instrument ID: VOAMS7.i
Lab File ID: v7995.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
TENTATIVELY IDENTIFIED COMPOUNDS
METHOD 624

	COMPOUND NAME	RT	EST. CONC. ug/l	Q
1.	NO VOLATILE ORGANIC COMPOUNDS FOUND			
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

TOTAL ESTIMATED CONCENTRATION	0.0

850930272

ENVIROTECH RESEARCH INC.
777 New Durham Road
Edison, New Jersey 08817
Phone: (732) 549-3900 Fax: (732) 549-3679

CHAIN OF CUSTODY / ANALYSIS REQUEST

PAGE 1 OF 1

Name (for report and invoice) George D.	Samplers Name (Printed) Gary Tavlaris	Site/Project Identification NBB-V12
Company Vectre Corp	P.O. #	State (Location of site) NJ: X NY: Other:
Address 15 Rt. 1J South	Analysis Turnaround Time Standard X	Regulatory Program:
City Lafayette State NJ Zip 07848	Rush Charges Authorized For: 2 Week 1 Week Other	
Phone (973) 383-2500 Fax		

Sample Identification	Date	Time	Matrix	No. of Cont.	VOA's											LAB USE ONLY Sample Numbers
MW-22	2/4/98	10:55	H2O	3	X											142917
Field Blank	↓	10:50	↓	2	X											142918
Trip Blank	2/3/98	8:30	↓	2	X		(1 of 2 - HEAD SPACE)									142919
Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH 6 = Other _____, 7 = Other _____					Soil:											
					Water: ✓											

Special Instructions Water Metals Filtered (Yes/No)?

Relinquished by	Company	Date / Time	Received by	Company
1) Gregg Tavlaris	Vectre	2/4/98 15:30	1) Bryan J. Hambenbuch	Envirotech
Relinquished by	Company	Date / Time	Received by	Company
2) Bryan J. Hambenbuch	Envirotech	2/4/98 16:40	2)	
Relinquished by	Company	Date / Time	Received by	Company
3)			3)	
Relinquished by	Company	Date / Time	Received by	Company
4)			4)	

Laboratory Certifications: New Jersey (12543), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132).

850930273

F-10

INTERNAL CUSTODY RECORD
AND
LABORATORY CHRONICLE

ENVIROTECH RESEARCH, INC.

777 NEW DURHAM ROAD, EDISON, NJ 08817
(732) 549-3900

Client: Vectre Corporation

Date Sampled: 2/4/98

Site: NBB V12

Date Received: 2/4/98

Matrix: WATER

Job No.: B069

Sample No.: 42917

Analytic Parameter	Extraction Date	Extractor's Name	Analysis Date	Analyst's Name	QA Batch
PPVOA+10			2/9/98	TC	7003

850930274

8 F-11

INTERNAL CUSTODY RECORD
AND
LABORATORY CHRONICLE

ENVIROTECH RESEARCH, INC.
777 NEW DURHAM ROAD, EDISON, NJ 08817
(732) 549-3900

Client: Vectre Corporation
Date Sampled: 2/4/98

Site: NBB V12
Date Received: 2/4/98

Matrix: WATER
Job No.: B069

Sample No.: 42918

Analytic Parameter	Extraction Date	Extractor's Name	Analysis Date	Analyst's Name	QA Batch
PPVOA+10			2/9/98	TC	7003

850930275

INTERNAL CUSTODY RECORD
AND
LABORATORY CHRONICLE

ENVIROTECH RESEARCH, INC.

777 NEW DURHAM ROAD, EDISON, NJ 08817
(732) 549-3900

Client: Vectre Corporation — **Date Sampled:** 2/3/98

Site: NBB V12 — **Date Received:** 2/4/98

Matrix: WATER — **Job No.:** B069

Sample No.: 42919

Analytic Parameter	Extraction Date	Extractor's Name	Analysis Date	Analyst's Name	QA Batch
PPVOA+10			2/9/98	TC	7003

850930276

Analytical Methodology Summary

Volatile Organics:

Water samples are analyzed for volatile organics by purge and trap GC/MS as specified in EPA Method 624. Drinking water samples are analyzed by EPA Methods 502.2 and 524.2. Solid samples are analyzed for priority pollutant volatile organics as specified in the EPA publication "Test Methods for Evaluating Solid Waste" (SW-846, 3rd Edition) Method 8240B. Water samples are analyzed for benzene, toluene, ethylbenzene and xylenes (BTEX) by GC-PID as specified in EPA Methods 502.2 and 602. Solid samples are analyzed for BTEX as specified in EPA Method 8020A.

Acid and Base/Neutral Extractable Organics:

Water samples are analyzed for acid and/or base/neutral extractable organics by GC/MS in accordance with EPA Method 625. Solids are analyzed for acid and/or base/neutral extractable priority pollutants as specified in the EPA publication "Test Methods for Evaluating Solid Waste" (SW-846, 3rd Edition) Method 8270B.

GC/MS Nontarget Compound Analysis:

Analysis for nontarget compounds is conducted, upon request, in conjunction with GC/MS analyses by EPA Methods 624, 625, 8240B and 8270B. Nontarget compound analysis is conducted using a forward library search of the EPA/NIH/NBS mass spectral library of compounds at the greatest apparent concentration (10% or greater of the nearest internal standard) in each organic fraction (15 for volatile, 15 for base/neutrals and 10 for acid extractables).

Organochlorine Pesticides and PCBs:

Water samples are analyzed for organochlorine pesticides and PCBs by dual column gas chromatography with electron capture detectors as specified in EPA Method 608. Solid samples are analyzed as specified in the EPA publication "Test Methods for Evaluating Solid Waste" (SW-846, 3rd Edition) Method 8080A.

Total Petroleum Hydrocarbons:

Water samples are analyzed for petroleum hydrocarbons by I.R. using EPA Method 418.1. Solid samples are prepared for analysis by soxhlet extraction consistent with the March 1990 N.J. DEP "Remedial Investigation Guide" Appendix A, page 52, and analyzed by U.S. EPA Method 418.1

Metals Analysis:

Metals analyses are performed by any of four techniques specified by a Method Code provided on each data report page, as follows:

P - Inductively Coupled Plasma Atomic Emission Spectroscopy (ICP)

A - Flame Atomic Absorption

F - Furnace Atomic Absorption

CV - Manual Cold Vapor (Mercury)

Water samples are digested and analyzed using EPA methods provided in "Methods for Chemical Analysis of Water and Wastewater" (EPA 600/4-79-020). Solid samples are analyzed as specified in the EPA publication "Test Methods for Evaluating Solid Waste" (SW-846, 3rd Edition); samples are digested according to Method 3050 "Acid Digestion of Soil, Sediments and Sludges."

Specific method references for ICP analyses are water Method 200.7 and solid Method 6010. Mercury analyses are conducted by the manual cold vapor technique specified by water Method 245.1 and solid Method 7471. Other specific Atomic Absorption method references are as follows:

	Water Test Method		Solid Test Method	
Element	Flame	Furnace	Flame	Furnace
Aluminum	202.1	202.2	7020	--
Antimony	204.1	204.2	7040	7041
Arsenic	--	206.2	--	7060
Barium	208.1	--	7080	--
Beryllium	210.1	210.2	7090	7091
Cadmium	213.1	213.2	7130	7131
Calcium	215.1	--	7140	--
Chromium, Total	218.1	218.2	7190	7191
Chromium, (+6)	218.4	218.5	7197	7195
Cobalt	219.1	219.2	7200	7201
Copper	220.1	220.2	7210	--
Iron	236.1	236.2	7380	--
Lead	239.1	239.2	7420	7421
Magnesium	242.1	--	7450	--
Manganese	243.1	243.2	7460	--
Nickel	249.1	249.2	7520	--
Potassium	258.1	--	7610	--
Selenium	--	270.2	--	7740
Silver	272.1	272.2	7760	--
Sodium	273.1	--	7770	--
Tin	283.1	283.2	7870	--
Thallium	279.1	279.2	7840	7841
Vanadium	286.1	286.2	7910	7911
Zinc	289.1	289.2	7950	--

Cyanide:

Water samples are analyzed for cyanide using EPA Method 335.2. Cyanide is determined in solid samples as specified in the EPA Contract Laboratory Program IFB dated July 1988, revised February 1989.

Phenols:

850930278

Water samples are analyzed for total phenols using EPA Method 420.1. Total phenols are determined in solid samples by preparing the sample as outlined in the EPA Contract Laboratory Program IFB for cyanide, followed by a phenols determination using EPA Method 420.1.

Cleanup of Semivolatile Extracts:

Upon request Method 3611 Alumina Column Cleanup and/or Method 3650 Acid-Base Partition Cleanup are performed to improve detection limits by the removal of saturated hydrocarbon interferences.

Hazardous Waste Characteristics:

Samples for hazardous waste characteristics are analyzed as specified in the U.S. EPA publication "Test Methods for Evaluating Solid Waste" (SW-846, 3rd Edition). Specific method references are as follows:

Ignitability	- Method 1020
Corrosivity	- Water pH Method 9040 Soil pH Method 9045
Reactivity	- Chapter 7, Section 7.3.3 and 7.3.4 respectively for hydrogen cyanide and hydrogen sulfide release
Toxicity	- TCLP Method 1311

Miscellaneous Parameters:

Additional analyses performed on both aqueous and solid samples are in accordance with methods published in the following references:

- Test Methods for Evaluating Solid Wastes, SW-846 3rd Edition, November 1986.
- Standard Methods for the Examination of Water and Wastewater, 17th Edition.
- Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, 1979.

DATA REPORTING QUALIFIERS

ND - The compound was not detected at the indicated concentration.

J - Mass spectral data indicates the presence of a compound that meets the identification criteria. The result is less than the specified detection limit but greater than zero. The concentration given is an approximate value.

B - The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample.

850930280

NON-CONFORMANCE SUMMARY

Envirotech Research, Inc. Job Number: B069

Volatile Organics Analysis:

All data conforms with method requirements /; or
Analysis was not requested _____; or
Non-conformance for the specific samples listed is as follows:

_____

_____

_____

_____

See continuation page if checked ( )

Base/Neutral and/or Acid Extractable Organics:

All data conforms with method requirements _____; or
Analysis was not requested /; or
Non-conformance for the specific samples listed is as follows:

_____

_____

_____

_____

See continuation page if checked ( )

PCBs and/or Organochlorine Pesticides:

All data conforms with method requirements _____; or
Analysis was not requested /; or
Non-conformance for the specific samples listed is as follows:

_____

_____

_____

_____

See continuation page if checked ( )

850930281

Non-conformance Summary, Page 2 of 2
Envirotech Research, Inc. Job Number: B069

Metals Analysis:

All data conforms with method requirements ____; or
Analysis was not requested /; or
Non-conformance for the specific samples listed is as follows:

_____

_____

_____

_____

_____

See continuation page if checked ( )

Total Petroleum Hydrocarbons:

All data conforms with method requirements ____; or
Analysis was not requested /; or
Non-conformance for the specific samples listed is as follows:

_____

_____

_____

See continuation page if checked ( )

General Chemistry/Disposal Parameters:

All data conforms with method requirements ____; or
Analysis was not requested /; or
Non-conformance for the specific samples listed is as follows:

_____

_____

_____

See continuation page if checked ( )

Signature of
Laboratory Manager: _____ Date: 2/20/98

850930282

16 F 19

Client ID: **MW-22**
Site: NBB V12

Lab Sample No: **42917**
Lab Job No: B069

Date Sampled: 02/04/98
Date Received: 02/04/98
Date Analyzed: 02/09/98
GC Column: DB624
Instrument ID: VOAMS7.i
Lab File ID: v7997.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Chloromethane	ND	0.9
Bromomethane	ND	0.3
Vinyl Chloride	ND	0.4
Chloroethane	ND	1.0
Methylene Chloride	ND	1.0
Trichlorofluoromethane	ND	0.2
1,1-Dichloroethene	ND	0.6
1,1-Dichloroethane	ND	0.3
trans-1,2-Dichloroethene	ND	0.3
cis-1,2-Dichloroethene	ND	1.0
Chloroform	ND	0.2
1,2-Dichloroethane	ND	0.2
1,1,1-Trichloroethane	ND	0.2
Carbon Tetrachloride	ND	0.2
Bromodichloromethane	ND	0.2
1,2-Dichloropropane	ND	0.5
cis-1,3-Dichloropropene	ND	0.3
Trichloroethene	ND	0.4
Dibromochloromethane	ND	0.2
1,1,2-Trichloroethane	ND	0.4
Benzene	ND	0.2
trans-1,3-Dichloropropene	ND	0.3
2-Chloroethyl Vinyl Ether	ND	0.5
Bromoform	ND	0.3
Tetrachloroethene	ND	0.1
1,1,2,2-Tetrachloroethane	ND	0.3
Toluene	ND	0.2
Chlorobenzene	ND	0.1
Ethylbenzene	ND	0.2
Xylene (Total)	ND	1.0

Client ID: **MW-22**
Site: NBB V12

Lab Sample No: **42917**
Lab Job No: B069

Date Sampled: 02/04/98
Date Received: 02/04/98
Date Analyzed: 02/09/98
GC Column: DB624
Instrument ID: VOAMS7.i
Lab File ID: v7997.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
TENTATIVELY IDENTIFIED COMPOUNDS
METHOD 624

	COMPOUND NAME	RT	EST. CONC. ug/l	Q
1.	NO VOLATILE ORGANIC COMPOUNDS FOUND			
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

TOTAL ESTIMATED CONCENTRATION	0.0

850930284

Data File: /chem/VOAMS7.i/624IFF/01-27-98/09feb98.b/v7997.d
Report Date: 10-Feb-98 09:18:18

Envirotech Research, Inc.

VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/VOAMS7.i/624IFF/01-27-98/09feb98.b/v7997.d
Lab Smp Id: 42917 Client Smp ID: MW-22
Inj Date : 09-FEB-98 22:00:00
Operator : VOAMS 7 Inst ID: VOAMS7.i
Smp Info : 42917;1
Misc Info : B069;7003;TC
Comment :
Method : /chem/VOAMS7.i/624IFF/01-27-98/09feb98.b/IFF624.m
Meth Date : 09-Feb-98 12:22:45 Quant Type: ISTD
Cal Date : 27-JAN-98 17:37:00 Cal File: v7580.d
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PPVOAv.sub
Target Version: 3.20
Procesing Host: hpvoa

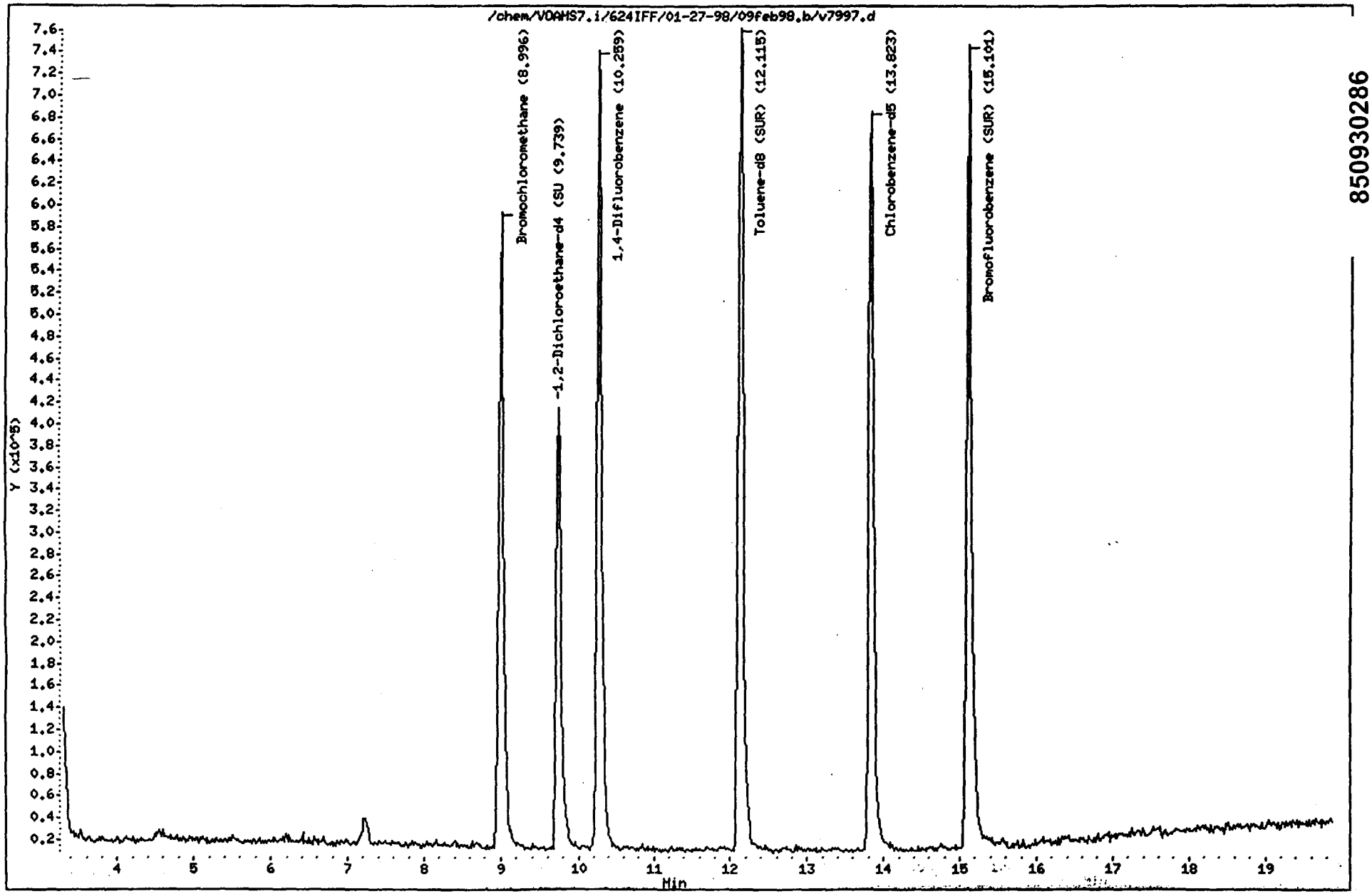
Concentration Formula: 5/Vo

Name	Value	Description
Vo	5.000	Sample Volume

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
*	2 Bromochloromethane	128	8.996	8.816	(1.000)	358745	30	
$	16 1,2-Dichloroethane-d4 (SUR)	104	9.739	9.574	(0.949)	77968	29	29
*	19 1,4-Difluorobenzene	114	10.259	10.093	(1.000)	1264453	30	
$	37 Toluene-d8 (SUR)	98	12.130	11.950	(1.182)	1138932	30	30
*	32 Chlorobenzene-d5	117	13.823	13.643	(1.000)	884164	30	
$	41 Bromofluorobenzene (SUR)	95	15.101	15.024	(1.092)	649932	29	29

Data File: /chem/VOAMS7.i/624IFF/01-27-98/09feb98.b/v7997.d
Date : 09-FEB-98 22:00:00
Client ID: MW-22
Sample Info: 42917;1
Purge Volume: 5.0
Column phase: DB624

Instrument: VOAMS7.i
Operator: VOAMS 7
Column diameter: 0.53



850930286

Client ID: **Field_Blank**
Site: NBB V12

Lab Sample No: **42918**
Lab Job No: B069

Date Sampled: 02/04/98
Date Received: 02/04/98
Date Analyzed: 02/09/98
GC Column: DB624
Instrument ID: VOAMS7.i
Lab File ID: v7996.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Chloromethane	ND	0.9
Bromomethane	ND	0.3
Vinyl Chloride	ND	0.4
Chloroethane	ND	1.0
Methylene Chloride	ND	1.0
Trichlorofluoromethane	ND	0.2
1,1-Dichloroethene	ND	0.6
1,1-Dichloroethane	ND	0.3
trans-1,2-Dichloroethene	ND	0.3
cis-1,2-Dichloroethene	ND	1.0
Chloroform	ND	0.2
1,2-Dichloroethane	ND	0.2
1,1,1-Trichloroethane	ND	0.2
Carbon Tetrachloride	ND	0.2
Bromodichloromethane	ND	0.2
1,2-Dichloropropane	ND	0.5
cis-1,3-Dichloropropene	ND	0.3
Trichloroethene	ND	0.4
Dibromochloromethane	ND	0.2
1,1,2-Trichloroethane	ND	0.4
Benzene	ND	0.2
trans-1,3-Dichloropropene	ND	0.3
2-Chloroethyl Vinyl Ether	ND	0.5
Bromoform	ND	0.3
Tetrachloroethene	ND	0.1
1,1,2,2-Tetrachloroethane	ND	0.3
Toluene	ND	0.2
Chlorobenzene	ND	0.1
Ethylbenzene	ND	0.2
Xylene (Total)	ND	1.0

Client ID: **Field_Blank**
Site: NBB V12

Lab Sample No: **42918**
Lab Job No: B069

Date Sampled: 02/04/98
Date Received: 02/04/98
Date Analyzed: 02/09/98
GC Column: DB624
Instrument ID: VOAMS7.i
Lab File ID: v7996.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
TENTATIVELY IDENTIFIED COMPOUNDS
METHOD 624

	COMPOUND NAME	RT	EST. CONC. ug/l	Q
1.	NO VOLATILE ORGANIC COMPOUNDS FOUND			
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

TOTAL ESTIMATED CONCENTRATION: 0.0

850930288

Data File: /chem/VOAMS7.i/624IFF/01-27-98/09feb98.b/v7996.d
Report Date: 10-Feb-98 09:18:15

Envirotech Research, Inc.

VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/VOAMS7.i/624IFF/01-27-98/09feb98.b/v7996.d
Lab Smp Id: 42918 Client Smp ID: Field_Blank
Inj Date : 09-FEB-98 21:33:00
Operator : VOAMS 7 Inst ID: VOAMS7.i
Smp Info : 42918;1
Misc Info : B069;7003;TC
Comment :
Method : /chem/VOAMS7.i/624IFF/01-27-98/09feb98.b/IFF624.m
Meth Date : 09-Feb-98 12:22:45 Quant Type: ISTD
Cal Date : 27-JAN-98 17:37:00 Cal File: v7580.d
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PPVOAv.sub
Target Version: 3.20
Procesing Host: hpvoa

Concentration Formula: 5/Vo

Name	Value	Description
Vo	5.000	Sample Volume

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
* 2 Bromochloromethane	128	8.997	8.816	(1.000)	371864	30	
$ 16 1,2-Dichloroethane-d4 (SUR)	104	9.739	9.574	(0.949)	75332	28	28
* 19 1,4-Difluorobenzene	114	10.259	10.093	(1.000)	1254998	30	
$ 37 Toluene-d8 (SUR)	98	12.116	11.950	(1.181)	1166464	31	31
* 32 Chlorobenzene-d5	117	13.824	13.643	(1.000)	872584	30	
$ 41 Bromofluorobenzene (SUR)	95	15.101	15.024	(1.092)	657089	30	30

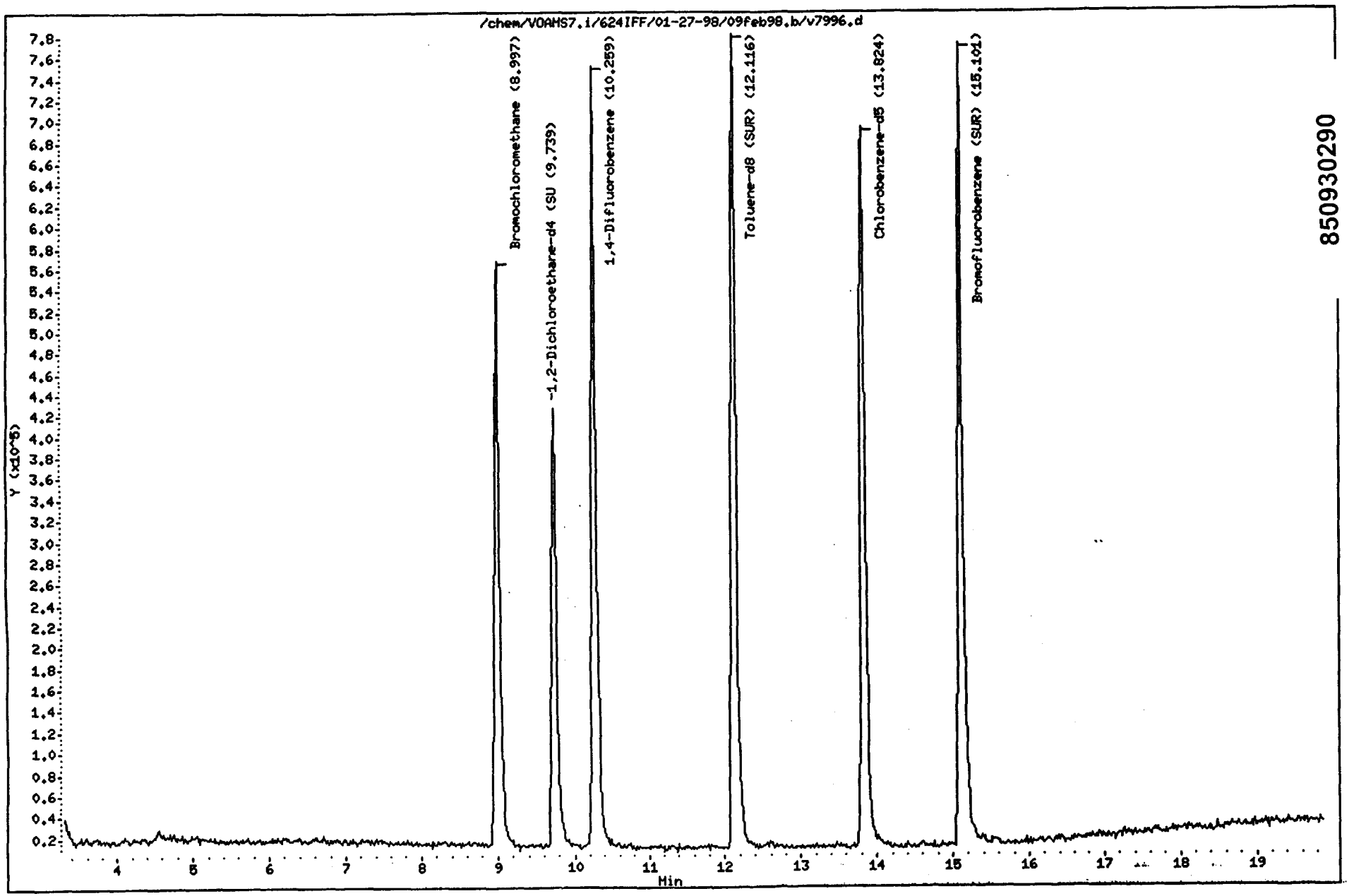
850930289

Data File: /chem/VOAMS7.i/624IFF/01-27-98/09feb98.b/v7996.d
Date : 09-FEB-98 21:33:00
Client ID: Field_Blank
Sample Info: 42918;1
Purge Volume: 5.0
Column phase: DB624

Instrument: VOAMS7.i

Operator: VOAMS 7
Column diameter: 0.53

24 F27



Client ID: **Trip_Blank**
Site: NBB V12

Lab Sample No: **42919**
Lab Job No: B069

Date Sampled: 02/03/98
Date Received: 02/04/98
Date Analyzed: 02/09/98
GC Column: DB624
Instrument ID: VOAMS7.i
Lab File ID: v7995.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Chloromethane	ND	0.9
Bromomethane	ND	0.3
Vinyl Chloride	ND	0.4
Chloroethane	ND	1.0
Methylene Chloride	ND	1.0
Trichlorofluoromethane	ND	0.2
1,1-Dichloroethene	ND	0.6
1,1-Dichloroethane	ND	0.3
trans-1,2-Dichloroethene	ND	0.3
cis-1,2-Dichloroethene	ND	1.0
Chloroform	ND	0.2
1,2-Dichloroethane	ND	0.2
1,1,1-Trichloroethane	ND	0.2
Carbon Tetrachloride	ND	0.2
Bromodichloromethane	ND	0.2
1,2-Dichloropropane	ND	0.5
cis-1,3-Dichloropropene	ND	0.3
Trichloroethene	ND	0.4
Dibromochloromethane	ND	0.2
1,1,2-Trichloroethane	ND	0.4
Benzene	ND	0.2
trans-1,3-Dichloropropene	ND	0.3
2-Chloroethyl Vinyl Ether	ND	0.5
Bromoform	ND	0.3
Tetrachloroethene	ND	0.1
1,1,2,2-Tetrachloroethane	ND	0.3
Toluene	ND	0.2
Chlorobenzene	ND	0.1
Ethylbenzene	ND	0.2
Xylene (Total)	ND	1.0

Client ID: **Trip_Blank**
Site: NBB V12

Lab Sample No: **42919**
Lab Job No: B069

Date Sampled: 02/03/98
Date Received: 02/04/98
Date Analyzed: 02/09/98
GC Column: DB624
Instrument ID: VOAMS7.i
Lab File ID: v7995.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
TENTATIVELY IDENTIFIED COMPOUNDS
METHOD 624

	COMPOUND NAME	RT	EST. CONC. ug/l	Q
1.	NO VOLATILE ORGANIC COMPOUNDS FOUND			
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

TOTAL ESTIMATED CONCENTRATION	0.0

850930292

Data File: /chem/VOAMS7.i/624IFF/01-27-98/09feb98.b/v7995.d
Report Date: 10-Feb-98 09:18:11

Envirotech Research, Inc.

VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/VOAMS7.i/624IFF/01-27-98/09feb98.b/v7995.d
Lab Smp Id: 42919 Client Smp ID: Trip_Blank
Inj Date : 09-FEB-98 21:06:00
Operator : VOAMS 7 Inst ID: VOAMS7.i
Smp Info : 42919;1
Misc Info : B069;7003;TC
Comment :
Method : /chem/VOAMS7.i/624IFF/01-27-98/09feb98.b/IFF624.m
Meth Date : 09-Feb-98 12:22:45 Quant Type: ISTD
Cal Date : 27-JAN-98 17:37:00 Cal File: v7580.d
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PPVOAv.sub
Target Version: 3.20
Procesing Host: hpvoa

Concentration Formula: 5/Vo

Name	Value	Description
Vo	5.000	Sample Volume

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
* 2 Bromochloromethane	128	8.998	8.816	(1.000)	375704	30	
$ 16 1,2-Dichloroethane-d4 (SUR)	104	9.740	9.574	(0.949)	78351	29	29
* 19 1,4-Difluorobenzene	114	10.260	10.093	(1.000)	1260135	30	
$ 37 Toluene-d8 (SUR)	98	12.117	11.950	(1.181)	1153466	30	30
* 32 Chlorobenzene-d5	117	13.810	13.643	(1.000)	879762	30	
$ 41 Bromofluorobenzene (SUR)	95	15.102	15.024	(1.094)	660690	30	30

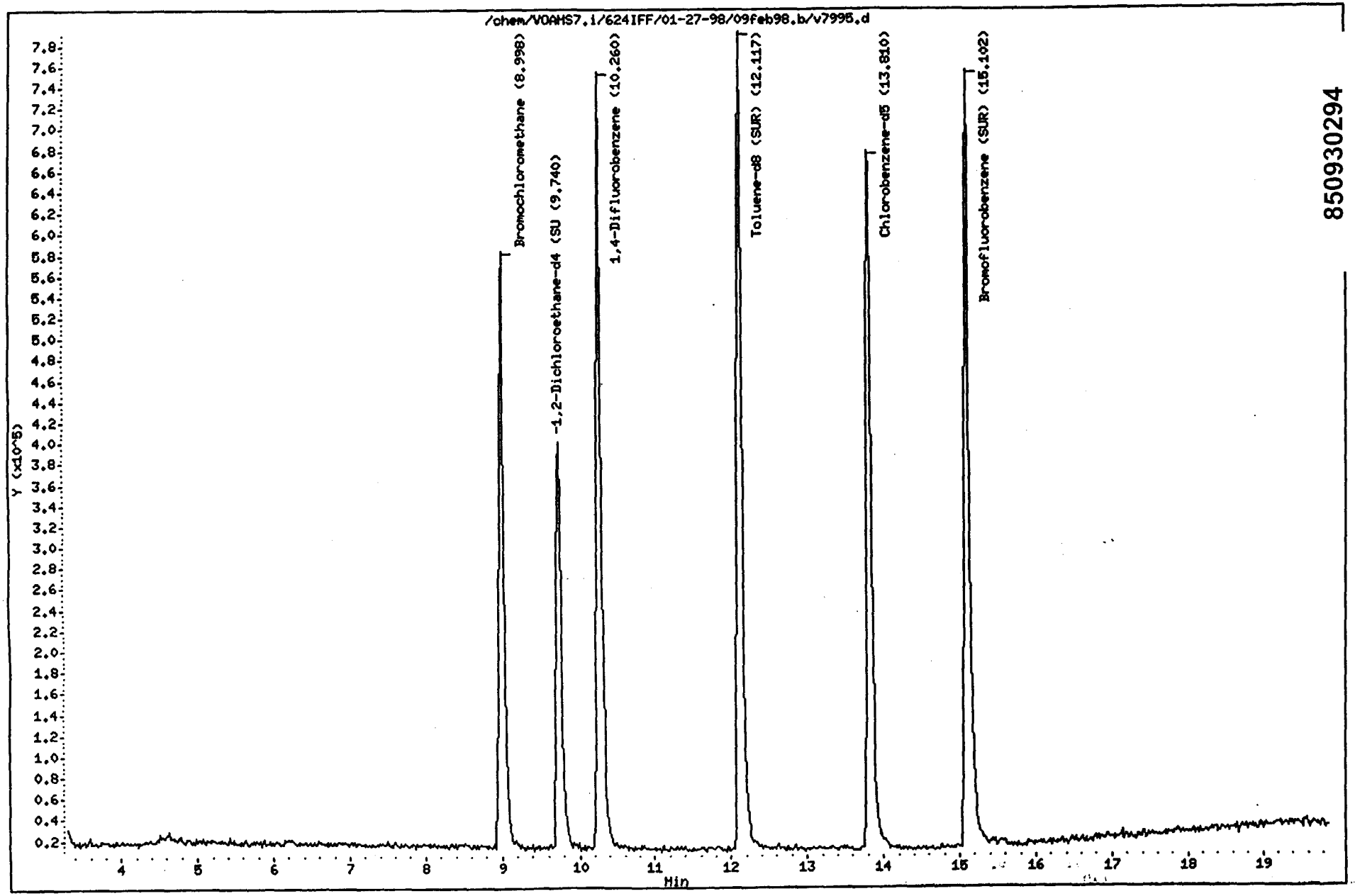
850930293

Data File: /chem/VOAMS7.i/624IFF/01-27-98/09feb98.b/v7995.d
Date : 09-FEB-98 21:06:00
Client ID: Trip_Blank
Sample Info: 42919;1
Purge Volume: 5.0
Column phase: DB624

Instrument: VOAMS7.i

Operator: VOAMS 7
Column diameter: 0.53

28 of 31



850930294

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab File ID: V7575

BFB Injection Date: 01/27/98

Instrument ID: VOAMS7

BFB Injection Time: 1507

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	22.8
75	30.0 - 60.0% of mass 95	52.2
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.2
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 100.0% of mass 95	80.2
175	5.0 - 9.0% of mass 174	5.7 (7.1)1
176	95.0 - 101.0% of mass 174	78.5 (97.8)1
177	5.0 - 9.0% of mass 176	5.4 (6.9)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT ID	LAB SAMPLE No.	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD005	VSTD005	V7576	01/27/98	1544
02	VSTD010	VSTD010	V7577	01/27/98	1612
03	VSTD020	VSTD020	V7578	01/27/98	1640
04	VSTD050	VSTD050	V7579	01/27/98	1708
05	VSTD200	VSTD200	V7580	01/27/98	1737
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

850930295

Data File: /chem/VOAMS7.i/624IFF/01-27-98/27jan98.b/v7575.d

Date : 27-JAN-98 15:07:00

Client ID:

Instrument: VOAMS7.i

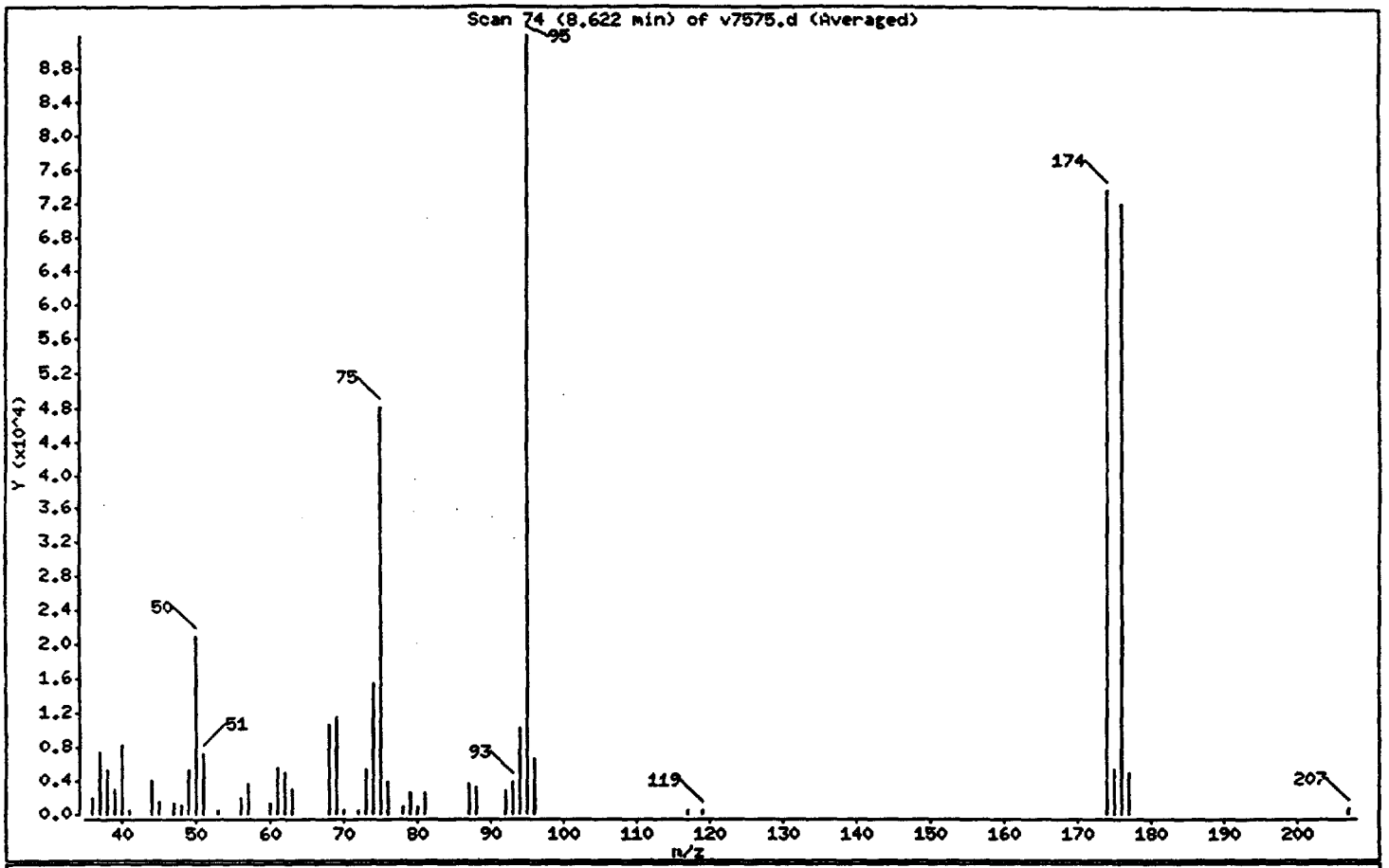
Sample Info: VBFB027 50ng

Operator: VOAMS 4

Column phase: DB-624

Column diameter: 0.53

1 Bromofluorobenzene



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	22.85
75	30.00 - 60.00% of mass 95	52.18
96	5.00 - 9.00% of mass 95	7.22
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 100.00% of mass 95	80.22
175	5.00 - 9.00% of mass 174	5.72 (7.13)
176	95.00 - 101.00% of mass 174	78.49 (97.84)
177	5.00 - 9.00% of mass 176	5.38 (6.85)

850930296

Data File: /chem/VOAMS7.i/624IFF/01-27-98/27jan98.b/v7575.d

Date : 27-JAN-98 15:07:00

Client ID:

Instrument: VOAMS7.i

Sample Info: VBFB027 50ng

Operator: VOAMS 4

Column phase: DB-624

Column diameter: 0.53

Data File: v7575.d
Spectrum: Scan 75 (8.622 min) of v7575.d (Averaged)
Location of Maximum: 95.00
Number of points: 46

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1860	51.00	7105	73.00	5173	94.00	10076
37.00	7470	53.00	333	74.00	15475	95.00	91821
38.00	5368	56.00	1865	75.00	47914	96.00	6626
39.00	2977	57.00	3555	76.00	3813	117.00	336
40.00	8301	60.00	1345	78.00	782	119.00	407
41.00	347	61.00	5497	79.00	2593	174.00	73658
44.00	3987	62.00	4931	80.00	776	175.00	5250
45.00	1426	63.00	2979	81.00	2486	176.00	72069
47.00	1226	68.00	10564	87.00	3669	177.00	4939
48.00	1141	69.00	11351	88.00	3199	207.00	722
49.00	5192	70.00	466	92.00	2689		
50.00	20981	72.00	512	93.00	3803		

850930297

Data File: /chem/VOAMS7.i/624IFF/01-27-98/27jan98.b/v7575.d

Date : 27-JAN-98 15:07:00

Client ID:

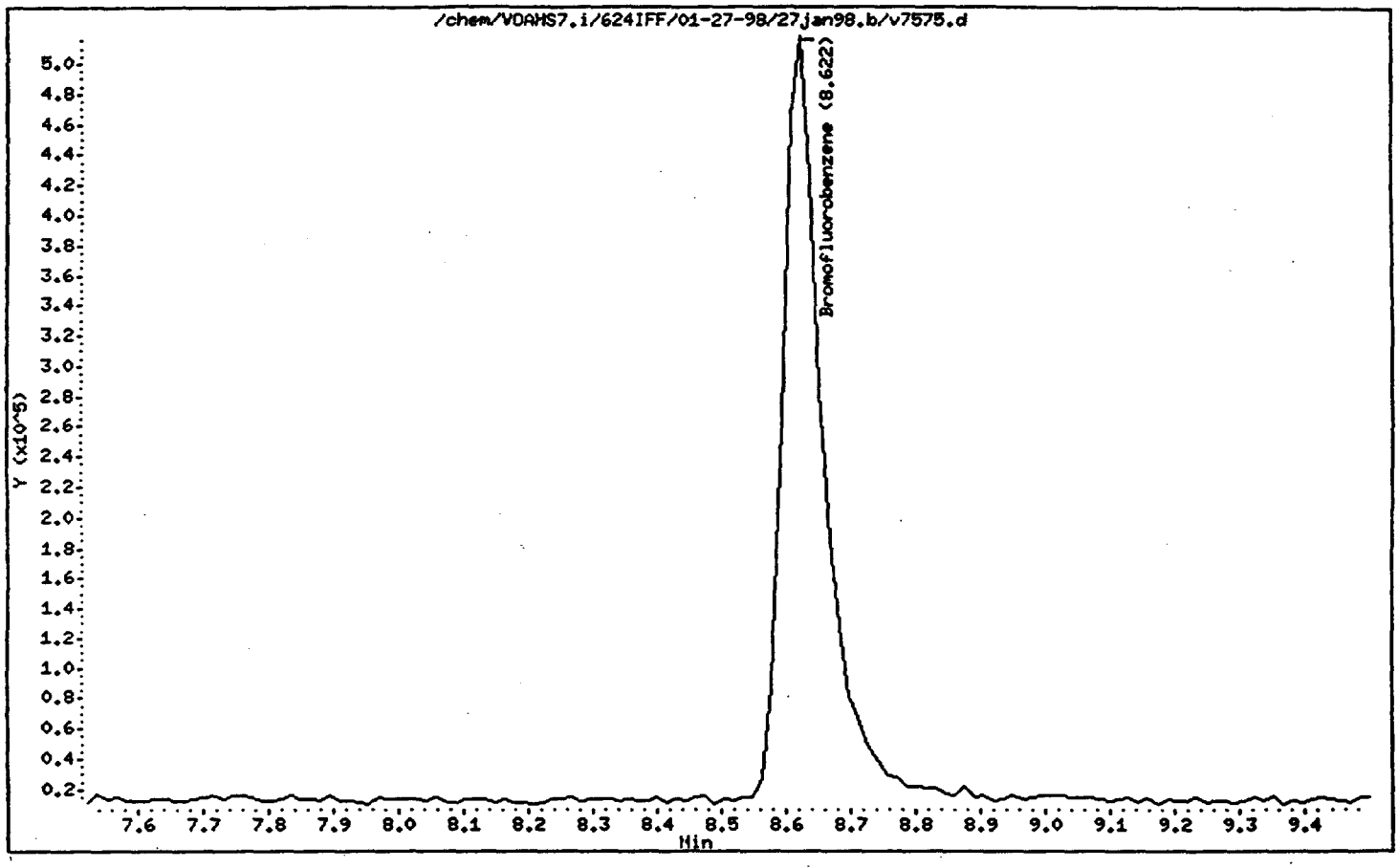
Instrument: VOAMS7.i

Sample Info: VBFB027 50ng

Operator: VOAMS 4

Column phase: DB-624

Column diameter: 0.53



850930298

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab File ID: V7975

BFB Injection Date: 02/09/98

Instrument ID: VOAMS7

BFB Injection Time: 1039

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	24.2
75	30.0 - 60.0% of mass 95	53.7
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.7
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 100.0% of mass 95	81.5
175	5.0 - 9.0% of mass 174	6.3 (7.7)1
176	95.0 - 101.0% of mass 174	79.2 (97.2)1
177	5.0 - 9.0% of mass 176	4.9 (6.2)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT ID	LAB SAMPLE No.	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD040	VSTD040	V7977	02/09/98	1149
02	VV040	VV040	V7980	02/09/98	1342
03	TRIP_BLANK	42919	V7995	02/09/98	2106
04	FIELD_BLANK	42918	V7996	02/09/98	2133
05	MW-22	42917	V7997	02/09/98	2200
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

850930299

Data File: /chem/VOAHS7.i/624IFF/01-27-98/09feb98.b/v7975.d

Date : 09-FEB-98 10:39:00

Client ID:

Instrument: VOAHS7.i

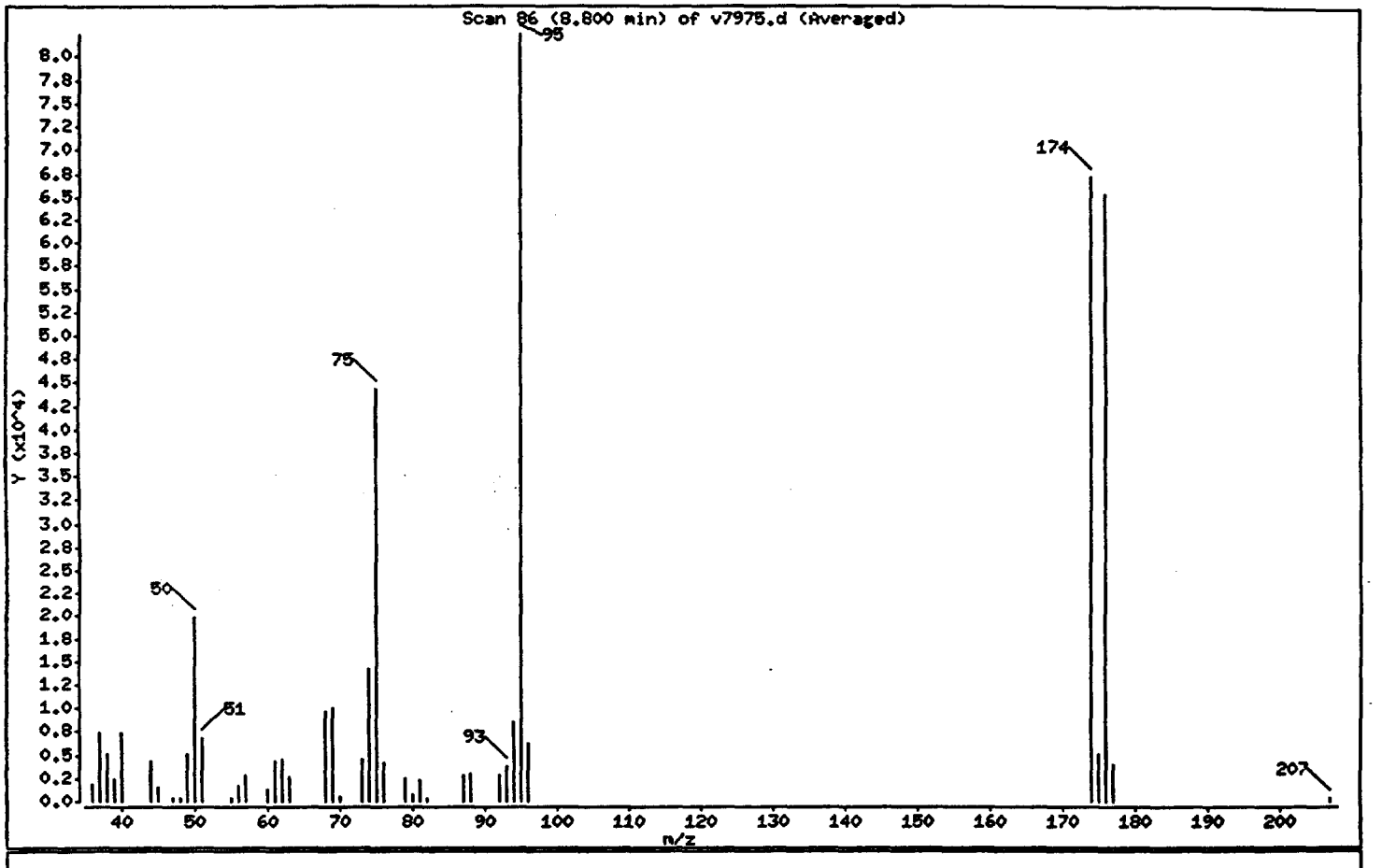
Sample Info: VBFB040 50ng

Operator: VOAHS 4

Column phase: DB-624

Column diameter: 0.53

1 Bromofluorobenzene



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	24.23
75	30.00 - 60.00% of mass 95	53.74
96	5.00 - 9.00% of mass 95	7.67
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 100.00% of mass 95	81.51
175	5.00 - 9.00% of mass 174	6.26 (7.68)
176	95.00 - 101.00% of mass 174	79.20 (97.17)
177	5.00 - 9.00% of mass 176	4.91 (6.20)

850930300

Data File: /chem/VOAMS7.i/624IFF/01-27-98/09feb98.b/v7975.d

Date : 09-FEB-98 10:39:00

Client ID:

Instrument: VOAMS7.i

Sample Info: VBFB040 50ng

Operator: VOAMS 4

Column phase: DB-624

Column diameter: 0.53

Data File: v7975.d

Spectrum: Scan 87 (8.800 min) of v7975.d (Averaged)

Location of Maximum: 95.00

Number of points: 42

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1926	51.00	6866	73.00	4570	93.00	3736
37.00	7322	55.00	333	74.00	14292	94.00	8578
38.00	5078	56.00	1665	75.00	44264	95.00	82365
39.00	2442	57.00	2922	76.00	4171	96.00	6314
40.00	7447	60.00	1261	79.00	2488	174.00	67133
44.00	4289	61.00	4342	80.00	827	175.00	5159
45.00	1581	62.00	4607	81.00	2256	176.00	65234
47.00	366	63.00	2691	82.00	399	177.00	4044
48.00	349	68.00	9703	87.00	2849	207.00	440
49.00	5072	69.00	10059	88.00	3069		
50.00	19960	70.00	492	92.00	2749		

850930301

Data File: /chem/VOAMS7.i/624IFF/01-27-98/09feb98.b/v7975.d

Date : 09-FEB-98 10:39:00

Client ID:

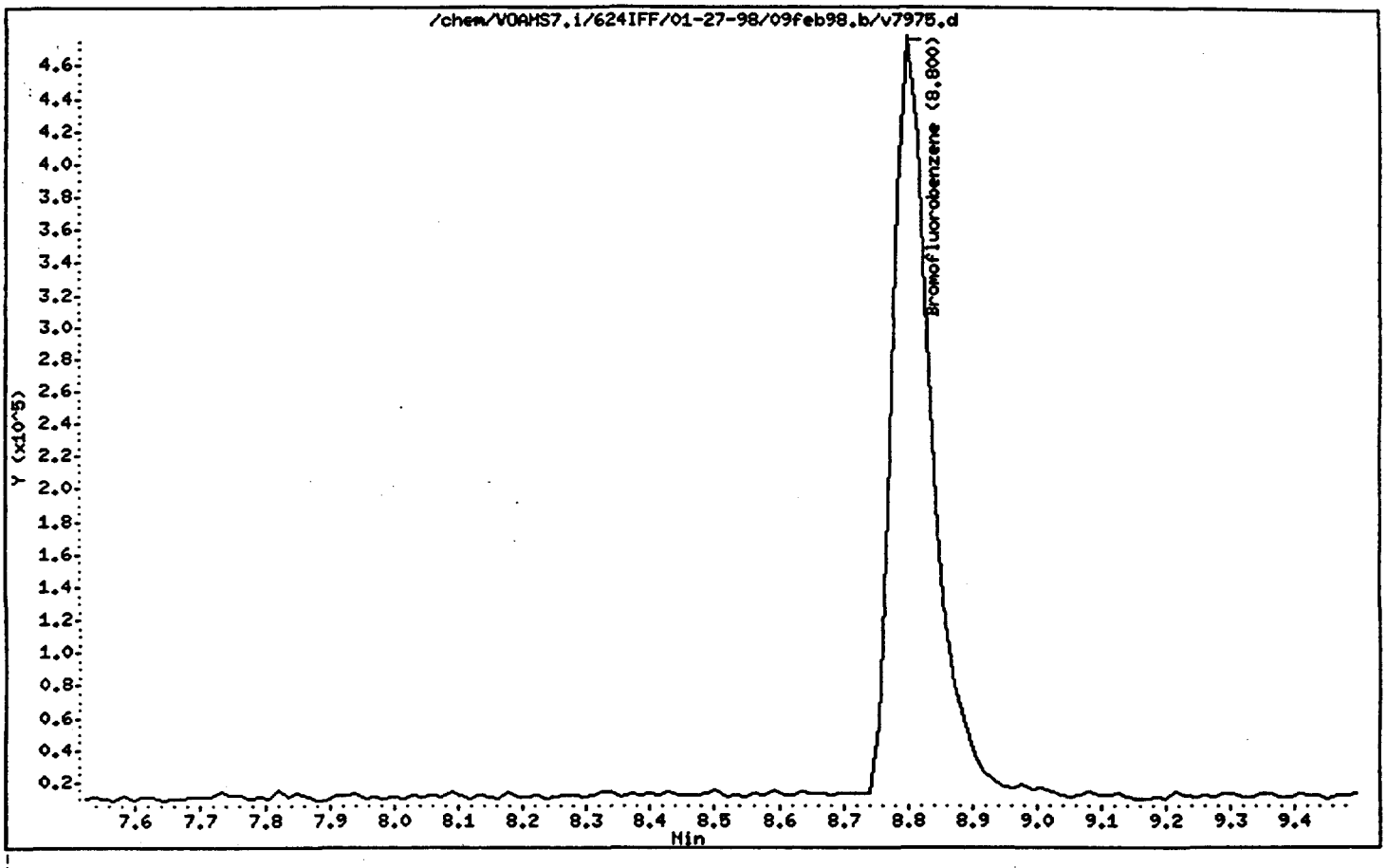
Instrument: VOAMS7.i

Sample Info: VBFB040 50ng

Operator: VOAMS 4

Column phase: DB-624

Column diameter: 0.53



850930302

VOLATILE METHOD BLANK SUMMARY

LAB SAMPLE NO.

VV040

Matrix: WATER

Level: LOW

Lab File ID: V7980

Instrument ID: VOAMS7

Date Analyzed: 02/09/98

Time Analyzed: 1342

Heated Purge (Y/N) N

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT ID.	LAB SAMPLE NO	LAB FILE ID	TIME ANALYZED
01	TRIP_BLANK	42919	V7995	2106
02	FIELD_BLANK	42918	V7996	2133
03	MW-22	42917	V7997	2200
04				
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS:

850930303

Client ID: **VV040**
Site:

Lab Sample No: **VV040**
Lab Job No: B069

Date Sampled: _____
Date Received: _____
Date Analyzed: 02/09/98
GC Column: DB624
Instrument ID: VOAMS7.i
Lab File ID: v7980.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Chloromethane	ND	0.9
Bromomethane	ND	0.3
Vinyl Chloride	ND	0.4
Chloroethane	ND	1.0
Methylene Chloride	ND	1.0
Acetone	ND	5.0
Carbon Disulfide	ND	1.0
Trichlorofluoromethane	ND	0.2
1,1-Dichloroethene	ND	0.6
1,1-Dichloroethane	ND	0.3
trans-1,2-Dichloroethene	ND	0.3
cis-1,2-Dichloroethene	ND	1.0
Chloroform	ND	0.2
1,2-Dichloroethane	ND	0.2
2-Butanone	ND	5.0
1,1,1-Trichloroethane	ND	0.2
Carbon Tetrachloride	ND	0.2
Bromodichloromethane	ND	0.2
1,2-Dichloropropane	ND	0.5
cis-1,3-Dichloropropene	ND	0.3
Trichloroethene	ND	0.4
Dibromochloromethane	ND	0.2
1,1,2-Trichloroethane	ND	0.4
Benzene	ND	0.2
trans-1,3-Dichloropropene	ND	0.3
2-Chloroethyl Vinyl Ether	ND	0.5
Bromoform	ND	0.3
4-Methyl-2-Pentanone	ND	5.0
2-Hexanone	ND	5.0
Tetrachloroethene	ND	0.1
1,1,2,2-Tetrachloroethane	ND	0.3
Toluene	ND	0.2
Chlorobenzene	ND	0.1
Ethylbenzene	ND	0.2

Client ID: **VV040**
Site:

Lab Sample No: **VV040**
Lab Job No: B069

Date Sampled: _____
Date Received: _____
Date Analyzed: 02/09/98
GC Column: DB624
Instrument ID: VOAMS7.i
Lab File ID: v7980.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS (cont'd)
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Styrene	ND	1.0
Xylene (Total)	ND	1.0
Ethyl Ether	ND	5.0
Acrolein	ND	50
Freon TF	ND	5.0
Isopropanol	ND	500
Acetonitrile	ND	100
TBA	ND	100
Acrylonitrile	ND	50
MTBE	ND	1.0
Hexane	ND	1.0
DIPE	ND	1.0
Ethyl Acetate	ND	10
Vinyl Acetate	ND	5.0
Tetrahydrofuran	ND	1.0
Cyclohexane	ND	5.0
Isobutanol	ND	500
Isopropyl Acetate	ND	5.0
n-Heptane	ND	1.0
n-Butanol	ND	250
Propyl Acetate	ND	5.0
Butyl Acetate	ND	5.0
1,2-Dibromoethane	ND	1.0
1,3-Dichlorobenzene	ND	0.3
1,4-Dichlorobenzene	ND	0.2
1,2-Dichlorobenzene	ND	0.2
Naphthalene	ND	1.0
Methylnaphthalene (total)	ND	1.0
Dimethylnaphthalene (total)	ND	1.0
Dichlorodifluoromethane	ND	0.5
1,4-Dioxane	ND	1000
n-Pentane	ND	1.0
5-Methyl-2-Hexanone	ND	1.0
Isopropylbenzene	ND	1.0

Client ID: **VV040**
Site:

Lab Sample No: **VV040**
Lab Job No: B069

Date Sampled: _____
Date Received: _____
Date Analyzed: 02/09/98
GC Column: DB624
Instrument ID: VOAMS7.i
Lab File ID: v7980.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS (cont'd)
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
1,2,4-Trimethylbenzene	ND	1.0
Cyclohexanone	ND	100
1,2,4-Trichlorobenzene	ND	1.0
Methyl Methacrylate	ND	5.0
Allyl Alcohol	ND	1000
Epichlorohydrin	ND	100
Allyl Chloride	ND	5.0
Benzyl Chloride	ND	5.0
Isoprene	ND	5.0
1,1,1,2-Tetrachloroethane	ND	1.0

Client ID: **VV040**
Site:

Lab Sample No: **VV040**
Lab Job No: B069

Date Sampled: _____
Date Received: _____
Date Analyzed: 02/09/98
GC Column: DB624
Instrument ID: VOAMS7.i
Lab File ID: v7980.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
TENTATIVELY IDENTIFIED COMPOUNDS
METHOD 624

	COMPOUND NAME	RT	EST. CONC. ug/l	Q
1.	NO VOLATILE ORGANIC COMPOUNDS FOUND			
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

TOTAL ESTIMATED CONCENTRATION	0.0

850930307

Data File: /chem/VOAMS7.i/624IFF/01-27-98/09feb98.b/v7980.d
Report Date: 10-Feb-98 07:21:17

Envirotech Research, Inc.

VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/VOAMS7.i/624IFF/01-27-98/09feb98.b/v7980.d
Lab Smp Id: VV040 Client Smp ID: VV040
Inj Date : 09-FEB-98 13:42:00
Operator : VOAMS 7 Inst ID: VOAMS7.i
Smp Info : VV040
Misc Info :
Comment :
Method : /chem/VOAMS7.i/624IFF/01-27-98/09feb98.b/IFF624.m
Meth Date : 09-Feb-98 12:22:45 Quant Type: ISTD
Cal Date : 27-JAN-98 17:37:00 Cal File: v7580.d
Als bottle: 4 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.20
Procesing Host: hpvoa

Concentration Formula: 5/Vo

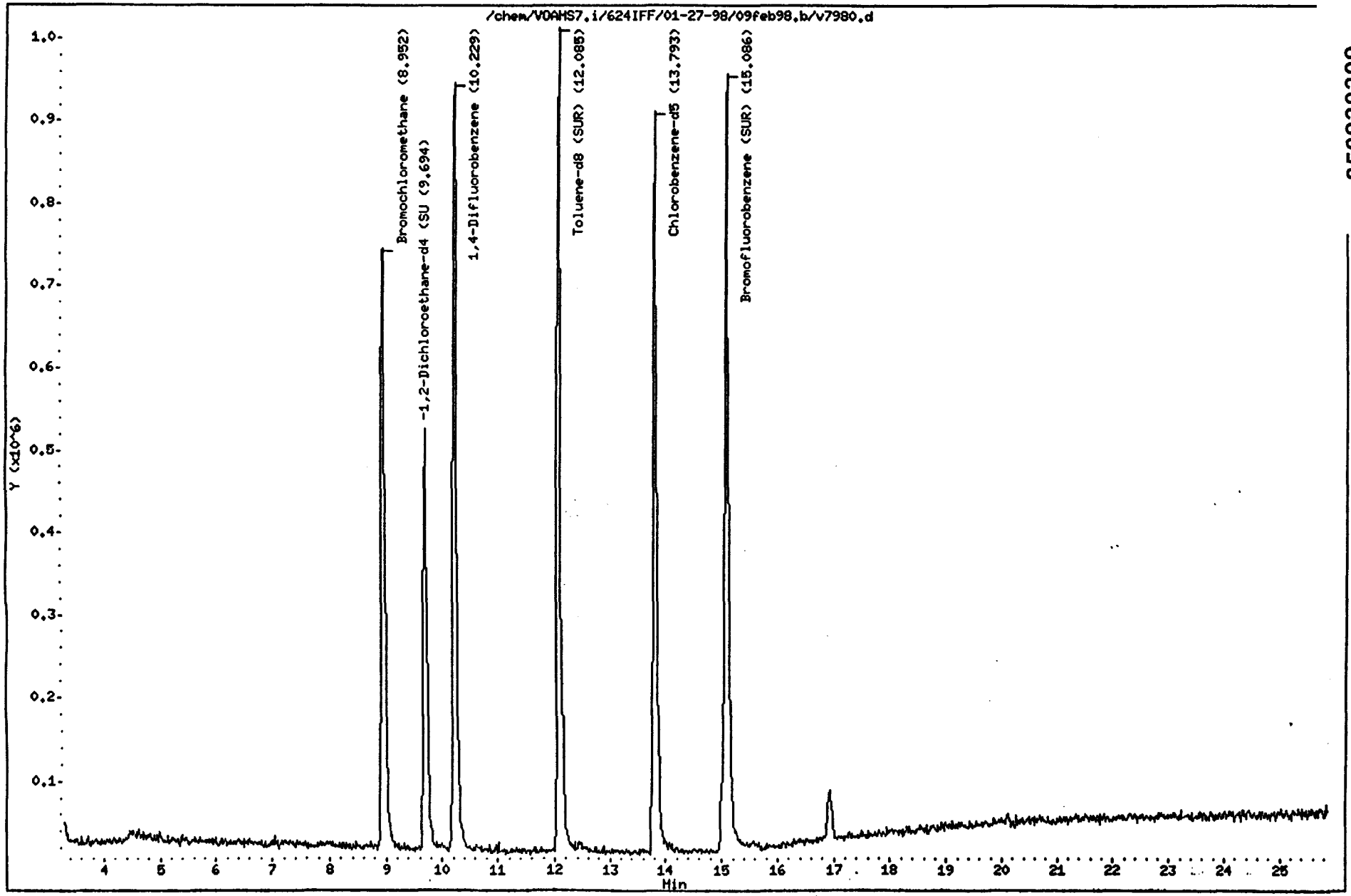
Name	Value	Description
Vo	5.000	Sample Volume

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
* 2 Bromochloromethane	128	8.952	8.816	(1.000)	470843	30	
$ 16 1,2-Dichloroethane-d4 (SUR)	104	9.694	9.574	(0.948)	106826	30	30
* 19 1,4-Difluorobenzene	114	10.229	10.093	(1.000)	1674155	30	
$ 37 Toluene-d8 (SUR)	98	12.085	11.950	(1.181)	1486375	30	30
* 32 Chlorobenzene-d5	117	13.793	13.643	(1.000)	1153715	30	
$ 41 Bromofluorobenzene (SUR)	95	15.086	15.024	(1.094)	849356	29	29

850930308

Data File: /chem/VOAHS7.i/624IFF/01-27-98/09feb98.b/v7980.d
Date : 09-FEB-98 13:42:00
Client ID: VV040
Sample Info: VV040
Purge Volume: 5.0
Column phase: DB624

Instrument: VOAHS7.i
Operator: VOAHS 7
Column diameter: 0.53



850930309

VOLATILE ORGANICS INITIAL CALIBRATION DATA
METHOD 624

Instrument ID: VOAMS7 Calibration Date(s): 01/27/98 01/27/98

Heated Purge: (Y/N) N Calibration Time(s): 1544 1737

LAB FILE ID: RRF5: V7576 RRF10: V7577 RRF20: V7578
RRF50: V7579 RRF200: V7580

COMPOUND	RRF5	RRF10	RRF20	RRF50	RRF200
Chloromethane	0.408	0.399	0.433	0.371	0.328
Bromomethane	0.571	0.647	0.677	0.625	0.722
Vinyl Chloride	0.353	0.428	0.522	0.436	0.418
Chloroethane	0.486	0.482	0.536	0.456	0.437
Methylene Chloride	1.216	1.211	1.190	1.164	1.014
Acetone	0.244	0.266	0.214	0.230	0.226
Carbon Disulfide	0.185	0.220	0.181	0.212	0.190
Trichlorofluoromethane	1.884	1.750	1.791	2.012	1.771
1,1-Dichloroethene	0.808	0.713	0.906	0.786	0.760
1,1-Dichloroethane	2.107	2.051	2.001	2.183	2.048
trans-1,2-Dichloroethene	1.160	1.170	1.304	1.177	1.138
cis-1,2-Dichloroethene	1.413	1.391	1.424	1.392	1.326
Chloroform	3.008	2.769	2.718	2.980	2.744
1,2-Dichloroethane	0.575	0.525	0.510	0.580	0.580
2-Butanone	0.096	0.072	0.074	0.087	0.081
1,1,1-Trichloroethane	0.561	0.526	0.554	0.620	0.606
Carbon Tetrachloride	0.517	0.507	0.533	0.601	0.591
Bromodichloromethane	0.837	0.856	0.890	0.892	0.936
1,2-Dichloropropane	0.331	0.291	0.291	0.322	0.337
cis-1,3-Dichloropropene	0.510	0.480	0.476	0.575	0.605
Trichloroethene	0.421	0.400	0.392	0.433	0.433
Dibromochloromethane	0.946	1.026	1.046	1.049	1.067
1,1,2-Trichloroethane	0.267	0.250	0.254	0.296	0.295
Benzene	0.807	0.722	0.713	0.826	0.827
trans-1,3-Dichloropropene	0.446	0.416	0.441	0.507	0.534
2-Chloroethyl Vinyl Ether	0.181	0.171	0.162	0.202	0.236
Bromoform	0.611	0.540	0.590	0.652	0.716
4-Methyl-2-Pentanone	0.227	0.210	0.201	0.229	0.246
2-Hexanone	0.184	0.176	0.164	0.209	0.222
Tetrachloroethene	0.680	0.596	0.671	0.678	0.685
1,1,2,2-Tetrachloroethane	0.538	0.450	0.433	0.496	0.520
Toluene	0.805	0.763	0.778	0.883	0.915
Chlorobenzene	0.986	0.881	0.917	0.996	1.037
Ethylbenzene	0.401	0.350	0.344	0.395	0.416
Styrene	0.700	0.706	0.727	0.856	0.910
Xylene (Total)	0.490	0.445	0.468	0.523	0.542
Ethyl Ether	0.767	0.702	0.722	0.721	0.668
Acrolein	0.087	0.092	0.090	0.094	0.087
Freon TF	1.831	2.196	2.264	2.244	2.138

850930310

VOLATILE ORGANICS INITIAL CALIBRATION DATA (cont'd)
METHOD 624

Instrument ID: VOAMS7 Calibration Date(s): 01/27/98 01/27/98

Heated Purge: (Y/N) N Calibration Time(s): 1544 1737

LAB FILE ID: RRF5: V7576 RRF10: V7577 RRF20: V7578
RRF50: V7579 RRF200: V7580

COMPOUND	RRF5	RRF10	RRF20	RRF50	RRF200
Isopropanol					
Acetonitrile	0.054	0.066	0.062	0.063	0.060
TBA	0.069	0.071	0.067	0.071	0.059
Acrylonitrile	0.163	0.164	0.146	0.154	0.164
MTBE	2.932	2.594	2.454	2.781	2.686
Hexane					
DIPE					
Ethyl Acetate	0.744	0.670	0.595	0.648	0.622
Vinyl Acetate	0.178	0.188	0.182	0.228	0.201
Tetrahydrofuran					
Cyclohexane	0.240	0.306	0.305	0.329	0.348
Isobutanol					
Isopropyl Acetate					
n-Heptane					
n-Butanol					
Propyl Acetate					
Butyl Acetate					
1,2-Dibromoethane	0.854	0.787	0.783	0.889	0.887
1,3-Dichlorobenzene	0.630	0.656	0.593	0.709	0.805
1,4-Dichlorobenzene	0.977	0.819	0.985	1.053	1.089
1,2-Dichlorobenzene	0.796	0.668	0.654	0.736	0.774
Naphthalene	0.151	0.120	0.136	0.168	0.147
Methylnaphthalene (total)					
Dimethylnaphthalene (total)					
Dichlorodifluoromethane	0.611	0.577	0.923	0.695	0.702
1,4-Dioxane	0.002	0.002	0.002	0.002	0.002
n-Pentane					
5-Methyl-2-Hexanone					
Isopropylbenzene					
1,2,4-Trimethylbenzene					
Cyclohexanone					
1,2,4-Trichlorobenzene					
Methyl Methacrylate	0.069	0.060	0.068	0.070	0.079
Allyl Alcohol	0.004	0.005	0.004	0.004	0.003
Epichlorohydrin	0.025	0.026	0.026	0.028	0.030
Allyl Chloride	0.690	0.797	0.730	0.715	0.754
Benzyl Chloride	0.459	0.477	0.526	0.534	0.596
Isoprene	0.568	0.760	0.818	0.821	0.766
1,1,1,2-Tetrachloroethane					

850930311

VOLATILE ORGANICS INITIAL CALIBRATION DATA (cont'd)
METHOD 624

Instrument ID: VOAMS7 Calibration Date(s): 01/27/98 01/27/98

Heated Purge: (Y/N) N Calibration Time(s): 1544 1737

LAB FILE ID: RRF5: V7576 RRF10: V7577 RRF20: V7578
RRF50: V7579 RRF200: V7580

COMPOUND	RRF5	RRF10	RRF20	RRF50	RRF200
1,2-Dichloroethane-d4 (SUR)	0.065	0.067	0.060	0.061	0.066
Toluene-d8 (SUR)	0.874	0.897	0.889	0.912	0.920
Bromofluorobenzene (SUR)	0.746	0.775	0.801	0.738	0.717

850930312

VOLATILE ORGANICS INITIAL CALIBRATION DATA (cont'd)
METHOD 624

Instrument ID: VOAMS7 Calibration Date(s): 01/27/98 01/27/98

Heated Purge: (Y/N) N Calibration Time(s): 1544 1737

COMPOUND	CURVE	COEFFICENT A1	%RSD OR R^2
Chloromethane	AVRG	0.38783852	10.4*
Bromomethane	AVRG	0.64847260	8.7*
Vinyl Chloride	AVRG	0.43151997	14.0*
Chloroethane	AVRG	0.47932185	7.8*
Methylene Chloride	AVRG	1.15898789	7.2*
Acetone	AVRG	0.23566775	8.4*
Carbon Disulfide	AVRG	0.19782065	8.8*
Trichlorofluoromethane	AVRG	1.84178793	5.9*
1,1-Dichloroethene	AVRG	0.79473512	9.0*
1,1-Dichloroethane	AVRG	2.07835624	3.3*
trans-1,2-Dichloroethene	AVRG	1.18994150	5.5*
cis-1,2-Dichloroethene	AVRG	1.38918405	2.7*
Chloroform	AVRG	2.84395057	4.9*
1,2-Dichloroethane	AVRG	0.55399090	6.1*
2-Butanone	AVRG	0.08203968	12.1*
1,1,1-Trichloroethane	AVRG	0.57362633	6.8*
Carbon Tetrachloride	AVRG	0.54963648	7.9*
Bromodichloromethane	AVRG	0.88211718	4.3*
1,2-Dichloropropane	AVRG	0.31437296	6.9*
cis-1,3-Dichloropropene	AVRG	0.52922556	10.9*
Trichloroethene	AVRG	0.41590323	4.6*
Dibromochloromethane	AVRG	1.02678088	4.6*
1,1,2-Trichloroethane	AVRG	0.27250682	8.1*
Benzene	AVRG	0.77890019	7.3*
trans-1,3-Dichloropropene	AVRG	0.46884779	10.5*
2-Chloroethyl Vinyl Ether	AVRG	0.19056777	15.4*
Bromoform	AVRG	0.62197361	10.6*
4-Methyl-2-Pentanone	AVRG	0.22264116	7.9*
2-Hexanone	AVRG	0.19113414	12.4*
Tetrachloroethene	AVRG	0.66203835	5.6*
1,1,2,2-Tetrachloroethane	AVRG	0.48734688	9.2*
Toluene	AVRG	0.82890391	8.1*
Chlorobenzene	AVRG	0.96331672	6.6*
Ethylbenzene	AVRG	0.38116473	8.5*
Styrene	AVRG	0.77989977	12.4*
Xylene (Total)	AVRG	0.49349183	8.0*
Ethyl Ether	AVRG	0.71623172	5.0*
Acrolein	AVRG	0.09015863	3.4*
Freon TF	AVRG	2.13445075	8.3*

* Compound with required maximum % RSD value.
** Compound with required minimum RRF value.

850930313

VOLATILE ORGANICS INITIAL CALIBRATION DATA (cont'd)
METHOD 624

Instrument ID: VOAMS7 Calibration Date(s): 01/27/98 01/27/98

Heated Purge: (Y/N) N Calibration Time(s): 1544 1737

COMPOUND	CURVE	COEFFICENT A1	%RSD OR R^2
Isopropanol	AVRG		
Acetonitrile	AVRG	0.06097352	7.5*
TBA	AVRG	0.06750030	7.4*
Acrylonitrile	AVRG	0.15831583	5.0*
MTBE	AVRG	2.68977271	6.8*
Hexane	AVRG		
DIPE	AVRG		
Ethyl Acetate	AVRG	0.65560004	8.6*
Vinyl Acetate	AVRG	0.19552433	10.5*
Tetrahydrofuran	AVRG		
Cyclohexane	AVRG	0.30561559	13.4*
Isobutanol	AVRG		
Isopropyl Acetate	AVRG		
n-Heptane	AVRG		
n-Butanol	AVRG		
Propyl Acetate	AVRG		
Butyl Acetate	AVRG		
1,2-Dibromoethane	AVRG	0.83999894	6.2*
1,3-Dichlorobenzene	AVRG	0.67865141	12.1*
1,4-Dichlorobenzene	AVRG	0.98467419	10.5*
1,2-Dichlorobenzene	AVRG	0.72568951	8.7*
Naphthalene	AVRG	0.14439436	12.5*
Methylnaphthalene (total)	AVRG		
Dimethylnaphthalene (total)	AVRG		
Dichlorodifluoromethane	AVRG	0.70178933	19.2**
1,4-Dioxane	AVRG	0.00193096	6.6*
n-Pentane	AVRG		
5-Methyl-2-Hexanone	AVRG		
Isopropylbenzene	AVRG		
1,2,4-Trimethylbenzene	AVRG		
Cyclohexanone	AVRG		
1,2,4-Trichlorobenzene	AVRG		
Methyl Methacrylate	AVRG	0.06939671	9.4*
Allyl Alcohol	AVRG	0.00422350	11.4*
Epichlorohydrin	AVRG	0.02680731	7.6**
Allyl Chloride	AVRG	0.73743260	5.5**
Benzyl Chloride	AVRG	0.51863627	10.3**
Isoprene	AVRG	0.74658079	13.9**
1,1,1,2-Tetrachloroethane	AVRG		

* Compound with required maximum % RSD value.
** Compound with required minimum RRF value.

850930314

VOLATILE ORGANICS INITIAL CALIBRATION DATA (cont'd)
METHOD 624

Instrument ID: VOAMS7 Calibration Date(s): 01/27/98 01/27/98

Heated Purge: (Y/N) N Calibration Time(s): 1544 1737

COMPOUND	CURVE	COEFFICENT A1	%RSD OR R^2
1,2-Dichloroethane-d4 (SUR)	AVRG	0.06390518	5.1*
Toluene-d8 (SUR)	AVRG	0.89845046	2.0*
Bromofluorobenzene (SUR)	AVRG	0.75559195	4.3*

* Compound with required maximum % RSD value.
** Compound with required minimum RRF value.

850930315

VOLATILE ORGANICS CONTINUING CALIBRATION CHECK
METHOD 624

Instrument ID: VOAMS7 Calibration Date: 02/09/98 Time: 1149

Lab File ID: V7977 Init. Calib. Date(s): 01/27/98 01/27/98

Heated Purge: (Y/N) N Init. Calib. Times: 1544 1737

COMPOUND	$\overline{RRF}$	RRF20	MIN RRF	%D	MAX %D
Chloromethane	0.388	0.397		-2.3	104
Bromomethane	0.648	0.672		-3.7	86.0
Vinyl Chloride	0.431	0.520		-20.6	96.0
Chloroethane	0.479	0.527		-10.0	62.0
Methylene Chloride	1.159	1.257		-8.4	39.5
Acetone	0.236	0.222		5.9	
Carbon Disulfide	0.198	0.221		-11.6	
Trichlorofluoromethane	1.842	2.307		-25.2	52.0
1,1-Dichloroethene	0.795	0.951		-19.6	49.5
1,1-Dichloroethane	2.078	2.183		-5.0	27.5
trans-1,2-Dichloroethene	1.190	1.288		-8.2	30.5
cis-1,2-Dichloroethene	1.389	1.437		-3.4	
Chloroform	2.844	3.110		-9.2	32.5
1,2-Dichloroethane	0.554	0.591		-6.5	32.0
2-Butanone	0.082	0.086		-4.7	
1,1,1-Trichloroethane	0.573	0.677		-18.0	25.0
Carbon Tetrachloride	0.550	0.674		-22.5	27.0
Bromodichloromethane	0.882	0.993		-12.4	34.5
1,2-Dichloropropane	0.314	0.316		0.1	66.0
cis-1,3-Dichloropropene	0.529	0.543		-2.6	76.0
Trichloroethene	0.416	0.453		-8.7	33.5
Dibromochloromethane	1.027	1.103		-7.4	32.5
1,1,2-Trichloroethane	0.272	0.287		-5.5	29.0
Benzene	0.779	0.812		-4.2	36.0
trans-1,3-Dichloropropene	0.469	0.482		-2.6	50.0
2-Chloroethyl Vinyl Ether	0.190	0.186		2.1	124
Bromoform	0.622	0.661		-6.1	29.0
4-Methyl-2-Pentanone	0.223	0.202		9.4	
2-Hexanone	0.191	0.171		10.5	
Tetrachloroethene	0.662	0.761		-14.8	26.5
1,1,2,2-Tetrachloroethane	0.487	0.475		2.5	39.5
Toluene	0.829	0.903		-8.9	25.5
Chlorobenzene	0.963	0.997		-3.5	34.0
Ethylbenzene	0.381	0.400		-4.8	41.0
Styrene	0.780	0.797		-2.0	
Xylene (Total)	0.494	0.506		-2.4	
Ethyl Ether	0.716	0.706		1.4	

850930316

VOLATILE ORGANICS CONTINUING CALIBRATION CHECK(cont'd)
METHOD 624

Instrument ID: VOAMS7 Calibration Date: 02/09/98 Time: 1149

Lab File ID: V7977 Init. Calib. Date(s): 01/27/98 01/27/98

Heated Purge: (Y/N) N Init. Calib. Times: 1544 1737

COMPOUND	$\overline{RRF}$	RRF20	MIN RRF	%D	MAX %D
Acrolein	0.090	0.065		27.8	
Freon TF	2.135	2.239		-4.7	
Isopropanol					
Acetonitrile	0.061	0.063		-3.1	
TBA	0.067	0.066		1.5	
Acrylonitrile	0.158	0.154		2.5	
MTBE	2.689	2.659		1.1	
Hexane					
DIPE					
Ethyl Acetate	0.656	0.644		1.8	
Vinyl Acetate	0.195	0.218		-11.6	
Tetrahydrofuran					
Cyclohexane	0.306	0.321		-4.9	
Isobutanol					
Isopropyl Acetate					
n-Heptane					
n-Butanol					
Propyl Acetate					
Butyl Acetate					
1,2-Dibromoethane	0.840	0.874		-4.0	
1,3-Dichlorobenzene	0.679	0.722		-6.3	27.0
1,4-Dichlorobenzene	0.985	1.006		-2.1	37.0
1,2-Dichlorobenzene	0.726	0.734		-1.1	37.0
Naphthalene	0.144	0.152		-5.4	
Methylnaphthalene (total)					
Dimethylnaphthalene (total)					
Dichlorodifluoromethane	0.702	0.853	0.01	-21.5	40.0
1,4-Dioxane	0.002	0.002		0.0	
n-Pentane			0.01		
5-Methyl-2-Hexanone			0.01		50.0
Isopropylbenzene			0.01		50.0
1,2,4-Trimethylbenzene			0.01		50.0
Cyclohexanone			0.0001		50.0
1,2,4-Trichlorobenzene			0.01		50.0
Methyl Methacrylate	0.069	0.072		-4.3	
Allyl Alcohol	0.004	0.003		25.0	40.0
Epichlorohydrin	0.027	0.024	0.01	11.1	40.0

VOLATILE ORGANICS CONTINUING CALIBRATION CHECK(cont'd)
METHOD 624

Instrument ID: VOAMS7 Calibration Date: 02/09/98 Time: 1149

Lab File ID: V7977 Init. Calib. Date(s): 01/27/98 01/27/98

Heated Purge: (Y/N) N Init. Calib. Times: 1544 1737

COMPOUND	$\overline{RRF}$	RRF20	MIN RRF	%D	MAX %D
Allyl Chloride	0.737	0.711	0.01	3.5	40.0
Benzyl Chloride	0.518	0.503	0.01	2.9	40.0
Isoprene	0.747	0.767	0.01	-2.5	40.0
1,1,1,2-Tetrachloroethane			0.01		50.0
1,2-Dichloroethane-d4 (SUR)	0.064	0.064		0.0	
Toluene-d8 (SUR)	0.898	0.894		0.4	
Bromofluorobenzene (SUR)	0.755	0.785		-3.8	

850930318

VOLATILE ORGANICS CONTINUING CALIBRATION CHECK
METHOD 624

Instrument ID: VOAMS7 Calibration Date: 02/10/98 Time: 1042

Lab File ID: V8019 Init. Calib. Date(s): 01/27/98 01/27/98

Heated Purge: (Y/N) N Init. Calib. Times: 1544 1737

COMPOUND	$\overline{RRF}$	RRF20	MIN RRF	%D	MAX %D
Chloromethane	0.388	0.445		-14.5	104
Bromomethane	0.648	0.582		10.2	86.0
Vinyl Chloride	0.431	0.524		-21.4	96.0
Chloroethane	0.479	0.468		2.3	62.0
Methylene Chloride	1.159	1.156		0.2	39.5
Acetone	0.236	0.262		-11.0	
Carbon Disulfide	0.198	0.192		3.0	
Trichlorofluoromethane	1.842	1.330		27.8	52.0
1,1-Dichloroethene	0.795	0.809		-1.6	49.5
1,1-Dichloroethane	2.078	2.244		-7.8	27.5
trans-1,2-Dichloroethene	1.190	1.296		-8.9	30.5
cis-1,2-Dichloroethene	1.389	1.430		-2.8	
Chloroform	2.844	2.787		2.0	32.5
1,2-Dichloroethane	0.554	0.468		15.5	32.0
2-Butanone	0.082	0.080		2.4	
1,1,1-Trichloroethane	0.573	0.579		-1.0	25.0
Carbon Tetrachloride	0.550	0.524		4.7	27.0
Bromodichloromethane	0.882	0.812		7.9	34.5
1,2-Dichloropropane	0.314	0.352		-12.1	66.0
cis-1,3-Dichloropropene	0.529	0.537		-1.5	76.0
Trichloroethene	0.416	0.450		-8.0	33.5
Dibromochloromethane	1.027	0.899		12.5	32.5
1,1,2-Trichloroethane	0.272	0.275		-1.1	29.0
Benzene	0.779	0.857		-10.0	36.0
trans-1,3-Dichloropropene	0.469	0.457		2.6	50.0
2-Chloroethyl Vinyl Ether	0.190	0.222		-16.8	124
Bromoform	0.622	0.584		6.1	29.0
4-Methyl-2-Pentanone	0.223	0.227		-1.6	
2-Hexanone	0.191	0.205		-7.3	
Tetrachloroethene	0.662	0.776		-17.2	26.5
1,1,2,2-Tetrachloroethane	0.487	0.476		2.2	39.5
Toluene	0.829	0.929		-11.9	25.5
Chlorobenzene	0.963	1.006		-4.3	34.0
Ethylbenzene	0.381	0.442		-16.0	41.0
Styrene	0.780	0.844		-8.2	
Xylene (Total)	0.494	0.526		-6.3	
Ethyl Ether	0.716	0.688		3.9	

VOLATILE ORGANICS CONTINUING CALIBRATION CHECK(cont'd)
METHOD 624

Instrument ID: VOAMS7 Calibration Date: 02/10/98 Time: 1042

Lab File ID: V8019 Init. Calib. Date(s): 01/27/98 01/27/98

Heated Purge: (Y/N) N Init. Calib. Times: 1544 1737

COMPOUND	$\overline{RRF}$	RRF20	MIN RRF	%D	MAX %D
Acrolein	0.090	0.066		26.7	
Freon TF	2.135	2.214		-3.7	
Isopropanol					
Acetonitrile	0.061	0.057		6.6	
TBA	0.067	0.058		13.4	
Acrylonitrile	0.158	0.158		0.0	
MTBE	2.689	2.535		5.7	
Hexane					
DIPE					
Ethyl Acetate	0.656	0.699		-6.4	
Vinyl Acetate	0.195	0.223		-14.2	
Tetrahydrofuran					
Cyclohexane	0.306	0.386		-26.1	
Isobutanol					
Isopropyl Acetate					
n-Heptane					
n-Butanol					
Propyl Acetate					
Butyl Acetate					
1,2-Dibromoethane	0.840	0.874		-4.0	
1,3-Dichlorobenzene	0.679	0.715		-5.3	27.0
1,4-Dichlorobenzene	0.985	1.062		-7.8	37.0
1,2-Dichlorobenzene	0.726	0.725		0.1	37.0
Naphthalene	0.144	0.158		-9.7	
Methylnaphthalene (total)					
Dimethylnaphthalene (total)					
Dichlorodifluoromethane	0.702	0.768	0.01	-9.4	40.0
1,4-Dioxane	0.002	0.002		0.0	
n-Pentane			0.01		
5-Methyl-2-Hexanone			0.01		50.0
Isopropylbenzene			0.01		50.0
1,2,4-Trimethylbenzene			0.01		50.0
Cyclohexanone			0.0001		50.0
1,2,4-Trichlorobenzene			0.01		50.0
Methyl Methacrylate	0.069	0.081		-17.2	
Allyl Alcohol	0.004	0.004		0.0	40.0
Epichlorohydrin	0.027	0.026	0.01	3.7	40.0

VOLATILE ORGANICS CONTINUING CALIBRATION CHECK(cont'd)
METHOD 624

Instrument ID: VOAMS7 Calibration Date: 02/10/98 Time: 1042

Lab File ID: V8019 Init. Calib. Date(s): 01/27/98 01/27/98

Heated Purge: (Y/N) N Init. Calib. Times: 1544 1737

COMPOUND	$\overline{RRF}$	RRF20	MIN RRF	%D	MAX %D
Allyl Chloride	0.737	0.763	0.01	-3.5	40.0
Benzyl Chloride	0.518	0.526	0.01	-1.5	40.0
Isoprene	0.747	0.846	0.01	-13.2	40.0
1,1,1,2-Tetrachloroethane			0.01		50.0
1,2-Dichloroethane-d4 (SUR)	0.064	0.060		6.2	
Toluene-d8 (SUR)	0.898	0.923		-2.6	
Bromofluorobenzene (SUR)	0.755	0.754		0.1	

VOLATILE SYSTEM MONITORING COMPOUND RECOVERY
METHOD 624

Matrix: WATER Level: LOW Lab Job No: B069

	LAB SAMPLE NO.	S1 #	S2 #	S3 #	OTHER	TOT OUT
01	VV040	100	99	97		0
02	42919	97	102	99		0
03	42918	94	103	100		0
04	42917	96	100	97		0
05	VV041	97	102	92		0
06	42917MS	94	99	100		0
07	42917MSD	88	101	101		0
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

		QC LIMITS
S1	= 1,2-Dichloroethane-d4	(86-115)
S2	= Toluene-d8	(89-106)
S3	= Bromofluorobenzene	(76-120)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

850930322

 F 5c

VOLATILE SPIKE RECOVERY SUMMARY
METHOD 624

Matrix: WATER

Level: LOW

Matrix Spike - Lab Sample No.: 42917

MS Sample from Lab Job No: B069

QA Batch: 7003

Compound	MS % REC.	BS % REC.	LIMITS
Chloromethane	165	165	0-273
Bromomethane	95	95	0-242
Vinyl Chloride	170	155	0-251
Chloroethane	110	105	14-230
Methylene Chloride	105	100	0-221
Trichlorofluoromethane	75	60	17-181
1,1-Dichloroethene	110	115	0-234
1,1-Dichloroethane	110	110	59-155
trans-1,2-Dichloroethene	100	100	54-156
Chloroform	100	95	51-138
1,2-Dichloroethane	85	85	49-155
1,1,1-Trichloroethane	90	90	52-162
Carbon Tetrachloride	95	90	70-140
Bromodichloromethane	75	80	35-155
1,2-Dichloropropane	115	110	0-210
cis-1,3-Dichloropropene	95	95	0-227
Trichloroethene	100	100	71-157
Dibromochloromethane	75	80	53-149
1,1,2-Trichloroethane	105	100	52-150
Benzene	105	105	37-151
trans-1,3-Dichloropropene	90	90	17-183
2-Chloroethyl Vinyl Ether	0	115	0-305
Bromoform	80	95	45-169
Tetrachloroethene	110	105	64-148
1,1,2,2-Tetrachloroethane	100	100	46-157
Toluene	110	110	47-150
Chlorobenzene	100	100	37-160
Ethylbenzene	115	115	37-162
1,3-Dichlorobenzene	95	100	59-156
1,4-Dichlorobenzene	95	100	18-190

* Values outside of QC limits

850930323

VOLATILE SPIKE RECOVERY SUMMARY
METHOD 624

Matrix: WATER

Level: LOW

Matrix Spike - Lab Sample No.: 42917

MS Sample from Lab Job No: B069

QA Batch: 7003

Compound	MS % REC.	BS % REC.	LIMITS
1,2-Dichlorobenzene	90	100	18-190

* Values outside of QC limits

Spike Recovery: 0 out of 62 outside limits

COMMENTS: _____

850930324

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): V7977 Date Analyzed: 02/09/98

Instrument ID: VOAMS7 Time Analyzed: 1149

		IS1 (BCM) AREA #	RT #	IS2 (DFB) AREA #	RT #	IS3 (CBZ) AREA #	RT #
	12 HOUR STD	409051	8.97	1410807	10.24	1017749	13.81
	UPPER LIMIT	818102	9.47	2821614	10.74	2035498	14.31
	LOWER LIMIT	204526	8.47	705404	9.74	508874	13.31
	LABORATORY SAMPLE NO.						
01	VV040	470843	8.95	1674155	10.23	1153715	13.79
02	42919	375704	9.00	1260135	10.26	879762	13.81
03	42918	371864	9.00	1254998	10.26	872584	13.82
04	42917	358745	9.00	1264453	10.26	884164	13.82
05							
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

850930325

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): V8019 Date Analyzed: 02/10/98

Instrument ID: VOAMS7 Time Analyzed: 1042

		IS1 (BCM) AREA	#	RT	#	IS2 (DFB) AREA	#	RT	#	IS3 (CBZ) AREA	#	RT	#
	12 HOUR STD	515498		9.07		1838863		10.35		1300367		13.93	
	UPPER LIMIT	1030996		9.57		3677726		10.85		2600734		14.43	
	LOWER LIMIT	257749		8.57		919432		9.85		650184		13.43	
	LABORATORY SAMPLE NO.												
01	VV041	601982		9.05		2280985		10.33		1644234		13.90	
02	42917MS	537919		8.95		2024260		10.23		1446802		13.78	
03	42917MSD	536563		8.95		1965534		10.21		1409524		13.76	
04													
05													
06													
07													
08													
09													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

850930326

VECTRE™
CORPORATION

15 Route 15 South
P.O. Box 930
Lafayette. NJ 07848-0930
973/383-2500
Fax: 973/579-0025

October 14, 1998

Edward M. Melton
Newark Boxboard Company
60 Lockwood Street
Newark, New Jersey 07105

RE: Geo Probe Soil & Ground Water Analytical Results
Newark Box Board
Newark, New Jersey

Dear Mr. Melton:

Vectre Corporation (Vectre) was retained by Newark Box Board (NBB) to document sampling activities being undertaken by EnviroSciences, Inc., on bahalf of Deleet Merchandising. To that end, Vectre collected split soil and ground water samples from ten soil borings and nine temporary ground water sampling locations on NBB property. The purpose of the investigation was to determine if discharges from underground storage tanks at a property directly east of the site (Deleet Manufacturing) have impacted the soils or ground water at NBB's Property. A discussion of the investigative procedures and the results of our split sampling are provided below. A copy of the site location map is presented as Figure 1.

Soil Boring and Well Point Installation/Sampling

On August 31, 1998, a Vectre field professional was present at the site along with a representative from Enviro-Sciences Inc. to observe the installation of ten soil borings/well points. The bore holes were installed by Goldstar Environmental Inc., of Edison, New Jersey. The boreholes were installed to a depth of approximately 3.5 to 15.5 feet below the existing surface grade. Ground water was encountered in the boreholes at depth ranging from 3.5 to 14 feet. During the course of the investigation, our representative observed evidence of petroleum odor and light sheen within bore hole GP-2. The locations of the soil and ground water samples are presented in the Sample Location Plan, Figure 2.

Subsequent to each borehole installation, the Vectre field professional and a professional from Enviro-Sciences Inc. collected split samples of both soil and ground water from each borehole. The ground water samples were obtained by drilling into the water table, removing the drilling tools and placing a section of PVC screen and riser into the borehole, then purging the ground water with a peristaltic pump with dedicated tubing. Each sample was then obtained by lowering a decontaminated bailer into the PVC screen.

Soil Sampling Results

The analytical results obtained for soil samples GP-1 to GP-10 revealed that total concentrations of volatile organic compounds range from not detected (ND) above instrument detection limits to 1.10 mg/kg (ppm) and were below the NJDEP Impact to Groundwater Soil Cleanup Criteria (IGWSCC). A summary of the analytical results are presented in Table 1. A copy of the laboratory analytical and QA/QC results, and chain of custody are present in Appendix A.
and placing a section of PVC screen and riser into the borehole, then purging the ground water with a peristaltic pump with dedicated tubing. Each sample was then obtained by lowering a decontaminated bailer into the PVC screen.

Soil Sampling Results

The analytical results obtained for soil samples GP-1 to GP-10 revealed that total concentrations of volatile organic compounds range from not detected (ND) above instrument detection limits to 1.10 mg/kg (ppm) and were below the NJDEP Impact to Groundwater Soil Cleanup Criteria (IGWSCC). A summary of the analytical results are presented in Table 1. A copy of the laboratory analytical and QA/QC results, and chain of custody are present in Appendix A.

Ground Water Sampling Results

The results of laboratory analysis conducted on the ground water samples, GP-1W to GP-9W, (GP-10W not collected due to the borehole collapsing/running sand) obtained from well points revealed concentrations of total volatile organic compounds (TVOCs) ranging from not detected above analytical instrument detection limits to 0.6 ug/l (ppb) and were below the NJDEP GWQC. Tentatively identified volatile organic compounds (TIVOCs) were detected at total concentrations ranging from not detected to 66 ug/l. The analytical results are summarized in Table 2. The analytical results as provided by the laboratory are included in Appendix A.

Conclusions

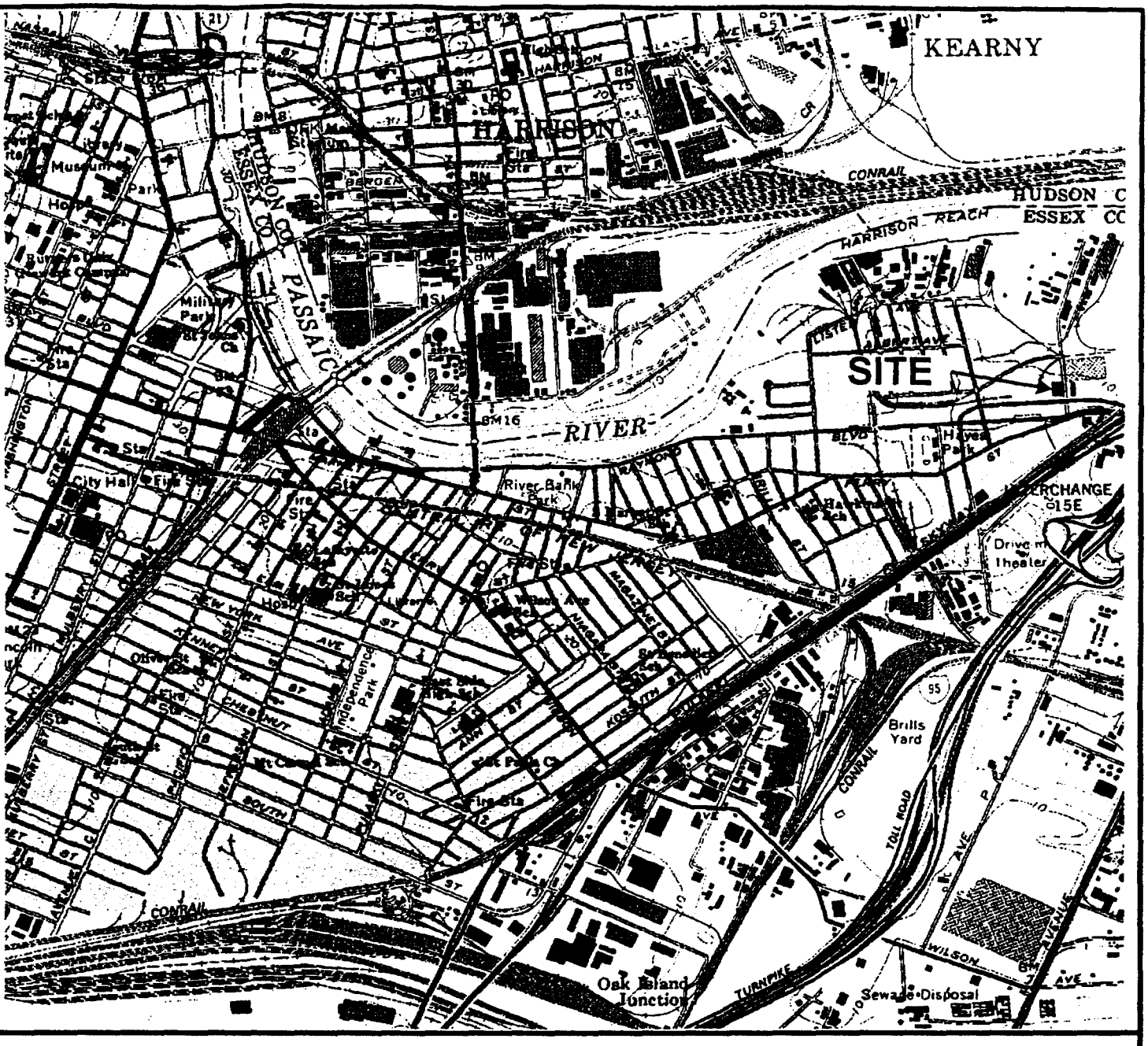
Based on the field observations and the information obtained from soil and ground water sampling laboratory analysis, we conclude and recommend the following:

- Reported soil analytical results were not impacted with volatile organic compounds in excess of the current soil cleanup criteria.
- Toluene was detected in samples GP-4W and GP-6W, but at concentrations well below the GWQC. 1,1-Dichloroethane was detected in sample GP-SW, whoever, the concentrations are significantly below the GWQC.

Please feel free to contact me at your earliest convenience if you have any further questions. Thank you.

Regards
VECTRE CORPORATION

George C. Dudkiewicz, P.G.
Project Manager



SOURCE: U.S.G.S. Elizabeth, N.J.
7.5 Minute Quadrangle

0 1000 2000
SCALE IN FEET

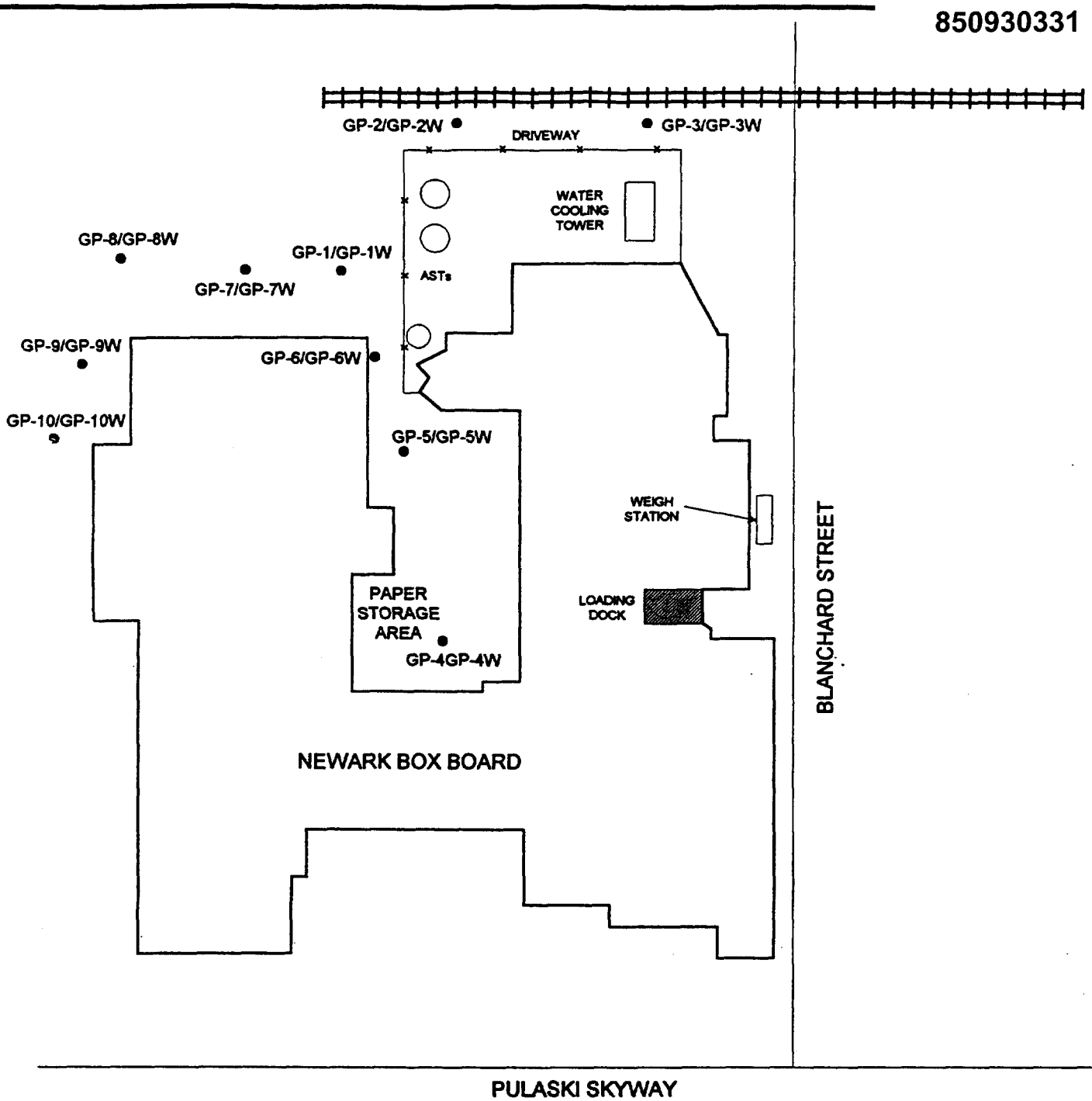
N

Site Location Map		
Newark Box Board 17 Blanchard Street Newark New Jersey		
Scale as Shown		VECTRE™ Corporation
FIGURE NUMBER 1	PROJECT NUMBER NBB-V12	

850930330

F 67

850930331



0 100

scale in feet

N

Legend

GP-1/GP-1W soil and groundwater sample locations

Soil and Ground Water Location Map		
Newark Box Board 17 Blanchard Street Newark New Jersey		
Scale As Shown		VECTRE™ Corporation
FIGURE NUMBER 2	PROJECT NUMBER NBB-V12	

F 68

Table 1. Soil Sampling Laboratory Results

Sample #	GP-1	GP-2	GP-3	GP-4	GP-5	GP-6	GP-7	GP-8	GP-9	GP-10	IGWSCC
Date Collected	8/31/98	8/31/98	8/31/98	8/31/98	8/31/98	8/31/98	8/31/98	8/31/98	8/31/98	8/31/98	
Depth Collected (ft)	6	3 1/2	4	15 1/2	10 1/2	9 1/2	6	6 1/2	8 1/2	9 1/2	
Analytical Parameters:											
Volatile Organics (mg/kg)											
Benzene	ND	0.140J	ND	ND	ND	ND	ND	ND	ND	ND	1
Toluene	ND	0.340J	ND	ND	ND	ND	ND	ND	ND	ND	500
Ethylbenzene	ND	0.540J	ND	ND	ND	ND	ND	ND	ND	ND	100
Xylene (total)	ND	1.10	ND	ND	ND	ND	ND	ND	ND	ND	10
Total VOC	0	1.060J	0	0	0	0	0	0	0	0	-
Total TIC	0	71.70	1.30	0	0	66.20	12.80	0	0.760	2.00	-

Notes:

J - Indicates an estimated value

mg/kg - Microgram/Liter or parts per million (ppm)

▒ - Indicates concentration above Class II - A Groundwater Quality Criteria

TTVOCs - Total Targeted Volatile Organic Compounds

TIVOCs - Tentatively Identified Volatile Organic Compounds

850930332

Table 2. Ground Water Laboratory Results (µg/L)

Sample #	GP-1W	GP-2W	GP-3W	GP-4W	GP-5W	GP-6W	GP-7W	GP-8W	GP-9W	GWQC
Date Collected	8/31/98	8/31/98	8/31/98	8/31/98	8/31/98	8/31/98	8/31/98	8/31/98	8/31/98	
Analytical Parameters:										
Volatile Organics (µg/L)										
1,1-Dichloroethane	ND	ND	ND	ND	0.6	ND	ND	ND	ND	70
Toluene	ND	ND	ND	0.5	ND	0.3	ND	ND	ND	1,000
TTVOCs	---	---	---	0.5	0.6	0.3	ND	ND	ND	---
TIVOCs	---	---	---	---	---	66	ND	ND	ND	---

Notes:

J - Indicates an estimated value

µg/L - Microgram/Liter or parts per billion (ppb)

▒ - Indicates concentration above Class II - A Groundwater Quality Criteria

TTVOCs - Total Targeted Volatile Organic Compounds

TIVOCs - Tentatively Identified Volatile Organic Compounds

850930333

Appendix A

Laboratory Data Package

ENVIROTECH RESEARCH, INC.

777 New Durham Road
Edison, New Jersey 08817
Tel: (732) 549-3900
Fax: (732) 549-3679
www.enviro-lab.com

September 24, 1998

Vectre Corporation
15 Route 15 South
P.O. Box 930
Lafayette, NJ 07848

Attention: Mr. Jerry Haug

Re: Job No. G893 - NBB-V12

Dear Mr. Haug:

Enclosed are the results you requested for the following sample(s) received at our laboratory on September 01, 1998:

Lab No.	Client ID	Analysis Required
81199	TB-1	PP VOA+10
81200	TB-2	PP VOA+10
81201	FB-2	PP VOA+10
81202	GP-1	PP VOA+10
81203	GP-1W	PP VOA+10
81204	GP-2	PP VOA+10
81205	GP-2W	PP VOA+10
81206	GP-3	PP VOA+10
81207	GP-3W	PP VOA+10
81208	GP-4	PP VOA+10
81209	GP-4W	PP VOA+10
81210	GP-5	PP VOA+10
81211	GP-5W	PP VOA+10
81212	GP-6	PP VOA+10
81213	GP-6W	PP VOA+10
81214	GP-7	PP VOA+10
81215	GP-7W	PP VOA+10
81216	GP-8	PP VOA+10

Lab No.	Client ID	Analysis Required
81217	GP-8W	PP VOA+10
81218	GP-9	PP VOA+10
81219	GP-9W	PP VOA+10
81220	GP-10	PP VOA+10

If you have any questions please contact your Project Manager, Bianca Buckwalter, at (732) 549-3900.

Very truly yours,

Michael J. Urban
Laboratory Manager

TABLE OF CONTENTS

	Section	Page
Analytical Results Summary	1	1
General Information	2	
Chain of Custody		45
Laboratory Chronicles		48
Methodology Review		70
Data Reporting Qualifiers		73
Non-Conformance Summary		74
GC/MS Forms and Data	3	
Results Summary and Chromatograms		76
Tuning Results Summary		217
Method Blank Results Summary		246
Calibration Summary		276
Surrogate Compound Recovery Summary		306
Spike Recovery Summary		309
Internal Standard Area Summary		313

ENVIROTECH RESEARCH, INC.

Client ID: **TB-1**
Site: NBB-V12

Lab Sample No: 81199
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/09/98
GC Column: DB624
Instrument ID: VOAMS5.i
Lab File ID: e3816.d

Matrix: SOIL
Level: HIGH
Sample Weight: 10.0 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 0

VOLATILE ORGANICS - GC/MS
METHOD 8260B

Parameter	Analytical Results Units: ug/kg	Quantitation Limit Units: ug/kg
Chloromethane	ND	620
Bromomethane	ND	620
Vinyl Chloride	ND	620
Chloroethane	ND	620
Methylene Chloride	ND	380
Trichlorofluoromethane	ND	620
1,1-Dichloroethene	ND	250
1,1-Dichloroethane	ND	620
trans-1,2-Dichloroethene	ND	620
cis-1,2-Dichloroethene	ND	620
Chloroform	ND	620
1,2-Dichloroethane	ND	250
1,1,1-Trichloroethane	ND	620
Carbon Tetrachloride	ND	250
Bromodichloromethane	ND	120
1,2-Dichloropropane	ND	120
cis-1,3-Dichloropropene	ND	620
Trichloroethene	ND	120
Dibromochloromethane	ND	620
1,1,2-Trichloroethane	ND	380
Benzene	ND	120
trans-1,3-Dichloropropene	ND	620
2-Chloroethyl Vinyl Ether	ND	620
Bromoform	ND	500
Tetrachloroethene	ND	120
1,1,2,2-Tetrachloroethane	ND	120
Toluene	ND	620
Chlorobenzene	ND	620
Ethylbenzene	ND	500
Xylene (Total)	ND	620

ENVIROTECH RESEARCH, INC.

Client ID: TB-1
Site: NBB-V12

Lab Sample No: 81199
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/09/98
GC Column: DB624
Instrument ID: VOAMS5.i
Lab File ID: e3816.d

Matrix: SOIL
Level: HIGH
Sample Weight: 10.0 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 0.0

VOLATILE ORGANICS - GC/MS
TENTATIVELY IDENTIFIED COMPOUNDS
METHOD 8260B

	COMPOUND NAME	RT	EST. CONC. ug/kg	Q
1.	NO VOLATILE ORGANIC COMPOUNDS FOUND			
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

TOTAL ESTIMATED CONCENTRATION: 0.0

ENVIROTECH RESEARCH, INC.

Client ID: TB-2
Site: NBB-V12

Lab Sample No: 81200
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/04/98
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f3718.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Chloromethane	ND	0.9
Bromomethane	ND	0.3
Vinyl Chloride	ND	0.4
Chloroethane	ND	1.0
Methylene Chloride	1.6	1.0
Trichlorofluoromethane	ND	0.2
1,1-Dichloroethene	ND	0.6
1,1-Dichloroethane	ND	0.3
trans-1,2-Dichloroethene	ND	0.3
cis-1,2-Dichloroethene	ND	1.0
Chloroform	ND	0.2
1,2-Dichloroethane	ND	0.2
1,1,1-Trichloroethane	ND	0.2
Carbon Tetrachloride	ND	0.2
Bromodichloromethane	ND	0.2
1,2-Dichloropropane	ND	0.5
cis-1,3-Dichloropropene	ND	0.3
Trichloroethene	ND	0.4
Dibromochloromethane	ND	0.2
1,1,2-Trichloroethane	ND	0.4
Benzene	ND	0.2
trans-1,3-Dichloropropene	ND	0.3
2-Chloroethyl Vinyl Ether	ND	0.5
Bromoform	ND	0.3
Tetrachloroethene	ND	0.1
1,1,2,2-Tetrachloroethane	ND	0.3
Toluene	ND	0.2
Chlorobenzene	ND	0.1
Ethylbenzene	ND	0.2
Xylene (Total)	ND	1.0

ENVIROTECH RESEARCH, INC.

Client ID: TB-2
Site: NBB-V12

Lab Sample No: 81200
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/04/98
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f3718.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
TENTATIVELY IDENTIFIED COMPOUNDS
METHOD 624

	COMPOUND NAME	RT	EST. CONC. ug/l	Q
1.	NO VOLATILE ORGANIC COMPOUNDS FOUND			
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

TOTAL ESTIMATED CONCENTRATION: 0.0

850930341

ENVIROTECH RESEARCH, INC.

Client ID: FB-2
Site: NBB-V12

Lab Sample No: 81201
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/04/98
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f3719.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Chloromethane	ND	0.9
Bromomethane	ND	0.3
Vinyl Chloride	ND	0.4
Chloroethane	ND	1.0
Methylene Chloride	1.1	1.0
Trichlorofluoromethane	ND	0.2
1,1-Dichloroethene	ND	0.6
1,1-Dichloroethane	ND	0.3
trans-1,2-Dichloroethene	ND	0.3
cis-1,2-Dichloroethene	ND	1.0
Chloroform	ND	0.2
1,2-Dichloroethane	ND	0.2
1,1,1-Trichloroethane	ND	0.2
Carbon Tetrachloride	ND	0.2
Bromodichloromethane	ND	0.2
1,2-Dichloropropane	ND	0.5
cis-1,3-Dichloropropene	ND	0.3
Trichloroethene	ND	0.4
Dibromochloromethane	ND	0.2
1,1,2-Trichloroethane	ND	0.4
Benzene	ND	0.2
trans-1,3-Dichloropropene	ND	0.3
2-Chloroethyl Vinyl Ether	ND	0.5
Bromoform	ND	0.3
Tetrachloroethene	ND	0.1
1,1,2,2-Tetrachloroethane	ND	0.3
Toluene	ND	0.2
Chlorobenzene	ND	0.1
Ethylbenzene	ND	0.2
Xylene (Total)	ND	1.0

ENVIROTECH RESEARCH, INC.

Client ID: FB-2
Site: NBB-V12

Lab Sample No: 81201
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/04/98
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f3719.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
TENTATIVELY IDENTIFIED COMPOUNDS
METHOD 624

	COMPOUND NAME	RT	EST. CONC. ug/l	Q
1.	NO VOLATILE ORGANIC COMPOUNDS FOUND			
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

TOTAL ESTIMATED CONCENTRATION	0.0

850930343

ENVIROTECH RESEARCH, INC.

Client ID: GP-1
Site: NBB-V12

Lab Sample No: 81202
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/09/98
GC Column: DB624
Instrument ID: VOAMS5.i
Lab File ID: e3818.d

Matrix: SOIL
Level: HIGH
Sample Weight: 10.5 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 16

VOLATILE ORGANICS - GC/MS
METHOD 8260B

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
Chloromethane	ND	700
Bromomethane	ND	700
Vinyl Chloride	ND	700
Chloroethane	ND	700
Methylene Chloride	ND	420
Trichlorofluoromethane	ND	700
1,1-Dichloroethene	ND	280
1,1-Dichloroethane	ND	700
trans-1,2-Dichloroethene	ND	700
cis-1,2-Dichloroethene	ND	700
Chloroform	ND	700
1,2-Dichloroethane	ND	280
1,1,1-Trichloroethane	ND	700
Carbon Tetrachloride	ND	280
Bromodichloromethane	ND	140
1,2-Dichloropropane	ND	140
cis-1,3-Dichloropropene	ND	700
Trichloroethene	ND	140
Dibromochloromethane	ND	700
1,1,2-Trichloroethane	ND	420
Benzene	ND	140
trans-1,3-Dichloropropene	ND	700
2-Chloroethyl Vinyl Ether	ND	700
Bromoform	ND	560
Tetrachloroethene	ND	140
1,1,2,2-Tetrachloroethane	ND	140
Toluene	ND	700
Chlorobenzene	ND	700
Ethylbenzene	ND	560
Xylene (Total)	ND	700

ENVIROTECH RESEARCH, INC.

Client ID: GP-1
Site: NBB-V12

Lab Sample No: 81202
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/09/98
GC Column: DB624
Instrument ID: VOAMS5.i
Lab File ID: e3818.d

Matrix: SOIL
Level: HIGH
Sample Weight: 10.5 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 15.5

VOLATILE ORGANICS - GC/MS
TENTATIVELY IDENTIFIED COMPOUNDS
METHOD 8260B

	COMPOUND NAME	RT	EST. CONC. ug/kg	Q
1.	NO VOLATILE ORGANIC COMPOUNDS FOUND			
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

TOTAL ESTIMATED CONCENTRATION: 0.0

850930345

8 F8

ENVIROTECH RESEARCH, INC.

Client ID: GP-1W
Site: NBB-V12

Lab Sample No: 81203
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/04/98
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f3720.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Chloromethane	ND	0.9
Bromomethane	ND	0.3
Vinyl Chloride	ND	0.4
Chloroethane	ND	1.0
Methylene Chloride	ND	1.0
Trichlorofluoromethane	ND	0.2
1,1-Dichloroethene	ND	0.6
1,1-Dichloroethane	ND	0.3
trans-1,2-Dichloroethene	ND	0.3
cis-1,2-Dichloroethene	ND	1.0
Chloroform	ND	0.2
1,2-Dichloroethane	ND	0.2
1,1,1-Trichloroethane	ND	0.2
Carbon Tetrachloride	ND	0.2
Bromodichloromethane	ND	0.2
1,2-Dichloropropane	ND	0.5
cis-1,3-Dichloropropene	ND	0.3
Trichloroethene	ND	0.4
Dibromochloromethane	ND	0.2
1,1,2-Trichloroethane	ND	0.4
Benzene	ND	0.2
trans-1,3-Dichloropropene	ND	0.3
2-Chloroethyl Vinyl Ether	ND	0.5
Bromoform	ND	0.3
Tetrachloroethene	ND	0.1
1,1,2,2-Tetrachloroethane	ND	0.3
Toluene	ND	0.2
Chlorobenzene	ND	0.1
Ethylbenzene	ND	0.2
Xylene (Total)	ND	1.0

ENVIROTECH RESEARCH, INC.

Client ID: GP-1W
Site: NBB-V12

Lab Sample No: 81203
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/04/98
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f3720.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
TENTATIVELY IDENTIFIED COMPOUNDS
METHOD 624

	COMPOUND NAME	RT	EST. CONC. ug/l	Q
1.	NO VOLATILE ORGANIC COMPOUNDS FOUND			
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

TOTAL ESTIMATED CONCENTRATION	0.0

850930347

F8

ENVIROTECH RESEARCH, INC.

Client ID: GP-2
Site: NBB-V12

Lab Sample No: 81204
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/11/98
GC Column: DB624
Instrument ID: VOAMS5.i
Lab File ID: e3882.d

Matrix: SOIL
Level: HIGH
Sample Weight: 9.9 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 24

VOLATILE ORGANICS - GC/MS
METHOD 8260B

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
Chloromethane	ND	840
Bromomethane	ND	840
Vinyl Chloride	ND	840
Chloroethane	ND	840
Methylene Chloride	ND	500
Trichlorofluoromethane	ND	840
1,1-Dichloroethene	ND	330
1,1-Dichloroethane	ND	840
trans-1,2-Dichloroethene	ND	840
cis-1,2-Dichloroethene	ND	840
Chloroform	ND	840
1,2-Dichloroethane	ND	330
1,1,1-Trichloroethane	ND	840
Carbon Tetrachloride	ND	330
Bromodichloromethane	ND	170
1,2-Dichloropropane	ND	170
cis-1,3-Dichloropropene	ND	840
Trichloroethene	ND	170
Dibromochloromethane	ND	840
1,1,2-Trichloroethane	ND	500
Benzene	140 J	170
trans-1,3-Dichloropropene	ND	840
2-Chloroethyl Vinyl Ether	ND	840
Bromoform	ND	670
Tetrachloroethene	ND	170
1,1,2,2-Tetrachloroethane	ND	170
Toluene	380 J	840
Chlorobenzene	ND	840
Ethylbenzene	540 J	670
Xylene (Total)	1100	840

850930348

ENVIROTECH RESEARCH, INC.

Client ID: GP-2
Site: NBB-V12

Lab Sample No: 81204
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/11/98
GC Column: DB624
Instrument ID: VOAMS5.i
Lab File ID: e3882.d

Matrix: SOIL
Level: HIGH
Sample Weight: 9.9 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 24.5

VOLATILE ORGANICS - GC/MS
TENTATIVELY IDENTIFIED COMPOUNDS
METHOD 8260B

	COMPOUND NAME	RT	EST. CONC. ug/kg	Q
1.	Unknown	14.50	6100	
2.	Unknown Hydrocarbon	15.15	4800	
3.	Unknown Hydrocarbon	15.69	13000	
4.	Unknown Alkene	15.89	5400	
5.	Decahydromethylnaphthalene isomer	16.31	11000	
6.	Decahydromethylnaphthalene isomer	16.55	14000	
7.	Unknown Ketone	16.91	7000	
8.	Unknown	17.19	9000	
9.	Unknown	17.67	6400	
10.	Unknown Hydrocarbon	17.77	6000	
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

TOTAL ESTIMATED CONCENTRATION: 82700

850930349

F86

ENVIROTECH RESEARCH, INC.

Client ID: GP-2W
Site: NBB-V12

Lab Sample No: 81205
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/04/98
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f3721.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Chloromethane	ND	0.9
Bromomethane	ND	0.3
Vinyl Chloride	ND	0.4
Chloroethane	ND	1.0
Methylene Chloride	ND	1.0
Trichlorofluoromethane	ND	0.2
1,1-Dichloroethene	ND	0.6
1,1-Dichloroethane	ND	0.3
trans-1,2-Dichloroethene	ND	0.3
cis-1,2-Dichloroethene	ND	1.0
Chloroform	ND	0.2
1,2-Dichloroethane	ND	0.2
1,1,1-Trichloroethane	ND	0.2
Carbon Tetrachloride	ND	0.2
Bromodichloromethane	ND	0.2
1,2-Dichloropropane	ND	0.5
cis-1,3-Dichloropropene	ND	0.3
Trichloroethene	ND	0.4
Dibromochloromethane	ND	0.2
1,1,2-Trichloroethane	ND	0.4
Benzene	ND	0.2
trans-1,3-Dichloropropene	ND	0.3
2-Chloroethyl Vinyl Ether	ND	0.5
Bromoform	ND	0.3
Tetrachloroethene	ND	0.1
1,1,2,2-Tetrachloroethane	ND	0.3
Toluene	ND	0.2
Chlorobenzene	ND	0.1
Ethylbenzene	ND	0.2
Xylene (Total)	ND	1.0

850930350

ENVIROTECH RESEARCH, INC.

Client ID: GP-2W
Site: NBB-V12

Lab Sample No: 81205
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/04/98
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f3721.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
TENTATIVELY IDENTIFIED COMPOUNDS
METHOD 624

	COMPOUND NAME	RT	EST. CONC. ug/l	Q
1.	NO VOLATILE ORGANIC COMPOUNDS FOUND			
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

TOTAL ESTIMATED CONCENTRATION: 0.0

850930351

F8

ENVIROTECH RESEARCH, INC.

Client ID: GP-3
Site: NBB-V12

Lab Sample No: 81206
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/09/98
GC Column: DB624
Instrument ID: VOAMS5.i
Lab File ID: e3819.d

Matrix: SOIL
Level: HIGH
Sample Weight: 10.5 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 14

VOLATILE ORGANICS - GC/MS
METHOD 8260B

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
Chloromethane	ND	690
Bromomethane	ND	690
Vinyl Chloride	ND	690
Chloroethane	ND	690
Methylene Chloride	ND	410
Trichlorofluoromethane	ND	690
1,1-Dichloroethene	ND	280
1,1-Dichloroethane	ND	690
trans-1,2-Dichloroethene	ND	690
cis-1,2-Dichloroethene	ND	690
Chloroform	ND	690
1,2-Dichloroethane	ND	280
1,1,1-Trichloroethane	ND	690
Carbon Tetrachloride	ND	280
Bromodichloromethane	ND	140
1,2-Dichloropropane	ND	140
cis-1,3-Dichloropropene	ND	690
Trichloroethene	ND	140
Dibromochloromethane	ND	690
1,1,2-Trichloroethane	ND	410
Benzene	ND	140
trans-1,3-Dichloropropene	ND	690
2-Chloroethyl Vinyl Ether	ND	690
Bromoform	ND	550
Tetrachloroethene	ND	140
1,1,2,2-Tetrachloroethane	ND	140
Toluene	ND	690
Chlorobenzene	ND	690
Ethylbenzene	ND	550
Xylene (Total)	ND	690

ENVIROTECH RESEARCH, INC.

Client ID: GP-3
Site: NBB-V12

Lab Sample No: 81206
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/09/98
GC Column: DB624
Instrument ID: VOAMS5.i
Lab File ID: e3819.d

Matrix: SOIL
Level: HIGH
Sample Weight: 10.5 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 13.6

VOLATILE ORGANICS - GC/MS
TENTATIVELY IDENTIFIED COMPOUNDS
METHOD 8260B

	COMPOUND NAME	RT	EST. CONC. ug/kg	Q
1.	Unknown Siloxane	15.93	1300	B
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

TOTAL ESTIMATED CONCENTRATION	0.0

ENVIROTECH RESEARCH, INC.

Client ID: GP-3W
Site: NBB-V12

Lab Sample No: 81207
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/04/98
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f3722.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Chloromethane	ND	0.9
Bromomethane	ND	0.3
Vinyl Chloride	ND	0.4
Chloroethane	ND	1.0
Methylene Chloride	ND	1.0
Trichlorofluoromethane	ND	0.2
1,1-Dichloroethene	ND	0.6
1,1-Dichloroethane	ND	0.3
trans-1,2-Dichloroethene	ND	0.3
cis-1,2-Dichloroethene	ND	1.0
Chloroform	ND	0.2
1,2-Dichloroethane	ND	0.2
1,1,1-Trichloroethane	ND	0.2
Carbon Tetrachloride	ND	0.2
Bromodichloromethane	ND	0.2
1,2-Dichloropropane	ND	0.5
cis-1,3-Dichloropropene	ND	0.3
Trichloroethene	ND	0.4
Dibromochloromethane	ND	0.2
1,1,2-Trichloroethane	ND	0.4
Benzene	ND	0.2
trans-1,3-Dichloropropene	ND	0.3
2-Chloroethyl Vinyl Ether	ND	0.5
Bromoform	ND	0.3
Tetrachloroethene	ND	0.1
1,1,2,2-Tetrachloroethane	ND	0.3
Toluene	ND	0.2
Chlorobenzene	ND	0.1
Ethylbenzene	ND	0.2
Xylene (Total)	ND	1.0

ENVIROTECH RESEARCH, INC.

Client ID: GP-3W
Site: NBB-V12

Lab Sample No: 81207
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/04/98
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f3722.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
TENTATIVELY IDENTIFIED COMPOUNDS
METHOD 624

	COMPOUND NAME	RT	EST. CONC. ug/l	Q
1.	NO VOLATILE ORGANIC COMPOUNDS FOUND			
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

TOTAL ESTIMATED CONCENTRATION	0.0

850930355

F92

ENVIROTECH RESEARCH, INC.

Client ID: GP-4
Site: NBB-V12

Lab Sample No: 81208
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/09/98
GC Column: DB624
Instrument ID: VOAMS5.i
Lab File ID: e3820.d

Matrix: SOIL
Level: HIGH
Sample Weight: 10.1 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 13

VOLATILE ORGANICS - GC/MS
METHOD 8260B

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
Chloromethane	ND	710
Bromomethane	ND	710
Vinyl Chloride	ND	710
Chloroethane	ND	710
Methylene Chloride	ND	420
Trichlorofluoromethane	ND	710
1,1-Dichloroethene	ND	280
1,1-Dichloroethane	ND	710
trans-1,2-Dichloroethene	ND	710
cis-1,2-Dichloroethene	ND	710
Chloroform	ND	710
1,2-Dichloroethane	ND	280
1,1,1-Trichloroethane	ND	710
Carbon Tetrachloride	ND	280
Bromodichloromethane	ND	140
1,2-Dichloropropane	ND	140
cis-1,3-Dichloropropene	ND	710
Trichloroethene	ND	140
Dibromochloromethane	ND	710
1,1,2-Trichloroethane	ND	420
Benzene	ND	140
trans-1,3-Dichloropropene	ND	710
2-Chloroethyl Vinyl Ether	ND	710
Bromoform	ND	570
Tetrachloroethene	ND	140
1,1,2,2-Tetrachloroethane	ND	140
Toluene	ND	710
Chlorobenzene	ND	710
Ethylbenzene	ND	570
Xylene (Total)	ND	710

ENVIROTECH RESEARCH, INC.

Client ID: GP-4
Site: NBB-V12

Lab Sample No: 81208
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/09/98
GC Column: DB624
Instrument ID: VOAMS5.i
Lab File ID: e3820.d

Matrix: SOIL
Level: HIGH
Sample Weight: 10.1 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 12.6

VOLATILE ORGANICS - GC/MS
TENTATIVELY IDENTIFIED COMPOUNDS
METHOD 8260B

	COMPOUND NAME	RT	EST. CONC. ug/kg	Q
1.	NO VOLATILE ORGANIC COMPOUNDS FOUND			
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

TOTAL ESTIMATED CONCENTRATION: 0.0

850930357

F94

ENVIROTECH RESEARCH, INC.

Client ID: GP-4W
Site: NBB-V12

Lab Sample No: 81209
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/05/98
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f3723.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Chloromethane	ND	0.9
Bromomethane	ND	0.3
Vinyl Chloride	ND	0.4
Chloroethane	ND	1.0
Methylene Chloride	ND	1.0
Trichlorofluoromethane	ND	0.2
1,1-Dichloroethene	ND	0.6
1,1-Dichloroethane	ND	0.3
trans-1,2-Dichloroethene	ND	0.3
cis-1,2-Dichloroethene	ND	1.0
Chloroform	ND	0.2
1,2-Dichloroethane	ND	0.2
1,1,1-Trichloroethane	ND	0.2
Carbon Tetrachloride	ND	0.2
Bromodichloromethane	ND	0.2
1,2-Dichloropropane	ND	0.5
cis-1,3-Dichloropropene	ND	0.3
Trichloroethene	ND	0.4
Dibromochloromethane	ND	0.2
1,1,2-Trichloroethane	ND	0.4
Benzene	ND	0.2
trans-1,3-Dichloropropene	ND	0.3
2-Chloroethyl Vinyl Ether	ND	0.5
Bromoform	ND	0.3
Tetrachloroethene	ND	0.1
1,1,2,2-Tetrachloroethane	ND	0.3
Toluene	0.5	0.2
Chlorobenzene	ND	0.1
Ethylbenzene	ND	0.2
Xylene (Total)	ND	1.0

ENVIROTECH RESEARCH, INC.

Client ID: GP-4W
Site: NBB-V12

Lab Sample No: 81209
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/05/98
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f3723.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
TENTATIVELY IDENTIFIED COMPOUNDS
METHOD 624

	COMPOUND NAME	RT	EST. CONC. ug/l	Q
1.	NO VOLATILE ORGANIC COMPOUNDS FOUND			
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

TOTAL ESTIMATED CONCENTRATION	0.0

850930359

F96

ENVIROTECH RESEARCH, INC.

Client ID: GP-5
Site: NBB-V12

Lab Sample No: 81210
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/09/98
GC Column: DB624
Instrument ID: VOAMS5.i
Lab File ID: e3821.d

Matrix: SOIL
Level: HIGH
Sample Weight: 10.3 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 14

VOLATILE ORGANICS - GC/MS
METHOD 8260B

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
Chloromethane	ND	710
Bromomethane	ND	710
Vinyl Chloride	ND	710
Chloroethane	ND	710
Methylene Chloride	ND	420
Trichlorofluoromethane	ND	710
1,1-Dichloroethene	ND	280
1,1-Dichloroethane	ND	710
trans-1,2-Dichloroethene	ND	710
cis-1,2-Dichloroethene	ND	710
Chloroform	ND	710
1,2-Dichloroethane	ND	280
1,1,1-Trichloroethane	ND	710
Carbon Tetrachloride	ND	280
Bromodichloromethane	ND	140
1,2-Dichloropropane	ND	140
cis-1,3-Dichloropropene	ND	710
Trichloroethene	ND	140
Dibromochloromethane	ND	710
1,1,2-Trichloroethane	ND	420
Benzene	ND	140
trans-1,3-Dichloropropene	ND	710
2-Chloroethyl Vinyl Ether	ND	710
Bromoform	ND	570
Tetrachloroethene	ND	140
1,1,2,2-Tetrachloroethane	ND	140
Toluene	ND	710
Chlorobenzene	ND	710
Ethylbenzene	ND	570
Xylene (Total)	ND	710

ENVIROTECH RESEARCH, INC.

Client ID: GP-5
Site: NBB-V12

Lab Sample No: 81210
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/09/98
GC Column: DB624
Instrument ID: VOAMS5.i
Lab File ID: e3821.d

Matrix: SOIL
Level: HIGH
Sample Weight: 10.3 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 14.4

VOLATILE ORGANICS - GC/MS
TENTATIVELY IDENTIFIED COMPOUNDS
METHOD 8260B

	COMPOUND NAME	RT	EST. CONC. ug/kg	Q
1.	NO VOLATILE ORGANIC COMPOUNDS FOUND			
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

TOTAL ESTIMATED CONCENTRATION	0.0

850930361

ENVIROTECH RESEARCH, INC.

Client ID: GP-5W
Site: NBB-V12

Lab Sample No: 81211
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/05/98
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f3724.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Chloromethane	ND	0.9
Bromomethane	ND	0.3
Vinyl Chloride	ND	0.4
Chloroethane	ND	1.0
Methylene Chloride	ND	1.0
Trichlorofluoromethane	ND	0.2
1,1-Dichloroethene	ND	0.6
1,1-Dichloroethane	0.6	0.3
trans-1,2-Dichloroethene	ND	0.3
cis-1,2-Dichloroethene	ND	1.0
Chloroform	ND	0.2
1,2-Dichloroethane	ND	0.2
1,1,1-Trichloroethane	ND	0.2
Carbon Tetrachloride	ND	0.2
Bromodichloromethane	ND	0.2
1,2-Dichloropropane	ND	0.5
cis-1,3-Dichloropropene	ND	0.3
Trichloroethene	ND	0.4
Dibromochloromethane	ND	0.2
1,1,2-Trichloroethane	ND	0.4
Benzene	ND	0.2
trans-1,3-Dichloropropene	ND	0.3
2-Chloroethyl Vinyl Ether	ND	0.5
Bromoform	ND	0.3
Tetrachloroethene	ND	0.1
1,1,2,2-Tetrachloroethane	ND	0.3
Toluene	ND	0.2
Chlorobenzene	ND	0.1
Ethylbenzene	ND	0.2
Xylene (Total)	ND	1.0

ENVIROTECH RESEARCH, INC.

Client ID: GP-5W
Site: NBB-V12

Lab Sample No: 81211
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/05/98
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f3724.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
TENTATIVELY IDENTIFIED COMPOUNDS
METHOD 624

	COMPOUND NAME	RT	EST. CONC. ug/l	Q
1.	NO VOLATILE ORGANIC COMPOUNDS FOUND			
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

TOTAL ESTIMATED CONCENTRATION	0.0

850930363

ENVIROTECH RESEARCH, INC.

Client ID: GP-6
Site: NBB-V12

Lab Sample No: 81212
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/10/98
GC Column: DB624
Instrument ID: VOAMS5.i
Lab File ID: e3828.d

Matrix: SOIL
Level: HIGH
Sample Weight: 10.5 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 17

VOLATILE ORGANICS - GC/MS
METHOD 8260B

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
Chloromethane	ND	710
Bromomethane	ND	710
Vinyl Chloride	ND	710
Chloroethane	ND	710
Methylene Chloride	ND	430
Trichlorofluoromethane	ND	710
1,1-Dichloroethene	ND	280
1,1-Dichloroethane	ND	710
trans-1,2-Dichloroethene	ND	710
cis-1,2-Dichloroethene	ND	710
Chloroform	ND	710
1,2-Dichloroethane	ND	280
1,1,1-Trichloroethane	ND	710
Carbon Tetrachloride	ND	280
Bromodichloromethane	ND	140
1,2-Dichloropropane	ND	140
cis-1,3-Dichloropropene	ND	710
Trichloroethene	ND	140
Dibromochloromethane	ND	710
1,1,2-Trichloroethane	ND	430
Benzene	ND	140
trans-1,3-Dichloropropene	ND	710
2-Chloroethyl Vinyl Ether	ND	710
Bromoform	ND	570
Tetrachloroethene	ND	140
1,1,2,2-Tetrachloroethane	ND	140
Toluene	ND	710
Chlorobenzene	ND	710
Ethylbenzene	ND	570
Xylene (Total)	ND	710

ENVIROTECH RESEARCH, INC.

Client ID: GP-6
Site: NBB-V12

Lab Sample No: 81212
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/10/98
GC Column: DB624
Instrument ID: VOAMS5.i
Lab File ID: e3828.d

Matrix: SOIL
Level: HIGH
Sample Weight: 10.5 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 16.7

VOLATILE ORGANICS - GC/MS
TENTATIVELY IDENTIFIED COMPOUNDS
METHOD 8260B

COMPOUND NAME	RT	EST. CONC. ug/kg	Q
1. C11H22 Cycloalkane	15.47	4100	
2. Decahydronaphthalene isomer	15.71	11000	
3. Decahydromethylnaphthalene isomer	16.33	9900	
4. Decahydromethylnaphthalene isomer	16.57	9900	
5. Unknown Aromatic	16.94	5100	
6. Coeluting Aromatics	17.70	4700	
7. Coeluting Unknowns	17.79	6200	
8. Coeluting Aromatics	18.45	4200	
9. C12H16 Aromatic/C12H22 Unknown	18.60	6300	
10. Coeluting Aromatics	19.14	4800	
11.			
12.			
13.			
14.			
15.			
16.			
17.			
18.			
19.			
20.			
21.			
22.			
23.			
24.			
25.			
26.			
27.			
28.			
29.			
30.			

TOTAL ESTIMATED CONCENTRATION	66200

850930365

ENVIROTECH RESEARCH, INC.

Client ID: GP-6W
Site: NBB-V12

Lab Sample No: 81213
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/05/98
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f3725.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Chloromethane	ND	0.9
Bromomethane	ND	0.3
Vinyl Chloride	ND	0.4
Chloroethane	ND	1.0
Methylene Chloride	ND	1.0
Trichlorofluoromethane	ND	0.2
1,1-Dichloroethene	ND	0.6
1,1-Dichloroethane	ND	0.3
trans-1,2-Dichloroethene	ND	0.3
cis-1,2-Dichloroethene	ND	1.0
Chloroform	ND	0.2
1,2-Dichloroethane	ND	0.2
1,1,1-Trichloroethane	ND	0.2
Carbon Tetrachloride	ND	0.2
Bromodichloromethane	ND	0.2
1,2-Dichloropropane	ND	0.5
cis-1,3-Dichloropropene	ND	0.3
Trichloroethene	ND	0.4
Dibromochloromethane	ND	0.2
1,1,2-Trichloroethane	ND	0.4
Benzene	ND	0.2
trans-1,3-Dichloropropene	ND	0.3
2-Chloroethyl Vinyl Ether	ND	0.5
Bromoform	ND	0.3
Tetrachloroethene	ND	0.1
1,1,2,2-Tetrachloroethane	ND	0.3
Toluene	0.3	0.2
Chlorobenzene	ND	0.1
Ethylbenzene	ND	0.2
Xylene (Total)	ND	1.0

850930366

ENVIROTECH RESEARCH, INC.

Client ID: GP-6W
Site: NBB-V12

Lab Sample No: 81213
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/05/98
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f3725.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
TENTATIVELY IDENTIFIED COMPOUNDS
METHOD 624

	COMPOUND NAME	RT	EST. CONC. ug/l	Q
1.	Unknown Ketone	12.92	22	
2.	Decahydromethylnaphthalene isomer	16.93	14	
3.	Coeluting Aromatic/Alkane	17.63	18	
4.	Coeluting Aromatic/Alkane	17.89	16	
5.	Unknown Alkane	18.12	18	
6.	Unknown Alkane	18.80	29	
7.	Tetrahydromethylnaphthalene isomer	19.17	16	
8.	2,3-dihydro-dimethyl-1H-Indene isomer	19.29	22	
9.	Coeluting Aromatic/Alkane	19.55	16	
10.	Unknown Alkane	20.04	12	
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

TOTAL ESTIMATED CONCENTRATION	183

850930367

ENVIROTECH RESEARCH, INC.

Client ID: GP-7
Site: NBB-V12

Lab Sample No: 81214
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/14/98
GC Column: DB624
Instrument ID: VOAMS5.i
Lab File ID: e3960.d

Matrix: SOIL
Level: HIGH
Sample Weight: 11.0 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 65

VOLATILE ORGANICS - GC/MS
METHOD 8260B

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
Chloromethane	ND	1600
Bromomethane	ND	1600
Vinyl Chloride	ND	1600
Chloroethane	ND	1600
Methylene Chloride	ND	970
Trichlorofluoromethane	ND	1600
1,1-Dichloroethene	ND	640
1,1-Dichloroethane	ND	1600
trans-1,2-Dichloroethene	ND	1600
cis-1,2-Dichloroethene	ND	1600
Chloroform	ND	1600
1,2-Dichloroethane	ND	640
1,1,1-Trichloroethane	ND	1600
Carbon Tetrachloride	ND	640
Bromodichloromethane	ND	320
1,2-Dichloropropane	ND	320
cis-1,3-Dichloropropene	ND	1600
Trichloroethene	ND	320
Dibromochloromethane	ND	1600
1,1,2-Trichloroethane	ND	970
Benzene	ND	320
trans-1,3-Dichloropropene	ND	1600
2-Chloroethyl Vinyl Ether	ND	1600
Bromoform	ND	1300
Tetrachloroethene	ND	320
1,1,2,2-Tetrachloroethane	ND	320
Toluene	ND	1600
Chlorobenzene	ND	1600
Ethylbenzene	ND	1300
Xylene (Total)	ND	1600

ENVIROTECH RESEARCH, INC.

Client ID: GP-7
Site: NBB-V12

Lab Sample No: 81214
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/14/98
GC Column: DB624
Instrument ID: VOAMS5.i
Lab File ID: e3960.d

Matrix: SOIL
Level: HIGH
Sample Weight: 11.0 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 64.8

VOLATILE ORGANICS - GC/MS
TENTATIVELY IDENTIFIED COMPOUNDS
METHOD 8260B

	COMPOUND NAME	RT	EST. CONC. ug/kg	Q
1.	Unknown Alkane	13.91	1700	
2.	C7H14 Cycloalkane	15.14	2400	
3.	Unknown Siloxane	15.90	6800	
4.	Unknown Alkane	16.20	1900	
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

TOTAL ESTIMATED CONCENTRATION	12800

850930369

ENVIROTECH RESEARCH, INC.

Client ID: GP-7W
Site: NBB-V12

Lab Sample No: 81215
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/05/98
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f3726.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Chloromethane	ND	0.9
Bromomethane	ND	0.3
Vinyl Chloride	ND	0.4
Chloroethane	ND	1.0
Methylene Chloride	ND	1.0
Trichlorofluoromethane	ND	0.2
1,1-Dichloroethene	ND	0.6
1,1-Dichloroethane	ND	0.3
trans-1,2-Dichloroethene	ND	0.3
cis-1,2-Dichloroethene	ND	1.0
Chloroform	ND	0.2
1,2-Dichloroethane	ND	0.2
1,1,1-Trichloroethane	ND	0.2
Carbon Tetrachloride	ND	0.2
Bromodichloromethane	ND	0.2
1,2-Dichloropropane	ND	0.5
cis-1,3-Dichloropropene	ND	0.3
Trichloroethene	ND	0.4
Dibromochloromethane	ND	0.2
1,1,2-Trichloroethane	ND	0.4
Benzene	ND	0.2
trans-1,3-Dichloropropene	ND	0.3
2-Chloroethyl Vinyl Ether	ND	0.5
Bromoform	ND	0.3
Tetrachloroethene	ND	0.1
1,1,2,2-Tetrachloroethane	ND	0.3
Toluene	ND	0.2
Chlorobenzene	ND	0.1
Ethylbenzene	ND	0.2
Xylene (Total)	ND	1.0

ENVIROTECH RESEARCH, INC.

Client ID: GP-7W
Site: NBB-V12

Lab Sample No: 81215
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/05/98
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f3726.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
TENTATIVELY IDENTIFIED COMPOUNDS
METHOD 624

	COMPOUND NAME	RT	EST. CONC. ug/l	Q
1.	Unknown Alkane	4.28	3.4	
2.	C5H12 Alkane	5.14	4.0	
3.	C6H14 Alkane	6.97	4.7	
4.	C6H14 Alkane	7.34	3.9	
5.	Unknown	20.89	3.1	
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

TOTAL ESTIMATED CONCENTRATION	19

850930371

ENVIROTECH RESEARCH, INC.

Client ID: GP-8
Site: NBB-V12

Lab Sample No: 81216
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/10/98
GC Column: DB624
Instrument ID: VOAMS5.i
Lab File ID: e3822.d

Matrix: SOIL
Level: HIGH
Sample Weight: 9.7 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 18

VOLATILE ORGANICS - GC/MS
METHOD 8260B

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
Chloromethane	ND	790
Bromomethane	ND	790
Vinyl Chloride	ND	790
Chloroethane	ND	790
Methylene Chloride	ND	470
Trichlorofluoromethane	ND	790
1,1-Dichloroethene	ND	320
1,1-Dichloroethane	ND	790
trans-1,2-Dichloroethene	ND	790
cis-1,2-Dichloroethene	ND	790
Chloroform	ND	790
1,2-Dichloroethane	ND	320
1,1,1-Trichloroethane	ND	790
Carbon Tetrachloride	ND	320
Bromodichloromethane	ND	160
1,2-Dichloropropane	ND	160
cis-1,3-Dichloropropene	ND	790
Trichloroethene	ND	160
Dibromochloromethane	ND	790
1,1,2-Trichloroethane	ND	470
Benzene	ND	160
trans-1,3-Dichloropropene	ND	790
2-Chloroethyl Vinyl Ether	ND	790
Bromoform	ND	630
Tetrachloroethene	ND	160
1,1,2,2-Tetrachloroethane	ND	160
Toluene	ND	790
Chlorobenzene	ND	790
Ethylbenzene	ND	630
Xylene (Total)	ND	790

ENVIROTECH RESEARCH, INC.

Client ID: ~~GP-8~~
Site: NBB-V12

Lab Sample No: 81216
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/10/98
GC Column: DB624
Instrument ID: VOAMS5.i
Lab File ID: e3822.d

Matrix: SOIL
Level: HIGH
Sample Weight: 9.7 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 18.3

VOLATILE ORGANICS - GC/MS
TENTATIVELY IDENTIFIED COMPOUNDS
METHOD 8260B

	COMPOUND NAME	RT	EST. CONC. ug/kg	Q
1.	NO VOLATILE ORGANIC COMPOUNDS FOUND			
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

TOTAL ESTIMATED CONCENTRATION	0.0

850930373

ENVIROTECH RESEARCH, INC.

Client ID: GP-8W
Site: NBB-V12

Lab Sample No: 81217
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/05/98
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f3727.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Chloromethane	ND	0.9
Bromomethane	ND	0.3
Vinyl Chloride	ND	0.4
Chloroethane	ND	1.0
Methylene Chloride	ND	1.0
Trichlorofluoromethane	ND	0.2
1,1-Dichloroethene	ND	0.6
1,1-Dichloroethane	ND	0.3
trans-1,2-Dichloroethene	ND	0.3
cis-1,2-Dichloroethene	ND	1.0
Chloroform	ND	0.2
1,2-Dichloroethane	ND	0.2
1,1,1-Trichloroethane	ND	0.2
Carbon Tetrachloride	ND	0.2
Bromodichloromethane	ND	0.2
1,2-Dichloropropane	ND	0.5
cis-1,3-Dichloropropene	ND	0.3
Trichloroethene	ND	0.4
Dibromochloromethane	ND	0.2
1,1,2-Trichloroethane	ND	0.4
Benzene	ND	0.2
trans-1,3-Dichloropropene	ND	0.3
2-Chloroethyl Vinyl Ether	ND	0.5
Bromoform	ND	0.3
Tetrachloroethene	ND	0.1
1,1,2,2-Tetrachloroethane	ND	0.3
Toluene	ND	0.2
Chlorobenzene	ND	0.1
Ethylbenzene	ND	0.2
Xylene (Total)	ND	1.0

ENVIROTECH RESEARCH, INC.

Client ID: GP-8W
Site: NBB-V12

Lab Sample No: 81217
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/05/98
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f3727.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
TENTATIVELY IDENTIFIED COMPOUNDS
METHOD 624

	COMPOUND NAME	RT	EST. CONC. ug/l	Q
1.	NO VOLATILE ORGANIC COMPOUNDS FOUND			
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

TOTAL ESTIMATED CONCENTRATION: 0.0

850930375

ENVIROTECH RESEARCH, INC.

Client ID: GP-9
Site: NBB-V12

Lab Sample No: 81218
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/10/98
GC Column: DB624
Instrument ID: VOAMS5.i
Lab File ID: e3823.d

Matrix: SOIL
Level: HIGH
Sample Weight: 10.7 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 19

VOLATILE ORGANICS - GC/MS
METHOD 8260B

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
Chloromethane	ND	720
Bromomethane	ND	720
Vinyl Chloride	ND	720
Chloroethane	ND	720
Methylene Chloride	ND	430
Trichlorofluoromethane	ND	720
1,1-Dichloroethene	ND	290
1,1-Dichloroethane	ND	720
trans-1,2-Dichloroethene	ND	720
cis-1,2-Dichloroethene	ND	720
Chloroform	ND	720
1,2-Dichloroethane	ND	290
1,1,1-Trichloroethane	ND	720
Carbon Tetrachloride	ND	290
Bromodichloromethane	ND	140
1,2-Dichloropropane	ND	140
cis-1,3-Dichloropropene	ND	720
Trichloroethene	ND	140
Dibromochloromethane	ND	720
1,1,2-Trichloroethane	ND	430
Benzene	ND	140
trans-1,3-Dichloropropene	ND	720
2-Chloroethyl Vinyl Ether	ND	720
Bromoform	ND	580
Tetrachloroethene	ND	140
1,1,2,2-Tetrachloroethane	ND	140
Toluene	ND	720
Chlorobenzene	ND	720
Ethylbenzene	ND	580
Xylene (Total)	ND	720

ENVIROTECH RESEARCH, INC.

Client ID: GP-9
Site: NBB-V12

Lab Sample No: 81218
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/10/98
GC Column: DB624
Instrument ID: VOAMS5.i
Lab File ID: e3823.d

Matrix: SOIL
Level: HIGH
Sample Weight: 10.7 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 19.1

VOLATILE ORGANICS - GC/MS
TENTATIVELY IDENTIFIED COMPOUNDS
METHOD 8260B

	COMPOUND NAME	RT	EST. CONC. ug/kg	Q
1.	Unknown Siloxane	15.93	760	B
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

TOTAL ESTIMATED CONCENTRATION	0.0

850930377

ENVIROTECH RESEARCH, INC.

Client ID: GP-9W
Site: NBB-V12

Lab Sample No: 81219
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/05/98
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f3728.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Chloromethane	ND	0.9
Bromomethane	ND	0.3
Vinyl Chloride	ND	0.4
Chloroethane	ND	1.0
Methylene Chloride	ND	1.0
Trichlorofluoromethane	ND	0.2
1,1-Dichloroethene	ND	0.6
1,1-Dichloroethane	ND	0.3
trans-1,2-Dichloroethene	ND	0.3
cis-1,2-Dichloroethene	ND	1.0
Chloroform	ND	0.2
1,2-Dichloroethane	ND	0.2
1,1,1-Trichloroethane	ND	0.2
Carbon Tetrachloride	ND	0.2
Bromodichloromethane	ND	0.2
1,2-Dichloropropane	ND	0.5
cis-1,3-Dichloropropene	ND	0.3
Trichloroethene	ND	0.4
Dibromochloromethane	ND	0.2
1,1,2-Trichloroethane	ND	0.4
Benzene	ND	0.2
trans-1,3-Dichloropropene	ND	0.3
2-Chloroethyl Vinyl Ether	ND	0.5
Bromoform	ND	0.3
Tetrachloroethene	ND	0.1
1,1,2,2-Tetrachloroethane	ND	0.3
Toluene	ND	0.2
Chlorobenzene	ND	0.1
Ethylbenzene	ND	0.2
Xylene (Total)	ND	1.0

850930378

ENVIROTECH RESEARCH, INC.

Client ID: GP-9W
Site: NBB-V12

Lab Sample No: 81219
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/05/98
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f3728.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
TENTATIVELY IDENTIFIED COMPOUNDS
METHOD 624

	COMPOUND NAME	RT	EST. CONC. ug/l	Q
1.	NO VOLATILE ORGANIC COMPOUNDS FOUND			
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

TOTAL ESTIMATED CONCENTRATION	0.0

850930379

ENVIROTECH RESEARCH, INC.

Client ID: GP-10
Site: NBB-V12

Lab Sample No: 81220
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/10/98
GC Column: DB624
Instrument ID: VOAMS5.i
Lab File ID: e3824.d

Matrix: SOIL
Level: HIGH
Sample Weight: 9.8 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 24

VOLATILE ORGANICS - GC/MS
METHOD 8260B

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
Chloromethane	ND	840
Bromomethane	ND	840
Vinyl Chloride	ND	840
Chloroethane	ND	840
Methylene Chloride	ND	500
Trichlorofluoromethane	ND	840
1,1-Dichloroethene	ND	340
1,1-Dichloroethane	ND	840
trans-1,2-Dichloroethene	ND	840
cis-1,2-Dichloroethene	ND	840
Chloroform	ND	840
1,2-Dichloroethane	ND	340
1,1,1-Trichloroethane	ND	840
Carbon Tetrachloride	ND	340
Bromodichloromethane	ND	170
1,2-Dichloropropane	ND	170
cis-1,3-Dichloropropene	ND	840
Trichloroethene	ND	170
Dibromochloromethane	ND	840
1,1,2-Trichloroethane	ND	500
Benzene	ND	170
trans-1,3-Dichloropropene	ND	840
2-Chloroethyl Vinyl Ether	ND	840
Bromoform	ND	670
Tetrachloroethene	ND	170
1,1,2,2-Tetrachloroethane	ND	170
Toluene	ND	840
Chlorobenzene	ND	840
Ethylbenzene	ND	670
Xylene (Total)	ND	840

ENVIROTECH RESEARCH, INC.

Client ID: GP-10
Site: NBB-V12

Lab Sample No: 81220
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/10/98
GC Column: DB624
Instrument ID: VOAMS5.i
Lab File ID: e3824.d

Matrix: SOIL
Level: HIGH
Sample Weight: 9.8 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 24.1

VOLATILE ORGANICS - GC/MS
TENTATIVELY IDENTIFIED COMPOUNDS
METHOD 8260B

	COMPOUND NAME	RT	EST. CONC. ug/kg	Q
1.	Unknown Siloxane	15.93	2000	B
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

TOTAL ESTIMATED CONCENTRATION	0.0

850930381

ENVIROTECH RESEARCH INC.
777 New Durham Road
Edison, New Jersey 08817
Phone: (732) 549-3900 Fax: (732) 549-3679

CHAIN OF CUSTODY / ANALYSIS REQUEST

PAGE 1 OF 3

Name (for report and invoice) JERRY HAUG	Samplers Name (Printed) DAVID MCMULLEN	Site/Project Identification NBB-V12	
Company VECTRE CORP	P.O. # 6746	State (Location of site) NJ: X NY: Other:	
Address P.O. BOX 930	Analysis Turnaround Time Standard X	Regulatory Program:	
City LAFAYETTE State NJ Zip 07848	Rush Charges Authorized For: 2 Week 1 Week Other	ANALYSIS REQUESTED (ENTER "X" BELOW TO INDICATE REQUEST)	LAB USE ONLY Project No: Job No: G893
Phone 973-383-2500 Fax 973-579-0025		VOA+10 (8260) VOA+10 (624)	

Sample Identification	Date	Time	Matrix	No. of Cont.			Sample Numbers
TB-1	8/31/95	—	MEOH	1	X		81199
TB-2	8/31/95	—	AQ	2		X	81200
FB-2		950	AQ	2		X	81201
GP-1	10/2	1002	SOIL	2	X		81202
GP-1W	10/2	1018	AQ	3		X	81203
GP-2	10/2	1012	SOIL	2	X		81204
GP-2W	10/2	1025	AQ	3		X	81205
GP-3	10/3	1035	SOIL	2	X		81206
GP-3W	10/2	1047	AQ	3		X	81207
GP-4	V	1120	SOIL	2	X		81208

Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH
6 = Other METHANOL 7 = Other _____
Soil: 1, 6
Water: 1, 6 1, 2

Special Instructions _____ Water Metals Filtered (Yes/No)? NO

Relinquished by	Company	Date / Time	Received by	Company
1) David McMullen	Vectre Corp	9/1/95 11525	1) [signature]	Envirotech
2) [signature]	Envirotech	9-1-95 1451	2) [signature]	ENVIROTECH
3)			3)	
4)			4)	

Laboratory Certifications: New Jersey (12543), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132).

850930382

45 F 119

ENVIROTECH RESEARCH INC.
777 New Durham Road
Edison, New Jersey 08817
Phone: (732) 549-3900 Fax: (732) 549-3679

CHAIN OF CUSTODY / ANALYSIS REQUEST

PAGE 2 OF 3

Name (for report and invoice) JERRY HAUG	Samplers Name (Printed) Dave McMullen	Site/Project Identification NJBB-U12
Company VECTRE CORP.	P.O. # 6746	State (Location of site) NJ: X NY: Other:
Address P.O. BOX 930		Regulatory Program:
City LAFAYETTE State NJ Zip 07848	Analysis Turnaround Time: Standard X; Rush Charges Authorized For: 2 Week, 1 Week, Other	
Phone 973-383-2500 Fax 973-579-0025		

ANALYSIS REQUESTED (ENTER "X" BELOW TO INDICATE REQUEST)

LAB USE ONLY
Project No:
Job No: G893

Sample Identification	Date	Time	Matrix	No. of Cont.	VOA 8260 Soil	VOA 8260 GW	Sample Numbers
GP-4W	8/31/98	1255	AQ	3		X	81209
GP-5		1150	SOIL	2	X		81210
GP-5W		1210	AQ	3		X	81211
GP-6		1301	SOIL	2	X		81212
GP-6W		1322	AQ	3		X	81213
GP-7		1350	SOIL	2	X		81214
GP-7W		1358	AQ	3		X	81215
GP-8		1420	SOIL	2	X		81216
GP-8W		1432	AQ	3		X	81217
GP-9		1442	SOIL	2	X		81218

Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH
6 = Other METHANOL, 7 = Other _____
Soil: 1,16 Water: 1,2

Special Instructions: Water Metals Filtered (Yes/No)? NO

Relinquished by	Company	Date / Time	Received by	Company
1) Dave McMullen	Vectre Corp	9/1/98, 1525	1)	Envirotech
Relinquished by	Company	Date / Time	Received by	Company
2)	Envirotech	9-1-98, 451	2) PJ Palusch	ENVIROTECH
Relinquished by	Company	Date / Time	Received by	Company
3)			3)	
Relinquished by	Company	Date / Time	Received by	Company
4)			4)	

Laboratory Certifications: New Jersey (12543), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132).

850930383

46

F120

ENVIROTECH RESEARCH INC.
777 New Durham Road
Edison, New Jersey 08817
Phone: (732) 549-3900 Fax: (732) 549-3679

CHAIN OF CUSTODY / ANALYSIS REQUEST

PAGE 3 OF 3

Name (for report and invpice) Jerry Haag	Samplers Name (Printed) Dave McMullen	Site/Project Identification NBB-V12
Company VECTRE CORP	P.O. # 6746	State (Location of site) NJ: X NY: Other:
		Regulatory Program:
Address P.O. Box 930	Analysis Turnaround Time Standard X	
City LAFAYETTE State NJ Zip 07848	Rush Charges Authorized For: 2 Week 1 Week Other	
Phone 973-383-2500 Fax 973-579-0025		

ANALYSIS REQUESTED (ENTER "X" BELOW TO INDICATE REQUEST)

LAB USE ONLY
Project No:
Job No: G893

Sample Identification	Date	Time	Matrix	No. of Cont.	VOH0 8260	VOF10 624	Sample Numbers
GP-9W	8/31/98	1520	AQ	3		X	81219
GP-10		1510	SOIL	2	X		81220
~~GP-10W~~	~~V~~	~~V~~	~~AQ~~	~~V~~	~~V~~	~~X~~	

Preservation Used: 1 = ICE, 2 = HCl, 3 = H_2SO_4, 4 = HNO_3, 5 = NaOH Soil: 1,6
6 = Other METHANOL 7 = Other _____ Water: 1,2

Special Instructions

Water Metals Filtered (Yes/No)? NO

	Relinquished by	Company	Date / Time	Received by	Company
1)	Dave McMullen	Vectre Corp	9/1/98 1525		Envirotech
2)		Envirotech	9-1-98 1451	Paluch	ENVIROTECH
3)					
4)					

Laboratory Certifications: New Jersey (12543), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132).

850930384

47

INTERNAL CUSTODY RECORD
AND
LABORATORY CHRONICLE

ENVIROTECH RESEARCH, INC.

777 NEW DURHAM ROAD, EDISON, NJ 08817

(732) 549-3900

Client: Vectre Corporation

Site: NBB-V12

Matrix: SOLID

Sample No.: 81199

Date Sampled: 8/31/1998

Date Received: 9/1/1998

Job No.: G893

Analytic Parameter	Extraction Date	Extractor's Name	Analysis Date	Analyst's Name	QA Batch
PPVOA+10			9/9/98	TL	6032

850930385

F122

INTERNAL CUSTODY RECORD
AND
LABORATORY CHRONICLE

ENVIROTECH RESEARCH, INC.

777 NEW DURHAM ROAD, EDISON, NJ 08817
(732) 549-3900

Client: Vectre Corporation

Site: NBB-V12

Matrix: WATER

Sample No.: 81200

Date Sampled: 8/31/1998

Date Received: 9/1/1998

Job No.: G893

Analytic Parameter	Extraction Date	Extractor's Name	Analysis Date	Analyst's Name	QA Batch
PPVOA+10			9/4/98	DRL	8121

850930386

 F12

INTERNAL CUSTODY RECORD
AND
LABORATORY CHRONICLE

ENVIROTECH RESEARCH, INC.

777 NEW DURHAM ROAD, EDISON, NJ 08817
(732) 549-3900

Client: Vectre Corporation

Site: NBB-V12

Matrix: WATER

Sample No.: 81201

Date Sampled: 8/31/1998

Date Received: 9/1/1998

Job No.: G893

Analytic Parameter	Extraction Date	Extractor's Name	Analysis Date	Analyst's Name	QA Batch
PPVOA+10			9/4/98	DRL	8121

850930387

50 F124

INTERNAL CUSTODY RECORD
AND
LABORATORY CHRONICLE

ENVIROTECH RESEARCH, INC.

777 NEW DURHAM ROAD, EDISON, NJ 08817

(732) 549-3900

Client: Vectre Corporation

Site: NBB-V12

Matrix: SOLID

Sample No.: 81202

Date Sampled: 8/31/1998

Date Received: 9/1/1998

Job No.: G893

Analytic Parameter	Extraction Date	Extractor's Name	Analysis Date	Analyst's Name	QA Batch
PPVOA+10			9/9/98	TL	6032

850930388

 F125

INTERNAL CUSTODY RECORD
AND
LABORATORY CHRONICLE

ENVIROTECH RESEARCH, INC.

777 NEW DURHAM ROAD, EDISON, NJ 08817

(732) 549-3900

Client: Vectre Corporation

Date Sampled: 8/31/1998

Site: NBB-V12

Date Received: 9/1/1998

Matrix: WATER

Job No.: G893

Sample No.: 81203

Analytic Parameter	Extraction Date	Extractor's Name	Analysis Date	Analyst's Name	QA Batch
PPVOA+10			9/4/98	DRL	8121

850930389

52 F126

INTERNAL CUSTODY RECORD
AND
LABORATORY CHRONICLE

ENVIROTECH RESEARCH, INC.

777 NEW DURHAM ROAD, EDISON, NJ 08817
(732) 549-3900

Client: Vectre Corporation

Site: NBB-V12

Matrix: SOLID

Sample No.: 81204

Date Sampled: 8/31/1998

Date Received: 9/1/1998

Job No.: G893

Analytic Parameter	Extraction Date	Extractor's Name	Analysis Date	Analyst's Name	QA Batch
PPVOA+10			9/11/98	TL	6032

850930390

INTERNAL CUSTODY RECORD
AND
LABORATORY CHRONICLE

ENVIROTECH RESEARCH, INC.

777 NEW DURHAM ROAD, EDISON, NJ 08817
(732) 549-3900

Client: Vectre Corporation
Date Sampled: 8/31/1998

Site: NBB-V12
Date Received: 9/1/1998

Matrix: WATER
Job No.: G893

Sample No.: 81205

Analytic Parameter	Extraction Date	Extractor's Name	Analysis Date	Analyst's Name	QA Batch
PPVOA+10			9/4/98	DRL	8121

850930391

F128

INTERNAL CUSTODY RECORD
AND
LABORATORY CHRONICLE

ENVIROTECH RESEARCH, INC.

777 NEW DURHAM ROAD, EDISON, NJ 08817
(732) 549-3900

Client: Vectre Corporation

Site: NBB-V12

Matrix: SOLID

Sample No.: 81206

Date Sampled: 8/31/1998

Date Received: 9/1/1998

Job No.: G893

Analytic Parameter	Extraction Date	Extractor's Name	Analysis Date	Analyst's Name	QA Batch
PPVOA+10			9/9/98	TL	6032

850930392

INTERNAL CUSTODY RECORD
AND
LABORATORY CHRONICLE

ENVIROTECH RESEARCH, INC.

777 NEW DURHAM ROAD, EDISON, NJ 08817
(732) 549-3900

Client: Vectre Corporation

Site: NBB-V12

Matrix: WATER

Sample No.: 81207

Date Sampled: 8/31/1998

Date Received: 9/1/1998

Job No.: G893

Analytic Parameter	Extraction Date	Extractor's Name	Analysis Date	Analyst's Name	QA Batch
PPVOA+10			9/4/98	DRL	8121

850930393

INTERNAL CUSTODY RECORD
AND
LABORATORY CHRONICLE

ENVIROTECH RESEARCH, INC.

777 NEW DURHAM ROAD, EDISON, NJ 08817
(732) 549-3900

Client: Vectre Corporation

Site: NBB-V12

Matrix: SOLID

Sample No.: 81208

Date Sampled: 8/31/1998

Date Received: 9/1/1998

Job No.: G893

Analytic Parameter	Extraction Date	Extractor's Name	Analysis Date	Analyst's Name	QA Batch
PPVOA+10			9/9/98	TL	6032

850930394

INTERNAL CUSTODY RECORD
AND
LABORATORY CHRONICLE

ENVIROTECH RESEARCH, INC.

777 NEW DURHAM ROAD, EDISON, NJ 08817
(732) 549-3900

Client: Vectre Corporation

Date Sampled: 8/31/1998

Site: NBB-V12

Date Received: 9/1/1998

Matrix: WATER

Job No.: G893

Sample No.: 81209

Analytic Parameter	Extraction Date	Extractor's Name	Analysis Date	Analyst's Name	QA Batch
PPVOA+10			9/5/98	DRC	8121

850930395

INTERNAL CUSTODY RECORD
AND
LABORATORY CHRONICLE

ENVIROTECH RESEARCH, INC.

777 NEW DURHAM ROAD, EDISON, NJ 08817
(732) 549-3900

Client: Vectre Corporation

Site: NBB-V12

Matrix: SOLID

Sample No.: 81210

Date Sampled: 8/31/1998

Date Received: 9/1/1998

Job No.: G893

Analytic Parameter	Extraction Date	Extractor's Name	Analysis Date	Analyst's Name	QA Batch
PPVOA+10			9/9/98	TL	6032

850930396

INTERNAL CUSTODY RECORD
AND
LABORATORY CHRONICLE

ENVIROTECH RESEARCH, INC.

777 NEW DURHAM ROAD, EDISON, NJ 08817
(732) 549-3900

Client: Vectre Corporation

Site: NBB-V12

Matrix: WATER

Sample No.: 81211

Date Sampled: 8/31/1998

Date Received: 9/1/1998

Job No.: G893

Analytic Parameter	Extraction Date	Extractor's Name	Analysis Date	Analyst's Name	QA Batch
PPVOA+10			9/5/98	DRL	8121

850930397

60 F13L

INTERNAL CUSTODY RECORD
AND
LABORATORY CHRONICLE

ENVIROTECH RESEARCH, INC.

777 NEW DURHAM ROAD, EDISON, NJ 08817
(732) 549-3900

Client: Vectre Corporation

Site: NBB-V12

Matrix: SOLID

Sample No.: 81212

Date Sampled: 8/31/1998

Date Received: 9/1/1998

Job No.: G893

Analytic Parameter	Extraction Date	Extractor's Name	Analysis Date	Analyst's Name	QA Batch
PPVOA+10			9/10/98	TL	6032

850930398

INTERNAL CUSTODY RECORD
AND
LABORATORY CHRONICLE

ENVIROTECH RESEARCH, INC.

777 NEW DURHAM ROAD, EDISON, NJ 08817
(732) 549-3900

Client: Vectre Corporation

Date Sampled: 8/31/1998

Site: NBB-V12

Date Received: 9/1/1998

Matrix: WATER

Job No.: G893

Sample No.: 81213

Analytic Parameter	Extraction Date	Extractor's Name	Analysis Date	Analyst's Name	QA Batch
PPVOA+10			9/5/98	DRL	8121

850930399

62 F131

INTERNAL CUSTODY RECORD
AND
LABORATORY CHRONICLE

ENVIROTECH RESEARCH, INC.

777 NEW DURHAM ROAD, EDISON, NJ 08817
(732) 549-3900

Client: Vectre Corporation
Date Sampled: 8/31/1998

Site: NBB-V12
Date Received: 9/1/1998

Matrix: SOLID
Job No.: G893

Sample No.: 81214

Analytic Parameter	Extraction Date	Extractor's Name	Analysis Date	Analyst's Name	QA Batch
PPVOA+10			9/14/98	TL	6010

850930400

INTERNAL CUSTODY RECORD
AND
LABORATORY CHRONICLE

ENVIROTECH RESEARCH, INC.

777 NEW DURHAM ROAD, EDISON, NJ 08817

(732) 549-3900

Client: Vectre Corporation

Site: NBB-V12

Matrix: WATER

Sample No.: 81215

Date Sampled: 8/31/1998

Date Received: 9/1/1998

Job No.: G893

Analytic Parameter	Extraction Date	Extractor's Name	Analysis Date	Analyst's Name	QA Batch
PPVOA+10			9/5/98	DRL	8121

850930401

64 F138

INTERNAL CUSTODY RECORD
AND
LABORATORY CHRONICLE

ENVIROTECH RESEARCH, INC.

777 NEW DURHAM ROAD, EDISON, NJ 08817
(732) 549-3900

Client: Vectre Corporation
Date Sampled: 8/31/1998

Site: NBB-V12
Date Received: 9/1/1998

Matrix: SOLID
Job No.: G893

Sample No.: 81216

Analytic Parameter	Extraction Date	Extractor's Name	Analysis Date	Analyst's Name	QA Batch
PPVOA+10			9/10/98	TL	6032

850930402

F139

INTERNAL CUSTODY RECORD
AND
LABORATORY CHRONICLE

ENVIROTECH RESEARCH, INC.

777 NEW DURHAM ROAD, EDISON, NJ 08817
(732) 549-3900

Client: Vectre Corporation

Site: NBB-V12

Matrix: WATER

Sample No.: 81217

Date Sampled: 8/31/1998

Date Received: 9/1/1998

Job No.: G893

Analytic Parameter	Extraction Date	Extractor's Name	Analysis Date	Analyst's Name	QA Batch
PPVOA+10			9/5/98	DRL	8121

850930403

F14C

INTERNAL CUSTODY RECORD
AND
LABORATORY CHRONICLE

ENVIROTECH RESEARCH, INC.

777 NEW DURHAM ROAD, EDISON, NJ 08817
(732) 549-3900

Client: Vectre Corporation
Date Sampled: 8/31/1998

Site: NBB-V12
Date Received: 9/1/1998

Matrix: SOLID
Job No.: G893

Sample No.: 81218

Analytic Parameter	Extraction Date	Extractor's Name	Analysis Date	Analyst's Name	QA Batch
PPVOA+10			9/10/98	TL	6032

850930404

INTERNAL CUSTODY RECORD
AND
LABORATORY CHRONICLE

ENVIROTECH RESEARCH, INC.

777 NEW DURHAM ROAD, EDISON, NJ 08817
(732) 549-3900

Client: Vectre Corporation

Date Sampled: 8/31/1998

Site: NBB-V12

Date Received: 9/1/1998

Matrix: WATER

Job No.: G893

Sample No.: 81219

Analytic Parameter	Extraction Date	Extractor's Name	Analysis Date	Analyst's Name	QA Batch
PPVOA+10			9/5/98	DRC	8121

850930405

INTERNAL CUSTODY RECORD
AND
LABORATORY CHRONICLE

ENVIROTECH RESEARCH, INC.

777 NEW DURHAM ROAD, EDISON, NJ 08817
(732) 549-3900

Client: Vectre Corporation
Date Sampled: 8/31/1998

Site: NBB-V12
Date Received: 9/1/1998

Matrix: SOLID
Job No.: G893

Sample No.: 81220

Analytic Parameter	Extraction Date	Extractor's Name	Analysis Date	Analyst's Name	QA Batch
PPVOA+10			9/10/98	TL	6032

850930406

Analytical Methodology Summary

Volatile Organics:

Unless otherwise specified, water samples are analyzed for volatile organics by purge and trap GC/MS as specified in EPA Method 624. Drinking water samples are analyzed by EPA Method 524.2. Solid samples are analyzed for volatile organics as specified in the EPA publication "Test Methods for Evaluating Solid Waste" (SW-846, 3rd Edition) Method 8260B. Water samples are analyzed for volatile organics by purge and trap GC/PID and GC/ELCD as specified in EPA Methods 601 and 602. Solid samples are analyzed by GC/PID and GC/ELCD in accordance with SW-846, 3rd Edition Method 8021B.

Acid and Base/Neutral Extractable Organics:

Unless otherwise specified, water samples are analyzed for acid and/or base/neutral extractable organics by GC/MS in accordance with EPA Method 625. Solids are analyzed for acid and/or base/neutral extractable organics as specified in the EPA publication "Test Methods for Evaluating Solid Waste" (SW-846, 3rd Edition) Method 8270C.

GC/MS Nontarget Compound Analysis:

Analysis for nontarget compounds is conducted, upon request, in conjunction with GC/MS analyses by EPA Methods 624, 625, 8260B and 8270C. Nontarget compound analysis is conducted using a forward library search of the EPA/NIH/NBS mass spectral library of compounds at the greatest apparent concentration (10% or greater of the nearest internal standard) in each organic fraction (15 for volatile, 15 for base/neutrals and 10 for acid extractables).

Organochlorine Pesticides and PCBs:

Unless otherwise specified, water samples are analyzed for organochlorine pesticides and PCBs by dual column gas chromatography with electron capture detectors as specified in EPA Method 608. Solid samples are analyzed as specified in the EPA publication "Test Methods for Evaluating Solid Waste" (SW-846, 3rd Edition) Method 8081A for organochlorine pesticides and Method 8082 for PCBs.

Total Petroleum Hydrocarbons:

Water samples are analyzed for petroleum hydrocarbons by I.R. using EPA Method 418.1. Solid samples are prepared for analysis by soxhlet extraction consistent with the March 1990 N.J. DEP "Remedial Investigation Guide" Appendix A, page 52, and analyzed by U.S. EPA Method 418.1

Metals Analysis:

Metals analyses are performed by any of four techniques specified by a Method Code provided on each data report page, as follows:

P - Inductively Coupled Plasma Atomic Emission Spectroscopy (ICP)

A - Flame Atomic Absorption

F - Furnace Atomic Absorption

CV - Manual Cold Vapor (Mercury)

Water samples are digested and analyzed using EPA methods provided in "Methods for Chemical Analysis of Water and Wastewater" (EPA 600/4-79-020). Solid samples are analyzed as specified in the EPA publication "Test Methods for Evaluating Solid Waste" (SW-846, 3rd Edition); samples are digested according to Method 3050B "Acid Digestion of Soil, Sediments and Sludges."

Specific method references for ICP analyses are water Method 200.7 and solid Method 6010B. Mercury analyses are conducted by the manual cold vapor technique specified by water Method 245.1 and solid Method 7471A. Other specific Atomic Absorption method references are as follows:

	Water Test Method		Solid Test Method	
Element	Flame	Furnace	Flame	Furnace
Aluminum	202.1	202.2	7020	--
Antimony	204.1	204.2	7040	7041
Arsenic	--	206.2	--	7060
Barium	208.1	--	7080	--
Beryllium	210.1	210.2	7090	7091
Cadmium	213.1	213.2	7130	7131
Calcium	215.1	--	7140	--
Chromium, Total	218.1	218.2	7190	7191
Chromium, (+6)	218.4	218.5	7197	7195
Cobalt	219.1	219.2	7200	7201
Copper	220.1	220.2	7210	--
Iron	236.1	236.2	7380	--
Lead	239.1	239.2	7420	7421
Magnesium	242.1	--	7450	--
Manganese	243.1	243.2	7460	--
Nickel	249.1	249.2	7520	--
Potassium	258.1	--	7610	--
Selenium	--	270.2	--	7740
Silver	272.1	272.2	7760	--
Sodium	273.1	--	7770	--
Tin	283.1	283.2	7870	--
Thallium	279.1	279.2	7840	7841
Vanadium	286.1	286.2	7910	7911
Zinc	289.1	289.2	7950	--

Cyanide:

Water samples are analyzed for cyanide using EPA Method 335.3. Cyanide is determined in solid samples as specified in the EPA Contract Laboratory Program IFB dated July 1988, revised February 1989.

850930408

F145

Phenols:

Water samples are analyzed for total phenols using EPA Method 420.2. Total phenols are determined in solid samples by preparing the sample as outlined in the EPA Contract Laboratory Program IFB for cyanide, followed by a phenols determination using EPA Method 420.1.

Cleanup of Semivolatile Extracts:

Upon request Method 3611B Alumina Column Cleanup and/or Method 3650B Acid-Base Partition Cleanup are performed to improve detection limits by the removal of saturated hydrocarbon interferences.

Hazardous Waste Characteristics:

Samples for hazardous waste characteristics are analyzed as specified in the U.S. EPA publication "Test Methods for Evaluating Solid Waste" (SW-846, 3rd Edition). Specific method references are as follows:

Ignitability - Method 1020A

Corrosivity - Water pH Method 9040B
Soil pH Method 9045C

Reactivity - Chapter 7, Section 7.3.3 and 7.3.4 respectively for hydrogen cyanide and hydrogen sulfide release

Toxicity - TCLP Method 1311

Miscellaneous Parameters:

Additional analyses performed on both aqueous and solid samples are in accordance with methods published in the following references:

- Test Methods for Evaluating Solid Wastes, SW-846 3rd Edition, November 1986.
- Standard Methods for the Examination of Water and Wastewater, 17th Edition.
- Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, 1979.

850930409

DATA REPORTING QUALIFIERS

ND - The compound was not detected at the indicated concentration.

J - Mass spectral data indicates the presence of a compound that meets the identification criteria. The result is less than the specified detection limit but greater than zero. The concentration given is an approximate value.

B - The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample.

P - For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%.

* - For dual column analysis, the lowest quantitated concentration is being reported due to coeluting interference.

NON-CONFORMANCE SUMMARY

Envirotech Research, Inc. Job Number: G893

Volatile Organics Analysis:

All data conforms with method requirements _____; or
Analysis was not requested _____; or
Non-conformance for the specific samples listed is as follows:

Sample 8/212: S-2 Surrogate Std recovery outside QC. limits. Sample reanalyzed confirming matrix interference.

See continuation page if checked ( )

Base/Neutral and/or Acid Extractable Organics:

All data conforms with method requirements _____; or
Analysis was not requested _____; or
Non-conformance for the specific samples listed is as follows:

See continuation page if checked ( )

PCBs and/or Organochlorine Pesticides:

All data conforms with method requirements _____; or
Analysis was not requested ✓; or
Non-conformance for the specific samples listed is as follows:

See continuation page if checked ( )

850930411

74 F148

Non-conformance Summary, Page 2 of 2
Envirotech Research, Inc. Job Number: G893

Metals Analysis:

All data conforms with method requirements _____; or
Analysis was not requested ___/___; or
Non-conformance for the specific samples listed is as follows:

_____

_____

_____

_____

_____

See continuation page if checked ( )

Total Petroleum Hydrocarbons:

All data conforms with method requirements _____; or
Analysis was not requested ___/___; or
Non-conformance for the specific samples listed is as follows:

_____

_____

_____

See continuation page if checked ( )

General Chemistry/Disposal Parameters:

All data conforms with method requirements _____; or
Analysis was not requested ___/___; or
Non-conformance for the specific samples listed is as follows:

_____

_____

_____

See continuation page if checked ( )

Signature of
Laboratory Manager: _____ Date: 9/24/98

850930412

75 F149

Client ID: **TB-1**
Site: NBB-V12

Lab Sample No: **81199**
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/09/98
GC Column: DB624
Instrument ID: VOAMS5.i
Lab File ID: e3816.d

Matrix: SOIL
Level: HIGH
Sample Weight: 10.0 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 0

VOLATILE ORGANICS - GC/MS
METHOD 8260B

Parameter	Analytical Results Units: ug/kg	Quantitation Limit Units: ug/kg
Chloromethane	ND	620
Bromomethane	ND	620
Vinyl Chloride	ND	620
Chloroethane	ND	620
Methylene Chloride	ND	380
Trichlorofluoromethane	ND	620
1,1-Dichloroethene	ND	250
1,1-Dichloroethane	ND	620
trans-1,2-Dichloroethene	ND	620
cis-1,2-Dichloroethene	ND	620
Chloroform	ND	620
1,2-Dichloroethane	ND	250
1,1,1-Trichloroethane	ND	620
Carbon Tetrachloride	ND	250
Bromodichloromethane	ND	120
1,2-Dichloropropane	ND	120
cis-1,3-Dichloropropene	ND	620
Trichloroethene	ND	120
Dibromochloromethane	ND	620
1,1,2-Trichloroethane	ND	380
Benzene	ND	120
trans-1,3-Dichloropropene	ND	620
2-Chloroethyl Vinyl Ether	ND	620
Bromoform	ND	500
Tetrachloroethene	ND	120
1,1,2,2-Tetrachloroethane	ND	120
Toluene	ND	620
Chlorobenzene	ND	620
Ethylbenzene	ND	500
Xylene (Total)	ND	620

Client ID: **TB-1**
Site: NBB-V12

Lab Sample No: **81199**
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/09/98
GC Column: DB624
Instrument ID: VOAMS5.i
Lab File ID: e3816.d

Matrix: SOIL
Level: HIGH
Sample Weight: 10.0 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 0.0

VOLATILE ORGANICS - GC/MS
TENTATIVELY IDENTIFIED COMPOUNDS
METHOD 8260B

	COMPOUND NAME	RT	EST. CONC. ug/kg	Q
1.	NO VOLATILE ORGANIC COMPOUNDS FOUND			
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

TOTAL ESTIMATED CONCENTRATION	0.0

850930414

F151

Data File: /chem/VOAMS5.i/8260HIGH_SP/08-25-98/09sep98a.b/e3816.d
Report Date: 11-Sep-98 16:08:39

Envirotech Research, Inc.

VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/VOAMS5.i/8260HIGH_SP/08-25-98/09sep98a.b/e3816.d
Lab Smp Id: 81199 Client Smp ID: TB-1
Inj Date : 09-SEP-98 21:29:00
Operator : VOAMS 5 Inst ID: VOAMS5.i
Smp Info : 81199;50;;10;25
Misc Info : G893;6032;TL
Comment :
Method : /chem/VOAMS5.i/8260HIGH_SP/08-25-98/09sep98a.b/8260b-HIGH.m
Meth Date : 09-Sep-98 18:27:26 Quant Type: ISTD
Cal Date : 25-AUG-98 13:08:00 Cal File: e3451.d
Als bottle: 8
Dil Factor: 50.00000
Integrator: HP RTE Compound Sublist: PPVOA.sub
Target Version: 3.20
Procesing Host: hpvoa

Concentration Formula: (Vt/Ws)/((100-M)/100)

Name	Value	Description
Vt	25.000	Volume of final extract (mL)
Ws	10.000	Weight of sample extracted (g)
M	0.000	% Moisture (not decanted)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
$ 16 1,2-Dichloroethane-d4 (SUR)	65	8.692	8.719	(0.949)	445183	48	5900
* 19 Fluorobenzene	96	9.159	9.171	(1.000)	1911472	50	
$ 37 Toluene-d8 (SUR)	98	11.121	11.137	(1.214)	1588162	51	6400
* 32 Chlorobenzene-d5	117	12.803	12.823	(1.000)	1151585	50	
$ 41 Bromofluorobenzene (SUR)	174	14.080	14.103	(1.100)	562718	49	6200
* 91 1,4-Dichlorobenzene-d4	152	15.295	15.307	(1.000)	436325	50	

850930415

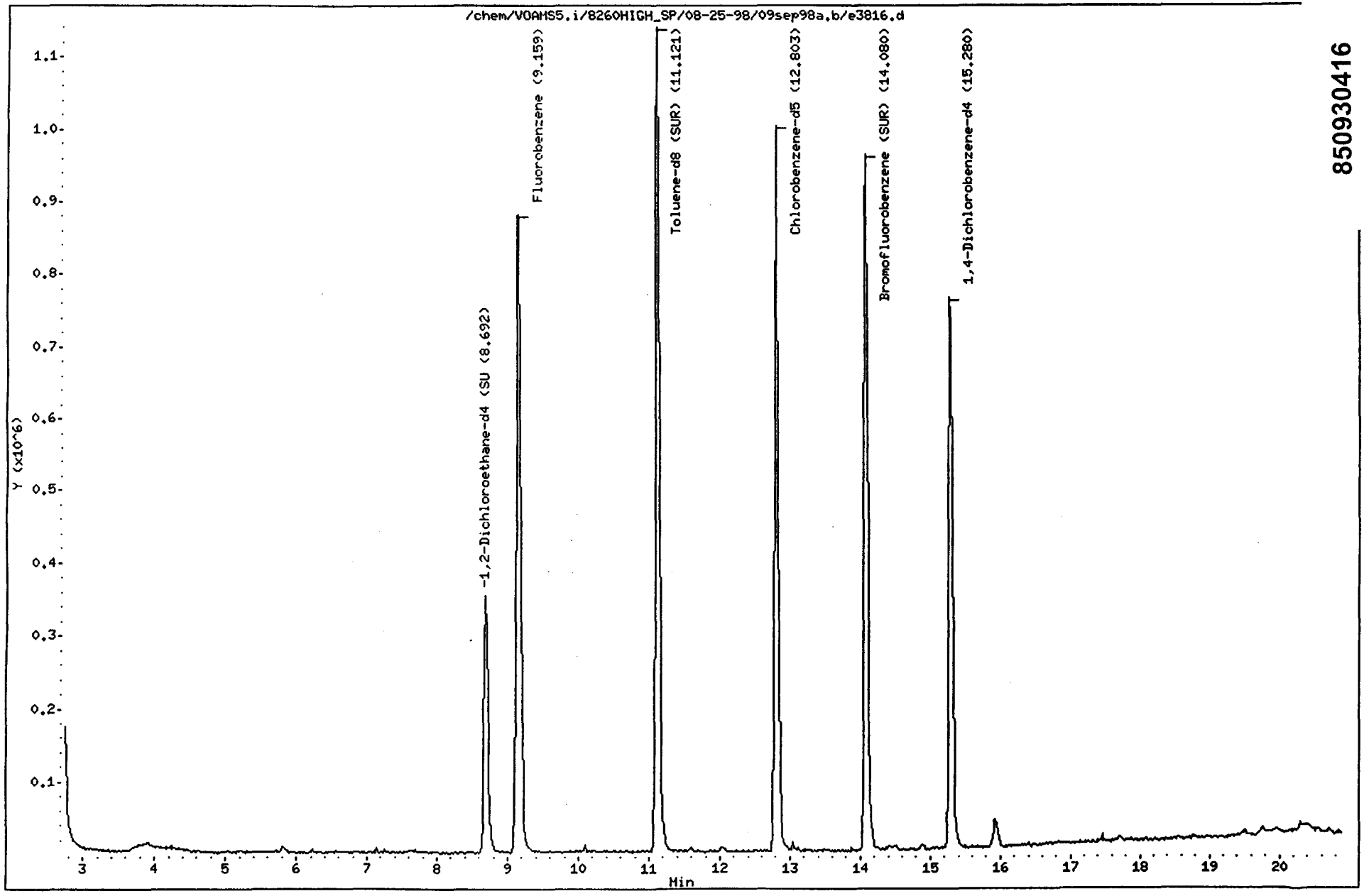
F152

Data File: /chem/VOAMS5.i/8260HIGH_SP/08-25-98/09sep98a.b/e3816.d
Date : 09-SEP-98 21:29:00
Client ID: TB-1
Sample Info: 81199;50;;10;25

Instrument: VOAMS5.i

Operator: VOAMS 5
Column diameter: 0.53

Column phase: DB624



850930416

Client ID: **TB-2**
Site: NBB-V12

Lab Sample No: **81200**
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/04/98
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f3718.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Chloromethane	ND	0.9
Bromomethane	ND	0.3
Vinyl Chloride	ND	0.4
Chloroethane	ND	1.0
Methylene Chloride	1.6	1.0
Trichlorofluoromethane	ND	0.2
1,1-Dichloroethene	ND	0.6
1,1-Dichloroethane	ND	0.3
trans-1,2-Dichloroethene	ND	0.3
cis-1,2-Dichloroethene	ND	1.0
Chloroform	ND	0.2
1,2-Dichloroethane	ND	0.2
1,1,1-Trichloroethane	ND	0.2
Carbon Tetrachloride	ND	0.2
Bromodichloromethane	ND	0.2
1,2-Dichloropropane	ND	0.5
cis-1,3-Dichloropropene	ND	0.3
Trichloroethene	ND	0.4
Dibromochloromethane	ND	0.2
1,1,2-Trichloroethane	ND	0.4
Benzene	ND	0.2
trans-1,3-Dichloropropene	ND	0.3
2-Chloroethyl Vinyl Ether	ND	0.5
Bromoform	ND	0.3
Tetrachloroethene	ND	0.1
1,1,2,2-Tetrachloroethane	ND	0.3
Toluene	ND	0.2
Chlorobenzene	ND	0.1
Ethylbenzene	ND	0.2
Xylene (Total)	ND	1.0

Client ID: **TB-2**
Site: NBB-V12

Lab Sample No: **81200**
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/04/98
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f3718.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
TENTATIVELY IDENTIFIED COMPOUNDS
METHOD 624

	COMPOUND NAME	RT	EST. CONC. ug/l	Q
1.	NO VOLATILE ORGANIC COMPOUNDS FOUND			
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

TOTAL ESTIMATED CONCENTRATION	0.0

850930418

F155

Data File: /chem/VOAMS6.i/624/08-28-98/04sep98.b/f3718.d
Report Date: 05-Sep-98 09:07:24

Envirotech Research, Inc.

VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/VOAMS6.i/624/08-28-98/04sep98.b/f3718.d
Lab Smp Id: 81200 Client Smp ID: TB-2
Inj Date : 04-SEP-98 21:37:00
Operator : VOAMS 7 Inst ID: VOAMS6.i
Smp Info : 81200;
Misc Info : G893;8121;;DRL
Comment :
Method : /chem/VOAMS6.i/624/08-28-98/04sep98.b/624.m
Meth Date : 04-Sep-98 13:01:48 Quant Type: ISTD
Cal Date : 28-AUG-98 11:49:00 Cal File: f3415.d
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PPVOAv.sub
Target Version: 3.20
Procesing Host: hpvoa

Concentration Formula: 5/Vo

Name	Value	Description
Vo	5.000	Sample Volume

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
6	Methylene Chloride	84	6.954	6.910	(0.765)	49599	1.6	1.6
* 2	Bromochloromethane	128	9.091	9.062	(1.000)	759455	30	
$ 16	1,2-Dichloroethane-d4 (SUR)	104	9.833	9.804	(0.950)	155440	30	30
* 19	1,4-Difluorobenzene	114	10.352	10.324	(1.000)	2395848	30	
$ 37	Toluene-d8 (SUR)	98	12.222	12.194	(1.181)	2059919	30	30
* 32	Chlorobenzene-d5	117	13.944	13.930	(1.000)	1623133	30	
$ 41	Bromofluorobenzene (SUR)	95	15.235	15.221	(1.093)	1191588	28	28

850930419

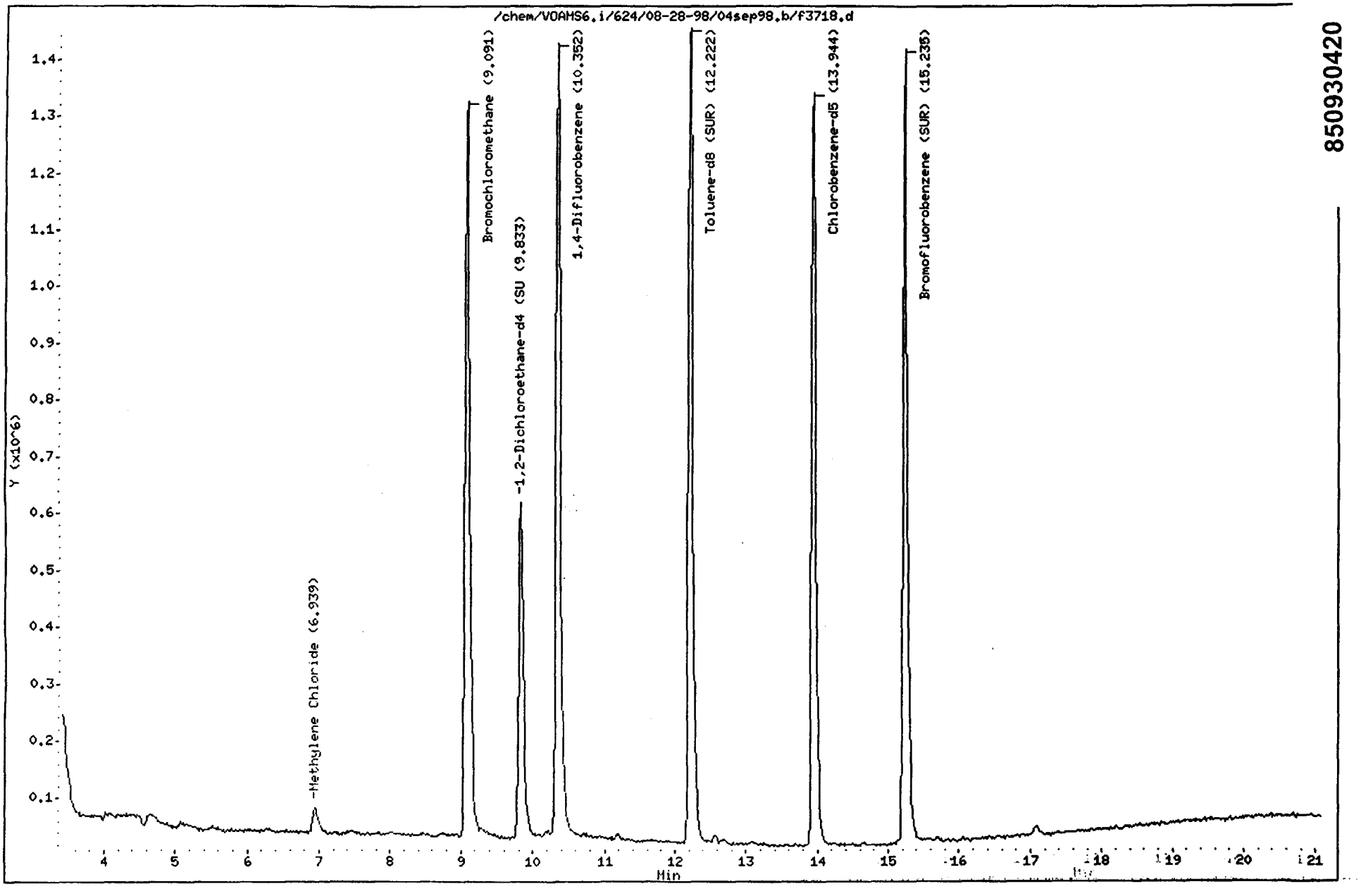
F15(

Data File: /chem/VOAMS6.i/624/08-28-98/04sep98.b/f3718.d
Date : 04-SEP-98 21:37:00
Client ID: TB-2
Sample Info: 81200;
Purge Volume: 5.0
Column phase: DB624

Instrument: VOAMS6.i
Operator: VOAMS 7
Column diameter: 0.53

F157

850930420



850930421

Data File: /chem/VOAMS6.i/624/08-28-98/04sep98.b/f3718.d

Date : 04-SEP-98 21:37:00

Client ID: TB-2

Instrument: VOAMS6.i

Sample Info: 81200;

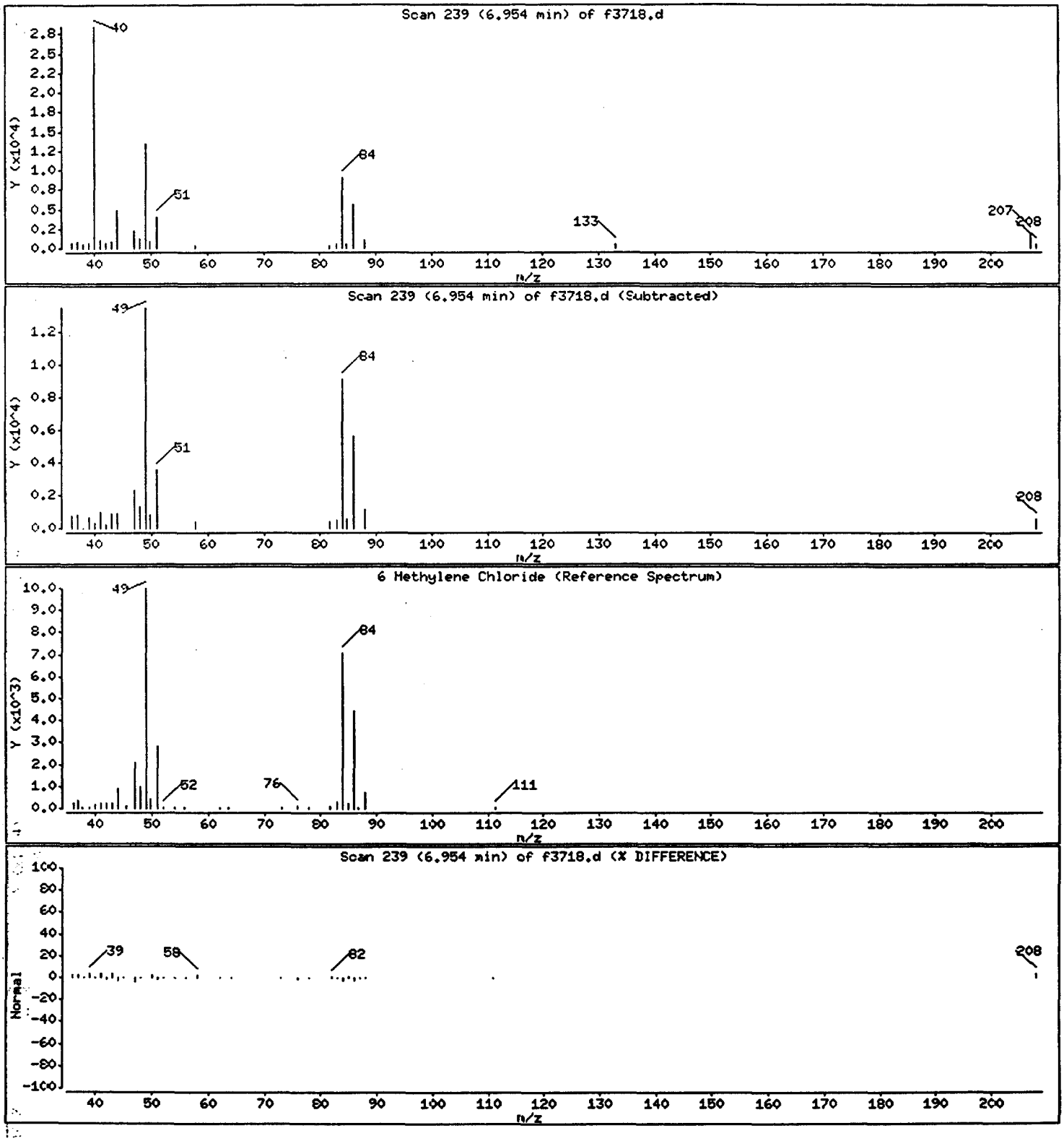
Purge Volume: 5.0

Operator: VOAMS 7

Column phase: DB624

Column diameter: 0.53

6 Methylene Chloride



F158

Client ID: **FB-2**
Site: NBB-V12

Lab Sample No: **81201**
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/04/98
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f3719.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Chloromethane	ND	0.9
Bromomethane	ND	0.3
Vinyl Chloride	ND	0.4
Chloroethane	ND	1.0
Methylene Chloride	1.1	1.0
Trichlorofluoromethane	ND	0.2
1,1-Dichloroethene	ND	0.6
1,1-Dichloroethane	ND	0.3
trans-1,2-Dichloroethene	ND	0.3
cis-1,2-Dichloroethene	ND	1.0
Chloroform	ND	0.2
1,2-Dichloroethane	ND	0.2
1,1,1-Trichloroethane	ND	0.2
Carbon Tetrachloride	ND	0.2
Bromodichloromethane	ND	0.2
1,2-Dichloropropane	ND	0.5
cis-1,3-Dichloropropene	ND	0.3
Trichloroethene	ND	0.4
Dibromochloromethane	ND	0.2
,1,2-Trichloroethane	ND	0.4
Benzene	ND	0.2
rans-1,3-Dichloropropene	ND	0.3
-Chloroethyl Vinyl Ether	ND	0.5
romoform	ND	0.3
etrachloroethene	ND	0.1
,1,2,2-Tetrachloroethane	ND	0.3
oluene	ND	0.2
hlorobenzene	ND	0.1
thylbenzene	ND	0.2
ylene (Total)	ND	1.0

850930422

F159

Client ID: **FB-2**
Site: NBB-V12

Lab Sample No: **81201**
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/04/98
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f3719.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
TENTATIVELY IDENTIFIED COMPOUNDS
METHOD 624

	COMPOUND NAME	RT	EST. CONC. ug/l	Q
1.	NO VOLATILE ORGANIC COMPOUNDS FOUND			
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

TOTAL ESTIMATED CONCENTRATION	0.0

850930423

F160

Data File: /chem/VOAMS6.i/624/08-28-98/04sep98.b/f3719.d
Report Date: 05-Sep-98 09:07:30

Envirotech Research, Inc.

VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/VOAMS6.i/624/08-28-98/04sep98.b/f3719.d
Lab Smp Id: 81201 Client Smp ID: FB-2
Inj Date : 04-SEP-98 22:05:00
Operator : VOAMS 7 Inst ID: VOAMS6.i
Smp Info : 81201;
Misc Info : G893;8121;;DRL
Comment :
Method : /chem/VOAMS6.i/624/08-28-98/04sep98.b/624.m
Meth Date : 04-Sep-98 13:01:48 Quant Type: ISTD
Cal Date : 28-AUG-98 11:49:00 Cal File: f3415.d
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PPVOAv.sub
Target Version: 3.20
Procesing Host: hpvoa

Concentration Formula: 5/Vo

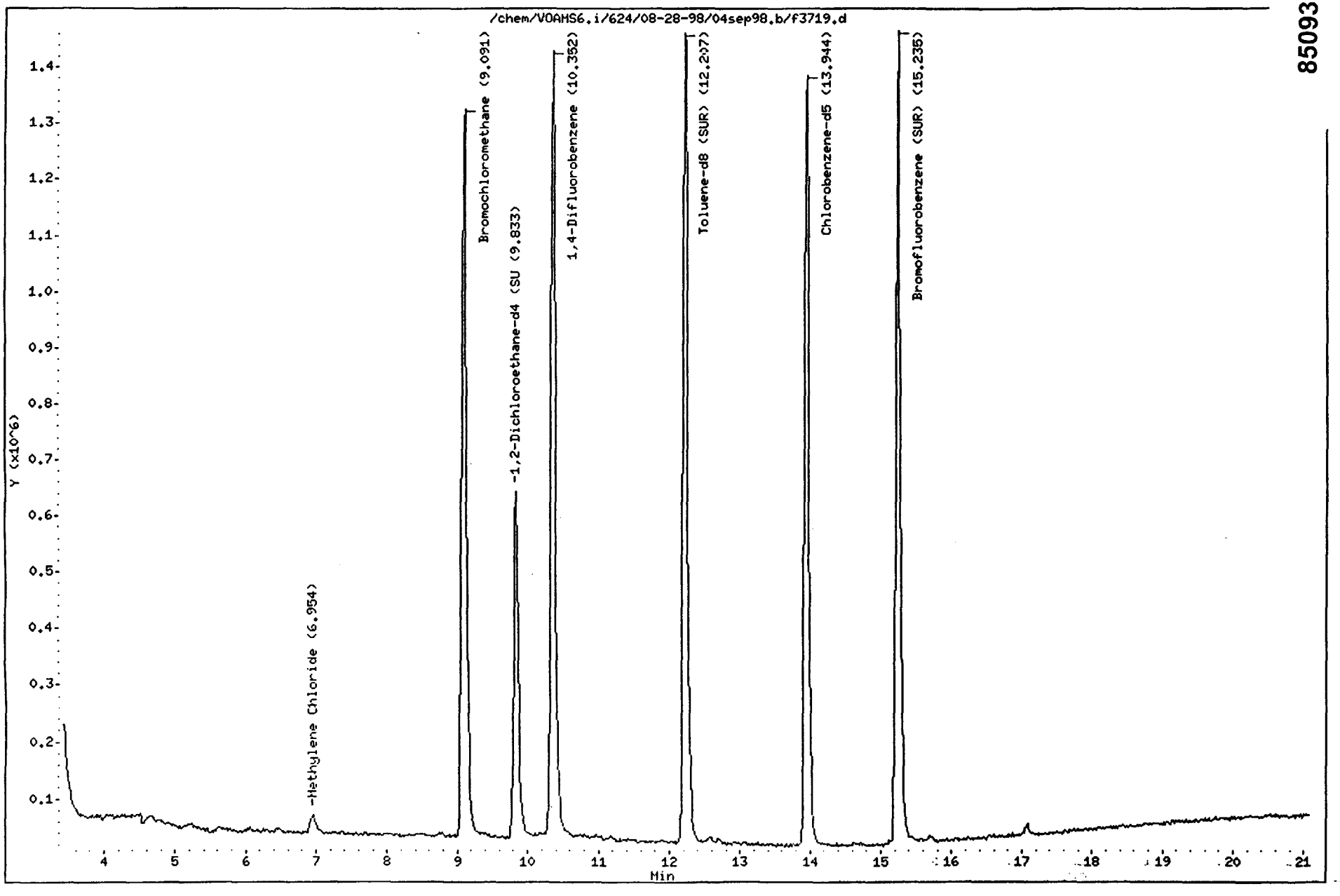
Name	Value	Description
Vo	5.000	Sample Volume

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
	6 Methylene Chloride	84	6.954	6.910	(0.765)	34707	1.1	1.1
*	2 Bromochloromethane	128	9.091	9.062	(1.000)	768584	30	
$	16 1,2-Dichloroethane-d4 (SUR)	104	9.833	9.804	(0.950)	152948	29	29
*	19 1,4-Difluorobenzene	114	10.352	10.324	(1.000)	2393774	30	
$	37 Toluene-d8 (SUR)	98	12.207	12.194	(1.179)	2085252	30	30
*	32 Chlorobenzene-d5	117	13.944	13.930	(1.000)	1689636	30	
$	41 Bromofluorobenzene (SUR)	95	15.235	15.221	(1.093)	1243219	29	29

Data File: /chem/VOAMS6.i/624/08-28-98/04sep98.b/f3719.d
Date : 04-SEP-98 22:05:00
Client ID: FB-2
Sample Info: 81201;
Purge Volume: 5.0
Column phase: DB624

Instrument: VOAMS6.i
Operator: VOAMS 7
Column diameter: 0.53

850930425



F162

Data File: /chem/VOAMS6.i/624/08-28-98/04sep98.b/f3719.d

850930426

Date : 04-SEP-98 22:05:00

Client ID: FB-2

Instrument: VOAMS6.i

Sample Info: 81201;

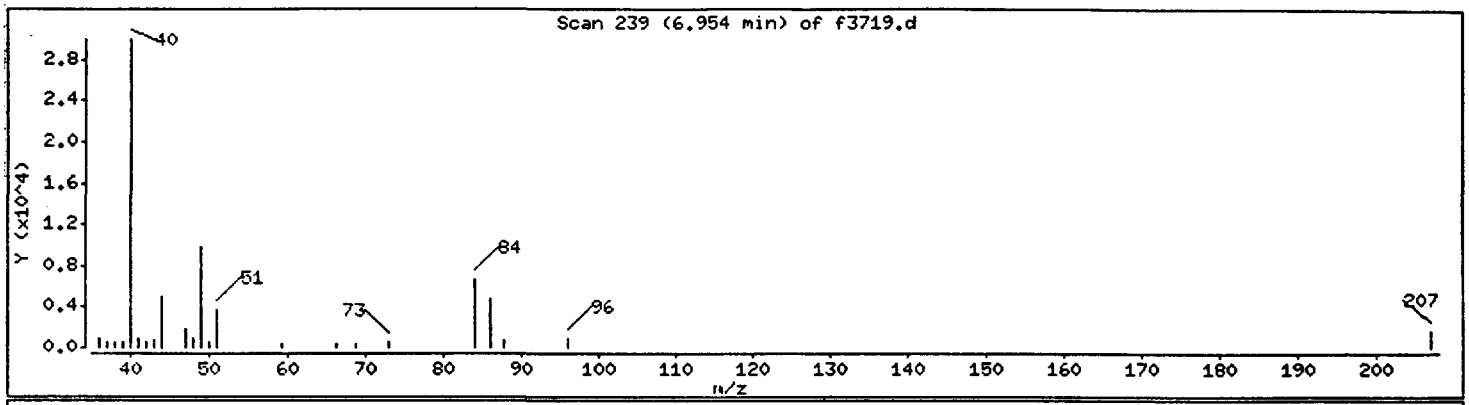
Purge Volume: 5.0

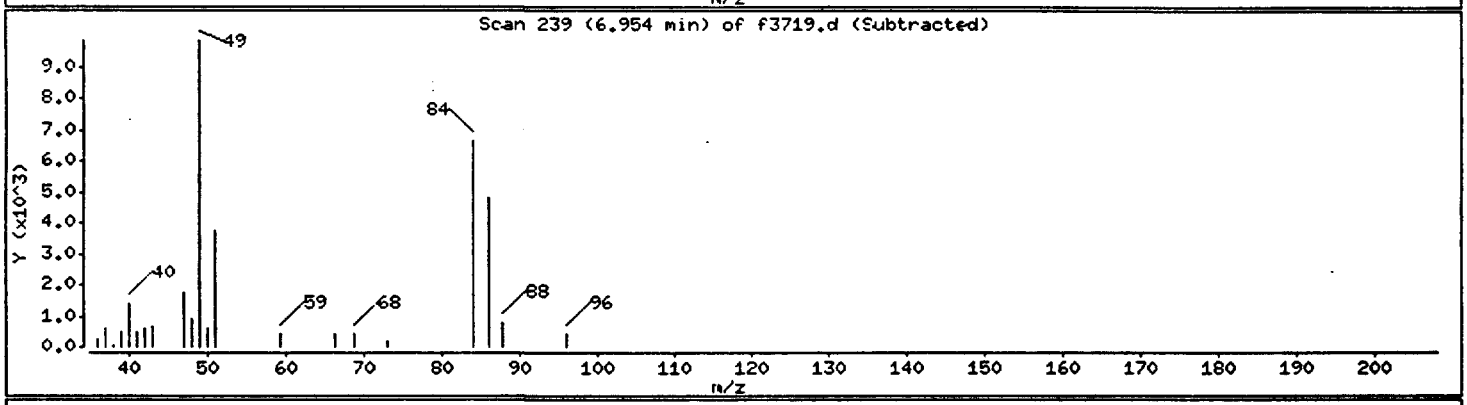
Operator: VOAMS 7

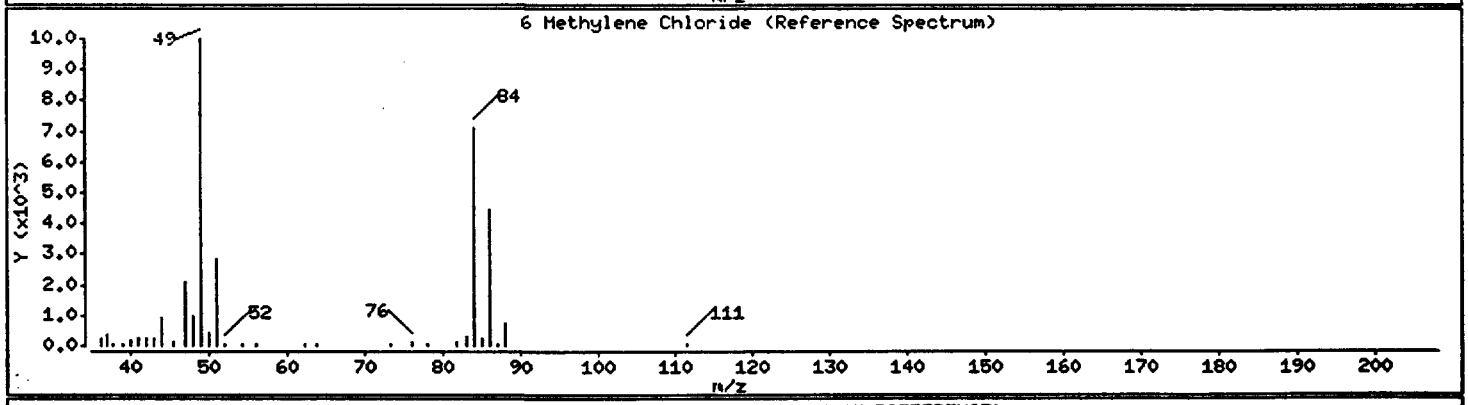
Column phase: DB624

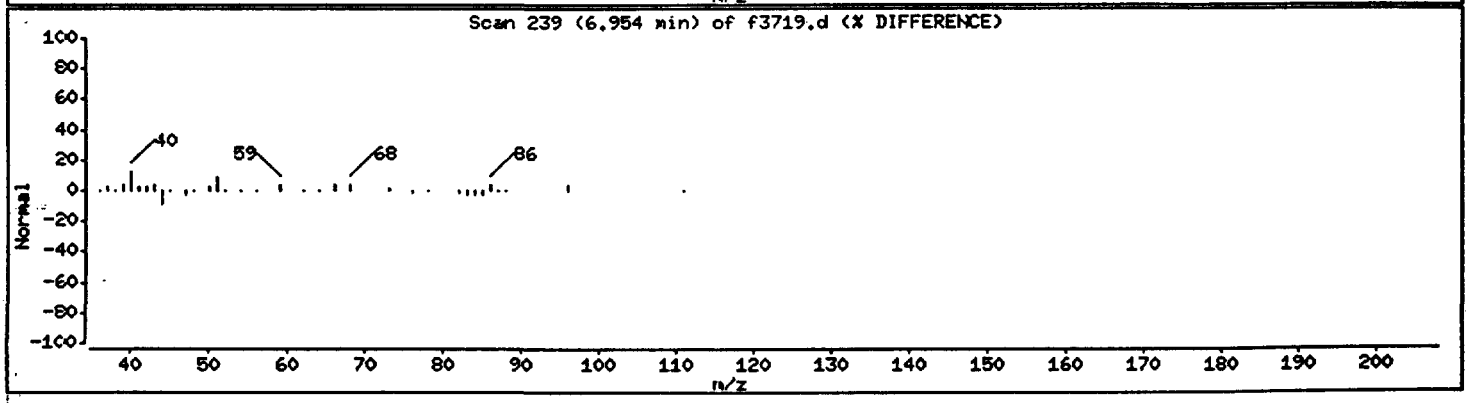
Column diameter: 0.53

6 Methylene Chloride









F163

Client ID: **GP-1**
Site: NBB-V12

Lab Sample No: **81202**
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/09/98
GC Column: DB624
Instrument ID: VOAMS5.i
Lab File ID: e3818.d

Matrix: SOIL
Level: HIGH
Sample Weight: 10.5 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 16

VOLATILE ORGANICS - GC/MS
METHOD 8260B

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
Chloromethane	ND	700
Bromomethane	ND	700
Vinyl Chloride	ND	700
Chloroethane	ND	700
Methylene Chloride	ND	420
Trichlorofluoromethane	ND	700
1,1-Dichloroethene	ND	280
1,1-Dichloroethane	ND	700
trans-1,2-Dichloroethene	ND	700
cis-1,2-Dichloroethene	ND	700
Chloroform	ND	700
1,2-Dichloroethane	ND	280
1,1,1-Trichloroethane	ND	700
Carbon Tetrachloride	ND	280
Bromodichloromethane	ND	140
1,2-Dichloropropane	ND	140
cis-1,3-Dichloropropene	ND	700
Trichloroethene	ND	140
Dibromochloromethane	ND	700
1,1,2-Trichloroethane	ND	420
Benzene	ND	140
trans-1,3-Dichloropropene	ND	700
2-Chloroethyl Vinyl Ether	ND	700
Bromoform	ND	560
Tetrachloroethene	ND	140
1,1,2,2-Tetrachloroethane	ND	140
Toluene	ND	700
Chlorobenzene	ND	700
Ethylbenzene	ND	560
Xylene (Total)	ND	700

Client ID: **GP-1**
Site: NBB-V12

Lab Sample No: 81202
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/09/98
GC Column: DB624
Instrument ID: VOAMS5.i
Lab File ID: e3818.d

Matrix: SOIL
Level: HIGH
Sample Weight: 10.5 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 15.5

VOLATILE ORGANICS - GC/MS
TENTATIVELY IDENTIFIED COMPOUNDS
METHOD 8260B

	COMPOUND NAME	RT	EST. CONC. ug/kg	Q
1.	NO VOLATILE ORGANIC COMPOUNDS FOUND			
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

TOTAL ESTIMATED CONCENTRATION	0.0

Data File: /chem/VOAMS5.i/8260HIGH_SP/08-25-98/09sep98a.b/e3818.d
Report Date: 11-Sep-98 16:09:11

Envirotech Research, Inc.

VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/VOAMS5.i/8260HIGH_SP/08-25-98/09sep98a.b/e3818.d
Lab Smp Id: 81202 Client Smp ID: GP-1
Inj Date : 09-SEP-98 22:24:00
Operator : VOAMS 5 Inst ID: VOAMS5.i
Smp Info : 81202;50;15.5;10.5;25
Misc Info : G893;6032;TL
Comment :
Method : /chem/VOAMS5.i/8260HIGH_SP/08-25-98/09sep98a.b/8260b-HIGH.m
Meth Date : 09-Sep-98 18:27:26 Quant Type: ISTD
Cal Date : 25-AUG-98 13:08:00 Cal File: e3451.d
Als bottle: 10
Dil Factor: 50.00000
Integrator: HP RTE Compound Sublist: PPVOA.sub
Target Version: 3.20
Procesing Host: hpvoa

Concentration Formula: (Vt/Ws)/((100-M)/100)

Name	Value	Description
Vt	25.000	Volume of final extract (mL)
Ws	10.500	Weight of sample extracted (g)
M	15.500	% Moisture (not decanted)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
$ 16 1,2-Dichloroethane-d4 (SUR)	65	8.692	8.719	(0.949)	428062	45	6300
* 19 Fluorobenzene	96	9.159	9.171	(1.000)	1940376	50	
$ 37 Toluene-d8 (SUR)	98	11.121	11.137	(1.214)	1551894	49	6900
* 32 Chlorobenzene-d5	117	12.803	12.823	(1.000)	1178627	50	
$ 41 Bromofluorobenzene (SUR)	174	14.080	14.103	(1.100)	540093	46	6500
* 91 1,4-Dichlorobenzene-d4	152	15.295	15.307	(1.000)	442168	50	

850930429

F166

Data File: /chem/VOAMS5.i/8260HIGH_SP/08-25-98/09sep98a.b/e3818.d
Date : 09-SEP-98 22:24:00
Client ID: GP-1
Sample Info: 81202;50;15.5;10.5;25

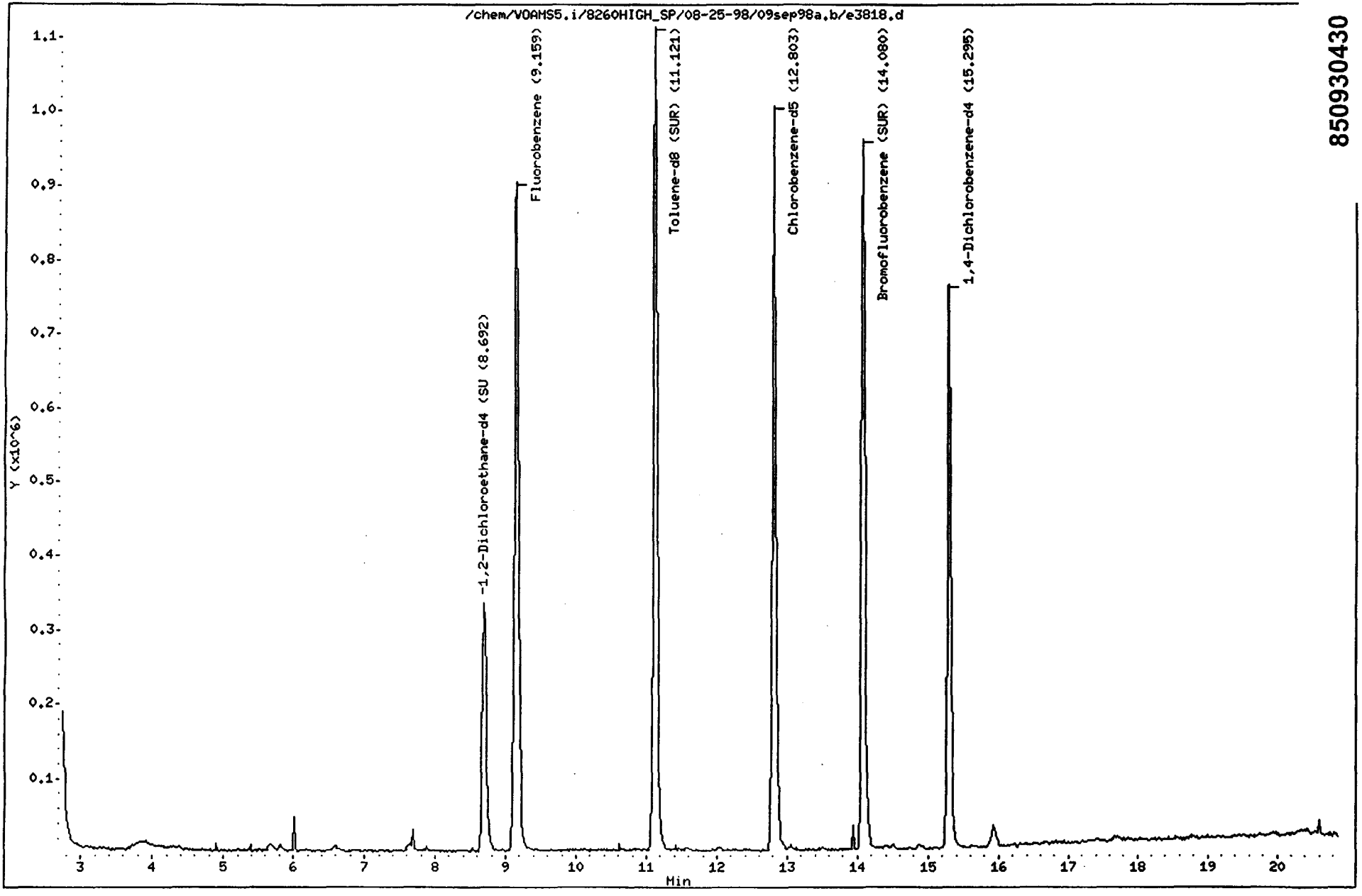
Instrument: VOAMS5.i

Operator: VOAMS 5
Column diameter: 0.53

Column phase: DB624

F167

850930430



Client ID: **GP-1W**
Site: NBB-V12

Lab Sample No: **81203**
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/04/98
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f3720.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Chloromethane	ND	0.9
Bromomethane	ND	0.3
Vinyl Chloride	ND	0.4
Chloroethane	ND	1.0
Methylene Chloride	ND	1.0
Trichlorofluoromethane	ND	0.2
1,1-Dichloroethene	ND	0.6
1,1-Dichloroethane	ND	0.3
trans-1,2-Dichloroethene	ND	0.3
cis-1,2-Dichloroethene	ND	1.0
Chloroform	ND	0.2
1,2-Dichloroethane	ND	0.2
1,1,1-Trichloroethane	ND	0.2
Carbon Tetrachloride	ND	0.2
Bromodichloromethane	ND	0.2
1,2-Dichloropropane	ND	0.5
cis-1,3-Dichloropropene	ND	0.3
Trichloroethene	ND	0.4
Dibromochloromethane	ND	0.2
1,1,2-Trichloroethane	ND	0.4
Benzene	ND	0.2
trans-1,3-Dichloropropene	ND	0.3
2-Chloroethyl Vinyl Ether	ND	0.5
Bromoform	ND	0.3
Tetrachloroethene	ND	0.1
1,1,2,2-Tetrachloroethane	ND	0.3
Toluene	ND	0.2
Chlorobenzene	ND	0.1
Ethylbenzene	ND	0.2
Xylene (Total)	ND	1.0

Client ID: **GP-1W**
Site: NBB-V12

Lab Sample No: 81203
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/04/98
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f3720.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
TENTATIVELY IDENTIFIED COMPOUNDS
METHOD 624

	COMPOUND NAME	RT	EST. CONC. ug/l	Q
1.	NO VOLATILE ORGANIC COMPOUNDS FOUND			
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

TOTAL ESTIMATED CONCENTRATION	0.0

Data File: /chem/VOAMS6.i/624/08-28-98/04sep98.b/f3720.d
Report Date: 05-Sep-98 09:07:35

Envirotech Research, Inc.

VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/VOAMS6.i/624/08-28-98/04sep98.b/f3720.d
Lab Smp Id: 81203 Client Smp ID: GP-1W
Inj Date : 04-SEP-98 22:34:00
Operator : VOAMS 7 Inst ID: VOAMS6.i
Smp Info : 81203;
Misc Info : G893;8121;;DRL
Comment :
Method : /chem/VOAMS6.i/624/08-28-98/04sep98.b/624.m
Meth Date : 04-Sep-98 13:01:48 Quant Type: ISTD
Cal Date : 28-AUG-98 11:49:00 Cal File: f3415.d
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PPVOAv.sub
Target Version: 3.20
Procesing Host: hpvoa

Concentration Formula: 5/Vo

Name	Value	Description
Vo	5.000	Sample Volume

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
* 2 Bromochloromethane	128	9.092	9.062	(1.000)	745788	30	
$ 16 1,2-Dichloroethane-d4 (SUR)	104	9.834	9.804	(0.950)	154809	30	30
* 19 1,4-Difluorobenzene	114	10.353	10.324	(1.000)	2355143	30	
$ 37 Toluene-d8 (SUR)	98	12.208	12.194	(1.179)	2036296	30	30
* 32 Chlorobenzene-d5	117	13.944	13.930	(1.000)	1669787	30	
$ 41 Bromofluorobenzene (SUR)	95	15.235	15.221	(1.093)	1227810	29	29

850930433

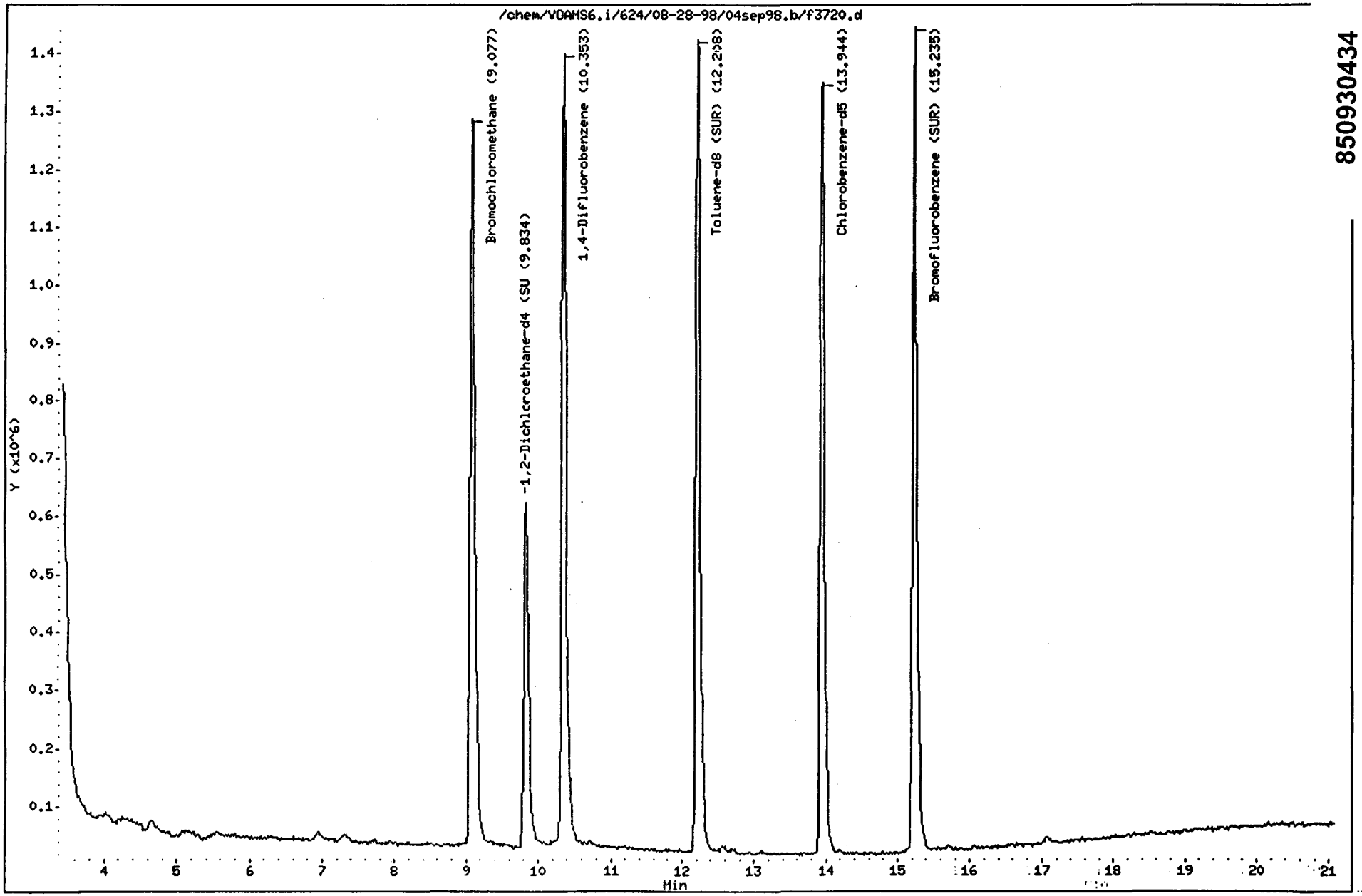
F 170

Data File: /chem/VOAMS6.i/624/08-28-98/04sep98.b/f3720.d
Date : 04-SEP-98 22:34:00
Client ID: GP-1W
Sample Info: 81203;
Purge Volume: 5.0
Column phase: DB624

Instrument: VOAMS6.i
Operator: VOAMS 7
Column diameter: 0.53

F171

850930434



Client ID: **GP-2**
Site: NBB-V12

Lab Sample No: **81204**
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/11/98
GC Column: DB624
Instrument ID: VOAMS5.i
Lab File ID: e3882.d

Matrix: SOIL
Level: HIGH
Sample Weight: 9.9 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 24

VOLATILE ORGANICS - GC/MS
METHOD 8260B

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
Chloromethane	ND	840
Bromomethane	ND	840
Vinyl Chloride	ND	840
Chloroethane	ND	840
Methylene Chloride	ND	500
Trichlorofluoromethane	ND	840
1,1-Dichloroethene	ND	330
1,1-Dichloroethane	ND	840
trans-1,2-Dichloroethene	ND	840
cis-1,2-Dichloroethene	ND	840
Chloroform	ND	840
1,2-Dichloroethane	ND	330
1,1,1-Trichloroethane	ND	840
Carbon Tetrachloride	ND	330
Bromodichloromethane	ND	170
1,2-Dichloropropane	ND	170
cis-1,3-Dichloropropene	ND	840
Trichloroethene	ND	170
Dibromochloromethane	ND	840
1,1,2-Trichloroethane	ND	500
Benzene	140 J	170
trans-1,3-Dichloropropene	ND	840
2-Chloroethyl Vinyl Ether	ND	840
Bromoform	ND	670
Tetrachloroethene	ND	170
1,1,2,2-Tetrachloroethane	ND	170
Toluene	380 J	840
Chlorobenzene	ND	840
Ethylbenzene	540 J	670
Xylene (Total)	1100	840

Client ID: GP-2
Site: NBB-V12

Lab Sample No: 81204
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/11/98
GC Column: DB624
Instrument ID: VOAMS5.i
Lab File ID: e3882.d

Matrix: SOIL
Level: HIGH
Sample Weight: 9.9 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 24.5

VOLATILE ORGANICS - GC/MS
TENTATIVELY IDENTIFIED COMPOUNDS
METHOD 8260B

	COMPOUND NAME	RT	EST. CONC. ug/kg	Q
1.	Unknown	14.50	6100	
2.	Unknown Hydrocarbon	15.15	4800	
3.	Unknown Hydrocarbon	15.69	13000	
4.	Unknown Alkene	15.89	5400	
5.	Decahydromethylnaphthalene isomer	16.31	11000	
6.	Decahydromethylnaphthalene isomer	16.55	14000	
7.	Unknown Ketone	16.91	7000	
8.	Unknown	17.19	9000	
9.	Unknown	17.67	6400	
10.	Unknown Hydrocarbon	17.77	6000	
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

TOTAL ESTIMATED CONCENTRATION 82700

850930436

F173

Data File: /chem/VOAMS5.i/8260HIGH_SP/09-10-98/11sep98a.b/e3882.d
Report Date: 12-Sep-98 15:34:48

Envirotech Research, Inc.

VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/VOAMS5.i/8260HIGH_SP/09-10-98/11sep98a.b/e3882.d
Lab Smp Id: 81204 Client Smp ID: GP-2
Inj Date : 11-SEP-98 21:53:00
Operator : VOAMS 5 Inst ID: VOAMS5.i
Smp Info : 81204;50;24.5;9.9;25
Misc Info : G893;6032;TL
Comment :
Method : /chem/VOAMS5.i/8260HIGH_SP/09-10-98/11sep98a.b/8260b-HIGH.m
Meth Date : 11-Sep-98 14:28:01 Quant Type: ISTD
Cal Date : 10-SEP-98 10:06:00 Cal File: e3836.d
Als bottle: 16
Dil Factor: 50.00000
Integrator: HP RTE Compound Sublist: PPVOA.sub
Target Version: 3.20
Procesing Host: hpvoa

Concentration Formula: (Vt/Ws)/((100-M)/100)

Name	Value	Description
Vt	25.000	Volume of final extract (mL)
Ws	9.900	Weight of sample extracted (g)
M	24.500	% Moisture (not decanted)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
$	16 1,2-Dichloroethane-d4 (SUR)	65	8.689	8.709	(0.949)	378561	43	7100
	28 Benzene	78	8.814	8.818	(0.963)	21059	0.81	140(a)
*	19 Fluorobenzene	96	9.156	9.161	(1.000)	1834545	50	
$	37 Toluene-d8 (SUR)	98	11.117	11.123	(1.214)	1396036	47	7800
	38 Toluene	91	11.195	11.201	(1.223)	72087	2.3	380(a)
*	32 Chlorobenzene-d5	117	12.799	12.805	(1.000)	1076258	50	
	40 Ethylbenzene	106	12.940	12.945	(1.011)	31149	3.2	540(a)
M	45 Xylene (Total)	100				80347	6.5	1100
$	41 Bromofluorobenzene (SUR)	174	14.078	14.083	(1.100)	467476	45	7600
*	91 1,4-Dichlorobenzene-d4	152	15.280	15.299	(1.000)	440521	50	
	43 m+p-Xylene	106	13.064	13.070	(1.021)	63614	5.1	860(a)
	44 o-Xylene	106	13.501	13.506	(1.055)	16733	1.4	230(a)

850930437

F17

Data File: /chem/VOAMS5.i/8260HIGH_SP/09-10-98/11sep98a.b/e3882.d
Report Date: 12-Sep-98 15:34:48

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

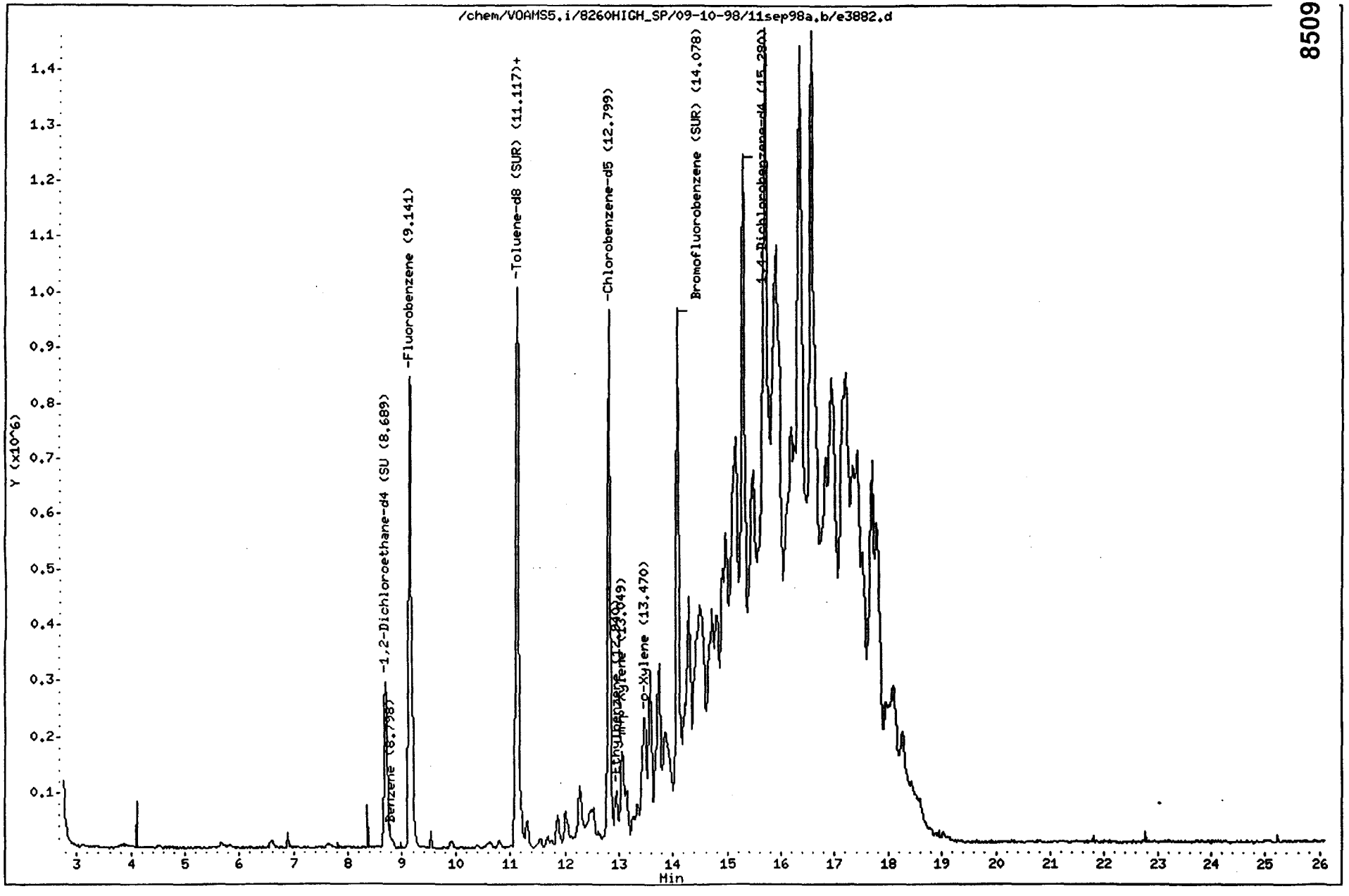
Data File: /chem/VOAMS5.i/8260HIGH_SP/09-10-98/11sep98a.b/e3882.d
Date : 11-SEP-98 21:53:00
Client ID: GP-2
Sample Info: 81204;50;24.5;9.9;25

Instrument: VOAMS5.i

Operator: VOAMS 5
Column diameter: 0.53

Column phase: DB624

850930439



F 176

Data File: /chem/VOAMS5.i/8260HIGH_SP/09-10-98/11sep98a.b/e3882.d

850930440

Date : 11-SEP-98 21:53:00

Client ID: CP-2

Instrument: VOAMS5.i

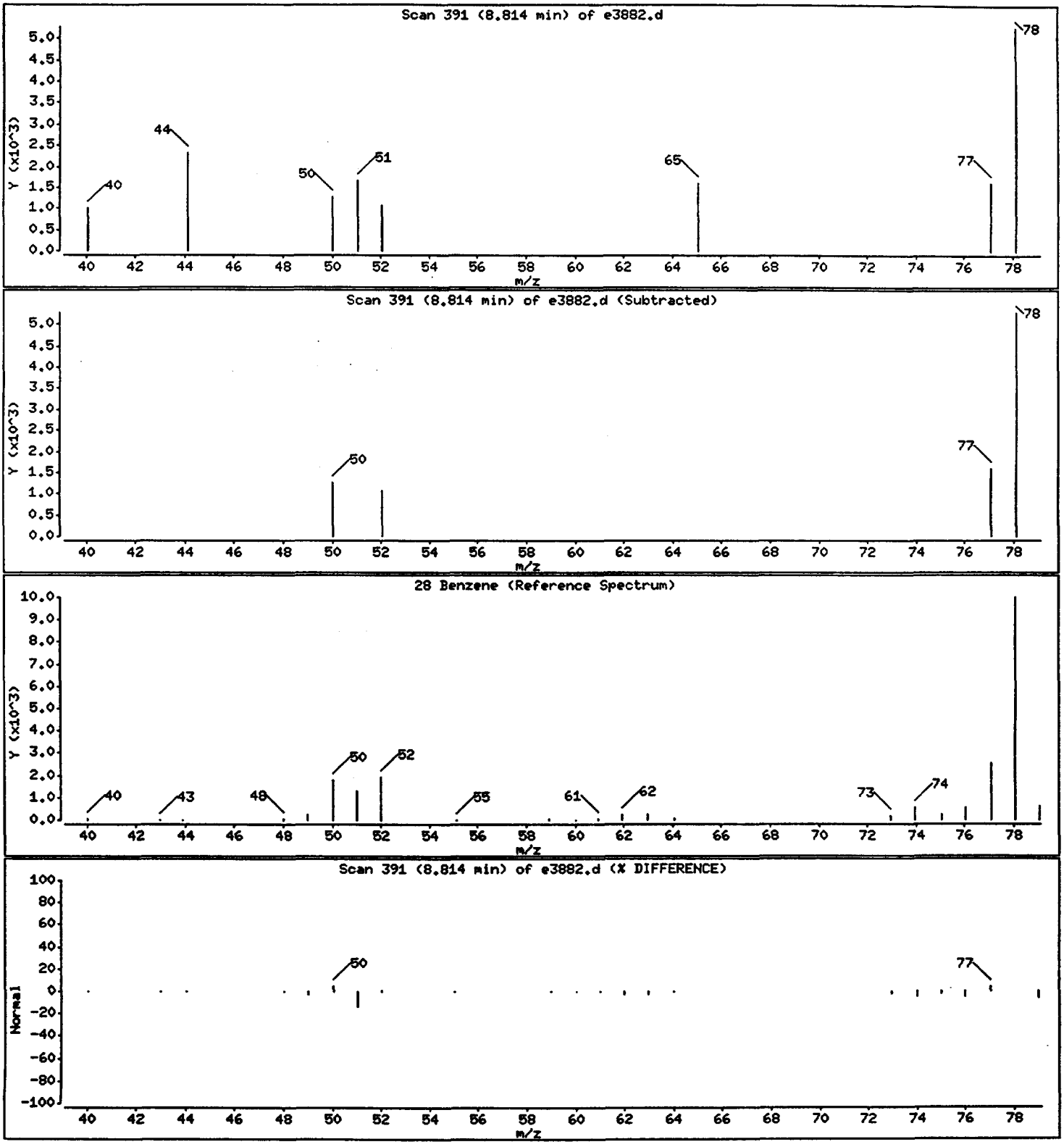
Sample Info: 81204;50;24.5;9.9;25

Operator: VOAMS 5

Column phase: DB624

Column diameter: 0.53

28 Benzene



F177

850930441

Data File: /chem/VOAHS5.i/8260HIGH_SP/09-10-98/11sep98a.b/e3882.d

Date : 11-SEP-98 21:53:00

Client ID: CP-2

Instrument: VOAHS5.i

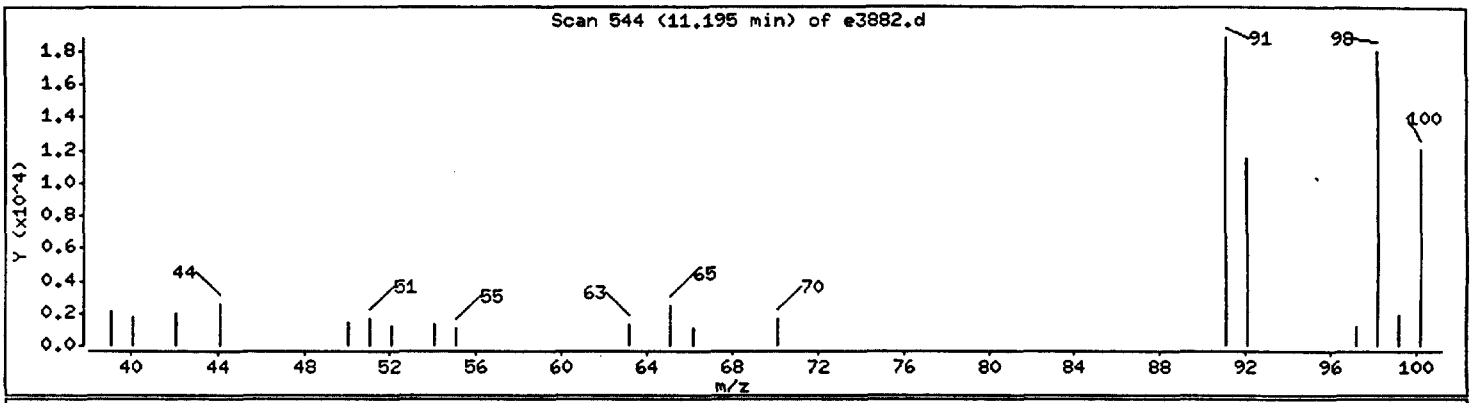
Sample Info: 81204;50;24.5;9.9;25

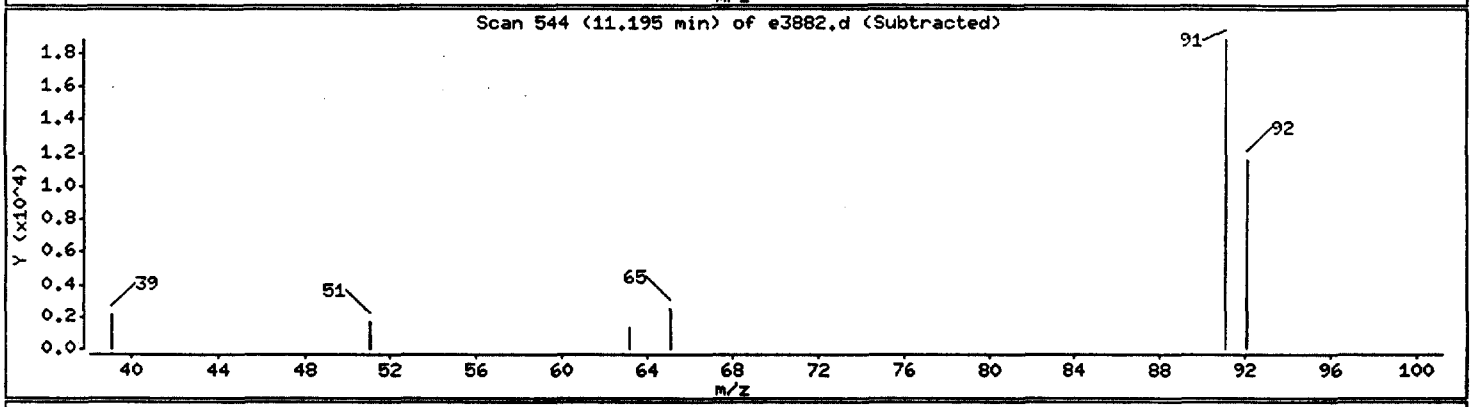
Operator: VOAHS 5

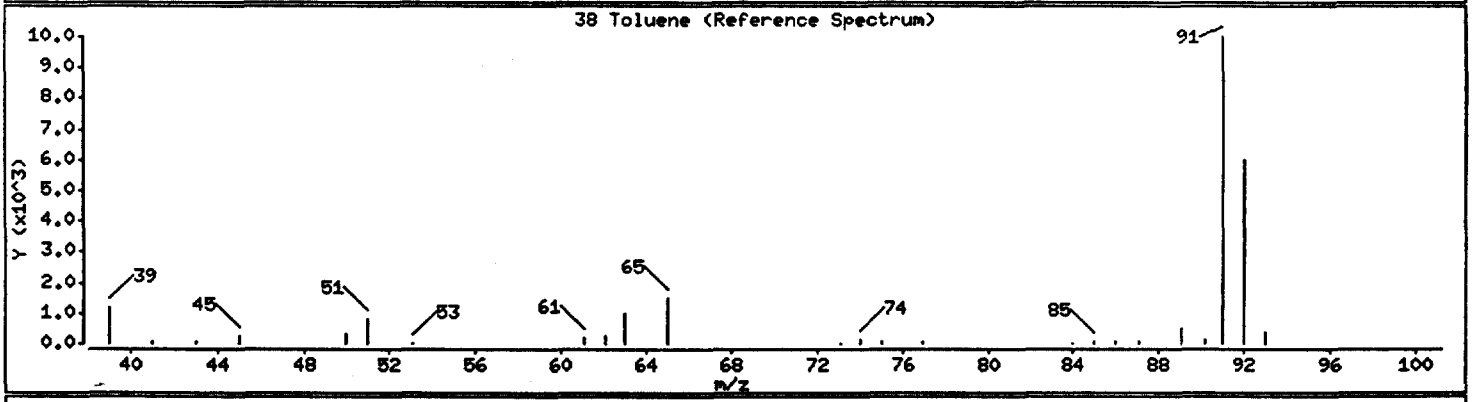
Column phase: DB624

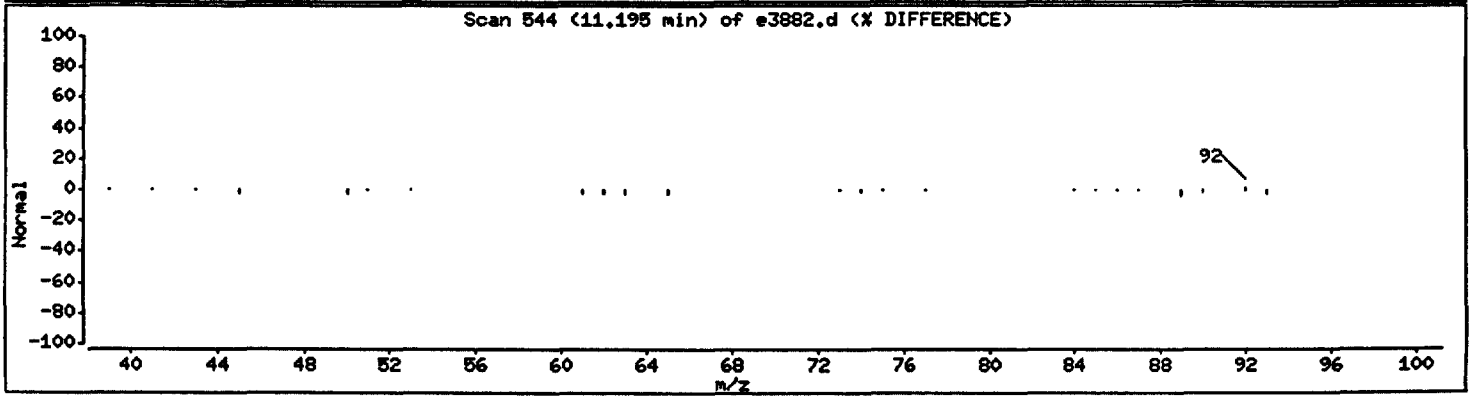
Column diameter: 0.53

38 Toluene









F 178

850930442

Data File: /chem/VOAMS5.i/8260HIGH_SP/09-10-98/11sep98a.b/e3882.d

Date : 11-SEP-98 21:53:00

Client ID: GP-2

Instrument: VOAMS5.i

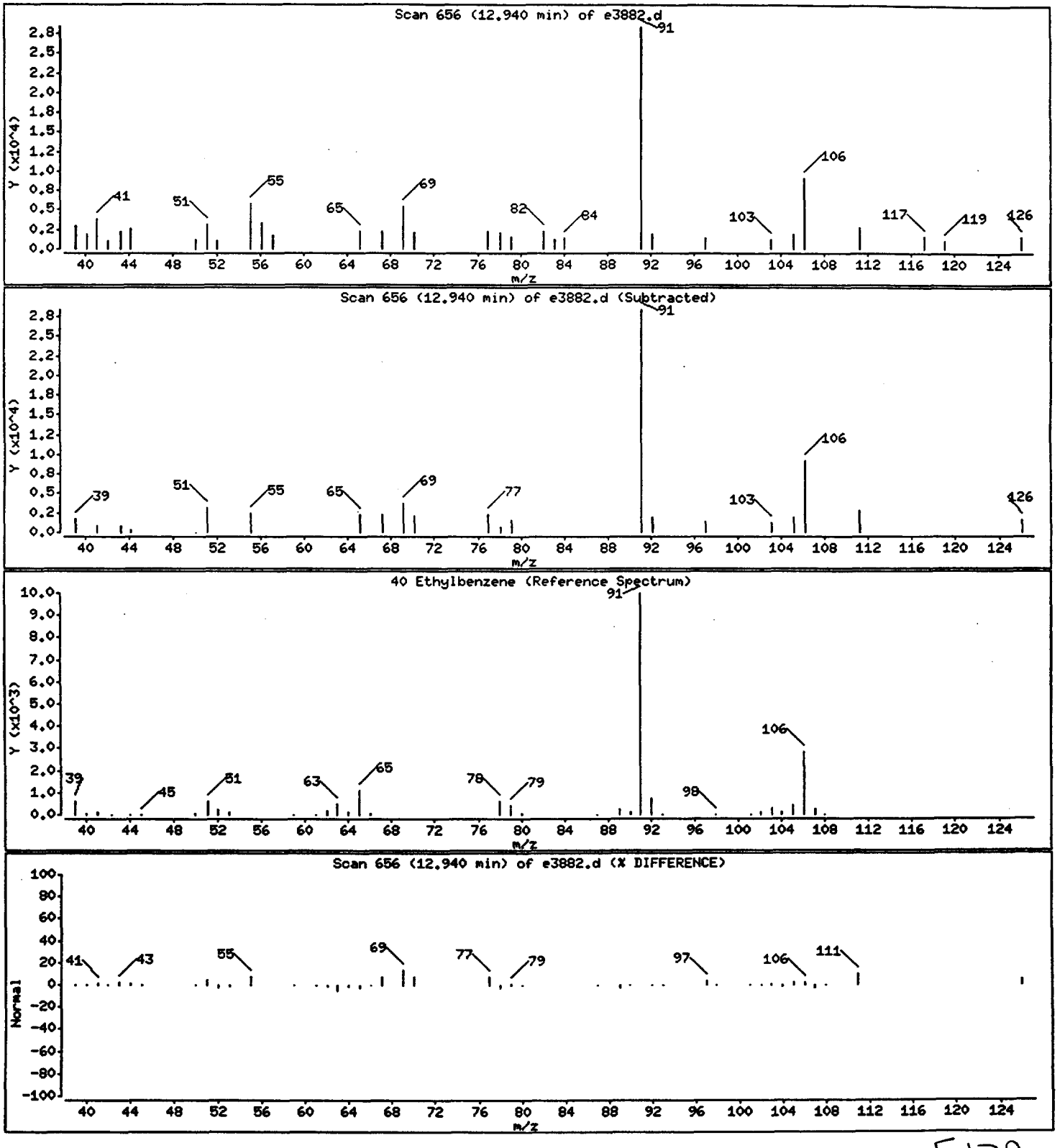
Sample Info: 81204;50;24.5;9.9;25

Operator: VOAMS 5

Column phase: DB624

Column diameter: 0.53

40 Ethylbenzene



F179

850930443

Data File: /chem/VOAMS5.i/8260HIGH_SP/09-10-98/11sep98a.b/e3882.d

Date : 11-SEP-98 21:53:00

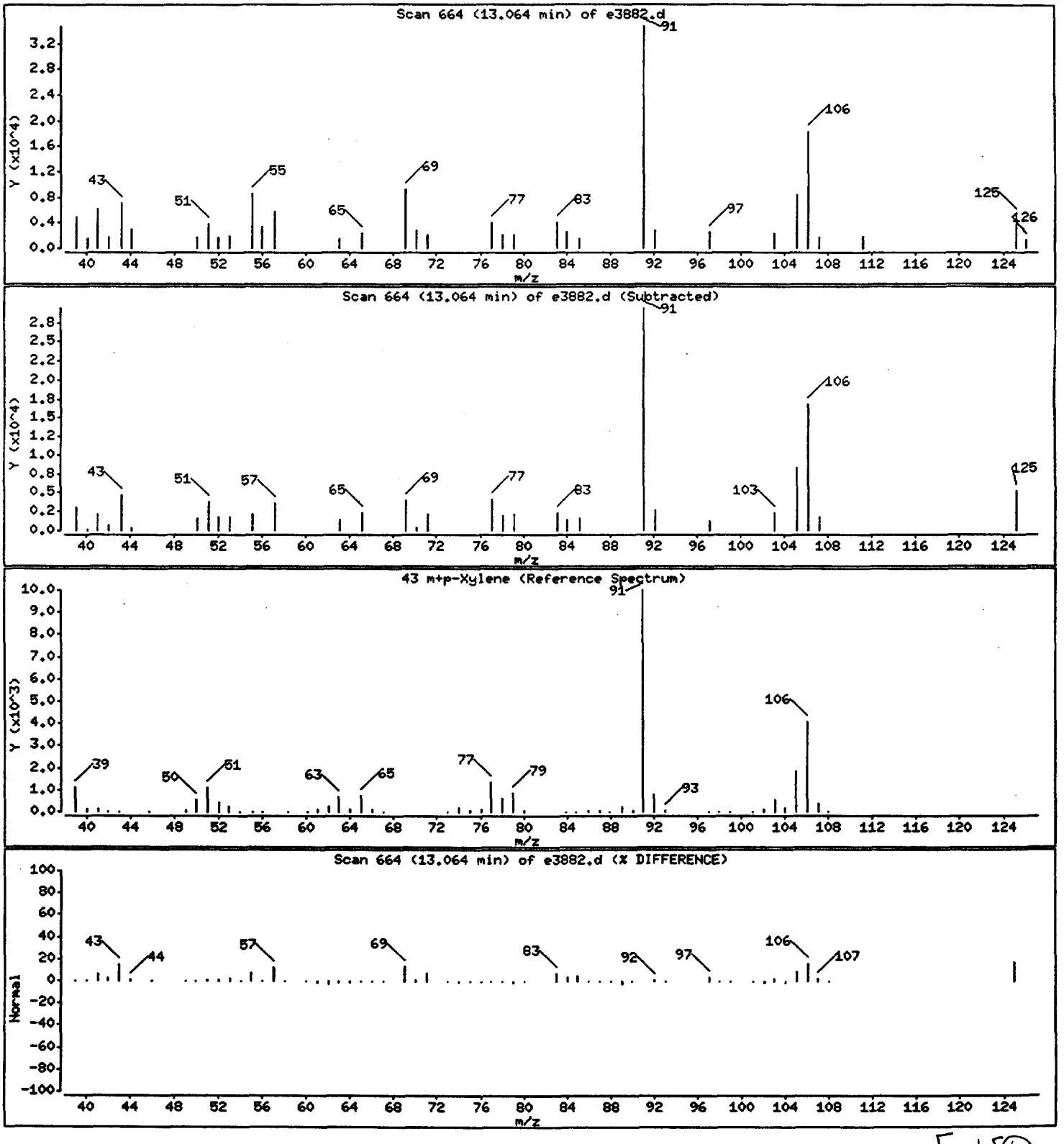
Client ID: GP-2 Instrument: VOAMS5.i

Sample Info: 81204;50;24.5;9.9;25

Operator: VOAMS 5

Column phase: DB624 Column diameter: 0.53

43 m+p-Xylene



F 180

Data File: /chem/VOAMS5.i/8260HIGH_SP/09-10-98/11sep98a.b/e3882.d

850930444

Date : 11-SEP-98 21:53:00

Client ID: GP-2

Instrument: VOAMS5.i

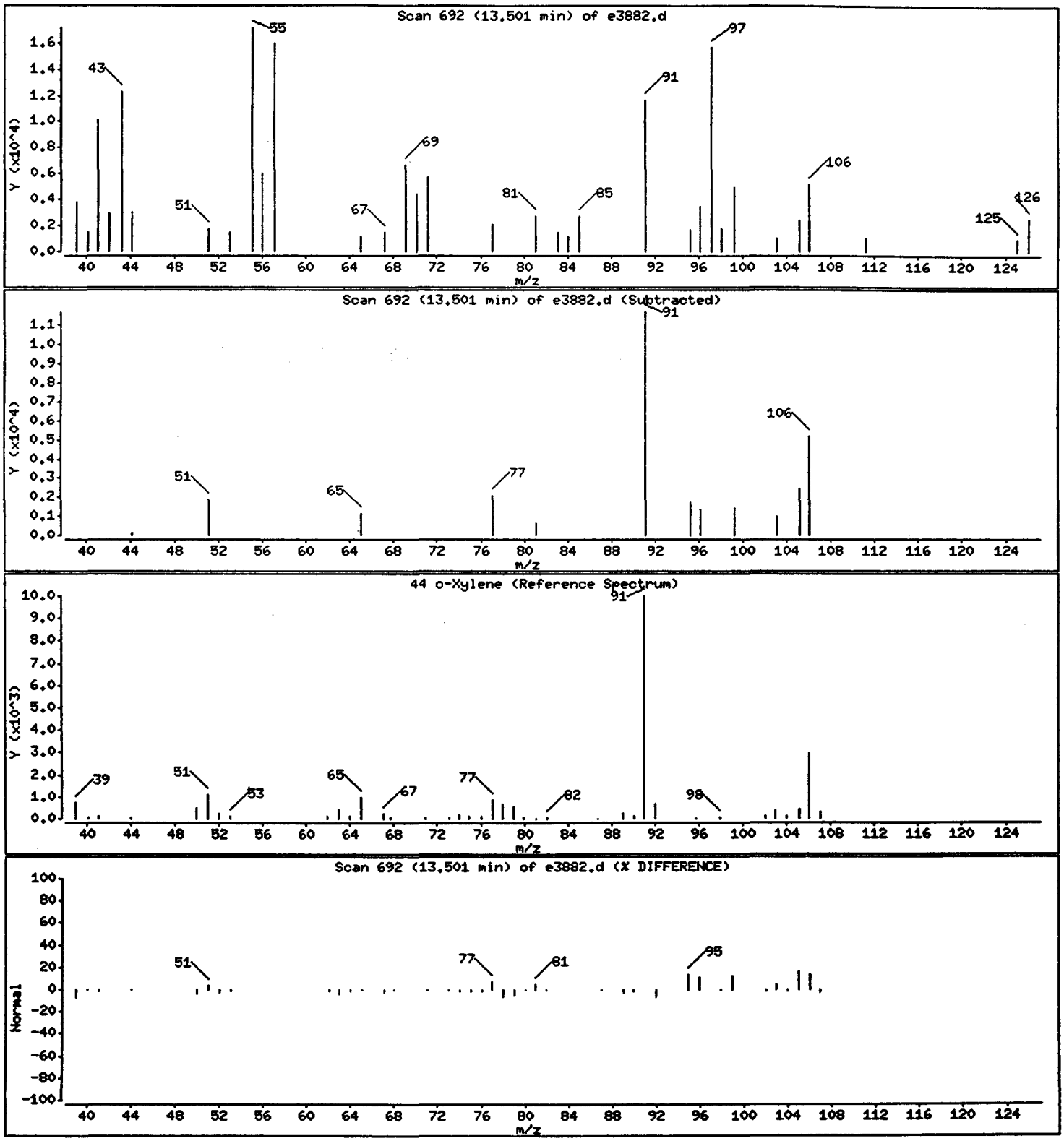
Sample Info: 81204;50;24.5;9.9;25

Operator: VOAMS 5

Column phase: DB624

Column diameter: 0.53

44 o-Xylene



F 181

Data File: /chem/VOAMS5.i/8260HIGH_SP/09-10-98/11sep98a.b/e3882.d

Date : 11-SEP-98 21:53:00

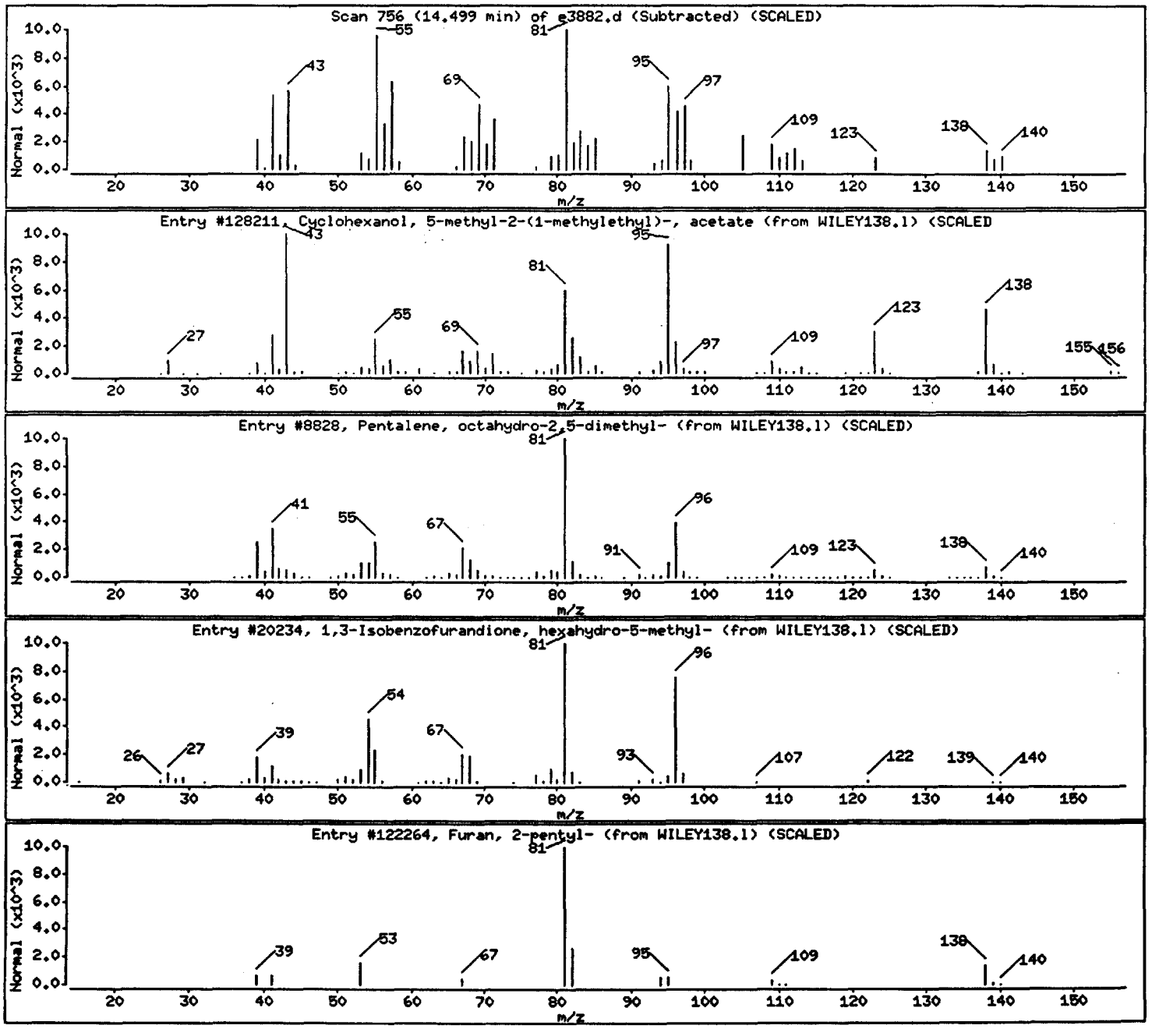
Client ID: GP-2 Instrument: VOAMS5.i

Sample Info: 81204;50;24.5;9.9;25

Operator: VOAMS 5

Column phase: DB624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cyclohexanol, 5-methyl-2-(1-methylethyl)	16409-45-3	WILEY138.l	128211	43	C12H2202	198
Pentalene, octahydro-2,5-dimethyl-	28588-55-8	WILEY138.l	8828	43	C10H18	138
1,3-Isobenzofurandione, hexahydro-5-meth	19438-60-9	WILEY138.l	20234	35	C9H1203	168
Furan, 2-pentyl-	3777-69-3	WILEY138.l	122264	22	C9H140	138



850930445

F182

Data File: /chem/VOAMS5.i/8260HIGH_SP/09-10-98/11sep98a.b/e3882.d

Date : 11-SEP-98 21:53:00

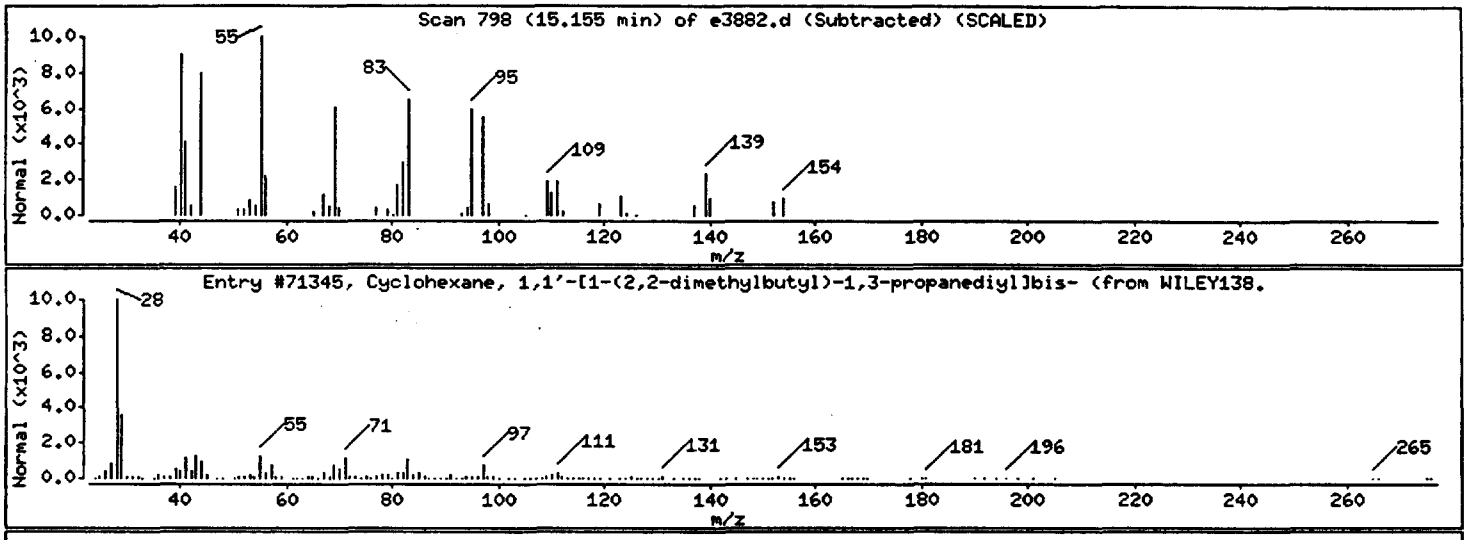
Client ID: GP-2 Instrument: VOAMS5.i

Sample Info: 81204;50;24.5;9.9;25

Operator: VOAMS 5

Column phase: DB624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Hydrocarbon						
Cyclohexane, 1,1'-[1-(2,2-dimethylbutyl)	61142-63-0	WILEY138.l	71345	38	C21H40	292



850930446

F183

Data File: /chem/VOAMS5.i/8260HIGH_SP/09-10-98/11sep98a.b/e3882.d

Date : 11-SEP-98 21:53:00

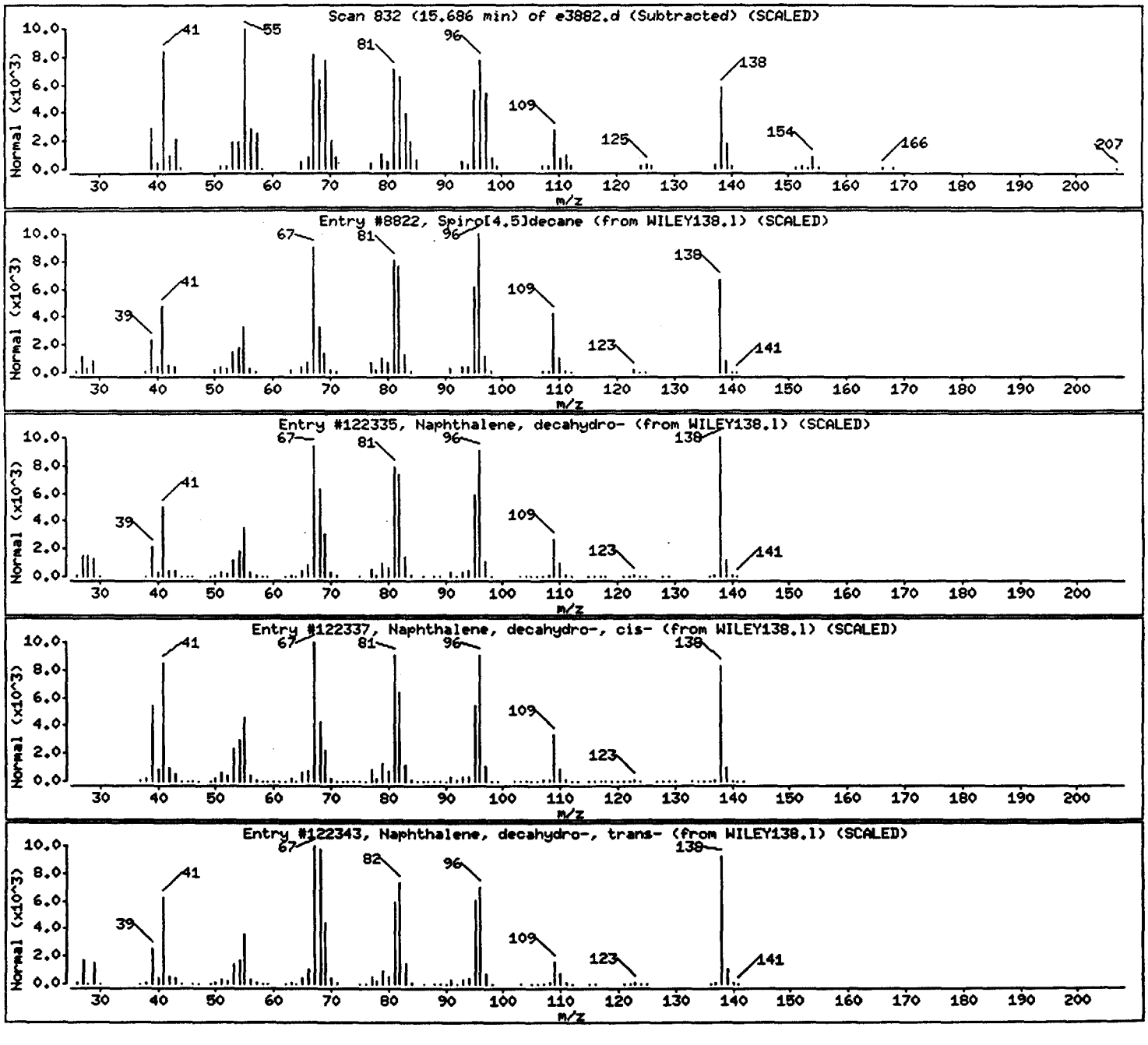
Client ID: GP-2 Instrument: VOAMS5.i

Sample Info: 81204;50;24.5;9.9;25

Operator: VOAMS 5

Column phase: DB624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Hydrocarbon						
Spiro[4.5]decane	176-63-6	WILEY138.l	8822	96	C10H18	138
Naphthalene, decahydro-	91-17-8	WILEY138.l	122335	92	C10H18	138
Naphthalene, decahydro-, cis-	493-01-6	WILEY138.l	122337	91	C10H18	138
Naphthalene, decahydro-, trans-	493-02-7	WILEY138.l	122343	90	C10H18	138



850930447

F184

Data File: /chem/VOAMS5.i/8260HIGH_SP/09-10-98/11sep98a.b/e3882.d

Date : 11-SEP-98 21:53:00

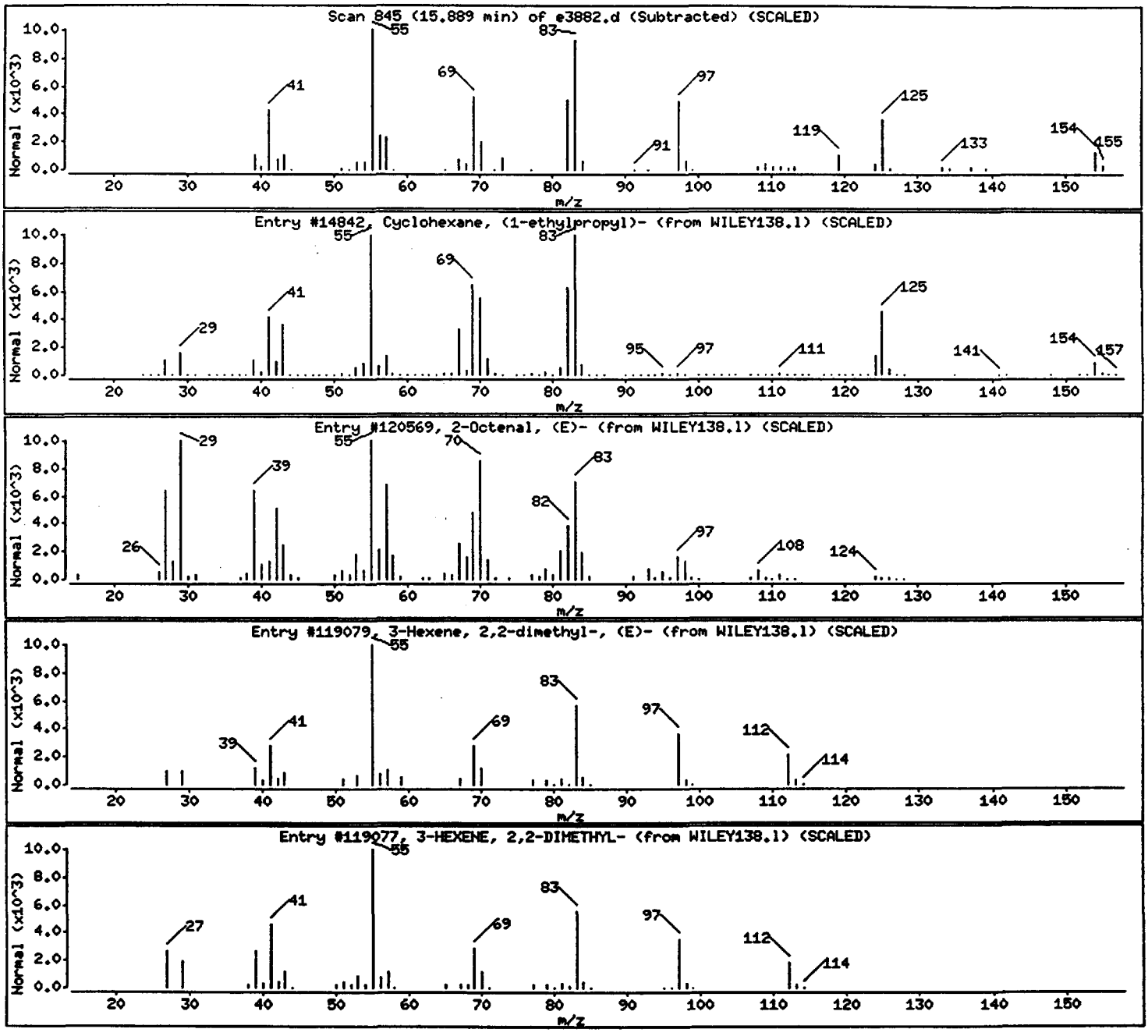
Client ID: GP-2 Instrument: VOAMS5.i

Sample Info: 81204;50;24.5;9.9;25

Operator: VOAMS 5

Column phase: DB624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Alkene						
Cyclohexane, (1-ethylpropyl)-	26321-98-2	WILEY138.1	14842	58	C11H22	154
2-Octenal, (E)-	2548-87-0	WILEY138.1	120569	50	C8H14O	126
3-Hexene, 2,2-dimethyl-, (E)-	690-93-7	WILEY138.1	119079	47	C8H16	112
3-HEXENE, 2,2-DIMETHYL-	0-00-0	WILEY138.1	119077	47	C8H16	112



850930448

F185

Data File: /chem/VOAMS5.i/8260HIGH_SP/09-10-98/11sep98a.b/e3882.d

Date : 11-SEP-98 21:53:00

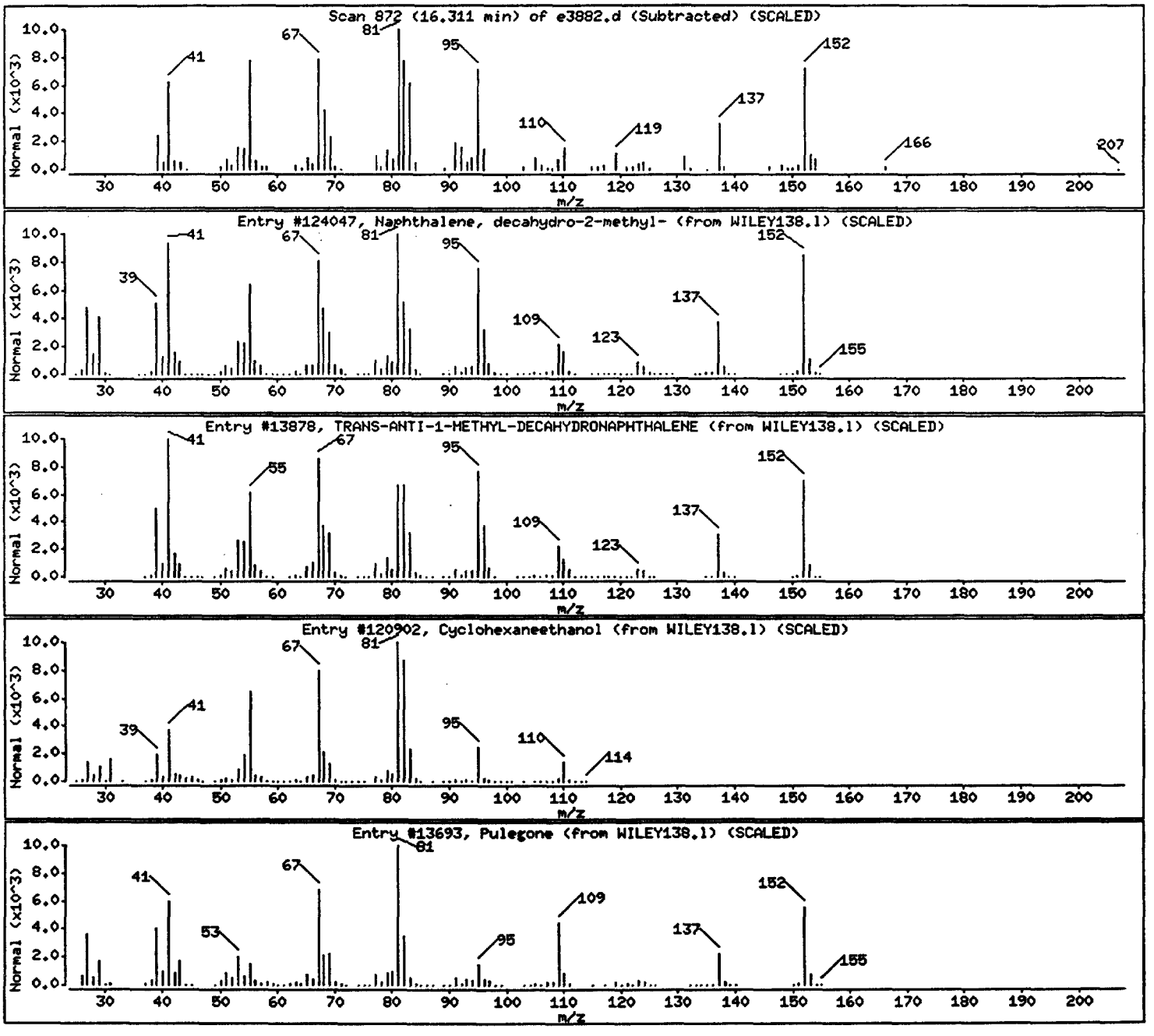
Client ID: GP-2 Instrument: VOAMS5.i

Sample Info: 81204;50;24.5;9.9;25

Operator: VOAMS 5

Column phase: DB624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Decahydromethylnaphthalene isomer						
Naphthalene, decahydro-2-methyl-	2958-76-1	WILEY138.1	124047	90	C11H20	152
TRANS-ANTI-1-METHYL-DECAHYDRONAPHTHALENE	0-00-0	WILEY138.1	13878	58	C11H20	152
Cyclohexaneethanol	4442-79-9	WILEY138.1	120902	50	C8H16O	128
Pulegone	89-82-7	WILEY138.1	13693	49	C10H16O	152



850930449

F 186

Data File: /chem/VOAMS5.i/8260HIGH_SP/09-10-98/11sep98a.b/e3882.d

Date : 11-SEP-98 21:53:00

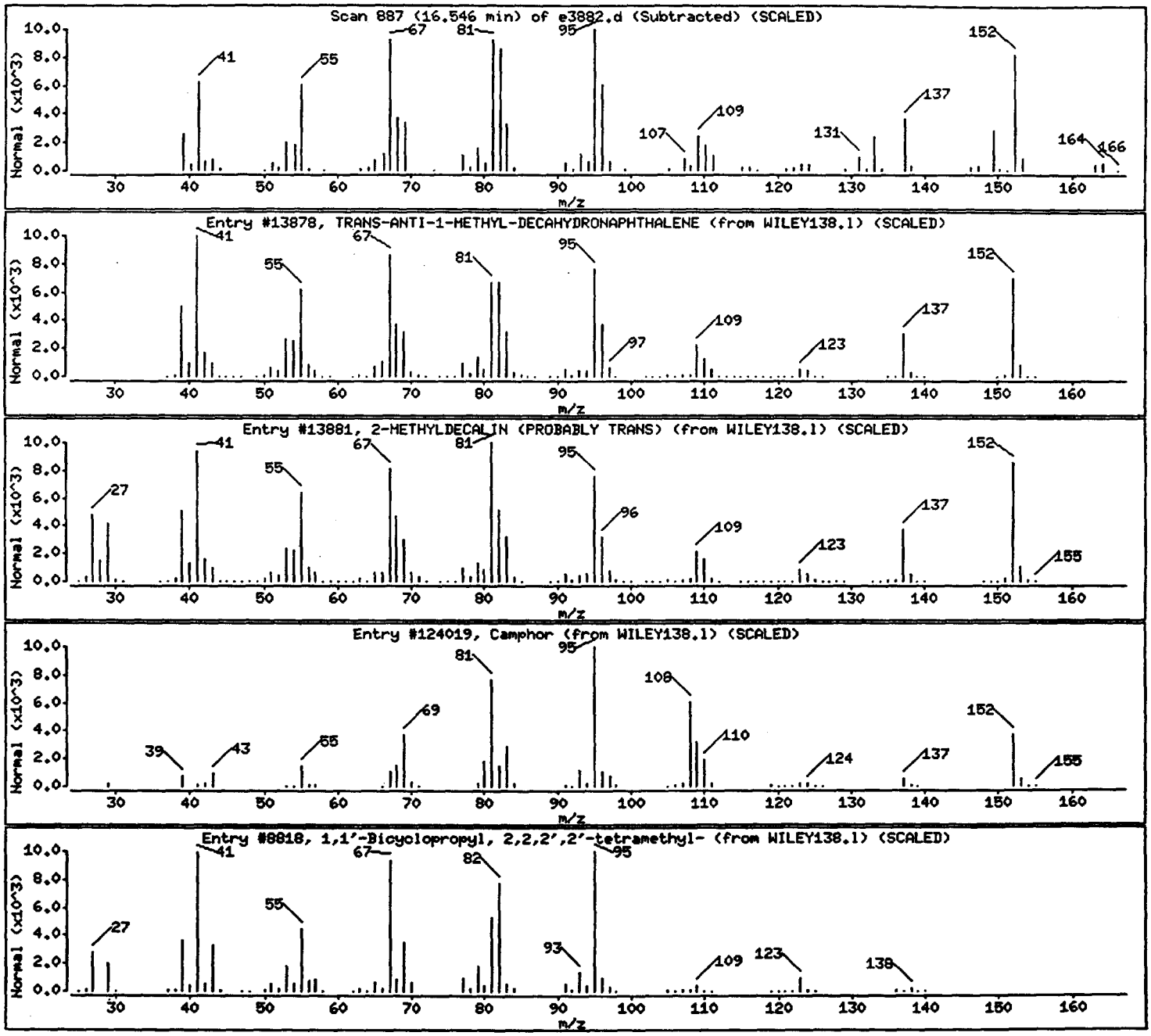
Client ID: GP-2 Instrument: VOAMS5.i

Sample Info: 81204;50;24.5;9.9;25

Operator: VOAMS 5

Column phase: DB624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Decahydromethylnaphthalene isomer						
TRANS-ANTI-1-METHYL-DECAHYDRONAPHTHALENE	0-00-0	WILEY138.l	13878	98	C11H20	152
2-METHYLDECALIN (PROBABLY TRANS)	2958-76-1	WILEY138.l	13881	93	C11H20	152
Camphor	76-22-2	WILEY138.l	124019	50	C10H16O	152
1,1'-Bicyclopropyl, 2,2,2',2'-tetramethy	68998-20-9	WILEY138.l	8818	50	C10H18	138



850930450

F 187

Data File: /chem/VOAMS5.i/8260HIGH_SP/09-10-98/11sep98a.b/e3882.d

Date : 11-SEP-98 21:53:00

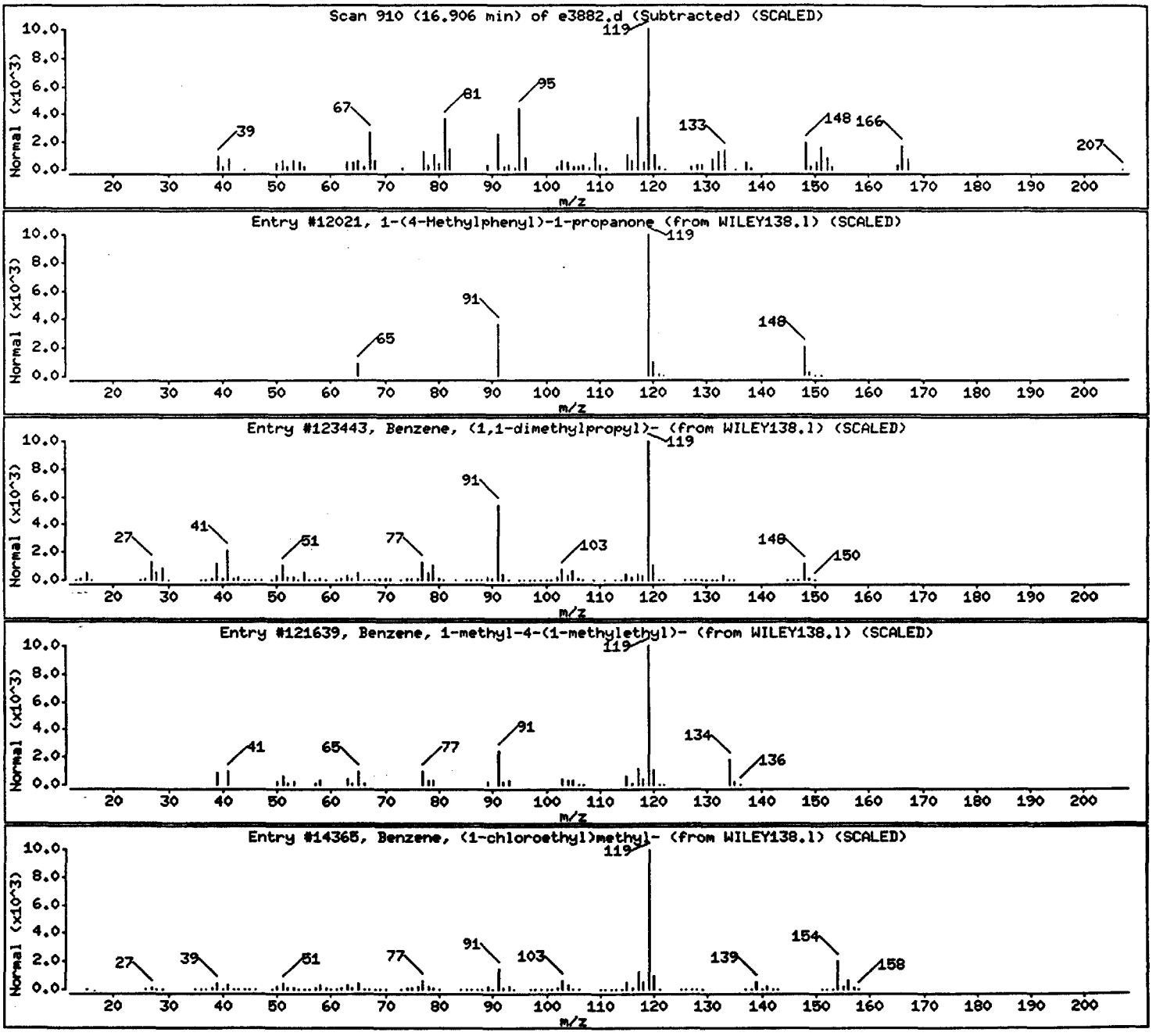
Client ID: GP-2 Instrument: VOAMS5.i

Sample Info: 81204;50;24.5;9.9;25

Operator: VOAMS 5

Column phase: DB624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Ketone						
1-(4-Methylphenyl)-1-propanone	5337-93-9	WILEY138.l	12021	43	C10H12O	148
Benzene, (1,1-dimethylpropyl)-	2049-95-8	WILEY138.l	123443	38	C11H16	148
Benzene, 1-methyl-4-(1-methylethyl)-	99-87-6	WILEY138.l	121639	35	C10H14	134
Benzene, (1-chloroethyl)methyl-	72403-15-7	WILEY138.l	14365	35	C9H11Cl	154



850930451

F 188

Data File: /chem/VOAHS5.i/8260HIGH_SP/09-10-98/11sep98a.b/e3882.d

Date : 11-SEP-98 21:53:00

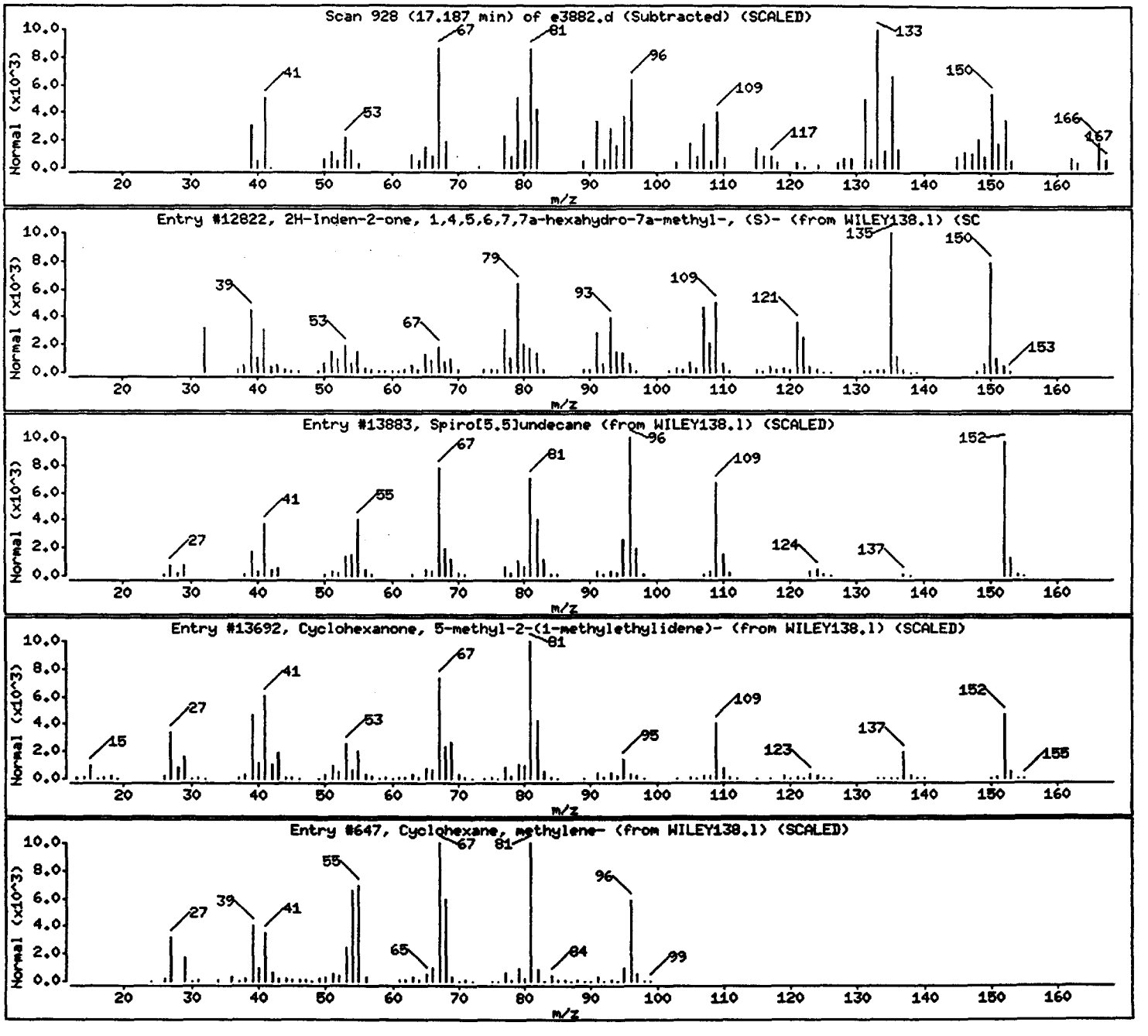
Client ID: GP-2 Instrument: VOAHS5.i

Sample Info: 81204;50;24.5;9.9;25

Operator: VOAHS 5

Column phase: DB624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2H-Inden-2-one, 1,4,5,6,7,7a-hexahydro-7	54725-16-5	WILEY138.l	12822	45	C10H140	150
Spiro[5.5]undecane	180-43-8	WILEY138.l	13883	42	C11H20	152
Cyclohexanone, 5-methyl-2-(1-methylethyl	15932-80-6	WILEY138.l	13692	30	C10H160	152
Cyclohexane, methylene-	1192-37-6	WILEY138.l	647	30	C7H12	96



850930452

F189

Data File: /chem/VOAMS5.i/8260HIGH_SP/09-10-98/11sep98a.b/e3882.d

Date : 11-SEP-98 21:53:00

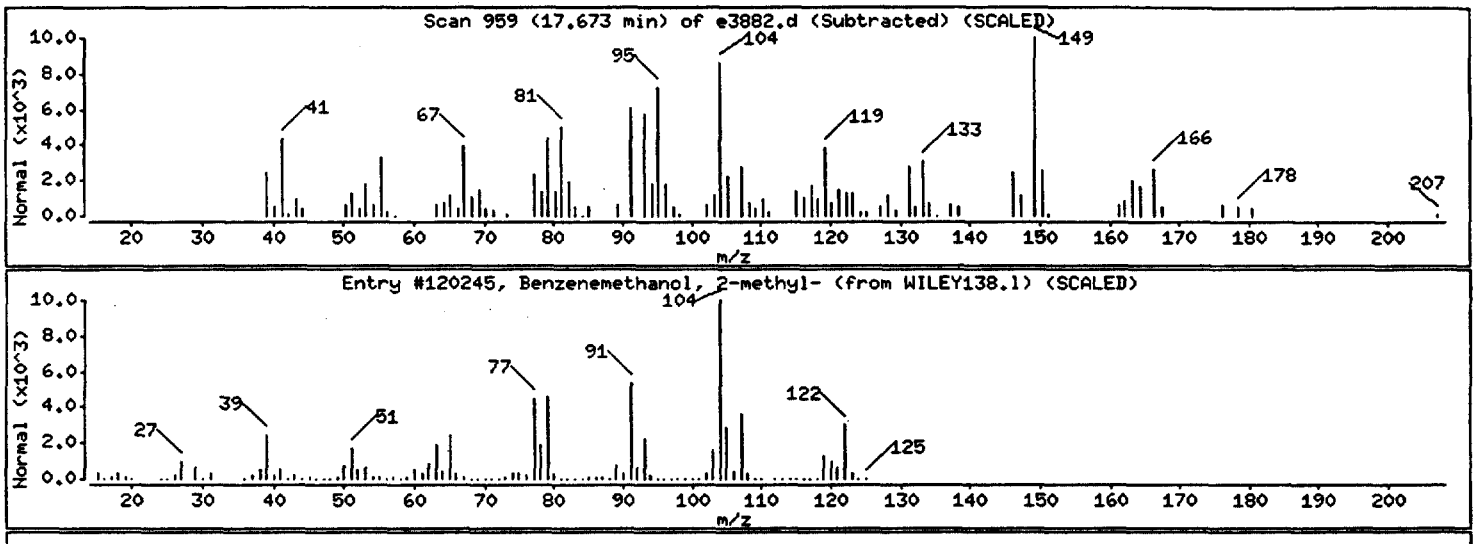
Client ID: CP-2 Instrument: VOAMS5.i

Sample Info: 81204;50;24.5;9.9;25

Operator: VOAMS 5

Column phase: DB624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Benzenemethanol, 2-methyl-	89-95-2	WILEY138.l	120245	25	C8H10O	122



850930453

F190

Data File: /chem/VOAHS5.i/8260HIGH_SP/09-10-98/11sep98a.b/e3882.d

Date : 11-SEP-98 21:53:00

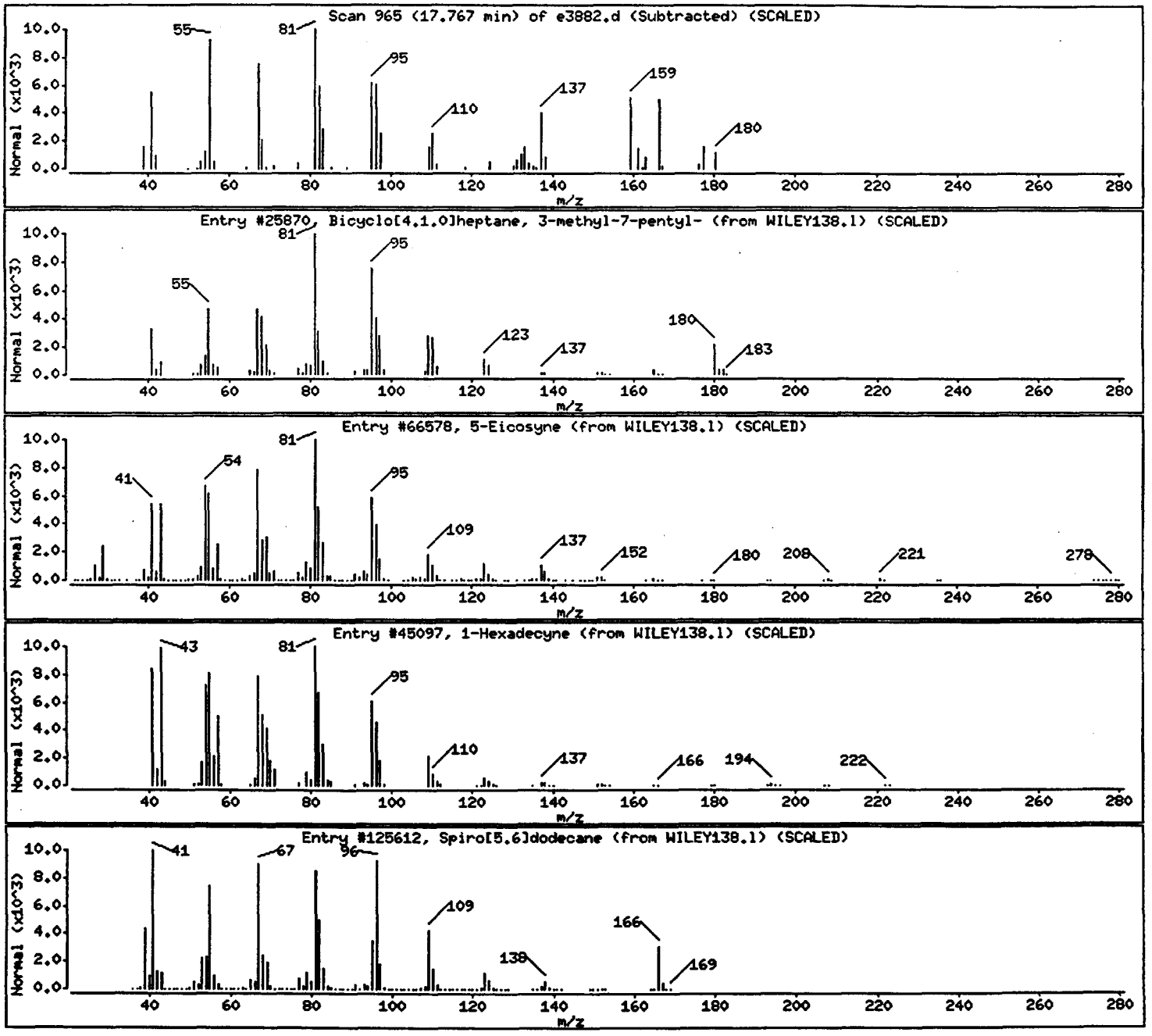
Client ID: GP-2 Instrument: VOAHS5.i

Sample Info: 81204;50;24.5;9.9;25

Operator: VOAHS 5

Column phase: DB624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Hydrocarbon						
Bicyclo[4.1.0]heptane, 3-methyl-7-pentyl	41977-48-4	WILEY138.l	25870	53	C13H24	180
5-Eicosyne	74685-31-7	WILEY138.l	66578	50	C20H38	278
1-Hexadecyne	629-74-3	WILEY138.l	45097	47	C16H30	222
Spiro[5.6]dodecane	181-15-7	WILEY138.l	125612	43	C12H22	166



850930454

F191

Client ID: **GP-2W**
Site: NBB-V12

Lab Sample No: **81205**
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/04/98
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f3721.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Chloromethane	ND	0.9
Bromomethane	ND	0.3
Vinyl Chloride	ND	0.4
Chloroethane	ND	1.0
Methylene Chloride	ND	1.0
Trichlorofluoromethane	ND	0.2
1,1-Dichloroethene	ND	0.6
1,1-Dichloroethane	ND	0.3
trans-1,2-Dichloroethene	ND	0.3
cis-1,2-Dichloroethene	ND	1.0
Chloroform	ND	0.2
1,2-Dichloroethane	ND	0.2
1,1,1-Trichloroethane	ND	0.2
Carbon Tetrachloride	ND	0.2
Bromodichloromethane	ND	0.2
1,2-Dichloropropane	ND	0.5
cis-1,3-Dichloropropene	ND	0.3
Trichloroethene	ND	0.4
Dibromochloromethane	ND	0.2
1,1,2-Trichloroethane	ND	0.4
Benzene	ND	0.2
trans-1,3-Dichloropropene	ND	0.3
2-Chloroethyl Vinyl Ether	ND	0.5
Bromoform	ND	0.3
Tetrachloroethene	ND	0.1
1,1,2,2-Tetrachloroethane	ND	0.3
Toluene	ND	0.2
Chlorobenzene	ND	0.1
Ethylbenzene	ND	0.2
Xylene (Total)	ND	1.0

Client ID: GP-2W
Site: NBB-V12

Lab Sample No: 81205
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/04/98
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f3721.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
TENTATIVELY IDENTIFIED COMPOUNDS
METHOD 624

	COMPOUND NAME	RT	EST. CONC. ug/l	Q
1.	NO VOLATILE ORGANIC COMPOUNDS FOUND			
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

TOTAL ESTIMATED CONCENTRATION	0.0

850930456

F193

Data File: /chem/VOAMS6.i/624/08-28-98/04sep98.b/f3721.d
Report Date: 05-Sep-98 09:07:40

Envirotech Research, Inc.

VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/VOAMS6.i/624/08-28-98/04sep98.b/f3721.d
Lab Smp Id: 81205 Client Smp ID: GP-2W
Inj Date : 04-SEP-98 23:03:00
Operator : VOAMS 7 Inst ID: VOAMS6.i
Smp Info : 81205;
Misc Info : G893;8121;;DRL
Comment :
Method : /chem/VOAMS6.i/624/08-28-98/04sep98.b/624.m
Meth Date : 04-Sep-98 13:01:48 Quant Type: ISTD
Cal Date : 28-AUG-98 11:49:00 Cal File: f3415.d
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PPVOAv.sub
Target Version: 3.20
Procesing Host: hpvoa

Concentration Formula: 5/Vo

Name	Value	Description
Vo	5.000	Sample Volume

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
*	2 Bromochloromethane	128	9.091	9.062	(1.000)	743278	30	
$	16 1,2-Dichloroethane-d4 (SUR)	104	9.833	9.804	(0.950)	151662	30	30
*	19 1,4-Difluorobenzene	114	10.353	10.324	(1.000)	2335784	30	
$	37 Toluene-d8 (SUR)	98	12.222	12.194	(1.181)	2031761	30	30
*	32 Chlorobenzene-d5	117	13.944	13.930	(1.000)	1646335	30	
$	41 Bromofluorobenzene (SUR)	95	15.235	15.221	(1.093)	1225138	29	29

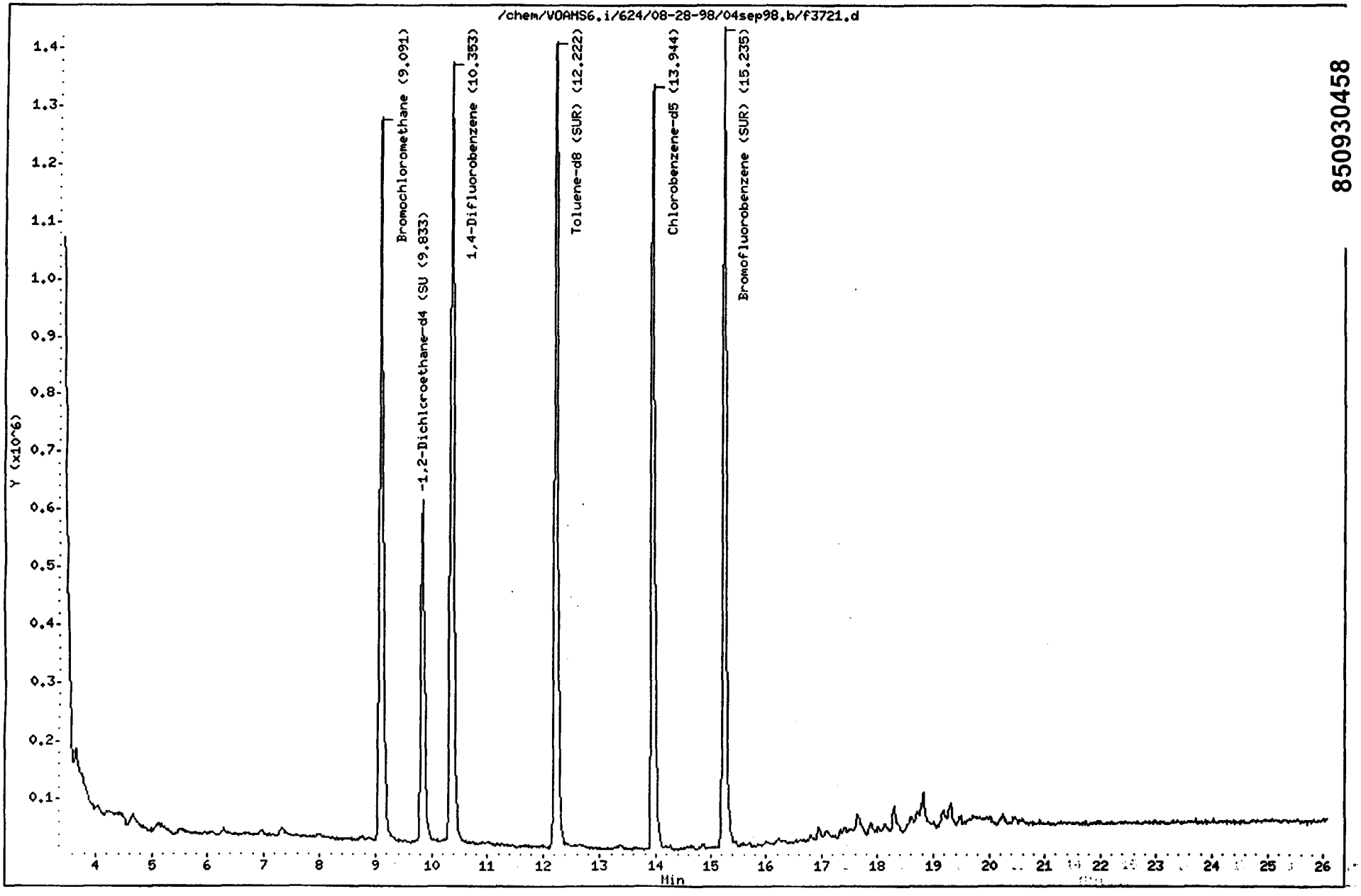
850930457

F 194

Data File: /chem/VOAMS6.i/624/08-28-98/04sep98.b/f3721.d
Date : 04-SEP-98 23:03:00
Client ID: GP-2W
Instrument: VOAMS6.i
Sample Info: 81205;
Purge Volume: 5.0
Operator: VOAMS 7
Column phase: DB624
Column diameter: 0.53

F195

850930458



Client ID: **GP-3**
Site: NBB-V12

Lab Sample No: **81206**
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/09/98
GC Column: DB624
Instrument ID: VOAMS5.i
Lab File ID: e3819.d

Matrix: SOIL
Level: HIGH
Sample Weight: 10.5 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 14

VOLATILE ORGANICS - GC/MS
METHOD 8260B

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
Chloromethane	ND	690
Bromomethane	ND	690
Vinyl Chloride	ND	690
Chloroethane	ND	690
Methylene Chloride	ND	410
Trichlorofluoromethane	ND	690
1,1-Dichloroethene	ND	280
1,1-Dichloroethane	ND	690
trans-1,2-Dichloroethene	ND	690
cis-1,2-Dichloroethene	ND	690
Chloroform	ND	690
1,2-Dichloroethane	ND	280
1,1,1-Trichloroethane	ND	690
Carbon Tetrachloride	ND	280
Bromodichloromethane	ND	140
1,2-Dichloropropane	ND	140
cis-1,3-Dichloropropene	ND	690
Trichloroethene	ND	140
Dibromochloromethane	ND	690
1,1,2-Trichloroethane	ND	410
Benzene	ND	140
trans-1,3-Dichloropropene	ND	690
2-Chloroethyl Vinyl Ether	ND	690
Bromoform	ND	550
Tetrachloroethene	ND	140
1,1,2,2-Tetrachloroethane	ND	140
Toluene	ND	690
Chlorobenzene	ND	690
Ethylbenzene	ND	550
Xylene (Total)	ND	690

Client ID: **GP-3**
Site: NBB-V12

Lab Sample No: **81206**
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/09/98
GC Column: DB624
Instrument ID: VOAMS5.i
Lab File ID: e3819.d

Matrix: SOIL
Level: HIGH
Sample Weight: 10.5 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 13.6

VOLATILE ORGANICS - GC/MS
TENTATIVELY IDENTIFIED COMPOUNDS
METHOD 8260B

	COMPOUND NAME	RT	EST. CONC. ug/kg	Q
1.	Unknown Siloxane	15.93	1300	B
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

TOTAL ESTIMATED CONCENTRATION: 0.0

Data File: /chem/VOAMS5.i/8260HIGH_SP/08-25-98/09sep98a.b/e3819.d
Report Date: 11-Sep-98 16:09:30

Envirotech Research, Inc.

VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/VOAMS5.i/8260HIGH_SP/08-25-98/09sep98a.b/e3819.d
Lab Smp Id: 81206 Client Smp ID: GP-3
Inj Date : 09-SEP-98 22:52:00
Operator : VOAMS 5 Inst ID: VOAMS5.i
Smp Info : 81206;50;13.6;10.5;25
Misc Info : G893;6032;TL
Comment :
Method : /chem/VOAMS5.i/8260HIGH_SP/08-25-98/09sep98a.b/8260b-HIGH.m
Meth Date : 09-Sep-98 18:27:26 Quant Type: ISTD
Cal Date : 25-AUG-98 13:08:00 Cal File: e3451.d
Als bottle: 11
Dil Factor: 50.00000
Integrator: HP RTE Compound Sublist: PPVOA.sub
Target Version: 3.20
Procesing Host: hpvoa

Concentration Formula: (Vt/Ws)/((100-M)/100)

Name	Value	Description
Vt	25.000	Volume of final extract (mL)
Ws	10.500	Weight of sample extracted (g)
M	13.600	% Moisture (not decanted)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
$ 16 1,2-Dichloroethane-d4 (SUR)	65	8.692	8.719	(0.949)	418636	44	6100
* 19 Fluorobenzene	96	9.159	9.171	(1.000)	1935680	50	
$ 37 Toluene-d8 (SUR)	98	11.121	11.137	(1.214)	1509741	48	6600
* 32 Chlorobenzene-d5	117	12.803	12.823	(1.000)	1170166	50	
$ 41 Bromofluorobenzene (SUR)	174	14.080	14.103	(1.100)	523857	45	6200
* 91 1,4-Dichlorobenzene-d4	152	15.295	15.307	(1.000)	439352	50	

850930461

F198

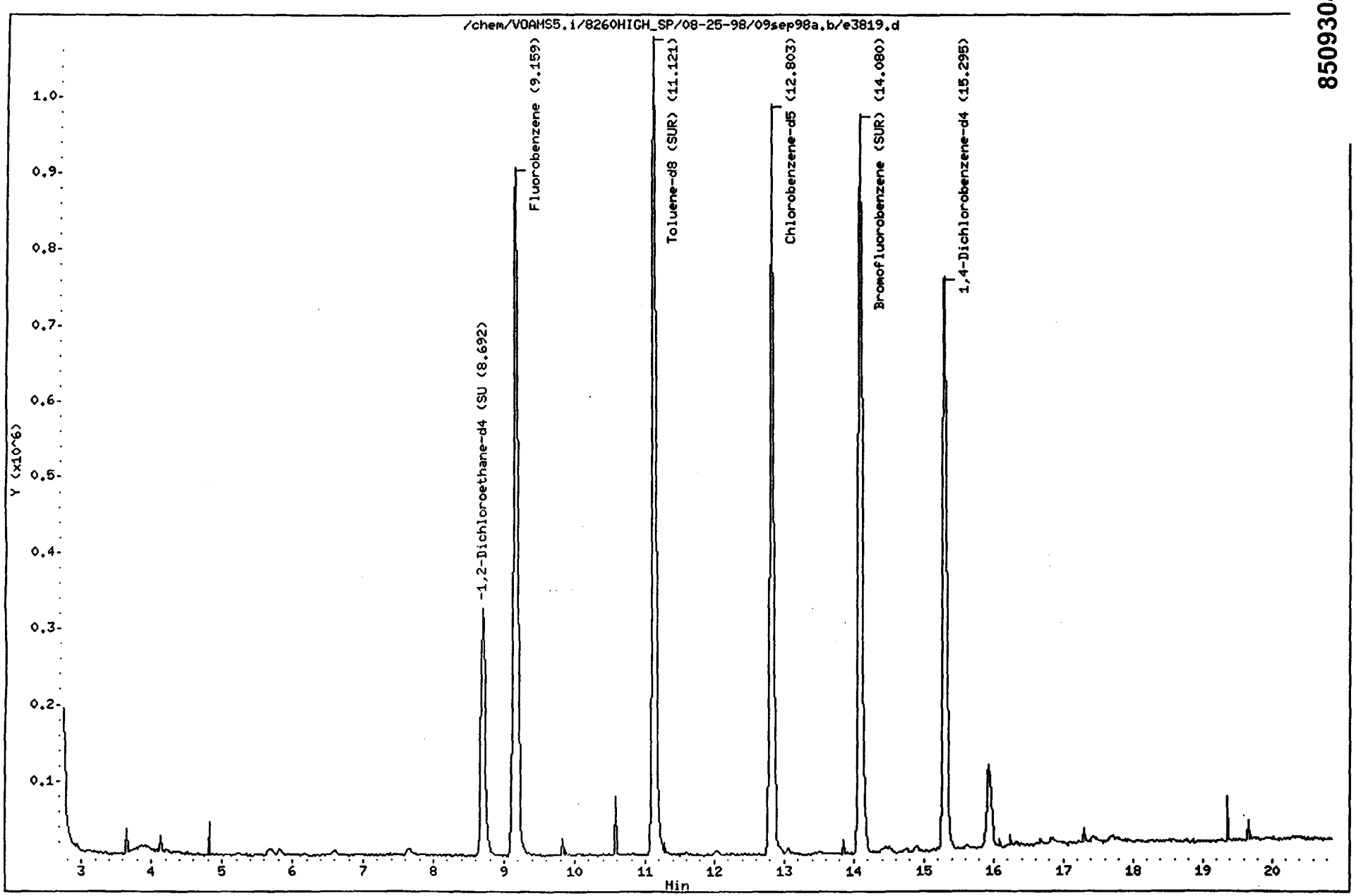
Data File: /chem/VOAMS5.i/8260HIGH_SP/08-25-98/09sep98a.b/e3819.d
Date : 09-SEP-98 22:52:00
Client ID: CP-3
Sample Info: 81206;50;13.6;10.5;25

Instrument: VOAMS5.i

Operator: VOAMS 5
Column diameter: 0.53

Column phase: DB624

850930462



F 199

Data File: /chem/VOAMS5.i/8260HIGH_SP/08-25-98/09sep98a.b/e3819.d

Date : 09-SEP-98 22:52:00

Client ID: GP-3

Instrument: VOAMS5.i

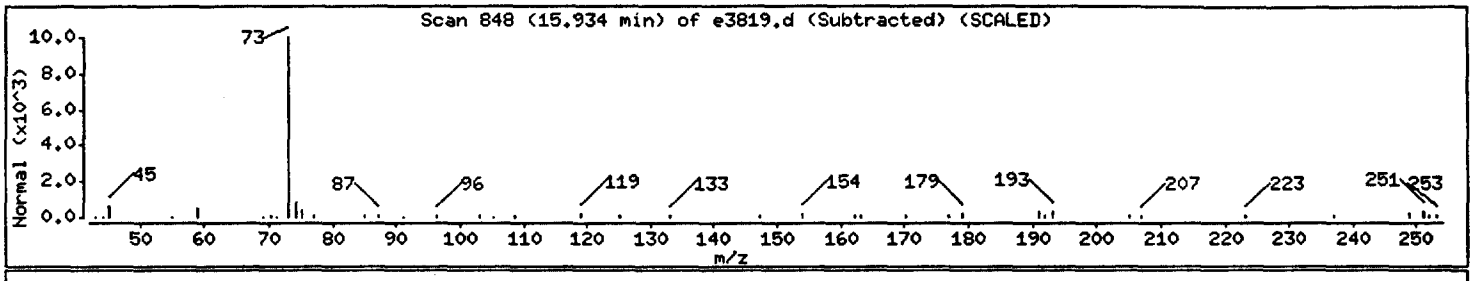
Sample Info: 81206;50;13.6;10.5;25

Operator: VOAMS 5

Column phase: DB624

Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Siloxane						
Unknown			0	0		0



850930463

F 200

Client ID: GP-3W
Site: NBB-V12

Lab Sample No: 81207
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/04/98
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f3722.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Chloromethane	ND	0.9
Bromomethane	ND	0.3
Vinyl Chloride	ND	0.4
Chloroethane	ND	1.0
Methylene Chloride	ND	1.0
Trichlorofluoromethane	ND	0.2
1,1-Dichloroethene	ND	0.6
1,1-Dichloroethane	ND	0.3
trans-1,2-Dichloroethene	ND	0.3
cis-1,2-Dichloroethene	ND	1.0
Chloroform	ND	0.2
1,2-Dichloroethane	ND	0.2
1,1,1-Trichloroethane	ND	0.2
Carbon Tetrachloride	ND	0.2
Bromodichloromethane	ND	0.2
1,2-Dichloropropane	ND	0.5
cis-1,3-Dichloropropene	ND	0.3
Trichloroethene	ND	0.4
Dibromochloromethane	ND	0.2
1,1,2-Trichloroethane	ND	0.4
Benzene	ND	0.2
trans-1,3-Dichloropropene	ND	0.3
2-Chloroethyl Vinyl Ether	ND	0.5
Bromoform	ND	0.3
Tetrachloroethene	ND	0.1
1,1,2,2-Tetrachloroethane	ND	0.3
Toluene	ND	0.2
Chlorobenzene	ND	0.1
Ethylbenzene	ND	0.2
Xylene (Total)	ND	1.0

Client ID: GP-3W
Site: NBB-V12

Lab Sample No: 81207
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/04/98
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f3722.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
TENTATIVELY IDENTIFIED COMPOUNDS
METHOD 624

	COMPOUND NAME	RT	EST. CONC. ug/l	Q
1.	NO VOLATILE ORGANIC COMPOUNDS FOUND			
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

TOTAL ESTIMATED CONCENTRATION	0.0

850930465

F202

Data File: /chem/VOAMS6.i/624/08-28-98/04sep98.b/f3722.d
Report Date: 05-Sep-98 09:07:45

Envirotech Research, Inc.

VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/VOAMS6.i/624/08-28-98/04sep98.b/f3722.d
Lab Smp Id: 81207 Client Smp ID: GP-3W
Inj Date : 04-SEP-98 23:37:00
Operator : VOAMS 7 Inst ID: VOAMS6.i
Smp Info : 81207;
Misc Info : G893;8121;;DRL
Comment :
Method : /chem/VOAMS6.i/624/08-28-98/04sep98.b/624.m
Meth Date : 04-Sep-98 13:01:48 Quant Type: ISTD
Cal Date : 28-AUG-98 11:49:00 Cal File: f3415.d
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PPVOAv.sub
Target Version: 3.20
Procesing Host: hpvoa

Concentration Formula: 5/Vo

Name	Value	Description
Vo	5.000	Sample Volume

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
*	2 Bromochloromethane	128	9.091	9.062	(1.000)	768626	30	
$	16 1,2-Dichloroethane-d4 (SUR)	104	9.833	9.804	(0.950)	157425	30	30
*	19 1,4-Difluorobenzene	114	10.353	10.324	(1.000)	2432694	30	
$	37 Toluene-d8 (SUR)	98	12.208	12.194	(1.179)	2117766	30	30
*	32 Chlorobenzene-d5	117	13.929	13.930	(1.000)	1720335	30	
$	41 Bromofluorobenzene (SUR)	95	15.220	15.221	(1.093)	1252255	28	28

850930466

F203

Data File: /chem/VOAMS6.i/624/08-28-98/04sep98.b/f3722.d
Date : 04-SEP-98 23:37:00
Client ID: GP-3W
Sample Info: 81207;
Purge Volume: 5.0
Column phase: DB624

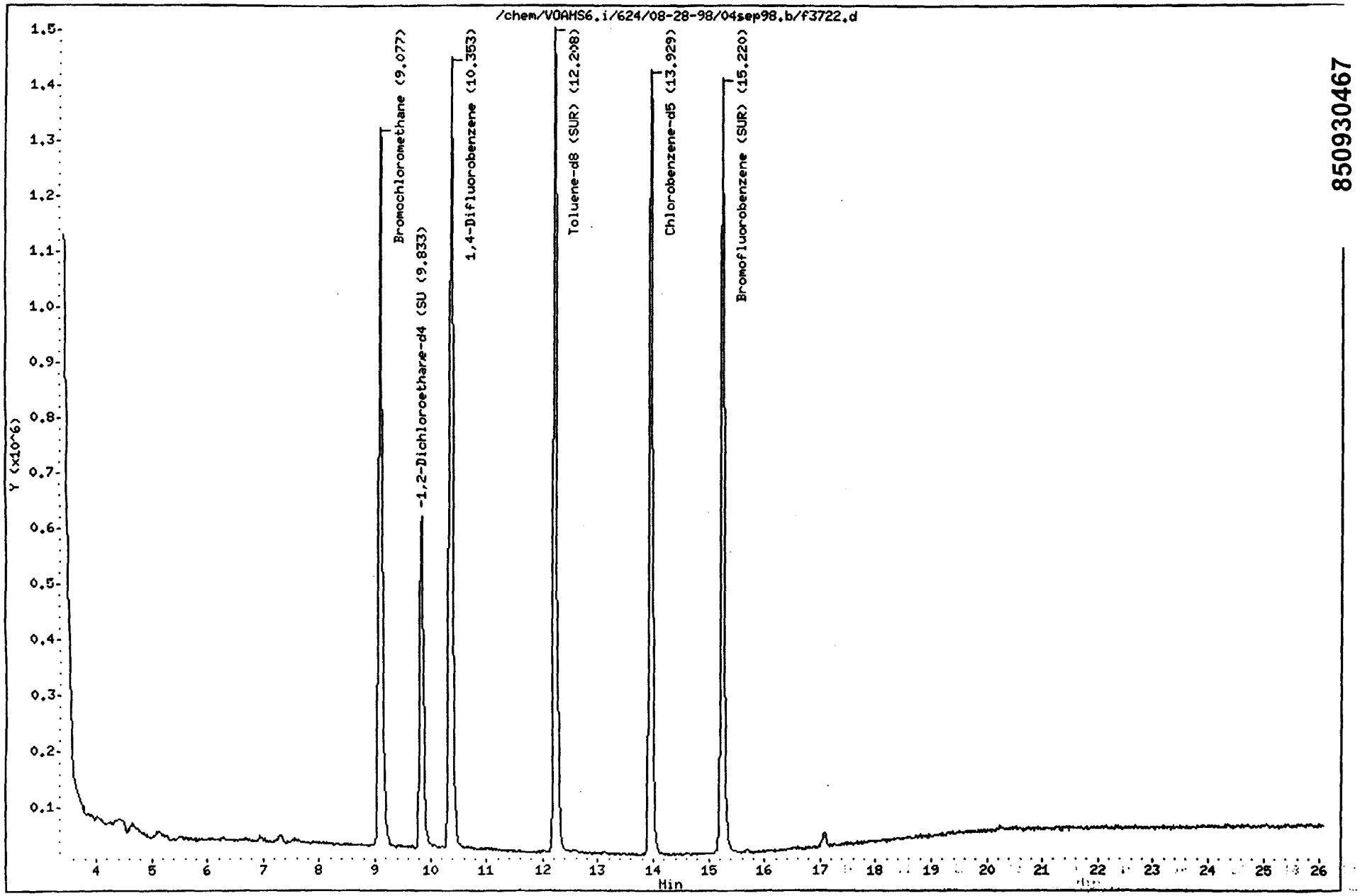
Instrument: VOAMS6.i

Operator: VOAMS 7
Column diameter: 0.53

F204

130

850930467



Client ID: **GP-4**
Site: NBB-V12

Lab Sample No: 81208
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/09/98
GC Column: DB624
Instrument ID: VOAMS5.i
Lab File ID: e3820.d

Matrix: SOIL
Level: HIGH
Sample Weight: 10.1 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 13

VOLATILE ORGANICS - GC/MS
METHOD 8260B

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
Chloromethane	ND	710
Bromomethane	ND	710
Vinyl Chloride	ND	710
Chloroethane	ND	710
Methylene Chloride	ND	420
Trichlorofluoromethane	ND	710
1,1-Dichloroethene	ND	280
1,1-Dichloroethane	ND	710
trans-1,2-Dichloroethene	ND	710
cis-1,2-Dichloroethene	ND	710
Chloroform	ND	710
1,2-Dichloroethane	ND	280
1,1,1-Trichloroethane	ND	710
Carbon Tetrachloride	ND	280
Bromodichloromethane	ND	140
1,2-Dichloropropane	ND	140
cis-1,3-Dichloropropene	ND	710
Trichloroethene	ND	140
Dibromochloromethane	ND	710
1,1,2-Trichloroethane	ND	420
Benzene	ND	140
trans-1,3-Dichloropropene	ND	710
2-Chloroethyl Vinyl Ether	ND	710
Bromoform	ND	570
Tetrachloroethene	ND	140
1,1,2,2-Tetrachloroethane	ND	140
Toluene	ND	710
Chlorobenzene	ND	710
Ethylbenzene	ND	570
Xylene (Total)	ND	710

Client ID: **GP-4**
Site: NBB-V12

Lab Sample No: **81208**
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/09/98
GC Column: DB624
Instrument ID: VOAMS5.i
Lab File ID: e3820.d

Matrix: SOIL
Level: HIGH
Sample Weight: 10.1 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 12.6

VOLATILE ORGANICS - GC/MS
TENTATIVELY IDENTIFIED COMPOUNDS
METHOD 8260B

	COMPOUND NAME	RT	EST. CONC. ug/kg	Q
1.	NO VOLATILE ORGANIC COMPOUNDS FOUND			
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

TOTAL ESTIMATED CONCENTRATION	0.0

850930469

Data File: /chem/VOAMS5.i/8260HIGH_SP/08-25-98/09sep98a.b/e3820.d
Report Date: 11-Sep-98 16:09:53

Envirotech Research, Inc.

VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/VOAMS5.i/8260HIGH_SP/08-25-98/09sep98a.b/e3820.d
Lab Smp Id: 81208 Client Smp ID: GP-4
Inj Date : 09-SEP-98 23:19:00
Operator : VOAMS 5 Inst ID: VOAMS5.i
Smp Info : 81208;50;12.6;10.1;25
Misc Info : G893;6032;TL
Comment :
Method : /chem/VOAMS5.i/8260HIGH_SP/08-25-98/09sep98a.b/8260b-HIGH.m
Meth Date : 09-Sep-98 18:27:26 Quant Type: ISTD
Cal Date : 25-AUG-98 13:08:00 Cal File: e3451.d
Als bottle: 12
Dil Factor: 50.00000
Integrator: HP RTE Compound Sublist: PPVOA.sub
Target Version: 3.20
Procesing Host: hpvoa

Concentration Formula: (Vt/Ws)/((100-M)/100)

Name	Value	Description
Vt	25.000	Volume of final extract (mL)
Ws	10.100	Weight of sample extracted (g)
M	12.600	% Moisture (not decanted)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
$ 16 1,2-Dichloroethane-d4 (SUR)	65	8.692	8.719	(0.949)	427714	50	7100
* 19 Fluorobenzene	96	9.159	9.171	(1.000)	1738685	50	
$ 37 Toluene-d8 (SUR)	98	11.121	11.137	(1.214)	1568955	55	7800
* 32 Chlorobenzene-d5	117	12.818	12.823	(1.000)	1114004	50	
$ 41 Bromofluorobenzene (SUR)	174	14.079	14.103	(1.098)	531517	48	6800
* 91 1,4-Dichlorobenzene-d4	152	15.294	15.307	(1.000)	431476	50	

850930470

F207

Data File: /chem/VOAMS5.i/8260HIGH_SP/08-25-98/09sep98a.b/e3820.d
Date : 09-SEP-98 23:19:00
Client ID: GP-4
Sample Info: 81208;50;12.6;10.1;25

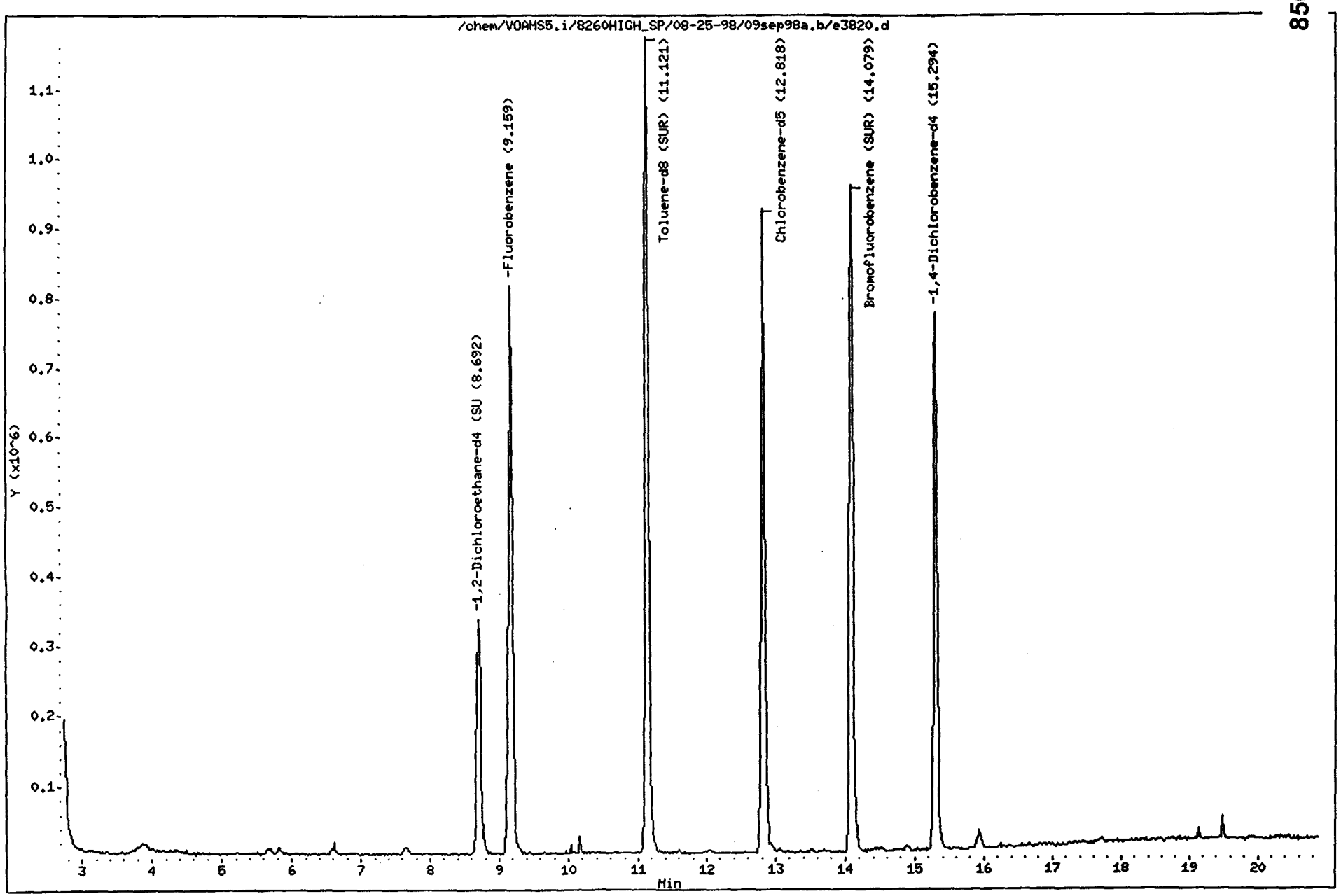
Instrument: VOAMS5.i

Operator: VOAMS 5
Column diameter: 0.53

Column phase: DB624

850930471

134 F20



Client ID: **GP-4W**
Site: NBB-V12

Lab Sample No: **81209**
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/05/98
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f3723.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Chloromethane	ND	0.9
Bromomethane	ND	0.3
Vinyl Chloride	ND	0.4
Chloroethane	ND	1.0
Methylene Chloride	ND	1.0
Trichlorofluoromethane	ND	0.2
1,1-Dichloroethene	ND	0.6
1,1-Dichloroethane	ND	0.3
trans-1,2-Dichloroethene	ND	0.3
cis-1,2-Dichloroethene	ND	1.0
Chloroform	ND	0.2
1,2-Dichloroethane	ND	0.2
1,1,1-Trichloroethane	ND	0.2
Carbon Tetrachloride	ND	0.2
Bromodichloromethane	ND	0.2
1,2-Dichloropropane	ND	0.5
cis-1,3-Dichloropropene	ND	0.3
Trichloroethene	ND	0.4
Dibromochloromethane	ND	0.2
1,1,2-Trichloroethane	ND	0.4
Benzene	ND	0.2
trans-1,3-Dichloropropene	ND	0.3
2-Chloroethyl Vinyl Ether	ND	0.5
Bromoform	ND	0.3
Tetrachloroethene	ND	0.1
1,1,2,2-Tetrachloroethane	ND	0.3
Toluene	0.5	0.2
Chlorobenzene	ND	0.1
Ethylbenzene	ND	0.2
Xylene (Total)	ND	1.0

Client ID: **GP-4W**
Site: NBB-V12

Lab Sample No: **81209**
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/05/98
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f3723.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
TENTATIVELY IDENTIFIED COMPOUNDS
METHOD 624

	COMPOUND NAME	RT	EST. CONC. ug/l	Q
1.	NO VOLATILE ORGANIC COMPOUNDS FOUND			
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

TOTAL ESTIMATED CONCENTRATION	0.0

850930473

F21

Data File: /chem/VOAMS6.i/624/08-28-98/04sep98.b/f3723.d
Report Date: 05-Sep-98 09:07:50

Envirotech Research, Inc.

VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/VOAMS6.i/624/08-28-98/04sep98.b/f3723.d
Lab Smp Id: 81209 Client Smp ID: GP-4W
Inj Date : 05-SEP-98 00:11:00
Operator : VOAMS 7 Inst ID: VOAMS6.i
Smp Info : 81209;
Misc Info : G893;8121;;DRL
Comment :
Method : /chem/VOAMS6.i/624/08-28-98/04sep98.b/624.m
Meth Date : 04-Sep-98 13:01:48 Quant Type: ISTD
Cal Date : 28-AUG-98 11:49:00 Cal File: f3415.d
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PPVOAv.sub
Target Version: 3.20
Procesing Host: hpvoa

Concentration Formula: 5/Vo

Name	Value	Description
Vo	5.000	Sample Volume

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
*	2 Bromochloromethane	128	9.079	9.062	(1.000)	837179	30	
$	16 1,2-Dichloroethane-d4 (SUR)	104	9.836	9.804	(0.950)	170718	31	31
*	19 1,4-Difluorobenzene	114	10.355	10.324	(1.000)	2492133	30	
$	37 Toluene-d8 (SUR)	98	12.210	12.194	(1.179)	2172665	30	30
	38 Toluene	91	12.299	12.283	(1.188)	38073	0.52	0.52
*	32 Chlorobenzene-d5	117	13.932	13.930	(1.000)	1754060	30	
$	41 Bromofluorobenzene (SUR)	95	15.223	15.221	(1.093)	1286682	28	28

850930474

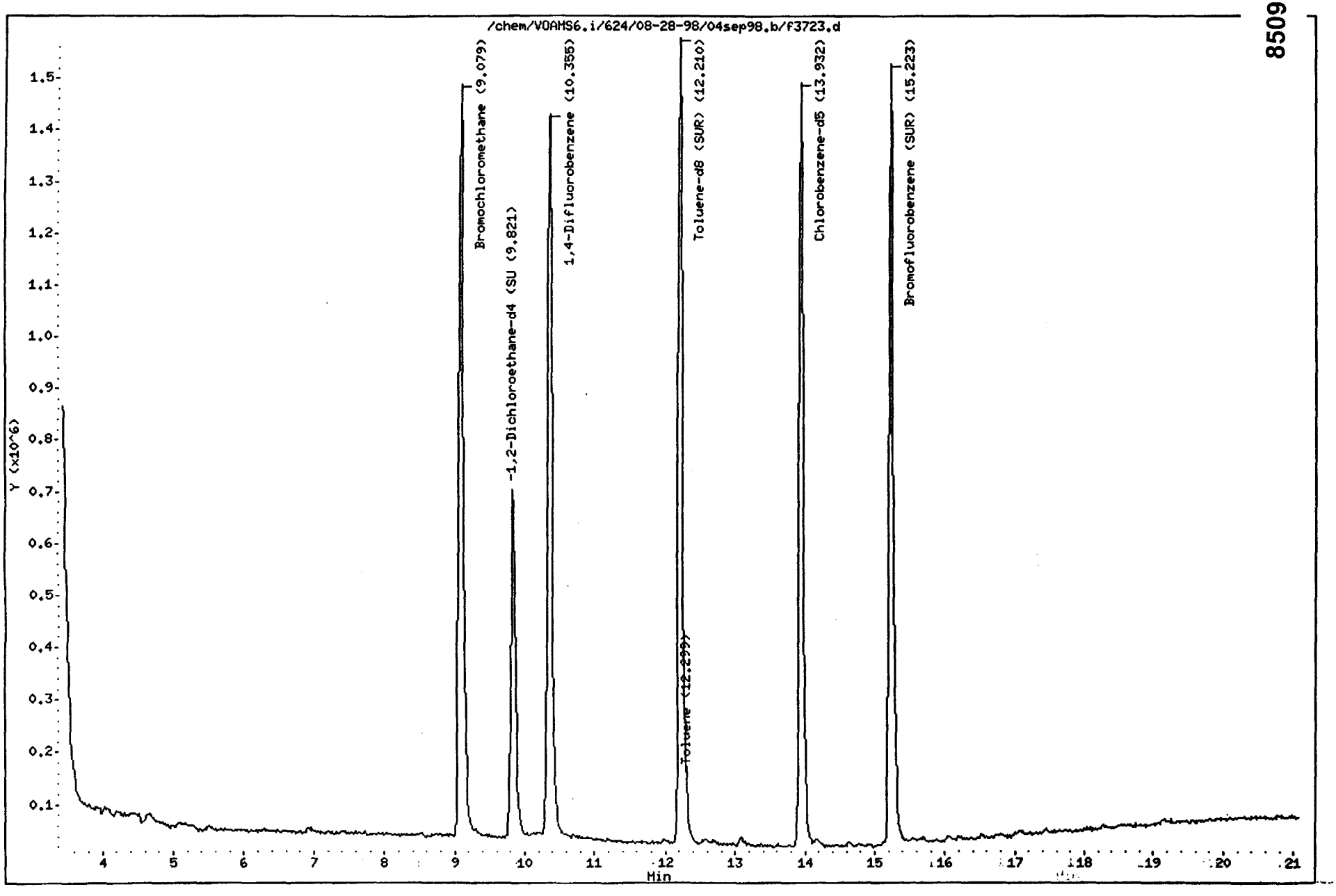
 F 211

Data File: /chem/VOAMS6.i/624/08-28-98/04sep98.b/f3723.d
Date : 05-SEP-98 00:11:00
Client ID: GP-4W
Instrument: VOAMS6.i
Sample Info: 81209;
Purge Volume: 5.0
Operator: VOAMS 7
Column phase: DB624
Column diameter: 0.53

850930475

E 2

138



Data File: /chem/VOAMS6.i/624/08-28-98/04sep98.b/f3723.d

Date : 05-SEP-98 00:11:00

Client ID: GP-4W

Instrument: VOAMS6.i

Sample Info: 81209;

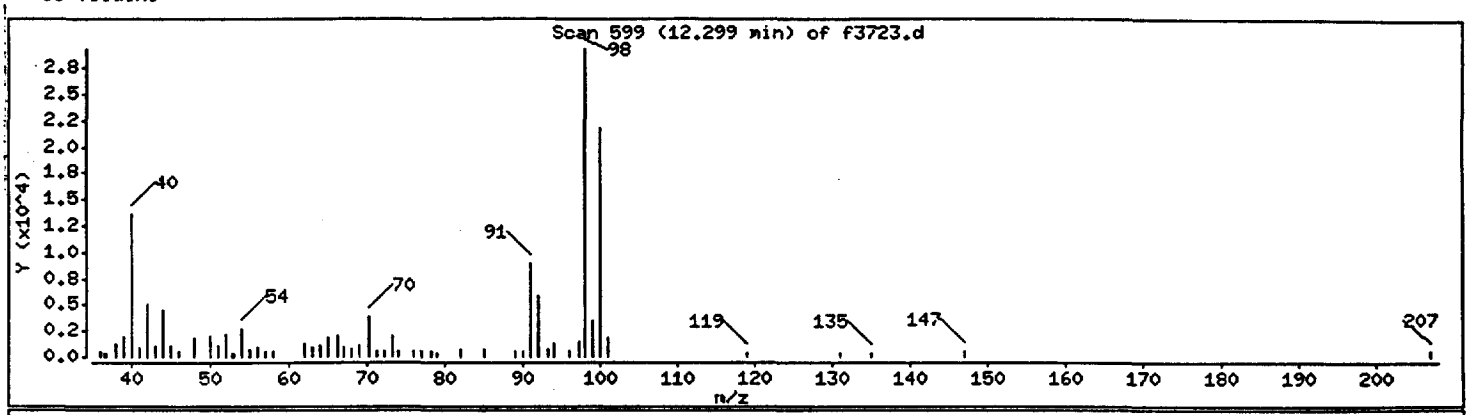
Purge Volume: 5.0

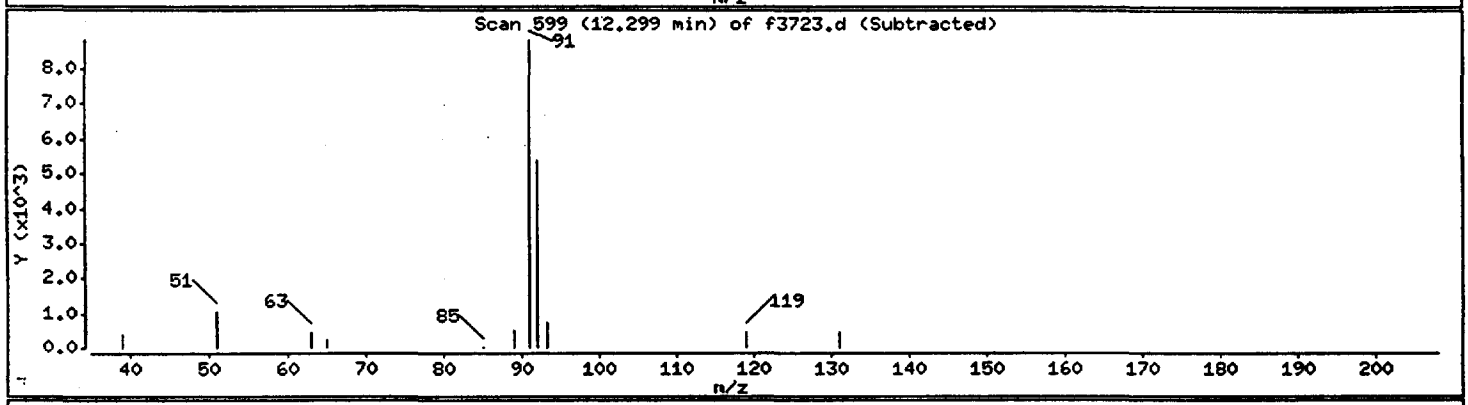
Operator: VOAMS 7

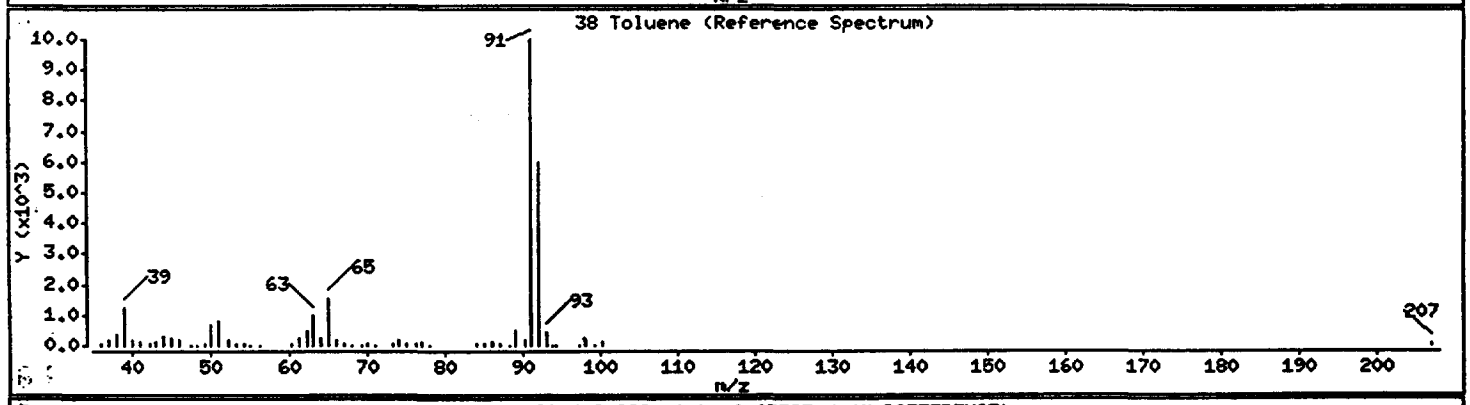
Column phase: DB624

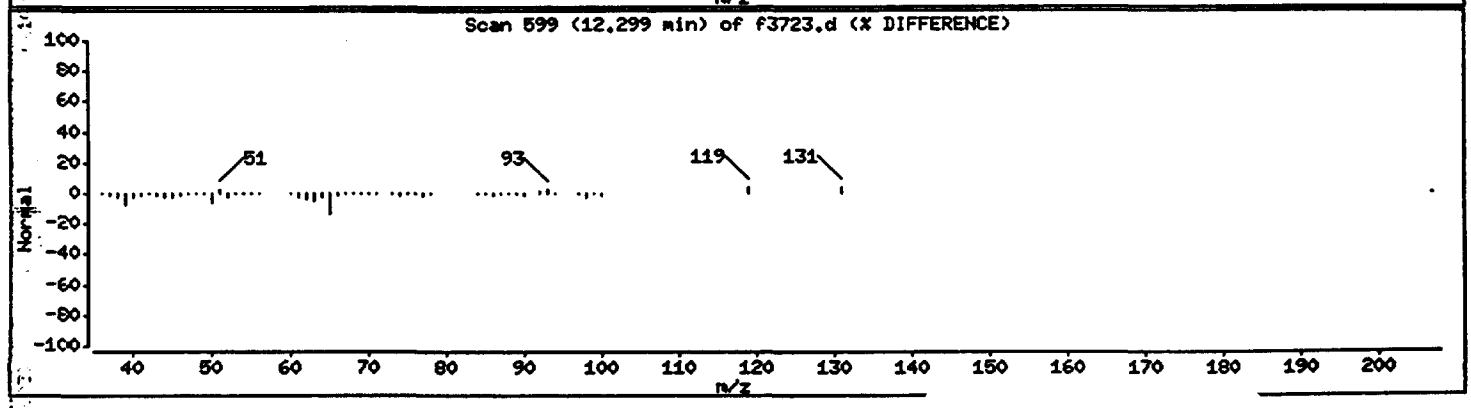
Column diameter: 0.53

38 Toluene









850930476

139 F213

Client ID: GP-5
Site: NBB-V12

Lab Sample No: 81210
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/09/98
GC Column: DB624
Instrument ID: VOAMS5.i
Lab File ID: e3821.d

Matrix: SOIL
Level: HIGH
Sample Weight: 10.3 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 14

VOLATILE ORGANICS - GC/MS
METHOD 8260B

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
Chloromethane	ND	710
Bromomethane	ND	710
Vinyl Chloride	ND	710
Chloroethane	ND	710
Methylene Chloride	ND	420
Trichlorofluoromethane	ND	710
1,1-Dichloroethene	ND	280
1,1-Dichloroethane	ND	710
trans-1,2-Dichloroethene	ND	710
cis-1,2-Dichloroethene	ND	710
Chloroform	ND	710
1,2-Dichloroethane	ND	280
1,1,1-Trichloroethane	ND	710
Carbon Tetrachloride	ND	280
Bromodichloromethane	ND	140
1,2-Dichloropropane	ND	140
cis-1,3-Dichloropropene	ND	710
Trichloroethene	ND	140
Dibromochloromethane	ND	710
1,1,2-Trichloroethane	ND	420
Benzene	ND	140
trans-1,3-Dichloropropene	ND	710
2-Chloroethyl Vinyl Ether	ND	710
Bromoform	ND	570
Tetrachloroethene	ND	140
1,1,2,2-Tetrachloroethane	ND	140
Toluene	ND	710
Chlorobenzene	ND	710
Ethylbenzene	ND	570
Xylene (Total)	ND	710

Client ID: **GP-5**
Site: NBB-V12

Lab Sample No: **81210**
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/09/98
GC Column: DB624
Instrument ID: VOAMS5.i
Lab File ID: e3821.d

Matrix: SOIL
Level: HIGH
Sample Weight: 10.3 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 14.4

VOLATILE ORGANICS - GC/MS
TENTATIVELY IDENTIFIED COMPOUNDS
METHOD 8260B

	COMPOUND NAME	RT	EST. CONC. ug/kg	Q
1.	NO VOLATILE ORGANIC COMPOUNDS FOUND			
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

TOTAL ESTIMATED CONCENTRATION	0.0

850930478

Data File: /chem/VOAMS5.i/8260HIGH_SP/08-25-98/09sep98a.b/e3821.d
Report Date: 11-Sep-98 16:10:04

Envirotech Research, Inc.

VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/VOAMS5.i/8260HIGH_SP/08-25-98/09sep98a.b/e3821.d
Lab Smp Id: 81210 Client Smp ID: GP-5
Inj Date : 09-SEP-98 23:47:00
Operator : VOAMS 5 Inst ID: VOAMS5.i
Smp Info : 81210;50;14.4;10.3;25
Misc Info : G893;6032;TL
Comment :
Method : /chem/VOAMS5.i/8260HIGH_SP/08-25-98/09sep98a.b/8260b-HIGH.m
Meth Date : 09-Sep-98 18:27:26 Quant Type: ISTD
Cal Date : 25-AUG-98 13:08:00 Cal File: e3451.d
Als bottle: 13
Dil Factor: 50.00000
Integrator: HP RTE Compound Sublist: PPVOA.sub
Target Version: 3.20
Procesing Host: hpvoa

Concentration Formula: (Vt/Ws)/((100-M)/100)

Name	Value	Description
Vt	25.000	Volume of final extract (mL)
Ws	10.300	Weight of sample extracted (g)
M	14.400	% Moisture (not decanted)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
$ 16 1,2-Dichloroethane-d4 (SUR)	65	8.692	8.719	(0.949)	422489	45	6400
* 19 Fluorobenzene	96	9.159	9.171	(1.000)	1900347	50	
$ 37 Toluene-d8 (SUR)	98	11.121	11.137	(1.214)	1508756	49	6900
* 32 Chlorobenzene-d5	117	12.818	12.823	(1.000)	1140951	50	
$ 41 Bromofluorobenzene (SUR)	174	14.079	14.103	(1.098)	534317	47	6700
* 91 1,4-Dichlorobenzene-d4	152	15.295	15.307	(1.000)	438423	50	

850930479

Data File: /chem/VOAHS5.i/8260HIGH_SP/08-25-98/09sep98a.b/e3821.d
Date : 09-SEP-98 23:47:00
Client ID: CP-5
Sample Info: 81210;50;14.4;10.3;25

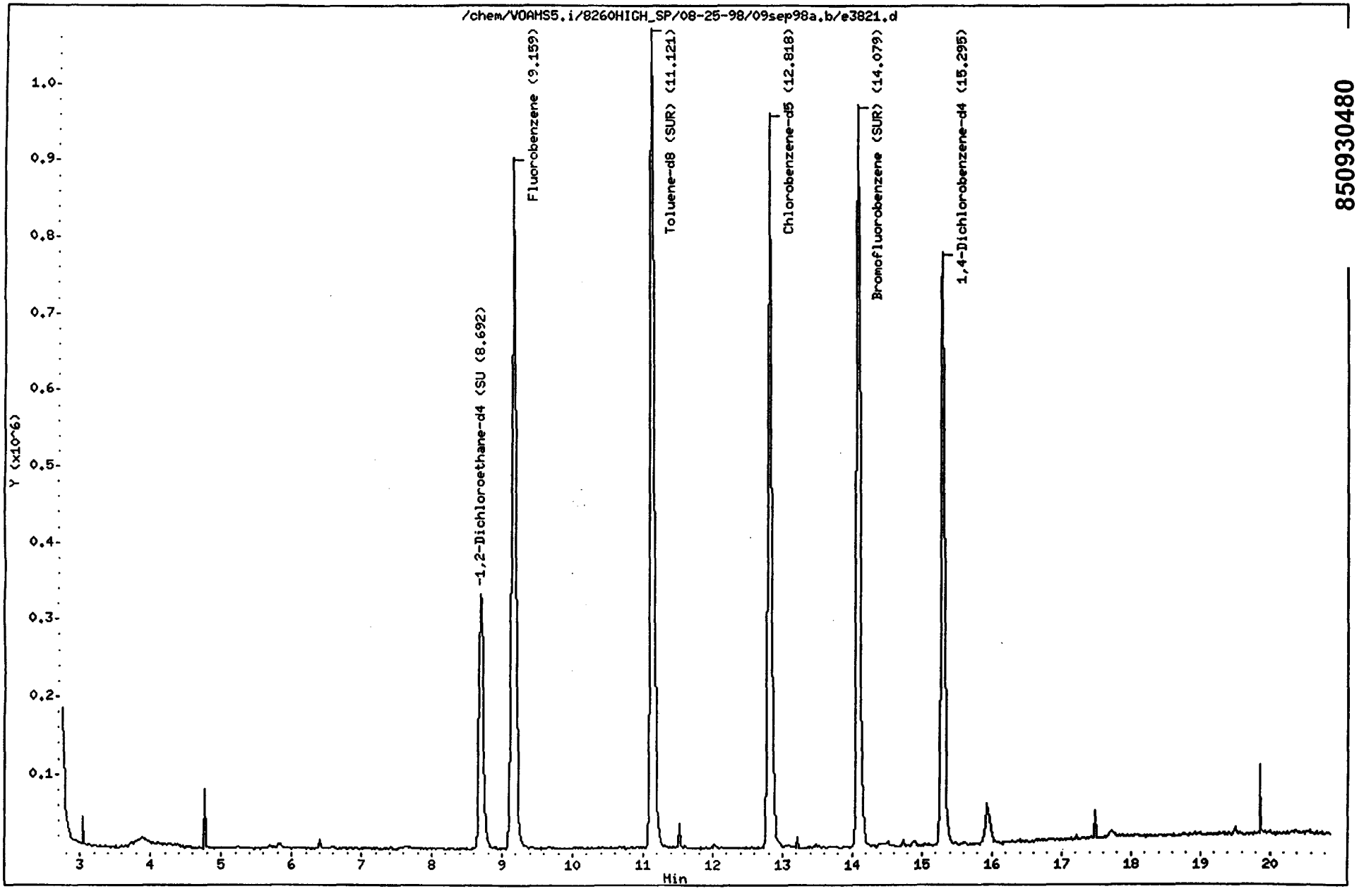
Column phase: DB624

Instrument: VOAHS5.i

Operator: VOAHS 5
Column diameter: 0.53

F217
143

850930480



Client ID: **GP-5W**
Site: NBB-V12

Lab Sample No: **81211**
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/05/98
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f3724.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Chloromethane	ND	0.9
Bromomethane	ND	0.3
Vinyl Chloride	ND	0.4
Chloroethane	ND	1.0
Methylene Chloride	ND	1.0
Trichlorofluoromethane	ND	0.2
1,1-Dichloroethene	ND	0.6
1,1-Dichloroethane	0.6	0.3
trans-1,2-Dichloroethene	ND	0.3
cis-1,2-Dichloroethene	ND	1.0
Chloroform	ND	0.2
1,2-Dichloroethane	ND	0.2
1,1,1-Trichloroethane	ND	0.2
Carbon Tetrachloride	ND	0.2
Bromodichloromethane	ND	0.2
1,2-Dichloropropane	ND	0.5
cis-1,3-Dichloropropene	ND	0.3
Trichloroethene	ND	0.4
Dibromochloromethane	ND	0.2
1,1,2-Trichloroethane	ND	0.4
Benzene	ND	0.2
trans-1,3-Dichloropropene	ND	0.3
2-Chloroethyl Vinyl Ether	ND	0.5
Bromoform	ND	0.3
Tetrachloroethene	ND	0.1
1,1,2,2-Tetrachloroethane	ND	0.3
Toluene	ND	0.2
Chlorobenzene	ND	0.1
Ethylbenzene	ND	0.2
Xylene (Total)	ND	1.0

850930481

Client ID: **GP-5W**
Site: NBB-V12

Lab Sample No: **81211**
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/05/98
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f3724.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
TENTATIVELY IDENTIFIED COMPOUNDS
METHOD 624

COMPOUND NAME	RT	EST. CONC. ug/l	Q
1. NO VOLATILE ORGANIC COMPOUNDS FOUND			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
15.			
16.			
17.			
18.			
19.			
20.			
21.			
22.			
23.			
24.			
25.			
26.			
27.			
28.			
29.			
30.			

TOTAL ESTIMATED CONCENTRATION	0.0

850930482

Data File: /chem/VOAMS6.i/624/08-28-98/04sep98.b/f3724.d
Report Date: 05-Sep-98 09:07:55

Envirotech Research, Inc.

VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/VOAMS6.i/624/08-28-98/04sep98.b/f3724.d
Lab Smp Id: 81211 Client Smp ID: GP-5W
Inj Date : 05-SEP-98 00:39:00
Operator : VOAMS 7 Inst ID: VOAMS6.i
Smp Info : 81211;
Misc Info : G893;8121;;DRL
Comment :
Method : /chem/VOAMS6.i/624/08-28-98/04sep98.b/624.m
Meth Date : 04-Sep-98 13:01:48 Quant Type: ISTD
Cal Date : 28-AUG-98 11:49:00 Cal File: f3415.d
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PPVOAv.sub
Target Version: 3.20
Procesing Host: hpvoa

Concentration Formula: 5/Vo

Name	Value	Description
Vo	5.000	Sample Volume

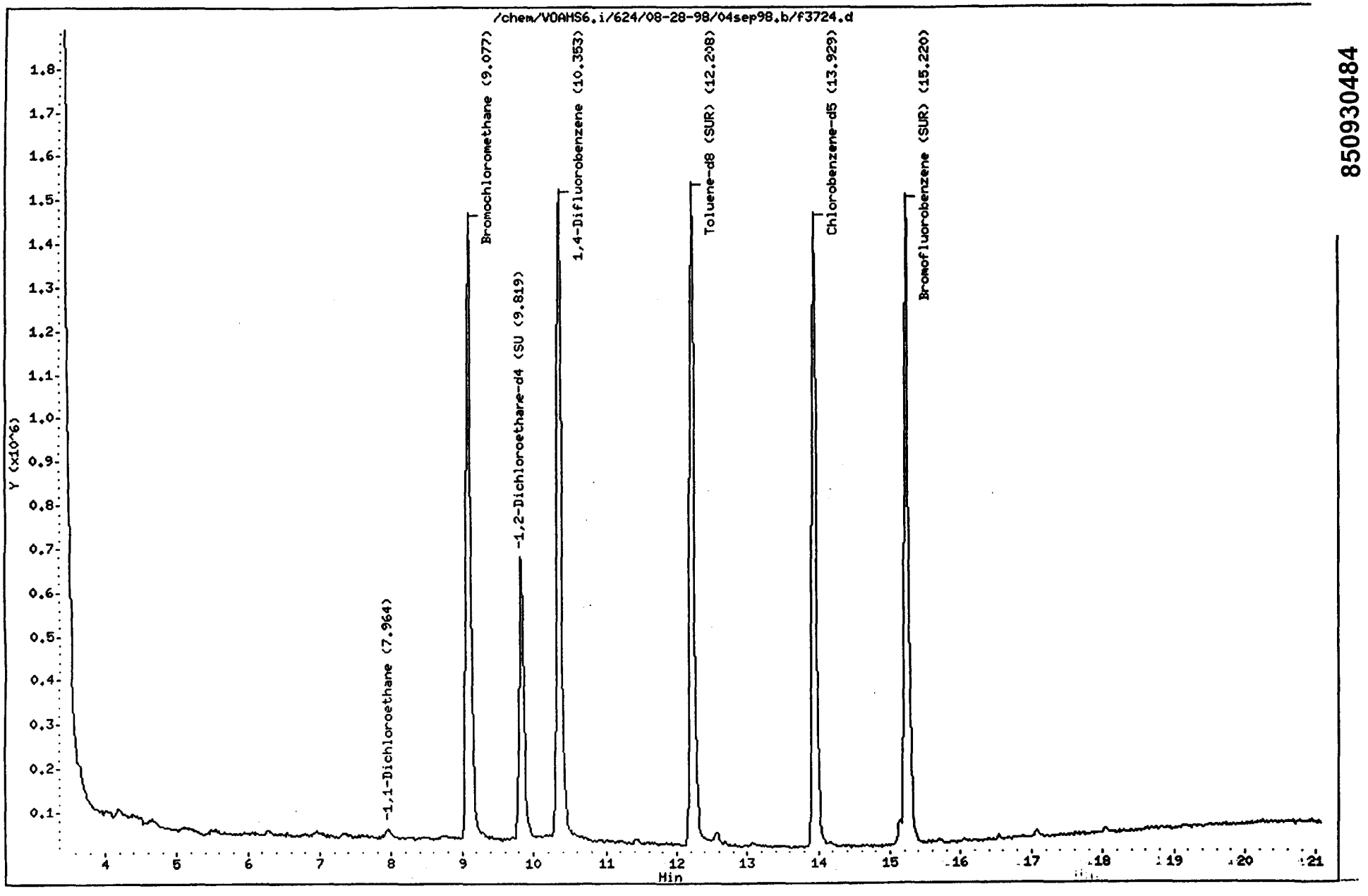
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
	11 1,1-Dichloroethane	63	7.949	7.905	(0.876)	38061	0.60	0.60
*	2 Bromochloromethane	128	9.077	9.062	(1.000)	824375	30	
$	16 1,2-Dichloroethane-d4 (SUR)	104	9.834	9.804	(0.950)	169611	30	30
*	19 1,4-Difluorobenzene	114	10.353	10.324	(1.000)	2603056	30	
$	37 Toluene-d8 (SUR)	98	12.208	12.194	(1.179)	2126616	28	28
*	32 Chlorobenzene-d5	117	13.929	13.930	(1.000)	1720503	30	
$	41 Bromofluorobenzene (SUR)	95	15.220	15.221	(1.093)	1275234	29	29

850930483

Data File: /chem/VOAMS6.i/624/08-28-98/04sep98.b/f3724.d
Date : 05-SEP-98 00:39:00
Client ID: GP-5W
Instrument: VOAMS6.i
Sample Info: 81211;
Purge Volume: 5.0
Operator: VOAMS 7
Column phase: DB624
Column diameter: 0.53

147 F21

850930484



Data File: /chem/VOAMS6.i/624/08-28-98/04sep98.b/f3724.d

Date : 05-SEP-98 00:39:00

Client ID: GP-5W

Instrument: VOAMS6.i

Sample Info: 81211;

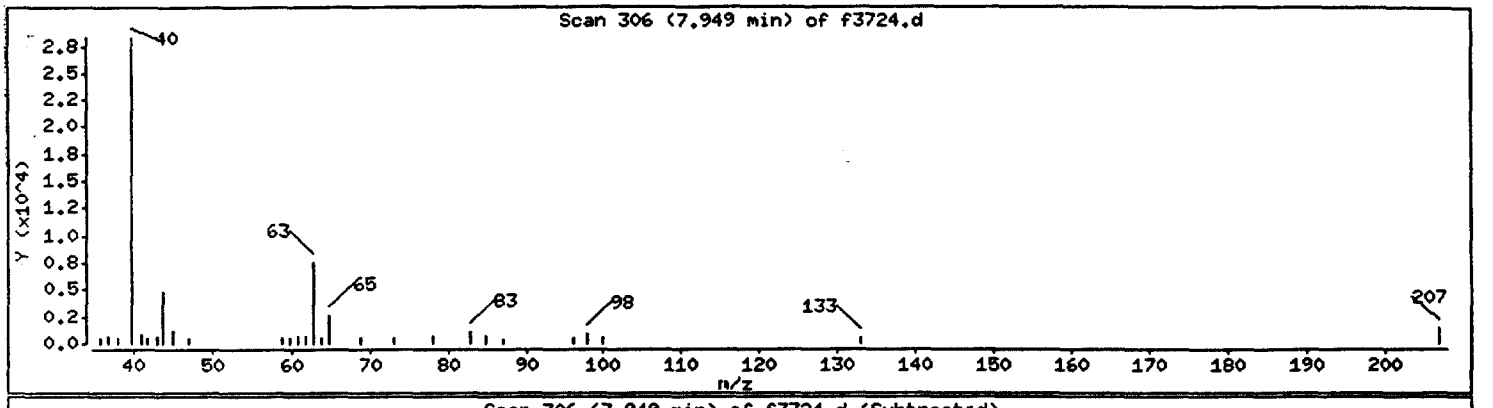
Purge Volume: 5.0

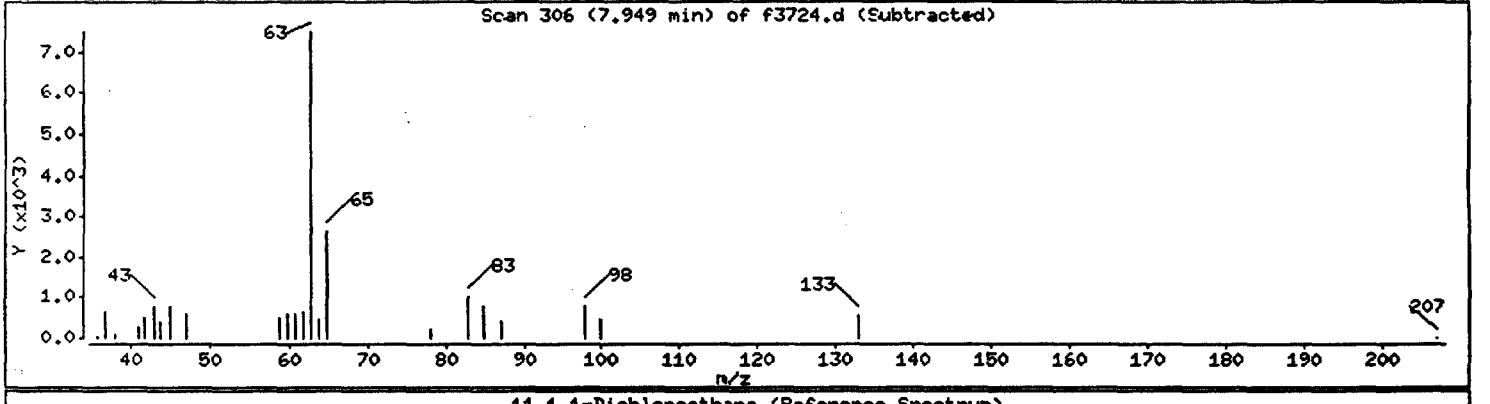
Operator: VOAMS 7

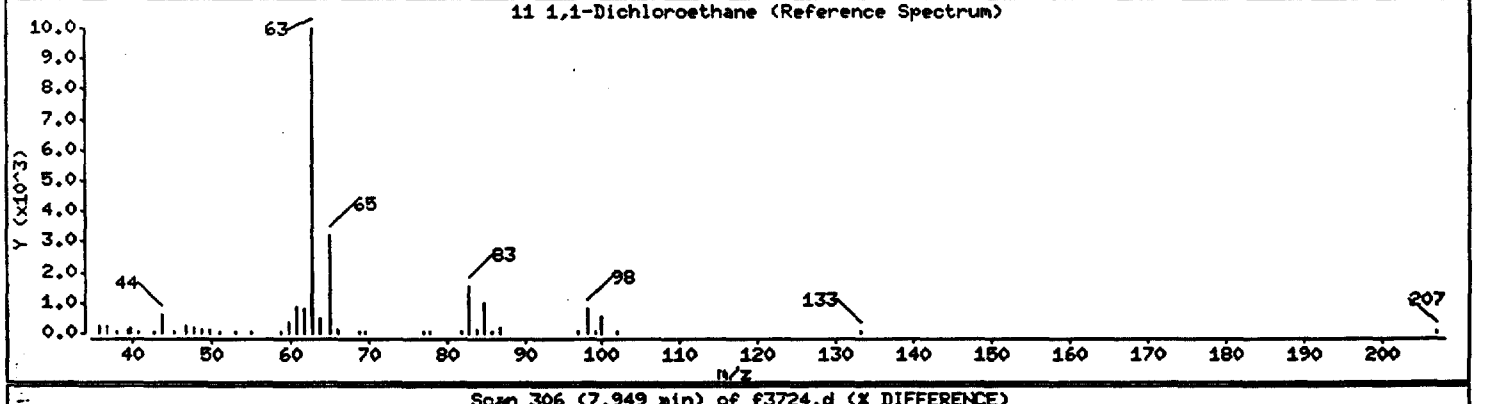
Column phase: DB624

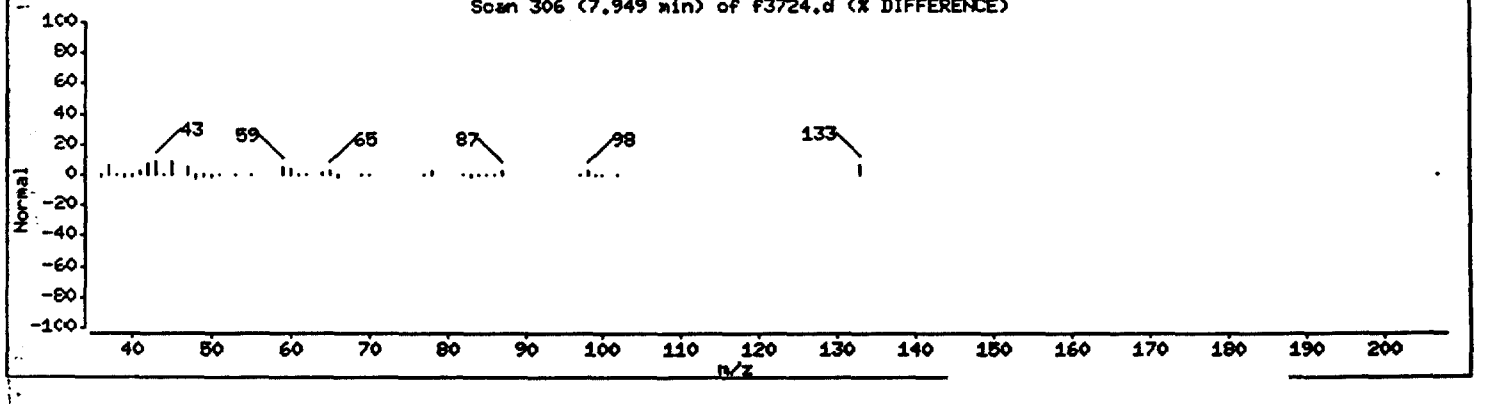
Column diameter: 0.53

11 1,1-Dichloroethane









850930485

Client ID: GP-6
Site: NBB-V12

Lab Sample No: 81212
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/10/98
GC Column: DB624
Instrument ID: VOAMS5.i
Lab File ID: e3828.d

Matrix: SOIL
Level: HIGH
Sample Weight: 10.5 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 17

VOLATILE ORGANICS - GC/MS
METHOD 8260B

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
Chloromethane	ND	710
Bromomethane	ND	710
Vinyl Chloride	ND	710
Chloroethane	ND	710
Methylene Chloride	ND	430
Trichlorofluoromethane	ND	710
1,1-Dichloroethene	ND	280
1,1-Dichloroethane	ND	710
trans-1,2-Dichloroethene	ND	710
cis-1,2-Dichloroethene	ND	710
Chloroform	ND	710
1,2-Dichloroethane	ND	280
1,1,1-Trichloroethane	ND	710
Carbon Tetrachloride	ND	280
Bromodichloromethane	ND	140
1,2-Dichloropropane	ND	140
cis-1,3-Dichloropropene	ND	710
Trichloroethene	ND	140
Dibromochloromethane	ND	710
1,1,2-Trichloroethane	ND	430
Benzene	ND	140
trans-1,3-Dichloropropene	ND	710
2-Chloroethyl Vinyl Ether	ND	710
Bromoform	ND	570
Tetrachloroethene	ND	140
1,1,2,2-Tetrachloroethane	ND	140
Toluene	ND	710
Chlorobenzene	ND	710
Ethylbenzene	ND	570
Xylene (Total)	ND	710

Client ID: **GP-6**
Site: NBB-V12

Lab Sample No: **81212**
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/10/98
GC Column: DB624
Instrument ID: VOAMS5.i
Lab File ID: e3828.d

Matrix: SOIL
Level: HIGH
Sample Weight: 10.5 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 16.7

VOLATILE ORGANICS - GC/MS
TENTATIVELY IDENTIFIED COMPOUNDS
METHOD 8260B

	COMPOUND NAME	RT	EST. CONC. ug/kg	Q
1.	C11H22 Cycloalkane	15.47	4100	
2.	Decahydronaphthalene isomer	15.71	11000	
3.	Decahydromethylnaphthalene isomer	16.33	9900	
4.	Decahydromethylnaphthalene isomer	16.57	9900	
5.	Unknown Aromatic	16.94	5100	
6.	Coeluting Aromatics	17.70	4700	
7.	Coeluting Unknowns	17.79	6200	
8.	Coeluting Aromatics	18.45	4200	
9.	C12H16 Aromatic/C12H22 Unknown	18.60	6300	
10.	Coeluting Aromatics	19.14	4800	
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

TOTAL ESTIMATED CONCENTRATION	66200

850930487

Data File: /chem/VOAMS5.i/8260HIGH_SP/08-25-98/09sep98a.b/e3828.d
Report Date: 11-Sep-98 16:10:53

Envirotech Research, Inc.

VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/VOAMS5.i/8260HIGH_SP/08-25-98/09sep98a.b/e3828.d
Lab Smp Id: 81212 Client Smp ID: GP-6
Inj Date : 10-SEP-98 02:59:00
Operator : VOAMS 5 Inst ID: VOAMS5.i
Smp Info : 81212;50;16.7;10.5;25
Misc Info : G893;6032;TL
Comment :
Method : /chem/VOAMS5.i/8260HIGH_SP/08-25-98/09sep98a.b/8260b-HIGH.m
Meth Date : 09-Sep-98 18:27:26 Quant Type: ISTD
Cal Date : 25-AUG-98 13:08:00 Cal File: e3451.d
Als bottle: 20
Dil Factor: 50.00000
Integrator: HP RTE Compound Sublist: PPVOA.sub
Target Version: 3.20
Procesing Host: hpvoa

Concentration Formula: (Vt/Ws)/((100-M)/100)

Name	Value	Description
Vt	25.000	Volume of final extract (mL)
Ws	10.500	Weight of sample extracted (g)
M	16.700	% Moisture (not decanted)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
$ 16 1,2-Dichloroethane-d4 (SUR)	65	8.707	8.719	(0.951)	411503	58	8200
* 19 Fluorobenzene	96	9.159	9.171	(1.000)	1458289	50	
$ 37 Toluene-d8 (SUR)	98	11.136	11.137	(1.216)	1466879	62	8800(R)
* 32 Chlorobenzene-d5	117	12.818	12.823	(1.000)	1018842	50	
$ 41 Bromofluorobenzene (SUR)	174	14.081	14.103	(1.099)	512923	51	7300
* 91 1,4-Dichlorobenzene-d4	152	15.300	15.307	(1.000)	382400	50	

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

850930488

Data File: /chem/VOAMS5.i/8260HIGH_SP/08-25-98/09sep98a.b/e3828.d
Date : 10-SEP-98 02:59:00
Client ID: GP-6
Sample Info: 81212;50;16.7;10.5;25

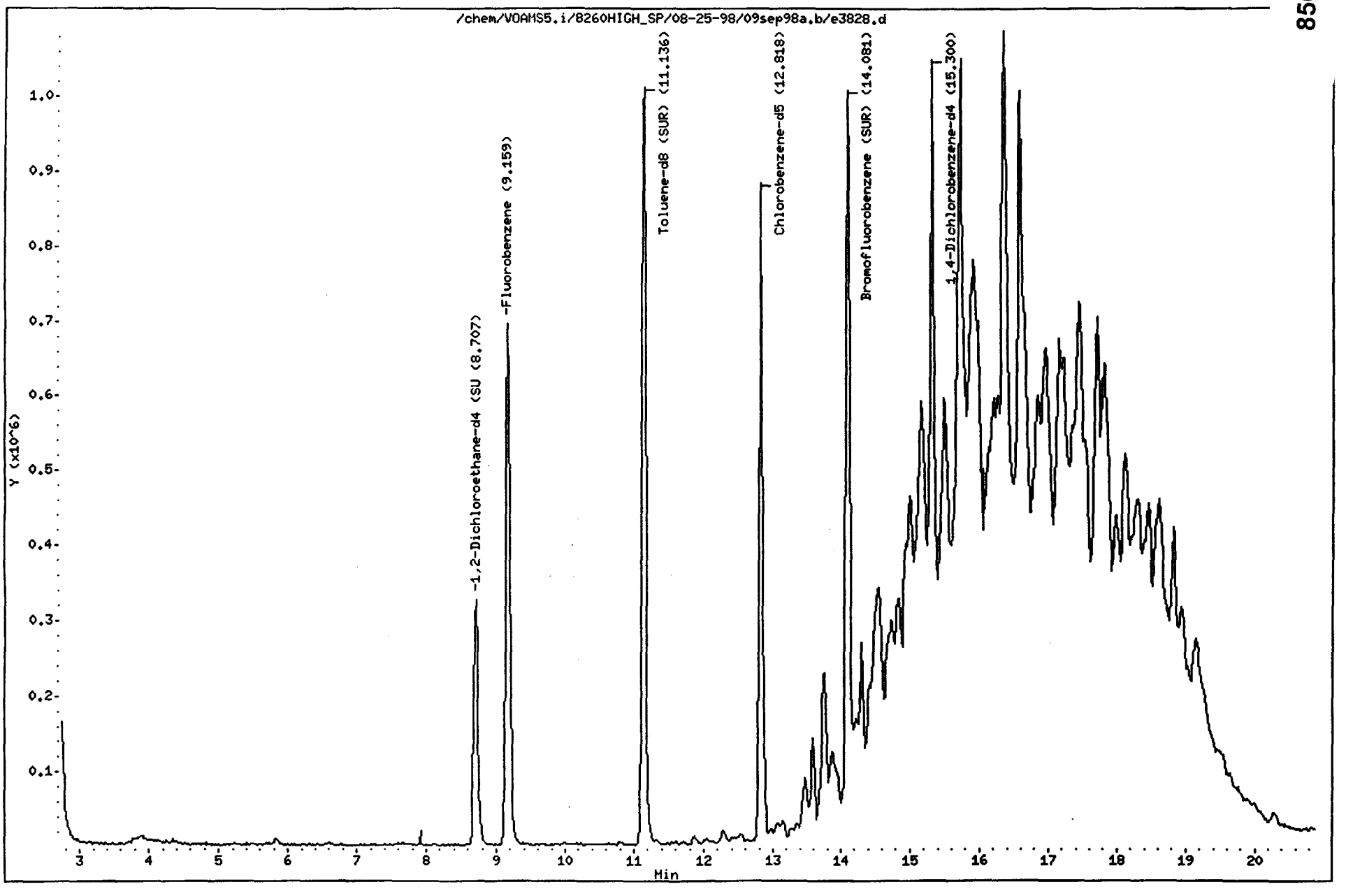
Instrument: VOAMS5.i

Operator: VOAMS 5
Column diameter: 0.53

Column phase: DB624

850930489

152 F22



Data File: /chem/VOAMS5.i/8260HIGH_SP/08-25-98/09sep98a.b/e3828.d

Date : 10-SEP-98 02:59:00

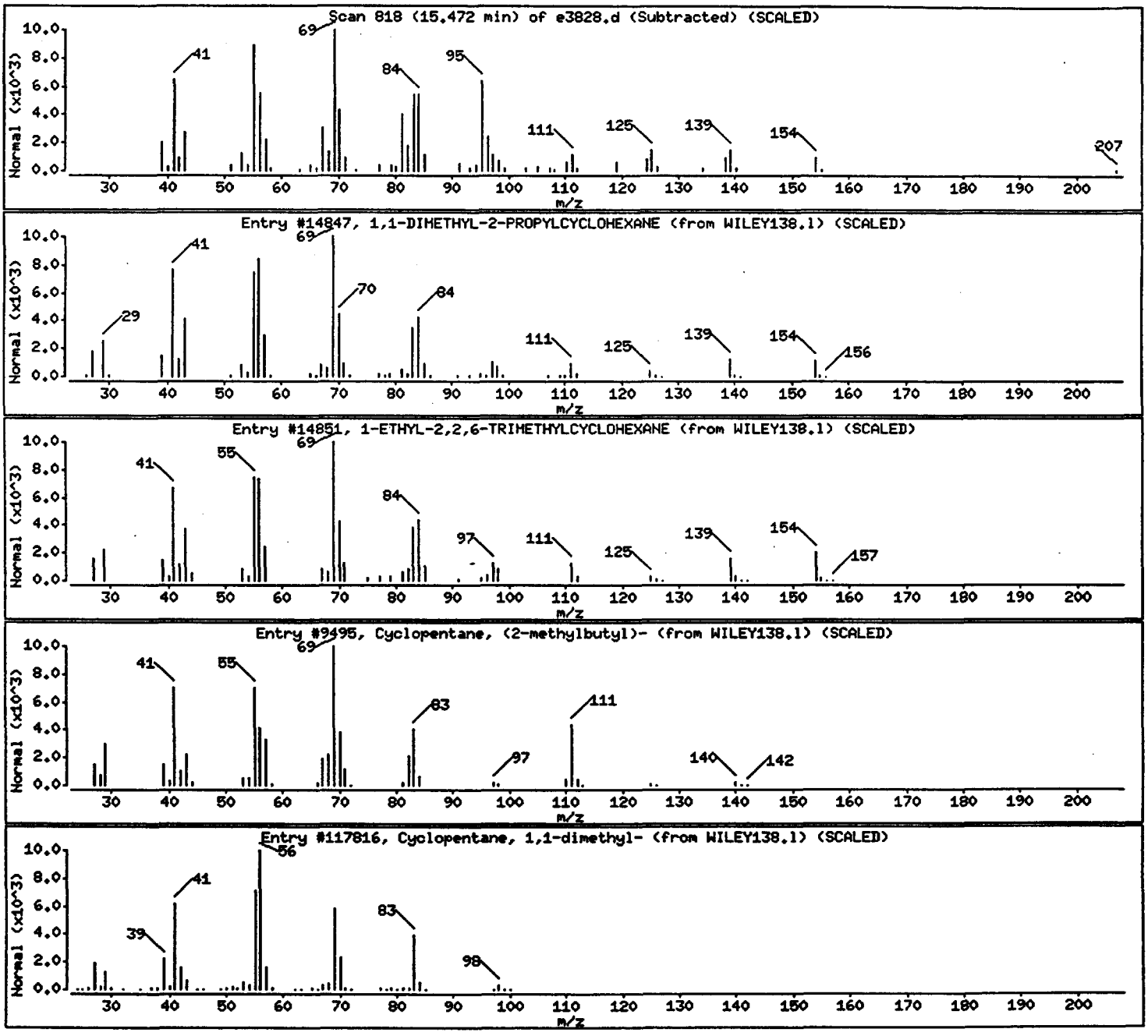
Client ID: GP-6 Instrument: VOAMS5.i

Sample Info: 81212;50;16.7;10.5;25

Operator: VOAMS 5

Column phase: DB624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
C11H22 Cycloalkane						
1,1-DIMETHYL-2-PROPYLCYCLOHEXANE	81983-71-3	WILEY138.1	14847	86	C11H22	154
1-ETHYL-2,2,6-TRIMETHYLCYCLOHEXANE	0-00-0	WILEY138.1	14851	64	C11H22	154
Cyclopentane, (2-methylbutyl)-	53366-38-4	WILEY138.1	9495	47	C10H20	140
Cyclopentane, 1,1-dimethyl-	1638-26-2	WILEY138.1	117816	43	C7H14	98



850930490

Data File: /chem/VOAMS5.i/8260HIGH_SP/08-25-98/09sep98a.b/e3828.d

Date : 10-SEP-98 02:59:00

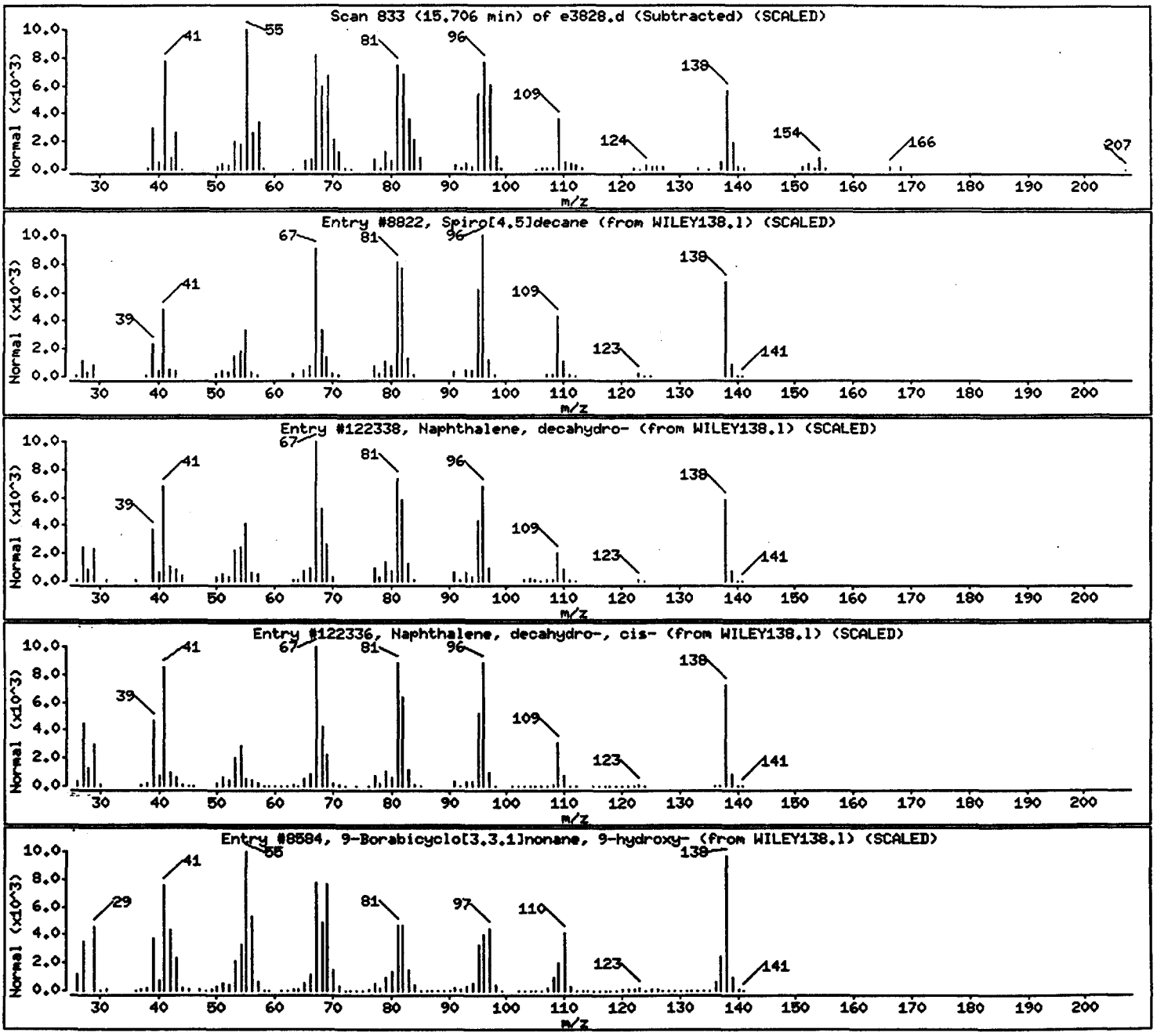
Client ID: GP-6 Instrument: VOAMS5.i

Sample Info: 81212;50;16.7;10.5;25

Operator: VOAMS 5

Column phase: DB624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Decahydronaphthalene isomer						
Spiro[4.5]decane	176-63-6	WILEY138.l	8822	91	C10H18	138
Naphthalene, decahydro-	91-17-8	WILEY138.l	122338	90	C10H18	138
Naphthalene, decahydro-, cis-	493-01-6	WILEY138.l	122336	87	C10H18	138
9-Borabicyclo[3.3.1]nonane, 9-hydroxy-	63366-65-4	WILEY138.l	8584	72	C8H15BO	138



850930491

Data File: /chem/VOAMS5.i/8260HIGH_SP/08-25-98/09sep98a.b/e3828.d

Date : 10-SEP-98 02:59:00

Client ID: GP-6

Instrument: VOAMS5.i

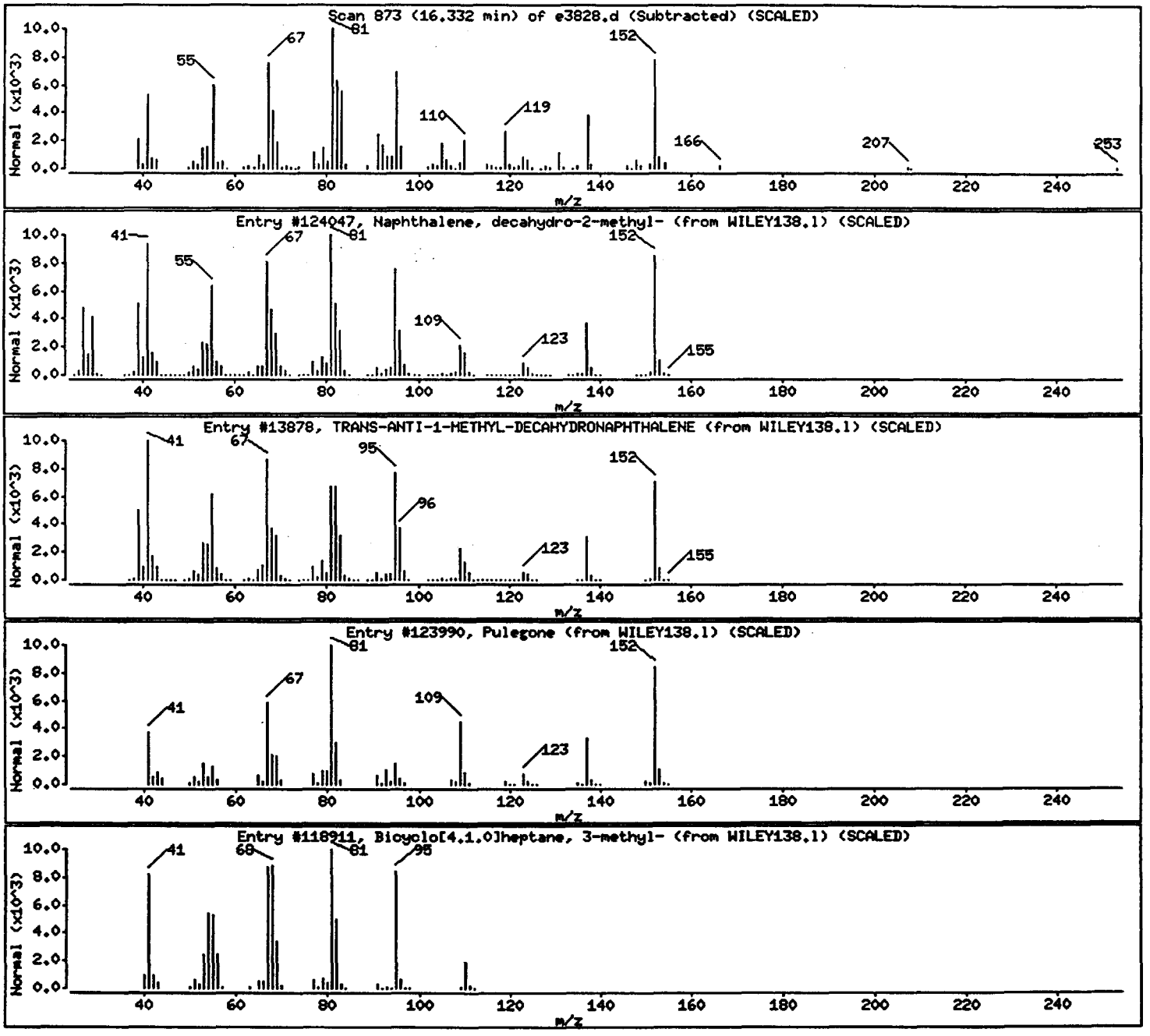
Sample Info: 81212;50;16.7;10.5;25

Operator: VOAMS 5

Column phase: DB624

Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Decahydromethylnaphthalene isomer						
Naphthalene, decahydro-2-methyl-	2958-76-1	WILEY138.1	124047	93	C11H20	152
TRANS-ANTI-1-METHYL-DECAHYDRONAPHTHALENE	0-00-0	WILEY138.1	13878	52	C11H20	152
Pulegone	89-82-7	WILEY138.1	123990	49	C10H16O	152
Bicyclo[4.1.0]heptane, 3-methyl-	41977-47-3	WILEY138.1	118911	43	C8H14	110



850930492

Data File: /chem/VOAHS5.i/8260HIGH_SP/08-25-98/09sep98a.b/e3828.d

Date : 10-SEP-98 02:59:00

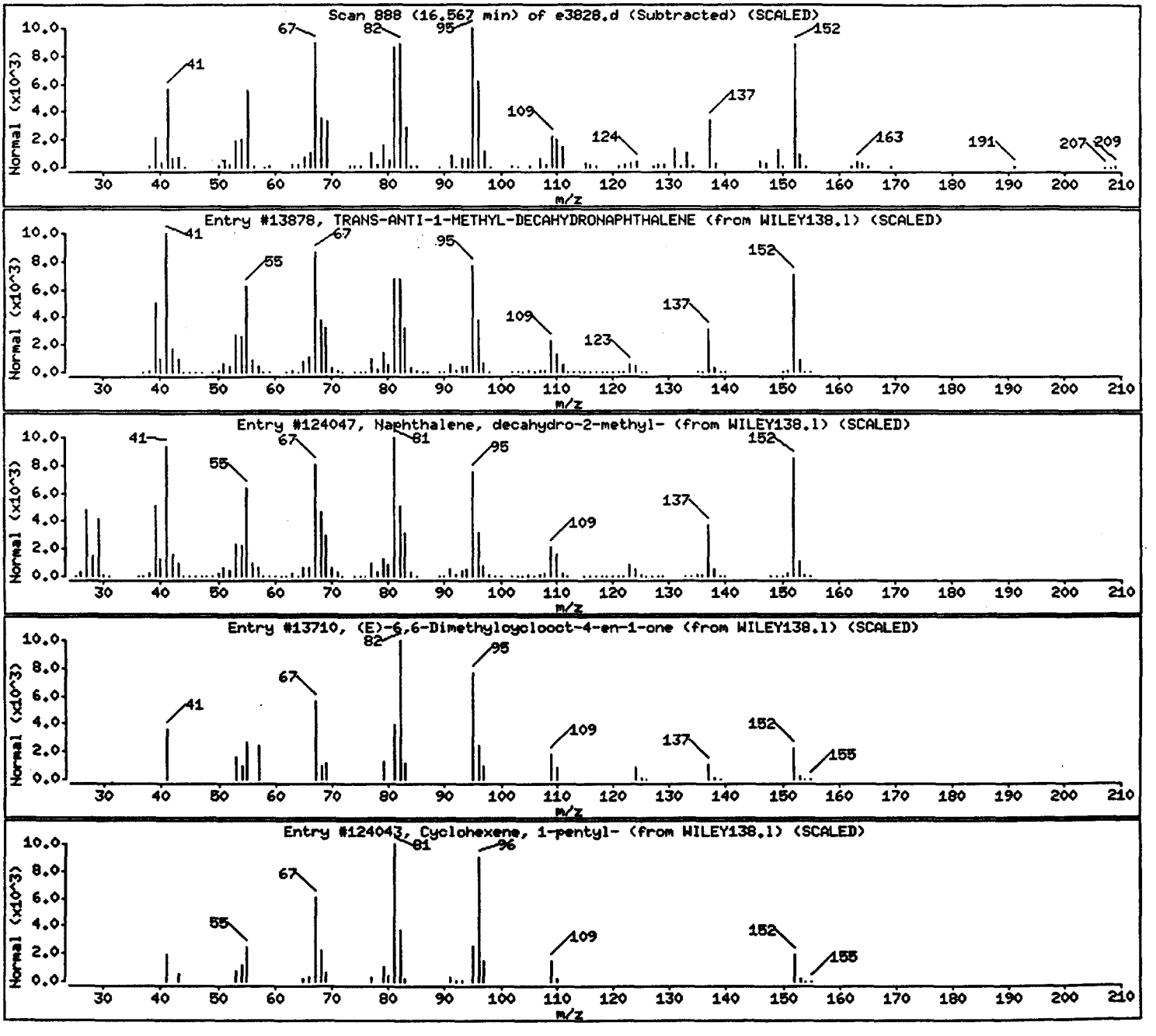
Client ID: GP-6 Instrument: VOAHS5.i

Sample Info: 81212;50;16.7;10.5;25

Operator: VOAHS 5

Column phase: DB624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Decahydromethylnaphthalene isomer						
TRANS-ANTI-1-METHYL-DECAHYDRONAPHTHALENE	0-00-0	WILEY138.l	13878	95	C11H20	152
Naphthalene, decahydro-2-methyl-	2958-76-1	WILEY138.l	124047	94	C11H20	152
(E)-6,6-Dimethylcyclooct-4-en-1-one	91531-49-6	WILEY138.l	13710	68	C10H16O	152
Cyclohexene, 1-pentyl-	15232-85-6	WILEY138.l	124043	64	C11H20	152



850930493

Data File: /chem/VOAMS5.i/8260HIGH_SP/08-25-98/09sep98a.b/e3828.d

Date : 10-SEP-98 02:59:00

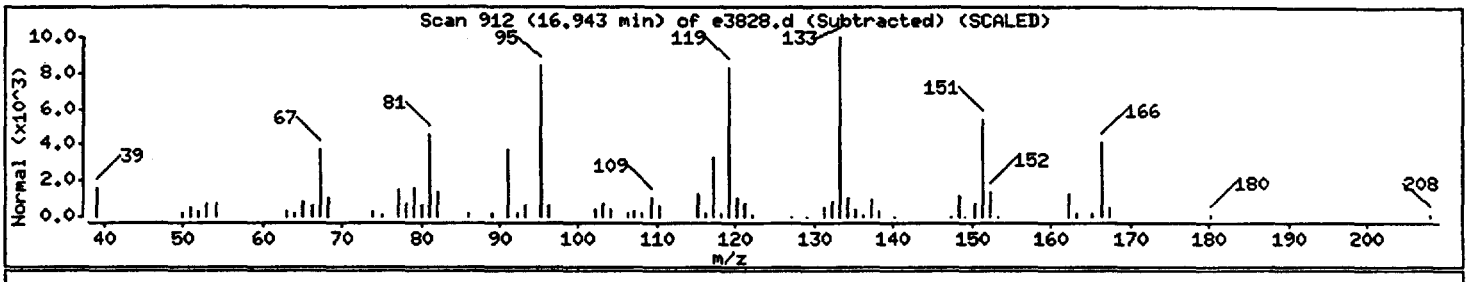
Client ID: GP-6 Instrument: VOAMS5.i

Sample Info: 81212;50;16.7;10.5;25

Operator: VOAMS 5

Column phase: DB624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Aromatic						
Unknown			0	0		0



850930494

157 F23

Data File: /chem/VOAHS5.i/8260HIGH_SP/08-25-98/09sep98a.b/e3828.d

Date : 10-SEP-98 02:59:00

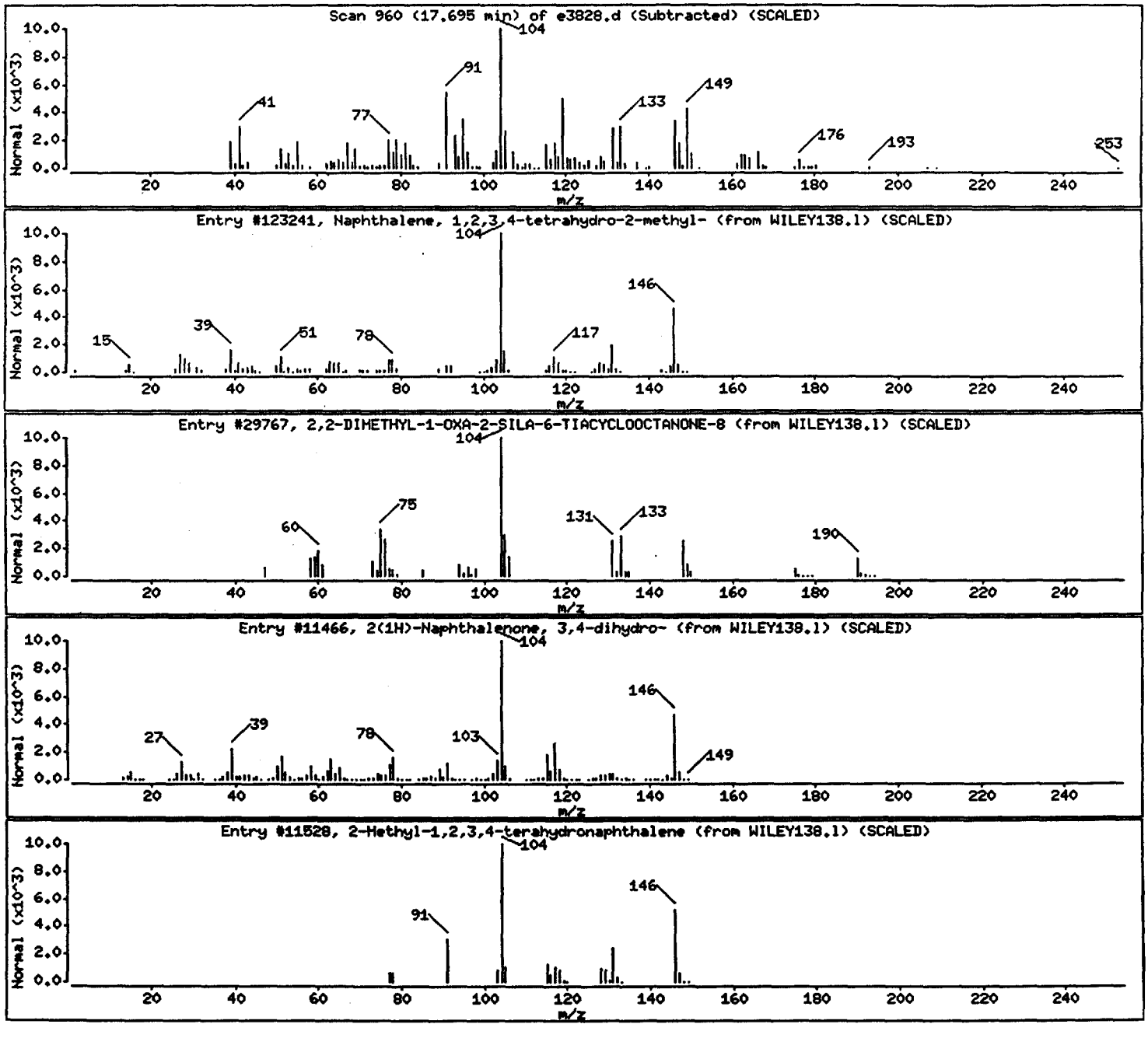
Client ID: GP-6 Instrument: VOAHS5.i

Sample Info: 81212;50;16.7;10.5;25

Operator: VOAHS 5

Column phase: DB624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Coeluting Aromatics						
Naphthalene, 1,2,3,4-tetrahydro-2-methyl	3877-19-8	WILEY138.l	123241	38	C11H14	146
2,2-DIMETHYL-1-OXA-2-SILA-6-TIACYCLOOCTA	66886-67-7	WILEY138.l	29767	35	C7H14O2SSi	190
2(1H)-Naphthalenone, 3,4-dihydro-	530-93-8	WILEY138.l	11466	30	C10H10O	146
2-Methyl-1,2,3,4-terahydronaphthalene	67519-35-1	WILEY138.l	11528	27	C11H14	146



850930495

Data File: /chem/VOAMS5.i/8260HIGH_SP/08-25-98/09sep98a.b/e3828.d

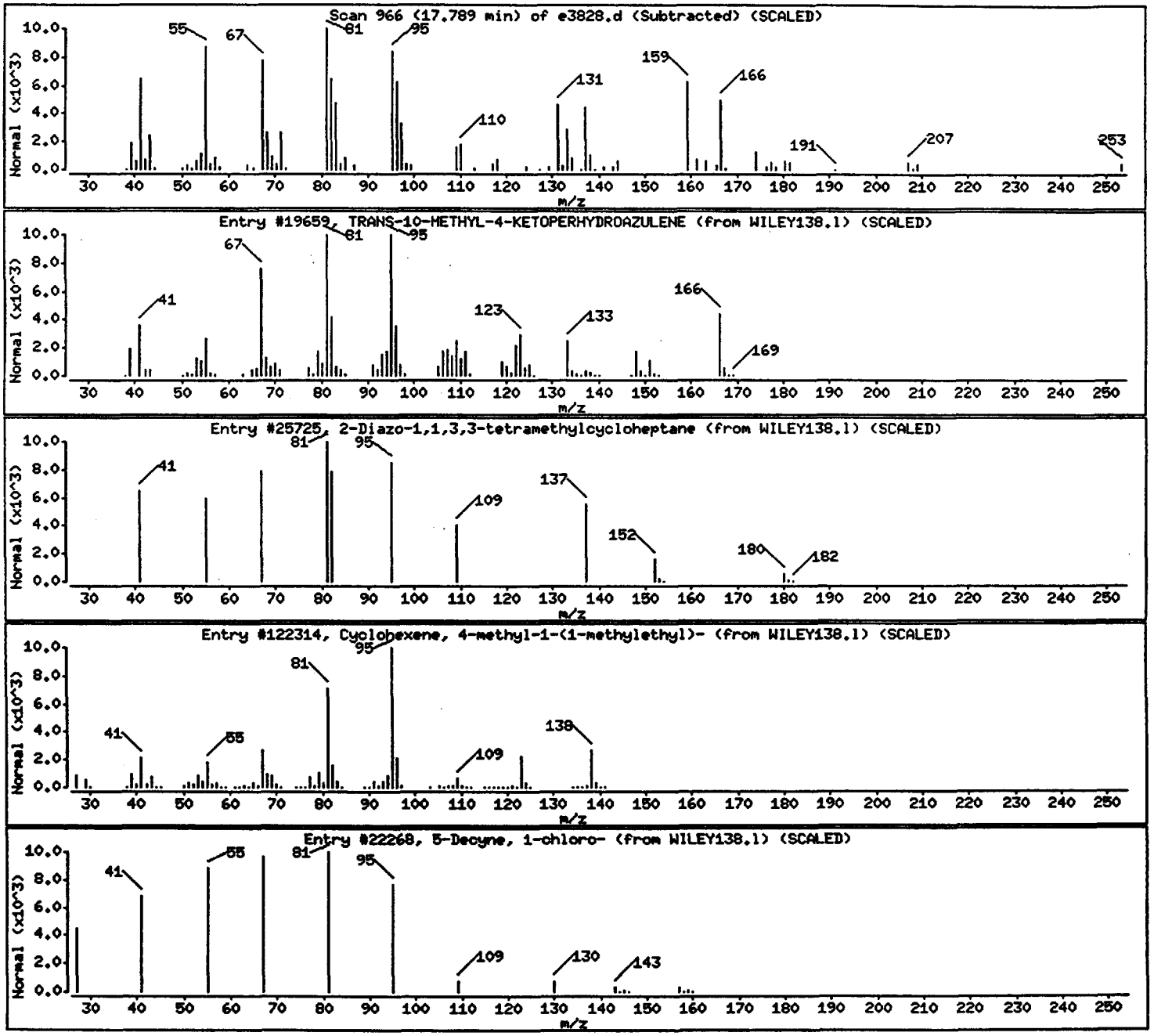
Date : 10-SEP-98 02:59:00

Client ID: GP-6 Instrument: VOAMS5.i

Sample Info: 81212;50;16.7;10.5;25 Operator: VOAMS 5

Column phase: DB624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Coeluting Unknowns						
TRANS-10-METHYL-4-KETOPERHYDROAZULENE	85318-94-1	WILEY138.l	19659	52	C11H18O	166
2-Diazo-1,1,3,3-tetramethylcycloheptane	0-00-0	WILEY138.l	25725	49	C11H20N2	180
Cyclohexene, 4-methyl-1-(1-methylethyl)-	500-00-5	WILEY138.l	122314	38	C10H18	138
5-Decyne, 1-chloro-	54377-34-3	WILEY138.l	22268	38	C10H17Cl	172



850930496

Data File: /chem/VOAMS5.i/8260HIGH_SP/08-25-98/09sep98a.b/e3828.d

Date : 10-SEP-98 02:59:00

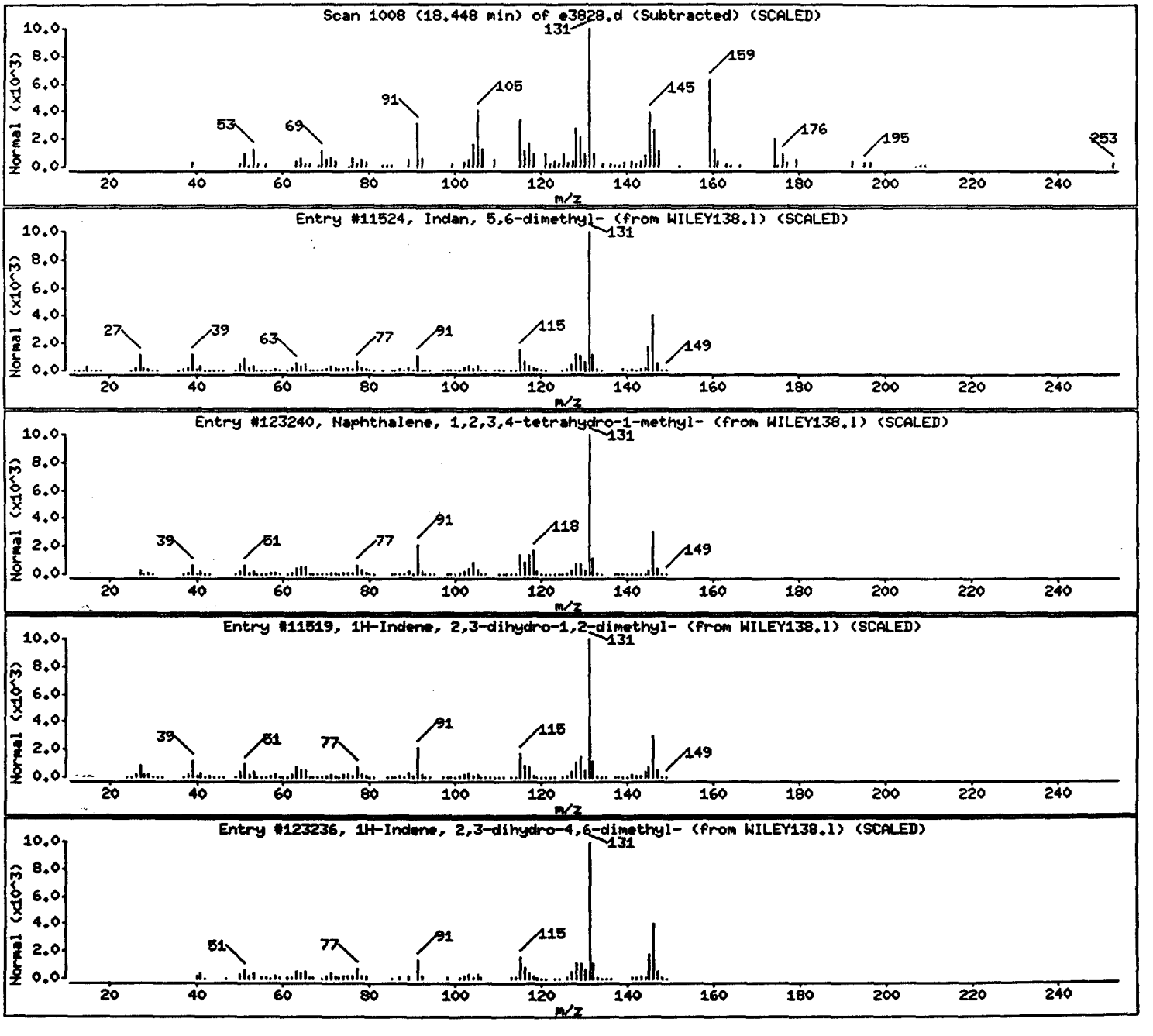
Client ID: GP-6 Instrument: VOAMS5.i

Sample Info: 81212;50;16.7;10.5;25

Operator: VOAMS 5

Column phase: DB624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Coeluting Aromatics						
Indan, 5,6-dimethyl-	1075-22-5	WILEY138.l	11524	43	C11H14	146
Naphthalene, 1,2,3,4-tetrahydro-1-methyl	1559-81-5	WILEY138.l	123240	42	C11H14	146
1H-Indene, 2,3-dihydro-1,2-dimethyl-	17057-82-8	WILEY138.l	11519	38	C11H14	146
1H-Indene, 2,3-dihydro-4,6-dimethyl-	1685-82-1	WILEY138.l	123236	38	C11H14	146



850930497

160 F23

Data File: /chem/VOAMS5.i/8260HIGH_SP/08-25-98/09sep98a.b/e3828.d

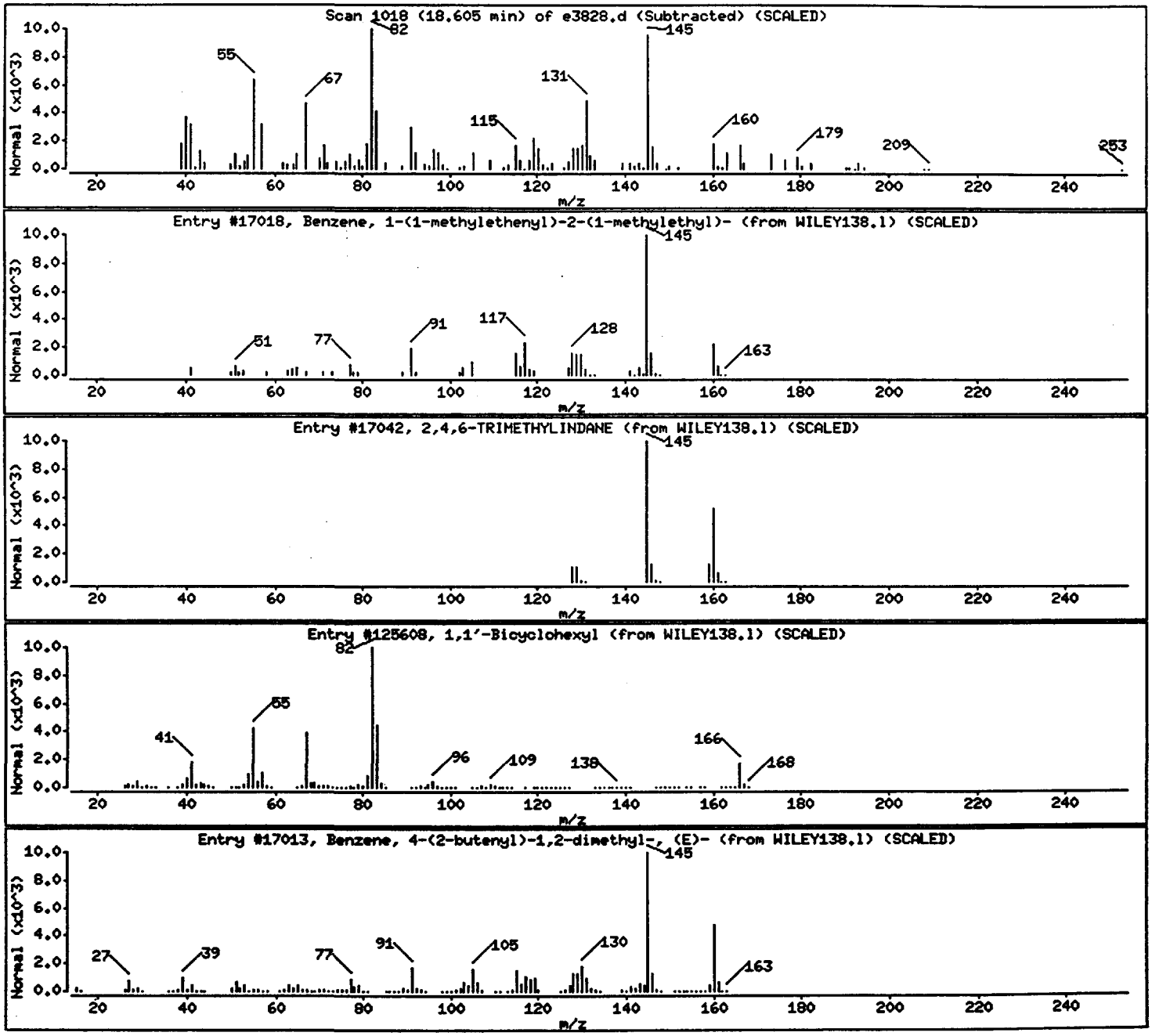
Date : 10-SEP-98 02:59:00

Client ID: CP-6 Instrument: VOAMS5.i

Sample Info: 81212;50;16.7;10.5;25 Operator: VOAMS 5

Column phase: DB624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
C12H16 Aromatic/C12H22 Unknown						
Benzene, 1-(1-methylethenyl)-2-(1-methyl	5557-93-7	WILEY138.l	17018	45	C12H16	160
2,4,6-TRIMETHYLINDANE	65001-56-1	WILEY138.l	17042	43	C12H16	160
1,1'-Bicyclohexyl	92-51-3	WILEY138.l	125608	43	C12H22	166
Benzene, 4-(2-butenyl)-1,2-dimethyl-, (E	54340-86-2	WILEY138.l	17013	35	C12H16	160



850930498

161 F235

Data File: /chem/VOAMS5.i/8260HIGH_SP/08-25-98/09sep98a.b/e3828.d

Date : 10-SEP-98 02:59:00

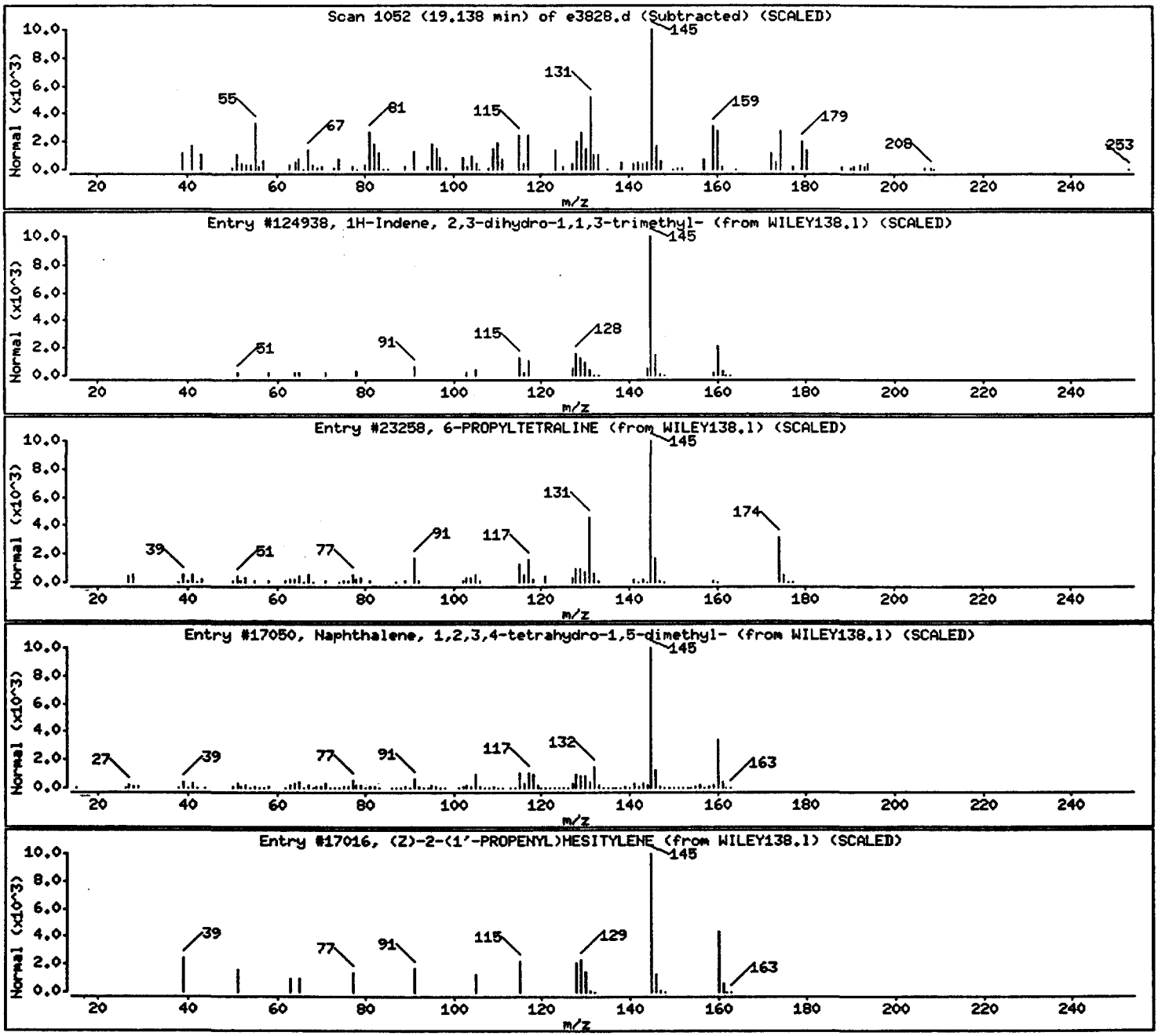
Client ID: GP-6 Instrument: VOAMS5.i

Sample Info: 81212;50;16.7;10.5;25

Operator: VOAMS 5

Column phase: DB624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Coeluting Aromatics						
1H-Indene, 2,3-dihydro-1,1,3-trimethyl-	2613-76-5	WILEY138.l	124938	55	C12H16	160
6-PROPYLTETRALINE	42775-77-9	WILEY138.l	23258	49	C13H18	174
Naphthalene, 1,2,3,4-tetrahydro-1,5-dime	21564-91-0	WILEY138.l	17050	49	C12H16	160
(Z)-2-(1'-PROPENYL)MESITYLENE	2077-40-9	WILEY138.l	17016	45	C12H16	160



850930499

Client ID: **GP-6W**
Site: NBB-V12

Lab Sample No: **81213**
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/05/98
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f3725.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Chloromethane	ND	0.9
Bromomethane	ND	0.3
Vinyl Chloride	ND	0.4
Chloroethane	ND	1.0
Methylene Chloride	ND	1.0
Trichlorofluoromethane	ND	0.2
1,1-Dichloroethene	ND	0.6
1,1-Dichloroethane	ND	0.3
trans-1,2-Dichloroethene	ND	0.3
cis-1,2-Dichloroethene	ND	1.0
Chloroform	ND	0.2
1,2-Dichloroethane	ND	0.2
1,1,1-Trichloroethane	ND	0.2
Carbon Tetrachloride	ND	0.2
Bromodichloromethane	ND	0.2
1,2-Dichloropropane	ND	0.5
cis-1,3-Dichloropropene	ND	0.3
Trichloroethene	ND	0.4
Dibromochloromethane	ND	0.2
1,1,2-Trichloroethane	ND	0.4
Benzene	ND	0.2
trans-1,3-Dichloropropene	ND	0.3
2-Chloroethyl Vinyl Ether	ND	0.5
Bromoform	ND	0.3
Tetrachloroethene	ND	0.1
1,1,2,2-Tetrachloroethane	ND	0.3
Toluene	0.3	0.2
Chlorobenzene	ND	0.1
Ethylbenzene	ND	0.2
Xylene (Total)	ND	1.0

Client ID: **GP-6W**
Site: NBB-V12

Lab Sample No: **81213**
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/05/98
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f3725.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
TENTATIVELY IDENTIFIED COMPOUNDS
METHOD 624

	COMPOUND NAME	RT	EST. CONC. ug/l	Q
1.	Unknown Ketone	12.92	22	
2.	Decahydromethylnaphthalene isomer	16.93	14	
3.	Coeluting Aromatic/Alkane	17.63	18	
4.	Coeluting Aromatic/Alkane	17.89	16	
5.	Unknown Alkane	18.12	18	
6.	Unknown Alkane	18.80	29	
7.	Tetrahydromethylnaphthalene isomer	19.17	16	
8.	2,3-dihydro-dimethyl-1H-Indene isomer	19.29	22	
9.	Coeluting Aromatic/Alkane	19.55	16	
10.	Unknown Alkane	20.04	12	
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

TOTAL ESTIMATED CONCENTRATION	183

850930501

Data File: /chem/VOAMS6.i/624/08-28-98/04sep98.b/f3725.d
Report Date: 05-Sep-98 09:20:28

Envirotech Research, Inc.

VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/VOAMS6.i/624/08-28-98/04sep98.b/f3725.d
Lab Smp Id: 81213 Client Smp ID: GP-6W
Inj Date : 05-SEP-98 01:08:00
Operator : VOAMS 7 Inst ID: VOAMS6.i
Smp Info : 81213;
Misc Info : G893;8121;;DRL
Comment :
Method : /chem/VOAMS6.i/624/08-28-98/04sep98.b/624.m
Meth Date : 04-Sep-98 13:01:48 Quant Type: ISTD
Cal Date : 28-AUG-98 11:49:00 Cal File: f3415.d
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PPVOAv.sub
Target Version: 3.20
Procesing Host: hpvoa

Concentration Formula: 5/Vo

Name	Value	Description
Vo	5.000	Sample Volume

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
*	2 Bromochloromethane	128	9.078	9.062	(1.000)	805692	30	
$	16 1,2-Dichloroethane-d4 (SUR)	104	9.820	9.804	(0.950)	161147	29	29
*	19 1,4-Difluorobenzene	114	10.339	10.324	(1.000)	2530522	30	
$	37 Toluene-d8 (SUR)	98	12.209	12.194	(1.181)	2190010	30	30
	38 Toluene	91	12.298	12.283	(1.189)	24996	0.33	0.33
*	32 Chlorobenzene-d5	117	13.931	13.930	(1.000)	1764527	30	
$	41 Bromofluorobenzene (SUR)	95	15.222	15.221	(1.093)	1256220	28	28

850930502

F 23

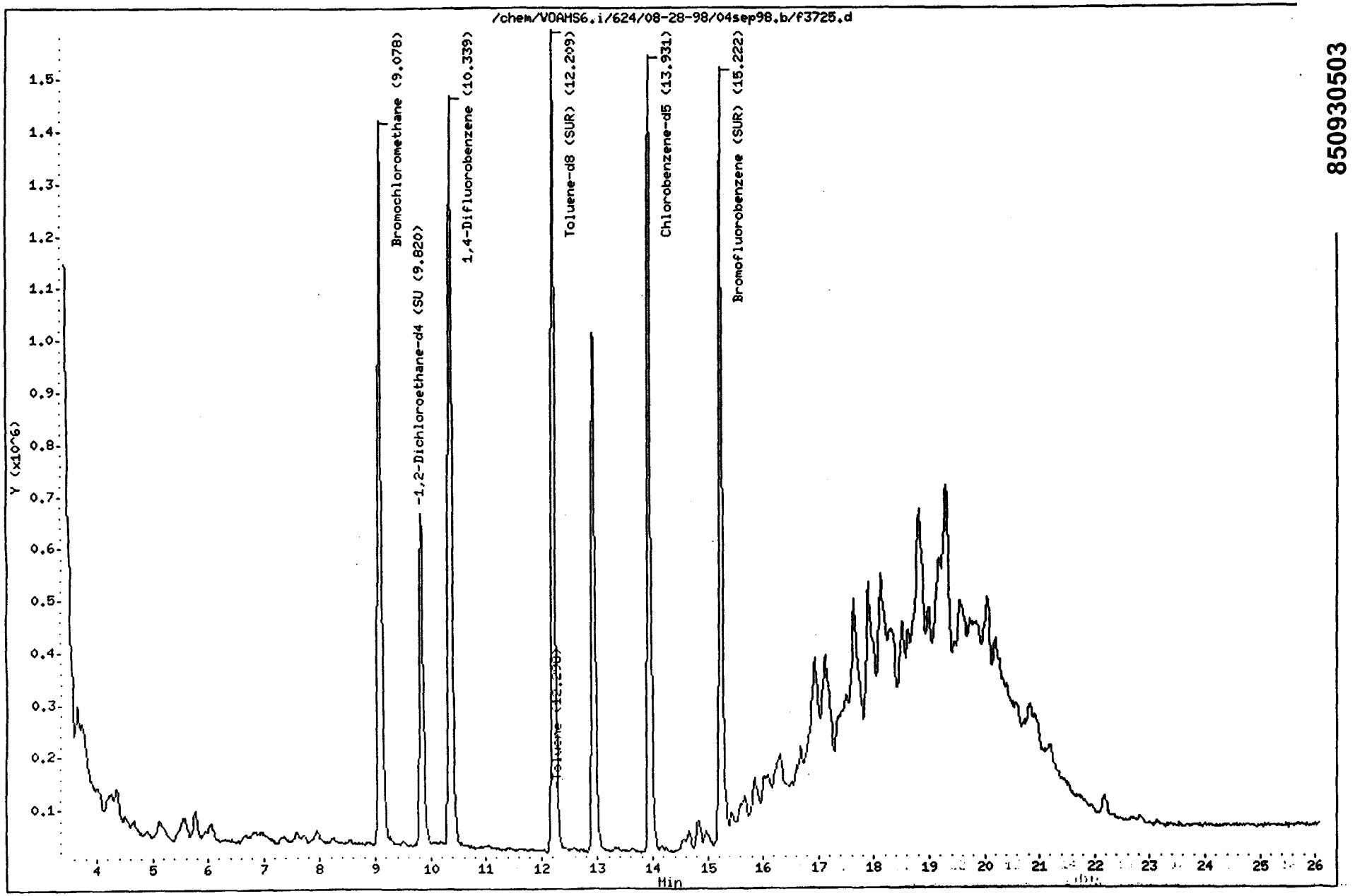
Data File: /chem/VOAHS6.i/624/08-28-98/04sep98.b/f3725.d
Date : 05-SEP-98 01:08:00
Client ID: GP-6W
Sample Info: 81213;
Purge Volume: 5.0
Column phase: DB624

Instrument: VOAHS6.i

Operator: VOAHS 7
Column diameter: 0.53

F 34

850930503



Data File: /chem/VOAMS6.i/624/08-28-98/04sep98.b/f3725.d

Date : 05-SEP-98 01:08:00

Client ID: GP-6W

Instrument: VOAMS6.i

Sample Info: S1213;

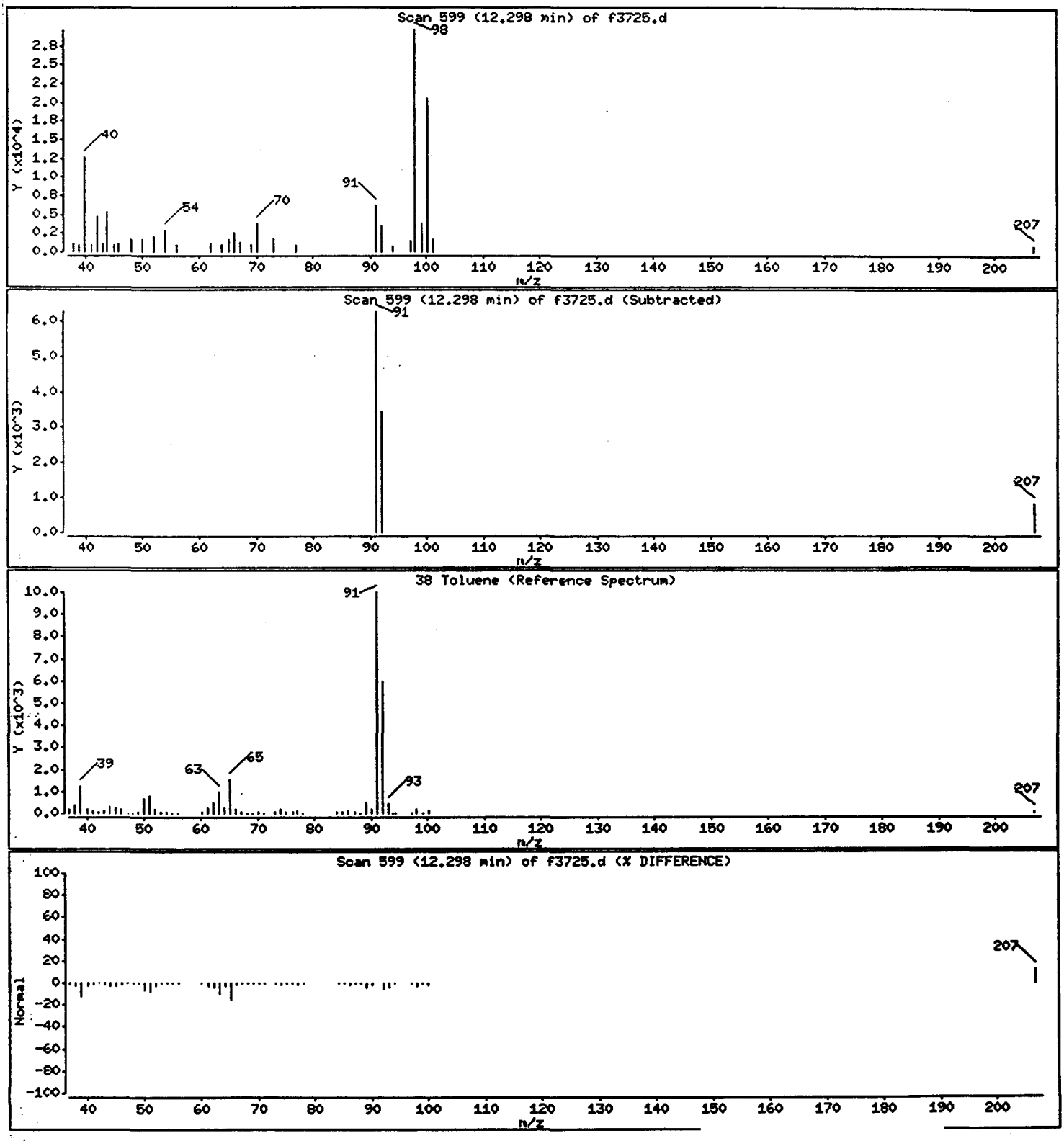
Purge Volume: 5.0

Operator: VOAMS 7

Column phase: DB624

Column diameter: 0.53

38 Toluene



850930504

F 241

Data File: /chem/VOAMS6.i/624/08-28-98/04sep98.b/f3725.d

Date : 05-SEP-98 01:08:00

Client ID: GP-6W

Instrument: VOAMS6.i

Sample Info: 61213;

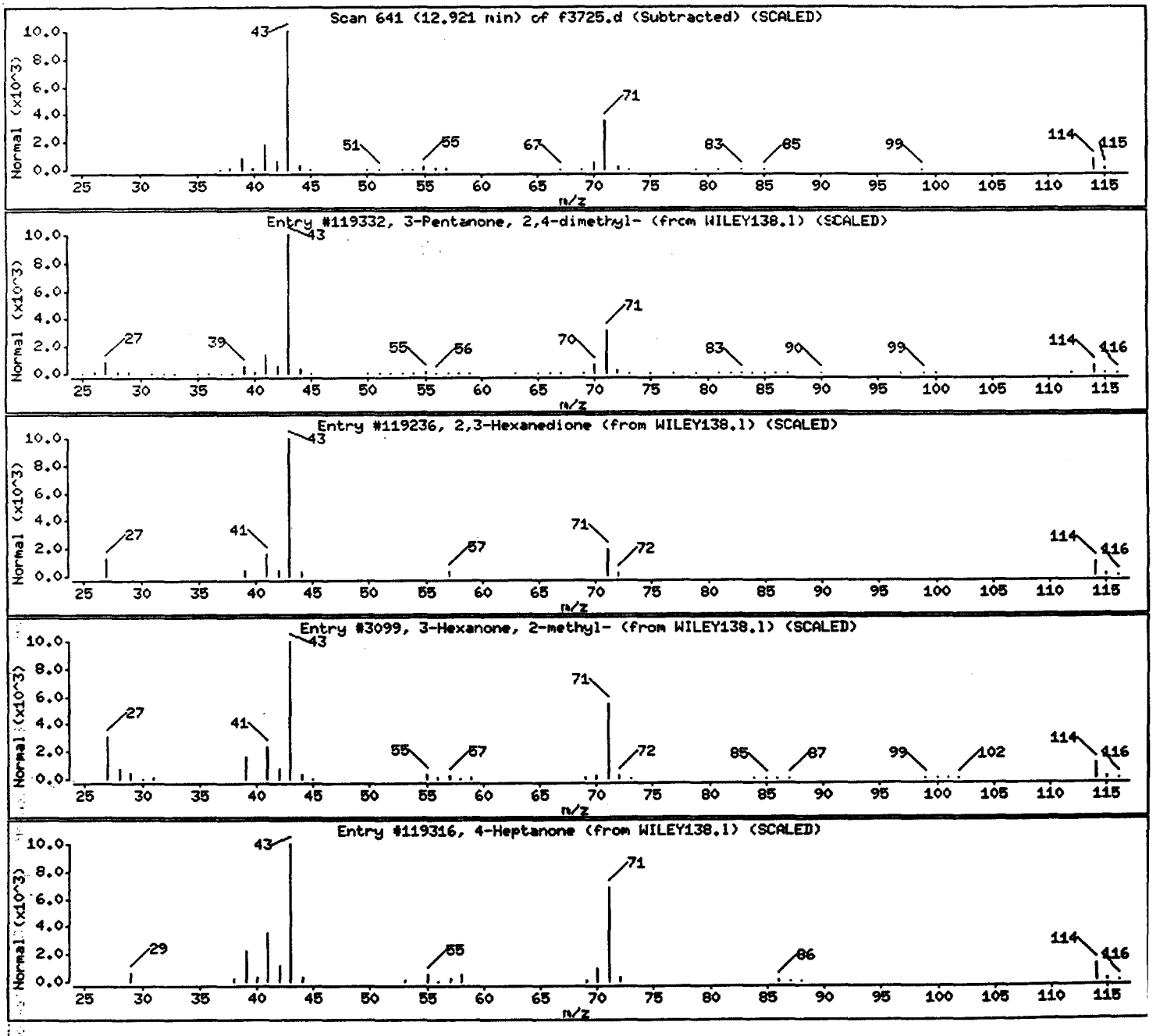
Purge Volume: 5.0

Operator: VOAMS 7

Column phase: DB624

Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Ketone						
3-Pentanone, 2,4-dimethyl-	565-80-0	WILEY138.l	119332	87	C7H140	114
2,3-Hexanedione	3848-24-6	WILEY138.l	119236	72	C6H1002	114
3-Hexanone, 2-methyl-	7379-12-6	WILEY138.l	3099	53	C7H140	114
4-Heptanone	123-19-3	WILEY138.l	119316	53	C7H140	114



850930505

Data File: /chem/VOAMS6.i/624/08-28-98/04sep98.b/f3725.d

Date : 05-SEP-98 01:08:00

Client ID: GP-6W

Instrument: VOAMS6.i

Sample Info: 81213;

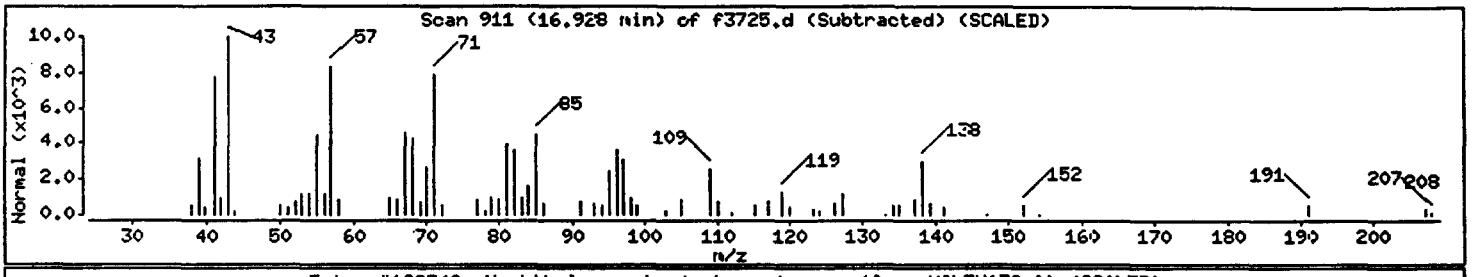
Purge Volume: 5.0

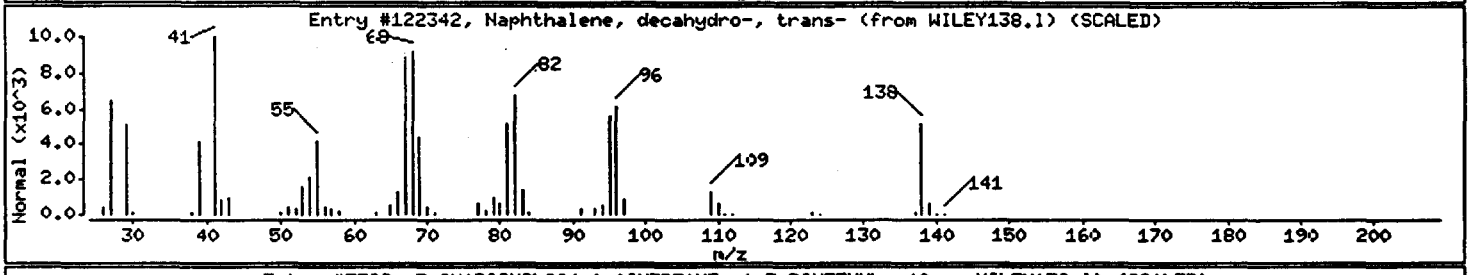
Operator: VOAMS 7

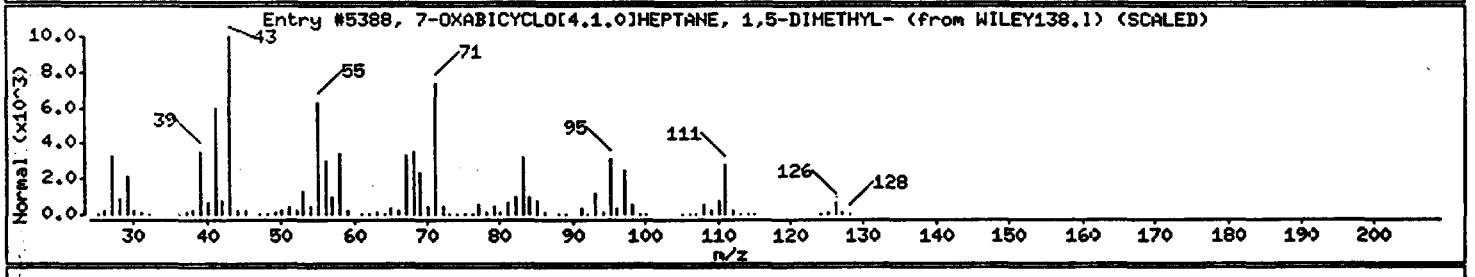
Column phase: DB624

Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Decahydromethylnaphthalene iscmer						
Naphthalene, decahydro-, trans-	493-02-7	WILEY138.l	122342	46	C10H18	138
7-OXABICYCLO[4.1.0]HEPTANE, 1,5-DIMETHYL	0-00-0	WILEY138.l	5388	46	C8H14O	126







850930506

...F243

Data File: /chem/VOAMS6.i/624/08-28-98/04sep98.b/f3725.d

Date : 05-SEP-98 01:08:00

Client ID: GP-6W

Instrument: VOAMS6.i

Sample Info: 81213;

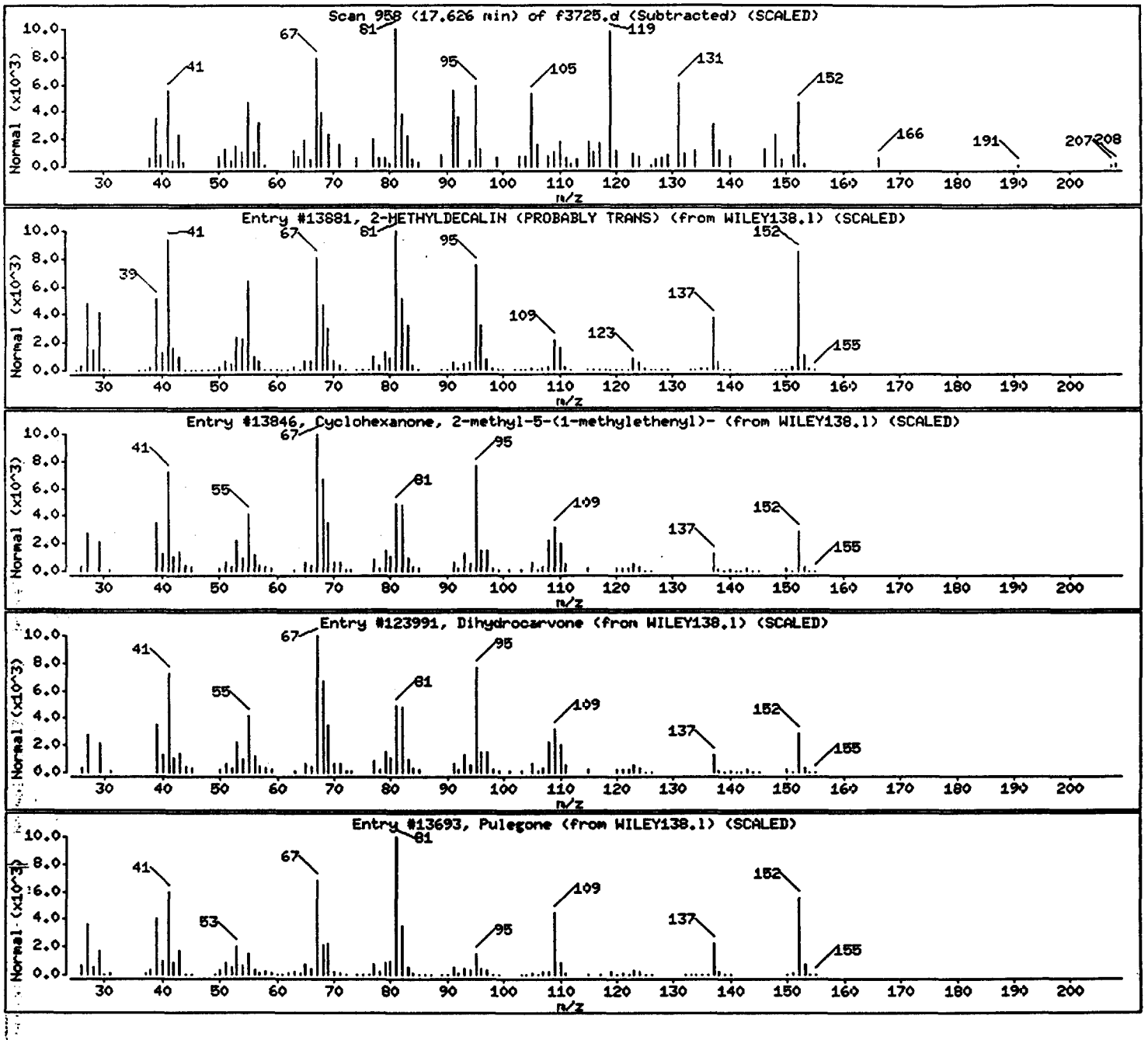
Purge Volume: 5.0

Operator: VOAMS 7

Column phase: DB624

Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Coeluting Aromatic/Alkane						
2-METHYLDECALIN (PROBABLY TRANS)	2958-76-1	WILEY138.1	13881	55	C11H20	152
Cyclohexanone, 2-methyl-5-(1-methylethen	7764-50-3	WILEY138.1	13846	46	C10H16O	152
Dihydrocarvone	5948-04-9	WILEY138.1	123991	46	C10H16O	152
Pulegone	89-82-7	WILEY138.1	13693	46	C10H16O	152



850930507

Data File: /chem/VOAMS6.i/624/08-28-98/04sep98.b/f3725.d

Date : 05-SEP-98 01:08:00

Client ID: GP-6W

Instrument: VOAMS6.i

Sample Info: 81213;

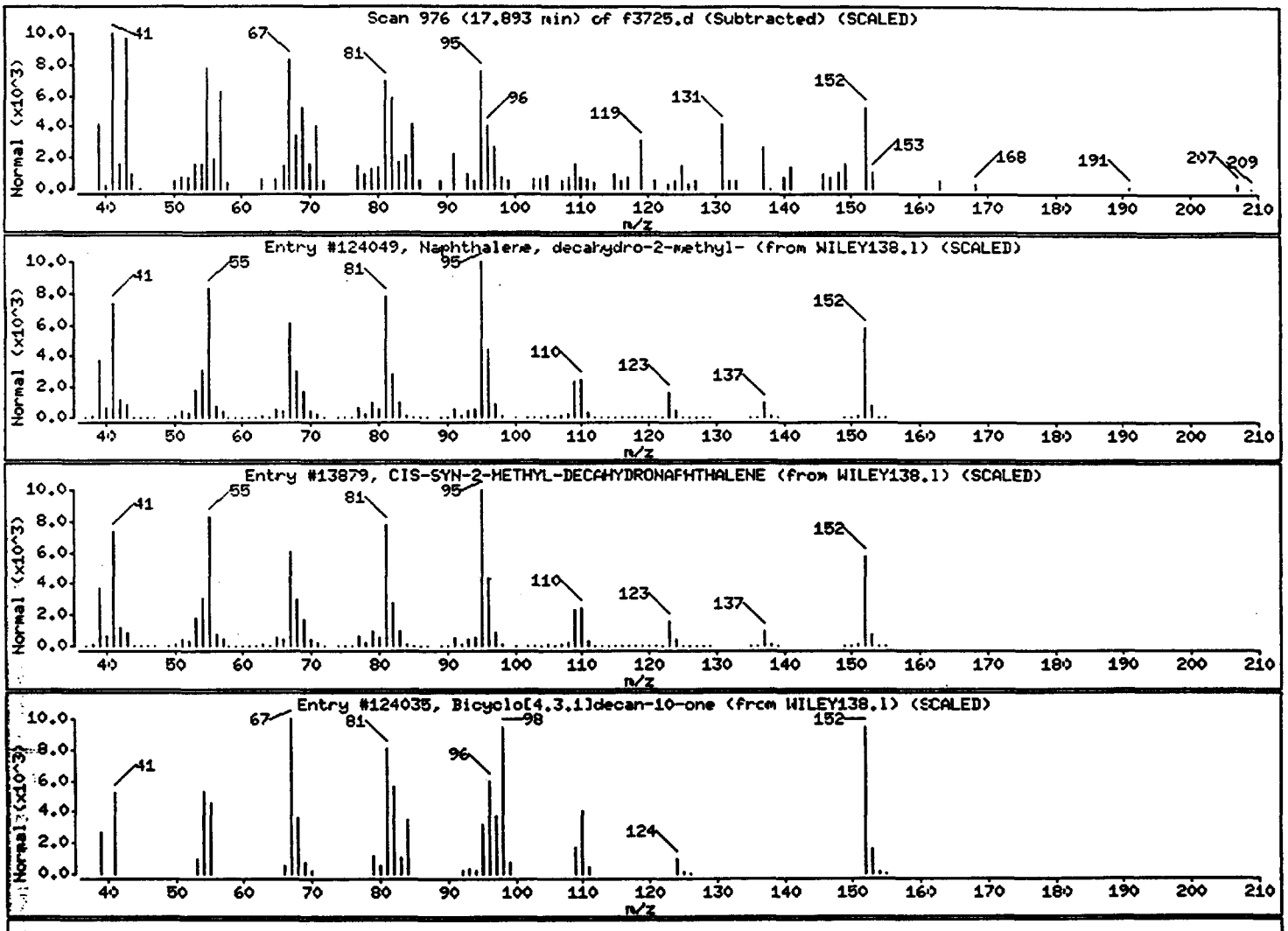
Purge Volume: 5.0

Operator: VOAMS 7

Column phase: DB624

Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Coeluting Aromatic/Alkane						
Naphthalene, decahydro-2-methyl-	2958-76-1	WILEY138.1	124049	50	C11H20	152
CIS-SYN-2-METHYL-DECAHYDRONAPHTHALENE	0-00-0	WILEY138.1	13879	50	C11H20	152
Bicyclo[4.3.1]decan-10-one	20440-21-5	WILEY138.1	124035	45	C10H160	152



850930508

F 24

Data File: /chem/VOAMS6.i/624/08-28-98/04sep98.b/f3725.d

Date : 05-SEP-98 01:08:00

Client ID: GP-6W

Instrument: VOAMS6.i

Sample Info: 81213;

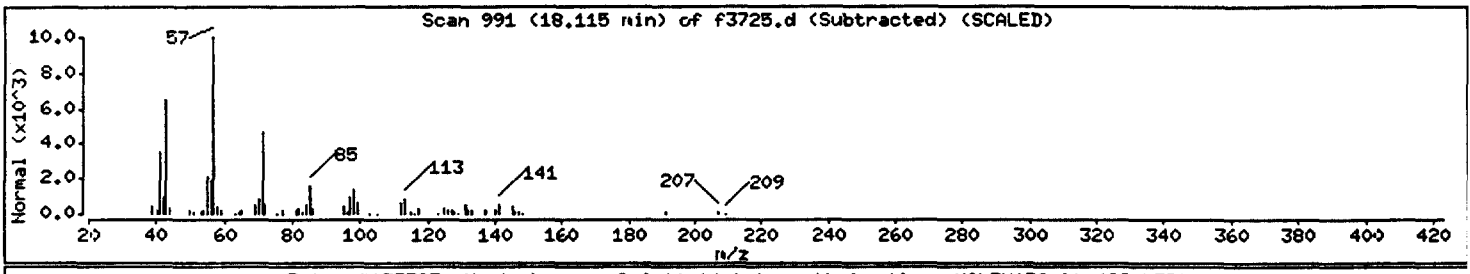
Purge Volume: 5.0

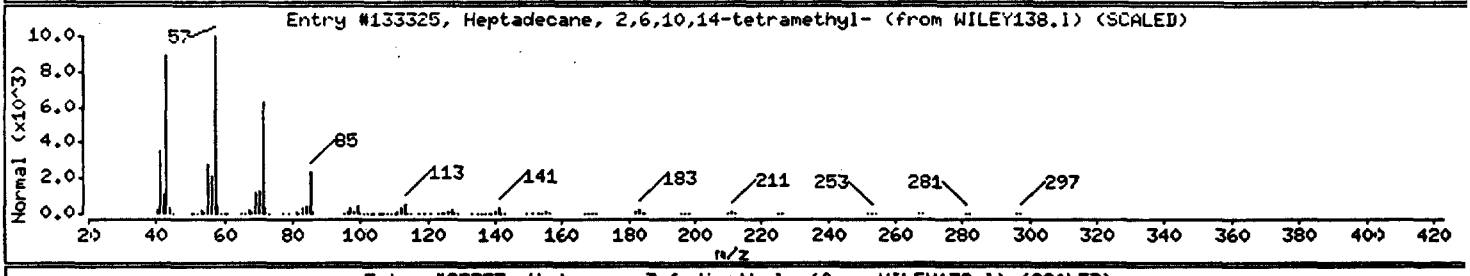
Operator: VOAMS 7

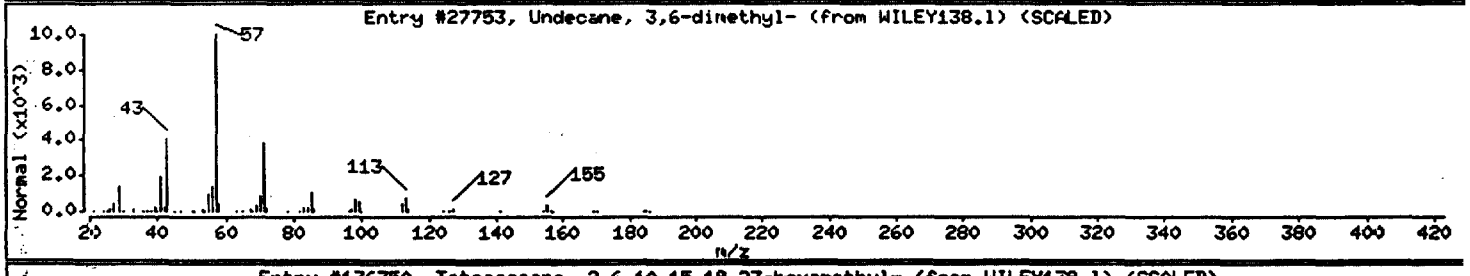
Column phase: DB624

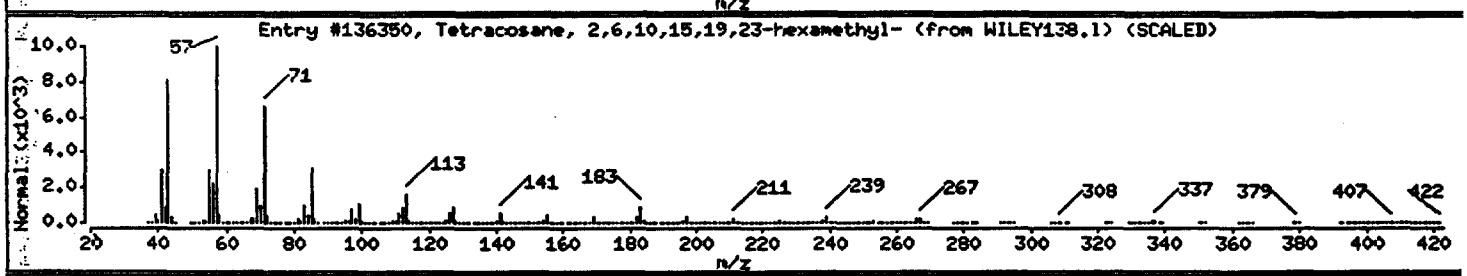
Column diameter: 0.53

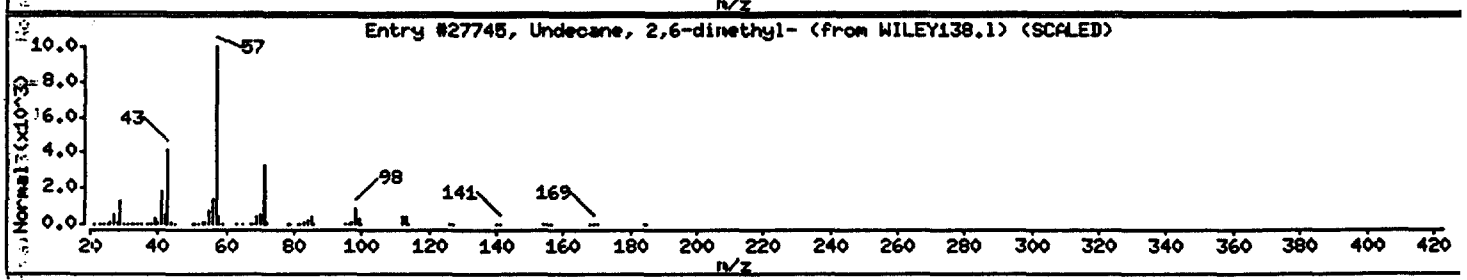
Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Alkane						
Heptadecane, 2,6,10,14-tetramethyl-	18344-37-1	WILEY138.1	133325	64	C21H44	296
Undecane, 3,6-dimethyl-	17301-28-9	WILEY138.1	27753	59	C13H28	184
Tetracosane, 2,6,10,15,19,23-hexamethyl-	111-01-3	WILEY138.1	136350	53	C30H62	422
Undecane, 2,6-dimethyl-	17301-23-4	WILEY138.1	27745	53	C13H28	184











850930509

Data File: /chem/VOAMS6.i/624/08-28-98/04sep98.b/f3725.d

Date : 05-SEP-98 01:08:00

Client ID: GP-6W

Instrument: VOAMS6.i

Sample Info: 81213;

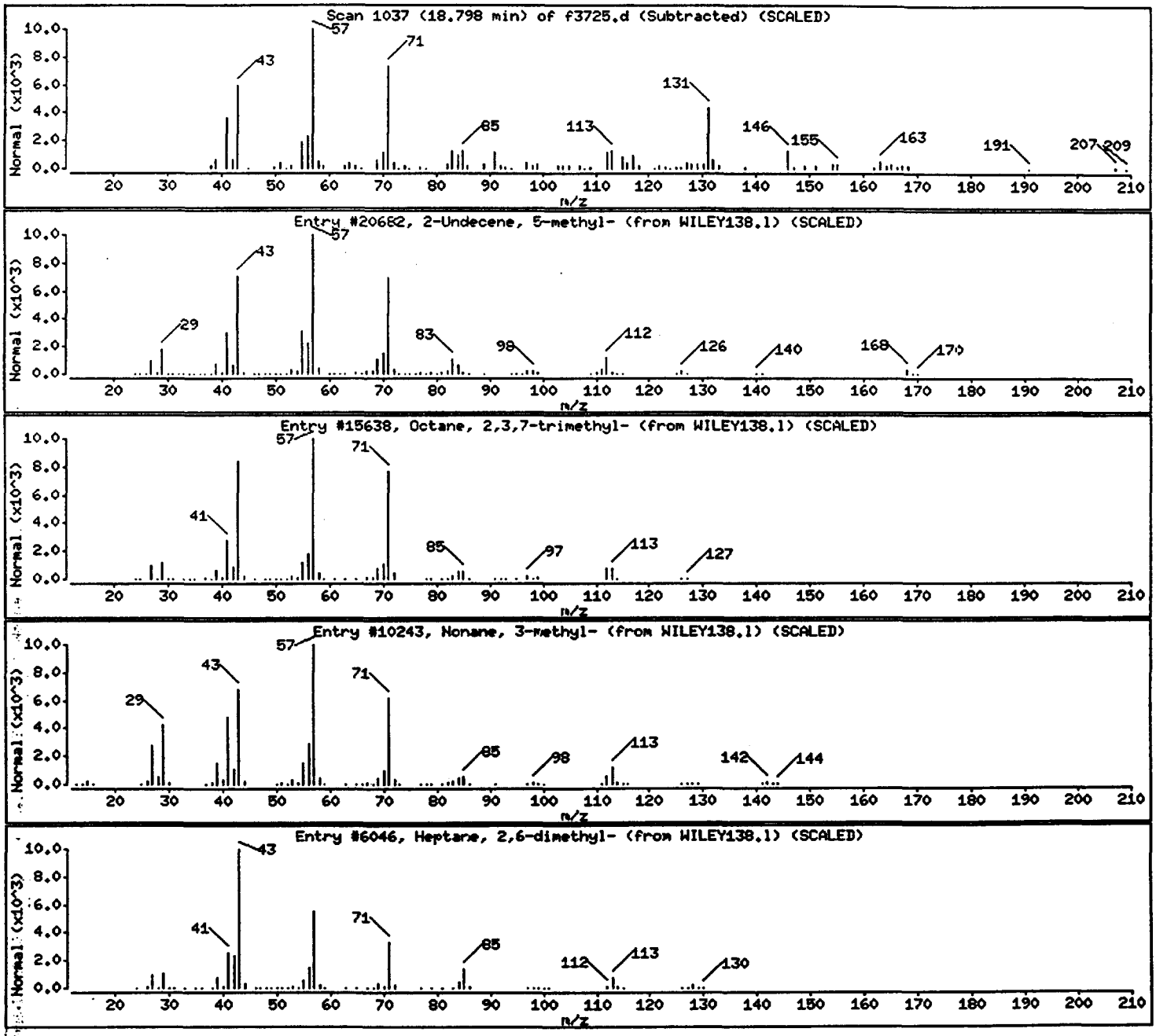
Purge Volume: 5.0

Operator: VOAMS 7

Column phase: DB624

Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Alkane						
2-Undecene, 5-methyl-	56851-34-4	WILEY138.l	20682	64	C12H24	168
Octane, 2,3,7-trimethyl-	62016-34-6	WILEY138.l	15638	53	C11H24	156
Nonane, 3-methyl-	5911-04-6	WILEY138.l	10243	53	C10H22	142
Heptane, 2,6-dimethyl-	1072-05-5	WILEY138.l	6046	49	C9H20	128



850930510

F 247

Data File: /chem/VOAMS6.i/624/08-28-98/04sep98.b/f3725.d

Date : 05-SEP-98 01:08:00

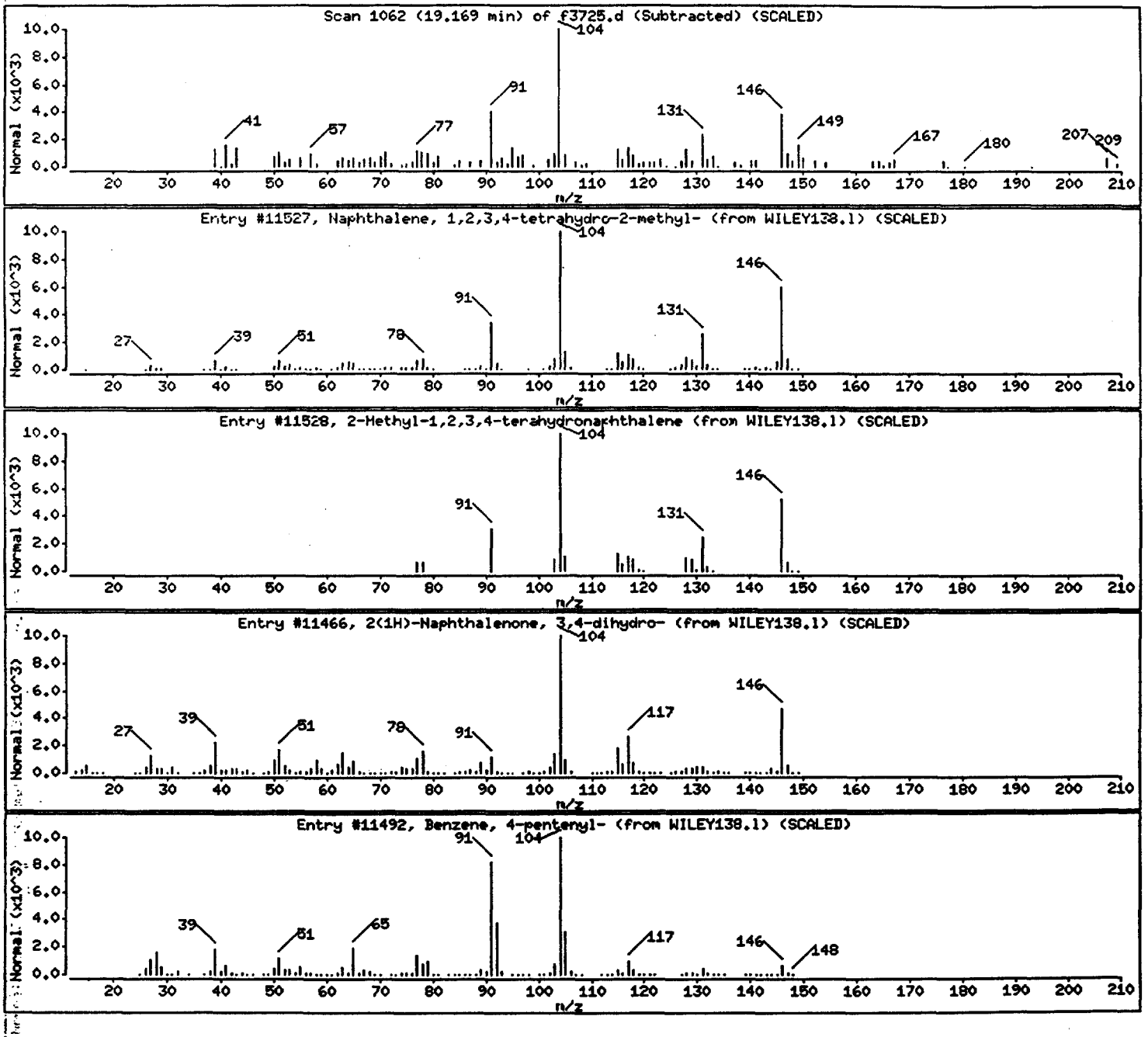
Client ID: GP-6W Instrument: VOAMS6.i

Sample Info: 81213;

Purge Volume: 5.0 Operator: VOAMS 7

Column phase: DB624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Tetrahydromethylnaphthalene isomer						
Naphthalene, 1,2,3,4-tetrahydro-2-methyl	3877-19-8	WILEY138.1	11527	90	C11H14	146
2-Methyl-1,2,3,4-terahydronaphthalene	67519-35-1	WILEY138.1	11528	81	C11H14	146
2(1H)-Naphthalenone, 3,4-dihydro-	530-93-8	WILEY138.1	11466	58	C10H10O	146
Benzene, 4-pentenyl-	1075-74-7	WILEY138.1	11492	53	C11H14	146



850930511

 F248

Data File: /chem/VOAMS6.i/624/08-28-98/04sep98.b/f3725.d

Date : 05-SEP-98 01:08:00

Client ID: CP-6W

Instrument: VOAMS6.i

Sample Info: 81213;

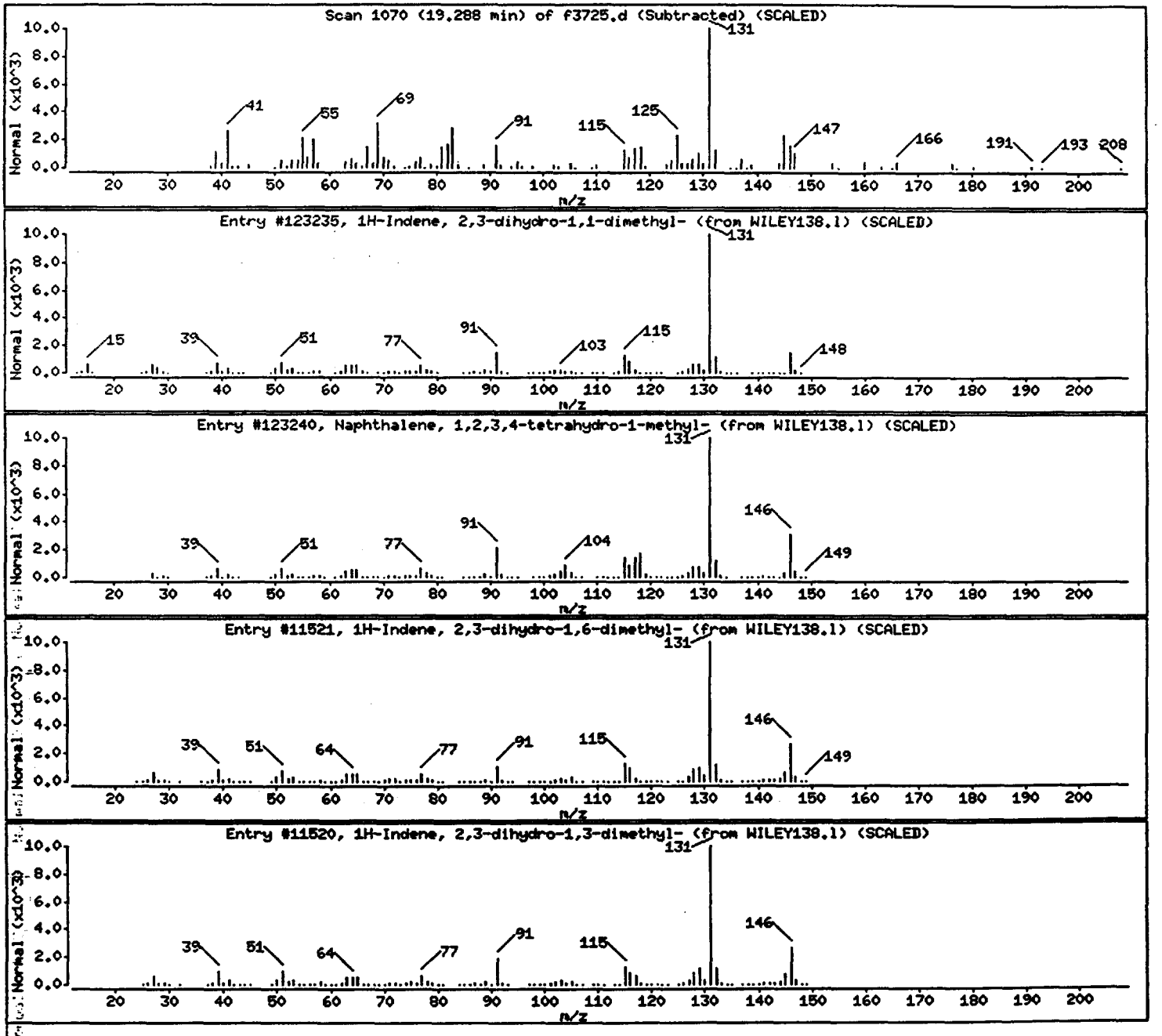
Purge Volume: 5.0

Operator: VOAMS 7

Column phase: DB624

Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2,3-dihydro-dimethyl-1H-Indene isomer						
1H-Indene, 2,3-dihydro-1,1-dimethyl-	4912-92-9	WILEY138.1	123235	87	C11H14	146
Naphthalene, 1,2,3,4-tetrahydro-1-methyl	1559-81-5	WILEY138.1	123240	64	C11H14	146
1H-Indene, 2,3-dihydro-1,6-dimethyl-	17059-48-2	WILEY138.1	11521	60	C11H14	146
1H-Indene, 2,3-dihydro-1,3-dimethyl-	4175-53-5	WILEY138.1	11520	60	C11H14	146



850930512

F24

Data File: /chem/VOAMS6.i/624/08-28-98/04sep98.b/f3725.d

Date : 05-SEP-98 01:08:00

Client ID: GP-6W

Instrument: VOAMS6.i

Sample Info: 81213;

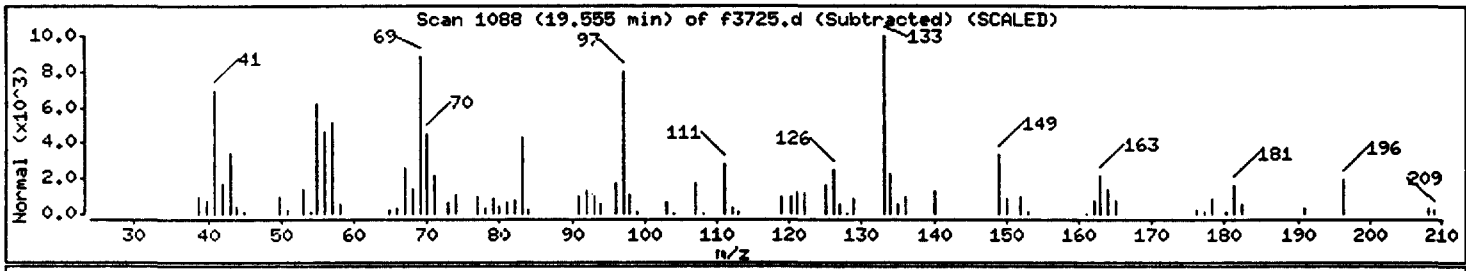
Purge Volume: 5.0

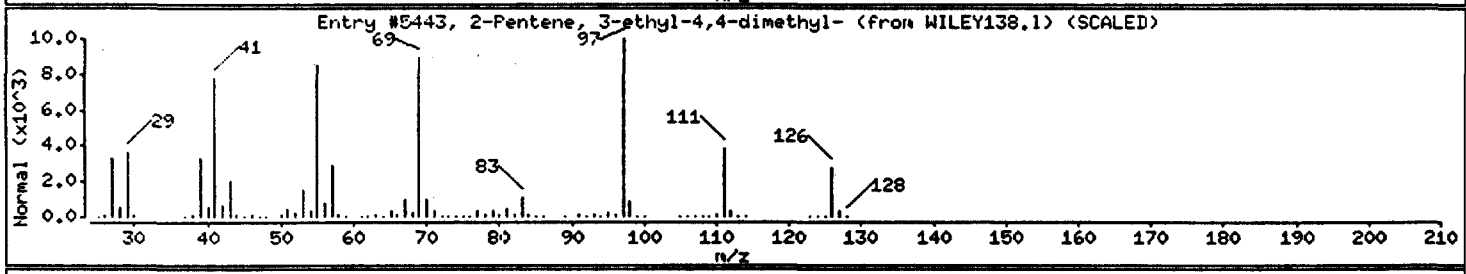
Operator: VOAMS 7

Column phase: DB624

Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Coeluting Aromatic/Alkane						
2-Pentene, 3-ethyl-4,4-dimethyl-	53907-59-8	WILEY138.1	5443	50	C9H18	126





850930513

F 250

Data File: /chem/VOAMS6.i/624/08-28-98/04sep98.b/f3725.d

Date : 05-SEP-98 01:08:00

Client ID: GP-6W

Instrument: VOAMS6.i

Sample Info: 81213;

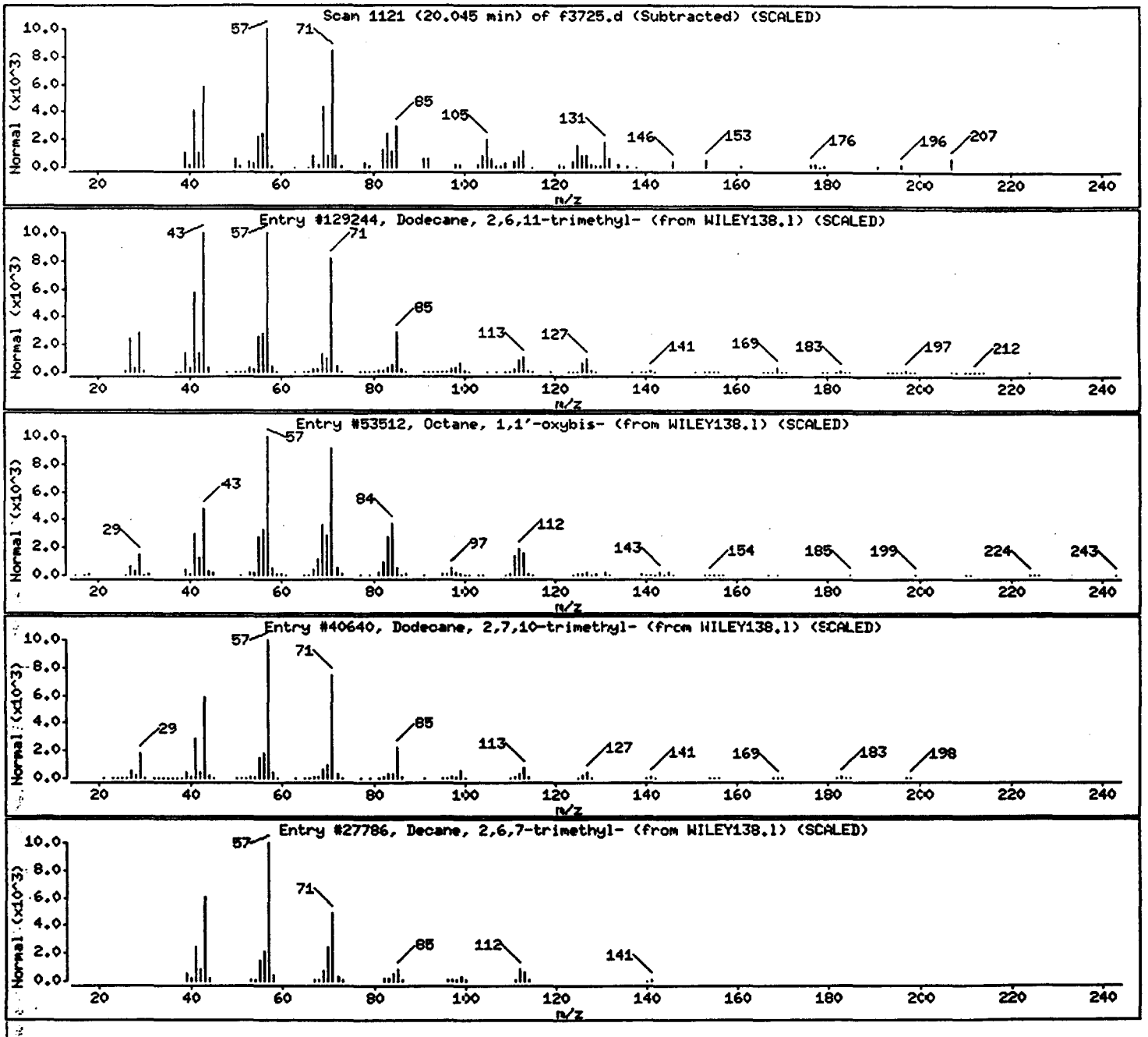
Purge Volume: 5.0

Operator: VOAMS 7

Column phase: DB624

Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Alkane						
Dodecane, 2,6,11-trimethyl-	31295-56-4	WILEY138.1	129244	53	C15H32	212
Octane, 1,1'-oxybis-	629-82-3	WILEY138.1	53512	53	C16H340	242
Dodecane, 2,7,10-trimethyl-	74645-98-0	WILEY138.1	40640	50	C15H32	212
Decane, 2,6,7-trimethyl-	62108-25-2	WILEY138.1	27786	50	C13H28	184



850930514

F 251

Client ID: **GP-7**
Site: NBB-V12

Lab Sample No: **81214**
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/14/98
GC Column: DB624
Instrument ID: VOAMS5.i
Lab File ID: e3960.d

Matrix: SOIL
Level: HIGH
Sample Weight: 11.0 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 65

VOLATILE ORGANICS - GC/MS
METHOD 8260B

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
Chloromethane	ND	1600
Bromomethane	ND	1600
Vinyl Chloride	ND	1600
Chloroethane	ND	1600
Methylene Chloride	ND	970
Trichlorofluoromethane	ND	1600
1,1-Dichloroethene	ND	640
1,1-Dichloroethane	ND	1600
trans-1,2-Dichloroethene	ND	1600
cis-1,2-Dichloroethene	ND	1600
Chloroform	ND	1600
1,2-Dichloroethane	ND	640
1,1,1-Trichloroethane	ND	1600
Carbon Tetrachloride	ND	640
Bromodichloromethane	ND	320
1,2-Dichloropropane	ND	320
cis-1,3-Dichloropropene	ND	1600
Trichloroethene	ND	320
Dibromochloromethane	ND	1600
1,1,2-Trichloroethane	ND	970
Benzene	ND	320
trans-1,3-Dichloropropene	ND	1600
2-Chloroethyl Vinyl Ether	ND	1600
Bromoform	ND	1300
Tetrachloroethene	ND	320
1,1,2,2-Tetrachloroethane	ND	320
Toluene	ND	1600
Chlorobenzene	ND	1600
Ethylbenzene	ND	1300
Xylene (Total)	ND	1600

850930515

F 252

Client ID: GP-7
Site: NBB-V12

Lab Sample No: 81214
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/14/98
GC Column: DB624
Instrument ID: VOAMS5.i
Lab File ID: e3960.d

Matrix: SOIL
Level: HIGH
Sample Weight: 11.0 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 64.8

VOLATILE ORGANICS - GC/MS
TENTATIVELY IDENTIFIED COMPOUNDS
METHOD 8260B

	COMPOUND NAME	RT	EST. CONC. ug/kg	Q
1.	Unknown Alkane	13.91	1700	
2.	C7H14 Cycloalkane	15.14	2400	
3.	Unknown Siloxane	15.90	6800	
4.	Unknown Alkane	16.20	1900	
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

TOTAL ESTIMATED CONCENTRATION	12800

Data File: /chem/VOAMS5.i/8260HIGH_SP/09-10-98/14sep98.b/e3960.d
Report Date: 15-Sep-98 16:32:29

Envirotech Research, Inc.

VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/VOAMS5.i/8260HIGH_SP/09-10-98/14sep98.b/e3960.d
Lab Smp Id: 81214 Client Smp ID: GP-7
Inj Date : 14-SEP-98 20:27:00
Operator : VOAMS 5 Inst ID: VOAMS5.i
Smp Info : 81214;50;64.8;11;25
Misc Info : G893;6010;TL
Comment :
Method : /chem/VOAMS5.i/8260HIGH_SP/09-10-98/14sep98.b/8260b-HIGH.m
Meth Date : 14-Sep-98 12:50:56 Quant Type: ISTD
Cal Date : 10-SEP-98 10:06:00 Cal File: e3836.d
Als bottle: 17
Dil Factor: 50.00000
Integrator: HP RTE Compound Sublist: PPVOA.sub
Target Version: 3.20
Procesing Host: hpvoa

Concentration Formula: (Vt/Ws)/((100-M)/100)

Name	Value	Description
Vt	25.000	Volume of final extract (mL)
Ws	11.000	Weight of sample extracted (g)
M	64.800	% Moisture (not decanted)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
$ 16 1,2-Dichloroethane-d4 (SUR)	65	8.659	8.709	(0.949)	378192	50	16000
* 19 Fluorobenzene	96	9.126	9.161	(1.000)	1563233	50	
$ 37 Toluene-d8 (SUR)	98	11.103	11.123	(1.217)	1386494	55	18000
* 32 Chlorobenzene-d5	117	12.784	12.805	(1.000)	1000345	50	
$ 41 Bromofluorobenzene (SUR)	174	14.062	14.083	(1.100)	480539	50	16000
* 91 1,4-Dichlorobenzene-d4	152	15.261	15.299	(1.000)	407570	50	

850930517

Data File: /chem/VOAMS5.i/8260HIGH_SP/09-10-98/14sep98.b/e3960.d
Date : 14-SEP-98 20:27:00
Client ID: GP-7
Sample Info: 81214;50;64.8;11;25

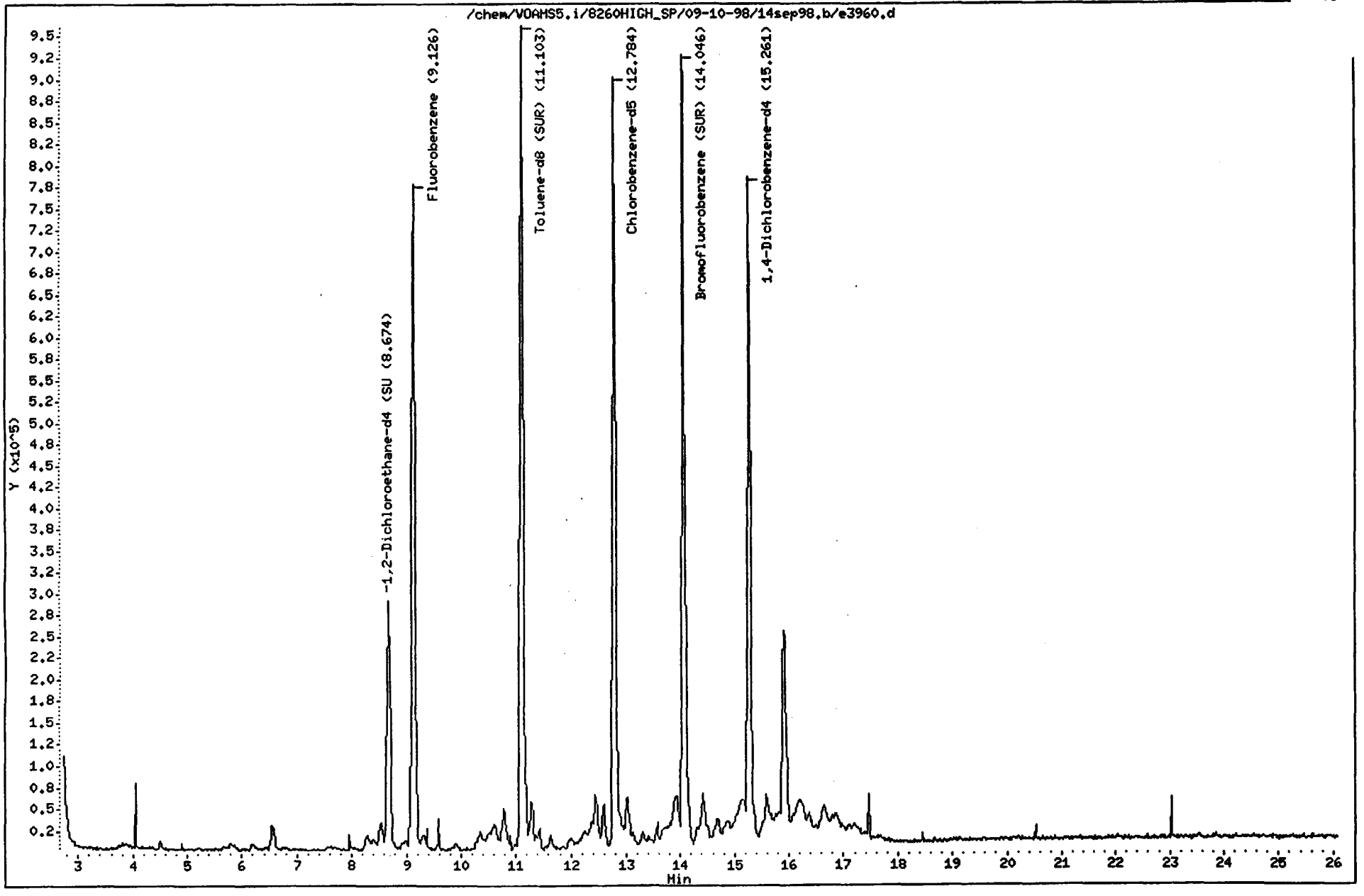
Instrument: VOAMS5.i

Operator: VOAMS 5
Column diameter: 0.53

Column phase: DB624

850930518

F25



Data File: /chem/VOAMS5.i/8260HIGH_SP/09-10-98/14sep98.b/e3960.d

Date : 14-SEP-98 20:27:00

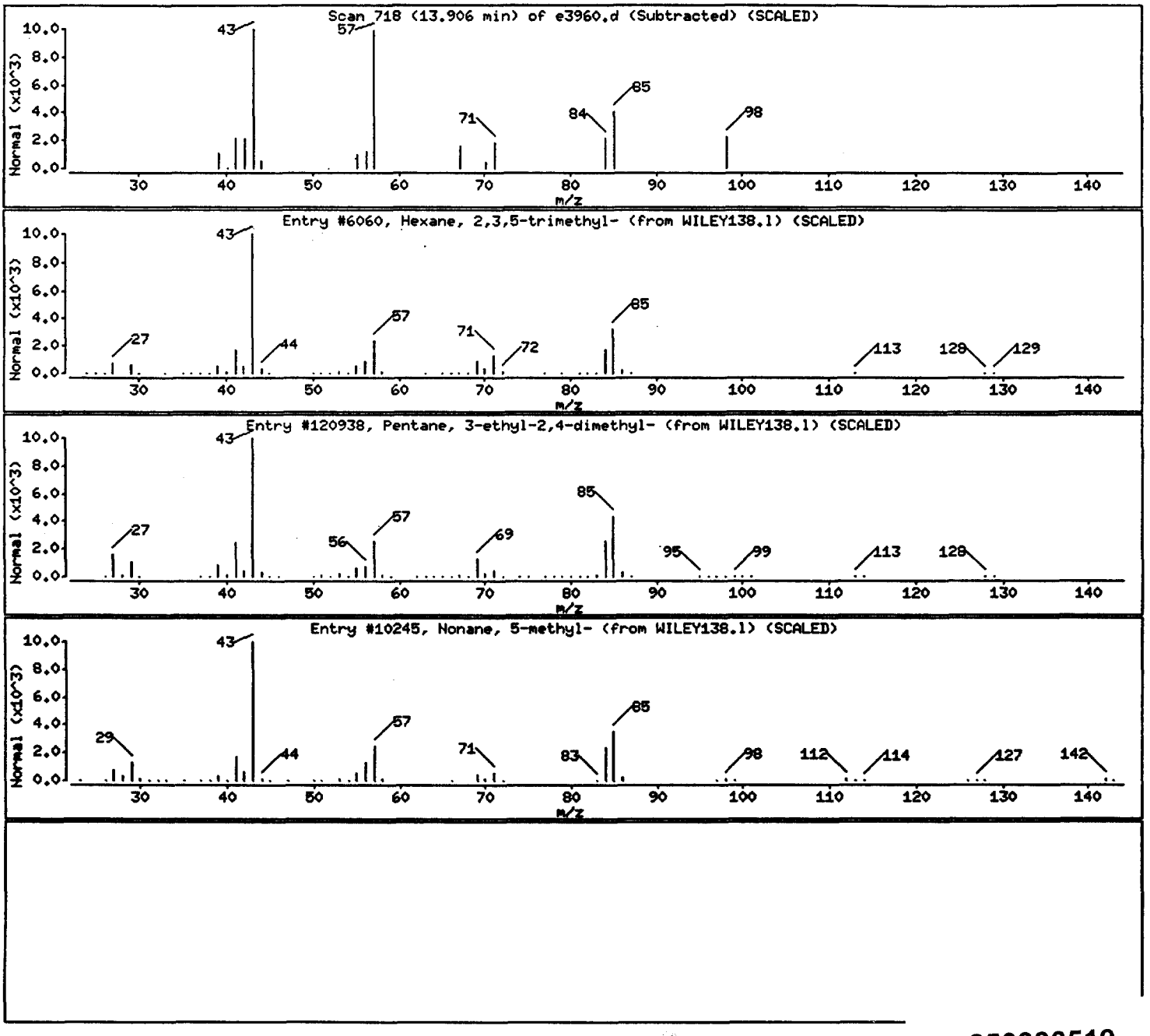
Client ID: GP-7 Instrument: VOAMS5.i

Sample Info: 81214;50;64.8;11;25

Operator: VOAMS 5

Column phase: DB624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Alkane						
Hexane, 2,3,5-trimethyl-	1069-53-0	WILEY138.1	6060	50	C9H20	128
Pentane, 3-ethyl-2,4-dimethyl-	1068-87-7	WILEY138.1	120938	28	C9H20	128
Nonane, 5-methyl-	15869-85-9	WILEY138.1	10245	28	C10H22	142



850930519

F 256

Data File: /chem/VOAHS5.i/8260HIGH_SP/09-10-98/14sep98.b/e3960.d

Date : 14-SEP-98 20:27:00

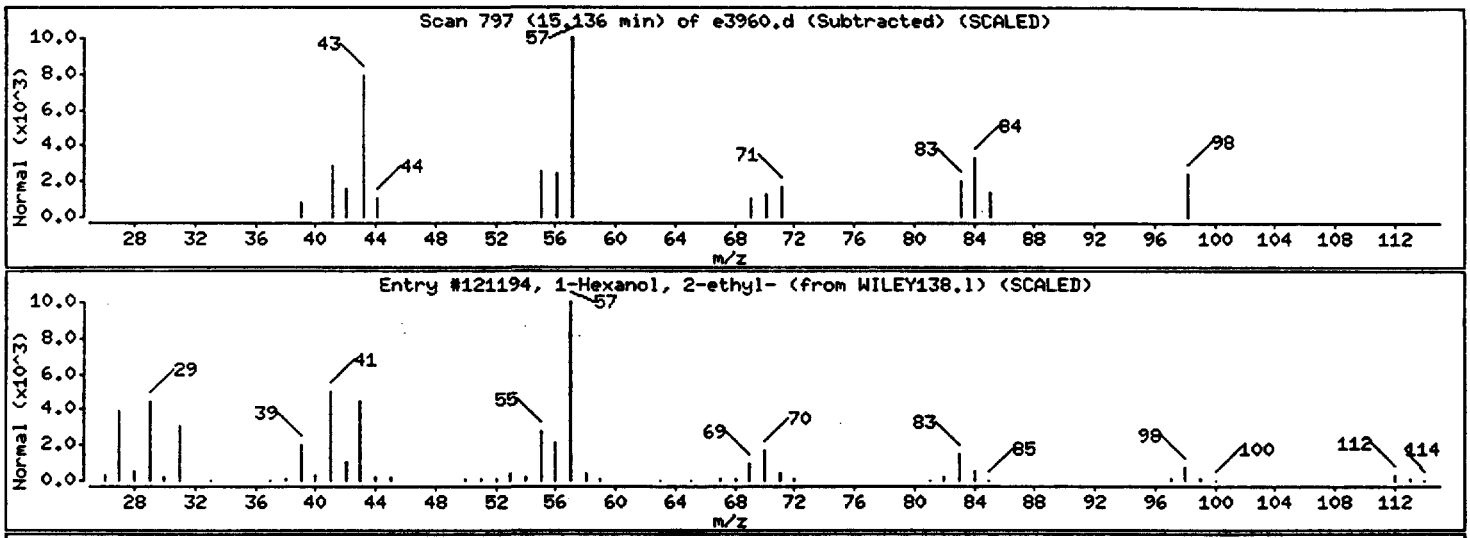
Client ID: GP-7 Instrument: VOAHS5.i

Sample Info: 81214;50;64.8;11;25

Operator: VOAHS 5

Column phase: DB624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
C7H14 Cycloalkane						
1-Hexanol, 2-ethyl-	104-76-7	WILEY138.1	121194	25	C8H18O	130



850930520

F25

Data File: /chem/VOAMS5.i/8260HIGH_SP/09-10-98/14sep98.b/e3960.d

Date : 14-SEP-98 20:27:00

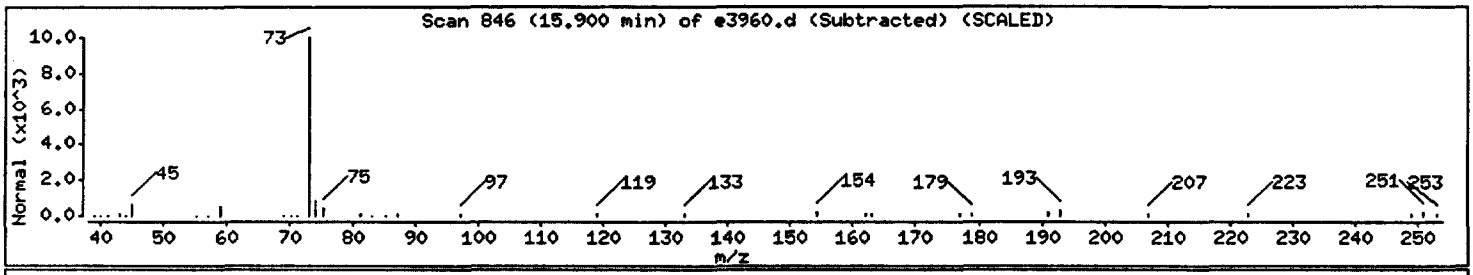
Client ID: GP-7 Instrument: VOAMS5.i

Sample Info: 81214;50;64.8;11;25

Operator: VOAMS 5

Column phase: DB624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Siloxane						
Unknown			0	0		0



850930521

F25

Data File: /chem/VOAMS5.i/8260HIGH_SP/09-10-98/14sep98.b/e3960.d

Date : 14-SEP-98 20:27:00

Client ID: GP-7

Instrument: VOAMS5.i

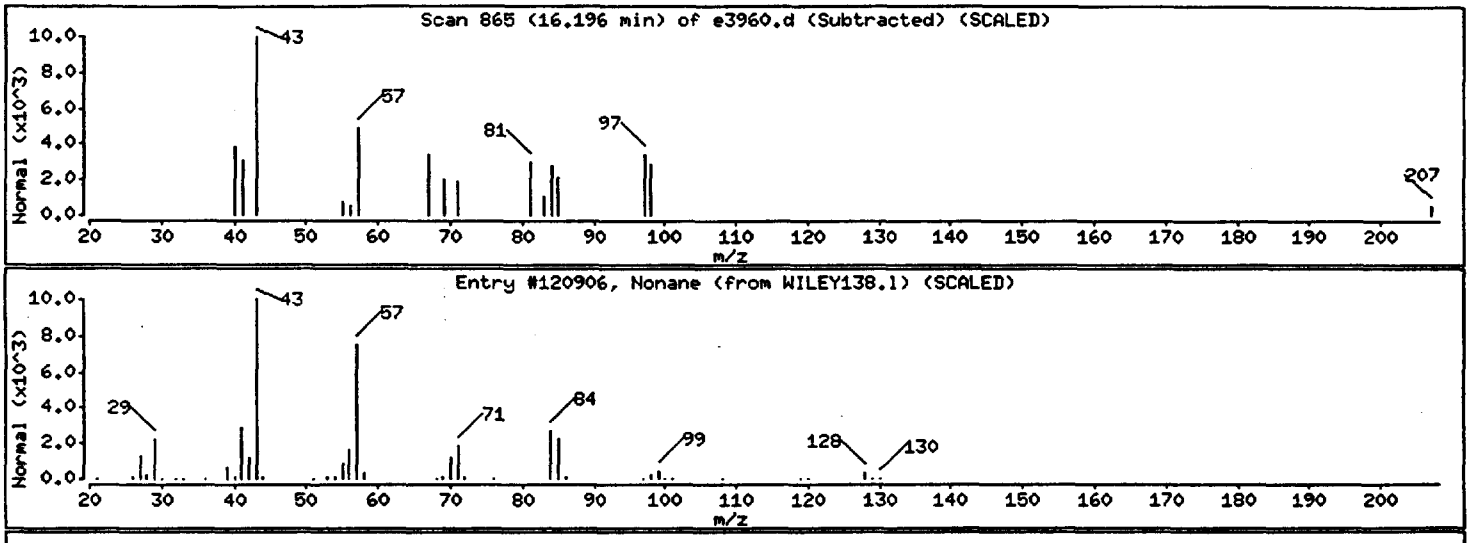
Sample Info: 81214;50;64.8;11;25

Operator: VOAMS 5

Column phase: DB624

Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Alkane						
Nonane	111-84-2	WILEY138.1	120906	23	C9H20	128



850930522

F259

Client ID: GP-7W
Site: NBB-V12

Lab Sample No: 81215
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/05/98
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f3726.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Chloromethane	ND	0.9
Bromomethane	ND	0.3
Vinyl Chloride	ND	0.4
Chloroethane	ND	1.0
Methylene Chloride	ND	1.0
Trichlorofluoromethane	ND	0.2
1,1-Dichloroethene	ND	0.6
1,1-Dichloroethane	ND	0.3
trans-1,2-Dichloroethene	ND	0.3
cis-1,2-Dichloroethene	ND	1.0
Chloroform	ND	0.2
1,2-Dichloroethane	ND	0.2
1,1,1-Trichloroethane	ND	0.2
Carbon Tetrachloride	ND	0.2
Bromodichloromethane	ND	0.2
1,2-Dichloropropane	ND	0.5
cis-1,3-Dichloropropene	ND	0.3
Trichloroethene	ND	0.4
Dibromochloromethane	ND	0.2
1,1,2-Trichloroethane	ND	0.4
Benzene	ND	0.2
trans-1,3-Dichloropropene	ND	0.3
2-Chloroethyl Vinyl Ether	ND	0.5
Bromoform	ND	0.3
Tetrachloroethene	ND	0.1
1,1,2,2-Tetrachloroethane	ND	0.3
Toluene	ND	0.2
Chlorobenzene	ND	0.1
Ethylbenzene	ND	0.2
Xylene (Total)	ND	1.0

Client ID: GP-7W
Site: NBB-V12

Lab Sample No: 81215
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/05/98
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f3726.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
TENTATIVELY IDENTIFIED COMPOUNDS
METHOD 624

	COMPOUND NAME	RT	EST. CONC. ug/l	Q
1.	Unknown Alkane	4.28	3.4	
2.	C5H12 Alkane	5.14	4.0	
3.	C6H14 Alkane	6.97	4.7	
4.	C6H14 Alkane	7.34	3.9	
5.	Unknown	20.89	3.1	
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

TOTAL ESTIMATED CONCENTRATION	19

850930524

F 261

Data File: /chem/VOAMS6.i/624/08-28-98/04sep98.b/f3726.d
Report Date: 05-Sep-98 09:08:11

Envirotech Research, Inc.

VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/VOAMS6.i/624/08-28-98/04sep98.b/f3726.d
Lab Smp Id: 81215 Client Smp ID: GP-7W
Inj Date : 05-SEP-98 01:42:00
Operator : VOAMS 7 Inst ID: VOAMS6.i
Smp Info : 81215;
Misc Info : G893;8121;;DRL
Comment :
Method : /chem/VOAMS6.i/624/08-28-98/04sep98.b/624.m
Meth Date : 04-Sep-98 13:01:48 Quant Type: ISTD
Cal Date : 28-AUG-98 11:49:00 Cal File: f3415.d
Als bottle: 22
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PPVOAv.sub
Target Version: 3.20
Procesing Host: hpvoa

Concentration Formula: 5/Vo

Name	Value	Description
Vo	5.000	Sample Volume

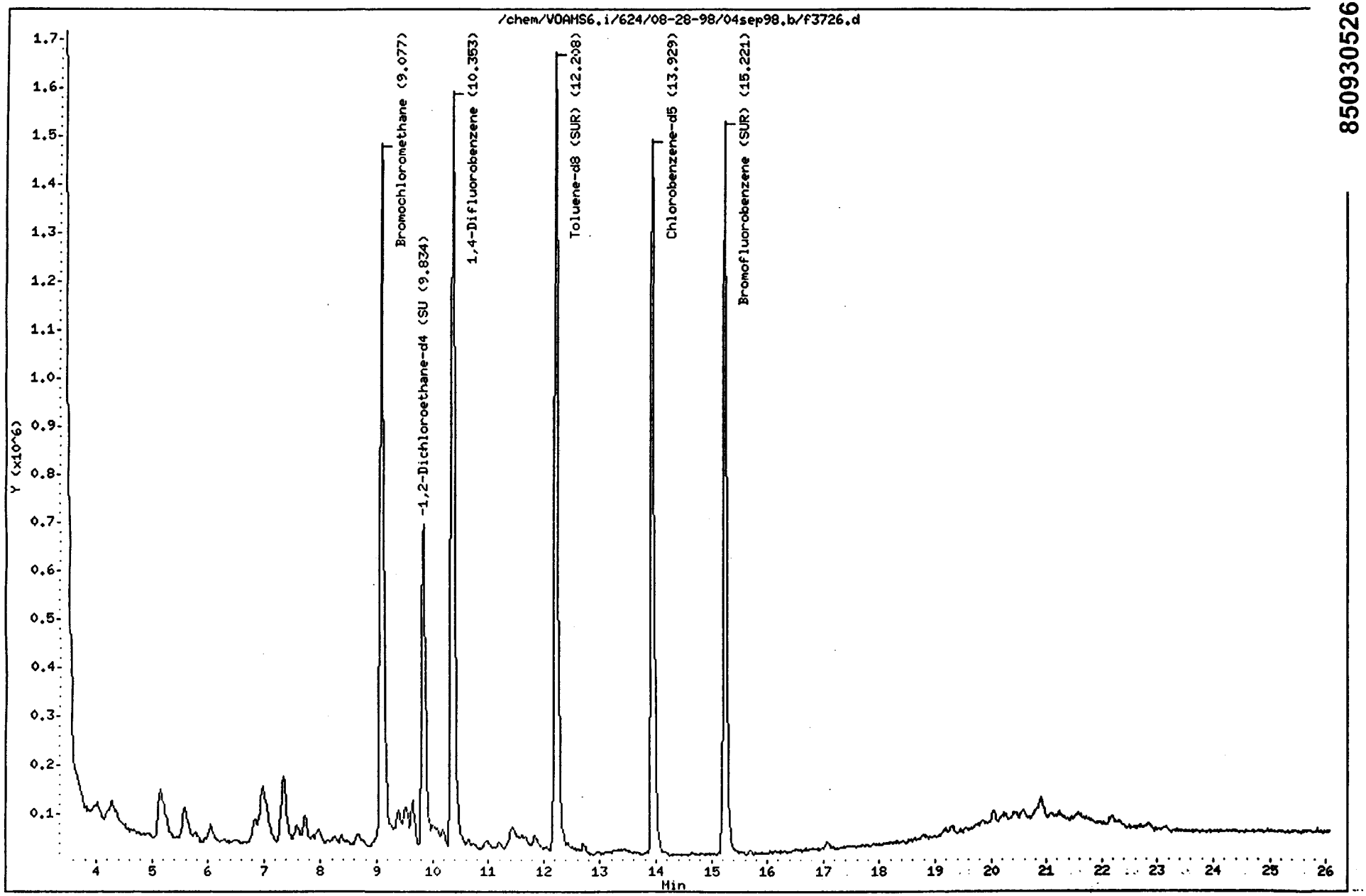
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
* 2 Bromochloromethane	128	9.092	9.062	(1.000)	849127	30	
$ 16 1,2-Dichloroethane-d4 (SUR)	104	9.834	9.804	(0.950)	172215	29	29
* 19 1,4-Difluorobenzene	114	10.353	10.324	(1.000)	2677987	30	
$ 37 Toluene-d8 (SUR)	98	12.208	12.194	(1.179)	2324126	30	30
* 32 Chlorobenzene-d5	117	13.929	13.930	(1.000)	1774846	30	
$ 41 Bromofluorobenzene (SUR)	95	15.221	15.221	(1.093)	1328016	29	29

850930525

F 262

Data File: /chem/VOAMS6.i/624/08-28-98/04sep98.b/f3726.d
Date : 05-SEP-98 01:42:00
Client ID: GP-7W
Instrument: VOAMS6.i
Sample Info: 81215;
Purge Volume: 5.0
Operator: VOAMS 7
Column phase: DB624
Column diameter: 0.53

850930526



Data File: /chem/VOAMS6.i/624/08-28-98/04sep98.b/f3726.d

Date : 05-SEP-98 01:42:00

Client ID: GP-7W

Instrument: VOAMS6.i

Sample Info: 61215;

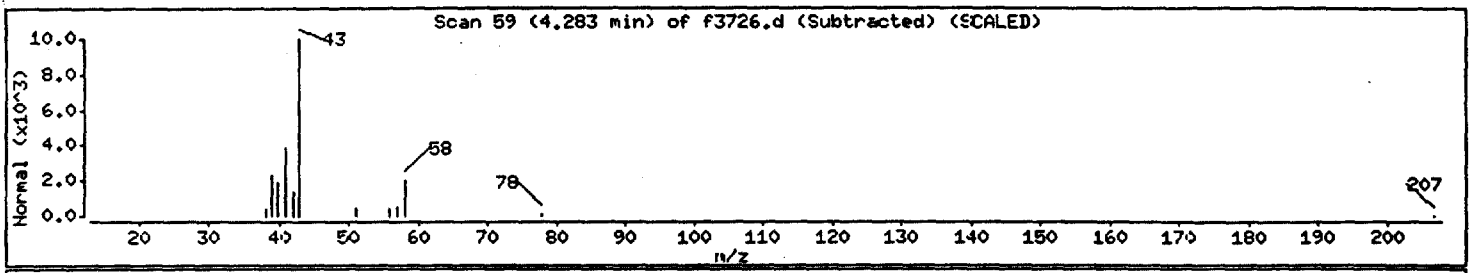
Purge Volume: 5.0

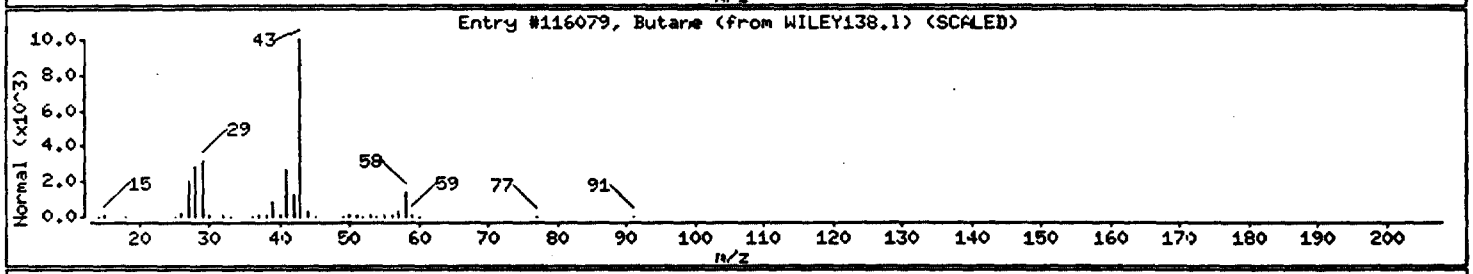
Operator: VOAMS 7

Column phase: DB624

Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Alkane						
Butane	106-97-8	WILEY138.1	116079	50	C4H10	58





850930527

Data File: /chem/VOAMS6.i/624/08-28-98/04sep98.b/f3726.d

Date : 05-SEP-98 01:42:00

Client ID: GP-7W

Instrument: VOAMS6.i

Sample Info: 81215;

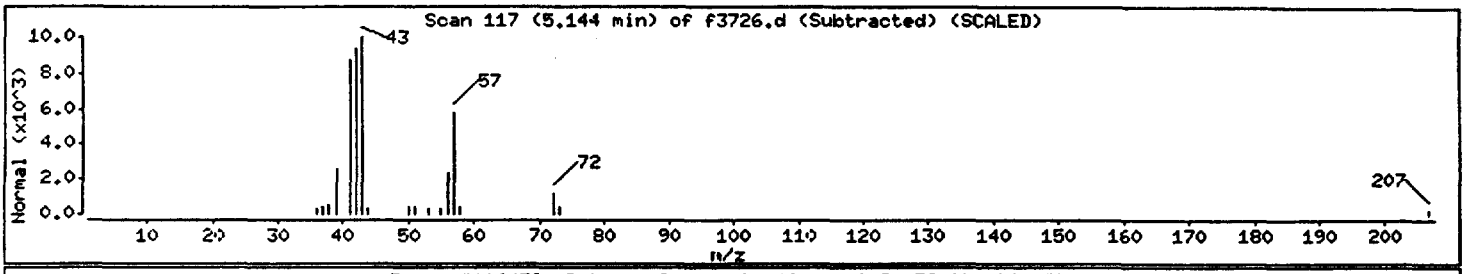
Purge Volume: 5.0

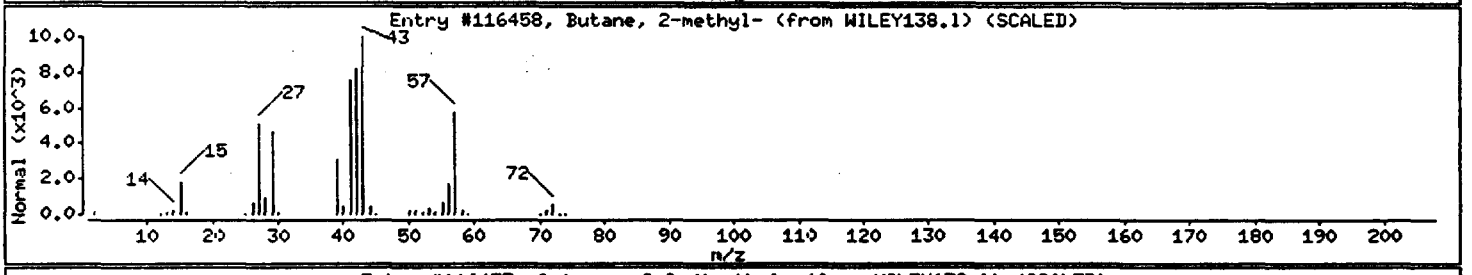
Operator: VOAMS 7

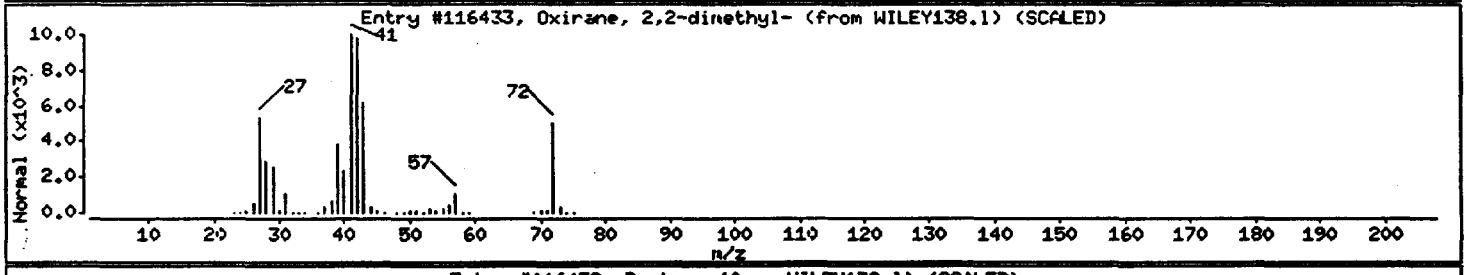
Column phase: DB624

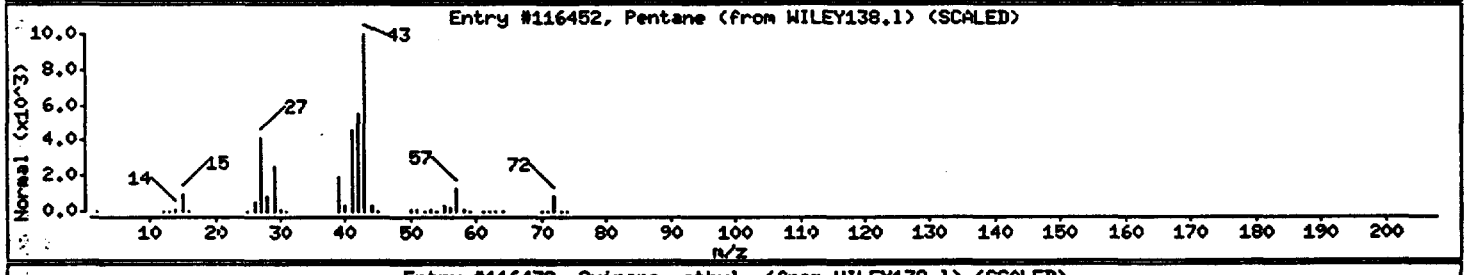
Column diameter: 0.53

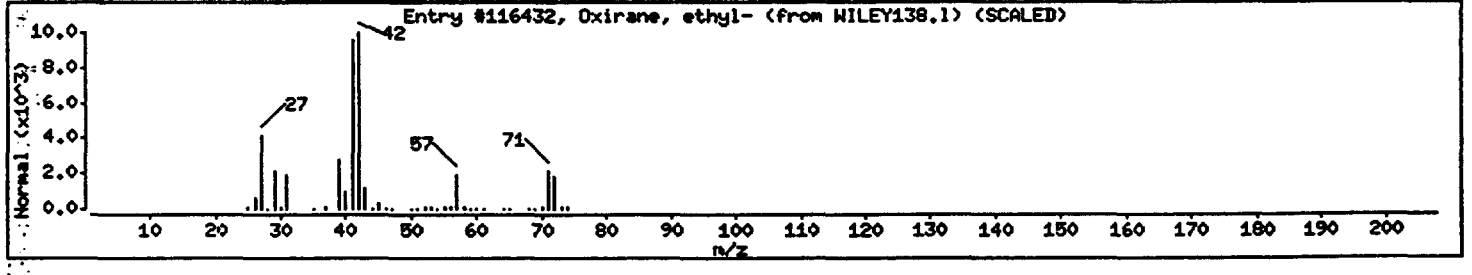
Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
C5H12 Alkane						
Butane, 2-methyl-	78-78-4	WILEY138.1	116458	86	C5H12	72
Oxirane, 2,2-dimethyl-	558-30-5	WILEY138.1	116433	59	C4H8O	72
Pentane	109-66-0	WILEY138.1	116452	42	C5H12	72
Oxirane, ethyl-	106-88-7	WILEY138.1	116432	40	C4H8O	72











850930528

191 F265

Data File: /chem/VOAMS6.i/624/08-28-98/04sep98.b/f3726.d

Date : 05-SEP-98 01:42:00

Client ID: GP-7W

Instrument: VOAMS6.i

Sample Info: 81215;

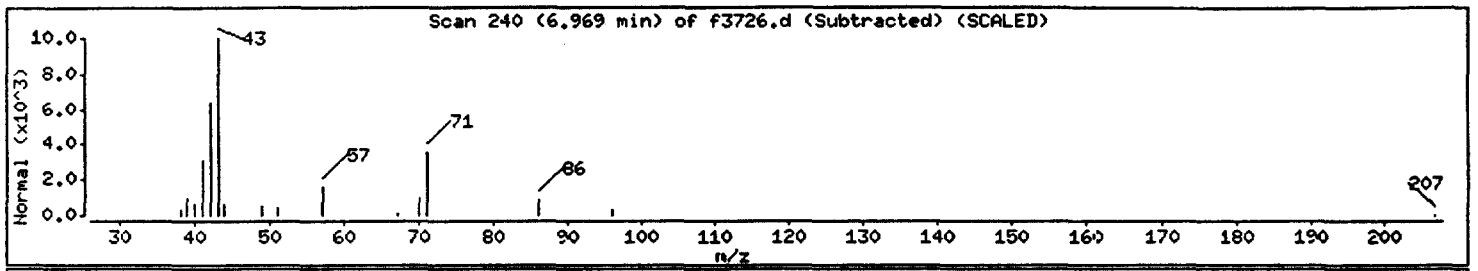
Purge Volume: 5.0

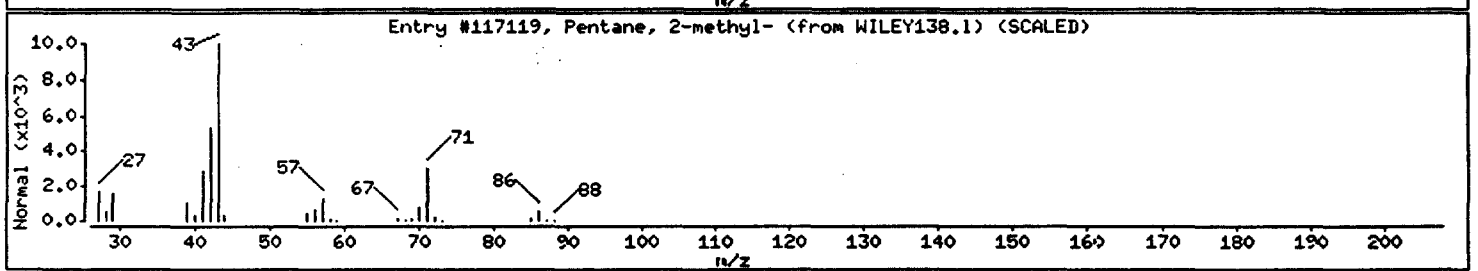
Operator: VOAMS 7

Column phase: DB624

Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
C6H14 Alkane						
Pentane, 2-methyl-	107-83-5	WILEY138.l	117119	86	C6H14	86





850930529

F 266

Data File: /chem/VOAMS6.i/624/08-28-98/04sep98.b/f3726.d

Date : 05-SEP-98 01:42:00

Client ID: GP-7W

Instrument: VOAMS6.i

Sample Info: 81215;

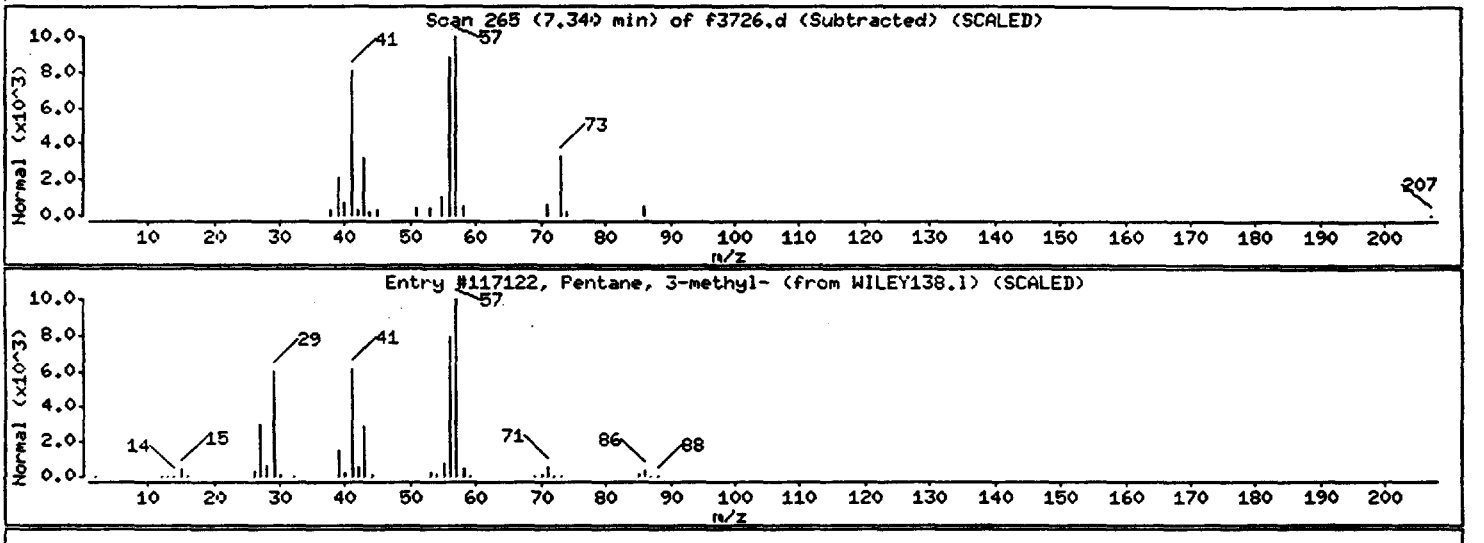
Purge Volume: 5.0

Operator: VOAMS 7

Column phase: DB624

Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
C6H14 Alkane						
Pentane, 3-methyl-	96-14-0	WILEY138.1	117122	72	C6H14	86



850930530

F26

Data File: /chem/VOAMS6.i/624/08-28-98/04sep98.b/f3726.d

Date : 05-SEP-98 01:42:00

Client ID: GP-7W

Instrument: VOAMS6.i

Sample Info: 81215;

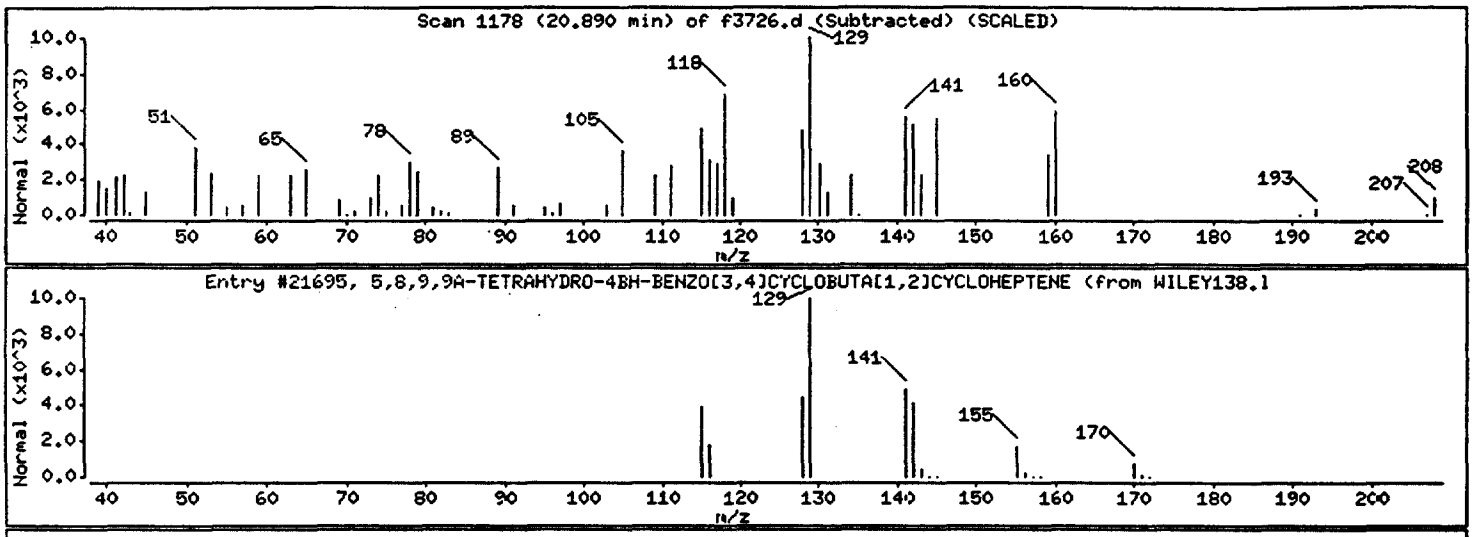
Purge Volume: 5.0

Operator: VOAMS 7

Column phase: DB624

Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
5,8,9,9A-TETRAHYDRO-4H-BENZO[3,4]CYCLOB	68913-31-5	WILEY138.l	21695	43	C13H14	170



850930531

F268

Client ID: GP-8
Site: NBB-V12

Lab Sample No: 81216
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/10/98
GC Column: DB624
Instrument ID: VOAMS5.i
Lab File ID: e3822.d

Matrix: SOIL
Level: HIGH
Sample Weight: 9.7 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 18

VOLATILE ORGANICS - GC/MS
METHOD 8260B

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
Chloromethane	ND	790
Bromomethane	ND	790
Vinyl Chloride	ND	790
Chloroethane	ND	790
Methylene Chloride	ND	470
Trichlorofluoromethane	ND	790
1,1-Dichloroethene	ND	320
1,1-Dichloroethane	ND	790
trans-1,2-Dichloroethene	ND	790
cis-1,2-Dichloroethene	ND	790
Chloroform	ND	790
1,2-Dichloroethane	ND	320
1,1,1-Trichloroethane	ND	790
Carbon Tetrachloride	ND	320
Bromodichloromethane	ND	160
1,2-Dichloropropane	ND	160
cis-1,3-Dichloropropene	ND	790
Trichloroethene	ND	160
Dibromochloromethane	ND	790
1,1,2-Trichloroethane	ND	470
Benzene	ND	160
trans-1,3-Dichloropropene	ND	790
2-Chloroethyl Vinyl Ether	ND	790
Bromoform	ND	630
Tetrachloroethene	ND	160
1,1,2,2-Tetrachloroethane	ND	160
Toluene	ND	790
Chlorobenzene	ND	790
Ethylbenzene	ND	630
Xylene (Total)	ND	790

Client ID: GP-8
Site: NBB-V12

Lab Sample No: 81216
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/10/98
GC Column: DB624
Instrument ID: VOAMS5.i
Lab File ID: e3822.d

Matrix: SOIL
Level: HIGH
Sample Weight: 9.7 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 18.3

VOLATILE ORGANICS - GC/MS
TENTATIVELY IDENTIFIED COMPOUNDS
METHOD 8260B

	COMPOUND NAME	RT	EST. CONC. ug/kg	Q
1.	NO VOLATILE ORGANIC COMPOUNDS FOUND			
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

TOTAL ESTIMATED CONCENTRATION 0.0

850930533

F270

Data File: /chem/VOAMS5.i/8260HIGH_SP/08-25-98/09sep98a.b/e3822.d
Report Date: 11-Sep-98 16:10:18

Envirotech Research, Inc.

VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/VOAMS5.i/8260HIGH_SP/08-25-98/09sep98a.b/e3822.d
Lab Smp Id: 81216 Client Smp ID: GP-8
Inj Date : 10-SEP-98 00:14:00
Operator : VOAMS 5 Inst ID: VOAMS5.i
Smp Info : 81216;50;18.3;9.7;25
Misc Info : G893;6032;TL
Comment :
Method : /chem/VOAMS5.i/8260HIGH_SP/08-25-98/09sep98a.b/8260b-HIGH.m
Meth Date : 09-Sep-98 18:27:26 Quant Type: ISTD
Cal Date : 25-AUG-98 13:08:00 Cal File: e3451.d
Als bottle: 14
Dil Factor: 50.00000
Integrator: HP RTE Compound Sublist: PPVOA.sub
Target Version: 3.20
Procesing Host: hpvoa

Concentration Formula: (Vt/Ws)/((100-M)/100)

Name	Value	Description
Vt	25.000	Volume of final extract (mL)
Ws	9.700	Weight of sample extracted (g)
M	18.300	% Moisture (not decanted)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
$ 16 1,2-Dichloroethane-d4 (SUR)	65	8.692	8.719	(0.949)	422195	44	7000
* 19 Fluorobenzene	96	9.159	9.171	(1.000)	1937308	50	
$ 37 Toluene-d8 (SUR)	98	11.121	11.137	(1.214)	1509982	48	7500
* 32 Chlorobenzene-d5	117	12.818	12.823	(1.000)	1169236	50	
$ 41 Bromofluorobenzene (SUR)	174	14.079	14.103	(1.098)	516386	44	7000
* 91 1,4-Dichlorobenzene-d4	152	15.295	15.307	(1.000)	442609	50	

850930534

F271

Data File: /chem/VOAMS5.i/8260HIGH_SP/08-25-98/09sep98a.b/e3822.d
Date : 10-SEP-98 00:14:00
Client ID: GP-8
Sample Info: 81216;50;18.3;9.7;25

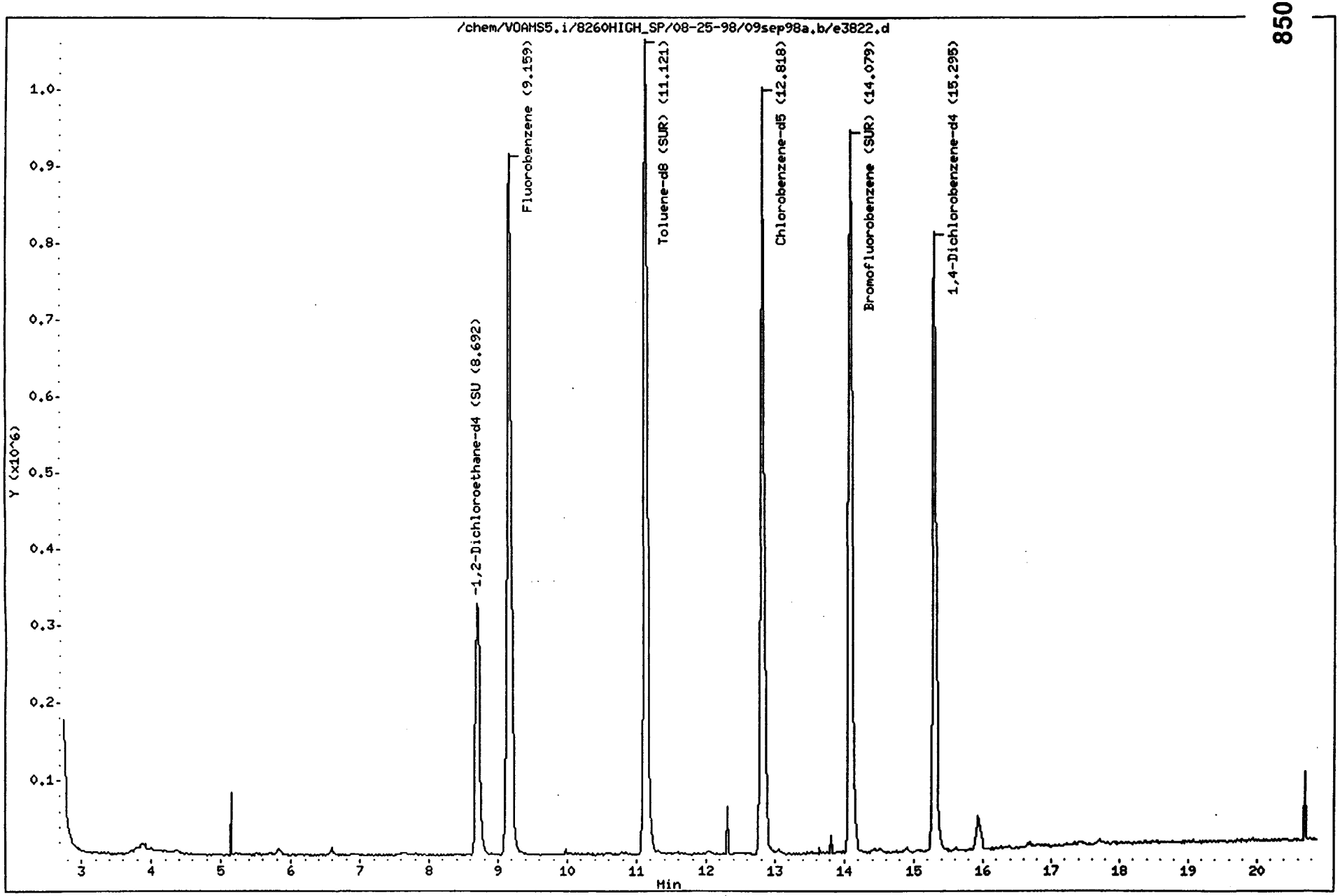
Instrument: VOAMS5.i

Operator: VOAMS 5
Column diameter: 0.53

Column phase: DB624

850930535

F272



Client ID: **GP-8W**
Site: NBB-V12

Lab Sample No: **81217**
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/05/98
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f3727.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Chloromethane	ND	0.9
Bromomethane	ND	0.3
Vinyl Chloride	ND	0.4
Chloroethane	ND	1.0
Methylene Chloride	ND	1.0
Trichlorofluoromethane	ND	0.2
1,1-Dichloroethene	ND	0.6
1,1-Dichloroethane	ND	0.3
trans-1,2-Dichloroethene	ND	0.3
cis-1,2-Dichloroethene	ND	1.0
Chloroform	ND	0.2
1,2-Dichloroethane	ND	0.2
1,1,1-Trichloroethane	ND	0.2
Carbon Tetrachloride	ND	0.2
Bromodichloromethane	ND	0.2
1,2-Dichloropropane	ND	0.5
cis-1,3-Dichloropropene	ND	0.3
Trichloroethene	ND	0.4
Dibromochloromethane	ND	0.2
1,1,2-Trichloroethane	ND	0.4
Benzene	ND	0.2
trans-1,3-Dichloropropene	ND	0.3
2-Chloroethyl Vinyl Ether	ND	0.5
Bromoform	ND	0.3
Tetrachloroethene	ND	0.1
1,1,2,2-Tetrachloroethane	ND	0.3
Toluene	ND	0.2
Chlorobenzene	ND	0.1
Ethylbenzene	ND	0.2
Xylene (Total)	ND	1.0

Client ID: **GP-8W**
Site: NBB-V12

Lab Sample No: **81217**
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/05/98
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f3727.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
TENTATIVELY IDENTIFIED COMPOUNDS
METHOD 624

	COMPOUND NAME	RT	EST. CONC. ug/l	Q
1.	NO VOLATILE ORGANIC COMPOUNDS FOUND			
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

TOTAL ESTIMATED CONCENTRATION 0.0

850930537

F274

Data File: /chem/VOAMS6.i/624/08-28-98/04sep98.b/f3727.d
Report Date: 05-Sep-98 09:08:18

Envirotech Research, Inc.

VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/VOAMS6.i/624/08-28-98/04sep98.b/f3727.d
Lab Smp Id: 81217 Client Smp ID: GP-8W
Inj Date : 05-SEP-98 02:15:00
Operator : VOAMS 7 Inst ID: VOAMS6.i
Smp Info : 81217;
Misc Info : G893;8121;;DRL
Comment :
Method : /chem/VOAMS6.i/624/08-28-98/04sep98.b/624.m
Meth Date : 04-Sep-98 13:01:48 Quant Type: ISTD
Cal Date : 28-AUG-98 11:49:00 Cal File: f3415.d
Als bottle: 23
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PPVOAv.sub
Target Version: 3.20
Procesing Host: hpvoa

Concentration Formula: 5/Vo

Name	Value	Description
Vo	5.000	Sample Volume

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
* 2 Bromochloromethane	128	9.077	9.062	(1.000)	843946	30	
$ 16 1,2-Dichloroethane-d4 (SUR)	104	9.834	9.804	(0.950)	176425	30	30
* 19 1,4-Difluorobenzene	114	10.353	10.324	(1.000)	2717887	30	
$ 37 Toluene-d8 (SUR)	98	12.208	12.194	(1.179)	2357621	30	30
* 32 Chlorobenzene-d5	117	13.930	13.930	(1.000)	1720458	30	
$ 41 Bromofluorobenzene (SUR)	95	15.221	15.221	(1.093)	1268446	29	29

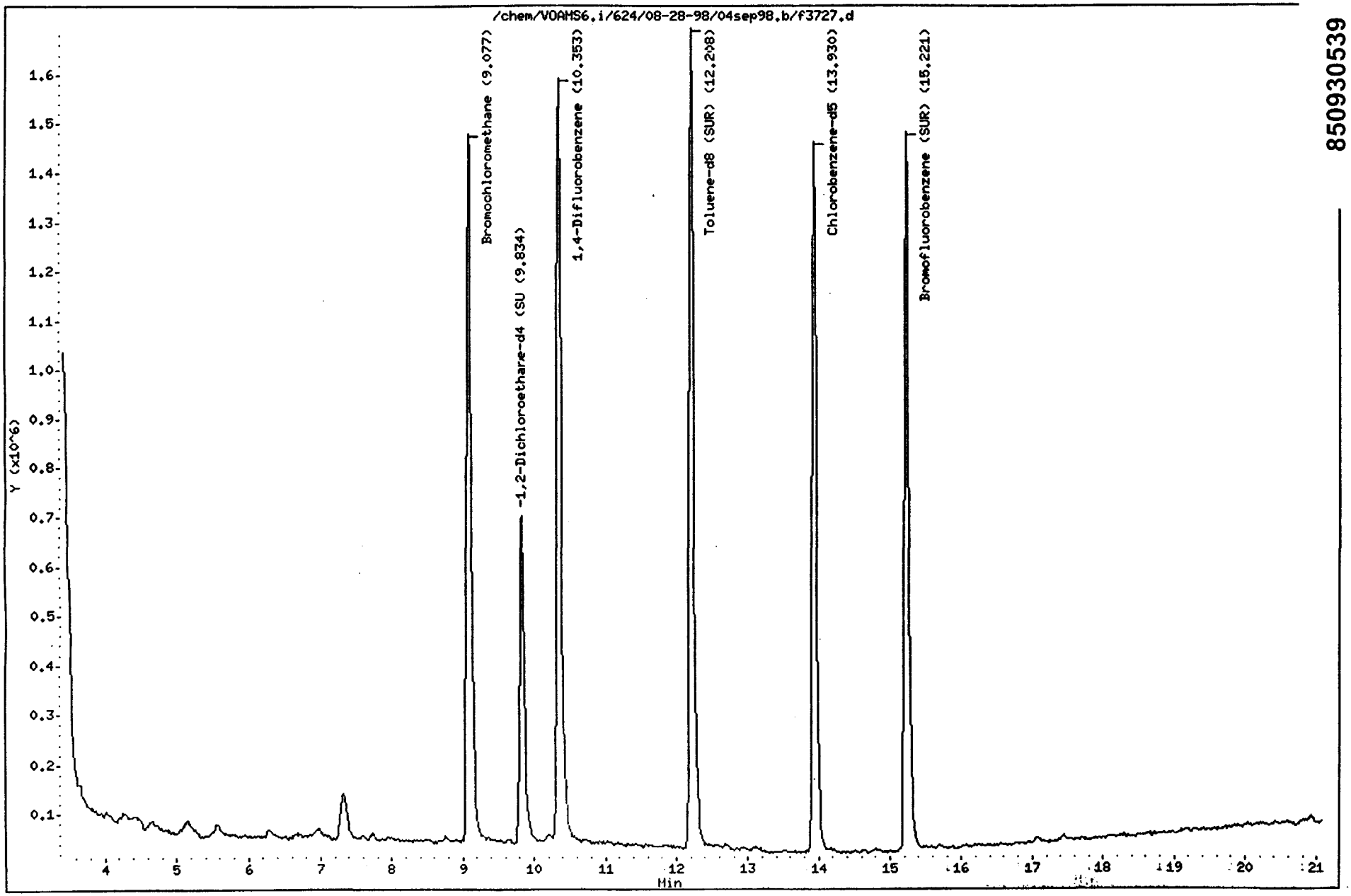
850930538

F275

Data File: /chem/VOAMS6.i/624/08-28-98/04sep98.b/f3727.d
Date : 05-SEP-98 02:15:00
Client ID: GP-8W
Instrument: VOAMS6.i
Sample Info: 81217;
Purge Volume: 5.0
Operator: VOAMS 7
Column phase: DB624
Column diameter: 0.53

F276

850930539



Client ID: GP-9
Site: NBB-V12

Lab Sample No: 81218
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/10/98
GC Column: DB624
Instrument ID: VOAMS5.i
Lab File ID: e3823.d

Matrix: SOIL
Level: HIGH
Sample Weight: 10.7 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 19

VOLATILE ORGANICS - GC/MS
METHOD 8260B

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
Chloromethane	ND	720
Bromomethane	ND	720
Vinyl Chloride	ND	720
Chloroethane	ND	720
Methylene Chloride	ND	430
Trichlorofluoromethane	ND	720
1,1-Dichloroethene	ND	290
1,1-Dichloroethane	ND	720
trans-1,2-Dichloroethene	ND	720
cis-1,2-Dichloroethene	ND	720
Chloroform	ND	720
1,2-Dichloroethane	ND	290
1,1,1-Trichloroethane	ND	720
Carbon Tetrachloride	ND	290
Bromodichloromethane	ND	140
1,2-Dichloropropane	ND	140
cis-1,3-Dichloropropene	ND	720
Trichloroethene	ND	140
Dibromochloromethane	ND	720
1,1,2-Trichloroethane	ND	430
Benzene	ND	140
trans-1,3-Dichloropropene	ND	720
2-Chloroethyl Vinyl Ether	ND	720
Bromoform	ND	580
Tetrachloroethene	ND	140
1,1,2,2-Tetrachloroethane	ND	140
Toluene	ND	720
Chlorobenzene	ND	720
Ethylbenzene	ND	580
Xylene (Total)	ND	720

Client ID: GP-9
Site: NBB-V12

Lab Sample No: 81218
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/10/98
GC Column: DB624
Instrument ID: VOAMS5.i
Lab File ID: e3823.d

Matrix: SOIL
Level: HIGH
Sample Weight: 10.7 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 19.1

VOLATILE ORGANICS - GC/MS
TENTATIVELY IDENTIFIED COMPOUNDS
METHOD 8260B

	COMPOUND NAME	RT	EST. CONC. ug/kg	Q
1.	Unknown Siloxane	15.93	760	B
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

TOTAL ESTIMATED CONCENTRATION	0.0

Data File: /chem/VOAMS5.i/8260HIGH_SP/08-25-98/09sep98a.b/e3823.d
Report Date: 11-Sep-98 16:10:29

Envirotech Research, Inc.

VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/VOAMS5.i/8260HIGH_SP/08-25-98/09sep98a.b/e3823.d
Lab Smp Id: 81218 Client Smp ID: GP-9
Inj Date : 10-SEP-98 00:42:00
Operator : VOAMS 5 Inst ID: VOAMS5.i
Smp Info : 81218;50;19.1;10.7;25
Misc Info : G893;6032;TL
Comment :
Method : /chem/VOAMS5.i/8260HIGH_SP/08-25-98/09sep98a.b/8260b-HIGH.m
Meth Date : 09-Sep-98 18:27:26 Quant Type: ISTD
Cal Date : 25-AUG-98 13:08:00 Cal File: e3451.d
Als bottle: 15
Dil Factor: 50.00000
Integrator: HP RTE Compound Sublist: PPVOA.sub
Target Version: 3.20
Procesing Host: hpvoa

Concentration Formula: (Vt/Ws)/((100-M)/100)

Name	Value	Description
Vt	25.000	Volume of final extract (mL)
Ws	10.700	Weight of sample extracted (g)
M	19.100	% Moisture (not decanted)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
$ 16 1,2-Dichloroethane-d4 (SUR)	65	8.691	8.719	(0.949)	433607	46	6700
* 19 Fluorobenzene	96	9.159	9.171	(1.000)	1904611	50	
$ 37 Toluene-d8 (SUR)	98	11.120	11.137	(1.214)	1566996	50	7300
* 32 Chlorobenzene-d5	117	12.818	12.823	(1.000)	1153504	50	
$ 41 Bromofluorobenzene (SUR)	174	14.079	14.103	(1.098)	547559	48	6900
* 91 1,4-Dichlorobenzene-d4	152	15.294	15.307	(1.000)	432817	50	

Data File: /chem/VOAMS5.i/8260HIGH_SP/08-25-98/09sep98a.b/e3823.d
Date : 10-SEP-98 00:42:00
Client ID: GP-9
Sample Info: 81218;50;19.1;10.7;25

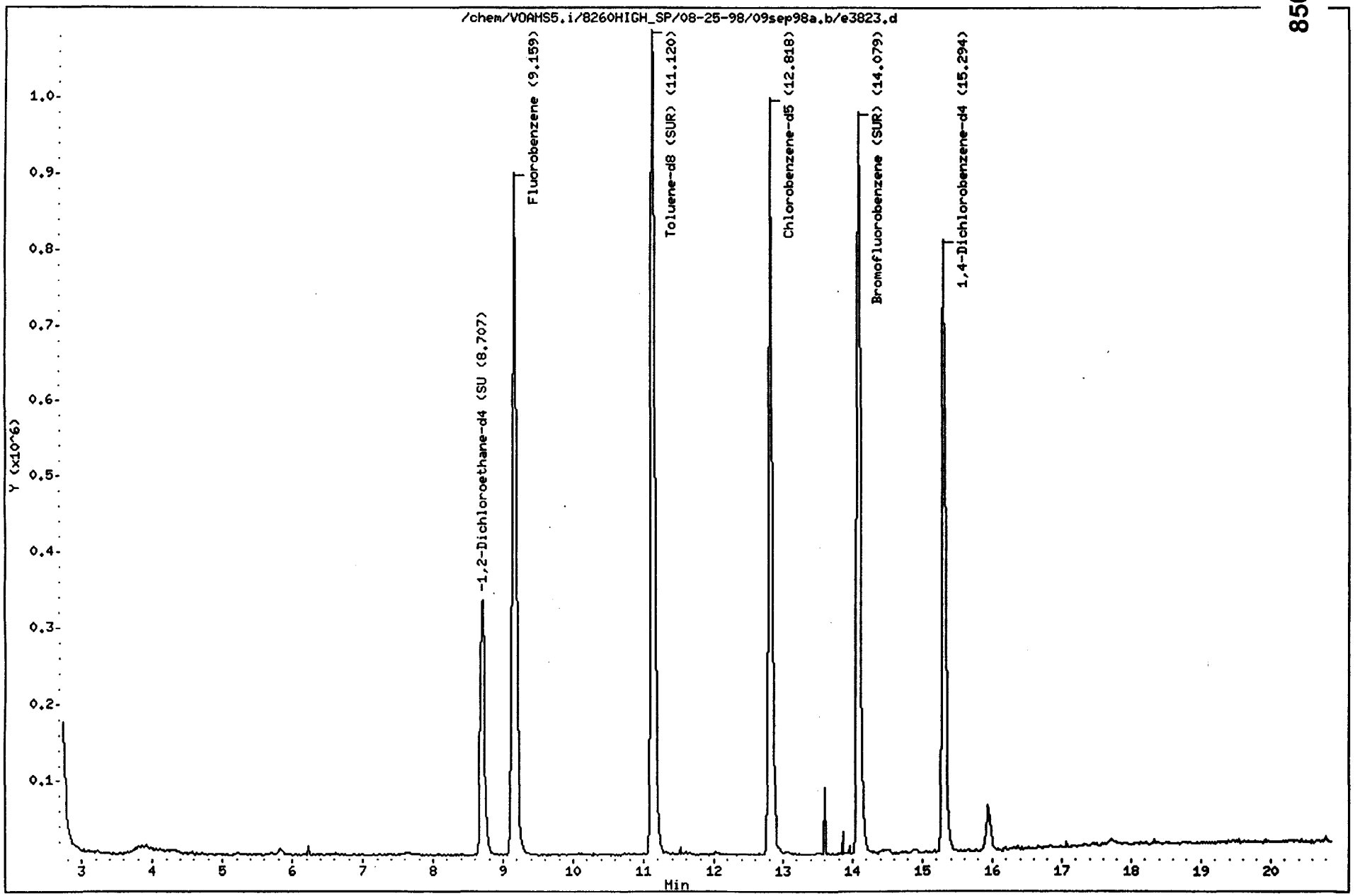
Instrument: VOAMS5.i

Operator: VOAMS 5
Column diameter: 0.53

Column phase: DB624

850930543

F 258



Data File: /chem/VOAMS5.i/8260HIGH_SP/08-25-98/09sep98a.b/e3823.d

Date : 10-SEP-98 00:42:00

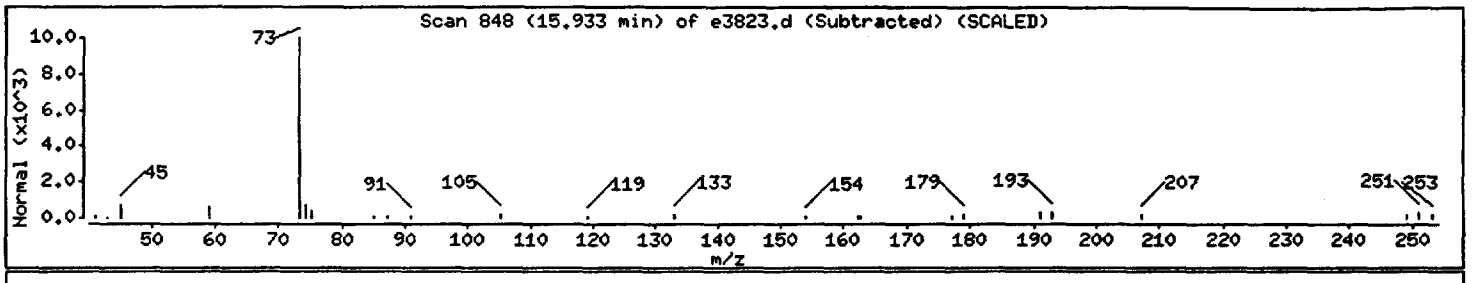
Client ID: GP-9 Instrument: VOAMS5.i

Sample Info: 81218;50;19.1;10.7;25

Operator: VOAMS 5

Column phase: DB624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Siloxane						
Unknown			0	0		0



850930544

F281

Client ID: **GP-9W**
Site: NBB-V12

Lab Sample No: **81219**
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/05/98
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f3728.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Chloromethane	ND	0.9
Bromomethane	ND	0.3
Vinyl Chloride	ND	0.4
Chloroethane	ND	1.0
Methylene Chloride	ND	1.0
Trichlorofluoromethane	ND	0.2
1,1-Dichloroethene	ND	0.6
1,1-Dichloroethane	ND	0.3
trans-1,2-Dichloroethene	ND	0.3
cis-1,2-Dichloroethene	ND	1.0
Chloroform	ND	0.2
1,2-Dichloroethane	ND	0.2
1,1,1-Trichloroethane	ND	0.2
Carbon Tetrachloride	ND	0.2
Bromodichloromethane	ND	0.2
1,2-Dichloropropane	ND	0.5
cis-1,3-Dichloropropene	ND	0.3
Trichloroethene	ND	0.4
Dibromochloromethane	ND	0.2
1,1,2-Trichloroethane	ND	0.4
Benzene	ND	0.2
trans-1,3-Dichloropropene	ND	0.3
2-Chloroethyl Vinyl Ether	ND	0.5
Bromoform	ND	0.3
Tetrachloroethene	ND	0.1
1,1,2,2-Tetrachloroethane	ND	0.3
Toluene	ND	0.2
Chlorobenzene	ND	0.1
Ethylbenzene	ND	0.2
Xylene (Total)	ND	1.0

Client ID: GP-9W
Site: NBB-V12

Lab Sample No: 81219
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/05/98
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f3728.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
TENTATIVELY IDENTIFIED COMPOUNDS
METHOD 624

	COMPOUND NAME	RT	EST. CONC. ug/l	Q
1.	NO VOLATILE ORGANIC COMPOUNDS FOUND			
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

TOTAL ESTIMATED CONCENTRATION	0.0

Data File: /chem/VOAMS6.i/624/08-28-98/04sep98.b/f3728.d
Report Date: 05-Sep-98 09:08:23

Envirotech Research, Inc.

VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/VOAMS6.i/624/08-28-98/04sep98.b/f3728.d
Lab Smp Id: 81219 Client Smp ID: GP-9W
Inj Date : 05-SEP-98 02:44:00
Operator : VOAMS 7 Inst ID: VOAMS6.i
Smp Info : 81219;
Misc Info : G893;8121;;DRL
Comment :
Method : /chem/VOAMS6.i/624/08-28-98/04sep98.b/624.m
Meth Date : 04-Sep-98 13:01:48 Quant Type: ISTD
Cal Date : 28-AUG-98 11:49:00 Cal File: f3415.d
Als bottle: 24
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PPVOAv.sub
Target Version: 3.20
Procesing Host: hpvoa

Concentration Formula: 5/Vo

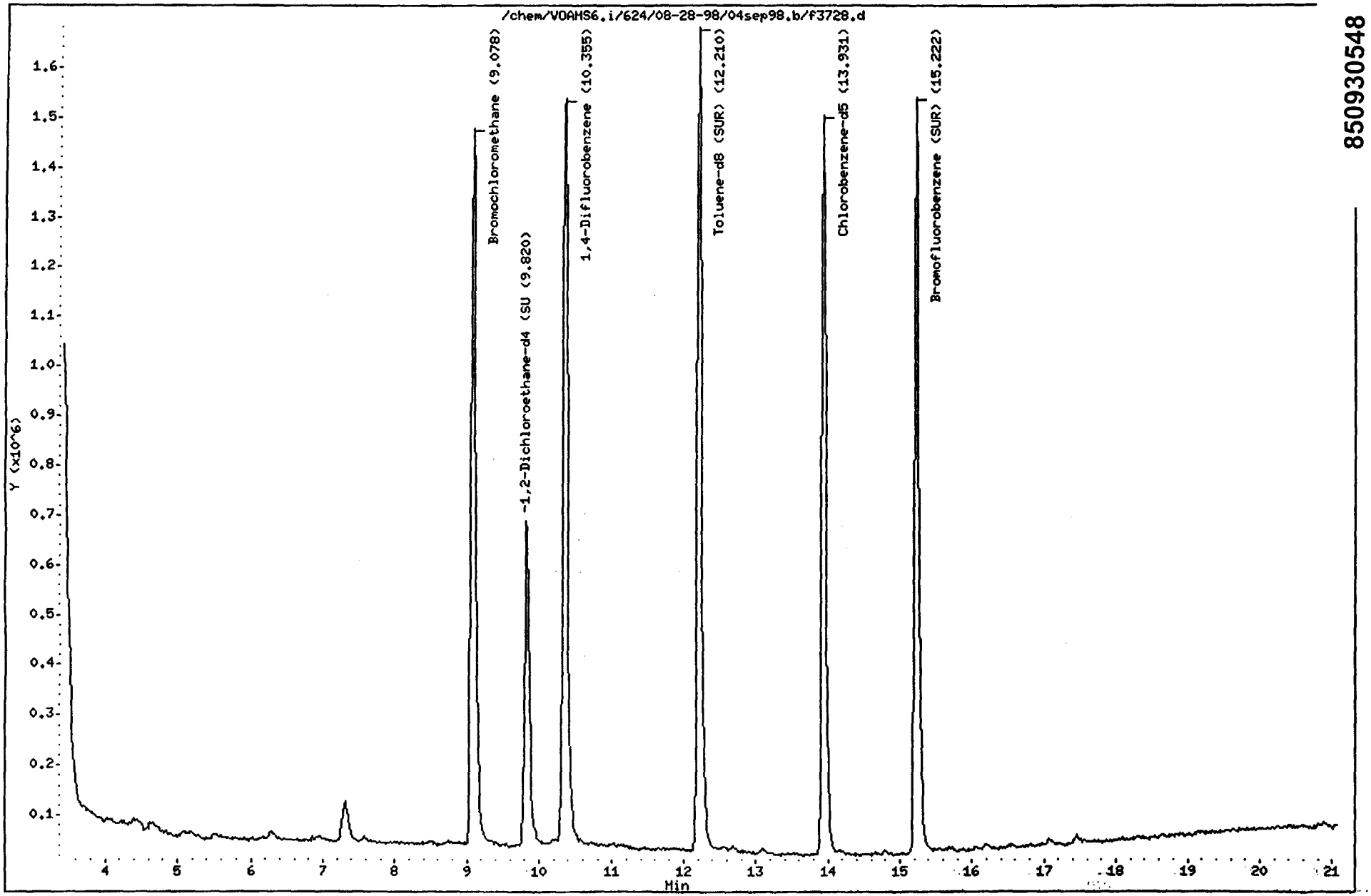
Name	Value	Description
Vo	5.000	Sample Volume

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
* 2 Bromochloromethane	128	9.078	9.062	(1.000)	846225	30	
$ 16 1,2-Dichloroethane-d4 (SUR)	104	9.820	9.804	(0.948)	172324	29	29
* 19 1,4-Difluorobenzene	114	10.355	10.324	(1.000)	2680119	30	
$ 37 Toluene-d8 (SUR)	98	12.210	12.194	(1.179)	2307672	30	30
* 32 Chlorobenzene-d5	117	13.931	13.930	(1.000)	1768422	30	
$ 41 Bromofluorobenzene (SUR)	95	15.222	15.221	(1.093)	1303507	29	29

850930547

F284

Data File: /chem/VOAMS6.i/624/08-28-98/04sep98.b/f3728.d
Date : 05-SEP-98 02:44:00
Client ID: GP-9W
Instrument: VOAMS6.i
Sample Info: 81219;
Purge Volume: 5.0
Operator: VOAMS 7
Column phase: DB624
Column diameter: 0.53



850930548

F285

Client ID: GP-10
Site: NBB-V12

Lab Sample No: 81220
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/10/98
GC Column: DB624
Instrument ID: VOAMS5.i
Lab File ID: e3824.d

Matrix: SOIL
Level: HIGH
Sample Weight: 9.8 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 24

VOLATILE ORGANICS - GC/MS
METHOD 8260B

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
Chloromethane	ND	840
Bromomethane	ND	840
Vinyl Chloride	ND	840
Chloroethane	ND	840
Methylene Chloride	ND	500
Trichlorofluoromethane	ND	840
1,1-Dichloroethene	ND	340
1,1-Dichloroethane	ND	840
trans-1,2-Dichloroethene	ND	840
cis-1,2-Dichloroethene	ND	840
Chloroform	ND	840
1,2-Dichloroethane	ND	340
1,1,1-Trichloroethane	ND	840
Carbon Tetrachloride	ND	340
Bromodichloromethane	ND	170
1,2-Dichloropropane	ND	170
cis-1,3-Dichloropropene	ND	840
Trichloroethene	ND	170
Dibromochloromethane	ND	840
1,1,2-Trichloroethane	ND	500
Benzene	ND	170
trans-1,3-Dichloropropene	ND	840
2-Chloroethyl Vinyl Ether	ND	840
Bromoform	ND	670
Tetrachloroethene	ND	170
1,1,2,2-Tetrachloroethane	ND	170
Toluene	ND	840
Chlorobenzene	ND	840
Ethylbenzene	ND	670
Xylene (Total)	ND	840

Client ID: GP-10
Site: NBB-V12

Lab Sample No: 81220
Lab Job No: G893

Date Sampled: 08/31/98
Date Received: 09/01/98
Date Analyzed: 09/10/98
GC Column: DB624
Instrument ID: VOAMS5.i
Lab File ID: e3824.d

Matrix: SOIL
Level: HIGH
Sample Weight: 9.8 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 24.1

VOLATILE ORGANICS - GC/MS
TENTATIVELY IDENTIFIED COMPOUNDS
METHOD 8260B

	COMPOUND NAME	RT	EST. CONC. ug/kg	Q
1.	Unknown Siloxane	15.93	2000	B
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

TOTAL ESTIMATED CONCENTRATION: 0.0

Data File: /chem/VOAMS5.i/8260HIGH_SP/08-25-98/09sep98a.b/e3824.d
Report Date: 11-Sep-98 16:10:39

Envirotech Research, Inc.

VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/VOAMS5.i/8260HIGH_SP/08-25-98/09sep98a.b/e3824.d
Lab Smp Id: 81220 Client Smp ID: GP-10
Inj Date : 10-SEP-98 01:10:00
Operator : VOAMS 5 Inst ID: VOAMS5.i
Smp Info : 81220;50;24.1;9.8;25
Misc Info : G893;6032;TL
Comment :
Method : /chem/VOAMS5.i/8260HIGH_SP/08-25-98/09sep98a.b/8260b-HIGH.m
Meth Date : 09-Sep-98 18:27:26 Quant Type: ISTD
Cal Date : 25-AUG-98 13:08:00 Cal File: e3451.d
Als bottle: 16
Dil Factor: 50.00000
Integrator: HP RTE Compound Sublist: PPVOA.sub
Target Version: 3.20
Procesing Host: hpvoa

Concentration Formula: (Vt/Ws)/((100-M)/100)

Name	Value	Description
Vt	25.000	Volume of final extract (mL)
Ws	9.800	Weight of sample extracted (g)
M	24.100	% Moisture (not decanted)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
$ 16 1,2-Dichloroethane-d4 (SUR)	65	8.691	8.719	(0.949)	415398	44	7400
* 19 Fluorobenzene	96	9.159	9.171	(1.000)	1924412	50	
$ 37 Toluene-d8 (SUR)	98	11.120	11.137	(1.214)	1503902	48	8000
* 32 Chlorobenzene-d5	117	12.818	12.823	(1.000)	1143014	50	
$ 41 Bromofluorobenzene (SUR)	174	14.079	14.103	(1.098)	515333	46	7600
* 91 1,4-Dichlorobenzene-d4	152	15.294	15.307	(1.000)	437273	50	

850930551

F288

Data File: /chem/VOAMS5.i/8260HIGH_SP/08-25-98/09sep98a.b/e3824.d
Date : 10-SEP-98 01:10:00
Client ID: GP-10
Sample Info: 81220;50;24.1;9.8;25

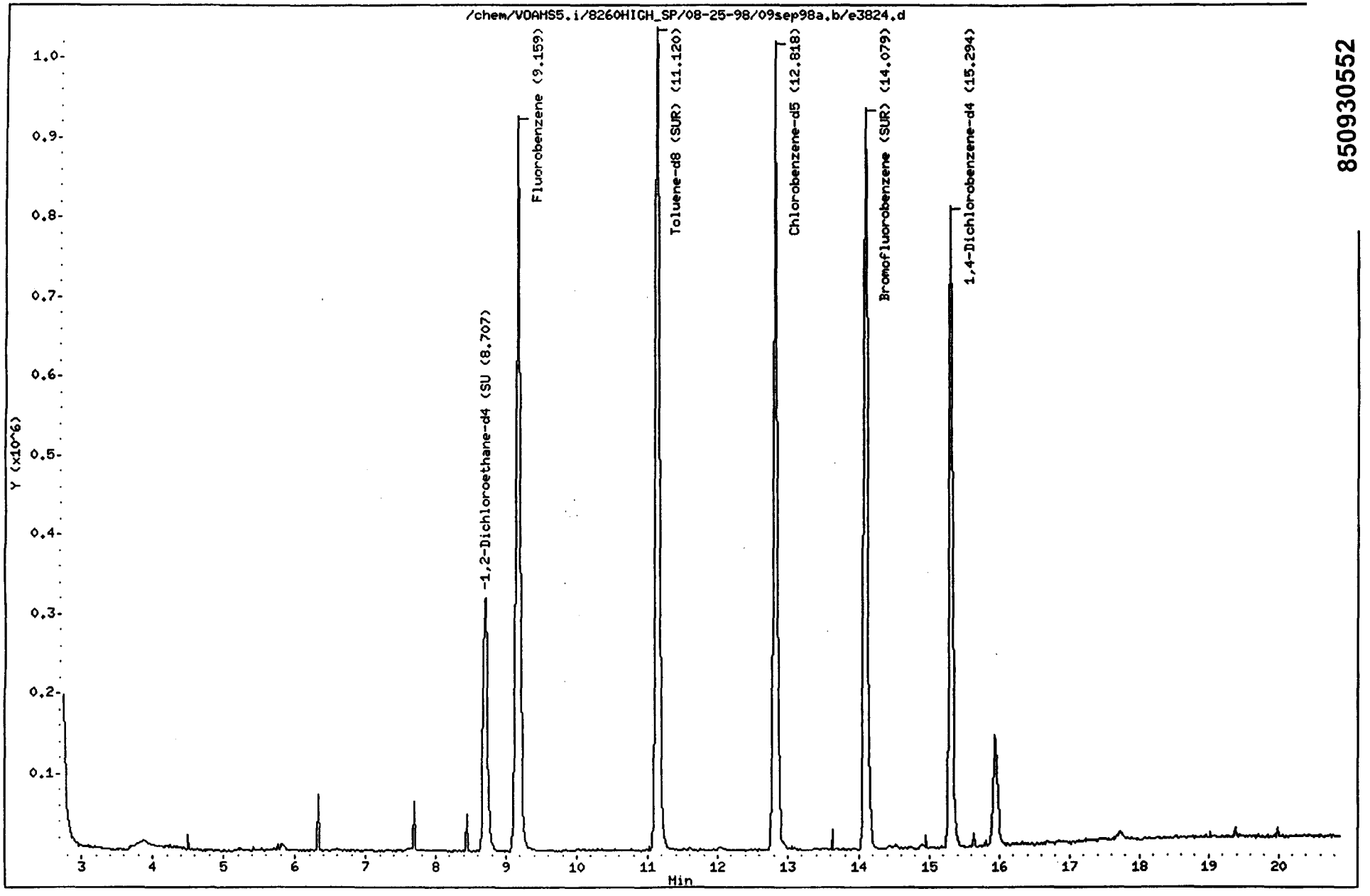
Column phase: DB624

Instrument: VOAMS5.i

Operator: VOAMS 5
Column diameter: 0.53

F269

850930552



Data File: /chem/VOAMS5.i/8260HIGH_SP/08-25-98/09sep98a.b/e3824.d

Date : 10-SEP-98 01:10:00

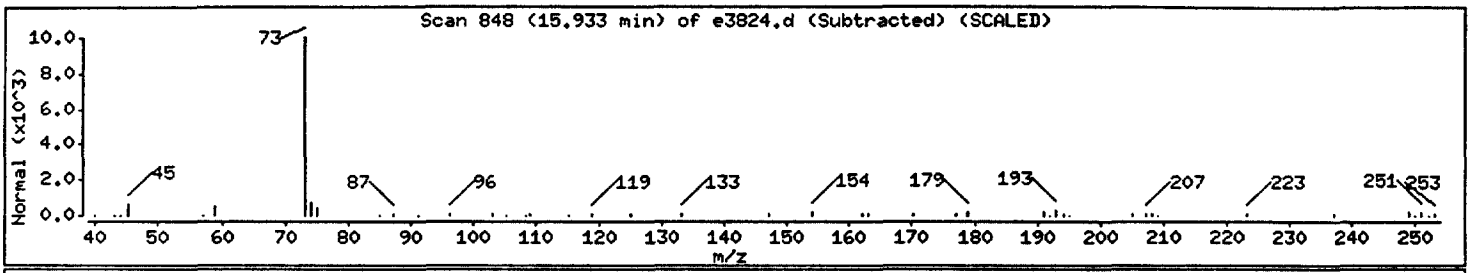
Client ID: GP-10 Instrument: VOAMS5.i

Sample Info: 81220;50;24.1;9.8;25

Operator: VOAMS 5

Column phase: DB624 Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Siloxane						
Unknown			0	0		0



850930553

F 290

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab File ID: E3444

BFB Injection Date: 08/25/98

Instrument ID: VOAMS5

BFB Injection Time: 1001

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	17.9
75	30.0 - 60.0% of mass 95	35.3
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 100.0% of mass 95	59.8
175	5.0 - 9.0% of mass 174	4.2 (7.0)1
176	95.0 - 101.0% of mass 174	57.5 (96.2)1
177	5.0 - 9.0% of mass 176	3.8 (6.7)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT ID	LAB SAMPLE No.	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	ESTD005	ESTD005	E3446	08/25/98	1044
02	ESTD020	ESTD020	E3447	08/25/98	1113
03	ESTD050	ESTD050	E3448	08/25/98	1141
04	ESTD100	ESTD100	E3450	08/25/98	1239
05	ESTD200	ESTD200	E3451	08/25/98	1308
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

850930554

F 291

Data File: /chem/VOAMS5.i/8260HIGH_SP/08-25-98/25aug98.b/e3444.d

Date : 25-AUG-98 10:01:00

Client ID: EBFB237 50ng

Instrument: VOAMS5.i

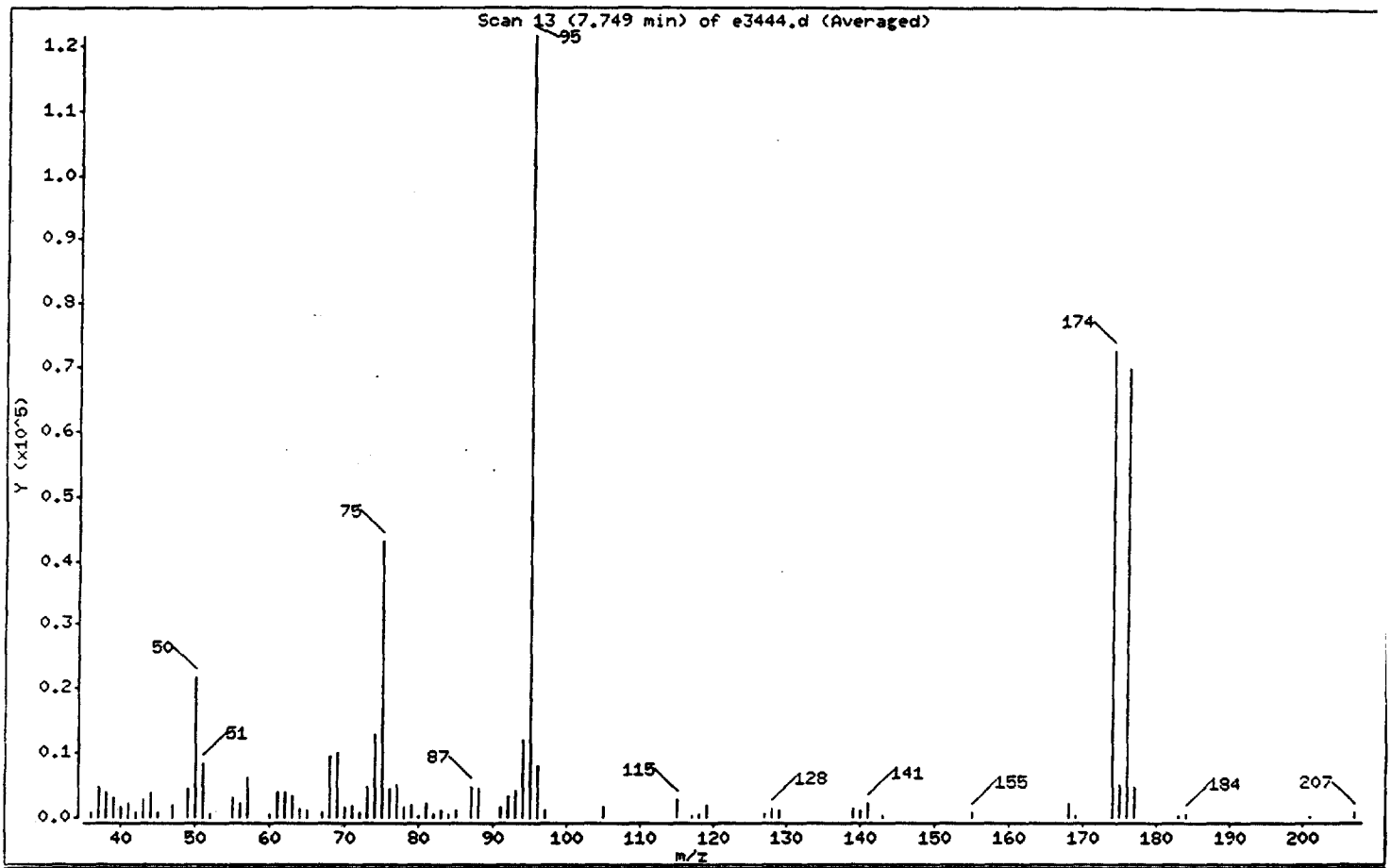
Sample Info: EBFB237 50ng

Operator: VOAMS 5

Column phase: DB-624

Column diameter: 0.53

1 Bromofluorobenzene



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	17.94
75	30.00 - 60.00% of mass 95	35.29
96	5.00 - 9.00% of mass 95	6.57
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 100.00% of mass 95	59.81
175	5.00 - 9.00% of mass 174	4.17 (6.96)
176	95.00 - 101.00% of mass 174	57.55 (96.21)
177	5.00 - 9.00% of mass 176	3.83 (6.66)

850930555

F 292

Data File: /chem/VOAHS5.i/8260HIGH_SP/08-25-98/25aug98.b/e3444.d

Date : 25-AUG-98 10:01:00

Client ID: EBFB237 50ng

Instrument: VOAHS5.i

Sample Info: EBFB237 50ng

Operator: VOAHS 5

Column phase: DB-624

Column diameter: 0.53

Data File: e3444.d

Spectrum: Scan 14 (7.749 min) of e3444.d (Averaged)

Location of Maximum: 95.00

Number of points: 75

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	964	61.00	4032	81.00	2093	127.00	637
37.00	4623	62.00	3840	82.00	530	128.00	1464
38.00	4041	63.00	3250	83.00	1037	129.00	1150
39.00	2968	64.00	1497	84.00	467	139.00	1287
40.00	1758	65.00	1032	85.00	1005	140.00	979
41.00	2363	67.00	805	87.00	4696	141.00	2370
42.00	700	68.00	9438	88.00	4471	143.00	223
43.00	2769	69.00	9906	91.00	1692	155.00	777
44.00	3992	70.00	1654	92.00	3251	168.00	2253
45.00	955	71.00	1963	93.00	4133	169.00	209
47.00	2042	72.00	804	94.00	12073	174.00	72602
49.00	4365	73.00	4621	95.00	121378	175.00	5056
50.00	21781	74.00	12707	96.00	7972	176.00	69850
51.00	8381	75.00	42834	97.00	985	177.00	4654
52.00	539	76.00	4603	105.00	1563	183.00	223
55.00	3038	77.00	5065	115.00	2658	184.00	588
56.00	2327	78.00	1787	117.00	239	201.00	215
57.00	6008	79.00	2084	118.00	454	207.00	718
60.00	602	80.00	275	119.00	1945		

Data File: /chem/VOAHS5.i/8260HIGH_SP/08-25-98/25aug98.b/e3444.d

Date : 25-AUG-98 10:01:00

Client ID: EBFB237 50ng

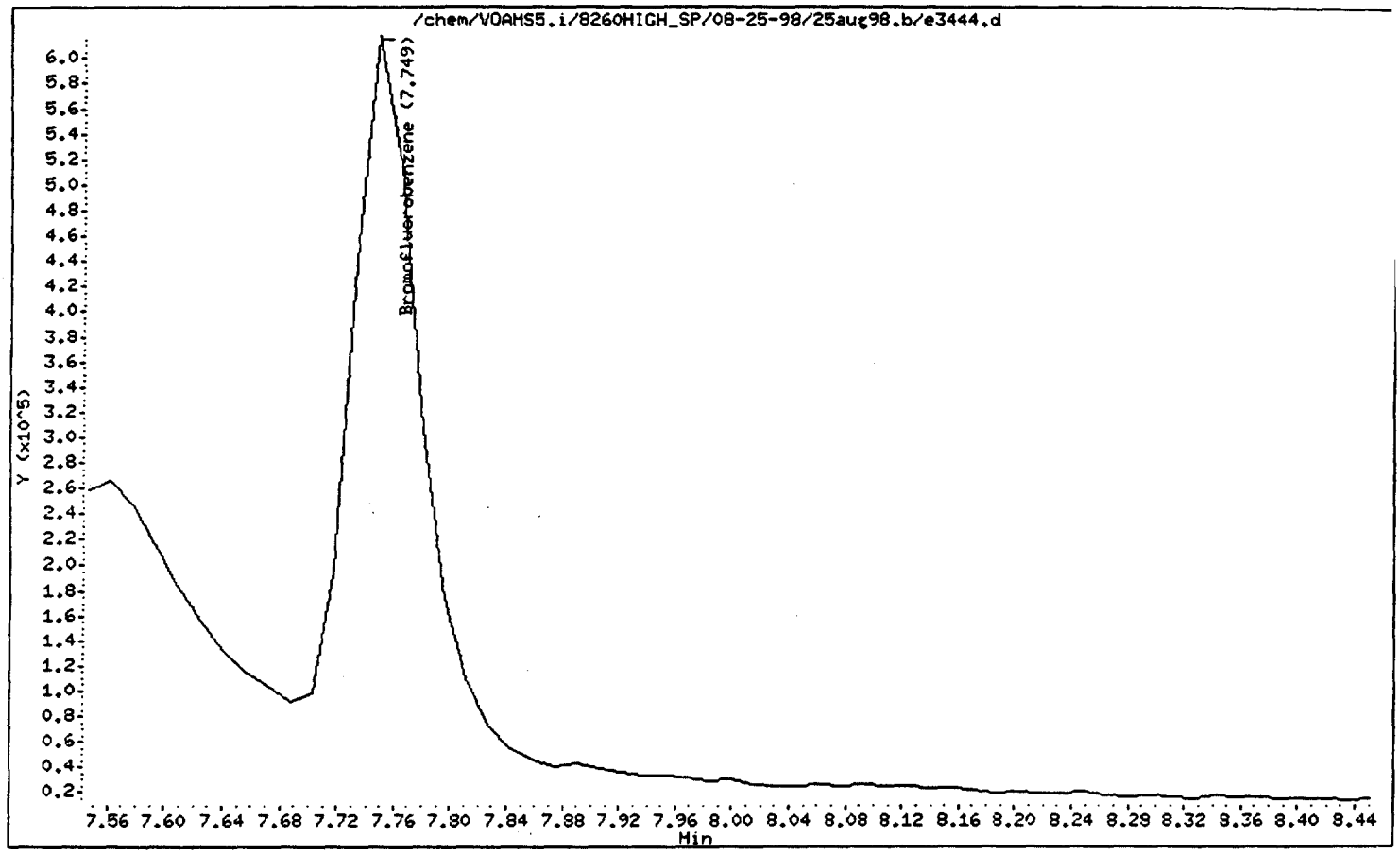
Instrument: VOAHS5.i

Sample Info: EBFB237 50ng

Operator: VOAHS 5

Column phase: DB-624

Column diameter: 0.53



850930557

F 29

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab File ID: E3807

BFB Injection Date: 09/09/98

Instrument ID: VOAMS5

BFB Injection Time: 1707

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	16.0
75	30.0 - 60.0% of mass 95	32.9
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.5
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 100.0% of mass 95	65.5
175	5.0 - 9.0% of mass 174	5.0 (7.6)1
176	95.0 - 101.0% of mass 174	63.4 (96.7)1
177	5.0 - 9.0% of mass 176	4.2 (6.6)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT ID	LAB SAMPLE No.	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	ESTD252A	ESTD252A	E3809	09/09/98	1759
02	EV252A	EV252A	E3813	09/09/98	2000
03	TB-1	81199	E3816	09/09/98	2129
04	GP-1	81202	E3818	09/09/98	2224
05	GP-3	81206	E3819	09/09/98	2252
06	GP-4	81208	E3820	09/09/98	2319
07	GP-5	81210	E3821	09/09/98	2347
08	GP-8	81216	E3822	09/10/98	0014
09	GP-9	81218	E3823	09/10/98	0042
10	GP-10	81220	E3824	09/10/98	0110
11	GP-6	81212	E3828	09/10/98	0259
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

850930558

... F 29

Data File: /chem/VOAMS5.i/8260HIGH_SP/08-25-98/09sep98a.b/e3807.d

Date : 09-SEP-98 17:07:00

Client ID: EBFB252A 50ng

Instrument: VOAMS5.i

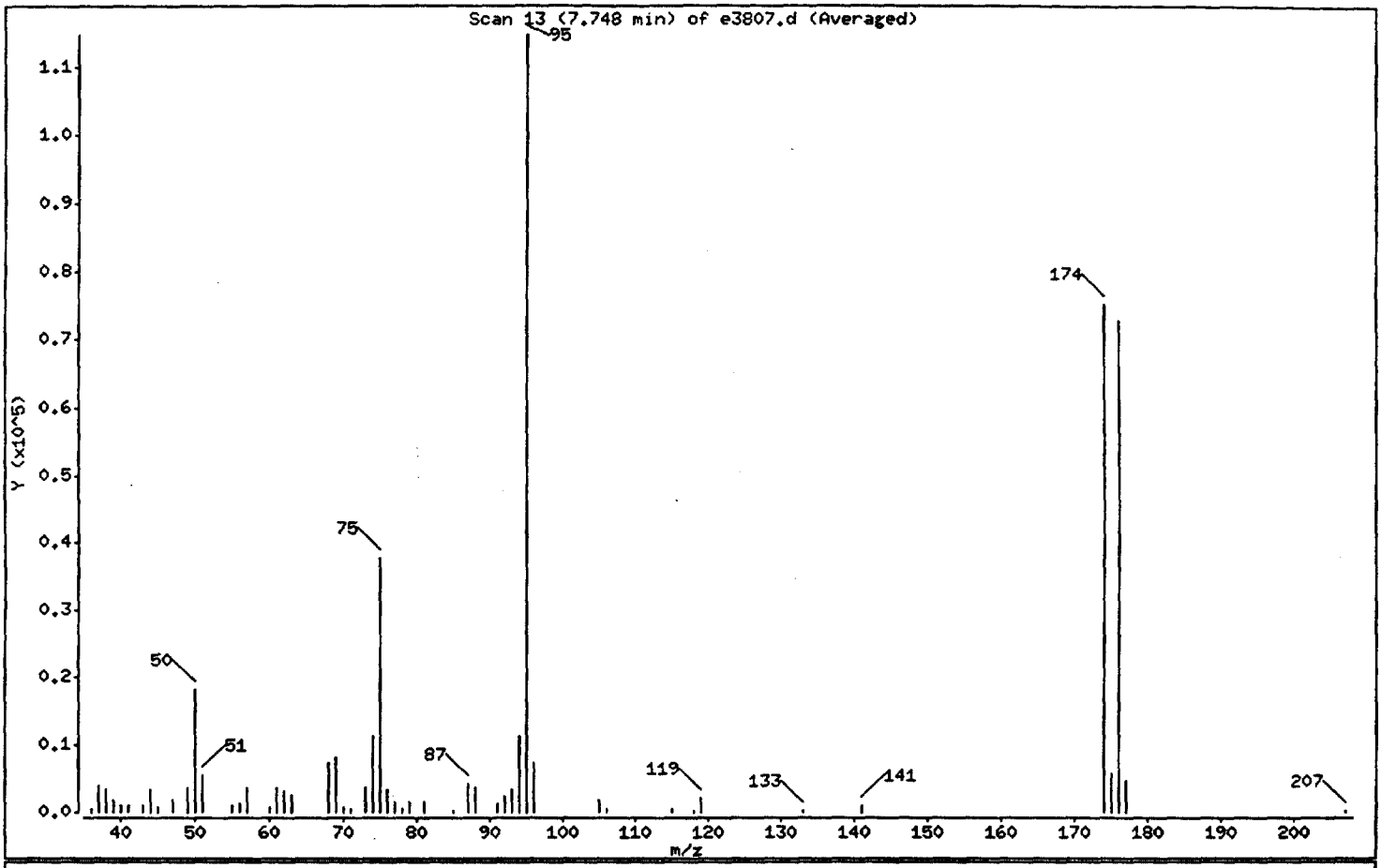
Sample Info: EBFB252A 50ng

Operator: VOAMS 5

Column phase: DB-624

Column diameter: 0.53

1 Bromofluorobenzene



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	15.97
75	30.00 - 60.00% of mass 95	32.88
96	5.00 - 9.00% of mass 95	6.52
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 100.00% of mass 95	65.53
175	5.00 - 9.00% of mass 174	4.99 (7.62)
176	95.00 - 101.00% of mass 174	63.37 (96.70)
177	5.00 - 9.00% of mass 176	4.19 (6.61)

850930559

F 296

Data File: /chem/VOAMS5.i/8260HIGH_SP/08-25-98/09sep98a.b/e3807.d

Date : 09-SEP-98 17:07:00

Client ID: EBFB252A 50ng

Instrument: VOAMS5.i

Sample Info: EBFB252A 50ng

Operator: VOAMS 5

Column phase: DB-624

Column diameter: 0.53

Data File: e3807.d
Spectrum: Scan 14 (7.748 min) of e3807.d (Averaged)
Location of Maximum: 95.00
Number of points: 53

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	630	56.00	1231	77.00	1529	106.00	424
37.00	4046	57.00	3665	78.00	508	115.00	471
38.00	3317	60.00	807	79.00	1525	118.00	226
39.00	1754	61.00	3745	81.00	1646	119.00	2214
40.00	1128	62.00	3076	85.00	203	133.00	204
41.00	956	63.00	2611	87.00	4136	141.00	967
43.00	1093	68.00	7467	88.00	3747	174.00	75216
44.00	3308	69.00	8284	91.00	1335	175.00	5730
45.00	812	70.00	689	92.00	2438	176.00	72736
47.00	1720	71.00	453	93.00	3460	177.00	4808
49.00	3819	73.00	3606	94.00	11300	207.00	228
50.00	18335	74.00	11407	95.00	114776		
51.00	5654	75.00	37736	96.00	7479		
55.00	1111	76.00	3310	105.00	1900		

Data File: /chem/VOAMS5.i/8260HIGH_SP/08-25-98/09sep98a.b/e3807.d

Date : 09-SEP-98 17:07:00

Client ID: EBFB252A 50ng

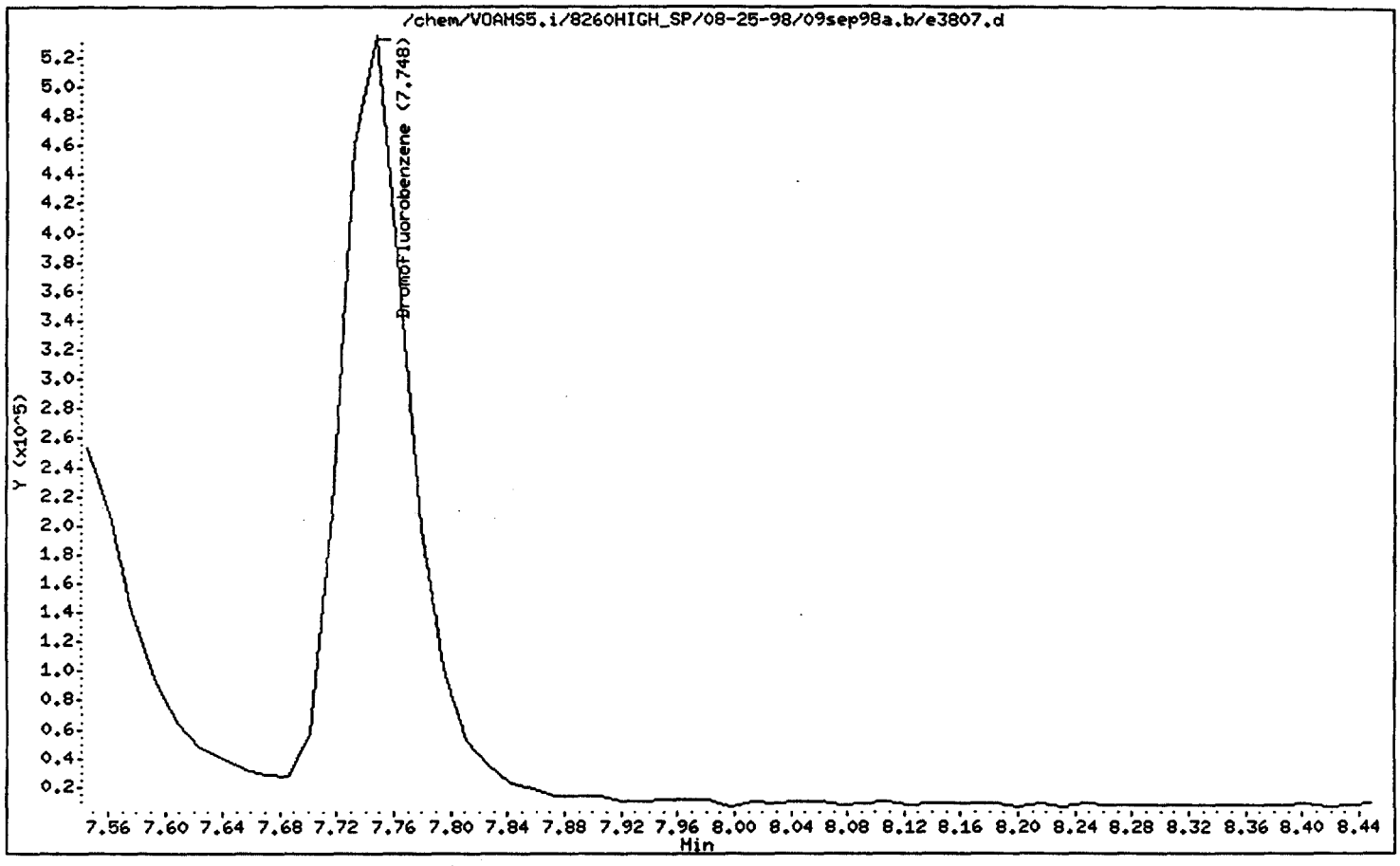
Instrument: VOAMS5.i

Sample Info: EBFB252A 50ng

Operator: VOAMS 5

Column phase: DB-624

Column diameter: 0.53



850930561

F 298

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab File ID: E3833

BFB Injection Date: 09/10/98

Instrument ID: VOAMS5

BFB Injection Time: 0856

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	16.8
75	30.0 - 60.0% of mass 95	33.7
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.4 (0.6)1
174	50.0 - 100.0% of mass 95	61.4
175	5.0 - 9.0% of mass 174	4.3 (7.0)1
176	95.0 - 101.0% of mass 174	59.0 (96.0)1
177	5.0 - 9.0% of mass 176	3.8 (6.5)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT ID	LAB SAMPLE No.	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	ESTD020	ESTD020	E3836	09/10/98	1006
02	ESTD050	ESTD050	E3838	09/10/98	1102
03	ESTD100	ESTD100	E3839	09/10/98	1129
04	ESTD200	ESTD200	E3840	09/10/98	1157
05	ESTD005	ESTD005	E3843	09/10/98	1406
06	EV253	EV253	E3846	09/10/98	1556
07	GP-6R1	81212R1	E3855	09/10/98	2014
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

F 299

Data File: /chem/VOAMS5.i/8260HIGH_SP/09-10-98/10sep98.b/e3833.d

Date : 10-SEP-98 08:56:00

Client ID: EBFB253 50ng

Instrument: VOAMS5.i

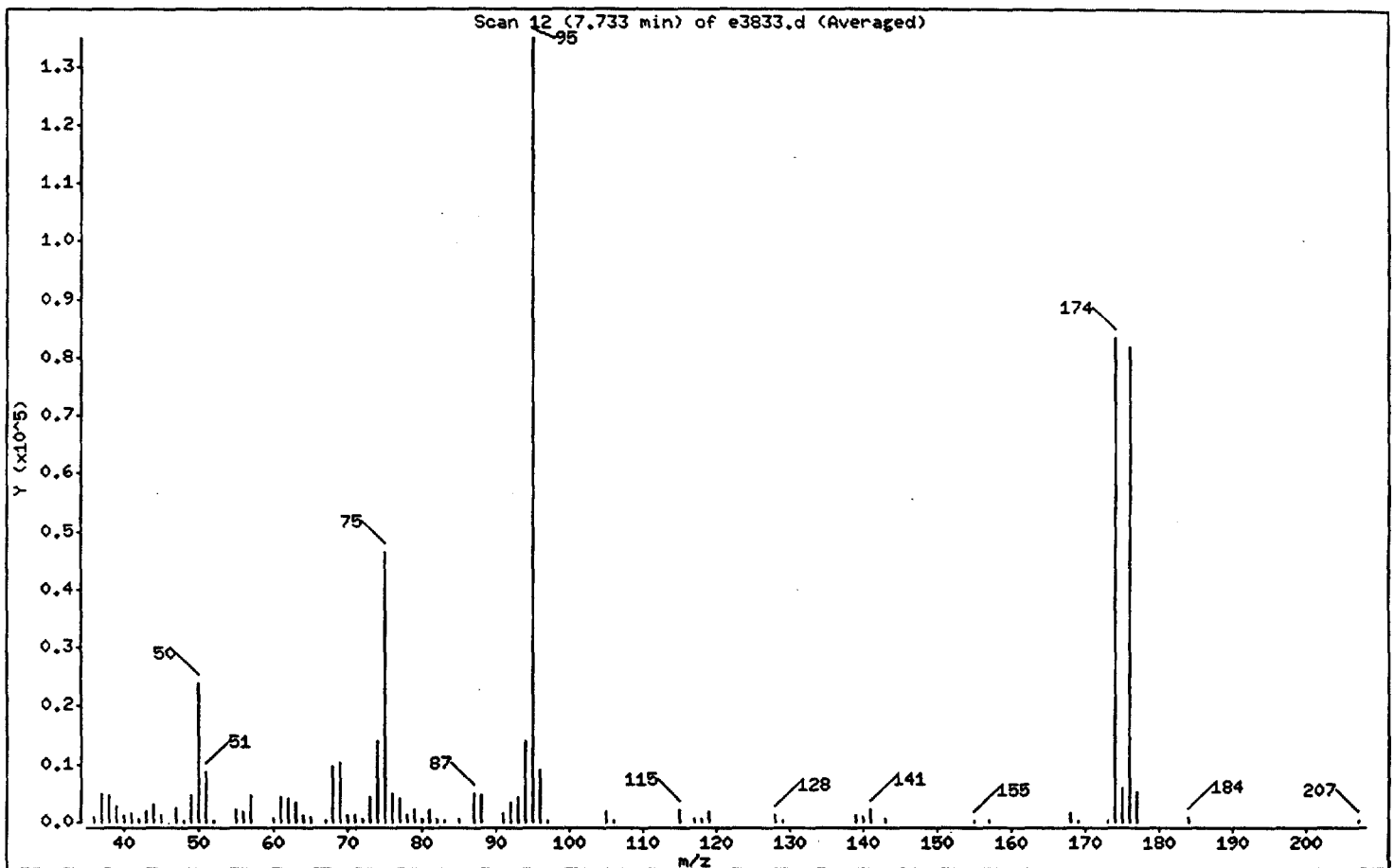
Sample Info: EBFB253 50ng

Operator: VOAMS 5

Column phase: DB-624

Column diameter: 0.53

1 Bromofluorobenzene



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	16.80
75	30.00 - 60.00% of mass 95	33.71
96	5.00 - 9.00% of mass 95	6.84
173	Less than 2.00% of mass 174	0.37 (0.60)
174	50.00 - 100.00% of mass 95	61.39
175	5.00 - 9.00% of mass 174	4.28 (6.98)
176	95.00 - 101.00% of mass 174	58.95 (96.02)
177	5.00 - 9.00% of mass 176	3.81 (6.47)

850930563

F 300

226

Data File: /chem/VOAMS5.i/8260HIGH_SP/09-10-98/10sep98.b/e3833.d

Date : 10-SEP-98 08:56:00

Client ID: EBFB253 50ng

Instrument: VOAMS5.i

Sample Info: EBFB253 50ng

Operator: VOAMS 5

Column phase: DB-624

Column diameter: 0.53

Data File: e3833.d

Spectrum: Scan 13 (7.733 min) of e3833.d (Averaged)

Location of Maximum: 95.00

Number of points: 75

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	987	60.00	615	80.00	703	119.00	2013
37.00	5028	61.00	4253	81.00	2248	128.00	1244
38.00	4790	62.00	4066	82.00	704	129.00	290
39.00	2747	63.00	3510	83.00	212	139.00	1195
40.00	1203	64.00	1196	85.00	557	140.00	808
41.00	1445	65.00	825	87.00	5000	141.00	2106
42.00	502	67.00	452	88.00	4697	143.00	489
43.00	1806	68.00	9735	91.00	1416	155.00	290
44.00	3215	69.00	10079	92.00	3376	157.00	213
45.00	1247	70.00	1254	93.00	4420	168.00	1683
47.00	2462	71.00	1300	94.00	13968	169.00	220
48.00	306	72.00	745	95.00	134858	173.00	201
49.00	4668	73.00	4253	96.00	9052	174.00	83405
50.00	23821	74.00	14026	97.00	444	175.00	5978
51.00	8819	75.00	46488	105.00	1990	176.00	81690
52.00	296	76.00	4820	106.00	258	177.00	5265
55.00	2145	77.00	4101	115.00	2062	184.00	913
56.00	2000	78.00	1297	117.00	512	207.00	235
57.00	4736	79.00	2033	118.00	735		

Data File: /chem/VOAMS5.i/8260HIGH_SP/09-10-98/10sep98.b/e3833.d

Date : 10-SEP-98 08:56:00

Client ID: EBFB253 50ng

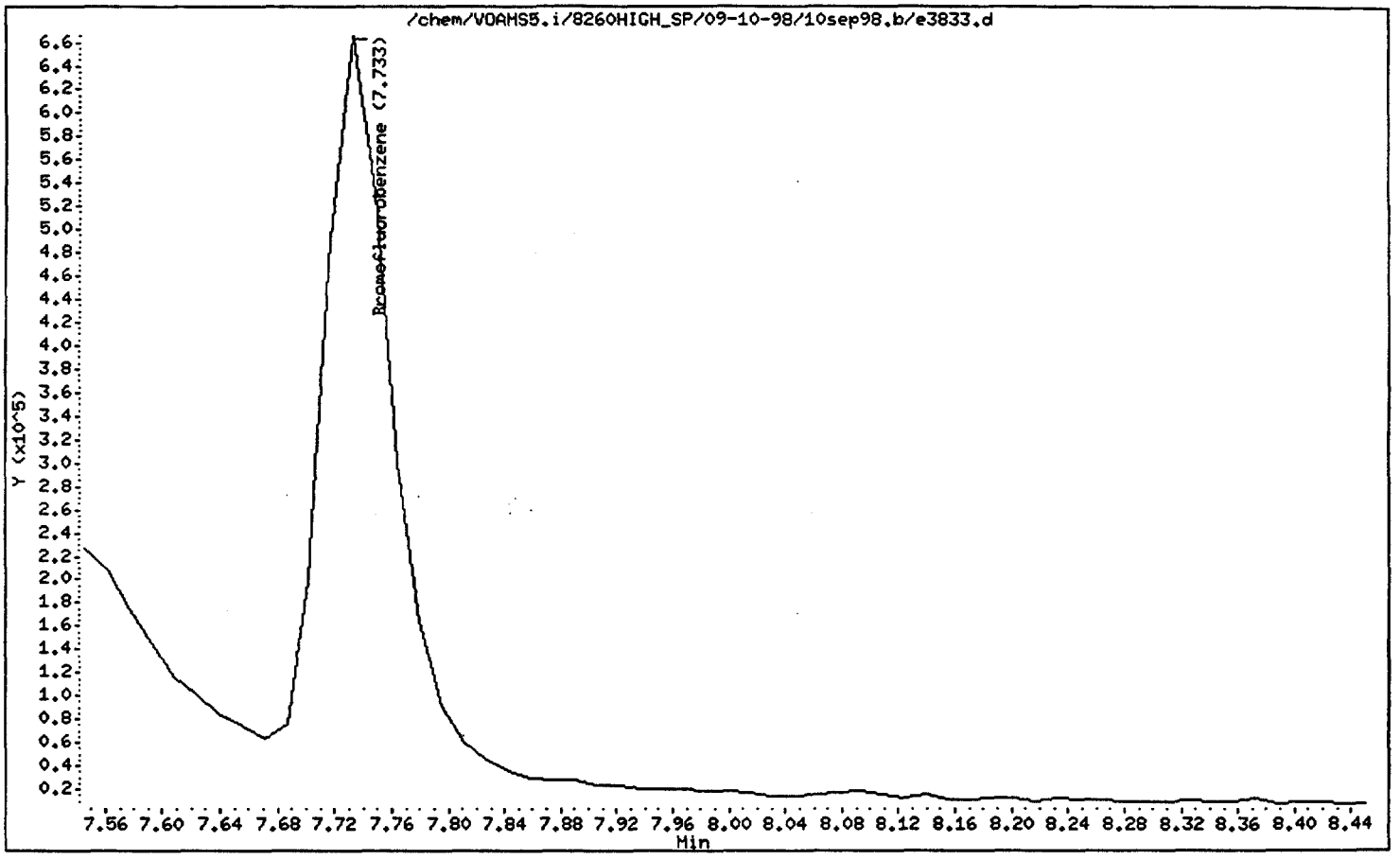
Instrument: VOAMS5.i

Sample Info: EBFB253 50ng

Operator: VOAMS 5

Column phase: DB-624

Column diameter: 0.53



850930565

F 302

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab File ID: E3866

BFB Injection Date: 09/11/98

Instrument ID: VOAMS5

BFB Injection Time: 1342

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	18.0
75	30.0 - 60.0% of mass 95	34.8
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 100.0% of mass 95	56.6
175	5.0 - 9.0% of mass 174	3.8 (6.8)1
176	95.0 - 101.0% of mass 174	54.9 (97.1)1
177	5.0 - 9.0% of mass 176	3.7 (6.8)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

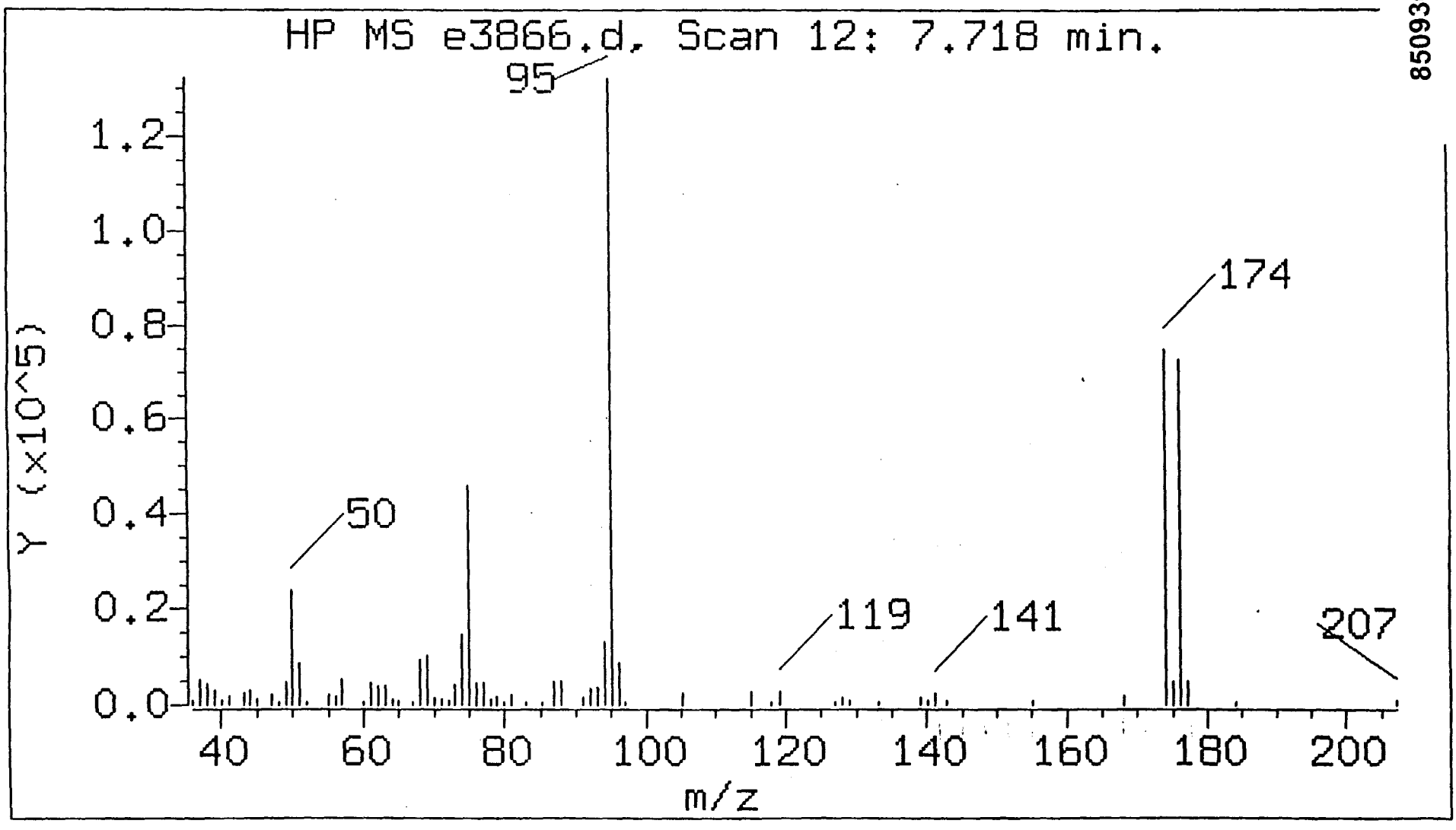
	CLIENT ID	LAB SAMPLE No.	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	ESTD254A	ESTD254A	E3867	09/11/98	1356
02	EV254A	EV254A	E3873	09/11/98	1730
03	GP-2	81204	E3882	09/11/98	2153
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

850930566

F 303

Data File: /chem/VOAMS5.i/8260HIGH_SP/09-10-98/11sep98a
Injection Date: 11-SEP-98 13:42:00
Instrument: VOAMS5.i
Client Sample ID: EBFB254A 50ng

850930567



F 304

Performance Check

Data File: /chem/VOAMS5.i/8260HIGH_SP/09-10-98/11sep98a.b/e3866.d
Inj Date: 11-SEP-98 13:42:00

Lab Sample ID: EBFB254A 50ng
Client Sample ID: EBFB254A 50ng
Spectrum: HP MS e3866.d, Scan 12: 7.718 min.
Performance Check: PASSED 12-Sep-98 15:51:17

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	18.02
75	30.00 - 60.00% of mass 95	34.82
96	5.00 - 9.00% of mass 95	6.69
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 100.00% of mass 95	56.61
175	5.00 - 9.00% of mass 174	3.84 (6.78)
176	95.00 - 101.00% of mass 174	54.94 (97.06)
177	5.00 - 9.00% of mass 176	3.72 (6.77)

850930568

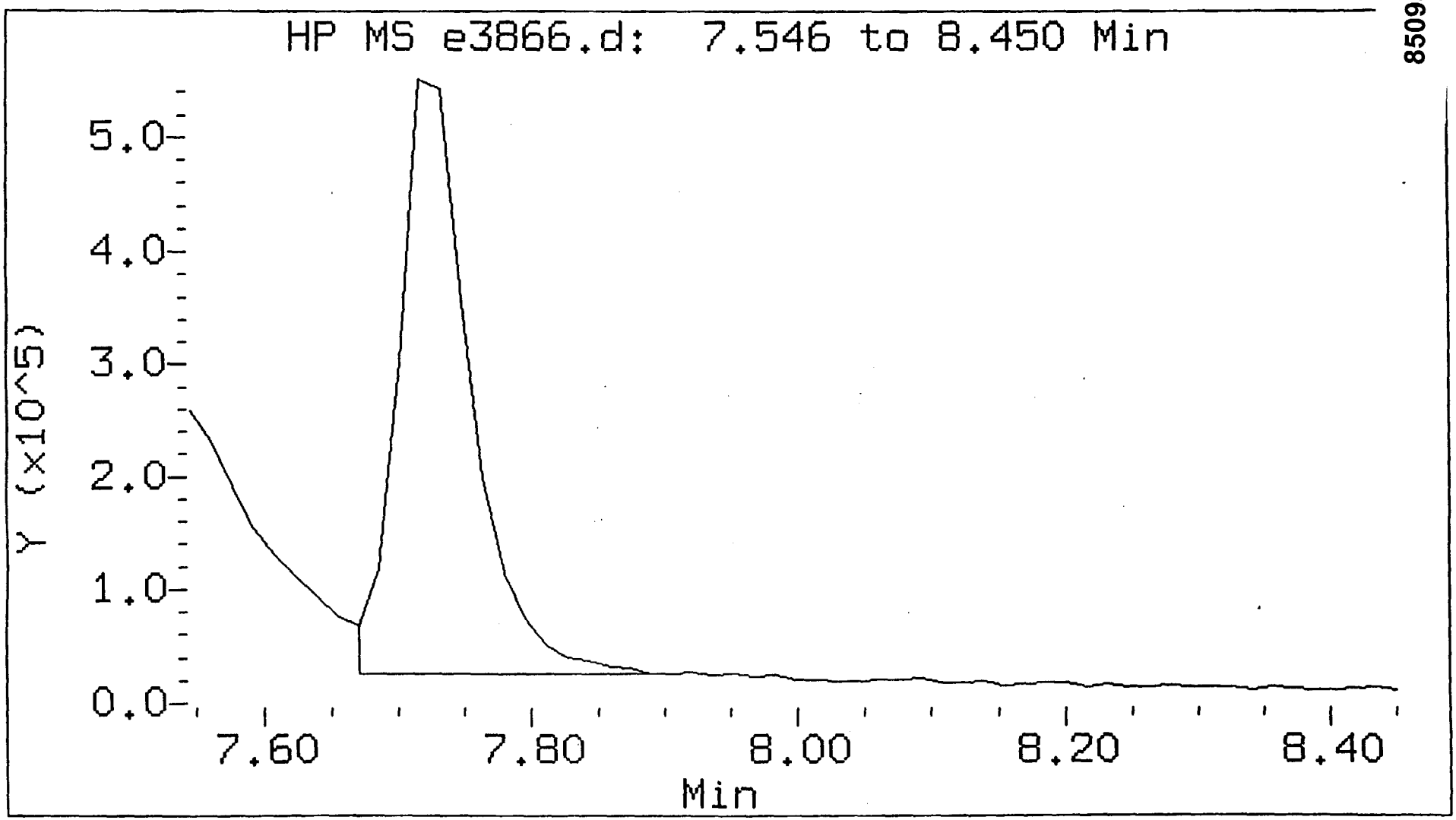
F 30

Data File: /chem/VOAMS5.i/8260HIGH_SP/09-10-98/11sep98a.b/e3866.d
Spectrum: HP MS e3866.d, Scan 12: 7.718 min.
Location of Maximum: 95.10
Number of points: 70

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1028	59.95	770	78.90	1797	127.05	741
37.10	5482	61.05	4755	79.90	751	128.05	1611
38.10	4276	62.05	4042	81.00	2255	129.05	899
39.10	3216	63.05	4008	83.10	753	133.15	665
40.10	1019	64.05	1118	85.20	783	139.10	1473
41.10	1962	65.05	1064	87.00	5057	140.10	930
43.10	2369	67.05	628	88.00	4959	141.10	2642
44.10	3253	68.05	9480	91.10	1513	142.90	822
45.10	1367	69.05	10323	92.10	3521	155.10	1054
47.05	2091	70.15	1536	93.10	3673	168.05	1990
48.05	748	71.15	1200	94.10	13323	174.05	74848
49.05	4624	72.05	817	95.10	132224	175.05	5071
50.05	23832	73.05	4560	96.10	8849	176.05	72648
51.05	8873	74.05	14864	97.10	717	177.05	4918
52.05	613	75.05	46040	105.20	2410	184.15	658
55.05	2328	76.15	4611	115.05	2711	207.10	843
56.05	2026	77.10	4729	118.05	765		
57.05	5258	78.10	1387	119.15	2766		

Data File: /chem/VOAMS5.i/8260HIGH_SP/09-10-98/11sep98a
Injection Date: 11-SEP-98 13:42:00
Instrument: VOAMS5.i
Client Sample ID: EBFB254A 50ng

850930570



F 307

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab File ID: E3943

BFB Injection Date: 09/14/98

Instrument ID: VOAMS5

BFB Injection Time: 1200

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	18.2
75	30.0 - 60.0% of mass 95	35.1
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 100.0% of mass 95	55.9
175	5.0 - 9.0% of mass 174	4.1 (7.4)1
176	95.0 - 101.0% of mass 174	54.5 (97.5)1
177	5.0 - 9.0% of mass 176	3.9 (7.1)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT ID	LAB SAMPLE No.	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	ESTD257	ESTD257	E3944	09/14/98	1216
02	EV257	EV257	E3948	09/14/98	1424
03	GP-7	81214	E3960	09/14/98	2027
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

850930571

F 308

Data File: /chem/VOAMS5.i/8260HIGH_SP/09-10-98/14sep98.b/e3943.d

Date : 14-SEP-98 12:00:00

Client ID: EBFB257 50ng

Instrument: VOAMS5.i

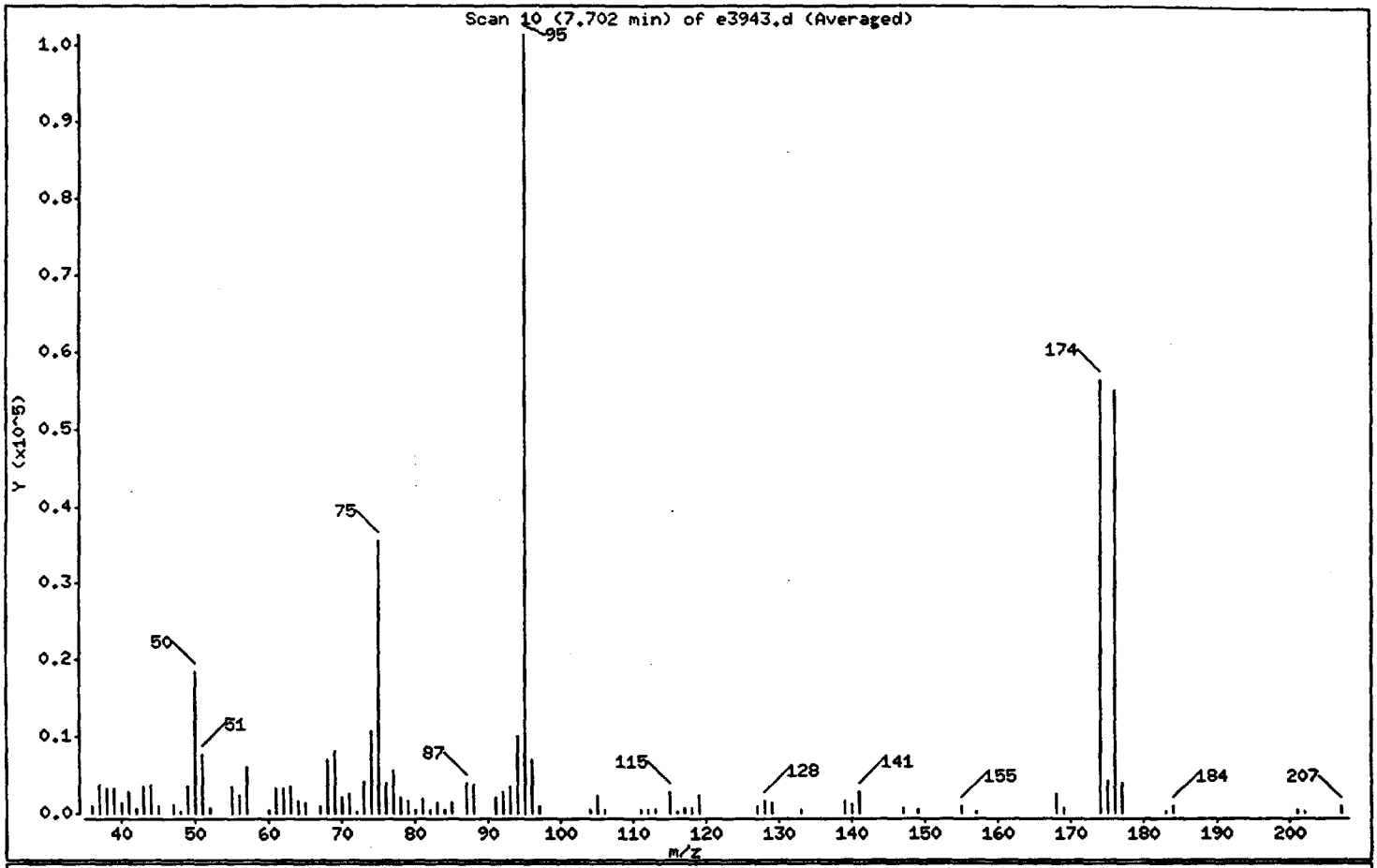
Sample Info: EBFB257 50ng

Operator: VOAMS 5

Column phase: DB-624

Column diameter: 0.53

1 Bromofluorobenzene



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	18.21
75	30.00 - 60.00% of mass 95	35.10
96	5.00 - 9.00% of mass 95	6.78
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 100.00% of mass 95	55.86
175	5.00 - 9.00% of mass 174	4.14 (7.40)
176	95.00 - 101.00% of mass 174	54.47 (97.51)
177	5.00 - 9.00% of mass 176	3.88 (7.12)

Data File: /chem/VOAMS5.i/8260HIGH_SP/09-10-98/14sep98.b/e3943.d

Date : 14-SEP-98 12:00:00

Client ID: EBFB257 50ng

Instrument: VOAMS5.i

Sample Info: EBFB257 50ng

Operator: VOAMS 5

Column phase: DB-624

Column diameter: 0.53

Data File: e3943.d

Spectrum: Scan 11 (7.702 min) of e3943.d (Averaged)

Location of Maximum: 95.00

Number of points: 86

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	845	63.00	3399	87.00	3991	129.00	1398
37.00	3684	64.00	1557	88.00	3645	133.00	472
38.00	3360	65.00	1317	91.00	1995	139.00	1724
39.00	3153	67.00	890	92.00	2740	140.00	1055
40.00	1410	68.00	6998	93.00	3530	141.00	2835
41.00	2812	69.00	8178	94.00	10099	147.00	681
42.00	760	70.00	2074	95.00	101293	149.00	541
43.00	3425	71.00	2482	96.00	6871	155.00	850
44.00	3668	72.00	201	97.00	919	157.00	214
45.00	1024	73.00	4120	104.00	416	168.00	2474
47.00	1210	74.00	10687	105.00	2431	169.00	724
48.00	210	75.00	35549	106.00	481	174.00	56586
49.00	3566	76.00	4033	111.00	463	175.00	4189
50.00	18441	77.00	5505	112.00	546	176.00	55176
51.00	7745	78.00	2053	113.00	445	177.00	3931
52.00	802	79.00	1721	115.00	2857	183.00	235
55.00	3601	80.00	505	116.00	248	184.00	999
56.00	2380	81.00	1932	117.00	729	201.00	541
57.00	5972	82.00	436	118.00	771	202.00	229
60.00	516	83.00	1328	119.00	2360	207.00	917
61.00	3239	84.00	547	127.00	850		
62.00	3248	85.00	1346	128.00	1578		

850930573

F 310

Data File: /chem/VOAMS5.i/8260HIGH_SP/09-10-98/14sep98.b/e3943.d

Date : 14-SEP-98 12:00:00

Client ID: EBFB257 50ng

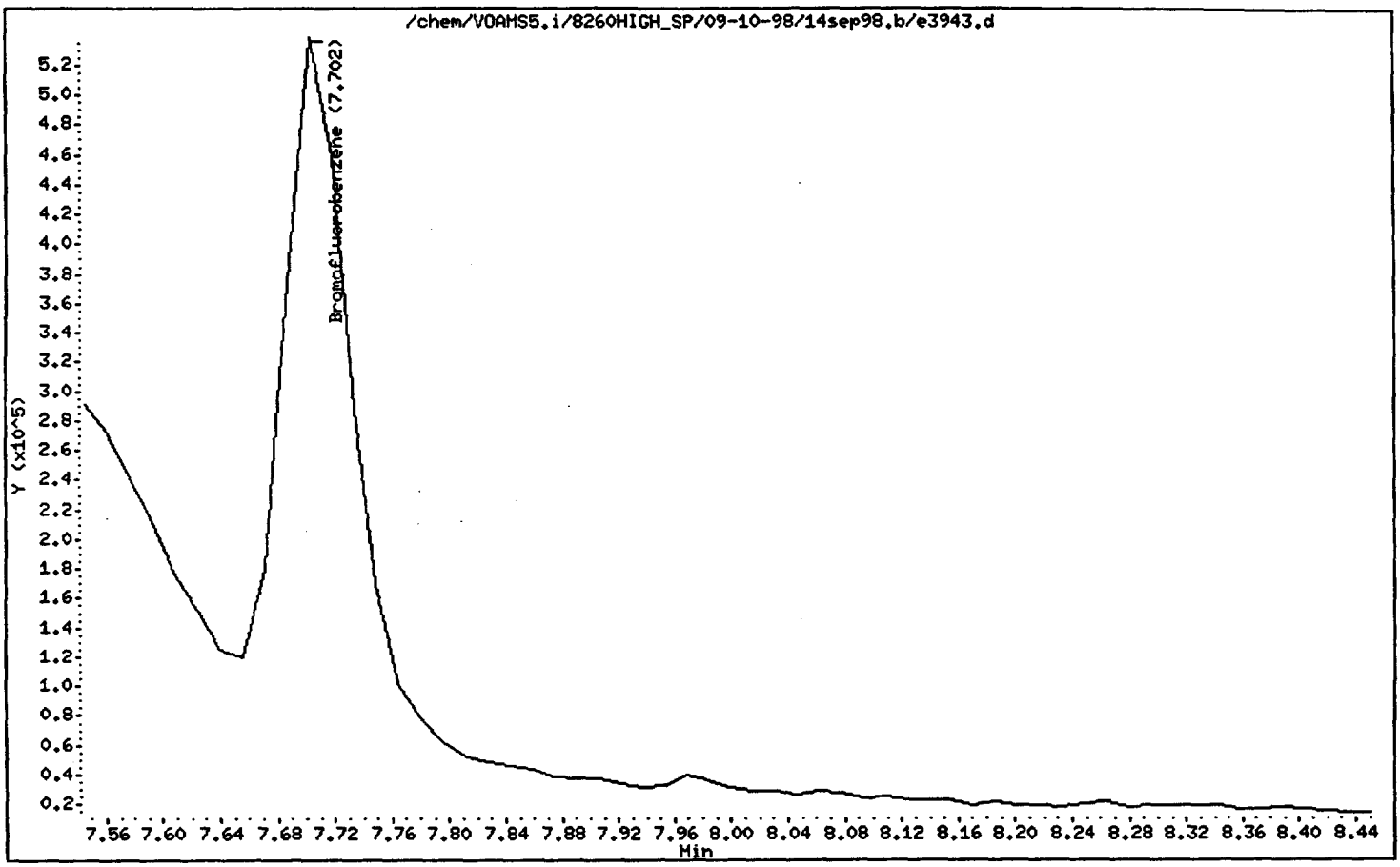
Instrument: VOAMS5.i

Sample Info: EBFB257 50ng

Operator: VOAMS 5

Column phase: DB-624

Column diameter: 0.53



850930574

F 31

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab File ID: F3414

BFB Injection Date: 08/28/98

Instrument ID: VOAMS6

BFB Injection Time: 1116

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	22.3
75	30.0 - 60.0% of mass 95	47.9
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.1
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 100.0% of mass 95	68.9
175	5.0 - 9.0% of mass 174	4.9 (7.2)1
176	95.0 - 101.0% of mass 174	67.1 (97.4)1
177	5.0 - 9.0% of mass 176	4.6 (6.9)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT ID	LAB SAMPLE No.	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	FSTD200	FSTD200	F3415	08/28/98	1149
02	FSTD050	FSTD050	F3416	08/28/98	1218
03	FSTD020	FSTD020	F3417	08/28/98	1247
04	FSTD010	FSTD010	F3418	08/28/98	1316
05	FSTD005	FSTD005	F3419	08/28/98	1345
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

850930575

F 312

Data File: /chem/VOAMS6.i/624/08-28-98/28aug98.b/f3414.d

Date : 28-AUG-98 11:16:00

Client ID: FBFB240 50ng

Instrument: VOAMS6.i

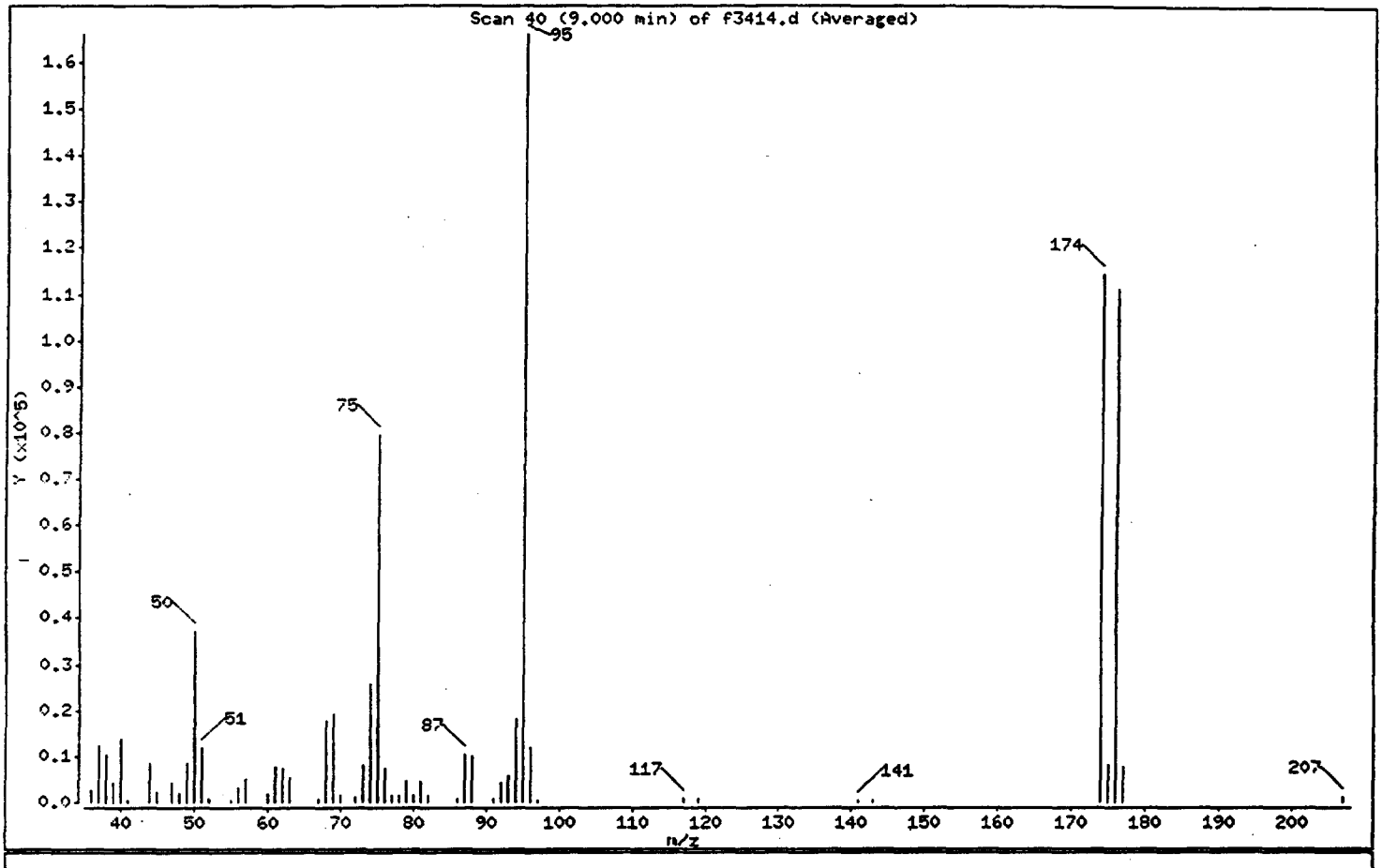
Sample Info: FBFB240 50ng

Operator: VOAMS 1

Column phase: DB-624

Column diameter: 0.53

1 Bromofluorobenzene



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	22.32
75	30.00 - 60.00% of mass 95	47.93
96	5.00 - 9.00% of mass 95	7.06
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 100.00% of mass 95	68.91
175	5.00 - 9.00% of mass 174	4.93 (7.16)
176	95.00 - 101.00% of mass 174	67.08 (97.35)
177	5.00 - 9.00% of mass 176	4.60 (6.85)

850930576

F 31

Data File: /chem/VOAHS6.i/624/08-28-98/28aug98.b/f3414.d

Date : 28-AUG-98 11:16:00

Client ID: FBFB240 50ng

Instrument: VOAHS6.i

Sample Info: FBFB240 50ng

Operator: VOAHS 1

Column phase: DB-624

Column diameter: 0.53

Data File: f3414.d

Spectrum: Scan 41 (9.000 min) of f3414.d (Averaged)

Location of Maximum: 95.00

Number of points: 55

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2813	55.00	416	75.00	79600	94.00	17926
37.00	12217	56.00	3144	76.00	7117	95.00	166080
38.00	10198	57.00	4910	77.00	1541	96.00	11733
39.00	4221	60.00	1797	78.00	1569	97.00	283
40.00	13960	61.00	7736	79.00	4669	117.00	902
41.00	556	62.00	7380	80.00	1588	119.00	653
44.00	8526	63.00	5327	81.00	4554	141.00	563
45.00	2334	67.00	847	82.00	1384	143.00	326
47.00	4327	68.00	17688	86.00	597	174.00	114440
48.00	1870	69.00	19133	87.00	10150	175.00	8191
49.00	8292	70.00	1627	88.00	10012	176.00	111408
50.00	37077	72.00	1033	91.00	930	177.00	7636
51.00	11686	73.00	8115	92.00	4058	207.00	1289
52.00	825	74.00	25570	93.00	5915		

850930577

F 314

Data File: /chem/VOAMS6.i/624/08-28-98/28aug98.b/f3414.d

Date : 28-AUG-98 11:16:00

Client ID: FBFB240 50ng

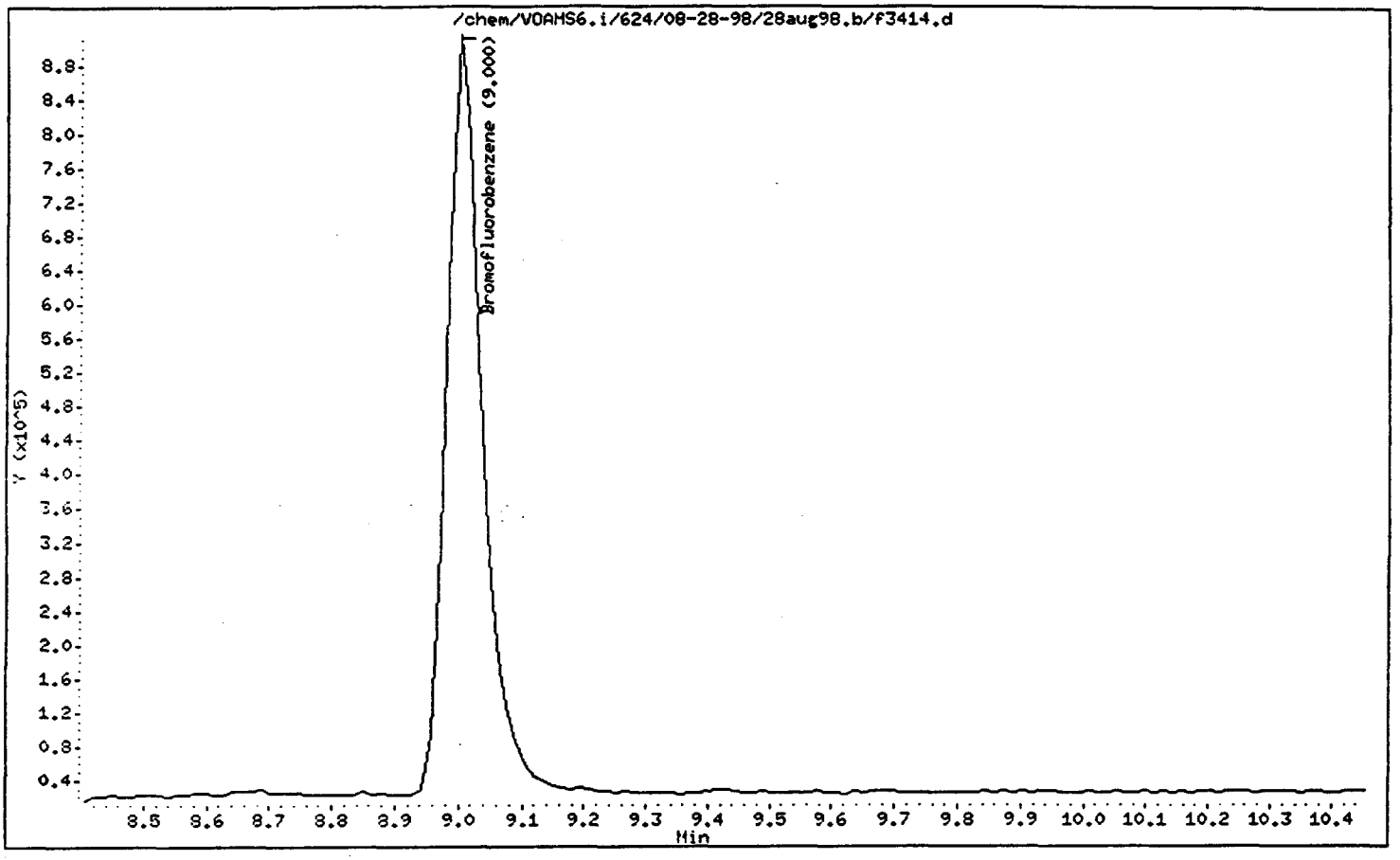
Instrument: VOAMS6.i

Sample Info: FBFB240 50ng

Operator: VOAMS 1

Column phase: DB-624

Column diameter: 0.53



850930578

F 31

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab File ID: F3700

BFB Injection Date: 09/04/98

Instrument ID: VOAMS6

BFB Injection Time: 1200

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	21.4
75	30.0 - 60.0% of mass 95	47.3
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.4
173	Less than 1.0% of mass 95	0.0
174	50.0 - 100.0% of mass 95	71.4
175	5.0 - 9.0% of mass 174	5.6 (7.8)1
176	95.0 - 101.0% of mass 174	68.9 (96.4)1
177	5.0 - 9.0% of mass 176	4.7 (6.9)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT ID	LAB SAMPLE No.	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	FSTD247	FSTD247	F3701	09/04/98	1226
02	FV247	FV247	F3704	09/04/98	1411
03	TB-2	81200	F3718	09/04/98	2137
04	FB-2	81201	F3719	09/04/98	2205
05	GP-1W	81203	F3720	09/04/98	2234
06	GP-2W	81205	F3721	09/04/98	2303
07	GP-3W	81207	F3722	09/04/98	2337
08	GP-4W	81209	F3723	09/05/98	0011
09	GP-5W	81211	F3724	09/05/98	0039
10	GP-6W	81213	F3725	09/05/98	0108
11	GP-7W	81215	F3726	09/05/98	0142
12	GP-8W	81217	F3727	09/05/98	0215
13	GP-9W	81219	F3728	09/05/98	0244
14					
15					
16					
17					
18					
19					
20					
21					
22					

850930579

F 346

Data File: /chem/VOAMS6.i/624/08-28-98/04sep98.b/f3700.d

Date : 04-SEP-98 12:00:00

Client ID: FBFB247 50ng

Instrument: VOAMS6.i

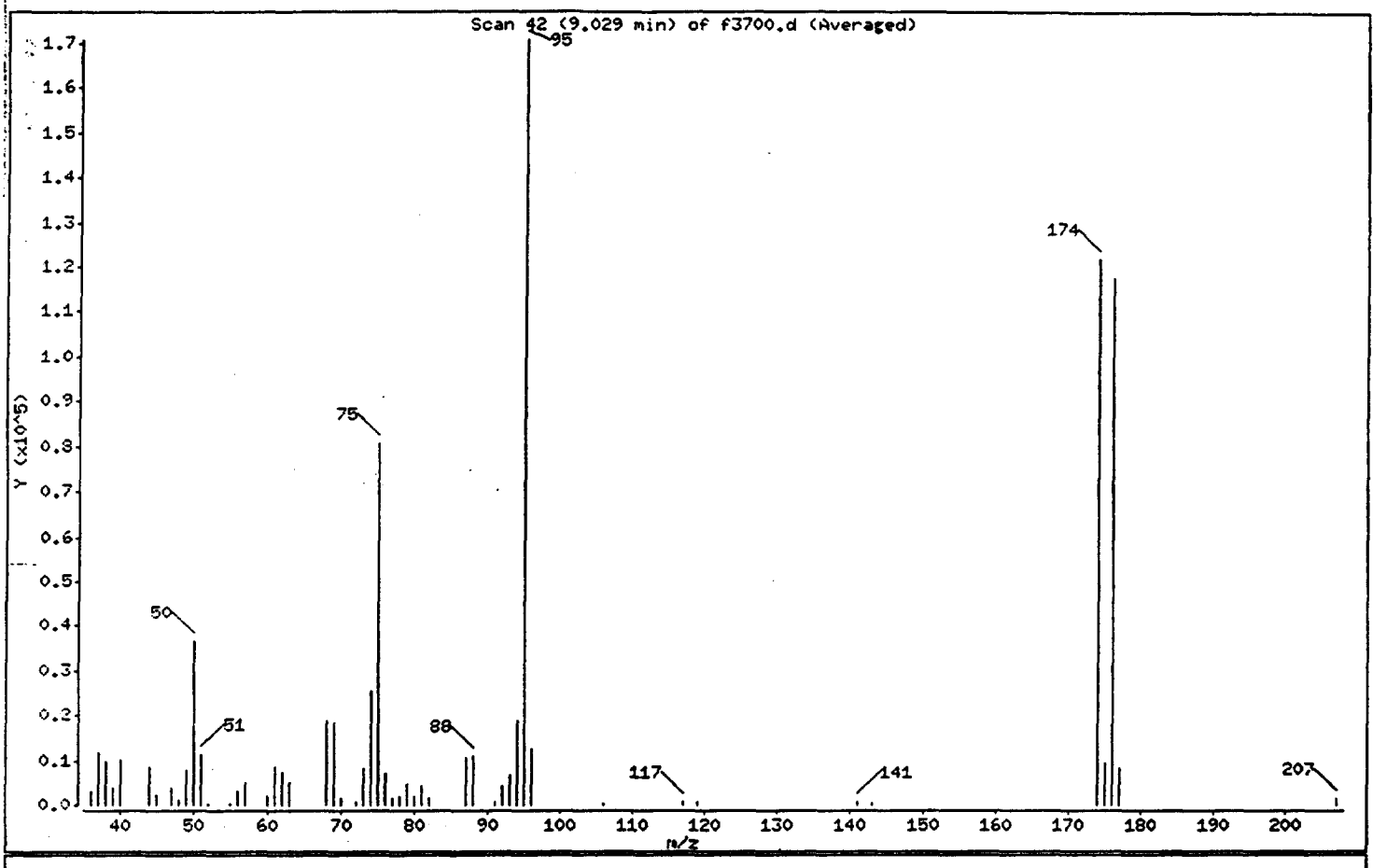
Sample Info: FBFB247 50ng

Operator: VOAMS 4

Column phase: DB-624

Column diameter: 0.53

1 Bromofluorobenzene



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	21.41
75	30.00 - 60.00% of mass 95	47.33
96	5.00 - 9.00% of mass 95	7.41
173	Less than 1.00% of mass 95	0.00
174	50.00 - 100.00% of mass 95	71.41
175	5.00 - 9.00% of mass 174	5.55 (7.78)
176	95.00 - 101.00% of mass 174	68.86 (96.42)
177	5.00 - 9.00% of mass 176	4.73 (6.87)

850930580

F 31

Data File: /chem/VOAMS6.i/624/08-28-98/04sep98.b/f3700.d

Date : 04-SEP-98 12:00:00

Client ID: FBFB247 5Cng

Instrument: VOAMS6.i

Sample Info: FBFB247 50ng

Operator: VOAMS 4

Column phase: DB-624

Column diameter: 0.53

Data File: f3700.d
Spectrum: Scan 43 (9.029 min) of f3700.d (Averaged)
Location of Maximum: 95.00
Number of points: 52

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	3147	56.00	3014	77.00	1759	106.00	276
37.00	11843	57.00	4951	78.00	1950	117.00	936
38.00	10033	60.00	2000	79.00	4567	119.00	863
39.00	4099	61.00	8662	80.00	1830	141.00	670
40.00	10360	62.00	7509	81.00	4525	143.00	328
44.00	8784	63.00	5126	82.00	1430	174.00	121970
45.00	2526	68.00	18935	87.00	10520	175.00	9484
47.00	3938	69.00	18656	88.00	10905	176.00	117608
48.00	1337	70.00	1589	91.00	942	177.00	8074
49.00	7870	72.00	975	92.00	4150	207.00	1471
50.00	36570	73.00	8318	93.00	6796		
51.00	11582	74.00	25648	94.00	18891		
52.00	290	75.00	80834	95.00	170794		
55.00	307	76.00	7213	96.00	12653		

Data File: /chem/VOAMS6.i/624/08-28-98/04sep98.b/f3700.d

Date : 04-SEP-98 12:00:00

Client ID: FBFB247 50ng

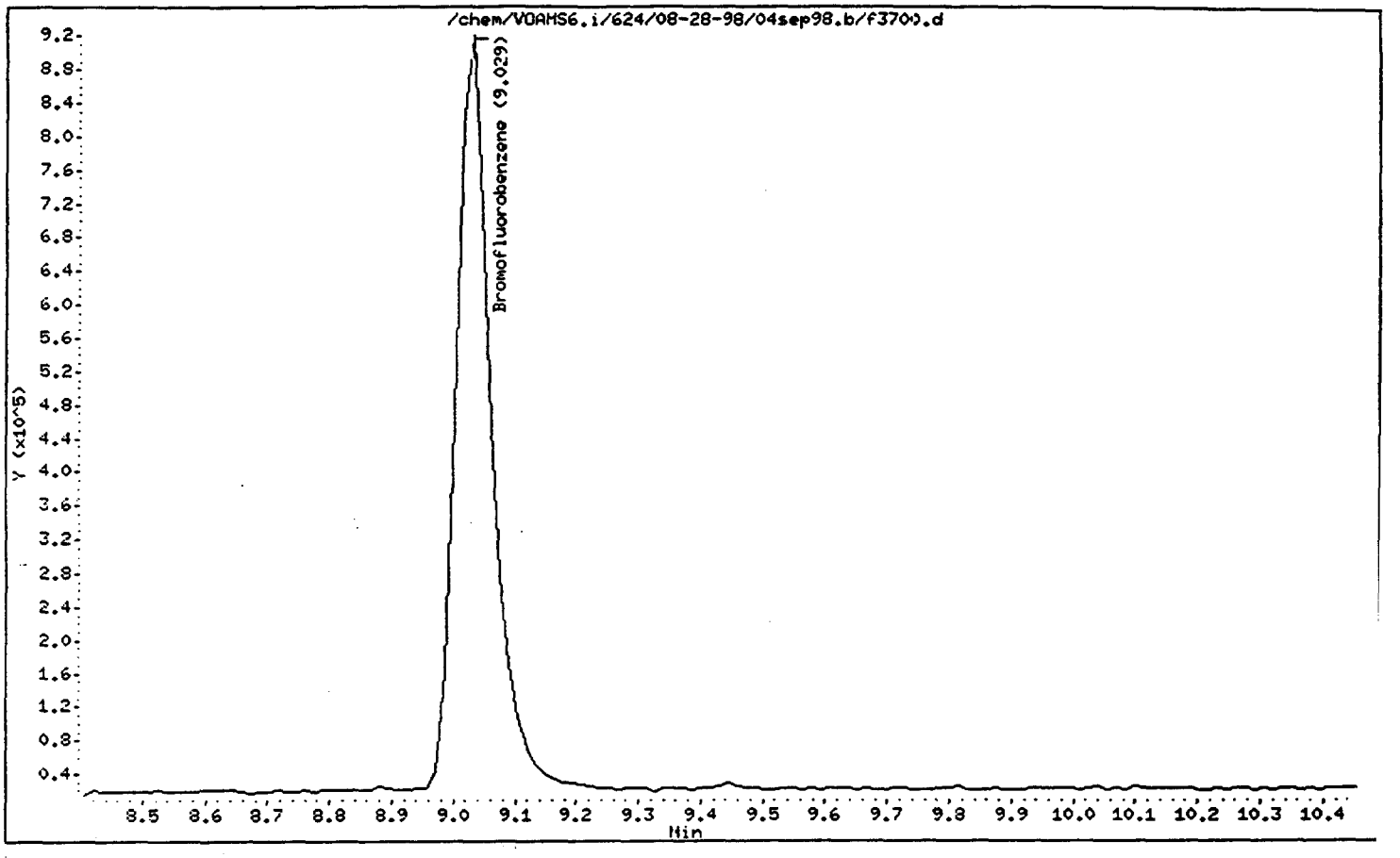
Instrument: VOAMS6.i

Sample Info: FBFB247 50ng

Operator: VOAMS 4

Column phase: DB-624

Column diameter: 0.53



850930582

F 319

VOLATILE METHOD BLANK SUMMARY

LAB SAMPLE NO.

