SDMS Document
109068

SITE SUMMARY REPORT

EPA ORDER INDEX NO. II-CERCLA-97-109

HAMILTON INDUSTRIAL PARK
333 HAMILTON BOULEVARD
SOUTH PLAINFIELD, NJ

PREPARED BY:

JOSEPH LOCKWOOD
ENVIRONMENTAL COMPLIANCE COORDINATOR

***D.S.C. OF NEWARK* ENTERPRISES INCORPORATED**
70 BLANCHARD STREET
NEWARK, NEW JERSEY 07105

FEBRUARY 2004

700011

DSC of Newark Enterprises, Inc.
70 BLANCHARD STREET
NEWARK, NEW JERSEY 07105

(973) 589-4200
FAX (973) 578-8845

March 5, 2004

Mr. Eric Wilson
On-Scene Coordinator
USEPA Region II
ERRD/RAB (MS-211)
2890 Woodbridge Avenue
Edison, New Jersey 08837

Re: Cornell-Dubilier Electronics Site

Dear Mr. Wilson:

As we discussed this afternoon, approximately fourteen plastic pails filled with concrete and debris were dumped on the property by an unknown party prior to the November 30, 2000 inspection by Nick Magriples, OSC for USEPA The containers and other miscellaneous debris were disposed of by Standard Recycling Corporation of Westfield, New Jersey on February 20, 2001 (see attached Bill of Lading & Photodocumentation).

Should you have any questions regarding this transmittal, please do not hesitate to call so that we may discuss them.

Sincerely,
DSC of Newark Enterprises, Inc.

Joseph R. Lockwood
Environmental Compliance Coordinator

cc: L. Coraci
File

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305825

STANDARD Recycling Corp
PO Box 344
WESTFIELD NJ 07090

CUSTOMER'S ORDER NO.	DATE 2/20/01
NAME Norpak Corp	
ADDRESS 333 Hamilton Blvd	
CITY, STATE, ZIP South Pl NJ	

SOLD BY	CASH	C.O.D.	CHARGE	ON ACCT.	MDSE. RETD.	PAID OUT

	QUAN.	DESCRIPTION	PRICE	AMOUNT	
1		1-30 yd roll - off [illegible]			
2			$	450	00
3		dumpster - removal			
4		of TAR Cans & fabric			
5		rotten skids + misc garbage			
6					
7					
8		att KAURA			
9		=			
10					
11					
12			$	450	00

RECEIVED BY

Adams 4705 KEEP THIS SLIP FOR REFERENCE

700013

700014

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION II
EDISON, NEW JERSEY 08837

By Facsimile and U.S. Mail

March 10, 2004

Mr. Joseph R. Lockwood
D.S.C. of Newark, Inc.
70 Blanchard Street
Newark, NJ 07105

Re: Administrative Order for Removal Action at Cornell-Dubilier Electronics Site, Index Number II-CERCLA-97-0109

Dear Mr. Lockwood:

The U.S. Environmental Protection Agency ("EPA") has completed its review of the of the Final Report and other materials submitted pursuant to the Administrative Order for Removal Action, Index Number II-CERCLA-97-0109 (the "Order"). The materials submitted meet the requirements of Paragraph VII. C. 9. of the Order. EPA hear by notifies the Respondent to the Order that the work required pursuant to this Order has been fully carried out. Please note that the records retention provisions of Paragraph VIII. A. 4. of the Order remain in effect. If you have any questions regarding this letter, please call me at (732) 906-5991.

Sincerely yours,

Eric Wilson
On-Scene Coordinator

cc: J. Rotola, EPA
S. Flanagan, EPA
P. Mannino

SITE SUMMARY REPORT

EPA ORDER INDEX NO. II-CERCLA-97-109

HAMILTON INDUSTRIAL PARK
333 HAMILTON BOULEVARD
SOUTH PLAINFIELD, NJ

PREPARED BY:

JOSEPH LOCKWOOD
ENVIRONMENTAL COMPLIANCE COORDINATOR

***D.S.C. OF NEWARK* ENTERPRISES INCORPORATED**
70 BLANCHARD STREET
NEWARK, NEW JERSEY 07105

FEBRUARY 2004

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Certification

To the best of my knowledge, after thorough investigation, I certify that the information contained in and accompanying this submission is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature

March 8, 2004
Date

Lara Coraci
Assistant to the President
DSC of Newark Enterprises, Inc.

SECTION 1: INTRODUCTION

1.1 Purpose

This document was generated as the final reporting obligation of those stabilization activities performed by DSC of Newark Enterprises Incorporated (DSC) as required by the Environmental Protection Agency (EPA) under Administrative Order No.II-CERCLA-97-109. The report summarizes all stabilization activities performed by DSC from 1997 to the present.

1.2 Brief History

In May of 1903, Clarence Spicer designed and a patented the "universal" joint. In the spring of 1904, Spicer began manufacturing his universal joint. In 1905 he incorporated the Spicer Universal Joint Manufacturing Company. In 1913, the Spicer Manufacturing Company constructed a factory near the railroad station on the old Elliot Farm in South Plainfield, New Jersey.

In 1914, in exchange for a controlling interest in the South Plainfield based company, Charles Dana lent $25,000 to Spicer. In 1916, with the help of Charles Merrill of Merrill Lynch, the company was re-organized as the Spicer Manufacturing Corporation. Manufacturing operations flourished at the South Plainfield facility for approximately 15 years while other plants were under construction to accommodate the company's growth.

Spicer Corporation consolidated its manufacturing operations in 1928 and relocated to Toledo, Ohio. Spicer production facilities started its move from South Plainfield in 1929 and completed its arrival to Toledo in 1931. In 1936 the site was sold to Cornell Dubilier Electronics. Cornell Dubilier Electronics manufactured and tested electronic parts and components, including capacitors. In 1961, Cornell-Dubilier Electronics Corporation ceased manufacturing operations and removed all possessions off-site. In 1962, the property was purchased by DSC of Newark Enterprises Incorporated and has been maintained as an investment/rental property to date.

SECTION 2: DISCUSSION

2.1 Site Description

The Cornell Dubilier Electronics Site is located at 333 Hamilton Boulevard in South Plainfield, New Jersey. During its years of operation (1936 to 1962), Cornell Dubilier Electronics, Inc. manufactured electronic parts and components, including capacitors. It is reported that transformer oils were tested for an unknown period of time during plant operations. It is alleged that during their operations, Cornell Dubilier Electronics, Inc. dumped PCB contaminated materials and other hazardous substances directly onto site soils. The site is currently known as Hamilton Industrial Park and is occupied by an estimated 15 commercial businesses. Through the years, numerous companies have operated at the site as tenants.

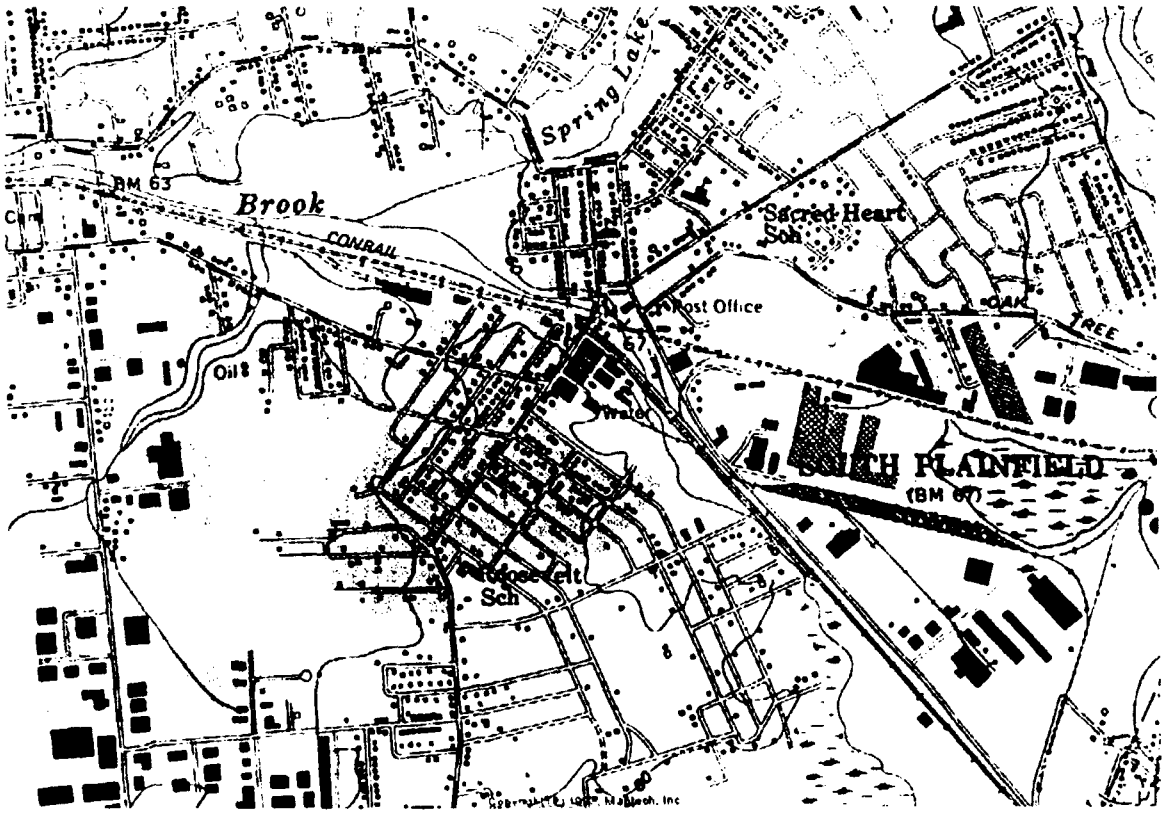

Figure 1. Cornell-Dubilier Electronics Site, 333 Hamilton Boulevard, South Plainfield, N.J.

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2.2 Investigations Activities

An investigation conducted by the NJ Department of Environmental Protection in the vicinity of Hamilton Boulevard during the period of 1988 through 1991 revealed significant ground water contamination consisting of mainly trichloroethene and tetrachloroethene.

EPA performed sampling and determined that the soil at the site is contaminated with VOCs, semivolatile organic compounds, inorganic constituents, and PCBs. In addition, building interiors at the site have been found to contain elevated levels of PCBs, metals and inorganic compounds. Contaminated surface water runoff from the site entered an unnamed tributary of the Bound Brook. Fish collected from the Bound Brook as part of an EPA study were found to contain PCBs at levels higher than the amount allowed by the Food and Drug Administration. As a result, DSC of Newark was ordered to stabilize the site (please refer to Appendix 1 – Site Summary Report dated February 19th 1998). NJDEP issued a Fish Advisory and posted signs warning people not to eat fish taken from these waters. In addition, soil sampling and building interior vacuum sampling of residences located adjacent to the site revealed low level PCB contamination. As a result, EPA performed a removal action, and potentially responsible parties performed additional removal actions to cleanup PCBs on these residential properties.

The site contaminants of concern primarily consist of polychlorinated biphenyls (PCBs), volatile and semi-volatile organics, heavy metals (lead, cadmium, chromium), and some poly-nuclear aromatic hydrocarbons (PAHs). According to the site investigation reports reviewed, the entire site is to be considered an area of concern. The primary area of concern is located towards the rear of the site where electrical components were identified in the surface and subsurface soils.

Analytical results for samples collected by the U.S. EPA indicate that PCBs, lead, and various heavy metals were found to exceed the acceptable federal and state standards. In July of 1999, Environ Corporation of Princeton, New Jersey performed an initial assessment of the groundwater at the site. Nine temporary wells were placed throughout the site yielding only three to the desired depth for sample acquisition. Environ outlined its findings in a "Preliminary Groundwater Assessment Report for the Hamilton Industrial Park Site". Environ determined that groundwater was approximately 20 to 30 feet below ground surface and is under confined conditions.

The table below presents the contaminants and their concentrations found on-site:

Table 2.2.1

Area of Concern	*Contaminant (Concentration)*
Driveways, parking areas, and walkways,	These areas have been paved over to eliminate potential imminent danger to the site occupants, the surrounding population, and the general public. Soils below the paved areas are suspected to have similar characteristics as Surface soil, various locations.
Surface soil, various locations	PCBs (1,100 mg/kg to 51,000 mg/kg, fenced area) Lead (2,200 mg/kg, soil) Arsenic (25.7 mg/kg, soil) Cadmium (36.1 mg/kg, soil) Chromium (78.6 mg/kg, soil) Copper (3,020 mg/kg, soil) Mercury (2.9 mg/kg, soil) Silver (26.7 mg/kg, soil) Zinc (1,380 mg/kg, soil)
Subsurface soil, various locations	PCBs (22,000 mg/kg, subsurface soil) Lead (7,460 mg/kg)
Stream	Trichloroethene (120 ug/kg, sediment; 2 ug/l, surface water)
Foot/bike path	PCBs (3,000 mg/kg, soil), Lead (66,000 mg/kg, soil), Cadmium (271 mg/kg, soil)
Buildings	PCBs Metals Semi-Volatile
Groundwater – General NE Along Stream and Slope Intersect – TW-03 East of Bldg. #11 – TW-05 Former Pepe Lot – TW-06	TCE (23 ug/L to 29,000 ug/L) PCE (1.1 ug/L to 28 ug/L) 1 2 DCE (7.1 ug/L to 14,000 ug/L) Chlorobenzene (11 ug/L) Benzene (0.79 ug/L)

2.3 Stabilization Activities

On March 25, 1997, EPA issued an Administrative Order to DSC to conduct the following interim remedial action: (1) limit access to areas of known PCB contamination; (2) take necessary actions to limit the movement of contaminants to the nearby Bound Brook through surface water runoff; and (3) pave driveways and parking areas within the industrial park. Implementation of this action was completed in the fall of 1997. Two additional actions were required of the initial stabilization effort, which included the paving of the Able Metro lot as well as the disposal of approximately 14 drums of waste materials. Please refer to Appendix 1 – Site Summary Report.

By constructing a fence to limit site access and paving driveways and parking areas within the industrial park, DSC and the EPA have reduced the potential for exposure to and off-site migration of hazardous materials.

In December of 1998, Environmental & Safety Compliance performed the closure of one 5,000 gallon underground storage tank located adjacent to and east of Building #12. The tank removal activities were not part of the stabilization requirements, however, completed to satisfy state regulations governing underground storage tanks. Seven drums of tank bottoms and personal protection equipment were generated as part of the closure activities. Approximately 100 cubic yards of heavily contaminated soils were stockpiled in the former truck driving school lot. Both the drums and excavated soil were secured and covered with plastic, pending waste characterization and disposal.

On November 30, 1999, Oxford Environmental performed the sampling and analysis of the soil pile and seven drums. Two composite samples of the soil pile were obtained and five grab samples from the drums. The samples were sent to Accredited Laboratories of Carteret, New Jersey for analysis (see Appendix 3A).

In March of 2000, in response to an EPA request, Oxford Environmental prepared a plan in order to address the proper management of TSCA hazardous soils and liquids which may be generated and/or exist on the subject property. The plan was entitled the "Materials Handling, Transportation and Disposal Plan" (Appendix 2).

On May 3, 2000, during site clearing activities in preparation for CERCLA Remedial Investigation activities, EPA discovered twelve drums and several small containers at the Cornell-Dubilier Electronics Site ("Site"). Approximately five drums were located in the former New Brunswick Roofing area. In response to this discovery, DSC retained Oxford Environmental to generate the Drum Stabilization and Characterization Plan ("Plan") as well as the associated Health and Safety Plan. Please refer to Appendix 4.

In August 2000, DSC retained Oxford and AWT Environmental Services, Inc. of Sayreville, New Jersey, a HAZMAT subcontractor, to stabilize the drums for sampling and characterization. There were a total of twelve (12) drums located within the former New Brunswick Paving area. Several other small containers were present in the areas of drums. Seven drums were empty, and five drums had contents, of which one appears to be under pressure as indicated by "bulging." The deteriorated drums were segregated from the intact drums and packaged into over-pack drums. The drums were properly labeled prior to shipment and staged on plastic.

On August 24, 2000, EPA discovered twelve additional drums at the site near the embankment of the Bound Brook. Oxford prepared an addendum to the approved work plan entitled "Removal Action Plan Drum and Waste Stabilization of Drum Cluster Discovered in the Bound Brook and Rear Embankment". Please refer to Appendix 5.

On August 30 and 31, 2000 Oxford and AWT Technologies removed several drums from the stream and embankment and consolidated the drums with those drums removed from the former New Brunswick Roofing area. Again, the deteriorated drums were segregated from the intact drums and packaged into over-pack drums. Waste characterization samples were obtained and sent to Accredited Laboratories for analysis (see Appendix 3B, 3C, 3D). The drums were properly labeled prior to shipment and staged on plastic. Please refer to Appendix 7 "Drum Stabilization Waste Disposal". All areas that were disturbed by the drum stabilization were covered with topsoil and seeded. Please refer to Appendix 6 for photo-documentation.

2.4 Soil Disposal Activities

On September 20th 2000, Oxford personnel disposed of 128.99 tons of soils which were stockpiled as part of the underground storage tank removal (previously described). Prior waste characterization revealed that the soils contained elevated levels of PCBs. The soils were loaded by Oxford personnel, transported by Page ETC Inc. (Transporters ID# NYD986969947) and disposed of at Chemical Waste Management of Model City, New York (TSDF ID#NYD049836679) under manifests numbers NYG1768725, NYG1768752, NYG1768743, NYG1768734, and NYG1497528. See Appendix 9 for manifest and certificate of disposal documentation.

2.5 Drum Disposal Activities

Eleven of the drums generated as part of the stabilization efforts were characterized as containing hazardous concentrations of PCBs and/or lead. Specifically, two drums containing parts and debris were characterized as RCRA Hazardous for lead and PCBs. Four drums of liquids and sludge were found to be RCRA Hazardous for PCBs. Four drums, consisting of a mixture of personal protective equipment, soil and debris were found to be RCRA Hazardous for PCBs. Finally, one drum of small capacitors was classified as RCRA Hazardous for PCBs.

On November 22, 2000, Oxford personnel supervised the loading of the RCRA hazardous, PCB containing drums onto a properly licensed truck owned by Maumee Express Inc.(Transporters ID# NJD986607380). The drums were shipped by Maumee Express to Chemical Waste Management of Model City, New York (TSDF ID#NYD049836679) under manifest #. NYG0700767. Please refer to Appendix 8A for disposal documentation.

Also on November 22, 2000, Maumee Express transported seven (7) drums of waste flammable liquids, fourteen (14) drums of non-RCRA hazardous waste in the form of chemical processed solids, and one (1) bag of asbestos containing materials (10' by 5" pipe covered with asbestos containing air-cell thermal insulating material), under manifest # NJA3060816 (see Appendix 8B). The wastes were transported to Cycle Chem Incorporated of Elizabeth, NJ (TSDF ID# NJD002200046).

Finally, Freehold Cartage (ID# NJD054126164) transported approximately 10,000 pounds of DOT unregulated, RCRA Non-Hazardous materials on November 22, 2000. The wastes, in the form of crushed drums, some of which containing waste tar left by New Brunswick Roofing, were consolidated into a lined roll-off container and disposed of at Cycle Chem Incorporated. Please refer to Appendix 8B for the waste manifest. Please refer to Appendix 6 for photo-documentation.

2.6 Well Abandonment Activities

Although not part of the stabilization activities performed under the subject Administrative Order, it should be noted that DSC closed two inactive production wells on the subject parcel. On December 4th and 5th, 2000, to comply with a New Jersey Department of Environmental Protection (NJDEP) directive, DSC retained Oxford Environmental and AC Schultes Incorporated of Woodbury Heights, New Jersey, to properly abandon two production wells located on the property.

3.0 Stabilization Cost

Please refer to Appendix 10 for a breakdown of costs incurred for the stabilization.

4.0 Conclusion

As documented in this report, DSC of Newark Enterprises Incorporated has met all of its obligations required by the Environmental Protection Agency (EPA) under Administrative Order No.II-CERCLA-97-109. With this submission and EPA's acceptance, DSC has successfully and completely satisfied all the directives of the Administrative Order and requests that it be subsequently terminated.

References:

- Dana Corporation @ http://www.dana.com/corporate/history/history1.htm
- EPA/Region 2 @ http://www.epa.gov/region02/superfnd/site_sum/0201112c.htm

The table below presents the contaminants and their concentrations found on-site:

Table 2.2.1

Area of Concern	*Contaminant (Concentration)*
Driveways, parking areas, and walkways,	These areas have been paved over to eliminate potential imminent danger to the site occupants, the surrounding population, and the general public. Soils below the paved areas are suspected to have similar characteristics as Surface soil, various locations.
Surface soil, various locations	PCBs (1,100 mg/kg to 51,000 mg/kg, fenced area) Lead (2,200 mg/kg, soil) Arsenic (25.7 mg/kg, soil) Cadmium (36.1 mg/kg, soil) Chromium (78.6 mg/kg, soil) Copper (3,020 mg/kg, soil) Mercury (2.9 mg/kg, soil) Silver (26.7 mg/kg, soil) Zinc (1,380 mg/kg, soil)
Subsurface soil, various locations	PCBs (22,000 mg/kg, subsurface soil) Lead (7,460 mg/kg)
Stream	Trichloroethene (120 ug/kg, sediment; 2 ug/l, surface water)
Foot/bike path	PCBs (3,000 mg/kg, soil), Lead (66,000 mg/kg, soil), Cadmium (271 mg/kg, soil)
Buildings	PCBs Metals Semi-Volatile
Groundwater – General NE Along Stream and Slope Intersect – TW-03 East of Bldg. #11 – TW-05 Former Pepe Lot – TW-06	TCE (23 ug/L to 29,000 ug/L) PCE (1.1 ug/L to 28 ug/L) 1 2 DCE (7.1 ug/L to 14,000 ug/L) Chlorobenzene (11 ug/L) Benzene (0.79 ug/L)

700029

Please note Area code changed: 973

OXFORD ENVIRONMENTAL, INC.

43 Route 46 East, Suite 702, Pine Brook, NJ 07058 • (201) 244-0600 • Fax: (201) 244-0722

February 19, 1998

U.S. Environmental Protection Agency, Region II
Removal Action Branch
2790 Woodbridge Avenue
Edison, NJ 08837

Attn: Mr. Eric Wilson, On-Scene Coordinator

Re: Site Summary Report
Cornell-Dubilier Electronics Site
South Plainfield, New Jersey
EPA Order Index No. II-CERCLA-97-109

Dear Mr. Wilson:

Oxford Environmental, Inc. (Oxford) respectfully submits the attached Site Summary Report on behalf of our client, DSC of Newark Enterprises, Inc.

The report summarizes the actions taken to stabilize the site under the Site Operations Plan. Basically the actions consisted of paving unpaved parking lots and driveways on the site, erecting fences to prevent pedestrian traffic, and installing soil erosion and sediment controls.

It is our understanding that the submission of this SOP constitutes compliance with the directives of the Administrative Order II-CERCLA-97-109 issued to DSC of Newark Enterprises, Inc.

If you have any questions or concerns, or if we may be of any assistance to you on this matter, please feel free to contact the undersigned.

Very truly yours,

John Hendry
Facility Coordinator
Vice President

Gary T. Boyer, P.E., DEE
Sr. Environmental Engineer
Project Engineer

attachment

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Equal Opportunity Employer

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Table 3 Summary of Actual Costs Incurred

FIGURES

DRAWINGS (24" X 36")

Figure 1 Layout, As Built

1. CERTIFICATION

To the best of my knowledge, after thorough investigation, I certify that the information contained in and accompanying this submission is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

_____ Signature 2/24/98 Date

Lara Corraci Name (typed or printed) Assistant to the President Title

DSC of Newark Enterprises, Inc.

2. SYNOPSIS OF WORK PERFORMED

The following sections provide information on the Site's history as well as work completed during stabilization activities. Sections have been broken down into general tasks with the exception of areas and/or activities not originally detailed in the Site Operations plan.

2.1 BACKGROUND

The following excerpt is taken from the May, 1997, Superfund Update by EPA Region 2:

The Cornell-Dubilier Site is located at 333 Hamilton Boulevard in South Plainfield, New Jersey. The Site occupies approximately 25 acres and is bounded by Hamilton Boulevard to the northwest, Spicer Avenue to the southwest, a wetlands area to the southeast, the Bound Brook and Conrail tracks to the northeast.

Cornell-Dubilier operated at the Site from 1936 to 1962, manufacturing electronic components, especially capacitors for correcting power factor. During that period of time, Cornell-Dubilier handled and may have disposed of or arranged for the disposal of PCBs at the Site. The Site is currently known as the Hamilton Industrial Park and is occupied by 15 businesses.

Sampling conducted by EPA has revealed the presence of a wide variety of contaminants including PCB's, lead and cadmium in soils at the Site and in the water and sediment of the Bound Brook that borders the Site. PCBs are the primary contaminant of concern at the Site due to the levels found in soils and the potential health effects from long-term exposure.

EPA initiated a study to determine the impacts of contamination of the Bound Brook on the surrounding community. The goals of this study are to provide the data necessary to determine the extent of contamination in the Bound Brook; evaluate potential threats to public health; and evaluate potential threats to wildlife in the stream corridor.

Under Superfund, EPA can respond to a release or the threat of a release of hazardous substances by conducting a removal action or requiring responsible parties to conduct a removal action. Removal actions are short-term operations to reduce or eliminate the threats to public health or the environment associated with the release of hazardous substances.

Responsible parties under Superfund include current and former owners or operators of the facility. EPA notified the current property owner and a past operator of their potential liability for the Site.

EPA issued an Order to the property owner to stabilize the Site. This Order requires that the owner take actions to limit access to areas of known PCB contamination, limit the migration of contaminants off-site to the stream which borders the Site and pave driveways and parking areas within the industrial park.

This Site Summary Report covers the actions undertaken to stabilize the site. These actions included fencing and the posting of warning signs, paving of driveways and parking areas, and installation of soil erosion and sediment controls.

2.2 NOTIFICATIONS

As required by the Site Operations Plan, which was approved on June 11, 1997, U.S. EPA was notified of the work a minimum of 48 hours prior to the beginning of onsite operations.

Local authorities were also notified of plans for the site. The municipal engineer, in a letter dated June 20, 1997, suggested that 4 inches of stabilized base rather than three inches be used. However, based on input from experienced paving contractors, three inches was kept as the specification.

Tenants in the industrial park were also notified of the progress of the work. The first written notice to all affected tenants was July 7, 1997. Subsequent notices were given by personal contact from the contractor or from the DSC representatives on site.

2.3 BIDDING AND ENGAGING A CONTRACTOR

After approval of the Site Operations Plan, bids were solicited for the work, and a contractor was selected. However, after selection, the contractor became unable to perform the work. Consequently, a new contractor, Bellamy Brothers Paving, of Middlesex, New Jersey, was retained. Table 1 shows a complete list of the contractors and subcontractors used on the project.

2.4 PAVING OF DRIVEWAYS AND PARKING AREAS

As shown on the as-built layout, almost all unpaved driveways and parking areas in the industrial park on the property were paved. The exceptions are loading ramps by Building 5 and Building 10. The areas were covered with 1 ½ inch clean stone to allow percolation of rain into the ground. The areas at Building 5 did not require a sump pump. The area at Building 10 did require a sump pump to alleviate standing

water problems. The pump discharges to piping leading across the paved drive into a natural depression.

The paving proceeded in stages, in order to allow tenants to maintain their business operations. Typically, an exclusion zone was established for a section of the property, using traffic barrels, caution tape, and snow fence. The contractor provided a security patrol to maintain control of the exclusion zone.

After establishing an exclusion zone, unsuitable material, such as weeds or soft soil, were cleared. Weeds, earth, railroad ties and broken concrete were deposited in an existing area marked 'trash and piles of conc.' (concrete) in Figure 1. Seeding and mulching with hay stabilized piles of soil created by this operation.

After clearing an area, the contractor then imported quarry process stone from a commercial quarry as required to fill any low areas and support the paving. The fill and existing suitable soil were graded and compacted to provide positive drainage.

After grading and compacting, the contractor paved an area with a minimum of three inches of asphalt concrete, stabilized base, mix I-2. The base was compacted, and traffic was excluded from newly paved areas to allow the base to harden. After hardening overnight, the paved area was opened to traffic.

During the paving, the property owner decided to pave a larger area than was originally proposed. The as built plan in Figure 1 shows the actual extent of the paving.

2.5 ABLE METRO PARKING LOT

During the work, it became necessary to determine if a parking area in the southeast portion of the site, known as the Able Metro parking area, should be paved or fenced. An adjoining area, formerly used by Brunswick Roofing, was also in question. Therefore, in response to DSC of Newark's request, Oxford Environmental prepared a sampling and analysis plan. EPA approved the plan on August 1, 1997.

Twelve samples, spaced approximately 75 feet apart, were collected. Results indicated levels of PCBs that were similar to other results displayed at the site. Therefore, it was decided to pave the Able Metro parking area, but to keep the Brunswick Roofing area fenced. Seeding and mulching stabilized any disturbed soil at the Brunswick Roofing area. A fence between the Brunswick Paving and Able Metro parking lots was also repaired.

2.6 FENCING

In order to restrict access to areas of known contamination, six-foot high chain link fence was erected at the boundary to the areas of PCB contamination. Lockable gates were provided where access was necessary.

During the course of the work, it became clear that installation of the fence as originally planned was not practical, since access for installation of the fence would have to interfere with a railroad line. Therefore, in an August 14, 1997 letter, EPA approved modification of the fence line. The fence east of Bound Brook was eliminated. The fence along the area of the wooded swamp was extended to Bound Brook. Bound Brook itself was considered a natural barrier to site entry.

In addition to the six-foot high chain link fence, certain grassed areas near the industrial park are restricted. These areas were covered with topsoil and seeded. They were subsequently surrounded with four-foot high snow fence. Warning signs indicating a hazardous site and that the property contained hazardous materials were posted along each fence or approximately every 100 feet along long fences.

2.7 MAINTENANCE OF INSTALLED SYSTEMS

An operations and maintenance (O&M) program was instituted. An O&M logbook was provided to the property owner's superintendent on site. The log book covers daily inspections, noting any deficiencies or system failures, and documenting any maintenance performed on the installed system to ensure the integrity and system performance. The logbook is maintained on site and may be inspected by the U.S. EPA and its representatives.

2.8 DUST CONTROL

Contaminated material was kept wet to avoid fugitive dust. A dust meter was used to monitor and adjust activities in accordance with the health and safety plan. During the course of the work, it was necessary to modify the plan. Due to the amount of dust generated by dumping quarry process stone and stabilized base, the action level for dust was exceeded. However, because the aggregate and stabilized base were not contaminated with PCBs, the action level for dust was not appropriate. Therefore, the action level was not applied to these activities.

2.9 SOIL EROSION AND SEDIMENT CONTROL

Not all areas of the industrial park were covered with paving. Many areas were covered with topsoil and seeded for permanent vegetative cover. Topsoil was applied three inches thick and the area was surrounded by snow fence to prevent pedestrian traffic. Warning signs were also posted.

Silt fence was installed at the downhill edge of slopes, to contain any soil erosion. During the course of the work, it became necessary to reroute the silt fence, in order to contain as much potentially contaminated silt as possible. The actual location of silt fence is shown on the as-built layout, Figure 1.

Storm outlets near Bound Brook were protected with silt fence and hay bales before beginning construction. Gravel dams were also installed where necessary to prevent erosion of slopes at the storm outlets. Figure 1 shows the locations.

2.10 DRAINAGE

Overall, existing drainage patterns at the site were maintained. Most of the property is drained by sheet flow. Asphalt curbing was installed at the rear of the industrial park to direct drainage to gravel dams and haybales. These outlets, located at low spots, retain silt and sediment while allowing rainwater to discharge.

Two areas were covered with 1 1/2 inch clean stone. One area has a low spot where water collects and must be pumped. At this location, a small sump and pump were installed. A pipe was installed beneath the paving to allow the pumped flow to drain. Figure 1 shows the location.

2.11 CONTAMINATION DISCOVERY AND DRUM REMOVAL

During clearing for installation of silt and chain link fence, what appears to be a landfill bordering the wetlands in the eastern portion of the site was discovered. EPA subsequently ordered removal of non-empty drums that were discovered. Also ordered was removal of non-empty drums at the former Brunswick Roofing area. Subsequently, a drum sampling and removal plan was prepared, approved (by EPA on October7, 1997) and implemented. The drums were overpacked as necessary and staged in one location in the former Pepe's Truck Driving School area. Also included were the drums of personal protective equipment generated by the work on site.

Fourteen drums were sampled and analyzed for RCRA characteristics, full TCLP and PCBs. Results, reported in a November 11, 1997, letter from Environmental Safety and Compliance Corp. to DSC of Newark Enterprises, indicated that some of the drums contained PCBs. Consequently, PCB containing drums were shipped to Model City, New York on December 29, 1997. Non-PCB wastes were shipped to East Chicago, Indiana on January 16, 1998. Table 2 lists the wastes removed and their ultimate disposition.

3. EPA-APPROVED MODIFICATIONS TO THE SITE OPERATIONS PLAN

The following section provides details on modifications made to the approved Site Operations Plan. These modifications were made to address field conditions and were approved by the EPA prior to implementation.

3.1 HEALTH AND SAFETY

1. Movement of the exclusion zone was permitted, in order to accommodate occupants of the industrial park. Occupants were excluded from the zone when PCB laden dust may be generated.
2. Joe Lockwood, Environmental Safety and Compliance Corp., replaced Kelly Walton, Tiger Environmental, as health and safety officer.
3. Safety goggles were not required if there was no impact hazard.
4. Dust generated by the dumping of asphalt mix into the paving machine was not subject to the 2.5 milligram per cubic meter limit for PCB laden dust, since the paving mix and the quarry process aggregate did not contain PCBs.
5. Monitoring for the asphalt mix consisted of a direct reading instrument for hydrogen sulfide.

3.2 PAVING

1. Paving of areas originally planned for topsoil, seeding and snow fence was permitted.
2. Paving of Able Metro parking area was required.
3. Paving of low spots at loading docks was not required. The areas were covered with 1 ½ inch clean stone. One area required a sump pump.

3.3 FENCING

1. Fencing around the Able Metro parking area was replaced.
2. Fencing along the railroad right of way east of Bound Brook was deleted. Fencing along the wooded swamp was added. Fencing along Factory Street east of Bound Brook was deleted.

3.4 SOIL EROSION AND SEDIMENT CONTROL

1. Silt fence along the top of the slope east of the site was relocated to the bottom of the slope due to the discovery of what appears to be a landfill adjacent to the wetlands.
2. Seeding and mulching stabilized soil that was exposed by clearing for silt fence.
3. Soil piles from clearing for paving were stabilized by seeding and mulching.
4. An area of black, fine powder discovered during clearing for silt fence was covered with topsoil, seeded and mulched.

3.5 DRUM REMOVAL

1. Drums discovered during clearing for installing silt fence were staged, sampled and disposed in accordance with applicable rules and regulations.
2. Drums discovered in Brunswick Roofing area were staged, sampled and disposed in accordance with applicable rules and regulations.
3. Drums of personal protective equipment were staged, sampled and disposed in accordance with applicable rules and regulations.

4. CONCLUSIONS

The Cornell-Dubilier site has been stabilized in accordance with the approved Site Operations Plan. Unpaved parking areas and driveways have been paved. Fences have been erected and warning signs have been posted. Soil erosion has been controlled. Drums discovered during construction have been removed.

The above activities have been completed in accordance with the EPA approved Site Operations Plan for this facility. In addition, the submission of this report completes the final requirement of the EPA Administrative Order (excluding subparagraph VII.C.1(d)) issued to DSC. As such, Oxford, on behalf of our client DSC, requests that EPA issue a Notice of Completion relating to this Order.

TABLE 1

LIST OF CONTRACTORS AND SUBCONTRACTORS

Contractor or Subcontractor	Role
Oxford Environmental 43 Route 46 East Pine Brook, NJ 07058 Tel. (973) 244-0600 Fax (973) 244-0722 Contact: John Hendry	Environmental consultant, designer of stabilization for DSC of Newark Enterprises (property owner). Also installed pre-construction erosion controls.
Lord Anderson Worrell and Barnett 651 High Street Burlington, NJ 08016 Tel. 609-387-2800 Contact: Gordon Lehner	Subcontractor to Oxford Environmental. Surveyor
Bellamy Brothers Paving 316 Fairview Avenue Middlesex, NJ 08846 Tel. (732) 868-0928 Fax none Contact: Joe Bellamy	Contractor, builder of stabilization for DSC of Newark Enterprises
Collucci Paving	Paving machine and roller operator, subcontractor to Bellamy Brothers
Tiger Construction	Bulldozer operator, subcontractor to Bellamy Brothers
Environmental and Safety Compliance Corp. 465 Sydney Road Piscataway, NJ 08854 Tel. (732) 465- 9777 Fax (732) 465-9778 Contact: Joe Lockwood	Health and Safety Officer, Drum Sampling and Disposal for DSC of Newark Enterprises

Contractor or Subcontractor	Role
Tiger Environmental 70 Clinton Avenue Newark, NJ 07114 Tel. (973) 242-4858 Fax (973) 622-7796 Contact: Kelly Walton	Health and Safety Officer, subcontractor to Oxford Environmental
Chemtech 110 Route 4 Englewood, NJ 07631 Tel. (201) 567-6868 Fax (201) 567-1333 Contact: Emanuel Hedvat	Laboratory, subcontractor to Oxford Environmental and Environmental Safety and Compliance
Anchor Fence of South Jersey 3071 Route 73 P.O. Box 627 Maple Shade, NJ 08052 Tel. 1-800-528-7082 Fax (609) 779-0879 Contact: Rich Paterno	Fence builder, subcontractor to Bellamy Brothers Paving

TABLE 2

LIST OF MATERIALS HANDLED ON SITE OR REMOVED FOR OFFSITE TREATMENT OR DISPOSAL

Quantity	Type of Material	Ultimate Destination
5- 55 gal. Drums	Personal protective equipment. PCB contamination.	CWM Chemical Services, Inc. 1550 Balmer Road Model City, New York 14107
3- 85 gal. Drums	Overpack of 55 gal. Drums of Roofing Tar from former Brunswick Roofing area	Pollution Control Industries of Indiana 4343 Kennedy Avenue East Chicago, IN 46312
2-85 gal. Drums	Overpack of 55 gal. Drums. PCB contamination. From former Brunswick Roofing area.	CWM Chemical Services, Inc. 1550 Balmer Road Model City, New York 14107
1-85 gal. Drum	Overpack of 55 gal. Drum pieces. PCB contamination. From Toe of slope near wetlands.	CWM Chemical Services, Inc. 1550 Balmer Road Model City, New York 14107
2- 55 gal. Drums	Remains from broken drum of petroleum jelly.	Pollution Control Industries of Indiana 4343 Kennedy Avenue East Chicago, IN 46312
1-85 gal. drum	Overpack of 55 gal. Drum. From toe of slope near wetlands	Pollution Control Industries of Indiana 4343 Kennedy Avenue East Chicago, IN 46312

TABLE 3

SUMMARY OF ACTUAL COSTS

Item	Cost
Quarry Process Stone	$13,708.57
Stabilized Base, Mix I-2	$92,690.54
1 1/2" Clean Stone	$554.74
Health and Safety	$2,744.00
Drum Sampling	$4,449.20
Drum Disposal	$4,603.34
Paving and Fencing	$185,442.39
Consulting	$49,865.00
Safety Signs	$216.15
Electricity	$220.04
Legal Fees	$8,292.86
Medical testing	$328.00
Weldon Concrete	$28,140.52
Total	**$391,255.35**

Note:

Cost of labor for DSC of Newark and loss of rent revenue not included.

700045

OXFORD ENVIRONMENTAL, INC.
43 Route 46 East, Suite 702, P.O. Box 667
Pine Brook, NJ 07058
Phone: (973) 244-0600
Fax: (973) 244-0722

LETTER OF TRANSMITTAL

DATE 1-11-00 JOB NO 9703

ATTENTION Eric Wilson

RE DSC / Cornell Dubilier

TO US EPA - Region II
2890 Woodbridge Ave
Edison, N.J. 08837
(732) 906-6991

GENTLEMEN:

WE ARE SENDING YOU ☒ Attached ☐ Under separate cover via _____ the following items:

☐ Shop drawings ☐ Prints ☐ Plans ☐ Samples ☐ Specifications

☐ Copy of letter ☐ Change order _____

COPIES	DATE	NO.	DESCRIPTION
1	12-8-99	40-72	Laboratory Data Sheets
1	"	1	Chain-of-Custody
1	"	1-4	Foreman's Reports - Sample Locations

THESE ARE TRANSMITTED as checked below:

☐ For approval ☐ Approved as submitted ☐ Resubmit _____ copies for approval

☐ For your use ☐ Approved as noted ☐ Submit _____ copies for distribution

☒ As requested ☐ Returned for corrections ☐ Return _____ corrected prints

☐ For review and comment ☐ _____

☐ FOR BIDS DUE _____ 19 _____ ☐ PRINTS RETURNED AFTER LOAN TO US

REMARKS

Sample locations can be found on attached Foremans Reports.

I am still awaiting for my clients direction for disposal. I proposal for this work was submitted.

700046

COPY TO File

If enclosures are not as noted, kindly notify us at once.

SIGNED: [signature]

OXFORD ENVIRONMENTAL, INC.

SUPERVISOR'S DAILY TIME & MATERIAL LOG

JOB NO. 9703
CLIENT Cornell Dubilier - DSC
PROJECT
LOCATION S. Plainfield, N.J.

SUPERVISOR John Hendry
FOREMAN Tony S.
WEATHER Cold - Overcast
TEMPERATURE 30° F

DAY: M, T, W, TH, F, S, SU

DATE 11/30/99

OXFORD PM John H.
OXFORD HSO Scott D.

START 6:00 AM PM
END 4:30 AM PM

LABOR

	NAME	CLASSIF.	① Drum Sampling	② Stockpile Sampling	③ Spread Topsoil	④ Replace Silt Fence	⑤ Reshape & Cover Stockpile	REG	~~OT~~ Travel	TOTAL	REMARKS
1	J. Hendry	Super	1	1	4.5	.5	1	8	2	10	1/2 Lunch
2	T. Scrittorale	Foreman	1	1	4.5	.5	1	8	2	10	"
3	S. Donnenburg	HSO	0	0	6	.5	1.5	8	2	10	"
4	Andy - EPA	Oversight									
5											
6											
7											
8	NOTE: Two Hours of Travel										
9											
10											
11											
12											
13											

EQUIPMENT / MATERIAL

	TYPE / MAKE / MODEL	OWNER	ITEMS AS ABOVE					REG	~~OT~~ Travel	TOTAL	REMARKS
1	O.E. Truck	OE							X		1 DAY
2	" "	OE							X		1 DAY
3	Shovels, Rake, Pick	OE			X	X					1 DAY
4	Soil Sampling Equip	OE	X	X							1 DAY
5	Decon Equip.	OE	X	X							1 DAY
6	Plastic	DSC					X				2 Rolls
7	Topsoil	DSC			X						8 Loads
8	Silt Fence	DSC				X					3 Rolls
9	Bob Cat	DSC			X		X				1 DAY
10											

DAILY PRODUCTION

	ITEM NO.	LOCATION	ITEM DESCRIPTION	QTY / UNIT
1		5 Drum / 2 Drum	Collected 2 Composite Samples	2 / Sample
2		Stockpile	1 Waste Char. - 5 PCBs	5 / 1 Sample
3		Site	Received 8 Loads, Spread 6	8 / Loads
4		Stream & Sink Hole	Replaced Fence & Stream & Sink Hole	2 / Rolls
5		Stockpile	Covered w/ 2 Rolls of Plastic	2 / Rolls

AUTHORIZATION

APPROVED FOR: DSC - Norpak
DATE: 11/30/99
NAME & TITLE: John Hendry

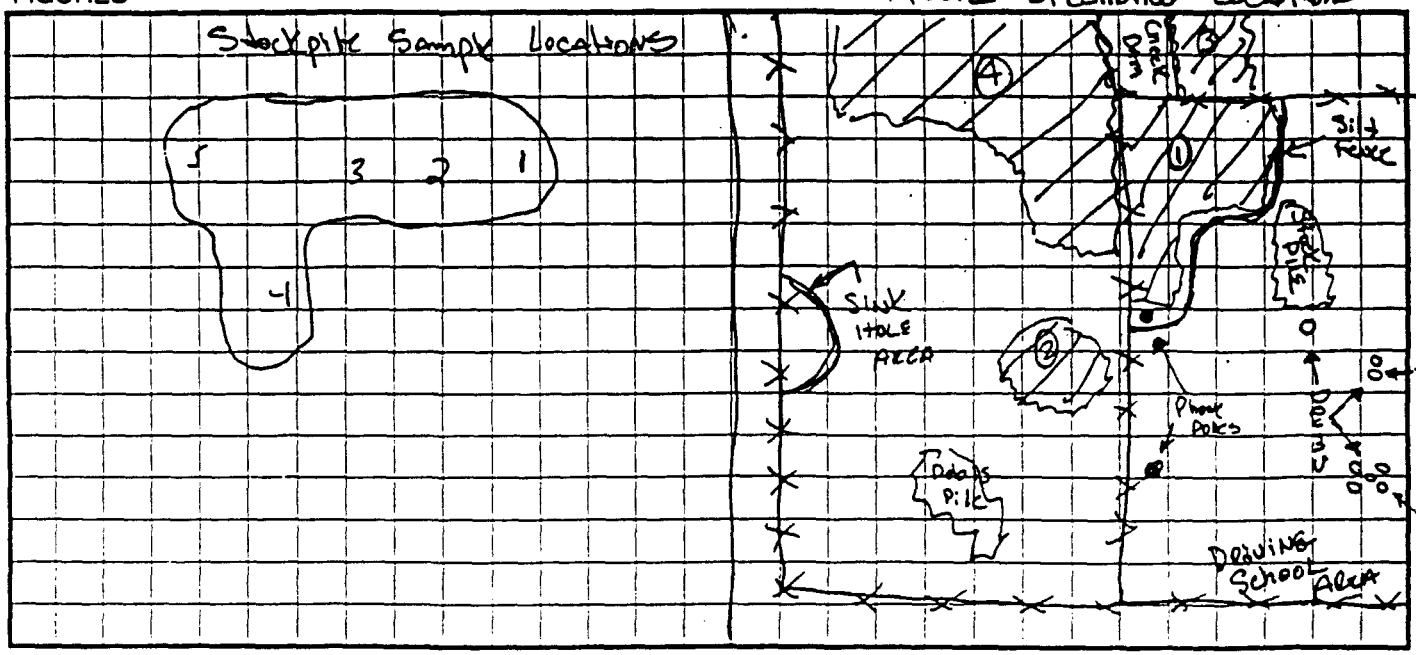
AUTHORIZED SIGNATURE

700047

NOTES

7:00 am	Arrived @ Site 7:00 am, met w/ EPA & DSC personnel (JOHN)
7:30 am	Removed Fence & Plastic, Accredited DROPPED off Bottles
8:00 - 12:00	Recieved 4 Loads of Topsoil, Replaced Silt Fence by Stream. JH & TS collected (2) composite samples from drum areas. Five Drums contained F.D. Tank? bottoms & Product, Two Drums contained PCB? Parts & Soil. Conducted Sampling in Level "C" PPE. Scott D. Reshaped Soil Stockpile & Spread 4 Loads of Topsoil w/ Bobcat. Filled boring hole w/ sand.
12:00 - 12:30	Lunch
12:30 - 3:00	Recieved & Spread 2 Loads of Topsoil, and Covered Stockpile w/ Plastic Sheeting.
3:00 - 3:15	Cleanup
	Topsoil Areas (see map below)
	(1) 6,679 SF
	(2) 500 SF
	(3) 375 SF
Total SF	7,554

FIGURES



OXFORD ENVIRONMENTAL, INC.

SUPERVISOR'S DAILY TIME & MATERIAL LOG

JOB NO. 9703
CLIENT Cornell Dubilier – DSC
PROJECT
LOCATION S. Plainfield, N.J

SUPERVISOR J. Hendry
FOREMAN T. Scrithorale
WEATHER Cold Clear
TEMPERATURE 28° F

DAY: M T (W) TH F S SU

DATE 12/1/99

OXFORD PM J. Hendry
OXFORD HSO Scott D.

START 7:00 (AM) PM
END 4:00 AM (PM)

LABOR

	NAME	CLASSIF.	① Spread Topsoil	② Seed	③ Repair Stone Check Dam	④ Hay/Mulch Silt Fence	⑤ Reshape Debris Pile	REG	Travel ~~OT~~	TOTAL	REMARKS
1	J. Hendry		2	1	.5			8.5	2	10.5	
2	T Scrithorale		2	1	.5	4.5	1	8.5	2	10.5	
3	S Donnenberg		2	1	.5			8.5	2	10.5	
4	Andy - EPA										
5											
6											
7											
8											
9	Note: Two Hours of Travel										
10											
11											
12											
13											

EQUIPMENT / MATERIAL

	TYPE / MAKE / MODEL	OWNER	ITEMS AS ABOVE					REG	Travel ~~OT~~	TOTAL	REMARKS
1	O.E. Truck	OE					1		X		1 DAY
2	" "	OE							X		1 DAY
3	Shovel, Rake, Pick	OE							[illegible]		1 DAY
4	Bob Cat	DSC	X				X		[illegible]		1 DAY
5	Seed	DSC		X					[illegible]		3 BAGS
6	HAY	DSC				X			[illegible]		2 Tons
7	Stone 2½ - 1½	DSC			X						38 Bails
8	Silt Fence	DSC				X					5 Rolls
9											
10											

DAILY PRODUCTION

	ITEM NO.	LOCATION	ITEM DESCRIPTION	QTY / UNIT
1		Site	SPREAD 2 LOADS (Delivered 11/30/99)	
2		Topsoil Areas	SPREAD 3 BAGS (1 WHEAT, 2 Reg Grass)	3 / BAGS
3		Check Dam	SPREAD 2 tons of 2½/1½" Stone	2 / tons
4		TOPSOIL AREAS	SPREAD 12,600 SF Seed, HAY - 180LF SFence	12,600SF
5		Debris Pile Area	Reshaped ≈ 30 CY Pile	NA

AUTHORIZATION

APPROVED FOR: DSC - Norpak
DATE: 12/1/99
NAME & TITLE: JOHN HENDRY

AUTHORIZED SIGNATURE

700049

NOTES

7:00	Arrived on-site, met w/ EPA & John from DEC
7:15 - 11:00	Spread 2 topsoil piles which were delivered on 11/30/99. Mixed Seed & Spread over Topsoiled Areas. Scott D. consolidated debris pile, surrounded it with silt Fence. Received and placed 2 1/2 / 1 1/2" Stone @ Check Dam Location. Removed debris from existing sediment controls in paved area. Replace Hay with New.
11:00 - 11:30	Lunch
11:30 - 4:00	Waited for materials to arrive. Applied Hay to Seeded areas (≈ 12,600 SF). Covered Drums w/ Plastic Bags. Installed silt Fence along topsoiled areas within the driving School Location. Repaired Snow fence between buildings. Installed Hay Bales @ Check dam location.
	Topsoil Areas - See 11/30/99 for location & previous Quantities:
	(A) 5,033
	Total for Job = 12,587 SF

FIGURES

See map from 11/30/99 Job sheet for details

700050

ACCREDITED LABORATORIES, INC.
20 PERSHING AVENUE
CARTERET, NEW JERSEY 07008
PHONE: (732) 541-2025 / (800) ALI-LABS

CHAIN OF CUSTODY FORM

PAGE 1 OF 1

CLIENT	Oxford Env.	PROJECT	DSC / Cornell
ADDRESS	43 RT 46 East	CONTACT	J. Hendin
CITY	Pinebrook	PHONE	973-244-0600
STATE	NJ ZIP 07058	FAX	973-244-0722

ALI SAMPLE #	FIELD ID	*C	**M	DATE / TIME SAMPLED	SAMPLE DESCRIPTION	ANALYSIS
9912904	DCOMP-1	3	S	11/30	Drum	Full TCLP, TPH, RCRA ~~[illegible]~~ PCB
*9912905	DCOMP-2	3	G	↓	Drum	↓
9912906	SP-1	3	S	↓	Soil from Pile	↓
9912907	SP-2	1	↓	↓	↓	PCB
9912908	SP-3	1	↓	↓	↓	↓
9912909	SP-4	1	↓	↓	↓	↓
9913000	SP-5	1	↓	↓	↓	↓

**- Biphasic sample - analyze oil phase.

**M = MATRIX A=AQUEOUS S=SOIL G=SLUDGE P=POTABLE WATER O=OIL F=FILTER K=SOLID X=OTHER

*C = NO. CONTAINERS TURNAROUND: STANDARD (If Blank, Std. 3 weeks)

DELIVERABLES (circle one) * STD REDUCED FULL NY-ASP CLP I CLP II

RELINQUISHED BY: PRINT	SIGN	RECEIVED BY: PRINT	SIGN	ORGANIZATION	DATE	TIME	REASON
Tom Scritbrook	[signature]	K. Roberts	Keith Robert	ALI	11/30	13:40	TRANSFER
K. Roberts	Keith Robert	[signature]	[signature]	ALI	11/30/99	1630	Analyzing

PERSON(S) ASSUMING RESPONSIBILITY FOR SAMPLING: PRINT: SIGN:

* QAI = Deliverables		ALI QUOTE#	
COMMENTS	TPH = Method 8015	ALI CASE#	6401
	40 Cooler Temp 25°C	P.O.#	

700051

ACCREDITED LABORATORIES, INC.
TCLP VOLATILES ANALYSIS DATA

CASE NUMBER	6481	MATRIX	Leachate
SAMPLE NUMBER	9912994	DILUTION FACTOR	10
DATA FILE	>A5132	DATE EXTRACTED	
CLIENT NAME	OE	DATE ANALYZED	12/08/99
FIELD ID	DCOMP-1	ANALYZED BY	ROBERT

CAS No.	Compound	Result (mg/l)	MDL (mg/l)	Regulatory Level (mg/l)
71432	Benzene	U	.050	0.5
78933	2-Butanone	U	.100	200.0
56235	Carbon Tetrachloride	U	.050	0.5
108907	Chlorobenzene	U	.050	100.0
67663	Chloroform	U	.050	6.0
75354	1,1-Dichloroethene	U	.050	0.7
107062	1,2-Dichloroethane	U	.050	0.5
127184	Tetrachloroethene	U	.050	0.7
79016	Trichloroethene	U	.050	0.5
75014	Vinyl Chloride	U	.100	0.2

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
1,2-Dichloroethane-d4	76 %	76 - 114	OK
Toluene-d8	103 %	88 - 110	OK
Bromofluorobenzene	92 %	86 - 115	OK

(U) Indicates compound was analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.

* 2-Butanone = Methyl ethyl ketone

ACCREDITED LABORATORIES, INC.
TCLP VOLATILES ANALYSIS DATA

CASE NUMBER	6481	MATRIX	Leachate
SAMPLE NUMBER	9912995	DILUTION FACTOR	1000
DATA FILE	>A5134	DATE EXTRACTED	
CLIENT NAME	OE	DATE ANALYZED	12/08/99
FIELD ID	DCOMP-2	ANALYZED BY	ROBERT

CAS No.	Compound	Result (mg/l)	MDL (mg/l)	Regulatory Level (mg/l)
71432	Benzene	U	5.000	0.5
78933	2-Butanone	U	10.000	200.0
56235	Carbon Tetrachloride	U	5.000	0.5
108907	Chlorobenzene	U	5.000	100.0
67663	Chloroform	U	5.000	6.0
75354	1,1-Dichloroethene	U	5.000	0.7
107062	1,2-Dichloroethane	U	5.000	0.5
127184	Tetrachloroethene	U	5.000	0.7
79016	Trichloroethene	U	5.000	0.5
75014	Vinyl Chloride	U	10.000	0.2

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
1,2-Dichloroethane-d4	104 %	76 - 114	OK
Toluene-d8	101 %	88 - 110	OK
Bromofluorobenzene	108 %	86 - 115	OK

(U) Indicates compound was analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.

* 2-Butanone = Methyl ethyl ketone

ACCREDITED LABORATORIES, INC.
TCLP VOLATILES ANALYSIS DATA

CASE NUMBER	6481	MATRIX	Leachate
SAMPLE NUMBER	9912996	DILUTION FACTOR	10
DATA FILE	>A5133	DATE EXTRACTED	
CLIENT NAME	OE	DATE ANALYZED	12/08/99
FIELD ID	SP-1	ANALYZED BY	ROBERT

CAS No.	Compound	Result (mg/l)	MDL (mg/l)	Regulatory Level (mg/l)
71432	Benzene	U	.050	0.5
78933	2-Butanone	U	.100	200.0
56235	Carbon Tetrachloride	U	.050	0.5
108907	Chlorobenzene	U	.050	100.0
67663	Chloroform	U	.050	6.0
75354	1,1-Dichloroethene	U	.050	0.7
107062	1,2-Dichloroethane	U	.050	0.5
127184	Tetrachloroethene	U	.050	0.7
79016	Trichloroethene	U	.050	0.5
75014	Vinyl Chloride	U	.100	0.2

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
1,2-Dichloroethane-d4	77 %	76 - 114	OK
Toluene-d8	103 %	88 - 110	OK
Bromofluorobenzene	94 %	86 - 115	OK

(U) Indicates compound was analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.

* 2-Butanone = Methyl ethyl ketone

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ACCREDITED LABORATORIES, INC.
TCLP SEMIVOLATILES ANALYSIS DATA

CASE NUMBER	6481	MATRIX	Leachate
SAMPLE NUMBER	9912994	DILUTION FACTOR	10
DATA FILE	>F9822	DATE EXTRACTED	12/08/99
CLIENT NAME	OF	DATE ANALYZED	12/09/99
FIELD ID	DCOMP-1	ANALYZED BY	DANTEI

CAS No.	Compound	Result (mg/l)	MDL (mg/l)	Regulatory Level (mg/l)
110861	Pyridine	U	.10	5.0
106467	1,4-Dichlorobenzene	U	.10	7.5
95478	2-Methylphenol	U	.10	200.0
108394	3&4-Methylphenol	U	.10	200.0
67721	Hexachloroethane	U	.10	3.0
989103	Nitrobenzene	U	.10	2.0
87683	Hexachlorobutadiene	U	.10	0.5
88062	2,4,6-Trichlorophenol	U	.10	2.0
9109104	2,4,5-Trichlorophenol	U	.50	400.0
121142	2,4-Dinitrotoluene	U	.10	0.13
118741	Hexachlorobenzene	U	.10	0.13
878610	Pentachlorophenol	U	.10	100.0

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
2-Fluorophenol	50 %	21 - 100	OK
Phenol-d5	54 %	10 - 94	OK
Nitrobenzene-d5	64 %	35 - 114	OK
2-Fluorobiphenyl	66 %	43 - 116	OK
2,4,6-Tribromophenol	75 %	10 - 123	OK
Terphenyl-d14	78 %	33 - 141	OK

U - Indicates compound was analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.

* 2-Methylphenol = o-cresol
* 3-Methylphenol = m-cresol
* 4-Methylphenol = p-cresol

** 3-Methylphenol and 4-Methylphenol can not be separated by the method applied.

ACCREDITED LABORATORIES, INC.
TCLP SEMIVOLATILES ANALYSIS DATA

CASE NUMBER	6481	MATRIX	Leachate
SAMPLE NUMBER	9912995	DILUTION FACTOR	10000
DATA FILE	>E9826	DATE EXTRACTED	12/08/99
CLIENT NAME	OF	DATE ANALYZED	12/09/99
FIELD ID	DCOMP-2	ANALYZED BY	DANIEL

CAS No.	Compound	Result (mg/l)	MDL (mg/l)	Regulatory Level (mg/l)
110861	Pyridine	U	100.00	5.0
106467	1,4-Dichlorobenzene	U	100.00	7.5
95478	2-Methylphenol	U	100.00	200.0
108394	3&4-Methylphenol	U	100.00	200.0
67721	Hexachloroethane	U	100.00	3.0
989103	Nitrobenzene	U	100.00	2.0
87683	Hexachlorobutadiene	U	100.00	0.5
88062	2,4,6-Trichlorophenol	U	100.00	2.0
9109104	2,4,5-Trichlorophenol	U	500.00	400.0
121142	2,4-Dinitrotoluene	U	100.00	0.13
118741	Hexachlorobenzene	U	100.00	0.13
878610	Pentachlorophenol	U	100.00	100.0

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
2-Fluorophenol	74 %	21 - 100	OK
Phenol-d5	74 %	10 - 94	OK
Nitrobenzene-d5	117 %	35 - 114	OUT
2-Fluorobiphenyl	163 %	43 - 116	OUT
2,4,6-Tribromophenol	47 %	10 - 123	OK
Terphenyl-d14	60 %	33 - 141	OK

U - Indicates compound was analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.

* 2-Methylphenol = o-cresol
* 3-Methylphenol = m-cresol
* 4-Methylphenol = p-cresol

** 3-Methylphenol and 4-Methylphenol can not be separated by the method applied.

ACCREDITED LABORATORIES, INC.
TCLP SEMIVOLATILES ANALYSIS DATA

CASE NUMBER	6481	MATRIX	Leachate
SAMPLE NUMBER	99129950L	DILUTION FACTOR	100000
DATA FILE	*F9832	DATE EXTRACTED	12/08/99
CLIENT NAME	DE	DATE ANALYZED	12/10/99
FIELD ID	DCOMP-2	ANALYZED BY	DANTEI

CAS No.	Compound	Result (mg/l)	MDL (mg/l)	Regulatory Level (mg/l)
110861	Pyridine	U	1000.00	5.0
106467	1,4-Dichlorobenzene	U	1000.00	7.5
95478	2-Methylphenol	U	1000.00	200.0
108394	3&4-Methylphenol	U	1000.00	200.0
67721	Hexachloroethane	U	1000.00	3.0
989103	Nitrobenzene	U	1000.00	2.0
87683	Hexachlorobutadiene	U	1000.00	0.5
88062	2,4,6-Trichlorophenol	U	1000.00	2.0
9109104	2,4,5-Trichlorophenol	U	5000.00	400.0
121142	2,4-Dinitrotoluene	U	1000.00	0.13
118741	Hexachlorobenzene	U	1000.00	0.13
878610	Pentachlorophenol	U	1000.00	100.0

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
2-Fluorophenol	82 %	21 - 100	OK
Phenol-d5	78 %	10 - 94	OK
Nitrobenzene-d5	78 %	35 - 114	OK
2-Fluorobiphenyl	127 %	43 - 116	OUT
2,4,6-Tribromophenol	7 %	10 - 123	OUT
Terphenyl-d14	97 %	33 - 141	OK

U - Indicates compound was analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.

* 2-Methylphenol = o-cresol
* 3-Methylphenol = m-cresol
* 4-Methylphenol = p-cresol

** 3-Methylphenol and 4-Methylphenol can not be separated by the method applied.

ACCREDITED LABORATORIES, INC.
TCLP SEMIVOLATILES ANALYSIS DATA

CASE NUMBER	6481	MATRIX	Leachate
SAMPLE NUMBER	9912996	DILUTION FACTOR	10
DATA FILE	>F9823	DATE EXTRACTED	12/08/99
CLIENT NAME	OF	DATE ANALYZED	12/09/99
FIELD ID	SP-1	ANALYZED BY	DANIEL

CAS No.	Compound	Result (mg/l)	MDL (mg/l)	Regulatory Level (mg/l)
110861	Pyridine	U	.10	5.0
106467	1,4-Dichlorobenzene	U	.10	7.5
95478	2-Methylphenol	U	.10	200.0
108394	3&4-Methylphenol	U	.10	200.0
67721	Hexachloroethane	U	.10	3.0
989103	Nitrobenzene	U	.10	2.0
87683	Hexachlorobutadiene	U	.10	0.5
88062	2,4,6-Trichlorophenol	U	.10	2.0
9109104	2,4,5-Trichlorophenol	U	.50	400.0
121142	2,4-Dinitrotoluene	U	.10	0.13
118741	Hexachlorobenzene	U	.10	0.13
878610	Pentachlorophenol	U	.10	100.0

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
2-Fluorophenol	55 %	21 - 100	OK
Phenol-d5	58 %	10 - 94	OK
Nitrobenzene-d5	70 %	35 - 114	OK
2-Fluorobiphenyl	72 %	43 - 116	OK
2,4,6-Tribromophenol	77 %	10 - 123	OK
Terphenyl-d14	79 %	33 - 141	OK

U - Indicates compound was analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.

* 2-Methylphenol = o-cresol
* 3-Methylphenol = m-cresol
* 4-Methylphenol = p-cresol

** 3-Methylphenol and 4-Methylphenol can not be separated by the method applied.

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ACCREDITED LABORATORIES, INC.
TCLP PESTICIDES ANALYSIS DATA

CASE NUMBER	6481	MATRIX	Leachate
SAMPLE NUMBER	9912994	DILUTION FACTOR	50
DATA FILE	>G4774	DATE EXTRACTED	12/09/99
CLIENT NAME	OE	DATE ANALYZED	12/10/99
FIELD ID	DCOMP-1	ANALYZED BY	JEFF

CAS No.	Compound	Result (mg/l)	MDL (mg/l)	Regulatory Level (mg/l)
58-89-9	G-BHC (Lindane)	U	.001	0.400
76-44-8	Heptachlor	U	.001	0.008
1024-57-3	Heptachlor Epoxide	U	.001	0.008
72-20-8	Endrin	U	.002	0.02
72-43-5	Methoxychlor	U	.010	10.0
5103-71-9	A-Chlordane	U	.001	0.03
5103-74-2	G-Chlordane	U	.001	0.03
8001-35-2	Toxaphene	U	.050	0.5

SURROGATE COMPOUNDS	RECOVERY	ADVISORY LIMITS	STATUS
DCB	87%	30 - 150	OK
Tetrachloro-m-xylene	75%	30 - 150	OK

U - Indicates compound was analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.

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ACCREDITED LABORATORIES, INC.
TCLP PESTICIDES ANALYSIS DATA

CASE NUMBER	6481	MATRIX	Leachate
SAMPLE NUMBER	9912995	DILUTION FACTOR	1000
DATA FILE	>G4776	DATE EXTRACTED	12/09/99
CLIENT NAME	OE	DATE ANALYZED	12/10/99
FIELD ID	DCOMP-2	ANALYZED BY	JEFF

CAS No.	Compound	Result (mg/l)	MDL (mg/l)	Regulatory Level (mg/l)
58-89-9	G-BHC (Lindane)	U	.020	0.400
76-44-8	Heptachlor	U	.020	0.008
1024-57-3	Heptachlor Epoxide	U	.020	0.008
72-20-8	Endrin	U	.040	0.02
72-43-5	Methoxychlor	U	.200	10.0
5103-71-9	A-Chlordane	U	.020	0.03
5103-74-2	G-Chlordane	U	.020	0.03
8001-35-2	Toxaphene	U	1.000	0.5

SURROGATE COMPOUNDS	RECOVERY	ADVISORY LIMITS	STATUS
DCB	91%	30 - 150	OK
Tetrachloro-m-xylene	91%	30 - 150	OK

U - Indicates compound was analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.

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ACCREDITED LABORATORIES, INC.
TCLP PESTICIDES ANALYSIS DATA

CASE NUMBER	6481	MATRIX	Leachate
SAMPLE NUMBER	9912996	DILUTION FACTOR	50
DATA FILE	>G4775	DATE EXTRACTED	12/09/99
CLIENT NAME	OE	DATE ANALYZED	12/10/99
FIELD ID	SP-1	ANALYZED BY	JEFF

CAS No.	Compound	Result (mg/l)	MDL (mg/l)	Regulatory Level (mg/l)
58-89-9	G-BHC (Lindane)	U	.001	0.400
76-44-8	Heptachlor	U	.001	0.008
1024-57-3	Heptachlor Epoxide	U	.001	0.008
72-20-8	Endrin	U	.002	0.02
72-43-5	Methoxychlor	U	.010	10.0
5103-71-9	A-Chlordane	U	.001	0.03
5103-74-2	G-Chlordane	U	.001	0.03
8001-35-2	Toxaphene	U	.050	0.5

SURROGATE COMPOUNDS	RECOVERY	ADVISORY LIMITS	STATUS
DCB	88%	30 - 150	OK
Tetrachloro-m-xylene	77%	30 - 150	OK

U - Indicates compound was analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.

ACCREDITED LABORATORIES, INC
TCLP HERBICIDE ANALYSIS DATA

CASE NUMBER	6481	MATRIX	Leachate
SAMPLE NUMBER	9912994	DILUTION FACTOR	1
DATA FILE	>A0603	DATE EXTRACTED	12/08/99
CLIENT NAME	OE	DATE ANALYZED	12/08/99
FIELD ID	DCOMP-1	ANALYZED BY	JEFF

CAS No.	Compound	Result (mg/l)	MDL (mg/l)	Regulatory Level (mg/l)
94757	2,4'-D	U	.100	10.0
93721	SILVEX	U	.010	1.0

U - Indicates compound was analyzed for but not detected

ACCREDITED LABORATORIES, INC
TCLP HERBICIDE ANALYSIS DATA

CASE NUMBER	6481	MATRIX	Leachate
SAMPLE NUMBER	9912995	DILUTION FACTOR	20
DATA FILE	>A0605	DATE EXTRACTED	12/08/99
CLIENT NAME	OE	DATE ANALYZED	12/08/99
FIELD ID	DCOMP-2	ANALYZED BY	JEFF

CAS No.	Compound	Result (mg/l)	MDL (mg/l)	Regulatory Level (mg/l)
94757	2,4'-D	U	2.000	10.0
93721	SILVEX	U	.200	1.0

U - Indicates compound was analyzed for but not detected

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ACCREDITED LABORATORIES, INC
TCLP HERBICIDE ANALYSIS DATA

CASE NUMBER	6481	MATRIX	Leachate
SAMPLE NUMBER	9912996	DILUTION FACTOR	1
DATA FILE	>A0604	DATE EXTRACTED	12/08/99
CLIENT NAME	OE	DATE ANALYZED	12/08/99
FIELD ID	SP-1	ANALYZED BY	JEFF

CAS No.	Compound	Result (mg/l)	MDL (mg/l)	Regulatory Level (mg/l)
94757	2,4'-D	U	.100	10.0
93721	SILVEX	U	.010	1.0

U - Indicates compound was analyzed for but not detected

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ACCREDITED LABORATORIES, INC
PCB ORGANIC ANALYSIS DATA

CASE NUMBER	6481	MATRIX	Soil
SAMPLE NUMBER	9912994	DILUTION FACTOR	1
DATA FILE	>G4744	DATE EXTRACTED	12/03/99
CLIENT NAME	OE	DATE ANALYZED	12/08/99
FIELD ID	DCOMP-1	ANALYZED BY	JEFF

CAS#	COMPOUND	UG/KG	MDL
12674112	Aroclor-1016	U	22.2
11104282	Aroclor-1221	U	22.2
11141165	Aroclor-1232	U	22.2
53469219	Aroclor-1242	268000 E I	22.2
12672296	Aroclor-1248	U	22.2
11097691	Aroclor-1254	109000 E I	22.2
11096825	Aroclor-1260	U	22.2

Percent Solid of 75.0 is used for all target compounds.

B - Indicates compound found in associated blank.
J - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.
R - Result exceeds residential surface soil standards.*
I - Result exceeds industrial surface soil standards.*

* Flags are based on New Jersey Soil Cleanup from Site Remediation News Volume 06 Number 1.

ACCREDITED LABORATORIES, INC
PCB ORGANIC ANALYSIS DATA

CASE NUMBER	6481	MATRIX	Soil
SAMPLE NUMBER	9912994DL 1000	DILUTION FACTOR	1000
DATA FILE	>G4755	DATE EXTRACTED	12/03/99
CLIENT NAME	OE	DATE ANALYZED	12/08/99
FIELD ID	DCOMP-1	ANALYZED BY	JEFF

CAS#	COMPOUND	UG/KG	MDL
12674112	Aroclor-1016	U	2220
11104282	Aroclor-1221	U	2220
11141165	Aroclor-1232	U	2220
53469219	Aroclor-1242	63800000 E DI	2220
12672296	Aroclor-1248	U	2220
11097691	Aroclor-1254	27000000 E DI	2220
11096825	Aroclor-1260	U	2220

Percent Solid of 75.0 is used for all target compounds.

B - Indicates compound found in associated blank.
J - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.
R - Result exceeds residential surface soil standards.*
I - Result exceeds industrial surface soil standards.*

* Flags are based on New Jersey Soil Cleanup from Site Remediation News Volume 06 Number 1.

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ACCREDITED LABORATORIES, INC
PCB ORGANIC ANALYSIS DATA

CASE NUMBER	6481	MATRIX	Soil
SAMPLE NUMBER	9912994DL2 100000	DILUTION FACTOR	100000
DATA FILE	>G4763	DATE EXTRACTED	12/03/99
CLIENT NAME	OE	DATE ANALYZED	12/08/99
FIELD ID	DCOMP-1	ANALYZED BY	JEFF

CAS#	COMPOUND	UG/KG		MDL
12674112	Aroclor-1016	U		22200
11104282	Aroclor-1221	U		22200
11141165	Aroclor-1232	U		22200
53469219	Aroclor-1242	160000000	DI	22200
12672296	Aroclor-1248	U		22200
11097691	Aroclor-1254	517000000	DI	22200
11096825	Aroclor-1260	U		22200

Percent Solid of 75.0 is used for all target compounds.

B - Indicates compound found in associated blank.
J - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.
R - Result exceeds residential surface soil standards.*
I - Result exceeds industrial surface soil standards.*

* Flags are based on New Jersey Soil Cleanup from Site Remediation News Volume 06 Number 1.

ACCREDITED LABORATORIES, INC
PCB ORGANIC ANALYSIS DATA

CASE NUMBER	6481	MATRIX	Oil
SAMPLE NUMBER	9912995	DILUTION FACTOR	1
DATA FILE	>G4752	DATE EXTRACTED	12/03/99
CLIENT NAME	OE	DATE ANALYZED	12/08/99
FIELD ID	DCOMP-2	ANALYZED BY	JEFF

CAS#	COMPOUND	MG/KG	MDL
12674112	Aroclor-1016	U	.500
11104282	Aroclor-1221	U	.500
11141165	Aroclor-1232	U	.500
53469219	Aroclor-1242	97.3	.500
12672296	Aroclor-1248	U	.500
11097691	Aroclor-1254	77.0	.500
11096825	Aroclor-1260	U	.500

B - Indicates compound found in associated blank.
J - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.

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ACCREDITED LABORATORIES, INC
PCB ORGANIC ANALYSIS DATA

CASE NUMBER	6481	MATRIX	Soil
SAMPLE NUMBER	9912996	DILUTION FACTOR	1
DATA FILE	>G4745	DATE EXTRACTED	12/03/99
CLIENT NAME	OE	DATE ANALYZED	12/08/99
FIELD ID	SP-1	ANALYZED BY	JEFF

CAS#	COMPOUND	UG/KG	MDL
12674112	Aroclor-1016	U	19.4
11104282	Aroclor-1221	U	19.4
11141165	Aroclor-1232	U	19.4
53469219	Aroclor-1242	85200 E I	19.4
12672296	Aroclor-1248	U	19.4
11097691	Aroclor-1254	145000 E I	19.4
11096825	Aroclor-1260	U	19.4

Percent Solid of 86.0 is used for all target compounds.

B - Indicates compound found in associated blank.
J - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.
R - Result exceeds residential surface soil standards.*
I - Result exceeds industrial surface soil standards.*

* Flags are based on New Jersey Soil Cleanup from Site Remediation News Volume 06 Number 1.

ACCREDITED LABORATORIES, INC
PCB ORGANIC ANALYSIS DATA

CASE NUMBER	6481	MATRIX	Soil
SAMPLE NUMBER	9912996DL 200	DILUTION FACTOR	200
DATA FILE	>G4756	DATE EXTRACTED	12/03/99
CLIENT NAME	OE	DATE ANALYZED	12/08/99
FIELD ID	SP-1	ANALYZED BY	JEFF

CAS#	COMPOUND	UG/KG		MDL
12674112	Aroclor-1016	U		3880
11104282	Aroclor-1221	U		3880
11141165	Aroclor-1232	U		3880
53469219	Aroclor-1242	205000	DI	3880
12672296	Aroclor-1248	U		3880
11097691	Aroclor-1254	806000	DI	3880
11096825	Aroclor-1260	U		3880

Percent Solid of 86.0 is used for all target compounds.

B - Indicates compound found in associated blank.
J - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.
R - Result exceeds residential surface soil standards.*
I - Result exceeds industrial surface soil standards.*

* Flags are based on New Jersey Soil Cleanup from Site Remediation News Volume 06 Number 1.

ACCREDITED LABORATORIES, INC
PCB ORGANIC ANALYSIS DATA

CASE NUMBER	6481	MATRIX	Soil
SAMPLE NUMBER	9912997	DILUTION FACTOR	1
DATA FILE	>G4746	DATE EXTRACTED	12/03/99
CLIENT NAME	OE	DATE ANALYZED	12/08/99
FIELD ID	SP-2	ANALYZED BY	JEFF

CAS#	COMPOUND	UG/KG	MDL
12674112	Aroclor-1016	U	19.3
11104282	Aroclor-1221	U	19.3
11141165	Aroclor-1232	U	19.3
53469219	Aroclor-1242	86800 E I	19.3
12672296	Aroclor-1248	U	19.3
11097691	Aroclor-1254	145000 E I	19.3
11096825	Aroclor-1260	U	19.3

Percent Solid of 86.3 is used for all target compounds.

B - Indicates compound found in associated blank.
J - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.
R - Result exceeds residential surface soil standards.*
I - Result exceeds industrial surface soil standards.*

* Flags are based on New Jersey Soil Cleanup from Site Remediation News Volume 06 Number 1.

ACCREDITED LABORATORIES, INC
PCB ORGANIC ANALYSIS DATA

CASE NUMBER	6481	MATRIX	Soil
SAMPLE NUMBER	9912997DL 200	DILUTION FACTOR	200
DATA FILE	>G4757	DATE EXTRACTED	12/03/99
CLIENT NAME	OE	DATE ANALYZED	12/08/99
FIELD ID	SP-2	ANALYZED BY	JEFF

CAS#	COMPOUND	UG/KG		MDL
12674112	Aroclor-1016	U		3860
11104282	Aroclor-1221	U		3860
11141165	Aroclor-1232	U		3860
53469219	Aroclor-1242	151000	DI	3860
12672296	Aroclor-1248	U		3860
11097691	Aroclor-1254	603000	DI	3860
11096825	Aroclor-1260	U		3860

Percent Solid of 86.3 is used for all target compounds.

B - Indicates compound found in associated blank.
J - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.
R - Result exceeds residential surface soil standards.*
I - Result exceeds industrial surface soil standards.*

* Flags are based on New Jersey Soil Cleanup from Site Remediation News Volume 06 Number 1.

ACCREDITED LABORATORIES, INC
PCB ORGANIC ANALYSIS DATA

CASE NUMBER	6481	MATRIX	Soil
SAMPLE NUMBER	9912998	DILUTION FACTOR	1
DATA FILE	>G4747	DATE EXTRACTED	12/03/99
CLIENT NAME	OE	DATE ANALYZED	12/08/99
FIELD ID	SP-3	ANALYZED BY	JEFF

CAS#	COMPOUND	UG/KG	MDL
12674112	Aroclor-1016	U	19.6
11104282	Aroclor-1221	U	19.6
11141165	Aroclor-1232	U	19.6
53469219	Aroclor-1242	106000 E I	19.6
12672296	Aroclor-1248	U	19.6
11097691	Aroclor-1254	161000 E I	19.6
11096825	Aroclor-1260	U	19.6

Percent Solid of 85.2 is used for all target compounds.

B - Indicates compound found in associated blank.
J - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.
R - Result exceeds residential surface soil standards.*
I - Result exceeds industrial surface soil standards.*

* Flags are based on New Jersey Soil Cleanup from Site Remediation News Volume 06 Number 1.

ACCREDITED LABORATORIES, INC
PCB ORGANIC ANALYSIS DATA

CASE NUMBER	6481	MATRIX	Soil
SAMPLE NUMBER	9912998DL 200	DILUTION FACTOR	200
DATA FILE	>G4758	DATE EXTRACTED	12/03/99
CLIENT NAME	OE	DATE ANALYZED	12/08/99
FIELD ID	SP-3	ANALYZED BY	JEFF

CAS#	COMPOUND	UG/KG		MDL
12674112	Aroclor-1016	U		3910
11104282	Aroclor-1221	U		3910
11141165	Aroclor-1232	U		3910
53469219	Aroclor-1242	187000	DI	3910
12672296	Aroclor-1248	U		3910
11097691	Aroclor-1254	708000	DI	3910
11096825	Aroclor-1260	U		3910

Percent Solid of 85.2 is used for all target compounds.

B - Indicates compound found in associated blank.
J - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.
R - Result exceeds residential surface soil standards.*
I - Result exceeds industrial surface soil standards.*

* Flags are based on New Jersey Soil Cleanup from Site Remediation News Volume 06 Number 1.

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ACCREDITED LABORATORIES, INC
PCB ORGANIC ANALYSIS DATA

CASE NUMBER	6481	MATRIX	Soil
SAMPLE NUMBER	9912999	DILUTION FACTOR	1
DATA FILE	>G4748	DATE EXTRACTED	12/03/99
CLIENT NAME	OE	DATE ANALYZED	12/08/99
FIELD ID	SP-4	ANALYZED BY	JEFF

CAS#	COMPOUND	UG/KG	MDL
12674112	Aroclor-1016	U	19.5
11104282	Aroclor-1221	U	19.5
11141165	Aroclor-1232	U	19.5
53469219	Aroclor-1242	94400 E I	19.5
12672296	Aroclor-1248	U	19.5
11097691	Aroclor-1254	162000 E I	19.5
11096825	Aroclor-1260	U	19.5

Percent Solid of 85.6 is used for all target compounds.

B - Indicates compound found in associated blank.
J - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.
R - Result exceeds residential surface soil standards.*
I - Result exceeds industrial surface soil standards.*

* Flags are based on New Jersey Soil Cleanup from Site Remediation News Volume 06 Number 1.

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ACCREDITED LABORATORIES, INC
PCB ORGANIC ANALYSIS DATA

CASE NUMBER	6481	MATRIX	Soil
SAMPLE NUMBER	99129990L 200	DILUTION FACTOR	200
DATA FILE	>G4759	DATE EXTRACTED	12/03/99
CLIENT NAME	OE	DATE ANALYZED	12/08/99
FIELD ID	SP-4	ANALYZED BY	JEFF

CAS#	COMPOUND	UG/KG		MDL
12674112	Aroclor-1016	U		3890
11104282	Aroclor-1221	U		3890
11141165	Aroclor-1232	U		3890
53469219	Aroclor-1242	138000	DI	3890
12672296	Aroclor-1248	U		3890
11097691	Aroclor-1254	632000	DI	3890
11096825	Aroclor-1260	U		3890

Percent Solid of 85.6 is used for all target compounds.

B - Indicates compound found in associated blank.
J - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.
R - Result exceeds residential surface soil standards.*
I - Result exceeds industrial surface soil standards.*

* Flags are based on New Jersey Soil Cleanup from Site Remediation News Volume 06 Number 1.

ACCREDITED LABORATORIES, INC
PCB ORGANIC ANALYSIS DATA

CASE NUMBER	6481	MATRIX	Soil
SAMPLE NUMBER	9913000	DILUTION FACTOR	1
DATA FILE	>G4751	DATE EXTRACTED	12/03/99
CLIENT NAME	OE	DATE ANALYZED	12/08/99
FIELD ID	SP-5	ANALYZED BY	JEFF

CAS#	COMPOUND	UG/KG	MDL
12674112	Aroclor-1016	U	19.4
11104282	Aroclor-1221	U	19.4
11141165	Aroclor-1232	U	19.4
53469219	Aroclor-1242	82400 E I	19.4
12672296	Aroclor-1248	U	19.4
11097691	Aroclor-1254	159000 E I	19.4
11096825	Aroclor-1260	U	19.4

Percent Solid of 86.0 is used for all target compounds.

B - Indicates compound found in associated blank.
J - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.
R - Result exceeds residential surface soil standards.*
I - Result exceeds industrial surface soil standards.*

* Flags are based on New Jersey Soil Cleanup from Site Remediation News Volume 06 Number 1.

ACCREDITED LABORATORIES, INC
PCB ORGANIC ANALYSIS DATA

CASE NUMBER	6481	MATRIX	Soil
SAMPLE NUMBER	9913000DL 200	DILUTION FACTOR	200
DATA FILE	>G4762	DATE EXTRACTED	12/03/99
CLIENT NAME	OE	DATE ANALYZED	12/08/99
FIELD ID	SP-5	ANALYZED BY	JEFF

CAS#	COMPOUND	UG/KG		MDL
12674112	Aroclor-1016	U		3880
11104282	Aroclor-1221	U		3880
11141165	Aroclor-1232	U		3880
53469219	Aroclor-1242	119000	DI	3880
12672296	Aroclor-1248	U		3880
11097691	Aroclor-1254	535000	DI	3880
11096825	Aroclor-1260	U		3880

Percent Solid of 86.0 is used for all target compounds.

B - Indicates compound found in associated blank.
J - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.
R - Result exceeds residential surface soil standards.*
I - Result exceeds industrial surface soil standards.*

* Flags are based on New Jersey Soil Cleanup from Site Remediation News Volume 06 Number 1.

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ACCREDITED LABORATORIES, INC.
REGULATED TCLP METALS
INORGANIC ANALYSIS DATA SHEET

Case #:	6481	Matrix:	Leachate
Sample #:	9912994	Date Received:	11/30/99
Field ID:	DCOMP-1		
Client Name:	OE		

CAS No.	Element	Result MG/L	MDL MG/L	Dilution Factor	Regulatory Level	Method	Date Analyzed
7440-38-2	Arsenic	ND	1.00	1	5.00	P	12/10/99
7440-39-3	Barium	3.74	.200	1	100.00	P	12/10/99
7440-43-9	Cadmium	.598	.100	1	1.00	P	12/10/99
7440-47-3	Chromium	ND	.100	1	5.00	P	12/10/99
7439-92-1	Lead	14.7	.500	1	5.00	P	12/10/99
7439-97-6	Mercury	ND	.002	2	.20	CV	12/03/99
7782-49-2	Selenium	ND	.500	1	1.00	P	12/10/99
7440-22-4	Silver	ND	.100	1	5.00	P	12/10/99

ND - Element analyzed for but not detected.
P - Analyzed by ICP
F - Analyzed by GFA
CV - Analyzed by Cold Vapor
A - Analyzed by flame AA

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ACCREDITED LABORATORIES, INC.
REGULATED TCLP METALS
INORGANIC ANALYSIS DATA SHEET

Case #: 6481
Sample #: 9912995
Field ID: DCOMP-2
Client Name: OE

Matrix: Leachate
Date Received: 11/30/99

CAS No.	Element	Result MG/L	MDL MG/L	Dilution Factor	Regulatory Level	Method	Date Analyzed
7440-38-2	Arsenic	ND	1.00	1	5.00	P	12/10/99
7440-39-3	Barium	ND	.200	1	100.00	P	12/10/99
7440-43-9	Cadmium	ND	.100	1	1.00	P	12/10/99
7440-47-3	Chromium	ND	.100	1	5.00	P	12/10/99
7439-92-1	Lead	ND	.500	1	5.00	P	12/10/99
7439-97-6	Mercury	ND	.010	10	.20	CV	12/03/99
7782-49-2	Selenium	ND	.500	1	1.00	P	12/10/99
7440-22-4	Silver	ND	.100	1	5.00	P	12/10/99

ND - Element analyzed for but not detected.
P - Analyzed by ICP
F - Analyzed by GFA
CV - Analyzed by Cold Vapor
A - Analyzed by flame AA

ACCREDITED LABORATORIES, INC.
REGULATED TCLP METALS
INORGANIC ANALYSIS DATA SHEET

Case #: 6481
Sample #: 9912996
Field ID: SP-1
Client Name: OE

Matrix: Leachate
Date Received: 11/30/99

CAS No.	Element	Result MG/L	MDL MG/L	Dilution Factor	Regulatory Level	Method	Date Analyzed
7440-38-2	Arsenic	ND	1.00	1	5.00	P	12/10/99
7440-39-3	Barium	1.54	.200	1	100.00	P	12/10/99
7440-43-9	Cadmium	.280	.100	1	1.00	P	12/10/99
7440-47-3	Chromium	ND	.100	1	5.00	P	12/10/99
7439-92-1	Lead	1.00	.500	1	5.00	P	12/10/99
7439-97-6	Mercury	ND	.002	2	.20	CV	12/03/99
7782-49-2	Selenium	ND	.500	1	1.00	P	12/10/99
7440-22-4	Silver	ND	.100	1	5.00	P	12/10/99

ND - Element analyzed for but not detected.
P - Analyzed by ICP
F - Analyzed by GFA
CV - Analyzed by Cold Vapor
A - Analyzed by flame AA

ACCREDITED LABORATORIES, INC.
GENERAL CHEMISTRY ANALYSIS DATA

Case #:	6481	Matrix:	Soil
Sample #:	9912994	Date Received:	11/30/99
Client Name:	OE	% Moisture:	25.0
Field Number:	DCOMP-1		

ANALYTES	RESULTS	MDL	UNITS	DILUTION FACTOR	METHOD BLANK RESULTS	METHOD BLANK MDL	ANALYSIS DATE
Solids, Percent	75.0	0.10	%	1.			12/02/99
Flash Point	>200	80.	°F	1.			12/03/99
PH	6.45		S.U.	1.			12/03/99
Cyanide, Reactive	ND	0.27	mg/Kg	1.	ND	0.20	12/03/99
Sulfide, Reactive	ND	53.3	mg/Kg	1.	ND	40.0	12/03/99

ACCREDITED LABORATORIES, INC.
GENERAL CHEMISTRY ANALYSIS DATA

Case #: 6481
Sample #: 9912995
Client Name: OE
Field Number: DCOMP-2

Matrix: Oil
Date Received: 11/30/99

ANALYTES	RESULTS	MDL	UNITS	DILUTION FACTOR	METHOD BLANK RESULTS	METHOD BLANK MDL	ANALYSIS DATE
Flash Point	170.	80.	°F	1.			12/03/99
PH	6.86		S.U.	1.			12/03/99
Cyanide, Reactive	ND	0.20	mg/Kg	1.	ND	0.20	12/03/99
Sulfide, Reactive	ND	40.0	mg/Kg	1.	ND	40.0	12/03/99

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ACCREDITED LABORATORIES, INC.
GENERAL CHEMISTRY ANALYSIS DATA

Case #:	6481	Matrix:	Soil
Sample #:	9912996	Date Received:	11/30/99
Client Name:	OE	% Moisture:	14.0
Field Number:	SP-1		

ANALYTES	RESULTS	MDL	UNITS	DILUTION FACTOR	METHOD BLANK RESULTS	METHOD BLANK MDL	ANALYSIS DATE
Solids, Percent	86.0	0.10	S.U.	1.			12/02/99
Flash Point	>200	80.	°F	1.			12/03/99
PH	6.74		S.U.	1.			12/03/99
Cyanide, Reactive	ND	0.23	mg/Kg	1.	ND	0.20	12/03/99
Sulfide, Reactive	ND	46.5	mg/Kg	1.	ND	40.0	12/03/99

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Oxford Project No.: 9703

Materials Handling, Transportation and Disposal Plan (MHTDP)

Cornell-Dubilier Electronics Site
333 Hamilton Boulevard
South Plainfield, New Jersey

Submitted to

U.S. Environmental Protection Agency, Region II
Removal Action Branch
2890 Woodbridge Avenue
Edison, New Jersey 08837

March 2000

Prepared by:

OXFORD ENVIRONMENTAL, INC.
43 Route 46 East, Suite 702,
Pine Brook, NJ 07058
973-244-0600 • fax 973-244-0722

700085

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1.0 INTRODUCTION

This Materials Handling, Transportation and Disposal Plan (MHTDP) has been prepared at the request of the Environmental Protection Agency (EPA), in order to address the proper management of TSCA hazardous soils and liquids.

The proposed removal operations include the loading, transportation and disposal of stockpiled soils and drums at the Cornell Dubilier facility in South Plainfield, New Jersey.

Sampling results from the stockpiled soils indicate elevated levels of PCBs. Samples obtained from drum contents indicate three separate waste types. Two drums contain scrap parts from former operations and soil that also contain elevated levels of PCBs as well as Lead. Four drums contain sludge from tank bottoms. Analytical results of sludge samples indicate elevated PCB concentrations. One single drum contains personal protective clothing utilized during past site stabilization activities.

2.0 DESCRIPTION OF PROPOSED ACTIVITIES

As mentioned previously, a soil pile exists in the former driving school lot at the subject facility. This soil was reportedly generated from tank excavation activities. The exact quantity of soil is unknown at this time however it is estimated at 75 tons. Five soil samples were collected from the existing stockpile. Samples were analyzed for the parameters identified in the EPA Work Plan. Results indicated total PCB levels >50 mg/kg in all samples. Therefore, this material would be considered hazardous under TSCA. The recommended disposal option for this soil is direct landfill into a TSCA permitted landfill.

Soil from the stockpile will be loaded directly into trucks via a loader. Trucks will be weighed at a certified public scale prior to arrival at the site to establish a tare weight. The trucks will enter the work zone at the designated entrance for loading. Upon completion of loading, trucks will exit the work zone using the same access point. Prior to exit, all loose soils will be removed from the truck wheels and body.

Prior to leaving the Exclusion Zone, truck beds will be covered with a tarpaulin to eliminate release of fugitive dust particles. Trucks will be weighed at a public scale to determine the quantity of material transported. All appropriate manifests / documentation will be provided to EPA upon receipt from the disposal facility.

There are a total of 7 drums located within the former driving school lot. Two drums contained various waste parts and soil. One composite sample was collected from the soils and analyzed for the parameters identified in the EPA Work Plan. Results indicated high levels of PCBs (i.e. >51%) as well as Lead (14.7 mg/L). This material would be considered hazardous under the Toxic Substance Control Act (TSCA) and the Resource Conservation and Recovery Act (RCRA). Subsequently, the treatment for this waste stream would be incineration. Four drums contained sludge reportedly from former tank bottoms. One composite sample was collected from the sludge and analyzed for the parameters identified in the EPA Work Plan. Results indicated levels of PCBs (174.3 mg/kg total PCBs). This material would be considered hazardous under TSCA (> 50 mg/kg). Subsequently, due to the materials matrix (i.e. sludge) and the contaminant concentration, the treatment for this waste stream would also be incineration. The remaining drum contains PPE. Due to its composition, the contents of this drum will be added to the soil stockpile for direct landfill disposal at a TSCA permitted facility.

The drums are currently covered with plastic to protect them from the elements. This plastic will be removed and the drum's integrity will be checked via visual inspection. Any drum that displays signs of physical inadequacy will be overpacked prior to shipment. Drums will be securely tightened to ensure that no waste materials will spill during loading or transportation activities. Drums will also be properly labeled prior to shipment. Drums will be loaded onto a box truck via a drum dolly or mechanical hoist.

The box truck will remain on paved areas during all loading procedures. This will eliminate the need for vehicle decontamination prior to exiting the site. . All appropriate manifests / documentation will be provided to EPA upon receipt from the disposal facility.

2.1 Disposal Facility

The following disposal facilities have been selected for this project:

- Disposal of stockpile soils:

  CWM Chemical Services, LLC
  1550 Balmer Road
  Model City, New York 14107

  EPA ID#: NYD049836679
  Phone #: (716) 754-8231

- Disposal of drummed materials:

  CWM Chemical Services, LLC
  1550 Balmer Road
  Model City, New York 14107

  EPA ID#: NYD049836679
  Phone #: (716) 754-8231

3.0 KEY PROJECT PERSONNEL & CONTACT INFORMATION

The following table identifies and briefly describes the duties of key project personnel, as well as provides their respective contact information.

Table 1 - Key Project Personnel and Contact Information

Owner	DSC of Newark Enterprises, Inc.
Project Manager: Responsible for the day-to-day oversight of the project.	Ms. Lara Coraci Office phone # (973) 589-4200
Environmental Subcontractor	**OXFORD ENVIRONMENTAL, INC.**
Site Manager: Responsible for overall coordination of oversight for removal operations.	Mr. John Hendry Office # (973) 244-0600 Pager # (973) 419-3654 Nextel # (973) 390-1619
Project Engineer: Responsible for oversight of on-site operations.	Mr. Tim Francisco Office # (973) 244-0600 Pager # (973) 419-3658
Safety Officer: Responsible for the implementation of the MHP in the field.	Ms. Joy Sauers, Pager # (973) 208-7237 Mr. Tony Scritoralle, Pager # (973) 419-3659

4.0 CONTAMINATED WORK AREAS AND TEMPORARY WORK ZONES

The following table and section summarizes the identified work zones in which contaminated materials will be encountered during removal operations.

Table 2 - Summary of Contaminated Areas and Materials

Activity	*Work Area Location*	*Quantity*	*Task Description*
Stockpiled Soil Removal	Former Driving School Lot	+/- 75 Tons	Loading and Transportation
Drum Removal	Former Driving School Lot	7 Drums	Loading and Transportation

Due to the likely presence of contaminants within the identified work areas above, work shall be performed in accordance with the existing Health and Safety Plan (HASP) as well as the below detailed. Accordingly, appropriate exclusion, decontamination and support zones shall be demarcated to prevent any contaminated media from migrating off-site.

4.1 Temporary Work Zones

Temporary work zones shall be established prior to working in any of the locations identified in Table 2 - Summary of Contaminated Areas and Materials, to prevent the migration of contaminants off-site. This will be accomplished by creating three separate work zones within work area location. These three zones are:

- Exclusion Zone
- Decontamination Reduction Zone
- Support Zone

Each of the above zones has task specific activities performed within them, which are discussed below. In addition, temporary facilities will be used in each work area location to support the requirements of the HASP.

The following sections briefly describe the activities to be performed within each work zone, as well as, the use of the temporary facilities.

4.2 Exclusion Zone

The exclusion zone or "hot zone" is the immediate area in a work location in which work performed will encounter contaminants. For the purpose of this project, the work area locations identified in Table 2 will be designated the exclusion zone. This area should

be delineated with barricade tape and/or cones. The exclusion zone will have a single entrance / exit location so as to control access to the contaminated work zone. This access will also be utilized for equipment and material transportation into and from the exclusion zone and will directly transition into the decontamination zone. Due to the contaminants present within the exclusion zone, no temporary facilities are located within it.

4.3 Decontamination Zone

The decontamination zone or "contaminant reduction zone" acts as a buffer zone between the exclusion zone and the support zone. Personnel and equipment leaving the exclusion shall be required to pass through the decontamination pad to ensure that no loose contaminated soil is tracked out of the exclusion area into other portions of the Site. This can be achieved simply through the use of a boot wash and tire washing station. Decontamination liquid shall be added to the drums being disposed of off site.

4.4 Support Zone

The support zone or "clean zone" is designated as the area in which removal activities will not encounter contamination. The support zone contains temporary facilities such as:

- Equipment storage
- Material storage
- Parking areas

5.0 POLLUTION PREVENTION AND CONTROL MEASURES

The following sections will detail the proper controls and procedures for management of contaminated materials generated in areas of contaminated soils and liquids, and to prevent non-permitted discharge of contaminants during removal operations.

5.1 Removal / Loading Operations

To prevent any contaminated soils from migrating off site the following procedures shall be followed:

Excavation equipment should remain within the exclusion zone in order to minimize possible transport of clinging soils and/or contaminated fluids. Dust suppression controls as described in Section 5.2 should be utilized during this activity. Upon completion of excavation activities, all heavy equipment should be decontaminated at the decontamination station.

If during the course of excavation, buried tanks and/or drums are encountered, the following procedures shall be implemented:

1) Stop work immediately and withdraw from the area.
2) Inform the Engineer of vessel location.
3) HSO and Engineer will visually inspect the area to determine the type of vessel (i.e. tank or drum), and document its condition.
4) HSO will call the NJDEP Hotline at (609) 292-7172 and report the incident.
5) The HSO, Engineer and General Contractor will then determine if work can safely continue within the vicinity of the vessel.
6) The Owner will then take necessary steps as required by NJDEP regulations to remove the vessel and restore the area to its previous condition.

5.2 Dust Control

Due to the nature of the contaminants present at the Site, control of fugitive dust emissions during soil loading operations may be required. If the HSO or Engineer deems it necessary to reduce the amount of airborne dust, the following control methods will be initiated.

- Wet excavation areas prior to and during excavation activities
- Clean impermeable surfaces (i.e. roadways) whenever dirt or mud is observed

5.3 Decontamination Solids and Liquids

During the course of removal activities, solid wastes in the form of PPE and decontamination liquids will be generated. PPE will be added to either the soil stockpile

or the parts / soil drum scheduled for incineration. Decontamination liquids will be added to the sludge drums that are also scheduled for incineration.

6.0 DOCUMENTATION AND REPORTING

6.1 Daily Construction Log

In order to maintain accurate documentation of the contaminated soils removed for off-site disposal, a Daily Construction Log shall be kept.

6.1.1 Soil Handling Activities

As part of the Daily Construction Log, detailed notes shall be kept of the soil handling activities performed at the site. Movement of contaminated disposed off-site shall be documented.

6.1.2 Manifests

Hazardous waste manifests will be completed which track the movement of stockpiled soils and drums from the Site to the selected disposal facility. Copies of these documents will be included in the Final SOP Report.

6.1.3 Incident Log (If Any)

An incident log shall be kept to document discharges and spills within the Site. The incident log shall detail specific information relative to the nature of the discharge or spill, the type of substance discharged/spilled, the type of impact to the environment (air, water, or soil), any corrective actions taken, and any measures taken to prevent another incident from occurring.

6.2 Field Considerations

During the course of removal activities, field conditions may vary or change from anticipated or planned conditions. It is for these reasons that minor adaptations or slight modifications must be made in the field to ensure that effective pollution prevention and control measures are implemented.

For this project, a qualified field representative will be present during the handling of contaminated soils and liquids. This individual will be responsible for making the initial determination that current engineering controls are adequate.

If is determined that there is a possibility that existing control methods are ineffective, work shall cease until a revised control procedure can be implemented.

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ACCREDITED LABORATORIES, INC.
Implementing Tomorrow's Technology, Today™...

Analytical Data Report

for

Oxford Environmental
43 Rt. 46 East
Pine Brook, NJ 07058

Project: D S C / Cornell

Accredited Laboratories Case No.: 6481
Date Received: 11/30/99

Field ID	Laboratory Sample #
DCOMP-1	9912994
DCOMP-2	9912995
SP-1	9912996
SP-2	9912997
SP-3	9912998
SP-4	9912999
SP-5	9913000

Accredited Laboratories, Inc. New Jersey Certification Number 12007. This data has been reviewed and accepted by:

T. Gaydos

Theodore C. Gaydos
Technical Director

(732) 541-2025

CORPORATE OFFICES
20 Pershing Avenue
Carteret, New Jersey 07008

FAX (732) 541-1383

700097

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Standard Calibrations	
Blanks	
ICP Interference Check Sample	
Spike Sample Recovery	
Sample Duplicate	
Laboratory Control Sample	
ICP Serial Dilution	
Instrument Detection Limits (Quarterly)	
ICP Interelement Correction Factors (Annually)	
ICP Linear Ranges (Quarterly)	
Preparation Log	
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Sample Duplicate	
GCFID/DRO:	175
Standard Calibrations	
MS/MSD Summary	
Raw Data	
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GCFID/DRO	694

ACCREDITED LABORATORIES, INC.
20 PERSHING AVENUE
CARTERET, NEW JERSEY 07008
PHONE: (732) 541-2025 / (800) ALI-LABS

CHAIN OF CUSTODY FORM

PAGE 1 OF 1

CLIENT	Oxford Env.	PROJECT	DSC / Cornell
ADDRESS	43 RT 46 East	CONTACT	J. Hendu
CITY	Pinebrook	PHONE	973-244-0600
STATE	NJ ZIP 07058	FAX	973-244-0722

ALI SAMPLE #	FIELD ID	*C	**M	DATE / TIME SAMPLED	SAMPLE DESCRIPTION	ANALYSIS
9912994	DCOMP-1	3	S	11/30	Drum	Full TCLP, TPH, RCRA ~~[illegible]~~ PCB
*9912995	DCOMP-2	3	G	↓	Drum	↓
9912996	SP-1	3	S	↓	Soil From Pile	↓
9912997	SP-2	1	↓	↓	↓	PCB
9912998	SP-3	1	↓	↓	↓	↓
9912999	SP-4	1	↓	↓	↓	↓
9913000	SP-5	1	↓	↓	↓	↓

**- Biphasic sample - analyze oil phase

**M = MATRIX A=AQUEOUS S=SOIL G=SLUDGE P=POTABLE WATER O=OIL F=FILTER K=SOLID X=OTHER

*C = NO. CONTAINERS TURNAROUND: STANDARD (If Blank, Std. 3 weeks)

DELIVERABLES (circle one) * STD REDUCED FULL NY-ASP CLP I CLP II

RELINQUISHED BY: PRINT	SIGN	RECEIVED BY: PRINT	SIGN	ORGANIZATION	DATE	TIME	REASON
Tony Scritborak	[signature]	K. Roberts	Kevin Robert	ALI	11/30	13:40	TRANSFER
K. Roberts	Kevin Robert	[signature]	[signature]	ALI	11/30/99	1630	Analyzing

PERSON(S) ASSUMING RESPONSIBILITY FOR SAMPLING: PRINT: SIGN:

*	QAI = Deliverables	ALI QUOTE#	
COMMENTS	TPH = Method 8015	ALI CASE#	6401
	Cooler Temp 25°C	P.O.#	

4 1 2 3 5

700099

Accredited Laboratories, Inc.

INTERNAL CHAIN OF CUSTODY

Laboratory Person Breaking Field Seal on Sample Shuttle & Accepting Responsibility for Sample

Laboratory: Accredited Laboratories, Inc. Location: Carteret, N.J.

Name: T. GAYDOS Title: SRO

Field Sample Seal No. None Date Broken: __/__/__ Military Time Seal Broken _____

Case No. 6481 ✓ Check if No Seal on Sample Shuttle.

Field #	Laboratory #	Test Name	Date Sampled	Date Received
DCOMP-1	9912994	TCLP VOA	11/30/99	11/30/99
DCOMP-2	9912995	TCLP VOA	11/30/99	11/30/99
SP-1	9912996	TCLP VOA	11/30/99	11/30/99

DATE	TIME	RELINQUISHED BY	RECEIVED BY	PURPOSE OF CHANGE OF CUSTODY
12/3/99	10:00	Printed Name RBAUTISTA Signature RB	Printed Name R.M. HORN Signature R.M. Horn	COLD STORAGE
		Printed Name Signature	Printed Name Signature	
		Printed Name Signature	Printed Name Signature	
		Printed Name Signature	Printed Name Signature	
		Printed Name Signature	Printed Name Signature	
		Printed Name Signature	Printed Name Signature	
		Printed Name Signature	Printed Name Signature	

FORM: 291COC

2

700100

Accredited Laboratories, Inc.

INTERNAL CHAIN OF CUSTODY

Laboratory Person Breaking Field Seal on Sample Shuttle & Accepting Responsibility for Sample

Laboratory: Accredited Laboratories, Inc. Location: Carteret, N.J.

Name: T. GAYDOS Title: SLO

Field Sample Seal No. None Date Broken: __/__/__ Military Time Seal Broken _____

Case No. 6481 ✓ Check if No Seal on Sample Shuttle.

Field #	Laboratory #	Test Name	Date Sampled	Date Received
DCOMP-1	9912994	TCLP EXT ORG	11/30/99	11/30/99
DCOMP-2	9912995	TCLP EXT ORG	11/30/99	11/30/99
SP-1	9912996	TCLP EXT ORG	11/30/99	11/30/99

DATE	TIME	RELINQUISHED BY	RECEIVED BY	PURPOSE OF CHANGE OF CUSTODY
12/2/99	16:00	Printed Name T. GAYDOS Signature	Printed Name RBAUTISTA Signature RB	EXTRACTION
12/2/99	18:00	Printed Name RBAUTISTA Signature RB	Printed Name T. GAYDOS Signature	COLD STORAGE
		Printed Name Signature	Printed Name Signature	
		Printed Name Signature	Printed Name Signature	
		Printed Name Signature	Printed Name Signature	
		Printed Name Signature	Printed Name Signature	
		Printed Name Signature	Printed Name Signature	

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700101

Accredited Laboratories, Inc.

INTERNAL CHAIN OF CUSTODY

Laboratory Person Breaking Field Seal on Sample Shuttle & Accepting Responsibility for Sample

Laboratory: Accredited Laboratories, Inc. Location: Carteret, N.J.

Name: T. GAYDOS Title: SLO

Field Sample Seal No. None Date Broken: __/__/__ Military Time Seal Broken _____

Case No. 6481 ✓ Check if No Seal on Sample Shuttle.

Field #	Laboratory #	Test Name	Date Sampled	Date Received
DCOMP-1	9912994	TCLP BNA	11/30/99	11/30/99
DCOMP-2	9912995	TCLP BNA	11/30/99	11/30/99
SP-1	9912996	TCLP BNA	11/30/99	11/30/99

DATE	TIME	RELINQUISHED BY	RECEIVED BY	PURPOSE OF CHANGE OF CUSTODY
12/3/99	10:00	Printed Name R BAUTISTA Signature	Printed Name T. GAYDOS Signature	COLD STORAGE
12-8		Printed Name T. GAYDOS Signature	Printed Name Lindaliguel Signature	Extraction
12-8		Printed Name Lindaliguel Signature	Printed Name T. GAYDOS Signature	Cold Storage
		Printed Name Signature	Printed Name Signature	
		Printed Name Signature	Printed Name Signature	
		Printed Name Signature	Printed Name Signature	
		Printed Name Signature	Printed Name Signature	

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700102

Accredited Laboratories, Inc.

INTERNAL CHAIN OF CUSTODY

Laboratory Person Breaking Field Seal on Sample Shuttle & Accepting Responsibility for Sample	Laboratory: Accredited Laboratories, Inc. Location: Carteret, N.J. Name: T. GAYDOS Title: SILO
Field Sample Seal No. [illegible]	Date Broken: __/__/__ Military Time Seal Broken _____
Case No. 6481	✓ Check if No Seal on Sample Shuttle.

Field #	Laboratory #	Test Name	Date Sampled	Date Received
DCOMP-1	9912994	TCLP PEST	11/30/99	11/30/99
DCOMP-2	9912995	TCLP PEST	11/30/99	11/30/99
SP-1	9912996	TCLP PEST	11/30/99	11/30/99

DATE	TIME	RELINQUISHED BY	RECEIVED BY	PURPOSE OF CHANGE OF CUSTODY
12/3/99	10:00	Printed Name RBAUTISTA Signature RB	Printed Name T. GAYDOS Signature [signature]	COLD STORAGE
12-9		Printed Name T. GAYDOS Signature [signature]	Printed Name Lino Miguel Signature [signature]	Extraction
12-9		Printed Name Lino Miguel Signature [signature]	Printed Name T. GAYDOS Signature [signature]	Cold Storage
		Printed Name Signature	Printed Name Signature	
		Printed Name Signature	Printed Name Signature	
		Printed Name Signature	Printed Name Signature	
		Printed Name Signature	Printed Name Signature	

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700103

Accredited Laboratories, Inc.

INTERNAL CHAIN OF CUSTODY

Laboratory Person Breaking Field Seal on Sample Shuttle & Accepting Responsibility for Sample

Laboratory: Accredited Laboratories, Inc. Location: Carteret, N.J.

Name: T. GAYDOS Title: SRO

Field Sample Seal No. None Date Broken: __/__/__ Military Time Seal Broken _____

Case No. 6481 ✓ Check if No Seal on Sample Shuttle.

Field #	Laboratory #	Test Name	Date Sampled	Date Received
DCOMP-1	9912994	TCLP HERB	11/30/99	11/30/99
DCOMP-2	9912995	TCLP HERB	11/30/99	11/30/99
SP-1	9912996	TCLP HERB	11/30/99	11/30/99

DATE	TIME	RELINQUISHED BY	RECEIVED BY	PURPOSE OF CHANGE OF CUSTODY
12/3/99	10:00	Printed Name RBAUTISTA Signature RB	Printed Name T. GAYDOS Signature	COLD STORAGE
12/8/99	13:00	Printed Name T. GAYDOS Signature	Printed Name S. Parekh Signature S. Parekh	Extraction
12/8/99	14:00	Printed Name S. Parekh Signature S. Parekh	Printed Name T. GAYDOS Signature	Cold storage
		Printed Name Signature	Printed Name Signature	
		Printed Name Signature	Printed Name Signature	
		Printed Name Signature	Printed Name Signature	
		Printed Name Signature	Printed Name Signature	

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700104

Accredited Laboratories, Inc.

INTERNAL CHAIN OF CUSTODY

Laboratory Person Breaking Field Seal on Sample Shuttle & Accepting Responsibility for Sample

Laboratory: Accredited Laboratories, Inc. Location: Carteret, N.J.

Name: T. GAYDOS Title: SRO

Field Sample Seal No. None Date Broken: __/__/__ Military Time Seal Broken _____

Case No. 6481 ✓ Check if No Seal on Sample Shuttle.

Field #	Laboratory #	Test Name	Date Sampled	Date Received
DCOMP-1	9912994	PCB	11/30/99	11/30/99
DCOMP-2	9912995	PCB	11/30/99	11/30/99
SP-1	9912996	PCB	11/30/99	11/30/99
SP-2	9912997	PCB	11/30/99	11/30/99
SP-3	9912998	PCB	11/30/99	11/30/99
SP-4	9912999	PCB	11/30/99	11/30/99
SP-5	9913000	PCB	11/30/99	11/30/99

DATE	TIME	RELINQUISHED BY	RECEIVED BY	PURPOSE OF CHANGE OF CUSTODY
12/3/99	12:00	Printed Name T. GAYDOS Signature	Printed Name S. Parekh Signature S. Parekh	Extraction
12/3/99	13:00	Printed Name S. Parekh Signature S. Parekh	Printed Name T. GAYDOS Signature	Cold storage
		Printed Name Signature	Printed Name Signature	
		Printed Name Signature	Printed Name Signature	
		Printed Name Signature	Printed Name Signature	
		Printed Name Signature	Printed Name Signature	
		Printed Name Signature	Printed Name Signature	

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700105

Accredited Laboratories, Inc.

INTERNAL CHAIN OF CUSTODY

Laboratory Person Breaking Field Seal on Sample Shuttle & Accepting Responsibility for Sample

Laboratory: Accredited Laboratories, Inc. Location: Carteret, N.J.

Name: T. GAYDOS Title: SHO

Field Sample Seal No. None Date Broken: __/__/__ Military Time Seal Broken _____

Case No. 6481 ✓ Check if No Seal on Sample Shuttle.

Field #	Laboratory #	Test Name	Date Sampled	Date Received
DCOMP-1	9912994	TCLP EXT MET	11/30/99	11/30/99
DCOMP-2	9912995	TCLP EXT MET	11/30/99	11/30/99
SP-1	9912996	TCLP EXT MET	11/30/99	11/30/99

DATE	TIME	RELINQUISHED BY	RECEIVED BY	PURPOSE OF CHANGE OF CUSTODY
12/3/99	10:00	Printed Name RBAUTISTA Signature RB	Printed Name LEO RIVERA Signature L.R	DIGESTION
12-03		Printed Name LEO RIVERA Signature L.R	Printed Name T. GAYDOS Signature	COLD STORAGE
		Printed Name Signature	Printed Name Signature	
		Printed Name Signature	Printed Name Signature	
		Printed Name Signature	Printed Name Signature	
		Printed Name Signature	Printed Name Signature	
		Printed Name Signature	Printed Name Signature	

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700106

Accredited Laboratories, Inc.

INTERNAL CHAIN OF CUSTODY

Laboratory Person Breaking Field Seal on Sample Shuttle & Accepting Responsibility for Sample

Laboratory: Accredited Laboratories, Inc. Location: Carteret, N.J.

Name: T. GAYDOS Title: SMO

Field Sample Seal No. None Date Broken: __/__/__ Military Time Seal Broken _____

Case No. 6481 ✓ Check if No Seal on Sample Shuttle.

Field #	Laboratory #	Test Name	Date Sampled	Date Received
DCOMP-1	9912994	TCLP MET	11/30/99	11/30/99
DCOMP-2	9912995	TCLP MET	11/30/99	11/30/99
SP-1	9912996	TCLP MET	11/30/99	11/30/99

DATE	TIME	RELINQUISHED BY	RECEIVED BY	PURPOSE OF CHANGE OF CUSTODY
12/9/99	10:00	Printed Name RBAUTISTA Signature RB	Printed Name LED RWEPA Signature L.R	DIGESTION
12-03		Printed Name LED RWEPA Signature L.R	Printed Name T GAYDOS Signature	COLD STORAGE
		Printed Name Signature	Printed Name Signature	
		Printed Name Signature	Printed Name Signature	
		Printed Name Signature	Printed Name Signature	
		Printed Name Signature	Printed Name Signature	
		Printed Name Signature	Printed Name Signature	

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700107

Accredited Laboratories, Inc.

INTERNAL CHAIN OF CUSTODY

Laboratory Person Breaking Field Seal on Sample Shuttle & Accepting Responsibility for Sample

Laboratory: Accredited Laboratories, Inc. Location: Carteret, N.J.

Name: T. GAYDOS Title: SCO

Field Sample Seal No. None Date Broken: __/__/__ Military Time Seal Broken _____

Case No. 6481 ✓ Check if No Seal on Sample Shuttle.

Field #	Laboratory #	Test Name	Date Sampled	Date Received
DCOMP-1	9912994	% SOLIDS	11/30/99	11/30/99
SP-1	9912996	% SOLIDS	11/30/99	11/30/99
SP-2	9912997	% SOLIDS	11/30/99	11/30/99
SP-3	9912998	% SOLIDS	11/30/99	11/30/99
SP-4	9912999	% SOLIDS	11/30/99	11/30/99
SP-5	9913000	% SOLIDS	11/30/99	11/30/99

DATE	TIME	RELINQUISHED BY	RECEIVED BY	PURPOSE OF CHANGE OF CUSTODY
12-2		Printed Name T. GAYDOS Signature	Printed Name Lindquist Signature	Analysis
12-2		Printed Name Lindquist Signature	Printed Name T. GAYDOS Signature	cold storage
		Printed Name Signature	Printed Name Signature	
		Printed Name Signature	Printed Name Signature	
		Printed Name Signature	Printed Name Signature	
		Printed Name Signature	Printed Name Signature	
		Printed Name Signature	Printed Name Signature	

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700108

Accredited Laboratories, Inc.

INTERNAL CHAIN OF CUSTODY

Laboratory Person Breaking Field Seal on Sample Shuttle & Accepting Responsibility for Sample

Laboratory: Accredited Laboratories, Inc. Location: Carteret, N.J.

Name: T GAYDOS Title: SKO

Field Sample Seal No. None Date Broken: __/__/__ Military Time Seal Broken _____

Case No. 6481 ✓ Check if No Seal on Sample Shuttle.

Field #	Laboratory #	Test Name	Date Sampled	Date Received
DCOMP-1	9912994	FP	11/30/99	11/30/99
DCOMP-2	9912995	FP	11/30/99	11/30/99
SP-1	9912996	FP	11/30/99	11/30/99

DATE	TIME	RELINQUISHED BY	RECEIVED BY	PURPOSE OF CHANGE OF CUSTODY
12/3/99		Printed Name T GAYDOS Signature	Printed Name Lina Miguel Signature	analysis
12/3/99		Printed Name Lina Miguel Signature	Printed Name T GAYDOS Signature	storage
		Printed Name Signature	Printed Name Signature	
		Printed Name Signature	Printed Name Signature	
		Printed Name Signature	Printed Name Signature	
		Printed Name Signature	Printed Name Signature	
		Printed Name Signature	Printed Name Signature	

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700109

Accredited Laboratories, Inc.

INTERNAL CHAIN OF CUSTODY

Laboratory Person Breaking Field Seal on Sample Shuttle & Accepting Responsibility for Sample

Laboratory: Accredited Laboratories, Inc. Location: Carteret, N.J.

Name: T. GAYDOS Title: SLO

Field Sample Seal No. None Date Broken: __/__/__ Military Time Seal Broken _____

Case No. 6481 ✓ Check if No Seal on Sample Shuttle.

Field #	Laboratory #	Test Name	Date Sampled	Date Received
DCOMP-1	9912994	PH	11/30/99	11/30/99
DCOMP-2	9912995	PH	11/30/99	11/30/99
SP-1	9912996	PH	11/30/99	11/30/99

DATE	TIME	RELINQUISHED BY	RECEIVED BY	PURPOSE OF CHANGE OF CUSTODY
12/3/99		Printed Name T. GAYDOS Signature	Printed Name Lino Liguel Signature	analysis
12/3/99		Printed Name Lino Liguel Signature	Printed Name T. GAYDOS Signature	storage
		Printed Name Signature	Printed Name Signature	
		Printed Name Signature	Printed Name Signature	
		Printed Name Signature	Printed Name Signature	
		Printed Name Signature	Printed Name Signature	
		Printed Name Signature	Printed Name Signature	

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700110

Accredited Laboratories, Inc.

INTERNAL CHAIN OF CUSTODY

Laboratory Person Breaking Field Seal on Sample Shuttle & Accepting Responsibility for Sample

Laboratory: Accredited Laboratories, Inc. Location: Carteret, N.J.

Name: T. GAYDOS Title: SC

Field Sample Seal No. None Date Broken: __/__/__ Military Time Seal Broken _____

Case No. 6481 ✓ Check if No Seal on Sample Shuttle.

Field #	Laboratory #	Test Name	Date Sampled	Date Received
DCOMP-1	9912994	RCN	11/30/99	11/30/99
DCOMP-2	9912995	RCN	11/30/99	11/30/99
SP-1	9912996	RCN	11/30/99	11/30/99

DATE	TIME	RELINQUISHED BY	RECEIVED BY	PURPOSE OF CHANGE OF CUSTODY
12/2/99		Printed Name T. GAYDOS Signature	Printed Name Lina Liguel Signature	analysis
12/2/99		Printed Name Lina Liguel Signature	Printed Name T. GAYDOS Signature	storage
		Printed Name Signature	Printed Name Signature	
		Printed Name Signature	Printed Name Signature	
		Printed Name Signature	Printed Name Signature	
		Printed Name Signature	Printed Name Signature	
		Printed Name Signature	Printed Name Signature	

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700111

Accredited Laboratories, Inc.

INTERNAL CHAIN OF CUSTODY

Laboratory Person Breaking Field Seal on Sample Shuttle & Accepting Responsibility for Sample	Laboratory: Accredited Laboratories, Inc. Location: Carteret, N.J. Name: T. GAYDOS Title: SLO
Field Sample Seal No. None	Date Broken: __/__/__ Military Time Seal Broken _____
Case No. 6481	✓ Check if No Seal on Sample Shuttle.

Field #	Laboratory #	Test Name	Date Sampled	Date Received
DCOMP-1	9912994	RS	11/30/99	11/30/99
DCOMP-2	9912995	RS	11/30/99	11/30/99
SP-1	9912996	RS	11/30/99	11/30/99

DATE	TIME	RELINQUISHED BY	RECEIVED BY	PURPOSE OF CHANGE OF CUSTODY
12/2/99		Printed Name T. GAYDOS Signature [signature]	Printed Name Lina Miguel Signature [signature]	analysis
12/2/99		Printed Name Lina Miguel Signature [signature]	Printed Name T. GAYDOS Signature [signature]	storage
		Printed Name Signature	Printed Name Signature	
		Printed Name Signature	Printed Name Signature	
		Printed Name Signature	Printed Name Signature	
		Printed Name Signature	Printed Name Signature	
		Printed Name Signature	Printed Name Signature	

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700112

Accredited Laboratories, Inc.

INTERNAL CHAIN OF CUSTODY

Laboratory Person Breaking Field Seal on Sample Shuttle & Accepting Responsibility for Sample

Laboratory: Accredited Laboratories, Inc. Location: Carteret, N.J.

Name: T. GAYDOS Title: SAO

Field Sample Seal No. None Date Broken: __/__/__ Military Time Seal Broken _____

Case No. 6481 ✓ Check if No Seal on Sample Shuttle.

Field #	Laboratory #	Test Name	Date Sampled	Date Received
DCOMP-1	9912994	GCFID/DRO	11/30/99	11/30/99
DCOMP-2	9912995	GCFID/DRO	11/30/99	11/30/99
SP-1	9912996	GCFID/DRO	11/30/99	11/30/99

DATE	TIME	RELINQUISHED BY	RECEIVED BY	PURPOSE OF CHANGE OF CUSTODY
12/8/99	10:00	Printed Name T. GAYDOS Signature	Printed Name S. Parekh Signature S. Parekh	Extraction
12/8/99	11:00	Printed Name S. Parekh Signature S. Parekh	Printed Name T. GAYDOS Signature	Cold storage
		Printed Name Signature	Printed Name Signature	
		Printed Name Signature	Printed Name Signature	
		Printed Name Signature	Printed Name Signature	
		Printed Name Signature	Printed Name Signature	
		Printed Name Signature	Printed Name Signature	

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700113

METHODOLOGY SUMMARY

Toxic Characteristic Leaching Procedure - TCLP (EPA Method 1311)

Before the leaching procedure can be initiated, the information regarding the wet % and dry % solid of the solid sample as well as the utilization of extraction fluid, either #1 or #2, must be determined.

For Volatile Analysis, a special extractor called Zero Headspace Extractor (ZHE) must be used to generate the TCLP leachate. A maximum of 25 grams of sample is placed in the vessel as the liquid portion is pressed out and saved. A 20X of extraction fluid #1 is charged into the vessel. After 18 +/- 2 hours rotation at 30 +/- 2 rpm, the liquid is pressed out of the vessel. The leachate from ZHE is combined with the initial liquid portion, if any. This is referred as TCLP Leachate. The contaminants in the leachate is determined by EPA Method 8260.

For Non-Volatile Analysis, a minimum of 100 grams is filtered through 0.6 to 0.8 um glass fiber filter. The filtrate, if any, is saved. A 20X of extracted fluid, either #1 or #2, is charged in the glass extraction bottle and then rotated at 30 +/- 2 rpm for 18 +/- 2 hours. After rotation, the sample is filtered through 0.6 to 0.8 um glass fiber filter. The filtrate is combined with the initial liquid, if any. This is referred as TCLP Leachate. The contaminants of Base Neutrals/Acids (BNA), pesticides and herbicides in the leachate are determined by EPA Method 8270, EPA Method 8081 and 8150 respectively.

For the Metal Analysis, a minimum of 100 grams is filtered through 0.6 to 0.8 um glass fiber filter. The filtrate, if any, is saved. A 20X of extracted fluid, either #1 or #2, is charged in the glass or plastic extraction bottle and then rotated at 30 +/- rpm for 18 +/- 2 hours. After rotation, the sample is filtered through 0.6 to 0.8 um glass fiber filter. The filtrate is combined with the initial liquid, if any. This is referred as TCLP Leachate. The contaminants of Metals in the leachate is determined by EPA Method 7471 for mercury, Method 7060 for arsenic, Method 7740 for selenium and Method 6010 (ICAP) and/or Method 7000's (Flame-AA) for the rest of metals.

PCB's - EPA 8082 (soil/solid)

A 30 gram portion of solid is mixed with anhydrous sodium sulfate and is extracted with 1:1 methylene chloride and acetone using sonication technique. The extract is separated from the sample by either centrifugation or filtration. The extract is then solvent-exchanged to hexane in a K-D concentrator to a final volume of 10 ml. The extract is injected into a gas chromatograph and the compounds in the GC effluent are detected by an electron capture detector.

PCB's - Modified EPA 8082 (oil)

A 1 gram portion of oil is extracted with 10 ml hexane. The extract is injected into a gas chromatograph (GC) and the compounds in the GC effluent are detected by an electron capture detector.

Reactive Cyanide - SW 846, 7.3.3.2 (solid)

An aliquot of the waste is acidified with 0.01 N sulfuric acid in a closed system. The gas generated is swept into a scrubber. The analyte is quantified by manual colorimetric method. The method is derived from EPA "Test Methods for Evaluating Solid Waste, SW846, 3rd ed., 1986".

Reactive Cyanide - SW 846, 7.3.3.2 (aqueous/oil)

An aliquot of the waste (approximately 200 ml for aqueous sample or 10 g for oil matrix) is acidified to pH 2 in a closed system. The gas generated is swept into a scrubber. The analyte is quantified by manual colorimetric method. The method is derived from EPA "Test Methods for Evaluating Solid Waste, SW846, 3rd ed., 1986".

Reactive Sulfide - SW 846, 7.3.4.1 (solid)

An aliquot of the waste is acidified with 0.01 N sulfuric acid in a closed system. The gas generated is swept into a scrubber. The sulfide in the scrubber solution is first reacted with iodine. The excess iodine is then back-titrated with phenylarsine oxide. The concentration of sulfide is determined through the back calculation of iodine being consumed. The method is derived from EPA "Test Methods for Evaluating Solid Waste, SW846, 3rd ed., 1986".

Reactive Sulfide - SW 846, 7.3.4.1 (aqueous/oil)

An aliquot of waste (approximately 200 ml for aqueous sample or 10 g for oil matrix) is acidified to pH 2 in a closed system. The gas generated is swept into a scrubber. The sulfide in the scrubber solution is first reacted with iodine. The excess iodine is then back-titrated with phenylarsine oxide. The concentration of sulfide is determined through the back calculation of iodine being consumed. The method is derived from EPA "Test Methods for Evaluating Solid Waste, SW846, 3rd ed., 1986".

Flash Point - EPA 1010

The sample is heated at a slow constant rate with continual stirring. A small flame is directed into the cup at regular intervals with simultaneous interruption of stirring. The flash point is the lowest temperature at which application of the test

flame ignites the vapor above the sample. The method is followed according to EPA "Test Methods for Evaluating Solid Waste", SW-846, 3rd ed., 1986.

pH - EPA 9045 (soil)

The soil sample is mixed either with Type II water or with a calcium chloride solution. The pH of the mixed solution is then measured with a pH meter.

pH - EPA 9045 (oil)

The oil sample is mixed with Type II water. The pH of the aqueous solution is then measured with a pH meter.

Diesel Range Organics (DRO) - by GC-FID

Approximately 25 grams of sample is extracted three times with 60 ml of methylene chloride by sonication technique. The extract is concentrated to 1 ml and analyzed by GC-FID. The presence of diesel in the sample is determined and quantified by the comparison with a diesel reference standard.

Date: 12/01/99 ACCREDITED LABORATORIES, INC. Time: 12:13:52

ORGANIC ANALYSIS LABORATORY CHRONICLE

DRO 8015

Client: Oxford Environmental
Fax Data Due: **12/10/99**
Test Date Due: 12/14/99
Hard Copy Due: **12/10/99**
Client Project Name: D S C / Cornell

Date Sampled:11/30/99 Date Received:11/30/99 Report Package: Regulatory

Test: TCLP VOA
Test Description:TCLP Volatiles
QC#: _____

By Method: _____

SAMPLE IDENTIFICATION			Mtx	EXTRACTION			ANALYSIS			TIC FLAG
Field#	Case#	Sample#		Date	Time	Init	Date	Time	Init	
DCOMP-1	6481	9912994	S	12-2-99	17:00	RB	12-08-99	19:43	R.H.	
DCOMP-2	6481	9912995	O					21:04		
SP-1	6481	9912996	S					20:23		

Reviewed by: _____ Date: 12/10/99

Abreviations:Sample Matrix:
Mtx:A=Aqueous:S=Soil:O=Oil:K=Solid:F=Filters:P=Potable Water:G=Sludge
X=Other

RPT:Report01

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700117

Date: 12/01/99 ACCREDITED LABORATORIES, INC. Time: 12:13:30

ORGANIC ANALYSIS LABORATORY CHRONICLE

DRO 8015

Client: Oxford Environmental
Fax Data Due: **12/10/99**
Test Date Due: 12/14/99
Hard Copy Due: **12/10/99**
Client Project Name: D S C / Cornell

Date Sampled:11/30/99 Date Received:11/30/99 Report Package: Regulatory

Test: TCLP EXT ORG
Test Description:TCLP Extraction Organics
QC#: _____

By Method: _____

SAMPLE IDENTIFICATION			M	EXTRACTION			ANALYSIS			TIC FLAG
Field#	Case#	Sample#	t x	Date	Time	Init	Date	Time	Init	
DCOMP-1	6481	9912994	S	12-2-99	17:00	RB				
DCOMP-2	6481	9912995	O							
SP-1	6481	9912996	S							

Reviewed by: _____ Date: 12-3-99

Abreviations:Sample Matrix:
Mtx:A=Aqueous:S=Soil:O=Oil:K=Solid:F=Filters:P=Potable Water:G=Sludge
X=Other

RPT:Report01

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700118

Date: 12/01/99 ACCREDITED LABORATORIES, INC. Time: 12:13:08

ORGANIC ANALYSIS LABORATORY CHRONICLE

DRO 8015

Client: Oxford Environmental Test Date Due: 12/14/99
Fax Data Due: **12/10/99** Hard Copy Due: **12/10/99**
Client Project Name: D S C / Cornell

Date Sampled:11/30/99 Date Received:11/30/99 Report Package: Regulatory

Test: TCLP BNA QC#:
Test Description:TCLP Base Neutral Acid

By Method:

SAMPLE IDENTIFICATION			M	EXTRACTION			ANALYSIS			TIC FLAG
Field#	Case#	Sample#	t x	Date	Time	Init	Date	Time	Init	
DCOMP-1	6481	9912994	S	12.8.99		dm	12/9/99	19:37	DM	
DCOMP-2	6481	9912995	O					22:37		
SP-1	6481	9912996	S					20:22		

Reviewed by: Date: 12/10/99

Abreviations:Sample Matrix:
Mtx:A=Aqueous:S=Soil:O=Oil:K=Solid:F=Filters:P=Potable Water:G=Sludge
X=Other RPT:Report01

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700119

Date: 12/01/99 ACCREDITED LABORATORIES, INC. Time: 12:13:45

ORGANIC ANALYSIS LABORATORY CHRONICLE

DRO 8015

Client: Oxford Environmental Test Date Due: 12/14/99
Fax Data Due: **12/10/99** Hard Copy Due: **12/10/99**
Client Project Name: D S C / Cornell

Date Sampled:11/30/99 Date Received:11/30/99 Report Package: Regulatory

Test: TCLP PEST QC#: _____
Test Description:TCLP Pesticides

By Method: _____

SAMPLE IDENTIFICATION			M	EXTRACTION			ANALYSIS			TIC FLAG
Field#	Case#	Sample#	t x	Date	Time	Init	Date	Time	Init	
DCOMP-1	6481	9912994	S	12-9-99		d.M	12/10/99	02:41	JH	
DCOMP-2	6481	9912995	O					03:55		
SP-1	6481	9912996	S					03:18		

Reviewed by: _____ Date: 12/14/99

Abreviations:Sample Matrix:
Mtx:A=Aqueous:S=Soil:O=Oil:K=Solid:F=Filters:P=Potable Water:G=Sludge
X=Other RPT:Report01

22

700120

Date: 12/01/99 ACCREDITED LABORATORIES, INC. Time: 12:13:38

ORGANIC ANALYSIS LABORATORY CHRONICLE

DRO 8015

Client: Oxford Environmental
Test Date Due: 12/14/99
Fax Data Due: **12/10/99**
Hard Copy Due: **12/10/99**
Client Project Name: D S C / Cornell

Date Sampled:11/30/99 Date Received:11/30/99 Report Package: Regulatory

Test: TCLP HERB
QC#: _____
Test Description:TCLP Herbicides

By Method: _____

SAMPLE IDENTIFICATION			Mtx	EXTRACTION			ANALYSIS			TIC FLAG
Field#	Case#	Sample#		Date	Time	Init	Date	Time	Init	
DCOMP-1	6481	9912994	S	12/8/99		SP	12-8-99	21:09	JH	
DCOMP-2	6481	9912995	O	/		/	/	21:59	/	
SP-1	6481	9912996	S	/		/	/	21:34	/	

Reviewed by: _____ Date: 12/9/99

Abreviations:Sample Matrix:
Mtx:A=Aqueous:S=Soil:O=Oil:K=Solid:F=Filters:P=Potable Water:G=Sludge
X=Other
RPT:Report01

23

700121

Date: 12/01/99 ACCREDITED LABORATORIES, INC. Time: 12:12:15

ORGANIC ANALYSIS LABORATORY CHRONICLE

DRO 8015

Client: Oxford Environmental
Test Date Due: 12/07/99
Fax Data Due: **12/10/99**
Hard Copy Due: **12/10/99**
Client Project Name: D S C / Cornell

Date Sampled:11/30/99 Date Received:11/30/99 Report Package: Regulatory

Test: PCB
QC#:
Test Description:PCBs (PCB)

By Method:

SAMPLE IDENTIFICATION			Mtx	EXTRACTION			ANALYSIS			TIC FLAG
Field#	Case#	Sample#		Date	Time	Init	Date	Time	Init	
DCOMP-1	6481	9912994	S	12/3/99		SP	12-08-99	02:48	JH	
SP-1	6481	9912996	S					03:25		
SP-2	6481	9912997	S					04:02		
SP-3	6481	9912998	S					04:39		
SP-4	6481	9912999	S					05:16		
SP-5	6481	9913000	S					02:02		

Reviewed by: Date: 12/9/99

Abreviations:Sample Matrix:
Mtx:A=Aqueous:S=Soil:O=Oil:K=Solid:F=Filters:P=Potable Water:G=Sludge
X=Other
RPT:Report01

24

700122

Date: 12/01/99 ACCREDITED LABORATORIES, INC. Time: 12:13:08

ORGANIC ANALYSIS LABORATORY CHRONICLE

DRO 8015

Client: Oxford Environmental Test Date Due: 12/14/99
Fax Data Due: **12/10/99** Hard Copy Due: **12/10/99**
Client Project Name: D S C / Cornell

Date Sampled:11/30/99 Date Received:11/30/99 Report Package: Regulatory

Test: PCB QC#: _____
Test Description:PCBs (PCB)

By Method: _____

SAMPLE IDENTIFICATION			Mtx	EXTRACTION			ANALYSIS			TIC FLAG
Field#	Case#	Sample#		Date	Time	Init	Date	Time	Init	
DCOMP-2	6481	9912995	O	12/3/99		S.P.	12-08-99	07:44	gtt	

Reviewed by: CG Date: 12/9/99

Abreviations:Sample Matrix:
Mtx:A=Aqueous:S=Soil:O=Oil:K=Solid:F=Filters:P=Potable Water:G=Sludge
X=Other RPT:Report01

25

700123

Date: 12/01/99 ACCREDITED LABORATORIES, INC. Time: 12:13:23

ORGANIC ANALYSIS LABORATORY CHRONICLE

DRO 8015

Client: Oxford Environmental Test Date Due: 12/14/99
Fax Data Due: **12/10/99** Hard Copy Due: **12/10/99**
Client Project Name: D S C / Cornell

Date Sampled:11/30/99 Date Received:11/30/99 Report Package: Regulatory

Test: TCLP EXT MET QC#: _____
Test Description:TCLP Extraction Metals

By Method: _____

SAMPLE IDENTIFICATION			Mtx	EXTRACTION			ANALYSIS			TIC FLAG
Field#	Case#	Sample#		Date	Time	Init	Date	Time	Init	
DCOMP-1	6481	9912994	S	12-2-99	17:00	RB				
DCOMP-2	6481	9912995	O							
SP-1	6481	9912996	S							

Reviewed by: _____ Date: 12-3-99

Abreviations:Sample Matrix:
Mtx:A=Aqueous:S=Soil:O=Oil:K=Solid:F=Filters:P=Potable Water:G=Sludge
X=Other RPT:Report01

26

700124

Date: 12/01/99 ACCREDITED LABORATORIES, INC. Time: 12:11:46

INORGANIC ANALYSIS LABORATORY CHRONICLE

DRO 8015

Client: Oxford Environmental Test Date Due: 12/14/99

Fax Data Due: **12/10/99** Hard Copy Due: **12/10/99**

Field#: DCOMP-1 Case#: 6481 Sample#: 9912994

Client Sample Description:

Date Sampled: 11/30/99 Date Received: 11/30/99 Report Package: Regulatory

Test: TCLP MET QC#: 990072

Test Description: TCLP Metals (TCLP MET) 990066

Project Name: D S C / Cornell

Mtx:A=Aqueous:S=Soil:O=Oil:K=Solid:F=Filters:P=Potable Water:G=Sludge:X=Oth

Sample Comments:

By Method:

MTX	ELEMENT	SYM	RESULT	MDL	UNITS	LABORATORY CHRONICLE PREPARATION DATE	PREPARATION INIT	ANALYSIS DATE	ANALYSIS INIT	REF
S	Arsenic	As				12-03	LR	12/10	DE	926-82
S	Barium	Ba								
S	Cadmium	Cd								
S	Chromium-T	Cr								
S	Lead	Pb								
S	Mercury	Hg				12/3	DE	12/3		939-34
S	Selenium	Se				12-03	LR	12/10		926-82
S	Silver	Ag								

Quality control Report Number(s): 991203 T

Reviewed by: Date: RPT:Report02

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700125

Date: 12/01/99 ACCREDITED LABORATORIES, INC. Time: 12:11:46

INORGANIC ANALYSIS LABORATORY CHRONICLE

DRO 8015

Client: Oxford Environmental
Test Date Due: 12/14/99
Fax Data Due: **12/10/99**
Hard Copy Due: **12/10/99**
Field#: DCOMP-2 Case#: 6481 Sample#: 9912995
Client Sample Description:
Date Sampled: 11/30/99 Date Received: 11/30/99 Report Package: Regulatory

Test: TCLP MET QC#: 990 07V
Test Description: TCLP Metals (TCLP MET) 99 0060
Project Name: D S C / Cornell
Mtx:A=Aqueous:S=Soil:O=Oil:K=Solid:F=Filters:P=Potable Water:G=Sludge:X=Oth
Sample Comments:

By Method: _____

						LABORATORY CHRONICLE PREPARATION		ANALYSIS		
MTX	ELEMENT	SYM	RESULT	MDL	UNITS	DATE	INIT	DATE	INIT	REF
O	Arsenic	As				12-03	LR	12/14/10	DCE	926-84
O	Barium	Ba								
O	Cadmium	Cd								
O	Chromium-T	Cr								
O	Lead	Pb								
O	Mercury	Hg				12/6	DCE	12/7		934-32
O	Selenium	Se				12-03	LR	12/14/10		926-84
O	Silver	Ag								

Quality control Report Number(s): 991203 T

Reviewed by: _____ Date: _____ RPT:Report02

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700126

Date: 12/01/99 ACCREDITED LABORATORIES, INC. Time: 12:12:08

INORGANIC ANALYSIS LABORATORY CHRONICLE

DRO 8015

Client: Oxford Environmental Test Date Due: 12/14/99

Fax Data Due: **12/10/99** Hard Copy Due: **12/10/99**

Field#: SP-1 Case#: 6481 Sample#: 9912996

Client Sample Description:

Date Sampled: 11/30/99 Date Received: 11/30/99 Report Package: Regulatory

Test: TCLP MET QC#: 99007v

Test Description: TCLP Metals (TCLP MET) 990060

Project Name: D S C / Cornell

Mtx:A=Aqueous:S=Soil:O=Oil:K=Solid:F=Filters:P=Potable Water:G=Sludge:X=Oth

Sample Comments:

By Method: _____

						LABORATORY CHRONICLE PREPARATION		ANALYSIS		
MTX	ELEMENT	SYM	RESULT	MDL	UNITS	DATE	INIT	DATE	INIT	REF
S	Arsenic	As				12-03	LR	12/4/10	DLE	926-8[illegible]
S	Barium	Ba								
S	Cadmium	Cd								
S	Chromium-T	Cr								
S	Lead	Pb								
S	Mercury	Hg				12/3	DLE	12/3		929-3[illegible]
S	Selenium	Se				12-03	LR	12/4/10		926-8[illegible]
S	Silver	Ag								

Quality control Report Number(s): 991203 T

Reviewed by: _____ Date: _____ RPT:Report02

24

700127

Date: 12/01/99

Accredited Laboratories, Inc.
General Chemistry Laboratory Chronicle

Time: 12:14:00
Page: 1

DRO 8015

Client Name: Oxford Environmental
Client Field Number: DCOMP-1
Client Sample Description:
Date Sampled: 11/30/99
Client Project Name: D S C / Cornell
Phases:

Case#: 6481
Date Received: 11/30/99

Sample#: 9912994
Fax Data Due: **12/10/99**
Hard Copy Due: **12/10/99**
Report Package: Regulatory

			ANALYTICAL DATA			SAMPLE PREP		SAMPLE ANALYSIS		
Tx	Analytes	Test Due Date	RESULTS	MDL	UNITS	DATE	INIT	DATE	INIT	REF
S	% SOLIDS	12/14/99	75.0	0.10	%	12-2-99	dm	12-2-99	dm	4983
S	FP	12/14/99	>200	80	°F			12-3-99	dm	942-16
S	PH	11/30/99	6.45		SU			12-3-99	dm	840-89
S	RCN	12/14/99	ND	0.27	mg/kg	12-2-99	dm	12-3-99	dm	934-92
S	RS	12/07/99	ND	53.3	mg/kg	12-2-99	dm	12-3-99	dm	934-93

Reviewed By: _____ Date: _____

Matrix:A=Aqueous: S=Soil: O=Oil: K=Solid: F=Filters: P=Potable Water: G=Sludge: X=Other: RPT:Report06

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700128

Date: 12/01/99

Accredited Laboratories, Inc.
General Chemistry Laboratory Chronicle

Time: 12:14:07
Page: 2

DRO 8015

Client Name: Oxford Environmental
Client Field Number: DCOMP-2
Client Sample Description:
Date Sampled: 11/30/99
Client Project Name: D S C / Cornell
Phases:

Case#: 6481
Date Received: 11/30/99

Sample#: 9912995
Fax Data Due: **12/10/99**
Hard Copy Due: **12/10/99**
Report Package: Regulatory

			ANALYTICAL DATA			SAMPLE PREP		SAMPLE ANALYSIS		
Ex	Analytes	Test Due Date	RESULTS	MDL	UNITS	DATE	INIT	DATE	INIT	REF
)	FP	12/14/99	170	80	°F			12.3.99	d.m	942-16
)	PH	12/14/99	6.86		SU			12.3.99		840-89
)	RCN	12/14/99	ND	0.20	mg/kg	12.2.99	d.m	12.3.99	d.m	934-92
)	RS	12/14/99	ND	40.0	mg/kg	12.2.99	d.m	12.3.99	d.m	934-93

Reviewed By: _____ Date: _____

Matrix:A=Aqueous: S=Soil: O=Oil: K=Solid: F=Filters: P=Potable Water: G=Sludge: X=Other: RPT:Report06
W

700129

Date: 12/01/99

Accredited Laboratories, Inc.
General Chemistry Laboratory Chronicle

Time: 12:14:15
Page: 3

DRO 8015

Client Name: Oxford Environmental
Client Field Number: SP-1
Client Sample Description:
Date Sampled: 11/30/99
Client Project Name: D S C / Cornell
Phases:

Case#: 6481
Date Received: 11/30/99

Sample#: 9912996
Fax Data Due: **12/10/99**
Hard Copy Due: **12/10/99**
Report Package: Regulatory

			ANALYTICAL DATA			SAMPLE PREP		SAMPLE ANALYSIS		
Ex	Analytes	Test Due Date	RESULTS	MDL	UNITS	DATE	INIT	DATE	INIT	REF
S	% SOLIDS	12/14/99	86.0	0.10	%	12.2.99	d.m	12.2.99	dm	4983
S	FP	12/14/99	> 200	80	°F			12.3.99	d.m	942-16
S	PH	11/30/99	6.74		SU			12.3.99		840-89
S	RCN	12/14/99	ND	0.23	mg/kg	12.2.99	dm	12.3.99	dm	934-92
S	RS	12/07/99	ND	46.5	mg/kg	12.2.99	d.m	12.3.99	dm	934-93

Reviewed By: _____ Date: _____

Matrix:A=Aqueous: S=Soil: O=Oil: K=Solid: F=Filters: P=Potable Water: G=Sludge: X=Other: RPT:Report06

W
D

700130

Date: 12/01/99

Accredited Laboratories, Inc.
General Chemistry Laboratory Chronicle

Time: 12:14:22
Page: 4

DRO 8015

Client Name: Oxford Environmental
Client Field Number: SP-2
Client Sample Description:
Date Sampled: 11/30/99
Client Project Name: D S C / Cornell
Phases:

Case#: 6481
Date Received: 11/30/99

Sample#: 9912997
Fax Data Due: **12/10/99**
Hard Copy Due: **12/10/99**
Report Package: Regulatory

			ANALYTICAL DATA			SAMPLE PREP		SAMPLE ANALYSIS		
tx	Analytes	Test Due Date	RESULTS	MDL	UNITS	DATE	INIT	DATE	INIT	REF
S	% SOLIDS	12/14/99	86.3	0.10	%	12-2-99	DM	12.2.99	DM	4983

Reviewed By: _____ Date: _____

Matrix:A=Aqueous: S=Soil: O=Oil: K=Solid: F=Filters: P=Potable Water: G=Sludge: X=Other: RPT:Report06

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700131

Date: 12/01/99

Accredited Laboratories, Inc.
General Chemistry Laboratory Chronicle

Time: 12:14:29
Page: 5

DRO 8015

Client Name: Oxford Environmental
Client Field Number: SP-3
Client Sample Description:
Date Sampled: 11/30/99
Client Project Name: D S C / Cornell
Phases:

Case#: 6481
Date Received: 11/30/99

Sample#: 9912998
Fax Data Due: **12/10/99**
Hard Copy Due: **12/10/99**
Report Package: Regulatory

			ANALYTICAL DATA			SAMPLE PREP		SAMPLE ANALYSIS		
Ex	Analytes	Test Due Date	RESULTS	MDL	UNITS	DATE	INIT	DATE	INIT	REF
S	% SOLIDS	12/14/99	85.2	0.10	%	12.2.99	dm	12.2.99	dm	4983

Reviewed By: _____ Date: _____

Matrix:A=Aqueous: S=Soil: O=Oil: K=Solid: F=Filters: P=Potable Water: G=Sludge: X=Other: RPT:Report06

3f

700132

Date: 12/01/99

Accredited Laboratories, Inc.
General Chemistry Laboratory Chronicle

Time: 12:14:37
Page: 6

DRO 8015

Client Name: Oxford Environmental
Client Field Number: SP-4
Client Sample Description:
Date Sampled: 11/30/99
Client Project Name: D S C / Cornell
Phases:

Case#: 6481
Date Received: 11/30/99

Sample#: 9912999
Fax Data Due: **12/10/99**
Hard Copy Due: **12/10/99**
Report Package: Regulatory

			ANALYTICAL DATA			SAMPLE PREP		SAMPLE ANALYSIS		
X	Analytes	Test Due Date	RESULTS	MDL	UNITS	DATE	INIT	DATE	INIT	REF
	% SOLIDS	12/14/99	85.6	0.10	%	12.2.99	dm	12.2.99	dm	4984

Reviewed By: _____ Date: _____

Matrix:A=Aqueous: S=Soil: O=Oil: K=Solid: F=Filters: P=Potable Water: G=Sludge: X=Other: RPT:Report06

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700133

ate: 12/01/99

Accredited Laboratories, Inc.
General Chemistry Laboratory Chronicle

Time: 12:14:44
Page: 7

DRO 8015

lient Name: Oxford Environmental
lient Field Number: SP-5
lient Sample Description:
ate Sampled: 11/30/99
lient Project Name: D S C / Cornell
hases:

Case#: 6481
Date Received: 11/30/99

Sample#: 9913000
Fax Data Due: **12/10/99**
Hard Copy Due: **12/10/99**
Report Package: Regulatory

x	Analytes	Test Due Date	ANALYTICAL DATA RESULTS	MDL	UNITS	SAMPLE PREP DATE	INIT	SAMPLE ANALYSIS DATE	INIT	REF
	% SOLIDS	12/14/99	86.0	0.10	%	12-2-99	d.m	12-2-99	d.m	4984

eviewed By: _____ Date: _____

atrix:A=Aqueous: S=Soil: O=Oil: K=Solid: F=Filters: P=Potable Water: G=Sludge: X=Other: RPT:Report06

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700134

Date: 12/01/99 ACCREDITED LABORATORIES, INC. Time: 12:12:15

ORGANIC ANALYSIS LABORATORY CHRONICLE

DRO 8015

Client: Oxford Environmental
Test Date Due: 12/14/99
Fax Data Due: **12/10/99**
Hard Copy Due: **12/10/99**
Client Project Name: D S C / Cornell

Date Sampled:11/30/99 Date Received:11/30/99 Report Package: Regulatory

Test: GCFID/DRO
QC#:
Test Description:GCFID/DRO (TPHC)

By Method:

SAMPLE IDENTIFICATION			Mtx	EXTRACTION			ANALYSIS			TIC FLAG
Field#	Case#	Sample#		Date	Time	Init	Date	Time	Init	
DCOMP-1	6481	9912994	S	12/8/99		SP	12-9-99		CG	
DCOMP-2	6481	9912995	O	/		/	/		/	
SP-1	6481	9912996	S	/		/	/		/	

Reviewed by: Date:

Abreviations:Sample Matrix:
Mtx:A=Aqueous:S=Soil:O=Oil:K=Solid:F=Filters:P=Potable Water:G=Sludge
X=Other
RPT:Report01

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700135

CONFORMANCE/NON-CONFORMANCE SUMMARY

Accredited Labs received 1 oil sample and 6 soil samples (Project: DSC/Cornell; ALI Case #6481) from Oxford Environmental, Inc. on 11/30/99 for the analyses of Full TCLP Scan, PCBs, Flash Point, pH, Reactivity and GCFID/DRO.

All analyses were performed within the required holding time.

The MDL levels were elevated for ALI Sample #9912995, for all the organic TCLP analyses, due to matrix interference.

In the TCLP BNA analysis, two surrogates (Nitrobenzene-d5 and 2-Fluorobiphenyl) for ALI Sample #9912995 were out of criteria. The sample was diluted and analyzed and one surrogate (2-Fluorobiphenyl) was again recovered out of the required criteria.

In the TCLP Metal analysis, the recoveries of certain matrix spike analytes were out of criteria. The matrix spikes were reanalyzed and reported.

"The laboratory has reviewed the quality assurance and quality control measurements for the sample analysis stated above."

T. Gaydos

Theodore C. Gaydos
Technical Director

STATE OF NEW JERSEY

DEPARTMENT OF ENVIRONMENTAL PROTECTION

Certifies That

ACCREDITED LABORATORIES

(Laboratory Name)

12007

(Laboratory I.D. Number)

having duly met the requirements of the

Regulations Governing The Certification Of

Laboratories And Environmental Measurements N.J.A.C. 7:18 et.seq.

is hereby approved as a

State Certified Environmental Laboratory

To perform the analyses as indicated on the Annual Certified Parameter List

which must accompany this certificate to be valid

Expiration Date: June 30, 2000

Joseph F. Aiello, Chief
Office of Quality Assurance

700137

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THIS CERTIFICATE IS TO BE CONSPICUOUSLY DISPLAYED AT THE LABORATORY WITH THE ANNUAL CERTIFIED PARAMETER LIST IN A LOCATION ON THE PREMISES VISIBLE TO THE PUBLIC

ACCREDITED LABORATORIES, INC.
TCLP VOLATILES ANALYSIS DATA

CASE NUMBER	6481	MATRIX	Leachate
SAMPLE NUMBER	9912994	DILUTION FACTOR	10
DATA FILE	>A5132	DATE EXTRACTED	
CLIENT NAME	OE	DATE ANALYZED	12/08/99
FIELD ID	DCOMP-1	ANALYZED BY	ROBERT

CAS No.	Compound	Result (mg/l)	MDL (mg/l)	Regulatory Level (mg/l)
71432	Benzene	U	.050	0.5
78933	2-Butanone	U	.100	200.0
56235	Carbon Tetrachloride	U	.050	0.5
108907	Chlorobenzene	U	.050	100.0
67663	Chloroform	U	.050	6.0
75354	1,1-Dichloroethene	U	.050	0.7
107062	1,2-Dichloroethane	U	.050	0.5
127184	Tetrachloroethene	U	.050	0.7
79016	Trichloroethene	U	.050	0.5
75014	Vinyl Chloride	U	.100	0.2

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
1,2-Dichloroethane-d4	76 %	76 - 114	OK
Toluene-d8	103 %	88 - 110	OK
Bromofluorobenzene	92 %	86 - 115	OK

(U) Indicates compound was analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.

* 2-Butanone = Methyl ethyl ketone

ACCREDITED LABORATORIES, INC.
TCLP VOLATILES ANALYSIS DATA

CASE NUMBER	6481	MATRIX	Leachate
SAMPLE NUMBER	9912995	DILUTION FACTOR	1000
DATA FILE	>A5134	DATE EXTRACTED	
CLIENT NAME	OE	DATE ANALYZED	12/08/99
FIELD ID	DCOMP-2	ANALYZED BY	ROBERT

CAS No.	Compound	Result (mg/l)	MDL (mg/l)	Regulatory Level (mg/l)
71432	Benzene	U	5.000	0.5
78933	2-Butanone	U	10.000	200.0
56235	Carbon Tetrachloride	U	5.000	0.5
108907	Chlorobenzene	U	5.000	100.0
67663	Chloroform	U	5.000	6.0
75354	1,1-Dichloroethene	U	5.000	0.7
107062	1,2-Dichloroethane	U	5.000	0.5
127184	Tetrachloroethene	U	5.000	0.7
79016	Trichloroethene	U	5.000	0.5
75014	Vinyl Chloride	U	10.000	0.2

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
1,2-Dichloroethane-d4	104 %	76 - 114	OK
Toluene-d8	101 %	88 - 110	OK
Bromofluorobenzene	108 %	86 - 115	OK

(U) Indicates compound was analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.

* 2-Butanone = Methyl ethyl ketone

ACCREDITED LABORATORIES, INC.
TCLP VOLATILES ANALYSIS DATA

CASE NUMBER	6481	MATRIX	Leachate
SAMPLE NUMBER	9912996	DILUTION FACTOR	10
DATA FILE	>A5133	DATE EXTRACTED	
CLIENT NAME	OE	DATE ANALYZED	12/08/99
FIELD ID	SP-1	ANALYZED BY	ROBERT

CAS No.	Compound	Result (mg/l)	MDL (mg/l)	Regulatory Level (mg/l)
71432	Benzene	U	.050	0.5
78933	2-Butanone	U	.100	200.0
56235	Carbon Tetrachloride	U	.050	0.5
108907	Chlorobenzene	U	.050	100.0
67663	Chloroform	U	.050	6.0
75354	1,1-Dichloroethene	U	.050	0.7
107062	1,2-Dichloroethane	U	.050	0.5
127184	Tetrachloroethene	U	.050	0.7
79016	Trichloroethene	U	.050	0.5
75014	Vinyl Chloride	U	.100	0.2

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
1,2-Dichloroethane-d4	77 %	76 - 114	OK
Toluene-d8	103 %	88 - 110	OK
Bromofluorobenzene	94 %	86 - 115	OK

(U) Indicates compound was analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.

* 2-Butanone = Methyl ethyl ketone

ACCREDITED LABORATORIES, INC.
TCLP SEMIVOLATILES ANALYSIS DATA

CASE NUMBER	6481	MATRIX	Leachate
SAMPLE NUMBER	9912994	DILUTION FACTOR	10
DATA FILE	>F9822	DATE EXTRACTED	12/08/99
CLIENT NAME	OE	DATE ANALYZED	12/09/99
FIELD ID	DCOMP-1	ANALYZED BY	DANIEL

CAS No.	Compound	Result (mg/l)	MDL (mg/l)	Regulatory Level (mg/l)
110861	Pyridine	U	.10	5.0
106467	1,4-Dichlorobenzene	U	.10	7.5
95478	2-Methylphenol	U	.10	200.0
108394	3&4-Methylphenol	U	.10	200.0
67721	Hexachloroethane	U	.10	3.0
989103	Nitrobenzene	U	.10	2.0
87683	Hexachlorobutadiene	U	.10	0.5
88062	2,4,6-Trichlorophenol	U	.10	2.0
9109104	2,4,5-Trichlorophenol	U	.50	400.0
121142	2,4-Dinitrotoluene	U	.10	0.13
118741	Hexachlorobenzene	U	.10	0.13
878610	Pentachlorophenol	U	.10	100.0

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
2-Fluorophenol	50 %	21 - 100	OK
Phenol-d5	54 %	10 - 94	OK
Nitrobenzene-d5	64 %	35 - 114	OK
2-Fluorobiphenyl	66 %	43 - 116	OK
2,4,6-Tribromophenol	75 %	10 - 123	OK
Terphenyl-d14	78 %	33 - 141	OK

U - Indicates compound was analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.

* 2-Methylphenol = o-cresol
* 3-Methylphenol = m-cresol
* 4-Methylphenol = p-cresol

** 3-Methylphenol and 4-Methylphenol can not be separated by the method applied.

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ACCREDITED LABORATORIES, INC.
TCLP SEMIVOLATILES ANALYSIS DATA

CASE NUMBER	6481	MATRIX	Leachate
SAMPLE NUMBER	9912995	DILUTION FACTOR	10000
DATA FILE	>F9826	DATE EXTRACTED	12/08/99
CLIENT NAME	QE	DATE ANALYZED	12/09/99
FIELD ID	DCOMP-2	ANALYZED BY	DANIEL

CAS No.	Compound	Result (mg/l)	MDL (mg/l)	Regulatory Level (mg/l)
110861	Pyridine	U	100.00	5.0
106467	1,4-Dichlorobenzene	U	100.00	7.5
95478	2-Methylphenol	U	100.00	200.0
108394	3&4-Methylphenol	U	100.00	200.0
67721	Hexachloroethane	U	100.00	3.0
989103	Nitrobenzene	U	100.00	2.0
87683	Hexachlorobutadiene	U	100.00	0.5
88062	2,4,6-Trichlorophenol	U	100.00	2.0
9109104	2,4,5-Trichlorophenol	U	500.00	400.0
121142	2,4-Dinitrotoluene	U	100.00	0.13
118741	Hexachlorobenzene	U	100.00	0.13
878610	Pentachlorophenol	U	100.00	100.0

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
2-Fluorophenol	74 %	21 - 100	OK
Phenol-d5	74 %	10 - 94	OK
Nitrobenzene-d5	117 %	35 - 114	OUT
2-Fluorobiphenyl	163 %	43 - 116	OUT
2,4,6-Tribromophenol	47 %	10 - 123	OK
Terphenyl-d14	60 %	33 - 141	OK

U - Indicates compound was analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.

* 2-Methylphenol = o-cresol
* 3-Methylphenol = m-cresol
* 4-Methylphenol = p-cresol

** 3-Methylphenol and 4-Methylphenol can not be separated by the method applied.

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ACCREDITED LABORATORIES, INC.
TCLP SEMIVOLATILES ANALYSIS DATA

CASE NUMBER	6481	MATRIX	Leachate
SAMPLE NUMBER	9912995DL	DILUTION FACTOR	100000
DATA FILE	>F9832	DATE EXTRACTED	12/08/99
CLIENT NAME	OE	DATE ANALYZED	12/10/99
FIELD ID	DCOMP-2	ANALYZED BY	DANIEL

CAS No.	Compound	Result (mg/l)	MDL (mg/l)	Regulatory Level (mg/l)
110861	Pyridine	U	1000.00	5.0
106467	1,4-Dichlorobenzene	U	1000.00	7.5
95478	2-Methylphenol	U	1000.00	200.0
108394	3&4-Methylphenol	U	1000.00	200.0
67721	Hexachloroethane	U	1000.00	3.0
989103	Nitrobenzene	U	1000.00	2.0
87683	Hexachlorobutadiene	U	1000.00	0.5
88062	2,4,6-Trichlorophenol	U	1000.00	2.0
9109104	2,4,5-Trichlorophenol	U	5000.00	400.0
121142	2,4-Dinitrotoluene	U	1000.00	0.13
118741	Hexachlorobenzene	U	1000.00	0.13
878610	Pentachlorophenol	U	1000.00	100.0

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
2-Fluorophenol	82 %	21 - 100	OK
Phenol-d5	78 %	10 - 94	OK
Nitrobenzene-d5	78 %	35 - 114	OK
2-Fluorobiphenyl	127 %	43 - 116	OUT
2,4,6-Tribromophenol	7 %	10 - 123	OUT
Terphenyl-d14	97 %	33 - 141	OK

U - Indicates compound was analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.

* 2-Methylphenol = o-cresol
* 3-Methylphenol = m-cresol
* 4-Methylphenol = p-cresol

** 3-Methylphenol and 4-Methylphenol can not be separated by the method applied.

ACCREDITED LABORATORIES, INC.
TCLP SEMIVOLATILES ANALYSIS DATA

CASE NUMBER	6481	MATRIX	Leachate
SAMPLE NUMBER	9912996	DILUTION FACTOR	10
DATA FILE	>F9823	DATE EXTRACTED	12/08/99
CLIENT NAME	OE	DATE ANALYZED	12/09/99
FIELD ID	SP-1	ANALYZED BY	DANIEL

CAS No.	Compound	Result (mg/l)	MDL (mg/l)	Regulatory Level (mg/l)
110861	Pyridine	U	.10	5.0
106467	1,4-Dichlorobenzene	U	.10	7.5
95478	2-Methylphenol	U	.10	200.0
108394	3&4-Methylphenol	U	.10	200.0
67721	Hexachloroethane	U	.10	3.0
989103	Nitrobenzene	U	.10	2.0
87683	Hexachlorobutadiene	U	.10	0.5
88062	2,4,6-Trichlorophenol	U	.10	2.0
9109104	2,4,5-Trichlorophenol	U	.50	400.0
121142	2,4-Dinitrotoluene	U	.10	0.13
118741	Hexachlorobenzene	U	.10	0.13
878610	Pentachlorophenol	U	.10	100.0

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
2-Fluorophenol	55 %	21 - 100	OK
Phenol-d5	58 %	10 - 94	OK
Nitrobenzene-d5	70 %	35 - 114	OK
2-Fluorobiphenyl	72 %	43 - 116	OK
2,4,6-Tribromophenol	77 %	10 - 123	OK
Terphenyl-d14	79 %	33 - 141	OK

U - Indicates compound was analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.

* 2-Methylphenol = o-cresol
* 3-Methylphenol = m-cresol
* 4-Methylphenol = p-cresol

** 3-Methylphenol and 4-Methylphenol can not be separated by the method applied.

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ACCREDITED LABORATORIES, INC.
TCLP PESTICIDES ANALYSIS DATA

CASE NUMBER	6481	MATRIX	Leachate
SAMPLE NUMBER	9912994	DILUTION FACTOR	50
DATA FILE	>G4774	DATE EXTRACTED	12/09/99
CLIENT NAME	OE	DATE ANALYZED	12/10/99
FIELD ID	DCOMP-1	ANALYZED BY	JEFF

CAS No.	Compound	Result (mg/l)	MDL (mg/l)	Regulatory Level (mg/l)
58-89-9	G-BHC (Lindane)	U	.001	0.400
76-44-8	Heptachlor	U	.001	0.008
1024-57-3	Heptachlor Epoxide	U	.001	0.008
72-20-8	Endrin	U	.002	0.02
72-43-5	Methoxychlor	U	.010	10.0
5103-71-9	A-Chlordane	U	.001	0.03
5103-74-2	G-Chlordane	U	.001	0.03
8001-35-2	Toxaphene	U	.050	0.5

SURROGATE COMPOUNDS	RECOVERY	ADVISORY LIMITS	STATUS
DCB	87%	30 - 150	OK
Tetrachloro-m-xylene	75%	30 - 150	OK

U - Indicates compound was analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.

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ACCREDITED LABORATORIES, INC.
TCLP PESTICIDES ANALYSIS DATA

CASE NUMBER	6481	MATRIX	Leachate
SAMPLE NUMBER	9912995	DILUTION FACTOR	1000
DATA FILE	>G4776	DATE EXTRACTED	12/09/99
CLIENT NAME	OE	DATE ANALYZED	12/10/99
FIELD ID	DCOMP-2	ANALYZED BY	JEFF

CAS No.	Compound	Result (mg/l)	MDL (mg/l)	Regulatory Level (mg/l)
58-89-9	G-BHC (Lindane)	U	.020	0.400
76-44-8	Heptachlor	U	.020	0.008
1024-57-3	Heptachlor Epoxide	U	.020	0.008
72-20-8	Endrin	U	.040	0.02
72-43-5	Methoxychlor	U	.200	10.0
5103-71-9	A-Chlordane	U	.020	0.03
5103-74-2	G-Chlordane	U	.020	0.03
8001-35-2	Toxaphene	U	1.000	0.5

SURROGATE COMPOUNDS	RECOVERY	ADVISORY LIMITS	STATUS
DCB	91%	30 - 150	OK
Tetrachloro-m-xylene	91%	30 - 150	OK

U - Indicates compound was analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.

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ACCREDITED LABORATORIES, INC.
TCLP PESTICIDES ANALYSIS DATA

CASE NUMBER	6481	MATRIX	Leachate
SAMPLE NUMBER	9912996	DILUTION FACTOR	50
DATA FILE	>G4775	DATE EXTRACTED	12/09/99
CLIENT NAME	OE	DATE ANALYZED	12/10/99
FIELD ID	SP-1	ANALYZED BY	JEFF

CAS No.	Compound	Result (mg/l)	MDL (mg/l)	Regulatory Level (mg/l)
58-89-9	G-BHC (Lindane)	U	.001	0.400
76-44-8	Heptachlor	U	.001	0.008
1024-57-3	Heptachlor Epoxide	U	.001	0.008
72-20-8	Endrin	U	.002	0.02
72-43-5	Methoxychlor	U	.010	10.0
5103-71-9	A-Chlordane	U	.001	0.03
5103-74-2	G-Chlordane	U	.001	0.03
8001-35-2	Toxaphene	U	.050	0.5

SURROGATE COMPOUNDS	RECOVERY	ADVISORY LIMITS	STATUS
DCB	88%	30 - 150	OK
Tetrachloro-m-xylene	77%	30 - 150	OK

U - Indicates compound was analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.

ACCREDITED LABORATORIES, INC
TCLP HERBICIDE ANALYSIS DATA

CASE NUMBER	6481	MATRIX	Leachate
SAMPLE NUMBER	9912994	DILUTION FACTOR	1
DATA FILE	>A0603	DATE EXTRACTED	12/08/99
CLIENT NAME	OE	DATE ANALYZED	12/08/99
FIELD ID	DCOMP-1	ANALYZED BY	JEFF

CAS No.	Compound	Result (mg/l)	MDL (mg/l)	Regulatory Level (mg/l)
94757	2,4'-D	U	.100	10.0
93721	SILVEX	U	.010	1.0

U - Indicates compound was analyzed for but not detected

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ACCREDITED LABORATORIES, INC
TCLP HERBICIDE ANALYSIS DATA

CASE NUMBER	6481	MATRIX	Leachate
SAMPLE NUMBER	9912995	DILUTION FACTOR	20
DATA FILE	>A0605	DATE EXTRACTED	12/08/99
CLIENT NAME	OE	DATE ANALYZED	12/08/99
FIELD ID	DCOMP-2	ANALYZED BY	JEFF

CAS No.	Compound	Result (mg/l)	MDL (mg/l)	Regulatory Level (mg/l)
94757	2,4'-D	U	2.000	10.0
93721	SILVEX	U	.200	1.0

U - Indicates compound was analyzed for but not detected

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ACCREDITED LABORATORIES, INC
TCLP HERBICIDE ANALYSIS DATA

CASE NUMBER	6481	MATRIX	Leachate
SAMPLE NUMBER	9912996	DILUTION FACTOR	1
DATA FILE	>A0604	DATE EXTRACTED	12/08/99
CLIENT NAME	OE	DATE ANALYZED	12/08/99
FIELD ID	SP-1	ANALYZED BY	JEFF

CAS No.	Compound	Result (mg/l)	MDL (mg/l)	Regulatory Level (mg/l)
94757	2,4'-D	U	.100	10.0
93721	SILVEX	U	.010	1.0

U - Indicates compound was analyzed for but not detected

ACCREDITED LABORATORIES, INC
PCB ORGANIC ANALYSIS DATA

CASE NUMBER	6481	MATRIX	Soil
SAMPLE NUMBER	9912994	DILUTION FACTOR	1
DATA FILE	>G4744	DATE EXTRACTED	12/03/99
CLIENT NAME	OE	DATE ANALYZED	12/08/99
FIELD ID	DCOMP-1	ANALYZED BY	JEFF

CAS#	COMPOUND	UG/KG	MDL
12674112	Aroclor-1016	U	22.2
11104282	Aroclor-1221	U	22.2
11141165	Aroclor-1232	U	22.2
53469219	Aroclor-1242	268000 E I	22.2
12672296	Aroclor-1248	U	22.2
11097691	Aroclor-1254	109000 E I	22.2
11096825	Aroclor-1260	U	22.2

Percent Solid of 75.0 is used for all target compounds.

B - Indicates compound found in associated blank.
J - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.
R - Result exceeds residential surface soil standards.*
I - Result exceeds industrial surface soil standards.*

* Flags are based on New Jersey Soil Cleanup from Site Remediation News Volume 06 Number 1.

ACCREDITED LABORATORIES, INC
PCB ORGANIC ANALYSIS DATA

CASE NUMBER	6481	MATRIX	Soil
SAMPLE NUMBER	9912994DL 1000	DILUTION FACTOR	1000
DATA FILE	>G4755	DATE EXTRACTED	12/03/99
CLIENT NAME	OE	DATE ANALYZED	12/08/99
FIELD ID	DCOMP-1	ANALYZED BY	JEFF

CAS#	COMPOUND	UG/KG	MDL
12674112	Aroclor-1016	U	2220
11104282	Aroclor-1221	U	2220
11141165	Aroclor-1232	U	2220
53469219	Aroclor-1242	63800000 E DI	2220
12672296	Aroclor-1248	U	2220
11097691	Aroclor-1254	27000000 E DI	2220
11096825	Aroclor-1260	U	2220

Percent Solid of 75.0 is used for all target compounds.

B - Indicates compound found in associated blank.
J - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.
R - Result exceeds residential surface soil standards.*
I - Result exceeds industrial surface soil standards.*

* Flags are based on New Jersey Soil Cleanup from Site Remediation News Volume 06 Number 1.

ACCREDITED LABORATORIES, INC
PCB ORGANIC ANALYSIS DATA

CASE NUMBER	6481	MATRIX	Soil
SAMPLE NUMBER	9912994DL2 100000	DILUTION FACTOR	100000
DATA FILE	>G4763	DATE EXTRACTED	12/03/99
CLIENT NAME	OE	DATE ANALYZED	12/08/99
FIELD ID	DCOMP-1	ANALYZED BY	JEFF

CAS#	COMPOUND	UG/KG		MDL
12674112	Aroclor-1016	U		22200
11104282	Aroclor-1221	U		22200
11141165	Aroclor-1232	U		22200
53469219	Aroclor-1242	160000000	DI	22200
12672296	Aroclor-1248	U		22200
11097691	Aroclor-1254	517000000	DI	22200
11096825	Aroclor-1260	U		22200

Percent Solid of 75.0 is used for all target compounds.

B - Indicates compound found in associated blank.
J - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.
R - Result exceeds residential surface soil standards.*
I - Result exceeds industrial surface soil standards.*

* Flags are based on New Jersey Soil Cleanup from Site Remediation News Volume 06 Number 1.

ACCREDITED LABORATORIES, INC
PCB ORGANIC ANALYSIS DATA

CASE NUMBER	6481	MATRIX	Oil
SAMPLE NUMBER	9912995	DILUTION FACTOR	1
DATA FILE	>G4752	DATE EXTRACTED	12/03/99
CLIENT NAME	OE	DATE ANALYZED	12/08/99
FIELD ID	DCOMP-2	ANALYZED BY	JEFF

CAS#	COMPOUND	MG/KG	MDL
12674112	Aroclor-1016	U	.500
11104282	Aroclor-1221	U	.500
11141165	Aroclor-1232	U	.500
53469219	Aroclor-1242	97.3	.500
12672296	Aroclor-1248	U	.500
11097691	Aroclor-1254	77.0	.500
11096825	Aroclor-1260	U	.500

B - Indicates compound found in associated blank.
J - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.

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ACCREDITED LABORATORIES, INC
PCB ORGANIC ANALYSIS DATA

CASE NUMBER	6481	MATRIX	Soil
SAMPLE NUMBER	9912996	DILUTION FACTOR	1
DATA FILE	>G4745	DATE EXTRACTED	12/03/99
CLIENT NAME	OE	DATE ANALYZED	12/08/99
FIELD ID	SP-1	ANALYZED BY	JEFF

CAS#	COMPOUND	UG/KG	MDL
12674112	Aroclor-1016	U	19.4
11104282	Aroclor-1221	U	19.4
11141165	Aroclor-1232	U	19.4
53469219	Aroclor-1242	85200 E I	19.4
12672296	Aroclor-1248	U	19.4
11097691	Aroclor-1254	145000 E I	19.4
11096825	Aroclor-1260	U	19.4

Percent Solid of 86.0 is used for all target compounds.

B - Indicates compound found in associated blank.
J - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.
R - Result exceeds residential surface soil standards.*
I - Result exceeds industrial surface soil standards.*

* Flags are based on New Jersey Soil Cleanup from Site Remediation News Volume 06 Number 1.

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ACCREDITED LABORATORIES, INC
PCB ORGANIC ANALYSIS DATA

CASE NUMBER	6481	MATRIX	Soil
SAMPLE NUMBER	9912996DL 200	DILUTION FACTOR	200
DATA FILE	>G4756	DATE EXTRACTED	12/03/99
CLIENT NAME	OE	DATE ANALYZED	12/08/99
FIELD ID	SP-1	ANALYZED BY	JEFF

CAS#	COMPOUND	UG/KG		MDL
12674112	Aroclor-1016	U		3880
11104282	Aroclor-1221	U		3880
11141165	Aroclor-1232	U		3880
53469219	Aroclor-1242	205000	DI	3880
12672296	Aroclor-1248	U		3880
11097691	Aroclor-1254	806000	DI	3880
11096825	Aroclor-1260	U		3880

Percent Solid of 86.0 is used for all target compounds.

B - Indicates compound found in associated blank.
J - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.
R - Result exceeds residential surface soil standards.*
I - Result exceeds industrial surface soil standards.*

* Flags are based on New Jersey Soil Cleanup from Site Remediation News Volume 06 Number 1.

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ACCREDITED LABORATORIES, INC
PCB ORGANIC ANALYSIS DATA

CASE NUMBER	6481	MATRIX	Soil
SAMPLE NUMBER	9912997	DILUTION FACTOR	1
DATA FILE	>G4746	DATE EXTRACTED	12/03/99
CLIENT NAME	OE	DATE ANALYZED	12/08/99
FIELD ID	SP-2	ANALYZED BY	JEFF

CAS#	COMPOUND	UG/KG	MDL
12674112	Aroclor-1016	U	19.3
11104282	Aroclor-1221	U	19.3
11141165	Aroclor-1232	U	19.3
53469219	Aroclor-1242	86800 E I	19.3
12672296	Aroclor-1248	U	19.3
11097691	Aroclor-1254	145000 E I	19.3
11096825	Aroclor-1260	U	19.3

Percent Solid of 86.3 is used for all target compounds.

B - Indicates compound found in associated blank.
J - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.
R - Result exceeds residential surface soil standards.*
I - Result exceeds industrial surface soil standards.*

* Flags are based on New Jersey Soil Cleanup from Site Remediation News Volume 06 Number 1.

ACCREDITED LABORATORIES, INC
PCB ORGANIC ANALYSIS DATA

CASE NUMBER	6481	MATRIX	Soil
SAMPLE NUMBER	9912997DL 200	DILUTION FACTOR	200
DATA FILE	>G4757	DATE EXTRACTED	12/03/99
CLIENT NAME	OE	DATE ANALYZED	12/08/99
FIELD ID	SP-2	ANALYZED BY	JEFF

CAS#	COMPOUND	UG/KG		MDL
12674112	Aroclor-1016	U		3860
11104282	Aroclor-1221	U		3860
11141165	Aroclor-1232	U		3860
53469219	Aroclor-1242	151000	DI	3860
12672296	Aroclor-1248	U		3860
11097691	Aroclor-1254	603000	DI	3860
11096825	Aroclor-1260	U		3860

Percent Solid of 86.3 is used for all target compounds.

B - Indicates compound found in associated blank.
J - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.
R - Result exceeds residential surface soil standards.*
I - Result exceeds industrial surface soil standards.*

* Flags are based on New Jersey Soil Cleanup from Site Remediation News Volume 06 Number 1.

ACCREDITED LABORATORIES, INC
PCB ORGANIC ANALYSIS DATA

CASE NUMBER	6481	MATRIX	Soil
SAMPLE NUMBER	9912998	DILUTION FACTOR	1
DATA FILE	>G4747	DATE EXTRACTED	12/03/99
CLIENT NAME	OE	DATE ANALYZED	12/08/99
FIELD ID	SP-3	ANALYZED BY	JEFF

CAS#	COMPOUND	UG/KG	MDL
12674112	Aroclor-1016	U	19.6
11104282	Aroclor-1221	U	19.6
11141165	Aroclor-1232	U	19.6
53469219	Aroclor-1242	106000 E I	19.6
12672296	Aroclor-1248	U	19.6
11097691	Aroclor-1254	161000 E I	19.6
11096825	Aroclor-1260	U	19.6

Percent Solid of 85.2 is used for all target compounds.

B - Indicates compound found in associated blank.
J - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.
R - Result exceeds residential surface soil standards.*
I - Result exceeds industrial surface soil standards.*

* Flags are based on New Jersey Soil Cleanup from Site Remediation News Volume 06 Number 1.

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ACCREDITED LABORATORIES, INC
PCB ORGANIC ANALYSIS DATA

CASE NUMBER	6481	MATRIX	Soil
SAMPLE NUMBER	9912998DL 200	DILUTION FACTOR	200
DATA FILE	>G4758	DATE EXTRACTED	12/03/99
CLIENT NAME	OE	DATE ANALYZED	12/08/99
FIELD ID	SP-3	ANALYZED BY	JEFF

CAS#	COMPOUND	UG/KG		MDL
12674112	Aroclor-1016	U		3910
11104282	Aroclor-1221	U		3910
11141165	Aroclor-1232	U		3910
53469219	Aroclor-1242	187000	DI	3910
12672296	Aroclor-1248	U		3910
11097691	Aroclor-1254	708000	DI	3910
11096825	Aroclor-1260	U		3910

Percent Solid of 85.2 is used for all target compounds.

B - Indicates compound found in associated blank.
J - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.
R - Result exceeds residential surface soil standards.*
I - Result exceeds industrial surface soil standards.*

* Flags are based on New Jersey Soil Cleanup from Site Remediation News Volume 06 Number 1.

ACCREDITED LABORATORIES, INC
PCB ORGANIC ANALYSIS DATA

CASE NUMBER	6481	MATRIX	Soil
SAMPLE NUMBER	9912999	DILUTION FACTOR	1
DATA FILE	>G4748	DATE EXTRACTED	12/03/99
CLIENT NAME	OE	DATE ANALYZED	12/08/99
FIELD ID	SP-4	ANALYZED BY	JEFF

CAS#	COMPOUND	UG/KG	MDL
12674112	Aroclor-1016	U	19.5
11104282	Aroclor-1221	U	19.5
11141165	Aroclor-1232	U	19.5
53469219	Aroclor-1242	94400 E I	19.5
12672296	Aroclor-1248	U	19.5
11097691	Aroclor-1254	162000 E I	19.5
11096825	Aroclor-1260	U	19.5

Percent Solid of 85.6 is used for all target compounds.

B - Indicates compound found in associated blank.
J - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.
R - Result exceeds residential surface soil standards.*
I - Result exceeds industrial surface soil standards.*

* Flags are based on New Jersey Soil Cleanup from Site Remediation News Volume 06 Number 1.

ACCREDITED LABORATORIES, INC
PCB ORGANIC ANALYSIS DATA

CASE NUMBER	6481	MATRIX	Soil
SAMPLE NUMBER	9912999DL 200	DILUTION FACTOR	200
DATA FILE	>G4759	DATE EXTRACTED	12/03/99
CLIENT NAME	OE	DATE ANALYZED	12/08/99
FIELD ID	SP-4	ANALYZED BY	JEFF

CAS#	COMPOUND	UG/KG		MDL
12674112	Aroclor-1016	U		3890
11104282	Aroclor-1221	U		3890
11141165	Aroclor-1232	U		3890
53469219	Aroclor-1242	138000	DI	3890
12672296	Aroclor-1248	U		3890
11097691	Aroclor-1254	632000	DI	3890
11096825	Aroclor-1260	U		3890

Percent Solid of 85.6 is used for all target compounds.

B - Indicates compound found in associated blank.
J - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.
R - Result exceeds residential surface soil standards.*
I - Result exceeds industrial surface soil standards.*

* Flags are based on New Jersey Soil Cleanup from Site Remediation News Volume 06 Number 1.

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ACCREDITED LABORATORIES, INC
PCB ORGANIC ANALYSIS DATA

CASE NUMBER	6481	MATRIX	Soil
SAMPLE NUMBER	9913000	DILUTION FACTOR	1
DATA FILE	>G4751	DATE EXTRACTED	12/03/99
CLIENT NAME	OE	DATE ANALYZED	12/08/99
FIELD ID	SP-5	ANALYZED BY	JEFF

CAS#	COMPOUND	UG/KG	MDL
12674112	Aroclor-1016	U	19.4
11104282	Aroclor-1221	U	19.4
11141165	Aroclor-1232	U	19.4
53469219	Aroclor-1242	82400 E I	19.4
12672296	Aroclor-1248	U	19.4
11097691	Aroclor-1254	159000 E I	19.4
11096825	Aroclor-1260	U	19.4

Percent Solid of 86.0 is used for all target compounds.

B - Indicates compound found in associated blank.
J - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.
R - Result exceeds residential surface soil standards.*
I - Result exceeds industrial surface soil standards.*

* Flags are based on New Jersey Soil Cleanup from Site Remediation News Volume 06 Number 1.

ACCREDITED LABORATORIES, INC
PCB ORGANIC ANALYSIS DATA

CASE NUMBER	6481	MATRIX	Soil
SAMPLE NUMBER	9913000DL 200	DILUTION FACTOR	200
DATA FILE	>G4762	DATE EXTRACTED	12/03/99
CLIENT NAME	OE	DATE ANALYZED	12/08/99
FIELD ID	SP-5	ANALYZED BY	JEFF

CAS#	COMPOUND	UG/KG		MDL
12674112	Aroclor-1016	U		3880
11104282	Aroclor-1221	U		3880
11141165	Aroclor-1232	U		3880
53469219	Aroclor-1242	119000	DI	3880
12672296	Aroclor-1248	U		3880
11097691	Aroclor-1254	535000	DI	3880
11096825	Aroclor-1260	U		3880

Percent Solid of 86.0 is used for all target compounds.

B - Indicates compound found in associated blank.
J - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.
R - Result exceeds residential surface soil standards.*
I - Result exceeds industrial surface soil standards.*

* Flags are based on New Jersey Soil Cleanup from Site Remediation News Volume 06 Number 1.