EV252A

Matrix: SOIL

Date Analyzed: 09/09/98

Level: HIGH

Time Analyzed: 2000

Lab File ID: E3813

Heated Purge (Y/N) N

Instrument ID: VOAMS5

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT ID.	LAB SAMPLE NO	LAB FILE ID	TIME ANALYZED
01	TB-1	81199	E3816	2129
02	GP-1	81202	E3818	2224
03	GP-3	81206	E3819	2252
04	GP-4	81208	E3820	2319
05	GP-5	81210	E3821	2347
06	GP-8	81216	E3822	0014
07	GP-9	81218	E3823	0042
08	GP-10	81220	E3824	0110
09	GP-6	81212	E3828	0259
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS:

Client ID: **EV252A**
Site:

Lab Sample No: **EV252A**
Lab Job No: G893

Date Sampled: _____
Date Received: _____
Date Analyzed: 09/09/98
GC Column: DB624
Instrument ID: VOAMS5.i
Lab File ID: e3813.d

Matrix: SOIL
Level: HIGH
Sample Weight: 5.0 g
Methanol Ext. Volume: 10.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 0

VOLATILE ORGANICS - GC/MS
METHOD 8260B

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
Chloromethane	ND	500
Bromomethane	ND	500
Vinyl Chloride	ND	500
Chloroethane	ND	500
Methylene Chloride	ND	300
Acetone	ND	500
Carbon Disulfide	ND	500
Trichlorofluoromethane	ND	500
1,1-Dichloroethene	ND	200
1,1-Dichloroethane	ND	500
trans-1,2-Dichloroethene	ND	500
cis-1,2-Dichloroethene	ND	500
Chloroform	ND	500
1,2-Dichloroethane	ND	200
2-Butanone	ND	500
1,1,1-Trichloroethane	ND	500
Carbon Tetrachloride	ND	200
Bromodichloromethane	ND	100
1,2-Dichloropropane	ND	100
cis-1,3-Dichloropropene	ND	500
Trichloroethene	ND	100
Dibromochloromethane	ND	500
1,1,2-Trichloroethane	ND	300
Benzene	ND	100
trans-1,3-Dichloropropene	ND	500
2-Chloroethyl Vinyl Ether	ND	500
Bromoform	ND	400
4-Methyl-2-Pentanone	ND	500
2-Hexanone	ND	500
Tetrachloroethene	ND	100
1,1,2,2-Tetrachloroethane	ND	100
Toluene	ND	500
Chlorobenzene	ND	500
Ethylbenzene	ND	400

Client ID: **EV252A**
Site:

Lab Sample No: **EV252A**
Lab Job No: G893

Date Sampled: _____
Date Received: _____
Date Analyzed: 09/09/98
GC Column: DB624
Instrument ID: VOAMS5.i
Lab File ID: e3813.d

Matrix: SOIL
Level: HIGH
Sample Weight: 5.0 g
Methanol Ext. Volume: 10.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 0

VOLATILE ORGANICS - GC/MS (cont'd)
METHOD 8260B

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
Styrene	ND	500
Xylene (Total)	ND	500
Ethyl Ether	ND	500
Acrolein	ND	10000
Freon TF	ND	500
Isopropanol	ND	50000
Acetonitrile	ND	10000
TBA	ND	10000
Acrylonitrile	ND	5000
MTBE	ND	500
Hexane	ND	100
DIPE	ND	500
Ethyl Acetate	ND	1000
Vinyl Acetate	ND	500
Tetrahydrofuran	ND	100
Cyclohexane	ND	500
Isobutanol	ND	50000
Isopropyl Acetate	ND	1000
n-Heptane	ND	100
n-Butanol	ND	50000
Propyl Acetate	ND	1000
Butyl Acetate	ND	1000
1,2-Dibromoethane	ND	500
1,3-Dichlorobenzene	ND	500
1,4-Dichlorobenzene	ND	500
1,2-Dichlorobenzene	ND	500
Naphthalene	ND	500
Methylnaphthalene (total)	ND	500
Dimethylnaphthalene (total)	ND	500
Dichlorodifluoromethane	ND	500
1,1-Dichloropropene	ND	500
1,2,4-Trichlorobenzene	ND	500
Hexachlorobutadiene	ND	500
1,4-Dioxane	ND	100000

Client ID: **EV252A**
Site:

Lab Sample No: **EV252A**
Lab Job No: G893

Date Sampled: _____
Date Received: _____
Date Analyzed: 09/09/98
GC Column: DB624
Instrument ID: VOAMS5.i
Lab File ID: e3813.d

Matrix: SOIL
Level: HIGH
Sample Weight: 5.0 g
Methanol Ext. Volume: 10.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 0

VOLATILE ORGANICS - GC/MS (cont'd)
METHOD 8260B

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
Methyl Acrylate	ND	100
1,1,1,2-Tetrachloroethane	ND	500
1,2,3-Trichlorobenzene	ND	500
1,2,3-Trichloropropane	ND	500
1,2,4-Trimethylbenzene	ND	500
1,2-Dibromo-3-chloropropane	ND	500
1,3,5-Trimethylbenzene	ND	500
1,3-Dichloropropane	ND	500
2,2-Dichloropropane	ND	500
2-Chlorotoluene	ND	500
4-Chlorotoluene	ND	500
Bromobenzene	ND	500
Bromochloromethane	ND	500
Dibromomethane	ND	500
Isopropylbenzene	ND	500
n-Butylbenzene	ND	500
n-Propylbenzene	ND	500
p-Isopropyltoluene	ND	500
sec-Butylbenzene	ND	500
tert-Butylbenzene	ND	500
Allyl chloride	ND	500
Benzyl chloride	ND	500
Epichlorohydrin	ND	10000
Isoprene	ND	500
Methyl methacrylate	ND	500
n-Pentane	ND	500
Allyl alcohol	ND	100000

Client ID: **EV252A**
Site:

Lab Sample No: **EV252A**
Lab Job No: G893

Date Sampled: _____
Date Received: _____
Date Analyzed: 09/09/98
GC Column: DB624
Instrument ID: VOAMS5.i
Lab File ID: e3813.d

Matrix: SOIL
Level: HIGH
Sample Weight: 5.0 g
Methanol Ext. Volume: 10.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 0.0

VOLATILE ORGANICS - GC/MS
TENTATIVELY IDENTIFIED COMPOUNDS
METHOD 8260B

	COMPOUND NAME	RT	EST. CONC. ug/kg	Q
1.	Unknown Siloxane	15.93	2200	
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

TOTAL ESTIMATED CONCENTRATION 2200

850930587

F 324

Data File: /chem/VOAMS5.i/8260HIGH_SP/08-25-98/09sep98a.b/e3813.d
Report Date: 11-Sep-98 16:07:58

Envirotech Research, Inc.

VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/VOAMS5.i/8260HIGH_SP/08-25-98/09sep98a.b/e3813.d
Lab Smp Id: EV252A Client Smp ID: EV252A
Inj Date : 09-SEP-98 20:00:00
Operator : VOAMS 5 Inst ID: VOAMS5.i
Smp Info : EV252A
Misc Info :
Comment :
Method : /chem/VOAMS5.i/8260HIGH_SP/08-25-98/09sep98a.b/8260b-HIGH.m
Meth Date : 09-Sep-98 18:27:26 Quant Type: ISTD
Cal Date : 25-AUG-98 13:08:00 Cal File: e3451.d
Als bottle: 5 QC Sample: BLANK
Dil Factor: 50.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.20
Procesing Host: hpvoa

Concentration Formula: (Vt/Ws)/((100-M)/100)

Name	Value	Description
Vt	10.000	Volume of final extract (mL)
Ws	5.000	Weight of sample extracted (g)
M	0.000	% Moisture (not decanted)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
$ 16 1,2-Dichloroethane-d4 (SUR)	65	8.689	8.719	(0.949)	415984	44	4400
* 19 Fluorobenzene	96	9.156	9.171	(1.000)	1938086	50	
$ 37 Toluene-d8 (SUR)	98	11.117	11.137	(1.214)	1521794	48	4800
* 32 Chlorobenzene-d5	117	12.814	12.823	(1.000)	1198196	50	
$ 41 Bromofluorobenzene (SUR)	174	14.074	14.103	(1.098)	538717	45	4500
* 91 1,4-Dichlorobenzene-d4	152	15.288	15.307	(1.000)	445703	50	

850930588

F 325

Data File: /chem/VOAMS5.i/8260HIGH_SP/08-25-98/09sep98a.b/e3813.d
Date : 09-SEP-98 20:00:00
Client ID: EV252A
Sample Info: EV252A

Instrument: VOAMS5.i

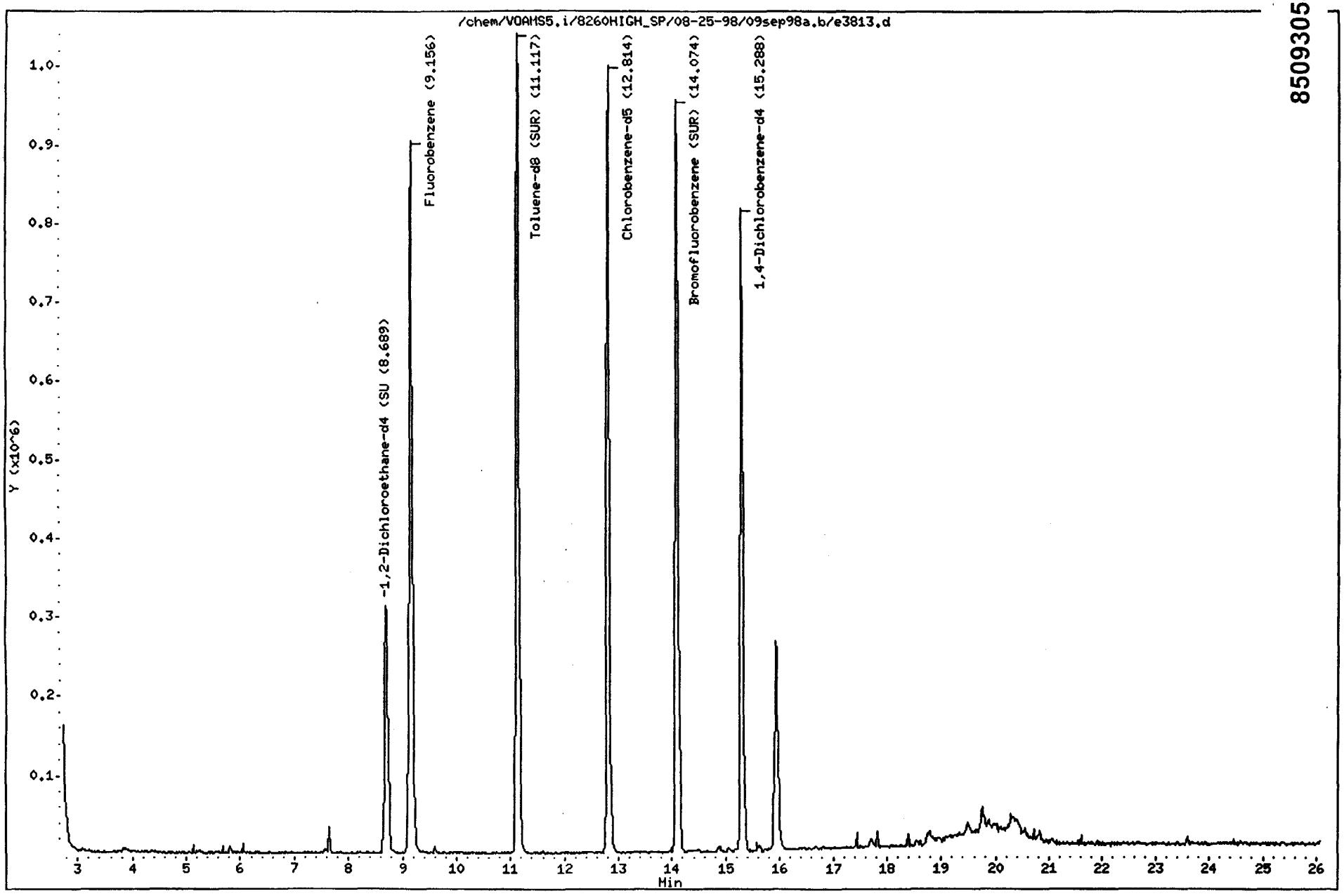
Operator: VOAMS 5
Column diameter: 0.53

Column phase: DB624

F 326

252

850930589



Data File: /chem/VOAHS5.i/8260HIGH_SP/08-25-98/09sep98a.b/e3813.d

Date : 09-SEP-98 20:00:00

Client ID: EV252A

Instrument: VOAHS5.i

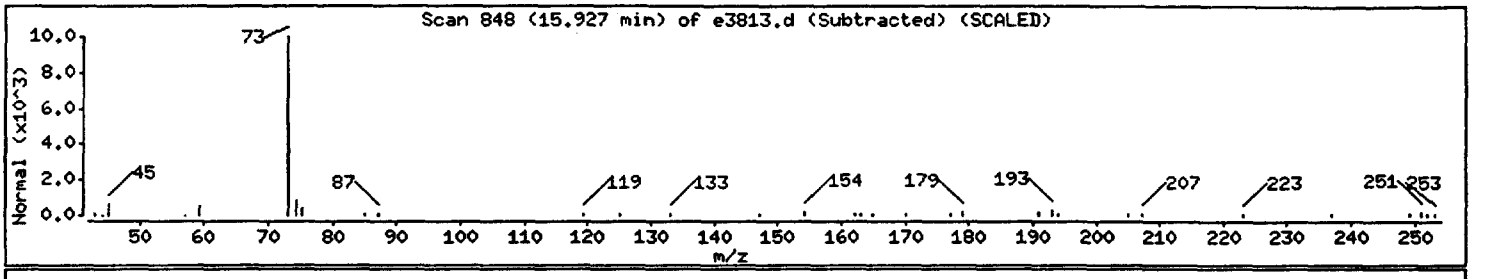
Sample Info: EV252A

Operator: VOAHS 5

Column phase: DB624

Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Siloxane						
Unknown			0	0		0



850930590

F 327

VOLATILE METHOD BLANK SUMMARY

LAB SAMPLE NO.

EV254A

Matrix: SOIL

Level: HIGH

Lab File ID: E3873

Instrument ID: VOAMS5

Date Analyzed: 09/11/98

Time Analyzed: 1730

Heated Purge (Y/N) N

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT ID.	LAB SAMPLE NO	LAB FILE ID	TIME ANALYZED
01	GP-2	81204	E3882	2153
02				
03				
04				
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS:

Client ID: **EV254A**
Site:

Lab Sample No: **EV254A**
Lab Job No: G893

Date Sampled: _____
Date Received: _____
Date Analyzed: 09/11/98
GC Column: DB624
Instrument ID: VOAMS5.i
Lab File ID: e3873.d

Matrix: SOIL
Level: HIGH
Sample Weight: 5.0 g
Methanol Ext. Volume: 10.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 0

VOLATILE ORGANICS - GC/MS
METHOD 8260B

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
Chloromethane	ND	500
Bromomethane	ND	500
Vinyl Chloride	ND	500
Chloroethane	ND	500
Methylene Chloride	ND	300
Acetone	ND	500
Carbon Disulfide	ND	500
Trichlorofluoromethane	ND	500
1,1-Dichloroethene	ND	200
1,1-Dichloroethane	ND	500
trans-1,2-Dichloroethene	ND	500
cis-1,2-Dichloroethene	ND	500
Chloroform	ND	500
1,2-Dichloroethane	ND	200
2-Butanone	ND	500
1,1,1-Trichloroethane	ND	500
Carbon Tetrachloride	ND	200
Bromodichloromethane	ND	100
1,2-Dichloropropane	ND	100
cis-1,3-Dichloropropene	ND	500
Trichloroethene	ND	100
Dibromochloromethane	ND	500
1,1,2-Trichloroethane	ND	300
Benzene	ND	100
trans-1,3-Dichloropropene	ND	500
2-Chloroethyl Vinyl Ether	ND	500
Bromoform	ND	400
4-Methyl-2-Pentanone	ND	500
2-Hexanone	ND	500
Tetrachloroethene	ND	100
1,1,2,2-Tetrachloroethane	ND	100
Toluene	ND	500
Chlorobenzene	ND	500
Ethylbenzene	ND	400

Client ID: **EV254A**
Site:

Lab Sample No: **EV254A**
Lab Job No: G893

Date Sampled: _____
Date Received: _____
Date Analyzed: 09/11/98
GC Column: DB624
Instrument ID: VOAMS5.i
Lab File ID: e3873.d

Matrix: SOIL
Level: HIGH
Sample Weight: 5.0 g
Methanol Ext. Volume: 10.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 0

VOLATILE ORGANICS - GC/MS (cont'd)
METHOD 8260B

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
Styrene	ND	500
Xylene (Total)	ND	500
Ethyl Ether	ND	500
Acrolein	ND	10000
Freon TF	ND	500
Isopropanol	ND	50000
Acetonitrile	ND	10000
TBA	ND	10000
Acrylonitrile	ND	5000
MTBE	ND	500
Hexane	ND	100
DIPE	ND	500
Ethyl Acetate	ND	1000
Vinyl Acetate	ND	500
Tetrahydrofuran	ND	100
Cyclohexane	ND	500
Isobutanol	ND	50000
Isopropyl Acetate	ND	1000
n-Heptane	ND	100
n-Butanol	ND	50000
Propyl Acetate	ND	1000
Butyl Acetate	ND	1000
1,2-Dibromoethane	ND	500
1,3-Dichlorobenzene	ND	500
1,4-Dichlorobenzene	ND	500
1,2-Dichlorobenzene	ND	500
Naphthalene	ND	500
Methylnaphthalene (total)	ND	500
Dimethylnaphthalene (total)	ND	500
Dichlorodifluoromethane	ND	500
1,1-Dichloropropene	ND	500
1,2,4-Trichlorobenzene	ND	500
Hexachlorobutadiene	ND	500
1,4-Dioxane	ND	100000

Client ID: **EV254A**
Site:

Lab Sample No: **EV254A**
Lab Job No: G893

Date Sampled: _____
Date Received: _____
Date Analyzed: 09/11/98
GC Column: DB624
Instrument ID: VOAMS5.i
Lab File ID: e3873.d

Matrix: SOIL
Level: HIGH
Sample Weight: 5.0 g
Methanol Ext. Volume: 10.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 0

VOLATILE ORGANICS - GC/MS (cont'd)
METHOD 8260B

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
Methyl Acrylate	ND	100
1,1,1,2-Tetrachloroethane	ND	500
1,2,3-Trichlorobenzene	ND	500
1,2,3-Trichloropropane	ND	500
1,2,4-Trimethylbenzene	ND	500
1,2-Dibromo-3-chloropropane	ND	500
1,3,5-Trimethylbenzene	ND	500
1,3-Dichloropropane	ND	500
2,2-Dichloropropane	ND	500
2-Chlorotoluene	ND	500
4-Chlorotoluene	ND	500
Bromobenzene	ND	500
Bromochloromethane	ND	500
Dibromomethane	ND	500
Isopropylbenzene	ND	500
n-Butylbenzene	ND	500
n-Propylbenzene	ND	500
p-Isopropyltoluene	ND	500
sec-Butylbenzene	ND	500
tert-Butylbenzene	ND	500
Allyl chloride	ND	500
Benzyl chloride	ND	500
Epichlorohydrin	ND	10000
Isoprene	ND	500
Methyl methacrylate	ND	500
n-Pentane	ND	500
Allyl alcohol	ND	100000

Client ID: **EV254A**
Site:

Lab Sample No: **EV254A**
Lab Job No: G893

Date Sampled: _____
Date Received: _____
Date Analyzed: 09/11/98
GC Column: DB624
Instrument ID: VOAMS5.i
Lab File ID: e3873.d

Matrix: SOIL
Level: HIGH
Sample Weight: 5.0 g
Methanol Ext. Volume: 10.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 0.0

VOLATILE ORGANICS - GC/MS
TENTATIVELY IDENTIFIED COMPOUNDS
METHOD 8260B

	COMPOUND NAME	RT	EST. CONC. ug/kg	Q
1.	Unknown Siloxane	15.93	1800	
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

TOTAL ESTIMATED CONCENTRATION: 1800

Data File: /chem/VOAMS5.i/8260HIGH_SP/09-10-98/11sep98a.b/e3873.d
Report Date: 12-Sep-98 15:34:32

Envirotech Research, Inc.

VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/VOAMS5.i/8260HIGH_SP/09-10-98/11sep98a.b/e3873.d
Lab Smp Id: EV254A Client Smp ID: EV254A
Inj Date : 11-SEP-98 17:30:00
Operator : VOAMS 5 Inst ID: VOAMS5.i
Smp Info : EV254A
Misc Info :
Comment :
Method : /chem/VOAMS5.i/8260HIGH_SP/09-10-98/11sep98a.b/8260b-HIGH.m
Meth Date : 11-Sep-98 14:28:01 Quant Type: ISTD
Cal Date : 10-SEP-98 10:06:00 Cal File: e3836.d
Als bottle: 7 QC Sample: BLANK
Dil Factor: 50.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.20
Procesing Host: hpvoa

Concentration Formula: (Vt/Ws)/((100-M)/100)

Name	Value	Description
Vt	10.000	Volume of final extract (mL)
Ws	5.000	Weight of sample extracted (g)
M	0.000	% Moisture (not decanted)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
$ 16 1,2-Dichloroethane-d4 (SUR)	65	8.689	8.709	(0.951)	392534	44	4400
* 19 Fluorobenzene	96	9.140	9.161	(1.000)	1834674	50	
$ 37 Toluene-d8 (SUR)	98	11.117	11.123	(1.216)	1434741	48	4800
* 32 Chlorobenzene-d5	117	12.797	12.805	(1.000)	1106985	50	
$ 41 Bromofluorobenzene (SUR)	174	14.074	14.083	(1.100)	496784	47	4700
* 91 1,4-Dichlorobenzene-d4	152	15.288	15.299	(1.000)	425570	50	

850930596

259 F 33

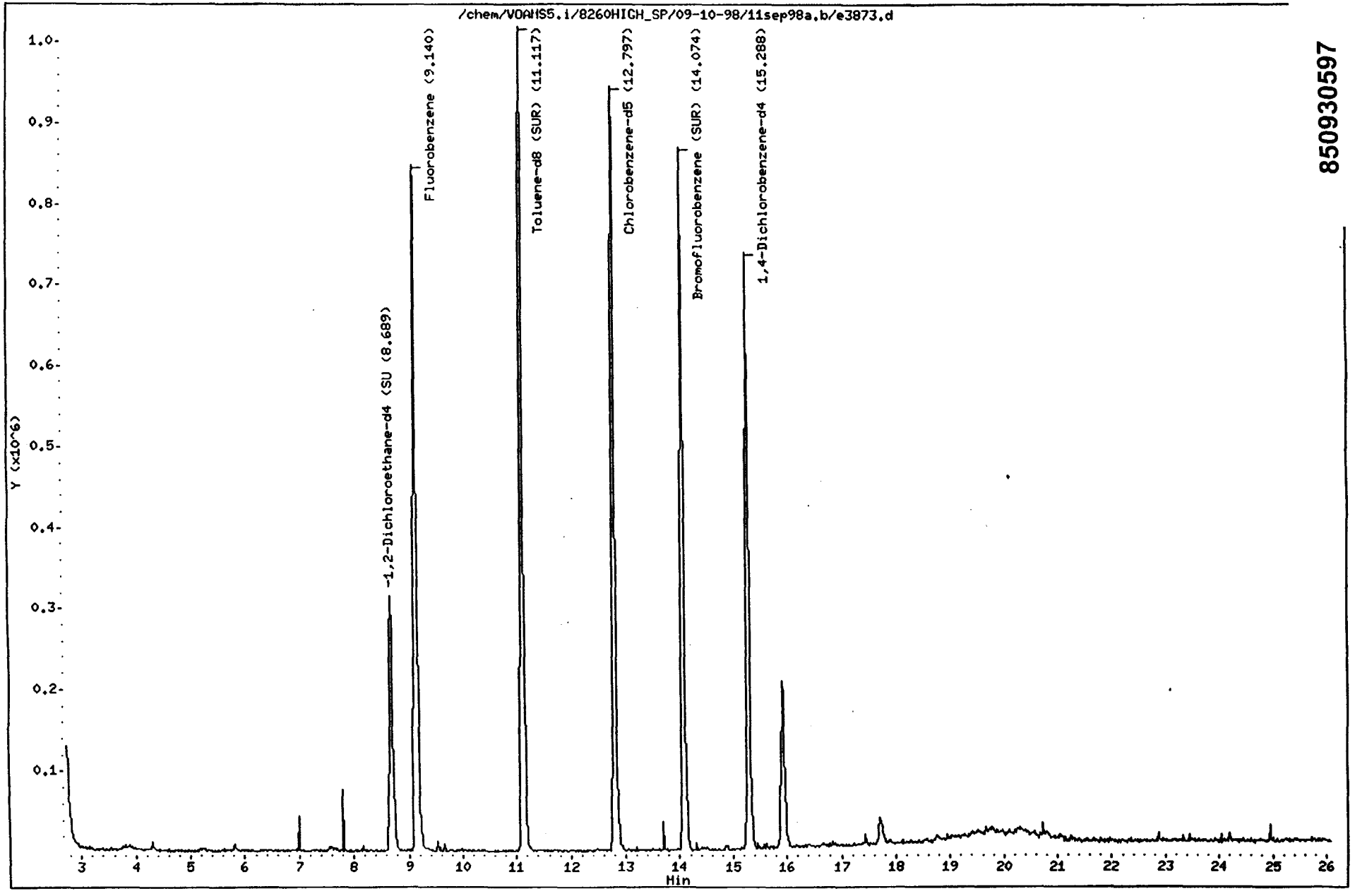
Data File: /chem/VOAHS5.i/8260HIGH_SP/09-10-98/11sep98a.b/e3873.d
Date : 11-SEP-98 17:30:00
Client ID: EV254A
Sample Info: EV254A

Instrument: VOAHS5.i

Operator: VOAHS 5
Column phase: DB624
Column diameter: 0.53

F 334
260

850930597



Data File: /chem/VOAMS5.i/8260HIGH_SP/09-10-98/11sep98a.b/e3873.d

Date : 11-SEP-98 17:30:00

Client ID: EV254A

Instrument: VOAMS5.i

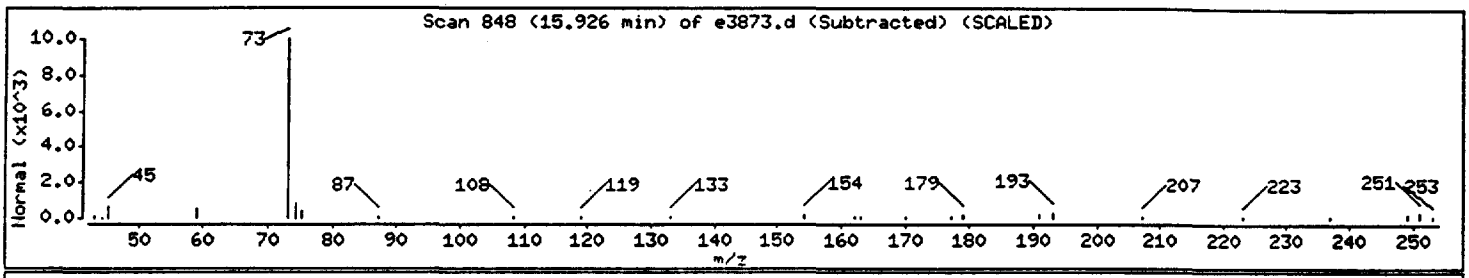
Sample Info: EV254A

Operator: VOAMS 5

Column phase: DB624

Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown Siloxane						
Unknown			0	0		0



850930598

--- F 335

VOLATILE METHOD BLANK SUMMARY

LAB SAMPLE NO.

EV257

Matrix: SOIL

Date Analyzed: 09/14/98

Level: HIGH

Time Analyzed: 1424

Lab File ID: E3948

Heated Purge (Y/N) N

Instrument ID: VOAMS5

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT ID.	LAB SAMPLE NO	LAB FILE ID	TIME ANALYZED
01	GP-7	81214	E3960	2027
02				
03				
04				
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS:

Client ID: **EV257**
Site:

Lab Sample No: **EV257**
Lab Job No: G893

Date Sampled: _____
Date Received: _____
Date Analyzed: 09/14/98
GC Column: DB624
Instrument ID: VOAMS5.i
Lab File ID: e3948.d

Matrix: SOIL
Level: HIGH
Sample Weight: 5.0 g
Methanol Ext. Volume: 10.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 0

VOLATILE ORGANICS - GC/MS
METHOD 8260B

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
Chloromethane	ND	500
Bromomethane	ND	500
Vinyl Chloride	ND	500
Chloroethane	ND	500
Methylene Chloride	ND	300
Acetone	ND	500
Carbon Disulfide	ND	500
Trichlorofluoromethane	ND	500
1,1-Dichloroethene	ND	200
1,1-Dichloroethane	ND	500
trans-1,2-Dichloroethene	ND	500
cis-1,2-Dichloroethene	ND	500
Chloroform	ND	500
1,2-Dichloroethane	ND	200
2-Butanone	ND	500
1,1,1-Trichloroethane	ND	500
Carbon Tetrachloride	ND	200
Bromodichloromethane	ND	100
1,2-Dichloropropane	ND	100
cis-1,3-Dichloropropene	ND	500
Trichloroethene	ND	100
Dibromochloromethane	ND	500
1,1,2-Trichloroethane	ND	300
Benzene	ND	100
trans-1,3-Dichloropropene	ND	500
2-Chloroethyl Vinyl Ether	ND	500
Bromoform	ND	400
4-Methyl-2-Pentanone	ND	500
2-Hexanone	ND	500
Tetrachloroethene	ND	100
1,1,2,2-Tetrachloroethane	ND	100
Toluene	ND	500
Chlorobenzene	ND	500
Ethylbenzene	ND	400

Client ID: **EV257**
Site:

Lab Sample No: **EV257**
Lab Job No: G893

Date Sampled: _____
Date Received: _____
Date Analyzed: 09/14/98
GC Column: DB624
Instrument ID: VOAMS5.i
Lab File ID: e3948.d

Matrix: SOIL
Level: HIGH
Sample Weight: 5.0 g
Methanol Ext. Volume: 10.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 0

VOLATILE ORGANICS - GC/MS (cont'd)
METHOD 8260B

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
Styrene	ND	500
Xylene (Total)	ND	500
Ethyl Ether	ND	500
Acrolein	ND	10000
Freon TF	ND	500
Isopropanol	ND	50000
Acetonitrile	ND	10000
TBA	ND	10000
Acrylonitrile	ND	5000
MTBE	ND	500
Hexane	ND	100
DIPE	ND	500
Ethyl Acetate	ND	1000
Vinyl Acetate	ND	500
Tetrahydrofuran	ND	100
Cyclohexane	ND	500
Isobutanol	ND	50000
Isopropyl Acetate	ND	1000
n-Heptane	ND	100
n-Butanol	ND	50000
Propyl Acetate	ND	1000
Butyl Acetate	ND	1000
1,2-Dibromoethane	ND	500
1,3-Dichlorobenzene	ND	500
1,4-Dichlorobenzene	ND	500
1,2-Dichlorobenzene	ND	500
Naphthalene	ND	500
Methylnaphthalene (total)	ND	500
Dimethylnaphthalene (total)	ND	500
Dichlorodifluoromethane	ND	500
1,1-Dichloropropene	ND	500
1,2,4-Trichlorobenzene	ND	500
Hexachlorobutadiene	ND	500
1,4-Dioxane	ND	100000

Client ID: **EV257**
Site:

Lab Sample No: **EV257**
Lab Job No: G893

Date Sampled: _____
Date Received: _____
Date Analyzed: 09/14/98
GC Column: DB624
Instrument ID: VOAMS5.i
Lab File ID: e3948.d

Matrix: SOIL
Level: HIGH
Sample Weight: 5.0 g
Methanol Ext. Volume: 10.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 0

VOLATILE ORGANICS - GC/MS (cont'd)
METHOD 8260B

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
Methyl Acrylate	ND	100
1,1,1,2-Tetrachloroethane	ND	500
1,2,3-Trichlorobenzene	ND	500
1,2,3-Trichloropropane	ND	500
1,2,4-Trimethylbenzene	ND	500
1,2-Dibromo-3-chloropropane	ND	500
1,3,5-Trimethylbenzene	ND	500
1,3-Dichloropropane	ND	500
2,2-Dichloropropane	ND	500
2-Chlorotoluene	ND	500
4-Chlorotoluene	ND	500
Bromobenzene	ND	500
Bromochloromethane	ND	500
Dibromomethane	ND	500
Isopropylbenzene	ND	500
n-Butylbenzene	ND	500
n-Propylbenzene	ND	500
p-Isopropyltoluene	ND	500
sec-Butylbenzene	ND	500
tert-Butylbenzene	ND	500
Allyl chloride	ND	500
Benzyl chloride	ND	500
Epichlorohydrin	ND	10000
Isoprene	ND	500
Methyl methacrylate	ND	500
n-Pentane	ND	500
Allyl alcohol	ND	100000

Client ID: **EV257**
Site:

Lab Sample No: **EV257**
Lab Job No: G893

Date Sampled: _____
Date Received: _____
Date Analyzed: 09/14/98
GC Column: DB624
Instrument ID: VOAMS5.i
Lab File ID: e3948.d

Matrix: SOIL
Level: HIGH
Sample Weight: 5.0 g
Methanol Ext. Volume: 10.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 0.0

VOLATILE ORGANICS - GC/MS
TENTATIVELY IDENTIFIED COMPOUNDS
METHOD 8260B

	COMPOUND NAME	RT	EST. CONC. ug/kg	Q
1.	NO VOLATILE ORGANIC COMPOUNDS FOUND			
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

TOTAL ESTIMATED CONCENTRATION 0.0

850930603

F340

Data File: /chem/VOAMS5.i/8260HIGH_SP/09-10-98/14sep98.b/e3948.d
Report Date: 15-Sep-98 16:31:09

Envirotech Research, Inc.

VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/VOAMS5.i/8260HIGH_SP/09-10-98/14sep98.b/e3948.d
Lab Smp Id: EV257 Client Smp ID: EV257
Inj Date : 14-SEP-98 14:24:00
Operator : VOAMS 5 Inst ID: VOAMS5.i
Smp Info : EV257
Misc Info :
Comment :
Method : /chem/VOAMS5.i/8260HIGH_SP/09-10-98/14sep98.b/8260b-HIGH.m
Meth Date : 14-Sep-98 12:50:56 Quant Type: ISTD
Cal Date : 10-SEP-98 10:06:00 Cal File: e3836.d
Als bottle: 5 QC Sample: BLANK
Dil Factor: 50.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.20
Procesing Host: hpvoa

Concentration Formula: (Vt/Ws)/((100-M)/100)

Name	Value	Description
Vt	10.000	Volume of final extract (mL)
Ws	5.000	Weight of sample extracted (g)
M	0.000	% Moisture (not decanted)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
$ 16 1,2-Dichloroethane-d4 (SUR)	65	8.674	8.709	(0.951)	393788	44	4400
* 19 Fluorobenzene	96	9.125	9.161	(1.000)	1834373	50	
$ 37 Toluene-d8 (SUR)	98	11.102	11.123	(1.217)	1407448	47	4700
* 32 Chlorobenzene-d5	117	12.782	12.805	(1.000)	1119210	50	
$ 41 Bromofluorobenzene (SUR)	174	14.059	14.083	(1.100)	484103	45	4500
* 91 1,4-Dichlorobenzene-d4	152	15.257	15.299	(1.000)	422517	50	

850930604

F341

Data File: /chem/VOAMS5.i/8260HIGH_SP/09-10-98/14sep98.b/e3948.d
Date : 14-SEP-98 14:24:00
Client ID: EV257
Sample Info: EV257

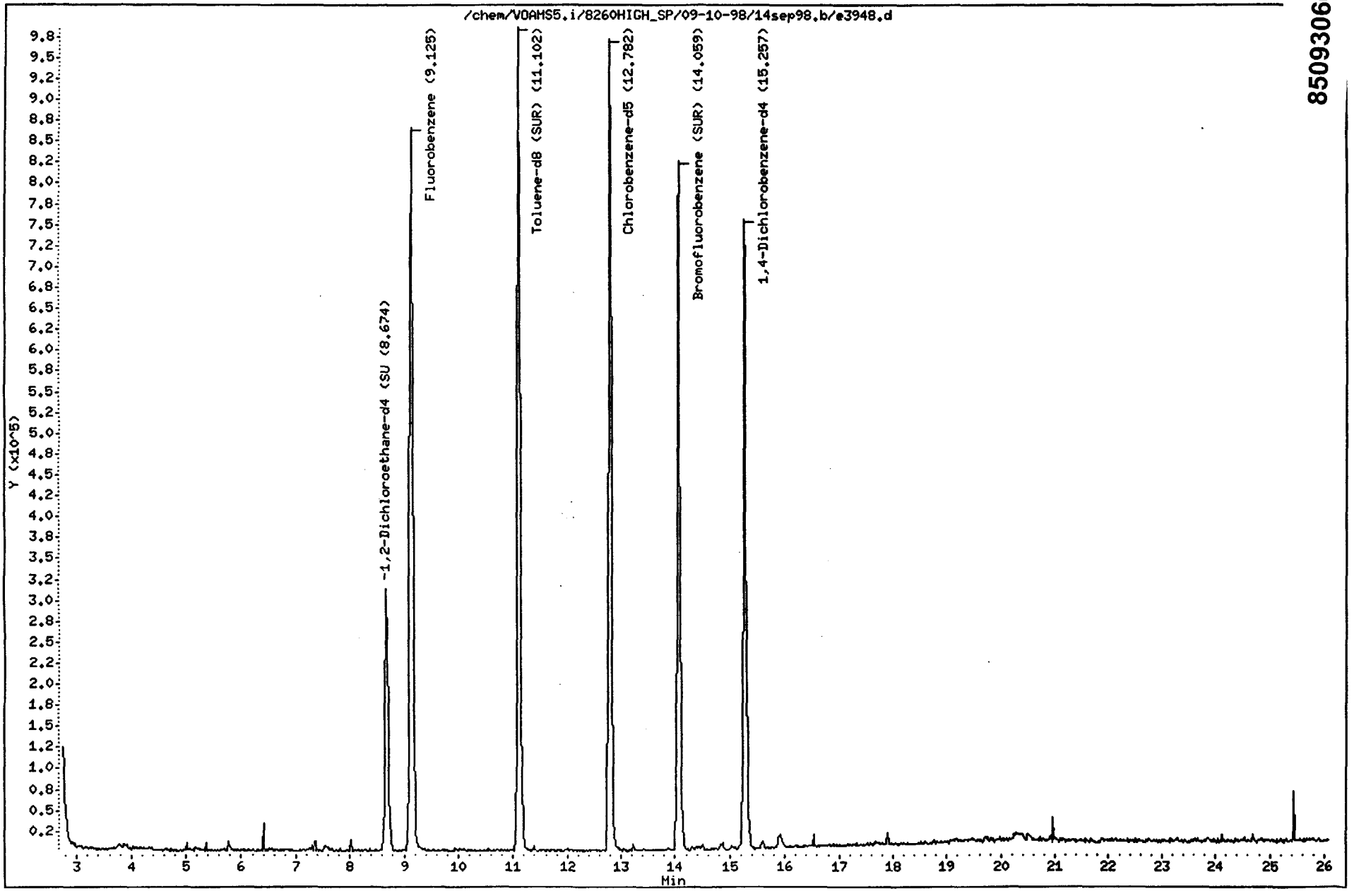
Instrument: VOAMS5.i

Operator: VOAMS 5
Column diameter: 0.53

Column phase: DB624

850930605

F34
268



VOLATILE METHOD BLANK SUMMARY

LAB SAMPLE NO.

FV247

Matrix: WATER

Date Analyzed: 09/04/98

Level: LOW

Time Analyzed: 1411

Lab File ID: F3704

Heated Purge (Y/N) N

Instrument ID: VOAMS6

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT ID.	LAB SAMPLE NO	LAB FILE ID	TIME ANALYZED
01	TB-2	81200	F3718	2137
02	FB-2	81201	F3719	2205
03	GP-1W	81203	F3720	2234
04	GP-2W	81205	F3721	2303
05	GP-3W	81207	F3722	2337
06	GP-4W	81209	F3723	0011
07	GP-5W	81211	F3724	0039
08	GP-6W	81213	F3725	0108
09	GP-7W	81215	F3726	0142
10	GP-8W	81217	F3727	0215
11	GP-9W	81219	F3728	0244
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS:

Client ID: **FV247**
Site:

Lab Sample No: **FV247**
Lab Job No: G893

Date Sampled: _____
Date Received: _____
Date Analyzed: 09/04/98
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f3704.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Chloromethane	ND	0.9
Bromomethane	ND	0.3
Vinyl Chloride	ND	0.4
Chloroethane	ND	1.0
Methylene Chloride	ND	1.0
Acetone	ND	5.0
Carbon Disulfide	ND	1.0
Trichlorofluoromethane	ND	0.2
1,1-Dichloroethene	ND	0.6
1,1-Dichloroethane	ND	0.3
trans-1,2-Dichloroethene	ND	0.3
cis-1,2-Dichloroethene	ND	1.0
Chloroform	ND	0.2
1,2-Dichloroethane	ND	0.2
2-Butanone	ND	5.0
1,1,1-Trichloroethane	ND	0.2
Carbon Tetrachloride	ND	0.2
Bromodichloromethane	ND	0.2
1,2-Dichloropropane	ND	0.5
cis-1,3-Dichloropropene	ND	0.3
Trichloroethene	ND	0.4
Dibromochloromethane	ND	0.2
1,1,2-Trichloroethane	ND	0.4
Benzene	ND	0.2
trans-1,3-Dichloropropene	ND	0.3
2-Chloroethyl Vinyl Ether	ND	0.5
Bromoform	ND	0.3
4-Methyl-2-Pentanone	ND	5.0
2-Hexanone	ND	5.0
Tetrachloroethene	ND	0.1
1,1,2,2-Tetrachloroethane	ND	0.3
Toluene	ND	0.2
Chlorobenzene	ND	0.1
Ethylbenzene	ND	0.2

Client ID: **FV247**
Site:

Lab Sample No: **FV247**
Lab Job No: G893

Date Sampled: _____
Date Received: _____
Date Analyzed: 09/04/98
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f3704.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS (cont'd)
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Styrene	ND	1.0
Xylene (Total)	ND	1.0
Ethyl Ether	ND	5.0
Acrolein	ND	50
Freon TF	ND	5.0
Isopropanol	ND	500
Acetonitrile	ND	100
TBA	ND	100
Acrylonitrile	ND	50
MTBE	ND	1.0
Hexane	ND	1.0
DIPE	ND	1.0
Ethyl Acetate	ND	10
Vinyl Acetate	ND	5.0
Tetrahydrofuran	ND	1.0
Cyclohexane	ND	5.0
Isobutanol	ND	500
Isopropyl Acetate	ND	5.0
n-Heptane	ND	1.0
n-Butanol	ND	250
Propyl Acetate	ND	5.0
Butyl Acetate	ND	5.0
1,2-Dibromoethane	ND	1.0
1,3-Dichlorobenzene	ND	0.3
1,4-Dichlorobenzene	ND	0.2
1,2-Dichlorobenzene	ND	0.2
Naphthalene	ND	1.0
Methylnaphthalene (total)	ND	1.0
Dimethylnaphthalene (total)	ND	1.0
Dichlorodifluoromethane	ND	0.5
1,4-Dioxane	ND	1000
n-Pentane	ND	1.0
5-Methyl-2-Hexanone	ND	1.0
Isopropylbenzene	ND	1.0

Client ID: **FV247**
Site:

Lab Sample No: **FV247**
Lab Job No: G893

Date Sampled: _____
Date Received: _____
Date Analyzed: 09/04/98
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f3704.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS (cont'd)
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
1,3,5-Trimethylbenzene	ND	1.0
Cyclohexanone	ND	100
1,2,4-Trichlorobenzene	ND	1.0
Methyl Methacrylate	ND	5.0
Allyl Alcohol	ND	1000
Epichlorohydrin	ND	100
Allyl Chloride	ND	5.0
Benzyl Chloride	ND	5.0
Isoprene	ND	5.0
1,1,1,2-Tetrachloroethane	ND	1.0
Camphene (total)	ND	20
Camphor	ND	20
1,2,4-Trimethylbenzene	ND	1.0

Client ID: **FV247**
Site:

Lab Sample No: **FV247**
Lab Job No: G893

Date Sampled: _____
Date Received: _____
Date Analyzed: 09/04/98
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f3704.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
TENTATIVELY IDENTIFIED COMPOUNDS
METHOD 624

	COMPOUND NAME	RT	EST. CONC. ug/l	Q
1.	NO VOLATILE ORGANIC COMPOUNDS FOUND			
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

TOTAL ESTIMATED CONCENTRATION	0.0

850930610

F 347

Data File: /chem/VOAMS6.i/624/08-28-98/04sep98.b/f3704.d
Report Date: 04-Sep-98 14:45:44

Envirotech Research, Inc.

VOLATILE ORGANIC COMPOUND ANALYSIS

Data file : /chem/VOAMS6.i/624/08-28-98/04sep98.b/f3704.d
Lab Smp Id: FV247 Client Smp ID: FV247
Inj Date : 04-SEP-98 14:11:00
Operator : VOAMS 7 Inst ID: VOAMS6.i
Smp Info : FV247
Misc Info :
Comment :
Method : /chem/VOAMS6.i/624/08-28-98/04sep98.b/624.m
Meth Date : 04-Sep-98 13:01:48 Quant Type: ISTD
Cal Date : 28-AUG-98 11:49:00 Cal File: f3415.d
Als bottle: 3 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.20
Procesing Host: hpvoa

Concentration Formula: 5/Vo

Name	Value	Description
Vo	5.000	Sample Volume

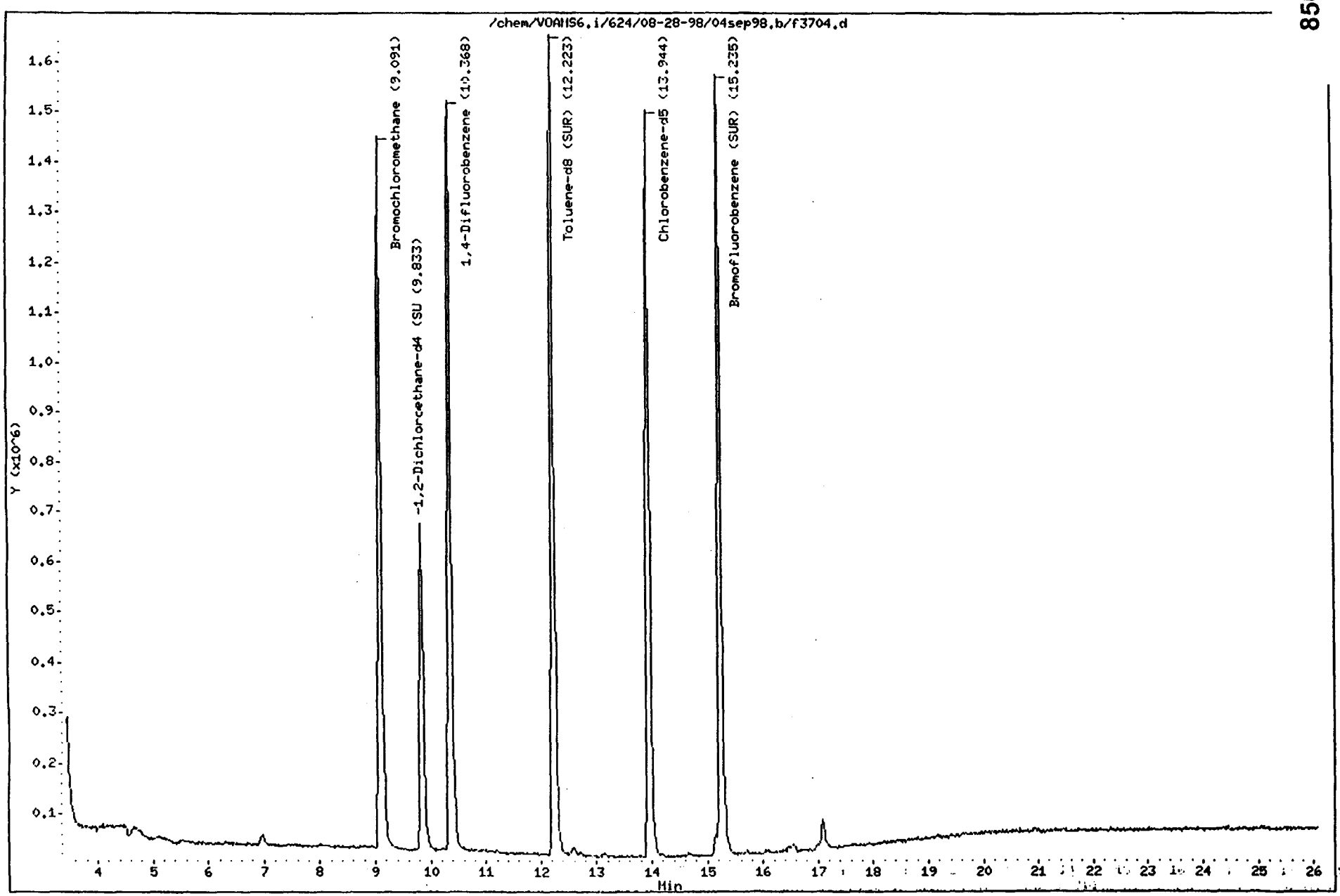
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
* 2 Bromochloromethane	128	9.091	9.062	(1.000)	810081	30	
S 15 1,2-Dichloroethane-d4 (SUR)	104	9.848	9.804	(0.950)	169177	30	30
* 19 1,4-Difluorobenzene	114	10.368	10.324	(1.000)	2607924	30	
S 37 Toluene-d8 (SUR)	98	12.223	12.194	(1.179)	2277792	30	30
* 32 Chlorobenzene-d5	117	13.944	13.930	(1.000)	1820703	30	
S 41 Bromofluorobenzene (SUR)	95	15.235	15.221	(1.093)	1337305	29	29

850930611

Data File: /chem/VOAMS6.i/624/08-28-98/04sep98.b/f3704.d
Date : 04-SEP-98 14:11:00
Client ID: FV247
Sample Info: FV247
Purge Volume: 5.0
Column phase: DB624

Instrument: VOAMS6.i
Operator: VOAMS 7
Column diameter: 0.53

850930612



F 349

VOLATILE ORGANICS INITIAL CALIBRATION DATA
METHOD 8260B

Instrument ID: VOAMS5 Calibration Date(s): 08/25/98 08/25/98

Heated Purge: (Y/N) N Calibration Time(s): 1016 1308

LAB FILE ID: RRF5: E3446 RRF20: E3447 RRF50: E3448
RRF100: E3450 RRF200: E3451

COMPOUND	RRF5	RRF20	RRF50	RRF100	RRF200
Chloromethane	0.116	0.108	0.125	0.135	0.124
Bromomethane	0.111	0.084	0.102	0.094	0.092
Vinyl Chloride	0.051	0.064	0.076	0.082	0.075
Chloroethane	0.045	0.043	0.040	0.046	0.041
Methylene Chloride	0.243	0.200	0.194	0.181	0.173
Acetone	0.049	0.049	0.045	0.043	0.044
Carbon Disulfide	0.317	0.331	0.281	0.272	0.259
Trichlorofluoromethane	0.195	0.193	0.212	0.207	0.182
1,1-Dichloroethene	0.157	0.169	0.172	0.152	0.143
1,1-Dichloroethane	0.433	0.489	0.493	0.482	0.471
trans-1,2-Dichloroethene	0.252	0.286	0.287	0.280	0.274
cis-1,2-Dichloroethene	0.284	0.298	0.304	0.300	0.294
Chloroform	0.470	0.489	0.502	0.489	0.475
1,2-Dichloroethane	0.260	0.278	0.289	0.284	0.280
2-Butanone	0.011	0.018	0.019	0.019	0.020
1,1,1-Trichloroethane	0.329	0.357	0.354	0.333	0.317
Carbon Tetrachloride	0.257	0.318	0.318	0.302	0.296
Bromodichloromethane	0.465	0.456	0.478	0.465	0.458
1,2-Dichloropropane	0.266	0.290	0.297	0.295	0.288
cis-1,3-Dichloropropene	0.354	0.382	0.396	0.385	0.376
Trichloroethene	0.341	0.314	0.318	0.304	0.304
Dibromochloromethane	0.532	0.561	0.594	0.601	0.590
1,1,2-Trichloroethane	0.299	0.346	0.355	0.345	0.329
Benzene	0.684	0.686	0.688	0.664	0.650
trans-1,3-Dichloropropene	0.446	0.526	0.548	0.532	0.511
2-Chloroethyl Vinyl Ether	0.181	0.187	0.193	0.194	0.194
Bromoform	0.378	0.430	0.455	0.473	0.473
4-Methyl-2-Pentanone	0.239	0.254	0.261	0.252	0.248
2-Hexanone	0.224	0.257	0.266	0.256	0.254
Tetrachloroethene	0.381	0.493	0.493	0.478	0.468
1,1,2,2-Tetrachloroethane	0.607	0.542	0.570	0.558	0.537
Toluene	0.829	0.859	0.843	0.809	0.782
Chlorobenzene	0.873	0.932	0.955	0.941	0.924
Ethylbenzene	0.407	0.450	0.448	0.439	0.427
Styrene	0.891	0.952	0.956	0.943	0.899
Xylene (Total)	0.502	0.558	0.563	0.546	0.532
Ethyl Ether	0.189	0.200	0.198	0.198	0.194
Acrolein	0.019	0.018	0.019	0.019	0.019
Freon TF	0.141	0.120	0.096	0.127	0.102

850930613

VOLATILE ORGANICS INITIAL CALIBRATION DATA (cont'd)
METHOD 8260B

Instrument ID: VOAMS5 Calibration Date(s): 08/25/98 08/25/98

Heated Purge: (Y/N) N Calibration Time(s): 1016 1308

LAB FILE ID: RRF5: E3446 RRF20: E3447 RRF50: E3448
RRF100: E3450 RRF200: E3451

COMPOUND	RRF5	RRF20	RRF50	RRF100	RRF200
Isopropanol					
Acetonitrile	0.023	0.024	0.021	0.020	0.019
TBA	0.014	0.014	0.014	0.014	0.013
Acrylonitrile	0.057	0.057	0.060	0.060	0.063
MTBE	0.334	0.305	0.293	0.274	0.249
Hexane					
DIPE	1.072	1.110	1.048	1.014	0.924
Ethyl Acetate	0.316	0.316	0.316	0.308	0.304
Vinyl Acetate	0.499	0.474	0.426	0.405	0.368
Tetrahydrofuran					
Cyclohexane	0.231	0.260	0.208	0.235	0.202
Isobutanol					
Isopropyl Acetate	0.604	0.587	0.588	0.565	0.546
n-Heptane					
n-Butanol					
Propyl Acetate	0.465	0.458	0.454	0.432	0.416
Butyl Acetate	0.754	0.805	0.826	0.815	0.779
1,2-Dibromoethane	0.596	0.616	0.646	0.642	0.624
1,3-Dichlorobenzene	1.300	1.423	1.335	1.340	1.336
1,4-Dichlorobenzene	1.627	1.636	1.756	1.642	1.592
1,2-Dichlorobenzene	1.236	1.295	1.340	1.277	1.243
Naphthalene	0.441	0.480	0.605	0.626	0.601
Methylnaphthalene (total)					
Dimethylnaphthalene (total)					
Dichlorodifluoromethane	0.058	0.040	0.085	0.090	0.075
1,1-Dichloropropene	0.259	0.319	0.328	0.309	0.304
1,2,4-Trichlorobenzene	0.284	0.406	0.503	0.536	0.524
Hexachlorobutadiene	0.250	0.295	0.308	0.292	0.280
1,4-Dioxane	0.004	0.004	0.004	0.004	0.004
Methyl Acrylate					
1,1,1,2-Tetrachloroethane	0.363	0.390	0.402	0.395	0.384
1,2,3-Trichlorobenzene	0.174	0.191	0.250	0.271	0.248
1,2,3-Trichloropropane	0.983	0.969	0.924	0.881	0.860
1,2,4-Trimethylbenzene	2.668	2.551	2.439	2.329	2.259
1,2-Dibromo-3-chloropropane	0.119	0.138	0.145	0.138	0.137
1,3,5-Trimethylbenzene	2.560	2.527	2.408	2.260	2.201
1,3-Dichloropropane	0.570	0.608	0.617	0.600	0.576
2,2-Dichloropropane	0.220	0.227	0.220	0.198	0.181
2-Chlorotoluene	2.325	2.420	2.305	2.146	2.101

VOLATILE ORGANICS INITIAL CALIBRATION DATA (cont'd)
METHOD 8260B

Instrument ID: VOAMS5 Calibration Date(s): 08/25/98 08/25/98

Heated Purge: (Y/N) N Calibration Time(s): 1016 1308

LAB FILE ID: RRF5: E3446 RRF20: E3447 RRF50: E3448
RRF100: E3450 RRF200: E3451

COMPOUND	RRF5	RRF20	RRF50	RRF100	RRF200
4-Chlorotoluene	3.095	3.054	2.858	2.831	2.750
Bromobenzene	1.102	1.082	1.035	1.026	0.994
Bromochloromethane	0.152	0.155	0.167	0.166	0.162
Dibromomethane	0.280	0.265	0.270	0.270	0.266
Isopropylbenzene	0.871	0.967	0.979	0.959	0.927
n-Butylbenzene	1.534	1.896	1.928	1.832	1.830
n-Propylbenzene	3.475	3.816	3.587	3.384	3.326
p-Isopropyltoluene	1.873	2.060	2.056	1.967	1.972
sec-Butylbenzene	2.421	2.771	2.687	2.517	2.506
tert-Butylbenzene	2.003	2.148	2.059	1.976	1.963
Allyl chloride	0.135	0.144	0.138	0.141	0.139
Benzyl chloride	1.621	1.772	1.747	1.682	1.658
Epichlorohydrin	0.025	0.025	0.025	0.024	0.025
Isoprene	0.185	0.226	0.177	0.204	0.182
Methyl methacrylate	0.173	0.170	0.169	0.166	0.166
n-Pentane	0.027	0.032	0.024	0.027	0.022
Allyl alcohol	0.002	0.002	0.003	0.003	0.003
1,2-Dichloroethane-d4 (SUR)	0.256	0.264	0.237	0.235	0.231
Toluene-d8 (SUR)	0.876	0.899	0.782	0.763	0.761
Bromofluorobenzene (SUR)	0.497	0.537	0.483	0.488	0.472

850930615

VOLATILE ORGANICS INITIAL CALIBRATION DATA (cont'd)
METHOD 8260B

Instrument ID: VOAMS5 Calibration Date(s): 08/25/98 08/25/98

Heated Purge: (Y/N) N Calibration Time(s): 1016 1308

COMPOUND	CURVE	COEFFICENT A1	%RSD OR R^2
Chloromethane	AVRG	0.12161267	8.3**
Bromomethane	AVRG	0.09685474	10.6*
Vinyl Chloride	AVRG	0.06976451	17.4*
Chloroethane	AVRG	0.04302642	6.1*
Methylene Chloride	AVRG	0.19818811	13.6*
Acetone	AVRG	0.04584635	5.7*
Carbon Disulfide	AVRG	0.29222060	10.5*
Trichlorofluoromethane	AVRG	0.19791610	6.2*
1,1-Dichloroethene	AVRG	0.15883928	7.6*
1,1-Dichloroethane	AVRG	0.47378955	5.1**
trans-1,2-Dichloroethene	AVRG	0.27577824	5.1*
cis-1,2-Dichloroethene	AVRG	0.29620132	2.6*
Chloroform	AVRG	0.48524458	2.6*
1,2-Dichloroethane	AVRG	0.27842213	4.0*
2-Butanone	AVRG	0.01736805	19.8*
1,1,1-Trichloroethane	AVRG	0.33780540	5.0*
Carbon Tetrachloride	AVRG	0.29824516	8.4*
Bromodichloromethane	AVRG	0.46431604	1.8*
1,2-Dichloropropane	AVRG	0.28720189	4.2*
cis-1,3-Dichloropropene	AVRG	0.37853122	4.2*
Trichloroethene	AVRG	0.31630359	4.7*
Dibromochloromethane	AVRG	0.57569443	5.0*
1,1,2-Trichloroethane	AVRG	0.33492873	6.6*
Benzene	AVRG	0.67447524	2.5*
trans-1,3-Dichloropropene	AVRG	0.51270553	7.7*
2-Chloroethyl Vinyl Ether	AVRG	0.19001019	3.0*
Bromoform	AVRG	0.44183852	9.0**
4-Methyl-2-Pentanone	AVRG	0.25096428	3.3*
2-Hexanone	AVRG	0.25159932	6.3*
Tetrachloroethene	AVRG	0.46282394	10.2*
1,1,2,2-Tetrachloroethane	AVRG	0.56289423	5.0**
Toluene	AVRG	0.82440825	3.7*
Chlorobenzene	AVRG	0.92481684	3.4**
Ethylbenzene	AVRG	0.43415111	4.1*
Styrene	AVRG	0.92820309	3.3*
Xylene (Total)	AVRG	0.53997302	4.5*
Ethyl Ether	AVRG	0.19582920	2.1*
Acrolein	AVRG	0.01886478	2.4*
Freon TF	AVRG	0.11721973	15.6*

* Compound with required maximum % RSD value.
** Compound with required minimum RRF value.

VOLATILE ORGANICS INITIAL CALIBRATION DATA (cont'd)
METHOD 8260B

Instrument ID: VOAMS5 Calibration Date(s): 08/25/98 08/25/98

Heated Purge: (Y/N) N Calibration Time(s): 1016 1308

COMPOUND	CURVE	COEFFICENT A1	%RSD OR R^2
Isopropanol	AVRG		
Acetonitrile	AVRG	0.02148049	10.3*
TBA	AVRG	0.01363718	0.8*
Acrylonitrile	AVRG	0.05940745	4.1*
MTBE	AVRG	0.29107777	11.0*
Hexane	AVRG		
DIPE	AVRG	1.03356922	6.8*
Ethyl Acetate	AVRG	0.31224931	1.8*
Vinyl Acetate	AVRG	0.43446240	12.2*
Tetrahydrofuran	AVRG		
Cyclohexane	AVRG	0.22730653	10.2*
Isobutanol	AVRG		
Isopropyl Acetate	AVRG	0.57780631	3.9*
n-Heptane	AVRG		
n-Butanol	AVRG		
Propyl Acetate	AVRG	0.44468204	4.6*
Butyl Acetate	AVRG	0.79610476	3.6*
1,2-Dibromoethane	AVRG	0.62512614	3.3*
1,3-Dichlorobenzene	AVRG	1.34682586	3.4*
1,4-Dichlorobenzene	AVRG	1.65040347	3.8*
1,2-Dichlorobenzene	AVRG	1.27838228	3.3*
Naphthalene	AVRG	0.55054068	15.3*
Methylnaphthalene (total)	AVRG		
Dimethylnaphthalene (total)	AVRG		
Dichlorodifluoromethane	AVRG	0.06972178	29.3*
1,1-Dichloropropene	AVRG	0.30393917	8.8*
1,2,4-Trichlorobenzene	AVRG	0.45061249	23.5*
Hexachlorobutadiene	AVRG	0.28515023	7.7*
1,4-Dioxane	AVRG	0.00362859	1.9*
Methyl Acrylate	AVRG		
1,1,1,2-Tetrachloroethane	AVRG	0.38671849	3.8*
1,2,3-Trichlorobenzene	AVRG	0.22683769	18.4*
1,2,3-Trichloropropane	AVRG	0.92329947	5.8*
1,2,4-Trimethylbenzene	AVRG	2.44918376	6.7*
1,2-Dibromo-3-chloropropane	AVRG	0.13526843	7.2*
1,3,5-Trimethylbenzene	AVRG	2.39127831	6.6*
1,3-Dichloropropane	AVRG	0.59410907	3.4*
2,2-Dichloropropane	AVRG	0.20912027	9.2*
2-Chlorotoluene	AVRG	2.25931516	5.9*

* Compound with required maximum % RSD value.
** Compound with required minimum RRF value.

VOLATILE ORGANICS INITIAL CALIBRATION DATA (cont'd)
METHOD 8260B

Instrument ID: VOAMS5 Calibration Date(s): 08/25/98 08/25/98

Heated Purge: (Y/N) N Calibration Time(s): 1016 1308

COMPOUND	CURVE	COEFFICENT A1	%RSD OR R^2
4-Chlorotoluene	AVRG	2.91773525	5.1*
Bromobenzene	AVRG	1.04776994	4.2*
Bromochloromethane	AVRG	0.16053741	4.2*
Dibromomethane	AVRG	0.27046742	2.2*
Isopropylbenzene	AVRG	0.94078511	4.6*
n-Butylbenzene	AVRG	1.80404398	8.7*
n-Propylbenzene	AVRG	3.51761172	5.5*
p-Isopropyltoluene	AVRG	1.98540756	3.9*
sec-Butylbenzene	AVRG	2.58024901	5.6*
tert-Butylbenzene	AVRG	2.02981562	3.7*
Allyl chloride	AVRG	0.13932187	2.3*
Benzyl chloride	AVRG	1.69596715	3.7*
Epichlorohydrin	AVRG	0.02495960	1.5*
Isoprene	AVRG	0.19478498	10.3*
Methyl methacrylate	AVRG	0.16872127	1.7*
n-Pentane	AVRG	0.02639966	13.0*
Allyl alcohol	AVRG	0.00260551	7.9*
1,2-Dichloroethane-d4 (SUR)	AVRG	0.24495598	5.9*
Toluene-d8 (SUR)	AVRG	0.81651932	8.1*
Bromofluorobenzene (SUR)	AVRG	0.49529752	5.0*

* Compound with required maximum % RSD value.
** Compound with required minimum RRF value.

VOLATILE ORGANICS CONTINUING CALIBRATION CHECK
METHOD 8260B

Instrument ID: VOAMS5 Calibration Date: 09/09/98 Time: 1759

Lab File ID: E3809 Init. Calib. Date(s): 08/25/98 08/25/98

Heated Purge: (Y/N) N Init. Calib. Times: 1016 1308

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Chloromethane	0.122	0.100	0.1	18.0	50.0
Bromomethane	0.097	0.072		25.8	50.0
Vinyl Chloride	0.070	0.064		8.6	20.0
Chloroethane	0.043	0.036		16.3	50.0
Methylene Chloride	0.198	0.192		3.0	50.0
Acetone	0.046	0.043		6.5	50.0
Carbon Disulfide	0.292	0.298		-2.0	50.0
Trichlorofluoromethane	0.198	0.187		5.6	50.0
1,1-Dichloroethene	0.159	0.172		-8.0	20.0
1,1-Dichloroethane	0.474	0.484	0.1	-2.1	50.0
trans-1,2-Dichloroethene	0.276	0.270		2.2	50.0
cis-1,2-Dichloroethene	0.296	0.295		0.3	50.0
Chloroform	0.485	0.475		2.1	20.0
1,2-Dichloroethane	0.278	0.279		-0.0	50.0
2-Butanone	0.017	0.017		0.0	50.0
1,1,1-Trichloroethane	0.338	0.335		0.9	50.0
Carbon Tetrachloride	0.298	0.297		0.3	50.0
Bromodichloromethane	0.464	0.446		3.9	50.0
1,2-Dichloropropane	0.287	0.290		-1.0	20.0
cis-1,3-Dichloropropene	0.379	0.368		2.9	50.0
Trichloroethene	0.316	0.300		5.1	50.0
Dibromochloromethane	0.576	0.557		3.3	50.0
1,1,2-Trichloroethane	0.335	0.318		5.1	50.0
Benzene	0.674	0.649		3.7	50.0
trans-1,3-Dichloropropene	0.513	0.480		6.4	50.0
2-Chloroethyl Vinyl Ether	0.190	0.180		5.3	50.0
Bromoform	0.442	0.414	0.1	6.3	50.0
4-Methyl-2-Pentanone	0.251	0.218		13.1	50.0
2-Hexanone	0.251	0.219		12.7	50.0
Tetrachloroethene	0.463	0.449		3.0	50.0
1,1,2,2-Tetrachloroethane	0.563	0.475	0.3	15.6	50.0
Toluene	0.824	0.791		4.0	20.0
Chlorobenzene	0.925	0.940	0.3	-1.6	50.0
Ethylbenzene	0.434	0.422		2.8	20.0
Styrene	0.928	0.904		2.6	50.0
Xylene (Total)	0.540	0.548		-1.3	50.0
Ethyl Ether	0.196	0.192		2.0	50.0

850930619

282 F35

VOLATILE ORGANICS CONTINUING CALIBRATION CHECK(cont'd)
METHOD 8260B

Instrument ID: VOAMS5 Calibration Date: 09/09/98 Time: 1759

Lab File ID: E3809 Init. Calib. Date(s): 08/25/98 08/25/98

Heated Purge: (Y/N) N Init. Calib. Times: 1016 1308

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Acrolein	0.019	0.009		52.6	50.0
Freon TF	0.117	0.095		18.8	50.0
Isopropanol					50.0
Acetonitrile	0.021	0.019		9.5	50.0
TBA	0.014	0.012		14.3	50.0
Acrylonitrile	0.059	0.054		8.5	50.0
MTBE	0.291	0.274		5.8	50.0
Hexane					50.0
DIPE	1.034	0.994		3.9	50.0
Ethyl Acetate	0.312	0.267		14.4	50.0
Vinyl Acetate	0.434	0.382		12.0	50.0
Tetrahydrofuran					50.0
Cyclohexane	0.227	0.192		15.4	50.0
Isobutanol					50.0
Isopropyl Acetate	0.578	0.510		11.8	50.0
n-Heptane					50.0
n-Butanol					50.0
Propyl Acetate	0.445	0.385		13.5	50.0
Butyl Acetate	0.796	0.709		10.9	50.0
1,2-Dibromoethane	0.625	0.599		4.2	50.0
1,3-Dichlorobenzene	1.347	1.355		-0.0	50.0
1,4-Dichlorobenzene	1.651	1.635		1.0	50.0
1,2-Dichlorobenzene	1.278	1.270		0.6	50.0
Naphthalene	0.551	0.572		-3.8	50.0
Methylnaphthalene (total)					50.0
Dimethylnaphthalene (total)					50.0
Dichlorodifluoromethane	0.070	0.071		-1.4	50.0
1,1-Dichloropropene	0.304	0.299		1.6	50.0
1,2,4-Trichlorobenzene	0.451	0.417		7.5	50.0
Hexachlorobutadiene	0.285	0.308		-7.9	50.0
1,4-Dioxane	0.004	0.003		25.0	50.0
Methyl Acrylate					50.0
1,1,1,2-Tetrachloroethane	0.387	0.382		1.3	50.0
1,2,3-Trichlorobenzene	0.227	0.284		-25.1	50.0
1,2,3-Trichloropropane	0.923	0.865		6.3	50.0
1,2,4-Trimethylbenzene	2.449	2.487		-1.4	50.0
1,2-Dibromo-3-chloropropane	0.135	0.111		17.8	50.0

850930620

F357

VOLATILE ORGANICS CONTINUING CALIBRATION CHECK(cont'd)
METHOD 8260B

Instrument ID: VOAMS5 Calibration Date: 09/09/98 Time: 1759

Lab File ID: E3809 Init. Calib. Date(s): 08/25/98 08/25/98

Heated Purge: (Y/N) N Init. Calib. Times: 1016 1308

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
1,3,5-Trimethylbenzene	2.391	2.423		-1.3	50.0
1,3-Dichloropropane	0.594	0.560		5.7	50.0
2,2-Dichloropropane	0.209	0.192		8.1	50.0
2-Chlorotoluene	2.259	2.243		0.7	50.0
4-Chlorotoluene	2.918	2.921		-0.0	50.0
Bromobenzene	1.048	1.057		0.1	50.0
Bromochloromethane	0.160	0.159		0.6	50.0
Dibromomethane	0.270	0.253		6.3	50.0
Isopropylbenzene	0.941	0.913		3.0	50.0
n-Butylbenzene	1.804	1.851		-2.6	50.0
n-Propylbenzene	3.518	3.445		2.1	50.0
p-Isopropyltoluene	1.986	2.055		-3.3	50.0
sec-Butylbenzene	2.580	2.686		-4.1	50.0
tert-Butylbenzene	2.030	2.091		-3.0	50.0
Allyl chloride	0.139	0.134		3.6	50.0
Benzyl chloride	1.696	1.391		18.0	50.0
Epichlorohydrin	0.025	0.022		12.0	50.0
Isoprene	0.195	0.182		6.7	50.0
Methyl methacrylate	0.169	0.154		8.9	50.0
n-Pentane	0.026	0.022		15.4	50.0
Allyl alcohol	0.003	0.002		33.3	50.0
1,2-Dichloroethane-d4 (SUR)	0.245	0.225		8.2	50.0
Toluene-d8 (SUR)	0.816	0.758		7.1	50.0
Bromofluorobenzene (SUR)	0.495	0.453		8.5	50.0

VOLATILE ORGANICS CONTINUING CALIBRATION CHECK
METHOD 8260B

Instrument ID: VOAMS5 Calibration Date: 09/11/98 Time: 1356

Lab File ID: E3867 Init. Calib. Date(s): 09/10/98 09/10/98

Heated Purge: (Y/N) N Init. Calib. Times: 0910 1434

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Chloromethane	0.115	0.106	0.1	7.8	50.0
Bromomethane	0.084	0.072		14.3	50.0
Vinyl Chloride	0.070	0.058		17.1	20.0
Chloroethane	0.042	0.038		9.5	50.0
Methylene Chloride	0.220	0.206		6.4	50.0
Acetone	0.047	0.035		25.5	50.0
Carbon Disulfide	0.360	0.320		11.1	50.0
Trichlorofluoromethane	0.213	0.193		9.4	50.0
1,1-Dichloroethene	0.177	0.165		6.8	20.0
1,1-Dichloroethane	0.500	0.508	0.1	-1.6	50.0
trans-1,2-Dichloroethene	0.290	0.290		0.0	50.0
cis-1,2-Dichloroethene	0.313	0.318		-1.4	50.0
Chloroform	0.502	0.507		0.1	20.0
1,2-Dichloroethane	0.292	0.291		0.3	50.0
2-Butanone	0.017	0.014		17.6	50.0
1,1,1-Trichloroethane	0.355	0.331		6.8	50.0
Carbon Tetrachloride	0.315	0.299		5.1	50.0
Bromodichloromethane	0.484	0.483		0.2	50.0
1,2-Dichloropropane	0.309	0.311		0.1	20.0
cis-1,3-Dichloropropene	0.386	0.399		-3.2	50.0
Trichloroethene	0.325	0.318		2.2	50.0
Dibromochloromethane	0.599	0.568		5.2	50.0
1,1,2-Trichloroethane	0.343	0.316		7.9	50.0
Benzene	0.707	0.682		3.5	50.0
trans-1,3-Dichloropropene	0.517	0.502		2.9	50.0
2-Chloroethyl Vinyl Ether	0.191	0.171		10.5	50.0
Bromoform	0.437	0.413	0.1	5.5	50.0
4-Methyl-2-Pentanone	0.236	0.199		15.7	50.0
2-Hexanone	0.245	0.196		20.0	50.0
Tetrachloroethene	0.500	0.464		7.2	50.0
1,1,2,2-Tetrachloroethane	0.545	0.460	0.3	15.6	50.0
Toluene	0.854	0.848		0.7	20.0
Chlorobenzene	0.992	0.984	0.3	0.8	50.0
Ethylbenzene	0.450	0.447		0.7	20.0
Styrene	0.982	0.979		0.3	50.0
Xylene (Total)	0.571	0.552		3.3	50.0
Ethyl Ether	0.201	0.191		5.0	50.0

850930622

... F 359

VOLATILE ORGANICS CONTINUING CALIBRATION CHECK(cont'd)
METHOD 8260B

Instrument ID: VOAMS5 Calibration Date: 09/11/98 Time: 1356

Lab File ID: E3867 Init. Calib. Date(s): 09/10/98 09/10/98

Heated Purge: (Y/N) N Init. Calib. Times: 0910 1434

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Acrolein	0.022	0.018		18.2	50.0
Freon TF	0.114	0.103		9.6	50.0
Isopropanol					50.0
Acetonitrile	0.022	0.020		9.1	50.0
TBA	0.013	0.009		30.8	50.0
Acrylonitrile	0.058	0.050		13.8	50.0
MTBE	0.302	0.268		11.2	50.0
Hexane					50.0
DIPE	1.050	0.981		6.6	50.0
Ethyl Acetate	0.049	0.033		32.6	50.0
Vinyl Acetate	0.403	0.369		8.4	50.0
Tetrahydrofuran					50.0
Cyclohexane	0.225	0.179		20.4	50.0
Isobutanol					50.0
Isopropyl Acetate	0.465	0.400		14.0	50.0
n-Heptane					50.0
n-Butanol					50.0
Propyl Acetate	0.111	0.074		33.3	50.0
Butyl Acetate	0.209	0.147		29.7	50.0
1,2-Dibromoethane	0.656	0.603		8.1	50.0
1,3-Dichlorobenzene	1.470	1.418		3.5	50.0
1,4-Dichlorobenzene	1.720	1.795		-4.2	50.0
1,2-Dichlorobenzene	1.337	1.342		-0.0	50.0
Naphthalene	0.521	0.402		22.8	50.0
Methylnaphthalene (total)					50.0
Dimethylnaphthalene (total)					50.0
Dichlorodifluoromethane	0.084	0.066		21.4	50.0
1,1-Dichloropropene	0.311	0.305		1.9	50.0
1,2,4-Trichlorobenzene	0.444	0.352		20.7	50.0
Hexachlorobutadiene	0.348	0.296		14.9	50.0
1,4-Dioxane	0.003	0.002		33.3	50.0
Methyl Acrylate					50.0
1,1,1,2-Tetrachloroethane	0.401	0.398		0.7	50.0
1,2,3-Trichlorobenzene					50.0
1,2,3-Trichloropropane	0.953	0.865		9.2	50.0
1,2,4-Trimethylbenzene	2.699	2.556		5.3	50.0
1,2-Dibromo-3-chloropropane	0.121	0.105		13.2	50.0

VOLATILE ORGANICS CONTINUING CALIBRATION CHECK(cont'd)
METHOD 8260B

Instrument ID: VOAMS5 Calibration Date: 09/11/98 Time: 1356

Lab File ID: E3867 Init. Calib. Date(s): 09/10/98 09/10/98

Heated Purge: (Y/N) N Init. Calib. Times: 0910 1434

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
1,3,5-Trimethylbenzene	2.638	2.489		5.6	50.0
1,3-Dichloropropane	0.602	0.561		6.8	50.0
2,2-Dichloropropane	0.217	0.209		3.7	50.0
2-Chlorotoluene	2.409	2.279		5.4	50.0
4-Chlorotoluene	3.127	3.139		-0.0	50.0
Bromobenzene	1.124	1.128		-0.0	50.0
Bromochloromethane	0.168	0.166		1.2	50.0
Dibromomethane	0.280	0.268		4.3	50.0
Isopropylbenzene	1.006	0.914		9.1	50.0
n-Butylbenzene	2.113	1.927		8.8	50.0
n-Propylbenzene	3.816	3.454		9.5	50.0
p-Isopropyltoluene	2.337	2.106		9.9	50.0
sec-Butylbenzene	3.059	2.656		13.2	50.0
tert-Butylbenzene	2.343	2.095		10.6	50.0
Allyl chloride	0.140	0.130		7.1	50.0
Benzyl chloride	1.650	1.568		5.0	50.0
Epichlorohydrin	0.024	0.020		16.7	50.0
Isoprene	0.203	0.178		12.3	50.0
Methyl methacrylate	0.161	0.143		11.2	50.0
n-Pentane	0.025	0.022		12.0	50.0
Allyl alcohol	0.002	0.001		50.0	50.0
1,2-Dichloroethane-d4 (SUR)	0.242	0.223		7.8	50.0
Toluene-d8 (SUR)	0.810	0.763		5.8	50.0
Bromofluorobenzene (SUR)	0.481	0.448		6.9	50.0

850930624

F361

VOLATILE ORGANICS CONTINUING CALIBRATION CHECK
METHOD 8260B

Instrument ID: VOAMS5 Calibration Date: 09/14/98 Time: 1216

Lab File ID: E3944 Init. Calib. Date(s): 09/10/98 09/10/98

Heated Purge: (Y/N) N Init. Calib. Times: 0910 1434

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Chloromethane	0.115	0.123	0.1	-6.8	50.0
Bromomethane	0.084	0.083		1.2	50.0
Vinyl Chloride	0.070	0.074		-5.7	20.0
Chloroethane	0.042	0.045		-7.1	50.0
Methylene Chloride	0.220	0.211		4.1	50.0
Acetone	0.047	0.041		12.8	50.0
Carbon Disulfide	0.360	0.354		1.7	50.0
Trichlorofluoromethane	0.213	0.218		-2.3	50.0
1,1-Dichloroethene	0.177	0.173		2.2	20.0
1,1-Dichloroethane	0.500	0.507	0.1	-1.4	50.0
trans-1,2-Dichloroethene	0.290	0.293		-1.0	50.0
cis-1,2-Dichloroethene	0.313	0.314		-0.0	50.0
Chloroform	0.502	0.512		-1.8	20.0
1,2-Dichloroethane	0.292	0.290		0.7	50.0
2-Butanone	0.017	0.018		-5.7	50.0
1,1,1-Trichloroethane	0.355	0.337		5.1	50.0
Carbon Tetrachloride	0.315	0.305		3.2	50.0
Bromodichloromethane	0.484	0.495		-2.1	50.0
1,2-Dichloropropane	0.309	0.310		-0.0	20.0
cis-1,3-Dichloropropene	0.386	0.411		-6.3	50.0
Trichloroethene	0.325	0.316		2.8	50.0
Dibromochloromethane	0.599	0.584		2.5	50.0
1,1,2-Trichloroethane	0.343	0.340		0.9	50.0
Benzene	0.707	0.698		1.3	50.0
trans-1,3-Dichloropropene	0.517	0.546		-5.6	50.0
2-Chloroethyl Vinyl Ether	0.191	0.189		1.0	50.0
Bromoform	0.437	0.429	0.1	1.8	50.0
4-Methyl-2-Pentanone	0.236	0.238		0.1	50.0
2-Hexanone	0.245	0.234		4.5	50.0
Tetrachloroethene	0.500	0.468		6.4	50.0
1,1,2,2-Tetrachloroethane	0.545	0.508	0.3	6.8	50.0
Toluene	0.854	0.851		0.4	20.0
Chlorobenzene	0.992	0.976	0.3	1.6	50.0
Ethylbenzene	0.450	0.444		1.3	20.0
Styrene	0.982	0.990		0.1	50.0
Xylene (Total)	0.571	0.566		0.9	50.0
Ethyl Ether	0.201	0.203		0.1	50.0

850930625

VOLATILE ORGANICS CONTINUING CALIBRATION CHECK(cont'd)
METHOD 8260B

Instrument ID: VOAMS5 Calibration Date: 09/14/98 Time: 1216

Lab File ID: E3944 Init. Calib. Date(s): 09/10/98 09/10/98

Heated Purge: (Y/N) N Init. Calib. Times: 0910 1434

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Acrolein	0.022	0.021		4.5	50.0
Freon TF	0.114	0.109		4.4	50.0
Isopropanol					50.0
Acetonitrile	0.022	0.023		-4.5	50.0
TBA	0.013	0.012		7.7	50.0
Acrylonitrile	0.058	0.056		3.4	50.0
MTBE	0.302	0.280		7.3	50.0
Hexane					50.0
DIPE	1.050	1.076		-2.3	50.0
Ethyl Acetate	0.049	0.031		36.7	50.0
Vinyl Acetate	0.403	0.409		-1.3	50.0
Tetrahydrofuran		0.012			50.0
Cyclohexane	0.225	0.220		2.2	50.0
Isobutanol					50.0
Isopropyl Acetate	0.465	0.458		1.5	50.0
n-Heptane					50.0
n-Butanol					50.0
Propyl Acetate	0.111	0.092		17.1	50.0
Butyl Acetate	0.209	0.171		18.2	50.0
1,2-Dibromoethane	0.656	0.638		2.7	50.0
1,3-Dichlorobenzene	1.470	1.545		-5.1	50.0
1,4-Dichlorobenzene	1.720	1.718		0.1	50.0
1,2-Dichlorobenzene	1.337	1.367		-2.2	50.0
Naphthalene	0.521	0.280		46.2	50.0
Methylnaphthalene (total)					50.0
Dimethylnaphthalene (total)					50.0
Dichlorodifluoromethane	0.084	0.077		8.3	50.0
1,1-Dichloropropene	0.311	0.315		-1.1	50.0
1,2,4-Trichlorobenzene	0.444	0.236		46.8	50.0
Hexachlorobutadiene	0.348	0.264		24.1	50.0
1,4-Dioxane	0.003	0.003		0.0	50.0
Methyl Acrylate		0.035			50.0
1,1,1,2-Tetrachloroethane	0.401	0.398		0.7	50.0
1,2,3-Trichlorobenzene		0.105			50.0
1,2,3-Trichloropropane	0.953	0.970		-1.6	50.0
1,2,4-Trimethylbenzene	2.699	2.695		0.1	50.0
1,2-Dibromo-3-chloropropane	0.121	0.104		14.0	50.0

VOLATILE ORGANICS CONTINUING CALIBRATION CHECK(cont'd)
METHOD 8260B

Instrument ID: VOAMS5 Calibration Date: 09/14/98 Time: 1216

Lab File ID: E3944 Init. Calib. Date(s): 09/10/98 09/10/98

Heated Purge: (Y/N) N Init. Calib. Times: 0910 1434

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
1,3,5-Trimethylbenzene	2.638	2.628		0.4	50.0
1,3-Dichloropropane	0.602	0.611		-1.3	50.0
2,2-Dichloropropane	0.217	0.209		3.7	50.0
2-Chlorotoluene	2.409	2.517		-4.3	50.0
4-Chlorotoluene	3.127	3.205		-2.3	50.0
Bromobenzene	1.124	1.161		-3.1	50.0
Bromochloromethane	0.168	0.164		2.4	50.0
Dibromomethane	0.280	0.274		2.1	50.0
Isopropylbenzene	1.006	0.948		5.8	50.0
n-Butylbenzene	2.113	2.080		1.6	50.0
n-Propylbenzene	3.816	3.835		-0.0	50.0
p-Isopropyltoluene	2.337	2.232		4.5	50.0
sec-Butylbenzene	3.059	2.896		5.3	50.0
tert-Butylbenzene	2.343	2.204		5.9	50.0
Allyl chloride	0.140	0.151		-7.8	50.0
Benzyl chloride	1.650	1.697		-2.8	50.0
Epichlorohydrin	0.024	0.023		4.2	50.0
Isoprene	0.203	0.215		-5.9	50.0
Methyl methacrylate	0.161	0.158		1.9	50.0
n-Pentane	0.025	0.028		-12.0	50.0
Allyl alcohol	0.002	0.002		0.0	50.0
1,2-Dichloroethane-d4 (SUR)	0.242	0.227		6.2	50.0
Toluene-d8 (SUR)	0.810	0.738		8.9	50.0
Bromofluorobenzene (SUR)	0.481	0.438		8.9	50.0

VOLATILE ORGANICS INITIAL CALIBRATION DATA
METHOD 8260B

Instrument ID: VOAMS5 Calibration Date(s): 09/10/98 09/10/98

Heated Purge: (Y/N) N Calibration Time(s): 0910 1434

LAB FILE ID: RRF5: E3843 RRF20: E3836 RRF50: E3838
RRF100: E3839 RRF200: E3840

COMPOUND	RRF5	RRF20	RRF50	RRF100	RRF200
Chloromethane	0.118	0.126	0.103	0.110	0.116
Bromomethane	0.082	0.083	0.083	0.082	0.090
Vinyl Chloride	0.064	0.079	0.068	0.065	0.072
Chloroethane	0.042	0.050	0.043	0.037	0.039
Methylene Chloride	0.285	0.217	0.202	0.197	0.199
Acetone	0.050	0.055	0.043	0.042	0.044
Carbon Disulfide	0.389	0.359	0.367	0.356	0.331
Trichlorofluoromethane	0.213	0.217	0.213	0.214	0.206
1,1-Dichloroethene	0.162	0.194	0.186	0.175	0.168
1,1-Dichloroethane	0.457	0.516	0.512	0.506	0.507
trans-1,2-Dichloroethene	0.257	0.307	0.298	0.295	0.294
cis-1,2-Dichloroethene	0.306	0.323	0.314	0.310	0.312
Chloroform	0.475	0.512	0.509	0.504	0.509
1,2-Dichloroethane	0.270	0.302	0.294	0.296	0.298
2-Butanone	0.010	0.018	0.018	0.019	0.019
1,1,1-Trichloroethane	0.340	0.378	0.366	0.350	0.341
Carbon Tetrachloride	0.266	0.334	0.338	0.322	0.315
Bromodichloromethane	0.487	0.474	0.484	0.484	0.489
1,2-Dichloropropane	0.314	0.311	0.309	0.302	0.307
cis-1,3-Dichloropropene	0.351	0.395	0.396	0.392	0.396
Trichloroethene	0.316	0.332	0.335	0.322	0.322
Dibromochloromethane	0.561	0.584	0.609	0.621	0.621
1,1,2-Trichloroethane	0.314	0.346	0.349	0.358	0.346
Benzene	0.745	0.716	0.699	0.685	0.692
trans-1,3-Dichloropropene	0.442	0.520	0.527	0.550	0.547
2-Chloroethyl Vinyl Ether	0.184	0.188	0.191	0.194	0.197
Bromoform	0.363	0.433	0.449	0.468	0.473
4-Methyl-2-Pentanone	0.225	0.237	0.235	0.241	0.243
2-Hexanone	0.243	0.234	0.242	0.255	0.252
Tetrachloroethene	0.508	0.493	0.510	0.502	0.486
1,1,2,2-Tetrachloroethane	0.597	0.522	0.530	0.541	0.535
Toluene	0.860	0.890	0.864	0.835	0.821
Chlorobenzene	0.968	0.996	1.008	1.006	0.983
Ethylbenzene	0.424	0.451	0.466	0.463	0.448
Styrene	0.943	0.991	1.006	1.002	0.966
Xylene (Total)	0.550	0.580	0.583	0.580	0.564
Ethyl Ether	0.207	0.198	0.198	0.195	0.206
Acrolein	0.023	0.022	0.022	0.022	0.022
Freon TF	0.106	0.138	0.112	0.110	0.106

VOLATILE ORGANICS INITIAL CALIBRATION DATA (cont'd)
METHOD 8260B

Instrument ID: VOAMS5 Calibration Date(s): 09/10/98 09/10/98

Heated Purge: (Y/N) N Calibration Time(s): 0910 1434

LAB FILE ID: RRF5: E3843 RRF20: E3836 RRF50: E3838
RRF100: E3839 RRF200: E3840

COMPOUND	RRF5	RRF20	RRF50	RRF100	RRF200
Isopropanol					
Acetonitrile	0.024	0.022	0.020	0.021	0.021
TBA	0.014	0.014	0.013	0.013	0.013
Acrylonitrile	0.056	0.057	0.058	0.058	0.061
MTBE	0.344	0.322	0.298	0.280	0.266
Hexane					
DIPE	1.122	1.069	1.030	1.011	1.016
Ethyl Acetate	0.058	0.052	0.032	0.032	0.031
Vinyl Acetate	0.437	0.424	0.393	0.381	0.378
Tetrahydrofuran					
Cyclohexane	0.218	0.241	0.233	0.223	0.208
Isobutanol					
Isopropyl Acetate	0.492	0.488	0.450	0.442	0.453
n-Heptane					
n-Butanol					
Propyl Acetate	0.144	0.143	0.096	0.088	0.086
Butyl Acetate	0.254	0.244	0.177	0.182	0.186
1,2-Dibromoethane	0.633	0.649	0.656	0.680	0.660
1,3-Dichlorobenzene	1.617	1.469	1.540	1.378	1.346
1,4-Dichlorobenzene	1.757	1.713	1.696	1.753	1.680
1,2-Dichlorobenzene	1.361	1.357	1.379	1.309	1.279
Naphthalene	0.647	0.454	0.606	0.457	0.443
Methylnaphthalene (total)					
Dimethylnaphthalene (total)					
Dichlorodifluoromethane	0.081	0.080	0.086	0.084	0.089
1,1-Dichloropropene	0.263	0.324	0.333	0.320	0.317
1,2,4-Trichlorobenzene	0.620	0.373	0.459	0.388	0.378
Hexachlorobutadiene	0.550	0.312	0.329	0.287	0.264
1,4-Dioxane	0.003	0.003	0.003	0.003	0.003
Methyl Acrylate					
1,1,1,2-Tetrachloroethane	0.377	0.403	0.405	0.413	0.407
1,2,3-Trichlorobenzene					
1,2,3-Trichloropropane	1.033	0.961	0.950	0.924	0.899
1,2,4-Trimethylbenzene	3.333	2.667	2.644	2.478	2.373
1,2-Dibromo-3-chloropropane	0.130	0.123	0.125	0.115	0.114
1,3,5-Trimethylbenzene	3.270	2.585	2.605	2.412	2.320
1,3-Dichloropropane	0.568	0.606	0.608	0.621	0.609
2,2-Dichloropropane	0.219	0.237	0.223	0.210	0.196
2-Chlorotoluene	2.581	2.493	2.446	2.302	2.222

VOLATILE ORGANICS INITIAL CALIBRATION DATA (cont'd)
METHOD 8260B

Instrument ID: VOAMS5 Calibration Date(s): 09/10/98 09/10/98

Heated Purge: (Y/N) N Calibration Time(s): 0910 1434

LAB FILE ID: RRF5: E3843 RRF20: E3836 RRF50: E3838
RRF100: E3839 RRF200: E3840

COMPOUND	RRF5	RRF20	RRF50	RRF100	RRF200
4-Chlorotoluene	3.234	3.126	3.138	3.126	3.009
Bromobenzene	1.178	1.148	1.136	1.098	1.059
Bromochloromethane	0.169	0.169	0.166	0.165	0.169
Dibromomethane	0.290	0.278	0.276	0.278	0.280
Isopropylbenzene	1.073	0.986	1.014	0.992	0.963
n-Butylbenzene	2.776	1.939	2.020	1.942	1.890
n-Propylbenzene	4.397	3.742	3.866	3.607	3.467
p-Isopropyltoluene	3.212	2.164	2.208	2.089	2.014
sec-Butylbenzene	4.344	2.834	2.868	2.672	2.578
tert-Butylbenzene	3.159	2.215	2.244	2.089	2.007
Allyl chloride	0.137	0.138	0.141	0.143	0.143
Benzyl chloride	1.687	1.618	1.646	1.640	1.658
Epichlorohydrin	0.026	0.024	0.024	0.024	0.024
Isoprene	0.171	0.219	0.212	0.212	0.200
Methyl methacrylate	0.162	0.160	0.159	0.159	0.164
n-Pentane	0.020	0.028	0.027	0.028	0.024
Allyl alcohol	0.002	0.002	0.002	0.002	0.003
1,2-Dichloroethane-d4 (SUR)	0.243	0.277	0.225	0.230	0.234
Toluene-d8 (SUR)	0.849	0.956	0.757	0.746	0.741
Bromofluorobenzene (SUR)	0.491	0.546	0.450	0.462	0.454

850930630

F 36

VOLATILE ORGANICS INITIAL CALIBRATION DATA (cont'd)
METHOD 8260B

Instrument ID: VOAMS5 Calibration Date(s): 09/10/98 09/10/98

Heated Purge: (Y/N) N Calibration Time(s): 0910 1434

COMPOUND	CURVE	COEFFICENT A1	%RSD OR R^2
Chloromethane	AVRG	0.11486476	7.4**
Bromomethane	AVRG	0.08416952	4.2*
Vinyl Chloride	AVRG	0.06959751	8.7*
Chloroethane	AVRG	0.04220075	11.4*
Methylene Chloride	AVRG	0.22021214	17.0*
Acetone	AVRG	0.04668381	11.6*
Carbon Disulfide	AVRG	0.36043848	5.8*
Trichlorofluoromethane	AVRG	0.21266369	1.9*
1,1-Dichloroethene	AVRG	0.17719374	7.3*
1,1-Dichloroethane	AVRG	0.49966711	4.8**
trans-1,2-Dichloroethene	AVRG	0.29019624	6.6*
cis-1,2-Dichloroethene	AVRG	0.31305446	2.1*
Chloroform	AVRG	0.50180892	3.0*
1,2-Dichloroethane	AVRG	0.29198894	4.4*
2-Butanone	AVRG	0.01679962	21.3*
1,1,1-Trichloroethane	AVRG	0.35515353	4.7*
Carbon Tetrachloride	AVRG	0.31503498	9.2*
Bromodichloromethane	AVRG	0.48337830	1.2*
1,2-Dichloropropane	AVRG	0.30871960	1.4*
cis-1,3-Dichloropropene	AVRG	0.38617936	5.1*
Trichloroethene	AVRG	0.32525346	2.4*
Dibromochloromethane	AVRG	0.59943960	4.4*
1,1,2-Trichloroethane	AVRG	0.34267108	4.9*
Benzene	AVRG	0.70737630	3.4*
trans-1,3-Dichloropropene	AVRG	0.51715762	8.5*
2-Chloroethyl Vinyl Ether	AVRG	0.19093773	2.8*
Bromoform	AVRG	0.43692617	10.2**
4-Methyl-2-Pentanone	AVRG	0.23604842	2.9*
2-Hexanone	AVRG	0.24519792	3.5*
Tetrachloroethene	AVRG	0.49984531	2.0*
1,1,2,2-Tetrachloroethane	AVRG	0.54500996	5.5**
Toluene	AVRG	0.85429630	3.2*
Chlorobenzene	AVRG	0.99212910	1.7**
Ethylbenzene	AVRG	0.45072419	3.7*
Styrene	AVRG	0.98168794	2.7*
Xylene (Total)	AVRG	0.57146270	2.4*
Ethyl Ether	AVRG	0.20100780	2.6*
Acrolein	AVRG	0.02240875	0.9*
Freon TF	AVRG	0.11450228	11.9*

* Compound with required maximum % RSD value.
** Compound with required minimum RRF value.

VOLATILE ORGANICS INITIAL CALIBRATION DATA (cont'd)
METHOD 8260B

Instrument ID: VOAMS5 Calibration Date(s): 09/10/98 09/10/98

Heated Purge: (Y/N) N Calibration Time(s): 0910 1434

COMPOUND	CURVE	COEFFICENT A1	%RSD OR R^2
Isopropanol	AVRG		
Acetonitrile	AVRG	0.02161426	7.9*
TBA	AVRG	0.01327645	4.3*
Acrylonitrile	AVRG	0.05800043	3.6*
MTBE	AVRG	0.30188042	10.4*
Hexane	AVRG		
DIPE	AVRG	1.04974591	4.4*
Ethyl Acetate	AVRG	0.04113781	31.3*
Vinyl Acetate	AVRG	0.40277346	6.6*
Tetrahydrofuran	AVRG		
Cyclohexane	AVRG	0.22461443	5.7*
Isobutanol	AVRG		
Isopropyl Acetate	AVRG	0.46520061	5.0*
n-Heptane	AVRG		
n-Butanol	AVRG		
Propyl Acetate	AVRG	0.11160380	26.4*
Butyl Acetate	AVRG	0.20870022	17.8*
1,2-Dibromoethane	AVRG	0.65558852	2.6*
1,3-Dichlorobenzene	AVRG	1.47006207	7.6*
1,4-Dichlorobenzene	AVRG	1.71960030	2.0*
1,2-Dichlorobenzene	AVRG	1.33705784	3.1*
Naphthalene	AVRG	0.52119531	18.6*
Methylnaphthalene (total)	AVRG		
Dimethylnaphthalene (total)	AVRG		
Dichlorodifluoromethane	AVRG	0.08431801	4.1*
1,1-Dichloropropene	AVRG	0.31135415	9.0*
1,2,4-Trichlorobenzene	AVRG	0.44383660	23.5*
Hexachlorobutadiene	AVRG	0.34834709	33.2*
1,4-Dioxane	AVRG	0.00328453	3.6*
Methyl Acrylate	AVRG		
1,1,1,2-Tetrachloroethane	AVRG	0.40094673	3.5*
1,2,3-Trichlorobenzene	AVRG		
1,2,3-Trichloropropane	AVRG	0.95350928	5.3*
1,2,4-Trimethylbenzene	AVRG	2.69899505	13.9*
1,2-Dibromo-3-chloropropane	AVRG	0.12171735	5.6*
1,3,5-Trimethylbenzene	AVRG	2.63852493	14.1*
1,3-Dichloropropane	AVRG	0.60261244	3.3*
2,2-Dichloropropane	AVRG	0.21679729	7.0*
2-Chlorotoluene	AVRG	2.40854121	6.0*

* Compound with required maximum % RSD value.
** Compound with required minimum RRF value.

850930632

F 369

VOLATILE ORGANICS INITIAL CALIBRATION DATA (cont'd)
METHOD 8260B

Instrument ID: VOAMS5 Calibration Date(s): 09/10/98 09/10/98

Heated Purge: (Y/N) N Calibration Time(s): 0910 1434

COMPOUND	CURVE	COEFFICENT A1	%RSD OR R^2
4-Chlorotoluene	AVRG	3.12644724	2.6*
Bromobenzene	AVRG	1.12371518	4.1*
Bromochloromethane	AVRG	0.16760521	1.2*
Dibromomethane	AVRG	0.28036454	2.0*
Isopropylbenzene	AVRG	1.00566071	4.1*
n-Butylbenzene	AVRG	2.11355561	17.7*
n-Propylbenzene	AVRG	3.81585528	9.4*
p-Isopropyltoluene	AVRG	2.33751485	21.2*
sec-Butylbenzene	AVRG	3.05953401	23.8*
tert-Butylbenzene	AVRG	2.34291743	19.9*
Allyl chloride	AVRG	0.14063997	2.1*
Benzyl chloride	AVRG	1.64989680	1.5*
Epichlorohydrin	AVRG	0.02452375	4.1*
Isoprene	AVRG	0.20278952	9.5*
Methyl methacrylate	AVRG	0.16083221	1.4*
n-Pentane	AVRG	0.02555324	13.7*
Allyl alcohol	AVRG	0.00242735	8.2*
1,2-Dichloroethane-d4 (SUR)	AVRG	0.24192829	8.5*
Toluene-d8 (SUR)	AVRG	0.80976311	11.5*
Bromofluorobenzene (SUR)	AVRG	0.48088049	8.3*

* Compound with required maximum % RSD value.
** Compound with required minimum RRF value.

VOLATILE ORGANICS CONTINUING CALIBRATION CHECK
METHOD 624

Instrument ID: VOAMS6 Calibration Date: 09/04/98 Time: 1226

Lab File ID: F3701 Init. Calib. Date(s): 08/28/98 08/28/98

Heated Purge: (Y/N) N Init. Calib. Times: 1149 1414

COMPOUND	$\overline{RRF}$	RRF20	MIN RRF	%D	MAX %D
Chloromethane	0.669	0.759		-13.4	104
Bromomethane	0.843	0.943		-11.7	86.0
Vinyl Chloride	0.544	0.596		-9.4	96.0
Chloroethane	0.558	0.610		-9.3	62.0
Methylene Chloride	1.235	1.208		2.2	39.5
Acetone	0.334	0.300		10.2	
Carbon Disulfide	0.236	0.241		-2.1	
Trichlorofluoromethane	0.856	1.084		-26.6	52.0
1,1-Dichloroethene	1.077	1.163		-7.8	49.5
1,1-Dichloroethane	2.319	2.593		-11.8	27.5
trans-1,2-Dichloroethene	1.127	1.227		-8.7	30.5
cis-1,2-Dichloroethene	1.242	1.312		-5.6	
Chloroform	2.354	2.516		-6.7	32.5
1,2-Dichloroethane	0.408	0.430		-5.2	32.0
2-Butanone	1.302	1.139		12.5	
1,1,1-Trichloroethane	0.479	0.532		-10.9	25.0
Carbon Tetrachloride	0.465	0.521		-12.0	27.0
Bromodichloromethane	0.644	0.681		-5.7	34.5
1,2-Dichloropropane	0.403	0.442		-9.5	66.0
cis-1,3-Dichloropropene	0.455	0.484		-6.2	76.0
Trichloroethene	0.424	0.472		-11.3	33.5
Dibromochloromethane	0.711	0.759		-6.6	32.5
1,1,2-Trichloroethane	0.315	0.327		-3.8	29.0
Benzene	0.854	0.937		-9.7	36.0
trans-1,3-Dichloropropene	0.363	0.385		-5.9	50.0
2-Chloroethyl Vinyl Ether	0.224	0.251		-12.0	124
Bromoform	0.394	0.436		-10.6	29.0
4-Methyl-2-Pentanone	0.280	0.323		-15.2	
2-Hexanone	0.255	0.295		-15.5	
Tetrachloroethene	0.591	0.632		-6.9	26.5
1,1,2,2-Tetrachloroethane	0.699	0.758		-8.4	39.5
Toluene	0.886	0.917		-3.3	25.5
Chlorobenzene	0.951	0.986		-3.5	34.0
Ethylbenzene	0.391	0.403		-2.9	41.0
Styrene	0.777	0.785		-1.0	
Xylene (Total)	0.501	0.540		-7.6	
Ethyl Ether					

850930634

F371

VOLATILE ORGANICS CONTINUING CALIBRATION CHECK(cont'd)
METHOD 624

Instrument ID: VOAMS6 Calibration Date: 09/04/98 Time: 1226

Lab File ID: F3701 Init. Calib. Date(s): 08/28/98 08/28/98

Heated Purge: (Y/N) N Init. Calib. Times: 1149 1414

COMPOUND	$\overline{RRF}$	RRF20	MIN RRF	%D	MAX %D
Acrolein	0.106	0.093		12.3	
Freon TF					
Isopropanol					
Acetonitrile					
TBA	0.064	0.064		0.0	
Acrylonitrile	0.261	0.276		-5.7	
MTBE	2.307	2.440		-5.6	
Hexane					
DIPE					
Ethyl Acetate					
Vinyl Acetate	0.128	0.104		18.8	
Tetrahydrofuran					
Cyclohexane					
Isobutanol					
Isopropyl Acetate					
n-Heptane					
n-Butanol					
Propyl Acetate					
Butyl Acetate					
1,2-Dibromoethane	0.797	0.836		-4.7	
1,3-Dichlorobenzene	0.592	0.542		8.4	27.0
1,4-Dichlorobenzene	0.739	0.730		1.2	37.0
1,2-Dichlorobenzene	0.564	0.525		6.9	37.0
Naphthalene	0.603			100.0	
Methylnaphthalene (total)					
Dimethylnaphthalene (total)					
Dichlorodifluoromethane	1.126	1.191	0.01	-5.6	40.0
1,4-Dioxane	0.002	0.002		0.0	
n-Pentane			0.01		
5-Methyl-2-Hexanone			0.01		50.0
Isopropylbenzene					
1,3,5-Trimethylbenzene	0.844		0.01	100.0	50.0
Cyclohexanone			0.0001		50.0
1,2,4-Trichlorobenzene	0.312		0.01	100.0	50.0
Methyl Methacrylate					
Allyl Alcohol					40.0
Epichlorohydrin			0.01		40.0

VOLATILE ORGANICS CONTINUING CALIBRATION CHECK(cont'd)
METHOD 624

Instrument ID: VOAMS6 Calibration Date: 09/04/98 Time: 1226

Lab File ID: F3701 Init. Calib. Date(s): 08/28/98 08/28/98

Heated Purge: (Y/N) N Init. Calib. Times: 1149 1414

COMPOUND	$\overline{RRF}$	RRF20	MIN RRF	%D	MAX %D
Allyl Chloride			0.01		40.0
Benzyl Chloride			0.01		40.0
Isoprene			0.01		40.0
1,1,1,2-Tetrachloroethane	0.515	0.539	0.01	-4.5	50.0
Camphene (total)					
Camphor					
1,2,4-Trimethylbenzene	0.926		0.01	100.0	50.0
1,2-Dichloroethane-d4 (SUR)	0.065	0.066		-1.5	
Toluene-d8 (SUR)	0.864	0.833		3.6	
Bromofluorobenzene (SUR)	0.770	0.842		-9.2	

850930636

F 373

VOLATILE ORGANICS INITIAL CALIBRATION DATA
METHOD 624

Instrument ID: VOAMS6 Calibration Date(s): 08/28/98 08/28/98

Heated Purge: (Y/N) N Calibration Time(s): 1149 1414

LAB FILE ID: RRF5: F3419 RRF10: F3418 RRF20: F3417
RRF50: F3416 RRF200: F3415

COMPOUND	RRF5	RRF10	RRF20	RRF50	RRF200
Chloromethane	0.610	0.643	0.657	0.708	0.725
Bromomethane	0.792	0.849	0.879	0.872	0.821
Vinyl Chloride	0.511	0.544	0.544	0.570	0.552
Chloroethane	0.536	0.570	0.550	0.541	0.591
Methylene Chloride	1.228	1.249	1.242	1.260	1.194
Acetone	0.558	0.365	0.285	0.251	0.211
Carbon Disulfide	0.175	0.255	0.237	0.254	0.260
Trichlorofluoromethane	0.726	0.824	0.854	0.966	0.908
1,1-Dichloroethene	1.027	1.158	1.080	1.082	1.040
1,1-Dichloroethane	2.125	2.398	2.393	2.310	2.370
trans-1,2-Dichloroethene	1.010	1.171	1.149	1.126	1.177
cis-1,2-Dichloroethene	1.195	1.276	1.279	1.228	1.234
Chloroform	2.186	2.448	2.431	2.349	2.354
1,2-Dichloroethane	0.386	0.419	0.414	0.411	0.412
2-Butanone	1.302	1.290	1.288	1.315	1.315
1,1,1-Trichloroethane	0.436	0.503	0.483	0.469	0.502
Carbon Tetrachloride	0.409	0.496	0.476	0.448	0.495
Bromodichloromethane	0.529	0.628	0.662	0.680	0.719
1,2-Dichloropropane	0.379	0.412	0.412	0.401	0.412
cis-1,3-Dichloropropene	0.353	0.432	0.470	0.494	0.528
Trichloroethene	0.390	0.458	0.426	0.418	0.428
Dibromochloromethane	0.503	0.663	0.750	0.785	0.852
1,1,2-Trichloroethane	0.293	0.323	0.329	0.317	0.315
Benzene	0.790	0.891	0.862	0.846	0.879
trans-1,3-Dichloropropene	0.280	0.342	0.371	0.397	0.426
2-Chloroethyl Vinyl Ether	0.210	0.222	0.228	0.221	0.238
Bromoform	0.246	0.349	0.420	0.469	0.488
4-Methyl-2-Pentanone	0.253	0.272	0.290	0.284	0.299
2-Hexanone	0.216	0.258	0.276	0.263	0.262
Tetrachloroethene	0.524	0.652	0.607	0.583	0.589
1,1,2,2-Tetrachloroethane	0.620	0.732	0.751	0.734	0.657
Toluene	0.862	0.932	0.898	0.865	0.873
Chlorobenzene	0.826	1.014	0.982	0.970	0.962
Ethylbenzene	0.370	0.424	0.398	0.397	0.366
Styrene	0.664	0.793	0.805	0.832	0.793
Xylene (Total)	0.438	0.537	0.525	0.514	0.490
Ethyl Ether					
Acrolein	0.102	0.107	0.105	0.120	0.094
Freon TF					

850930637

VOLATILE ORGANICS INITIAL CALIBRATION DATA (cont'd)
METHOD 624

Instrument ID: VOAMS6 Calibration Date(s): 08/28/98 08/28/98

Heated Purge: (Y/N) N Calibration Time(s): 1149 1414

LAB FILE ID: RRF5: F3419 RRF10: F3418 RRF20: F3417
RRF50: F3416 RRF200: F3415

COMPOUND	RRF5	RRF10	RRF20	RRF50	RRF200
Isopropanol					
Acetonitrile					
TBA	0.064	0.060	0.065	0.072	0.057
Acrylonitrile	0.247	0.248	0.260	0.269	0.279
MTBE	2.170	2.306	2.397	2.347	2.314
Hexane					
DIPE					
Ethyl Acetate					
Vinyl Acetate	0.126	0.125	0.132	0.128	0.130
Tetrahydrofuran					
Cyclohexane					
Isobutanol					
Isopropyl Acetate					
n-Heptane					
n-Butanol					
Propyl Acetate					
Butyl Acetate					
1,2-Dibromoethane	0.672	0.829	0.832	0.824	0.826
1,3-Dichlorobenzene	0.534	0.621	0.621	0.636	0.547
1,4-Dichlorobenzene	0.629	0.739	0.776	0.845	0.708
1,2-Dichlorobenzene	0.504	0.588	0.595	0.627	0.506
Naphthalene	0.694	0.669	0.783	0.712	0.159
Methylnaphthalene (total)					
Dimethylnaphthalene (total)					
Dichlorodifluoromethane	1.030	1.187	1.089	1.172	1.151
1,4-Dioxane	0.002	0.002	0.002	0.002	0.002
n-Pentane					
5-Methyl-2-Hexanone					
Isopropylbenzene					
1,3,5-Trimethylbenzene	0.749	0.883	0.892	0.916	0.781
Cyclohexanone					
1,2,4-Trichlorobenzene	0.337	0.342	0.382	0.356	0.145
Methyl Methacrylate					
Allyl Alcohol					
Epichlorohydrin					
Allyl Chloride					
Benzyl Chloride					
Isoprene					
1,1,1,2-Tetrachloroethane	0.432	0.534	0.542	0.543	0.526

850930638

F 375

VOLATILE ORGANICS INITIAL CALIBRATION DATA (cont'd)
METHOD 624

Instrument ID: VOAMS6 Calibration Date(s): 08/28/98 08/28/98

Heated Purge: (Y/N) N Calibration Time(s): 1149 1414

LAB FILE ID: RRF5: F3419 RRF10: F3418 RRF20: F3417
RRF50: F3416 RRF200: F3415

COMPOUND	RRF5	RRF10	RRF20	RRF50	RRF200
Camphene (total)					
Camphor					
1,2,4-Trimethylbenzene	0.886	0.854	0.967	1.039	0.884
1,2-Dichloroethane-d4 (SUR)	0.064	0.065	0.065	0.065	0.068
Toluene-d8 (SUR)	0.863	0.862	0.863	0.865	0.867
Bromofluorobenzene (SUR)	0.740	0.820	0.846	0.761	0.683

850930639

VOLATILE ORGANICS INITIAL CALIBRATION DATA (cont'd)
METHOD 624

Instrument ID: VOAMS6 Calibration Date(s): 08/28/98 08/28/98

Heated Purge: (Y/N) N Calibration Time(s): 1149 1414

COMPOUND	CURVE	COEFFICENT A1	%RSD OR R^2
Chloromethane	AVRG	0.66859415	7.1*
Bromomethane	AVRG	0.84254880	4.3*
Vinyl Chloride	AVRG	0.54422422	3.9*
Chloroethane	AVRG	0.55766607	4.1*
Methylene Chloride	AVRG	1.23468735	2.0*
Acetone	AVRG	0.33397937	41.1*
Carbon Disulfide	AVRG	0.23614977	14.9*
Trichlorofluoromethane	AVRG	0.85572924	10.5*
1,1-Dichloroethene	AVRG	1.07749512	4.8*
1,1-Dichloroethane	AVRG	2.31942567	4.9*
trans-1,2-Dichloroethene	AVRG	1.12661157	6.1*
cis-1,2-Dichloroethene	AVRG	1.24218736	2.8*
Chloroform	AVRG	2.35377140	4.4*
1,2-Dichloroethane	AVRG	0.40865619	3.1*
2-Butanone	AVRG	1.30201879	1.0*
1,1,1-Trichloroethane	AVRG	0.47867274	5.8*
Carbon Tetrachloride	AVRG	0.46502992	7.9*
Bromodichloromethane	AVRG	0.64366772	11.2*
1,2-Dichloropropane	AVRG	0.40320739	3.5*
cis-1,3-Dichloropropene	AVRG	0.45523551	14.7*
Trichloroethene	AVRG	0.42424847	5.7*
Dibromochloromethane	AVRG	0.71065780	18.9*
1,1,2-Trichloroethane	AVRG	0.31542978	4.3*
Benzene	AVRG	0.85376301	4.6*
trans-1,3-Dichloropropene	AVRG	0.36334659	15.4*
2-Chloroethyl Vinyl Ether	AVRG	0.22396365	4.6*
Bromoform	AVRG	0.39424874	25.0*
4-Methyl-2-Pentanone	AVRG	0.27955532	6.4*
2-Hexanone	AVRG	0.25498712	9.0*
Tetrachloroethene	AVRG	0.59100402	7.8*
1,1,2,2-Tetrachloroethane	AVRG	0.69876970	8.2*
Toluene	AVRG	0.88598962	3.3*
Chlorobenzene	AVRG	0.95103582	7.6*
Ethylbenzene	AVRG	0.39098595	6.1*
Styrene	AVRG	0.77727328	8.4*
Xylene (Total)	AVRG	0.50082929	7.8*
Ethyl Ether	AVRG		
Acrolein	AVRG	0.10571637	8.9*
Freon TF	AVRG		

* Compound with required maximum % RSD value.
** Compound with required minimum RRF value.

850930640

F 377

VOLATILE ORGANICS INITIAL CALIBRATION DATA (cont'd)
METHOD 624

Instrument ID: VOAMS6 Calibration Date(s): 08/28/98 08/28/98

Heated Purge: (Y/N) N Calibration Time(s): 1149 1414

COMPOUND	CURVE	COEFFICENT A1	%RSD OR R^2
Isopropanol	AVRG		
Acetonitrile	AVRG		
TBA	AVRG	0.06349341	8.9*
Acrylonitrile	AVRG	0.26055413	5.2*
MTBE	AVRG	2.30696828	3.7*
Hexane	AVRG		
DIPE	AVRG		
Ethyl Acetate	AVRG		
Vinyl Acetate	AVRG	0.12830961	2.1*
Tetrahydrofuran	AVRG		
Cyclohexane	AVRG		
Isobutanol	AVRG		
Isopropyl Acetate	AVRG		
n-Heptane	AVRG		
n-Butanol	AVRG		
Propyl Acetate	AVRG		
Butyl Acetate	AVRG		
1,2-Dibromoethane	AVRG	0.79661545	8.7*
1,3-Dichlorobenzene	AVRG	0.59209790	8.0*
1,4-Dichlorobenzene	AVRG	0.73948925	10.8*
1,2-Dichlorobenzene	AVRG	0.56407582	9.9*
Naphthalene	AVRG	0.60339008	41.8*
Methylnaphthalene (total)	AVRG		
Dimethylnaphthalene (total)	AVRG		
Dichlorodifluoromethane	AVRG	1.12614528	5.8**
1,4-Dioxane	AVRG	0.00200761	7.8*
n-Pentane	AVRG		
5-Methyl-2-Hexanone	AVRG		
Isopropylbenzene	AVRG		
1,3,5-Trimethylbenzene	AVRG	0.84424064	8.8**
Cyclohexanone	AVRG		
1,2,4-Trichlorobenzene	AVRG	0.31250929	30.5**
Methyl Methacrylate	AVRG		
Allyl Alcohol	AVRG		
Epichlorohydrin	AVRG		
Allyl Chloride	AVRG		
Benzyl Chloride	AVRG		
Isoprene	AVRG		
1,1,1,2-Tetrachloroethane	AVRG	0.51571494	9.1**

* Compound with required maximum % RSD value.
** Compound with required minimum RRF value.

850930641

VOLATILE ORGANICS INITIAL CALIBRATION DATA (cont'd)
METHOD 624

Instrument ID: VOAMS6 Calibration Date(s): 08/28/98 08/28/98

Heated Purge: (Y/N) N Calibration Time(s): 1149 1414

COMPOUND	CURVE	COEFFICENT A1	%RSD OR R^2
Camphene (total)	AVRG		
Camphor	AVRG		
1,2,4-Trimethylbenzene	AVRG	0.92624409	8.2**
1,2-Dichloroethane-d4 (SUR)	AVRG	0.06553991	2.0*
Toluene-d8 (SUR)	AVRG	0.86400387	0.2*
Bromofluorobenzene (SUR)	AVRG	0.77024561	8.4*

* Compound with required maximum % RSD value.
** Compound with required minimum RRF value.

VOLATILE SYSTEM MONITORING COMPOUND RECOVERY
METHOD 8260B

Matrix: SOIL Level: HIGH Lab Job No: G893

	LAB SAMPLE NO.	S1 #	S2 #	S3 #	OTHER	TOT OUT
01	81199	95	102	99		0
02	81202	90	98	92		0
03	81206	88	96	90		0
04	81208	100	110	96		0
05	81210	91	97	94		0
06	81216	89	95	89		0
07	81218	93	101	96		0
08	81220	88	96	91		0
09	81212	115	123D	102		0
10	81212R1	109	120D	105		0
11	81204	85	94	90		0
12	81214	100	110	100		0
13	81202MS	93	97	98		0
14	81202MSD	98	99	100		0
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

		QC LIMITS
S1	= 1,2-Dichloroethane-d4	(70-121)
S2	= Toluene-d8	(81-117)
S3	= Bromofluorobenzene	(74-121)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

VOLATILE SYSTEM MONITORING COMPOUND RECOVERY
METHOD 8260B

Matrix: SOIL Level: HIGH Lab Job No: G893

	LAB SAMPLE NO.	S1 #	S2 #	S3 #	OTHER	TOT OUT
01	EV252A	88	96	91		0
02	EV253	89	97	92		0
03	EV254A	88	96	93		0
04	EV257	89	95	90		0
05	EV260	85	91	89		0
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

		QC LIMITS
S1	= 1,2-Dichloroethane-d4	(70-121)
S2	= Toluene-d8	(81-117)
S3	= Bromofluorobenzene	(74-121)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

850930644

F 381

VOLATILE SYSTEM MONITORING COMPOUND RECOVERY
METHOD 624

Matrix: WATER Level: LOW Lab Job No: G893

	LAB SAMPLE NO.	S1 #	S2 #	S3 #	OTHER	TOT OUT
01	FV247	99	101	95		0
02	81200	99	100	95		0
03	81201	97	101	96		0
04	81203	100	100	95		0
05	81205	99	101	97		0
06	81207	99	101	94		0
07	81209	104	101	95		0
08	81211	99	94	96		0
09	81213	97	100	92		0
10	81215	98	100	97		0
11	81217	99	100	96		0
12	81219	98	100	96		0
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

		QC LIMITS
S1	= 1,2-Dichloroethane-d4	(86-115)
S2	= Toluene-d8	(89-106)
S3	= Bromofluorobenzene	(76-120)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

850930645

308 F 38

VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY
METHOD 8260B

Matrix: SOIL

Level: HIGH

Matrix Spike - Lab Sample No.: 80983

MS Sample from Lab Job No: G847

QA Batch: 6010

Compound	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC. LIMITS REC.
1,1-Dichloroethene	7300	0.00	6800	93	59-172
Trichloroethene	7300	0.00	8800	121	62-137
Benzene	7300	0.00	7800	107	66-142
Toluene	7300	0.00	7600	104	59-139
Chlorobenzene	7300	0.00	7700	105	60-133

Compound	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	7300	6800	93	0	22	59-172
Trichloroethene	7300	8600	118	2	24	62-137
Benzene	7300	7500	103	4	21	66-142
Toluene	7300	7400	101	3	21	59-139
Chlorobenzene	7300	7500	103	3	21	60-133

Column to be used to flag recovery and RPD values with an asterik
* Values outside of QC limits
RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

COMMENTS: _____

_____

850930646

F383

VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY
METHOD 8260B

Matrix: SOIL

Level: HIGH

Matrix Spike - Lab Sample No.: 81202

MS Sample from Lab Job No: G893

QA Batch: 6032

Compound	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC. LIMITS REC.
1,1-Dichloroethene	7000	0.00	5000	71	59-172
Trichloroethene	7000	0.00	6400	91	62-137
Benzene	7000	0.00	6000	86	66-142
Toluene	7000	0.00	5900	84	59-139
Chlorobenzene	7000	0.00	6400	91	60-133

Compound	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	7000	5300	76	6	22	59-172
Trichloroethene	7000	6600	94	3	24	62-137
Benzene	7000	6100	87	2	21	66-142
Toluene	7000	5900	84	0	21	59-139
Chlorobenzene	7000	6500	93	2	21	60-133

Column to be used to flag recovery and RPD values with an asterik
* Values outside of QC limits
RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

COMMENTS: _____

850930647

VOLATILE SPIKE RECOVERY SUMMARY
METHOD 624

Matrix: WATER

Level: LOW

Matrix Spike - Lab Sample No.: 81014

MS Sample from Lab Job No: G856

QA Batch: 8121

Compound	MS % REC.	BS % REC.	LIMITS
Chloromethane	156	150	0-273
Bromomethane	152	140	0-242
Vinyl Chloride	186	170	0-251
Chloroethane	132	125	14-230
Methylene Chloride	100	95	0-221
Trichlorofluoromethane	158	140	17-181
1,1-Dichloroethene	102	90	0-234
1,1-Dichloroethane	104	100	59-155
trans-1,2-Dichloroethene	106	100	54-156
Chloroform	101	100	51-138
1,2-Dichloroethane	102	100	49-155
1,1,1-Trichloroethane	108	105	52-162
Carbon Tetrachloride	108	100	70-140
Bromodichloromethane	104	100	35-155
1,2-Dichloropropane	104	100	0-210
cis-1,3-Dichloropropene	96	100	0-227
Trichloroethene	99	95	71-157
Dibromochloromethane	100	100	53-149
1,1,2-Trichloroethane	100	100	52-150
Benzene	104	100	37-151
trans-1,3-Dichloropropene	104	100	17-183
2-Chloroethyl Vinyl Ether	0	95	0-305
Bromoform	96	100	45-169
Tetrachloroethene	120	100	64-148
1,1,2,2-Tetrachloroethane	96	100	46-157
Toluene	98	95	47-150
Chlorobenzene	100	95	37-160
Ethylbenzene	104	100	37-162
1,3-Dichlorobenzene	84	90	59-156
1,4-Dichlorobenzene	92	90	18-190

* Values outside of QC limits

VOLATILE SPIKE RECOVERY SUMMARY
METHOD 624

Matrix: WATER

Level: LOW

Matrix Spike - Lab Sample No.: 81014

MS Sample from Lab Job No: G856

QA Batch: 8121

Compound	MS % REC.	BS % REC.	LIMITS
1,2-Dichlorobenzene	92	95	18-190

* Values outside of QC limits

Spike Recovery: 0 out of 62 outside limits

COMMENTS: _____

850930649

 F386

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): E3809 Date Analyzed: 09/09/98

Instrument ID: VOAMS5 Time Analyzed: 1759

		IS1 AREA #	RT #	IS2(CBZ) AREA #	RT #	IS3(DCB) AREA #	RT #
	12 HOUR STD	1919891	9.15	1197129	12.81	474371	15.30
	UPPER LIMIT	3839782	9.65	2394258	13.31	948742	15.80
	LOWER LIMIT	959946	8.65	598564	12.31	237186	14.80
	LABORATORY SAMPLE NO.						
01	EV252A	1938086	9.16	1198196	12.81	445703	15.29
02	81199	1911472	9.16	1151585	12.80	436325	15.30
03	81202	1940376	9.16	1178627	12.80	442168	15.29
04	81206	1935680	9.16	1170166	12.80	439352	15.30
05	81208	1738685	9.16	1114004	12.82	431476	15.29
06	81210	1900347	9.16	1140951	12.82	438423	15.29
07	81216	1937308	9.16	1169236	12.82	442609	15.29
08	81218	1904611	9.16	1153504	12.82	432817	15.29
09	81220	1924412	9.16	1143014	12.82	437273	15.29
10	81212	1458289	9.16	1018842	12.82	382400	15.30
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 = Fluorobenzene
IS2 (CBZ) = Chlorobenzene-d5
IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

850930650

F387

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): E3838 Date Analyzed: 09/10/98

Instrument ID: VOAMS5 Time Analyzed: 1102

		IS1 AREA	#	RT	#	IS2(CBZ) AREA	#	RT	#	IS3(DCB) AREA	#	RT	#
	12 HOUR STD	1877667		9.17		1164273		12.83		465430		15.31	
	UPPER LIMIT	3755334		9.67		2328546		13.33		930860		15.81	
	LOWER LIMIT	938834		8.67		582136		12.33		232715		14.81	
	LABORATORY SAMPLE NO.												
01	EV253	1889696		9.16		1165167		12.81		436357		15.29	
02	81212R1	1545860		9.14		1061886		12.80		406261		15.28	
03													
04													
05													
06													
07													
08													
09													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													

IS1 = Fluorobenzene
IS2 (CBZ) = Chlorobenzene-d5
IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): E3867 Date Analyzed: 09/11/98

Instrument ID: VOAMS5 Time Analyzed: 1356

		IS1 AREA #	RT #	IS2 (CBZ) AREA #	RT #	IS3 (DCB) AREA #	RT #
	12 HOUR STD	1791186	9.17	1148798	12.81	444979	15.30
	UPPER LIMIT	3582372	9.67	2297596	13.31	889958	15.80
	LOWER LIMIT	895593	8.67	574399	12.31	222490	14.80
	LABORATORY SAMPLE NO.						
01	EV254A	1834674	9.14	1106985	12.80	425570	15.29
02	81204	1834545	9.16	1076258	12.80	440521	15.28
03							
04							
05							
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 = Fluorobenzene
IS2 (CBZ) = Chlorobenzene-d5
IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

850930652

315 F389

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): E3944 Date Analyzed: 09/14/98

Instrument ID: VOAMS5 Time Analyzed: 1216

		IS1 AREA #	RT #	IS2 (CBZ) AREA #	RT #	IS3 (DCB) AREA #	RT #
	12 HOUR STD	1766055	9.12	1102470	12.78	423891	15.27
	UPPER LIMIT	3532110	9.62	2204940	13.28	847782	15.77
	LOWER LIMIT	883028	8.62	551235	12.28	211946	14.77
	LABORATORY SAMPLE NO.						
01	EV257	1834373	9.13	1119210	12.78	422517	15.26
02	81214	1563233	9.13	1000345	12.78	407570	15.26
03							
04							
05							
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 = Fluorobenzene
IS2 (CBZ) = Chlorobenzene-d5
IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): E4017 Date Analyzed: 09/17/98

Instrument ID: VOAMS5 Time Analyzed: 1057

		IS1 AREA #	RT #	IS2 (CBZ) AREA #	RT #	IS3 (DCB) AREA #	RT #
	12 HOUR STD	1717637	9.14	1039027	12.80	418404	15.28
	UPPER LIMIT	3435274	9.64	2078054	13.30	836808	15.78
	LOWER LIMIT	858818	8.64	519514	12.30	209202	14.78
	LABORATORY SAMPLE NO.						
01	EV260	1824798	9.14	1083185	12.80	417900	15.27
02	81202MS	1751595	9.15	1061349	12.80	429787	15.29
03	81202MSD	1692046	9.15	1019248	12.80	423768	15.27
04							
05							
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 = Fluorobenzene
IS2 (CBZ) = Chlorobenzene-d5
IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

850930654

F 391

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): F3701 Date Analyzed: 09/04/98

Instrument ID: VOAMS6 Time Analyzed: 1226

		IS1 (BCM) AREA	#	RT	#	IS2 (DFB) AREA	#	RT	#	IS3 (CBZ) AREA	#	RT	#
	12 HOUR STD	915802		9.08		2963356		10.34		1990295		13.94	
	UPPER LIMIT	1831604		9.58		5926712		10.84		3980590		14.44	
	LOWER LIMIT	457901		8.58		1481678		9.84		995148		13.44	
	LABORATORY SAMPLE NO.												
01	FV247	810081		9.09		2607924		10.37		1820703		13.94	
02	81200	759455		9.09		2395848		10.35		1623133		13.94	
03	81201	768584		9.09		2393774		10.35		1689636		13.94	
04	81203	745788		9.09		2355143		10.35		1669787		13.94	
05	81205	743278		9.09		2335784		10.35		1646335		13.94	
06	81207	768626		9.09		2432694		10.35		1720335		13.93	
07	81209	837179		9.08		2492133		10.36		1754060		13.93	
08	81211	824375		9.08		2603056		10.35		1720503		13.93	
09	81213	805692		9.08		2530522		10.34		1764527		13.93	
10	81215	849127		9.09		2677987		10.35		1774846		13.93	
11	81217	843946		9.08		2717887		10.35		1720458		13.93	
12	81219	846225		9.08		2680119		10.35		1768422		13.93	
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): E3944 Date Analyzed: 09/14/98

Instrument ID: VOAMS5 Time Analyzed: 1216

		IS1 AREA #	RT #	IS2(CBZ) AREA #	RT #	IS3(DCB) AREA #	RT #
	12 HOUR STD	1766055	9.12	1102470	12.78	423891	15.27
	UPPER LIMIT	3532110	9.62	2204940	13.28	847782	15.77
	LOWER LIMIT	883028	8.62	551235	12.28	211946	14.77
	LABORATORY SAMPLE NO.						
01	EV257	1834373	9.13	1119210	12.78	422517	15.26
02	81214	1563233	9.13	1000345	12.78	407570	15.26
03							
04							
05							
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 = Fluorobenzene
IS2 (CBZ) = Chlorobenzene-d5
IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): E4017 Date Analyzed: 09/17/98

Instrument ID: VOAMS5 Time Analyzed: 1057

		IS1 AREA #	RT #	IS2 (CBZ) AREA #	RT #	IS3 (DCB) AREA #	RT #
	12 HOUR STD	1717637	9.14	1039027	12.80	418404	15.28
	UPPER LIMIT	3435274	9.64	2078054	13.30	836808	15.78
	LOWER LIMIT	858818	8.64	519514	12.30	209202	14.78
	LABORATORY SAMPLE NO.						
01	EV260	1824798	9.14	1083185	12.80	417900	15.27
02	81202MS	1751595	9.15	1061349	12.80	429787	15.29
03	81202MSD	1692046	9.15	1019248	12.80	423768	15.27
04							
05							
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 = Fluorobenzene
IS2 (CBZ) = Chlorobenzene-d5
IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

850930657

F394

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): F3701 Date Analyzed: 09/04/98

Instrument ID: VOAMS6 Time Analyzed: 1226

		IS1 (BCM) AREA	#	RT	#	IS2 (DFB) AREA	#	RT	#	IS3 (CBZ) AREA	#	RT	#
	12 HOUR STD	915802		9.08		2963356		10.34		1990295		13.94	
	UPPER LIMIT	1831604		9.58		5926712		10.84		3980590		14.44	
	LOWER LIMIT	457901		8.58		1481678		9.84		995148		13.44	
	LABORATORY SAMPLE NO.												
01	FV247	810081		9.09		2607924		10.37		1820703		13.94	
02	81200	759455		9.09		2395848		10.35		1623133		13.94	
03	81201	768584		9.09		2393774		10.35		1689636		13.94	
04	81203	745788		9.09		2355143		10.35		1669787		13.94	
05	81205	743278		9.09		2335784		10.35		1646335		13.94	
06	81207	768626		9.09		2432694		10.35		1720335		13.93	
07	81209	837179		9.08		2492133		10.36		1754060		13.93	
08	81211	824375		9.08		2603056		10.35		1720503		13.93	
09	81213	805692		9.08		2530522		10.34		1764527		13.93	
10	81215	849127		9.09		2677987		10.35		1774846		13.93	
11	81217	843946		9.08		2717887		10.35		1720458		13.93	
12	81219	846225		9.08		2680119		10.35		1768422		13.93	
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

VECTRE™
CORPORATION

P.O. Box 930
Lafayette, New Jersey 07848-0930
(201)383-2500
Fax: (201) 579-0025

June 9, 1997

Sent Via Facsimile and Regular Mail

Edward M. Melton
Newark Boxboard Company
60 Lockwood Street
Newark, New Jersey 07105

RE: Ground Water and Soil Split Sampling
Newark Box Board
Newark, New Jersey

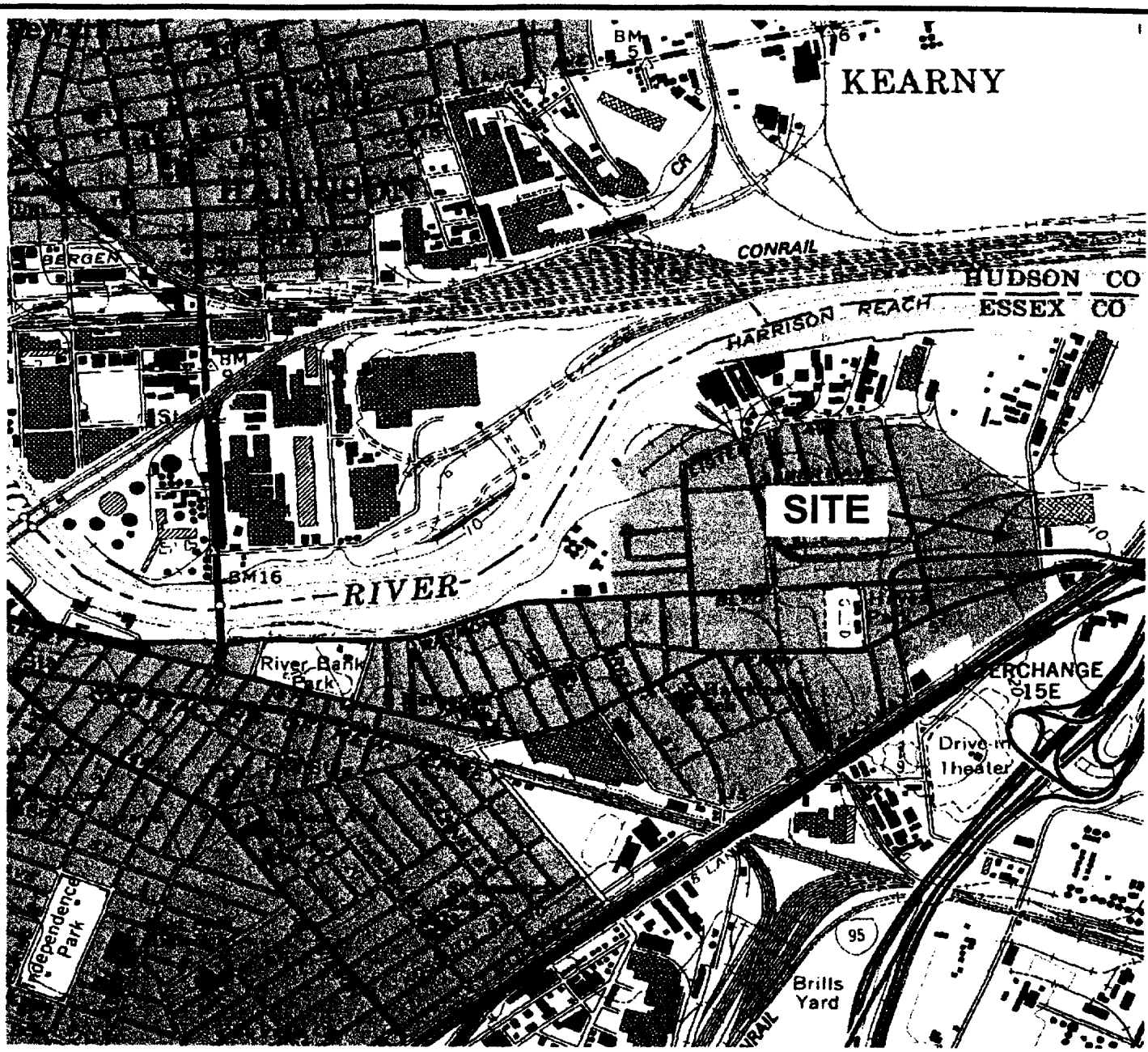
Dear Mr. Melton:

Vectre Corporation (Vectre) was retained by Newark Box Board (NBB) to oversee sampling activities and collect soil and groundwater samples in conjunction with an ongoing environmental investigation at the above referenced facility. The investigative activities consisted of the installation and sampling of five temporary well points and soil borings on NBB property. The purpose of the investigation was to determine if discharges from underground storage tanks at Deleet have impacted the soil and the ground water at NBB's Property. A discussion of the investigative procedures and the results of our split sampling are provided below. A copy of Site Location Map is presented in Figure 1.

Soil Boring and Well Point Installation/Sampling

On April 29, 1997, a Vectre field professional was present at the site along with a representative from Enviro-Sciences Inc. to observe the installation of five soil borings/well points. The bore holes were installed by Horizon Environmental Drilling Inc., of Wharton, New Jersey. The bore holes were installed to a depth of approximately 12 to 12.5 feet below the existing surface grade. Groundwater was encountered in the bore holes at depth ranging from 9.5 to 11 feet. During the course of investigation, our representative observed evidence of petroleum product, odor and sheen within bore hole SB-1. The location of soil and ground water samples is presented in Sample Location Plan, Figure 2.

Subsequent to each bore hole installation, the Vectre field professional and a professional from Enviro-Sciences Inc. collected both soil and groundwater samples from each borehole. The ground water samples were obtained by drilling into the water table, removing the drilling tools and placing a section of PVC screen and riser into the borehole. Each sample was then obtained by lowering a decontaminated bailer into the PVC screen.



SOURCE: U.S.G.S. Elizabeth, N.J.
7.5 Minute Quadrangle

0 1000 2000
SCALE IN FEET

N

Site Location Map		
Newark Box Board		
Newark		New Jersey
Scale as Shown		VECTRE™ Corporation
FIGURE NUMBER	PROJECT NUMBER	
1	NBB-V11	

850930660

F 397

The ground water samples collected from each well point were placed in laboratory prepared sample jars and were transported to Industrial Corrosion Management Inc.,a NJDEP certified laboratory, for the analysis of target compound list volatile organic compounds plus 10 (VO+10). Standard chain-of-custody procedures were implemented to track the samples.

Ground Water Sampling Results

The results of laboratory analysis conducted on the ground water samples (HP-1 to HP-2) obtained from well points revealed concentrations of total volatile organic compounds (TVOCs) ranging from not detected above analytical instrument detection limits to 5,590 ug/l (ppb). Tentatively identified volatile organic compounds (TIVOCs) were detected at total concentrations ranging from not detected to 45,000 ug/l.

Of the targeted volatile organic compounds, total Xylenes were detected at concentrations above applicable NJDEP Groundwater Quality Criteria (GWQC) for class II-A groundwater in ground water samples collected from HP-1 and HP-3. The analytical results are summarized in Table 1.

Table 1. Ground Water Laboratory Results

Sample #	HP-1	HP-2	HP-3	HP-4	HP-5C	Field blank	Trip Blank	Field Blank	Trip Blank	GWQC
Date Collected	4/29/97	4/29/97	4/29/97	4/30/97	4/30/97	4/29/97	4/29/97	4/30/97	4/30/97	
Analytical Parameters:										
Volatile Organics (µg/L)										
Ethylbenzene	450	ND	310	ND	2.5	ND	ND	ND	ND	700
Toluene	840	ND	730	ND	1.1	ND	ND	ND	ND	1,000
Xylene (total)	4,300	4.7J	4,500	ND	33	ND	ND	ND	ND	40
Acetone	ND	12J	ND	ND	ND	ND	ND	ND	ND	700
Methylene Chloride	ND	ND	ND	ND	1.9J	ND	ND	ND	ND	30
Chlorobenzene	ND	ND	ND	ND	1.8	ND	ND	ND	ND	4
TTVOCs	5,590	16.7J	5,540	ND	40.3	ND	ND	ND	ND	---
TIVOCs	45,000	0.221	30,400	0.006	0.011	ND	ND	ND	ND	---

Notes:

J - Indicates an estimated value

µg/L - Microgram/Liter or parts per billion (ppb)

▒ - Indicates concentration above Class II - A Groundwater Quality Criteria

TTVOCs - Total Targeted Volatile Organic Compounds

TIVOCs - Tentatively Identified Volatile Organic Compounds

850930662

Soil Sampling Results

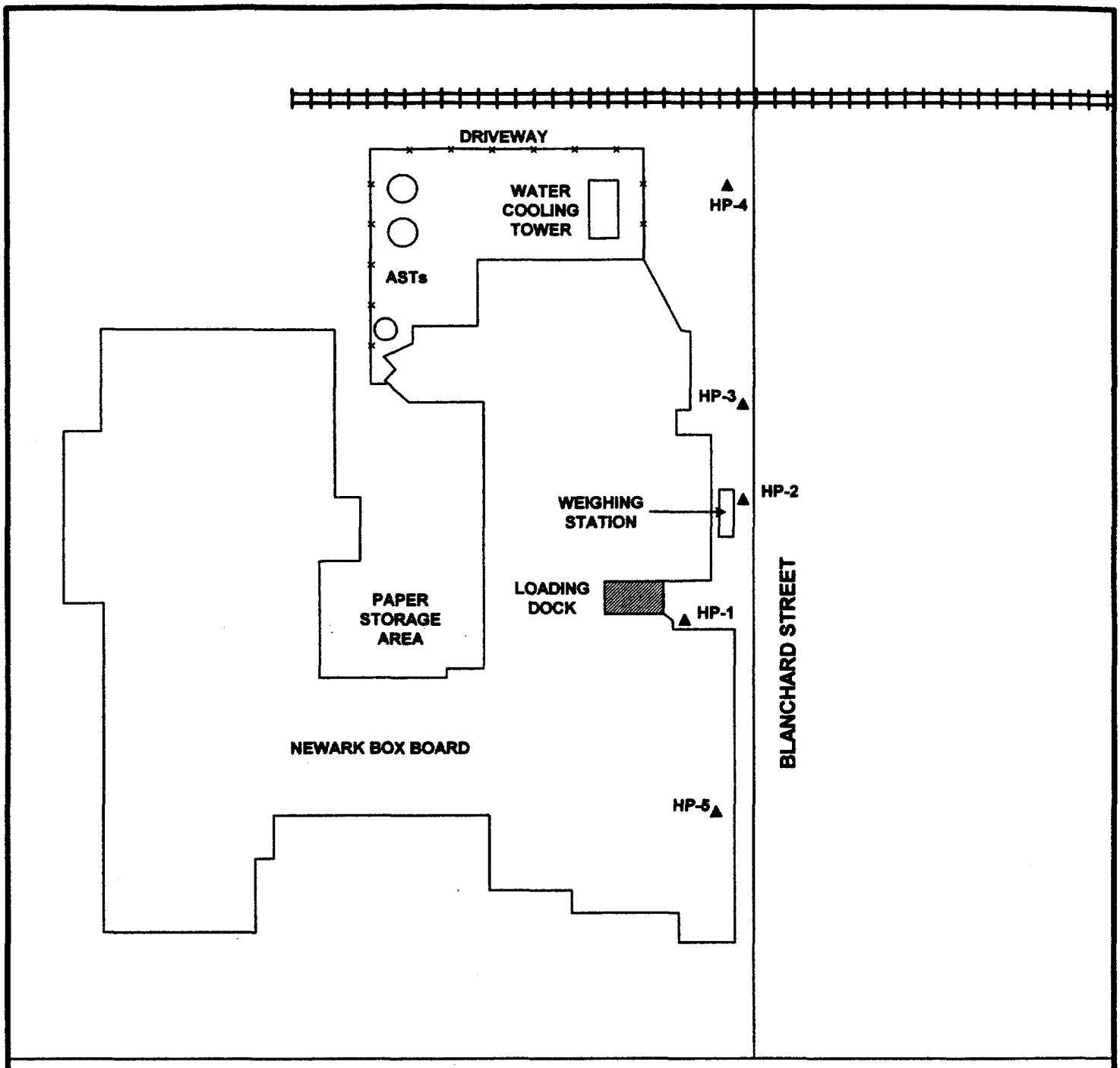
The analytical results obtained for soil samples SB-1 to SB-5 revealed that total concentrations of volatile organic compounds range from not detected above instrument detection limits to 14.10 mg/kg (ppm). Methylene Chloride was observed in soil sample SB-1 at concentrations which exceeded of NJDEP Impact to Groundwater Soil Cleanup Criteria (IGWSCC) of 1 ppm. However, it should be noted that Methylene Chloride is a common laboratory artifact and its presence may suggest common laboratory contamination. Remaining targeted volatile organic compounds in sample SB-1 to SB-5 were either not detected above analytical instrument limits or were below NJDEP Impact to Groundwater Soil Cleanup Criteria (IGWSCC). The analytical results are presented in Table 2. A copy of the laboratory analytical and QA/QC results, and chain of custody are present in Appendix 1.

Table 2. Soil Sampling Laboratory Results

Sample #	SB-1	SB-2	SB-3	SB-4A	SB-5C	
Date Collected	4/29/97	4/29/97	4/29/97	4/29/97	4/29/97	
Depth Collected (ft)	10.5-11	10-10.5	8-8.5	3.5-4	2-2.5	IGWSCC
Analytical Parameters:						
Volatile Organic (mg/kg)						
Methylene Chloride	3.70B	0.0056J	0.0026J	0.0069	ND	1
Toluene	1.90J	ND	ND	ND	ND	500
Ethylbenzene	4.10	ND	ND	ND	ND	100
Xylene (total)	4.40	ND	ND	ND	ND	10
TVOCs	14.10	0.0056J	0.0026J	0.0069	ND	---
TIVOCs	1,476.0	0.0	0.009	0.0	0.0	---

Notes:

- Indicates concentration above NJDEP Cleanup Standards
- B - Indicates that analyte was found in the Blank as well as the sample
- J - Indicates an estimated value
- mg/kg - Milligram/kilogram or parts per million (ppm)
- TVOCs - Total Volatile Organic Compounds
- TIVOCs - Tentatively Identified Volatile Organic Compounds



0 100

scale in feet

N

SAMPLE LOCATION PLAN

NEWARK BOX BOARD

NEWARK NEW JERSEY

SCALE AS SHOWN

FIGURE NUMBER	PROJECT NUMBER
2	NBB-V11

VECTRE™ Corporation

850930664

F 401

Conclusions

Based on the field observations and the information obtained from soil and ground water sampling laboratory analysis, we conclude and recommend the following:

- Soils did not appear to be impacted with volatile organic compounds in excess of the current soil cleanup criteria.
- Groundwater appeared to be impacted in samples HP-1 and HP-3.
- The analytical data suggest that total Xylenes were detected at concentrations in excess of applicable GWQC for class II-A ground water in HP-1 and HP-3.

If there are any further questions regarding these results, please contact the undersigned at your earliest convenience.

Respectfully Submitted,
VECTRE CORPORATION

George C. Dudkiewicz
Project Manager

Appendix A

Laboratory Data Package

ANALYTICAL DATA REPORT PACKAGE

May 19, 1997

VECTRE CORPORATION

NBB-V11

850930667

F4

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330

TABLE OF CONTENTS

		Page#
Data Management Summary		1
Lab/Client ID Cross Reference		2
Deliverables Checklist		3
Chain-of-Custody		4
Laboratory Chronicles		7
Nonconformance Summary		8
Methodology Summaries		10
Sample Results:		11
Field Blank	Lab #262098	
SB-1 (10.5'-11')	Lab #262099	
HP-1	Lab #262100	
SB-2 (10'-10.5')	Lab #262101	
HP-2	Lab #262102	
SB-3 (8'-8.5')	Lab #262103	
HP-3	Lab #262104	
Trip Blank	Lab #262105	
Quality Assurance Data: GC/MS Requirements Volatiles		112

850930668

F 405

ICM Laboratories
Industrial Corrosion Management, Inc.
1152 Route 10
Randolph, NJ 07869
Phone: 201-584-0330 FAX: 201-584-0515

MAY 19, 1997
09:45:49

850930669

Client:
VECTRE CORPORATION
Source:
NBB-V11

ANALYTICAL DATA SUMMARY REPORT--FOOTNOTE PAGE

U = Indicates a compound was analyzed for but not detected.
For results marked U, the numerical value is the compound MDL or PQL.

J = Indicates an estimated value. It is utilized when a reported value meets the identification.
criteria but the result is less than the specified detection limit and greater than zero.

B = Indicates that the analyte was found in the blank as well as the sample. It indicates possible/probable blank contamination.

W = Analytical Spike recovery for furnace AA analysis was not within control limits but was greater than or equal to 40%.

NA = Not Applicable; P = Positive; N = Negative

IND = Indeterminable - compound decomposes in water.

\+ = Indicates that an MDL was not available for this compound. PQL was reported.
++ = Sample boiled at 100 degree C with no flash

NOTES
262099: SB-1 (10.5'-11')
262101: SB-2 (10'-10.5')
262103: SB-3 (8'-8.5')
SUSANN

F 406

ICM Laboratories
Industrial Corrosion Management, Inc.
1152 Route 10
Randolph, NJ 07869
Phone: 201-584-0330 FAX: 201-584-0515

MAY 19, 1997
09:45:36

Client:
VECTRE CORPORATION
Source:
NBB-V11

ANALYTICAL DATA SUMMARY REPORT

850930670

Client ID	Field Blank		See Notes		HP-1		See Notes		HP-2		See Notes		HP-3		Trip Blank	
ICM Sample Number	262098		262099		262100		262101		262102		262103		262104		262105	
Sampling Date	04/29/97		04/29/97		04/29/97		04/29/97		04/29/97		04/29/97		04/29/97		04/29/97	
Units	UG/L		UG/KG		UG/L		UG/KG		UG/L		UG/KG		UG/L		UG/L	
VOLATILE PARAMETERS (METHOD 624/8240)																
Chloromethane	5	U	2900	U	250	U	5.9	U	5	U	5.8	U	250	U	5	U
Bromomethane	5	U	2900	U	250	U	5.9	U	5	U	5.8	U	250	U	5	U
Vinyl chloride	5	U	2900	U	250	U	5.9	U	5	U	5.8	U	250	U	5	U
Chloroethane	5	U	2900	U	250	U	5.9	U	5	U	5.8	U	250	U	5	U
Methylene chloride	5	U	3700	B	250	U	5.6	J	5	U	2.6	J	250	U	5	U
Acetone	20	U	12000	U	1000	U	24	U	12	J	25		1000	U	20	U
Carbon disulfide	5	U	2900	U	250	U	5.9	U	5	U	5.8	U	250	U	5	U
1,1-Dichloroethene	5	U	2900	U	250	U	5.9	U	5	U	5.8	U	250	U	5	U
1,1-Dichloroethane	5	U	2900	U	250	U	5.9	U	5	U	5.8	U	250	U	5	U
trans-1,2-Dichloroethene	5	U	2900	U	250	U	5.9	U	5	U	5.8	U	250	U	5	U
cis-1,2-Dichloroethene	5	U	2900	U	250	U	5.9	U	5	U	5.8	U	250	U	5	U
Chloroform	5	U	2900	U	250	U	5.9	U	5	U	5.8	U	250	U	5	U
1,2-Dichloroethane	5	U	2900	U	250	U	5.9	U	5	U	5.8	U	250	U	5	U
2-Butanone	20	U	12000	U	1000	U	24	U	20	U	23	U	1000	U	20	U
1,1,1-Trichloroethane	5	U	2900	U	250	U	5.9	U	5	U	5.8	U	250	U	5	U
Carbon tetrachloride	5	U	2900	U	250	U	5.9	U	5	U	5.8	U	250	U	5	U
Bromodichloromethane	5	U	2900	U	250	U	5.9	U	5	U	5.8	U	250	U	5	U
1,2-Dichloropropane	5	U	2900	U	250	U	5.9	U	5	U	5.8	U	250	U	5	U
cis-1,3-Dichloropropene	5	U	2900	U	250	U	5.9	U	5	U	5.8	U	250	U	5	U
Trichloroethene	5	U	2900	U	250	U	5.9	U	5	U	5.8	U	250	U	5	U
Dibromochloromethane	5	U	2900	U	250	U	5.9	U	5	U	5.8	U	250	U	5	U
1,1,2-Trichloroethane	5	U	2900	U	250	U	5.9	U	5	U	5.8	U	250	U	5	U
Benzene	5	U	2900	U	250	U	5.9	U	5	U	5.8	U	250	U	5	U
trans-1,3-Dichloropropene	5	U	2900	U	250	U	5.9	U	5	U	5.8	U	250	U	5	U
Bromoform	5	U	2900	U	250	U	5.9	U	5	U	5.8	U	250	U	5	U
4-Methyl-2-pentanone	20	U	12000	U	1000	U	24	U	20	U	23	U	1000	U	20	U
2-Hexanone	20	U	12000	U	1000	U	24	U	20	U	23	U	1000	U	20	U
Tetrachloroethene	5	U	2900	U	250	U	5.9	U	5	U	5.8	U	250	U	5	U
1,1,2,2-Tetrachloroethane	5	U	2900	U	250	U	5.9	U	5	U	5.8	U	250	U	5	U
Toluene	5	U	1900	J	840		5.9	U	5	U	5.8	U	730		5	U
Chlorobenzene	5	U	2900	U	250	U	5.9	U	5	U	5.8	U	250	U	5	U
Ethylbenzene	5	U	4100		450		5.9	U	5	U	5.8	U	310		5	U
Styrene	5	U	2900	U	250	U	5.9	U	5	U	5.8	U	250	U	5	U
p&m-Xylene	5	U	22000		2100		5.9	U	4.7	J	5.8	U	1800		5	U
o-Xylene	5	U	22000		2200		5.9	U	5	U	5.8	U	2700		5	U
total Xylenes	5	U	44000		4300		5.9	U	4.7	J	5.8	U	4500		5	U
Total Non-Target Compounds	0		1476000		45000		0		221		9		30400		0	

F 407

INDUSTRIAL CORROSION MANAGEMENT, Inc.
1152 Route 10
Randolph, NJ 07869
201-584-0330
May 19, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

ANALYTICAL DATA REPORT PACKAGE

Client: VECTRE CORPORATION
Sampled By: Customer

SAMPLE ID:	MATRIX	LAB NUMBER	DATE & TIME COLLECTED	AT LAB DATE
Field Blank	Aqueous	262098	04/29/97 09:00	04/29/97
SB-1 (10.5'-11')	Soil	262099	04/29/97	04/29/97
HP-1	Aqueous	262100	04/29/97	04/29/97
SB-2 (10'-10.5')	Soil	262101	04/29/97	04/29/97
HP-2	Aqueous	262102	04/29/97	04/29/97
SB-3 (8'-8.5')	Soil	262103	04/29/97 15:10	04/29/97
HP-3	Aqueous	262104	04/29/97 15:25	04/29/97
Trip Blank	Aqueous	262105	04/29/97	04/29/97

Supervisor/Manager Signature:

Richard S. Levine (me)

Richard S. Levine

Copyright ICM, Inc., 1997.
All rights reserved.
SUS

850930671

F 408

LABORATORY DELIVERABLES

THIS FORM MUST BE COMPLETED BY THE LABORATORY OR ENVIRONMENTAL CONSULTANT AND ACCOMPANY ALL DATA SUBMISSIONS

The following laboratory deliverables shall be included in the data submissions. All deviations from the accepted methodology and procedures, or performance values outside acceptable ranges shall be summarized in the Non-Conformance Summary. The proposed "Technical Requirements for Site Remediation" rules, which appeared in the May 4, 1992 New Jersey Register, provides further details. The document shall be bound and paginated, contain a table of contents, and all pages shall be legible. Incomplete packages will be returned or held without review until the data package is completed.

It is recommended that the analytical results summary sheets listing all targeted and non-targeted compounds with the method detection limits be included in one section of the data package and in the main body of the report.

	Check if Complete
1. Cover Page, Title Page listing Lab Certification #, facility name & address, & date of report	✓
2. Table of Contents	✓
3. Summary Sheets listing analytical results for all targeted and non-targeted compounds	✓
4. Summary Table cross-referencing field ID #'s vs. Lab ID #'s	✓
5. Document bound, paginated and legible	✓
6. Chain of Custody	✓
7. Methodology Summary	✓
8. Laboratory Chronicle and Holding Time Check	✓
9. Results submitted on a dry weight basis (if applicable)	✓
10. Method Detection Limits	✓
11. Lab certified by NJDEPE for parameters or appropriate category of parameters or a member of the USEPA CLP	✓
12. Non-Conformance Summary	✓

Susan Stanley — 5/16/97

ICM LABORATORIES — Date

Quality Assurance Officer

003 - 3

850930672

F409

ICM LABORATORIES — CHAIN OF CUSTODY REPORT

CLIENT: VECTRE CORP.
ADDRESS: P.O. BOX 930
LAFAYETTE, NJ
PHONE: 201-383-2500
PROJECT: NBB-VII
PROJ. MGR.: GCD

BILL TO: VECTRE
SEND REPORT TO: Vectre Corp.
Attn: George Dudkiewicz
IN CASE OF QUESTIONS UPON SAMPLE RECEIPT CALL: George Dudkiewicz
PHONE: 201-383-2500

DELIVERABLES:
- [x] REDUCED DELIVERABLES NON-CLP FORMAT
- [ ] REDUCED DEL. CLP FORMAT
- [ ] REGULATORY FORMAT
- [ ] FULL DEL. CLP FORMAT
- [ ] NPDES
- [ ] STATE FORMS REQUIRED

TURNAROUND TIME
FAX (PRELIMINARIES) (If required) _____
HARDCOPY _____
COOLER TEMP 2.5°C

LABORATORY ID CODE	SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	COMPOSITE	SAMPLE MATRIX: GRAB	SOIL	LIQUID	SLUDGE	OTHER	# OF BOTTLES	ANALYSIS: VOA 10	PRESERVATIVES: H_2SO_4	HNO_3	HCL	NAOH	OTHER
262098	FIELD BLANK	4/29	9AM				✓			3	✓			✓		
099	SB-1 (10.5'-11')					✓				1	✓					
100	HP-1						✓			3	✓					
101	SB-2 (10'-10.5')					✓				1	✓					
102	HP-2						✓			3	✓					
103	SB-3 (8'-8.5')		1510			✓				1	✓					
104	HP-3	↓	1525			✓	✓			3	✓					
↓ 105	Trip Blank						✓			3	✓					

SAMPLED BY: Tom Cunello
RELINQUISHED BY: _____ DATE: _____ TIME: _____
RECEIVED BY: _____ DATE: 4/29/97 TIME: 1602
RELINQUISHED BY: _____ DATE: 4/29/97 TIME: 1603
RECEIVED BY: _____ DATE: 4-29-97 TIME: 17:20
RELINQUISHED BY: _____ DATE: 4-29-97 TIME: 1720
RECEIVED BY: _____ DATE: _____ TIME: _____
RELINQUISHED BY: _____ DATE: _____ TIME: _____

COMMENTS: Please fax a copy of Chain of Custody to George Dudkiewicz of Vectre - 201-579-0075

COMPOUND LIST
- [ ] PRIORITY POLLUTANT
- [ ] TARGET COMPOUND LIST
- [ ] NJAC 7:14A APP B
- [ ] OTHER _____

CONCENTRATIONS EXPECTED
- [ ] HIGH
- [x] MEDIUM
- [ ] LOW

IS SAMPLE CHLORINATED? [ ] YES [x] NO

KNOWN HAZARD xylenes

If analysis is for informational purposes only, please sign the following statement:

"Analysis is for informational purposes, not to be used for compliance or regulatory purposes."

Signature: _____

850930673

II CCCCC MM MM
II CC CC MM M M MM
II CC MM M M MM
II CC MM MM MM
II CC MM MM MM
II CC CC MM MM
II CCCCC MM MM

ICM LABORATORIES
1152 Route 10
Randolph, NJ 07689
Tel: 201-584-0330
Fax: 201-584-0515

April 23, 1997

SAMPLING EQUIPMENT CUSTODY RECORD

Client: VECTRE CORPORATION

ICM Contact: Kim Norton

Project: NBB-V11

Matrix (#): Aqueous(10)

Project Mgr: Ray Tavana

Sampled by: Client

Fax Preliminaries: Yes

D/O to Office

~~Picked up by Client.~~

Deliverables: Reduced 2

Date Reqd: ~~04/23/97~~ 4/28/97 Time Reqd: ~~02:00~~ ANY

1 case 4 oz. amber jars

TOTAL BOTTLE REQUIREMENT

20 of: 40 ml glass vial w/Hydrochloric Acid

ANALYSIS REQUIREMENT

*** Aqueous Analyses ***

10 => 624 : 2 each 40 ml glass vial w/Hydrochloric Acid

Field Blk: Yes 624+15

Trip Blk: Yes 624+15

Prepared by: Kathy Lovell Date/Time: 4-25-97/17:12 Title: F.S. ASSIST.

Cooler No: 391 Ice Packs: ____ COC,etc. X

Checked by: [signature] Date/Time: 4-28-97 Title: F.S.

Cooler Sealed (Date/Time): 4-28-97 Seal No: 6590 Name: [signature]

Title: F.S.

Relinquished by: [signature] Date/Time: 4-28-97 1420

Received by: [signature] Date/Time: 4-28-97 1420

850930674

F411

ICM Laboratories, Inc.
Internal Chain-of-Custody

NK: 262098-262105

Account number: WA1532 VECTRE CORPORATION
Project: NBB-V11
Tier Level: Reduced 2

Laboratory Person Breaking Seal on Shuttle: [signature]

Title: Lab

Lab Number	Relinq. By	Recd. By	Date	Time	Reason for Transfer	Aliquo
[illegible]	DS	[illegible]	04/29/97	1807	STORAGE	ALL
099,101,103	[illegible]	[illegible]	4/30/97	1230	8240	HH1
099,101,103	[illegible]	[illegible]	5/8/97	1000	STORAGE	HH1
098,100,102, 104,105	[illegible]	[illegible]	4/30/97	1230	8240/ depleted	HH1

850930675

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330, FAX: 201-584-0515

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

LABORATORY CHRONICLE

DATE SAMPLED: 04/29/97 PRESERVATIVE: 4 degrees C; HCl @

DATE RECEIPT/REFRIGERATION: 04/29/97 Cooler Temp: 2.5°C

GC/MS VOLATILES:

LAB ID #	DATE ANALYZED	pH
@ 262098	05/03/97	<2
262099	05/06/97	NA
@ 262100	05/03/97	<2
262101	05/06/97	NA
@ 262102	05/03/97	<2
262103	05/05/97	NA
@ 262104	05/03/97	<2
@ 262105	05/03/97	<2

DEPT. SUPERVISOR: M. Baron

QA REVIEW & APPROVAL: Susan Stanley

850930676

F 413

GC/MS ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY FORMAT

	NO	YES
1. Chromatograms Labeled/Compounds Identified (Field Samples and Method Blanks)	___	✓
2. GC/MS Tuning Specifications		
a. BFB Meet Criteria	___	✓
b. DFTPP Meet Criteria	___ N/A	___
3. GC/MS Tuning Frequency - Performed every 24 hours for 600 series and 12 hours for 8000 series	___	✓
4. GC/MS Calibration - Initial Calibration performed within 30 days before sample analysis and continuing calibration performed within 24 hours of sample analysis for 600 series and 12 hours for 8000 series	___	✓
5. GC/MS Calibration Requirements		
a. Calibration Check Compounds	___	✓
b. System Performance Check Compounds	___	✓

6. Blank Contamination - If yes, list compounds and concentrations in each blank:

a. *VOA Fraction >01374 - methylene chloride - 4.1 ug/kg
b. B/N Fraction ___
c. Acid Fraction ___

* methylene chloride is acceptable up to 5 times the PQL

7. Surrogate Recoveries Meet Criteria	___	✓

If not met, list those compounds and their recoveries which fall outside the acceptable ranges

a. VOA Fraction ___
b. B/N Fraction ___
c. Acid Fraction ___

If not met, were the calculations checked and the results qualified as "estimated"? N/A

8. Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria (If not met, list those compounds and their recoveries which fall outside the acceptable range)	___	✓

a. VOA Fraction ___
b. B/N Fraction ___
c. Acid Fraction ___

9. Internal Standard Area/Retention Time Shift Meet Criteria	___	✓

GC/MS ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY FORMAT(CONTINUED)

	NO	YES
10. Extraction Holding Time Met		✓
If not met, list number of days exceeded for each sample:		
11. Analysis Holding Time Met		✓
If not met, list number of days exceeded for each sample:		

Additional Comments:

Laboratory Manager: [signature] Date: 5/16/97

850930678

F 415

Volatile Organics by GC/MS
*Test Methods for Evaluating Solid Wastes, SW846, 3rd edition
**Method 8240B

* Indicates reference.
** Indicates method.

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330, FAX: 201-584-0515
MAY 7, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

TARGET COMPOUND LIST - VOLATILE ANALYSIS BY GC/MS
PLUS 10 PEAKS

Lab Number: 262098 Data File: >B1333
Client: VECTRE CORPORATION
Sample source: NBB-V11
Sample ID: Field Blank
Sample date: 04/29/97
Sampled by: Customer Analysis Date: 05/03/97 Column: DB-624
At lab date: 04/29/97 Dilution Factor: 1
Matrix: Water Init Sample volume= 5ml Final volume= 5ml

Conc. in Sample = (Conc. on Quant Report/Initial Volume)*Final Volume

Parameter	Result ug/l	Method Blank ug/l	Practical Quantitation Limit ug/l	Minimum Detection Limit ug/l
Chloromethane	U	U	5	4.6
Bromomethane	U	U	5	3.8
Vinyl chloride	U	U	5	1.7
Chloroethane	U	U	5	1.8
Methylene chloride	U	U	5	2.7
Acetone	U	U	20	4.5
Carbon disulfide	U	U	5	1.7
1,1-Dichloroethene	U	U	5	1.7
1,1-Dichloroethane	U	U	5	1.4
trans-1,2-Dichloroethene	U	U	5	1.7
cis-1,2-Dichloroethene	U	U	5	1.7
Chloroform	U	U	5	1.6
1,2-Dichloroethane	U	U	5	1.9
2-Butanone	U	U	20	2.4
1,1,1-Trichloroethane	U	U	5	0.5
Carbon tetrachloride	U	U	5	0.6
Bromodichloromethane	U	U	5	0.6
1,2-Dichloropropane	U	U	5	0.6
cis-1,3-Dichloropropene	U	U	5	0.5
Trichloroethene	U	U	5	0.6
Dibromochloromethane	U	U	5	0.6
1,1,2-Trichloroethane	U	U	5	0.5
Benzene	U	U	5	0.5
trans-1,3-Dichloropropene	U	U	5	0.6
Bromoform	U	U	5	0.8
4-Methyl-2-pentanone	U	U	20	1.1
2-Hexanone	U	U	20	1.2
Tetrachloroethene	U	U	5	0.7
1,1,2,2-Tetrachloroethane	U	U	5	0.5
Toluene	U	U	5	0.8
Chlorobenzene	U	U	5	0.6
Ethylbenzene	U	U	5	0.7
Styrene	U	U	5	1
p&m-Xylene	U	U	5	0.9
o-Xylene	U	U	5	0.9
total Xylenes	U	U	5	0.9

ug/l = micrograms/liter or ppb
ND: Not Determined.
IND: Indeterminable.
U: Indicates a compound was analyzed for but not detected at the PQL.
J: Indicates an estimated value. It is utilized when a reported value meets the identification criteria but the result is less than the specified detection limit but greater than zero.
B: Indicates that the analyte was found in the blank as well as the sample. It indicates possible/probable blank contamination.

WO 5/7/97

INDUSTRIAL CORROSION MANAGEMENT, INC.
Richard Levine, President
Copyright ICM, Inc., 1997.
All rights reserved.
ERI

850930680

F 417

INDUSTRIAL CORROSION MANAGEMENT, Inc.
1152 Route 10
Randolph, NJ 07869
201-584-0330
MAY 7, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

LIBRARY SEARCH RESULTS OF NONTARGETED PEAKS WITH
ESTIMATED CONCENTRATION OF TENTATIVELY IDENTIFIED COMPOUNDS.

Data file name: >B1333
Lab number: 262098
Fraction: VOLATILE

Initial Sample Wt/Vol=5 Final Volume=5

CAS No.	Retention Time	Compound Name	Molecular Weight	Estimated Concentration ug/l
None found				

Estimated total non-target compound concentration (excluding compounds flagged with A, B or **) in ug/l is: 0

A: Indicates that the compound is an acetone based aldol-type condensation product formed by concentrating the extraction solvent (1:1 acetone/methylene chloride).
B: Indicates that the analyte was found in the blank as well as the sample. It further indicates possible/probable blank contamination.
C: Co-eluting and/or poorly resolved non-target compounds cause superimposed spectra that prevent identification of individual compounds.
* Compounds flagged are from diluted analysis.
** This compound is not flagged B; it was not found in the corresponding blank. However, it is commonly found as a laboratory contaminant.

Copyright ICM, Inc., 1997.
All rights reserved.
ERI

QUANT REPORT Page 1

Operator ID: LB3274 Quant Rev: 7 Quant Time: 970503 16:24
Output File: ^B1333::QT Injected at: 970503 15:51
Data File: >B1333::B1 Dilution Factor: 1.00000
Name: INST 59702, SAMPLE Instrument ID: INST "B"
Misc: 262098 ,L,5,5 , 0.53mm X 75M DB624

ID File: ID824B::X2
Title: GENERAL IDFILE FOR INSTRUMENT B
Last Calibration: 970415 20:09 Last Qcal Time: 970503 12:32

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	9.80	128.0	12623	50.00	UG/L	96
22)	1,2-Dichloroethane-d4	11.09	65.0	33274	50.10	UG/L	89
27)	*1,4-Difluorobenzene	12.12	114.0	53064	50.00	UG/L	98
44)	*Chlorobenzene-d5	19.90	117.0	40462	50.00	UG/L	99
49)	Toluene-d8	15.92	98.0	54347	49.31	UG/L	92
56)	Bromofluorobenzene	22.53	95.0	24487	50.74	UG/L	48

* Compound is ISTD 5/7/97

850930682

F 419

>B1333 INST 55702, SAMPLE 282098 ,L,5,5 , 0.53mm X 75M DB624
35.0: 260.0 TIC
Upslope: .1000 Area Reject: 5.00 % Max Peaks: 7 Bunch: 1 Valley 100 %
Dnslope: -.0100 Results File VDIR79 Sorted by Time/Area INT

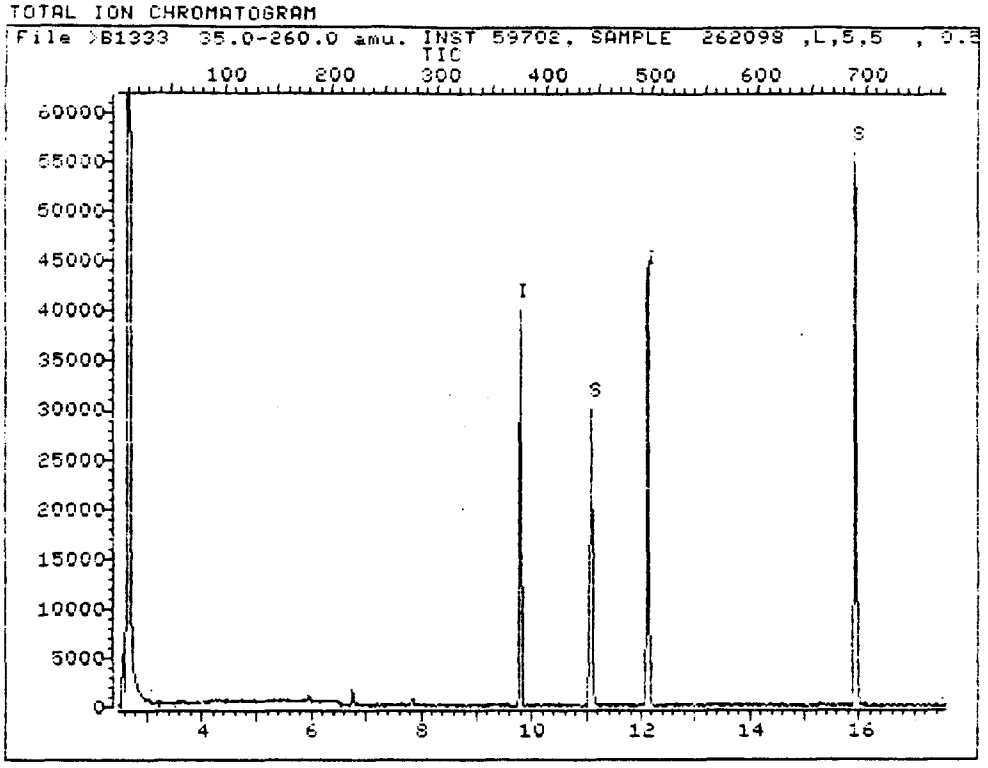
Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	2.69	7	11	26	201795	664098	654674*	100.00	46.548
2	9.80	373	376	380	40056	97819	97819	14.94	6.955
3	11.09	439	442	447	29910	88419	87053	13.30	6.190
4	12.14	492	496	499	44776	134878	132986	20.31	9.455
5	15.92	687	690	698	55777	174344	172710	26.38	12.280
6	19.90	891	894	898	48439	137836	136302	20.82	9.691
7	22.53	1027	1029	1032	56351	125826	124901	19.08	8.881

Sum of corrected areas: 1406445.

850930683

F 420

TOTAL ION CHROMATOGRAM



Data File: >B1333::B1 Quant Output File: ^B1333::QT
Name: INST 59702, SAMPLE Instrument ID: INST "S"
Misc: 262098 ,L,5,5 , 0.53mm X 75M DB624

Id File: ID824B::X2
Title: GENERAL IDFILE FOR INSTRUMENT B
Last Calibration: 970415 20:09 Last Qcal Time: 970503 12:32

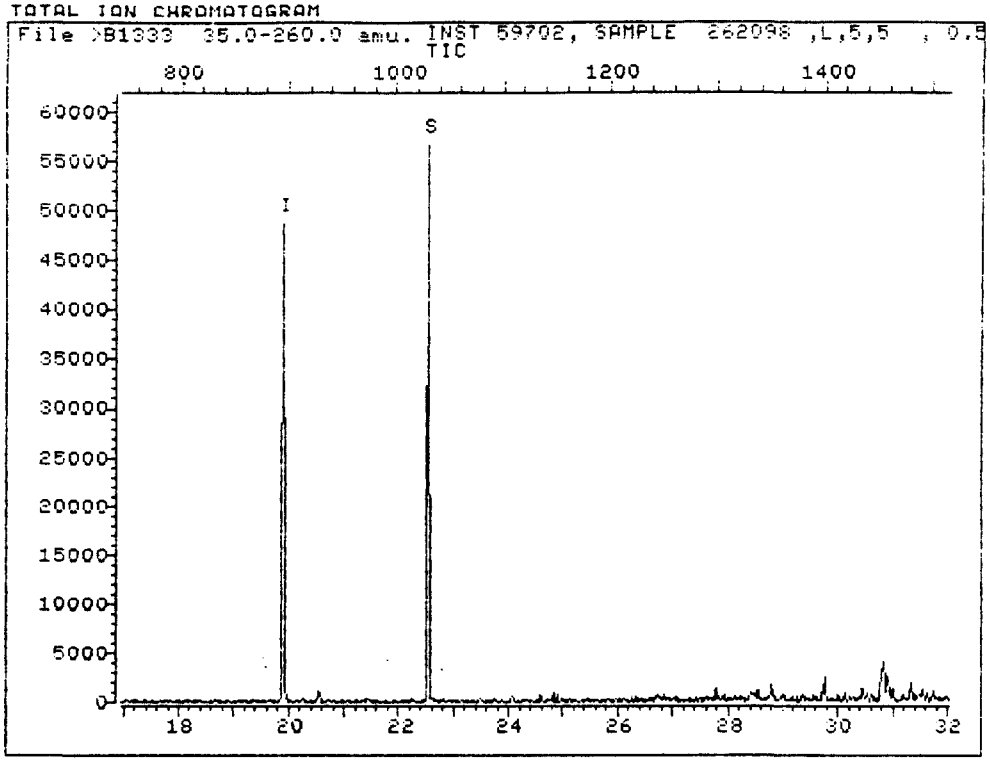
Operator ID: LB3274
Quant Time : 970503 16:24
Injected at: 970503 15:51

Page 1 of 2

850930684

F421

TOTAL ION CHROMATOGRAM



Data File: >B1333::B1 Quant Output File: ^B1333::QT
Name: INST 59702, SAMPLE Instrument ID: INST "B"
Misc: 262098 ,L,5,5 , 0.53mm X 75M DB624

Id File: ID824B::X2
Title: GENERAL IDFILE FOR INSTRUMENT B
Last Calibration: 970415 20:09 Last Qcal Time: 970503 12:32

Operator ID: LB3274
Quant Time : 970503 16:24
Injected at: 970503 15:51

Page 2 of 2

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330, FAX: 201-584-0515
Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab
MAY 7, 1997

TARGET COMPOUND LIST - VOLATILE ANALYSIS BY GC/MS
PLUS 10 PEAKS

Lab Number: 262099 Data File: >B1377
Client: VECTRE CORPORATION
Sample source: NBB-V11
Sample ID: SB-1 (10.5'-11')
Sample date: 04/29/97
Sampled by: Customer Analysis Date: 05/06/97 Column: DB-624
At lab date: 04/29/97 Dilution Factor: 500
Percent Moisture: 13.36%
Matrix: Soil Init Sample Wght= .01g Final volume= 5ml

Initial sample weight DWB= 0.008664g

Conc. in Sample = (Conc. on Quant Report/Initial Sample Weight DWB)*Final Volume

Parameter	Result ug/kg	Method Blank ug/kg	Practical Quantitation Limit ug/kg	Minimum Detection Limit ug/kg
Chloromethane	U	U	2900	2700
Bromomethane	U	U	2900	2200
Vinyl chloride	U	U	2900	980
Chloroethane	U	U	2900	1000
Methylene chloride	3700 B	4.1J	2900	1600
Acetone	U	U	12000	2600
Carbon disulfide	U	U	2900	980
1,1-Dichloroethene	U	U	2900	980
1,1-Dichloroethane	U	U	2900	810
trans-1,2-Dichloroethene	U	U	2900	980
cis-1,2-Dichloroethene	U	U	2900	980
Chloroform	U	U	2900	920
1,2-Dichloroethane	U	U	2900	1100
2-Butanone	U	U	12000	1400
1,1,1-Trichloroethane	U	U	2900	290
Carbon tetrachloride	U	U	2900	350
Bromodichloromethane	U	U	2900	350
1,2-Dichloropropane	U	U	2900	350
cis-1,3-Dichloropropene	U	U	2900	290
Trichloroethene	U	U	2900	350
Dibromochloromethane	U	U	2900	350
1,1,2-Trichloroethane	U	U	2900	290
Benzene	U	U	2900	290
trans-1,3-Dichloropropene	U	U	2900	350
Bromoform	U	U	2900	460
4-Methyl-2-pentanone	U	U	12000	630
2-Hexanone	U	U	12000	690
Tetrachloroethene	U	U	2900	400
1,1,2,2-Tetrachloroethane	U	U	2900	290
Toluene	1900J	U	2900	460
Chlorobenzene	U	U	2900	350
Ethylbenzene	4100	U	2900	400
Styrene	U	U	2900	580
p&m-Xylene	22000	U	2900	520
o-Xylene	22000	U	2900	520
total Xylenes	44000	U	2900	520

ug/kg = micrograms/kilogram or ppb
Results are in ug/kg (ppb); they are reported on a dry weight basis.
ND: Not Determined.
IND: Indeterminable.
U: Indicates a compound was analyzed for but not detected at the PQL.
J: Indicates an estimated value. It is utilized when a reported value meets the identification criteria but the result is less than the specified detection limit but greater than zero.
B: Indicates that the analyte was found in the blank as well as the sample. It indicates possible/probable blank contamination.

5/11/97

Copyright ICM, Inc., 1997.
All rights reserved.
ERT

F422

INDUSTRIAL CORROSION MANAGEMENT, Inc.
1152 Route 10
Randolph, NJ 07869
201-584-0330
MAY 7, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

LIBRARY SEARCH RESULTS OF NONTARGETED PEAKS WITH
ESTIMATED CONCENTRATION OF TENTATIVELY IDENTIFIED COMPOUNDS.

Data file name: >B1377
Lab number: 262099
Fraction: VOLATILE

Initial Sample Wt/Vol=.01 Final Volume=5
Moisture=13.36% Initial sample weight DWB=0.008664

CAS No.	Retention Time	Compound Name	Molecular Weight	Estimated Concentration ug/kg
103651	23.07	Propylbenzene	120	110000
98828	23.27	Methylethylbenzene	120	440000
622968	23.42	Ethylmethylbenzene	120	150000
	23.50	Unknown Alkane		81000
	23.81	Ethylmethylbenzene isomer	120	110000
526738	24.15	Trimethylbenzene	120	240000
	24.91	Ethylmethylbenzene isomer	120	69000
135013	25.28	Diethylbenzene	134	120000
	25.43	Diethylbenzene isomer	134	81000
535773	26.10	Methylmethylethyl Benzene	134	75000

Estimated total non-target compound concentration (excluding compounds flagged with A, B or **) in ug/kg is: 1476000

A: Indicates that the compound is an acetone based aldol-type condensation product formed by concentrating the extraction solvent (1:1 acetone/methylene chloride).
B: Indicates that the analyte was found in the blank as well as the sample. It further indicates possible/probable blank contamination.
C: Co-eluting and/or poorly resolved non-target compounds cause superimposed spectra that prevent identification of individual compounds.
* Compounds flagged are from diluted analysis.
** This compound is not flagged B; it was not found in the corresponding blank. However, it is commonly found as a laboratory contaminant.

Copyright ICM, Inc., 1997.
All rights reserved.
SUS

850930687

F 423

Operator ID: KS9934 Quant Rev: 7 Quant Time: 970506 13:08
Output File: ^B1377::QT Injected at: 970506 12:34
Data File: >B1377::X1 Dilution Factor: 1.00000
Name: INST 59702, SAMPLE Instrument ID: INST "B"
Misc: 262099,5,0.01,5, 0.18mm X 40M DB-8240

ID File: ID824B::X2
Title: GENERAL IDFILE FOR INSTRUMENT B
Last Calibration: 970415 20:09 Last Qcal Time: 970506 09:20

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	9.82	128.0	15326	50.00	UG/L	99
9)	Methylene Chloride B	6.78	84.0	3819	6.35	UG/L	86
22)	1,2-Dichloroethane-d4	11.08	65.0	36921	48.63	UG/L	94
27)	*1,4-Difluorobenzene	12.14	114.0	69978	50.00	UG/L	95
30)	~~Vinyl Acetate~~	14.92	43.0	2017	10.04	UG/L	100
44)	*Chlorobenzene-d5	19.89	117.0	57947	50.00	UG/L	93
48)	~~1,1,2,2-Tetrachloroethane~~	22.88	83.0	[illegible]	[illegible]		[illegible]
49)	Toluene-d8	15.92	98.0	70355	48.88	UG/L	98
50)	Toluene	16.11	92.0	3408	3.23	UG/L	90
52)	Ethylbenzene	20.26	106.0	4074	7.09	UG/L	95
54)	p&m Xylene	20.54	106.0	28578	37.28	UG/L	44
55)	o-Xylene	21.41	106.0	30423	38.77	UG/L	95
56)	Bromofluorobenzene	22.53	95.0	30342	47.88	UG/L	82

* Compound is ISTD DLS 7/97

850930688

F423

850930689

MS data file header from : B1377::M1

Sample: INST 59702, SAMPLE Operator: KS9934 MS 5/06/97 12:1
Misc : 262099,S.0.01,5, 0.18mm X 40M DB-8240
Sys. #: 2 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: INST
Method file: UOAB Tuning file: APEI02 No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 270

Chromatographic temperatures :	30.	90.	200.	0.	0.
Chromatographic times, min. :	1.0	1.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	4.0	10.0	0.0	.1	0.0

B1377 INST 59702, SAMPLE 262099,S.0.01,5, 0.18mm X 40M DB-8240
35.01 260.0 TIC
Upslope: .2000 Area Reject: 17574. Max Peaks: 20 Bunch: -1 Valley >100
Dnslope: 0.0000 Results File IB1377 Sorted by Time/Area INT

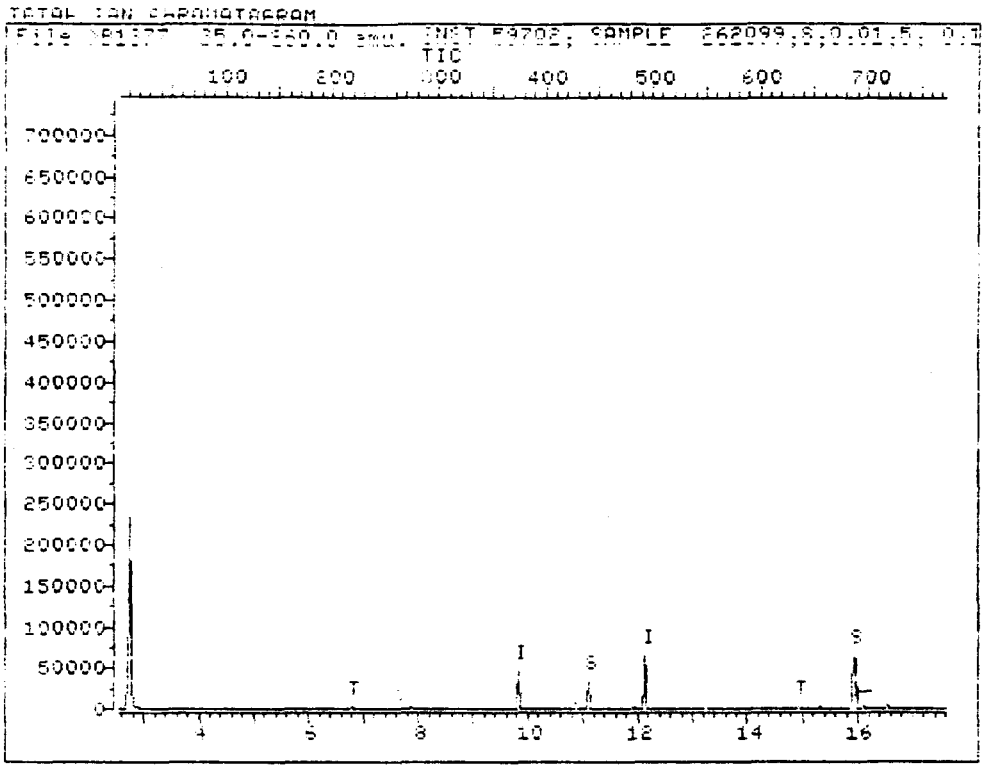
Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% to
1	2.74	4	11	38	233029	708421	704645	23.85	5
2	12.14	487	493	501	65252	175744	175744	5.95	1
3	15.92	678	687	693	65602	226746	226746	7.68	1
4	19.89	887	891	898	75222	193023	190656	6.45	1
5	20.54	918	924	929	79716	221042	221042	7.48	1
6	21.43	965	970	977	80042	251149	233952*	7.92	1
7	22.23	1006	1011	1014	169295	386623	377603	12.78	3
8	22.53	1023	1026	1029	90058	281110	250657	8.48	2
9	23.07	1050	1054	1057	359291	724932	709518	24.02	5
10	23.27	1060	1064	1069	740064	3002498	2954234*	100.00	23
11	23.42	1069	1072	1074	429009	1006086	973556*	32.95	7
12	23.50	1074	1076	1080	272422	576182	531797*	18.00	4
13	23.81	1095	1092	1098	317555	792369	728925	24.67	5
14	24.15	1103	1109	1116	680885	1619820	1567946	53.07	12
15	24.59	1129	1132	1137	44234	205517	198264	5.36	1
16	24.91	1145	1148	1155	183580	506480	456501	15.45	3
17	25.28	1164	1167	1172	365095	818406	807049	27.32	6
18	25.43	1172	1175	1180	229606	574064	546079	18.48	4
19	25.69	1180	1188	1190	67109	227381	192413	6.51	1
20	26.10	1206	1209	1215	260244	508746	486723*	16.48	3

Sum of corrected areas: 12494036.