ACCREDITED LABORATORIES, INC.
REGULATED TCLP METALS
INORGANIC ANALYSIS DATA SHEET

Case #: 6481
Sample #: 9912994
Field ID: DCOMP-1
Client Name: OE

Matrix: Leachate
Date Received: 11/30/99

CAS No.	Element	Result MG/L	MDL MG/L	Dilution Factor	Regulatory Level	Method	Date Analyzed
7440-38-2	Arsenic	ND	1.00	1	5.00	P	12/10/99
7440-39-3	Barium	3.74	.200	1	100.00	P	12/10/99
7440-43-9	Cadmium	.598	.100	1	1.00	P	12/10/99
7440-47-3	Chromium	ND	.100	1	5.00	P	12/10/99
7439-92-1	Lead	14.7	.500	1	5.00	P	12/10/99
7439-97-6	Mercury	ND	.002	2	.20	CV	12/03/99
7782-49-2	Selenium	ND	.500	1	1.00	P	12/10/99
7440-22-4	Silver	ND	.100	1	5.00	P	12/10/99

ND - Element analyzed for but not detected.
P - Analyzed by ICP
F - Analyzed by GFA
CV - Analyzed by Cold Vapor
A - Analyzed by flame AA

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ACCREDITED LABORATORIES, INC.
REGULATED TCLP METALS
INORGANIC ANALYSIS DATA SHEET

Case #: 6481
Sample #: 9912995
Field ID: DCOMP-2
Client Name: OE

Matrix: Leachate
Date Received: 11/30/99

CAS No.	Element	Result MG/L	MDL MG/L	Dilution Factor	Regulatory Level	Method	Date Analyzed
7440-38-2	Arsenic	ND	1.00	1	5.00	P	12/10/99
7440-39-3	Barium	ND	.200	1	100.00	P	12/10/99
7440-43-9	Cadmium	ND	.100	1	1.00	P	12/10/99
7440-47-3	Chromium	ND	.100	1	5.00	P	12/10/99
7439-92-1	Lead	ND	.500	1	5.00	P	12/10/99
7439-97-6	Mercury	ND	.010	10	.20	CV	12/03/99
7782-49-2	Selenium	ND	.500	1	1.00	P	12/10/99
7440-22-4	Silver	ND	.100	1	5.00	P	12/10/99

ND - Element analyzed for but not detected.
P - Analyzed by ICP
F - Analyzed by GFA
CV - Analyzed by Cold Vapor
A - Analyzed by flame AA

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ACCREDITED LABORATORIES, INC.
REGULATED TCLP METALS
INORGANIC ANALYSIS DATA SHEET

Case #: 6481
Sample #: 9912996
Field ID: SP-1
Client Name: OE

Matrix: Leachate
Date Received: 11/30/99

CAS No.	Element	Result MG/L	MDL MG/L	Dilution Factor	Regulatory Level	Method	Date Analyzed
7440-38-2	Arsenic	ND	1.00	1	5.00	P	12/10/99
7440-39-3	Barium	1.54	.200	1	100.00	P	12/10/99
7440-43-9	Cadmium	.280	.100	1	1.00	P	12/10/99
7440-47-3	Chromium	ND	.100	1	5.00	P	12/10/99
7439-92-1	Lead	1.00	.500	1	5.00	P	12/10/99
7439-97-6	Mercury	ND	.002	2	.20	CV	12/03/99
7782-49-2	Selenium	ND	.500	1	1.00	P	12/10/99
7440-22-4	Silver	ND	.100	1	5.00	P	12/10/99

ND - Element analyzed for but not detected.
P - Analyzed by ICP
F - Analyzed by GFA
CV - Analyzed by Cold Vapor
A - Analyzed by flame AA

ACCREDITED LABORATORIES, INC.
GENERAL CHEMISTRY ANALYSIS DATA

Case #:	6481	Matrix:	Soil
Sample #:	9912994	Date Received:	11/30/99
Client Name:	OE	% Moisture:	25.0
Field Number:	DCOMP-1		

ANALYTES	RESULTS	MDL	UNITS	DILUTION FACTOR	METHOD BLANK RESULTS	METHOD BLANK MDL	ANALYSIS DATE
Solids, Percent	75.0	0.10	%	1.			12/02/99
Flash Point	>200	80.	°F	1.			12/03/99
PH	6.45		S.U.	1.			12/03/99
Cyanide, Reactive	ND	0.27	mg/Kg	1.	ND	0.20	12/03/99
Sulfide, Reactive	ND	53.3	mg/Kg	1.	ND	40.0	12/03/99

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ACCREDITED LABORATORIES, INC.
GENERAL CHEMISTRY ANALYSIS DATA

Case #: 6481
Sample #: 9912995
Client Name: OE
Field Number: DCOMP-2

Matrix: Oil
Date Received: 11/30/99

ANALYTES	RESULTS	MDL	UNITS	DILUTION FACTOR	METHOD BLANK RESULTS	METHOD BLANK MDL	ANALYSIS DATE
Flash Point	170.	80.	°F	1.			12/03/99
PH	6.86		S.U.	1.			12/03/99
Cyanide, Reactive	ND	0.20	mg/Kg	1.	ND	0.20	12/03/99
Sulfide, Reactive	ND	40.0	mg/Kg	1.	ND	40.0	12/03/99

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ACCREDITED LABORATORIES, INC.
GENERAL CHEMISTRY ANALYSIS DATA

Case #:	6481	Matrix:	Soil
Sample #:	9912996	Date Received:	11/30/99
Client Name:	OE	% Moisture:	14.0
Field Number:	SP-1		

ANALYTES	RESULTS	MDL	UNITS	DILUTION FACTOR	METHOD BLANK RESULTS	METHOD BLANK MDL	ANALYSIS DATE
Solids, Percent	86.0	0.10	S.U.	1.			12/02/99
Flash Point	>200	80.	°F	1.			12/03/99
PH	6.74		S.U.	1.			12/03/99
Cyanide, Reactive	ND	0.23	mg/Kg	1.	ND	0.20	12/03/99
Sulfide, Reactive	ND	46.5	mg/Kg	1.	ND	40.0	12/03/99

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ACCREDITED LABORATORIES, INC.
DRO by GC-FID

CASE NUMBER	6481	MATRIX	Soil
CLIENT NAME	OE	DATE RECEIVED	11/30/99
ANALYZED BY	CLIFF	DATE EXTRACTED	12/08/99

Field ID	Sample #	% Solids	Dilution Factor	Date Analyzed	Result mg/Kg	MDL mg/Kg	Data File
	DBLK49		1	12/08/99	ND	4.0	>K8823
DCOMP-1	9912994	75.0	5	12/09/99	ND	27	>K8828
SP-1	9912996	86.0	1	12/09/99	ND	4.7	>K8829

ND - Not Detected
Detection was based on the peak pattern compared to Diesel Fuel #2.

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ACCREDITED LABORATORIES, INC.
DRO by GC-FID

CASE NUMBER	6481	MATRIX	Oil
CLIENT NAME	OE	DATE RECEIVED	11/30/99
ANALYZED BY	CLIFF	DATE EXTRACTED	12/08/99

Field ID	Sample #	% Solids	Dilution Factor	Date Analyzed	Result mg/Kg	MDL mg/Kg	Data File
	DBLK49		1	12/08/99	ND	1000	>K8823
DCOMP-2	9912995		1	12/09/99	512000	1000	>K8832

ND - Not Detected
Detection was based on the peak pattern compared to Diesel Fuel #2.

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VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION
BROMOFLUOROBENZENE (BFB)

Lab Name: ACCREDITED LABORATORIES, INC. Contract: _____

Lab File ID: >A5121 BFB Injection Date: 12/08/99

Instrument ID: HP5970BA BFB Injection Time: 11:59

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	16.1
75	30.0 - 60.0% of mass 95	44.4
95	Base peak, 100% relative abundance	100.
96	5.0 - 9.0% of mass 95	8.1
173	Less than 2.0% of mass 174	0.0(0.0)1
174	Greater than 50.0% of mass 95	67.3
175	5.0 - 9.0% of mass 174	4.9(7.2)1
176	95.0 - 101.0% of mass 174	66.7(99.0)1
177	5.0 - 9.0% of mass 176	4.3(6.5)2

1-Value is % mass 174 2-Value is % mass 176

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		VSTD020	>A5123	12/08/99	13:31
02		VSTD010	>A5124	12/08/99	14:12
03		VSTD100	>A5125	12/08/99	14:52
04		VSTD200	>A5126	12/08/99	15:34
05		VSTD050	>A5127	12/08/99	16:15
06		VBLKA15	>A5129	12/08/99	17:41
07		9912922DL	>A5130	12/08/99	18:22
08		9912996MS	>A5131	12/08/99	19:02
09		9912994	>A5132	12/08/99	19:43
10		9912996	>A5133	12/08/99	20:23
11		9912995	>A5134	12/08/99	21:04
12		9913080	>A5135	12/08/99	21:46
13		9913213	>A5136	12/08/99	22:26
14					
15					
16					
17					
18					
19					
20					
21					
22					

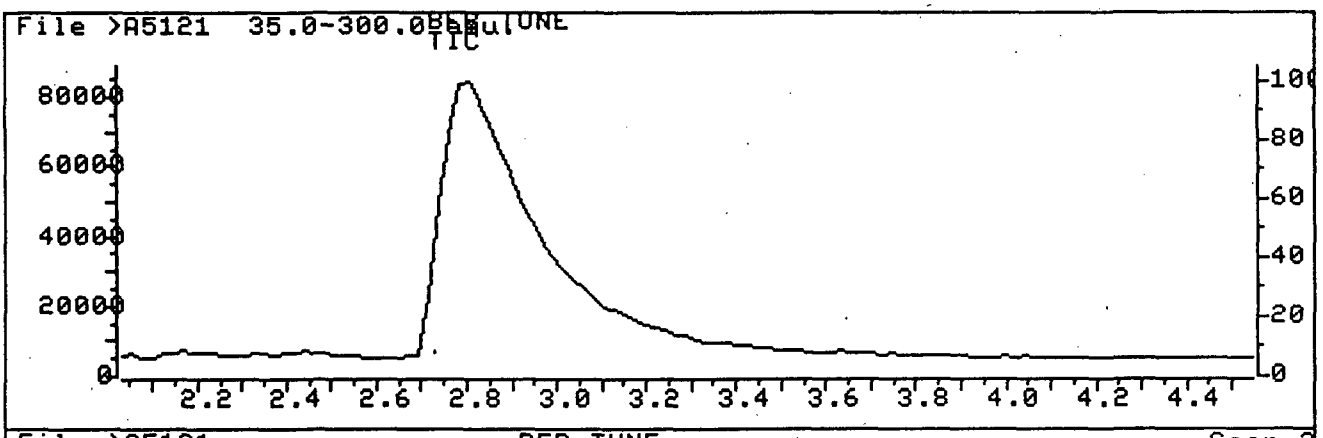
FORM V VOA

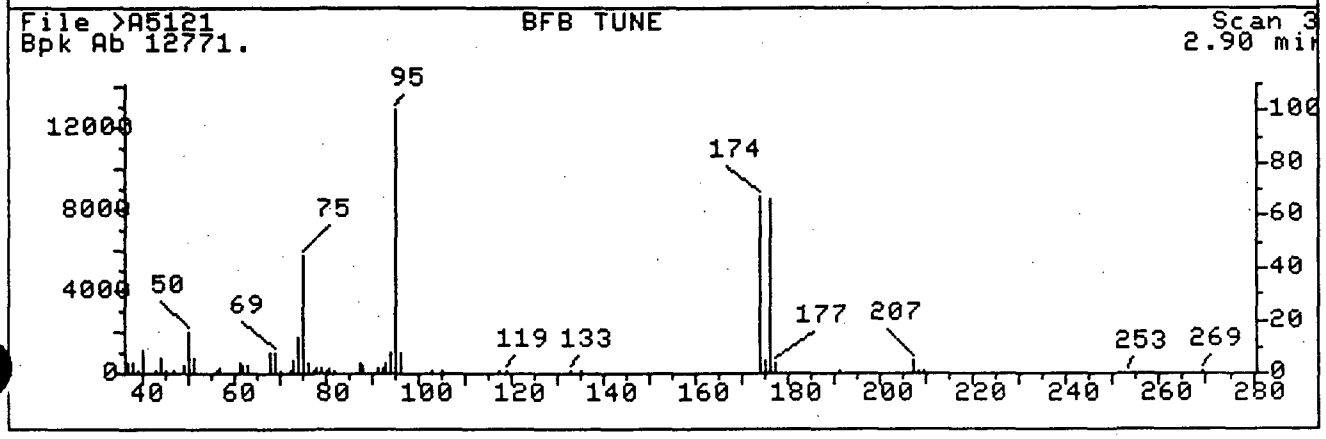
GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
50	15-40% of mass 95	16.07	16.07	Ok
75	30-60% of mass 95	44.39	44.39	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	8.08	8.08	Ok
173	Less than 2% of mass 174	0.00	0.00	Ok
174	Greater than 50% of mass 95	67.34	67.34	Ok
175	5-9% of mass 174	4.88	7.24	Ok
176	95-101% of mass 174	66.66	98.99	Ok
177	5-9% of mass 176	4.34	6.51	Ok

Injection Date: 12/08/99
Injection Time: 11:59
Data File: >A5121
Scan: 39





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700174

>A5121 BFB TUNE
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File: >A5121 Scan #: 39 Retn. time: 2.90

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
36.00	299.0	56.00	142.0	75.00	5669.0	92.95	457.0	134.85	85.0
36.90	532.0	56.90	301.0	76.00	468.0	93.95	1055.0	173.95	8600.0
38.00	458.0	60.90	528.0	77.00	186.0	95.00	12771.0	174.95	623.0
39.05	195.0	61.95	415.0	78.00	203.0	96.00	1032.0	175.95	8513.0
39.95	1172.0	62.95	350.0	78.90	283.0	97.00	55.0	176.95	554.0
42.95	122.0	66.95	63.0	79.80	153.0	102.90	84.0	190.80	97.0
43.95	722.0	67.95	1025.0	80.80	281.0	103.90	54.0	207.00	683.0
44.95	173.0	68.95	1060.0	81.80	145.0	104.90	84.0	208.00	182.0
46.95	150.0	70.05	118.0	86.95	489.0	114.85	52.0	209.00	113.0
48.95	395.0	71.95	97.0	87.95	431.0	117.00	81.0	252.90	66.0
49.95	2052.0	73.00	689.0	90.95	240.0	119.00	104.0	269.05	162.0
51.00	705.0	74.00	1762.0	91.95	266.0	132.95	138.0	281.00	146.0
52.00	68.0								

Initial Calibration Data
HSL Compounds

Case No: Instrument ID: HP5970BA

Contractor: Accredited Labs Calibration Date: 12/08/99

Contract No: CAAS06

Minimum $\overline{RF}$ for SPCC is 0.1 Maximum % RSD for CCC is 20%

Laboratory ID:	>A5124	>A5123	>A5127	>A5125	>A5126					
	RF	RF	RF	RF	RF					
Compound	10.00	20.00	50.00	100.00	200.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CCC	SPCC
Acrolein	.01399	.01612	.02086	.02510	.02304	.450	.01982	23.517		
Acrylonitrile	.05924	.05601	.05956	.07140	.06617	.642	.06247	9.931		
Acetone	.05187	.04998	.04534	.05337	.05004	.482	.05012	6.026		
Dichlorodifluoromethane	.25805	.30031	.23094	.31551	.26724	.244	.27441	12.317		
Chloromethane	.24282	.26243	.24015	.30011	.26801	.266	.26270	9.190		**
Vinyl Chloride	.22380	.24677	.22578	.27360	.24602	.280	.24319	8.287	*	
Bromomethane	.25733	.26464	.21460	.23430	.19908	.320	.23399	11.857		
Chloroethane	.12729	.14391	.09662	.10809	.08642	.337	.11247	20.645		
Trichlorofluoromethane	.67509	.71609	.62955	.69697	.43561	.365	.63066	18.029		
1,1-Dichloroethene	.51119	.52103	.50591	.59205	.54785	.450	.53561	6.619	*	
Carbon disulfide	.31189	.36735	.36467	.44717	.42423	.481	.38306	13.970		
Methylene Chloride	.64052	.52055	.49254	.52358	.47879	.560	.53120	12.040		
trans-1,2-Dichloroethene	.54092	.55715	.55308	.63501	.55714	.608	.56866	6.627		
1,1-Dichloroethane	.69343	.68992	.70939	.81101	.74675	.727	.73010	6.920		**
Vinyl acetate	.42560	.39950	.45152	.50730	.49494	.752	.45577	9.985		
2,2-Dichloropropane	.41722	.42551	.45692	.46596	.43182	.857	.43949	4.766		
2-Butanone	.11801	.10258	.12035	.14144	.11459	.890	.11939	11.803		
cis-1,2-dichloroethene	.70142	.69732	.70914	.81161	.72661	.868	.72922	6.501		
Chloroform	.95062	.89160	.91250	1.04055	.95531	.945	.95011	6.011	*	
Bromochloromethane	.37301	.39007	.41097	.47532	.43739	.919	.41735	9.669		
1,1,1-Trichloroethane	.64933	.66066	.69300	.77957	.73352	.963	.70322	7.647		
T-butyl alcohol	.02435	.02056	.02375	.02845	.02579	.622	.02458	11.744		
1,2-Dichloroethane-d4	.30485	.31312	.31166	.35781	.31857	.920	.32120	6.551		
1,1-Dichloropropene	.86892	.70317	.55645	.57192	.47427	.875	.63495	24.316		
Carbon Tetrachloride	.38206	.46554	.57370	.60226	.50124	.865	.50496	17.396		
1,2-Dichloroethane	.35203	.35922	.35921	.39945	.35525	.936	.36503	5.335		
Benzene	.91781	.93069	.86499	.96667	.82771	.911	.90157	6.111		
Trichloroethene	.43891	.45615	.45849	.49966	.42627	1.035	.45590	6.095		
1,2-Dichloropropane	.37059	.36448	.37216	.41573	.36183	1.083	.37696	5.859	*	
Bromodichloromethane	.62639	.67761	.67925	.78204	.69503	1.135	.69206	8.171		

(Conc=50.0,100.0,250.0,50
(Conc=50.0,100.0,250.0,50
(Conc=100.0,200.0,500.0,1

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 (**)

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Initial Calibration Data
HSL Compounds

Case No: Instrument ID: HP5970BA

Contractor: Accredited Labs Calibration Date: 12/08/99

Contract No: CAAS06

Minimum $\overline{RF}$ for SPCC is 0.1 Maximum % RSD for CCC is 20%

Laboratory ID:	>A5124	>A5123	>A5127	>A5125	>A5126						
Compound	RF 10.00	RF 20.00	RF 50.00	RF 100.00	RF 200.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CCC	SPCC	
Dibromomethane	.32457	.36403	.32302	.36572	.31485	1.103	.33844	7.217			
2-Chloroethylvinylether	.13541	.14885	.15779	.18925	.17103	1.196	.16047	12.885			
cis-1,3-dichloropropene	.52620	.55938	.56564	.63850	.57162	1.215	.57227	7.162			(Conc=9.45,18.9,47.3,94.5
Toluene-d8	.93383	.96255	.94462	1.02102	.86684	1.247	.94577	5.868			
Toluene	1.04024	1.06936	1.02881	1.09041	.94443	1.257	1.03465	5.407	*		
trans-1,3-Dichloropropene	.36428	.39623	.40902	.47536	.42298	1.317	.41358	9.864			(Conc=10.5,21.1,52.8,105.
1,1,2-Trichloroethane	.31282	.31767	.30678	.31968	.25636	1.346	.30266	8.709			
4-Methyl-2-pentanone	.26548	.24603	.25832	.26627	.21588	1.247	.25040	8.359			
1,2-Dibromoethane	.54242	.56131	.54492	.60168	.50441	1.420	.55095	6.389			
Bromofluorobenzene	.70006	.72572	.70195	.72345	.59891	1.708	.69002	7.578			
2-Hexanone	.21670	.19457	.22798	.21185	.18718	.929	.20766	7.997			
1,3-dichloropropane	.69276	.66362	.66421	.75893	.67620	.917	.69115	5.744			
Tetrachloroethene	.57436	.61760	.56259	.62941	.52036	.897	.58087	7.575			
Dibromochloromethane	.63505	.69115	.73157	.85453	.76213	.938	.73488	11.169			
Ethylbenzene	1.64343	1.60701	1.53204	1.59344	1.32252	1.015	1.53969	8.305	*		
Chlorobenzene	1.06726	1.05364	1.03340	1.13025	.98033	1.004	1.05298	5.166		**	
1,1,1,2-Tetrachloroethane	.51510	.53570	.53667	.58716	.49943	1.017	.53481	6.191			
m,p-Xylene	1.34601	1.34149	1.23462	1.30419	1.11332	1.030	1.26793	7.671			(Conc=20.0,40.0,100.0,200
o-Xylene	1.35129	1.33700	1.24682	1.28613	1.09012	1.075	1.26227	8.304			(Conc=20.0,40.0,100.0,200
Styrene	.92663	.94577	.93215	.94478	.78199	1.079	.90626	7.719			(Conc=20.0,40.0,100.0,200
Bromoform	.41570	.48574	.50809	.57924	.53553	1.101	.50486	12.048		**	
Isopropylbenzene	2.84852	2.76842	2.67785	3.10642	2.57548	.877	2.79534	7.210			
1,1,2,2-Tetrachloroethane	1.24544	1.19107	1.14296	1.36269	1.04601	.914	1.19763	9.840		**	
1,2,3-Trichloropropane	.28360	.27485	.26926	.32584	.26766	.917	.28424	8.470			
n-Propyl benzene	3.73828	3.56654	3.26274	3.61277	2.93644	.915	3.42336	9.448			
Bromobenzene	1.94518	1.86818	1.74956	2.02103	1.66787	.905	1.85036	7.733			
1,3,5-Trimethylbenzene	2.42344	2.31677	2.21456	2.46644	2.02451	.933	2.28914	7.748			
2-Chlorotoluene	2.58727	2.48869	2.39182	2.71227	2.27526	.924	2.49106	6.795			
4-Chlorotoluene	2.92319	2.72390	2.53197	2.89018	2.33099	.935	2.68005	9.309			
tert-Butylbenzene	2.44527	2.41807	2.30480	2.64533	2.26759	.961	2.41621	6.133			

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 (**)

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700177

Initial Calibration Data
HSL Compounds

Case No: Instrument ID: HP5970BA

Contractor: Accredited Labs Calibration Date: 12/08/99

Contract No: CAAS06

Minimum $\overline{RF}$ for SPCC is 0.1 Maximum % RSD for CCC is 20%

Laboratory ID:	>A5124	>A5123	>A5127	>A5125	>A5126					
	RF	RF	RF	RF	RF					
Compound	10.00	20.00	50.00	100.00	200.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CCC	SPCC
1,2,4-Trimethylbenzene	2.48373	2.37080	2.33854	2.63257	2.23609	.967	2.41234	6.281		
sec-Butylbenzene	3.55663	3.40921	3.25677	3.68481	3.16466	.982	3.41442	6.223		
p-Isopropyltoluene	2.77426	2.72300	2.63196	2.86204	2.39246	.996	2.67674	6.704		
1,3-Dichlorobenzene	1.61076	1.59773	1.52719	1.70023	1.45171	.993	1.57753	5.924		
1,4-Dichlorobenzene	1.67024	1.60115	1.50280	1.76147	1.43051	1.003	1.59323	8.241		
n-Butylbenzene	3.00439	2.92469	2.76728	3.06329	2.51417	1.035	2.85477	7.723		
1,2-Dichlorobenzene	1.55775	1.52721	1.48401	1.60309	1.36510	1.036	1.50743	6.015		
1,2-Dibromo-3-Chloropropane	.20612	.22803	.24144	.32821	.31274	1.113	.26331	20.495		
1,2,4-Trichlorobenzene	1.07365	1.17648	1.07571	1.28870	1.17980	1.187	1.15887	7.692		
Hexachlorobutadiene	.67561	.72996	.67252	.75224	.67357	1.199	.70078	5.373		
Naphthalene	1.84141	2.03871	1.83635	2.36052	2.06925	1.210	2.02925	10.567		
1,2,3-Trichlorobenzene	.95629	1.08442	.91395	1.18582	1.03137	1.233	1.03437	10.373		
Methyl t-butyl ether	.71344	.64342	.60702	.73057	.62548	.282	.66399	8.259		(Conc=100.0,200.0,500.0,1

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 (**)

ACCREDITED LABORATORIES, INC.
WATER/SOIL VOLATILE SURROGATE RECOVERY

	ALI Sample No.	Mtx	S1 (DCE-d4)	S2 (TOL-d8)	S3 (BFB)	TOTAL OUT
1	VBLKA15	W	106	100	108	0
2	9912994	W	76	103	92	0
3	9912995	W	104	101	108	0
4	9912996	W	77	103	94	0
5	9912996MS	W	91	100	103	0

EPA CLP QC Limits for:	WATER	SOIL
S1 (DCE-d4) = 1,2-Dichloroethane-d4	(76-114)	(70-121)
S2 (TOL-d8) = Toluene-d8	(88-110)	(81-117)
S3 (BFB) = Bromofluorobenzene	(86-115)	(74-121)

* Values outside of EPA contract laboratory QC limits

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ACCREDITED LABORATORIES, Contract:

Lab Code: _____ Case No.: SAS No.: _____ SDG No.:

Lab File ID (Standard): >A5127 Date Analyzed: 12/08/99

Instrument ID: HP5970BA Time Analyzed: 16:15

GC Column: RTX-502 ID: 0.53 (mm) Heated Purge: (Y/N) Y

		IS1(DFB) AREA #	RT #	IS2(CBZ) AREA #	RT #	IS3(PFB) AREA #	RT #
	12 HOUR STD	195464	14.16	156379	21.20	151810	12.39
	UPPER LIMIT	390928	14.66	312758	21.70	303620	12.89
	LOWER LIMIT	97732	13.66	78190	20.70	75905	11.89
	LAB SAMPLE NO.						
01	VBLKA15	146467	14.16	125958	21.19	106973	12.39
02	9912994	170972	14.21	136547	21.24	153776	12.43
03	9912995	126767	14.21	110528	21.24	96625	12.43
04	9912996	125282	14.21	102682	21.24	108390	12.43
05	9912996MS	137016	14.16	114473	21.24	114865	12.44
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 (DFB) = 1,4-Difluorobenzene
IS2 (CBZ) = Chlorobenzene-d5
IS3 (PFB) = Pentafluorobenzene
IS4 (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.

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8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ACCREDITED LABORATORIES, Contract:

Lab Code: _____ Case No.: SAS No.: _____ SDG No.:

Lab File ID (Standard): >A5127 Date Analyzed: 12/08/99

Instrument ID: HP5970BA Time Analyzed: 16:15

GC Column: RTX-502 ID: 0.53 (mm) Heated Purge: (Y/N) Y

		IS4(DCB) AREA #	RT #				
	12 HOUR STD	97995	27.01				
	UPPER LIMIT	195990	27.51				
	LOWER LIMIT	48998	26.51				
	LAB SAMPLE NO.						
01	VBLKA15	79631	27.05				
02	9912994	75307	27.05				
03	9912995	54311	27.06				
04	9912996	57297	27.05				
05	9912996MS	68800	27.06				
06							
07							
08							
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17							
18							
19							
20							
21							
22							

IS1 (DFB) = 1,4-Difluorobenzene
IS2 (CBZ) = Chlorobenzene-d5
IS3 (PFB) = Pentafluorobenzene
IS4 (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.

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ACCREDITED LABORATORIES, INC.
TCLP VOLATILE MATRIX SPIKE RECOVERY

Matrix Spike Sample No.: 9912996

Date Analyzed: 12/08/99

Data File: >A5131

COMPOUND	SPIKE ADDED (mg/l)	SAMPLE CONCENTRATION (mg/l)	MS CONCENTRATION (mg/l)	MS % REC
Benzene	.050	.000	.048	97
2-Butanone	.100	.000	.075	75
Carbon Tetrachloride	.050	.000	.051	102
Chlorobenzene	.050	.000	.047	94
Chloroform	.050	.000	.042	84
1,1-Dichloroethene	.050	.000	.047	94
1,2-Dichloroethane	.050	.000	.045	90
Tetrachloroethene	.050	.000	.049	97
Trichloroethene	.050	.000	.046	92
Vinyl Chloride	.050	.000	.050	100

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ACCREDITED LABORATORIES, INC.
TCLP VOLATILES ANALYSIS DATA

CASE NUMBER		MATRIX	Leachate
SAMPLE NUMBER	VBLKA15	DILUTION FACTOR	1
DATA FILE	>A5129	DATE EXTRACTED	
CLIENT NAME		DATE ANALYZED	12/08/99
FIELD ID		ANALYZED BY	ROBERT

CAS No.	Compound	Result (mg/l)	MDL (mg/l)	Regulatory Level (mg/l)
71432	Benzene	U	.005	0.5
78933	2-Butanone	U	.010	200.0
56235	Carbon Tetrachloride	U	.005	0.5
108907	Chlorobenzene	U	.005	100.0
67663	Chloroform	U	.005	6.0
75354	1,1-Dichloroethene	U	.005	0.7
107062	1,2-Dichloroethane	U	.005	0.5
127184	Tetrachloroethene	U	.005	0.7
79016	Trichloroethene	U	.005	0.5
75014	Vinyl Chloride	U	.010	0.2

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
1,2-Dichloroethane-d4	106 %	76 - 114	OK
Toluene-d8	100 %	88 - 110	OK
Bromofluorobenzene	108 %	86 - 115	OK

(U) Indicates compound was analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.

* 2-Butanone = Methyl ethyl ketone

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4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

Lab Name: ACCREDITED LABS, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Lab File ID: >A5129 Lab Sample ID: VBLKA15

Date Analyzed: 12/08/99 Time Analyzed: 17:41

GC Column: RTX-502 ID: 0.53(mm) Heated Purge: (Y/N) Y

Instrument ID: HP5970A

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01		9912994	>A5132	19:43
02		9912995	>A5134	21:04
03		9912996	>A5133	20:23
04		9912996MS	>A5131	19:02
05				
06				
07				
08				
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30				

COMMENTS:

5H

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: ACCREDITED LABORATORIES, INC. Contract: _____

Lab File ID: >F9810 DFTPP Injection Date: 12/09/99

Instrument ID: HP5970BF DFTPP Injection Time: 10:49

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	45.4
68	Less than 2.0% of mass 69	0.0(0.0)1
69	Mass 69 relative abundance	55.5
70	Less than 2.0% of mass 69	.9(.5)1
127	40.0 - 60.0% of mass 198	43.2
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% Relative abundance	100.
199	5.0 - 9.0% of mass 198	6.7
275	10.0 - 30.0% of mass 198	21.9
365	Greater than 1.00% of mass 198	2.34
441	Present, but less than mass 443	0.0
442	Greater than 40.0% of mass 198	70.8
443	17.0 - 23.0% of mass 442	13.8(19.4)2

1-Value is % mass 69 2-Value is % mass 442

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		SSTD050	>F9811	12/09/99	11:05
02		SSTD160	>F9812	12/09/99	11:50
03		SSTD020	>F9813	12/09/99	12:36
04		SSTD080	>F9814	12/09/99	13:22
05		SSTD120	>F9815	12/09/99	14:08
06		SBLK98	>F9816	12/09/99	15:06
07		SBLK99	>F9817	12/09/99	15:51
08		SBLK99MS	>F9818	12/09/99	16:36
09		SBLK98MS	>F9819	12/09/99	17:21
10		SBLK98MSD	>F9820	12/09/99	18:06
11		9913211MS	>F9821	12/09/99	18:52
12		9912994	>F9822	12/09/99	19:37
13		9912996	>F9823	12/09/99	20:22
14		9913211	>F9824	12/09/99	21:07
15		9913208	>F9825	12/09/99	21:52
16		9912995	>F9826	12/09/99	22:37
17		9913085	>F9827	12/09/99	23:22
18		9913085DL	>F9828	12/10/99	00:08
19					
20					
21					
22					

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FORM V SV

700185

5B

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: ACCREDITED LABORATORIES, INC. Contract: _____

Lab File ID: >F9828 DFTPP Injection Date: 12/10/99

Instrument ID: HP5970BF DFTPP Injection Time: 10:52

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	48.3
68	Less than 2.0% of mass 69	0.0(0.0)1
69	Mass 69 relative abundance	56.5
70	Less than 2.0% of mass 69	.4(.7)1
127	40.0 - 60.0% of mass 198	43.7
197	Less than 1.0% of mass 198	0.0
198	*Base Peak, 100% Relative abundance*	100.
199	5.0 - 9.0% of mass 198	6.8
275	10.0 - 30.0% of mass 198	19.5
365	Greater than 1.00% of mass 198	1.90
441	Present, but less than mass 443	8.5
442	Greater than 40.0% of mass 198	52.2
443	17.0 - 23.0% of mass 442	9.6(18.4)2

1-Value is % mass 69 2-Value is % mass 442

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		SSTD050	>F9829	12/10/99	11:08
02		9913208	>F9830	12/10/99	11:53
03		9913206	>F9831	12/10/99	12:39
04		9912995DL	>F9832	12/10/99	13:25
05		SBLK03	>F9833	12/10/99	14:14
06		SBLK02	>F9834	12/10/99	14:59
07		9913343	>F9835	12/10/99	15:45
08		9913344	>F9836	12/10/99	16:30
09		9913348	>F9837	12/10/99	17:16
10		9913354	>F9838	12/10/99	18:01
11		9913356	>F9839	12/10/99	18:47
12		9913357	>F9840	12/10/99	19:32
13		9913358	>F9841	12/10/99	20:17
14		9913359	>F9842	12/10/99	21:03
15		9913360	>F9843	12/10/99	21:48
16		9913361	>F9844	12/10/99	22:33
17					
18					
19					
20					
21					
22					

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FORM V SV

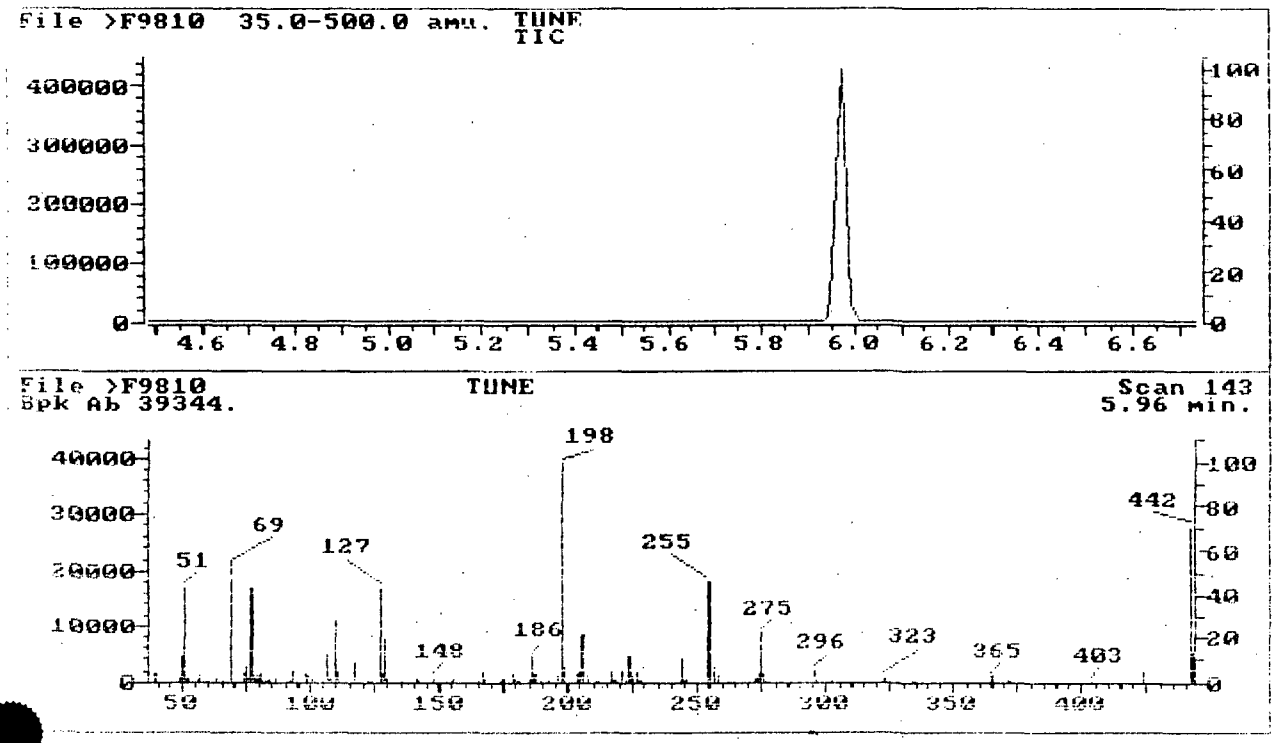
700186

GC/MS PERFORMANCE STANDARD

Decafluorotriphenylphospine (DFTPP)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	Appropriate Peak	Status
51	30-60% of mass 198	43.39	43.39	Ok
68	Less than 2% of mass 69	0.00	0.00	Ok
69	(reference only)	53.54	53.54	Ok
70	Less than 2% of mass 69	.26	.48	Ok
127	40-60% of mass 198	43.19	43.19	Ok
197	Less than 1% of mass 198	0.00	0.00	Ok
198	Base peak, 100% relative abundance	100.00	100.00	Ok
199	5-9% of mass 198	6.74	6.74	Ok
275	10-30% of mass 198	21.93	21.93	Ok
365	Greater than 1% of mass 198	2.34	2.34	Ok
441	Less than mass 443	0.00	0.00	Ok
442	Greater than 40% of mass 198	70.80	70.80	Ok
443	17-23% of mass 442	13.76	19.43	Ok

Injection Date: 12/09/99
Injection Time: 10:49
Data File: >F9810
Scan: 143



700187

File: >F9810 Scan #: 143 Retn. time: 5.96

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
36.80	91.0	99.00	1086.0	155.00	502.0	204.95	1916.0	274.05	1481.0
38.00	245.0	99.90	95.0	156.00	623.0	206.05	8237.0	275.05	8627.0
39.10	1455.0	101.00	659.0	157.00	151.0	207.05	1097.0	276.05	1242.0
40.00	94.0	103.10	186.0	158.00	142.0	207.95	265.0	276.95	727.0
44.05	242.0	104.00	398.0	159.00	130.0	209.05	92.0	283.05	72.0
47.05	210.0	105.00	386.0	160.00	234.0	210.95	337.0	284.95	130.0
49.05	904.0	106.00	162.0	161.00	343.0	215.05	118.0	293.00	135.0
50.05	4309.0	106.95	4903.0	165.00	305.0	216.05	154.0	296.00	2244.0
51.05	17072.1	108.05	728.0	166.00	246.0	216.95	2226.0	297.00	301.0
52.05	878.0	109.95	10982.0	167.00	1610.0	217.95	297.0	302.95	255.0
55.05	82.0	110.95	1581.0	168.00	680.0	221.00	2335.0	314.05	151.0
56.05	546.0	112.05	197.0	169.10	154.0	223.00	522.0	315.05	234.0
57.05	1199.0	116.05	231.0	171.00	104.0	224.00	4529.0	316.05	182.0
61.00	201.0	117.05	3362.0	171.95	145.0	225.00	1215.0	320.90	76.0
62.00	240.0	118.05	308.0	172.95	200.0	226.00	111.0	323.10	774.0
63.00	687.0	119.95	53.0	173.95	413.0	227.00	1889.0	324.00	166.0
64.00	82.0	122.05	283.0	175.05	616.0	228.00	264.0	326.90	122.0
65.00	278.0	123.00	536.0	176.05	228.0	229.00	395.0	328.00	87.0
69.00	21064.1	124.00	280.0	176.95	329.0	231.00	184.0	333.00	74.0
70.00	101.0	125.00	223.0	178.05	120.0	234.00	123.0	334.05	423.0
73.10	143.0	127.00	16992.0	178.95	1271.0	235.00	140.0	335.05	123.0
74.05	1436.0	128.00	1352.0	179.95	848.0	236.00	64.0	341.05	77.0
74.95	2703.0	129.00	7668.0	180.95	361.0	236.95	142.0	346.05	170.0
76.05	870.0	130.00	644.0	184.15	109.0	239.95	61.0	352.00	246.0
77.05	16888.0	131.00	118.0	185.05	652.0	240.95	100.0	353.00	166.0
78.05	1131.0	134.00	214.0	186.05	4683.0	241.95	222.0	354.00	231.0
79.05	1039.0	135.00	563.0	187.05	1364.0	243.05	259.0	365.00	921.0
80.05	931.0	136.00	177.0	188.00	112.0	244.05	4040.0	366.00	147.0
81.05	1324.0	137.10	216.0	189.00	266.0	245.05	555.0	372.05	427.0
82.05	300.0	139.85	72.0	191.00	144.0	245.95	749.0	373.05	118.0
83.05	289.0	140.95	787.0	192.00	413.0	246.95	106.0	383.00	95.0
84.05	728.0	142.05	295.0	193.00	407.0	249.05	147.0	390.10	65.0
85.05	245.0	142.95	225.0	194.00	122.0	252.90	77.0	402.05	163.0
86.05	679.0	146.05	141.0	195.10	102.0	255.00	17904.1	402.95	252.0
86.95	137.0	147.05	440.0	196.00	1137.0	256.00	2754.0	403.95	96.0
88.05	131.0	147.95	887.0	198.00	39344.1	257.00	186.0	421.00	249.0
91.00	309.0	149.05	182.0	199.00	2651.0	258.00	1004.0	423.10	1587.0
92.00	327.0	151.15	119.0	200.10	166.0	259.00	177.0	424.00	286.0
93.00	1867.0	151.75	68.0	201.50	218.0	265.00	402.0	442.05	27856.1
94.00	119.0	153.05	290.0	203.00	230.0	266.00	69.0	443.05	5413.0
98.00	1283.0	154.05	212.0	204.05	1238.0	273.05	593.0	444.05	495.0

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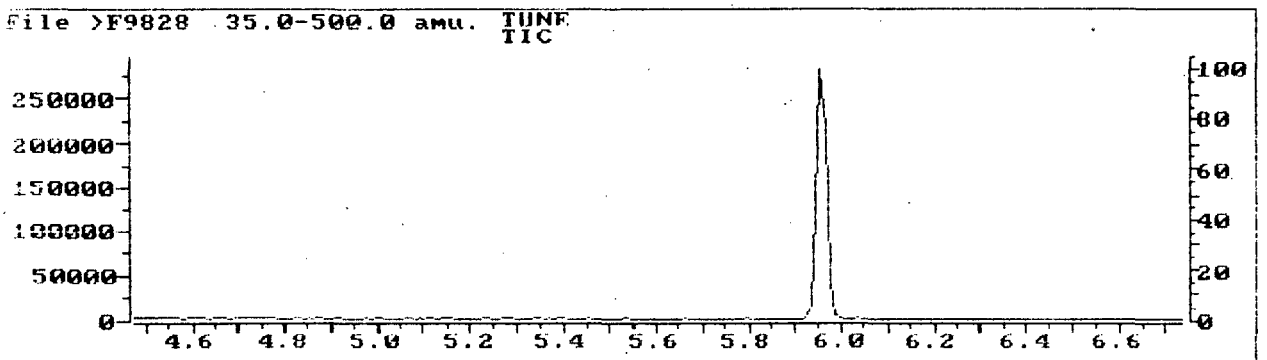
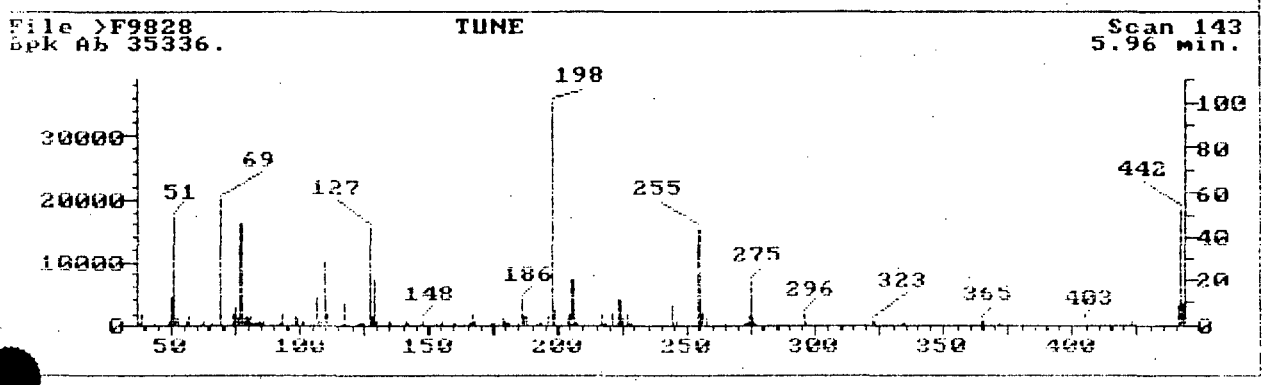
GC/MS PERFORMANCE STANDARD

Decafluorotriphenylphospine (DFTPP)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
51	30-60% of mass 198	48.29	48.29	Ok
68	Less than 2% of mass 69	0.00	0.00	Ok
69	(reference only)	56.46	56.46	Ok
70	Less than 2% of mass 69	.38	.68	Ok
127	40-60% of mass 198	43.66	43.66	Ok
197	Less than 1% of mass 198	0.00	0.00	Ok
198	Base peak, 100% relative abundance	100.00	100.00	Ok
199	5-9% of mass 198	6.76	6.76	Ok
275	10-30% of mass 198	19.46	19.46	Ok
365	Greater than 1% of mass 198	1.90	1.90	Ok
441	Less than mass 443	8.82	91.81	Ok
442	Greater than 40% of mass 198	52.16	52.16	Ok
443	17-23% of mass 442	9.61	18.42	Ok

Injection Date: 12/10/99
Injection Time: 10:52
Data File: >F9828
Scan: 143





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700189

File: >F9828 Scan #: 143 Retn. time: 5.96

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
37.00	92.0	94.00	153.0	151.45	65.0	203.10	203.0	271.95	51.0
38.00	230.0	98.00	1257.0	153.05	283.0	204.05	1072.0	272.95	488.0
39.10	1532.0	99.00	1111.0	153.95	203.0	205.05	1736.0	274.05	1190.0
40.00	114.0	100.00	101.0	155.00	424.0	206.05	7315.0	275.05	6876.0
43.95	242.0	101.00	661.0	156.00	645.0	207.05	933.0	276.05	909.0
46.95	180.0	103.00	176.0	157.00	150.0	207.95	262.0	276.95	514.0
48.05	96.0	104.00	427.0	158.00	126.0	210.95	292.0	283.05	86.0
49.05	745.0	105.10	400.0	158.90	123.0	211.75	90.0	285.10	80.0
50.05	4546.0	106.95	4473.0	160.00	244.0	214.95	71.0	296.00	1679.0
51.05	17064.0	107.95	706.0	161.00	392.0	216.05	153.0	297.00	240.0
52.05	903.0	109.95	10195.0	165.00	268.0	216.95	1907.0	302.95	178.0
55.95	524.0	110.95	1441.0	166.00	248.0	217.95	271.0	303.95	66.0
57.05	1230.0	111.95	160.0	167.00	1437.0	221.00	2032.0	315.05	183.0
61.00	192.0	112.95	65.0	168.00	665.0	223.00	442.0	316.05	100.0
62.00	246.0	116.05	271.0	169.00	107.0	224.00	3817.0	323.00	564.0
63.00	716.0	116.95	3200.0	171.95	154.0	225.00	1032.0	324.10	131.0
64.00	100.0	118.05	246.0	172.95	173.0	227.00	1683.0	327.00	105.0
65.10	327.0	122.05	275.0	174.05	321.0	228.00	258.0	333.95	333.0
69.00	19952.1	123.00	452.0	175.05	496.0	229.00	337.0	345.95	108.0
70.00	136.0	124.00	230.0	175.95	168.0	231.00	132.0	352.00	180.0
73.10	127.0	125.00	234.0	177.05	268.0	235.10	97.0	353.00	87.0
74.05	1564.0	177.00	15426.0	177.95	118.0	236.00	74.0	354.10	223.0
74.95	2612.0	128.00	1193.0	178.95	1086.0	237.05	101.0	365.00	670.0
76.05	931.0	129.00	7053.0	180.05	679.0	239.95	46.0	366.00	118.0
77.05	16052.0	130.00	594.0	181.05	407.0	241.05	81.0	372.05	270.0
78.05	1021.0	134.00	196.0	185.05	514.0	242.05	196.0	373.05	74.0
79.05	1170.0	135.00	543.0	186.05	4042.0	243.05	202.0	383.00	85.0
80.05	835.0	136.00	246.0	187.05	1209.0	244.05	3177.0	401.95	94.0
81.05	1177.0	137.10	238.0	188.00	129.0	245.05	425.0	403.05	170.0
82.05	315.0	139.85	50.0	188.90	209.0	245.95	615.0	421.10	139.0
83.05	272.0	140.95	767.0	191.00	119.0	247.05	101.0	422.10	138.0
84.05	556.0	142.05	226.0	192.00	327.0	248.95	105.0	423.00	942.0
85.05	225.0	142.95	188.0	193.00	347.0	253.00	89.0	424.10	243.0
85.95	653.0	145.95	145.0	194.10	65.0	255.00	15250.0	441.05	2995.0
87.05	144.0	147.05	432.0	196.00	1127.0	256.00	2114.0	441.35	3118.0
88.05	117.0	148.05	801.0	198.00	35336.1	257.00	158.0	442.05	18432.1
91.00	245.0	149.05	176.0	199.00	2389.0	258.00	845.0	443.05	3396.0
92.00	247.0	150.05	48.0	200.00	183.0	259.00	114.0	444.05	334.0
93.00	1848.0	151.05	74.0	201.60	163.0	265.00	322.0		

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HSL Compounds

Case No: Instrument ID: HP5890BF

Contractor: Accredited Labs Calibration Date: 12/09/99

Contract No: CALF01

Minimum $\overline{RF}$ for SPCC is 0.05 Maximum % RSD for CCC is 30%

Laboratory ID:	>F9813	>F9811	>F9814	>F9815	>F9812					
	RF	RF	RF	RF	RF					
Compound	20.00	50.00	80.00	120.00	160.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CCC	SPCC
Pyridine	.82324	1.01702	.89126	1.25645	1.21490	.385	1.04057	18.428		
N-Nitrosodimethylamine	.91877	.90265	.90010	.93984	.85482	.392	.90324	3.473		
2-Fluorophenol	1.36589	1.44071	1.40134	1.46603	1.33169	.714	1.40113	3.884		
Aniline	2.48556	2.29125	2.41084	2.46713	2.44925	.939	2.42081	3.202		
Phenol-d5	2.12479	2.06373	2.12612	2.10704	2.05259	.946	2.09485	1.650		
Phenol	2.04731	1.93703	2.20556	1.99888	1.81012	.949	1.99978	7.268	*	
bis(-2-Chloroethyl)Ether	1.63138	1.45039	1.41889	1.22793	1.21899	.958	1.38952	12.374		
2-Chlorophenol	1.54707	1.44621	1.47035	1.38730	1.33443	.961	1.43707	5.643		
1,3-Dichlorobenzene	1.51617	1.38256	1.36209	1.23940	1.18132	.990	1.33631	9.798		
1,4-Dichlorobenzene	1.54972	1.40964	1.37362	1.24634	1.18541	1.004	1.35294	10.569	*	
Benzyl Alcohol	.98116	.93947	.98963	1.06897	.98506	1.052	.99286	4.738		
1,2-Dichlorobenzene	1.44868	1.23940	1.21676	1.17456	1.11005	1.049	1.23789	10.316		
2-Methylphenol	1.57250	1.45281	1.41890	1.37693	1.25353	1.086	1.41493	8.195		
bis(2-Chloroisopropyl)ether	2.38585	2.21019	2.28123	2.23667	2.19951	1.086	2.26269	3.347		
3&4-Methylphenol	1.66049	1.52836	1.39754	1.49613	1.45090	1.124	1.50668	6.575		
N-Nitroso-Di-n-propylamine	1.35952	1.21398	1.36341	1.34660	1.29121	1.126	1.31494	4.824		**
Hexachloroethane	.56396	.54168	.55852	.53371	.50623	1.120	.54082	4.233		
Nitrobenzene-d5	.46012	.44410	.46331	.47523	.46164	.874	.46088	2.412		
Nitrobenzene	.48300	.46954	.47268	.46522	.43450	.878	.46499	3.927		
Isophorone	1.01563	.94661	1.00568	1.04550	1.03327	.925	1.00934	3.795		
2-Nitrophenol	.23665	.24103	.24098	.23663	.23519	.937	.23809	1.143	*	
2,4-Dimethylphenol	.37353	.34690	.33911	.33962	.33048	.954	.34593	4.767		
Benzoic Acid	.19689	.24325	.21515	.23227	.19953	.996	.21742	9.297		
bis(-2-Chloroethoxy)Methane	.54026	.51272	.51729	.51275	.47473	.970	.51155	4.601		
2,4-Dichlorophenol	.33178	.31827	.30808	.29765	.29049	.982	.30925	5.306	*	
1,2,4-Trichlorobenzene	.31948	.29937	.28761	.27347	.25957	.994	.28790	8.033		
Naphthalene	1.12315	1.04952	1.01177	.89561	.86872	1.004	.98975	10.760		
4-Chloroaniline	.51160	.45873	.42902	.40203	.41347	1.025	.44297	9.904		
Hexachlorobutadiene	.15686	.14493	.13836	.13438	.12700	1.040	.14030	8.060	*	
4-Chloro-3-methylphenol	.44970	.42373	.41006	.43164	.41908	1.121	.42684	3.509	*	

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 (**)

Case No: Instrument ID: HP5890BF

Contractor: Accredited Labs Calibration Date: 12/09/99

Contract No: CALF01

Minimum $\overline{RF}$ for SPCC is 0.05 Maximum % RSD for CCC is 30%

Laboratory ID:	>F9813	>F9811	>F9814	>F9815	>F9812					
Compound	RF 20.00	RF 50.00	RF 80.00	RF 120.00	RF 160.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CCC	SPCC
2-Methylnaphthalene	.79778	.69728	.65666	.66812	.63727	1.135	.69142	9.156		
Hexachlorocyclopentadiene	.21198	.25686	.24844	.23955	.22431	.882	.23623	7.677		**
2,4,6-Trichlorophenol	.40352	.38689	.36956	.34610	.31569	.897	.36435	9.478	*	
2,4,5-Trichlorophenol	.44263	.43154	.41016	.38674	.34932	.902	.40408	9.240		
2-Chloronaphthalene	1.19790	1.09525	1.05802	.95145	.88938	.919	1.03840	11.679		
2-Fluorobiphenyl	1.30342	1.15628	1.07346	1.04130	.93485	.908	1.10186	12.506		
2-Nitroaniline	.56991	.55430	.58175	.57897	.59088	.943	.57516	2.409		
Dimethyl Phthalate	1.60101	1.43315	1.45345	1.26893	1.13905	.976	1.37912	12.943		
Acenaphthylene	2.08788	1.83931	1.73052	1.55203	1.36874	.978	1.71570	15.994		
3-Nitroaniline	.42434	.43064	.43501	.37161	.34016	1.004	.40035	10.555		
Acenaphthene	1.31932	1.14826	1.04349	.93557	.84718	1.006	1.05876	17.421	*	
2,4-Dinitrophenol	.18035	.22918	.26247	.27695	.27070	1.018	.24393	16.412		**
4-Nitrophenol	.26914	.26498	.29173	.29274	.27316	1.032	.27835	4.672		**
Dibenzofuran	1.82839	1.64945	1.54655	1.45204	1.34371	1.028	1.56403	11.900		
2,6-Dinitrotoluene	.37999	.37731	.37897	.36036	.33157	.985	.36564	5.652		
2,4-Dinitrotoluene	.57284	.56889	.58682	.55676	.54369	1.040	.56580	2.892		
Diethylphthalate	1.69272	1.46443	1.32254	1.03839	.82835	1.076	1.26929	26.947		
4-Chlorophenyl-phenylether	.61121	.55924	.51293	.42911	.37622	1.079	.49774	19.156		
Fluorene	1.41340	1.14000	1.01242	.79797	.72787	1.077	1.01833	27.065		
4-Nitroaniline	.48464	.47310	.51307	.47702	.42626	1.095	.47482	6.598		
2,4,6-Tribromophenol	.19915	.20170	.20011	.18168	.17870	1.114	.19227	5.780		
4,6-Dinitro-2-methylphenol	.17057	.18737	.17709	.12488	.11369	.909	.15472	21.414		
N-Nitrosodiphenylamine	.58022	.49839	.43468	.37190	.28834	.910	.43470	25.873	*	
Azobenzene	1.07079	1.07841	1.01991	.86388	.81539	.912	.96968	12.585		
4-Bromophenyl-phenylether	.18784	.17789	.16638	.15583	.14899	.949	.16739	9.454		
Hexachlorobenzene	.20790	.19575	.18823	.17748	.16950	.965	.18777	8.027		
Pentachlorophenol	.15675	.15244	.14889	.14657	.14328	.988	.14959	3.488	*	
Phenanthrene	1.15378	1.07779	.99099	.90592	.87094	1.003	.99988	11.758		
Anthracene	1.17555	1.04908	1.00523	.88593	.87352	1.008	.99786	12.501		
Di-n-Butylphthalate	1.75852	1.60279	1.52088	1.24422	1.13055	1.080	1.45139	17.832		

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 (**)

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HSL Compounds

Case No: Instrument ID: HP5890BF

Contractor: Accredited Labs Calibration Date: 12/09/99

Contract No: CALF01

Minimum $\overline{RF}$ for SPCC is 0.05 Maximum % RSD for CCC is 30%

Laboratory ID:	>F9813	>F9811	>F9814	>F9815	>F9812					
	RF	RF	RF	RF	RF					
Compound	20.00	50.00	80.00	120.00	160.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CCC	SPCC
Fluoranthene	1.30358	1.16886	1.10291	1.01149	.94369	1.143	1.10611	12.647	*	
Benzidine	.57933	.42585	.57428	.65009	.66181	.886	.57827	16.265		
Pyrene	1.45645	1.37678	1.40197	1.61979	1.56186	.891	1.48337	7.029		
Terphenyl-d14	.82210	.78501	.80028	.94116	.88898	.907	.84750	7.754		
Butylbenzylphthalate	.90414	.87086	.93890	1.04253	1.03741	.956	.95877	8.131		
3,3'-Dichlorobenzidine	.35241	.30504	.38788	.42981	.46022	1.000	.38707	15.878		
Benzo(a)Anthracene	1.30782	1.22738	1.32334	1.49082	1.50082	.998	1.37004	8.796		
Bis(2-Ethylhexyl)Phthalate	1.31161	1.19932	1.28521	1.37453	1.38412	1.009	1.31096	5.724		
Chrysene	1.24857	1.21588	1.32889	1.39782	1.35512	1.003	1.30926	5.758		
Di-n-octyl phthalate	2.16076	1.96277	1.81710	1.73528	1.57973	.947	1.85113	11.975	*	
Benzo(b)fluoranthene	1.44832	1.51754	1.34713	1.25589	1.16439	.974	1.34666	10.567		
Benzo(k)Fluoranthene	1.14143	.96160	1.11144	.94063	.92962	.976	1.01694	9.948		
Benzo(a)Pyrene	1.24376	1.20941	1.20292	1.12017	1.08849	.996	1.17295	5.584	*	
Indeno(1,2,3-cd)Pyrene	1.46138	1.33924	1.31373	1.11950	1.01558	1.069	1.24989	14.351		
Dibenzo(a,h)Anthracene	1.18291	1.05794	1.01534	.91542	.83985	1.070	1.00229	13.182		
Benzo(g,h,i)Perylene	1.27274	1.18945	1.18004	.99588	.92464	1.087	1.11255	13.107		

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 (**)

HSL Compounds

Case No: | Calibration Date: 12/10/99

Contractor: Accredited Labs | Time: 11:08

Contract No: CALF01 | Laboratory ID: >F9829

Instrument ID: HP5890BF | Initial Calibration Date: 12/09/99

Minimum $\overline{RF}$ for SPCC is 0.05 | Maximum % Diff for CCC is 30%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC
Pyridine	1.04057	.90453	13.07		
N-Nitrosodimethylamine	.90324	.88415	2.11		
2-Fluorophenol	1.40113	1.40682	.41		
Aniline	2.42081	2.30458	4.80		
Phenol-d5	2.09485	2.02984	3.10		
Phenol	1.99978	1.90017	4.98	*	
bis(-2-Chloroethyl)Ether	1.38952	1.47069	5.84		
2-Chlorophenol	1.43707	1.43505	.14		
1,3-Dichlorobenzene	1.33631	1.38893	3.94		
1,4-Dichlorobenzene	1.35294	1.43816	6.30	*	
Benzyl Alcohol	.99286	.89202	10.16		
1,2-Dichlorobenzene	1.23789	1.26323	2.05		
2-Methylphenol	1.41493	1.45402	2.76		
bis(2-Chloroisopropyl)ether	2.26269	2.19764	2.87		
3&4-Methylphenol	1.50668	1.54733	2.70		
N-Nitroso-Di-n-propylamine	1.31494	1.19874	8.84		**
Hexachloroethane	.54082	.53270	1.50		
Nitrobenzene-d5	.46088	.43466	5.69		
Nitrobenzene	.46499	.44753	3.75		
Isophorone	1.00934	.93140	7.72		
2-Nitrophenol	.23809	.23883	.31	*	
2,4-Dimethylphenol	.34593	.34684	.26		
Benzoic Acid	.21742	.24778	13.97		
bis(-2-Chloroethoxy)Methane	.51155	.49976	2.30		
2,4-Dichlorophenol	.30925	.31520	1.92	*	
1,2,4-Trichlorobenzene	.28790	.30192	4.87		
Naphthalene	.98975	1.06639	7.74		
4-Chloroaniline	.44297	.46298	4.52		
Hexachlorobutadiene	.14030	.15409	9.82	*	
4-Chloro-3-methylphenol	.42684	.41841	1.98	*	
2-Methylnaphthalene	.69142	.71184	2.95		
Hexachlorocyclopentadiene	.23623	.24014	1.66		**

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 (**)

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700194

Case No: Calibration Date: 12/10/99

Contractor: Accredited Labs Time: 11:08

Contract No: CALF01 Laboratory ID: >F9829

Instrument ID: HP5890BF Initial Calibration Date: 12/09/99

Minimum $\overline{RF}$ for SPCC is 0.05 Maximum % Diff for CCC is 30%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC
2,4,6-Trichlorophenol	.36435	.38288	5.09	*	
2,4,5-Trichlorophenol	.40408	.42674	5.61		
2-Chloronaphthalene	1.03840	1.11247	7.13		
2-Fluorobiphenyl	1.10186	1.18436	7.49		
2-Nitroaniline	.57516	.55896	2.82		
Dimethyl Phthalate	1.37912	1.44929	5.09		
Acenaphthylene	1.71570	1.89370	10.37		
3-Nitroaniline	.40035	.44910	12.18		
Acenaphthene	1.05876	1.19357	12.73	*	
2,4-Dinitrophenol	.24393	.21990	9.85		**
4-Nitrophenol	.27835	.26217	5.81		**
Dibenzofuran	1.56403	1.65516	5.83		
2,6-Dinitrotoluene	.36564	.35602	2.63		
2,4-Dinitrotoluene	.56580	.56674	.17		
Diethylphthalate	1.26929	1.54866	22.01		
4-Chlorophenyl-phenylether	.49774	.56746	14.01		
Fluorene	1.01833	1.21689	19.50		
4-Nitroaniline	.47482	.49988	5.28		
2,4,6-Tribromophenol	.19227	.19331	.54		
4,6-Dinitro-2-methylphenol	.15472	.17468	12.90		
N-Nitrosodiphenylamine	.43470	.49900	14.79	*	
Azobenzene	.96968	1.06097	9.42		
4-Bromophenyl-phenylether	.16739	.17315	3.44		
Hexachlorobenzene	.18777	.19187	2.18		
Pentachlorophenol	.14959	.14444	3.44	*	
Phenanthrene	.99988	1.05855	5.87		
Anthracene	.99786	1.07096	7.33		
Di-n-Butylphthalate	1.45139	1.65724	14.18		
Fluoranthene	1.10611	1.16879	5.67	*	
Benzidine	.57827	.52661	8.93		
Pyrene	1.48337	1.41098	4.88		
Terphenyl-d14	.84750	.81821	3.46		

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 (**)

97

HSL Compounds

Case No: Calibration Date: 12/10/99

Contractor: Accredited Labs Time: 11:08

Contract No: CALF01 Laboratory ID: >F9829

Instrument ID: HP5890BF Initial Calibration Date: 12/09/99

Minimum $\overline{RF}$ for SPCC is 0.05 Maximum % Diff for CCC is 30%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC
Butylbenzylphthalate	.95877	.89706	6.44		
3,3'-Dichlorobenzidine	.38707	.39303	1.54		
Benzo(a)Anthracene	1.37004	1.26216	7.87		
Bis(2-Ethylhexyl)Phthalate	1.31096	1.25904	3.96		
Chrysene	1.30926	1.23805	5.44		
Di-n-octyl phthalate	1.85113	2.09434	13.14	*	
Benzo(b)fluoranthene	1.34666	1.52704	13.39		
Benzo(k)Fluoranthene	1.01694	.95488	6.10.		
Benzo(a)Pyrene	1.17295	1.20008	2.31	*	
Indeno(1,2,3-cd)Pyrene	1.24989	1.31325	5.07		
Dibenzo(a,h)Anthracene	1.00229	1.09910	9.66		
Benzo(g,h,i)Perylene	1.11255	1.16385	4.61		

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 (**)

2C
WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: ACCREDITED LABS, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.:

	LAB SAMPLE NO.	S1 (NBZ)#	S2 (FBP)#	S3 (TPH)#	S4 (PHL)#	S5 (2FP)#	S6 (TBP)#	TOT OUT
01	SBLK99	69	71	77	56	54	68	0
02	9912994	64	66	78	54	50	75	0
03	9912995	117*	163*	60	74	74	47	2
04	9912995DL	78	127*	97	78	82	7*	2
05	9912996	70	72	79	58	55	77	0
06	9913211MS	70	71	71	54	54	68	0
07								
08								
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29								
30								

	QC LIMITS
S1 (NBZ) = Nitrobenzene-d5	(35-114)
S2 (FBP) = 2-Fluorobiphenyl	(43-116)
S3 (TPH) = Terphenyl-d14	(33-141)
S4 (PHL) = Phenol-d5	(10- 94)
S5 (2FP) = 2-Fluorophenol	(21-100)
S6 (TBP) = 2,4,6-Tribromophenol	(10-123)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogate diluted out

99

700197

8R

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ACCREDITED LABS, INC. Contract:

Lab Code: Case No.: SAS No.: SDG No.:

Lab File ID (Standard): >F9811 Date Analyzed: 12/09/99

Instrument ID: HP5970B F Time Analyzed: 11:05

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
	12 HOUR STD	43248	10.29	175180	13.49	109607	18.02
	UPPER LIMIT	86496	10.79	350360	13.99	219214	18.52
	LOWER LIMIT	21624	9.79	87590	12.99	54804	17.52
	LAB SAMPLE NO.						
01	SBLK99	37329	10.31	152687	13.49	95621	18.01
02	9912994	36391	10.29	148379	13.48	94899	18.01
03	9912995	35171	10.34	98934	13.57	20586*	18.17
04	9912996	36310	10.31	147666	13.49	92416	18.01
05	9913211MS	40132	10.31	161793	13.49	102301	18.01
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07							
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20							
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22							

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

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 internal standard area values with an asterisk.
* Values outside of QC limits.

100

700198

RC

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ACCREDITED LABS, INC. Contract:

Lab Code: Case No.: 1 SAS No.: SDG No.:

Lab File ID (Standard): >F9811 Date Analyzed: 12/09/99

Instrument ID: HP5970B F Time Analyzed: 11:05

		IS4(PHN) AREA #	RT #	IS5(CRY) AREA #	RT #	IS6(PRY) AREA #	RT #
	12 HOUR STD	198844	21.75	179318	28.57	188202	31.97
	UPPER LIMIT	397688	22.25	358636	29.07	376404	32.47
	LOWER LIMIT	99422	21.25	89659	28.07	94101	31.47
	LAB SAMPLE NO.						
01	SBLK99	175009	21.76	175898	28.55	170070	31.95
02	9912994	173996	21.76	169968	28.56	171462	31.96
03	9912995	68109*	21.96	184605	28.60	184258	31.97
04	9912996	173944	21.76	171276	28.55	167692	31.95
05	9913211MS	193322	21.76	187543	28.55	186570	31.96
06							
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21							
22							

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

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 internal standard area values with an asterisk.
* Values outside of QC limits.

101

700199

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ACCREDITED LABS, INC. Contract:

Lab Code: Case No.: 6481 1 SAS No.: SDG No.:

Lab File ID (Standard): >F9829 Date Analyzed: 12/10/99

Instrument ID: HP5970B F Time Analyzed: 11:08

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
	12 HOUR STD	33445	10.27	134215	13.47	83715	18.00
	UPPER LIMIT	66890	10.77	268430	13.97	167430	18.50
	LOWER LIMIT	16723	9.77	67108	12.97	41858	17.50
	LAB SAMPLE NO.						
01	9912995DL	34602	10.28	145629	13.49	74987	18.02
02							
03							
04							
05							
06							
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20							
21							
22							

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

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 internal standard area values with an asterisk.
* Values outside of QC limits.

102

700200

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ACCREDITED LABS, INC. Contract:

Lab Code: Case No.: 6481 1 SAS No.: SDG No.:

Lab File ID (Standard): >F9829 Date Analyzed: 12/10/99

Instrument ID: HP5970B F Time Analyzed: 11:08

		IS4(PHN) AREA #	RT #	IS5(CRY) AREA #	RT #	IS6(PRY) AREA #	RT #
	12 HOUR STD	156736	21.73	137364	28.55	137199	31.95
	UPPER LIMIT	313472	22.23	274728	29.05	274398	32.45
	LOWER LIMIT	78368	21.23	68682	28.05	68600	31.45
	LAB SAMPLE NO.						
01	9912995DL	157748	21.76	154138	28.55	139753	31.93
02							
03							
04							
05							
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20							
21							
22							

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

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 internal standard area values with an asterisk.
* Values outside of QC limits.

103

700201

ACCREDITED LABORATORIES, INC.
TCLP SEMIVOLATILE MATRIX SPIKE RECOVERY

Matrix Spike Sample No.: 9915211

Date Extracted: 12/08/99

Data File: >F9821

COMPOUND	SPIKE ADDED (mg/l)	SAMPLE CONCENTRATION (mg/l)	MS CONCENTRATION (mg/l)	MS % REC
Pyridine	.100	.000	.057	57
1,4-Dichlorobenzene	.100	.000	.072	72
2-Methylphenol	.100	.000	.071	71
3&4-Methylphenol	.200	.000	.130	65
Hexachloroethane	.100	.000	.067	67
Nitrobenzene	.100	.000	.075	75
Hexachlorobutadiene	.100	.000	.065	65
2,4,6-Trichlorophenol	.100	.000	.069	69
2,4,5-Trichlorophenol	.100	.000	.069	69
2,4-Dinitrotoluene	.100	.000	.074	74
Hexachlorobenzene	.100	.000	.087	87
Pentachlorophenol	.100	.000	.085	85

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ACCREDITED LABORATORIES, INC.
TCLP SEMIVOLATILES ANALYSIS DATA

CASE NUMBER		MATRIX	Leachate
SAMPLE NUMBER	SBLK99	DILUTION FACTOR	10
DATA FILE	>F9817	DATE EXTRACTED	12/08/99
CLIENT NAME		DATE ANALYZED	12/09/99
FIELD ID		ANALYZED BY	DANIEL

CAS No.	Compound	Result (mg/l)	MDL (mg/l)	Regulatory Level (mg/l)
110861	Pyridine	U	.10	5.0
106467	1,4-Dichlorobenzene	U	.10	7.5
95478	2-Methylphenol	U	.10	200.0
108394	3&4-Methylphenol	U	.10	200.0
67721	Hexachloroethane	U	.10	3.0
989103	Nitrobenzene	U	.10	2.0
87683	Hexachlorobutadiene	U	.10	0.5
88062	2,4,6-Trichlorophenol	U	.10	2.0
9109104	2,4,5-Trichlorophenol	U	.50	400.0
121142	2,4-Dinitrotoluene	U	.10	0.13
118741	Hexachlorobenzene	U	.10	0.13
878610	Pentachlorophenol	U	.10	100.0

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
2-Fluorophenol	54 %	21 - 100	OK
Phenol-d5	56 %	10 - 94	OK
Nitrobenzene-d5	69 %	35 - 114	OK
2-Fluorobiphenyl	71 %	43 - 116	OK
2,4,6-Tribromophenol	68 %	10 - 123	OK
Terphenyl-d14	77 %	33 - 141	OK

U - Indicates compound was analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.

* 2-Methylphenol = o-cresol
* 3-Methylphenol = m-cresol
* 4-Methylphenol = p-cresol

** 3-Methylphenol and 4-Methylphenol can not be separated by the method applied.

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4B

EPA SAMPLE NO.

SEMIVOLATILE METHOD BLANK SUMMARY

SBLK99

Lab Name: ACCREDITED LABS, INC. Contract:

Lab Code: Case No.: 1 SAS No.: SDG No.:

Lab File ID: >F9817 Lab Sample ID: SBLK99

Instrument ID: HP5970B F Date Extracted: 12/08/99

Matrix: (soil/water) WATER Date Analyzed: 12/09/99

Level:(low/med) LOW Time Analyzed: 15:51

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01		9912994	>F9822	12/09/99
02		9912995	>F9826	12/09/99
03		9912995DL	>F9832	12/10/99
04		9912996	>F9823	12/09/99
05		9913211MS	>F9821	12/09/99
06				
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COMMENTS:

106

700204

Initial Calibration Data
HSL Compounds

Case No:

Instrument ID: GC/ECD #7

Contractor: ACCREDITED LABS INC.

Calibration Date: 09/28/99

Contract No: CA7TCL

Minimum $\overline{RF}$ for SPCC is 5000 Maximum % RSD for CCC is 20%

Comp No.	Compound	Laboratory ID: >G4254 RF .0200	>G4253 RF .100	>G4252 RF .200	>G4251 RF .400	>G4250 RF .800	$\overline{RRT}$	$\overline{RF}$	% RSD	CORR1	CCC	SPCC	
1)	Tetrachloro-m-xylene	396650.	529960.	556795.	517890.	461267.	5.879	492513.	12.979	.997099			
2)	G-BHC (Lindane)	554200.	823770.	761515.	802777.	753640.	8.151	739181.	14.527	.999258			
3)	Heptachlor	536550.	897470.	790635.	823395.	768892.	10.627	763388.	17.794	.999035			
4)	Heptachlor Epoxide	659100.	589900.	718560.	647863.	641338.	13.521	651352.	7.063	.999259			
5)	G-Chlordane	587150.	606060.	736870.	648427.	648290.	14.511	645359.	8.943	.999072			
6)	A-Chlordane	594550.	589450.	703300.	640533.	628745.	15.107	631315.	7.249	.999299			
7)	Endrin	428500.	641375.	644252.	646075.	606723.	16.875	593385.	15.771	.999242			(Conc=.0400,
8)	Methoxychlor	234060.	378096.	319679.	311170.	271047.	21.975	302811.	17.905	.996301			(Conc=.200,1
9)	Toxaphene Peak 1	6009.00	5726.70	6028.52	6061.14	6817.02	20.053	6128.48	6.650	.998343			(Conc=1.00,1
10)	Toxaphene Peak 2	9952.00	8782.60	9266.64	9888.72	9422.18	20.563	9462.43	5.078	.999540			(Conc=1.00,1
11)	Toxaphene Peak 3	7623.00	9392.70	10331.6	10278.8	10353.6	20.907	9595.95	12.237	.999969			(Conc=1.00,1
12)	DCB	609475.	763355.	726592.	698964.	592825.	28.723	678242.	10.943	.995191			(Conc=.0400,

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

CORRn - Coefficient of Correlation (nth degree)

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

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Initial Calibration Data
HSL Compounds

Case No: Instrument ID: GC/ECD #8

Contractor: ACCREDITED LABS INC. Calibration Date: 09/28/99

Contract No: CA8TCL

Minimum $\overline{RF}$ for SPCC is 5000 Maximum % RSD for CCC is 20%

Comp No.	Compound	RF .0200	RF .100	RF .200	RF .400	RF .800	$\overline{RRT}$	$\overline{RF}$	% RSD	CORR1	CCC	SPCC	
	Laboratory ID:	>H4254	>H4253	>H4252	>H4251	>H4250							
1)	Tetrachloro-m-xylene	1159650	1645150	1385025	1389930	1221251	4.575	1360201	13.863	.997052			
2)	G-BHC (Lindane)	1475950	2134210	1933580	2081410	1936269	8.623	1912283	13.568	.999025			
3)	Heptachlor	1450350	2014600	2046695	1999170	1759330	9.213	1854029	13.642	.997005			
4)	Heptachlor Epoxide	1579800	1782100	2273020	1984352	1895962	12.886	1903047	13.465	.998079			
5)	G-Chlordane	2133200	2042220	1988195	1719300	1601846	14.277	1896952	11.902	.998312			
6)	A-Chlordane	1533050	1471990	1780115	1763307	1732394	14.485	1656172	8.631	.999659			
7)	Endrin	1128600	1774390	1574898	1763693	1537305	16.244	1555777	16.829	.996683			(Conc=.0400,
8)	Methoxychlor	671640.	902487.	832515.	794438.	669577.	21.929	774131.	13.194	.994654			(Conc=.200,1
9)	Toxaphene Peak 1	9756.00	10337.4	11417.2	11276.0	10363.5	19.698	10630.0	6.581	.998721			(Conc=1.00,1
10)	Toxaphene Peak 2	12055.0	12629.4	14544.7	15302.2	14801.0	20.683	13866.4	10.329	.999663			(Conc=1.00,1
11)	Toxaphene Peak 3	25376.0	28042.8	31151.4	32142.8	31496.0	21.128	29641.8	9.650	.999855			(Conc=1.00,1
12)	DCB	1737950	2254475	1874325	1791916	1531884	26.427	1838110	14.410	.995488			(Conc=.0400,

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

CORRn - Coefficient of Correlation (nth degree)

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Initial Calibration Data
HSL Compounds

Case No:

Instrument ID: GC/ECD #1

Contractor: ACCREDITED LABS, INC

Calibration Date: 11/16/99

Contract No: CAHRB1

Minimum $\overline{RF}$ for SPCC is 10000 Maximum % RSD for CCC is 20%

Comp No.	Compound	Laboratory ID: >A0492 RF .100	>A0491 RF .250	>A0490 RF .500	>A0489 RF .750	>A0488 RF 1.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CORR1	CCC	SPCC	
1)	DICAMBA	3329830	3060144	2916652	2712270	2813106	3.990	2966400	8.109	.999076			
2)	2,4'-D	1857520	1682816	1576216	1458673	1524129	5.310	1619871	9.638	.998775			
3)	SILVEX	7169600	7120320	6927840	6424453	6617720	7.003	6851987	4.708	.999093			(Conc=.0100,

RF - Response Factor (Subscript is amount in UG/ML)

$\overline{RRT}$ - Average Relative Retention Time (RT Std/RT Istd)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

CORRn - Coefficient of Correlation (nth degree)

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Initial Calibration Data
HSL Compounds

Case No: Instrument ID: GC/ECD #2

Contractor: ACCREDITED LABS,INC. Calibration Date: 11/16/99

Contract No: CAHRB2

Minimum $\overline{RF}$ for SPCC is Maximum % RSD for CCC is 20%

Comp No.	Compound	Laboratory ID: >B0492 RF .100	>B0491 RF .250	>B0490 RF .500	>B0489 RF .750	>B0488 RF 1.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CORR1	CCC	SPCC	
1)	DICAMBA	2601350	2471080	2186074	2061588	2036865	3.650	2271391	11.117	.999301			
2)	2,4'-D	1520030	1398204	1260180	1137946	1137054	5.447	1290683	12.966	.998574			
3)	SILVEX	5592700	5108800	4924960	4662933	5084500	6.767	5074778	6.694	.997311			(Conc=.0100

RF - Response Factor (Subscript is amount in UG/ML)

$\overline{RRT}$ - Average Relative Retention Time (RT Std/RT Istd)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

CORRn - Coefficient of Correlation (nth degree)

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Initial Calibration Data
HSL Compounds

Case No: Instrument ID: GC/ECD #7

Contractor: ACCREDITED LABS INC. Calibration Date: 09/28/99

Contract No: CAGPCB

Minimum $\overline{RF}$ for SPCC is 10000 Maximum % RSD for CCC is 20%

Comp No.	Compound	Laboratory ID: >G4244 RF 1.00	>G4243 RF 10.00	>G4242 RF 25.00	>G4241 RF 50.00	>G4240 RF 100.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CORR1	CCC	SPCC	
1)	Tetrachloro-m-xylene	475120.	433596.	463598.	448464.	484836.	5.887	461123.	4.447	.999530			(Conc=.200,.
2)	Aroclor-1016 Peak 1	9774.00	9535.50	9291.88	8885.70	7044.91	9.180	8906.40	12.252	.990341			
3)	Aroclor-1016 Peak 2	17360.0	18976.4	19538.8	20841.9	18950.3	10.300	19133.5	6.552	.998562			
4)	Aroclor-1016 Peak 3	5495.00	7202.60	5042.12	6144.36	7635.28	10.637	6303.87	17.471	.992574			
5)	Aroclor-1260 Peak 1	89746.0	70857.1	64765.7	75068.9	56440.7	18.529	71375.7	17.416	.986127			
6)	Aroclor-1260 Peak 2	55763.0	65235.1	62495.1	74110.9	58010.4	19.643	63122.9	11.366	.989662			
7)	Aroclor-1260 Peak 3	130526.	115141.	111133.	130471.	89912.6	22.431	115437.	14.520	.974476			
8)	DCB	599135.	640242.	620790.	582094.	612486.	28.732	610949.	3.595	.999686			(Conc=.200,.

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

CORRn - Coefficient of Correlation (nth degree)

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Initial Calibration Data
HSL Compounds

Case No: Instrument ID: GC/ECD #8

Contractor: ACCREDITED LABS INC. Calibration Date: 09/28/99

Contract No: CAHPCB

Minimum $\overline{RF}$ for SPCC is 10000 Maximum % RSD for CCC is 20%

Comp No.	Compound	Laboratory ID: >H4244 RF 1.00	>H4243 RF 10.00	>H4242 RF 25.00	>H4241 RF 50.00	>H4240 RF 100.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CORR1	CCC	SPCC	
1)	Tetrachloro-m-xylene	1408490	1219688	1295670	1224308	1294816	4.557	1288594	5.929	.999665			(Conc=.200,
2)	Aroclor-1016 Peak 1	39983.0	36509.2	33383.0	37069.1	27578.8	7.529	34904.6	13.516	.984967			
3)	Aroclor-1016 Peak 2	78223.0	67782.1	64748.5	78143.5	60314.4	9.399	69842.3	11.546	.988368			
4)	Aroclor-1016 Peak 3	26053.0	32173.7	30407.1	35585.0	26764.7	11.453	30196.7	13.031	.985829			
5)	Aroclor-1260 Peak 1	114271.	106797.	98625.1	133424.	102615.	17.112	111146.	12.357	.986927			
6)	Aroclor-1260 Peak 2	325305.	322896.	296753.	374086.	276118.	21.109	319032.	11.542	.983400			
7)	Aroclor-1260 Peak 3	179149.	206168.	195145.	237462.	178386.	22.514	199262.	12.201	.985515			
8)	DCB	1674360	1682184	1614590	1479815	1531383	26.431	1596467	5.566	.999723			(Conc=.200,

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

CORRn - Coefficient of Correlation (nth degree)

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Continuing Calibration Check
HSL Compounds

Case No:

Calibration Date: 12/09/99

Contractor: ACCREDITED LABS INC.

Time: 21:06

Contract No: CA7TCL

Laboratory ID: >G4765

Instrument ID: GC/ECD #7

Initial Calibration Date: 09/28/99

Minimum $\overline{RF}$ for SPCC is 5000 Maximum % Diff for CCC is 15%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
Tetrachloro-m-xylene	492513.	478580.	2.83			
G-BHC (Lindane)	739181.	692560.	6.31			
Heptachlor	763388.	863155.	13.07			
Heptachlor Epoxide	651352.	609555.	6.42			
G-Chlordane	645359.	646345.	.15			
A-Chlordane	631315.	593535.	5.98			
Endrin	593385.	606970.	2.29			(Conc=.400)
Methoxychlor	302811.	265770.	12.23			(Conc=2.00)
Toxaphene Peak 1	6128.48	6899.96	12.59			(Conc=25.00)
Toxaphene Peak 2	9462.43	9245.64	2.29			(Conc=25.00)
Toxaphene Peak 3	9595.95	9037.60	5.82			(Conc=25.00)
DCB	678242.	656358.	3.23			(Conc=.400)

RF - Response Factor from daily standard file at .200 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: 12/09/99

Contractor: ACCREDITED LABS INC.

Time: 21:44

Contract No: CA8TCL

Laboratory ID: >H4765

Instrument ID: GC/ECD #8

Initial Calibration Date: 09/28/99

Minimum $\overline{RF}$ for SPCC is 5000

Maximum % Diff for CCC is 15%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
Tetrachloro-m-xylene	1360201	1560590	14.73			
G-BHC (Lindane)	1912283	2099210	9.78			
Heptachlor	1854029	1797625	3.04			
Heptachlor Epoxide	1903047	2065000	8.51			
G-Chlordane	1896952	2015335	6.24			
A-Chlordane	1656172	1882005	13.64			
Endrin	1555777	1708460	9.81			(Conc=.400)
Methoxychlor	774131.	814406.	5.20			(Conc=2.00)
Toxaphene Peak 1	10630.0	9396.56	11.60			(Conc=25.00)
Toxaphene Peak 2	13866.4	14568.4	5.06			(Conc=25.00)
Toxaphene Peak 3	29641.8	29300.4	1.15			(Conc=25.00)
DCB	1838110	1813600	1.33			(Conc=.400)

RF - Response Factor from daily standard file at .200 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: 12/08/99

Contractor: ACCREDITED LABS, INC

Time: 18:11

Contract No: CAHRB1

Laboratory ID: >A0596

Instrument ID: GC/ECD #1

Initial Calibration Date: 11/16/99

Minimum $\overline{RF}$ for SPCC is 10000

Maximum % Diff for CCC is 15%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
DICAMBA	2966400	3257848	9.82			
2,4'-D	1619871	1835514	13.31			
SILVEX	6851987	7387840	7.82			(Conc=.0500)

RF - Response Factor from daily standard file at .500 UG/ML

$\overline{RF}$ - 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: 12/08/99

Contractor: ACCREDITED LABS,INC. Time: 18:36

Contract No: CAHRB2 Laboratory ID: >B0596

Instrument ID: GC/ECD #2 Initial Calibration Date: 11/16/99

Minimum $\overline{RF}$ for SPCC is Maximum % Diff for CCC is 15%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
DICAMBA	2271391	2388314	5.15			
2,4'-D	1290683	1380884	6.99			
SILVEX	5074778	5483500	8.05			(Conc=.0500)

RF - Response Factor from daily standard file at .500 UG/ML

$\overline{RF}$ - 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: 12/08/99

Contractor: ACCREDITED LABS, INC

Time: 22:25

Contract No: CAHRB1

Laboratory ID: >A0606

Instrument ID: GC/ECD #1

Initial Calibration Date: 11/16/99

Minimum $\overline{RF}$ for SPCC is 10000 Maximum % Diff for CCC is 15%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
DICAMBA	2966400	3004274	1.28			
2,4'-D	1619871	1793896	10.74			
SILVEX	6851987	7023500	2.50			(Conc=.0500)

RF - Response Factor from daily standard file at .500 UG/ML

$\overline{RF}$ - 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: 12/08/99

Contractor: ACCREDITED LABS,INC.

Time: 22:50

Contract No: CAHRB2

Laboratory ID: >B0606

Instrument ID: GC/ECD #2

Initial Calibration Date: 11/16/99

Minimum $\overline{RF}$ for SPCC is

Maximum % Diff for CCC is 15%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
DICAMBA	2271391	2170428	4.45			
2,4'-D	1290683	1318550	2.16			
SILVEX	5074778	5167820	1.83			(Conc=.0500)

RF - Response Factor from daily standard file at .500 UG/ML

$\overline{RF}$ - 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: 12/07/99

Contractor: ACCREDITED LABS INC.

Time: 17:33

Contract No: CAGPCB

Laboratory ID: >G4729

Instrument ID: GC/ECD #7

Initial Calibration Date: 09/28/99

Minimum $\overline{RF}$ for SPCC is 10000 Maximum % Diff for CCC is 15%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
Tetrachloro-m-xylene	461123.	486465.	5.50			(Conc=1.00)
Aroclor-1016 Peak 1	8906.40	9371.08	5.22			
Aroclor-1016 Peak 2	19133.5	21115.2	10.36			
Aroclor-1016 Peak 3	6303.87	6909.40	9.61			
Aroclor-1260 Peak 1	71375.7	66480.5	6.86			
Aroclor-1260 Peak 2	63122.9	66525.8	5.39			
Aroclor-1260 Peak 3	115437.	110021.	4.69			
DCB	610949.	609319.	.27			(Conc=1.00)

RF - Response Factor from daily standard file at 25.00 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: 12/07/99

Contractor: ACCREDITED LABS INC.

Time: 18:10

Contract No: CAHPCB

Laboratory ID: >H4729

Instrument ID: GC/ECD #8

Initial Calibration Date: 09/28/99

Minimum $\overline{RF}$ for SPCC is 10000

Maximum % Diff for CCC is 15%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
Tetrachloro-m-xylene	1288594	1410802	9.48			(Conc=1.00)
Aroclor-1016 Peak 1	34904.6	36957.8	5.88			
Aroclor-1016 Peak 2	69842.3	79561.5	13.92			
Aroclor-1016 Peak 3	30196.7	33522.1	11.01			
Aroclor-1260 Peak 1	111146.	127314.	14.55			
Aroclor-1260 Peak 2	319032.	335488.	5.16			
Aroclor-1260 Peak 3	199262.	218328.	9.57			
DCB	1596467	1764081	10.50			(Conc=1.00)

RF - Response Factor from daily standard file at 25.00 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: 12/08/99

Contractor: ACCREDITED LABS INC.

Time: 08:59

Contract No: CAGPCB

Laboratory ID: >G4754

Instrument ID: GC/ECD #7

Initial Calibration Date: 09/28/99

Minimum $\overline{RF}$ for SPCC is 10000

Maximum % Diff for CCC is 15%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
Tetrachloro-m-xylene	461123.	-	-			(Conc=1.00)
Aroclor-1016 Peak 1	8906.40	9317.64	4.62			
Aroclor-1016 Peak 2	19133.5	21462.9	12.17			
Aroclor-1016 Peak 3	6303.87	6979.00	10.71			
Aroclor-1260 Peak 1	71375.7	65271.1	8.55			
Aroclor-1260 Peak 2	63122.9	64808.9	2.67			
Aroclor-1260 Peak 3	115437.	109334.	5.29			
DCB	610949.	-	-			(Conc=1.00)

RF - Response Factor from daily standard file at 25.00 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: 12/08/99

Contractor: ACCREDITED LABS INC.

Time: 09:37

Contract No: CAHPCB

Laboratory ID: >H4754

Instrument ID: GC/ECD #8

Initial Calibration Date: 09/28/99

Minimum $\overline{RF}$ for SPCC is 10000 Maximum % Diff for CCC is 15%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
Tetrachloro-m-xylene	1288594	-	-			(Conc=1.00)
Aroclor-1016 Peak 1	34904.6	34777.6	.36			
Aroclor-1016 Peak 2	69842.3	78039.3	11.74			
Aroclor-1016 Peak 3	30196.7	32031.4	6.08			
Aroclor-1260 Peak 1	111146.	133870.	20.44			
Aroclor-1260 Peak 2	319032.	349175.	9.45			
Aroclor-1260 Peak 3	199262.	223470.	12.15			
DCB	1596467	-	-			(Conc=1.00)

RF - Response Factor from daily standard file at 25.00 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 (**)

ACCREDITED LABORATORIES, INC.
RETENTION TIME WINDOW

Instrument ID: HP5890-G GC #7 Primary Column
Dates Analyzed: 09/28/99 to 09/29/99

ANALYTE	RETENTION TIMES 1/40 Mix A/B	1/8 Mix A/B	1/4 Mix A/B	1/2 Mix A/B	High Mix A/B	Average
G-BHC (Lindane)	8.15	8.15	8.15	8.15	8.15	8.15
Heptachlor	10.62	10.63	10.63	10.63	10.63	10.63
Heptachlor Epoxide	13.52	13.52	13.52	13.52	13.52	13.52
G-Chlordane	14.51	14.51	14.51	14.51	14.51	14.51
A-Chlordane	15.10	15.11	15.11	15.11	15.11	15.11
Endrin	16.87	16.87	16.88	16.88	16.88	16.87
Methoxychlor	21.98	21.98	21.98	21.97	21.97	21.98
Toxaphene Peak 1	20.05	20.06	20.05	20.05	20.05	20.05
Toxaphene Peak 2	20.56	20.56	20.56	20.56	20.56	20.56
Toxaphene Peak 3	20.91	20.91	20.91	20.91	20.90	20.91

ANALYTE	RT WINDOW	FROM	TO
G-BHC (Lindane)	± .050	8.10	8.20
Heptachlor	± .050	10.58	10.68
Heptachlor Epoxide	± .070	13.45	13.59
G-Chlordane	± .070	14.44	14.58
A-Chlordane	± .070	15.04	15.18
Endrin	± .070	16.80	16.94
Methoxychlor	± .070	21.91	22.05
Toxaphene Peak 1	± .070	19.98	20.12
Toxaphene Peak 2	± .070	20.49	20.63
Toxaphene Peak 3	± .070	20.84	20.98

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ACCREDITED LABORATORIES, INC.
RETENTION TIME WINDOW

Instrument ID: HP5890-H GC #8 Confirmation Column
Dates Analyzed: 09/28/99 to 09/29/99

RETENTION TIMES

ANALYTE	1/40 Mix A/B	1/8 Mix A/B	1/4 Mix A/B	1/2 Mix A/B	High Mix A/B	Average
G-BHC (Lindane)	8.63	8.63	8.63	8.62	8.62	8.62
Heptachlor	9.21	9.21	9.21	9.21	9.22	9.21
Heptachlor Epoxide	12.88	12.89	12.89	12.89	12.89	12.89
G-Chlordane	14.28	14.28	14.28	14.28	14.28	14.28
A-Chlordane	14.48	14.48	14.49	14.49	14.49	14.49
Endrin	16.25	16.24	16.24	16.25	16.24	16.24
Methoxychlor	21.98	21.93	21.93	21.91	21.90	21.93
Toxaphene Peak 1	19.71	19.70	19.70	19.69	19.69	19.70
Toxaphene Peak 2	20.69	20.69	20.68	20.68	20.67	20.68
Toxaphene Peak 3	21.15	21.13	21.13	21.12	21.11	21.13

ANALYTE	RT WINDOW	FROM	TO
G-BHC (Lindane)	± .050	8.57	8.67
Heptachlor	± .050	9.16	9.26
Heptachlor Epoxide	± .070	12.82	12.96
G-Chlordane	± .070	14.21	14.35
A-Chlordane	± .070	14.42	14.56
Endrin	± .070	16.17	16.31
Methoxychlor	± .070	21.86	22.00
Toxaphene Peak 1	± .070	19.63	19.77
Toxaphene Peak 2	± .070	20.61	20.75
Toxaphene Peak 3	± .070	21.06	21.20

ACCREDITED LABORATORIES, INC.
RETENTION TIME WINDOW

INSTRUMENT ID: HP5890-A
DATE(S) ANALYZED: 11/16/99

Primary Column

ANALYTE	RETENTION TIMES HERBICIDE STANDARDS 1/10	1/4	1/2	3/4	1
DICAMBA	3.98	3.98	4.00	3.98	4.00
2,4'-D	5.32	5.30	5.32	5.30	5.32
SILVEX	7.00	6.98	7.02	7.00	7.02

ANALYTE	RT WINDOW	FROM	TO
DICAMBA	0.050	3.94	4.04
2,4'-D	0.050	5.26	5.36
SILVEX	0.050	6.95	7.05

ACCREDITED LABORATORIES, INC.
RETENTION TIME WINDOW

INSTRUMENT ID: HP5890-B
DATE(S) ANALYZED: 11/16/99

Confirmation Column

RETENTION TIMES
HERBICIDE STANDARDS

ANALYTE	1/10	1/4	1/2	3/4	1
DICAMBA	3.65	3.65	3.65	3.65	3.65
2,4'-D	5.45	5.45	5.43	5.45	5.45
SILVEX	6.77	6.77	6.77	6.77	6.77

ANALYTE	RT WINDOW	FROM	TO
DICAMBA	0.050	3.60	3.70
2,4'-D	0.050	5.40	5.50
SILVEX	0.050	6.72	6.82

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ACCREDITED LABORATORIES, INC.
RETENTION TIME WINDOW

Instrument ID: HP5890-G GC #7 Primary Column
Date Analyzed: 09/28/99

ANALYTE	RETENTION TIMES 0.10 ug/L	1.0 ug/L	2.5 ug/L	5.0 ug/L	10.0 ug/L	Average
Aroclor-1016 Peak 1	9.17	9.17	9.17	9.17	9.21	9.18
Aroclor-1016 Peak 2	10.35	10.31	10.29	10.27	10.28	10.30
Aroclor-1016 Peak 3	10.68	10.64	10.63	10.61	10.63	10.64
Aroclor-1260 Peak 1	18.54	18.53	18.52	18.51	18.54	18.53
Aroclor-1260 Peak 2	19.66	19.64	19.63	19.63	19.65	19.64
Aroclor-1260 Peak 3	22.45	22.43	22.42	22.42	22.44	22.43

ANALYTE	RT WINDOW	FROM	TO
Aroclor-1016 Peak 1	± .070	9.11	9.25
Aroclor-1016 Peak 2	± .070	10.23	10.37
Aroclor-1016 Peak 3	± .070	10.57	10.71
Aroclor-1260 Peak 1	± .070	18.46	18.60
Aroclor-1260 Peak 2	± .070	19.57	19.71
Aroclor-1260 Peak 3	± .070	22.36	22.50

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ACCREDITED LABORATORIES, INC.
RETENTION TIME WINDOW

Instrument ID: HP5890-H
Date Analyzed: 09/28/99

GC #8 Confirmation Column

ANALYTE	RETENTION TIMES 0.10 ug/L	1.0 ug/L	2.5 ug/L	5.0 ug/L	10.0 ug/L	Average
Aroclor-1016 Peak 1	7.58	7.55	7.53	7.50	7.49	7.53
Aroclor-1016 Peak 2	9.56	9.45	9.38	9.32	9.29	9.40
Aroclor-1016 Peak 3	11.51	11.48	11.45	11.43	11.40	11.45
Aroclor-1260 Peak 1	17.18	17.13	17.10	17.08	17.07	17.11
Aroclor-1260 Peak 2	21.16	21.13	21.10	21.08	21.07	21.11
Aroclor-1260 Peak 3	22.56	22.53	22.51	22.49	22.48	22.51

ANALYTE	RT WINDOW	FROM	TO
Aroclor-1016 Peak 1	± .070	7.46	7.60
Aroclor-1016 Peak 2	± .070	9.33	9.47
Aroclor-1016 Peak 3	± .070	11.38	11.52
Aroclor-1260 Peak 1	± .070	17.04	17.18
Aroclor-1260 Peak 2	± .070	21.04	21.18
Aroclor-1260 Peak 3	± .070	22.44	22.58

ACCREDITED LABORATORIES, INC.
TCLP PESTICIDE RETENTION TIME WINDOW

Instrument ID: HP5890-G Primary Column

Date Analyzed: 12/09/99

COMPOUND NAME	RT OF STD	WINDOW FROM	TO
G-BHC (Lindane)	8.43	8.38	8.48
Heptachlor	10.93	10.88	10.98
Heptachlor Epoxide	13.85	13.78	13.92
Endrin	17.21	17.14	17.28
Methoxychlor	22.23	22.16	22.30
A-Chlordane	15.44	15.37	15.51
G-Chlordane	14.85	14.78	14.92
Toxaphene Peak 1	20.07	20.00	20.14
Toxaphene Peak 2	20.89	20.82	20.96
Toxaphene Peak 3	21.24	21.17	21.31

ACCREDITED LABORATORIES, INC.
TCLP PESTICIDE RETENTION TIME WINDOW

Instrument ID: HP5890-H

Confirmation Column

Date Analyzed: 12/09/99

COMPOUND NAME	RT OF STD	WINDOW FROM	TO
G-BHC (Lindane)	8.53	8.48	8.58
Heptachlor	9.21	9.16	9.26
Heptachlor Epoxide	12.89	12.82	12.96
Endrin	16.25	16.18	16.32
Methoxychlor	21.85	21.78	21.92
A-Chlordane	14.49	14.42	14.56
G-Chlordane	14.28	14.21	14.35
Toxaphene Peak 1	19.71	19.64	19.78
Toxaphene Peak 2	20.69	20.62	20.76
Toxaphene Peak 3	21.11	21.04	21.18

130

ACCREDITED LABORATORIES, INC.
HERBICIDE RETENTION TIME WINDOW

Instrument ID: HP5890-A Primary Column

Date Analyzed: 12/08/99

COMPOUND NAME	RT OF STD	WINDOW FROM	TO
DICAMBA	4.07	4.02	4.12
2,4'-D	5.40	5.35	5.45
SILVEX	7.10	7.05	7.15

131

ACCREDITED LABORATORIES, INC.
HERBICIDE RETENTION TIME WINDOW

Instrument ID: HP5890-B

Confirmation Column

Date Analyzed: 12/08/99

COMPOUND NAME	RT OF STD	WINDOW FROM	TO
DICAMBA	3.72	3.67	3.77
2,4'-D	5.53	5.48	5.58
SILVEX	6.87	6.82	6.92

132

ACCREDITED LABORATORIES, INC.
HERBICIDE RETENTION TIME WINDOW

Instrument ID: HP5890-A Primary Column

Date Analyzed: 12/08/99

COMPOUND NAME	RT OF STD	WINDOW FROM	TO
DICAMBA	4.05	4.00	4.10
2,4'-D	5.38	5.33	5.43
SILVEX	7.08	7.03	7.13

133

ACCREDITED LABORATORIES, INC.
HERBICIDE RETENTION TIME WINDOW

Instrument ID: HP5890-B Confirmation Column

Date Analyzed: 12/08/99

COMPOUND NAME	RT OF STD	WINDOW FROM	TO
DICAMBA	3.70	3.65	3.75
2,4'-D	5.52	5.47	5.57
SILVEX	6.83	6.78	6.88

134

ACCREDITED LABORATORIES, INC.
RT WINDOW FOR MULTICOMPONENT ANALYTES

Instrument ID: HP5890-G

Date Analyzed: 12/07/99

COMPOUND NAME	RT OF STD	WINDOW FROM	TO
Aroclor-1016 Peak 1	9.43	9.36	9.50
Aroclor-1016 Peak 2	10.49	10.42	10.56
Aroclor-1016 Peak 3	10.84	10.77	10.91
Aroclor-1221 Peak 1	6.80	6.73	6.87
Aroclor-1221 Peak 2	7.13	7.06	7.20
Aroclor-1221 Peak 3	7.33	7.26	7.40
Aroclor-1232 Peak 1	7.33	7.26	7.40
Aroclor-1232 Peak 2	8.75	8.68	8.82
Aroclor-1232 Peak 3	10.49	10.42	10.56
Aroclor-1242 Peak 1	10.49	10.42	10.56
Aroclor-1242 Peak 2	12.59	12.52	12.66
Aroclor-1242 Peak 3	13.08	13.01	13.15
Aroclor-1248 Peak 1	10.49	10.42	10.56
Aroclor-1248 Peak 2	11.80	11.73	11.87
Aroclor-1248 Peak 3	13.08	13.01	13.15
Aroclor-1254 Peak 1	14.32	14.25	14.39
Aroclor-1254 Peak 2	15.30	15.23	15.37
Aroclor-1254 Peak 3	16.78	16.71	16.85
Aroclor-1260 Peak 1	18.80	18.73	18.87
Aroclor-1260 Peak 2	19.90	19.83	19.97
Aroclor-1260 Peak 3	22.69	22.62	22.76

135

ACCREDITED LABORATORIES, INC.
RT WINDOW FOR MULTICOMPONENT ANALYTES

Instrument ID: HP5890-H

Date Analyzed: 12/07/99

COMPOUND NAME	RT OF STD	WINDOW FROM	TO
Aroclor-1016 Peak 1	7.42	7.35	7.49
Aroclor-1016 Peak 2	9.14	9.07	9.21
Aroclor-1016 Peak 3	11.30	11.23	11.37
Aroclor-1221 Peak 1	5.50	5.43	5.57
Aroclor-1221 Peak 2	5.96	5.89	6.03
Aroclor-1221 Peak 3	6.16	6.09	6.23
Aroclor-1232 Peak 1	6.16	6.09	6.23
Aroclor-1232 Peak 2	7.42	7.35	7.49
Aroclor-1232 Peak 3	9.14	9.07	9.21
Aroclor-1242 Peak 1	7.42	7.35	7.49
Aroclor-1242 Peak 2	9.14	9.07	9.21
Aroclor-1242 Peak 3	11.69	11.62	11.76
Aroclor-1248 Peak 1	10.44	10.37	10.51
Aroclor-1248 Peak 2	11.30	11.23	11.37
Aroclor-1248 Peak 3	11.69	11.62	11.76
Aroclor-1254 Peak 1	13.66	13.59	13.73
Aroclor-1254 Peak 2	15.44	15.37	15.51
Aroclor-1254 Peak 3	18.42	18.35	18.49
Aroclor-1260 Peak 1	17.04	16.97	17.11
Aroclor-1260 Peak 2	21.06	20.99	21.13
Aroclor-1260 Peak 3	22.45	22.38	22.52

ACCREDITED LABORATORIES, INC.
RT WINDOW FOR MULTICOMPONENT ANALYTES

Instrument ID: HP5890-G

Date Analyzed: 12/08/99

COMPOUND NAME	RT OF STD	WINDOW FROM	TO
Aroclor-1016 Peak 1	9.40	9.33	9.47
Aroclor-1016 Peak 2	10.47	10.40	10.54
Aroclor-1016 Peak 3	10.82	10.75	10.89
Aroclor-1221 Peak 1	6.77	6.70	6.84
Aroclor-1221 Peak 2	7.10	7.03	7.17
Aroclor-1221 Peak 3	7.30	7.23	7.37
Aroclor-1232 Peak 1	7.30	7.23	7.37
Aroclor-1232 Peak 2	8.72	8.65	8.79
Aroclor-1232 Peak 3	10.47	10.40	10.54
Aroclor-1242 Peak 1	10.47	10.40	10.54
Aroclor-1242 Peak 2	12.57	12.50	12.64
Aroclor-1242 Peak 3	13.06	12.99	13.13
Aroclor-1248 Peak 1	10.47	10.40	10.54
Aroclor-1248 Peak 2	11.77	11.70	11.84
Aroclor-1248 Peak 3	13.06	12.99	13.13
Aroclor-1254 Peak 1	14.30	14.23	14.37
Aroclor-1254 Peak 2	15.28	15.21	15.35
Aroclor-1254 Peak 3	16.77	16.70	16.84
Aroclor-1260 Peak 1	18.79	18.72	18.86
Aroclor-1260 Peak 2	19.89	19.82	19.96
Aroclor-1260 Peak 3	22.69	22.62	22.76

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ACCREDITED LABORATORIES, INC.
RT WINDOW FOR MULTICOMPONENT ANALYTES

Instrument ID: HP5890-H

Date Analyzed: 12/08/99

COMPOUND NAME	RT OF STD	WINDOW FROM	TO
Aroclor-1016 Peak 1	7.44	7.37	7.51
Aroclor-1016 Peak 2	9.17	9.10	9.24
Aroclor-1016 Peak 3	11.32	11.25	11.39
Aroclor-1221 Peak 1	5.52	5.45	5.59
Aroclor-1221 Peak 2	5.99	5.92	6.06
Aroclor-1221 Peak 3	6.18	6.11	6.25
Aroclor-1232 Peak 1	6.18	6.11	6.25
Aroclor-1232 Peak 2	7.44	7.37	7.51
Aroclor-1232 Peak 3	9.17	9.10	9.24
Aroclor-1242 Peak 1	7.44	7.37	7.51
Aroclor-1242 Peak 2	9.17	9.10	9.24
Aroclor-1242 Peak 3	11.71	11.64	11.78
Aroclor-1248 Peak 1	10.46	10.39	10.53
Aroclor-1248 Peak 2	11.32	11.25	11.39
Aroclor-1248 Peak 3	11.71	11.64	11.78
Aroclor-1254 Peak 1	13.68	13.61	13.75
Aroclor-1254 Peak 2	15.46	15.39	15.53
Aroclor-1254 Peak 3	18.44	18.37	18.51
Aroclor-1260 Peak 1	17.06	16.99	17.13
Aroclor-1260 Peak 2	21.07	21.00	21.14
Aroclor-1260 Peak 3	22.47	22.40	22.54

ACCREDITED LABORATORIES, INC.
PESTICIDE SURROGATE RECOVERY

Case Number : 6481 Client Name : OE

GC Column : RTX-5 Column ID : 0.53mm

Instrument ID : HP5890-G

	LAB FILE ID	LAB SAMPLE ID	TCX %REC #	DCB %REC #	TOT OUT
01	>G4768	PBLK21	71	84	0
02	>G4769	PBLK21MS	75	87	0
03	>G4774	9912994	75	87	0
04	>G4775	9912996	77	88	0
05	>G4776	9912995	91	91	0
06					
07					
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09					
10					
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30					

	ADVISORY QC LIMITS
TCX = Tetrachloro-m-xylene	(30-150)
DCB = Decachlorobiphenyl	(30-150)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out

ACCREDITED LABORATORIES, INC.
PESTICIDE SURROGATE RECOVERY

Case Number : 6481 Client Name : OE

GC Column : RTX-1701 Column ID : 0.53mm

Instrument ID : HP5890-H

	LAB FILE ID	LAB SAMPLE ID	TCX %REC #	DCB %REC #	TOT OUT
01	>H4768	PBLK21	83	119	0
02	>H4769	PBLK21MS	87	125	0
03	>H4774	9912994	80	123	0
04	>H4775	9912996	88	124	0
05	>H4776	9912995	104	115	0
06					
07					
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09					
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27					
28					
29					
30					

	ADVISORY QC LIMITS
TCX = Tetrachloro-m-xylene	(30-150)
DCB = Decachlorobiphenyl	(30-150)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out

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700238

ACCREDITED LABORATORIES, INC.
PCB SURROGATE RECOVERY

Case Number : 6481 Client Name : OE

GC Column : RTX-5 Column ID : 0.53mm

Instrument ID : HP5890-G

	LAB FILE ID	LAB SAMPLE ID	TCX %REC #	DCB %REC #	TOT OUT
01	>G4731	PBLK17	62	89	0
02	>G4732	PBLK17MS	70	92	0
03	>G4733	PBLK17-A	64	87	0
04	>G4744	9912994	**** *	4282 *	2
05	>G4745	9912996	78	90	0
06	>G4746	9912997	93	139	0
07	>G4747	9912998	82	108	0
08	>G4748	9912999	97	117	0
09	>G4749	9912999MS	89	117	0
10	>G4750	9912999MSD	98	116	0
11	>G4751	9913000	91	90	0
12	>G4752	9912995	83	97	0
13	>G4755	9912994DL	**** *	7679 *	2
14	>G4756	9912996DL	65	81	0
15	>G4757	9912997DL	80	123	0
16	>G4758	9912998DL	104	75	0
17	>G4759	9912999DL	94	32	0
18	>G4760	9912999MSD	88	110	0
19	>G4761	9912999MSD	96	54	0
20	>G4762	9913000DL	52	106	0
21	>G4763	9912994DL2	0 *	0 *	2
22					
23					
24					
25					
26					
27					
28					
29					
30					

	ADVISORY QC LIMITS
TCX = Tetrachloro-m-xylene	(30-150)
DCB = Decachlorobiphenyl	(30-150)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out

ACCREDITED LABORATORIES, INC.
PCB SURROGATE RECOVERY

Case Number : 6481 Client Name : OE

GC Column : RTX-1701 Column ID : 0.53mm

Instrument ID : HP5890-H

	LAB FILE ID	LAB SAMPLE ID	TCX %REC	#	DCB %REC	#	TOT OUT
01	>H4731	PBLK17	74		85		0
02	>H4732	PBLK17MS	85		100		0
03	>H4733	PBLK17-A	80		93		0
04	>H4744	9912994	97		2889	*	1
05	>H4745	9912996	99		150		0
06	>H4746	9912997	105		73		0
07	>H4747	9912998	113		146		0
08	>H4748	9912999	125		134		0
09	>H4749	9912999MS	101		108		0
10	>H4750	9912999MSD	117		141		0
11	>H4751	9913000	100		113		0
12	>H4752	9912995	101		64		0
13	>H4755	9912994DL	0	*	****	*	2
14	>H4756	9912996DL	195	*	161	*	2
15	>H4757	9912997DL	100		99		0
16	>H4758	9912998DL	118		150		0
17	>H4759	9912999DL	130		98		0
18	>H4760	9912999MSD	134		108		0
19	>H4761	9912999MSD	118		73		0
20	>H4762	9913000DL	117		106		0
21	>H4763	9912994DL2	0	*	0	*	2
22							
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24							
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26							
27							
28							
29							
30							

	ADVISORY QC LIMITS
TCX = Tetrachloro-m-xylene	(30-150)
DCB = Decachlorobiphenyl	(30-150)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out

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700240

ACCREDITED LABORATORIES, INC.
PESTICIDE ANALYTICAL SEQUENCE

Case Number : 6481 Client Name : OE

GC Column : RTX-5 Column ID : 0.53mm

Instrument ID : HP5890-G

THE ANALYTICAL SEQUENCE FOR BLANKS AND SAMPLES IS GIVEN BELOW:

SURROGATE RT FROM CHECK STANDARD
TCX: 6.10 DCB: 28.98

	LAB FILE ID.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	>G4768	PBLK21	12/09/99	22:58	6.09	28.99
02	>G4769	PBLK21MS	12/09/99	23:35	6.09	28.98
03	>G4774	9912994	12/10/99	02:41	6.08	28.97
04	>G4775	9912996	12/10/99	03:18	6.08	28.97
05	>G4776	9912995	12/10/99	03:55	6.15 *	28.97
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QC LIMITS
TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)
DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

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700241

ACCREDITED LABORATORIES, INC.
PESTICIDE ANALYTICAL SEQUENCE

Case Number : 6481 Client Name : OE

GC Column : RTX-1701 Column ID : 0.53mm

Instrument ID : HP5890-H

THE ANALYTICAL SEQUENCE FOR BLANKS AND SAMPLES IS GIVEN BELOW:

SURROGATE RT FROM CHECK STANDARD
TCX: 4.46 DCB: 26.46

	LAB FILE ID.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	>H4768	PBLK21	12/09/99	23:35	4.46	26.45
02	>H4769	PBLK21MS	12/10/99	00:12	4.46	26.45
03	>H4774	9912994	12/10/99	03:18	4.46	26.44
04	>H4775	9912996	12/10/99	03:55	4.46	26.44
05	>H4776	9912995	12/10/99	04:33	4.53 *	26.44
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QC LIMITS
TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)
DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

ACCREDITED LABORATORIES, INC.
PCB ANALYTICAL SEQUENCE

Case Number : 6481 Client Name : OE

GC Column : RTX-5 Column ID : 0.53mm

Instrument ID : HP5890-G

THE ANALYTICAL SEQUENCE FOR BLANKS AND SAMPLES IS GIVEN BELOW:

SURROGATE RT FROM CHECK STANDARD
TCX: 6.07 DCB: 28.98

	LAB FILE ID.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	>G4731	PBLK17	12/07/99	18:47	6.07	28.97
02	>G4732	PBLK17MS	12/07/99	19:24	6.07	28.98
03	>G4733	PBLK17-A	12/07/99	20:01	6.07	28.98
04	>G4744	9912994	12/08/99	02:48	6.12	29.04
05	>G4745	9912996	12/08/99	03:25	6.07	28.99
06	>G4746	9912997	12/08/99	04:02	6.08	28.99
07	>G4747	9912998	12/08/99	04:39	6.07	29.00
08	>G4748	9912999	12/08/99	05:16	6.08	28.99
09	>G4749	9912999MS	12/08/99	05:53	6.08	28.99
10	>G4750	9912999MSD	12/08/99	06:30	6.08	28.99
11	>G4751	9913000	12/08/99	07:07	6.08	28.99
12	>G4752	9912995	12/08/99	07:44	6.17 *	28.99
13	>G4755	9912994DL	12/08/99	11:46	6.05	29.01
14	>G4756	9912996DL	12/08/99	15:07	6.13 *	29.03
15	>G4757	9912997DL	12/08/99	15:44	6.08	29.01
16	>G4758	9912998DL	12/08/99	16:21	6.06	29.06
17	>G4759	9912999DL	12/08/99	16:58	6.08	29.02
18	>G4760	9912999MSD	12/08/99	17:36	6.08	29.07
19	>G4761	9912999MSD	12/08/99	18:13	6.08	29.03
20	>G4762	9913000DL	12/08/99	18:51	6.08	29.04
21	>G4763	9912994DL2	12/08/99	19:28	0.00 *	0.00 *
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QC LIMITS
TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)
DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

ACCREDITED LABORATORIES, INC.
PCB ANALYTICAL SEQUENCE

Case Number : 6481 Client Name : OE

GC Column : RTX-1701 Column ID : 0.53mm

Instrument ID : HP5890-H

THE ANALYTICAL SEQUENCE FOR BLANKS AND SAMPLES IS GIVEN BELOW:

SURROGATE RT FROM CHECK STANDARD
TCX: 4.45 DCB: 26.47

	LAB FILE ID.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	>H4731	PBLK17	12/07/99	19:24	4.45	26.47
02	>H4732	PBLK17MS	12/07/99	20:01	4.45	26.47
03	>H4733	PBLK17-A	12/07/99	20:38	4.45	26.47
04	>H4744	9912994	12/08/99	03:25	4.50	26.52
05	>H4745	9912996	12/08/99	04:02	4.45	26.49
06	>H4746	9912997	12/08/99	04:39	4.46	26.48
07	>H4747	9912998	12/08/99	05:16	4.45	26.48
08	>H4748	9912999	12/08/99	05:53	4.46	26.48
09	>H4749	9912999MS	12/08/99	06:30	4.46	26.48
10	>H4750	9912999MSD	12/08/99	07:07	4.46	26.48
11	>H4751	9913000	12/08/99	07:44	4.46	26.48
12	>H4752	9912995	12/08/99	08:22	4.56 *	26.48
13	>H4755	9912994DL	12/08/99	15:07	0.00 *	26.48
14	>H4756	9912996DL	12/08/99	15:44	4.47	26.49
15	>H4757	9912997DL	12/08/99	16:21	4.47	26.49
16	>H4758	9912998DL	12/08/99	16:58	4.47	26.48
17	>H4759	9912999DL	12/08/99	17:36	4.47	26.48
18	>H4760	9912999MSD	12/08/99	18:13	4.47	26.49
19	>H4761	9912999MSD	12/08/99	18:51	4.46	26.49
20	>H4762	9913000DL	12/08/99	19:28	4.47	26.49
21	>H4763	9912994DL2	12/08/99	20:05	0.00 *	0.00 *
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QC LIMITS
TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)
DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

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700244

ACCREDITED LABORATORIES, INC.
PESTICIDE DDT / ENDRIN BREAKDOWN SUMMARY

Lab Sample :	DDT/ENDRIN	Date Analyzed :	12/09/99
Data File :	>G4764	Time Analyzed :	20:29
GC Column :	RTX-5	Column ID :	0.53mm
Instrument ID :	HP5890-G		

4,4'-DDT % breakdown : 15.4

Endrin % breakdown : 0.0

Combined % breakdown : 15.4

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ACCREDITED LABORATORIES, INC.
PESTICIDE DDT / ENDRIN BREAKDOWN SUMMARY

Lab Sample :	DDT/ENDRIN	Date Analyzed :	12/09/99
Data File :	>H4764	Time Analyzed :	21:06
GC Column :	RTX-1701	Column ID :	0.53mm
Instrument ID :	HP5890-H		

4,4'-DDT % breakdown : 0.0

Endrin % breakdown : 0.0

Combined % breakdown : 0.0

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ACCREDITED LABORATORIES, INC.
TCLP PESTICIDE MATRIX SPIKE RECOVERY

Matrix Spike Sample No.: PBLK21

Date Extracted: 12/09/99

Data File: >G4769

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENTRATION (mg/L)	MS CONCENTRATION (mg/L)	MS % REC
G-BHC (Lindane)	.020	.000	.014	72
Heptachlor	.020	.000	.013	67
Heptachlor Epoxide	.020	.000	.019	97
Endrin	.020	.000	.019	94
Methoxychlor	.020	.000	.015	76
A-Chlordane	.004	.000	.007	172
G-Chlordane	.004	.000	.003	79
Toxaphene	.040	.000	.036	89

ACCREDITED LABORATORIES, INC.
TCLP PESTICIDE MATRIX SPIKE RECOVERY

Matrix Spike Sample No.: 9913211

Date Extracted: 12/09/99

Data File: >G4773

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENTRATION (mg/L)	MS CONCENTRATION (mg/L)	MS % REC
G-BHC (Lindane)	.020	.000	.015	76
Heptachlor	.020	.000	.014	71
Heptachlor Epoxide	.020	.000	.020	99
Endrin	.020	.000	.018	93
Methoxychlor	.020	.000	.017	84
A-Chlordane	.004	.000	.006	141
G-Chlordane	.004	.000	.003	79
Toxaphene	.040	.000	.039	97

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ACCREDITED LABORATORIES, INC.
TCLP HERBICIDE MATRIX SPIKE RECOVERY

Matrix Spike Sample No.: 9913211

Date Extracted: 12/08/99

Data File: >A0602

COMPOUND	SPIKE ADDED (mg/l)	SAMPLE CONCENTRATION (mg/l)	MS CONCENTRATION (mg/l)	MS % REC
2,4'-D	.500	.000	.247	49
SILVEX	.500	.000	.379	76

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ACCREDITED LABORATORIES, INC.
SOIL PCB BLANK SPIKE

Matrix Spike Sample Number: PBLK17

Sample Data File: >G4731

Date Extracted: 12/03/99

MS Data File: >G4732

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC ** LIMITS REC
Aroclor-1260	333	0.000	346	104	40-140

Column used to flag recovery values with an asterisk
* Values outside of QC limits

Spike Recovery: 0 out of 1 outside limits

** Values were generated within ALI for advisory purposes only

COMMENTS: _____

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ACCREDITED LABORATORIES, INC.
SOIL PCB MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Matrix Spike Sample Number: 9912999

Sample Data File: >G4748

Date Extracted: 12/03/99

MS Data File: >G4749

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC ** LIMITS REC
Aroclor-1260	333	0.000	9712	*** *	40-140

MSD Data File: >G4750

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS ** RPD	REC
Aroclor-1260	333	23429	*** *	83 *	25	40-140

Column used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 1 out of 1 outside limits
Spike Recovery: 2 out of 2 outside limits

** Values were generated within ALI for advisory purposes only

COMMENTS: High concentration of Aroclor-1254 resulting in spike compound out of range.

ACCREDITED LABORATORIES, INC.
TCLP PESTICIDES ANALYSIS DATA

CASE NUMBER		MATRIX	Leachate
SAMPLE NUMBER	PBLK21	DILUTION FACTOR	50
DATA FILE	>G4768	DATE EXTRACTED	12/09/99
CLIENT NAME		DATE ANALYZED	12/09/99
FIELD ID		ANALYZED BY	JEFF

CAS No.	Compound	Result (mg/l)	MDL (mg/l)	Regulatory Level (mg/l)
58-89-9	G-BHC (Lindane)	U	.001	0.400
76-44-8	Heptachlor	U	.001	0.008
1024-57-3	Heptachlor Epoxide	U	.001	0.008
72-20-8	Endrin	U	.002	0.02
72-43-5	Methoxychlor	U	.010	10.0
5103-71-9	A-Chlordane	U	.001	0.03
5103-74-2	G-Chlordane	U	.001	0.03
8001-35-2	Toxaphene	U	.050	0.5

SURROGATE COMPOUNDS	RECOVERY	ADVISORY LIMITS	STATUS
DCB	84%	30 - 150	OK
Tetrachloro-m-xylene	71%	30 - 150	OK

U - Indicates compound was analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.

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ACCREDITED LABORATORIES, INC
TCLP HERBICIDE ANALYSIS DATA

CASE NUMBER		MATRIX	Leachate
SAMPLE NUMBER	HBLK12	DILUTION FACTOR	1
DATA FILE	>A0597	DATE EXTRACTED	12/08/99
CLIENT NAME		DATE ANALYZED	12/08/99
FIELD ID		ANALYZED BY	JEFF

CAS No.	Compound	Result (mg/l)	MDL (mg/l)	Regulatory Level (mg/l)
94757	2,4'-D	U	.100	10.0
93721	SILVEX	U	.010	1.0

U - Indicates compound was analyzed for but not detected

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ACCREDITED LABORATORIES, INC
PCB ORGANIC ANALYSIS DATA

CASE NUMBER		MATRIX	Soil
SAMPLE NUMBER	PBLK17	DILUTION FACTOR	1
DATA FILE	>G4731	DATE EXTRACTED	12/03/99
CLIENT NAME		DATE ANALYZED	12/07/99
FIELD ID		ANALYZED BY	JEFF

CAS#	COMPOUND	UG/KG	MDL
12674112	Aroclor-1016	U	16.7
11104282	Aroclor-1221	U	16.7
11141165	Aroclor-1232	U	16.7
53469219	Aroclor-1242	U	16.7
12672296	Aroclor-1248	U	16.7
11097691	Aroclor-1254	U	16.7
11096825	Aroclor-1260	U	16.7

Percent Solid of 100. is used for all target compounds.

B - Indicates compound found in associated blank.
J - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.

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ACCREDITED LABORATORIES, INC
PCB ORGANIC ANALYSIS DATA

CASE NUMBER		MATRIX	Soil
SAMPLE NUMBER	PBLK17-A	DILUTION FACTOR	1
DATA FILE	>G4733	DATE EXTRACTED	12/03/99
CLIENT NAME		DATE ANALYZED	12/07/99
FIELD ID		ANALYZED BY	JEFF

CAS#	COMPOUND	UG/KG	MDL
12674112	Aroclor-1016	U	16.7
11104282	Aroclor-1221	U	16.7
11141165	Aroclor-1232	U	16.7
53469219	Aroclor-1242	U	16.7
12672296	Aroclor-1248	U	16.7
11097691	Aroclor-1254	U	16.7
11096825	Aroclor-1260	U	16.7

Percent Solid of 100. is used for all target compounds.

B - Indicates compound found in associated blank.
J - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.

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ACCREDITED LABORATORIES, INC.
REGULATED TCLP METALS
INITIAL CALIBRATION

Initial Calibration Source: PE/LEEMAN

Concentration Units: µg/L

Analyte	Initial Calibration True	Found	% Rec	Date	Method
Arsenic	7500.0	7440.00	99.2	12/10/99	P
Barium	7500.0	7880.00	105.1	12/10/99	P
Cadmium	7500.0	7690.00	102.5	12/10/99	P
Chromium	7500.0	7190.00	95.9	12/10/99	P
Lead	7500.0	7330.00	97.7	12/10/99	P
Mercury	4.0	3.24	81.0	12/03/99	CV
Selenium	7500.0	7740.00	103.2	12/10/99	P
Silver	750.0	728.00	97.1	12/10/99	P

Control Limits:

Mercury 80-120; ICP Metals 90-110; GFA 80-120; CN 85-115

ALI FORM II (Part I) - INORGANICS

ACCREDITED LABORATORIES, INC.
REGULATED TCLP METALS
CONTINUING CALIBRATION VERIFICATION

Initial Calibration Source: PE/LEEMAN

Continuing Calibration Source: ALI

Concentration Units: µg/L

Analyte	Continuing Calibration(s)							M
	True	Found 1	% Rec	Date 1	Found 2	% Rec	Date 2	
Arsenic	5000.0	5350.00	107.0	12/10/99	5140.00	102.8	12/10/99	P
Barium	5000.0	5210.00	104.2	12/10/99	5190.00	103.8	12/10/99	P
Cadmium	5000.0	5180.00	103.6	12/10/99	5160.00	103.2	12/10/99	P
Chromium	5000.0	5060.00	101.2	12/10/99	5150.00	103.0	12/10/99	P
Lead	5000.0	5130.00	102.6	12/10/99	5040.00	100.8	12/10/99	P
Mercury	5.0	5.09	101.8	12/03/99	5.56	111.2	12/03/99	CV
Selenium	5000.0	5140.00	102.8	12/10/99	5260.00	105.2	12/10/99	P
Silver	500.0	515.00	103.0	12/10/99	523.00	104.6	12/10/99	P

Control Limits: Mercury 80-120; ICP Metals 90-110; GFA 80-120; CN 85-115

ALI FORM II (Part II) - INORGANICS

ACCREDITED LABORATORIES, INC.
REGULATED TCLP METALS
INITIAL CALIBRATION & PREPARATORY BLANKS

Preparation Blank Matrix: Leachate

Analyte	Initial Calibration Blank (µg/L)		Preparation Blank (µg/L)		Method
	Result	Date	Result	Date	
Arsenic	< 500.0	12/10/99	< 500.0	12/10/99	P
Barium	< 100.0	12/10/99	< 100.0	12/10/99	P
Cadmium	< 50.0	12/10/99	< 50.0	12/10/99	P
Chromium	< 50.0	12/10/99	< 50.0	12/10/99	P
Lead	< 250.0	12/10/99	< 250.0	12/10/99	P
Mercury	< 1.0	12/03/99	< 1.0	12/03/99	CV
Selenium	< 250.0	12/10/99	< 250.0	12/10/99	P
Silver	< 50.0	12/10/99	< 50.0	12/10/99	P

ALI FORM III (Part I) - INORGANICS

160

ACCREDITED LABORATORIES, INC.
REGULATED TCLP METALS
CONTINUING CALIBRATION BLANKS

Concentration Units: µg/L

Analyte	Continuing Calibration Blank(s) Result 1	Date 1	Result 2	Date 2	Result 3	Date 3	Method
Arsenic	< 500.0	12/10/99	< 500.0	12/10/99			P
Barium	< 100.0	12/10/99	< 100.0	12/10/99			P
Cadmium	< 50.0	12/10/99	< 50.0	12/10/99			P
Chromium	< 50.0	12/10/99	< 50.0	12/10/99			P
Lead	< 250.0	12/10/99	< 250.0	12/10/99			P
Mercury	< 1.0	12/03/99	< 1.0	12/03/99	< 1.0	12/03/99	CV
Selenium	< 250.0	12/10/99	< 250.0	12/10/99			P
Silver	< 50.0	12/10/99	< 50.0	12/10/99			P

ALI FORM III (Part II) - INORGANICS

161

ACCREDITED LABORATORIES, INC.
REGULATED TCLP METALS
ICP INTERFERENCE CHECK SAMPLE

ICP ID Number: ES-2000 ICS Source: SPEX-3-129AS

Concentration Units: µg/L

Analyte	True		Initial Found			Final Found		
	Sol A	Sol AB	Sol A	Sol AB	% Rec	Sol A	Sol AB	% Rec
Arsenic								
Barium	0.	500.	0.	535.0	107.0	-1.	515.0	103.0
Cadmium	0.	1000.	84.	1140.0	114.0	67.	1070.0	107.0
Chromium	0.	500.	-4.	507.0	101.4	-2.	495.0	99.0
Lead	0.	1000.	157.	1150.0	115.0	76.	970.0	97.0
Mercury								
Selenium								
Silver	0.	1000.	13.	975.0	97.5	2.	932.0	93.2

ALI FORM IV - INORGANICS

162

ACCREDITED LABORATORIES, INC.
REGULATED TCLP METALS
SPIKE SAMPLE RECOVERY

Sample #: 9912996 Matrix: Leachate

Concentration Units: mg/l

Analyte	Spike Added	Sample Result	Spiked Sample Result	% Recovery	Q	QC Limits %Rec	Date Analyzed	M
Arsenic	4.00	ND	4.40	110.0	_	75-125	12/10/99	P
Barium	4.00	1.54	5.62	102.0	_	75-125	12/10/99	P
Cadmium	.10	.280	.358	78.0	_	75-125	12/10/99	P
Chromium	.40	ND	.408	102.0	_	75-125	12/10/99	P
Lead	1.50	1.00	2.04	69.3	*	75-125	12/10/99	P
Mercury	2.00	ND	2.19	109.5	_	75-125	12/03/99	CV
Selenium	4.00	ND	4.46	111.5	_	75-125	12/10/99	P
Silver	.20	ND	.242	121.0	_	75-125	12/10/99	P

Comments:
ND - Element analyzed for but not detected.
P - Analyzed by ICP
F - Analyzed by GFA
CV - Analyzed by cold vapor
A - Analyzed by flame AA

ALI FORM V (Part I) - INORGANICS

ACCREDITED LABORATORIES, INC.
REGULATED TCLP METALS
SPIKE SAMPLE RECOVERY

Sample #: 9912996 Matrix: Leachate

Concentration Units: mg/l

Analyte	Spike Added	Sample Result	Spiked Sample Result	% Recovery	Q	QC Limits %Rec	Date Analyzed	M
Lead	1.50	1.00	2.14	76.0	_	75-125	12/10/99	P

Comments:
ND - Element analyzed for but not detected.
P - Analyzed by ICP
F - Analyzed by GFA
CV - Analyzed by cold vapor
A - Analyzed by flame AA

ALI FORM V (Part I) - INORGANICS

164

ACCREDITED LABORATORIES, INC.
REGULATED TCLP METALS
DUPLICATES

Sample #: 9912996 Matrix: Leachate

Concentration Units (µG/L, MG/L or MG/KG dry weight): MG/L

Analyte	Control Limit	Sample Result	Duplicate Result	RPD	Q	Date Analyzed	M
Arsenic		ND	ND			12/10/99	P
Barium		1.54	1.55	.6		12/10/99	P
Cadmium	.100	.280	.302	7.6		12/10/99	P
Chromium		ND	ND			12/10/99	P
Lead	.500	1.00	1.07	6.8		12/10/99	P
Mercury		ND	ND			12/03/99	CV
Selenium		ND	ND			12/10/99	P
Silver		ND	ND			12/10/99	P

ND - Element analyzed for but not detected or detected below MDL.

ALI FORM VI - INORGANICS

165

ACCREDITED LABORATORIES, INC.
REGULATED TCLP METALS
LABORATORY CONTROL SAMPLE

Solid LCS Source: ALI

Aqueous LCS Source: ALI

Analyte	Aqueous (µg/L)					Solid (mg/kg)				
	True	Found	%Rec	Q	M	True	Found	%Rec	Q	M
Arsenic	2000.0	2280.0	114.0		P					
Barium	2000.0	2160.0	108.0		P					
Cadmium	50.0	64.8	129.6		P					
Chromium	200.0	217.0	108.5		P					
Lead	750.0	682.0	90.9		P					
Mercury	2.0	2.2	108.0		CV					
Selenium	2000.0	2280.0	114.0		P					
Silver	75.0	71.3	95.1		P					

ALI FORM VII - INORGANICS

ACCREDITED LABORATORIES, INC.
REGULATED TCLP METALS
ICP SERIAL DILUTION SUMMARY

Sample #: 9912996 Matrix: Leachate

Concentration Units: µg/L

Analyte	MDL	Initial Sample Result	Serial Dilution Result	% Difference	Date Date Analyzed	M
Arsenic	500	ND	ND		12/10/99	P
Barium	100	769	825	7.3	12/10/99	P
Cadmium	50.0	140	181	29.3	12/10/99	P
Chromium	50.0	ND	ND		12/10/99	P
Lead	250	500	710	42.0	12/10/99	P
Selenium	250	ND	ND		12/10/99	P
Silver	50.0	ND	ND		12/10/99	P

ND - Element analyzed for but not detected or detected below MDL.

ALI FORM IX - INORGANICS

167

U.S. EPA - CLP

10
Instrument Detection Limits (Quarterly)

Lab Name: ACCREDITED LABS INC. Contract: _____
Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____
ICP ID Number: ES_2000 Date: 12/01/99
Flame AA ID Number : _____
Furnace AA ID Number : _____

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum	308.22		200	153.0	P
Antimony	206.83		60	58.4	P
Arsenic	193.70		10	78.0	P
Barium	455.40		200	2.2	P
Beryllium	313.04		5	0.5	P
Cadmium	226.50		5	4.9	P
Calcium	317.93		1000	199.0	P
Chromium	267.72		10	16.4	P
Cobalt	228.62		50	10.6	P
Copper	324.75		30	9.7	P
Iron	259.94		100	73.5	P
Lead	220.35		3	89.7	P
Magnesium	279.08		5000	210.0	P
Manganese	257.61		15	1.1	P
Mercury			0.2		NR
Nickel	231.60		40	13.6	P
Potassium	766.49		5000	739.0	P
Selenium	196.03		5	134.0	P
Silver	328.07		10	9.2	P
Sodium	589.00		1000	259.0	P
Thallium	190.80		10	283.0	P
Vanadium	292.40		50	7.2	P
Zinc	213.86		100	19.7	P
Cyanide			10		NR

Comments:

FORM X - IN ILM02.1

168

U.S. EPA - CLP

10

Instrument Detection Limits (Quarterly)

Lab Name: ACCREDITED LABS INC. Contract: _____
Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____
ICP ID Number: _____ Date: 12/01/99
Flame AA ID Number : PS200
Furnace AA ID Number : _____

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200		NR
Antimony			60		NR
Arsenic			10		NR
Barium			200		NR
Beryllium			5		NR
Cadmium			5		NR
Calcium			1000		NR
Chromium			10		NR
Cobalt			50		NR
Copper			30		NR
Iron			100		NR
Lead			3		NR
Magnesium			5000		NR
Manganese			15		NR
Mercury	253.60	BD	0.2	0.1	CV
Nickel			40		NR
Potassium			5000		NR
Selenium			5		NR
Silver			10		NR
Sodium			1000		NR
Thallium			10		NR
Vanadium			50		NR
Zinc			100		NR
Cyanide			10		NR

Comments:

FORM X - IN ILM02.1

169

700267

U.S. EPA - CLP

11A
ICP Interelement Correction Factors (Annually)

Lab Name: ACCREDITED_LABS_INC._____ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

ICP ID Number: ES 2000_____ Date: 01/14/99

Analyte	Wave-length (nm)	Interelement Correction Factors for : Al	Ca	Fe	Mg	CR_
Aluminum	308.22	0.0000000	0.0003000	-0.0001000	0.0000000	-0.0013000
Antimony	206.83	0.0000000	0.0000000	-0.0001000	0.0000000	0.0018000
Arsenic	193.70	0.0001000	0.0000000	-0.0004000	0.0000000	0.0001000
Barium	455.40	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.50	0.0000000	0.0000000	0.0001000	0.0000000	0.0000000
Calcium	317.93	0.0003000	0.0000000	0.0001100	0.0001000	0.0001000
Chromium	267.72	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.62	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	324.75	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	259.94	0.0001000	0.0000000	0.0000000	0.0001000	0.0001000
Lead	220.35	-0.0002000	0.0000000	0.0001000	0.0000000	-0.0002000
Magnesium	279.08	0.0000000	0.0000000	-0.0001000	0.0000000	0.0002000
Manganese	257.61	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Mercury						
Nickel	231.60	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.49	0.0003000	0.0003000	-0.0002000	0.0000000	0.0000000
Selenium	196.03	0.0001000	0.0001000	0.0000000	0.0000000	0.0000000
Silver	328.07	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	589.00	0.0024000	0.0016000	0.0012200	0.0018000	0.0015000
Thallium	190.80	0.0000000	0.0000000	0.0000000	0.0001000	0.0002000
Vanadium	292.40	0.0000000	0.0000000	0.0000000	0.0000000	-0.0004000
Zinc	213.86	0.0001000	0.0002000	0.0001000	0.0001000	0.0000000
Cyanide						
						-0.0000036

Comments:

FORM XI (Part 1) - IN ILM02.1

170

700268

U.S. EPA - CLP

12
ICP Linear Ranges (Quarterly)

Lab Name: ACCREDITED_LABS_INC._____ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

ICP ID Number: ES 2000_____ Date: 12/02/99

Analyte	Integ. Time (sec.)	Concentration (ug/L)	M
Aluminum	5.00	500000.0	P
Antimony	5.00	100000.0	P
Arsenic	5.00	100000.0	P
Barium	5.00	100000.0	P
Beryllium	5.00	100000.0	P
Cadmium	5.00	100000.0	P
Calcium	5.00	500000.0	P
Chromium	5.00	100000.0	P
Cobalt	5.00	100000.0	P
Copper	5.00	100000.0	P
Iron	5.00	500000.0	P
Lead	5.00	100000.0	P
Magnesium	5.00	500000.0	P
Manganese	5.00	100000.0	P
Mercury			NR
Nickel	5.00	100000.0	P
Potassium	5.00	100000.0	P
Selenium	5.00	100000.0	P
Silver	5.00	1000.0	P
Sodium	5.00	200000.0	P
Thallium	5.00	100000.0	P
Vanadium	5.00	100000.0	P
Zinc	5.00	100000.0	P
Cyanide			

Comments:

ACCREDITED LABORATORIES, INC.
PREPARATION LOG

Method: ICP

Case No.: 6481

Lab Sample No	Field ID	Preparation Date	Initial Weight (g)	Initial Volume (ml)	Final Volume (ml)
PBL916	PREPBLANK	12/03/99		100	100
LCSW916	LCS	12/03/99		100	100
9912996	SP-1	12/03/99		50	100
9912996L		12/03/99		50	100
9912996D		12/03/99		50	100
9912996SA		12/03/99		50	100
9912996SB		12/03/99		50	100
9912994	DCOMP-1	12/03/99		50	100
9912995	DCOMP-2	12/03/99		50	100

ALI FORM XIII - INORGANICS

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ACCREDITED LABORATORIES, INC.
PREPARATION LOG

Method: Cold Vapor

Case No.: 6481

Lab Sample No	Field ID	Preparation Date	Initial Weight (g)	Initial Volume (ml)	Final Volume (ml)
PBL916	PREPBLANK	12/03/99		100	100
LCSW916	LCS	12/03/99		100	100
9912996	SP-1	12/03/99		50	100
9912996D		12/03/99		50	100
9912996SA		12/03/99		50	100
9912996SB		12/03/99		50	100
9912994	DCOMP-1	12/03/99		50	100
9912995	DCOMP-2	12/03/99		10	100

ALI FORM XIII - INORGANICS

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ACCREDITED LABORATORIES, INC.
GENERAL CHEMISTRY DUPLICATE SAMPLE RESULTS SUMMARY

Matrix: Soil

ANALYTES	SAMPLE #	ORIGINAL SAMPLE CONCENTRATION	UNITS	DUPICATE SAMPLE CONCENTRATION	RPD	QC LIMITS
Flash Point	9912995	170	°F	160	6.1	20%
PH	9912995	6.86	S.U.	6.79	1.0	20%
Cyanide, Reactive	9912996	ND	mg/Kg	ND	.0	20%
Sulfide, Reactive	9912996	ND	mg/Kg	ND	.0	20%

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Initial Calibration Data
HSL Compounds

Case No:

Instrument ID: GC/FID #3

Contractor: ACCREDITED LABS INC.

Calibration Date: 07/08/98

Contract No: C3DROA

Minimum $\overline{RF}$ for SPCC is 10000 Maximum % RSD for CCC is 25%

Comp No.	Compound	Laboratory ID: >K7827 RF 1.00	>K7826 RF 5.00	>K7825 RF 10.00	>K7824 RF 20.00	>K7823 RF 50.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CORR1	CCC	SPCC
1)	Decane	12417.0	8476.80	8918.10	9514.60	9135.16	8.637	9692.33	16.185	.999700		
2)	Dodecane	10227.0	9438.40	9722.80	9973.40	9198.52	11.222	9712.03	4.221	.999371		
3)	Tetradecane	8663.00	8149.80	8657.20	9317.95	8979.18	13.502	8753.43	4.952	.999734		
4)	Hexadecane	18300.0	15603.8	12997.5	11684.9	9998.54	15.567	13717.0	23.913	.997704		
5)	Octadecane	16740.0	13045.4	11600.3	10820.8	9599.24	17.442	12361.1	22.237	.998913		
6)	Ortho-terphenyl	14663.0	11659.2	11422.0	11345.6	10507.1	18.632	11919.4	13.375	.999574		
7)	Eicosane	13372.0	12031.8	11013.1	10551.9	9544.72	19.152	11302.7	12.936	.999178		
8)	Decosane	15799.0	11213.4	10514.4	10348.2	9530.64	20.710	11481.1	21.661	.999610		
9)	Tetracosane	15905.0	10962.8	10954.5	10285.4	9378.60	22.143	11497.3	22.160	.999353		
10)	Hexacosane	11875.0	10256.0	10026.4	10066.2	9337.52	23.477	10312.2	9.120	.999562		
11)	Octacosane	12967.0	10364.8	10018.3	10026.0	9295.48	24.838	10534.3	13.430	.999598		

RF - Response Factor (Subscript is amount in MG/L)

$\overline{RRT}$ - Average Relative Retention Time (RT Std/RT Istd)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

CORRn - Coefficient of Correlation (nth degree)

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Continuing Calibration Check
HSL Compounds

Case No:

Calibration Date: 12/08/99

Contractor: ACCREDITED LABS INC.

Time: 12:37

Contract No: C3DROA

Laboratory ID: >K8819

Instrument ID: GC/FID #3

Initial Calibration Date: 07/08/98

Minimum $\overline{RF}$ for SPCC is 10000

Maximum % Diff for CCC is 25%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC
Decane	9692.33	9365.55	3.37		
Dodecane	9712.03	10353.9	6.61		
Tetradecane	8753.43	10456.3	19.45		
Hexadecane	13717.0	15641.7	14.03		
Octadecane	12361.1	11379.1	7.94		
Ortho-terphenyl	11919.4	13704.7	14.98		
Eicosane	11302.7	12830.6	13.52		
Decosane	11481.1	12654.8	10.22		
Tetracosane	11497.3	11267.1	2.00		
Hexacosane	10312.2	11851.3	14.92		
Octacosane	10534.3	11905.4	13.02		

RF - Response Factor from daily standard file at 20.00 MG/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 (**)

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ACCREDITED LABORATORIES, INC.
SOIL DRO TPHC MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Matrix Spike Sample Number: 9912996

Sample Data File: >K8829

Date Extracted: 12/08/99

MS Data File: >K8830

COMPOUND	SPIKE ADDED (mg/Kg)	SAMPLE CONCENTRATION (mg/Kg)	MS CONCENTRATION (mg/Kg)	MS % REC #	QC LIMITS REC
Diesel Fuel #2	23.3	00.0	87.2	374 *	60-120

MSD Data File: >K8831

COMPOUND	SPIKE ADDED (mg/Kg)	MSD CONCENTRATION (mg/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC
Diesel Fuel #2	23.3	118	506 *	30.0*	20	60-120

Column used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 1 out of 1 outside limits
Spike Recovery: 2 out of 2 outside limits

** Values were generated within ALI for advisory purposes only

COMMENTS: Very high matrix interference contributing to high recoveries.

Operator ID: ROBERT Quant Rev: 7 Quant Time: 991208 14:47
Output File: ^A5124::D5 Injected at: 991208 14:12
Data File: >A5124::D2 Dilution Factor: 1.00000
Name: VSTD010 Instrument ID: HP5970BA
Misc:

ID File: IDAS05::D5
Title: Accredited Labs ID file for 8260
Last Calibration: 991207 16:33 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Pentafluorobenzene	12.39	168.0	139567	50.00	ug/l	100
2)	Acrolein	5.54	56.0	1953	33.31	ug/l	91
3)	Acrylonitrile	7.94	53.0	8268	44.09	ug/l	96
4)	Acetone	5.95	43.0	1448	9.82	ug/l	99
5)	Dichlorodifluoromethane	3.04	85.0	7203	4.45	ug/l	100
6)	Chloromethane	3.31	50.0	6778	6.73	ug/l	100
7)	Vinyl Chloride	3.45	62.0	6247	6.83	ug/l	100
8)	Bromomethane	3.99	94.0	7183	9.34	ug/l	100
9)	Chloroethane	4.18	64.0	3553	10.15	ug/l	100
10)	Trichlorofluoromethane	4.54	101.0	18844	9.13	ug/l	100
11)	1,1-Dichloroethene	5.58	61.0	14269	8.21	ug/l	100
12)	Carbon disulfide	5.99	76.0	8706	6.85	ug/l	100
13)	Methylene Chloride	6.94	49.0	17879	11.16	ug/l	97
14)	trans-1,2-Dichloroethene	7.53	61.0	15099	8.55	ug/l	100
15)	1,1-Dichloroethane	8.99	63.0	19356	8.72	ug/l	71
16)	Vinyl acetate	9.30	43.0	11880	8.58	ug/l	99
17)	2,2-Dichloropropane	10.62	77.0	11646	9.21	ug/l	97
18)	2-Butanone	11.03	43.0	3294M	9.03	ug/l	
19)	cis-1,2-dichloroethene	10.76	61.0	19579	8.93	ug/l	83
20)	Chloroform	11.71	83.0	26535	9.36	ug/l	86
21)	Bromochloromethane	11.39	130.0	10412	8.18	ug/l	99
22)	1,1,1-Trichloroethane	11.94	97.0	18125	8.62	ug/l	96
23)	T-butyl alcohol	7.62	59.0	6798	93.82	ug/l	100
24)	*1,4-Difluorobenzene	14.16	114.0	181334	50.00	ug/l	89
25)	1,2-Dichloroethane-d4	13.03	65.0	11056	8.89	ug/l	88
26)	1,1-Dichloropropene	12.39	75.0	31513M	13.02	ug/l	69
27)	Carbon Tetrachloride	12.25	117.0	13856M	6.57	ug/l	99
28)	1,2-Dichloroethane	13.25	62.0	12767	9.09	ug/l	93
29)	Benzene	12.89	78.0	33286	9.58	ug/l	100
30)	Trichloroethene	14.66	95.0	15918	9.03	ug/l	100
31)	1,2-Dichloropropane	15.34	63.0	13440	9.25	ug/l	100
32)	Bromodichloromethane	16.07	83.0	22717	8.69	ug/l	100
33)	Dibromomethane	15.61	174.0	11771M	9.05	ug/l	
34)	2-Chloroethylvinylether	16.93	63.0	4911	8.01	ug/l	92
35)	cis-1,3-dichloropropene	17.20	75.0	18034	8.41	ug/l	93
36)	Toluene-d8	17.66	98.0	33867	9.35	ug/l	95
37)	Toluene	17.79	91.0	37726	9.44	ug/l	89
38)	trans-1,3-Dichloropropene	18.66	75.0	13938	8.99	ug/l	85
39)	1,1,2-Trichloroethane	19.06	83.0	11345	9.97	ug/l	87
40)	4-Methyl-2-pentanone	17.66	43.0	9628	10.31	ug/l	100

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Operator ID: ROBERT Quant Rev: 7 Quant Time: 991208 14:47
Output File: ^A5124::D5 Injected at: 991208 14:12
Data File: >A5124::D2 Dilution Factor: 1.00000
Name: VSTD010 Instrument ID: HP5970BA
Misc:

ID File: IDAS05::D5
Title: Accredited Labs ID file for 8260
Last Calibration: 991207 16:33 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
41)	1,2-Dibromoethane	20.11	107.0	19672	9.37	ug/l	98
42)	Bromofluorobenzene	24.19	95.0	25389	9.61	ug/l	78
43)	*Chlorobenzene-d5	21.20	117.0	145476	50.00	ug/l	100
44)	2-Hexanone	19.70	43.0	6305	10.12	ug/l	100
45)	1,3-dichloropropane	19.43	76.0	20156	9.56	ug/l	85
46)	Tetrachloroethene	19.02	166.0	16711	9.47	ug/l	86
47)	Dibromochloromethane	19.88	129.0	18477	8.26	ug/l	100
48)	Ethylbenzene	21.52	91.0	47816M	10.21	ug/l	72
49)	Chlorobenzene	21.29	112.0	31052	9.63	ug/l	100
50)	1,1,1,2-Tetrachloroethane	21.56	131.0	14987	9.29	ug/l	100
51)	m,p-Xylene	21.83	91.0	78325	20.13	ug/l	99
52)	o-Xylene	22.79	91.0	78632	20.21	ug/l	100
53)	Styrene	22.88	104.0	53921	19.24	ug/l	100
54)	Bromoform	23.33	173.0	12095	8.07	ug/l	100
55)	*1,4-Dichlorobenzene-d4	27.01	152.0	87254	50.00	ug/l	97
56)	Isopropylbenzene	23.69	105.0	49709	9.44	ug/l	76
57)	1,1,2,2-Tetrachloroethane	24.69	83.0	21734	9.72	ug/l	84
58)	1,2,3-Trichloropropane	24.78	110.0	4949	9.25	ug/l	93
59)	n-Propyl benzene	24.74	91.0	65236	10.31	ug/l	99
60)	Bromobenzene	24.47	77.0	33945	9.78	ug/l	100
61)	1,3,5-Trimethylbenzene	25.24	105.0	42291	9.92	ug/l	95
62)	2-Chlorotoluene	24.97	91.0	45150M	9.60	ug/l	81
63)	4-Chlorotoluene	25.28	91.0	51012	10.16	ug/l	89
64)	tert-Butylbenzene	25.96	119.0	42672	9.45	ug/l	100
65)	1,2,4-Trimethylbenzene	26.15	105.0	43343	9.65	ug/l	83
66)	sec-Butylbenzene	26.51	105.0	62066	9.73	ug/l	94
67)	p-Isopropyltoluene	26.92	119.0	48413	9.76	ug/l	92
68)	1,3-Dichlorobenzene	26.83	146.0	28109M	9.61	ug/l	94
69)	1,4-Dichlorobenzene	27.10	146.0	29147	9.73	ug/l	94
70)	n-Butylbenzene	27.96	91.0	52429	9.79	ug/l	95
71)	1,2-Dichlorobenzene	28.01	146.0	27184	9.75	ug/l	96
72)	1,2-Dibromo-3-Chloropropane	30.09	157.0	3597M	7.36	ug/l	
73)	1,2,4-Trichlorobenzene	32.09	180.0	18736	8.98	ug/l	100
74)	Hexachlorobutadiene	32.41	225.0	11790	9.41	ug/l	96
75)	Naphthalene	32.68	128.0	32134	8.49	ug/l	100
76)	1,2,3-Trichlorobenzene	33.32	180.0	16688	8.87	ug/l	100
77)	Methyl t-butyl ether	7.62	73.0	124501	99.16	ug/l	97

* Compound is ISTD

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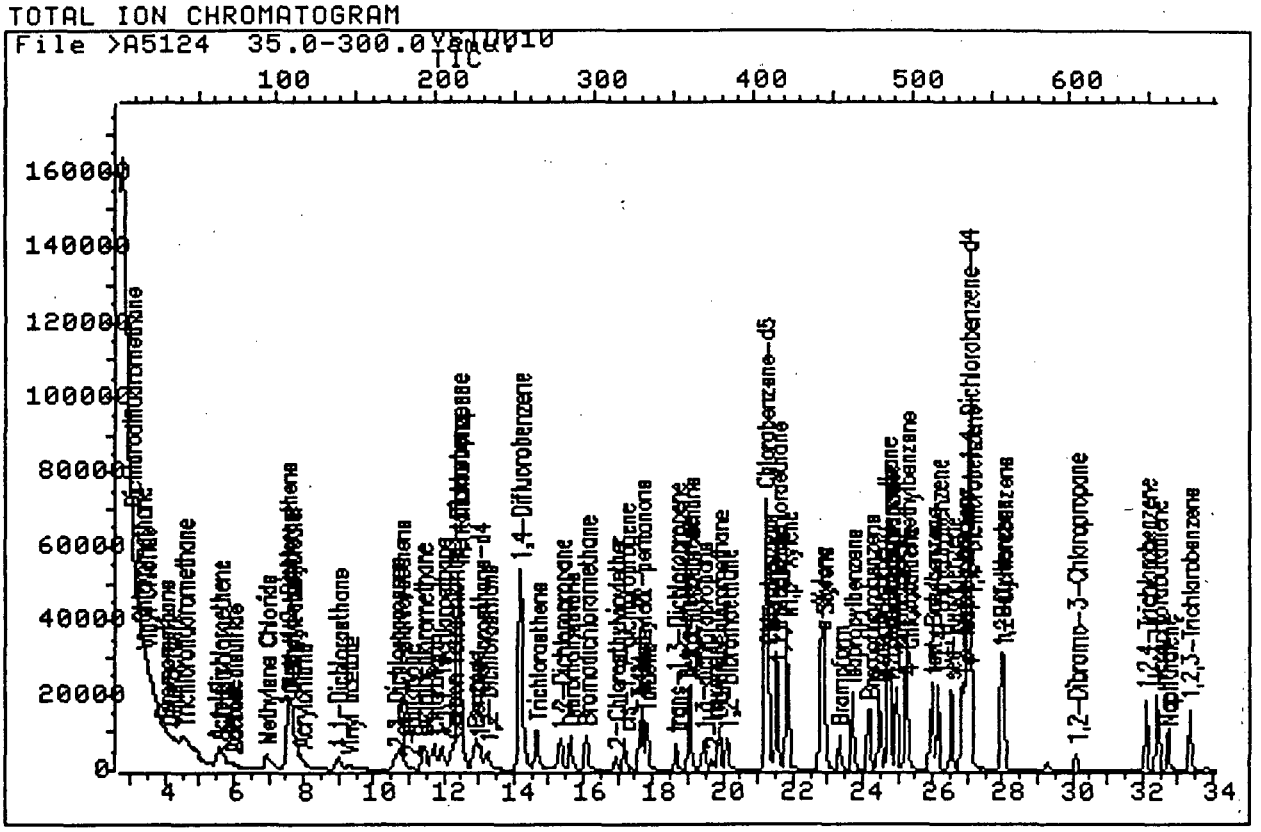
TOTAL ION CHROMATOGRAM



Data File: >A5124::D2 Quant Output File: ^A5124::D5
Name: VSTD010 Instrument ID: HP5970BA
Misc:

Id File: IDAS05::D5
Title: Accredited Labs ID file for 8260
Last Calibration: 991207 16:33 Last Qcal Time: <none>

Operator ID: ROBERT
Quant Time : 991208 14:47
Injected at: 991208 14:12

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Operator ID: ROBERT Quant Rev: 7 Quant Time: 991208 14:06
Output File: ^A5123::D5 Injected at: 991208 13:31
Data File: >A5123::D2 Dilution Factor: 1.00000
Name: VSTD020 Instrument ID: HP5970BA
Misc:

ID File: IDAS05::D5
Title: Accredited Labs ID file for 8260
Last Calibration: 991207 16:33 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Pentafluorobenzene	12.39	168.0	161407	50.00	ug/l	100
2)	Acrolein	5.54	56.0	5205	76.75	ug/l	96
3)	Acrylonitrile	7.94	53.0	18081	83.36	ug/l	92
4)	Acetone	5.95	43.0	3227	18.92	ug/l	99
5)	Dichlorodifluoromethane	3.00	85.0	19389	10.37	ug/l	100
6)	Chloromethane	3.27	50.0	16943	14.56	ug/l	100
7)	Vinyl Chloride	3.45	62.0	15932	15.05	ug/l	100
8)	Bromomethane	3.95	94.0	17086	19.21	ug/l	100
9)	Chloroethane	4.18	64.0	9291	22.94	ug/l	100
10)	Trichlorofluoromethane	4.54	101.0	46233	19.37	ug/l	100
11)	1,1-Dichloroethene	5.58	61.0	33639	16.74	ug/l	100
12)	Carbon disulfide	5.95	76.0	23717	16.13	ug/l	100
13)	Methylene Chloride	6.94	49.0	33608	18.14	ug/l	98
14)	trans-1,2-Dichloroethene	7.54	61.0	35971	17.61	ug/l	100
15)	1,1-Dichloroethane	9.03	63.0	44543	17.35	ug/l	70
16)	Vinyl acetate	9.31	43.0	25793	16.12	ug/l	99
17)	2,2-Dichloropropane	10.62	77.0	27472	18.78	ug/l	99
18)	2-Butanone	11.03	43.0	6623	15.70	ug/l	85
19)	cis-1,2-dichloroethene	10.76	61.0	45021	17.75	ug/l	81
20)	Chloroform	11.71	83.0	57564	17.56	ug/l	86
21)	Bromochloromethane	11.39	130.0	25184	17.11	ug/l	83
22)	1,1,1-Trichloroethane	11.94	97.0	42654	17.54	ug/l	90
23)	T-butyl alcohol	7.63	59.0	13275	158.43	ug/l	100
24)	*1,4-Difluorobenzene	14.16	114.0	191788	50.00	ug/l	91
25)	1,2-Dichloroethane-d4	13.07	65.0	24021	18.27	ug/l	91
26)	1,1-Dichloropropene	12.39	75.0	53944	21.08	ug/l	80
27)	Carbon Tetrachloride	12.26	117.0	35714M	16.02	ug/l	98
28)	1,2-Dichloroethane	13.26	62.0	27558	18.56	ug/l	94
29)	Benzene	12.94	78.0	71398	19.43	ug/l	100
30)	Trichloroethene	14.66	95.0	34994	18.76	ug/l	100
31)	1,2-Dichloropropane	15.34	63.0	27961	18.19	ug/l	100
32)	Bromodichloromethane	16.07	83.0	51983	18.81	ug/l	100
33)	Dibromomethane	15.62	174.0	27927	20.30	ug/l	83
34)	2-Chloroethylvinylether	16.98	63.0	11419	17.61	ug/l	92
35)	cis-1,3-dichloropropene	17.20	75.0	40553	17.88	ug/l	95
36)	Toluene-d8	17.66	98.0	73842	19.28	ug/l	95
37)	Toluene	17.84	91.0	82036	19.42	ug/l	91
38)	trans-1,3-Dichloropropene	18.66	75.0	32069	19.55	ug/l	88
39)	1,1,2-Trichloroethane	19.07	83.0	24370	20.25	ug/l	86
40)	4-Methyl-2-pentanone	17.66	43.0	18874	19.12	ug/l	100

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Operator ID: ROBERT Quant Rev: 7 Quant Time: 991208 14:06
Output File: ^A5123::D5 Injected at: 991208 13:31
Data File: >A5123::D2 Dilution Factor: 1.00000
Name: VSTD020 Instrument ID: HP5970BA
Misc:

ID File: IDAS05::D5
Title: Accredited Labs ID file for 8260
Last Calibration: 991207 16:33 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
41)	1,2-Dibromoethane	20.11	107.0	43061	19.38	ug/l	99
42)	Bromofluorobenzene	24.20	95.0	55674	19.93	ug/l	82
43)	*Chlorobenzene-d5	21.20	117.0	156678	50.00	ug/l	100
44)	2-Hexanone	19.70	43.0	12194	18.18	ug/l	100
45)	1,3-dichloropropane	19.47	76.0	41590	18.32	ug/l	84
46)	Tetrachloroethene	19.02	166.0	38706	20.37	ug/l	86
47)	Dibromochloromethane	19.88	129.0	43315	17.98	ug/l	100
48)	Ethylbenzene	21.52	91.0	100713M	19.97	ug/l	70
49)	Chlorobenzene	21.29	112.0	66033	19.01	ug/l	100
50)	1,1,1,2-Tetrachloroethane	21.56	131.0	33573	19.32	ug/l	100
51)	m,p-Xylene	21.83	91.0	168145	40.13	ug/l	98
52)	o-Xylene	22.83	91.0	167583	40.00	ug/l	100
53)	Styrene	22.88	104.0	118545	39.27	ug/l	100
54)	Bromoform	23.33	173.0	30442	18.86	ug/l	100
55)	*1,4-Dichlorobenzene-d4	27.06	152.0	97488	50.00	ug/l	92
56)	Isopropylbenzene	23.70	105.0	107955	18.35	ug/l	76
57)	1,1,2,2-Tetrachloroethane	24.74	83.0	46446	18.60	ug/l	83
58)	1,2,3-Trichloropropane	24.79	110.0	10718	17.93	ug/l	98
59)	n-Propyl benzene	24.74	91.0	139078	19.68	ug/l	99
60)	Bromobenzene	24.47	77.0	72850	18.79	ug/l	100
61)	1,3,5-Trimethylbenzene	25.24	105.0	90343	18.98	ug/l	92
62)	2-Chlorotoluene	24.97	91.0	97047M	18.47	ug/l	86
63)	4-Chlorotoluene	25.29	91.0	106219	18.94	ug/l	94
64)	tert-Butylbenzene	25.97	119.0	94293	18.69	ug/l	100
65)	1,2,4-Trimethylbenzene	26.15	105.0	92450	18.42	ug/l	82
66)	sec-Butylbenzene	26.56	105.0	132943	18.66	ug/l	93
67)	p-Isopropyltoluene	26.92	119.0	106184	19.16	ug/l	93
68)	1,3-Dichlorobenzene	26.83	146.0	62304M	19.07	ug/l	92
69)	1,4-Dichlorobenzene	27.10	146.0	62437	18.65	ug/l	92
70)	n-Butylbenzene	27.96	91.0	114049	19.06	ug/l	98
71)	1,2-Dichlorobenzene	28.01	146.0	59554	19.11	ug/l	97
72)	1,2-Dibromo-3-Chloropropane	30.10	157.0	8892M	16.29	ug/l	
73)	1,2,4-Trichlorobenzene	32.09	180.0	45877	19.69	ug/l	100
74)	Hexachlorobutadiene	32.41	225.0	28465	20.34	ug/l	87
75)	Naphthalene	32.73	128.0	79500	18.80	ug/l	100
76)	1,2,3-Trichlorobenzene	33.32	180.0	42287	20.12	ug/l	100
77)	Methyl t-butyl ether	7.63	73.0	250904	178.85	ug/l	98

* Compound is ISTD

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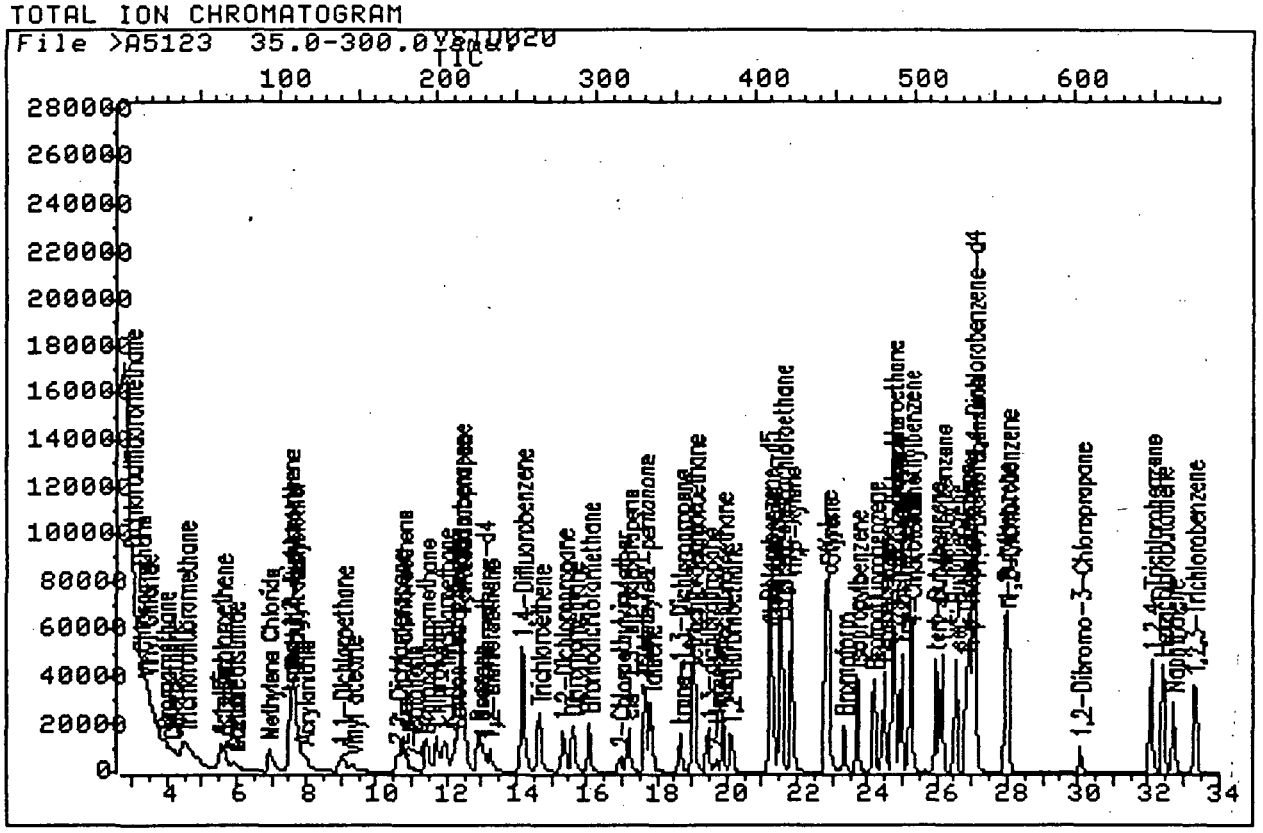
TOTAL ION CHROMATOGRAM



Data File: >A5123::D2 Quant Output File: ^A5123::D5
Name: VSTD020 Instrument ID: HP5970BA
Misc:

Id File: IDAS05::D5
Title: Accredited Labs ID file for 8260
Last Calibration: 991207 16:33 Last Qcal Time: <none>

Operator ID: ROBERT
Quant Time : 991208 14:06
Injected at: 991208 13:31

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Operator ID: ROBERT Quant Rev: 7 Quant Time: 991208 16:49
Output File: ^A5127::D5 Injected at: 991208 16:15
Data File: >A5127::D2 Dilution Factor: 1.00000
Name: VSTD050 Instrument ID: HP5970BA
Misc:

ID File: IDAS05::D5
Title: Accredited Labs ID file for 8260
Last Calibration: 991207 16:33 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Pentafluorobenzene	12.39	168.0	151810	50.00	ug/l	100
2)	Acrolein	5.58	56.0	15830	248.19	ug/l	92
3)	Acrylonitrile	7.94	53.0	45207	221.61	ug/l	98
4)	Acetone	5.95	43.0	6883	42.91	ug/l	87
5)	Dichlorodifluoromethane	2.99	85.0	35059	19.93	ug/l	100
6)	Chloromethane	3.31	50.0	36457	33.30	ug/l	100
7)	Vinyl Chloride	3.45	62.0	34276	34.44	ug/l	100
8)	Bromomethane	3.95	94.0	32579	38.94	ug/l	100
9)	Chloroethane	4.18	64.0	14668	38.51	ug/l	100
10)	Trichlorofluoromethane	4.54	101.0	95572	42.57	ug/l	100
11)	1,1-Dichloroethene	5.54	61.0	76802	40.65	ug/l	100
12)	Carbon disulfide	5.95	76.0	55361	40.03	ug/l	100
13)	Methylene Chloride	6.94	49.0	74773	42.90	ug/l	99
14)	trans-1,2-Dichloroethene	7.53	61.0	83963	43.71	ug/l	100
15)	1,1-Dichloroethane	8.99	63.0	107692	44.60	ug/l	73
16)	Vinyl acetate	9.31	43.0	68545	45.54	ug/l	98
17)	2,2-Dichloropropane	10.62	77.0	69365	50.41	ug/l	99
18)	2-Butanone	11.03	43.0	18271	46.06	ug/l	84
19)	cis-1,2-dichloroethene	10.76	61.0	107654	45.14	ug/l	84
20)	Chloroform	11.71	83.0	138526	44.94	ug/l	82
21)	Bromochloromethane	11.39	130.0	62390	45.08	ug/l	95
22)	1,1,1-Trichloroethane	11.94	97.0	105205	45.99	ug/l	94
23)	T-butyl alcohol	7.67	59.0	36056	457.50	ug/l	100
24)	*1,4-Difluorobenzene	14.16	114.0	195464	50.00	ug/l	91
25)	1,2-Dichloroethane-d4	13.03	65.0	60918	45.46	ug/l	89
26)	1,1-Dichloropropene	12.39	75.0	108766	41.70	ug/l	80
27)	Carbon Tetrachloride	12.26	117.0	112138	49.35	ug/l	99
28)	1,2-Dichloroethane	13.26	62.0	70213	46.39	ug/l	95
29)	Benzene	12.89	78.0	169075	45.14	ug/l	100
30)	Trichloroethene	14.66	95.0	89619	47.14	ug/l	100
31)	1,2-Dichloropropane	15.34	63.0	72743	46.43	ug/l	100
32)	Bromodichloromethane	16.07	83.0	132768	47.14	ug/l	100
33)	Dibromomethane	15.62	174.0	63138M	45.03	ug/l	
34)	2-Chloroethylvinylether	16.93	63.0	30842	46.66	ug/l	93
35)	cis-1,3-dichloropropene	17.21	75.0	104592	45.26	ug/l	94
36)	Toluene-d8	17.66	98.0	184640	47.30	ug/l	97
37)	Toluene	17.80	91.0	201096	46.71	ug/l	95
38)	trans-1,3-Dichloropropene	18.66	75.0	84426	50.50	ug/l	86
39)	1,1,2-Trichloroethane	19.07	83.0	59964	48.89	ug/l	83
40)	4-Methyl-2-pentanone	17.66	43.0	50492	50.18	ug/l	100

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Operator ID: ROBERT Quant Rev: 7 Quant Time: 991208 16:49
Output File: ^A5127::D5 Injected at: 991208 16:15
Data File: >A5127::D2 Dilution Factor: 1.00000
Name: VSTD050 Instrument ID: HP5970BA
Misc:

ID File: IDAS05::D5
Title: Accredited Labs ID file for 8260
Last Calibration: 991207 16:33 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
41)	1,2-Dibromoethane	20.11	107.0	106512	47.05	ug/l	97
42)	Bromofluorobenzene	24.15	95.0	137206	48.19	ug/l	94
43)	*Chlorobenzene-d5	21.20	117.0	156379	50.00	ug/l	100
44)	2-Hexanone	19.70	43.0	35652	53.24	ug/l	100
45)	1,3-dichloropropane	19.43	76.0	103869	45.84	ug/l	84
46)	Tetrachloroethene	19.02	166.0	87977	46.39	ug/l	87
47)	Dibromochloromethane	19.88	129.0	114402	47.59	ug/l	100
48)	Ethylbenzene	21.52	91.0	239579M	47.60	ug/l	69
49)	Chlorobenzene	21.29	112.0	161602	46.60	ug/l	100
50)	1,1,1,2-Tetrachloroethane	21.56	131.0	83924	48.39	ug/l	100
51)	m,p-Xylene	21.84	91.0	386137	92.34	ug/l	97
52)	o-Xylene	22.79	91.0	389954	93.25	ug/l	100
53)	Styrene	22.88	104.0	291538	96.76	ug/l	100
54)	Bromoform	23.34	173.0	79455	49.33	ug/l	100
55)	*1,4-Dichlorobenzene-d4	27.01	152.0	97995	50.00	ug/l	97
56)	Isopropylbenzene	23.70	105.0	262416	44.36	ug/l	75
57)	1,1,2,2-Tetrachloroethane	24.70	83.0	112004	44.61	ug/l	88
58)	1,2,3-Trichloropropane	24.79	110.0	26386	43.92	ug/l	95
59)	n-Propyl benzene	24.74	91.0	319732	45.01	ug/l	99
60)	Bromobenzene	24.47	77.0	171448	43.99	ug/l	100
61)	1,3,5-Trimethylbenzene	25.20	105.0	217016	45.35	ug/l	86
62)	2-Chlorotoluene	24.97	91.0	234386M	44.38	ug/l	90
63)	4-Chlorotoluene	25.24	91.0	248120	44.02	ug/l	98
64)	tert-Butylbenzene	25.97	119.0	225859	44.53	ug/l	100
65)	1,2,4-Trimethylbenzene	26.15	105.0	229165	45.42	ug/l	83
66)	sec-Butylbenzene	26.51	105.0	319147	44.57	ug/l	98
67)	p-Isopropyltoluene	26.92	119.0	257919	46.30	ug/l	93
68)	1,3-Dichlorobenzene	26.83	146.0	149657	45.56	ug/l	95
69)	1,4-Dichlorobenzene	27.10	146.0	147267M	43.76	ug/l	95
70)	n-Butylbenzene	27.97	91.0	271180	45.09	ug/l	98
71)	1,2-Dichlorobenzene	28.01	146.0	145426	46.43	ug/l	98
72)	1,2-Dibromo-3-Chloropropane	30.06	157.0	23660	43.12	ug/l	88
73)	1,2,4-Trichlorobenzene	32.05	180.0	105414	45.00	ug/l	100
74)	Hexachlorobutadiene	32.42	225.0	65904	46.85	ug/l	89
75)	Naphthalene	32.69	128.0	179953	42.32	ug/l	100
76)	1,2,3-Trichlorobenzene	33.32	180.0	89563	42.38	ug/l	100
77)	Methyl t-butyl ether	7.63	73.0	594853	421.84	ug/l	98

* Compound is ISTD

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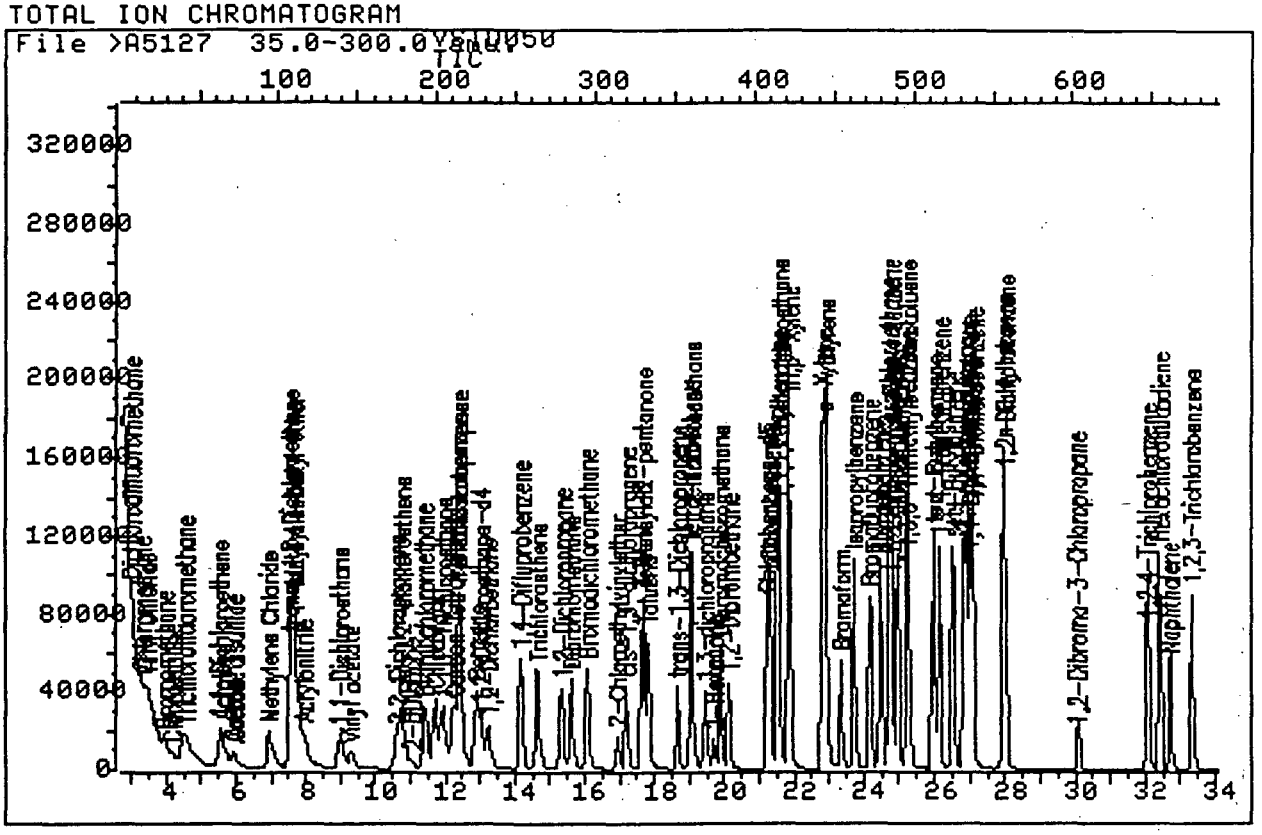
TOTAL ION CHROMATOGRAM



Data File: >A5127::D2 Quant Output File: ^A5127::D5
Name: VSTD050 Instrument ID: HP5970BA
Misc:

Id File: IDAS05::D5
Title: Accredited Labs ID file for 8260
Last Calibration: 991207 16:33 Last Qcal Time: <none>

Operator ID: ROBERT
Quant Time : 991208 16:49
Injected at: 991208 16:15

186

Operator ID: ROBERT
Output File: ^A5125::D5
Data File: >A5125::D2
Name: VSTD100
Misc:

Quant Rev: 7
Quant Time: 991208 15:27
Injected at: 991208 14:52
Dilution Factor: 1.00000
Instrument ID: HP5970BA

ID File: IDAS05::D5
Title: Accredited Labs ID file for 8260
Last Calibration: 991207 16:33
Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Pentafluorobenzene	12.39	168.0	133943	50.00	ug/l	100
2)	Acrolein	5.58	56.0	33617	597.37	ug/l	90
3)	Acrylonitrile	7.99	53.0	95630	531.32	ug/l	94
4)	Acetone	5.99	43.0	14296	101.00	ug/l	94
5)	Dichlorodifluoromethane	3.04	85.0	84522	54.45	ug/l	100
6)	Chloromethane	3.31	50.0	80395	83.24	ug/l	100
7)	Vinyl Chloride	3.49	62.0	73294	83.46	ug/l	100
8)	Bromomethane	3.95	94.0	62765	85.02	ug/l	100
9)	Chloroethane	4.18	64.0	28956	86.17	ug/l	100
10)	Trichlorofluoromethane	4.54	101.0	186708	94.25	ug/l	100
11)	1,1-Dichloroethene	5.58	61.0	158602	95.13	ug/l	100
12)	Carbon disulfide	5.99	76.0	119791	98.17	ug/l	100
13)	Methylene Chloride	6.94	49.0	140259	91.22	ug/l	99
14)	trans-1,2-Dichloroethene	7.54	61.0	170111	100.37	ug/l	100
15)	1,1-Dichloroethane	9.03	63.0	217257	101.99	ug/l	72
16)	Vinyl acetate	9.35	43.0	135898	102.32	ug/l	96
17)	2,2-Dichloropropane	10.62	77.0	124825	102.82	ug/l	99
18)	2-Butanone	11.03	43.0	37889	108.25	ug/l	89
19)	cis-1,2-dichloroethene	10.76	61.0	217420	103.32	ug/l	83
20)	Chloroform	11.71	83.0	278748	102.49	ug/l	84
21)	Bromochloromethane	11.39	130.0	127332	104.27	ug/l	93
22)	1,1,1-Trichloroethane	11.94	97.0	208835	103.47	ug/l	91
23)	T-butyl alcohol	7.76	59.0	76217	1096.10	ug/l	100
24)	*1,4-Difluorobenzene	14.17	114.0	176204	50.00	ug/l	90
25)	1,2-Dichloroethane-d4	13.03	65.0	126095	104.37	ug/l	87
26)	1,1-Dichloropropene	12.39	75.0	201550	85.72	ug/l	85
27)	Carbon Tetrachloride	12.26	117.0	212241	103.62	ug/l	96
28)	1,2-Dichloroethane	13.26	62.0	140770	103.17	ug/l	94
29)	Benzene	12.89	78.0	340662	100.89	ug/l	100
30)	Trichloroethene	14.66	95.0	176084	102.75	ug/l	100
31)	1,2-Dichloropropane	15.35	63.0	146506	103.73	ug/l	100
32)	Bromodichloromethane	16.07	83.0	275597	108.55	ug/l	100
33)	Dibromomethane	15.62	174.0	128884M	101.96	ug/l	
34)	2-Chloroethylvinylether	16.93	63.0	66694	111.92	ug/l	92
35)	cis-1,3-dichloropropene	17.21	75.0	212636	102.07	ug/l	94
36)	Toluene-d8	17.66	98.0	359817	102.26	ug/l	96
37)	Toluene	17.80	91.0	384270	99.00	ug/l	96
38)	trans-1,3-Dichloropropene	18.66	75.0	176736	117.26	ug/l	84
39)	1,1,2-Trichloroethane	19.07	83.0	112659	101.90	ug/l	87
40)	4-Methyl-2-pentanone	17.66	43.0	93836	103.45	ug/l	100

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Operator ID: ROBERT Quant Rev: 7 Quant Time: 991208 15:27
Output File: ^A5125::D5 Injected at: 991208 14:52
Data File: >A5125::D2 Dilution Factor: 1.00000
Name: VSTD100 Instrument ID: HP5970BA
Misc:

ID File: IDAS05::D5
Title: Accredited Labs ID file for 8260
Last Calibration: 991207 16:33 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
41)	1,2-Dibromoethane	20.11	107.0	212036	103.89	ug/l	95
42)	Bromofluorobenzene	24.20	95.0	254948	99.33	ug/l	81
43)	*Chlorobenzene-d5	21.20	117.0	137236	50.00	ug/l	100
44)	2-Hexanone	19.71	43.0	58148	98.95	ug/l	100
45)	1,3-dichloropropane	19.43	76.0	208305	104.76	ug/l	84
46)	Tetrachloroethene	19.02	166.0	172756	103.80	ug/l	87
47)	Dibromochloromethane	19.89	129.0	234544	111.17	ug/l	100
48)	Ethylbenzene	21.52	91.0	437355M	99.01	ug/l	72
49)	Chlorobenzene	21.29	112.0	310221	101.94	ug/l	100
50)	1,1,1,2-Tetrachloroethane	21.57	131.0	161158	105.87	ug/l	100
51)	m,p-Xylene	21.84	91.0	715930	195.09	ug/l	99
52)	o-Xylene	22.79	91.0	706012	192.37	ug/l	100
53)	Styrene	22.88	104.0	518631	196.15	ug/l	100
54)	Bromoform	23.34	173.0	158986	112.47	ug/l	100
55)	*1,4-Dichlorobenzene-d4	27.02	152.0	79850	50.00	ug/l	96
56)	Isopropylbenzene	23.70	105.0	496095	102.93	ug/l	75
57)	1,1,2,2-Tetrachloroethane	24.70	83.0	217621	106.38	ug/l	86
58)	1,2,3-Trichloropropane	24.79	110.0	52037	106.29	ug/l	97
59)	n-Propyl benzene	24.75	91.0	576960	99.67	ug/l	98
60)	Bromobenzene	24.47	77.0	322758	101.64	ug/l	100
61)	1,3,5-Trimethylbenzene	25.20	105.0	393890	101.01	ug/l	87
62)	2-Chlorotoluene	24.97	91.0	433150M	100.65	ug/l	89
63)	4-Chlorotoluene	25.25	91.0	461561	100.49	ug/l	97
64)	tert-Butylbenzene	25.97	119.0	422459	102.21	ug/l	100
65)	1,2,4-Trimethylbenzene	26.15	105.0	420421	102.26	ug/l	78
66)	sec-Butylbenzene	26.52	105.0	588464	100.85	ug/l	97
67)	p-Isopropyltoluene	26.93	119.0	457068	100.70	ug/l	94
68)	1,3-Dichlorobenzene	26.84	146.0	271527M	101.44	ug/l	98
69)	1,4-Dichlorobenzene	27.11	146.0	281306	102.58	ug/l	97
70)	n-Butylbenzene	27.97	91.0	489207	99.83	ug/l	98
71)	1,2-Dichlorobenzene	28.02	146.0	256014	100.30	ug/l	95
72)	1,2-Dibromo-3-Chloropropane	30.06	157.0	52415	117.23	ug/l	86
73)	1,2,4-Trichlorobenzene	32.06	180.0	205805	107.82	ug/l	100
74)	Hexachlorobutadiene	32.42	225.0	120132	104.80	ug/l	90
75)	Naphthalene	32.69	128.0	376975	108.81	ug/l	100
76)	1,2,3-Trichlorobenzene	33.33	180.0	189375	109.99	ug/l	100
77)	Methyl t-butyl ether	7.63	73.0	1166716	1015.39	ug/l	95

* Compound is ISTD

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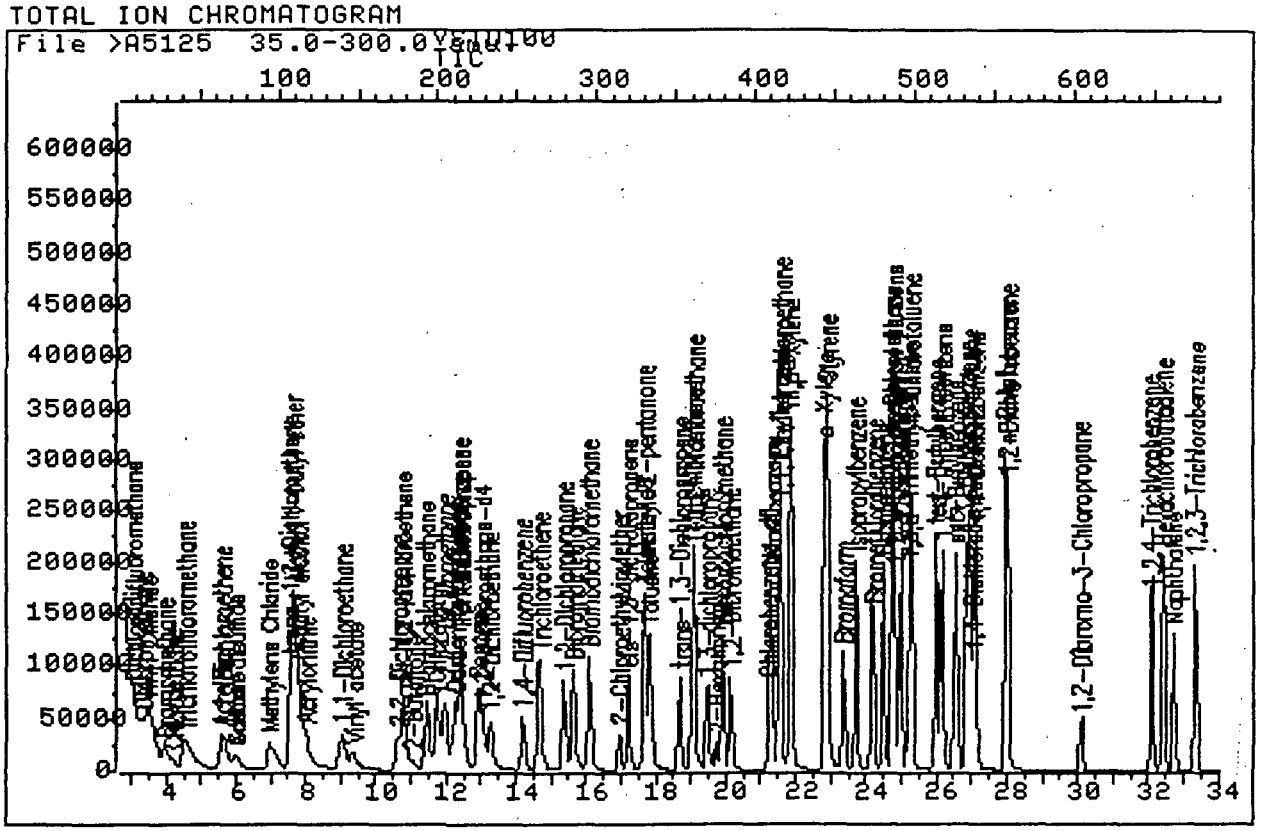
TOTAL ION CHROMATOGRAM



Data File: >A5125::D2 Quant Output File: ^A5125::D5
Name: VSTD100 Instrument ID: HP5970BA
Misc:

Id File: IDAS05::D5
Title: Accredited Labs ID file for 8260
Last Calibration: 991207 16:33 Last Qcal Time: <none>

Operator ID: ROBERT
Quant Time : 991208 15:27
Injected at: 991208 14:52

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QUANT REPORT

Operator ID: ROBERT
Output File: ^A5126::D5
Data File: >A5126::D2
Name: VSTD200
Misc:

Quant Rev: 7
Quant Time: 991208 16:09
Injected at: 991208 15:34
Dilution Factor: 1.00000
Instrument ID: HP5970BA

ID File: IDAS05::D5
Title: Accredited Labs ID file for 8260
Last Calibration: 991207 16:33
Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Pentafluorobenzene	12.39	168.0	133130	50.00	ug/l	100
2)	Acrolein	5.62	56.0	61354	1096.91	ug/l	93
3)	Acrylonitrile	7.98	53.0	176172	984.78	ug/l	93
4)	Acetone	6.03	43.0	26649	189.43	ug/l	97
5)	Dichlorodifluoromethane	3.03	85.0	142313	92.24	ug/l	100
6)	Chloromethane	3.30	50.0	142723	148.67	ug/l	100
7)	Vinyl Chloride	3.48	62.0	131013	150.10	ug/l	100
8)	Bromomethane	3.98	94.0	106015	144.48	ug/l	100
9)	Chloroethane	4.17	64.0	46023	137.79	ug/l	100
10)	Trichlorofluoromethane	4.48	101.0	231973	117.82	ug/l	100
11)	1,1-Dichloroethene	5.57	61.0	291743	176.06	ug/l	100
12)	Carbon disulfide	5.94	76.0	225910	186.26	ug/l	100
13)	Methylene Chloride	6.94	49.0	254967	166.83	ug/l	99
14)	trans-1,2-Dichloroethene	7.53	61.0	296689	176.13	ug/l	100
15)	1,1-Dichloroethane	8.98	63.0	397657	187.81	ug/l	72
16)	Vinyl acetate	9.34	43.0	263565	199.66	ug/l	97
17)	2,2-Dichloropropane	10.61	77.0	229954	190.58	ug/l	98
18)	2-Butanone	11.02	43.0	61023	175.42	ug/l	83
19)	cis-1,2-dichloroethene	10.75	61.0	386937	185.00	ug/l	81
20)	Chloroform	11.70	83.0	508720	188.18	ug/l	85
21)	Bromochloromethane	11.39	130.0	232920	191.90	ug/l	94
22)	1,1,1-Trichloroethane	11.93	97.0	390615	194.71	ug/l	91
23)	T-butyl alcohol	7.84	59.0	137333	1987.08	ug/l	100
24)	*1,4-Difluorobenzene	14.16	114.0	186109	50.00	ug/l	88
25)	1,2-Dichloroethane-d4	13.02	65.0	237155	185.86	ug/l	90
26)	1,1-Dichloropropene	12.39	75.0	353067	142.17	ug/l	83
27)	Carbon Tetrachloride	12.25	117.0	373143	172.47	ug/l	98
28)	1,2-Dichloroethane	13.25	62.0	264458	183.50	ug/l	95
29)	Benzene	12.89	78.0	616177	172.78	ug/l	100
30)	Trichloroethene	14.66	95.0	317329	175.32	ug/l	100
31)	1,2-Dichloropropane	15.34	63.0	269360	180.57	ug/l	100
32)	Bromodichloromethane	16.07	83.0	517403	192.94	ug/l	100
33)	Dibromomethane	15.61	174.0	234387M	175.56	ug/l	
34)	2-Chloroethylvinylether	16.93	63.0	127323	202.30	ug/l	94
35)	cis-1,3-dichloropropene	17.20	75.0	402130	182.75	ug/l	94
36)	Toluene-d8	17.65	98.0	645309	173.64	ug/l	99
37)	Toluene	17.79	91.0	703066	171.50	ug/l	94
38)	trans-1,3-Dichloropropene	18.65	75.0	332199	208.68	ug/l	83
39)	1,1,2-Trichloroethane	19.06	83.0	190841	163.43	ug/l	89
40)	4-Methyl-2-pentanone	17.65	43.0	160712	167.75	ug/l	100

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Operator ID: ROBERT Quant Rev: 7 Quant Time: 991208 16:09
Output File: ^A5126::D5 Injected at: 991208 15:34
Data File: >A5126::D2 Dilution Factor: 1.00000
Name: VSTD200 Instrument ID: HP5970BA
Misc:

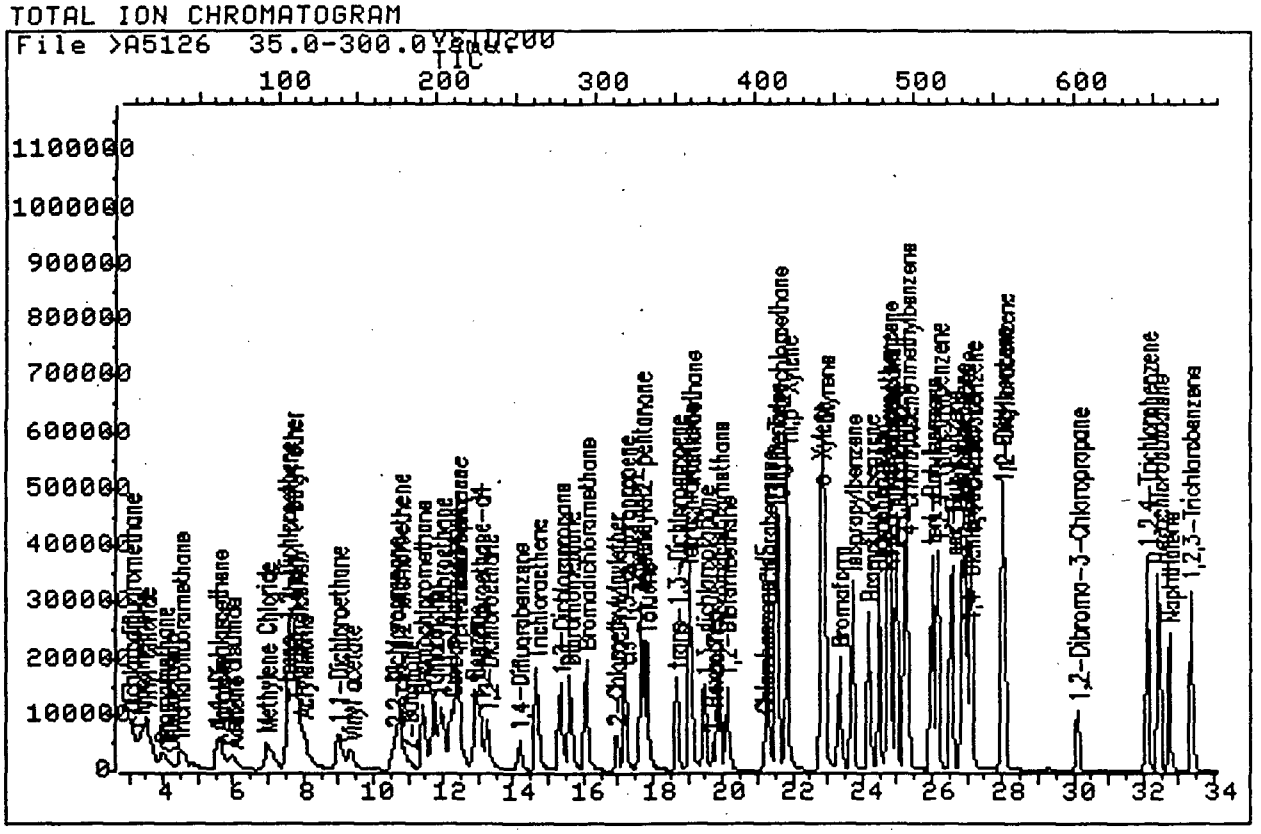
ID File: IDAS05::D5
Title: Accredited Labs ID file for 8260
Last Calibration: 991207 16:33 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
41)	1,2-Dibromoethane	20.11	107.0	375500	174.20	ug/l	99
42)	Bromofluorobenzene	24.19	95.0	445852	164.47	ug/l	79
43)	*Chlorobenzene-d5	21.20	117.0	139480M	50.00	ug/l	100
44)	2-Hexanone	19.70	43.0	104433	174.86	ug/l	100
45)	1,3-dichloropropane	19.47	76.0	377268	186.68	ug/l	84
46)	Tetrachloroethene	19.02	166.0	290322	171.63	ug/l	86
47)	Dibromochloromethane	19.88	129.0	425206	198.30	ug/l	100
48)	Ethylbenzene	21.51	91.0	737862M	164.36	ug/l	78
49)	Chlorobenzene	21.29	112.0	546947	176.84	ug/l	100
50)	1,1,1,2-Tetrachloroethane	21.56	131.0	278642	180.11	ug/l	100
51)	m,p-Xylene	21.83	91.0	1242285	333.08	ug/l	94
52)	o-Xylene	22.79	91.0	1216403	326.10	ug/l	100
53)	Styrene	22.88	104.0	872573	324.70	ug/l	100
54)	Bromoform	23.33	173.0	298785	207.98	ug/l	100
55)	*1,4-Dichlorobenzene-d4	27.06	152.0	83473	50.00	ug/l	88
56)	Isopropylbenzene	23.69	105.0	859932	170.67	ug/l	77
57)	1,1,2,2-Tetrachloroethane	24.69	83.0	349253	163.32	ug/l	84
58)	1,2,3-Trichloropropane	24.79	110.0	89371	174.63	ug/l	99
59)	n-Propyl benzene	24.74	91.0	980455	162.02	ug/l	99
60)	Bromobenzene	24.47	77.0	556887	167.75	ug/l	100
61)	1,3,5-Trimethylbenzene	25.24	105.0	675968	165.81	ug/l	95
62)	2-Chlorotoluene	24.97	91.0	759692M	168.87	ug/l	83
63)	4-Chlorotoluene	25.29	91.0	778300	162.09	ug/l	91
64)	tert-Butylbenzene	25.97	119.0	757129	175.23	ug/l	100
65)	1,2,4-Trimethylbenzene	26.15	105.0	746612	173.71	ug/l	81
66)	sec-Butylbenzene	26.56	105.0	1056656	173.23	ug/l	94
67)	p-Isopropyltoluene	26.92	119.0	798824	168.36	ug/l	95
68)	1,3-Dichlorobenzene	26.83	146.0	484715	173.23	ug/l	95
69)	1,4-Dichlorobenzene	27.10	146.0	477635M	166.62	ug/l	95
70)	n-Butylbenzene	27.97	91.0	839462	163.87	ug/l	98
71)	1,2-Dichlorobenzene	28.01	146.0	455796	170.82	ug/l	92
72)	1,2-Dibromo-3-Chloropropane	30.10	157.0	104422M	223.41	ug/l	
73)	1,2,4-Trichlorobenzene	32.10	180.0	393927	197.42	ug/l	100
74)	Hexachlorobutadiene	32.41	225.0	224901	187.69	ug/l	81
75)	Naphthalene	32.73	128.0	690906	190.77	ug/l	100
76)	1,2,3-Trichlorobenzene	33.32	180.0	344367	191.32	ug/l	100
77)	Methyl t-butyl ether	7.66	73.0	2088442	1738.68	ug/l	96

* Compound is ISTD

191

TOTAL ION CHROMATOGRAM



Data File: >A5126::D2 Quant Output File: ^A5126::D5
Name: VSTD200 Instrument ID: HP5970BA
Misc:

Id File: IDAS05::D5
Title: Accredited Labs ID file for 8260
Last Calibration: 991207 16:33 Last Qcal Time: <none>

Operator ID: ROBERT
Quant Time : 991208 16:09
Injected at: 991208 15:34

19a

ACCREDITED LABORATORIES, INC.
TCLP VOLATILES ANALYSIS DATA

CASE NUMBER		MATRIX	Leachate
SAMPLE NUMBER	9912996MS	DILUTION FACTOR	10
DATA FILE	>A5131	DATE EXTRACTED	
CLIENT NAME		DATE ANALYZED	12/08/99
FIELD ID		ANALYZED BY	ROBERT

CAS No.	Compound	Result (mg/l)	MDL (mg/l)	Regulatory Level (mg/l)
71432	Benzene	.483	.050	0.5
78933	2-Butanone	.750	.100	200.0
56235	Carbon Tetrachloride	.509	.050	0.5
108907	Chlorobenzene	.471	.050	100.0
67663	Chloroform	.421	.050	6.0
75354	1,1-Dichloroethene	.470	.050	0.7
107062	1,2-Dichloroethane	.449	.050	0.5
127184	Tetrachloroethene	.486	.050	0.7
79016	Trichloroethene	.461	.050	0.5
75014	Vinyl Chloride	.500	.100	0.2

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
1,2-Dichloroethane-d4	91 %	76 - 114	OK
Toluene-d8	100 %	88 - 110	OK
Bromofluorobenzene	103 %	86 - 115	OK

(U) Indicates compound was analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.

* 2-Butanone = Methyl ethyl ketone

193

Operator ID: ROBERT
Output File: ^A5131::D5
Data File: >A5131::D2
Name: 9912996MS
Misc:

Quant Rev: 7
Quant Time: 991208 19:37
Injected at: 991208 19:02
Dilution Factor: 1.00000
Instrument ID: HP5970BA

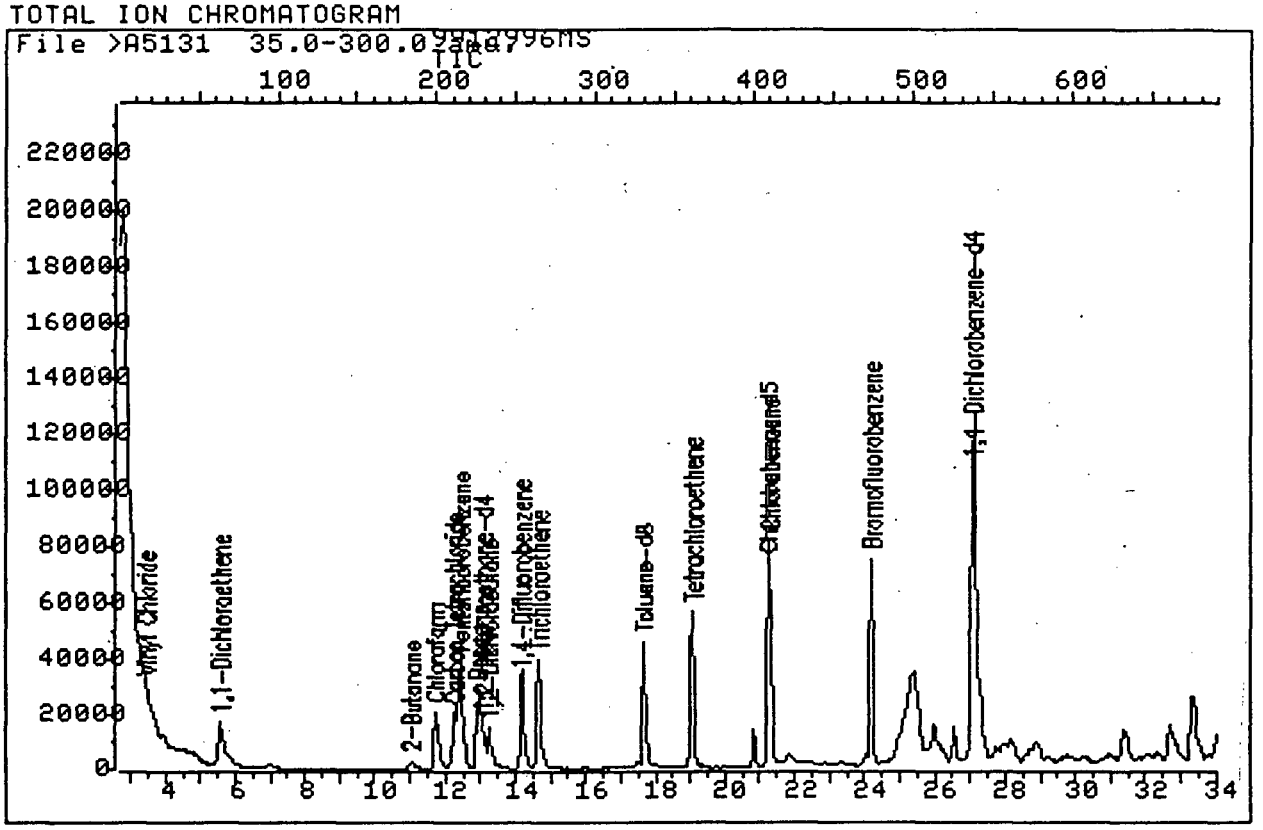
ID File: IDAS06::D5
Title: Accredited Labs ID file for 8260
Last Calibration: 991208 17:16
Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Pentafluorobenzene	12.44	168.0	114865	50.00	ug/l	100
7)	Vinyl Chloride	3.45	62.0	27927	49.99	ug/l	100
11)	1,1-Dichloroethene	5.58	61.0	57877	47.04	ug/l	100
18)	2-Butanone	11.03	43.0	20566	74.98	ug/l	83
20)	Chloroform	11.71	83.0	91820	42.07	ug/l	85
24)	*1,4-Difluorobenzene	14.16	114.0	137016	50.00	ug/l	95
25)	1,2-Dichloroethane-d4	13.07	65.0	40003	45.45	ug/l	88
27)	Carbon Tetrachloride	12.25	117.0	76703	50.95	ug/l	99
28)	1,2-Dichloroethane	13.25	62.0	44957	44.94	ug/l	93
29)	Benzene	12.94	78.0	119314	48.29	ug/l	100
30)	Trichloroethene	14.66	95.0	57595	46.10	ug/l	100
36)	Toluene-d8	17.66	98.0	129055	49.80	ug/l	95
42)	Bromofluorobenzene	24.19	95.0	96996	51.30	ug/l	88
43)	*Chlorobenzene-d5	21.24	117.0	114473	50.00	ug/l	100
46)	Tetrachloroethene	19.06	166.0	64583	48.56	ug/l	87
49)	Chlorobenzene	21.29	112.0	113582	47.11	ug/l	100
55)	*1,4-Dichlorobenzene-d4	27.06	152.0	68800	50.00	ug/l	93

* Compound is ISTD

194

TOTAL ION CHROMATOGRAM



Data File: >A5131::D2 Quant Output File: ^A5131::D5
Name: 9912996MS Instrument ID: HP5970BA
Misc:

Id File: IDAS06::D5
Title: Accredited Labs ID file for 8260
Last Calibration: 991208 17:16 Last Qcal Time: <none>

Operator ID: ROBERT
Quant Time : 991208 19:37
Injected at: 991208 19:02

195

Operator ID: ROBERT
Output File: ^A5129::D5
Data File: >A5129::D2
Name: VBLKA15
Misc:

Quant Rev: 7
Quant Time: 991208 18:16
Injected at: 991208 17:41
Dilution Factor: 1.00000
Instrument ID: HP5970BA

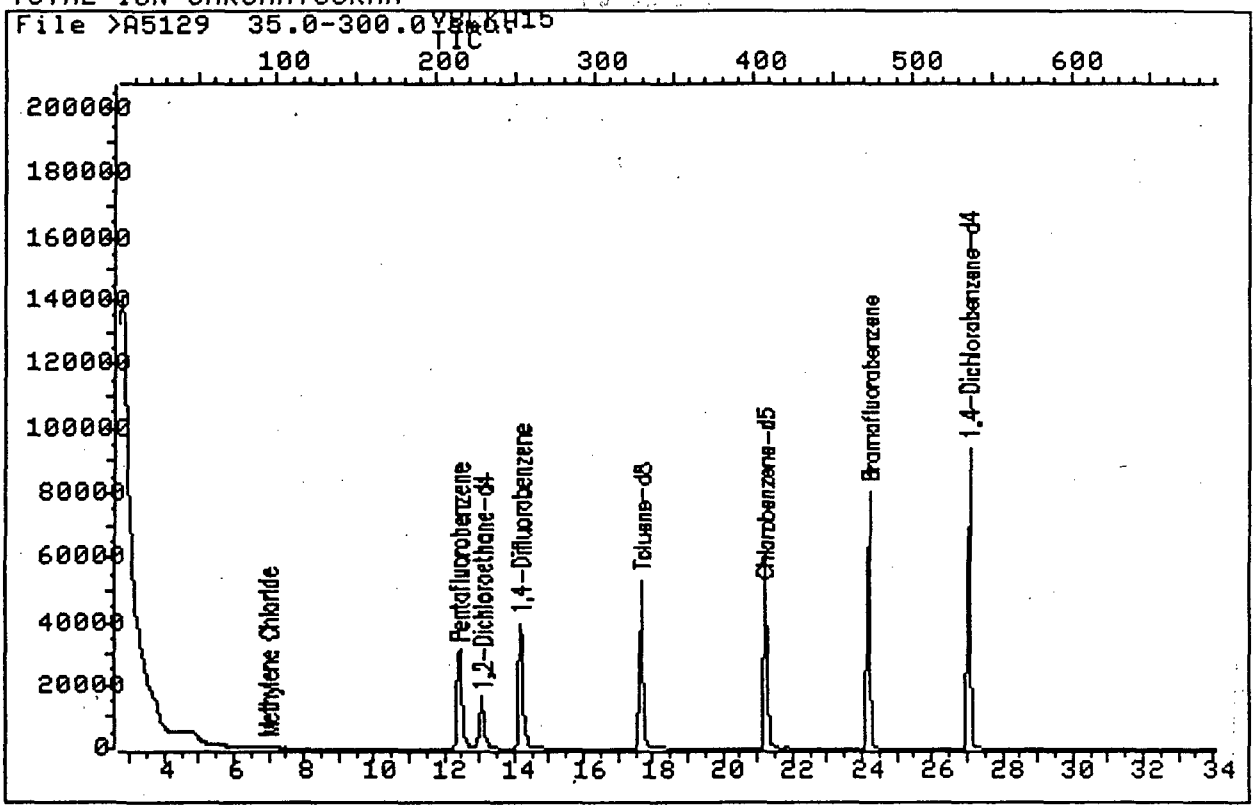
ID File: IDAS06::D5
Title: Accredited Labs ID file for 8260
Last Calibration: 991208 17:16
Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Pentafluorobenzene	12.39	168.0	106973	50.00	ug/l	100
13)	Methylene Chloride	6.99	49.0	1772	1.56	ug/l	93
24)	*1,4-Difluorobenzene	14.16	114.0	146467	50.00	ug/l	92
25)	1,2-Dichloroethane-d4	13.07	65.0	50013	53.15	ug/l	93
36)	Toluene-d8	17.65	98.0	138476	49.98	ug/l	95
42)	Bromofluorobenzene	24.19	95.0	109619	54.23	ug/l	85
43)	*Chlorobenzene-d5	21.19	117.0	125958	50.00	ug/l	100
55)	*1,4-Dichlorobenzene-d4	27.05	152.0	79631	50.00	ug/l	92

* Compound is ISTD

196

TOTAL ION CHROMATOGRAM



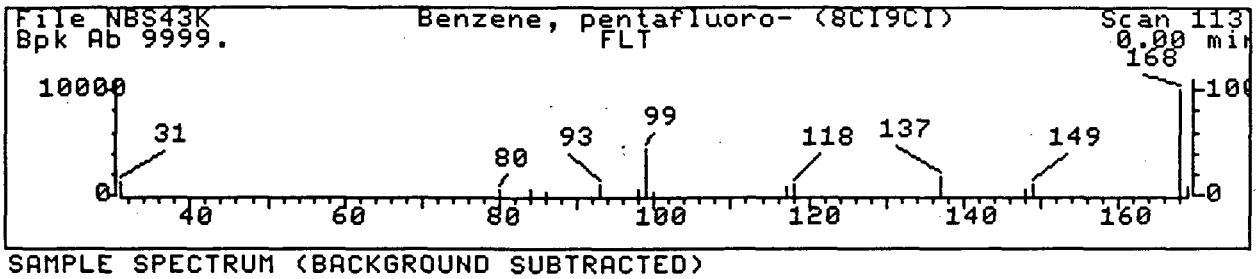
Data File: >A5129::D2 Quant Output File: ^A5129::D5
Name: VBLKA15 Instrument ID: HP5970BA
Misc:

Id File: IDAS06::D5
Title: Accredited Labs ID file for 8260
Last Calibration: 991208 17:16 Last Qcal Time: <none>

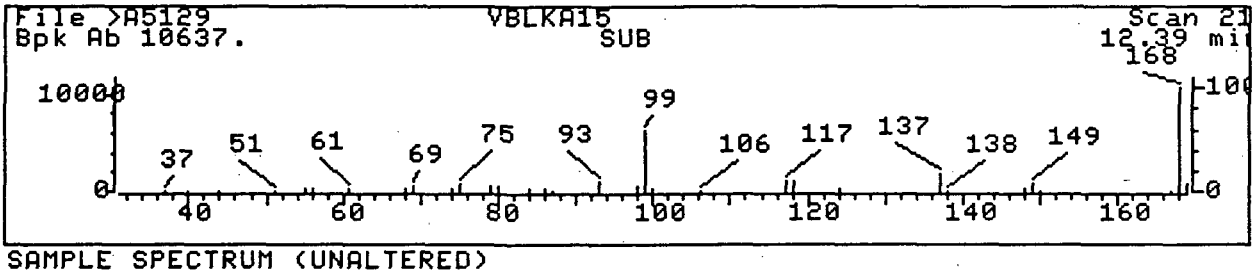
Operator ID: ROBERT
Quant Time : 991208 18:16
Injected at: 991208 17:41

190

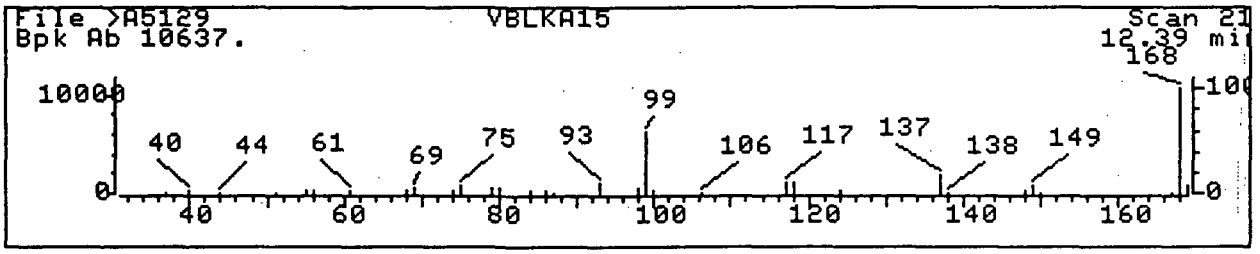
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

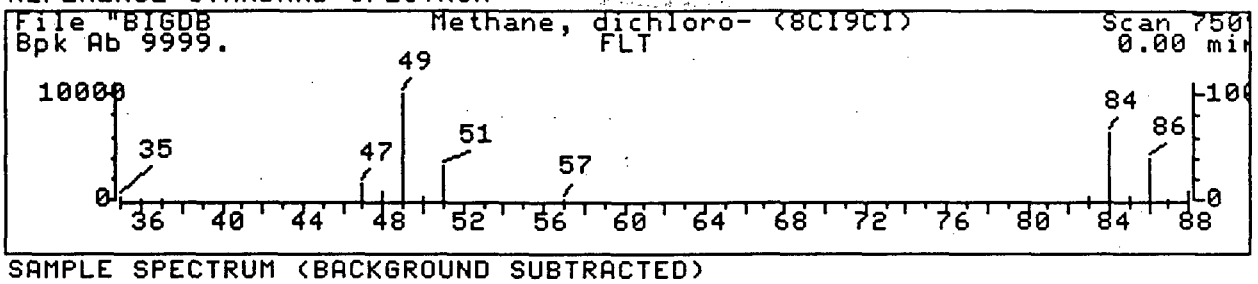


Data File: >A5129::D2
Name: VBLKA15
Misc:
Quant Time: 991208 18:16
Injected at: 991208 17:41
Last Qcal Time: <none>

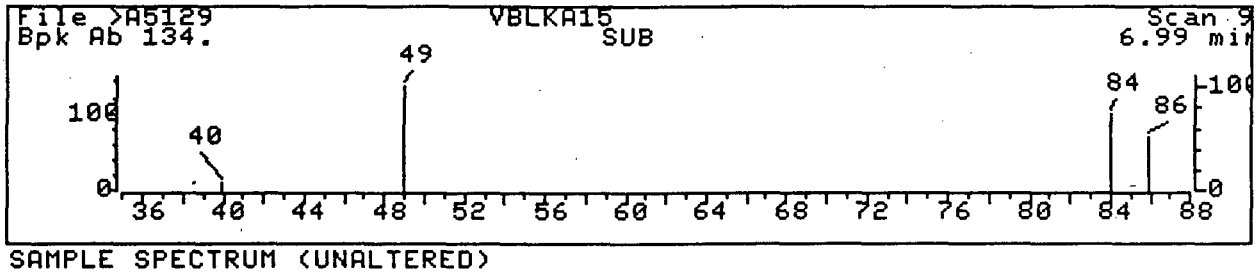
Quant Output File: ^A5129::D5
Instrument ID: HP5970BA
Quant ID File: IDAS06::D5
Last Calibration: 991208 17:16

Compound No : 1 (ISTD)
Compound Name : Pentafluorobenzene
Scan Number : 214
Retention Time: 12.39 min.
Quant Ion : 168.0
Area : 106973
Concentration : 50.00 ug/l
q-value : 100

REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



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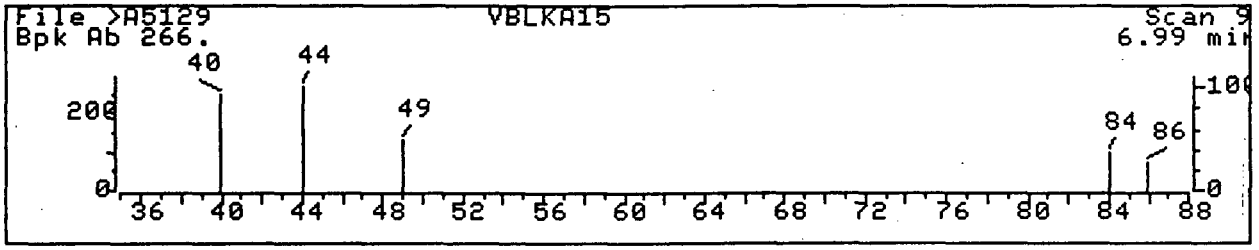


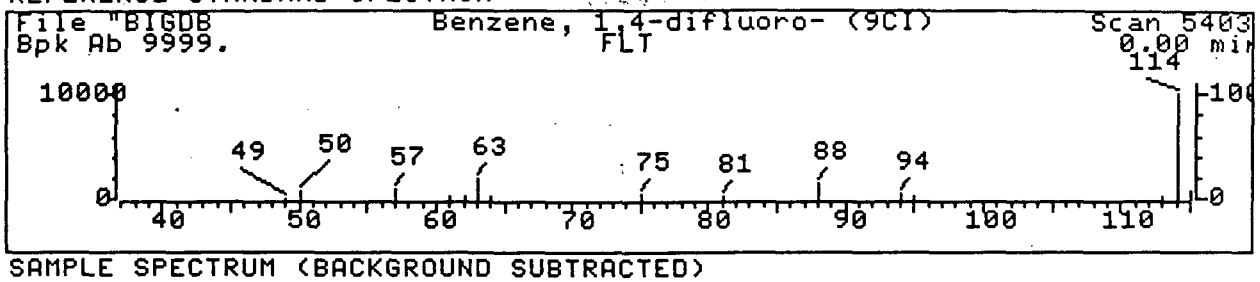
Data File: >A5129::D2
Name: VBLKA15
Misc:
Quant Time: 991208 18:16
Injected at: 991208 17:41
Last Qcal Time: <none>

Quant Output File: ^A5129::D5
Instrument ID: HP5970BA
Quant ID File: IDAS06::D5
Last Calibration: 991208 17:16

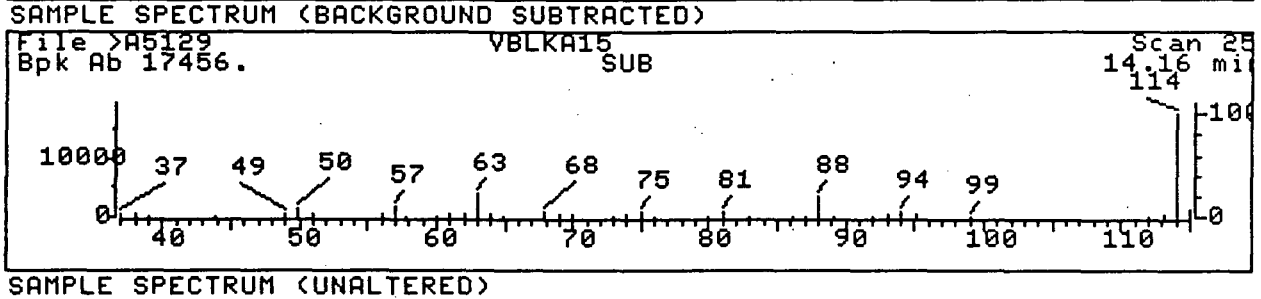
Compound No : 13
Compound Name : Methylene Chloride
Scan Number : 95
Retention Time: 6.99 min.
Quant Ion : 49.0
Area : 1772
Concentration : 1.56 ug/l
q-value : 93

199

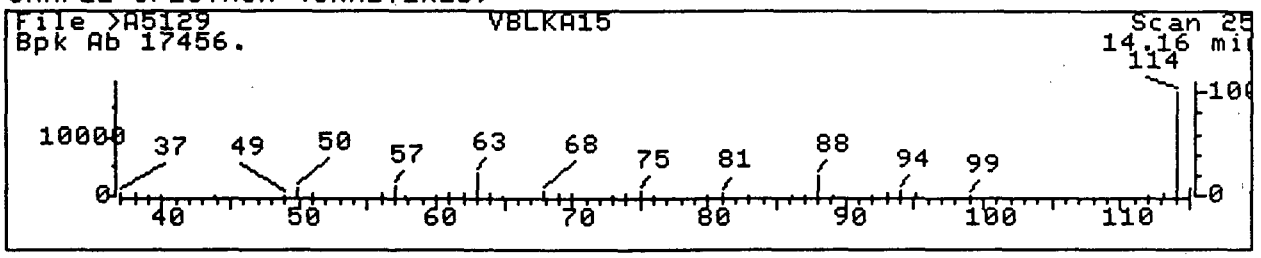
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



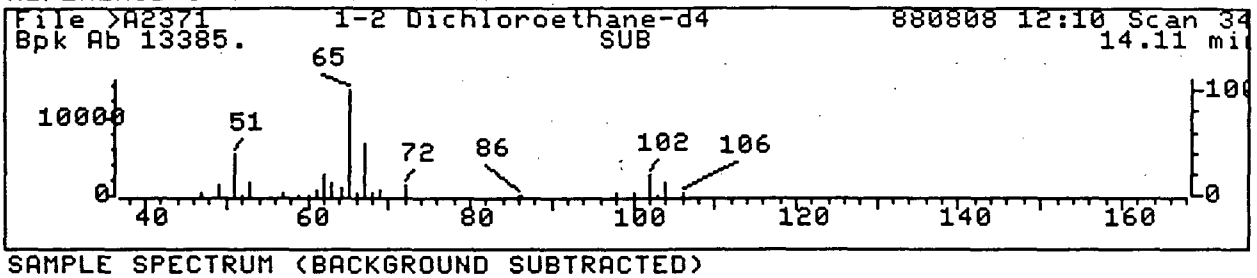
Data File: >A5129::D2
Name: VBLKA15
Misc:
Quant Time: 991208 18:16
Injected at: 991208 17:41
Last Qcal Time: <none>

Quant Output File: ^A5129::D5
Instrument ID: HP5970BA
Quant ID File: IDAS06::D5
Last Calibration: 991208 17:16

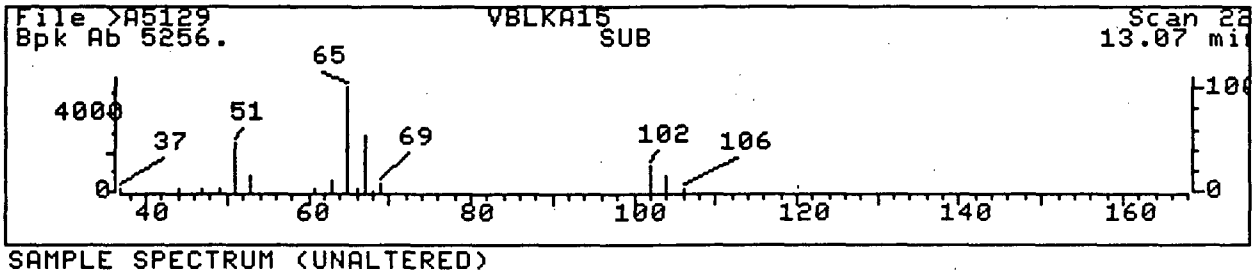
Compound No : 24 (ISTD)
Compound Name : 1,4-Difluorobenzene
Scan Number : 253
Retention Time: 14.16 min.
Quant Ion : 114.0
Area : 146467
Concentration : 50.00 ug/l
q-value : 92

200

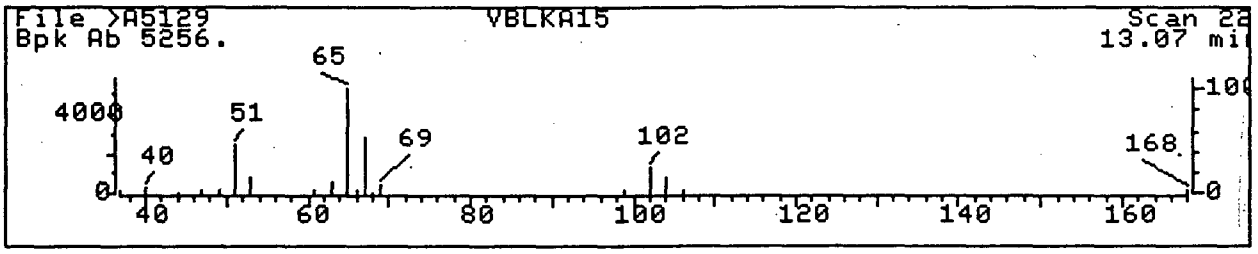
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >A5129::D2
Name: VBLKA15
Misc:
Quant Time: 991208 18:16
Injected at: 991208 17:41
Last Qcal Time: <none>

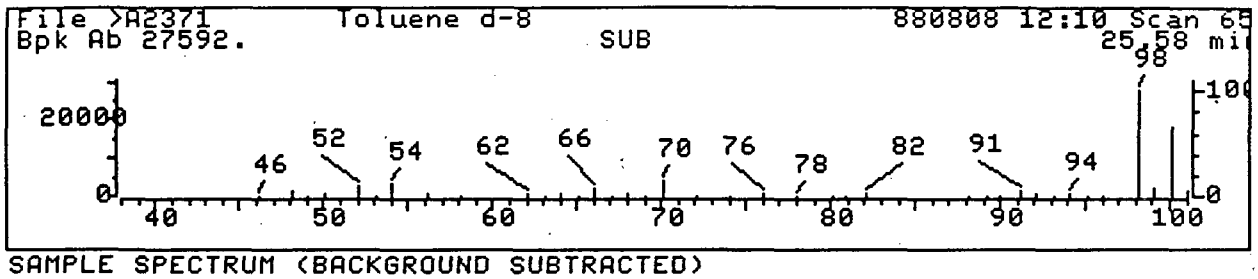
Quant Output File: ^A5129::D5
Instrument ID: HP5970BA

Quant ID File: IDAS06::D5
Last Calibration: 991208 17:16

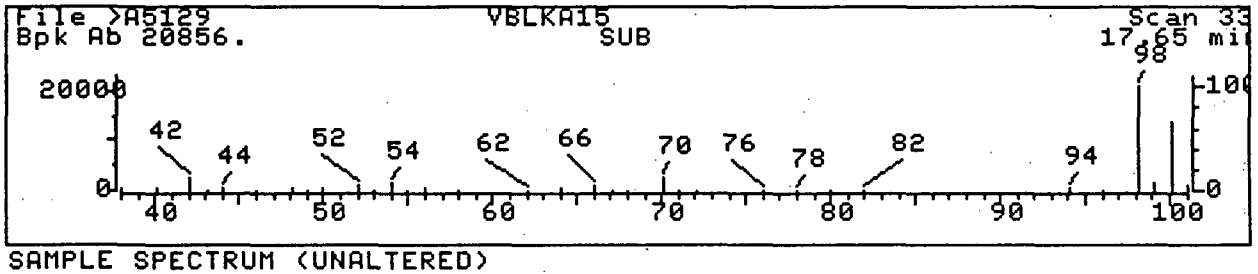
Compound No : 25
Compound Name : 1,2-Dichloroethane-d4
Scan Number : 229
Retention Time: 13.07 min.
Quant Ion : 65.0
Area : 50013
Concentration : 53.15 ug/l
q-value : 93

201

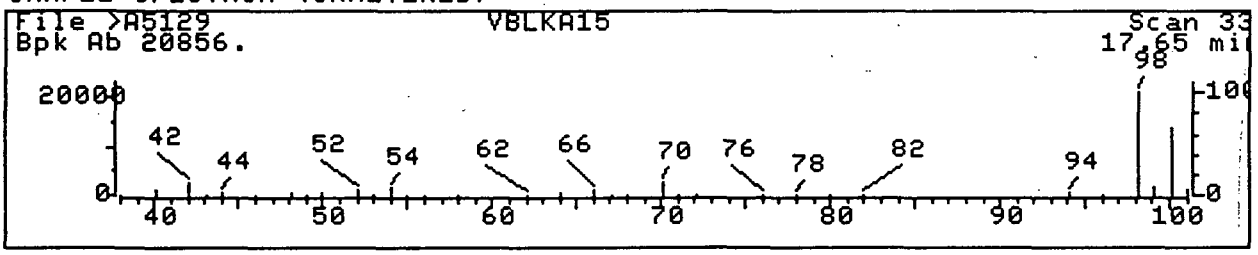
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >A5129::D2
Name: VBLKA15
Misc:
Quant Time: 991208 18:16
Injected at: 991208 17:41
Last Qcal Time: <none>

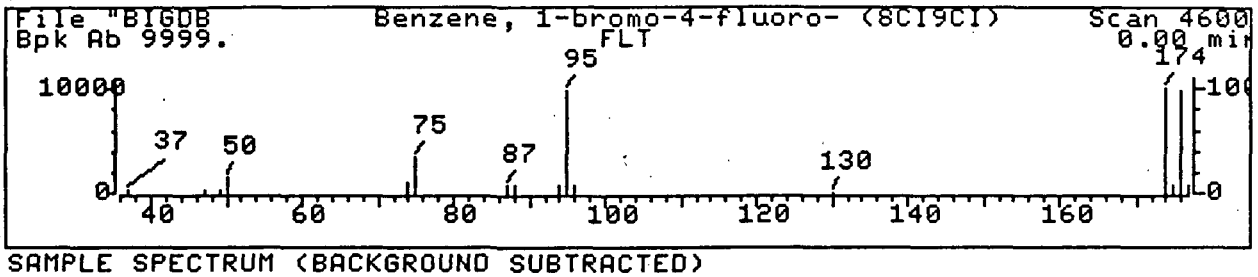
Quant Output File: ^A5129::D5
Instrument ID: HP5970BA

Quant ID File: IDAS06::D5
Last Calibration: 991208 17:16

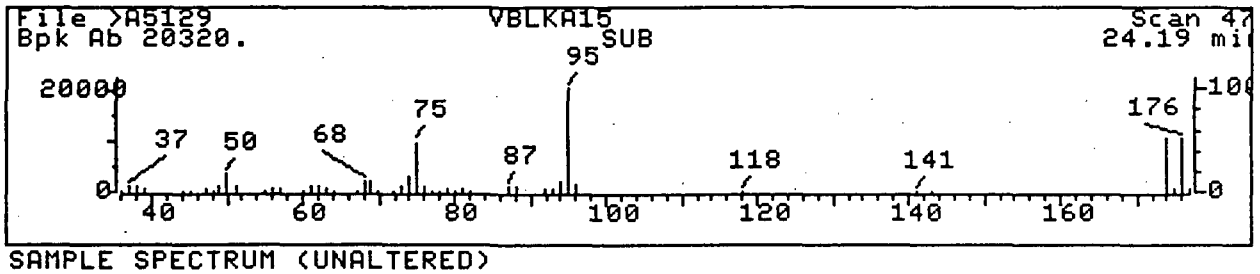
Compound No : 36
Compound Name : Toluene-d8
Scan Number : 330
Retention Time: 17.65 min.
Quant Ion : 98.0
Area : 138476
Concentration : 49.98 ug/l
q-value : 95

203

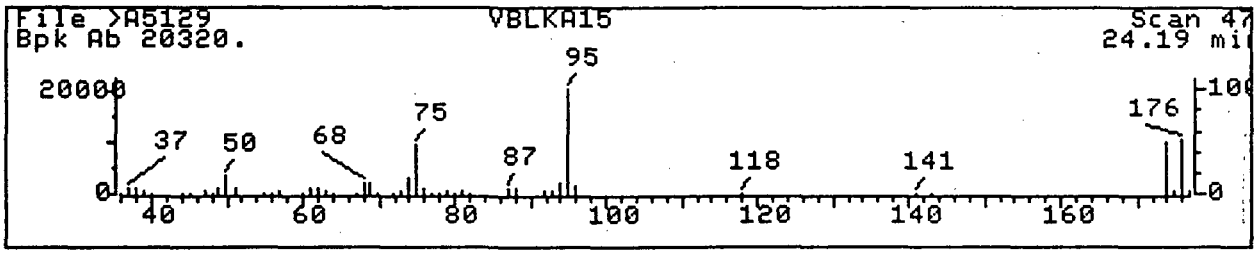
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



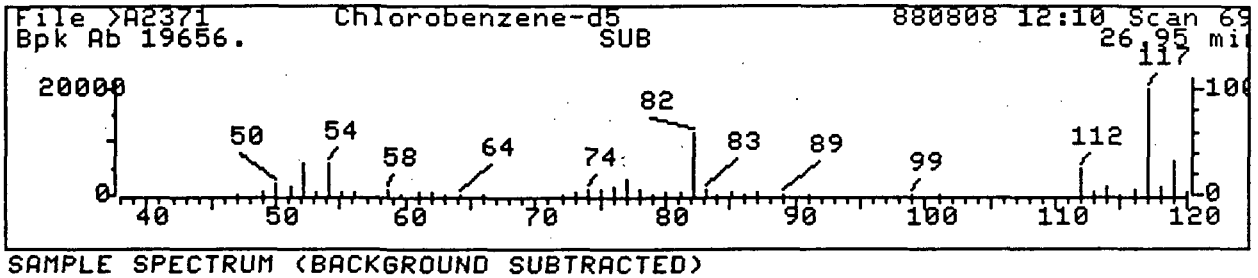
Data File: >A5129::D2
Name: VBLKA15
Misc:
Quant Time: 991208 18:16
Injected at: 991208 17:41
Last Qcal Time: <none>

Quant Output File: ^A5129::D5
Instrument ID: HP5970BA
Quant ID File: IDAS06::D5
Last Calibration: 991208 17:16

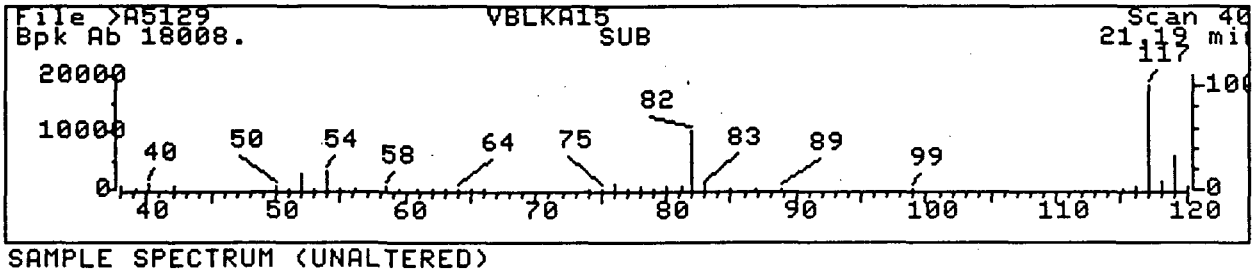
Compound No : 42
Compound Name : Bromofluorobenzene
Scan Number : 474
Retention Time: 24.19 min.
Quant Ion : 95.0
Area : 109619
Concentration : 54.23 ug/l
q-value : 85

203

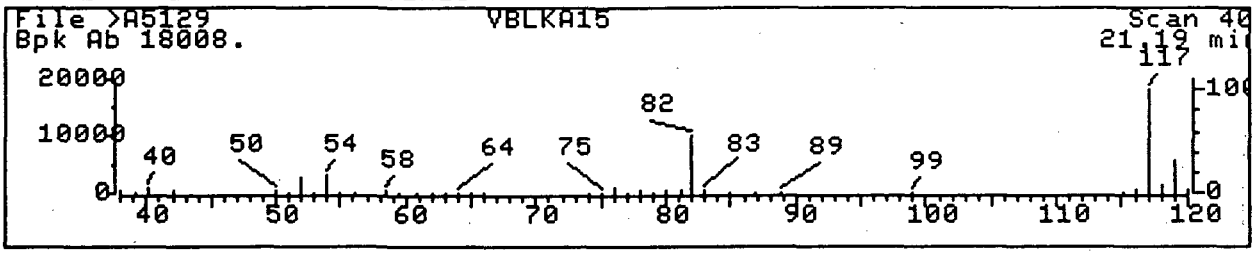
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >A5129::D2
Name: VBLKA15
Misc:
Quant Time: 991208 18:16
Injected at: 991208 17:41
Last Qcal Time: <none>

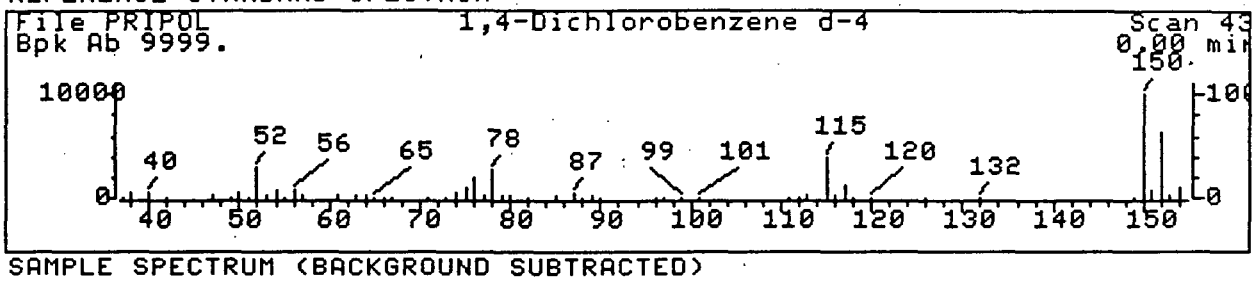
Quant Output File: ^A5129::D5
Instrument ID: HP5970BA

Quant ID File: IDAS06::D5
Last Calibration: 991208 17:16

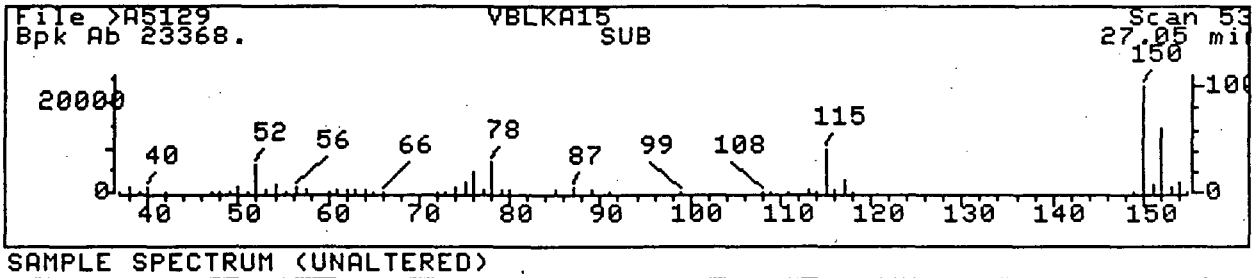
Compound No : 43 (ISTD)
Compound Name : Chlorobenzene-d5
Scan Number : 408
Retention Time: 21.19 min.
Quant Ion : 117.0
Area : 125958
Concentration : 50.00 ug/l
q-value : 100

204

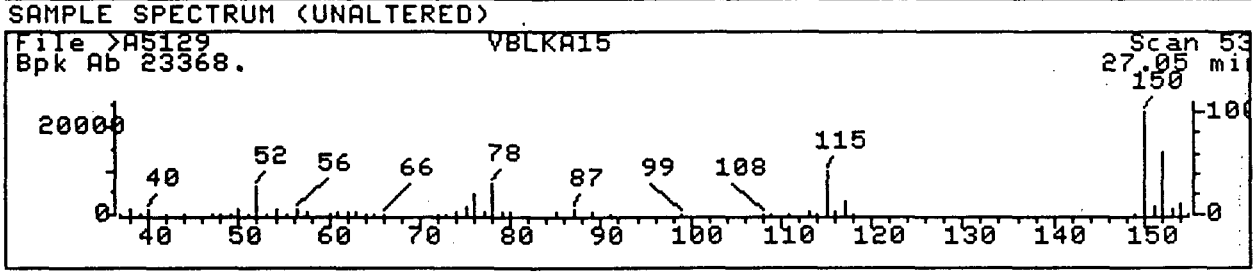
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >A5129::D2
Name: VBLKA15
Misc:
Quant Time: 991208 18:16
Injected at: 991208 17:41
Last Qcal Time: <none>

Quant Output File: ^A5129::D5
Instrument ID: HP5970BA
Quant ID File: IDAS06::D5
Last Calibration: 991208 17:16

Compound No : 55 (ISTD)
Compound Name : 1,4-Dichlorobenzene-d4
Scan Number : 537
Retention Time: 27.05 min.
Quant Ion : 152.0
Area : 79631
Concentration : 50.00 ug/l
q-value : 92

205

Operator ID: ROBERT
Output File: ^A5132::D5
Data File: >A5132::D2
Name: 9912994
Misc: 6481 OE

Quant Rev: 7
Quant Time: 991208 20:18
Injected at: 991208 19:43
Dilution Factor: 1.00000
Instrument ID: HP5970BA
DCOMP-1

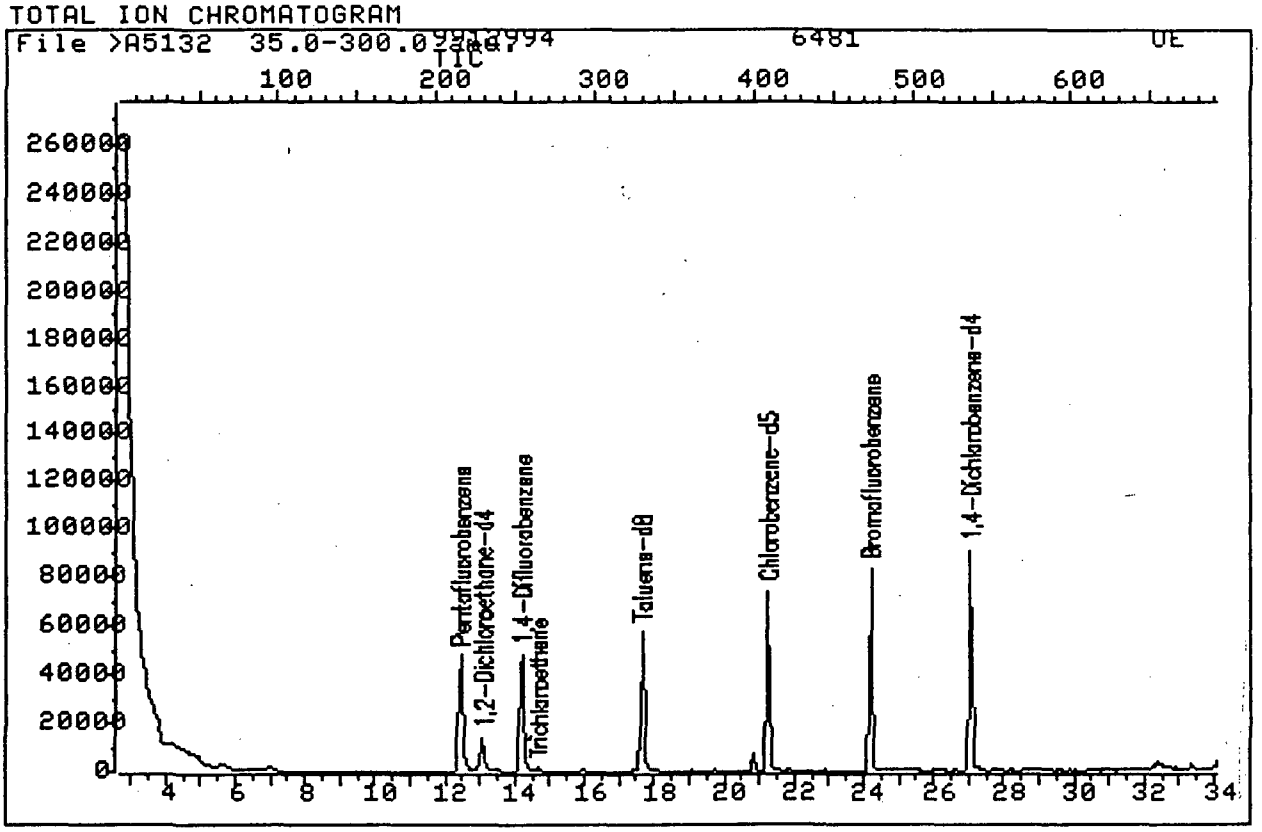
ID File: IDAS06::D5
Title: Accredited Labs ID file for 8260
Last Calibration: 991208 17:16
Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Pentafluorobenzene	12.43	168.0	153776	50.00	ug/l	100
24)	*1,4-Difluorobenzene	14.21	114.0	170972M	50.00	ug/l	86
25)	1,2-Dichloroethane-d4	13.07	65.0	42006	38.25	ug/l	88
30)	Trichloroethene	14.66	95.0	2039	1.31	ug/l	100
36)	Toluene-d8	17.65	98.0	166602	51.52	ug/l	98
42)	Bromofluorobenzene	24.19	95.0	108736	46.08	ug/l	88
43)	*Chlorobenzene-d5	21.24	117.0	136547	50.00	ug/l	100
55)	*1,4-Dichlorobenzene-d4	27.05	152.0	75307	50.00	ug/l	90

* Compound is ISTD

206

TOTAL ION CHROMATOGRAM



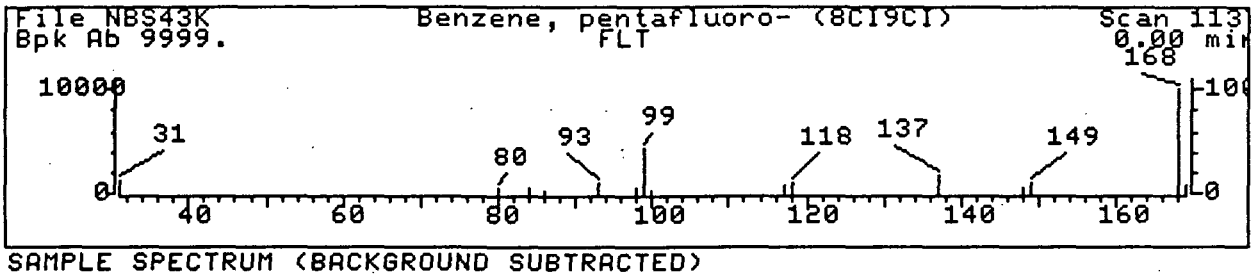
Data File: >A5132::D2 Quant Output File: ^A5132::D5
Name: 9912994 Instrument ID: HP5970BA
Misc: 6481 OE DCOMP-1

Id File: IDAS06::D5
Title: Accredited Labs ID file for 8260
Last Calibration: 991208 17:16 Last Qcal Time: <none>

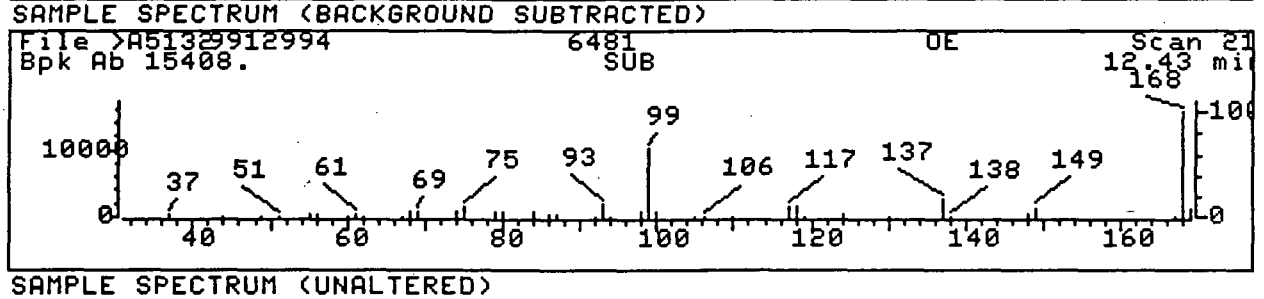
Operator ID: ROBERT
Quant Time : 991208 20:18
Injected at: 991208 19:43

307

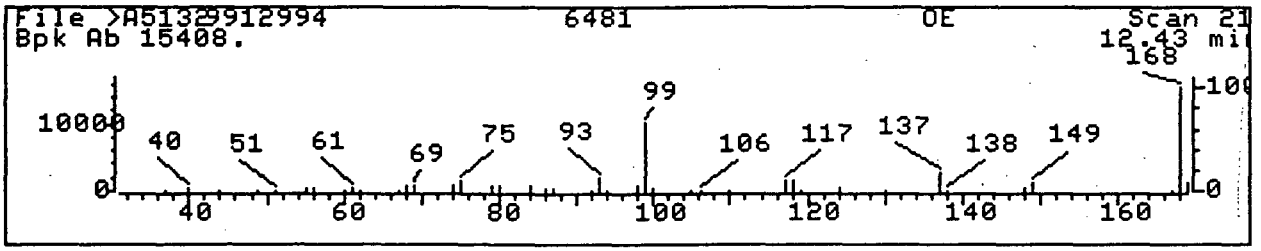
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



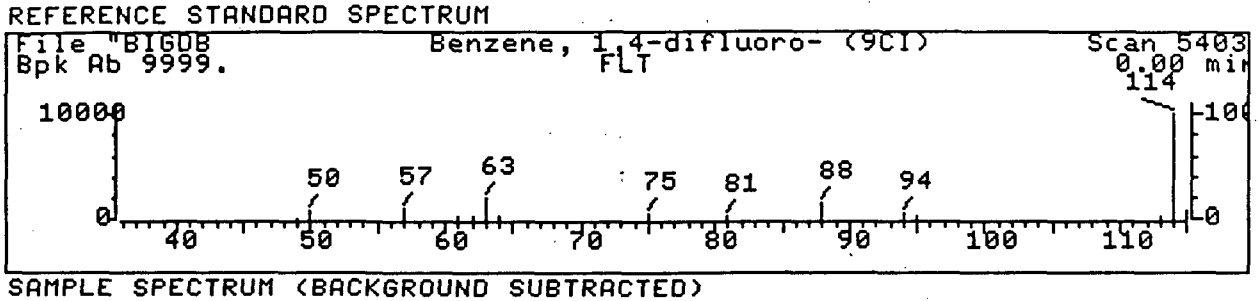
Data File: >A5132::D2
Name: 9912994
Misc: 6481 OE
Quant Time: 991208 20:18
Injected at: 991208 19:43
Last Qcal Time: <none>

Quant Output File: ^A5132::D5
Instrument ID: HP5970BA
DCOMP-1
Quant ID File: IDAS06::D5
Last Calibration: 991208 17:16

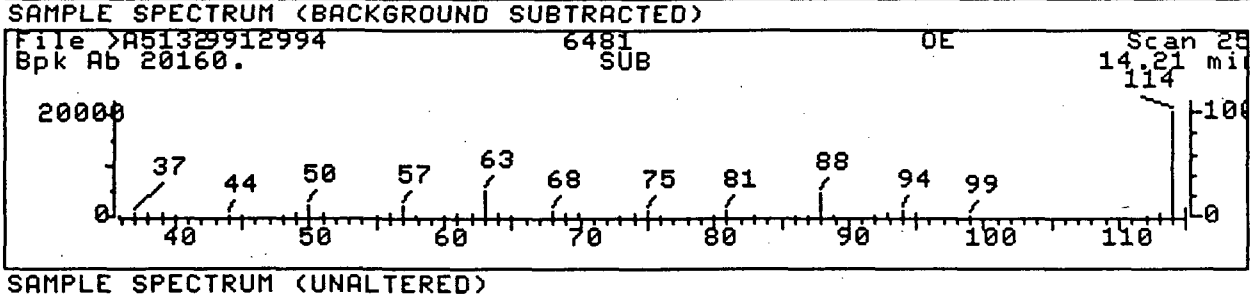
Compound No : 1 (ISTD)
Compound Name : Pentafluorobenzene
Scan Number : 215
Retention Time: 12.43 min.
Quant Ion : 168.0
Area : 153776
Concentration : 50.00 ug/l
q-value : 100

208

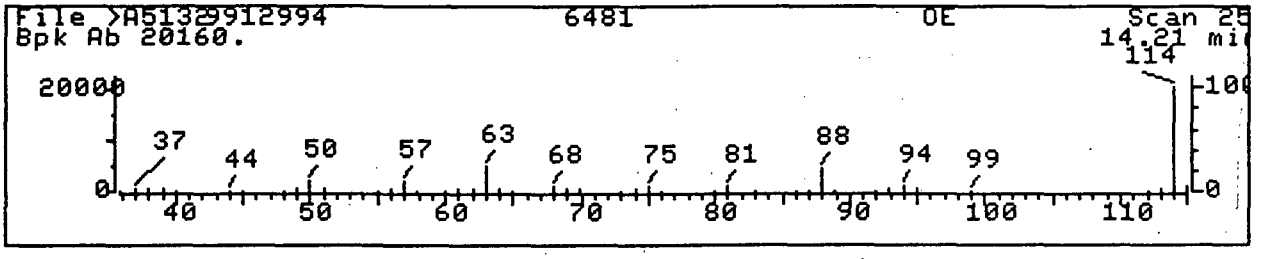
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



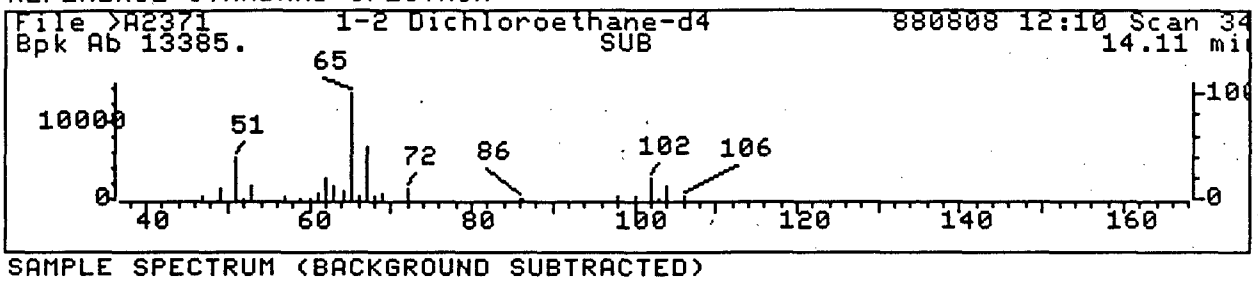
Data File: >A5132::D2
Name: 9912994
Misc: 6481 OE
Quant Time: 991208 20:18
Injected at: 991208 19:43
Last Qcal Time: <none>

Quant Output File: ^A5132::D5
Instrument ID: HP5970BA
DCOMP-1
Quant ID File: IDAS06::D5
Last Calibration: 991208 17:16

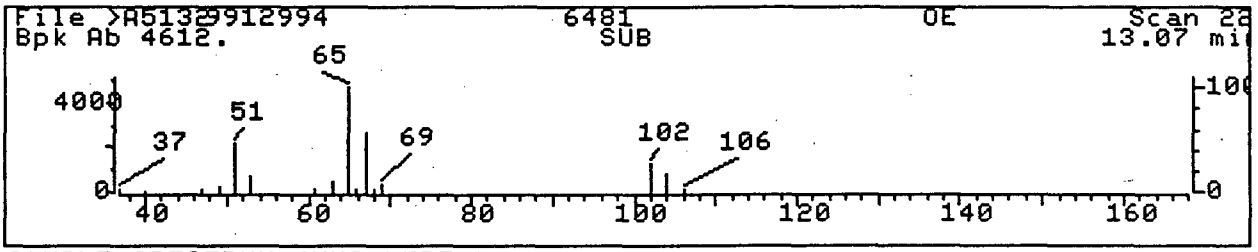
Compound No : 24 (ISTD)
Compound Name : 1,4-Difluorobenzene
Scan Number : 254
Retention Time: 14.21 min.
Quant Ion : 114.0
Area : 170972M
Concentration : 50.00 ug/l
q-value : 86

209

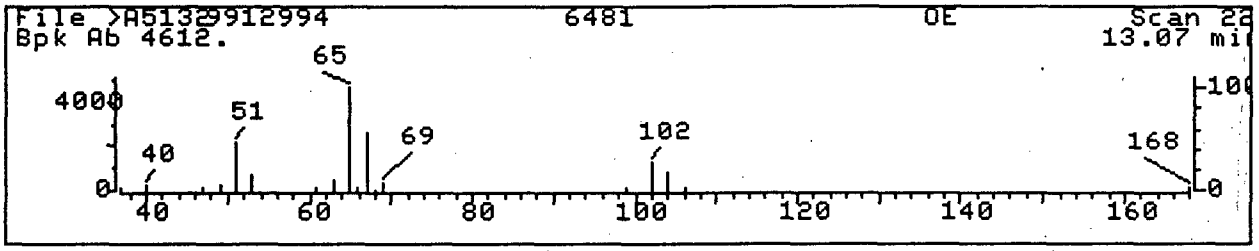
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



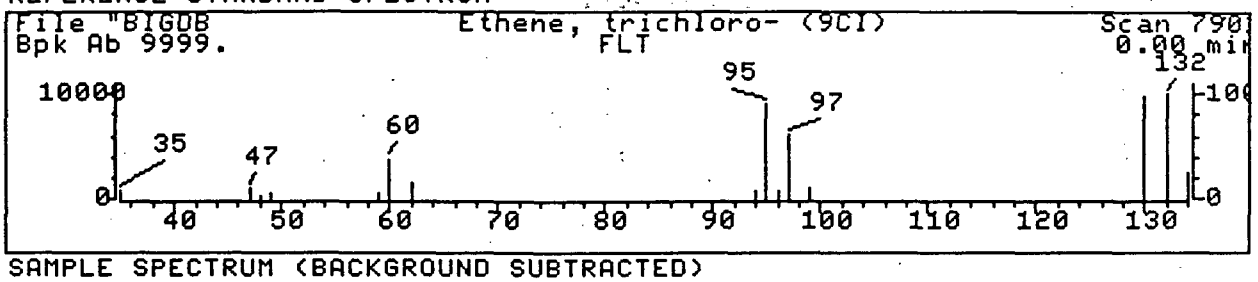
Data File: >A5132::D2
Name: 9912994
Misc: 6481 OE
Quant Time: 991208 20:18
Injected at: 991208 19:43
Last Qcal Time: <none>

Quant Output File: ^A5132::D5
Instrument ID: HP5970BA
DCOMP-1
Quant ID File: IDAS06::D5
Last Calibration: 991208 17:16

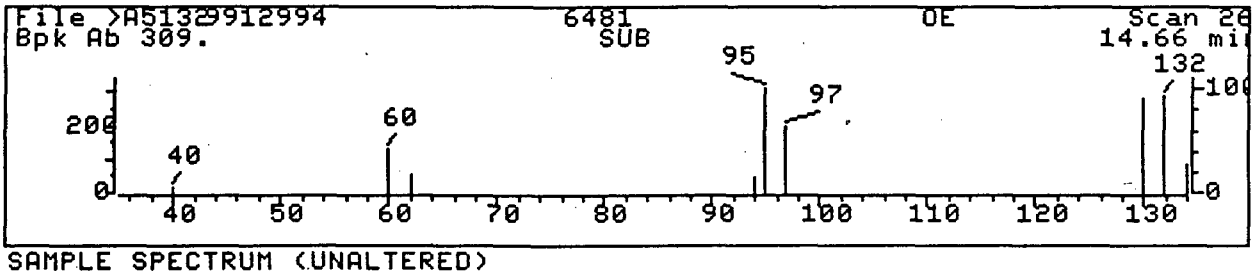
Compound No : 25
Compound Name : 1,2-Dichloroethane-d4
Scan Number : 229
Retention Time: 13.07 min.
Quant Ion : 65.0
Area : 42006
Concentration : 38.25 ug/l
q-value : 88

210

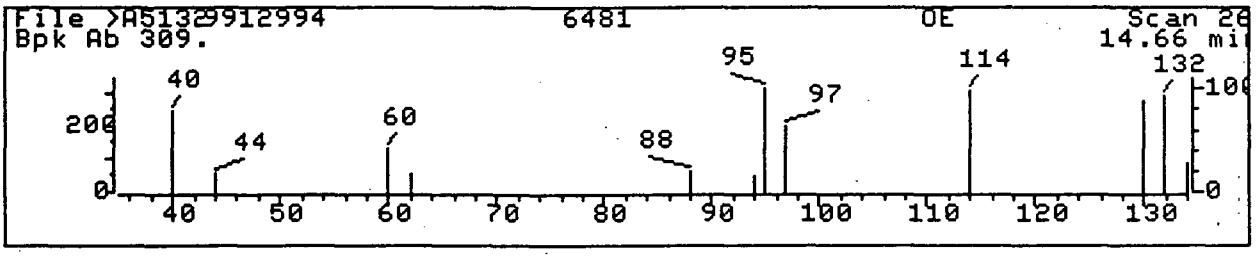
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



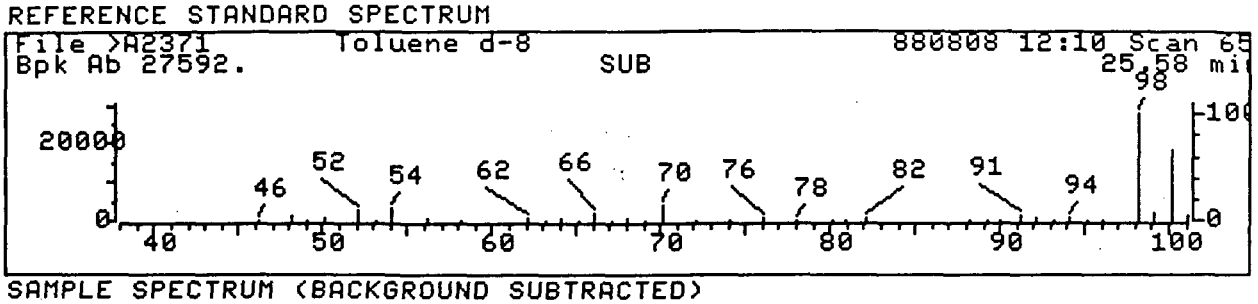
Data File: >A5132::D2
Name: 9912994
Misc: 6481 OE
Quant Time: 991208 20:18
Injected at: 991208 19:43
Last Qcal Time: <none>

Quant Output File: ^A5132::D5
Instrument ID: HP5970BA
DCOMP-1
Quant ID File: IDAS06::D5
Last Calibration: 991208 17:16

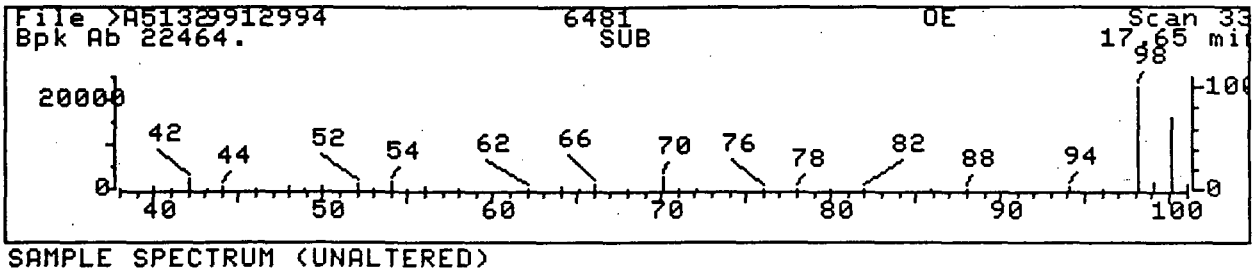
Compound No : 30
Compound Name : Trichloroethene
Scan Number : 264
Retention Time: 14.66 min.
Quant Ion : 95.0
Area : 2039
Concentration : 1.31 ug/l
q-value : 100

811

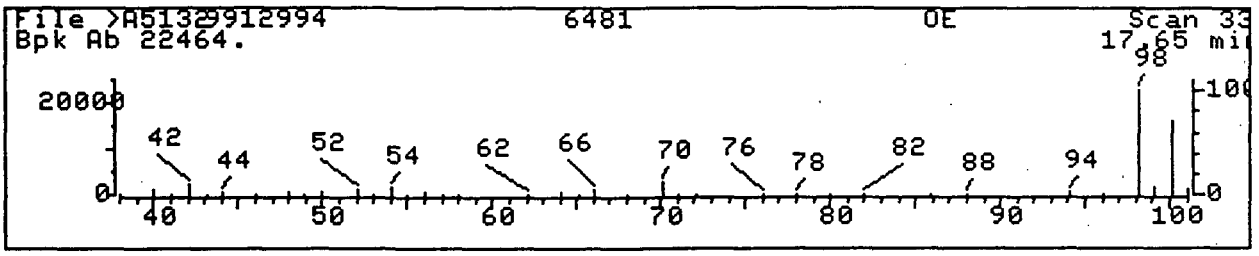
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



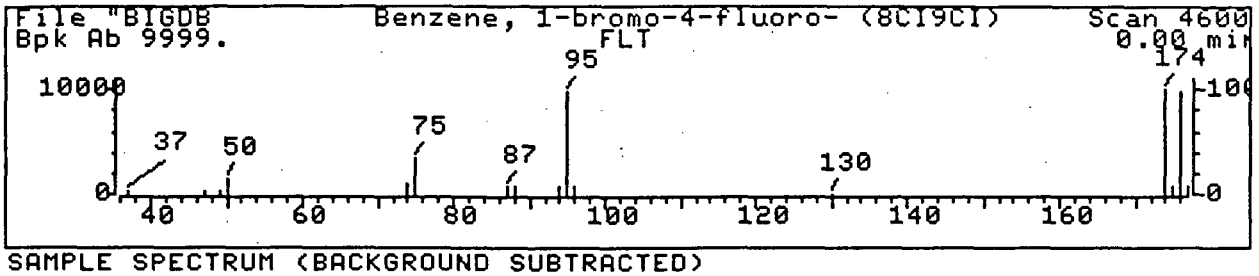
Data File: >A5132::D2
Name: 9912994
Misc: 6481 OE
Quant Time: 991208 20:18
Injected at: 991208 19:43
Last Qcal Time: <none>

Quant Output File: ^A5132::D5
Instrument ID: HP5970BA
DCOMP-1
Quant ID File: IDAS06::D5
Last Calibration: 991208 17:16

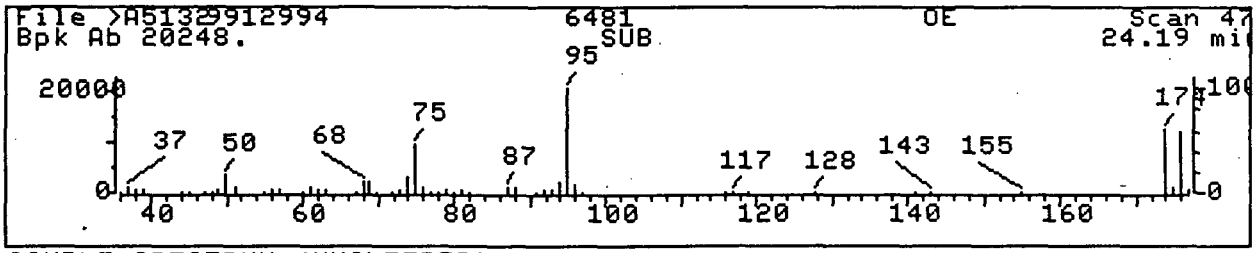
Compound No : 36
Compound Name : Toluene-d8
Scan Number : 330
Retention Time: 17.65 min.
Quant Ion : 98.0
Area : 166602
Concentration : 51.52 ug/l
q-value : 98

616

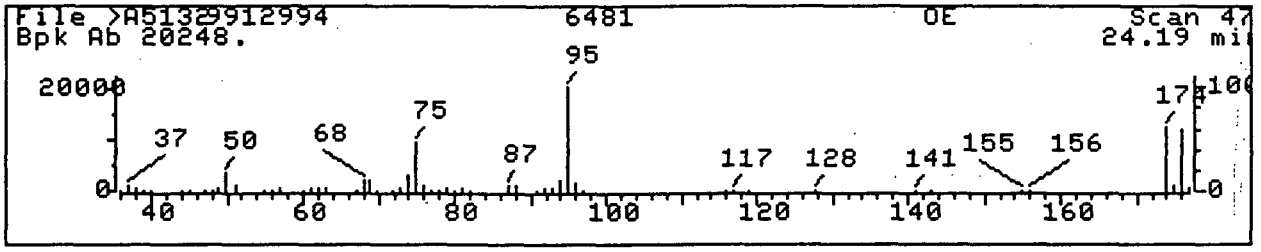
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



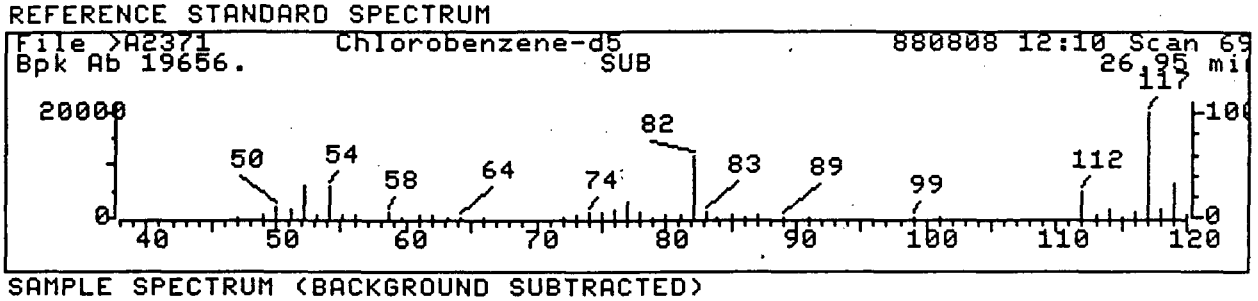
Data File: >A5132::D2
Name: 9912994
Misc: 6481 OE
Quant Time: 991208 20:18
Injected at: 991208 19:43
Last Qcal Time: <none>

Quant Output File: ^A5132::D5
Instrument ID: HP5970BA
DCOMP-1
Quant ID File: IDAS06::D5
Last Calibration: 991208 17:16

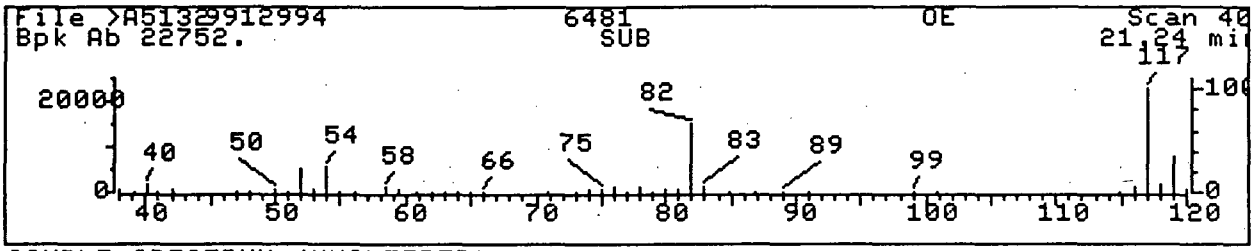
Compound No : 42
Compound Name : Bromofluorobenzene
Scan Number : 474
Retention Time: 24.19 min.
Quant Ion : 95.0
Area : 108736
Concentration : 46.08 ug/l
q-value : 88

213

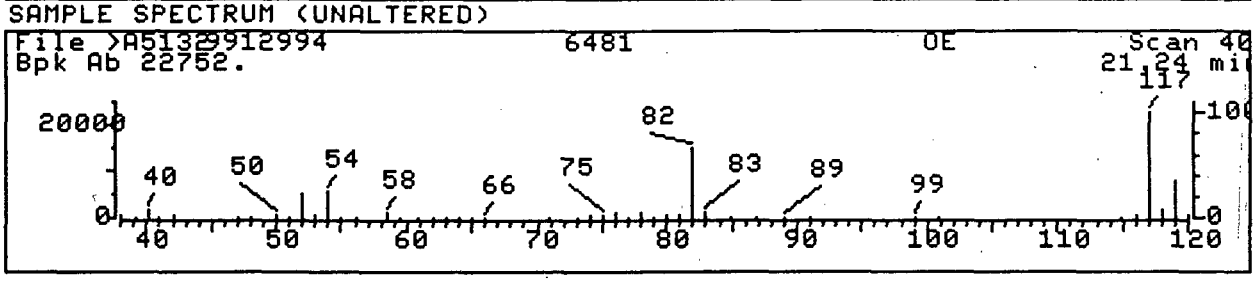
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >A5132::D2
Name: 9912994
Misc: 6481 OE
Quant Time: 991208 20:18
Injected at: 991208 19:43
Last Qcal Time: <none>

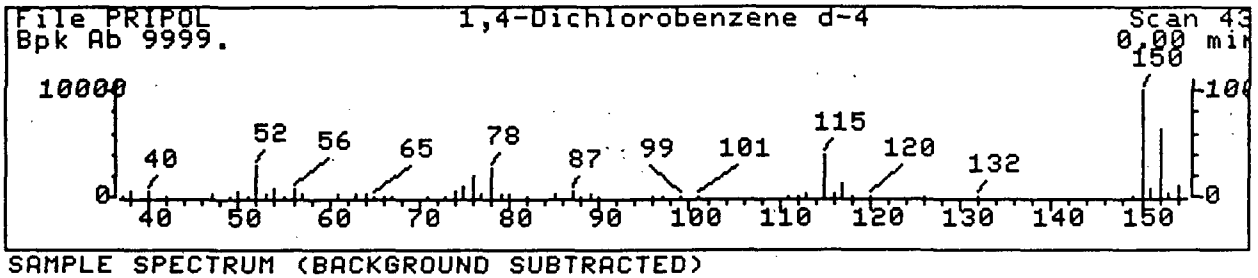
Quant Output File: ^A5132::D5
Instrument ID: HP5970BA
DCOMP-1
Quant ID File: IDAS06::D5
Last Calibration: 991208 17:16

Compound No : 43 (ISTD)
Compound Name : Chlorobenzene-d5
Scan Number : 409
Retention Time: 21.24 min.
Quant Ion : 117.0
Area : 136547
Concentration : 50.00 ug/l
q-value : 100

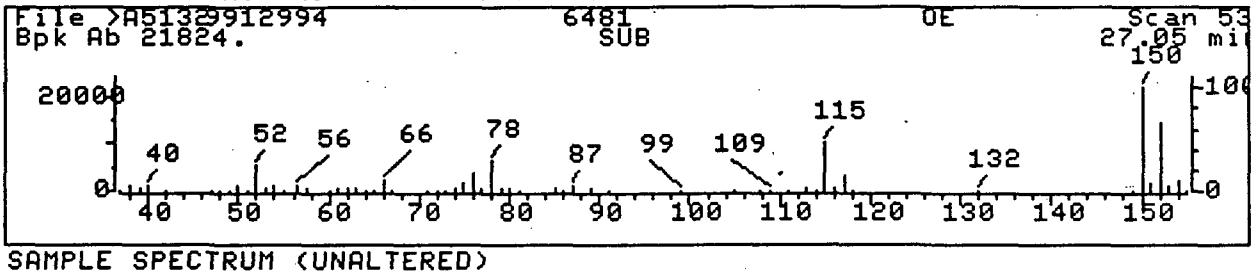
214

700312

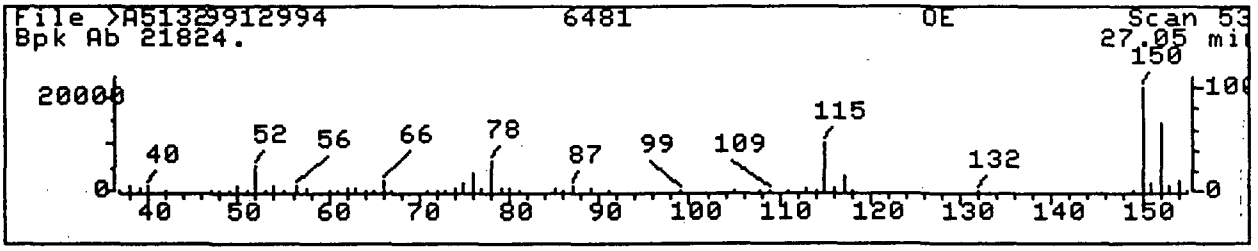
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >A5132::D2 Quant Output File: ^A5132::D5
Name: 9912994 Instrument ID: HP5970BA
Misc: 6481 OE DCOMP-1
Quant Time: 991208 20:18 Quant ID File: IDAS06::D5
Injected at: 991208 19:43 Last Calibration: 991208 17:16
Last Qcal Time: <none>

Compound No : 55 (ISTD)
Compound Name : 1,4-Dichlorobenzene-d4
Scan Number : 537
Retention Time: 27.05 min.
Quant Ion : 152.0
Area : 75307
Concentration : 50.00 ug/l
q-value : 90

215

Operator ID: ROBERT Quant Rev: 7 Quant Time: 991208 21:39
Output File: ^A5134::D5 Injected at: 991208 21:04
Data File: >A5134::D2 Dilution Factor: 1.00000
Name: 9912995 Instrument ID: HP5970BA
Misc: 6481 OE DCOMP-2

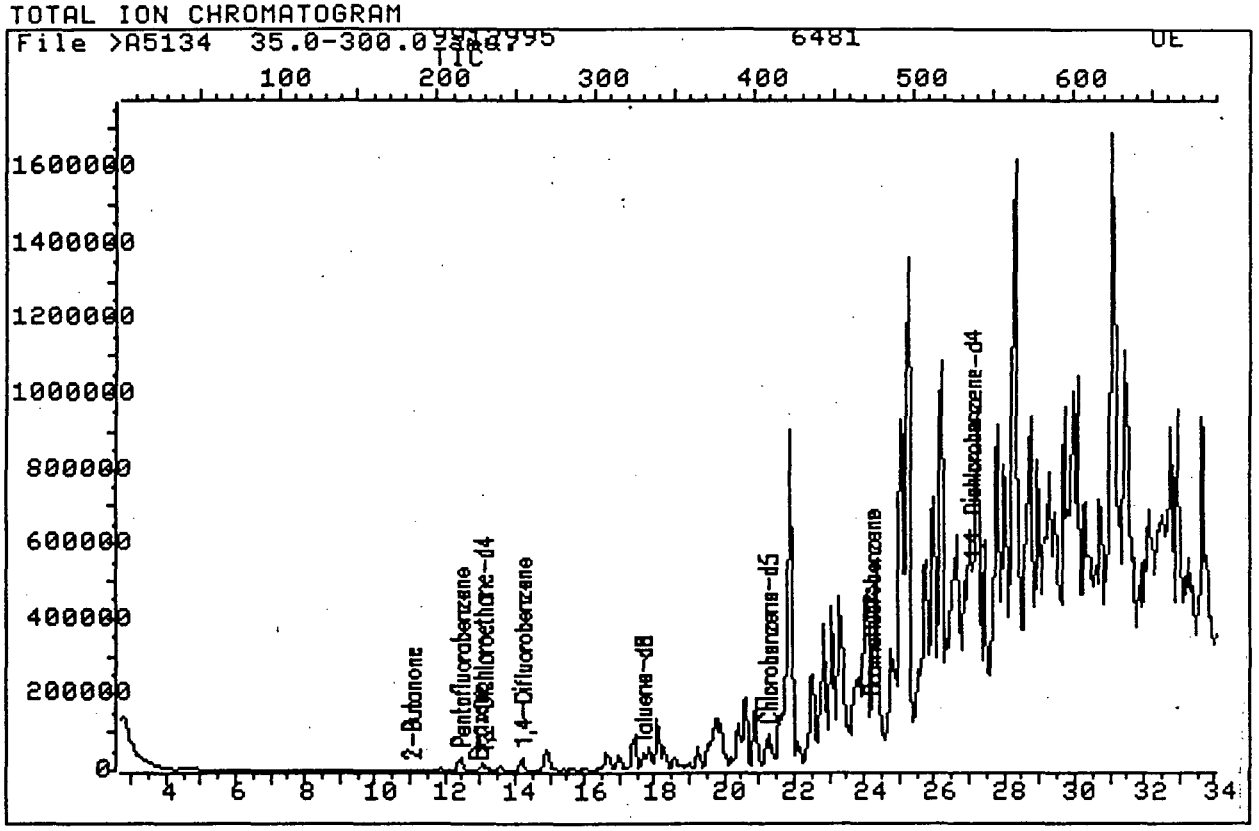
ID File: IDAS06::D5
Title: Accredited Labs ID file for 8260
Last Calibration: 991208 17:16 Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Pentafluorobenzene	12.43	168.0	96625	50.00	ug/l	100
18)	2-Butanone	11.03	43.0	1219M	5.28	ug/l	
24)	*1,4-Difluorobenzene	14.21	114.0	126767	50.00	ug/l	86
25)	1,2-Dichloroethane-d4	13.07	65.0	42431	52.10	ug/l	87
29)	Benzene	12.93	78.0	2370	1.04	ug/l	100
36)	Toluene-d8	17.66	98.0	121427	50.64	ug/l	96
42)	Bromofluorobenzene	24.20	95.0	94577M	54.06	ug/l	98
43)	*Chlorobenzene-d5	21.24	117.0	110528	50.00	ug/l	100
55)	*1,4-Dichlorobenzene-d4	27.06	152.0	54311	50.00	ug/l	94

* Compound is ISTD

216

TOTAL ION CHROMATOGRAM



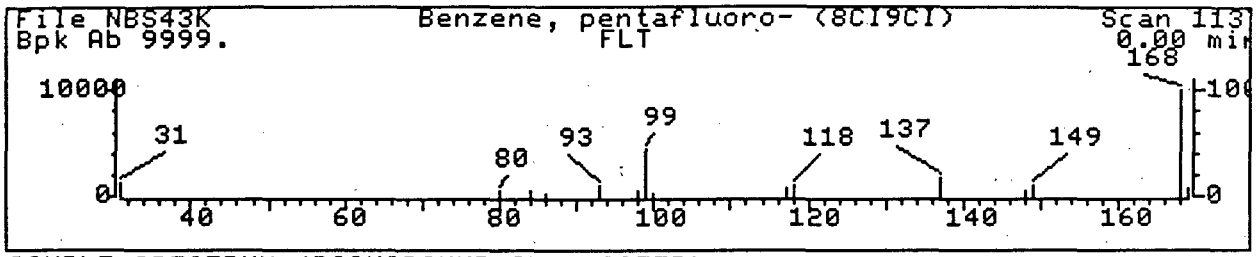
Data File: >A5134::D2 Quant Output File: ^A5134::D5
Name: 9912995 Instrument ID: HP5970BA
Misc: 6481 OE DCOMP-2

Id File: IDAS06::D5
Title: Accredited Labs ID file for 8260
Last Calibration: 991208 17:16 Last Qcal Time: <none>

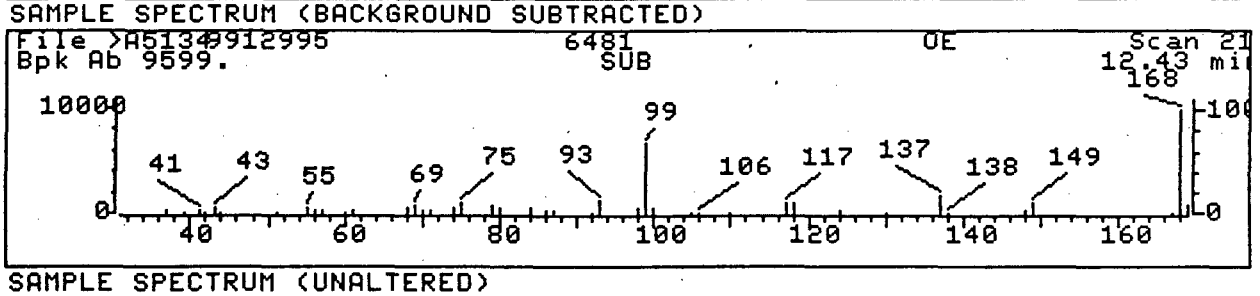
Operator ID: ROBERT
Quant Time : 991208 21:39
Injected at: 991208 21:04

217

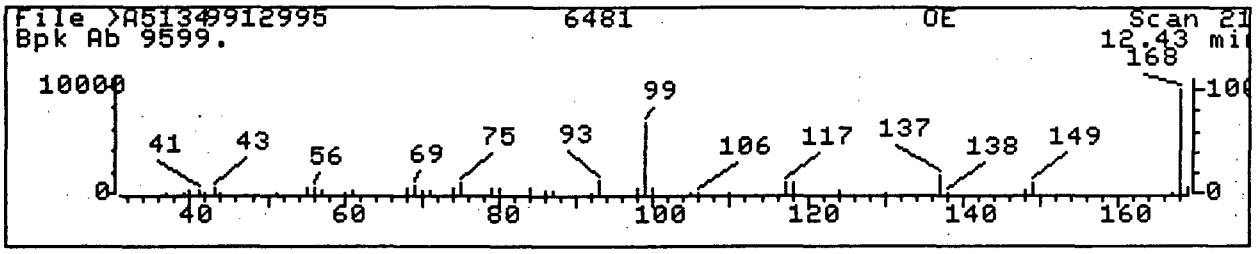
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



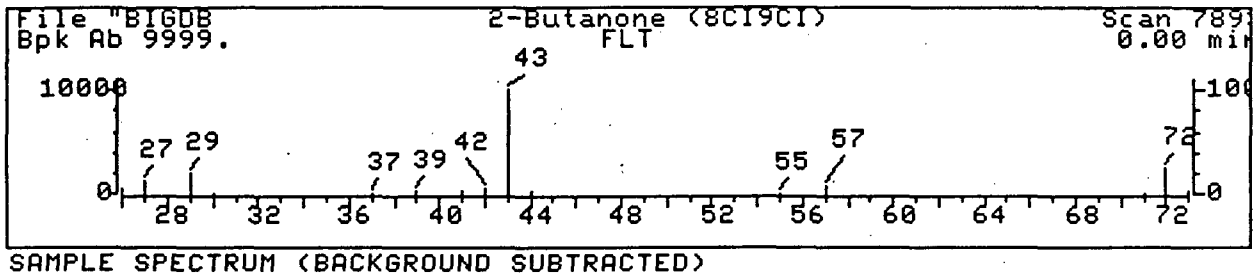
Data File: >A5134::D2
Name: 9912995
Misc: 6481 OE
Quant Time: 991208 21:39
Injected at: 991208 21:04
Last Qcal Time: <none>

Quant Output File: ^A5134::D5
Instrument ID: HP5970BA
DCOMP-2
Quant ID File: IDAS06::D5
Last Calibration: 991208 17:16

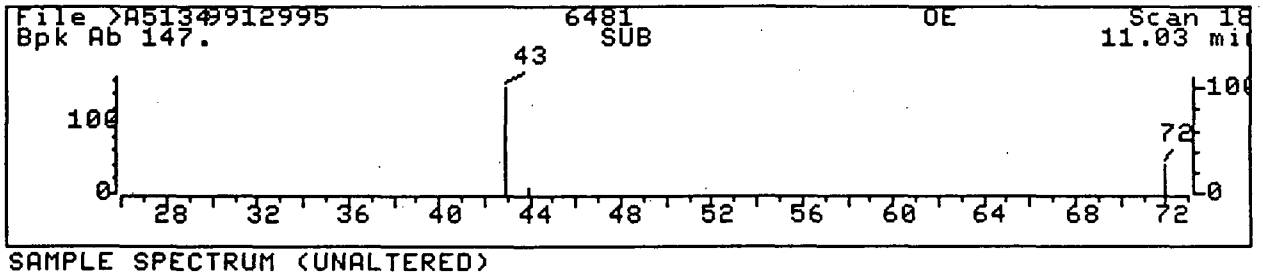
Compound No : 1 (ISTD)
Compound Name : Pentafluorobenzene
Scan Number : 215
Retention Time: 12.43 min.
Quant Ion : 168.0
Area : 96625
Concentration : 50.00 ug/l
q-value : 100

218

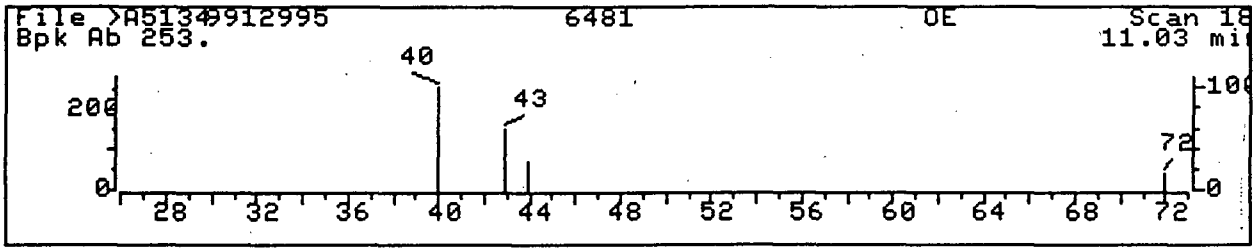
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



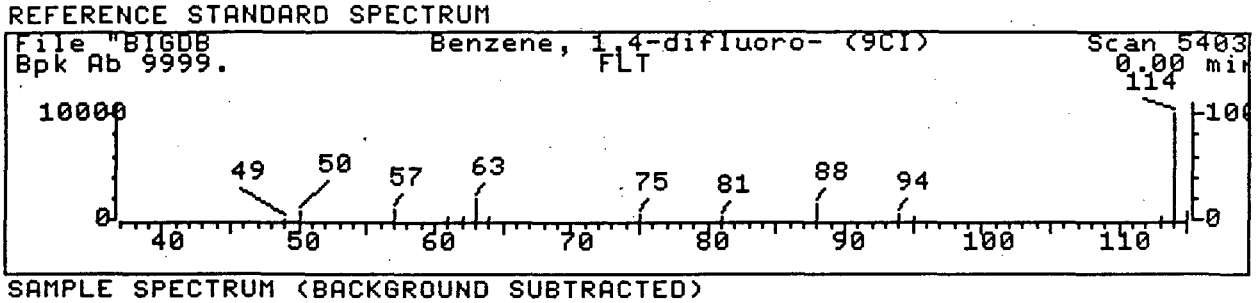
Data File: >A5134::D2
Name: 9912995
Misc: 6481 OE
Quant Time: 991208 21:39
Injected at: 991208 21:04
Last Qcal Time: <none>

Quant Output File: ^A5134::D5
Instrument ID: HP5970BA
DCOMP-2
Quant ID File: IDAS06::D5
Last Calibration: 991208 17:16

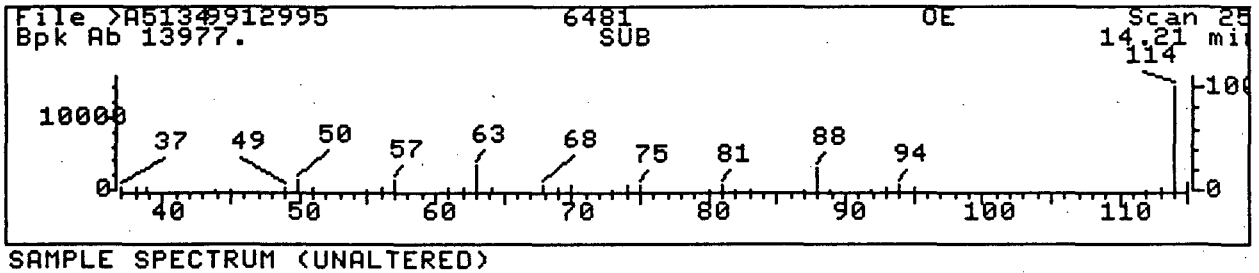
Compound No : 18
Compound Name : 2-Butanone
Scan Number : 184
Retention Time: 11.03 min.
Quant Ion : 43.0
Area : 1219M
Concentration : 5.28 ug/l

219

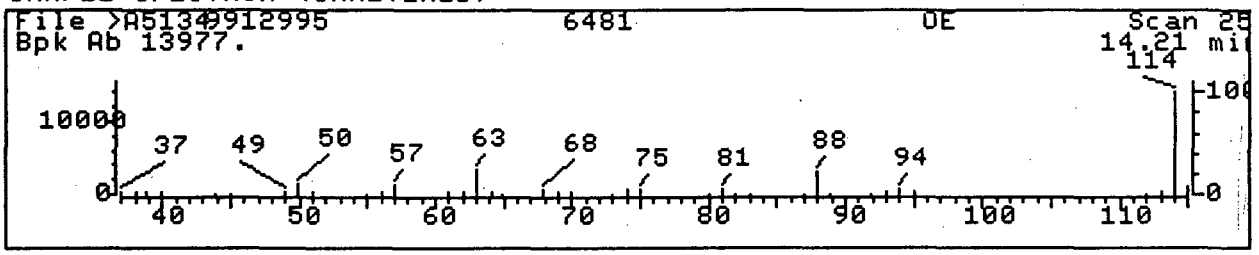
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



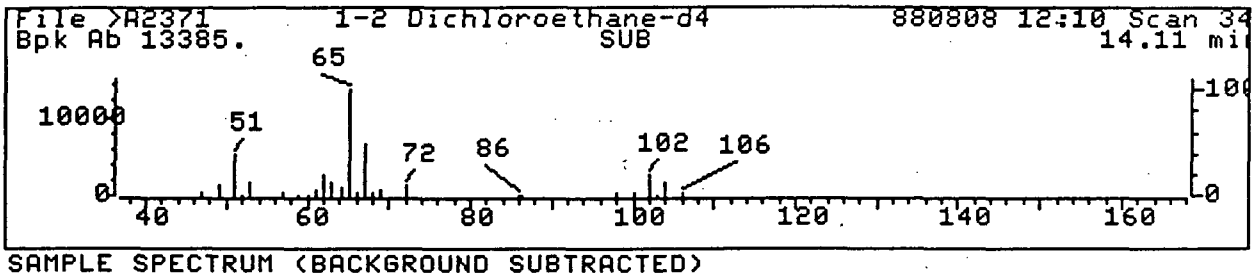
Data File: >A5134::D2
Name: 9912995
Misc: 6481 OE
Quant Time: 991208 21:39
Injected at: 991208 21:04
Last Qcal Time: <none>

Quant Output File: ^A5134::D5
Instrument ID: HP5970BA
DCOMP-2
Quant ID File: IDAS06::D5
Last Calibration: 991208 17:16

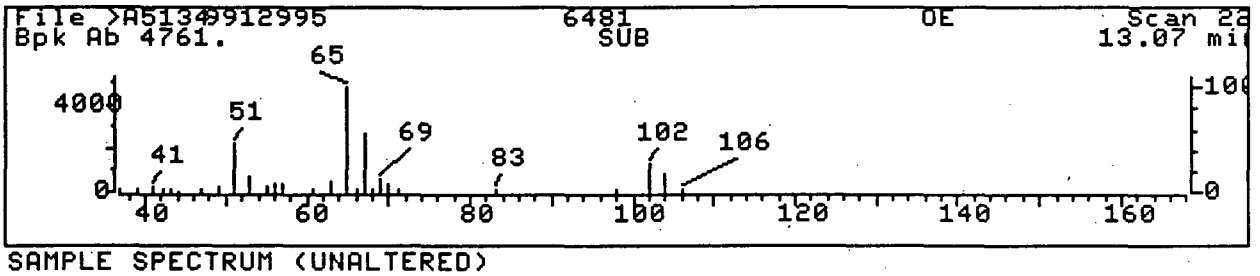
Compound No : 24 (ISTD)
Compound Name : 1,4-Difluorobenzene
Scan Number : 254
Retention Time: 14.21 min.
Quant Ion : 114.0
Area : 126767
Concentration : 50.00 ug/l
q-value : 86

220

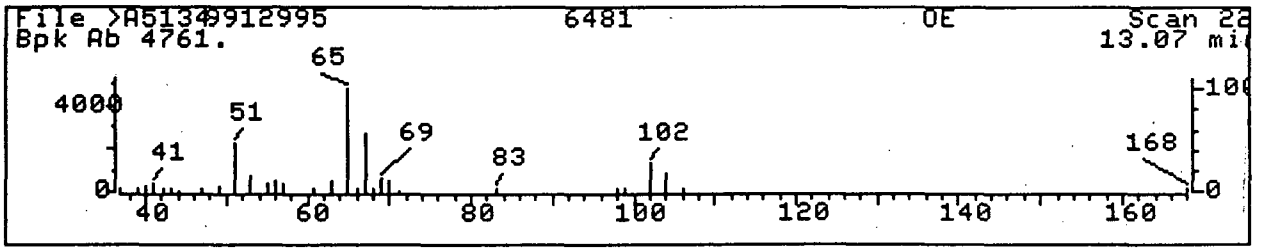
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



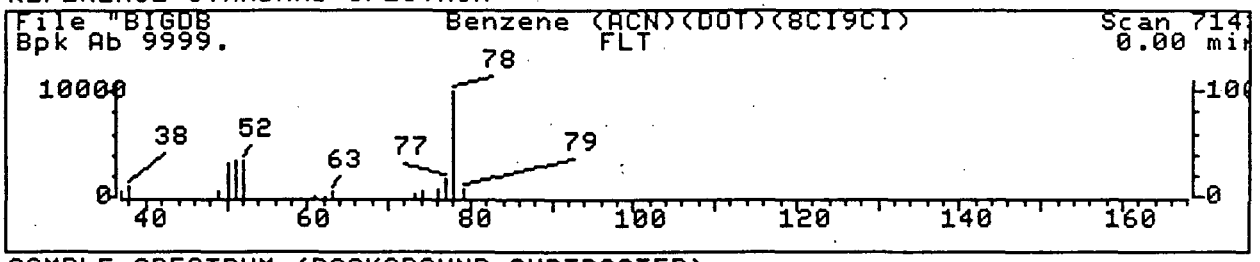
Data File: >A5134::D2 Quant Output File: ^A5134::D5
Name: 9912995 Instrument ID: HP5970BA
Misc: 6481 OE DCOMP-2
Quant Time: 991208 21:39 Quant ID File: IDAS06::D5
Injected at: 991208 21:04 Last Calibration: 991208 17:16
Last Qcal Time: <none>

Compound No : 25
Compound Name : 1,2-Dichloroethane-d4
Scan Number : 229
Retention Time: 13.07 min.
Quant Ion : 65.0
Area : 42431
Concentration : 52.10 ug/l
q-value : 87

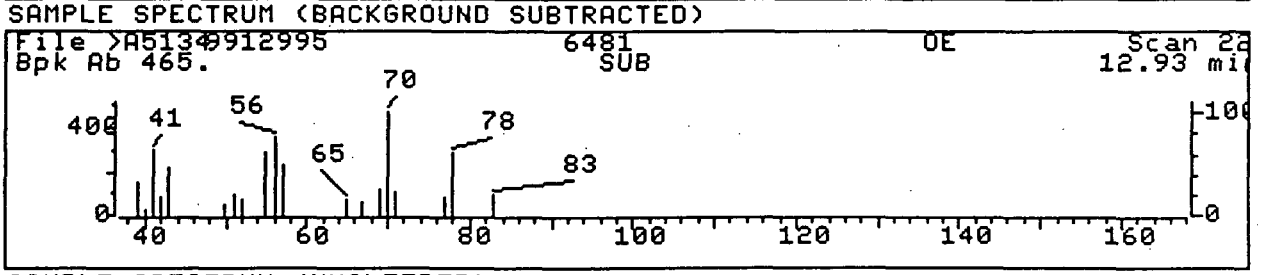
221

700319

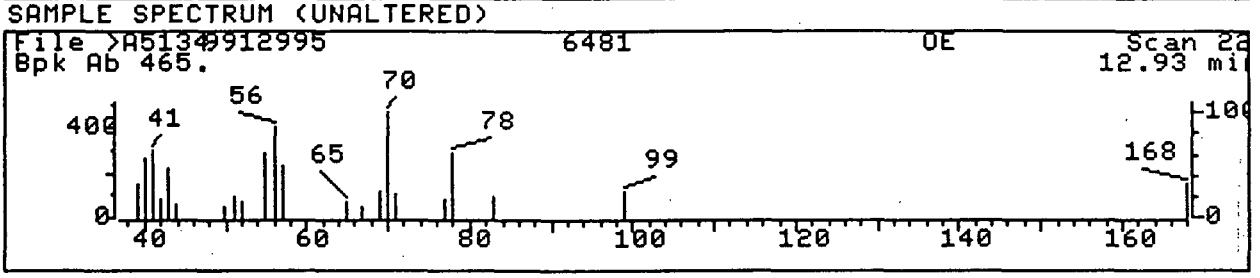
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



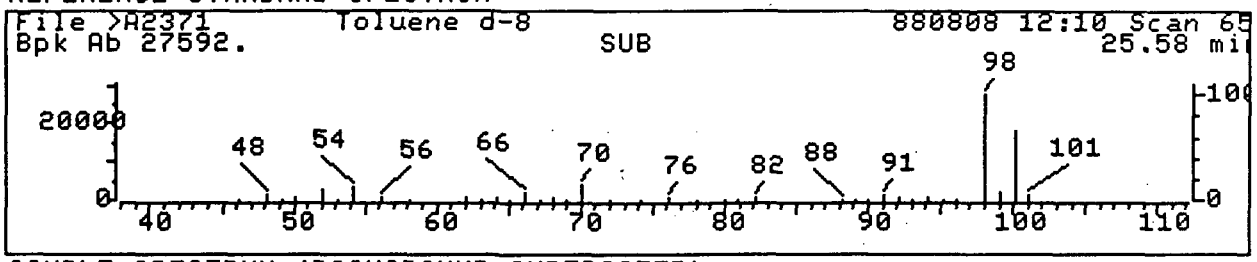
Data File: >A5134::D2
Name: 9912995
Misc: 6481 OE
Quant Time: 991208 21:39
Injected at: 991208 21:04
Last Qcal Time: <none>

Quant Output File: ^A5134::D5
Instrument ID: HP5970BA
DCOMP-2
Quant ID File: IDAS06::D5
Last Calibration: 991208 17:16

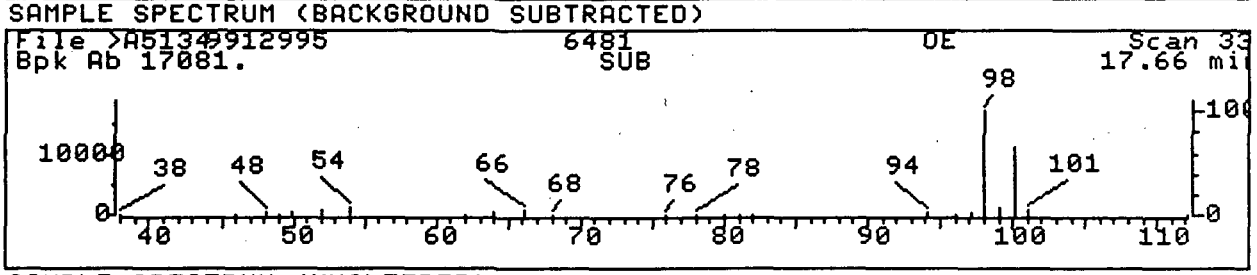
Compound No : 29
Compound Name : Benzene
Scan Number : 226
Retention Time: 12.93 min.
Quant Ion : 78.0
Area : 2370
Concentration : 1.04 ug/l
q-value : 100

222

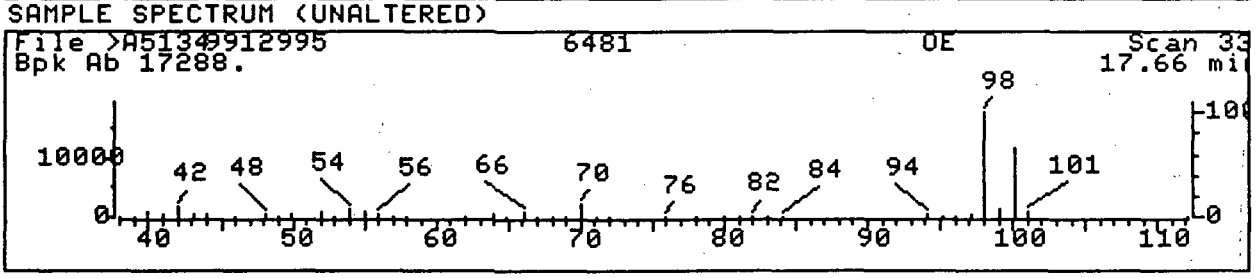
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



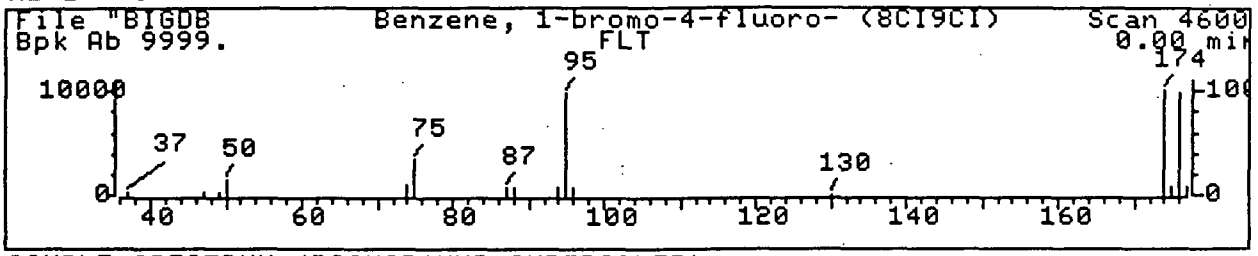
Data File: >A5134::D2
Name: 9912995
Misc: 6481 OE
Quant Time: 991208 21:39
Injected at: 991208 21:04
Last Qcal Time: <none>

Quant Output File: ^A5134::D5
Instrument ID: HP5970BA
DCOMP-2
Quant ID File: IDAS06::D5
Last Calibration: 991208 17:16

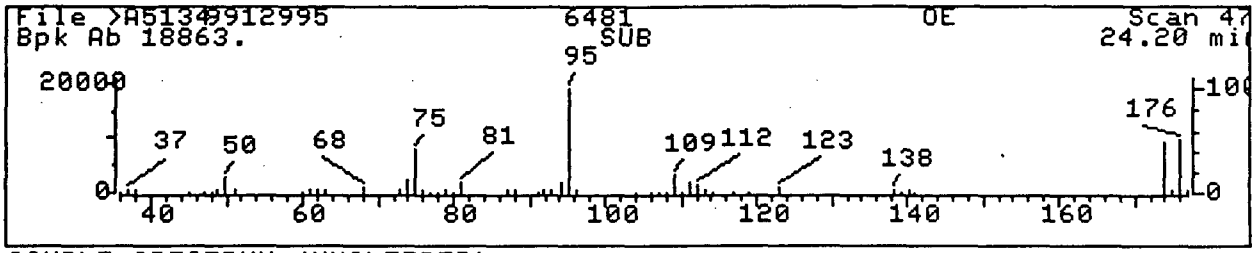
Compound No : 36
Compound Name : Toluene-d8
Scan Number : 330
Retention Time: 17.66 min.
Quant Ion : 98.0
Area : 121427
Concentration : 50.64 ug/l
q-value : 96

623

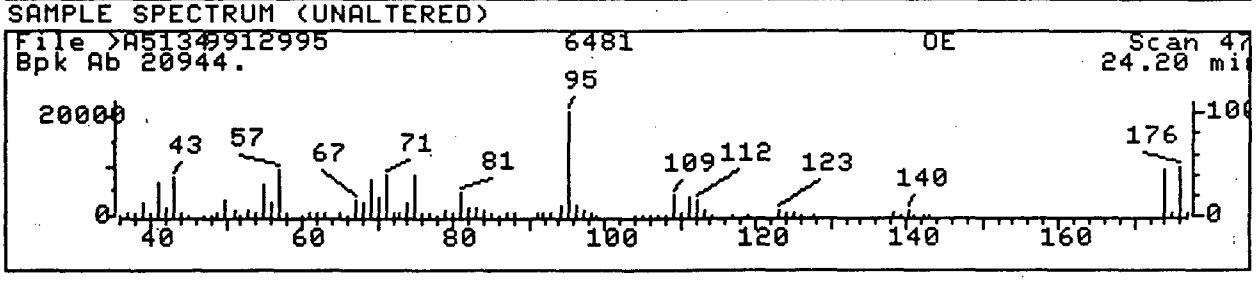
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



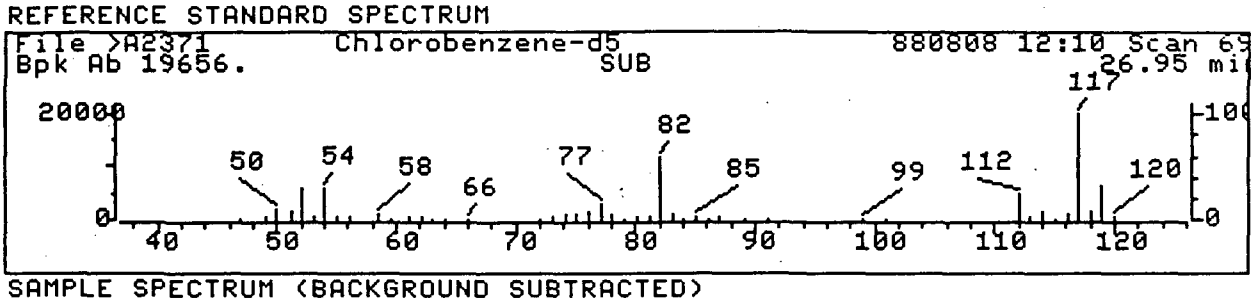
Data File: >A5134::D2
Name: 9912995
Misc: 6481 OE
Quant Time: 991208 21:39
Injected at: 991208 21:04
Last Qcal Time: <none>

Quant Output File: ^A5134::D5
Instrument ID: HP5970BA
DCOMP-2
Quant ID File: IDAS06::D5
Last Calibration: 991208 17:16

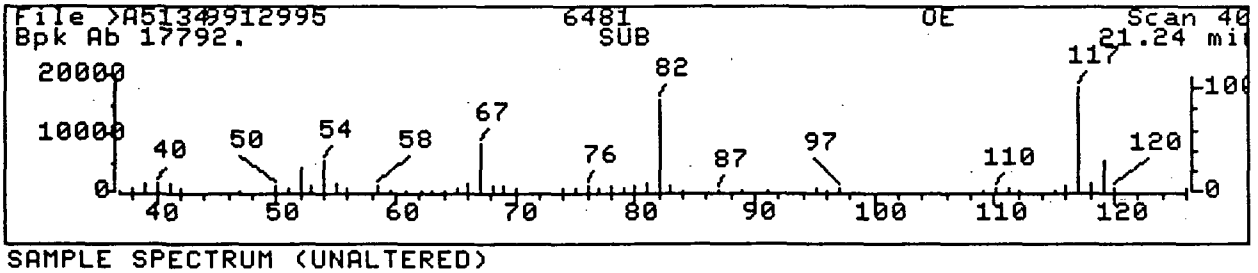
Compound No : 42
Compound Name : Bromofluorobenzene
Scan Number : 474
Retention Time: 24.20 min.
Quant Ion : 95.0
Area : 94577M
Concentration : 54.06 ug/l
q-value : 98

224

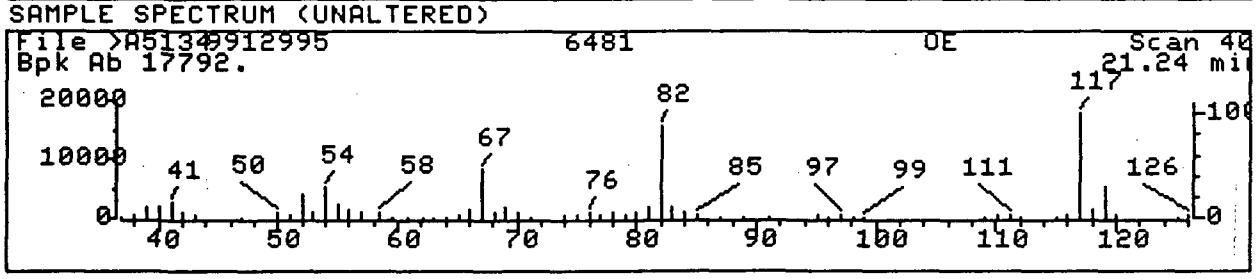
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



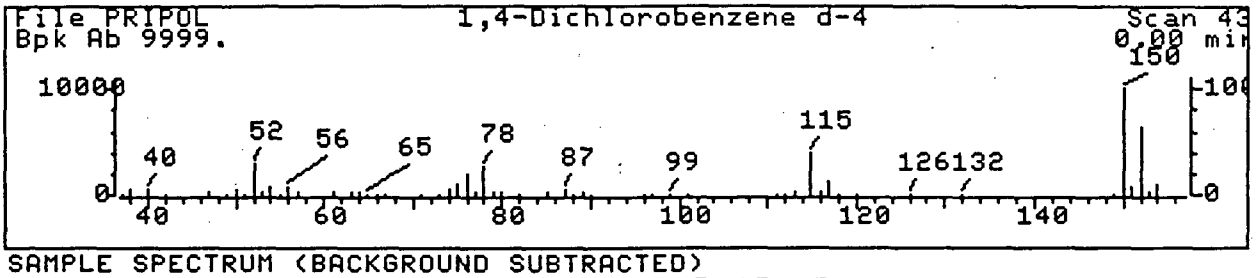
Data File: >A5134::D2
Name: 9912995
Misc: 6481 OE
Quant Time: 991208 21:39
Injected at: 991208 21:04
Last Qcal Time: <none>

Quant Output File: ^A5134::D5
Instrument ID: HP5970BA
DCOMP-2
Quant ID File: IDAS06::D5
Last Calibration: 991208 17:16

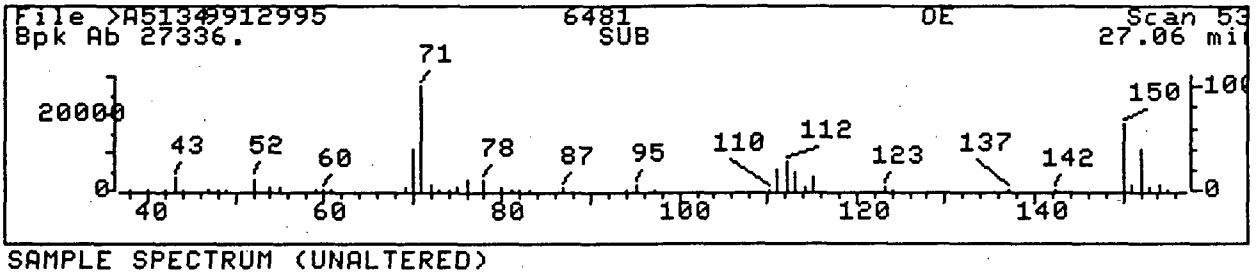
Compound No : 43 (ISTD)
Compound Name : Chlorobenzene-d5
Scan Number : 409
Retention Time: 21.24 min.
Quant Ion : 117.0
Area : 110528
Concentration : 50.00 ug/l
q-value : 100

225

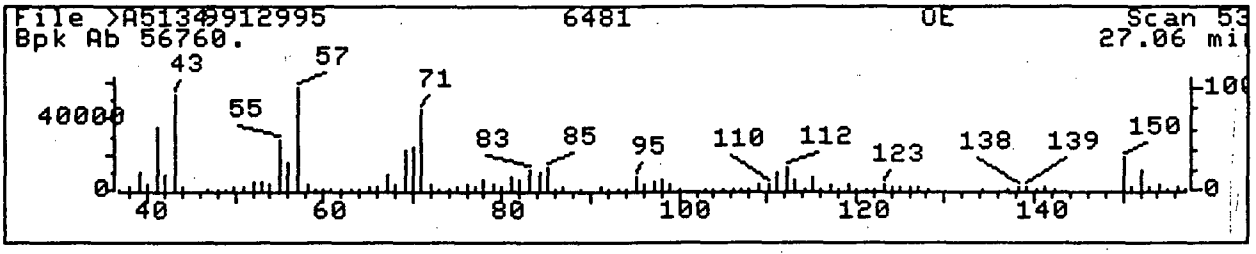
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >A5134::D2
Name: 9912995
Misc: 6481 OE
Quant Time: 991208 21:39
Injected at: 991208 21:04
Last Qcal Time: <none>

Quant Output File: ^A5134::D5
Instrument ID: HP5970BA
DCOMP-2
Quant ID File: IDAS06::D5
Last Calibration: 991208 17:16

Compound No : 55 (ISTD)
Compound Name : 1,4-Dichlorobenzene-d4
Scan Number : 537
Retention Time: 27.06 min.
Quant Ion : 152.0
Area : 54311
Concentration : 50.00 ug/l
q-value : 94

226

QUANT REPORT

Operator ID: ROBERT
Output File: ^A5133::D5
Data File: >A5133::D2
Name: 9912996
Misc: 6481 OE

Quant Rev: 7
Quant Time: 991208 20:58
Injected at: 991208 20:23
Dilution Factor: 1.00000
Instrument ID: HP5970BA
SP-1

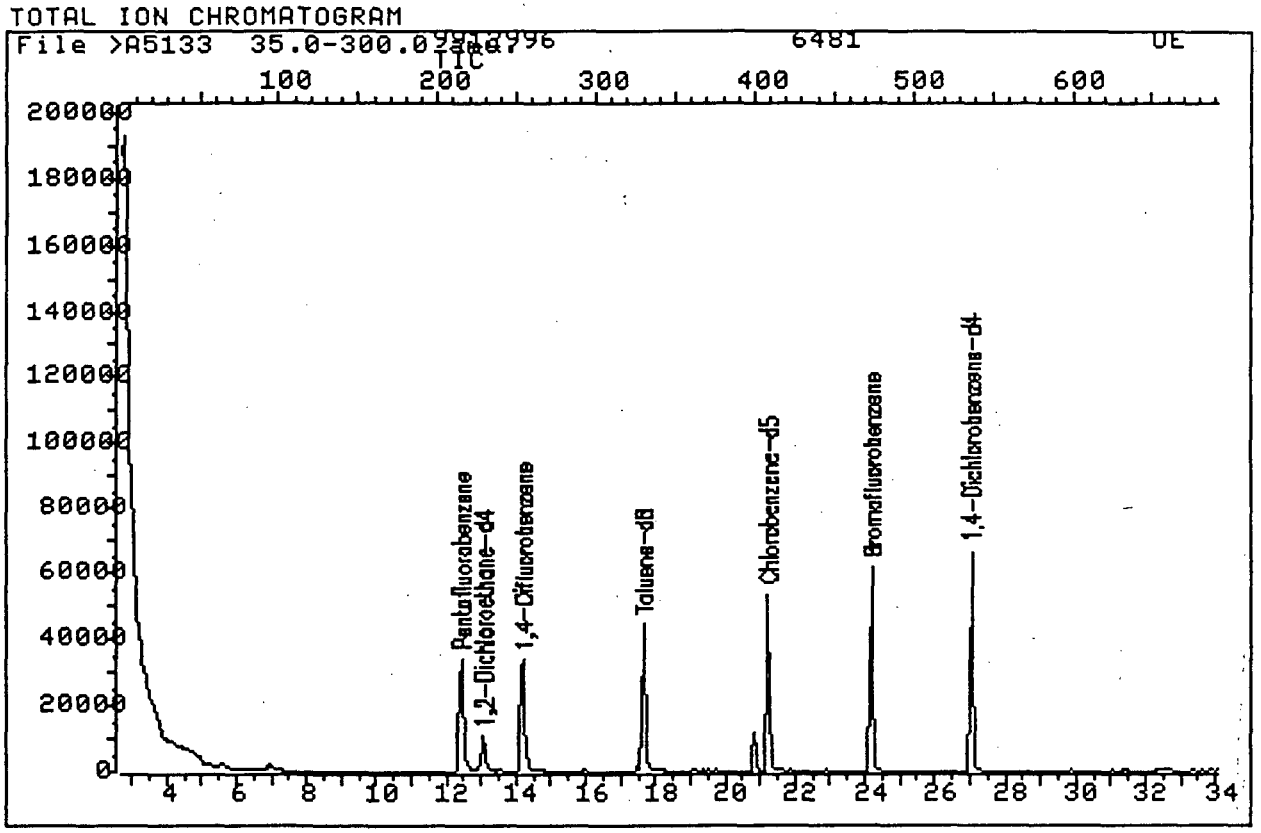
ID File: IDAS06::D5
Title: Accredited Labs ID file for 8260
Last Calibration: 991208 17:16
Last Qcal Time: <none>

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Pentafluorobenzene	12.43	168.0	108390	50.00	ug/l	100
24)	*1,4-Difluorobenzene	14.21	114.0	125282M	50.00	ug/l	86
25)	1,2-Dichloroethane-d4	13.07	65.0	30805	38.28	ug/l	87
36)	Toluene-d8	17.65	98.0	121469	51.26	ug/l	97
42)	Bromofluorobenzene	24.19	95.0	80888	46.78	ug/l	86
43)	*Chlorobenzene-d5	21.24	117.0	102682	50.00	ug/l	100
55)	*1,4-Dichlorobenzene-d4	27.05	152.0	57297	50.00	ug/l	93

* Compound is ISTD

227

TOTAL ION CHROMATOGRAM



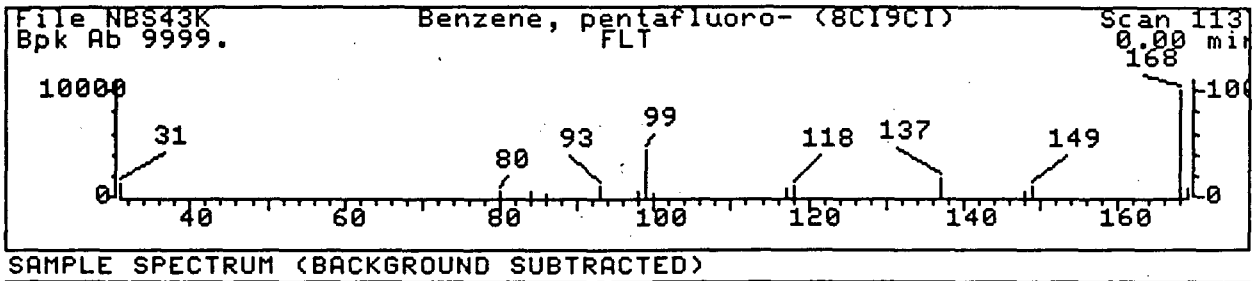
Data File: >A5133::D2 Quant Output File: ^A5133::D5
Name: 9912996 Instrument ID: HP5970BA
Misc: 6481 OE SP-1

Id File: IDAS06::D5
Title: Accredited Labs ID file for 8260
Last Calibration: 991208 17:16 Last Qcal Time: <none>

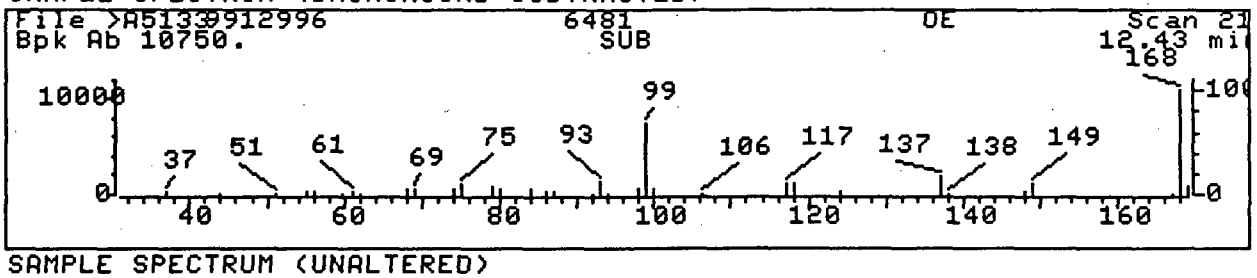
Operator ID: ROBERT
Quant Time : 991208 20:58
Injected at: 991208 20:23

228

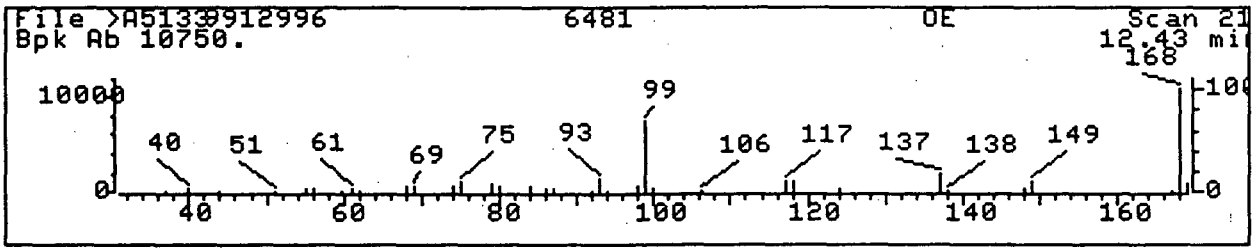
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



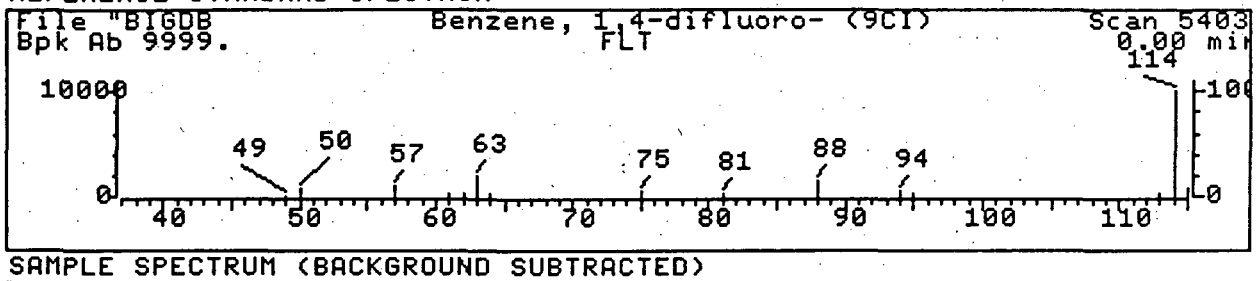
Data File: >A5133::D2
Name: 9912996
Misc: 6481 OE
Quant Time: 991208 20:58
Injected at: 991208 20:23
Last Qcal Time: <none>

Quant Output File: ^A5133::D5
Instrument ID: HP5970BA
SP-1
Quant ID File: IDAS06::D5
Last Calibration: 991208 17:16

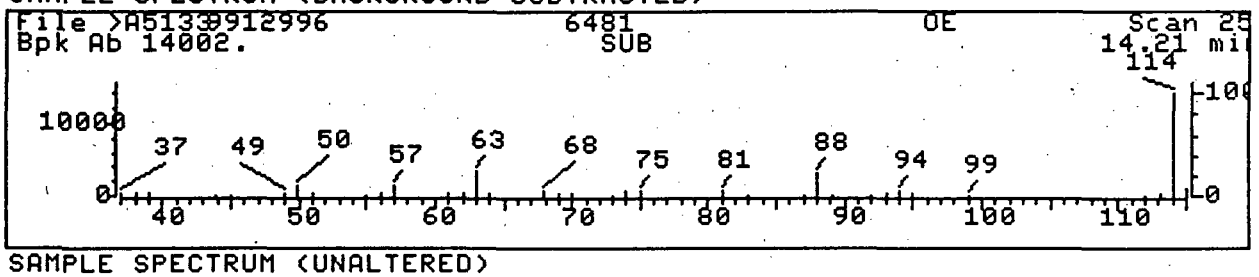
Compound No : 1 (ISTD)
Compound Name : Pentafluorobenzene
Scan Number : 215
Retention Time: 12.43 min.
Quant Ion : 168.0
Area : 108390
Concentration : 50.00 ug/l
q-value : 100

229

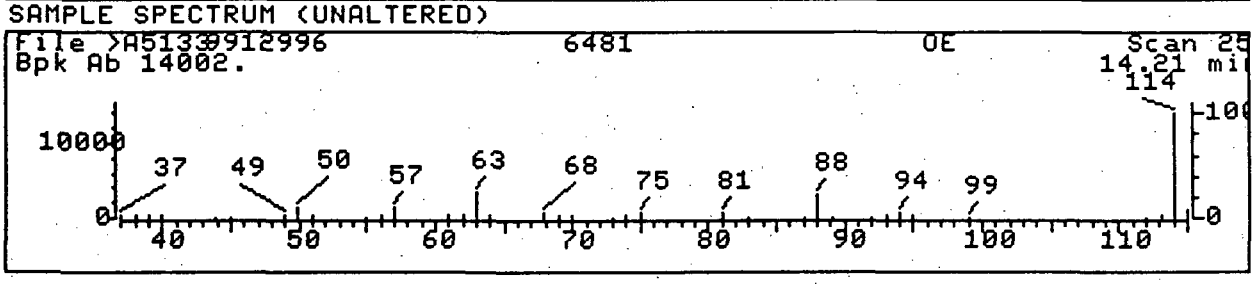
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



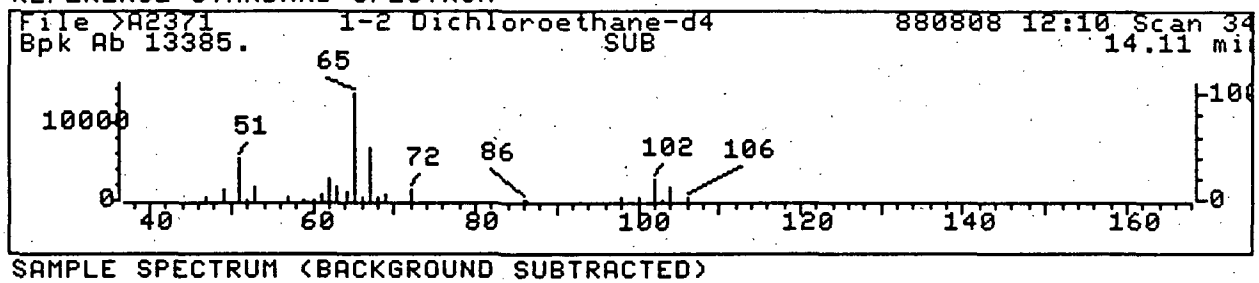
Data File: >A5133::D2
Name: 9912996
Misc: 6481 OE
Quant Time: 991208 20:58
Injected at: 991208 20:23
Last Qcal Time: <none>

Quant Output File: ^A5133::D5
Instrument ID: HP5970BA
SP-1
Quant ID File: IDAS06::D5
Last Calibration: 991208 17:16

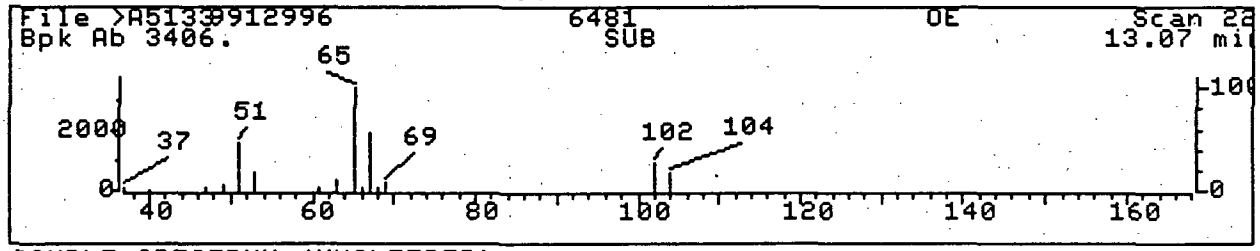
Compound No : 24 (ISTD)
Compound Name : 1,4-Difluorobenzene
Scan Number : 254
Retention Time: 14.21 min.
Quant Ion : 114.0
Area : 125282M
Concentration : 50.00 ug/l
q-value : 86

230

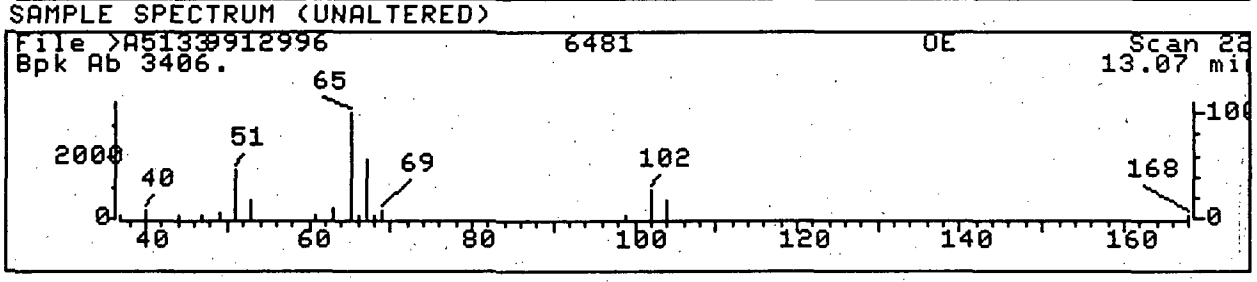
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

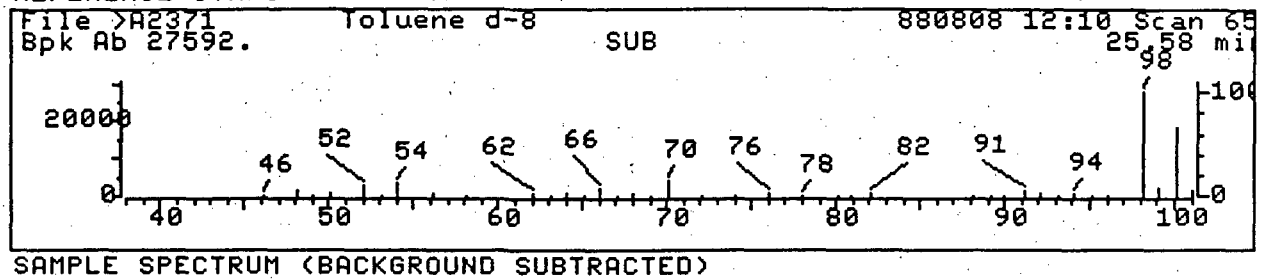


Data File: >A5133::D2 Quant Output File: ^A5133::D5
Name: 9912996 Instrument ID: HP5970BA
Misc: 6481 OE SP-1
Quant Time: 991208 20:58 Quant ID File: IDAS06::D5
Injected at: 991208 20:23 Last Calibration: 991208 17:16
Last Qcal Time: <none>

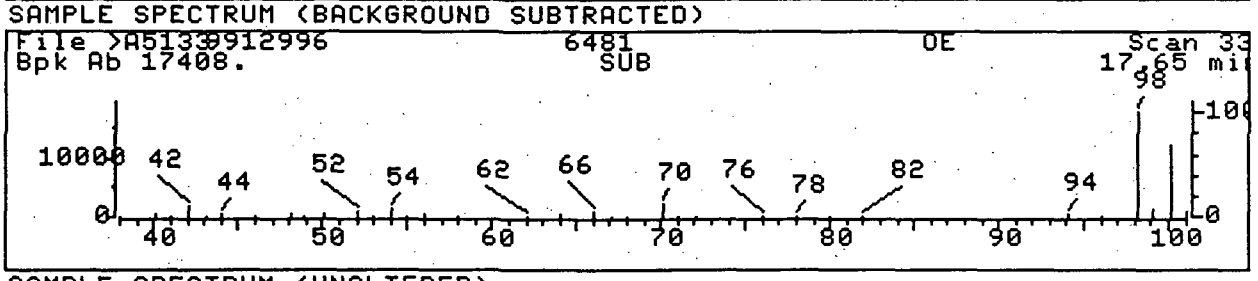
Compound No : 25
Compound Name : 1,2-Dichloroethane-d4
Scan Number : 229
Retention Time: 13.07 min.
Quant Ion : 65.0
Area : 30805
Concentration : 38.28 ug/l
q-value : 87

231

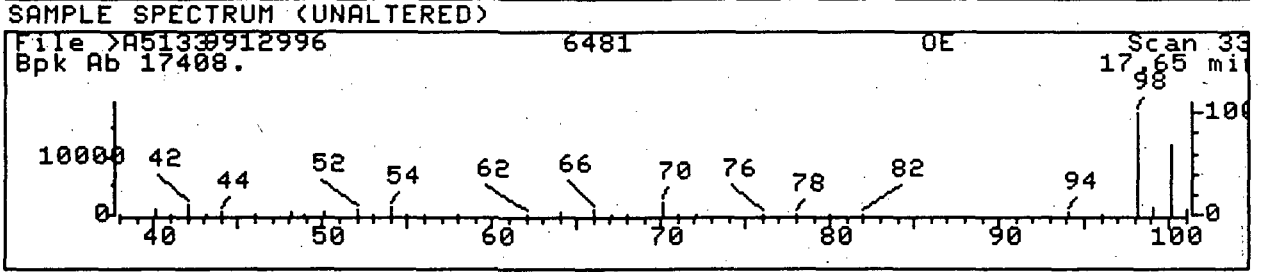
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

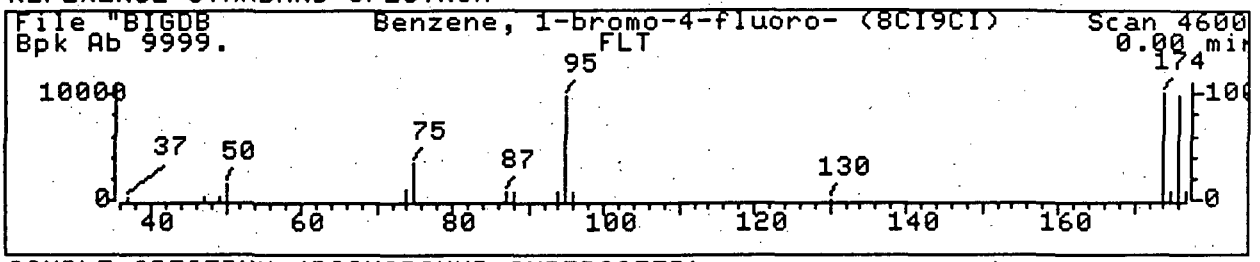


Data File: >A5133::D2
Name: 9912996
Misc: 6481 OE
Quant Time: 991208 20:58
Injected at: 991208 20:23
Last Qcal Time: <none>

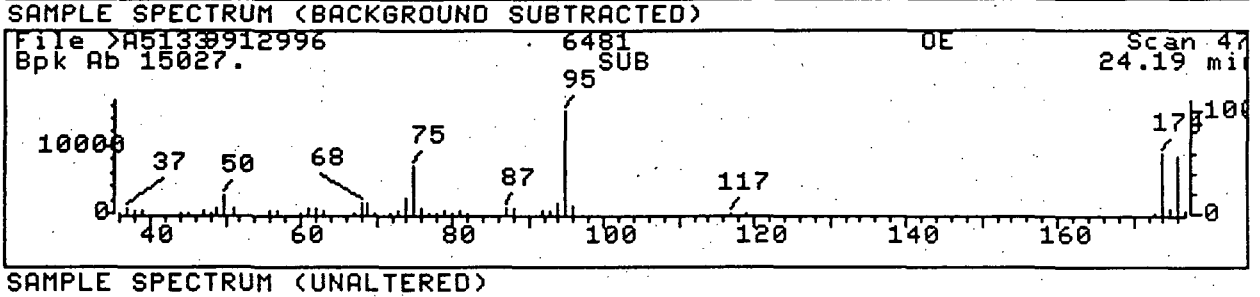
Quant Output File: ^A5133::D5
Instrument ID: HP5970BA
SP-1
Quant ID File: IDAS06::D5
Last Calibration: 991208 17:16

Compound No : 36
Compound Name : Toluene-d8
Scan Number : 330
Retention Time: 17.65 min.
Quant Ion : 98.0
Area : 121469
Concentration : 51.26 ug/l
q-value : 97

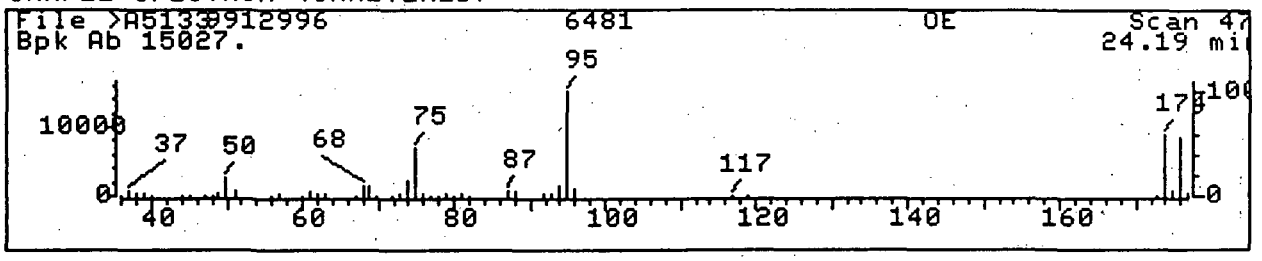
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

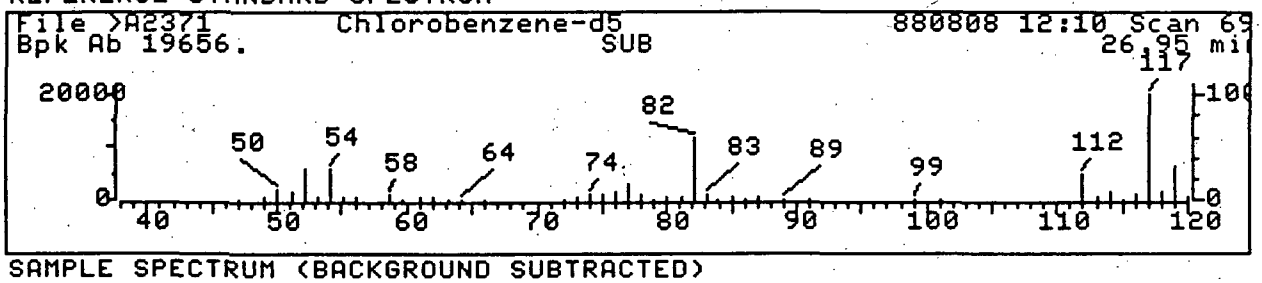


Data File: >A5133::D2
Name: 9912996
Misc: 6481 OE
Quant Time: 991208 20:58
Injected at: 991208 20:23
Last Qcal Time: <none>

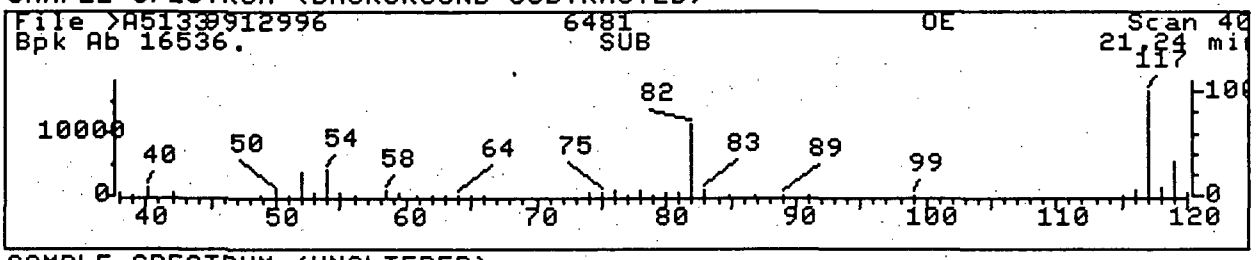
Quant Output File: ^A5133::D5
Instrument ID: HP5970BA
SP-1
Quant ID File: IDAS06::D5
Last Calibration: 991208 17:16

Compound No : 42
Compound Name : Bromofluorobenzene
Scan Number : 474
Retention Time: 24.19 min.
Quant Ion : 95.0
Area : 80888
Concentration : 46.78 ug/l
q-value : 86

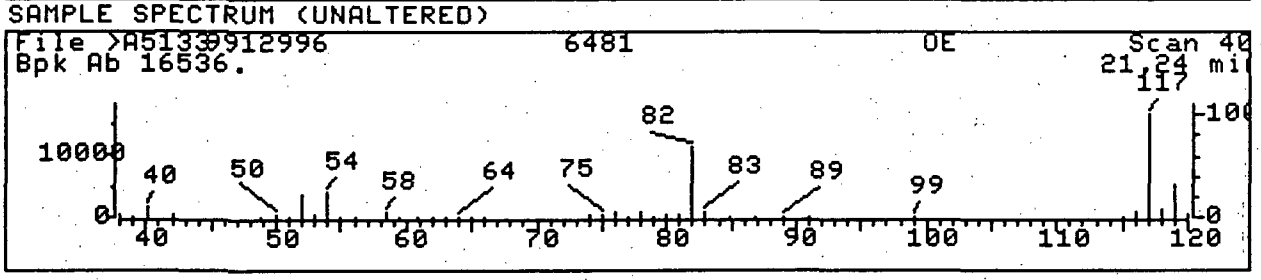
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >A5133::D2
Name: 9912996
Misc: 6481 OE
Quant Time: 991208 20:58
Injected at: 991208 20:23
Last Qcal Time: <none>

Quant Output File: ^A5133::D5
Instrument ID: HP5970BA
SP-1
Quant ID File: IDAS06::D5
Last Calibration: 991208 17:16

Compound No : 43 (ISTD)
Compound Name : Chlorobenzene-d5
Scan Number : 409
Retention Time: 21.24 min.
Quant Ion : 117.0
Area : 102682
Concentration : 50.00 ug/l
q-value : 100

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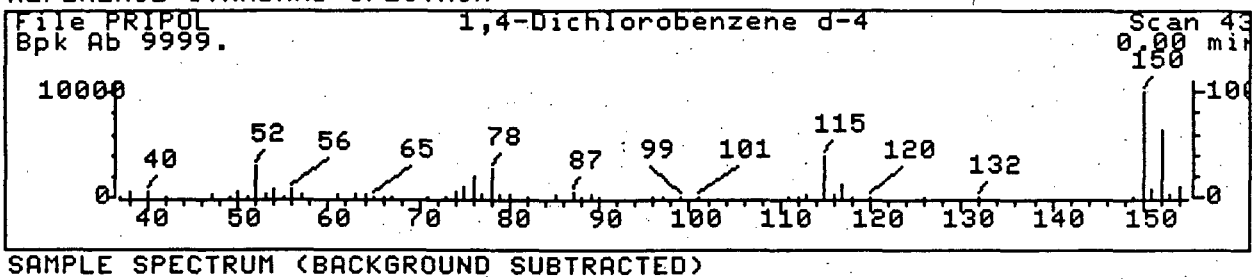
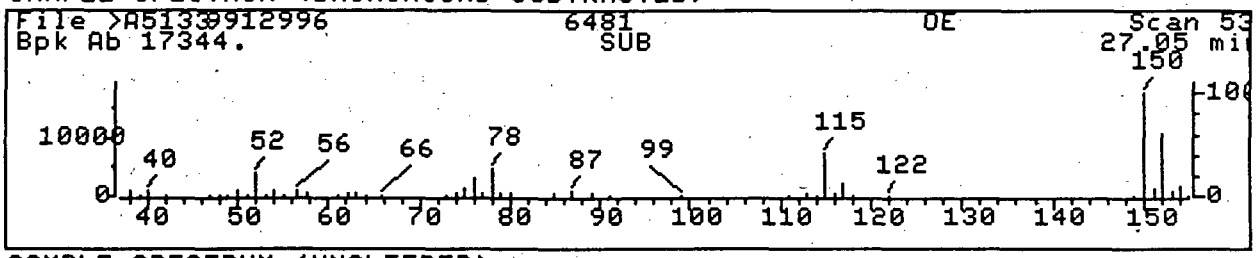
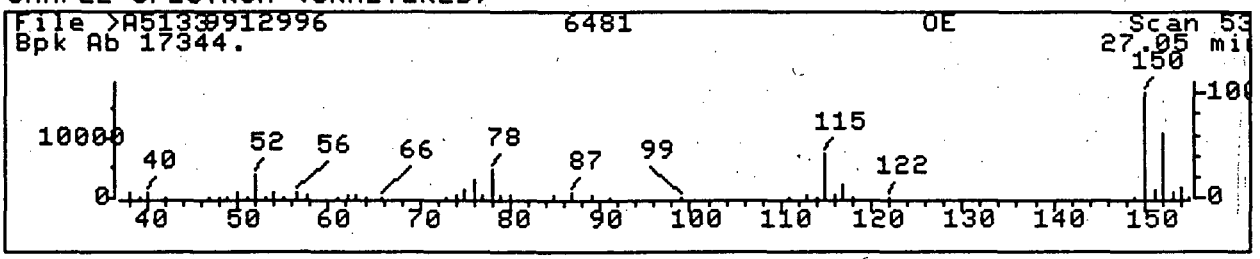
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >A5133::D2
Name: 9912996
Misc: 6481 OE
Quant Time: 991208 20:58
Injected at: 991208 20:23
Last Qcal Time: <none>

Quant Output File: ^A5133::D5
Instrument ID: HP5970BA
SP-1
Quant ID File: IDAS06::D5
Last Calibration: 991208 17:16

Compound No : 55 (ISTD)
Compound Name : 1,4-Dichlorobenzene-d4
Scan Number : 537
Retention Time: 27.05 min.
Quant Ion : 152.0
Area : 57297
Concentration : 50.00 ug/l
q-value : 93

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PROJECT WEDNESDAY DECEMBER 8, 1999

Notebook No. 957

Continued From Page

BFBA

T7002		BFB TUNE	> A 5121	SCA 39
ME624A	NO GOOD ⇒	VSTD050	> A 5122	
IDAS05		VSTD020	> A 5123	
CAAS05		VSTD010	> A 5124	
	A55121	VSTD100	> A 5125	
		VSTD200	> A 5126	
		VSTD050	> A 5127	

CREATED 8260 FIVE POINT (CAAS06) AND ID FILE (IDAS06)

VBLKA15	> A 5128	
VBLKA15	> A 5129	
9912922 DL	> A 5130	10 µl OF MEDH EXT
2996 MS	31	1:10 TCLP
2994	32	
2996	33	
2995	34	1:1000 TCLP
3080	35	1:50
3213	36	1:10

Continued on Page

700334

Read and Understood By

236

Robert M. Horn — Signed

12-08-99 — Date

Signed

Date

Operator ID: DANIEL Quant Rev: 7 Quant Time: 991209 11:41
Output File: ^F9811::QT Injected at: 991209 11:05
Data File: >F9811::F1 Dilution Factor: 1.00000
Name: SSTD050 Instrument ID: AHP5970B
Misc: BTL#25

ID File: IDF99::SC
Title: Accredited Laboratories Base/Neutral/Acid Identity File
Last Calibration: 991207 07:54 Last Qcal Time: 991206 12:17

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*d4-1,4-Dichlorobenzene	10.29	407	43248	40.00	ug/l	93
2)	Pyridine	3.95	96	54980	40.57	ug/l	97
3)	N-Nitrosodimethylamine	4.01	99	48797	42.91	ug/l	91
4)	2-Fluorophenol	7.33	262	77885	48.54	ug/l	100
5)	Aniline	9.64	375	123865	42.73	ug/l	91
6)	Phenol-d5	9.72	379	111565	45.65	ug/l	86
7)	Phenol	9.74	380	104716	43.24	ug/l	97
8)	bis(-2-Chloroethyl)Ether	9.84	385	78408	47.72	ug/l	99
9)	2-Chlorophenol	9.88	387	78182	47.84	ug/l	95
10)	1,3-Dichlorobenzene	10.19	402	74741	50.34	ug/l	98
11)	1,4-Dichlorobenzene	10.33	409	76205	50.42	ug/l	90
12)	Benzyl Alcohol	10.80	432	50788	45.59	ug/l	96
13)	1,2-Dichlorobenzene	10.78	431	67002	49.57	ug/l	91
14)	2-Methylphenol	11.17	450	78539	47.27	ug/l	83
15)	bis(2-Chloroisopropyl)ether	11.17	450	119483	38.13	ug/l	100
16)	3&4-Methylphenol	11.55	469	82623	48.33	ug/l	87
17)	N-Nitroso-Di-n-propylamine	11.55	469	65628	40.35	ug/l	80
18)	Hexachloroethane	11.51	467	29283	48.31	ug/l	100
19)	*d8-Naphthalene	13.49	564	175180	40.00	ug/l	98
20)	Nitrobenzene-d5	11.78	480	97247	45.42	ug/l	98
21)	Nitrobenzene	11.84	483	102817	46.04	ug/l	92
22)	Isophorone	12.45	513	207283	44.27	ug/l	94
23)	2-Nitrophenol	12.63	522	52779	53.00	ug/l	84
24)	2,4-Dimethylphenol	12.86	533	75963	50.04	ug/l	91
25)	Benzoic Acid	13.35	557	53266M	50.96	ug/l	97
26)	bis(-2-Chloroethoxy)Methane	13.08	544	112273	45.70	ug/l	98
27)	2,4-Dichlorophenol	13.23	551	69694	53.25	ug/l	88
28)	1,2,4-Trichlorobenzene	13.41	560	65555	55.73	ug/l	98
29)	Naphthalene	13.55	567	229819	53.17	ug/l	78
30)	4-Chloroaniline	13.82	580	100450	50.97	ug/l	100
31)	Hexachlorobutadiene	14.04	591	31735M	59.77	ug/l	100
32)	4-Chloro-3-methylphenol	15.12	644	92786	49.70	ug/l	91
33)	2-Methylnaphthalene	15.31	653	152686	51.40	ug/l	90
34)	*d10-Acenaphthene	18.02	786	109607	40.00	ug/l	97
35)	Hexachlorocyclopentadiene	15.90	682	35192	55.67	ug/l	93
36)	2,4,6-Trichlorophenol	16.14	694	53007	54.05	ug/l	92
37)	2,4,5-Trichlorophenol	16.22	698	59125	55.66	ug/l	98
38)	2-Chloronaphthalene	16.55	714	150059	50.55	ug/l	92
39)	2-Fluorobiphenyl	16.35	704	158421	51.43	ug/l	94
40)	2-Nitroaniline	16.98	735	75944	40.91	ug/l	90

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Operator ID: DANIEL Quant Rev: 7 Quant Time: 991209 11:41
Output File: ^F9811::QT Injected at: 991209 11:05
Data File: >F9811::F1 Dilution Factor: 1.00000
Name: SSTD050 Instrument ID: AHP5970B
Misc: BTL#25

ID File: IDF99::SC
Title: Accredited Laboratories Base/Neutral/Acid Identity File
Last Calibration: 991207 07:54 Last Qcal Time: 991206 12:17

	Compound	R.T.	Scan#	Area	Conc	Units	q
41)	Dimethyl Phthalate	17.55	763	196354	49.87	ug/l	92
42)	Acenaphthylene	17.61	766	252002	51.63	ug/l	90
43)	3-Nitroaniline	18.06	788	59001	48.85	ug/l	90
44)	Acenaphthene	18.10	790	157322	52.35	ug/l	92
45)	2,4-Dinitrophenol	18.31	800	31399	45.57	ug/l	93
46)	4-Nitrophenol	18.57	813	36305	48.02	ug/l	93
47)	Dibenzofuran	18.51	810	225989	52.45	ug/l	99
48)	2,6-Dinitrotoluene	17.71	771	51695M	51.21	ug/l	
49)	2,4-Dinitrotoluene	18.71	820	77943	52.68	ug/l	88
50)	Diethylphthalate	19.37	852	200640	53.55	ug/l	90
51)	4-Chlorophenyl-phenylether	19.43	855	76621	57.58	ug/l	97
52)	Fluorene	19.39	853	156190	52.83	ug/l	98
53)	4-Nitroaniline	19.67	867	64819	46.08	ug/l	81
54)	2,4,6-Tribromophenol	20.06	886	27635	65.85	ug/l	97
55)	*d10-Phenanthrene	21.75	969	198844	40.00	ug/l	100
56)	4,6-Dinitro-2-methylphenol	19.76	871	46572	57.80	ug/l	100
57)	N-Nitrosodiphenylamine	19.80	873	123878	54.25	ug/l	91
58)	Azobenzene	19.84	875	268043	46.95	ug/l	89
59)	4-Bromophenyl-phenylether	20.65	915	44215	55.71	ug/l	100
60)	Hexachlorobenzene	21.00	932	48655	60.12	ug/l	98
61)	Pentachlorophenol	21.49	956	37890	52.78	ug/l	90
62)	Phenanthrene	21.82	972	267891	52.53	ug/l	99
63)	Anthracene	21.94	978	260754	50.56	ug/l	83
65)	Di-n-Butylphthalate	23.51	1055	398381	51.56	ug/l	92
66)	Fluoranthene	24.87	1122	290527	52.93	ug/l	100
67)	*d12-Chrysene	28.57	1303	179318	40.00	ug/l	100
68)	Benzidine	25.28	1142	95454	29.22	ug/l	88
69)	Pyrene	25.45	1150	308602	43.73	ug/l	87
70)	Terphenyl-d14	25.92	1173	175957	44.72	ug/l	91
71)	Butylbenzylphthalate	27.28	1240	195201	39.30	ug/l	93
72)	3,3'-Dichlorobenzidine	28.55	1302	68373M	35.81	ug/l	
73)	Benzo(a)Anthracene	28.51	1300	275115	43.90	ug/l	94
74)	Bis(2-Ethylhexyl)Phthalate	28.81	1315	268824	39.46	ug/l	80
75)	Chrysene	28.65	1307	272537	44.88	ug/l	88
76)	*d12-Perylene	31.97	1470	188202	40.00	ug/l	100
77)	Di-n-octyl phthalate	30.28	1387	461747	44.61	ug/l	86
78)	Benzo(b)fluoranthene	31.12	1428	357006	53.99	ug/l	99
79)	Benzo(k)Fluoranthene	31.18	1431	226218	43.54	ug/l	87
80)	Benzo(a)Pyrene	31.83	1463	284516	49.36	ug/l	95
81)	Indeno(1,2,3-cd)Pyrene	34.16	1577	315059	54.41	ug/l	90
82)	Dibenzo(a,h)Anthracene	34.20	1579	248882	54.91	ug/l	84

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Operator ID: DANIEL Quant Rev: 7 Quant Time: 991209 11:41
Output File: ^F9811::QT Injected at: 991209 11:05
Data File: >F9811::F1 Dilution Factor: 1.00000
Name: SSTD050 Instrument ID: AHP5970B
Misc: BTL#25

ID File: IDF99::SC
Title: Accredited Laboratories Base/Neutral/Acid Identity File
Last Calibration: 991207 07:54 Last Qcal Time: 991206 12:17

	Compound	R.T.	Scan#	Area	Conc	Units	q
83)	Benzo(g,h,i)Perylene	34.75	1606	279821	55.94	ug/l	97

* Compound is ISTD

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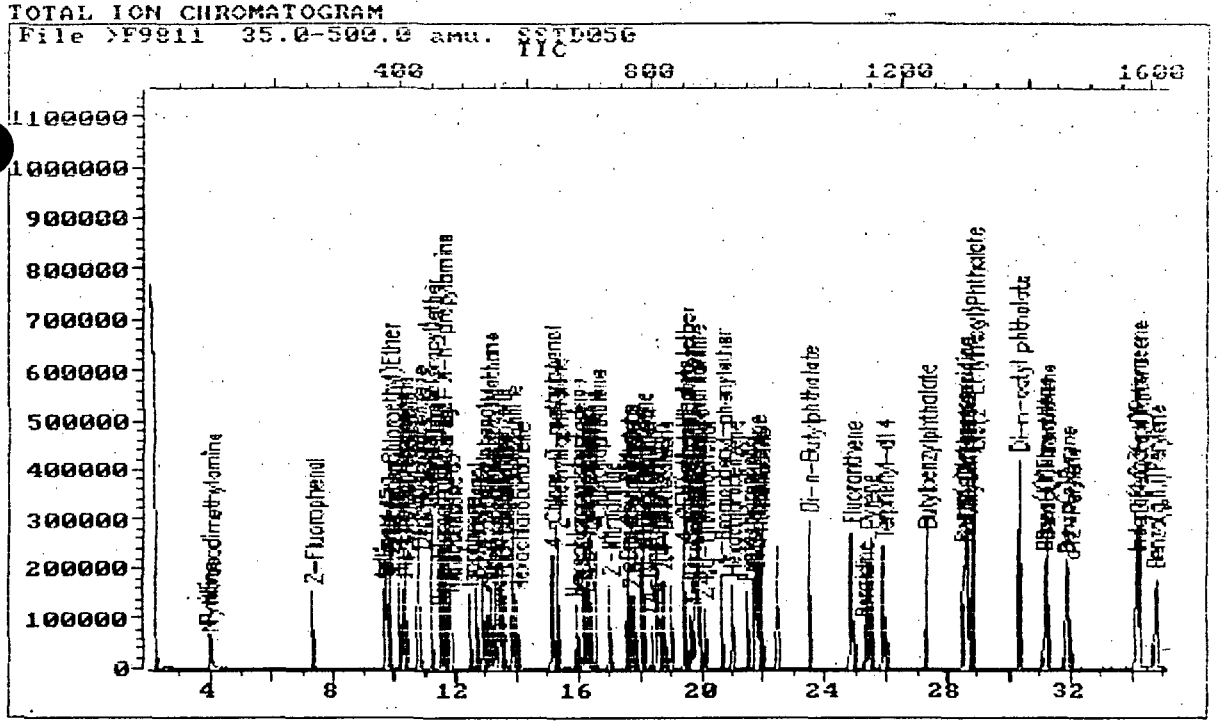
TOTAL ION CHROMATOGRAM



Data File: >F9811::F1 Quant Output File: ^F9811::QT
Name: SSTD050 Instrument ID: AHP5970B
Misc: BTL#25

Id File: IDF99::SC
Title: Accredited Laboratories Base/Neutral/Acid Identity File
Last Calibration: 991207 07:54 Last Qcal Time: 991206 12:17

Operator ID: DANIEL
Quant Time : 991209 11:41
Injected at: 991209 11:05

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QUANT REPORT

Operator ID: DANIEL
Output File: ^F9812::QT
Data File: >F9812::F1
Name: SSTD160
Misc:

Quant Rev: 7
Quant Time: 991209 12:26
Injected at: 991209 11:50
Dilution Factor: 1.00000
Instrument ID: AHP5970B
BTL# 1

ID File: IDF99::SC
Title: Accredited Laboratories Base/Neutral/Acid Identity File
Last Calibration: 991207 07:54
Last Qcal Time: 991206 12:17

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*d4-1,4-Dichlorobenzene	10.31	408	37210	40.00	ug/l	94
2)	Pyridine	3.99	98	180825	155.10	ug/l	88
3)	N-Nitrosodimethylamine	4.09	103	127232	130.05	ug/l	83
4)	2-Fluorophenol	7.37	264	198208	143.57	ug/l	100
5)	Aniline	9.70	378	364547	146.18	ug/l	87
6)	Phenol-d5	9.78	382	305507	145.29	ug/l	86
7)	Phenol	9.82	384	269419	129.29	ug/l	94
8)	bis(-2-Chloroethyl)Ether	9.88	387	181434	128.34	ug/l	99
9)	2-Chlorophenol	9.92	389	198617	141.25	ug/l	97
10)	1,3-Dichlorobenzene	10.21	403	175828	137.63	ug/l	98
11)	1,4-Dichlorobenzene	10.35	410	176436	135.67	ug/l	91
12)	Benzyl Alcohol	10.88	436	146616	152.96	ug/l	93
13)	1,2-Dichlorobenzene	10.82	433	165220	142.06	ug/l	87
14)	2-Methylphenol	11.21	452	186575	130.52	ug/l	82
15)	bis(2-Chloroisopropyl)ether	11.19	451	327375	121.43	ug/l	100
16)	3&4-Methylphenol	11.62	472	215952	146.82	ug/l	86
17)	N-Nitroso-Di-n-propylamine	11.68	475	192183	137.33	ug/l	83
18)	Hexachloroethane	11.53	468	75348	144.49	ug/l	100
19)	*d8-Naphthalene	13.52	565	152332	40.00	ug/l	96
20)	Nitrobenzene-d5	11.84	483	281293	151.09	ug/l	94
21)	Nitrobenzene	11.88	485	264754	136.34	ug/l	93
22)	Isophorone	12.55	518	629603	154.65	ug/l	94
23)	2-Nitrophenol	12.68	524	143306	165.50	ug/l	68
24)	2,4-Dimethylphenol	12.92	536	201372	152.55	ug/l	92
25)	Benzoic Acid	13.64	571	121578M	133.75	ug/l	94
26)	bis(-2-Chloroethoxy)Methane	13.13	546	289266	135.41	ug/l	95
27)	2,4-Dichlorophenol	13.29	554	177003	155.53	ug/l	94
28)	1,2,4-Trichlorobenzene	13.43	561	158164	154.64	ug/l	97
29)	Naphthalene	13.58	568	529334	140.84	ug/l	78
30)	4-Chloroaniline	13.88	583	251937	147.02	ug/l	100
31)	Hexachlorobutadiene	14.05	591	77383	167.61	ug/l	100
32)	4-Chloro-3-methylphenol	15.17	646	255357	157.29	ug/l	85
33)	2-Methylnaphthalene	15.35	655	388309	150.32	ug/l	86
34)	*d10-Acenaphthene	18.03	786	102763	40.00	ug/l	98
35)	Hexachlorocyclopentadiene	15.90	682	92204	155.58	ug/l	96
36)	2,4,6-Trichlorophenol	16.19	696	129765	141.14	ug/l	87
37)	2,4,5-Trichlorophenol	16.29	701	143590	144.17	ug/l	94
38)	2-Chloronaphthalene	16.58	715	365581	131.36	ug/l	93
39)	2-Fluorobiphenyl	16.39	706	384274	133.05	ug/l	95
40)	2-Nitroaniline	17.03	737	242881	139.56	ug/l	91

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700339

Operator ID: DANIEL Quant Rev: 7 Quant Time: 991209 12:26
Output File: ^F9812::QT Injected at: 991209 11:50
Data File: >F9812::F1 Dilution Factor: 1.00000
Name: SSTD160 Instrument ID: AHP5970B
Misc: BTL# 1

ID File: IDF99::SC
Title: Accredited Laboratories Base/Neutral/Acid Identity File
Last Calibration: 991207 07:54 Last Qcal Time: 991206 12:17

	Compound	R.T.	Scan#	Area	Conc	Units	q
41)	Dimethyl Phthalate	17.62	766	468209	126.84	ug/l	91
42)	Acenaphthylene	17.66	768	562625	122.94	ug/l	90
43)	3-Nitroaniline	18.13	791	139825	123.49	ug/l	97
44)	Acenaphthene	18.15	792	348234	123.59	ug/l	94
45)	2,4-Dinitrophenol	18.39	804	111270	172.26	ug/l	94
46)	4-Nitrophenol	18.66	817	112281	158.39	ug/l	93
47)	Dibenzofuran	18.56	812	552334	136.74	ug/l	98
48)	2,6-Dinitrotoluene	17.78	774	136294	144.00	ug/l	84
49)	2,4-Dinitrotoluene	18.80	824	223485	161.10	ug/l	83
50)	Diethylphthalate	19.44	855	340495	96.93	ug/l	90
51)	4-Chlorophenyl-phenylether	19.46	856	154644	123.95	ug/l	98
52)	Fluorene	19.41	854	299192	107.95	ug/l	98
53)	4-Nitroaniline	19.82	874	175215	132.86	ug/l	74
54)	2,4,6-Tribromophenol	20.11	888	73457	186.68	ug/l	98
55)	*d10-Phenanthrene	21.78	970	189490	40.00	ug/l	100
56)	4,6-Dinitro-2-methylphenol	19.86	876	86175	112.24	ug/l	100
57)	N-Nitrosodiphenylamine	19.86	876	218548	100.42	ug/l	81
58)	Azobenzene	19.88	877	618036	113.61	ug/l	94
59)	4-Bromophenyl-phenylether	20.68	916	112927	149.30	ug/l	100
60)	Hexachlorobenzene	21.05	934	128473	166.57	ug/l	97
61)	Pentachlorophenol	21.54	958	108598	158.73	ug/l	88
62)	Phenanthrene	21.87	974	660134	135.82	ug/l	99
63)	Anthracene	21.99	980	662096	134.71	ug/l	83
65)	Di-n-Butylphthalate	23.54	1056	856912	116.37	ug/l	97
66)	Fluoranthene	24.93	1124	715279	136.75	ug/l	100
67)	*d12-Chrysene	28.60	1304	120405	40.00	ug/l	100
68)	Benzidine	25.33	1144	318743	145.33	ug/l	88
69)	Pyrene	25.50	1152	752221	158.73	ug/l	88
70)	Terphenyl-d14	25.95	1174	428149	162.07	ug/l	92
71)	Butylbenzylphthalate	27.33	1242	499635	149.81	ug/l	80
72)	3,3'-Dichlorobenzidine	28.62	1305	221649M	172.89	ug/l	
73)	Benzo(a)Anthracene	28.56	1302	722823	171.79	ug/l	95
74)	Bis(2-Ethylhexyl)Phthalate	28.84	1316	666619	145.71	ug/l	80
75)	Chrysene	28.72	1310	652652	160.04	ug/l	89
76)	*d12-Perylene	32.01	1471	162194	40.00	ug/l	100
77)	Di-n-octyl phthalate	30.31	1388	1024893	114.89	ug/l	93
78)	Benzo(b)fluoranthene	31.21	1432	755428M	132.55	ug/l	98
79)	Benzo(k)Fluoranthene	31.27	1435	603117M	134.71	ug/l	89
80)	Benzo(a)Pyrene	31.91	1466	706184	142.15	ug/l	96
81)	Indeno(1,2,3-cd)Pyrene	34.27	1582	658886	132.03	ug/l	98
82)	Dibenzo(a,h)Anthracene	34.29	1583	544875	139.48	ug/l	86

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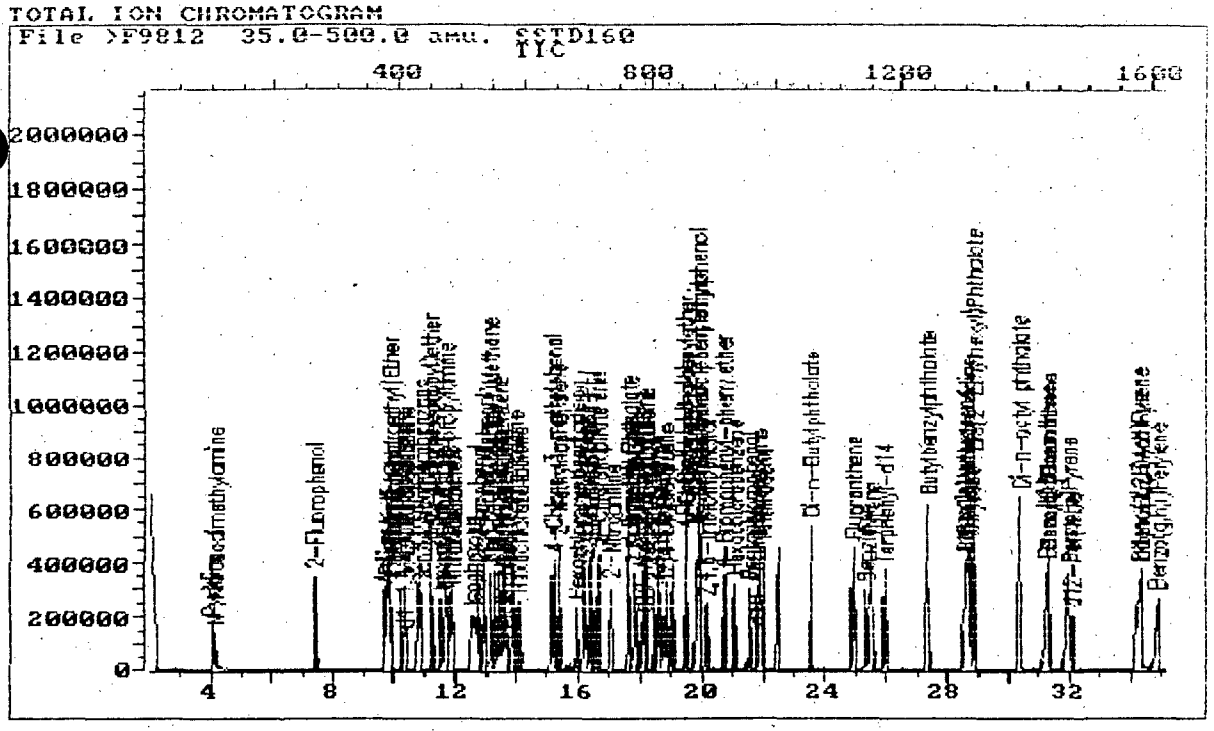
Operator ID: DANIEL Quant Rev: 7 Quant Time: 991209 17:56
Output File: ^F9812::QT Injected at: 991209 11:50
Data File: >F9812::F1 Dilution Factor: 1.00000
Name: SSTD160 Instrument ID: AHP5970B
Misc: BTL# 1

ID File: IDF99::SC
Title: Accredited Laboratories Base/Neutral/Acid Identity File
Last Calibration: 991207 07:54 Last Qcal Time: 991206 12:17

	Compound	R.T.	Scan#	Area	Conc	Units	q
83)	Benzo(g,h,i)Perylene	34.83	1609	599882	139.16	ug/l	97

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >F9812::F1 Quant Output File: ^F9812::QT
Name: SSTD160 Instrument ID: AHP5970B
Misc: BTL# 1

Id File: IDF99::SC
Title: Accredited Laboratories Base/Neutral/Acid Identity File
Last Calibration: 991207 07:54 Last Qcal Time: 991206 12:17

Operator ID: DANIEL
Quant Time : 991209 12:26
Injected at: 991209 11:50

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QUANT REPORT

Operator ID: DANIEL
Output File: ^F9813::QT
Data File: >F9813::F1
Name: SSTD020
Misc:

Quant Rev: 7
Quant Time: 991209 13:1[illegible]
Injected at: 991209 17:3[illegible]
Dilution Factor: 1.00000
Instrument ID: AHP5970B
BTL# 1

ID File: IDF99::SC
Title: Accredited Laboratories Base/Neutral/Acid Identity File
Last Calibration: 991207 07:54
Last Qcal Time: 991206 12:17

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*d4-1,4-Dichlorobenzene	10.29	407	39233	40.00	ug/l	93
2)	Pyridine	3.99	98	16149M	13.14	ug/l	97
3)	N-Nitrosodimethylamine	4.01	99	18023	17.47	ug/l	89
4)	2-Fluorophenol	7.33	262	26794	18.41	ug/l	100
5)	Aniline	9.63	375	48758	18.54	ug/l	86
6)	Phenol-d5	9.69	378	41681	18.80	ug/l	87
7)	Phenol	9.72	379	40161	18.28	ug/l	97
8)	bis(-2-Chloroethyl)Ether	9.84	385	32002	21.47	ug/l	98
9)	2-Chlorophenol	9.86	386	30348	20.47	ug/l	97
10)	1,3-Dichlorobenzene	10.18	402	29742	22.08	ug/l	99
11)	1,4-Dichlorobenzene	10.33	409	30400	22.17	ug/l	90
12)	Benzyl Alcohol	10.78	431	19247	19.04	ug/l	96
13)	1,2-Dichlorobenzene	10.78	431	28418	23.17	ug/l	91
14)	2-Methylphenol	11.14	449	30847	20.47	ug/l	99
15)	bis(2-Chloroisopropyl)ether	11.16	450	46802	16.46	ug/l	100
16)	3&4-Methylphenol	11.53	468	32573	21.00	ug/l	88
17)	N-Nitroso-Di-n-propylamine	11.53	468	26669	18.07	ug/l	76
18)	Hexachloroethane	11.53	468	11063	20.12	ug/l	100
19)	*d8-Naphthalene	13.49	564	161631	40.00	ug/l	96
20)	Nitrobenzene-d5	11.77	480	37185	18.82	ug/l	94
21)	Nitrobenzene	11.82	482	39034	18.95	ug/l	91
22)	Isophorone	12.43	512	82079	19.00	ug/l	91
23)	2-Nitrophenol	12.63	522	19125	20.82	ug/l	69
24)	2,4-Dimethylphenol	12.83	532	30187	21.55	ug/l	92
25)	Benzoic Acid	13.20	550	15912	16.50	ug/l	97
26)	bis(-2-Chloroethoxy)Methane	13.06	543	43661	19.26	ug/l	94
27)	2,4-Dichlorophenol	13.22	551	26813	22.20	ug/l	93
28)	1,2,4-Trichlorobenzene	13.41	560	25819	23.79	ug/l	97
29)	Naphthalene	13.53	566	90768	22.76	ug/l	79
30)	4-Chloroaniline	13.81	580	41345	22.74	ug/l	100
31)	Hexachlorobutadiene	14.04	591	12677	25.88	ug/l	100
32)	4-Chloro-3-methylphenol	15.12	644	36343	21.10	ug/l	84
33)	2-Methylnaphthalene	15.30	653	64473	23.52	ug/l	88
34)	*d10-Acenaphthene	18.01	786	101160	40.00	ug/l	97
35)	Hexachlorocyclopentadiene	15.89	682	10722	18.38	ug/l	97
36)	2,4,6-Trichlorophenol	16.14	694	20410	22.55	ug/l	91
37)	2,4,5-Trichlorophenol	16.22	698	22388	22.83	ug/l	97
38)	2-Chloronaphthalene	16.53	713	60590	22.12	ug/l	97
39)	2-Fluorobiphenyl	16.34	704	65927	23.19	ug/l	96
40)	2-Nitroaniline	16.95	734	28826	16.83	ug/l	82

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Operator ID: DANIEL Quant Rev: 7 Quant Time: 991209 13:12
Output File: ^F9813::QT Injected at: 991209 12:36
Data File: >F9813::F1 Dilution Factor: 1.00000
Name: SSTD020 Instrument ID: AHP5970B
Misc: BTL# 1