Summary of Unknowns PBM Library Search and Quantitation

Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	175744.	9.82	2.55 - 10.98
2	50.0	175744.	12.14	10.98 - 16.01
3	50.0	190656.	19.89	16.01 - 32.06

F42



Data File: >B1377::X1 Quant Output File: ^B1377::QT
Name: INST 59702, SAMPLE Instrument ID: INST "B"
Misc: 262099,S,0.01,5, 0.18mm X 40M D8-8240

Id File: ID8248::X2
Title: GENERAL IDFILE FOR INSTRUMENT B
Last Calibration: 970415 20:09 Last Qcal Time: 970506 09:20

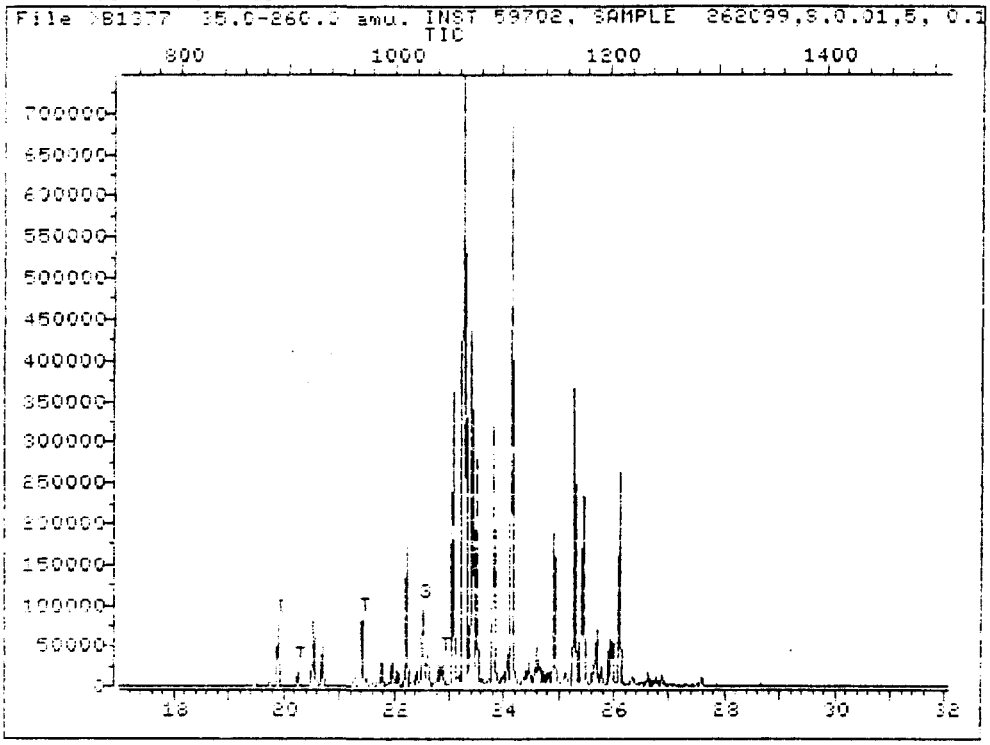
Operator ID: KS9934
Quant Time : 970506 13:08
Injected at: 970506 12:34

Page 1 of 2

850930690

F425

TOTAL ION CHROMATOGRAM



Data File: :B1377::X1 Quant Output File: :B1377::QT
Name: INST 59702, SAMPLE Instrument ID: INST "B"
Misc: 262099,S,0.01,5, 0.18mm X 40M D8-8240

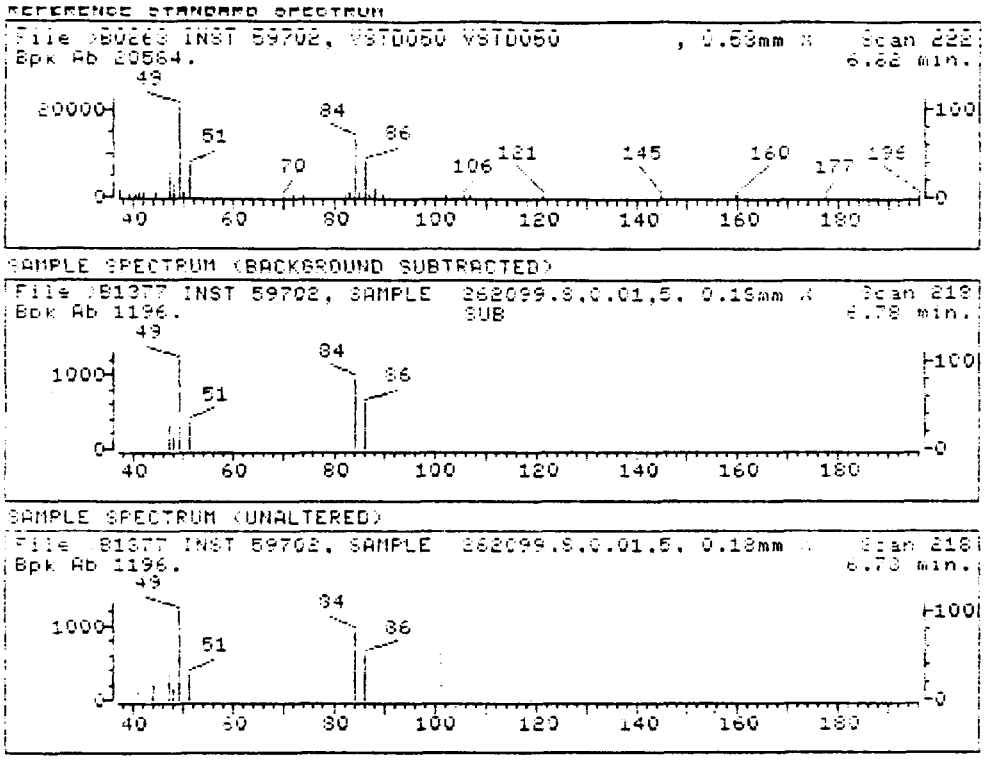
Id File: ID824B::X2
Title: GENERAL IDFILE FOR INSTRUMENT B
Last Calibration: 970415 20:09 Last Qcal Time: 970506 09:20

Operator ID: KS9934
Quant Time : 970506 13:08
Injected at: 970506 12:34

Page 2 of 2

850930691

F 426



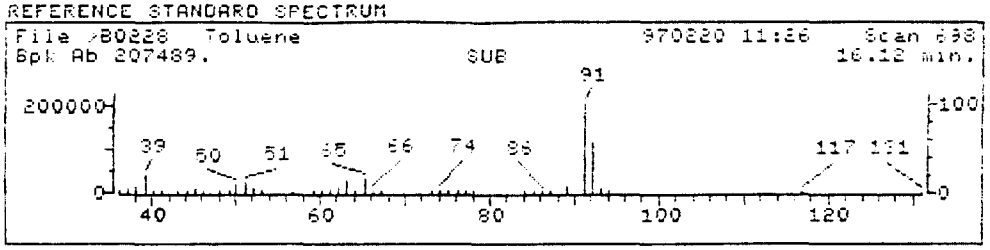
Data File: >B1377::X1 Quant Output File: ^B1377::QT
Name: INST 59702, SAMPLE Instrument ID: INST "B"
Misc: 262099,S,0.01,5, 0.18mm X 40M D8-8240
Quant Time: 970506 13:08 Quant ID File: ID824B::X2
Injected at: 970506 12:34 Last Calibration: 970415 20:09
Last Qcal Time: 970506 09:20

Compound No : 9
Compound Name : Methylene Chloride
Scan Number : 218
Retention Time: 6.78 min.
Quant Ion : 84.0
Area : 3819
Concentration : 6.35 UG/L
q-value : 86

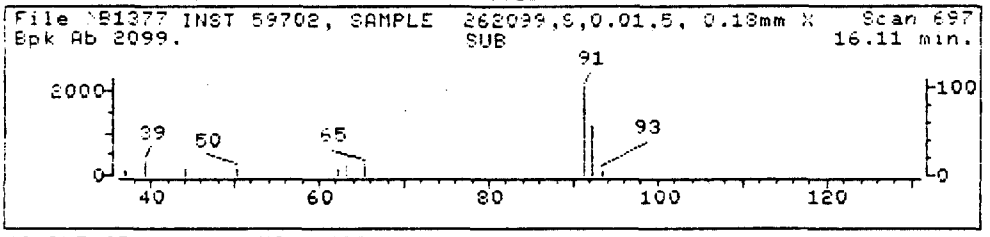
850930692

F 427

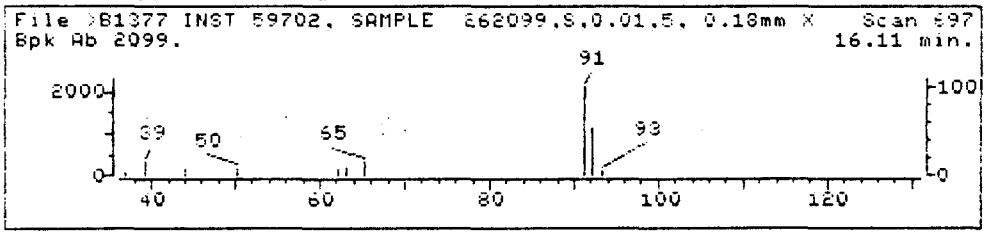
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



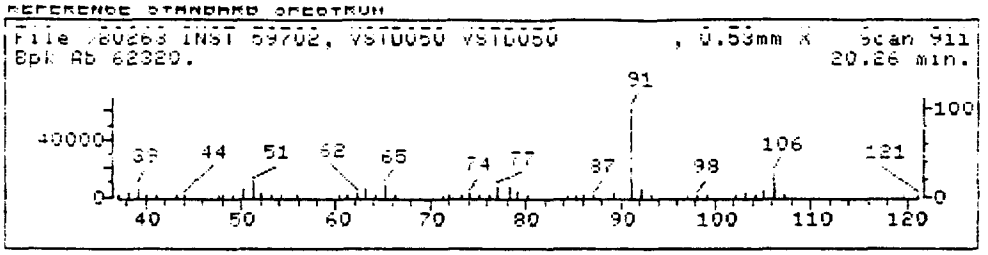
Data File: >B1377::X1
Quant Output File: ^B1377::QT
Name: INST 59702, SAMPLE
Instrument ID: INST "B"
Misc: 262099,S,0.01,5, 0.18mm X 40M D8-8240
Quant Time: 970506 13:08
Quant ID File: ID824B::X2
Injected at: 970506 12:34
Last Calibration: 970415 20:09
Last Qcal Time: 970506 09:20

Compound No	:	50
Compound Name	:	Toluene
Scan Number	:	697
Retention Time	:	16.11 min.
Quant Ion	:	92.0
Area	:	3408
Concentration	:	3.23 UG/L
q-value	:	90

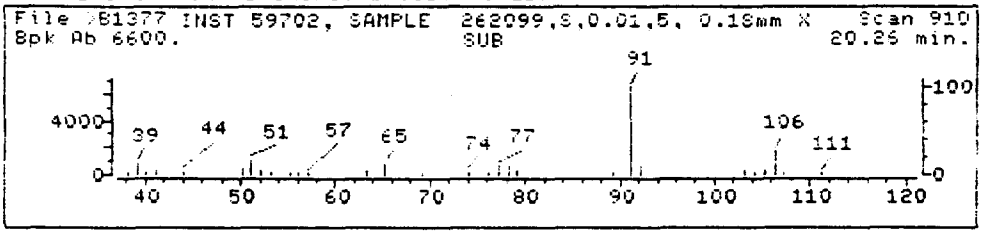
850930693

F 429

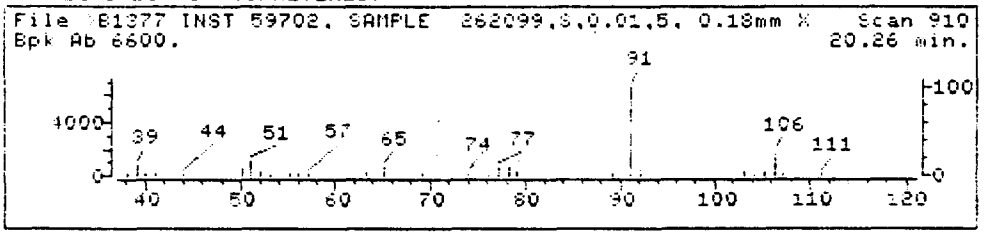
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



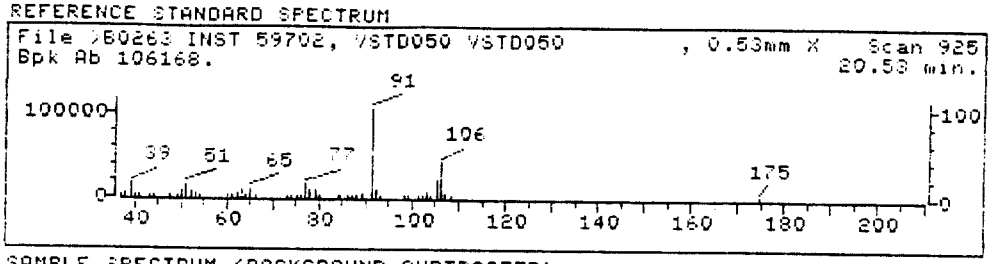
Data File: >B1377::X1 Quant Output File: ^B1377::QT
Name: INST 59702, SAMPLE Instrument ID: INST "B"
Misc: 262099,S,0.01,5, 0.18mm X 40M DB-8240
Quant Time: 970506 13:08 Quant ID File: ID824B::X2
Injected at: 970506 12:34 Last Calibration: 970415 20:09
Last Qcal Time: 970506 09:20

Compound No : 52
Compound Name : Ethylbenzene
Scan Number : 910
Retention Time: 20.26 min.
Quant Ion : 106.0
Area : 4074
Concentration : 7.09 UG/L
q-value : 95

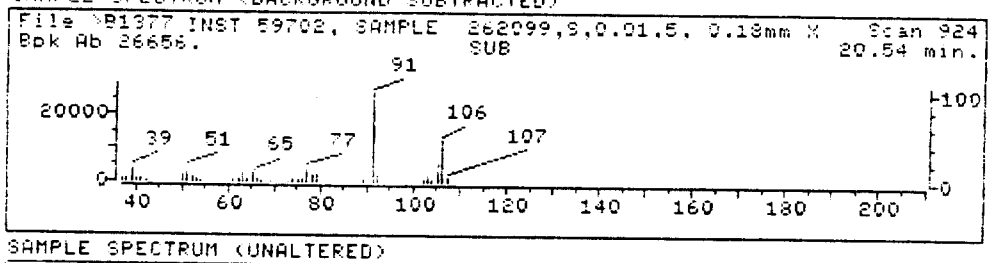
850930694

F 429

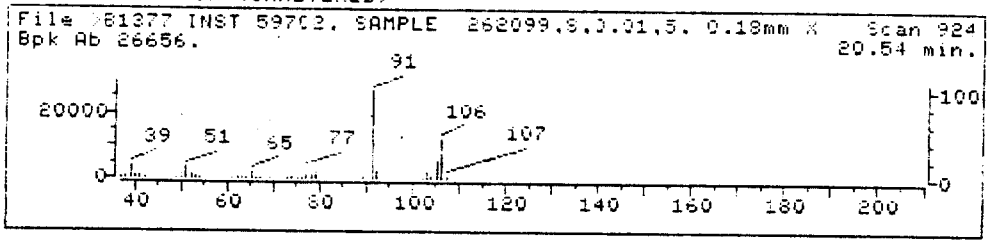
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

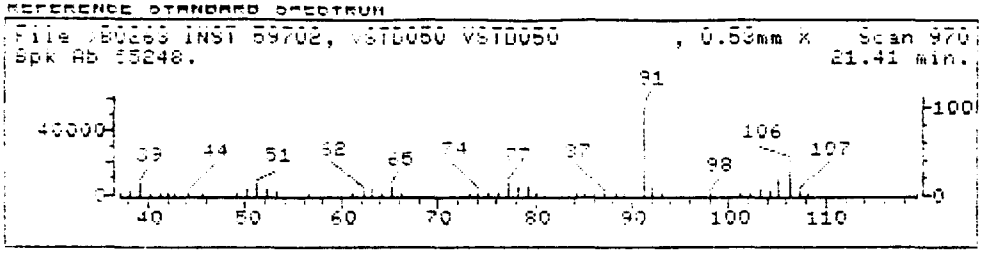


Data File: >B1377::X1
Name: INST 59702, SAMPLE
Misc: 262099,S,0.01,5, 0.18mm X 40M D8-8240
Quant Time: 970506 13:08
Injected at: 970506 12:34
Last Qcal Time: 970506 09:20

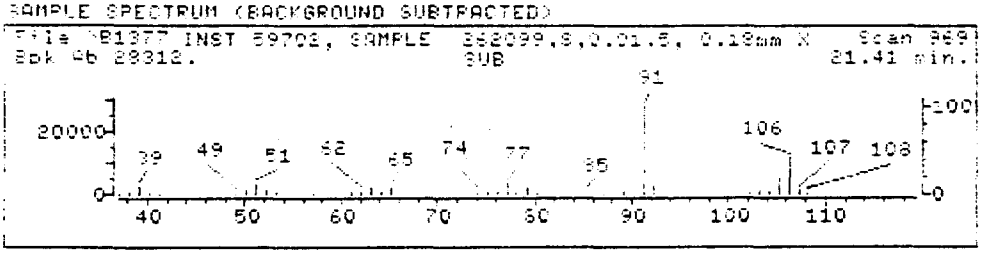
Quant Output File: ^B1377::QT
Instrument ID: INST "B"
Quant ID File: ID824B::X2
Last Calibration: 970415 20:09

Compound No : 54
Compound Name : p&m Xylene
Scan Number : 924
Retention Time: 20.54 min.
Quant Ion : 106.0
Area : 28578
Concentration : 37.28 UG/L
q-value : 44

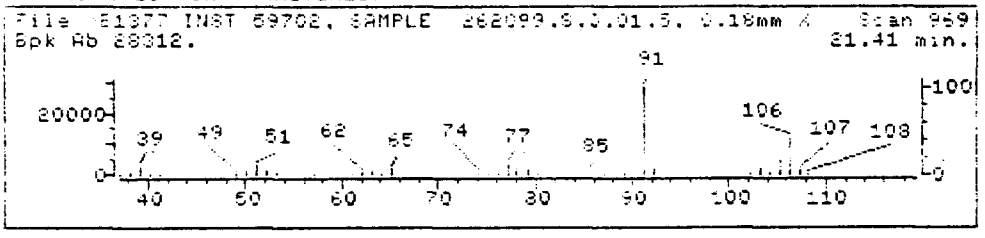
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

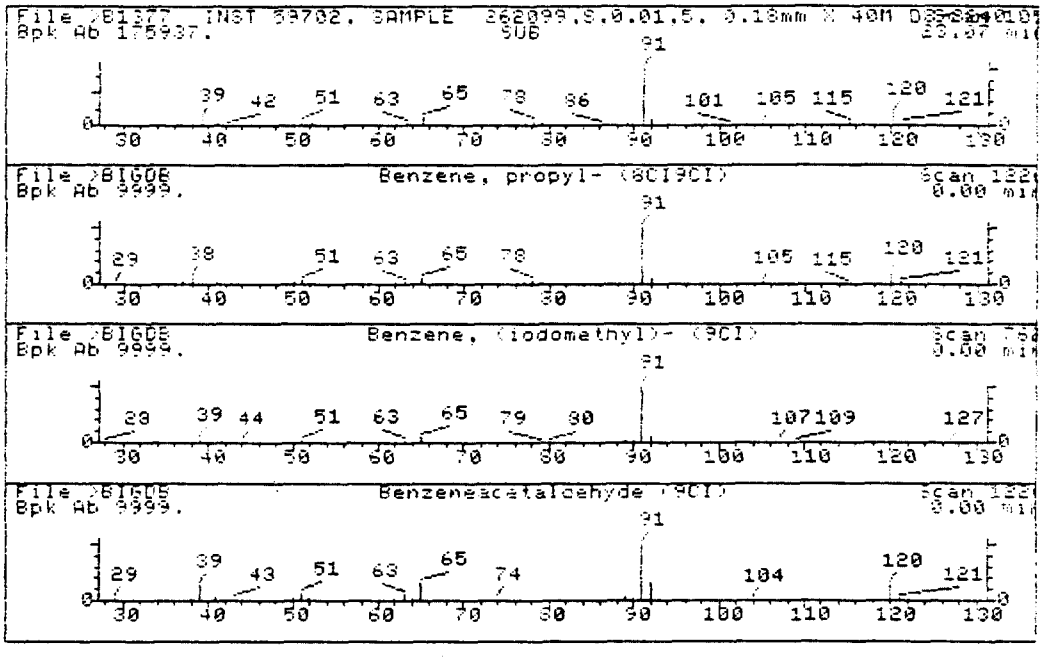


Data File: >B1377::X1 Quant Output File: `B1377::QT
Name: INST 59702, SAMPLE Instrument ID: INST "B"
Misc: 262099,S,0.01,5, 0.18mm X 40M D8-8240
Quant Time: 970506 13:08 Quant ID File: ID824B::X2
Injected at: 970506 12:34 Last Calibration: 970415 20:09
Last Qcal Time: 970506 09:20

Compound No : 55
Compound Name : o-Xylene
Scan Number : 969
Retention Time: 21.41 min.
Quant Ion : 106.0
Area : 50423
Concentration : 58.77 UG/L
q-value : 95

850930696

F 431



Instrument ID: INST " Analyzed on: 5/06/97 12:34
Result 9 in PBM results file: LB1377
Retention Time: 23.07 Area: 709518 Tentative Conc: 190.00
The unknown area is 372.15% of the nearest internal standard

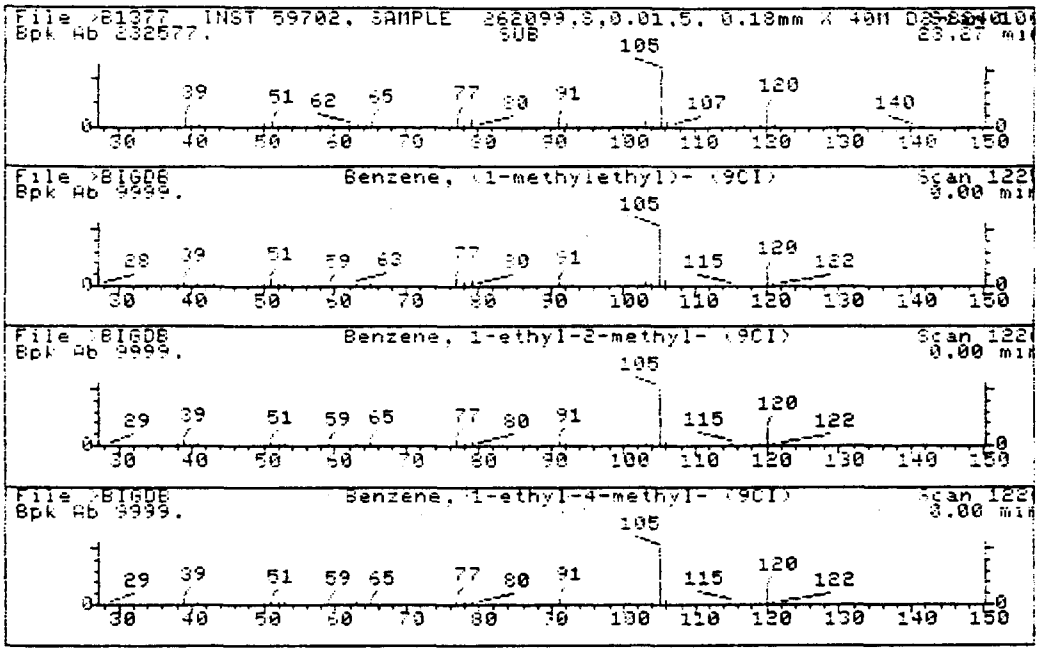
1. Benzene, propyl- (8CI9CI)	120	C9H12
2. Benzene, (iodomethyl)- (9CI)	218	C7H7I
3. Benzeneacetaldehyde (9CI)	120	C8H8O
4. 1,3,5-Cycloheptatriene (8CI9CI)	92	C7H8

Sample file: >B1377 Spectrum #: 1054
Search speed: 1 Tilting option: N No. of ion ranges searched: 4

	Prob.	CAS #	CON #	ROOT	K	OK	#FLG	TILT	%	CON	C_I	R_
1.	86*	103651	12261	"BIGDB	52	35	1	0	88	1	60	
2.	60	620053	7623	"BIGDB	41	43	2	0	100	15	30	
3.	28*	122781	12263	"BIGDB	48	31	1	0	28	55	8	
4.	11*	544252	7652	"BIGDB	20	35	2	0	21	65	2	

850930697

F 432



Instrument ID: INST " Analyzed on: 5/06/97 12:34
Result 10 in PBM results file: LB1377
Retention Time: 23.27 Area: 2954234 Tentative Conc: 770.00
The unknown area is 1549.5% of the nearest internal standard

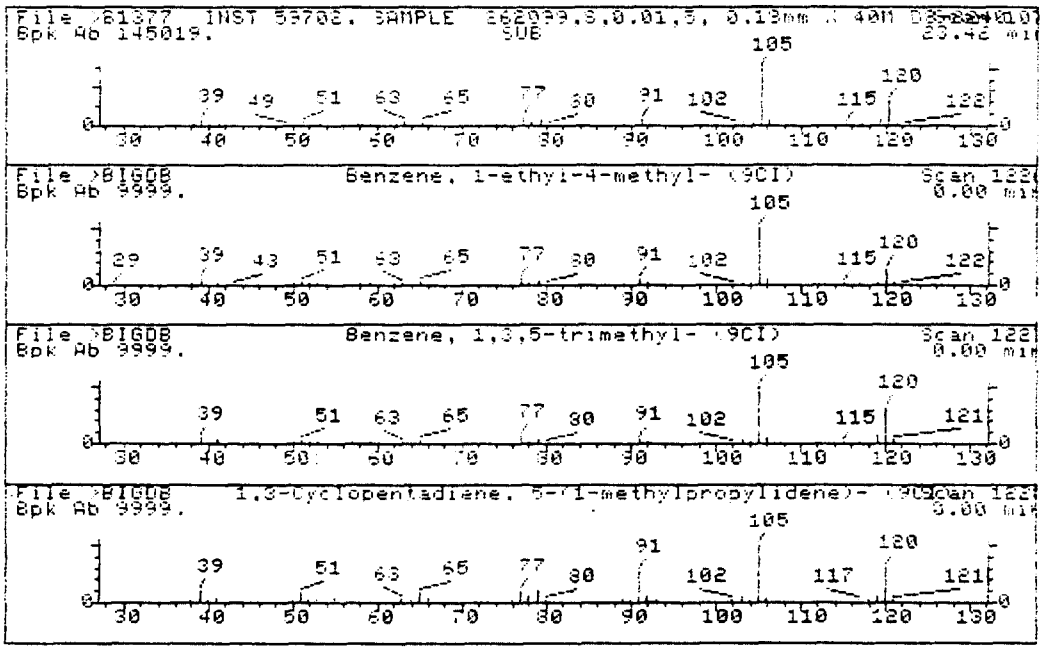
1.	Benzene, (1-methylethyl)- (9CI)	120	C9H12
2.	Benzene, 1-ethyl-2-methyl- (9CI)	120	C9H12
3.	Benzene, 1-ethyl-4-methyl- (9CI)	120	C9H12
4.	Benzene, 1-ethyl-3-methyl- (9CI)	120	C9H12
5.	Benzene, 1,2,3-trimethyl- (8CI9CI)	120	C9H12
6.	Benzene, 1,1'-(1-methyl-1,2-ethanediyl)bis- (9CI)	196	C15H16

Sample file: >B1377 Spectrum #: 1064
Search speed: 1 Tilting option: N No. of ion ranges searched: 41

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	89*	98828	12259	"BIGDB	70	17	1	0	100	8	62	80
2.	89*	611143	12266	"BIGDB	61	24	0	0	88	3	66	77
3.	86*	622968	12268	"BIGDB	62	23	0	0	88	8	59	78
4.	83*	620144	12267	"BIGDB	57	30	1	0	85	7	54	55

850930698

F 433



Instrument ID: INST " Analyzed on: 5/06/97 12:34
Result 11 in PBM results file: LB1377
Retention Time: 23.42 Area: 973556 Tentative Conc: 260.00
The unknown area is 510.63% of the nearest internal standard

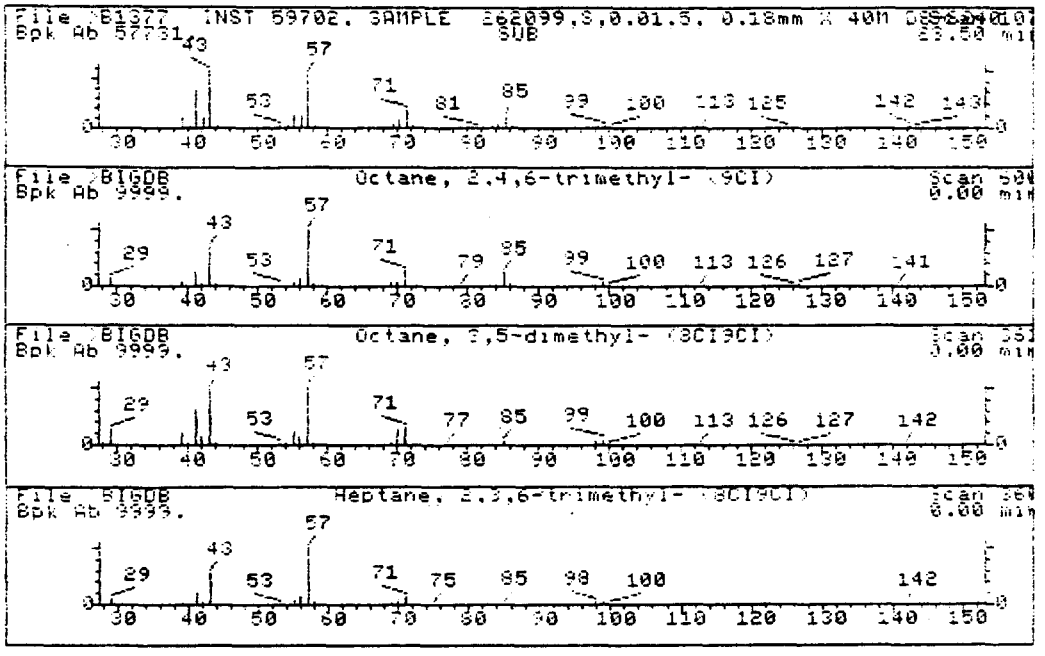
1.	Benzene, 1-ethyl-4-methyl- (9CI)	120 C9H12
2.	Benzene, 1,3,5-trimethyl- (9CI)	120 C9H12
3.	1,3-Cyclopentadiene, 5-(1-methylpropylidene)- (9CI)	120 C9H12
4.	Benzene, 1-ethyl-2-methyl- (9CI)	120 C9H12
5.	Benzene, 1,2,4-trimethyl- (8CI9CI)	120 C9H12
6.	Benzene, 1-ethyl-3-methyl- (9CI)	120 C9H12

Sample file: >B1377 Spectrum #: 1072
Search speed: 1 Tilting option: N No. of ion ranges searched:

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_
1.	93*	622968	12268	"BIGDB	69	16	0	0	79	21	53	
2.	88*	108678	12275	"BIGDB	67	21	2	0	69	4	65	
3.	78*	3141024	12296	"BIGDB	34	70	3	0	72	4	55	
4.	77*	611143	12266	"BIGDB	65	20	1	0	86	21	41	

850930699

F 43



Instrument ID: INST " Analyzed on: 5/06/97 12:34

Result 12 in PBM results file: LB1377

Retention Time: 23.50 Area: 531797 Tentative Conc: 140.00

The unknown area is 278.93% of the nearest internal standard

1.	Octane, 2,4,6-trimethyl- (9CI)	156 C11H24
2.	Octane, 3,5-dimethyl- (8CI9CI)	142 C10H22
3.	Heptane, 2,3,6-trimethyl- (8CI9CI)	142 C10H22
4.	Decane, 2,5,9-trimethyl- (9CI)	184 C13H28
5.	Octane, 2,5,6-trimethyl- (9CI)	156 C11H24
6.	Nonane (8CI9CI)	128 C9H20

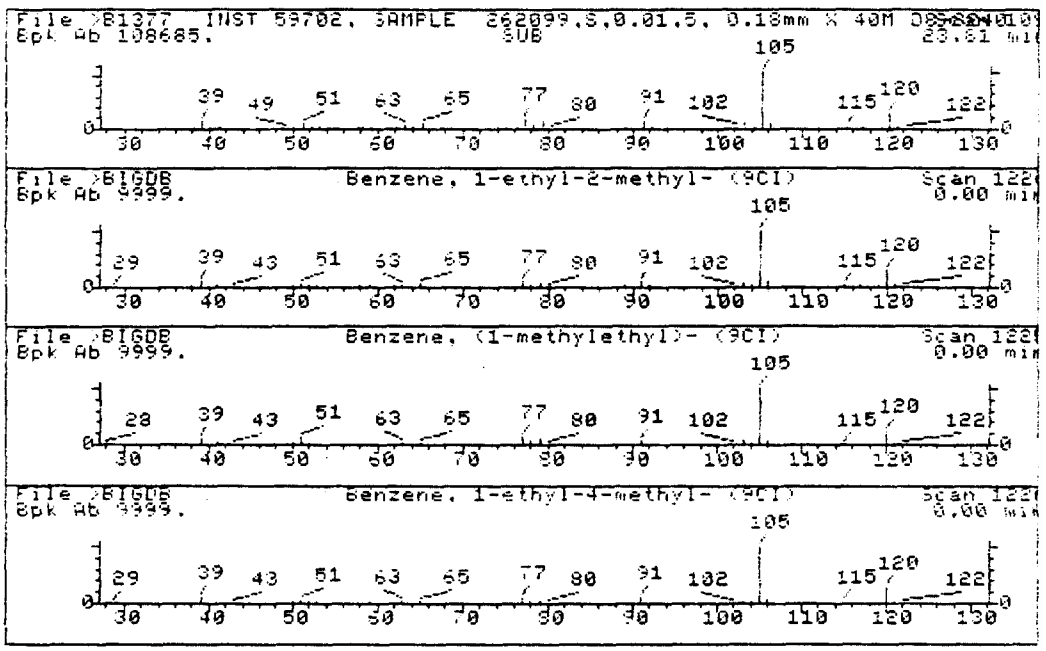
Sample file: >B1377 Spectrum #: 1076

Search speed: 1 Tilting option: N No. of ion ranges searched: 42

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	52	62016379	6004	"BIGDB	57	28	2	0	84	18	20	19
2.	51*	15869939	3611	"BIGDB	44	49	2	0	93	22	22	23
3.	51	4032933	3607	"BIGDB	41	41	0	0	91	22	22	23
4.	47	62108229	3927	"BIGDB	48	43	1	0	88	22	17	18

850930700

F 435



Instrument ID: INST " Analyzed on: 5/06/97 12:34
Result 13 in PBM results file: LB1377
Retention Time: 23.81 Area: 728925 Tentative Conc: 190.00
The unknown area is 732.32% of the nearest internal standard

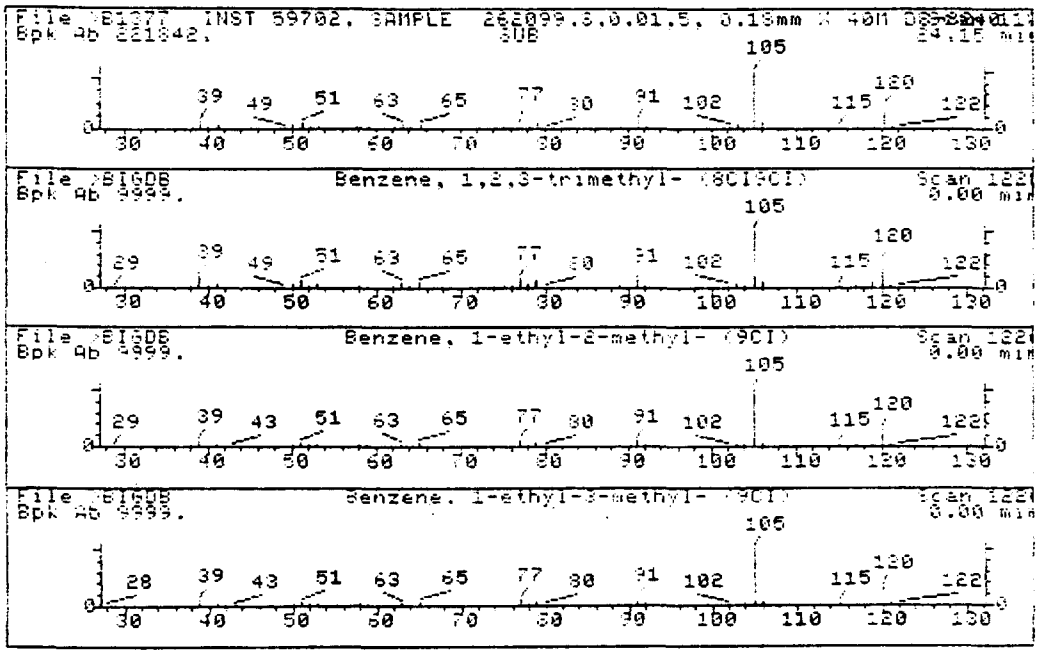
1.	Benzene, 1-ethyl-2-methyl- (9CI) ISOMER	120	C9H12
2.	Benzene, (1-methylethyl)- (9CI)	120	C9H12
3.	Benzene, 1-ethyl-4-methyl- (9CI)	120	C9H12
4.	Benzene, 1-ethyl-3-methyl- (9CI)	120	C9H12
5.	Benzene, 1,2,3-trimethyl- (8CI9CI)	120	C9H12
6.	Benzene, 1,1'-(1-methyl-1,2-ethanediyl)bis- (9CI)	196	C15H16

Sample file: >B1377 Spectrum #: 1092
Search speed: 1 Tilting option: N No. of ion ranges searched: 4

	Prob.	CAS #	CON #	ROOT	K	OK	#FLG	TILT	%	CON	C_I	R_
1.	95*	611143	12266	"BIGDB	72	13	0	0	80	7	68	
2.	89*	98828	12259	"BIGDB	70	17	1	0	98	7	62	
3.	86*	622968	12268	"BIGDB	67	18	1	0	88	7	59	
4.	76*	620144	12267	"BIGDB	45	42	2	0	87	7	45	

850930701

F 436



Instrument ID: INST " Analyzed on: 5/06/87 12:34
Result 14 in PBM results file: LB1377
Retention Time: 24.15 Area: 1567946 Tentative Conc: 410.00
The unknown area is 822.40% of the nearest internal standard

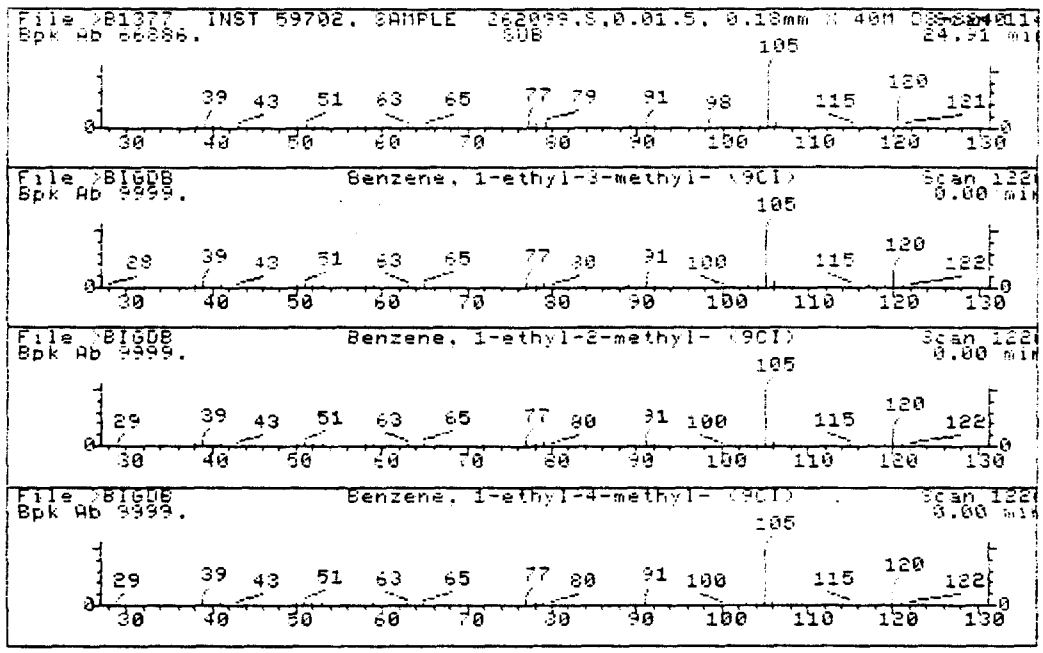
1.	Benzene, 1,2,3-trimethyl- (8CI,9CI)	120 C9H12
2.	Benzene, 1-ethyl-2-methyl- (9CI)	120 C9H12
3.	Benzene, 1-ethyl-3-methyl- (9CI)	120 C9H12
4.	Benzene, 1,2,4-trimethyl- (8CI,9CI)	120 C9H12
5.	Benzene, 1-ethyl-4-methyl- (9CI)	120 C9H12
6.	Benzene, (1-methylethyl)- (9CI)	120 C9H12

Sample file: >B1377 Spectrum #: 1109
Search speed: 1 Tilting option: N No. of ion ranges searched: 41

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	89*	526738	12280	"BIGDB	73	27	0	0	56	34	50	92
2.	87*	611143	12266	"BIGDB	68	17	1	0	97	12	55	80
3.	86*	620144	12267	"BIGDB	68	19	1	0	97	10	59	76
4.	85*	95636	12273	"BIGDB	71	24	0	0	55	36	37	89

850930702

F 43



Instrument ID: INST " Analyzed on: 5/06/97 12:34
Result 16 in PBM results file: LB1377
Retention Time: 24.91 Area: 456901 Tentative Conc: 120.00
The unknown area is 239.44% of the nearest internal standard

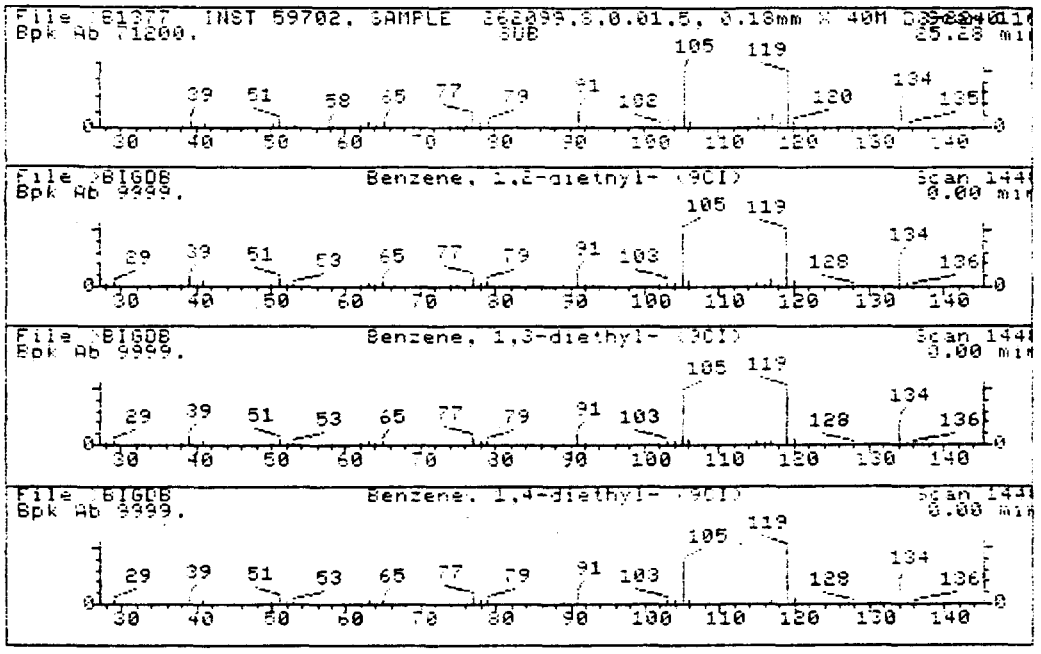
1.	Benzene, 1-ethyl-3-methyl- (9CI) isomer	120 C9H12
2.	Benzene, 1-ethyl-2-methyl- (9CI)	120 C9H12
3.	Benzene, 1-ethyl-4-methyl- (9CI)	120 C9H12
4.	Benzene, 1,2,3-trimethyl- (8CI9CI)	120 C9H12
5.	Benzene, 1,2,4-trimethyl- (8CI9CI)	120 C9H12
6.	Benzene, (1-methylethyl)- (9CI)	120 C9H12

Sample file: >B1377 Spectrum #: 1148
Search speed: 1 Tilting option: N No. of ion ranges searched: 4

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_
1.	95*	620144	12267	"BIGDB	75	12	1	0	89	5	72	
2.	94*	611143	12266	"BIGDB	75	10	1	0	88	7	68	
3.	93*	622968	12268	"BIGDB	73	12	1	0	87	7	68	
4.	88*	526738	12280	"BIGDB	77	23	2	0	67	5	65	

850930703

F 438



Instrument ID: INST " Analyzed on: 5/06/97 12:34
Result 17 in PBM results file: LB1377
Retention Time: 25.28 Area: 807049 Tentative Conc: 210.00
The unknown area is 423.30% of the nearest internal standard

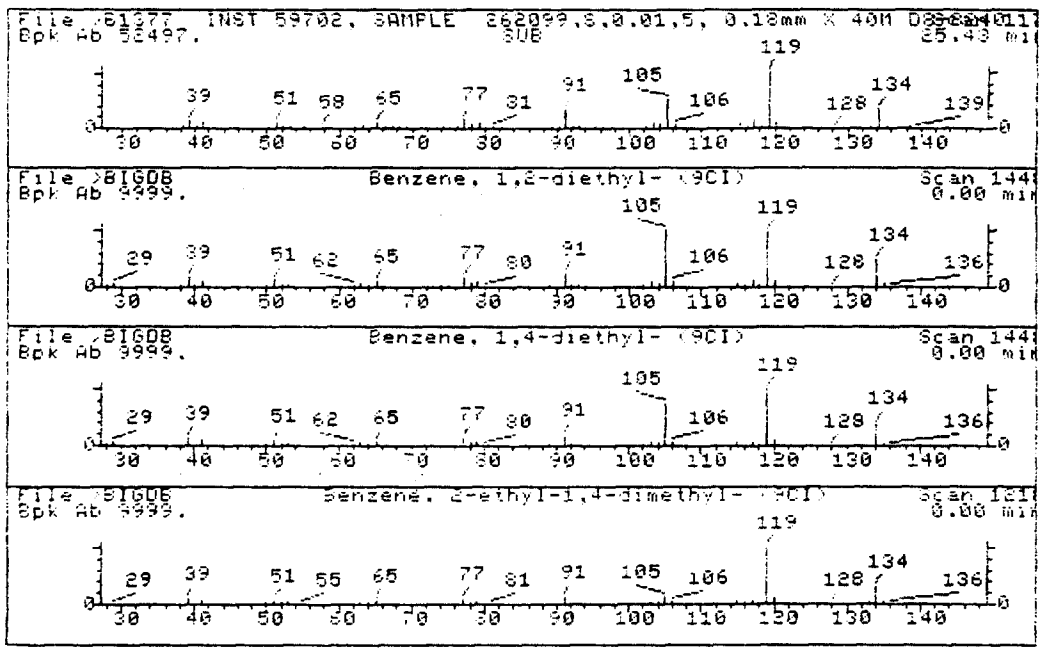
1.	Benzene, 1,2-diethyl- (9CI)	134 C10H14
2.	Benzene, 1,3-diethyl- (9CI)	134 C10H14
3.	Benzene, 1,4-diethyl- (9CI)	134 C10H14
4.	Benzene, 1-methyl-4-(1-methylethyl)- (9CI)	134 C10H14
5.	Benzene, diethyl- (8CI9CI)	134 C10H14
6.	Benzene, 2-ethyl-1,4-dimethyl- (9CI)	134 C10H14

Sample file: >B1377 Spectrum #: 1167
Search speed: 1 Tilting option: N No. of ion ranges searched: 41

	Prob.	CAS #	CON #	ROOT	K	OK	#FLG	TILT	%	CON	C_I	R_IV
1.	94*	135013	14481	"BIGDB	78	28	0	0	83	10	68	93
2.	87*	141935	14482	"BIGDB	70	32	0	0	85	14	55	89
3.	75*	105055	14480	"BIGDB	60	40	0	0	85	29	37	73
4.	42*	99876	12178	"BIGDB	64	41	3	0	92	37	17	31

850930704

F 439



Instrument ID: INST " Analyzed on: 5/06/97 12:34
Result 18 in PBM results file: LB1377
Retention Time: 25.43 Area: 546079 Tentative Conc: 140.00
The unknown area is 286.42% of the nearest internal standard

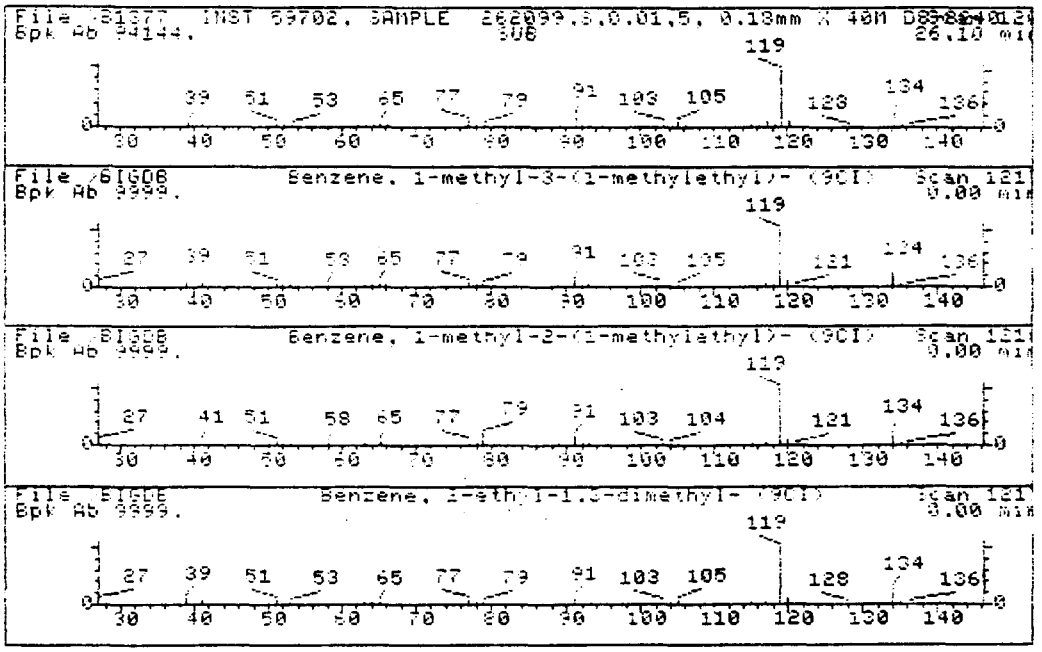
1.	Benzene, 1,2-diethyl- (9CI) isomer	134	C10H14
2.	Benzene, 1,4-diethyl- (9CI)	134	C10H14
3.	Benzene, 2-ethyl-1,4-dimethyl- (9CI)	134	C10H14
4.	Benzene, 1-methyl-3-(1-methylethyl)- (9CI)	134	C10H14
5.	Benzene, 1-methyl-2-(1-methylethyl)- (9CI)	134	C10H14
6.	Benzene, methyl(1-methylethyl)- (9CI)	134	C10H14

Sample file: >B1377 Spectrum #: 1175
Search speed: 1 Tilting option: N No. of ion ranges searched: 4

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_
1.	90*	135013	14481	"BIGDB	77	29	0	0	52	31	50	
2.	89*	105055	14480	"BIGDB	68	32	0	0	69	6	62	
3.	89*	1758889	12181	"BIGDB	63	31	1	0	100	3	66	
4.	86*	535773	12170	"BIGDB	66	23	0	0	100	6	59	

850930705

F 440



Instrument ID: INST " Analyzed on: 5/06/97 12:34
Result 20 in PBM results file: LB1377
Retention Time: 26.10 Area: 486723 Tentative Conc: 130.00
The unknown area is 255.29% of the nearest internal standard

1.	Benzene, 1-methyl-3-(1-methylethyl)- (9CI)	134	C10H14
2.	Benzene, 1-methyl-2-(1-methylethyl)- (9CI)	134	C10H14
3.	Benzene, 2-ethyl-1,3-dimethyl- (9CI)	134	C10H14
4.	Benzene, 1-ethyl-2,4-dimethyl- (9CI)	134	C10H14
5.	Benzene, 2-ethyl-1,4-dimethyl- (9CI)	134	C10H14
6.	Benzene, 1-ethyl-2,3-dimethyl- (9CI)	134	C10H14

Sample file: >B1377 Spectrum #: 1209
Search speed: 1 Tilting option: N No. of ion ranges searched: 41

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	97*	535773	12170	"BIGDB	83	6	0	0	87	8	68	97
2.	96*	527844	12169	"BIGDB	84	8	1	0	94	8	68	96
3.	95*	2870044	12174	"BIGDB	77	12	1	0	94	3	72	93
4.	95*	874419	12171	"BIGDB	76	12	1	0	96	3	72	93

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330, FAX: 201-584-0515
MAY 16, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

TARGET COMPOUND LIST - VOLATILE ANALYSIS BY GC/MS
PLUS 10 PEAKS

Lab Number: 262100
Client: VECTRE CORPORATION
Sample source: NBB-V11
Sample ID: HP-1
Sample date: 04/29/97
Sampled by: Customer
At lab date: 04/29/97
Matrix: Water

Data File: >B1340
Analysis Date: 05/03/97
Init Sample volume= .1ml
Column: DB-624
Dilution Factor: 50
Final volume= 5ml

Conc. in Sample = (Conc. on Quant Report/Initial Volume)*Final Volume

Parameter	Result ug/l	Method Blank ug/l	Practical Quantitation Limit ug/l	Minimum Detecti Limit ug/l
Chloromethane	U	U	250	230
Bromomethane	U	U	250	190
Vinyl chloride	U	U	250	85
Chloroethane	U	U	250	90
Methylene chloride	U	U	250	140
Acetone	U	U	1000	230
Carbon disulfide	U	U	250	85
1,1-Dichloroethene	U	U	250	85
1,1-Dichloroethane	U	U	250	70
trans-1,2-Dichloroethene	U	U	250	85
cis-1,2-Dichloroethene	U	U	250	85
Chloroform	U	U	250	80
1,2-Dichloroethane	U	U	250	95
2-Butanone	U	U	1000	120
1,1,1-Trichloroethane	U	U	250	25
Carbon tetrachloride	U	U	250	30
Bromodichloromethane	U	U	250	30
1,2-Dichloropropane	U	U	250	30
cis-1,3-Dichloropropene	U	U	250	25
Trichloroethene	U	U	250	30
Dibromochloromethane	U	U	250	30
1,1,2-Trichloroethane	U	U	250	25
Benzene	U	U	250	25
trans-1,3-Dichloropropene	U	U	250	30
Bromoform	U	U	250	40
4-Methyl-2-pentanone	U	U	1000	55
2-Hexanone	U	U	1000	60
Tetrachloroethene	U	U	250	35
1,1,2,2-Tetrachloroethane	U	U	250	25
Toluene	840	U	250	40
Chlorobenzene	U	U	250	30
Ethylbenzene	450	U	250	35
Styrene	U	U	250	50
p&m-Xylene	2100	U	250	45
o-Xylene	2200	U	250	45
total Xylenes	4300	U	250	45

ug/l = micrograms/liter or ppb
ND: Not Determined.
IND: Indeterminable.
U: Indicates a compound was analyzed for but not detected at the PQL.
J: Indicates an estimated value. It is utilized when a reported value meets the identification criteria but the result is less than the specified detection limit but greater than zero.
B: Indicates that the analyte was found in the blank as well as the sample. It indicates possible/probable blank contamination.

INDUSTRIAL CORROSION MANAGEMENT, INC.
Richard Levine, President
Copyright ICM, Inc., 1997.
All rights reserved.
SUS

850930707

F 442

INDUSTRIAL CORROSION MANAGEMENT, Inc.
1152 Route 10
Randolph, NJ 07869
201-584-0330
Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab
MAY 7, 1997

LIBRARY SEARCH RESULTS OF NONTARGETED PEAKS WITH
ESTIMATED CONCENTRATION OF TENTATIVELY IDENTIFIED COMPOUNDS.

Data file name: >B1340
Lab number: 262100
Fraction: VOLATILE

Initial Sample Wt/Vol=.1 Final Volume=5

CAS No.	Retention Time	Compound Name	Molecular Weight	Estimated Concentration ug/l
98828	22.24	Methylethylbenzene	120	2300
103651	23.08	Propylbenzene	120	3400
611143	23.25	Ethylmethylbenzene	120	17000
	23.43	Ethylmethylbenzene isomer	120	4500
	23.82	Ethylmethylbenzene isomer	120	3900
526738	24.15	Trimethylbenzene	120	8000
	24.93	Trimethylbenzene isomer	120	2200
	25.28	Unknown Hydrocarbon		2000
105055	25.44	Diethylbenzene	134	800
535773	26.10	Methylmethylethyl Benzene	134	900

Estimated total non-target compound concentration (excluding compounds flagged with A, B or **) in ug/l is: 45000

A: Indicates that the compound is an acetone based aldol-type condensation product formed by concentrating the extraction solvent (1:1 acetone/methylene chloride).
B: Indicates that the analyte was found in the blank as well as the sample. It further indicates possible/probable blank contamination.
C: Co-eluting and/or poorly resolved non-target compounds cause superimposed spectra that prevent identification of individual compounds.
* Compounds flagged are from diluted analysis.
** This compound is not flagged B; it was not found in the corresponding blank. However, it is commonly found as a laboratory contaminant.

Copyright ICM, Inc., 1997.
All rights reserved.
SUS

Operator ID: LB3274 Quant Rev: 7 Quant Time: 970503 21:05
Output File: ^B1340::QT Injected at: 970503 20:27
Data File: >B1340::B1 Dilution Factor: 1.00000
Name: INST 59702, SAMPLE Instrument ID: INST "B"
Misc: 262100 ,L,0.1,5, 0.53mm X 75M DB624

ID File: ID824B::X2
Title: GENERAL IDFILE FOR INSTRUMENT B
Last Calibration: 970415 20:09 Last Qcal Time: 970503 12:32

	Compound	R.T.	Q ion	Area	Conc	Units
1)	*Bromochloromethane	9.87	128.0	11746	50.00	UG/L
22)	1,2-Dichloroethane-d4	11.13	65.0	34678	56.11	UG/L
27)	*1,4-Difluorobenzene	12.17	114.0	58395	50.00	UG/L
44)	*Chlorobenzene-d5	19.92	117.0	45871	50.00	UG/L
49)	Toluene-d8	15.95	98.0	61477	49.21	UG/L
50)	Toluene	16.14	92.0	14582	16.85	UG/L
52)	Ethylbenzene	20.27	106.0	4150	8.94	UG/L
54)	p&m Xylene	20.55	106.0	25676	41.08	UG/L
55)	o-Xylene	21.44	106.0	27302	43.78	UG/L
56)	Bromofluorobenzene	22.53	95.0	27252	49.81	UG/L

* Compound is ISTD

DLS 7/97

850930709

F 444

850930710

MS data file header from : >B1340::B1

Sample: INST 59702, SAMPLE Operator: LB3274 MS 8/03/97 20:27
Misc : 262100 ,L,0.1,5, 0.53mm X 75M DB624
Sys. #: 2 MS model: 70 SW/HW rev.: LF ALE # : 0 Equip ID: INST "B"
Method file: VOAB Tuning file: APEI02 No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 270

Chromatographic temperatures :	30.	90.	200.	0.	0.
Chromatographic times, min. :	1.0	1.3	9.0	2.0	9.0
Chromatographic rate, deg/min:	4.0	10.0	0.0	.1	0.0

>B1340 INST 59702. SAMPLE 262100 ,L,0.1,5, 0.53mm X 75M DB624
35.01 260.0 TIC
Upslope: .2000 Area Reject: 9482. Max Peaks: 20 Bunch: -1 Valley >100 %
Onslope: 0.0000 Results File IB1340 Sorted by Time/Area INT

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	2.83	8	18	38	178466	545286	545286	52.26	11.945
2	9.87	375	379	384	39074	94824	94824	9.09	2.077
3	11.13	438	444	449	35125	91901	91901	8.81	2.013
4	12.17	490	497	507	49260	148659	148659	14.25	3.256
5	15.95	687	691	697	61504	196271	194966	18.68	4.271
6	16.14	697	701	709	23036	68577	68577	6.57	1.502
7	19.92	889	895	902	61023	154211	154211	14.78	3.378
8	20.55	924	927	934	69850	180346	180346	17.28	3.951
9	21.44	968	973	977	92825	201820	201820	19.34	4.421
10	22.24	1007	1014	1020	67577	137628	137628	13.19	3.015
11	22.53	1025	1029	1038	65916	138078	137318*	13.16	3.008
12	23.08	1049	1057	1063	106962	207552	206603	19.80	4.526
13	23.25	1063	1066	1073	293275	1044824	1043477*	100.00	22.858
14	23.43	1073	1075	1086	126699	277268	277268	26.57	6.074
15	23.82	1090	1095	1101	124051	239604	238137	22.82	5.217
16	24.15	1106	1112	1118	244398	480445	479729	45.97	10.509
17	24.93	1148	1152	1160	62388	138027	136077	13.04	2.981
18	25.28	1165	1170	1175	59030	126004	124612	11.94	2.730
19	25.44	1175	1178	1183	21219	50618	49233*	4.72	1.078
20	26.10	1209	1212	1220	25322	55777	54356*	5.21	1.191

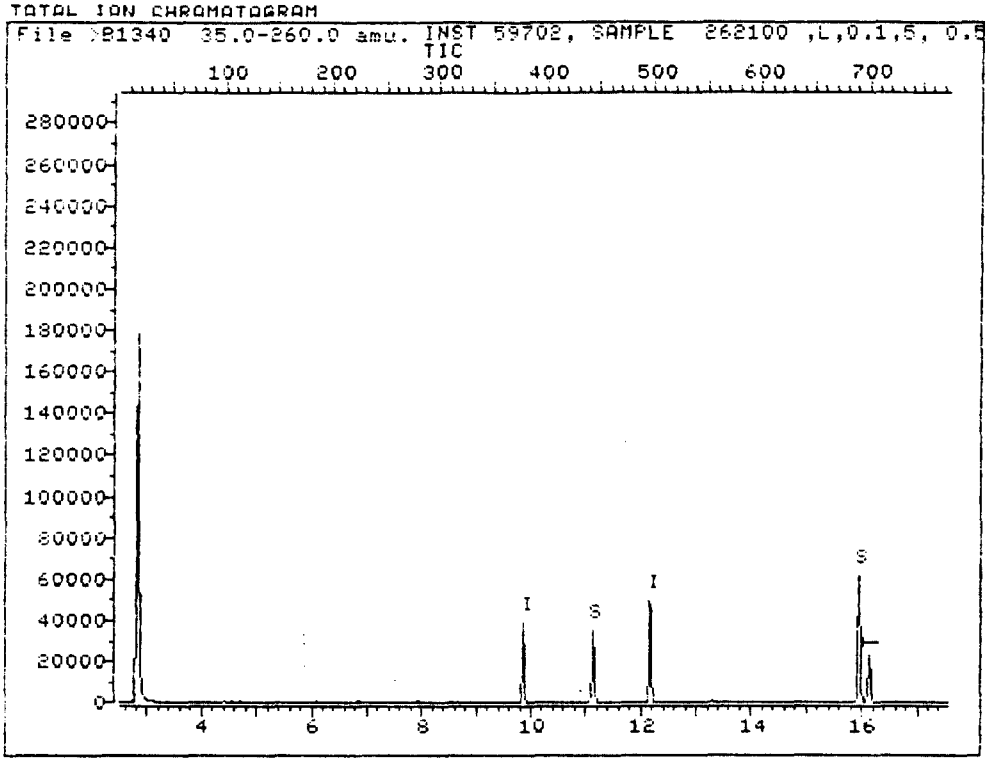
Sum of corrected areas: 4565028.

Summary of Unknowns PBM Library Search and Quantitation

Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	94824.	9.87	2.50 - 11.02
2	50.0	148659.	12.17	11.02 - 16.04
3	50.0	154211.	19.92	16.04 - 32.04

F 445

TOTAL ION CHROMATOGRAM



Data File: >B1340::B1 Quant Output File: ^B1340::QT
Name: INST 59702, SAMPLE Instrument ID: INST "B"
Misc: 262100 ,L,0.1,5, 0.53mm X 75M DB624

Id File: ID824B::X2
Title: GENERAL IDFILE FOR INSTRUMENT B
Last Calibration: 970415 20:09 Last Qcal Time: 970503 12:32

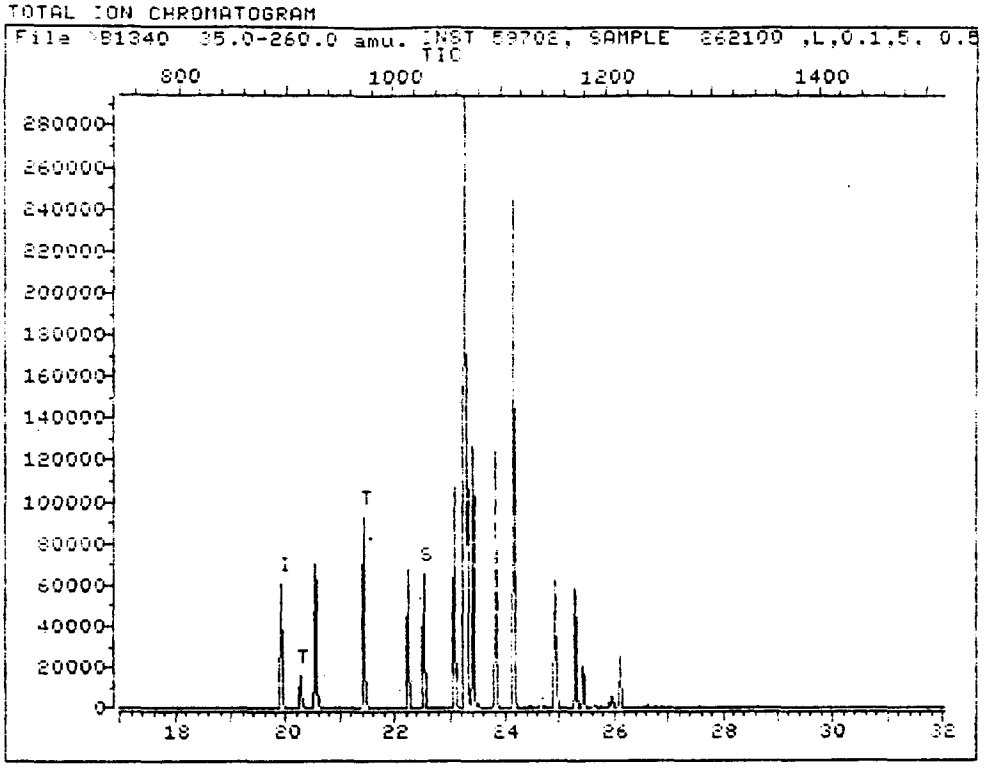
Operator ID: LB3274
Quant Time : 970503 21:05
Injected at: 970503 20:27

Page 1 of 2

850930711

F 446

TOTAL ION CHROMATOGRAM



Data File: >B1340::B1 Quant Output File: ^B1340::QT
Name: INST 59702, SAMPLE Instrument ID: INST "B"
Misc: 262100 ,L,0.1,5, 0.53mm X 75M DB624

Id File: ID824B::X2
Title: GENERAL IDFILE FOR INSTRUMENT B
Last Calibration: 970415 20:09 Last Qcal Time: 970503 12:32

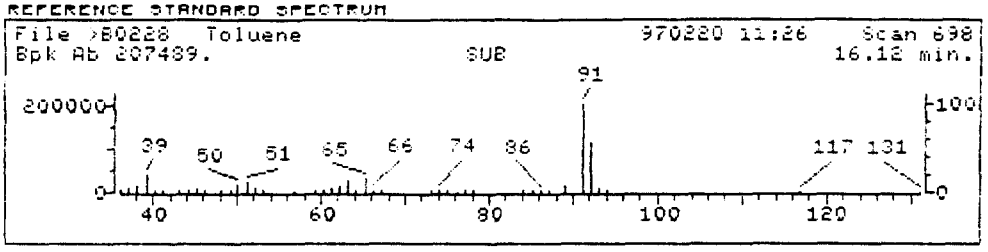
Operator ID: LB3274
Quant Time : 970503 21:05
Injected at: 970503 20:27

Page 2 of 2

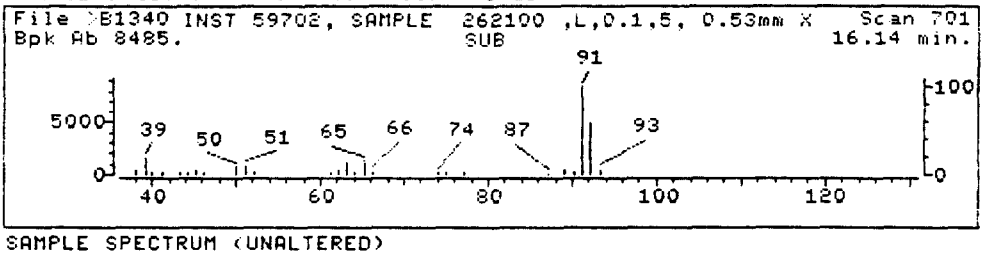
850930712

F 447

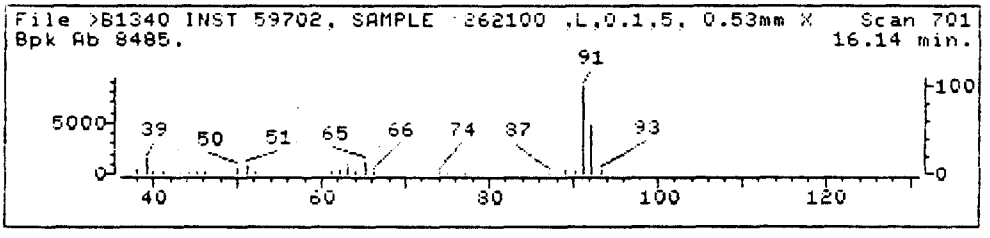
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



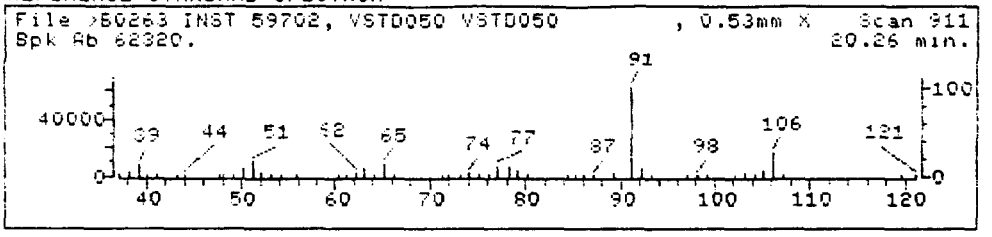
SAMPLE SPECTRUM (UNALTERED)



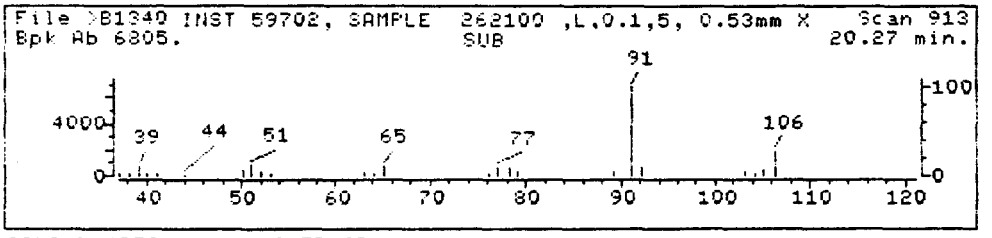
Data File: >B1340::B1 Quant Output File: ^B1340::QT
Name: INST 59702, SAMPLE Instrument ID: INST "B"
Misc: 262100 ,L,0.1,5, 0.53mm X 75M DB624
Quant Time: 970503 21:05 Quant ID File: ID824B::X2
Injected at: 970503 20:27 Last Calibration: 970415 20:09
Last Qcal Time: 970503 12:32

Compound No : 50
Compound Name : Toluene
Scan Number : 701
Retention Time: 16.14 min.
Quant Ion : 92.0
Area : 14582
Concentration : 16.85 UG/L
q-value : 93

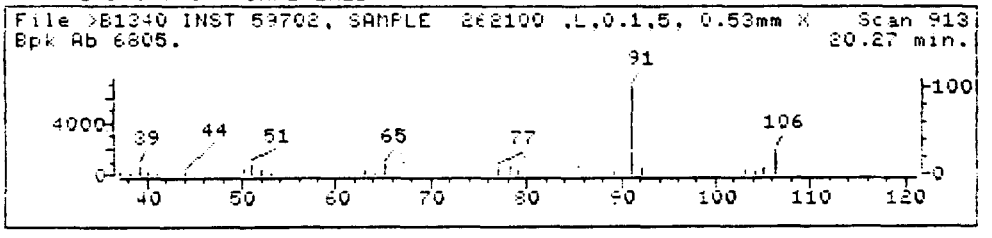
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



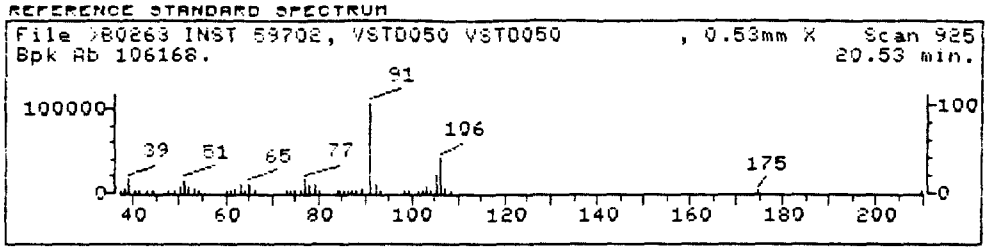
Data File: >B1340::B1 Quant Output File: ^B1340::QT
Name: INST 59702, SAMPLE Instrument ID: INST "B"
Misc: 262100 ,L,0.1,5, 0.53mm X 75M DB624
Quant Time: 970503 21:05 Quant ID File: ID824B::X2
Injected at: 970503 20:27 Last Calibration: 970415 20:09
Last Qcal Time: 970503 12:32

Compound No : 52
Compound Name : Ethylbenzene
Scan Number : 913
Retention Time: 20.27 min.
Quant Ion : 106.0
Area : 4150
Concentration : 8.94 UG/L
q-value : 98

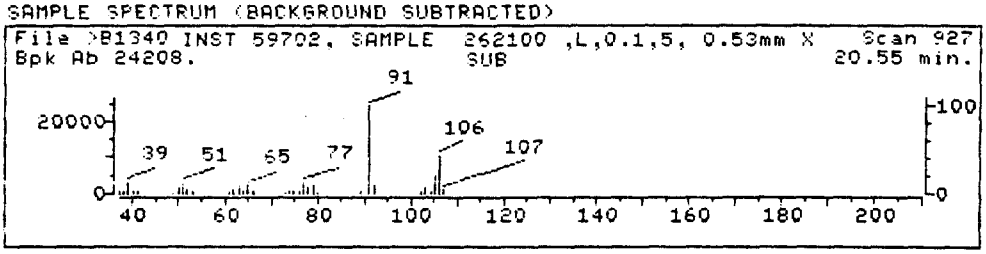
850930714

F449

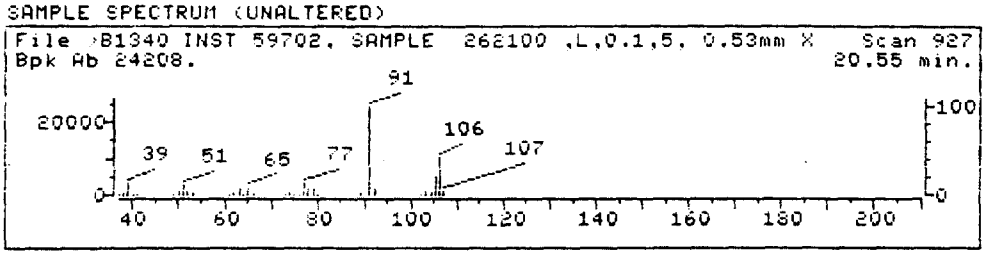
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



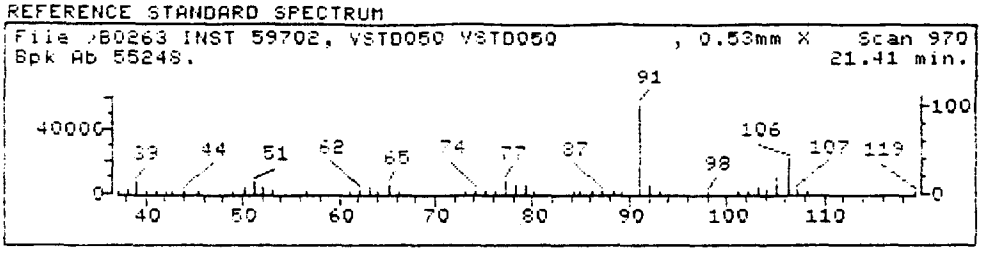
SAMPLE SPECTRUM (UNALTERED)



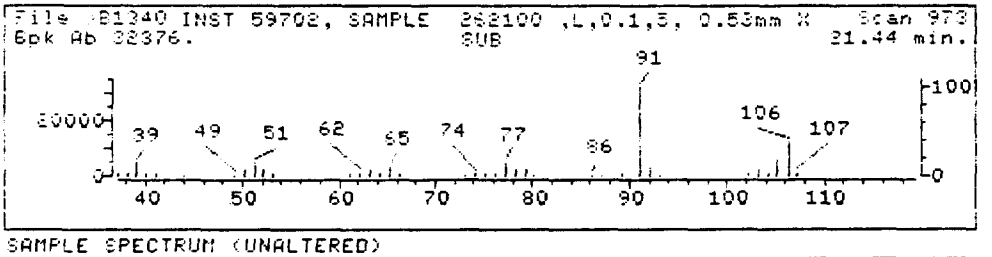
Data File: >B1340::B1 Quant Output File: ^B1340::QT
Name: INST 59702, SAMPLE Instrument ID: INST "B"
Misc: 262100 ,L,0.1,5, 0.53mm X 75M DB624
Quant Time: 970503 21:05 Quant ID File: ID8248::X2
Injected at: 970503 20:27 Last Calibration: 970415 20:09
Last Qcal Time: 970503 12:32

Compound No : 54
Compound Name : p&m Xylene
Scan Number : 927
Retention Time: 20.55 min.
Quant Ion : 106.0
Area : 25676
Concentration : 41.08 UG/L
q-value : 50

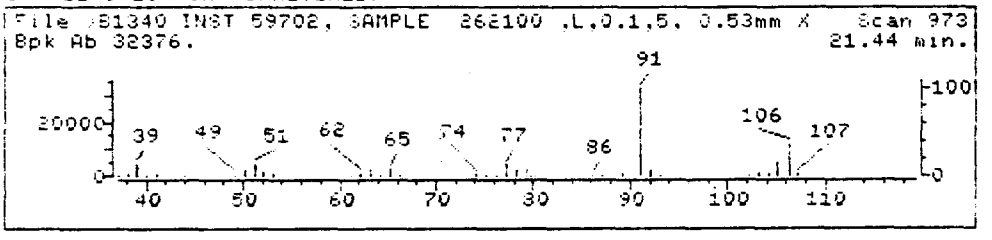
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



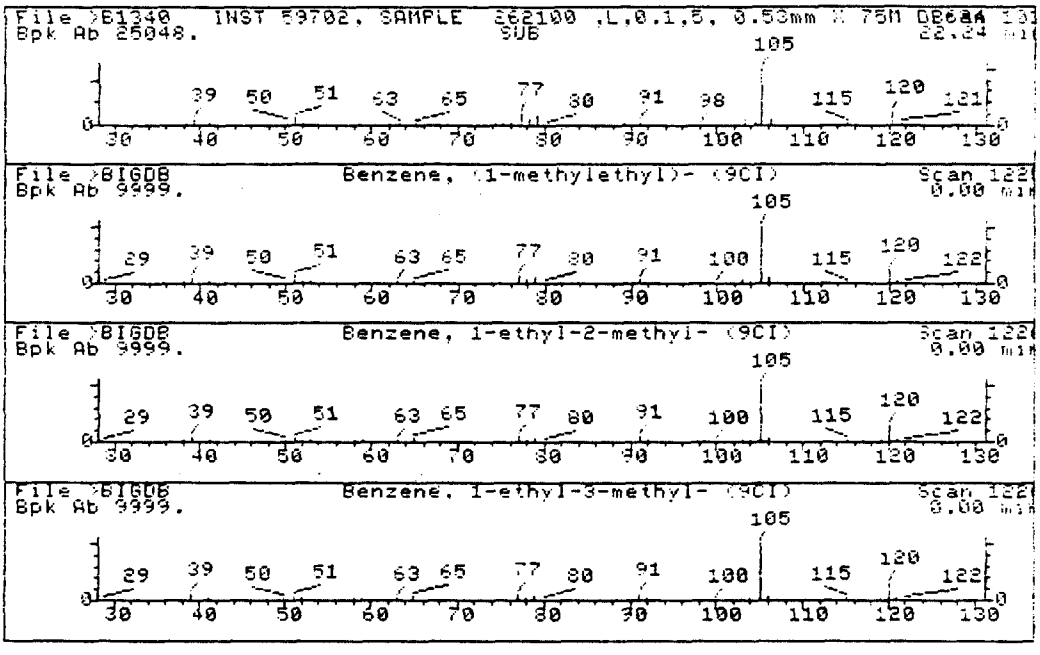
Data File: >B1340::B1
Name: INST 59702, SAMPLE
Misc: 262100 ,L,0.1,5, 0.53mm X 75M DB624
Quant Time: 970503 21:05
Injected at: 970503 20:27
Last Qcal Time: 970503 12:32

Quant Output File: ^B1340::QT
Instrument ID: INST "B"
Quant ID File: IDB24B::X2
Last Calibration: 970415 20:09

Compound No : 55
Compound Name : o-Xylene
Scan Number : 973
Retention Time: 21.44 min.
Quant Ion : 106.0
Area : 27302
Concentration : 43.78 UG/L
q-value : 87

850930716

F 451

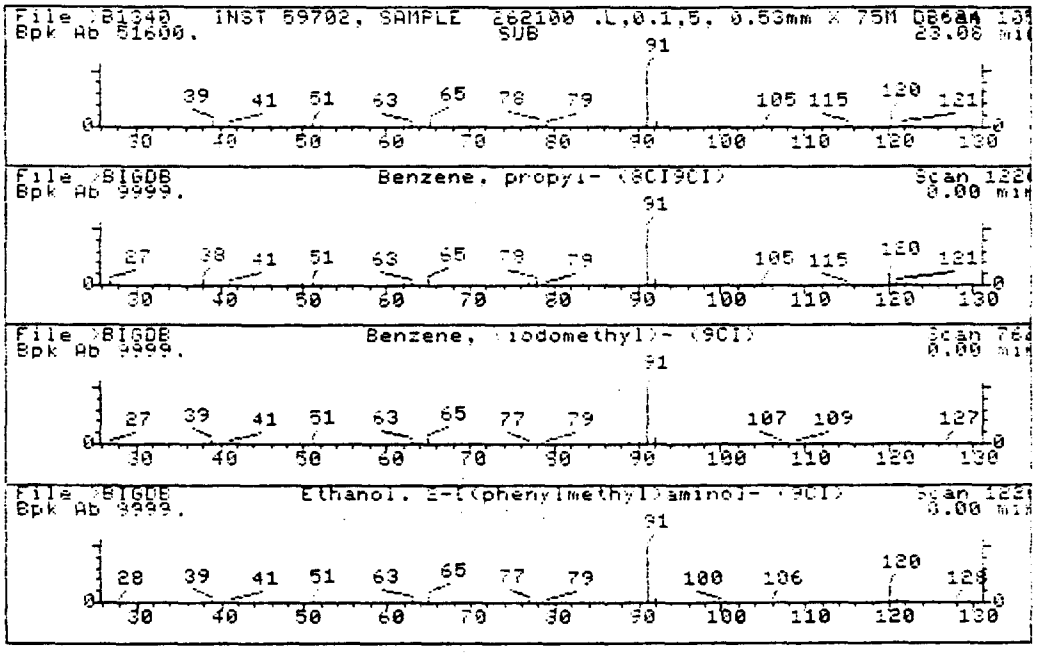


Instrument ID: INST " Analyzed on: 5/03/97 20:27
Result 10 in PBM results file: LB1340
Retention Time: 22.24 Area: 137628 Tentative Conc: 45.00
The unknown area is 89.25% of the nearest internal standard

1.	Benzene, (1-methylethyl)- (9CI)	120	C9H12
2.	Benzene, 1-ethyl-2-methyl- (9CI)	120	C9H12
3.	Benzene, 1-ethyl-3-methyl- (9CI)	120	C9H12
4.	Benzene, 1-ethyl-4-methyl- (9CI)	120	C9H12
5.	Benzene, 1,2,3-trimethyl- (8CI9CI)	120	C9H12

Sample file: >B1340 Spectrum #: 1014
Search speed: 1 Tilting option: N No. of ion ranges searched: 4

	Prob.	CAS #	CON #	ROOT	K	DK	#FLS	TILT	%	CON	C_I	R_
1.	94*	98828	12259	"BIGDB	74	13	1	0	92	3	72	
2.	70*	611143	12266	"BIGDB	35	50	2	0	81	9	42	
3.	70*	620144	12267	"BIGDB	35	52	2	0	76	9	42	
4.	60*	622968	12268	"BIGDB	35	50	2	0	83	11	30	



Instrument ID: INST " Analyzed on: 5/03/97 20:27
Result 12 in PBM results file: LB1340
Retention Time: 23.08 Area: 206603 Tentative Conc: 67.00
The unknown area is 133.97% of the nearest internal standard

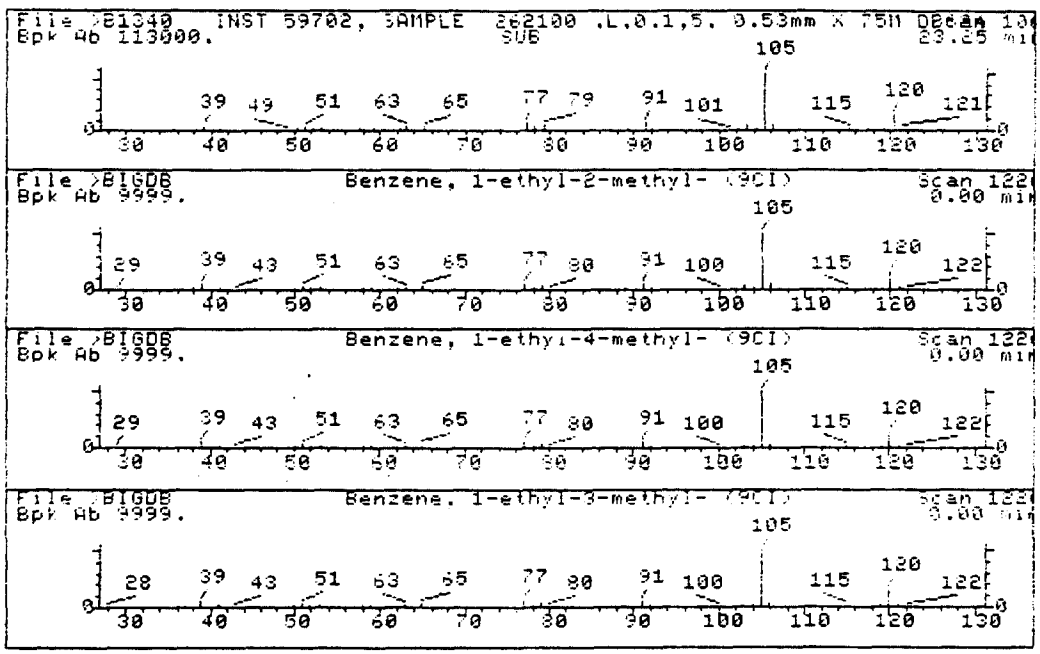
1.	Benzene, propyl- (8CI9CI)	120	C9H12
2.	Benzene, (iodomethyl)- (9CI)	218	C7H7I
3.	Ethanol, 2-[(phenylmethyl)amino]- (9CI)	151	C9H13NO
4.	Benzeneacetaldehyde (9CI)	120	C8H8O

Sample file: >B1340 Spectrum #: 1057
Search speed: 1 Tilting option: N No. of ion ranges searched: 40

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	89*	103651	12261	"BIGDB	62	23	1	0	75	1	66	67
2.	52	620053	7623	"BIGDB	38	46	2	0	100	19	20	13
3.	29	104632	12262	"BIGDB	42	37	1	0	65	39	10	15
4.	24*	122781	12263	"BIGDB	47	32	2	0	33	55	7	27

850930718

F 453

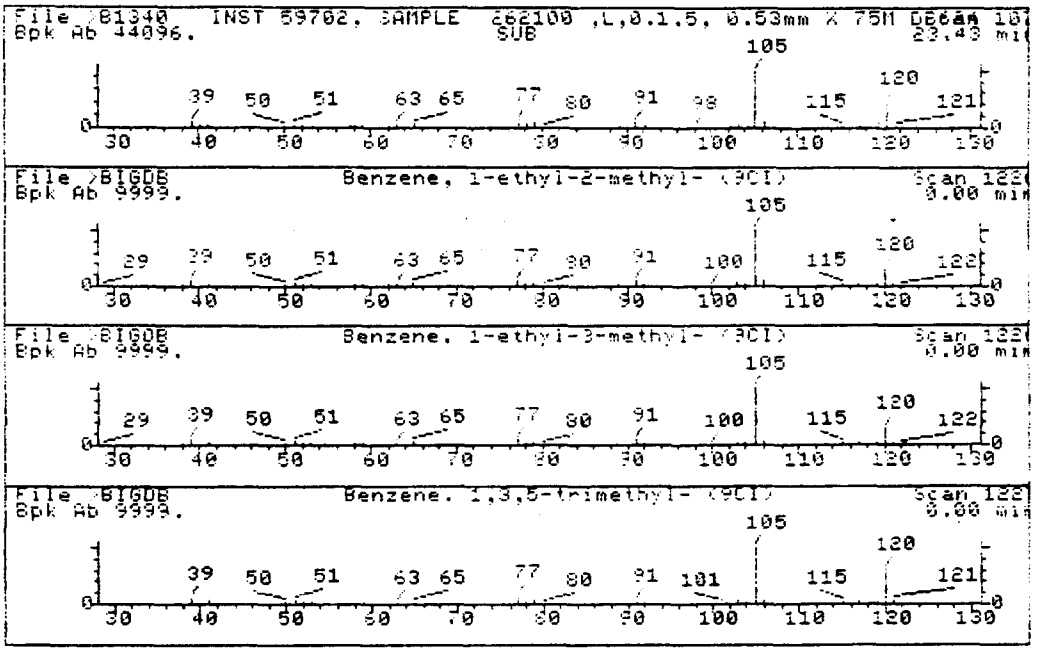


Instrument ID: INST " Analyzed on: 5/03/97 20:27
Result 13 in PBM results file: LB1340
Retention Time: 23.25 Area: 1043477 Tentative Conc: 340.00
The unknown area is 676.66% of the nearest internal standard

1.	Benzene, 1-ethyl-2-methyl- (9CI)	120	C9H12
2.	Benzene, 1-ethyl-4-methyl- (9CI)	120	C9H12
3.	Benzene, 1-ethyl-3-methyl- (9CI)	120	C9H12
4.	Benzene, (1-methylethyl)- (9CI)	120	C9H12
5.	Benzene, 1,2,3-trimethyl- (8CI9CI)	120	C9H12
6.	Benzene, 1,1'-(1-methyl-1,2-ethanediyl)bis- (9CI)	196	C15H16

Sample file: >B1340 Spectrum #: 1066
Search speed: 1 Tilting option: N No. of ion ranges searched:

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R
1.	97*	611143	12266	"BIGDB	85	0	0	0	94	1	72	
2.	97*	622968	12268	"BIGDB	84	1	0	0	96	1	72	
3.	96*	620144	12267	"BIGDB	81	6	1	0	88	1	72	
4.	93*	98828	12259	"BIGDB	74	13	1	0	86	8	68	



Instrument ID: INST " Analyzed on: 5/03/97 20:27
Result 14 in PBM results file: LB1340
Retention Time: 23.43 Area: 277268 Tentative Conc: 90.00
The unknown area is 179.80% of the nearest internal standard

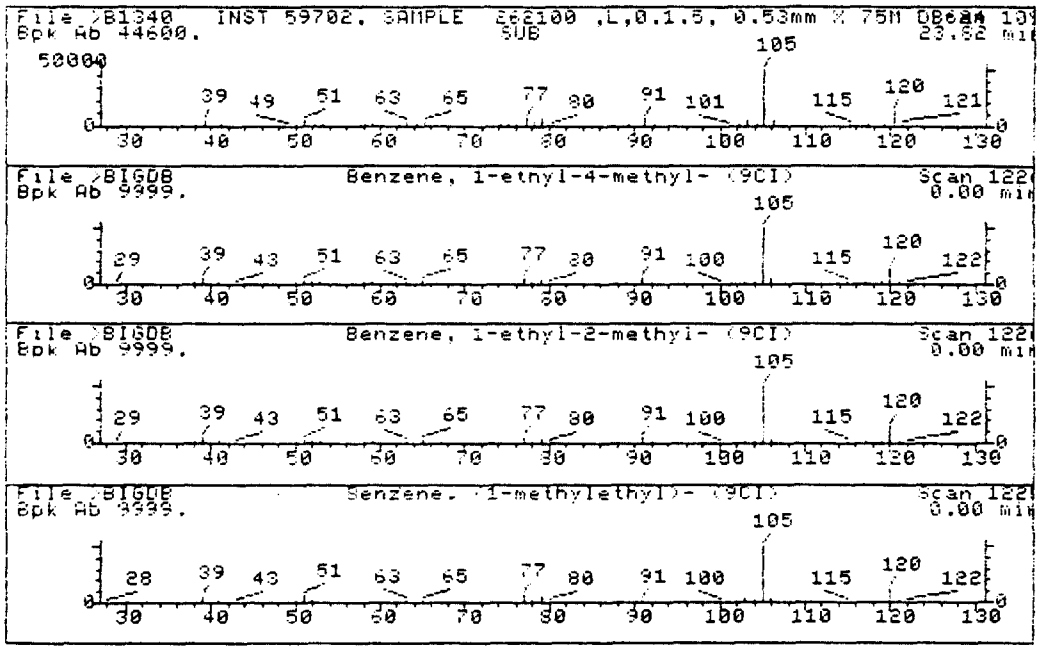
1.	Benzene, 1-ethyl-2-methyl- (9CI) isomer	120	C9H12
2.	Benzene, 1-ethyl-3-methyl- (9CI)	120	C9H12
3.	Benzene, 1,3,5-trimethyl- (9CI)	120	C9H12
4.	Benzene, 1,2,4-trimethyl- (8CI,9CI)	120	C9H12
5.	Benzene, 1-ethyl-4-methyl- (9CI)	120	C9H12
6.	1,3-Cyclopentadiene, 5-(1-methylpropylidene)- (9CI)	120	C9H12

Sample file: >B1340 Spectrum #: 1075
Search speed: 1 Tilting option: N No. of ion ranges searched: 42

	Prob.	CAS #	CON #	ROOT	K	OK	#FLG	TILT	%	CON	C_I	R_IV
1.	94*	611143	12266	"BIGDB	75	10	1	0	96	9	68	93
2.	94*	620144	12267	"BIGDB	75	12	1	0	97	7	68	93
3.	89*	108678	12275	"BIGDB	71	17	2	0	66	4	66	63
4.	88*	95636	12273	"BIGDB	70	25	0	0	52	30	43	89

850930720

F 455

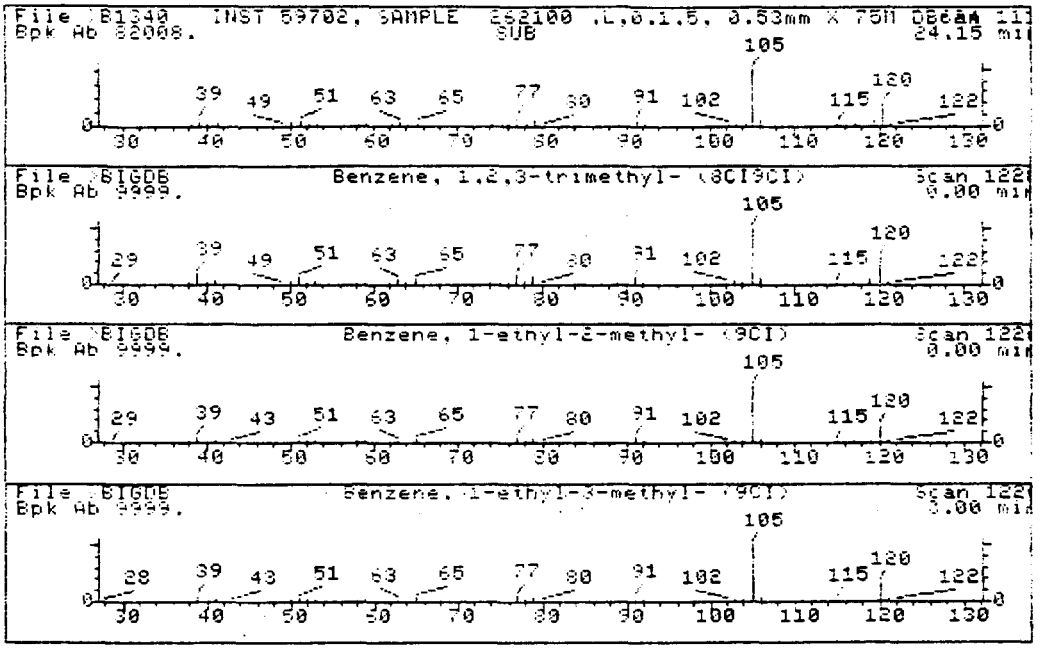


Instrument ID: INST " Analyzed on: 5/03/97 20:27
Result 15 in PBM results file: LB1340
Retention Time: 23.82 Area: 238137 Tentative Conc: 77.00
The unknown area is 154.42% of the nearest internal standard

1.	Benzene, 1-ethyl-4-methyl- (9CI)	120	C9H12
2.	Benzene, 1-ethyl-2-methyl- (9CI)	120	C9H12
3.	Benzene, (1-methylethyl)- (9CI)	120	C9H12
4.	Benzene, 1-ethyl-3-methyl- (9CI)	120	C9H12
5.	Benzene, 1,2,3-trimethyl- (8CI9CI)	120	C9H12
6.	Benzene, 1,1'-(1-methyl-1,2-ethanediyl)bis- (9CI)	196	C15H16

Sample file: >B1340 Spectrum #: 1095
Search speed: 1 Tilting option: N No. of ion ranges searched:

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_
1.	93*	622968	12268	"BIGDB	73	12	1	0	93	7	68	
2.	93*	611143	12266	"BIGDB	73	12	1	0	90	7	68	
3.	89*	98828	12259	"BIGDB	70	17	1	0	98	8	62	
4.	81*	620144	12267	"BIGDB	62	25	2	0	85	10	53	



Instrument ID: INST " Analyzed on: 5/03/97 20:27
Result 16 in PBM results file: LB1340
Retention Time: 24.15 Area: 479729 Tentative Conc: 160.00
The unknown area is 311.09% of the nearest internal standard

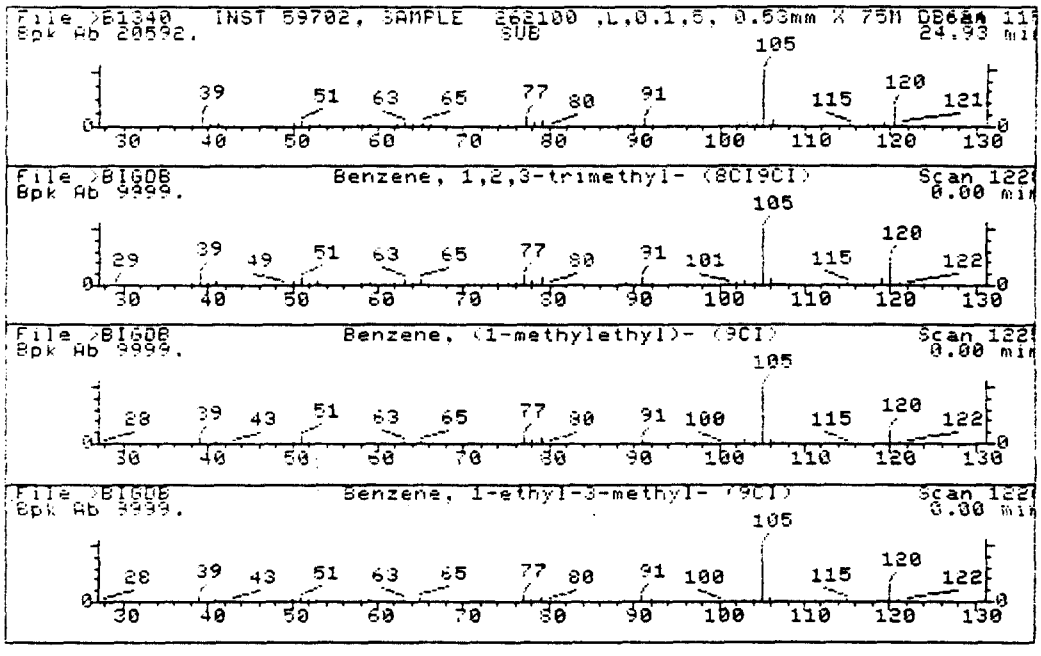
1.	Benzene, 1,2,3-trimethyl- (8CI9CI)	120 C9H12
2.	Benzene, 1-ethyl-2-methyl- (9CI)	120 C9H12
3.	Benzene, 1-ethyl-3-methyl- (9CI)	120 C9H12
4.	Benzene, 1,2,4-trimethyl- (8CI9CI)	120 C9H12
5.	Benzene, (1-methylethyl)- (9CI)	120 C9H12
6.	Benzene, 1-ethyl-4-methyl- (9CI)	120 C9H12

Sample file: >B1340 Spectrum #: 1112
Search speed: 1 Tilting option: N No. of ion ranges searched: 41

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	91*	526738	12280	"BIGDB	80	20	0	0	57	34	50	94
2.	87*	611143	12266	"BIGDB	68	17	1	0	94	12	55	80
3.	86*	620144	12267	"BIGDB	68	19	1	0	94	10	59	76
4.	85*	95636	12273	"BIGDB	70	25	0	0	50	38	37	89

850930722

F457

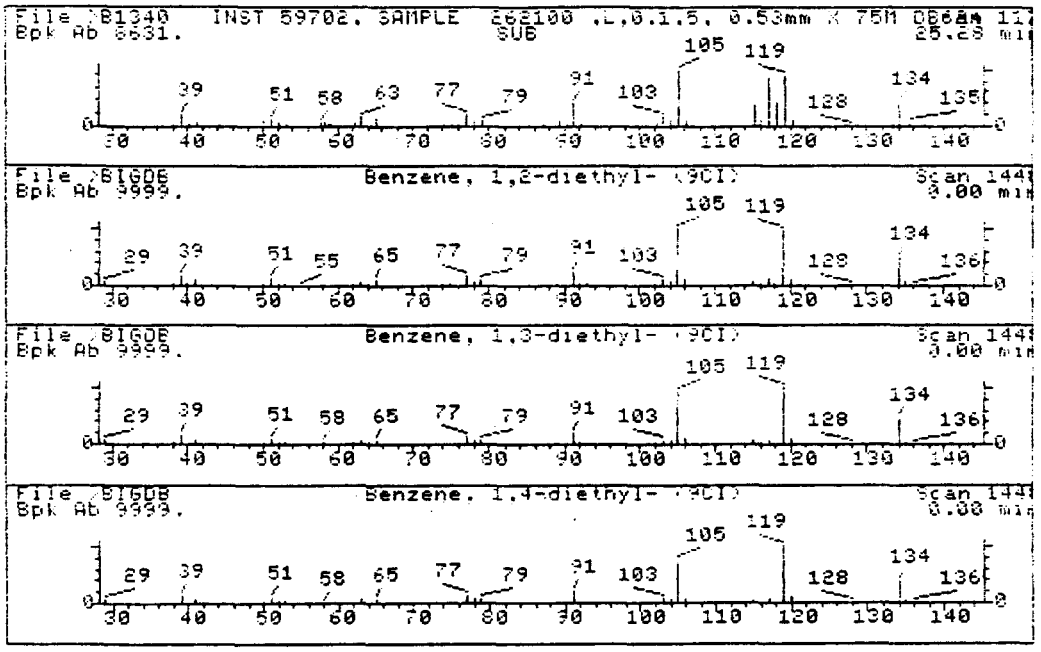


Instrument ID: INST " Analyzed on: 5/03/97 20:27
Result 17 in PBM results file: LB1340
Retention Time: 24.93 Area: 136077 Tentative Conc: 44.00
The unknown area is 98.24% of the nearest internal standard

1.	Benzene, 1,2,3-trimethyl- (8CI9CI) isomer	120 C9H12
2.	Benzene, (1-methylethyl)- (9CI)	120 C9H12
3.	Benzene, 1-ethyl-3-methyl- (9CI)	120 C9H12
4.	Benzene, 1-ethyl-2-methyl- (9CI)	120 C9H12
5.	Benzene, 1-ethyl-4-methyl- (9CI)	120 C9H12
6.	Benzene, 1,2,4-trimethyl- (8CI9CI)	120 C9H12

Sample file: >B1340 Spectrum #: 1152
Search speed: 1 Tilting option: N No. of ion ranges searched: 4

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_
1.	96*	526738	12280	"BIGDB	90	10	0	0	72	3	72	
2.	95*	98828	12259	"BIGDB	71	16	0	0	90	7	68	
3.	94*	620144	12267	"BIGDB	74	13	1	0	95	5	72	
4.	89*	611143	12266	"BIGDB	68	17	1	0	95	7	62	



Instrument ID: INST " Analyzed on: 5/03/97 20:27
Result 18 in PBM results file: LB1340
Retention Time: 25.28 Area: 124612 Tentative Conc: 40.00 uH
The unknown area is 80.81% of the nearest internal standard

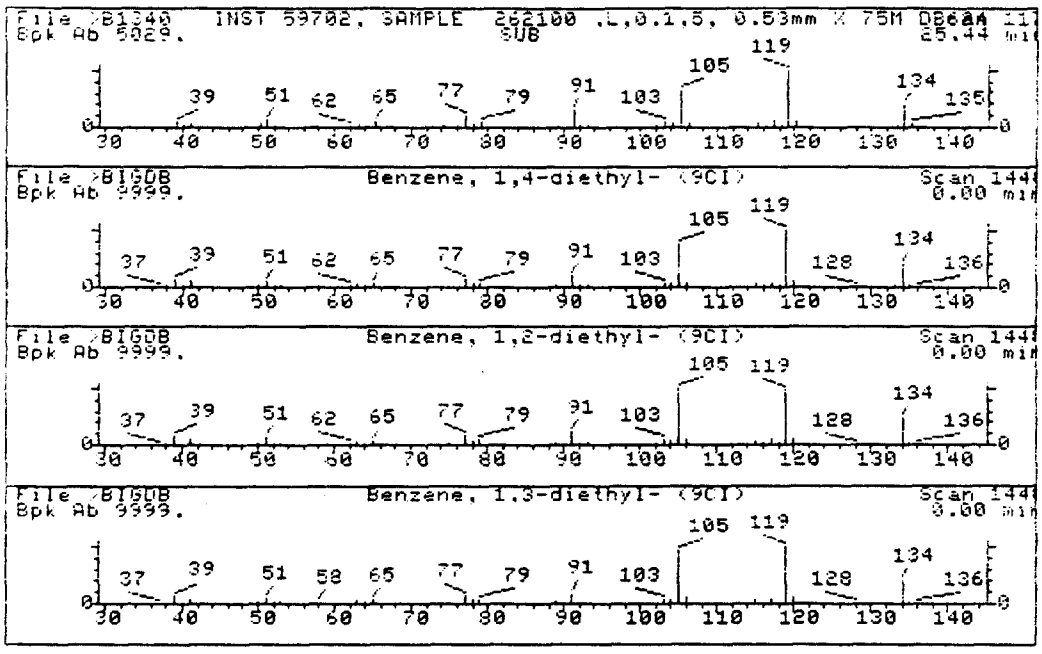
1.	Benzene, 1,2-diethyl- (9CI)	134 C10H14
2.	Benzene, 1,3-diethyl- (9CI)	134 C10H14
3.	Benzene, 1,4-diethyl- (9CI)	134 C10H14
4.	Benzene, cyclopropyl- (8CI9CI)	118 C9H10
5.	Benzene, 2-propenyl- (9CI)	118 C9H10
6.	Benzeneethanol, .beta.-ethenyl- (9CI)	148 C10H12O

Sample file: >B1340 Spectrum #: 1170
Search speed: 1 Tilting option: N No. of ion ranges searched: 42

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	82*	135013	14481	"BIGDB	73	33	0	0	89	49	40	92
2.	64*	141935	14482	"BIGDB	70	32	0	0	87	52	25	89
3.	44*	105055	14480	"BIGDB	55	45	0	0	87	54	11	66
4.	40*	873494	11986	"BIGDB	56	54	1	0	59	46	12	44

850930724

F459



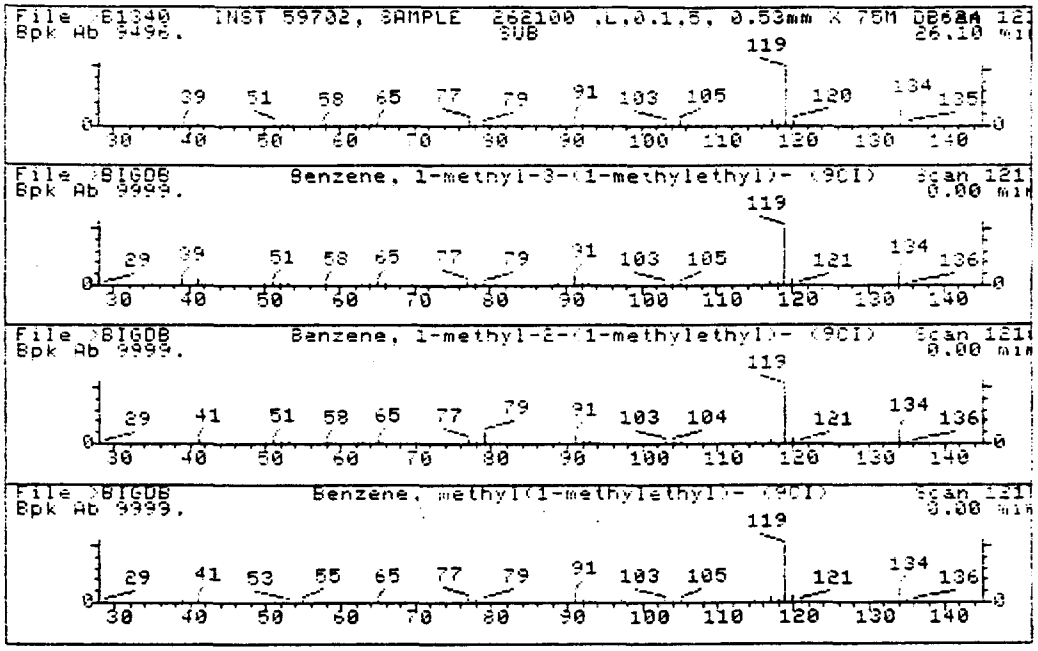
Instrument ID: INST " Analyzed on: 5/03/97 20:27
Result 19 in PBM results file: LB1340
Retention Time: 25.44 Area: 49233 Tentative Conc: 16.00
The unknown area is 31.93% of the nearest internal standard

1.	Benzene, 1,4-diethyl- (9CI)	134	C10H14
2.	Benzene, 1,2-diethyl- (9CI)	134	C10H14
3.	Benzene, 1,3-diethyl- (9CI)	134	C10H14
4.	Benzene, 2-ethyl-1,4-dimethyl- (9CI)	134	C10H14
5.	Benzene, 4-ethyl-1,2-dimethyl- (9CI)	134	C10H14
6.	Benzene, 1-methyl-4-(1-methylethyl)- (9CI)	134	C10H14

Sample file: >B1340 Spectrum #: 1178
Search speed: 1 Tilting option: N No. of ion ranges searched: 4

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_
1.	92*	105055	14480	"BIGDB	74	26	0	0	85	11	64	
2.	88*	135013	14481	"BIGDB	71	35	0	0	63	28	43	
3.	87*	141935	14482	"BIGDB	69	33	0	0	69	14	55	
4.	76*	1758889	12181	"BIGDB	46	48	1	0	100	9	45	

F 460



Instrument ID: INST " Analyzed on: 5/03/97 20:27
Result 20 in PBM results file: LB1340
Retention Time: 26.10 Area: 54356 Tentative Conc: 18.00
The unknown area is 35.25% of the nearest internal standard

1.	Benzene, 1-methyl-3-(1-methylethyl)- (9CI)	134 C10H14
2.	Benzene, 1-methyl-2-(1-methylethyl)- (9CI)	134 C10H14
3.	Benzene, methyl(1-methylethyl)- (9CI)	134 C10H14
4.	Benzene, 4-ethyl-1,2-dimethyl- (9CI)	134 C10H14
5.	Benzene, 2-ethyl-1,3-dimethyl- (9CI)	134 C10H14
6.	Benzene, 1-ethyl-2,4-dimethyl- (9CI)	134 C10H14

Sample file: >B1340 Spectrum #: 1212
Search speed: 1 Tilting option: N No. of ion ranges searched: 42

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	97*	535773	12170	"BIGDB	84	5	0	0	94	1	72	97
2.	96*	527844	12169	"BIGDB	84	8	1	0	100	1	72	96
3.	95*	25155151	12177	"BIGDB	78	12	0	0	91	3	72	95
4.	94*	934805	12173	"BIGDB	79	14	1	0	88	3	72	92

850930726

F461

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330, FAX: 201-584-0515
MAY 7, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

TARGET COMPOUND LIST - VOLATILE ANALYSIS BY GC/MS
PLUS 10 PEAKS

Lab Number: 262101
Client: VECTRE CORPORATION
Sample source: NBB-V11
Sample ID: SB-2 (10'-10.5')
Sample date: 04/29/97
Sampled by: Customer
At lab date: 04/29/97
Matrix: Soil

Analysis Date: 05/06/97
Init Sample Wght= 5g

Data File: >A3760
Column: DB-624
Dilution Factor: 1
Percent Moisture: 15.38%
Final volume= 5ml

Initial sample weight DWB= 4.231g

Conc. in Sample = (Conc. on Quant Report/Initial Sample Weight DWB)*Final Volume

Parameter	Result ug/kg	Method Blank ug/kg	Practical Quantitation Limit ug/kg	Minimum Detecti Limit ug/kg
Chloromethane	U	U	5.9	5.4
Bromomethane	U	U	5.9	4.5
Vinyl chloride	U	U	5.9	2
Chloroethane	U	U	5.9	2.1
Methylene chloride	5.6J #	U	5.9	3.2
Acetone	U	U	24	5.3
Carbon disulfide	U	U	5.9	2
1,1-Dichloroethene	U	U	5.9	2
1,1-Dichloroethane	U	U	5.9	1.7
trans-1,2-Dichloroethene	U	U	5.9	2
cis-1,2-Dichloroethene	U	U	5.9	2
Chloroform	U	U	5.9	1.9
1,2-Dichloroethane	U	U	5.9	2.2
2-Butanone	U	U	24	2.8
1,1,1-Trichloroethane	U	U	5.9	0.59
Carbon tetrachloride	U	U	5.9	0.71
Bromodichloromethane	U	U	5.9	0.71
1,2-Dichloropropane	U	U	5.9	0.71
cis-1,3-Dichloropropene	U	U	5.9	0.59
Trichloroethene	U	U	5.9	0.71
Dibromochloromethane	U	U	5.9	0.71
1,1,2-Trichloroethane	U	U	5.9	0.59
Benzene	U	U	5.9	0.59
trans-1,3-Dichloropropene	U	U	5.9	0.71
Bromoform	U	U	5.9	0.95
4-Methyl-2-pentanone	U	U	24	1.3
2-Hexanone	U	U	24	1.4
Tetrachloroethene	U	U	5.9	0.83
1,1,2,2-Tetrachloroethane	U	U	5.9	0.59
Toluene	U	U	5.9	0.95
Chlorobenzene	U	U	5.9	0.71
Ethylbenzene	U	U	5.9	0.83
Styrene	U	U	5.9	1.2
p&m-Xylene	U	U	5.9	1.1
o-Xylene	U	U	5.9	1.1
total Xylenes	U	U	5.9	1.1

ug/kg = micrograms/kilogram or ppb
Results are in ug/kg (ppb); they are reported on a dry weight basis.
ND: Not Determined.
IND: Indeterminable.
U: Indicates a compound was analyzed for but not detected at the PQL.
J: Indicates an estimated value. It is utilized when a reported value meets the identification criteria but the result is less than the specified detection limit but greater than zero.
B: Indicates that the analyte was found in the blank as well as the sample. It indicates possible/probable blank contamination.

Methylene chloride: This compound is not flagged with a B since it was not found in corresponding blank. However, this compound is commonly found as a laboratory contaminant.

MS 7/1/97

850930727

F46

INDUSTRIAL CORROSION MANAGEMENT, Inc.
1152 Route 10
Randolph, NJ 07869
201-584-0330
MAY 7, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

LIBRARY SEARCH RESULTS OF NONTARGETED PEAKS WITH
ESTIMATED CONCENTRATION OF TENTATIVELY IDENTIFIED COMPOUNDS.

Data file name: >A3760
Lab number: 262101
Fraction: VOLATILE

Initial Sample Wt/Vol=5 Final Volume=5
Moisture=15.38% Initial sample weight DWB=4.231

CAS No.	Retention Time	Compound Name	Molecular Weight	Estimated Concentration ug/kg
None found				

Estimated total non-target compound concentration (excluding compounds flagged with A, B or **) in ug/kg is: 0

A: Indicates that the compound is an acetone based aldol-type condensation product formed by concentrating the extraction solvent (1:1 acetone/methylene chloride).
B: Indicates that the analyte was found in the blank as well as the sample. It further indicates possible/probable blank contamination.
C: Co-eluting and/or poorly resolved non-target compounds cause superimposed spectra that prevent identification of individual compounds.
* Compounds flagged are from diluted analysis.
** This compound is not flagged B; it was not found in the corresponding blank. However, it is commonly found as a laboratory contaminant.

Copyright ICM, Inc., 1997.
All rights reserved.
EIL

QUANT REPORT Page 1

Operator ID: RS9734 Quant Rev: 7 Quant Time: 970506 12:25
Output File: A3760::QT Injected at: 970506 11:50
Data File: A3760::A1 Dilution Factor: 1.00000
Name: INST 09701, SAMPLE Instrument ID: INST "A"
Misc: 262101 .5,5,5 , 0.53mm X .5M DB624

ID File: ID8248::X2
Title: GENERAL IDFILE FOR INSTRUMENT A
Last Calibration: 970429 23:03 Last Qcal Time: 970506 09:28

	Compound	R.T.	Q ion	Area	Conc	Units
11	*Bromochloromethane	6.98	128.0	50091	50.00	UG/L
21	Methylene Chloride FNT	4.77	84.0	6744	4.71	UG/L
221	1,2-Dichloroethane-d4	8.02	65.0	102241	50.23	UG/L
27	*1,4-Difluorobenzene	8.96	114.0	266039	50.00	UG/L
441	*Chlorobenzene-d5	17.27	117.0	200385	50.00	UG/L
491	Toluene-d8	12.65	98.0	238264	50.51	UG/L
961	Bromofluorobenzene	21.84	95.0	169825	50.47	UG/L

* Compound is ISTD DLS/1/97

850930729

F46

:RU,INT,.1:.01

A3760 INST 59701. SAMPLE 262101 .S,5,5 . 0.53mm X 75M DB624
35.01 260.0 TIC
Upslope: .1000 Area Reject: 5.00 % Max Peaks: 7 Bunch: 1 Valley >100 %
Dnslope: -.0100 Results File VDIR80 Sorted by Time/Area INT

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	2.50 CUL	7	21	40	154042	1027637	1017842	100.00	22.568
2	6.98 I	243	250	264	68210	365977	360281	35.40	7.988
3	8.02 S	297	303	313	46937	270385	265013	26.04	5.876
4	8.96 I	344	351	368	113972	692120	681155	66.92	15.103
5	12.65 S	531	540	560	107815	759113	748112	73.50	16.587
6	17.27 I	768	776	792	92140	689867	681490	66.95	15.110
7	21.84 S	1001	1010	1032	97748	765768	756227	74.30	16.767

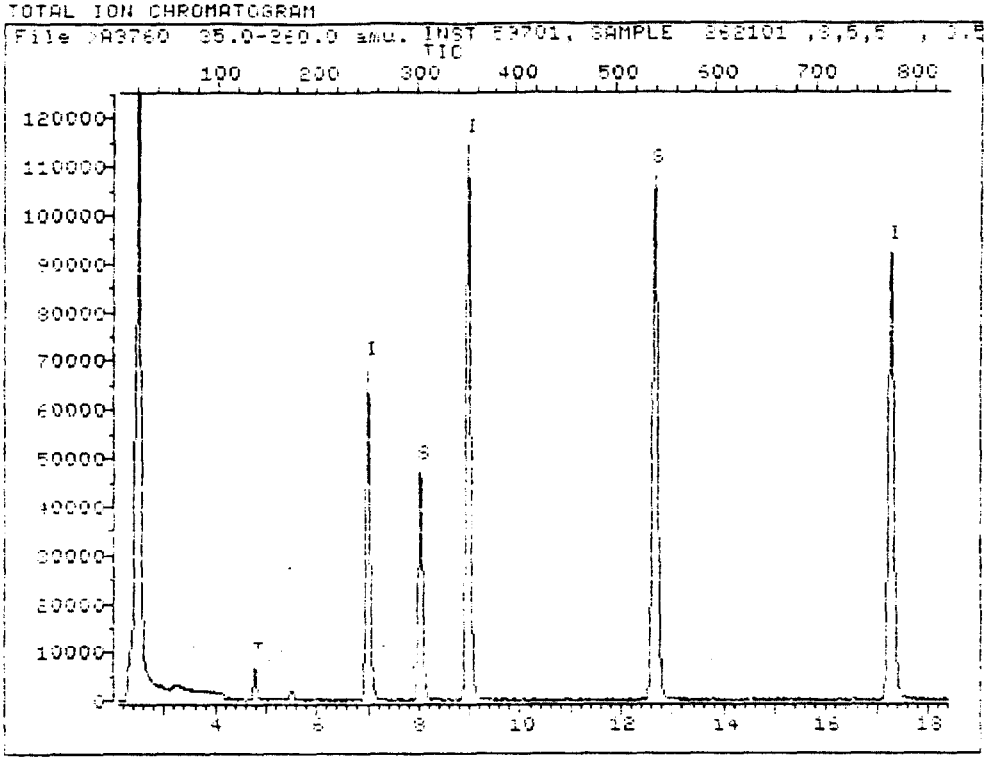
Sum of corrected areas: 4510120.

:RU,AL,,1

850930730

F 465

TOTAL ION CHROMATOGRAM



Data File: ^A3760::A1 Quant Output File: ^A3760::QT
Name: INST 59701, SAMPLE Instrument ID: INST "A"
Misc: 262101 ,5,5,5 , 0.53mm X 75M DB624

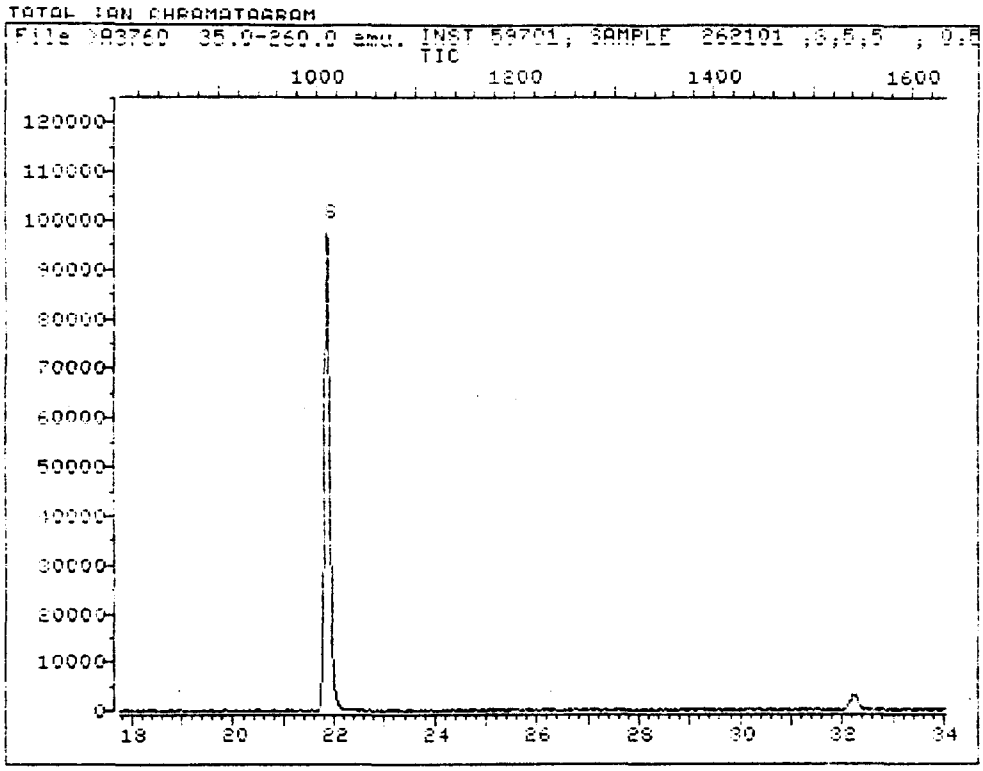
Id File: ID824A::X2
Title: GENERAL IDFILE FOR INSTRUMENT A
Last Calibration: 970429 23:03 Last Qcal Time: 970506 09:28

Operator ID: KS9934
Quant Time : 970506 12:25
Injected at: 970506 11:50

Page 1 of 2

850930731

F466



Data File: >A3760::A1 Quant Output File: ^A3760::QT
Name: INST 59701, SAMPLE Instrument ID: INST "A"
Misc: 262101 ,S,5,5 , 0.53mm X 75M DB624

Id File: ID824A::X2
Title: GENERAL IDFILE FOR INSTRUMENT A
Last Calibration: 970429 23:03 Last Qcal Time: 970506 09:28

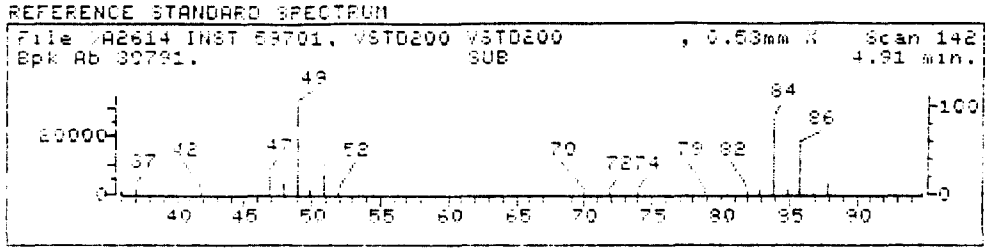
Operator ID: KS9934
Quant Time : 970506 12:25
Injected at: 970506 11:50

Page 2 of 2

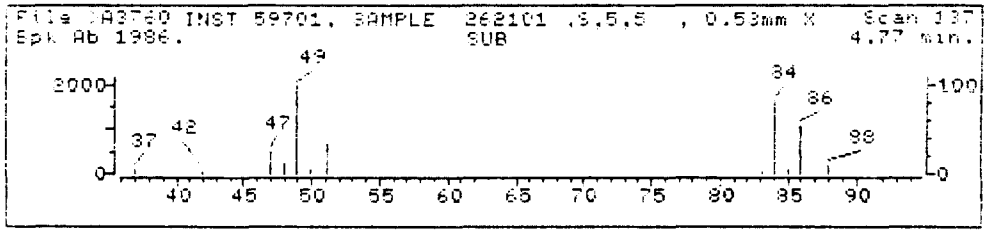
850930732

F 467

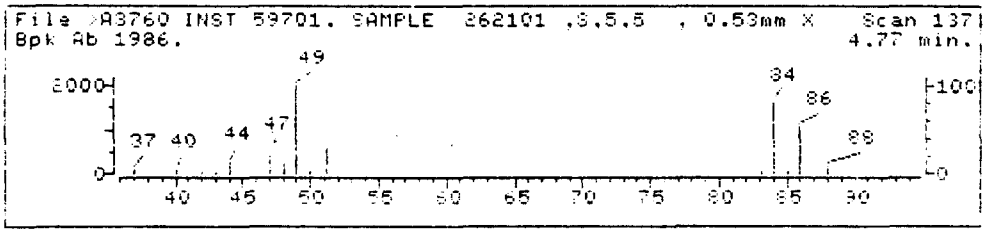
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >A3760::A1 Quant Output File: ^A3760::QT
Name: INST 59701, SAMPLE Instrument ID: INST "A"
Misc: 262101 ,S,5,5 , 0.53mm X 75M DB624
Quant Time: 970506 12:25 Quant ID File: ID824A::X2
Injected at: 970506 11:50 Last Calibration: 970429 23:03
Last Qcal Time: 970506 09:28

Compound No : 9
Compound Name : Methylene Chloride
Scan Number : 137
Retention Time: 4.77 min.
Quant Ion : 84.0
Area : 6744
Concentration : 4.71 UG/L
q-value : 87

850930733

F 468

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330, FAX: 201-584-0515
Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab
MAY 7, 1997

TARGET COMPOUND LIST - VOLATILE ANALYSIS BY GC/MS
PLUS 10 PEAKS

Lab Number: 262102 Data File: >B1324
Client: VECTRE CORPORATION
Sample source: NBB-V11
Sample ID: HP-2
Sample date: 04/29/97
Sampled by: Customer Analysis Date: 05/03/97 Column: DB-624
At lab date: 04/29/97 Dilution Factor: 1
Matrix: Water Init Sample volume= 5ml Final volume= 5ml

Conc. in Sample = (Conc. on Quant Report/Initial Volume)*Final Volume

Parameter	Result ug/l	Method Blank ug/l	Practical Quantitation Limit ug/l	Minimum Detection Limit ug/l
Chloromethane	U	U	5	4.6
Bromomethane	U	U	5	3.8
Vinyl chloride	U	U	5	1.7
Chloroethane	U	U	5	1.8
Methylene chloride	U	U	5	2.7
Acetone	12J	U	20	4.5
Carbon disulfide	U	U	5	1.7
1,1-Dichloroethene	U	U	5	1.7
1,1-Dichloroethane	U	U	5	1.4
trans-1,2-Dichloroethene	U	U	5	1.7
cis-1,2-Dichloroethene	U	U	5	1.7
Chloroform	U	U	5	1.6
1,2-Dichloroethane	U	U	5	1.9
2-Butanone	U	U	20	2.4
1,1,1-Trichloroethane	U	U	5	0.5
Carbon tetrachloride	U	U	5	0.6
Bromodichloromethane	U	U	5	0.6
1,2-Dichloropropane	U	U	5	0.6
cis-1,3-Dichloropropene	U	U	5	0.5
Trichloroethene	U	U	5	0.6
Dibromochloromethane	U	U	5	0.6
1,1,2-Trichloroethane	U	U	5	0.5
Benzene	U	U	5	0.5
trans-1,3-Dichloropropene	U	U	5	0.6
Bromoform	U	U	5	0.8
4-Methyl-2-pentanone	U	U	20	1.1
2-Hexanone	U	U	20	1.2
Tetrachloroethene	U	U	5	0.7
1,1,2,2-Tetrachloroethane	U	U	5	0.5
Toluene	U	U	5	0.8
Chlorobenzene	U	U	5	0.6
Ethylbenzene	U	U	5	0.7
Styrene	U	U	5	1
p&m-Xylene	4.7J	U	5	0.9
o-Xylene	U	U	5	0.9
total Xylenes	4.7J	U	5	0.9

ug/l = micrograms/liter or ppb
ND: Not Determined.
IND: Indeterminable.
U: Indicates a compound was analyzed for but not detected at the PQL.
J: Indicates an estimated value. It is utilized when a reported value meets the identification criteria but the result is less than the specified detection limit but greater than zero.
B: Indicates that the analyte was found in the blank as well as the sample. It indicates possible/probable blank contamination.

µg 5/7/97

INDUSTRIAL CORROSION MANAGEMENT, INC.
Richard Levine, President
Copyright ICM, Inc., 1997.
All rights reserved.
ERI

850930734

F 469

INDUSTRIAL CORROSION MANAGEMENT, Inc.
1152 Route 10
Randolph, NJ 07869
201-584-0330
MAY 7, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

LIBRARY SEARCH RESULTS OF NONTARGETED PEAKS WITH
ESTIMATED CONCENTRATION OF TENTATIVELY IDENTIFIED COMPOUNDS.

Data file name: >B1324
Lab number: 262102
Fraction: VOLATILE

Initial Sample Wt/Vol=5 Final Volume=5

CAS No.	Retention Time	Compound Name	Molecular Weight	Estimated Concentration ug/l
611143	23.25	Ethylmethylbenzene	120	11
	24.13	Ethylmethylbenzene isomer	120	9
	25.27	Unknown		6
91203	28.65	Naphthalene	128	180
91576	30.87	Methylnaphthalene	142	10
	31.32	Methylnaphthalene isomer	142	5

Estimated total non-target compound concentration (excluding compounds flagged with A, B or **) in ug/l is: 221

A: Indicates that the compound is an acetone based aldol-type condensation product formed by concentrating the extraction solvent (1:1 acetone/methylene chloride).
B: Indicates that the analyte was found in the blank as well as the sample. It further indicates possible/probable blank contamination.
C: Co-eluting and/or poorly resolved non-target compounds cause superimposed spectra that prevent identification of individual compounds.
* Compounds flagged are from diluted analysis.
** This compound is not flagged B; it was not found in the corresponding blank. However, it is commonly found as a laboratory contaminant.

Copyright ICM, Inc., 1997.
All rights reserved.
SUS

850930735
F 470

QUANT REPORT Page 1

Operator ID: KS9934 Quant Rev: 7 Quant Time: 970503 03:49
Output File: ^B1324::E1 Injected at: 970503 03:15
Data File: >B1324::B1 Dilution Factor: 1.00000
Name: INST. 59702,SAMPLE Instrument ID: INST "B"
Misc: 262102,QV ,L,5.5.0.18mm X 40M 08-824

ID File: ID824B::X2
Title: GENERAL IDFILE FOR INSTRUMENT B
Last Calibration: 970415 20:09 Last Qcal Time: 970502 18:13

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	9.82	128.0	14771	50.00	UG/L	98
10)	Acetone	6.00	43.0	2883	12.25	UG/L	100
22)	1,2-Dichloroethane-d4	11.09	65.0	38685	51.59	UG/L	93
27)	*1,4-Difluorobenzene	12.14	114.0	66982	50.00	UG/L	97
44)	*Chlorobenzene-d5	19.90	117.0	47808	50.00	UG/L	94
49)	Toluene-d8	15.92	98.0	69740	52.94	UG/L	99
54)	p&m Xylene	20.54	106.0	2761	4.68	UG/L	52
56)	Bromofluorobenzene	22.53	95.0	28226	51.54	UG/L	91

* Compound is ISTD DLS/7/97

850930736

F 471

850930737

MS data file header from : B1324::B1

Sample: INST. 59702,SAMPLE Operator: KS9934 MS 5/03/97 3:
Misc : 262102,QV ,L,5,5,0.18mm X 40M D8-824
Sys. #: 2 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: INST
Method file: VOAB Tuning file: APEI02 No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 270

Chromatographic temperatures :	30.	90.	200.	0.	0.
Chromatographic times, min. :	1.0	1.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	4.0	10.0	0.0	.1	0.0

>B1324 INST. 59702,SAMPLE 262102,QV ,L,5,5,0.18mm X 40M D8-824

35.01 260.0 TIC
Upslope: .2000 Area Reject: 11442. Max Peaks: 16 Bunch: -1 Valley >100
Dnslope: 0.0000 Results File IB1324 Sorted by Time/Area INT

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% tot
1 COC	2.79	4	14	34	255964	974757	974757	100.00	36.
2 IS	9.82	370	375	383	40694	114417	114417	11.74	4.
3 S	11.09	434	440	446	35509	103531	103531	10.62	3.
4 IS	12.14	489	494	508	64014	172395	172395	17.69	6.
5 S	15.92	681	688	695	74315	216661	216661	22.23	8.
6 IS	19.90	887	892	900	66910	162471	162471	16.67	6.
7 T	20.54	920	925	929	6693	18760	18760	1.92	.
8 S	22.53	1023	1027	1035	59554	141385	141385	14.50	5.
(9)	23.25	1060	1064	1069	12553	35477	35477	3.64	1.
(10)	24.13	1104	1109	1117	12856	29835	29835	3.06	1.
11 <10	24.61	1125	1134	1138	5311	13509	13509	1.39	.
(12)	25.27	1162	1168	1172	8640	18788	18788	1.93	.
(13)	28.65	1336	1341	1349	283692	577182	573837	58.87	21.
14 <10	28.86	1349	1352	1355	7449	16419	13562*	1.39	.
(15)	30.87	1451	1455	1461	12105	35401	33729	3.46	1.
(16)	31.32	1475	1478	1482	6812	16946	16946	1.74	.

Sum of corrected areas: 2640060.

Summary of Unknowns PBM Library Search and Quantitation

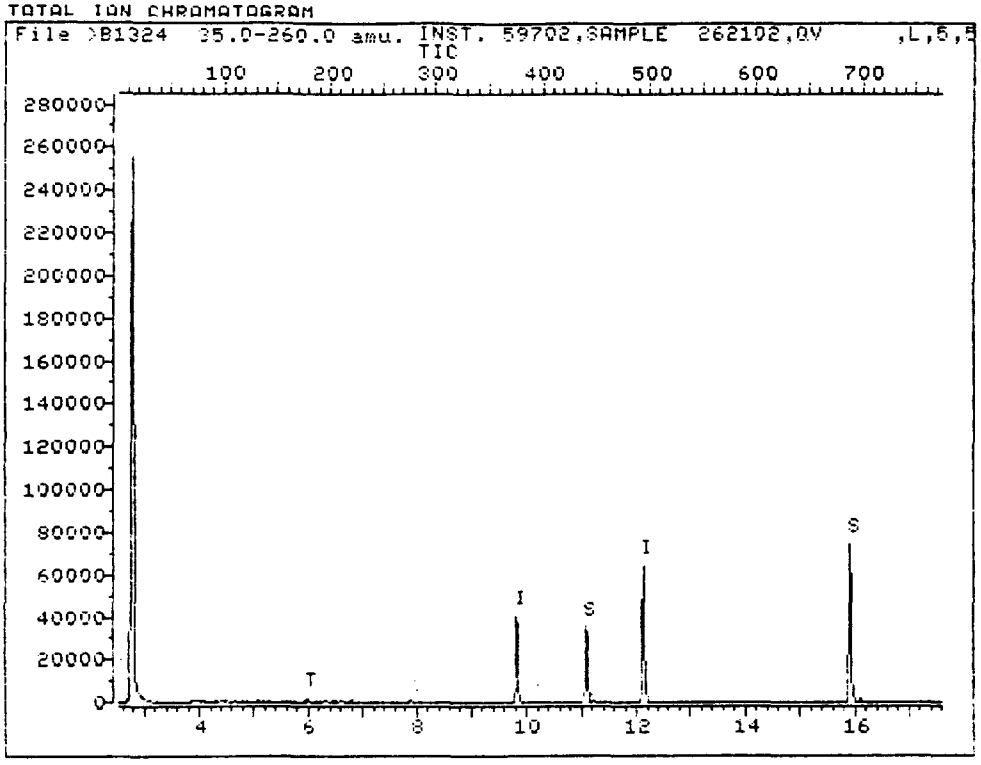
Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	114417.	9.82	2.53 - 10.98
2	50.0	172395.	12.14	10.98 - 16.02
3	50.0	162471.	19.90	16.02 - 32.06

F47

PLEASE NOTE THE NOTATION USED FOR IDENTIFYING THE PEAKS ON THIS PAGE

NT=NON TARGETED COMPOUND T= TARGETED COMPOUND (COMPOUNDS FROM SAMPLE)

TOTAL ION CHROMATOGRAM



Data File: >B1324::B1 Quant Output File: ^B1324::E1
Name: INST. 59702,SAMPLE Instrument ID: INST "B"
Misc: 262102,QV ,L,5,5,0.18mm X 40M D8-824

Id File: ID824B::X2
Title: GENERAL IDFILE FOR INSTRUMENT B
Last Calibration: 970415 20:09 Last Qcal Time: 970502 18:13

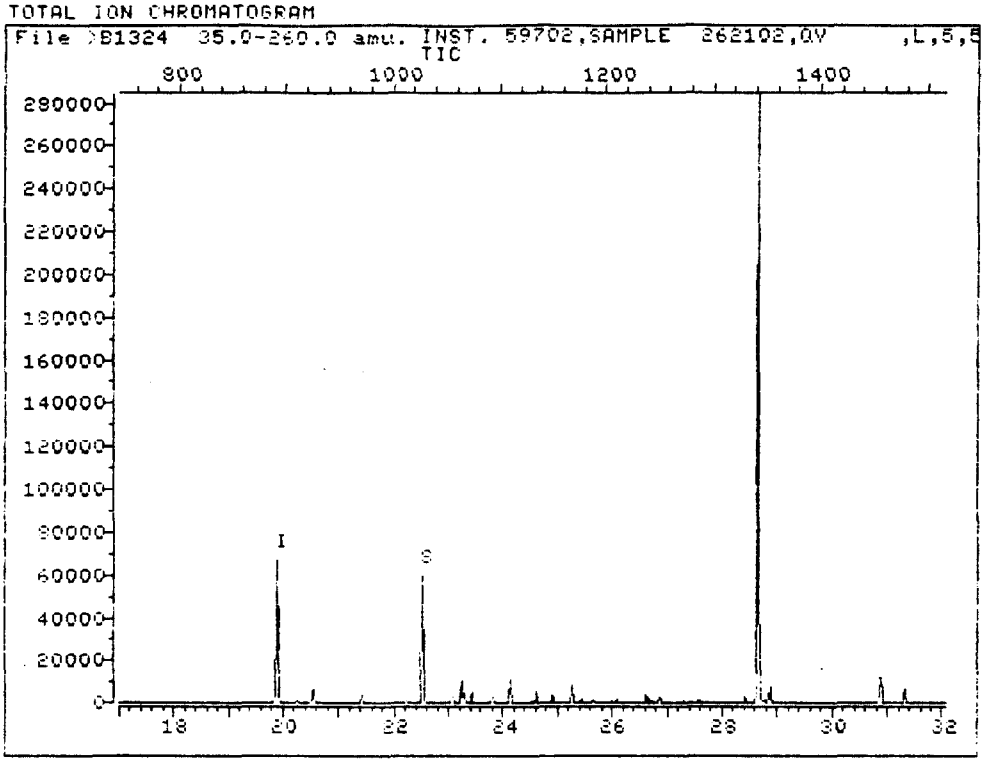
Operator ID: KS9934
Quant Time : 970503 03:49
Injected at: 970503 03:15

Page 1 of 2

850930738

F 473

TOTAL ION CHROMATOGRAM



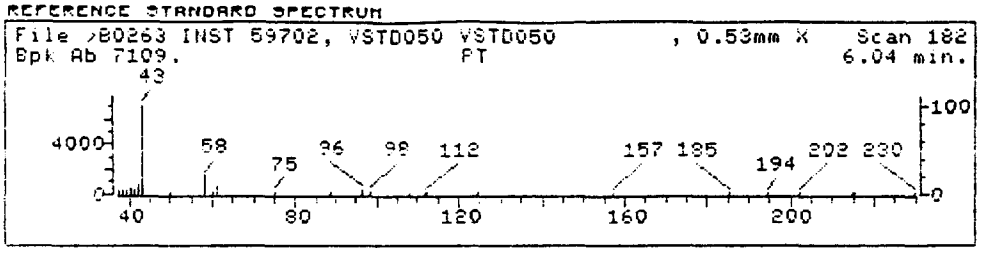
Data File: >B1324::B1 Quant Output File: ^B1324::E1
Name: INST. 59702.SAMPLE Instrument ID: INST "B"
Misc: 262102.QV ,L,5,5,0.18mm X 40M DB-824

Id File: ID824B::X2
Title: GENERAL IDFILE FOR INSTRUMENT B
Last Calibration: 970415 20:09 Last Qcal Time: 970502 18:13

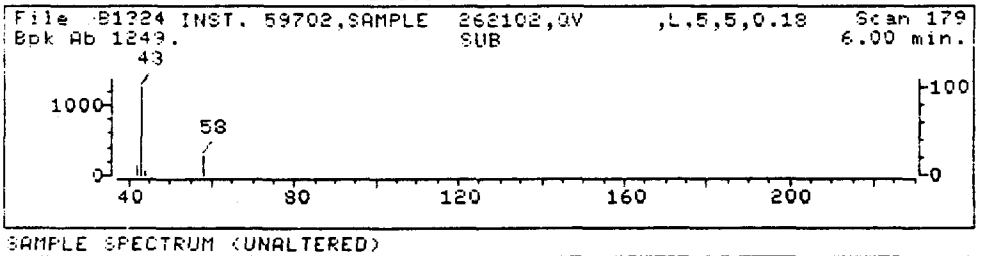
Operator ID: KS9934
Quant Time : 970503 03:49
Injected at: 970503 03:15

Page 2 of 2

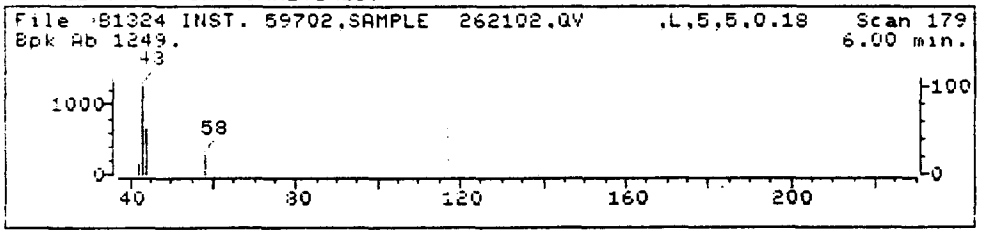
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

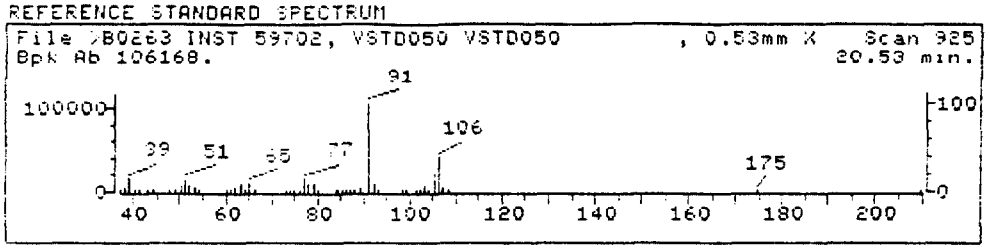


Data File: >B1324::B1 Quant Output File: ^B1324::E1
Name: INST. 59702,SAMPLE Instrument ID: INST "B"
Misc: 262102,QV ,L,5,5,0.18mm X 40M DB-824
Quant Time: 970503 03:49 Quant ID File: ID824B::X2
Injected at: 970503 03:15 Last Calibration: 970415 20:09
Last Qcal Time: 970502 18:13

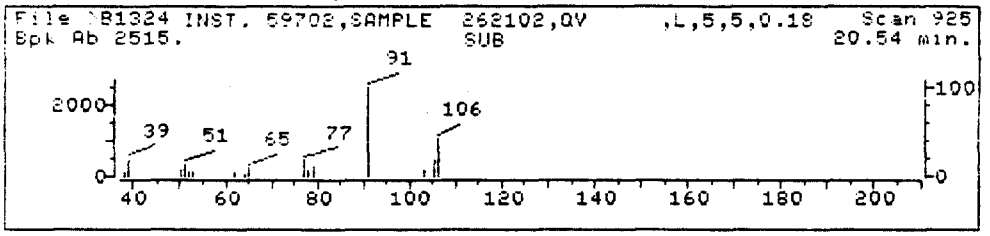
Compound No : 10
Compound Name : Acetone
Scan Number : 179
Retention Time: 6.00 min.
Quant Ion : 43.0
Area : 2883
Concentration : 12.25 UG/L
q-value : 100

850930740

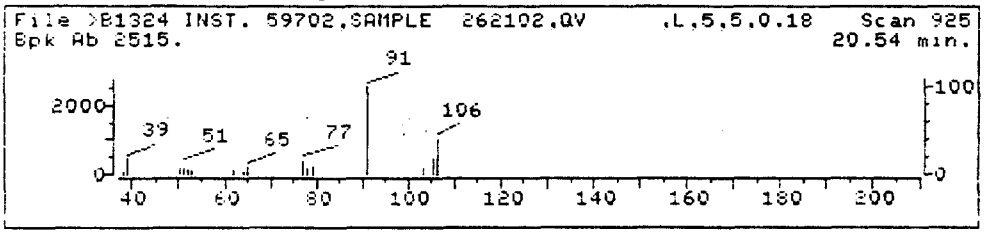
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

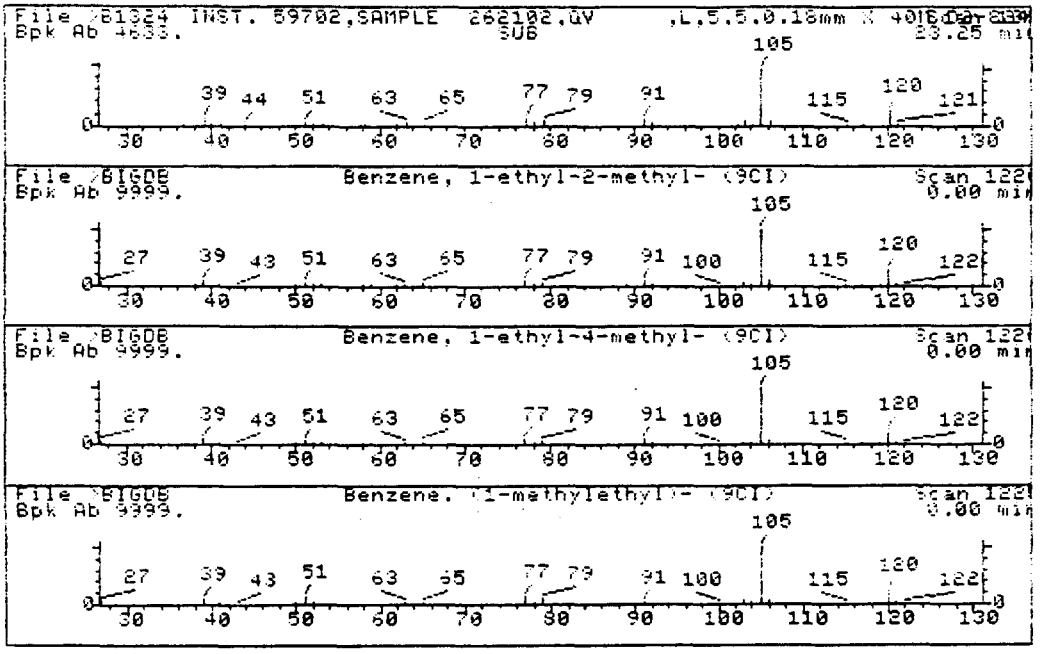


Data File: >B1324::B1 Quant Output File: ^B1324::E1
Name: INST. 59702.SAMPLE Instrument ID: INST "B"
Misc: 262102,QV ,L,5,5,0.18mm X 40M D8-824
Quant Time: 970503 03:49 Quant ID File: ID824B::X2
Injected at: 970503 03:15 Last Calibration: 970415 20:09
Last Qcal Time: 970502 18:13

Compound No : 54
Compound Name : p&m Xylene
Scan Number : 925
Retention Time: 20.54 min.
Quant Ion : 106.0
Area : 2761
Concentration : 4.68 UG/L
q-value : 52

850930741

F 476



Instrument ID: INST " Analyzed on: 5/03/97 3:15
Result 9 in PBM results file: LB1324
Retention Time: 23.25 Area: 35477 Tentative Conc: 11.00
The unknown area is 21.84% of the nearest internal standard

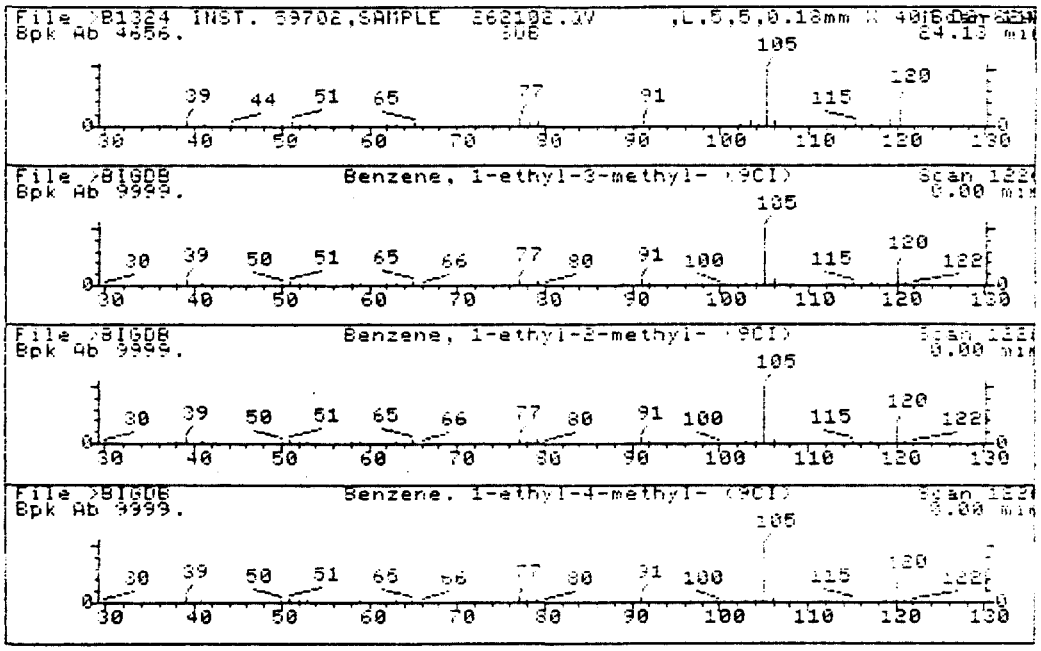
1.	Benzene, 1-ethyl-2-methyl- (9CI)	120	C9H12
2.	Benzene, 1-ethyl-4-methyl- (9CI)	120	C9H12
3.	Benzene, (1-methylethyl)- (9CI)	120	C9H12
4.	Benzene, 1-ethyl-3-methyl- (9CI)	120	C9H12
5.	Benzene, 1,2,3-trimethyl- (8CI9CI)	120	C9H12
6.	Benzene, 1,1'-(1-methyl-1,2-ethanediyl)bis- (9CI)	196	C15H16

Sample file: >B1324 Spectrum #: 1064
Search speed: 1 Tilting option: N No. of ion ranges searched: 41

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	89*	611143	12266	"BIGDB	70	15	2	0	94	5	66	61
2.	86*	620968	12268	"BIGDB	51	34	2	0	97	5	60	33
3.	79*	98828	12259	"BIGDB	54	33	2	0	100	8	48	39
4.	76*	620144	12267	"BIGDB	46	41	2	0	88	8	45	26

850930742

F477

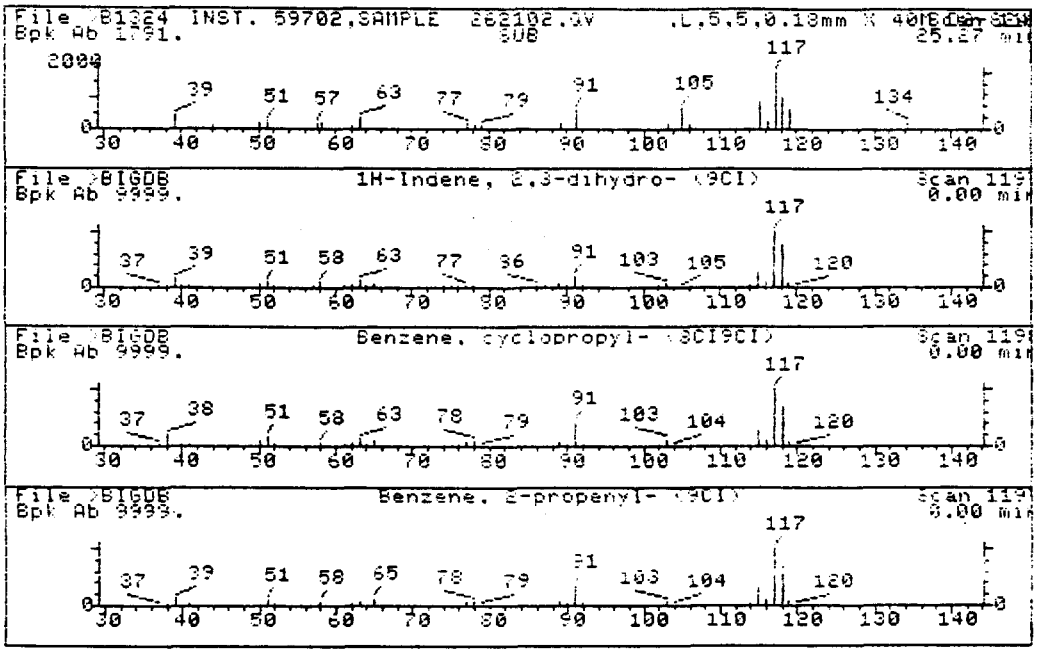


Instrument ID: INST " Analyzed on: 5/03/87 3:15
Result 10 in PBM results file: LB1324
Retention Time: 24.13 Area: 29835 Tentative Conc: 9.00
The unknown area is 18.36% of the nearest internal standard

1.	Benzene, 1-ethyl-3-methyl- (9CI) isomer	120	C9H12
2.	Benzene, 1-ethyl-2-methyl- (9CI)	120	C9H12
3.	Benzene, 1-ethyl-4-methyl- (9CI)	120	C9H12
4.	Benzene, (1-methylethyl)- (9CI)	120	C9H12
5.	Benzene, (1,2,2-trimethyl-3-butenyl)- (9CI)	174	C13H18
6.	Benzene, (1,3-dimethyl-3-butenyl)- (9CI)	160	C12H16

Sample file: >B1324 Spectrum #: 1109
Search speed: 1 Tilting option: N No. of ion ranges searched: 4

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_
1.	81*	620144	12267	"BIGDB	60	27	2	0	96	7	53	
2.	81*	611143	12266	"BIGDB	55	30	2	0	95	10	53	
3.	79*	622968	12268	"BIGDB	53	32	2	0	100	9	48	
4.	51*	98828	12259	"BIGDB	44	43	2	0	100	24	22	



Instrument ID: INST " Analyzed on: 5/03/97 3:15
Result 11 in PBM results file: LB1324
Retention Time: 25.27 Area: 18788 Tentative Conc: 6.00
The unknown area is 11.56% of the nearest internal standard

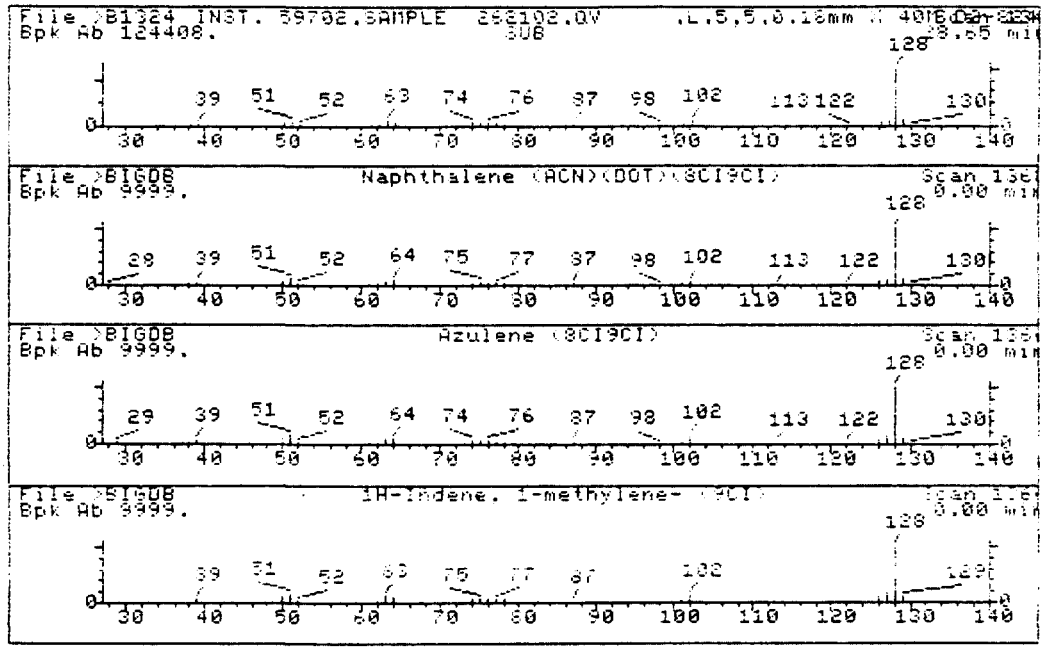
1.	1H-Indene, 2,3-dihydro- (9CI)	118 C9H10
2.	Benzene, cyclopropyl- (8CI9CI)	118 C9H10
3.	Benzene, 2-propenyl- (9CI)	118 C9H10
4.	Benzene, 1-ethenyl-2-methyl- (9CI)	118 C9H10
5.	Benzene, 1-ethenyl-4-methyl- (9CI)	118 C9H10
6.	Benzene, 1-isocyano-4-methyl- (9CI)	117 C8H7N

Sample file: >B1324 Spectrum #: 1168
Search speed: 1 Tilting option: N No. of ion ranges searched: 43

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	45*	496117	11979	"BIGDB	50	52	2	0	71	30	19	23
2.	38*	873494	11986	"BIGDB	52	58	3	0	77	28	14	15
3.	30*	300572	11978	"BIGDB	38	59	3	0	78	34	12	13
4.	28*	611154	11981	"BIGDB	26	67	2	0	69	36	10	14

850930744

F 479



Instrument ID: INST " Analyzed on: 5/03/97 3:15
Result 12 in PBM results file: LB1324
Retention Time: 28.65 Area: 573837 Tentative Conc: 180.00
The unknown area is 393.19% of the nearest internal standard

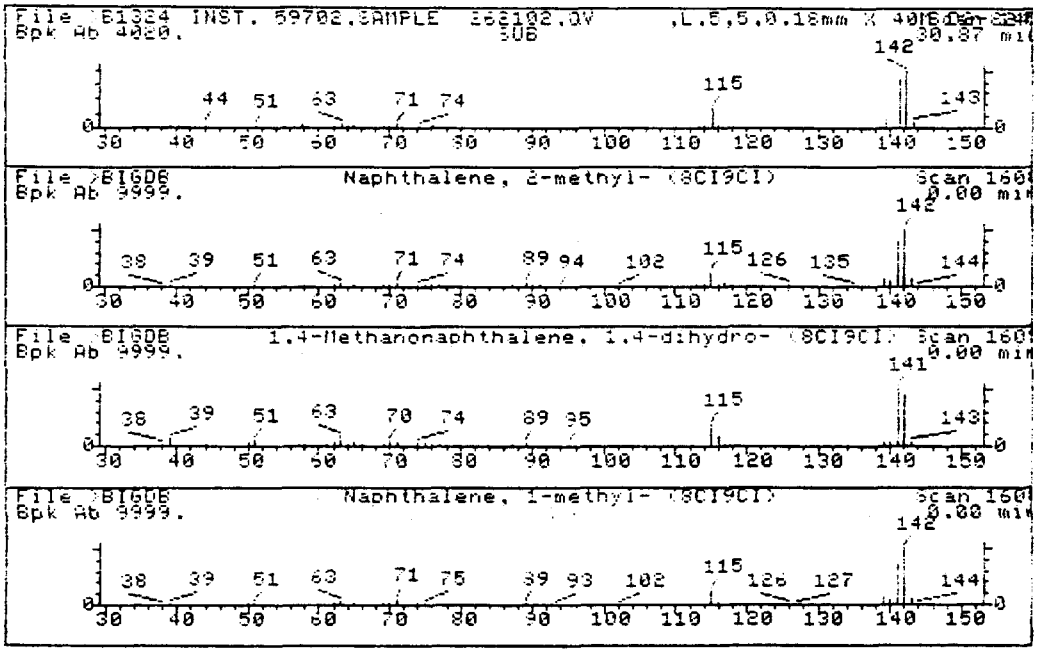
1.	Naphthalene (ACN)(DOT)(8CI9CI)	128 C10H8
2.	Azulene (8CI9CI)	128 C10H8
3.	1H-Indene, 1-methylene- (9CI)	128 C10H8
4.	Bicyclo[4.4.1]undeca-1,3,5,7,9-pentaen-11-one (9CI)	156 C11H8O
5.	1,2-Benzenedicarbonitrile (9CI)	128 C8H4N2
6.	1,3-Benzenedicarbonitrile (9CI)	128 C8H4N2

Sample file: >B1324 Spectrum #: 1341
Search speed: 1 Tilting option: N No. of ion ranges searched: 4

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_
1.	95*	91203	13638	"BIGDB	82	9	1	0	87	7	68	
2.	91*	275514	13641	"BIGDB	69	17	0	0	48	30	57	
3.	90*	3471843	13646	"BIGDB	69	17	0	0	45	33	50	
4.	70	36628805	13665	"BIGDB	44	48	2	0	82	7	42	

850930745

F 480

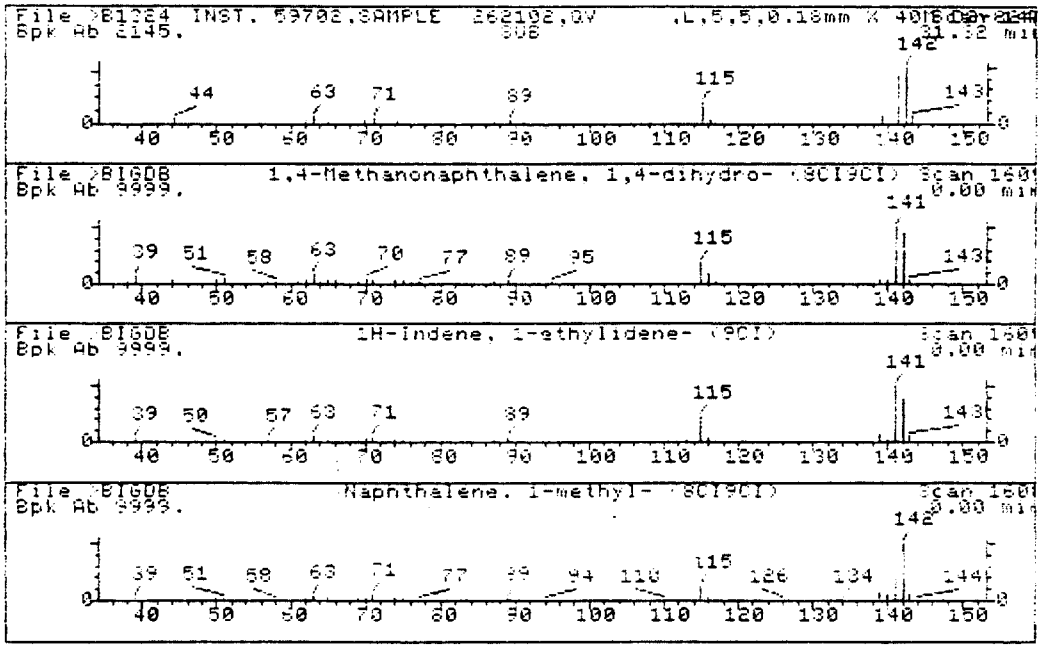


Instrument ID: INST " Analyzed on: 5/03/97 3:15
Result 13 in PBM results file: LB1324
Retention Time: 30.87 Area: 33729 Tentative Conc: 10.00
The unknown area is 20.76% of the nearest internal standard

1.	Naphthalene, 2-methyl- (8CI9CI)	142 C11H10
2.	1,4-Methanonaphthalene, 1,4-dihydro- (8CI9CI)	142 C11H10
3.	Naphthalene, 1-methyl- (8CI9CI)	142 C11H10
4.	1H-Indene, 1-ethylidene- (9CI)	142 C11H10
5.	Benzeneacetonitrile, 4-cyano- (9CI)	142 C9H6N2

Sample file: >B1324 Spectrum #: 1455
Search speed: 1 Tilting option: N No. of ion ranges searched: 43

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	78*	91576	16085	"BIGDB	43	55	3	0	100	4	55	13
2.	78*	4453901	16098	"BIGDB	39	63	2	0	86	2	55	14
3.	78*	90120	16084	"BIGDB	51	49	3	0	100	4	55	16
4.	58*	2471832	16096	"BIGDB	49	51	2	0	74	19	25	22



Instrument ID: INST " Analyzed on: 5/03/97 3:15
Result 14 in PBM results file: LB1324
Retention Time: 31.32 Area: 16946 Tentative Conc: 5.00
The unknown area is 10.43% of the nearest internal standard

1.	1,4-Methanonaphthalene, 1,4-dihydro- (8CI9CI)	142	C11H10
2.	1H-Indene, 1-ethylidene- (9CI)	142	C11H10
3.	Naphthalene, 1-methyl- (8CI9CI) Isomer	142	C11H10
4.	Naphthalene, 2-methyl- (8CI9CI)	142	C11H10
5.	Benzeneacetonitrile, 4-cyano- (9CI)	142	C9H6N2
6.	Benzeneacetonitrile, 2-cyano- (9CI)	142	C9H6N2

Sample file: >B1324 Spectrum #: 1478
Search speed: 1 Tilting option: N No. of ion ranges searched: 4

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_
1.	78*	4453901	16098	"BIGDB	33	69	3	0	85	4	55	
2.	63*	2471832	16096	"BIGDB	54	46	2	0	85	16	30	
3.	52*	90120	16084	"BIGDB	46	54	3	0	100	16	20	
4.	52*	91576	16085	"BIGDB	32	66	3	0	100	16	20	

850930747

F482

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330, FAX: 201-584-0515
Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab
MAY 7, 1997

TARGET COMPOUND LIST - VOLATILE ANALYSIS BY GC/MS
PLUS 10 PEAKS

Lab Number: 262103 Data File: >A3747
Client: VECTRE CORPORATION
Sample source: NBB-V11
Sample ID: SB-3 (8'-8.5')
Sample date: 04/29/97
Sampled by: Customer Analysis Date: 05/05/97 Column: DB-624
At lab date: 04/29/97 Dilution Factor: 1
Percent Moisture: 14.17%
Matrix: Soil Init Sample Wght= 5g Final volume= 5ml

Initial sample weight DWB= 4.2915g

Conc. in Sample = (Conc. on Quant Report/Initial Sample Weight DWB)*Final Volume

Parameter	Result ug/kg	Method Blank ug/kg	Practical Quantitation Limit ug/kg	Minimum Detection Limit ug/kg
Chloromethane	U	U	5.8	5.4
Bromomethane	U	U	5.8	4.4
Vinyl chloride	U	U	5.8	2
Chloroethane	U	U	5.8	2.1
Methylene chloride	2.6J #	U	5.8	3.1
Acetone	25	U	23	5.2
Carbon disulfide	U	U	5.8	2
1,1-Dichloroethene	U	U	5.8	2
1,1-Dichloroethane	U	U	5.8	1.6
trans-1,2-Dichloroethene	U	U	5.8	2
cis-1,2-Dichloroethene	U	U	5.8	2
Chloroform	U	U	5.8	1.9
1,2-Dichloroethane	U	U	5.8	2.2
2-Butanone	U	U	23	2.8
1,1,1-Trichloroethane	U	U	5.8	0.58
Carbon tetrachloride	U	U	5.8	0.7
Bromodichloromethane	U	U	5.8	0.7
1,2-Dichloropropane	U	U	5.8	0.7
cis-1,3-Dichloropropene	U	U	5.8	0.58
Trichloroethene	U	U	5.8	0.7
Dibromochloromethane	U	U	5.8	0.7
1,1,2-Trichloroethane	U	U	5.8	0.58
Benzene	U	U	5.8	0.58
trans-1,3-Dichloropropene	U	U	5.8	0.7
Bromoform	U	U	5.8	0.93
4-Methyl-2-pentanone	U	U	23	1.3
2-Hexanone	U	U	23	1.4
Tetrachloroethene	U	U	5.8	0.82
1,1,2,2-Tetrachloroethane	U	U	5.8	0.58
Toluene	U	U	5.8	0.93
Chlorobenzene	U	U	5.8	0.7
Ethylbenzene	U	U	5.8	0.82
Styrene	U	U	5.8	1.2
p&m-Xylene	U	U	5.8	1
o-Xylene	U	U	5.8	1
total Xylenes	U	U	5.8	1

ug/kg = micrograms/kilogram or ppb
Results are in ug/kg (ppb); they are reported on a dry weight basis.
ND: Not Determined.
IND: Indeterminable.
U: Indicates a compound was analyzed for but not detected at the PQL.
J: Indicates an estimated value. It is utilized when a reported value meets the identification criteria but the result is less than the specified detection limit but greater than zero.
B: Indicates that the analyte was found in the blank as well as the sample. It indicates possible/probable blank contamination.

Methylene chloride: This compound is not flagged with a B since it was not found in corresponding blank. However, this compound is commonly found as a laboratory contaminant.

HBS 7/7/97

850930748

INDUSTRIAL CORROSION MANAGEMENT, Inc.
1152 Route 10
Randolph, NJ 07869
201-584-0330
MAY 7, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

LIBRARY SEARCH RESULTS OF NONTARGETED PEAKS WITH
ESTIMATED CONCENTRATION OF TENTATIVELY IDENTIFIED COMPOUNDS.

Data file name: >A3747
Lab number: 262103
Fraction: VOLATILE

Initial Sample Wt/Vol=5 Final Volume=5
Moisture=14.17% Initial sample weight DWB=4.2915

CAS No.	Retention Time	Compound Name	Molecular Weight	Estimated Concentration ug/kg
	32.02	Unknown		9

Estimated total non-target compound concentration (excluding compounds flagged with A, B or **) in ug/kg is: 9

A: Indicates that the compound is an acetone based aldol-type condensation product formed by concentrating the extraction solvent (1:1 acetone/methylene chloride).
B: Indicates that the analyte was found in the blank as well as the sample. It further indicates possible/probable blank contamination.
C: Co-eluting and/or poorly resolved non-target compounds cause superimposed spectra that prevent identification of individual compounds.
* Compounds flagged are from diluted analysis.
** This compound is not flagged B; it was not found in the corresponding blank. However, it is commonly found as a laboratory contaminant.

Copyright ICM, Inc., 1997.
All rights reserved.
EIL

Operator ID: KS9934 Quant Rev: 7 Quant Time: 970505 23:17
Output File: ^A3747::QT Injected at: 970505 22:42
Data File: >A3747::A1 Dilution Factor: 1.00000
Name: INST. 59701, SAMPLE Instrument ID: INST "A"
Misc: 262103,005037,S,5,5,0.53mm X 75M 08-8240

ID File: ID824A::X2
Title: GENERAL IDFILE FOR INSTRUMENT A
Last Calibration: 970429 23:03 Last Qcal Time: 970505 17:40

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	6.89	128.0	49970	50.00	UG/L	96
9)	Methylene Chloride FWA	4.68	84.0	3269	2.24	UG/L	78
10)	Acetone	4.17	43.0	6060	21.88	UG/L	100
22)	1,2-Dichloroethane-d4	7.94	65.0	107520	53.38	UG/L	92
27)	*1,4-Difluorobenzene	8.88	114.0	226591	50.00	UG/L	98
44)	*Chlorobenzene-d5	17.21	117.0	184430	50.00	UG/L	96
49)	Toluene-d8	12.58	98.0	207376	47.81	UG/L	98
56)	Bromofluorobenzene	21.81	95.0	162568	54.95	UG/L	82

* Compound is ISTD DR 5/7/97

850930750

F485

MS data file header from : A3747::A1

Sample: INST. 59701, SAMPLE Operator: KS9934 MS 5/05/97 22:4
Misc : 262103,QV5037.S,5,5,0.53mm X 75M D8-8240
Sys. #: 1 MS model: 70 SW/HW rev.: LF HLS # : 0 Equip ID: INST
Method file: UOAA Tuning file: APEI01 No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	40.	220.	0.	0.	0.
Chromatographic times, min. :	1.0	20.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	3.0	0.0	0.0	.2	0.0

>A3747 INST. 59701, SAMPLE 262103.QV5037.S,5,5,0.53mm X 75M D8-8240

35.01 260.0 TIC
Upslope: .2000 Area Reject: 36913. Max Peaks: 2 Bunch: -1 Valley >100
Dnslope: 0.0000 Results File IA3747 Sorted by Time/Area INT

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% o tot
1	2.39CW	3	16	42	276794	2485144	2469633	100.00	41.
2	6.89I	240	246	264	72752	378706	369127	14.95	6.
3	7.94S	293	300	315	51763	295602	287700	11.65	4.
4	8.88I	339	348	366	99534	602662	593689	24.04	9.
5	12.58S	529	537	556	94724	670792	663467	26.87	11.
6	17.21I	764	774	796	86956	646913	635676	25.74	10.
7	21.81S	980	1009	1039	96042	882528	851677	34.49	14.
8	26.60<	1245	1254	1267	3305	39059	38155	1.54	.
9	32.02	1522	1531	1553	9537	121739	106989	4.33	1.

Sum of corrected areas: 6016113.

Summary of Unknowns PBM Library Search and Quantitation

Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	369127.	6.89	2.10 - 7.89
2	50.0	593689.	9.88	7.89 - 13.05
3	50.0	635676.	17.21	13.05 - 34.04

PLEASE NOTE THE NOTATION USED FOR IDENTIFYING THE PEAKS ON THIS PAGE

NT=NON TARGETED COMPOUND T= TARGETED COMPOUND (COMPOUNDS FROM SAMPLE)

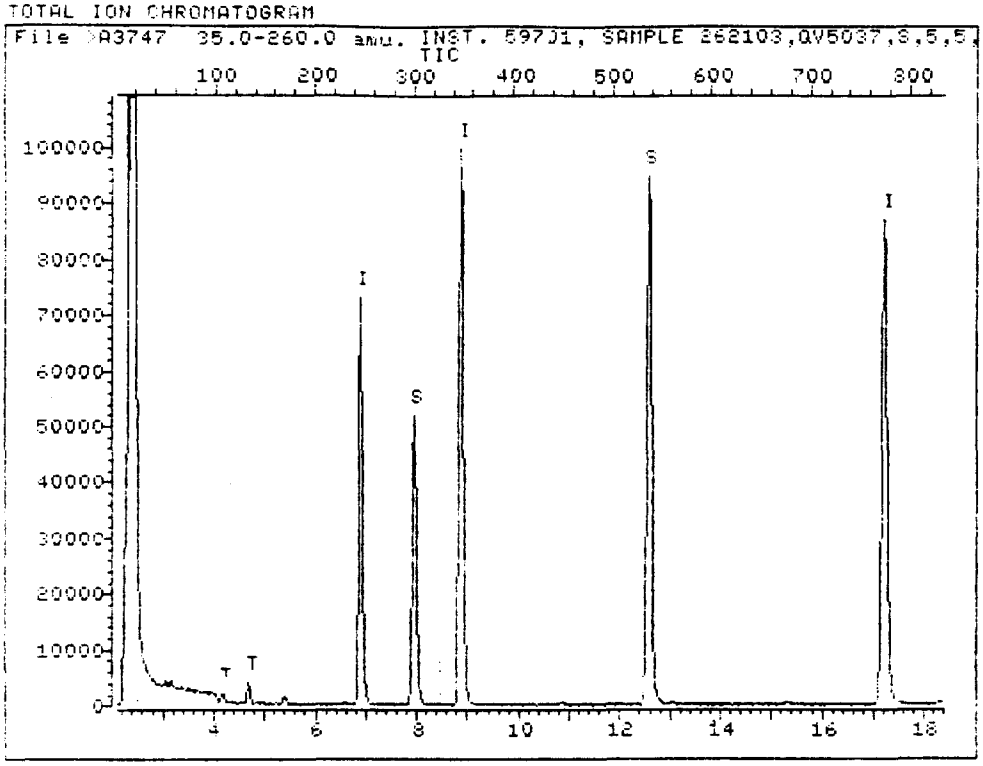
I=INTERNAL STANDARD COMPOUND S=SURROGATE COMPOUND (SYSTEM MONITORING)

$$\text{Unknown Concentration} = \frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}} * \text{Correction Factor}$$

F486

3:04 PM TUE 6 MAY 1997

TOTAL ION CHROMATOGRAM



Data File: >A3747::A1 Quant Output File: ^A3747::QT
Name: INST. 59701, SAMPLE Instrument ID: INST "A"
Misc: 262103,QV5037,S,5,5,0.53mm X 75M DB-8240

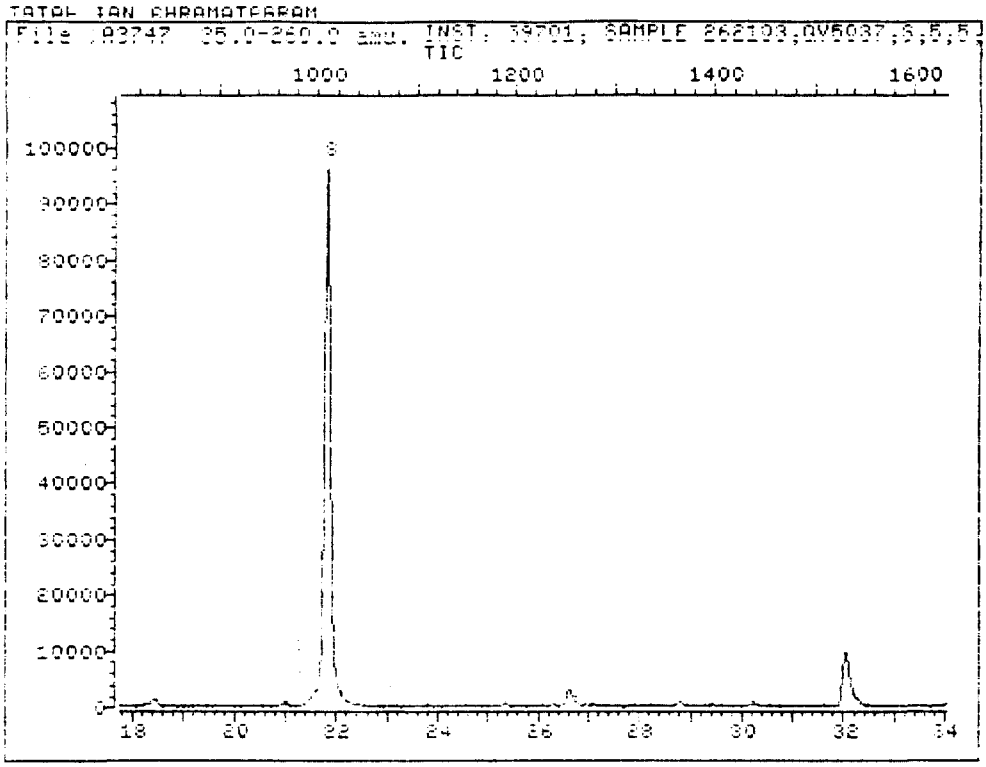
Id File: ID824A::X2
Title: GENERAL IDFILE FOR INSTRUMENT A
Last Calibration: 970429 23:03 Last Qcal Time: 970505 17:40

Operator ID: KS9934
Quant Time : 970505 23:17
Injected at: 970505 22:42

Page 1 of 2

850930752

F 487



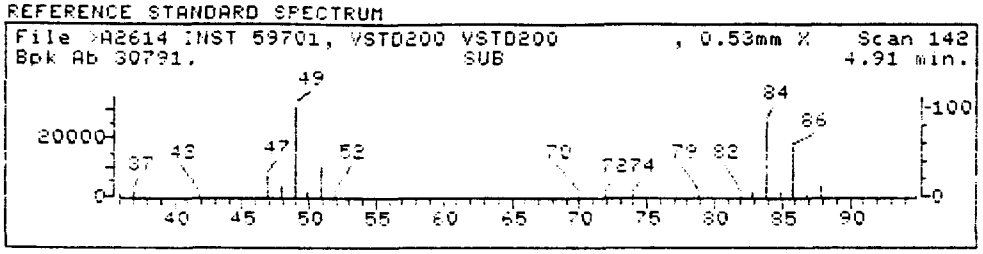
Data File: ^A3747::A1 Quant Output File: ^A3747::QT
Name: INST. 59701, SAMPLE Instrument ID: INST "A"
Misc: 262103,QV5037,S,5,5,0.53mm X 75M DB-8240

Id File: ID824A::X2
Title: GENERAL IDFILE FOR INSTRUMENT A
Last Calibration: 970429 23:03 Last Qcal Time: 970505 17:40

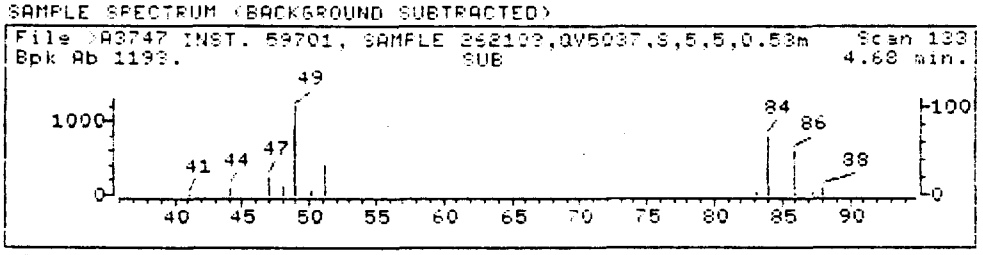
Operator ID: KS9934
Quant Time : 970505 23:17
Injected at: 970505 22:42

Page 2 of 2

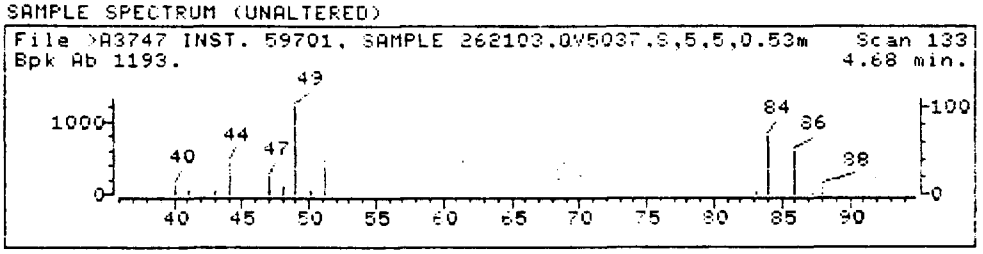
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



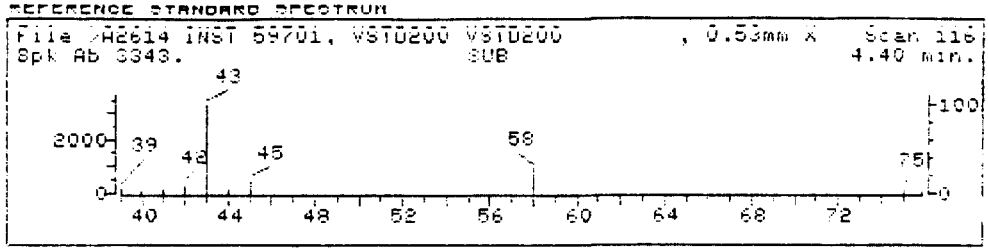
Data File: >A3747::A1 Quant Output File: ^A3747::QT
Name: INST. 59701. SAMPLE Instrument ID: INST "A"
Misc: 262103,QV5037,S,5,5,0.53mm X 75M DB-8240
Quant Time: 970505 23:17 Quant ID File: ID824A::X2
Injected at: 970505 22:42 Last Calibration: 970429 23:03
Last Qcal Time: 970505 17:40

Compound No : 9
Compound Name : Methylene Chloride
Scan Number : 133
Retention Time: 4.68 min.
Quant Ion : 84.0
Area : 3269
Concentration : 2.24 UG/L
q-value : 78

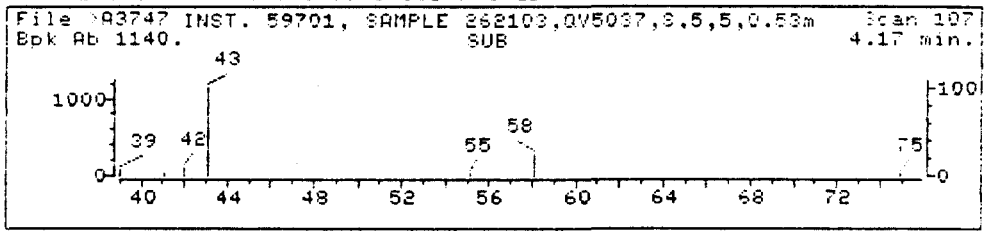
850930754

F489

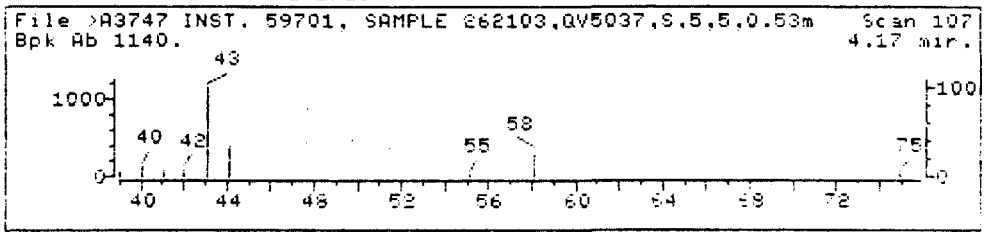
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

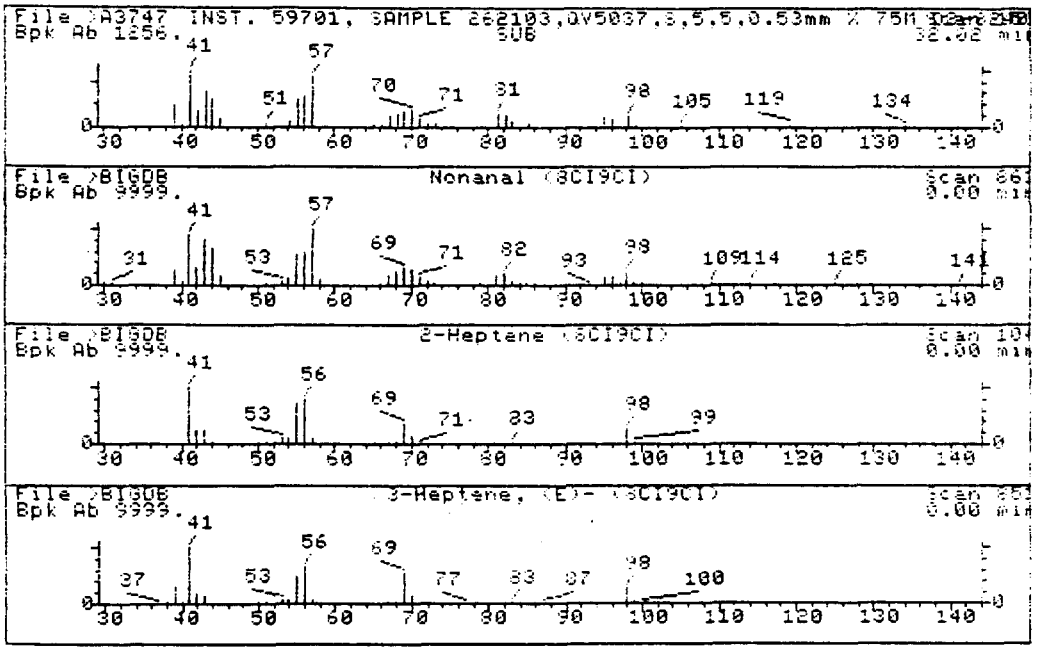


Data File: >A3747::A1 Quant Output File: ^A3747::QT
Name: INST. 59701, SAMPLE Instrument ID: INST "A"
Misc: 262103,QV5037,S,5,5,0.53mm X 75M DB-8240
Quant Time: 970505 23:17 Quant ID File: ID824A::X2
Injected at: 970505 22:42 Last Calibration: 970429 23:03
Last Qcal Time: 970505 17:40

Compound No : 10
Compound Name : Acetone
Scan Number : 107
Retention Time: 4.17 min.
Quant Ion : 43.0
Area : 6060
Concentration : 21.88 UG/L
q-value : 100

850930755

F 490



Instrument ID: INST " Analyzed on: 5/05/97 22:42 Unknown
Result 8 in PBM results file: LA3747
Retention Time: 32.02 Area: 106989 Tentative Conc: 8.00
The unknown area is 16.83% of the nearest internal standard

1.	Nonanal (8CI9CI)	142 C9H18O
2.	2-Heptene (8CI9CI)	98 C7H14
3.	3-Heptene, (E)- (8CI9CI)	98 C7H14
4.	1-Heptene (8CI9CI)	98 C7H14
5.	Butane, 1-isocyanato- (9CI)	99 C5H9NO
6.	Cyanic acid, butyl ester (8CI9CI)	99 C5H9NO

Sample file: >A3747 Spectrum #: 1531
Search speed: 1 Tilting option: N No. of ion ranges searched: 51

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	67	124196	8616	"BIGDB	84	30	2	0	76	12	34	27
2.	12*	592778	1047	"BIGDB	42	54	1	0	66	62	2	24
3.	11*	14686147	8518	"BIGDB	39	54	2	0	74	61	2	19
4.	11*	592767	3578	"BIGDB	35	63	2	0	64	61	2	14

850930756

F 491

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330, FAX: 201-584-0515
MAY 16, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

TARGET COMPOUND LIST - VOLATILE ANALYSIS BY GC/MS
PLUS 10 PEAKS

Lab Number: 262104
Client: VECTRE CORPORATION
Sample source: NBB-V11
Sample ID: HP-3
Sample date: 04/29/97
Sampled by: Customer
At lab date: 04/29/97
Matrix: Water

Data File: >B1326
Analysis Date: 05/03/97
Init Sample volume= .1ml
Column: DB-624
Dilution Factor: 50
Final volume= 5ml

Conc. in Sample = (Conc. on Quant Report/Initial Volume)*Final Volume

Parameter	Result ug/l	Method Blank ug/l	Practical Quantitation Limit ug/l	Minimum Detectic Limit ug/l
Chloromethane	U	U	250	230
Bromomethane	U	U	250	190
Vinyl chloride	U	U	250	85
Chloroethane	U	U	250	90
Methylene chloride	U	U	250	140
Acetone	U	U	1000	230
Carbon disulfide	U	U	250	85
1,1-Dichloroethene	U	U	250	85
1,1-Dichloroethane	U	U	250	70
trans-1,2-Dichloroethene	U	U	250	85
cis-1,2-Dichloroethene	U	U	250	85
Chloroform	U	U	250	80
1,2-Dichloroethane	U	U	250	95
2-Butanone	U	U	1000	120
1,1,1-Trichloroethane	U	U	250	25
Carbon tetrachloride	U	U	250	30
Bromodichloromethane	U	U	250	30
1,2-Dichloropropane	U	U	250	30
cis-1,3-Dichloropropene	U	U	250	25
Trichloroethene	U	U	250	30
Dibromochloromethane	U	U	250	30
1,1,2-Trichloroethane	U	U	250	25
Benzene	U	U	250	25
trans-1,3-Dichloropropene	U	U	250	30
Bromoform	U	U	250	40
4-Methyl-2-pentanone	U	U	1000	55
2-Hexanone	U	U	1000	60
Tetrachloroethene	U	U	250	35
1,1,2,2-Tetrachloroethane	U	U	250	25
Toluene	730	U	250	40
Chlorobenzene	U	U	250	30
Ethylbenzene	310	U	250	35
Styrene	U	U	250	50
p&m-Xylene	1800	U	250	45
o-Xylene	2700	U	250	45
total Xylenes	4500	U	250	45

ug/l = micrograms/liter or ppb
ND: Not Determined.
IND: Indeterminable.
U: Indicates a compound was analyzed for but not detected at the PQL.
J: Indicates an estimated value. It is utilized when a reported value meets the identification criteria but the result is less than the specified detection limit but greater than zero.
B: Indicates that the analyte was found in the blank as well as the sample. It indicates possible/probable blank contamination.

INDUSTRIAL CORROSION MANAGEMENT, INC.
Richard Levine, President
Copyright ICM, Inc., 1997.
All rights reserved.
SUS

850930757

86A

F 492

INDUSTRIAL CORROSION MANAGEMENT, Inc.
1152 Route 10
Randolph, NJ 07869
201-584-0330
MAY 7, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

LIBRARY SEARCH RESULTS OF NONTARGETED PEAKS WITH
ESTIMATED CONCENTRATION OF TENTATIVELY IDENTIFIED COMPOUNDS.

Data file name: >B1326
Lab number: 262104
Fraction: VOLATILE

Initial Sample Wt/Vol=.1 Final Volume=5

CAS No.	Retention Time	Compound Name	Molecular Weight	Estimated Concentration ug/l
98828	22.23	Methylethylbenzene	120	1500
103651	23.07	Propylbenzene	120	1900
611143	23.24	Ethylmethylbenzene	120	12000
622968	23.42	Ethylmethylbenzene	120	3000
	23.81	Ethylmethylbenzene isomer	120	3100
526738	24.14	Trimethylbenzene	120	5500
	24.90	Ethylmethylbenzene isomer	120	1700
	25.27	Unknown		1300
535773	26.09	Methylmethylethyl Benzene	134	400

Estimated total non-target compound concentration (excluding compounds flagged with A, B or **) in ug/l is: 30400

A: Indicates that the compound is an acetone based aldol-type condensation product formed by concentrating the extraction solvent (1:1 acetone/methylene chloride).
B: Indicates that the analyte was found in the blank as well as the sample. It further indicates possible/probable blank contamination.
C: Co-eluting and/or poorly resolved non-target compounds cause superimposed spectra that prevent identification of individual compounds.
* Compounds flagged are from diluted analysis.
** This compound is not flagged B; it was not found in the corresponding blank. However, it is commonly found as a laboratory contaminant.

Copyright ICM, Inc., 1997.
All rights reserved.
SUS

Operator ID: KS9934 Quant Rev: 7 Quant Time: 970503 05:09
Output File: ^B1326::E1 Injected at: 970503 04:34
Data File: >B1326::B1 Dilution Factor: 1.00000
Name: INST. 59702.SAMPLE Instrument ID: INST "B"
Misc: Z62104,QV ,L.0.1.5.0.18mm X 40M DB-824

ID File: ID824B::X2
Title: GENERAL IDFILE FOR INSTRUMENT B
Last Calibration: 970415 20:09 Last Qcal Time: 970502 18:13

	Compound	R.T.	Q ion	Area	Conc	Units
1)	*Bromochloromethane	9.81	128.0	12698	50.00	UG/L
22)	1,2-Dichloroethane-d4	11.10	65.0	33624	52.16	UG/L
27)	*1,4-Difluorobenzene	12.13	114.0	57116	50.00	UG/L
44)	*Chlorobenzene-d5	19.89	117.0	47549	50.00	UG/L
49)	Toluene-d8	15.91	98.0	61831	47.19	UG/L
50)	Toluene	16.11	92.0	12908	14.60	UG/L
52)	Ethylbenzene	20.24	106.0	2797	6.16	UG/L
54)	p&m Xylene	20.53	106.0	21470	36.60	UG/L
55)	o-Xylene	21.41	106.0	33046	54.88	UG/L
56)	Bromofluorobenzene	22.52	95.0	27714	50.88	UG/L

* Compound is ISTD

DLS 7/97

850930759

F 49

850930760

MS data file header from : B1326::B1

Sample: INST. 59702,SAMPLE Operator: KS9934 MS 5/03/97 4:34
Misc : 262104,QV ,L,0.1,5,0.18mm X 40M D8-824
Sys. #: 2 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: INST "B"
Method file: VOAB Tuning file: APEI02 No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 270

Chromatographic temperatures :	30.	90.	200.	0.	0.
Chromatographic times, min. :	1.0	1.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	4.0	10.0	0.0	.1	0.0

B1326 INST. 59702,SAMPLE 262104,QV ,L,0.1,5,0.18mm X 40M D8-8

35.01 260.0 TIC
Upslope: .2000 Area Reject: 9976. Max Peaks: 20 Bunch: -1 Valley >100 %
Dnslope: 0.0000 Results File IB1326 Sorted by Time/Area INT

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	2.78	4	17	40	127508	416453	416453	56.25	11.453
2	9.83	374	379	385	35482	102659	99764	13.47	2.744
3	11.10	440	444	452	31947	91572	91572	12.37	2.518
4	12.13	493	497	504	54152	147940	147940	19.98	4.068
5	15.91	682	691	696	60940	194587	194587	26.28	5.351
6	16.11	696	701	705	20068	60307	59886*	8.09	1.647
7	19.89	889	895	900	68125	158557	158557	21.42	4.360
8	20.26	910	914	919	8408	22950	22950	3.10	.631
9	20.53	924	928	933	61704	151002	150450*	20.32	4.137
10	21.41	970	973	981	103623	240182	240182	32.44	6.605
11	22.23	1011	1015	1019	40259	96182	96182	12.99	2.645
12	22.52	1024	1030	1037	64456	144279	144279	19.49	3.968
13	23.07	1054	1058	1063	58564	120077	119393	16.13	3.283
14	23.24	1063	1067	1073	261689	741852	740394*	100.00	20.361
15	23.42	1073	1076	1081	97314	189843	187952*	25.39	5.169
16	23.81	1092	1096	1100	85284	195534	195534	26.41	5.377
17	24.14	1109	1113	1120	146013	358947	357029	48.22	9.819
18	24.90	1146	1152	1160	47946	106752	106752	14.42	2.936
19	25.27	1160	1171	1176	40556	81382	80362*	10.85	2.210
20	26.09	1209	1213	1217	15043	26055	26055	3.52	.717

Sum of corrected areas: 3636273.