ID File: IDF99::SC
Title: Accredited Laboratories Base/Neutral/Acid Identity File
Last Calibration: 991207 07:54 Last Qcal Time: 991206 12:17

	Compound	R.T.	Scan#	Area	Conc	Units	q
41)	Dimethyl Phthalate	17.54	763	80979	22.29	ug/l	89
42)	Acenaphthylene	17.61	766	105605	23.44	ug/l	90
43)	3-Nitroaniline	18.03	787	21463	19.26	ug/l	95
44)	Acenaphthene	18.10	790	66731	24.06	ug/l	94
45)	2,4-Dinitrophenol	18.30	800	9122	14.35	ug/l	93
46)	4-Nitrophenol	18.54	812	13613M	19.51	ug/l	
47)	Dibenzofuran	18.48	809	92480	23.26	ug/l	93
48)	2,6-Dinitrotoluene	17.71	771	19220	20.63	ug/l	85
49)	2,4-Dinitrotoluene	18.69	819	28974	21.22	ug/l	91
50)	Diethylphthalate	19.34	851	85618	24.76	ug/l	92
51)	4-Chlorophenyl-phenylether	19.42	855	30915	25.17	ug/l	98
52)	Fluorene	19.38	853	71490	26.20	ug/l	98
53)	4-Nitroaniline	19.63	865	24513	18.88	ug/l	74
54)	2,4,6-Tribromophenol	20.05	886	10073	26.01	ug/l	98
55)	*d10-Phenanthrene	21.77	970	181791	40.00	ug/l	100
56)	4,6-Dinitro-2-methylphenol	19.71	869	15504	21.05	ug/l	100
57)	N-Nitrosodiphenylamine	19.77	872	52739	25.26	ug/l	91
58)	Azobenzene	19.83	875	97330	18.65	ug/l	86
59)	4-Bromophenyl-phenylether	20.64	915	17074	23.53	ug/l	100
60)	Hexachlorobenzene	20.99	932	18897	25.54	ug/l	98
61)	Pentachlorophenol	21.48	956	14248	21.71	ug/l	89
62)	Phenanthrene	21.81	972	104873	22.49	ug/l	99
63)	Anthracene	21.93	978	106852	22.66	ug/l	83
65)	Di-n-Butylphthalate	23.50	1055	159842	22.63	ug/l	92
66)	Fluoranthene	24.86	1122	118490	23.61	ug/l	100
67)	*d12-Chrysene	28.55	1303	172589	40.00	ug/l	100
68)	Benzidine	25.27	1142	49993	15.90	ug/l	86
69)	Pyrene	25.42	1149	125684	18.50	ug/l	84
70)	Terphenyl-d14	25.90	1173	70943	18.74	ug/l	92
71)	Butylbenzylphthalate	27.29	1241	78022	16.32	ug/l	73
72)	3,3'-Dichlorobenzidine	28.53	1302	30411M	16.55	ug/l	
73)	Benzo(a)Anthracene	28.49	1300	112858	18.71	ug/l	95
74)	Bis(2-Ethylhexyl)Phthalate	28.80	1315	113185	17.26	ug/l	78
75)	Chrysene	28.62	1306	107745	18.43	ug/l	87
76)	*d12-Perylene	31.96	1470	180878	40.00	ug/l	100
77)	Di-n-octyl phthalate	30.27	1387	195417	19.64	ug/l	86
78)	Benzo(b)fluoranthene	31.10	1428	130985M	20.61	ug/l	98
79)	Benzo(k)Fluoranthene	31.14	1430	103230M	20.68	ug/l	87
80)	Benzo(a)Pyrene	31.82	1463	112484	20.30	ug/l	98
81)	Indeno(1,2,3-cd)Pyrene	34.12	1576	132166	23.75	ug/l	91
82)	Dibenzo(a,h)Anthracene	34.14	1577	106981	24.56	ug/l	83

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Operator ID: DANIEL Quant Rev: 7 Quant Time: 991209 13:12
Output File: ^F9813::QT Injected at: 991209 12:56
Data File: >F9813::F1 Dilution Factor: 1.00000
Name: SSTD020 Instrument ID: AHP5970B
Misc: BTL# 1

ID File: IDF99::SC
Title: Accredited Laboratories Base/Neutral/Acid Identity File
Last Calibration: 991207 07:54 Last Qcal Time: 991206 12:17

	Compound	R.T.	Scan#	Area	Conc	Units	q
83)	Benzo(g,h,i)Perylene	34.69	1604	115105	23.94	ug/l	97

* Compound is ISTD

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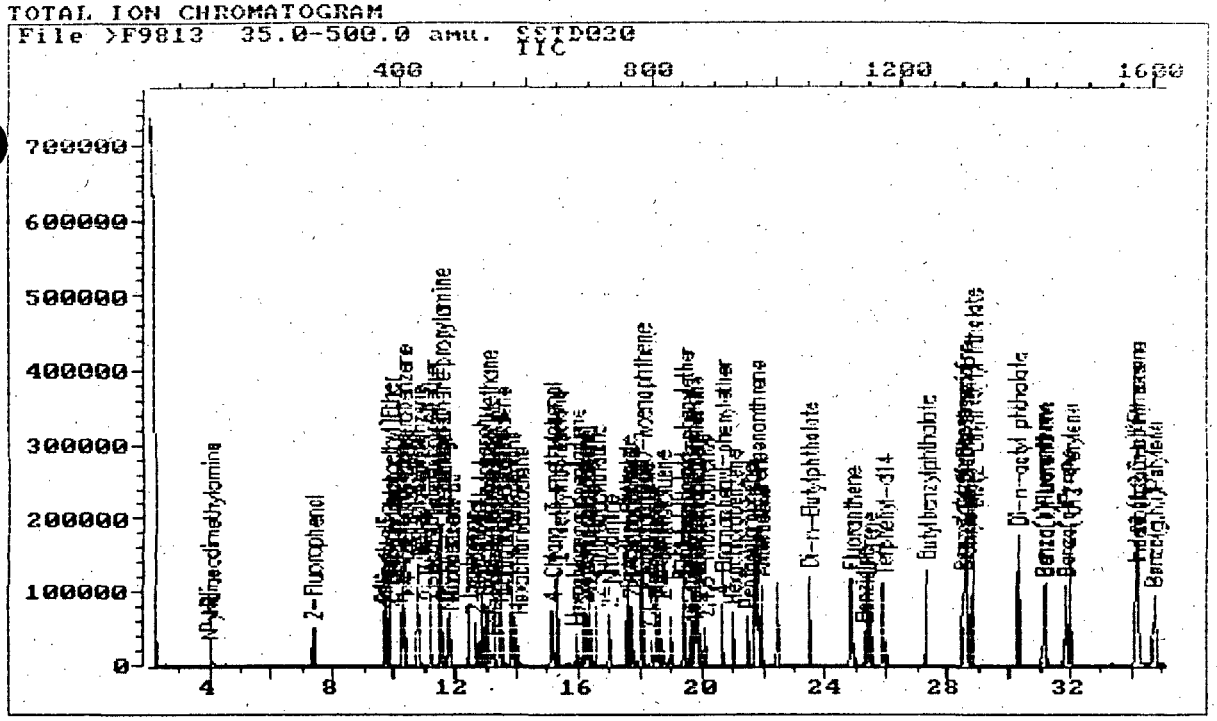
TOTAL ION CHROMATOGRAM



Data File: >F9813::F1 Quant Output File: ^F9813::QT
Name: SSTD020 Instrument ID: AHP5970B
Misc: BTL# 1

Id File: IDF99::SC
Title: Accredited Laboratories Base/Neutral/Acid Identity File
Last Calibration: 991207 07:54 Last Qcal Time: 991206 12:17

Operator ID: DANIEL
Quant Time : 991209 13:12
Injected at: 991209 12:36

Operator ID: DANIEL Quant Rev: 7 Quant Time: 991209 15:58
Output File: ^F9814::QT Injected at: 991209 13:22
Data File: >F9814::F1 Dilution Factor: 1.00000
Name: SSTD080 Instrument ID: AHP5970B
Misc: BTL# 1

ID File: IDF99::SC
Title: Accredited Laboratories Base/Neutral/Acid Identity File
Last Calibration: 991207 07:54 Last Qcal Time: 991206 12:17

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*d4-1,4-Dichlorobenzene	10.29	407	40081	40.00	ug/l	96
2)	Pyridine	3.95	96	71445	56.89	ug/l	98
3)	N-Nitrosodimethylamine	4.01	99	72154	68.47	ug/l	80
4)	2-Fluorophenol	7.33	262	112334	75.54	ug/l	100
5)	Aniline	9.65	376	193258	71.94	ug/l	86
6)	Phenol-d5	9.74	380	170434	75.25	ug/l	86
7)	Phenol	9.78	382	176802	78.77	ug/l	92
8)	bis(-2-Chloroethyl)Ether	9.86	386	113741	74.70	ug/l	99
9)	2-Chlorophenol	9.90	388	117866	77.82	ug/l	96
10)	1,3-Dichlorobenzene	10.21	403	109188	79.34	ug/l	96
11)	1,4-Dichlorobenzene	10.35	410	110112	78.60	ug/l	86
12)	Benzyl Alcohol	10.82	433	79331	76.83	ug/l	94
13)	1,2-Dichlorobenzene	10.80	432	97538	77.86	ug/l	89
14)	2-Methylphenol	11.19	451	113742	73.87	ug/l	83
15)	bis(2-Chloroisopropyl)ether	11.19	451	182868	62.97	ug/l	100
16)	3&4-Methylphenol	11.57	470	112030	70.71	ug/l	87
17)	N-Nitroso-Di-n-propylamine	11.59	471	109294	72.50	ug/l	77
18)	Hexachloroethane	11.53	468	44772	79.71	ug/l	100
19)	*d8-Naphthalene	13.51	565	164753	40.00	ug/l	95
20)	Nitrobenzene-d5	11.80	481	152663	75.82	ug/l	100
21)	Nitrobenzene	11.86	484	155750	74.16	ug/l	92
22)	Isophorone	12.49	515	331379	75.26	ug/l	94
23)	2-Nitrophenol	12.65	523	79405	84.79	ug/l	76
24)	2,4-Dimethylphenol	12.88	534	111738	78.26	ug/l	92
25)	Benzoic Acid	13.47	563	70892M	72.11	ug/l	91
26)	bis(-2-Chloroethoxy)Methane	13.10	545	170451	73.77	ug/l	97
27)	2,4-Dichlorophenol	13.27	553	101514	82.47	ug/l	96
28)	1,2,4-Trichlorobenzene	13.43	561	94768	85.67	ug/l	97
29)	Naphthalene	13.57	568	333385	82.02	ug/l	78
30)	4-Chloroaniline	13.84	581	141364	76.27	ug/l	100
31)	Hexachlorobutadiene	14.04	591	45591	91.31	ug/l	100
32)	4-Chloro-3-methylphenol	15.14	645	135117	76.95	ug/l	89
33)	2-Methylnaphthalene	15.33	654	216374	77.45	ug/l	88
34)	*d10-Acenaphthene	18.02	786	102245	40.00	ug/l	98
35)	Hexachlorocyclopentadiene	15.90	682	50803	86.16	ug/l	94
36)	2,4,6-Trichlorophenol	16.16	695	75571	82.61	ug/l	92
37)	2,4,5-Trichlorophenol	16.26	700	83874	84.64	ug/l	95
38)	2-Chloronaphthalene	16.57	715	216355	78.13	ug/l	92
39)	2-Fluorobiphenyl	16.37	705	219511	76.39	ug/l	95
40)	2-Nitroaniline	17.00	736	118962	68.70	ug/l	90

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Operator ID: DANIEL Quant Rev: 7 Quant Time: 991209 13:58
Output File: ^F9814::QT Injected at: 991209 13:22
Data File: >F9814::F1 Dilution Factor: 1.00000
Name: SSTD080 Instrument ID: AHP5970B
Misc: BTL# 1

ID File: IDF99::SC
Title: Accredited Laboratories Base/Neutral/Acid Identity File
Last Calibration: 991207 07:54 Last Qcal Time: 991206 12:17

	Compound	R.T.	Scan#	Area	Conc	Units	q
41)	Dimethyl Phthalate	17.59	765	297217	80.93	ug/l	90
42)	Acenaphthylene	17.63	767	353874	77.72	ug/l	91
43)	3-Nitroaniline	18.08	789	88956	78.96	ug/l	92
44)	Acenaphthene	18.12	791	213383	76.11	ug/l	93
45)	2,4-Dinitrophenol	18.35	802	53672	83.51	ug/l	97
46)	4-Nitrophenol	18.61	815	59656	84.58	ug/l	96
47)	Dibenzofuran	18.53	811	316254	78.69	ug/l	99
48)	2,6-Dinitrotoluene	17.75	773	77496	82.29	ug/l	85
49)	2,4-Dinitrotoluene	18.75	822	119998	86.94	ug/l	78
50)	Diethylphthalate	19.39	853	270446	77.38	ug/l	91
51)	4-Chlorophenyl-phenylether	19.45	856	104890	84.50	ug/l	99
52)	Fluorene	19.41	854	207029	75.07	ug/l	98
53)	4-Nitroaniline	19.73	870	104918	79.96	ug/l	82
54)	2,4,6-Tribromophenol	20.08	887	40921	104.52	ug/l	98
55)	*d10-Phenanthrene	21.77	970	190500	40.00	ug/l	100
56)	4,6-Dinitro-2-methylphenol	19.80	873	67470	87.41	ug/l	100
57)	N-Nitrosodiphenylamine	19.82	874	165612	75.70	ug/l	86
58)	Azobenzene	19.86	876	388585	71.05	ug/l	89
59)	4-Bromophenyl-phenylether	20.67	916	63391	83.36	ug/l	100
60)	Hexachlorobenzene	21.02	933	71715	92.49	ug/l	98
61)	Pentachlorophenol	21.51	957	56726	82.47	ug/l	89
62)	Phenanthrene	21.86	974	377568	77.27	ug/l	99
63)	Anthracene	21.96	979	382993	77.51	ug/l	83
65)	Di-n-Butylphthalate	23.53	1056	579455	78.28	ug/l	92
66)	Fluoranthene	24.89	1123	420207	79.91	ug/l	100
67)	*d12-Chrysene	28.59	1304	155697	40.00	ug/l	100
68)	Benzidine	25.32	1144	178827	63.05	ug/l	89
69)	Pyrene	25.47	1151	436566	71.24	ug/l	86
70)	Terphenyl-d14	25.94	1174	249202	72.95	ug/l	92
71)	Butylbenzylphthalate	27.32	1242	292368	67.79	ug/l	76
72)	3,3'-Dichlorobenzidine	28.59	1304	120783M	72.86	ug/l	
73)	Benzo(a)Anthracene	28.54	1302	412079	75.74	ug/l	96
74)	Bis(2-Ethylhexyl)Phthalate	28.83	1316	400206	67.65	ug/l	78
75)	Chrysene	28.67	1308	413809	78.47	ug/l	86
76)	*d12-Perylene	31.99	1471	174040	40.00	ug/l	100
77)	Di-n-octyl phthalate	30.30	1388	632496	66.08	ug/l	89
78)	Benzo(b)fluoranthene	31.16	1430	468910	76.68	ug/l	99
79)	Benzo(k)Fluoranthene	31.22	1433	386871	80.53	ug/l	88
80)	Benzo(a)Pyrene	31.87	1465	418714	78.55	ug/l	94
81)	Indeno(1,2,3-cd)Pyrene	34.20	1579	457282M	85.40	ug/l	
82)	Dibenzo(a,h)Anthracene	34.24	1581	353419	84.31	ug/l	83

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Operator ID: DANIEL Quant Rev: 7 Quant Time: 991209 13:58
Output File: ^F9814::QT Injected at: 991209 13:22
Data File: >F9814::F1 Dilution Factor: 1.00000
Name: SSTD080 Instrument ID: AHP5970B
Misc: BTL# 1

ID File: IDF99::SC
Title: Accredited Laboratories Base/Neutral/Acid Identity File
Last Calibration: 991207 07:54 Last Qcal Time: 991206 12:17

	Compound	R.T.	Scan#	Area	Conc	Units	q
83)	Benzo(g,h,i)Perylene	34.79	1608	410749	88.80	ug/l	96

* Compound is ISTD

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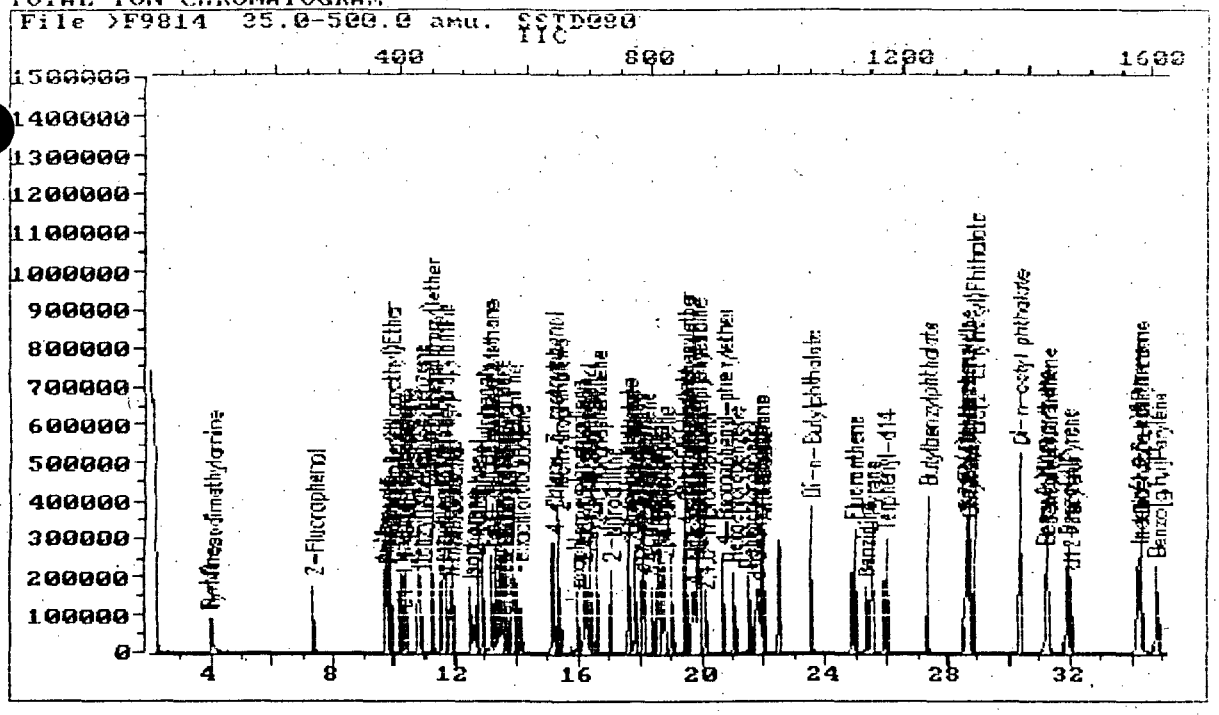
TOTAL ION CHROMATOGRAM



Data File: >F9814::F1 Quant Output File: ^F9814::QT
Name: SSTD080 Instrument ID: AHP5970B
Misc: BTL# 1

Id File: IDF99::SC
Title: Accredited Laboratories Base/Neutral/Acid Identity File
Last Calibration: 991207 07:54 Last Qcal Time: 991206 12:17

Operator ID: DANIEL
Quant Time : 991209 13:58
Injected at: 991209 13:22

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Operator ID: DANIEL Quant Rev: 7 Quant Time: 991209 14:44
Output File: ^F9815::QT Injected at: 991209 14:08
Data File: >F9815::F1 Dilution Factor: 1.00000
Name: SSTD120 Instrument ID: AHP5970B
Misc: BTL# 1

ID File: IDF99::SC
Title: Accredited Laboratories Base/Neutral/Acid Identity File
Last Calibration: 991207 07:54 Last Qcal Time: 991206 12:17

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*d4-1,4-Dichlorobenzene	10.31	408	40255	40.00	ug/l	93
2)	Pyridine	3.97	97	151735	120.30	ug/l	96
3)	N-Nitrosodimethylamine	4.07	102	113500	107.24	ug/l	88
4)	2-Fluorophenol	7.37	264	177045	118.54	ug/l	100
5)	Aniline	9.69	378	297943	110.43	ug/l	85
6)	Phenol-d5	9.78	382	254457	111.86	ug/l	88
7)	Phenol	9.80	383	241395	107.08	ug/l	94
8)	bis(-2-Chloroethyl)Ether	9.88	387	148291	96.96	ug/l	98
9)	2-Chlorophenol	9.92	389	167537	110.13	ug/l	96
10)	1,3-Dichlorobenzene	10.20	403	149676	108.30	ug/l	98
11)	1,4-Dichlorobenzene	10.35	410	150514	106.98	ug/l	91
12)	Benzyl Alcohol	10.86	435	129094	124.49	ug/l	95
13)	1,2-Dichlorobenzene	10.82	433	141846	112.73	ug/l	86
14)	2-Methylphenol	11.20	452	166285	107.52	ug/l	84
15)	bis(2-Chloroisopropyl)ether	11.18	451	270111	92.61	ug/l	100
16)	3&4-Methylphenol	11.61	472	180680	113.54	ug/l	87
17)	N-Nitroso-Di-n-propylamine	11.63	473	162622	107.41	ug/l	80
18)	Hexachloroethane	11.53	468	64454	114.25	ug/l	100
19)	*d8-Naphthalene	13.51	565	164714	40.00	ug/l	96
20)	Nitrobenzene-d5	11.82	482	234829	116.65	ug/l	97
21)	Nitrobenzene	11.88	485	229883	109.49	ug/l	92
22)	Isophorone	12.53	517	516626	117.36	ug/l	94
23)	2-Nitrophenol	12.65	523	116927	124.89	ug/l	84
24)	2,4-Dimethylphenol	12.90	535	167819	117.57	ug/l	91
25)	Benzoic Acid	13.59	569	114774M	116.77	ug/l	94
26)	bis(-2-Chloroethoxy)Methane	13.12	546	253370	109.69	ug/l	97
27)	2,4-Dichlorophenol	13.29	554	147082	119.52	ug/l	96
28)	1,2,4-Trichlorobenzene	13.43	561	135135	122.19	ug/l	98
29)	Naphthalene	13.57	568	442559	108.90	ug/l	79
30)	4-Chloroaniline	13.86	582	198658	107.21	ug/l	100
31)	Hexachlorobutadiene	14.04	591	66401	133.01	ug/l	100
32)	4-Chloro-3-methylphenol	15.14	645	213292	121.50	ug/l	92
33)	2-Methylnaphthalene	15.35	655	330146	118.20	ug/l	86
34)	*d10-Acenaphthene	18.02	786	108995	40.00	ug/l	95
35)	Hexachlorocyclopentadiene	15.92	683	78328	124.61	ug/l	95
36)	2,4,6-Trichlorophenol	16.18	696	113170	116.05	ug/l	84
37)	2,4,5-Trichlorophenol	16.27	700	126458	119.71	ug/l	96
38)	2-Chloronaphthalene	16.57	715	311109	105.39	ug/l	93
39)	2-Fluorobiphenyl	16.39	706	340488	111.15	ug/l	95
40)	2-Nitroaniline	17.02	737	189314	102.56	ug/l	90

253

Operator ID: DANIEL Quant Rev: 7 Quant Time: 991209 14:44
Output File: ^F9815::QT Injected at: 991209 14:08
Data File: >F9815::F1 Dilution Factor: 1.00000
Name: SSTD120 Instrument ID: AHP5970B
Misc: BTL# 1

ID File: IDF99::SC
Title: Accredited Laboratories Base/Neutral/Acid Identity File
Last Calibration: 991207 07:54 Last Qcal Time: 991206 12:17

	Compound	R.T.	Scan#	Area	Conc	Units	q
41)	Dimethyl Phthalate	17.61	766	414922	105.98	ug/l	90
42)	Acenaphthylene	17.63	767	507492	104.56	ug/l	91
43)	3-Nitroaniline	18.12	791	121511	101.18	ug/l	99
44)	Acenaphthene	18.14	792	305917	102.36	ug/l	94
45)	2,4-Dinitrophenol	18.37	803	90560	132.18	ug/l	97
46)	4-Nitrophenol	18.63	816	95721	127.31	ug/l	91
47)	Dibenzofuran	18.55	812	474797	110.82	ug/l	96
48)	2,6-Dinitrotoluene	17.78	774	117833	117.37	ug/l	83
49)	2,4-Dinitrotoluene	18.78	823	182051	123.73	ug/l	89
50)	Diethylphthalate	19.41	854	339539	91.14	ug/l	90
51)	4-Chlorophenyl-phenylether	19.45	856	140314	106.03	ug/l	98
52)	Fluorene	19.43	855	260923	88.76	ug/l	97
53)	4-Nitroaniline	19.80	873	155977	111.51	ug/l	76
54)	2,4,6-Tribromophenol	20.10	888	59406	142.34	ug/l	98
55)	*d10-Phenanthrene	21.80	971	202245	40.00	ug/l	100
56)	4,6-Dinitro-2-methylphenol	19.84	875	75771	92.46	ug/l	100
57)	N-Nitrosodiphenylamine	19.86	876	225645	97.15	ug/l	89
58)	Azobenzene	19.88	877	524145	90.27	ug/l	89
59)	4-Bromophenyl-phenylether	20.67	916	94548	117.12	ug/l	100
60)	Hexachlorobenzene	21.04	934	107686	130.82	ug/l	97
61)	Pentachlorophenol	21.53	958	88929	121.79	ug/l	88
62)	Phenanthrene	21.86	974	549652	105.96	ug/l	98
63)	Anthracene	21.98	980	537525	102.47	ug/l	83
65)	Di-n-Butylphthalate	23.53	1056	754910	96.06	ug/l	95
66)	Fluoranthene	24.92	1124	613707	109.93	ug/l	100
67)	*d12-Chrysene	28.59	1304	132161	40.00	ug/l	100
68)	Benzidine	25.33	1144	257748	107.06	ug/l	88
69)	Pyrene	25.49	1152	642221	123.47	ug/l	88
70)	Terphenyl-d14	25.94	1174	373154	128.69	ug/l	92
71)	Butylbenzylphthalate	27.33	1242	413346	112.92	ug/l	82
72)	3,3'-Dichlorobenzidine	28.61	1305	170411M	121.10	ug/l	
73)	Benzo(a)Anthracene	28.55	1302	591083	127.99	ug/l	94
74)	Bis(2-Ethylhexyl)Phthalate	28.84	1316	544978	108.53	ug/l	79
75)	Chrysene	28.69	1309	554212	123.82	ug/l	87
76)	*d12-Perylene	32.00	1471	180396	40.00	ug/l	100
77)	Di-n-octyl phthalate	30.30	1388	939111	94.65	ug/l	91
78)	Benzo(b)fluoranthene	31.20	1432	679670M	107.22	ug/l	98
79)	Benzo(k)Fluoranthene	31.26	1435	509056M	102.23	ug/l	90
80)	Benzo(a)Pyrene	31.90	1466	606223	109.72	ug/l	96
81)	Indeno(1,2,3-cd)Pyrene	34.28	1583	605858	109.16	ug/l	98
82)	Dibenzo(a,h)Anthracene	34.26	1582	495415	114.02	ug/l	83

254

Operator ID: DANIEL Quant Rev: 7 Quant Time: 991209 14:44
Output File: ^F9815::QT Injected at: 991209 14:08
Data File: >F9815::F1 Dilution Factor: 1.00000
Name: SSTD120 Instrument ID: AHP5970B
Misc: BTL# 1

ID File: IDF99::SC
Title: Accredited Laboratories Base/Neutral/Acid Identity File
Last Calibration: 991207 07:54 Last Qcal Time: 991206 12:17

Compound	R.T.	Scan#	Area	Conc	Units	q
83) Benzo(g,h,i)Perylene	34.82	1609	538957	112.41	ug/l	95

* Compound is ISTD

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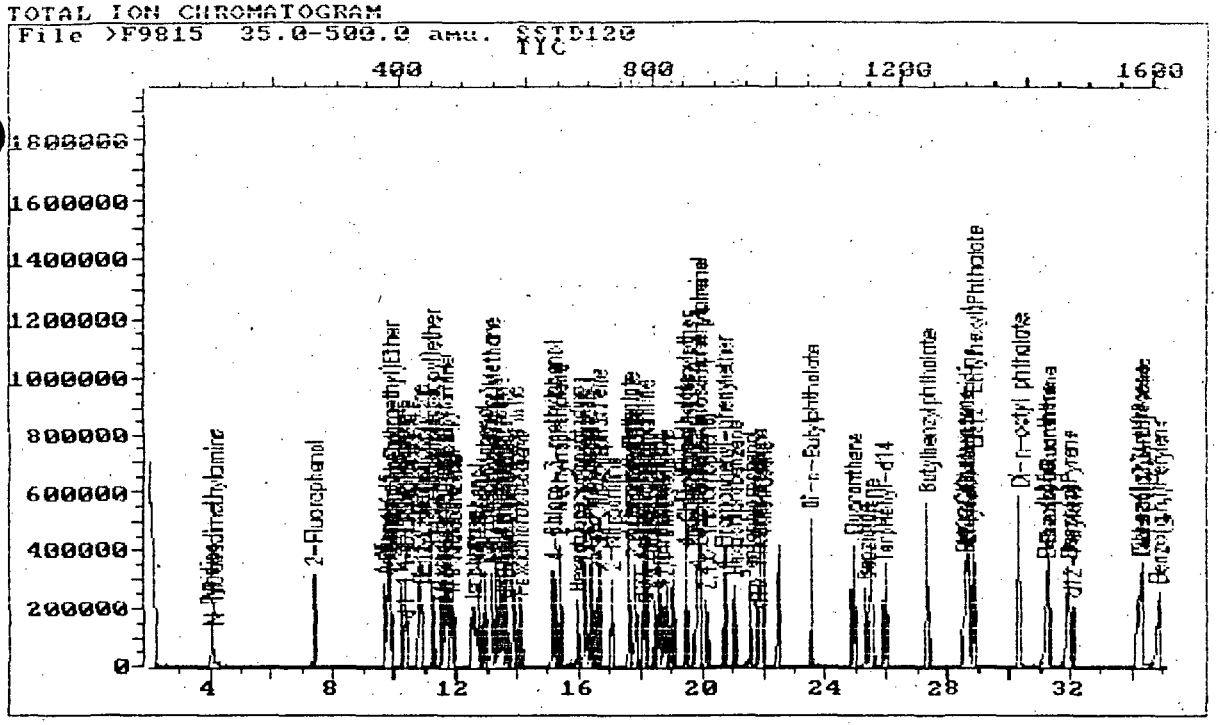
TOTAL ION CHROMATOGRAM



Data File: >F9815::F1 Quant Output File: ^F9815::QT
Name: SSTD120 Instrument ID: AHP5970B
Misc: BTL# 1

Id File: IDF99::SC
Title: Accredited Laboratories Base/Neutral/Acid Identity File
Last Calibration: 991207 07:54 Last Qcal Time: 991206 12:17

Operator ID: DANIEL
Quant Time : 991209 14:44
Injected at: 991209 14:08

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QUANT REPORT

Operator ID: DANTFI
Output File: ^F9829::QT
Data File: >F9829::F1
Name: SSTD050
Misc:

Quant Rev: 7
Quant Time: 991210 11:44
Injected at: 991210 11:04
Dilution Factor: 1.00000
Instrument ID: AHP5970B
BTL#75

ID File: IDF01::ME
Title: Accredited Laboratories Base/Neutral/Acid Identity File
Last Calibration: 991209 15:19
Last Qcal Time: <none>

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*d4-1,4-Dichlorobenzene	10.27	406	33445	40.00	ug/l	94
2)	Pyridine	3.91	94	37815	43.46	ug/l	96
3)	N-Nitrosodimethylamine	3.95	96	36963	48.94	ug/l	86
4)	2-Fluorophenol	7.31	261	58814	50.20	ug/l	100
5)	Aniline	9.62	374	96346	47.60	ug/l	89
6)	Phenol-d5	9.70	378	84860	48.45	ug/l	87
7)	Phenol	9.72	379	79439	47.51	ug/l	99
8)	bis(-2-Chloroethyl)Ether	9.82	384	61484	52.92	ug/l	97
9)	2-Chlorophenol	9.86	386	59994	49.93	ug/l	96
10)	1,3-Dichlorobenzene	10.17	401	58066	51.97	ug/l	98
11)	1,4-Dichlorobenzene	10.31	408	60124	53.15	ug/l	91
12)	Benzyl Alcohol	10.78	431	37292	44.92	ug/l	92
13)	1,2-Dichlorobenzene	10.76	430	52811	51.02	ug/l	91
14)	2-Methylphenol	11.15	449	60787	51.38	ug/l	84
15)	bis(2-Chloroisopropyl)ether	11.15	449	91875	48.56	ug/l	100
16)	3&4-Methylphenol	11.53	468	64688	51.35	ug/l	85
17)	N-Nitroso-Di-n-propylamine	11.51	467	50115	45.58	ug/l	86
18)	Hexachloroethane	11.51	467	22270	49.25	ug/l	100
19)	*d8-Naphthalene	13.47	563	134215	40.00	ug/l	97
20)	Nitrobenzene-d5	11.76	479	72923	47.16	ug/l	99
21)	Nitrobenzene	11.80	481	75082	48.12	ug/l	89
22)	Isophorone	12.41	511	156259	46.14	ug/l	98
23)	2-Nitrophenol	12.62	521	40068	50.15	ug/l	80
24)	2,4-Dimethylphenol	12.82	531	58189	50.13	ug/l	94
25)	Benzoic Acid	13.29	554	41570	56.98	ug/l	95
26)	bis(-2-Chloroethoxy)Methane	13.04	542	83844	48.85	ug/l	88
27)	2,4-Dichlorophenol	13.21	550	52880	50.96	ug/l	89
28)	1,2,4-Trichlorobenzene	13.39	559	50652	52.43	ug/l	99
29)	Naphthalene	13.53	566	178907	53.87	ug/l	78
30)	4-Chloroaniline	13.80	579	77673	52.76	ug/l	100
31)	Hexachlorobutadiene	14.02	590	25851	54.91	ug/l	100
32)	4-Chloro-3-methylphenol	15.10	643	70196	49.01	ug/l	92
33)	2-Methylnaphthalene	15.29	652	119424	51.48	ug/l	89
34)	*d10-Acenaphthene	18.00	785	83715	40.00	ug/l	98
35)	Hexachlorocyclopentadiene	15.88	681	25129	50.83	ug/l	98
36)	2,4,6-Trichlorophenol	16.12	693	40066	52.54	ug/l	91
37)	2,4,5-Trichlorophenol	16.21	697	44656	52.80	ug/l	95
38)	2-Chloronaphthalene	16.53	713	116413	53.57	ug/l	91
39)	2-Fluorobiphenyl	16.33	703	123936	53.74	ug/l	95
40)	2-Nitroaniline	16.96	734	58492	48.59	ug/l	94

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700355

Operator ID: DANIEL Quant Rev: 7 Quant Time: 991210 11:44
Output File: ^F9829::QT Injected at: 991210 11:08
Data File: >F9829::F1 Dilution Factor: 1.00000
Name: SSTD050 Instrument ID: AHP5970B
Misc: BTL#25

ID File: IDF01::ME
Title: Accredited Laboratories Base/Neutral/Acid Identity File
Last Calibration: 991209 15:19 Last Qcal Time: <none>

	Compound	R.T.	Scan#	Area	Conc.	Units	q
41)	Dimethyl Phthalate	17.53	762	151659	52.54	ug/l	92
42)	Acenaphthylene	17.59	765	198164	55.19	ug/l	90
43)	3-Nitroaniline	18.04	787	46996	56.09	ug/l	98
44)	Acenaphthene	18.08	789	124900	56.37	ug/l	93
45)	2,4-Dinitrophenol	18.29	799	23011	45.07	ug/l	96
46)	4-Nitrophenol	18.55	812	27434	47.09	ug/l	91
47)	Dibenzofuran	18.49	809	173202	52.91	ug/l	99
48)	2,6-Dinitrotoluene	17.69	770	37255	48.68	ug/l	79
49)	2,4-Dinitrotoluene	18.67	818	59306	50.08	ug/l	97
50)	Diethylphthalate	19.35	851	162058	61.01	ug/l	90
51)	4-Chlorophenyl-phenylether	19.41	854	59381	57.00	ug/l	98
52)	Fluorene	19.37	852	127340	59.75	ug/l	99
53)	4-Nitroaniline	19.63	865	52309	52.64	ug/l	85
54)	2,4,6-Tribromophenol	20.04	885	20229	50.27	ug/l	99
55)	*d10-Phenanthrene	21.73	968	156736	40.00	ug/l	100
56)	4,6-Dinitro-2-methylphenol	19.72	869	34224	56.45	ug/l	100
57)	N-Nitrosodiphenylamine	19.76	871	97765	57.40	ug/l	89
58)	Azobenzene	19.82	874	207866	54.71	ug/l	88
59)	4-Bromophenyl-phenylether	20.63	914	33923	51.72	ug/l	100
60)	Hexachlorobenzene	20.98	931	37592	51.09	ug/l	98
61)	Pentachlorophenol	21.47	955	28298	48.28	ug/l	89
62)	Phenanthrene	21.80	971	207391	52.93	ug/l	99
63)	Anthracene	21.92	977	209822	53.66	ug/l	83
65)	Di-n-Butylphthalate	23.49	1054	324687	57.09	ug/l	91
66)	Fluoranthene	24.85	1121	228990	52.83	ug/l	100
67)	*d12-Chrysene	28.55	1302	137364	40.00	ug/l	100
68)	Benzidine	25.26	1141	90422	45.53	ug/l	87
69)	Pyrene	25.41	1148	242273	47.56	ug/l	83
70)	Terphenyl-d14	25.89	1172	140490	48.27	ug/l	91
71)	Butylbenzylphthalate	27.28	1240	154029	46.78	ug/l	80
72)	3,3'-Dichlorobenzidine	28.53	1301	67486M	50.77	ug/l	
73)	Benzo(a)Anthracene	28.48	1299	216719	46.06	ug/l	94
74)	Bis(2-Ethylhexyl)Phthalate	28.79	1314	216183	48.02	ug/l	80
75)	Chrysene	28.63	1306	212580	47.28	ug/l	90
76)	*d12-Perylene	31.95	1469	137199	40.00	ug/l	100
77)	Di-n-octyl phthalate	30.26	1386	359176	56.57	ug/l	87
78)	Benzo(b)fluoranthene	31.10	1427	261885	56.70	ug/l	99
79)	Benzo(k)Fluoranthene	31.16	1430	163761	46.95	ug/l	88
80)	Benzo(a)Pyrene	31.81	1462	205813	51.16	ug/l	94
81)	Indeno(1,2,3-cd)Pyrene	34.13	1576	225221	52.53	ug/l	91
82)	Dibenzo(a,h)Anthracene	34.15	1577	188494	54.83	ug/l	81

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QUANT REPORT

Page 7

Operator ID: DANIEL
Output File: ^F9829::QT
Data File: >F9829::F1
Name: SSTD050
Misc:

Quant Rev: 7
Quant Time: 991710 11:44
Injected at: 991710 11:44
Dilution Factor: 1.00000
Instrument ID: AHP5970B
BTL#25

ID File: IDF01::ME
Title: Accredited Laboratories Base/Neutral/Acid Identity File
Last Calibration: 991209 15:19
Last Qcal Time: <none>

	Compound	R.T.	Scan#	Area	Conc.	Units	q
83)	Benzo(g,h,i)Perylene	34.71	1604	199598	52.31	ug/l	9[illegible]

* Compound is ISTD

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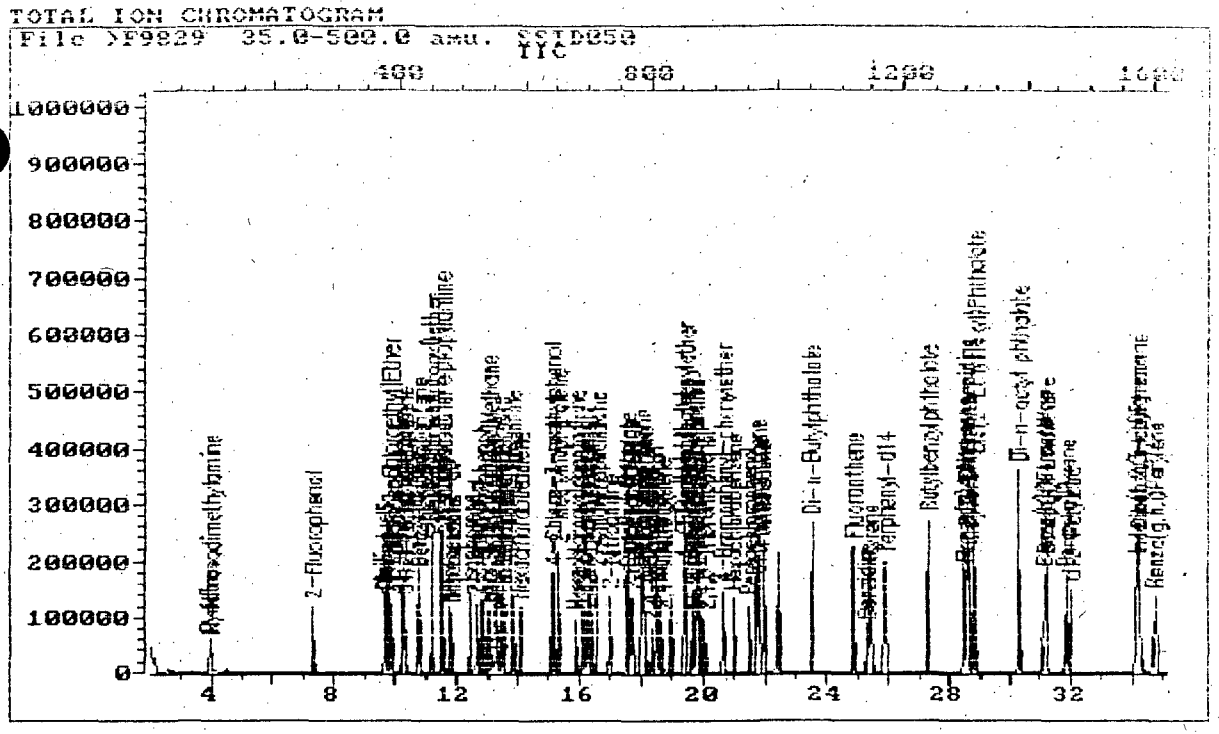
700357

TOTAL ION CHROMATOGRAM



Data File: >F9829::F1 Quant Output File: ^F9829::QT
Name: SSTD050 Instrument ID: AHP5970B
Misc: BTI #25

Id File: IDF01::ME
Title: Accredited Laboratories Base/Neutral/Acid Identity File
Last Calibration: 991209 15:19 Last Qcal Time: <none>

Operator ID: DANIEL
Quant Time : 991210 11:44
Injected at: 991210 11:08

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Operator ID: DANIEL Quant Rev: 7 Quant Time: 991209 19:28
Output File: ^F9821::QT Injected at: 991209 18:52
Data File: >F9821::G2 Dilution Factor: 1.00000
Name: 9913211MS Instrument ID: AHP5970B
Misc: 12/08/99 BTL# 6

ID File: IDF01::ME
Title: Accredited Laboratories Base/Neutral/Acid Identity File
Last Calibration: 991209 15:19 Last Qcal Time: <none>

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*d4-1,4-Dichlorobenzene	10.31	408	40132	40.00	ug/l	89
2)	Pyridine	4.11	104	59323	56.82	ug/l	96
4)	2-Fluorophenol	7.39	265	152479	108.47	ug/l	100
6)	Phenol-d5	9.74	380	226463	107.75	ug/l	87
11)	1,4-Dichlorobenzene	10.35	410	97612	71.91	ug/l	89
14)	2-Methylphenol	11.18	451	101364	71.40	ug/l	92
16)	3&4-Methylphenol	11.59	471	194715	128.81	ug/l	89
18)	Hexachloroethane	11.53	468	36235	66.78	ug/l	100
19)	*d8-Naphthalene	13.49	564	161793	40.00	ug/l	97
20)	Nitrobenzene-d5	11.80	481	129752	69.60	ug/l	97
21)	Nitrobenzene	11.86	484	140979	74.96	ug/l	92
31)	Hexachlorobutadiene	14.04	591	37120	65.41	ug/l	100
34)	*d10-Acenaphthene	18.01	786	102301	40.00	ug/l	95
36)	2,4,6-Trichlorophenol	16.16	695	64603	69.33	ug/l	90
37)	2,4,5-Trichlorophenol	16.24	699	71509	69.20	ug/l	98
39)	2-Fluorobiphenyl	16.36	705	199392	70.76	ug/l	95
49)	2,4-Dinitrotoluene	18.70	820	107443	74.25	ug/l	93
54)	2,4,6-Tribromophenol	20.07	887	66719	135.68	ug/l	98
55)	*d10-Phenanthrene	21.76	970	193322	40.00	ug/l	100
60)	Hexachlorobenzene	21.01	933	78809	86.84	ug/l	98
61)	Pentachlorophenol	21.50	957	61424	84.96	ug/l	89
67)	*d12-Chrysene	28.55	1303	187543	40.00	ug/l	100
70)	Terphenyl-d14	25.94	1175	281851	70.93	ug/l	93
76)	*d12-Perylene	31.96	1470	186570	40.00	ug/l	100

* Compound is ISTD

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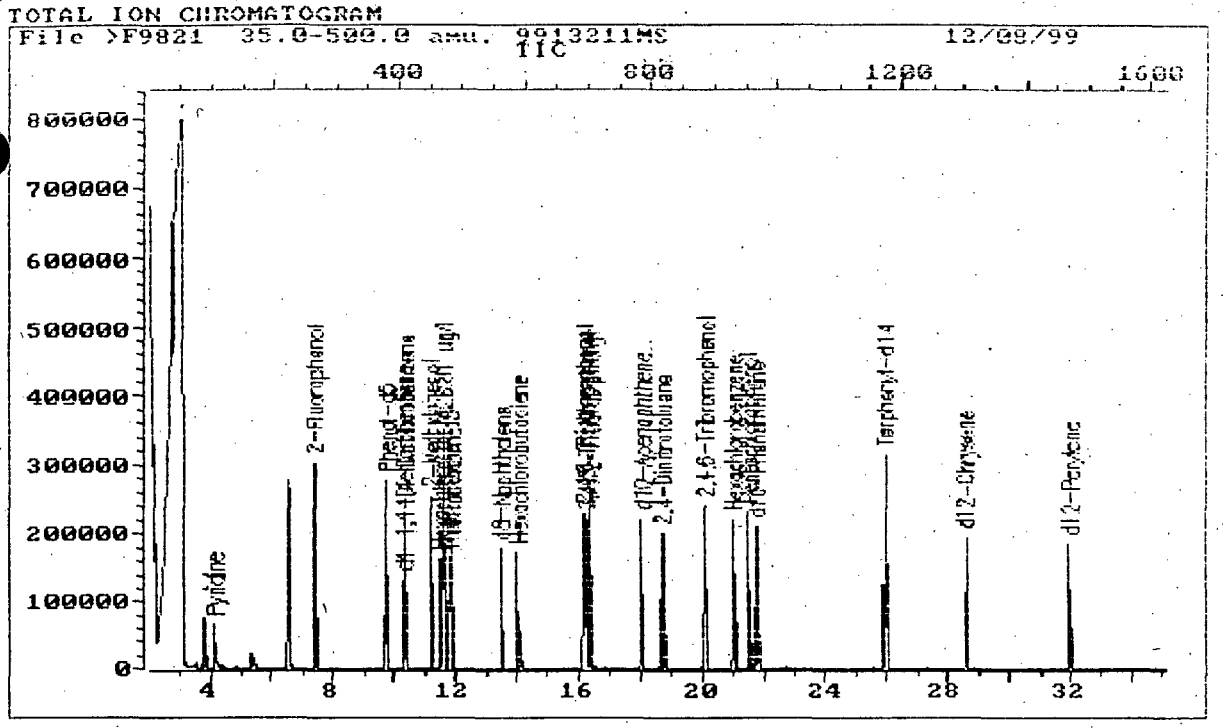
TOTAL ION CHROMATOGRAM



Data File: >F9821::G2 Quant Output File: ^F9821::QT
Name: 9913211MS Instrument ID: AHP5970B
Misc: 12/08/99 BTL# 6

Id File: IDF01::ME
Title: Accredited Laboratories Base/Neutral/Acid Identity File
Last Calibration: 991209 15:19 Last Qcal Time: <none>

Operator ID: DANIEL
Quant Time : 991209 19:28
Injected at: 991209 18:52

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Operator ID: DANIEL Quant Rev: 7 Quant Time: 991209 16:27
Output File: ^F9817::QT Injected at: 991209 15:51
Data File: >F9817::G2 Dilution Factor: 1.00000
Name: SBLK99 Instrument ID: AHP5970B
Misc: 12/08/99 BTL# 2

ID File: IDF01::ME
Title: Accredited Laboratories Base/Neutral/Acid Identity File
Last Calibration: 991209 15:19 Last Qcal Time: <none>

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*d4-1,4-Dichlorobenzene	10.31	408	37329	40.00	ug/l	87
4)	2-Fluorophenol	7.37	264	140350	107.34	ug/l	100
6)	Phenol-d5	9.74	380	220281	112.68	ug/l	90
19)	*d8-Naphthalene	13.49	564	152687	40.00	ug/l	98
20)	Nitrobenzene-d5	11.80	481	120648	68.58	ug/l	90
34)	*d10-Acenaphthene	18.01	786	95621	40.00	ug/l	97
39)	2-Fluorobiphenyl	16.34	704	185900	70.58	ug/l	95
54)	2,4,6-Tribromophenol	20.07	887	62428	135.82	ug/l	98
55)	*d10-Phenanthrene	21.76	970	175009	40.00	ug/l	100
67)	*d12-Chrysene	28.55	1303	175898	40.00	ug/l	100
70)	Terphenyl-d14	25.94	1175	286313	76.82	ug/l	92
76)	*d12-Perylene	31.95	1470	170070	40.00	ug/l	100

Compound is ISTD

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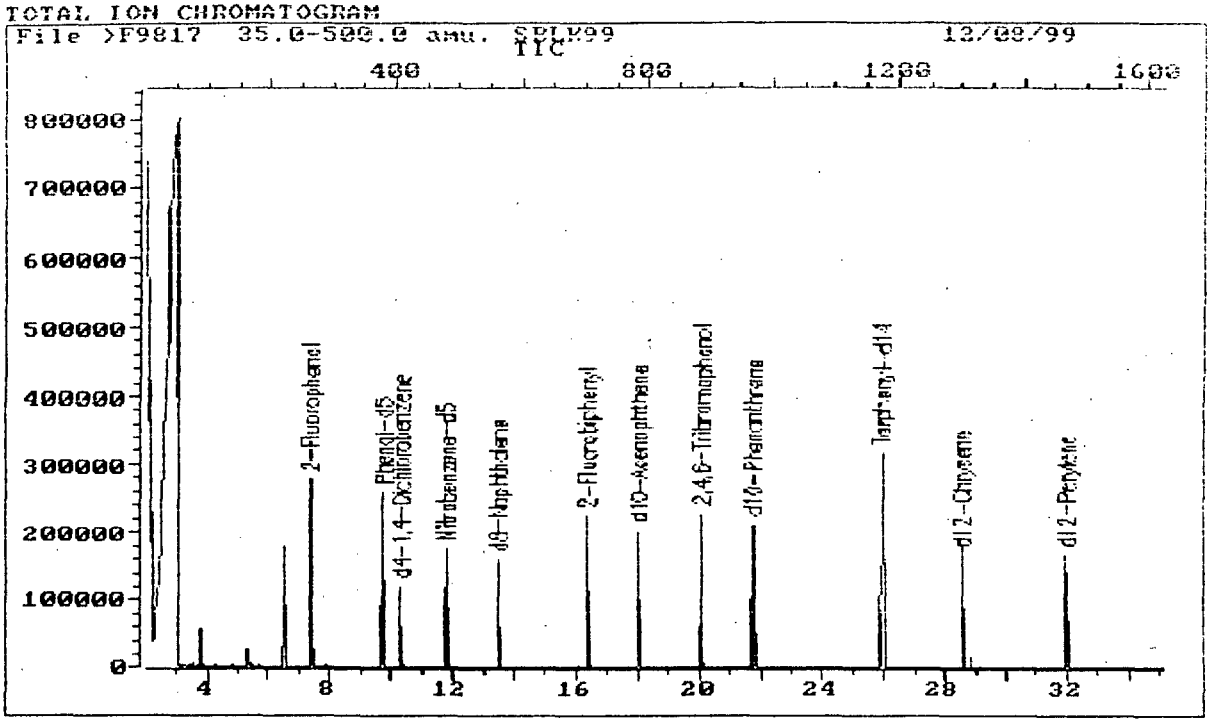
TOTAL ION CHROMATOGRAM



Data File: >F9817::G2 Quant Output File: ^F9817::QT
Name: SBLK99 Instrument ID: AHP5970B
Misc: 12/08/99 BTL# 2

Id File: IDF01::ME
Title: Accredited Laboratories Base/Neutral/Acid Identity File
Last Calibration: 991209 15:19 Last Qcal Time: <none>

Operator ID: DANIEL
Quant Time : 991209 16:27
Injected at: 991209 15:51

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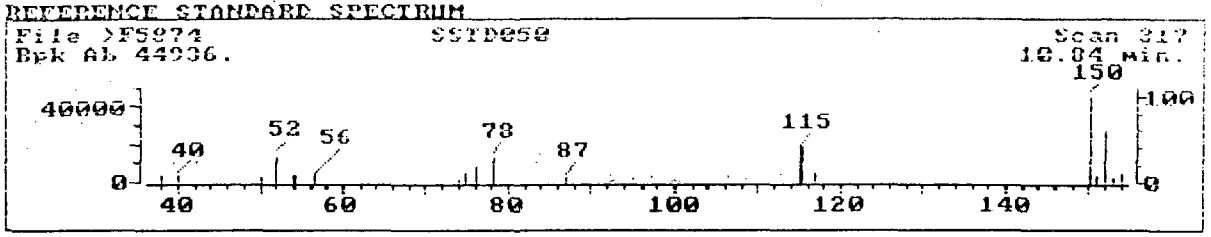
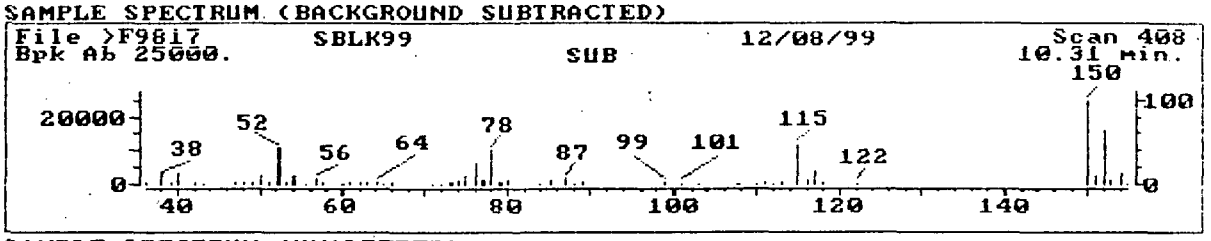
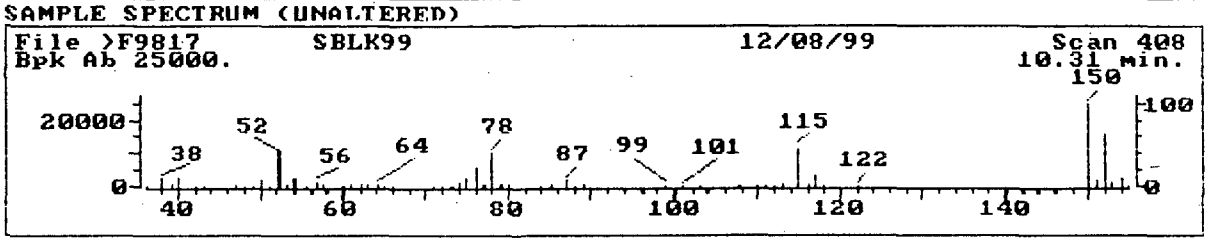
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



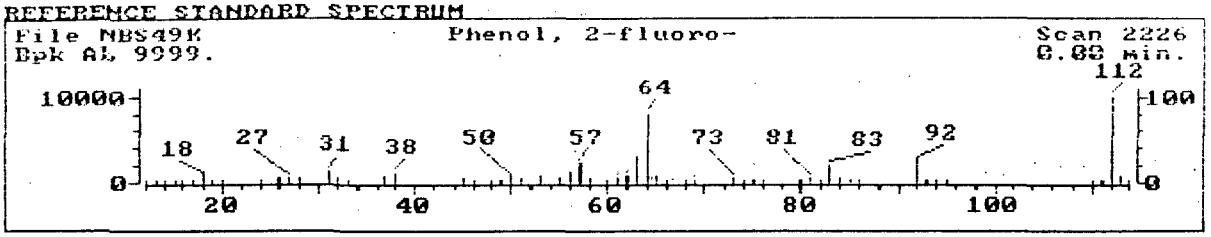
Data File: >F9817::G2
Name: SBLK99
Misc: 12/08/99
Quant Time: 991209 16:27
Injected at: 991209 15:51
Last Qcal Time: <none>

Quant Output File: ^F9817::QT
Instrument ID: AHP5970B
BTL# 2
Quant ID File: IDF01::ME
Last Calibration: 991209 15:19

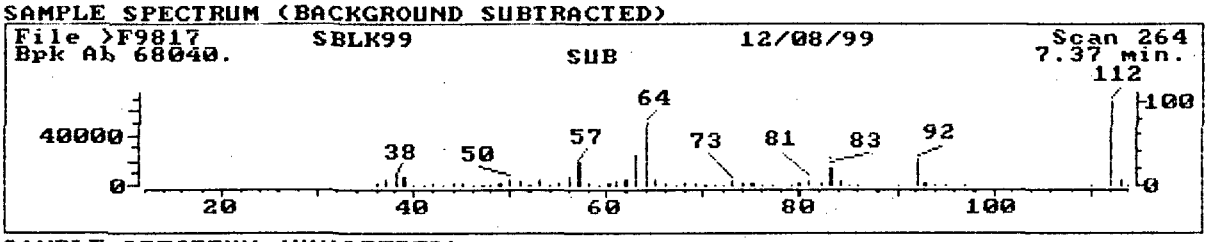
Compound No : 1 (ISTD)
Compound Name : d4-1,4-Dichlorobenzene
Scan Number : 408
Retention Time: 10.31 min.
Quant Ion : 152.0
Area : 37329
Concentration : 40.00 ug/l
q-value : 87

265

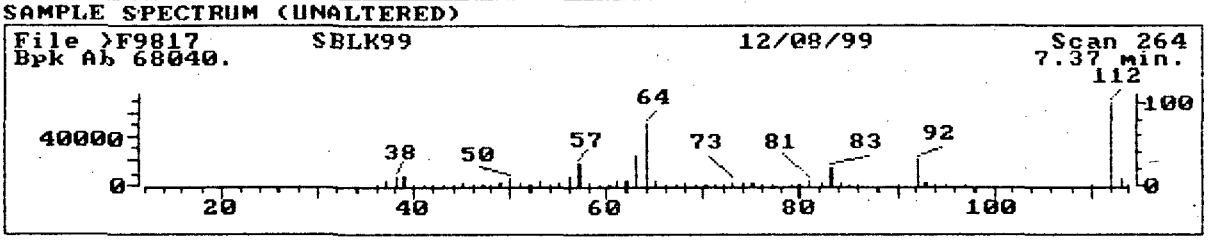
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



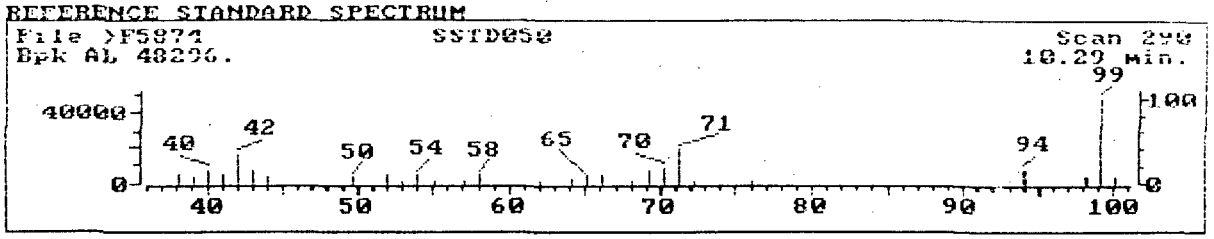
Data File: >F9817::G2
Name: SBLK99
Misc: 12/08/99
Quant Time: 991209 16:27
Injected at: 991209 15:51
Last Qcal Time: <none>

Quant Output File: ^F9817::QT
Instrument ID: AHP5970B
BTL# 2
Quant ID File: IDF01::ME
Last Calibration: 991209 15:19

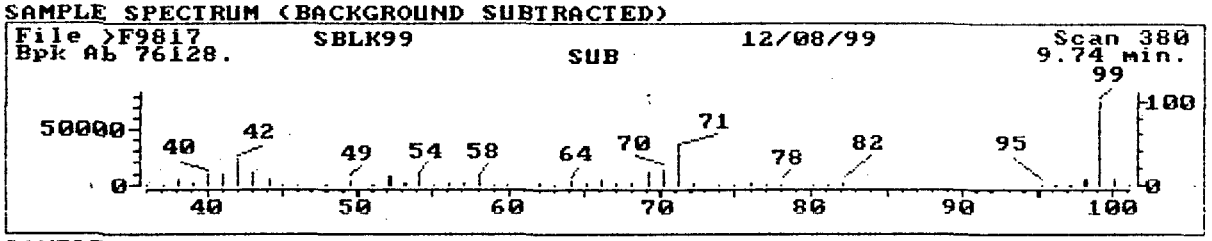
Compound No : 4
Compound Name : 2-Fluorophenol
Scan Number : 264
Retention Time: 7.37 min.
Quant Ion : 112.0
Area : 140350
Concentration : 107.34 ug/l
q-value : 100

266

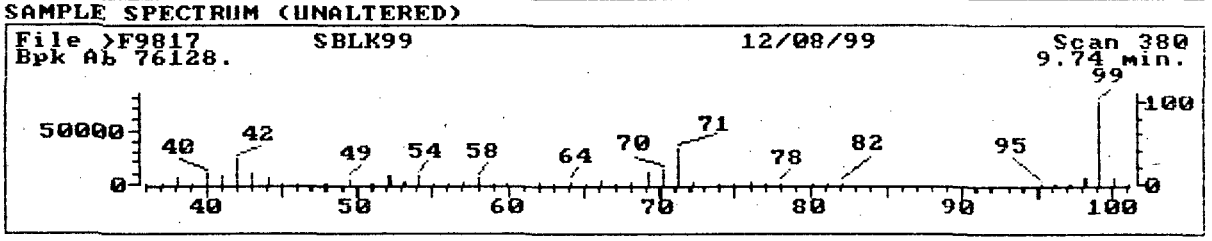
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



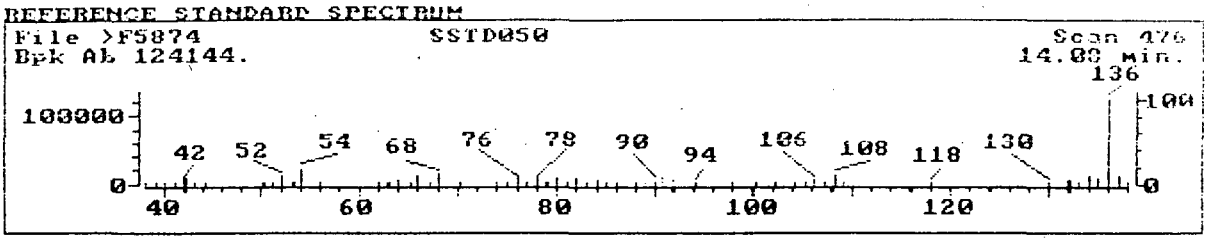
Data File: >F9817::G2
Name: SBLK99
Misc: 12/08/99
Quant Time: 991209 16:27
Injected at: 991209 15:51
Last Qcal Time: <none>

Quant Output File: ^F9817::QT
Instrument ID: AHP5970B
BTL# 2
Quant ID File: IDF01::ME
Last Calibration: 991209 15:19

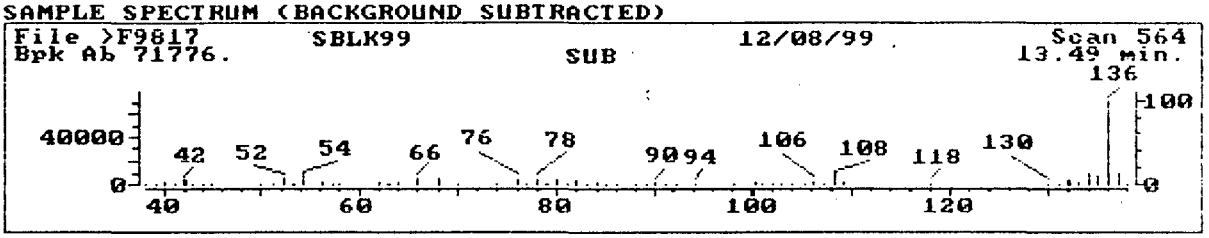
Compound No : 6
Compound Name : Phenol-d5
Scan Number : 380
Retention Time: 9.74 min.
Quant Ion : 99.0
Area : 220281
Concentration : 112.68 ug/l
q-value : 90

267

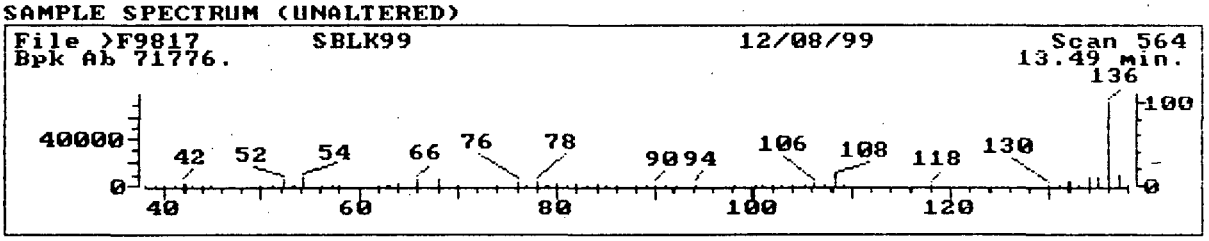
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



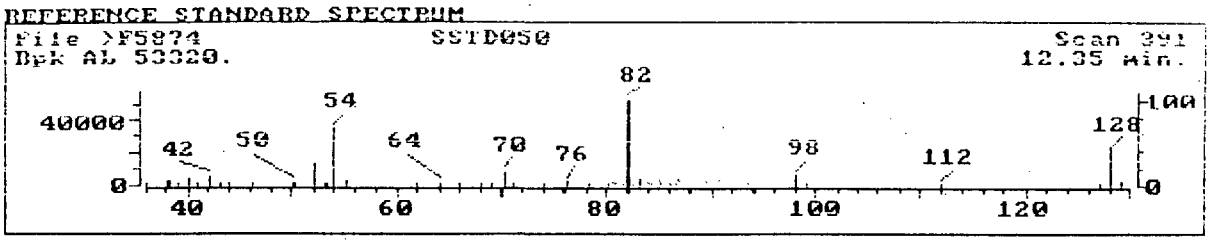
Data File: >F9817::G2
Name: SBLK99
Misc: 12/08/99
Quant Time: 991209 16:27
Injected at: 991209 15:51
Last Qcal Time: <none>

Quant Output File: ^F9817::QT
Instrument ID: AHP5970B
BTL# 2
Quant ID File: IDF01::ME
Last Calibration: 991209 15:19

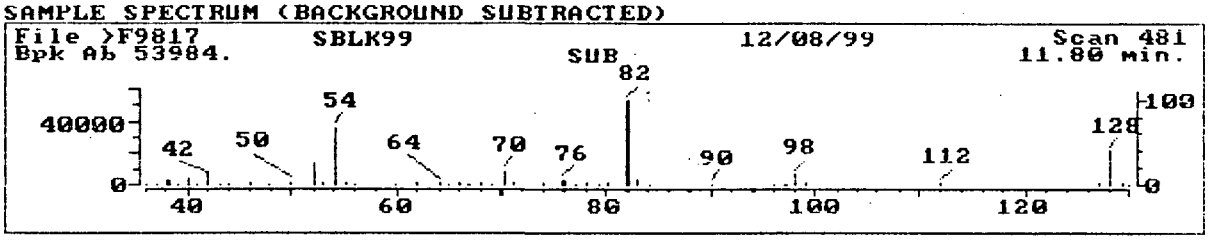
Compound No : 19 (ISTD)
Compound Name : d8-Naphthalene
Scan Number : 564
Retention Time: 13.49 min.
Quant Ion : 136.0
Area : 152687
Concentration : 40.00 ug/l
q-value : 98

263

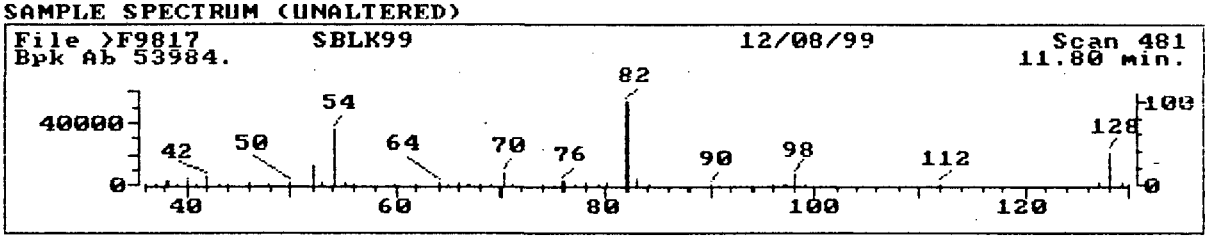
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



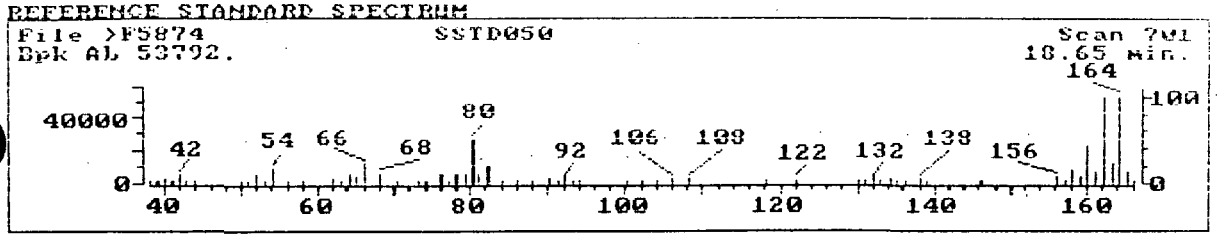
Data File: >F9817::G2
Name: SBLK99
Misc: 12/08/99
Quant Time: 991209 16:27
Injected at: 991209 15:51
Last Qcal Time: <none>

Quant Output File: ^F9817::QT
Instrument ID: AHP5970B
BTL# 2
Quant ID File: IDF01::ME
Last Calibration: 991209 15:19

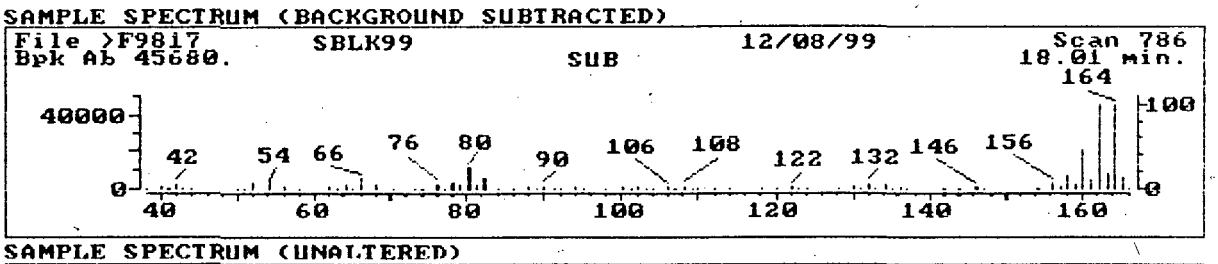
Compound No : 20
Compound Name : Nitrobenzene-d5
Scan Number : 481
Retention Time: 11.80 min.
Quant Ion : 82.0
Area : 120648
Concentration : 68.58 ug/l
q-value : 90

369

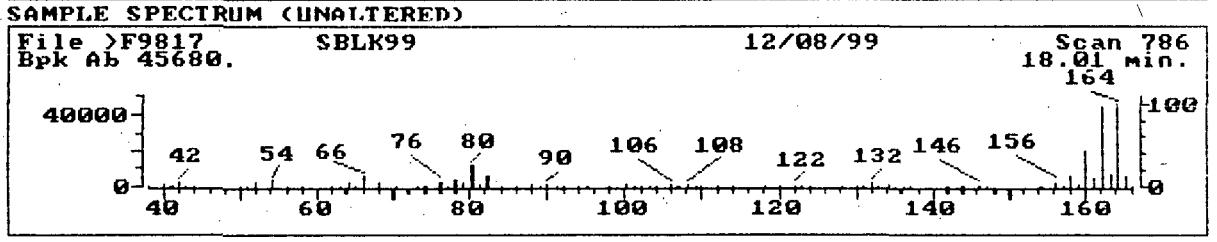
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



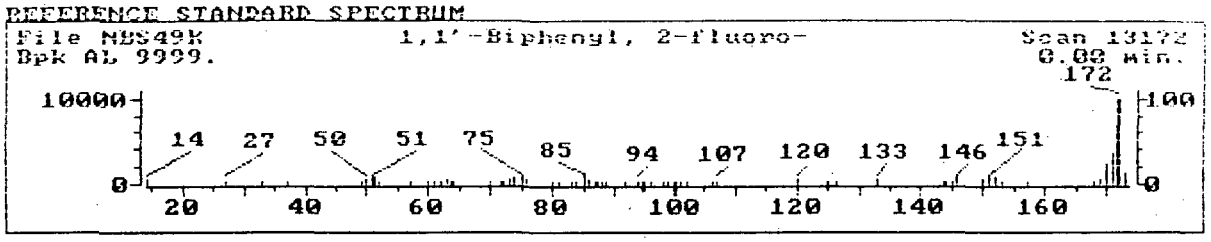
Data File: >F9817::G2
Name: SBLK99
Misc: 12/08/99
Quant Time: 991209 16:27
Injected at: 991209 15:51
Last Qcal Time: <none>

Quant Output File: ^F9817::QT
Instrument ID: AHP5970B
BTL# 2
Quant ID File: IDF01::ME
Last Calibration: 991209 15:19

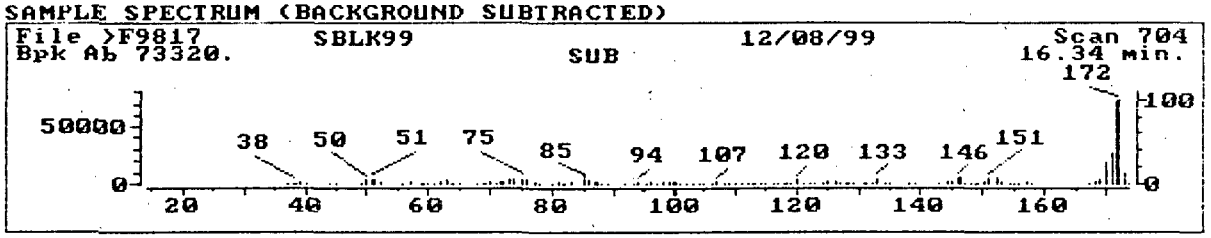
Compound No : 34 (ISTD)
Compound Name : d10-Acenaphthene
Scan Number : 786
Retention Time: 18.01 min.
Quant Ion : 164.0
Area : 95621
Concentration : 40.00 ug/l
q-value : 97

270

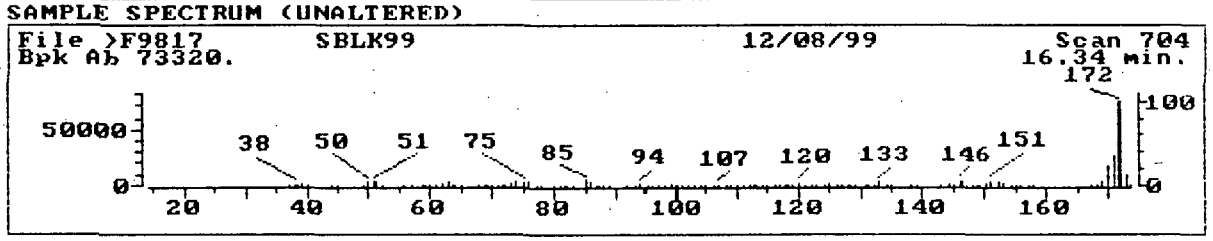
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



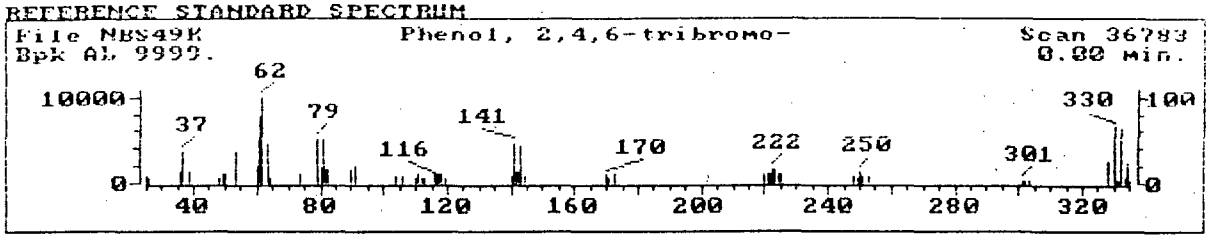
Data File: >F9817::G2
Name: SBLK99
Misc: 12/08/99
Quant Time: 991209 16:27
Injected at: 991209 15:51
Last Qcal Time: <none>

Quant Output File: ^F9817::QT
Instrument ID: AHP5970B
BTL# 2
Quant ID File: IDF01::ME
Last Calibration: 991209 15:19

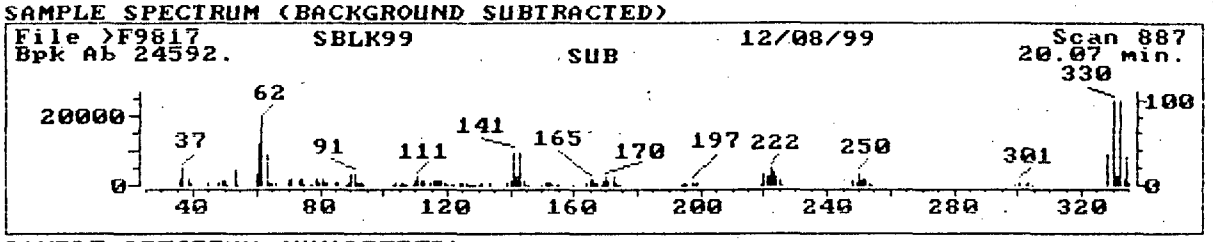
Compound No : 39
Compound Name : 2-Fluorobiphenyl
Scan Number : 704
Retention Time: 16.34 min.
Quant Ion : 172.0
Area : 185900
Concentration : 70.58 ug/l
q-value : 95

271

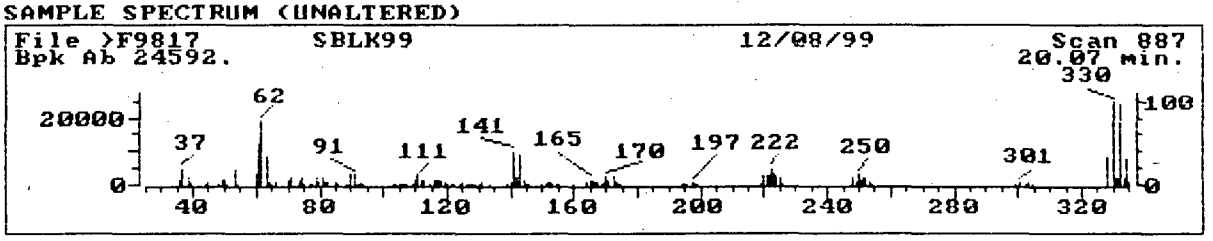
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



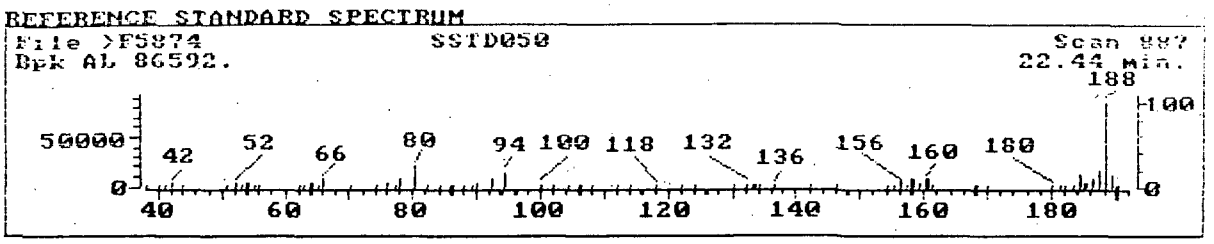
Data File: >F9817::G2
Name: SBLK99
Misc: 12/08/99
Quant Time: 991209 16:27
Injected at: 991209 15:51
Last Qcal Time: <none>

Quant Output File: ^F9817::QT
Instrument ID: AHP5970B
BTL# 2
Quant ID File: IDF01::ME
Last Calibration: 991209 15:19

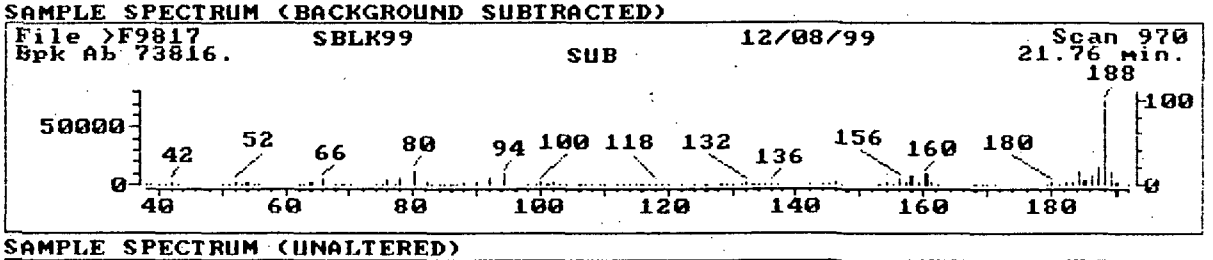
Compound No : 54
Compound Name : 2,4,6-Tribromophenol
Scan Number : 887
Retention Time: 20.07 min.
Quant Ion : 329.8
Area : 62428
Concentration : 135.82 ug/l
q-value : 98

272

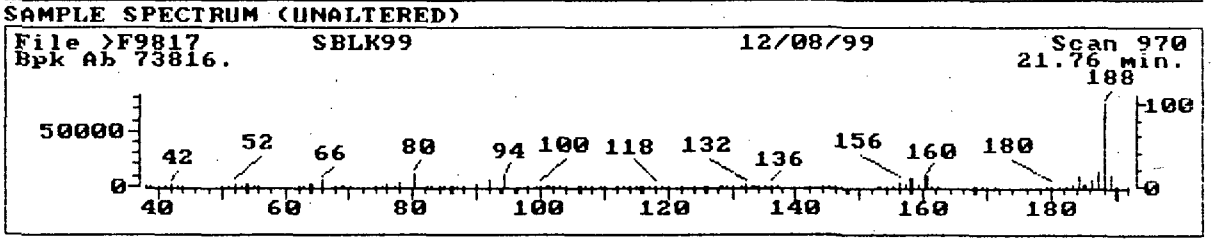
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



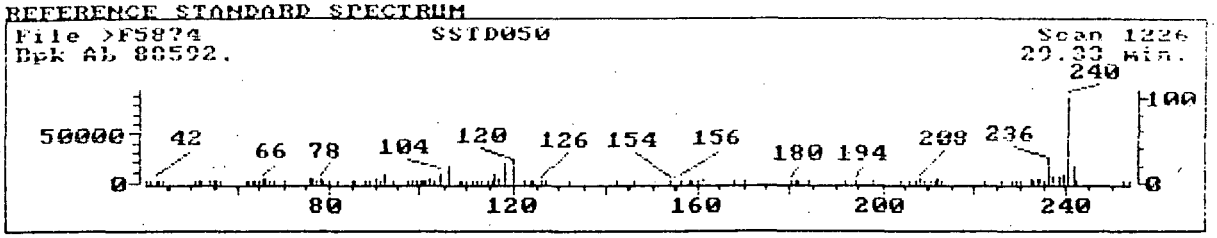
Data File: >F9817::G2
Name: SBLK99
Misc: 12/08/99
Quant Time: 991209 16:27
Injected at: 991209 15:51
Last Qcal Time: <none>

Quant Output File: ^F9817::QT
Instrument ID: AHP5970B
BTL# 2
Quant ID File: IDF01::ME
Last Calibration: 991209 15:19

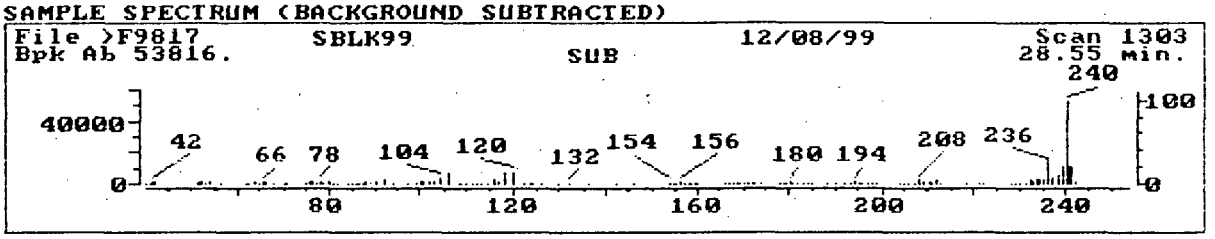
Compound No : 55 (ISTD)
Compound Name : d10-Phenanthrene
Scan Number : 970
Retention Time: 21.76 min.
Quant Ion : 188.0
Area : 175009
Concentration : 40.00 ug/l
q-value : 100

273

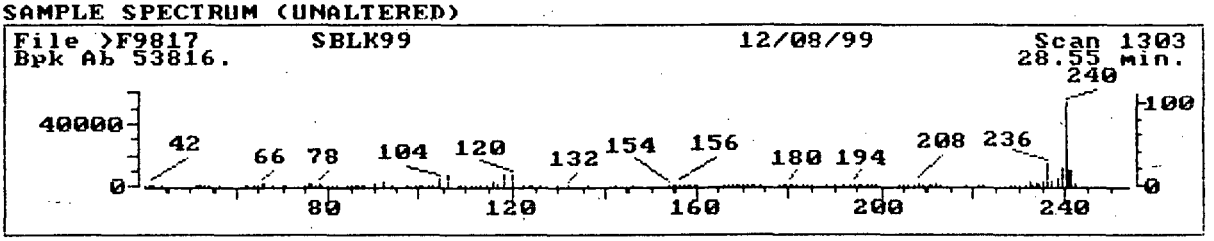
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



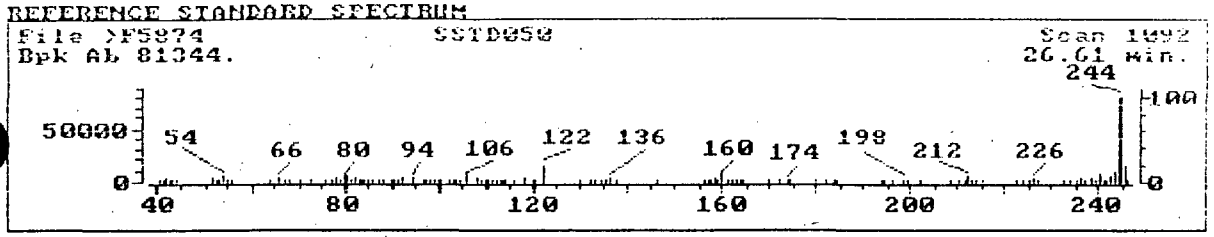
Data File: >F9817::G2
Name: SBLK99
Misc: 12/08/99
Quant Time: 991209 16:27
Injected at: 991209 15:51
Last Qcal Time: <none>

Quant Output File: ^F9817::QT
Instrument ID: AHP5970B
BTL# 2
Quant ID File: IDF01::ME
Last Calibration: 991209 15:19

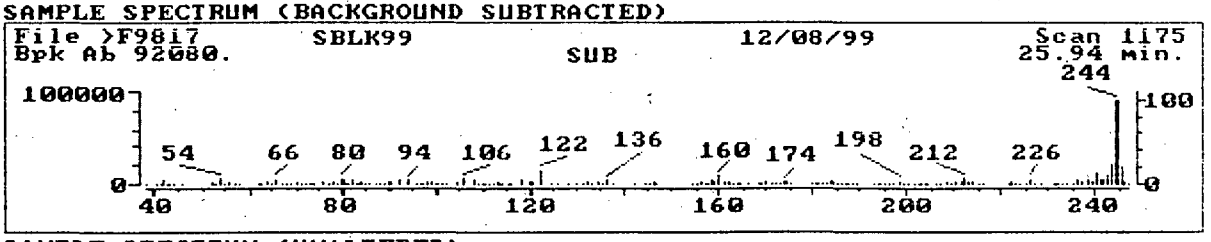
Compound No : 67 (ISTD)
Compound Name : d12-Chrysene
Scan Number : 1303
Retention Time: 28.55 min.
Quant Ion : 240.0
Area : 175898
Concentration : 40.00 ug/l
q-value : 100

274

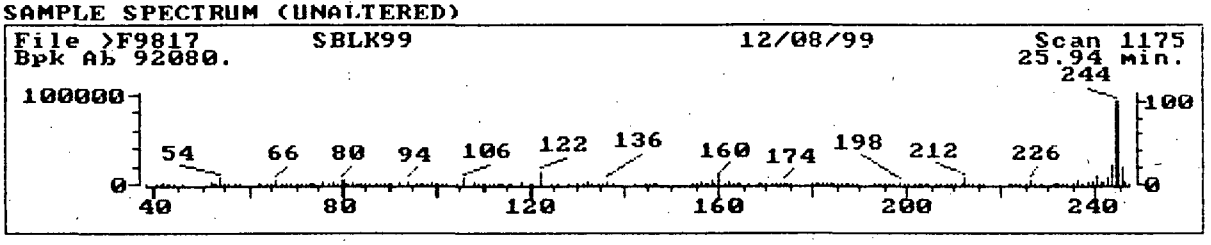
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



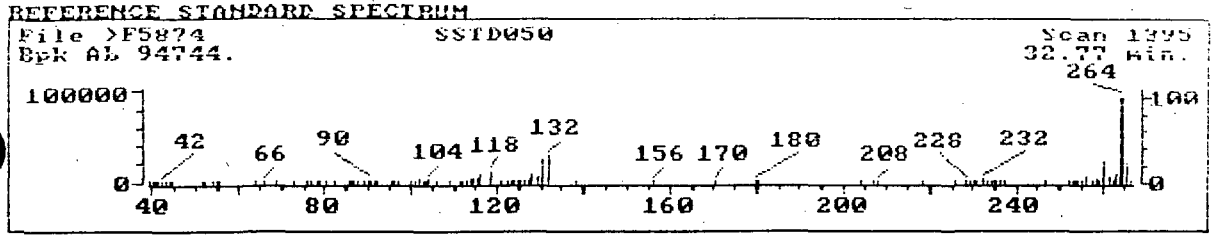
Data File: >F9817::G2
Name: SBLK99
Misc: 12/08/99
Quant Time: 991209 16:27
Injected at: 991209 15:51
Last Qcal Time: <none>

Quant Output File: ^F9817::QT
Instrument ID: AHP5970B
BTL# 2
Quant ID File: IDF01::ME
Last Calibration: 991209 15:19

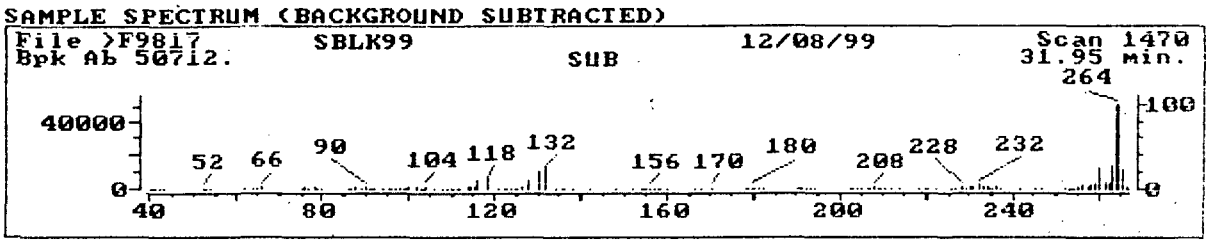
Compound No : 70
Compound Name : Terphenyl-d14
Scan Number : 1175
Retention Time: 25.94 min.
Quant Ion : 244.0
Area : 286313
Concentration : 76.82 ug/l
q-value : 92

275

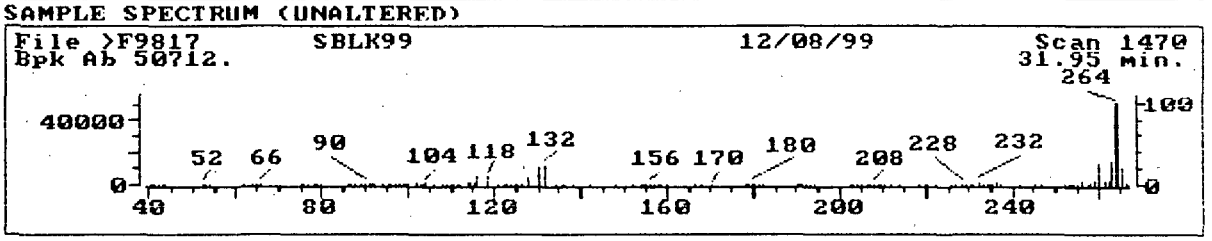
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >F9817::G2
Name: SBLK99
Misc: 12/08/99
Quant Time: 991209 16:27
Injected at: 991209 15:51
Last Qcal Time: <none>

Quant Output File: ^F9817::QT
Instrument ID: AHP5970B
BTL# 2
Quant ID File: IDF01::ME
Last Calibration: 991209 15:19

Compound No : 76 (ISTD)
Compound Name : d12-Perylene
Scan Number : 1470
Retention Time: 31.95 min.
Quant Ion : 264.0
Area : 170070
Concentration : 40.00 ug/l
q-value : 100

276

Operator ID: DANIEL Quant Rev: 7 Quant Time: 991209 20:13
Output File:\^F9822::QT Injected at: 991209 19:57
Data File: >F9822::G2 Dilution Factor: 1.00000
Name: 9912994 Instrument ID: AHP5970B
Misc: 6481 12/08/99 OE DCOMP-1 BTL# 7

ID File: IDF01::ME
Title: Accredited Laboratories Base/Neutral/Acid Identity File
Last Calibration: 991209 15:19 Last Qcal Time: <none>

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*d4-1,4-Dichlorobenzene	10.29	407	36391	40.00	ug/l	96
4)	2-Fluorophenol	7.37	264	127663	100.15	ug/l	100
6)	Phenol-d5	9.74	380	205217	107.68	ug/l	93
19)	*d8-Naphthalene	13.48	564	148379	40.00	ug/l	96
20)	Nitrobenzene-d5	11.79	481	109626	64.12	ug/l	90
34)	*d10-Acenaphthene	18.01	786	94899	40.00	ug/l	96
39)	2-Fluorobiphenyl	16.34	704	172349	65.93	ug/l	95
54)	2,4,6-Tribromophenol	20.07	887	68035	149.15	ug/l	99
55)	*d10-Phenanthrene	21.76	970	173996	40.00	ug/l	100
67)	*d12-Chrysene	28.56	1303	169968	40.00	ug/l	100
70)	Terphenyl-d14	25.95	1175	280388	77.86	ug/l	93
76)	*d12-Perylene	31.96	1470	171462	40.00	ug/l	100

* Compound is ISTD

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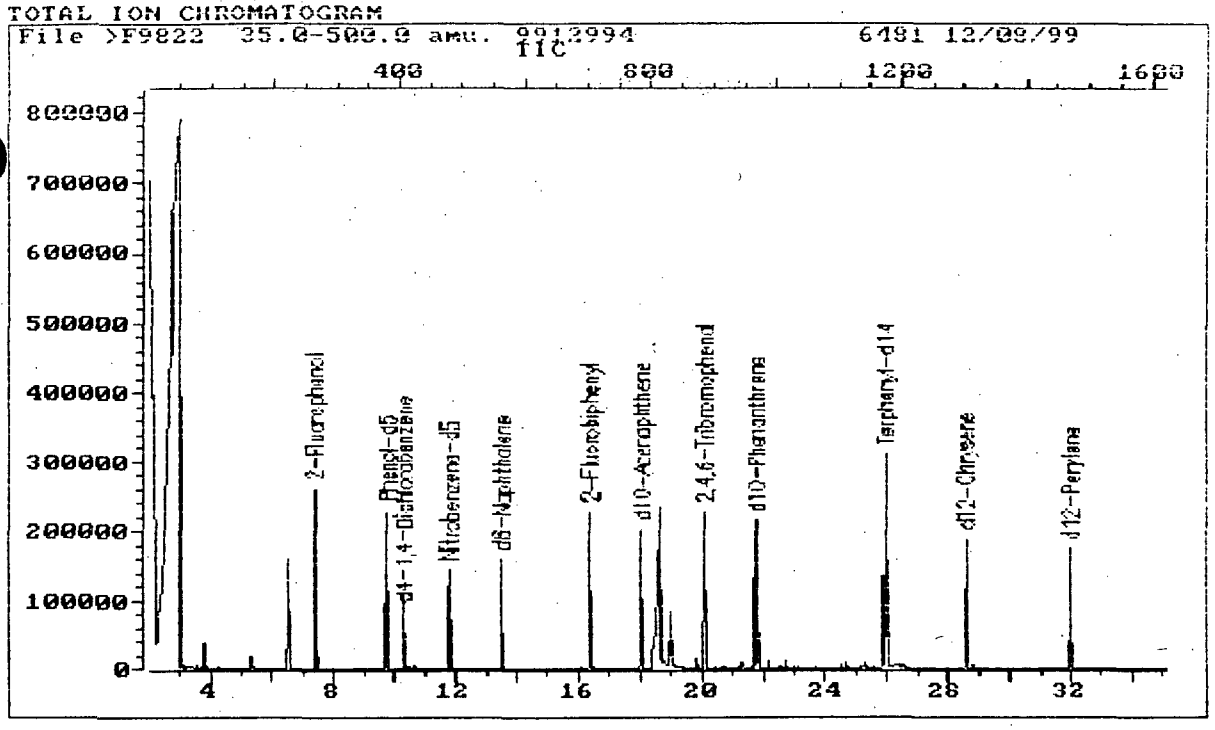
TOTAL ION CHROMATOGRAM



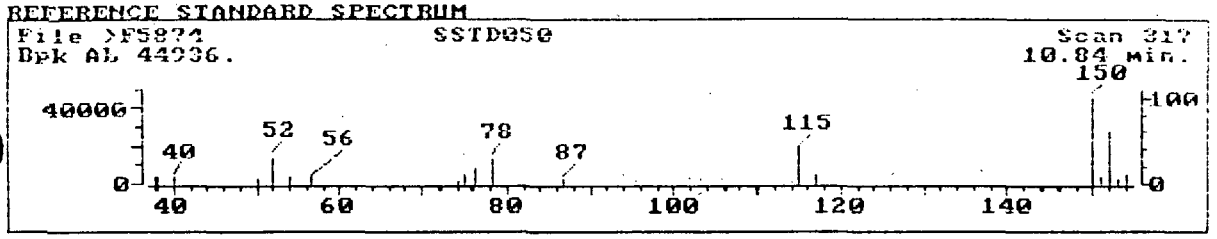
Data File: >F9822::G2 Quant Output File: ^F9822::QT
Name: 9912994 Instrument ID: AHP5970B
Misc: 6481 12/08/99 OE DCOMP-1 BTL# 7

Id File: IDF01::ME
Title: Accredited Laboratories Base/Neutral/Acid Identity File
Last Calibration: 991209 15:19 Last Qcal Time: <none>

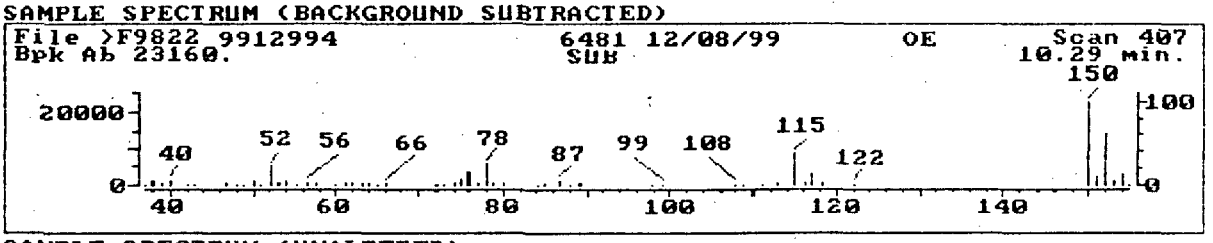
Operator ID: DANIEL
Quant Time : 991209 20:13
Injected at: 991209 19:37

278

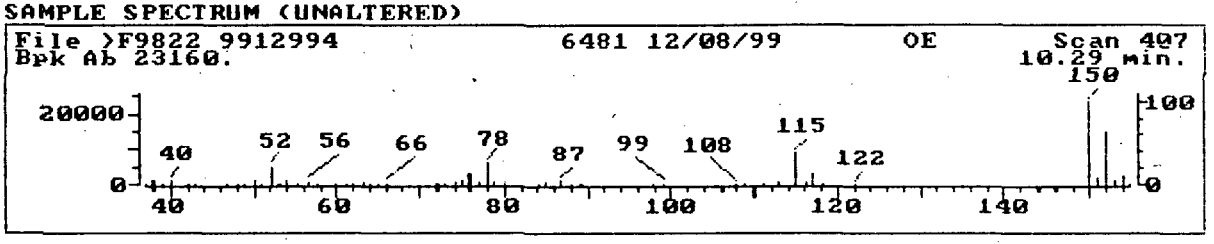
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

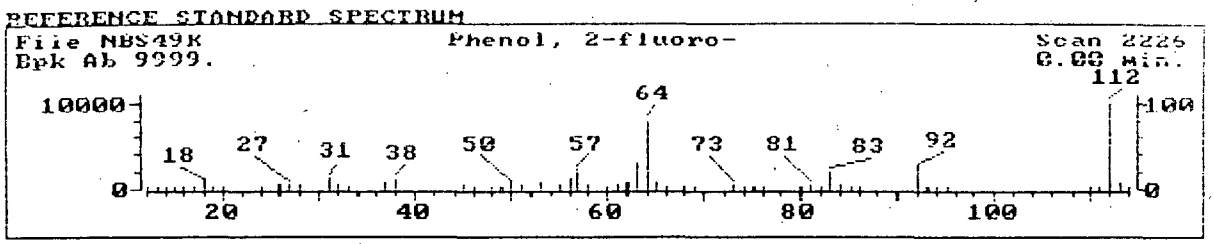


Data File: >F9822::G2
Quant Output File: ^F9822::QT
Name: 9912994
Instrument ID: AHP5970B
Misc: 6481 12/08/99 OE
DCOMP-1 BTL# 7
Quant Time: 991209 20:13
Quant ID File: IDF01::ME
Injected at: 991209 19:37
Last Calibration: 991209 15:19
Last Qcal Time: <none>

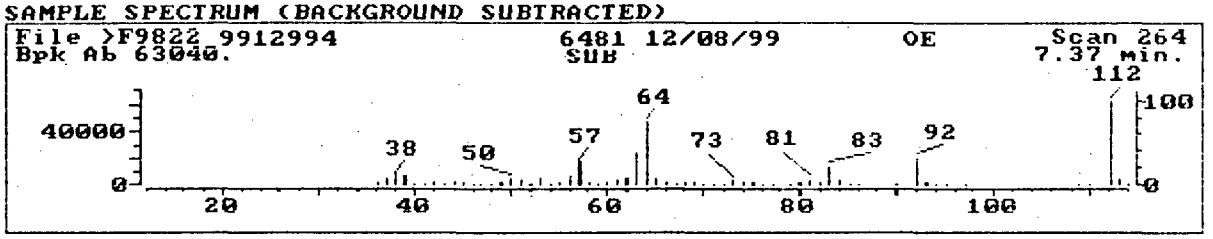
Compound No : 1 (ISTD)
Compound Name : d4-1,4-Dichlorobenzene
Scan Number : 407
Retention Time: 10.29 min.
Quant Ion : 152.0
Area : 36391
Concentration : 40.00 ug/l
q-value : 96

279

REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



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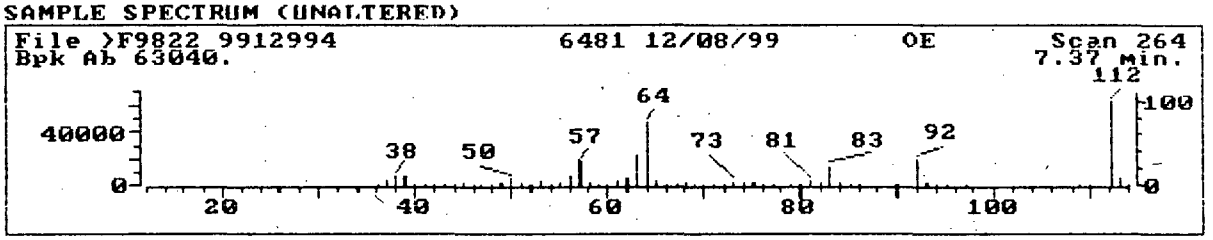


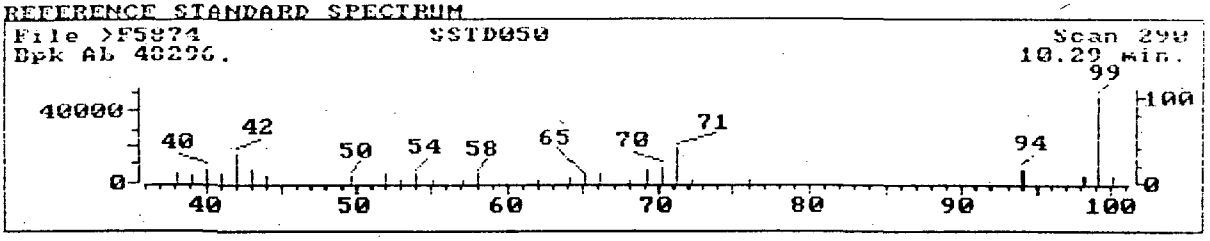
Data File: >F9822::G2
Name: 9912994
Misc: 6481 12/08/99 OE
Quant Time: 991209 20:13
Injected at: 991209 19:37
Last Qcal Time: <none>

Quant Output File: ^F9822::QT
Instrument ID: AHP5970B
DCOMP-1 BTL# 7
Quant ID File: IDF01::ME
Last Calibration: 991209 15:19

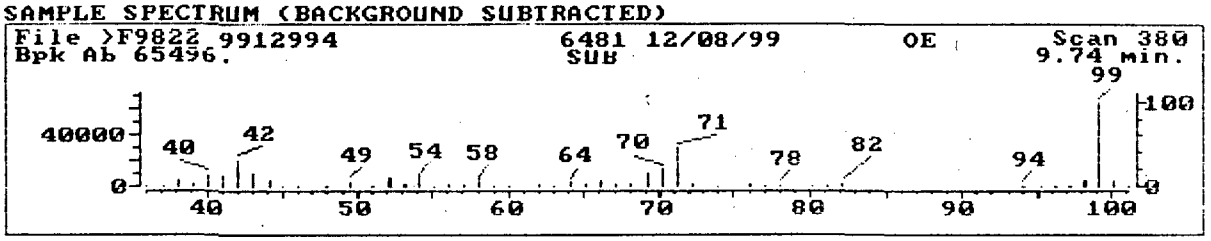
Compound No : 4
Compound Name : 2-Fluorophenol
Scan Number : 264
Retention Time: 7.37 min.
Quant Ion : 112.0
Area : 127663
Concentration : 100.15 ug/l
q-value : 100

280

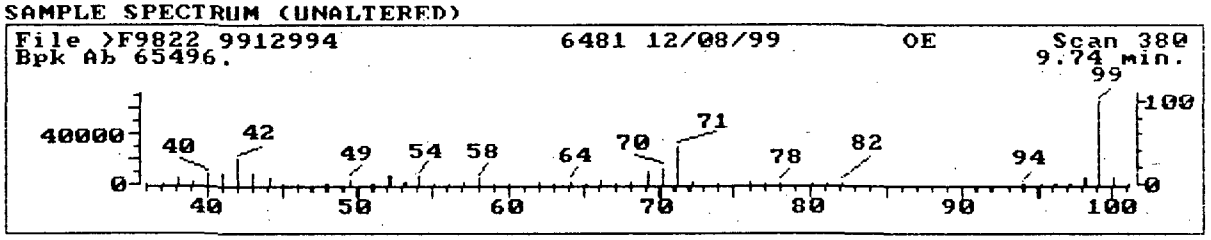
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



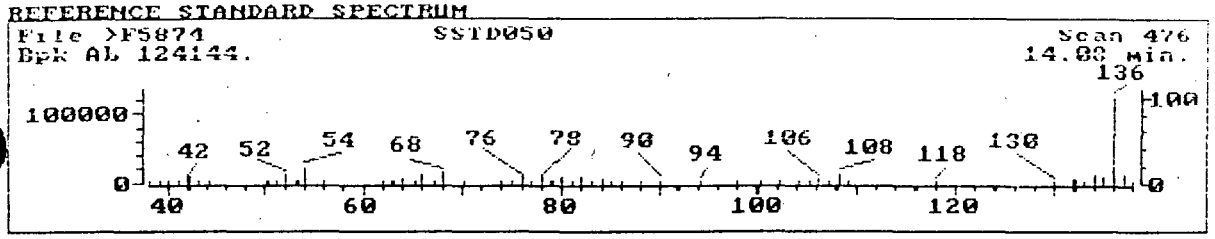
Data File: >F9822::G2
Name: 9912994
Misc: 6481 12/08/99 OE
Quant Time: 991209 20:13
Injected at: 991209 19:37
Last Qcal Time: <none>

Quant Output File: ^F9822::QT
Instrument ID: AHP5970B
DCOMP-1 BTL# 7
Quant ID File: IDF01::ME
Last Calibration: 991209 15:19

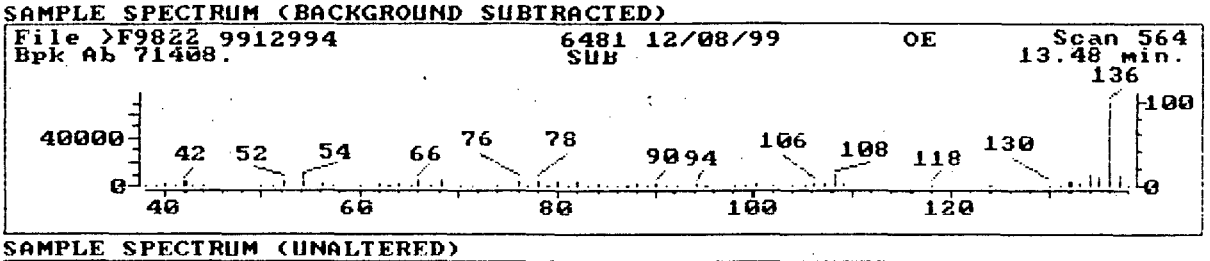
Compound No : 6
Compound Name : Phenol-d5
Scan Number : 380
Retention Time: 9.74 min.
Quant Ion : 99.0
Area : 205217
Concentration : 107.68 ug/l
q-value : 93

281

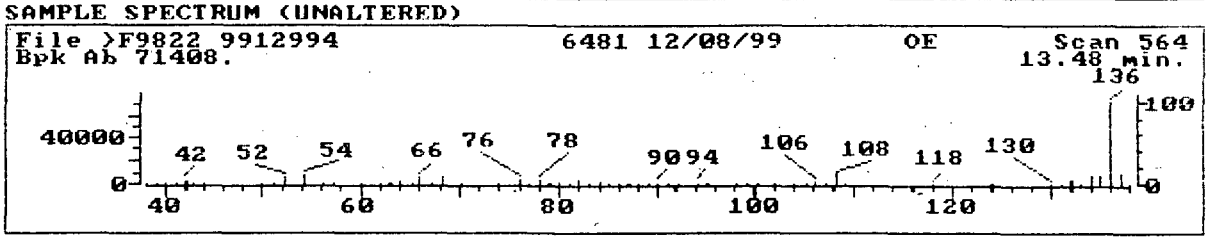
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



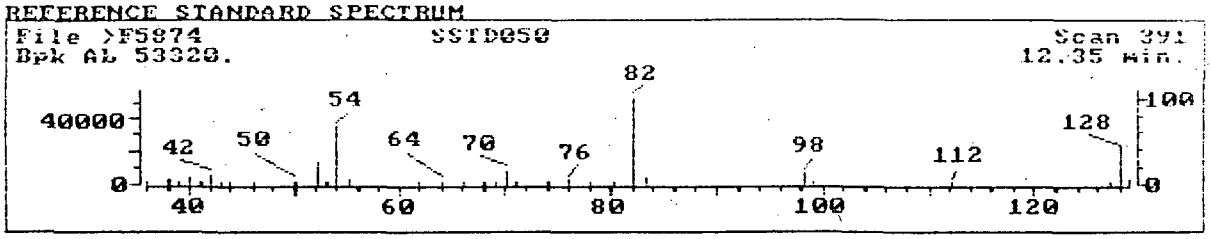
Data File: >F9822::G2
Name: 9912994
Misc: 6481 12/08/99 OE
Quant Time: 991209 20:13
Injected at: 991209 19:37
Last Qcal Time: <none>

Quant Output File: ^F9822::QT
Instrument ID: AHP5970B
DCOMP-1 BTL# 7
Quant ID File: IDF01::ME
Last Calibration: 991209 15:19

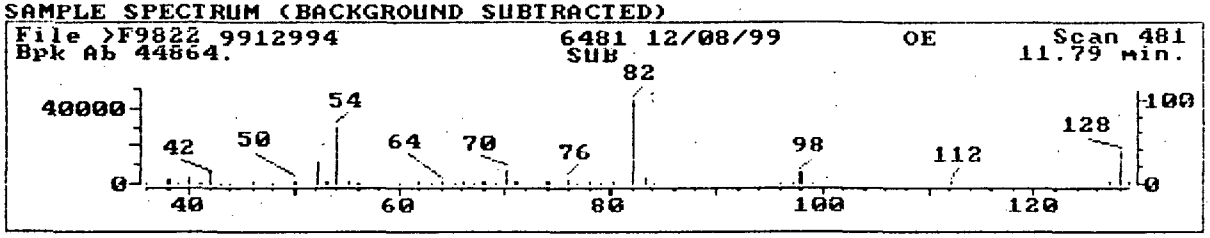
Compound No : 19 (ISTD)
Compound Name : d8-Naphthalene
Scan Number : 564
Retention Time: 13.48 min.
Quant Ion : 136.0
Area : 148379
Concentration : 40.00 ug/l
q-value : 96

282

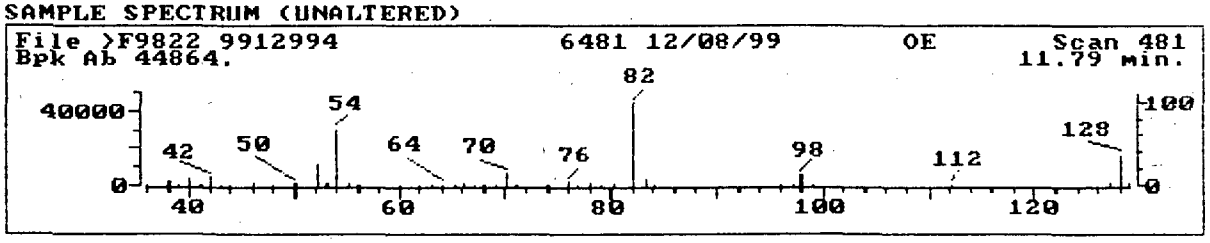
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



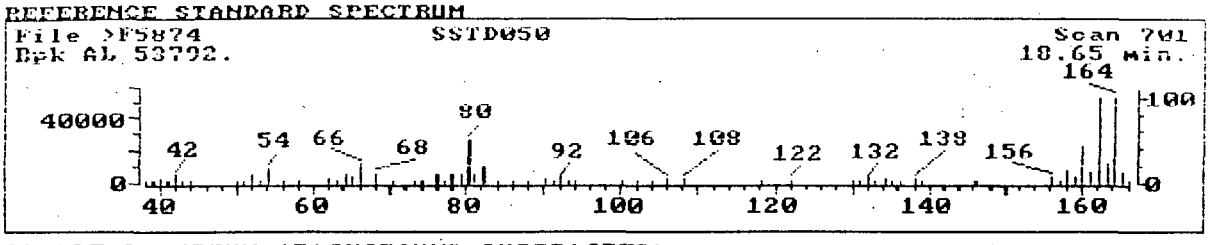
Data File: >F9822::G2
Name: 9912994
Misc: 6481 12/08/99 OE
Quant Time: 991209 20:13
Injected at: 991209 19:37
Last Qcal Time: <none>

Quant Output File: ^F9822::QT
Instrument ID: AHP5970B
DCOMP-1 BTL# 7
Quant ID File: IDF01::ME
Last Calibration: 991209 15:19

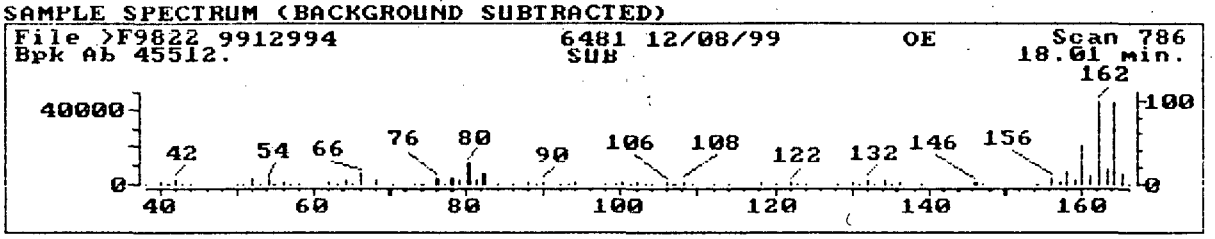
Compound No : 20
Compound Name : Nitrobenzene-d5
Scan Number : 481
Retention Time: 11.79 min.
Quant Ion : 82.0
Area : 109626
Concentration : 64.12 ug/l
q-value : 90

283

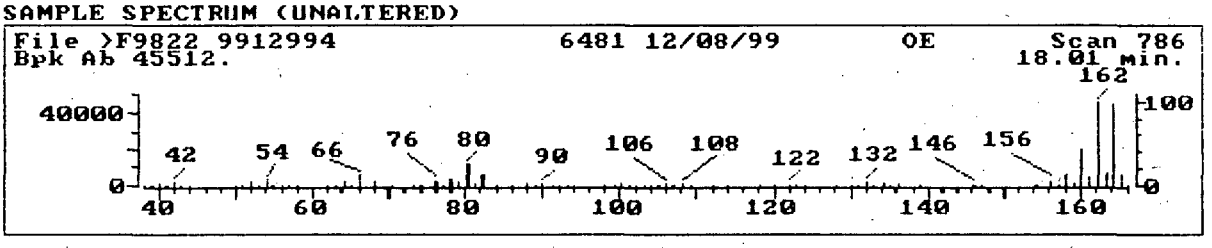
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



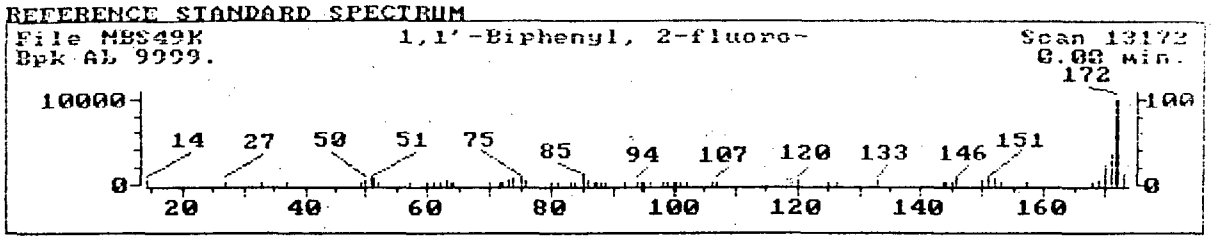
Data File: >F9822::G2
Name: 9912994
Misc: 6481 12/08/99 OE
Quant Time: 991209 20:13
Injected at: 991209 19:37
Last Qcal Time: <none>

Quant Output File: ^F9822::QT
Instrument ID: AHP5970B
DCOMP-1 BTL# 7
Quant ID File: IDF01::ME
Last Calibration: 991209 15:19

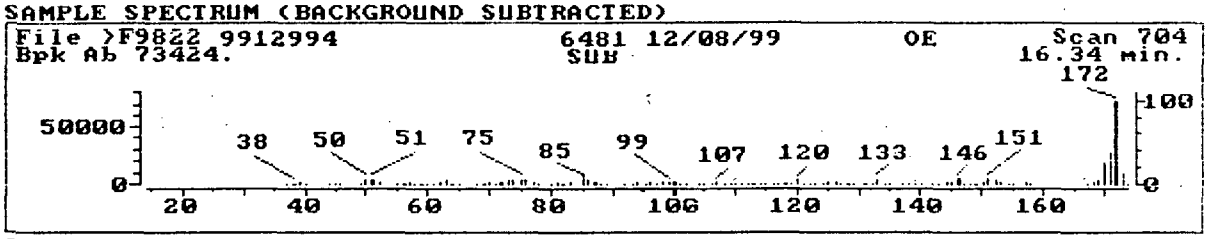
Compound No : 34 (ISTD)
Compound Name : d10-Acenaphthene
Scan Number : 786
Retention Time: 18.01 min.
Quant Ion : 164.0
Area : 94899
Concentration : 40.00 ug/l
q-value : 96

284

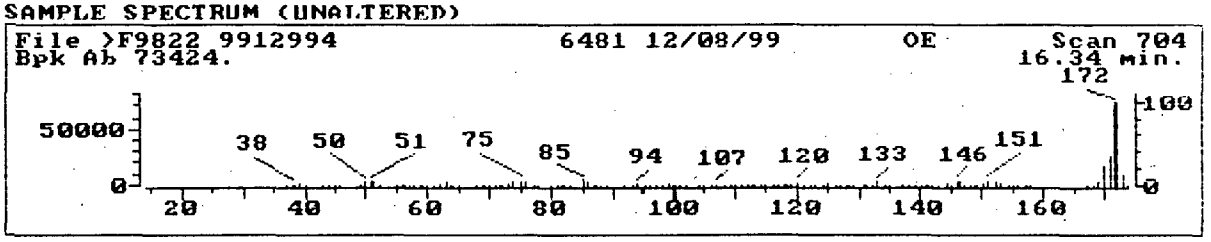
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

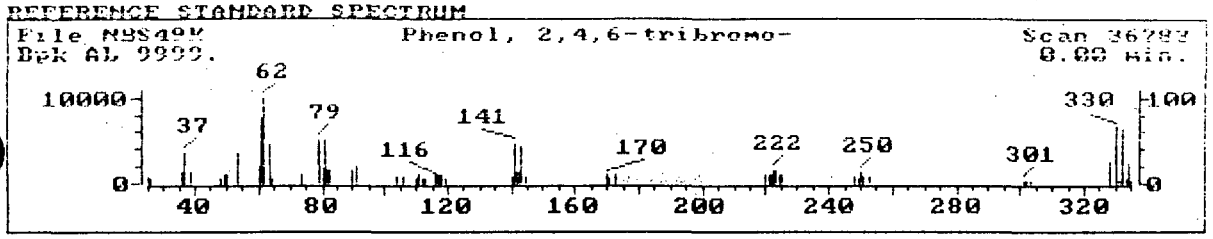


Data File: >F9822::G2
Quant Output File: ^F9822::QT
Name: 9912994
Instrument ID: AHP5970B
Misc: 6481 12/08/99 OE
DCOMP-1 BTL# 7
Quant Time: 991209 20:13
Quant ID File: IDF01::ME
Injected at: 991209 19:37
Last Calibration: 991209 15:19
Last Qcal Time: <none>

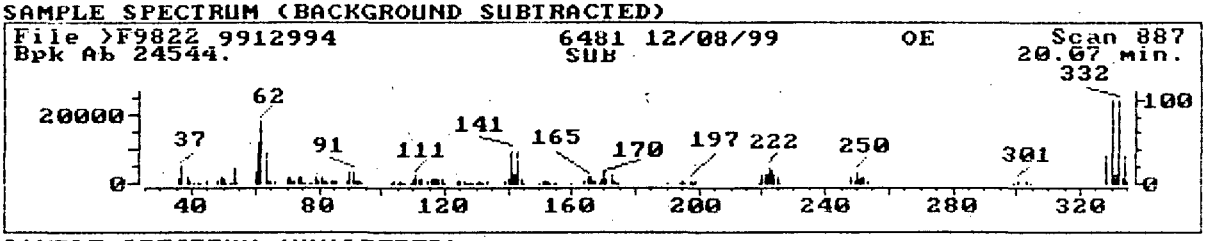
Compound No : 39
Compound Name : 2-Fluorobiphenyl
Scan Number : 704
Retention Time: 16.34 min.
Quant Ion : 172.0
Area : 172349
Concentration : 65.93 ug/l
q-value : 95

285

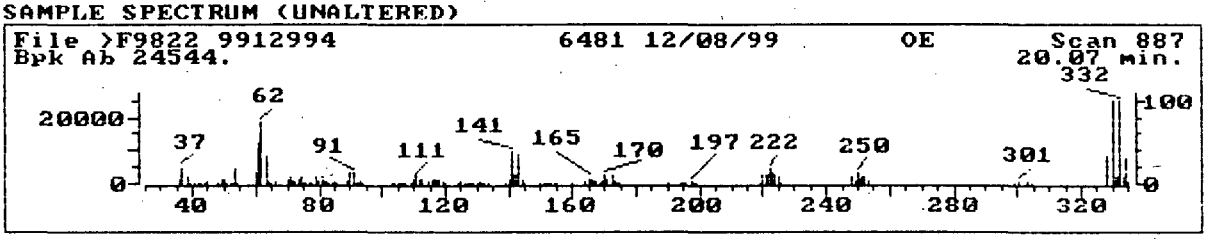
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



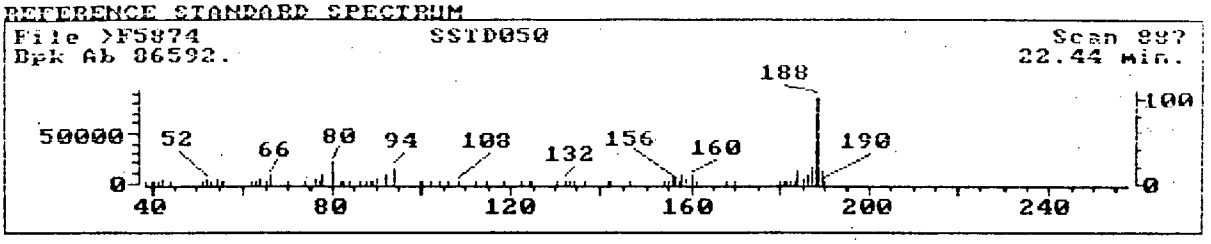
Data File: >F9822::G2
Name: 9912994
Misc: 6481 12/08/99 OE
Quant Time: 991209 20:13
Injected at: 991209 19:37
Last Qcal Time: <none>

Quant Output File: ^F9822::QT
Instrument ID: AHP5970B
DCOMP-1 BTL# 7
Quant ID File: IDF01::ME
Last Calibration: 991209 15:19

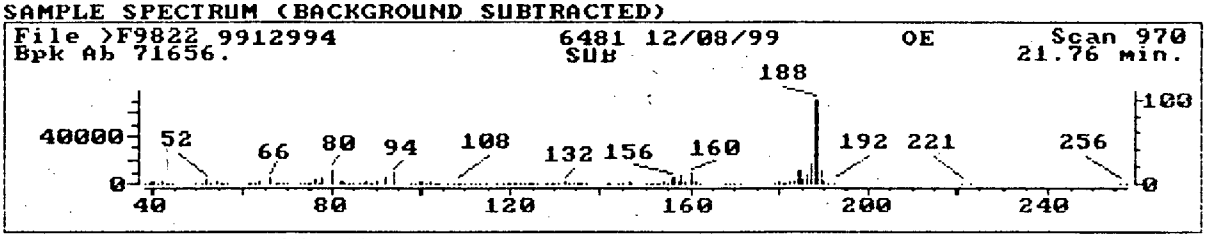
Compound No : 54
Compound Name : 2,4,6-Tribromophenol
Scan Number : 887
Retention Time: 20.07 min.
Quant Ion : 329.8
Area : 68035
Concentration : 149.15 ug/l
q-value : 99

286

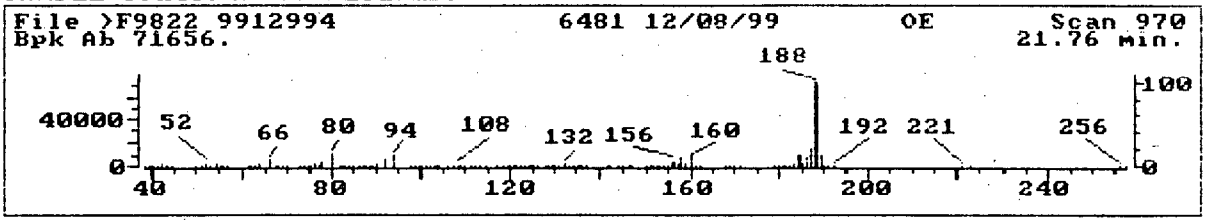
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



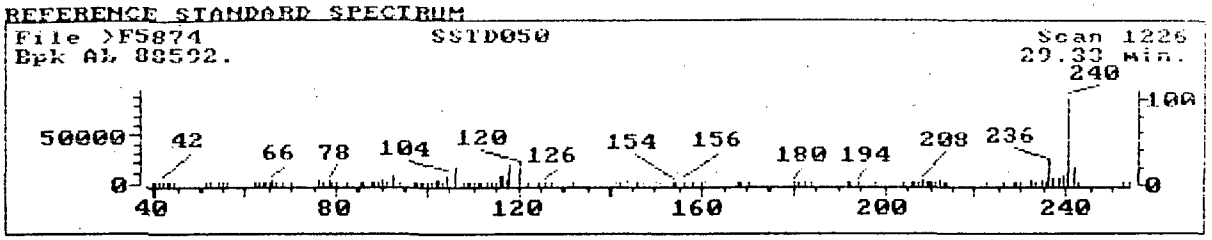
Data File: >F9822::G2
Name: 9912994
Misc: 6481 12/08/99 OE
Quant Time: 991209 20:13
Injected at: 991209 19:37
Last Qcal Time: <none>

Quant Output File: ^F9822::QT
Instrument ID: AHP5970B
DCOMP-1 BTL# 7
Quant ID File: IDF01::ME
Last Calibration: 991209 15:19

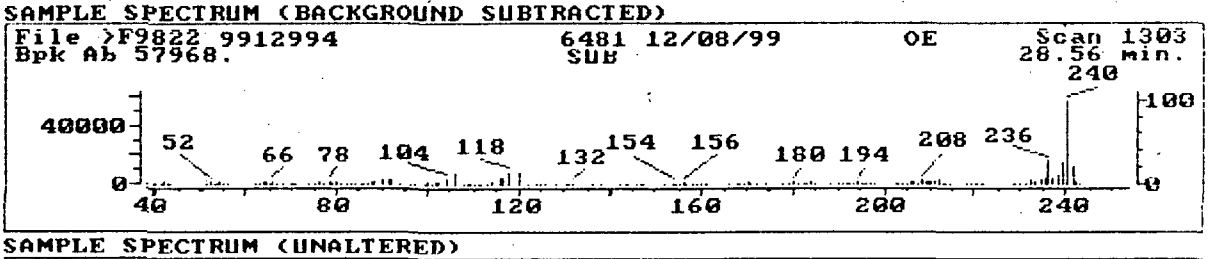
Compound No : 55 (ISTD)
Compound Name : d10-Phenanthrene
Scan Number : 970
Retention Time: 21.76 min.
Quant Ion : 188.0
Area : 173996
Concentration : 40.00 ug/l
q-value : 100

287

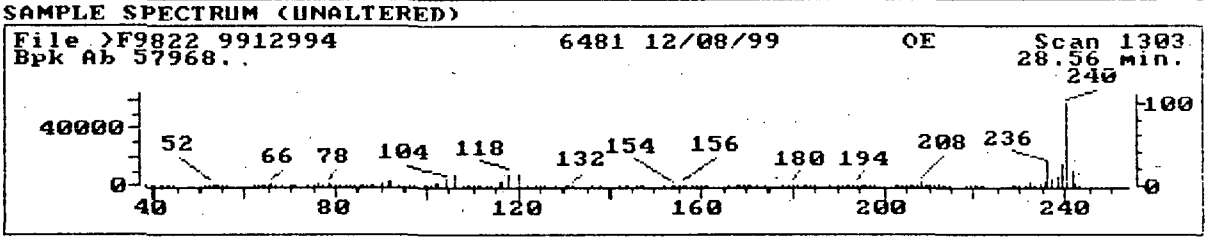
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



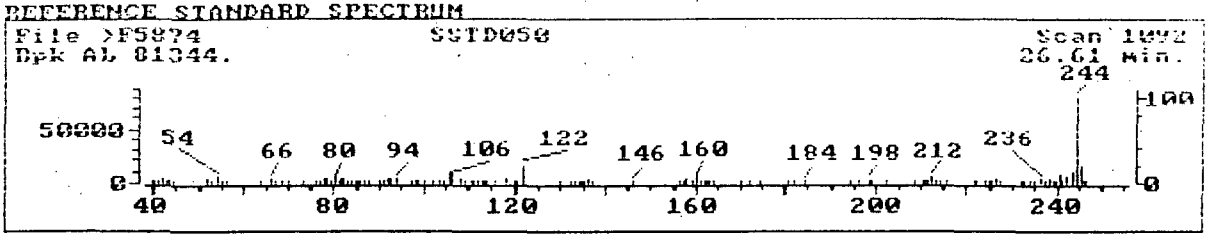
Data File: >F9822::G2
Name: 9912994
Misc: 6481 12/08/99 OE
Quant Time: 991209 20:13
Injected at: 991209 19:37
Last Qcal Time: <none>

Quant Output File: ^F9822::QT
Instrument ID: AHP5970B
DCOMP-1 BTL# 7
Quant ID File: IDF01::ME
Last Calibration: 991209 15:19

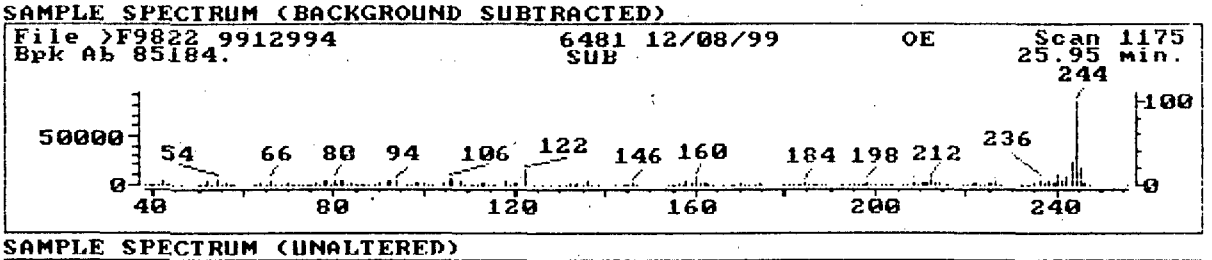
Compound No : 67 (ISTD)
Compound Name : d12-Chrysene
Scan Number : 1303
Retention Time: 28.56 min.
Quant Ion : 240.0
Area : 169968
Concentration : 40.00 ug/l
q-value : 100

288

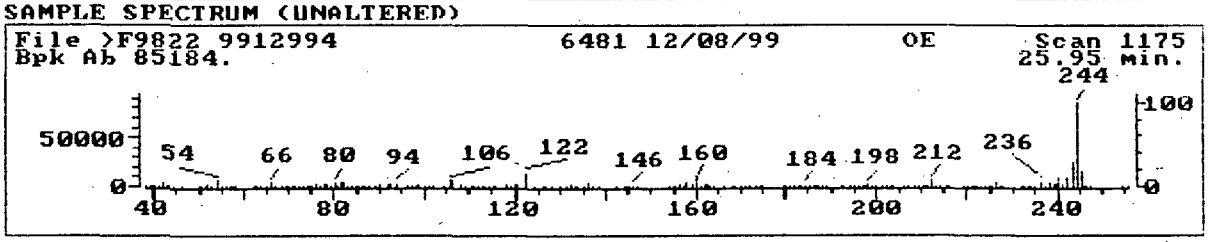
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



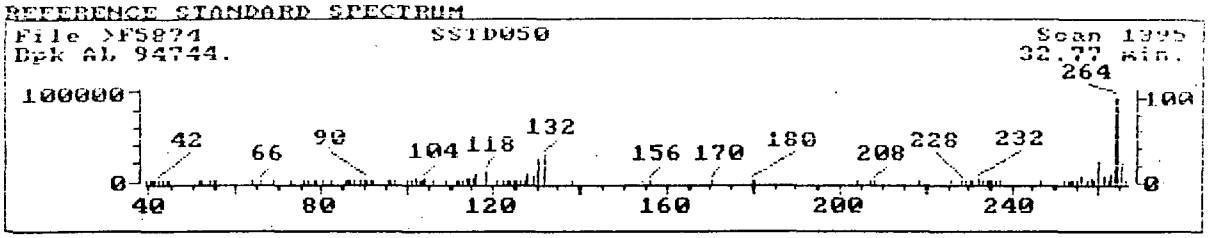
Data File: >F9822::G2
Name: 9912994
Misc: 6481 12/08/99 OE
Quant Time: 991209 20:13
Injected at: 991209 19:37
Last Qcal Time: <none>

Quant Output File: ^F9822::QT
Instrument ID: AHP5970B
DCOMP-1 BTL# 7
Quant ID File: IDF01::ME
Last Calibration: 991209 15:19

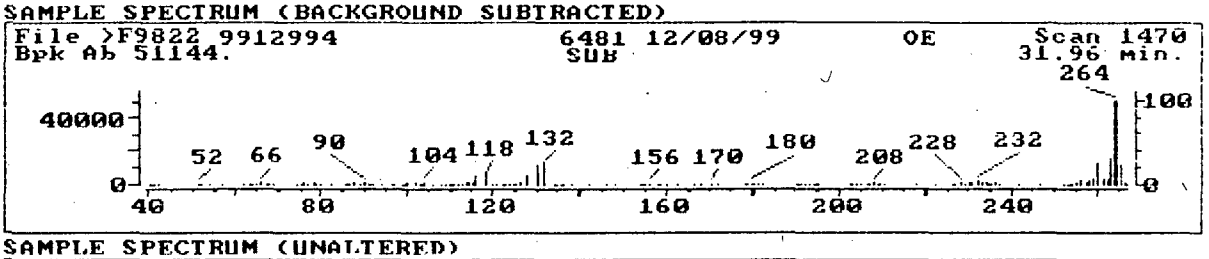
Compound No : 70
Compound Name : Terphenyl-d14
Scan Number : 1175
Retention Time: 25.95 min.
Quant Ion : 244.0
Area : 280388
Concentration : 77.86 ug/l
q-value : 93

289

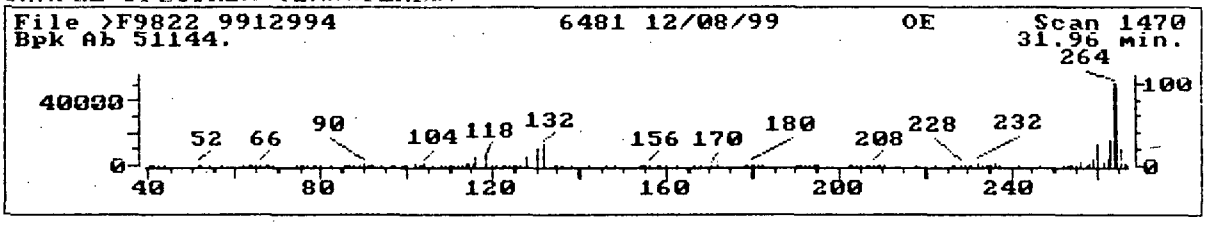
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >F9822::G2
Name: 9912994
Misc: 6481 12/08/99 OE
Quant Time: 991209 20:13
Injected at: 991209 19:37
Last Qcal Time: <none>

Quant Output File: ^F9822::QT
Instrument ID: AHP5970B
DCOMP-1 BTL# 7
Quant ID File: IDF01::ME
Last Calibration: 991209 15:19

Compound No : 76 (ISTD)
Compound Name : d12-Perylene
Scan Number : 1470
Retention Time: 31.96 min.
Quant Ion : 264.0
Area : 171462
Concentration : 40.00 ug/l
q-value : 100

290

Operator ID: DANIEL Quant Rev: 7 Quant Time: 991209 23:15
Output File: ^F9826::QT Injected at: 991209 22:57
Data File: >F9826::G2 Dilution Factor: 1.00000
Name: 9912995 Instrument ID: AHP5970B
Misc: 6481 12/08/99 OE DCOMP-2 BTL#11

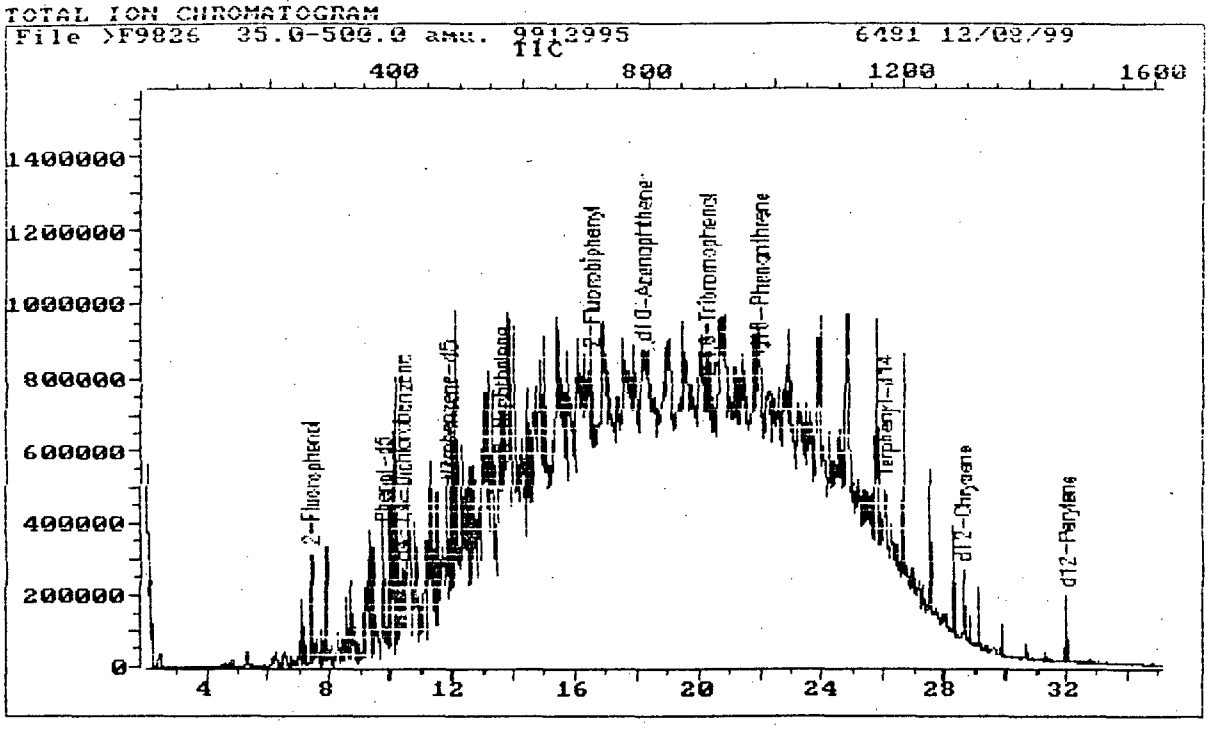
ID File: IDF01::ME
Title: Accredited Laboratories Base/Neutral/Acid Identity File
Last Calibration: 991209 15:19 Last Qcal Time: <none>

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*d4-1,4-Dichlorobenzene	10.34	409	35171	40.00	ug/l	86
4)	2-Fluorophenol	7.37	264	181432	147.27	ug/l	100
6)	Phenol-d5	9.74	380	273470	148.47	ug/l	89
19)	*d8-Naphthalene	13.57	567	98934	40.00	ug/l	85
20)	Nitrobenzene-d5	11.83	482	133732	117.32	ug/l	89
34)	*d10-Acenaphthene	18.17	791	20586	40.00	ug/l	91
39)	2-Fluorobiphenyl	16.47	708	92642	163.37	ug/l	96
54)	2,4,6-Tribromophenol	20.25	892	9364	94.63	ug/l	99
55)	*d10-Phenanthrene	21.96	975	68109	40.00	ug/l	100
67)	*d12-Chrysene	28.60	1297	184605	40.00	ug/l	100
70)	Terphenyl-d14	26.04	1173	235217	60.14	ug/l	95
76)	*d12-Perylene	31.97	1461	184258	40.00	ug/l	100

* Compound is ISTD

291

TOTAL ION CHROMATOGRAM



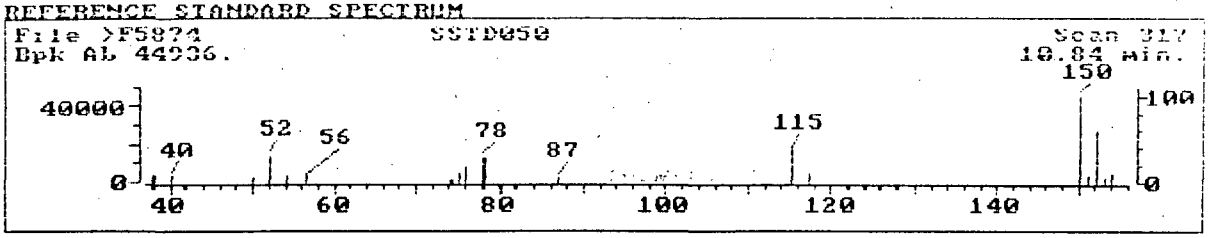
Data File: >F9826::G2 Quant Output File: ^F9826::QT
Name: 9912995 Instrument ID: AHP5970B
Misc: 6481 12/08/99 OE DCOMP-2 BTL#11

Id File: IDF01::ME
Title: Accredited Laboratories Base/Neutral/Acid Identity File
Last Calibration: 991209 15:19 Last Qcal Time: <none>

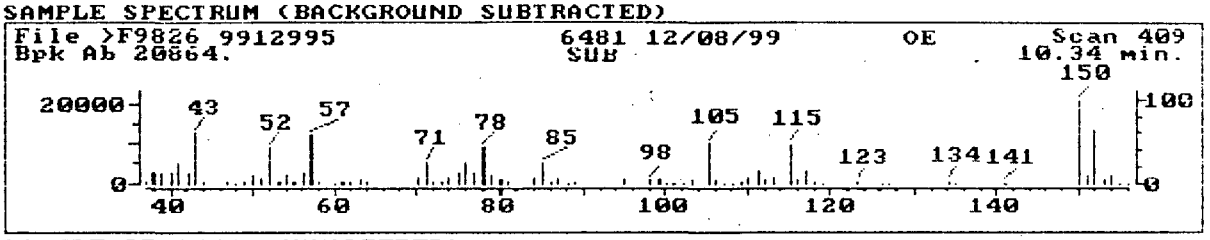
Operator ID: DANIEL
Quant Time : 991209 23:13
Injected at: 991209 22:37

292

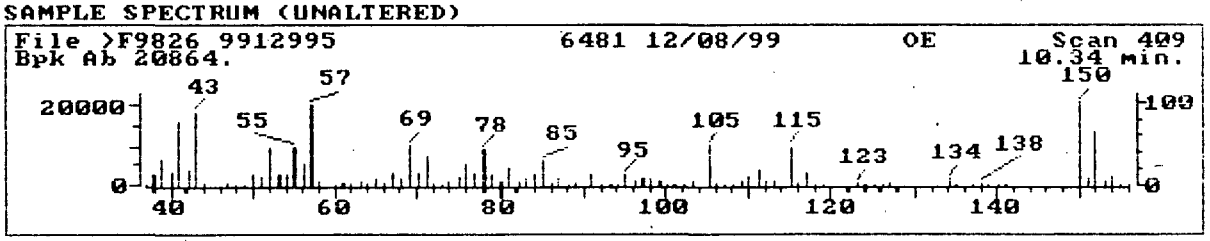
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

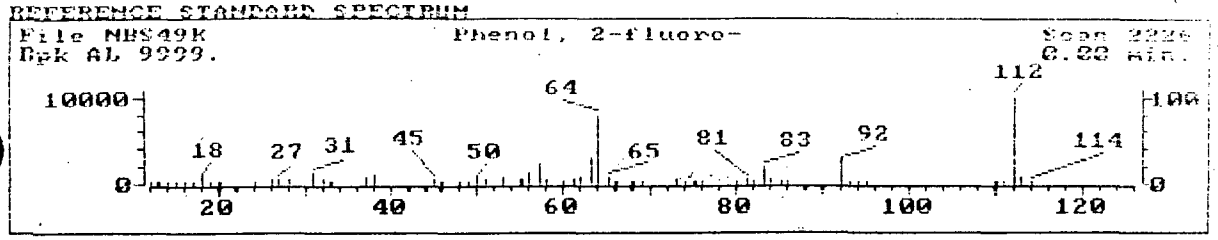


Data File: >F9826::G2 Quant Output File: ^F9826::QT
Name: 9912995 Instrument ID: AHP5970B
Misc: 6481 12/08/99 OE DCOMP-2 BTL#11
Quant Time: 991209 23:13 Quant ID File: IDF01::ME
Injected at: 991209 22:37 Last Calibration: 991209 15:19
Last Qcal Time: <none>

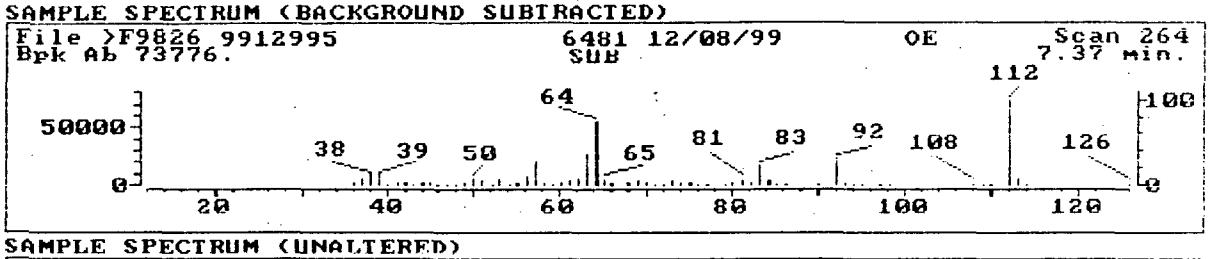
Compound No : 1 (ISTD)
Compound Name : d4-1,4-Dichlorobenzene
Scan Number : 409
Retention Time: 10.34 min.
Quant Ion : 152.0
Area : 35171
Concentration : 40.00 ug/l
q-value : 86

293

REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



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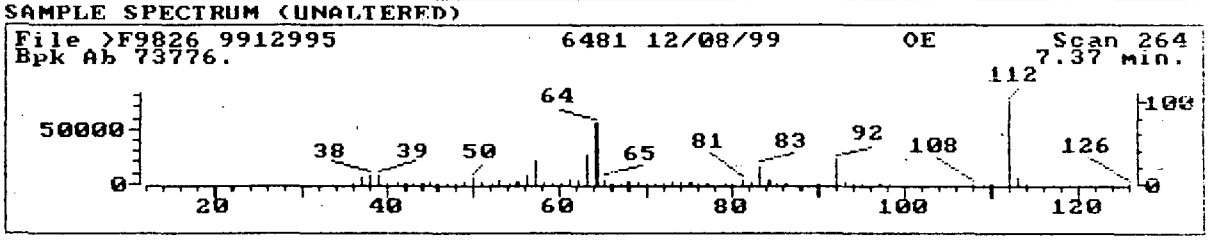


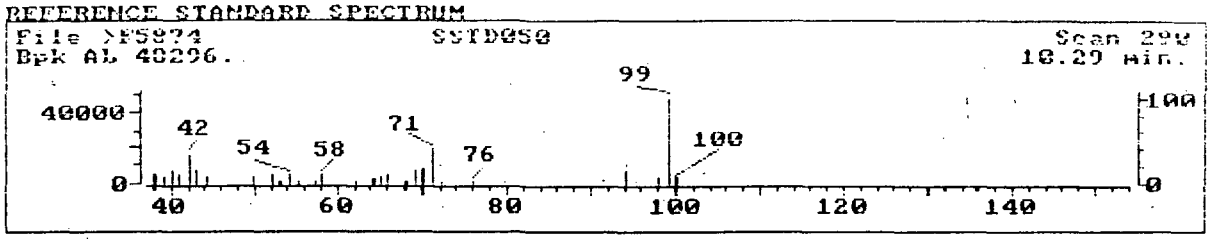
Data File: >F9826::G2
Name: 9912995
Misc: 6481 12/08/99 OE
Quant Time: 991209 23:13
Injected at: 991209 22:37
Last Qcal Time: <none>

Quant Output File: ^F9826::QI
Instrument ID: AHP5970B
DCOMP-2 BTL#11
Quant ID File: IDF01::ME
Last Calibration: 991209 15:19

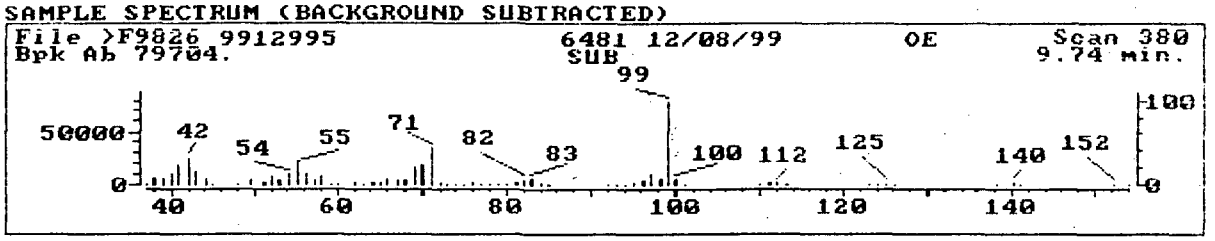
Compound No : 4
Compound Name : 2-Fluorophenol
Scan Number : 264
Retention Time: 7.37 min.
Quant Ion : 112.0
Area : 181432
Concentration : 147.27 ug/l
q-value : 100

394

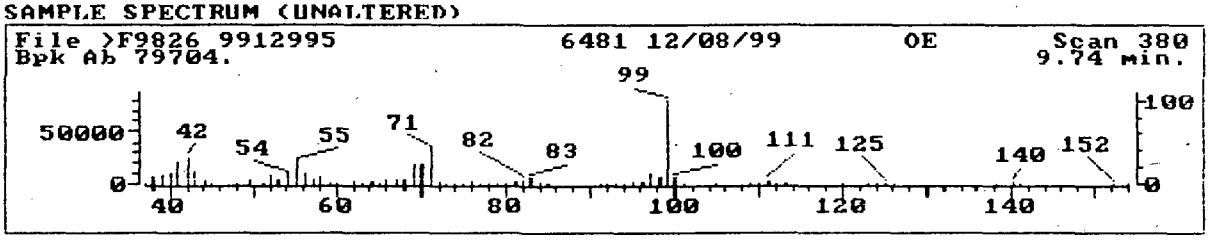
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



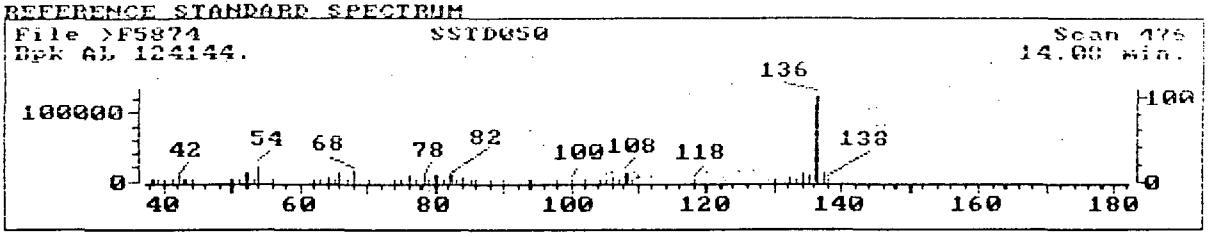
Data File: >F9826::G2
Name: 9912995
Misc: 6481 12/08/99 OE
Quant Time: 991209 23:13
Injected at: 991209 22:37
Last Qcal Time: <none>

Quant Output File: ^F9826::QT
Instrument ID: AHP5970B
DCOMP-2 BTL#11
Quant ID File: IDF01::ME
Last Calibration: 991209 15:19

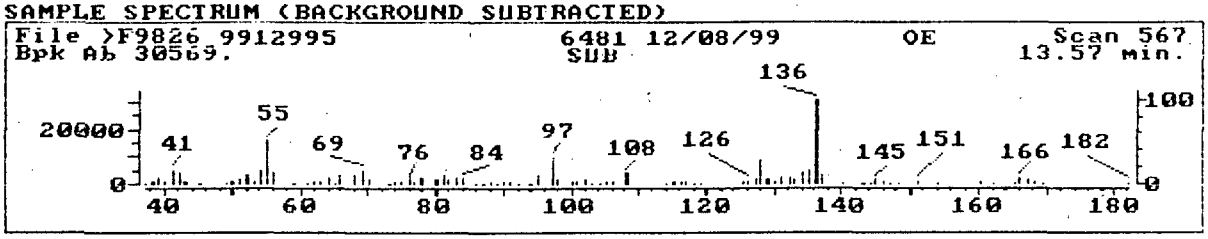
Compound No : 6
Compound Name : Phenol-d5
Scan Number : 380
Retention Time: 9.74 min.
Quant Ion : 99.0
Area : 273470
Concentration : 148.47 ug/l
q-value : 89

295

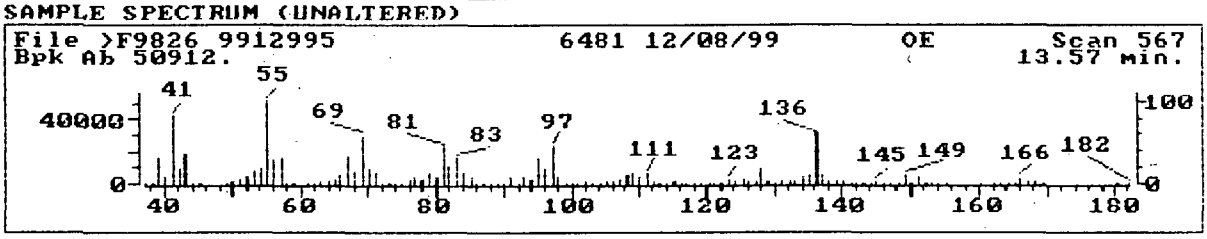
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



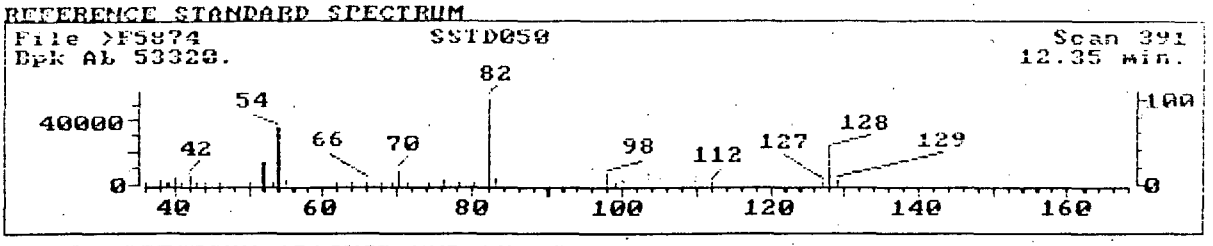
Data File: >F9826::G2
Name: 9912995
Misc: 6481 12/08/99 OE
Quant Time: 991209 23:13
Injected at: 991209 22:37
Last Qcal Time: <none>

Quant Output File: ^F9826::QT
Instrument ID: AHP5970B
DCOMP-2 BTL#11
Quant ID File: IDF01::ME
Last Calibration: 991209 15:19

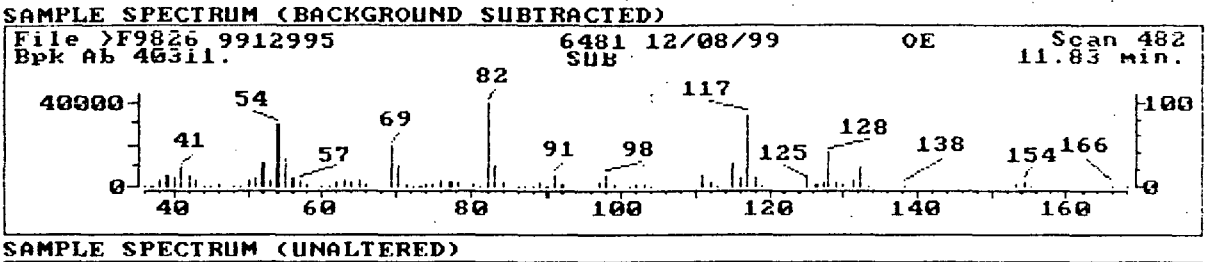
Compound No : 19 (ISTD)
Compound Name : d8-Naphthalene
Scan Number : 567
Retention Time: 13.57 min.
Quant Ion : 136.0
Area : 98934
Concentration : 40.00 ug/l
q-value : 85

896

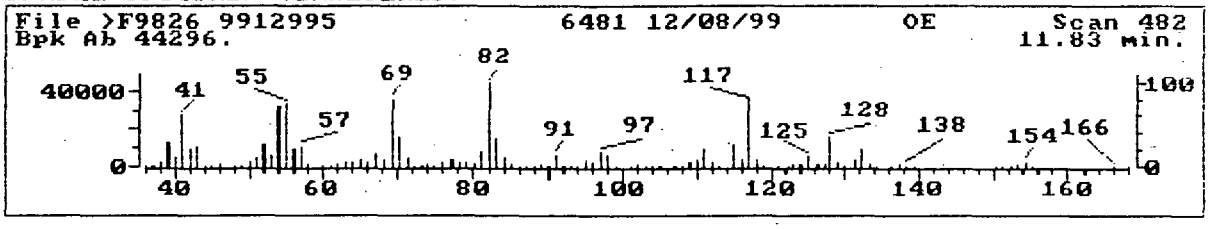
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



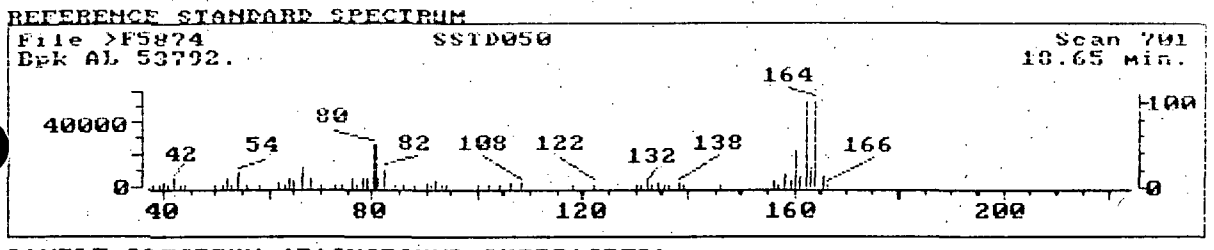
Data File: >F9826::G2
Name: 9912995
Misc: 6481 12/08/99 OE
Quant Time: 991209 23:13
Injected at: 991209 22:37
Last Qcal Time: <none>

Quant Output File: ^F9826::QT
Instrument ID: AHP5970B
DCOMP-2 BTL#11
Quant ID File: IDF01::ME
Last Calibration: 991209 15:19

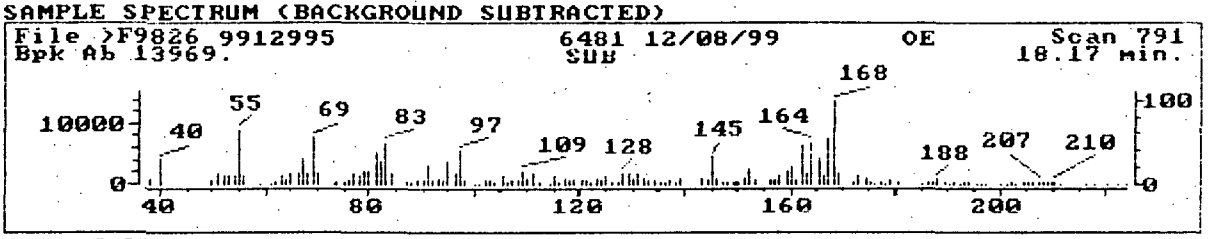
Compound No : 20
Compound Name : Nitrobenzene-d5
Scan Number : 482
Retention Time: 11.83 min.
Quant Ion : 82.0
Area : 133732
Concentration : 117.32 ug/l
q-value : 85

297

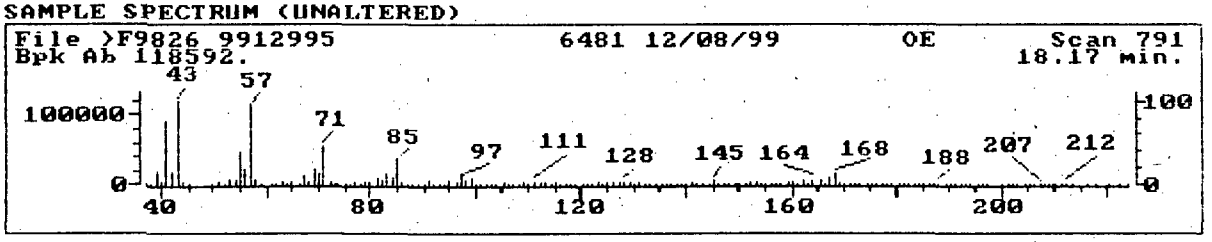
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >F9826::G2
Name: 9912995
Misc: 6481 12/08/99 OE
Quant Time: 991209 23:13
Injected at: 991209 22:37
Last Qcal Time: <none>

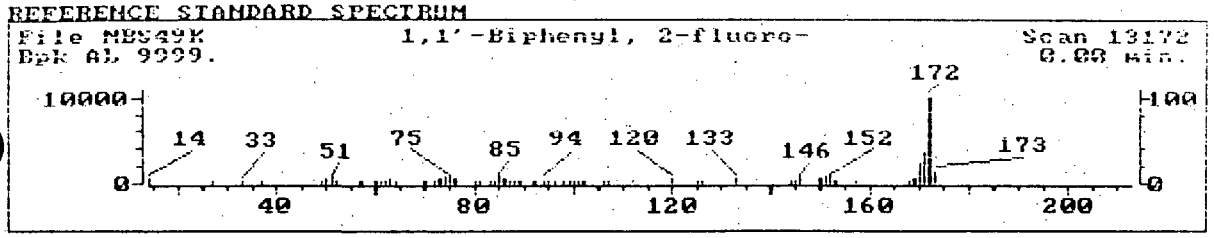
Quant Output File: ^F9826::QT
Instrument ID: AHP5970B
DCOMP-2 BTL#11
Quant ID File: IDF01::ME
Last Calibration: 991209 15:19

Compound No : 34 (ISTD)
Compound Name : d10-Acenaphthene
Scan Number : 791
Retention Time: 18.17 min.
Quant Ion : 164.0
Area : 20586
Concentration : 40.00 ug/l
q-value : 91

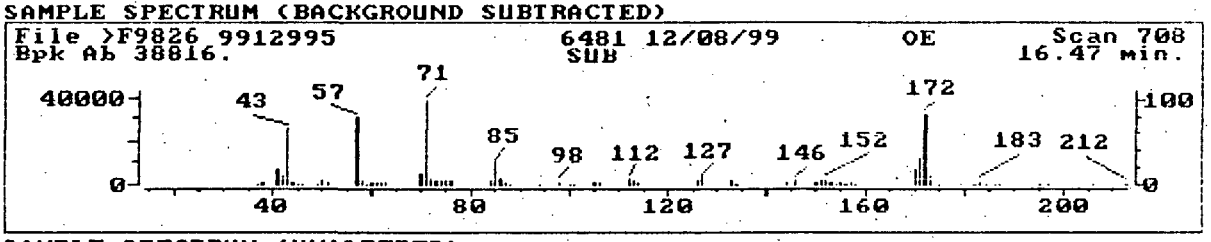
298

700396

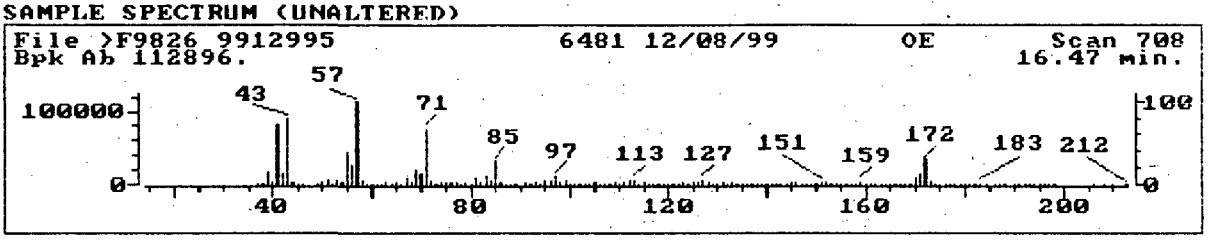
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



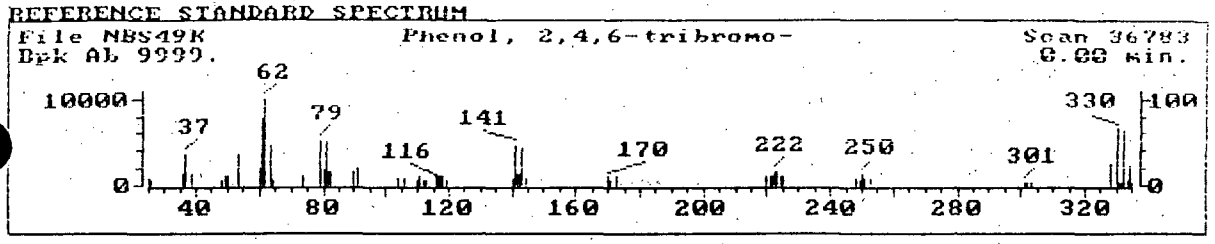
Data File: >F9826::G2
Name: 9912995
Misc: 6481 12/08/99 OE
Quant Time: 991209 23:13
Injected at: 991209 22:37
Last Qcal Time: <none>

Quant Output File: ^F9826::QT
Instrument ID: AHP5970B
DCOMP-2 BTL#11
Quant ID File: IDF01::ME
Last Calibration: 991209 15:19

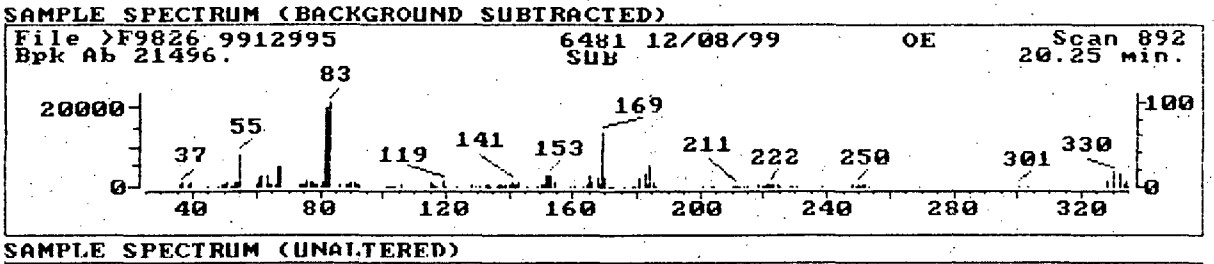
Compound No : 39
Compound Name : 2-Fluorobiphenyl
Scan Number : 708
Retention Time: 16.47 min.
Quant Ion : 172.0
Area : 92642
Concentration : 163.37 ug/l
q-value : 96

299

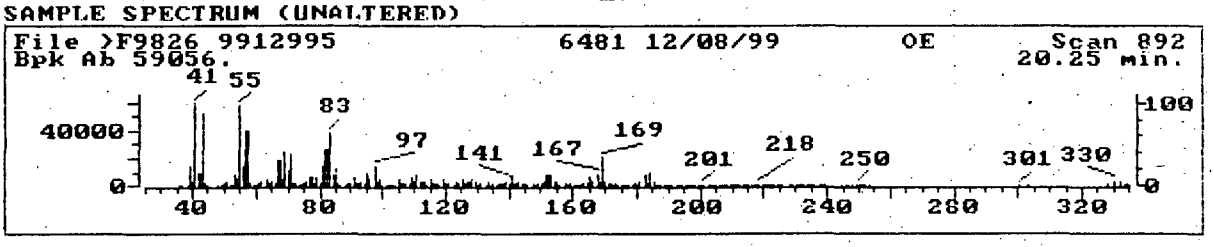
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

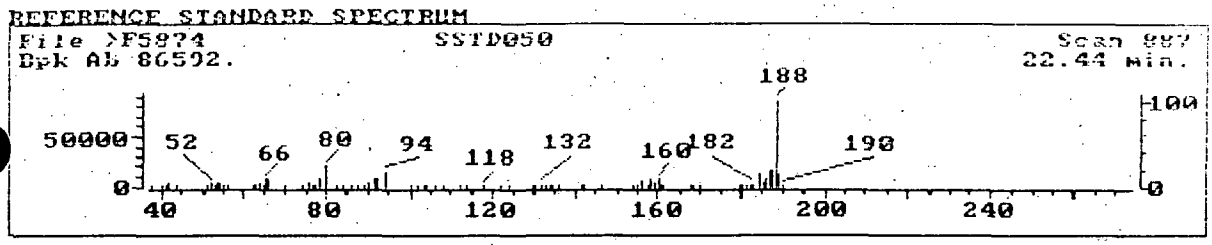


Data File: >F9826::G2
Quant Output File: ^F9826::QT
Name: 9912995
Instrument ID: AHP5970B
Misc: 6481 12/08/99 OE
DCOMP-2 BTL#11
Quant Time: 991209 23:13
Quant ID File: IDF01::ME
Injected at: 991209 22:37
Last Calibration: 991209 15:19
Last Qcal Time: <none>

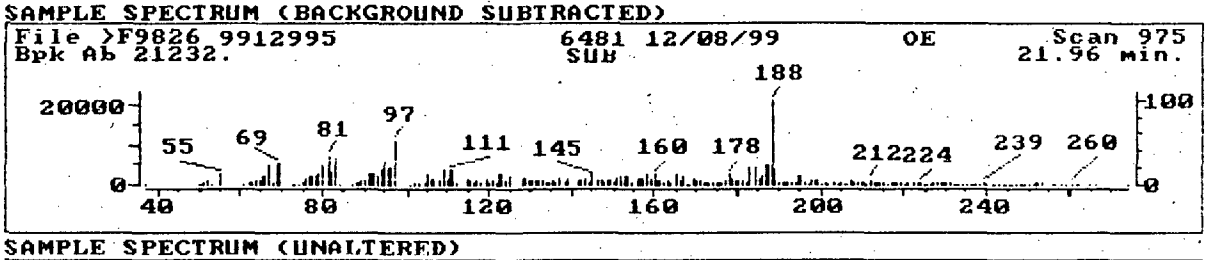
Compound No : 54
Compound Name : 2,4,6-Tribromophenol
Scan Number : 892
Retention Time: 20.25 min.
Quant Ion : 329.8
Area : 9364
Concentration : 94.63 ug/l
q-value : 99

300

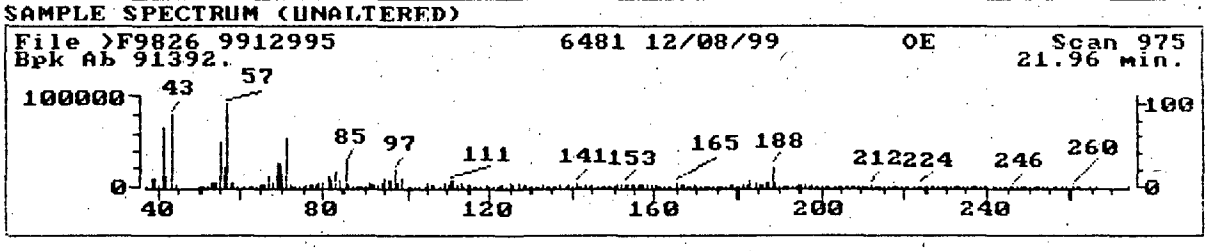
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



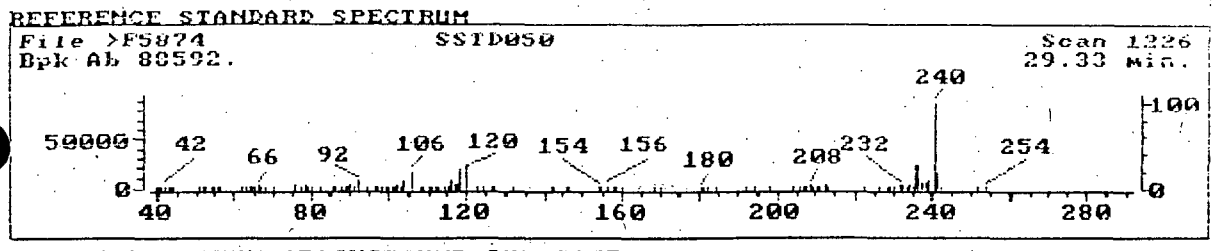
Data File: >F9826::G2
Name: 9912995
Misc: 6481 12/08/99 OE
Quant Time: 991209 23:13
Injected at: 991209 22:37
Last Qcal Time: <none>

Quant Output File: ^F9826::QT
Instrument ID: AHP5970B
DCOMP-2 BTL#11
Quant ID File: IDF01::ME
Last Calibration: 991209 15:19

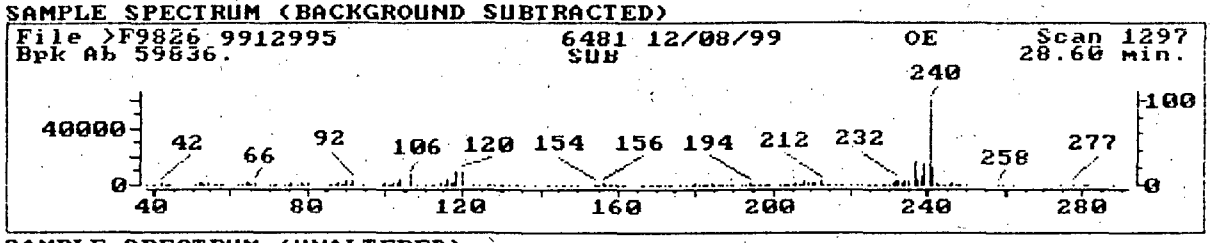
Compound No : 55 (ISTD)
Compound Name : d10-Phenanthrene
Scan Number : 975
Retention Time: 21.96 min.
Quant Ion : 188.0
Area : 68109
Concentration : 40.00 ug/l
q-value : 100

301

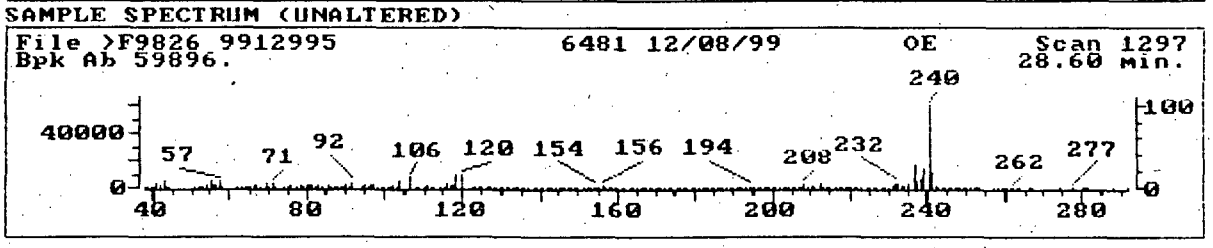
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



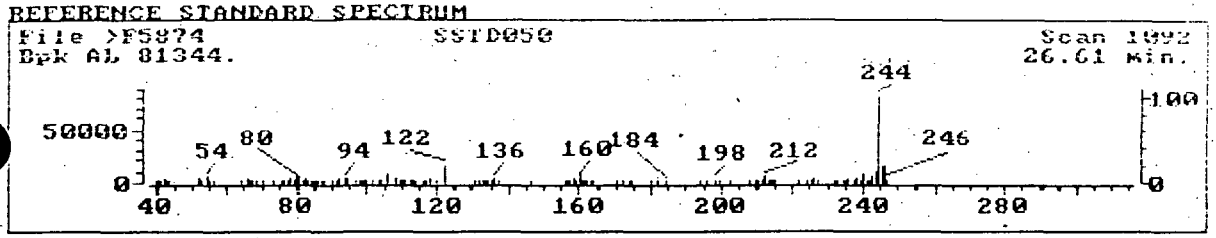
Data File: >F9826::G2
Name: 9912995
Misc: 6481 12/08/99 OE
Quant Time: 991209 23:13
Injected at: 991209 22:37
Last Qcal Time: <none>

Quant Output File: ^F9826::QT
Instrument ID: AHP5970B
DCOMP-2 BTL#11
Quant ID File: IDF01::ME
Last Calibration: 991209 15:19

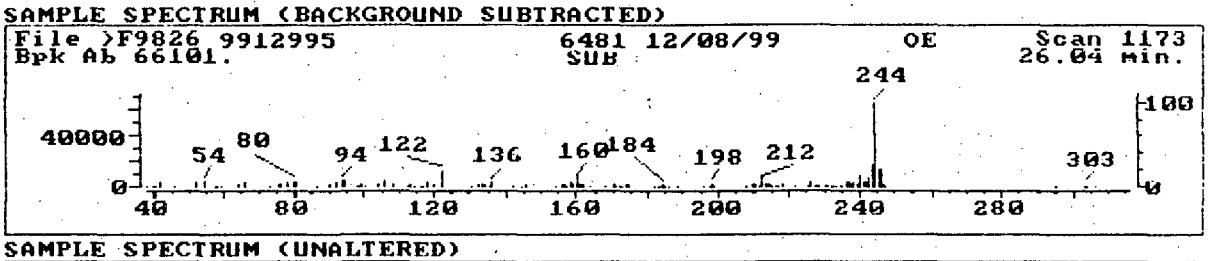
Compound No : 67 (ISTD)
Compound Name : d12-Chrysene
Scan Number : 1297
Retention Time: 28.60 min.
Quant Ion : 240.0
Area : 184605
Concentration : 40.00 ug/l
q-value : 100

303

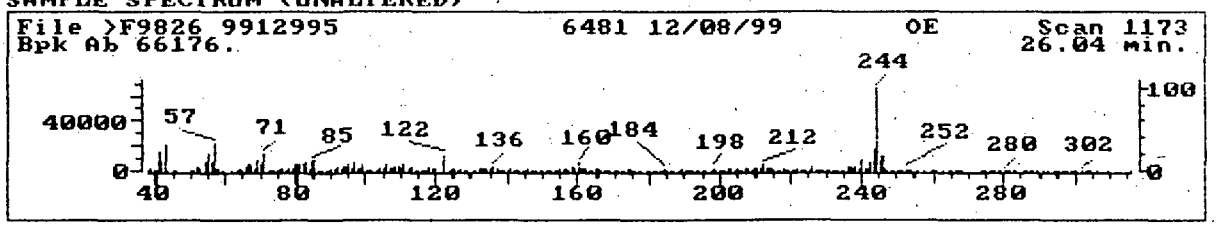
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



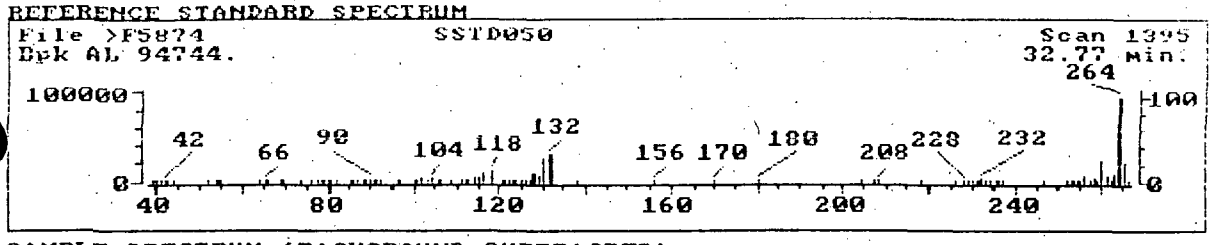
Data File: >F9826::G2
Name: 9912995
Misc: 6481 12/08/99 OE
Quant Time: 991209 23:13
Injected at: 991209 22:37
Last Qcal Time: <none>

Quant Output File: ^F9826::QT
Instrument ID: AHP5970B
DCOMP-2 BTL#11
Quant ID File: IDF01::ME
Last Calibration: 991209 15:19

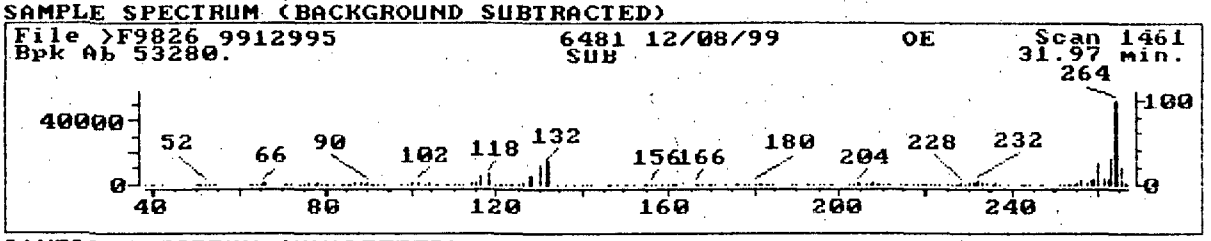
Compound No : 70
Compound Name : Terphenyl-d14
Scan Number : 1173
Retention Time: 26.04 min.
Quant Ion : 244.0
Area : 235217
Concentration : 60.14 ug/l
q-value : 95

303

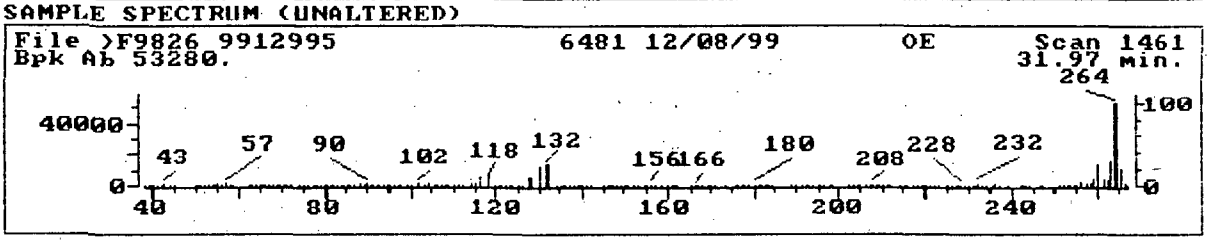
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >F9826::G2
Name: 9912995
Misc: 6481 12/08/99 OE
Quant Time: 991209 23:13
Injected at: 991209 22:37
Last Qcal Time: <none>

Quant Output File: ^F9826::QT
Instrument ID: AHP5970B
DCOMP-2 BTL#11
Quant ID File: IDF01::ME
Last Calibration: 991209 15:19

Compound No : 76 (ISTD)
Compound Name : d12-Perylene
Scan Number : 1461
Retention Time: 31.97 min.
Quant Ion : 264.0
Area : 184258
Concentration : 40.00 ug/l
q-value : 100

304

700402

QUANT REPORT

Operator ID: DANIEL Quant Rev: 7 Quant Time: 991210 14:01
Output File: ^F9832::QT Injected at: 991210 13:25
Data File: >F9832::F1 Dilution Factor: 1.00000
Name: 9912995DL Instrument ID: AHP5970B
Misc: 6481 12/08/99 OE DCOMP-2 BTL# 1

ID File: IDF01::ME
Title: Accredited Laboratories Base/Neutral/Acid Identity File
Last Calibration: 991209 15:19 Last Qcal Time: <none>

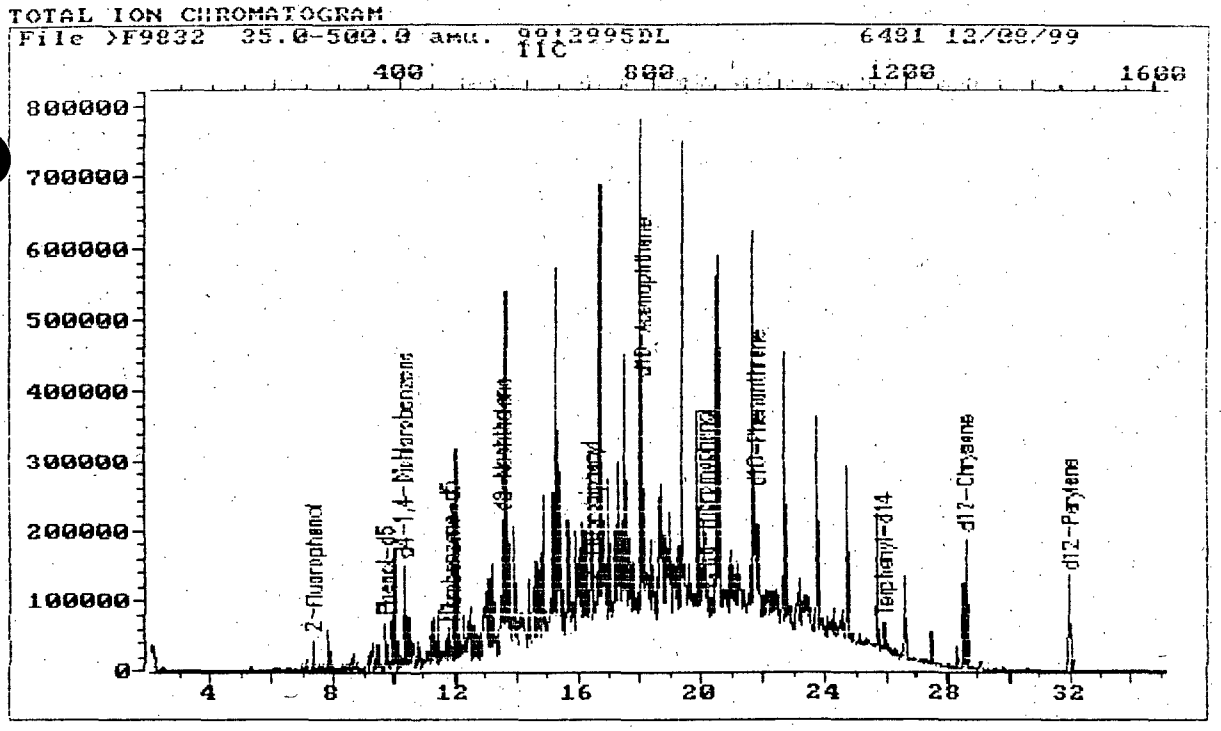
	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*d4-1,4-Dichlorobenzene	10.28	406	34602	40.00	ug/l	93
4)	2-Fluorophenol	7.32	261	19849	16.38	ug/l	100
6)	Phenol-d5	9.69	377	28131	15.52	ug/l	88
19)	*d8-Naphthalene	13.49	563	145629	40.00	ug/l	95
20)	Nitrobenzene-d5	11.77	479	13101	7.81	ug/l	89
34)	*d10-Acenaphthene	18.02	784	74982	40.00	ug/l	97
39)	2-Fluorobiphenyl	16.33	702	26139	12.66	ug/l	95
54)	2,4,6-Tribromophenol	20.05	883	498M	1.38	ug/l	
55)	*d10-Phenanthrene	21.76	966	157748	40.00	ug/l	100
67)	*d12-Chrysene	28.55	1297	154138	40.00	ug/l	100
70)	Terphenyl-d14	25.89	1167	31606	9.68	ug/l	90
76)	*d12-Perylene	31.93	1463	139753	40.00	ug/l	100

* Compound is ISTD

305

700403

TOTAL ION CHROMATOGRAM



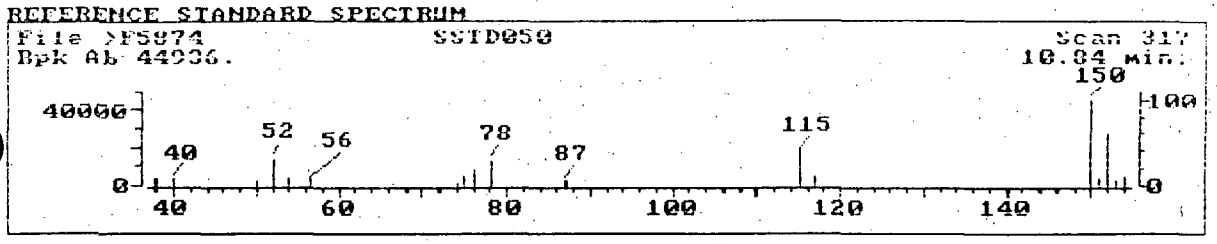
Data File: >F9832::F1 Quant Output File: ^F9832::QT
Name: 9912995DL Instrument ID: AHP5970B
Misc: 6481 12/08/99 OE DCOMP-2 BTL# 1

Id File: IDF01::ME
Title: Accredited Laboratories Base/Neutral/Acid Identity File
Last Calibration: 991209 15:19 Last Qcal Time: <none>

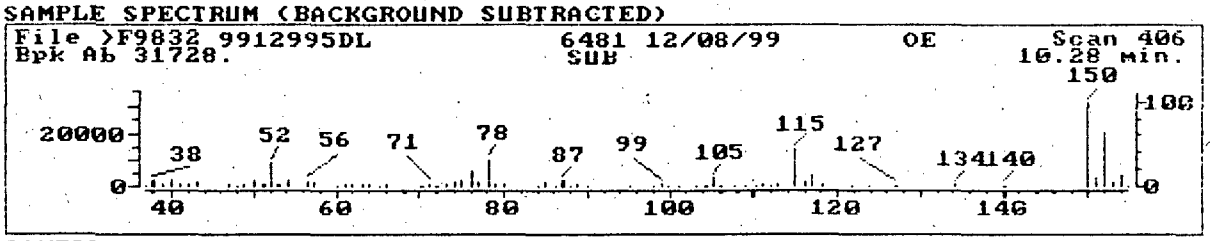
Operator ID: DANIEL
Quant Time : 991210 14:01
Injected at: 991210 13:25

306

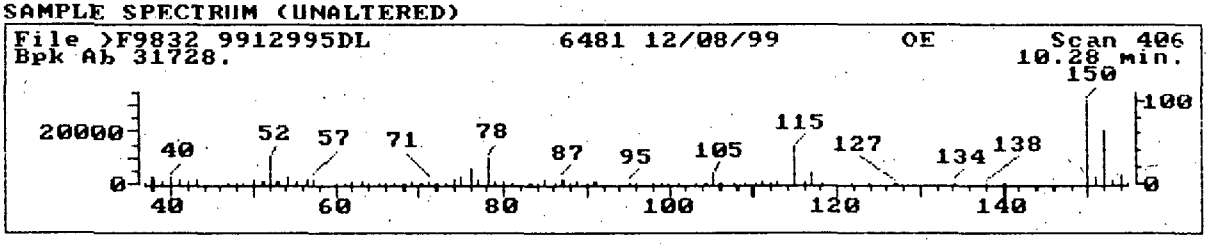
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



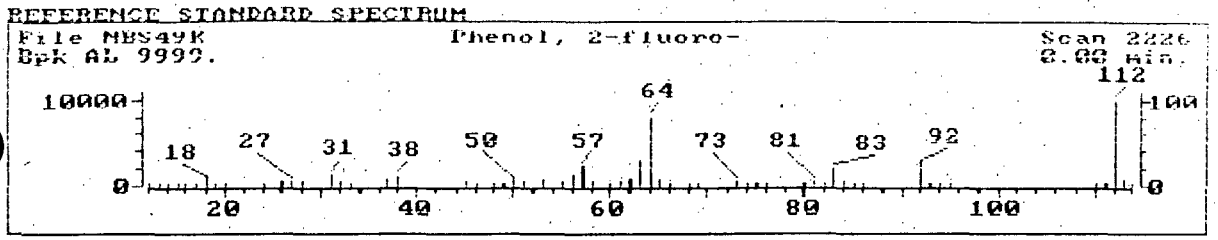
Data File: >F9832::F1 Quant Output File: ^F9832::QT
Name: 9912995DL Instrument ID: AHP5970B
Misc: 6481 12/08/99 OE DCOMP-2 BTL# 1
Quant Time: 991210 14:01 Quant ID File: IDF01::ME
Injected at: 991210 13:25 Last Calibration: 991209 15:19
Last Qcal Time: <none>

Compound No : 1 (ISTD)
Compound Name : d4-1,4-Dichlorobenzene
Scan Number : 406
Retention Time: 10.28 min.
Quant Ion : 152.0
Area : 34602
Concentration : 40.00 ug/l
q-value : 93

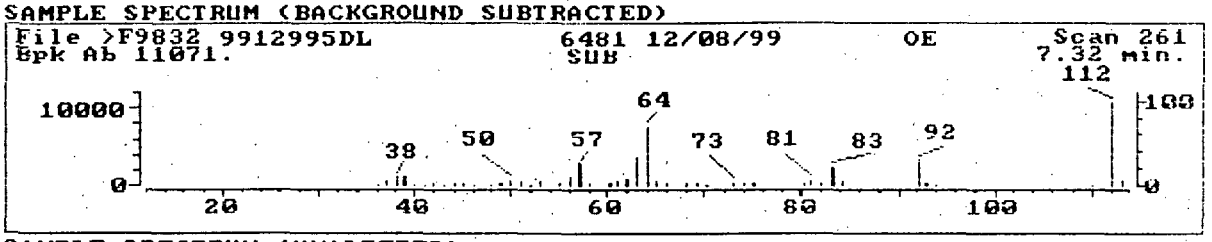
307

700405

REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



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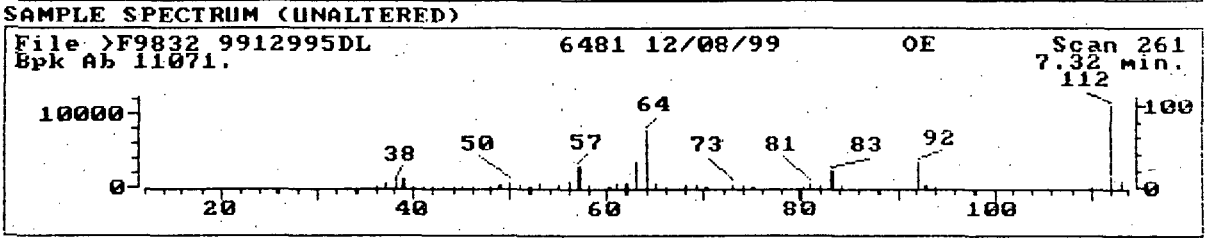


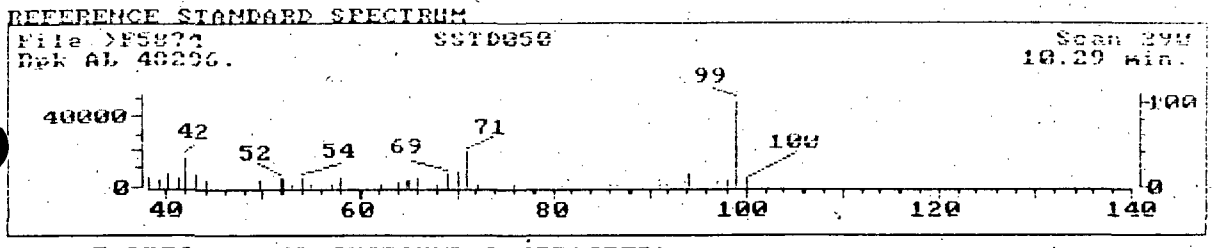
Data File: >F9832::F1
Name: 9912995DL
Misc: 6481 12/08/99 OE
Quant Time: 991210 14:01
Injected at: 991210 13:25
Last Qcal Time: <none>

Quant Output File: ^F9832::QT
Instrument ID: AHP5970B
DCOMP-2 BTL# 1
Quant ID File: IDF01::ME
Last Calibration: 991209 15:19

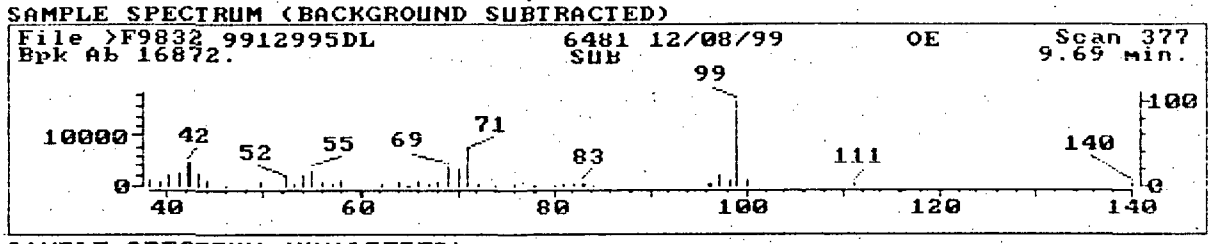
Compound No : 4
Compound Name : 2-Fluorophenol
Scan Number : 261
Retention Time: 7.32 min.
Quant Ion : 112.0
Area : 19849
Concentration : 16.38 ug/l
q-value : 100

308

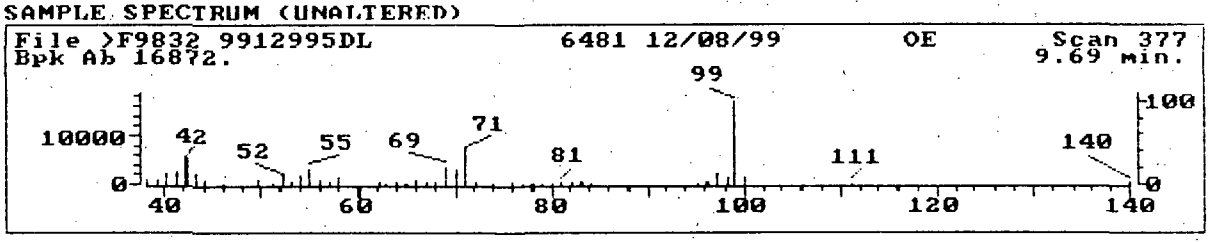
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



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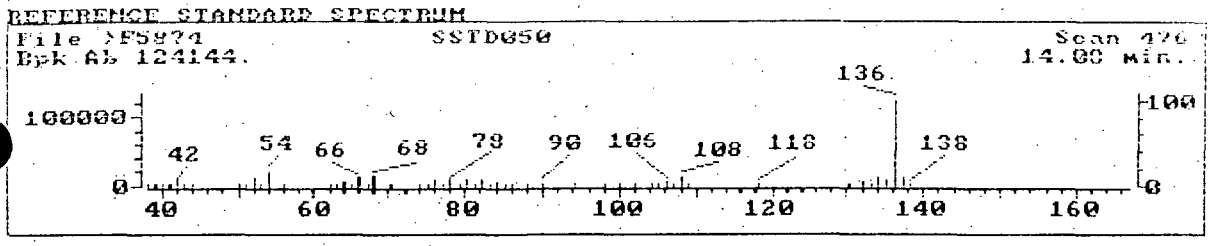
Misc: 6481 12/08/99 OE
Quant Time: 991210 14:01
Injected at: 991210 13:25
Last Qcal Time: <none>

Quant Output File: ^F9832::QT
Instrument ID: AHP5970B
DCOMP-2 BTL# 1
Quant ID File: IDF01::ME
Last Calibration: 991209 15:19

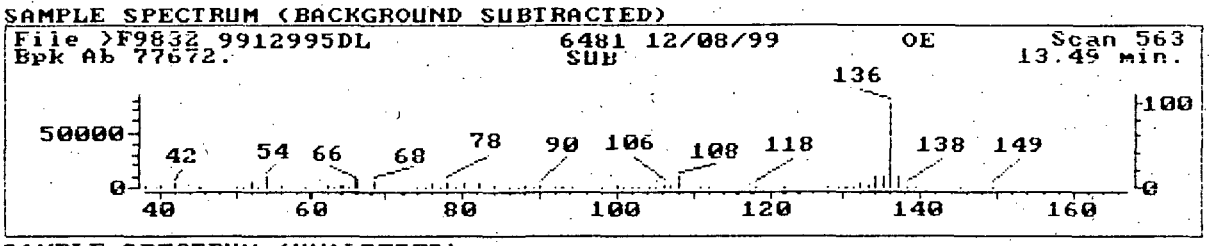
Compound No : 6
Compound Name : Phenol-d5
Scan Number : 377
Retention Time: 9.69 min.
Quant Ion : 99.0
Area : 28131
Concentration : 15.52 ug/l
q-value : 88

309

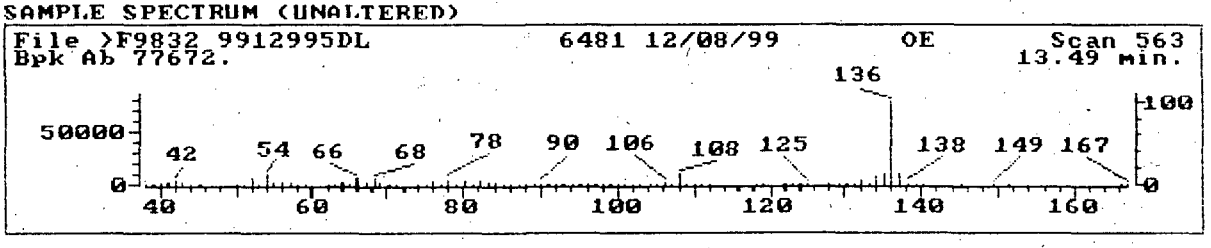
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

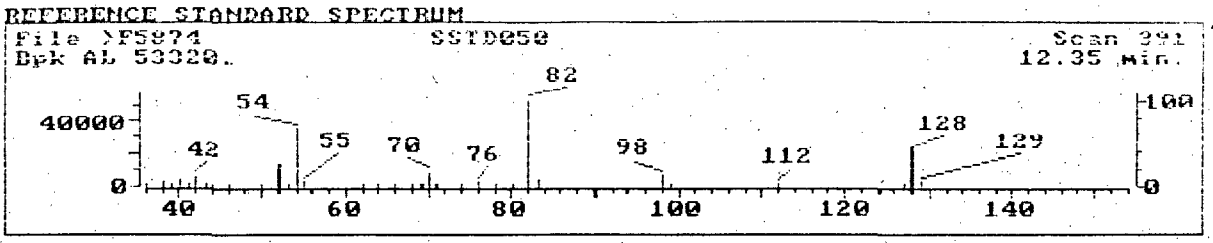


Data File: >F9832::F1
Name: 9912995DL
Misc: 6481 12/08/99 OE
Quant Time: 991210 14:01
Injected at: 991210 13:25
Last Qcal Time: <none>

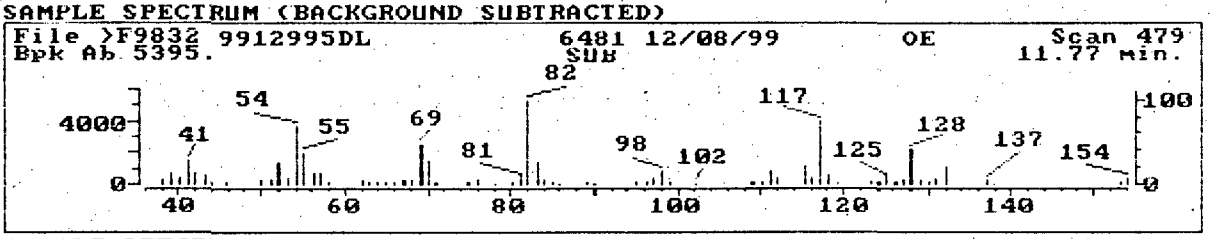
Quant Output File: ^F9832::QT
Instrument ID: AHP5970B
DCOMP-2 BTL# 1
Quant ID File: IDF01::ME
Last Calibration: 991209 15:19

Compound No : 19 (ISTD)
Compound Name : d8-Naphthalene
Scan Number : 563
Retention Time: 13.49 min.
Quant Ion : 136.0
Area : 145629
Concentration : 40.00 ug/l
q-value : 95

REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



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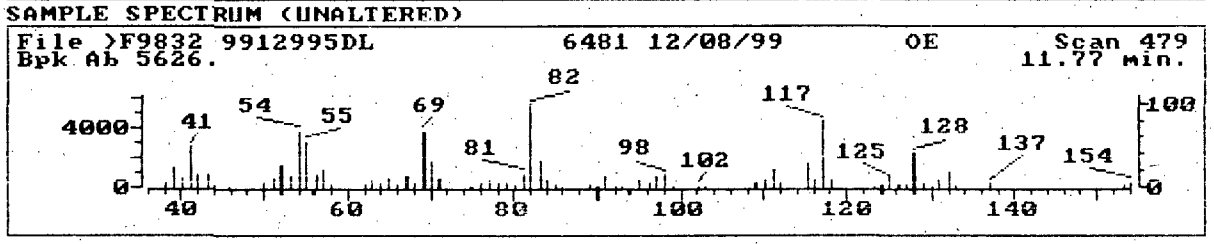


Data File: >F9832::F1
Name: 9912995DL
Misc: 6481 12/08/99 OE
Quant Time: 991210 14:01
Injected at: 991210 13:25
Last Qcal Time: <none>

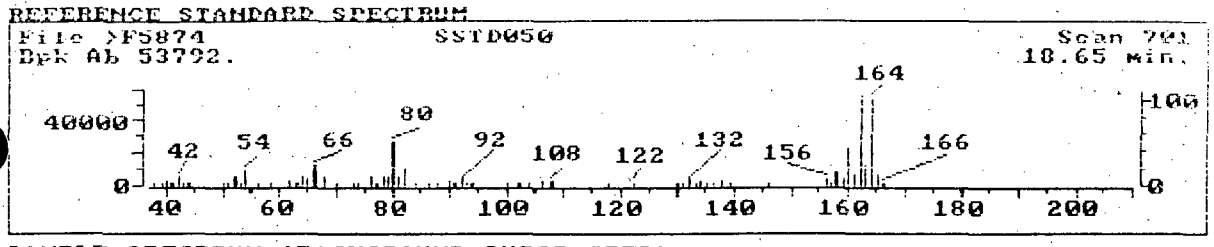
Quant Output File: ^F9832::QT
Instrument ID: AHP5970B
DCOMP-2 BTL# 1
Quant ID File: IDF01::ME
Last Calibration: 991209 15:19

Compound No : 20
Compound Name : Nitrobenzene-d5
Scan Number : 479
Retention Time: 11.77 min.
Quant Ion : 82.0
Area : 13101
Concentration : 7.81 ug/l
q-value : 89

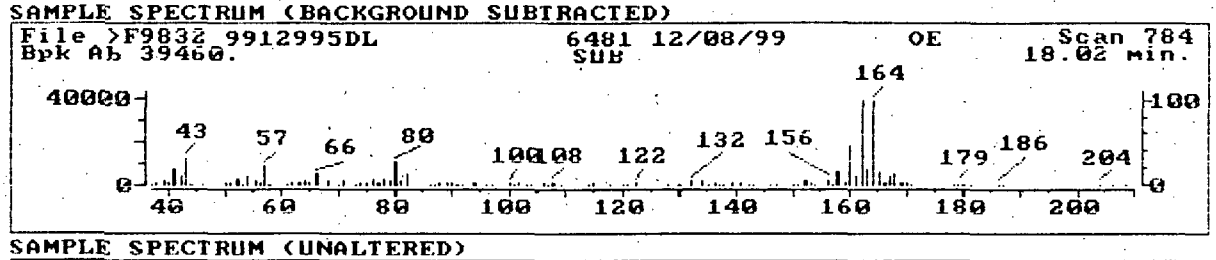
311

700409

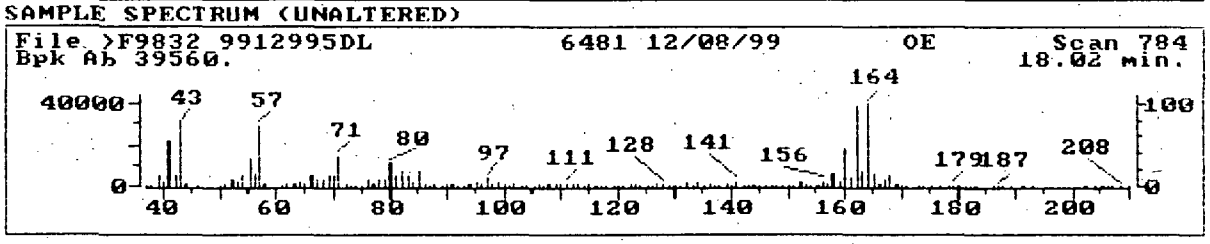
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



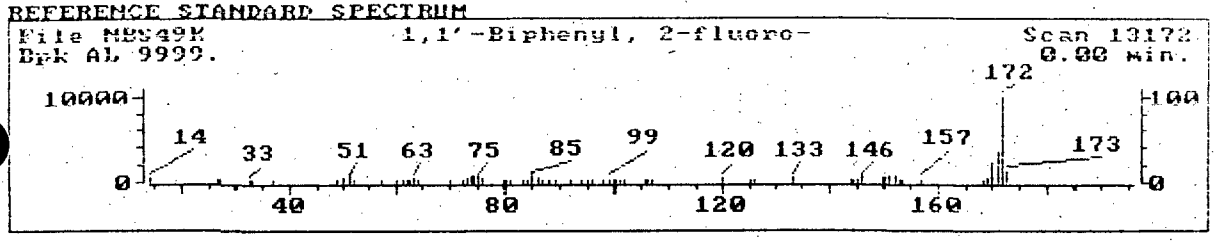
Data File: >F9832::F1 Quant Output File: ^F9832::QT
Name: 9912995DL Instrument ID: AHP5970B
Misc: 6481 12/08/99 OE DCOMP-2 BTL# 1
Quant Time: 991210 14:01 Quant ID File: IDF01::ME
Injected at: 991210 13:25 Last Calibration: 991209 15:19
Last Qcal Time: <none>

Compound No : 34 (ISTD)
Compound Name : d10-Acenaphthene
Scan Number : 784
Retention Time: 18.02 min.
Quant Ion : 164.0
Area : 74982
Concentration : 40.00 ug/l
q-value : 97

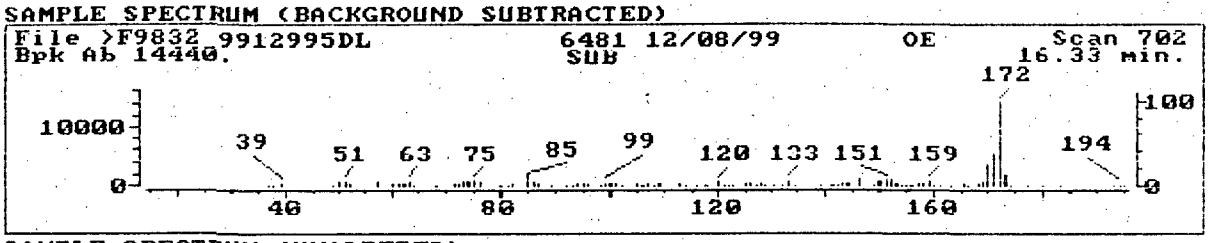
312

700410

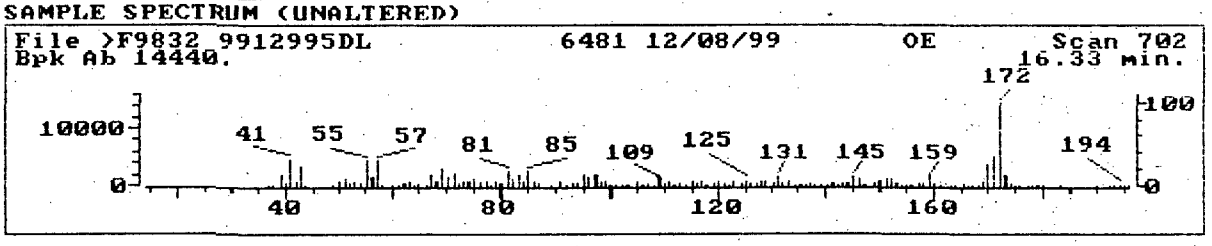
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



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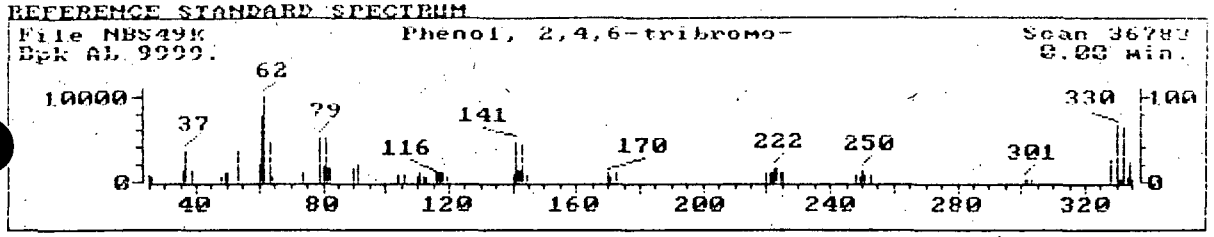
Misc: 6481 12/08/99 OE
Quant Time: 991210 14:01
Injected at: 991210 13:25
Last Qcal Time: <none>

Quant Output File: ^F9832::QT
Instrument ID: AHP5970B
DCOMP-2 BTL# 1
Quant ID File: IDF01::ME
Last Calibration: 991209 15:19

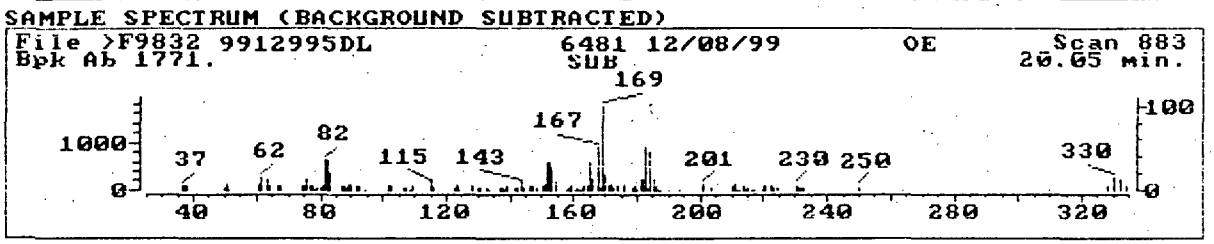
Compound No : 39
Compound Name : 2-Fluorobiphenyl
Scan Number : 702
Retention Time: 16.33 min.
Quant Ion : 172.0
Area : 26139
Concentration : 12.66 ug/l
q-value : 95

313

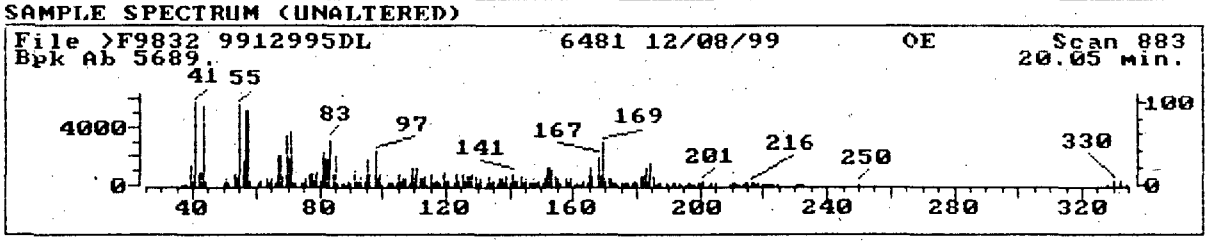
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

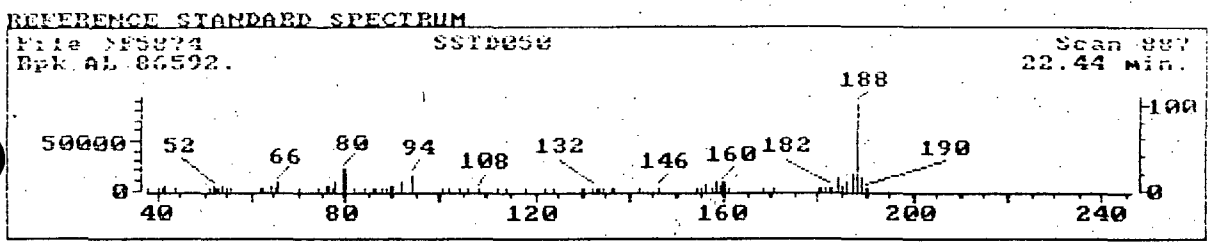


Data File: >F9832::F1
Quant Output File: ^F9832::QT
Name: 9912995DL
Instrument ID: AHP5970B
Misc: 6481 12/08/99 OE
DCOMP-2 BTL# 1
Quant Time: 991210 14:01
Quant ID File: IDF01::ME
Injected at: 991210 13:25
Last Calibration: 991209 15:19
Last Qcal Time: <none>

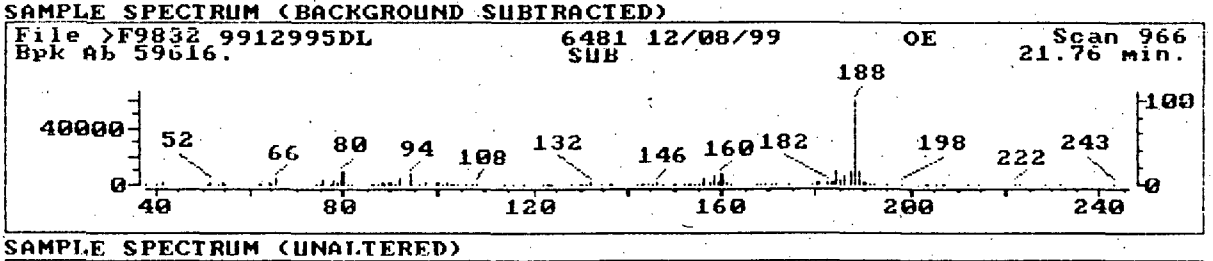
Compound No : 54
Compound Name : 2,4,6-Tribromophenol
Scan Number : 883
Retention Time: 20.05 min.
Quant Ion : 329.8
Area : 498M
Concentration : 1.38 ug/l

314

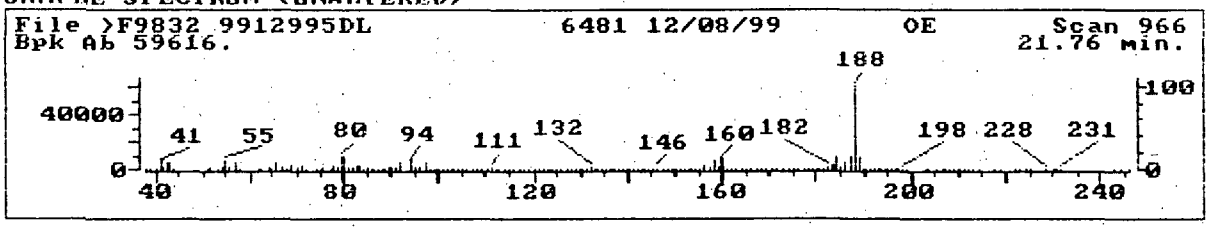
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

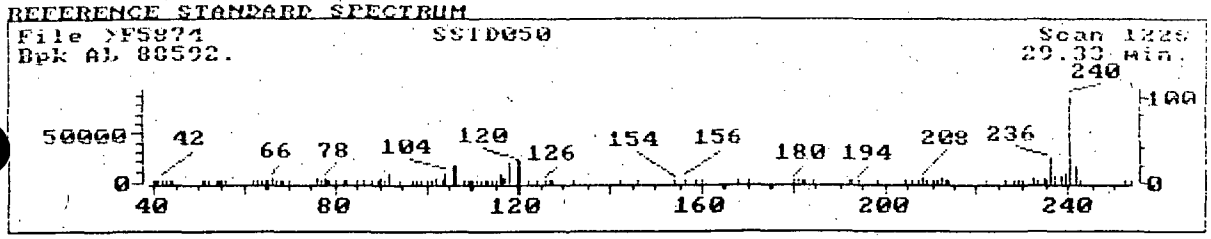


Data File: >F9832::F1 Quant Output File: ^F9832::QT
Name: 9912995DL Instrument ID: AHP5970B
Misc: 6481 12/08/99 OE DCOMP-2 BTL# 1
Quant Time: 991210 14:01 Quant ID File: IDF01::ME
Injected at: 991210 13:25 Last Calibration: 991209 15:19
Last Qcal Time: <none>

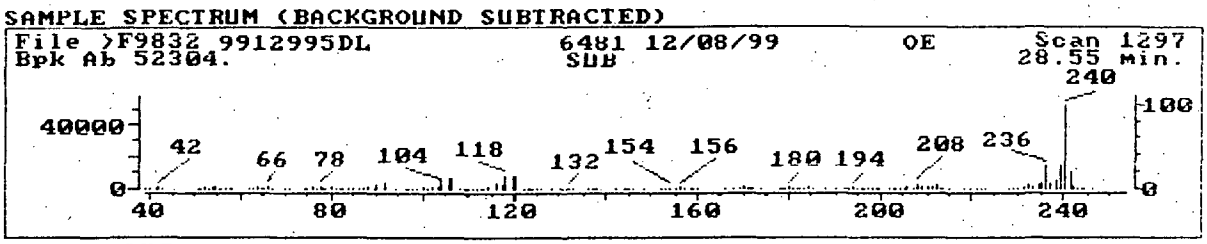
Compound No : 55 (ISTD)
Compound Name : d10-Phenanthrene
Scan Number : 966
Retention Time: 21.76 min.
Quant Ion : 188.0
Area : 157748
Concentration : 40.00 ug/l
q-value : 100

315

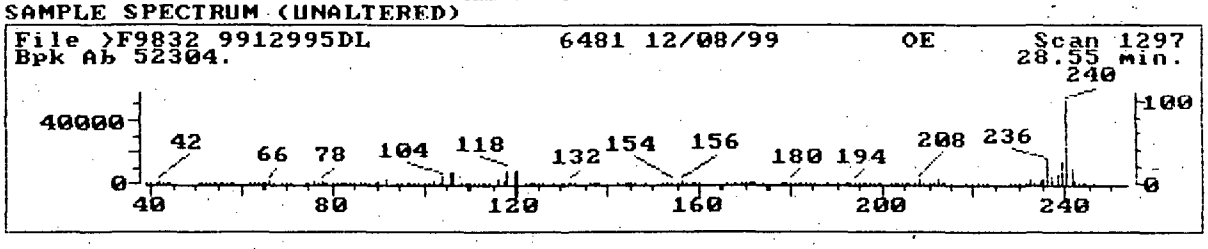
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



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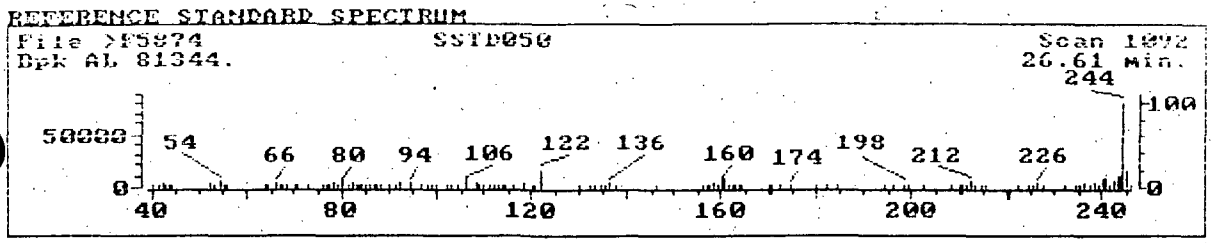
Misc: 6481 12/08/99 OE
Quant Time: 991210 14:01
Injected at: 991210 13:25
Last Qcal Time: <none>

Quant Output File: ^F9832::QT
Instrument ID: AHP5970B
DCOMP-2 BTL# 1
Quant ID File: IDF01::ME
Last Calibration: 991209 15:19

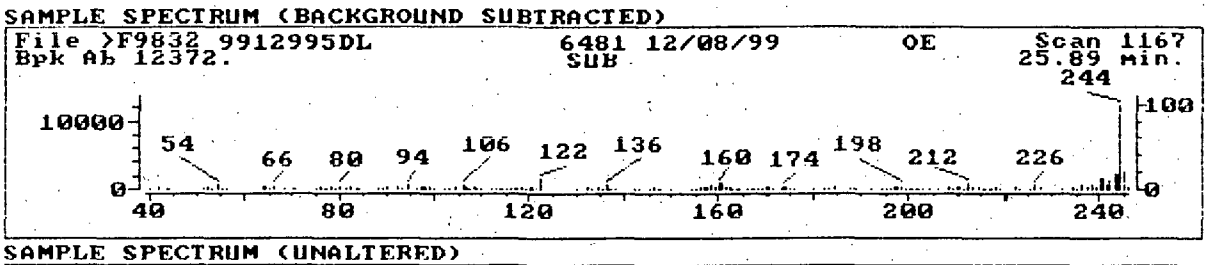
Compound No : 67 (ISTD)
Compound Name : d12-Chrysene
Scan Number : 1297
Retention Time: 28.55 min.
Quant Ion : 240.0
Area : 154138
Concentration : 40.00 ug/l
q-value : 100

316

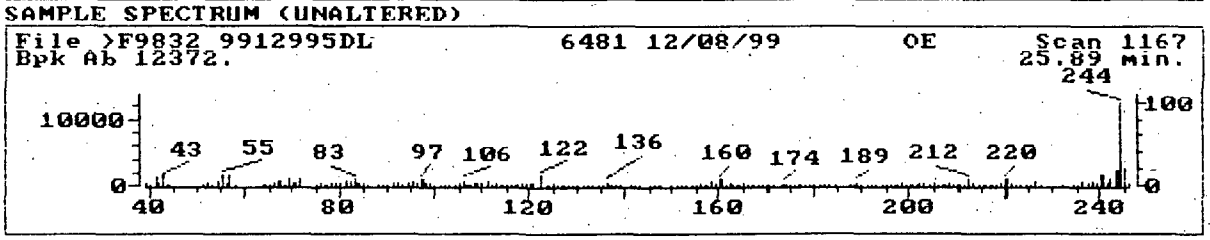
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



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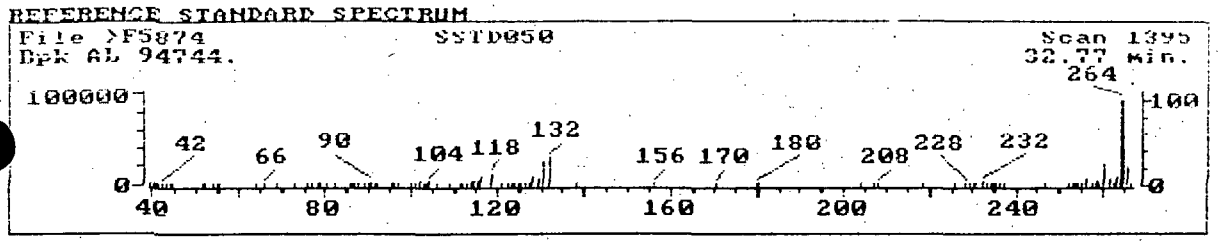
Misc: 6481 12/08/99 OE
Quant Time: 991210 14:01
Injected at: 991210 13:25
Last Qcal Time: <none>

Quant Output File: ^F9832::QT
Instrument ID: AHP5970B
DCOMP-2 BTL# 1
Quant ID File: IDF01::ME
Last Calibration: 991209 15:19

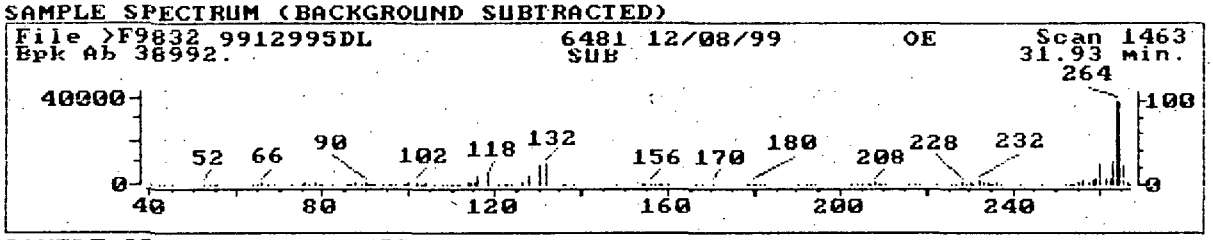
Compound No : 70
Compound Name : Terphenyl-d14
Scan Number : 1167
Retention Time: 25.89 min.
Quant Ion : 244.0
Area : 31606
Concentration : 9.68 ug/l
q-value : 90

317

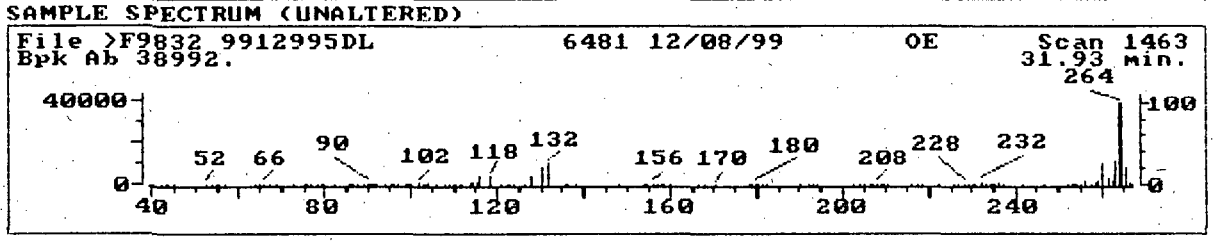
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >F9832::F1
Name: 9912995DL
Misc: 6481 12/08/99 OE
Quant Time: 991210 14:01
Injected at: 991210 13:25
Last Qcal Time: <none>

Quant Output File: ^F9832::QT
Instrument ID: AHP5970B
DCOMP-2 BTL# 1
Quant ID File: IDF01::ME
Last Calibration: 991209 15:19

Compound No : 76 (ISTD)
Compound Name : d12-Perylene
Scan Number : 1463
Retention Time: 31.93 min.
Quant Ion : 264.0
Area : 139753
Concentration : 40.00 ug/l
q-value : 100

318

QUANT REPORT

Operator ID: DANIEL
Output File: ^F9823::QT
Data File: >F9823::G2
Name: 9912996
Misc: 6481 12/08/99 OE

Quant Rev: 7
Quant Time: 991209 20:55
Injected at: 991209 20:22
Dilution Factor: 1.00000
Instrument ID: AHP5970B
SP-1
BTL# 8

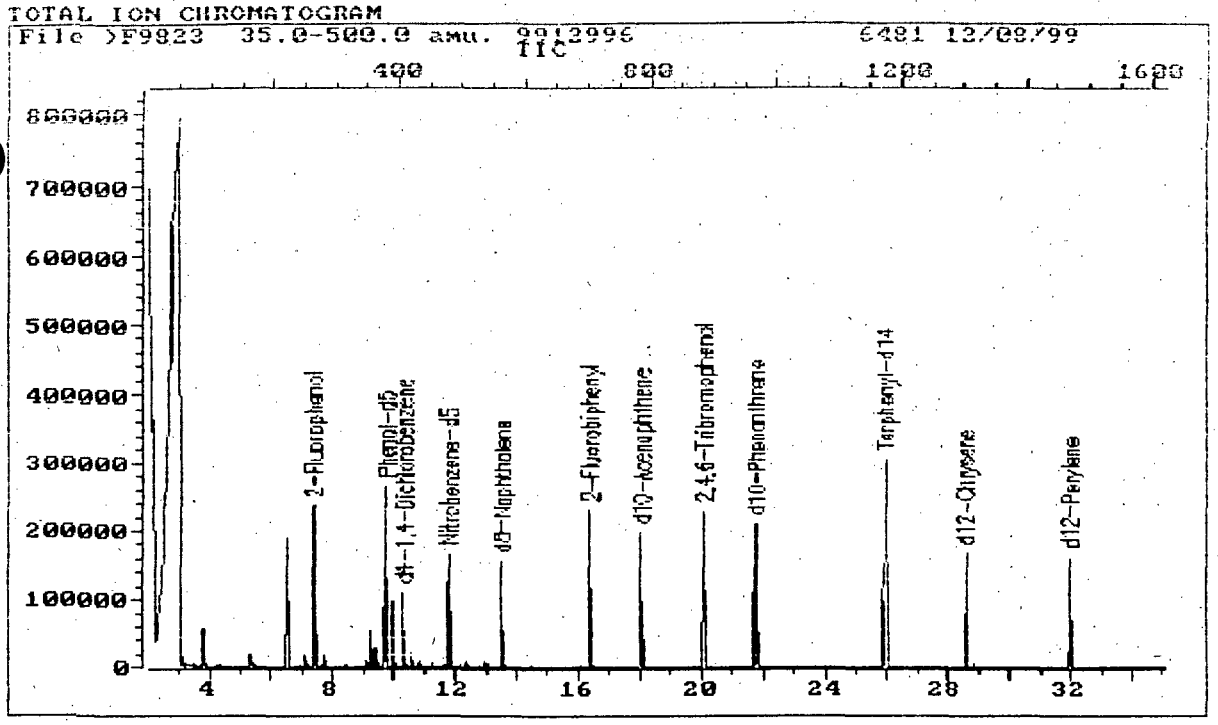
ID File: IDF01::ME
Title: Accredited Laboratories Base/Neutral/Acid Identity File
Last Calibration: 991209 15:19
Last Qcal Time: <none>

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*d4-1,4-Dichlorobenzene	10.31	408	36310	40.00	ug/l	87
4)	2-Fluorophenol	7.37	264	141177	111.00	ug/l	100
6)	Phenol-d5	9.74	380	220090	115.74	ug/l	90
19)	*d8-Naphthalene	13.49	564	147666	40.00	ug/l	97
20)	Nitrobenzene-d5	11.79	481	118576	69.69	ug/l	90
34)	*d10-Acenaphthene	18.01	786	92416	40.00	ug/l	97
39)	2-Fluorobiphenyl	16.34	704	183202	71.96	ug/l	95
54)	2,4,6-Tribromophenol	20.07	887	68546	154.31	ug/l	99
55)	*d10-Phenanthrene	21.76	970	173944	40.00	ug/l	100
67)	*d12-Chrysene	28.55	1303	171276	40.00	ug/l	100
70)	Terphenyl-d14	25.94	1175	286047	78.82	ug/l	92
76)	*d12-Perylene	31.95	1470	167692	40.00	ug/l	100

* Compound is ISTD

319

TOTAL ION CHROMATOGRAM



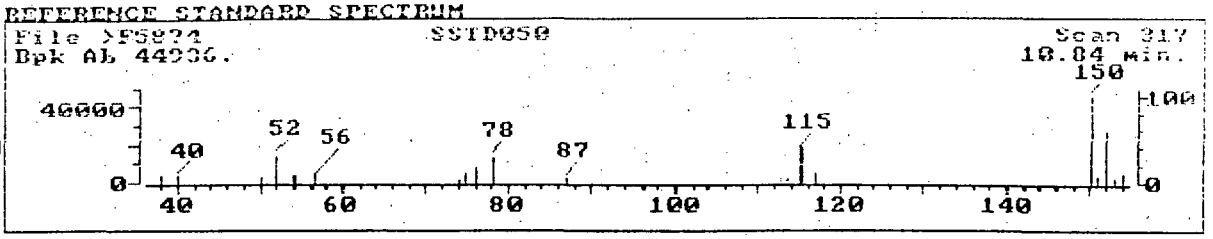
Data File: >F9823::G2 Quant Output File: ^F9823::QT
Name: 9912996 Instrument ID: AHP5970B
Misc: 6481 12/08/99 DE SP-1 BTL# 8

Id File: IDF01::ME
Title: Accredited Laboratories Base/Neutral/Acid Identity File
Last Calibration: 991209 15:19 Last Qcal Time: <none>

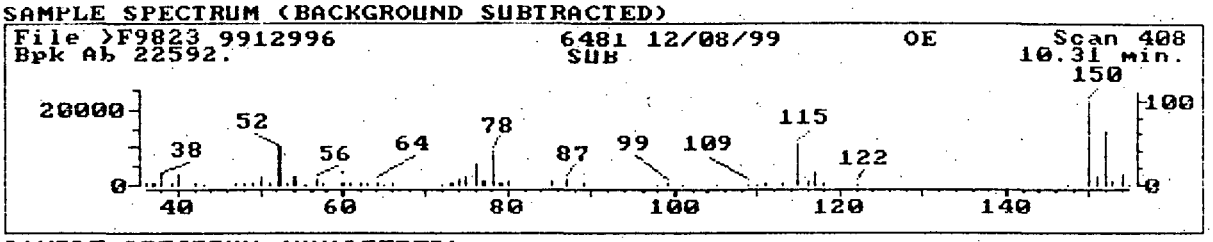
Operator ID: DANIEL
Quant Time : 991209 20:58
Injected at: 991209 20:22

320

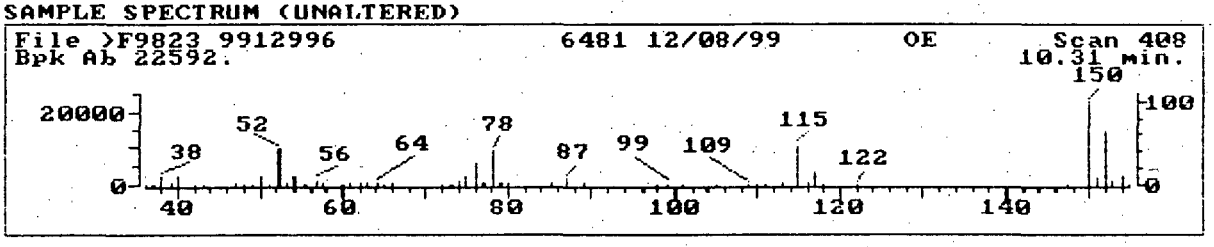
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

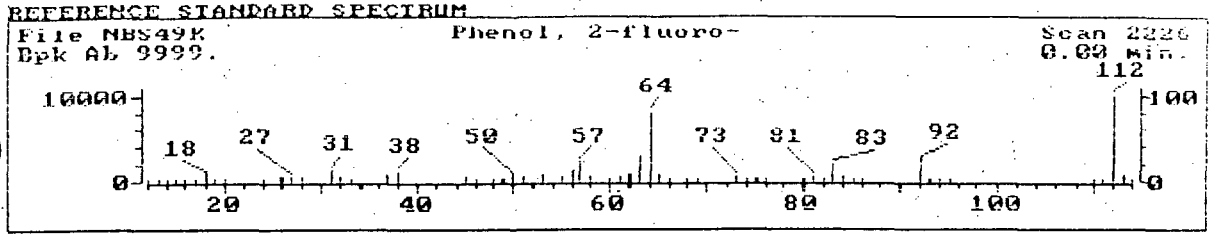


Data File: >F9823::G2 Quant Output File: ^F9823::QT
Name: 9912996 Instrument ID: AHP5970B
Misc: 6481 12/08/99 OE SP-1 BTL# 8
Quant Time: 991209 20:58 Quant ID File: IDF01::ME
Injected at: 991209 20:22 Last Calibration: 991209 15:19
Last Qcal Time: <none>

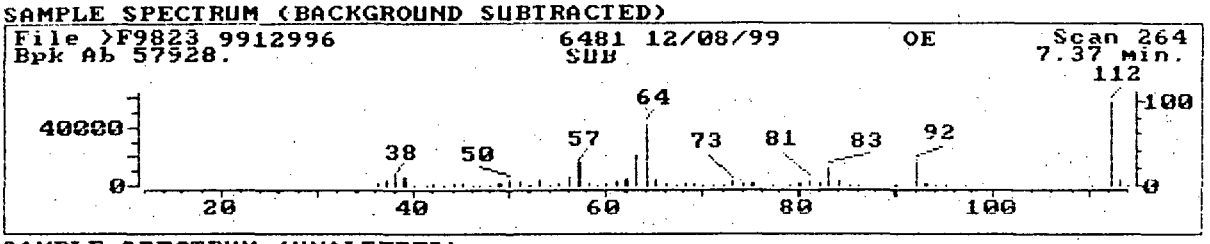
Compound No : 1 (ISTD)
Compound Name : d4-1,4-Dichlorobenzene
Scan Number : 408
Retention Time: 10.31 min.
Quant Ion : 152.0
Area : 36310
Concentration : 40.00 ug/l
q-value : 87

321

REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



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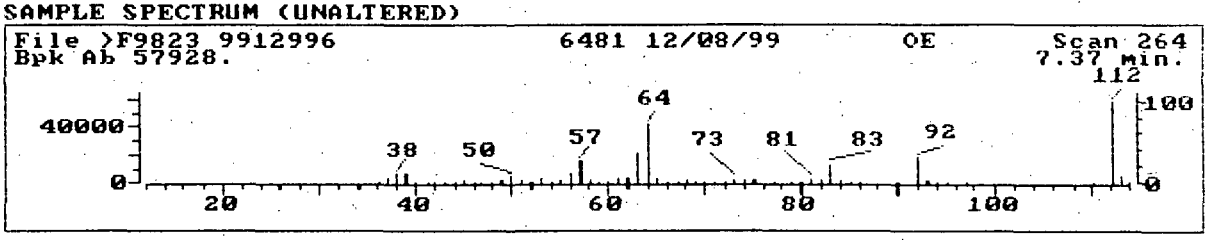


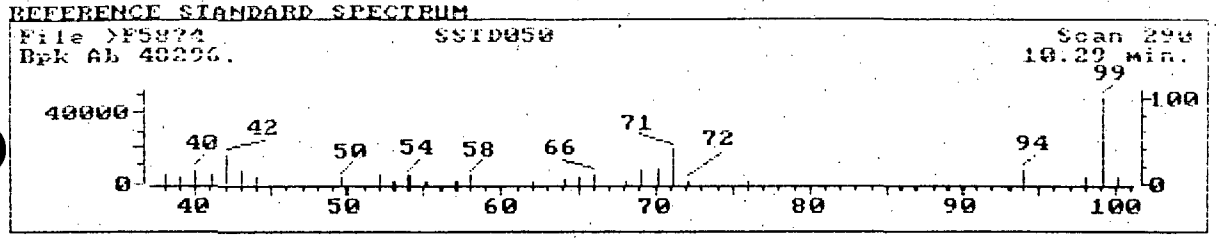
Data File: >F9823::G2
Name: 9912996
Misc: 6481 12/08/99 OE
Quant Time: 991209 20:58
Injected at: 991209 20:22
Last Qcal Time: <none>

Quant Output File: ^F9823::QT
Instrument ID: AHP5970B
SP-1 BTL# 8
Quant ID File: IDF01::ME
Last Calibration: 991209 15:19

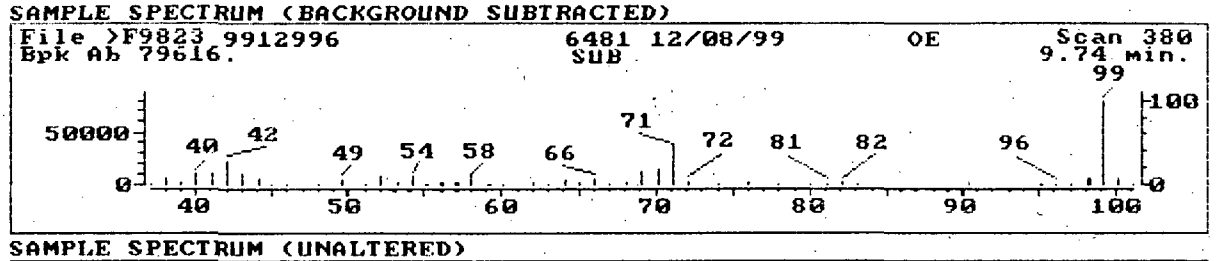
Compound No : 4
Compound Name : 2-Fluorophenol
Scan Number : 264
Retention Time: 7.37 min.
Quant Ion : 112.0
Area : 141177
Concentration : 111.00 ug/l
q-value : 100

322

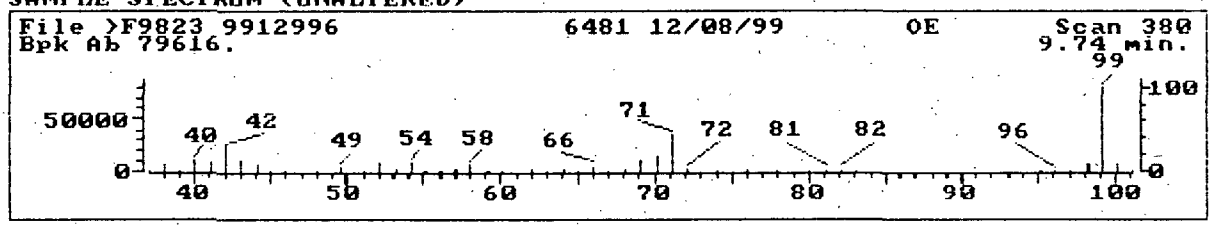
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



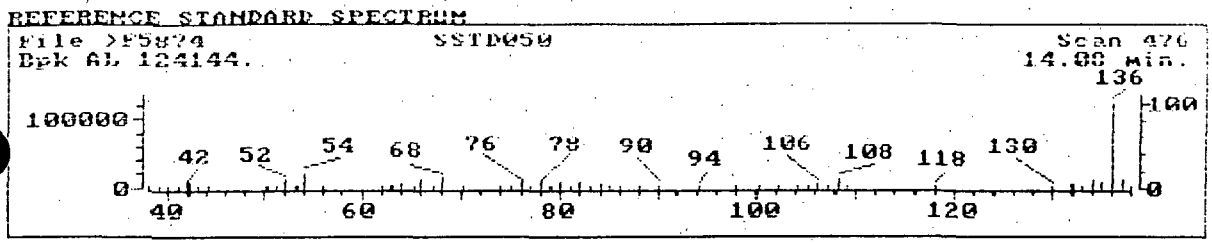
Data File: >F9823::G2
Name: 9912996
Misc: 6481 12/08/99 OE
Quant Time: 991209 20:58
Injected at: 991209 20:22
Last Qcal Time: <none>

Quant Output File: ^F9823::QT
Instrument ID: AHP5970B
SP-1 BTL# 8
Quant ID File: IDF01::ME
Last Calibration: 991209 15:19

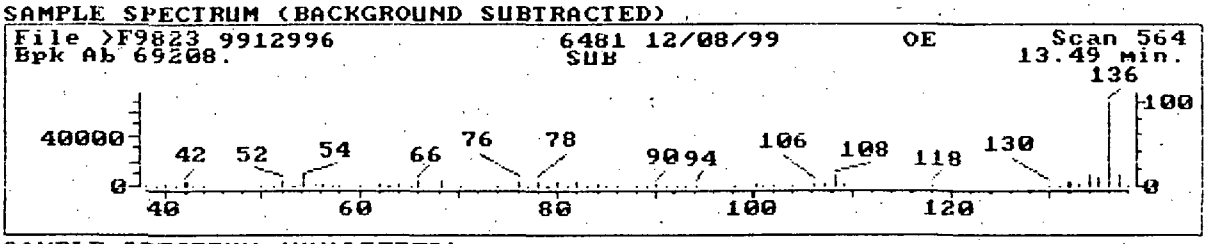
Compound No : 6
Compound Name : Phenol-d5
Scan Number : 380
Retention Time: 9.74 min.
Quant Ion : 99.0
Area : 220090
Concentration : 115.74 ug/l
q-value : 90

323

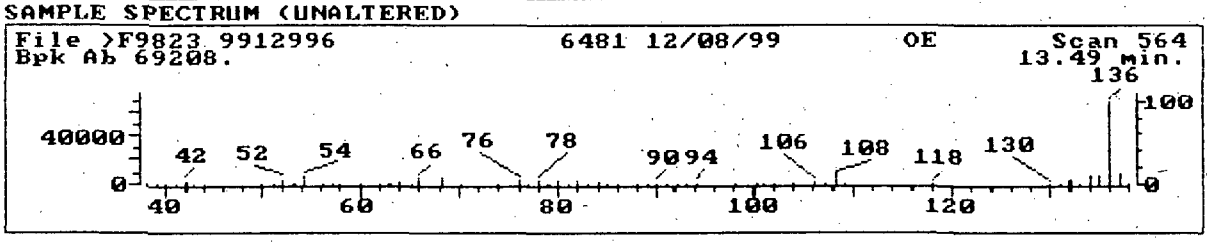
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



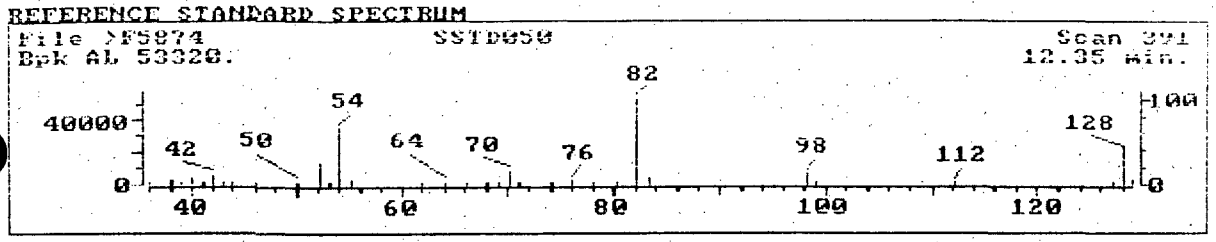
Data File: >F9823::G2
Name: 9912996
Misc: 6481 12/08/99 OE
Quant Time: 991209 20:58
Injected at: 991209 20:22
Last Qcal Time: <none>

Quant Output File: ^F9823::QT
Instrument ID: AHP5970B
SP-1 BTL# 8
Quant ID File: IDF01::ME
Last Calibration: 991209 15:19

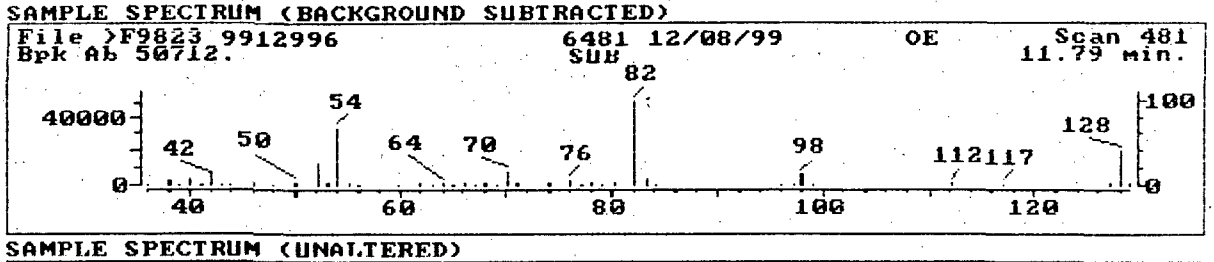
Compound No : 19 (ISTD)
Compound Name : d8-Naphthalene
Scan Number : 564
Retention Time: 13.49 min.
Quant Ion : 136.0
Area : 147666
Concentration : 40.00 ug/l
q-value : 97

324

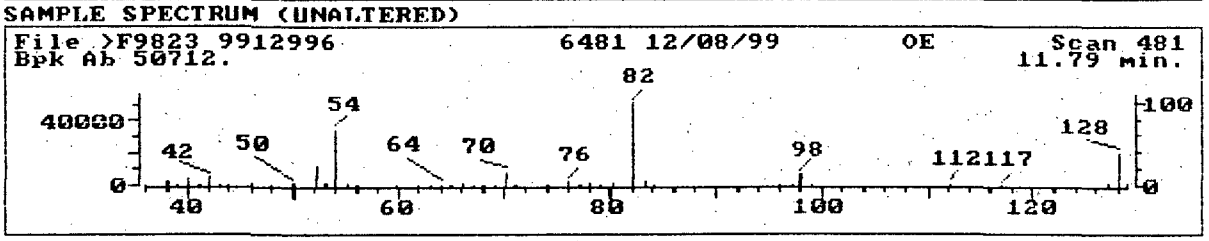
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >F9823::G2
Name: 9912996
Misc: 6481 12/08/99 OE
Quant Time: 991209 20:58
Injected at: 991209 20:22
Last Qcal Time: <none>

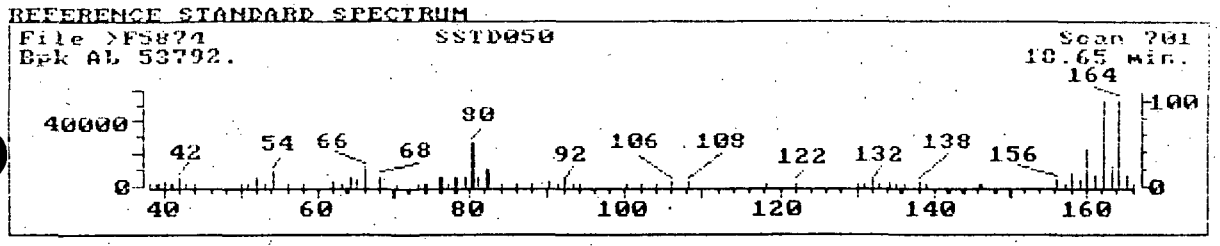
Quant Output File: ^F9823::QT
Instrument ID: AHP5970B
SP-1 BTL# 8
Quant ID File: IDF01::ME
Last Calibration: 991209 15:19

Compound No : 20
Compound Name : Nitrobenzene-d5
Scan Number : 481
Retention Time: 11.79 min.
Quant Ion : 82.0
Area : 118576
Concentration : 69.69 ug/l
q-value : 90

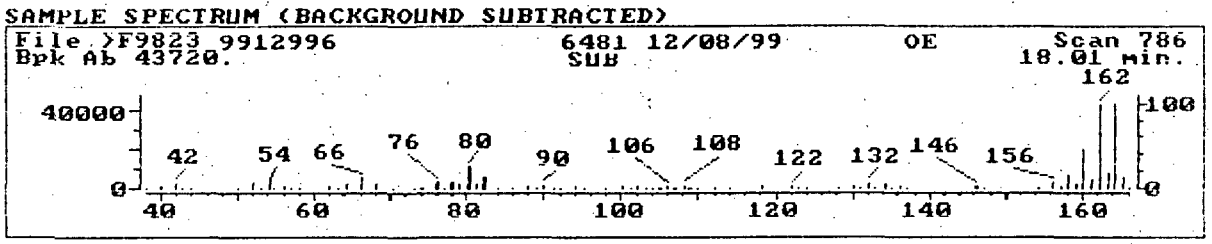
325

700423

REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



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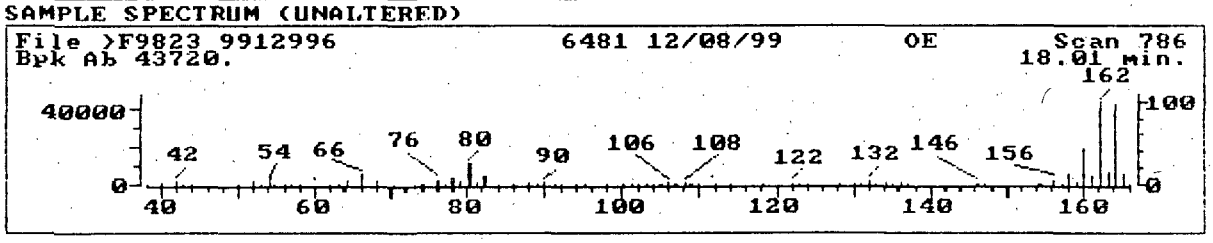
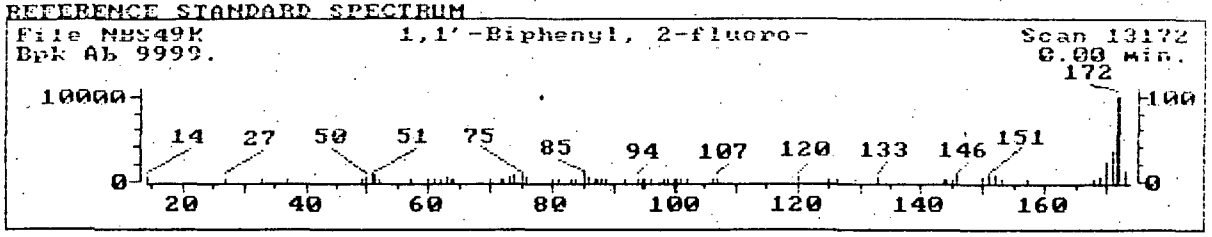


Data File: >F9823::G2 Quant Output File: ^F9823::QT
Name: 9912996 Instrument ID: AHP5970B
Misc: 6481 12/08/99 OE SP-1 BTL# 8
Quant Time: 991209 20:58 Quant ID File: IDF01::ME
Injected at: 991209 20:22 Last Calibration: 991209 15:19
Last Qcal Time: <none>

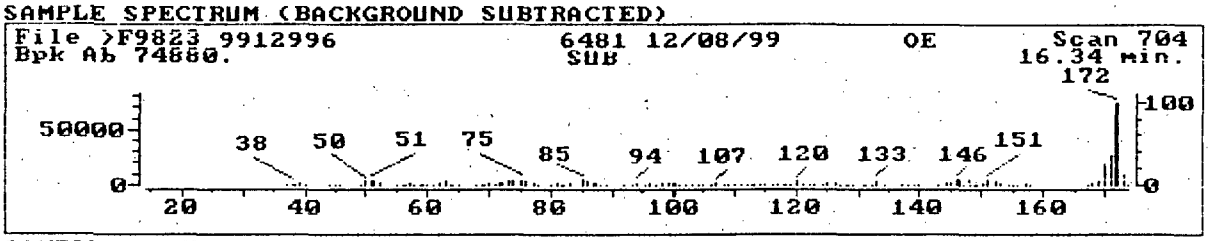
Compound No : 34 (ISTD)
Compound Name : d10-Acenaphthene
Scan Number : 786
Retention Time: 18.01 min.
Quant Ion : 164.0
Area : 92416
Concentration : 40.00 ug/l
q-value : 97

306

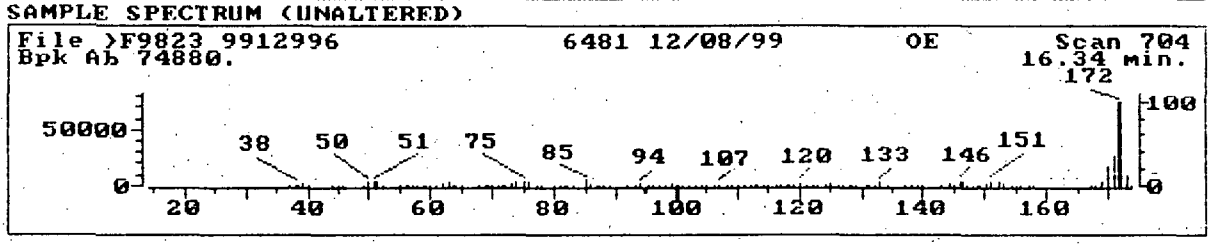
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

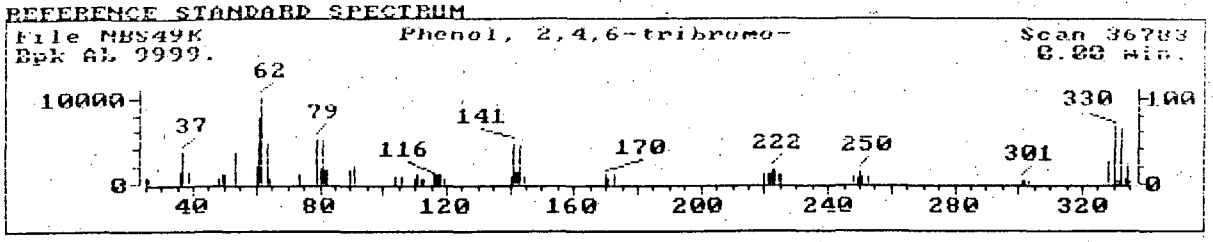


Data File: >F9823::G2 Quant Output File: ^F9823::QT
Name: 9912996 Instrument ID: AHP5970B
Misc: 6481 12/08/99 OE SP-1 BTL# 8
Quant Time: 991209 20:58 Quant ID File: IDF01::ME
Injected at: 991209 20:22 Last Calibration: 991209 15:19
Last Qcal Time: <none>

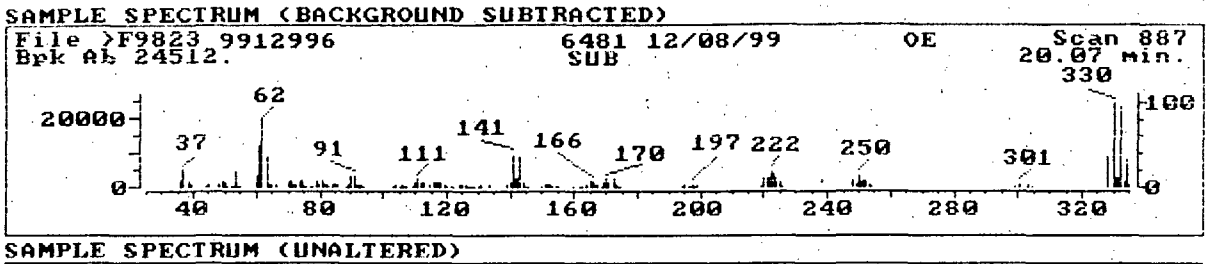
Compound No : 39
Compound Name : 2-Fluorobiphenyl
Scan Number : 704
Retention Time: 16.34 min.
Quant Ion : 172.0
Area : 183202
Concentration : 71.96 ug/l
q-value : 95

327

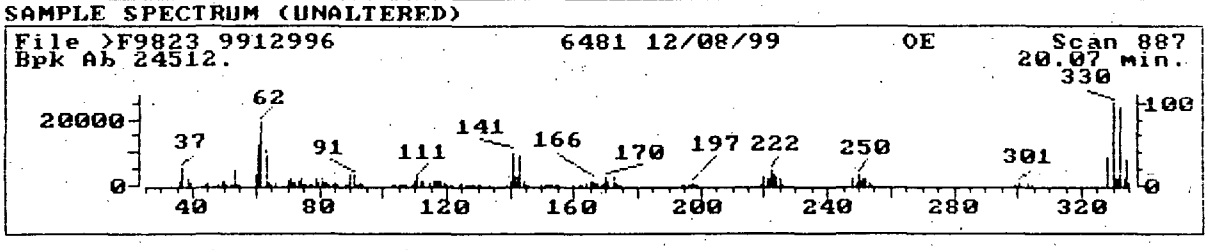
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

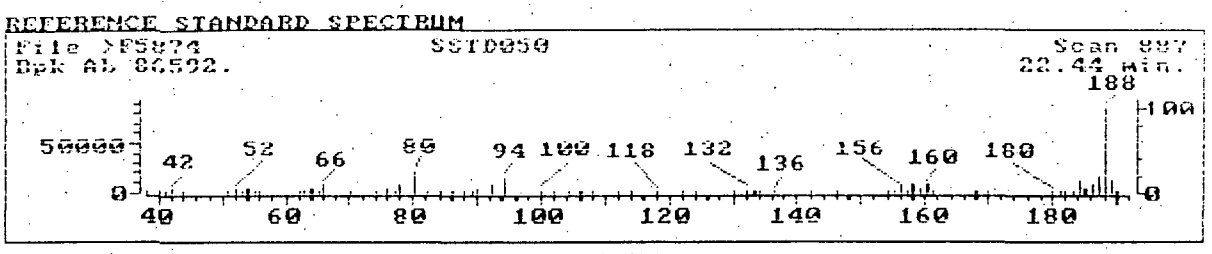


Data File: >F9823::G2 Quant Output File: ^F9823::QT
Name: 9912996 Instrument ID: AHP5970B
Misc: 6481 12/08/99 OE SP-1 BTL# 8
Quant Time: 991209 20:58 Quant ID File: IDF01::ME
Injected at: 991209 20:22 Last Calibration: 991209 15:19
Last Qcal Time: <none>

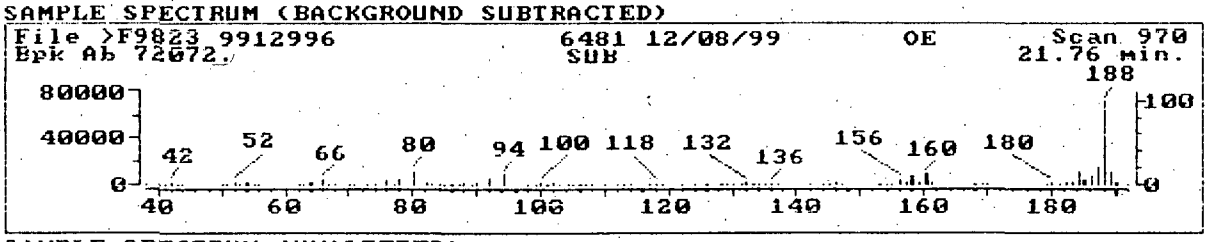
Compound No : 54
Compound Name : 2,4,6-Tribromophenol
Scan Number : 887
Retention Time: 20.07 min.
Quant Ion : 329.8
Area : 68546
Concentration : 154.31 ug/l
q-value : 99

328

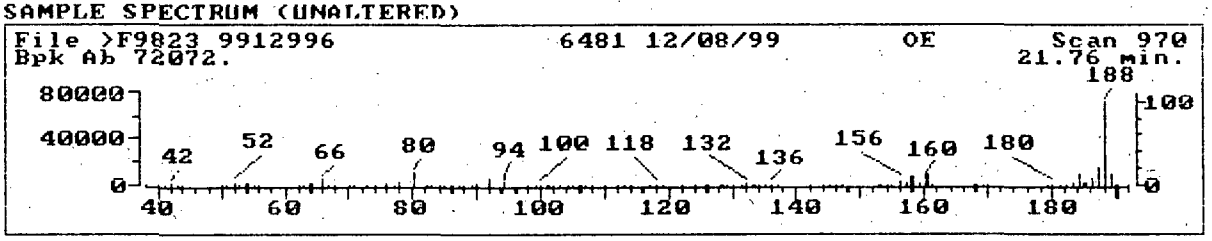
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >F9823::G2
Name: 9912996
Misc: 6481 12/08/99 OE
Quant Time: 991209 20:58
Injected at: 991209 20:22
Last Qcal Time: <none>

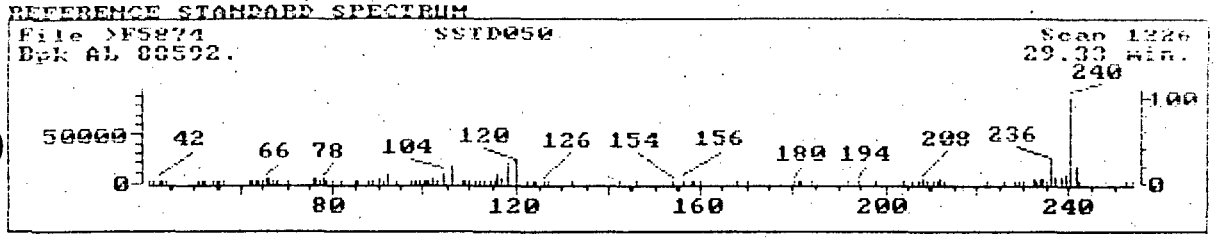
Quant Output File: ^F9823::QT
Instrument ID: AHP5970B
SP-1 BTL# 8
Quant ID File: IDF01::ME
Last Calibration: 991209 15:19

Compound No : 55 (ISTD)
Compound Name : d10-Phenanthrene
Scan Number : 970
Retention Time: 21.76 min.
Quant Ion : 188.0
Area : 173944
Concentration : 40.00 ug/l
q-value : 100

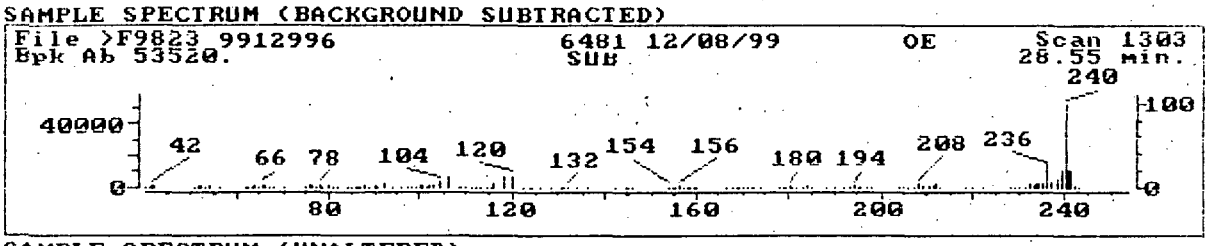
329

700427

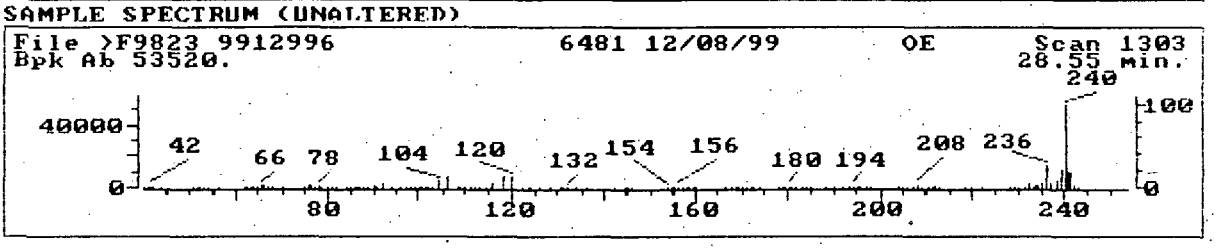
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >F9823::G2
Name: 9912996
Misc: 6481 12/08/99 OE
Quant Time: 991209 20:58
Injected at: 991209 20:22
Last Qcal Time: <none>

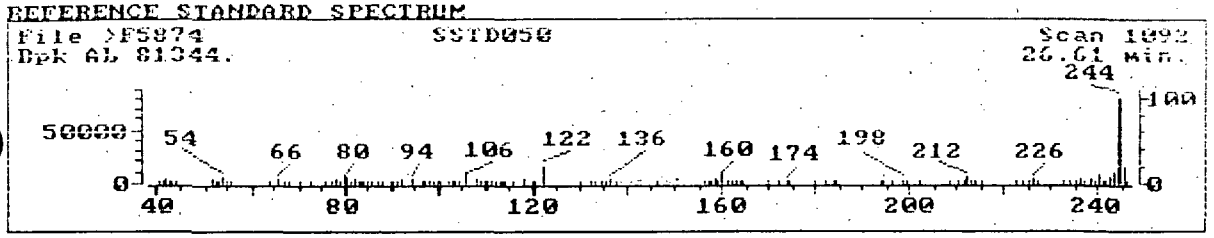
Quant Output File: ^F9823::QT
Instrument ID: AHP5970B
SP-1 BTL# 8
Quant ID File: -IDF01::ME
Last Calibration: 991209 15:19

Compound No : 67 (ISTD)
Compound Name : d12-Chrysene
Scan Number : 1303
Retention Time: 28.55 min.
Quant Ion : 240.0
Area : 171276
Concentration : 40.00 ug/l
q-value : 100

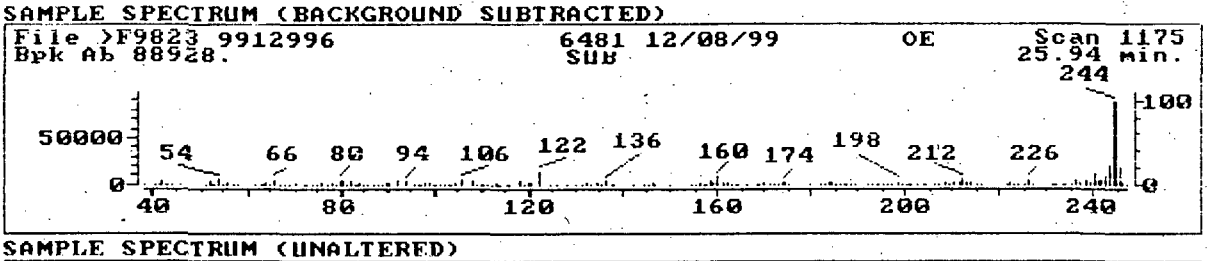
330

700428

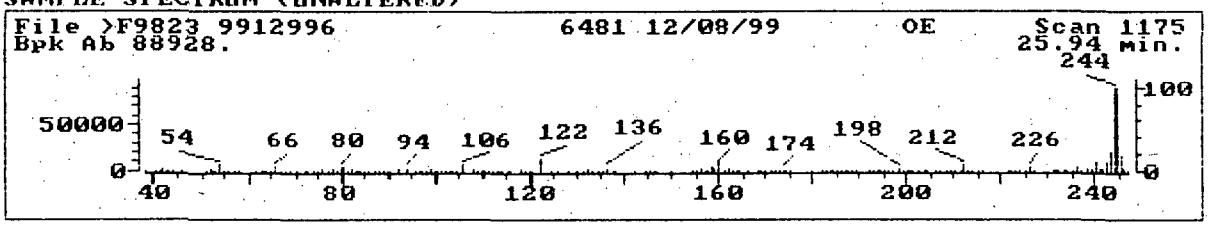
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



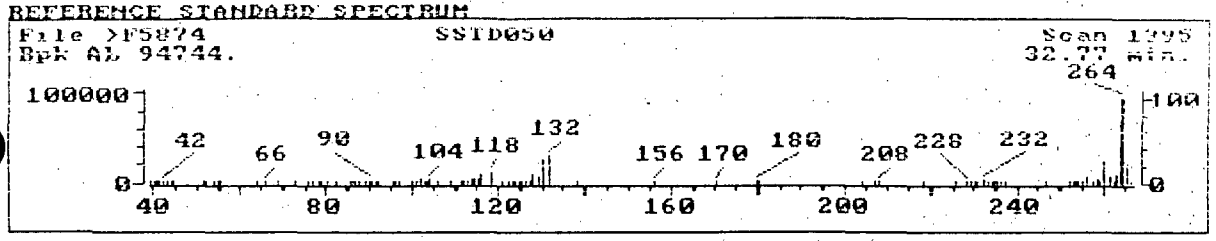
Data File: >F9823::G2
Name: 9912996
Misc: 6481 12/08/99 OE
Quant Time: 991209 20:58
Injected at: 991209 20:22
Last Qcal Time: <none>

Quant Output File: ^F9823::QT
Instrument ID: AHP5970B
SP-1 BTL# 8
Quant ID File: IDF01::ME
Last Calibration: 991209 15:19

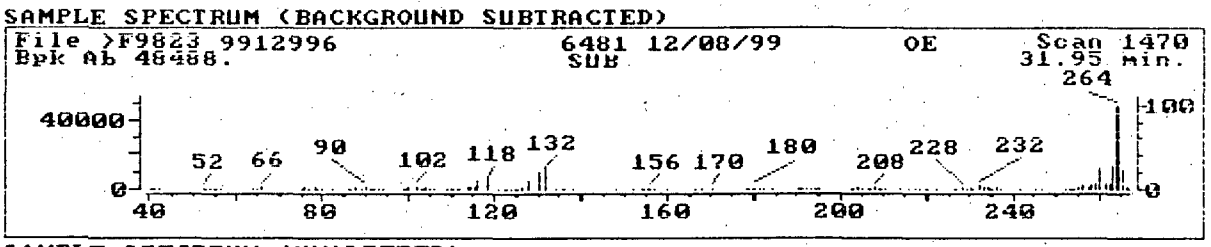
Compound No : 70
Compound Name : Terphenyl-d14
Scan Number : 1175
Retention Time: 25.94 min.
Quant Ion : 244.0
Area : 286047
Concentration : 78.82 ug/l
q-value : 92

331

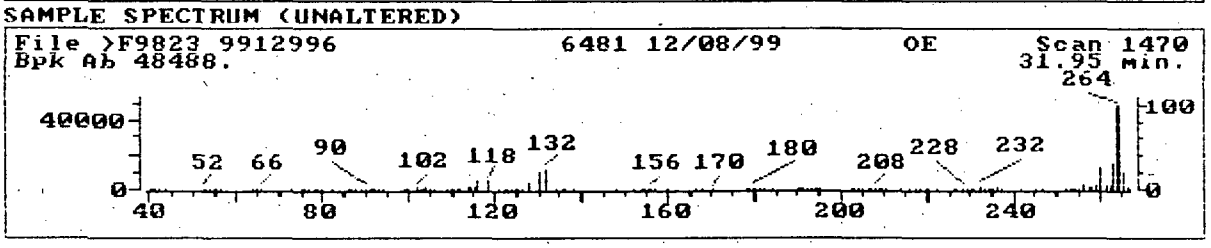
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >F9823::G2
Name: 9912996
Misc: 6481 12/08/99 OE
Quant Time: 991209 20:58
Injected at: 991209 20:22
Last Qcal Time: <none>

Quant Output File: ^F9823::QT
Instrument ID: AHP5970B
SP-1 BTL# 8
Quant ID File: IDF01::ME
Last Calibration: 991209 15:19

Compound No : 76 (ISTD)
Compound Name : d12-Perylene
Scan Number : 1470
Retention Time: 31.95 min.
Quant Ion : 264.0
Area : 167692
Concentration : 40.00 ug/l
q-value : 100

332

700430

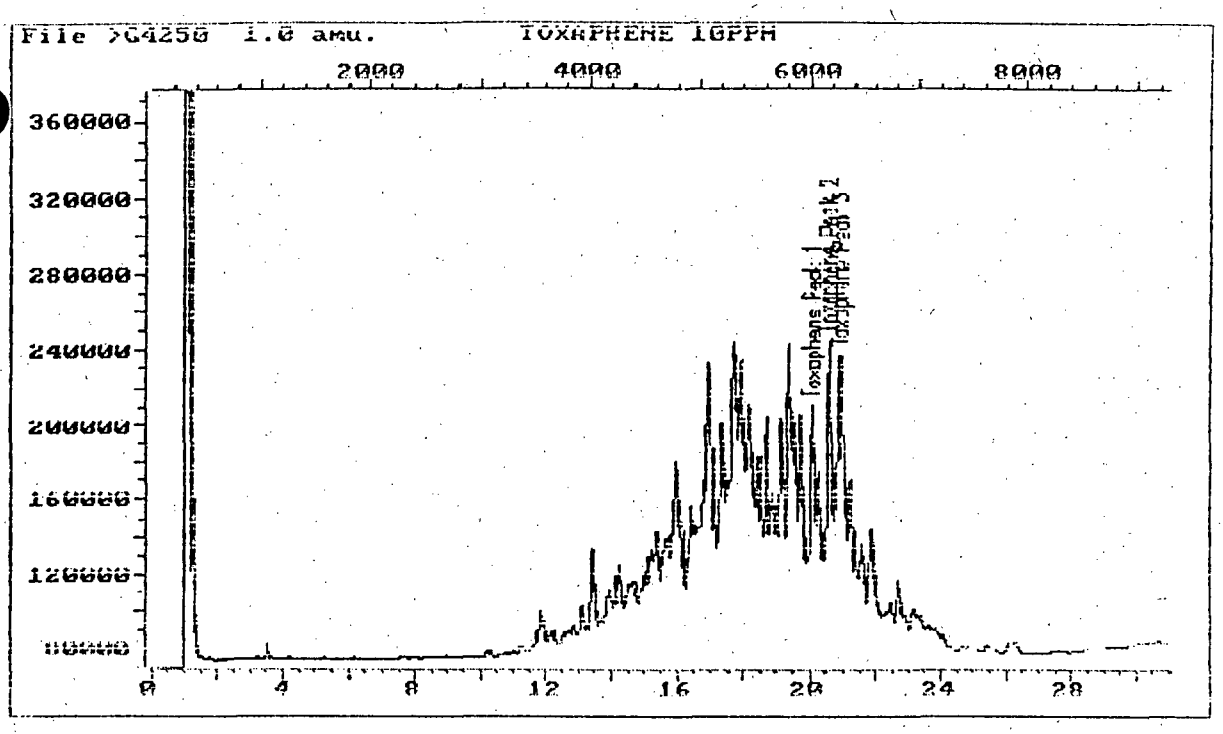
Operator ID: CLIFF Quant Rev: 7 Quant Time: 990929 10:51
Output File: ^G4250::QT Injected at: 990928 22:44
Data File: >G4250::G1 Dilution Factor: 1.00000
Name: TOXAPHENE 10PPM Instrument ID: G
Misc:

ID File: IDPST7::G5
Title: PESTICIDES HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990929 10:50 Last Qcal Time: 990915 14:26

Compound	R.T.	Scan#	Area	Conc	Units	q
22) #Toxaphene Peak 1	20.05	6016	681702	681702.0	NO CALIB100	
23) #Toxaphene Peak 2	20.56	6168	942218	942218.0	NO CALIB100	
24) #Toxaphene Peak 3	20.90	6271	1035360M	1035360.	NO CALIB	

Compound uses ESTD

333



Data File: >G4250::G1 Quant Output File: ^G4250::QT
Name: TOXAPHENE 10PPM Instrument ID: G
Misc:

Id File: IDPST7::G5
Title: PESTICIDES HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990929 10:50 Last Qcal Time: 990915 14:26

Operator ID: CLIFF
Quant Time : 990929 10:51
Injected at: 990928 22:44

334

QUANT REPORT

Operator ID: CLIFF
Output File: ^H4250::G5
Data File: >H4250::G1
Name: TOXAPHENE 10PPM
Misc:

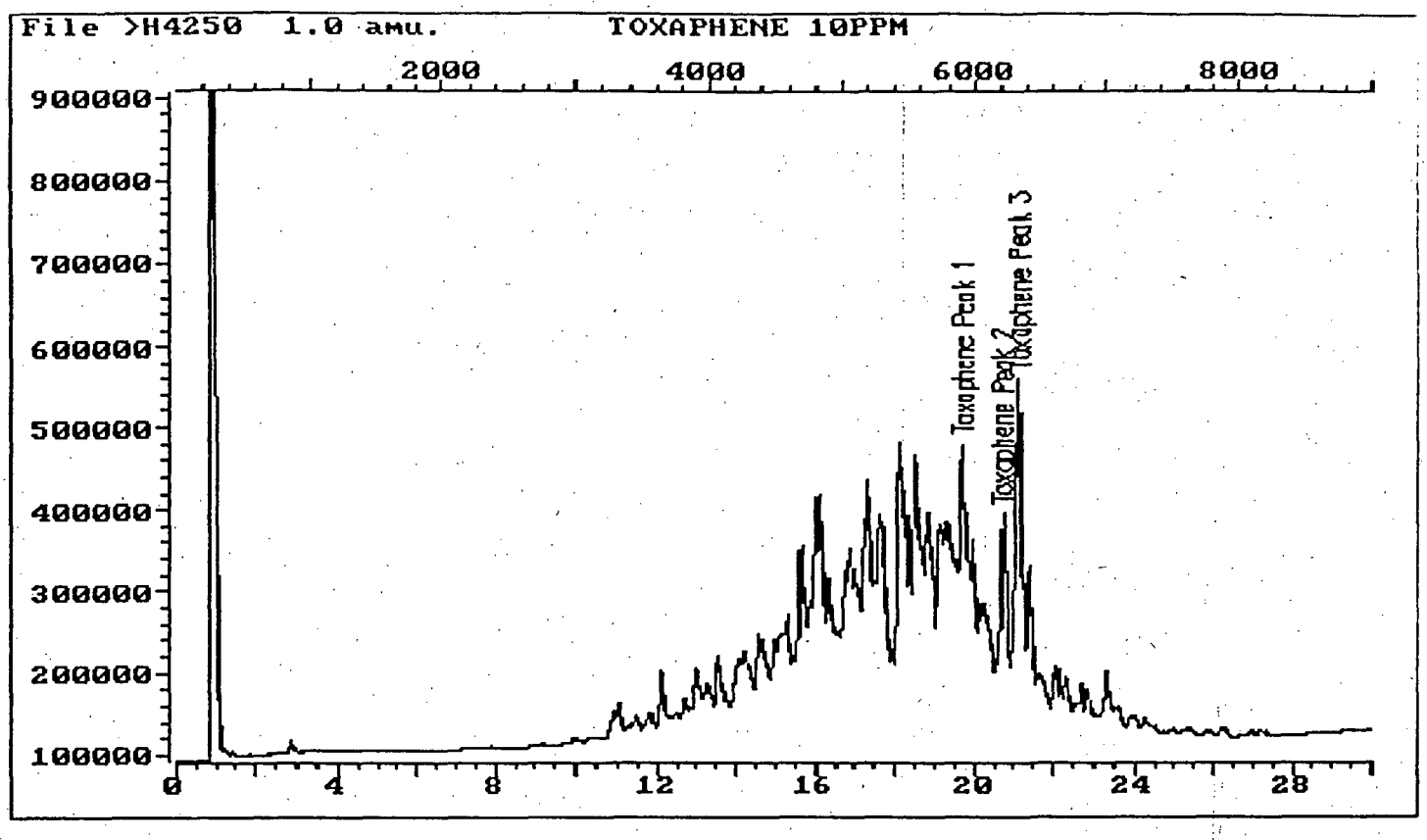
Quant Rev: 7
Quant Time: 990929 12:01
Injected at: 990928 23:21
Dilution Factor: 1.00000
Instrument ID: H

ID File: IDPST8::G5
Title: PESTICIDES HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990929 10:51
Last Qcal Time: 990915 15:03

	Compound	R.T.	Scan#	Area	Conc	Units	q
22)	#Toxaphene Peak 1	19.69	5907	1036354M	1036354.	NO CALIB	
23)	#Toxaphene Peak 2	20.67	6202	1480099	1480099.	NO CALIB	100
24)	#Toxaphene Peak 3	21.11	6333	3149601M	3149601.	NO CALIB	

Compound uses ESTD

335



Data File: >H4250 Quant Output File: ^H4250::G5
Name: TOXAPHENE 10PPM Instrument ID: H
Misc:

Id File: IDPST8::G5
Title: PESTICIDES HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990929 10:51 Last Qcal Time: 990915 15:03

Operator ID: CLIFF
Quant Time : 990929 12:01
Injected at: 990928 23:21

336

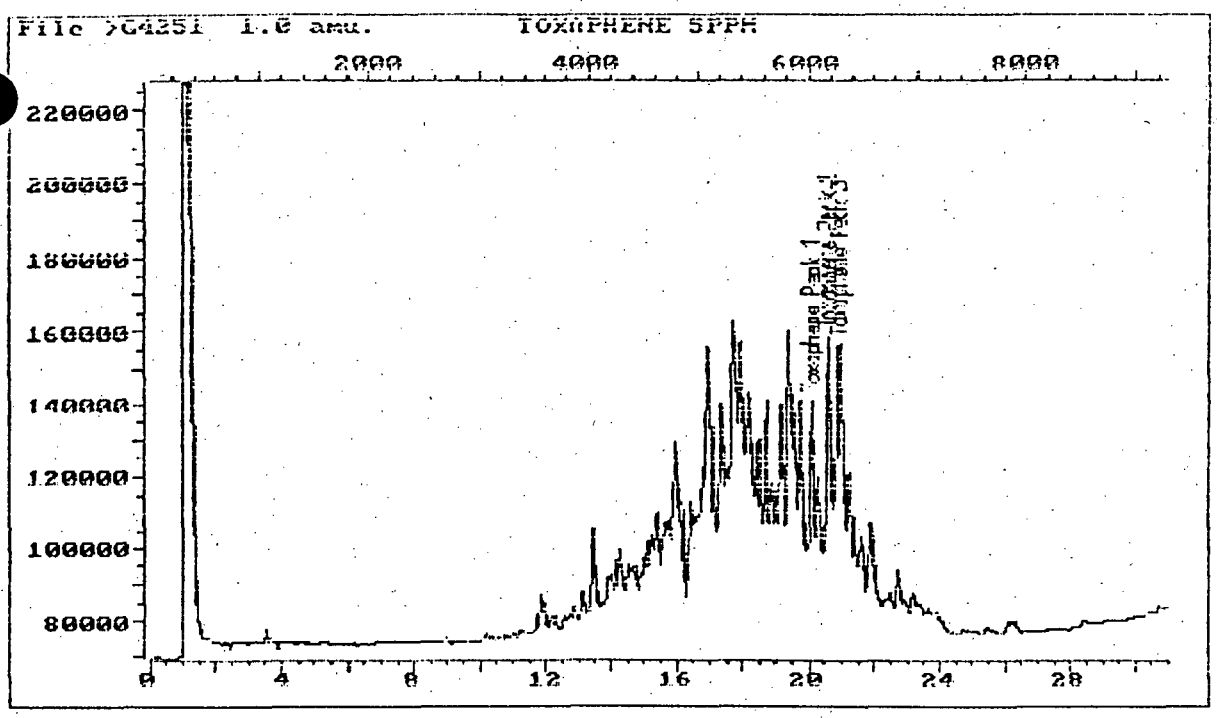
Operator ID: CLIFF Quant Rev: 7 Quant Time: 990929 10:54
Output File: ^G4251::QT Injected at: 990928 23:21
Data File: >G4251::G1 Dilution Factor: 1.00000
Name: TOXAPHENE 5PPM Instrument ID: G
Misc:

ID File: IDPST7::G5
Title: PESTICIDES HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990929 10:50 Last Qcal Time: 990915 14:26

Compound	R.T.	Scan#	Area	Conc	Units	q
22) #Toxaphene Peak 1	20.05	6016	303057	303057.0	NO CALIB	100
23) #Toxaphene Peak 2	20.56	6169	494436	494436.0	NO CALIB	100
24) #Toxaphene Peak 3	20.91	6272	513941M	513941.0	NO CALIB	

Compound uses ESTD

337



Data File: >G4251::G1 Quant Output File: ^G4251::QT
Name: TOXAPHENE 5PPM Instrument ID: G
Misc:

Id File: IDPST7::G5
Title: PESTICIDES HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990929 10:50 Last Qcal Time: 990915 14:26

Operator ID: CLIFF
Quant Time : 990929 10:54
Injected at: 990928 23:21

338

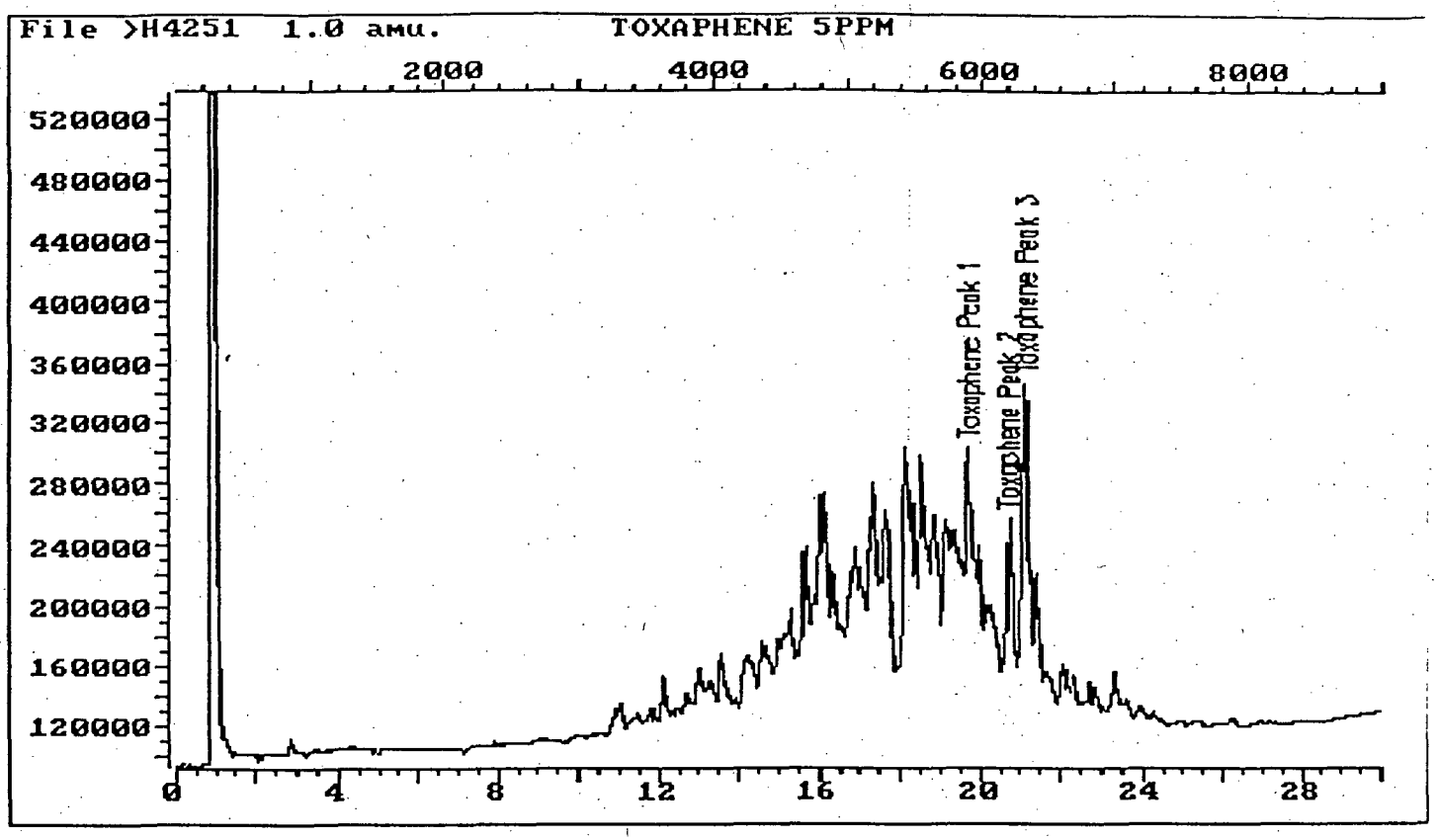
Operator ID: CLIFF Quant Rev: 7 Quant Time: 990929 12:04
Output File: ^H4251::G5 Injected at: 990928 23:58
Data File: >H4251::G1 Dilution Factor: 1.00000
Name: TOXAPHENE 5PPM Instrument ID: H
Misc:

ID File: IDPST8::G5
Title: PESTICIDES HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990929 10:51 Last Qcal Time: 990915 15:03

Compound	R.T.	Scan#	Area	Conc	Units	q
22) #Toxaphene Peak 1	19.69	5907	563801M	563801.0	NO CALIB	
23) #Toxaphene Peak 2	20.68	6204	765109	765109.0	NO CALIB	10(
24) #Toxaphene Peak 3	21.12	6336	1607141M	1607141.	NO CALIB	

Compound uses ESTD

339



Data File: >H4251
Name: TOXAPHENE 5PPM
Misc:

Quant Output File: ^H4251::G5
Instrument ID: H

Id File: IDPST8::G5
Title: PESTICIDES HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990929 10:51
Last Qcal Time: 990915 15:03

Operator ID: CLIFF
Quant Time : 990929 12:04
Injected at: 990928 23:58

340

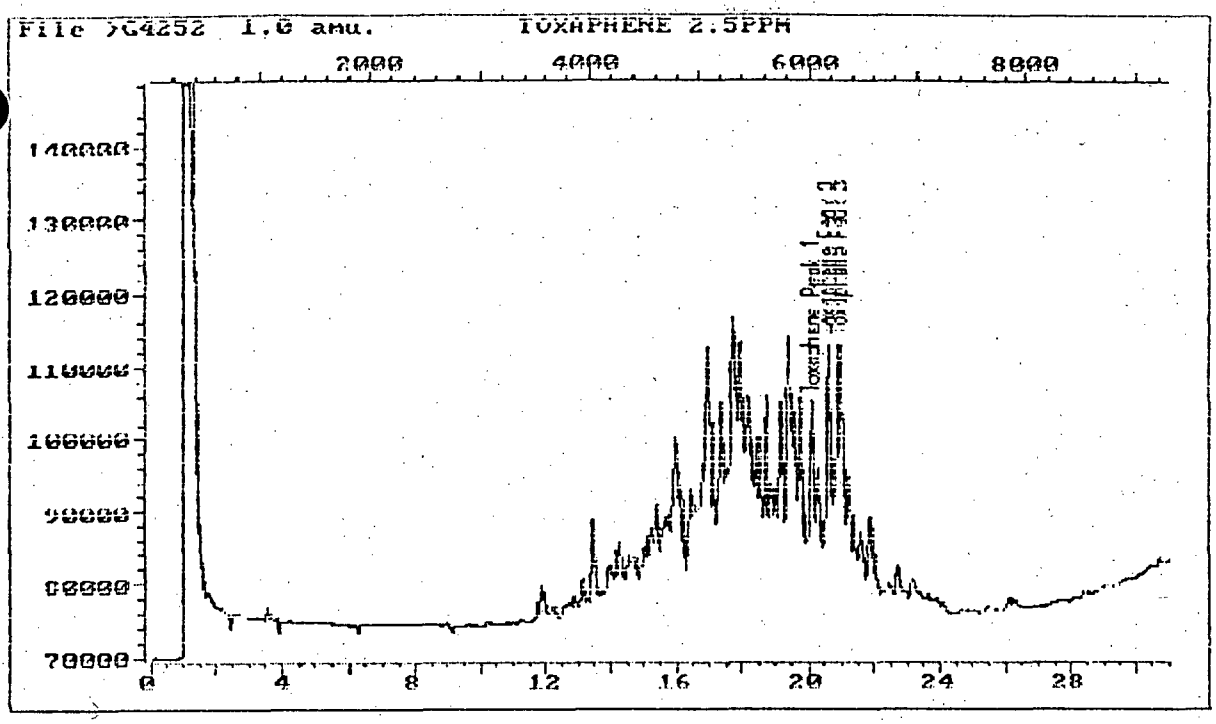
Operator ID: CLIFF Quant Rev: 7 Quant Time: 990929 10:55
Output File: ^G4252::QT Injected at: 990928 23:58
Data File: >G4252::G1 Dilution Factor: 1.00000
Name: TOXAPHENE 2.5PPM Instrument ID: G
Misc:

ID File: IDPST7::G5
Title: PESTICIDES HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990929 10:50 Last Qcal Time: 990915 14:26

Compound	R.T.	Scan#	Area	Conc	Units	q
22) #Toxaphene Peak 1	20.05	6016	150713	150713.0	NO CALIB	100
23) #Toxaphene Peak 2	20.56	6169	231666	231666.0	NO CALIB	100
24) #Toxaphene Peak 3	20.91	6272	258291M	258291.0	NO CALIB	

Compound uses ESTD

341



Data File: >G4252::G1 Quant Output File: ^G4252::QT
Name: TOXAPHENE 2.5PPM Instrument ID: G
Misc:

Id File: IDPST7::G5
Title: PESTICIDES HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990929 10:50 Last Qcal Time: 990915 14:26

Operator ID: CLIFF
Quant Time : 990929 10:55
Injected at: 990928 23:58

342

QUANT REPORT

Operator ID: CLIFF
Output File: ^H4252::G5
Data File: >H4252::G1
Name: TOXAPHENE 2.5PPM
Misc:

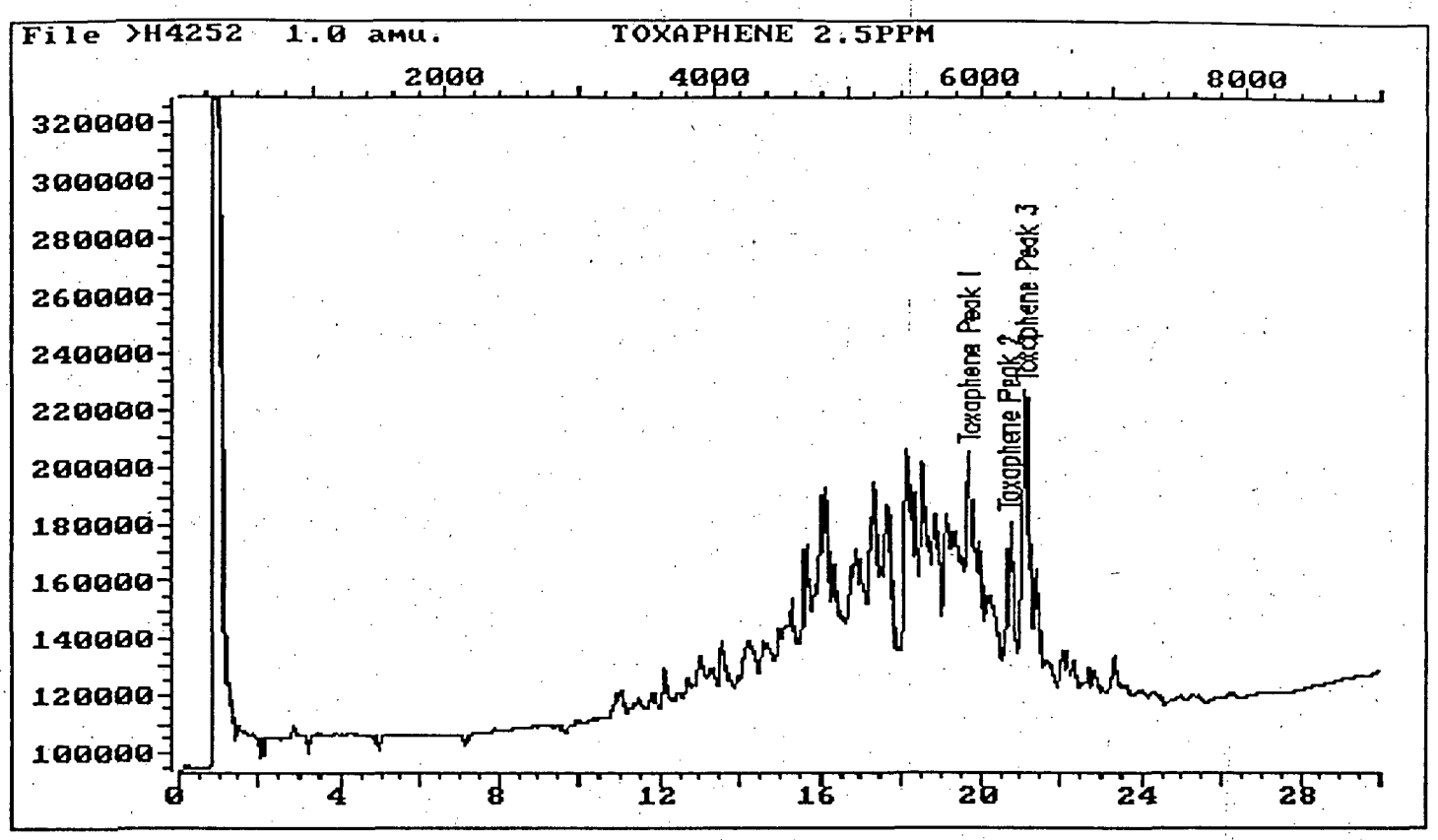
Quant Rev: 7
Quant Time: 990929 12:06
Injected at: 990929 00:36
Dilution Factor: 1.00000
Instrument ID: H

ID File: IDPST8::G5
Title: PESTICIDES HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990929 10:51
Last Qcal Time: 990915 15:03

	Compound	R.T.	Scan#	Area	Conc	Units	q
22)	#Toxaphene Peak 1	19.70	5910	285431M	285431.0	NO CALIB	
23)	#Toxaphene Peak 2	20.68	6205	363617	363617.0	NO CALIB	100
24)	#Toxaphene Peak 3	21.13	6339	778786M	778786.0	NO CALIB	

Compound uses ESTD

343



Data File: >H4252 Quant Output File: ^H4252::G5
Name: TOXAPHENE 2.5PPM Instrument ID: H
Misc:

Id File: IDPST8::G5
Title: PESTICIDES HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990929 10:51 Last Qcal Time: 990915 15:03

Operator ID: CLIFF
Quant Time : 990929 12:06
Injected at: 990929 00:36

344

QUANT REPORT

Operator ID: CLIFF
Output File: ^G4253::QT
Data File: >G4253::G1
Name: TOXAPHENE 1.0PPM
Misc:

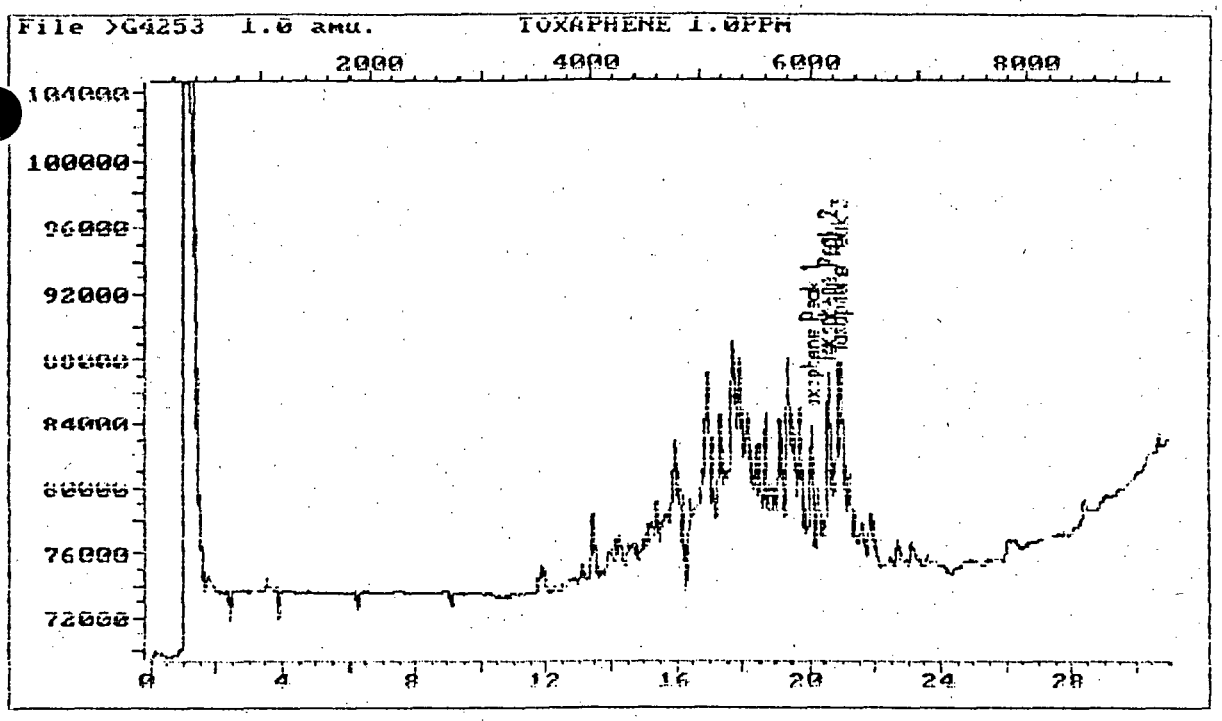
Quant Rev: 7
Quant Time: 990929 10:57
Injected at: 990929 00:36
Dilution Factor: 1.00000
Instrument ID: G

ID File: IDPST7::G5
Title: PESTICIDES HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990929 10:50
Last Qcal Time: 990915 14:26

Compound	R.T.	Scan#	Area	Conc	Units	q
22) #Toxaphene Peak 1	20.06	6017	57267	57267.00	NO CALIB	100
23) #Toxaphene Peak 2	20.56	6169	87826	87826.00	NO CALIB	100
24) #Toxaphene Peak 3	20.91	6272	93927M	93927.00	NO CALIB	

Compound uses ESTD

345



Data File: >G4253::G1 Quant Output File: ^G4253::QT
Name: TOXAPHENE 1.0PPM Instrument ID: G
Misc:

Id File: IDPST7::G5
Title: PESTICIDES HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990929 10:50 Last Qcal Time: 990915 14:26

Operator ID: CLIFF
Quant Time : 990929 10:57
Injected at: 990929 00:36

346

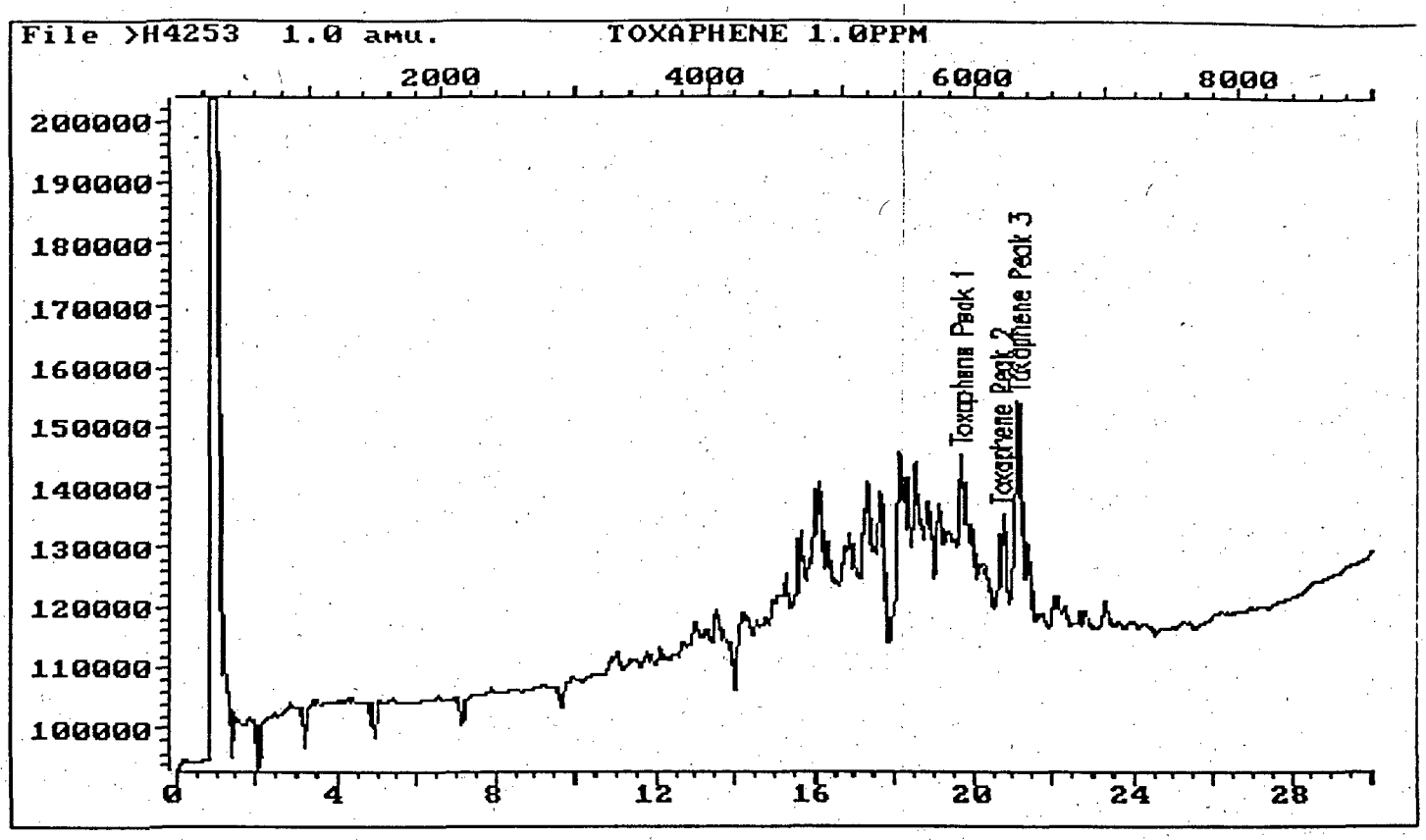
Operator ID: CLIFF Quant Rev: 7 Quant Time: 990929 12:07
Output File: ^H4253::G5 Injected at: 990929 01:13
Data File: >H4253::G1 Dilution Factor: 1.00000
Name: TOXAPHENE 1.0PPM Instrument ID: H
Misc:

ID File: IDPST8::G5
Title: PESTICIDES HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990929 10:51 Last Qcal Time: 990915 15:03

	Compound	R.T.	Scan#	Area	Conc	Units	q
22)	#Toxaphene Peak 1	19.70	5911	103374M	103374.0	NO CALIB	
23)	#Toxaphene Peak 2	20.69	6207	126294	126294.0	NO CALIB	100
24)	#Toxaphene Peak 3	21.13	6340	280428M	280428.0	NO CALIB	

Compound uses ESTD

347



Data File: >H4253 Quant Output File: ^H4253::G5
Name: TOXAPHENE 1.0PPM Instrument ID: H
Misc:

Id File: IDPST8::G5
Title: PESTICIDES HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990929 10:51 Last Qcal Time: 990915 15:03

Operator ID: CLIFF
Quant Time : 990929 12:07
Injected at: 990929 01:13

348

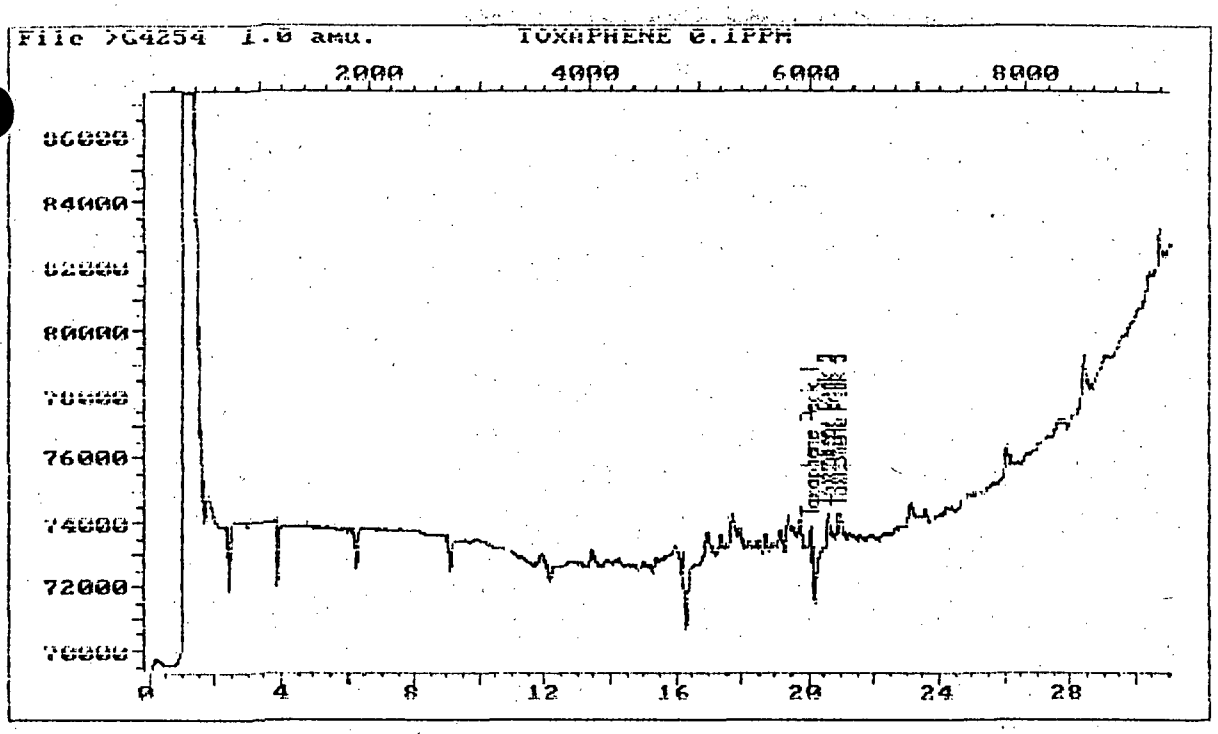
Operator ID: CLIFF Quant Rev: 7 Quant Time: 990929 10:58
Output File: ^G4254::QT Injected at: 990929 01:13
Data File: >G4254::G1 Dilution Factor: 1.00000
Name: TOXAPHENE 0.1PPM Instrument ID: G
Misc:

ID File: IDPST7::G5
Title: PESTICIDES HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990929 10:50 Last Qcal Time: 990915 14:26

Compound	R.T.	Scan#	Area	Conc	Units	q
22) #Toxaphene Peak 1	20.05	6015	6009M	6009.00	NO CALIB	
23) #Toxaphene Peak 2	20.56	6169	9952M	9952.00	NO CALIB	
24) #Toxaphene Peak 3	20.91	6273	7623M	7623.00	NO CALIB	

Compound uses ESTD

349



Data File: >G4254::G1 Quant Output File: ^G4254::QT
Name: TOXAPHENE 0.1PPM Instrument ID: G
Misc:

Id File: IDPST7::G5
Title: PESTICIDES HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990929 10:50 Last Qcal Time: 990915 14:26

Operator ID: CLIFF
Quant Time : 990929 10:58
Injected at: 990929 01:13

350

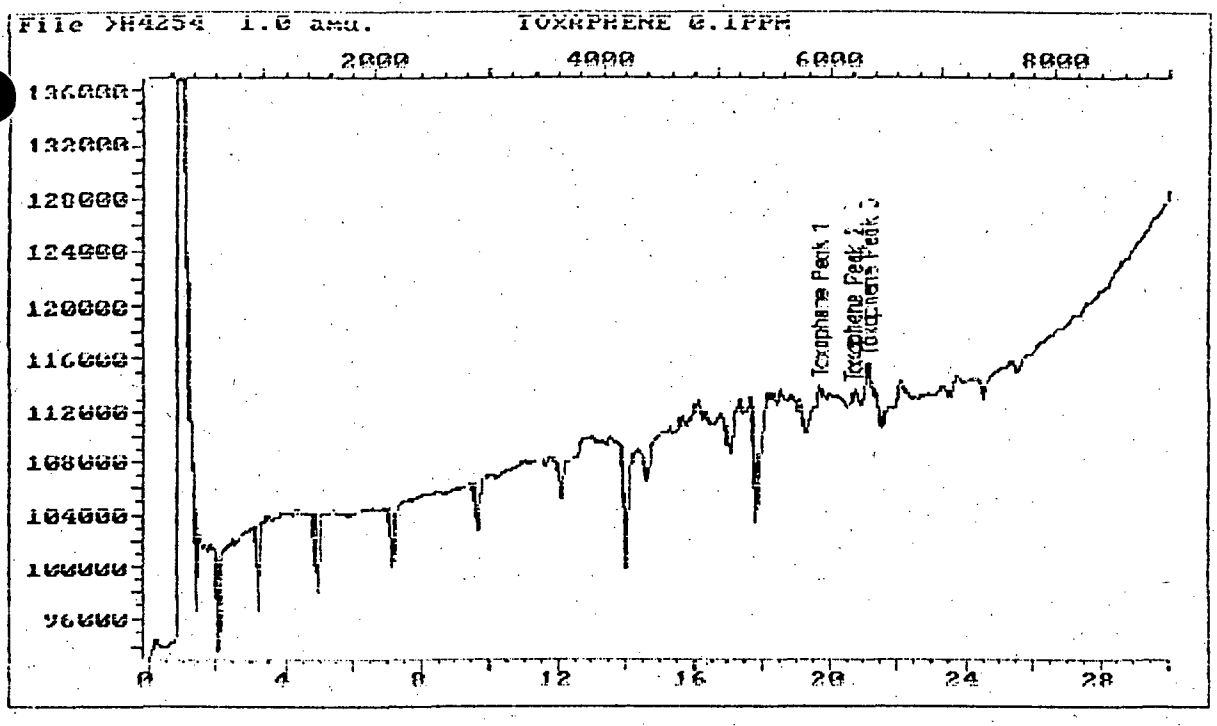
Operator ID: CLIFF Quant Rev: 7 Quant Time: 990929 12:09
Output File: ^H4254::QT Injected at: 990929 01:49
Data File: >H4254::G1 Dilution Factor: 1.00000
Name: TOXAPHENE 0.1PPM Instrument ID: H
Misc:

ID File: IDPST8::G5
Title: PESTICIDES HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990929 10:51 Last Qcal Time: 990915 15:03

Compound	R.T.	Scan#	Area	Conc	Units	q
22) #Toxaphene Peak 1	19.71	5912	9756M	9756.00	NO CALIB	
23) #Toxaphene Peak 2	20.69	6207	12055M	12055.00	NO CALIB	
24) #Toxaphene Peak 3	21.15	6344	25376M	25376.00	NO CALIB	

Compound uses ESTD

351



Data File: >H4254::G1 Quant Output File: ^H4254::QT
Name: TOXAPHENE 0.1PPM Instrument ID: H
Misc:

Id File: IDPST8::G5
Title: PESTICIDES HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990929 10:51 Last Qcal Time: 990915 15:03

Operator ID: CLIFF
Quant Time : 990929 12:09
Injected at: 990929 01:49

352

QUANT REPORT

Operator ID: CLIFF
Output File: ^G4255::QT
Data File: >G4255::G1
Name: MIX A
Misc:

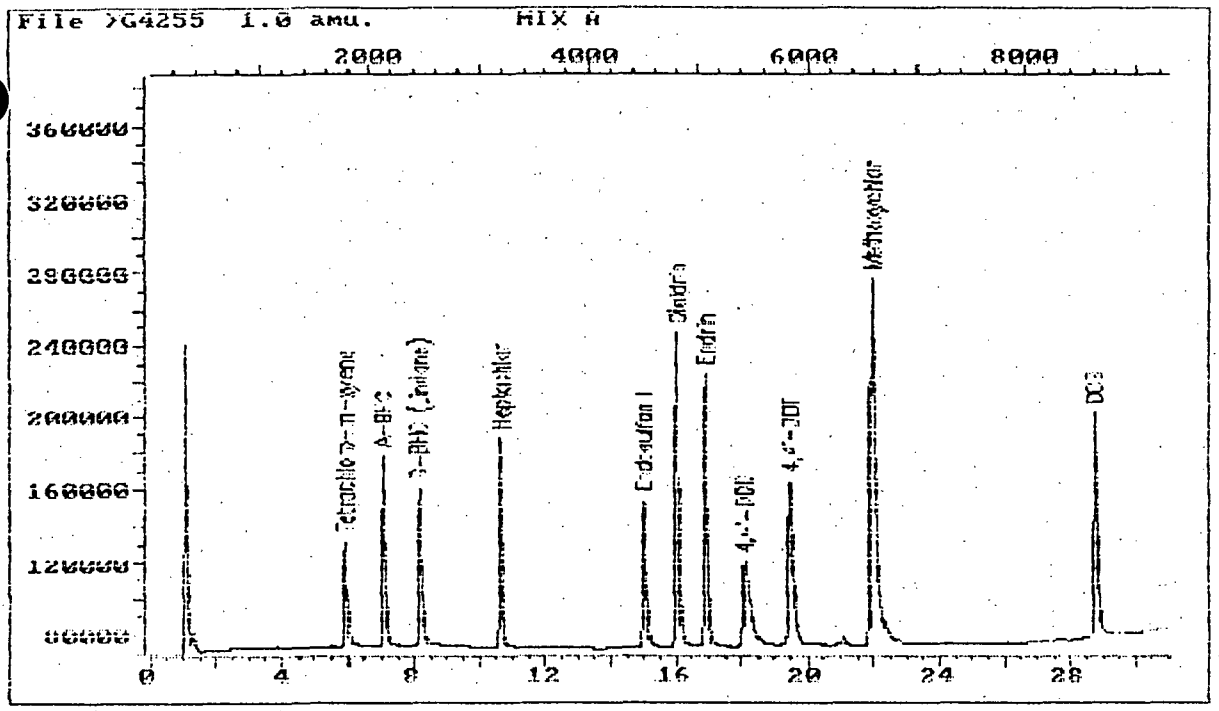
Quant Rev: 7
Quant Time: 990929 11:00
Injected at: 990929 01:49
Dilution Factor: 1.00000
Instrument ID: G

ID File: IDPST7::G5
Title: PESTICIDES HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990929 10:50
Last Qcal Time: 990915 14:26

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	5.88	1764	369014	369014.0	NO	CALIB100
2)	#A-BHC	7.06	2119	619096	619096.0	NO	CALIB100
4)	#G-BHC (Lindane)	8.15	2446	602912	602912.0	NO	CALIB100
6)	#Heptachlor	10.63	3189	615114	615114.0	NO	CALIB100
10)	#Endosulfan I	14.96	4489	536484	536484.0	NO	CALIB100
12)	#Dieldrin	16.01	4804	1120816	1120816.	NO	CALIB100
14)	#Endrin	16.88	5064	970757	970757.0	NO	CALIB100
16)	#4,4'-DDD	18.06	5418	728563	728563.0	NO	CALIB100
19)	#4,4'-DDT	19.46	5839	782439	782439.0	NO	CALIB100
21)	#Methoxychlor	21.97	6590	2168377	2168377.	NO	CALIB100
25)	#DCB	28.72	8617	948520	948520.0	NO	CALIB100

Compound uses ESTD

353



Data File: >G4255::G1 Quant Output File: ^G4255::QT
Name: MIX A Instrument ID: G
Misc:

Id File: IDPST7::G5
Title: PESTICIDES HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990929 10:50 Last Qcal Time: 990915 14:26

Operator ID: CLIFF
Quant Time : 990929 11:00
Injected at: 990929 01:49

354

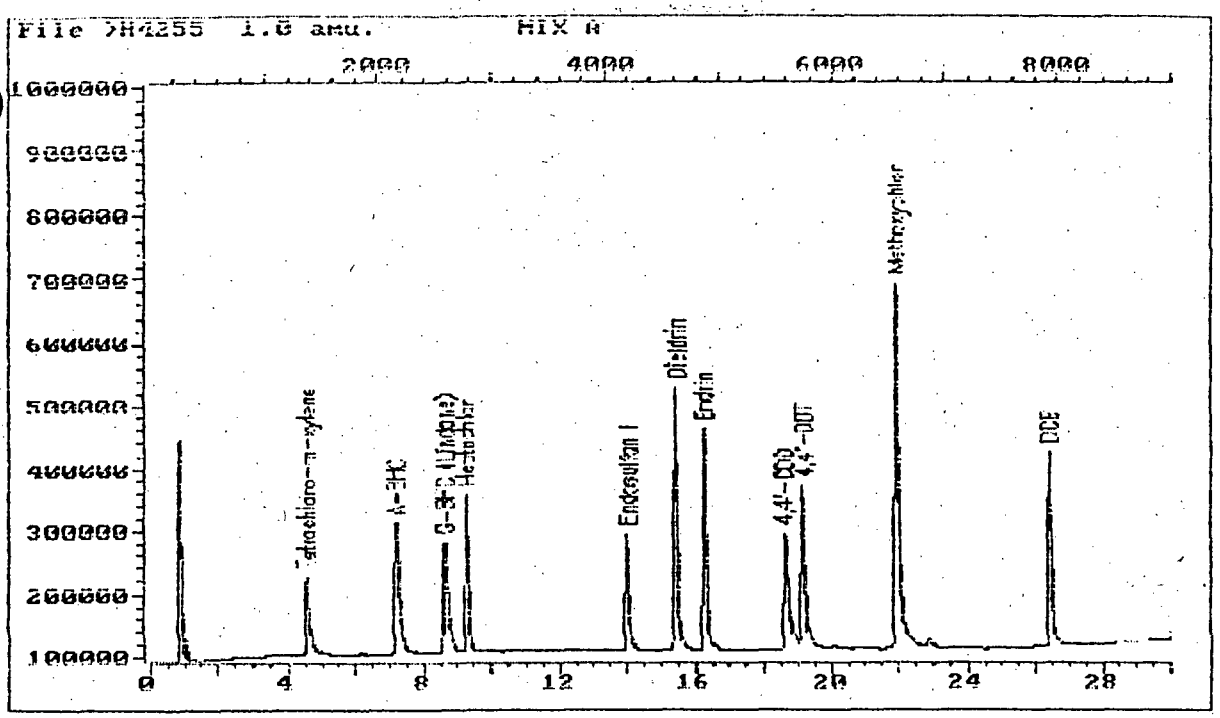
Operator ID: CLIFF Quant Rev: 7 Quant Time: 990929 12:10
Input File: ^H4255::QT Injected at: 990929 02:26
Data File: >H4255::G1 Dilution Factor: 1.00000
Name: MIX A Instrument ID: H
Misc:

ID File: IDPST8::G5
Title: PESTICIDES HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990929 10:51 Last Qcal Time: 990915 15:03

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	4.56	1369	977001	977001.0	NO	CALIB100
2)	#A-BHC	7.17	2152	1633370	1633370.	NO	CALIB100
3)	#G-BHC (Lindane)	8.62	2585	1549015	1549015.	NO	CALIB100
4)	#Heptachlor	9.22	2765	1407464	1407464.	NO	CALIB100
9)	#Endosulfan I	13.98	4194	1202544M	1202544.	NO	CALIB100
13)	#Dieldrin	15.44	4631	2878463	2878463.	NO	CALIB100
14)	#Endrin	16.24	4873	2459687	2459687.	NO	CALIB100
16)	#4,4'-DDD	18.61	5584	1849874	1849874.	NO	CALIB100
17)	#4,4'-DDT	19.17	5750	2073890	2073890.	NO	CALIB100
20)	#Methoxychlor	21.90	6570	5356615	5356615.	NO	CALIB100
25)	#DCB	26.42	7927	2451015	2451015.	NO	CALIB100

Compound uses ESTD

355



Data File: >H4255::G1 Quant Output File: ^H4255::QT
Name: MIX A Instrument ID: H
Misc:

Id File: IDPST8::C5
Title: PESTICIDES HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990929 10:51 Last Qcal Time: 990915 15:03

Operator ID: CLIFF
Quant Time : 990929 12:10
Injected at: 990929 02:26

356

QUANT REPORT

Operator ID: CLIFF
Output File: ^G4256::QT
Data File: >G4256::G1
Name: 1/2 MIX A
Misc:

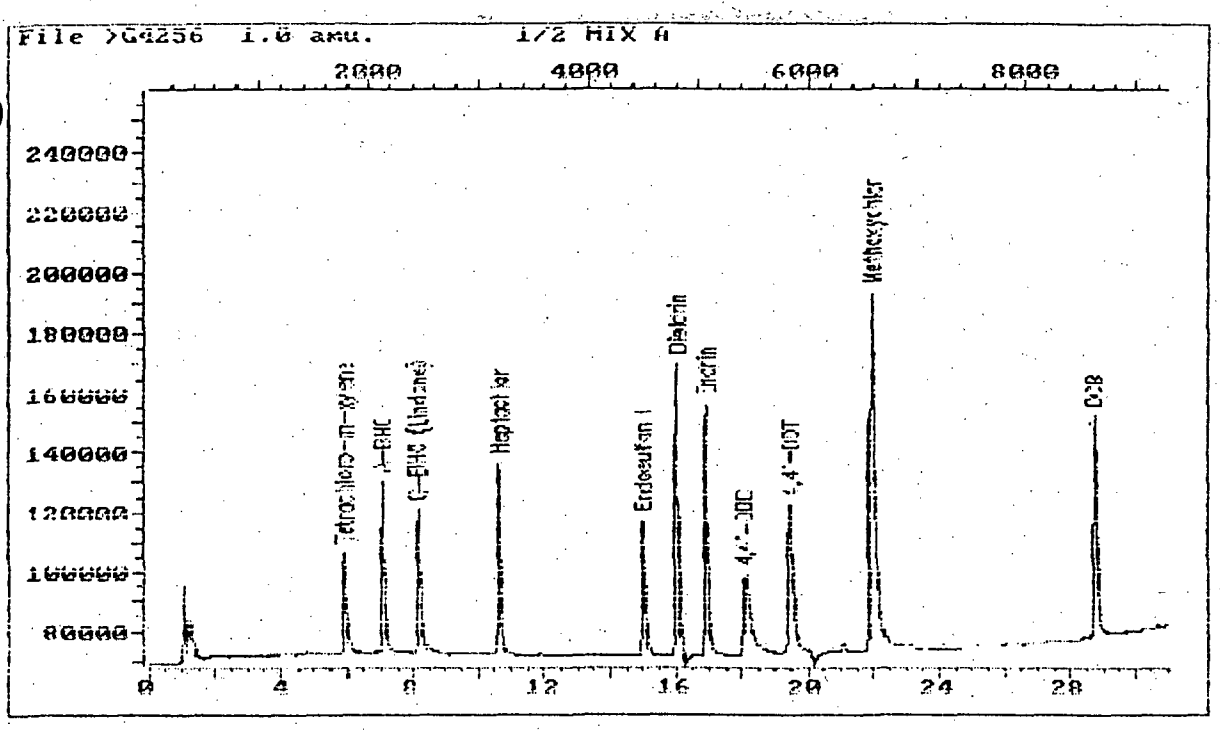
Quant Rev: 7
Quant Time: 990929 11:02
Injected at: 990929 02:26
Dilution Factor: 1.00000
Instrument ID: G

ID File: IDPST7::G5
Title: PESTICIDES HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990929 10:50
Last Qcal Time: 990915 14:26

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	5.88	1764	207156	207156.0	NO CALIB100	
2)	#A-BHC	7.06	2119	330798	330798.0	NO CALIB100	
4)	#G-BHC (Lindane)	8.15	2446	321111	321111.0	NO CALIB100	
6)	#Heptachlor	10.63	3189	329358	329358.0	NO CALIB100	
10)	#Endosulfan I	14.96	4489	280836	280836.0	NO CALIB100	
12)	#Dieldrin	16.01	4804	648873	648873.0	NO CALIB100	
14)	#Endrin	16.88	5063	516860	516860.0	NO CALIB100	
16)	#4,4'-DDD	18.05	5416	381246	381246.0	NO CALIB100	
19)	#4,4'-DDT	19.46	5839	398442M	398442.0	NO CALIB100	
21)	#Methoxychlor	21.97	6591	1244682	1244682.	NO CALIB100	
25)	#DCB	28.72	8617	559171	559171.0	NO CALIB100	

Compound uses ESTD

357



Data File: >G4256::G1 Quant Output File: ^G4256::QT
Name: 1/2 MIX A Instrument ID: G
Misc:

Id File: IDPST7::G5
Title: PESTICIDES HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990929 10:50 Last Qcal Time: 990915 14:26

Operator ID: CLIFF
Quant Time : 990929 11:02
Injected at: 990929 02:26

358

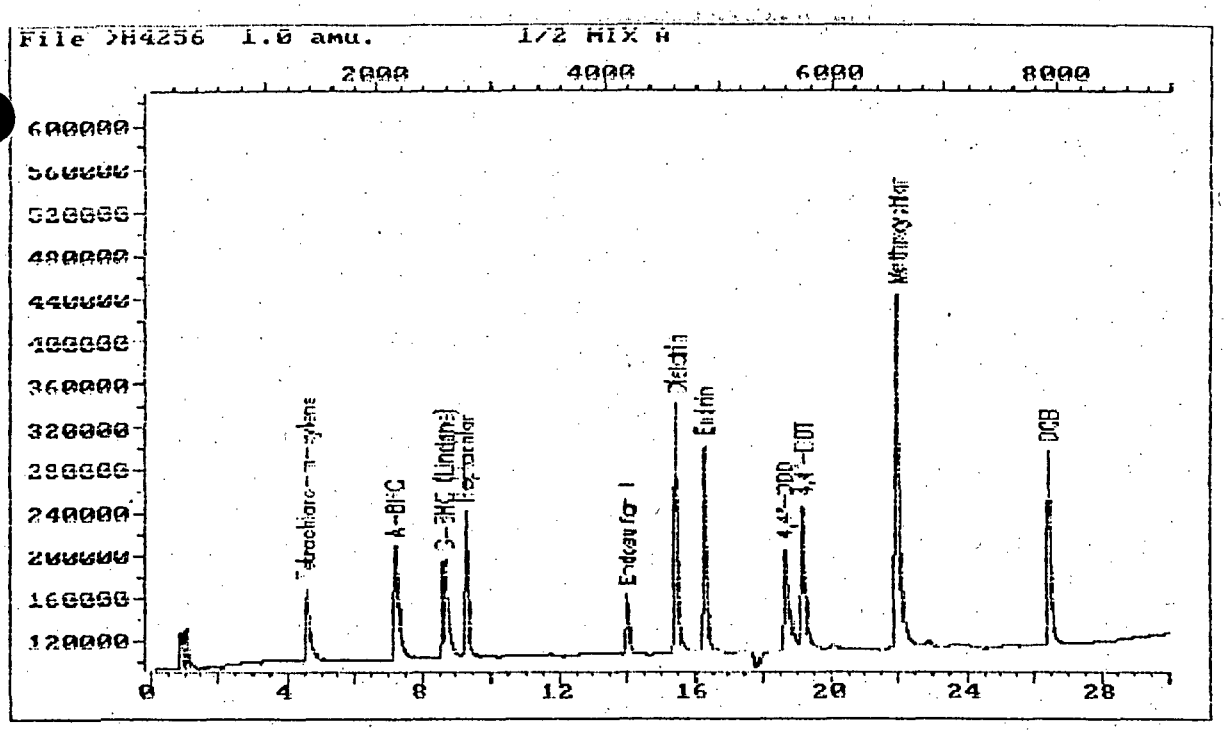
Operator ID: CLIFF Quant Rev: 7 Quant Time: 990929 12:12
Output File: ^H4256::QT Injected at: 990929 03:03
Data File: >H4256::G1 Dilution Factor: 1.00000
Name: 1/2 MIX A Instrument ID: H
Misc:

ID File: IDPST8::G5
Title: PESTICIDES HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990929 10:51 Last Qcal Time: 990915 15:03

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	4.57	1371	555972	555972.0	NO	CALIB100
2)	#A-BHC	7.18	2153	851890	851890.0	NO	CALIB100
3)	#G-BHC (Lindane)	8.62	2586	832564	832564.0	NO	CALIB100
4)	#Heptachlor	9.21	2764	799668	799668.0	NO	CALIB100
9)	#Endosulfan I	13.98	4193	380650M	380650.0	NO	CALIB100
13)	#Dieldrin	15.44	4631	1561242	1561242.	NO	CALIB100
14)	#Endrin	16.25	4874	1410954	1410954.	NO	CALIB100
16)	#4,4'-DDD	18.63	5588	863625	863625.0	NO	CALIB100
17)	#4,4'-DDT	19.17	5752	1098662	1098662.	NO	CALIB100
20)	#Methoxychlor	21.91	6573	3177750	3177750.	NO	CALIB100
25)	#DCB	26.43	7928	1433533	1433533.	NO	CALIB100

Compound uses ESTD

359



Data File: >H4256::G1 Quant Output File: ^H4256::QT
Name: 1/2 MIX A Instrument ID: H
Misc:

Id File: IDPST8::G5
Title: PESTICIDES HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990929 10:51 Last Qcal Time: 990915 15:03

Operator ID: CLIFF
Quant Time : 990929 12:12
Injected at: 990929 03:03

360

QUANT REPORT

Operator ID: CLIFF
Output File: ^G4257::QT
Data File: >G4257::G1
Name: 1/4 MIX A
Misc:

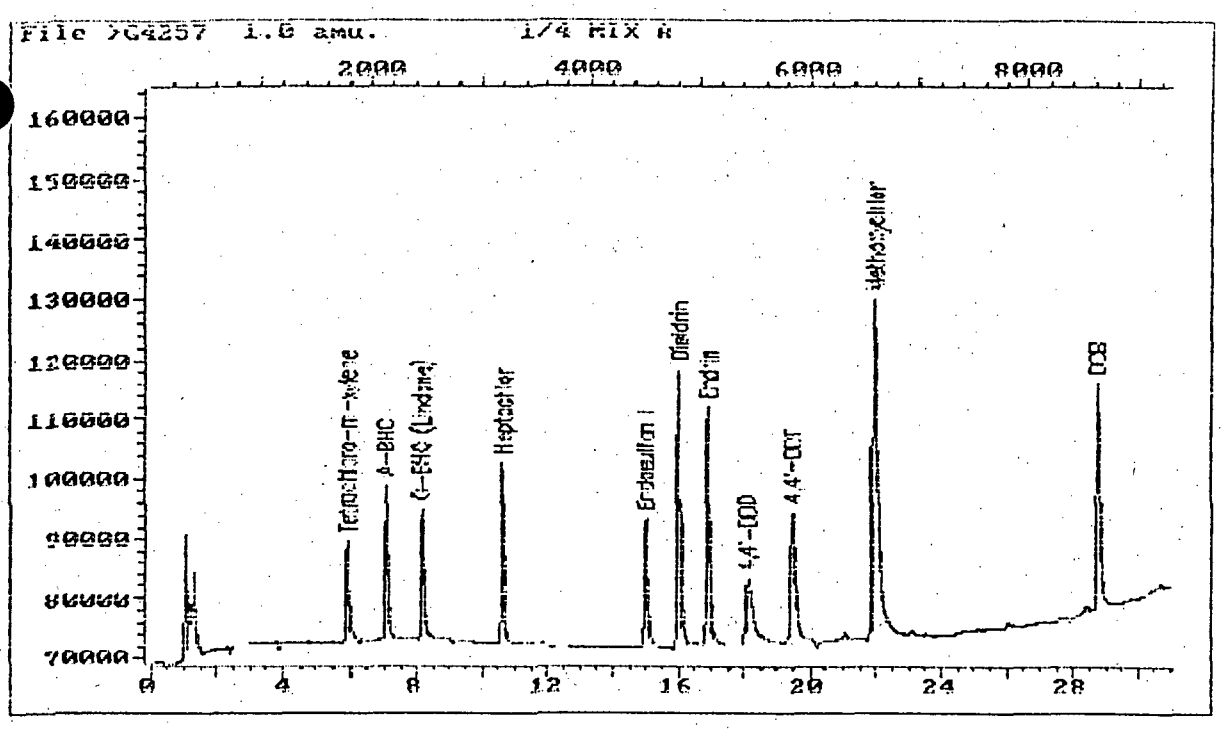
Quant Rev: 7
Quant Time: 990929 11:03
Injected at: 990929 03:03
Dilution Factor: 1.00000
Instrument ID: G

ID File: IDPST7::G5
Title: PESTICIDES HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990929 10:50
Last Qcal Time: 990915 14:26

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	5.88	1764	111359	111359.0	NO CALIB100	
2)	#A-BHC	7.06	2119	155127	155127.0	NO CALIB100	
4)	#G-BHC (Lindane)	8.15	2446	152303	152303.0	NO CALIB100	
6)	#Heptachlor	10.63	3188	158127	158127.0	NO CALIB100	
10)	#Endosulfan I	14.96	4489	137332	137332.0	NO CALIB100	
12)	#Dieldrin	16.01	4804	289026	289026.0	NO CALIB100	
14)	#Endrin	16.88	5063	257701	257701.0	NO CALIB100	
16)	#4,4'-DDD	18.07	5421	177634	177634.0	NO CALIB100	
19)	#4,4'-DDT	19.47	5840	193207	193207.0	NO CALIB100	
21)	#Methoxychlor	21.98	6594	639358	639358.0	NO CALIB100	
25)	#DCB	28.73	8618	290637	290637.0	NO CALIB100	

Compound uses ESTD

361



Data File: >G4257::G1 Quant Output File: ^G4257::QT
Name: 1/4 MIX A Instrument ID: G
Misc:

Id File: IDPST7::G5
Title: PESTICIDES HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990929 10:50 Last Qcal Time: 990915 14:26

Operator ID: CLIFF
Quant Time : 990929 11:03
Injected at: 990929 03:03

362

QUANT REPORT

Operator ID: CLIFF
Output File: ^H4257::QT
Data File: >H4257::G1
Name: 1/4 MIX A
Misc:

Quant Rev: 7
Quant Time: 990929 12:14
Injected at: 990929 03:40
Dilution Factor: 1.00000
Instrument ID: H

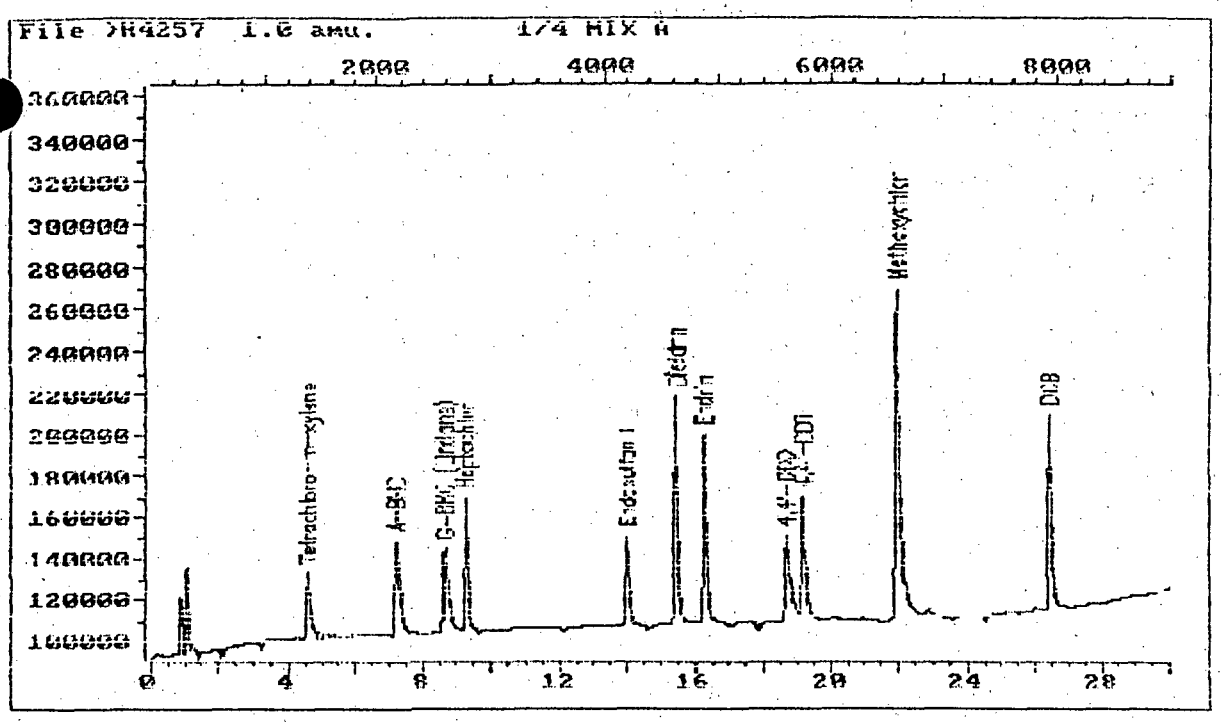
ID File: IDPST8::G5
Title: PESTICIDES HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990929 10:51
Last Qcal Time: 990915 15:03

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	4.58	1373	277005	277005.0	NO CALIB100	
2)	#A-BHC	7.18	2155	399166	399166.0	NO CALIB100	
3)	#G-BHC (Lindane)	8.63	2588	386716	386716.0	NO CALIB100	
4)	#Heptachlor	9.21	2764	409339	409339.0	NO CALIB100	
9)	#Endosulfan I	13.98	4193	277334M	277334.0	NO CALIB100	
13)	#Dieldrin	15.44	4631	734894	734894.0	NO CALIB100	
14)	#Endrin	16.24	4873	629959	629959.0	NO CALIB100	
16)	#4,4'-DDD	18.65	5595	434743	434743.0	NO CALIB100	
17)	#4,4'-DDT	19.18	5755	439267M	439267.0	NO CALIB	
20)	#Methoxychlor	21.93	6578	1665031	1665031.	NO CALIB100	
25)	#DCB	26.43	7928	749730	749730.0	NO CALIB100	

Compound uses ESTD

363

700461



Data File: >H4257::G1 Quant Output File: ^H4257::QT
Name: 1/4 MIX A Instrument ID: H
Misc:

Id File: IDPST8::G5
Title: PESTICIDES HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990929 10:51 Last Qcal Time: 990915 15:03

Operator ID: CLIFF
Quant Time : 990929 12:14
Injected at: 990929 03:40

364

QUANT REPORT

Operator ID: CLIFF
Output File: ^G4258::QT
Data File: >G4258::G1
Name: 1/8 MIX A
Misc:

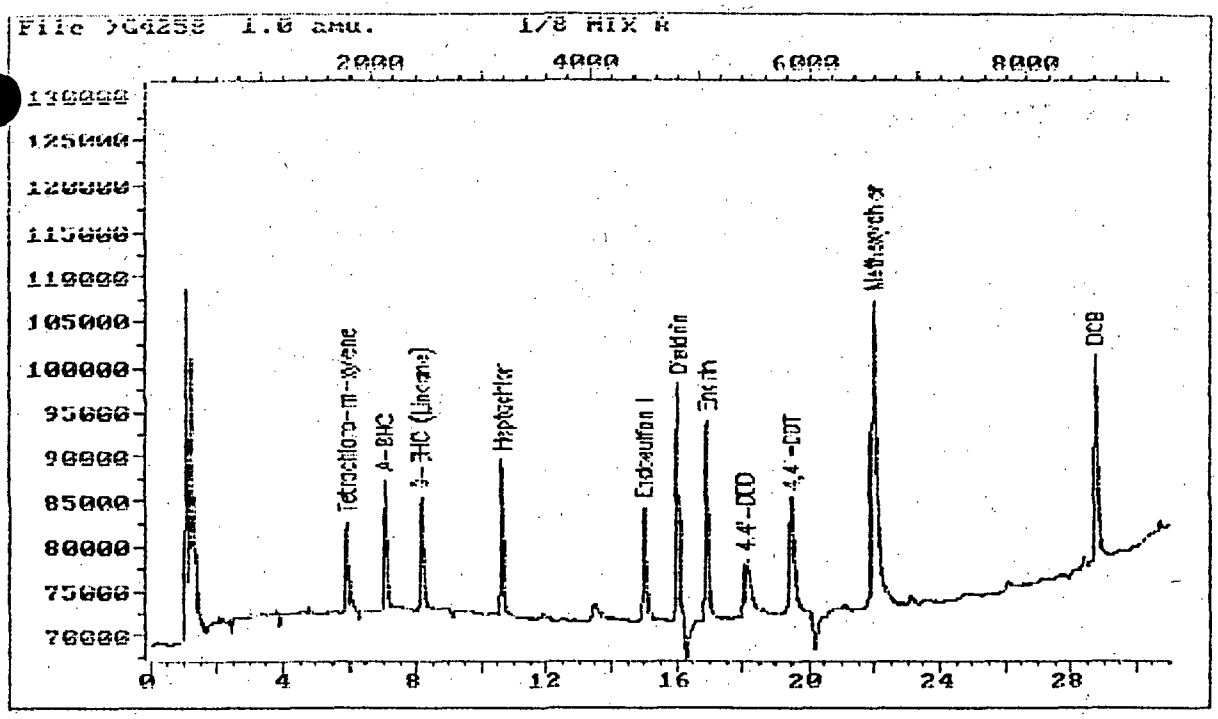
Quant Rev: 7
Quant Time: 990929 11:05
Injected at: 990929 03:40
Dilution Factor: 1.00000
Instrument ID: G

ID File: IDPST7::G5
Title: PESTICIDES HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990929 10:50
Last Qcal Time: 990915 14:26

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	5.88	1764	52996M	52996.00	NO	CALIB100
2)	#A-BHC	7.06	2118	87016	87016.00	NO	CALIB100
4)	#G-BHC (Lindane)	8.15	2445	82377	82377.00	NO	CALIB100
6)	#Heptachlor	10.63	3188	89747	89747.00	NO	CALIB100
10)	#Endosulfan I	14.96	4489	78027	78027.00	NO	CALIB100
12)	#Dieldrin	16.01	4803	164537M	164537.0	NO	CALIB100
14)	#Endrin	16.87	5062	128275	128275.0	NO	CALIB100
16)	#4,4'-DDD	18.06	5418	87289	87289.00	NO	CALIB100
19)	#4,4'-DDT	19.46	5839	104311	104311.0	NO	CALIB100
21)	#Methoxychlor	21.98	6593	378096	378096.0	NO	CALIB100
25)	#DCB	28.72	8617	152671M	152671.0	NO	CALIB100

Compound uses ESTD

365



Data File: >G4258::G1 Quant Output File: ^G4258::QT
Name: 1/8 MIX A Instrument ID: G
Misc:

Id File: IDPST7::G5
Title: PESTICIDES HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990929 10:50 Last Qcal Time: 990915 14:26

Operator ID: CLIFF
Quant Time : 990929 11:05
Injected at: 990929 03:40

366

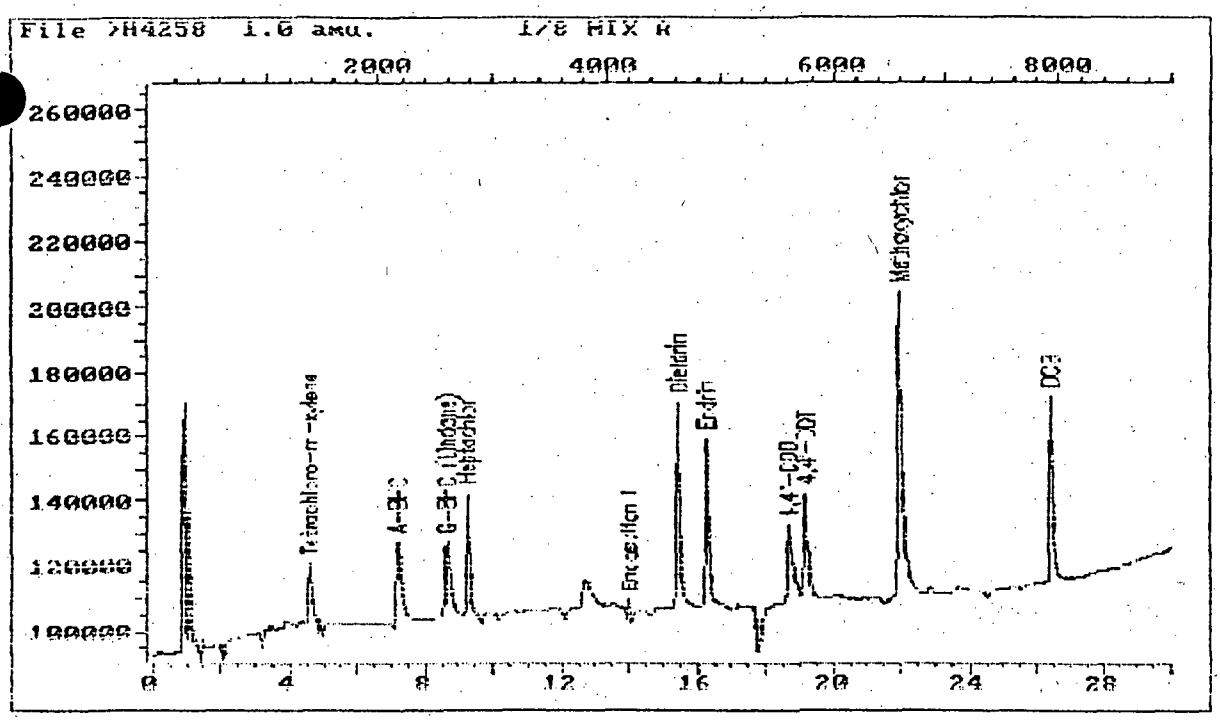
Operator ID: CLIFF Quant Rev: 7 Quant Time: 990929 12:15
Output File: ^H4258::QT Injected at: 990929 04:17
Data File: >H4258::G1 Dilution Factor: 1.00000
Name: 1/8 MIX A Instrument ID: H
Misc:

ID File: IDPST8::G5
Title: PESTICIDES HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990929 10:51 Last Qcal Time: 990915 15:03

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	4.58	1374	164515	164515.0	NO	CALIB100
2)	#A-BHC	7.19	2156	216523M	216523.0	NO	CALIB100
3)	#G-BHC (Lindane)	8.63	2588	213421M	213421.0	NO	CALIB100
4)	#Heptachlor	9.21	2763	201460M	201460.0	NO	CALIB100
9)	#Endosulfan I	13.98	4193	121138M	121138.0	NO	CALIB100
13)	#Dieldrin	15.43	4630	407842	407842.0	NO	CALIB100
14)	#Endrin	16.24	4872	354878	354878.0	NO	CALIB100
16)	#4,4'-DDD	18.66	5597	238781M	238781.0	NO	CALIB
17)	#4,4'-DDT	19.19	5756	256096	256096.0	NO	CALIB100
20)	#Methoxychlor	21.93	6580	902487M	902487.0	NO	CALIB100
25)	#DCB	26.43	7928	450895	450895.0	NO	CALIB100

Compound uses ESTD

367



Data File: >H4258::G1 Quant Output File: ^H4258::QT
Name: 1/8 MIX A Instrument ID: H
Misc:

Id File: IDPST8::G5
Title: PESTICIDES HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990929 10:51 Last Qcal Time: 990915 15:03

Operator ID: CLIFF
Quant Time : 990929 12:15
Injected at: 990929 04:17

368

QUANT REPORT

Operator ID: CLIFF
Output File: ^G4259::QT
Data File: >G4259::G1
Name: 1/40 MIX A
Misc:

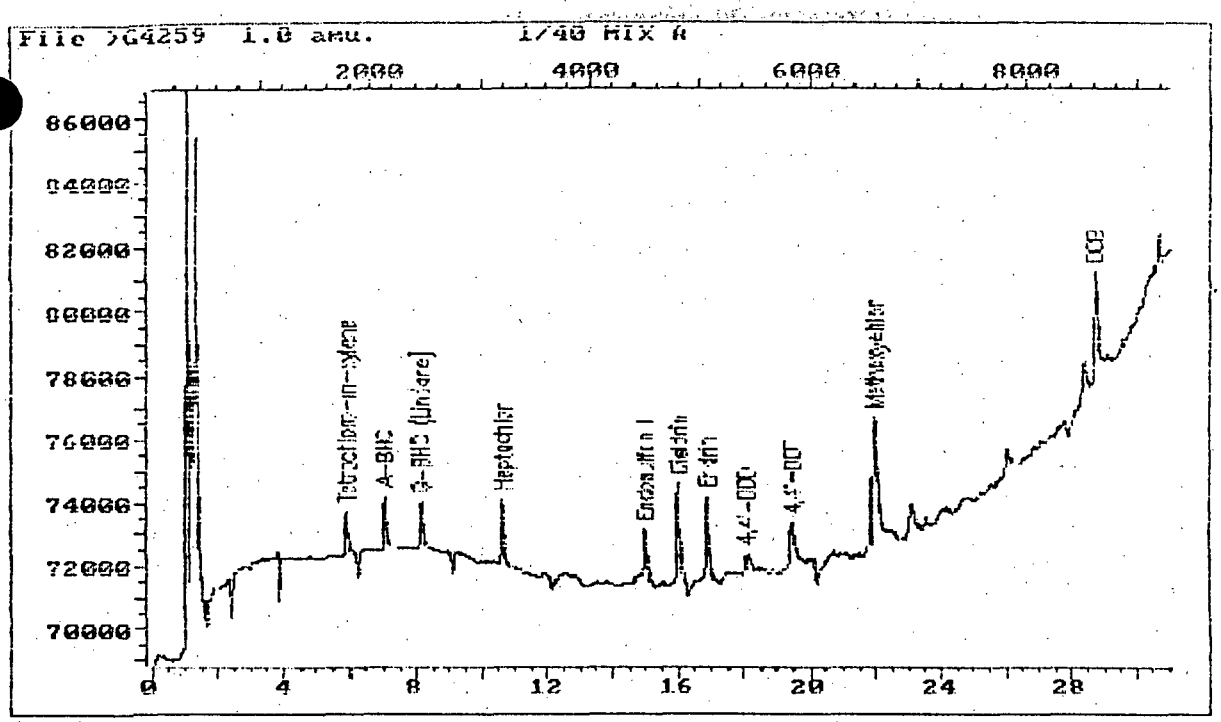
Quant Rev: 7
Quant Time: 990929 11:07
Injected at: 990929 04:17
Dilution Factor: 1.00000
Instrument ID: G

ID File: IDPST7::G5
Title: PESTICIDES HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990929 10:50
Last Qcal Time: 990915 14:26

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	5.88	1763	7933M	7933.00	NO	CALIB100
2)	#A-BHC	7.06	2117	11373M	11373.00	NO	CALIB100
4)	#G-BHC (Lindane)	8.15	2444	11084M	11084.00	NO	CALIB100
6)	#Heptachlor	10.62	3186	10731	10731.00	NO	CALIB100
10)	#Endosulfan I	14.95	4486	13707	13707.00	NO	CALIB100
12)	#Dieldrin	16.00	4801	29329	29329.00	NO	CALIB100
14)	#Endrin	16.87	5060	17140	17140.00	NO	CALIB100
16)	#4,4'-DDD	18.06	5417	14460M	14460.00	NO	CALIB
19)	#4,4'-DDT	19.46	5839	16843M	16843.00	NO	CALIB100
21)	#Methoxychlor	21.98	6595	46812M	46812.00	NO	CALIB100
25)	#DCB	28.72	8616	24379M	24379.00	NO	CALIB

Compound uses ESTD

369



Data File: >G4259::G1 Quant Output File: ^G4259::QT
Name: 1/40 MIX A Instrument ID: G
Misc:

Id File: IDPST7::G5
Title: PESTICIDES HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990929 10:50 Last Qcal Time: 990915 14:26

Operator ID: CLIFF
Quant Time : 990929 11:07
Injected at: 990929 04:17

370

QUANT REPORT

Operator ID: CLIFF
Output File: ^H4259::QT
Data File: >H4259::G1
Name: 1/40 MIX A
Misc:

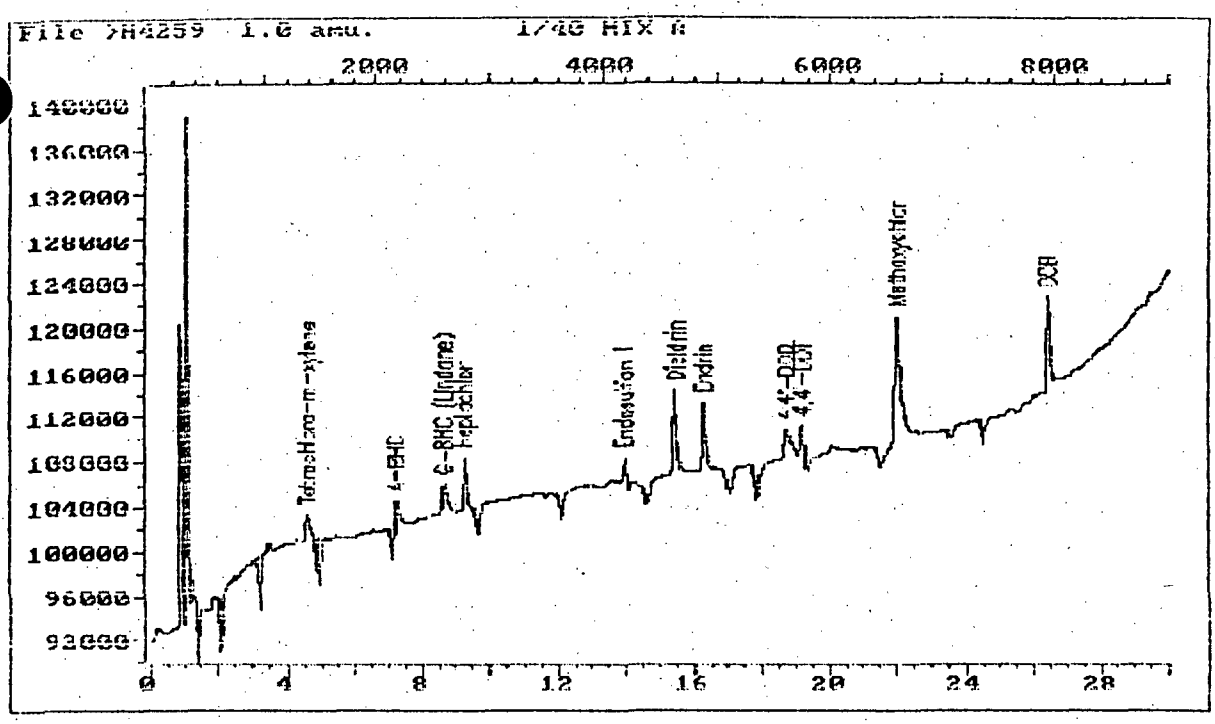
Quant Rev: 7
Quant Time: 990929 12:17
Injected at: 990929 04:54
Dilution Factor: 1.00000
Instrument ID: H

ID File: IDPST8::G5
Title: PESTICIDES HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990929 10:51
Last Qcal Time: 990915 15:03

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	4.58	1375	23193	23193.00	NO	CALIB100
2)	#A-BHC	7.20	2160	34915M	34915.00	NO	CALIB100
3)	#G-BHC (Lindane)	8.63	2588	29519M	29519.00	NO	CALIB100
4)	#Heptachlor	9.21	2763	29007M	29007.00	NO	CALIB100
9)	#Endosulfan I	13.96	4187	20990M	20990.00	NO	CALIB
13)	#Dieldrin	15.44	4631	54157M	54157.00	NO	CALIB100
14)	#Endrin	16.25	4874	45144M	45144.00	NO	CALIB100
16)	#4,4'-DDD	18.70	5611	34633M	34633.00	NO	CALIB
17)	#4,4'-DDT	19.20	5759	33479M	33479.00	NO	CALIB100
20)	#Methoxychlor	21.98	6593	134328M	134328.0	NO	CALIB
25)	#DCB	26.43	7930	69518M	69518.00	NO	CALIB100

Compound uses ESTD

371



Data File: >H4259::G1 Quant Output File: ^H4259::QT
Name: 1/40 MIX A Instrument ID: H
Misc:

Id File: IDPST8::G5
Title: PESTICIDES HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990929 10:51 Last Qcal Time: 990915 15:03

Operator ID: CLIFF
Quant Time : 990929 12:17
Injected at: 990929 04:54

302

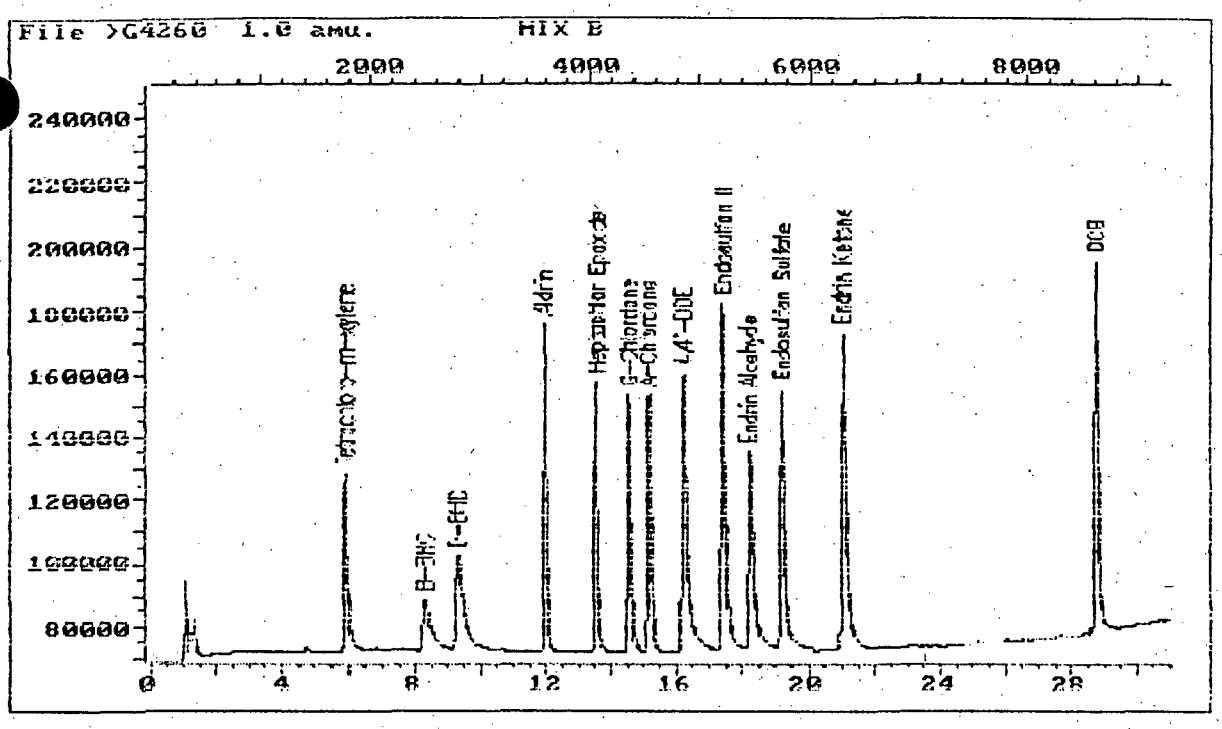
Operator ID: CLIFF Quant Rev: 7 Quant Time: 990929 11:09
Output File: ^G4260::QT Injected at: 990929 04:54
Data File: >G4260::G1 Dilution Factor: 1.00000
Name: MIX B Instrument ID: G
Misc:

ID File: IDPST7::G5
Title: PESTICIDES HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990929 10:50 Last Qcal Time: 990915 14:26

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	5.88	1763	352361	352361.0	NO CALIB100	
3)	#B-BHC	8.29	2486	232718	232718.0	NO CALIB100	
5)	#D-BHC	9.29	2786	401435	401435.0	NO CALIB100	
7)	#Aldrin	11.92	3575	559922	559922.0	NO CALIB100	
8)	#Heptachlor Epoxide	13.52	4057	513070	513070.0	NO CALIB100	
9)	#G-Chlordane	14.51	4354	518632	518632.0	NO CALIB100	
11)	#A-Chlordane	15.11	4533	502996	502996.0	NO CALIB100	
13)	#4,4'-DDE	16.21	4863	931522	931522.0	NO CALIB100	
15)	#Endosulfan II	17.37	5212	896357	896357.0	NO CALIB100	
17)	#Endrin Aldehyde	18.18	5454	618525	618525.0	NO CALIB100	
18)	#Endosulfan Sulfate	19.18	5754	715559	715559.0	NO CALIB100	
20)	#Endrin Ketone	21.01	6302	949234	949234.0	NO CALIB100	
[illegible])	#DCB	28.72	8615	911187	911187.0	NO CALIB100	

Compound uses ESTD

303



Data File: >G4260::G1 Quant Output File: ^G4260::QT
Name: MIX B Instrument ID: G
Misc:

Id File: IDPST7::G5
Title: PESTICIDES HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990929 10:50 Last Qcal Time: 990915 14:26

Operator ID: CLIFF
Quant Time : 990929 11:09
Injected at: 990929 04:54

374

QUANT REPORT

Operator ID: CLIFF
Output File: ^H4260::QT
Data File: >H4260::G1
Name: MIX B
Misc:

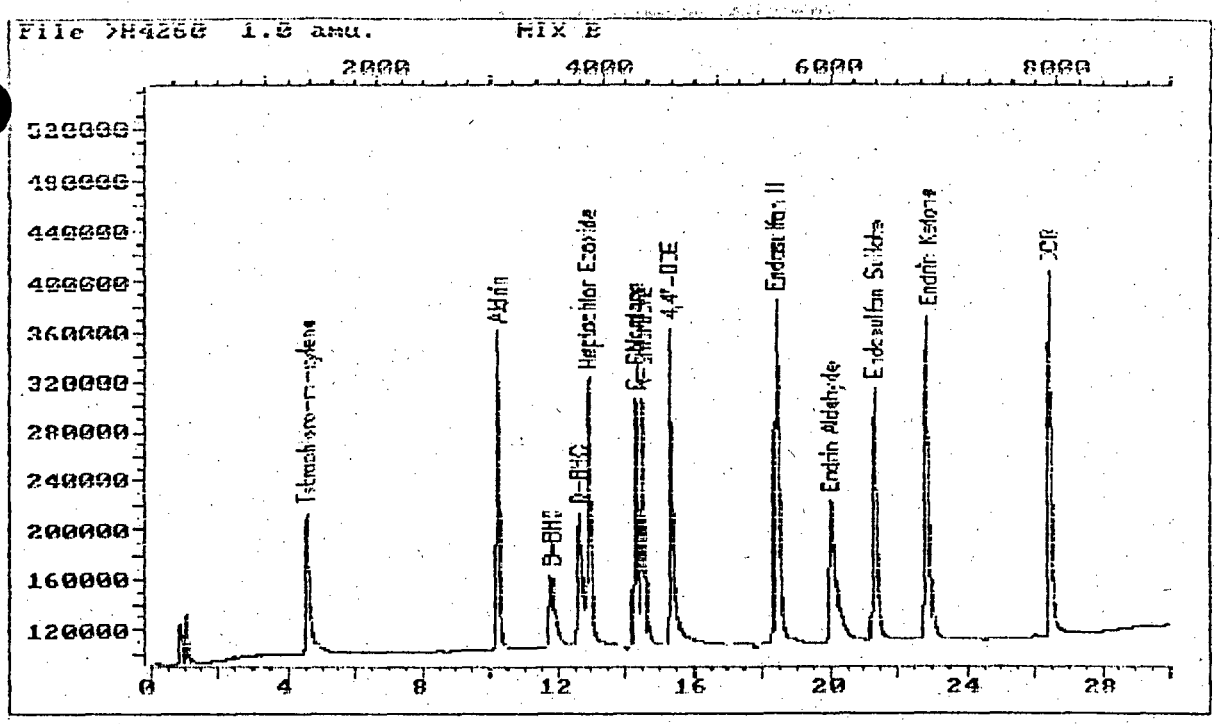
Quant Rev: 7
Quant Time: 990929 12:18
Injected at: 990929 05:31
Dilution Factor: 1.00000
Instrument ID: H

ID File: IDPST8::G5
Title: PESTICIDES HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990929 10:51
Last Qcal Time: 990915 15:03

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	4.56	1369	921923	921923.0	NO	CALIB100
5)	#Aldrin	10.20	3061	1450874	1450874.	NO	CALIB100
6)	#B-BHC	11.81	3543	701044	701044.0	NO	CALIB100
7)	#D-BHC	12.62	3787	978894	978894.0	NO	CALIB100
8)	#Heptachlor Epoxide	12.89	3866	1516770	1516770.	NO	CALIB100
10)	#G-Chlordane	14.28	4283	1281477	1281477.	NO	CALIB100
11)	#A-Chlordane	14.49	4346	1385915	1385915.	NO	CALIB100
12)	#4,4'-DDE	15.28	4585	2458308	2458308.	NO	CALIB100
15)	#Endosulfan II	18.38	5514	2293188	2293188.	NO	CALIB100
18)	#Endrin Aldehyde	20.01	6004	1603175	1603175.	NO	CALIB100
19)	#Endosulfan Sulfate	21.30	6391	1647550	1647550.	NO	CALIB100
21)	#Endrin Ketone	22.84	6853	2197994	2197994.	NO	CALIB100
[illegible])	#DCB	26.42	7926	2310685	2310685.	NO	CALIB100

Compound uses ESTD

375



Data File: >H4260::G1 Quant Output File: ^H4260::QT
Name: MIX B Instrument ID: H
Misc:

Id File: IDPST8::G5
Title: PESTICIDES HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990929 10:51 Last Qcal Time: 990915 15:03