Summary of Unknowns PBM Library Search and Quantitation

Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	99764.	9.81	2.47 - 10.97
2	50.0	147940.	12.13	10.97 - 16.01

F495

PLEASE NOTE THE NOTATION USED FOR IDENTIFYING THE PEAKS ON THIS PAGE

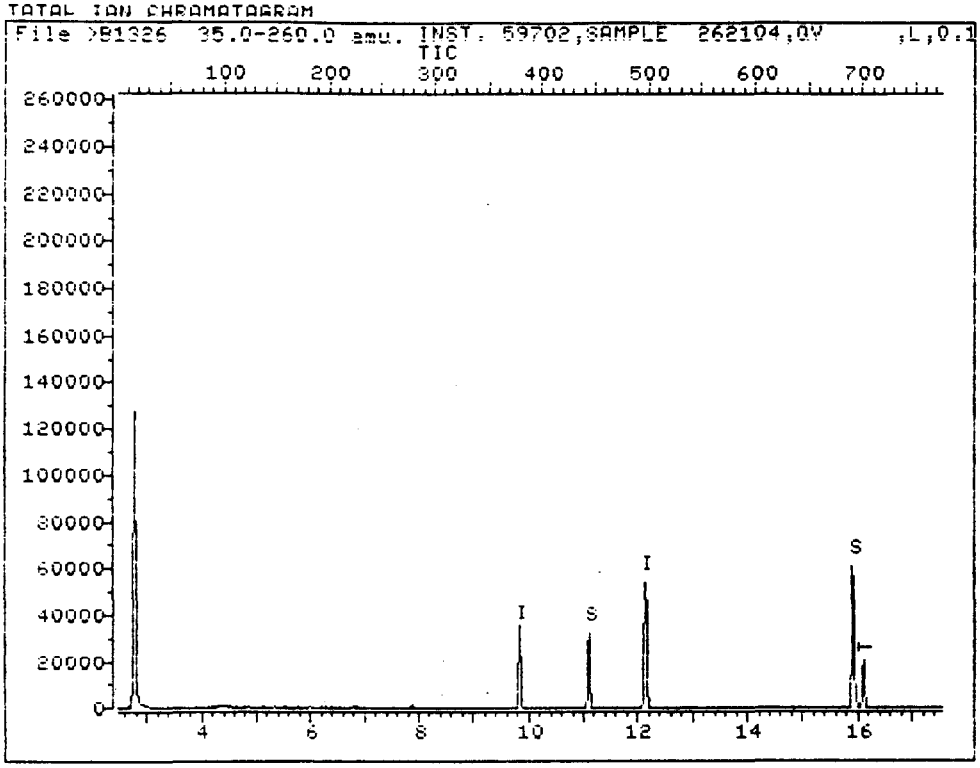
NT=NON TARGETED COMPOUND T= TARGETED COMPOUND (COMPOUNDS FROM SAMPLE)

I=INTERNAL STANDARD COMPOUND S=SURROGATE COMPOUND (SYSTEM MONITORING)

$$\text{Unknown Concentration} = \frac{(\text{Conc Int Std} * \text{Area Unknown})}{\text{Area Int Std}} * \text{Correction Factor}$$

7:50 AM TUE., 6 MAY , 1997

TOTAL ION CHROMATOGRAM



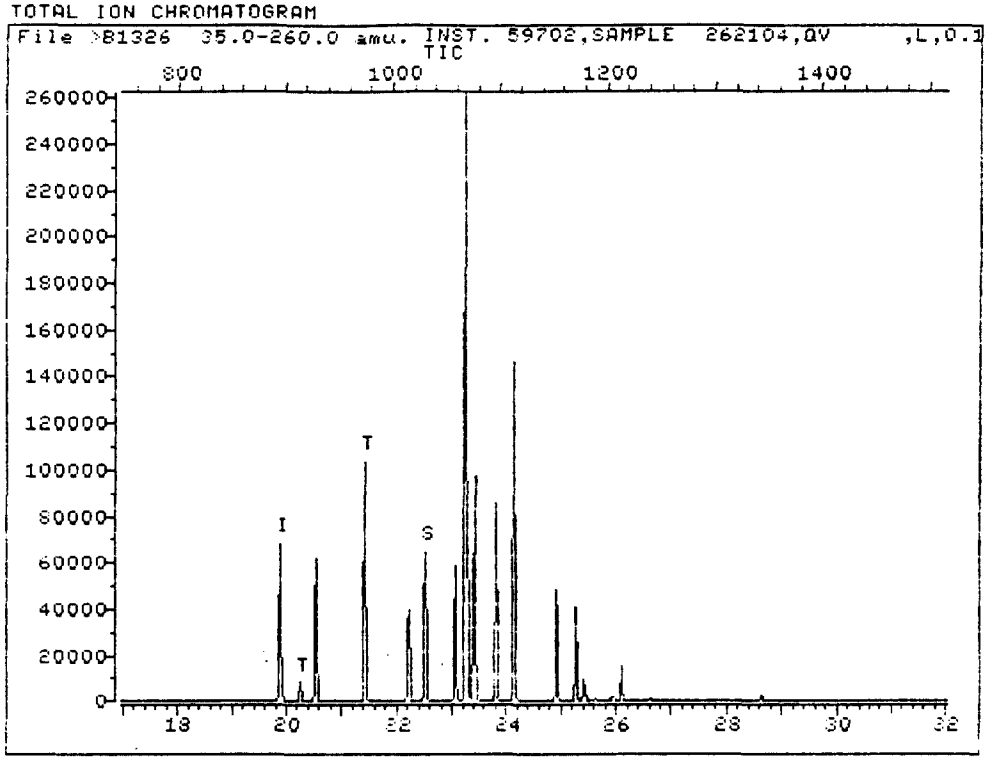
Data File: >B1326::B1 Quant Output File: ^B1326::E1
Name: INST. 59702,SAMPLE Instrument ID: INST "B"
Misc: 262104,QV ,L,0.1,5,0.18mm X 40M DB-824

Id File: ID824B::X2
Title: GENERAL IDFILE FOR INSTRUMENT B
Last Calibration: 970415 20:09 Last Qcal Time: 970502 18:13

Operator ID: KS9934
Quant Time : 970503 05:09
Injected at: 970503 04:34

Page 1 of 2

TOTAL ION CHROMATOGRAM

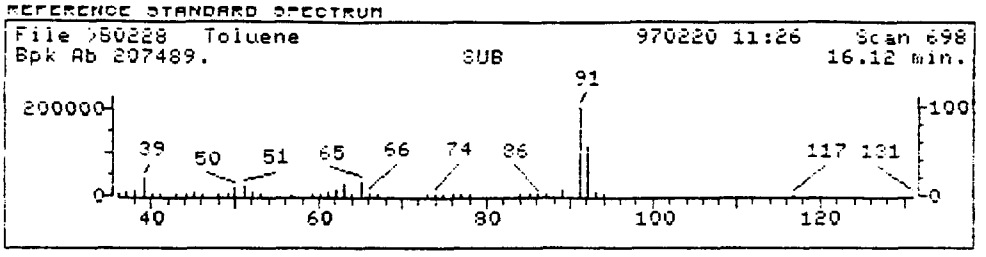


Data File: >B1326::B1 Quant Output File: ^B1326::E1
Name: INST. 59702,SAMPLE Instrument ID: INST "B"
Misc: 262104,QV ,L,0.1,5,0.18mm X 40M D8-824

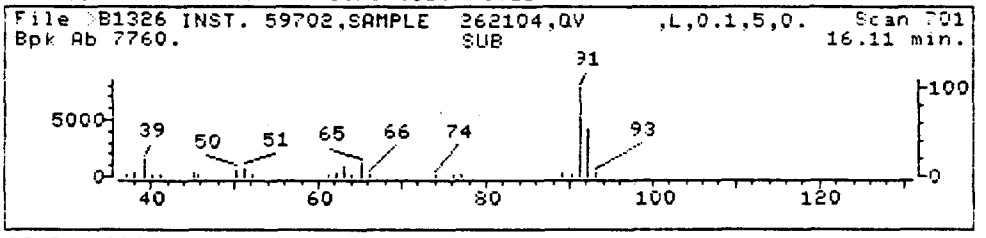
Id File: ID824B::X2
Title: GENERAL IDFILE FOR INSTRUMENT B
Last Calibration: 970415 20:09 Last Qcal Time: 970502 18:13

Operator ID: KS9934
Quant Time : 970503 05:09
Injected at: 970503 04:34

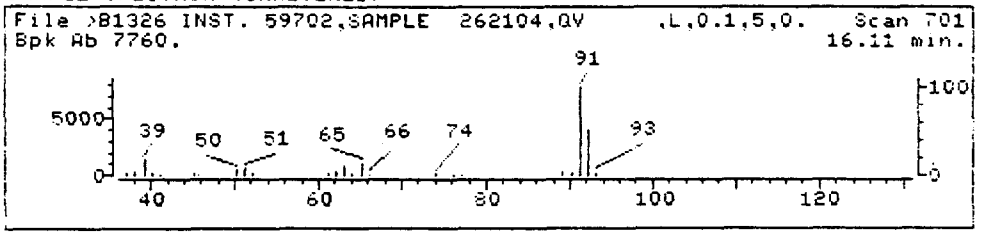
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



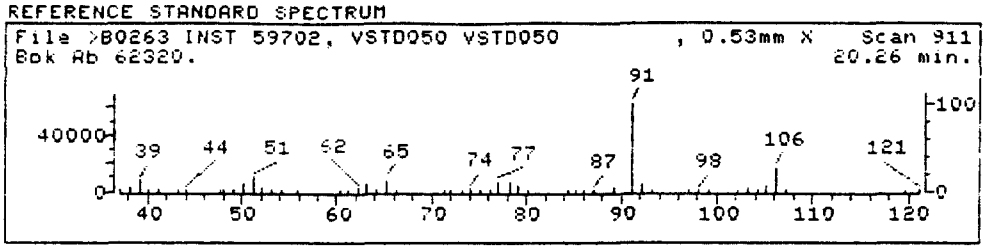
Data File: >B1326::B1 Quant Output File: ^B1326::E1
Name: INST. 59702,SAMPLE Instrument ID: INST "B"
Misc: 262104,QV ,L,0.1,5,0.18mm X 40M DB-824
Quant Time: 970503 05:09 Quant ID File: ID824B::X2
Injected at: 970503 04:34 Last Calibration: 970415 20:09
Last Qcal Time: 970502 18:13

Compound No : 50
Compound Name : Toluene
Scan Number : 701
Retention Time: 16.11 min.
Quant Ion : 92.0
Area : 12908
Concentration : 14.60 UG/L
q-value : 87

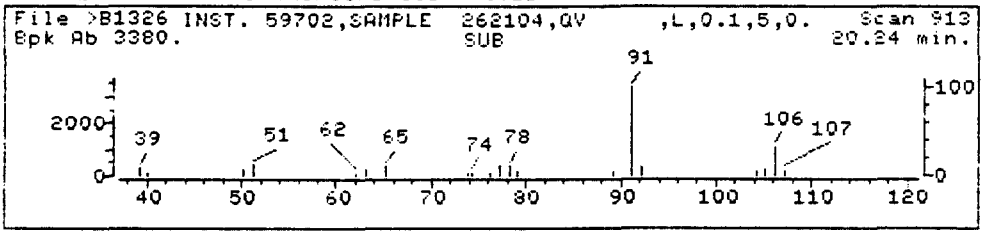
850930764

F499

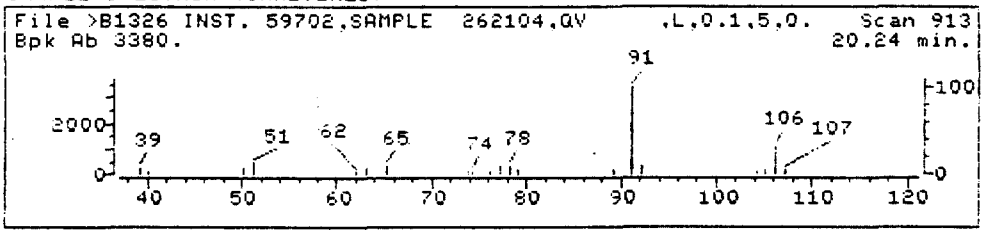
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



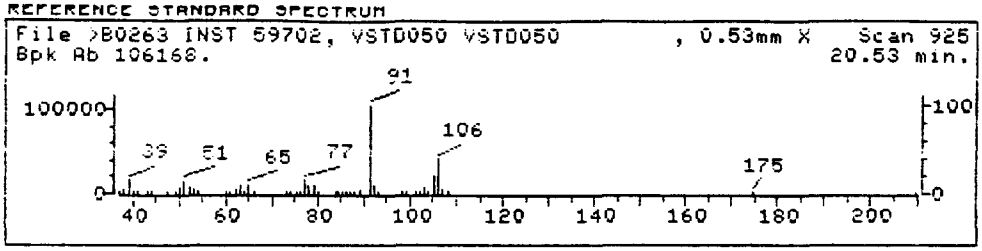
Data File: >B1326::B1 Quant Output File: ^B1326::E1
Name: INST. 59702,SAMPLE Instrument ID: INST "B"
Misc: 262104,QV ,L,0.1,5,0.18mm X 40M DB-824
Quant Time: 970503 05:09 Quant ID File: ID824B::X2
Injected at: 970503 04:34 Last Calibration: 970415 20:09
Last Qcal Time: 970502 18:13

Compound No : 52
Compound Name : Ethylbenzene
Scan Number : 913
Retention Time: 20.24 min.
Quant Ion : 106.0
Area : 2797
Concentration : 6.16 UG/L
q-value : 94

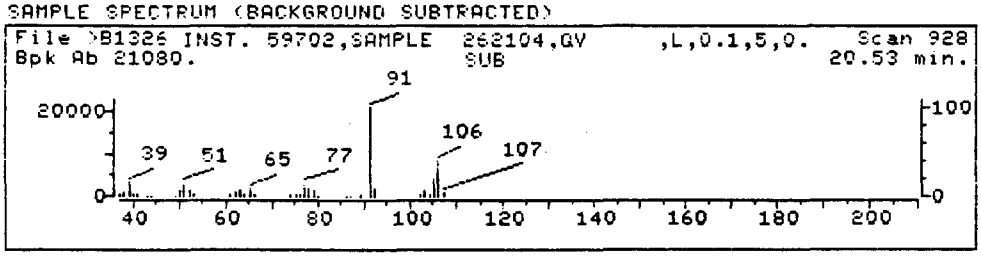
850930765

F900

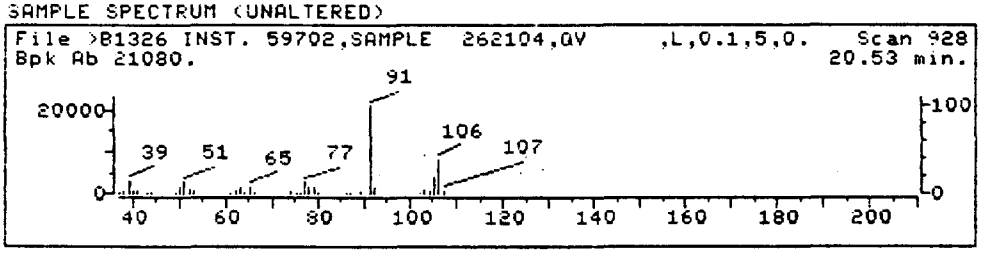
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



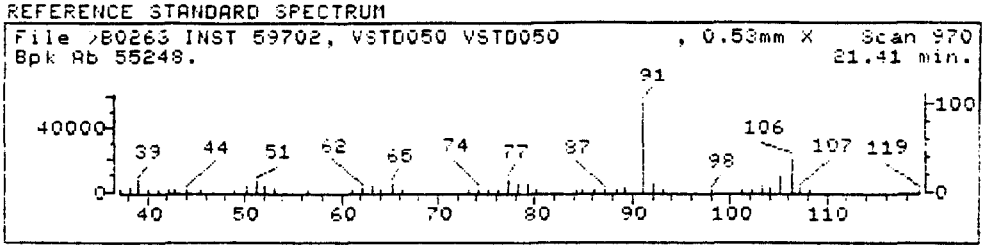
Data File: >B1326::B1 Quant Output File: ^B1326::E1
Name: INST. 59702,SAMPLE Instrument ID: INST "B"
Misc: 262104,QV ,L,0.1,5,0.18mm X 40M DB-824
Quant Time: 970503 05:09 Quant ID File: ID824B::X2
Injected at: 970503 04:34 Last Calibration: 970415 20:09
Last Qcal Time: 970502 18:13

Compound No : 54
Compound Name : p&m Xylene
Scan Number : 928
Retention Time: 20.53 min.
Quant Ion : 106.0
Area : 21470
Concentration : 36.60 UG/L
q-value : 58

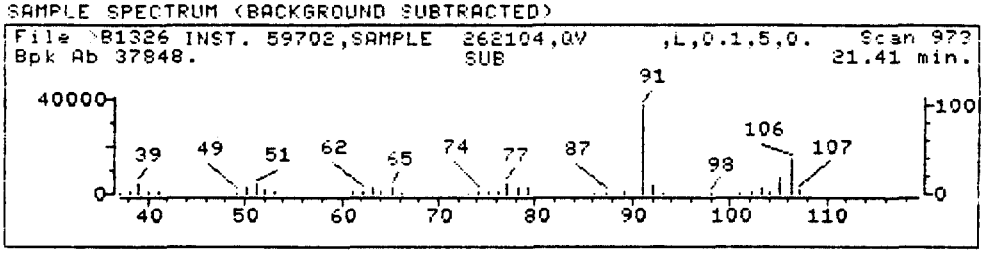
850930766

F 501

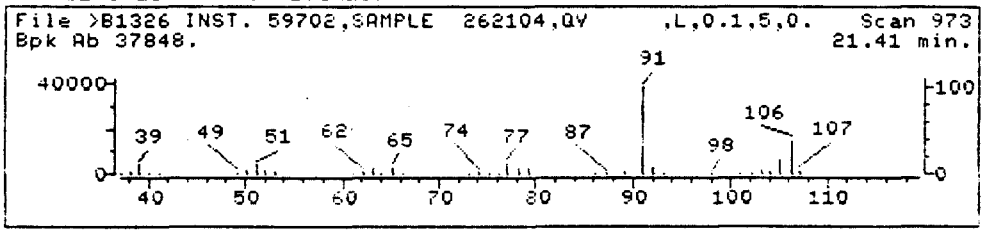
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

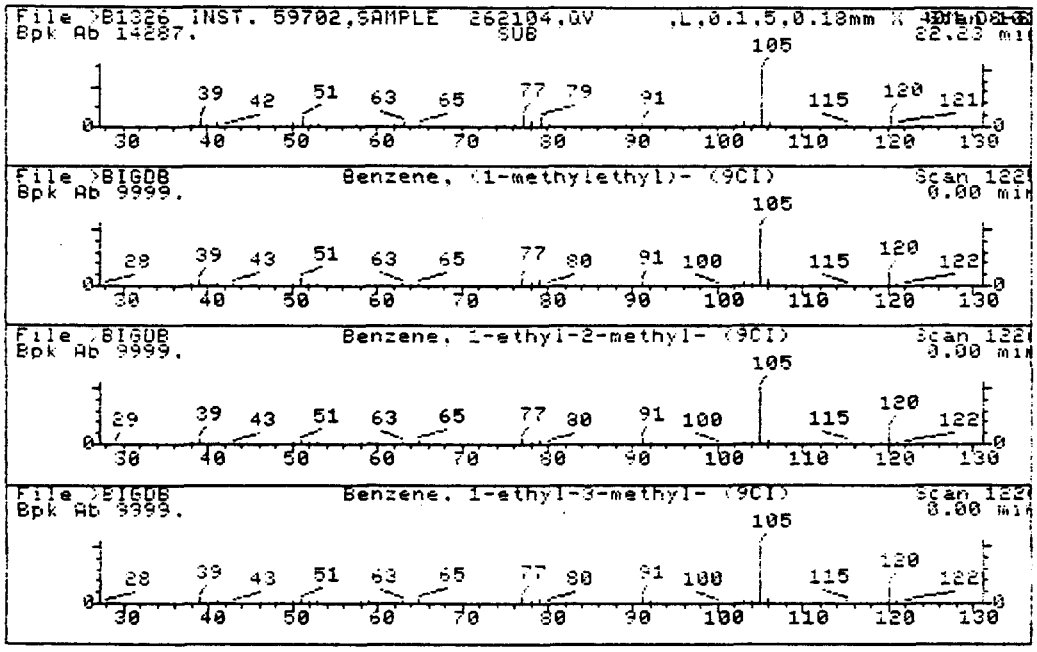


Data File: >B1326::B1 Quant Output File: ^B1326::E1
Name: INST. 59702.SAMPLE Instrument ID: INST "B"
Misc: 262104,QV ,L,0.1,5,0.18mm X 40M DB-824
Quant Time: 970503 05:09 Quant ID File: ID824B::X2
Injected at: 970503 04:34 Last Calibration: 970415 20:09
Last Qcal Time: 970502 18:13

Compound No : 55
Compound Name : o-Xylene
Scan Number : 973
Retention Time: 21.41 min.
Quant Ion : 106.0
Area : 33046
Concentration : 54.88 UG/L
o-value : 91

850930767

F 502



Instrument ID: INST " Analyzed on: 5/03/97 4:34
Result 11 in PBM results file: LB1326
Retention Time: 22.23 Area: 96182 Tentative Conc: 30.00
The unknown area is 60.66% of the nearest internal standard

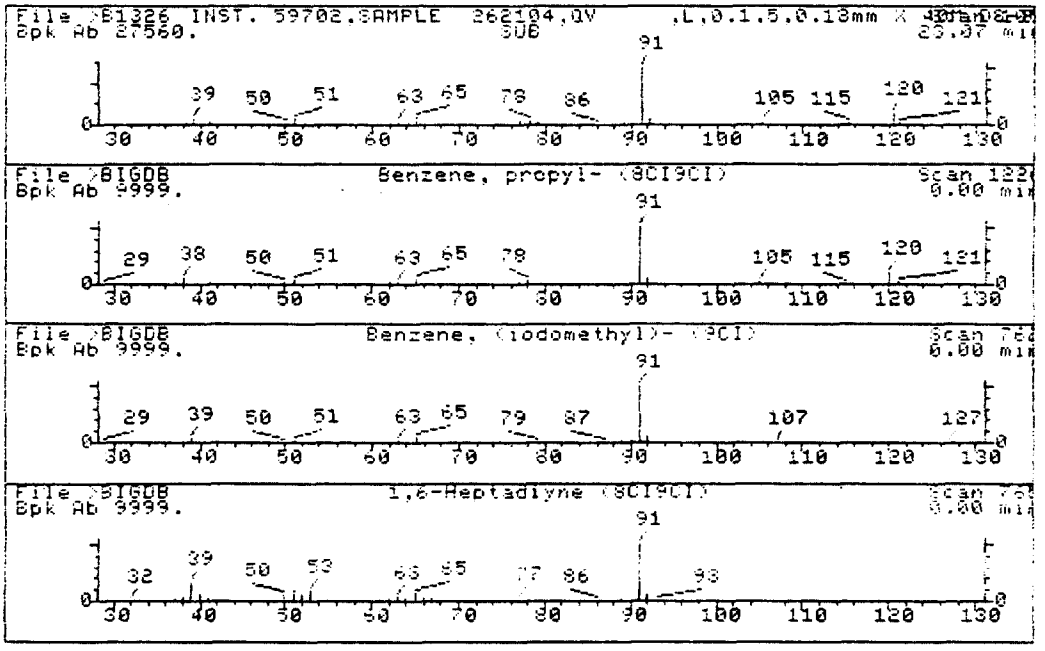
1.	Benzene, (1-methylethyl)- (9CI)	120	C9H12
2.	Benzene, 1-ethyl-2-methyl- (9CI)	120	C9H12
3.	Benzene, 1-ethyl-3-methyl- (9CI)	120	C9H12
4.	Benzene, 1-ethyl-4-methyl- (9CI)	120	C9H12
5.	Benzene, 1,2,3-trimethyl- (8CI9CI)	120	C9H12
6.	2,3-Heptadien-5-yne, 2,4-dimethyl- (9CI)	120	C9H12

Sample file: >B1326 Spectrum #: 1015
Search speed: 1 Tilting option: N No. of ion ranges searched: 41

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	86*	98828	12259	"BIGDB	61	26	0	0	84	7	59	73
2.	67*	~~611143~~	12266	"BIGDB	41	44	1	0	67	12	34	23
3.	67*	620144	12267	"BIGDB	41	46	1	0	67	12	34	23
4.	67*	622968	12268	"BIGDB	46	39	1	0	74	12	34	29

850930768

F 503

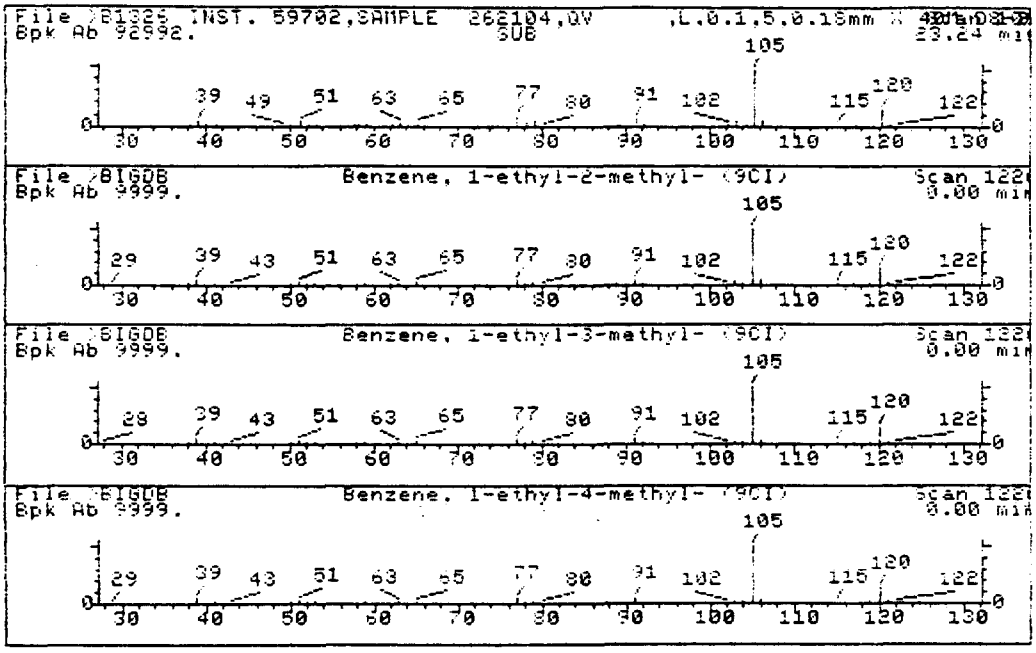


Instrument ID: INST " Analyzed on: 5/03/97 4:34
Result 13 in PBM results file: LB1326
Retention Time: 23.07 Area: 119393 Tentative Conc: 38.00
The unknown area is 75.30% of the nearest internal standard

1. Benzene, propyl- (8CI9CI)	120	C9H12
2. Benzene, (iodomethyl)- (9CI)	118	C7H7I
3. 1,6-Heptadiyne (8CI9CI)	92	C7H8
4. Benzeneacetaldehyde (9CI)	120	C8H8O
5. Ethanol, 2-[(phenylmethyl)amino]- (9CI)	151	C9H13NO

Sample file: >B1326 Spectrum #: 1058
Search speed: 1 Tilting option: N No. of ion ranges searched: 4

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_
1.	86*	103651	12261	"BIGDB	52	33	2	0	87	0	60	
2.	60	620053	7623	"BIGDB	38	46	2	0	100	13	30	
3.	60*	2396636	7653	"BIGDB	25	71	2	0	93	13	30	
4.	40*	122781	12263	"BIGDB	52	27	1	0	32	50	12	



Instrument ID: INST " Analyzed on: 5/03/87 4:34
Result 14 in PBM results file: LB1326
Retention Time: 23.24 Area: 740394 Tentative Conc: 230.00
The unknown area is 466.96% of the nearest internal standard

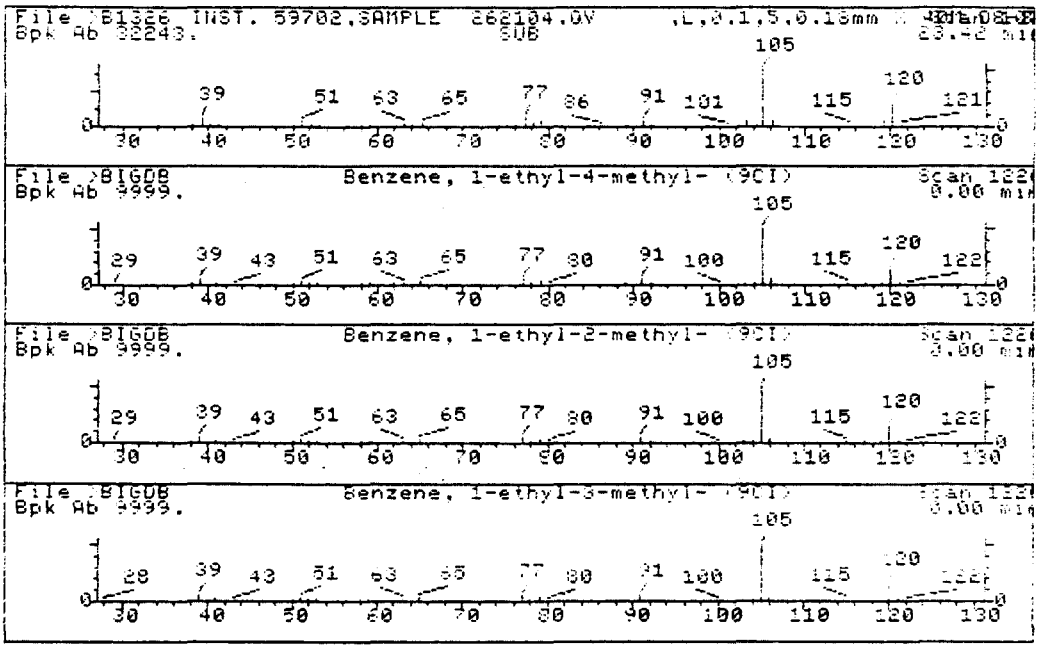
1. Benzene, 1-ethyl-2-methyl- (9CI)	120	C9H12
2. Benzene, 1-ethyl-3-methyl- (9CI)	120	C9H12
3. Benzene, 1-ethyl-4-methyl- (9CI)	120	C9H12
4. Benzene, (1-methylethyl)- (9CI)	120	C9H12
5. Benzene, 1,2,3-trimethyl- (8CI9CI)	120	C9H12
6. Benzene, 1,1'-(1-methyl-1,2-ethanediyl)bis- (9CI)	196	C15H16

Sample file: >B1326 Spectrum #: 1067
Search speed: 1 Tilting option: N No. of ion ranges searched: 41

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	97*	611143	12266	"BIGDB	78	7	0	0	94	1	72	97
2.	95*	620144	12267	"BIGDB	74	13	0	0	75	5	72	95
3.	95*	622968	12268	"BIGDB	72	13	0	0	95	3	72	95
4.	86*	98828	12259	"BIGDB	69	18	1	0	93	8	59	77

850930770

F 505



Instrument ID: INST " Analyzed on: 5/03/97 4:34
Result 15 in PBM results file: _B132e
Retention Time: 23.42 Area: 187952 Tentative Conc: 59.00
The unknown area is 118.54% of the nearest internal standard

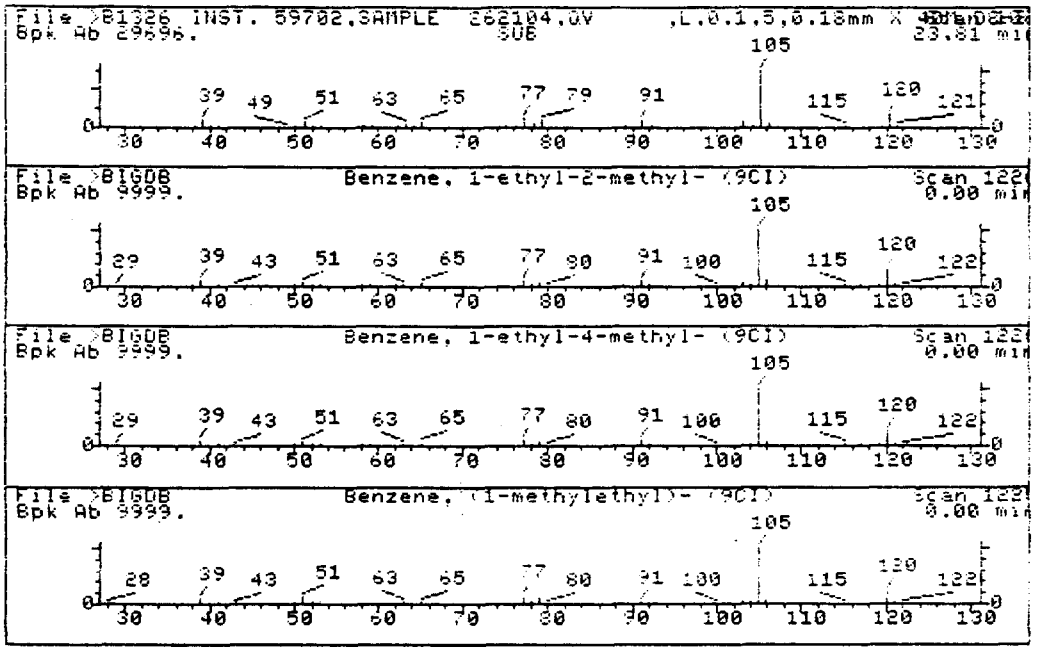
1.	Benzene, 1-ethyl-4-methyl- (9CI)	120	C9H12
2.	Benzene, 1-ethyl-2-methyl- (9CI)	120	C9H12
3.	Benzene, 1-ethyl-3-methyl- (9CI)	120	C9H12
4.	Benzene, 1,2,3-trimethyl- (8CI9CI)	120	C9H12
5.	Benzene, (1-methylethyl)- (9CI)	120	C9H12
6.	Benzene, 1,3,5-trimethyl- (9CI)	120	C9H12

Sample file: >B1326 Spectrum #: 1076
Search speed: 1 Tilting option: N No. of ion ranges searched: 4

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_
1.	93*	622968	12268	"BIGDB	69	16	0	0	89	21	53	
2.	89*	611143	12266	"BIGDB	68	17	1	0	97	9	62	
3.	86*	620144	12267	"BIGDB	68	18	1	0	97	7	59	
4.	82*	526738	12280	"BIGDB	69	31	0	0	51	39	37	

850930771

F SOI



Instrument ID: INST " Analyzed on: 5/03/97 4:34
Result 16 in PBM results file: LB1326
Retention Time: 23.81 Area: 195534 Tentative Conc: 62.00
The unknown area is 123.32% of the nearest internal standard

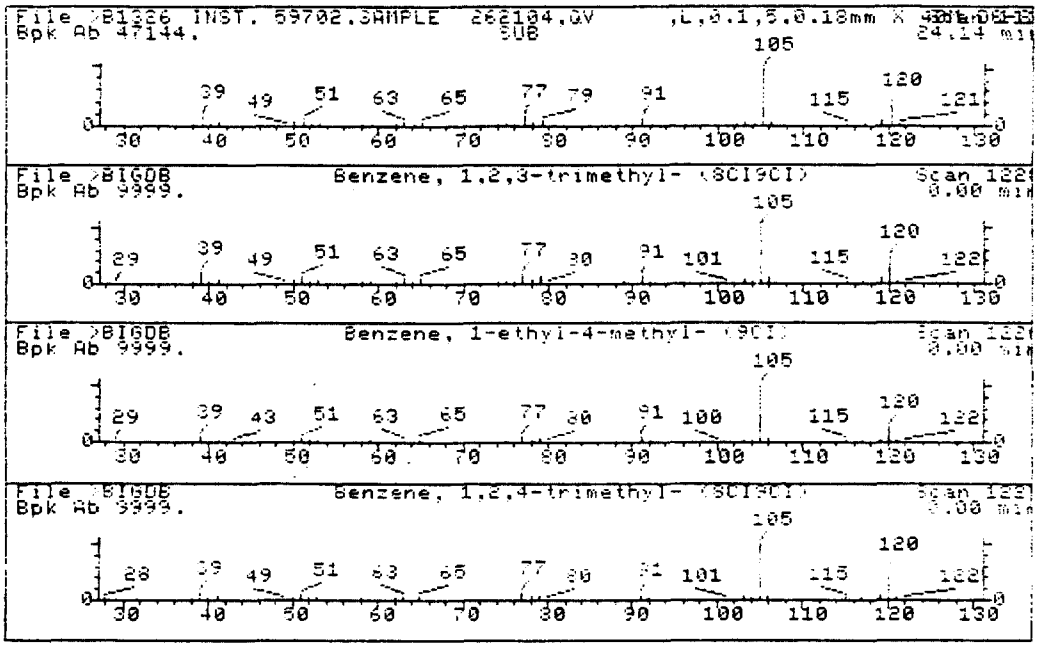
1.	Benzene, 2-ethyl-1-methyl- (9CI) isomer	120 C9H12
2.	Benzene, 1-ethyl-4-methyl- (9CI)	120 C9H12
3.	Benzene, (1-methylethyl)- (9CI)	120 C9H12
4.	Benzene, 1-ethyl-3-methyl- (9CI)	120 C9H12
5.	Benzene, 1,2,3-trimethyl- (8CI9CI)	120 C9H12
6.	Benzene, 1,1'-(1-methyl-1,2-ethanediyl)bis- (9CI)	196 C15H16

Sample file: >B1326 Spectrum #: 1096
Search speed: 1 Tilting option: N No. of ion ranges searched: 41

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	93*	611143	12266	"BIGDB	73	12	1	0	83	7	68	92
2.	86*	622968	12268	"BIGDB	67	18	1	0	86	7	59	77
3.	86*	98828	12259	"BIGDB	64	23	0	0	75	9	59	78
4.	81*	620144	12267	"BIGDB	53	34	1	0	72	7	53	46

850930772

F 507



Instrument ID: INST " Analyzed on: 5/03/97 4:34
Result 17 in PBM results file: LB1326
Retention Time: 24.14 Area: 357029 Tentative Conc: 110.00
The unknown area is 225.17% of the nearest internal standard

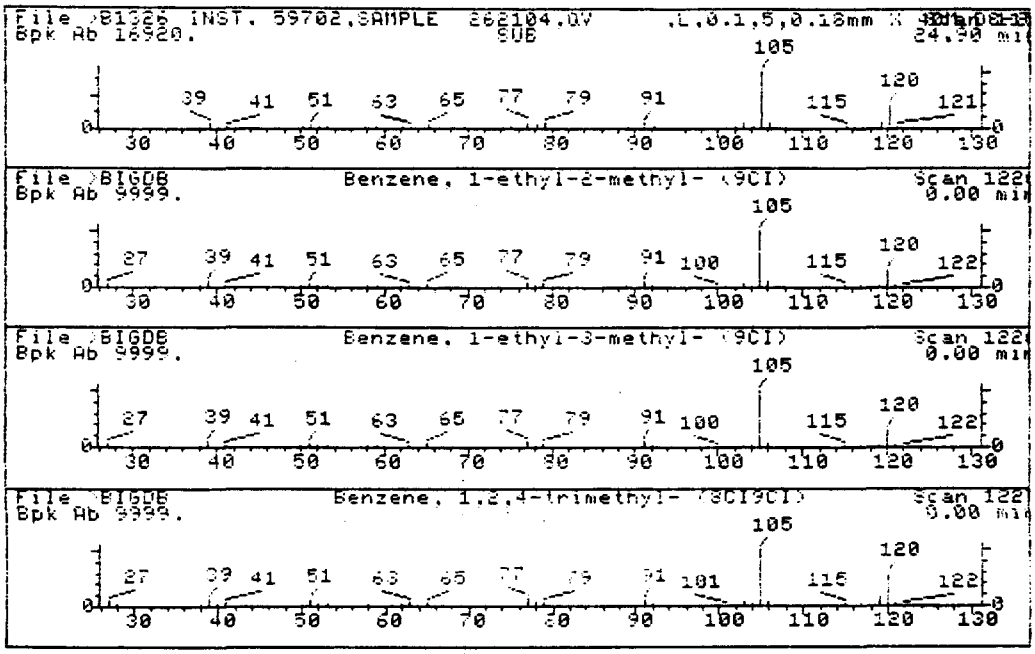
1.	Benzene, 1,2,3-trimethyl- (8CI9CI)	120	C9H12
2.	Benzene, 1-ethyl-4-methyl- (9CI)	120	C9H12
3.	Benzene, 1,2,4-trimethyl- (8CI9CI)	120	C9H12
4.	Benzene, 1-ethyl-2-methyl- (9CI)	120	C9H12
5.	Benzene, 1-ethyl-3-methyl- (9CI)	120	C9H12
6.	Benzene, (1-methylethyl)- (9CI)	120	C9H12

Sample file: >B1326 Spectrum #: 1113
Search speed: 1 Tilting option: N No. of ion ranges searched: 4

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_
1.	96*	526738	12280	"BIGDB	90	10	0	0	69	5	72	
2.	92*	622968	12268	"BIGDB	73	12	1	0	93	12	64	
3.	88*	95636	12273	"BIGDB	77	18	0	0	57	36	47	
4.	87*	611143	12266	"BIGDB	68	17	1	0	93	12	55	

850930773

F 508



Instrument ID: INST " Analyzed on: 5/03/97 4:34
Result 18 in PBM results file: LB1326
Retention Time: 24.90 Area: 106752 Tentative Conc: 34.00
The unknown area is 67.33% of the nearest internal standard

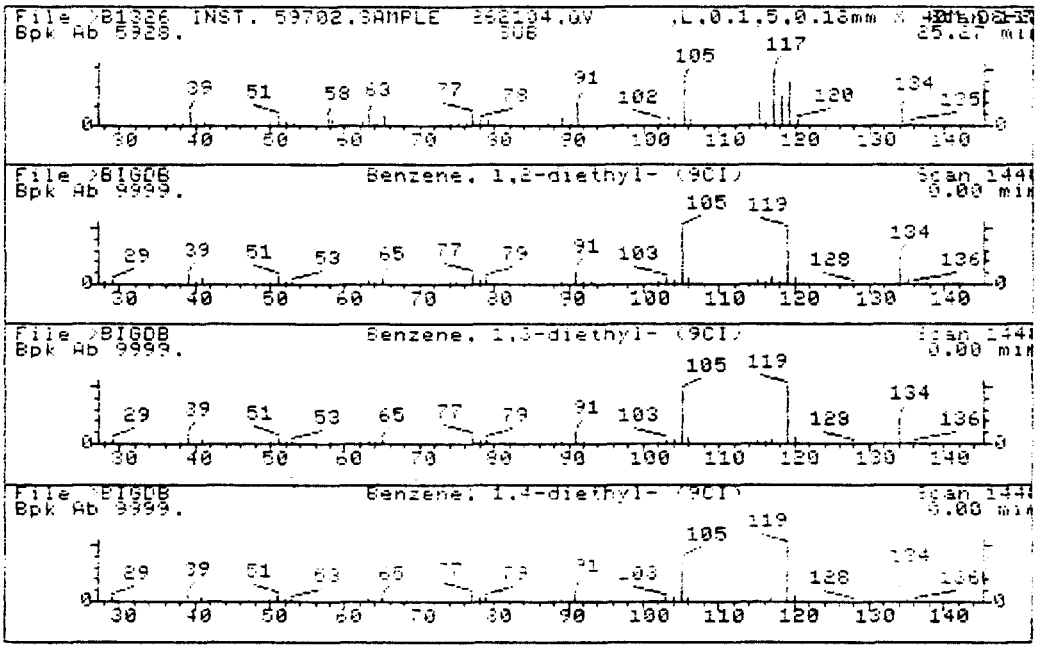
1.	Benzene, 1-ethyl-2-methyl- (9CI) Isomer	120	C9H12
2.	Benzene, 1-ethyl-3-methyl- (9CI)	120	C9H12
3.	Benzene, 1,2,4-trimethyl- (8CI9CI)	120	C9H12
4.	Benzene, 1-ethyl-4-methyl- (9CI)	120	C9H12
5.	1,3-Cyclopentadiene, 5-(1-methylpropylidene)- (9CI)	120	C9H12
6.	Benzene, (1-methylethyl)- (9CI)	120	C9H12

Sample file: >B1326 Spectrum #: 1152
Search speed: 1 Tilting option: N No. of ion ranges searched: 40

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	94*	611143	12266	"BIGDB	75	10	1	0	99	10	68	93
2.	94*	620144	12267	"BIGDB	75	12	1	0	100	9	68	93
3.	88*	95636	12273	"BIGDB	71	24	0	0	56	28	43	89
4.	76*	622968	12268	"BIGDB	64	21	1	0	93	22	41	72

850930774

F 509



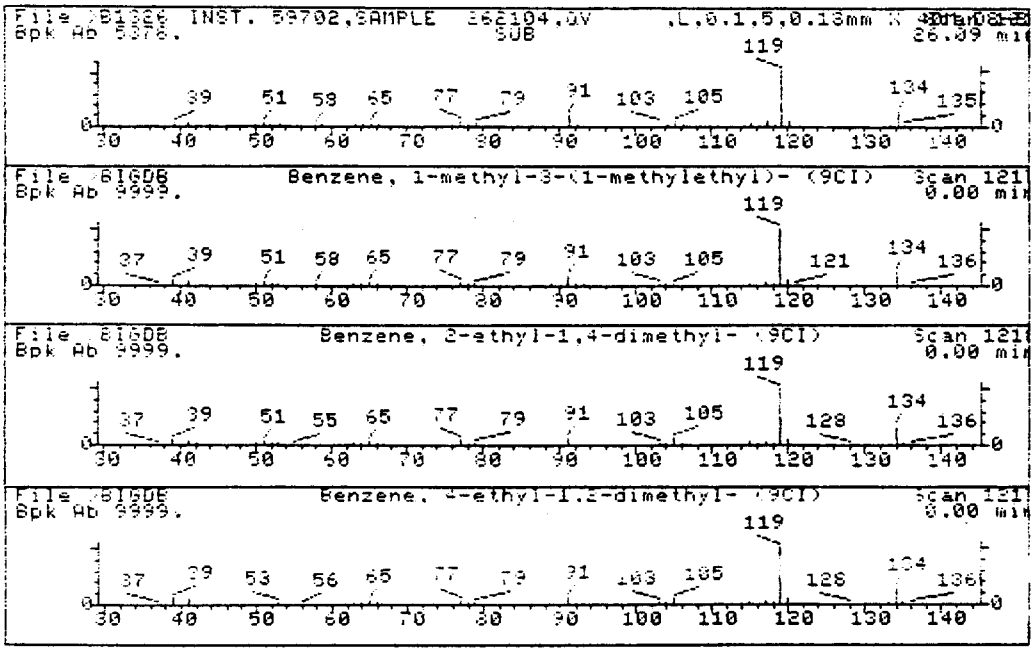
Instrument ID: INST " Analyzed on: 5/03/97 4:34
Result 19 in PBM results file: LB1326
Retention Time: 25.27 Area: 80362 Tentative Conc: 25.00
The unknown area is 50.68% of the nearest internal standard

1.	Benzene, 1,2-diethyl- (9CI)	134 C10H14
2.	Benzene, 1,3-diethyl- (9CI)	134 C10H14
3.	Benzene, 1,4-diethyl- (9CI)	134 C10H14
4.	Benzene, cyclopropyl- (8CI9CI)	118 C9H10
5.	1H-Indene, 2,3-dihydro- (9CI)	118 C9H10
6.	Benzene, 2-propenyl- (9CI)	118 C9H10

Sample file: >B1326 Spectrum #: 1171
Search speed: 1 Tilting option: N No. of ion ranges searched: 4

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_
1.	61*	135013	14481	"BIGDB	58	48	0	0	64	46	20	
2.	40*	141935	14482	"BIGDB	58	44	1	0	70	48	12	
3.	35*	105055	14480	"BIGDB	51	49	1	0	75	48	11	
4.	18*	873494	11986	"BIGDB	50	60	2	0	75	59	4	

850930775



Instrument ID: INST " Analyzed on: 5/03/97 4:34
Result 20 in PBM results file: LB1326
Retention Time: 26.09 Area: 26055 Tentative Conc: 8.00
The unknown area is 16.43% of the nearest internal standard

1.	Benzene, 1-methyl-3-(1-methylethyl)- (9CI)	134	C10H14
2.	Benzene, 2-ethyl-1,4-dimethyl- (9CI)	134	C10H14
3.	Benzene, 4-ethyl-1,2-dimethyl- (9CI)	134	C10H14
4.	Benzene, 1-ethyl-2,4-dimethyl- (9CI)	134	C10H14
5.	Benzene, 1-ethyl-2,3-dimethyl- (9CI)	134	C10H14
6.	Benzene, 2-ethyl-1,3-dimethyl- (9CI)	134	C10H14

Sample file: >B1326 Spectrum #: 1213
Search speed: 1 Tilting option: N No. of ion ranges searched: 43

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	95*	535773	12170	"BIGDB	79	10	1	0	94	6	68	95
2.	95*	1758889	12181	"BIGDB	79	15	0	0	72	3	72	95
3.	93*	934805	12173	"BIGDB	71	22	0	0	79	3	68	89
4.	89*	874419	12171	"BIGDB	70	18	1	0	94	3	66	77

850930776

F 50

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330, FAX: 201-584-0515
MAY 7, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

TARGET COMPOUND LIST - VOLATILE ANALYSIS BY GC/MS
PLUS 10 PEAKS

Lab Number: 262105 Data File: >B1325
Client: VECTRE CORPORATION
Sample source: NBB-V11
Sample ID: Trip Blank
Sample date: 04/29/97
Sampled by: Customer Analysis Date: 05/03/97 Column: DB-624
At lab date: 04/29/97 Dilution Factor: 1
Matrix: Water Init Sample volume= 5ml Final volume= 5ml

Conc. in Sample = (Conc. on Quant Report/Initial Volume)*Final Volume

Parameter	Result ug/l	Method Blank ug/l	Practical Quantitation Limit ug/l	Minimum Detectic Limit ug/l
Chloromethane	U	U	5	4.6
Bromomethane	U	U	5	3.8
Vinyl chloride	U	U	5	1.7
Chloroethane	U	U	5	1.8
Methylene chloride	U	U	5	2.7
Acetone	U	U	20	4.5
Carbon disulfide	U	U	5	1.7
1,1-Dichloroethene	U	U	5	1.7
1,1-Dichloroethane	U	U	5	1.4
trans-1,2-Dichloroethene	U	U	5	1.7
cis-1,2-Dichloroethene	U	U	5	1.7
Chloroform	U	U	5	1.6
1,2-Dichloroethane	U	U	5	1.9
2-Butanone	U	U	20	2.4
1,1,1-Trichloroethane	U	U	5	0.5
Carbon tetrachloride	U	U	5	0.6
Bromodichloromethane	U	U	5	0.6
1,2-Dichloropropane	U	U	5	0.6
cis-1,3-Dichloropropene	U	U	5	0.5
Trichloroethene	U	U	5	0.6
Dibromochloromethane	U	U	5	0.6
1,1,2-Trichloroethane	U	U	5	0.5
Benzene	U	U	5	0.5
trans-1,3-Dichloropropene	U	U	5	0.6
Bromoform	U	U	5	0.8
4-Methyl-2-pentanone	U	U	20	1.1
2-Hexanone	U	U	20	1.2
Tetrachloroethene	U	U	5	0.7
1,1,2,2-Tetrachloroethane	U	U	5	0.5
Toluene	U	U	5	0.8
Chlorobenzene	U	U	5	0.6
Ethylbenzene	U	U	5	0.7
Styrene	U	U	5	1
p&m-Xylene	U	U	5	0.9
o-Xylene	U	U	5	0.9
total Xylenes	U	U	5	0.9

ug/l = micrograms/liter or ppb
ND: Not Determined.
IND: Indeterminable.
U: Indicates a compound was analyzed for but not detected at the PQL.
J: Indicates an estimated value. It is utilized when a reported value meets the identification criteria but the result is less than the specified detection limit but greater than zero.
B: Indicates that the analyte was found in the blank as well as the sample. It indicates possible/probable blank contamination.

MS 5/7/97

INDUSTRIAL CORROSION MANAGEMENT, INC.
Richard Levine, President
Copyright ICM, Inc., 1997.
All rights reserved.
ERI

850930777

F 51

INDUSTRIAL CORROSION MANAGEMENT, Inc.
1152 Route 10
Randolph, NJ 07869
201-584-0330
Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab
MAY 7, 1997

LIBRARY SEARCH RESULTS OF NONTARGETED PEAKS WITH
ESTIMATED CONCENTRATION OF TENTATIVELY IDENTIFIED COMPOUNDS.

Data file name: >B1325
Lab number: 262105
Fraction: VOLATILE

Initial Sample Wt/Vol=5 Final Volume=5

CAS No.	Retention Time	Compound Name	Molecular Weight	Estimated Concentration ug/l
None found				

Estimated total non-target compound concentration (excluding compounds flagged with A, B or **) in ug/l is: 0

A: Indicates that the compound is an acetone based aldol-type condensation product formed by concentrating the extraction solvent (1:1 acetone/methylene chloride).
B: Indicates that the analyte was found in the blank as well as the sample. It further indicates possible/probable blank contamination.
C: Co-eluting and/or poorly resolved non-target compounds cause superimposed spectra that prevent identification of individual compounds.
* Compounds flagged are from diluted analysis.
** This compound is not flagged B; it was not found in the corresponding blank. However, it is commonly found as a laboratory contaminant.

Copyright ICM, Inc., 1997.
All rights reserved.
ERI

Operator ID: KS9934 Quant Rev: 7 Quant Time: 970503 04:29
Output File: ^B1325::E1 Injected at: 970503 03:56
Data File: >B1325::B1 Dilution Factor: 1.00000
Name: INST. 59702,SAMPLE Instrument ID: INST "B"
Misc: 262105,QV ,L,5,5,0.18mm X 40M D8-624

ID File: ID824B::X2
Title: GENERAL IDFILE FOR INSTRUMENT B
Last Calibration: 970415 20:09 Last Qcal Time: 970502 18:13

	Compound	R.T.	Q ion	Area	Conc	Units	
1)	*Bromochloromethane	9.83	128.0	10894	50.00	UG/L	9
22)	1,2-Dichloroethane-d4	11.09	65.0	27513	49.75	UG/L	8
27)	*1,4-Difluorobenzene	12.13	114.0	47937	50.00	UG/L	9
44)	*Chlorobenzene-d5	19.88	117.0	39631	50.00	UG/L	9
49)	Toluene-d8	15.93	98.0	49020	44.89	UG/L	9
56)	Bromofluorobenzene	22.51	95.0	21948	48.34	UG/L	5

* Compound is ISTD DLS 7/97

850930779

F 514

850930780

MS data file header from : B1325::B1

Sample: INST. 59702,SAMPLE Operator: KS9934 MS 5/03/97 3:56
Misc : 262105,QV ,L,5,5,0.18mm X 40M DB-624
Sys. #: 2 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: INST "B"
Method file: VOAB Tuning file: APE102 No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 270

Chromatographic temperatures :	30.	90.	200.	0.	0.
Chromatographic times, min. :	1.0	1.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	4.0	10.0	0.0	.1	0.0

B1325 INST. 59702,SAMPLE 262105,QV ,L,5,5,0.18mm X 40M DB-624

35.01 260.0 TIC
Upslope: .2000 Area Reject: 8484. Max Peaks: 8 Bunch: -1 Valley >100 %
Dnslope: 0.0000 Results File IB1325 Sorted by Time/Area INT

Peak #		R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	CO2	2.77	5	15	33	242087	807747	807747	100.00	54.047
2	I	9.83	373	377	384	33938	84836	84836	10.50	5.676
3	S	11.09	438	442	448	28031	72995	72995	9.04	4.884
4	I	12.15	488	496	503	39774	122862	122862	15.21	8.221
5	S	15.93	684	690	697	48830	155046	154179	19.09	10.316
6	I	19.88	889	893	903	45840	132517	132517	16.41	8.867
7	S	22.51	1024	1028	1035	47748	109993	109993	13.62	7.360
8	(1028)	28.65	1339	1343	1349	3949	10077	9399	1.16	.629

Sum of corrected areas: 1494528.

Summary of Unknowns PBM Library Search and Quantitation

Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	84836.	9.83	2.50 - 10.98
2	50.0	122862.	12.13	10.98 - 16.01
3	50.0	132517.	19.88	16.01 - 32.04

PLEASE NOTE THE NOTATION USED FOR IDENTIFYING THE PEAKS ON THIS PAGE

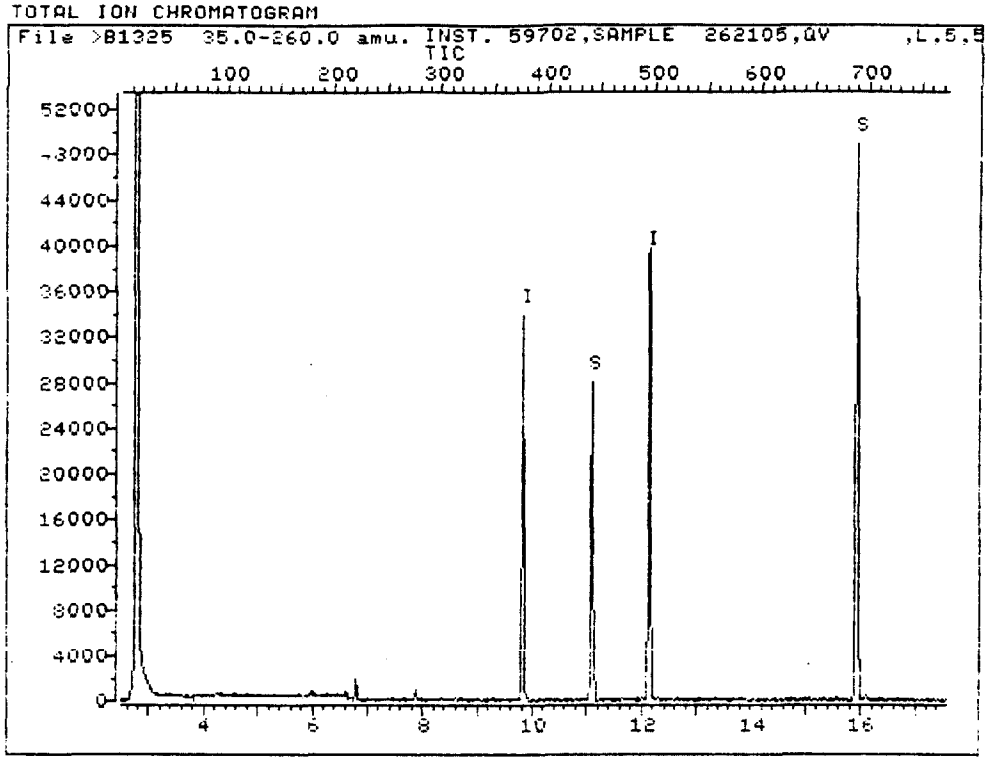
NT=NON TARGETED COMPOUND T= TARGETED COMPOUND (COMPOUNDS FROM SAMPLE)

I=INTERNAL STANDARD COMPOUND S=SURROGATE COMPOUND (SYSTEM MONITORING)

$$\text{Unknown Concentration} = \frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}} * \text{Correction Factor}$$

F 515

TOTAL ION CHROMATOGRAM



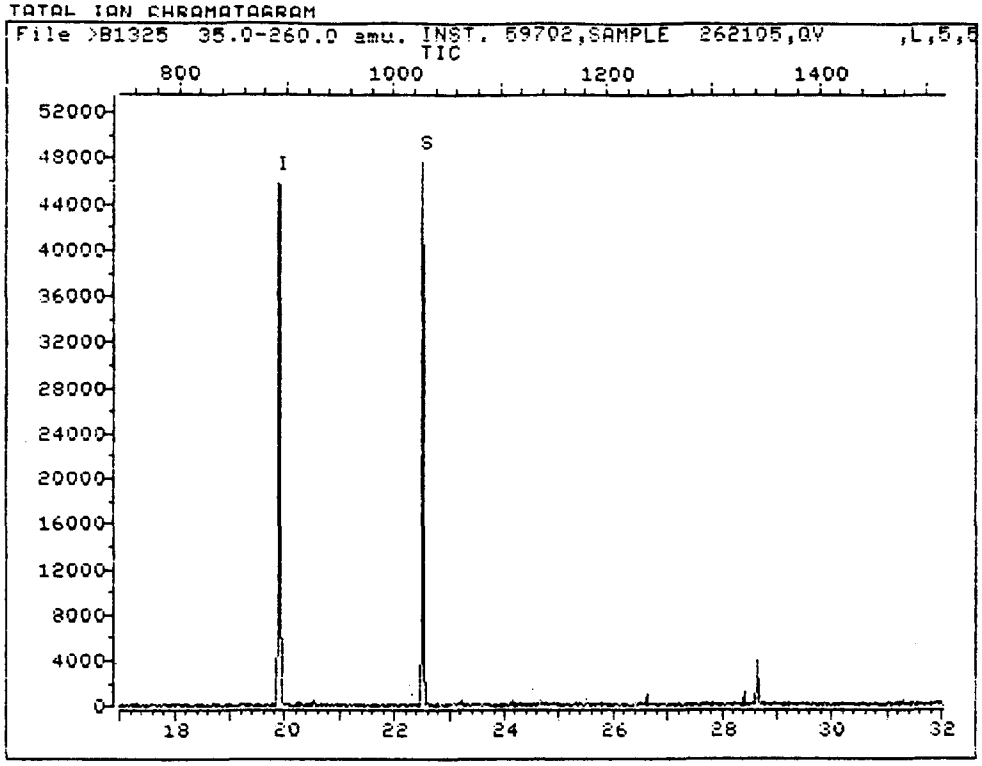
Data File: >B1325::B1 Quant Output File: ^B1325::E1
Name: INST. 59702.SAMPLE Instrument ID: INST "B"
Misc: 262105,QV ,L,5,5,0.18mm X 40M D8-824

Id File: ID824B::X2
Title: GENERAL IDFILE FOR INSTRUMENT B
Last Calibration: 970415 20:09 Last Qcal Time: 970502 18:13

Operator ID: KS9934
Quant Time : 970503 04:29
Injected at: 970503 03:56

Page 1 of 2

TOTAL ION CHROMATOGRAM



Data File: >B1325::B1 Quant Output File: ^B1325::E1
Name: INST. 59702,SAMPLE Instrument ID: INST "B"
Misc: 262105,QV ,L,5,5,0.18mm X 40M D8-824

Id File: ID824B::X2
Title: GENERAL IDFILE FOR INSTRUMENT B
Last Calibration: 970415 20:09 Last Qcal Time: 970502 18:13

Operator ID: KS9934
Quant Time : 970503 04:29
Injected at: 970503 03:56

Page 2 of 2

850930782

F 517

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330, FAX: 201-584-0515
MAY 5, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

BROMOFLUOROBENZENE (BFB) GC/MS TUNING AND MASS CALIBRATION
VOLATILE ORGANIC COMPOUNDS

INSTRUMENT ID: 59702
LAB FILE NO: >B1260
BFB INJECTION DATE: 04/30/97

BATCH #: QV5028
BFB INJECTION TIME: 19:08

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS

LAB SAMPLE ID	DATA FILE	ANALYSIS DATE	ANALYSIS TIME
VSTD200	>B1261	04/30/97	19:46
VSTD150	>B1262	04/30/97	20:33
VSTD100	>B1263	04/30/97	21:20
VSTD050	>B1264	04/30/97	22:07
VSTD020	>B1265	04/30/97	22:54

See next page for ION ABUNDANCE CRITERIA and Spectra

Copyright ICM, Inc.,1997.
All rights reserved.
ERI

850930783

F 51

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330, FAX: 201-584-0515
MAY 7, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

BROMOFLUOROBENZENE (BFB) GC/MS TUNING AND MASS CALIBRATION
VOLATILE ORGANIC COMPOUNDS

INSTRUMENT ID: 59702
LAB FILE NO: >B1260
BFB INJECTION DATE: 04/30/97

BATCH #: QV5029
BFB INJECTION TIME: 19:08

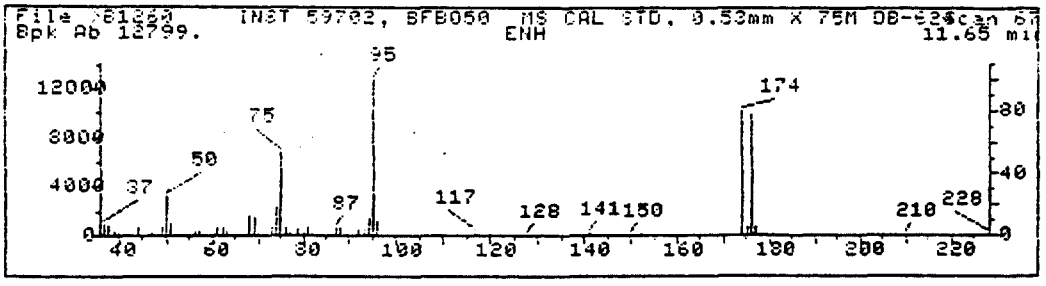
THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS

LAB SAMPLE ID	DATA FILE	ANALYSIS DATE	ANALYSIS TIME
VSTD200	>B1261	04/30/97	19:46
VSTD150	>B1262	04/30/97	20:33
VSTD100	>B1263	04/30/97	21:20
VSTD050	>B1264	04/30/97	22:07
VSTD020	>B1265	04/30/97	22:54

See next page for ION ABUNDANCE CRITERIA and Spectra

Copyright ICM, Inc.,1997.
All rights reserved.
ERI

850930785



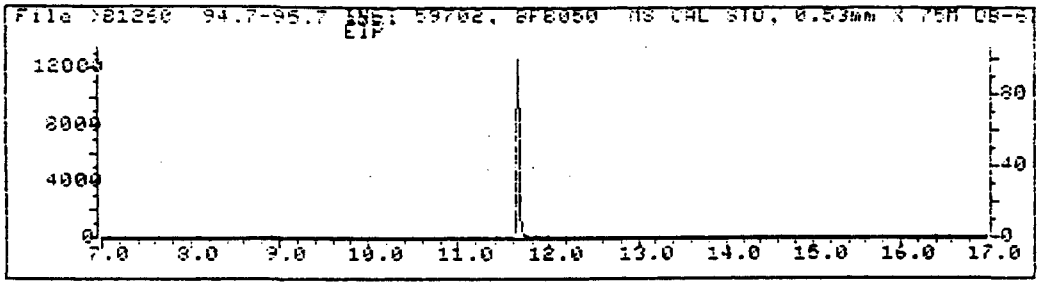
GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
50	15-40% of mass 95	25.13	25.13	Ok
75	30-60% of mass 95	53.18	53.18	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	8.84	8.84	Ok
173	Less than 1% of mass 95	0.00	0.00	Ok
174	Greater than 50% of mass 95	79.35	79.35	Ok
175	5-9% of mass 174	5.81	7.32	Ok
176	95-101% of mass 174	77.78	98.03	Ok
177	5-9% of mass 176	5.06	6.51	Ok

Injection Date: 04/30/97 Data File: >B1260
Injection Time: 19:08 Scan: 671

Analyst's signature: _____ F 520



>B1260 INST 59702, BFB050 MS CAL STD, 0.53mm X 75M DB-624
671 NRM ENH

File: >B1260 Scan #: 671 Retn. time: 11.65

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
36.05	1.691	51.10	8.375	72.25	.355	87.10	5.492	130.05	.273
37.10	8.129	56.10	2.789	73.05	4.789	88.10	5.403	141.20	1.266
38.10	6.977	57.10	3.301	74.15	18.669	92.10	3.543	150.00	.266
39.10	2.793	60.10	1.309	75.15	53.178	93.20	4.414	174.15	79.347
40.10	1.059	61.15	5.840	76.15	4.817	94.10	11.868	175.15	5.809
40.90	.480	62.15	5.703	77.05	1.293	95.10	100.000	176.15	77.780
44.10	5.160	63.15	3.942	78.05	.766	96.10	8.840	177.15	5.063
47.10	1.781	68.05	13.126	78.95	3.992	115.95	.598	209.95	.293
48.00	.375	69.15	11.731	80.05	1.523	116.95	.801	216.05	.227
49.10	5.293	70.15	1.332	80.95	4.746	117.95	.684	228.60	.387
50.10	25.130	72.05	.742	81.95	.984	127.85	.523		

850930786

F 521

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330, FAX: 201-584-0515
MAY 7, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

BROMOFLUOROBENZENE (BFB) GC/MS TUNING AND MASS CALIBRATION
VOLATILE ORGANIC COMPOUNDS

INSTRUMENT ID: 59702
LAB FILE NO: >B1372
BFB INJECTION DATE: 05/06/97

BATCH #: QV5028
BFB INJECTION TIME: 08:45

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS

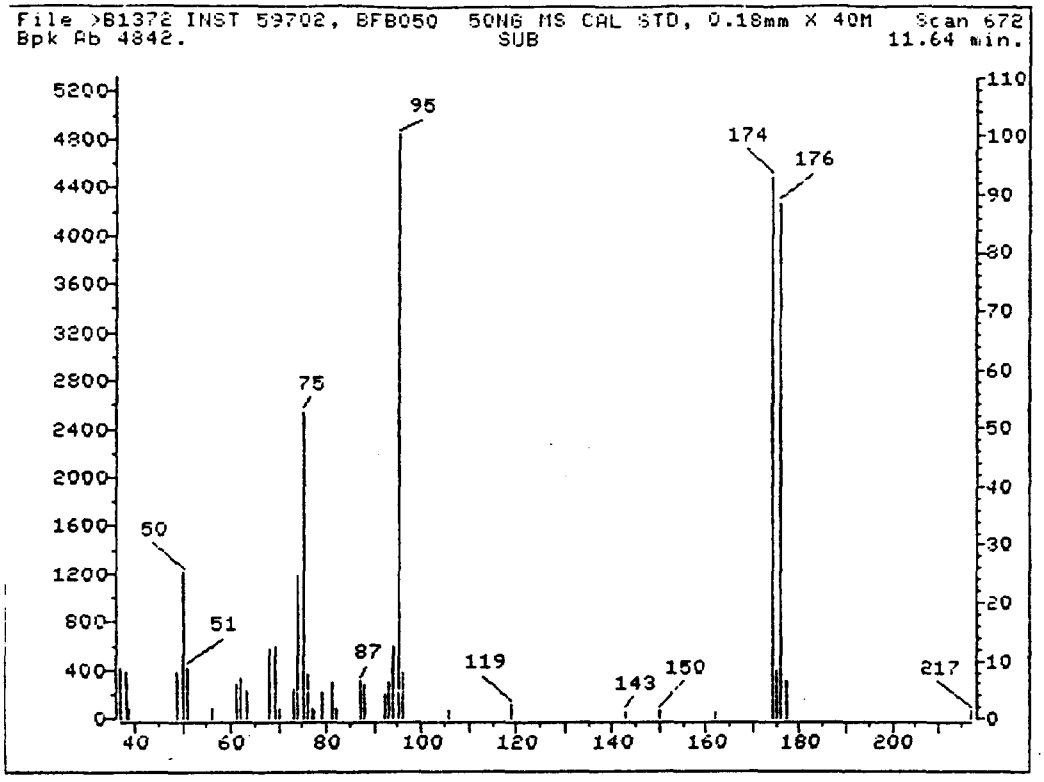
LAB SAMPLE ID	DATA FILE	ANALYSIS DATE	ANALYSIS TIME
VSTD050	>B1373	05/06/97	09:20
BLANK	>B1374	05/06/97	10:15
262099	>B1377	05/06/97	12:34

See next page for ION ABUNDANCE CRITERIA and Spectra

Copyright ICM, Inc.,1997.
All rights reserved.
ERI

850930787

F 52



GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
50	15-40% of mass 95	25.01	25.01	Ok
75	30-60% of mass 95	52.48	52.48	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	7.99	7.99	Ok
173	Less than 1% of mass 95	0.00	0.00	Ok
174	Greater than 50% of mass 95	92.69	92.69	Ok
175	5-9% of mass 174	8.16	8.80	Ok
176	95-101% of mass 174	88.37	95.34	Ok
177	5-9% of mass 176	6.53	7.38	Ok

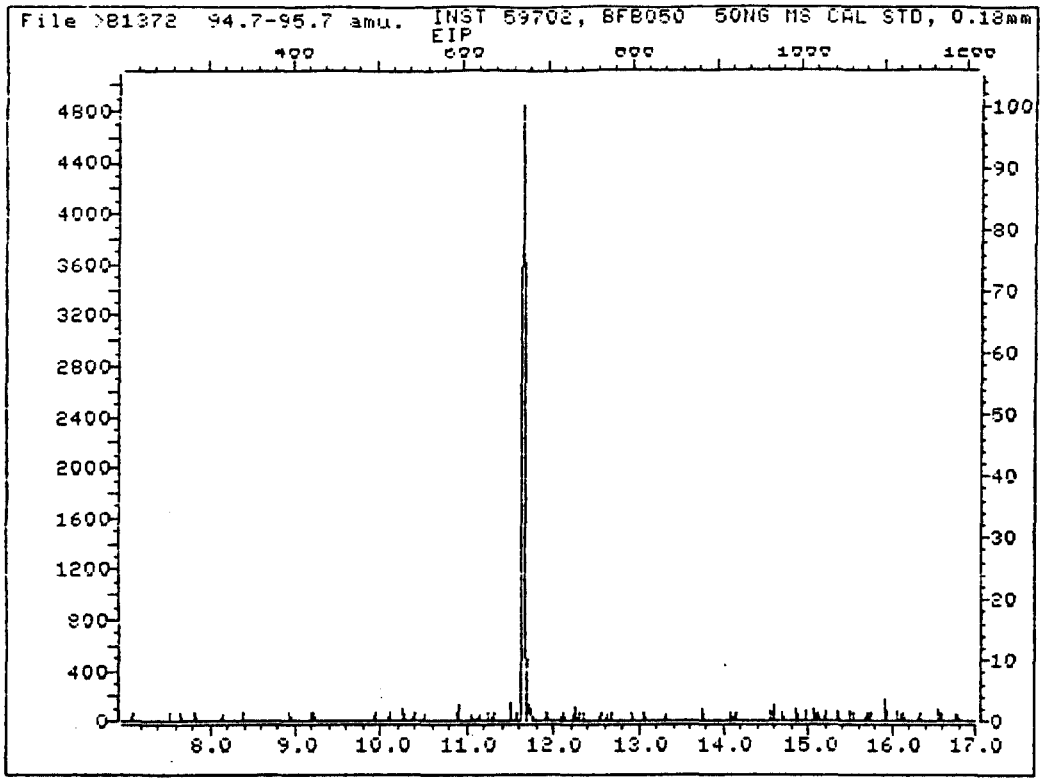
Injection Date: 05/06/97 Data File: >B1372
Injection Time: 08:45 Scan: 672

Analyst's signature: K. Santacana

Associated samples: _____

850930788

F-523



>B1372 INST 59702, BFB050 50NG MS CAL STD, 0.18mm X 40M DB-8240
672 SUB NRM

File: >B1372 Scan #: 672 Retn. time: 11.64

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
37.10	8.488	62.05	7.001	76.05	7.373	92.10	4.192	150.10	1.363
38.10	7.807	63.15	4.915	76.95	1.755	93.10	6.216	161.75	1.033
38.90	1.900	68.05	11.875	77.45	1.322	94.10	12.082	174.15	92.689
49.00	7.910	69.15	12.288	79.05	4.523	95.10	100.000	175.15	8.158
50.10	25.010	70.05	1.859	81.05	6.258	96.10	7.993	176.15	88.373
51.10	8.633	73.15	5.287	81.95	1.879	106.00	1.570	177.05	6.526
56.00	1.673	74.15	24.515	87.10	6.382	118.85	2.292	217.35	1.322
61.15	5.700	75.15	52.478	88.10	5.741	143.00	1.219		

850930789

F 52

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330, FAX: 201-584-0515
MAY 7, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

BROMOFLUOROBENZENE (BFB) GC/MS TUNING AND MASS CALIBRATION
VOLATILE ORGANIC COMPOUNDS

INSTRUMENT ID: 59702
LAB FILE NO: >B1311
BFB INJECTION DATE: 05/02/97

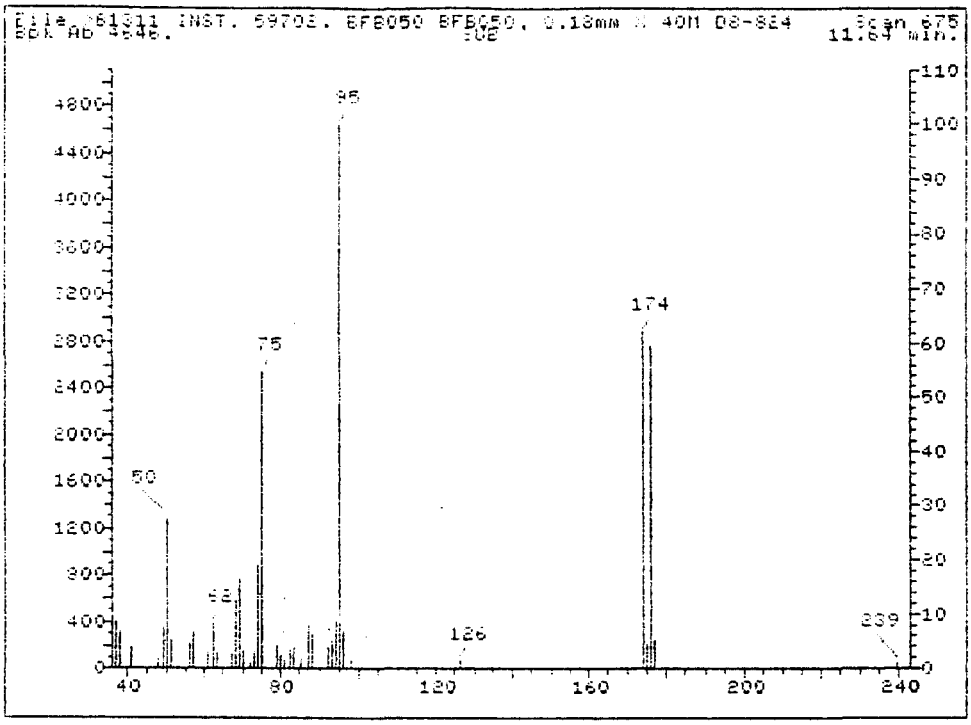
BATCH #: QV5029
BFB INJECTION TIME: 17:05

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS

LAB SAMPLE ID	DATA FILE	ANALYSIS DATE	ANALYSIS TIME
VSTD050	>B1312	05/02/97	18:13
BLANK	>B1313	05/02/97	19:07
262021 MS	>B1321	05/03/97	01:15
261021 MSD	>B1322	05/03/97	01:54
262102	>B1324	05/03/97	03:15
262105	>B1325	05/03/97	03:56
262104	>B1326	05/03/97	04:34

See next page for ION ABUNDANCE CRITERIA and Spectra

Copyright ICM, Inc.,1997.
All rights reserved.
ERI



GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
50	15-40% of mass 95	27.57	27.57	Ok
75	30-60% of mass 95	54.82	54.82	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	6.95	6.95	Ok
173	Less than 1% of mass 95	0.00	0.00	Ok
174	Greater than 50% of mass 95	62.16	62.16	Ok
175	5-9% of mass 174	4.46	7.17	Ok
176	95-101% of mass 174	59.43	95.60	Ok
177	5-9% of mass 176	5.29	8.91	Ok

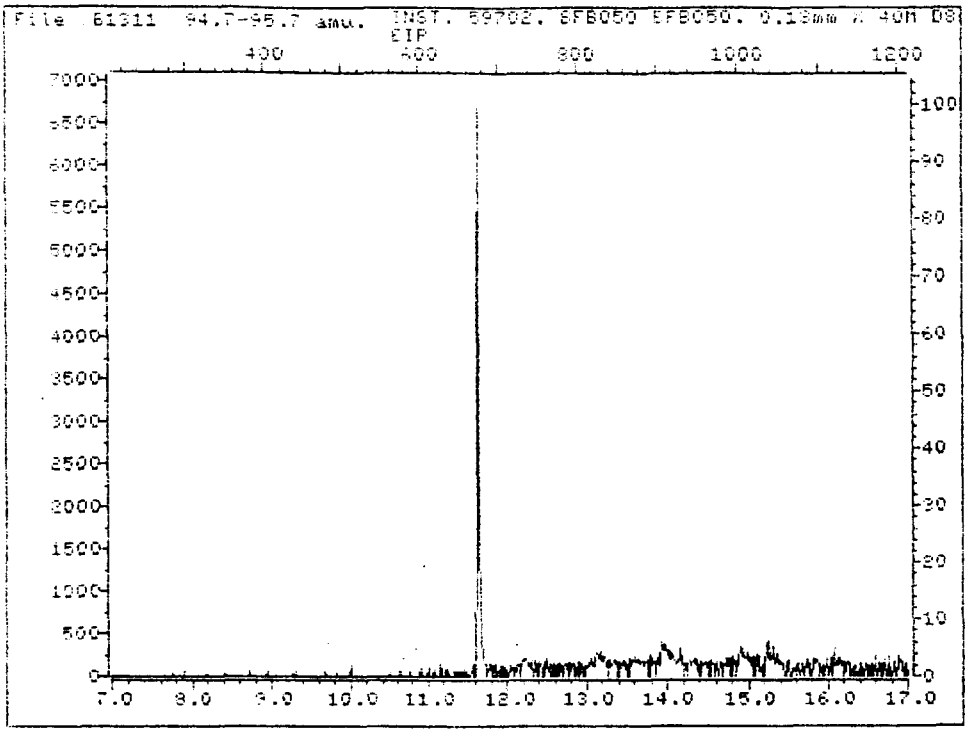
Injection Date: 05/02/97 Data File: >B1311
Injection Time: 17:05 Scan: 675

Analyst's signature: Kathleen Lacel

Associated samples: _____

850930791

F 52



>B1311 INST. 59702, SFB050 BFB050, 0.18mm X 40M D8-824
675 SUB NRM

File: >B1311 Scan #: 675 Retn. time: 11.64

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
36.15	4.068	56.10	4.563	72.05	1.205	85.10	1.743	98.10	1.399
37.00	8.696	57.10	6.522	73.15	3.099	87.10	8.351	126.05	1.550
38.10	6.931	61.15	2.949	74.15	19.156	88.10	6.070	174.15	62.161
41.10	3.917	62.15	8.244	75.15	54.821	92.00	3.982	175.05	4.455
42.10	.237	63.15	2.690	79.05	4.090	93.10	5.295	176.15	59.427
47.70	1.657	67.25	2.863	79.95	2.432	94.20	8.631	177.05	5.295
49.10	7.512	68.15	12.118	80.95	1.464	95.20	100.000	239.30	1.184
50.10	27.572	69.15	16.143	82.15	3.594	96.10	6.952	243.00	1.421
51.10	5.252	70.15	3.444	83.15	3.745	97.20	.344		

850930792

F 527

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330, FAX: 201-584-0515
MAY 7, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

BROMOFLUOROBENZENE (BFB) GC/MS TUNING AND MASS CALIBRATION
VOLATILE ORGANIC COMPOUNDS

INSTRUMENT ID: 59702
LAB FILE NO: >B1328
BFB INJECTION DATE: 05/03/97

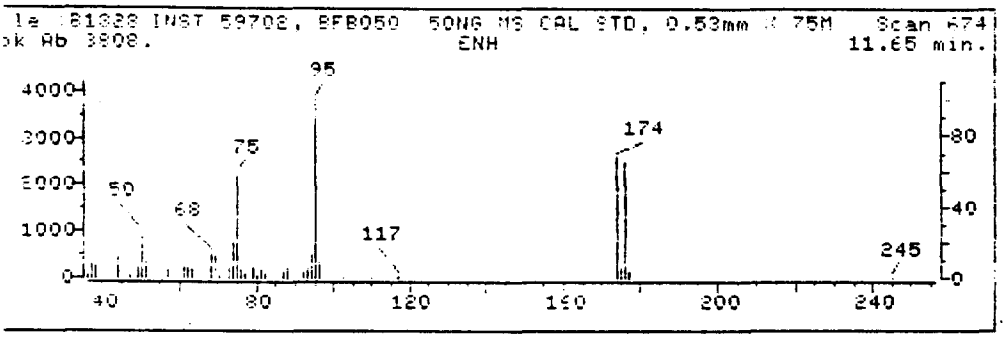
BATCH #: QV5029
BFB INJECTION TIME: 11:53

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS

LAB SAMPLE ID	DATA FILE	ANALYSIS DATE	ANALYSIS TIME
VSTD050	>B1329	05/03/97	12:32
BLANK	>B1330	05/03/97	13:32
262098	>B1333	05/03/97	15:51
262100	>B1340	05/03/97	20:27

See next page for ION ABUNDANCE CRITERIA and Spectra

Copyright ICM, Inc.,1997.
All rights reserved.
ERI



GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
50	15-40% of mass 95	24.90	24.90	Ok
75	30-60% of mass 95	57.69	57.69	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	8.52	8.52	Ok
173	Less than 1% of mass 95	0.00	0.00	Ok
174	Greater than 50% of mass 95	68.20	68.20	Ok
175	5-9% of mass 174	5.36	7.86	Ok
176	95-101% of mass 174	65.58	96.16	Ok
177	5-9% of mass 176	3.73	5.69	Ok

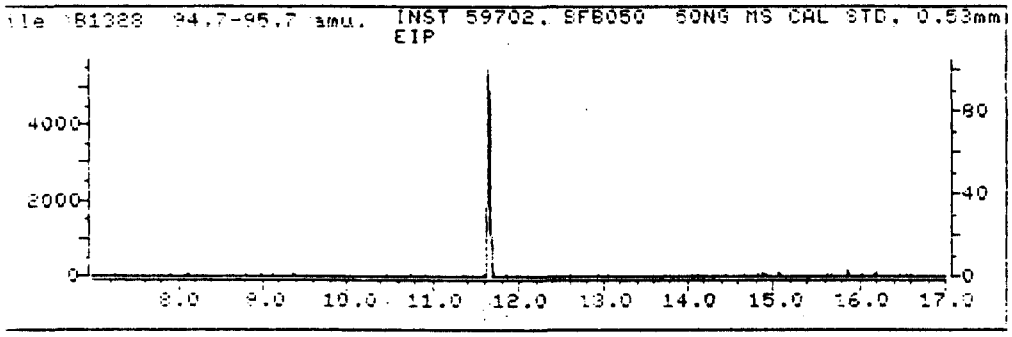
Injection Date: 05/03/97 Data File: >B1328
Injection Time: 11:53 Scan: 674

Analyst's signature: K. Santacana

Associated samples: _____

850930794

F 529



B1328 INST 59702, BFB050 50NG MS CAL STD, 0.53mm X 75M DB624
674 NRM ENH

ile: B1328 Scan #: 674 Retn. time: 11.65

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
36.25	.963	61.15	7.126	75.15	57.691	88.20	5.708	116.75	.657
37.10	8.054	62.15	5.515	76.15	4.964	92.10	3.108	117.05	.709
38.00	7.178	63.15	4.255	77.25	2.084	93.10	5.550	174.15	68.196
44.10	11.757	68.05	13.473	79.05	6.023	94.20	12.895	175.15	5.358
46.90	1.182	69.05	12.571	80.05	1.322	95.10	100.000	176.15	65.578
49.10	5.865	70.15	.735	81.05	5.016	96.10	8.518	177.05	3.729
50.10	24.897	73.15	6.548	82.15	1.856	102.60	.473	245.10	.458
51.10	9.104	74.15	19.890	87.10	3.335	109.65	.508	256.15	.560
57.00	4.911								

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330, FAX: 201-584-0515
MAY 7, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

BROMOFLUOROBENZENE (BFB) GC/MS TUNING AND MASS CALIBRATION
VOLATILE ORGANIC COMPOUNDS

INSTRUMENT ID: 59701
LAB FILE NO: >A3692
BFB INJECTION DATE: 05/02/97

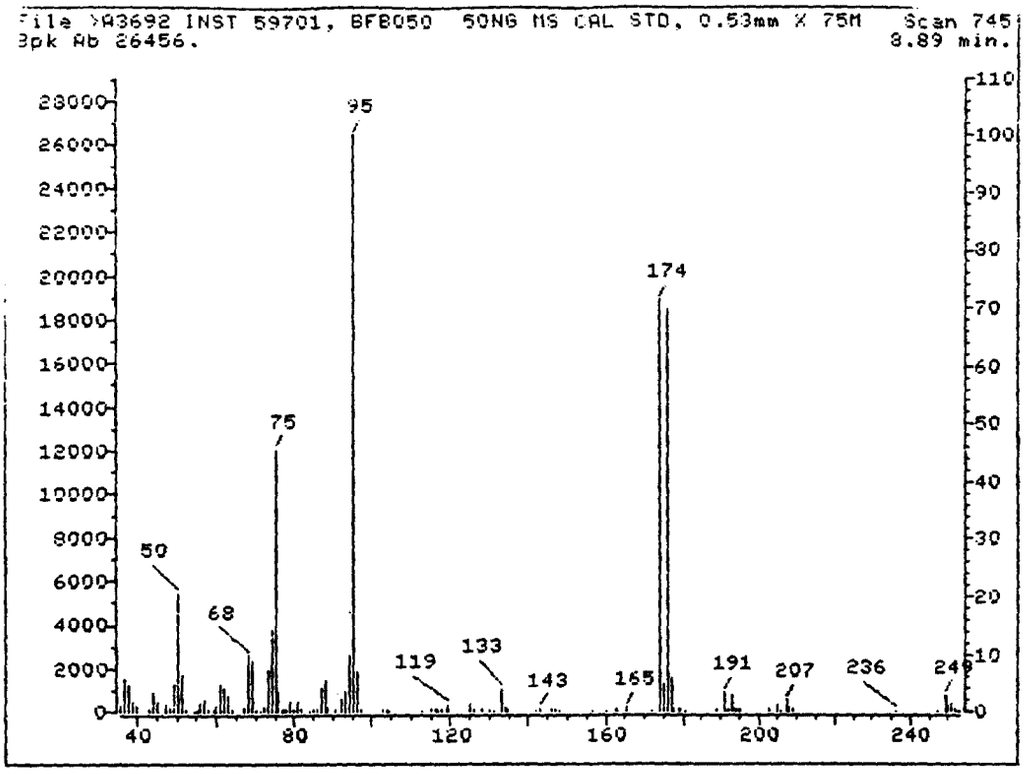
BATCH #: QV5037
BFB INJECTION TIME: 08:48

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS

LAB SAMPLE ID	DATA FILE	ANALYSIS DATE	ANALYSIS TIME
VSTD020	>A3694	05/02/97	10:31
VSTD050	>A3695	05/02/97	11:31
VSTD100	>A3696	05/02/97	12:31
VSTD150	>A3697	05/02/97	13:26
VSTD200	>A3698	05/02/97	14:21

See next page for ION ABUNDANCE CRITERIA and Spectra

Copyright ICM, Inc.,1997.
All rights reserved.
EIL



GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
50	15-40% of mass 95	20.38	20.38	Ok
75	30-60% of mass 95	45.51	45.51	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	6.86	6.86	Ok
173	Less than 1% of mass 95	0.00	0.00	Ok
174	Greater than 50% of mass 95	71.36	71.36	Ok
175	5-9% of mass 174	4.88	6.84	Ok
176	95-101% of mass 174	69.67	97.63	Ok
177	5-9% of mass 176	5.77	8.28	Ok

Injection Date: 05/02/97 Data File: >A3692
Injection Time: 08:48 Scan: 745

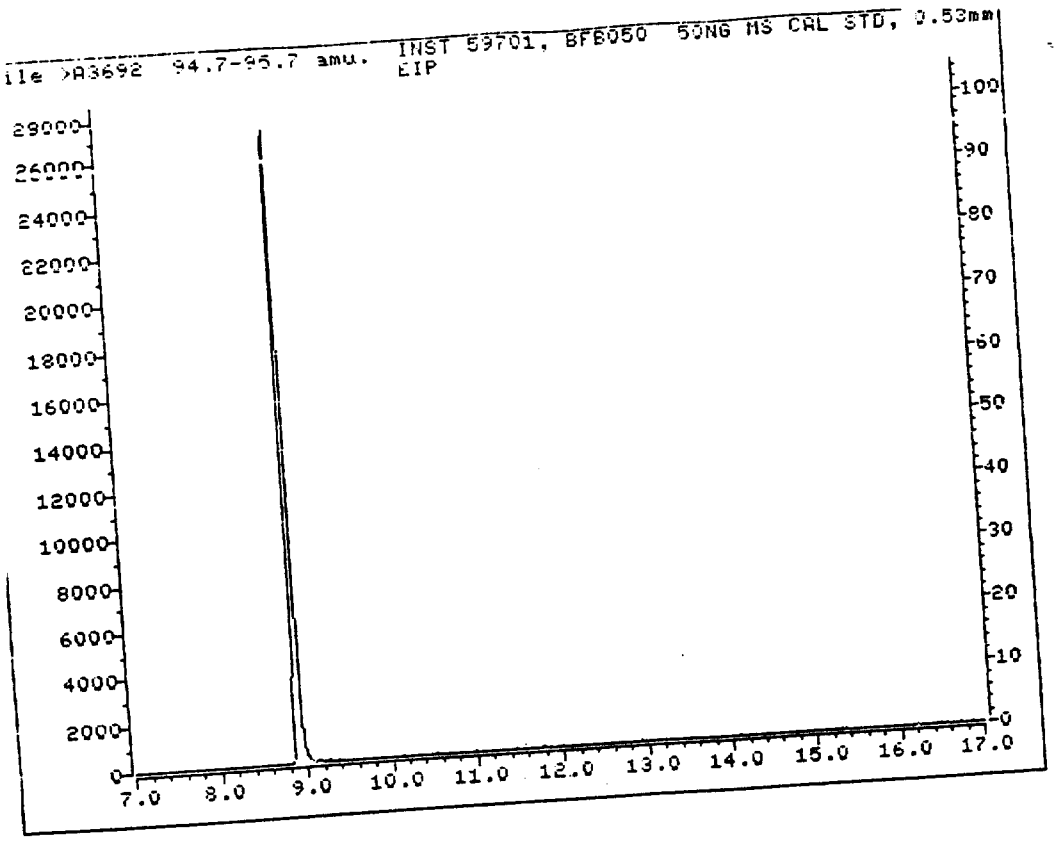
Analyst's signature: L. Santacana

Associated samples: _____

850930797

F 536

850930798



INST 59701, BFB050 50NG MS CAL STD, 0.53mm X 75M DB624

>A3692
745

NRM

File: >A3692 Scan #: 745 Retn. time: 8.89

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
35.95	1.043	61.00	4.971	86.00	.276	125.85	.420	177.85	.401
37.05	5.881	62.00	4.060	86.20	.261	127.75	.431	179.05	.567
38.05	4.959	63.00	2.903	87.00	4.090	130.00	.348	180.75	.208
39.05	1.712	63.80	.336	88.00	5.413	130.80	.215	188.95	.378
39.95	.987	67.00	.643	88.70	.624	131.00	.223	190.95	3.417
42.85	.314	68.00	9.812	90.80	.321	133.10	3.829	192.05	.514
44.05	3.417	69.00	8.992	92.00	2.241	134.00	.809	192.95	2.767
45.05	1.875	70.00	.559	93.05	3.440	134.80	.359	194.05	.488
47.05	1.342	71.20	.163	94.05	9.865	141.70	.087	195.05	.287
47.95	.605	72.10	.714	95.05	100.000	143.00	.563	202.95	.363
49.05	4.800	73.00	7.220	96.05	6.857	145.80	.348	205.00	.968
50.05	20.385	74.00	14.201	97.15	.302	146.90	.359	206.00	.253
51.05	6.358	75.00	45.509	103.05	.578	148.00	.231	207.10	2.034
52.05	.314	76.00	3.591	103.85	.499	156.80	.117	208.00	.601
54.35	.178	77.00	.389	104.55	.144	160.00	.106	209.00	.416
54.65	.223	77.30	.389	112.65	.106	163.00	.522	236.00	.208
54.85	.234	78.00	.272	115.05	.333	165.10	.627	247.05	.189
55.35	.355	79.00	1.663	115.95	.340	171.95	.223	249.05	2.907
56.00	1.542	80.00	.544	116.95	.423	173.95	71.364	250.05	1.017
57.00	2.000	80.90	1.863	117.95	.469	174.95	4.884	250.95	1.285
58.00	.276	81.80	.310	119.05	1.160	175.95	69.670	252.05	.355
59.20	.370	84.20	.140	124.95	1.346	176.95	5.768	253.05	.170
60.00	.941	85.20	.276	227					

F 533

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330, FAX: 201-584-0515
MAY 7, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

BROMOFLUOROBENZENE (BFB) GC/MS TUNING AND MASS CALIBRATION
VOLATILE ORGANIC COMPOUNDS

INSTRUMENT ID: 59701
LAB FILE NO: >A3740
BFB INJECTION DATE: 05/05/97

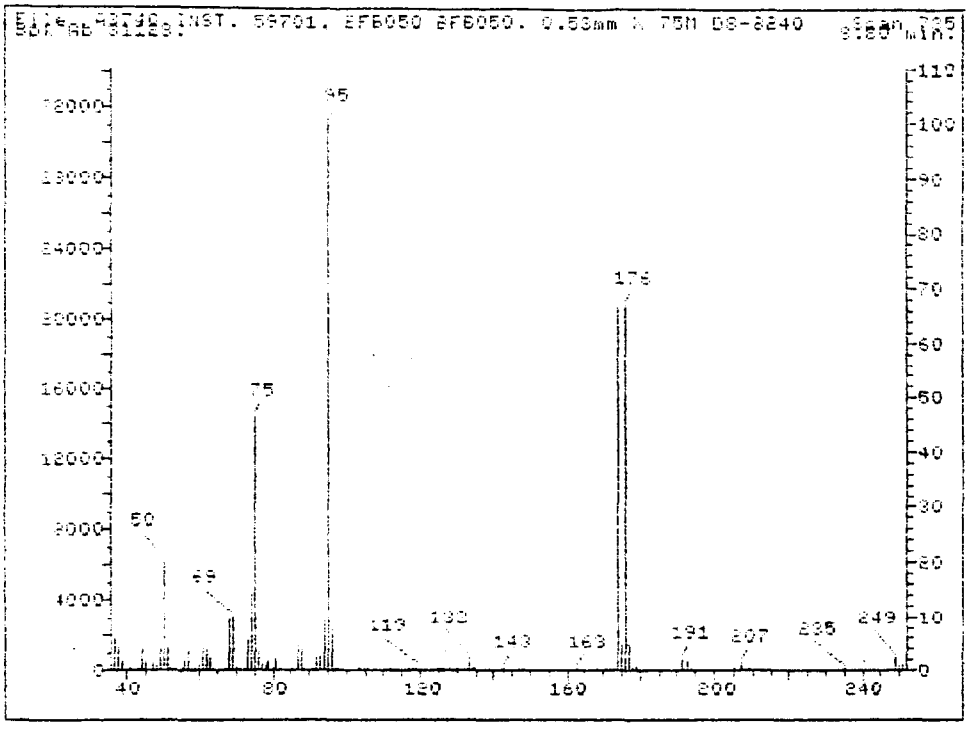
BATCH #: QV5037
BFB INJECTION TIME: 16:48

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS

LAB SAMPLE ID	DATA FILE	ANALYSIS DATE	ANALYSIS TIME
VSTD050	>A3741	05/05/97	17:40
BLANK	>A3742	05/05/97	18:39
262103	>A3747	05/05/97	22:42
262211 MS	>A3753	05/06/97	02:28
262211 MSD	>A3754	05/06/97	03:06

See next page for ION ABUNDANCE CRITERIA and Spectra

Copyright ICM, Inc.,1997.
All rights reserved.
EIL



GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
50	15-40% of mass 95	20.00	20.00	Ok
75	30-60% of mass 95	46.45	46.45	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	7.54	7.54	Ok
173	Less than 1% of mass 95	0.00	0.00	Ok
174	Greater than 50% of mass 95	66.72	66.72	Ok
175	5-9% of mass 174	4.83	7.24	Ok
176	95-101% of mass 174	67.03	100.46	Ok
177	5-9% of mass 176	4.95	7.39	Ok

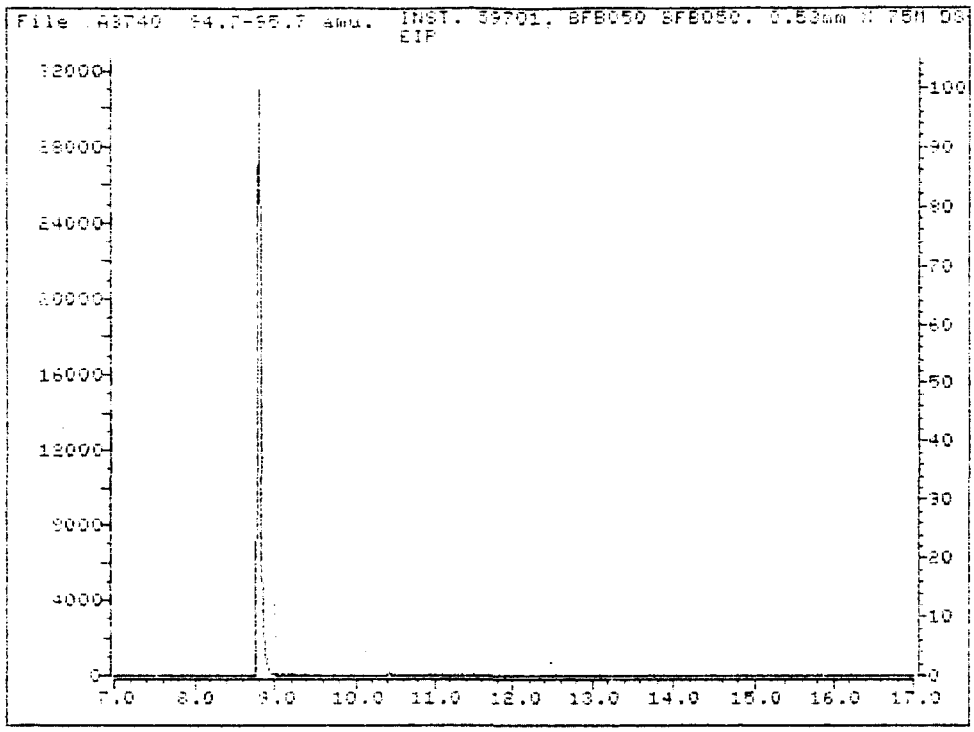
Injection Date: 05/05/97 Data File: >A3740
Injection Time: 16:48 Scan: 735

Analyst's signature: Kathleen Lund

Associated samples: _____

850930800

F 535



>A3740 INST. 59701, BFB050 BFB050, 0.53mm X 75M DB-8240
735 NRM

File: >A3740 Scan #: 735 Retn. time: 8.80

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
36.05	1.128	60.00	1.034	85.30	.279	133.10	2.387	178.85	.697
37.05	5.969	61.00	4.478	87.00	4.600	134.00	.617	180.05	.164
38.05	4.559	62.00	3.759	88.00	3.807	134.90	.386	188.95	.218
39.05	1.854	63.00	2.432	91.00	.341	136.70	.190	191.05	2.165
40.95	.321	64.00	.379	92.00	2.432	142.90	.437	191.95	.398
43.15	.508	67.00	.549	93.05	2.904	145.00	.164	193.05	1.873
44.05	3.797	68.00	9.708	93.95	9.136	146.00	.177	194.05	.408
45.05	1.722	69.00	9.792	95.05	100.000	146.90	.405	205.00	.774
46.15	.196	70.10	.765	96.05	7.537	148.00	.341	205.90	.186
47.05	1.295	70.90	.257	96.95	.360	149.00	.296	207.00	1.574
48.15	.768	71.10	.279	102.95	.556	153.60	.119	207.90	.231
49.05	4.176	72.00	.466	103.85	.456	155.00	.132	208.30	.215
50.05	20.001	73.00	5.445	104.75	.488	158.90	.164	209.00	.289
51.05	5.220	74.00	14.370	105.95	.296	160.90	.231	220.80	.167
52.25	.382	75.00	46.450	111.95	.347	163.00	.475	235.00	.296
53.05	.077	76.10	3.566	116.95	.411	165.00	.218	242.05	.067
54.15	.186	77.10	1.002	118.05	.562	171.55	.112	248.95	2.451
55.05	.575	78.00	.758	119.05	.793	173.95	66.718	249.95	.630
55.95	1.609	78.90	1.613	125.05	.723	174.95	4.832	251.05	.932
57.00	3.457	80.10	.517	126.05	.324	175.95	67.026	251.85	.154

F 536

86.80	.357	80.80	1.969	109.05	.418	175.95	4.654	252.05	.194
68.90	.450	83.10	.112	129.90	.366	177.95	.031		

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330, FAX: 201-584-0515
MAY 7, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

BROMOFLUOROBENZENE (BFB) GC/MS TUNING AND MASS CALIBRATION
VOLATILE ORGANIC COMPOUNDS

INSTRUMENT ID: 59701
LAB FILE NO: >A3757
BFB INJECTION DATE: 05/06/97

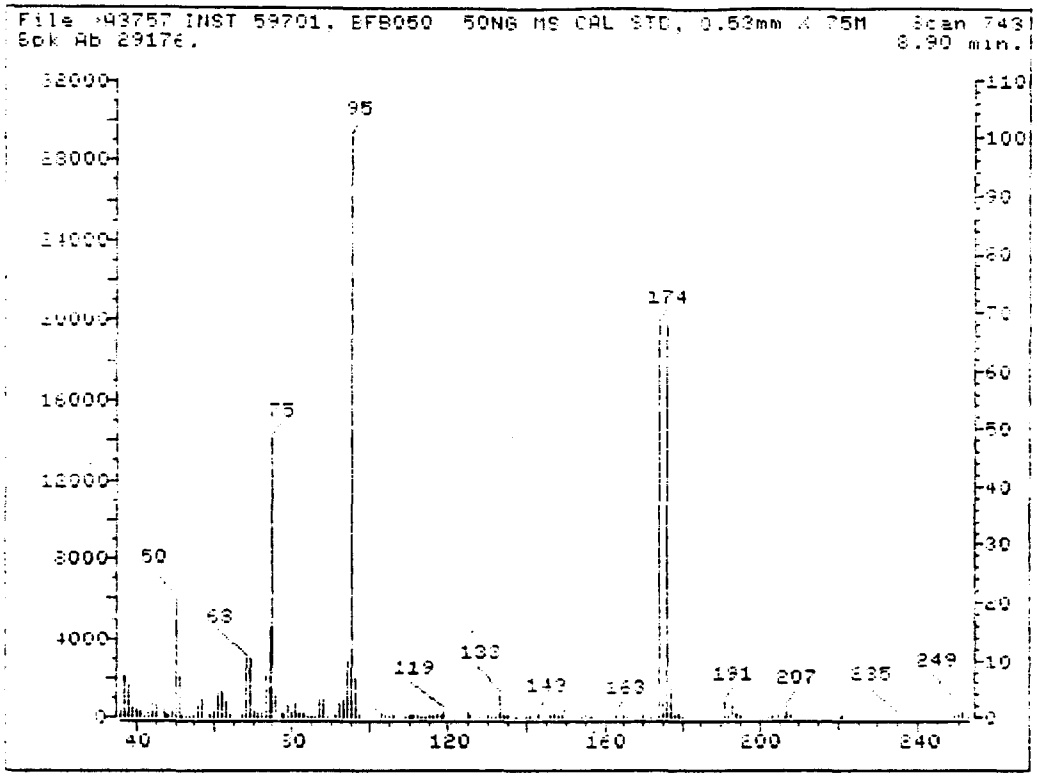
BATCH #: QV5037
BFB INJECTION TIME: 08:50

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS

LAB SAMPLE ID	DATA FILE	ANALYSIS DATE	ANALYSIS TIME
VSTD050	>A3758	05/06/97	09:28
BLANK	>A3759	05/06/97	10:33
262101	>A3760	05/06/97	11:50

See next page for ION ABUNDANCE CRITERIA and Spectra

Copyright ICM, Inc.,1997.
All rights reserved.
EIL



GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
50	15-40% of mass 95	20.26	20.26	Ok
75	30-60% of mass 95	48.24	48.24	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	6.77	6.77	Ok
173	Less than 1% of mass 95	0.00	0.00	Ok
174	Greater than 50% of mass 95	67.81	67.81	Ok
175	5-9% of mass 174	4.95	7.29	Ok
176	95-101% of mass 174	67.75	99.92	Ok
177	5-9% of mass 176	5.93	8.75	Ok

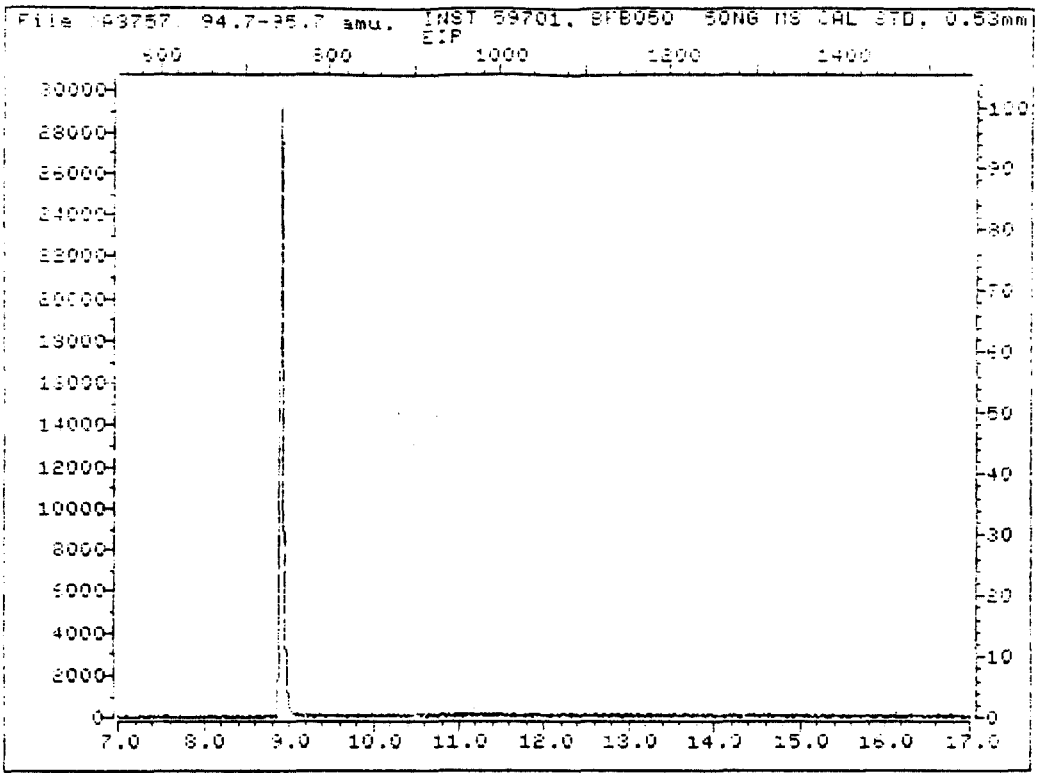
Injection Date: 05/06/97 Data File: >A3757
Injection Time: 08:50 Scan: 743

Analyst's signature: K. Santacana

Associated samples: _____

850930804

850930805



>A3757 INST 59701, BFB050 50NG MS CAL STD. 0.53mm X 75M DB624
743 NRM

File: >A3757 Scan #: 743 Retn. time: 8.20

F 54(

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
36.05	1.001	63.00	2.944	92.00	2.344	129.90	.326	174.95	4.946
37.05	7.150	64.00	.428	93.05	3.582	130.90	.254	175.95	67.754
37.95	5.501	66.90	.449	94.05	9.755	132.00	.096	176.95	5.930
39.05	1.909	68.00	10.221	95.05	100.000	133.10	3.948	178.05	.322
40.05	1.559	69.00	10.084	96.05	6.773	134.10	.514	179.05	.757
41.15	.932	70.10	1.049	97.05	.511	135.00	.456	180.05	.134
41.95	.161	71.00	.658	102.95	.781	137.00	.147	188.95	.240
43.15	.792	72.10	.912	103.95	.531	139.60	.123	191.05	2.776
44.05	2.536	73.10	7.283	104.95	.662	140.00	.134	192.05	.744
45.05	1.961	74.10	15.777	105.89	.332	141.00	.507	193.05	2.176
47.05	1.344	75.00	48.242	109.25	.243	143.00	.843	194.05	.600
47.75	.579	76.00	3.955	110.05	.459	146.00	.257	195.05	.315
48.05	.586	77.10	.857	110.85	.267	147.00	.627	201.95	.093
49.05	4.709	78.00	.648	111.15	.305	147.90	.422	203.05	.572
50.05	20.263	79.00	2.214	111.95	.271	149.00	.302	204.90	.929
51.05	7.201	80.00	.953	113.05	.209	152.90	.216	206.00	.216
51.95	.288	80.90	2.334	114.35	.079	154.00	.161	207.00	2.043
52.85	.137	82.00	.829	114.95	.480	155.00	.497	207.90	.377
53.95	.117	83.10	.696	116.05	.408	156.00	.079	219.20	.089
55.05	1.275	84.10	.185	117.05	.679	156.40	.103	220.40	.110
56.00	2.194	85.10	.171	118.05	.559	163.00	.545	221.00	.291
57.00	3.918	86.10	.206	118.95	1.261	165.00	.494	234.90	.377
58.90	.497	87.00	3.218	125.15	2.987	166.00	.123	249.05	2.608

61.00	4.216	39.00	.178	126.15	.230	172.05	.106 251.05	1.004
62.00	4.380	91.20	.374	127.85	.161	173.95	67.809 252.95	.137

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330, FAX: 201-584-0515
MAY 7, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

Volatile Method Blank Summary by GC/MS

Data File: >B1374
Batch No: QV5028
Matrix: Soil

Associated Samples

Sample #	Data File	Analysis Date
262099	>B1377	05/06/97

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330, FAX: 201-584-0515
Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

MAY 7, 1997

TARGET COMPOUND LIST - VOLATILE ANALYSIS BY GC/MS
PLUS 10 PEAKS

Sample ID: Method Blank
Data File: >B1374
Analysis Date: 05/06/97

Batch Number: QV5028
Dilution Factor: 1
Column: DB-624

Matrix: Soil Init Sample Wght= 5g Final volume= 5ml

Initial sample weight DWB= 5g

Conc. in Sample = (Conc. on Quant Report/Initial Sample Weight DWB)*Final Volume

Parameter	Method Blank ug/kg	Practical Quantitation Limit ug/kg	Minimum Detection Limit ug/kg
Chloromethane	U	5	4.6
Bromomethane	U	5	3.8
Vinyl chloride	U	5	1.7
Chloroethane	U	5	1.8
Methylene chloride	4.1J	5	2.7
Acetone	U	20	4.5
Carbon disulfide	U	5	1.7
1,1-Dichloroethene	U	5	1.7
1,1-Dichloroethane	U	5	1.4
trans-1,2-Dichloroethene	U	5	1.7
cis-1,2-Dichloroethene	U	5	1.7
Chloroform	U	5	1.6
1,2-Dichloroethane	U	5	1.9
2-Butanone	U	20	2.4
1,1,1-Trichloroethane	U	5	0.5
Carbon tetrachloride	U	5	0.6
Bromodichloromethane	U	5	0.6
1,2-Dichloropropane	U	5	0.6
cis-1,3-Dichloropropene	U	5	0.5
Trichloroethene	U	5	0.6
Dibromochloromethane	U	5	0.6
1,1,2-Trichloroethane	U	5	0.5
Benzene	U	5	0.5
trans-1,3-Dichloropropene	U	5	0.6
Bromoform	U	5	0.8
4-Methyl-2-pentanone	U	20	1.1
2-Hexanone	U	20	1.2
Tetrachloroethene	U	5	0.7
1,1,2,2-Tetrachloroethane	U	5	0.5
Toluene	U	5	0.8
Chlorobenzene	U	5	0.6
Ethylbenzene	U	5	0.7
Styrene	U	5	1
p&m-Xylene	U	5	0.9
o-Xylene	U	5	0.9
total Xylenes	U	5	0.9

ug/kg = micrograms/kilogram or ppb
Results are in ug/kg (ppb); they are reported on a dry weight basis.
ND: Not Determined.
IND: Indeterminable.
U: Indicates a compound was analyzed for but not detected at the PQL.
J: Indicates an estimated value. It is utilized when a reported value meets the identification criteria but the result is less than the specified detection limit but greater than zero.

INDUSTRIAL CORROSION MANAGEMENT, INC.
Richard Levine, President
Copyright ICM, Inc., 1997.
All rights reserved.
ERI

850930808

F 543

INDUSTRIAL CORROSION MANAGEMENT, Inc.
1152 Route 10
Randolph, NJ 07869
201-584-0330
MAY 7, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

LIBRARY SEARCH RESULTS OF NONTARGETED PEAKS WITH
ESTIMATED CONCENTRATION OF TENTATIVELY IDENTIFIED COMPOUNDS.

Data file name: >B1374
Lab number: BLANK
Fraction: VOLATILE

Initial Sample Wt/Vol=5 Final Volume=5

This BLANK corresponds to the following lab numbers:
262233 262099

CAS No.	Retention Time	Compound Name	Molecular Weight	Estimated Concentration ug/kg
None found				

Estimated total non-target compound concentration (excluding compounds flagged with A, B or **) in ug/kg is: 0

A: Indicates that the compound is an acetone based aldol-type condensation product formed by concentrating the extraction solvent (1:1 acetone/methylene chloride).
B: Indicates that the analyte was found in the blank as well as the sample. It further indicates possible/probable blank contamination.
C: Co-eluting and/or poorly resolved non-target compounds cause superimposed spectra that prevent identification of individual compounds.
* Compounds flagged are from diluted analysis.
** This compound is not flagged B; it was not found in the corresponding blank. However, it is commonly found as a laboratory contaminant.

Copyright ICM, Inc., 1997.
All rights reserved.
ERI

QUANT REPORT Page 1

Operator ID: KS9934 Quant Rev: 7 Quant Time: 970506 10:48
Output File: ^B1374::QT Injected at: 970506 10:15
Data File: >B1374::B1 Dilution Factor: 1.00000
Name: INST 59702, BLANK Instrument ID: INST "B"
Misc: BLANK ,L,5,5 , 0.18mm X 40M D8-8240

ID File: ID824B::X2
Title: GENERAL IDFILE FOR INSTRUMENT B
Last Calibration: 970415 20:09 Last Qcal Time: 970506 09:20

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	9.83	128.0	15605	50.00	UG/L	94
9)	Methylene Chloride DC 5/7/97	6.81	84.0	2514	4.11	UG/L	84
22)	1,2-Dichloroethane-d4	11.11	65.0	39766	51.44	UG/L	88
27)	*1,4-Difluorobenzene	12.15	114.0	67955	50.00	UG/L	98
44)	*Chlorobenzene-d5	19.90	117.0	53981	50.00	UG/L	94
49)	Toluene-d8	15.93	98.0	71149	53.06	UG/L	90
56)	Bromofluorobenzene DC 5/7/97	22.53	95.0	29872	50.61	UG/L	94

* Compound is ISTD

850930810

F 545

>81374 INST 59702, BLANK BLANK ,L,5.5 , 0.18mm X 40M DB-6240
35.0: 260.0 TIC
Upslope: .1000 Area Reject: 5.00 % Max Peaks: 7 Bunch: 1 Valley >100 %
Dnslope: -.0100 Results File VDIR78 Sorted by Time/Area INT

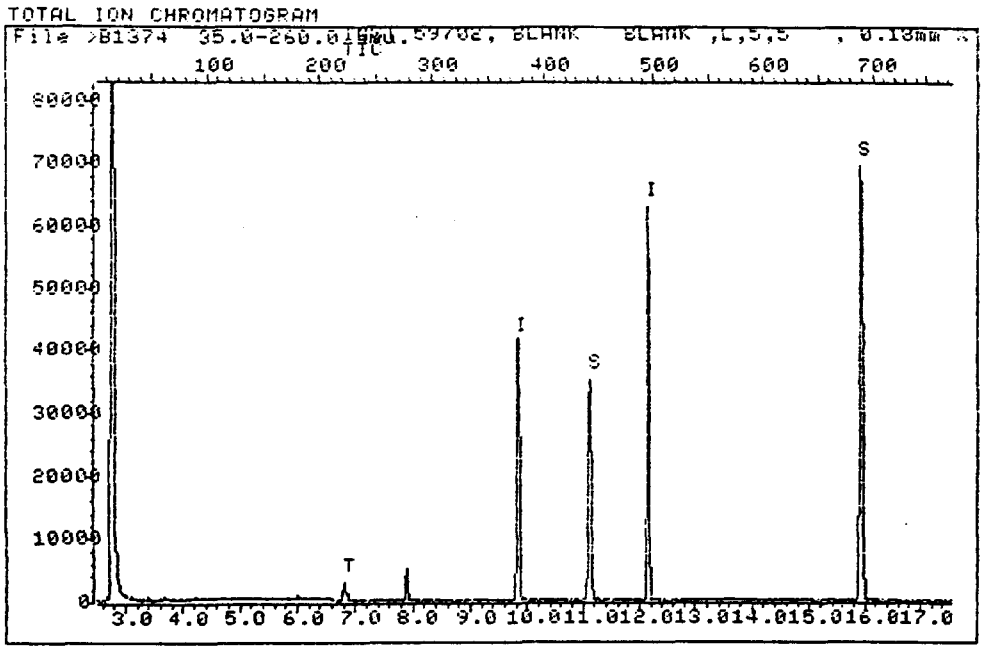
Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	2.73	11	15	25	154332	477407	468749	100.00	33.096
2	9.85	373	377	380	41854	122871	121061	25.83	8.548
3	11.11	438	442	448	35488	104953	104953	22.39	7.410
4	12.15	492	495	499	62881	171869	170094	36.29	12.010
5	15.93	686	689	696	69833	226116	225519	48.11	15.923
6	19.90	890	893	896	75539	179919	178359	38.05	12.593
7	22.53	1025	1028	1031	71564	148650	147586	31.49	10.420

Sum of corrected areas: 1416321.

850930811

F 54

240



Data File: >B1374::B1 Quant Output File: ^B1374::QT
Name: INST 59702, BLANK Instrument ID: INST "B"
Misc: BLANK ,L,5,5 , 0.18mm X 40M D8-8240

Id File: ID824B::X2
Title: GENERAL IDFILE FOR INSTRUMENT B
Last Calibration: 970415 20:09 Last Qcal Time: 970506 09:20

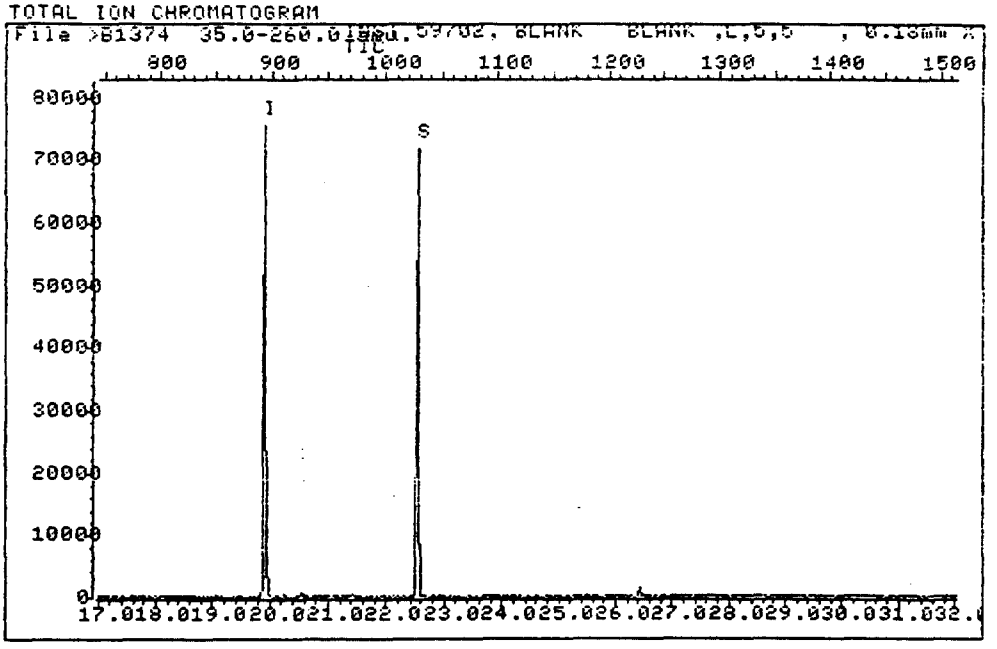
Operator ID: KS9934
Quant Time : 970506 10:48
Injected at: 970506 10:15

Page 1 of 2

850930812

F 547

TOTAL ION CHROMATOGRAM



Data File: >B1374::B1 Quant Output File: ^B1374::QT
Name: INST 59702, BLANK Instrument ID: INST "B"
Misc: BLANK ,L,5,5 , 0.18mm X 40M D8-8240

Id File: ID824B::X2
Title: GENERAL IDFILE FOR INSTRUMENT B
Last Calibration: 970415 20:09 Last Qcal Time: 970506 09:20

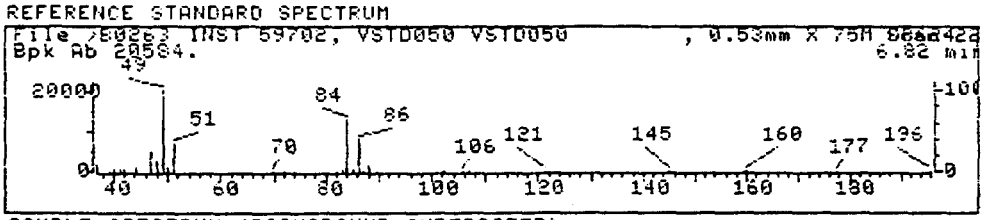
Operator ID: KS9934
Quant Time : 970506 10:48
Injected at: 970506 10:15

Page 2 of 2

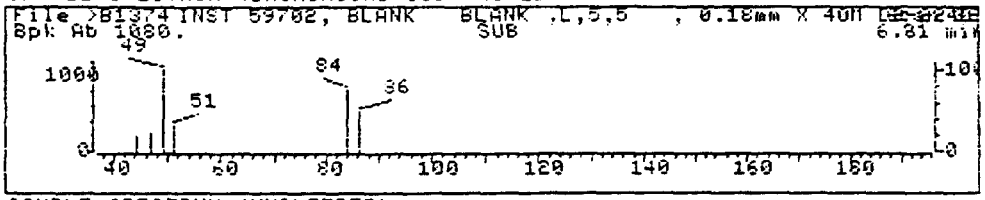
850930813

F 548

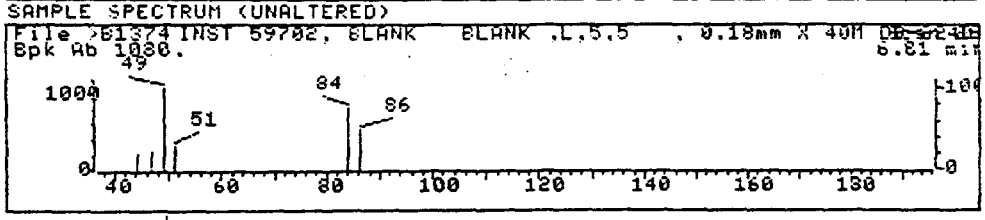
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >B1374::B1 Quant Output File: ^B1374::QT
Name: INST 59702, BLANK Instrument ID: INST "B"
Misc: BLANK ,L,5,5 , 0.18mm X 40M D8-8240
Quant Time: 970506 10:48 Quant ID File: ID824B::X2
Injected at: 970506 10:15 Last Calibration: 970415 20:09
Last Qcal Time: 970506 09:20

Compound No : 9
Compound Name : Methylene Chloride
Scan Number : 221
Retention Time: 6.81 min.
Quant Ion : 84.0
Area : 2514
Concentration : 4.11 UG/L
q-value : 84

850930814

F 549

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330, FAX: 201-584-0515
MAY 7, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

Volatile Method Blank Summary by GC/MS

Data File: >B1313
Batch No: QV5029
Matrix: Water

Associated Samples

Sample #	Data File	Analysis Date
262021 MS	>B1321	05/03/97
261021 MSD	>B1322	05/03/97
262102	>B1324	05/03/97
262105	>B1325	05/03/97
262104	>B1326	05/03/97

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330, FAX: 201-584-0515
MAY 7, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

TARGET COMPOUND LIST - VOLATILE ANALYSIS BY GC/MS
PLUS 10 PEAKS

Sample ID: Method Blank
Data File: >B1313
Analysis Date: 05/02/97

Batch Number: QV5029
Dilution Factor: 1
Column: DB-624

Matrix: Water Init Sample volume= 5ml Final volume= 5ml

Conc. in Sample = (Conc. on Quant Report/Initial Volume)*Final Volume

Parameter	Method Blank ug/l	Practical Quantitation Limit ug/l	Minimum Detection Limit ug/l
Chloromethane	U	5	4.6
Bromomethane	U	5	3.8
Vinyl chloride	U	5	1.7
Chloroethane	U	5	1.8
Methylene chloride	U	5	2.7
Acetone	U	20	4.5
Carbon disulfide	U	5	1.7
1,1-Dichloroethene	U	5	1.7
1,1-Dichloroethane	U	5	1.4
trans-1,2-Dichloroethene	U	5	1.7
cis-1,2-Dichloroethene	U	5	1.7
Chloroform	U	5	1.6
1,2-Dichloroethane	U	5	1.9
2-Butanone	U	20	2.4
1,1,1-Trichloroethane	U	5	0.5
Carbon tetrachloride	U	5	0.6
Bromodichloromethane	U	5	0.6
1,2-Dichloropropane	U	5	0.6
cis-1,3-Dichloropropene	U	5	0.5
Trichloroethene	U	5	0.6
Dibromochloromethane	U	5	0.6
1,1,2-Trichloroethane	U	5	0.5
Benzene	U	5	0.5
trans-1,3-Dichloropropene	U	5	0.6
Bromoform	U	5	0.8
4-Methyl-2-pentanone	U	20	1.1
2-Hexanone	U	20	1.2
Tetrachloroethene	U	5	0.7
1,1,2,2-Tetrachloroethane	U	5	0.5
Toluene	U	5	0.8
Chlorobenzene	U	5	0.6
Ethylbenzene	U	5	0.7
Styrene	U	5	1
p&m-Xylene	U	5	0.9
o-Xylene	U	5	0.9
total Xylenes	U	5	0.9

ug/l = micrograms/liter or ppb
ND: Not Determined.
IND: Indeterminable.
U: Indicates a compound was analyzed for but not detected at the PQL.
J: Indicates an estimated value. It is utilized when a reported value meets the identification criteria but the result is less than the specified detection limit but greater than zero.

INDUSTRIAL CORROSION MANAGEMENT, INC.
Richard Levine, President
Copyright ICM, Inc., 1997.
All rights reserved.
ERI

850930816

F 551

INDUSTRIAL CORROSION MANAGEMENT, Inc.
1152 Route 10
Randolph, NJ 07869
201-584-0330
MAY 7, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

LIBRARY SEARCH RESULTS OF NONTARGETED PEAKS WITH
ESTIMATED CONCENTRATION OF TENTATIVELY IDENTIFIED COMPOUNDS.

Data file name: >B1313
Lab number: BLANK
Fraction: VOLATILE

Initial Sample Wt/Vol=5 Final Volume=5

This BLANK corresponds to the following lab numbers:
262020 262022 262023 262021 262102 262105 262104

CAS No.	Retention Time	Compound Name	Molecular Weight	Estimated Concentration ug/l
		None found		

Estimated total non-target compound concentration (excluding compounds flagged with A, B or **) in ug/l is: 0

A: Indicates that the compound is an acetone based aldol-type condensation product formed by concentrating the extraction solvent (1:1 acetone/methylene chloride).
B: Indicates that the analyte was found in the blank as well as the sample. It further indicates possible/probable blank contamination.
C: Co-eluting and/or poorly resolved non-target compounds cause superimposed spectra that prevent identification of individual compounds.
* Compounds flagged are from diluted analysis.
** This compound is not flagged B; it was not found in the corresponding blank. However, it is commonly found as a laboratory contaminant.

Copyright ICM, Inc., 1997.
All rights reserved.
ERI

850930817

F 552

Operator ID: MANAGER Quant Rev: 7 Quant Time: 970502 19:40
Output File: ^B1313::QT Injected at: 970502 19:07
Data File: ^B1313::B1 Dilution Factor: 1.00000
Name: INST. 59702, BLANK Instrument ID: INST "B"
Misc: BLANK,L,5,5,0.18mm X 40M DB-624

ID File: ID824B::X2
Title: GENERAL IDFILE FOR INSTRUMENT B
Last Calibration: 970415 20:09 Last Qcal Time: 970502 18:13

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	9.83	128.0	15355	50.00	UG/L	86
22)	1,2-Dichloroethane-d4	11.10	65.0	40238	51.62	UG/L	90
27)	*1,4-Difluorobenzene	12.13	114.0	71183	50.00	UG/L	98
44)	*Chlorobenzene-d5	19.89	117.0	58258	50.00	UG/L	90
49)	Toluene-d8	15.91	98.0	73569	45.83	UG/L	93
56)	Bromofluorobenzene	22.52	95.0	32072	48.06	UG/L	90

* Compound is ISTD DLS 5/19/97

850930818

F 553

MS data file header from : >B1313::B1

Sample: INST. 59702, BLANK Operator: MANAGER MS 5/02/97 19:07
Misc : BLANK,L,5,5,0.18mm X 40M D8-824
Sys. #: 2 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: INST "B"
Method file: VOAB Tuning file: APEI02 No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 270

Chromatographic temperatures :	30.	90.	200.	0.	0.
Chromatographic times, min. :	1.0	1.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	4.0	10.0	0.0	.1	0.0

>B1313 INST. 59702, BLANK BLANK,L,5,5,0.18mm X 40M D8-824
35.01 260.0 TIC
Upslope: .2000 Area Reject: 12505. Max Peaks: 7 Bunch: -1 Valley >100 %
Dnslope: 0.0000 Results File IB1313 Sorted by Time/Area INT

Peak #		R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	COC	2.82	5	17	33	56445	220168	220168	94.31	18.122
2	I	9.83	368	377	386	49335	125052	125052	53.57	10.293
3	S	11.10	438	442	448	40652	106853	106853	45.77	8.795
4	I	12.15	490	496	501	59347	181842	178355	76.40	14.680
5	S	15.91	684	689	695	69654	233448	233448	100.00	19.215
6	I	19.89	886	893	900	79583	190519	190519	81.61	15.681
7	S	22.52	1022	1028	1037	75959	160554	160554	68.78	13.215

Sum of corrected areas: 1214949.

Summary of Unknowns PBM Library Search and Quantitation

Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	125052.	9.83	2.51 - 10.98
2	50.0	178355.	12.13	10.98 - 16.01
3	50.0	190519.	19.89	16.01 - 32.03

PLEASE NOTE THE NOTATION USED FOR IDENTIFYING THE PEAKS ON THIS PAGE

NT=NON TARGETED COMPOUND T= TARGETED COMPOUND (COMPOUNDS FROM SAMPLE)

I=INTERNAL STANDARD COMPOUND S=SURROGATE COMPOUND (SYSTEM MONITORING)

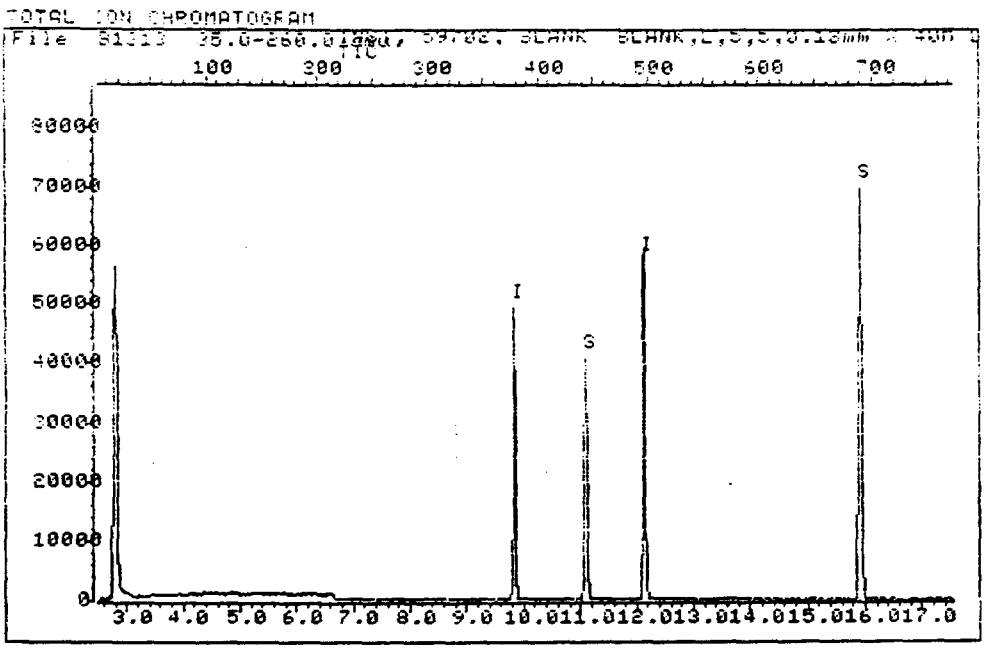
$$\text{Unknown Concentration} = \frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}} * \text{Correction Factor}$$

3:34 AM TUE., 6 MAY , 1997

850930819

F 55

248



Data File: >B1313::B1 Quant Output File: ^B1313::QT
Name: INST. 59702. BLANK Instrument ID: INST "B"
Misc: BLANK,L,5,5,0.18mm X 40M D8-824

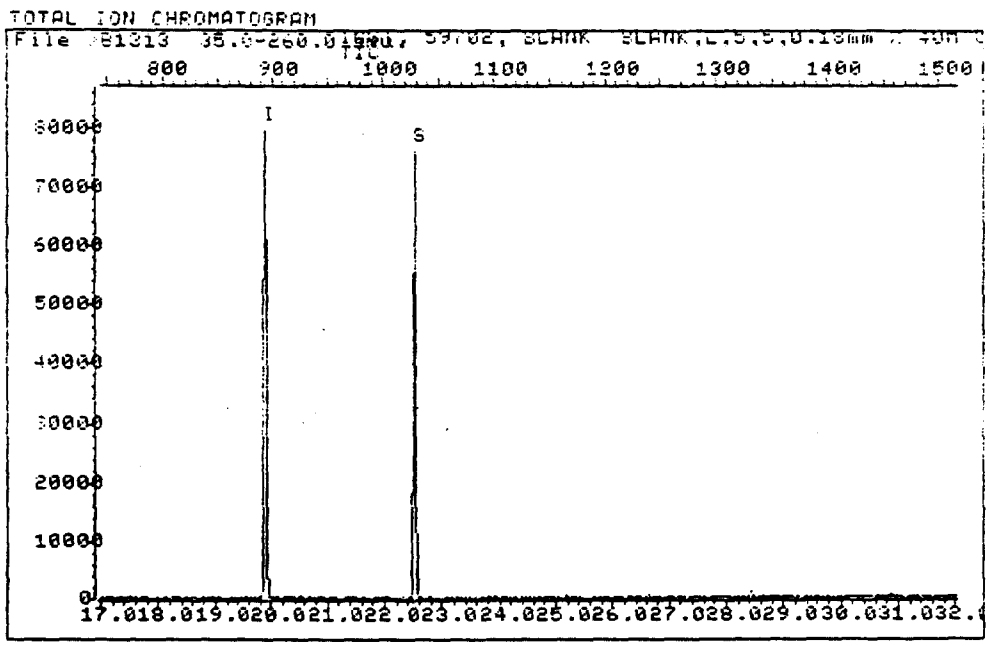
Ic File: ID824B::X2
Title: GENERAL IDFILE FOR INSTRUMENT B
Last Calibration: 970415 20:09 Last Qcal Time: 970502 18:13

Operator ID: MANAGER
Quant Time : 970502 19:40
Injected at: 970502 19:07

Page 1 of 2

850930820

F 555



Data File: >B1313::B1 Quant Output File: ^B1313::QT
Name: INST. 59702, BLANK Instrument ID: INST "B"
Misc: BLANK,L,5,5,0.18mm X 40M D8-824

Id File: ID824B::X2
Title: GENERAL IDFILE FOR INSTRUMENT B
Last Calibration: 970415 20:09 Last Qcal Time: 970502 18:13

Operator ID: MANAGER
Quant Time : 970502 19:40
Injected at: 970502 19:07

Page 2 of 2

850930821

F 556

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330, FAX: 201-584-0515
MAY 7, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

Volatile Method Blank Summary by GC/MS

Data File: >B1330
Batch No: QV5029
Matrix: Water

Associated Samples

Sample #	Data File	Analysis Date
262098	>B1333	05/03/97
262100	>B1340	05/03/97

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330, FAX: 201-584-0515
MAY 7, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

TARGET COMPOUND LIST - VOLATILE ANALYSIS BY GC/MS
PLUS 10 PEAKS

Sample ID: Method Blank
Data File: >B1330
Analysis Date: 05/03/97

Batch Number: QV5029
Dilution Factor: 1
Column: DB-624

Matrix: Water Init Sample volume= 5ml Final volume= 5ml

Conc. in Sample = (Conc. on Quant Report/Initial Volume)*Final Volume

Parameter	Method Blank ug/l	Practical Quantitation Limit ug/l	Minimum Detectio Limit ug/l
Chloromethane	U	5	4.6
Bromomethane	U	5	3.8
Vinyl chloride	U	5	1.7
Chloroethane	U	5	1.8
Methylene chloride	U	5	2.7
Acetone	U	20	4.5
Carbon disulfide	U	5	1.7
t-Butyl alcohol	U	50	10
t-Butyl methyl ether	U	5	2
1,1-Dichloroethene	U	5	1.7
1,1-Dichloroethane	U	5	1.4
trans-1,2-Dichloroethene	U	5	1.7
cis-1,2-Dichloroethene	U	5	1.7
Chloroform	U	5	1.6
1,2-Dichloroethane	U	5	1.9
2-Butanone	U	20	2.4
1,1,1-Trichloroethane	U	5	0.5
Carbon tetrachloride	U	5	0.6
Bromodichloromethane	U	5	0.6
1,2-Dichloropropane	U	5	0.6
cis-1,3-Dichloropropene	U	5	0.5
Trichloroethene	U	5	0.6
Dibromochloromethane	U	5	0.6
1,1,2-Trichloroethane	U	5	0.5
Benzene	U	5	0.5
trans-1,3-Dichloropropene	U	5	0.6
Bromoform	U	5	0.8
4-Methyl-2-pentanone	U	20	1.1
2-Hexanone	U	20	1.2
Tetrachloroethene	U	5	0.7
1,1,2,2-Tetrachloroethane	U	5	0.5
Toluene	U	5	0.8
Chlorobenzene	U	5	0.6
Ethylbenzene	U	5	0.7
Styrene	U	5	1
p&m-Xylene	U	5	0.9
o-Xylene	U	5	0.9
total Xylenes	U	5	0.9

ug/l = micrograms/liter or ppb
ND: Not Determined.
IND: Indeterminable.
U: Indicates a compound was analyzed for but not detected at the PQL.
J: Indicates an estimated value. It is utilized when a reported value meets the identification criteria but the result is less than the specified detection limit but greater than zero.

INDUSTRIAL CORROSION MANAGEMENT, INC.
Richard Levine, President
Copyright ICM, Inc., 1997.
All rights reserved.
ERI

850930823

F 558

INDUSTRIAL CORROSION MANAGEMENT, Inc.
1152 Route 10
Randolph, NJ 07869
201-584-0330
Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

MAY 6, 1997

LIBRARY SEARCH RESULTS OF NONTARGETED PEAKS WITH
ESTIMATED CONCENTRATION OF TENTATIVELY IDENTIFIED COMPOUNDS.

Data file name: >B1330
Lab number: BLANK
Fraction: VOLATILE

Initial Sample Wt/Vol=5 Final Volume=5

This BLANK corresponds to the following lab numbers:
262036 262098 262023 262100

CAS No.	Retention Time	Compound Name	Molecular Weight	Estimated Concentration ug/l
None found				

Estimated total non-target compound concentration (excluding compounds flagged with A, B or **) in ug/l is: 0

A: Indicates that the compound is an acetone based aldol-type condensation product formed by concentrating the extraction solvent (1:1 acetone/methylene chloride).
B: Indicates that the analyte was found in the blank as well as the sample. It further indicates possible/probable blank contamination.
C: Co-eluting and/or poorly resolved non-target compounds cause superimposed spectra that prevent identification of individual compounds.
* Compounds flagged are from diluted analysis.
** This compound is not flagged B; it was not found in the corresponding blank. However, it is commonly found as a laboratory contaminant.

Copyright ICM, Inc., 1997.
All rights reserved.
ERI

Operator ID: KS9934 Quant Rev: 7 Quant Time: 970503 14:05
Output File: ^B1330::E1 Injected at: 970503 13:32
Data File: >B1330::B1 Dilution Factor: 1.00000
Name: INST 59702, BLANK Instrument ID: INST "B"
Misc: BLANK ,L,5,5 , 0.53mm X 75M DB624

ID File: ID824B::X2
Title: GENERAL IDFILE FOR INSTRUMENT B
Last Calibration: 970415 20:09 Last Qcal Time: 970503 12:32

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	9.86	128.0	11617	50.00	UG/L	97
22)	1,2-Dichloroethane-d4	11.12	65.0	29974	49.04	UG/L	90
27)	*1,4-Difluorobenzene	12.16	114.0	49677	50.00	UG/L	99
44)	*Chlorobenzene-d5	19.91	117.0	41002	50.00	UG/L	91
49)	Toluene-d8	15.94	98.0	53650	48.04	UG/L	94
56)	Bromofluorobenzene	22.54	95.0	23735	48.54	UG/L	96

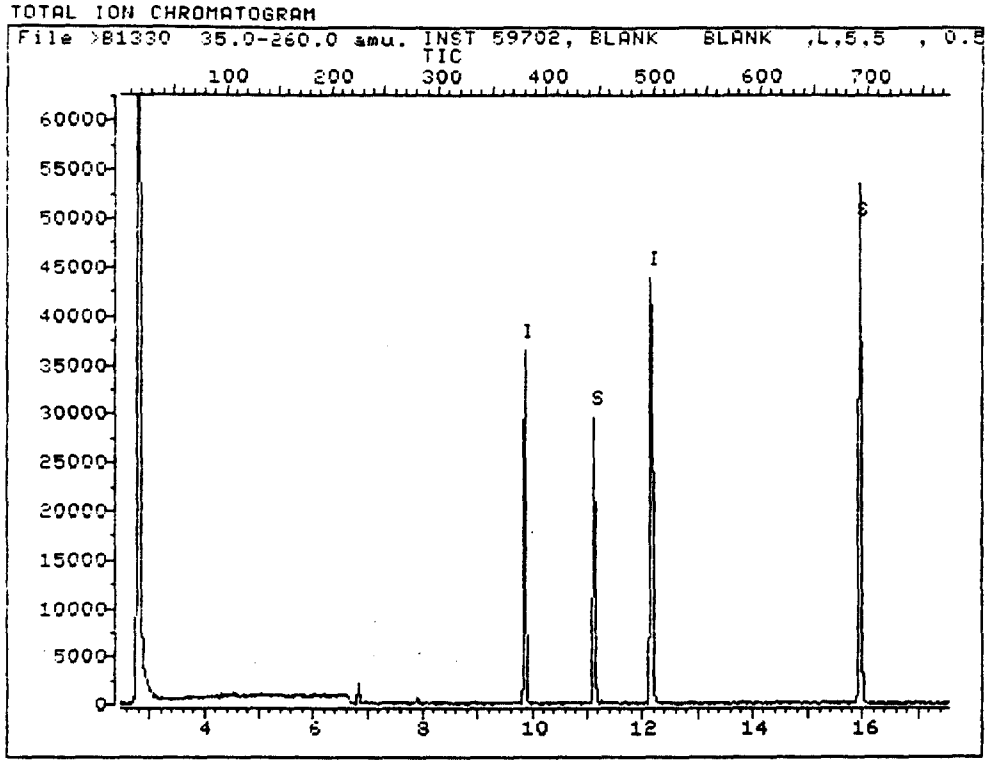
* Compound is ISTD 5/7/97

>81330 INST 59702, BLANK BLANK ,L,5,5 , 0.53mm X 75M DB624
35.0: 260.0 TIC
Upslope: .1000 Area Reject: 5.00 % Max Peaks: 7 Bunch: 1 Valley >100 %
Dnslope: -.0100 Results File VDIR78 Sorted by Time/Area INT

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	2.80	15	18	29	150831	544430	532932	100.00	42.484
2	9.86	377	380	383	36453	90427	90427	16.97	7.209
3	11.12	442	445	450	29609	79717	79717	14.96	6.355
4	12.16	495	498	502	44009	125962	125962	23.64	10.041
5	15.95	689	693	700	53654	172053	171049	32.10	13.636
6	19.91	893	896	900	56986	136280	134511	25.24	10.723
7	22.54	1028	1031	1034	55248	119830	119830	22.49	9.553

Sum of corrected areas: 1254428.

TOTAL ION CHROMATOGRAM



Data File: >B1330::B1 Quant Output File: ^B1330::E1
Name: INST 59702, BLANK Instrument ID: INST "B"
Misc: BLANK ,L,5,5 , 0.53mm X 75M DB624

Id File: ID824B::X2
Title: GENERAL IDFILE FOR INSTRUMENT B
Last Calibration: 970415 20:09 Last Qcal Time: 970503 12:32

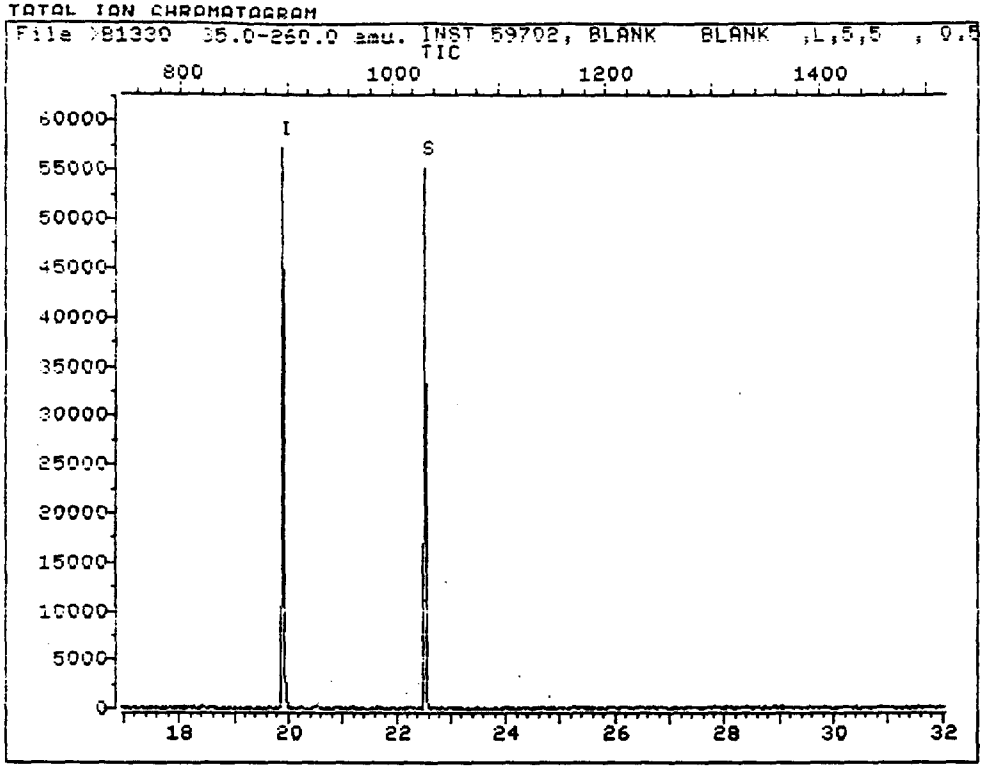
Operator ID: KS9934
Quant Time : 970503 14:05
Injected at: 970503 13:32

Page 1 of 2

850930827

F 562

TOTAL ION CHROMATOGRAM



Data File: >B1330::B1 Quant Output File: ^B1330::E1
Name: INST 59702, BLANK Instrument ID: INST "B"
Misc: BLANK ,L,5,5 , 0.53mm X 75M DB624

Id File: ID824B::X2
Title: GENERAL IDFILE FOR INSTRUMENT B
Last Calibration: 970415 20:09 Last Qcal Time: 970503 12:32

Operator ID: KS9934
Quant Time : 970503 14:05
Injected at: 970503 13:32

850930828

F 563

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330, FAX: 201-584-0515
MAY 7, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

Volatile Method Blank Summary by GC/MS

Data File: >A3742
Batch No: QV5037
Matrix: Soil

Associated Samples

Sample #	Data File	Analysis Date
262103	>A3747	05/05/97
262211 MSD	>A3754	05/06/97
262211 MS	>A3753	05/06/97

850930829

F 564

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330, FAX: 201-584-0515
Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

MAY 7, 1997

TARGET COMPOUND LIST - VOLATILE ANALYSIS BY GC/MS
PLUS 10 PEAKS

Sample ID: Method Blank
Data File: >A3742
Analysis Date: 05/05/97

Batch Number: QV5037
Dilution Factor: 1
Column: DB-624

Matrix: Soil Init Sample Wght= 5g Final volume= 5ml

Initial sample weight DWB= 5g

Conc. in Sample = (Conc. on Quant Report/Initial Sample Weight DWB)*Final Volume

Parameter	Method Blank ug/kg	Practical Quantitation Limit ug/kg	Minimum Detection Limit ug/kg
Chloromethane	U	5	4.6
Bromomethane	U	5	3.8
Vinyl chloride	U	5	1.7
Chloroethane	U	5	1.8
Methylene chloride	U	5	2.7
Acetone	U	20	4.5
Carbon disulfide	U	5	1.7
1,1-Dichloroethene	U	5	1.7
1,1-Dichloroethane	U	5	1.4
trans-1,2-Dichloroethene	U	5	1.7
cis-1,2-Dichloroethene	U	5	1.7
Chloroform	U	5	1.6
1,2-Dichloroethane	U	5	1.9
2-Butanone	U	20	2.4
1,1,1-Trichloroethane	U	5	0.5
Carbon tetrachloride	U	5	0.6
Bromodichloromethane	U	5	0.6
1,2-Dichloropropane	U	5	0.6
cis-1,3-Dichloropropene	U	5	0.5
Trichloroethene	U	5	0.6
Dibromochloromethane	U	5	0.6
1,1,2-Trichloroethane	U	5	0.5
Benzene	U	5	0.5
trans-1,3-Dichloropropene	U	5	0.6
Bromoform	U	5	0.8
4-Methyl-2-pentanone	U	20	1.1
2-Hexanone	U	20	1.2
Tetrachloroethene	U	5	0.7
1,1,2,2-Tetrachloroethane	U	5	0.5
Toluene	U	5	0.8
Chlorobenzene	U	5	0.6
Ethylbenzene	U	5	0.7
Styrene	U	5	1
p&m-Xylene	U	5	0.9
o-Xylene	U	5	0.9
total Xylenes	U	5	0.9

ug/kg = micrograms/kilogram or ppb
Results are in ug/kg (ppb); they are reported on a dry weight basis.
ND: Not Determined.
IND: Indeterminable.
U: Indicates a compound was analyzed for but not detected at the PQL.
J: Indicates an estimated value. It is utilized when a reported value meets the identification criteria but the result is less than the specified detection limit but greater than zero.

INDUSTRIAL CORROSION MANAGEMENT, INC.
Richard Levine, President
Copyright ICM, Inc., 1997.
All rights reserved.
EIL

850930830

F 565

ICM Laboratories
Industrial Corrosion Management, Inc.
1152 Route 10
Randolph, NJ 07869
Phone: 201-584-0330 FAX: 201-584-0515

MAY 21, 1997
08:49:20

Client:
VECTRE CORPORATION
Source:
NBB-V11

ANALYTICAL DATA SUMMARY REPORT--FOOTNOTE PAGE

U = Indicates a compound was analyzed for but not detected.
For results marked U, the numerical value is the compound MDL or PQL.

J = Indicates an estimated value. It is utilized when a reported value meets the identification.
criteria but the result is less than the specified detection limit and greater than zero.

B = Indicates that the analyte was found in the blank as well as the sample. It indicates possible/probable blank contamination.

W = Analytical Spike recovery for furnace AA analysis was not within control limits but was greater than or equal to 40%.

NA = Not Applicable; P = Positive; N = Negative

IND = Indeterminable - compound decomposes in water.

\+ = Indicates that an MDL was not available for this compound. PQL was reported.
++ = Sample boiled at 100 degree C with no flash

NOTES
262215: SB-4A (40-46")
262217: SB-5 (24-30")
CHRIS

850930831

F 566

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330

TABLE OF CONTENTS

		Page#
Data Management Summary		1
Lab/Client ID Cross Reference		2
Deliverables Checklist		3
Chain-of-Custody		4
Laboratory Chronicles		7
Nonconformance Summary		8
Methodology Summaries		10
Sample Results:		11
Field Blank	Lab #262214	
SB-4A (40-46")	Lab #262215	
HP-4	Lab #262216	
SB-5 (24-30")	Lab #262217	
HP-5C	Lab #262218	
Trip Blank	Lab #262219	
Quality Assurance Data: GC/MS Requirements		
Volatiles		60

ANALYTICAL DATA REPORT PACKAGE

May 21, 1997

VECTRE CORPORATION

NBB-V11

850930833

F568

ICM Laboratories
Industrial Corrosion Management, Inc.
1152 Route 10
Randolph, NJ 07869
Phone: 201-584-0330 FAX: 201-584-0515

MAY 19, 1997
09:45:36

Client:
VECTRE CORPORATION
Source:
NBB-V11

ANALYTICAL DATA SUMMARY REPORT

Client ID	Field Blank	See Notes	HP-1	See Notes	HP-2	See Notes	HP-3	Trip Blank
ICM Sample Number	262098	262099	262100	262101	262102	262103	262104	262105
Sampling Date	04/29/97	04/29/97	04/29/97	04/29/97	04/29/97	04/29/97	04/29/97	04/29/97
Units	UG/L	UG/KG	UG/L	UG/KG	UG/L	UG/KG	UG/L	UG/L
VOLATILE PARAMETERS (METHOD 624/8240)								
Chloromethane	5 U	2900 U	250 U	5.9 U	5 U	5.8 U	250 U	5 U
Bromomethane	5 U	2900 U	250 U	5.9 U	5 U	5.8 U	250 U	5 U
Vinyl chloride	5 U	2900 U	250 U	5.9 U	5 U	5.8 U	250 U	5 U
Chloroethane	5 U	2900 U	250 U	5.9 U	5 U	5.8 U	250 U	5 U
Methylene chloride	5 U	3700 B	250 U	5.6 J	5 U	2.6 J	250 U	5 U
Acetone	20 U	12000 U	1000 U	24 U	12 J	25	1000 U	20 U
Carbon disulfide	5 U	2900 U	250 U	5.9 U	5 U	5.8 U	250 U	5 U
1,1-Dichloroethene	5 U	2900 U	250 U	5.9 U	5 U	5.8 U	250 U	5 U
1,1-Dichloroethane	5 U	2900 U	250 U	5.9 U	5 U	5.8 U	250 U	5 U
trans-1,2-Dichloroethene	5 U	2900 U	250 U	5.9 U	5 U	5.8 U	250 U	5 U
cis-1,2-Dichloroethene	5 U	2900 U	250 U	5.9 U	5 U	5.8 U	250 U	5 U
Chloroform	5 U	2900 U	250 U	5.9 U	5 U	5.8 U	250 U	5 U
1,2-Dichloroethane	5 U	2900 U	250 U	5.9 U	5 U	5.8 U	250 U	5 U
2-Butanone	20 U	12000 U	1000 U	24 U	20 U	23 U	1000 U	20 U
1,1,1-Trichloroethane	5 U	2900 U	250 U	5.9 U	5 U	5.8 U	250 U	5 U
Carbon tetrachloride	5 U	2900 U	250 U	5.9 U	5 U	5.8 U	250 U	5 U
Bromodichloromethane	5 U	2900 U	250 U	5.9 U	5 U	5.8 U	250 U	5 U
1,2-Dichloropropane	5 U	2900 U	250 U	5.9 U	5 U	5.8 U	250 U	5 U
cis-1,3-Dichloropropene	5 U	2900 U	250 U	5.9 U	5 U	5.8 U	250 U	5 U
Trichloroethene	5 U	2900 U	250 U	5.9 U	5 U	5.8 U	250 U	5 U
Dibromochloromethane	5 U	2900 U	250 U	5.9 U	5 U	5.8 U	250 U	5 U
1,1,2-Trichloroethane	5 U	2900 U	250 U	5.9 U	5 U	5.8 U	250 U	5 U
Benzene	5 U	2900 U	250 U	5.9 U	5 U	5.8 U	250 U	5 U
trans-1,3-Dichloropropene	5 U	2900 U	250 U	5.9 U	5 U	5.8 U	250 U	5 U
Bromoform	5 U	2900 U	250 U	5.9 U	5 U	5.8 U	250 U	5 U
4-Methyl-2-pentanone	20 U	12000 U	1000 U	24 U	20 U	23 U	1000 U	20 U
2-Hexanone	20 U	12000 U	1000 U	24 U	20 U	23 U	1000 U	20 U
Tetrachloroethene	5 U	2900 U	250 U	5.9 U	5 U	5.8 U	250 U	5 U
1,1,2,2-Tetrachloroethane	5 U	2900 U	250 U	5.9 U	5 U	5.8 U	250 U	5 U
Toluene	5 U	1900 J	840	5.9 U	5 U	5.8 U	730	5 U
Chlorobenzene	5 U	2900 U	250 U	5.9 U	5 U	5.8 U	250 U	5 U
Ethylbenzene	5 U	4100	450	5.9 U	5 U	5.8 U	310	5 U
Styrene	5 U	2900 U	250 U	5.9 U	5 U	5.8 U	250 U	5 U
p&m-Xylene	5 U	22000	2100	5.9 U	4.7 J	5.8 U	1800	5 U
o-Xylene	5 U	22000	2200	5.9 U	5 U	5.8 U	2700	5 U
total Xylenes	5 U	44000	4300	5.9 U	4.7 J	5.8 U	4500	5 U
Total Non-Target Compounds	0	1476000	45000	0	221	9	30400	0

850930834

F 56

8A

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: ICM

Lab File ID (Standard): >A3753 Date Analyzed: 05/06/87

Instrument ID: 5970 1 Time Analyzed: 09:28

	IS1::INT AREA #	RT	IS2ERNAL AREA #	RT	IS3 STAN AREA #	RT
12 HOUR STD	42960	6.96	236705	8.93	183419	17.25
UPPER LIMIT	85920	7.46	473410	9.43	366838	17.75
LOWER LIMIT	21480	6.46	118353	8.43	91710	16.75
LAB SAMPLE NO.						
1 BLANK ,S,	42805	6.94	235064	8.93	180933	17.25
2 262101 ,S,	50091	6.98	266039	8.96	200385	17.27
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

Conc.

IS1 ::INT = 50 PPB50 PPB50 PPB

IS2 ERNAL =

IS3 STAN =

UPPER LIMIT = + 100% of internal standard area.

LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk

850930835

F 590

8A

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: ICM

Lab File ID (Standard): >B1373 Date Analyzed: 05/06/97

Instrument ID: 59702 Time Analyzed: 09:20

	IS1::INT AREA #	RT	IS2ERNAL AREA #	RT	IS3 STAN AREA #	RT
12 HOUR STD	15529	9.82	72027	12.14	60115	19.90
UPPER LIMIT	31058	10.32	144054	12.64	120230	20.40
LOWER LIMIT	7765	9.32	36014	11.64	30058	19.40
LAB SAMPLE NO.						
1 BLANK ,L,5	15605	9.83	67955	12.15	53981	19.90
2 262099,S,0	15326	9.82	69978	12.14	57947	19.89
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

Conc.

IS1 ::INT = 50 PPB50 PPB50 PPB

IS2 ERNAL =

IS3 STAN =

UPPER LIMIT = + 100% of internal standard area.

LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk

850930836

F 571

8A

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: ICM

Lab File ID (Standard): A3741 Date Analyzed: 05/05/97

Instrument ID: 59701 Time Analyzed: 17:40

	IS1::INT AREA #	RT	IS2ERNAL AREA #	RT	IS3 STAN AREA #	RT
12 HOUR STD	44027	6.86	246236	8.84	189514	17.16
UPPER LIMIT	88054	7.36	492472	9.34	379028	17.66
LOWER LIMIT	22014	6.36	123118	8.34	94757	16.66
LAB SAMPLE NO.						
1 BLANK,L,S,	40040	6.95	235336	8.91	184885	17.22
2 262103.QV5	49970	6.89	226591	8.88	184430	17.21
3 262211 MS,	37542	6.93	195342	8.93	140650	17.26
4 262211 MSD	38423	6.93	190569	8.94	135870	17.30
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

Conc.

IS1 ::INT = 50 PPB50 PPB50 PPB UPPER LIMIT = + 100%
IS2 ERNAL = of internal standard area.
IS3 STAN = LOWER LIMIT = - 50%
of internal standard area.

Column used to flag internal standard area values with an asterisk

850930837

F 572

8A

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: ICM

Lab File ID (Standard): >E1329 Date Analyzed: 05/03/97

Instrument ID: 5970Z Time Analyzed: 12:32

	IS1		IS2		IS3			
	AREA	#	RT	AREA	#	RT	AREA	#	RT
12 HOUR STD	14705		9.85	68850		12.17	56388		19.91
UPPER LIMIT	28410		10.35	137700		12.67	112776		20.41
LOWER LIMIT	7353		9.35	34425		11.67	28194		19.41
LAB SAMPLE NO.									
1 BLANK ,L,	11617		9.86	49677		12.16	41002		19.91
2 262098 ,L,	12623		9.80	53064		12.12	40462		19.90
3 262100 ,L,	11746		9.87	58395		12.17	45871		19.92
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									

Conc.

IS1 = UPPER LIMIT = + 100%
IS2 = of internal standard area.
IS3 = LOWER LIMIT = - 50%

of internal standard area.

Column used to flag internal standard area values with an asterisk

8A

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: ICM

Lab File ID (Standard): B1312 Date Analyzed: 05/02/97

Instrument ID: 5970C Time Analyzed: 18:13

	IS1 AREA	#	IS1 RT	IS2 AREA	#	IS2 RT	IS3 AREA	#	IS3 RT
12 HOUR STD	18873		9.83	76681		12.13	60184		19.89
UPPER LIMIT	33746		10.33	153362		12.63	120368		20.39
LOWER LIMIT	8437		9.33	38340		11.63	30092		19.39
LAB SAMPLE NO.									
1 BLANK,L,5,	15355		9.83	71183		12.13	58258		19.89
2 262021MS,	14048		9.81	70547		12.13	60281		19.88
3 262021MSD,	15111		9.83	69391		12.13	59648		19.90
4 262102,QV	14771		9.82	66982		12.14	47808		19.90
5 262105,QV	10894		9.83	47937		12.13	39631		19.88
6 262104,QV	12698		9.81	57116		12.13	47549		19.89
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									

Conc.

IS1 = UPPER LIMIT = + 100%
IS2 = of internal standard area.
IS3 = LOWER LIMIT = - 50%

of internal standard area.

Column used to flag internal standard area values with an asterisk

850930839

F 574

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330, FAX: 201-584-0515
MAY 7, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

QUALITY ASSURANCE DATA
GC/MS Volatile
Matrix Spike/Matrix Spike Duplicate Recovery

			Sample	MS	MSD
Batch number:	QV5037				
Spike Sample:	262211	Initial wt/vol:	5	5	5
Method:	8240	Final vol:	5	5	5
Matrix:	Soil/Sludge	Unit: ug/Kg			
Moisture:	26.49%				

For samples: 262101 262103

Compound	Conc Added	Sample Conc	Matrix Spike Conc	%	Spike Dup Conc	%	QC RPD	RPD	Limit Recov
1,1-Dichloroethene	68	U	57	84	57	84	22	0	59-
Trichloroethene	68	U	59	87	59	87	24	0	62-
Benzene	68	U	60	88	61	90	21	2	66-
Toluene	68	U	64	94	65	96	21	2	59-
Chlorobenzene	68	U	64	94	64	94	21	0	60-

* Values outside QC Limits.
** Spike recovery does not meet quality control limits due to a high concentration of this parameter in the spiked sample.
*** Recovery is determined from Blank Spike.

Copyright ICM, Inc.,1997.
All rights reserved.
EIL

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330, FAX: 201-584-0515
MAY 8, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

QUALITY ASSURANCE DATA
GC/MS Volatile
Matrix Spike/Matrix Spike Duplicate Recovery

			Sample	MS	MSD
Batch number:	QV5029				
Spike Sample:	262021	Initial wt/vol:	.05	.05	.05
Method:	8240	Final vol:	5	5	5
Matrix:	Water	Unit: ug/L			

For samples: 262098 262100 262102 262104 262105

Compound	Conc Added	Sample Conc	Matrix Spike Conc	%	Spike Dup Conc	%	QC RPD	RPD	Limits Recovery
1,1-Dichloroethene	5000	U	4900	98	5100	102	14	4	61-145
Trichloroethene	5000	U	5800	116	5500	110	14	5	71-120
Benzene	5000	2739	8300	111	8500	115	11	4	76-127
Toluene	5000	8203	16000	156 *	15000	136 *	13	14 *	76-125
Chlorobenzene	5000	U	5500	110	5500	110	13	0	75-130

* Values outside QC Limits.
** Spike recovery does not meet quality control limits due to a high concentration of this parameter in the spiked sample.
*** Recovery is determined from Blank Spike.

Copyright ICM, Inc.,1997.
All rights reserved.
MAR

850930841

F 576

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330, FAX: 201-584-0515
MAY 8, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

QUALITY ASSURANCE DATA
GC/MS Volatile
Matrix Spike/Matrix Spike Duplicate Recovery

			Sample	MS	MSD
Batch number:	QV5028				
Spike Sample:	261543	Initial wt/vol:	.125	.125	.125
Method:	8240	Final vol:	5	5	5
Matrix:	Soil/Sludge	Unit: ug/Kg			
Moisture:	38.59%				

For samples: 262099

Compound	Conc Added	Sample Conc	Matrix Spike Conc	%	Spike Dup Conc	%	QC RPD	RPD	Limits Recove
1,1-Dichloroethene	3300	U	3000	91	3300	100	22	9	59-1
Trichloroethene	3300	U	3000	91	2800	85	24	7	62-1
Benzene	3300	92	3100	91	3400	100	21	9	66-1
Toluene	3300	240	3000	84	3300	93	21	10	59-1
Chlorobenzene	3300	U	2800	85	3200	97	21	13	60-1

* Values outside QC Limits.
** Spike recovery does not meet quality control limits due to a high concentration of this parameter in the spiked sample.
*** Recovery is determined from Blank Spike.

Copyright ICM, Inc.,1997.
All rights reserved.
ERI

850930842

F 57

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330, FAX: 201-584-0515
MAY 7, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

SURROGATE RECOVERY SUMMARY
GC/MS Volatile

Batch number: QV5037
Method: 8240
Matrix: Soil/Solid/Liquid Non_Aq

Sample Number	Data File	% Recovery 1,2-Dichlo	% Recovery Toluene-d8	% Recovery Bromofluor	# Outside QC Limits
BLANK	>A3742	96	95	97	0
262103	>A3747	107	96	110	0
262211 MS	>A3753	99	100	96	0
262211 MSD	>A3754	98	95	93	0
BLANK	>A3759	100	100	99	0
262101	>A3760	100	101	101	0

QC Limits:	Compound	Percent Recovery	Concentration Added
	1,2-Dichloroethane-d4	70-121	50ppb
	Toluene-d8	81-117	50ppb
	Bromofluorobenzene	74-121	50ppb

** Surrogates are diluted out.
* Values outside QC Limits.

S= Spike sample
SD= Spike duplicate sample
DL= Dilution
RE= Indicates a reanalysis of the sample confirming matrix interference.
NA= Not Applicable

Copyright ICM, Inc.,1997.
All rights reserved.
EIL

850930843

F 578

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330, FAX: 201-584-0515
MAY 7, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

SURROGATE RECOVERY SUMMARY
GC/MS Volatile

Batch number: QV5029
Method: 8240
Matrix: Water

Sample Number	Data File	% Recovery 1,2-Dichlo	% Recovery Toluene-d8	% Recovery Bromofluor	# Outside QC Limits
BLANK	>B1313	103	92	96	0
262021 MS	>B1321	111	98	98	0
262021 MSD	>B1322	93	88	86	0
262102	>B1324	103	106	103	0
262105	>B1325	100	90	97	0
262104	>B1326	104	94	102	0
BLANK	>B1330	98	96	97	0
262098	>B1333	100	99	101	0
262100	>B1340	112	98	100	0

QC Limits:	Compound	Percent Recovery	Concentration Added
	1,2-Dichloroethane-d4	76-114	50ppb
	Toluene-d8	88-110	50ppb
	Bromofluorobenzene	86-115	50ppb

** Surrogates are diluted out.
* Values outside QC Limits.

S= Spike sample
SD= Spike duplicate sample
DL= Dilution
RE= Indicates a reanalysis of the sample confirming matrix interference.
NA= Not Applicable

Copyright ICM, Inc.,1997.
All rights reserved.
ERI

850930844

F 579

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330, FAX: 201-584-0515
MAY 8, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

SURROGATE RECOVERY SUMMARY
GC/MS Volatile

Batch number: QV5028
Method: 8240
Matrix: Soil/Solid/Liquid Non_Aq

Sample Number	Data File	% Recovery 1,2-Dichlo	% Recovery Toluene-d8	% Recovery Bromofluor	# Outside QC Limits
BLANK	>B1266	96	94	103	0
261543MS	>B1272	84	91	80	0
261543MSD	>B1273	93	102	88	0
BLANK	>B1374	103	106	101	0
262099	>B1377	97	98	96	0

QC Limits:	Compound	Percent Recovery	Concentration Added
	1,2-Dichloroethane-d4	70-121	50ppb
	Toluene-d8	81-117	50ppb
	Bromofluorobenzene	74-121	50ppb

** Surrogates are diluted out.
* Values outside QC Limits.

S= Spike sample
SD= Spike duplicate sample
DL= Dilution
RE= Indicates a reanalysis of the sample confirming matrix interference.
NA= Not Applicable

Copyright ICM, Inc.,1997.
All rights reserved.
ERI

850930845

F 580

52)	Ethylbenzene	17.86	106.0	92346	50.57	UG/L
53)	Styrene	19.87	104.0	199406	50.93	UG/L
54)	p&m Xylene	18.33	106.0	243154	102.06	UG/L
55)	o-Xylene	19.79	106.0	117939	51.20	UG/L
56)	Bromofluorobenzene	21.85	95.0	154010	52.33	UG/L
57)	1,3-Dichlorobenzene	26.55	146.0	160057	52.93	UG/L
58)	1,4-Dichlorobenzene	26.78	146.0	165710	53.71	UG/L
59)	1,2-Dichlorobenzene	28.52	146.0	150918	52.24	UG/L

* Compound is ISTD

850930846

F 58

QUANT REPORT

Operator ID: KS9934 Quant Rev: 7 Quant Time: 970506 10:03
Output File: ^A3758::QT Injected at: 970506 09:29
Data File: ^A3758::A1 Dilution Factor: 1.00000
Name: INST 5970L, USTD050 Instrument ID: INST "9"
Misc: USTD050 , 0.53mm X 75M DB624

ID File: ID824A::X2
Title: GENERAL IDFILE FOR INSTRUMENT A
Last Calibration: 970429 23:03 Last Qcal Date: 970505 17:40

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	6.96	128.0	42960	50.00	UG/L	98
2)	Dichlorodifluoromethane	7.09	85.0	101609	40.00	UG/L	100
3)	Chloromethane	2.77	50.0	48110	43.37	UG/L	91
4)	Bromomethane	3.20	94.0	24939	65.85	UG/L	90
5)	Vinyl Chloride	2.86	62.0	61769	46.79	UG/L	98
6)	Chloroethane	3.50	64.0	27188	58.75	UG/L	98
7)	Acrolein	4.02	56.0	4452	245.62	UG/L	93
8)	Acrylonitrile	5.04	53.0	44786	230.23	UG/L	98
9)	Methylene Chloride	4.72	84.0	61425	48.94	UG/L	84
10)	Acetone	4.22	43.0	11629	48.85	UG/L	100
11)	Carbon Disulfide	4.41	76.0	134463	46.58	UG/L	100
12)	Trichlorofluoromethane	3.57	101.0	122702	56.14	UG/L	100
13)	t-Butyl alcohol	4.92	59.0	12756	126.93	UG/L	100
14)	t-Butyl methyl ether	5.10	73.0	160628	50.87	UG/L	94
16)	1,1-Dichloroethene	4.16	96.0	65643	50.10	UG/L	92
17)	1,1-Dichloroethane	5.66	63.0	147297	48.72	UG/L	95
18)	trans-1,2-Dichloroethene	5.08	96.0	76902	51.87	UG/L	85
19)	cis-1,2-Dichloroethene	4.16	96.0	65643	50.10	UG/L	74
20)	Chloroform	7.11	83.0	154335	49.57	UG/L	94
21)	1,4-Dioxane	10.40	88.0	20605	914.74	UG/L	87
22)	1,2-Dichloroethane-d4	9.01	65.0	87279	50.40	UG/L	93
23)	1,2-Dichloroethane	8.15	62.0	98817	52.01	UG/L	98
24)	2-Butanone	6.58	72.0	4631	49.51	UG/L	92
27)	*1,4-Difluorobenzene	8.93	114.0	236705	50.00	UG/L	98
28)	1,1,1-Trichloroethane	7.45	97.0	152783	54.59	UG/L	78
29)	Carbon Tetrachloride	7.72	117.0	122211	57.84	UG/L	85
30)	Vinyl Acetate	10.42	43.0	8384	47.89	UG/L	100
31)	Bromodichloromethane	10.71	83.0	151600	51.34	UG/L	90
32)	1,2-Dichloropropane	9.99	63.0	79418	46.39	UG/L	94
33)	cis-1,3-Dichloropropene	11.91	75.0	128741	48.93	UG/L	96
34)	Trichloroethene	9.50	130.0	93192	49.58	UG/L	96
35)	Dibromochloromethane	15.29	129.0	99462	53.60	UG/L	99
36)	Ethylene dibromide	15.59	107.0	178714	128.43	UG/L	95
37)	1,1,2-Trichloroethane	14.08	97.0	55854	49.95	UG/L	97
38)	Benzene	8.11	78.0	214316	47.22	UG/L	93
39)	trans-1,3-Dichloropropene	11.91	75.0	128741	48.93	UG/L	97
40)	2-Chloroethylvinylether	12.83	63.0	25598	52.82	UG/L	100
41)	Bromoform	20.42	173.0	66864	55.37	UG/L	94
44)	*Chlorobenzene-d5	17.25	117.0	183419	50.00	UG/L	96
45)	4-Methyl-2-Pentanone	12.40	43.0	53465	47.79	UG/L	80
46)	2-Hexanone	15.02	43.0	35652	50.00	UG/L	74
47)	Tetrachloroethene	14.47	164.0	83689	50.74	UG/L	98
48)	1,1,2,2-Tetrachloroethane	22.67	83.0	83394	52.37	UG/L	95
49)	Toluene-d8	12.63	98.0	215871	50.04	UG/L	99
50)	Toluene	12.81	92.0	148912	48.66	UG/L	92

F 58

Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 05/06/97

Contractor: Time: 09:28

Contract No: Laboratory ID: A3758

Instrument ID: Initial Calibration Date: 05/02/97

Minimum $\overline{RF}$ for SPCC is Maximum % Diff for CCC is %

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
Bromoform	.31502	.28248	10.33		**	
4-Methyl-2-Pentanone	.37701	.29149	22.68			
2-Hexanone	.24922	.19437	22.01			
Tetrachloroethene	.44030	.45627	3.63			
1,1,2,2-Tetrachloroethane	.54101	.45466	15.96		**	
Toluene-d8	1.21213	1.17693	2.90			
Toluene	.87994	.81187	7.74	*		
Chlorobenzene	.93984	.90488	3.72		**	
Ethylbenzene	.51386	.50347	2.02	*		
Styrene	1.12265	1.08716	3.16			
p&m Xylene	.66893	.66284	.91			(Conc=100.00)
o-Xylene	.65762	.64300	2.22			
Bromofluorobenzene	.90413	.83966	7.13			
1,3-Dichlorobenzene	.90709	.87252	3.81			
1,4-Dichlorobenzene	.90932	.89255	1.84			
1,2-Dichlorobenzene	.76569	.71049	7.21			
Naphthalene	.61897	-	-			(Conc=50.00)
2-Methylnaphthalene	.05464	-	-			
1,3-Dimethylnaphthalene	.03274	-	-			(Conc=500.00)

RF - Response Factor from daily standard file at 50.00 UG/L

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

850930848

F 58

Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 05/06/97

Contractor: Time: 09:28

Contract No: Laboratory ID: >A3758

Instrument ID: Initial Calibration Date: 05/02/97

Minimum $\overline{RF}$ for SPCC is Maximum % Diff for CCC is %

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
Chloromethane	1.37529	1.11983	18.57		**	
Bromomethane	.45572	.58052	27.39			
Vinyl Chloride	1.65354	1.43783	13.05	*		
Chloroethane	.46400	.63287	36.39			
Acrolein	.02052	.00691	66.33			(Conc=750.00)
Acrylonitrile	.26669	.20850	21.82			(Conc=250.00)
Methylene Chloride	1.55442	1.42982	8.02			
Acetone	.33903	.27069	20.16			
Carbon Disulfide	3.29596	3.12996	5.04			
Trichlorofluoromethane	1.75225	2.85619	63.00			
t-Butyl alcohol	.09217	.11877	28.87			(Conc=125.00)
t-Butyl methyl ether	4.06042	3.73901	7.92			
1,1-Dichloroethene	1.45215	1.52800	5.22	*		
1,1-Dichloroethane	3.54000	3.42870	3.14		**	
trans-1,2-Dichloroethene	1.65807	1.79008	7.96			
Chloroform	3.57249	3.59248	.56	*		
1,2-Dichloroethane-d4	2.13355	2.03163	4.78			
1,2-Dichloroethane	2.35168	2.25365	4.17			
2-Butanone	.13232	.10780	18.53			
1,1,1-Trichloroethane	.63237	.64546	2.07			
Carbon Tetrachloride	.50573	.51630	2.09			
Vinyl Acetate	.04934	.03542	28.21			
Bromodichloromethane	.65827	.64046	2.71			
1,2-Dichloropropane	.38268	.33551	12.32	*		
cis-1,3-Dichloropropene	.59046	.54389	7.89			
Trichloroethene	.39550	.39371	.45			
Dibromochloromethane	.45068	.42019	6.76			
Ethylene dibromide	.34231	.30200	11.77			(Conc=125.00)
1,1,2-Trichloroethane	.26567	.23596	11.18			
Benzene	.97124	.90541	6.78			
trans-1,3-Dichloropropene	.59046	.54389	7.89			
2-Chloroethylvinylether	.11387	.10814	5.03			

RF - Response Factor from daily standard file at 50.00 UG/L

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330, FAX: 201-584-0515
MAY 7, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

GC/MS CONTINUING CALIBRATION SUMMARY
VOLATILE ORGANIC COMPOUNDS

INSTRUMENT ID: 59701
BATCH #: QV5037

THIS CONTINUING CALIBRATION APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS

LAB SAMPLE ID	DATA FILE	ANALYSIS DATE	ANALYSIS TIME
VSTD050	>A3758	05/06/97	09:28
BLANK	>A3759	05/06/97	10:33
262101	>A3760	05/06/97	11:50
FROM INITIAL CALIBRATION			
VSTD020	>A3694	05/02/97	10:31
VSTD050	>A3695	05/02/97	11:31
VSTD100	>A3696	05/02/97	12:31
VSTD150	>A3697	05/02/97	13:26
VSTD200	>A3698	05/02/97	14:21

NOTE: The 'Initial Calibration Date' listed on the Continuing Calibration Check form reflects the last date a modification was made to the file, not the date that the Initial Calibration was acquired. The Initial Calibration acquisition dates are on the 'GC/MS Continuing Calibration Summary'.

Copyright ICM, Inc.,1997.
All rights reserved.
EIL

850930850

F 58

Operator ID: LB3274 Quant Rev: 7 Quant Time: 970505 18:15
Output File: ^A3741::QT Injected at: 970505 17:40
Data File: >A3741::A1 Dilution Factor: 1.00000
Name: INST. 59701,VSTD050 Instrument ID: INST "A"
Misc: VSTD050, 0.53mm X 75M 98-8240

ID File: ID824A::X2
Title: GENERAL IDFILE FOR INSTRUMENT A
Last Calibration: 970429 23:03 Last Qcal Time: 970505 09:45

	Compound	R.T.	Q ion	Area	Conc	Units	q
46)	2-Hexanone	14.93	43.0	36837	38.28	UG/L	75
47)	Tetrachloroethene	14.38	164.0	85211	42.92	UG/L	97
48)	1,1,2,2-Tetrachloroethane	22.58	83.0	82261	38.77	UG/L	94
49)	Toluene-d8	12.52	98.0	222855	45.02	UG/L	97
50)	Toluene	12.71	92.0	158109	43.08	UG/L	94
51)	Chlorobenzene	17.25	112.0	169792	42.56	UG/L	89
52)	Ethylbenzene	17.76	106.0	94348	42.40	UG/L	99
53)	Styrene	19.78	104.0	202271	41.70	UG/L	93
54)	p&m Xylene	18.23	106.0	246159	83.59	UG/L	50
55)	o-Xylene	19.70	106.0	119013	41.53	UG/L	93
56)	Bromofluorobenzene	21.76	95.0	152043	43.64	UG/L	79
57)	1,3-Dichlorobenzene	26.27	146.0	156209	41.55	UG/L	74
58)	1,4-Dichlorobenzene	26.69	146.0	157461	41.78	UG/L	88
59)	1,2-Dichlorobenzene	28.23	146.0	128882	41.30	UG/L	89

* Compound is ISTD

850930851

F 586

Operator ID: LB3274 Quant Rev: 7 Quant Time: 970505 18:15
Output File: ^A3741::QT Injected at: 970505 17:40
Data File: >A3741::A1 Dilution Factor: 1.00000
Name: INST. 59701.VSTD050 Instrument ID: INST "A"
Misc: VSTD050, 1.53mm X 75M 08-3240

ID File: ID824A::X2
Title: GENERAL IDFILE FOR INSTRUMENT A
Last Calibration: 970429 23:03 Last Qcal Time: 970505 09:45

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	6.86	128.0	44027	50.00	UG/L	97
2)	Dichlorodifluoromethane	7.02	85.0	104134	35.06	UG/L	10(
3)	Chloromethane	2.75	50.0	56842	50.34	UG/L	93
4)	Bromomethane	3.16	94.0	19413	33.66	UG/L	9:
5)	Vinyl Chloride	2.85	62.0	67652	48.15	UG/L	96
6)	Chloroethane	3.26	64.0	23723	50.17	UG/L	9:
7)	Acrolein	3.99	56.0	4644	494.70	UG/L	9-
8)	Acrylonitrile	4.96	53.0	49839	204.59	UG/L	9(
9)	Methylene Chloride	4.67	84.0	64311	41.60	UG/L	8(
10)	Acetone	4.18	43.0	12199	38.50	UG/L	10(
11)	Carbon Disulfide	4.36	76.0	147907	42.56	UG/L	10(
12)	Trichlorofluoromethane	3.53	101.0	112004	42.55	UG/L	10(
13)	t-Butyl alcohol	4.85	59.0	12874	103.78	UG/L	10(
14)	t-Butyl methyl ether	5.02	73.0	161788	40.14	UG/L	9:
16)	1,1-Dichloroethene	4.10	96.0	67143	44.51	UG/L	9:
17)	1,1-Dichloroethane	5.59	63.0	154933	44.30	UG/L	9:
18)	trans-1,2-Dichloroethene	5.02	96.0	75973	41.95	UG/L	8(
19)	cis-1,2-Dichloroethene	4.10	96.0	67143	44.51	UG/L	7-
20)	Chloroform	7.02	83.0	159535	43.73	UG/L	9-
21)	1,4-Dioxane	10.29	88.0	23085	820.34	UG/L	8:
22)	1,2-Dichloroethane-d4	7.92	65.0	88731	47.18	UG/L	9(
23)	1,2-Dichloroethane	8.06	62.0	95396	42.96	UG/L	9-
24)	2-Butanone	6.49	72.0	4793	42.68	UG/L	8(
27)	*1,4-Difluorobenzene	8.84	114.0	246236	50.00	UG/L	9(
28)	1,1,1-Trichloroethane	7.33	97.0	145573	42.62	UG/L	7:
29)	Carbon Tetrachloride	7.63	117.0	109902	37.48	UG/L	8!
30)	Vinyl Acetate	10.33	43.0	9105	40.55	UG/L	10(
31)	Bromodichloromethane	10.60	83.0	152111	41.56	UG/L	9
32)	1,2-Dichloropropane	9.90	63.0	89042	42.61	UG/L	9!
33)	cis-1,3-Dichloropropene	11.79	75.0	136843	41.52	UG/L	9.
34)	Trichloroethene	9.39	130.0	97775	43.15	UG/L	9:
35)	Dibromochloromethane	15.20	129.0	96521	40.37	UG/L	9
36)	Ethylene dibromide	15.49	107.0	180951	101.40	UG/L	9-
37)	1,1,2-Trichloroethane	13.99	97.0	58161	41.74	UG/L	9
38)	Benzene	8.02	78.0	236092	42.45	UG/L	9:
39)	trans-1,3-Dichloropropene	11.79	75.0	136843	41.52	UG/L	9
40)	2-Chloroethylvinylether	12.71	63.0	25209	42.27	UG/L	10(
41)	Bromoform	20.35	173.0	62808	38.25	UG/L	9
44)	*Chlorobenzene-d5	17.16	117.0	189514	50.00	UG/L	-
45)	4-Methyl-2-Pentanone	12.28	43.0	57802	39.85	UG/L	8

Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 05/05/97

Contractor: Time: 17:10

Contract No: Laboratory ID: 283741

Instrument ID: Initial Calibration Date: 05/02/97

Minimum $\overline{RF}$ for SPCC is Maximum % Diff for CCC is %

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
Bromoform	.31502	.25507	19.03		**	
4-Methyl-2-Pentanone	.37701	.30500	19.10			
2-Hexanone	.24922	.19438	22.01			
Tetrachloroethene	.44030	.44963	2.12			
1,1,2,2-Tetrachloroethane	.54101	.42406	18.77		**	
Toluene-d8	1.21213	1.17593	2.99			
Toluene	.87994	.83429	5.19	*		
Chlorobenzene	.93984	.89593	4.67		**	
Ethylbenzene	.51386	.49784	3.12	*		
Styrene	1.12265	1.06731	4.93			
p&m Xylene	.66893	.64945	2.91			(Conc=100.00)
o-Xylene	.65762	.62799	4.50			
Bromofluorobenzene	.90413	.80228	11.26			
1,3-Dichlorobenzene	.90709	.82426	9.13			
1,4-Dichlorobenzene	.90932	.83087	8.63			
1,2-Dichlorobenzene	.76569	.68007	11.18			
Naphthalene	.61897	-	-			(Conc=50.00)
2-Methylnaphthalene	.05464	-	-			
1,3-Dimethylnapnthalene	.03274	-	-			(Conc=500.00)

RF - Response Factor from daily standard file at 50.00 UG/L

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

850930853

F 588

Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 05/05/97

Contractor: Time: 17:48

Contract No: Laboratory ID:)H3741

Instrument ID: Initial Calibration Date: 05/02/97

Minimum $\overline{RF}$ for SPCC is Maximum % Diff for CCC is %

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
Chloromethane	1.37529	1.29107	6.12		**	
Bromomethane	.45572	.44093	3.24			
Vinyl Chloride	1.65354	1.53660	7.07	*		
Chloroethane	.46400	.53883	16.13			
Acrolein	.02052	.00703	65.73			(Conc=750.00)
Acrylonitrile	.26669	.22840	14.36			(Conc=250.00)
Methylene Chloride	1.55442	1.46072	6.03			
Acetone	.33903	.27708	18.27			
Carbon Disulfide	3.29596	3.35946	1.93			
Trichlorofluoromethane	1.75225	2.54398	45.18			
t-Butyl alcohol	.09217	.11696	26.91			(Conc=125.00)
t-Butyl methyl ether	4.06042	3.67475	9.50			
1,1-Dichloroethene	1.45215	1.52504	5.02	*		
1,1-Dichloroethane	3.54000	3.51905	.59		**	
trans-1,2-Dichloroethene	1.65807	1.72560	4.07			
Chloroform	3.57249	3.62357	1.43	*		
1,2-Dichloroethane-d4	2.13355	2.01538	5.54			
1,2-Dichloroethane	2.35168	2.16676	7.86			
2-Butanone	.13232	.10887	17.73			
1,1,1-Trichloroethane	.63237	.59119	6.51			
Carbon Tetrachloride	.50573	.44633	11.75			
Vinyl Acetate	.04934	.03698	25.05			
Bromodichloromethane	.65827	.61774	6.16			
1,2-Dichloropropane	.38268	.36161	5.50	*		
cis-1,3-Dichloropropene	.59046	.55574	5.88			
Trichloroethene	.39550	.39708	.40			
Dibromochloromethane	.45068	.39199	13.02			
Ethylene dibromide	.34231	.29395	14.13			(Conc=125.00)
1,1,2-Trichloroethane	.26567	.23620	11.09			
Benzene	.97124	.95880	1.28			
trans-1,3-Dichloropropene	.59046	.55574	5.88			
2-Chloroethylvinylether	.11387	.10238	10.09			

RF - Response Factor from daily standard file at 50.00 UG/L

$\overline{RF}$ - Average Response factor from Initial Calibration Form VI

XDiff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

850930854

F 589

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330, FAX: 201-584-0515
MAY 7, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

GC/MS CONTINUING CALIBRATION SUMMARY
VOLATILE ORGANIC COMPOUNDS

INSTRUMENT ID: 59701
BATCH #: QV5037

THIS CONTINUING CALIBRATION APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS

LAB SAMPLE ID	DATA FILE	ANALYSIS DATE	ANALYSIS TIME
VSTD050	>A3741	05/05/97	17:40
BLANK	>A3742	05/05/97	18:39
262103	>A3747	05/05/97	22:42
262211 MS	>A3753	05/06/97	02:28
262211 MSD	>A3754	05/06/97	03:06
FROM INITIAL CALIBRATION			
VSTD020	>A3694	05/02/97	10:31
VSTD050	>A3695	05/02/97	11:31
VSTD100	>A3696	05/02/97	12:31
VSTD150	>A3697	05/02/97	13:26
VSTD200	>A3698	05/02/97	14:21

NOTE: The 'Initial Calibration Date' listed on the Continuing Calibration Check form reflects the last date a modification was made to the file, not the date that the Initial Calibration was acquired. The Initial Calibration acquisition dates are on the 'GC/MS Continuing Calibration Summary'.

Copyright ICM, Inc.,1997.
All rights reserved.
EIL

850930855

F 590

54)	p&m Xylene	18.14	420539	51.93 UG/L
55)	o-Xylene	19.61 106.0	155965	227.06 UG/L
56)	Bromofluorobenzene	21.65 95.0	587399	225.47 UG/L
57)	1,3-Dichlorobenzene	26.17 146.0	593086	227.12 UG/L
58)	1,4-Dichlorobenzene	26.60 146.0	494388	195.80 UG/L
59)	1,2-Dichlorobenzene	28.13 146.0	371654	246.06 UG/L
60)	Naphthalene	36.48 128.0	36091	2197.69 UG/L
61)	2-Methylnaphthalene	41.82 142.0	204276	
62)	1,3-Dimethylnaphthalene	47.54 156.0		

* Compound is ISTD

850930856

F 591

850930857

QUANT REPORT

Operator ID: KS9934 Quant Rev: 7 Quant Time: 970502 15:12
Output File: ^A3698::QT Injected at: 970502 14:21
Data File: >A3698::A1 Dilution Factor: 1.00000
Name: INST 59701, VSTD200 Instrument ID: INST "A"
Misc: INITIAL CAL , 0.53mm X 75M DB624

ID File: ID824A::X2
Title: GENERAL IDFILE FOR INSTRUMENT A
Last Calibration: 970429 23:03 Last Qcal Date: 970502 10:31

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	6.82	128.0	42735	50.00	UG/L	99
2)	Dichlorodifluoromethane	6.96	85.0	361739	178.34	UG/L	100
3)	Chloromethane	2.67	50.0	227860	349.33	UG/L	91
4)	Bromomethane	3.10	94.0	82125	406.44	UG/L	87
5)	Vinyl Chloride	2.77	62.0	267933	310.36	UG/L	96
6)	Chloroethane	3.20	64.0	54554	176.95	UG/L	95
7)	Acrolein	3.94	56.0	15561	928.97	UG/L	95
8)	Acrylonitrile	4.96	53.0	223984	1278.49	UG/L	94
9)	Methylene Chloride	4.61	84.0	245117	311.69	UG/L	80
10)	Acetone	4.16	43.0	52686	243.58	UG/L	100
11)	Carbon Disulfide	4.26	76.0	537639	603.00	UG/L	100
12)	Trichlorofluoromethane	3.43	101.0	112231	185.24	UG/L	100
13)	t-Butyl alcohol	5.28	59.0	45147	424.39	UG/L	100
14)	t-Butyl methyl ether	5.00	73.0	635920	230.40	UG/L	89
16)	1,1-Dichloroethene	4.00	96.0	230272	468.29	UG/L	93
17)	1,1-Dichloroethane	5.53	63.0	569047	271.56	UG/L	94
18)	trans-1,2-Dichloroethene	4.94	96.0	260090	299.52	UG/L	77
19)	cis-1,2-Dichloroethene	4.00	96.0	230272	468.29	UG/L	72
20)	Chloroform	6.98	83.0	557935	221.06	UG/L	92
21)	1,4-Dioxane	10.45	88.0	106129	4170.85	UG/L	77
22)	1,2-Dichloroethane-d4	7.86	65.0	86019	47.67	UG/L	92
23)	1,2-Dichloroethane	8.02	62.0	367140	229.89	UG/L	9
24)	2-Butanone	6.49	72.0	21867	262.92	UG/L	8
27)	*1,4-Difluorobenzene	8.78	114.0	220857	50.00	UG/L	9
28)	1,1,1-Trichloroethane	7.27	97.0	522372	242.35	UG/L	7
29)	Carbon Tetrachloride	7.57	117.0	424362	290.61	UG/L	8
30)	Vinyl Acetate	10.45	43.0	40461	204.14	UG/L	10
31)	Bromodichloromethane	10.54	83.0	551547	219.55	UG/L	
32)	1,2-Dichloropropane	9.84	63.0	334405	255.26	UG/L	
33)	cis-1,3-Dichloropropene	11.74	75.0	497779	241.17	UG/L	
34)	Trichloroethene	9.35	130.0	331346	275.16	UG/L	
35)	Dibromochloromethane	15.13	129.0	383361	230.17	UG/L	
36)	Ethylene dibromide	15.40	107.0	717352	624.09	UG/L	
37)	1,1,2-Trichloroethane	13.93	97.0	224598	229.84	UG/L	
38)	Benzene	7.96	78.0	822382	269.80	UG/L	
39)	trans-1,3-Dichloropropene	11.74	75.0	497779	241.17	UG/L	
40)	2-Chloroethylvinylether	12.66	63.0	95320	260.36	UG/L	
41)	Bromoform	20.30	173.0	274659	237.25	UG/L	
44)	*Chlorobenzene-d5	17.07	117.0	169378	50.00	UG/L	
45)	4-Methyl-2-Pentanone	12.31	43.0	254608	259.45	UG/L	
46)	2-Hexanone	14.97	43.0	169859	258.20	UG/L	
47)	Tetrachloroethene	14.28	164.0	275094	266.88	UG/L	
48)	1,1,2,2-Tetrachloroethane	22.51	83.0	355173	229.74	UG/L	
49)	Toluene-d8	12.46	98.0	205511	50.12	UG/	
50)	Toluene	12.66	92.0	573815	261.63	UG/	
		17.16	112.0	614420	242.38	U	
		17.67	106.0	331106	244.34	U	
				228108	244.29	U	

F 592

54)	p&m Xylene	18.16	106.0	65787?	188.94 UG/L	93
55)	o-Xylene	19.61	106.0	326565	51.59 UG/L	81
56)	Bromofluorobenzene	21.65	95.0	156126	172.10 UG/L	74
57)	1,3-Dichlorobenzene	26.17	146.0	448549	170.02 UG/L	83
58)	1,4-Dichlorobenzene	26.58	146.0	450577	173.42 UG/L	89
59)	1,2-Dichlorobenzene	28.13	146.0	380326	174.00 UG/L	100
60)	Naphthalene	36.48	128.0	332757	201.65 UG/L	98
61)	2-Methylnaphthalene	41.84	142.0	29799	1839.10 UG/L	99
62)	1,3-Dimethylnaphthalene	47.53	156.0	172230		

* Compound is ISTD

850930859

QUANT REPORT

Quant Rev: 7 Quant Time: 970502 14:17
Injected at: 970502 13:26
Dilution Factor: 1.00000
Instrument ID: INST "A"

Operator ID: KS9934
Output File: ^A3697::QT
Data File: >A3697::A1
Name: INST 59701, VSTD150
Misc: INITIAL CAL , 0.53mm X 75M DB624

ID File: IDB24A::X2
Title: GENERAL IDFILE FOR INSTRUMENT A
Last Calibration: 970429 23:03
Last Qcal Date: 970502 10:31

	Compound	R.T.	Q ion	Area	Conc	Units	Q
1)	*Bromochloromethane	6.84	128.0	41533	50.00	UG/L	97
2)	Dichlorodifluoromethane	7.00	85.0	275248	139.63	UG/L	100
3)	Chloromethane	2.71	50.0	168935	266.49	UG/L	92
4)	Bromomethane	3.14	94.0	60053	305.80	UG/L	90
5)	Vinyl Chloride	2.83	62.0	201744	240.46	UG/L	96
6)	Chloroethane	3.24	64.0	40899	136.50	UG/L	94
7)	Acrolein	3.98	56.0	11488	705.66	UG/L	99
8)	Acrylonitrile	5.00	53.0	173261	1017.59	UG/L	96
9)	Methylene Chloride	4.65	84.0	184832	241.83	UG/L	81
10)	Acetone	4.20	43.0	41824	198.96	UG/L	100
11)	Carbon Disulfide	4.32	76.0	403806	466.00	UG/L	100
12)	Trichlorofluoromethane	3.49	101.0	81818	138.95	UG/L	100
13)	t-Butyl alcohol	5.22	59.0	33119	320.33	UG/L	100
14)	t-Butyl methyl ether	5.04	73.0	497983	185.65	UG/L	91
16)	1,1-Dichloroethene	4.06	96.0	170411	356.58	UG/L	94
17)	1,1-Dichloroethane	5.57	63.0	430641	211.46	UG/L	95
18)	trans-1,2-Dichloroethene	5.00	96.0	199950	236.93	UG/L	77
19)	cis-1,2-Dichloroethene	4.06	96.0	170411	356.58	UG/L	71
20)	Chloroform	7.00	83.0	423812	172.78	UG/L	95
21)	1,4-Dioxane	10.41	88.0	81931	3313.06	UG/L	82
22)	1,2-Dichloroethane-d4	7.90	65.0	87788	50.06	UG/L	90
23)	1,2-Dichloroethane	8.04	62.0	281555	181.40	UG/L	94
24)	2-Butanone	6.53	72.0	16862	208.61	UG/L	82
27)	*1,4-Difluorobenzene	8.82	114.0	217948	50.00	UG/L	98
28)	1,1,1-Trichloroethane	7.31	97.0	397459	186.86	UG/L	79
29)	Carbon Tetrachloride	7.61	117.0	321709	223.25	UG/L	86
30)	Vinyl Acetate	10.43	43.0	32057	163.89	UG/L	100
31)	Bromodichloromethane	10.58	83.0	423489	170.83	UG/L	91
32)	1,2-Dichloropropane	9.88	63.0	250592	193.84	UG/L	93
33)	cis-1,3-Dichloropropene	11.76	75.0	383190	188.13	UG/L	95
34)	Trichloroethene	9.37	130.0	250782	211.04	UG/L	96
35)	Dibromochloromethane	15.15	129.0	298321	181.51	UG/L	9[illegible]
36)	Ethylene dibromide	15.42	107.0	566366	499.31	UG/L	9[illegible]
37)	1,1,2-Trichloroethane	13.93	97.0	173786	180.21	UG/L	9[illegible]
38)	Benzene	8.00	78.0	616278	204.88	UG/L	9[illegible]
39)	trans-1,3-Dichloropropene	11.76	75.0	383190	188.13	UG/L	9
40)	2-Chloroethylvinylether	12.68	63.0	72216	199.88	UG/L	10
41)	Bromoform	20.28	173.0	215546	188.67	UG/L	9
44)	*Chlorobenzene-d5	17.08	117.0	170651	50.00	UG/L	[illegible]
45)	4-Methyl-2-Pentanone	12.29	43.0	200898	203.19	UG/L	[illegible]
46)	2-Hexanone	14.93	43.0	133487	201.40	UG/L	[illegible]
47)	Tetrachloroethene	14.30	164.0	214869	206.90	UG/L	[illegible]
48)	1,1,2,2-Tetrachloroethane	22.51	83.0	279864	179.67	UG/L	[illegible]
49)	Toluene-d8	12.48	98.0	207414	50.20	UG/L	[illegible]
50)	Toluene	12.68	92.0	436852	197.70	UG/L	[illegible]
	[illegible]benzene	17.18	112.0	466796	182.77	UG/[illegible]	[illegible]
		17.69	106.0	255197	186.91	UG/[illegible]	[illegible]
					186.72	UG/L	[illegible]

313

F 594

54)	p&m Xylene	18.17	106.0	[illegible]	124.57 UG/L	87
55)	o-Xylene	19.62	106.0	212770	52.19 UG/L	80
56)	Bromofluorobenzene	21.65	95.0	156068	117.13 UG/L	75
57)	1,3-Dichlorobenzene	26.15	146.0	301693	116.16 UG/L	84
58)	1,4-Dichlorobenzene	26.56	146.0	304211	117.40 UG/L	87
59)	1,2-Dichlorobenzene	28.09	146.0	254436	114.81 UG/L	100
60)	Naphthalene	36.46	128.0	216988	118.57 UG/L	93
61)	2-Methylnaphthalene	41.82	142.0	17315	977.29 UG/L	96
62)	1,3-Dimethylnaphthalene	47.55	156.0	90445		

* Compound is ISTD

850930860

F595

850930861

QUANT REPORT

Quant Rev: 7 Quant Time: 970502 13:22
Injected at: 970502 12:31
Operator ID: KS9934 Dilution Factor: 1.00000
Output File: ^A3696::QT Instrument ID: INST "A"
Data File: >A3696::A1
Name: INST 59701, VSTD100
Misc: INITIAL CAL , 0.53mm X 75M DB624

ID File: ID824A::X2
Title: GENERAL IDFILE FOR INSTRUMENT A
Last Calibration: 970429 23:03 Last Qcal Date: 970502 10:31

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	6.87	128.0	41888	50.00	UG/L	97
2)	Dichlorodifluoromethane	7.03	85.0	185483	93.29	UG/L	100
3)	Chloromethane	2.74	50.0	109294	170.95	UG/L	90
4)	Bromomethane	3.17	94.0	41697	210.53	UG/L	91
5)	Vinyl Chloride	2.86	62.0	131900	155.88	UG/L	95
6)	Chloroethane	3.27	64.0	28211	93.36	UG/L	96
7)	Acrolein	4.01	56.0	5973	363.79	UG/L	99
8)	Acrylonitrile	5.01	53.0	109627	638.40	UG/L	95
9)	Methylene Chloride	4.68	84.0	126600	164.24	UG/L	81
10)	Acetone	4.21	43.0	26303	124.06	UG/L	100
11)	Carbon Disulfide	4.36	76.0	264462	302.61	UG/L	100
12)	Trichlorofluoromethane	3.54	101.0	119853	201.82	UG/L	100
13)	t-Butyl alcohol	5.03	59.0	6086	58.37	UG/L	100
14)	t-Butyl methyl ether	5.05	73.0	336481	124.38	UG/L	91
16)	1,1-Dichloroethene	4.11	96.0	114744	238.07	UG/L	93.
17)	1,1-Dichloroethane	5.60	63.0	279707	136.18	UG/L	95
18)	trans-1,2-Dichloroethene	5.03	96.0	131509	154.51	UG/L	78
19)	cis-1,2-Dichloroethene	4.11	96.0	114744	238.07	UG/L	70
20)	Chloroform	7.03	83.0	284599	115.04	UG/L	93
21)	1,4-Dioxane	10.37	88.0	51585	2068.27	UG/L	80
22)	1,2-Dichloroethane-d4	7.93	65.0	89290	50.48	UG/L	90
23)	1,2-Dichloroethane	8.06	62.0	191332	122.23	UG/L	94
24)	2-Butanone	6.54	72.0	11232	137.78	UG/L	84
27)	*1,4-Difluorobenzene	8.83	114.0	219747	50.00	UG/L	99
28)	1,1,1-Trichloroethane	7.34	97.0	264297	123.24	UG/L	77
29)	Carbon Tetrachloride	7.63	117.0	218416	150.33	UG/L	89
30)	Vinyl Acetate	10.35	43.0	21650	109.78	UG/L	100
31)	Bromodichloromethane	10.61	83.0	281043	112.44	UG/L	92
32)	1,2-Dichloropropane	9.90	63.0	162451	124.63	UG/L	91
33)	cis-1,3-Dichloropropene	11.78	75.0	254780	124.06	UG/L	95
34)	Trichloroethene	9.40	130.0	167538	139.83	UG/L	97
35)	Dibromochloromethane	15.17	129.0	197441	119.14	UG/L	99
36)	Ethylene dibromide	15.45	107.0	372935	326.09	UG/L	96
37)	1,1,2-Trichloroethane	13.96	97.0	115747	119.05	UG/L	95
38)	Benzene	8.02	78.0	411099	135.55	UG/L	92
39)	trans-1,3-Dichloropropene	11.78	75.0	254780	124.06	UG/L	95
40)	2-Chloroethylvinylether	12.70	63.0	48983	134.47	UG/L	100
41)	Bromoform	20.28	173.0	137281	119.18	UG/L	99
44)	*Chlorobenzene-d5	17.11	117.0	168642	50.00	UG/L	
45)	4-Methyl-2-Pentanone	12.29	43.0	131595	134.68	UG/L	
46)	2-Hexanone	14.92	43.0	90277	137.83	UG/L	
47)	Tetrachloroethene	14.33	164.0	141866	138.23	UG/L	
48)	1,1,2,2-Tetrachloroethane	22.49	83.0	184487	119.85	UG/L	
49)	Toluene-d8	12.51	98.0	205313	50.29	UG/L	9
50)	Toluene	12.68	92.0	288102	131.94	UG/L	9
	Chlorobenzene	17.21	112.0	308473	122.22	UG/L	8
		17.70	106.0	166297	123.25	UG/L	9
					123.87	UG/L	

311

F 596

54)	p&m Xylene	18.22	106.0	[illegible]		
55)	o-Xylene	19.67	106.0	109510	65.29 UG/L	92
56)	Bromofluorobenzene	21.73	95.0	149501	50.90 UG/L	85
57)	1,3-Dichlorobenzene	26.23	146.0	150883	59.65 UG/L	72
58)	1,4-Dichlorobenzene	26.64	146.0	150564	58.94 UG/L	[illegible]
59)	1,2-Dichlorobenzene	28.18	146.0	127645	59.97 UG/L	86
60)	Naphthalene	36.52	128.0	109296	58.89 UG/L	100
61)	2-Methylnaphthalene	41.89	142.0	8387	58.48 UG/L	90
62)	1,3-Dimethylnaphthalene	47.60	156.0	56706	623.92 UG/L	93

* Compound is ISTD

850930862

F 597

850930863

QUANT REPORT

Quant Rev: 7 Quant Time: 970502 12:28
Injected at: 970502 11:31
Dilution Factor: 1.00000
Instrument ID: INST "A"

Uperator ID: KS9934
Uutput File: ^A3695::QT
Data File: >A3695::A1
Name: INST 59701, USTD050
Misc: INITIAL CAL , 0.53mm X 75M DB624

ID File: ID824A::X2
Title: GENERAL IDFILE FOR INSTRUMENT A
Last Calibration: 970429 23:03

Last Qcal Date: 970502 10:31

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	6.85	128.0	39657	50.00	UG/L	97
2)	Dichlorodifluoromethane	6.99	85.0	92221	48.99	UG/L	100
3)	Chloromethane	2.66	50.0	53467	88.33	UG/L	91
4)	Bromomethane	3.09	94.0	22164	118.20	UG/L	88
5)	Vinyl Chloride	2.78	62.0	63920	79.79	UG/L	96
6)	Chloroethane	3.19	64.0	15736	55.00	UG/L	96
7)	Acrolein	3.95	56.0	3046	195.96	UG/L	82
8)	Acrylonitrile	4.95	53.0	53464	328.86	UG/L	95
9)	Methylene Chloride	4.62	84.0	66596	91.26	UG/L	83
10)	Acetone	4.13	43.0	13586	67.69	UG/L	100
11)	Carbon Disulfide	4.31	76.0	127485	154.08	UG/L	100
12)	Trichlorofluoromethane	3.46	101.0	105340	187.36	UG/L	100
13)	t-Butyl alcohol	4.87	59.0	7859	79.61	UG/L	100
14)	t-Butyl methyl ether	4.99	73.0	167728	65.49	UG/L	92
16)	1,1-Dichloroethene	4.05	96.0	59770	130.98	UG/L	94.
17)	1,1-Dichloroethane	5.56	63.0	140386	72.19	UG/L	95
18)	trans-1,2-Dichloroethene	4.97	96.0	67955	84.33	UG/L	83
19)	cis-1,2-Dichloroethene	4.05	96.0	59770	130.98	UG/L	71
20)	Chloroform	6.99	83.0	142699	60.93	UG/L	93
21)	1,4-Dioxane	10.31	88.0	25470	1078.66	UG/L	82
22)	1,2-Dichloroethane-d4	7.89	65.0	89266	53.31	UG/L	94
23)	1,2-Dichloroethane	8.04	62.0	95209	64.24	UG/L	93
24)	2-Butanone	6.48	72.0	5241	67.91	UG/L	88
27)	*1,4-Difluorobenzene	8.83	114.0	208260	50.00	UG/L	97
28)	1,1,1-Trichloroethane	7.30	97.0	134294	66.07	UG/L	79
29)	Carbon Tetrachloride	7.61	117.0	108154	78.55	UG/L	86
30)	Vinyl Acetate	10.31	43.0	10997	58.84	UG/L	100
31)	Bromodichloromethane	10.61	83.0	140615	59.36	UG/L	91
32)	1,2-Dichloropropane	9.88	63.0	80476	65.15	UG/L	90
33)	cis-1,3-Dichloropropene	11.78	75.0	125881	64.68	UG/L	95
34)	Trichloroethene	9.39	130.0	83046	73.14	UG/L	98
35)	Dibromochloromethane	15.19	129.0	96390	61.37	UG/L	98
36)	Ethylene dibromide	15.46	107.0	186481	172.05	UG/L	95
37)	1,1,2-Trichloroethane	13.97	97.0	57285	62.17	UG/L	94
38)	Benzene	8.01	78.0	203222	70.70	UG/L	91
39)	trans-1,3-Dichloropropene	11.78	75.0	125881	64.68	UG/L	96
40)	2-Chloroethylvinylether	12.70	63.0	24275	70.32	UG/L	100
41)	Bromoform	20.34	173.0	67394	61.74	UG/L	
44)	*Chlorobenzene-d5	17.14	117.0	165618	50.00	UG/L	
45)	4-Methyl-2-Pentanone	12.29	43.0	65380	68.14	UG/L	F598
46)	2-Hexanone	14.93	43.0	42819	66.57	UG/L	
47)	Tetrachloroethene	14.37	164.0	74104	73.52	UG/L	
48)	1,1,2,2-Tetrachloroethane	22.57	83.0	91647	60.63	UG/L	9
49)	Toluene-d8	12.53	98.0	203101	50.65	UG/L	9
50)	Toluene	12.70	92.0	143918	67.11	UG/L	9
		17.24	112.0	155851	62.88	UG/L	9
		17.75	106.0	85267	64.35	UG/L	9

F598

52)	Ethylbenzene	17.81	106.0	98500	--	
53)	Styrene	19.82	104.0	82039	27.96 UG/L	88
54)	p&m Xylene	18.28	106.0	102355	61.44 UG/L	50
55)	o-Xylene	19.73	106.0	49193	29.12 UG/L	94
56)	Bromofluorobenzene	21.78	95.0	142893	48.32 UG/L	83
57)	1,3-Dichlorobenzene	26.30	146.0	65829	25.84 UG/L	75
58)	1,4-Dichlorobenzene	26.71	146.0	65376	25.24 UG/L	86
59)	1,2-Dichlorobenzene	28.28	146.0	55420	25.86 UG/L	88
60)	Naphthalene	36.63	128.0	39563	21.17 UG/L	100
61)	2-Methylnaphthalene	42.02	142.0	3984M	27.59 UG/L	
62)	1,3-Dimethylnaphthalene	47.75	156.0	25920M	283.22 UG/L	

* Compound is ISTD

850930865

QUANT REPORT

Quant Rev: 7 Quant Time: 970502 11:28
Injected at: 970502 10:31
Dilution Factor: 1.00000
Instrument ID: INST "A"

Operator ID: KS9934
Output File: ^A3694::QT
Data File: >A3694::A1
Name: INST 59701, VSTD020
Misc: INITIAL CAL , 0.53mm X 75M DB624

ID File: ID824A::X2
Title: GENERAL IDFILE FOR INSTRUMENT A
Last Calibration: 970429 23:03

Last Qcal Date: 970501 18:00

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	6.97	128.0	38389	50.00	UG/L	99
2)	Dichlorodifluoromethane	7.13	85.0	41888	22.99	UG/L	100
3)	Chloromethane	2.86	50.0	23568	40.22	UG/L	90
4)	Bromomethane	3.27	94.0	3986	21.96	UG/L	80
5)	Vinyl Chloride	2.94	62.0	29097	37.52	UG/L	99
6)	Chloroethane	3.37	64.0	14420	52.07	UG/L	97
7)	Acrolein	4.07	56.0	2789	185.35	UG/L	99
8)	Acrylonitrile	5.07	53.0	20111	127.79	UG/L	90
9)	Methylene Chloride	4.78	84.0	25556	36.18	UG/L	81
10)	Acetone	4.27	43.0	6061	31.19	UG/L	100
11)	Carbon Disulfide	4.46	76.0	57158	71.36	UG/L	100
12)	Trichlorofluoromethane	3.64	101.0	51612	94.83	UG/L	100
13)	t-Butyl alcohol	4.95	59.0	5395	56.45	UG/L	100
14)	t-Butyl methyl ether	5.13	73.0	66634	26.88	UG/L	91
16)	1,1-Dichloroethene	4.21	96.0	25631	58.03	UG/L	94
17)	1,1-Dichloroethane	5.70	63.0	61977	32.92	UG/L	94
18)	trans-1,2-Dichloroethene	5.13	96.0	28880	37.02	UG/L	81
19)	cis-1,2-Dichloroethene	4.21	96.0	25631	58.03	UG/L	73
20)	Chloroform	7.13	83.0	64519	28.46	UG/L	94
21)	1,4-Dioxane	10.39	88.0	8918	390.15	UG/L	89
22)	1,2-Dichloroethane-d4	8.03	65.0	82868	51.12	UG/L	95
23)	1,2-Dichloroethane	8.16	62.0	40942	28.54	UG/L	97
24)	2-Butanone	6.60	72.0	2029	27.16	UG/L	86
27)	*1,4-Difluorobenzene	8.93	114.0	215400	50.00	UG/L	98
28)	1,1,1-Trichloroethane	7.44	97.0	61731	29.37	UG/L	81
29)	Carbon Tetrachloride	7.73	117.0	46524	32.67	UG/L	89
30)	Vinyl Acetate	10.39	43.0	4290	22.19	UG/L	100
31)	Bromodichloromethane	10.71	83.0	60714	24.78	UG/L	93
32)	1,2-Dichloropropane	10.00	63.0	34079	26.67	UG/L	90
33)	cis-1,3-Dichloropropene	11.88	75.0	53302	26.48	UG/L	95
34)	Trichloroethene	9.49	130.0	37816	32.20	UG/L	9(
35)	Dibromochloromethane	15.27	129.0	38869	23.93	UG/L	9!
36)	Ethylene dibromide	15.54	107.0	73807	65.84	UG/L	9:
37)	1,1,2-Trichloroethane	14.05	97.0	23253	24.40	UG/L	9
38)	Benzene	8.12	78.0	92324	31.06	UG/L	9
39)	trans-1,3-Dichloropropene	11.88	75.0	53302	26.48	UG/L	9
40)	2-Chloroethylvinylether	12.80	63.0	10597	29.68	UG/L	10
41)	Bromoform	20.39	173.0	25723	22.78	UG/L	9
44)	*Chlorobenzene-d5	17.20	117.0	166771	50.00	UG/L	9
45)	4-Methyl-2-Pentanone	12.37	43.0	22142	22.92	UG/L	
46)	2-Hexanone	14.99	43.0	13905	21.47	UG/L	
47)	Tetrachloroethene	14.44	164.0	33870	33.37	UG/L	
48)	1,1,2,2-Tetrachloroethane	22.60	83.0	35609	23.39	UG/L	
		12.60	98.0	198142	49.07	UG/L	
		12.80	92.0	65127	30.16	UG/L	
					27.39	UG/L	

F 600

Initial Calibration Data
HSL Compounds

Case No: ---------- Instrument ID: ----------

Contractor: ---------- Calibration Date: 05/02/97 ----------

Contract No: ----------

Minimum $\overline{RF}$ for SPCC is Maximum % RSD for CCC is %

Laboratory ID:	>A3694	>A3695	>A3696	>A3697	>A3698						
Compound	RF 20.00	RF 50.00	RF 100.00	RF 150.00	RF 200.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CCC	SPCC	
trans-1,3-Dichloropropene	.61864	.60444	.57971	.58606	.56346	1.334	.59046	3.645			
2-Chloroethylvinylether	.12299	.11656	.11145	.11045	.10790	1.438	.11387	5.263			
Bromoform	.29855	.32361	.31236	.32966	.31090	2.299	.31502	3.834		**	
4-Methyl-2-Pentanone	.33192	.39476	.39016	.39241	.37580	.719	.37701	6.967			
2-Hexanone	.20844	.25854	.26766	.26074	.25071	.873	.24922	9.462			
Tetrachloroethene	.50773	.44744	.42061	.41970	.40604	.838	.44030	9.214			
1,1,2,2-Tetrachloroethane	.53380	.55336	.54698	.54666	.52423	1.316	.54101	2.175		**	
Toluene-d8	1.18811	1.22632	1.21745	1.21543	1.21333	.731	1.21213	1.181			(Conc=50.0,50.0,50.0,50.
Toluene	.97629	.86898	.85418	.85330	.84694	.742	.87994	6.190	*		
Chlorobenzene	1.02491	.94103	.91458	.91179	.90688	1.006	.93984	5.253		**	
Ethylbenzene	.57422	.51484	.49305	.49848	.48871	1.035	.51386	6.843	*		
Styrene	1.22982	1.12369	1.08983	1.09522	1.07468	1.152	1.12265	5.566			
p&m Xylene	.76718	.67416	.63806	.64251	.62275	1.063	.66893	8.673			(Conc=40.0,100.0,200.0,
o-Xylene	.73743	.66122	.63083	.63788	.62071	1.148	.65762	7.154			
Bromofluorobenzene	.85682	.90269	.92544	.91488	.92081	1.267	.90413	3.073			(Conc=50.0,50.0,50.0,5(
1,3-Dichlorobenzene	.98682	.91103	.89448	.87615	.86699	1.531	.90709	5.257			
1,4-Dichlorobenzene	.98003	.90910	.90194	.88011	.87539	1.555	.90932	4.620			
1,2-Dichlorobenzene	.83078	.77072	.75437	.74289	.72971	1.645	.76569	5.144			
Naphthalene	.59307	.65993	.64334	.64998	.54856	2.133	.61897	7.604			
2-Methylnaphthalene	.05972	.05064	.05134	.05821	.05327	2.446	.05464	7.510			
1,3-Dimethylnaphthalene	.03886	.03424	.02682	.03364	.03015	2.780	.03274	13.851			(Conc=200.0,500.0,100

RF - Response Factor (Subscript is amount in UG/L)

$\overline{RRT}$ - Average Relative Retention Time (RT Std/RT Istd)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

850930866

F 601

Initial Calibration Data
HSL Compounds

Case No: _____ Instrument ID: _____

Contractor: _____ Calibration Date: 05/02/97

Contract No: _____

Minimum $\overline{RF}$ for SPCC is _____ Maximum % RSD for CCC is _____ %

Laboratory ID:	>A3694	>A3695	>A3696	>A3697	>A3698					
Compound	RF 20.00	RF 50.00	RF 100.00	RF 150.00	RF 200.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CCC	SPCC	
Chloromethane	1.53481	1.34824	1.30460	1.35583	1.33298	.397	1.37529	6.639		**	
Bromomethane	.25958	.55889	.49772	.48197	.48043	.459	.45572	25.062			
Vinyl Chloride	1.89488	1.61182	1.57444	1.61915	1.56741	.412	1.65354	8.272	*		
Chloroethane	.93907	.39680	.33674	.32824	.31914	.473	.46400	57.610			
Acrolein	.03633	.01536	.01426	.01844	.01821	.581	.02052	43.950			(Conc=100.0,250.0,500.0,7
Acrylonitrile	.26194	.26963	.26171	.27811	.26206	.728	.26669	2.703			(Conc=100.0,250.0,500.0,7
Methylene Chloride	1.66428	1.67930	1.51117	1.48341	1.43394	.679	1.55442	7.127			
Acetone	.39471	.34259	.31397	.33567	.30821	.610	.33903	10.113			
Carbon Disulfide	3.72229	3.21469	3.15677	3.24084	3.14519	.632	3.29596	7.331			
Trichlorofluoromethane	3.36112	2.65628	1.43064	.65665	.65655	.512	1.75225	69.370			
t-Butyl alcohol	.14054	.07927	.02906	.10632	.10564	.738	.09217	44.967			(Conc=50.0,125.0,250.0,37
t-Butyl methyl ether	4.33939	4.22947	4.01644	3.99669	3.72014	.734	4.06042	5.882			
1,1-Dichloroethene	1.66916	1.50717	1.36965	1.36768	1.34709	.595	1.45215	9.436	*		
1,1-Dichloroethane	4.03612	3.54001	3.33875	3.45622	3.32893	.814	3.54000	8.214		**	
trans-1,2-Dichloroethene	1.88075	1.71357	1.56977	1.60475	1.52153	.730	1.65807	8.633			
Chloroform	4.20166	3.59833	3.39714	3.40141	3.26392	1.022	3.57249	10.396	*		
1,2-Dichloroethane-d4	2.15864	2.25095	2.13164	2.11369	2.01285	1.153	2.13355	4.017			(Conc=50.0,50.0,50.0,50.0
1,2-Dichloroethane	2.66626	2.40081	2.28385	2.25969	2.14777	1.174	2.35168	8.398			
2-Butanone	.13213	.13216	.13407	.13533	.12792	.950	.13232	2.122			
1,1,1-Trichloroethane	.71647	.64484	.60137	.60788	.59130	.830	.63237	8.093			
Carbon Tetrachloride	.53997	.51932	.49697	.49203	.48036	.864	.50573	4.706			
Vinyl Acetate	.04979	.05280	.04926	.04903	.04580	1.175	.04934	5.051			
Bromodichloromethane	.70467	.67519	.63947	.64769	.62433	1.201	.65827	4.838			
1,2-Dichloropropane	.39553	.38642	.36963	.38326	.37853	1.121	.38268	2.503	*		
cis-1,3-Dichloropropene	.61864	.60444	.57971	.58606	.56346	1.334	.59046	3.645			
Trichloroethene	.43890	.39876	.38121	.38355	.37507	1.064	.39550	6.519			
Dibromochloromethane	.45113	.46283	.44925	.45626	.43395	1.718	.45068	2.382			
Ethylene dibromide	.34265	.35817	.33942	.34648	.32480	1.749	.34231	3.529			(Conc=50.0,125.0,250.0,37
1,1,2-Trichloroethane	.26988	.27506	.26336	.26579	.25423	1.581	.26567	2.928			
Benzene	1.07154	.97581	.93539	.94255	.93090	.908	.97124	6.051			

RF - Response Factor (Subscript is amount in UG/L)

$\overline{RRT}$ - Average Relative Retention Time (RT Std/RT Istd)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330, FAX: 201-584-0515
MAY 7, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

GC/MS INITIAL CALIBRATION SUMMARY
VOLATILE ORGANIC COMPOUNDS

INSTRUMENT ID: 59701
BATCH #: QV5037

THIS INITIAL CALIBRATION APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS

LAB SAMPLE ID	DATA FILE	ANALYSIS DATE	ANALYSIS TIME
VSTD050	>A3758	05/06/97	09:28
BLANK	>A3759	05/06/97	10:33
262101	>A3760	05/06/97	11:50
INITIAL CALIBRATION			
VSTD020	>A3694	05/02/97	10:31
VSTD050	>A3695	05/02/97	11:31
VSTD100	>A3696	05/02/97	12:31
VSTD150	>A3697	05/02/97	13:26
VSTD200	>A3698	05/02/97	14:21

NOTE: The 'Calibration Date' listed on the Initial Calibration Data form reflects the last date that a modification was made to the file, not the date that the Initial Calibration was acquired. The Initial Calibration acquisition dates are on the 'GC/MS Initial Calibration Summary'.

Copyright ICM, Inc.,1997.
All rights reserved.
EIL

850930868

F 60

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330, FAX: 201-584-0515
MAY 7, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

GC/MS INITIAL CALIBRATION SUMMARY
VOLATILE ORGANIC COMPOUNDS

INSTRUMENT ID: 59701
BATCH #: QV5037

THIS INITIAL CALIBRATION APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS

LAB SAMPLE ID	DATA FILE	ANALYSIS DATE	ANALYSIS TIME
VSTD050	>A3741	05/05/97	17:40
BLANK	>A3742	05/05/97	18:39
262103	>A3747	05/05/97	22:42
262211 MS	>A3753	05/06/97	02:28
262211 MSD	>A3754	05/06/97	03:06
INITIAL CALIBRATION			
VSTD020	>A3694	05/02/97	10:31
VSTD050	>A3695	05/02/97	11:31
VSTD100	>A3696	05/02/97	12:31
VSTD150	>A3697	05/02/97	13:26
VSTD200	>A3698	05/02/97	14:21

NOTE: The 'Calibration Date' listed on the Initial Calibration Data form reflects the last date that a modification was made to the file, not the date that the Initial Calibration was acquired. The Initial Calibration acquisition dates are on the 'GC/MS Initial Calibration Summary'.