Operator ID: CLIFF
Quant Time : 990929 12:18
Injected at: 990929 05:31

376

QUANT REPORT

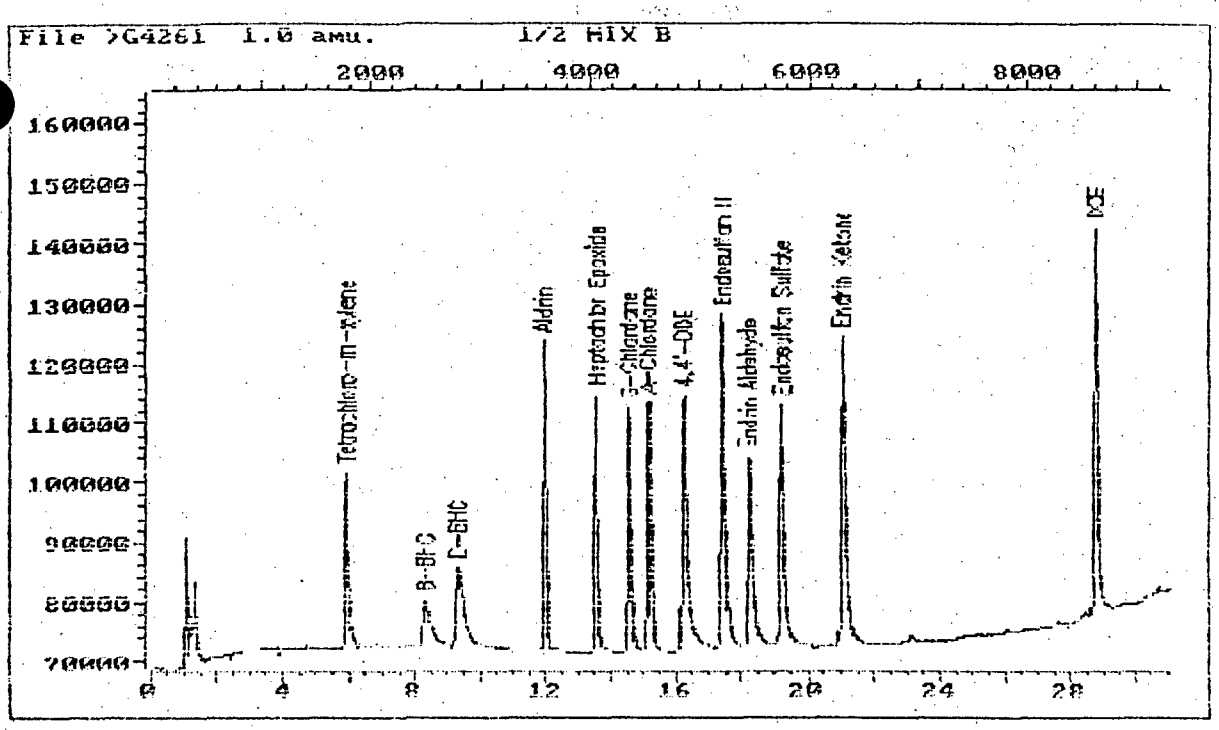
Operator ID: CLIFF Quant Rev: 7 Quant Time: 990929 11:11
Input File: ^G4261::QT Injected at: 990929 05:31
Data File: >G4261::G1 Dilution Factor: 1.00000
Name: 1/2 MIX B Instrument ID: G
Misc:

ID File: IDPST7::G5
Title: PESTICIDES HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990929 10:50 Last Qcal Time: 990915 14:26

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	5.88	1763	183975	183975.0	NO CALIB100	
3)	#B-BHC	8.29	2487	112626M	112626.0	NO CALIB	
5)	#D-BHC	9.29	2786	205123	205123.0	NO CALIB100	
7)	#Aldrin	11.92	3575	273437	273437.0	NO CALIB100	
8)	#Heptachlor Epoxide	13.52	4057	259145	259145.0	NO CALIB100	
9)	#G-Chlordane	14.51	4354	259371	259371.0	NO CALIB100	
11)	#A-Chlordane	15.11	4533	256213	256213.0	NO CALIB100	
13)	#4,4'-DDE	16.22	4865	456336	456336.0	NO CALIB100	
15)	#Endosulfan II	17.37	5212	461808	461808.0	NO CALIB100	
17)	#Endrin Aldehyde	18.18	5454	314849	314849.0	NO CALIB100	
18)	#Endosulfan Sulfate	19.18	5755	351327	351327.0	NO CALIB100	
20)	#Endrin Ketone	21.01	6303	480823	480823.0	NO CALIB100	
[illegible])	#DCB	28.72	8616	493179	493179.0	NO CALIB100	

Compound uses ESTD

377



Data File: >G4261::G1 Quant Output File: ^G4261::QT
Name: 1/2 MIX B Instrument ID: G
Misc:

Id File: IDPST7::G5
Title: PESTICIDES HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990929 10:50 Last Qcal Time: 990915 14:26

Operator ID: CLIFF
Quant Time : 990929 11:11
Injected at: 990929 05:31

378

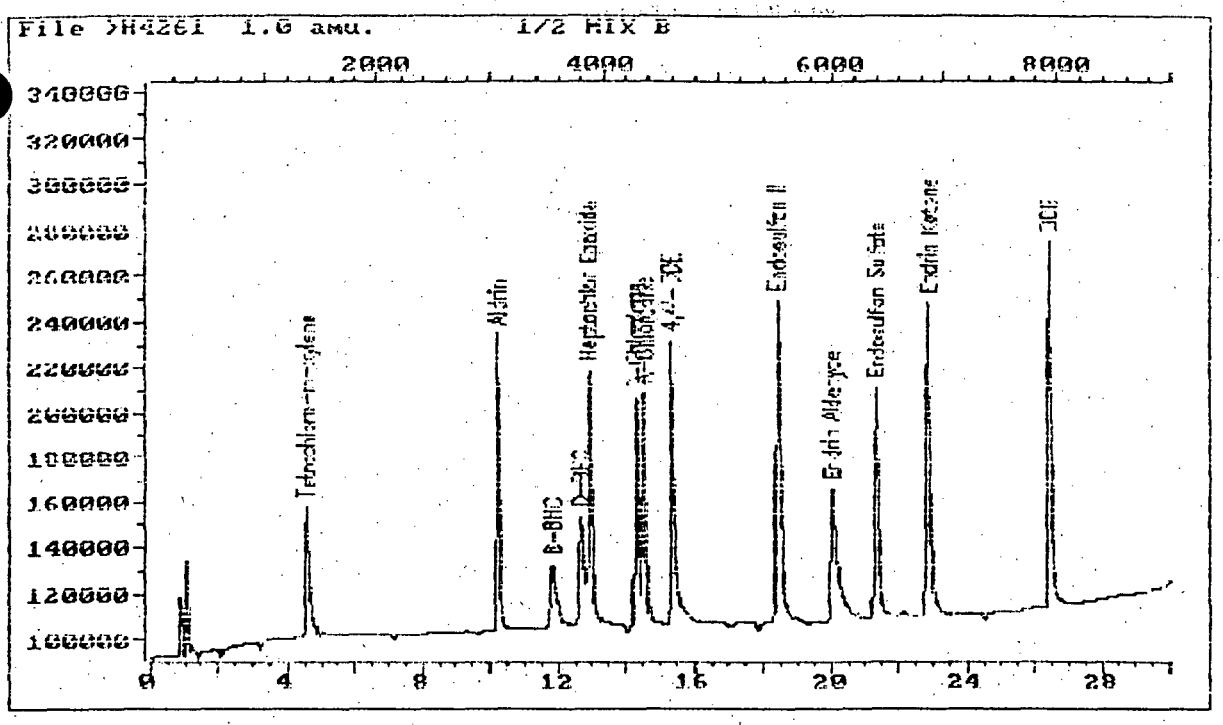
Operator ID: CLIFF Quant Rev: 7 Quant Time: 990929 12:20
Output File: ^H4261::QT Injected at: 990929 06:08
Data File: >H4261::G1 Dilution Factor: 1.00000
Name: 1/2 MIX B Instrument ID: H
Misc:

ID File: IDPST8::G5
Title: PESTICIDES HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990929 10:51 Last Qcal Time: 990915 15:03

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	4.57	1371	491005	491005.0	NO	CALIB100
5)	#Aldrin	10.20	3061	735347	735347.0	NO	CALIB100
6)	#B-BHC	11.83	3550	322996	322996.0	NO	CALIB100
7)	#D-BHC	12.64	3793	451828	451828.0	NO	CALIB100
8)	#Heptachlor Epoxide	12.89	3866	793741	793741.0	NO	CALIB100
10)	#G-Chlordane	14.28	4283	687720	687720.0	NO	CALIB100
11)	#A-Chlordane	14.49	4347	705323	705323.0	NO	CALIB100
12)	#4,4'-DDE	15.30	4590	1257307	1257307.	NO	CALIB100
15)	#Endosulfan II	18.39	5516	1124835	1124835.	NO	CALIB100
18)	#Endrin Aldehyde	20.02	6005	829928	829928.0	NO	CALIB100
19)	#Endosulfan Sulfate	21.31	6393	824711	824711.0	NO	CALIB100
21)	#Endrin Ketone	22.85	6855	1168019	1168019.	NO	CALIB100
[illegible])	#DCB	26.42	7926	1280162	1280162.	NO	CALIB100

Compound uses ESTD

379



Data File: >H4261::G1 Quant Output File: ^H4261::QT
Name: 1/2 MIX B Instrument ID: H
Misc:

Id File: IDPST8::G5
Title: PESTICIDES HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990929 10:51 Last Qcal Time: 990915 15:03

Operator ID: CLIFF
Quant Time : 990929 12:20
Injected at: 990929 06:08

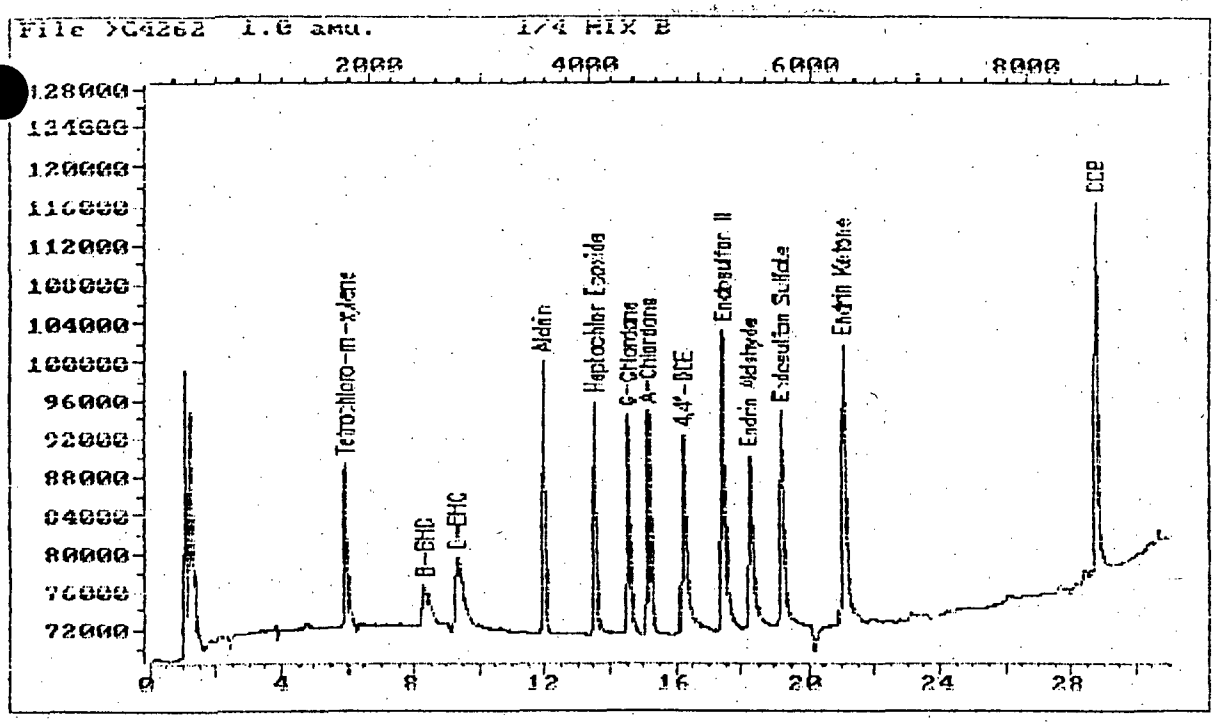
380

Operator ID: CLIFF Quant Rev: 7 Quant Time: 990929 11:13
Input File: ^G4262::QT Injected at: 990929 06:08
Data File: >G4262::G1 Dilution Factor: 1.00000
Name: 1/4 MIX B Instrument ID: G
Misc:

ID File: IDPST7::G5
Title: PESTICIDES HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990929 10:50 Last Qcal Time: 990915 14:26

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	5.88	1763	115259	115259.0	NO	CALIB100
3)	#B-BHC	8.29	2488	44191M	44191.00	NO	CALIB
5)	#D-BHC	9.29	2787	90508M	90508.00	NO	CALIB
7)	#Aldrin	11.91	3574	153749	153749.0	NO	CALIB100
8)	#Heptachlor Epoxide	13.52	4056	143712	143712.0	NO	CALIB100
9)	#G-Chlordane	14.51	4353	147374	147374.0	NO	CALIB100
11)	#A-Chlordane	15.11	4532	140660	140660.0	NO	CALIB100
13)	#4,4'-DDE	16.21	4862	200275	200275.0	NO	CALIB100
15)	#Endosulfan II	17.37	5212	259588	259588.0	NO	CALIB100
17)	#Endrin Aldehyde	18.18	5455	179915	179915.0	NO	CALIB100
18)	#Endosulfan Sulfate	19.18	5754	181972	181972.0	NO	CALIB100
20)	#Endrin Ketone	21.01	6303	260197	260197.0	NO	CALIB100
[illegible])	#DCB	28.72	8616	298469	298469.0	NO	CALIB100

Compound uses ESTD



Data File: >G4262::G1 Quant Output File: ^G4262::QT
Name: 1/4 MIX B Instrument ID: G
Misc:

Id File: IDPST7::G5
Title: PESTICIDES HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990929 10:50 Last Qcal Time: 990915 14:26

Operator ID: CLIFF
Quant Time : 990929 11:13
Injected at: 990929 06:08

382

QUANT REPORT

rator ID: CLIFF
put File: ^H4262::QT
Data File: >H4262::G1
Name: 1/4 MIX B
Misc:

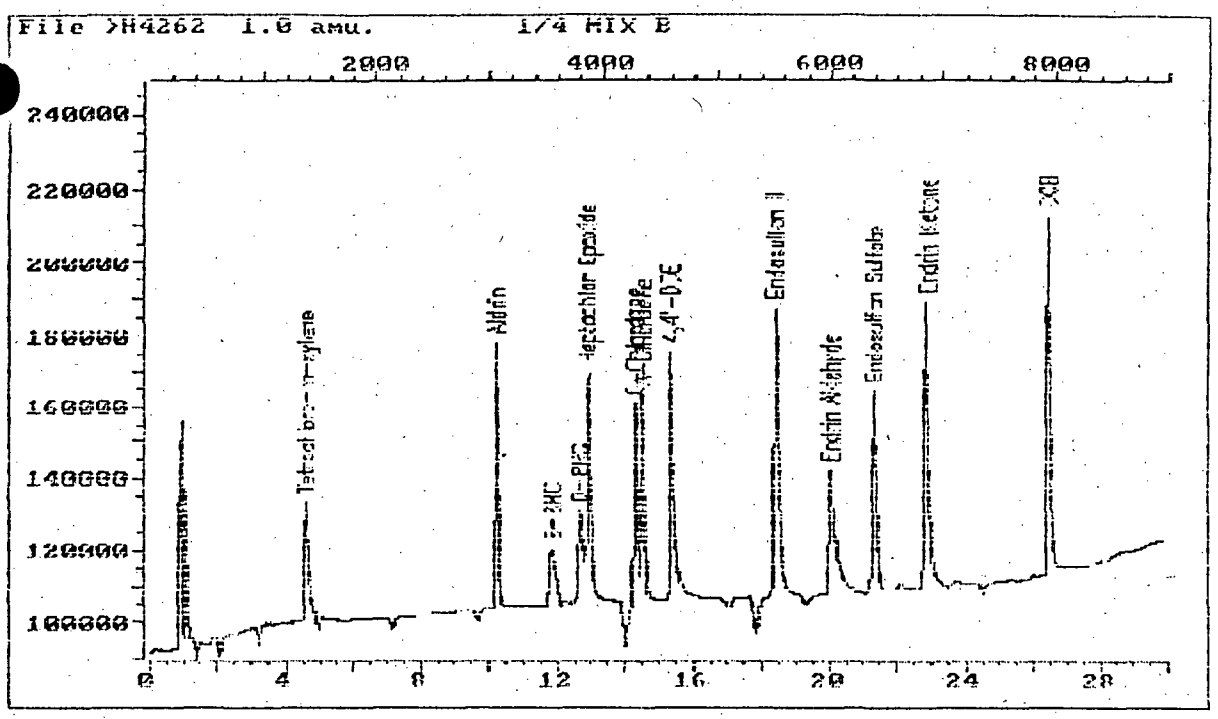
Quant Rev: 7
Quant Time: 990929 12:21
Injected at: 990929 06:44
Dilution Factor: 1.00000
Instrument ID: H

ID File: IDPST8::G5
Title: PESTICIDES HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990929 10:51
Last Qcal Time: 990915 15:03

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	4.57	1372	288627	288627.0	NO	CALIB100
5)	#Aldrin	10.20	3061	405656	405656.0	NO	CALIB100
6)	#B-BHC	11.85	3555	161799M	161799.0	NO	CALIB100
7)	#D-BHC	12.65	3795	242452	242452.0	NO	CALIB100
8)	#Heptachlor Epoxide	12.89	3866	454604	454604.0	NO	CALIB100
10)	#G-Chlordane	14.28	4284	397639M	397639.0	NO	CALIB100
11)	#A-Chlordane	14.49	4346	356023	356023.0	NO	CALIB100
12)	#4,4'-DDE	15.31	4592	715121	715121.0	NO	CALIB100
15)	#Endosulfan II	18.39	5517	682545M	682545.0	NO	CALIB100
18)	#Endrin Aldehyde	20.02	6007	466659	466659.0	NO	CALIB100
19)	#Endosulfan Sulfate	21.31	6394	442038	442038.0	NO	CALIB100
)	#Endrin Ketone	22.86	6857	678206	678206.0	NO	CALIB100
)	#DCB	26.43	7928	776740	776740.0	NO	CALIB100

Compound uses ESTD

383



Data File: >H4262::G1 Quant Output File: ^H4262::QT
Name: 1/4 MIX B Instrument ID: H
Misc:

Id File: IDPST8::G5
Title: PESTICIDES HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990929 10:51 Last Qcal Time: 990915 15:03

Operator ID: CLIFF
Quant Time : 990929 12:21
Injected at: 990929 06:44

384

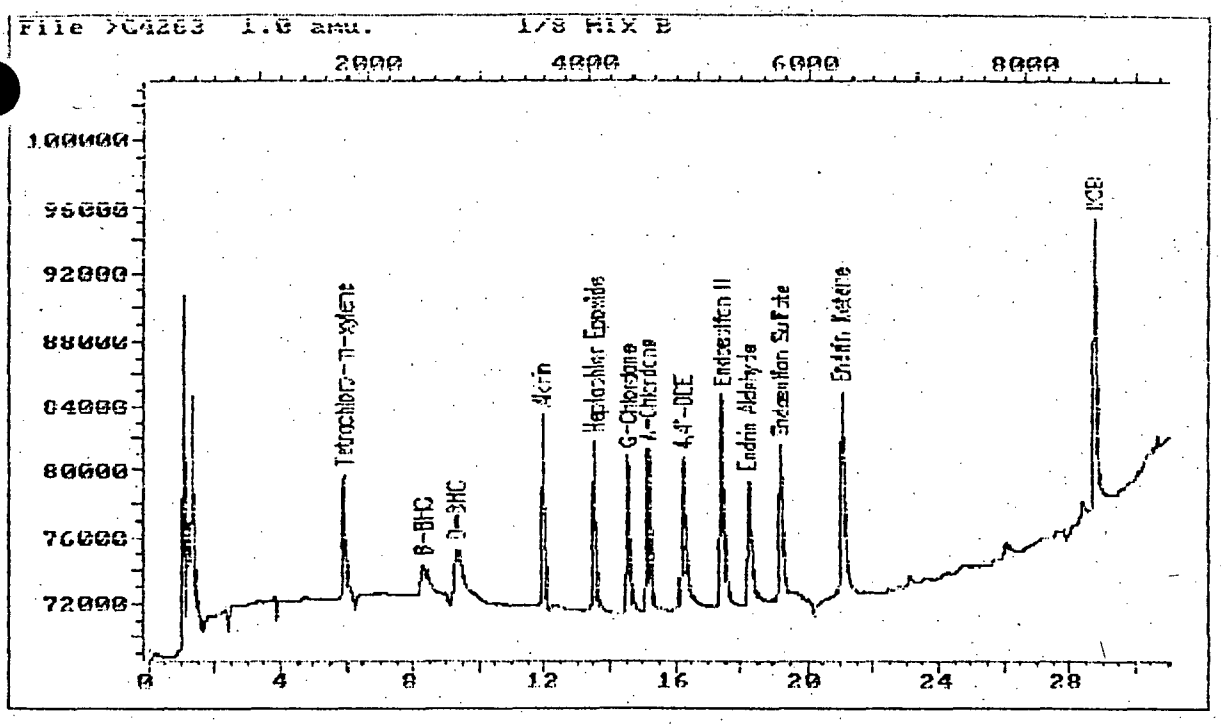
rator ID: CLIFF Quant Rev: 7 Quant Time: 990929 11:14
put File: ^G4263::QT Injected at: 990929 06:44
Data File: >G4263::G1 Dilution Factor: 1.00000
Name: 1/8 MIX B Instrument ID: G
Misc:

ID File: IDPST7::G5
Title: PESTICIDES HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990929 10:50 Last Qcal Time: 990915 14:26

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	5.88	1763	60270	60270.00	NO	CALIB100
3)	#B-BHC	8.30	2489	27751M	27751.00	NO	CALIB
5)	#D-BHC	9.29	2788	32787M	32787.00	NO	CALIB
7)	#Aldrin	11.91	3574	66923	66923.00	NO	CALIB100
8)	#Heptachlor Epoxide	13.52	4056	58990	58990.00	NO	CALIB100
9)	#G-Chlordane	14.51	4353	60606	60606.00	NO	CALIB100
11)	#A-Chlordane	15.11	4532	58945	58945.00	NO	CALIB100
13)	#4,4'-DDE	16.21	4863	87636	87636.00	NO	CALIB100
15)	#Endosulfan II	17.37	5212	104659	104659.0	NO	CALIB100
17)	#Endrin Aldehyde	18.18	5454	79046	79046.00	NO	CALIB100
18)	#Endosulfan Sulfate	19.18	5754	75114	75114.00	NO	CALIB100
[illegible])	#Endrin Ketone	21.01	6303	105450	105450.0	NO	CALIB100
[illegible])	#DCB	28.72	8616	124880	124880.0	NO	CALIB100

Compound uses ESTD

385



Data File: >G4263::G1 Quant Output File: ^G4263::QT
Name: 1/8 MIX B Instrument ID: G
Misc:

Id File: IDPST7::G5
Title: PESTICIDES HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990929 10:50 Last Qcal Time: 990915 14:26

Operator ID: CLIFF
Quant Time : 990929 11:14
Injected at: 990929 06:44

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QUANT REPORT

Operator ID: CLIFF
Output File: ^H4263::QT
Data File: >H4263::G1
Name: 1/8 MIX B
Misc:

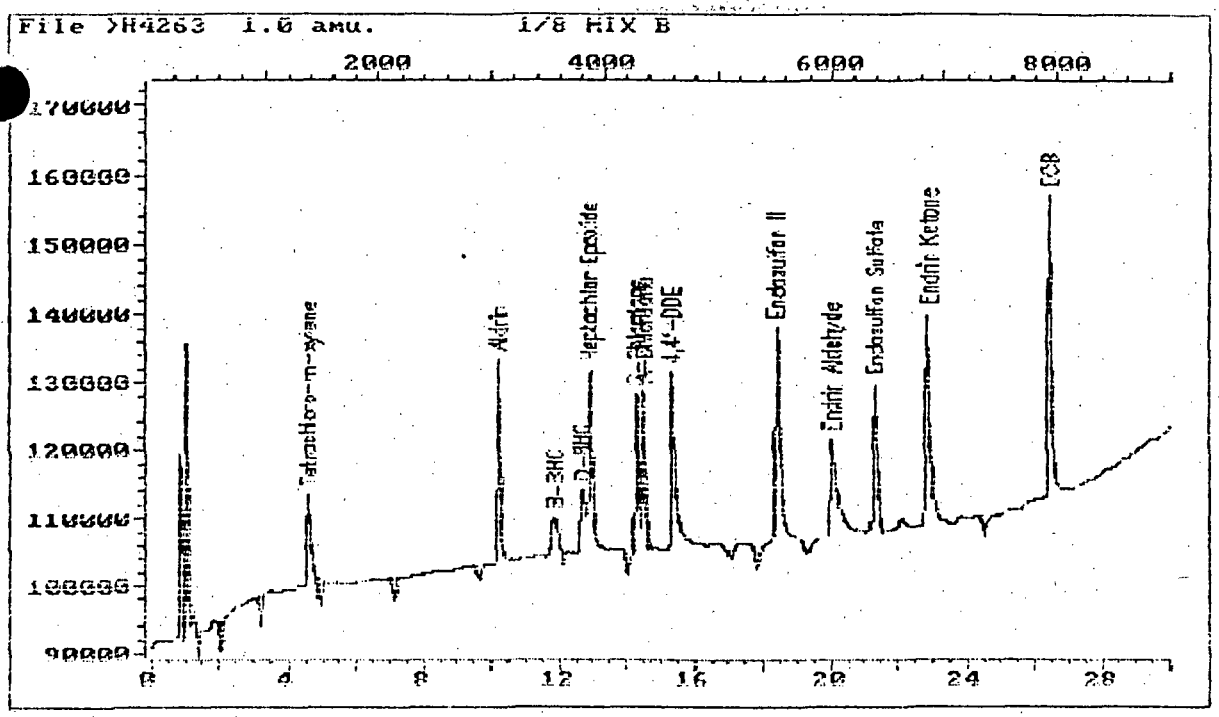
Quant Rev: 7
Quant Time: 990929 12:23
Injected at: 990929 07:21
Dilution Factor: 1.00000
Instrument ID: H

ID File: IDPST8::G5
Title: PESTICIDES HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990929 10:51
Last Qcal Time: 990915 15:03

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	4.58	1374	123863	123863.0	NO	CALIB100
5)	#Aldrin	10.20	3060	165056	165056.0	NO	CALIB100
6)	#B-BHC	11.86	3559	59927M	59927.00	NO	CALIB
7)	#D-BHC	12.67	3801	85195	85195.00	NO	CALIB100
8)	#Heptachlor Epoxide	12.89	3866	178210	178210.0	NO	CALIB100
10)	#G-Chlordane	14.28	4283	204222	204222.0	NO	CALIB100
11)	#A-Chlordane	14.48	4345	147199	147199.0	NO	CALIB100
12)	#4,4'-DDE	15.33	4598	291308	291308.0	NO	CALIB100
15)	#Endosulfan II	18.39	5518	241570	241570.0	NO	CALIB100
18)	#Endrin Aldehyde	20.02	6007	179664	179664.0	NO	CALIB100
19)	#Endosulfan Sulfate	21.31	6394	176622	176622.0	NO	CALIB100
[illegible])	#Endrin Ketone	22.86	6857	278506	278506.0	NO	CALIB100
[illegible])	#DCB	26.43	7929	343055	343055.0	NO	CALIB100

Compound uses ESTD

387



Data File: >H4263::G1 Quant Output File: ^H4263::QT
Name: 1/8 MIX B Instrument ID: H
Misc:

Id File: IDPST8::G5
Title: PESTICIDES HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990929 10:51 Last Qcal Time: 990915 15:03

Operator ID: CLIFF
Quant Time : 990929 12:23
Injected at: 990929 07:21

QUANT REPORT

rator ID: CLIFF
put File: ^G4264::QT
Data File: >G4264::G1
Name: 1/40 MIX B
Misc:

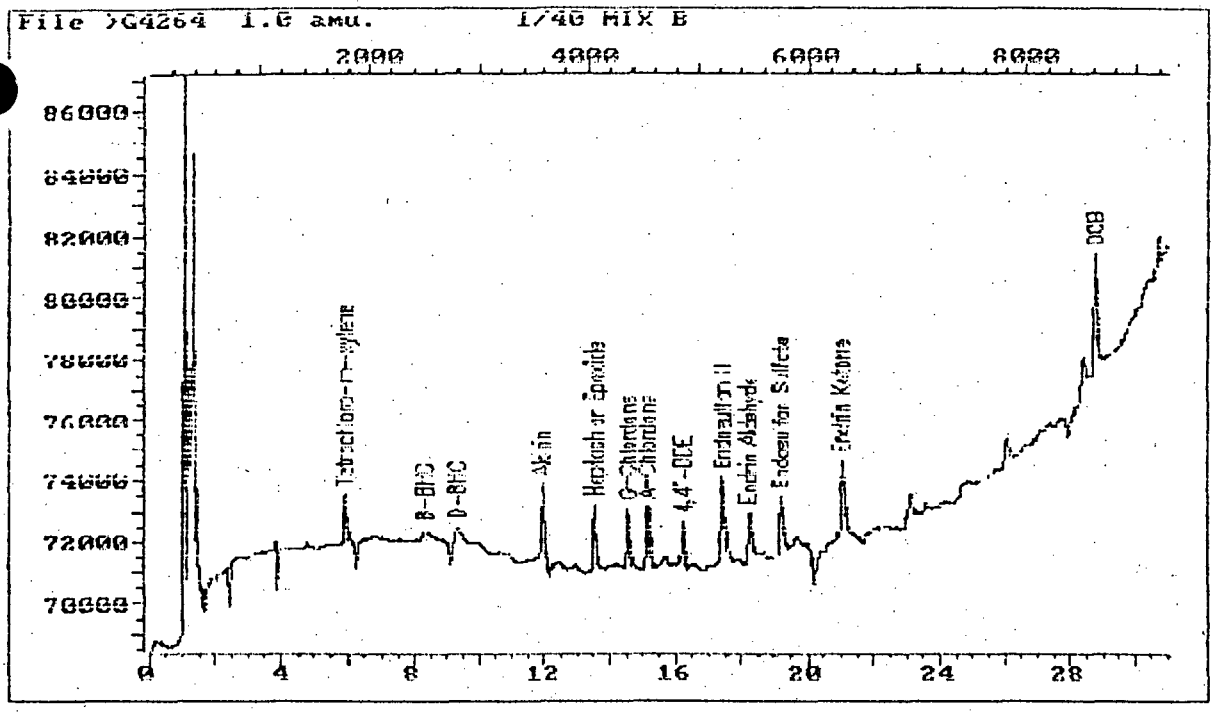
Quant Rev: 7
Quant Time: 990929 11:16
Injected at: 990929 07:21
Dilution Factor: 1.00000
Instrument ID: G

ID File: IDPST7::G5
Title: PESTICIDES HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990929 10:50
Last Qcal Time: 990915 14:26

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	5.87	1762	7808	7808.00	NO	CALIB100
3)	#B-BHC	8.29	2487	4277M	4277.00	NO	CALIB
5)	#D-BHC	9.29	2787	8338M	8338.00	NO	CALIB100
7)	#Aldrin	11.91	3572	12577M	12577.00	NO	CALIB100
8)	#Heptachlor Epoxide	13.52	4055	13182	13182.00	NO	CALIB100
9)	#G-Chlordane	14.51	4352	11743	11743.00	NO	CALIB100
11)	#A-Chlordane	15.10	4531	11891	11891.00	NO	CALIB100
13)	#4,4'-DDE	16.19	4858	18434M	18434.00	NO	CALIB100
15)	#Endosulfan II	17.37	5210	21348	21348.00	NO	CALIB100
17)	#Endrin Aldehyde	18.18	5454	15228	15228.00	NO	CALIB100
18)	#Endosulfan Sulfate	19.18	5753	13377	13377.00	NO	CALIB100
[illegible])	#Endrin Ketone	21.01	6303	20046M	20046.00	NO	CALIB
[illegible])	#DCB	28.72	8616	20449	20449.00	NO	CALIB100

Compound uses ESTD

389



Data File: >G4264::G1 Quant Output File: ^G4264::QT
Name: 1/40 MIX B Instrument ID: G
Misc:

Id File: IDPST7::G5
Title: PESTICIDES HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990929 10:50 Last Qcal Time: 990915 14:26

Operator ID: CLIFF
Quant Time : 990929 11:16
Injected at: 990929 07:21

390

QUANT REPORT

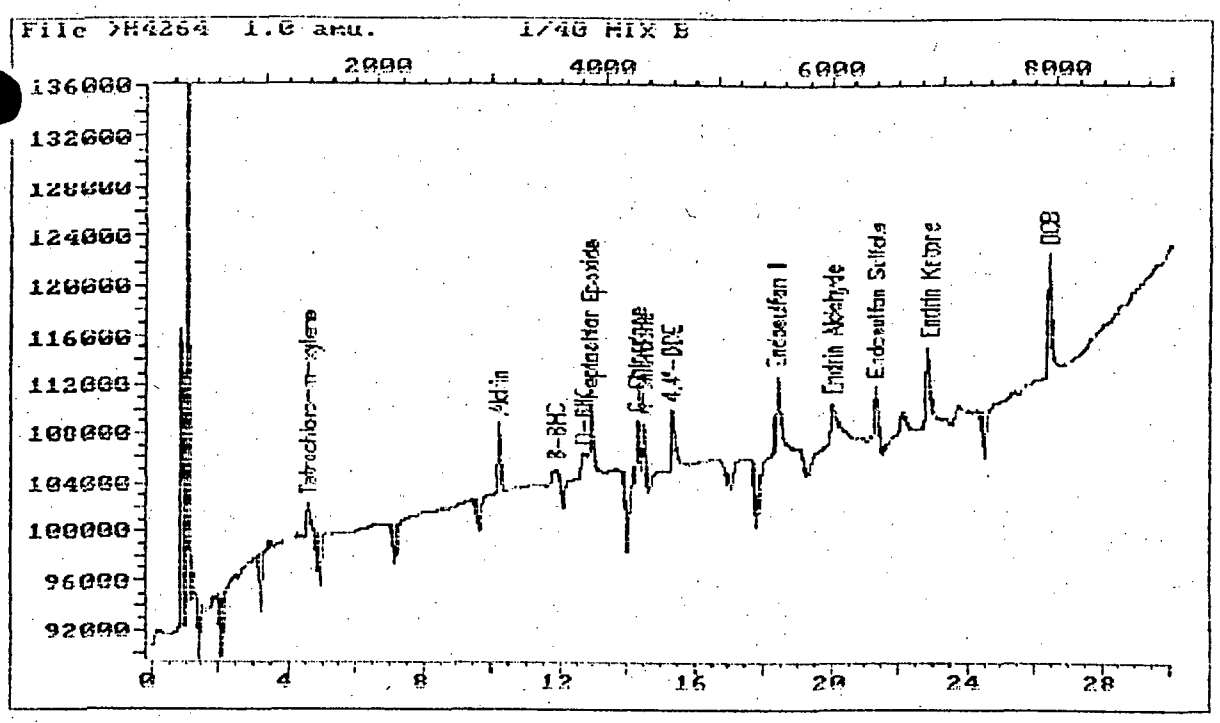
or ID: CLIFF Quant Rev: 7 Quant Time: 990929 12:24
File: ^H4264::QT Injected at: 990929 07:58
ile: >H4264::G1 Dilution Factor: 1.00000
/40 MIX B Instrument ID: H

: IDPST8::G5
PESTICIDES HP5890-H RTX-1701 0.53mm 1.0uL
alibration: 990929 10:51 Last Qcal Time: 990915 15:03

Compound	R.T.	Scan#	Area	Conc	Units	q
etrachloro-m-xylene	4.58	1375	26044	26044.00	NO CALIB	100
aldrin	10.20	3060	29652	29652.00	NO CALIB	100
-BHC	11.88	3563	13823M	13823.00	NO CALIB	
-BHC	12.69	3806	20882M	20882.00	NO CALIB	
eptachlor Epoxide	12.88	3865	31596	31596.00	NO CALIB	100
-Chlordane	14.28	4283	42664M	42664.00	NO CALIB	100
-Chlordane	14.48	4344	30661M	30661.00	NO CALIB	
,4'-DDE	15.33	4600	56093M	56093.00	NO CALIB	100
ndosulfan II	18.39	5518	56547M	56547.00	NO CALIB	
ndrin Aldehyde	20.04	6011	36123M	36123.00	NO CALIB	
ndosulfan Sulfate	21.31	6394	47904	47904.00	NO CALIB	100
ndrin Ketone	22.86	6859	46742	46742.00	NO CALIB	100
CB	26.43	7929	66986	66986.00	NO CALIB	100

ound uses ESTD

391



Data File: >H4264::G1 Quant Output File: ^H4264::QT
Name: 1/40 MIX B Instrument ID: H
Misc:

Id File: IDPST8::G5
Title: PESTICIDES HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990929 10:51 Last Qcal Time: 990915 15:03

Operator ID: CLIFF
Quant Time : 990929 12:24
Injected at: 990929 07:58

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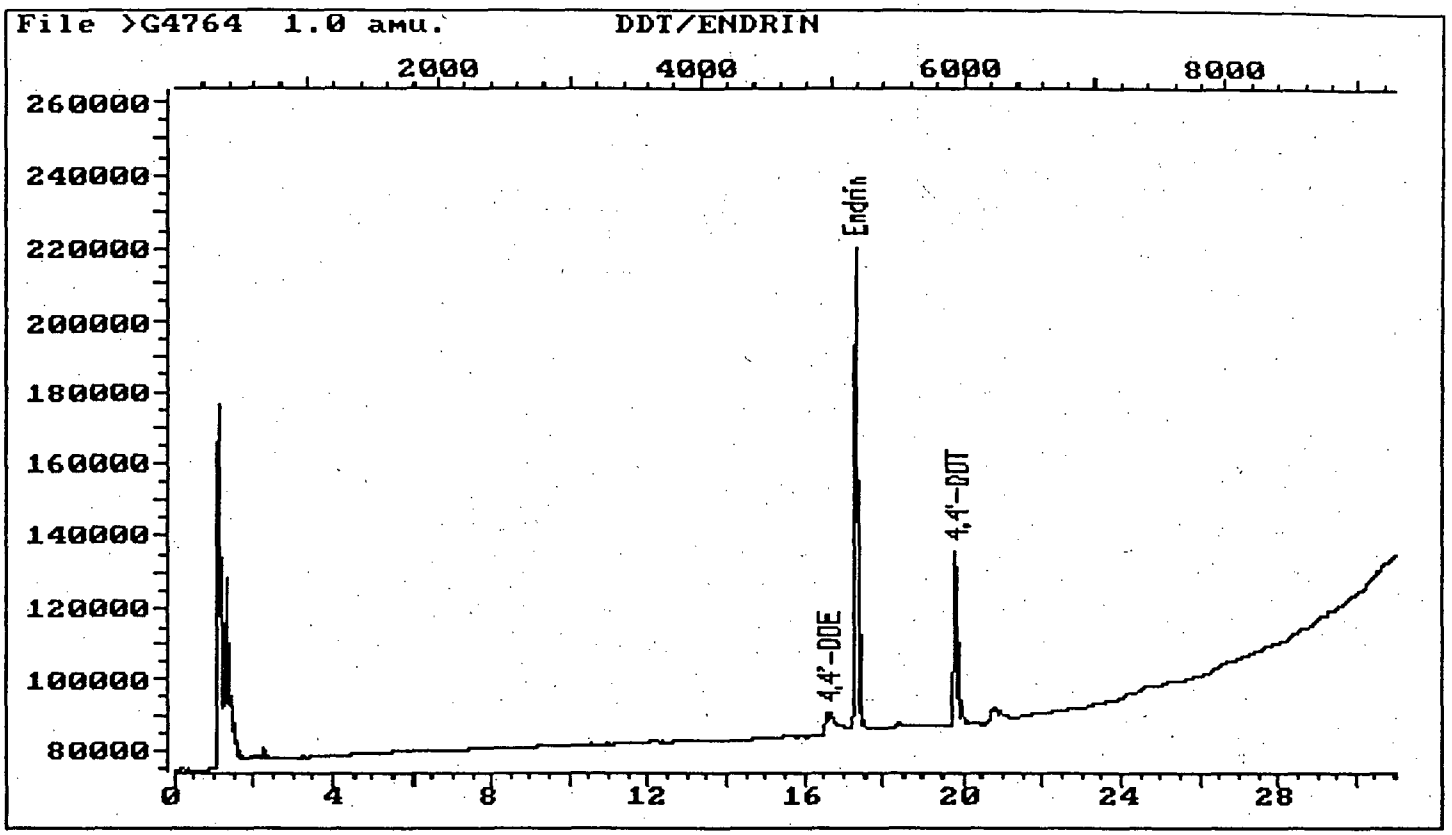
Operator ID: JEFF Quant Rev: 7 Quant Time: 991210 12:42
Output File: ^G4764::QT Injected at: 991209 20:29
Data File: >G4764::G4 Dilution Factor: 1.00000
Name: DDT/ENDRIN Instrument ID: G
Misc:

ID File: IDPST7::G5
Title: PESTICIDES HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990930 11:53 Last Qcal Time: 991209 21:06

Compound	R.T.	Scan#	Area	Conc	Units	q
13) #4,4'-DDE	16.55	4966	54422M	.101	ug/l	100
14) #Endrin	17.26	5177	766251	1.26	ug/l	100
19) #4,4'-DDT	19.79	5936	297913	.662	ug/l	100

Compound uses ESTD

393



Data File: >G4764::G4 Quant Output File: ^G4764::QT
Name: DDT/ENDRIN Instrument ID: G
Misc:

Id File: IDPST7::G5
Title: PESTICIDES HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990930 11:53 Last Qcal Time: 991209 21:06

Operator ID: JEFF
Quant Time : 991210 12:42
Injected at: 991209 20:29

394

Operator ID: JEFF
Output File: ^H4764::QT
Data File: >H4764::G4
Name: DDT/ENDRIN
Misc:

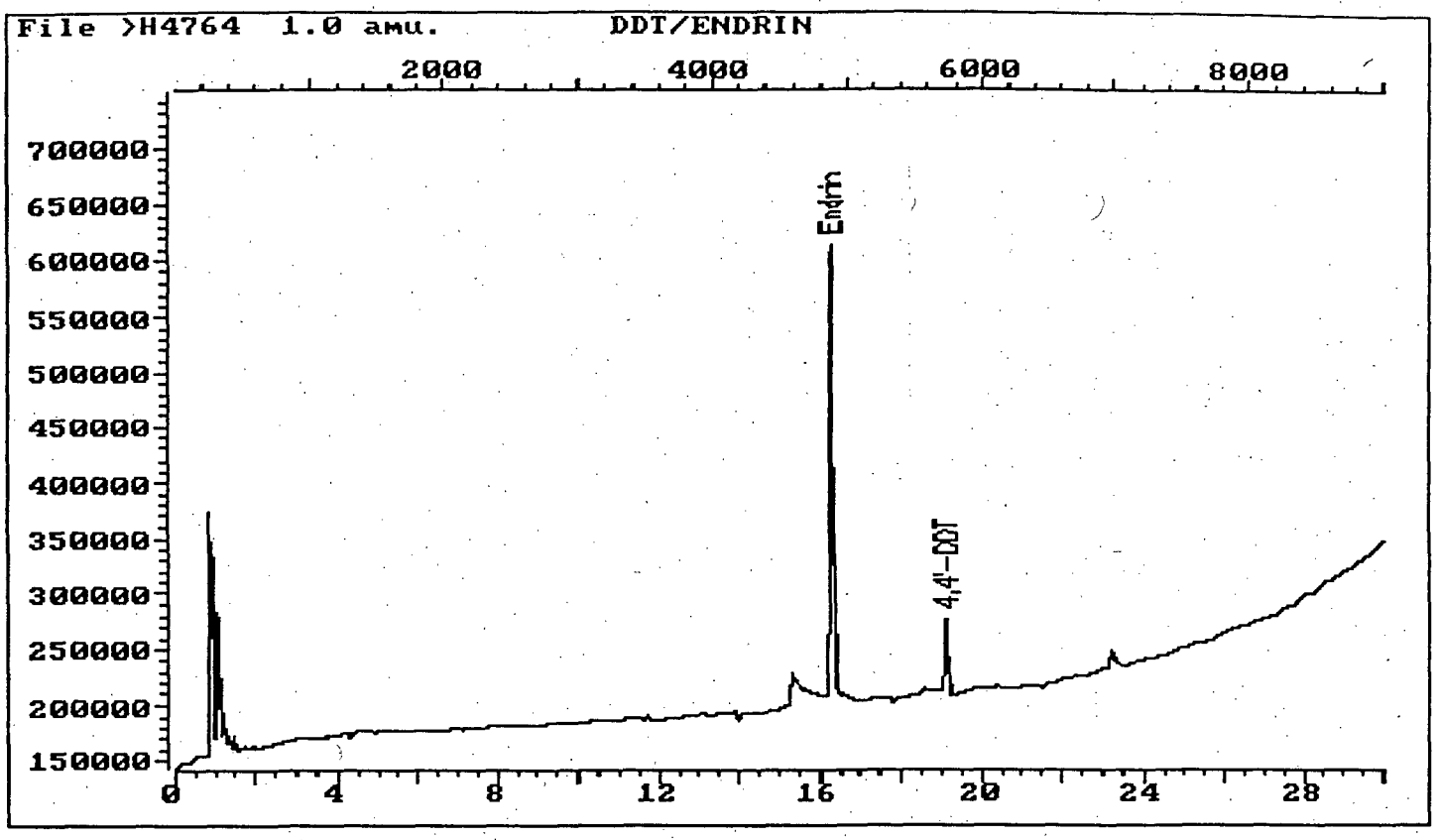
Quant Rev: 7
Quant Time: 991214 11:41
Injected at: 991209 21:06
Dilution Factor: 1.00000
Instrument ID: H

ID File: IDPST8::G5
Title: PESTICIDES HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990930 11:58
Last Qcal Time: 991129 12:51

Compound	R.T.	Scan#	Area	Conc	Units	q
14) #Endrin	16.25	4874	2405730	1.40	ug/l	100
17) #4,4'-DDT	19.11	5733	441349	.338	ug/l	100

Compound uses ESTD

395



Data File: >H4764::G4 Quant Output File: ^H4764::QT
Name: DDT/ENDRIN Instrument ID: H
Misc:

Id File: IDPST8::G5
Title: PESTICIDES HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990930 11:58 Last Qcal Time: 991129 12:51

Operator ID: JEFF
Quant Time : 991214 11:41
Injected at: 991209 21:06

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QUANT REPORT

Operator ID: JEFF
Output File: ^G4765::QT
Data File: >G4765::G4
Name: 1/4 MIX A
Misc:

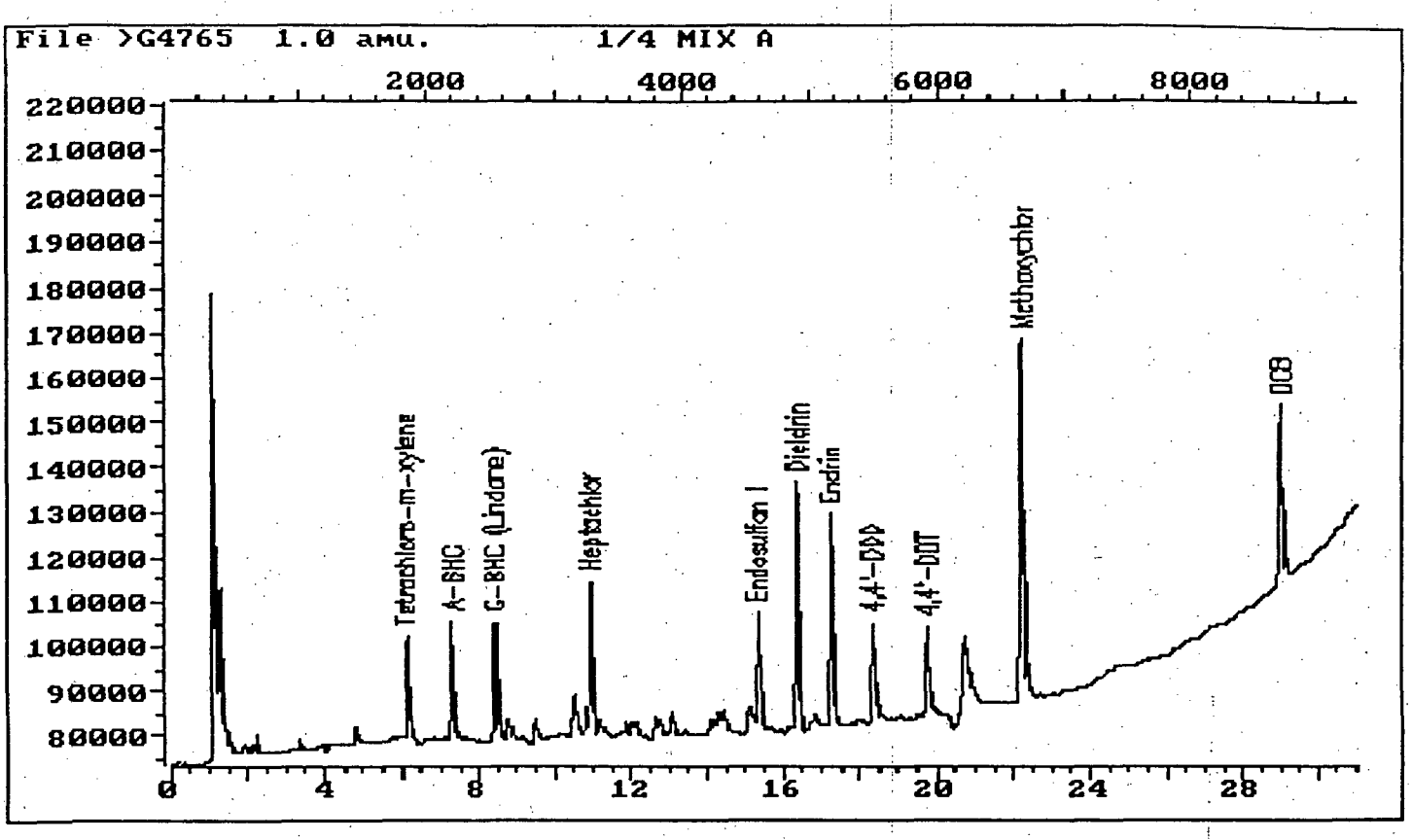
Quant Rev: 7
Quant Time: 991209 21:41
Injected at: 991209 21:06
Dilution Factor: 1.00000
Instrument ID: G

ID File: IDPST7::G5
Title: PESTICIDES HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990930 11:53
Last Qcal Time: 991129 12:13

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	6.10	1829	95716M	.209	ug/l	100
2)	#A-BHC	7.32	2195	163811M	.198	ug/l	
4)	#G-BHC (Lindane)	8.43	2529	138512M	.189	ug/l	
6)	#Heptachlor	10.93	3279	172631M	.209	ug/l	
10)	#Endosulfan I	15.29	4588	131868M	.209	ug/l	
12)	#Dieldrin	16.35	4904	290928M	.416	ug/l	
14)	#Endrin	17.21	5164	242788M	.416	ug/l	
16)	#4,4'-DDD	18.30	5491	191238M	.402	ug/l	
19)	#4,4'-DDT	19.75	5925	179970M	.398	ug/l	
21)	#Methoxychlor	22.23	6668	531541M	2.06	ug/l	
25)	#DCB	28.98	8695	262543M	.410	ug/l	100

Compound uses ESTD

397



Data File: >G4765::G4 Quant Output File: ^G4765::QT
Name: 1/4 MIX A Instrument ID: G
Misc:

Id File: IDPST7::G5
Title: PESTICIDES HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990930 11:53 Last Qcal Time: 991129 12:13

Operator ID: JEFF
Quant Time : 991209 21:41
Injected at: 991209 21:06

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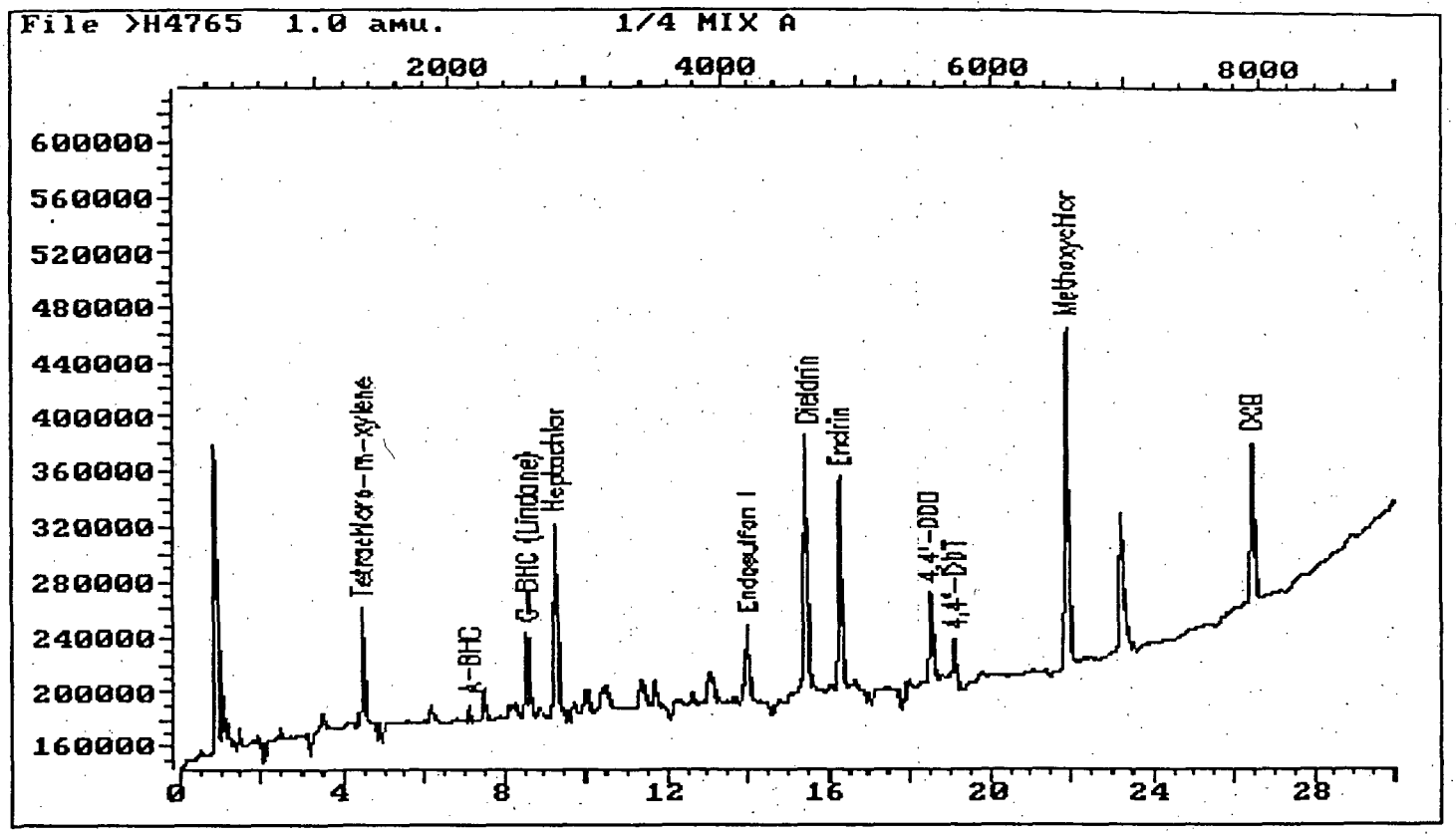
Operator ID: JEFF Quant Rev: 7 Quant Time: 991209 22:16
Output File: ^H4765::QT Injected at: 991209 21:44
Data File: >H4765::G4 Dilution Factor: 1.00000
Name: 1/4 MIX A Instrument ID: H
Misc:

ID File: IDPST8::G5
Title: PESTICIDES HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990930 11:58 Last Qcal Time: 991129 12:51

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	4.46	1339	312118M	.208	ug/l	100
2)	#A-BHC	7.09	2128	54002	.0341	ug/l	100
3)	#G-BHC (Lindane)	8.53	2559	419842M	.190	ug/l	100
4)	#Heptachlor	9.21	2764	359525M	.121	ug/l	100
9)	#Endosulfan I	13.97	4190	296505	.200	ug/l	100
13)	#Dieldrin	15.44	4632	1083850	.536	ug/l	100
14)	#Endrin	16.25	4874	683384M	.399	ug/l	100
16)	#4,4'-DDD	18.48	5543	391508	.308	ug/l	100
17)	#4,4'-DDT	19.11	5733	255047	.195	ug/l	100
20)	#Methoxychlor	21.85	6554	1628813	2.20	ug/l	100
25)	#DCB	26.46	7938	725440	.488	ug/l	100

Compound uses ESTD

399



Data File: >H4765::G4 Quant Output File: ^H4765::QT
Name: 1/4 MIX A Instrument ID: H
Misc:

Id File: IDPST8::G5
Title: PESTICIDES HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990930 11:58 Last Qcal Time: 991129 12:51

Operator ID: JEFF
Quant Time : 991209 22:16
Injected at: 991209 21:44

400

QUANT REPORT

Operator ID: JEFF
Output File: ^G4766::QT
Data File: >G4766::G4
Name: 1/4 MIX B
Misc:

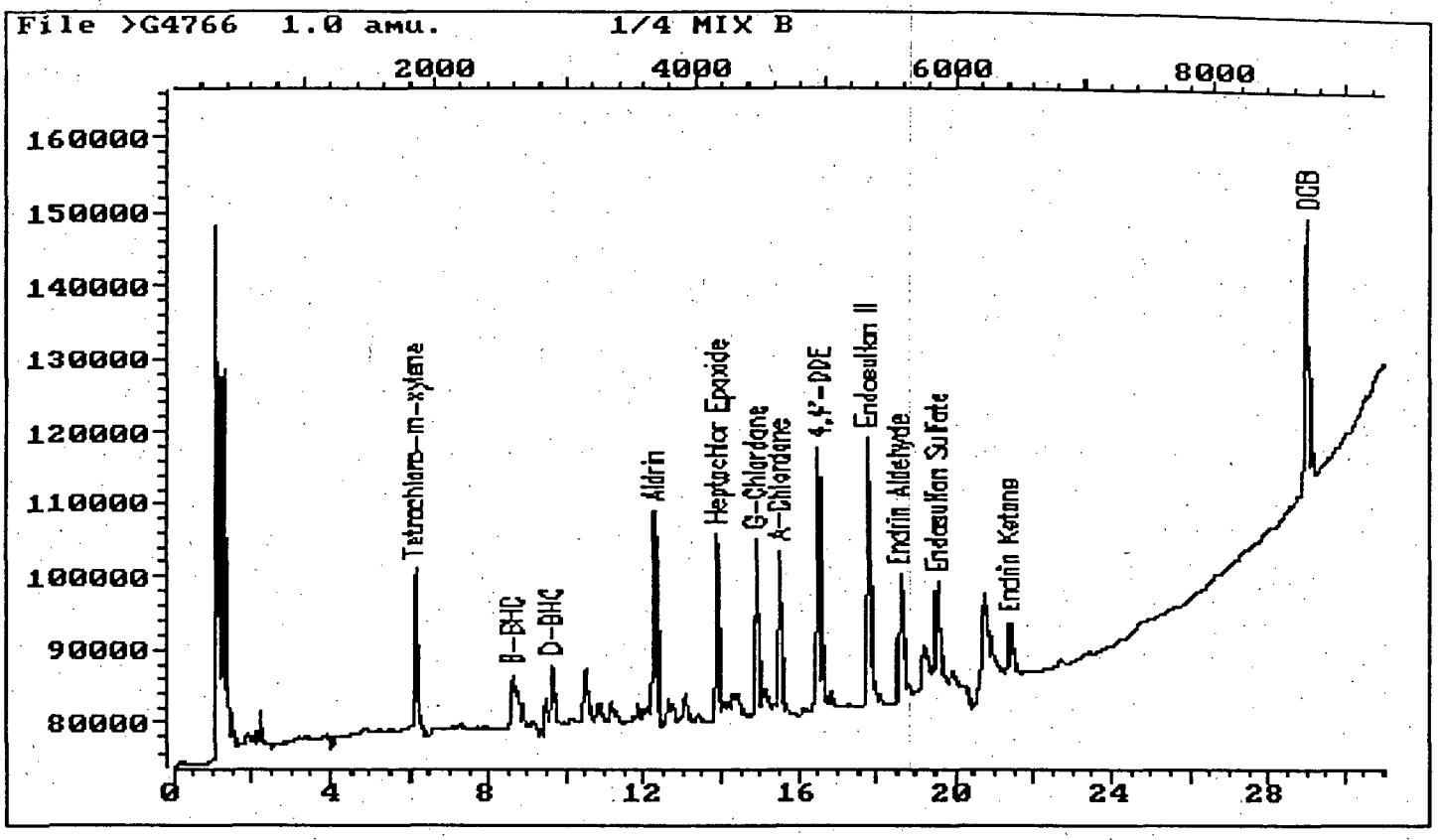
Quant Rev: 7
Quant Time: 991209 22:19
Injected at: 991209 21:44
Dilution Factor: 1.00000
Instrument ID: G

ID File: IDPST7::G5
Title: PESTICIDES HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990930 11:53
Last Qcal Time: 991129 12:13

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	6.10	1829	92046M	.201	ug/l	100
3)	#B-BHC	8.60	2580	53971M	.197	ug/l	
5)	#D-BHC	9.60	2881	98367M	.199	ug/l	100
7)	#Aldrin	12.23	3670	133562M	.207	ug/l	
8)	#Heptachlor Epoxide	13.85	4155	121911M	.202	ug/l	
9)	#G-Chlordane	14.85	4456	129269M	.198	ug/l	
11)	#A-Chlordane	15.44	4633	118707M	.201	ug/l	100
13)	#4,4'-DDE	16.48	4945	215588M	.398	ug/l	
15)	#Endosulfan II	17.73	5318	217499M	.395	ug/l	
17)	#Endrin Aldehyde	18.53	5559	154810M	.404	ug/l	
18)	#Endosulfan Sulfate	19.52	5857	165638M	.400	ug/l	
20)	#Endrin Ketone	21.35	6404	210797M	.401	ug/l	
25)	#DCB	28.98	8695	251258M	.392	ug/l	100

Compound uses ESTD

401



Data File: >G4766::G4 Quant Output File: ^G4766::QT
Name: 1/4 MIX B Instrument ID: G
Misc:

Id File: IDPST7::G5
Title: PESTICIDES HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990930 11:53 Last Qcal Time: 991129 12:13

Operator ID: JEFF
Quant Time : 991209 22:19
Injected at: 991209 21:44

402

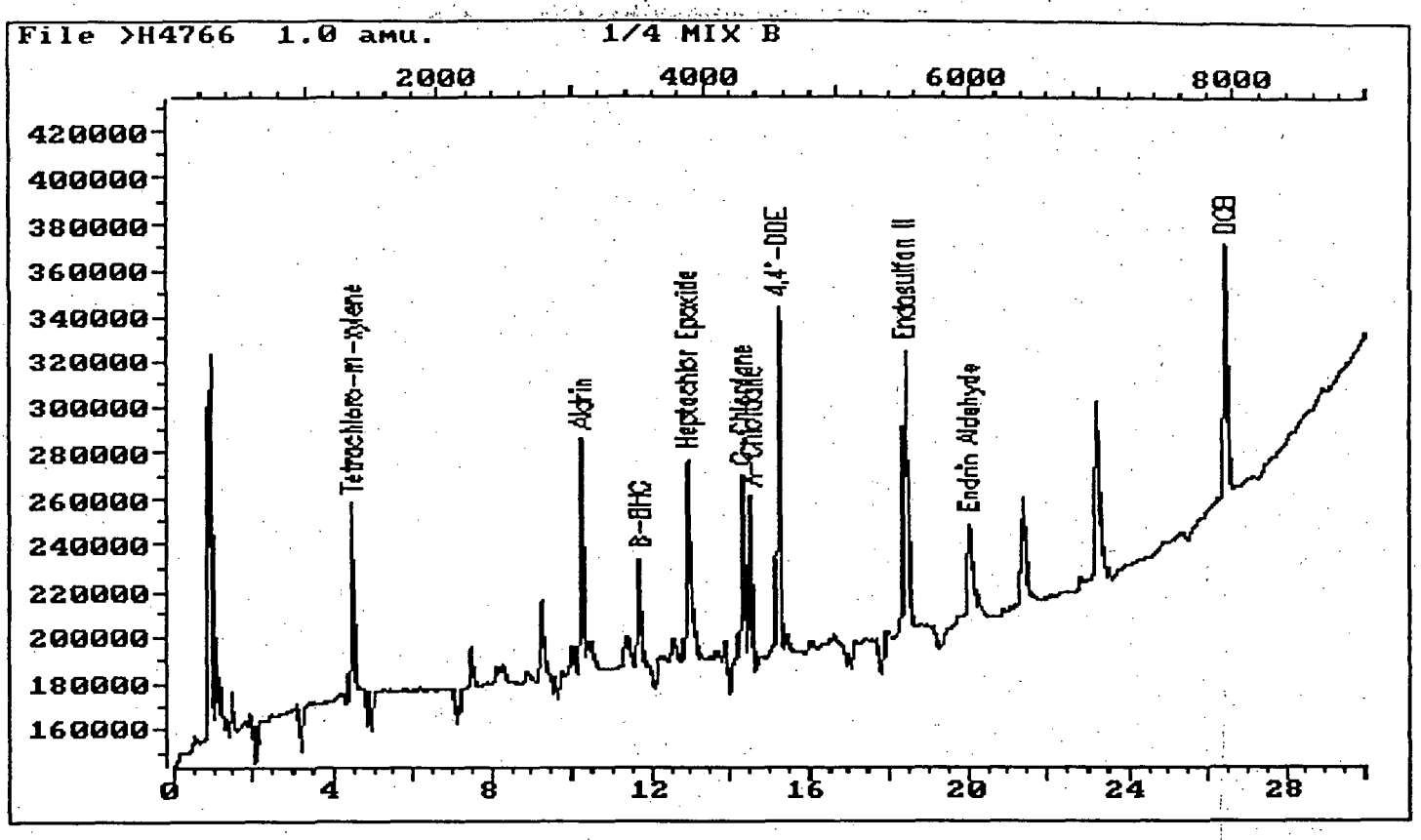
Operator ID: JEFF Quant Rev: 7 Quant Time: 991209 22:54
Output File: ^H4766::QT Injected at: 991209 22:21
Data File: >H4766::G4 Dilution Factor: 1.00000
Name: 1/4 MIX B Instrument ID: H
Misc:

ID File: IDPST8::G5
Title: PESTICIDES HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990930 11:58 Last Qcal Time: 991129 12:51

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	4.46	1338	309974M	.207	ug/l	100
5)	#Aldrin	10.22	3066	532681	.266	ug/l	100
6)	#B-BHC	11.69	3506	290222	.314	ug/l	100
8)	#Heptachlor Epoxide	12.89	3867	413000M	.213	ug/l	100
10)	#G-Chlordane	14.28	4285	403067	.211	ug/l	100
11)	#A-Chlordane	14.49	4347	376401M	.205	ug/l	100
12)	#4,4'-DDE	15.18	4555	870967	.487	ug/l	100
15)	#Endosulfan II	18.37	5512	761151	.505	ug/l	100
18)	#Endrin Aldehyde	20.00	6000	424903	.458	ug/l	100
25)	#DCB	26.46	7937	707668M	.476	ug/l	100

Compound uses ESTD

403



Data File: >H4766::G4 Quant Output File: ^H4766::QT
Name: 1/4 MIX B Instrument ID: H
Misc:

Id File: IDPST8::G5
Title: PESTICIDES HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990930 11:58 Last Qcal Time: 991129 12:51

Operator ID: JEFF
Quant Time : 991209 22:54
Injected at: 991209 22:21

404

QUANT REPORT

Operator ID: JEFF
Output File: ^G4767::QT
Data File: >G4767::G4
Name: TOXAPHENE
Misc:

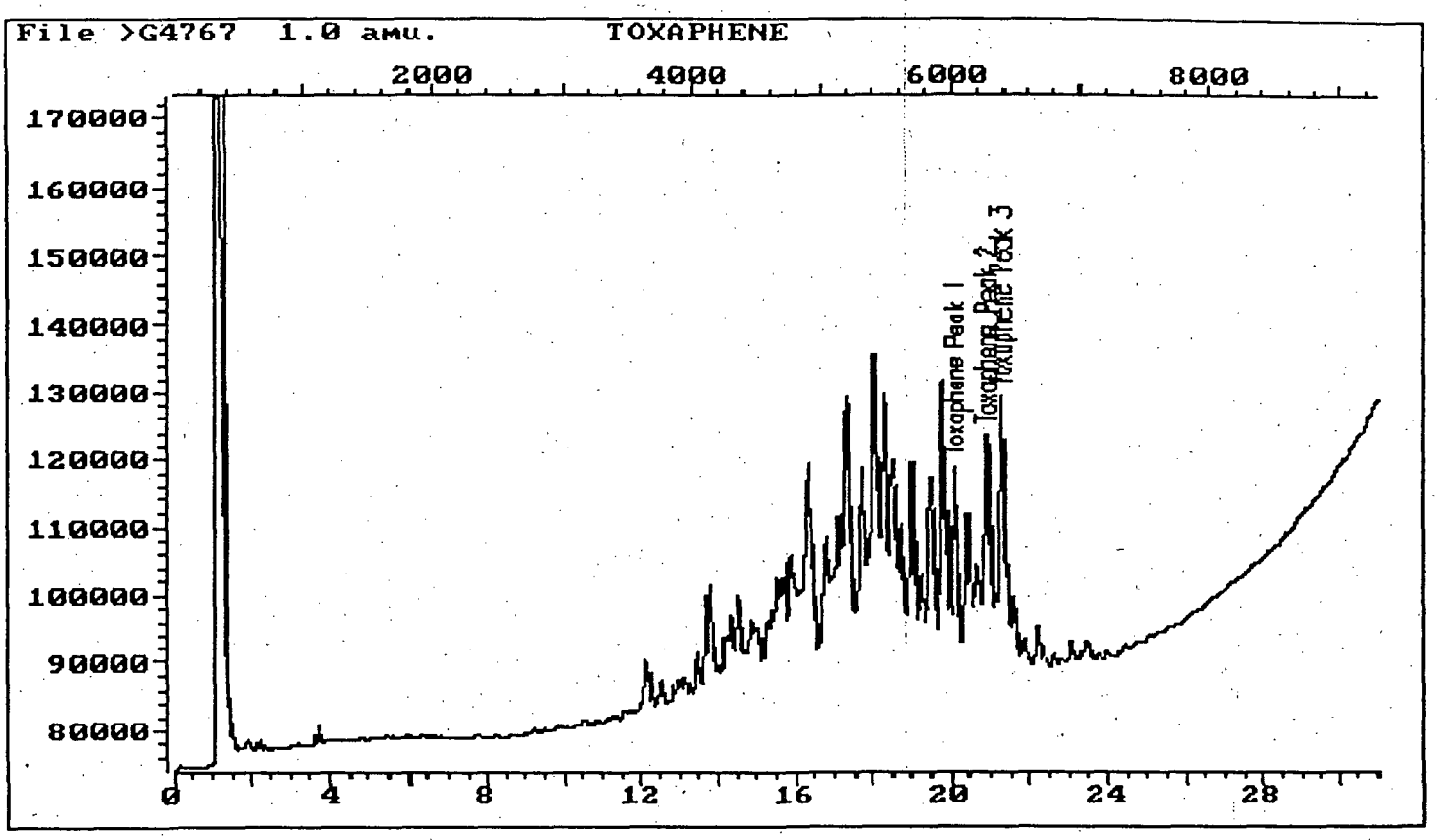
Quant Rev: 7
Quant Time: 991209 22:56
Injected at: 991209 22:21
Dilution Factor: 1.00000
Instrument ID: G

ID File: IDPST7::G5
Title: PESTICIDES HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990930 11:53
Last Qcal Time: 991129 12:13

	Compound	R.T.	Scan#	Area	Conc	Units	q
22)	#Toxaphene Peak 1	20.07	6020	172499M	25.50	ug/l	
23)	#Toxaphene Peak 2	20.89	6266	231141M	25.20	ug/l	
24)	#Toxaphene Peak 3	21.24	6371	225940M	24.65	ug/l	

Compound uses ESTD

405



Data File: >G4767::G4 Quant Output File: ^G4767::QT
Name: TOXAPHENE Instrument ID: G
Misc:

Id File: IDPST7::G5
Title: PESTICIDES HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990930 11:53 Last Qcal Time: 991129 12:13

Operator ID: JEFF
Quant Time : 991209 22:56
Injected at: 991209 22:21

406

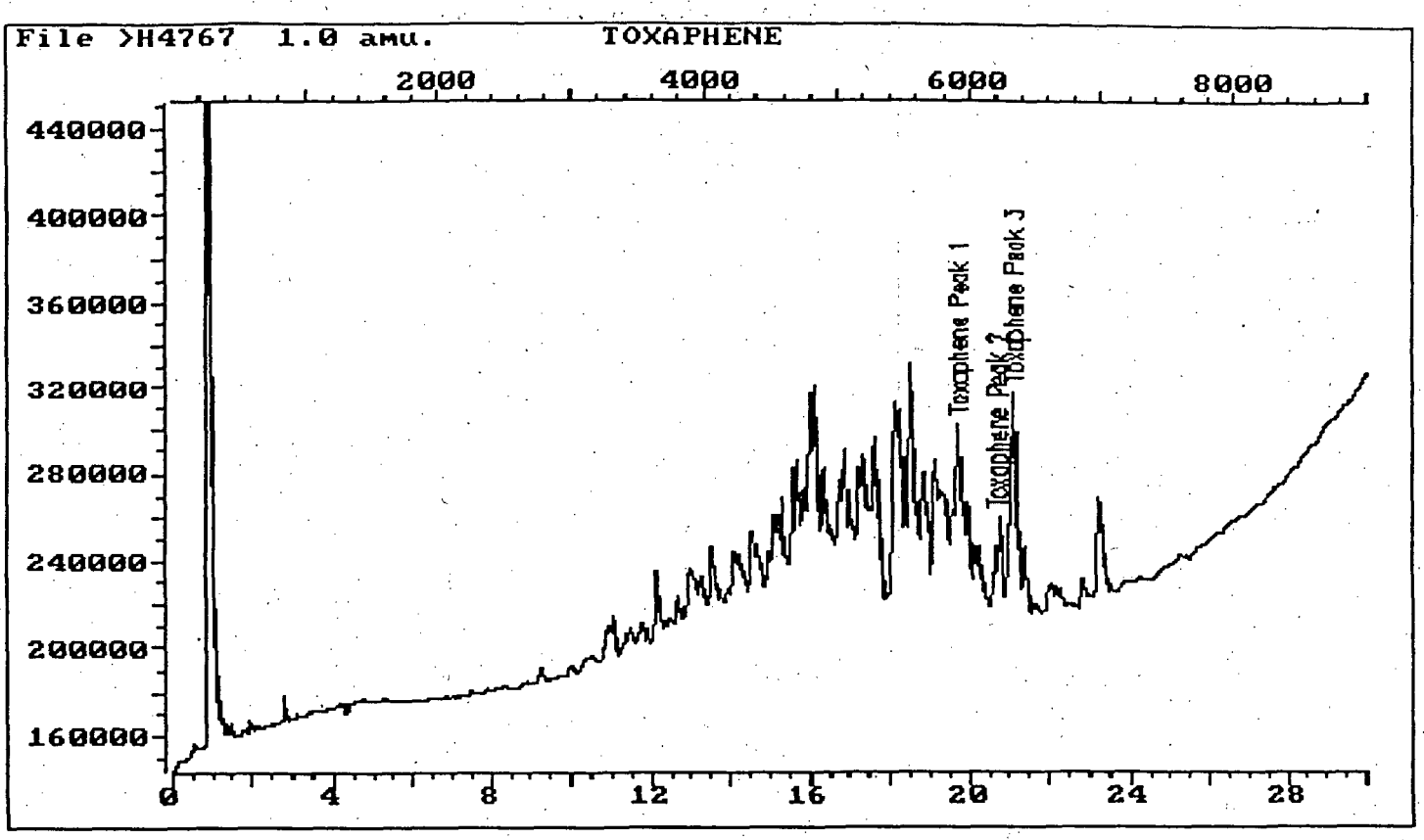
Operator ID: JEFF Quant Rev: 7 Quant Time: 991209 23:31
Output File: ^H4767::QT Injected at: 991209 22:58
Data File: >H4767::G4 Dilution Factor: 1.00000
Name: TOXAPHENE Instrument ID: H
Misc:

ID File: IDPST8::G5
Title: PESTICIDES HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990930 11:58 Last Qcal Time: 991129 12:51

Compound	R.T.	Scan#	Area	Conc	Units	q
22) #Toxaphene Peak 1	19.71	5913	234914M	17.82	ug/l	
23) #Toxaphene Peak 2	20.69	6208	364209	24.04	ug/l	100
24) #Toxaphene Peak 3	21.11	6332	732510M	20.31	ug/l	100

Compound uses ESTD

407



Data File: >H4767::G4 Quant Output File: ^H4767::QT
Name: TOXAPHENE Instrument ID: H
Misc:

Id File: IDPST8::G5
Title: PESTICIDES HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990930 11:58 Last Qcal Time: 991129 12:51

Operator ID: JEFF
Quant Time : 991209 23:31
Injected at: 991209 22:58

408

QUANT REPORT

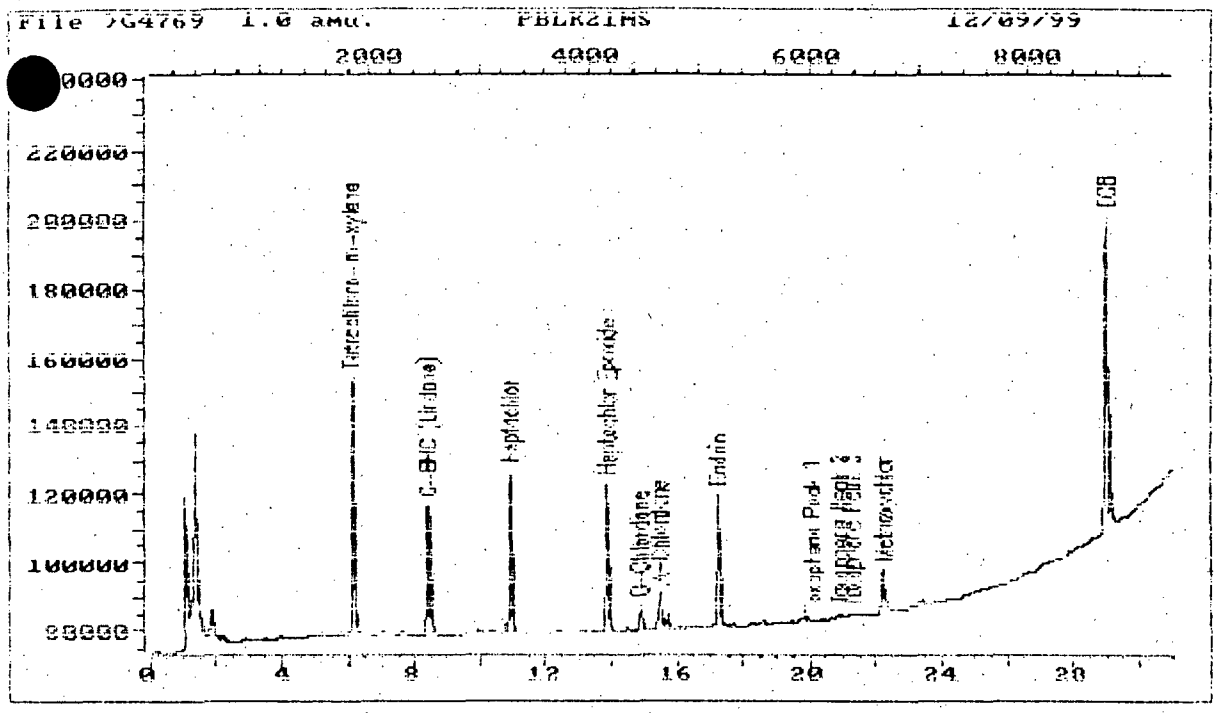
ator ID: JEFF
Quant Rev: 7
Quant Time: 991210 11:29
t File: ^G4769::QT
Injected at: 991209 23:35
ata File: >G4769::G4
Dilution Factor: 1.00000
ame: PBLK21MS
Instrument ID: G
isc: 12/09/99

D File: ID7TCL::G5
itle: TCLP PESTICIDES HP5890-G RTX-5 0.53mm 1.0uL
ast Calibration: 990930 14:37
Last Qcal Time: 991209 21:06

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	6.09	1828	359764	.752	ug/l	100
2)	#G-BHC (Lindane)	8.42	2527	199940	.289	ug/l	100
3)	#Heptachlor	10.93	3278	230847	.267	ug/l	100
4)	#Heptachlor Epoxide	13.85	4154	235947	.387	ug/l	100
5)	#G-Chlordane	14.85	4454	41076	.0636	ug/l	100
6)	#A-Chlordane	15.43	4630	81660	.138	ug/l	100
7)	#Endrin	17.21	5163	227835	.375	ug/l	100
8)	#Methoxychlor	22.23	6668	80712	.304	ug/l	100
9)	#Toxaphene Peak 1	20.06	6019	2427M	.352	ug/l	
10)	#Toxaphene Peak 2	20.90	6269	12137M	1.31	ug/l	
11)	#Toxaphene Peak 3	21.24	6371	4193M	.464	ug/l	
	#DCB	28.98	8695	567955	.865	ug/l	100

Compound uses ESTD

409



Data File: >G4769::G4 Quant Output File: ^G4769::QT
Name: PBLK21MS Instrument ID: G
Misc: 12/09/99

Id File: ID7TCL::G5
Title: TCLP PESTICIDES HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990930 14:37 Last Qcal Time: 991209 21:06

Operator ID: JEFF
Quant Time : 991210 11:29
Injected at: 991209 23:35

40

700508

QUANT REPORT

Operator ID: JEFF Quant Rev: 7 Quant Time: 991210 11:30
Output File: ^H4769::QT Injected at: 991210 00:12
Data File: >H4769::G4 Dilution Factor: 1.00000
Name: PBLK21MS Instrument ID: H
Misc: 12/09/99

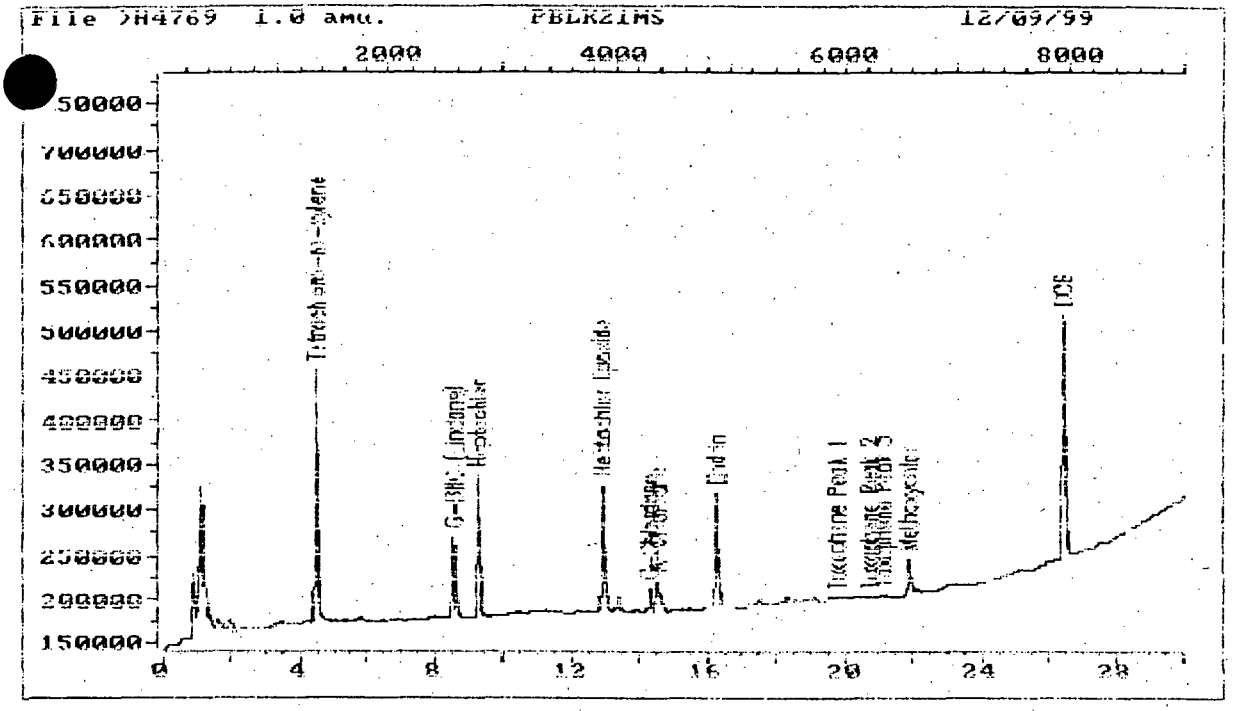
ID File: ID8TCL::G5
Title: TCLP PESTICIDES HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990930 14:37 Last Qcal Time: 991129 12:51

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	4.46	1338	1310335	.875	ug/l	100
2)	#G-BHC (Lindane)	8.53	2558	466502	.211	ug/l	100
3)	#Heptachlor	9.22	2765	789828	.266	ug/l	100
4)	#Heptachlor Epoxide	12.89	3866	823972	.425	ug/l	100
5)	#G-Chlordane	14.28	4284	137196	.0718	ug/l	100
6)	#A-Chlordane	14.49	4347	272469	.148	ug/l	100
7)	#Endrin	16.24	4873	737005	.430	ug/l	100
8)	#Methoxychlor	21.85	6554	249475	.337	ug/l	100
9)	#Toxaphene Peak 1	19.73	5919	11205M	.850	ug/l	
10)	#Toxaphene Peak 2	20.69	6207	5465M	.361	ug/l	
11)	#Toxaphene Peak 3	21.09	6328	19339M	.536	ug/l	
12)	#DCB	26.45	7936	1856637	1.25	ug/l	100

Compound uses ESTD

411

700509



Data File: >H4769::G4 Quant Output File: ^H4769::QT
Name: PBLK21MS Instrument ID: H
Misc: 12/09/99

Id File: ID8TCL::G5
Title: TCLP PESTICIDES HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990930 14:37 Last Qcal Time: 991129 12:51

Operator ID: JEFF
Quant Time : 991210 11:30
Injected at: 991210 00:12

412

700510

QUANT REPORT

Operator ID: JEFF Quant Rev: 7 Quant Time: 991210 11:36
Output File: ^G4773::QT Injected at: 991210 02:04
Data File: >G4773::G4 Dilution Factor: 1.00000
Name: 9913211MS Instrument ID: G
Misc: 6525 12/09/99 ITS 19AGCOMP

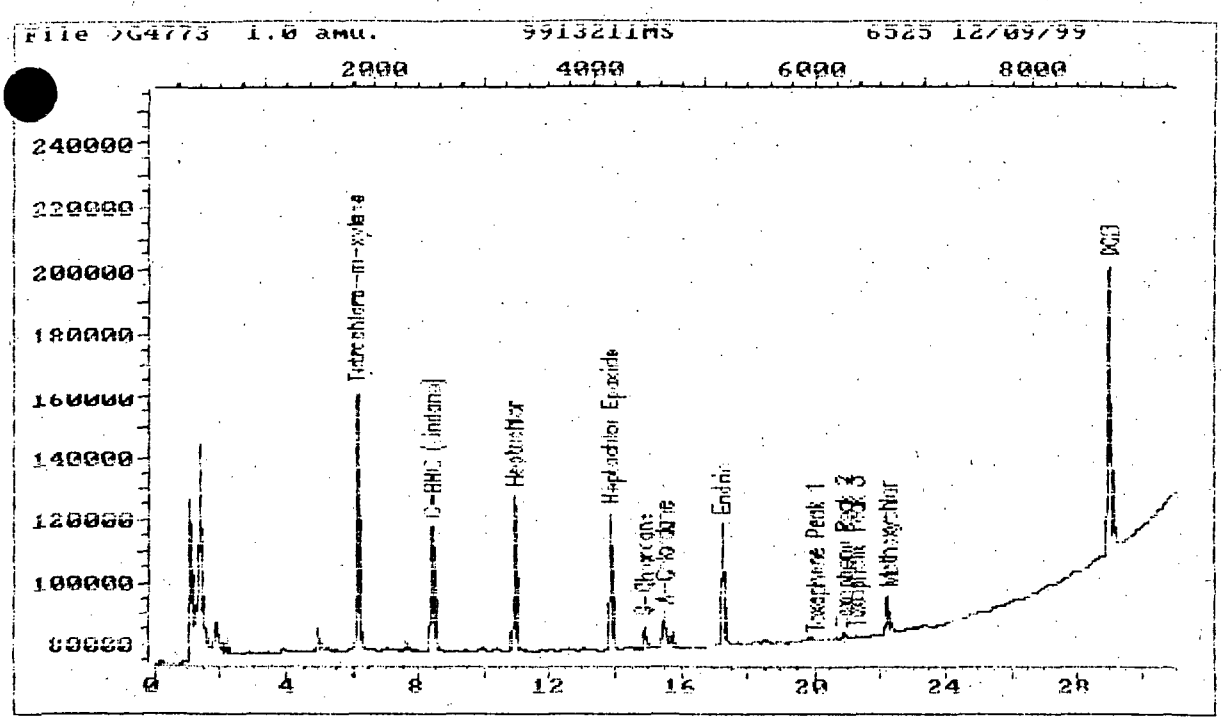
ID File: ID7TCL::G5
Title: TCLP PESTICIDES HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990930 14:37 Last Qcal Time: 991209 21:06

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	6.09	1826	397024	.830	ug/l	100
2)	#G-BHC (Lindane)	8.42	2525	210527	.304	ug/l	100
3)	#Heptachlor	10.92	3275	246073	.285	ug/l	100
4)	#Heptachlor Epoxide	13.84	4151	242103	.397	ug/l	100
5)	#G-Chlordane	14.84	4451	41050	.0635	ug/l	100
6)	#A-Chlordane	15.43	4628	66779M	.113	ug/l	100
7)	#Endrin	17.20	5160	225118	.371	ug/l	100
8)	#Methoxychlor	22.22	6665	88874	.334	ug/l	100
9)	#Toxaphene Peak 1	20.04	6013	5539M	.803	ug/l	
10)	#Toxaphene Peak 2	20.89	6268	9970M	1.08	ug/l	
11)	#Toxaphene Peak 3	21.22	6365	4075M	.451	ug/l	
	#DCB	28.97	8692	580526	.884	ug/l	100

Compound uses ESTD

413

700511



Data File: >G4773::G4 Quant Output File: ^G4773::QT
Name: 9913211MS Instrument ID: G
Misc: 6525 12/09/99 ITS 19AGCOMP

Id File: ID7TCL::G5
Title: TCLP PESTICIDES HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990930 14:37 Last Qcal Time: 991209 21:06

Operator ID: JEFF
Quant Time : 991210 11:36
Injected at: 991210 02:04

414

QUANT REPORT

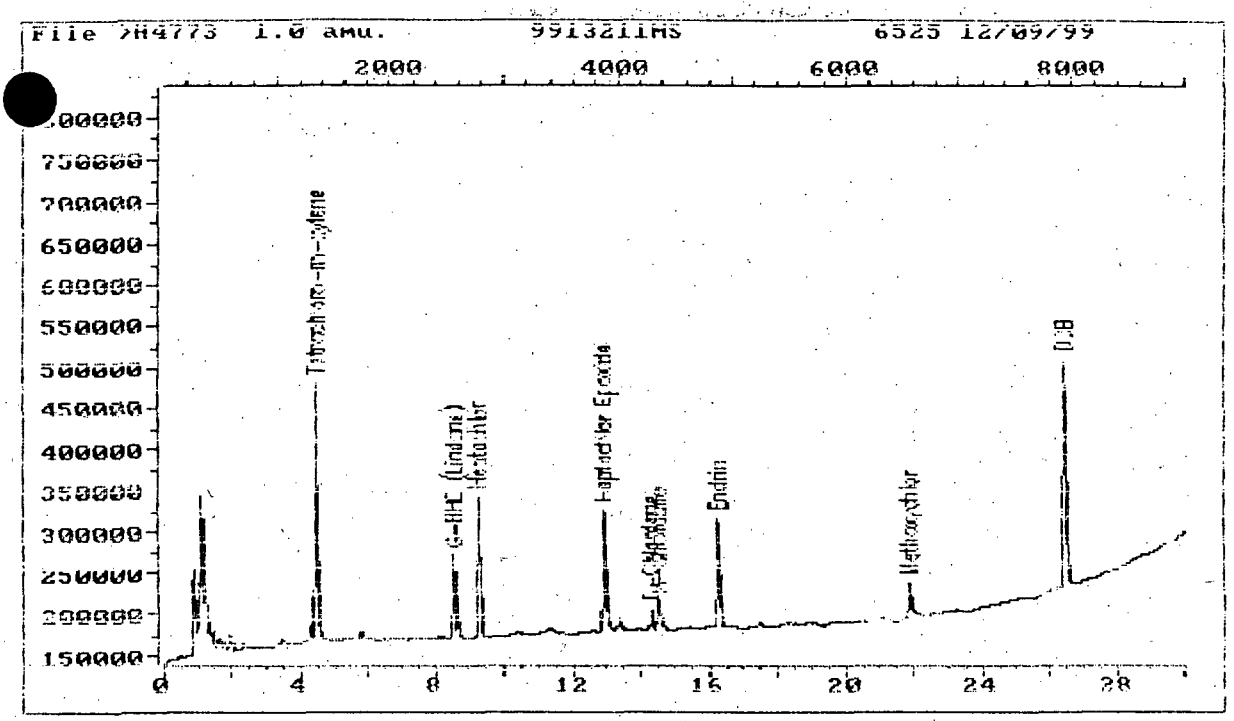
tor ID: JEFF Quant Rev: 7 Quant Time: 991210 11:37
t File: ^H4773::QT Injected at: 991210 02:41
ata File: >H4773::G4 Dilution Factor: 1.00000
ame: 9913211MS Instrument ID: H
isc: 6525 12/09/99 ITS 19AGCOMP

D File: ID8TCL::G5
itle: TCLP PESTICIDES HP5890-H RTX-1701 0.53mm 1.0uL
ast Calibration: 990930 14:37 Last Qcal Time: 991129 12:51

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	4.46	1337	1345553	.898	ug/l	100
2)	#G-BHC (Lindane)	8.52	2556	504777	.228	ug/l	100
3)	#Heptachlor	9.21	2762	858230	.289	ug/l	100
4)	#Heptachlor Epoxide	12.88	3863	864138	.446	ug/l	100
5)	#G-Chlordane	14.27	4281	139409	.0730	ug/l	100
6)	#A-Chlordane	14.48	4345	281464	.153	ug/l	100
7)	#Endrin	16.24	4871	766969	.447	ug/l	100
8)	#Methoxychlor	21.84	6552	260963	.352	ug/l	100
12)	#DCB	26.44	7933	1896835	1.28	ug/l	100

Compound uses ESTD

415



Data File: >H4773::G4 Quant Output File: ^H4773::QT
Name: 9913211MS Instrument ID: H
Misc: 6525 12/09/99 ITS 19ACCOMP

Id File: ID8TCL::G5
Title: TCLP PESTICIDES HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990930 14:37 Last Qcal Time: 991129 12:51

Operator ID: JEFF
Quant Time : 991210 11:37
Injected at: 991210 02:41

416

700514

Operator ID: JEFF
Output File: ^G4768::QT
Data File: >G4768::G4
Name: PBLK21
Misc: 12/09/99

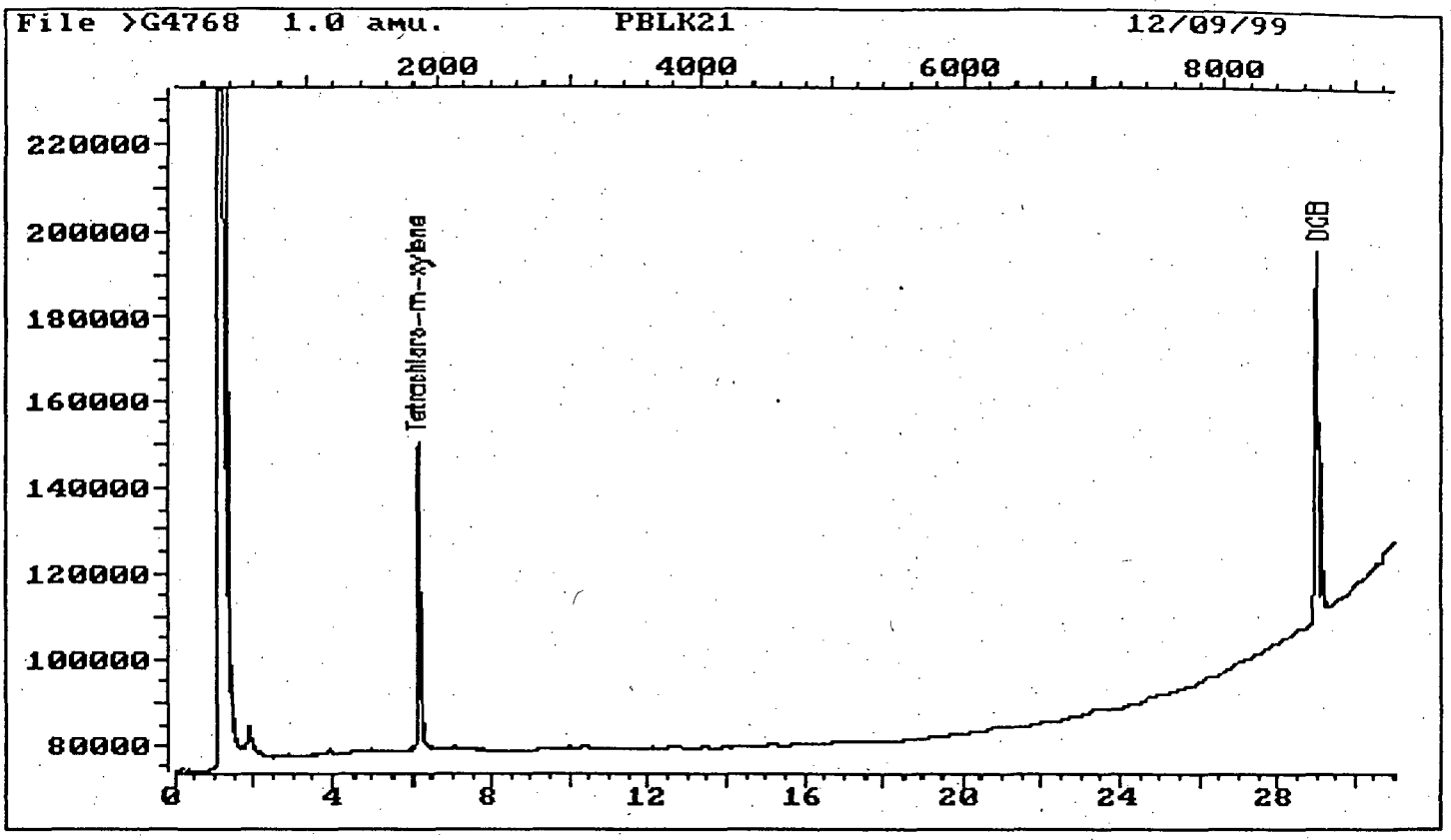
Quant Rev: 7
Quant Time: 991210 11:27
Injected at: 991209 22:58
Dilution Factor: 1.00000
Instrument ID: G

ID File: ID7TCL::G5
Title: TCLP PESTICIDES HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990930 14:37
Last Qcal Time: 991209 21:06

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	6.09	1828	341816	.714	ug/l	100
12)	#DCB	28.99	8696	552056	.841	ug/l	100

Compound uses ESTD

417



Data File: >G4768::G4 Quant Output File: ^G4768::QT
Name: PBLK21 Instrument ID: G
Misc: 12/09/99

Id File: ID7TCL::G5
Title: TCLP PESTICIDES HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990930 14:37 Last Qcal Time: 991209 21:06

Operator ID: JEFF
Quant Time : 991210 11:27
Injected at: 991209 22:58

418

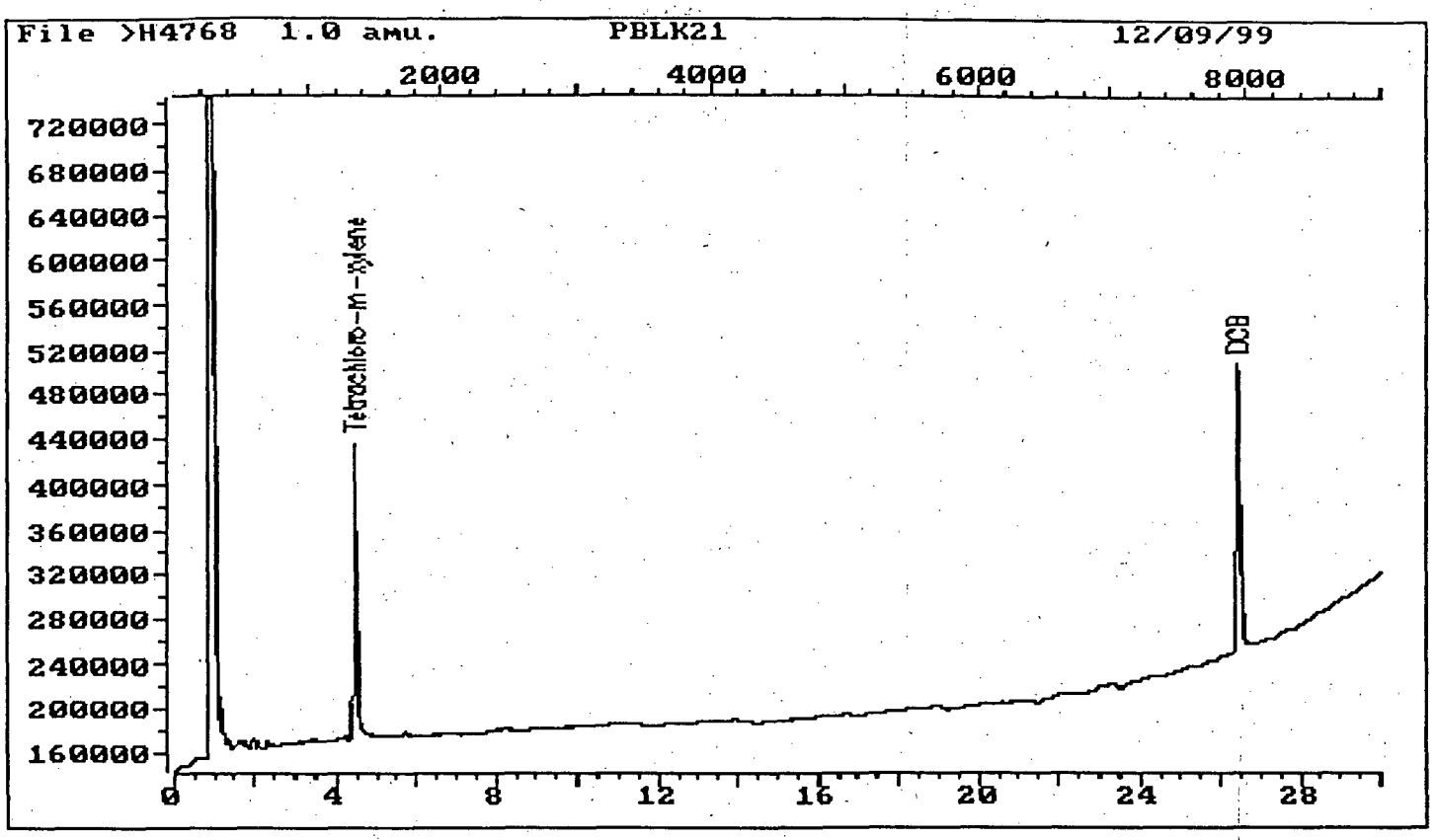
ator ID: JEFF Quant Rev: 7 Quant Time: 991210 11:28
t File: ^H4768::QT Injected at: 991209 23:35
ata File: >H4768::G4 Dilution Factor: 1.00000
ame: PBLK21 Instrument ID: H
isc: 12/09/99

D File: ID8TCL::G5
itle: TCLP PESTICIDES HP5890-H RTX-1701 0.53mm 1.0uL
ast Calibration: 990930 14:37 Last Qcal Time: 991129 12:51

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	4.46	1338	1240304	.828	ug/l	100
12)	#DCB	26.45	7936	1770589	1.19	ug/l	100

Compound uses ESTD

419



Data File: >H4768::G4 Quant Output File: ^H4768::QT
Name: PBLK21 Instrument ID: H
Misc: 12/09/99

Id File: ID8TCL::G5
Title: TCLP PESTICIDES HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990930 14:37 Last Qcal Time: 991129 12:51

Operator ID: JEFF
Quant Time : 991210 11:28
Injected at: 991209 23:35

420

QUANT REPORT

tor ID: JEFF Quant Rev: 7 Quant Time: 991210 11:38
ut File: ^G4774::QT Injected at: 991210 02:41
ta File: >G4774::G4 Dilution Factor: 1.00000
me: 9912994 Instrument ID: G
sc: 6481 12/09/99 OE DCOMP-1

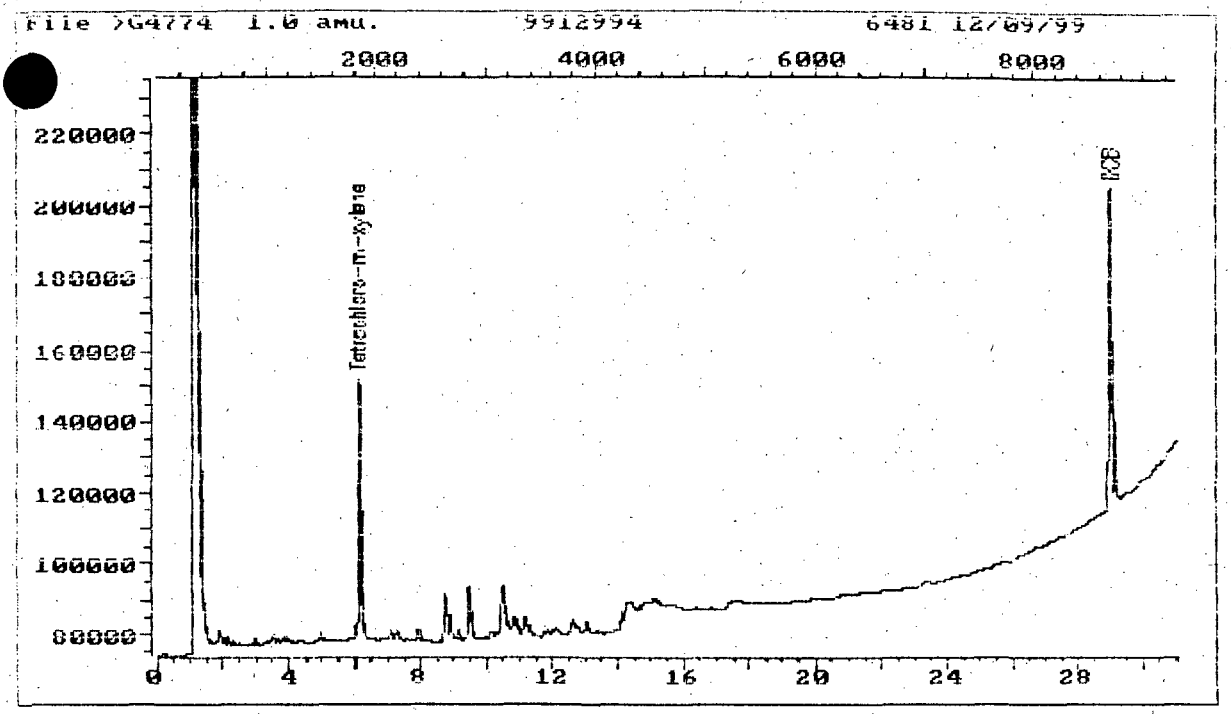
File: ID7TCL::G5
tle: TCLP PESTICIDES HP5890-G RTX-5 0.53mm 1.0uL
st Calibration: 990930 14:37 Last Qcal Time: 991209 21:06

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	6.08	1825	357110	.746	ug/l	100
12)	#DCB	28.97	8691	570810	.870	ug/l	100

Compound uses ESTD

421

700519



Data File: >G4774::G4 Quant Output File: ^G4774::QT
Name: 9912994 Instrument ID: G
Misc: 6481 12/09/99 OE DCOMP-1

Id File: ID7TCL::G5
Title: TCLP PESTICIDES HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990930 14:37 Last Qcal Time: 991209 21:06

Operator ID: JEFF
Quant Time : 991210 11:38
Injected at: 991210 02:41

422

QUANT REPORT

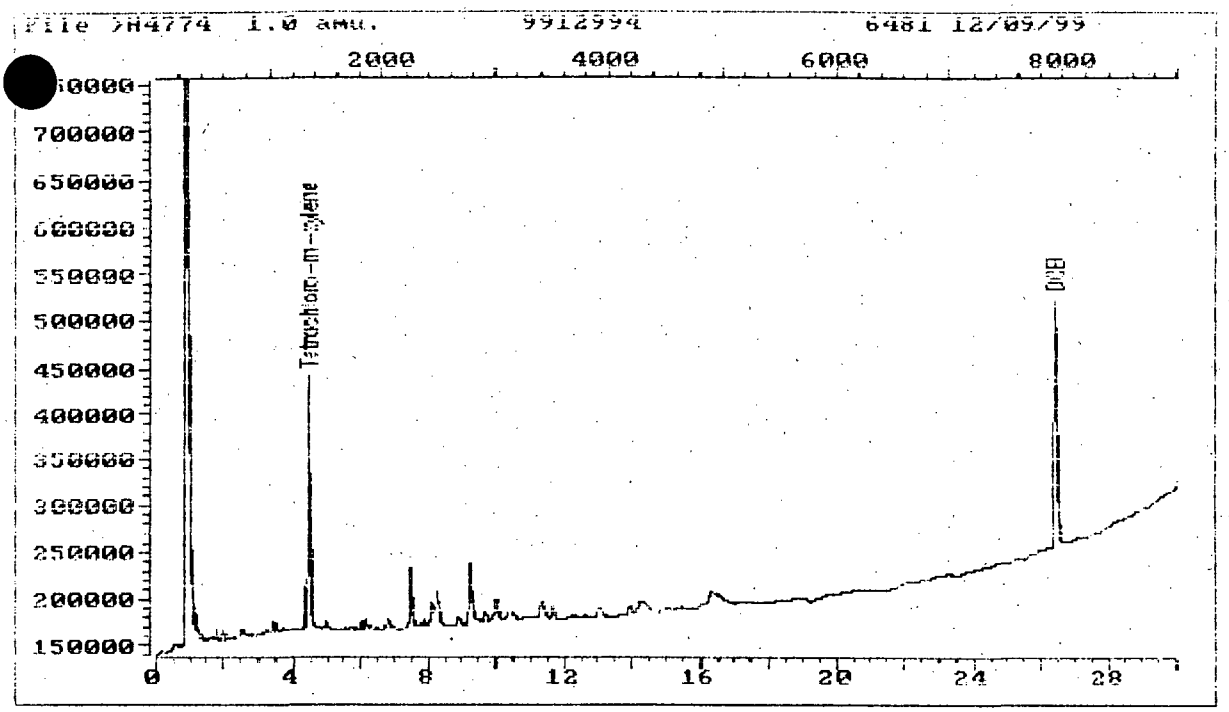
tor ID: JEFF Quant Rev: 7 Quant Time: 991210 11:39
t File: ^H4774::QT Injected at: 991210 03:18
ta File: >H4774::G4 Dilution Factor: 1.00000
me: 9912994 Instrument ID: H
sc: 6481 12/09/99 OE DCOMP-1

File: ID8TCL::G5
tle: TCLP PESTICIDES HP5890-H RTX-1701 0.53mm 1.0uL
st Calibration: 990930 14:37 Last Qcal Time: 991129 12:51

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	4.46	1337	1192474	.796	ug/l	100
2)	#DCB	26.44	7932	1831051	1.23	ug/l	100

Compound uses ESTD

423



Data File: >H4774::G4 Quant Output File: ^H4774::QT
Name: 9912994 Instrument ID: H
Misc: 6481 12/09/99 OE DCOMP-1

Id File: ID8TCL::G5
Title: TCLP PESTICIDES HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990930 14:37 Last Qcal Time: 991129 12:51

Operator ID: JEFF
Quant Time : 991210 11:39
Injected at: 991210 03:18

424

QUANT REPORT

Operator ID: JEFF Quant Rev: 7 Quant Time: 991210 11:42
Output File: ^G4776::QT Injected at: 991210 03:55
Data File: >G4776::G4 Dilution Factor: 1.00000
Name: 9912995 Instrument ID: G
Misc: 6481 12/09/99 OE DCOMP-2

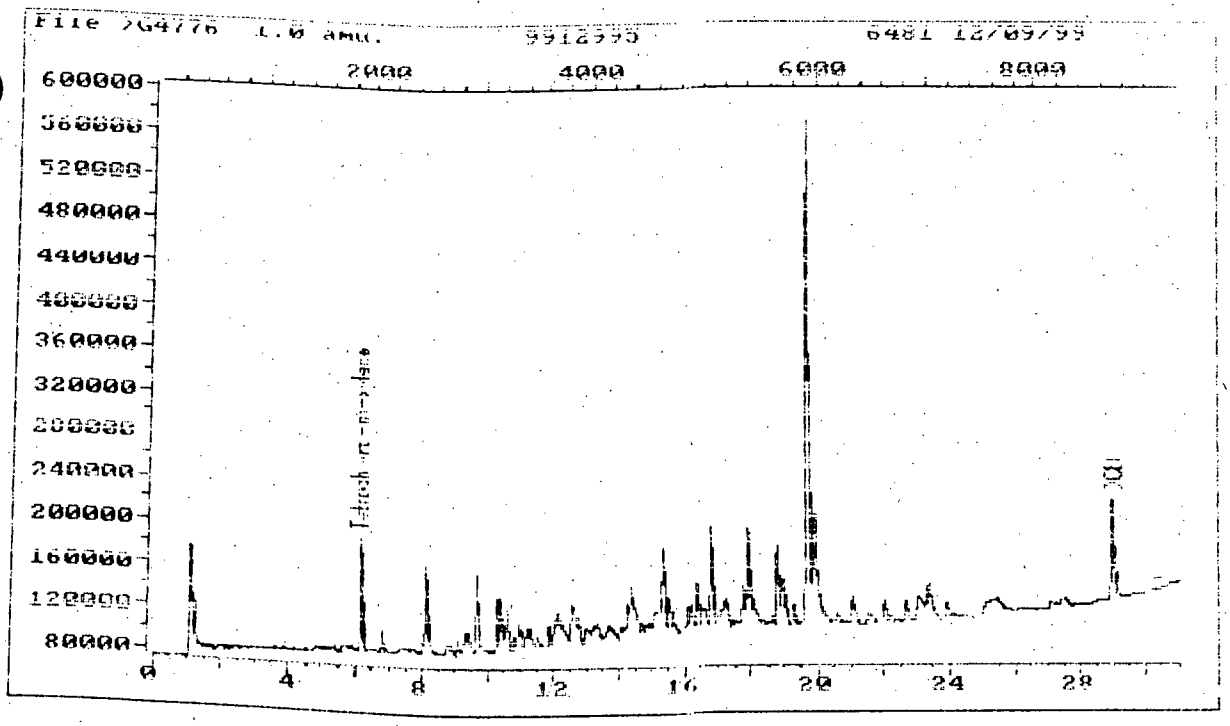
ID File: ID7TCL::G5
Title: TCLP PESTICIDES HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990930 14:37 Last Qcal Time: 991209 21:06

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	6.15	1845	437112	.913	ug/l	100
12)	#DCB	28.97	8691	596969	.910	ug/l	100

Compound uses ESTD

425

700523



Data File: >G4776::G4 Quant Output File: ^G4776::QT
Name: 9912995 Instrument ID: G
Misc: 6481 12/09/99 OE DCOMP-2

Id File: ID7TCL::G5
Title: TCLP PESTICIDES HP5890 G RTX-5 0.53mm 1.0uL
Last Calibration: 990930 14:37 Last Qcal Time: 991209 21:06

Operator ID: JEFF
Quant Time : 991210 11:42
Injected at: 991210 03:55

426

QUANT REPORT

Operator ID: JEFF
Output File: ^H4776::QT
Data File: >H4776::G4
Name: 9912995
Misc: 6481 12/09/99 OE

Quant Rev: 7
Quant Time: 991210 11:44
Injected at: 991210 04:33
Dilution Factor: 1.00000
Instrument ID: H
DCOMP-2

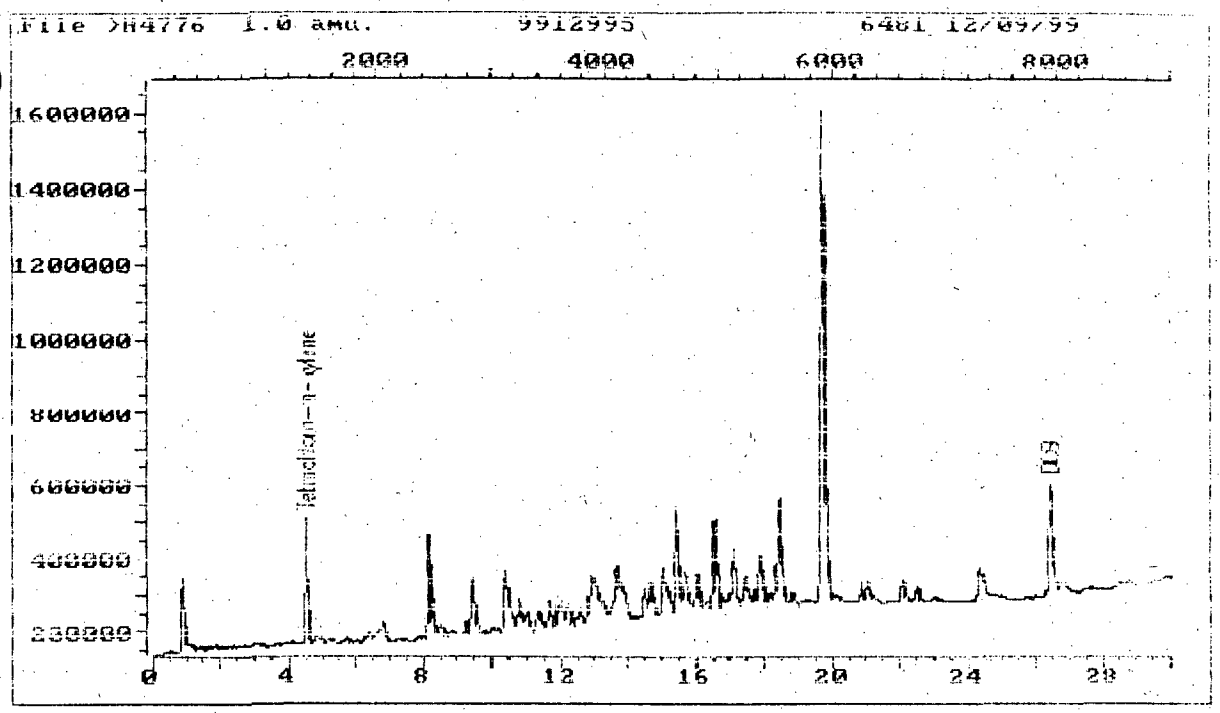
ID File: ID8TCL::G5
Title: TCLP PESTICIDES HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990930 14:37
Last Qcal Time: 991129 12:51

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	4.53	1359	1552033	1.04	ug/l	100
12)	#DCB	26.44	7933	1702018M	1.15	ug/l	100

Compound uses ESTD

427

700525



Data File: >H4776::G4 Quant Output File: ^H4776::QT
Name: 9912995 Instrument ID: H
Misc: 6481 12/09/99 OE DCOMP-2

Id File: ID8TCL::G5
Title: TCLP PESTICIDES HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990930 14:37 Last Qcal Time: 991129 12:51

Operator ID: JEFF
Quant Time : 991210 11:44
Injected at: 991210 04:33

428

QUANT REPORT

tor ID: JEFF Quant Rev: 7 Quant Time: 991210 11:40
t File: ^G4775::QT Injected at: 991210 03:18
ta File: >G4775::G4 Dilution Factor: 1.00000
me: 9912996 Instrument ID: G
sc: 6481 12/09/99 OE SP-1

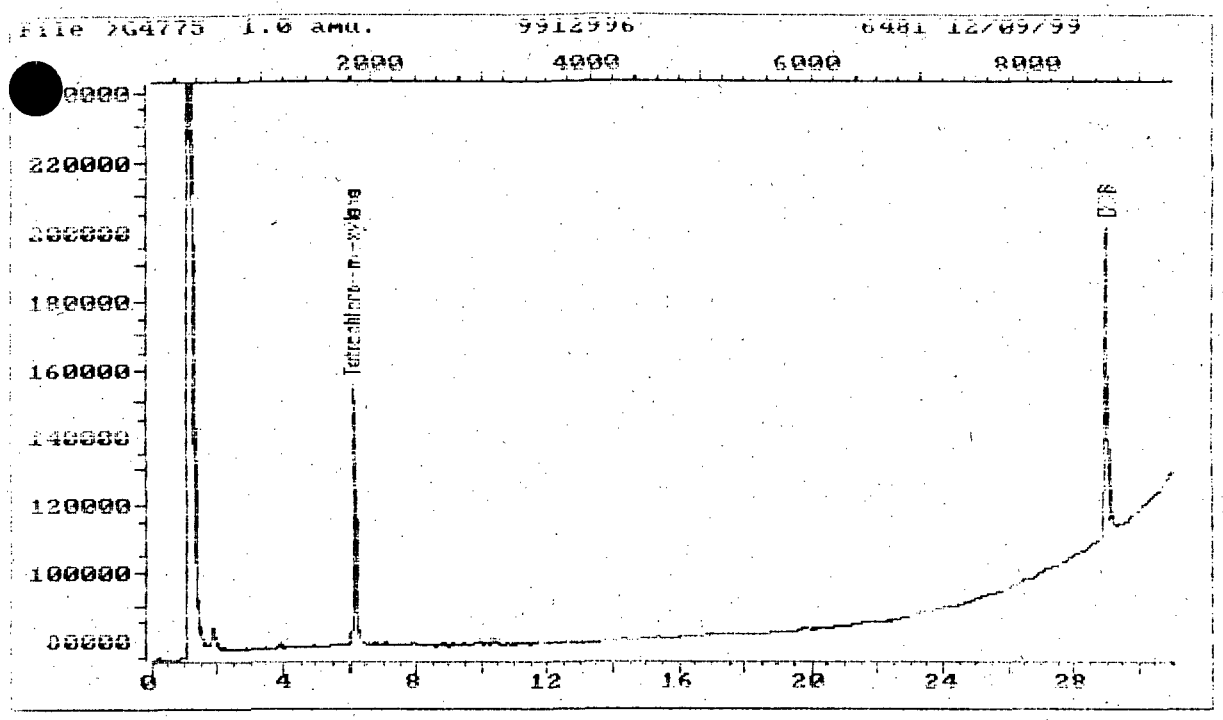
File: ID7TCL::G5
tle: TCLP PESTICIDES HP5890-G RTX-5 0.53mm 1.0uL
st Calibration: 990930 14:37 Last Qcal Time: 991209 21:06

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	6.08	1824	369284	.772	ug/l	100
2)	#DCB	28.97	8691	577508	.880	ug/l	100

Compound uses ESTD

429

700527



Data File: >G4775::G4 Quant Output File: ^G4775::QT
Name: 9912996 Instrument ID: G
Misc: 6481 12/09/99 OE SP-1

Id File: ID7TCL::G5
Title: TCLP PESTICIDES HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990930 14:37 Last Qcal Time: 991209 21:06

Operator ID: JEFF
Quant Time : 991210 11:40
Injected at: 991210 03:18

430

QUANT REPORT

tor ID: JEFF Quant Rev: 7 Quant Time: 991210 11:41
put File: ^H4775::QT Injected at: 991210 03:55
ta File: >H4775::G4 Dilution Factor: 1.00000
me: 9912096 Instrument ID: H
sc: 6481 12/09/99 OE SP-1

File: ID8TCL::G5
tle: TCLP PESTICIDES HP5890-H RTX-1701 0.53mm 1.0uL
st Calibration: 990930 14:37 Last Qcal Time: 991129 12:51

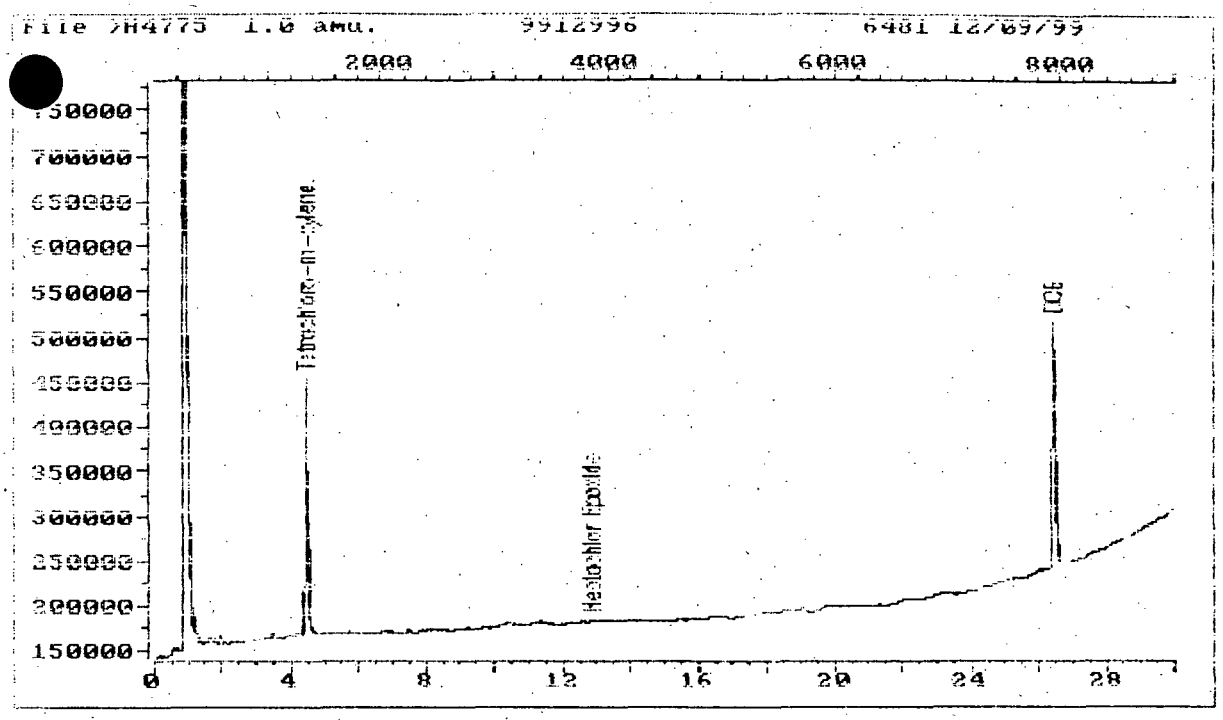
	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	4.46	1337	1314147	.877	ug/l	100
~~4)~~	~~#Heptachlor Epoxide~~	12.85	3854	6323	.00326	ug/l	100
2)	#DCB	26.44	7932	1846675	1.24	ug/l	100

Compound uses ESTD

JH 12/9/99

431

700529



Data File: >H4775::G4 Quant Output File: ^H4775::QT
Name: 9912996 Instrument ID: H
Misc: 6481 12/09/99 OE SP-1

Id File: ID8TCL::G5
Title: TCLP PESTICIDES HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990930 14:37 Last Qcal Time: 991129 12:51

Operator ID: JEFF
Quant Time : 991210 11:41
Injected at: 991210 03:55

432

QUANT REPORT

Operator ID: JEFF
Output File: ^A0488::QT
Data File: >A0488::G1
Name: HERB STD.
Misc:

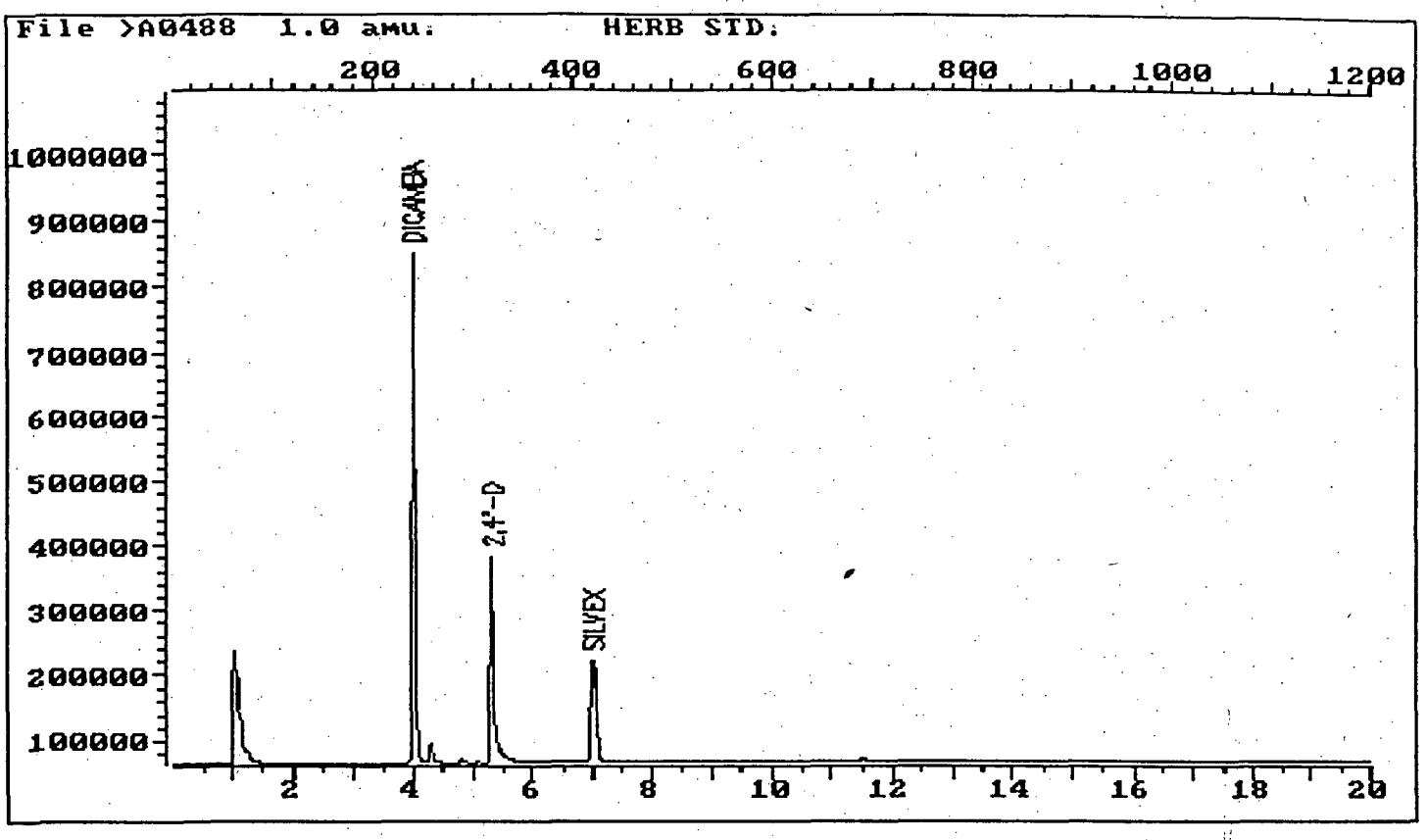
Quant Rev: 7
Quant Time: 991116 11:02
Injected at: 991116 10:41
Dilution Factor: 1.00000
Instrument ID: A

ID File: IDHRB1::G5
Title: HERBICIDES HP5890-A RTX-5 0.53mm 1.0uL
Last Calibration: 991116 10:49
Last Qcal Time: 991103 11:17

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#DICAMBA	4.00	240	2813106	2813106.	NO CALIB	100
2)	#2,4'-D	5.32	319	1524129	1524129.	NO CALIB	100
3)	#SILVEX	7.02	421	661772	661772.0	NO CALIB	100

Compound uses ESTD

433



Data File: >A0488::G1 Quant Output File: ^A0488::QT
Name: HERB STD. Instrument ID: A
Misc:

Id File: IDHRB1::G5
Title: HERBICIDES HP5890-A RTX-5 0.53mm 1.0uL
Last Calibration: 991116 10:49 Last Qcal Time: 991103 11:17

Operator ID: JEFF
Quant Time : 991116 11:02
Injected at: 991116 10:41

434

Operator ID: JEFF
Output File: ^B0488::QT
Data File: >B0488::G1
Name: HERB STD.
Misc:

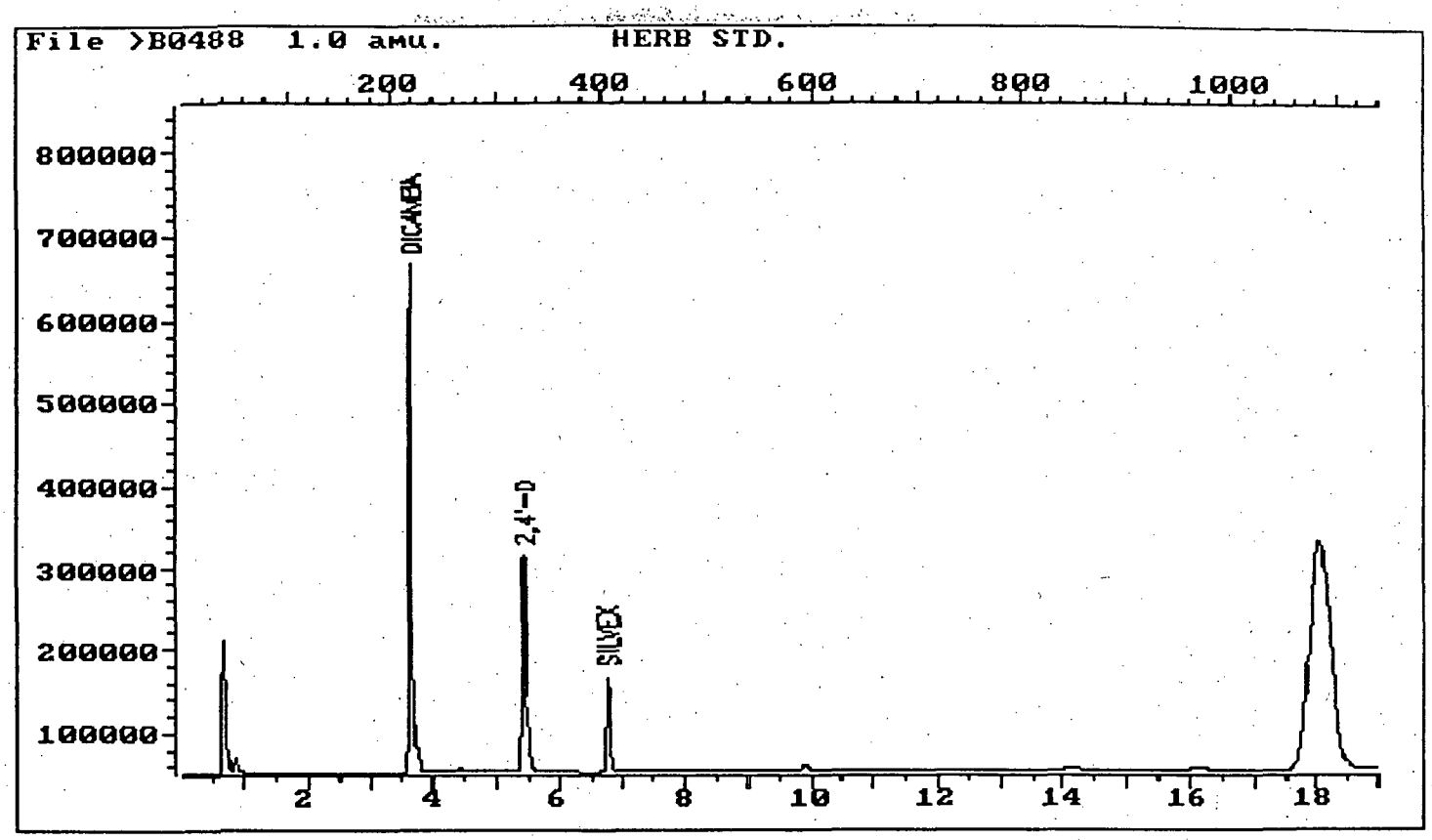
Quant Rev: 7
Quant Time: 991116 11:26
Injected at: 991116 11:06
Dilution Factor: 1.00000
Instrument ID: B

ID File: IDHRB2::G5
Title: HERBICIDES HP5890-B RTX-1701 0.53mm 1.0uL
Last Calibration: 991116 10:49
Last Qcal Time: 991103 11:43

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#DICAMBA	3.65	219	2036865	2036865.	NO CALIB	100
2)	#2,4'-D	5.45	327	1137054	1137054.	NO CALIB	100
3)	#SILVEX	6.77	406	508450	508450.0	NO CALIB	100

Compound uses ESTD

435



Data File: >B0488::G1 Quant Output File: ^B0488::QT
Name: HERB STD. Instrument ID: B
Misc:

Id File: IDHRB2::G5
Title: HERBICIDES HP5890-B RTX-1701 0.53mm 1.0uL
Last Calibration: 991116 10:49 Last Qcal Time: 991103 11:43

Operator ID: JEFF
Quant Time : 991116 11:26
Injected at: 991116 11:06

436

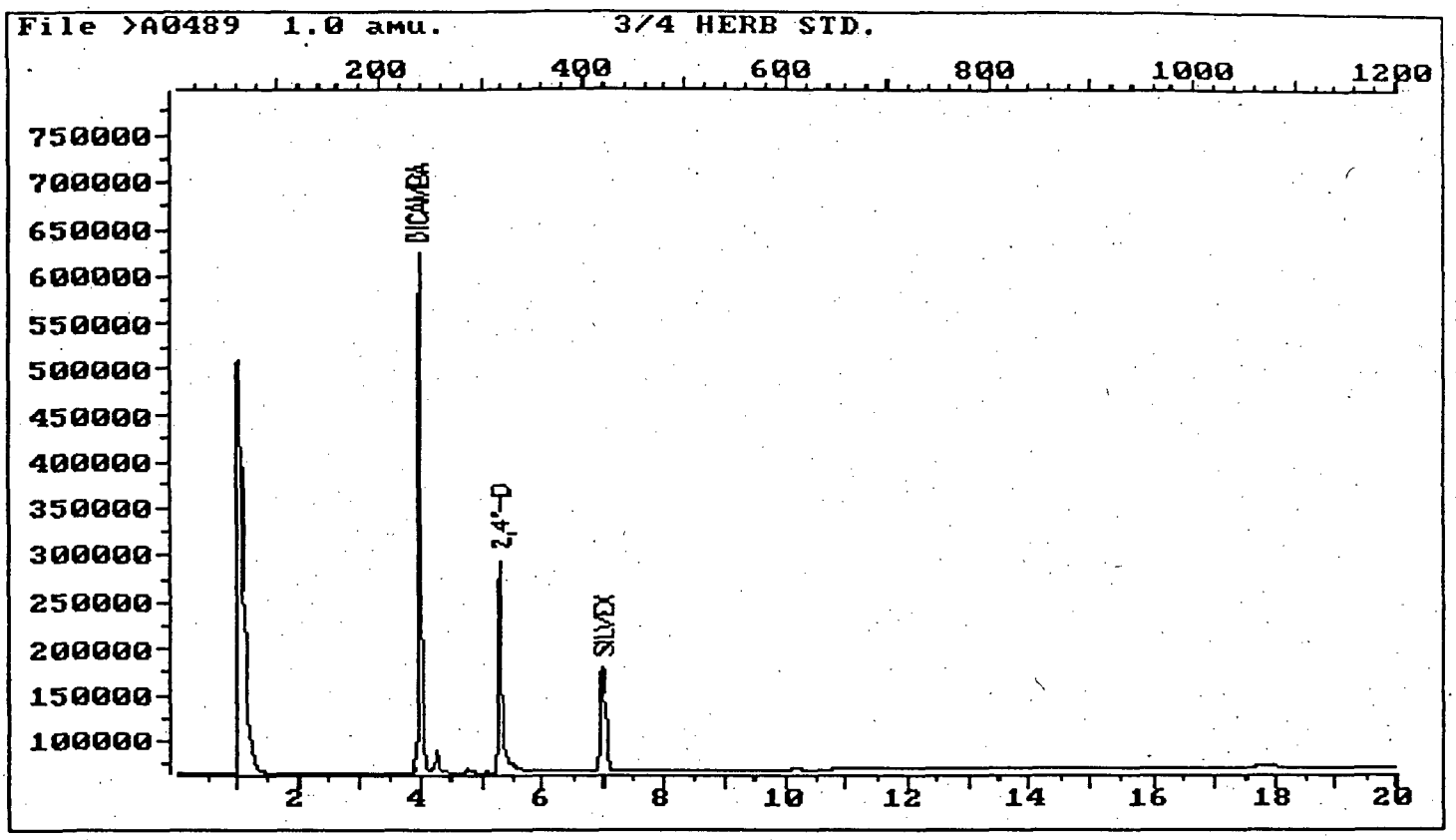
Operator ID: JEFF Quant Rev: 7 Quant Time: 991116 11:27
Output File: ^A0489::QT Injected at: 991116 11:06
Data File: >A0489::G1 Dilution Factor: 1.00000
Name: 3/4 HERB STD. Instrument ID: A
Misc:

ID File: IDHRB1::G5
Title: HERBICIDES HP5890-A RTX-5 0.53mm 1.0uL
Last Calibration: 991116 10:49 Last Qcal Time: 991103 11:17

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#DICAMBA	3.98	239	2034203	2034203.	NO CALIB	100
2)	#2,4'-D	5.30	318	1094005	1094005.	NO CALIB	100
3)	#SILVEX	7.00	420	481834	481834.0	NO CALIB	100

Compound uses ESTD

437



Data File: >A0489::G1 Quant Output File: ^A0489::QT
Name: 3/4 HERB STD. Instrument ID: A
Misc:

Id File: IDHRB1::G5
Title: HERBICIDES HP5890-A RTX-5 0.53mm 1.0uL
Last Calibration: 991116 10:49 Last Qcal Time: 991103 11:17

Operator ID: JEFF
Quant Time : 991116 11:27
Injected at: 991116 11:06

438

QUANT REPORT

Operator ID: JEFF
Output File: ^B0489::QT
Data File: >B0489::G1
Name: 3/4 HERB STD.
Misc:

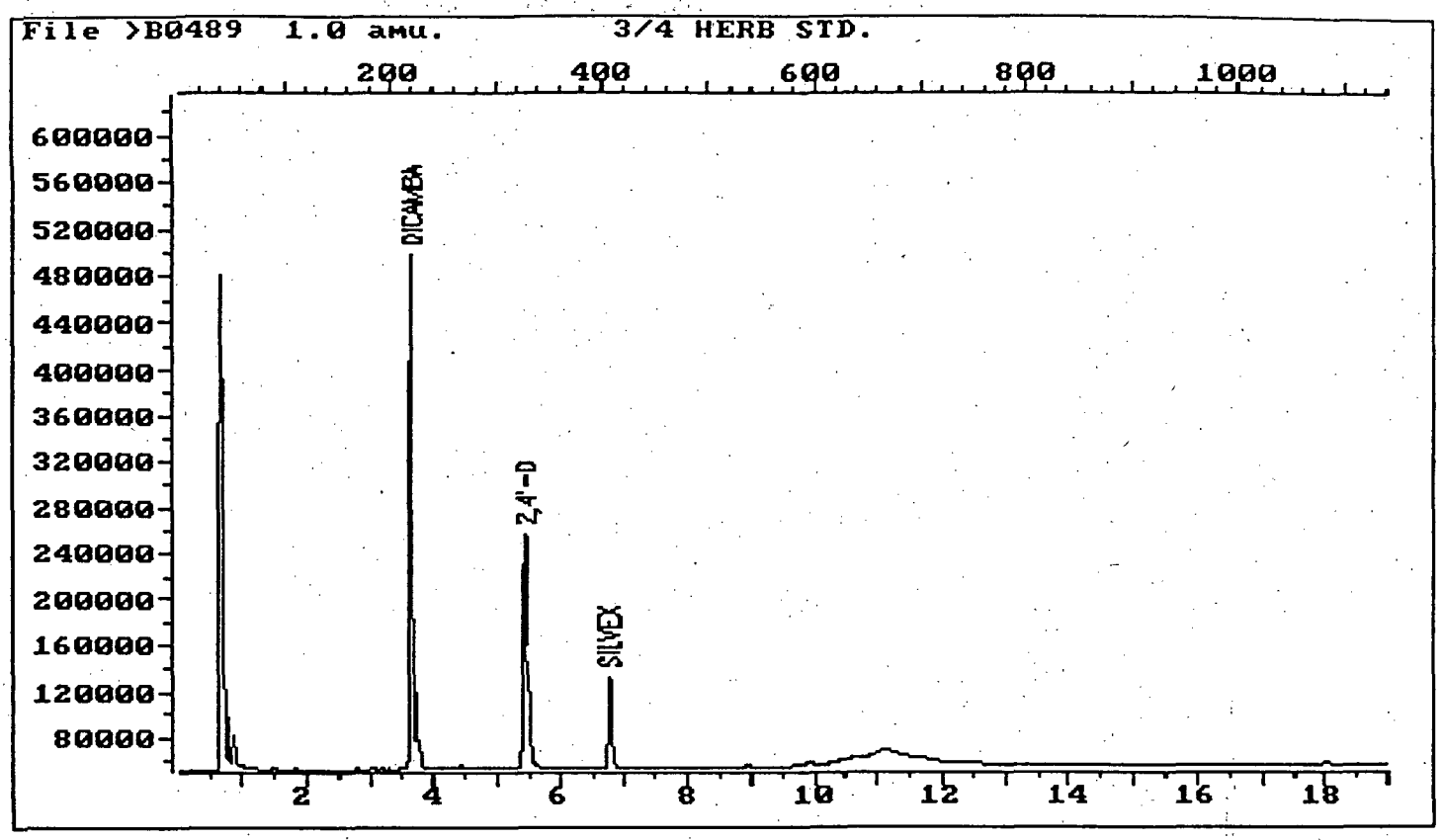
Quant Rev: 7
Quant Time: 991116 11:52
Injected at: 991116 11:32
Dilution Factor: 1.00000
Instrument ID: B

ID File: IDHRB2::G5
Title: HERBICIDES HP5890-B RTX-1701 0.53mm 1.0uL
Last Calibration: 991116 10:49
Last Qcal Time: 991103 11:43

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#DICAMBA	3.65	219	1546191	1546191.	NO CALIB	100
2)	#2,4'-D	5.45	327	853460	853460.0	NO CALIB	100
3)	#SILVEX	6.77	406	349720	349720.0	NO CALIB	100

Compound uses ESTD

439



Data File: >B0489::G1 Quant Output File: ^B0489::QT
Name: 3/4 HERB STD. Instrument ID: B
Misc:

Id File: IDHRB2::G5
Title: HERBICIDES HP5890-B RTX-1701 0.53mm 1.0uL
Last Calibration: 991116 10:49 Last Qcal Time: 991103 11:43

Operator ID: JEFF
Quant Time : 991116 11:52
Injected at: 991116 11:32

440

QUANT REPORT

Operator ID: JEFF
Output File: ^A0490::QT
Data File: >A0490::G1
Name: 1/2 HERB STD.
Misc:

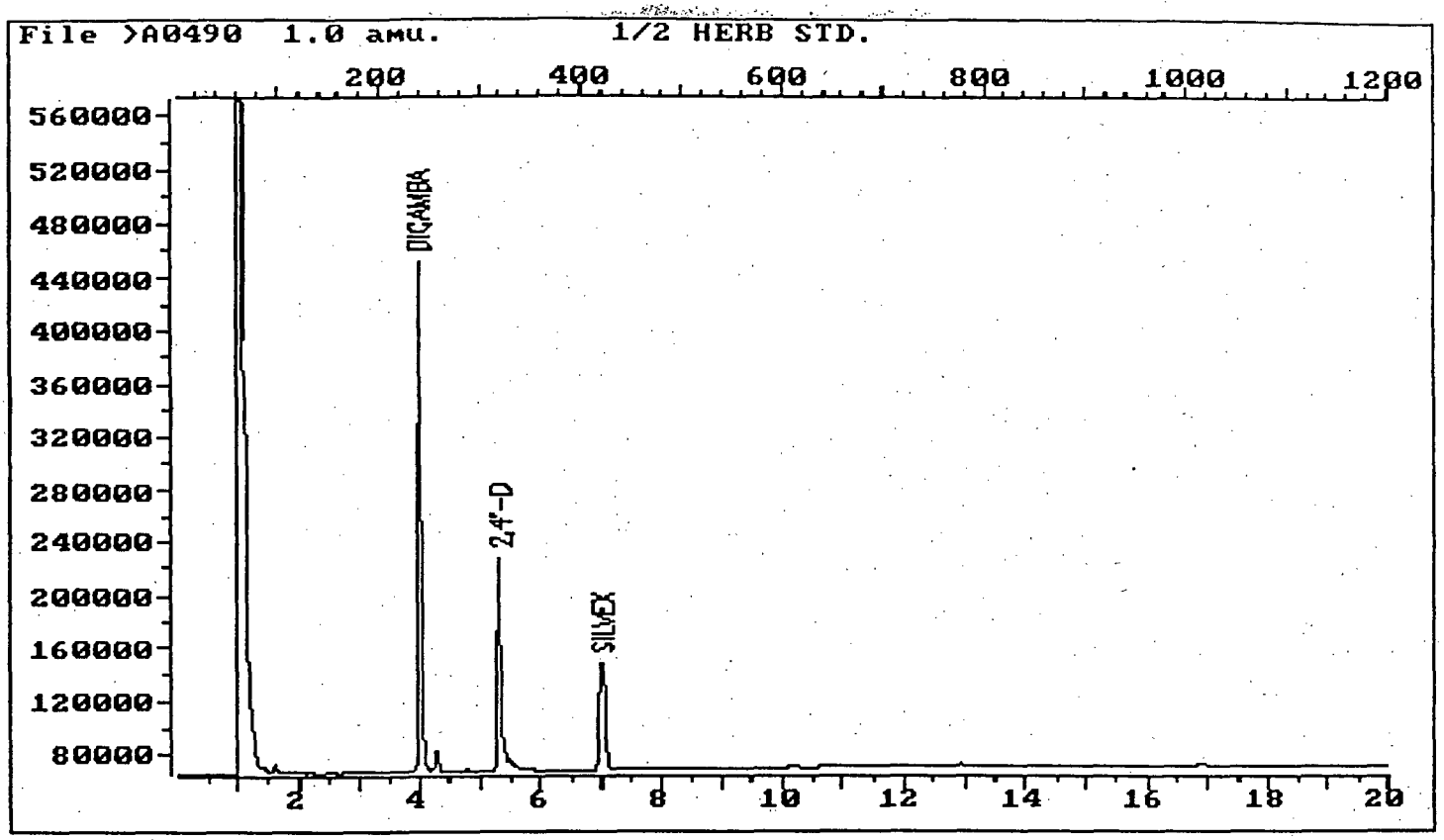
Quant Rev: 7
Quant Time: 991116 11:52
Injected at: 991116 11:32
Dilution Factor: 1.00000
Instrument ID: A

ID File: IDHRB1::G5
Title: HERBICIDES HP5890-A RTX-5 0.53mm 1.0uL
Last Calibration: 991116 10:49
Last Qcal Time: 991103 11:17

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#DICAMBA	4.00	240	1458326	1458326.	NO	CALIB100
2)	#2,4'-D	5.32	319	788108	788108.0	NO	CALIB100
3)	#SILVEX	7.02	421	346392	346392.0	NO	CALIB100

Compound uses ESTD

441



Data File: >A0490::G1 Quant Output File: ^A0490::QT
Name: 1/2 HERB STD. Instrument ID: A
Misc:

Id File: IDHRB1::G5
Title: HERBICIDES HP5890-A RTX-5 0.53mm 1.0uL
Last Calibration: 991116 10:49 Last Qcal Time: 991103 11:17

Operator ID: JEFF
Quant Time : 991116 11:52
Injected at: 991116 11:32

442

Operator ID: JEFF
Output File: ^B0490::QT
Data File: >B0490::G1
Name: 1/2 HERB STD.
Misc:

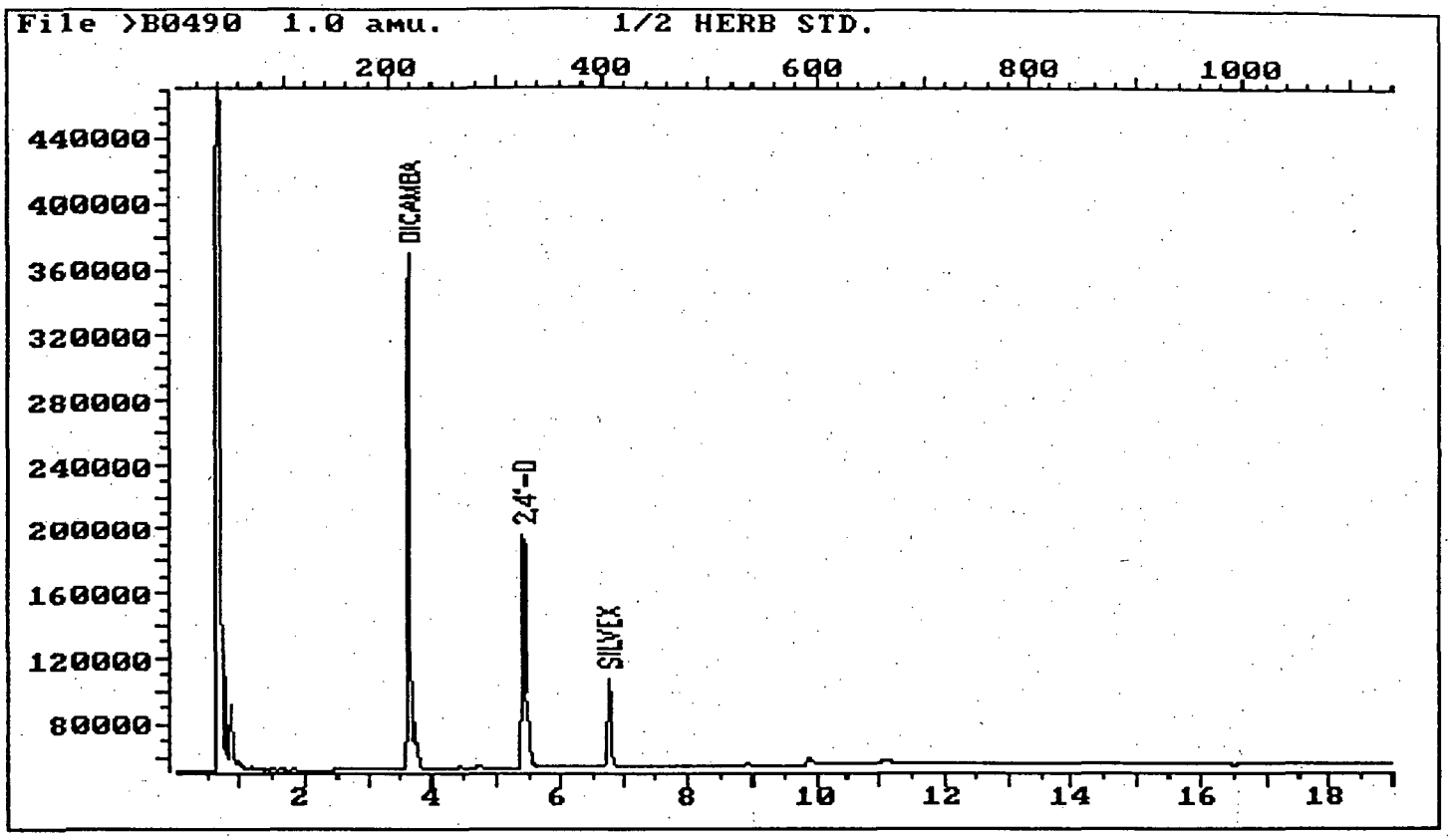
Quant Rev: 7
Quant Time: 991116 12:17
Injected at: 991116 11:57
Dilution Factor: 1.00000
Instrument ID: B

ID File: IDHRB2::G5
Title: HERBICIDES HP5890-B RTX-1701 0.53mm 1.0uL
Last Calibration: 991116 10:49
Last Qcal Time: 991103 11:43

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#DICAMBA	3.65	219	1093037	1093037.	NO CALIB	100
2)	#2,4'-D	5.43	326	630090	630090.0	NO CALIB	100
3)	#SILVEX	6.77	406	246248	246248.0	NO CALIB	100

Compound uses ESTD

443



Data File: >B0490::G1 Quant Output File: ^B0490::QT
Name: 1/2 HERB STD. Instrument ID: B
Misc:

Id File: IDHRB2::G5
Title: HERBICIDES HP5890-B RTX-1701 0.53mm 1.0uL
Last Calibration: 991116 10:49 Last Qcal Time: 991103 11:43

Operator ID: JEFF
Quant Time : 991116 12:17
Injected at: 991116 11:57

444

Operator ID: JEFF
Output File: ^A0491::QT
Data File: >A0491::G1
Name: 1/4 HERB STD.
Misc:

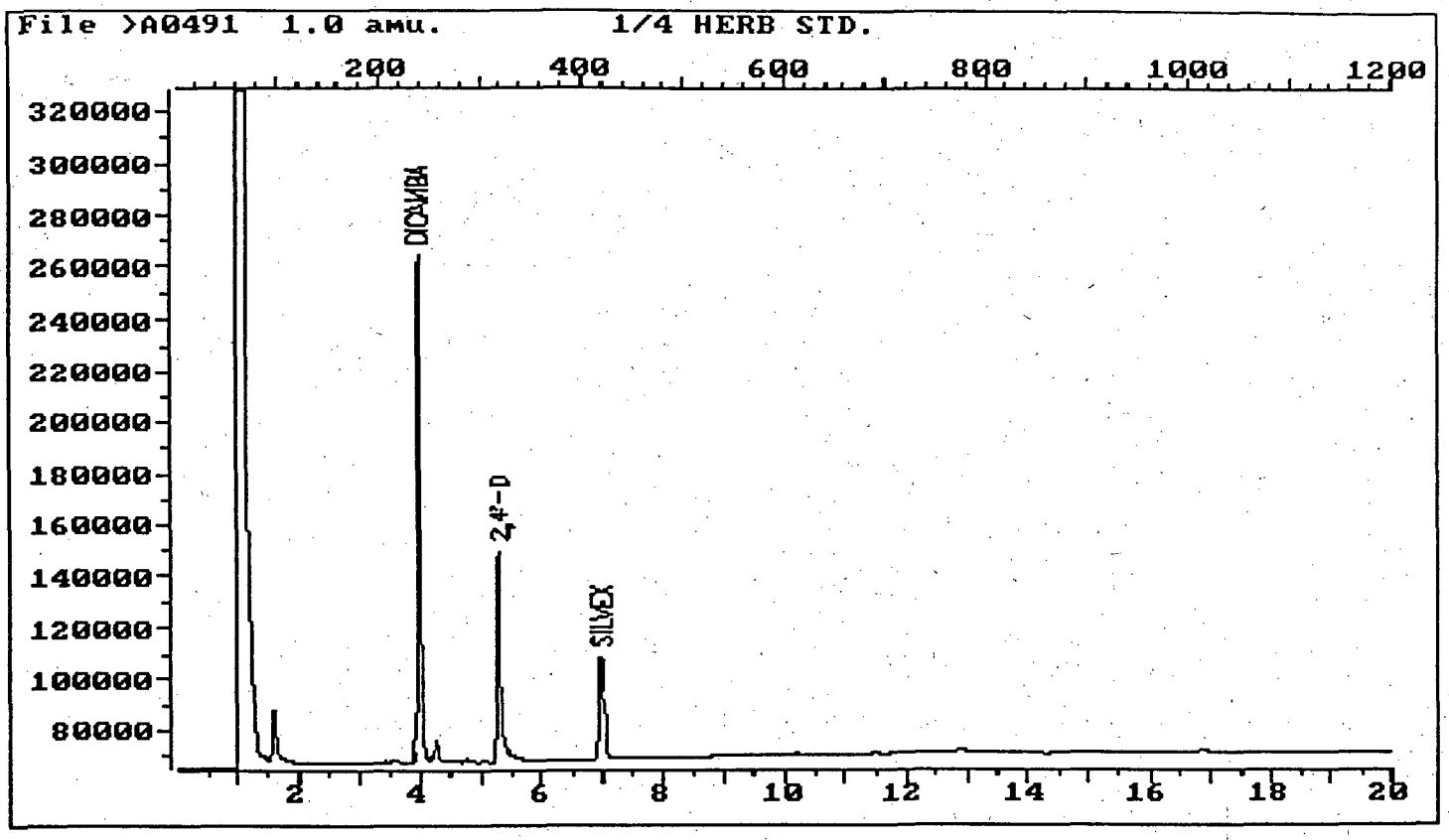
Quant Rev: 7
Quant Time: 991116 12:18
Injected at: 991116 11:57
Dilution Factor: 1.00000
Instrument ID: A

ID File: IDHRB1::G5
Title: HERBICIDES HP5890-A RTX-5 0.53mm 1.0uL
Last Calibration: 991116 10:49
Last Qcal Time: 991103 11:17

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#DICAMBA	3.98	239	765036	765036.0	NO CALIB100	
2)	#2,4'-D	5.30	318	420704	420704.0	NO CALIB100	
3)	#SILVEX	6.98	419	178008	178008.0	NO CALIB100	

Compound uses ESTD

445



Data File: >A0491::G1 Quant Output File: ^A0491::QT
Name: 1/4 HERB STD. Instrument ID: A
Misc:

Id File: IDHRB1::G5
Title: HERBICIDES HP5890-A RTX-5 0.53mm 1.0uL
Last Calibration: 991116 10:49 Last Qcal Time: 991103 11:17

Operator ID: JEFF
Quant Time : 991116 12:18
Injected at: 991116 11:57

446

QUANT REPORT

Operator ID: JEFF
Output File: ^B0491::QT
Data File: >B0491::G1
Name: 1/4 HERB STD.
Misc:

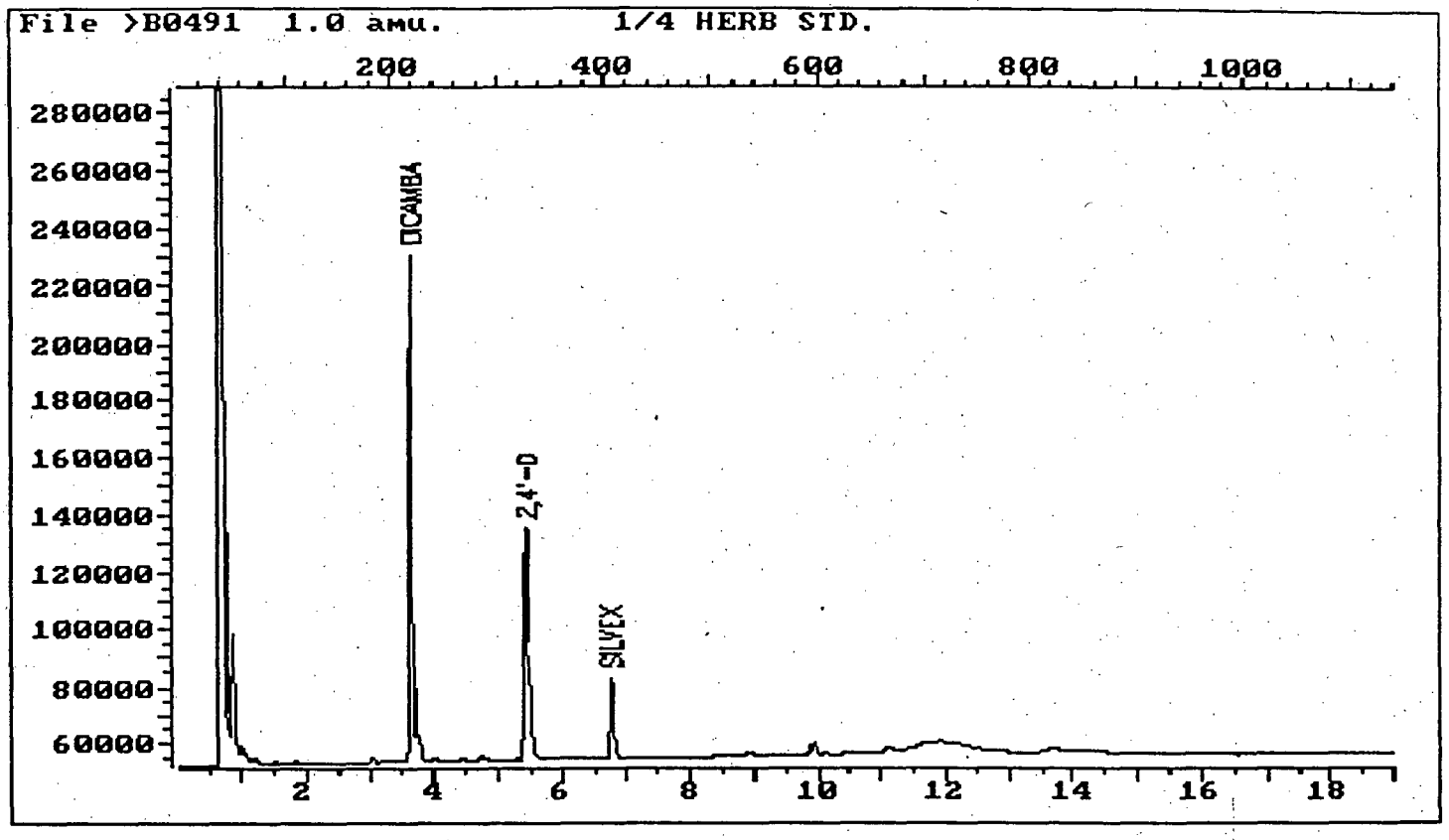
Quant Rev: 7
Quant Time: 991116 12:42
Injected at: 991116 12:22
Dilution Factor: 1.00000
Instrument ID: B

ID File: IDHRB2::G5
Title: HERBICIDES HP5890-B RTX-1701 0.53mm 1.0uL
Last Calibration: 991116 10:49
Last Qcal Time: 991103 11:43

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#DICAMBA	3.65	219	617770	617770.0	NO CALIB	100
2)	#2,4'-D	5.45	327	349551	349551.0	NO CALIB	100
3)	#SILVEX	6.77	406	127720	127720.0	NO CALIB	100

Compound uses ESTD

447



Data File: >B0491::G1 Quant Output File: ^B0491::QT
Name: 1/4 HERB STD. Instrument ID: B
Misc:

Id File: IDHRB2::G5
Title: HERBICIDES HP5890-B RTX-1701 0.53mm 1.0uL
Last Calibration: 991116 10:49 Last Qcal Time: 991103 11:43

Operator ID: JEFF
Quant Time : 991116 12:42
Injected at: 991116 12:22

448

QUANT REPORT

Operator ID: JEFF
Output File: ^A0492::QT
Data File: >A0492::G1
Name: 1/10 HERB STD.
Misc:

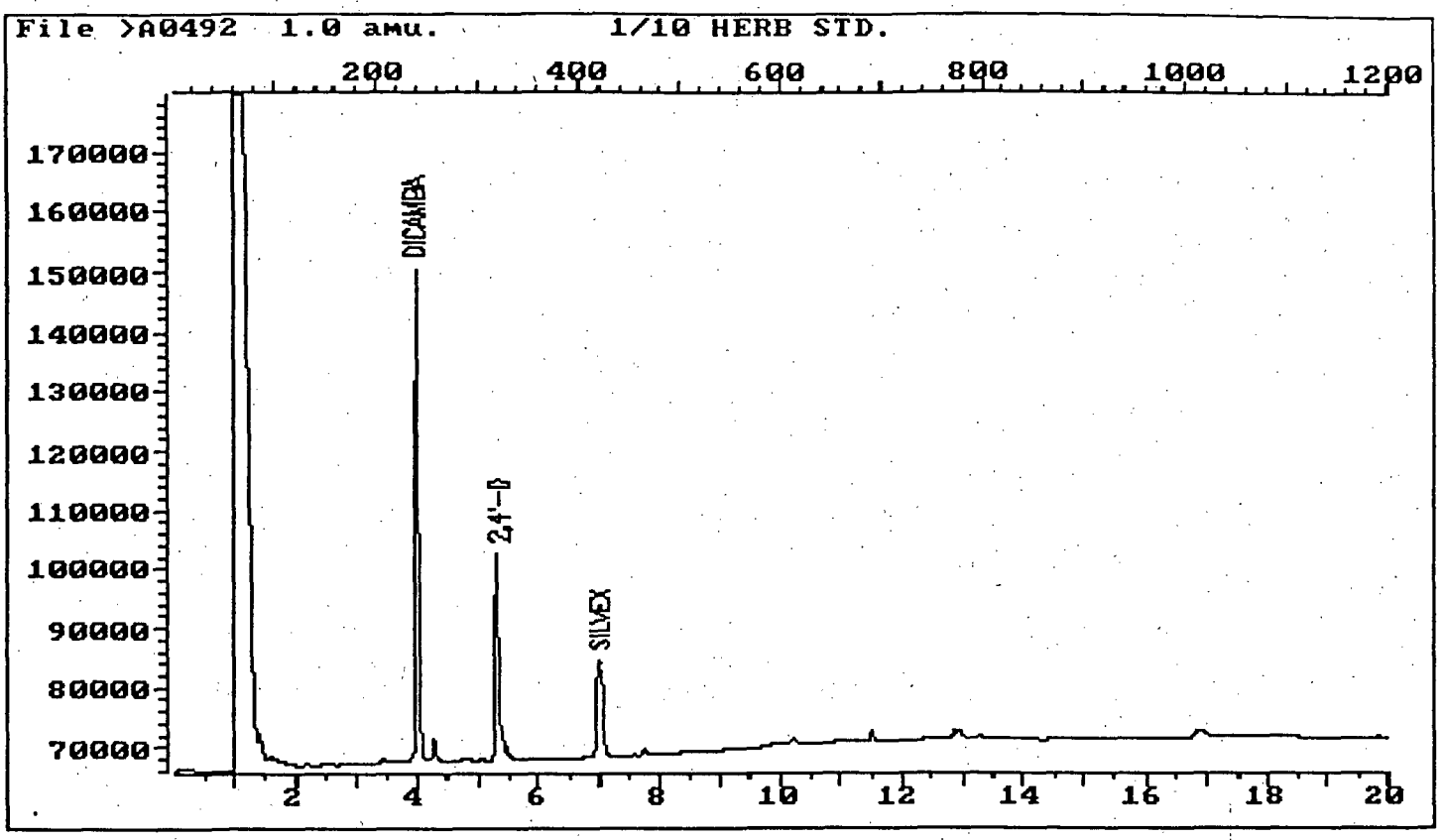
Quant Rev: 7
Quant Time: 991116 12:43
Injected at: 991116 12:22
Dilution Factor: 1.00000
Instrument ID: A

ID File: IDHRB1::G5
Title: HERBICIDES HP5890-A RTX-5 0.53mm 1.0uL
Last Calibration: 991116 10:49
Last Qcal Time: 991103 11:17

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#DICAMBA	3.98	239	332983	332983.0	NO CALIB	100
2)	#2,4'-D	5.32	319	185752	185752.0	NO CALIB	100
3)	#SILVEX	7.00	420	71696	71696.00	NO CALIB	100

Compound uses ESTD

449



Data File: >A0492::G1 Quant Output File: ^A0492::QT
Name: 1/10 HERB STD. Instrument ID: A
Misc:

Id File: IDHRB1::G5
Title: HERBICIDES HP5890-A RTX-5 0.53mm 1.0uL
Last Calibration: 991116 10:49 Last Qcal Time: 991103 11:17

Operator ID: JEFF
Quant Time : 991116 12:43
Injected at: 991116 12:22

450

Operator ID: JEFF
Output File: ^B0492::QT
Data File: >B0492::G1
Name: 1/10 HERB STD.
Misc:

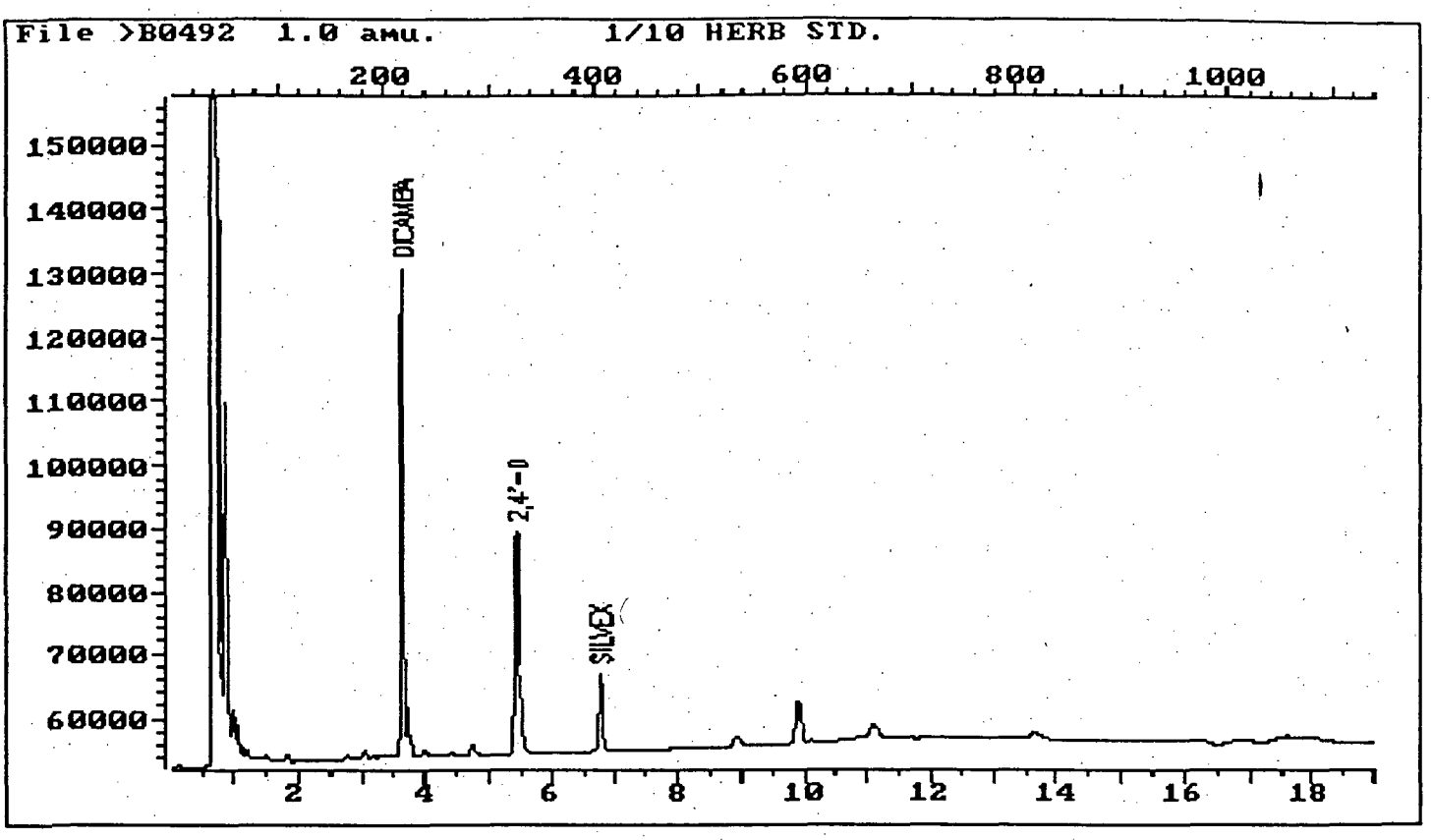
Quant Rev: 7
Quant Time: 991116 13:08
Injected at: 991116 12:48
Dilution Factor: 1.00000
Instrument ID: B

ID File: IDHRB2::G5
Title: HERBICIDES HP5890-B RTX-1701 0.53mm 1.0uL
Last Calibration: 991116 10:49
Last Qcal Time: 991103 11:43

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#DICAMBA	3.65	219	260135	260135.0	NO CALIB	100
2)	#2,4'-D	5.45	327	152003M	152003.0	NO CALIB	100
3)	#SILVEX	6.77	406	55927	55927.00	NO CALIB	100

Compound uses ESTD

451



Data File: >B0492::G1 Quant Output File: ^B0492::QT
Name: 1/10 HERB STD. Instrument ID: B
Misc:

Id File: IDHRB2::G5
Title: HERBICIDES HP5890-B RTX-1701 0.53mm 1.0uL
Last Calibration: 991116 10:49 Last Qcal Time: 991103 11:43

Operator ID: JEFF
Quant Time : 991116 13:08
Injected at: 991116 12:48

452

Operator ID: JEFF
Output File: ^A0596::QT
Data File: >A0596::G4
Name: 1/2 HERB STD
Misc:

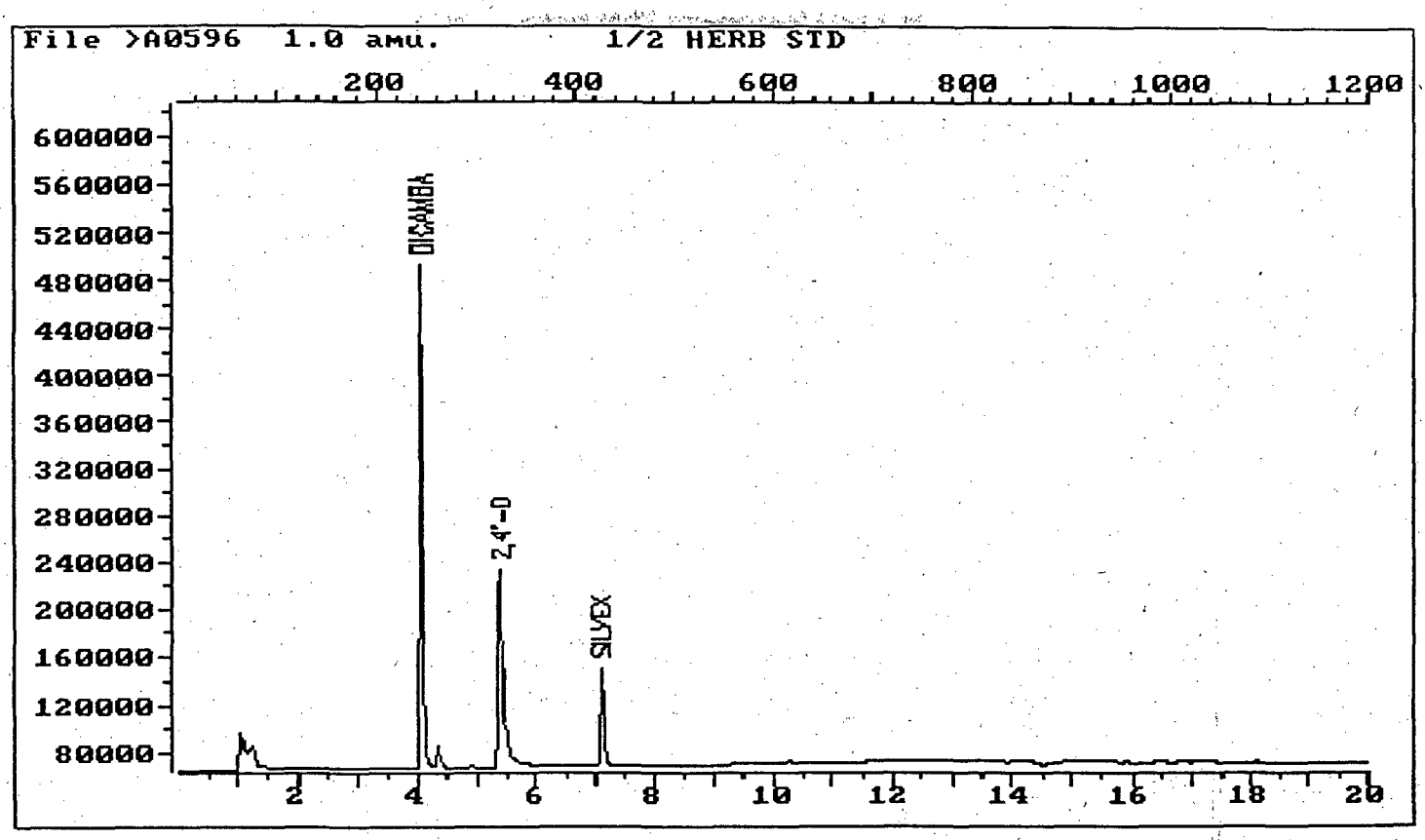
Quant Rev: 7
Quant Time: 991208 18:32
Injected at: 991208 18:11
Dilution Factor: 1.00000
Instrument ID: A

ID File: IDHRB1::G5
Title: HERBICIDES HP5890-A RTX-5 0.53mm 1.0uL
Last Calibration: 991118 09:30
Last Qcal Time: 991206 14:01

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#DICAMBA	4.07	244	1628924	.555	UG/ML	100
2)	#2,4'-D	5.40	324	917757	.556	UG/ML	100
3)	#SILVEX	7.10	426	369392	.0549	UG/ML	100

Compound uses ESTD

453



Data File: >A0596::G4 Quant Output File: ^A0596::QT
Name: 1/2 HERB STD Instrument ID: A
Misc:

Id File: IDHRB1::G5
Title: HERBICIDES HP5890-A RTX-5 0.53mm 1.0uL
Last Calibration: 991118 09:30 Last Qcal Time: 991206 14:01

Operator ID: JEFF
Quant Time : 991208 18:32
Injected at: 991208 18:11

454

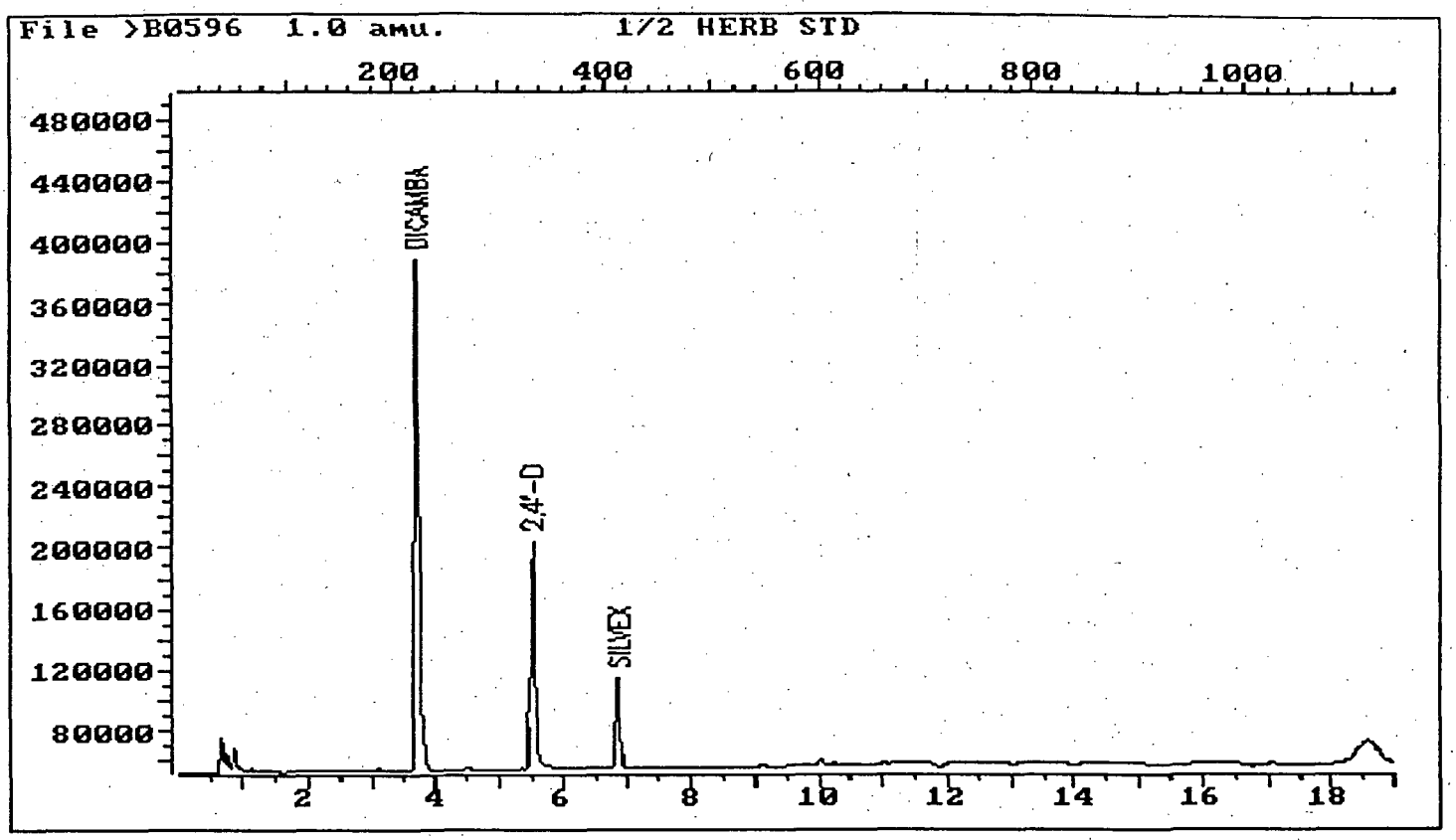
Operator ID: JEFF Quant Rev: 7 Quant Time: 991209 08:22
Output File: ^B0596::QT Injected at: 991208 18:36
Data File: >B0596::G4 Dilution Factor: 1.00000
Name: 1/2 HERB STD Instrument ID: B
Misc:

ID File: IDHRB2::G5
Title: HERBICIDES HP5890-B RTX-1701 0.53mm 1.0uL
Last Calibration: 991118 09:30 Last Qcal Time: 991206 14:01

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#DICAMBA	3.72	223	1194157	.526	UG/ML	100
2)	#2,4'-D	5.53	332	690442	.533	UG/ML	100
3)	#SILVEX	6.87	412	274175	.0520	UG/ML	100

Compound uses ESTD

455



Data File: >B0596::G4 Quant Output File: ^B0596::QT
Name: 1/2 HERB STD Instrument ID: B
Misc:

Id File: IDHRB2::G5
Title: HERBICIDES HP5890-B RTX-1701 0.53mm 1.0uL
Last Calibration: 991118 09:30 Last Qcal Time: 991206 14:01

Operator ID: JEFF
Quant Time : 991209 08:22
Injected at: 991208 18:36

456

Operator ID: JEFF
Output File: ^A0606::QT
Data File: >A0606::G4
Name: 1/2 HERB STD
Misc:

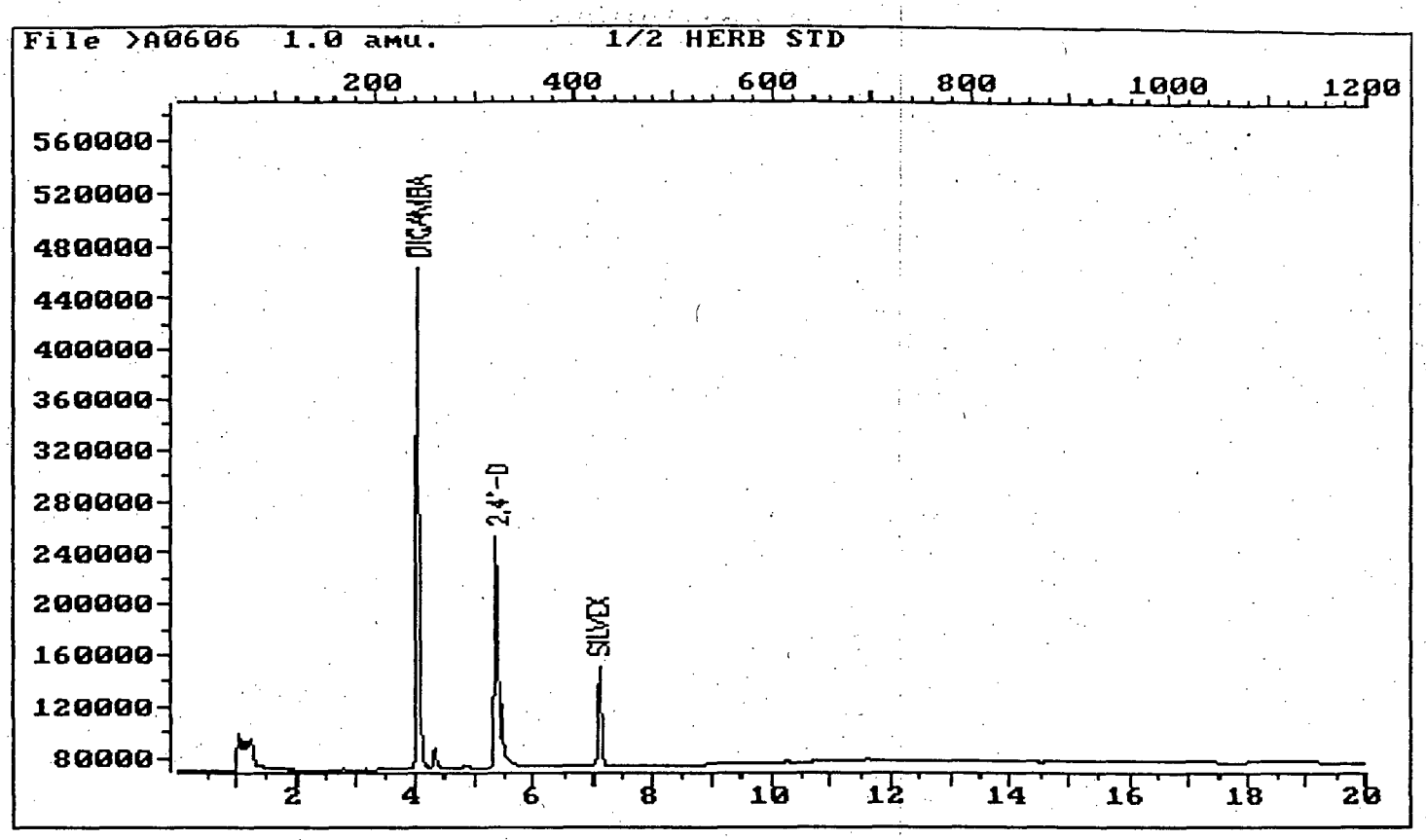
Quant Rev: 7
Quant Time: 991208 22:46
Injected at: 991208 22:25
Dilution Factor: 1.00000
Instrument ID: A