Copyright ICM, Inc.,1997.
All rights reserved.
EIL

850930869

F 604

52)	Ethylbenzene	20.28	106.0	28539	52.99 UG/L	96
53)	Styrene	21.47	104.0	65625	56.00 UG/L	96
54)	p&m Xylene	20.55	106.0	76835	110.44 UG/L	44
55)	o-Xylene	21.43	106.0	38327	53.67 UG/L	93
56)	Bromofluorobenzene	22.54	95.0	33628	52.06 UG/L	97
57)	1,3-Dichlorobenzene	24.64	146.0	47765	51.88 UG/L	71
58)	1,4-Dichlorobenzene	24.82	146.0	49784	53.19 UG/L	82
59)	1,2-Dichlorobenzene	25.48	146.0	44583	54.36 UG/L	79

* Compound is ISTD

QUANT REPORT

Operator ID: KS9934 Quant Rev: 7 Quant Time: 970503 13:05
Output File: B1329::E1 Injected at: 970503 12:32
Data File: B1329::B1 Dilution Factor: 1.00000
Name: INST 59702, VSTD050 Instrument ID: INST "B"
Misc: VSTD050 , 0.53mm x 75M DB624

ID File: ID8248::X2
Title: GENERAL IDFILE FOR INSTRUMENT B
Last Calibration: 970415 20:09 Last Qcal Date: 970502 18:13

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	8.85	128.0	14705	50.00	UG/L	99
2)	Dichlorodifluoromethane	3.17	85.0	66785	40.00	UG/L	100
3)	Chloromethane	3.54	50.0	32710	47.68	UG/L	92
4)	Bromomethane	4.34	94.0	15224	55.75	UG/L	88
5)	Vinyl Chloride	3.73	62.0	32832	50.23	UG/L	98
6)	Chloroethane	4.55	64.0	17331	53.68	UG/L	91
7)	Acrolein	5.76	56.0	4134	241.97	UG/L	95
8)	Acrylonitrile	7.30	53.0	54836	267.24	UG/L	92
9)	Methylene Chloride	6.83	84.0	29891	48.60	UG/L	85
10)	Acetone	6.05	43.0	12259	52.31	UG/L	100
11)	Carbon Disulfide	6.36	76.0	37486	43.26	UG/L	100
12)	Trichlorofluoromethane	5.02	101.0	35021	53.66	UG/L	100
13)	t-Butyl alcohol	7.12	59.0	4749	99.00	UG/L	100
14)	t-Butyl methyl ether	7.40	73.0	44924	46.52	UG/L	98
16)	1,1-Dichloroethene	5.93	96.0	22528	50.05	UG/L	92
17)	1,1-Dichloroethane	8.17	63.0	49380	51.13	UG/L	94
18)	trans-1,2-Dichloroethene	8.36	96.0	29970	50.56	UG/L	96
19)	cis-1,2-Dichloroethene	7.38	96.0	28916	52.08	UG/L	80
20)	Chloroform	10.05	83.0	48345	51.49	UG/L	91
22)	1,2-Dichloroethane-d4	11.14	65.0	38686	51.82	UG/L	89
23)	1,2-Dichloroethane	11.29	62.0	45171	55.54	UG/L	94
24)	2-Butanone	9.40	72.0	3122	51.99	UG/L	95
27)	*1,4-Difluorobenzene	12.17	114.0	68850	50.00	UG/L	97
28)	1,1,1-Trichloroethane	10.43	97.0	31290	48.18	UG/L	79
29)	Carbon Tetrachloride	10.82	117.0	26330	50.78	UG/L	89
30)	Vinyl Acetate	14.86	43.0	10966	65.01	UG/L	100
31)	Bromodichloromethane	14.04	83.0	33229	62.12	UG/L	91
32)	1,2-Dichloropropane	13.34	63.0	24109	54.57	UG/L	91
33)	cis-1,3-Dichloropropene	15.23	75.0	32753	59.00	UG/L	94
34)	Trichloroethene	12.79	130.0	23542	52.43	UG/L	96
35)	Dibromochloromethane	18.44	129.0	21828	63.27	UG/L	94
37)	1,1,2-Trichloroethane	17.33	97.0	19343	57.39	UG/L	96
38)	Benzene	11.27	78.0	95237	52.67	UG/L	95
39)	trans-1,3-Dichloropropene	16.79	75.0	24247	60.37	UG/L	97
40)	2-Chloroethylvinylether	17.33	63.0	4650	56.82	UG/L	100
41)	Bromoform	21.84	173.0	13422	66.90	UG/L	98
44)	*Chlorobenzene-d5	19.91	117.0	56388	50.00	UG/L	96
45)	4-Methyl-2-Pentanone	15.66	43.0	29811	54.44	UG/L	73
46)	2-Hexanone	18.11	43.0	18007	63.84	UG/L	88
47)	Tetrachloroethene	17.76	164.0	19715	54.10	UG/L	93
48)	1,1,2,2-Tetrachloroethane	22.85	83.0	30793	56.45	UG/L	95
49)	Toluene-d8	15.95	98.0	76791	49.42	UG/L	96
50)	Toluene	16.13	92.0	53185	50.73	UG/L	90

F 606

Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 05/03/97

Contractor: Time: 12:32

Contract No: Laboratory ID: >81329

Instrument ID: Initial Calibration Date: 05/01/97

Minimum $\overline{RF}$ for SPCC is Maximum % Diff for CCC is %

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
2-Chloroethylvinylether	.06592	.06754	2.46			
Bromoform	.17797	.19495	9.54		**	
2-Nitropropane	-	-	-			
Benzyl Chloride	-	-	-			
4-Methyl-2-Pentanone	.54523	.52868	3.04			
2-Hexanone	.31036	.31934	2.89			
Tetrachloroethene	.35420	.34963	1.29			
1,1,2,2-Tetrachloroethane	.50895	.54609	7.30		**	
Toluene-d8	1.32851	1.36183	2.51			
Toluene	.99649	.94320	5.35	*		
Chlorobenzene	.99269	1.03329	4.09		**	
Ethylbenzene	.48250	.50612	4.89	*		
Styrene	1.07663	1.16381	8.10			
p&m Xylene	.63654	.68131	7.03			(Conc=100.00)
o-Xylene	.65022	.67970	4.53			
Bromofluorobenzene	.53842	.59633	10.76			
1,3-Dichlorobenzene	.81042	.84708	4.52			
1,4-Dichlorobenzene	.84080	.88306	5.03			
1,2-Dichlorobenzene	.73770	.79040	7.14			

RF - Response Factor from daily standard file at 50.00 UG/L

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

850930872

F 607

Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 05/03/97

Contractor: Time: 12:32

Contract No: Laboratory ID: 361329

Instrument ID: Initial Calibration Date: 05/01/97

Minimum $\overline{RF}$ for SPCC is Maximum % Diff for CCC is %

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
Chloromethane	2.16486	2.22441	2.75		**	
Bromomethane	.77616	1.03529	33.39			
Vinyl Chloride	2.15290	2.23271	3.71	*		
Chloroethane	.65123	1.17858	80.98			
Acrolein	.06650	.01874	71.81			(Conc=750.00)
Acrylonitrile	.80611	.74581	7.48			(Conc=250.00)
Methylene Chloride	1.92929	2.03271	5.36			
Acetone	.90504	.83366	7.89			
Carbon Disulfide	2.70110	2.54920	5.62			
Trichlorofluoromethane	1.74110	2.38157	36.79			
t-Butyl alcohol	.15997	.12918	19.25			(Conc=125.00)
t-Butyl methyl ether	3.27060	3.05502	6.59			
1,1-Dichloroethene	1.40775	1.53200	8.83	*		
1,1-Dichloroethane	3.26759	3.35804	2.77		**	
trans-1,2-Dichloroethene	1.95402	2.03808	4.30			
Chloroform	3.18609	3.28766	3.19	*		
1,2-Dichloroethane-d4	2.43601	2.63081	8.00			
1,2-Dichloroethane	2.88437	3.07181	6.50			
2-Butanone	.23258	.21231	8.72			
Acetonitrile	-	-	-			(Conc=1250.00)
Ethyl Acetate	-	-	-			
1,1,1-Trichloroethane	.44133	.45447	2.98			
Carbon Tetrachloride	.36810	.38243	3.89			
Vinyl Acetate	.14596	.15927	9.12			
Bromochloromethane	.42331	.48263	14.01			
1,2-Dichloropropane	.33272	.35017	5.24	*		
cis-1,3-Dichloropropene	.45603	.47572	4.32			
Trichloroethene	.36262	.34193	5.71			
Dibromochloromethane	.29156	.31704	8.74			
1,1,2-Trichloroethane	.27313	.28094	2.86			
Benzene	1.37106	1.38325	.89			
trans-1,3-Dichloropropene	.33350	.35217	5.60			

RF - Response Factor from daily standard file at 50.00 UG/L

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

850930873

F 606

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330, FAX: 201-584-0515
MAY 7, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

GC/MS CONTINUING CALIBRATION SUMMARY
VOLATILE ORGANIC COMPOUNDS

INSTRUMENT ID: 59702
BATCH #: QV5029

THIS CONTINUING CALIBRATION APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS

LAB SAMPLE ID	DATA FILE	ANALYSIS DATE	ANALYSIS TIME
VSTD050	>B1329	05/03/97	12:32
BLANK	>B1330	05/03/97	13:32
262098	>B1333	05/03/97	15:51
262100	>B1340	05/03/97	20:27
FROM INITIAL CALIBRATION			
VSTD200	>B1261	04/30/97	19:46
VSTD150	>B1262	04/30/97	20:33
VSTD100	>B1263	04/30/97	21:20
VSTD050	>B1264	04/30/97	22:07
VSTD020	>B1265	04/30/97	22:54

NOTE: The 'Initial Calibration Date' listed on the Continuing Calibration Check form reflects the last date a modification was made to the file, not the date that the Initial Calibration was acquired. The Initial Calibration acquisition dates are on the 'GC/MS Continuing Calibration Summary'.

Copyright ICM, Inc.,1997.
All rights reserved.
ERI

Operator ID: MANAGER Quant Rev: 7 Quant Time: 970502 18:46
Output File: ^B1312::QT Injected at: 970501 18:15
Data File: ^B1312::B1 Dilution Factor: 1.00000
Name: INST. 59702,USTD050 Instrument ID: INST "B"
Misc: USTD050,0.18mm X 40M DB-624

ID File: ID824B::X2
Title: GENERAL IDFILE FOR INSTRUMENT B
Last Calibration: 970415 20:09 Last Qcal Time: 970501 18:33

	Compound	R.T.	Q ion	Area	Conc	Units	a
48)	1,1,2,2-Tetrachloroethane	22.83	83.0	29113	45.78	UG/L	88
49)	Toluene-d8	15.91	98.0	82919	53.53	UG/L	95
50)	Toluene	16.11	92.0	55951	49.84	UG/L	92
51)	Chlorobenzene	19.96	112.0	56056	45.68	UG/L	96
52)	Ethylbenzene	20.26	106.0	28742	47.60	UG/L	98
53)	Styrene	21.44	104.0	62539	45.92	UG/L	96
54)	p&m Xylene	20.53	106.0	74256	92.10	UG/L	56
55)	o-Xylene	21.41	106.0	38109	46.55	UG/L	93
56)	Bromofluorobenzene	22.52	95.0	34472	50.03	UG/L	87
57)	1,3-Dichlorobenzene	24.64	146.0	49130	50.18	UG/L	73
58)	1,4-Dichlorobenzene	24.80	146.0	49960	47.63	UG/L	83
59)	1,2-Dichlorobenzene	25.46	146.0	43758	47.67	UG/L	81

* Compound is ISTD

850930876

QUANT REPORT Page 1

Operator ID: MANAGER Quant Rev: 7 Quant Time: 970502 18:46
Output File: ^B1312::QT Injected at: 970502 18:13
Data File: ^B1312::B1 Dilution Factor: 1.00000
Name: INST. 59702.VSTD050 Instrument ID: INST "B"
Misc: VSTD050,0.18mm X 40M 08-824

ID File: ID824B::X2
Title: GENERAL IDFILE FOR INSTRUMENT B
Last Calibration: 970415 20:09 Last Qcal Time: 970501 18:33

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	9.83	128.0	16873	50.00	UG/L	94
2)	Dichlorodifluoromethane	3.15	85.0	76635	39.22	UG/L	100
3)	Chloromethane	3.52	50.0	39362	58.00	UG/L	97
4)	Bromomethane	4.32	94.0	15666	49.20	UG/L	90
5)	Vinyl Chloride	3.71	62.0	37498	53.72	UG/L	95
6)	Chloroethane	4.51	64.0	18524	51.13	UG/L	93
7)	Acrolein	5.72	56.0	4901	274.42	UG/L	98
8)	Acrylonitrile	7.26	53.0	58861	251.11	UG/L	93
9)	Methylene Chloride	6.81	84.0	35286	53.81	UG/L	82
10)	Acetone	6.01	43.0	13446	51.59	UG/L	100
11)	Carbon Disulfide	6.30	76.0	49710	57.92	UG/L	100
12)	Trichlorofluoromethane	4.98	101.0	37446	48.06	UG/L	100
13)	t-Butyl alcohol	7.10	59.0	6880	178.79	UG/L	100
14)	t-Butyl methyl ether	7.37	73.0	55404	59.26	UG/L	97
16)	1,1-Dichloroethene	5.91	96.0	25823	53.20	UG/L	94
17)	1,1-Dichloroethane	8.15	63.0	55403	50.05	UG/L	95
18)	trans-1,2-Dichloroethene	9.32	96.0	34007	53.98	UG/L	91
19)	cis-1,2-Dichloroethene	7.34	96.0	31857	51.64	UG/L	93
20)	Chloroform	10.03	83.0	53863	48.90	UG/L	90
22)	1,2-Dichloroethane-d4	11.10	65.0	42829	49.22	UG/L	90
23)	1,2-Dichloroethane	11.27	62.0	46660	46.67	UG/L	91
24)	2-Butanone	9.36	72.0	3445	53.15	UG/L	98
27)	*1,4-Difluorobenzene	12.13	114.0	76681	50.00	UG/L	99
28)	1,1,1-Trichloroethane	10.41	97.0	36166	51.89	UG/L	79
29)	Carbon Tetrachloride	10.78	117.0	28873	48.33	UG/L	82
30)	Vinyl Acetate	14.82	43.0	9393	46.22	UG/L	101
31)	Bromodichloromethane	14.02	83.0	29786	42.47	UG/L	96
32)	1,2-Dichloropropane	13.30	63.0	24601	48.90	UG/L	9
33)	cis-1,3-Dichloropropene	15.19	75.0	30916	47.35	UG/L	9
34)	Trichloroethene	12.77	130.0	25003	45.69	UG/L	9
35)	Dibromochloromethane	18.40	129.0	19213	42.97	UG/L	9
37)	1,1,2-Trichloroethane	17.29	97.0	18768	46.52	UG/L	9
38)	Benzene	11.23	78.0	100684	46.99	UG/L	9
39)	trans-1,3-Dichloropropene	16.75	75.0	22367	48.94	UG/L	9
40)	2-Chloroethylvinylether	17.29	63.0	4557	44.50	UG/L	10
41)	Bromoform	21.82	173.0	11172	43.14	UG/L	9
44)	*Chlorobenzene-d5	19.89	117.0	60184	50.00	UG/L	9
45)	4-Methyl-2-Pentanone	15.64	43.0	29221	50.86	UG/L	7
46)	2-Hexanone	18.09	43.0	15053	49.03	UG/L	8
47)	Tetrachloroethene	17.72	164.0	19449	46.54	UG/L	9

F611

Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 05/02/97

Contractor: Time: 10:13

Contract No: Laboratory ID: 181312

Instrument ID: Initial Calibration Date: 05/01/97

Minimum $\overline{RF}$ for SPCC is Maximum % Diff for CCC is %

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
2-Chloroethylvinylether	.06592	.05943	9.85			
Bromoform	.17797	.14569	18.14		**	
2-Nitropropane	-	-	-			
Benzyl Chloride	-	-	-			
4-Methyl-2-Pentanone	.54523	.48553	10.95			
2-Hexanone	.31036	.25012	19.41			
Tetrachloroethene	.35420	.32316	8.76			
1,1,2,2-Tetrachloroethane	.50895	.48373	4.95		**	
Toluene-d8	1.32851	1.37776	3.71			
Toluene	.99649	.92967	6.71	*		
Chlorobenzene	.99269	.93141	6.17		**	
Ethylbenzene	.48250	.47757	1.02	*		
Styrene	1.07663	1.03913	3.48			
p&m Xylene	.63654	.61691	3.08			(Conc=100.00)
o-Xylene	.65022	.63321	2.62			
Bromofluorobenzene	.53842	.57278	6.38			
1,3-Dichlorobenzene	.01042	.01633	.73			
1,4-Dichlorobenzene	.84080	.83012	1.27			
1,2-Dichlorobenzene	.73770	.72787	1.44			

RF - Response Factor from daily standard file at 50.00 UG/L

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

850930877

F 612

Continuing Calibration Check
HSL Compounds

Case No: _____ Calibration Date: 05/02/97

Contractor: _____ Time: 19:13

Contract No: _____ Laboratory ID: 01312

Instrument ID: _____ Initial Calibration Date: 05/01/97

Minimum $\overline{RF}$ for SPCC is _____ Maximum % Diff for CCC is %

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
Chloromethane	2.16486	2.33284	7.76		**	
Bromomethane	.77616	.92847	19.62			
Vinyl Chloride	2.15290	2.22237	3.23	*		
Chloroethane	.65123	1.09785	68.58			
Acrolein	.36650	.81936	70.88			(Conc=750.00)
Acrylonitrile	.80611	.69769	13.45			(Conc=250.00)
Methylene Chloride	1.92929	2.09127	8.40			
Acetone	.90504	.79689	11.95			
Carbon Disulfide	2.70110	2.94613	9.07			
Trichlorofluoromethane	1.74110	2.21929	27.46			
t-Butyl alcohol	.15997	.16310	1.96			(Conc=125.00)
t-Butyl methyl ether	3.27060	3.28359	.40			
1,1-Dichloroethene	1.40775	1.53043	8.71	*		
1,1-Dichloroethane	3.26759	3.28353	.49		**	
trans-1,2-Dichloroethene	1.95402	2.01547	3.14			
Chloroform	3.18609	3.19226	.19	*		
1,2-Dichloroethane-d4	2.43601	2.53832	4.20			
1,2-Dichloroethane	2.88437	2.76536	4.13			
2-Butanone	.23258	.20417	12.21			
Acetonitrile	-	-	-			(Conc=1250.00)
Ethyl Acetate	-	-	-			
1,1,1-Trichloroethane	.44133	.47164	6.87			
Carbon Tetrachloride	.36810	.37653	2.29			
Vinyl Acetate	.14596	.12249	16.08			
Bromodichloromethane	.42331	.38844	8.24			
1,2-Dichloropropane	.33272	.32082	3.58	*		
cis-1,3-Dichloropropene	.45603	.40318	11.59			
Trichloroethene	.36262	.32607	10.08			
Dibromochloromethane	.29156	.25056	14.06			
1,1,2-Trichloroethane	.27313	.24475	10.39			
Benzene	1.37106	1.31302	4.23			
trans-1,3-Dichloropropene	.33350	.29169	12.54			

RF - Response Factor from daily standard file at 50.00 UG/L

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

850930878

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330, FAX: 201-584-0515
MAY 7, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

GC/MS CONTINUING CALIBRATION SUMMARY
VOLATILE ORGANIC COMPOUNDS

INSTRUMENT ID: 59702
BATCH #: QV5029

THIS CONTINUING CALIBRATION APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS

LAB SAMPLE ID	DATA FILE	ANALYSIS DATE	ANALYSIS TIME
VSTD050	>B1312	05/02/97	18:13
BLANK	>B1313	05/02/97	19:07
262021 MS	>B1321	05/03/97	01:15
261021 MSD	>B1322	05/03/97	01:54
262102	>B1324	05/03/97	03:15
262105	>B1325	05/03/97	03:56
262104	>B1326	05/03/97	04:34
FROM INITIAL CALIBRATION			
VSTD200	>B1261	04/30/97	19:46
VSTD150	>B1262	04/30/97	20:33
VSTD100	>B1263	04/30/97	21:20
VSTD050	>B1264	04/30/97	22:07
VSTD020	>B1265	04/30/97	22:54

NOTE: The 'Initial Calibration Date' listed on the Continuing Calibration Check form reflects the last date a modification was made to the file, not the date that the Initial Calibration was acquired. The Initial Calibration acquisition dates are on the 'GC/MS Continuing Calibration Summary'.

Copyright ICM, Inc.,1997.
All rights reserved.
ERI

850930879

F 614

54)	p&m Xylene	20.94	106.0	77955	107.78 UG/L	46
55)	o-Xylene	21.42	106.0	40701	53.21 UG/L	90
56)	Bromofluorobenzene	22.53	95.0	32868	51.35 UG/L	88
57)	1,3-Dichlorobenzene	24.66	146.0	51732	54.87 UG/L	73
58)	1,4-Dichlorobenzene	24.81	146.0	52635	53.25 UG/L	84
59)	1,2-Dichlorobenzene	25.47	146.0	46924	54.94 UG/L	81

* Compound is ISTD

850930880

850930881

QUANT REPORT

Operator ID: KS9934 Quant Rev: 7 Quant Time: 970506 09:53
Output File: ^B1373::QT Injected at: 970506 09:20
Data File: >B1373::B1 Dilution Factor: 1.00000
Name: INST 59702, VSTD050 Instrument ID: INST "B"
Misc: VSTD050 , 0.18mm X 40M DB-8240

ID File: ID824B::X2
Title: GENERAL IDFILE FOR INSTRUMENT B
Last Calibration: 970415 20:09 Last Qcal Date: 970505 18:27

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	9.82	128.0	15529	50.00	UG/L	99
2)	Dichlorodifluoromethane	3.12	85.0	54286	40.76	UG/L	100
3)	Chloromethane	3.47	50.0	30268	51.73	UG/L	99
4)	Bromomethane	4.29	94.0	13458	56.74	UG/L	90
5)	Vinyl Chloride	3.68	62.0	30985	48.92	UG/L	97
6)	Chloroethane	4.48	64.0	16757	50.77	UG/L	98
7)	Acrolein	5.71	56.0	3965	280.69	UG/L	97
8)	Acrylonitrile	7.25	53.0	62037	285.45	UG/L	93
9)	Methylene Chloride	6.80	84.0	30449	53.04	UG/L	82
10)	Acetone	6.00	43.0	13552	56.57	UG/L	100
11)	Carbon Disulfide	6.32	76.0	38056	47.56	UG/L	100
12)	Trichlorofluoromethane	4.97	101.0	33597	51.72	UG/L	100
13)	t-Butyl alcohol	7.10	59.0	5263	125.20	UG/L	100
14)	t-Butyl methyl ether	7.37	73.0	48115	48.96	UG/L	96
16)	1,1-Dichloroethene	5.89	96.0	22722	51.72	UG/L	90
17)	1,1-Dichloroethane	8.15	63.0	52868	53.77	UG/L	91
18)	trans-1,2-Dichloroethene	9.34	96.0	30538	52.97	UG/L	87
19)	cis-1,2-Dichloroethene	7.33	96.0	28556	49.50	UG/L	89
20)	Chloroform	10.02	83.0	49473	53.46	UG/L	99
22)	1,2-Dichloroethane-d4	11.11	65.0	38464	54.76	UG/L	91
23)	1,2-Dichloroethane	11.29	62.0	47665	58.55	UG/L	95
24)	2-Butanone	9.38	72.0	3573	65.07	UG/L	94
27)	*1,4-Difluorobenzene	12.14	114.0	72027	50.00	UG/L	97
28)	1,1,1-Trichloroethane	10.43	97.0	31952	50.13	UG/L	84
29)	Carbon Tetrachloride	10.80	117.0	26630	53.21	UG/L	83
30)	Vinyl Acetate	14.85	43.0	10338	56.05	UG/L	100
31)	Bromodichloromethane	14.03	83.0	34135	55.28	UG/L	88
32)	1,2-Dichloropropane	13.31	63.0	25017	55.41	UG/L	98
33)	cis-1,3-Dichloropropene	15.20	75.0	32305	51.86	UG/L	94
34)	Trichloroethene	12.79	130.0	24273	52.90	UG/L	88
35)	Dibromochloromethane	18.42	129.0	22195	57.52	UG/L	99
37)	1,1,2-Trichloroethane	17.31	97.0	20254	57.71	UG/L	95
38)	Benzene	11.25	78.0	100095	54.30	UG/L	96
39)	trans-1,3-Dichloropropene	16.78	75.0	23949	54.65	UG/L	96
40)	2-Chloroethylvinylether	17.33	63.0	5155	57.83	UG/L	100
41)	Bromoform	21.83	173.0	13091	57.02	UG/L	96
44)	*Chlorobenzene-d5	19.90	117.0	60115	50.00	UG/L	98
45)	4-Methyl-2-Pentanone	15.65	43.0	31932	62.14	UG/L	71
46)	2-Hexanone	18.11	43.0	16686	54.34	UG/L	80
47)	Tetrachloroethene	17.74	164.0	20767	55.92	UG/L	98
48)	1,1,2,2-Tetrachloroethane	22.84	83.0	32951	56.26	UG/L	88
49)	Toluene-d8	15.92	98.0	74666	50.83	UG/L	96
50)	Toluene	16.12	92.0	54803	54.50	UG/L	89
51)	Chlorobenzene	19.98	112.0	62249	56.40	UG/L	96
52)	Ethylbenzene	20.27	106.0	29795	55.57	UG/L	99

F 616

Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 05/06/97

Contractor: Time: 09:20

Contract No: Laboratory ID: >B1373

Instrument ID: Initial Calibration Date: 05/01/97

Minimum $\overline{RF}$ for SPCC is Maximum % Diff for CCC is %

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
2-Chloroethylvinylether	.06592	.07157	8.57			
Bromoform	.17797	.18175	2.12		**	
2-Nitropropane	-	-	-			
Benzyl Chloride	-	-	-			
4-Methyl-2-Pentanone	.54523	.53118	2.58			
2-Hexanone	.31036	.27757	10.57			
Tetrachloroethene	.35420	.34545	2.47			
1,1,2,2-Tetrachloroethane	.50895	.54813	7.70		**	
Toluene-d8	1.32851	1.24205	6.51			
Toluene	.99649	.91164	8.52	*		
Chlorobenzene	.99269	1.03550	4.31		**	
Ethylbenzene	.48250	.49563	2.72	*		
Styrene	1.07663	1.10124	2.29			
p&m Xylene	.63654	.66152	3.92			(Conc=100.00)
o-Xylene	.65022	.67705	4.13			
Bromofluorobenzene	.53842	.54675	1.55			
1,3-Dichlorobenzene	.81042	.86055	6.19			
1,4-Dichlorobenzene	.84080	.87557	4.14			
1,2-Dichlorobenzene	.73770	.78057	5.81			

RF - Response Factor from daily standard file at 50.00 UG/L

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

850930882

F 617

Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 05/06/97

Contractor: Time: 09:20

Contract No: Laboratory ID: >81373

Instrument ID: Initial Calibration Date: 05/01/97

Minimum $\overline{RF}$ for SPCC is Maximum % Diff for CCC is %

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
Chloromethane	2.16486	1.94913	9.97		**	
Bromomethane	.77616	.86664	11.66			
Vinyl Chloride	2.15290	1.99530	7.32	*		
Chloroethane	.65123	1.07908	65.70			
Acrolein	.06650	.01702	74.40			(Conc=750.00)
Acrylonitrile	.80611	.79898	.88			(Conc=250.00)
Methylene Chloride	1.92929	1.96078	1.63			
Acetone	.90504	.87269	3.57			
Carbon Disulfide	2.70110	2.45064	9.27			
Trichlorofluoromethane	1.74110	2.16350	24.26			
t-Butyl alcohol	.15997	.13557	15.26			(Conc=125.00)
t-Butyl methyl ether	3.27060	3.09840	5.27			
1,1-Dichloroethene	1.40775	1.46320	3.94	*		
1,1-Dichloroethane	3.26759	3.40447	4.19		**	
trans-1,2-Dichloroethene	1.95402	1.96651	.64			
Chloroform	3.18609	3.18585	.01	*		
1,2-Dichloroethane-d4	2.43601	2.47691	1.68			
1,2-Dichloroethane	2.88437	3.06942	6.42			
2-Butanone	.23258	.23009	1.07			
Acetonitrile	-	-	-			(Conc=1250.00)
Ethyl Acetate	-	-	-			
1,1,1-Trichloroethane	.44133	.44361	.52			
Carbon Tetrachloride	.36810	.36972	.44			
Vinyl Acetate	.14596	.14353	1.67			
Bromodichloromethane	.42331	.47392	11.96			
1,2-Dichloropropane	.33272	.34733	4.39	*		
cis-1,3-Dichloropropene	.45603	.44851	1.65			
Trichloroethene	.36262	.33700	7.07			
Dibromochloromethane	.29156	.30815	5.69			
1,1,2-Trichloroethane	.27313	.28120	2.95			
Benzene	1.37106	1.38969	1.36			
trans-1,3-Dichloropropene	.33350	.33250	.30			

RF - Response Factor from daily standard file at 50.00 UG/L

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330, FAX: 201-584-0515
MAY 7, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

GC/MS CONTINUING CALIBRATION SUMMARY
VOLATILE ORGANIC COMPOUNDS

INSTRUMENT ID: 59702
BATCH #: QV5028

THIS CONTINUING CALIBRATION APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARD

LAB SAMPLE ID	DATA FILE	ANALYSIS DATE	ANALYSIS TIME
VSTD050	>B1373	05/06/97	09:20
BLANK	>B1374	05/06/97	10:15
262099	>B1377	05/06/97	12:34
FROM INITIAL CALIBRATION			
VSTD200	>B1261	04/30/97	19:46
VSTD150	>B1262	04/30/97	20:33
VSTD100	>B1263	04/30/97	21:20
VSTD050	>B1264	04/30/97	22:07
VSTD020	>B1265	04/30/97	22:54

NOTE: The 'Initial Calibration Date' listed on the Continuing Calibration Check form reflects the last date a modification was made to the file, not the date that the Initial Calibration was acquired. The Initial Calibration acquisition dates are on the 'GC/MS Continuing Calibration Summary'.

Copyright ICM, Inc.,1997.
All rights reserved.
ERI

850930884

F 619

Operator ID: MANAGER Quant Rev: 7 Quant Time: 970430 23:35
Output File: ^B1265::QT Injected at: 970430 22:54
Data File: >B1265::C1 Dilution Factor: 1.00000
Name: INST 59702, VSTD020 Instrument ID: INST "B"
Misc: CAL STD, L,5,5,0.53mm X 75M DB-624

ID File: ID824B::X2
Title: GENERAL IDFILE FOR INSTRUMENT B
Last Calibration: 970415 20:09 Last Qcal Time: 970429 16:14

	Compound	R.T.	Q ion	Area	Conc	Units	q
48)	1,1,2,2-Tetrachloroethane	22.85	83.0	14718	21.69	UG/L	91
49)	Toluene-d8	15.95	98.0	88289	47.19	UG/L	99
50)	Toluene	16.13	92.0	27399	23.05	UG/L	95
51)	Chlorobenzene	19.98	112.0	27417	22.24	UG/L	95
52)	Ethylbenzene	20.28	106.0	13318	22.22	UG/L	99
53)	Styrene	21.47	104.0	29544	22.02	UG/L	99
54)	p&m Xylene	20.55	106.0	36369	46.71	UG/L	49
55)	o-Xylene	21.45	106.0	18002	21.59	UG/L	89
56)	Bromofluorobenzene	22.54	95.0	35579	46.35	UG/L	65
57)	1,3-Dichlorobenzene	24.66	146.0	23062	20.34	UG/L	76
58)	1,4-Dichlorobenzene	24.82	146.0	24358	21.16	UG/L	78
59)	1,2-Dichlorobenzene	25.48	146.0	20725	20.22	UG/L	84

* Compound is ISTD

850930885

F 620

QUANT REPORT Page 1

Operator ID: MANAGER Quant Rev: 7 Quant Time: 970430 23:35
Output File: ^B1265::QT Injected at: 970430 22:54
Data File: >B1265::C1 Dilution Factor: 1.00000
Name: INST 59702, VSTD020 Instrument ID: INST "B"
Misc: CAL STD, L,5,5,0.53mm X 75M DB-624

ID File: ID824B::X2
Title: GENERAL IDFILE FOR INSTRUMENT B
Last Calibration: 970415 20:09 Last Qcal Time: 970429 16:14

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	9.85	128.0	17963	50.00	UG/L	9
2)	Dichlorodifluoromethane	3.13	85.0	33270	32.52	UG/L	10
3)	Chloromethane	3.50	50.0	17676	30.04	UG/L	9
4)	Bromomethane	4.32	94.0	7413	26.39	UG/L	9
5)	Vinyl Chloride	3.71	62.0	17210	27.27	UG/L	9
6)	Chloroethane	4.51	64.0	8766	22.90	UG/L	9
7)	Acrolein	5.74	56.0	2307	325.10	UG/L	9
8)	Acrylonitrile	7.28	53.0	29047	125.78	UG/L	9
9)	Methylene Chloride	6.83	84.0	15772	27.02	UG/L	7
10)	Acetone	6.03	43.0	6824	23.96	UG/L	10
11)	Carbon Disulfide	6.33	76.0	14818	28.02	UG/L	10
12)	Trichlorofluoromethane	4.98	101.0	15538	56.46	UG/L	10
13)	t-Butyl alcohol	7.12	59.0	2594	60.35	UG/L	10
14)	t-Butyl methyl ether	7.38	73.0	24392	24.56	UG/L	9
16)	1,1-Dichloroethene	5.92	96.0	10270	39.80	UG/L	9
17)	1,1-Dichloroethane	8.18	63.0	23157	25.79	UG/L	9
18)	trans-1,2-Dichloroethene	9.36	96.0	14119	23.59	UG/L	
19)	cis-1,2-Dichloroethene	7.36	96.0	12618	24.56	UG/L	7
20)	Chloroform	10.05	83.0	22932	22.61	UG/L	9
22)	1,2-Dichloroethane-d4	11.12	65.0	44155	50.69	UG/L	9
23)	1,2-Dichloroethane	11.29	62.0	21936	23.41	UG/L	9
24)	2-Butanone	9.38	72.0	1793M	33.11	UG/L	
27)	*1,4-Difluorobenzene	12.17	114.0	84455	50.00	UG/L	9
28)	1,1,1-Trichloroethane	10.44	97.0	13782	19.88	UG/L	7
29)	Carbon Tetrachloride	10.83	117.0	10691	20.72	UG/L	9
30)	Vinyl Acetate	14.86	43.0	4346	24.83	UG/L	10
31)	Bromodichloromethane	14.04	83.0	12043	18.74	UG/L	9
32)	1,2-Dichloropropane	13.34	63.0	10925	22.62	UG/L	9
33)	cis-1,3-Dichloropropene	15.23	75.0	11822	18.80	UG/L	9
34)	Trichloroethene	12.79	130.0	12379	24.60	UG/L	9
35)	Dibromochloromethane	18.45	129.0	7797	18.99	UG/L	9
37)	1,1,2-Trichloroethane	17.33	97.0	9269	23.84	UG/L	9
38)	Benzene	11.27	78.0	47934	23.81	UG/L	9
39)	trans-1,3-Dichloropropene	16.79	75.0	7949	18.58	UG/L	9
40)	2-Chloroethylvinylether	17.33	63.0	2382	25.82	UG/L	10
41)	Bromoform	21.84	173.0	4534	17.05	UG/L	9
44)	*Chlorobenzene-d5	19.91	117.0	67084	50.00	UG/L	9
45)	4-Methyl-2-Pentanone	15.68	43.0	14916	23.75	UG/L	7
46)	2-Hexanone	18.11	43.0	8688	30.88	UG/L	8
47)	Tetrachloroethene	17.76	164.0	9480	24.84	UG/L	9

850930886

F 621

Operator ID: MANAGER Quant Rev: 7 Quant Time: 970430 22:47
Output File: ^B1264::QT Injected at: 970430 22:07
Data File: >B1264::C1 Dilution Factor: 1.00000
Name: INST 59702, VSTD050 Instrument ID: INST "B"
Misc: CAL STD, L,5,5,0.53mm X 75M DB-624

ID File: ID824B::X2
Title: GENERAL IDFILE FOR INSTRUMENT B
Last Calibration: 970415 20:09 Last Qcal Time: 970429 16:14

	Compound	R.T.	Q ion	Area	Conc	Units	q
48)	1,1,2,2-Tetrachloroethane	22.85	83.0	28608	41.72	UG/L	89
49)	Toluene-d8	15.95	98.0	92682	49.01	UG/L	98
50)	Toluene	16.13	92.0	70032	58.28	UG/L	97
51)	Chlorobenzene	19.99	112.0	69873	56.07	UG/L	92
52)	Ethylbenzene	20.28	106.0	33957	56.06	UG/L	97
53)	Styrene	21.47	104.0	76158	56.16	UG/L	97
54)	p&m Xylene	20.55	106.0	91583	116.37	UG/L	52
55)	o-Xylene	21.45	106.0	46786	55.52	UG/L	90
56)	Bromofluorobenzene	22.54	95.0	37158	47.90	UG/L	75
57)	1,3-Dichlorobenzene	24.66	146.0	58191	50.77	UG/L	72
58)	1,4-Dichlorobenzene	24.82	146.0	58239	50.05	UG/L	83
59)	1,2-Dichlorobenzene	25.48	146.0	53970	52.09	UG/L	79

* Compound is ISTD

850930887

F 625

Operator ID: MANAGER Quant Rev: 7 Quant Time: 970430 22:47
Output File: ^B1264::QT Injected at: 970430 22:07
Data File: >B1264::C1 Dilution Factor: 1.00000
Name: INST 59702, VSTD050 Instrument ID: INST "B"
Misc: CAL STD, L,5,5,0.53mm X 75M DB-624

ID File: ID824B::X2
Title: GENERAL IDFILE FOR INSTRUMENT B
Last Calibration: 970415 20:09 Last Qcal Time: 970429 16:14

	Compound	R.T.	Q ion	Area	Conc	Units	c
1)	*Bromochloromethane	9.85	128.0	19052	50.00	UG/L	9
2)	Dichlorodifluoromethane	3.15	85.0	83488	76.95	UG/L	1(
3)	Chloromethane	3.50	50.0	41682	66.79	UG/L	9
4)	Bromomethane	4.32	94.0	14917	50.08	UG/L	9
5)	Vinyl Chloride	3.71	62.0	41139	61.47	UG/L	9
6)	Chloroethane	4.51	64.0	14631	36.03	UG/L	9
7)	Acrolein	5.74	56.0	6964	925.26	UG/L	9
8)	Acrylonitrile	7.28	53.0	80569	328.94	UG/L	9
9)	Methylene Chloride	6.83	84.0	37331	60.29	UG/L	8
10)	Acetone	6.03	43.0	17398	57.61	UG/L	1(
11)	Carbon Disulfide	6.34	76.0	48852	87.09	UG/L	10
12)	Trichlorofluoromethane	5.00	101.0	39191	134.27	UG/L	1(
13)	t-Butyl alcohol	7.14	59.0	9240	202.67	UG/L	10
14)	t-Butyl methyl ether	7.40	73.0	64814	61.54	UG/L	9
16)	1,1-Dichloroethene	5.92	96.0	27525	100.57	UG/L	9
17)	1,1-Dichloroethane	8.18	63.0	62911	66.07	UG/L	9
18)	trans-1,2-Dichloroethene	9.36	96.0	37500	59.08	UG/L	8
19)	cis-1,2-Dichloroethene	7.36	96.0	35882	65.84	UG/L	8
20)	Chloroform	10.05	83.0	61643	57.31	UG/L	9
22)	1,2-Dichloroethane-d4	11.12	65.0	47488	51.40	UG/L	9
23)	1,2-Dichloroethane	11.29	62.0	56012	56.36	UG/L	9
24)	2-Butanone	9.40	72.0	4385	76.36	UG/L	9
27)	*1,4-Difluorobenzene	12.17	114.0	89493	50.00	UG/L	9
28)	1,1,1-Trichloroethane	10.44	97.0	39315	53.52	UG/L	8
29)	Carbon Tetrachloride	10.83	117.0	31452	57.53	UG/L	9
30)	Vinyl Acetate	14.86	43.0	12127	65.39	UG/L	10
31)	Bromodichloromethane	14.06	83.0	34639	50.87	UG/L	9
32)	1,2-Dichloropropane	13.34	63.0	30157	58.92	UG/L	9
33)	cis-1,3-Dichloropropene	15.23	75.0	34567	51.88	UG/L	9
34)	Trichloroethene	12.79	130.0	35208	66.02	UG/L	9
35)	Dibromochloromethane	18.45	129.0	22249	51.15	UG/L	9
37)	1,1,2-Trichloroethane	17.33	97.0	23536	57.12	UG/L	9
38)	Benzene	11.27	78.0	123489	57.88	UG/L	9
39)	trans-1,3-Dichloropropene	16.79	75.0	23513	51.86	UG/L	9
40)	2-Chloroethylvinylether	17.33	63.0	5827	59.60	UG/L	10
41)	Bromoform	21.84	173.0	11853	42.07	UG/L	9
44)	*Chlorobenzene-d5	19.91	117.0	67802	50.00	UG/L	9
45)	4-Methyl-2-Pentanone	15.68	43.0	39097	61.61	UG/L	7
46)	2-Hexanone	18.11	43.0	21432	75.37	UG/L	8
47)	Tetrachloroethene	17.76	164.0	24999	64.80	UG/L	9

Operator ID: MANAGER Quant Rev: 7 Quant Time: 970430 22:01
Output File: ^B1263::QT Injected at: 970430 21:20
Data File: >B1263::C1 Dilution Factor: 1.00000
Name: INST 59702, VSTD100 Instrument ID: INST "B"
Misc: CAL STD, L,5,5,0.53mm X 75M DB-624

ID File: ID824B::X2
Title: GENERAL IDFILE FOR INSTRUMENT B
Last Calibration: 970415 20:09 Last Qcal Time: 970429 16:14

	Compound	R.T.	Q ion	Area	Conc	Units	q
48)	1,1,2,2-Tetrachloroethane	22.85	83.0	81244	109.18	UG/L	91
49)	Toluene-d8	15.95	98.0	99470	48.48	UG/L	99
50)	Toluene	16.13	92.0	147840	113.38	UG/L	96
51)	Chlorobenzene	19.99	112.0	146420	108.28	UG/L	94
52)	Ethylbenzene	20.28	106.0	71702	109.08	UG/L	97
53)	Styrene	21.47	104.0	160511	109.08	UG/L	99
54)	p&m Xylene	20.55	106.0	188103	220.25	UG/L	49
55)	o-Xylene	21.45	106.0	95818	104.78	UG/L	86
56)	Bromofluorobenzene	22.54	95.0	41512	49.31	UG/L	87
57)	1,3-Dichlorobenzene	24.65	146.0	120504	96.88	UG/L	69
58)	1,4-Dichlorobenzene	24.82	146.0	126074	99.85	UG/L	81
59)	1,2-Dichlorobenzene	25.48	146.0	109956	97.80	UG/L	82
60)	Naphthalene	28.66	128.0	190883M	328.82	UG/L	

* Compound is ISTD

850930889

F 624

Operator ID: MANAGER Quant Rev: 7 Quant Time: 970430 22:01
Output File: ^B1263::QT Injected at: 970430 21:20
Data File: >B1263::C1 Dilution Factor: 1.00000
Name: INST 59702, VSTD100 Instrument ID: INST "B"
Misc: CAL STD, L,5,5,0.53mm X 75M DB-624

ID File: ID824B::X2
Title: GENERAL IDFILE FOR INSTRUMENT B
Last Calibration: 970415 20:09 Last Qcal Time: 970429 16:14

	Compound	R.T.	Q ion	Area	Conc	Units	
1)	*Bromochloromethane	9.85	128.0	20051	50.00	UG/L	
2)	Dichlorodifluoromethane	3.15	85.0	166447	145.76	UG/L	1
3)	Chloromethane	3.50	50.0	82793	126.05	UG/L	
4)	Bromomethane	4.32	94.0	28362	90.47	UG/L	
5)	Vinyl Chloride	3.71	62.0	81951	116.35	UG/L	
6)	Chloroethane	4.51	64.0	17494	40.94	UG/L	
7)	Acrolein	5.76	56.0	16508	2084.04	UG/L	
8)	Acrylonitrile	7.30	53.0	160558	622.86	UG/L	
9)	Methylene Chloride	6.83	84.0	74009	113.58	UG/L	
10)	Acetone	6.07	43.0	37908	119.26	UG/L	1
11)	Carbon Disulfide	6.32	76.0	111064	188.14	UG/L	1
12)	Trichlorofluoromethane	4.98	101.0	72052	234.56	UG/L	1
13)	t-Butyl alcohol	7.18	59.0	16918	352.59	UG/L	1
14)	t-Butyl methyl ether	7.42	73.0	131775	118.88	UG/L	
16)	1,1-Dichloroethene	5.92	96.0	55842	193.87	UG/L	
17)	1,1-Dichloroethane	8.18	63.0	128138	127.87	UG/L	
18)	trans-1,2-Dichloroethene	9.37	96.0	77726	116.35	UG/L	
19)	cis-1,2-Dichloroethene	7.36	96.0	73443	128.05	UG/L	
20)	Chloroform	10.05	83.0	125269	110.66	UG/L	
22)	1,2-Dichloroethane-d4	11.12	65.0	49021	50.41	UG/L	
23)	1,2-Dichloroethane	11.29	62.0	112322	107.39	UG/L	
24)	2-Butanone	9.40	72.0	9207	152.33	UG/L	
27)	*1,4-Difluorobenzene	12.17	114.0	93644	50.00	UG/L	
28)	1,1,1-Trichloroethane	10.44	97.0	83492	108.63	UG/L	
29)	Carbon Tetrachloride	10.81	117.0	70168	122.66	UG/L	
30)	Vinyl Acetate	14.86	43.0	28459	146.65	UG/L	1
31)	Bromodichloromethane	14.04	83.0	82124	115.26	UG/L	
32)	1,2-Dichloropropane	13.34	63.0	62524	116.75	UG/L	
33)	cis-1,3-Dichloropropene	15.23	75.0	91088	130.66	UG/L	
34)	Trichloroethene	12.80	130.0	66199	118.64	UG/L	
35)	Dibromochloromethane	18.45	129.0	59165	129.99	UG/L	
37)	1,1,2-Trichloroethane	17.34	97.0	51855	120.27	UG/L	
38)	Benzene	11.28	78.0	253314	113.47	UG/L	
39)	trans-1,3-Dichloropropene	16.79	75.0	66846	140.89	UG/L	
40)	2-Chloroethylvinylether	17.34	63.0	12098	118.25	UG/L	1
41)	Bromoform	21.84	173.0	36996	125.50	UG/L	
44)	*Chlorobenzene-d5	19.91	117.0	73575	50.00	UG/L	
45)	4-Methyl-2-Pentanone	15.68	43.0	82364	119.60	UG/L	
46)	2-Hexanone	18.12	43.0	47065	152.53	UG/L	
47)	Tetrachloroethene	17.77	164.0	52771	126.06	UG/L	

850930890

F625

Operator ID: MANAGER Quant Rev: 7 Quant Time: 970430 21:14
Output File: ^B1262::QT Injected at: 970430 20:33
Data File: >B1262::C1 Dilution Factor: 1.00000
Name: INST 59702, VSTD150 Instrument ID: INST "B"
Misc: CAL STD, L,5,5,0.53mm X 75M DB-624

ID File: ID824B::X2
Title: GENERAL IDFILE FOR INSTRUMENT B
Last Calibration: 970415 20:09 Last Qcal Time: 970429 16:14

	Compound	R.T.	Q ion	Area	Conc	Units	q
48)	1,1,2,2-Tetrachloroethane	22.86	83.0	120465	156.08	UG/L	98
49)	Toluene-d8	15.96	98.0	99842	46.91	UG/L	99
50)	Toluene	16.13	92.0	221234	163.58	UG/L	91
51)	Chlorobenzene	19.99	112.0	223216	159.15	UG/L	98
52)	Ethylbenzene	20.28	106.0	108400	158.99	UG/L	98
53)	Styrene	21.47	104.0	242594	158.95	UG/L	97
54)	p&m Xylene	20.56	106.0	279673	315.72	UG/L	40
55)	o-Xylene	21.43	106.0	144203	152.03	UG/L	93
56)	Bromofluorobenzene	22.55	95.0	40284	46.13	UG/L	93
57)	1,3-Dichlorobenzene	24.65	146.0	176747	137.00	UG/L	69
58)	1,4-Dichlorobenzene	24.83	146.0	187051	142.83	UG/L	84
59)	1,2-Dichlorobenzene	25.49	146.0	160194	137.36	UG/L	87
60)	Naphthalene	28.65	128.0	283450M	470.75	UG/L	

* Compound is ISTD

850930891

F 626

Operator ID: MANAGER Quant Rev: 7 Quant Time: 970430 21:14
Output File: ^B1262::QT Injected at: 970430 20:33
Data File: >B1262::C1 Dilution Factor: 1.00000
Name: INST 59702, VSTD150 Instrument ID: INST "B"
Misc: CAL STD, L,5,5,0.53mm X 75M DB-624

ID File: ID824B::X2
Title: GENERAL IDFILE FOR INSTRUMENT B
Last Calibration: 970415 20:09 Last Qcal Time: 970429 16:14

	Compound	R.T.	Q ion	Area	Conc	Units	
1)	*Bromochloromethane	9.86	128.0	20277	50.00	UG/L	
2)	Dichlorodifluoromethane	3.15	85.0	241572	209.20	UG/L	1(
3)	Chloromethane	3.52	50.0	123811	186.39	UG/L	8
4)	Bromomethane	4.32	94.0	41451	130.75	UG/L	9
5)	Vinyl Chloride	3.74	62.0	126186	177.16	UG/L	9
6)	Chloroethane	4.52	64.0	25405	58.79	UG/L	9
7)	Acrolein	5.78	56.0	17066	2130.47	UG/L	9
8)	Acrylonitrile	7.32	53.0	235687	904.11	UG/L	9
9)	Methylene Chloride	6.83	84.0	109062	165.51	UG/L	8
10)	Acetone	6.09	43.0	50539	157.23	UG/L	1(
11)	Carbon Disulfide	6.33	76.0	180543	302.43	UG/L	1(
12)	Trichlorofluoromethane	4.98	101.0	96003	309.05	UG/L	1(
13)	t-Butyl alcohol	7.24	59.0	22765	469.16	UG/L	1(
14)	t-Butyl methyl ether	7.42	73.0	198831	177.38	UG/L	9
16)	1,1-Dichloroethene	5.96	96.0	82679	283.84	UG/L	9
17)	1,1-Dichloroethane	8.18	63.0	201149	198.49	UG/L	9
18)	trans-1,2-Dichloroethene	9.37	96.0	115026	170.27	UG/L	8
19)	cis-1,2-Dichloroethene	7.36	96.0	112149	193.35	UG/L	8
20)	Chloroform	10.05	83.0	193280	168.84	UG/L	9
22)	1,2-Dichloroethane-d4	11.14	65.0	48051	48.86	UG/L	8
23)	1,2-Dichloroethane	11.32	62.0	168604	159.40	UG/L	9
24)	2-Butanone	9.43	72.0	14062	230.07	UG/L	9
27)	*1,4-Difluorobenzene	12.18	114.0	95369	50.00	UG/L	9
28)	1,1,1-Trichloroethane	10.44	97.0	128875	164.64	UG/L	8
29)	Carbon Tetrachloride	10.83	117.0	110827	190.23	UG/L	8
30)	Vinyl Acetate	14.87	43.0	44632	225.83	UG/L	1(
31)	Bromodichloromethane	14.05	83.0	129339	178.24	UG/L	9
32)	1,2-Dichloropropane	13.34	63.0	95504	175.11	UG/L	9
33)	cis-1,3-Dichloropropene	15.24	75.0	147324	207.50	UG/L	9
34)	Trichloroethene	12.80	130.0	99310	174.75	UG/L	9
35)	Dibromochloromethane	18.45	129.0	92832	200.27	UG/L	9
37)	1,1,2-Trichloroethane	17.34	97.0	78034	177.72	UG/L	9
38)	Benzene	11.28	78.0	388982	171.10	UG/L	9
39)	trans-1,3-Dichloropropene	16.80	75.0	112794	233.44	UG/L	9
40)	2-Chloroethylvinylether	17.34	63.0	18604	178.08	UG/L	
41)	Bromoform	21.84	173.0	58907	196.21	UG/L	9
44)	*Chlorobenzene-d5	19.91	117.0	76315	50.00	UG/L	9
45)	4-Methyl-2-Pentanone	15.68	43.0	121229	169.71	UG/L	7
46)	2-Hexanone	18.12	43.0	70729	221.00	UG/L	8
47)	Tetrachloroethene	17.77	164.0	79653	183.45	UG/L	9

850930892

F627

Operator ID: MANAGER Quant Rev: 7 Quant Time: 970430 20:29
Output File: ^B1261::QT Injected at: 970430 19:46
Data File: >B1261::C1 Dilution Factor: 1.00000
Name: INST 59702, VSTD200 Instrument ID: INST "B"
Misc: CAL STD, L,5,5,0.53mm X 75M DB-624

ID File: ID824B::X2
Title: GENERAL IDFILE FOR INSTRUMENT B
Last Calibration: 970415 20:09 Last Qcal Time: 970429 16:14

	Compound	R.T.	Q ion	Area	Conc	Units	q
48)	1,1,2,2-Tetrachloroethane	22.86	83.0	154670	196.18	UG/L	95
49)	Toluene-d8	15.96	98.0	101288	46.59	UG/L	99
50)	Toluene	16.13	92.0	298577	216.11	UG/L	96
51)	Chlorobenzene	19.99	112.0	293483	204.84	UG/L	96
52)	Ethylbenzene	20.28	106.0	141765	203.54	UG/L	97
53)	Styrene	21.47	104.0	314481	201.70	UG/L	98
54)	p&m Xylene	20.56	106.0	361550	399.55	UG/L	32
55)	o-Xylene	21.43	106.0	189961	196.05	UG/L	99
56)	Bromofluorobenzene	22.54	95.0	40663	45.59	UG/L	94
57)	1,3-Dichlorobenzene	24.65	146.0	231843	175.92	UG/L	69
58)	1,4-Dichlorobenzene	24.83	146.0	238079	177.96	UG/L	83
59)	1,2-Dichlorobenzene	25.49	146.0	209927	176.22	UG/L	83
60)	Naphthalene	28.66	128.0	349343M	567.96	UG/L	

* Compound is ISTD

850930893

F 628

QUANT REPORT Page 1

Operator ID: MANAGER Quant Rev: 7 Quant Time: 970430 20:29
Output File: ^B1261::QT Injected at: [illegible]
Data File: >B1261::C1 Dilution Factor: 1.00000
Name: INST 59702, VSTD200 Instrument ID: INST "B"
Misc: CAL STD, L,5,5,0.53mm X 75M DB-624

ID File: ID824B::X2
Title: GENERAL IDFILE FOR INSTRUMENT B
Last Calibration: 970415 20:09 Last Qcal Time: 970429 16:14

	Compound	R.T.	Q ion	Area	Conc	Units	
1)	*Bromochloromethane	9.85	128.0	20091	50.00	UG/L	
2)	Dichlorodifluoromethane	3.13	85.0	327153	285.93	UG/L	1
3)	Chloromethane	3.48	50.0	166879	253.55	UG/L	
4)	Bromomethane	4.30	94.0	54445	173.32	UG/L	
5)	Vinyl Chloride	3.70	62.0	168125	238.22	UG/L	
6)	Chloroethane	4.49	64.0	33296	77.76	UG/L	
7)	Acrolein	5.78	56.0	22790	2871.37	UG/L	
8)	Acrylonitrile	7.32	53.0	321695	1245.47	UG/L	
9)	Methylene Chloride	6.83	84.0	148958	228.15	UG/L	
10)	Acetone	6.09	43.0	71218	223.61	UG/L	1
11)	Carbon Disulfide	6.31	76.0	252470	426.83	UG/L	1
12)	Trichlorofluoromethane	4.94	101.0	89289	290.09	UG/L	1
13)	t-Butyl alcohol	7.26	59.0	28731	597.59	UG/L	1
14)	t-Butyl methyl ether	7.42	73.0	241230	217.20	UG/L	
16)	1,1-Dichloroethene	5.92	96.0	113557	393.45	UG/L	
17)	1,1-Dichloroethane	8.16	63.0	266087	265.00	UG/L	
18)	trans-1,2-Dichloroethene	9.35	96.0	161345	241.05	UG/L	
19)	cis-1,2-Dichloroethene	7.34	96.0	150129	261.23	UG/L	
20)	Chloroform	10.05	83.0	257349	226.89	UG/L	
22)	1,2-Dichloroethane-d4	11.12	65.0	48517	49.80	UG/L	
23)	1,2-Dichloroethane	11.30	62.0	229548	219.03	UG/L	
24)	2-Butanone	9.43	72.0	17876	295.18	UG/L	
27)	*1,4-Difluorobenzene	12.18	114.0	93452	50.00	UG/L	
28)	1,1,1-Trichloroethane	10.44	97.0	173118	225.70	UG/L	
29)	Carbon Tetrachloride	10.81	117.0	153473	268.83	UG/L	
30)	Vinyl Acetate	14.86	43.0	58956	304.43	UG/L	1
31)	Bromodichloromethane	14.05	83.0	180341	253.62	UG/L	
32)	1,2-Dichloropropane	13.33	63.0	125443	234.72	UG/L	
33)	cis-1,3-Dichloropropene	15.24	75.0	202860	291.58	UG/L	
34)	Trichloroethene	12.80	130.0	131840	236.76	UG/L	
35)	Dibromochloromethane	18.45	129.0	126358	278.19	UG/L	
37)	1,1,2-Trichloroethane	17.34	97.0	104172	242.12	UG/L	
38)	Benzene	11.26	78.0	502546	225.58	UG/L	
39)	trans-1,3-Dichloropropene	16.79	75.0	156373	330.27	UG/L	
40)	2-Chloroethylvinylether	17.34	63.0	24119	236.24	UG/L	1
41)	Bromoform	21.84	173.0	82155	279.26	UG/L	
44)	*Chlorobenzene-d5	19.91	117.0	77957	50.00	UG/L	
45)	4-Methyl-2-Pentanone	15.68	43.0	157293	215.56	UG/L	
46)	2-Hexanone	18.12	43.0	88294	270.07	UG/L	
47)	Tetrachloroethene	17.77	164.0	106789	240.76	UG/L	

850930894

F 629

Initial Calibration Data
HSL Compounds

Case No: Instrument ID:

Contractor: Calibration Date: 05/01/97

Contract No:

Minimum $\overline{RF}$ for SPCC is Maximum % RSD for CCC is %

Laboratory ID:	>81265	>81264	>81263	>81262	>81261					
	RF	RF	RF	RF	RF					
Compound	20.00	50.00	100.00	150.00	200.00	$\overline{RRT}$	$\overline{RF}$	%RSD	CCC	SPCC
Benzene	1.41892	1.37987	1.35254	1.35957	1.34440	.926	1.37106	2.174		
trans-1,3-Dichloropropene	.23530	.26274	.35692	.39424	.41832	1.379	.33350	24.213		
2-Chloroethylvinylether	.07051	.06511	.06460	.06485	.06452	1.424	.06592	3.911		
Bromoform	.13421	.13245	.19754	.20589	.21978	1.794	.17797	23.332		**
2-Nitropropane	-	-	-	-	-	-	-	-		
Benzyl Chloride	-	-	-	-	-	-	-	-		
4-Methyl-2-Pentanone	.55587	.57663	.55973	.52951	.50442	.789	.54523	5.205		
2-Hexanone	.32377	.31610	.31984	.30893	.28315	.910	.31036	5.208		
Tetrachloroethene	.35329	.36871	.35862	.34791	.34246	.892	.35420	2.852		
1,1,2,2-Tetrachloroethane	.51849	.42193	.55212	.52617	.49601	1.148	.50895	10.518		**
Toluene-d8	1.31610	1.36695	1.35195	1.30829	1.29928	.801	1.32851	2.209		(Conc=50.0,50.0,50.0,50.0
Toluene	1.02107	1.03289	1.00169	.96632	.95751	.810	.99649	3.338	*	
Chlorobenzene	1.02174	1.03054	.99504	.97498	.94117	1.004	.99269	3.650		**
Ethylbenzene	.49632	.50083	.48727	.47348	.45463	1.019	.48250	3.888	*	
Styrene	1.10191	1.12324	1.09080	1.05962	1.00851	1.078	1.07663	4.127		
p&m Xylene	.67768	.67537	.63915	.61079	.57973	1.032	.63654	6.618		(Conc=40.0,100.0,200.0,20
o-Xylene	.67088	.69004	.65116	.62986	.60919	1.077	.65022	4.931		
Bromofluorobenzene	.53036	.54904	.56421	.52796	.52161	1.132	.53842	3.239		(Conc=50.0,50.0,50.0,50.0
1,3-Dichlorobenzene	.85944	.85825	.81892	.77201	.74350	1.238	.81042	6.387		
1,4-Dichlorobenzene	.90774	.85896	.85677	.81701	.76349	1.247	.84080	6.407		
1,2-Dichlorobenzene	.77235	.79599	.74724	.69971	.67321	1.280	.73770	6.876		

RF - Response Factor (Subscript is amount in UG/L)

$\overline{RRT}$ - Average Relative Retention Time (RT Std/RT Istd)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

850930895

F 630

Initial Calibration Data
HSL Compounds

Case No: _____ Instrument ID: _____

Contractor: _____ Calibration Date: 05/01/97

Contract No: _____

Minimum $\overline{RF}$ for SPCC is _____ Maximum % RSD for CCC is _____

Laboratory ID:	>B1265	>B1264	>B1263	>B1262	>B1261					
	RF	RF	RF	RF	RF					
Compound	20.00	50.00	100.00	150.00	200.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CCC	SPCC
Chloromethane	2.46006	2.18780	2.06456	2.03533	2.07654	.355	2.16486	8.077		**
Bromomethane	1.03170	.78296	.70725	.68141	.67748	.438	.77616	19.198		
Vinyl Chloride	2.39520	2.15930	2.04356	2.07437	2.09204	.377	2.15290	6.592	*	
Chloroethane	1.22001	.76795	.43624	.41763	.41431	.458	.65123	53.966		
Acrolein	.06422	.07311	.08233	.05611	.05672	.585	.06650	16.866		(Conc=100.0,250.0,500.0,7
Acrylonitrile	.80852	.84578	.80075	.77489	.80059	.741	.80611	3.171		(Conc=100.0,250.0,500.0,7
Methylene Chloride	2.19507	1.95943	1.84552	1.79287	1.85354	.693	1.92929	8.314		
Acetone	.94973	.91319	.94529	.83081	.88619	.616	.90504	5.399		
Carbon Disulfide	2.06229	2.56414	2.76954	2.96794	3.14158	.642	2.70110	15.451		
Trichlorofluoromethane	2.16250	2.05705	1.79672	1.57819	1.11106	.505	1.74110	24.095		
t-Butyl alcohol	.14441	.19400	.16875	.14969	.14300	.730	.15997	13.518		(Conc=50.0,125.0,250.0,37
t-Butyl methyl ether	3.39476	3.40195	3.28600	3.26858	3.00172	.752	3.27060	4.959		
1,1-Dichloroethene	1.42933	1.44473	1.39250	1.35916	1.41303	.601	1.40775	2.371	*	
1,1-Dichloroethane	3.22288	3.20207	3.19530	3.30669	3.31102	.830	3.26759	1.664		**
trans-1,2-Dichloroethene	1.96501	1.96830	1.93821	1.89091	2.00768	.950	1.95402	2.207		
Chloroform	3.19156	3.23551	3.12376	3.17733	3.20229	1.020	3.18609	1.284	*	
1,2-Dichloroethane-d4	2.45811	2.49255	2.44482	2.36973	2.41486	1.129	2.43601	1.904		(Conc=50.0,50.0,50.0,50.0
1,2-Dichloroethane	3.05294	2.93995	2.80091	2.77168	2.85635	1.147	2.88437	3.951		
2-Butanone	.24954	.23016	.22959	.23116	.22244	.955	.23258	4.339		
Acetonitrile	-	-	-	-	-	-	-	-		(Conc=500.0,1250.0,2500.0
Ethyl Acetate	-	-	-	-	-	-	-	-		
1,1,1-Trichloroethane	.40797	.43931	.44579	.45044	.46312	.857	.44133	4.664		
Carbon Tetrachloride	.31647	.35145	.37465	.38736	.41057	.889	.36810	9.758		
Vinyl Acetate	.12865	.13551	.15195	.15600	.15772	1.221	.14596	8.958		
Bromodichloromethane	.35649	.38706	.43849	.45207	.48244	1.154	.42331	12.007		
1,2-Dichloropropane	.32340	.33698	.33384	.33381	.33558	1.096	.33272	1.616	*	
cis-1,3-Dichloropropene	.34995	.38625	.48635	.51493	.54269	1.251	.45603	18.353		
Trichloroethene	.36644	.39342	.35346	.34711	.35269	1.051	.36262	5.133		
Dibromochloromethane	.23080	.24861	.31590	.32447	.33803	1.516	.29156	16.601		
1,1,2-Trichloroethane	.27438	.26299	.27687	.27274	.27868	1.424	.27313	2.236		

RF - Response Factor (Subscript is amount in UG/L)

$\overline{RRT}$ - Average Relative Retention Time (RT Std/RT Istd)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

850930896

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330, FAX: 201-584-0515
MAY 7, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

GC/MS INITIAL CALIBRATION SUMMARY
VOLATILE ORGANIC COMPOUNDS

INSTRUMENT ID: 59702
BATCH #: QV5029

THIS INITIAL CALIBRATION APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS

LAB SAMPLE ID	DATA FILE	ANALYSIS DATE	ANALYSIS TIME
VSTD050	>B1329	05/03/97	12:32
BLANK	>B1330	05/03/97	13:32
262098	>B1333	05/03/97	15:51
262100	>B1340	05/03/97	20:27
INITIAL CALIBRATION			
VSTD200	>B1261	04/30/97	19:46
VSTD150	>B1262	04/30/97	20:33
VSTD100	>B1263	04/30/97	21:20
VSTD050	>B1264	04/30/97	22:07
VSTD020	>B1265	04/30/97	22:54

NOTE: The 'Calibration Date' listed on the Initial Calibration Data form reflects the last date that a modification was made to the file, not the date that the Initial Calibration was acquired. The Initial Calibration acquisition dates are on the 'GC/MS Initial Calibration Summary'.

Copyright ICM, Inc.,1997.
All rights reserved.
ERI

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330, FAX: 201-584-0515
MAY 7, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

GC/MS INITIAL CALIBRATION SUMMARY
VOLATILE ORGANIC COMPOUNDS

INSTRUMENT ID: 59702
BATCH #: QV5029

THIS INITIAL CALIBRATION APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS

LAB SAMPLE ID	DATA FILE	ANALYSIS DATE	ANALYSIS TIME
VSTD050	>B1312	05/02/97	18:13
BLANK	>B1313	05/02/97	19:07
262021 MS	>B1321	05/03/97	01:15
261021 MSD	>B1322	05/03/97	01:54
262102	>B1324	05/03/97	03:15
262105	>B1325	05/03/97	03:56
262104	>B1326	05/03/97	04:34
INITIAL CALIBRATION			
VSTD200	>B1261	04/30/97	19:46
VSTD150	>B1262	04/30/97	20:33
VSTD100	>B1263	04/30/97	21:20
VSTD050	>B1264	04/30/97	22:07
VSTD020	>B1265	04/30/97	22:54

NOTE: The 'Calibration Date' listed on the Initial Calibration Data form reflects the last date that a modification was made to the file, not the date that the Initial Calibration was acquired. The Initial Calibration acquisition dates are on the 'GC/MS Initial Calibration Summary'.

Copyright ICM, Inc.,1997.
All rights reserved.
ERI

850930898

F 633

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330, FAX: 201-584-0515
MAY 7, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

GC/MS INITIAL CALIBRATION SUMMARY
VOLATILE ORGANIC COMPOUNDS

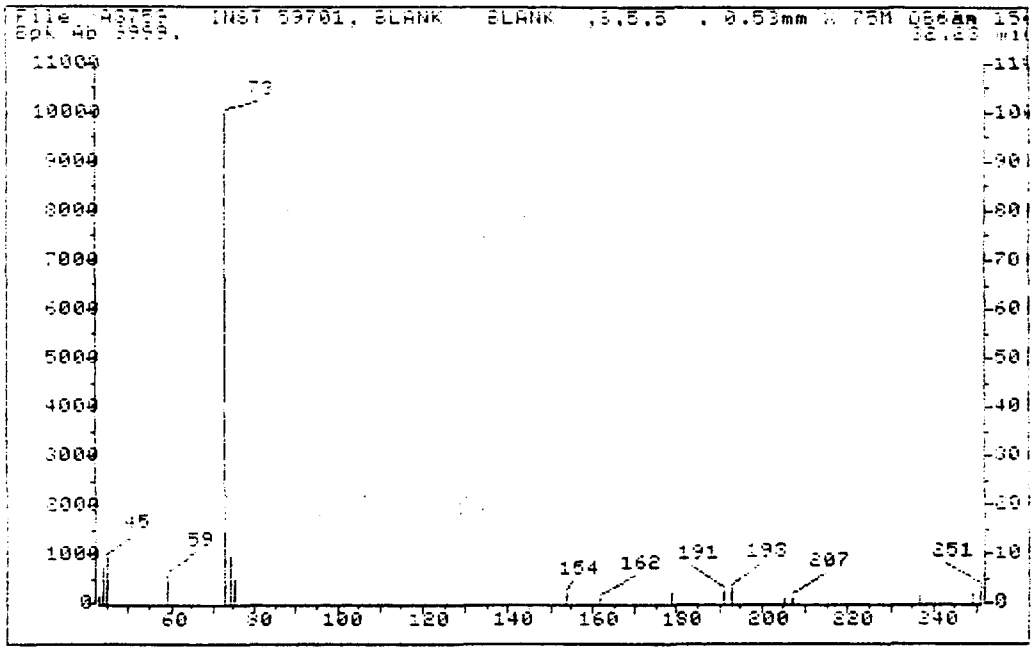
INSTRUMENT ID: 59702
BATCH #: QV5028

THIS INITIAL CALIBRATION APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS

LAB SAMPLE ID	DATA FILE	ANALYSIS DATE	ANALYSIS TIME
VSTD050	>B1373	05/06/97	09:20
BLANK	>B1374	05/06/97	10:15
262099	>B1377	05/06/97	12:34
INITIAL CALIBRATION			
VSTD200	>B1261	04/30/97	19:46
VSTD150	>B1262	04/30/97	20:33
VSTD100	>B1263	04/30/97	21:20
VSTD050	>B1264	04/30/97	22:07
VSTD020	>B1265	04/30/97	22:54

NOTE: The 'Calibration Date' listed on the Initial Calibration Data form reflects the last date that a modification was made to the file, not the date that the Initial Calibration was acquired. The Initial Calibration acquisition dates are on the 'GC/MS Initial Calibration Summary'.

Copyright ICM, Inc.,1997.
All rights reserved.
ERI



Column Bleed (5)

:RU,PPE

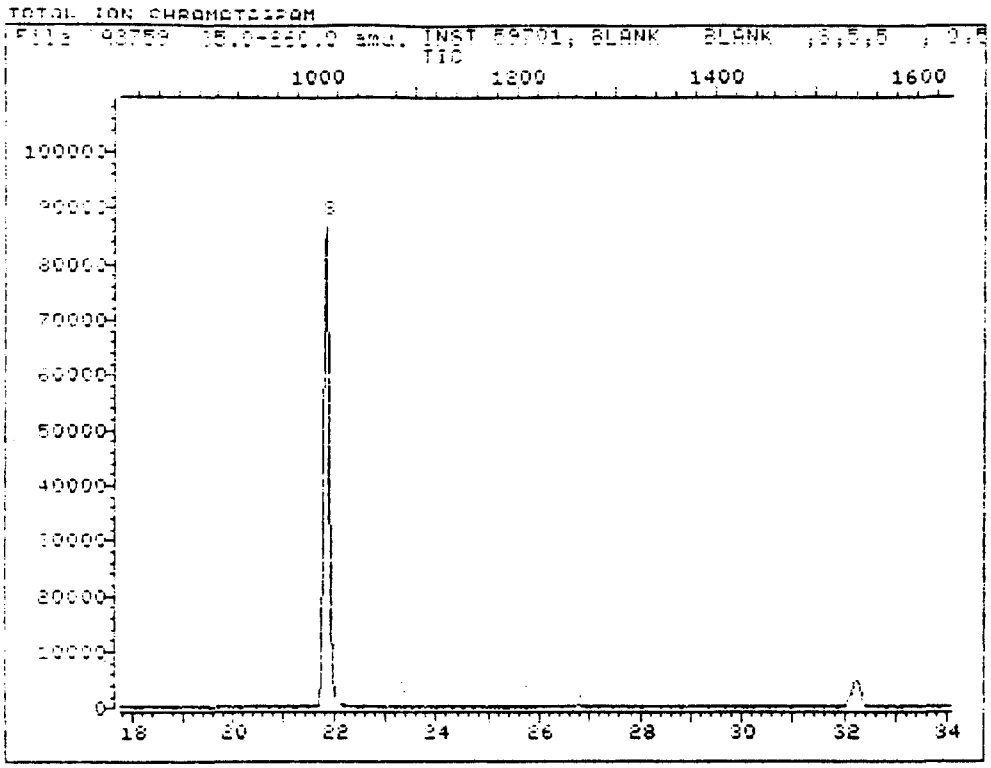
Sample File: >A3759 Spectrum #: 1541

No data base entries were retrieved.

:RU,AL,,1 .

850930900

F 635



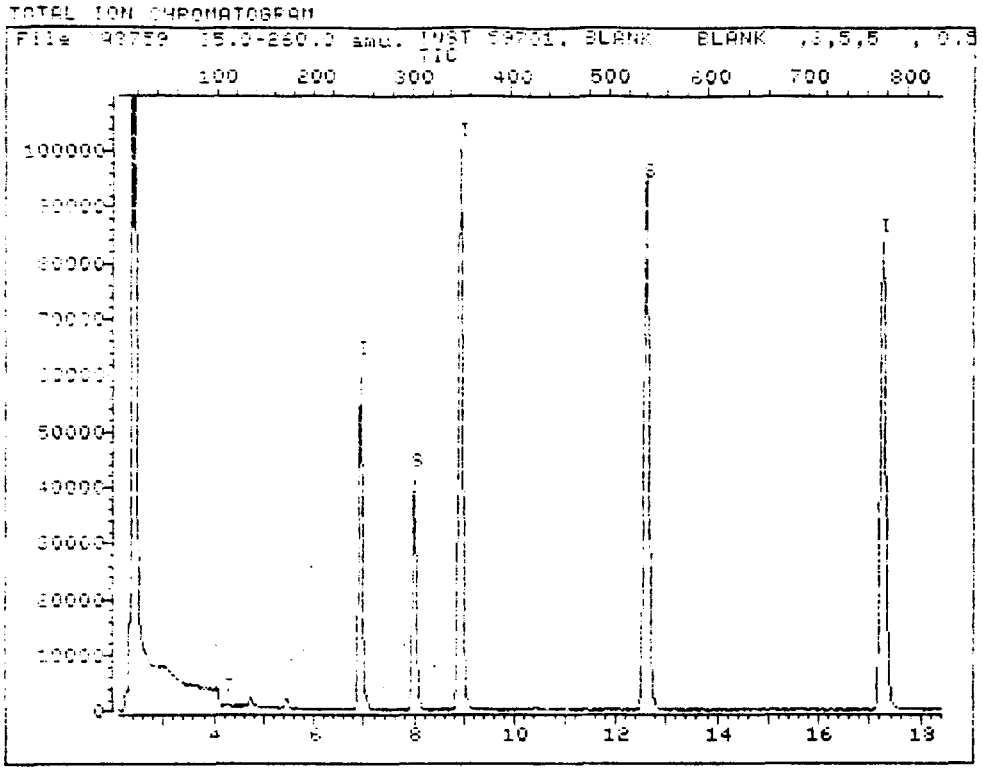
Data File: >A3759::A1 Quant Output File: ^A3759::QT
Name: INST 59701, BLANK Instrument ID: INST "A"
Misc: BLANK ,S,5,5 , 0.53mm X 75M DB624

Id File: ID824A::X2
Title: GENERAL IDFILE FOR INSTRUMENT A
Last Calibration: 970429 23:03 Last Qcal Time: 970506 09:28

Operator ID: KS9934
Quant Time : 970506 11:08
Injected at: 970506 10:33

850930901

F 636



Data File: ^A3759::A1 Quant Output File: ^A3759::QT
Name: INST 59701, BLANK Instrument ID: INST "A"
Misc: BLANK ,S,5,5 , 0.53mm X 75M DB624

Id File: ID824A::X2
Title: GENERAL IDFILE FOR INSTRUMENT A
Last Calibration: 970429 23:03 Last Qcal Time: 970506 09:28

Operator ID: KS995
Quant Time : 970506 11:08
Injected at: 970506 10:33

Page 1 of 2

850930902

F 637

:RU,INT,.1:.01

-A3759 INST 89701, BLANK BLANK .S.S.S , 0.53mm X 75M DB624
35.0' 260.0 TIC
Upslope: .1000 Area Reject: 5.00 % Max Peaks: 9 Bunch: 1 Valley 100 ;
Dnslope: -.0100 Results File HDIP80 Sorted by Time/Area INT

Peak #	R.T. min.	First scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	2.36	12	14	16	171268	489153	458766	68.79	11.357
2	2.42	16	17	37	102546	592036	410235*	61.50	10.156
3	6.94	242	248	261	61287	322086	314812	47.20	7.794
4	8.00	295	302	313	41229	234971	229389	34.39	5.679
5	8.93	342	350	362	99847	614656	605961	90.84	15.002
6	12.63	530	539	552	95774	674979	667042	100.00	16.514
7	17.27	766	776	797	83386	629815	621637	93.19	15.389
8	21.84	1000	1010	1029	86402	676599	666718	99.95	16.506
9	32.23	1826	1841	1851	8240	75640	64776	9.71	1.604

Sum of corrected areas: 4039332.

:RU.AL.,1

850930903

F 638

QUAN REPORT Page 1

Operator ID: RS9934 Quant Rev: 7 Quant Time: 970506 11:08
Output File: ^A3759::QT Injected at: 970506 10:33
Data File: >A3759::A1 Dilution Factor: 1.00000
Name: INST 59701, BLANK Instrument ID: INST "A"
Misc: BLANK .5,5,5 , 0.53mm X 75M CB624

ID File: IDF240::X2
Title: GENERAL IDFILE FOR INSTRUMENT A
Last Calibration: 970429 23:03 Last Qcal Time: 970506 09:28

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	6.94	128.0	42805	50.00	UG/L	92
101	~~Acetone~~	4.24	43.0	2367	10.21	UG/L	100
221	1,2-Dichloroethane-d4	7.00	65.0	82774	50.24	UG/L	93
27	*1,4-Difluorobenzene	8.93	114.0	235164	50.00	UG/L	98
441	*Chlorobenzene-d5	17.25	117.0	190[illegible]	50.00	UG/L	95
471	Toluene-d8	12.61	98.0	212736	49.[illegible]	UG/L	98
561	Bromofluorobenzene	21.64	95.0	150427	49.51	UG/L	81

* Compound is ISTD DK 5/7/97

850930904

F 639

INDUSTRIAL CORROSION MANAGEMENT, Inc.
1152 Route 10
Randolph, NJ 07869
201-584-0330
MAY 7, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

LIBRARY SEARCH RESULTS OF NONTARGETED PEAKS WITH
ESTIMATED CONCENTRATION OF TENTATIVELY IDENTIFIED COMPOUNDS.

Data file name: >A3759
Lab number: BLANK
Fraction: VOLATILE

Initial Sample Wt/Vol=5 Final Volume=5

This BLANK corresponds to the following lab numbers:
262101 262052 262053 262234

CAS No.	Retention Time	Compound Name	Molecular Weight	Estimated Concentration ug/kg
	32.23	Column bleed		5

Estimated total non-target compound concentration (excluding compounds flagged with A, B or **) in ug/kg is: 5

A: Indicates that the compound is an acetone based aldol-type condensation product formed by concentrating the extraction solvent (1:1 acetone/methylene chloride).
B: Indicates that the analyte was found in the blank as well as the sample. It further indicates possible/probable blank contamination.
C: Co-eluting and/or poorly resolved non-target compounds cause superimposed spectra that prevent identification of individual compounds.
* Compounds flagged are from diluted analysis.
** This compound is not flagged B; it was not found in the corresponding blank. However, it is commonly found as a laboratory contaminant.

Copyright ICM, Inc., 1997.
All rights reserved.
SUS

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330, FAX: 201-584-0515
MAY 7, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

TARGET COMPOUND LIST - VOLATILE ANALYSIS BY GC/MS PLUS 10 PEAKS

Sample ID: Method Blank
Data File: >A3759
Analysis Date: 05/06/97

Batch Number: QV5037
Dilution Factor: 1
Column: DB-624

Matrix: Soil

Init Sample Wght= 5g

Final volume= 5ml

Initial sample weight DWB= 5g

Conc. in Sample = (Conc. on Quant Report/Initial Sample Weight DWB)*Final Volume

Parameter	Method Blank ug/kg	Practical Quantitation Limit ug/kg	Minimum Detection Limit ug/kg
Chloromethane	U	5	4.6
Bromomethane	U	5	3.8
Vinyl chloride	U	5	1.7
Chloroethane	U	5	1.8
Methylene chloride	U	5	2.7
Acetone	U	20	4.5
Carbon disulfide	U	5	1.7
1,1-Dichloroethene	U	5	1.7
1,1-Dichloroethane	U	5	1.4
trans-1,2-Dichloroethene	U	5	1.7
cis-1,2-Dichloroethene	U	5	1.7
Chloroform	U	5	1.6
1,2-Dichloroethane	U	5	1.9
2-Butanone	U	20	2.4
1,1,1-Trichloroethane	U	5	0.5
Carbon tetrachloride	U	5	0.6
Bromodichloromethane	U	5	0.6
1,2-Dichloropropane	U	5	0.6
cis-1,3-Dichloropropene	U	5	0.5
Trichloroethene	U	5	0.6
Dibromochloromethane	U	5	0.6
1,1,2-Trichloroethane	U	5	0.5
Benzene	U	5	0.5
trans-1,3-Dichloropropene	U	5	0.6
Bromoform	U	5	0.8
4-Methyl-2-pentanone	U	20	1.1
2-Hexanone	U	20	1.2
Tetrachloroethene	U	5	0.7
1,1,2,2-Tetrachloroethane	U	5	0.5
Toluene	U	5	0.8
Chlorobenzene	U	5	0.6
Ethylbenzene	U	5	0.7
Styrene	U	5	1
p&m-Xylene	U	5	0.9
o-Xylene	U	5	0.9
total Xylenes	U	5	0.9

ug/kg = micrograms/kilogram or ppb
Results are in ug/kg (ppb); they are reported on a dry weight basis.
ND: Not Determined.
IND: Indeterminable.
U: Indicates a compound was analyzed for but not detected at the PQL.
J: Indicates an estimated value. It is utilized when a reported value meets the identification criteria but the result is less than the specified detection limit but greater than zero.

INDUSTRIAL CORROSION MANAGEMENT, INC.
Richard Levine, President
Copyright ICM, Inc., 1997.
All rights reserved.
EIL

850930906

F 641

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330, FAX: 201-584-0515
MAY 7, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

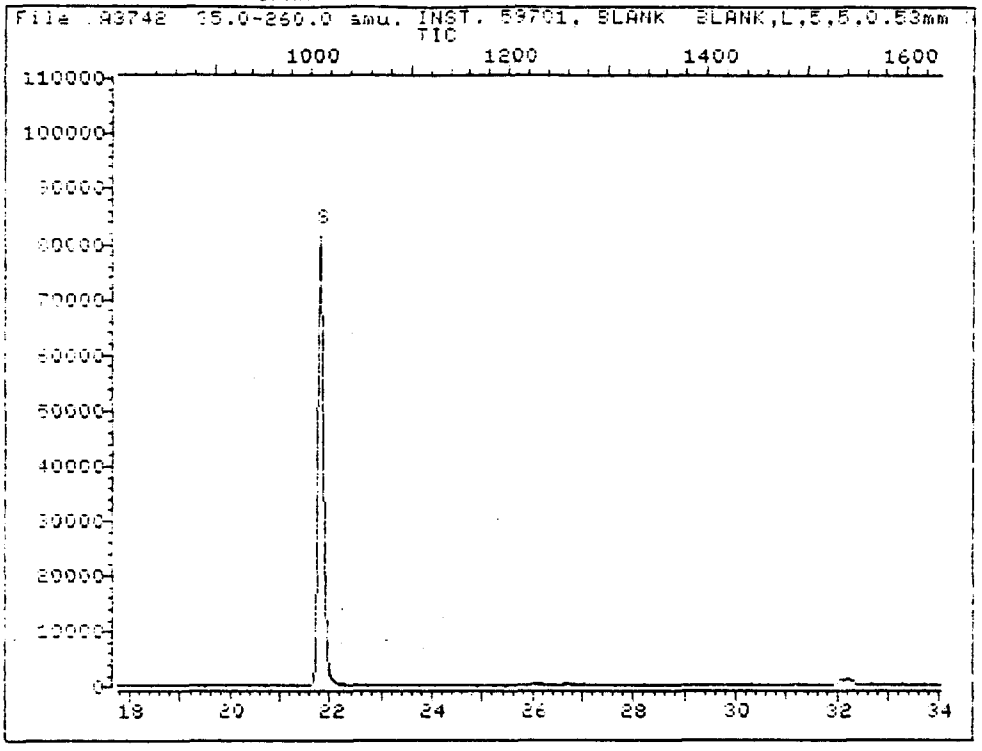
Volatile Method Blank Summary by GC/MS

Data File: >A3759
Batch No: QV5037
Matrix: Soil

Associated Samples

Sample #	Data File	Analysis Date
262101	>A3760	05/06/97

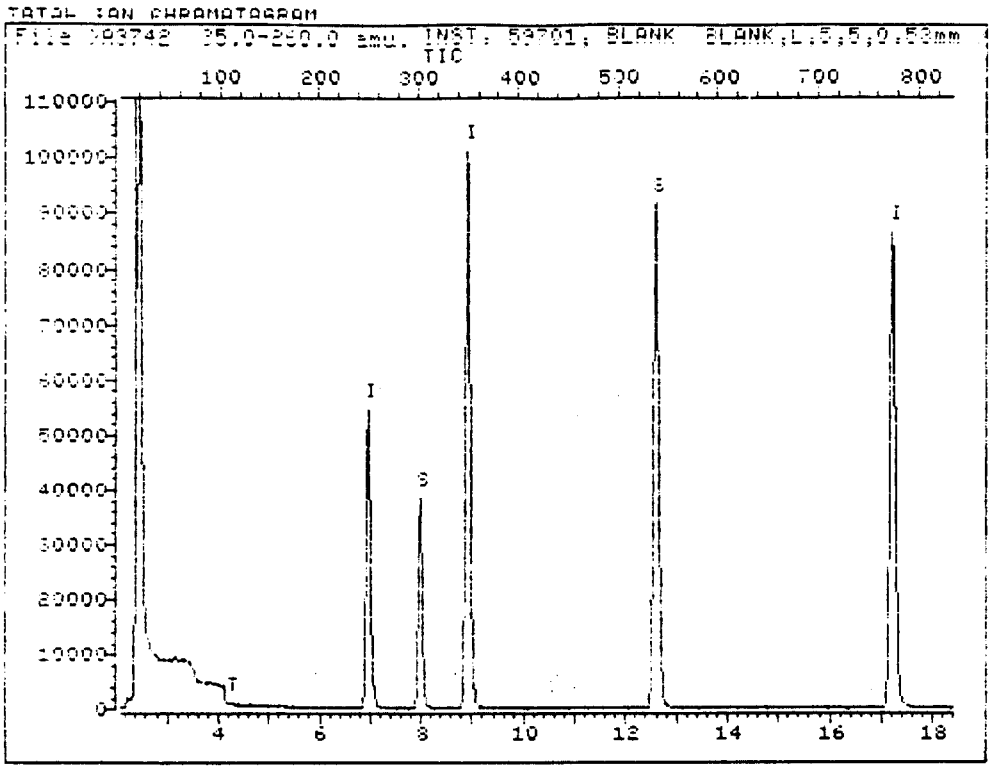
TOTAL ION CHROMATOGRAM



Data File: :A3742::A1 Quant Output File: ^A3742::QT
Name: INST. 59701. BLANK Instrument ID: INST "A"
Misc: BLANK.L,5,5,0.53mm X 75M D8-8240

Id File: IDB24A::X2
Title: GENERAL IDFILE FOR INSTRUMENT A
Last Calibration: 970429 23:03 Last Qcal Time: 970505 17:40

Operator ID: KS9934
Quant Time : 970505 19:15
Injected at: 970505 18:39



Data File: >A3742::A1 Quant Output File: ^A3742::QT
Name: INST. 59701, BLANK Instrument ID: INST "A"
Misc: BLANK,L,5,5,0.53mm X 75M D8-8240

Id File: ID824A::X2
Title: GENERAL IDFILE FOR INSTRUMEN: A
Last Calibration: 970429 23:03 Last Qcal Time: 970505 17:40

Operator ID: KS9934
Quant Time : 970505 19:15
Injected at: 970505 18:39

Page 1 of 2

:RU,INT,,1:.01

A3742 INST. 59701. BLANK BLANK.L.5,5,0.53mm / 75M 28-8240 .
35.01 260.0 TIC
Upslope: .1000 Area Reject: 5.00 % Max Peaks: 9 Bunch: 1 Valley >100 %
Onslope: -.0100 Results File VDIP80 Sorted by Time/Area INT

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	2.39	13	16	17	120898	271465	259491	36.37	6.44
2	2.47	17	20	38	146811	869846	713475*	100.00	17.72
3	6.95	240	249	258	54261	313595	304422	42.67	7.56
4	7.99	295	302	316	38141	221415	215351	30.18	5.34
5	8.91	342	349	362	100801	624151	617337	86.53	15.33
6	12.60	529	533	555	91519	662484	650757	91.21	16.16
7	17.22	766	774	791	86109	642213	630496	88.37	15.66
8	21.81	998	1009	1029	81202	647680	634678	88.96	15.76

Sum of corrected areas: 4026007.

:RU,AL,,1

850930910

F 645

Operator ID: KS9934 Quant Rev: 7 Quant Time: 970505 19:15
Output File: ^A3742::QT Injected at: 970505 18:39
Data File: ^A3742::A1 Dilution Factor: 1.00000
Name: INST. 59701. BLANK Instrument ID: INST "A"
Misc: BLANK,L,5,5,0.53mm X 75M 08-8240

ID File: ID824A::X2
Title: GENERAL IDFILE FOR INSTRUMENT A
Last Calibration: 970429 23:03 Last Qcal Time: 970505 17:40

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	6.95	128.0	40040	50.00	UG/L	89
10)	~~Acetone~~	4.23	43.0	3278	14.77	UG/L	100
22)	1,2-Dichloroethane-d4	7.99	65.0	77414	47.97	UG/L	98
27)	*1,4-Difluorobenzene	8.91	114.0	235336	50.00	UG/L	99
44)	*Chlorobenzene-d5	17.22	117.0	184385	50.00	UG/L	97
49)	Toluene-d8	12.58	98.0	206211	47.42	UG/L	97
56)	Bromofluorobenzene	21.81	95.0	145305	48.51	UG/L	84

* Compound is ISTD DL 5/7/97

INDUSTRIAL CORROSION MANAGEMENT, Inc.
1152 Route 10
Randolph, NJ 07869
201-584-0330
MAY 7, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

LIBRARY SEARCH RESULTS OF NONTARGETED PEAKS WITH
ESTIMATED CONCENTRATION OF TENTATIVELY IDENTIFIED COMPOUNDS.

Data file name: >A3742
Lab number: BLANK
Fraction: VOLATILE

Initial Sample Wt/Vol=5 Final Volume=5
Moisture=0% Initial sample weight DWB=5

This BLANK corresponds to the following lab numbers:
262103 262278 262279 262280

CAS No.	Retention Time	Compound Name	Molecular Weight	Estimated Concentration ug/kg
None found				

Estimated total non-target compound concentration (excluding compounds flagged with A, B or **) in ug/kg is: 0

A: Indicates that the compound is an acetone based aldol-type condensation product formed by concentrating the extraction solvent (1:1 acetone/methylene chloride).
B: Indicates that the analyte was found in the blank as well as the sample. It further indicates possible/probable blank contamination.
C: Co-eluting and/or poorly resolved non-target compounds cause superimposed spectra that prevent identification of individual compounds.
* Compounds flagged are from diluted analysis.
** This compound is not flagged B; it was not found in the corresponding blank. However, it is commonly found as a laboratory contaminant.

Copyright ICM, Inc., 1997.
All rights reserved.
EIL

ICM Laboratories
Industrial Corrosion Management, Inc.
1152 Route 10
Randolph, NJ 07869
Phone: 201-584-0330 FAX: 201-584-0515

MAY 21, 1997
08:49:10

Client:
VECTRE CORPORATION
Source:
NBB-V11

ANALYTICAL DATA SUMMARY REPORT

Client ID	Field Blank		See Notes		HP-4		See Notes		HP-5C		Trip Blank	
ICM Sample Number	262214		262215		262216		262217		262218		262219	
Sampling Date	04/30/97		04/30/97		04/30/97		04/30/97		04/30/97		04/30/97	
Units	UG/L		UG/KG		UG/L		UG/KG		UG/L		UG/L	
VOLATILE PARAMETERS (METHOD 624/8240)												
Chloromethane	4.6	U	5.4	U	4.6	U	6	U	4.6	U	4.6	U
Bromomethane	3.8	U	5.4	U	3.8	U	6	U	3.8	U	3.8	U
Vinyl chloride	1.7	U	5.4	U	1.7	U	6	U	1.7	U	1.7	U
Chloroethane	1.8	U	5.4	U	1.8	U	6	U	1.8	U	1.8	U
Methylene chloride	2.7	U	6.9		2.7	U	6	U	1.9	J	2.7	U
Acetone	4.5	U	22	U	4.5	U	24	U	4.5	U	4.5	U
Carbon disulfide	1.7	U	5.4	U	1.7	U	6	U	1.7	U	1.7	U
1,1-Dichloroethene	1.7	U	5.4	U	1.7	U	6	U	1.7	U	1.7	U
1,1-Dichloroethane	1.4	U	5.4	U	1.4	U	6	U	1.4	U	1.4	U
trans-1,2-Dichloroethene	1.7	U	5.4	U	1.7	U	6	U	1.7	U	1.7	U
cis-1,2-Dichloroethene	1.7	U	5.4	U	1.7	U	6	U	1.7	U	1.7	U
Chloroform	1.6	U	5.4	U	1.6	U	6	U	1.6	U	1.6	U
1,2-Dichloroethane	1.9	U	5.4	U	1.9	U	6	U	1.9	U	1.9	U
2-Butanone	2.4	U	22	U	2.4	U	24	U	2.4	U	2.4	U
1,1,1-Trichloroethane	0.5	U	5.4	U	0.5	U	6	U	0.5	U	0.5	U
Carbon tetrachloride	0.6	U	5.4	U	0.6	U	6	U	0.6	U	0.6	U
Bromodichloromethane	0.6	U	5.4	U	0.6	U	6	U	0.6	U	0.6	U
1,2-Dichloropropane	0.6	U	5.4	U	0.6	U	6	U	0.6	U	0.6	U
cis-1,3-Dichloropropene	0.5	U	5.4	U	0.5	U	6	U	0.5	U	0.5	U
Trichloroethene	0.6	U	5.4	U	0.6	U	6	U	0.6	U	0.6	U
Dibromochloromethane	0.6	U	5.4	U	0.6	U	6	U	0.6	U	0.6	U
1,1,2-Trichloroethane	0.5	U	5.4	U	0.5	U	6	U	0.5	U	0.5	U
Benzene	0.5	U	5.4	U	0.5	U	6	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.6	U	5.4	U	0.6	U	6	U	0.6	U	0.6	U
Bromoform	0.8	U	5.4	U	0.8	U	6	U	0.8	U	0.8	U
4-Methyl-2-pentanone	1.1	U	22	U	1.1	U	24	U	1.1	U	1.1	U
2-Hexanone	1.2	U	22	U	1.2	U	24	U	1.2	U	1.2	U
Tetrachloroethene	0.7	U	5.4	U	0.7	U	6	U	0.7	U	0.7	U
1,1,2,2-Tetrachloroethane	0.5	U	5.4	U	0.5	U	6	U	0.5	U	0.5	U
Toluene	0.8	U	5.4	U	0.8	U	6	U	1.1		0.8	U
Chlorobenzene	0.6	U	5.4	U	0.6	U	6	U	1.8		0.6	U
Ethylbenzene	0.7	U	5.4	U	0.7	U	6	U	2.5		0.7	U
Styrene	1	U	5.4	U	1	U	6	U	1	U	1	U
p&m-Xylene	0.9	U	5.4	U	0.9	U	6	U	15		0.9	U
o-Xylene	0.9	U	5.4	U	0.9	U	6	U	18		0.9	U
total Xylenes	0.9	U	5.4	U	0.9	U	6	U	33		0.9	U
1,3-Dichlorobenzene	0.7	U	NA		0.7	U	NA		0.7	U	0.7	U
1,4-Dichlorobenzene	0.5	U	NA		0.5	U	NA		0.5	U	0.5	U
1,2-Dichlorobenzene	1.5	U	NA		1.5	U	NA		1.5	U	1.5	U
Total Non-Target Compounds	0		0		6		0		11		0	

1A - 85093913

F648

INDUSTRIAL CORROSION MANAGEMENT, Inc.
1152 Route 10
Randolph, NJ 07869
201-584-0330
May 21, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

ANALYTICAL DATA REPORT PACKAGE

Client: VECTRE CORPORATION
Sampled By: Customer

SAMPLE ID:	MATRIX	LAB NUMBER	DATE & TIME COLLECTED	AT LAB DATE
Field Blank	Aqueous	262214	04/30/97 09:45	05/01/97
SB-4A (40-46")	Soil	262215	04/30/97 09:55	05/01/97
HP-4	Aqueous	262216	04/30/97 10:00	05/01/97
SB-5 (24-30")	Soil	262217	04/30/97 16:20	05/01/97
HP-5C	Aqueous	262218	04/30/97 17:00	05/01/97
Trip Blank	Aqueous	262219	04/30/97	05/01/97

Supervisor/Manager Signature:

Richard S. Levine (RSL)

Richard S. Levine

Copyright ICM, Inc., 1997.
All rights reserved.
CHR

850930914

F 649

LABORATORY DELIVERABLES

THIS FORM MUST BE COMPLETED BY THE LABORATORY OR ENVIRONMENTAL CONSULTANT AND ACCOMPANY ALL DATA SUBMISSIONS

The following laboratory deliverables shall be included in the data submissions. All deviations from the accepted methodology and procedures, or performance values outside acceptable ranges shall be summarized in the Non-Conformance Summary. The proposed "Technical Requirements for Site Remediation" rules, which appeared in the May 4, 1992 New Jersey Register, provides further details. The document shall be bound and paginated, contain a table of contents, and all pages shall be legible. Incomplete packages will be returned or held without review until the data package is completed.

It is recommended that the analytical results summary sheets listing all targeted and non-targeted compounds with the method detection limits be included in one section of the data package and in the main body of the report.

	Check if Complete
1. Cover Page, Title Page listing Lab Certification #, facility name & address, & date of report	✓
2. Table of Contents	✓
3. Summary Sheets listing analytical results for all targeted and non-targeted compounds	✓
4. Summary Table cross-referencing field ID #'s vs. Lab ID #'s	✓
5. Document bound, paginated and legible	✓
6. Chain of Custody	✓
7. Methodology Summary	✓
8. Laboratory Chronicle and Holding Time Check	✓
9. Results submitted on a dry weight basis (if applicable)	✓
10. Method Detection Limits	✓
11. Lab certified by NJDEPE for parameters or appropriate category of parameters or a member of the USEPA CLP	✓
12. Non-Conformance Summary	✓

Robin Jotter
ICM LABORATORIES
Quality Assurance Officer

5/20/97
Date

850930915

F 650

ICM LABORATORIES — CHAIN OF CUSTODY REPORT

CLIENT: VECTRE CORP
ADDRESS: P.O. BOX 930
LAFAYETTE, NJ
PHONE: 201-363-2500
PROJECT: NJSB-VII
PROJ. MGR.: George Dudkiewicz

BILL TO: Vectre Corp.
SEND REPORT TO: P.O. Box 930
Lafayette, NJ 07848
IN CASE OF QUESTIONS UPON SAMPLE RECEIPT CALL: George Dudkiewicz
PHONE: (201)-383-2500

DELIVERABLES:
- [x] REDUCED DELIVERABLES NON-CLP FORMAT
- [ ] REDUCED DEL. CLP FORMAT
- [ ] REGULATORY FORMAT
- [ ] FULL DEL. CLP FORMAT
- [ ] NPDES
- [ ] STATE FORMS REQUIRED

TURNAROUND TIME
FAX (PRELIMINARIES) (If required): _____
HARDCOPY: _____
COOLER TEMP: 2.8°C

LABORATORY ID CODE	SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	COMPOSITE	SAMPLE MATRIX: GRAB	SOIL	LIQUID	SLUDGE	OTHER	# OF BOTTLES	ANALYSIS: VOA 10	PRESERVATIVES: H_2SO_4	HNO_3	HCL	NAOH	OTHER
262214	11ELD	4/30	0945				✓			3	✓					
215	SB-4A(40'-46")	4/30	0955			✓				1	✓					
216	HP-4 *	4/30	1000				✓			3	✓					
217	SB-5(24'-30")	4/30	1620			✓				1	✓					
218	HP-5C *	4/30	1700				✓			3	✓					
219	TRIP BLANK						✓			3	✓					

	DATE/TIME
SAMPLED BY: Tom Cinello	
RELINQUISHED BY:	DATE: 5/1/97 TIME: 1000
RECEIVED BY:	DATE: 5-1-97 TIME: 10:00
RELINQUISHED BY:	DATE: 5-1-97 TIME: 11:05
RECEIVED BY:	DATE: 5-01-97 TIME: 1105
RELINQUISHED BY:	DATE: TIME:
RECEIVED BY:	DATE: TIME:

COMMENTS: Please fax copy of Chain of Custody to George Dudkiewicz at Vectre - 201-579-0025
Aqueous VOA10 by 624, Soils VOA10 by 8240 - per George Dudkiewicz
*VOA vials have headspace. 5/2/97, mer/csr

COMPOUND LIST
- [ ] PRIORITY POLLUTANT
- [ ] TARGET COMPOUND LIST
- [ ] NJAC 7:14A APP B
- [ ] OTHER _____

CONCENTRATIONS EXPECTED
- [ ] HIGH
- [ ] MEDIUM
- [ ] LOW

IS SAMPLE CHLORINATED? [ ] YES [ ] NO

KNOWN HAZARD _____

If analysis is for informational purposes only, please sign the following statement:

"Analysis is for informational purposes, not to be used for compliance or regulatory purposes."

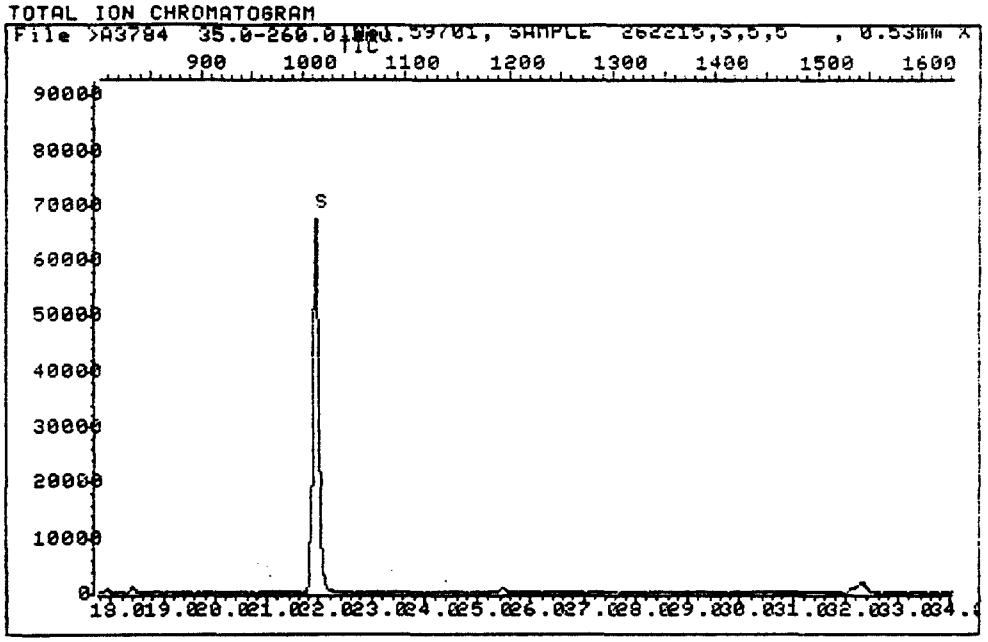
Signature: _____

04

850930916

E151

TOTAL ION CHROMATOGRAM



Data File: >A3784::A1 Quant Output File: ^A3784::QT
Name: INST 59701, SAMPLE Instrument ID: INST "A"
Misc: 262215,S,5,5 , 0.53mm X 75M DB624

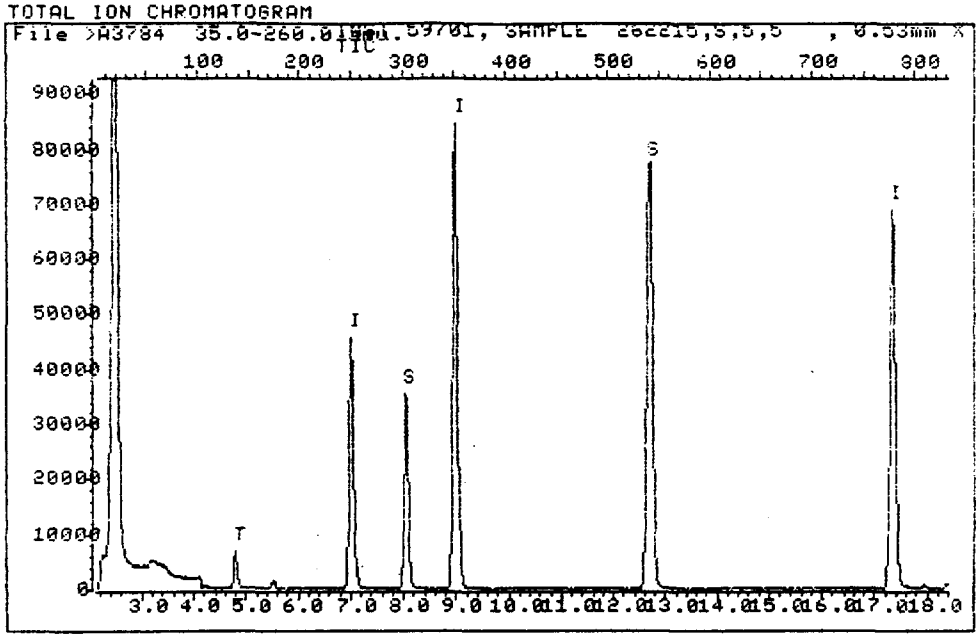
Id File: ID824A::X2
Title: GENERAL IDFILE FOR INSTRUMENT A
Last Calibration: 970429 23:03 Last Qcal Time: 970507 10:09

Operator ID: KS9934
Quant Time : 970507 12:58
Injected at: 970507 12:22

Page 2 of 2

850930917 F 652

TOTAL ION CHROMATOGRAM



Data File: >A3784::A1 Quant Output File: ^A3784::QT
Name: INST 59701, SAMPLE Instrument ID: INST "A"
Misc: 262215,S,5,5 , 0.53mm X 75M DB624

Id File: ID824A::X2
Title: GENERAL IDFILE FOR INSTRUMENT A
Last Calibration: 970429 23:03 Last Qcal Time: 970507 10:09

Operator ID: KS9934
Quant Time : 970507 12:58
Injected at: 970507 12:22

Page 1 of 2

850930918

F 653

>A3784 INST 59701, SAMPLE 262215,S,5.S , 0.53mm X 75M DB624
35.0: 260.0 TIC
Upslope: .1000 Area Reject: 5.00 % Max Peaks: 7 Bunch: 1 Valley >100 %
Dnslope: -.0100 Results File VDIR78 Sorted by Time/Area INT

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	2.47	10	18	36	230865	1316706	1220614*	100.00	32.305
2	7.01	242	250	261	45631	264884	261314	21.41	6.916
3	8.05	296	303	317	35354	206038	201328	16.49	5.328
4	8.99	344	351	360	84657	511922	509308	41.73	13.479
5	12.70	532	541	553	77748	553624	549330	45.00	14.539
6	17.34	770	778	797	68902	505704	499582	40.93	13.222
7	21.91	1002	1012	1025	67961	536963	536963	43.99	14.211

Sum of corrected areas: 3778439.

850930919

F 654

Operator ID: KS9934 Quant Rev: 7 Quant Time: 970507 12:58
Output File: ^A3784::QT Injected at: 970507 12:22
Data File: >A3784::A1 Dilution Factor: 1.00000
Name: INST 59701, SAMPLE Instrument ID: INST "A"
Misc: 262215,S,5,5 , 0.53mm X 75M DB624

ID File: ID824A::X2
Title: GENERAL IDFILE FOR INSTRUMENT A
Last Calibration: 970429 23:03 Last Qcal Time: 970507 10:09

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	7.01	128.0	36105	50.00	UG/L	9
9)	Methylene Chloride FNT	4.78	84.0	7405	6.35	UG/L	8
22)	1,2-Dichloroethane-d4	8.05	65.0	78256	53.29	UG/L	9
27)	*1,4-Difluorobenzene	8.99	114.0	196728	50.00	UG/L	9
44)	*Chlorobenzene-d5	17.34	117.0	147532	50.00	UG/L	9
49)	Toluene-d8	12.68	98.0	174623	50.93	UG/L	9
56)	Bromofluorobenzene	21.93	95.0	118045	48.00	UG/L	8

* Compound is ISTD DLS 8/97

850930920

5655

INDUSTRIAL CORROSION MANAGEMENT, Inc.
1152 Route 10
Randolph, NJ 07869
201-584-0330
Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab
MAY 8, 1997

LIBRARY SEARCH RESULTS OF NONTARGETED PEAKS WITH
ESTIMATED CONCENTRATION OF TENTATIVELY IDENTIFIED COMPOUNDS.

Data file name: >A3784
Lab number: 262215
Fraction: VOLATILE

Initial Sample Wt/Vol=5 Final Volume=5
Moisture=7.32% Initial sample weight DWB=4.634

CAS No.	Retention Time	Compound Name	Molecular Weight	Estimated Concentration ug/kg
None found				

Estimated total non-target compound concentration (excluding compounds flagged with A, B or **) in ug/kg is: 0

A: Indicates that the compound is an acetone based aldol-type condensation product formed by concentrating the extraction solvent (1:1 acetone/methylene chloride).
B: Indicates that the analyte was found in the blank as well as the sample. It further indicates possible/probable blank contamination.
C: Co-eluting and/or poorly resolved non-target compounds cause superimposed spectra that prevent identification of individual compounds.
* Compounds flagged are from diluted analysis.
** This compound is not flagged B; it was not found in the corresponding blank. However, it is commonly found as a laboratory contaminant.

Copyright ICM, Inc., 1997.
All rights reserved.
EIL

850930921

F 656

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330, FAX: 201-584-0515
MAY 8, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

TARGET COMPOUND LIST - VOLATILE ANALYSIS BY GC/MS
PLUS 10 PEAKS

Lab Number: 262215 Data File: >A3784
Client: VECTRE CORPORATION
Sample source: NBB-V11
Sample ID: SB-4A (40-46")
Sample date: 04/30/97
Sampled by: Customer Analysis Date: 05/07/97 Column: DB-624
At lab date: 05/01/97 Dilution Factor: 1
Percent Moisture: 7.32%
Matrix: Soil Init Sample Wght= 5g Final volume= 5ml

Initial sample weight DWB= 4.634g

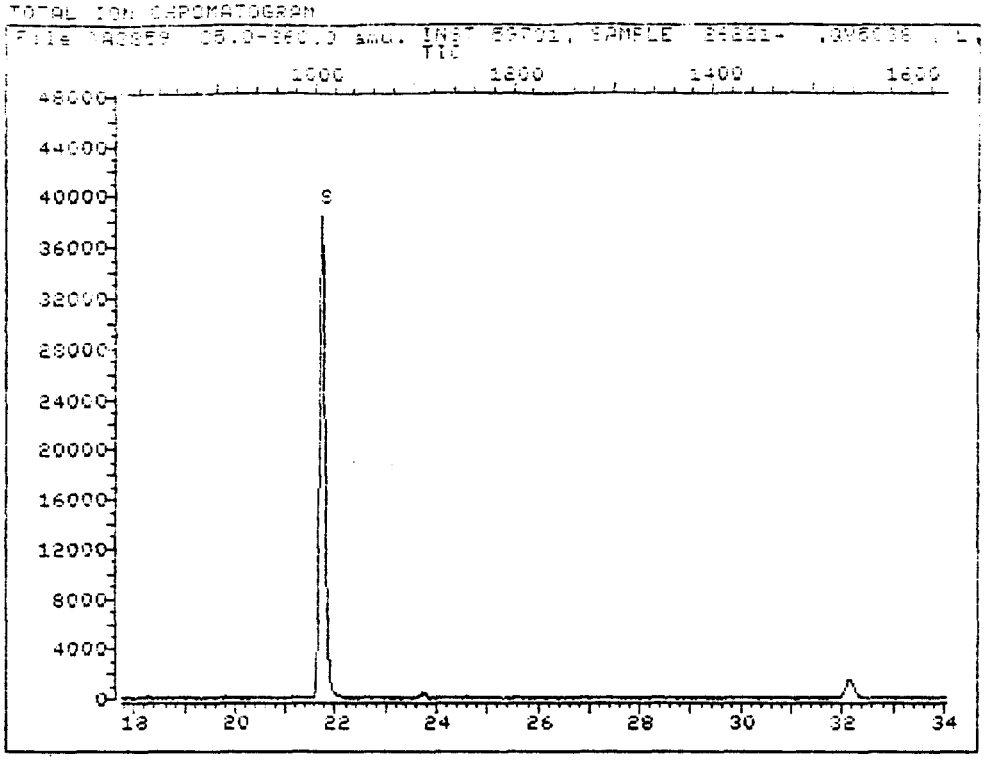
Conc. in Sample = (Conc. on Quant Report/Initial Sample Weight DWB)*Final Volume

Parameter	Result ug/kg	Method Blank ug/kg	Practical Quantitation Limit ug/kg	Minimum Detection Limit ug/kg
Chloromethane	U	U	5.4	5
Bromomethane	U	U	5.4	4.1
Vinyl chloride	U	U	5.4	1.8
Chloroethane	U	U	5.4	1.9
Methylene chloride	6.9 #	U	5.4	2.9
Acetone	U	U	22	4.9
Carbon disulfide	U	U	5.4	1.8
1,1-Dichloroethene	U	U	5.4	1.8
1,1-Dichloroethane	U	U	5.4	1.5
trans-1,2-Dichloroethene	U	U	5.4	1.8
cis-1,2-Dichloroethene	U	U	5.4	1.8
Chloroform	U	U	5.4	1.7
1,2-Dichloroethane	U	U	5.4	2.1
2-Butanone	U	U	22	2.6
1,1,1-Trichloroethane	U	U	5.4	0.54
Carbon tetrachloride	U	U	5.4	0.65
Bromodichloromethane	U	U	5.4	0.65
1,2-Dichloropropane	U	U	5.4	0.65
cis-1,3-Dichloropropene	U	U	5.4	0.54
Trichloroethene	U	U	5.4	0.65
Dibromochloromethane	U	U	5.4	0.65
1,1,2-Trichloroethane	U	U	5.4	0.54
Benzene	U	U	5.4	0.54
trans-1,3-Dichloropropene	U	U	5.4	0.65
Bromoform	U	U	5.4	0.86
4-Methyl-2-pentanone	U	U	22	1.2
2-Hexanone	U	U	22	1.3
Tetrachloroethene	U	U	5.4	0.76
1,1,2,2-Tetrachloroethane	U	U	5.4	0.54
Toluene	U	U	5.4	0.86
Chlorobenzene	U	U	5.4	0.65
Ethylbenzene	U	U	5.4	0.76
Styrene	U	U	5.4	1.1
p&m-Xylene	U	U	5.4	0.97
o-Xylene	U	U	5.4	0.97
total Xylenes	U	U	5.4	0.97

ug/kg = micrograms/kilogram or ppb
Results are in ug/kg (ppb); they are reported on a dry weight basis.
ND: Not Determined.
IND: Indeterminable.
U: Indicates a compound was analyzed for but not detected at the PQL.
J: Indicates an estimated value. It is utilized when a reported value meets the identification criteria but the result is less than the specified detection limit but greater than zero.
B: Indicates that the analyte was found in the blank as well as the sample. It indicates possible/probable blank contamination.
Methylene chloride: This compound is not flagged with a B since it was not found in corresponding blank. However, this compound is commonly found as a laboratory contaminant.

MS 5/8/97

TOTAL ION CHROMATOGRAM



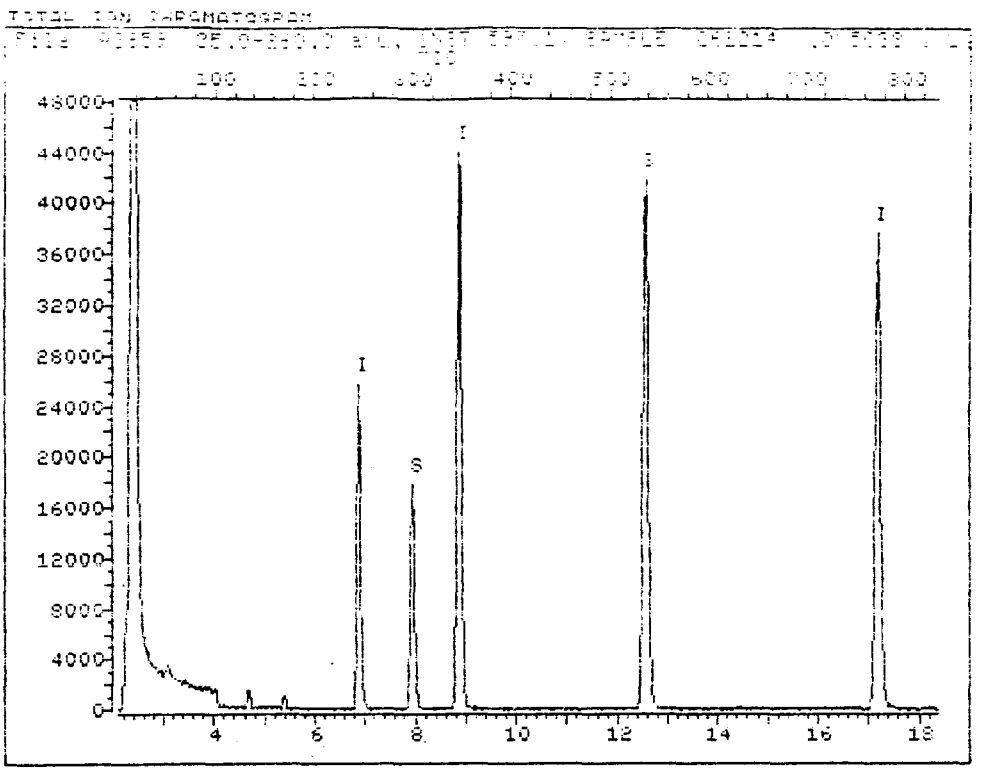
Data File: >A3859::A1 Quant Output File: ^A3859::QT
Name: INST 59701, SAMPLE Instrument ID: INST "A"
Misc: 262214 ,QV5038 , L,5,5,0.53mm X 75M DB-624

Id File: ID624A::X2
Title: GENERAL IDFILE FOR INSTRUMENT A
Last Calibration: 970507 23:18 Last Qcal Time: <none>

Operator ID: LB3274
Quant Time : 970510 01:12
Injected at: 970510 00:37

Page 2 of 2

850930923 F 658



Data File: >A3859::A1 Quant Output File: ^A3859::QT
Name: INST 59701, SAMPLE Instrument ID: INST "A"
Misc: 262214 ,QV5038 , L,5,5,0.53mm X 75M DB-624

Id File: ID624A::X2
Title: GENERAL IDFILE FOR INSTRUMENT A
Last Calibration: 970507 23:18 Last Qcal Time: <none>

Operator ID: LB3274
Quant Time : 970510 01:12
Injected at: 970510 00:37

Page 1 of 2

850930924 F 659

MS data file header from : >A3859::A1

Sample: INST 59701, SAMPLE Operator: LB3274 MS 5/10/97 0:37
Misc : 262214 ,QV5038 , L,5,5,0.53mm X 75M DB-624
Sys. #: 1 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: INST "A"
Method file: VOAA Tuning file: APEI01 No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	40.	220.	0.	0.	0.
Chromatographic times, min. :	1.0	20.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	3.0	0.0	0.0	.2	0.0

>A3859 INST 59701, SAMPLE 262214 ,QV5038 , L,5,5,0.53mm X 75M DB-

35.01 260.0 TIC
Upslope: .2000 Area Reject: 12636. Max Peaks: 8 Bunch: -1 Valley >100 %
Dnslope: 0.0000 Results File IA3859 Sorted by Time/Area INT

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	2.39	4	17	43	239779	1488024	1485645	100.00	51.99
2	6.89	239	247	258	25668	128259	126363	8.51	4.42
3	7.94	295	301	311	17679	101081	98659	6.64	3.45
4	8.86	341	348	363	43981	264663	263139	17.71	9.21
5	12.56	529	537	551	41781	295759	290437	19.55	10.16
6	17.17	763	773	784	37724	270816	269830	18.16	9.44
7	21.75	996	1007	1030	38459	305515	304716	20.51	10.66
8	32.15	1525	1539	1550	1517	21973	18277	1.23	.64

Sum of corrected areas: 2857066.

Summary of Unknowns PBM Library Search and Quantitation

Standard	Concentration	Area	Retention Time	Unknown Window
1	30.0	126363.	6.89	2.08 - 7.88
2	30.0	263139.	8.86	7.88 - 13.02
3	30.0	269830.	17.17	13.02 - 34.05

PLEASE NOTE THE NOTATION USED FOR IDENTIFYING THE PEAKS ON THIS PAGE

NT=NON TARGETED COMPOUND T= TARGETED COMPOUND (COMPOUNDS FROM SAMPLE)

I=INTERNAL STANDARD COMPOUND S=SURROGATE COMPOUND (SYSTEM MONITORING)

$$\text{Unknown Concentration} = \frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}} * \text{Correction Factor}$$

850930925

Operator ID: LS3274 Quant Rev: 1 Quant Time: 970513 0:13
Output File: ^A3859::QT Injected at: 970510 00:57
Data File: >A3859::A1 Dilution Factor: 1.00000
Name: INST 99701, SAMPLE Instrument ID: INST "A"
Misc: 262214 ,QV5038 , L,5,5,0.53mm X 75M DB-624

ID File: ID624A::X2
Title: GENERAL IDFILE FOR INSTRUMENT A
Last Calibration: 970507 23:18 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	6.89	128.0	17153	30.00	UG/L	96
22)	1,2-Dichloroethane-d4	7.94	65.0	40488	34.33	UG/L	85
27)	*1,4-Difluorobenzene	8.86	114.0	98821	30.00	UG/L	99
44)	*Chlorobenzene-d5	17.17	117.0	76903	30.00	UG/L	95
49)	Toluene-d8	12.56	98.0	91288	30.09	UG/L	95
56)	Bromofluorobenzene	21.75	95.0	67615	31.87	UG/L	90

* Compound is ISTD

D45/12/97

850930926

F 661

INDUSTRIAL CORROSION MANAGEMENT, Inc.
1152 Route 10
Randolph, NJ 07869
201-584-0330
Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab
MAY 12, 1997

LIBRARY SEARCH RESULTS OF NONTARGETED PEAKS WITH
ESTIMATED CONCENTRATION OF TENTATIVELY IDENTIFIED COMPOUNDS.

Data file name: >A3859
Lab number: 262214
Fraction: VOLATILE

Initial Sample Wt/Vol=5 Final Volume=5

CAS No.	Retention Time	Compound Name	Molecular Weight	Estimated Concentration ug/l
None found				

Estimated total non-target compound concentration (excluding compounds flagged with A, B or **) in ug/l is: 0

A: Indicates that the compound is an acetone based aldol-type condensation product formed by concentrating the extraction solvent (1:1 acetone/methylene chloride).
B: Indicates that the analyte was found in the blank as well as the sample. It further indicates possible/probable blank contamination.
C: Co-eluting and/or poorly resolved non-target compounds cause superimposed spectra that prevent identification of individual compounds.
* Compounds flagged are from diluted analysis.
** This compound is not flagged B; it was not found in the corresponding blank. However, it is commonly found as a laboratory contaminant.

Copyright ICM, Inc., 1997.
All rights reserved.
ERI

850930927

F 662

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330, FAX: 201-584-0515
MAY 12, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

TARGET COMPOUND LIST - VOLATILE ANALYSIS BY GC/MS
PLUS 10 PEAKS

Lab Number: 262214
Client: VECTRE CORPORATION
Sample source: NBB-V11
Sample ID: Field Blank
Sample date: 04/30/97
Sampled by: Customer
At lab date: 05/01/97
Matrix: Water

Data File: >A3859
Analysis Date: 05/10/97
Init Sample volume= 5ml
Column: DB-624
Dilution Factor: 1
Final volume= 5ml

Conc. in Sample = (Conc. on Quant Report/Initial Volume)*Final Volume

Parameter	Result ug/l	Method Blank ug/l	Practical Quantitation Limit ug/l	Minimum Detection Limit ug/l
Chloromethane	U	U	5	4.6
Bromomethane	U	U	5	3.8
Vinyl chloride	U	U	5	1.7
Chloroethane	U	U	5	1.8
Methylene chloride	U	U	5	2.7
Acetone	U	U	20	4.5
Carbon disulfide	U	U	5	1.7
1,1-Dichloroethene	U	U	5	1.7
1,1-Dichloroethane	U	U	5	1.4
trans-1,2-Dichloroethene	U	U	5	1.7
cis-1,2-Dichloroethene	U	U	5	1.7
Chloroform	U	U	5	1.6
1,2-Dichloroethane	U	U	5	1.9
2-Butanone	U	U	20	2.4
1,1,1-Trichloroethane	U	U	5	0.5
Carbon tetrachloride	U	U	5	0.6
Bromodichloromethane	U	U	5	0.6
1,2-Dichloropropane	U	U	5	0.6
cis-1,3-Dichloropropene	U	U	5	0.5
Trichloroethene	U	U	5	0.6
Dibromochloromethane	U	U	5	0.6
1,1,2-Trichloroethane	U	U	5	0.5
Benzene	U	U	5	0.5
trans-1,3-Dichloropropene	U	U	5	0.6
Bromoform	U	U	5	0.8
4-Methyl-2-pentanone	U	U	20	1.1
2-Hexanone	U	U	20	1.2
Tetrachloroethene	U	U	5	0.7
1,1,2,2-Tetrachloroethane	U	U	5	0.5
Toluene	U	U	5	0.8
Chlorobenzene	U	U	5	0.6
Ethylbenzene	U	U	5	0.7
Styrene	U	U	5	1
p&m-Xylene	U	U	5	0.9
o-Xylene	U	U	5	0.9
total Xylenes	U	U	5	0.9
1,3-Dichlorobenzene	U	U	10	0.7
1,4-Dichlorobenzene	U	U	10	0.5
1,2-Dichlorobenzene	U	U	10	1.5

ug/l = micrograms/liter or ppb
ND: Not Determined.
IND: Indeterminable.
U: Indicates a compound was analyzed for but not detected at the MDL.
J: Indicates an estimated value. It is utilized when a reported value meets the identification criteria but the result is less than the specified detection limit but greater than zero.
B: Indicates that the analyte was found in the blank as well as the sample. It indicates possible/probable blank contamination.

MS 5/14/97

INDUSTRIAL CORROSION MANAGEMENT, INC.
Richard Levine, President
Copyright ICM, Inc., 1997.
All rights reserved.
ERI

850930928

F 663

Volatiles
*40 Code of Federal Regulations
**Method 624

Volatile Organics by GC/MS
*Test Methods for Evaluating Solid Wastes, SW846, 3rd edition
**Method 8240B

* Indicates reference.
** Indicates method.

850930929 F 664

GC/MS ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY FORMAT(CONTINUED)

	NO	YES
10. Extraction Holding Time Met		- N/A -
If not met, list number of days exceeded for each sample:		
11. Analysis Holding Time Met		✓
If not met, list number of days exceeded for each sample:		

Additional Comments: *Aqueous Samples 262216 and 262218 contained headspace.

Laboratory Manager: [signature] Date: 5/20/97

850930930 F665

GC/MS ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY FORMAT

	NO	YES
1. Chromatograms Labeled/Compounds Identified (Field Samples and Method Blanks)	___	✓
2. GC/MS Tuning Specifications		
a. BFB Meet Criteria	___	✓
b. DFTPP Meet Criteria	-N/A-	
3. GC/MS Tuning Frequency - Performed every 24 hours for 600 series and 12 hours for 8000 series	___	✓
4. GC/MS Calibration - Initial Calibration performed within 30 days before sample analysis and continuing calibration performed within 24 hours of sample analysis for 600 series and 12 hours for 8000 series	___	✓
5. GC/MS Calibration Requirements		
a. Calibration Check Compounds	___	✓
b. System Performance Check Compounds	___	✓

6. Blank Contamination - If yes, list compounds and concentrations in each blank:

a. VOA Fraction_____
b. B/N Fraction_____
c. Acid Fraction_____

7. Surrogate Recoveries Meet Criteria	___	✓

If not met, list those compounds and their recoveries which fall outside the acceptable ranges

a. VOA Fraction_____
b. B/N Fraction_____
c. Acid Fraction_____

If not met, were the calculations checked and the results qualified as "estimated"? -N/A-

8. Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria (If not met, list those compounds and their recoveries which fall outside the acceptable range)	___	✓

a. VOA Fraction_____
b. B/N Fraction_____
c. Acid Fraction_____

9. Internal Standard Area/Retention Time Shift Meet Criteria	___	✓

850930931 F 666

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330, FAX: 201-584-0515

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

LABORATORY CHRONICLE

DATE SAMPLED: 04/30/97 PRESERVATIVE: 4 degrees C; HCl @

DATE RECEIPT/REFRIGERATION: 05/01/97 Cooler Temp: 2.8°C

GC/MS VOLATILES:

LAB ID #	DATE ANALYZED	pH
@ 262214	05/10/97	<2
262215	05/07/97	NA
@ 262216	05/10/97	<2
262217	05/07/97	NA
@ 262218	05/10/97	<2
@ 262219	05/10/97	<2

DEPT. SUPERVISOR: M. Baron

QA REVIEW & APPROVAL: Robin Jetter

07

850930932

F 667

ICM Laboratories, Inc.
Internal Chain-of-Custody

TNK: 262214-262219

Account number: WA1532 VECTRE CORPORATION
Project: NBB-V11
Tier Level: Reduced 2

Laboratory Person Breaking Seal on Shuttle: Dan
Title: Lab

Lab Number	Relinq. By	Recd. By	Date	Time	Reason for Transfer	Aliquot
214,216	DS	G	05/01/97	1226	STORAGE	ALL
218,219	G		5/2/97	1100	@ 624 B240/depleted	HV_1
215,217	G		5/2/97	1100	B240	HV_1
215,217		G	5/8/97	1000	STORAGE	HV_1
216	G		5/10/97	1100	624/depleted	HV_2

850930933

F 668

Plu Wed- 4:00 PM - 4:30

II CCCCC MM MM
II CC CC MM M M MM
II CC MM M M MM
II CC MM MM MM
II CC MM MM MM
II CC CC MM MM
II CCCCC MM MM

ICM LABORATORIES
1152 Route 10
Randolph, NJ 07689
Tel: 201-584-0330
Fax: 201-584-0515

April 28, 1997

SAMPLING EQUIPMENT CUSTODY RECORD

Client: VECTRE CORPORATION
ICM Contact: Maria Ramirez

Project: NBB-V11
Matrix (#): Aqueous(00)

Project Mgr: George Dudkiewicz

Sampled by: Client
Fax Preliminaries: Yes

Deliver to: Site, Newark, NJ
Deliverables: Reduced 2

Date Reqd: 04/~~30~~29/97 Time Reqd: 04:00

Please provide field blank and trip blank only.

TOTAL BOTTLE REQUIREMENT

ANALYSIS REQUIREMENT

*** Aqueous Analyses ***

Field Blk: Yes 624+15

Trip Blk: Yes 624+15

Prepared by: [signature] Date/Time: 4/28/97 1630 Title: Lead

Cooler No: 862 Ice Packs: _____ COC,etc. _____

Checked by: [signature] Date/Time: 4-29-97 8:30 Title: [signature]

Cooler Sealed (Date/Time): _____ Seal No: 6552 Name: [signature]

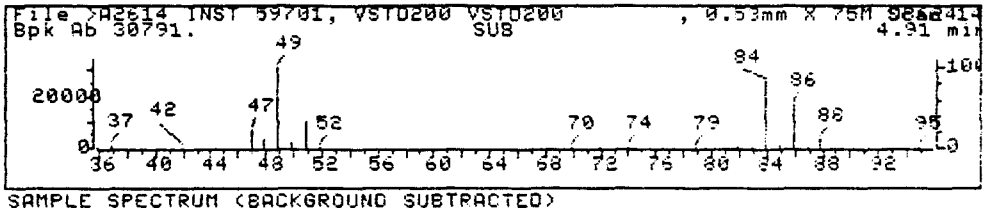
Title: _____

Relinquished by: [signature] Date/Time: 4-29-97 15:55

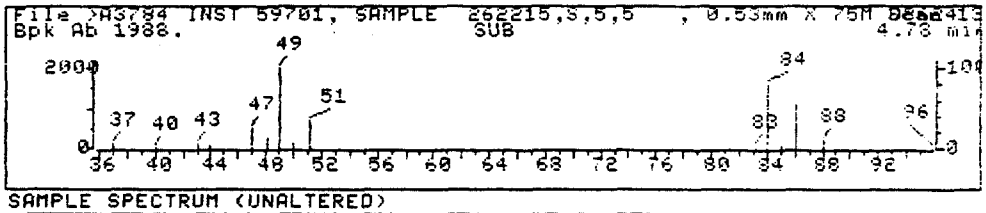
Received by: [signature] Date/Time: " "

850930934 F669

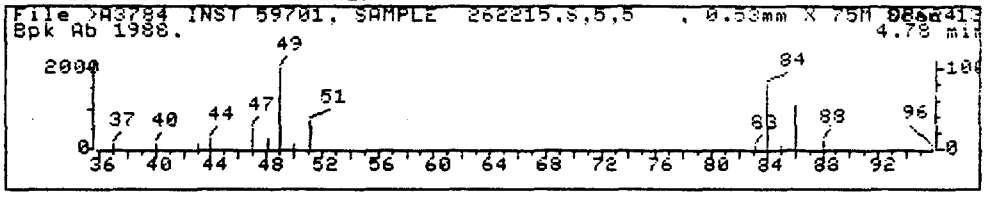
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >A3784::A1 Quant Output File: ^A3784::QT
Name: INST 59701, SAMPLE Instrument ID: INST "A"
Misc: 262215,S,5,5 , 0.53mm X 75M DB624
Quant Time: 970507 12:58 Quant ID File: ID824A::X2
Injected at: 970507 12:22 Last Calibration: 970429 23:03
Last Qcal Time: 970507 10:09

Compound No : 9
Compound Name : Methylene Chloride
Scan Number : 136
Retention Time: 4.78 min.
Quant Ion : 84.0
Area : 7405
Concentration : 6.35 UG/L
q-value : 86

850930935

F670

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330, FAX: 201-584-0515
Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

MAY 12, 1997

TARGET COMPOUND LIST - VOLATILE ANALYSIS BY GC/MS
PLUS 10 PEAKS

Lab Number: 262216 Data File: >A3881
Client: VECTRE CORPORATION
Sample source: NBB-V11
Sample ID: HP-4
Sample date: 04/30/97
Sampled by: Customer Analysis Date: 05/10/97 Column: DB-624
At lab date: 05/01/97 Dilution Factor: 1
Matrix: Water Init Sample volume= 5ml Final volume= 5ml

Conc. in Sample = (Conc. on Quant Report/Initial Volume)*Final Volume

Parameter	Result ug/l	Method Blank ug/l	Practical Quantitation Limit ug/l	Minimum Detection Limit ug/l
Chloromethane	U	U	5	4.6
Bromomethane	U	U	5	3.8
Vinyl chloride	U	U	5	1.7
Chloroethane	U	U	5	1.8
Methylene chloride	U	U	5	2.7
Acetone	U	U	20	4.5
Carbon disulfide	U	U	5	1.7
1,1-Dichloroethene	U	U	5	1.7
1,1-Dichloroethane	U	U	5	1.4
trans-1,2-Dichloroethene	U	U	5	1.7
cis-1,2-Dichloroethene	U	U	5	1.7
Chloroform	U	U	5	1.6
1,2-Dichloroethane	U	U	5	1.9
2-Butanone	U	U	20	2.4
1,1,1-Trichloroethane	U	U	5	0.5
Carbon tetrachloride	U	U	5	0.6
Bromodichloromethane	U	U	5	0.6
1,2-Dichloropropane	U	U	5	0.6
cis-1,3-Dichloropropene	U	U	5	0.5
Trichloroethene	U	U	5	0.6
Dibromochloromethane	U	U	5	0.6
1,1,2-Trichloroethane	U	U	5	0.5
Benzene	U	U	5	0.5
trans-1,3-Dichloropropene	U	U	5	0.6
Bromoform	U	U	5	0.8
4-Methyl-2-pentanone	U	U	20	1.1
2-Hexanone	U	U	20	1.2
Tetrachloroethene	U	U	5	0.7
1,1,2,2-Tetrachloroethane	U	U	5	0.5
Toluene	U	U	5	0.8
Chlorobenzene	U	U	5	0.6
Ethylbenzene	U	U	5	0.7
Styrene	U	U	5	1
p&m-Xylene	U	U	5	0.9
o-Xylene	U	U	5	0.9
total Xylenes	U	U	5	0.9
1,3-Dichlorobenzene	U	U	10	0.7
1,4-Dichlorobenzene	U	U	10	0.5
1,2-Dichlorobenzene	U	U	10	1.5

ug/l = micrograms/liter or ppb
ND: Not Determined.
IND: Indeterminable.
U: Indicates a compound was analyzed for but not detected at the MDL.
J: Indicates an estimated value. It is utilized when a reported value meets the identification criteria but the result is less than the specified detection limit but greater than zero.
B: Indicates that the analyte was found in the blank as well as the sample. It indicates possible/probable blank contamination.

MS5/14/97

INDUSTRIAL CORROSION MANAGEMENT, INC.
Richard Levine, President
Copyright ICM, Inc., 1997.
All rights reserved.
ERI

850930936

F671

INDUSTRIAL CORROSION MANAGEMENT, Inc.
1152 Route 10
Randolph, NJ 07869
201-584-0330
MAY 12, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

LIBRARY SEARCH RESULTS OF NONTARGETED PEAKS WITH
ESTIMATED CONCENTRATION OF TENTATIVELY IDENTIFIED COMPOUNDS.

Data file name: >A3881
Lab number: 262216
Fraction: VOLATILE

Initial Sample Wt/Vol=5 Final Volume=5

CAS No.	Retention Time	Compound Name	Molecular Weight	Estimated Concentration ug/l
	31.97	Unknown		6

Estimated total non-target compound concentration (excluding compounds flagged with A, B or **) in ug/l is: 6

A: Indicates that the compound is an acetone based aldol-type condensation product formed by concentrating the extraction solvent (1:1 acetone/methylene chloride).
B: Indicates that the analyte was found in the blank as well as the sample. It further indicates possible/probable blank contamination.
C: Co-eluting and/or poorly resolved non-target compounds cause superimposed spectra that prevent identification of individual compounds.
* Compounds flagged are from diluted analysis.
** This compound is not flagged B; it was not found in the corresponding blank. However, it is commonly found as a laboratory contaminant.

Copyright ICM, Inc., 1997.
All rights reserved.
ERI

850930937

F 672

Operator ID: LS2274 Quant Rev: / Quant Time: 970510 17:15
Output File: ^A3881::QT Injected at: 970510 16:40
Data File: >A3881::A1 Dilution Factor: 1.00000
Name: INST 59701, SAMPLE Instrument ID: INST "A"
Misc: 262216 ,QV5038 , L,5,5,0.53mm X 75M DB-624

ID File: ID624A::X2
Title: GENERAL IDFILE FOR INSTRUMENT A
Last Calibration: 970507 23:18 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	6.88	128.0	20123	30.00	UG/L	96
22)	1,2-Dichloroethane-d4	7.92	65.0	42657	30.83	UG/L	89
27)	*1,4-Difluorobenzene	8.86	114.0	116492	30.00	UG/L	99
44)	*Chlorobenzene-d5	17.17	117.0	89524	30.00	UG/L	96
49)	Toluene-d8	12.56	98.0	102108	28.91	UG/L	98
56)	Bromofluorobenzene	21.77	95.0	73722	29.85	UG/L	91

* Compound is ISTD DL 5/12/97

850930938

F 673

MS data file header from : A3881::A1

Sample: INST 59701, SAMPLE Operator: LB3274 MS 5/10/97 16:40
Misc : 262216 ,QV5038 , L,5,5,0.53mm X 75M DB-624
Sys. #: 1 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: INST "4
Method file: VOAA Tuning file: APE101 No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	40.	220.	0.	0.	0.
Chromatographic times, min. :	1.0	20.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	3.0	0.0	0.0	.2	0.0

>A3881 INST 59701, SAMPLE 262216 .QV5038 , L,5,5,0.53mm X 75M DB-

35.0 260.0 TIC
Upslope: .2000 Area Reject: 14337. Max Peaks: 9 Bunch: -1 Valley >100 %
Dnslope: 0.0000 Results File IA3881 Sorted by Time/Area INT

Peak #	R.T. min.	first scan	max. scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	2.37	3	13	15	286089	1416841	1379799	100.00	40.7
2	2.56	15	16	38	29619	611973	415172*	30.09	12.2
3	6.88	231	237	250	28462	147797	143872	10.43	4.2
4	7.92	283	290	304	18937	112601	108435	7.86	3.1
5	8.86	331	338	351	51332	309875	307620	22.29	9.0
6	12.56	518	527	545	46185	330465	323268	23.43	9.5
7	17.19	752	764	782	41849	317164	317164	22.99	9.3
8	21.77	988	998	1018	41836	333203	327003	23.70	9.6
9	31.97	1508	1520	1542	6106	68781	67624	4.90	1.9

Sum of corrected areas: 3389957.

Summary of Unknowns PBM Library Search and Quantitation

Standard	Concentration	Area	Retention Time	Unknown Window
1	30.0	143872.	6.88	2.13 - 7.87
2	30.0	307620.	8.86	7.87 - 13.02
3	30.0	317164.	17.17	13.02 - 34.05

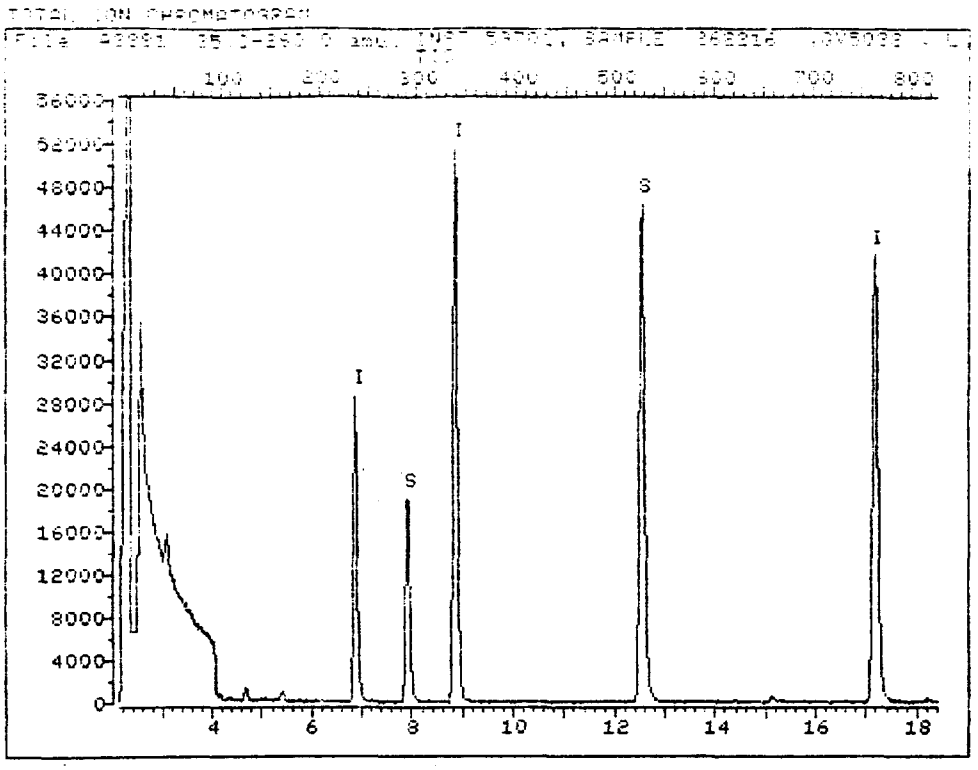
PLEASE NOTE THE NOTATION USED FOR IDENTIFYING THE PEAKS ON THIS PAGE

NT=NON TARGETED COMPOUND T= TARGETED COMPOUND (COMPOUNDS FROM SAMPLE)

I=INTERNAL STANDARD COMPOUND S=SURROGATE COMPOUND (SYSTEM MONITORING)

$$\text{Unknown Concentration} = \frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}} * \text{Correction Factor}$$

850930939



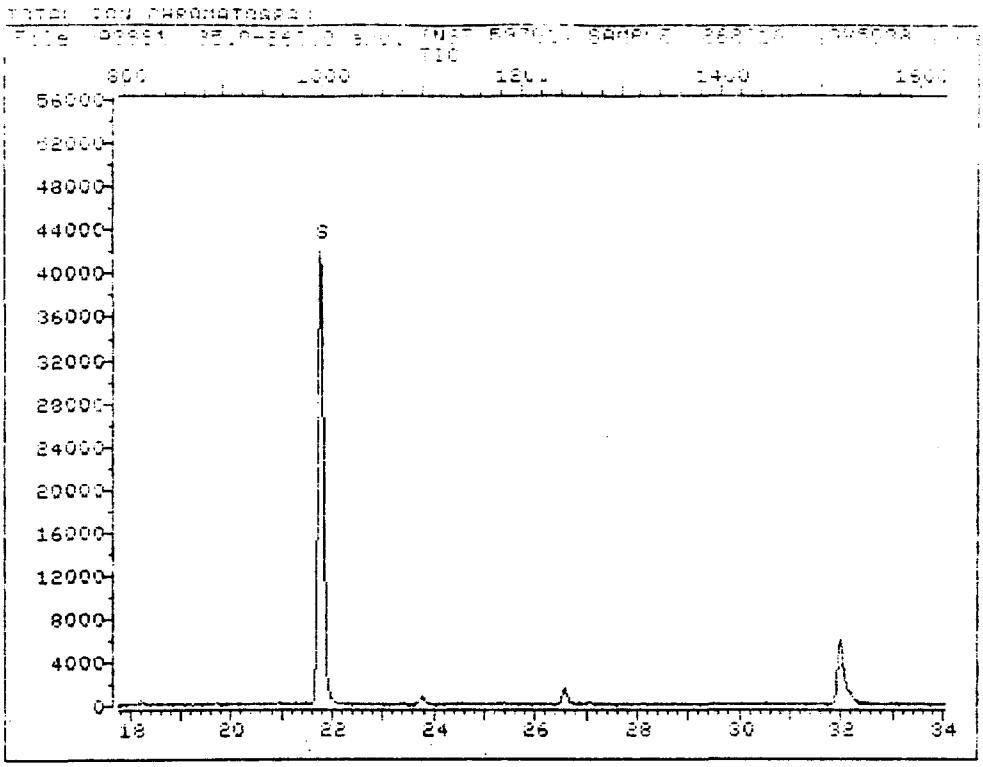
Data File: >A3881::A1 Quant Output File: ^A3881::QT
Name: INST 59701, SAMPLE Instrument ID: INST "A"
Misc: 262216 ,QV5038 , L,5,5,0.53mm X 75M DB-624

Id File: ID624A::X2
Title: GENERAL IDFILE FOR INSTRUMENT A
Last Calibration: 970507 23:18 Last Qcal Time: <none>

Operator ID: LB3274
Quant Time : 970510 17:15
Injected at: 970510 16:40

Page 1 of 2

850930940 F 675



Data File: >A3881::A1 Quant Output File: ^A3881::QT
Name: INST 59701, SAMPLE Instrument ID: INST "A"
Misc: 262216 ,QV5038 , L,5,5,0.53mm X 75M DB-624

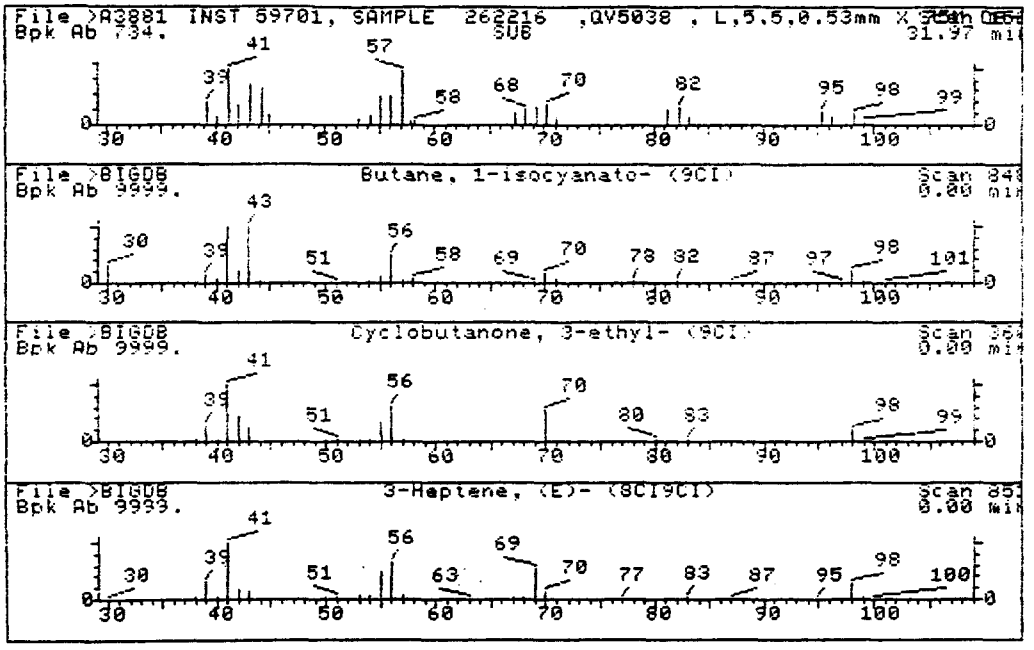
Id File: ID624A::X2
Title: GENERAL IDFILE FOR INSTRUMENT A
Last Calibration: 970507 23:18 Last Qcal Time: <none>

Operator ID: LB3274
Quant Time : 970510 17:15
Injected at: 970510 16:40

Page 2 of 2

850930941

F 676



Unknown

Instrument ID: INST " Analyzed on: 5/10/97 16:40
Result 9 in PBM results file: LA3881
Retention Time: 31.97 Area: 67624 Tentative Conc: 6.00
The unknown area is 21.32% of the nearest internal standard

1.	Butane, 1-isocyanato- (9CI)	99 C5H9NO
2.	Cyclobutanone, 3-ethyl- (9CI)	98 C6H10O
3.	3-Heptene, (E)- (8CI9CI)	98 C7H14

Sample file: >A3881 Spectrum #: 1520
Search speed: 1 Tilting option: N No. of ion ranges searched: 52

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	12*	111364	8485	"BIGDB	39	56	1	0	73	65	2	22
2.	11*	56335730	3600	"BIGDB	33	57	2	0	66	61	2	16
3.	11*	14686147	8518	"BIGDB	34	59	2	0	72	63	2	15

850930942

F 677

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330, FAX: 201-584-0515
MAY 8, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

TARGET COMPOUND LIST - VOLATILE ANALYSIS BY GC/MS
PLUS 10 PEAKS

Lab Number: 262217
Client: VECTRE CORPORATION
Sample source: NBB-V11
Sample ID: SB-5 (24-30")
Sample date: 04/30/97
Sampled by: Customer
At lab date: 05/01/97
Matrix: Soil

Analysis Date: 05/07/97
Init Sample Wght= 5g

Data File: >A3774
Column: DB-624
Dilution Factor: 1
Percent Moisture: 17.25%
Final volume= 5ml

Initial sample weight DWB= 4.1375g

Conc. in Sample = (Conc. on Quant Report/Initial Sample Weight DWB)*Final Volume

Parameter	Result ug/kg	Method Blank ug/kg	Practical Quantitation Limit ug/kg	Minimum Detection Limit ug/kg
Chloromethane	U	U	6	5.6
Bromomethane	U	U	6	4.6
Vinyl chloride	U	U	6	2.1
Chloroethane	U	U	6	2.2
Methylene chloride	U	U	6	3.3
Acetone	U	U	24	5.4
Carbon disulfide	U	U	6	2.1
1,1-Dichloroethene	U	U	6	2.1
1,1-Dichloroethane	U	U	6	1.7
trans-1,2-Dichloroethene	U	U	6	2.1
cis-1,2-Dichloroethene	U	U	6	2.1
Chloroform	U	U	6	1.9
1,2-Dichloroethane	U	U	6	2.3
2-Butanone	U	U	24	2.9
1,1,1-Trichloroethane	U	U	6	0.6
Carbon tetrachloride	U	U	6	0.73
Bromodichloromethane	U	U	6	0.73
1,2-Dichloropropane	U	U	6	0.73
cis-1,3-Dichloropropene	U	U	6	0.6
Trichloroethene	U	U	6	0.73
Dibromochloromethane	U	U	6	0.73
1,1,2-Trichloroethane	U	U	6	0.6
Benzene	U	U	6	0.6
trans-1,3-Dichloropropene	U	U	6	0.73
Bromoform	U	U	6	0.97
4-Methyl-2-pentanone	U	U	24	1.3
2-Hexanone	U	U	24	1.5
Tetrachloroethene	U	U	6	0.85
1,1,2,2-Tetrachloroethane	U	U	6	0.6
Toluene	U	U	6	0.97
Chlorobenzene	U	U	6	0.73
Ethylbenzene	U	U	6	0.85
Styrene	U	U	6	1.2
p&m-Xylene	U	U	6	1.1
o-Xylene	U	U	6	1.1
total Xylenes	U	U	6	1.1

ug/kg = micrograms/kilogram or ppb
Results are in ug/kg (ppb); they are reported on a dry weight basis.
ND: Not Determined.
IND: Indeterminable.
U: Indicates a compound was analyzed for but not detected at the PQL.
J: Indicates an estimated value. It is utilized when a reported value meets the identification criteria but the result is less than the specified detection limit but greater than zero.
B: Indicates that the analyte was found in the blank as well as the sample. It indicates possible/probable blank contamination.

MD 5/14/97

INDUSTRIAL CORROSION MANAGEMENT, INC.
Richard Levine, President
Copyright ICM, Inc., 1997.
All rights reserved.
RTT.

850930943

F 678

INDUSTRIAL CORROSION MANAGEMENT, Inc.
1152 Route 10
Randolph, NJ 07869
201-584-0330
Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

MAY 8, 1997

LIBRARY SEARCH RESULTS OF NONTARGETED PEAKS WITH
ESTIMATED CONCENTRATION OF TENTATIVELY IDENTIFIED COMPOUNDS.

Data file name: >A3774
Lab number: 262217
Fraction: VOLATILE

Initial Sample Wt/Vol=5 Final Volume=5
Moisture=17.25% Initial sample weight DWB=4.1375

CAS No.	Retention Time	Compound Name	Molecular Weight	Estimated Concentration ug/kg	
	32.17	Column bleed		6	**

Estimated total non-target compound concentration (excluding compounds flagged with A, B or **) in ug/kg is: 0

A: Indicates that the compound is an acetone based aldol-type condensation product formed by concentrating the extraction solvent (1:1 acetone/methylene chloride).
B: Indicates that the analyte was found in the blank as well as the sample. It further indicates possible/probable blank contamination.
C: Co-eluting and/or poorly resolved non-target compounds cause superimposed spectra that prevent identification of individual compounds.
* Compounds flagged are from diluted analysis.
** This compound is not flagged B; it was not found in the corresponding blank. However, it is commonly found as a laboratory contaminant.

Copyright ICM, Inc., 1997.
All rights reserved.
EIL

850930944
F 679

Operator ID: KSY934 Quant Rev: 7 Quant Time: 970507 00:50
Output File: ^A3774::QT Injected at: 970507 00:21
Data File: ^A3774::E1 Dilution Factor: 1.00000
Name: INST. 59701, SAMPLE Instrument ID: INST "A"
Misc: 262217,QV ,S,5,5,0.53mm X 75M DB-8240

ID File: ID824A::X2
Title: GENERAL IDFILE FOR INSTRUMENT A
Last Calibration: 970429 23:03 Last Qcal Time: 970506 19:31

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	6.86	128.0	36955	50.00	UG/L	99
22)	1,2-Dichloroethane-d4	7.92	65.0	78593	51.59	UG/L	90
27)	*1,4-Difluorobenzene	8.86	114.0	183090	50.00	UG/L	99
44)	*Chlorobenzene-d5	17.19	117.0	142272	50.00	UG/L	96
49)	Toluene-d8	12.55	98.0	166400	51.02	UG/L	98
56)	Bromofluorobenzene	21.76	95.0	125450	53.57	UG/L	83

* Compound is ISTD DC 5/8/97

850930945

F 680

MS data file header from : >A3774::E1

Sample: INST. 59701, SAMPLE Operator: KS9934 MS 5/07/97 0:21
Misc : 262217,QV ,S,5,5,0.53mm X 75M D8-8240
Sys. #: 1 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: INST "A"
Method file: VOAA Tuning file: APEI01 No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	40.	220.	0.	0.	0.
Chromatographic times, min. :	1.0	20.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	3.0	0.0	0.0	.2	0.0

>A3774 INST. 59701, SAMPLE 262217,QV ,S,5,5,0.53mm X 75M D8-8240

35.0 260.0 TIC
Upslope: .2000 Area Reject: 26811. Max Peaks: 8 Bunch: -1 Valley >100 %
Dnslope: 0.0000 Results File IA3774 Sorted by Time/Area INT

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	2.36	3	15	41	122579	752272	743533	100.00	22.35
2	6.86	238	245	259	50976	271148	268115	36.06	8.05
3	7.92	289	299	312	36269	208318	202891	27.29	6.09
4	8.86	337	347	364	79778	484435	478123	64.30	14.37
5	12.55	528	536	550	75777	530412	523742	70.44	15.74
6	17.19	759	773	792	67595	502335	499506	67.18	15.01
7	21.76	995	1007	1024	71741	567454	560707	75.41	16.85
8	32.17	1524	1539	1552	3369	80581	50195	6.75	1.50

Sum of corrected areas: 3326812.

Summary of Unknowns PBM Library Search and Quantitation

Standard	Concentration	Area	Retention Time	Unknown Window
1	50.0	268115.	6.86	2.09 - 7.86
2	50.0	478123.	8.86	7.86 - 13.02
3	50.0	499506.	17.19	13.02 - 34.03

PLEASE NOTE THE NOTATION USED FOR IDENTIFYING THE PEAKS ON THIS PAGE

NT=NON TARGETED COMPOUND T= TARGETED COMPOUND (COMPOUNDS FROM SAMPLE)

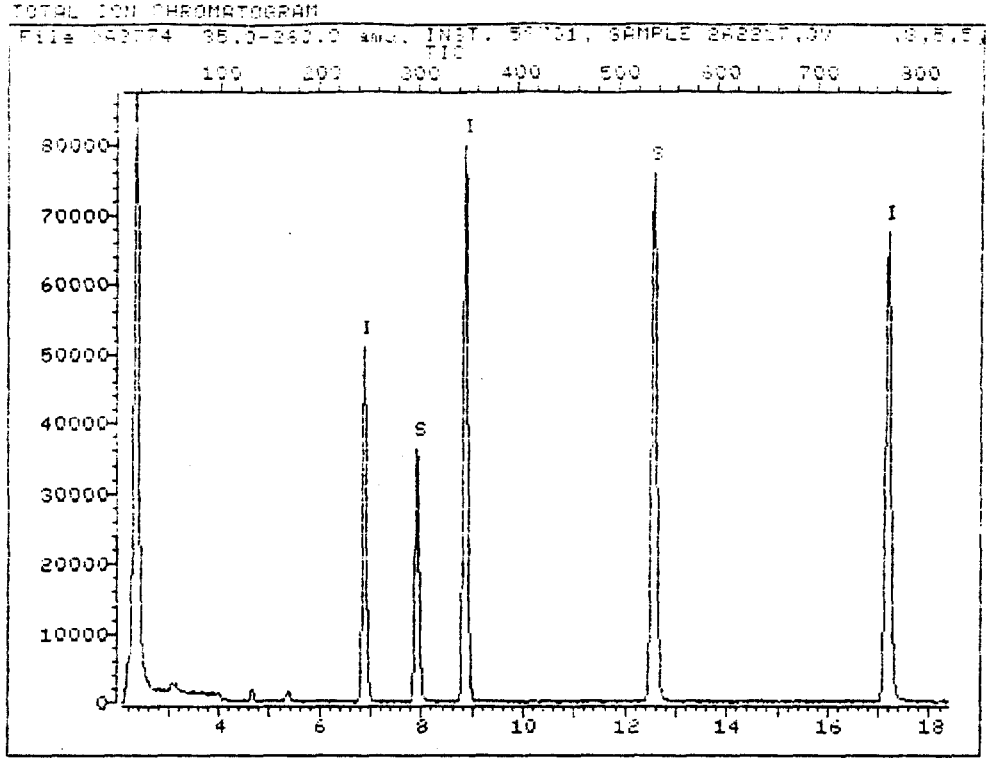
I=INTERNAL STANDARD COMPOUND S=SURROGATE COMPOUND (SYSTEM MONITORING)

$$\text{Unknown Concentration} = \frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}} * \text{Correction Factor}$$

850930946

E 681

TOTAL ION CHROMATOGRAM



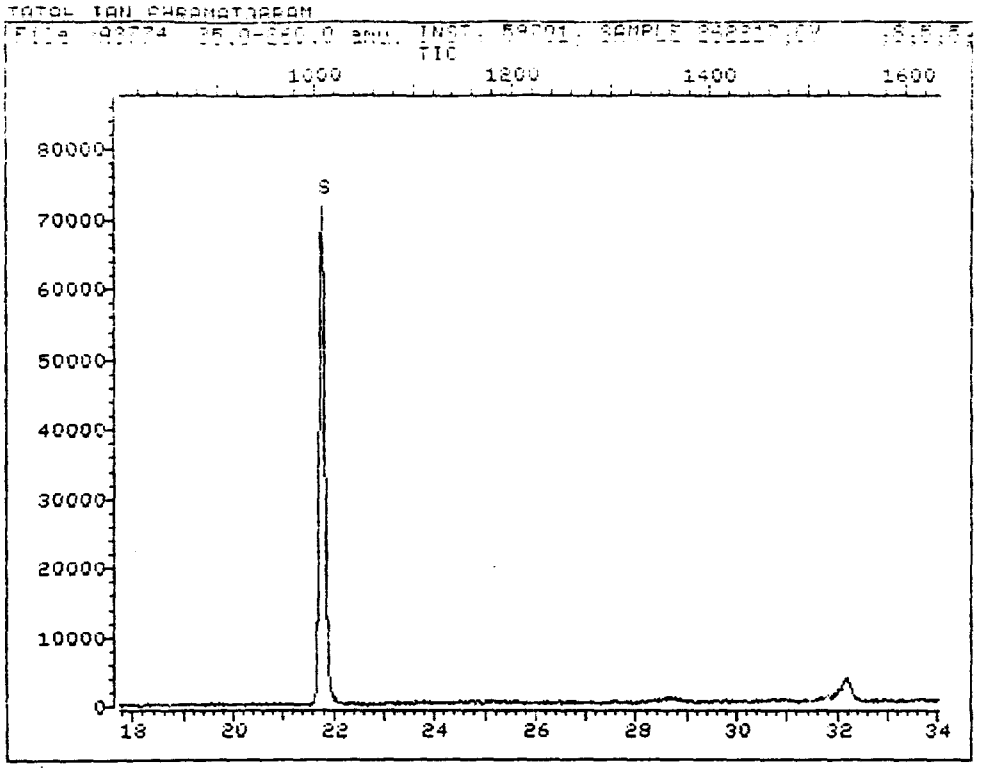
Data File: >A3774::E1 Quant Output File: ^A3774::QT
Name: INST. 59701, SAMPLE Instrument ID: INST "A"
Misc: 262217,QV ,S,5,5,0.53mm X 75M D8-8240

Id File: ID824A::X2
Title: GENERAL IDFILE FOR INSTRUMENT A
Last Calibration: 970429 23:03 Last Qcal Time: 970506 19:31

Operator ID: KS9934
Quant Time : 970507 00:56
Injected at: 970507 00:21

Page 1 of 2

850930947 F 682



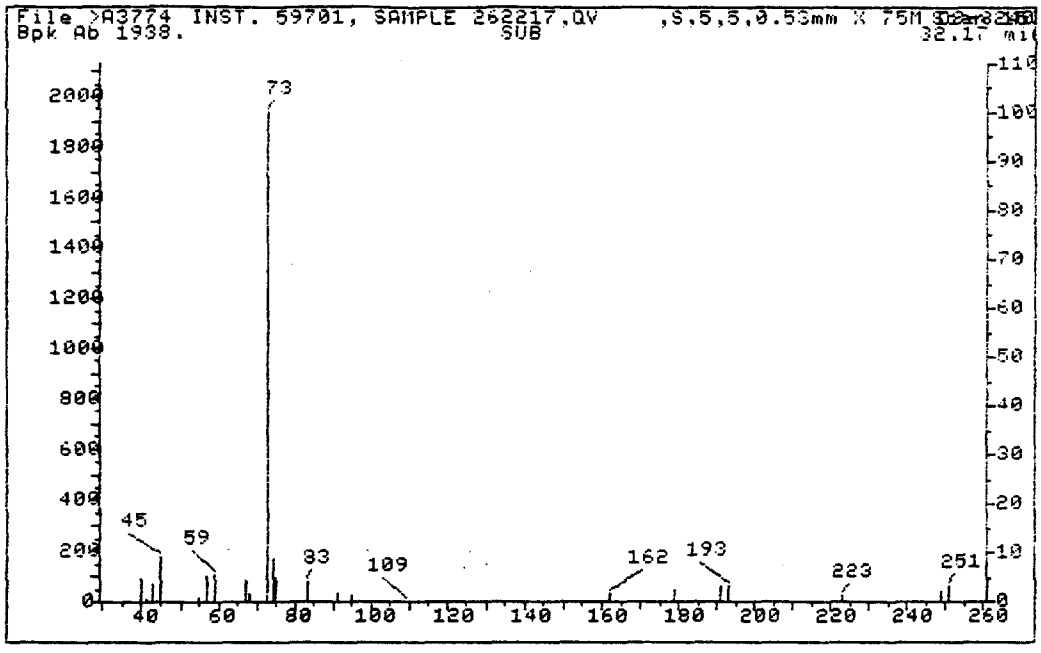
Data File: >A3774::E1 Quant Output File: ^A3774::QT
Name: INST. 59701, SAMPLE Instrument ID: INST "A"
Misc: 262217,QV ,S,5,5,0.53mm X 75M DB-8240

Id File: ID824A::X2
Title: GENERAL IDFILE FOR INSTRUMENT A
Last Calibration: 970429 23:03 Last Qcal Time: 970506 19:31

Operator ID: KS9934
Quant Time : 970507 00:56
Injected at: 970507 00:21

Page 2 of 2

850930948 F 683



Instrument ID: INST " Analyzed on: 5/07/97 0:21
Result 8 in PBM results file: LA3774
Retention Time: 32.17 Area: 50195 Tentative Conc: 5.00
The unknown area is 10.05% of the nearest internal standard

Column Bleed ***

Sample file: >A3774 Spectrum #: 1539

No data base entries were retrieved.

850930949

F 684

Operator ID: LB52/4 Quant Rev: 7 Quant Time: 970510 02:33
Output File: ^A3861::QT Injected at: 970510 01:52
Data File: >A3861::A1 Dilution Factor: 1.00000
Name: INST 09701, SAMPLE Instrument ID: INST "A"
Misc: 262218 ,QV5038 , L,5,5,0.53mm X 75M DB-624

ID File: ID624A::X2
Title: GENERAL IDFILE FOR INSTRUMENT A
Last Calibration: 970507 23:18 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	6.87	128.0	17175	30.00	UG/L	98
9)	Methylene Chloride FNF	4.66	84.0	2054	1.91	UG/L	85
10)	~~Acetone~~	4.15	43.0	2719	17.21	UG/L	100
22)	1,2-Dichloroethane-d4	7.92	65.0	39180	33.18	UG/L	86
27)	*1,4-Difluorobenzene	8.86	114.0	99817	30.00	UG/L	98
44)	*Chlorobenzene-d5	17.19	117.0	73199	30.00	UG/L	95
46)	~~2-Hexanone~~	15.25	43.0	3912	11.86	UG/L	70
49)	Toluene-d8	12.56	98.0	87231	30.21	UG/L	97
50)	Toluene	12.73	92.0	2092	1.05	UG/L	96
51)	Chlorobenzene	17.27	112.0	3943	1.77	UG/L	87
52)	Ethylbenzene	17.78	106.0	3025	2.51	UG/L	90
54)	p&m Xylene	18.25	106.0	24303	15.37	UG/L	59
55)	o-Xylene	19.71	106.0	27580	18.07	UG/L	86
56)	Bromofluorobenzene	21.75	95.0	63929	31.66	UG/L	89

* Compound is ISTD DL 5/12/97

850930950 F 685

MS data file header from : >A3861::A1

Sample: INST 59701, SAMPLE Operator: LB3274 MS 5/10/97 1:52
Misc : 262218 ,QV5038 , L,5,5,0.53mm X 75M DB-624
Sys. #: 1 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: INST "A"
Method file: VOAAEX Tuning file: APEI01 No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	40.	220.	0.	0.	0.
Chromatographic times, min. :	1.0	20.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	3.0	0.0	0.0	.2	0.0

>A3861 INST 59701, SAMPLE 262218 ,QV5038 , L,5,5,0.53mm X 75M DB-

35.01 260.0 TIC
Upslope: .2000 Area Reject: 12823. Max Peaks: 19 Bunch: -1 Valley >100 %
Dnslope: 0.0000 Results File IA3861 Sorted by Time/Area INT

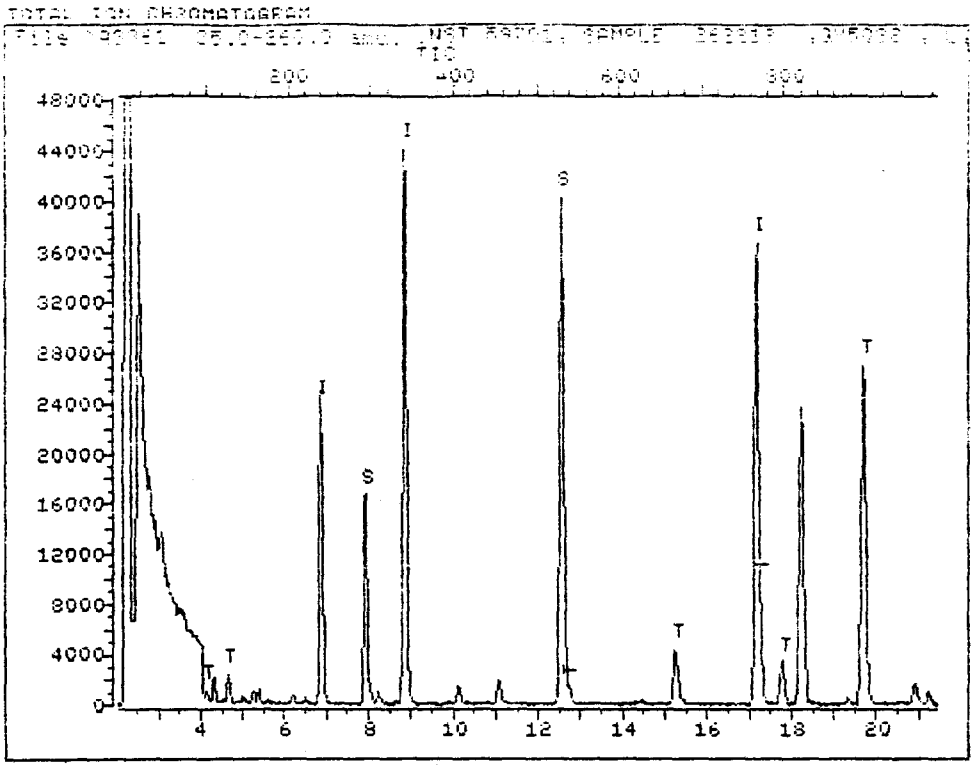
Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	2.35	4	15	17	291204	1514807	1514724	100.00	40.02
2	2.55	17	18	29	32335	446033	323075	21.34	8.54
3	6.89	233	240	255	25070	128233	128233	8.47	3.39
4	7.94	285	294	305	16797	102183	101644	6.71	2.68
5	8.86	335	341	357	44082	263898	262683	17.35	6.94
6	11.07	447	454	461	1934	15506	13174	.87	.34
7	12.56	522	530	547	40200	289484	286403	18.89	7.56
8	15.25	660	668	684	4246	38098	33817	2.23	.89
9	17.19	758	767	782	36732	277929	277929	18.36	7.34
10	17.80	787	798	806	3698	28322	27408*	1.81	.72
11	18.25	811	821	838	23666	180669	177439*	11.72	4.69
12	19.71	887	896	909	27096	210794	209273	13.83	5.53
13	20.93	949	958	969	1676	17645	14594	.96	.38
14	21.75	991	1000	1013	36339	285925	284321	18.80	7.52
15	23.72	1095	1101	1112	1953	18889	16075	1.06	.42
16	25.31	1173	1182	1192	2079	19549	16094	1.06	.42
17	26.54	1236	1245	1259	3877	39088	36010	2.38	.95
18	31.94	1514	1521	1526	3718	31075	30189	1.99	.79
19	32.13	1528	1531	1546	3421	32579	29749*	1.97	.78

Sum of corrected areas: 3781689.

Summary of Unknowns PBM Library Search and Quantitation

Standard	Concentration	Area	Retention Time	Unknown Window
1	30.0	128233.	6.97	2.07 - 7.86
2	30.0	262683.	8.86	7.86 - 13.03
3	30.0	277929.	17.19	13.03 - 40.05

PLEASE NOTE THE NOTATION USED FOR IDENTIFYING THE PEAKS ON THIS PAGE



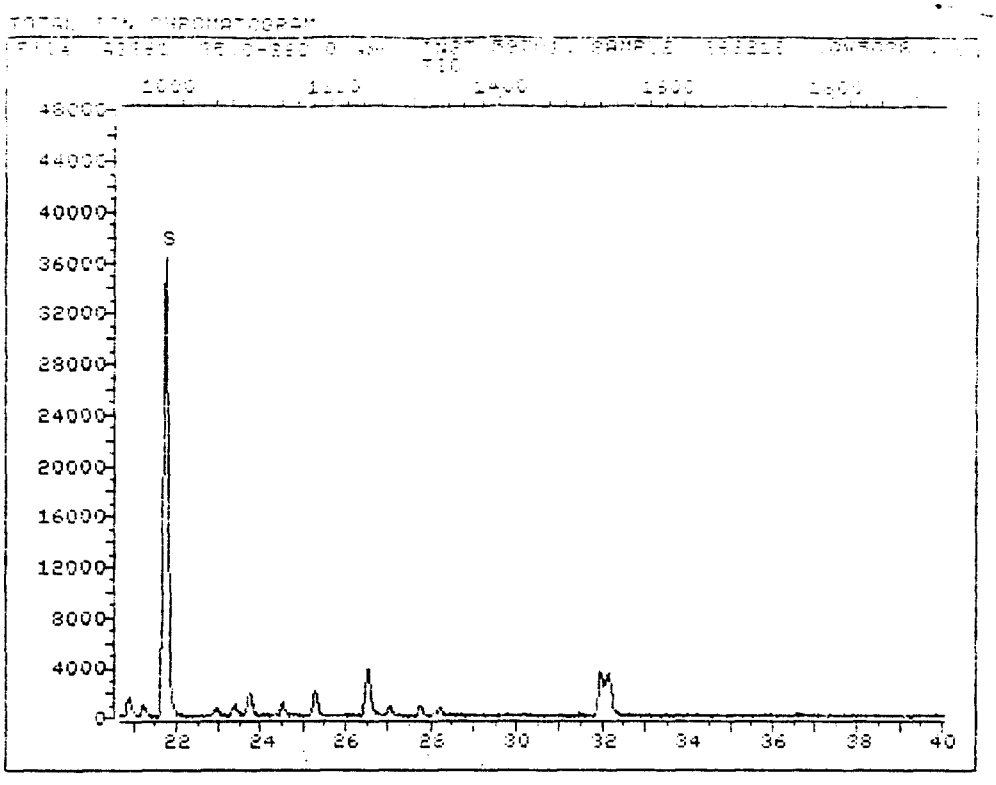
Data File: >A3861::A1 Quant Output File: ^A3861::QT
Name: INST 59701, SAMPLE Instrument ID: INST "A"
Misc: 262218 ,QV5038 , L,5,5,0.53mm X 75M DB-624

Id File: ID624A::X2
Title: GENERAL IDFILE FOR INSTRUMENT A
Last Calibration: 970507 23:18 Last Qcal Time: <none>

Operator ID: LB3274
Quant Time : 970510 02:33
Injected at: 970510 01:52

Page 1 of 2

850930952 F 687



Data File: >A3861::A1 Quant Output File: ^A3861::QT
Name: INST 59701, SAMPLE Instrument ID: INST "A"
Misc: 262218 ,QV5038 , L,5,5,0.53mm X 75M DB-624

Id File: ID624A::X2
Title: GENERAL IDFILE FOR INSTRUMENT A
Last Calibration: 970507 23:18 Last Qcal Time: <none>

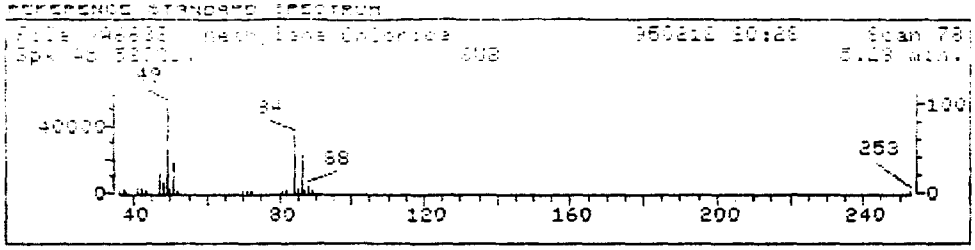
Operator ID: LB3274
Quant Time : 970510 02:35
Injected at: 970510 01:52

Page 2 of 2

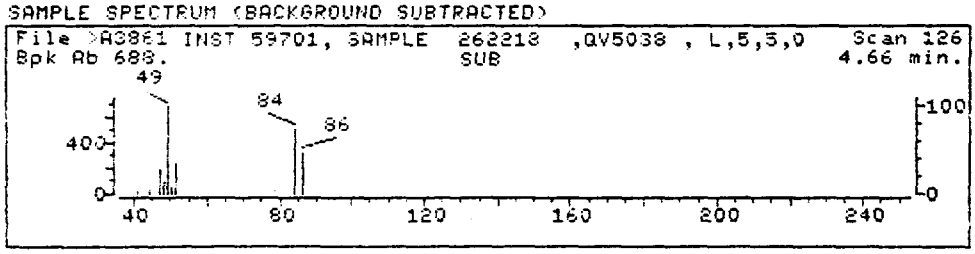
850930953

F 688

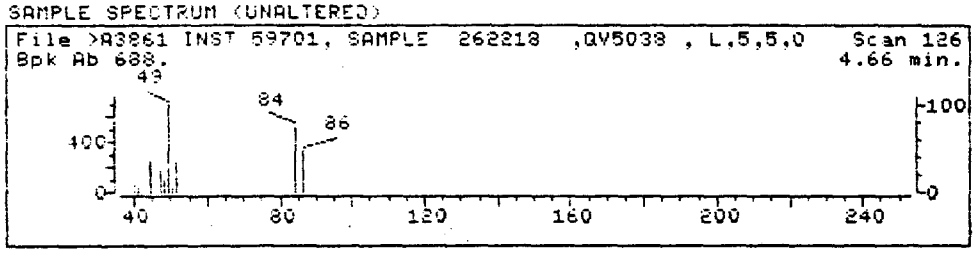
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



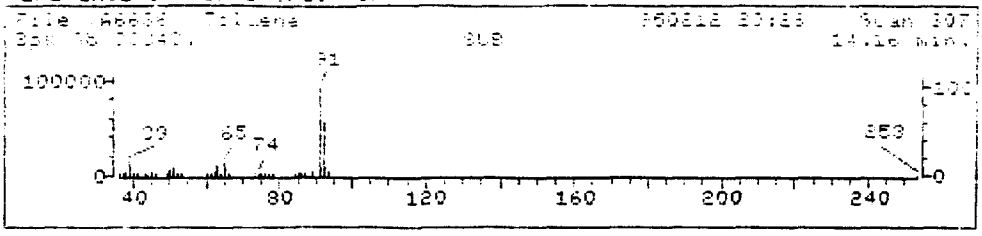
SAMPLE SPECTRUM (UNALTERED)



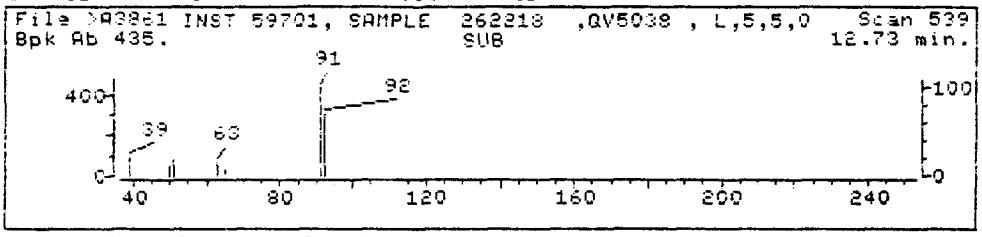
Data File: >A3861::A1 Quant Output File: ^A3861::QT
Name: INST 59701, SAMPLE Instrument ID: INST "A"
Misc: 262218 ,QV5038 , L,5,5,0.53mm X 75M DB-624
Quant Time: 970510 02:33 Quant ID File: ID624A::X2
Injected at: 970510 01:52 Last Calibration: 970507 23:18
Last Qcal Time: <none>

Compound No : 9
Compound Name : Methylene Chloride
Scan Number : 126
Retention Time: 4.66 min.
Quant Ion : 84.0
Area : 2054
Concentration : 1.91 UG/L
q-value : 85

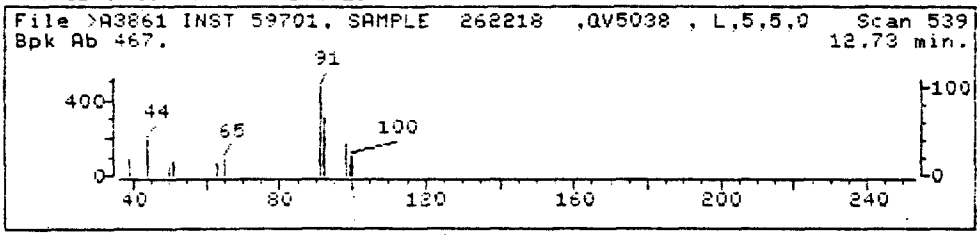
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

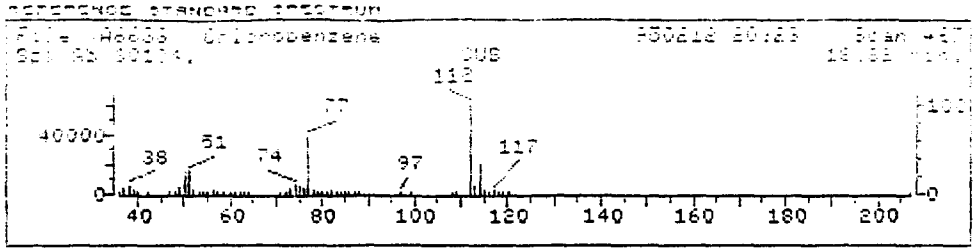


Data File: >A3861::A1 Quant Output File: ^A3861::QT
Name: INST 59701, SAMPLE Instrument ID: INST "A"
Misc: 262218 ,QV5038 , L,5,5,0.53mm X 75M DB-624
Quant Time: 970510 02:33 Quant ID File: ID624A::X2
Injected at: 970510 01:52 Last Calibration: 970507 23:18
Last Qcal Time: <none>

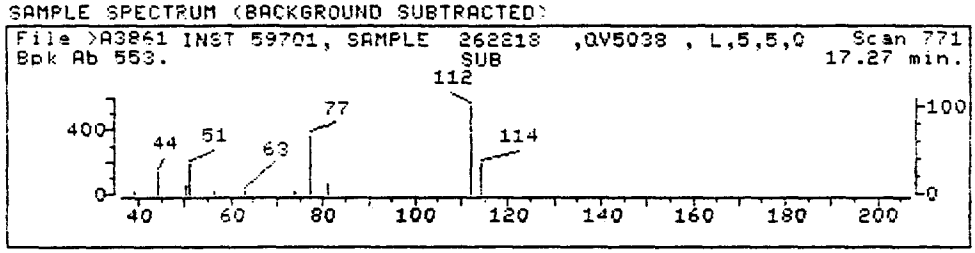
Compound No : 50
Compound Name : Toluene
Scan Number : 539
Retention Time: 12.73 min.
Quant Ion : 92.0
Area : 2092
Concentration : 1.05 UG/L
q-value : 96

850930955 F 696

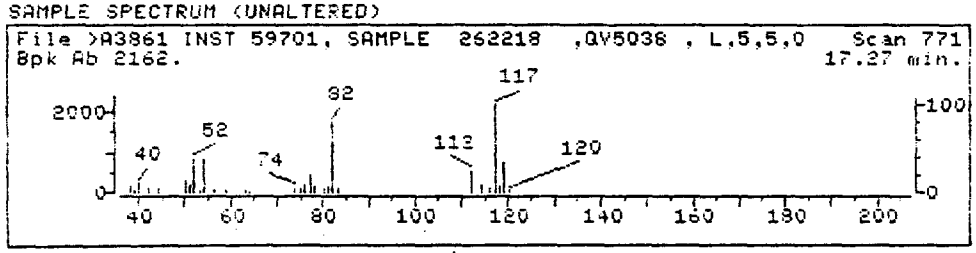
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



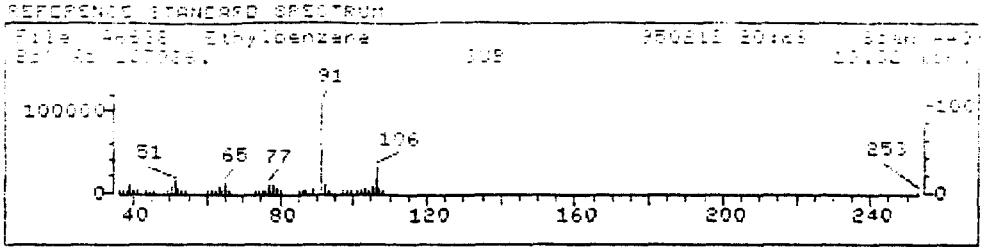
Data File: >A3861::A1 Quant Output File: ^A3861::QT
Name: INST 59701, SAMPLE Instrument ID: INST "A"
Misc: 262218 ,QV5038 , L,5,5,0.53mm X 75M DB-624
Quant Time: 970510 02:33 Quant ID File: ID624A::X2
Injected at: 970510 01:52 Last Calibration: 970507 23:18
Last Qcal Time: <none>

Compound No : 51
Compound Name : Chlorobenzene
Scan Number : 771
Retention Time: 17.27 min.
Quant Ion : 112.0
Area : 3943
Concentration : 1.77 UG/L
q-value : 87

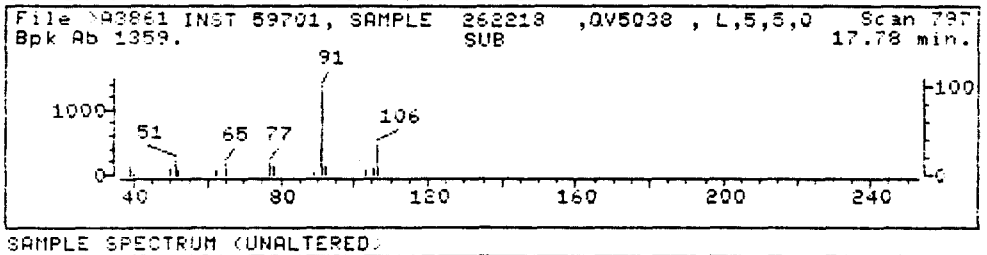
850930956

F 691

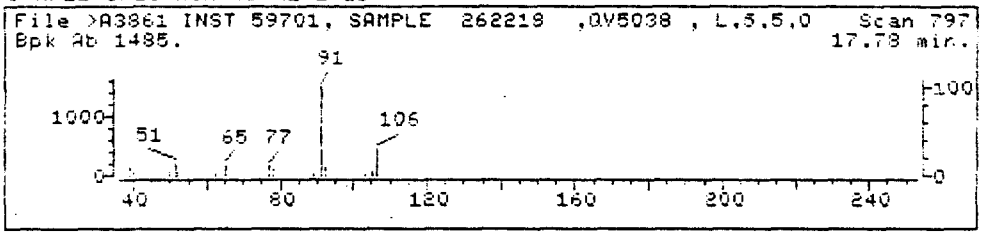
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



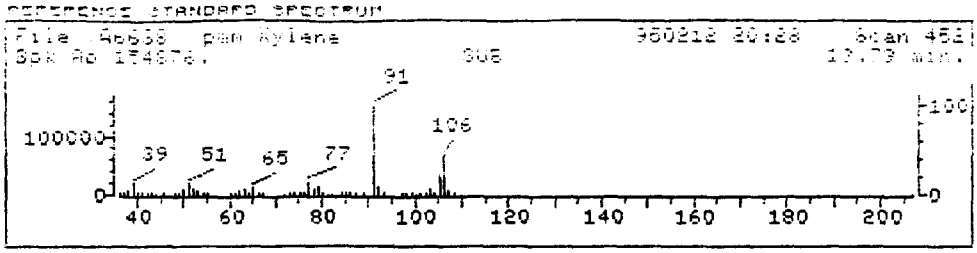
Data File: >A3861::A1 Quant Output File: ^A3861::QT
Name: INST 59701, SAMPLE Instrument ID: INST "A"
Misc: 262218 ,QV5038 , L,5,5,0.53mm X 75M DB-624
Quant Time: 970510 02:33 Quant ID File: ID624A::X2
Injected at: 970510 01:52 Last Calibration: 970507 23:18
Last Qcal Time: <none>

Compound No : 52
Compound Name : Ethylbenzene
Scan Number : 797
Retention Time: 17.78 min.
Quant Ion : 106.0
Area : 3025
Concentration : 2.51 UG/L
q-value : 90

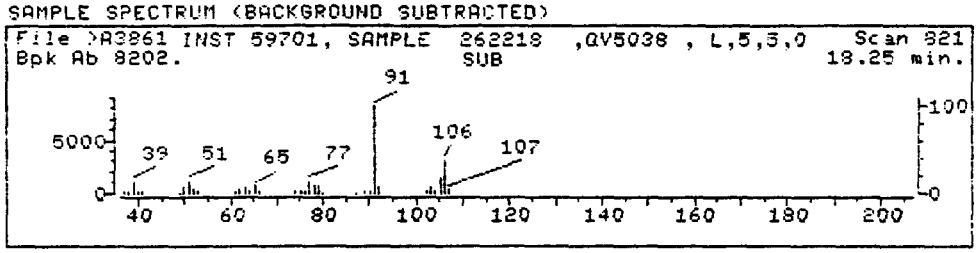
850930957

F692

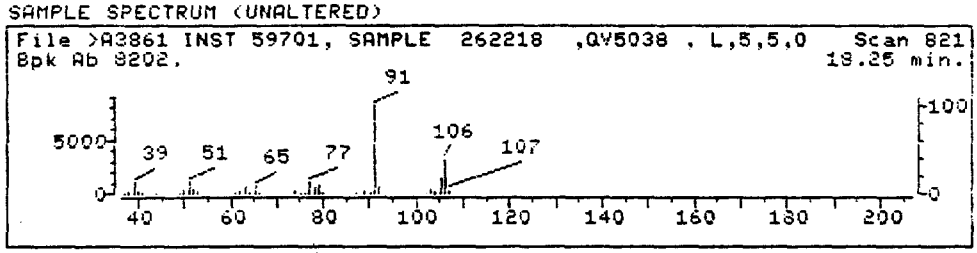
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



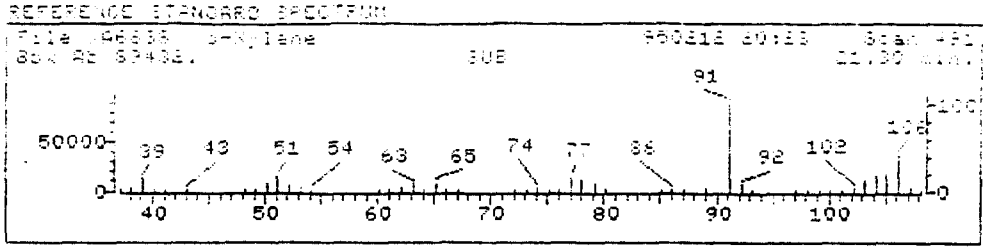
Data File: >A3861::A1 Quant Output File: ^A3861::QT
Name: INST 59701, SAMPLE Instrument ID: INST "A"
Misc: 262218 ,QV5038 , L,5,5,0.53mm X 75M DB-624
Quant Time: 970510 02:33 Quant ID File: ID624A::X2
Injected at: 970510 01:52 Last Calibration: 970507 23:18
Last Qcal Time: <none>

Compound No : 54
Compound Name : p&m Xylene
Scan Number : 821
Retention Time: 18.25 min.
Quant Ion : 106.0
Area : 24303
Concentration : 15.37 UG/L
q-value : 59

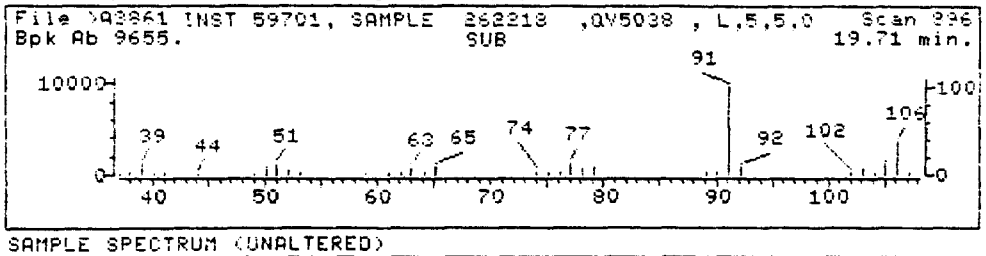
850930958

F 693

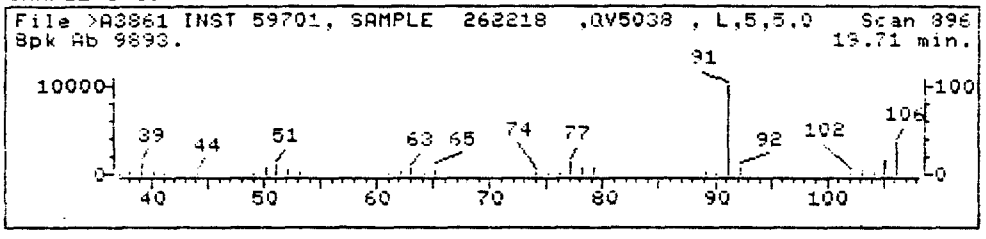
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

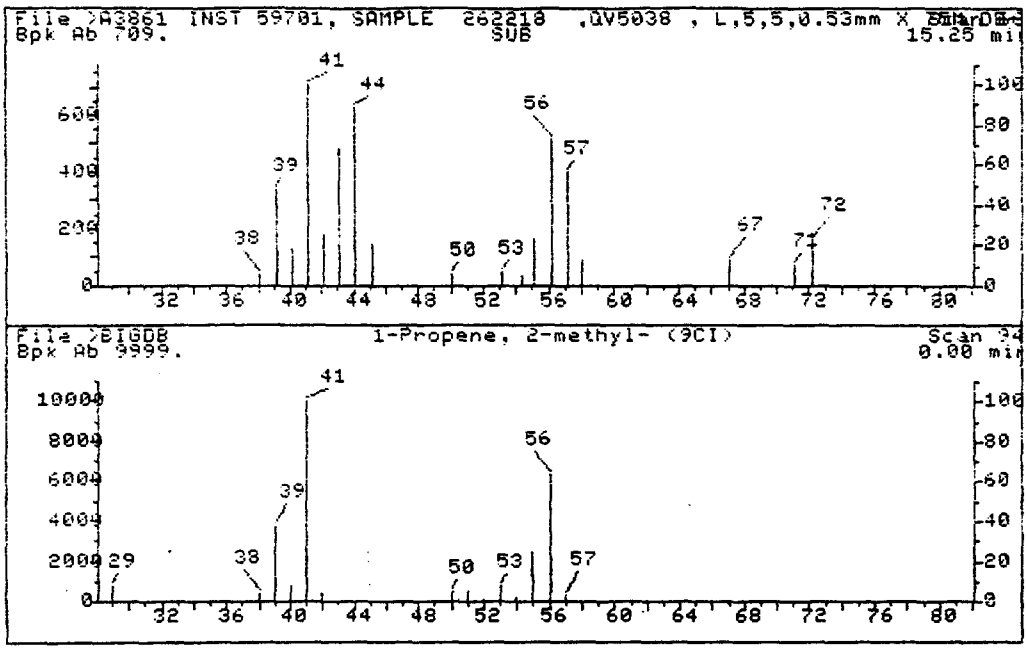


Data File: >A3861::A1 Quant Output File: ^A3861::QT
Name: INST 59701, SAMPLE Instrument ID: INST "A"
Misc: 262218 ,QV5038 , L,5.5,0.53mm X 75M DB-624
Quant Time: 970510 02:33 Quant ID File: ID624A::X2
Injected at: 970510 01:52 Last Calibration: 970507 23:18
Last Qcal Time: <none>

Compound No : 55
Compound Name : o-Xylene
Scan Number : 896
Retention Time: 19.71 min.
Quant Ion : 106.0
Area : 27580
Concentration : 18.07 UG/L
q-value : 86

850930959

F 694



Unknown

Instrument ID: INST " Analyzed on: 5/10/97 1:52
Result 7 in PBM results file: LA3861
Retention Time: 15.25 Area: 33817 Tentative Conc: 4.00
The unknown area is 12.17% of the nearest internal standard

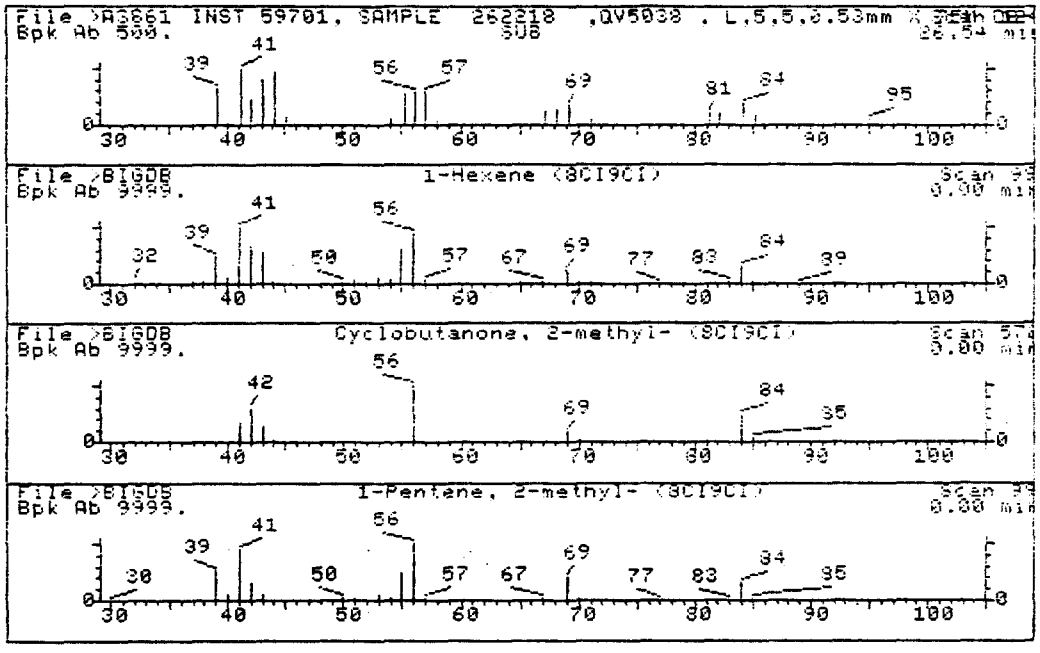
1. 1-Propene, 2-methyl- (9CI) 56 C4H8

Sample file: >A3861 Spectrum #: 668
Search speed: 1 Tilting option: N No. of ion ranges searched: 42

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_I
1.	11*	115117	940	"BIGDB	33	40	2	0	96	63	2	1

850930960

F 695



Instrument ID: INST " Analyzed on: 5/10/97 1:52
Result 12 in PBM results file: LA3861
Retention Time: 26.54 Area: 36010 Tentative Conc: 4.00
The unknown area is 12.96% of the nearest internal standard

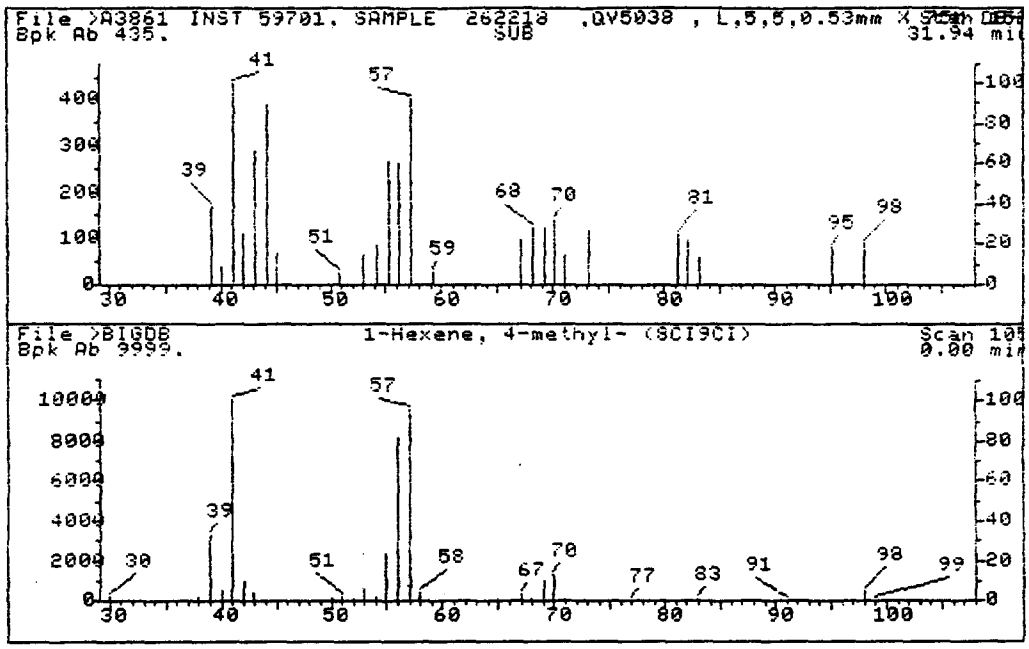
Unknown

1. 1-Hexene (8CI9CI) 84 C6H12
2. Cyclobutanone, 2-methyl- (8CI9CI) 84 C5H8O
3. 1-Pentene, 2-methyl- (8CI9CI) 84 C6H12

Sample file: >A3861 Spectrum #: 1245
Search speed: 1 Tilting option: N No. of ion ranges searched: 43

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	15*	592416	990	"BIGDB	23	77	3	0	65	57	3	12
2.	11*	1517153	5726	"BIGDB	26	36	1	0	58	65	2	14
3.	11*	763291	995	"BIGDB	36	65	3	0	112	62	2	13

850930961 F 696



Instrument ID: INST " Analyzed on: 5/10/97 1:52
Result 13 in PBM results file: LA3861
Retention Time: 31.94 Area: 30188 Tentative Conc: 3.00
The unknown area is 10.86% of the nearest internal standard

Unknown

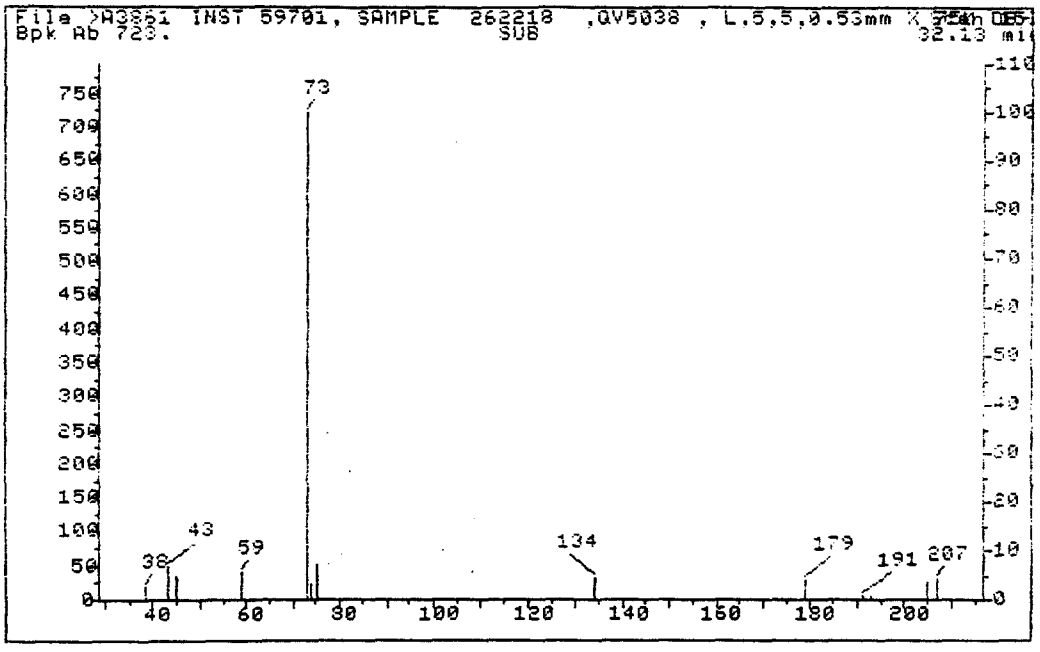
1. 1-Hexene, 4-methyl- (8CI9CI) 98 C7H14

Sample file: >A3861 Spectrum #: 1521
Search speed: 1 Tilting option: N No. of ion ranges searched: 45

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_I
1.	15*	3769231	1052	"BIGDB	22	71	1	0	73	60	3	1

850930962

F 697



Instrument ID: INST " Analyzed on: 5/10/97 1:52
Result 14 in PBM results file: LA3861
Retention Time: 32.13 Area: 29749 Tentative Conc: 3.00
The unknown area is 10.70% of the nearest internal standard

Column Bleed
**

Sample file: >A3861 Spectrum #: 1531

No data base entries were retrieved.

850930963

F 698

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330, FAX: 201-584-0515
MAY 12, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

TARGET COMPOUND LIST - VOLATILE ANALYSIS BY GC/MS
PLUS 10 PEAKS

Lab Number: 262219 Data File: >A3862
Client: VECTRE CORPORATION
Sample source: NBB-V11
Sample ID: Trip Blank
Sample date: 04/30/97
Sampled by: Customer Analysis Date: 05/10/97 Column: DB-624
At lab date: 05/01/97 Dilution Factor: 1
Matrix: Water Init Sample volume= 5ml Final volume= 5ml

Conc. in Sample = (Conc. on Quant Report/Initial Volume)*Final Volume

Parameter	Result ug/l	Method Blank ug/l	Practical Quantitation Limit ug/l	Minimum Detection Limit ug/l
Chloromethane	U	U	5	4.6
Bromomethane	U	U	5	3.8
Vinyl chloride	U	U	5	1.7
Chloroethane	U	U	5	1.8
Methylene chloride	U	U	5	2.7
Acetone	U	U	20	4.5
Carbon disulfide	U	U	5	1.7
1,1-Dichloroethene	U	U	5	1.7
1,1-Dichloroethane	U	U	5	1.4
trans-1,2-Dichloroethene	U	U	5	1.7
cis-1,2-Dichloroethene	U	U	5	1.7
Chloroform	U	U	5	1.6
1,2-Dichloroethane	U	U	5	1.9
2-Butanone	U	U	20	2.4
1,1,1-Trichloroethane	U	U	5	0.5
Carbon tetrachloride	U	U	5	0.6
Bromodichloromethane	U	U	5	0.6
1,2-Dichloropropane	U	U	5	0.6
cis-1,3-Dichloropropene	U	U	5	0.5
Trichloroethene	U	U	5	0.6
Dibromochloromethane	U	U	5	0.6
1,1,2-Trichloroethane	U	U	5	0.5
Benzene	U	U	5	0.5
trans-1,3-Dichloropropene	U	U	5	0.6
Bromoform	U	U	5	0.8
4-Methyl-2-pentanone	U	U	20	1.1
2-Hexanone	U	U	20	1.2
Tetrachloroethene	U	U	5	0.7
1,1,2,2-Tetrachloroethane	U	U	5	0.5
Toluene	U	U	5	0.8
Chlorobenzene	U	U	5	0.6
Ethylbenzene	U	U	5	0.7
Styrene	U	U	5	1
p&m-Xylene	U	U	5	0.9
o-Xylene	U	U	5	0.9
total Xylenes	U	U	5	0.9
1,3-Dichlorobenzene	U	U	10	0.7
1,4-Dichlorobenzene	U	U	10	0.5
1,2-Dichlorobenzene	U	U	10	1.5

ug/l = micrograms/liter or ppb
ND: Not Determined.
IND: Indeterminable.
U: Indicates a compound was analyzed for but not detected at the MDL.
J: Indicates an estimated value. It is utilized when a reported value meets the identification criteria but the result is less than the specified detection limit but greater than zero.
B: Indicates that the analyte was found in the blank as well as the sample. It indicates possible/probable blank contamination.

MS 5/14/97

INDUSTRIAL CORROSION MANAGEMENT, INC.
Richard Levine, President
Copyright ICM, Inc., 1997.
All rights reserved.
ERI

850930964 F 699

INDUSTRIAL CORROSION MANAGEMENT, Inc.
1152 Route 10
Randolph, NJ 07869
201-584-0330
MAY 12, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

LIBRARY SEARCH RESULTS OF NONTARGETED PEAKS WITH
ESTIMATED CONCENTRATION OF TENTATIVELY IDENTIFIED COMPOUNDS.

Data file name: >A3862
Lab number: 262219
Fraction: VOLATILE

Initial Sample Wt/Vol=5 Final Volume=5

CAS No.	Retention Time	Compound Name	Molecular Weight	Estimated Concentration ug/l
None found				

Estimated total non-target compound concentration (excluding compounds flagged with A, B or **) in ug/l is: 0

A: Indicates that the compound is an acetone based aldol-type condensation product formed by concentrating the extraction solvent (1:1 acetone/methylene chloride).
B: Indicates that the analyte was found in the blank as well as the sample. It further indicates possible/probable blank contamination.
C: Co-eluting and/or poorly resolved non-target compounds cause superimposed spectra that prevent identification of individual compounds.
* Compounds flagged are from diluted analysis.
** This compound is not flagged B; it was not found in the corresponding blank. However, it is commonly found as a laboratory contaminant.

Copyright ICM, Inc., 1997.
All rights reserved.
ERI

850930965

F 700

Operator ID: LB3274 Quant Rev: 7 Quant Time: 970510 03:18
Output File: ^A3862::07 Injected at: 970510 02:36
Data File: >H3862::A1 Dilution Factor: 1.00000
Name: INST 59701, SAMPLE Instrument ID: INST "A"
Misc: 262219 ,QV5038 , L,5,5,0.53mm X 75M DB-624

ID File: ID624A::X2
Title: GENERAL IDFILE FOR INSTRUMENT A
Last Calibration: 970507 23:18 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	6.84	128.0	17640	30.00	UG/L	96
22)	1,2-Dichloroethane-d4	7.90	65.0	41625	34.32	UG/L	87
27)	*1,4-Difluorobenzene	8.83	114.0	100274	30.00	UG/L	98
44)	*Chlorobenzene-d5	17.16	117.0	78379	30.00	UG/L	97
49)	Toluene-d8	12.51	98.0	93244	30.16	UG/L	96
56)	Bromofluorobenzene	21.74	95.0	69120	31.97	UG/L	94

* Compound is ISTD DCS 12/97

850930966

F 701

MS data file header from : >A3862::A1

Sample: INST 59701, SAMPLE Operator: LB3274 MS 5/10/97 2:36
Misc : 262219 ,QV5038 , L,5,5,0.53mm X 75M DB-624
Sys. #: 1 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: INST "A"
Method file: VOAAEX Tuning file: APEI01 No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	40.	220.	0.	0.	0.
Chromatographic times, min. :	1.0	20.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	3.0	0.0	0.0	.2	0.0

>A3862 INST 59701, SAMPLE 262219 ,QV5038 , L,5,5,0.53mm X 75M DB-

35.01 260.0 TIC
Upslope: .2000 Area Reject: 13082. Max Peaks: 8 Bunch: -1 Valley >100 %
Dnslope: 0.0000 Results File IA3862 Sorted By Time/Area INT

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	2.34	3	13	33	233233	1349694	1292093	100.00	47.85
2	6.84	237	243	255	26727	130824	130824	10.12	4.84
3	7.90 S	288	297	312	18600	105979	103585	8.02	3.83
4	8.83	337	345	359	43396	267035	262876	20.34	9.73
5	12.53 S	523	534	552	42391	299439	299439	23.17	11.08
6	17.16	761	771	791	37420	279462	279462	21.63	10.34
7	21.74 S	994	1005	1024	40342	312220	312220	24.16	11.56
8	32.16	1523	1538	1548	1391	19812	19812	1.53	.73

Sum of corrected areas: 2700311.

Summary of Unknowns PBM Library Search and Quantitation

Standard	Concentration	Area	Retention Time	Unknown Window
1	30.0	130824.	6.84	2.11 - 7.84
2	30.0	262876.	8.83	7.84 - 13.00
3	30.0	279462.	17.16	13.00 - 40.06

PLEASE NOTE THE NOTATION USED FOR IDENTIFYING THE PEAKS ON THIS PAGE

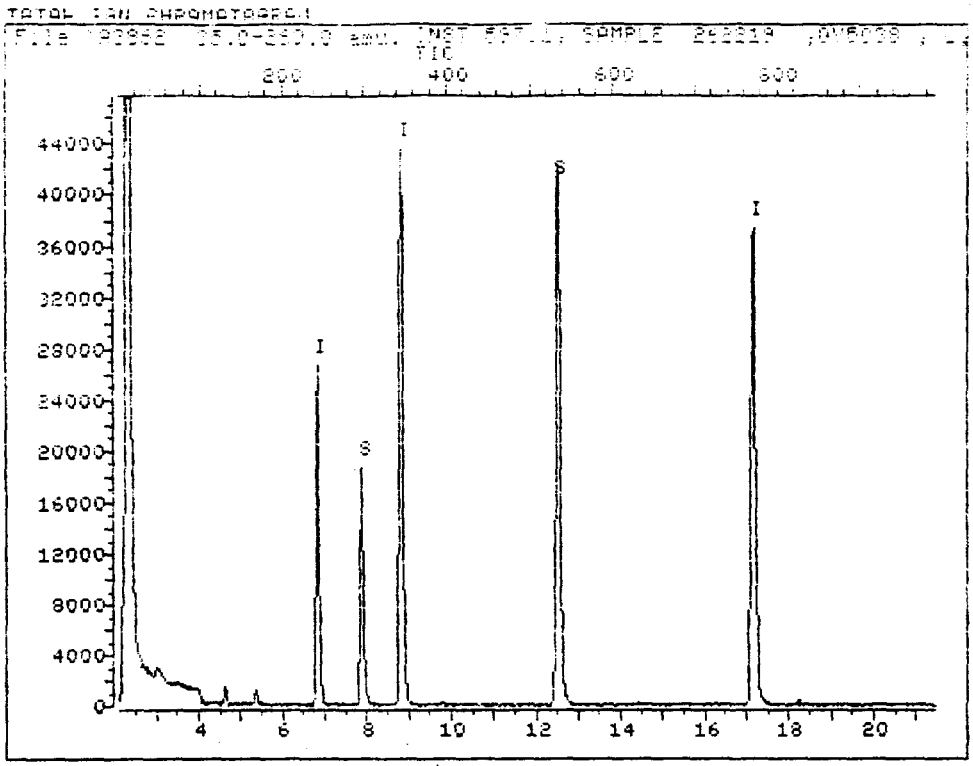
NT=NON TARGETED COMPOUND T= TARGETED COMPOUND (COMPOUNDS FROM SAMPLE)

I=INTERNAL STANDARD COMPOUND S=SURROGATE COMPOUND (SYSTEM MONITORING)

$$\text{Unknown Concentration} = \frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}} * \text{Corfection Factor}$$

850930967

F 702



Data File: >A3862::A1 Quant Output File: ^A3862::QT
Name: INST 59701, SAMPLE Instrument ID: INST "A"
Misc: 262219 ,QV5038 , L,5,5,0.53mm X 75M DB-624

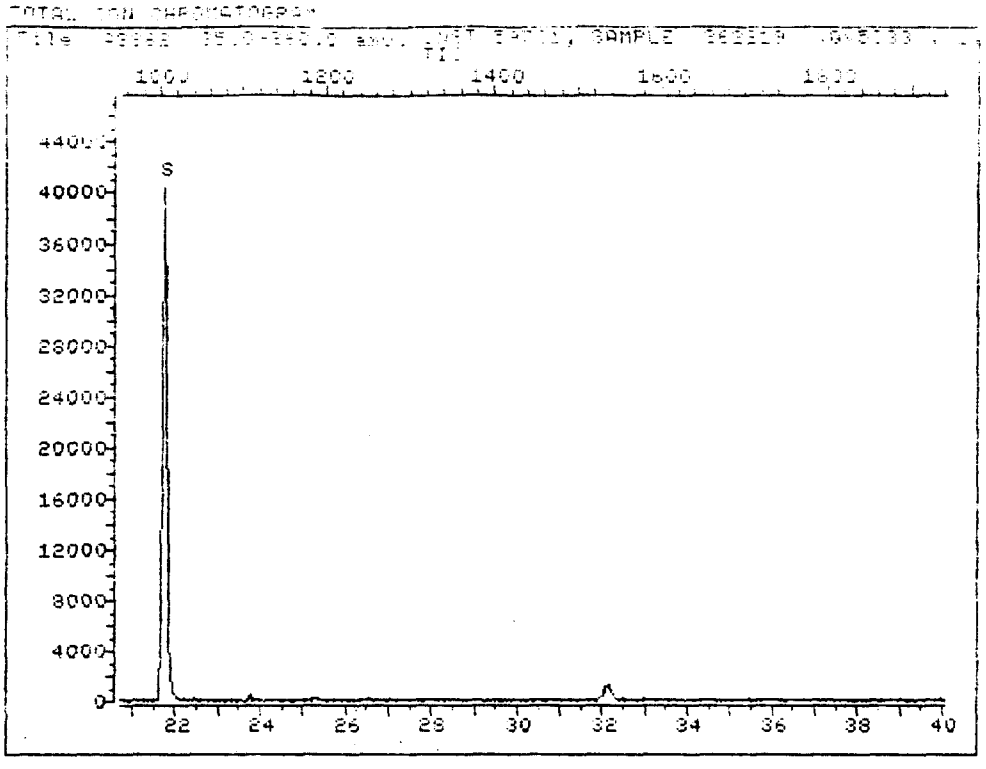
Id File: ID624A::X2
Title: GENERAL IDFILE FOR INSTRUMENT A
Last Calibration: 970507 23:18 Last Qcal Time: <none>

Operator ID: LB3274
Quant Time : 970510 03:18
Injected at: 970510 02:36

Page 1 of 2

850930968

F 703



Data File: >A3862::A1 Quant Output File: ^A3862::QT
Name: INST 59701, SAMPLE Instrument ID: INST "A"
Misc: 262219 ,QV5038 , L,5.5,0.53mm X 75M DB-624

Id File: ID624A::X2
Title: GENERAL IDFILE FOR INSTRUMENT A
Last Calibration: 970507 23:18 Last Qcal Time: <none>

Operator ID: LB3274
Quant Time : 970510 03:18
Injected at: 970510 02:36

Page 2 of 2

850930969 F 704

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330, FAX: 201-584-0515
MAY 12, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

BROMOFLUOROBENZENE (BFB) GC/MS TUNING AND MASS CALIBRATION
VOLATILE ORGANIC COMPOUNDS

INSTRUMENT ID: 59701
LAB FILE NO: >A3785
BFB INJECTION DATE: 05/07/97

BATCH #: QV5038
BFB INJECTION TIME: 15:40

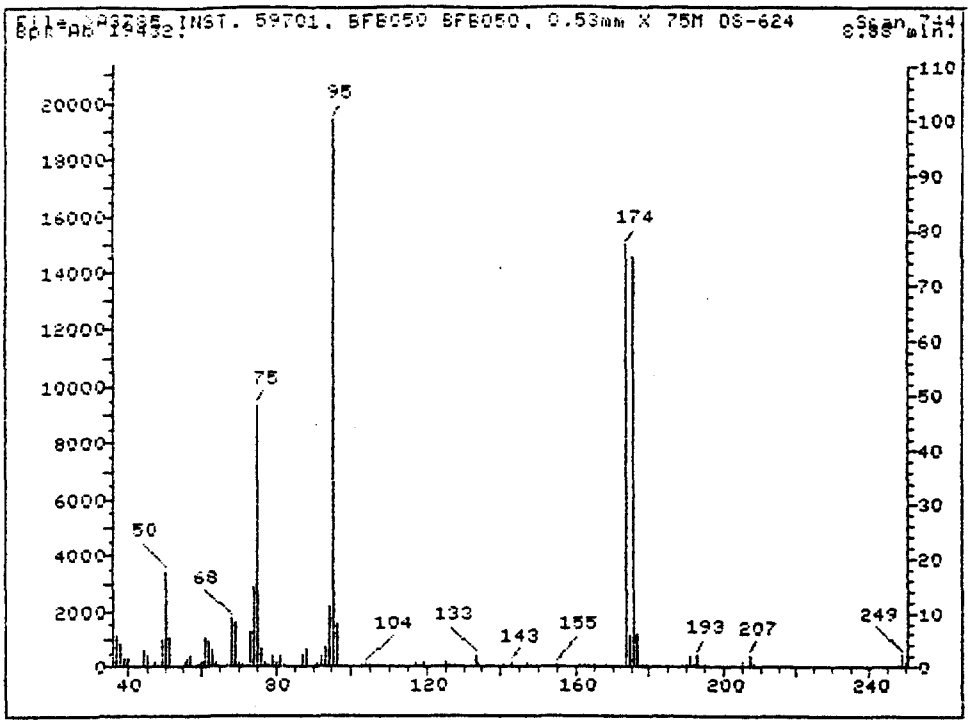
THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS

LAB SAMPLE ID	DATA FILE	ANALYSIS DATE	ANALYSIS TIME
VSTD200	>A3786	05/07/97	17:02
VSTD100	>A3787	05/07/97	17:57
VSTD050	>A3788	05/07/97	18:42
VSTD020	>A3789	05/07/97	19:26
VSTD005	>A3790	05/07/97	20:10

See next page for ION ABUNDANCE CRITERIA and Spectra

Copyright ICM, Inc.,1997.
All rights reserved.
ERI

850930970 F 705



GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

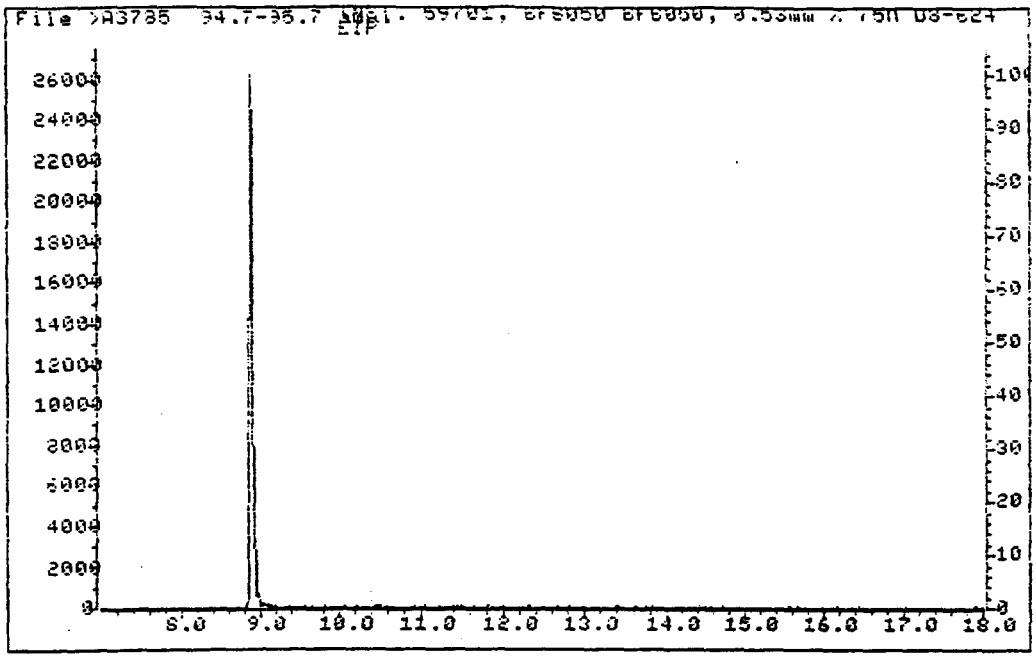
m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
50	15-40% of mass 95	17.76	17.76	Ok
75	30-60% of mass 95	48.17	48.17	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	7.76	7.76	Ok
173	Less than 1% of mass 95	0.00	0.00	Ok
174	Greater than 50% of mass 95	77.37	77.37	Ok
175	5-9% of mass 174	5.69	7.36	Ok
176	95-101% of mass 174	75.23	97.23	Ok
177	5-9% of mass 176	6.15	8.17	Ok

Injection Date: 05/07/97 Data File: >A3785
Injection Time: 15:40 Scan: 744

Analyst's signature: Kathleen Lock

Associated samples: _____

F 706



>A3785 INST. 59701, BFB050 BFB050, 0.53mm X 75M D8-624
744 NRM

File: >A3785 Scan #: 744 Retn. time: 8.88

F707

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
36.15	1.060	63.00	3.083	92.10	2.012	143.00	.813	176.95	6.150
37.05	5.939	64.00	.710	93.05	3.669	143.60	.108	178.05	.396
38.05	4.441	66.90	.530	94.05	11.090	145.80	.113	179.05	.576
39.05	1.662	68.00	9.206	95.05	100.000	147.00	.628	179.85	.129
40.05	1.647	69.00	8.280	96.05	7.760	147.90	.371	188.95	.309
44.05	3.088	70.00	.669	102.75	.592	148.50	.165	190.15	.273
45.05	2.017	70.80	.268	103.85	.664	149.00	.247	191.05	2.161
46.05	.124	73.10	6.433	104.95	.432	149.20	.257	192.05	.432
47.05	1.256	74.00	14.955	105.75	.211	154.90	.448	192.25	.386
48.05	.504	75.00	48.173	107.15	.288	156.00	.149	192.95	2.408
49.05	5.131	76.10	3.618	110.85	.216	157.00	.160	195.05	.355
50.05	17.759	76.90	.988	116.95	.654	161.00	.412	202.75	.149
51.05	5.645	77.50	.376	117.95	.298	162.80	.437	203.20	.242
55.15	.767	78.00	.443	119.05	1.127	163.70	.278	203.90	.170
56.00	1.369	79.00	2.269	125.05	1.081	165.00	.427	204.30	.149
57.00	2.275	79.90	.705	125.75	.247	165.40	.196	205.10	1.230
58.20	.180	80.90	2.254	126.25	.386	165.80	.180	207.00	2.233
58.90	.432	82.00	.525	127.85	.273	168.35	.273	208.00	.509
59.20	.262	87.00	2.305	128.95	.154	171.45	.154	249.05	2.383

61.00	5.352	90.60	.412	133.90	.659	174.95	5.692	250.85	1.070
62.00	4.668	91.00	.648	141.00	.592	175.95	75.231		

850930973

F 708

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330, FAX: 201-584-0515
MAY 12, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

BROMOFLUOROBENZENE (BFB) GC/MS TUNING AND MASS CALIBRATION
VOLATILE ORGANIC COMPOUNDS

INSTRUMENT ID: 59701
LAB FILE NO: >A3850
BFB INJECTION DATE: 05/09/97

BATCH #: QV5038
BFB INJECTION TIME: 17:27

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS

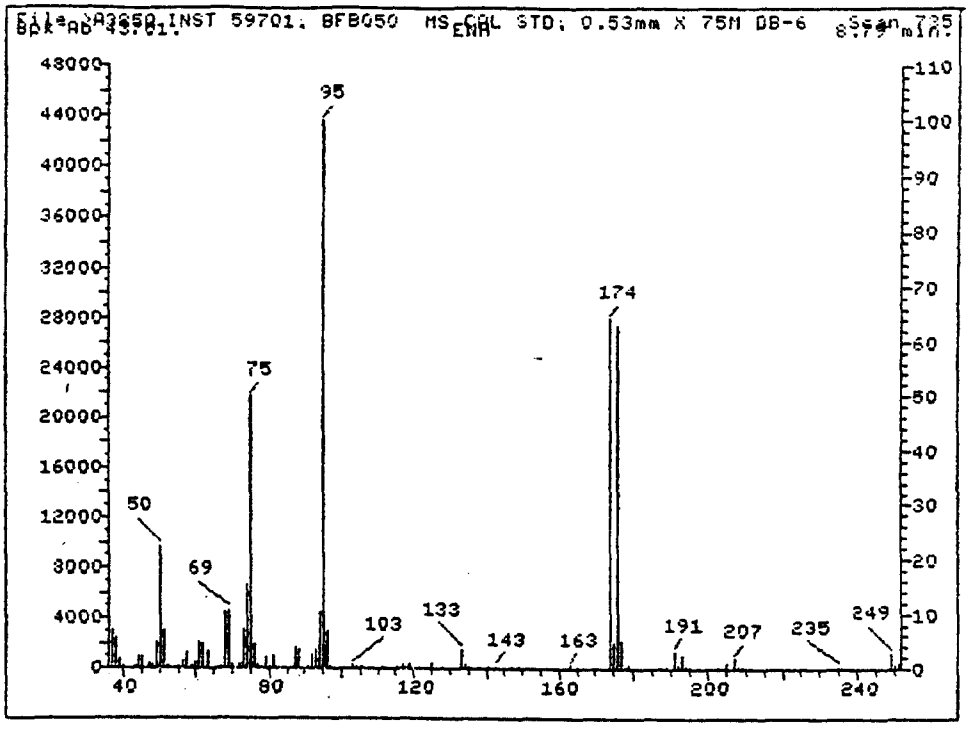
LAB SAMPLE ID	DATA FILE	ANALYSIS DATE	ANALYSIS TIME
VSTD020	>A3851	05/09/97	18:08
BLANK	>A3852	05/09/97	19:14
262214	>A3859	05/10/97	00:37
262218	>A3861	05/10/97	01:52
262219	>A3862	05/10/97	02:36
262510 S	>A3866	05/10/97	05:20
BLANK S	>A3867	05/10/97	05:58
262216	>A3881	05/10/97	16:40

See next page for ION ABUNDANCE CRITERIA and Spectra

Copyright ICM, Inc.,1997.
All rights reserved.
ERI

850930974

F 709



GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

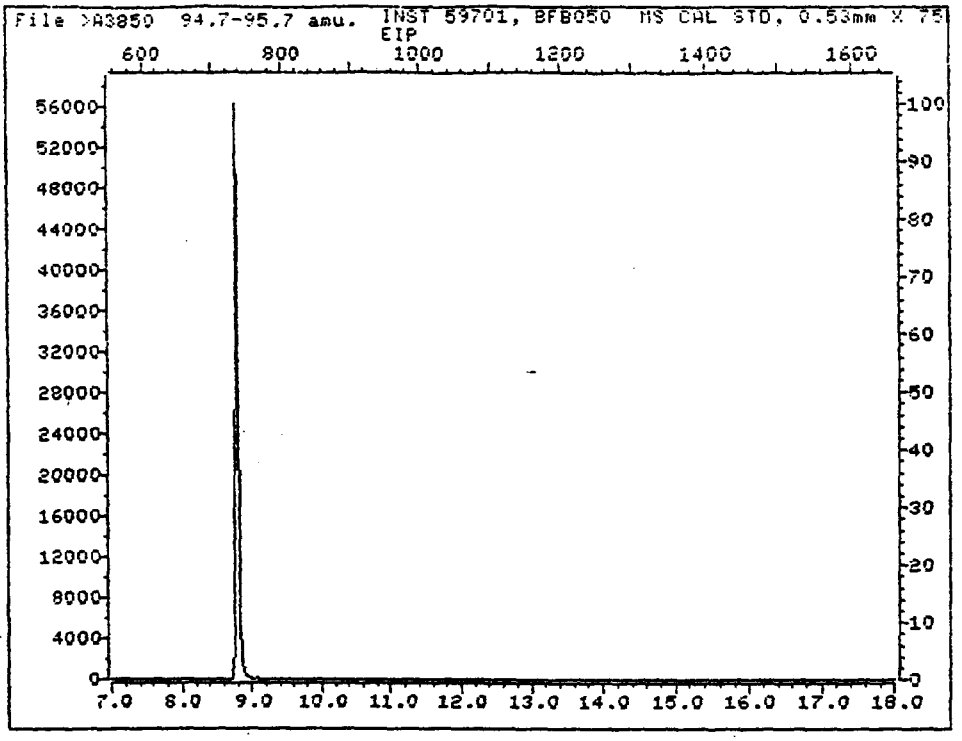
m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
50	15-40% of mass 95	22.18	22.18	Ok
75	30-60% of mass 95	49.63	49.63	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	6.83	6.83	Ok
173	Less than 1% of mass 95	0.00	0.00	Ok
174	Greater than 50% of mass 95	64.23	64.23	Ok
175	5-9% of mass 174	4.83	7.52	Ok
176	95-101% of mass 174	62.93	97.97	Ok
177	5-9% of mass 176	5.13	8.15	Ok

Injection Date: 05/09/97 Data File: >A3850
Injection Time: 17:27 Scan: 735

Analyst's signature: _____

Associated samples: _____

850930975 F 710



>A3850 INST 59701, BFB050 MS CAL STD, 0.53mm X 75M DB-624
735 NRM ENH

File: >A3850 Scan #: 735 Retn. time: 8.79

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
35.95	1.167	68.00	10.268	96.05	6.833	132.00	.115	173.95	64.229
37.05	6.848	69.00	10.662	97.05	.328	133.00	3.485	175.05	4.828
38.05	5.360	70.10	.766	100.85	.015	133.90	.663	175.95	62.926
39.05	1.940	72.10	.605	103.05	.758	135.00	.448	177.05	5.130
39.95	.585	73.10	7.283	103.95	.540	136.90	.076	178.05	.358
42.85	.287	74.00	15.353	105.05	.430	138.70	.021	179.05	.860
43.25	.118	75.10	49.632	105.85	.310	138.90	.024	180.95	.086
44.05	2.227	76.00	4.393	107.05	.073	139.90	.020	187.15	.011
45.05	2.132	77.10	.735	109.95	.194	141.00	.526	189.15	.292
47.05	1.070	78.00	.470	110.45	.098	143.00	.578	191.05	3.152
48.05	.779	79.00	2.268	111.05	.280	145.00	.067	191.95	.632
49.05	4.851	80.00	.575	112.05	.161	145.90	.130	193.05	2.622
50.05	22.183	81.00	2.435	115.05	.347	147.00	.451	194.05	.481
51.05	6.730	81.90	.478	115.95	.190	148.00	.183	195.15	.297
52.05	.311	83.00	.051	116.95	.703	149.00	.289	203.10	.356
54.95	.342	85.10	.081	118.15	.563	149.90	.080	205.00	1.080
56.00	1.573	86.00	.052	119.05	1.083	152.00	.014	206.00	.241
57.00	2.800	87.10	3.743	120.95	.166	157.00	.134	207.10	2.038
57.90	.178	88.10	3.562	123.95	.041	162.10	.048	208.10	.446
58.90	.592	89.80	.072	125.05	1.066	163.00	.606	209.10	.292

F 711

59.10	.100	91.00	.307	125.65	.147	164.00	.145	235.10	.432
60.00	.975	92.10	2.503	126.05	.159	165.00	.489	248.05	2.858
61.00	4.808	92.95	3.406	127.95	.310	166.10	.077	250.05	.819
62.00	4.551	94.05	10.127	129.05	.093	166.95	.043	251.05	1.107
63.10	3.264	95.05	100.000	131.00	.211	170.25	.015	251.95	.220
67.10	.291								

850930977

F 712

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330, FAX: 201-584-0515
MAY 8, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

BROMOFLUOROBENZENE (BFB) GC/MS TUNING AND MASS CALIBRATION
VOLATILE ORGANIC COMPOUNDS

INSTRUMENT ID: 59701
LAB FILE NO: >A3692
BFB INJECTION DATE: 05/02/97

BATCH #: QV5041
BFB INJECTION TIME: 08:48

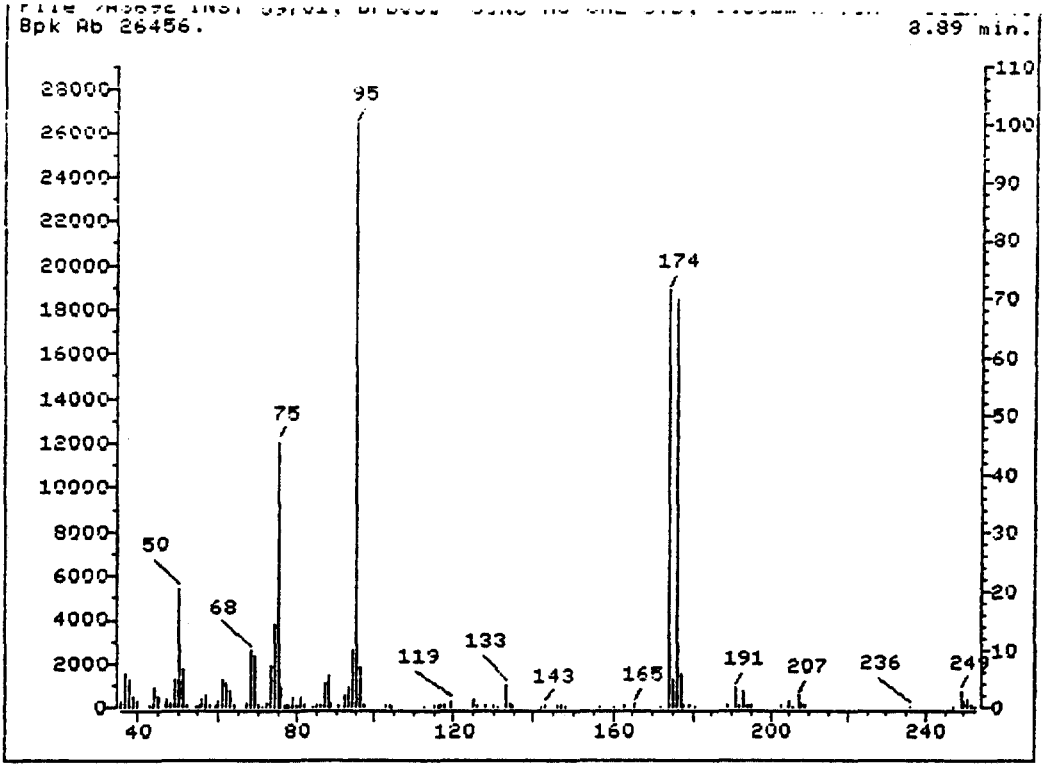
THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS

LAB SAMPLE ID	DATA FILE	ANALYSIS DATE	ANALYSIS TIME
VSTD020	>A3694	05/02/97	10:31
VSTD050	>A3695	05/02/97	11:31
VSTD100	>A3696	05/02/97	12:31
VSTD150	>A3697	05/02/97	13:26
VSTD200	>A3698	05/02/97	14:21

See next page for ION ABUNDANCE CRITERIA and Spectra

Copyright ICM, Inc.,1997.
All rights reserved.
EIL

850930978 F 713



GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

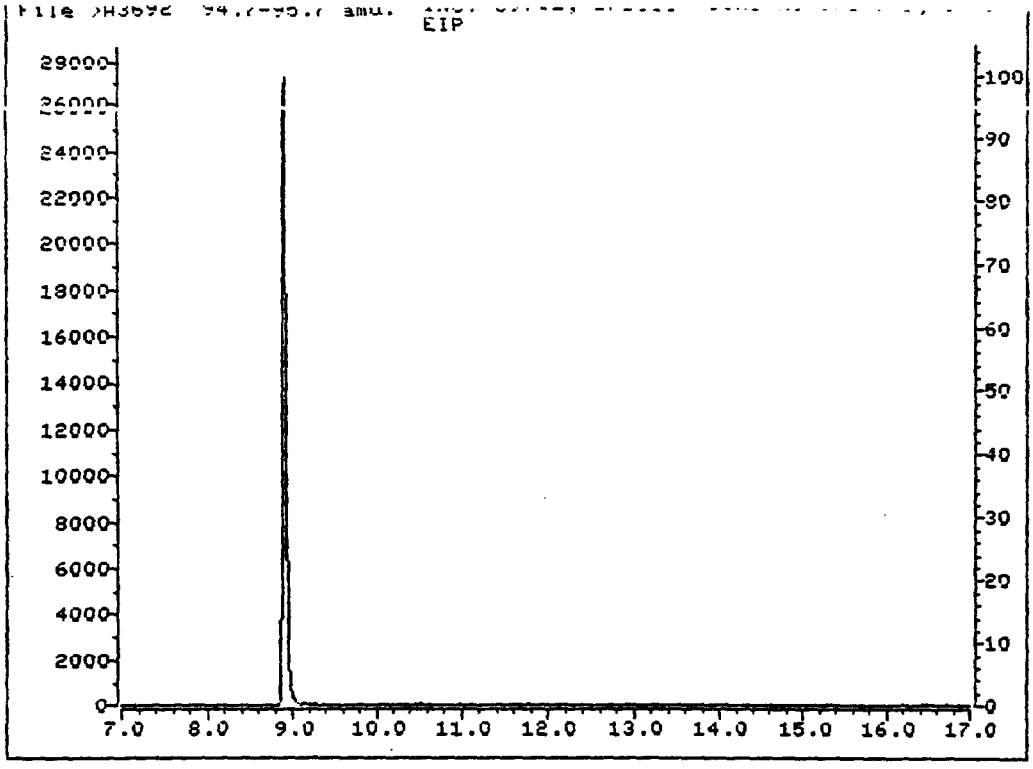
m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
50	15-40% of mass 95	20.38	20.38	Ok
75	30-60% of mass 95	45.51	45.51	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	6.86	6.86	Ok
173	Less than 1% of mass 95	0.00	0.00	Ok
174	Greater than 50% of mass 95	71.36	71.36	Ok
175	5-9% of mass 174	4.88	6.84	Ok
176	95-101% of mass 174	69.67	97.63	Ok
177	5-9% of mass 176	5.77	8.28	Ok

Injection Date: 05/02/97 Data File: >A3692
Injection Time: 08:48 Scan: 745

Analyst's signature: L. Santacana

Associated samples: _____

850930979 F714



>A3692 INST 59701, BFB050 50NG MS CAL STD, 0.53mm X 75M DB624
745 NRM

File: >A3692 Scan #: 745 Retn. time: 8.89

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
35.95	1.043	61.00	4.971	86.00	.276	125.85	.420	177.85	.401
37.05	5.881	62.00	4.060	86.20	.261	127.75	.431	179.05	.567
38.05	4.959	63.00	2.903	87.00	4.090	130.00	.348	180.75	.208
39.05	1.712	63.80	.336	88.00	5.413	130.80	.215	188.95	.378
39.95	.987	67.00	.643	88.70	.624	131.00	.223	190.95	3.417
42.85	.314	68.00	9.812	90.80	.321	133.10	3.829	192.05	.514
44.05	3.417	69.00	8.992	92.00	2.241	134.00	.809	192.95	2.767
45.05	1.875	70.00	.559	93.05	3.440	134.80	.359	194.05	.488
47.05	1.342	71.20	.163	94.05	9.865	141.70	.087	195.05	.287
47.95	.605	72.10	.714	95.05	100.000	143.00	.563	202.95	.363
49.05	4.800	73.00	7.220	96.05	6.857	145.80	.348	205.00	.968
50.05	20.385	74.00	14.201	97.15	.302	146.90	.359	206.00	.253
51.05	6.358	75.00	45.509	103.05	.578	148.00	.231	207.10	2.034
52.05	.314	76.00	3.591	103.85	.499	156.80	.117	208.00	.601
54.35	.178	77.00	.389	104.55	.144	160.00	.106	209.00	.416
54.65	.223	77.30	.389	112.65	.106	163.00	.522	236.00	.208
54.85	.234	78.00	.272	115.05	.333	165.10	.627	247.05	.189
55.35	.355	79.00	1.663	115.95	.340	171.95	.223	249.05	2.907
56.00	1.542	80.00	.544	116.95	.423	173.95	71.364	250.05	1.017
57.00	2.000	80.90	1.863	117.95	.469	174.95	4.884	250.95	1.285
58.00	.276	81.80	.310	119.05	1.160	175.95	69.670	252.05	.355
59.20	.370	84.20	.140	124.95	1.346	176.95	5.768	253.05	.170
60.00	.941	85.20	.276						

850930980

F 715

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330, FAX: 201-584-0515
MAY 8, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

BROMOFLUOROBENZENE (BFB) GC/MS TUNING AND MASS CALIBRATION
VOLATILE ORGANIC COMPOUNDS

INSTRUMENT ID: 59701
LAB FILE NO: >A3767
BFB INJECTION DATE: 05/06/97

BATCH #: QV5041
BFB INJECTION TIME: 18:05

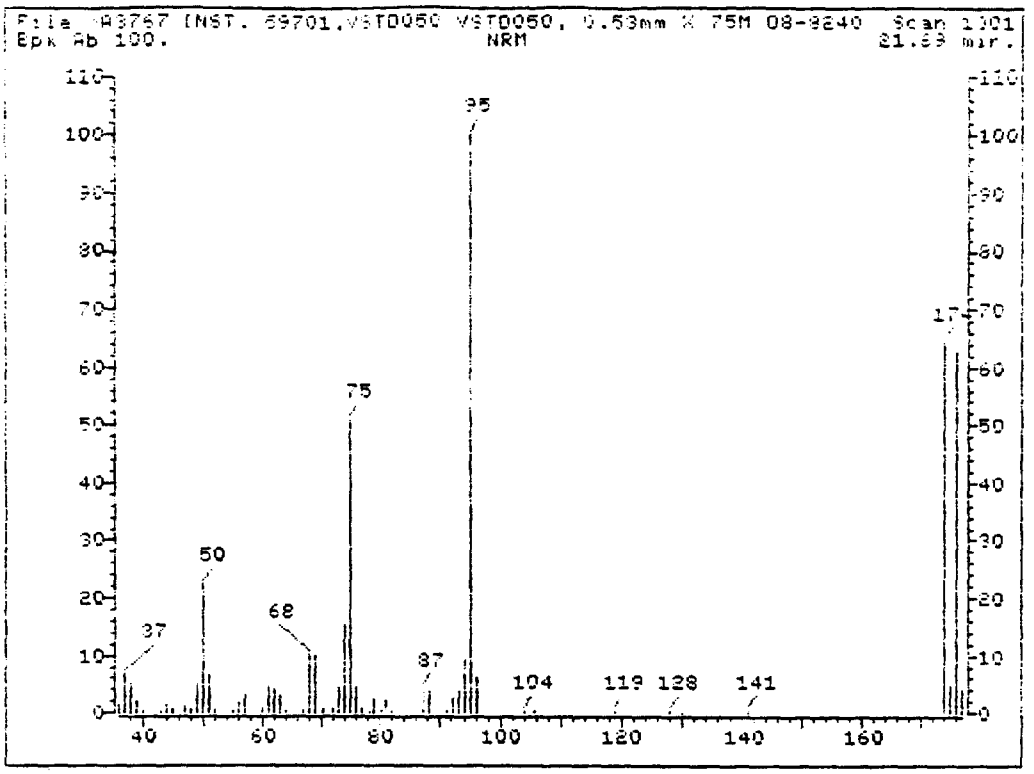
THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS

LAB SAMPLE ID	DATA FILE	ANALYSIS DATE	ANALYSIS TIME
VSTD050	>A3768	05/06/97	19:31
BLANK	>A3769	05/06/97	20:53
262217	>A3774	05/07/97	00:21
262406 MS	>A3779	05/07/97	04:38
262406 MSD	>A3780	05/07/97	05:33

See next page for ION ABUNDANCE CRITERIA and Spectra

Copyright ICM, Inc.,1997.
All rights reserved.
EIL

F 716



GC/MS PERFORMANCE STANDARD

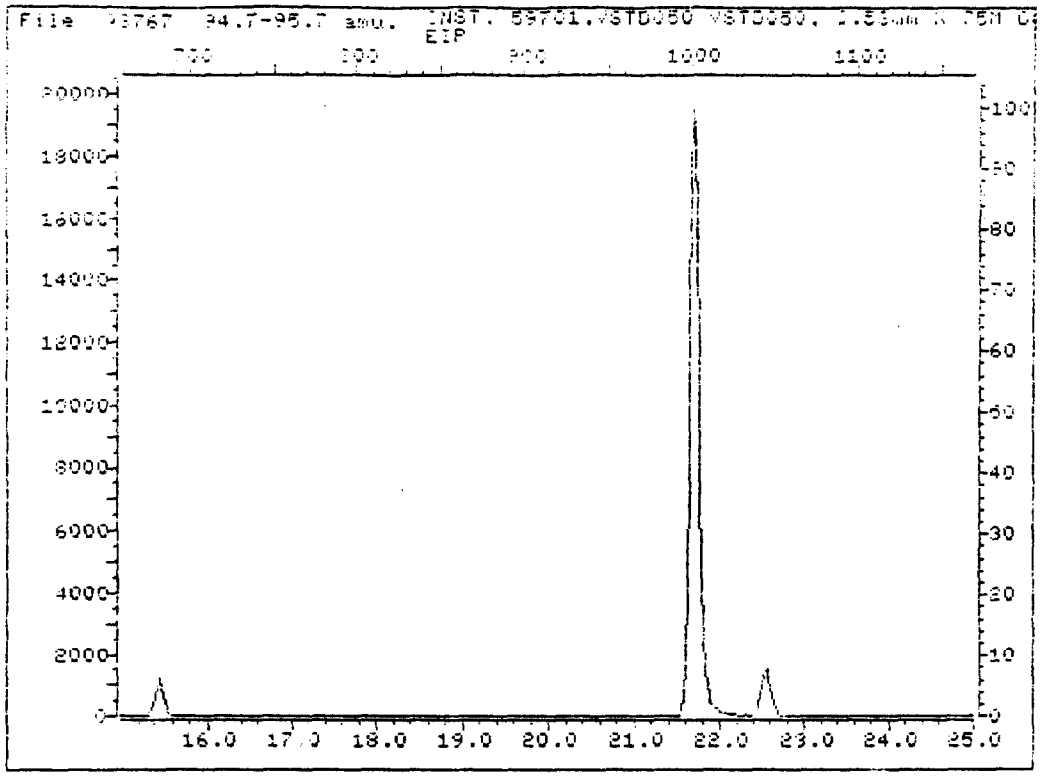
Bromofluorobenzene (BFB)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
50	15-40% of mass 95	22.31	22.31	Ok
75	30-60% of mass 95	50.82	50.82	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	6.10	6.10	Ok
173	Less than 1% of mass 95	0.00	0.00	Ok
174	Greater than 50% of mass 95	64.32	64.32	Ok
175	5-9% of mass 174	4.68	7.27	Ok
176	95-101% of mass 174	62.67	97.43	Ok
177	5-9% of mass 176	4.22	6.74	Ok

Injection Date: 05/06/97 Data File: >A3767
Injection Time: 18:05 Scan: 1001

Analyst's signature: L Santacana

Associated samples: _____



>A3767 INST. 59701,VSTD050 VSTD050, 0.53mm X 7EM DB-8240
1001 NRM

File: >A3767 Scan #: 1001 Retn. time: 21.69

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
36.10	1.513	51.10	6.592	68.05	10.211	80.05	.567	104.00	.368
37.10	6.684	52.10	.342	69.05	9.883	80.95	2.203	105.90	.266
38.10	5.279	55.10	.399	70.15	.736	81.95	.496	118.00	.240
39.10	2.059	56.05	1.620	72.05	.649	87.05	4.191	119.00	.429
40.10	.501	57.05	3.092	73.05	4.334	88.05	3.685	128.10	.281
43.10	.378	60.05	.940	74.05	15.311	91.05	.378	129.95	.256
44.00	1.395	61.05	4.988	75.05	50.823	92.05	2.310	141.05	.511
45.00	.894	62.05	4.027	76.05	4.518	93.00	3.705	174.00	64.324
47.10	1.119	63.05	3.153	77.05	.905	94.10	9.194	175.00	4.676
48.00	.772	64.05	.332	78.15	.577	95.10	100.000	176.00	62.674
49.10	4.988	67.05	.383	78.95	2.392	96.10	6.097	177.00	4.221
50.10	22.312								

850930983

F 718

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330, FAX: 201-584-0515
MAY 8, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

BROMOFLUOROBENZENE (BFB) GC/MS TUNING AND MASS CALIBRATION
VOLATILE ORGANIC COMPOUNDS

INSTRUMENT ID: 59701
LAB FILE NO: >A3781
BFB INJECTION DATE: 05/07/97

BATCH #: QV5041
BFB INJECTION TIME: 09:24

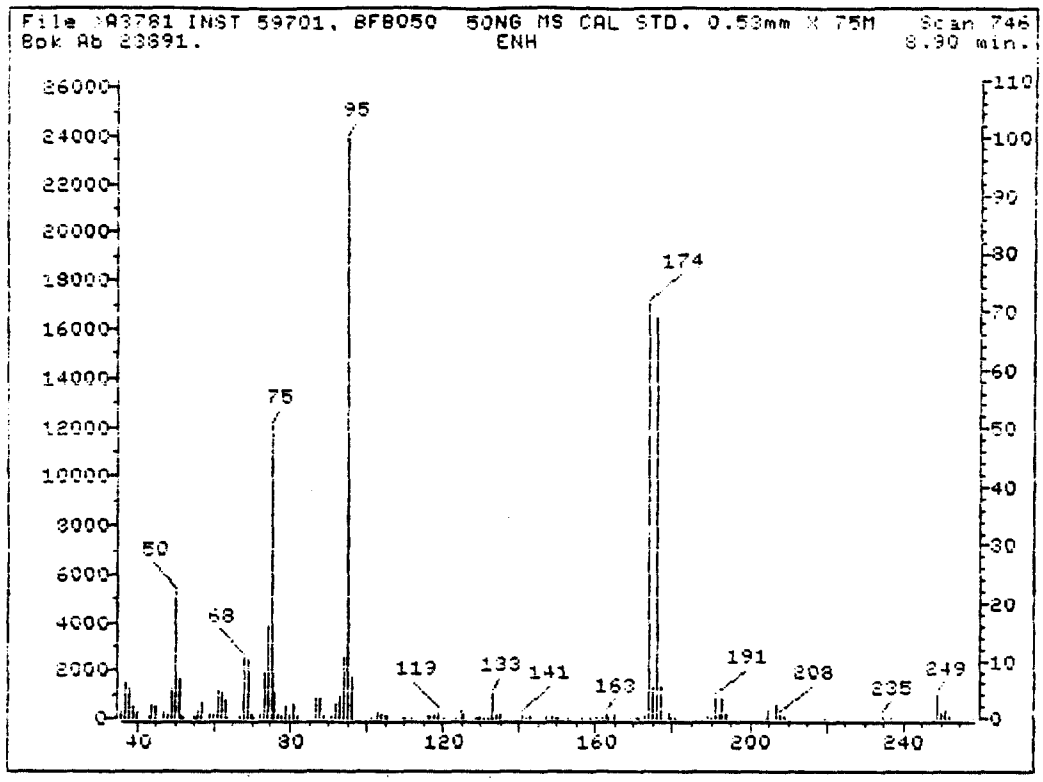
THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS

LAB SAMPLE ID	DATA FILE	ANALYSIS DATE	ANALYSIS TIME
VSTD050	>A3782	05/07/97	10:09
BLANK	>A3783	05/07/97	11:15
262215	>A3784	05/07/97	12:22

See next page for ION ABUNDANCE CRITERIA and Spectra

Copyright ICM, Inc.,1997.
All rights reserved.
EIL

850930984 F 719



GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
50	15-40% of mass 95	22.04	22.04	Ok
75	30-60% of mass 95	50.30	50.30	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	7.18	7.18	Ok
173	Less than 1% of mass 95	.47	.47	Ok
174	Greater than 50% of mass 95	71.28	71.28	Ok
175	5-9% of mass 174	5.39	7.57	Ok
176	95-101% of mass 174	68.99	96.80	Ok
177	5-9% of mass 176	5.61	8.13	Ok

Injection Date: 05/07/97 Data File: >A3781
Injection Time: 09:24 Scan: 746

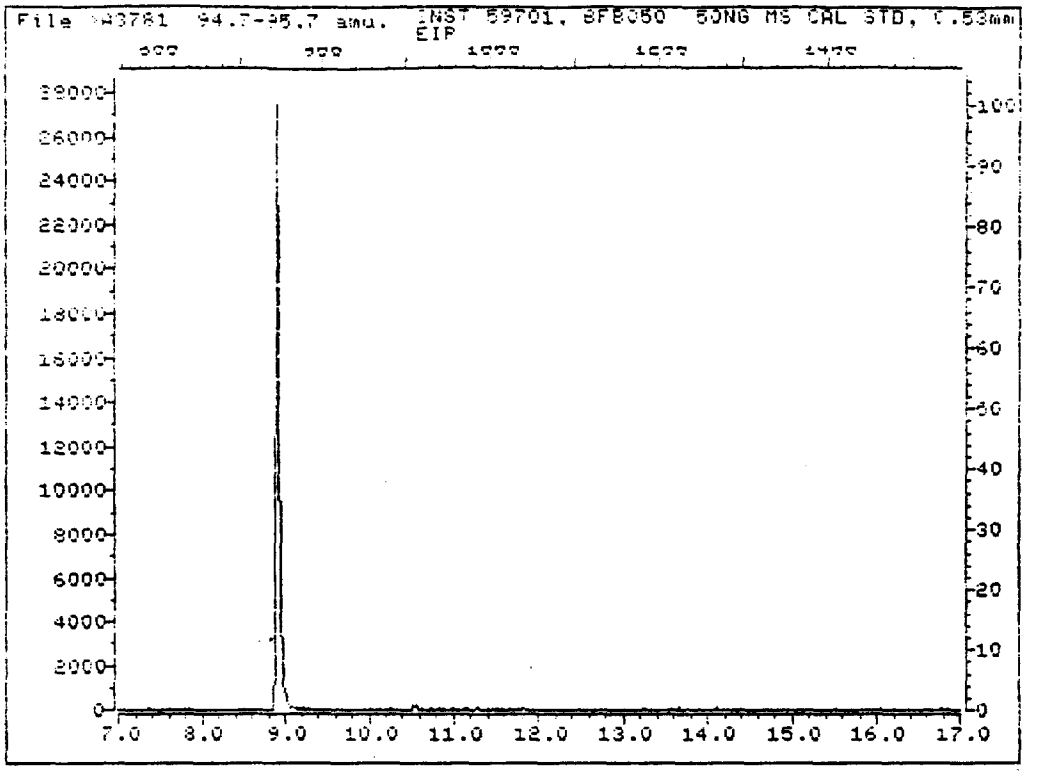
Analyst's signature: K Santacana

Associated samples: _____

850930985

F 720

850930986



>A3781 INST 59701, BFB050 50NG MS CAL STD, 0.53mm X 75M DB624
746 NRM ENH

File: >A3781 Scan #: 746 Retn. time: 8.90

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
36.05	1.175	64.00	.134	95.05	100.000	133.00	4.452	175.95	8.995
37.05	6.178	67.10	.446	96.05	7.179	133.90	.677	176.95	5.606
38.05	5.281	68.00	10.487	101.75	.033	135.00	.632	179.05	1.097
39.05	2.068	69.10	10.213	103.05	1.179	140.90	.610	179.75	.033
40.05	1.173	70.00	.832	104.05	.688	141.80	.091	181.05	.067
43.25	.349	70.50	.056	105.05	.508	143.00	.467	189.05	.360
44.05	2.456	72.00	.784	105.95	.417	147.00	.559	190.15	.046
45.05	2.189	73.10	7.691	109.95	.237	149.00	.424	191.05	3.470
47.05	1.039	74.00	15.998	110.55	.187	149.90	.087	192.15	.858
48.05	.889	75.10	50.298	112.15	.166	150.60	.039	193.05	3.452
49.05	5.068	76.00	4.533	116.05	.292	152.80	.106	194.05	.618
50.05	22.036	77.00	.797	116.85	.523	156.60	.035	204.30	.137
51.05	6.810	78.00	.525	118.05	.854	158.90	.077	205.00	1.279
51.85	.335	78.90	2.024	119.05	1.231	160.50	.063	207.10	2.588
52.25	.053	80.00	.783	120.65	.077	162.00	.059	208.10	.594
54.95	.573	80.90	2.556	123.35	.035	163.00	.914	209.00	.333
55.15	.131	82.00	.559	125.05	1.385	163.70	.039	219.40	.036
56.00	1.476	87.00	3.421	125.65	.593	165.10	.668	235.00	.522
57.00	2.742	88.00	3.513	128.85	.038	169.05	.035	237.00	.068
59.00	.674	88.90	.318	129.45	.063	170.95	.060	248.95	3.978
60.00	.959	90.90	.578	130.00	.356	171.25	.042	249.95	1.129
61.00	4.915	92.10	2.563	130.90	.215	172.85	.466	250.95	1.366
62.00	4.544	93.05	3.805	131.80	.088	173.95	71.279	251.95	.413
63.00	3.188	94.05	10.505	132.00	.043	174.95	5.393	258.65	.038

7

F-727

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330, FAX: 201-584-0515
MAY 12, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

Volatile Method Blank Summary by GC/MS

Data File: >A3852
Batch No: QV5038
Matrix: Water

Associated Samples

Sample #	Data File	Analysis Date
262214	>A3859	05/10/97
262218	>A3861	05/10/97
262219	>A3862	05/10/97
262510 S	>A3866	05/10/97
BLANK S	>A3867	05/10/97
262216	>A3881	05/10/97

F 722

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330, FAX: 201-584-0515
MAY 12, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

TARGET COMPOUND LIST - VOLATILE ANALYSIS BY GC/MS
PLUS 10 PEAKS

Sample ID: Method Blank
Data File: >A3852
Analysis Date: 05/09/97

Batch Number: QV5038
Dilution Factor: 1
Column: DB-624

Matrix: Water Init Sample volume= 5ml Final volume= 5ml

Conc. in Sample = (Conc. on Quant Report/Initial Volume)*Final Volume

Parameter	Method Blank ug/l	Practical Quantitation Limit ug/l	Minimum Detection Limit ug/l
Chloromethane	U	5	4.6
Bromomethane	U	5	3.8
Vinyl chloride	U	5	1.7
Chloroethane	U	5	1.8
Methylene chloride	U	5	2.7
Acetone	U	20	4.5
Carbon disulfide	U	5	1.7
1,1-Dichloroethene	U	5	1.7
1,1-Dichloroethane	U	5	1.4
trans-1,2-Dichloroethene	U	5	1.7
cis-1,2-Dichloroethene	U	5	1.7
Chloroform	U	5	1.6
1,2-Dichloroethane	U	5	1.9
2-Butanone	U	20	2.4
1,1,1-Trichloroethane	U	5	0.5
Carbon tetrachloride	U	5	0.6
Bromodichloromethane	U	5	0.6
1,2-Dichloropropane	U	5	0.6
cis-1,3-Dichloropropene	U	5	0.5
Trichloroethene	U	5	0.6
Dibromochloromethane	U	5	0.6
1,1,2-Trichloroethane	U	5	0.5
Benzene	U	5	0.5
trans-1,3-Dichloropropene	U	5	0.6
Bromoform	U	5	0.8
4-Methyl-2-pentanone	U	20	1.1
2-Hexanone	U	20	1.2
Tetrachloroethene	U	5	0.7
1,1,2,2-Tetrachloroethane	U	5	0.5
Toluene	U	5	0.8
Chlorobenzene	U	5	0.6
Ethylbenzene	U	5	0.7
Styrene	U	5	1
p&m-Xylene	U	5	0.9
o-Xylene	U	5	0.9
total Xylenes	U	5	0.9
1,3-Dichlorobenzene	U	10	0.7
1,4-Dichlorobenzene	U	10	0.5
1,2-Dichlorobenzene	U	10	1.5

ug/l = micrograms/liter or ppb
ND: Not Determined.
IND: Indeterminable.
U: Indicates a compound was analyzed for but not detected at the MDL.
J: Indicates an estimated value. It is utilized when a reported value meets the identification criteria but the result is less than the specified detection limit but greater than zero.

INDUSTRIAL CORROSION MANAGEMENT, INC.
Richard Levine, President
Copyright ICM, Inc., 1997.
All rights reserved.
ERI

JU 78'

850930988

F 723

INDUSTRIAL CORROSION MANAGEMENT, Inc.
1152 Route 10
Randolph, NJ 07869
201-584-0330
Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

MAY 12, 1997

LIBRARY SEARCH RESULTS OF NONTARGETED PEAKS WITH
ESTIMATED CONCENTRATION OF TENTATIVELY IDENTIFIED COMPOUNDS.

Data file name: >A3852
Lab number: BLANK
Fraction: VOLATILE

Initial Sample Wt/Vol=5 Final Volume=5

This BLANK corresponds to the following lab numbers:
262510 262214 262218 262219 262419 262420 262216

CAS No.	Retention Time	Compound Name	Molecular Weight	Estimated Concentration ug/l

None found

Estimated total non-target compound concentration (excluding compounds flagged with A, B or **) in ug/l is: 0

A: Indicates that the compound is an acetone based aldol-type condensation product formed by concentrating the extraction solvent (1:1 acetone/methylene chloride).
B: Indicates that the analyte was found in the blank as well as the sample. It further indicates possible/probable blank contamination.
C: Co-eluting and/or poorly resolved non-target compounds cause superimposed spectra that prevent identification of individual compounds.
* Compounds flagged are from diluted analysis.
** This compound is not flagged B; it was not found in the corresponding blank. However, it is commonly found as a laboratory contaminant.

Copyright ICM, Inc., 1997.
All rights reserved.
ERI

850930989

F 724

Operator ID: LB3274 Quant Rev: 7 Quant Time: 970509 19:55
Output File: ^A3852::QT Injected at: 970509 19:14
Data File: >A3852::A1 Dilution Factor: 1.00000
Name: INST 59701, BLANK Instrument ID: INST "A"
Misc: BLANK .QV , L,5,5,0.53mm X 75M DB-624

ID File: ID624A::X2
Title: GENERAL IDFILE FOR INSTRUMENT A
Last Calibration: 970507 23:18 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	6.87	128.0	20931	30.00	UG/L	9
22)	1,2-Dichloroethane-d4	7.93	65.0	46586	32.37	UG/L	8
27)	*1,4-Difluorobenzene	8.85	114.0	123402	30.00	UG/L	9
44)	*Chlorobenzene-d5	17.12	117.0	90408	30.00	UG/L	9
49)	Toluene-d8	12.52	98.0	104967	29.43	UG/L	9
56)	Bromofluorobenzene	21.69	95.0	76734	30.77	UG/L	9

* Compound is ISTD

5/12/97

850930990 F 725

MS data file header from : >A3852::A1

Sample: INST 59701, BLANK Operator: LB3174 MS 5/09/97 19:14
Misc : BLANK ,QV , L,5,5,0.53mm X 75M DB-624
Sys. #: 1 MS model: 70 SW/HW rev.: LF ALS # : 0 Equip ID: INST "A
Method File: NOAAEX Tuning File: APEI01 No. of extra records: 2
Source temp.: N/A Analyzer temp.: N/A Transfer line temp. : 0

Chromatographic temperatures :	40.	220.	0.	0.	0.
Chromatographic times, min. :	1.0	20.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	3.0	0.0	0.0	.2	0.0

>A3852 INST 59701, BLANK BLANK ,QV , L,5,5,0.53mm X 75M DB-

35.01 260.0 TIC
Upslope: .2000 Area Reject: 15102. Max Peaks: 7 Bunch: -1 Valley >100 %
Onslope: 0.0000 Results File IA3852 Sorted by Time/Area INT

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of tota
1	2.41 cw	4	17	37	125265	996839	990452	100.00	38.4
2	6.89 I	239	246	257	27394	155582	151017	15.25	5.8
3	7.93 S	289	299	308	21145	119583	118379	11.95	4.5
4	8.85 I	339	346	358	53712	321202	318903	32.20	12.3
5	12.52 S	522	534	550	47915	338540	333149	33.64	12.9
6	17.12 I	759	769	789	42859	320632	315313	31.84	12.2
7	21.69 S	992	1003	1022	44419	347853	347853	35.12	13.5

Sum of corrected areas: 2575066.

Summary of Unknowns PBM Library Search and Quantitation

Standard	Concentration	Area	Retention Time	Unknown Window
1	30.0	151017.	6.87	2.10 - 7.86
2	30.0	318903.	8.85	7.86 - 12.98
3	30.0	315313.	17.12	12.98 - 40.05

PLEASE NOTE THE NOTATION USED FOR IDENTIFYING THE PEAKS ON THIS PAGE

NT=NON TARGETED COMPOUND T= TARGETED COMPOUND (COMPOUNDS FROM SAMPLE)

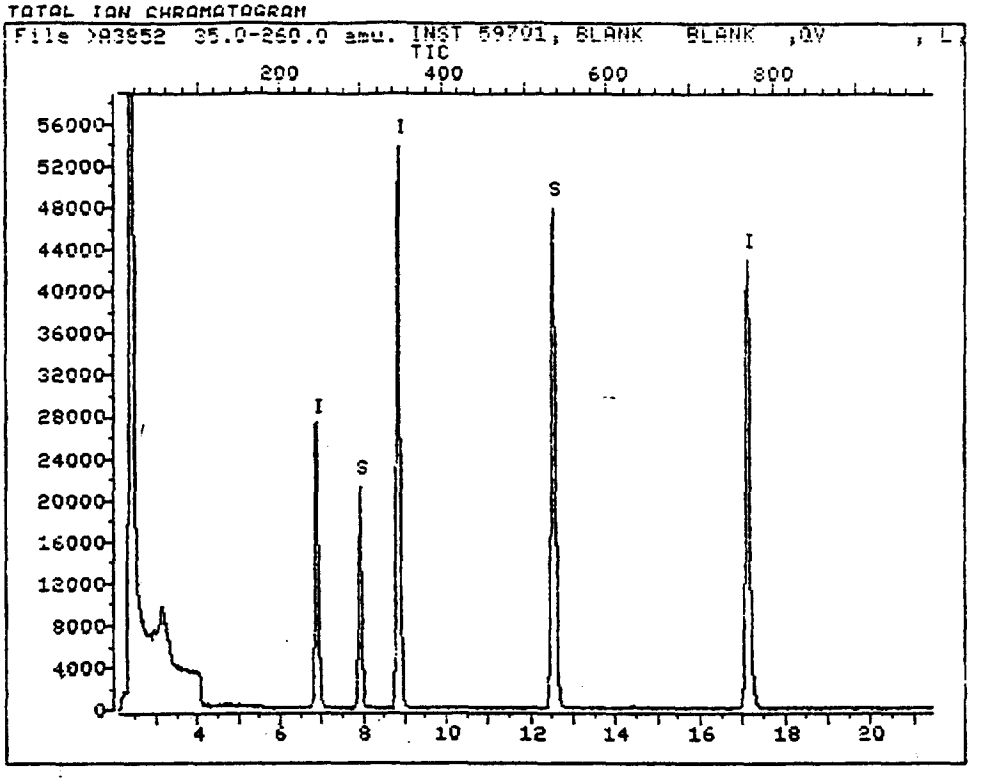
I=INTERNAL STANDARD COMPOUND S=SURROGATE COMPOUND (SYSTEM MONITORING)

$$\text{Unknown Concentration} = \left| \frac{\text{Conc Int Std} * \text{Area Unknown}}{\text{Area Int Std}} \right| * \text{Correction Factor}$$

850930991

F 726

TOTAL ION CHROMATOGRAM



Data File: >A3852::A1 Quant Output File: ^A3852::QT
Name: INST 59701, BLANK Instrument ID: INST "A"
Misc: BLANK ,QV , L,5,5,0.53mm X 75M DB-624

Id File: ID624A::X2
Title: GENERAL IDFILE FOR INSTRUMENT A
Last Calibration: 970507 23:18 Last Qcal Time: <none>

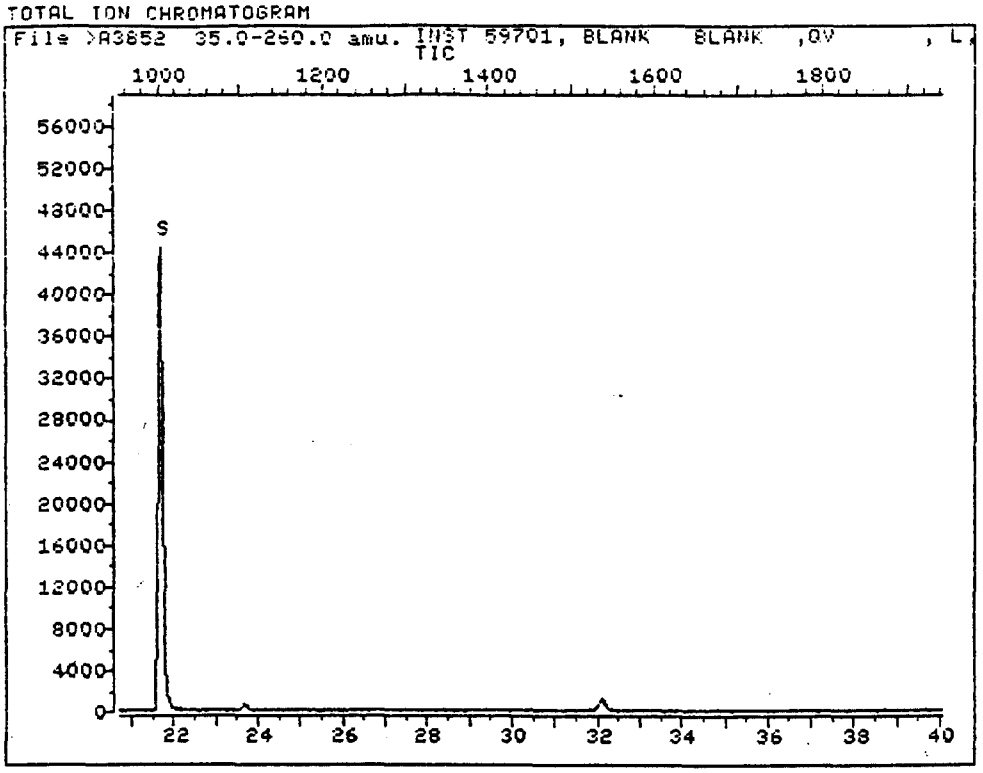
Operator ID: LB3274
Quant Time : 970509 19:55
Injected at: 970509 19:14

Page 1 of 2

850930992

F 727

TOTAL ION CHROMATOGRAM



Data File: >A3852::A1 Quant Output File: ^A3852::QT
Name: INST 59701, BLANK Instrument ID: INST "A"
Misc: BLANK ,QV , L,5,5,0.53mm X 75M DB-624

Id File: ID624A::X2
Title: GENERAL IDFILE FOR INSTRUMENT A
Last Calibration: 970507 23:18 Last Qcal Time: <none>

Operator ID: LB3274
Quant Time : 970509 19:55
Injected at: 970509 19:14

Page 2 of 2

850930993

F 728

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330, FAX: 201-584-0515
MAY 8, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

Volatile Method Blank Summary by GC/MS

Data File: >A3769
Batch No: QV5041
Matrix: Soil

Associated Samples

Sample #	Data File	Analysis Date
262217	>A3774	05/07/97
262406 MS	>A3779	05/07/97
262406 MSD	>A3780	05/07/97

850930994

F 729

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330, FAX: 201-584-0515
MAY 8, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

TARGET COMPOUND LIST - VOLATILE ANALYSIS BY GC/MS
PLUS 10 PEAKS

Sample ID: Method Blank
Data File: >A3769
Analysis Date: 05/06/97

Batch Number: QV5041
Dilution Factor: 1
Column: DB-624

Matrix: Soil Init Sample Wght= 5g Final volume= 5ml

Initial sample weight DWB= 5g

Conc. in Sample = (Conc. on Quant Report/Initial Sample Weight DWB)*Final Volume

Parameter	Method Blank ug/kg	Practical Quantitation Limit ug/kg	Minimum Detection Limit ug/kg
Chloromethane	U	5	4.6
Bromomethane	U	5	3.8
Vinyl chloride	U	5	1.7
Chloroethane	U	5	1.8
Methylene chloride	U	5	2.7
Acetone	U	20	4.5
Carbon disulfide	U	5	1.7
1,1-Dichloroethene	U	5	1.7
1,1-Dichloroethane	U	5	1.4
trans-1,2-Dichloroethene	U	5	1.7
cis-1,2-Dichloroethene	U	5	1.7
Chloroform	U	5	1.6
1,2-Dichloroethane	U	5	1.9
2-Butanone	U	20	2.4
1,1,1-Trichloroethane	U	5	0.5
Carbon tetrachloride	U	5	0.6
Bromodichloromethane	U	5	0.6
1,2-Dichloropropane	U	5	0.6
cis-1,3-Dichloropropene	U	5	0.5
Trichloroethene	U	5	0.6
Dibromochloromethane	U	5	0.6
1,1,2-Trichloroethane	U	5	0.5
Benzene	U	5	0.5
trans-1,3-Dichloropropene	U	5	0.6
Bromoform	U	5	0.8
4-Methyl-2-pentanone	U	20	1.1
2-Hexanone	U	20	1.2
Tetrachloroethene	U	5	0.7
1,1,2,2-Tetrachloroethane	U	5	0.5
Toluene	U	5	0.8
Chlorobenzene	U	5	0.6
Ethylbenzene	U	5	0.7
Styrene	U	5	1
p&m-Xylene	U	5	0.9
o-Xylene	U	5	0.9
total Xylenes	U	5	0.9

ug/kg = micrograms/kilogram or ppb
Results are in ug/kg (ppb); they are reported on a dry weight basis.
ND: Not Determined.
IND: Indeterminable.
U: Indicates a compound was analyzed for but not detected at the PQL.
J: Indicates an estimated value. It is utilized when a reported value meets the identification criteria but the result is less than the specified detection limit but greater than zero.

INDUSTRIAL CORROSION MANAGEMENT, INC.
Richard Levine, President
Copyright ICM, Inc., 1997.
All rights reserved.
EIL

850930995

F 730

INDUSTRIAL CORROSION MANAGEMENT, Inc.
1152 Route 10
Randolph, NJ 07869
201-584-0330
MAY 8, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

LIBRARY SEARCH RESULTS OF NONTARGETED PEAKS WITH
ESTIMATED CONCENTRATION OF TENTATIVELY IDENTIFIED COMPOUNDS.

Data file name: >A3769
Lab number: BLANK
Fraction: VOLATILE

Initial Sample Wt/Vol=5 Final Volume=5
Moisture=0% Initial sample weight DWB=5

This BLANK corresponds to the following lab numbers:
262263 262217 262406 262408 262405 262407

CAS No.	Retention Time	Compound Name	Molecular Weight	Estimated Concentration ug/kg
None found				

Estimated total non-target compound concentration (excluding compounds flagged with A, B or **) in ug/kg is: 0

A: Indicates that the compound is an acetone based aldol-type condensation product formed by concentrating the extraction solvent (1:1 acetone/methylene chloride).
B: Indicates that the analyte was found in the blank as well as the sample. It further indicates possible/probable blank contamination.
C: Co-eluting and/or poorly resolved non-target compounds cause superimposed spectra that prevent identification of individual compounds.
* Compounds flagged are from diluted analysis.
** This compound is not flagged B; it was not found in the corresponding blank. However, it is commonly found as a laboratory contaminant.

Copyright ICM, Inc., 1997.
All rights reserved.
EIL

850930996 F 731

Operator ID: LB3274 Quant Rev: 7 Quant Time: 970506 21:28
Output File: ^A3769::QT Injected at: 970506 20:53
Data File: >A3769::E1 Dilution Factor: 1.00000
Name: INST. 59701.BLANK Instrument ID: INST "A"
Misc: BLANK,L,5,5,0.53mm X 75M DB-8240

ID File: ID824A::X2
Title: GENERAL IDFILE FOR INSTRUMENT A
Last Calibration: 970429 23:03 Last Qcal Time: 970506 19:31

	Compound	R.T.	Q ion	Area	Conc	Units
1)	*Bromochloromethane	6.85	128.0	38568	50.00	UG/L
22)	1,2-Dichloroethane-d4	7.91	65.0	80411	50.57	UG/L
27)	*1,4-Difluorobenzene	8.83	114.0	215741	50.00	UG/L
44)	*Chlorobenzene-d5	17.14	117.0	161392	50.00	UG/L
49)	Toluene-d8	12.52	98.0	193228	52.23	UG/L
56)	Bromofluorobenzene	21.73	95.0	134638	50.68	UG/L

* Compound is ISTD DLS10/97

850930997

F 732

>A3769 INST. 59701,BLANK BLANK,L,5,5,0.53mm X 75M DB-8240
35.0| 260.0 TIC
Upslope: .1000 Area Reject: 5.00 % Max Peaks: 8 Bunch: 1 Valley >100 %
Dnslope: -.0100 Results File VOIR78 Sorted by Time/Area INT

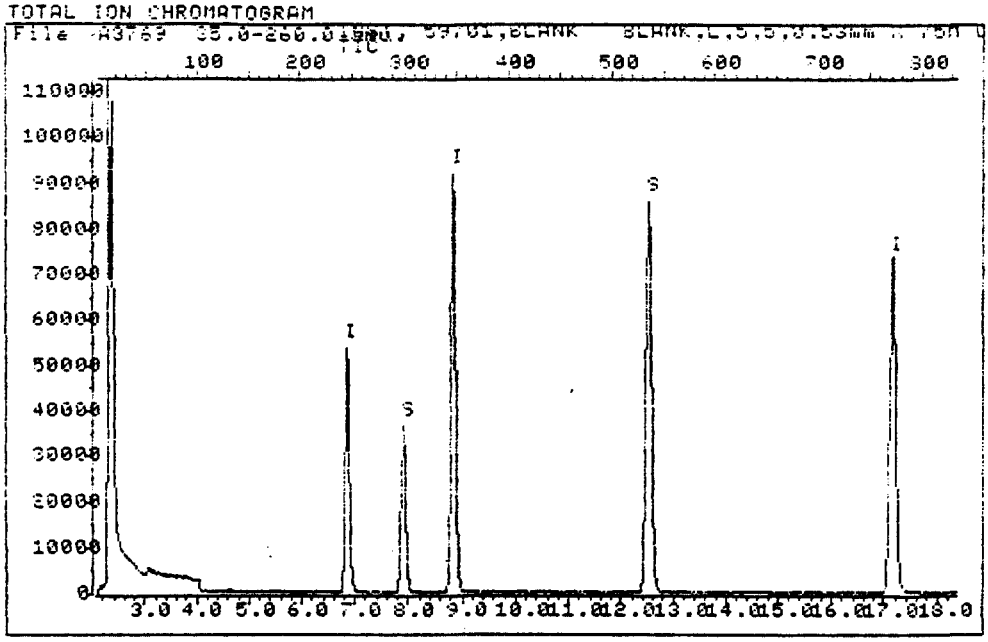
Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	2.31	10	13	14	111453	269673	264719*	43.83	7.265
2	2.37	14	16	46	106834	668698	580087*	96.06	15.920
3	6.85	239	245	257	53753	284043	278654	46.14	7.648
4	7.91	291	299	310	36517	212912	207223	34.31	5.687
5	8.83	339	346	359	92119	563437	555448	91.98	15.244
6	12.52	526	535	548	86303	610081	603904	100.00	16.574
7	17.16	761	772	790	74340	561030	554594	91.83	15.221
8	21.73	997	1006	1025	77847	607445	599025	99.19	16.440

Sum of corrected areas: 3643654.

850930998

F 733

TOTAL ION CHROMATOGRAM



Data File: >A3769::E1 Quant Output File: ^A3769::QT
Name: INST. 59701,BLANK Instrument ID: INST "A"
Misc: BLANK,L,5,5,0.53mm X 75M 08-8240

Id File: ID824A::X2
Title: GENERAL IDFILE FOR INSTRUMENT A
Last Calibration: 970429 23:03 Last Qcal Time: 970506 19:31

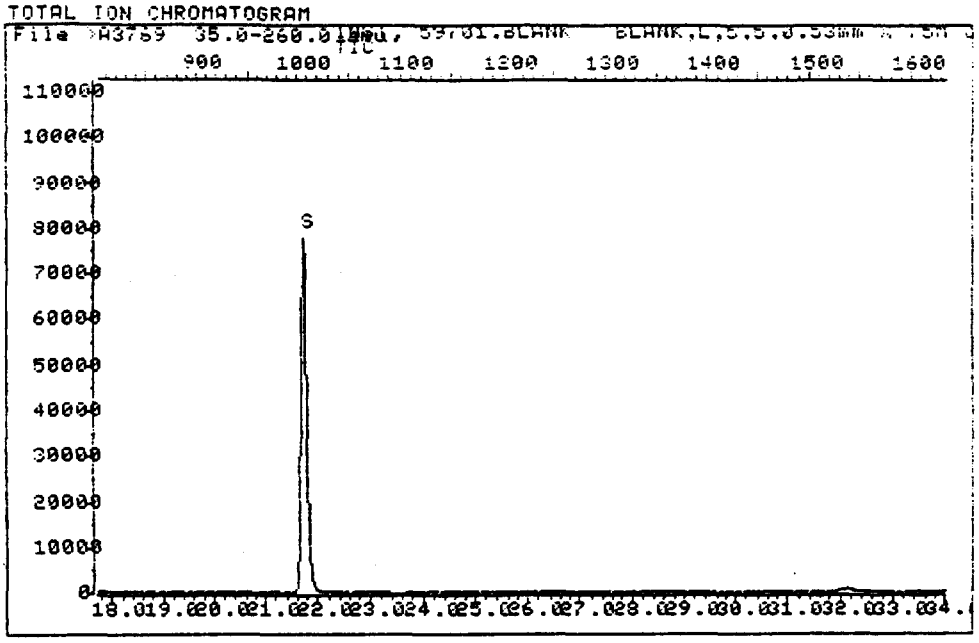
Operator ID: LB3274
Quant Time : 970506 21:28
Injected at: 970506 20:53

Page 1 of 2

850930999

F 734

TOTAL ION CHROMATOGRAM



Data File: >A3769::E1 Quant Output File: >A3769::QT
Name: INST. 59701,BLANK Instrument ID: INST "A"
Misc: BLANK,L,5,5,0.53mm X 25M D8-8240

Id File: ID824A::X2
Title: GENERAL IDFILE FOR INSTRUMENT A
Last Calibration: 970429 23:03 Last Qcal Time: 970506 19:31

Operator ID: LB3274
Quant Time : 970506 21:28
Injected at: 970506 20:53

Page 2 of 2

850931000

F 735

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330, FAX: 201-584-0515
MAY 8, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

Volatile Method Blank Summary by GC/MS

Data File: >A3783
Batch No: QV5041
Matrix: Soil

Associated Samples

Sample #	Data File	Analysis Date
262215	>A3784	05/07/97

850931001

F 736

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330, FAX: 201-584-0515
MAY 8, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

TARGET COMPOUND LIST - VOLATILE ANALYSIS BY GC/MS
PLUS 10 PEAKS

Sample ID: Method Blank
Data File: >A3783
Analysis Date: 05/07/97

Batch Number: QV5041
Dilution Factor: 1
Column: DB-624

Matrix: Soil Init Sample Wght= 5g Final volume= 5ml

Initial sample weight DWB= 5g

Conc. in Sample = (Conc. on Quant Report/Initial Sample Weight DWB)*Final Volume

Parameter	Method Blank ug/kg	Practical Quantitation Limit ug/kg	Minimum Detection Limit ug/kg
Chloromethane	U	5	4.6
Bromomethane	U	5	3.8
Vinyl chloride	U	5	1.7
Chloroethane	U	5	1.8
Methylene chloride	U	5	2.7
Acetone	U	20	4.5
Carbon disulfide	U	5	1.7
1,1-Dichloroethene	U	5	1.7
1,1-Dichloroethane	U	5	1.4
trans-1,2-Dichloroethene	U	5	1.7
cis-1,2-Dichloroethene	U	5	1.7
Chloroform	U	5	1.6
1,2-Dichloroethane	U	5	1.9
2-Butanone	U	20	2.4
1,1,1-Trichloroethane	U	5	0.5
Carbon tetrachloride	U	5	0.6
Bromodichloromethane	U	5	0.6
1,2-Dichloropropane	U	5	0.6
cis-1,3-Dichloropropene	U	5	0.5
Trichloroethene	U	5	0.6
Dibromochloromethane	U	5	0.6
1,1,2-Trichloroethane	U	5	0.5
Benzene	U	5	0.5
trans-1,3-Dichloropropene	U	5	0.6
Bromoform	U	5	0.8
4-Methyl-2-pentanone	U	20	1.1
2-Hexanone	U	20	1.2
Tetrachloroethene	U	5	0.7
1,1,2,2-Tetrachloroethane	U	5	0.5
Toluene	U	5	0.8
Chlorobenzene	U	5	0.6
Ethylbenzene	U	5	0.7
Styrene	U	5	1
p&m-Xylene	U	5	0.9
o-Xylene	U	5	0.9
total Xylenes	U	5	0.9

ug/kg = micrograms/kilogram or ppb
Results are in ug/kg (ppb); they are reported on a dry weight basis.
ND: Not Determined.
IND: Indeterminable.
U: Indicates a compound was analyzed for but not detected at the PQL.
J: Indicates an estimated value. It is utilized when a reported value meets the identification criteria but the result is less than the specified detection limit but greater than zero.

INDUSTRIAL CORROSION MANAGEMENT, INC.
Richard Levine, President
Copyright ICM, Inc., 1997.
All rights reserved.
EIL

850931002

F737

INDUSTRIAL CORROSION MANAGEMENT, Inc.
1152 Route 10
Randolph, NJ 07869
201-584-0330
MAY 8, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

LIBRARY SEARCH RESULTS OF NONTARGETED PEAKS WITH
ESTIMATED CONCENTRATION OF TENTATIVELY IDENTIFIED COMPOUNDS.

Data file name: >A3783
Lab number: BLANK
Fraction: VOLATILE

Initial Sample Wt/Vol=5 Final Volume=5
Moisture=0% Initial sample weight DWB=5

This BLANK corresponds to the following lab numbers:
262215

CAS No.	Retention Time	Compound Name	Molecular Weight	Estimated Concentration ug/kg
None found				

Estimated total non-target compound concentration (excluding compounds flagged with A, B or **) in ug/kg is: 0

A: Indicates that the compound is an acetone based aldol-type condensation product formed by concentrating the extraction solvent (1:1 acetone/methylene chloride).
B: Indicates that the analyte was found in the blank as well as the sample. It further indicates possible/probable blank contamination.
C: Co-eluting and/or poorly resolved non-target compounds cause superimposed spectra that prevent identification of individual compounds.
* Compounds flagged are from diluted analysis.
** This compound is not flagged B; it was not found in the corresponding blank. However, it is commonly found as a laboratory contaminant.

Copyright ICM, Inc., 1997.
All rights reserved.
EIL

850931003

F 738

Operator ID: KS9934 Quant Rev: 7 Quant Time: 970507 12:09
Output File: ^A3783::QT Injected at: 970507 11:15
Data File: >A3783::A1 Dilution Factor: 1.00000
Name: INST 59701, BLANK Instrument ID: INST "A"
Misc: BLANK ,S,5,5 , 0.53mm X 75M DB624

ID File: ID824A::X2
Title: GENERAL IDFILE FOR INSTRUMENT A
Last Calibration: 970429 23:03 Last Qcal Time: 970507 10:09

	Compound	R.T.	Q ion	Area	Conc	Units
1)	*Bromochloromethane	6.99	128.0	43841	50.00	UG/L
22)	1,2-Dichloroethane-d4	8.06	65.0	89681	50.30	UG/L
27)	*1,4-Difluorobenzene	8.98	114.0	228870	50.00	UG/L
44)	*Chlorobenzene-d5	17.33	117.0	178869	50.00	UG/L
49)	Toluene-d8	12.70	98.0	200277	48.18	UG/L
56)	Bromofluorobenzene	21.93	95.0	146031	48.97	UG/L

* Compound is ISTD DL 5/8/97

850931004

F 739

>A3783 INST 59701, BLANK BLANK ,S,S,S , 0.53mm X 75M DB624
35.0 260.0 TIC
Upslope: .1000 Area Reject: 5.00 % Max Peaks: 9 Bunch: 1 Valley >100 %
Dnslope: -.0100 Results File VDIR78 Sorted by Time/Area INT

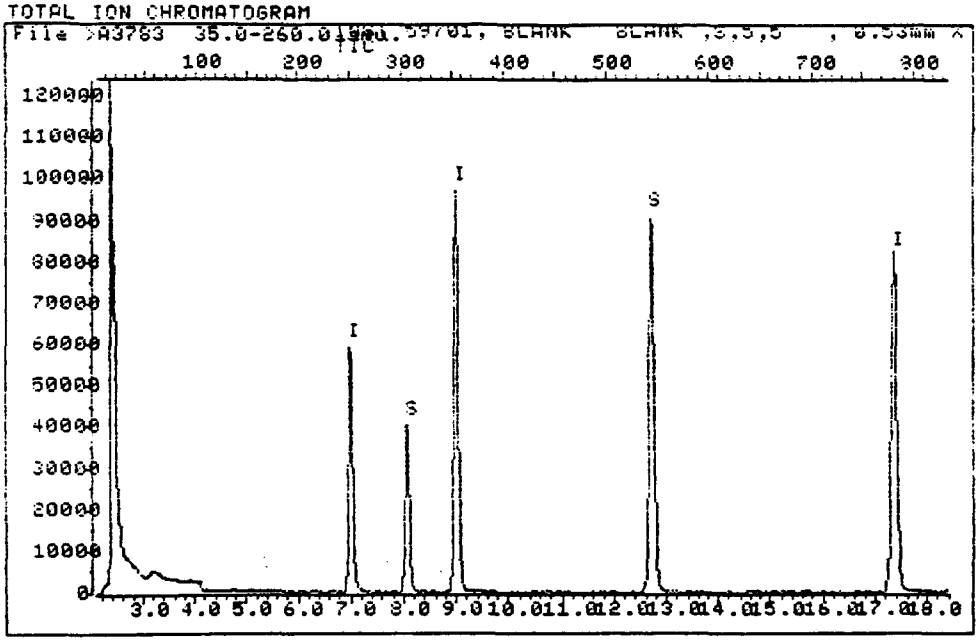
Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	2.37	13	15	17	122857	343537	338819*	51.72	8.787
2	2.43	17	18	50	83830	541056	443585*	67.71	11.504
3	6.99	244	251	264	59340	319456	313727	47.89	8.136
4	8.04	299	305	316	40395	235919	231169	35.29	5.995
5	8.98	346	353	369	96841	595838	587896	89.74	15.246
6	12.70	535	543	558	91093	640220	634520	96.86	16.455
7	17.35	772	781	798	82691	615215	609902	93.10	15.817
8	21.93	1006	1015	1032	85218	663577	655084	100.00	16.989
9	32.33	1540	1547	1559	3362	41330	41330	6.31	1.072

Sum of corrected areas: 3856032.

850931005

F 740

TOTAL ION CHROMATOGRAM



Data File: >A3783::A1 Quant Output File: ^A3783::QT
Name: INST 59701, BLANK Instrument ID: INST "A"
Misc: BLANK ,S,5,5 ; 0.53mm X 75M DB624

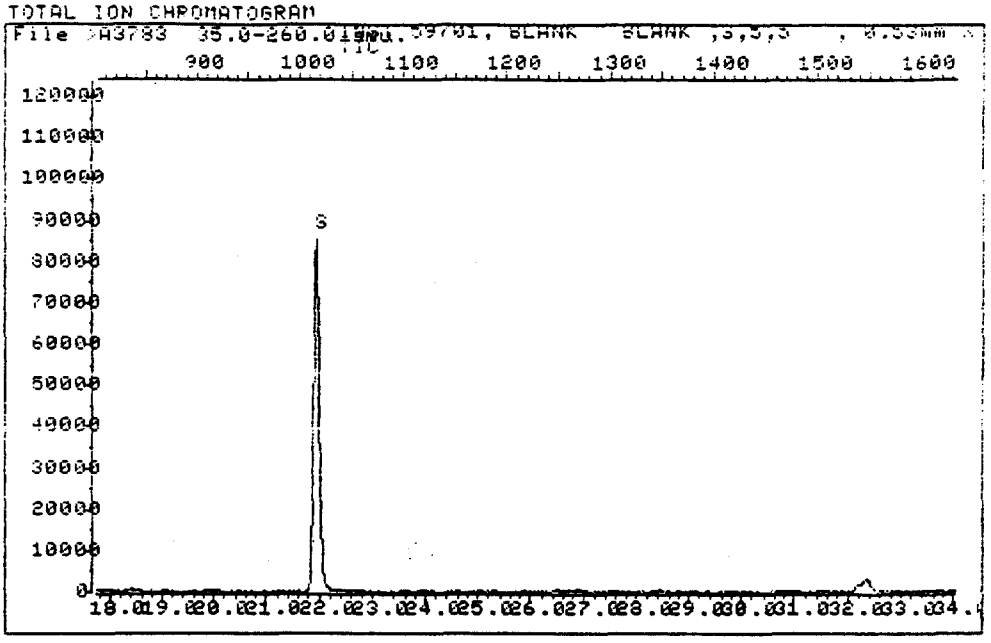
Id File: ID824A::X2
Title: GENERAL IDFILE FOR INSTRUMENT A
Last Calibration: 970429 23:03 Last Qcal Time: 970507 10:09

Operator ID: KS9934
Quant Time : 970507 12:09
Injected at: 970507 11:15

Page 1 of 2

850931006 F741

TOTAL ION CHROMATOGRAM



Data File: >A3783::A1 Quant Output File: ^A3783::QT
Name: INST 59701, BLANK Instrument ID: INST "A"
Misc: BLANK ,S,5,5 , 0.53mm X 75M 08624

Id File: ID824A::X2
Title: GENERAL IDFILE FOR INSTRUMENT A
Last Calibration: 970429 23:03 Last Qcal Time: 970507 10:09

Operator ID: KS9934
Quant Time : 970507 12:09
Injected at: 970507 11:15

Page 2 of 2

850931007

F 742

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330, FAX: 201-584-0515
MAY 13, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

GC/MS CONTINUING CALIBRATION SUMMARY
VOLATILE ORGANIC COMPOUNDS

INSTRUMENT ID: 59701
BATCH #: QV5038

THIS CONTINUING CALIBRATION APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS

LAB SAMPLE ID	DATA FILE	ANALYSIS DATE	ANALYSIS TIME
VSTD020	>A3851	05/09/97	18:08
BLANK	>A3852	05/09/97	19:14
262214	>A3859	05/10/97	00:37
262218	>A3861	05/10/97	01:52
262219	>A3862	05/10/97	02:36
262510 S	>A3866	05/10/97	05:20
BLANK S	>A3867	05/10/97	05:58
262216	>A3881	05/10/97	16:40
FROM INITIAL CALIBRATION			
VSTD200	>A3786	05/07/97	17:02
VSTD100	>A3787	05/07/97	17:57
VSTD050	>A3788	05/07/97	18:42
VSTD020	>A3789	05/07/97	19:26
VSTD005	>A3790	05/07/97	20:10

NOTE: The 'Initial Calibration Date' listed on the Continuing Calibration Check form reflects the last date a modification was made to the file, not the date that the Initial Calibration was acquired. The Initial Calibration acquisition dates are on the 'GC/MS Continuing Calibration Summary'.

Copyright ICM, Inc.,1997.
All rights reserved.
ERI

Calibration Report

Title: 624 CALIBRATION FOR INST C
Calibrated: 970507 21:39

Compound	Files: >A3790 RF 5.00	>A3789 RF 20.00	>A3788 RF 50.00	>A3787 RF 100.00	>A3786 RF 200.00	$\overline{RRT}$	$\overline{RF}$	% RSD	
Dichlorodifluoromethane	1.42044	2.83763	2.93609	2.72195	2.49834	.367	2.48089	24.825	(Conc=20.0,40.0,100.0,200.0,400.0)
Chloromethane	1.42512	1.36904	1.33085	1.35449	1.13944	.395	1.32379	8.214	
Bromomethane	.93310	.88773	.68392	.65655	.56391	.459	.74504	21.233	
Vinyl Chloride	1.67832	1.69534	1.56458	1.66556	1.43183	.412	1.60713	6.873	
Chloroethane	.63530	.70274	.57352	.42770	.43658	.474	.55517	21.847	
Acrolein	.01634	.02165	.01810	.01835	.01750	.580	.01839	10.779	(Conc=25.0,100.0,250.0,500.0,1000.
Acrylonitrile	.16268	.17509	.18764	.18457	.20956	.725	.18391	9.428	(Conc=25.0,100.0,250.0,500.0,1000.
Methylene Chloride	2.92246	1.87629	1.65187	1.47842	1.48645	.679	1.88310	32.027	
Acetone	.39591	.24597	.25237	.22565	.25982	.698	.27594	24.736	
Carbon Disulfide	2.82549	3.07254	3.30889	3.22333	3.22245	.634	3.13054	6.088	
Trichlorofluoromethane	3.17969	3.17996	3.26357	3.36728	1.75549	.513	2.94920	22.777	
t-Butyl alcohol	.03510	.07598	.07692	.07382	.04485	.724	.06133	32.333	(Conc=12.5,50.0,125.0,250.0,500.0)
t-Butyl methyl ether	3.45418	3.52271	3.46143	3.23777	3.65707	.734	3.46663	4.379	
1,1-Dichloroethene	1.67746	1.53517	1.62896	1.53409	1.48326	.596	1.57178	5.033	
1,1-Dichloroethane	3.46799	3.56221	3.76360	3.55969	3.44300	.814	3.55930	3.543	
trans-1,2-Dichloroethene	1.72695	1.83836	1.91708	1.80359	1.75180	.730	1.80756	4.156	
Chloroform	3.74392	3.75968	3.86622	3.63034	3.62478	1.022	3.72499	2.702	
1,2-Dichloroethane-d4	2.10416	2.17060	2.08547	2.00615	1.94763	1.152	2.06280	4.221	(Conc=30.0,30.0,30.0,30.0,30.0)
1,2-Dichloroethane	2.34930	2.41333	2.37734	2.17034	2.18344	1.174	2.29875	4.943	
2-Butanone	.32830	.35297	.36550	.36687	.42649	.949	.36802	9.826	
1,1,1-Trichloroethane	.62634	.67037	.67706	.63030	.64000	.830	.64881	3.605	
Carbon Tetrachloride	.48784	.54410	.54591	.52744	.50995	.865	.52305	4.679	
Vinyl Acetate	.14901	.18003	.16998	.17400	.18762	1.391	.17213	8.444	
Bromodichloromethane	.56027	.64096	.61983	.58612	.62293	1.200	.60602	5.339	
1,2-Dichloropropane	.30452	.34487	.34460	.32756	.32928	1.120	.33016	4.999	
cis-1,3-Dichloropropene	.47567	.53376	.53711	.49845	.53032	1.334	.51506	5.224	
Trichloroethene	.37407	.39445	.39853	.37784	.38854	1.064	.38668	2.717	
Dibromochloromethane	.34963	.41540	.40832	.37816	.40544	1.717	.39139	6.973	
1,1,2-Trichloroethane	.20106	.22496	.22397	.20640	.22065	1.579	.21541	5.081	
Benzene	.83845	.91361	.91822	.87993	.91109	.909	.89226	3.773	
trans-1,3-Dichloropropene	.47567	.53376	.53711	.49845	.53032	1.334	.51506	5.224	
2-Chloroethylvinylether	.30452	.34487	.34460	.32756	.32928	1.120	.33016	4.999	
Bromoform	.22017	.25524	.25368	.24394	.26047	2.294	.24670	6.482	
4-Methyl-2-Pentanone	.15965	.23175	.22407	.22966	.25003	.719	.21903	15.794	
2-Hexanone	.08386	.13834	.14334	.14034	.17014	.871	.13520	23.268	
Tetrachloroethene	.41835	.44745	.45832	.44249	.45409	.838	.44414	3.522	
1,1,2,2-Tetrachloroethane	.44700	.45326	.41747	.39941	.41398	1.315	.42622	5.386	
Toluene-d8	1.16827	1.18115	1.18635	1.20401	1.17763	.731	1.18348	1.118	(Conc=30.0,30.0,30.0,30.0,30.0)
Toluene	.78620	.82952	.84754	.80924	.82558	.742	.81962	2.821	

RF - Response Factor (Subscript is amount in UG/L)

$\overline{RRT}$ - Average Relative Retention Time (RT Std/RT Istd)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

99

850931009

F744

Calibration Report

Title: 624 CALIBRATION FOR INST C
Calibrated: 970507 21:39

Compound	Files: >A3790 RF 5.00	>A3789 RF 20.00	>A3788 RF 50.00	>A3787 RF 100.00	>A3786 RF 200.00	$\overline{RRT}$	$\overline{RF}$	% RSD	
Chlorobenzene	.88613	.93311	.94437	.89044	.90298	1.005	.91141	2.854	
Ethylbenzene	.46556	.49789	.51310	.49071	.49976	1.035	.49341	3.556	
Styrene	.96929	1.04936	1.08717	1.03198	1.05784	1.152	1.03913	4.220	
p&m Xylene	.62470	.66094	.67091	.63829	.64500	1.062	.64797	2.823	(Conc=10.0,40.0,100.0,200.0,400.0)
o-Xylene	.61949	.62364	.64590	.61351	.62582	1.147	.62567	1.956	
Bromofluorobenzene	.84869	.85167	.83123	.83618	.76997	1.266	.82755	4.022	(Conc=30.0,30.0,30.0,30.0,30.0)
1,3-Dichlorobenzene	.88569	.88023	.89076	.83890	.84224	1.528	.86756	2.876	
1,4-Dichlorobenzene	.93016	.87571	.90174	.82257	.84382	1.552	.87480	4.943	
1,2-Dichlorobenzene	.71307	.73163	.72807	.67375	.67055	1.642	.70342	4.180	

RF - Response Factor (Subscript is amount in UG/L)

$\overline{RRT}$ - Average Relative Retention Time (RT Std/RT Istd)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

100

850931010

F 745

850931011

QUANT REPORT Page 1

Operator ID: LB3274 Quant Rev: 7 Quant Time: 970507 17:53
Output File: ^A3786::QT Injected at: 970507 17:02
Data File: >A3786::A1 Dilution Factor: 1.00000
Name: INST. 59701,VSTD200 Instrument ID: INST "A"
Misc: VSTD200, 0.53mm X 75M D8-624

ID File: ID624A::X2
Title: GENERAL IDFILE FOR INSTRUMENT A
Last Calibration: 970422 09:50 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	6.94	128.0	26006	30.00	UG/L	99
2)	Dichlorodifluoromethane	2.53	85.0	862825	374.84	UG/L	100
3)	Chloromethane	2.73	50.0	197549	96.95	UG/L	91
4)	Bromomethane	3.18	94.0	97767	129.29	UG/L	87
5)	Vinyl Chloride	2.84	62.0	248241	119.48	UG/L	97
6)	Chloroethane	3.27	64.0	75692	97.26	UG/L	95
7)	Acrolein	4.00	56.0	15171	602.77	UG/L	96
8)	Acrylonitrile	5.04	53.0	181660	889.70	UG/L	94
9)	Methylene Chloride	4.69	84.0	257711	172.50	UG/L	84
10)	Acetone	4.23	43.0	45045M	150.17	UG/L	100
11)	Carbon Disulfide	4.35	76.0	558687	167.36	UG/L	100
12)	Trichlorofluoromethane	3.51	101.0	304355M	242.51	UG/L	100
13)	t-Butyl alcohol	5.37	59.0	19440	324.16	UG/L	100
14)	t-Butyl methyl ether	5.10	73.0	634038	215.87	UG/L	95
16)	1,1-Dichloroethene	4.10	96.0	257157	286.36	UG/L	94
17)	1,1-Dichloroethane	5.63	63.0	596925	172.53	UG/L	94
18)	trans-1,2-Dichloroethene	5.04	96.0	303715	185.20	UG/L	85
19)	cis-1,2-Dichloroethene	6.53	96.0	322299	189.36	UG/L	91
20)	Chloroform	7.07	83.0	628441	176.70	UG/L	94
21)	1,4-Dioxane	10.58	88.0	86647	16116.37	UG/L	89
22)	1,2-Dichloroethane-d4	7.99	65.0	50650	31.91	UG/L	96
23)	1,2-Dichloroethane	8.13	62.0	378550	193.11	UG/L	93
24)	2-Butanone	6.58	43.0	73942	149.71	UG/L	100
27)	*1,4-Difluorobenzene	8.91	114.0	144450	30.00	UG/L	99
28)	1,1,1-Trichloroethane	7.39	97.0	616322	202.04	UG/L	79
29)	Carbon Tetrachloride	7.70	117.0	491079	221.37	UG/L	85
30)	Vinyl Acetate	12.40	43.0	180680	152.23	UG/L	100
31)	Bromodichloromethane	10.70	83.0	599884	191.07	UG/L	92
32)	1,2-Dichloropropane	9.99	63.0	317096	159.78	UG/L	92
33)	cis-1,3-Dichloropropene	11.89	75.0	510694	187.64	UG/L	96
34)	Trichloroethene	9.48	130.0	374162	230.21	UG/L	98
35)	Dibromochloromethane	15.32	129.0	390443	226.81	UG/L	99
36)	Ethylene dibromide	15.59	107.0	686447	343.17	UG/L	94
37)	1,1,2-Trichloroethane	14.08	97.0	212484	208.82	UG/L	96
38)	Benzene	8.09	78.0	877381	179.94	UG/L	93
39)	trans-1,3-Dichloropropene	11.89	75.0	510694	187.64	UG/L	98
40)	2-Chloroethylvinylether	9.99	63.0	317096	159.78	UG/L	100
41)	Bromoform	20.47	173.0	250832	277.96	UG/L	99
44)	*Chlorobenzene-d5	17.28	117.0	108395	30.00	UG/L	92
45)	4-Methyl-2-Pentanone	12.40	43.0	180680	134.63	UG/L	82

E 746

Operator ID: LB3274 Quant Rev: 7 Quant Time: 970507 17:53
Output File: ^A3786::QT Injected at: 970507 17:02
Data File: >A3786::A1 Dilution Factor: 1.00000
Name: INST. 59701,VSTD200 Instrument ID: INST "A"
Misc: VSTD200, 0.53mm X 75M DB-624

ID File: ID624A::X2
Title: GENERAL IDFILE FOR INSTRUMENT A
Last Calibration: 970422 09:50 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
46)	2-Hexanone	15.04	43.0	122946	170.58	UG/L	77
47)	Tetrachloroethene	14.48	164.0	328137	245.79	UG/L	97
48)	1,1,2,2-Tetrachloroethane	22.72	83.0	299153	174.49	UG/L	94
49)	Toluene-d8	12.64	98.0	127649	29.41	UG/L	99
50)	Toluene	12.81	92.0	596591	178.30	UG/L	93
51)	Chlorobenzene	17.37	112.0	652525	194.90	UG/L	91
52)	Ethylbenzene	17.88	106.0	361144	187.00	UG/L	99
53)	Styrene	19.90	104.0	764431	212.76	UG/L	92
54)	p&m Xylene	18.35	106.0	932194	411.26	UG/L	34
55)	o-Xylene	19.80	106.0	452241	202.09	UG/L	93
56)	Bromofluorobenzene	21.86	95.0	83461	33.93	UG/L	98
57)	1,3-Dichlorobenzene	26.40	146.0	608628	220.68	UG/L	73
58)	1,4-Dichlorobenzene	26.84	146.0	609775	222.00	UG/L	84
59)	1,2-Dichlorobenzene	28.38	146.0	484562	213.96	UG/L	90

* Compound is ISTD

850931012

F 747

850931013

QUANT REPORT Page 1

Operator ID: LB3274 Quant Rev: 7 Quant Time: 970507 18:38
Output File: ^A3787::QT Injected at: 970507 17:57
Data File: >A3787::A1 Dilution Factor: 1.00000
Name: INST. 59701,VSTD100 Instrument ID: INST "A"
Misc: VSTD100, 0.53mm X 75M DB-624

ID File: ID624A::X2
Title: GENERAL IDFILE FOR INSTRUMENT A
Last Calibration: 970422 09:50 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	6.91	128.0	22127	30.00	UG/L	96
2)	Dichlorodifluoromethane	2.55	85.0	401524	205.01	UG/L	100
3)	Chloromethane	2.72	50.0	99903	57.63	UG/L	93
4)	Bromomethane	3.17	94.0	48425	75.26	UG/L	90
5)	Vinyl Chloride	2.84	62.0	122846	69.49	UG/L	95
6)	Chloroethane	3.27	64.0	31546	47.64	UG/L	93
7)	Acrolein	4.01	56.0	6768	316.05	UG/L	95
8)	Acrylonitrile	5.01	53.0	68068	391.81	UG/L	95
9)	Methylene Chloride	4.70	84.0	109043	85.78	UG/L	82
10)	Acetone	4.21	43.0	16643M	65.21	UG/L	100
11)	Carbon Disulfide	4.39	76.0	237742	83.70	UG/L	100
12)	Trichlorofluoromethane	3.52	101.0	248359M	232.58	UG/L	100
13)	t-Butyl alcohol	5.05	59.0	13611	266.75	UG/L	100
14)	t-Butyl methyl ether	5.07	73.0	238807	95.56	UG/L	95
16)	1,1-Dichloroethene	4.11	96.0	113149	148.09	UG/L	93
17)	1,1-Dichloroethane	5.62	63.0	262551	89.19	UG/L	96
18)	trans-1,2-Dichloroethene	5.05	96.0	133027	95.34	UG/L	80
19)	cis-1,2-Dichloroethene	6.52	96.0	136013	93.92	UG/L	89
20)	Chloroform	7.07	83.0	267762	88.49	UG/L	94
21)	1,4-Dioxane	10.42	88.0	31301	6842.63	UG/L	85
22)	1,2-Dichloroethane-d4	7.97	65.0	44390	32.87	UG/L	93
23)	1,2-Dichloroethane	8.13	62.0	160077	95.98	UG/L	97
24)	2-Butanone	6.56	43.0	27059	64.39	UG/L	100
27)	*1,4-Difluorobenzene	8.89	114.0	129250	30.00	UG/L	99
28)	1,1,1-Trichloroethane	7.38	97.0	271554	99.49	UG/L	78
29)	Carbon Tetrachloride	7.69	117.0	227237	114.48	UG/L	86
30)	Vinyl Acetate	12.37	43.0	74964	70.59	UG/L	100
31)	Bromodichloromethane	10.67	83.0	252521	89.89	UG/L	93
32)	1,2-Dichloropropane	9.97	63.0	141122	79.47	UG/L	94
33)	cis-1,3-Dichloropropene	11.86	75.0	214748	88.18	UG/L	96
34)	Trichloroethene	9.46	130.0	162784	111.93	UG/L	97
35)	Dibromochloromethane	15.27	129.0	162922	105.77	UG/L	97
36)	Ethylene dibromide	15.54	107.0	290681	162.41	UG/L	93
37)	1,1,2-Trichloroethane	14.06	97.0	88922	97.66	UG/L	93
38)	Benzene	8.09	78.0	379103	86.90	UG/L	92
39)	trans-1,3-Dichloropropene	11.86	75.0	214748	88.18	UG/L	97
40)	2-Chloroethylvinylether	9.97	63.0	141122	79.47	UG/L	100
41)	Bromoform	20.40	173.0	105097	130.16	UG/L	99
44)	*Chlorobenzene-d5	17.23	117.0	97923	30.00	UG/L	95
45)	4-Methyl-2-Pentanone	12.37	43.0	74964	61.83	UG/L	80

103

F 748

Operator ID: LB3274 Quant Rev: 7 Quant Time: 970507 18:38
Output File: ^A3787::QT Injected at: 970507 17:57
Data File: >A3787::A1 Dilution Factor: 1.00000
Name: INST. 59701,VSTD100 Instrument ID: INST "A"
Misc: VSTD100, 0.53mm X 75M D8-624

ID File: ID624A::X2
Title: GENERAL IDFILE FOR INSTRUMENT A
Last Calibration: 970422 09:50 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
46)	2-Hexanone	15.00	43.0	45810	70.35	UG/L	79
47)	Tetrachloroethene	14.43	164.0	144434	119.76	UG/L	97
48)	1,1,2,2-Tetrachloroethane	22.63	83.0	130373	84.17	UG/L	93
49)	Toluene-d8	12.59	98.0	117900	30.06	UG/L	97
50)	Toluene	12.78	92.0	264145	87.39	UG/L	93
51)	Chlorobenzene	17.30	112.0	290647	96.10	UG/L	91
52)	Ethylbenzene	17.81	106.0	160174	91.81	UG/L	99
53)	Styrene	19.83	104.0	336849	103.78	UG/L	88
54)	p&m Xylene	18.28	106.0	416690	203.49	UG/L	53
55)	o-Xylene	19.75	106.0	200255	99.06	UG/L	92
56)	Bromofluorobenzene	21.79	95.0	81881	36.85	UG/L	93
57)	1,3-Dichlorobenzene	26.29	146.0	273825	109.90	UG/L	73
58)	1,4-Dichlorobenzene	26.70	146.0	268496	108.21	UG/L	86
59)	1,2-Dichlorobenzene	28.24	146.0	219919	107.49	UG/L	87

* Compound is ISTD

850931014

F 749

850931015

QUANT REPORT Page 1

Operator ID: LB3274 Quant Rev: 7 Quant Time: 970507 19:23
Output File: ^A3788::QT Injected at: 970507 18:42
Data File: >A3788::A1 Dilution Factor: 1.00000
Name: INST. 59701,VSTD050 Instrument ID: INST "A"
Misc: VSTD050, 0.53mm X 75M D8-624

ID File: ID624A::X2
Title: GENERAL IDFILE FOR INSTRUMENT A
Last Calibration: 970422 09:50 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	6.86	128.0	21528	30.00	UG/L	95
2)	Dichlorodifluoromethane	2.50	85.0	210694	110.57	UG/L	100
3)	Chloromethane	2.69	50.0	47751	28.31	UG/L	89
4)	Bromomethane	3.12	94.0	24539	39.20	UG/L	86
5)	Vinyl Chloride	2.81	62.0	56137	32.64	UG/L	97
6)	Chloroethane	3.22	64.0	20578	31.94	UG/L	97
7)	Acrolein	3.96	56.0	3248	155.89	UG/L	97
8)	Acrylonitrile	4.96	53.0	33663	199.16	UG/L	92
9)	Methylene Chloride	4.65	84.0	59269	47.92	UG/L	85
10)	Acetone	4.16	43.0	9055M	36.47	UG/L	100
11)	Carbon Disulfide	4.34	76.0	118723	42.96	UG/L	100
12)	Trichlorofluoromethane	3.51	101.0	117097	112.71	UG/L	100
13)	t-Butyl alcohol	4.85	59.0	6900	138.99	UG/L	100
14)	t-Butyl methyl ether	5.02	73.0	124196	51.08	UG/L	92
16)	1,1-Dichloroethene	4.08	96.0	58447	78.62	UG/L	94
17)	1,1-Dichloroethane	5.59	63.0	135038	47.15	UG/L	95
18)	trans-1,2-Dichloroethene	5.00	96.0	68785	50.67	UG/L	85
19)	cis-1,2-Dichloroethene	6.47	96.0	71426	50.70	UG/L	92
20)	Chloroform	7.02	83.0	138720	47.12	UG/L	95
21)	1,4-Dioxane	10.33	88.0	15268	3430.57	UG/L	82
22)	1,2-Dichloroethane-d4	7.92	65.0	44896	34.17	UG/L	92
23)	1,2-Dichloroethane	8.07	62.0	85299	52.57	UG/L	98
24)	2-Butanone	6.51	43.0	13114	32.07	UG/L	100
27)	*1,4-Difluorobenzene	8.86	114.0	126779	30.00	UG/L	98
28)	1,1,1-Trichloroethane	7.33	97.0	143062	53.44	UG/L	79
29)	Carbon Tetrachloride	7.64	117.0	115350	59.25	UG/L	82
30)	Vinyl Acetate	12.34	43.0	35917	34.48	UG/L	100
31)	Bromodichloromethane	10.64	83.0	130969	47.53	UG/L	92
32)	1,2-Dichloropropane	9.91	63.0	72813	41.80	UG/L	93
33)	cis-1,3-Dichloropropene	11.83	75.0	113490	47.51	UG/L	97
34)	Trichloroethene	9.42	130.0	84208	59.03	UG/L	98
35)	Dibromochloromethane	15.24	129.0	86277	57.11	UG/L	96
36)	Ethylene dibromide	15.51	107.0	152972	87.13	UG/L	93
37)	1,1,2-Trichloroethane	14.00	97.0	47324	52.99	UG/L	98
38)	Benzene	8.04	78.0	194019	45.34	UG/L	92
39)	trans-1,3-Dichloropropene	11.83	75.0	113490	47.51	UG/L	97
40)	2-Chloroethylvinylether	9.91	63.0	72813	41.80	UG/L	100
41)	Bromoform	20.38	173.0	53603	67.68	UG/L	99
44)	*Chlorobenzene-d5	17.17	117.0	96176	30.00	UG/L	94
45)	4-Methyl-2-Pentanone	12.34	43.0	35917	30.16	UG/L	79

F 750

Operator ID: LB3274 Quant Rev: 7 Quant Time: 970507 19:23
Output File: ^A3788::QT Injected at: 970507 18:42
Data File: >A3788::A1 Dilution Factor: 1.00000
Name: INST. 59701,VSTD050 Instrument ID: INST "A"
Misc: VSTD050, 0.53mm X 75M D8-624

ID File: ID624A::X2
Title: GENERAL IDFILE FOR INSTRUMENT A
Last Calibration: 970422 09:50 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
46)	2-Hexanone	14.96	43.0	22976	35.93	UG/L	80
47)	Tetrachloroethene	14.40	164.0	73465	62.02	UG/L	95
48)	1,1,2,2-Tetrachloroethane	22.61	83.0	66918	43.99	UG/L	95
49)	Toluene-d8	12.56	98.0	114098	29.62	UG/L	97
50)	Toluene	12.73	92.0	135855	45.76	UG/L	92
51)	Chlorobenzene	17.27	112.0	151376	50.96	UG/L	91
52)	Ethylbenzene	17.80	106.0	82247	48.00	UG/L	98
53)	Styrene	19.80	104.0	174266	54.67	UG/L	88
54)	p&m Xylene	18.25	106.0	215085	106.95	UG/L	54
55)	o-Xylene	19.72	106.0	103533	52.14	UG/L	91
56)	Bromofluorobenzene	21.77	95.0	79944	36.63	UG/L	95
57)	1,3-Dichlorobenzene	26.29	146.0	142783	58.35	UG/L	76
58)	1,4-Dichlorobenzene	26.72	146.0	144543	59.31	UG/L	85
59)	1,2-Dichlorobenzene	28.27	146.0	116705	58.08	UG/L	89

* Compound is ISTD

850931016

F 751

850931017

QUANT REPORT Page 1

Operator ID: LB3274 Quant Rev: 7 Quant Time: 970507 20:07
Output File: ^A3789::QT Injected at: 970507 19:26
Data File: >A3789::A1 Dilution Factor: 1.00000
Name: INST. 59701,VSTD020 Instrument ID: INST "A"
Misc: VSTD020, 0.53mm X 75M DB-624

ID File: ID624A::X2
Title: GENERAL IDFILE FOR INSTRUMENT A
Last Calibration: 970422 09:50 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	6.93	128.0	21155	30.00	UG/L	95
2)	Dichlorodifluoromethane	2.53	85.0	80040	42.75	UG/L	100
3)	Chloromethane	2.72	50.0	19308	11.65	UG/L	87
4)	Bromomethane	3.17	94.0	12520	20.35	UG/L	90
5)	Vinyl Chloride	2.84	62.0	23910	14.15	UG/L	95
6)	Chloroethane	3.27	64.0	9911M	15.66	UG/L	95
7)	Acrolein	4.01	56.0	1527	74.58	UG/L	99
8)	Acrylonitrile	5.01	53.0	12347	74.34	UG/L	94
9)	Methylene Chloride	4.70	84.0	26462	21.77	UG/L	84
10)	Acetone	4.19	43.0	3469M	14.22	UG/L	100
11)	Carbon Disulfide	4.39	76.0	43333	15.96	UG/L	100
12)	Trichlorofluoromethane	3.56	101.0	44848	43.93	UG/L	100
13)	t-Butyl alcohol	4.88	59.0	2679	54.92	UG/L	100
14)	t-Butyl methyl ether	5.07	73.0	49682	20.79	UG/L	96
16)	1,1-Dichloroethene	4.13	96.0	21651	29.64	UG/L	94
17)	1,1-Dichloroethane	5.64	63.0	50239	17.85	UG/L	91
18)	trans-1,2-Dichloroethene	5.05	96.0	25927	19.43	UG/L	86
19)	cis-1,2-Dichloroethene	6.52	96.0	26943	19.46	UG/L	91
20)	Chloroform	7.09	83.0	53024	18.33	UG/L	90
21)	1,4-Dioxane	10.37	88.0	5401	1234.95	UG/L	82
22)	1,2-Dichloroethane-d4	7.97	65.0	45919	35.57	UG/L	89
23)	1,2-Dichloroethane	8.12	62.0	34036	21.34	UG/L	98
24)	2-Butanone	6.56	43.0	4978	12.39	UG/L	100
27)	*1,4-Difluorobenzene	8.91	114.0	119480	30.00	UG/L	99
28)	1,1,1-Trichloroethane	7.40	97.0	53397	21.16	UG/L	81
29)	Carbon Tetrachloride	7.69	117.0	43339	23.62	UG/L	84
30)	Vinyl Acetate	12.39	43.0	14340	14.61	UG/L	100
31)	Bromodichloromethane	10.69	83.0	51055	19.66	UG/L	92
32)	1,2-Dichloropropane	9.96	63.0	27470	16.73	UG/L	94
33)	cis-1,3-Dichloropropene	11.88	75.0	42516	18.89	UG/L	96
34)	Trichloroethene	9.47	130.0	31419	23.37	UG/L	96
35)	Dibromochloromethane	15.28	129.0	33088	23.24	UG/L	99
36)	Ethylene dibromide	15.56	107.0	60887	36.80	UG/L	90
37)	1,1,2-Trichloroethane	14.07	97.0	17919	21.29	UG/L	95
38)	Benzene	8.08	78.0	72772	18.04	UG/L	91
39)	trans-1,3-Dichloropropene	11.88	75.0	42516	18.89	UG/L	94
40)	2-Chloroethylvinylether	9.96	63.0	27470	16.73	UG/L	100
41)	Bromoform	20.43	173.0	20331	27.24	UG/L	99
44)	*Chlorobenzene-d5	17.24	117.0	92815	30.00	UG/L	92
45)	4-Methyl-2-Pentanone	12.39	43.0	14340	12.48	UG/L	72

F 75

Operator ID: LB3274 Quant Rev: 7 Quant Time: 970507 20:07
Output File: ^A3789::QT Injected at: 970507 19:26
Data File: >A3789::A1 Dilution Factor: 1.00000
Name: INST. 59701,VSTD020 Instrument ID: INST "A"
Misc: VSTD020, 0.53mm X 75M DB-624

ID File: ID624A::X2
Title: GENERAL IDFILE FOR INSTRUMENT A
Last Calibration: 970422 09:50 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
46)	2-Hexanone	15.01	43.0	8560	13.87	UG/L	84
47)	Tetrachloroethene	14.44	164.0	27687	24.22	UG/L	97
48)	1,1,2,2-Tetrachloroethane	22.66	83.0	28046	19.10	UG/L	96
49)	Toluene-d8	12.60	98.0	109628	29.49	UG/L	96
50)	Toluene	12.80	92.0	51328	17.92	UG/L	92
51)	Chlorobenzene	17.32	112.0	57738	20.14	UG/L	93
52)	Ethylbenzene	17.85	106.0	30808	18.63	UG/L	99
53)	Styrene	19.84	104.0	64931	21.11	UG/L	81
54)	p&m Xylene	18.30	106.0	81793	42.14	UG/L	54
55)	o-Xylene	19.76	106.0	38589	20.14	UG/L	88
56)	Bromofluorobenzene	21.82	95.0	79048	37.53	UG/L	92
57)	1,3-Dichlorobenzene	26.34	146.0	54466	23.06	UG/L	73
58)	1,4-Dichlorobenzene	26.77	146.0	54186	23.04	UG/L	83
59)	1,2-Dichlorobenzene	28.31	146.0	45271	23.35	UG/L	86

* Compound is ISTD

850931018

F75

850931019

QUANT REPORT

Operator ID: LB3274 Quant Rev: 7 Quant Time: 970507 20:51
Output File: ^A3790::QT Injected at: 970507 20:10
Data File: >A3790::A1 Dilution Factor: 1.00000
Name: INST. 59701,VSTD005 Instrument ID: INST "A"
Misc: VSTD005, 0.53mm X 75M DB-624

ID File: ID624A::X2
Title: GENERAL IDFILE FOR INSTRUMENT A
Last Calibration: 970422 09:50 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	6.98	128.0	20853	30.00	UG/L	99
2)	Dichlorodifluoromethane	2.61	85.0	19747	10.70	UG/L	100
3)	Chloromethane	2.81	50.0	4953	3.03	UG/L	88
4)	Bromomethane	3.26	94.0	3243M	5.35	UG/L	87
5)	Vinyl Chloride	2.93	62.0	5833	3.50	UG/L	94
6)	Chloroethane	3.38	64.0	2208M	3.54	UG/L	93
7)	Acrolein	4.08	56.0	284	14.07	UG/L	47
8)	Acrylonitrile	5.08	53.0	2827	17.27	UG/L	85
9)	Methylene Chloride	4.76	84.0	10157M	8.48	UG/L	88
10)	Acetone	4.26	43.0	1376M	5.72	UG/L	100
11)	Carbon Disulfide	4.47	76.0	9820	3.67	UG/L	100
12)	Trichlorofluoromethane	3.65	101.0	11051	10.98	UG/L	100
13)	t-Butyl alcohol	4.92	59.0	305M	6.34	UG/L	
14)	t-Butyl methyl ether	5.14	73.0	12005	5.10	UG/L	99
16)	1,1-Dichloroethene	4.22	96.0	5830	8.10	UG/L	92
17)	1,1-Dichloroethane	5.70	63.0	12053	4.34	UG/L	99
18)	trans-1,2-Dichloroethene	5.12	96.0	6002	4.56	UG/L	84
19)	cis-1,2-Dichloroethene	6.58	96.0	6393	4.68	UG/L	88
20)	Chloroform	7.13	83.0	13012	4.56	UG/L	92
22)	1,2-Dichloroethane-d4	8.03	65.0	43878	34.48	UG/L	90
23)	1,2-Dichloroethane	8.19	62.0	8165	5.19	UG/L	93
24)	2-Butanone	6.64	43.0	1141M	2.88	UG/L	
27)	*1,4-Difluorobenzene	8.95	114.0	122770	30.00	UG/L	99
28)	1,1,1-Trichloroethane	7.44	97.0	12816	4.94	UG/L	81
29)	Carbon Tetrachloride	7.76	117.0	9982	5.29	UG/L	89
30)	Vinyl Acetate	12.43	43.0	3049	3.02	UG/L	100
31)	Bromodichloromethane	10.73	83.0	11464	4.30	UG/L	96
32)	1,2-Dichloropropane	10.03	63.0	6231	3.69	UG/L	97
33)	cis-1,3-Dichloropropene	11.90	75.0	9733	4.21	UG/L	97
34)	Trichloroethene	9.52	130.0	7654	5.54	UG/L	99
35)	Dibromochloromethane	15.31	129.0	7154	4.89	UG/L	98
37)	1,1,2-Trichloroethane	14.10	97.0	4114	4.76	UG/L	94
38)	Benzene	8.15	78.0	17156	4.14	UG/L	90
39)	trans-1,3-Dichloropropene	11.90	75.0	9733	4.21	UG/L	98
40)	2-Chloroethylvinylether	10.03	63.0	6231	3.69	UG/L	100
41)	Bromoform	20.43	173.0	4505	5.87	UG/L	93
44)	*Chlorobenzene-d5	17.27	117.0	94442	30.00	UG/L	96
45)	4-Methyl-2-Pentanone	12.43	43.0	2513M	2.15	UG/L	
46)	2-Hexanone	15.05	43.0	1320M	2.10	UG/L	
47)	Tetrachloroethene	14.47	164.0	6585	5.66	UG/L	97

F 754

Operator ID: LB3274 Quant Rev: 7 Quant Time: 970507 20:51
Output File: ^A3790::QT Injected at: 970507 20:10
Data File: >A3790::A1 Dilution Factor: 1.00000
Name: INST. 59701,VSTD005 Instrument ID: INST "A"
Misc: VSTD005, 0.53mm X 75M DB-624

ID File: ID624A::X2
Title: GENERAL IDFILE FOR INSTRUMENT A
Last Calibration: 970422 09:50 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
48)	1,1,2,2-Tetrachloroethane	22.68	83.0	7036	4.71	UG/L	96
49)	Toluene-d8	12.65	98.0	110334	29.17	UG/L	99
50)	Toluene	12.82	92.0	12375	4.24	UG/L	95
51)	Chlorobenzene	17.36	112.0	13948	4.78	UG/L	92
52)	Ethylbenzene	17.87	106.0	7328	4.36	UG/L	99
53)	Styrene	19.89	104.0	15257	4.87	UG/L	89
54)	p&m Xylene	18.34	106.0	19666	9.96	UG/L	56
55)	o-Xylene	19.79	106.0	9751	5.00	UG/L	94
56)	Bromofluorobenzene	21.84	95.0	80152	37.40	UG/L	90
57)	1,3-Dichlorobenzene	26.34	146.0	13941	5.80	UG/L	76
58)	1,4-Dichlorobenzene	26.75	146.0	14641	6.12	UG/L	81
59)	1,2-Dichlorobenzene	28.32	146.0	11224	5.69	UG/L	88

* Compound is ISTD

850931020

F 755

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330, FAX: 201-584-0515
MAY 12, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

GC/MS CONTINUING CALIBRATION SUMMARY
VOLATILE ORGANIC COMPOUNDS

INSTRUMENT ID: 59701
BATCH #: QV5038

THIS CONTINUING CALIBRATION APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS

LAB SAMPLE ID	DATA FILE	ANALYSIS DATE	ANALYSIS TIME
VSTD020	>A3851	05/09/97	18:08
BLANK	>A3852	05/09/97	19:14
262214	>A3859	05/10/97	00:37
262218	>A3861	05/10/97	01:52
262219	>A3862	05/10/97	02:36
262510 S	>A3866	05/10/97	05:20
BLANK S	>A3867	05/10/97	05:58
262216	>A3881	05/10/97	16:40
FROM INITIAL CALIBRATION			
VSTD200	>A3786	05/07/97	17:02
VSTD100	>A3787	05/07/97	17:57
VSTD050	>A3788	05/07/97	18:42
VSTD020	>A3789	05/07/97	19:26
VSTD005	>A3790	05/07/97	20:10
262421	>A3798	05/08/97	02:23
262422	>A3799	05/08/97	03:01
262425	>A3804	05/08/97	06:22
262411	>A3810	05/08/97	10:42
262423	>A3813	05/08/97	12:48
262425 DL	>A3815	05/08/97	14:03
262412	A3811	05/08/97	10 42

NOTE: The 'Initial Calibration Date' listed on the Continuing Calibration Check form reflects the last date a modification was made to the file, not the date that the Initial Calibration was acquired. The Initial Calibration acquisition dates are on the 'GC/MS Continuing Calibration Summary'.

Copyright ICM, Inc.,1997.
All rights reserved.
ERI

850931021

F 75

ICM

VOA QC CHECK REPORT

LAB NAME : ICM LABS
BATCH # : __ _____
LAB FILE ID : ___>A3851_____

MATRIX : _
INST. ID : MSA
DATE ANALYZED: 05/09/97
TIME ANALYZED: 1808

Compound	Concentration	Limits	Status
Benzene	17.6	12.8 <-> 27.2	
Bromodichloromethane	19.3	13.1 <-> 26.9	
Bromoform	16.8	14.2 <-> 25.8	
Chloromethane	12.6	.1 <-> 40.8	
Bromomethane	15.3	2.8 <-> 37.2	
Carbon Tetrachloride	19.3	14.6 <-> 25.4	
Chlorobenzene	19.1	13.2 <-> 26.8	
Chloroethane	32.0	7.6 <-> 32.4	
2-Chloroethylvinylether	17.6	.1 <-> 44.8	
Chloroform	19.6	13.5 <-> 26.5	
Dibromochloromethane	18.2	13.5 <-> 26.5	
1,3-Dichlorobenzene	19.2	14.6 <-> 25.4	
1,2-Dichlorobenzene	18.6	12.6 <-> 27.4	
1,4-Dichlorobenzene	18.9	12.6 <-> 27.4	
1,1-Dichloroethane	18.5	14.5 <-> 25.5	
1,2-Dichloroethane	19.3	13.6 <-> 26.4	
1,1-Dichloroethene	17.5	10.1 <-> 29.9	
trans-1,2-Dichloroethene	18.7	13.9 <-> 26.1	
1,2-Dichloropropane	17.6	6.8 <-> 33.2	
cis-1,3-Dichloropropene	17.7	4.8 <-> 35.2	
trans-1,3-Dichloropropene	17.7	10.0 <-> 30.0	
Ethylbenzene	19.0	11.8 <-> 28.2	
Vinyl Chloride	14.9	.8 <-> 39.2	
Methylene Chloride	14.1	12.1 <-> 27.9	
1,1,2,2-Tetrachloroethane	15.7	12.1 <-> 27.9	
Tetrachloroethene	19.3	14.7 <-> 25.3	
Toluene	18.8	14.9 <-> 25.1	
1,1,1-Trichloroethane	19.7	15.0 <-> 25.0	
1,1,2-Trichloroethane	17.3	14.2 <-> 25.8	
Trichloroethene	18.6	13.3 <-> 26.7	
Trichlorofluoromethane	19.8	18.9 <-> 180.6	
Acetone	57.8	10.0 <-> 100.0	
Acrolein	90.5	10.0 <-> 300.0	
Acrylonitrile	75.7	10.0 <-> 300.0	
p&m Xylene	38.4	10.0 <-> 200.0	
o-Xylene	19.0	10.0 <-> 100.0	
t-Butyl methyl ether	17.8	10.0 <-> 100.0	
t-Butyl alcohol	58.0	10.0 <-> 200.0	
2-Butanone	13.6	10.0 <-> 100.0	
4-Methyl-2-Pentanone	16.8	10.0 <-> 100.0	
2-Hexanone	16.0	10.0 <-> 100.0	
Styrene	18.8	10.0 <-> 100.0	
Carbon Disulfide	14.7	10.0 <-> 100.0	
Isopropanol	0.0	300.0 <-> 5000.	OUT
n-Butanol	0.0	300.0 <-> 5000.	OUT

850931022

F 757

850931023

QUANT REPORT

Operator ID: LB3274 Quant Rev: 7 Quant Time: 970509 18:49
Output File: ^A3851::E1 Injected at: 970509 18:08
Data File: >A3851::A1 Dilution Factor: 1.00000
Name: INST 59701, VSTD020 Instrument ID: INST "A"
Misc: CAL STD, L,5,5,0.53mm X 7SM DB-624

ID File: ID624A::X2
Title: GENERAL IDFILE FOR INSTRUMENT A
Last Calibration: 970507 23:18 Last Qcal Date: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	6.78	128.0	21686	30.00	UG/L	98
2)	Dichlorodifluoromethane	2.45	85.0	38457	21.44	UG/L	100
3)	Chloromethane	2.65	50.0	12103	12.65	UG/L	95
4)	Bromomethane	3.08	94.0	8214	15.25	UG/L	93
5)	Vinyl Chloride	2.75	62.0	17365	14.95	UG/L	94
6)	Chloroethane	3.18	64.0	12837M	31.99	UG/L	99
7)	Acrolein	3.90	56.0	1203	90.49	UG/L	95
8)	Acrylonitrile	4.88	53.0	10064	75.70	UG/L	94
9)	Methylene Chloride	4.58	84.0	19249	14.14	UG/L	84
10)	Acetone	4.27	43.0	11524	57.77	UG/L	100
11)	Carbon Disulfide	4.27	76.0	33262	14.70	UG/L	100
12)	Trichlorofluoromethane	3.45	101.0	42242	19.81	UG/L	100
13)	t-Butyl alcohol	4.74	59.0	2570	57.97	UG/L	100
14)	t-Butyl methyl ether	4.94	73.0	44596	17.80	UG/L	95
16)	1,1-Dichloroethene	4.02	96.0	19860	17.48	UG/L	93
17)	1,1-Dichloroethane	5.50	63.0	47519	18.47	UG/L	93
18)	trans-1,2-Dichloroethene	4.94	96.0	24375	18.65	UG/L	83
19)	cis-1,2-Dichloroethene	6.38	96.0	25664	18.08	UG/L	91
20)	Chloroform	6.93	83.0	52825	19.62	UG/L	95
21)	1,4-Dioxane	10.20	88.0	4503	1004.41	UG/L	90
22)	1,2-Dichloroethane-d4	7.81	65.0	47302	31.72	UG/L	92
23)	1,2-Dichloroethane	7.97	62.0	32135	19.34	UG/L	93
24)	2-Butanone	6.42	43.0	3613	13.58	UG/L	100
27)	*1,4-Difluorobenzene	8.75	114.0	126837	30.00	UG/L	97
28)	1,1,1-Trichloroethane	7.23	97.0	54117	19.73	UG/L	75
29)	Carbon Tetrachloride	7.54	117.0	42624	19.27	UG/L	85
30)	Vinyl Acetate	12.19	43.0	11391	15.65	UG/L	100
31)	Bromodichloromethane	10.51	83.0	49410	19.28	UG/L	91
32)	1,2-Dichloropropane	9.81	63.0	24611	17.63	UG/L	92
33)	cis-1,3-Dichloropropene	11.70	75.0	38462	17.66	UG/L	93
34)	Trichloroethene	9.30	130.0	30447	18.62	UG/L	97
35)	Dibromochloromethane	15.09	129.0	30106	18.19	UG/L	96
36)	Ethylene dibromide	15.36	107.0	50860	28.96	UG/L	96
37)	1,1,2-Trichloroethane	13.88	97.0	15753	17.30	UG/L	94
38)	Benzene	7.93	78.0	66565	17.65	UG/L	93
39)	trans-1,3-Dichloropropene	11.70	75.0	38462	17.66	UG/L	95
40)	2-Chloroethylvinylether	9.81	63.0	24611	17.63	UG/L	100
41)	Bromoform	20.20	173.0	17496	16.77	UG/L	100
44)	*Chlorobenzene-d5	17.03	117.0	93101	30.00	UG/L	96
45)	4-Methyl-2-Pentanone	12.19	43.0	11391	16.76	UG/L	77
46)	2-Hexanone	14.83	43.0	6733	16.05	UG/L	81
47)	Tetrachloroethene	14.25	164.0	26591	19.29	UG/L	97
48)	1,1,2,2-Tetrachloroethane	22.44	83.0	20806	15.73	UG/L	95
49)	Toluene-d8	12.43	98.0	109981	29.94	UG/L	97
50)	Toluene	12.61	92.0	47787	18.79	UG/L	92

113

F-755

50)	Toluene	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
51)	Chlorobenzene	17.12	112.0	54132	19.14	UG/L	91
52)	Ethylbenzene	17.63	106.0	29157	19.04	UG/L	99
53)	Styrene	19.63	104.0	60751	18.84	UG/L	87
54)	p&m Xylene	18.10	106.0	77206	38.39	UG/L	56
55)	o-Xylene	19.57	106.0	36835	18.97	UG/L	90
56)	Bromofluorobenzene	21.60	95.0	78843	30.70	UG/L	96
57)	1,3-Dichlorobenzene	25.12	146.0	51788	19.24	UG/L	73
58)	1,4-Dichlorobenzene	26.53	146.0	51442	18.95	UG/L	84
59)	1,2-Dichlorobenzene	28.10	146.0	40674	18.63	UG/L	88

* Compound is ISTD

850931024

F 759

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330, FAX: 201-584-0515
MAY 8, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

GC/MS INITIAL CALIBRATION SUMMARY
VOLATILE ORGANIC COMPOUNDS

INSTRUMENT ID: 59701
BATCH #: QV5041

THIS INITIAL CALIBRATION APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS

LAB SAMPLE ID	DATA FILE	ANALYSIS DATE	ANALYSIS TIME
VSTD050	>A3768	05/06/97	19:31
BLANK	>A3769	05/06/97	20:53
262217	>A3774	05/07/97	00:21
262406 MS	>A3779	05/07/97	04:38
262406 MSD	>A3780	05/07/97	05:33
INITIAL CALIBRATION			
VSTD020	>A3694	05/02/97	10:31
VSTD050	>A3695	05/02/97	11:31
VSTD100	>A3696	05/02/97	12:31
VSTD150	>A3697	05/02/97	13:26
VSTD200	>A3698	05/02/97	14:21

NOTE: The 'Calibration Date' listed on the Initial Calibration Data form reflects the last date that a modification was made to the file, not the date that the Initial Calibration was acquired. The Initial Calibration acquisition dates are on the 'GC/MS Initial Calibration Summary'.

Copyright ICM, Inc.,1997.
All rights reserved.
EIL

F 760

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330, FAX: 201-584-0515
MAY 8, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

GC/MS INITIAL CALIBRATION SUMMARY
VOLATILE ORGANIC COMPOUNDS

INSTRUMENT ID: 59701
BATCH #: QV5041

THIS INITIAL CALIBRATION APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS

LAB SAMPLE ID	DATA FILE	ANALYSIS DATE	ANALYSIS TIME
VSTD050	>A3782	05/07/97	10:09
BLANK	>A3783	05/07/97	11:15
262215	>A3784	05/07/97	12:22
INITIAL CALIBRATION			
VSTD020	>A3694	05/02/97	10:31
VSTD050	>A3695	05/02/97	11:31
VSTD100	>A3696	05/02/97	12:31
VSTD150	>A3697	05/02/97	13:26
VSTD200	>A3698	05/02/97	14:21

NOTE: The 'Calibration Date' listed on the Initial Calibration Data form reflects the last date that a modification was made to the file, not the date that the Initial Calibration was acquired. The Initial Calibration acquisition dates are on the 'GC/MS Initial Calibration Summary'.

Copyright ICM, Inc.,1997.
All rights reserved.
EIL

850931026
F 761

Initial Calibration Data
HSL Compounds

Case No: _____ Instrument ID: _____

Contractor: _____ Calibration Date: 05/07/97

Contract No: _____

Minimum $\overline{RF}$ for SPCC is _____ Maximum % RSD for CCC is %

Laboratory ID:	>A3694	>A3695	>A3696	>A3697	>A3698					
	RF	RF	RF	RF	RF					
Compound	20.00	50.00	100.00	150.00	200.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CCC	SPCC	
Chloromethane	1.53481	1.34824	1.30460	1.35583	1.33298	.397	1.37529	6.639		**	
Bromomethane	.25958	.55889	.49772	.48197	.48043	.459	.45572	25.062			
Vinyl Chloride	1.89488	1.61182	1.57444	1.61915	1.56741	.412	1.65354	8.272	*		
Chloroethane	.93907	.39680	.33674	.32824	.31914	.473	.46400	57.610			
Acrolein	.03633	.01536	.01426	.01844	.01821	.581	.02052	43.950			(Conc=100.0,250.0,500.0,7
Acrylonitrile	.26194	.26963	.26171	.27811	.26206	.728	.26669	2.703			(Conc=100.0,250.0,500.0,7
Methylene Chloride	1.66428	1.67930	1.51117	1.48341	1.43394	.679	1.55442	7.127			
Acetone	.39471	.34259	.31397	.33567	.30821	.610	.33903	10.113			
Carbon Disulfide	3.72229	3.21469	3.15677	3.24084	3.14519	.632	3.29596	7.331			
Trichlorofluoromethane	3.36112	2.65628	1.43064	.65665	.65655	.512	1.75225	69.370			
t-Butyl alcohol	.14054	.07927	.02906	.10632	.10564	.738	.09217	44.967			(Conc=50.0,125.0,250.0,37
t-Butyl methyl ether	4.33939	4.22947	4.01644	3.99669	3.72014	.734	4.06042	5.882			
1,1-Dichloroethene	1.66916	1.50717	1.36965	1.36768	1.34709	.595	1.45215	9.436	*		
1,1-Dichloroethane	4.03612	3.54001	3.33875	3.45622	3.32893	.814	3.54000	8.214		**	
trans-1,2-Dichloroethene	1.88075	1.71357	1.56977	1.60475	1.52153	.730	1.65807	8.633			
cis-1,2-Dichloroethene	2.14886	1.87084	1.77759	1.80420	1.71971	.942	1.86424	9.018			
Chloroform	4.20166	3.59833	3.39714	3.40141	3.26392	1.022	3.57249	10.396	*		
1,2-Dichloroethane-d4	2.15864	2.25095	2.13164	2.11369	2.01285	1.153	2.13355	4.017			(Conc=50.0,50.0,50.0,50.0
1,2-Dichloroethane	2.66626	2.40081	2.28385	2.25969	2.14777	1.174	2.35168	8.398			
2-Butanone	.13213	.13216	.13407	.13533	.12792	.950	.13232	2.122			
1,1,1-Trichloroethane	.71647	.64484	.60137	.60788	.59130	.830	.63237	8.093			
Carbon Tetrachloride	.53997	.51932	.49697	.49203	.48036	.864	.50573	4.706			
Vinyl Acetate	.04979	.05280	.04926	.04903	.04580	1.175	.04934	5.051			
Bromodichloromethane	.70467	.67519	.63947	.64769	.62433	1.201	.65827	4.838			
1,2-Dichloropropane	.39553	.38642	.36963	.38326	.37853	1.121	.38268	2.503	*		
cis-1,3-Dichloropropene	.61864	.60444	.57971	.58606	.56346	1.334	.59046	3.645			
Trichloroethene	.43890	.39876	.38121	.38355	.37507	1.064	.39550	6.519			
Dibromochloromethane	.45113	.46283	.44925	.45626	.43395	1.718	.45068	2.382			
Ethylene dibromide	.34265	.35817	.33942	.34648	.32480	1.749	.34231	3.529			(Conc=50.0,125.0,250.0,37
1,1,2-Trichloroethane	.26988	.27506	.26336	.26579	.25423	1.581	.26567	2.928			

RF - Response Factor (Subscript is amount in UG/L)

$\overline{RRT}$ - Average Relative Retention Time (RT Std/RT Istd)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

850931027

Initial Calibration Data
HSL Compounds

Case No: _____ Instrument ID: _____

Contractor: _____ Calibration Date: 05/07/97

Contract No: _____

Minimum $\overline{RF}$ for SPCC is _____ Maximum % RSD for CCC is _____ %

Laboratory ID:	>A3694	>A3695	>A3696	>A3697	>A3698					
Compound	RF 20.00	RF 50.00	RF 100.00	RF 150.00	RF 200.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CCC	SPCC
Benzene	1.07154	.97581	.93539	.94255	.93090	.908	.97124	6.051		
trans-1,3-Dichloropropene	.61864	.60444	.57971	.58606	.56346	1.334	.59046	3.645		
2-Chloroethylvinylether	.12299	.11656	.11145	.11045	.10790	1.438	.11387	5.263		
Bromoform	.29855	.32361	.31236	.32966	.31090	2.299	.31502	3.834		**
4-Methyl-2-Pentanone	.33192	.39476	.39016	.39241	.37580	.719	.37701	6.967		
2-Hexanone	.20844	.25854	.26766	.26074	.25071	.873	.24922	9.462		
Tetrachloroethene	.50773	.44744	.42061	.41970	.40604	.838	.44030	9.214		
1,1,2,2-Tetrachloroethane	.53380	.55336	.54698	.54666	.52423	1.316	.54101	2.175		**
Toluene-d8	1.18811	1.22632	1.21745	1.21543	1.21333	.731	1.21213	1.181		(Conc=50.0,50.0,50.0,50.0
Toluene	.97629	.86898	.85418	.85330	.84694	.742	.87994	6.190	*	
Chlorobenzene	1.02491	.94103	.91458	.91179	.90688	1.006	.93984	5.253		**
Ethylbenzene	.57422	.51484	.49305	.49848	.48871	1.035	.51386	6.843	*	
Styrene	1.22982	1.12369	1.08983	1.09522	1.07468	1.152	1.12265	5.566		
p&m Xylene	.76718	.67416	.63806	.64251	.62275	1.063	.66893	8.673		(Conc=40.0,100.0,200.0,30
o-Xylene	.73743	.66122	.63083	.63788	.62071	1.148	.65762	7.154		
Bromofluorobenzene	.85682	.90269	.92544	.91488	.92081	1.267	.90413	3.073		(Conc=50.0,50.0,50.0,50.0 -
1,3-Dichlorobenzene	.98682	.91103	.89448	.87615	.86699	1.531	.90709	5.257		
1,4-Dichlorobenzene	.98003	.90910	.90194	.88011	.87539	1.555	.90932	4.620		
1,2-Dichlorobenzene	.83078	.77072	.75437	.74289	.72971	1.645	.76569	5.144		
Naphthalene	.59307	.65993	.64334	.64998	.54856	2.133	.61897	7.604		
2-Methylnaphthalene	.05972	.05064	.05134	.05821	.05327	2.446	.05464	7.510		
1,3-Dimethylnaphthalene	.03886	.03424	.02682	.03364	.03015	2.780	.03274	13.851		(Conc=200.0,500.0,1000.0,

RF - Response Factor (Subscript is amount in UG/L)

$\overline{RRT}$ - Average Relative Retention Time (RT Std/RT Istd)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

850931029

QUANT REPORT

Operator ID: KS9934 Quant Rev: 7 Quant Time: 970502 11:28
Output File: ^A3694::RS Injected at: 970502 10:31
Data File: >A3694::A1 Dilution Factor: 1.00000
Name: INST 59701, VSTD020 Instrument ID: INST "A"
Misc: INITIAL CAL , 0.53mm X 75M DB624

ID File: ID824A::X2
Title: GENERAL IDFILE FOR INSTRUMENT A
Last Calibration: 970429 23:03 Last Qcal Date: 970501 18:00

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	6.97	128.0	38389	50.00	UG/L	99
2)	Dichlorodifluoromethane	7.13	85.0	41888	22.99	UG/L	100
3)	Chloromethane	2.86	50.0	23568	40.22	UG/L	90
4)	Bromomethane	3.27	94.0	3986	21.96	UG/L	80
5)	Vinyl Chloride	2.94	62.0	29097	37.52	UG/L	99
6)	Chloroethane	3.37	64.0	14420	52.07	UG/L	97
7)	Acrolein	4.07	56.0	2789	185.35	UG/L	99
8)	Acrylonitrile	5.07	53.0	20111	127.79	UG/L	90
9)	Methylene Chloride	4.78	84.0	25556	36.18	UG/L	81
10)	Acetone	4.27	43.0	6061	31.19	UG/L	100
11)	Carbon Disulfide	4.46	76.0	57158	71.36	UG/L	100
12)	Trichlorofluoromethane	3.64	101.0	51612	94.83	UG/L	100
13)	t-Butyl alcohol	4.95	59.0	5395	56.45	UG/L	100
14)	t-Butyl methyl ether	5.13	73.0	66634	26.88	UG/L	91
16)	1,1-Dichloroethene	4.21	96.0	25631	58.03	UG/L	94
17)	1,1-Dichloroethane	5.70	63.0	61977	32.92	UG/L	94
18)	trans-1,2-Dichloroethene	5.13	96.0	28880	37.02	UG/L	81
19)	cis-1,2-Dichloroethene	6.58	96.0	32997M	74.70	UG/L	73
20)	Chloroform	7.13	83.0	64519	28.46	UG/L	94
21)	1,4-Dioxane	10.39	88.0	8918	390.15	UG/L	89
22)	1,2-Dichloroethane-d4	8.03	65.0	82868	51.12	UG/L	95
23)	1,2-Dichloroethane	8.16	62.0	40942	28.54	UG/L	97
24)	2-Butanone	6.60	72.0	2029	27.16	UG/L	86
27)	*1,4-Difluorobenzene	8.93	114.0	215400	50.00	UG/L	98
28)	1,1,1-Trichloroethane	7.44	97.0	61731	29.37	UG/L	81
29)	Carbon Tetrachloride	7.73	117.0	46524	32.67	UG/L	89
30)	Vinyl Acetate	10.39	43.0	4290	22.19	UG/L	100
31)	Bromodichloromethane	10.71	83.0	60714	24.78	UG/L	93
32)	1,2-Dichloropropane	10.00	63.0	34079	26.67	UG/L	90
33)	cis-1,3-Dichloropropene	11.88	75.0	53302	26.48	UG/L	95
34)	Trichloroethene	9.49	130.0	37816	32.20	UG/L	96
35)	Dibromochloromethane	15.27	129.0	38869	23.93	UG/L	99
36)	Ethylene dibromide	15.54	107.0	73807	65.84	UG/L	93
37)	1,1,2-Trichloroethane	14.05	97.0	23253	24.40	UG/L	91
38)	Benzene	8.12	78.0	92324	31.06	UG/L	91
39)	trans-1,3-Dichloropropene	11.88	75.0	53302	26.48	UG/L	97
40)	2-Chloroethylvinylether	12.80	63.0	10597	29.68	UG/L	100
41)	Bromoform	20.39	173.0	25723	22.78	UG/L	99
44)	*Chlorobenzene-d5	17.20	117.0	166771	50.00	UG/L	95
45)	4-Methyl-2-Pentanone	12.37	43.0	22142	22.92	UG/L	78
46)	2-Hexanone	14.99	43.0	13905	21.47	UG/L	73
47)	Tetrachloroethene	14.44	164.0	33870	33.37	UG/L	95
48)	1,1,2,2-Tetrachloroethane	22.60	83.0	35609	23.39	UG/L	94
49)	Toluene-d8	12.60	98.0	198142	49.07	UG/L	95
50)	Toluene	12.80	92.0	65127	30.16	UG/L	95
51)	Chlorobenzene	17.30	112.0	68370	27.39	UG/L	90

F 764

53)	Styrene	19.82	104.0	82039	27.96 UG/L	88
54)	p&m Xylene	18.28	106.0	102355	61.44 UG/L	50
55)	o-Xylene	19.73	106.0	49193	29.12 UG/L	94
56)	Bromofluorobenzene	21.78	95.0	142893	48.32 UG/L	83
57)	1,3-Dichlorobenzene	26.30	146.0	65829	25.84 UG/L	75
58)	1,4-Dichlorobenzene	26.71	146.0	65376	25.24 UG/L	86
59)	1,2-Dichlorobenzene	28.28	146.0	55420	25.86 UG/L	88
60)	Naphthalene	36.63	128.0	39563	21.17 UG/L	100
61)	2-Methylnaphthalene	42.02	142.0	3984M	27.59 UG/L	
62)	1,3-Dimethylnaphthalene	47.75	156.0	25920M	283.22 UG/L	

* Compound is ISTD

850931030

F 765

850931031

QUANT REPORT

Operator ID: KS9934 Quant Rev: 7 Quant Time: 970502 12:28
Output File: ^A3695::RS Injected at: 970502 11:31
Data File: >A3695::A1 Dilution Factor: 1.00000
Name: INST 59701, VSTD050 Instrument ID: INST "A"
Misc: INITIAL CAL , 0.53mm X 75M DB624

ID File: ID824A::X2
Title: GENERAL IDFILE FOR INSTRUMENT A
Last Calibration: 970429 23:03 Last Qcal Date: 970502 10:31

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	6.85	128.0	39657	50.00	UG/L	97
2)	Dichlorodifluoromethane	6.99	85.0	92221	48.99	UG/L	100
3)	Chloromethane	2.66	50.0	53467	88.33	UG/L	91
4)	Bromomethane	3.09	94.0	22164	118.20	UG/L	88
5)	Vinyl Chloride	2.78	62.0	63920	79.79	UG/L	96
6)	Chloroethane	3.19	64.0	15736	55.00	UG/L	96
7)	Acrolein	3.95	56.0	3046	195.96	UG/L	82
8)	Acrylonitrile	4.95	53.0	53464	328.86	UG/L	95
9)	Methylene Chloride	4.62	84.0	66596	91.26	UG/L	83
10)	Acetone	4.13	43.0	13586	67.69	UG/L	100
11)	Carbon Disulfide	4.31	76.0	127485	154.08	UG/L	100
12)	Trichlorofluoromethane	3.46	101.0	105340	187.36	UG/L	100
13)	t-Butyl alcohol	4.87	59.0	7859	79.61	UG/L	100
14)	t-Butyl methyl ether	4.99	73.0	167728	65.49	UG/L	92
16)	1,1-Dichloroethene	4.05	96.0	59770	130.98	UG/L	94
17)	1,1-Dichloroethane	5.56	63.0	140386	72.19	UG/L	95
18)	trans-1,2-Dichloroethene	4.97	96.0	67955	84.33	UG/L	83
19)	cis-1,2-Dichloroethene	6.44	96.0	74192M	162.59	UG/L	71
20)	Chloroform	6.99	83.0	142699	60.93	UG/L	93
21)	1,4-Dioxane	10.31	88.0	25470	1078.66	UG/L	82
22)	1,2-Dichloroethane-d4	7.89	65.0	89266	53.31	UG/L	94
23)	1,2-Dichloroethane	8.04	62.0	95209	64.24	UG/L	93
24)	2-Butanone	6.48	72.0	5241	67.91	UG/L	88
27)	*1,4-Difluorobenzene	8.83	114.0	208260	50.00	UG/L	97
28)	1,1,1-Trichloroethane	7.30	97.0	134294	66.07	UG/L	79
29)	Carbon Tetrachloride	7.61	117.0	108154	78.55	UG/L	86
30)	Vinyl Acetate	10.31	43.0	10997	58.84	UG/L	100
31)	Bromodichloromethane	10.61	83.0	140615	59.36	UG/L	91
32)	1,2-Dichloropropane	9.88	63.0	80476	65.15	UG/L	90
33)	cis-1,3-Dichloropropene	11.78	75.0	125881	64.68	UG/L	95
34)	Trichloroethene	9.39	130.0	83046	73.14	UG/L	98
35)	Dibromochloromethane	15.19	129.0	96390	61.37	UG/L	98
36)	Ethylene dibromide	15.46	107.0	186481	172.05	UG/L	95
37)	1,1,2-Trichloroethane	13.97	97.0	57285	62.17	UG/L	94
38)	Benzene	8.01	78.0	203222	70.70	UG/L	91
39)	trans-1,3-Dichloropropene	11.78	75.0	125881	64.68	UG/L	96
40)	2-Chloroethylvinylether	12.70	63.0	24275	70.32	UG/L	100
41)	Bromoform	20.34	173.0	67394	61.74	UG/L	99
44)	*Chlorobenzene-d5	17.14	117.0	165618	50.00	UG/L	96
45)	4-Methyl-2-Pentanone	12.29	43.0	65380	68.14	UG/L	79
46)	2-Hexanone	14.93	43.0	42819	66.57	UG/L	77
47)	Tetrachloroethene	14.37	164.0	74104	73.52	UG/L	96
48)	1,1,2,2-Tetrachloroethane	22.57	83.0	91647	60.63	UG/L	90
49)	Toluene-d8	12.53	98.0	203101	50.65	UG/L	99
50)	Toluene	12.70	92.0	143918	67.11	UG/L	92
51)	Chlorobenzene	17.24	112.0	155851	62.88	UG/L	90
52)	Ethylbenzene	17.75	106.0	85267	64.35	UG/L	99
53)	Styrene	19.75	104.0	186104	63.86	UG/L	90

121

F 766

54)	para-Xylene	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
55)	o-Xylene	19.67	106.0	109510	65.29	UG/L	92
56)	Bromofluorobenzene	21.73	95.0	149501	50.90	UG/L	83
57)	1,3-Dichlorobenzene	26.23	146.0	150883	59.65	UG/L	72
58)	1,4-Dichlorobenzene	26.64	146.0	150564	58.54	UG/L	88
59)	1,2-Dichlorobenzene	28.18	146.0	127645	59.97	UG/L	86
60)	Naphthalene	36.52	128.0	109296	58.89	UG/L	100
61)	2-Methylnaphthalene	41.89	142.0	8387	58.48	UG/L	90
62)	1,3-Dimethylnaphthalene	47.60	156.0	56706	623.92	UG/L	93

* Compound is ISTD

850931033

QUANT REPORT

Operator ID: KS9934 Quant Rev: 7 Quant Time: 970502 13:22
Output File: ^A3696::RS Injected at: 970502 12:31
Data File: >A3696::A1 Dilution Factor: 1.00000
Name: INST 59701, VSTD100 Instrument ID: INST "A"
Misc: INITIAL CAL , 0.53mm X 75M DB624

ID File: ID824A::X2
Title: GENERAL IDFILE FOR INSTRUMENT A
Last Calibration: 970429 23:03 Last Qcal Date: 970502 10:31

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	6.87	128.0	41888	50.00	UG/L	97
2)	Dichlorodifluoromethane	7.03	85.0	195483	93.29	UG/L	100
3)	Chloromethane	2.74	50.0	109294	170.95	UG/L	90
4)	Bromomethane	3.17	94.0	41697	210.53	UG/L	91
5)	Vinyl Chloride	2.86	62.0	131900	155.88	UG/L	95
6)	Chloroethane	3.27	64.0	28211	93.36	UG/L	96
7)	Acrolein	4.01	56.0	5973	363.79	UG/L	99
8)	Acrylonitrile	5.01	53.0	109627	638.40	UG/L	95
9)	Methylene Chloride	4.68	84.0	126600	164.24	UG/L	81
10)	Acetone	4.21	43.0	26303	124.06	UG/L	100
11)	Carbon Disulfide	4.36	76.0	264462	302.61	UG/L	100
12)	Trichlorofluoromethane	3.54	101.0	119853	201.82	UG/L	100
13)	t-Butyl alcohol	5.03	59.0	6086	58.37	UG/L	100
14)	t-Butyl methyl ether	5.05	73.0	336481	124.38	UG/L	91
16)	1,1-Dichloroethene	4.11	96.0	114744	238.07	UG/L	93
17)	1,1-Dichloroethane	5.60	63.0	279707	136.18	UG/L	95
18)	trans-1,2-Dichloroethene	5.03	96.0	131509	154.51	UG/L	78
19)	cis-1,2-Dichloroethene	6.48	96.0	148919M	308.97	UG/L	70
20)	Chloroform	7.03	83.0	284599	115.04	UG/L	93
21)	1,4-Dioxane	10.37	88.0	51585	2068.27	UG/L	80
22)	1,2-Dichloroethane-d4	7.93	65.0	89296	50.48	UG/L	99
23)	1,2-Dichloroethane	8.06	62.0	191332	122.23	UG/L	94
24)	2-Butanone	6.54	72.0	11232	137.78	UG/L	84
27)	*1,4-Difluorobenzene	8.83	114.0	219747	50.00	UG/L	99
28)	1,1,1-Trichloroethane	7.34	97.0	264297	123.24	UG/L	77
29)	Carbon Tetrachloride	7.63	117.0	218416	150.33	UG/L	89
30)	Vinyl Acetate	10.35	43.0	21650	109.78	UG/L	100
31)	Bromodichloromethane	10.61	83.0	281043	112.44	UG/L	92
32)	1,2-Dichloropropane	9.90	63.0	162451	124.63	UG/L	91
33)	cis-1,3-Dichloropropene	11.78	75.0	254780	124.06	UG/L	95
34)	Trichloroethene	9.40	130.0	167538	139.83	UG/L	97
35)	Dibromochloromethane	15.17	129.0	197441	119.14	UG/L	99
36)	Ethylene dibromide	15.45	107.0	372935	326.09	UG/L	96
37)	1,1,2-Trichloroethane	13.96	97.0	115747	119.05	UG/L	95
38)	Benzene	8.02	78.0	411099	135.55	UG/L	92
39)	trans-1,3-Dichloropropene	11.78	75.0	254780	124.06	UG/L	95
40)	2-Chloroethylvinylether	12.70	63.0	48983	134.47	UG/L	100
41)	Bromoform	20.28	173.0	137281	119.18	UG/L	99
44)	*Chlorobenzene-d5	17.11	117.0	168642	50.00	UG/L	94
45)	4-Methyl-2-Pentanone	12.29	43.0	131595	134.68	UG/L	79
46)	2-Hexanone	14.92	43.0	90277	137.83	UG/L	80
47)	Tetrachloroethene	14.33	164.0	141866	138.23	UG/L	96
48)	1,1,2,2-Tetrachloroethane	22.49	83.0	184487	119.85	UG/L	93
49)	Toluene-d8	12.51	98.0	205313	50.29	UG/L	96
50)	Toluene	12.68	92.0	288102	131.94	UG/L	93
51)	Chlorobenzene	17.21	112.0	308473	122.22	UG/L	89
52)	Ethylbenzene	17.70	106.0	166297	123.25	UG/L	98
53)	Styrene	19.69	104.0	367581	123.87	UG/L	88

F 268

54)	p&m Xylene	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
55)	o-Xylene	19.62	106.0	212770	124.57	UG/L	89
56)	Bromofluorobenzene	21.65	95.0	156068	52.19	UG/L	80
57)	1,3-Dichlorobenzene	26.15	146.0	301693	117.13	UG/L	75
58)	1,4-Dichlorobenzene	26.56	146.0	304211	116.16	UG/L	84
59)	1,2-Dichlorobenzene	28.09	146.0	254436	117.40	UG/L	87
60)	Naphthalene	36.46	128.0	216988	114.81	UG/L	100
61)	2-Methylnaphthalene	41.82	142.0	17315	118.57	UG/L	93
62)	1,3-Dimethylnaphthalene	47.55	156.0	90445	977.29	UG/L	96

* Compound is ISTD

850931035

QUANT REPORT

Operator ID: KS9934 Quant Rev: 7 Quant Time: 970502 14:17
Output File: ^A3697::RS Injected at: 970502 13:26
Data File: >A3697::A1 Dilution Factor: 1.00000
Name: INST 59701, VSTD150 Instrument ID: INST "A"
Misc: INITIAL CAL , 0.53mm X 75M DB624

ID File: ID824A::X2
Title: GENERAL IDFILE FOR INSTRUMENT A
Last Calibration: 970429 23:03 Last Qcal Date: 970502 10:31

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	6.84	128.0	41533	50.00	UG/L	97
2)	Dichlorodifluoromethane	7.00	85.0	275248	139.63	UG/L	100
3)	Chloromethane	2.71	50.0	168935	266.49	UG/L	92
4)	Bromomethane	3.14	94.0	60053	305.80	UG/L	90
5)	Vinyl Chloride	2.83	62.0	201744	240.46	UG/L	96
6)	Chloroethane	3.24	64.0	40899	136.50	UG/L	94
7)	Acrolein	3.98	56.0	11488	705.66	UG/L	99
8)	Acrylonitrile	5.00	53.0	173261	1017.59	UG/L	96
9)	Methylene Chloride	4.65	84.0	184832	241.83	UG/L	81
10)	Acetone	4.20	43.0	41824	198.96	UG/L	100
11)	Carbon Disulfide	4.32	76.0	403806	466.00	UG/L	100
12)	Trichlorofluoromethane	3.49	101.0	81818	138.95	UG/L	100
13)	t-Butyl alcohol	5.22	59.0	33119	320.33	UG/L	100
14)	t-Butyl methyl ether	5.04	73.0	497983	185.65	UG/L	91
16)	1,1-Dichloroethene	4.06	96.0	170411	356.58	UG/L	94
17)	1,1-Dichloroethane	5.57	63.0	430641	211.46	UG/L	95
18)	trans-1,2-Dichloroethene	5.00	96.0	199950	236.93	UG/L	77
19)	cis-1,2-Dichloroethene	6.45	96.0	224802M	470.40	UG/L	71
20)	Chloroform	7.00	83.0	423812	172.78	UG/L	95
21)	1,4-Dioxane	10.41	88.0	81931	3313.06	UG/L	82
22)	1,2-Dichloroethane-d4	7.90	65.0	87788	50.06	UG/L	90
23)	1,2-Dichloroethane	8.04	62.0	281555	181.40	UG/L	94
24)	2-Butanone	6.53	72.0	16862	208.61	UG/L	82
27)	*1,4-Difluorobenzene	8.82	114.0	217948	50.00	UG/L	98
28)	1,1,1-Trichloroethane	7.31	97.0	397459	186.86	UG/L	79
29)	Carbon Tetrachloride	7.61	117.0	321709	223.25	UG/L	86
30)	Vinyl Acetate	10.43	43.0	32057	163.89	UG/L	100
31)	Bromodichloromethane	10.58	83.0	423489	170.83	UG/L	91
32)	1,2-Dichloropropane	9.88	63.0	250592	193.84	UG/L	93
33)	cis-1,3-Dichloropropene	11.76	75.0	383190	188.13	UG/L	95
34)	Trichloroethene	9.37	130.0	250782	211.04	UG/L	96
35)	Dibromochloromethane	15.15	129.0	298321	181.51	UG/L	99
36)	Ethylene dibromide	15.42	107.0	566366	499.31	UG/L	95
37)	1,1,2-Trichloroethane	13.93	97.0	173786	180.21	UG/L	96
38)	Benzene	8.00	78.0	616278	204.88	UG/L	92
39)	trans-1,3-Dichloropropene	11.76	75.0	383190	188.13	UG/L	96
40)	2-Chloroethylvinylether	12.68	63.0	72216	199.88	UG/L	100
41)	Bromoform	20.28	173.0	215546	188.67	UG/L	98
44)	*Chlorobenzene-d5	17.08	117.0	170651	50.00	UG/L	94
45)	4-Methyl-2-Pentanone	12.29	43.0	200898	203.19	UG/L	77
46)	2-Hexanone	14.93	43.0	133487	201.40	UG/L	77
47)	Tetrachloroethene	14.30	164.0	214869	206.90	UG/L	96
48)	1,1,2,2-Tetrachloroethane	22.51	83.0	279864	179.67	UG/L	96
49)	Toluene-d8	12.48	98.0	207414	50.20	UG/L	98
50)	Toluene	12.68	92.0	436852	197.70	UG/L	93
51)	Chlorobenzene	17.18	112.0	466796	182.77	UG/L	88
52)	Ethylbenzene	17.69	106.0	255197	186.91	UG/L	99
53)	Styrene	19.69	104.0	560701	186.72	UG/L	91

F 770

54)	p&m Xylene	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
55)	o-Xylene	19.61	106.0	326565	188.94	UG/L	93
56)	Bromofluorobenzene	21.65	95.0	156126	51.59	UG/L	61
57)	1,3-Dichlorobenzene	26.17	146.0	448549	172.10	UG/L	74
58)	1,4-Dichlorobenzene	26.58	146.0	450577	170.02	UG/L	83
59)	1,2-Dichlorobenzene	28.13	146.0	380326	173.42	UG/L	89
60)	Naphthalene	36.48	128.0	332757	174.00	UG/L	100
61)	2-Methylnaphthalene	41.84	142.0	29799	201.65	UG/L	98
62)	1,3-Dimethylnaphthalene	47.53	156.0	172230	1839.10	UG/L	99

* Compound is ISTD

850931036

F 771

850931037

QUANT REPORT

Operator ID: KS9934 Quant Rev: 7 Quant Time: 970502 15:12
Output File: ^A3698::RS Injected at: 970502 14:21
Data File: >A3698::A1 Dilution Factor: 1.00000
Name: INST 59701, VSTD200 Instrument ID: INST "A"
Misc: INITIAL CAL , 0.53mm X 75M DB624

ID File: ID824A::X2
Title: GENERAL IDFILE FOR INSTRUMENT A
Last Calibration: 970429 23:05 Last Qcal Date: 970502 10:31

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	6.82	128.0	42735	50.00	UG/L	99
2)	Dichlorodifluoromethane	6.96	85.0	361739	178.34	UG/L	100
3)	Chloromethane	2.67	50.0	227860	349.33	UG/L	91
4)	Bromomethane	3.10	94.0	82125	406.44	UG/L	87
5)	Vinyl Chloride	2.77	62.0	267933	310.36	UG/L	96
6)	Chloroethane	3.20	64.0	54554	176.95	UG/L	95
7)	Acrolein	3.94	56.0	15561	928.97	UG/L	95
8)	Acrylonitrile	4.96	53.0	223984	1278.49	UG/L	94
9)	Methylene Chloride	4.61	84.0	245117	311.69	UG/L	80
10)	Acetone	4.16	43.0	52686	243.58	UG/L	100
11)	Carbon Disulfide	4.26	76.0	537639	603.00	UG/L	100
12)	Trichlorofluoromethane	3.43	101.0	112231	185.24	UG/L	100
13)	t-Butyl alcohol	5.28	59.0	45147	424.39	UG/L	100
14)	t-Butyl methyl ether	5.00	73.0	635920	230.40	UG/L	89
16)	1,1-Dichloroethene	4.00	96.0	230272	468.29	UG/L	93
17)	1,1-Dichloroethane	5.53	63.0	569047	271.56	UG/L	94
18)	trans-1,2-Dichloroethene	4.94	96.0	260090	299.52	UG/L	77
19)	cis-1,2-Dichloroethene	6.41	96.0	293967M	597.82	UG/L	72
20)	Chloroform	6.98	83.0	557935	221.06	UG/L	92
21)	1,4-Dioxane	10.45	88.0	106129	4170.85	UG/L	77
22)	1,2-Dichloroethane-d4	7.86	65.0	86019	47.67	UG/L	92
23)	1,2-Dichloroethane	8.02	62.0	367140	229.89	UG/L	95
24)	2-Butanone	6.49	72.0	21867	262.92	UG/L	84
27)	*1,4-Difluorobenzene	8.78	114.0	220857	50.00	UG/L	99
28)	1,1,1-Trichloroethane	7.27	97.0	522372	242.35	UG/L	76
29)	Carbon Tetrachloride	7.57	117.0	424362	290.61	UG/L	86
30)	Vinyl Acetate	10.45	43.0	40461	204.14	UG/L	100
31)	Bromodichloromethane	10.54	83.0	551547	219.55	UG/L	90
32)	1,2-Dichloropropane	9.84	63.0	334405	255.26	UG/L	93
33)	cis-1,3-Dichloropropene	11.74	75.0	497779	241.17	UG/L	95
34)	Trichloroethene	9.35	130.0	331346	275.16	UG/L	95
35)	Dibromochloromethane	15.13	129.0	383361	230.17	UG/L	98
36)	Ethylene dibromide	15.40	107.0	717352	624.09	UG/L	97
37)	1,1,2-Trichloroethane	13.93	97.0	224598	229.84	UG/L	97
38)	Benzene	7.96	78.0	822382	269.80	UG/L	93
39)	trans-1,3-Dichloropropene	11.74	75.0	497779	241.17	UG/L	96
40)	2-Chloroethylvinylether	12.66	63.0	95320	260.36	UG/L	100
41)	Bromoform	20.30	173.0	274659	237.25	UG/L	95
44)	*Chlorobenzene-d5	17.07	117.0	169378	50.00	UG/L	95
45)	4-Methyl-2-Pentanone	12.31	43.0	254608	259.45	UG/L	77
46)	2-Hexanone	14.97	43.0	169859	258.20	UG/L	77
47)	Tetrachloroethene	14.28	164.0	275094	266.88	UG/L	96
48)	1,1,2,2-Tetrachloroethane	22.51	83.0	355173	229.74	UG/L	94
49)	Toluene-d8	12.46	98.0	205511	50.12	UG/L	99
50)	Toluene	12.66	92.0	573815	261.63	UG/L	93
51)	Chlorobenzene	17.16	112.0	614420	242.38	UG/L	91
52)	Ethylbenzene	17.67	106.0	331106	244.34	UG/L	98
53)	Styrene	19.69	104.0	728108	244.29	UG/L	91

F-272

54)	p/m-Xylene	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
55)	o-Xylene	19.61	106.0	420539	245.14	UG/L	90
56)	Bromofluorobenzene	21.65	95.0	155965	51.93	UG/L	79
57)	1,3-Dichlorobenzene	26.17	146.0	587399	227.06	UG/L	73
58)	1,4-Dichlorobenzene	26.60	146.0	593086	225.47	UG/L	84
59)	1,2-Dichlorobenzene	28.13	146.0	494388	227.12	UG/L	87
60)	Naphthalene	36.48	128.0	371654	195.80	UG/L	100
61)	2-Methylnaphthalene	41.82	142.0	36091	246.06	UG/L	91
62)	1,3-Dimethylnaphthalene	47.54	156.0	204276	2197.69	UG/L	96

* Compound is IST0

F 72

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330, FAX: 201-584-0515
MAY 8, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

GC/MS CONTINUING CALIBRATION SUMMARY
VOLATILE ORGANIC COMPOUNDS

INSTRUMENT ID: 59701
BATCH #: QV5041

THIS CONTINUING CALIBRATION APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS

LAB SAMPLE ID	DATA FILE	ANALYSIS DATE	ANALYSIS TIME
VSTD050	>A3768	05/06/97	19:31
BLANK	>A3769	05/06/97	20:53
262217	>A3774	05/07/97	00:21
262406 MS	>A3779	05/07/97	04:38
262406 MSD	>A3780	05/07/97	05:33
FROM INITIAL CALIBRATION			
VSTD020	>A3694	05/02/97	10:31
VSTD050	>A3695	05/02/97	11:31
VSTD100	>A3696	05/02/97	12:31
VSTD150	>A3697	05/02/97	13:26
VSTD200	>A3698	05/02/97	14:21

NOTE: The 'Initial Calibration Date' listed on the Continuing Calibration Check form reflects the last date a modification was made to the file, not the date that the Initial Calibration was acquired. The Initial Calibration acquisition dates are on the 'GC/MS Continuing Calibration Summary'.

Copyright ICM, Inc.,1997.
All rights reserved.
EIL

850931039

F 774

Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 05/06/97

Contractor: Time: 19:31

Contract No: Laboratory ID: >A3768

Instrument ID: Initial Calibration Date: 05/02/97

Minimum $\overline{RF}$ for SPCC is Maximum % Diff for CCC is %

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
Chloromethane	1.37529	1.02033	25.81		**	
Bromomethane	.45572	.52897	16.07			
Vinyl Chloride	1.65354	1.38123	16.47	*		
Chloroethane	.46400	.47304	1.95			
Acrolein	.02052	.00640	68.81			(Conc=750.00)
Acrylonitrile	.26669	.22125	17.04			(Conc=250.00)
Methylene Chloride	1.55442	1.51731	2.39			
Acetone	.33903	.26981	20.42			
Carbon Disulfide	3.29596	3.15470	4.29			
Trichlorofluoromethane	1.75225	2.82987	61.50			
t-Butyl alcohol	.09217	.11196	21.47			(Conc=125.00)
t-Butyl methyl ether	4.06042	3.99899	1.51			
1,1-Dichloroethene	1.45215	1.54690	6.52	*		
1,1-Dichloroethane	3.54000	3.56884	.81		**	
trans-1,2-Dichloroethene	1.65807	1.87246	12.93			
Chloroform	3.57249	3.78955	6.08	*		
1,2-Dichloroethane-d4	2.13355	2.06135	3.38			
1,2-Dichloroethane	2.35168	2.48512	5.67			
2-Butanone	.13232	.10924	17.44			
1,1,1-Trichloroethane	.63237	.70230	11.06			
Carbon Tetrachloride	.50573	.55178	9.11			
Vinyl Acetate	.04934	.03912	20.71			
Bromodichloromethane	.65827	.69846	6.11			
1,2-Dichloropropane	.38268	.36126	5.60	*		
cis-1,3-Dichloropropene	.59046	.59002	.08			
Trichloroethene	.39550	.43396	9.73			
Dibromochloromethane	.45068	.46970	4.22			
Ethylene dibromide	.34231	.33898	.97			(Conc=125.00)
1,1,2-Trichloroethane	.26567	.26133	1.63			
Benzene	.97124	.95566	1.60			
trans-1,3-Dichloropropene	.59046	.59002	.08			
2-Chloroethylvinylether	.11387	.11782	3.47			

RF - Response factor from daily standard file at 50.00 UG/L

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 05/06/97

Contractor: Time: 19:31

Contract No: Laboratory ID: >H3768

Instrument ID: Initial Calibration Date: 05/02/97

Minimum $\overline{RF}$ for SPCC is Maximum % Diff for CCC is %

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
Bromoform	.31502	.31114	1.23		**	
4-Methyl-2-Pentanone	.37701	.30495	19.11			
2-Hexanone	.24922	.20393	18.17			
Tetrachloroethene	.44030	.48350	9.81			
1,1,2,2-Tetrachloroethane	.54101	.47521	12.16		**	
Toluene-d8	1.21213	1.14613	5.44			
Toluene	.87994	.89398	1.60	*		
Chlorobenzene	.93984	.97977	4.25		**	
Ethylbenzene	.51386	.54021	5.13	*		
Styrene	1.12265	1.14488	1.98			
p&m Xylene	.66893	.69980	4.61			(Conc=100.00)
o-Xylene	.65762	.68043	3.47			
Bromofluorobenzene	.90413	.82299	8.97			
1,3-Dichlorobenzene	.90709	.93279	2.83			
1,4-Dichlorobenzene	.90932	.94582	4.01			
1,2-Dichlorobenzene	.76569	.77160	.77			
Naphthalene	.61897	-	-			(Conc=50.00)
2-Methylnaphthalene	.05464	-	-			
1,3-Dimethylnaphthalene	.03274	-	-			(Conc=500.00)

RF - Response Factor from daily standard file at 50.00 UG/L

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

QUANT REPORT

Operator ID: LB3274 Quant Rev: 7 Quant Time: 970506 20:22
Output File: ^A3768::QT Injected at: 970506 19:31
Data File: ^A3768::E1 Dilution Factor: 1.00000
Name: INST. 59701,VSTD050 Instrument ID: INST "A"
Misc: VSTD050, 0.53mm X 75M DB-8240

ID File: ID824A::X2
Title: GENERAL IDFILE FOR INSTRUMENT A
Last Calibration: 970429 23:03 Last Qcal Time: 970506 09:28

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	6.83	128.0	42785	50.00	UG/L	9
2)	Dichlorodifluoromethane	6.97	85.0	106340	42.03	UG/L	10
3)	Chloromethane	2.66	50.0	43655	45.56	UG/L	8
4)	Bromomethane	3.09	94.0	22632	45.56	UG/L	8
5)	Vinyl Chloride	2.78	62.0	59096	48.03	UG/L	9
6)	Chloroethane	3.19	64.0	20239	37.37	UG/L	9
7)	Acrolein	3.91	56.0	4107	231.57	UG/L	9
8)	Acrylonitrile	4.93	53.0	47331	265.29	UG/L	9
9)	Methylene Chloride	4.62	84.0	64918	53.06	UG/L	8
10)	Acetone	4.11	43.0	11544	49.84	UG/L	10
11)	Carbon Disulfide	4.30	76.0	134974	50.40	UG/L	10
12)	Trichlorofluoromethane	3.46	101.0	121076	49.54	UG/L	10
13)	t-Butyl alcohol	4.81	59.0	11975	117.83	UG/L	10
14)	t-Butyl methyl ether	4.99	73.0	171097	53.48	UG/L	9
16)	1,1-Dichloroethene	4.03	96.0	66184	50.62	UG/L	9
17)	1,1-Dichloroethane	5.54	63.0	152693	52.04	UG/L	9
18)	trans-1,2-Dichloroethene	4.97	96.0	80113	52.30	UG/L	8
19)	cis-1,2-Dichloroethene	4.03	96.0	66184	50.62	UG/L	7
20)	Chloroform	6.97	83.0	162136	52.74	UG/L	9
21)	1,4-Dioxane	10.27	88.0	22871	1114.51	UG/L	8
22)	1,2-Dichloroethane-d4	7.87	65.0	88195	50.73	UG/L	9
23)	1,2-Dichloroethane	8.02	62.0	106326	55.14	UG/L	9
24)	2-Butanone	6.46	72.0	4674	50.67	UG/L	8
27)	*1,4-Difluorobenzene	8.79	114.0	228629	50.00	UG/L	9
28)	1,1,1-Trichloroethane	7.28	97.0	160566	54.40	UG/L	8
29)	Carbon Tetrachloride	7.59	117.0	126153	53.44	UG/L	8
30)	Vinyl Acetate	10.29	43.0	8944	55.22	UG/L	10
31)	Bromodichloromethane	10.57	83.0	159688	54.53	UG/L	9
32)	1,2-Dichloropropane	9.84	63.0	82595	53.84	UG/L	9
33)	cis-1,3-Dichloropropene	11.74	75.0	134895	54.24	UG/L	9
34)	Trichloroethene	9.35	130.0	99216	55.11	UG/L	9
35)	Dibromochloromethane	15.15	129.0	107386	55.89	UG/L	9
36)	Ethylene dibromide	15.42	107.0	193752	140.31	UG/L	9
37)	1,1,2-Trichloroethane	13.93	97.0	59748	55.38	UG/L	9
38)	Benzene	7.98	78.0	218492	52.77	UG/L	9
39)	trans-1,3-Dichloropropene	11.74	75.0	134895	54.24	UG/L	9
40)	2-Chloroethylvinylether	12.66	63.0	26938	54.48	UG/L	10
41)	Bromoform	20.30	173.0	71136	55.07	UG/L	9
44)	*Chlorobenzene-d5	17.10	117.0	179283	50.00	UG/L	9
45)	4-Methyl-2-Pentanone	12.25	43.0	54672	52.31	UG/L	7

F777

Operator ID: LB3274 Quant Rev: 7 Quant Time: 970506 20:22
Output File: ^A3768::QT Injected at: 970506 19:31
Data File: ^A3768::E1 Dilution Factor: 1.00000
Name: INST. 59701,VSTD050 Instrument ID: INST "A"
Misc: VSTD050, 0.53mm X 75M DB-8240

ID File: ID824A::X2
Title: GENERAL IDFILE FOR INSTRUMENT A
Last Calibration: 970429 23:03 Last Qcal Time: 970506 09:28

	Compound	R.T.	Q ion	Area	Conc	Units
46)	2-Hexanone	14.87	43.0	36561	52.46	UG/L
47)	Tetrachloroethene	14.31	164.0	36683	52.98	UG/L
48)	1,1,2,2-Tetrachloroethane	22.56	83.0	35197	52.26	UG/L
49)	Toluene-d8	12.49	98.0	205482	48.69	UG/L
50)	Toluene	12.66	92.0	160276	55.06	UG/L
51)	Chlorobenzene	17.20	112.0	175657	54.14	UG/L
52)	Ethylbenzene	17.71	106.0	96850	53.65	UG/L
53)	Styrene	19.73	104.0	205257	52.65	UG/L
54)	p&m Xylene	18.18	106.0	250923	105.58	UG/L
55)	o-Xylene	19.65	106.0	121989	52.91	UG/L
56)	Bromofluorobenzene	21.70	95.0	147548	49.01	UG/L
57)	1,3-Dichlorobenzene	26.23	146.0	167233	53.45	UG/L
58)	1,4-Dichlorobenzene	26.66	146.0	169570	52.98	UG/L
59)	1,2-Dichlorobenzene	28.21	146.0	138334	54.30	UG/L

* Compound is ISTD

850931043

F 778

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330, FAX: 201-584-0515
MAY 8, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

GC/MS CONTINUING CALIBRATION SUMMARY
VOLATILE ORGANIC COMPOUNDS

INSTRUMENT ID: 59701
BATCH #: QV5041

THIS CONTINUING CALIBRATION APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS

LAB SAMPLE ID	DATA FILE	ANALYSIS DATE	ANALYSIS TIME
VSTD050	>A3782	05/07/97	10:09
BLANK	>A3783	05/07/97	11:15
262215	>A3784	05/07/97	12:22
FROM INITIAL CALIBRATION			
VSTD020	>A3694	05/02/97	10:31
VSTD050	>A3695	05/02/97	11:31
VSTD100	>A3696	05/02/97	12:31
VSTD150	>A3697	05/02/97	13:26
VSTD200	>A3698	05/02/97	14:21

NOTE: The 'Initial Calibration Date' listed on the Continuing Calibration Check form reflects the last date a modification was made to the file, not the date that the Initial Calibration was acquired. The Initial Calibration acquisition dates are on the 'GC/MS Continuing Calibration Summary'.

Copyright ICM, Inc.,1997.
All rights reserved.
EIL

850931044

F779

Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 05/07/97

Contractor: Time: 10:09

Contract No: Laboratory ID: SA3732

Instrument ID: Initial Calibration Date: 05/02/97

Minimum $\overline{RF}$ for SPCC is Maximum % Diff for CCC is %

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
Chloromethane	1.37529	1.05330	23.41		**	
Bromomethane	.45572	.82457	80.94			
Vinyl Chloride	1.65354	1.47758	10.64	*		
Chloroethane	.46400	.60467	30.32			
Acrolein	.02052	.00485	76.34			(Conc=750.00)
Acrylonitrile	.26669	.21140	20.73			(Conc=250.00)
Methylene Chloride	1.55442	1.61409	3.84			
Acetone	.33903	.29046	14.33			
Carbon Disulfide	3.29596	3.39682	3.06			
Trichlorofluoromethane	1.75225	3.24269	85.06			
t-Butyl alcohol	.09217	.11533	25.13			(Conc=125.00)
t-Butyl methyl ether	4.06042	4.13554	1.85			
1,1-Dichloroethene	1.45215	1.59374	9.75	*		
1,1-Dichloroethane	3.54000	3.67440	3.80		**	
trans-1,2-Dichloroethene	1.65807	1.95183	17.72			
Chloroform	3.57249	4.00431	12.09	*		
1,2-Dichloroethane-d4	2.13355	2.03349	4.69			
1,2-Dichloroethane	2.35168	2.48384	5.62			
2-Butanone	.13232	.10985	16.99			
1,1,1-Trichloroethane	.63237	.73419	16.10			
Carbon Tetrachloride	.50573	.61762	22.12			
Vinyl Acetate	.04934	.03795	23.08			
Bromodichloromethane	.65827	.70589	7.23			
1,2-Dichloropropane	.38268	.35355	7.61	*		
cis-1,3-Dichloropropene	.59046	.57748	2.20			
Trichloroethene	.39550	.44039	11.35			
Dibromochloromethane	.45068	.45785	1.59			
Ethylene dibromide	.34231	.32417	5.30			(Conc=125.00)
1,1,2-Trichloroethane	.26567	.25060	5.67			
Benzene	.97124	.97416	.30			
trans-1,3-Dichloropropene	.59046	.57748	2.20			
2-Chloroethylvinylether	.11387	.11848	4.05			

RF - Response Factor from daily standard file at 50.00 UG/L

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Continuing Calibration Check
HSL Compounds

Case No: | Calibration Date: 05/07/97

Contractor: | Time: 10:09

Contract No: | Laboratory ID: >A3782

Instrument ID: | Initial Calibration Date: 05/02/97

Minimum $\overline{RF}$ for SPCC is | Maximum % Diff for CCC is %

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
Bromoform	.31502	.29477	6.43		**	
4-Methyl-2-Pentanone	.37701	.29819	20.91			
2-Hexanone	.24922	.18869	24.29			
Tetrachloroethene	.44030	.50558	14.83			
1,1,2,2-Tetrachloroethane	.54101	.46013	14.95		**	
Toluene-d8	1.21213	1.16209	4.13			
Toluene	.87994	.88242	.28	*		
Chlorobenzene	.93984	.98581	4.89		**	
Ethylbenzene	.51386	.54305	5.68	*		
Styrene	1.12265	1.15646	3.01			
p&m Xylene	.66893	.70627	5.58			(Conc=100.00)
o-Xylene	.65762	.69264	5.33			
Bromofluorobenzene	.90413	.83352	7.81			
1,3-Dichlorobenzene	.90709	.94605	4.29			
1,4-Dichlorobenzene	.90932	.93954	3.32			
1,2-Dichlorobenzene	.76569	.77730	1.52			
Naphthalene	.61897	-	-			(Conc=50.00)
2-Methylnaphthalene	.05464	-	-			
1,3-Dimethylnaphthalene	.03274	-	-			(Conc=500.00)

RF - Response Factor from daily standard file at 50.00 UG/L

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

850931047

QUANT REPORT

Operator ID: KS9934 Quant Rev: 7 Quant Time: 970507 10:44
Output File: "A3782::QT Injected at: 970507 10:09
Data File: >A3782::A1 Dilution Factor: 1.00000
Name: INST 58701, VSTD050 Instrument ID: INST "A"
Misc: VSTD050 , 0.53mm X 75M DB624

ID File: ID824A::X2
Title: GENERAL IDFILE FOR INSTRUMENT A
Last Calibration: 970429 23:03 Last Qcal Date: 970506 19:31

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	6.94	128.0	40129	50.00	UG/L	93
2)	Dichlorodifluoromethane	7.10	85.0	104191	41.79	UG/L	100
3)	Chloromethane	2.74	50.0	42268	51.62	UG/L	91
4)	Bromomethane	3.19	94.0	33089	77.94	UG/L	87
5)	Vinyl Chloride	2.85	62.0	59294	53.49	UG/L	96
6)	Chloroethane	3.29	64.0	24265	63.91	UG/L	97
7)	Acrolein	4.03	56.0	2922	189.64	UG/L	79
8)	Acrylonitrile	5.03	53.0	42416	238.87	UG/L	94
9)	Methylene Chloride	4.71	84.0	64772	53.19	UG/L	85
10)	Acetone	4.22	43.0	11656	53.83	UG/L	100
11)	Carbon Disulfide	4.40	76.0	136311	53.84	UG/L	100
12)	Trichlorofluoromethane	3.56	101.0	130126	57.29	UG/L	100
13)	t-Butyl alcohol	4.95	59.0	11570	128.77	UG/L	100
14)	t-Butyl methyl ether	5.09	73.0	165955	51.71	UG/L	95
16)	1,1-Dichloroethene	4.15	96.0	63955	51.51	UG/L	94
17)	1,1-Dichloroethane	5.65	63.0	147450	51.48	UG/L	96
18)	trans-1,2-Dichloroethene	5.07	96.0	78325	52.12	UG/L	87
19)	cis-1,2-Dichloroethene	4.15	96.0	63955	51.51	UG/L	73
20)	Chloroform	7.10	83.0	160689	52.83	UG/L	94
21)	1,4-Dioxane	10.41	88.0	20659	963.07	UG/L	82
22)	1,2-Dichloroethane-d4	8.00	65.0	81602	49.32	UG/L	93
23)	1,2-Dichloroethane	8.16	62.0	99674	49.97	UG/L	97
24)	2-Butanone	6.57	72.0	4408	50.28	UG/L	89
27)	*1,4-Difluorobenzene	8.94	114.0	221410	50.00	UG/L	98
28)	1,1,1-Trichloroethane	7.41	97.0	162558	52.27	UG/L	77
29)	Carbon Tetrachloride	7.73	117.0	136747	55.97	UG/L	85
30)	Vinyl Acetate	10.43	43.0	8403	48.51	UG/L	100
31)	Bromodichloromethane	10.72	83.0	156291	50.53	UG/L	95
32)	1,2-Dichloropropane	10.00	63.0	78279	48.93	UG/L	93
33)	cis-1,3-Dichloropropene	11.92	75.0	127859	48.94	UG/L	96
34)	Trichloroethene	9.51	130.0	97506	50.74	UG/L	97
35)	Dibromochloromethane	15.32	129.0	101373	48.74	UG/L	96
36)	Ethylene dibromide	15.61	107.0	179438	119.54	UG/L	94
37)	1,1,2-Trichloroethane	14.11	97.0	55485	47.95	UG/L	97
38)	Benzene	8.12	78.0	215688	50.97	UG/L	88
39)	trans-1,3-Dichloropropene	11.92	75.0	127859	48.94	UG/L	96
40)	2-Chloroethylvinylether	12.84	63.0	26232	50.28	UG/L	100
41)	Bromoform	20.49	173.0	65264	47.37	UG/L	99
44)	*Chlorobenzene-d5	17.30	117.0	170483	50.00	UG/L	96
45)	4-Methyl-2-Pentanone	12.40	43.0	50837	48.89	UG/L	82
46)	2-Hexanone	15.07	43.0	32168	46.26	UG/L	77
47)	Tetrachloroethene	14.50	164.0	86193	52.28	UG/L	96
48)	1,1,2,2-Tetrachloroethane	22.72	83.0	78445	48.41	UG/L	97
49)	Toluene-d8	12.66	98.0	198116	50.70	UG/L	98

E 7582

50)	Toluene	12.84	92.0	150438	49.65 UG/L	94
51)	Chlorobenzene	17.40	112.0	168063	50.31 UG/L	90
52)	Ethylbenzene	17.90	106.0	92581	50.26 UG/L	97
53)	Styrene	19.90	104.0	197157	50.51 UG/L	90
54)	p&m Xylene	18.35	106.0	240813	100.92 UG/L	53
55)	o-Xylene	19.82	106.0	118084	50.80 UG/L	93
56)	Bromofluorobenzene	21.88	95.0	142101	50.64 UG/L	87
57)	1,3-Dichlorobenzene	26.39	146.0	161285	50.71 UG/L	72
58)	1,4-Dichlorobenzene	26.82	146.0	160176	49.67 UG/L	86
59)	1,2-Dichlorobenzene	28.37	146.0	132517	50.37 UG/L	88

* Compound is ISTD

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330, FAX: 201-584-0515
MAY 12, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

SURROGATE RECOVERY SUMMARY
GC/MS Volatile

Batch number: QV5038
Method: 624
Matrix: Water

Sample Number	Data File	% Recovery 1,2-Dichlo	% Recovery Toluene-d8	% Recovery Bromofluor	# Outside QC Limits
BLANK	>A3852	108	98	103	0
262214	>A3859	114	100	106	0
262218	>A3861	111	101	106	0
262219	>A3862	114	101	107	0
262510 S	>A3866	117	100	107	0
BLANK S	>A3867	116	104	110	0
262216	>A3881	103	96	100	0

QC Limits:	Compound	Percent Recovery	Concentration Added
	1,2-Dichloroethane-d4	93-126	30ppb
	Toluene-d8	86-114	30ppb
	Bromofluorobenzene	87-116	30ppb

** Surrogates are diluted out.
* Values outside QC Limits.

S= Spike sample
SD= Spike duplicate sample
DL= Dilution
RE= Indicates a reanalysis of the sample confirming matrix interference.
NA= Not Applicable

Copyright ICM, Inc.,1997.
All rights reserved.
ERI

850931049

F 784

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330, FAX: 201-584-0515
MAY 8, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

SURROGATE RECOVERY SUMMARY
GC/MS Volatile

Batch number: QV5041
Method: 8240
Matrix: Soil/Solid/Liquid Non_Aq

Sample Number	Data File	% Recovery 1,2-Dichlo	% Recovery Toluene-d8	% Recovery Bromofluor	# Outside QC Limits
BLANK	>A3769	101	104	101	0
262217	>A3774	103	102	107	0
262406 MS	>A3779	101	101	106	0
262406 MSD	>A3780	103	101	105	0
BLANK	>A3783	101	96	98	0
262215	>A3784	107	102	96	0

QC Limits:	Compound	Percent Recovery	Concentration Added
	1,2-Dichloroethane-d4	70-121	50ppb
	Toluene-d8	81-117	50ppb
	Bromofluorobenzene	74-121	50ppb

** Surrogates are diluted out.
* Values outside QC Limits.

S= Spike sample
SD= Spike duplicate sample
DL= Dilution
RE= Indicates a reanalysis of the sample confirming matrix interference.
NA= Not Applicable

Copyright ICM, Inc.,1997.
All rights reserved.
EIL

850931050

F785

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330, FAX: 201-584-0515
MAY 12, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

QUALITY ASSURANCE DATA
GC/MS Volatile
Matrix Spike Recovery

			Sample	MS
Batch number:	QV5038			
Spike Sample:	262510	Initial wt/vol:	5	5
Method:	624	Final vol:	5	5
Matrix:	Water	Unit: ug/L		

For samples: 262214 262216 262218 262219

Compound	Conc Added	Sample Conc	Matrix Spike Conc	%	Limits Recovery
Chloromethane	20	U	13	65	0-273
Bromomethane	20	U	20	100	0-242
Vinyl Chloride	20	U	14	70	0-251
Chloroethane	20	U	31	155	14-230
Acrolein	100	U	72	72	ND-ND
Acrylonitrile	100	U	80	80	ND-ND
Methylene Chloride	20	U	16	80	0-221
Acetone	20	U	16	80	ND-ND
Carbon Disulfide	20	U	15	75	ND-ND
Trichlorofluoromethane	20	U	22	110	17-181
t-Butyl Alcohol	50	U	68	136	ND-ND
t-Butyl methyl ether	20	U	18	90	ND-ND
Diisopropyl ether	50	U	18	36	ND-ND
1,1-Dichloroethene	20	U	20	100	0-234
1,1-Dichloroethane	20	U	19	95	59-155
trans-1,2-Dichloroethene	20	U	19	95	54-156
Chloroform	20	U	22	110	51-138
1,4-Dioxane	1000	U	1100	110	ND-ND
1,2-Dichloroethane	20	U	22	110	49-155
2-Butanone (MEK)	20	U	15	75	ND-ND
1,1,1-Trichloroethane	20	U	21	105	52-162
Carbon Tetrachloride	20	U	19	95	70-140
Bromodichloromethane	20	U	17	85	35-155
1,2-Dichloropropane	20	U	21	105	0-210
cis-1,3-Dichloropropene	20	U	19	95	0-227
Trichloroethene	20	U	18	90	71-157
Dibromochloromethane	20	U	19	95	53-149
Ethylene Dibromide	50	U	21	42	ND-ND
1,1,2-Trichloroethane	20	U	19	95	52-150
Benzene	20	U	19	95	37-151
trans-1,3-Dichloropropene	20	U	18	90	17-183
2-Chloroethylvinyl ether	20	U	19	95	0-305
Bromoform	20	U	19	95	45-169
4-Methyl-2-Pentanone	20	U	17	85	ND-ND

(continued on next page)

850931051

F 786

(continued from previous page)

Batch number: QV5038
Spike Sample: 262510
Method: 624
Matrix: Water

	Sample	MS
Initial wt/vol:	5	5
Final vol:	5	5

For samples: 262214 262216 262218 262219

Compound	Conc Added	Sample Conc	Matrix Spike Conc	%	Limits Recovery
2-Hexanone	20	U	16	80	ND-ND
Tetrachloroethene	20	U	19	95	64-148
1,1,2,2-Tetrachloroethane	20	U	17	85	46-157
Toluene	20	U	19	95	47-150
Chlorobenzene	20	U	20	100	37-160
Ethylbenzene	20	U	19	95	37-162
Styrene	20	U	19	95	ND-ND
p&m Xylene	40	U	39	98	ND-ND
o-Xylene	20	U	20	100	ND-ND
1,3-Dichlorobenzene	20	U	20	100	59-156
1,4-Dichlorobenzene	20	U	20	100	18-190
1,2-Dichlorobenzene	20	U	20	100	18-190

* Values outside QC Limits.
** Spike recovery does not meet quality control limits due to a high concentration of this parameter in the spiked sample.
*** Recovery is determined from Blank Spike.

Copyright ICM, Inc.,1997.
All rights reserved.
ERI

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, NJ 07869
201-584-0330, FAX: 201-584-0515
MAY 8, 1997

Certified for: NJ, PA, DE, CT, NY(DOH)
NJ #14116 NY #11376
US EPA CLP Lab

QUALITY ASSURANCE DATA
GC/MS Volatile
Matrix Spike/Matrix Spike Duplicate Recovery

			Sample	MS	MSD
Batch number:	QV5041				
Spike Sample:	262406	Initial wt/vol:	5	5	5
Method:	8240	Final vol:	5	5	5
Matrix:	Soil/Sludge	Unit: ug/Kg			
Moisture:	9.16%				

For samples: 262215 262217

Compound	Conc Added	Sample Conc	Matrix Spike Conc	%	Spike Dup Conc	%	QC RPD	RPD	Limits Recovery
1,1-Dichloroethene	55	U	52	95	49	89	22	7	59-172
Trichloroethene	55	U	54	98	51	93	24	5	62-137
Benzene	55	U	57	104	55	100	21	4	66-142
Toluene	55	U	55	100	53	96	21	4	59-139
Chlorobenzene	55	U	56	102	54	98	21	4	60-133

* Values outside QC Limits.
** Spike recovery does not meet quality control limits due to a high concentration of this parameter in the spiked sample.
*** Recovery is determined from Blank Spike.

Copyright ICM, Inc.,1997.
All rights reserved.
EIL

850931053

F 788

8A

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: ICM

Lab File ID (Standard): >A3851 Date Analyzed: 05/09/97

Instrument ID: 59701 Time Analyzed: 18:08

	IS1		IS2		IS3			
	AREA	#	RT	AREA	#	RT	AREA	#	RT
12 HOUR STD	21686		6.78	126837		8.75	93101		17.03
UPPER LIMIT	43372		7.28	253674		9.25	186202		17.53
LOWER LIMIT	10843		6.28	63419		8.25	46550		16.53
LAB SAMPLE NO.									
1 BLANK ,QV	20931		6.87	123402		8.85	90408		17.12
2 262214 ,Q	17153		6.89	98821		8.86	76903		17.17
~~3 262218 ,Q~~	~~17833~~		~~6.87~~	~~101719~~		~~8.84~~	~~77312~~		~~17.17~~
4 262218 ,Q	17175		6.87	99817		8.86	73199		17.19
5 262219 ,Q	17640		6.84	100274		8.83	78379		17.16
6 262510 SPK	18787		6.91	110217		8.86	83948		17.12
7 BLANK SPK	17958		6.82	105304		8.81	77993		17.13
8 262216 ,Q	20123		6.88	116492		8.86	89524		17.17
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									

5/12/97

Conc.

IS1 = UPPER LIMIT = + 100%
IS2 = of internal standard area.
IS3 = LOWER LIMIT = - 50%

of internal standard area.

Column used to flag internal standard area values with an asterisk

Page 1 of 1

850931054

F 78

8A

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: ICM

Lab File ID (Standard): >A3768 Date Analyzed: 05/06/87

Instrument ID: 5970 1 Time Analyzed: 19:31

		IS1		IS2		IS3			
		AREA	#	RT	AREA	#	RT	AREA	#	RT
	12 HOUR STD	42785		6.83	228629		8.79	179283		17.10
	UPPER LIMIT	85570		7.33	457258		9.29	358566		17.60
	LOWER LIMIT	21393		6.33	114314		8.29	89642		16.60
	LAB SAMPLE NO.									
1	BLANK,L,S,	38568		6.85	215741		8.83	161382		17.14
2	262217,QV	36955		6.86	183090		8.86	142272		17.19
3	262406 MS,	35885		6.97	178291		8.95	142254		17.25
4	262406 MSD	36044		6.93	183225		8.93	144266		17.25
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										

Conc.

IS1 = UPPER LIMIT = + 100%
IS2 = of internal standard area.
IS3 = LOWER LIMIT = - 50%

of internal standard area.

Column used to flag internal standard area values with an asterisk

F 780

8A

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: ICM

Lab File ID (Standard): >A3782 Date Analyzed: 05/07/97

Instrument ID: 5970 I Time Analyzed: 10:09

		IS1 AREA	#	IS2 RT	IS2 AREA	#	IS3 RT	IS3 AREA	#	RT
	12 HOUR STD	40129		6.94	221410		8.94	170483		17.30
	UPPER LIMIT	80258		7.44	442820		9.44	340966		17.80
	LOWER LIMIT	20064		6.44	110705		8.44	85242		16.80
	LAB SAMPLE NO.									
1	BLANK ,S,5	43841		6.99	228870		8.98	178869		17.33
2	262215,S,5	36105		7.01	196728		8.99	147532		17.34
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										

Conc.

IS1 = UPPER LIMIT = + 100%
IS2 = of internal standard area.
IS3 = LOWER LIMIT = - 50%

of internal standard area.

Column used to flag internal standard area values with an asterisk

ICM LABORATORIES (INDUSTRIAL CORROSION MANAGEMENT, INC.)
1152 ROUTE 10
RANDOLPH, NJ 07869
PHONE: (201) 584-0330 FAX: (201) 584-0515

RUSH
SEPTEMBER 8, 1995
16:16:48

CLIENT: VECTRE CORPORATION
SOURCE: MRB-V10

TENTATIVE FAX PRELIMINARY RESULTS
These results are tentative, subject to change pending QA/QC review.

Client Sample Number	TRIP BLANK	FIELD BLANK	MW-18	MW-17
ICM Sample Number	219496	219497	219498	219499
Sampling Date	09/01/95	09/01/95	09/01/95	09/01/95
Units	UG/L	UG/L	UG/L	UG/L
VOLATILE PARAMETERS				
Chloromethane	5 U	5 U	5 U	5 U
Bromomethane	4 U	4 U	4 U	4 U
Vinyl chloride	2 U	2 U	2 U	2 U
Chloroethane	2 U	2 U	2 U	2 U
Methylene chloride	3	4	1J	1J
Acetone	5 U	5 U	5 U	5 U
Carbon disulfide	2 U	2 U	2 U	2 U
1,1-Dichloroethene	2 U	2 U	2 U	2 U
1,1-Dichloroethane	1 U	1 U	10	1 U
trans-1,2-Dichloroethene	2 U	2 U	2 U	2 U
Chloroform	2 U	2 U	2 U	2 U
1,2-Dichloroethane	2 U	2 U	2 U	2 U
2-Butanone	2 U	2 U	2 U	2 U
1,1,1-Trichloroethane	0.5 U	0.5 U	4	0.5 U
Carbon tetrachloride	0.6 U	0.6 U	0.6 U	0.6 U
Bromodichloromethane	0.6 U	0.6 U	0.6 U	0.6 U
1,2-Dichloropropane	0.6 U	0.6 U	0.6 U	0.6 U
cis-1,3-Dichloropropene	0.5 U	0.5 U	0.5 U	0.5 U
Trichloroethene	0.6 U	0.6 U	0.6 U	0.6 U
Dibromochloromethane	0.6 U	0.6 U	0.6 U	0.6 U
1,1,2-Trichloroethane	0.5 U	0.5 U	0.5 U	0.5 U
Benzene	0.5 U	0.5 U	0.5 U	13
trans-1,3-Dichloropropene	0.6 U	0.6 U	0.6 U	0.6 U
2-Chloroethyl vinyl ether	0.6 U	0.6 U	0.6 U	0.6 U
Bromoform	0.8 U	0.8 U	0.8 U	0.8 U
4-Methyl-2-pentanone	1 U	1 U	1 U	1 U
2-Hexanone	1 U	1 U	1 U	1 U
Tetrachloroethene	0.7 U	0.7 U	0.7 U	0.7 U
1,1,2,2-Tetrachloroethane	0.5 U	0.5 U	0.5 U	0.5 U
Toluene	0.8 U	0.8 U	0.8 U	7
Chlorobenzene	0.6 U	0.6 U	0.6 U	0.6 U
Ethylbenzene	0.7 U	0.7 U	0.7 U	4
Styrene	1 U	1 U	1 U	1 U
p&m-Xylene	0.9 U	0.9 U	0.9 U	11
o-Xylene	0.9 U	0.9 U	0.9 U	16
total Xylenes	0.9 U	0.9 U	0.9 U	27
1,3-Dichlorobenzene	0.7 U	0.7 U	0.7 U	0.7 U
1,2-Dichlorobenzene	0.5 U	0.5 U	0.5 U	0.5 U
1,4-Dichlorobenzene	2 U	2 U	2 U	2 U
Total Non-Target Compounds	0	0	0	817

Post-It™ brand fax transmittal memo 7671 | # of pages ▸

To	From
ED MELTON	JERRY HAUG
Co. NEUMEK BOX BOARD	Co. VECTRE CORP
Dept.	Phone # 383-2500
Fax # 589-0424	Fax # 579-0025

850931057

SEP-11-95 MON 11:08
SEP-11-95 MON 9:51 ICM LABORATORIES
P.02
P.01/03

P.02/03
P.03
SEP-11-95 MON 11:08
SEP-11-95 MON 9:52 ICM LABORATORIES

ICM LABORATORIES (INDUSTRIAL CORROSION MANAGEMENT, INC.)
1152 ROUTE 10
RANDOLPH, NJ 07869
PHONE: (201) 584-0330 FAX: (201) 584-0515

SEPTEMBER 11, 1995
10:46:30

CLIENT: VECTRE CORPORATION
SOURCE: NBB-VIO

ANALYTICAL DATA SUMMARY REPORT

850931058

Client Sample Number		TRIP BLANK	FIELD BLANK	MW-18	MW-17
ICM Sample Number		219496	219497	219498	219499
Sampling Date		09/01/95	09/01/95	09/01/95	09/01/95
Units		UG/L	UG/L	UG/L	UG/L
SEMIVOLATILE PARAMETERS (BASE/NEUTRAL)					
N-Nitrosodimethylamine		NA	1 U	1 U	1 U
bis(2-Chloroethyl)ether		NA	1 U	1 U	1 U
1,3-Dichlorobenzene		NA	2 U	2 U	2 U
1,4-Dichlorobenzene		NA	2 U	2 U	2 U
1,2-Dichlorobenzene		NA	2 U	2 U	2 U
bis(2-Chloroisopropyl)ether		NA	1 U	1 U	1 U
N-Nitroso-di-n-propylamine		NA	2 U	2 U	2 U
Hexachloroethane		NA	3 U	3 U	3 U
Nitrobenzene		NA	1 U	1 U	1 U
Isophorone		NA	1 U	1 U	1 U
bis(2-Chloroethoxy)methane		NA	1 U	1 U	1 U
1,2,4-Trichlorobenzene		NA	2 U	2 U	2 U
Naphthalene		NA	2 U	2 U	2 U
Hexachlorobutadiene		NA	1 U	1 U	1 U
Hexachlorocyclopentadiene		NA	2 U	2 U	2 U
2-Chloronaphthalene		NA	2 U	2 U	2 U
Dimethyl phthalate		NA	5 U	5 U	5 U
Acenaphthylene		NA	2 U	2 U	2 U
2,6-Dinitrotoluene		NA	1 U	1 U	1 U
Acenaphthene		NA	2 U	2 U	2 U
2,4-Dinitrotoluene		NA	1 U	1 U	1 U
Diethyl phthalate		NA	2 U	2 U	2 U
4-Chlorophenyl phenyl ether		NA	2 U	2 U	2 U
Fluorene		NA	2 U	2 U	2 U
N-Nitrosodiphenylamine		NA	1 U	1 U	1 U
1,2-Diphenylhydrazine (Azobenzene)		NA	1 U	1 U	1 U
4-Bromophenyl phenyl ether		NA	2 U	2 U	2 U
Hexachlorobenzene		NA	2 U	2 U	2 U
Phenanthrene		NA	0.9 U	0.9 U	0.9 U
Anthracene		NA	0.8 U	0.8 U	0.8 U
Di-n-butylphthalate		NA	3 U	3 U	3 U
Fluoranthene		NA	0.6 U	0.6 U	0.6 U
Benzidine		NA	1 U	1 U	1 U
Pyrene		NA	0.5 U	0.5 U	0.5 U
Butyl benzylphthalate		NA	1 U	1 U	1 U
3,3'-Dichlorobenzidine		NA	1 U	1 U	1 U
Benzo(a)anthracene		NA	0.5 U	0.5 U	0.5 U
Chrysene		NA	0.5 U	0.5 U	0.5 U
bis(2-Ethylhexyl)phthalate		NA	3 U	3 U	3 U
Di-n-octylphthalate		NA	1 U	1 U	1 U
Benzo(b)fluoranthene		NA	0.7 U	0.7 U	0.7 U
Benzo(k)fluoranthene		NA	0.7 U	0.7 U	0.7 U
Benzo(a)pyrene		NA	0.5 U	0.5 U	0.5 U
Indeno(1,2,3-cd)pyrene		NA	1 U	1 U	1 U
Dibenz(a,h)anthracene		NA	0.5 U	0.5 U	0.5 U
Benzo(g,h,i)perylene		NA	0.5 U	0.5 U	0.5 U
Total Non-Target Compounds		NA	0	0	370

F 793

ICM LABORATORIES (INDUSTRIAL CORROSION MANAGEMENT, INC.)
1152 ROUTE 10
RANDOLPH, NJ 07869
PHONE: (201) 584-0330 FAX: (201) 584-0515

SEPTEMBER 11, 1995
10:48:03

CLIENT: VECTRE CORPORATION
SOURCE: NBB-V10

ANALYTICAL DATA SUMMARY REPORT FOOTNOTE PAGE

850931059

U = Indicates a compound was analyzed for but not detected.
For results marked U, the numerical value is the compound MDL.

J = Indicates an estimated value. It is utilized when a reported value meets the identification.
criteria but the result is less than the specified detection limit and greater than zero.

B = Indicates that the analyte was found in the blank as well as the sample. It indicates possible/probable blank contamination.

W = Analytical Spike recovery for furnace AA analysis was not within control limits but was greater than or equal to 40%.

NA = Not Applicable.

Trip Blank pH is measured in laboratory.

IND = Indeterminable - compound decomposes in water.

+ = Indicates that an MDL was not available for this compound. PQL was reported.

P = Positive

N = Negative

MARIA

F 794

Exhibit G

850931060

CITY OF NEWARK

DEPARTMENT OF FINANCE

CITY HALL

NEWARK, NEW JERSEY

KENNETH A. GIBSON

MAYOR

CERTIFICATE OF OWNERSHIP

TO:

CHIEF MAGISTRATE, MUNICIPAL
COURT OF THE CITY OF NEWARK

RE: 17-61 Blanchard St.
Street Address of Property

CITY OF NEWARK, NEW JERSEY

I, the undersigned, Tax Assessor of the City of Newark, do hereby certify, that based upon the Abstract of Records of Deeds, in this office, record title to the above mentioned premises, which are also known as Block No. 2412 Lot No. 75 is vested in:

NAME OF OWNER Newark Boxboard Co.

ADDRESS 17 Blanchard St.

by deed dated 9/13/68 recorded in The Essex County Register's Office in Book No. 4480 Page No. 124

on 7/11/74

Lot Size 579.24 x 501.31

Tax Assessor

DATED:

8/23 1985

850931061

G1

Exhibit H

850931062

CERTIFICATE OF MERGER
OF
NEWARK GROUP INDUSTRIES, INC.
(Surviving Corporation)
AND
THE NEWARK GROUP, INC.
(Merged Corporation)

FILED

APR 28 1997

LONNA R. HOOKS
Secretary of State

Including
CERTIFICATE OF ADOPTION
of
AMENDED AND RESTATED CERTIFICATE OF INCORPORATION
of
NEWARK GROUP INDUSTRIES, INC.
(Surviving Corporation)

(Pursuant to N.J.S. 14A:10-5.1)

Dated: APRIL 25 1997

THE NEWARK GROUP, INC., having adopted a plan of merger (the "Plan of Merger") pursuant to N.J.S. 14A:10-5.1 for the purpose of merging itself into its subsidiary, NEWARK GROUP INDUSTRIES, INC., a New Jersey corporation, hereby certifies that:

1. The name of the surviving corporation is Newark Group Industries, Inc. The name of the merged corporation is The Newark Group, Inc.

2. The Plan of Merger, pursuant to which the merger will be effectuated, is annexed hereto as Exhibit A.

3. The date of approval of the Plan of Merger by the Board of Directors of The Newark Group, Inc., the parent corporation, is April 25 1997.

4. The number of outstanding shares of Newark Group Industries, Inc., the subsidiary, is 100 shares of common stock, all of which are owned by The Newark Group, Inc., the parent corporation.

850931063

H1

5. The shares of common stock of The Newark Group, Inc. entitled to vote on the Plan of Merger was 6,000,000 shares of common stock. No other class nor series of stock is entitled to vote on the Plan of Merger.

6. Approval of the Plan of Merger by the shareholders of The Newark Group, Inc. was given without a meeting by written consent dated April 25 1997. The number of shares represented by the consent was 6,000,000. The number of shares of common stock of The Newark Group, Inc. that voted in favor of the Plan of Merger was 6,000,000. The number of shares of common stock of The Newark Group, Inc. that voted against the Plan of Merger was zero.

7. The merger shall become effective at 11:59 p.m. on April 30, 1997.

NEWARK GROUP INDUSTRIES, INC., having adopted an amended and restated certificate of incorporation pursuant to N.J.S. 14A:9-5, certifies that:

A. The name of the corporation is NEWARK GROUP INDUSTRIES, INC.

B. The date the amended and restated certificate of incorporation was adopted was April 25, 1997. The restated certificate of incorporation is annexed to the Plan of Merger.

C. The amended and restated certificate of incorporation was adopted by the sole shareholder of NEWARK GROUP INDUSTRIES, INC.

(i) The number of shares entitled to vote on adoption of the amended and restated certificate of incorporation was 100 shares of common stock.

(ii) The number of shares voted for and against the adoption of the amended and restated certificate of incorporation is as follows:

For:	100
Against:	0

D. The amended and restated certificate of incorporation shall become effective upon the effectiveness of the merger of THE NEWARK GROUP, INC. into NEWARK GROUP INDUSTRIES, INC.

850931064

H2

IN WITNESS WHEREOF, each of the undersigned corporations has caused this certificate of merger including certificate of adoption of the amended and restated certificate of incorporation to be executed on its behalf by its duly authorized officer as of the date first written above.

THE NEWARK GROUP, INC.

By: _____
William D. Harper, Vice President

NEWARK GROUP INDUSTRIES, INC.

By: _____
William D. Harper, Vice President

850931065

H3

EXHIBIT A

PLAN OF MERGER
OF
NEWARK GROUP INDUSTRIES, INC.
(Surviving Corporation)
and
THE NEWARK GROUP, INC.
(Merged Corporation)

1. The names of the corporations proposing to merge are The Newark Group, Inc. ("The Newark Group, Inc."), a New Jersey corporation, and Newark Group Industries, Inc. ("Newark Group Industries, Inc."), a New Jersey corporation. Newark Group Industries, Inc. will be the surviving corporation.

2. The terms and conditions of the proposed merger are as follows:

(a) The Newark Group, Inc., the merged corporation and the parent and sole shareholder of Newark Group Industries, Inc., shall be merged with and into its wholly-owned subsidiary, Newark Group Industries, Inc., the surviving corporation, effective at 11:59 p.m. on April 30, 1997, the Effective Date of the merger.

(b) Upon the effectiveness of the merger, each issued and outstanding share of The Newark Group, Inc. stock, and each share of The Newark Group, Inc. stock in the treasury of The Newark Group, Inc., the merged corporation, shall be automatically exchanged for and converted into one share of common stock of Newark Group Industries, Inc. The shares of The Newark Group, Inc. stock that are treasury shares shall be automatically exchanged for and converted into treasury shares of Newark Group Industries, Inc. stock. Each share certificate evidencing ownership of The Newark Group, Inc. stock shall, upon the effectiveness of the merger, be deemed to evidence ownership of the shares of Newark Group Industries, Inc. stock into which those shares will have been automatically converted. Newark Group Industries, Inc. shall issue certificates to The Newark Group, Inc. shareholders evidencing his or her ownership of shares of Newark Group Industries, Inc. stock upon the surrender by the shareholders of the certificate or certificates evidencing ownership of shares of The Newark Group, Inc. stock. The issue date of those new Newark Group Industries, Inc. certificates shall be as of the Effective Date of the merger.

(c) At the Effective Date, each issued and outstanding share of Newark Group Industries, Inc. stock, all of which are owned by The Newark Group, Inc., shall be canceled.

(d) Upon the effectiveness of the merger, the certificate of incorporation of Newark Group Industries, Inc. shall be amended and restated in connection with the merger to change the name of Newark Group Industries, Inc. to "The Newark Group, Inc." and to increase the number of authorized shares of stock to 10,000,00, all in accordance with the Amended and Restated Certificate of Incorporation of Newark Group Industries, Inc. annexed hereto.

850931066

(e) Upon the effectiveness of the merger, each employee benefit plan of The Newark Group, Inc. shall automatically be and become an employee benefit plan of Newark Group Industries, Inc.

(f) Notwithstanding the approval of the merger by the shareholders of The Newark Group, Inc., the merger may be terminated and abandoned at any time before the effective time of the merger by the Board of Directors of The Newark Group, Inc. or by the Board of Directors of Newark Group Industries, Inc. by the filing of a certificate of abandonment with the Secretary of State of the State of New Jersey executed by either of the constituent corporations.

850931067

H5

AMENDED AND RESTATED
CERTIFICATE OF INCORPORATION
OF
NEWARK GROUP INDUSTRIES, INC.

Pursuant to N.J.S. 14A:9-5(4)

Dated: April 25, 1997

THE UNDERSIGNED CORPORATION certifies that it has adopted the following Restated Certificate of Incorporation:

ARTICLE I
Corporate Name

The name of the corporation is The Newark Group, Inc.

ARTICLE II
Purpose

The purpose for which this corporation is organized is to engage in any activity within the purposes for which corporations may be organized under the New Jersey Business Corporation Act.

ARTICLE III
Capital Stock

The corporation is authorized to issue 10,000,000 shares of common stock.

ARTICLE IV
Registered Office and Agent

The address of the corporation's current registered office is c/o Lowenstein, Sandler, Kohl, Fisher & Boylan, P.A., 65 Livingston Avenue, Roseland, New Jersey 07068-1791; the name of the corporation's current registered agent at that address is Benedict M. Kohl, Esq.

850931068

ARTICLE V
Current Board of Directors

The current board of directors consists of one person whose name and address is as follows:

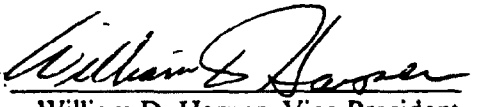
Edward K. Mullen
The Newark Group, Inc.
20 Jackson Drive
Cranford, New Jersey 07016

ARTICLE VI
Personal Liability of Directors or Officers

A director or an officer of the corporation shall not be personally liable to the corporation or its shareholders for the breach of any duty owed to the corporation or its shareholders except to the extent that an exemption from personal liability is not permitted by the New Jersey Business Corporation Act.

IN WITNESS WHEREOF, the undersigned corporation has caused this certificate to be executed on its behalf by its duly authorized officer as of the date first above written.

Newark Group Industries, Inc.

By: 
William D. Harper, Vice President

850931069

H7