ID File: IDHRB1::G5
Title: HERBICIDES HP5890-A RTX-5 0.53mm 1.0uL
Last Calibration: 991118 09:30
Last Qcal Time: 991208 18:11

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#DICAMBA	4.05	243	1502137	.461	UG/ML	100
2)	#2,4'-D	5.38	323	896948	.489	UG/ML	100
3)	#SILVEX	7.08	425	351175	.0475	UG/ML	100

Compound uses ESTD

457



Data File: >A0606::G4 Quant Output File: ^A0606::QT
Name: 1/2 HERB STD Instrument ID: A
Misc:

Id File: IDHRB1::G5
Title: HERBICIDES HP5890-A RTX-5 0.53mm 1.0uL
Last Calibration: 991118 09:30 Last Qcal Time: 991208 18:11

Operator ID: JEFF
Quant Time : 991208 22:46
Injected at: 991208 22:25

458

QUANT REPORT

Operator ID: JEFF
Output File: ^B0606::QT
Data File: >B0606::G4
Name: 1/2 HERB STD
Misc:

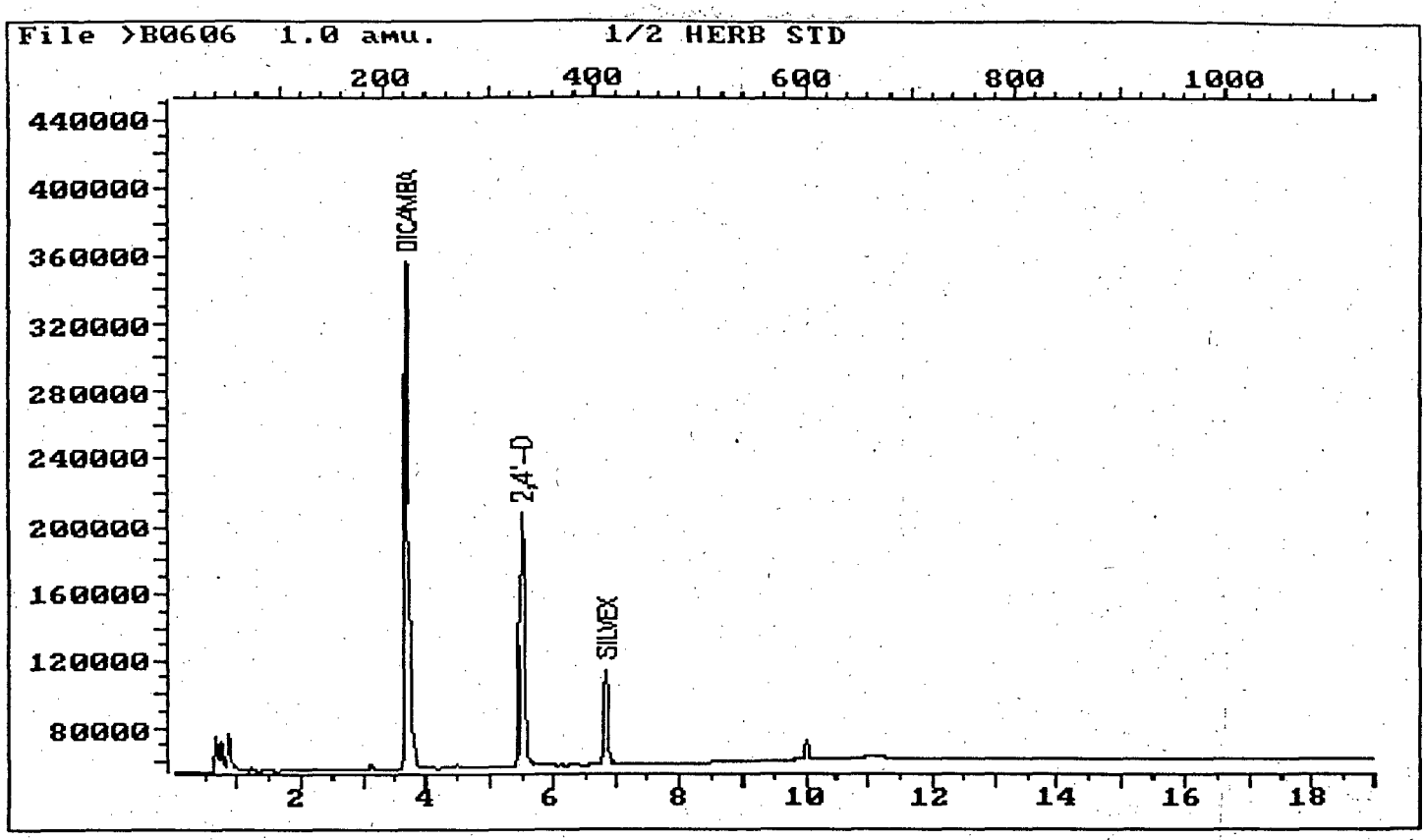
Quant Rev: 7
Quant Time: 991209 08:49
Injected at: 991208 22:50
Dilution Factor: 1.00000
Instrument ID: B

ID File: IDHRB2::G5
Title: HERBICIDES HP5890-B RTX-1701 0.53mm 1.0uL
Last Calibration: 991118 09:30
Last Qcal Time: 991208 18:36

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#DICAMBA	3.70	222	1085214	.454	UG/ML	100
2)	#2,4'-D	5.52	331	659275	.477	UG/ML	100
3)	#SILVEX	6.83	410	258391	.0471	UG/ML	100

Compound uses ESTD

459



Data File: >B0606::G4 Quant Output File: ^B0606::QT
Name: 1/2 HERB STD Instrument ID: B
Misc:

Id File: IDHRB2::G5
Title: HERBICIDES HP5890-B RTX-1701 0.53mm 1.0uL
Last Calibration: 991118 09:30 Last Qcal Time: 991208 18:36

Operator ID: JEFF
Quant Time : 991209 08:49
Injected at: 991208 22:50

460

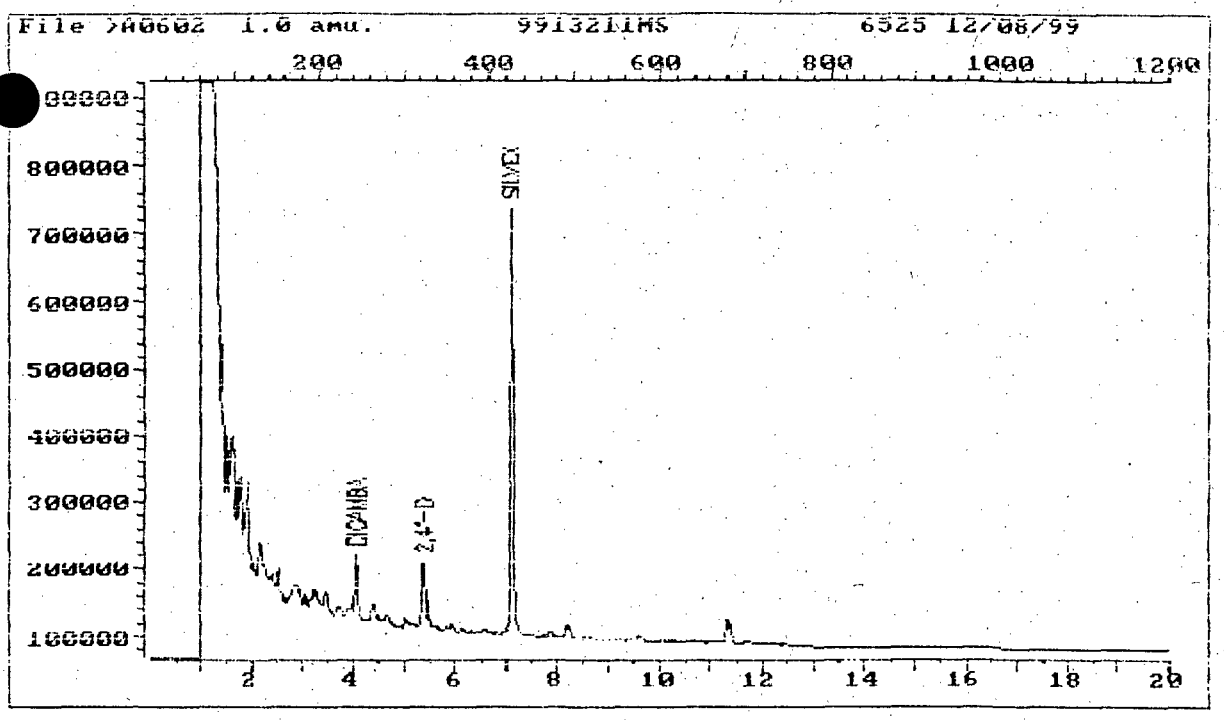
Operator ID: JEFF Quant Rev: 7 Quant Time: 991208 21:04
Output File: ^A0602::QT Injected at: 991208 20:44
Data File: >A0602::G4 Dilution Factor: 1.00000
Name: 9913211MS Instrument ID: A
Misc: 6525 12/08/99 ITS 19AGCOMP

ID File: IDHRB1::G5
Title: HERBICIDES HP5890-A RTX-5 0.53mm 1.0uL
Last Calibration: 991118 09:30 Last Qcal Time: 991208 18:11

Compound	R.T.	Scan#	Area	Conc	Units	q
1) #DICAMBA	4.07	244	407062	.125	UG/ML	100
2) #2,4'-D	5.38	323	453928	.247	UG/ML	100
3) #SILVEX	7.10	426	2802741	.379	UG/ML	100

Compound uses ESTD

461



Data File: >A0602::G4 Quant Output File: ^A0602::QT
Name: 9913211MS Instrument ID: A
Misc: 6525 12/08/99 ITS 19AGCOMP

Id File: IDHRB1::G5
Title: HERBICIDES HP5890-A RTX-5 0.53mm 1.0uL
Last Calibration: 991118 09:30 Last Qcal Time: 991208 18:11

Operator ID: JEFF
Quant Time : 991208 21:04
Injected at: 991208 20:44

462

QUANT REPORT

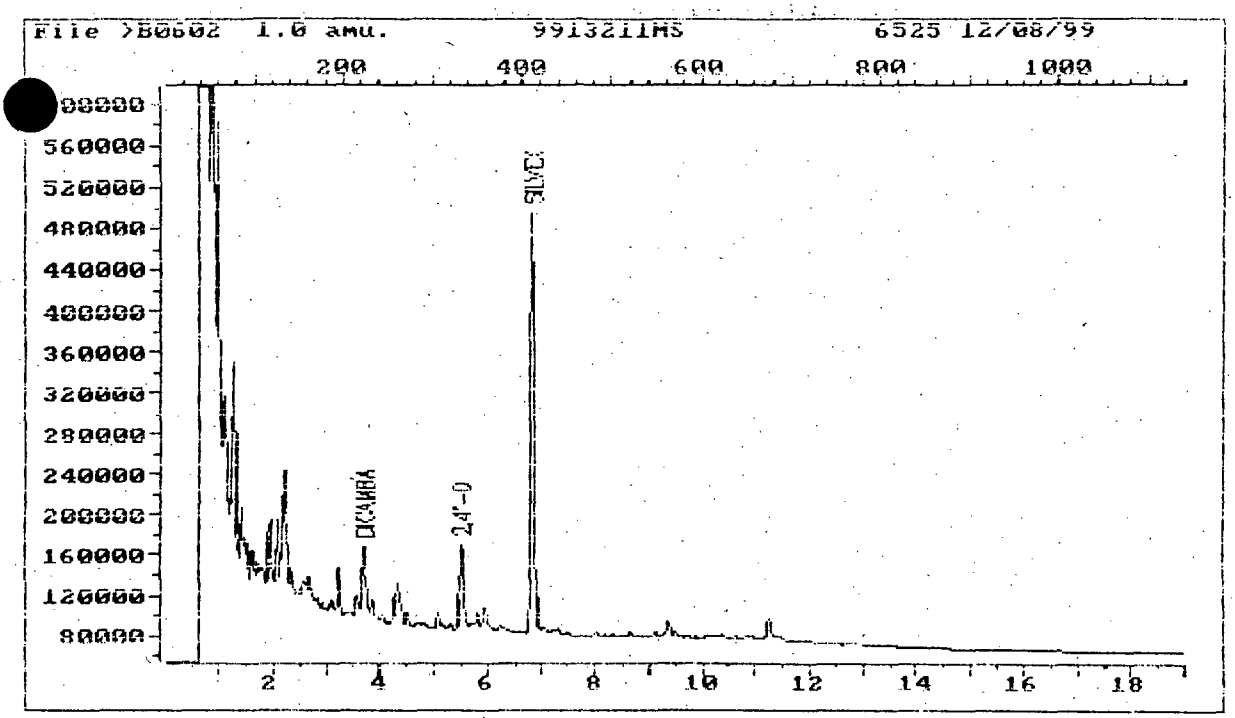
Operator ID: JEFF
Quant Rev: 7
Quant Time: 991209 08:48
Output File: ^B0602::QT
Injected at: 991208 21:09
Data File: >B0602::G4
Dilution Factor: 1.00000
Name: 9913211MS
Instrument ID: B
Misc: 6525 12/08/99 ITS
19AGCOMP

ID File: IDHRB2::G5
Title: HERBICIDES HP5890-B RTX-1701 0.53mm 1.0uL
Last Calibration: 991118 09:30
Last Qcal Time: 991208 18:36

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#DICAMBA	3.72	223	288515	.121	UG/ML	100
2)	#2,4'-D	5.52	331	387674	.281	UG/ML	100
3)	#SILVEX	6.85	411	1869943	.341	UG/ML	100

Compound uses ESTD

463



Data File: >B0602::G4 Quant Output File: ^B0602::QT
Name: 9913211MS Instrument ID: B
Misc: 6525 12/08/99 ITS 19AGCOMP

Id File: IDHRB2::G5
Title: HERBICIDES HP5890-B RTX-1701 0.53mm 1.0uL
Last Calibration: 991118 09:30 Last Qcal Time: 991208 18:36

Operator ID: JEFF
Quant Time : 991209 08:48
Injected at: 991208 21:09

464

QUANT REPORT

Operator ID: JEFF
Output File: ^A0597::QT
Data File: >A0597::G4
Name: HBLK12
Misc: 12/08/99

Quant Rev: 7
Quant Time: 991208 18:57
Injected at: 991208 18:36
Dilution Factor: 1.00000
Instrument ID: A

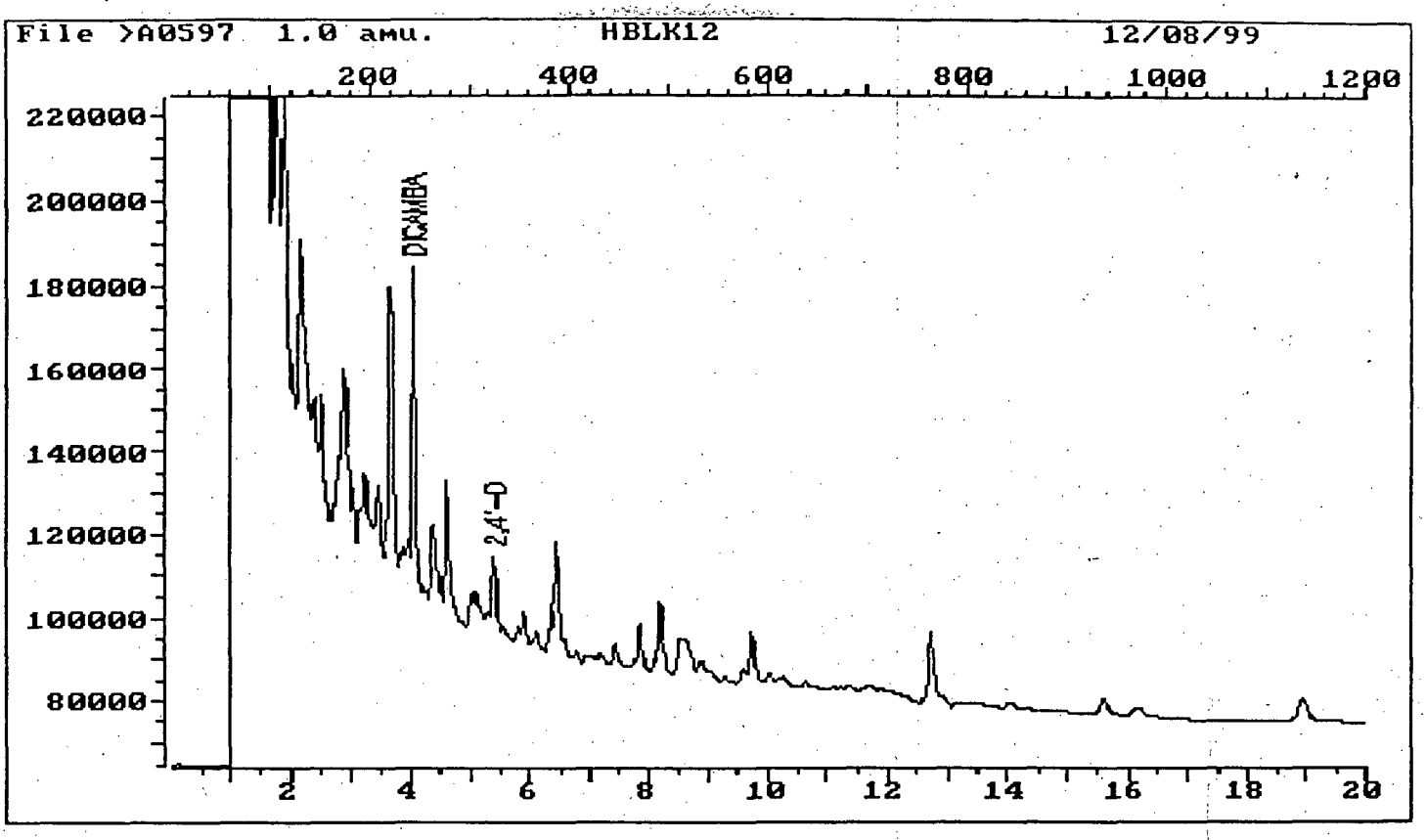
ID File: IDHRB1::G5
Title: HERBICIDES HP5890-A RTX-5 0.53mm 1.0uL
Last Calibration: 991118 09:30
Last Qcal Time: 991208 18:11

Compound	R.T.	Scan#	Area	Conc	Units	q
1) #DICAMBA	4.05	243	327307	.100	UG/ML	100
~~2) #2,4'-D~~	5.42	325	76487	.0417	UG/ML	100

Compound uses ESTD

JH 12/9/99

465



Data File: >A0597::G4 Quant Output File: ^A0597::QT
Name: HBLK12 Instrument ID: A
Misc: 12/08/99

Id File: IDHRB1::G5
Title: HERBICIDES HP5890-A RTX-5 0.53mm 1.0uL
Last Calibration: 991118 09:30 Last Qcal Time: 991208 18:11

Operator ID: JEFF
Quant Time : 991208 18:57
Injected at: 991208 18:36

466

QUANT REPORT

Operator ID: JEFF
Output File: ^B0597::QT
Data File: >B0597::G4
Name: HBLK12
Misc: 12/08/99

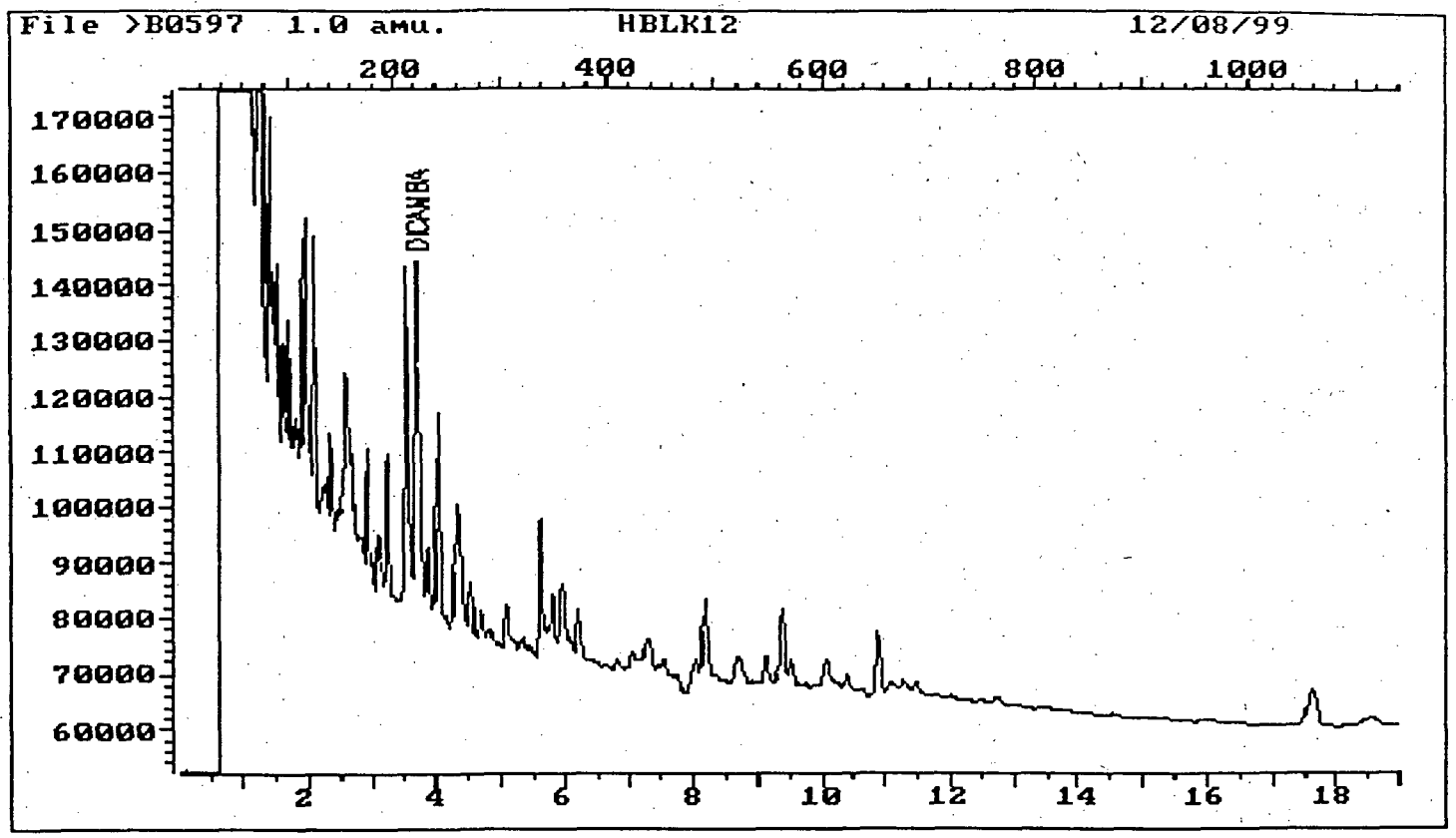
Quant Rev: 7
Quant Time: 991209 08:46
Injected at: 991208 19:01
Dilution Factor: 1.00000
Instrument ID: B

ID File: IDHRB2::G5
Title: HERBICIDES HP5890-B RTX-1701 0.53mm 1.0uL
Last Calibration: 991118 09:30
Last Qcal Time: 991208 18:36

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#DICAMBA	3.72	223	227763	.0954	UG/ML	100

Compound uses ESTD

467



Data File: >B0597::G4
Name: HBLK12
Misc: 12/08/99

Quant Output File: ^B0597::QT
Instrument ID: B

Id File: IDHRB2::G5
Title: HERBICIDES HP5890-B RTX-1701 0.53mm 1.0uL
Last Calibration: 991118 09:30
Last Qcal Time: 991208 18:36

Operator ID: JEFF
Quant Time : 991209 08:46
Injected at: 991208 19:01

468

QUANT REPORT

ator ID: JEFF
utput File: ^A0603::QT
ata File: >A0603::G4
ame: 9912994
isc: 6481 12/08/99 OE

Quant Rev: 7
Quant Time: 991208 21:30
Injected at: 991208 21:09
Dilution Factor: 1.00000
Instrument ID: A
DCOMP-1

D File: IDHRB1::G5
itle: HERBICIDES HP5890-A RTX-5 0.53mm 1.0uL
ast Calibration: 991118 09:30
Last Qcal Time: 991208 18:11

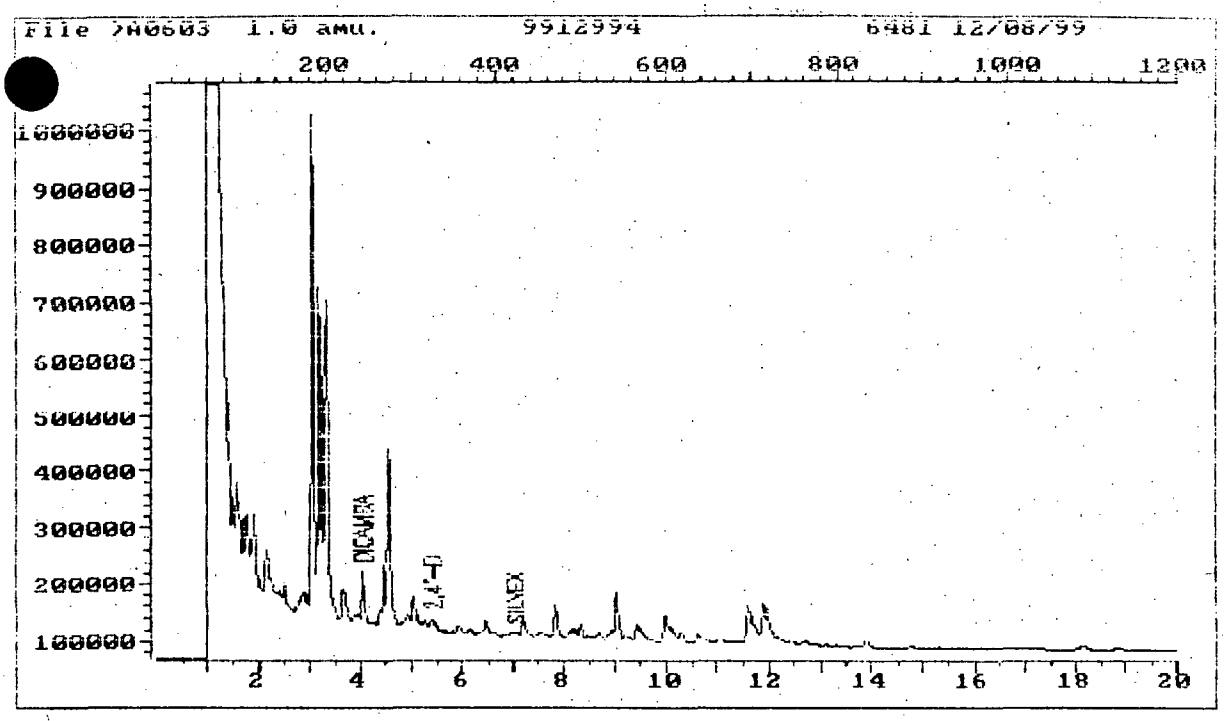
Compound	R.T.	Scan#	Area	Conc	Units	q
1) #DICAMBA	4.05	243	358406	.110	UG/ML	100
~~2) #2,4'-D~~	5.42	325	109936	.0599	UG/ML	100
~~3) #SILVEX~~	7.05	423	55645	.00753	UG/ML	100

Compound uses ESTD

JH 12/9/99

469

700567



Data File: >A0603::G4 Quant Output File: ^A0603::QT
Name: 9912994 Instrument ID: A
Misc: 6481 12/08/99 OE DCOMP-1

Id File: IDHRB1::G5
Title: HERBICIDES HP5890-A RTX-5 0.53mm 1.0uL
Last Calibration: 991118 09:30 Last Qcal Time: 991208 18:11

Operator ID: JEFF
Quant Time : 991208 21:30
Injected at: 991208 21:09

470

QUANT REPORT

ator ID: JEFF
ut File: ^B0603::QT
ata File: >B0603::G4
ame: 9912994
isc: 6481 12/08/99 OE

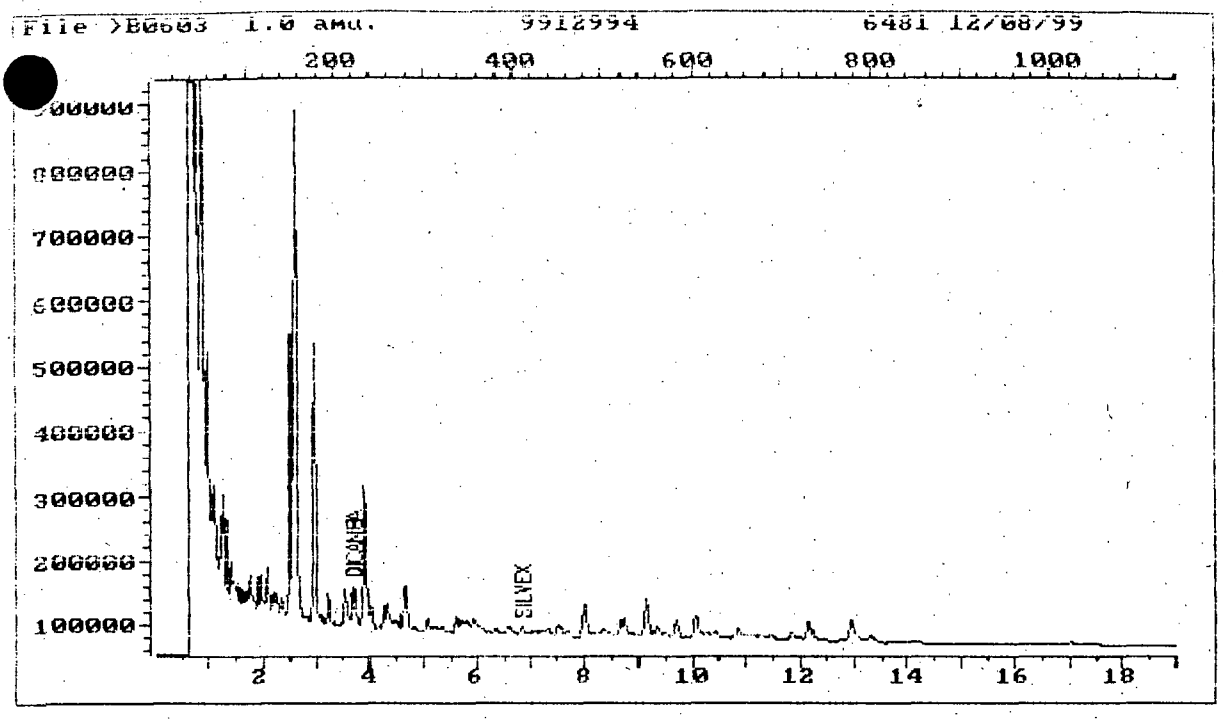
Quant Rev: 7
Quant Time: 991209 08:48
Injected at: 991208 21:34
Dilution Factor: 1.00000
Instrument ID: B
DCOMP-1

D File: IDHRB2::G5
itle: HERBICIDES HP5890-B RTX-1701 0.53mm 1.0uL
ast Calibration: 991118 09:30
Last Qcal Time: 991208 18:36

Compound	R.T.	Scan#	Area	Conc	Units	q
1) #DICAMBA	3.70	222	242068	.101	UG/ML	100
~~3) #SILVEX~~	6.83	410	57528	.0105	UG/ML	100

Compound uses ESTD

471



Data File: >B0603::G4 Quant Output File: ^B0603::QT
Name: 9912994 Instrument ID: B
Misc: 6481 12/08/99 OE DCOMP-1

Id File: IDHRB2::G5
Title: HERBICIDES HP5890-B RTX-1701 0.53mm 1.0uL
Last Calibration: 991118 09:30 Last Qcal Time: 991208 18:36

Operator ID: JEFF
Quant Time : 991209 08:48
Injected at: 991208 21:34

472

QUANT REPORT

ator ID: JEFF
utput File: ^A0605::QT
ata File: >A0605::G4
ame: 9912995
isc: 6481 12/08/99 OE

Quant Rev: 7
Quant Time: 991208 22:20
Injected at: 991208 21:59
Dilution Factor: 1.00000
Instrument ID: A
DCOMP-2

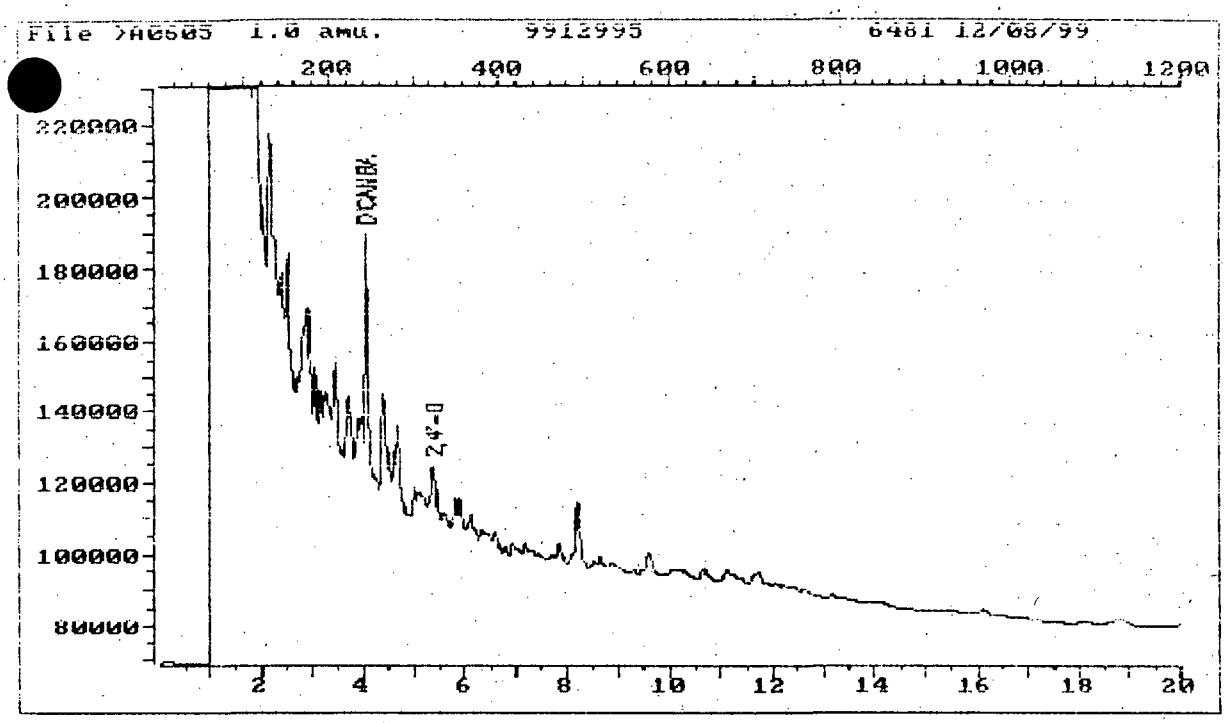
D File: IDHRB1::G5
itle: HERBICIDES HP5890-A RTX-5 0.53mm 1.0uL
ast Calibration: 991118 09:30
Last Qcal Time: 991208 18:11

Compound	R.T.	Scan#	Area	Conc	Units	q
1) #DICAMBA	4.05	243	359491	.110	UG/ML	100
~~2) #2,4'-D~~	5.40	324	91863	.0500	UG/ML	100

Compound uses ESTD

JH 12/9/99

473



Data File: >A0605::G4 Quant Output File: ^A0605::QT
Name: 9912995 Instrument ID: A
Misc: 6481 12/08/99 OE DCOMP-2

Id File: IDHRB1::G5
Title: HERBICIDES HP5890-A RTX-5 0.53mm 1.0uL
Last Calibration: 991118 09:30 Last Qcal Time: 991208 18:11

Operator ID: JEFF
Quant Time : 991208 22:20
Injected at: 991208 21:59

474

QUANT REPORT

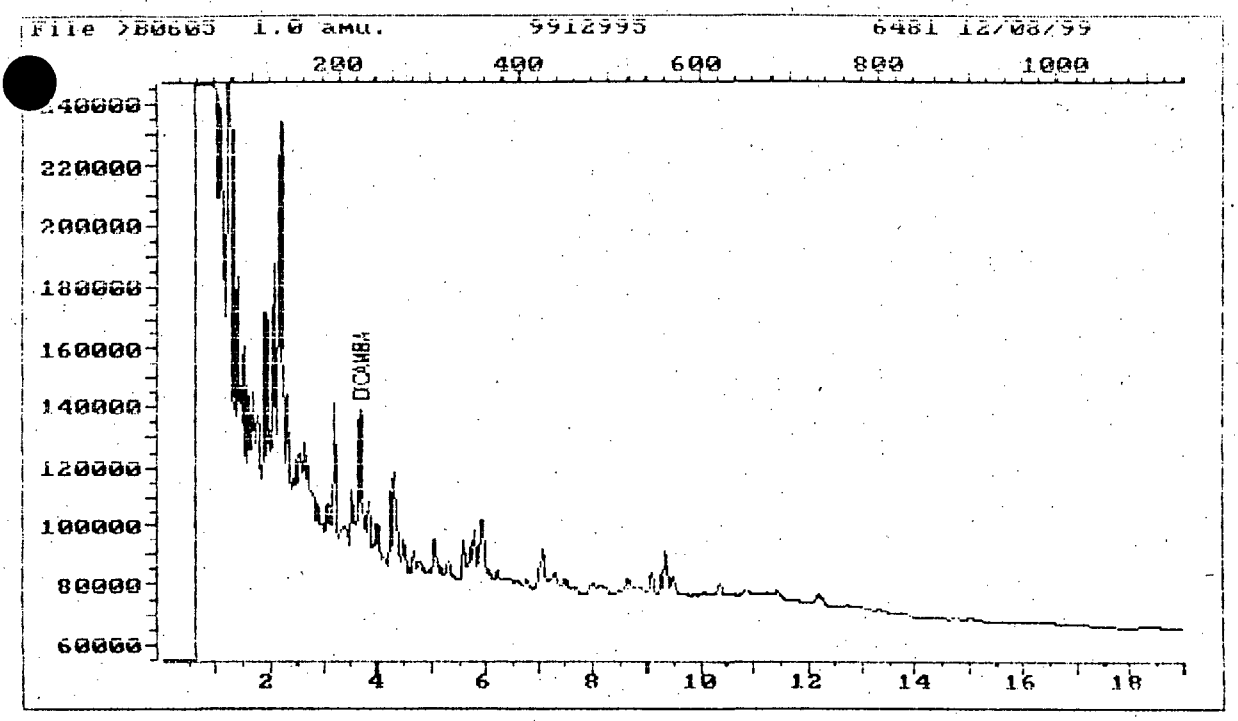
ator ID: JEFF
Quant Rev: 7 Quant Time: 991209 08:48
utput File: ^B0605::QT
Injected at: 991208 22:25
ata File: >B0605::G4
Dilution Factor: 1.00000
ame: 9912995
Instrument ID: B
isc: 6481 12/08/99 OE
DCOMP-2

D File: IDHRB2::G5
itle: HERBICIDES HP5890-B RTX-1701 0.53mm 1.0uL
ast Calibration: 991118 09:30
Last Qcal Time: 991208 18:36

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#DICAMBA	3.70	222	197213	.0826	UG/ML	100

Compound uses ESTD

475



Data File: >B0605::G4 Quant Output File: ^B0605::QT
Name: 9912995 Instrument ID: B
Misc: 6481 12/08/99 OE DCOMP-2

Id File: IDHRB2::G5
Title: HERBICIDES HP5890-B RTX-1701 0.53mm 1.0uL
Last Calibration: 991118 09:30 Last Qcal Time: 991208 18:36

Operator ID: JEFF
Quant Time : 991209 08:48
Injected at: 991208 22:25

476

QUANT REPORT

ator ID: JEFF
utput File: ^A0604::QT
ata File: >A0604::G4
ame: 9912996
isc: 6481 12/08/99 OE

Quant Rev: 7
Quant Time: 991208 21:55
Injected at: 991208 21:34
Dilution Factor: 1.00000
Instrument ID: A
SP-1

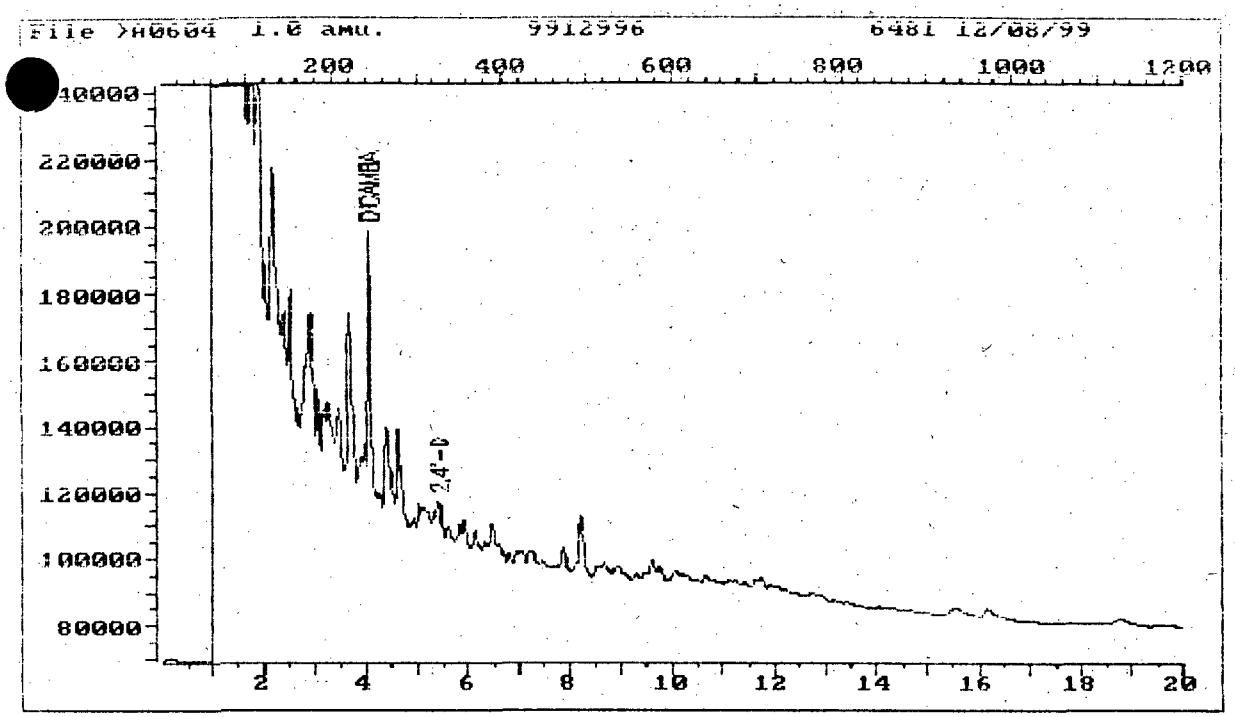
D File: IDHRB1::G5
itle: HERBICIDES HP5890-A RTX-5 0.53mm 1.0uL
ast Calibration: 991118 09:30
Last Qcal Time: 991208 18:11

Compound	R.T.	Scan#	Area	Conc	Units	q
1) #DICAMBA	4.07	244	339510	.104	UG/ML	100
~~2) #2,4' D~~	5.42	325	53688	.0292	UG/ML	100

Compound uses ESTD

JH 12/9/99

477



Data File: >A0604::G4 Quant Output File: ^A0604::QT
Name: 9912996 Instrument ID: A
Misc: 6481 12/08/99 OE SP-1

Id File: IDHRB1::G5
Title: HERBICIDES HP5890-A RTX-5 0.53mm 1.0uL
Last Calibration: 991118 09:30 Last Qcal Time: 991208 18:11

Operator ID: JEFF
Quant Time : 991208 21:55
Injected at: 991208 21:34

ator ID: JEFF Quant Rev: 7 Quant Time: 991209 08:48
utput File: ^B0604::QT Injected at: 991208 21:59
ata File: >B0604::G4 Dilution Factor: 1.00000
ame: 9912996 Instrument ID: B
isc: 6481 12/08/99 OE SP-1

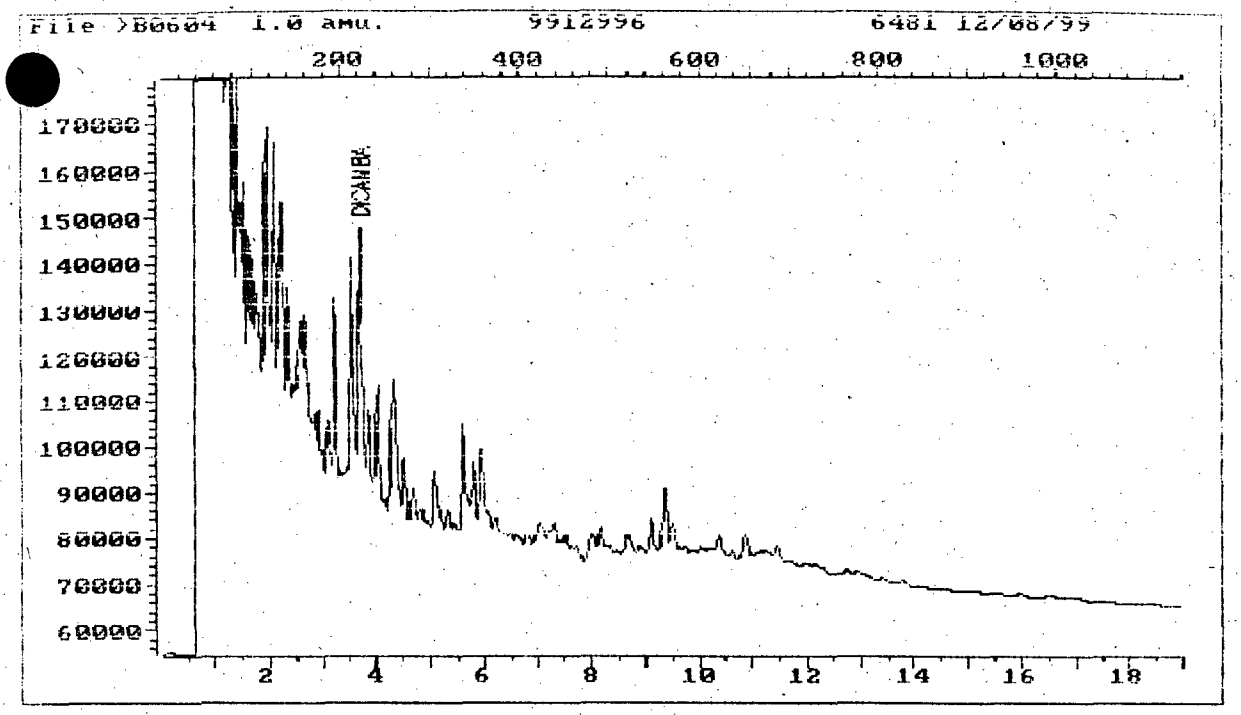
D File: IDHRB2::G5
itle: HERBICIDES HP5890-B RTX-1701 0.53mm 1.0uL
ast Calibration: 991118 09:30 Last Qcal Time: 991208 18:36

Compound	R.T.	Scan#	Area	Conc	Units	q
1) #DICAMBA	3.72	223	213975	.0896	UG/ML	100

Compound uses ESTD

479

700577



Data File: >B0604::G4 Quant Output File: ^B0604::QT
Name: 9912996 Instrument ID: B
Misc: 6481 12/08/99 OE SP-1

Id File: IDHRB2::G5
Title: HERBICIDES HP5890-B RTX-1701 0.53mm 1.0uL
Last Calibration: 991118 09:30 Last Qcal Time: 991208 18:36

Operator ID: JEFF
Quant Time : 991209 08:48
Injected at: 991208 21:59

480

QUANT REPORT

Operator ID: JEFF
Output File: >G4236::QT
Data File: >G4236::G1
Name: A1221/1254 2.5PPM
Misc:

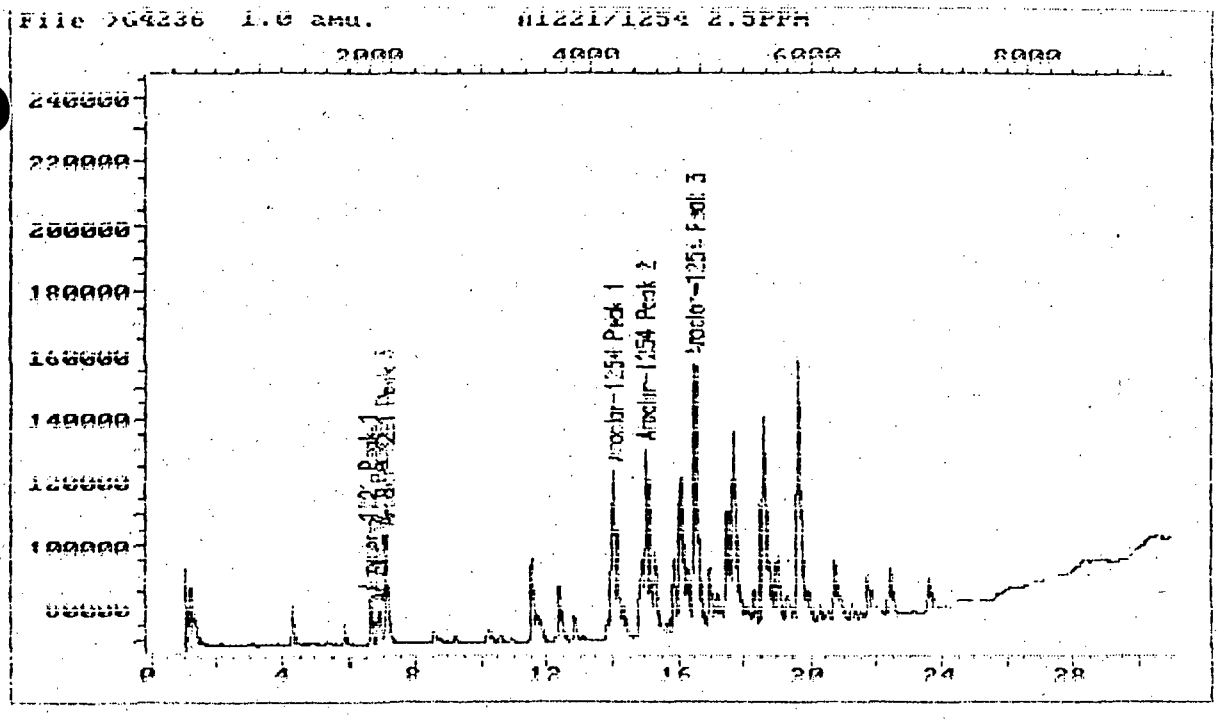
Quant Rev: 7
Quant Time: 991001 07:30
Injected at: 990927 14:05
Dilution Factor: 1.00000
Instrument ID: G

ID File: ID7PCB::G5
Title: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990930 11:54
Last Qcal Time: <none>

	Compound	R.T.	Scan#	Area	Conc	Units	q
5)	#Aroclor-1221 Peak 1	6.60	1979	88382	44.32	ug/L	100
6)	#Aroclor-1221 Peak 2	6.92	2076	58275	17.11	ug/L	100
7)	#Aroclor-1221 Peak 3	7.12	2135	231235	31.08	ug/L	100
17)	#Aroclor-1254 Peak 1	14.04	4211	447841	21.54	ug/L	100
18)	#Aroclor-1254 Peak 2	15.01	4504	292606	26.91	ug/L	100
19)	#Aroclor-1254 Peak 3	16.50	4950	592873	26.03	ug/L	100

Compound uses ESTD

481



Data File: >G4236::C1 Quant Output File: >G4236::QT
Name: A1221/1254 2.5PPM Instrument ID: C
Misc:

Id File: ID7PCB::C5
Title: PCB'S HP5890-C RTX-5 0.53mm 1.0uL
Last Calibration: 990930 11:54 Last Qcal Time: <none>

Operator ID: JEFF
Quant Time : 991001 07:39
Injected at: 990927 14:05

482

QUANT REPORT

Operator ID: JEFF
Output File: ^H4236::QT
Data File: >H4236::G1
Name: A1221/1254 2.5PPM
Misc:

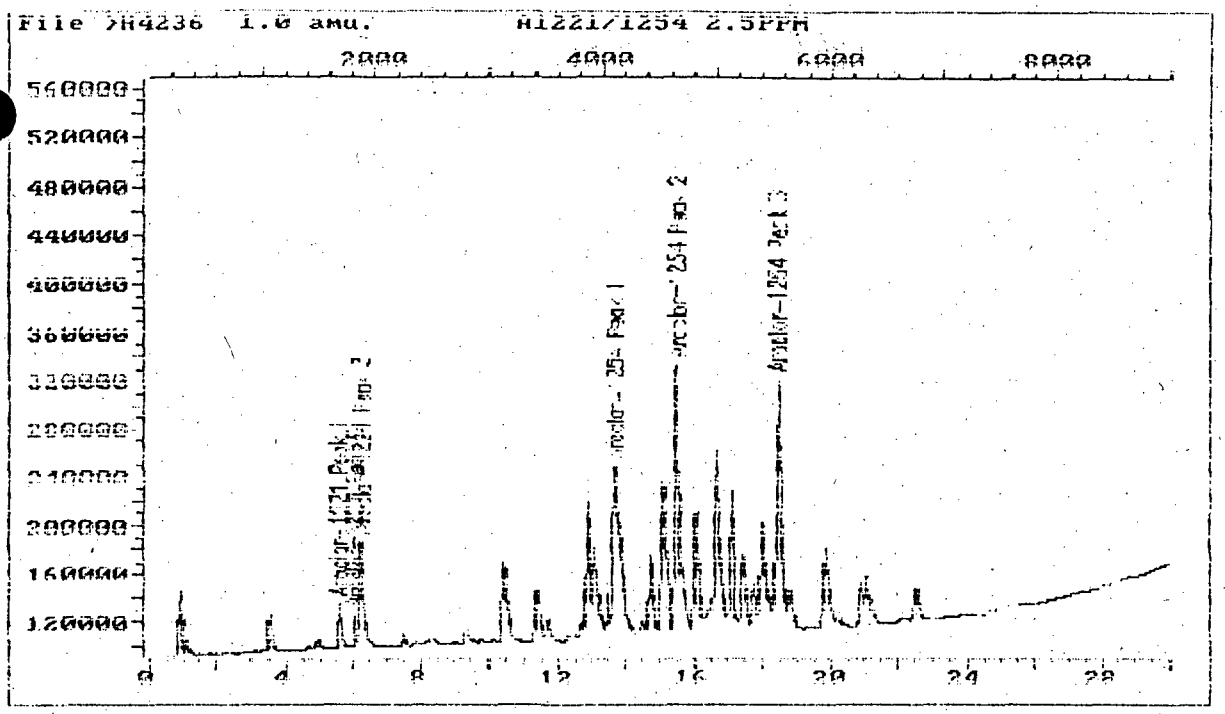
Quant Rev: 7 Quant Time: 991001 07:42
Injected at: 990927 14:42
Dilution Factor: 1.00000
Instrument ID: H

ID File: ID8PCB::G5
Title: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990930 11:58 Last Qcal Time: 990930 15:12

	Compound	R.T.	Scan#	Area	Conc	Units	q
5)	#Aroclor-1221 Peak 1	5.56	1669	232008M	81.07	ug/L	
6)	#Aroclor-1221 Peak 2	6.03	1810	152590	58.63	ug/L	100
7)	#Aroclor-1221 Peak 3	6.23	1870	617297	38.46	ug/L	100
17)	#Aroclor-1254 Peak 1	13.68	4104	833134	28.87	ug/L	100
18)	#Aroclor-1254 Peak 2	15.48	4644	1049384	31.42	ug/L	100
19)	#Aroclor-1254 Peak 3	18.44	5533	1627026M	28.44	ug/L	

Compound uses ESTD

483



Data File: >H4236::G1 Quant Output File: ^H4236::QT
Name: A1221/1254 2.5PPM Instrument ID: H
Misc:

Id File: ID8PCB::G5
Title: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990930 11:58 Last Qcal Time: 990930 15:12

Operator ID: JEFF
Quant Time : 991001 07:42
Injected at: 990927 14:42

484

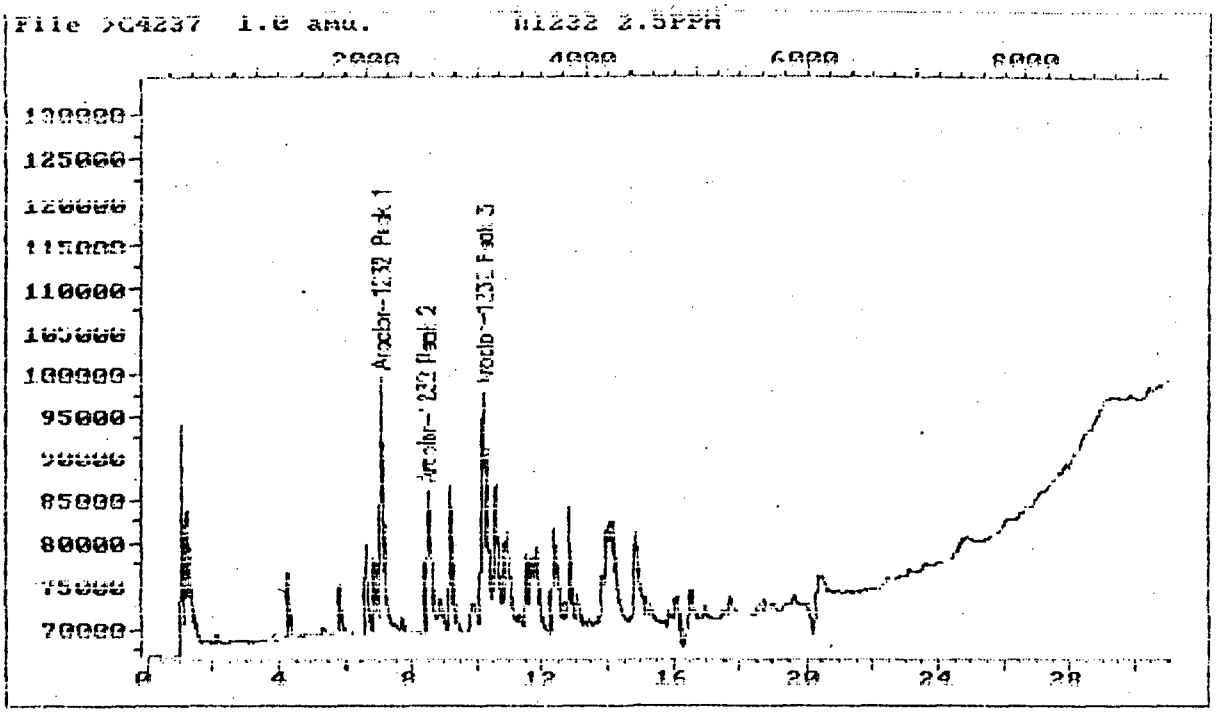
Operator ID: JEFF Quant Rev: 7 Quant Time: 991001 07:45
Output File: ^G4237::QT Injected at: 990927 14:42
Data File: >G4237::G1 Dilution Factor: 1.00000
Name: A1232 2.5PPM Instrument ID: G
Misc:

ID File: ID7PCB::G5
Title: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990930 11:54 Last Qcal Time: <none>

	Compound	R.T.	Scan#	Area	Conc	Units	q
8)	#Aroclor-1232 Peak 1	7.08	2125	218785	28.00	ug/L	100
9)	#Aroclor-1232 Peak 2	8.47	2542	167795	15.62	ug/L	100
10)	#Aroclor-1232 Peak 3	10.22	3067	283000	65.04	ug/L	100

Compound uses ESTD

485



Data File: >G4237::G1 Quant Output File: `G4237::QT
Name: A1232 2.5PPM Instrument ID: G
Misc:

Id File: ID7PCB::G5
Title: PCB'S HP5890 G RTX-5 0.53mm 1.0uL
Last Calibration: 990930 11:54 Last Qcal Time: <none>

Operator ID: JEFF
Quant Time : 991001 07:45
Injected at: 990927 14:42

486

QUANT REPORT

Operator ID: JEFF
Output File: ^H4237::QT
Data File: >H4237::G1
Name: A1232 2.5PPM
Misc:

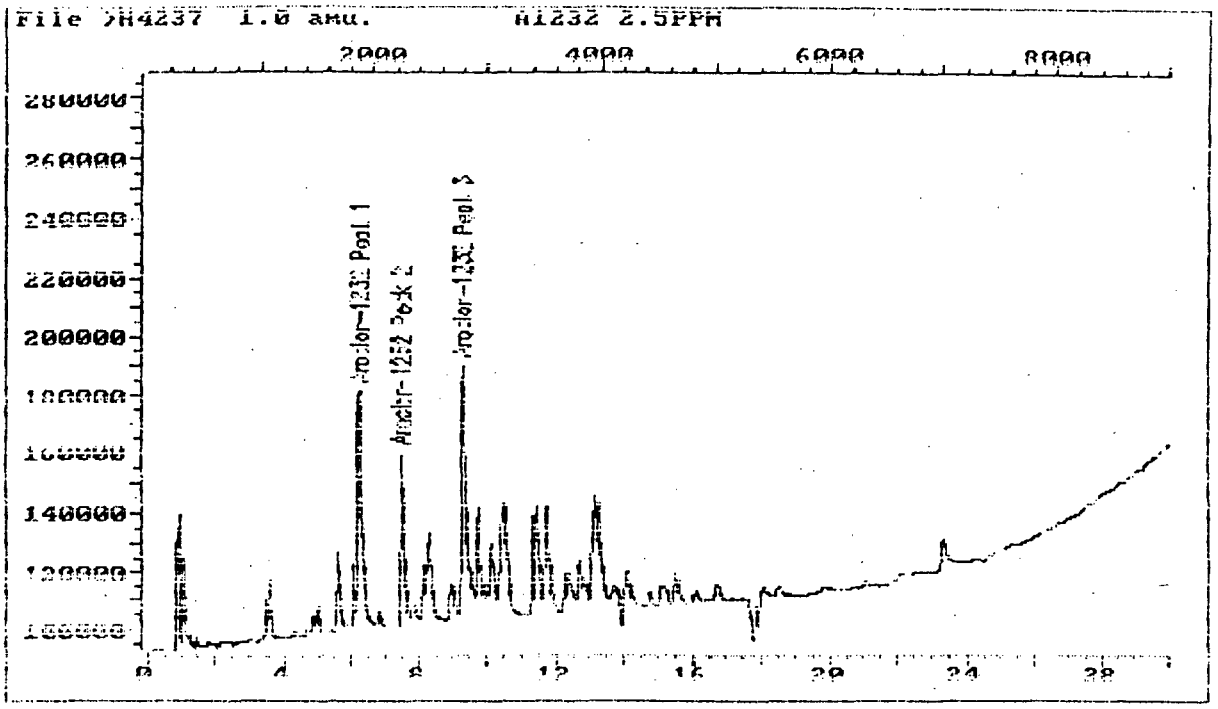
Quant Rev: 7
Quant Time: 991001 07:47
Injected at: 990927 15:20
Dilution Factor: 1.00000
Instrument ID: H

ID File: ID8PCB::G5
Title: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990930 11:58
Last Qcal Time: 990930 15:12

	Compound	R.T.	Scan#	Area	Conc	Units	q
8)	#Aroclor-1232 Peak 1	6.24	1871	579503	36.11	ug/L	100
9)	#Aroclor-1232 Peak 2	7.46	2239	387679	12.63	ug/L	100
10)	#Aroclor-1232 Peak 3	9.26	2777	843324	13.21	ug/L	100

Compound uses ESTD

487



Data File: >H4237::C1 Quant Output File: ^H4237::QT
Name: A1232 2.5PPM Instrument ID: H
Misc:

Id File: ID8PCB::C5
Title: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990930 11:58 Last Qcal Time: 990930 15:12

Operator ID: JEFF
Quant Time : 991001 07:47
Injected at: 990927 15:20

488

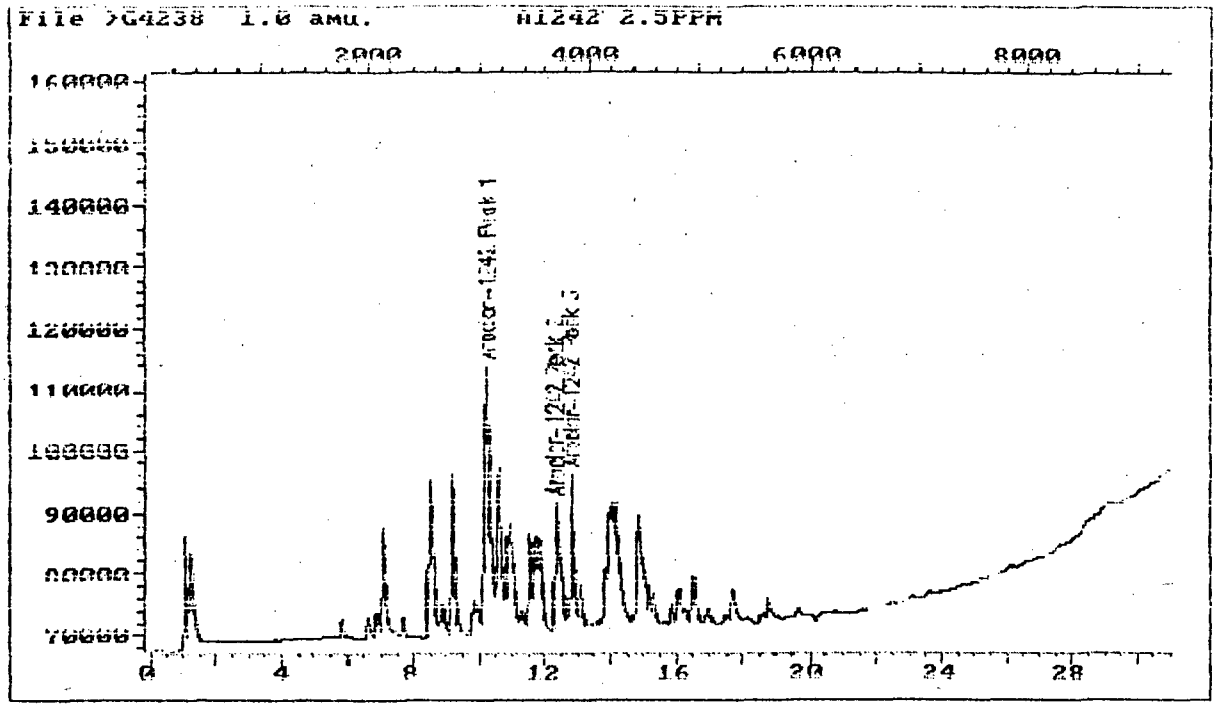
Operator ID: JEFF Quant Rev: 7 Quant Time: 991001 07:49
Output File: ^G4238::QT Injected at: 990927 15:20
Data File: >G4238::G1 Dilution Factor: 1.00000
Name: A1242 2.5PPM Instrument ID: G
Misc:

ID File: ID7PCB::G5
Title: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990930 11:54 Last Qcal Time: <none>

Compound	R.T.	Scan#	Area	Conc	Units	q
11) #Aroclor-1242 Peak 1	10.23	3068	439852	27.03	ug/L	100
12) #Aroclor-1242 Peak 2	12.30	3689	131702	20.67	ug/L	100
13) #Aroclor-1242 Peak 3	12.79	3836	188141	25.22	ug/L	100

Compound uses ESTD

489



Data File: >G4238::G1 Quant Output File: ^G4238::QT
Name: A1242 2.5PPM Instrument ID: G
Misc:

Id File: ID7PCB::G5
Title: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990930 11:54 Last Qcal Time: <none>

Operator ID: JEFF
Quant Time : 991001 07:49
Injected at: 990927 15:20

490

QUANT REPORT

Operator ID: JEFF
Output File: ^H4238::QT
Data File: >H4238::G1
Name: A1242 2.5PPM
Misc:

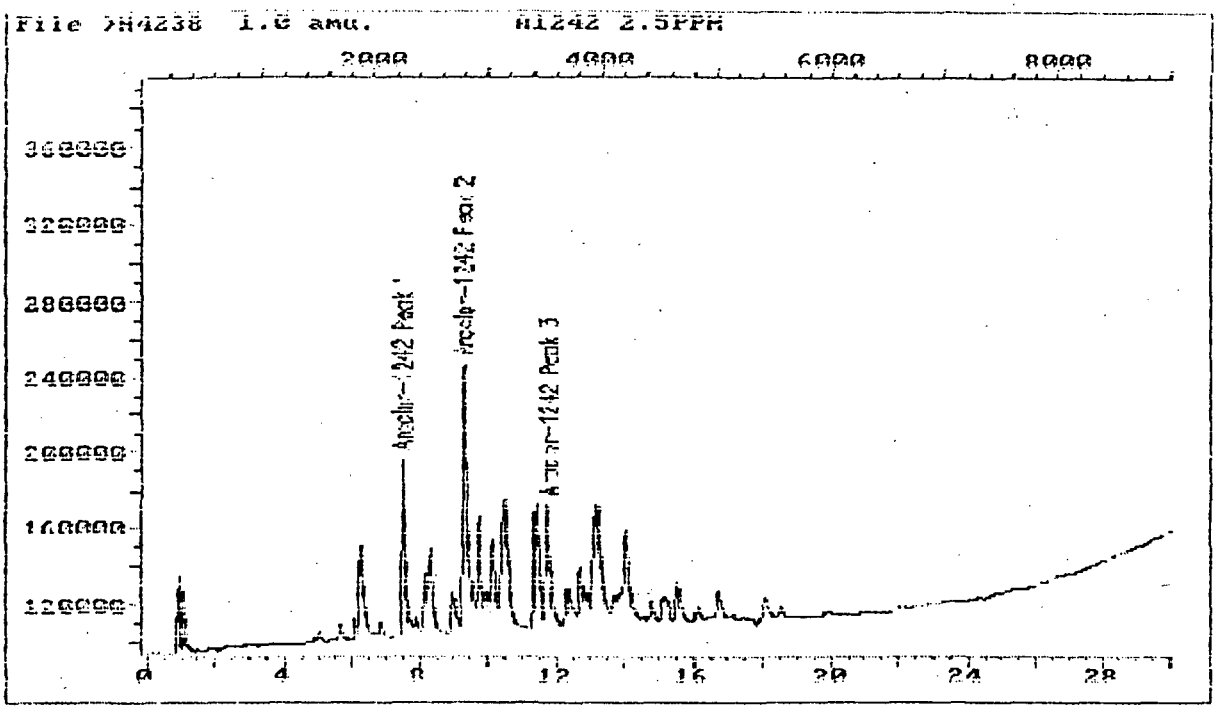
Quant Rev: 7
Quant Time: 991001 07:51
Injected at: 990927 15:57
Dilution Factor: 1.00000
Instrument ID: H

ID File: ID8PCB::G5
Title: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990930 11:58
Last Qcal Time: 990930 15:12

Compound	R.T.	Scan#	Area	Conc	Units	q
11) #Aroclor-1242 Peak 1	7.46	2239	612664	19.95	ug/L	100
12) #Aroclor-1242 Peak 2	9.25	2775	1337737	20.96	ug/L	100
13) #Aroclor-1242 Peak 3	11.76	3528	567326	24.21	ug/L	100

Compound uses ESTD

491



Data File: >H4238::C1 Quant Output File: ^H4238::QT
Name: A1242 2.5PPM Instrument ID: H
Misc:

Id File: ID8PCB::C5
Title: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990930 11:58 Last Qcal Time: 990930 15:12

Operator ID: JEFF
Quant Time : 991001 07:51
Injected at: 990927 15:57

492

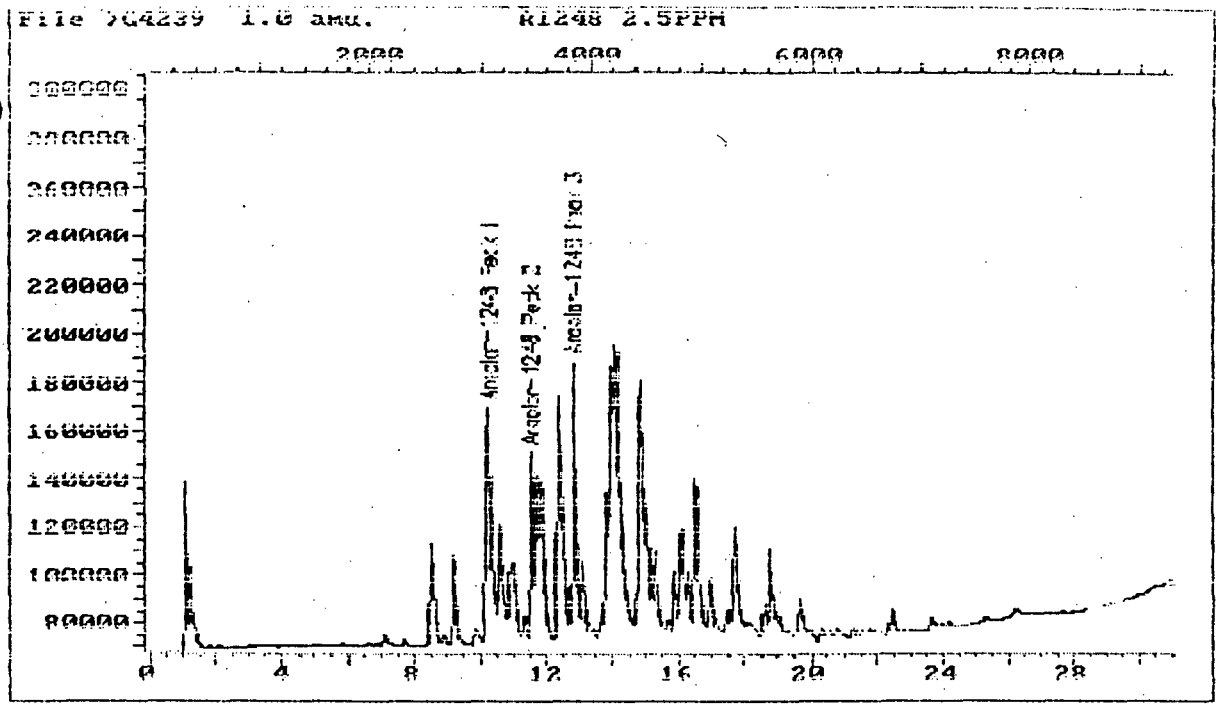
Operator ID: JEFF Quant Rev: 7 Quant Time: 991001 07:54
Output File: ^G4239::QT Injected at: 990927 15:57
Data File: >G4239::G1 Dilution Factor: 1.00000
Name: A1248 2.5PPM Instrument ID: G
Misc:

ID File: ID7PCB::G5
Title: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990930 11:54 Last Qcal Time: <none>

Compound	R.T.	Scan#	Area	Conc	Units	q
14) #Aroclor-1248 Peak 1	10.22	3066	1029875	30.03	ug/L	100
15) #Aroclor-1248 Peak 2	11.50	3449	450906	14.27	ug/L	100
16) #Aroclor-1248 Peak 3	12.78	3835	877995	22.47	ug/L	100

Compound uses ESTD

493



Data File: >G4239::G1 Quant Output File: ^G4239::QT
Name: A1248 2.5PPM Instrument ID: G
Misc:

Id File: ID7PCB::G5
Title: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990930 11:54 Last Qcal Time: <none>

Operator ID: JEFF
Quant Time : 991001 07:54
Injected at: 990927 15:57

494

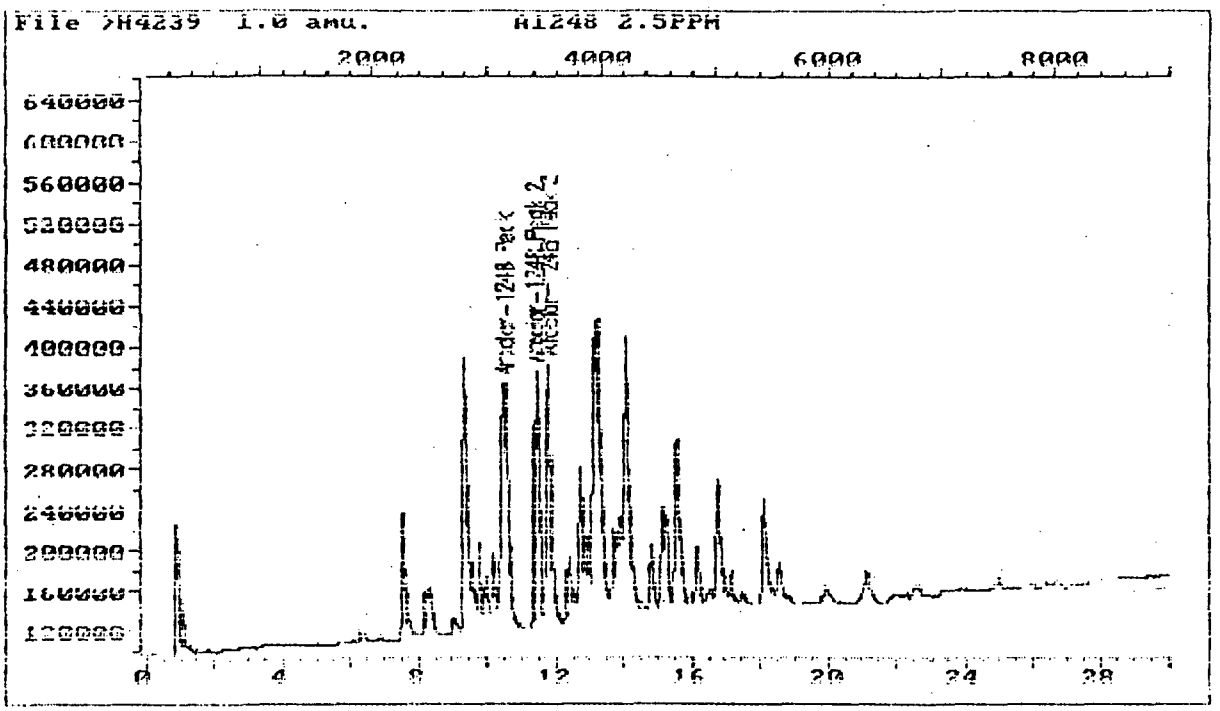
Operator ID: CLIFF Quant Rev: 7 Quant Time: 991001 07:56
Output File: ^H4239::QT Injected at: 990928 16:33
Data File: >H4239::G1 Dilution Factor: 1.00000
Name: A1248 2.5PPM Instrument ID: H
Misc:

ID File: ID8PCB::G5
Title: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990930 11:58 Last Qcal Time: 990930 15:12

Compound	R.T.	Scan#	Area	Conc	Units	q
14) #Aroclor-1248 Peak 1	10.50	3150	3176677	74.21	ug/L	100
15) #Aroclor-1248 Peak 2	11.37	3412	2331923	81.38	ug/L	100
16) #Aroclor-1248 Peak 3	11.78	3535	2282188	97.40	ug/L	100

Compound uses ESTD

495



Data File: >H4239::C1 Quant Output File: ^H4239::QT
Name: A1248 2.5PPM Instrument ID: H
Misc:

Id File: ID8PCB::C5
Title: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990930 11:58 Last Qcal Time: 990930 15:12

Operator ID: CLIFF
Quant Time : 991001 07:56
Injected at: 990928 16:33

496

Operator ID: CLIFF
Output File: ^G4240::QT
Data File: >G4240::G1
Name: A1016/1260 10PPM
Misc:

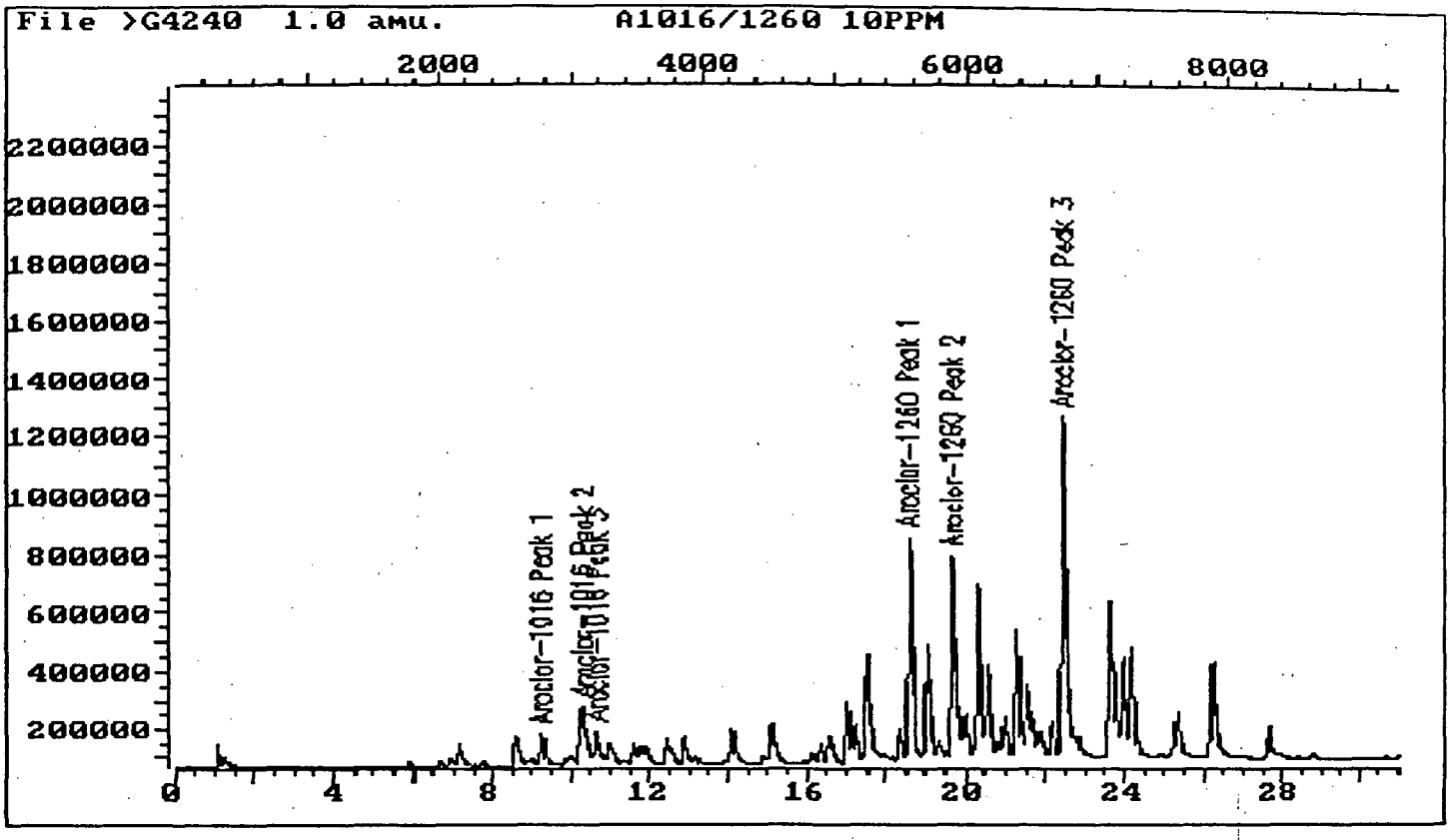
Quant Rev: 7 Quant Time: 990929 14:36
Injected at: 990928 16:33
Dilution Factor: 1.00000
Instrument ID: G

ID File: ID7PCB::G5
Title: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990427 16:22 Last Qcal Time: 990901 08:34

	Compound	R.T.	Scan#	Area	Conc	Units	q
2)	#Aroclor-1016 Peak 1	9.21	2764	704491	89.41	ug/L	100
3)	#Aroclor-1016 Peak 2	10.28	3085	1895033	100.21	ug/L	100
4)	#Aroclor-1016 Peak 3	10.63	3190	763528M	104.69	ug/L	100
20)	#Aroclor-1260 Peak 1	18.54	5562	5644071	104.84	ug/L	100
21)	#Aroclor-1260 Peak 2	19.65	5895	5801044	116.67	ug/L	100
22)	#Aroclor-1260 Peak 3	22.44	6731	8991264	111.05	ug/L	100

Compound uses ESTD

497



Data File: >G4240::G1 Quant Output File: ^G4240::QT
Name: A1016/1260 10PPM Instrument ID: G
Misc:

Id File: ID7PCB::G5
Title: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990427 16:22 Last Qcal Time: 990901 08:34

Operator ID: CLIFF
Quant Time : 990929 14:36
Injected at: 990928 16:33

498

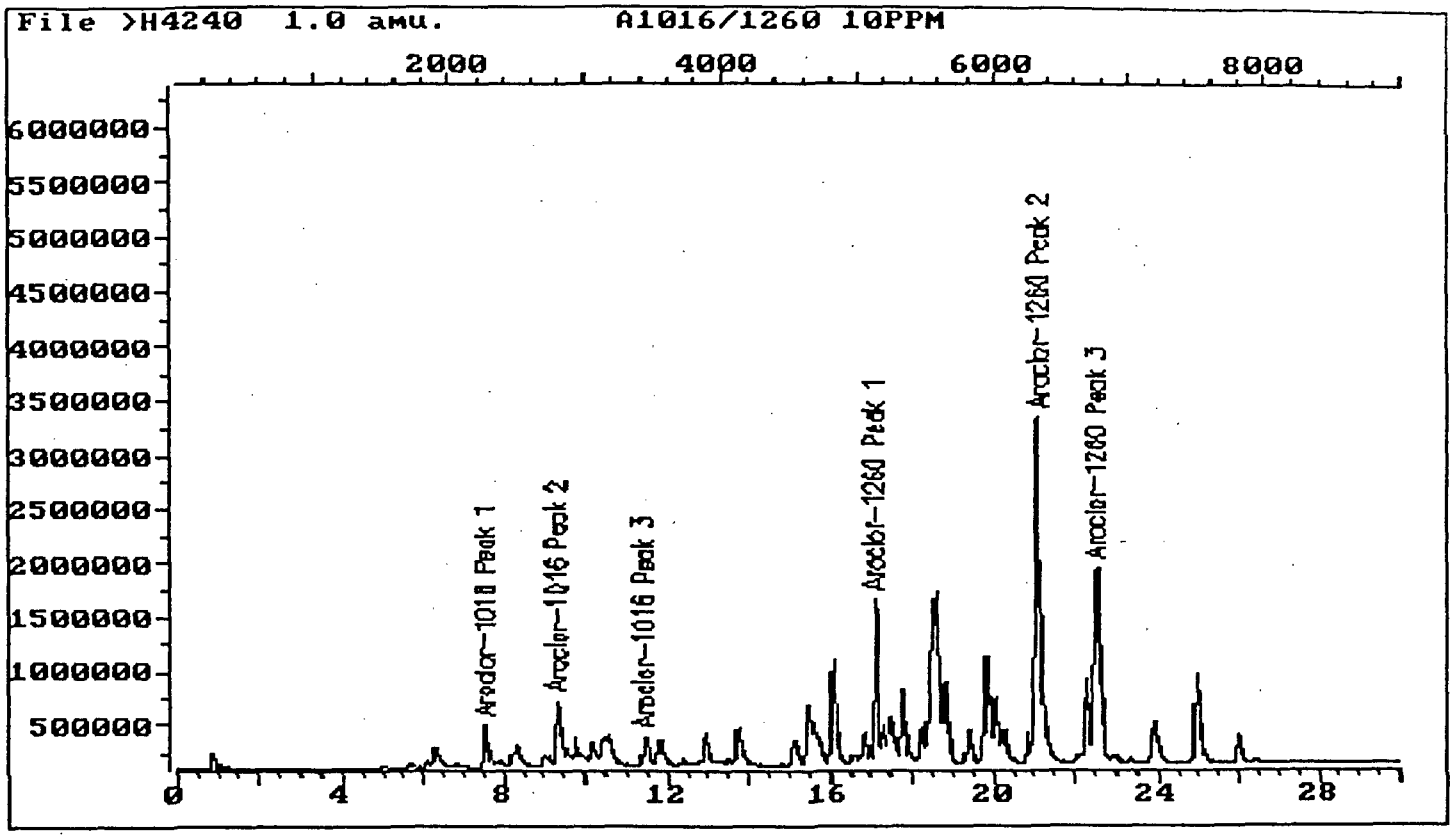
Operator ID: CLIFF Quant Rev: 7 Quant Time: 990930 09:05
Output File: ^H4240::QT Injected at: 990928 17:10
Data File: >H4240::G1 Dilution Factor: 1.00000
Name: A1016/1260 10PPM Instrument ID: H
Misc:

ID File: ID8PCB::G5
Title: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990428 12:12 Last Qcal Time: 990624 09:48

	Compound	R.T.	Scan#	Area	Conc	Units	q
2)	#Aroclor-1016 Peak 1	7.49	2246	2757876	98.80	ug/L	100
3)	#Aroclor-1016 Peak 2	9.29	2786	6031435	136.89	ug/L	100
4)	#Aroclor-1016 Peak 3	11.40	3421	2676466	89.74	ug/L	100
20)	#Aroclor-1260 Peak 1	17.07	5120	10261522	161.82	ug/L	100
21)	#Aroclor-1260 Peak 2	21.07	6322	27611848	351.15	ug/L	100
22)	#Aroclor-1260 Peak 3	22.48	6743	17838564	91.77	ug/L	100

Compound uses ESTD

499



Data File: >H4240::G1 Quant Output File: ^H4240::QT
Name: A1016/1260 10PPM Instrument ID: H
Misc:

Id File: ID8PCB::G5
Title: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990428 12:12 Last Qcal Time: 990624 09:48

Operator ID: CLIFF
Quant Time : 990930 09:05
Injected at: 990928 17:10

500

QUANT REPORT

Operator ID: CLIFF
Output File: ^G4241::QT
Data File: >G4241::G1
Name: A1016/1260 5PPM
Misc:

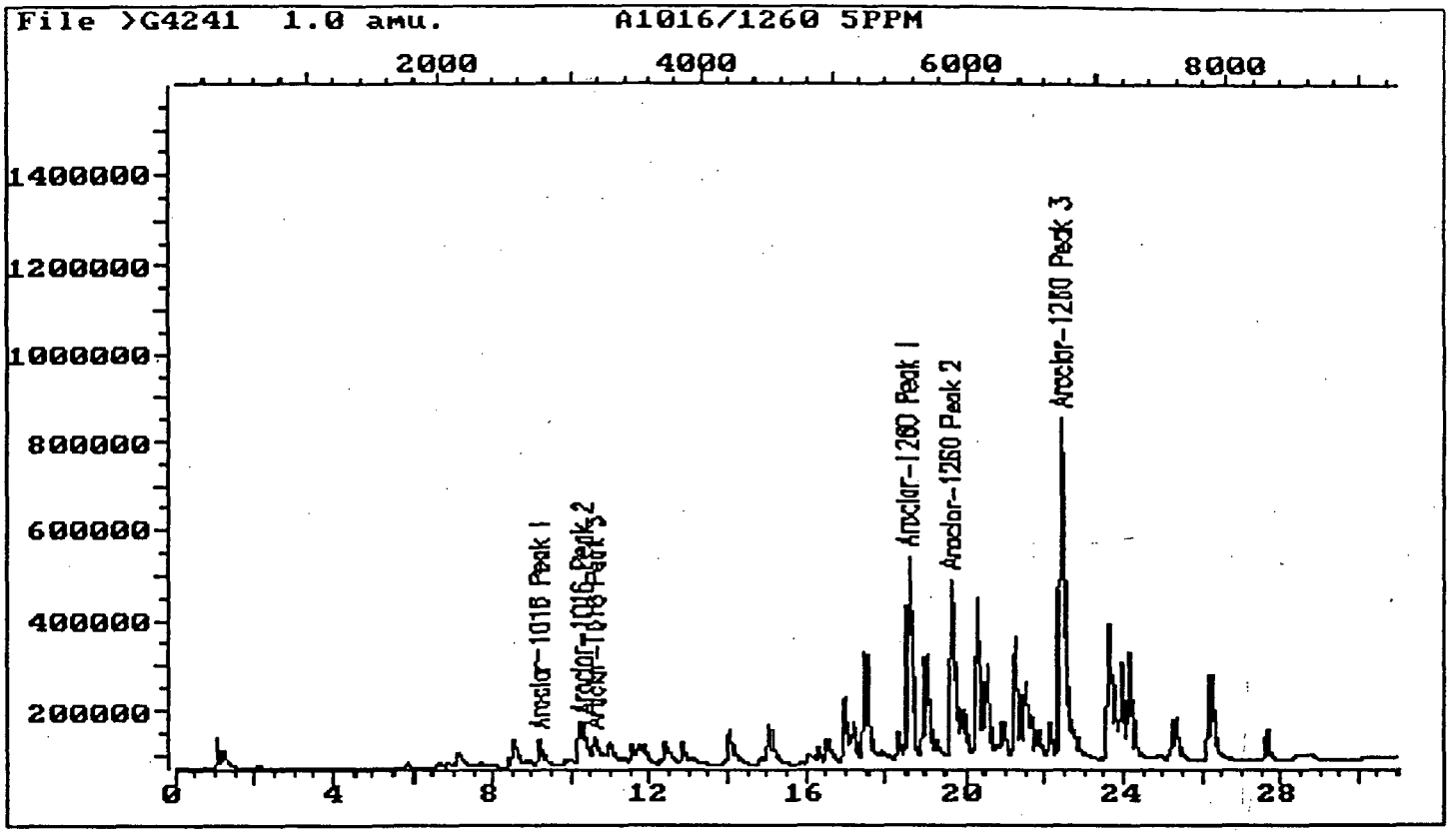
Quant Rev: 7
Quant Time: 990929 14:38
Injected at: 990928 17:10
Dilution Factor: 1.00000
Instrument ID: G

ID File: ID7PCB::G5
Title: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990427 16:22
Last Qcal Time: 990901 08:34

	Compound	R.T.	Scan#	Area	Conc	Units	q
2)	#Aroclor-1016 Peak 1	9.17	2750	444285	56.39	ug/L	100
3)	#Aroclor-1016 Peak 2	10.27	3080	1042095	55.11	ug/L	100
4)	#Aroclor-1016 Peak 3	10.61	3182	307218M	42.12	ug/L	
20)	#Aroclor-1260 Peak 1	18.51	5554	3753445	69.72	ug/L	100
21)	#Aroclor-1260 Peak 2	19.63	5889	3705545	74.53	ug/L	100
22)	#Aroclor-1260 Peak 3	22.42	6726	6523532	80.57	ug/L	100

Compound uses ESTD

501



Data File: >G4241::G1 Quant Output File: ^G4241::QT
Name: A1016/1260 5PPM Instrument ID: G
Misc:

Id File: ID7PCB::G5
Title: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990427 16:22 Last Qcal Time: 990901 08:34

Operator ID: CLIFF
Quant Time : 990929 14:38
Injected at: 990928 17:10

502

700600

QUANT REPORT

Operator ID: CLIFF
Output File: ^H4241::QT
Data File: >H4241::G1
Name: A1016/1260 5PPM
Misc:

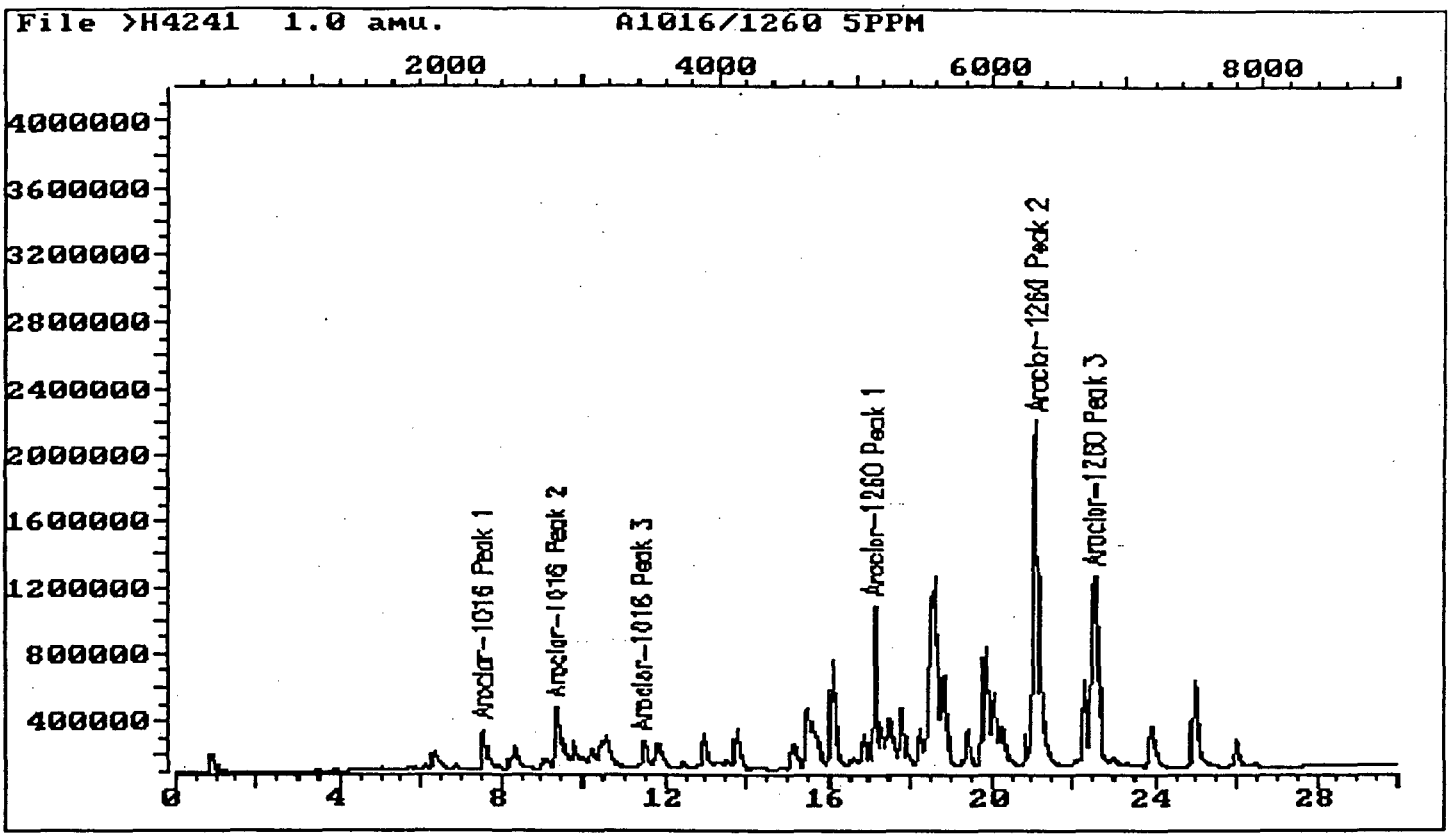
Quant Rev: 7
Quant Time: 990930 09:06
Injected at: 990928 17:47
Dilution Factor: 1.00000
Instrument ID: H

ID File: ID8PCB::G5
Title: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990428 12:12
Last Qcal Time: 990624 09:48

	Compound	R.T.	Scan#	Area	Conc	Units	q
2)	#Aroclor-1016 Peak 1	7.50	2251	1853455	66.40	ug/L	100
3)	#Aroclor-1016 Peak 2	9.32	2796	3907174	88.68	ug/L	100
4)	#Aroclor-1016 Peak 3	11.43	3428	1779252	59.66	ug/L	100
20)	#Aroclor-1260 Peak 1	17.08	5125	6671179	105.20	ug/L	100
21)	#Aroclor-1260 Peak 2	21.08	6325	18704320	237.87	ug/L	100
22)	#Aroclor-1260 Peak 3	22.49	6748	11873122	61.08	ug/L	100

Compound uses ESTD

503



Data File: >H4241::G1 Quant Output File: ^H4241::QT
Name: A1016/1260 5PPM Instrument ID: H
Misc:

Id File: ID8PCB::G5
Title: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990428 12:12 Last Qcal Time: 990624 09:48

Operator ID: CLIFF
Quant Time : 990930 09:06
Injected at: 990928 17:47

504

700602

QUANT REPORT

Operator ID: CLIFF
Output File: ^G4242::QT
Data File: >G4242::G1
Name: A1016/1260 2.5PPM
Misc:

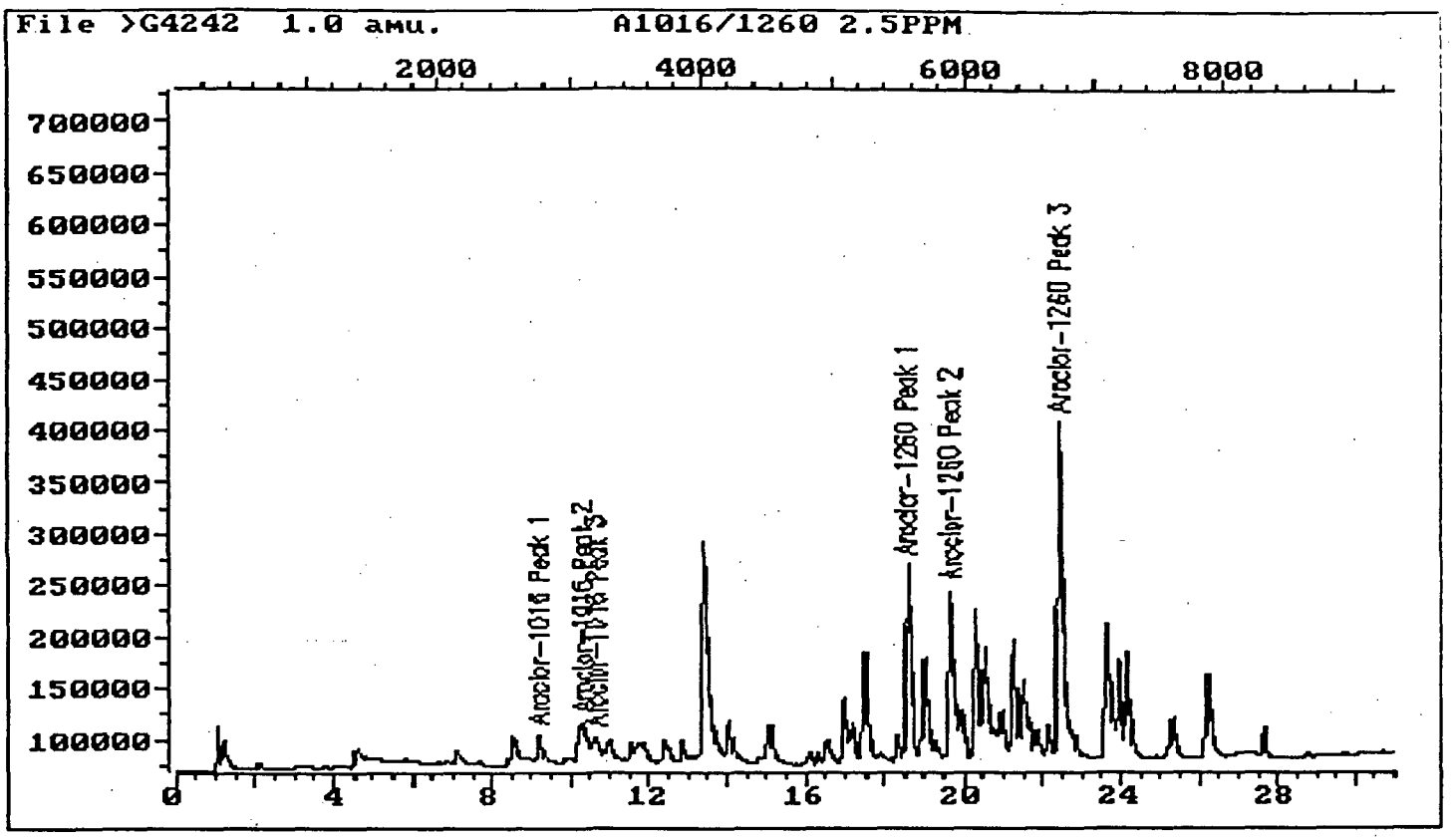
Quant Rev: 7
Quant Time: 990929 14:38
Injected at: 990928 17:47
Dilution Factor: 1.00000
Instrument ID: G

ID File: ID7PCB::G5
Title: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990427 16:22
Last Qcal Time: 990901 08:34

	Compound	R.T.	Scan#	Area	Conc	Units	q
2)	#Aroclor-1016 Peak 1	9.17	2752	232297	29.48	ug/L	100
3)	#Aroclor-1016 Peak 2	10.29	3087	488469	25.83	ug/L	100
4)	#Aroclor-1016 Peak 3	10.63	3188	126053M	17.28	ug/L	
20)	#Aroclor-1260 Peak 1	18.52	5556	1619142	30.08	ug/L	100
21)	#Aroclor-1260 Peak 2	19.63	5890	1562378	31.42	ug/L	100
22)	#Aroclor-1260 Peak 3	22.42	6726	2778325	34.31	ug/L	100

Compound uses ESTD

505



Data File: >G4242::G1 Quant Output File: ^G4242::QT
Name: A1016/1260 2.5PPM Instrument ID: G
Misc:

Id File: ID7PCB::G5
Title: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990427 16:22 Last Qcal Time: 990901 08:34

Operator ID: CLIFF
Quant Time : 990929 14:38
Injected at: 990928 17:47

506

Operator ID: CLIFF
Output File: ^H4242::QT
Data File: >H4242::G1
Name: A1016/1260 2.5PPM
Misc:

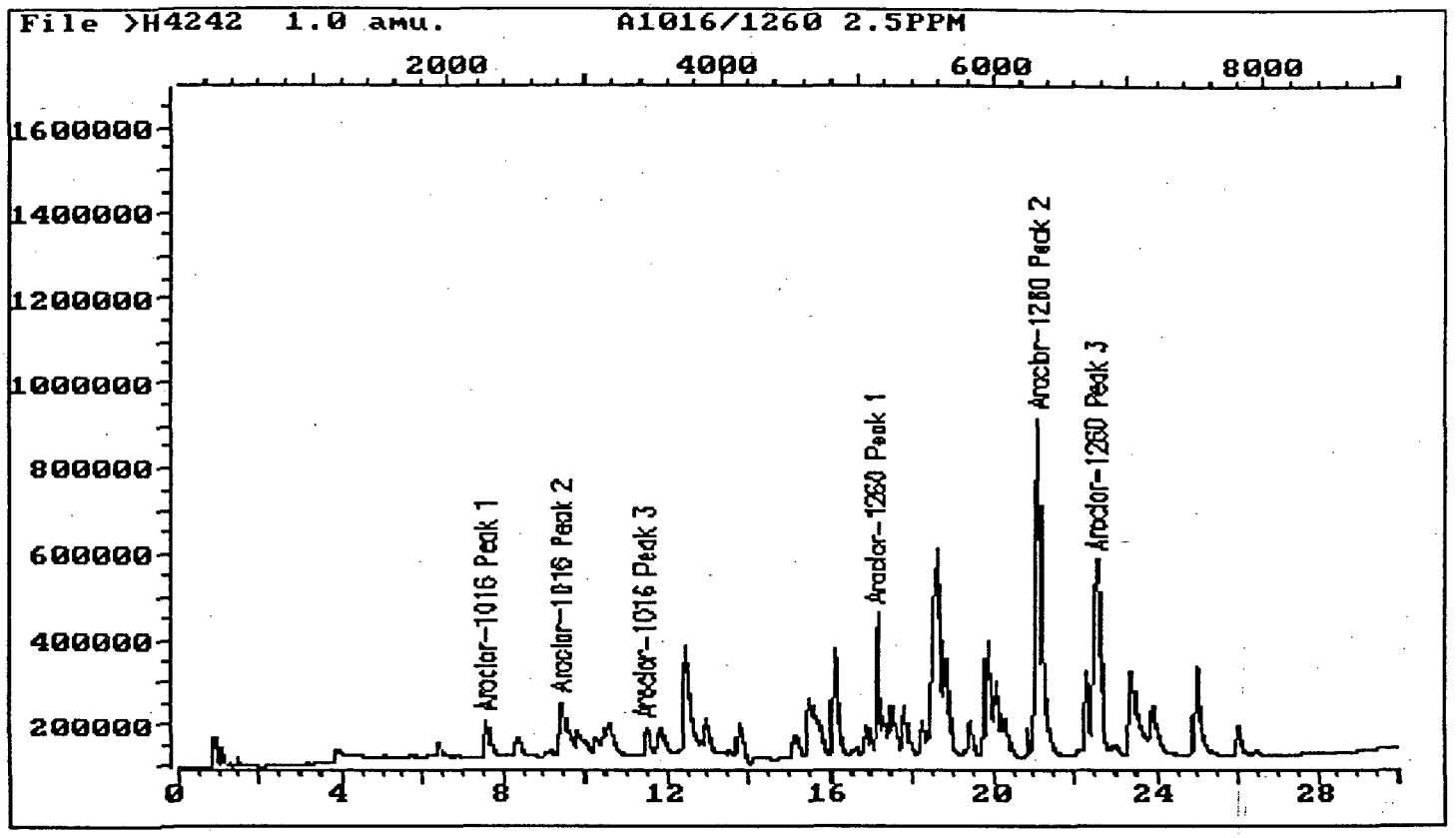
Quant Rev: 7
Quant Time: 990930 09:07
Injected at: 990928 18:24
Dilution Factor: 1.00000
Instrument ID: H

ID File: ID8PCB::G5
Title: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990428 12:12
Last Qcal Time: 990624 09:48

	Compound	R.T.	Scan#	Area	Conc	Units	q
2)	#Aroclor-1016 Peak 1	7.53	2258	834576	29.90	ug/L	100
3)	#Aroclor-1016 Peak 2	9.38	2815	1618712M	36.74	ug/L	
4)	#Aroclor-1016 Peak 3	11.45	3435	760177	25.49	ug/L	100
20)	#Aroclor-1260 Peak 1	17.10	5130	2465627	38.88	ug/L	100
21)	#Aroclor-1260 Peak 2	21.10	6330	7418818	94.35	ug/L	100
22)	#Aroclor-1260 Peak 3	22.51	6753	4878619	25.10	ug/L	100

Compound uses ESTD

507



Data File: >H4242::G1 Quant Output File: ^H4242::QT
Name: A1016/1260 2.5PPM Instrument ID: H
Misc:

Id File: ID8PCB::G5
Title: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990428 12:12 Last Qcal Time: 990624 09:48

Operator ID: CLIFF
Quant Time : 990930 09:07
Injected at: 990928 18:24

508

700606

QUANT REPORT

Operator ID: CLIFF
Output File: ^G4243::QT
Data File: >G4243::G1
Name: A1016/1260 1.0PPM
Misc:

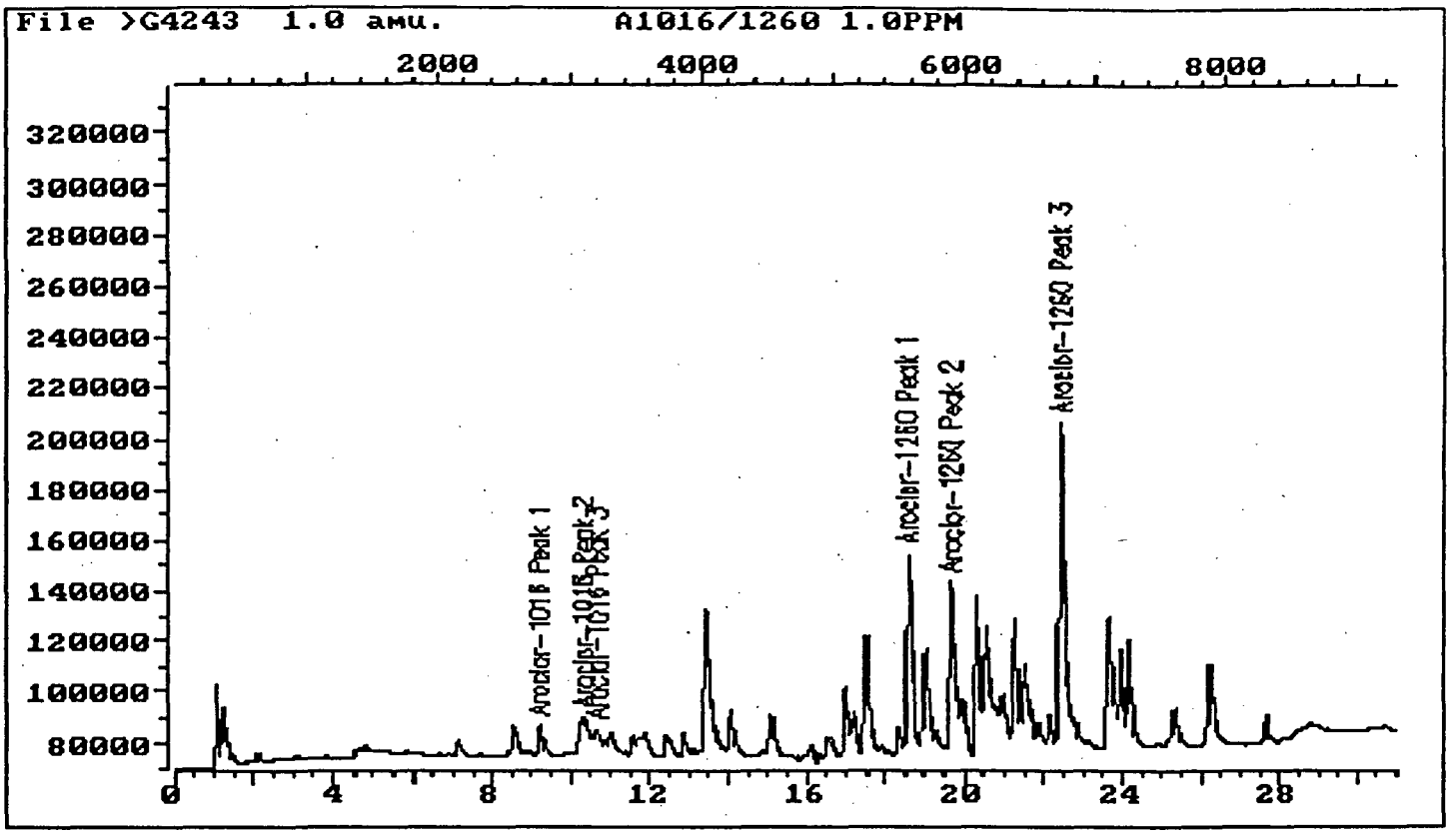
Quant Rev: 7
Quant Time: 990929 14:39
Injected at: 990928 18:24
Dilution Factor: 1.00000
Instrument ID: G

ID File: ID7PCB::G5
Title: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990427 16:22
Last Qcal Time: 990901 08:34

	Compound	R.T.	Scan#	Area	Conc	Units	q
2)	#Aroclor-1016 Peak 1	9.17	2752	95355	12.10	ug/L	100
3)	#Aroclor-1016 Peak 2	10.31	3093	189764M	10.04	ug/L	100
4)	#Aroclor-1016 Peak 3	10.64	3193	72026M	9.88	ug/L	
20)	#Aroclor-1260 Peak 1	18.53	5558	708571	13.16	ug/L	100
21)	#Aroclor-1260 Peak 2	19.64	5893	652351	13.12	ug/L	100
22)	#Aroclor-1260 Peak 3	22.43	6729	1151410	14.22	ug/L	100

Compound uses ESTD

509



Data File: >G4243::G1 Quant Output File: ^G4243::QT
Name: A1016/1260 1.0PPM Instrument ID: G
Misc:

Id File: ID7PCB::G5
Title: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990427 16:22 Last Qcal Time: 990901 08:34

Operator ID: CLIFF
Quant Time : 990929 14:39
Injected at: 990928 18:24

510

700608

QUANT REPORT

Operator ID: CLIFF
Output File: ^H4243::QT
Data File: >H4243::G1
Name: A1016/1260 1.0PPM
Misc:

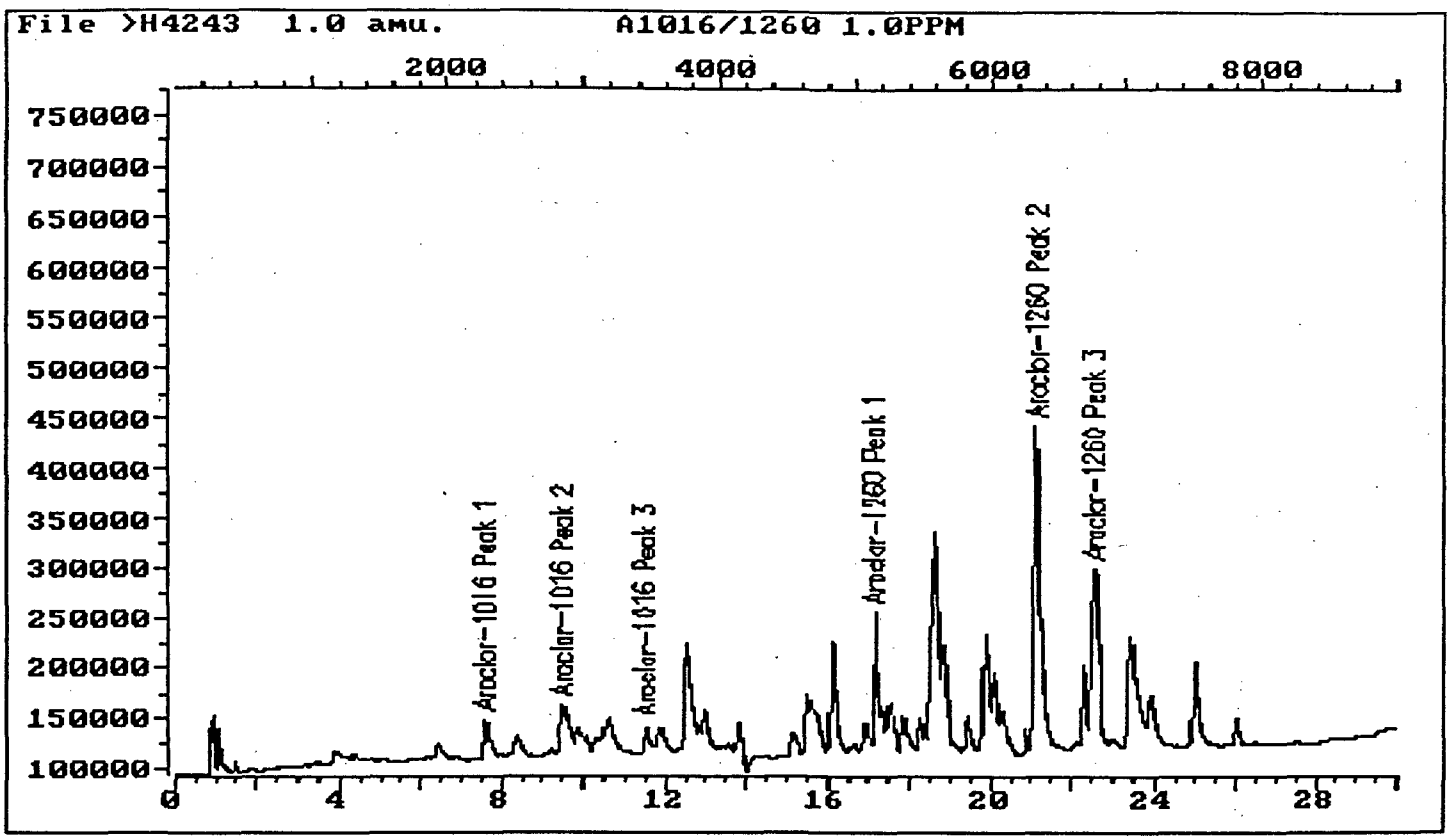
Quant Rev: 7
Quant Time: 990930 09:09
Injected at: 990928 19:01
Dilution Factor: 1.00000
Instrument ID: H

ID File: ID8PCB::G5
Title: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990428 12:12
Last Qcal Time: 990624 09:48

	Compound	R.T.	Scan#	Area	Conc	Units	q
2)	#Aroclor-1016 Peak 1	7.55	2264	365092	13.08	ug/L	100
3)	#Aroclor-1016 Peak 2	9.45	2834	677821M	15.38	ug/L	
4)	#Aroclor-1016 Peak 3	11.48	3443	321737M	10.79	ug/L	
20)	#Aroclor-1260 Peak 1	17.13	5138	1067972	16.84	ug/L	100
21)	#Aroclor-1260 Peak 2	21.13	6338	3228962	41.06	ug/L	100
22)	#Aroclor-1260 Peak 3	22.53	6759	2061683	10.61	ug/L	100

Compound uses ESTD

511



Data File: >H4243::G1 Quant Output File: ^H4243::QT
Name: A1016/1260 1.0PPM Instrument ID: H
Misc:

Id File: ID8PCB::G5
Title: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990428 12:12 Last Qcal Time: 990624 09:48

Operator ID: CLIFF
Quant Time : 990930 09:09
Injected at: 990928 19:01

5/a

700610

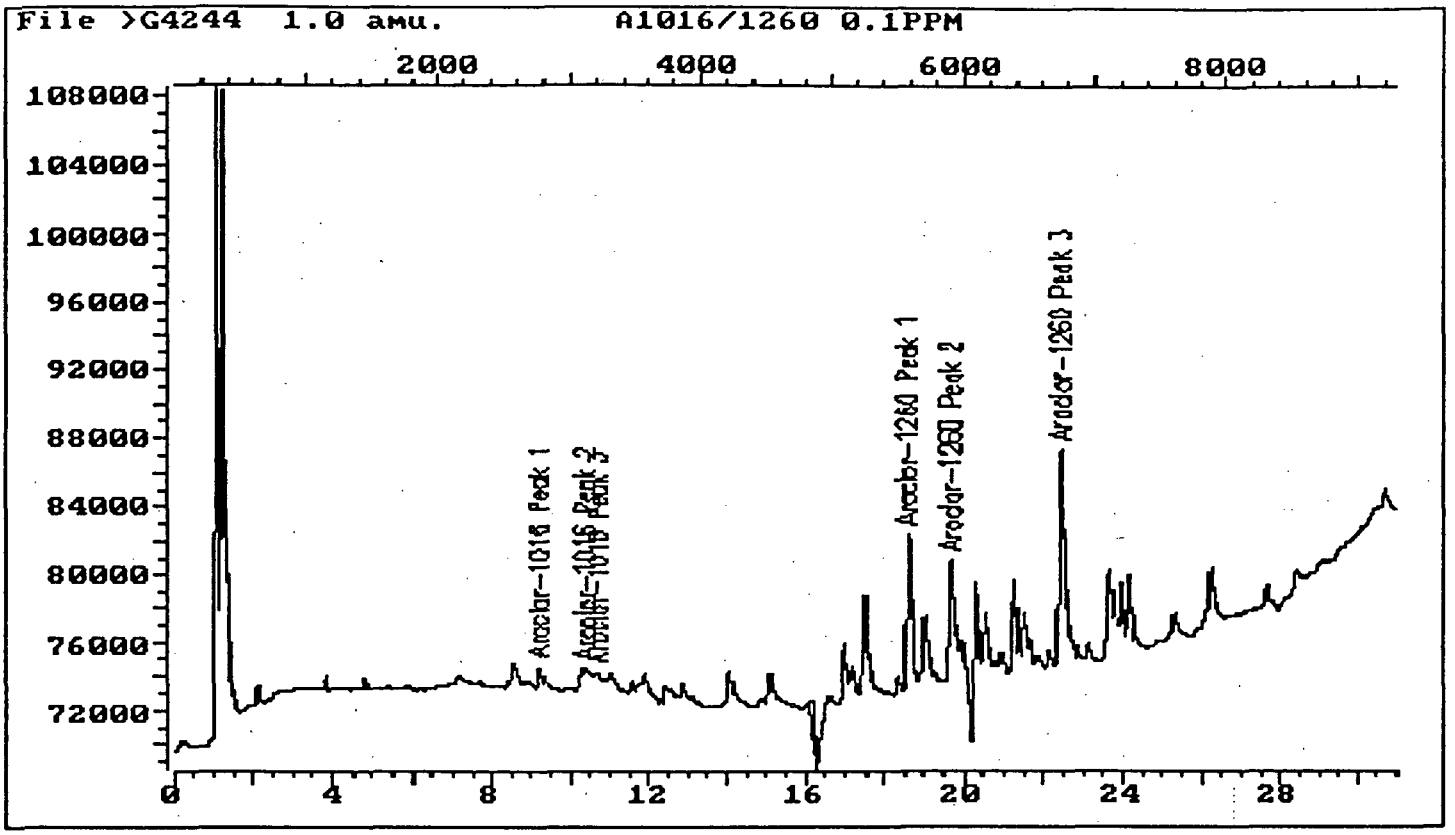
Operator ID: CLIFF Quant Rev: 7 Quant Time: 990929 14:40
Output File: ^G4244::QT Injected at: 990928 19:01
Data File: >G4244::G1 Dilution Factor: 1.00000
Name: A1016/1260 0.1PPM Instrument ID: G
Misc:

ID File: ID7PCB::G5
Title: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990427 16:22 Last Qcal Time: 990901 08:34

	Compound	R.T.	Scan#	Area	Conc	Units	q
2)	#Aroclor-1016 Peak 1	9.17	2752	9774	1.24	ug/L	100
3)	#Aroclor-1016 Peak 2	10.35	3105	17360M	.918	ug/L	100
4)	#Aroclor-1016 Peak 3	10.68	3203	5495M	.753	ug/L	
20)	#Aroclor-1260 Peak 1	18.54	5563	89746	1.67	ug/L	100
21)	#Aroclor-1260 Peak 2	19.66	5898	55763M	1.12	ug/L	
22)	#Aroclor-1260 Peak 3	22.45	6734	130526	1.61	ug/L	100

Compound uses ESTD

513



Data File: >G4244::G1 Quant Output File: ^G4244::QT
Name: A1016/1260 0.1PPM Instrument ID: G
Misc:

Id File: ID7PCB::G5
Title: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990427 16:22 Last Qcal Time: 990901 08:34

Operator ID: CLIFF
Quant Time : 990929 14:40
Injected at: 990928 19:01

514

700612

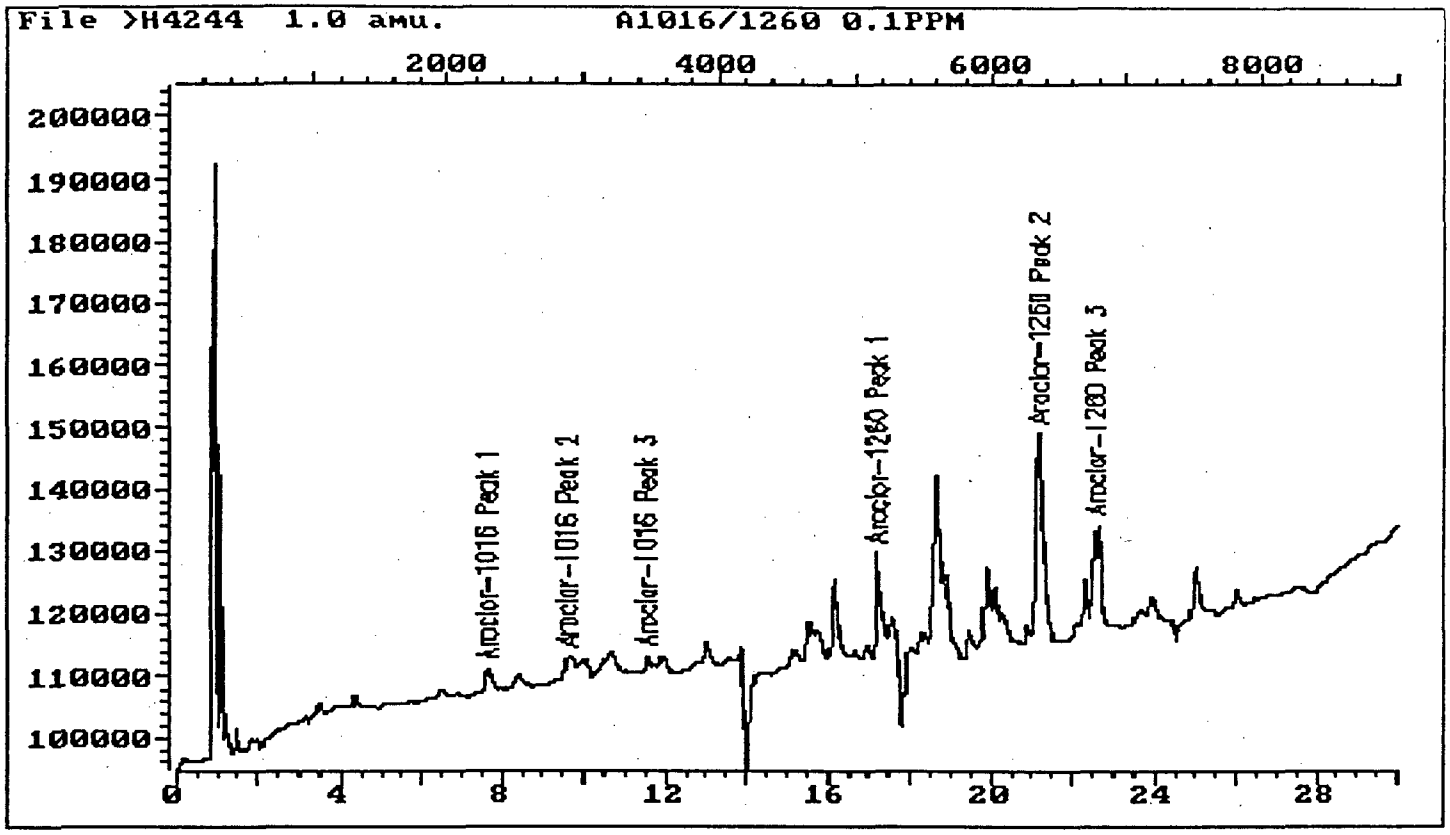
Operator ID: CLIFF Quant Rev: 7 Quant Time: 990930 09:11
Output File: ^H4244::QT Injected at: 990928 19:38
Data File: >H4244::G1 Dilution Factor: 1.00000
Name: A1016/1260 0.1PPM Instrument ID: H
Misc:

ID File: ID8PCB::G5
Title: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990428 12:12 Last Qcal Time: 990624 09:48

	Compound	R.T.	Scan#	Area	Conc	Units	q
2)	#Aroclor-1016 Peak 1	7.58	2274	39983M	1.43	ug/L	
3)	#Aroclor-1016 Peak 2	9.56	2868	78223M	1.78	ug/L	
4)	#Aroclor-1016 Peak 3	11.51	3452	26053M	.874	ug/L	
20)	#Aroclor-1260 Peak 1	17.18	5155	114271M	1.80	ug/L	
21)	#Aroclor-1260 Peak 2	21.16	6349	325305M	4.14	ug/L	
22)	#Aroclor-1260 Peak 3	22.56	6768	179149M	.922	ug/L	

Compound uses ESTD

515



Data File: >H4244::G1 Quant Output File: ^H4244::QT
Name: A1016/1260 0.1PPM Instrument ID: H
Misc:

Id File: ID8PCB::G5
Title: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990428 12:12 Last Qcal Time: 990624 09:48

Operator ID: CLIFF
Quant Time : 990930 09:11
Injected at: 990928 19:38

516

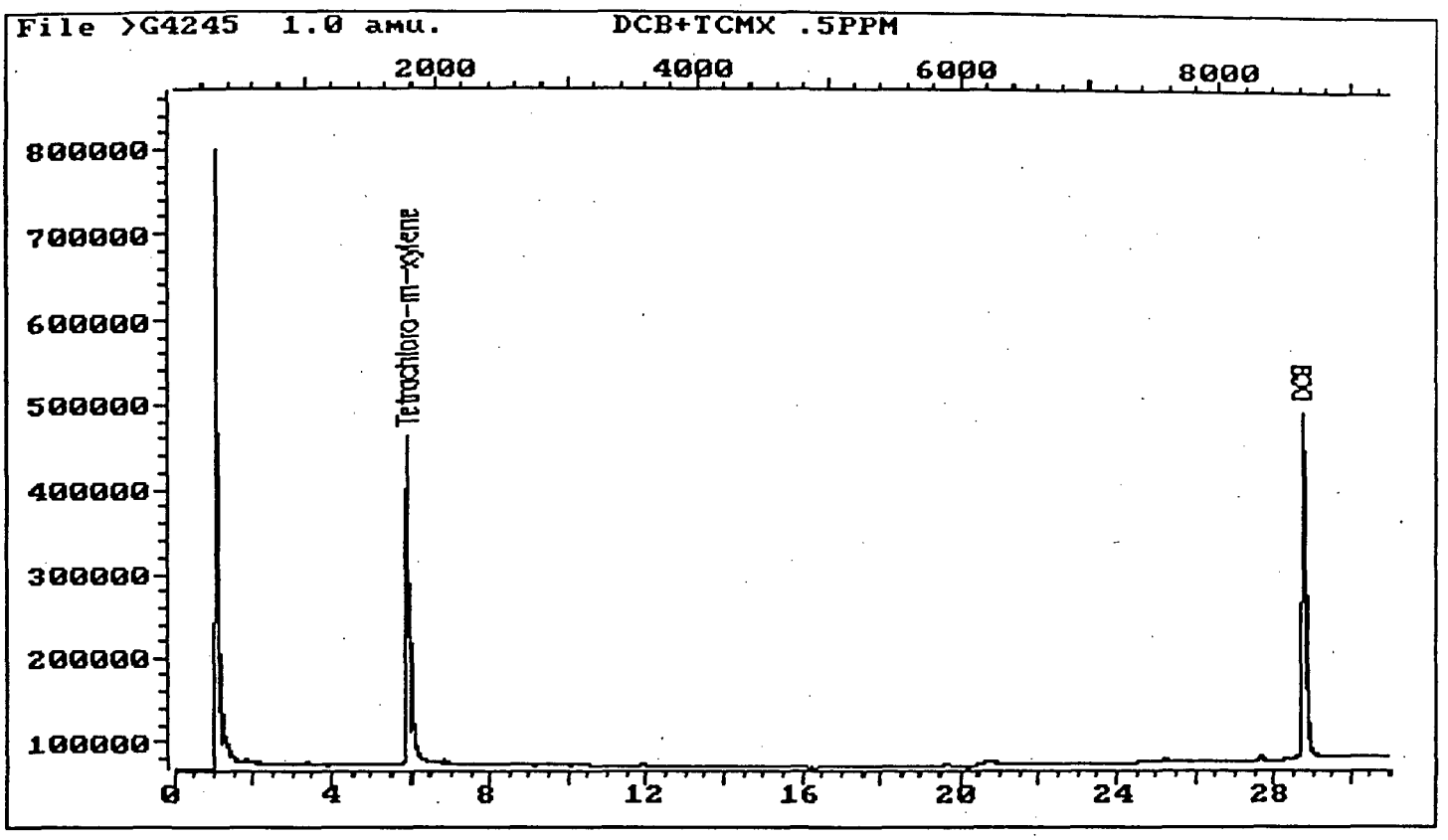
Operator ID: CLIFF Quant Rev: 7 Quant Time: 990929 14:41
Output File: ^G4245::QT Injected at: 990928 19:38
Data File: >G4245::G1 Dilution Factor: 1.00000
Name: DCB+TCMX .5PPM Instrument ID: G
Misc:

ID File: ID7PCB::G5
Title: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990427 16:22 Last Qcal Time: 990901 08:34

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	5.88	1765	2424180	6.55	ug/L	100
23)	#DCB	28.73	8619	3062429	7.49	ug/L	100

Compound uses ESTD

517



Data File: >G4245::G1 Quant Output File: ^G4245::QT
Name: DCB+TCMX .5PPM Instrument ID: G
Misc:

Id File: ID7PCB::G5
Title: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990427 16:22 Last Qcal Time: 990901 08:34

Operator ID: CLIFF
Quant Time : 990929 14:41
Injected at: 990928 19:38

518

700616

QUANT REPORT

Operator ID: CLIFF
Output File: ^H4245::QT
Data File: >H4245::G1
Name: DCB+TCMX .5PPM
Misc:

Quant Rev: 7
Quant Time: 990930 09:12
Injected at: 990928 20:16
Dilution Factor: 1.00000
Instrument ID: H

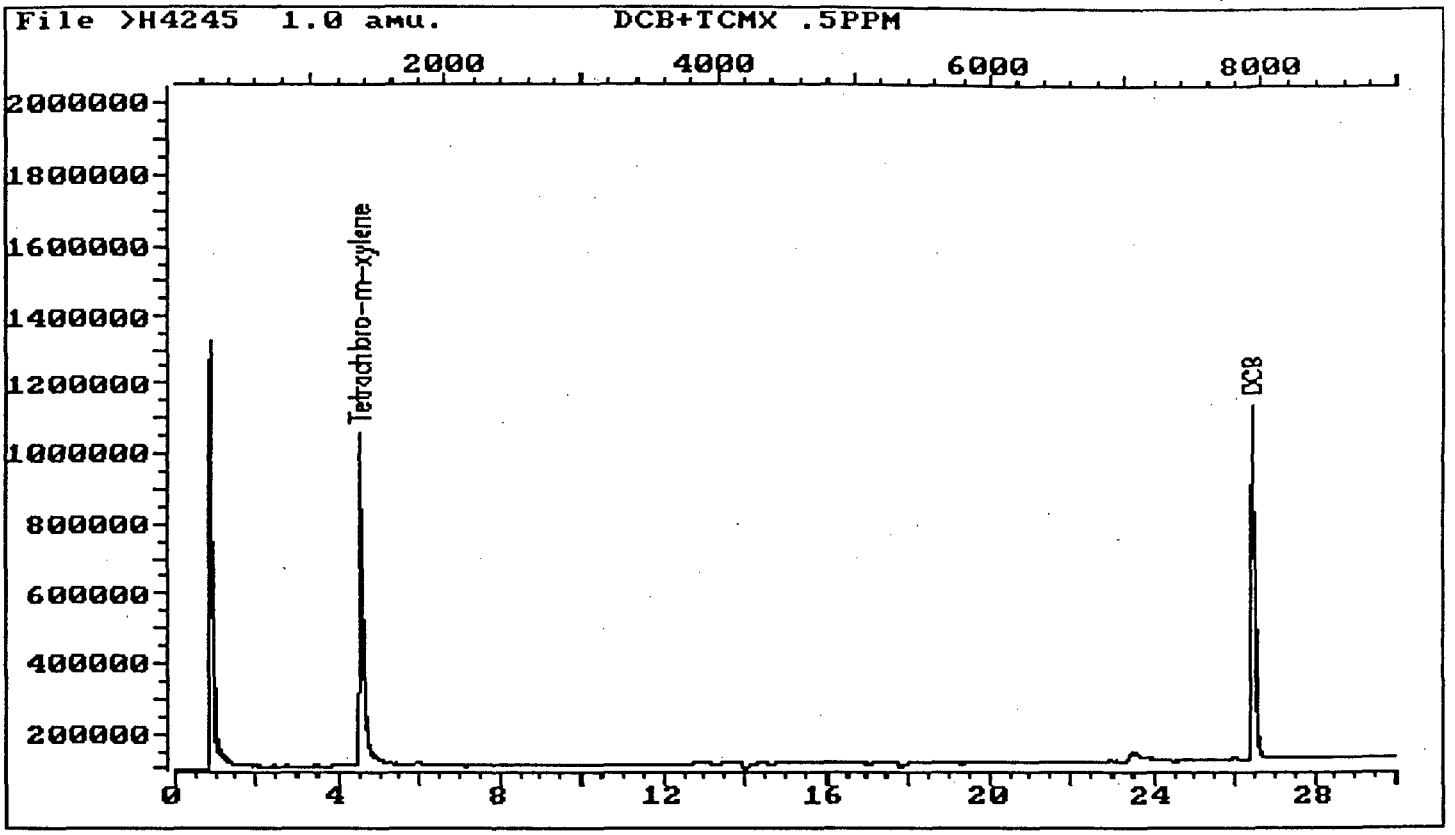
ID File: ID8PCB::G5
Title: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990428 12:12
Last Qcal Time: 990624 09:48

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	4.52	1357	6474081	6.33	ug/L	100
23)	#DCB	26.42	7926	7656915	6.77	ug/L	100

Compound uses ESTD

519

700617



Data File: >H4245::G1 Quant Output File: ^H4245::QT
Name: DCB+TCMX .5PPM Instrument ID: H
Misc:

Id File: ID8PCB::G5
Title: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990428 12:12 Last Qcal Time: 990624 09:48

Operator ID: CLIFF
Quant Time : 990930 09:12
Injected at: 990928 20:16

520

QUANT REPORT

Operator ID: CLIFF
Output File: ^G4246::QT
Data File: >G4246::G1
Name: DCB+TCMX .2PPM
Misc:

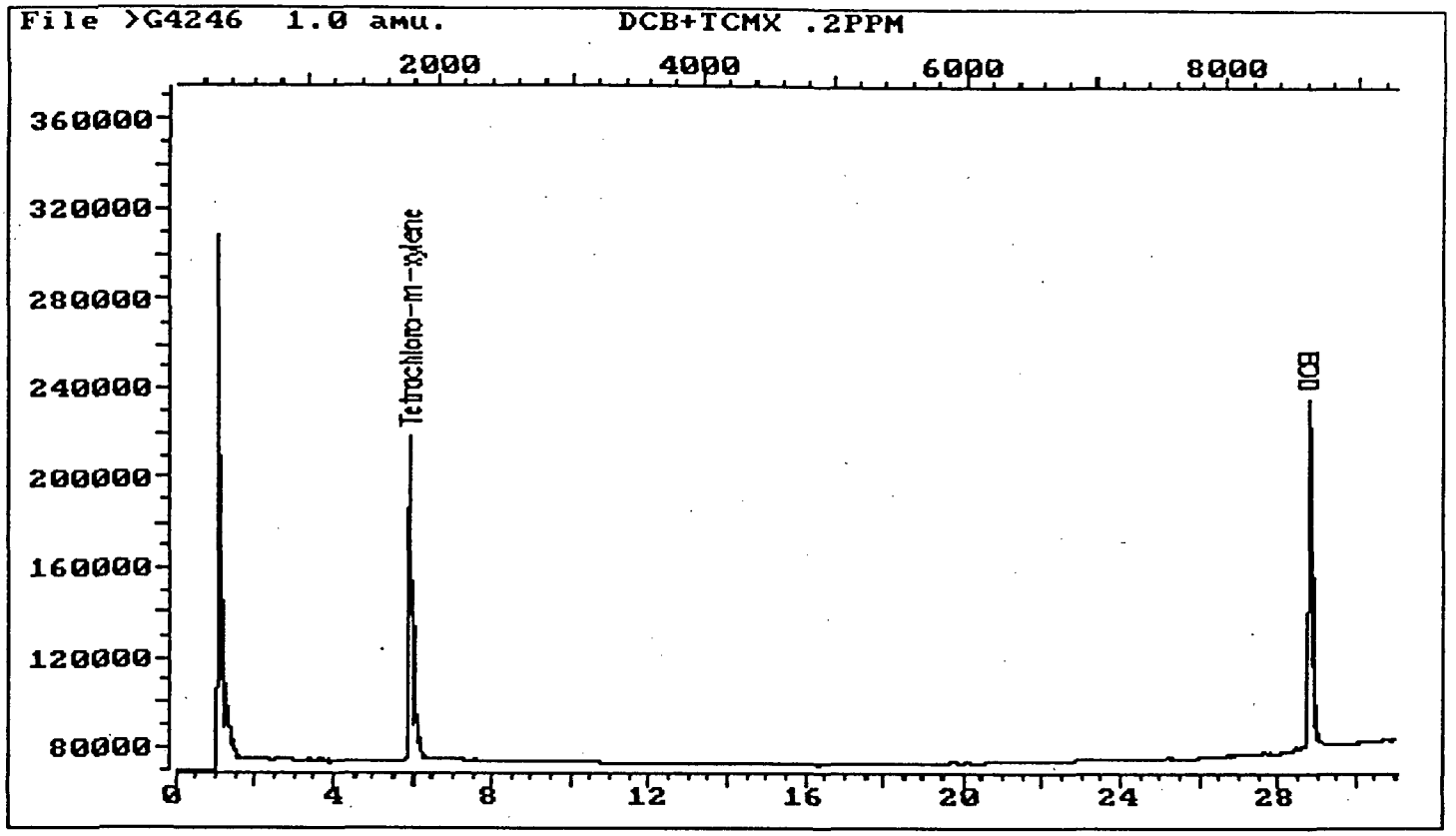
Quant Rev: 7
Quant Time: 990929 14:42
Injected at: 990928 20:16
Dilution Factor: 1.00000
Instrument ID: G

ID File: ID7PCB::G5
Title: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990427 16:22
Last Qcal Time: 990901 08:34

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	5.89	1766	896928	2.42	ug/L	100
23)	#DCB	28.73	8619	1164189	2.85	ug/L	100

Compound uses ESTD

521



Data File: >G4246::G1 Quant Output File: ^G4246::QT
Name: DCB+TCMX .2PPM Instrument ID: G
Misc:

Id File: ID7PCB::G5
Title: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990427 16:22 Last Qcal Time: 990901 08:34

Operator ID: CLIFF
Quant Time : 990929 14:42
Injected at: 990928 20:16

522

QUANT REPORT

Operator ID: CLIFF
Output File: ^H4246::QT
Data File: >H4246::G1
Name: DCB+TCMX .2PPM
Misc:

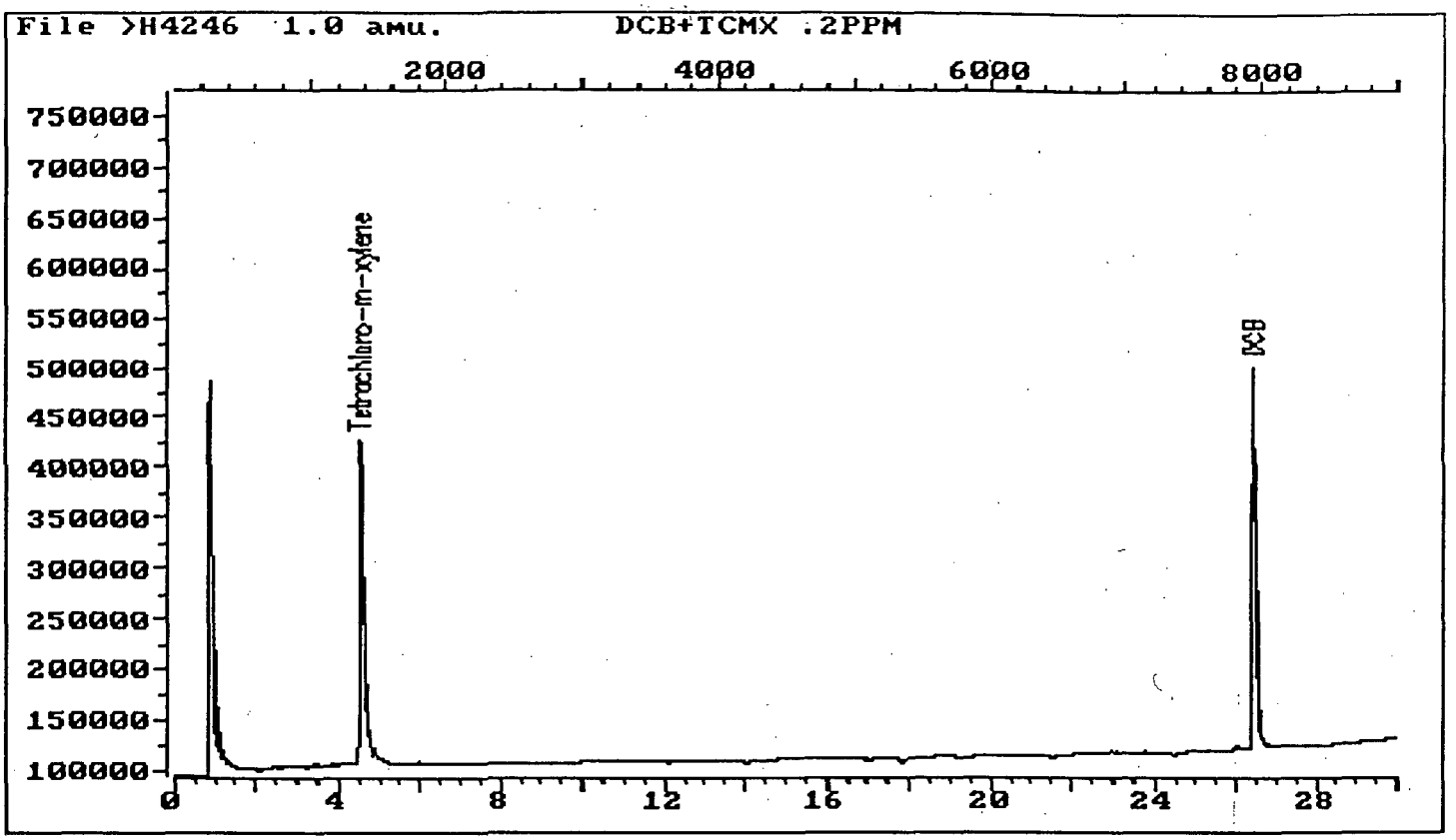
Quant Rev: 7
Quant Time: 990930 09:13
Injected at: 990928 20:53
Dilution Factor: 1.00000
Instrument ID: H

ID File: ID8PCB::G5
Title: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990428 12:12
Last Qcal Time: 990624 09:48

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	4.55	1365	2448617	2.40	ug/L	100
23)	#DCB	26.43	7929	2959631	2.62	ug/L	100

Compound uses ESTD

523



Data File: >H4246::G1 Quant Output File: ^H4246::QT
Name: DCB+TCMX .2PPM Instrument ID: H
Misc:

Id File: ID8PCB::G5
Title: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990428 12:12 Last Qcal Time: 990624 09:48

Operator ID: CLIFF
Quant Time : 990930 09:13
Injected at: 990928 20:53

524

QUANT REPORT

Operator ID: CLIFF
Output File: ^G4247::QT
Data File: >G4247::G1
Name: DCB+TCMX .1PPM
Misc:

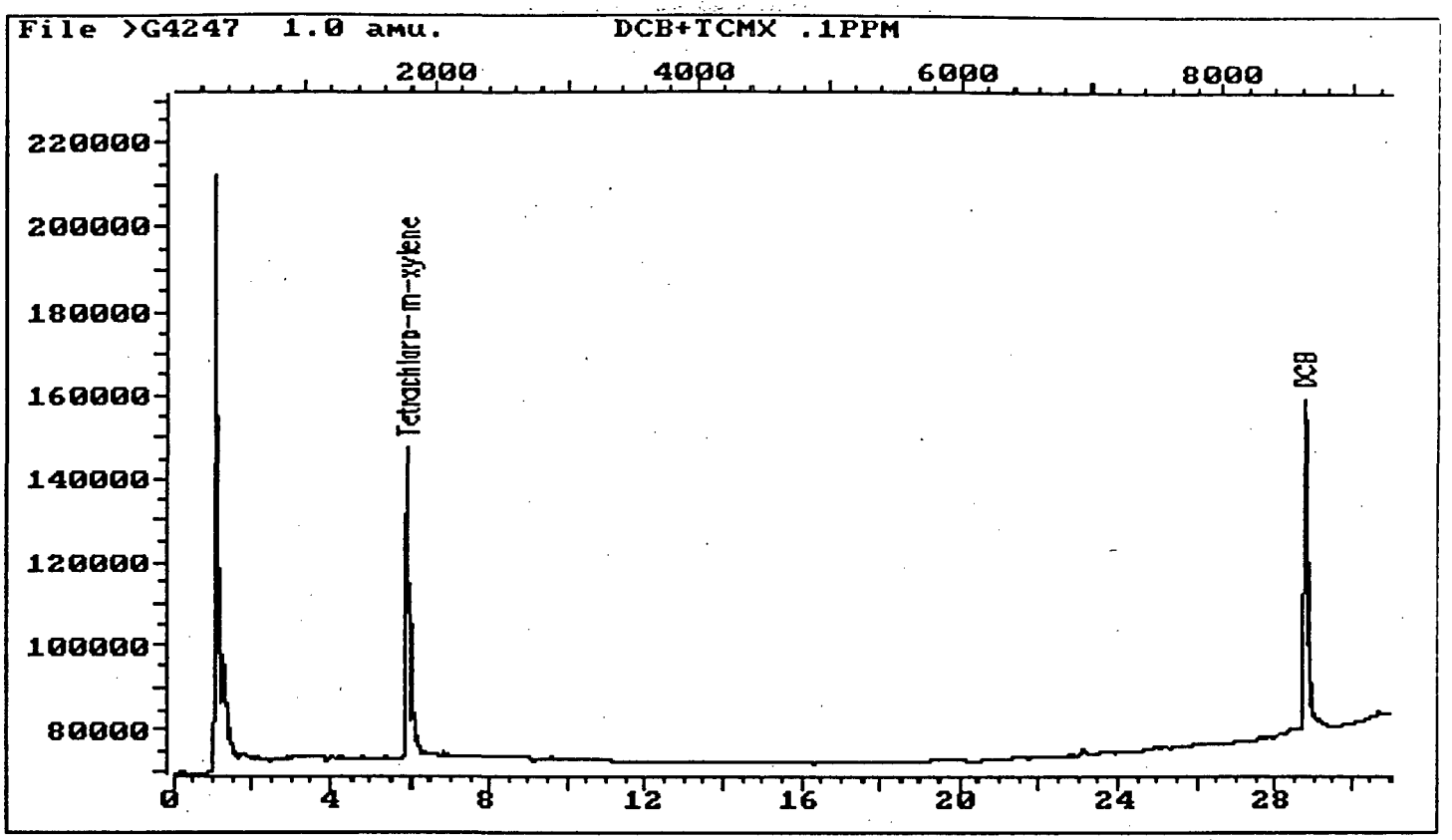
Quant Rev: 7
Quant Time: 990929 14:43
Injected at: 990928 20:53
Dilution Factor: 1.00000
Instrument ID: G

ID File: ID7PCB::G5
Title: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990427 16:22
Last Qcal Time: 990901 08:34

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	5.89	1767	463598	1.25	ug/L	100
23)	#DCB	28.73	8620	620790	1.52	ug/L	100

Compound uses ESTD

525



Data File: >G4247::G1 Quant Output File: ^G4247::QT
Name: DCB+TCMX .1PPM Instrument ID: G
Misc:

Id File: ID7PCB::G5
Title: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990427 16:22 Last Qcal Time: 990901 08:34

Operator ID: CLIFF
Quant Time : 990929 14:43
Injected at: 990928 20:53

526

QUANT REPORT

Operator ID: CLIFF
Output File: ^H4247::QT
Data File: >H4247::G1
Name: DCB+TCMX .1PPM
Misc:

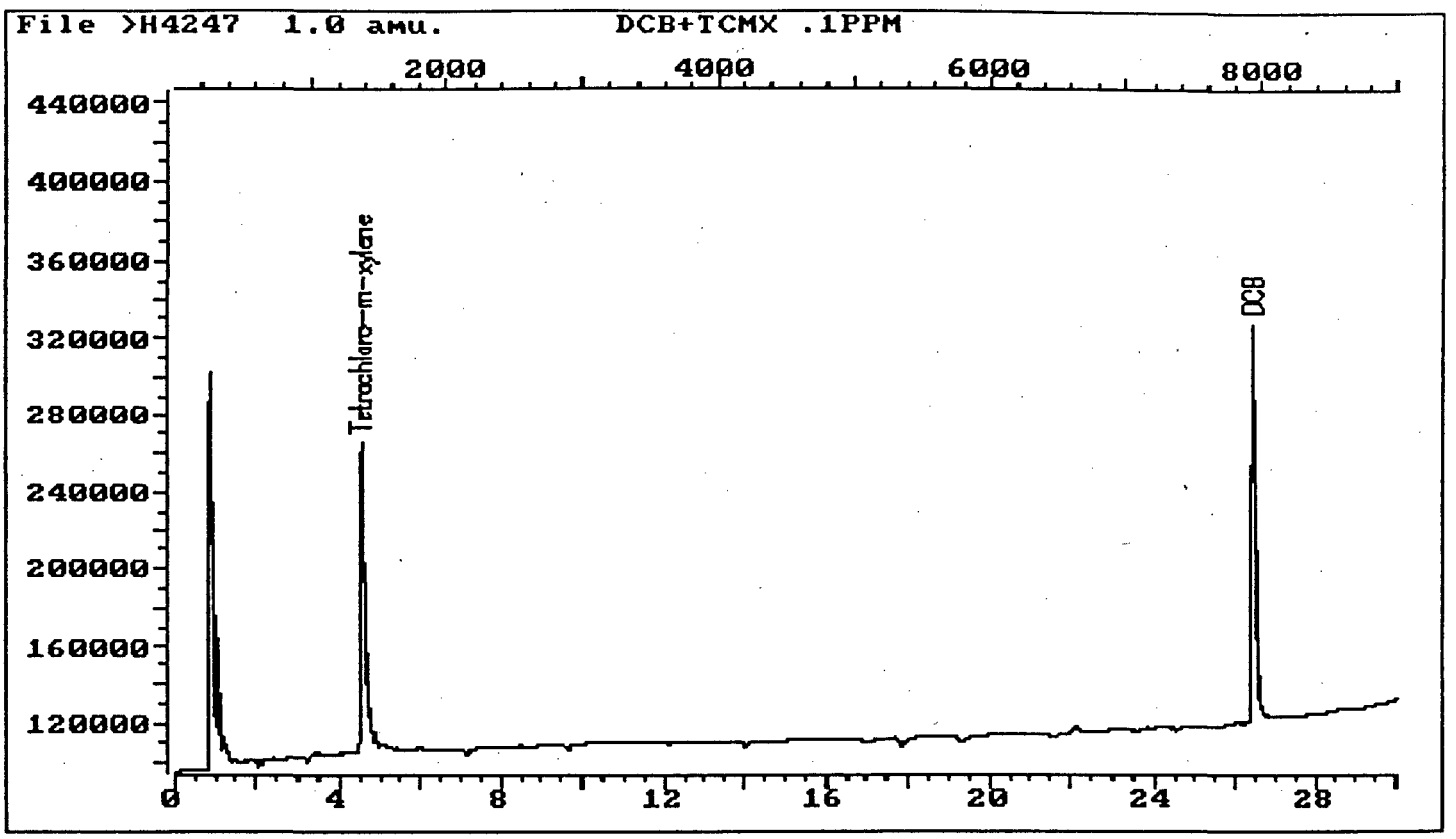
Quant Rev: 7
Quant Time: 990930 09:14
Injected at: 990928 21:30
Dilution Factor: 1.00000
Instrument ID: H

ID File: ID8PCB::G5
Title: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990428 12:12
Last Qcal Time: 990624 09:48

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	4.56	1368	1295670	1.27	ug/L	100
23)	#DCB	26.43	7930	1614590	1.43	ug/L	100

Compound uses ESTD

527



Data File: >H4247::G1 Quant Output File: ^H4247::QT
Name: DCB+TCMX .1PPM Instrument ID: H
Misc:

Id File: ID8PCB::G5
Title: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990428 12:12 Last Qcal Time: 990624 09:48

Operator ID: CLIFF
Quant Time : 990930 09:14
Injected at: 990928 21:30

528

700626

QUANT REPORT

Operator ID: CLIFF
Output File: ^G4248::QT
Data File: >G4248::G1
Name: DCB+TCMX .05PPM
Misc:

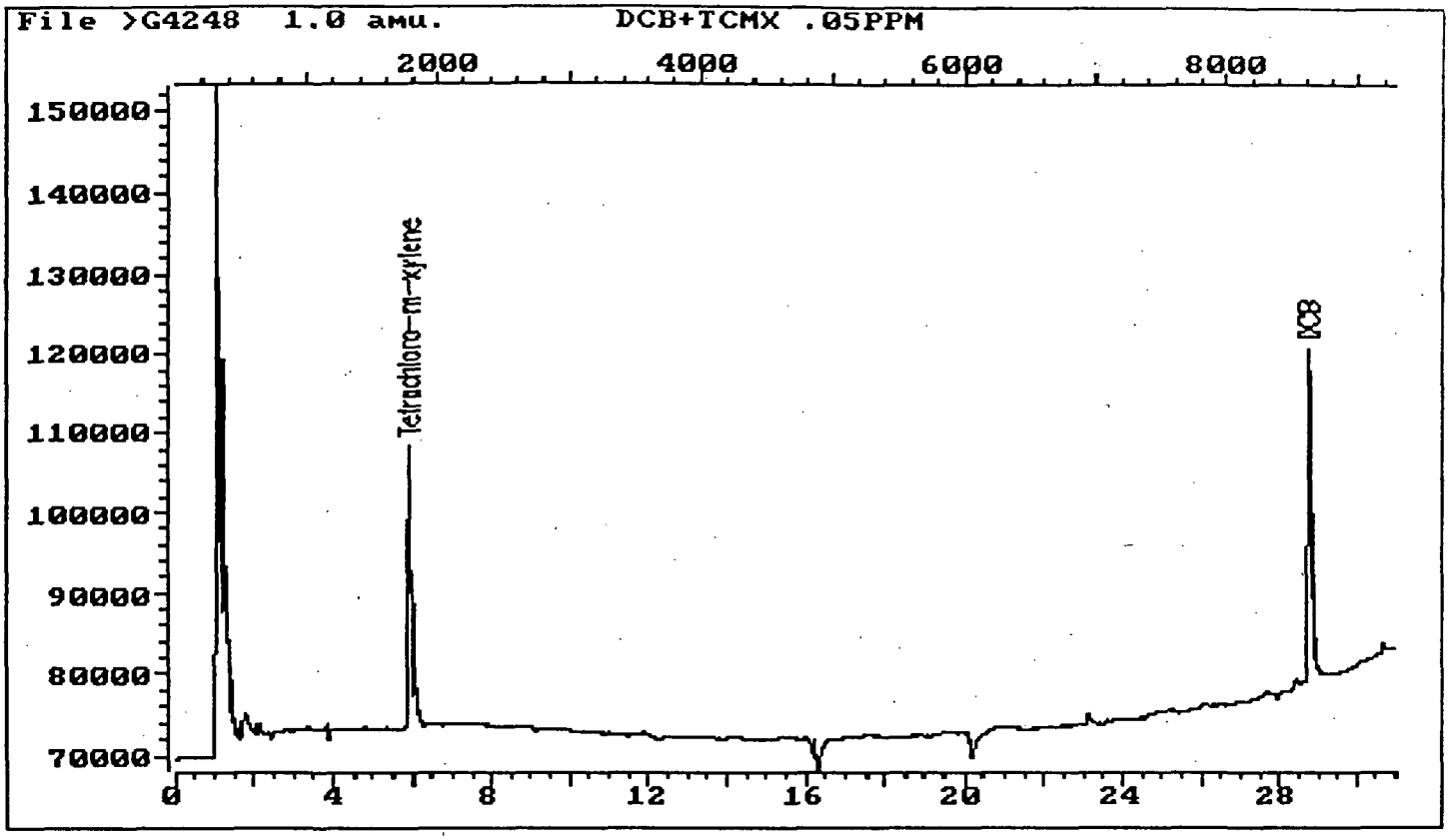
Quant Rev: 7
Quant Time: 990929 14:45
Injected at: 990928 21:30
Dilution Factor: 1.00000
Instrument ID: G

ID File: ID7PCB::G5
Title: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990427 16:22
Last Qcal Time: 990901 08:34

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	5.89	1767	216798	.586	ug/L	100
23)	#DCB	28.73	8620	320121	.783	ug/L	100

Compound uses ESTD

529



Data File: >G4248::G1 Quant Output File: ^G4248::QT
Name: DCB+TCMX .05PPM Instrument ID: G
Misc:

Id File: ID7PCB::G5
Title: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990427 16:22 Last Qcal Time: 990901 08:34

Operator ID: CLIFF
Quant Time : 990929 14:45
Injected at: 990928 21:30

530

700628

QUANT REPORT

Operator ID: CLIFF
Output File: ^H4248::QT
Data File: >H4248::G1
Name: DCB+TCMX .05PPM
Misc:

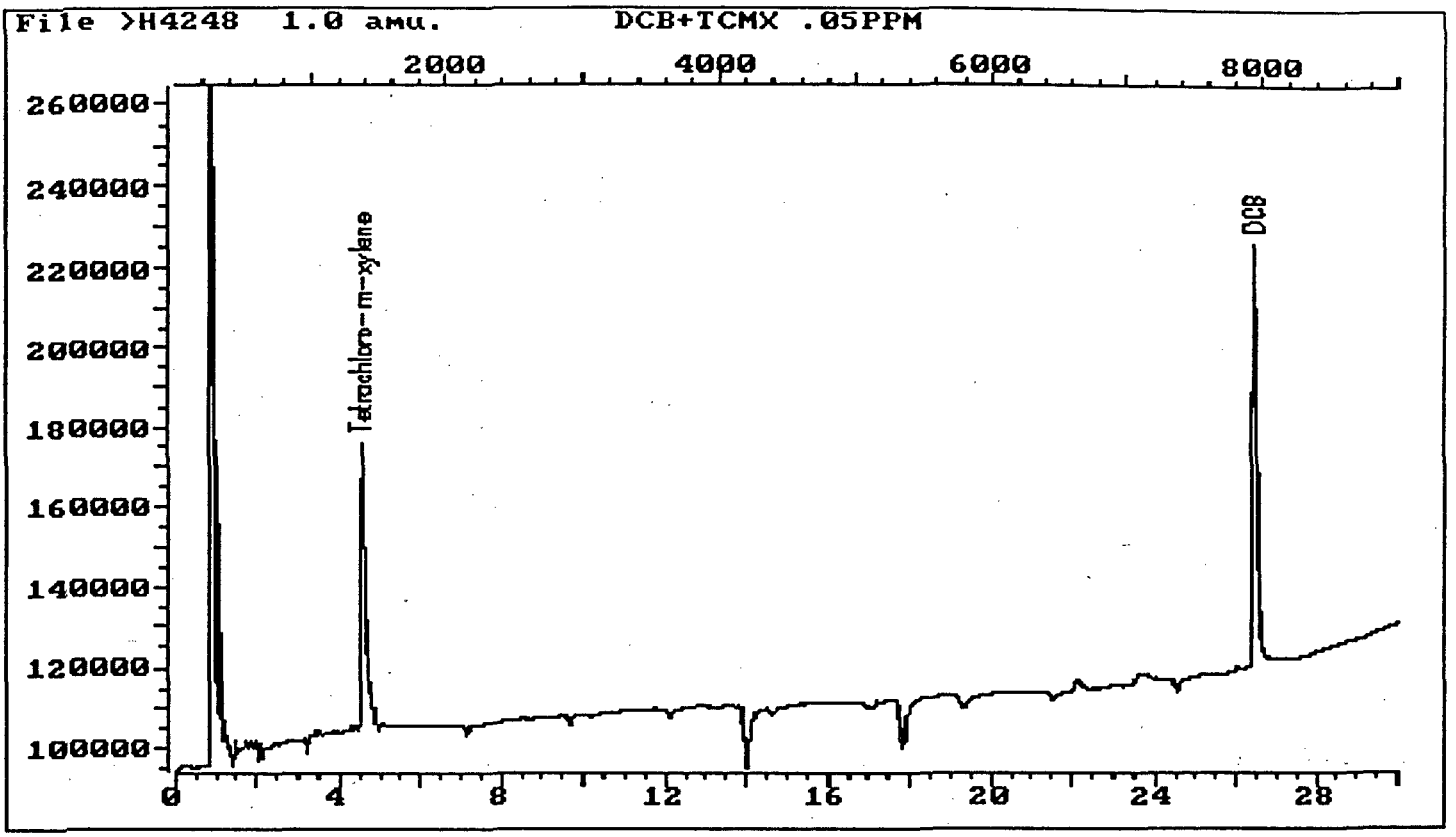
Quant Rev: 7
Quant Time: 990930 09:15
Injected at: 990928 22:07
Dilution Factor: 1.00000
Instrument ID: H

ID File: ID8PCB::G5
Title: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990428 12:12
Last Qcal Time: 990624 09:48

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	4.57	1371	609844	.597	ug/L	100
23)	#DCB	26.44	7931	841092	.744	ug/L	100

Compound uses ESTD

531



Data File: >H4248::G1 Quant Output File: ^H4248::QT
Name: DCB+TCMX .05PPM Instrument ID: H
Misc:

Id File: ID8PCB::G5
Title: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990428 12:12 Last Qcal Time: 990624 09:48

Operator ID: CLIFF
Quant Time : 990930 09:15
Injected at: 990928 22:07

532

QUANT REPORT

Operator ID: CLIFF
Output File: ^G4249::QT
Data File: >G4249::G1
Name: DCB+TCMX .02PPM
Misc:

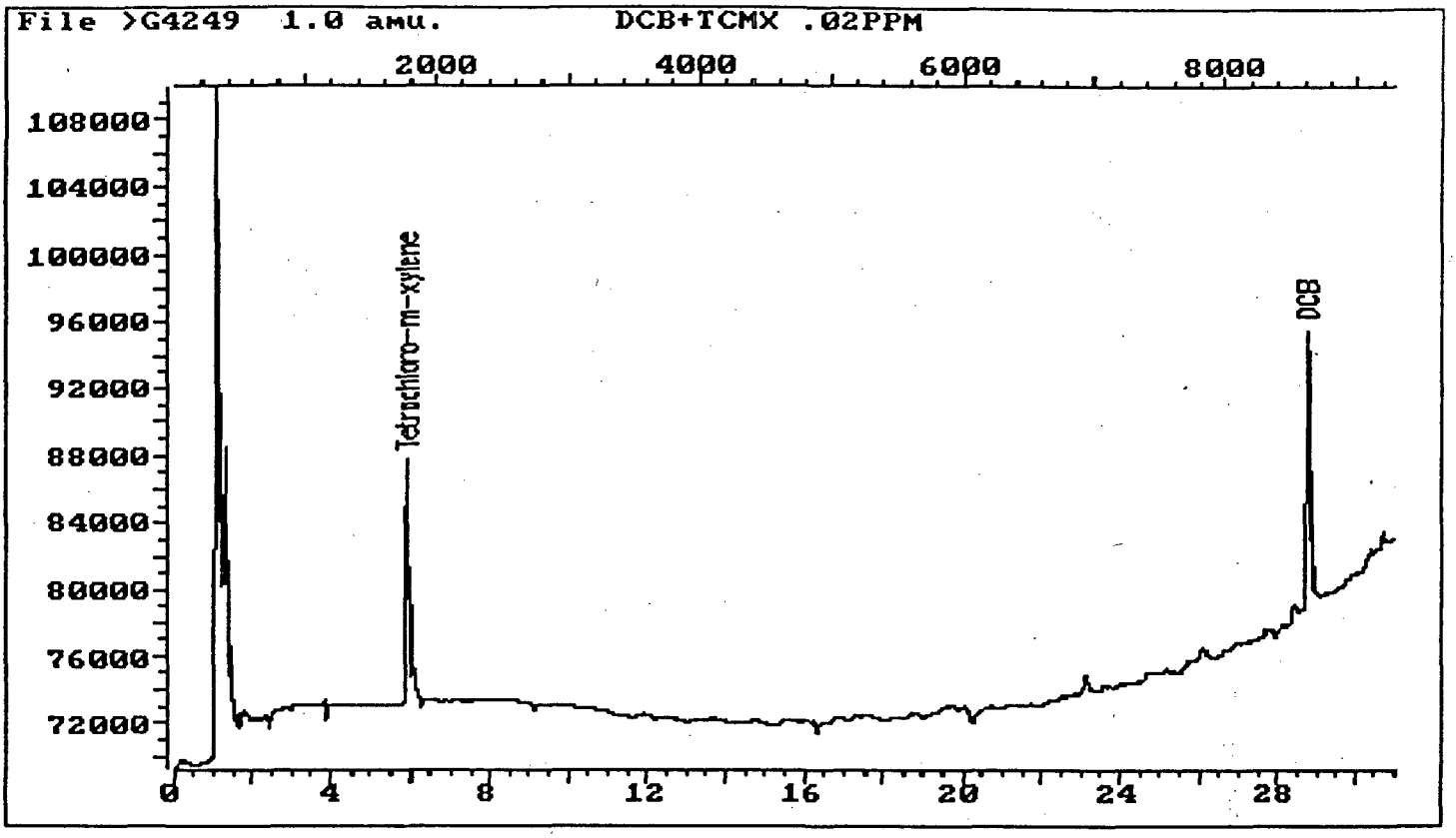
Quant Rev: 7
Quant Time: 990929 14:45
Injected at: 990928 22:07
Dilution Factor: 1.00000
Instrument ID: G

ID File: ID7PCB::G5
Title: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990427 16:22
Last Qcal Time: 990901 08:34

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	5.89	1766	95024	.257	ug/L	100
23)	#DCB	28.73	8620	119827	.293	ug/L	100

Compound uses ESTD

533



Data File: >G4249::G1 Quant Output File: ^G4249::QT
Name: DCB+TCMX .02PPM Instrument ID: G
Misc:

Id File: ID7PCB::G5
Title: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990427 16:22 Last Qcal Time: 990901 08:34

Operator ID: CLIFF
Quant Time : 990929 14:45
Injected at: 990928 22:07

534

QUANT REPORT

Operator ID: CLIFF
Output File: ^H4249::QT
Data File: >H4249::G1
Name: DCB+TCMX .02PPM
Misc:

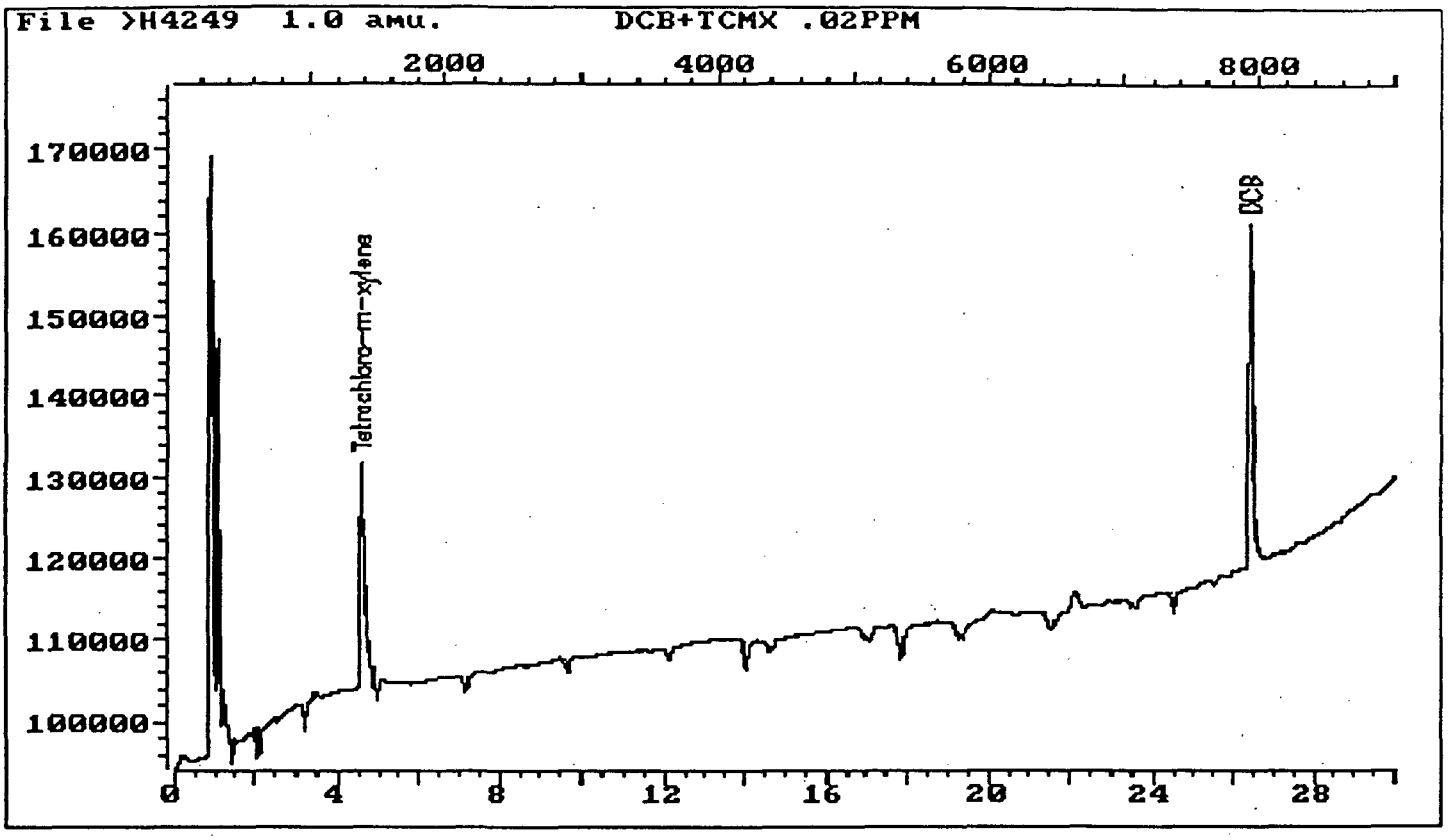
Quant Rev: 7
Quant Time: 990930 09:16
Injected at: 990928 22:44
Dilution Factor: 1.00000
Instrument ID: H

ID File: ID8PCB::G5
Title: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990428 12:12
Last Qcal Time: 990624 09:48

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	4.58	1374	281698	.276	ug/L	100
23)	#DCB	26.44	7931	334872	.296	ug/L	100

Compound uses ESTD

535



Data File: >H4249::G1 Quant Output File: ^H4249::QT
Name: DCB+TCMX .02PPM Instrument ID: H
Misc:

Id File: ID8PCB::G5
Title: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990428 12:12 Last Qcal Time: 990624 09:48

Operator ID: CLIFF
Quant Time : 990930 09:16
Injected at: 990928 22:44

536

Operator ID: JEFF
Output File: ^G4729::QT
Data File: >G4729::G4
Name: A1016/1260
Misc:

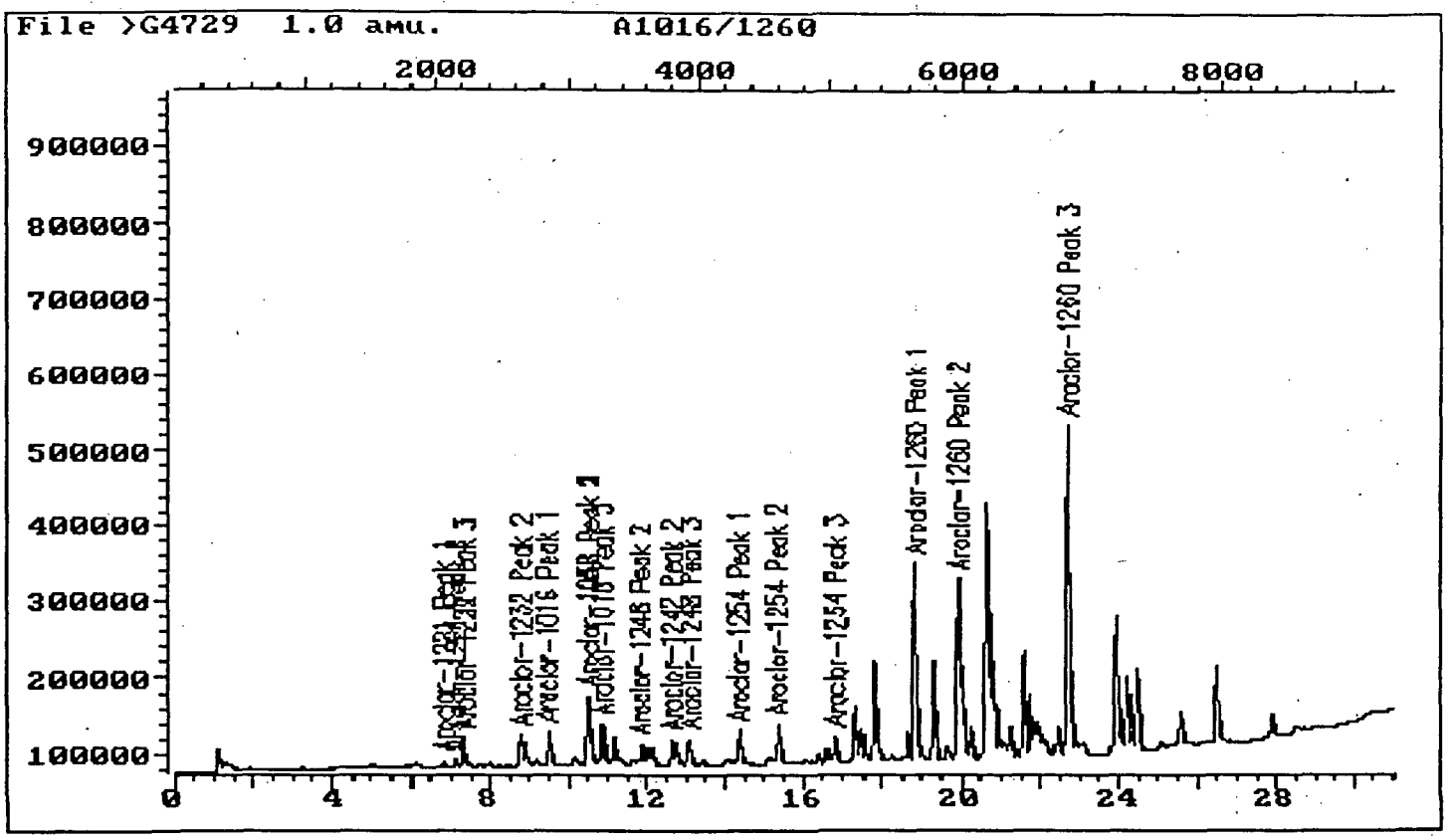
Quant Rev: 7
Quant Time: 991207 18:06
Injected at: 991207 17:33
Dilution Factor: 1.00000
Instrument ID: G

ID File: ID7PCB::G5
Title: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990930 11:54
Last Qcal Time: 991202 17:34

	Compound	R.T.	Scan#	Area	Conc	Units	q
2)	#Aroclor-1016 Peak 1	9.43	2829	234277	25.93	ug/L	100
3)	#Aroclor-1016 Peak 2	10.49	3147	527879M	24.12	ug/L	100
4)	#Aroclor-1016 Peak 3	10.84	3253	172735M	25.61	ug/L	100
5)	#Aroclor-1221 Peak 1	6.80	2039	30835	27.46	ug/L	100
6)	#Aroclor-1221 Peak 2	7.13	2138	35115	27.73	ug/L	100
7)	#Aroclor-1221 Peak 3	7.33	2198	176476	26.29	ug/L	100
8)	#Aroclor-1232 Peak 1	7.33	2198	176476	26.29	ug/L	100
9)	#Aroclor-1232 Peak 2	8.75	2625	200366	27.43	ug/L	100
10)	#Aroclor-1232 Peak 3	10.49	3147	695319	26.92	ug/L	100
11)	#Aroclor-1242 Peak 1	10.49	3147	695319	26.92	ug/L	100
12)	#Aroclor-1242 Peak 2	12.59	3778	192541	26.57	ug/L	100
13)	#Aroclor-1242 Peak 3	13.08	3925	241870	26.64	ug/L	100
14)	#Aroclor-1248 Peak 1	10.49	3147	695319	26.92	ug/L	100
15)	#Aroclor-1248 Peak 2	11.80	3539	147741	27.67	ug/L	100
16)	#Aroclor-1248 Peak 3	13.08	3925	241870	26.64	ug/L	100
17)	#Aroclor-1254 Peak 1	14.32	4297	295673	26.96	ug/L	100
18)	#Aroclor-1254 Peak 2	15.30	4589	298223	22.43	ug/L	100
19)	#Aroclor-1254 Peak 3	16.78	5034	224966	26.29	ug/L	100
20)	#Aroclor-1260 Peak 1	18.80	5640	1662013	25.73	ug/L	100
21)	#Aroclor-1260 Peak 2	19.90	5970	1663146	24.98	ug/L	100
22)	#Aroclor-1260 Peak 3	22.69	6806	2750517	25.27	ug/L	100

Compound uses ESTD

537



Data File: >G4729::G4 Quant Output File: ^G4729::QT
Name: A1016/1260 Instrument ID: G
Misc:

Id File: ID7PCB::G5
Title: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990930 11:54 Last Qcal Time: 991202 17:34

Operator ID: JEFF
Quant Time : 991207 18:06
Injected at: 991207 17:33

538

Operator ID: JEFF
Output File: ^H4729::QT
Data File: >H4729::G4
Name: A1016/1260
Misc:

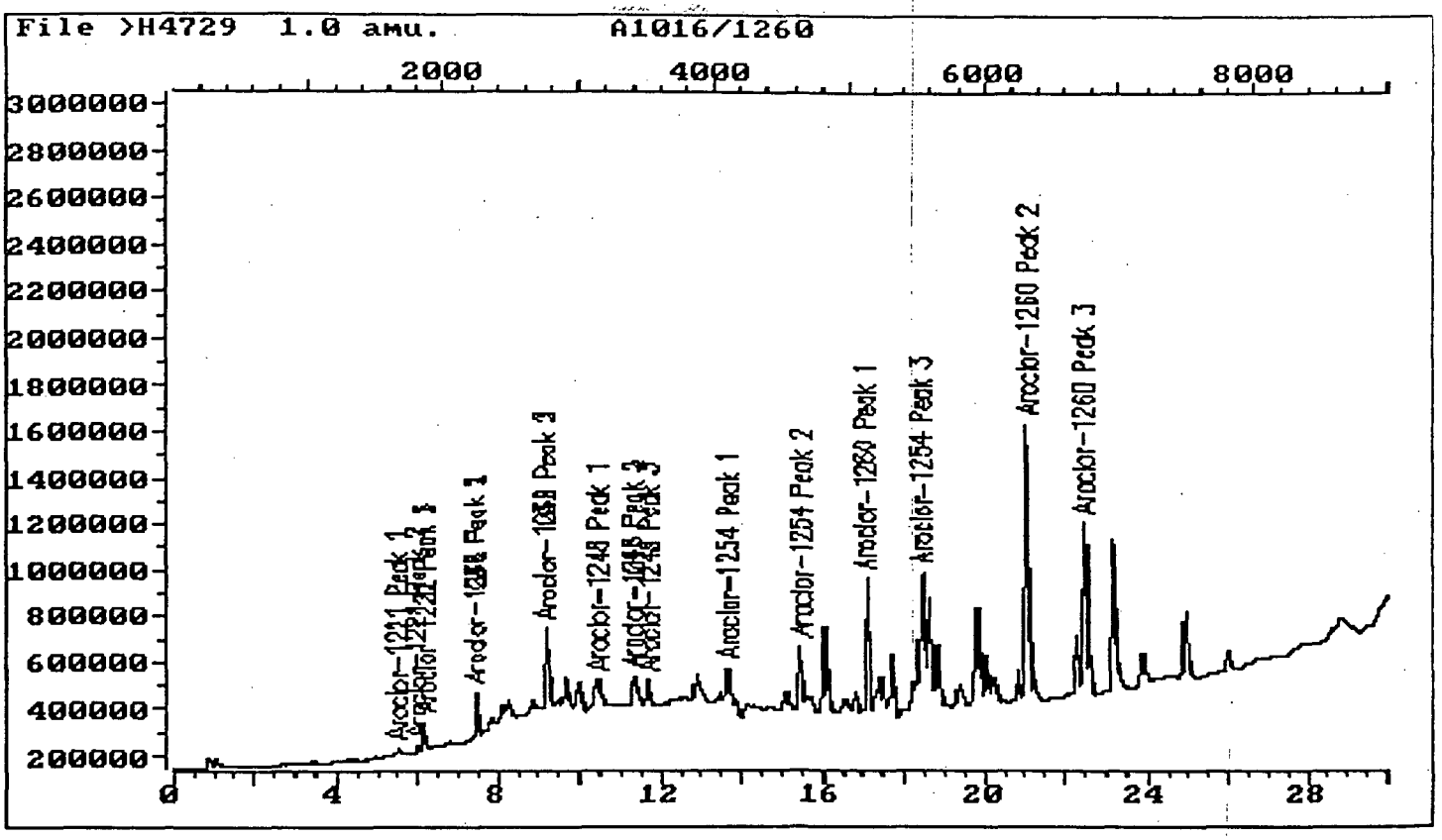
Quant Rev: 7
Quant Time: 991207 18:43
Injected at: 991207 18:10
Dilution Factor: 1.00000
Instrument ID: H

ID File: ID8PCB::G5
Title: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990930 11:58
Last Qcal Time: 991202 18:12

	Compound	R.T.	Scan#	Area	Conc	Units	q
2)	#Aroclor-1016 Peak 1	7.42	2226	923945	25.52	ug/L	100
3)	#Aroclor-1016 Peak 2	9.14	2743	1989037M	26.30	ug/L	100
4)	#Aroclor-1016 Peak 3	11.30	3389	838052	25.01	ug/L	100
5)	#Aroclor-1221 Peak 1	5.50	1650	91995M	26.17	ug/L	
6)	#Aroclor-1221 Peak 2	5.96	1789	128847	29.53	ug/L	100
7)	#Aroclor-1221 Peak 3	6.16	1849	584700	25.72	ug/L	100
8)	#Aroclor-1232 Peak 1	6.16	1849	584700	25.72	ug/L	100
9)	#Aroclor-1232 Peak 2	7.42	2226	923945	22.61	ug/L	100
10)	#Aroclor-1232 Peak 3	9.14	2743	2089006	24.09	ug/L	100
11)	#Aroclor-1242 Peak 1	7.42	2226	923945	22.61	ug/L	100
12)	#Aroclor-1242 Peak 2	9.14	2743	2089006	24.09	ug/L	100
13)	#Aroclor-1242 Peak 3	11.69	3507	624878	19.10	ug/L	100
14)	#Aroclor-1248 Peak 1	10.44	3131	1221696	23.35	ug/L	100
15)	#Aroclor-1248 Peak 2	11.30	3389	838052	21.47	ug/L	100
16)	#Aroclor-1248 Peak 3	11.69	3507	624878	19.10	ug/L	100
17)	#Aroclor-1254 Peak 1	13.66	4097	796372	25.05	ug/L	100
18)	#Aroclor-1254 Peak 2	15.44	4633	1632413	23.86	ug/L	100
19)	#Aroclor-1254 Peak 3	18.42	5526	3589531	26.90	ug/L	100
20)	#Aroclor-1260 Peak 1	17.04	5113	3182859M	26.02	ug/L	100
21)	#Aroclor-1260 Peak 2	21.06	6317	8387207	26.65	ug/L	100
22)	#Aroclor-1260 Peak 3	22.45	6734	5458209	26.20	ug/L	100

Compound uses ESTD

539



Data File: >H4729::G4 Quant Output File: ^H4729::QT
Name: A1016/1260 Instrument ID: H
Misc:

Id File: ID8PCB::G5
Title: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990930 11:58 Last Qcal Time: 991202 18:12

Operator ID: JEFF
Quant Time : 991207 18:43
Injected at: 991207 18:10

540

QUANT REPORT

Operator ID: JEFF
Output File: ^G4730::QT
Data File: >G4730::G4
Name: DCB+TCMX
Misc:

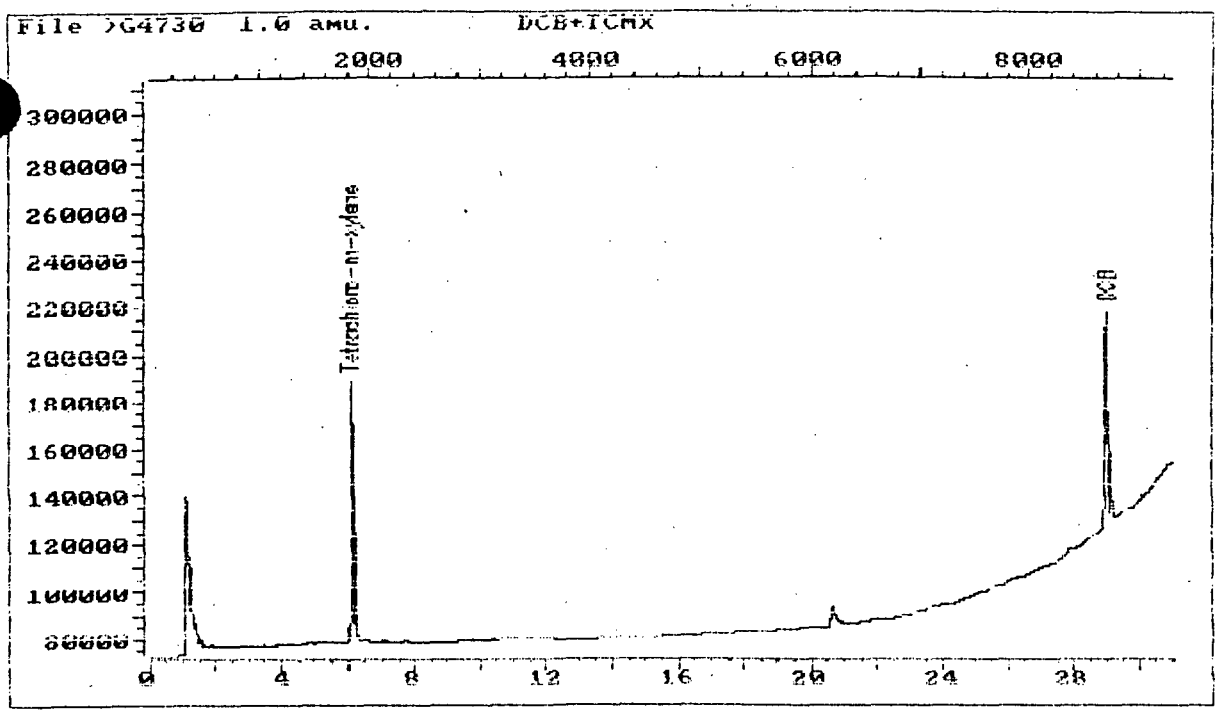
Quant Rev: 7
Quant Time: 991207 18:44
Injected at: 991207 18:10
Dilution Factor: 1.00000
Instrument ID: G

ID File: ID7PCB::G5
Title: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990930 11:54
Last Qcal Time: 991202 17:34

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	6.07	1822	486465	.963	ug/L	100
23)	#DCB	28.98	8694	609319M	.991	ug/L	100

Compound uses ESTD

541



Data File: >G4730::G4 Quant Output File: ^G4730::QT
Name: DCB+TCMX Instrument ID: G
Misc:

Id File: ID7PCB::G5
Title: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990930 11:54 Last Qcal Time: 991202 17:34

Operator ID: JEFF
Quant Time : 991207 18:44
Injected at: 991207 18:10

542

QUANT REPORT

Operator ID: JEFF
Output File: ^H4730::QT
Data File: >H4730::G4
Name: DCB+TCMX
Misc:

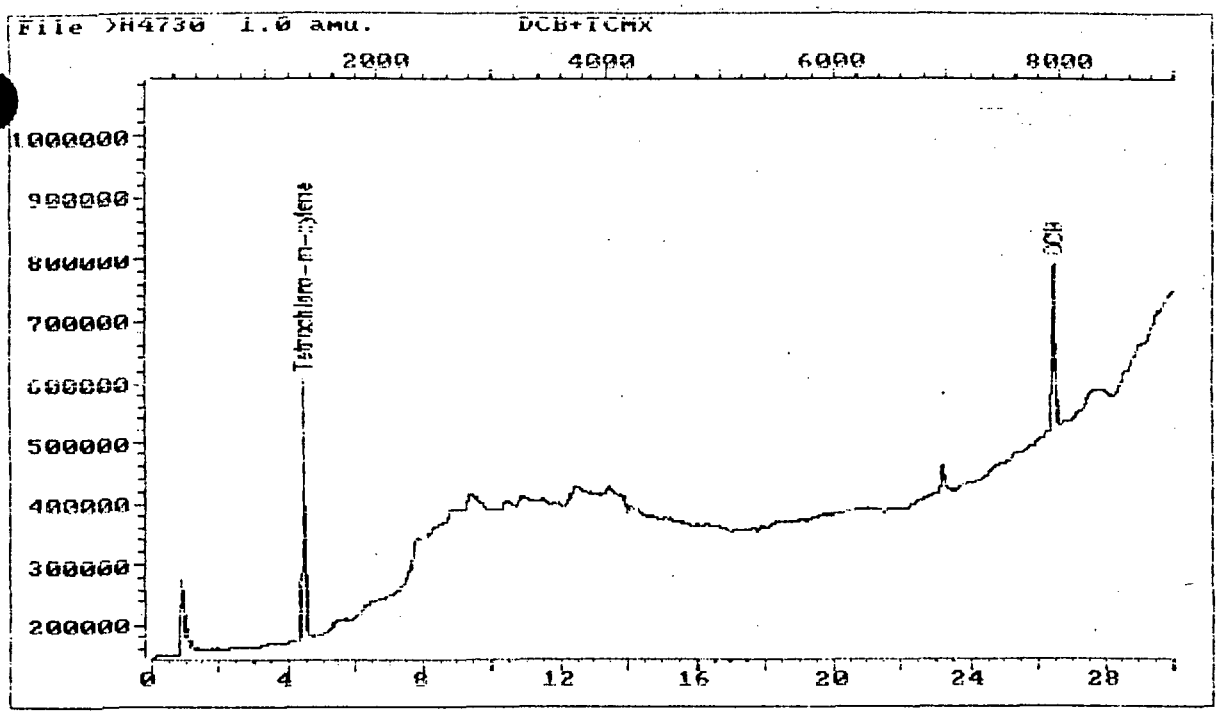
Quant Rev: 7
Quant Time: 991207 19:20
Injected at: 991207 18:47
Dilution Factor: 1.00000
Instrument ID: H

ID File: ID8PCB::G5
Title: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990930 11:58
Last Qcal Time: 991202 18:12

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	4.45	1335	1410802M	1.00	ug/L	100
23)	#DCB	26.47	7940	1764081M	1.04	ug/L	100

Compound uses ESTD

543



Data File: >H4730::G4 Quant Output File: ^H4730::QT
Name: DCB+TCMX Instrument ID: H
Misc:

Id File: ID8PCB::G5
Title: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990930 11:58 Last Qcal Time: 991202 18:12

Operator ID: JEFF
Quant Time : 991207 19:20
Injected at: 991207 18:47

544

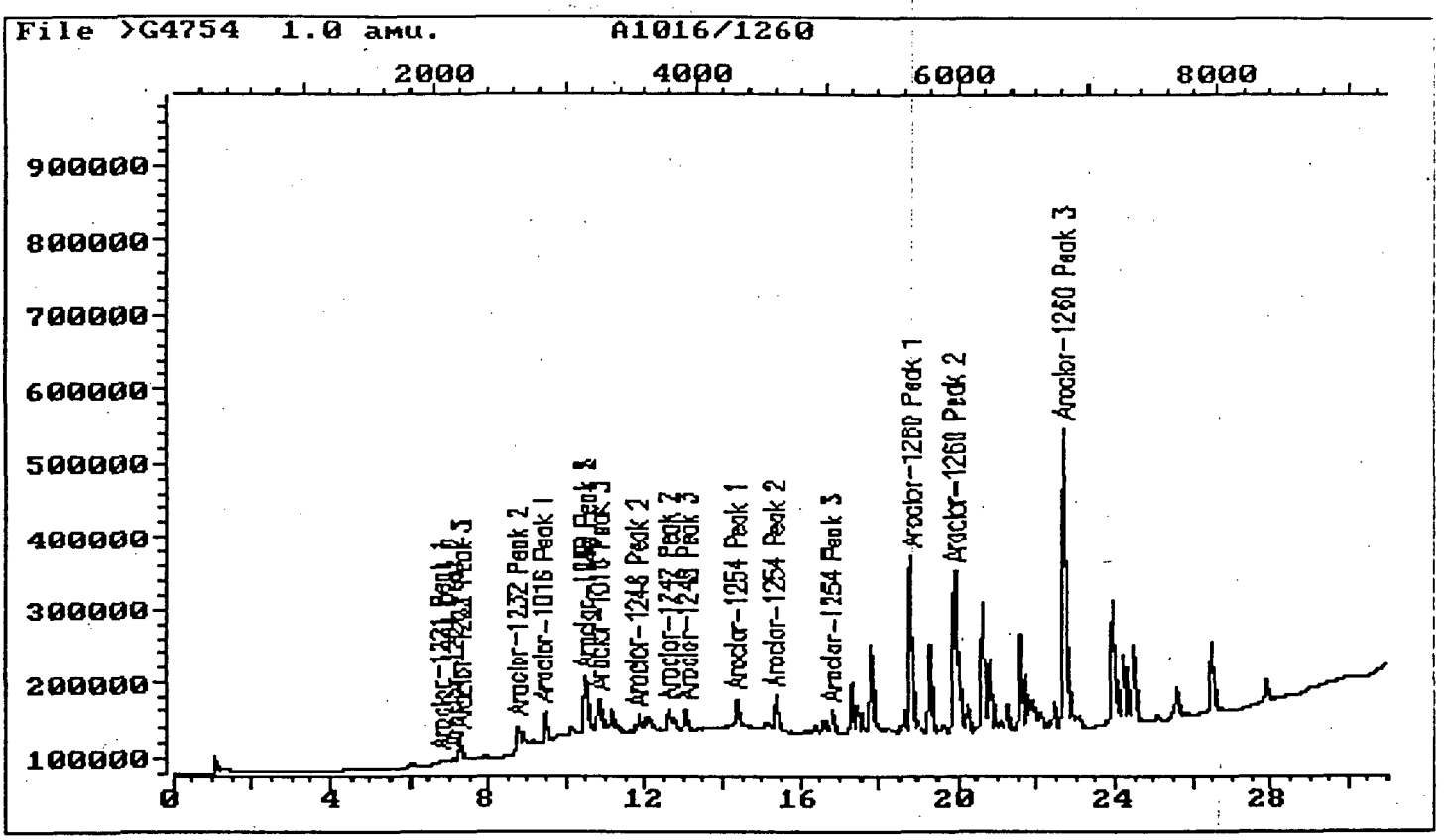
Operator ID: JEFF Quant Rev: 7 Quant Time: 991208 09:34
Output File: ^G4754::QT Injected at: 991208 08:59
Data File: >G4754::G4 Dilution Factor: 1.00000
Name: A1016/1260 Instrument ID: G
Misc:

ID File: ID7PCB::G5
Title: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990930 11:54 Last Qcal Time: 991207 17:33

	Compound	R.T.	Scan#	Area	Conc	Units	q
2)	#Aroclor-1016 Peak 1	9.40	2820	232941	24.86	ug/L	100
3)	#Aroclor-1016 Peak 2	10.47	3141	536572M	25.41	ug/L	100
4)	#Aroclor-1016 Peak 3	10.82	3247	174475M	25.25	ug/L	100
5)	#Aroclor-1221 Peak 1	6.77	2030	35433M	28.73	ug/L	100
6)	#Aroclor-1221 Peak 2	7.10	2130	30670	21.84	ug/L	100
7)	#Aroclor-1221 Peak 3	7.30	2190	168001	23.80	ug/L	100
8)	#Aroclor-1232 Peak 1	7.30	2190	168001	23.80	ug/L	100
9)	#Aroclor-1232 Peak 2	8.72	2616	256990	32.07	ug/L	100
10)	#Aroclor-1232 Peak 3	10.47	3141	638644	22.96	ug/L	100
11)	#Aroclor-1242 Peak 1	10.47	3141	638644	22.96	ug/L	100
12)	#Aroclor-1242 Peak 2	12.57	3771	161417	20.96	ug/L	100
13)	#Aroclor-1242 Peak 3	13.06	3918	213396	22.06	ug/L	100
14)	#Aroclor-1248 Peak 1	10.47	3141	638644	22.96	ug/L	100
15)	#Aroclor-1248 Peak 2	11.77	3532	114018	19.29	ug/L	100
16)	#Aroclor-1248 Peak 3	13.06	3918	213396	22.06	ug/L	100
17)	#Aroclor-1254 Peak 1	14.30	4291	251570	21.27	ug/L	100
18)	#Aroclor-1254 Peak 2	15.28	4584	269973	22.63	ug/L	100
19)	#Aroclor-1254 Peak 3	16.77	5031	199650	22.19	ug/L	100
20)	#Aroclor-1260 Peak 1	18.79	5637	1631778	24.55	ug/L	100
21)	#Aroclor-1260 Peak 2	19.89	5968	1620222	24.35	ug/L	100
22)	#Aroclor-1260 Peak 3	22.69	6806	2733355	24.84	ug/L	100

Compound uses ESTD

545



Data File: >G4754::G4 Quant Output File: ^G4754::QT
Name: A1016/1260 Instrument ID: G
Misc:

Id File: ID7PCB::G5
Title: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990930 11:54 Last Qcal Time: 991207 17:33

Operator ID: JEFF
Quant Time : 991208 09:34
Injected at: 991208 08:59

546

QUANT REPORT

Operator ID: JEFF
Output File: ^H4754::QT
Data File: >H4754::G4
Name: A1016/1260
Misc:

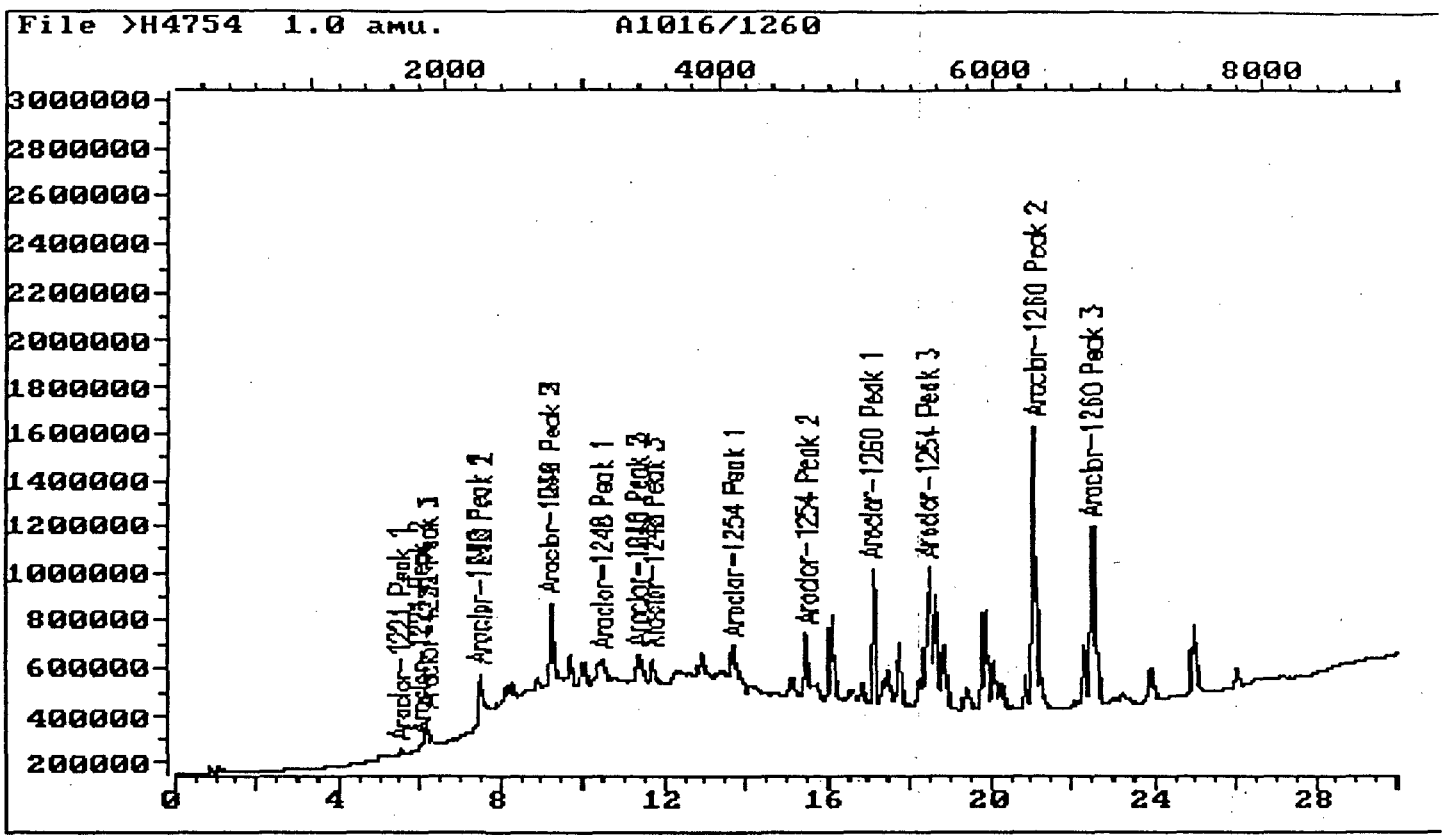
Quant Rev: 7
Quant Time: 991208 10:11
Injected at: 991208 09:37
Dilution Factor: 1.00000
Instrument ID: H

ID File: ID8PCB::G5
Title: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990930 11:58
Last Qcal Time: 991207 18:10

	Compound	R.T.	Scan#	Area	Conc	Units	q
2)	#Aroclor-1016 Peak 1	7.44	2232	869440M	23.53	ug/L	10C
3)	#Aroclor-1016 Peak 2	9.17	2750	1950982M	24.52	ug/L	10C
4)	#Aroclor-1016 Peak 3	11.32	3395	800784M	23.89	ug/L	10C
5)	#Aroclor-1221 Peak 1	5.52	1655	70595	19.18	ug/L	10C
6)	#Aroclor-1221 Peak 2	5.99	1796	136581	26.50	ug/L	10C
7)	#Aroclor-1221 Peak 3	6.18	1855	520657	22.26	ug/L	10C
8)	#Aroclor-1232 Peak 1	6.18	1855	520657	22.26	ug/L	10C
9)	#Aroclor-1232 Peak 2	7.44	2232	3486848	94.35	ug/L	10C
10)	#Aroclor-1232 Peak 3	9.17	2750	2221223	26.58	ug/L	10C
11)	#Aroclor-1242 Peak 1	7.44	2232	3486848	94.35	ug/L	10C
12)	#Aroclor-1242 Peak 2	9.17	2750	2221223	26.58	ug/L	10C
13)	#Aroclor-1242 Peak 3	11.71	3513	770893	30.84	ug/L	100
14)	#Aroclor-1248 Peak 1	10.46	3137	1378316	28.20	ug/L	100
15)	#Aroclor-1248 Peak 2	11.32	3395	940189	28.05	ug/L	100
16)	#Aroclor-1248 Peak 3	11.71	3513	770893	30.84	ug/L	100
17)	#Aroclor-1254 Peak 1	13.68	4103	727600	22.84	ug/L	100
18)	#Aroclor-1254 Peak 2	15.46	4639	1550374	23.74	ug/L	10C
19)	#Aroclor-1254 Peak 3	18.44	5532	4902586	34.15	ug/L	10C
20)	#Aroclor-1260 Peak 1	17.06	5118	3346750M	26.29	ug/L	10C
21)	#Aroclor-1260 Peak 2	21.07	6322	8729368	26.02	ug/L	10C
22)	#Aroclor-1260 Peak 3	22.47	6740	5586763	25.59	ug/L	10C

Compound uses ESTD

547



Data File: >H4754::G4 Quant Output File: ^H4754::QT
Name: A1016/1260 Instrument ID: H
Misc:

Id File: ID8PCB::G5
Title: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990930 11:58 Last Qcal Time: 991207 18:10

Operator ID: JEFF
Quant Time : 991208 10:11
Injected at: 991208 09:37

548

QUANT REPORT

Operator ID: JEFF
Output File: ^G4732::QT
Data File: >G4732::G4
Name: PBLK17MS
Misc: 12/03/99

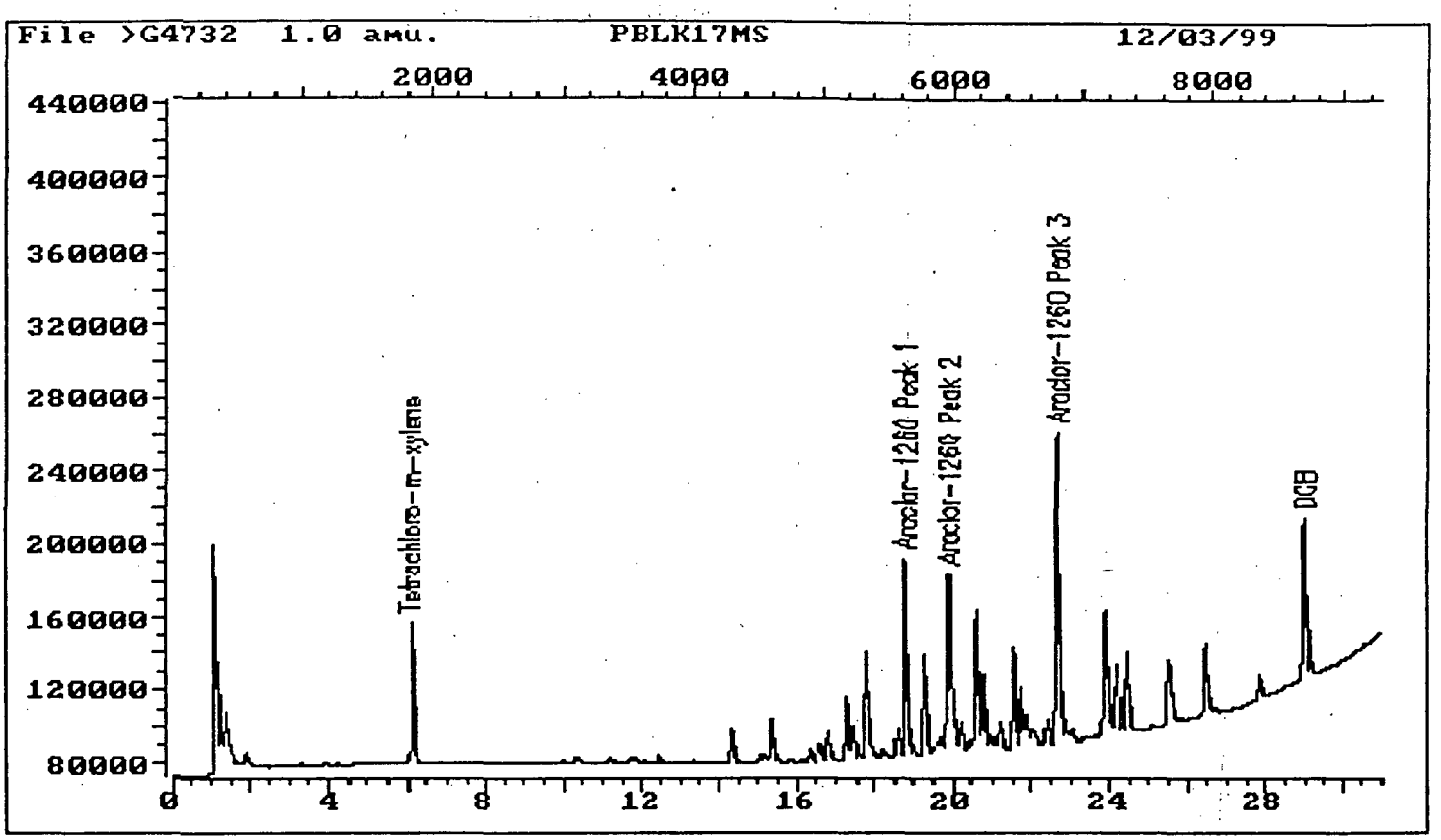
Quant Rev: 7
Quant Time: 991208 07:38
Injected at: 991207 19:24
Dilution Factor: 1.00000
Instrument ID: G

ID File: ID7PCB::G5
Title: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990930 11:54
Last Qcal Time: 991207 17:33

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	6.07	1821	340122	.699	ug/L	100
20)	#Aroclor-1260 Peak 1	18.77	5631	722772	10.87	ug/L	100
21)	#Aroclor-1260 Peak 2	19.88	5963	674603	10.14	ug/L	100
22)	#Aroclor-1260 Peak 3	22.67	6800	1112467	10.11	ug/L	100
23)	#DCB	28.98	8693	560563	.920	ug/L	100

Compound uses ESTD

549



Data File: >G4732::G4 Quant Output File: ^G4732::QT
Name: PBLK17MS Instrument ID: G
Misc: 12/03/99

Id File: ID7PCB::G5
Title: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990930 11:54 Last Qcal Time: 991207 17:33

Operator ID: JEFF
Quant Time : 991208 07:38
Injected at: 991207 19:24

550

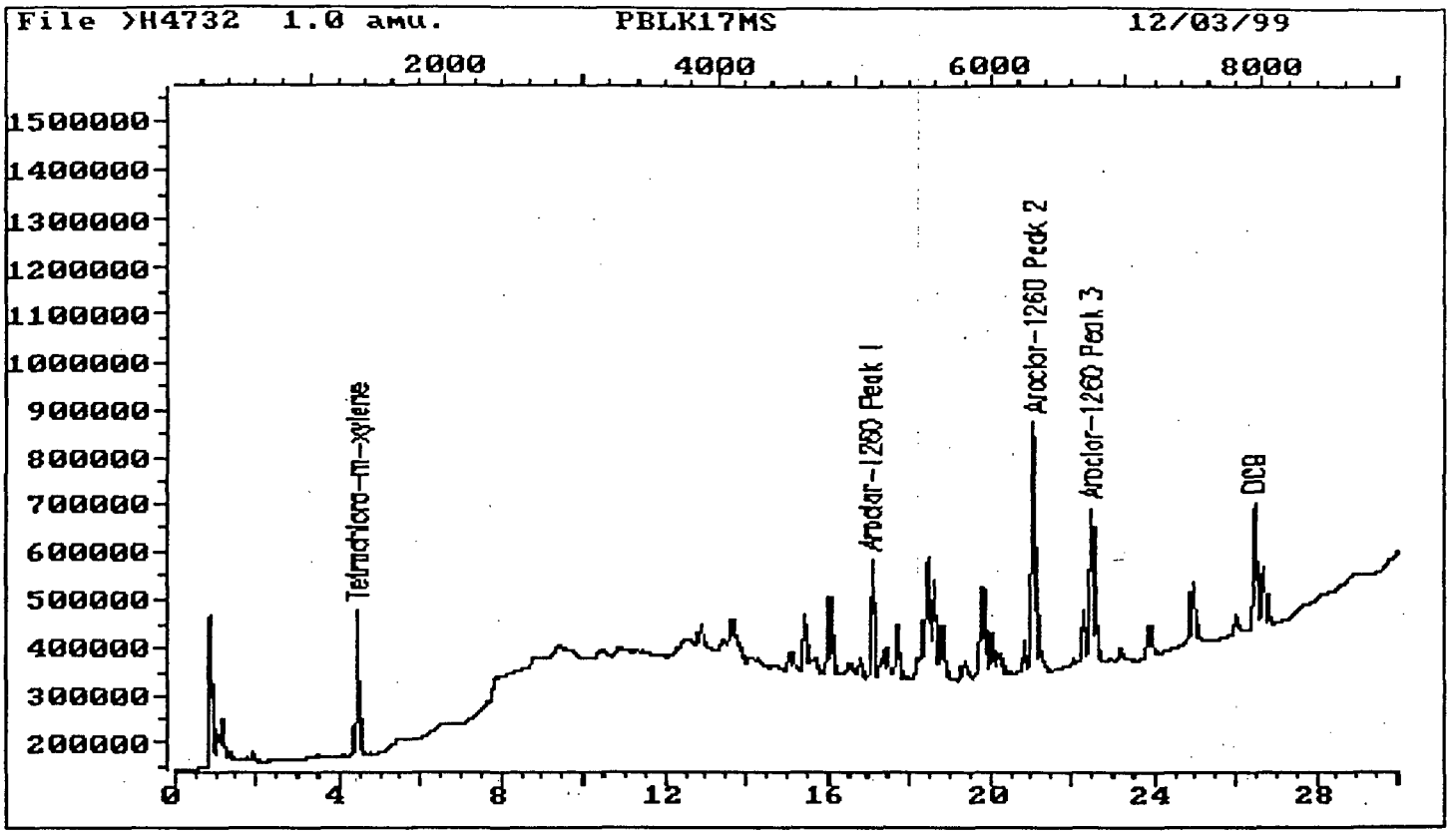
Operator ID: JEFF Quant Rev: 7 Quant Time: 991208 08:35
Output File: ^H4732::QT Injected at: 991207 20:01
Data File: >H4732::G4 Dilution Factor: 1.00000
Name: PBLK17MS Instrument ID: H
Misc: 12/03/99

ID File: ID8PCB::G5
Title: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990930 11:58 Last Qcal Time: 991207 18:10

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	4.45	1336	1200826	.851	ug/L	100
20)	#Aroclor-1260 Peak 1	17.04	5113	1509966	11.86	ug/L	100
21)	#Aroclor-1260 Peak 2	21.06	6318	3739631	11.15	ug/L	100
22)	#Aroclor-1260 Peak 3	22.45	6735	2395327	10.97	ug/L	100
23)	#DCB	26.47	7941	1761482	.999	ug/L	100

Compound uses ESTD

551



Data File: >H4732::G4 Quant Output File: ^H4732::QT
Name: PBLK17MS Instrument ID: H
Misc: 12/03/99

Id File: ID8PCB::G5
Title: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990930 11:58 Last Qcal Time: 991207 18:10

Operator ID: JEFF
Quant Time : 991208 08:35
Injected at: 991207 20:01

552

QUANT REPORT

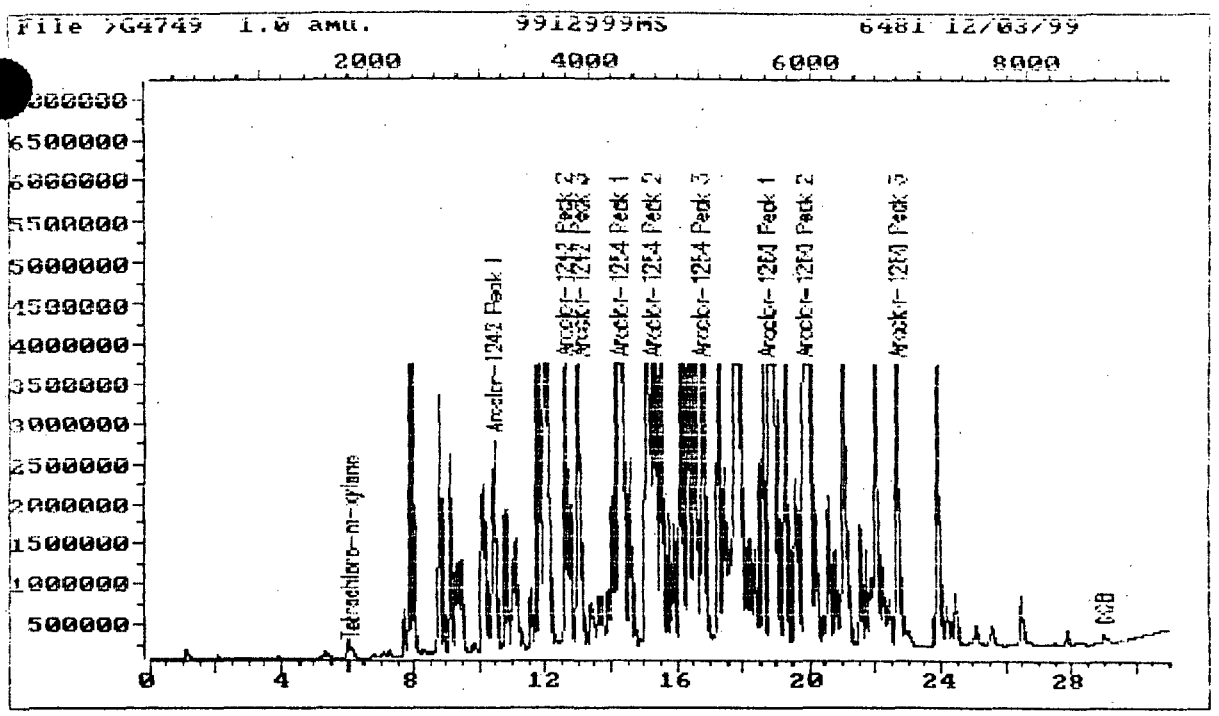
rator ID: JEFF Quant Rev: 7 Quant Time: 991208 07:56
put File: ^G4749::QT Injected at: 991208 05:53
ata File: >G4749::G4 Dilution Factor: 1.00000
ame: 9912999MS Instrument ID: G
isc: 6481 12/03/99 OE SP-4

D File: ID7PCB::G5
itle: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
ast Calibration: 990930 11:54 Last Qcal Time: 991207 17:33

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	6.08	1823	434074M	.892	ug/L	
11)	#Aroclor-1242 Peak 1	10.44	3132	19656820	706.76	ug/L	100
12)	#Aroclor-1242 Peak 2	12.56	3767	17607080	2286.15	ug/L	100
13)	#Aroclor-1242 Peak 3	13.03	3909	31000068M	3204.21	ug/L	
17)	#Aroclor-1254 Peak 1	14.25	4276	57946608M	4899.55	ug/L	
18)	#Aroclor-1254 Peak 2	15.23	4568	34318568M	2876.92	ug/L	
19)	#Aroclor-1254 Peak 3	16.71	5012	38796432M	4311.37	ug/L	
20)	#Aroclor-1260 Peak 1	18.73	5619	3257080	48.99	ug/L	100
21)	#Aroclor-1260 Peak 2	19.85	5955	53829952M	809.16	ug/L	
22)	#Aroclor-1260 Peak 3	22.66	6797	1747995	15.89	ug/L	100
23)	#DCB	28.99	8697	714022	1.17	ug/L	100

ompound uses ESTD

553

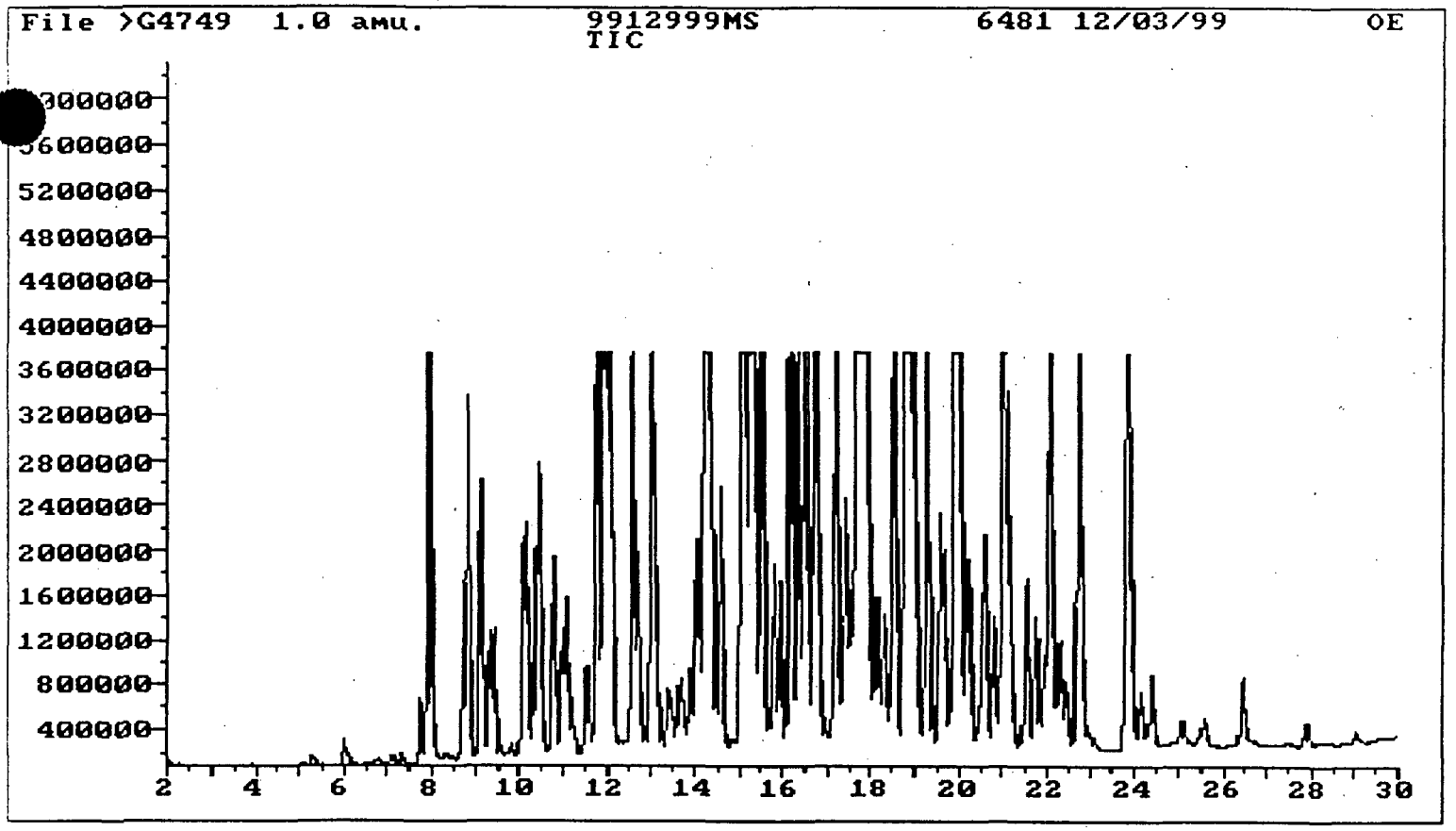


Data File: >G4749::G4 Quant Output File: ^G4749::QT
Name: 9912999MS Instrument ID: G
Misc: 6481 12/03/99 OE SP-4

Id File: ID7PCB::G5
Title: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990930 11:54 Last Qcal Time: 991207 17:33

Operator ID: JEFF
Quant Time : 991208 07:56
Injected at: 991208 05:53

554


File >G4749 1.0 amu.
9912999MS
TIC
6481 12/03/99
OE
6000000
5600000
5200000
4800000
4400000
4000000
3600000
3200000
2800000
2400000
2000000
1600000
1200000
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400000
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555

700653

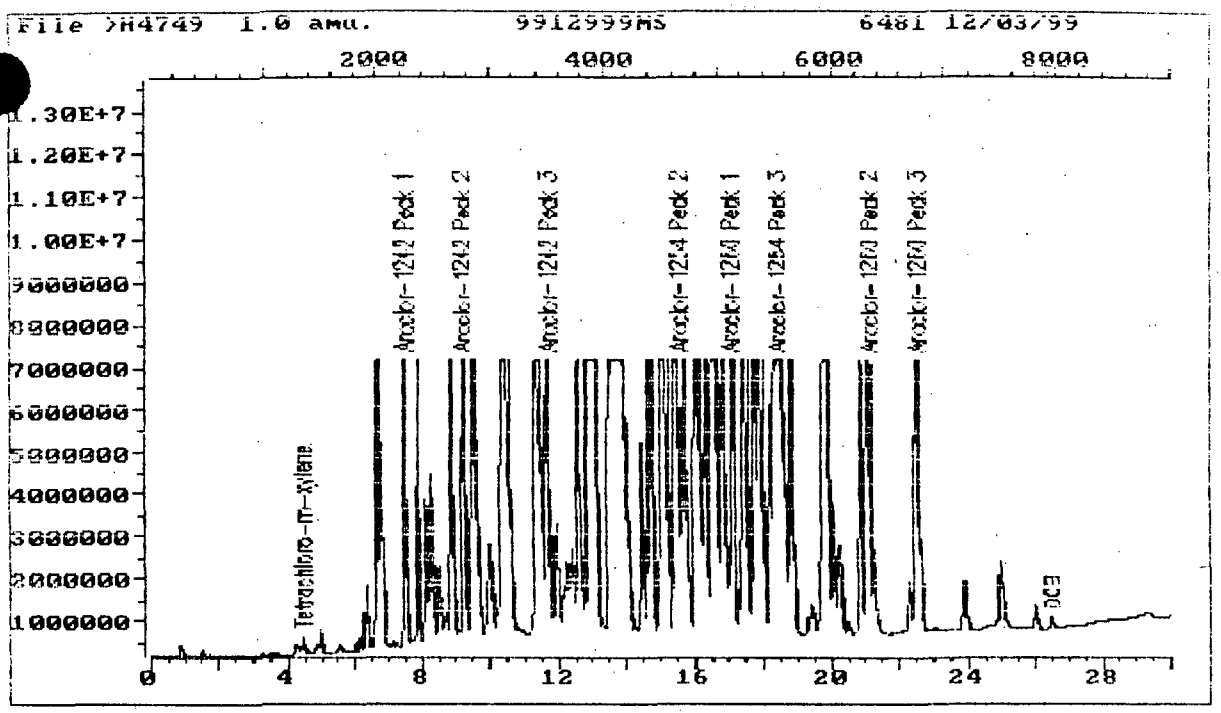
rator ID: JEFF Quant Rev: 7 Quant Time: 991208 09:07
put File: ^H4749::QT Injected at: 991208 06:30
ata File: >H4749::G4 Dilution Factor: 1.00000
ame: 9912999MS Instrument ID: H
isc: 6481 12/03/99 OE SP-4

D File: ID8PCB::G5
itle: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
ast Calibration: 990930 11:58 Last Qcal Time: 991207 18:10

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	4.46	1337	1427732	1.01	ug/L	100
11)	#Aroclor-1242 Peak 1	7.46	2237	42303616M	1144.65	ug/L	100
12)	#Aroclor-1242 Peak 2	9.17	2751	45405504M	543.39	ug/L	100
13)	#Aroclor-1242 Peak 3	11.68	3503	52699912M	2108.41	ug/L	100
18)	#Aroclor-1254 Peak 2	15.53	4659	80117408M	1226.98	ug/L	100
19)	#Aroclor-1254 Peak 3	18.41	5524	.111E+09M	772.99	ug/L	
20)	#Aroclor-1260 Peak 1	17.04	5112	73062560M	573.88	ug/L	100
21)	#Aroclor-1260 Peak 2	21.11	6332	63752952M	190.03	ug/L	100
22)	#Aroclor-1260 Peak 3	22.51	6752	57128968M	261.67	ug/L	100
23)	#DCB	26.48	7943	1911278	1.08	ug/L	100

Compound uses ESTD

556



Data File: >H4749::G4 Quant Output File: ^H4749::QT
Name: 9912999MS Instrument ID: H
Misc: 6481 12/03/99 OE SP-4

Id File: ID8PCB::G5
Title: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990930 11:58 Last Qcal Time: 991207 18:10

Operator ID: JEFF
Quant Time : 991208 09:07
Injected at: 991208 06:30

557

QUANT REPORT

rator ID: JEFF Quant Rev: 7 Quant Time: 991208 07:57
put File: ^G4750::QT Injected at: 991208 06:30
ata File: >G4750::G4 Dilution Factor: 1.00000
ame: 9912999MSD Instrument ID: G
isc: 6481 12/03/99 OE SP-4

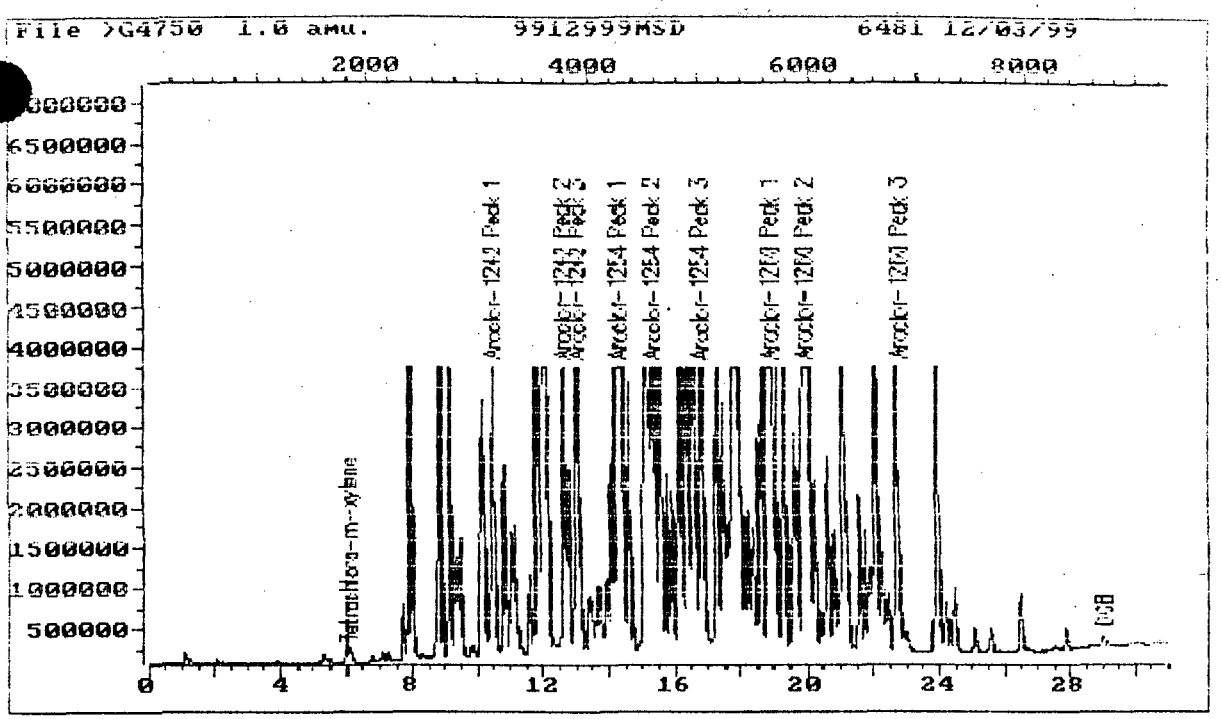
D File: ID7PCB::G5
itle: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
ast Calibration: 990930 11:54 Last Qcal Time: 991207 17:33

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	6.08	1823	479135M	.985	ug/L	
11)	#Aroclor-1242 Peak 1	10.45	3136	25336220	910.96	ug/L	100
12)	#Aroclor-1242 Peak 2	12.55	3765	2391428	310.51	ug/L	100
13)	#Aroclor-1242 Peak 3	13.01	3902	35741008M	3694.24	ug/L	
17)	#Aroclor-1254 Peak 1	14.25	4275	59898848M	5064.62	ug/L	
18)	#Aroclor-1254 Peak 2	15.27	4580	33435456M	2802.89	ug/L	
19)	#Aroclor-1254 Peak 3	16.73	5019	40694288M	4522.27	ug/L	
20)	#Aroclor-1260 Peak 1	18.81	5642	67926064M	1021.74	ug/L	100
21)	#Aroclor-1260 Peak 2	19.87	5960	54260408M	815.63	ug/L	
22)	#Aroclor-1260 Peak 3	22.72	6816	29837964M	271.20	ug/L	100
23)	#DCB	28.99	8697	709818M	1.16	ug/L	100

ompound uses ESTD

558

700656

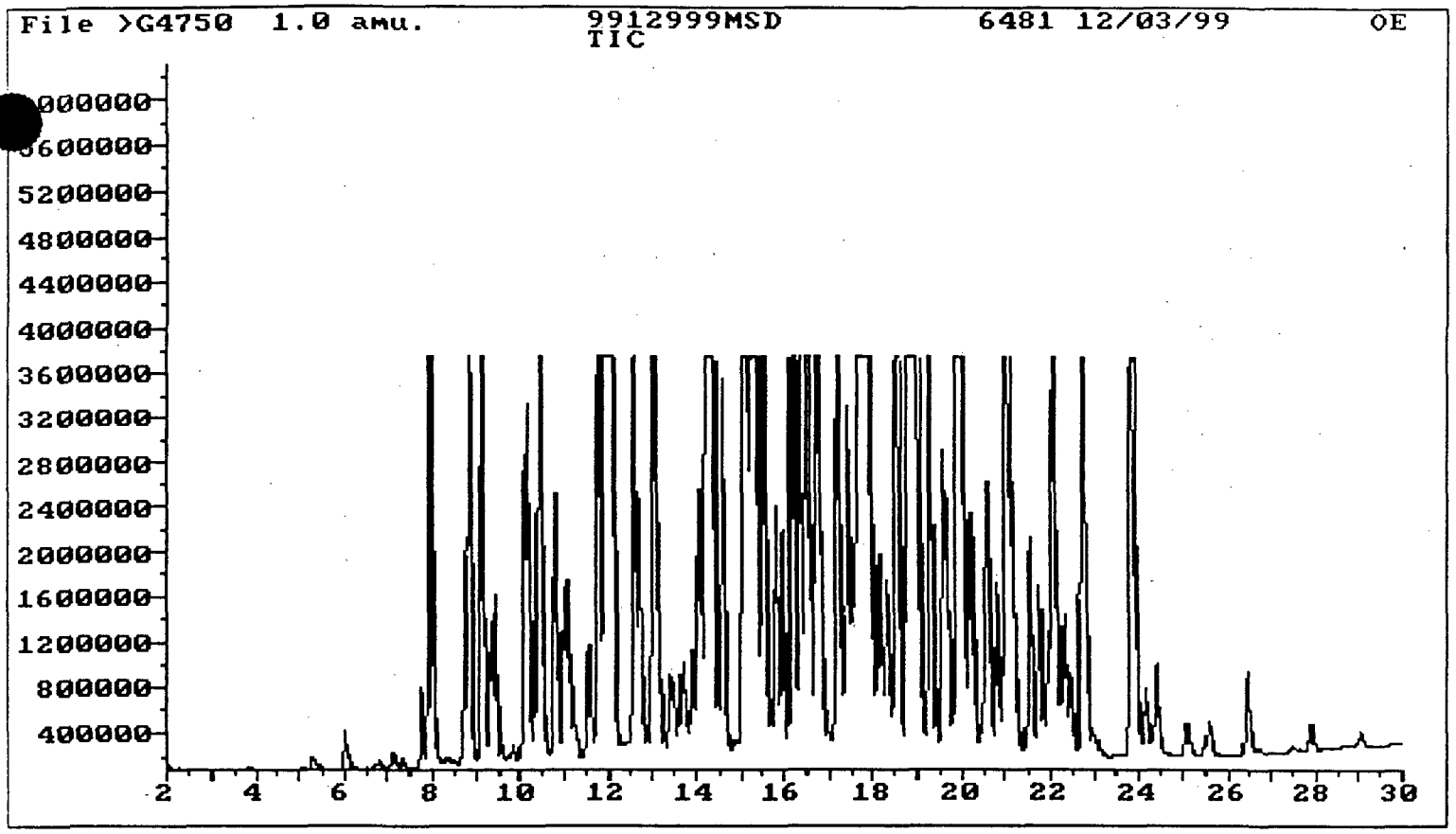


Data File: >G4750::G4 Quant Output File: ^G4750::QT
Name: 9912999MSD Instrument ID: G
Misc: 6481 12/03/99 OE SP-4

Id File: ID7PCB::G5
Title: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990930 11:54 Last Qcal Time: 991207 17:33

Operator ID: JEFF
Quant Time : 991208 07:57
Injected at: 991208 06:30

559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6481 12/03/99
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2400000
2000000
1600000
1200000
800000
400000
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560

700658

QUANT REPORT

rator ID: JEFF Quant Rev: 7 Quant Time: 991208 09:09
put File: ^H4750::QT Injected at: 991208 07:07
ata File: >H4750::G4 Dilution Factor: 1.00000
ame: 9912999MSD Instrument ID: H
isc: 6481 12/03/99 OE SP-4

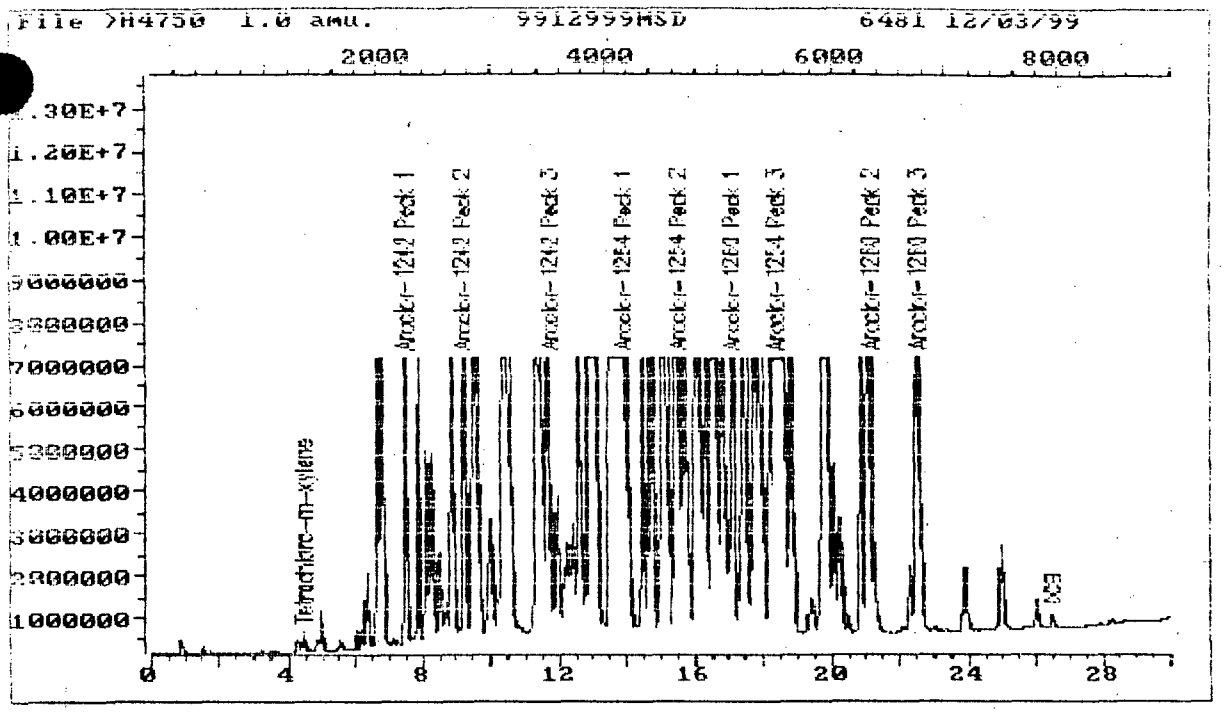
D File: ID8PCB::G5
itle: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
ast Calibration: 990930 11:58 Last Qcal Time: 991207 18:10

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	4.46	1337	1648627	1.17	ug/L	100
11)	#Aroclor-1242 Peak 1	7.46	2239	46440296M	1256.58	ug/L	100
12)	#Aroclor-1242 Peak 2	9.18	2753	49628072M	593.92	ug/L	100
13)	#Aroclor-1242 Peak 3	11.72	3516	55118280M	2205.16	ug/L	100
17)	#Aroclor-1254 Peak 1	13.90	4169	.229E+09M	7186.74	ug/L	
18)	#Aroclor-1254 Peak 2	15.50	4650	83394224M	1277.16	ug/L	100
19)	#Aroclor-1254 Peak 3	18.37	5512	.153E+09M	1066.79	ug/L	
20)	#Aroclor-1260 Peak 1	17.09	5127	76366176M	599.82	ug/L	100
21)	#Aroclor-1260 Peak 2	21.14	6341	65894720M	196.41	ug/L	100
22)	#Aroclor-1260 Peak 3	22.52	6755	61986936M	283.92	ug/L	100
23)	#DCB	26.48	7944	2482589	1.41	ug/L	100

ompound uses ESTD

561

700659



Data File: >H4750::G4 Quant Output File: ^H4750::QT
Name: 9912999MSD Instrument ID: H
Misc: 6481 12/03/99 OE SP-4

Id File: ID8PCB::G5
Title: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990930 11:58 Last Qcal Time: 991207 18:10

Operator ID: JEFF
Quant Time : 991208 09:09
Injected at: 991208 07:07

562

QUANT REPORT

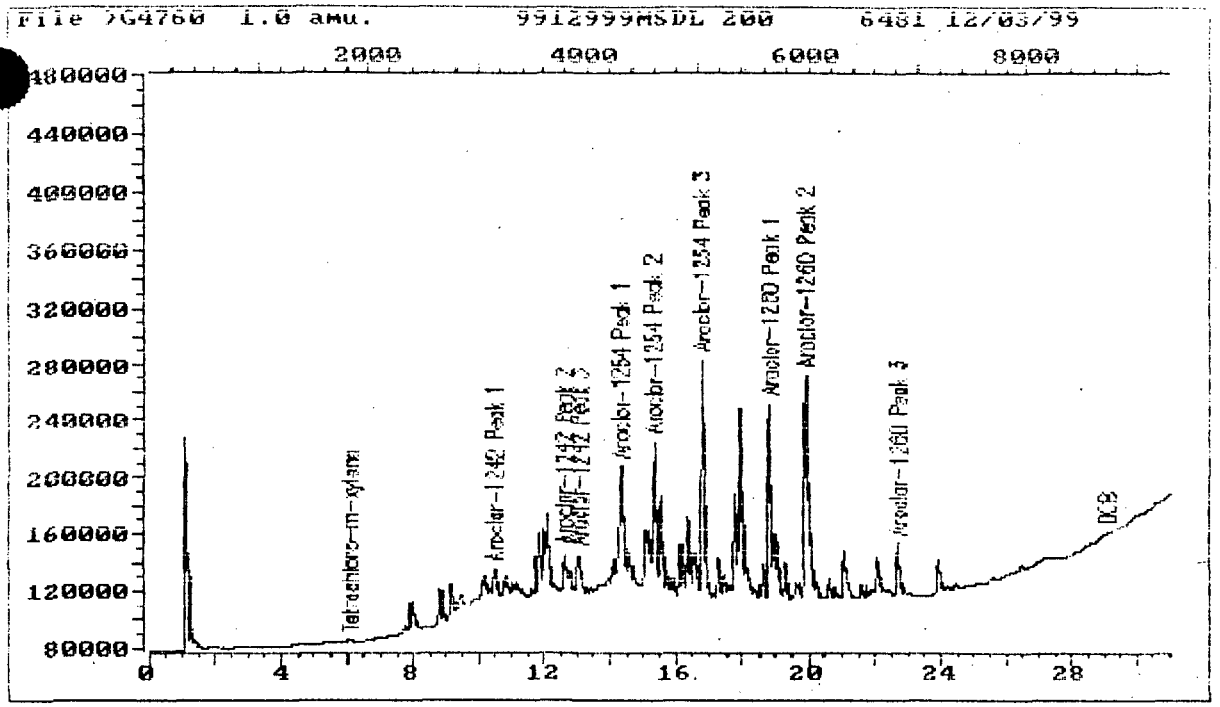
ator ID: JEFF Quant Rev: 7 Quant Time: 991208 18:11
put File: ^G4760::QT Injected at: 991208 17:36
ata File: >G4760::G4 Dilution Factor: 1.00000
ame: 9912999MSDL 200 Instrument ID: G
isc: 6481 12/03/99 OE SP-4

D File: ID7PCB::G5
itle: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
ast Calibration: 990930 11:54 Last Qcal Time: 991207 17:33

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	6.08	1824	2133M	.00438	ug/L	
11)	#Aroclor-1242 Peak 1	10.47	3142	142874	5.14	ug/L	100
12)	#Aroclor-1242 Peak 2	12.57	3770	150013M	19.48	ug/L	
13)	#Aroclor-1242 Peak 3	13.03	3908	268267	27.73	ug/L	100
17)	#Aroclor-1254 Peak 1	14.30	4290	746490	63.12	ug/L	100
18)	#Aroclor-1254 Peak 2	15.27	4582	520882	43.67	ug/L	100
19)	#Aroclor-1254 Peak 3	16.76	5029	1097271	121.94	ug/L	100
20)	#Aroclor-1260 Peak 1	18.79	5637	922098	13.87	ug/L	100
21)	#Aroclor-1260 Peak 2	19.89	5968	1192150	17.92	ug/L	100
22)	#Aroclor-1260 Peak 3	22.68	6805	249018	2.26	ug/L	100
23)	#DCB	29.07	8721	3347M	.00549	ug/L	

ompound uses ESTD

563

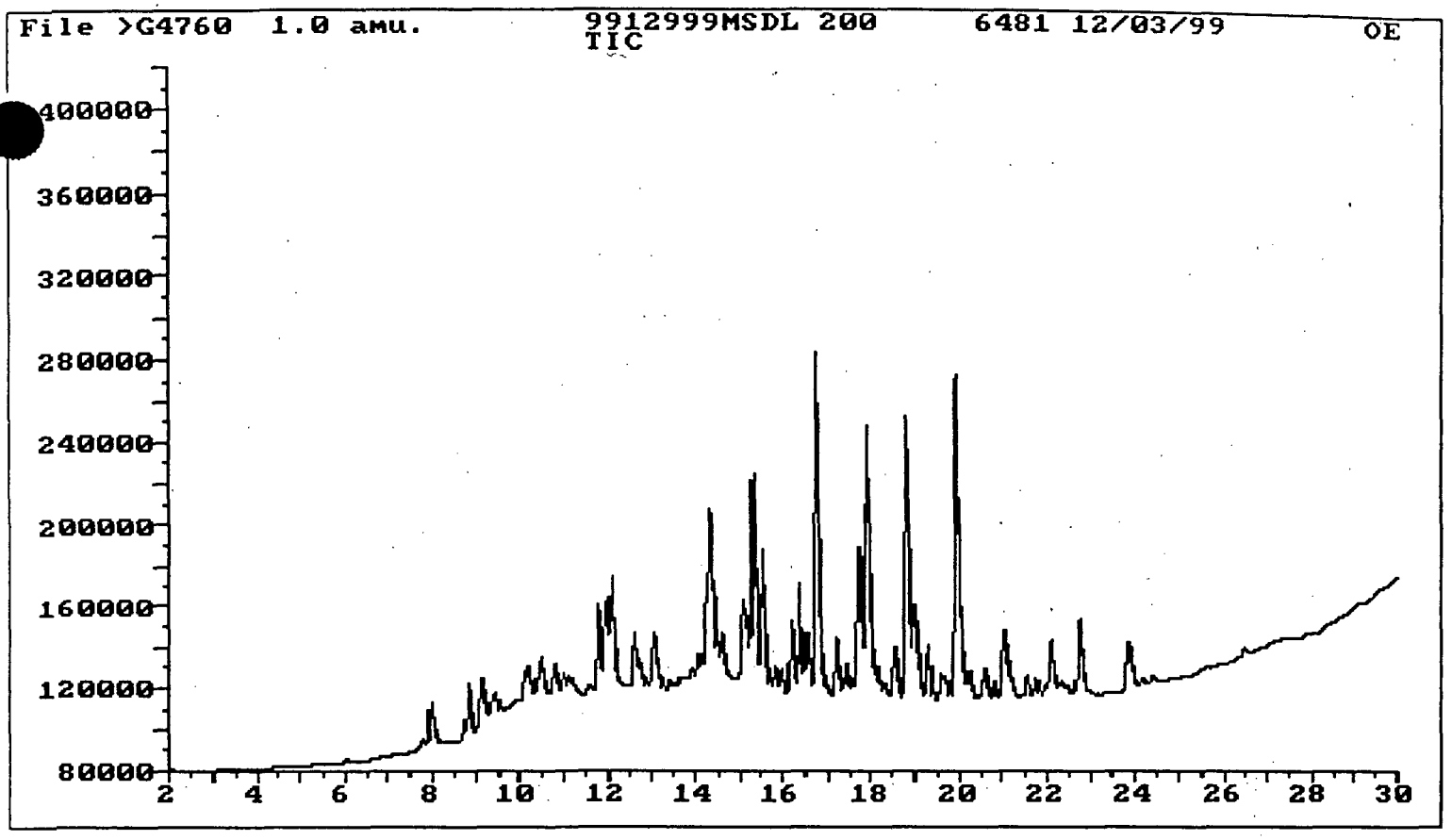


Data File: >G4760::G4 Quant Output File: ^G4760::QT
Name: 9912999MSDL 200 Instrument ID: G
Misc: 6481 12/03/99 OE SP-4

Id File: ID7PCB::G5
Title: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990930 11:54 Last Qcal Time: 991207 17:33

Operator ID: JEFF
Quant Time : 991208 18:11
Injected at: 991208 17:36

564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9912999MSDL 200
TIC
6481 12/03/99
OE
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320000
280000
240000
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160000
120000
80000
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565

700663

QUANT REPORT

Operator ID: JEFF
Output File: [illegible]60::QT
Data File: [illegible]60::G4
Name: 9912999M[illegible] 200
Misc: 6481 12/[illegible]/99 OE

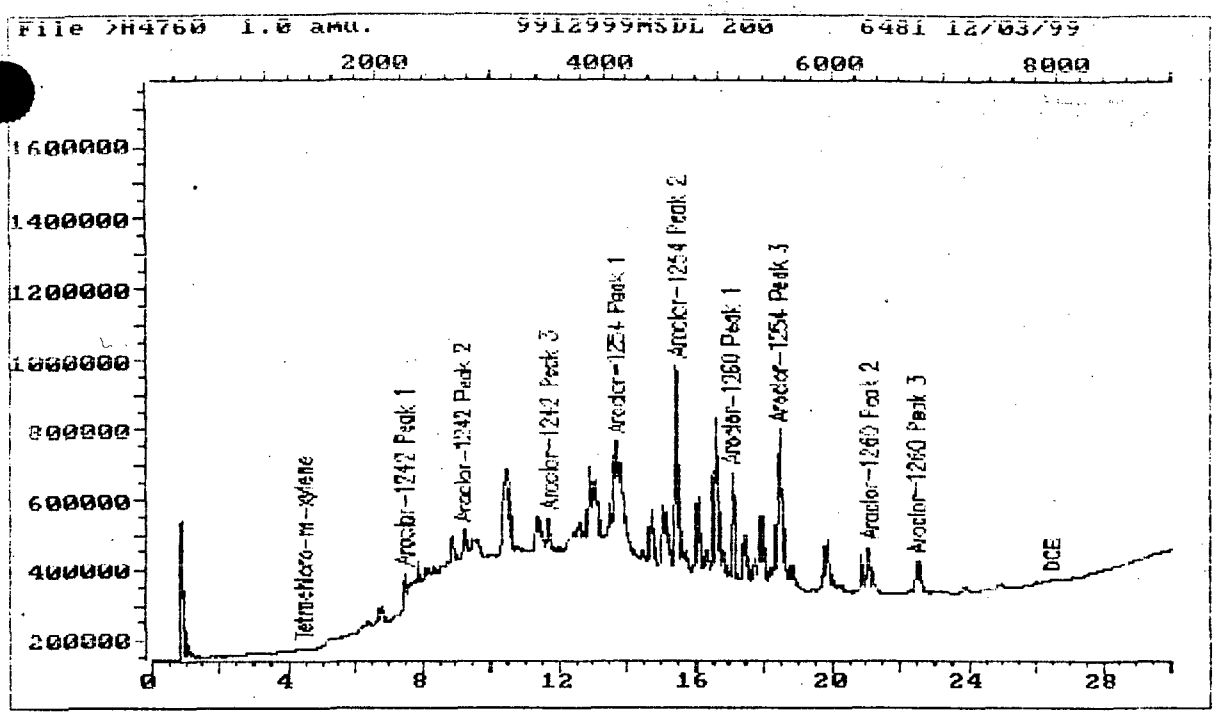
Quant Rev: 7
Quant Time: 991208 18:46
Injected at: 991208 18:13
Dilution Factor: 1.00000
Instrument ID: H
SP-4

ID File: ID8PC[illegible]G5
Title: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990930 11:58
Last Qcal Time: 991207 18:10

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrach[illegible]-m-xylene	4.47	1340	9440M	.00669	ug/L	
11)	#Aroclor-[illegible] Peak 1	7.44	2232	1171776	31.71	ug/L	100
12)	#Aroclor-[illegible] Peak 2	9.18	2753	610307	7.30	ug/L	100
13)	#Aroclor-[illegible] Peak 3	11.69	3507	662433	26.50	ug/L	100
17)	#Aroclor-[illegible] Peak 1	13.67	4101	1059948	33.27	ug/L	100
18)	#Aroclor-[illegible] Peak 2	15.46	4639	3527359	54.02	ug/L	100
19)	#Aroclor-[illegible] Peak 3	18.44	5532	3716138	25.88	ug/L	100
20)	#Aroclor-[illegible] Peak 1	17.06	5117	1899167	14.92	ug/L	100
21)	#Aroclor-[illegible] Peak 2	21.08	6323	1187514	3.54	ug/L	100
22)	#Aroclor-[illegible] Peak 3	22.47	6741	630678	2.89	ug/L	100
23)	#DCB	26.49	7946	9484M	.00538	ug/L	

Compound uses ESTD

566



Data File: >H4760::G4 Quant Output File: ^H4760::QT
Name: 9912999MSDL 200 Instrument ID: H
Misc: 6481 12/03/99 OE SP-4

Id File: ID8PCB::G5
Title: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990930 11:58 Last Qcal Time: 991207 18:10

Operator ID: JEFF
Quant Time : 991208 18:46
Injected at: 991208 18:13

567

QUANT REPORT

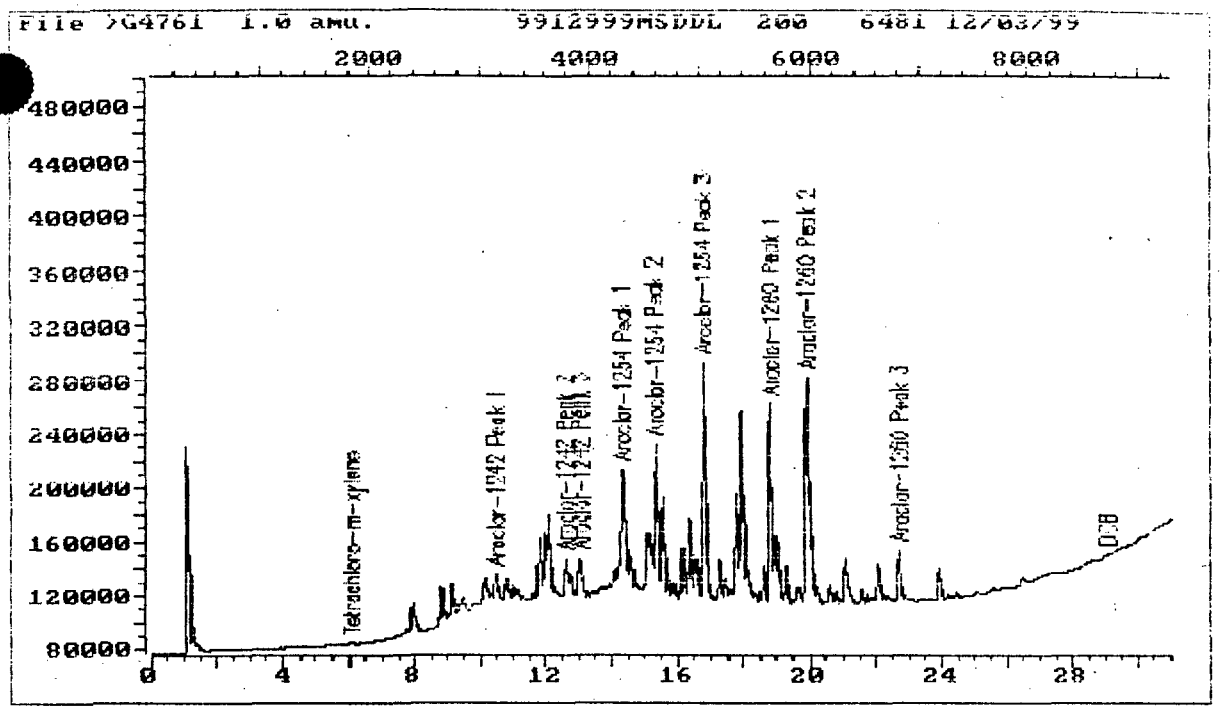
rator ID: JEFF Quant Rev: 7 Quant Time: 991208 18:49
put File: ^G4761::QT Injected at: 991208 18:13
ata File: >G4761::G4 Dilution Factor: 1.00000
ame: 9912999MSDDL 200 Instrument ID: G
isc: 6481 12/03/99 OE SP-4

D File: ID7PCB::G5
itle: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
ast Calibration: 990930 11:54 Last Qcal Time: 991207 17:33

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	6.08	1825	2325M	.00478	ug/L	
11)	#Aroclor-1242 Peak 1	10.48	3143	149245	5.37	ug/L	100
12)	#Aroclor-1242 Peak 2	12.57	3771	155570	20.20	ug/L	100
13)	#Aroclor-1242 Peak 3	13.03	3908	255952M	26.46	ug/L	
17)	#Aroclor-1254 Peak 1	14.30	4291	794221	67.15	ug/L	100
18)	#Aroclor-1254 Peak 2	15.28	4583	553071	46.36	ug/L	100
19)	#Aroclor-1254 Peak 3	16.77	5030	1165738	129.55	ug/L	100
20)	#Aroclor-1260 Peak 1	18.79	5638	985689	14.83	ug/L	100
21)	#Aroclor-1260 Peak 2	19.90	5969	1278470	19.22	ug/L	100
22)	#Aroclor-1260 Peak 3	22.69	6806	267469	2.43	ug/L	100
23)	#DCB	29.03	8710	1649M	.00271	ug/L	

ompound uses ESTD

568

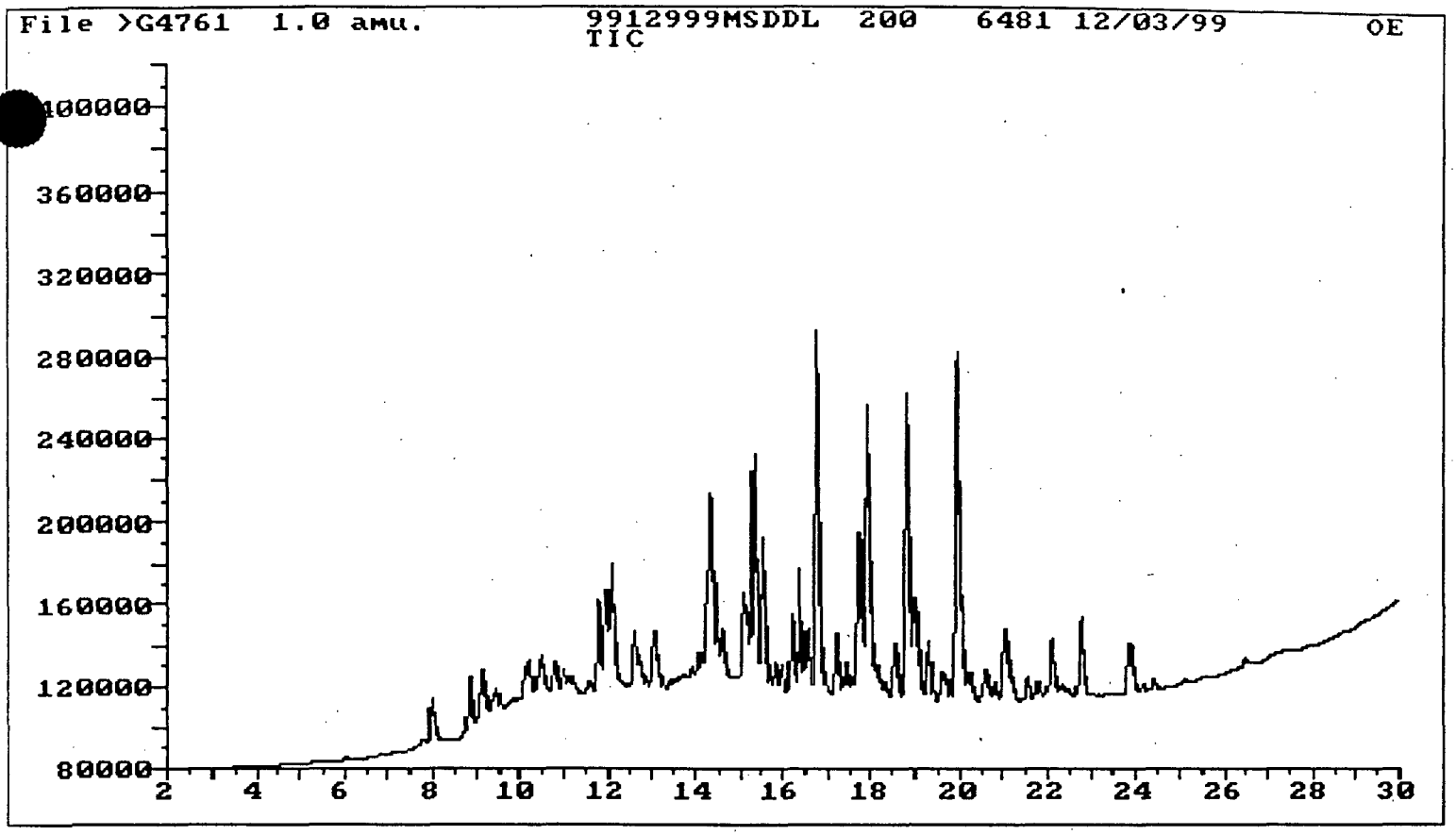


Data File: >G4761::G4 Quant Output File: ^G4761::QT
Name: 9912999MSDDL 200 Instrument ID: G
Misc: 6481 12/03/99 OE SP-4

Id File: ID7PCB::G5
Title: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990930 11:54 Last Qcal Time: 991207 17:33

Operator ID: JEFF
Quant Time : 991208 18:49
Injected at: 991208 18:13

569


File >G4761 1.0 amu.
9912999MSDDL 200 6481 12/03/99
TIC
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120000
80000
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570

700668

QUANT REPORT

rator ID: JEFF
put File: ^H4761::QT
ata File: >H4761::G4
ame: 9912999MSDDL 200
isc: 6481 12/03/99 OE

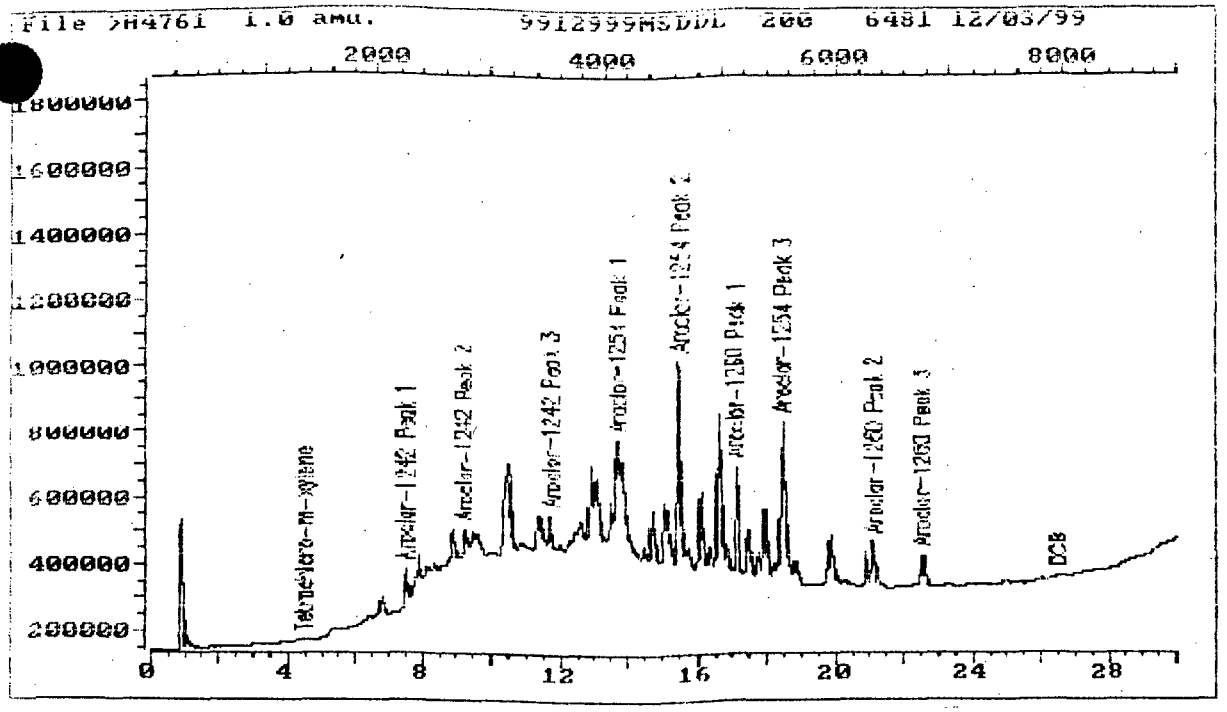
Quant Rev: 7
Quant Time: 991208 19:25
Injected at: 991208 18:51
Dilution Factor: 1.00000
Instrument ID: H
SP-4

D File: ID8PCB::G5
itle: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
ast Calibration: 990930 11:58
Last Qcal Time: 991207 18:10

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	4.46	1339	8320M	.00590	ug/L	
11)	#Aroclor-1242 Peak 1	7.44	2232	995803	26.94	ug/L	100
12)	#Aroclor-1242 Peak 2	9.18	2753	513605	6.15	ug/L	100
13)	#Aroclor-1242 Peak 3	11.69	3507	621091	24.85	ug/L	100
17)	#Aroclor-1254 Peak 1	13.67	4102	1054505	33.10	ug/L	100
18)	#Aroclor-1254 Peak 2	15.46	4639	3763788	57.64	ug/L	100
19)	#Aroclor-1254 Peak 3	18.44	5532	3971630	27.66	ug/L	100
20)	#Aroclor-1260 Peak 1	17.06	5117	2033732	15.97	ug/L	100
21)	#Aroclor-1260 Peak 2	21.08	6323	1260901	3.76	ug/L	100
22)	#Aroclor-1260 Peak 3	22.47	6742	689074	3.16	ug/L	100
23)	#DCB	26.49	7947	6406M	.00363	ug/L	

Compound uses ESTD

571



Data File: >H4761::G4 Quant Output File: ^H4761::QT
Name: 9912999MSDDL 200 Instrument ID: H
Misc: 6481 12/03/99 OE SP-4

Id File: ID8PCB::G5
Title: PCB'S HP5890-II RTX-1701 0.53mm 1.0uL
Last Calibration: 990930 11:58 Last Qcal Time: 991207 18:10

Operator ID: JEFF
Quant Time : 991208 19:25
Injected at: 991208 18:51

572

QUANT REPORT

Operator ID: JEFF
Output File: ^G4731::QT
Data File: >G4731::G4
Name: PBLK17
Misc: 12/03/99

Quant Rev: 7
Quant Time: 991208 07:36
Injected at: 991207 18:47
Dilution Factor: 1.00000
Instrument ID: G

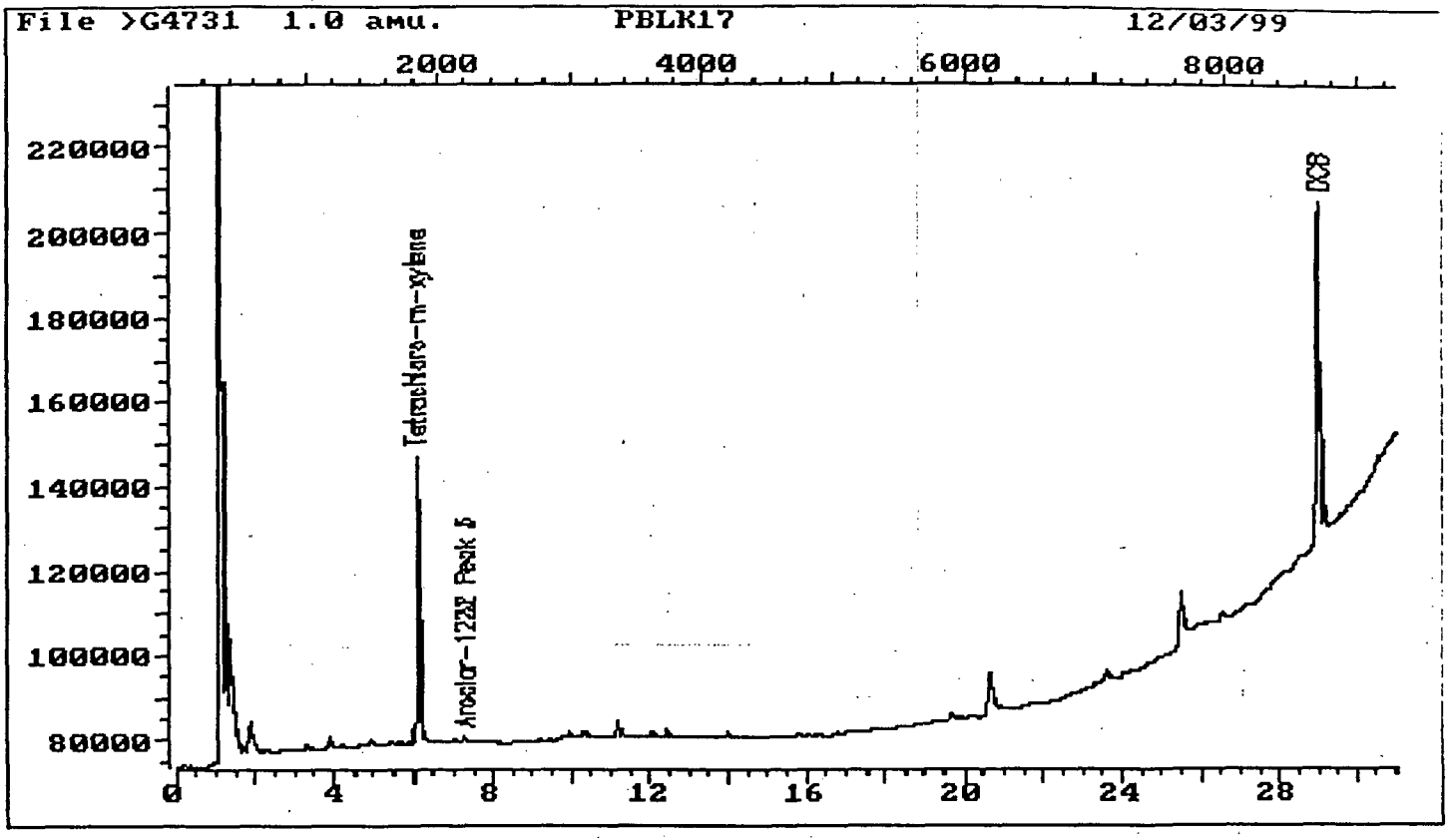
ID File: ID7PCB::G5
Title: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990930 11:54
Last Qcal Time: 991207 17:33

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	6.07	1822	299778	.616	ug/L	100
~~7)~~	~~#Aroclor-1221 Peak 3~~	7.30	2189	4513	.639	ug/L	100
~~8)~~	~~#Aroclor-1232 Peak 1~~	7.30	2189	4513	.639	ug/L	100
23)	#DCB	28.97	8692	540402M	.887	ug/L	100

Compound uses ESTD

JH 12/8/99

573



Data File: >G4731::G4 Quant Output File: ^G4731::QT
Name: PBLK17 Instrument ID: G
Misc: 12/03/99

Id File: ID7PCB::G5
Title: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990930 11:54 Last Qcal Time: 991207 17:33

Operator ID: JEFF
Quant Time : 991208 07:36
Injected at: 991207 18:47

574

QUANT REPORT

Operator ID: JEFF
Output File: ^H4731::QT
Data File: >H4731::G4
Name: PBLK17
Misc: 12/03/99

Quant Rev: 7
Quant Time: 991208 08:32
Injected at: 991207 19:24
Dilution Factor: 1.00000
Instrument ID: H

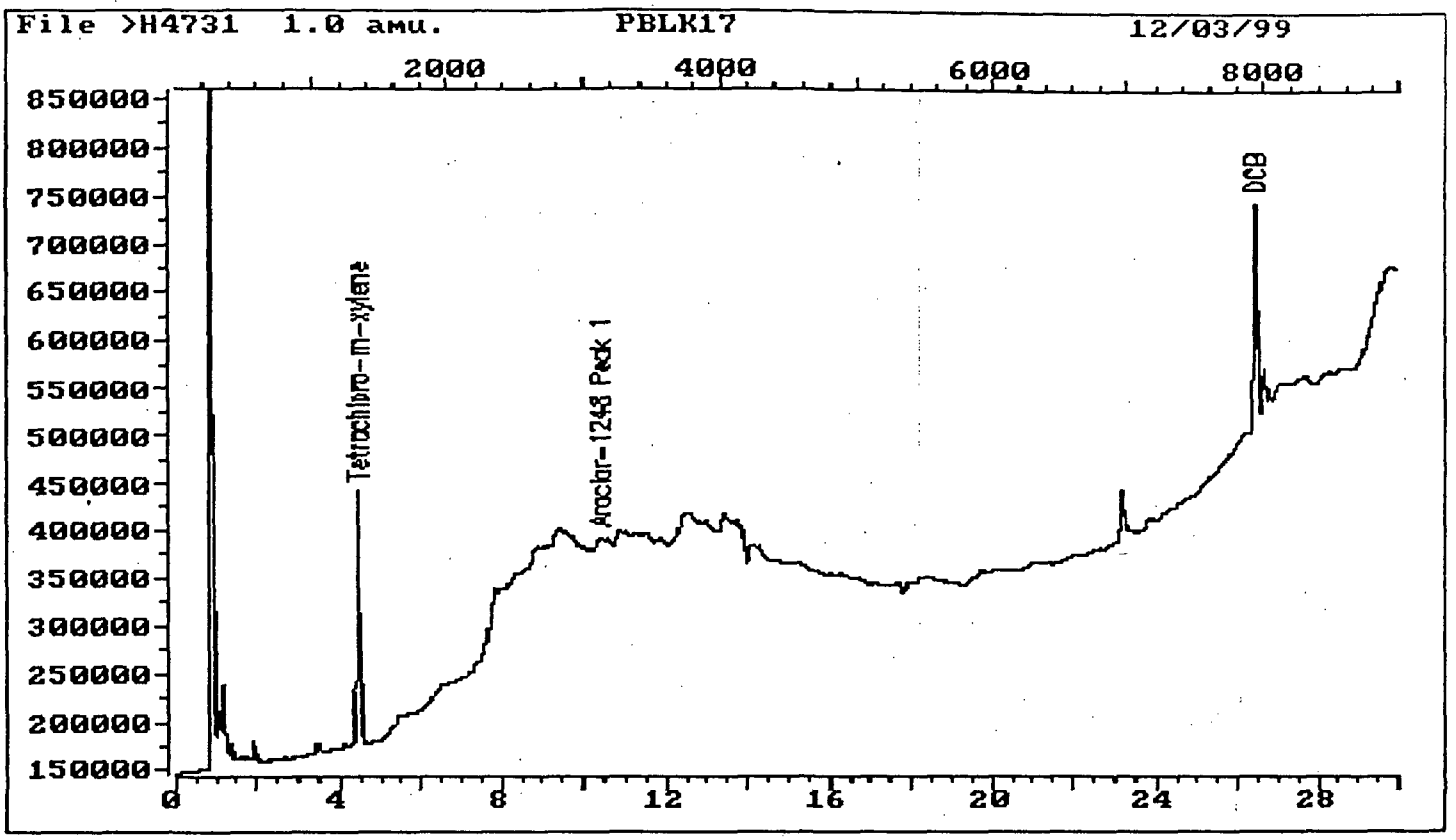
ID File: ID8PCB::G5
Title: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990930 11:58
Last Qcal Time: 991207 18:10

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	4.45	1335	1040953	.738	ug/L	100
~~14)~~	~~#Aroclor-1248 Peak 1~~	10.41	3123	10945	.224	ug/L	100
23)	#DCB	26.47	7940	1507995	.855	ug/L	100

Compound uses ESTD

JH 12/8/99

575



Data File: >H4731::G4 Quant Output File: ^H4731::QT
Name: PBLK17 Instrument ID: H
Misc: 12/03/99

Id File: ID8PCB::G5
Title: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990930 11:58 Last Qcal Time: 991207 18:10

Operator ID: JEFF
Quant Time : 991208 08:32
Injected at: 991207 19:24

576

QUANT REPORT

Operator ID: JEFF
Output File: ^G4733::QT
Data File: >G4733::G4
Name: PBLK17-A
Misc: 12/03/99

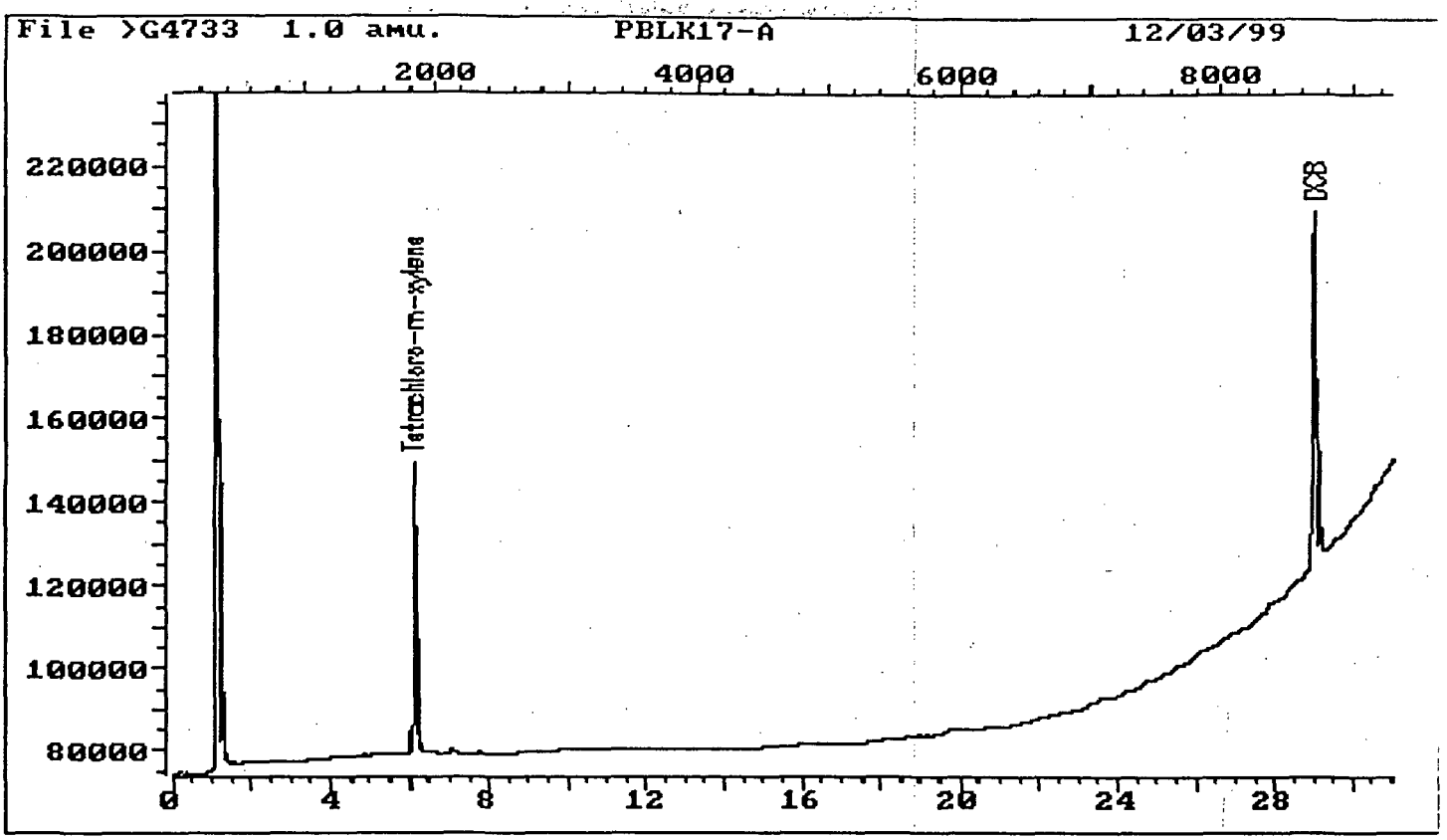
Quant Rev: 7
Quant Time: 991208 07:41
Injected at: 991207 20:01
Dilution Factor: 1.00000
Instrument ID: G

ID File: ID7PCB::G5
Title: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990930 11:54
Last Qcal Time: 991207 17:33

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	6.07	1821	309929	.637	ug/L	100
23)	#DCB	28.98	8694	532602	.874	ug/L	100

Compound uses ESTD

577



Data File: >G4733::G4 Quant Output File: ^G4733::QT
Name: PBLK17-A Instrument ID: G
Misc: 12/03/99

Id File: ID7PCB::G5
Title: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990930 11:54 Last Qcal Time: 991207 17:33

Operator ID: JEFF
Quant Time : 991208 07:41
Injected at: 991207 20:01

578

QUANT REPORT

Operator ID: JEFF
Output File: ^H4733::QT
Data File: >H4733::G4
Name: PBLK17-A
Misc: 12/03/99

Quant Rev: 7
Quant Time: 991208 08:36
Injected at: 991207 20:38
Dilution Factor: 1.00000
Instrument ID: H

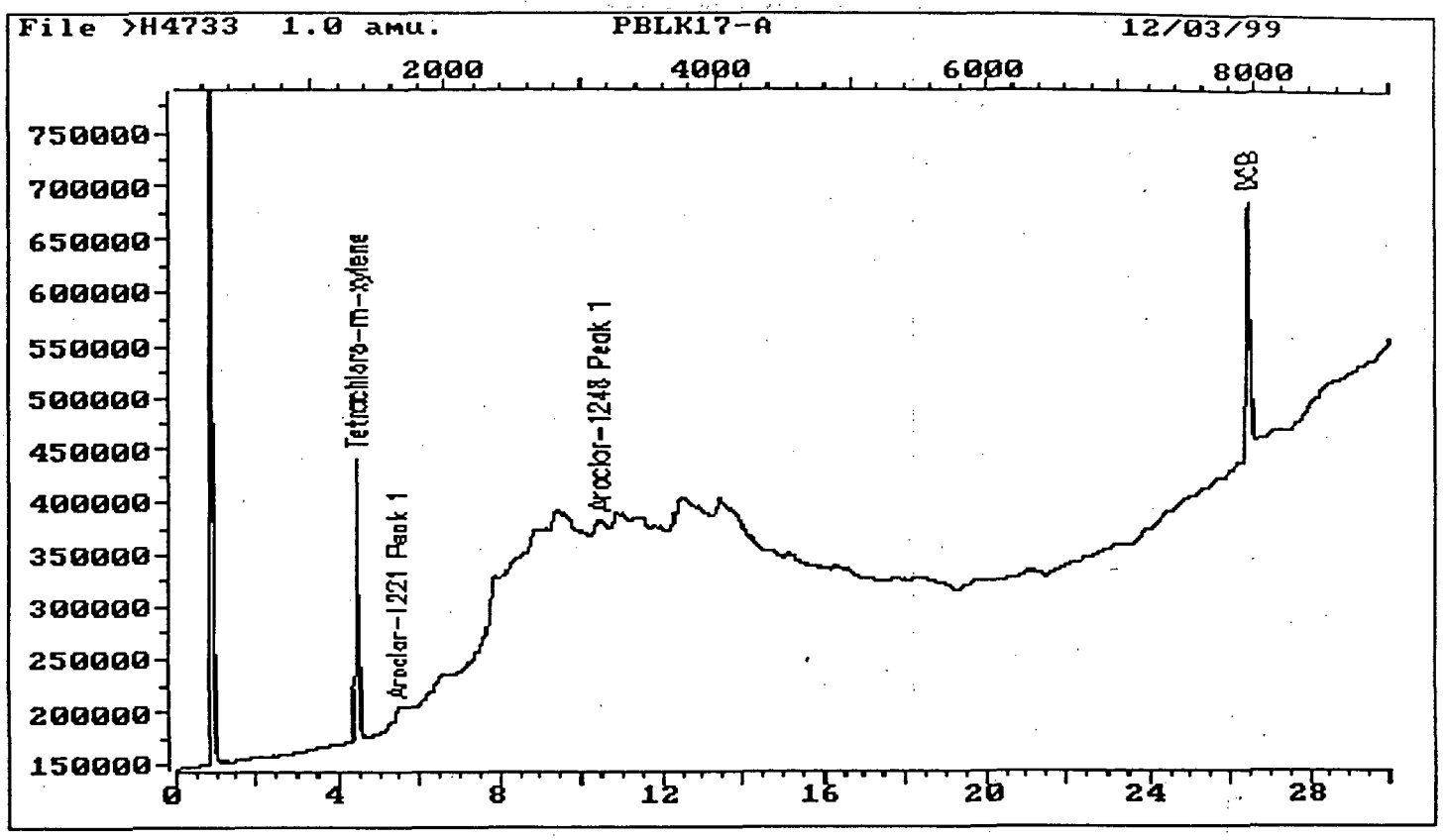
ID File: ID8PCB::G5
Title: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990930 11:58
Last Qcal Time: 991207 18:10

Compound	R.T.	Scan#	Area	Conc	Units	q
1) #Tetrachloro-m-xylene	4.45	1336	1132303	.803	ug/L	100
~~5) #Aroclor-1221 Peak 1~~	5.45	1635	324002	88.05	ug/L	100
~~14) #Aroclor-1248 Peak 1~~	10.43	3130	126910	2.60	ug/L	100
23) #DCB	26.47	7941	1636457	.928	ug/L	100

Compound uses ESTD

JH 12/9/99

579



Data File: >H4733::G4 Quant Output File: ^H4733::QT
Name: PBLK17-A Instrument ID: H
Misc: 12/03/99

Id File: ID8PCB::G5
Title: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990930 11:58 Last Qcal Time: 991207 18:10

Operator ID: JEFF
Quant Time : 991208 08:36
Injected at: 991207 20:38

580

QUANT REPORT

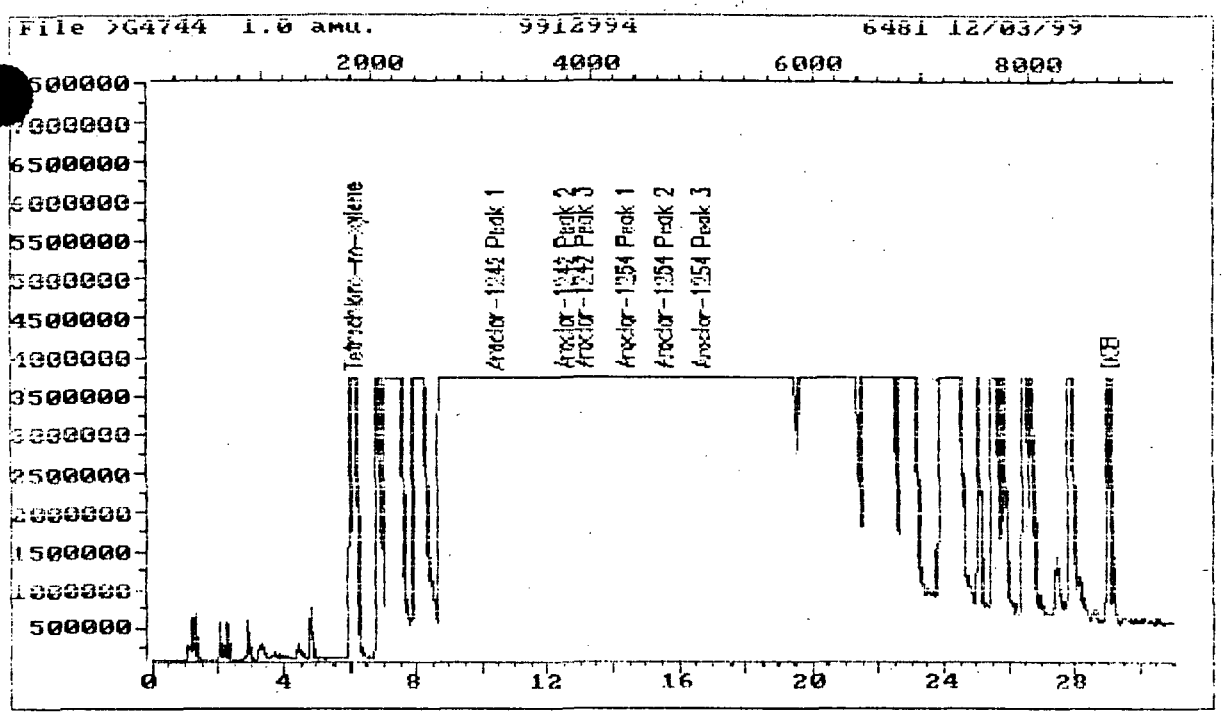
rator ID: JEFF Quant Rev: 7 Quant Time: 991208 07:51
put File: ^G4744::QT Injected at: 991208 02:48
ata File: >G4744::G4 Dilution Factor: 1.00000
ame: 9912994 Instrument ID: G
isc: 6481 12/03/99 OE DCOMP-1

D File: ID7PCB::G5
itle: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
ast Calibration: 990930 11:54 Last Qcal Time: 991207 17:33

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	6.12	1836	58262880M	119.77	ug/L	
11)	#Aroclor-1242 Peak 1	10.42	3126	58812056M	2114.57	ug/L	100
12)	#Aroclor-1242 Peak 2	12.52	3756	74179424M	9631.64	ug/L	
13)	#Aroclor-1242 Peak 3	13.10	3930	61095680M	6314.93	ug/L	
17)	#Aroclor-1254 Peak 1	14.37	4312	16001402M	1352.96	ug/L	
18)	#Aroclor-1254 Peak 2	15.51	4654	19315940M	1619.25	ug/L	
19)	#Aroclor-1254 Peak 3	16.68	5003	39451872M	4384.20	ug/L	
23)	#DCB	29.04	8713	26089400M	42.82	ug/L	100

Compound uses ESTD

581

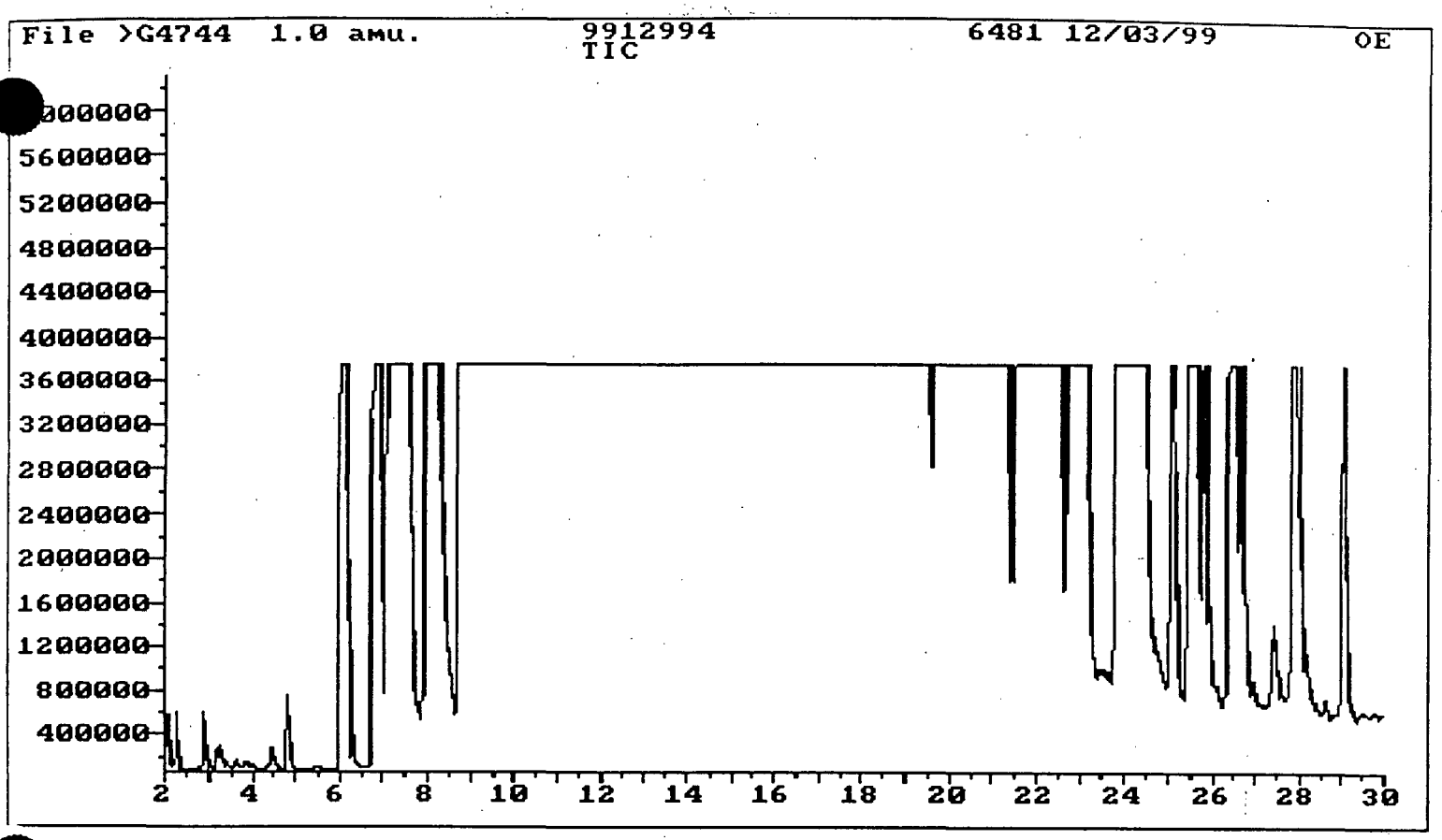


Data File: >G4744::G4 Quant Output File: ^G4744::QT
Name: 9912994 Instrument ID: G
Misc: 6481 12/03/99 OE DCOMP-1

Id File: ID7PCB::G5
Title: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990930 11:54 Last Qcal Time: 991207 17:33

Operator ID: JEFF
Quant Time : 991208 07:51
Injected at: 991208 02:48

582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1200000
800000
400000
2
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583

700681

QUANT REPORT

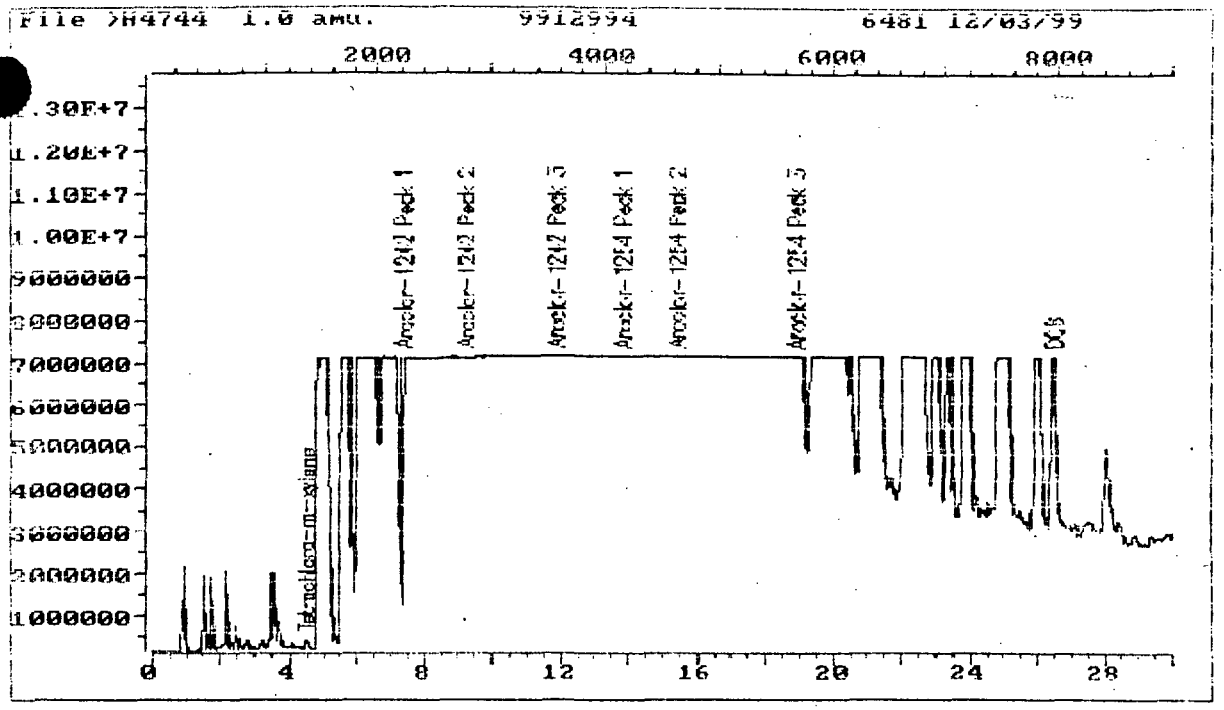
rator ID: JEFF Quant Rev: 7 Quant Time: 991208 08:58
put File: ^H4744::QT Injected at: 991208 03:25
ata File: >H4744::G4 Dilution Factor: 1.00000
ame: 9912994 Instrument ID: H
isc: 6481 12/03/99 OE DCOMP-1

D File: ID8PCB::G5
itle: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
ast Calibration: 990930 11:58 Last Qcal Time: 991207 18:10

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	4.50	1350	1364327	.967	ug/L	100
11)	#Aroclor-1242 Peak 1	7.41	2222	.146E+09M	3945.28	ug/L	100
12)	#Aroclor-1242 Peak 2	9.23	2770	.168E+09M	2008.76	ug/L	
13)	#Aroclor-1242 Peak 3	11.88	3565	99826880M	3993.85	ug/L	
17)	#Aroclor-1254 Peak 1	13.86	4157	60461592M	1898.03	ug/L	
18)	#Aroclor-1254 Peak 2	15.43	4629	.154E+09M	2365.83	ug/L	
19)	#Aroclor-1254 Peak 3	18.95	5685	.190E+09M	1323.23	ug/L	
23)	#DCB	26.52	7957	50972288M	28.89	ug/L	100

Compound uses ESTD

584



Data File: >H4744::G4 Quant Output File: ^H4744::QT
Name: 9912994 Instrument ID: H
Misc: 6481 12/03/99 OE DCOMP-1

Id File: ID8PCB::G5
Title: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990930 11:58 Last Qcal Time: 991207 18:10

Operator ID: JEFF
Quant Time : 991208 08:58
Injected at: 991208 03:25

585

QUANT REPORT

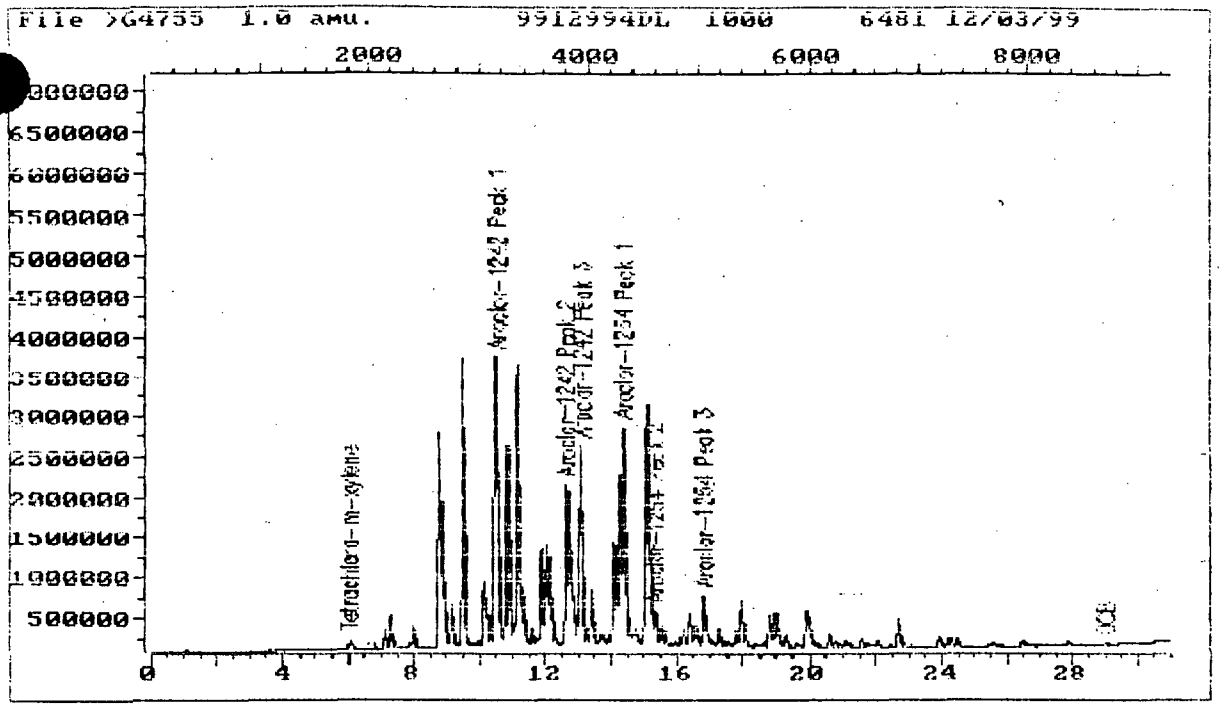
rator ID: JEFF Quant Rev: 7 Quant Time: 991208 12:20
put File: ^G4755::QT Injected at: 991208 11:46
ata File: >G4755::G4 Dilution Factor: 1.00000
ame: 9912994DL 1000 Instrument ID: G
isc: 6481 12/03/99 OE DCOMP-1

D File: ID7PCB::G5
itle: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
ast Calibration: 990930 11:54 Last Qcal Time: 991207 17:33

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	6.05	1814	494373	1.02	ug/L	100
11)	#Aroclor-1242 Peak 1	10.55	3164	35292584M	1268.94	ug/L	100
12)	#Aroclor-1242 Peak 2	12.61	3782	10587668	1374.73	ug/L	100
13)	#Aroclor-1242 Peak 3	13.09	3928	16115056	1665.67	ug/L	100
17)	#Aroclor-1254 Peak 1	14.37	4312	14785996	1250.20	ug/L	100
18)	#Aroclor-1254 Peak 2	15.31	4593	2092275	175.40	ug/L	100
19)	#Aroclor-1254 Peak 3	16.80	5039	3588318	398.76	ug/L	100
23)	#DCB	29.01	8702	46792M	.0768	ug/L	100

Compound uses ESTD

586

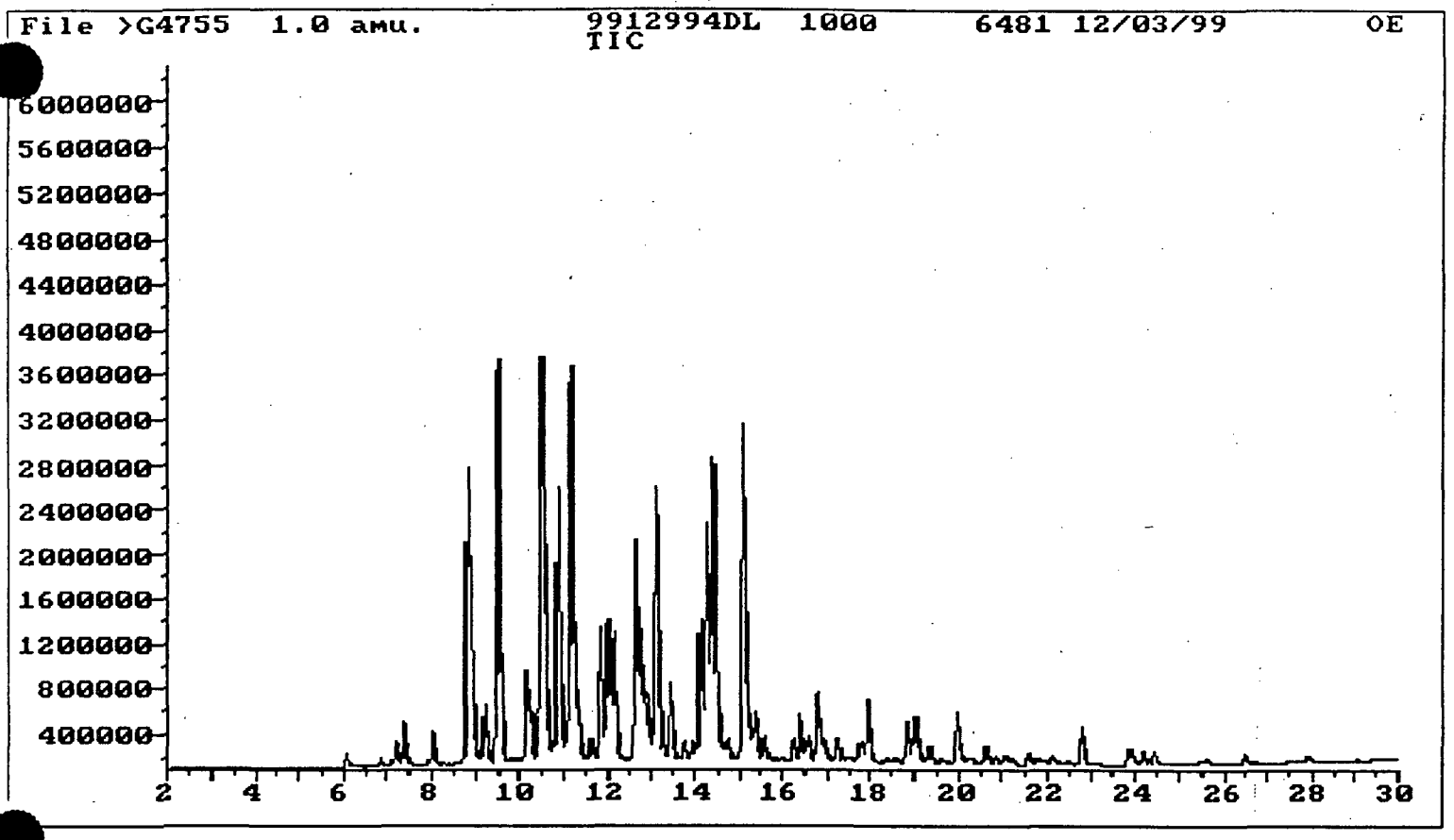


Data File: >G4755::G4 Quant Output File: ^G4755::QT
Name: 9912994DL 1000 Instrument ID: G
Misc: 6481 12/03/99 OE DCOMP-1

Id File: ID7PCB::G5
Title: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990930 11:54 Last Qcal Time: 991207 17:33

Operator ID: JEFF
Quant Time : 991208 12:20
Injected at: 991208 11:46

587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3200000
2800000
2400000
2000000
1600000
1200000
800000
400000
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588

700686

QUANT REPORT

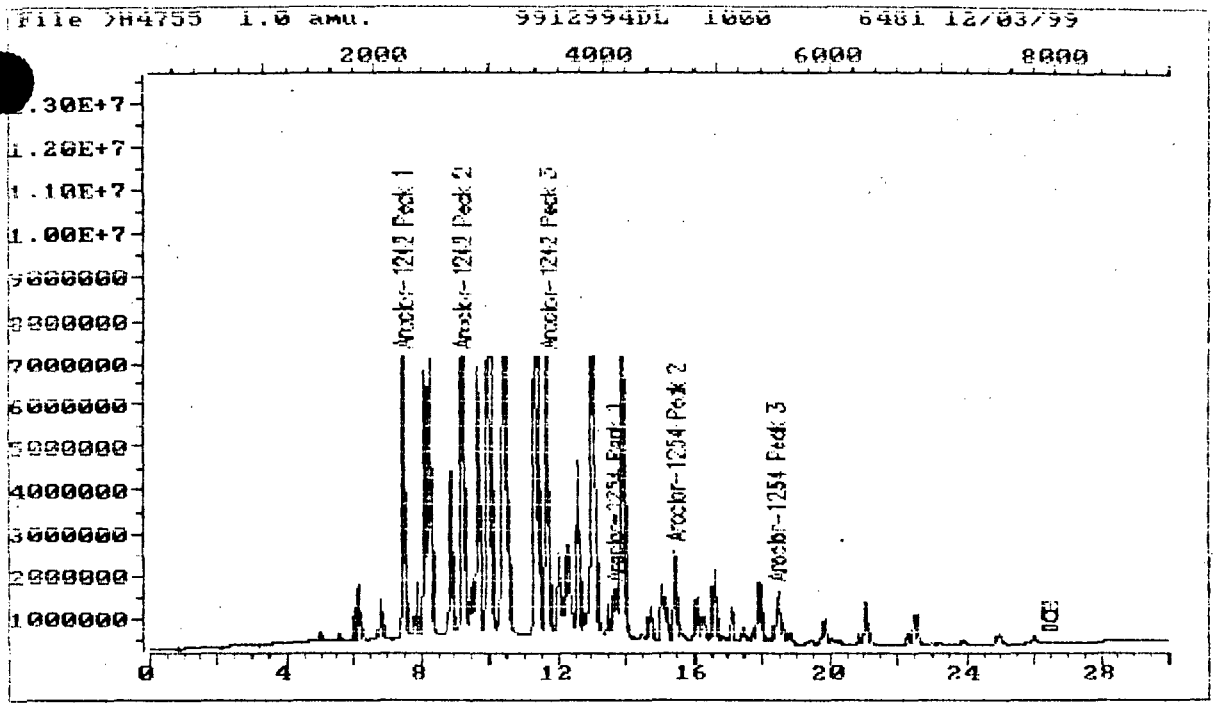
rator ID: JEFF Quant Rev: 7 Quant Time: 991208 15:40
put File: ^H4755::QT Injected at: 991208 15:07
ata File: >H4755::G4 Dilution Factor: 1.00000
ame: 9912994DL 1000 Instrument ID: H
isc: 6481 12/03/99 OE DCOMP-1

D File: ID8PCB::G5
itle: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
ast Calibration: 990930 11:58 Last Qcal Time: 991207 18:10

	Compound	R.T.	Scan#	Area	Conc	Units	q
11)	#Aroclor-1242 Peak 1	7.46	2237	43172632M	1168.16	ug/L	100
12)	#Aroclor-1242 Peak 2	9.20	2759	62319760M	745.81	ug/L	100
13)	#Aroclor-1242 Peak 3	11.72	3516	48268568M	1931.12	ug/L	100
17)	#Aroclor-1254 Peak 1	13.67	4101	5177086	162.52	ug/L	100
18)	#Aroclor-1254 Peak 2	15.46	4637	12940850	198.19	ug/L	100
19)	#Aroclor-1254 Peak 3	18.44	5531	7982384	55.59	ug/L	100
23)	#DCB	26.48	7944	223690	.127	ug/L	100

Compound uses ESTD

589



Data File: >H4755::G4 Quant Output File: ^H4755::QT
Name: 9912994DL 1000 Instrument ID: H
Misc: 6481 12/03/99 OE DCOMP-1

Id File: ID8PCB::G5
Title: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990930 11:58 Last Qcal Time: 991207 18:10

Operator ID: JEFF
Quant Time : 991208 15:40
Injected at: 991208 15:07

590

QUANT REPORT

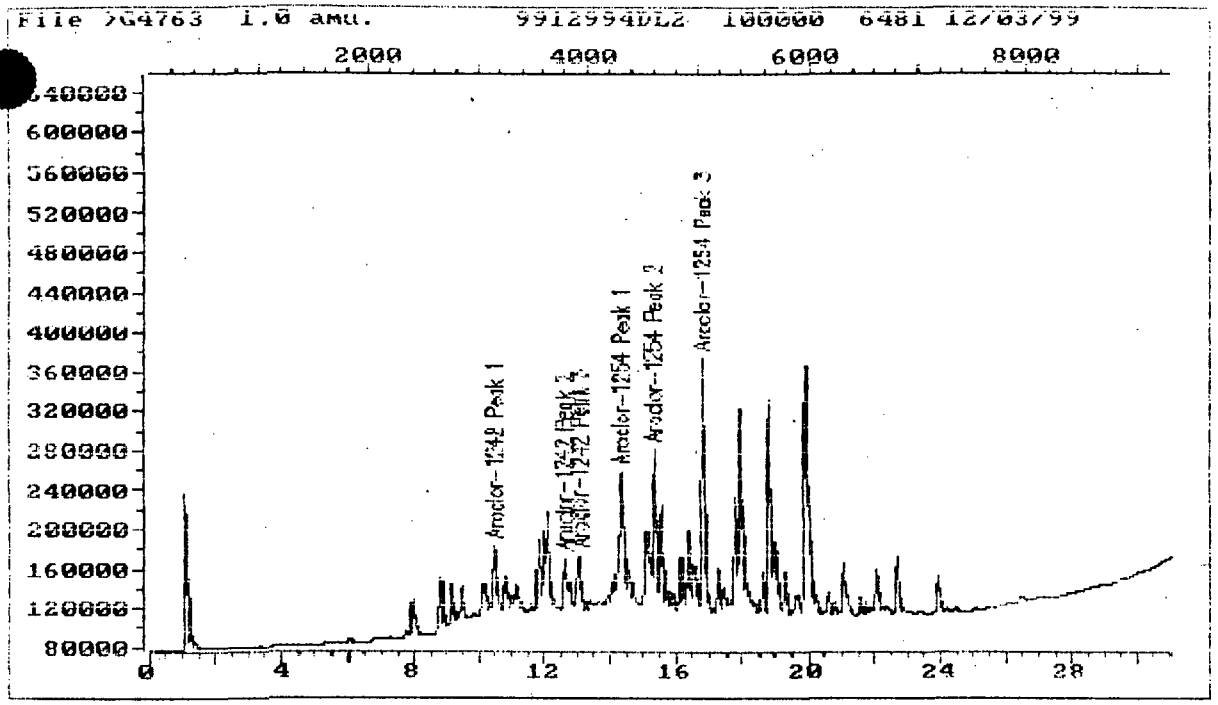
rator ID: JEFF Quant Rev: 7 Quant Time: 991208 20:02
put File: ^G4763::QT Injected at: 991208 19:28
ata File: >G4763::G4 Dilution Factor: 1.00000
ame: 9912994DL2 100000 Instrument ID: G
isc: 6481 12/03/99 OE DCOMP-1

D File: ID7PCB::G5
itle: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
ast Calibration: 990930 11:54 Last Qcal Time: 991207 17:33

	Compound	R.T.	Scan#	Area	Conc	Units	q
11)	#Aroclor-1242 Peak 1	10.47	3142	508297	18.28	ug/L	100
12)	#Aroclor-1242 Peak 2	12.57	3770	286685	37.22	ug/L	100
13)	#Aroclor-1242 Peak 3	13.04	3911	506792	52.38	ug/L	100
17)	#Aroclor-1254 Peak 1	14.31	4292	1140771M	96.46	ug/L	
18)	#Aroclor-1254 Peak 2	15.27	4582	795189	66.66	ug/L	100
19)	#Aroclor-1254 Peak 3	16.76	5029	1669477	185.53	ug/L	100

Compound uses ESTD

591

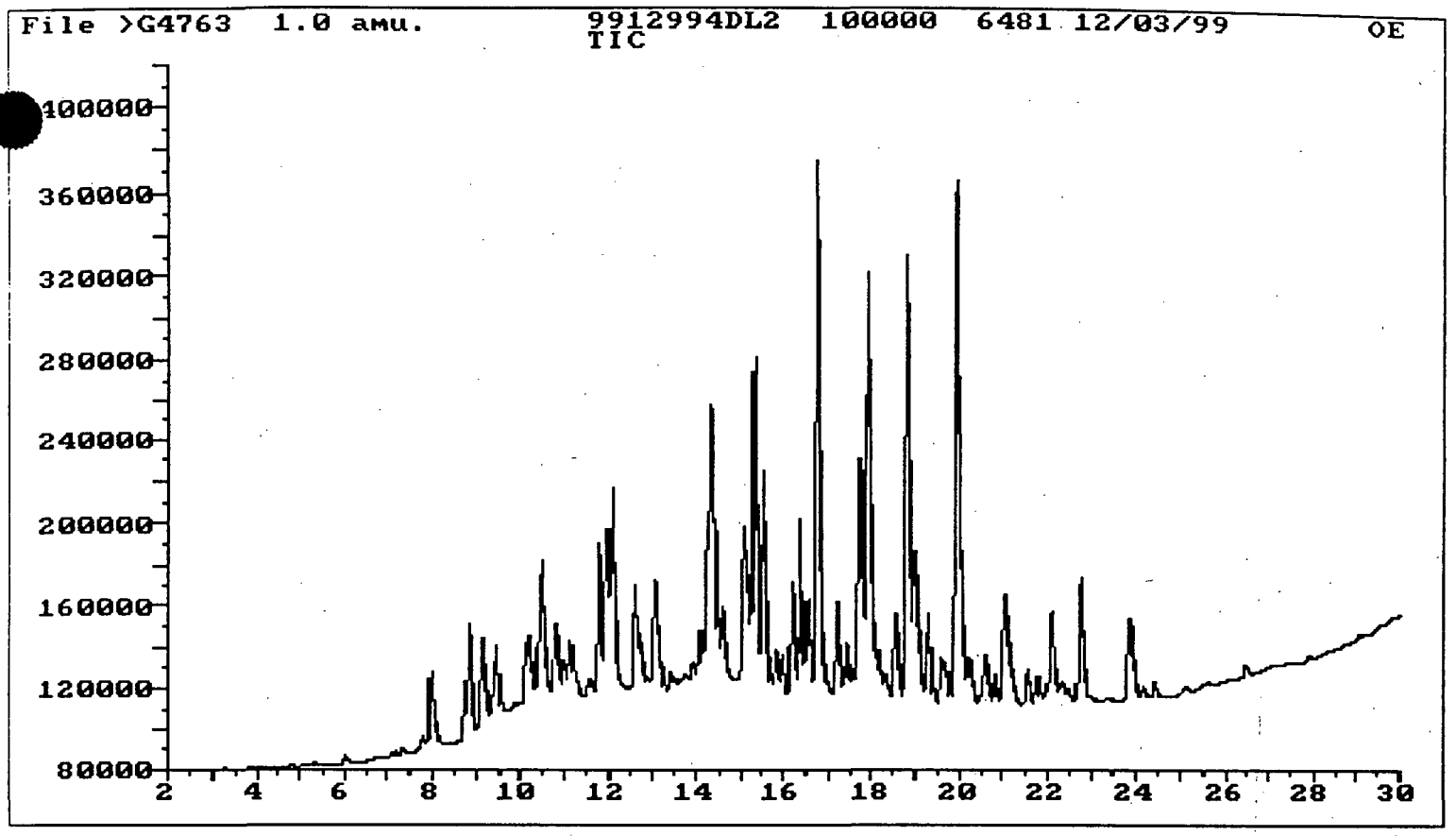


Data File: >G4763::G4 Quant Output File: ^G4763::QT
Name: 9912994DL2 100000 Instrument ID: G
Misc: 6481 12/03/99 OE DCOMP-1

Id File: ID7PCB::G5
Title: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990930 11:54 Last Qcal Time: 991207 17:33

Operator ID: JEFF
Quant Time : 991208 20:02
Injected at: 991208 19:28

592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320000
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240000
200000
160000
120000
80000
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593

QUANT REPORT

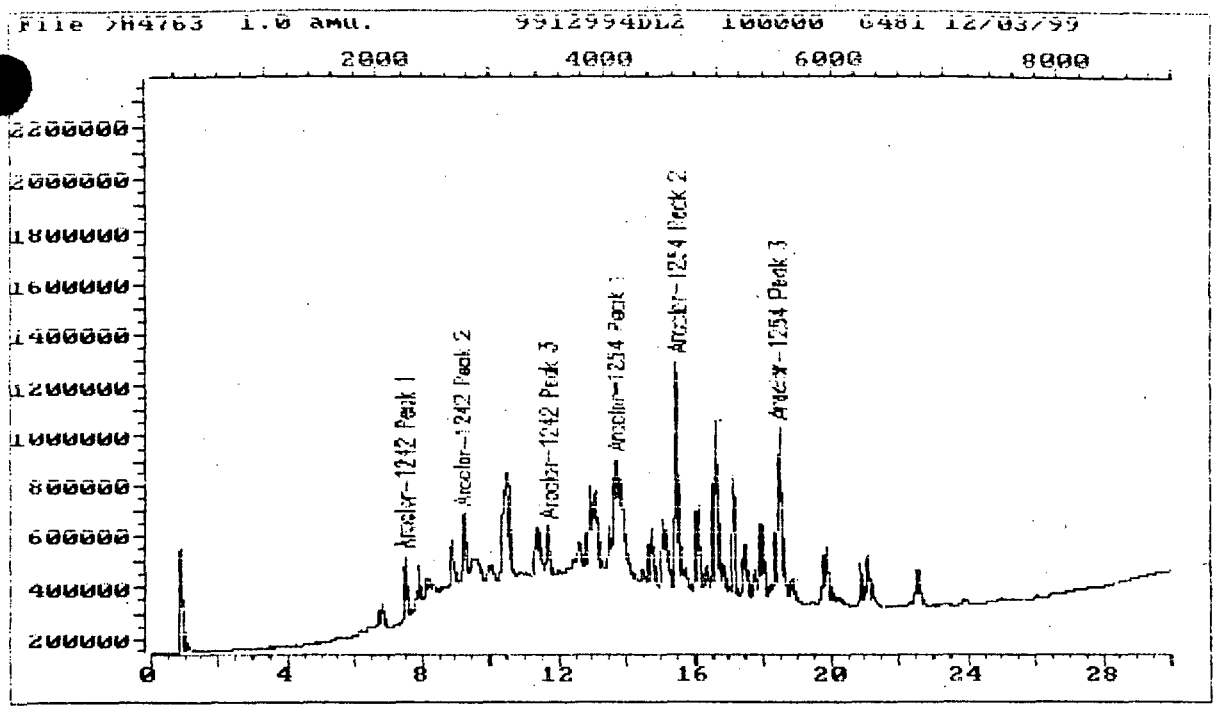
rator ID: JEFF Quant Rev: 7 Quant Time: 991208 20:39
put File: ^H4763::QT Injected at: 991208 20:05
ata File: >H4763::G4 Dilution Factor: 1.00000
ame: 9912994DL2 100000 Instrument ID: H
isc: 6481 12/03/99 OE DCOMP-1

D File: ID8PCB::G5
itle: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
ast Calibration: 990930 11:58 Last Qcal Time: 991207 18:10

	Compound	R.T.	Scan#	Area	Conc	Units	q
11)	#Aroclor-1242 Peak 1	7.44	2231	1687704	45.67	ug/L	100
12)	#Aroclor-1242 Peak 2	9.17	2752	1734012	20.75	ug/L	100
13)	#Aroclor-1242 Peak 3	11.69	3508	1234814	49.40	ug/L	100
17)	#Aroclor-1254 Peak 1	13.67	4102	1589373	49.89	ug/L	100
18)	#Aroclor-1254 Peak 2	15.46	4638	5494213	84.14	ug/L	100
19)	#Aroclor-1254 Peak 3	18.44	5532	6087262	42.40	ug/L	100

Compound uses ESTD

594



Data File: >H4763::G4 Quant Output File: ^H4763::QT
Name: 9912994DL2 100000 Instrument ID: H
Misc: 6481 12/03/99 OE DCOMP-1

Id File: ID8PCB::G5
Title: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990930 11:58 Last Qcal Time: 991207 18:10

Operator ID: JEFF
Quant Time : 991208 20:39
Injected at: 991208 20:05

595

QUANT REPORT

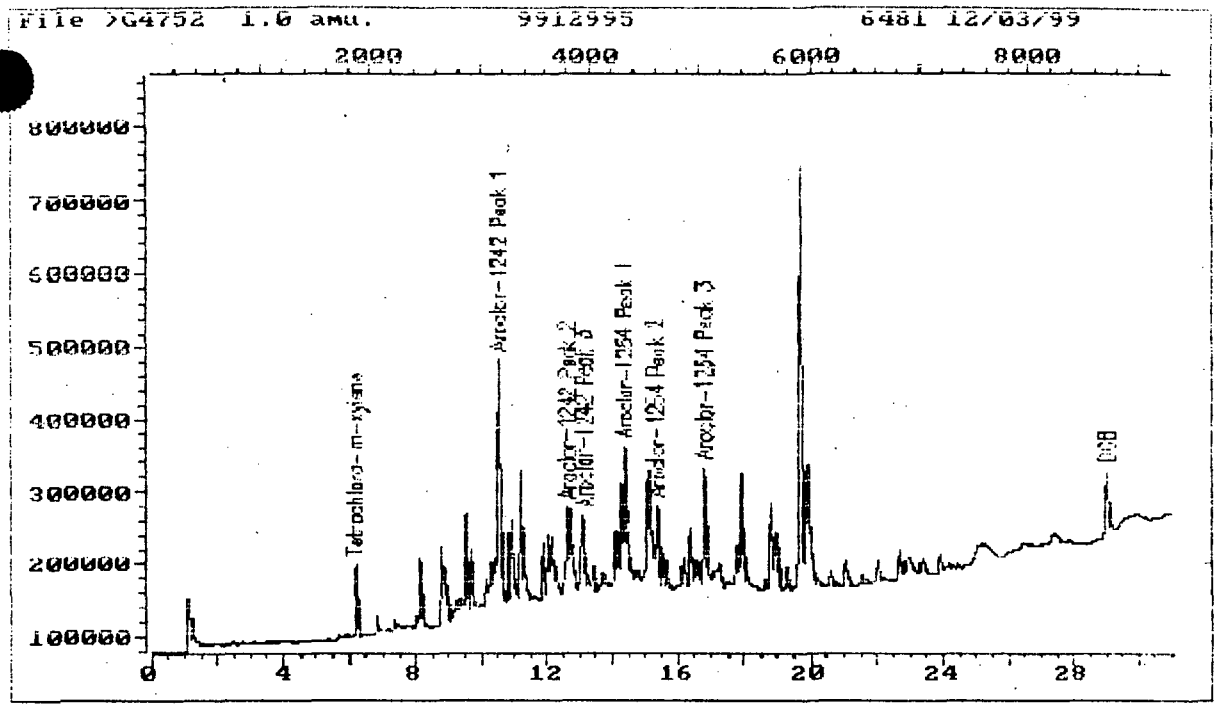
rator ID: JEFF Quant Rev: 7 Quant Time: 991208 08:19
put File: ^G4752::QT Injected at: 991208 07:44
ata File: >G4752::G4 Dilution Factor: 1.00000
ame: 9912995 Instrument ID: G
isc: 6481 12/03/99 OE DCOMP-2

D File: ID7PCB::G5
itle: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
ast Calibration: 990930 11:54 Last Qcal Time: 991207 17:33

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	6.17	1851	404312M	.831	ug/L	
11)	#Aroclor-1242 Peak 1	10.52	3156	2486326	89.40	ug/L	100
12)	#Aroclor-1242 Peak 2	12.61	3783	882469	114.58	ug/L	100
13)	#Aroclor-1242 Peak 3	13.11	3934	849687	87.82	ug/L	100
17)	#Aroclor-1254 Peak 1	14.37	4311	1024890	86.66	ug/L	100
18)	#Aroclor-1254 Peak 2	15.32	4596	529564	44.39	ug/L	100
19)	#Aroclor-1254 Peak 3	16.78	5034	898919	99.89	ug/L	100
23)	#DCB	28.99	8698	592845	.973	ug/L	100

Compound uses ESTD

596

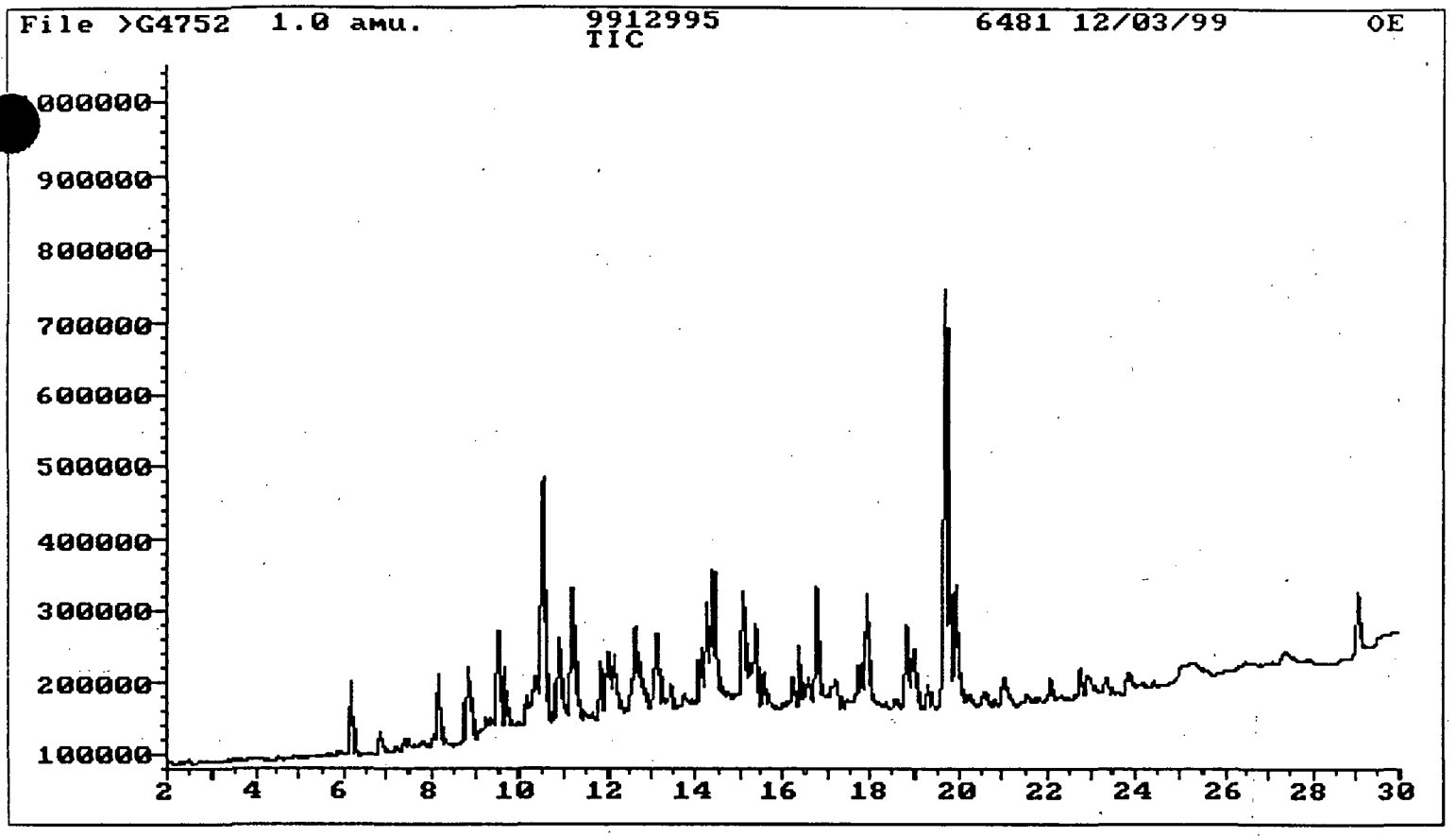


Data File: >G4752::G4 Quant Output File: ^G4752::QT
Name: 9912995 Instrument ID: G
Misc: 6481 12/03/99 OE DCOMP-2

Id File: ID7PCB::G5
Title: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990930 11:54 Last Qcal Time: 991207 17:33

Operator ID: JEFF
Quant Time : 991208 08:19
Injected at: 991208 07:44

597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6481 12/03/99
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600000
500000
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300000
200000
100000
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598

QUANT REPORT

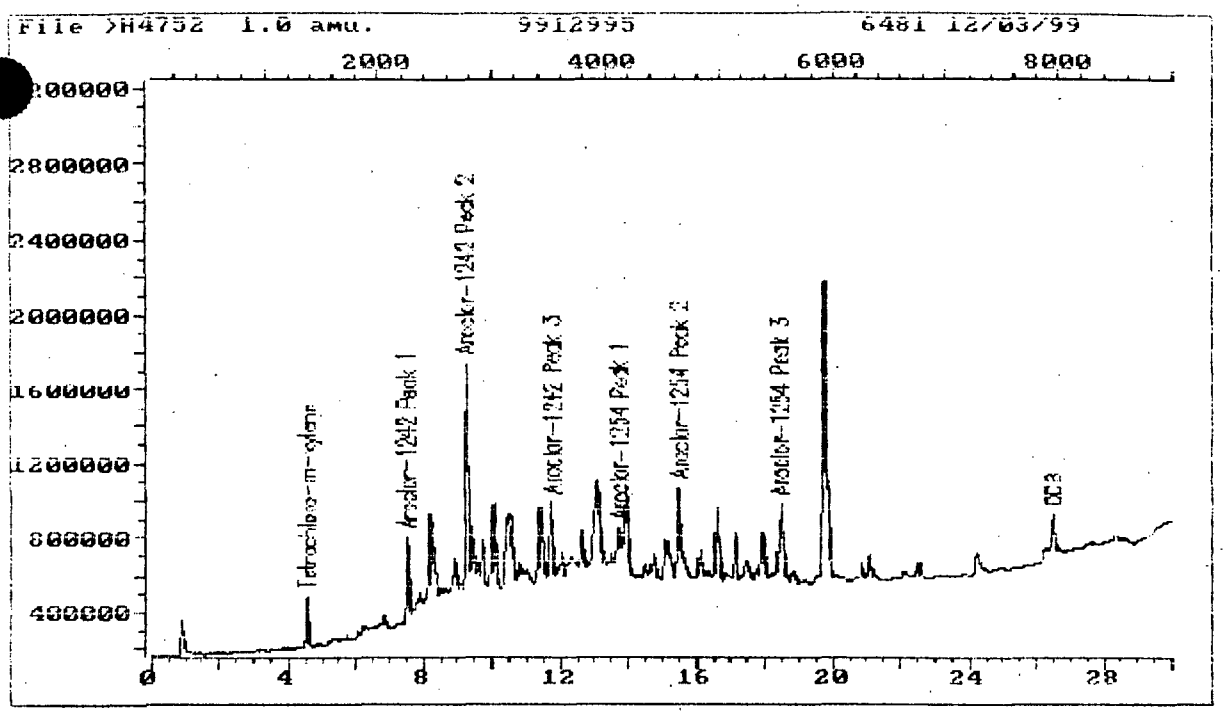
ator ID: JEFF Quant Rev: 7 Quant Time: 991208 09:13
put File: ^H4752::QT Injected at: 991208 08:22
ta File: >H4752::G4 Dilution Factor: 1.00000
me: 9912995 Instrument ID: H
sc: 6481 12/03/99 OE DCOMP-2

File: ID8PCB::G5
tle: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
st Calibration: 990930 11:58 Last Qcal Time: 991207 18:10

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	4.56	1368	1422498M	1.01	ug/L	
11)	#Aroclor-1242 Peak 1	7.48	2244	2311550	62.55	ug/L	100
12)	#Aroclor-1242 Peak 2	9.20	2759	6646636	79.54	ug/L	100
13)	#Aroclor-1242 Peak 3	11.73	3520	2407254	96.31	ug/L	100
17)	#Aroclor-1254 Peak 1	13.70	4111	936305	29.39	ug/L	100
18)	#Aroclor-1254 Peak 2	15.47	4642	2928459	44.85	ug/L	100
19)	#Aroclor-1254 Peak 3	18.44	5533	2962467	20.63	ug/L	100
13)	#DCB	26.48	7944	1136341	.644	ug/L	100

Compound uses ESTD

599



Data File: >H4752::G4 Quant Output File: ^H4752::QT
Name: 9912995 Instrument ID: H
Misc: 6481 12/03/99 OE DCOMP-2

Id File: ID8PCB::G5
Title: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990930 11:58 Last Qcal Time: 991207 18:10

Operator ID: JEFF
Quant Time : 991208 09:13
Injected at: 991208 08:22

600

QUANT REPORT

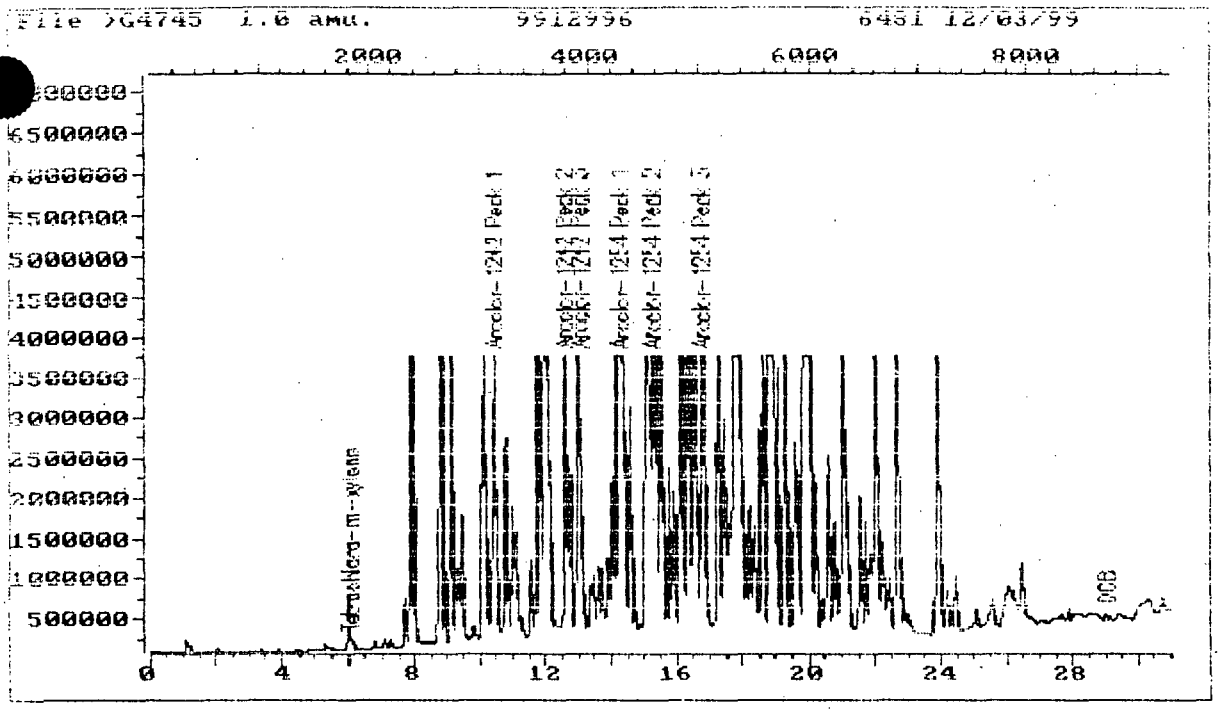
ator ID: JEFF Quant Rev: 7 Quant Time: 991208 07:52
put File: ^G4745::QT Injected at: 991208 03:25
ata File: >G4745::G4 Dilution Factor: 1.00000
ame: 9912996 Instrument ID: G
isc: 6481 12/03/99 OE SP-1

D File: ID7PCB::G5
itle: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
ast Calibration: 990930 11:54 Last Qcal Time: 991207 17:33

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	6.07	1821	378456M	.778	ug/L	
11)	#Aroclor-1242 Peak 1	10.46	3137	23494624M	844.74	ug/L	100
12)	#Aroclor-1242 Peak 2	12.56	3767	17878920M	2321.44	ug/L	100
13)	#Aroclor-1242 Peak 3	13.02	3906	33178504M	3429.37	ug/L	
17)	#Aroclor-1254 Peak 1	14.27	4281	51039304M	4315.52	ug/L	
18)	#Aroclor-1254 Peak 2	15.23	4568	31236520M	2618.55	ug/L	
19)	#Aroclor-1254 Peak 3	16.73	5019	38335416M	4260.13	ug/L	
23)	#DCB	28.99	8697	551062	.904	ug/L	100

Compound uses ESTD

601

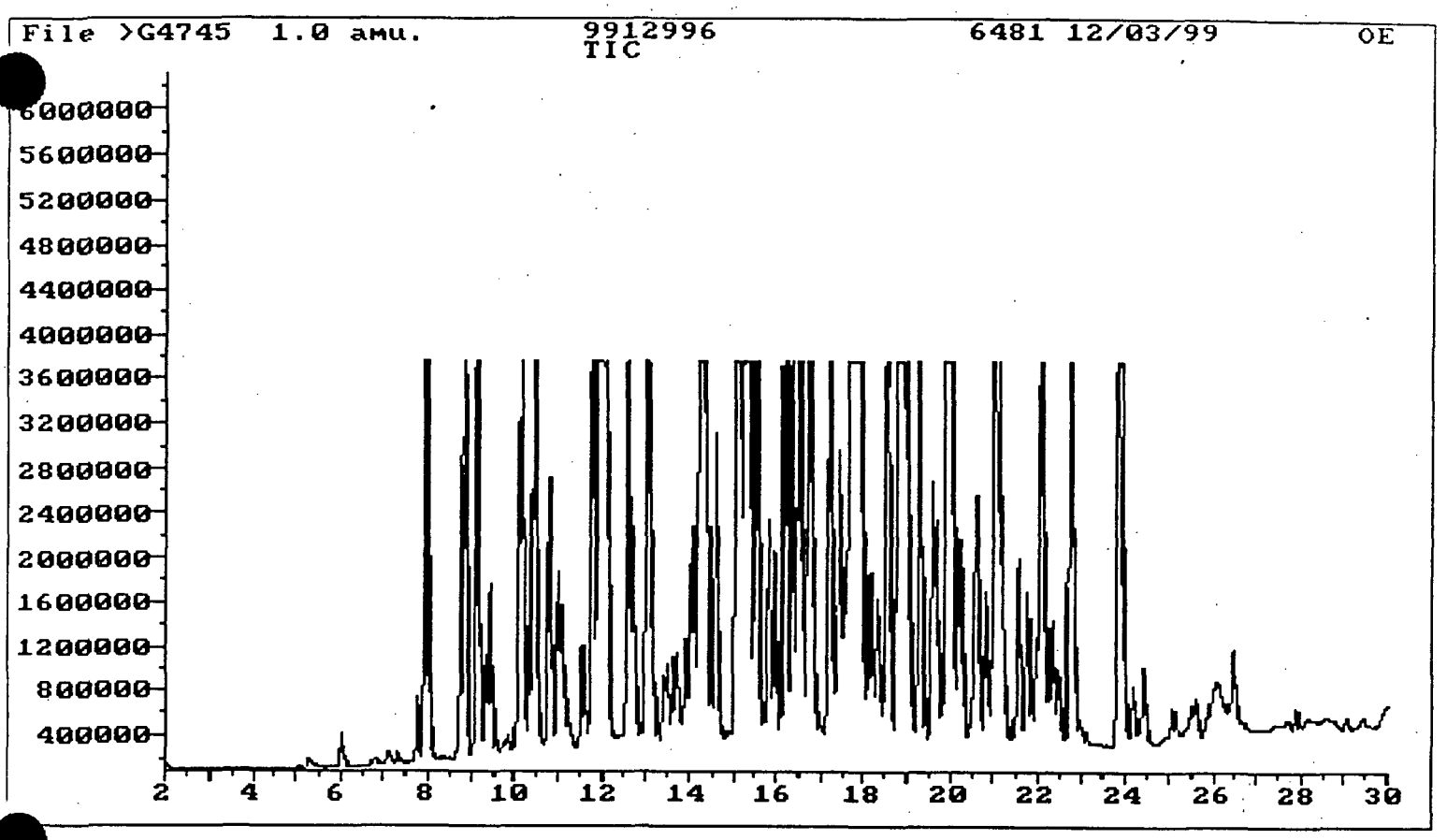


Data File: >G4745::G4 Quant Output File: ^G4745::QT
Name: 9912996 Instrument ID: G
Misc: 6481 12/03/99 OE SP-1

Id File: ID7PCB::G5
Title: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990930 11:54 Last Qcal Time: 991207 17:33

Operator ID: JEFF
Quant Time : 991208 07:52
Injected at: 991208 03:25

602


File >G4745 1.0 amu.
9912996
TIC
6481 12/03/99
OE
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2000000
1600000
1200000
800000
400000
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603

700701

QUANT REPORT

rator ID: JEFF Quant Rev: 7 Quant Time: 991208 08:50
out File: ^H4745::QT Injected at: 991208 04:02
ta File: >H4745::G4 Dilution Factor: 1.00000
me: 9912996 Instrument ID: H
sc: 6481 12/03/99 OE SP-1

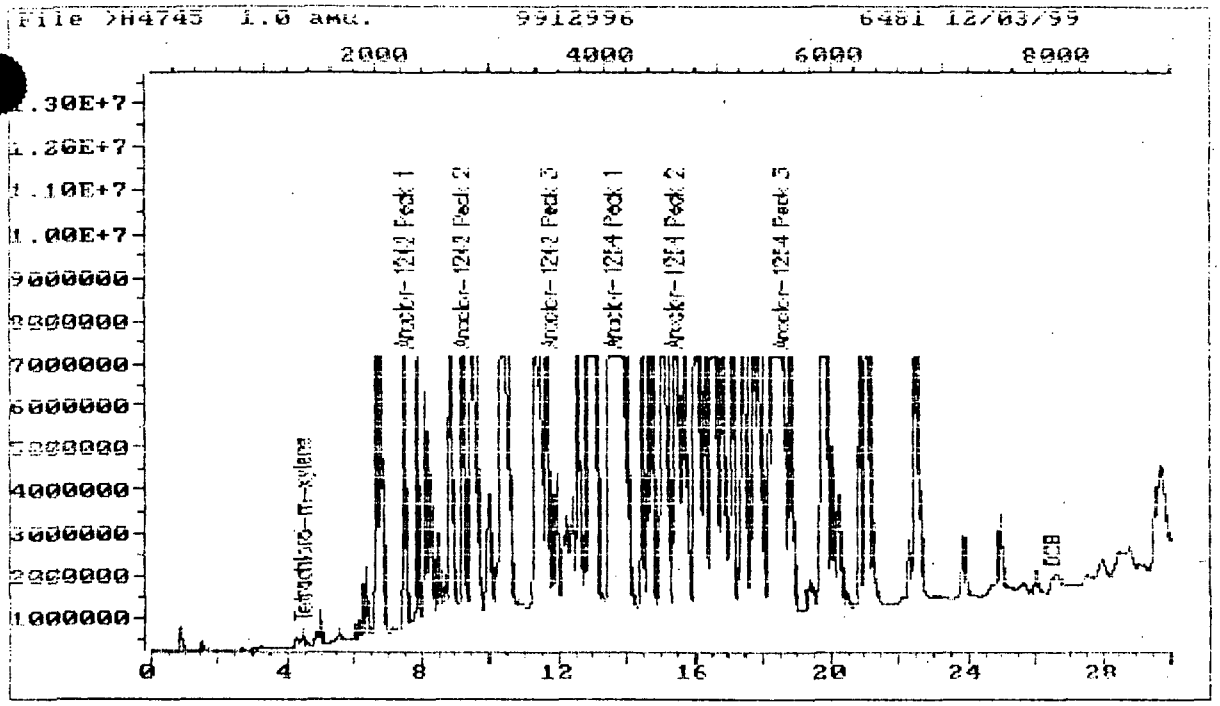
D File: ID8PCB::G5
tle: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
st Calibration: 990930 11:58 Last Qcal Time: 991207 18:10

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	4.45	1336	1390363	.986	ug/L	100
11)	#Aroclor-1242 Peak 1	7.46	2239	46963840M	1270.74	ug/L	100
12)	#Aroclor-1242 Peak 2	9.18	2753	46791464M	559.97	ug/L	100
13)	#Aroclor-1242 Peak 3	11.72	3515	50321168M	2013.24	ug/L	100
17)	#Aroclor-1254 Peak 1	13.56	4067	.206E+09M	6454.50	ug/L	
18)	#Aroclor-1254 Peak 2	15.38	4613	4405264	67.47	ug/L	100
19)	#Aroclor-1254 Peak 3	18.55	5565	.140E+09M	976.22	ug/L	
13)	#DCB	26.49	7946	2642807	1.50	ug/L	100

: Compound uses ESTD

604

700702



Data File: >H4745::G4 Quant Output File: ^H4745::QT
Name: 9912996 Instrument ID: H
Misc: 6481 12/03/99 OE SP-1

Id File: ID8PCB::G5
Title: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990930 11:58 Last Qcal Time: 991207 18:10

Operator ID: JEFF
Quant Time : 991208 08:59
Injected at: 991208 04:02

605

QUANT REPORT

rator ID: JEFF Quant Rev: 7 Quant Time: 991208 15:42
put File: ^G4756::QT Injected at: 991208 15:07
ata File: >G4756::G4 Dilution Factor: 1.00000
ame: 9912996DL 200 Instrument ID: G
isc: 6481 12/03/99 OE SP-1

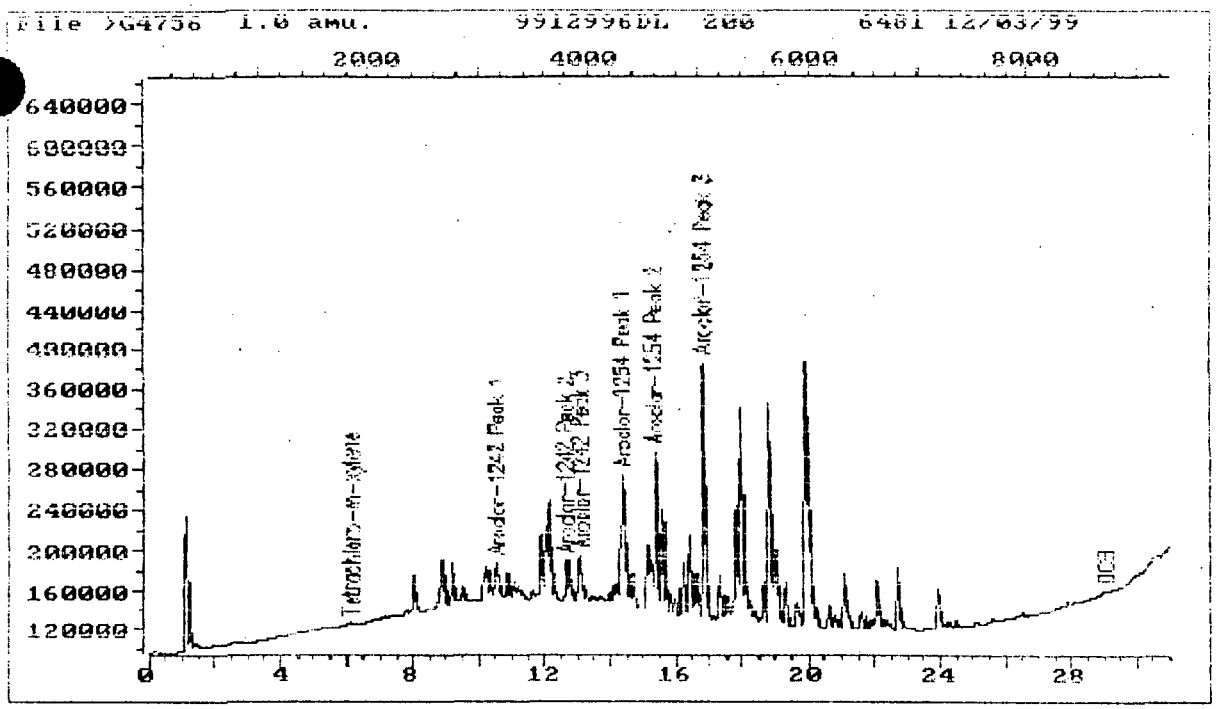
D File: ID7PCB::G5
itle: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
ast Calibration: 990930 11:54 Last Qcal Time: 991207 17:33

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	6.13	1840	1588M	.00326	ug/L	100
11)	#Aroclor-1242 Peak 1	10.52	3156	273716	9.84	ug/L	100
12)	#Aroclor-1242 Peak 2	12.61	3784	207075	26.89	ug/L	100
13)	#Aroclor-1242 Peak 3	13.07	3920	411780	42.56	ug/L	100
17)	#Aroclor-1254 Peak 1	14.35	4305	789106	66.72	ug/L	100
18)	#Aroclor-1254 Peak 2	15.32	4595	789301	66.17	ug/L	100
19)	#Aroclor-1254 Peak 3	16.80	5039	1612746	179.22	ug/L	100
23)	#DCB	29.03	8708	2482M	.00407	ug/L	

Compound uses ESTD

606

700704

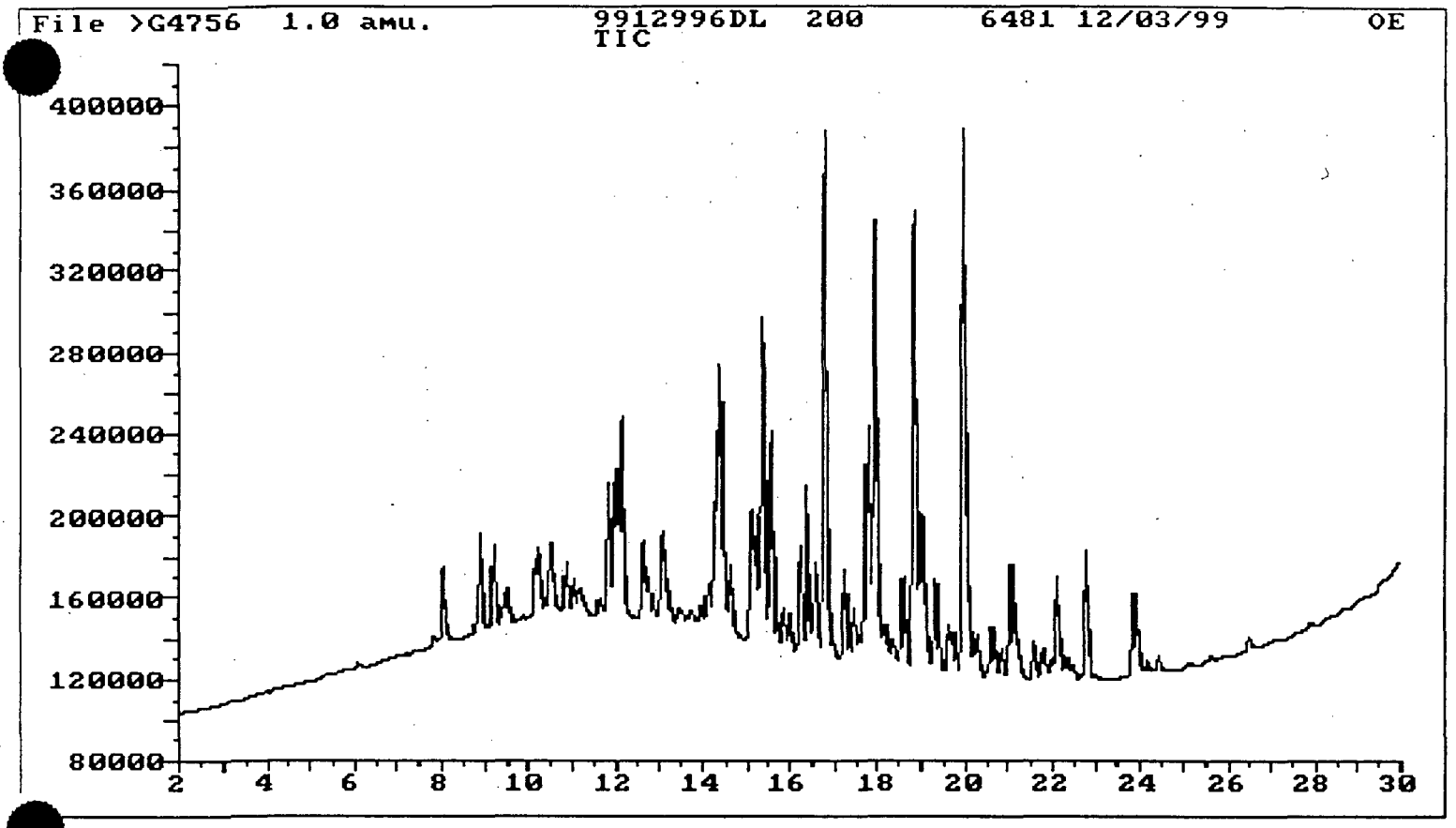


Data File: >G4756::G4 Quant Output File: ^G4756::QT
Name: 9912996DL 200 Instrument ID: G
Misc: 6481 12/03/99 OE SP-1

Id File: ID7PCB::G5
Title: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990930 11:54 Last Qcal Time: 991207 17:33

Operator ID: JEFF
Quant Time : 991208 15:42
Injected at: 991208 15:07

607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9912996DL 200
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6481 12/03/99
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608

700706

QUANT REPORT

ator ID: JEFF Quant Rev: 7 Quant Time: 991208 15:17
put File: ^H4756::QT Injected at: 991208 15:44
ata File: >H4756::G4 Dilution Factor: 1.00000
me: 9912996DL 200 Instrument ID: H
isc: 6481 12/03/99 OE SP-1

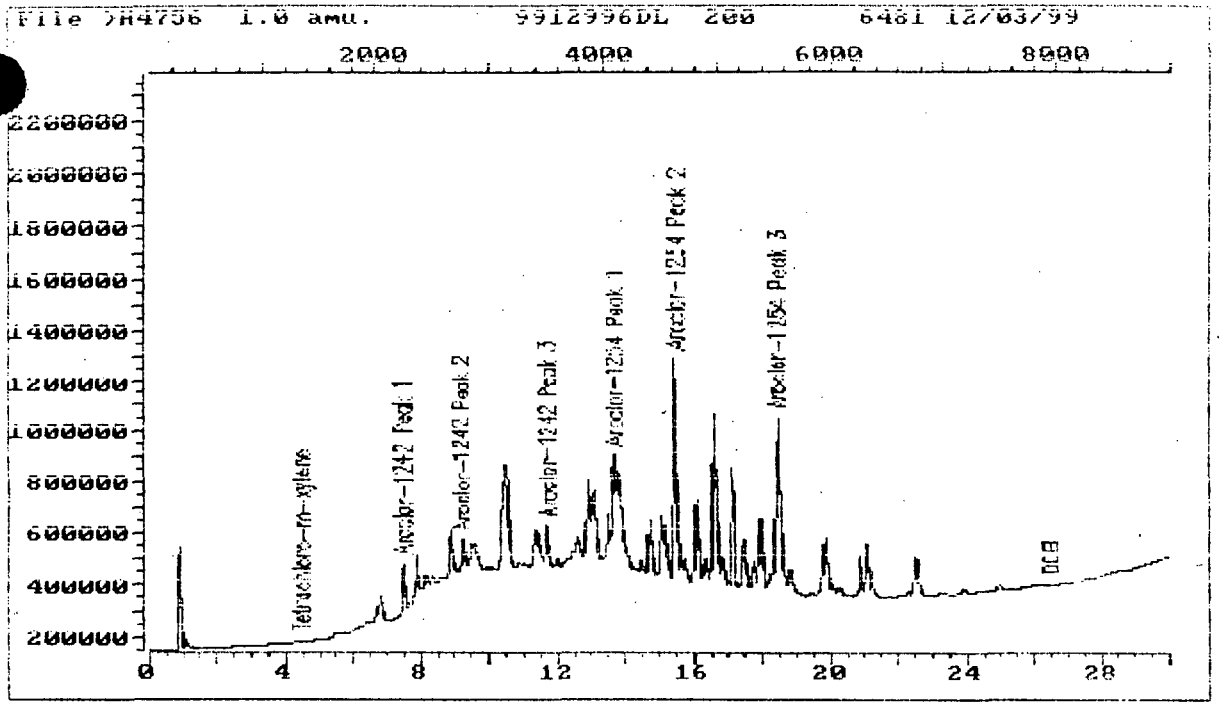
File: ID8PCB::G5
itle: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
st Calibration: 990930 11:58 Last Qcal Time: 991207 18:10

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	4.47	1340	13785M	.00977	ug/L	
11)	#Aroclor-1242 Peak 1	7.44	2231	1437853	38.91	ug/L	100
12)	#Aroclor-1242 Peak 2	9.17	2751	743377	8.90	ug/L	100
13)	#Aroclor-1242 Peak 3	11.69	3506	977627	39.11	ug/L	100
17)	#Aroclor-1254 Peak 1	13.67	4101	1457628	45.76	ug/L	100
18)	#Aroclor-1254 Peak 2	15.46	4637	5258947	80.54	ug/L	100
19)	#Aroclor-1254 Peak 3	18.44	5531	5063508	35.27	ug/L	100
13)	#DCB	26.49	7948	14214M	.00806	ug/L	

Compound uses ESTD

609

700707



Data File: >H4756::G4 Quant Output File: ^H4756::QT
Name: 9912996DL 200 Instrument ID: H
Misc: 6481 12/03/99 OE SP-1

Id File: ID8PCB::G5
Title: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990930 11:58 Last Qcal Time: 991207 18:10

Operator ID: JEFF
Quant Time : 991208 16:17
Injected at: 991208 15:44

610

QUANT REPORT

rator ID: JEFF Quant Rev: 7 Quant Time: 991208 07:53
put File: ^G4746::QT Injected at: 991208 04:02
ata File: >G4746::G4 Dilution Factor: 1.00000
ame: 9912997 Instrument ID: G
isc: 6481 12/03/99 OE SP-2

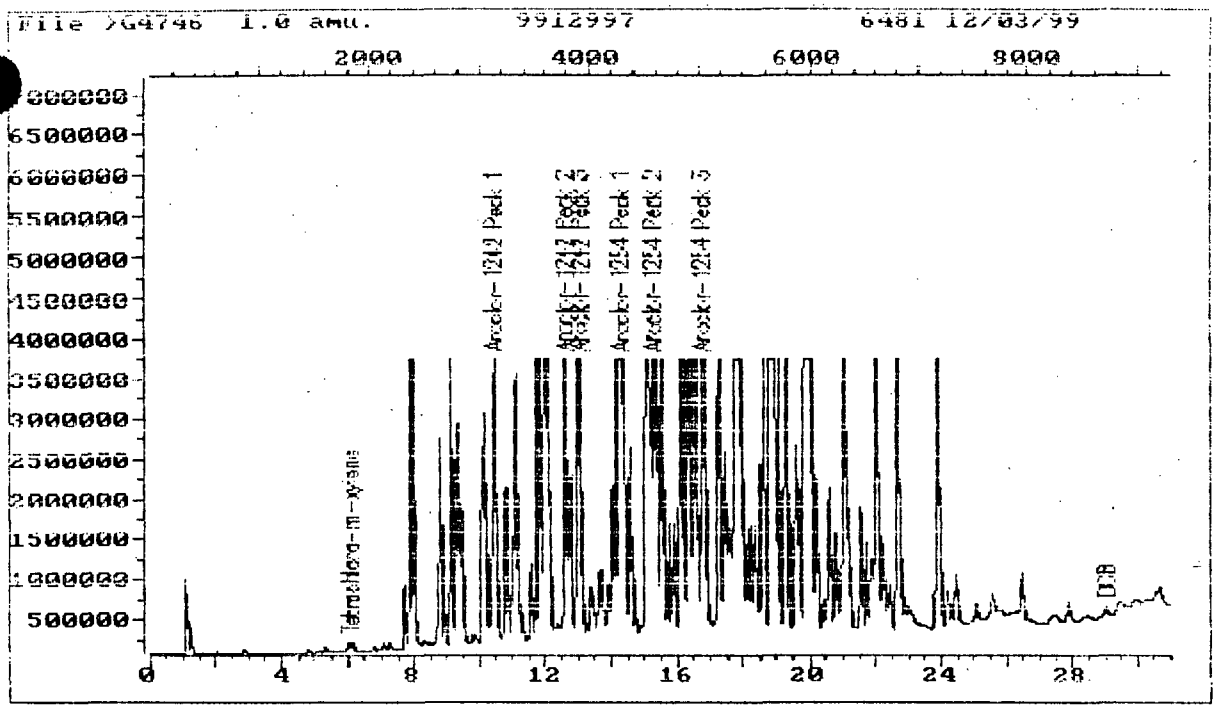
D File: ID7PCB::G5
itle: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
ast Calibration: 990930 11:54 Last Qcal Time: 991207 17:33

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	6.08	1823	451631	.928	ug/L	100
11)	#Aroclor-1242 Peak 1	10.44	3131	25859648M	929.78	ug/L	100
12)	#Aroclor-1242 Peak 2	12.57	3770	19274976M	2502.71	ug/L	100
13)	#Aroclor-1242 Peak 3	13.03	3909	31999952M	3307.56	ug/L	
17)	#Aroclor-1254 Peak 1	14.26	4277	51544608M	4358.24	ug/L	
18)	#Aroclor-1254 Peak 2	15.23	4568	32008136M	2683.24	ug/L	
19)	#Aroclor-1254 Peak 3	16.72	5015	37743024M	4194.30	ug/L	
3)	#DCB	28.99	8697	847215M	1.39	ug/L	100

Compound uses ESTD

611

700709

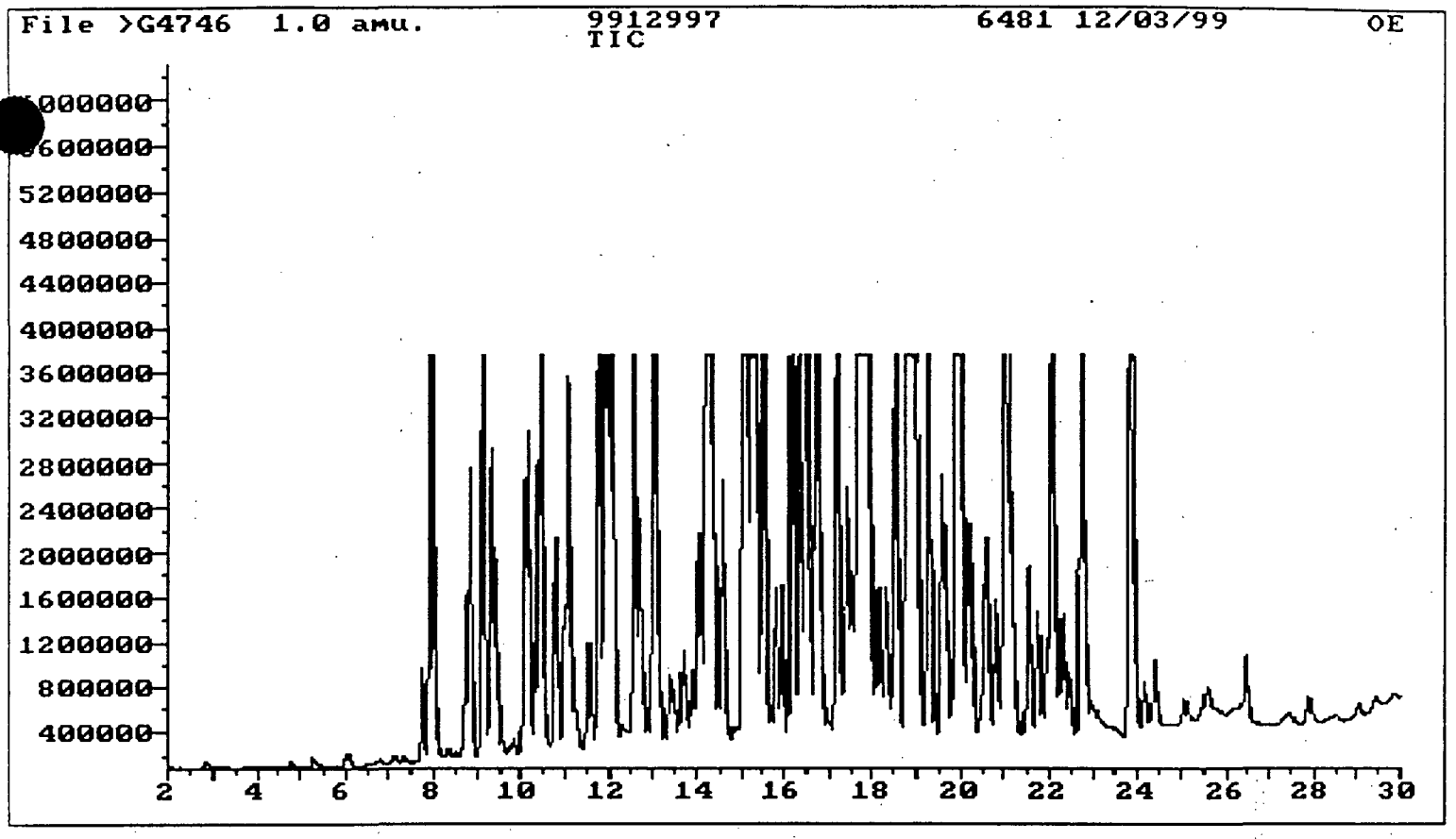


Data File: >G4746::G4 Quant Output File: ^G4746::QT
Name: 9912997 Instrument ID: G
Misc: 6481 12/03/99 OE SP-2

Id File: ID7PCB::G5
Title: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990930 11:54 Last Qcal Time: 991207 17:33

Operator ID: JEFF
Quant Time : 991208 07:53
Injected at: 991208 04:02

612


File >G4746 1.0 amu.
9912997
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400000
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613

700711

QUANT REPORT

rator ID: JEFF Quant Rev: 7 Quant Time: 991208 09:01
put File: ^H4746::QT Injected at: 991208 04:39
ata File: >H4746::G4 Dilution Factor: 1.00000
ame: 9912997 Instrument ID: H
isc: 6481 12/03/99 OE SP-2

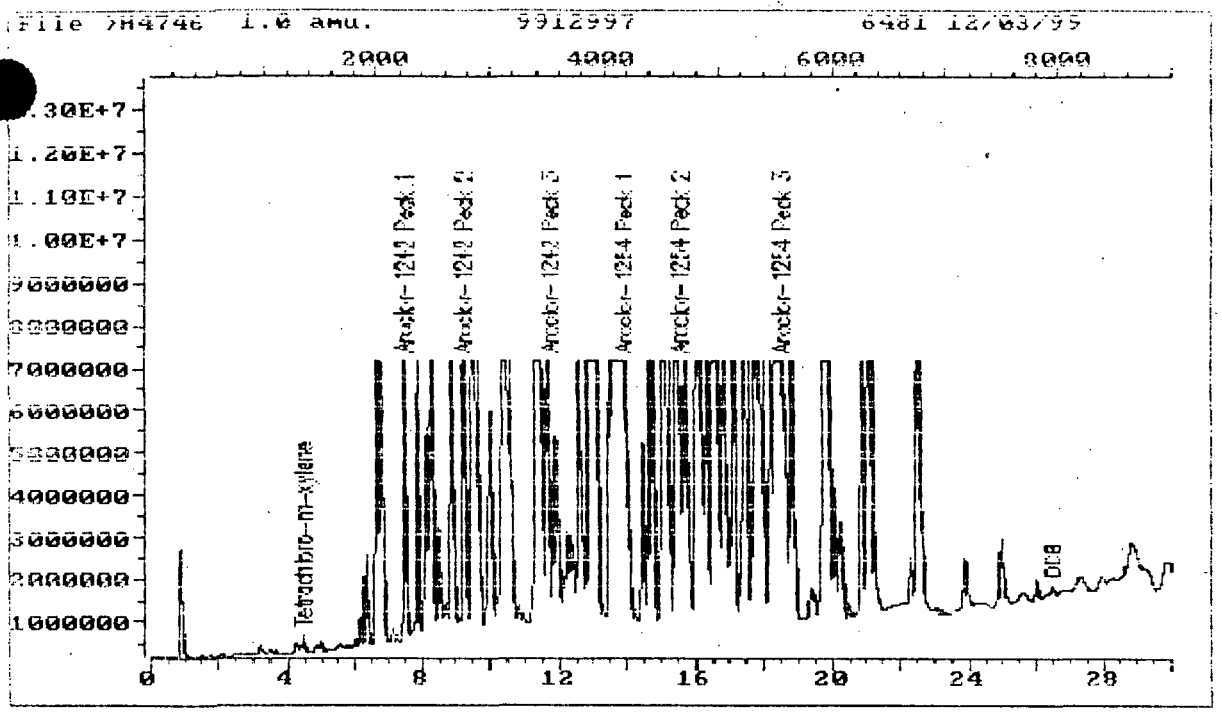
D File: ID8PCB::G5
itle: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
ast Calibration: 990930 11:58 Last Qcal Time: 991207 18:10

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	4.46	1337	1477205	1.05	ug/L	100
11)	#Aroclor-1242 Peak 1	7.45	2234	39859896M	1078.52	ug/L	100
12)	#Aroclor-1242 Peak 2	9.19	2757	49165680M	588.39	ug/L	100
13)	#Aroclor-1242 Peak 3	11.72	3516	47391664M	1896.04	ug/L	100
17)	#Aroclor-1254 Peak 1	13.90	4170	.162E+09M	5076.03	ug/L	
18)	#Aroclor-1254 Peak 2	15.52	4655	76387152M	1169.85	ug/L	100
19)	#Aroclor-1254 Peak 3	18.52	5555	.106E+09M	741.47	ug/L	
33)	#DCB	26.48	7943	1289245M	.731	ug/L	

Compound uses ESTD

614

700712



Data File: >H4746::G4 Quant Output File: ^H4746::QT
Name: 9912997 Instrument ID: H
Misc: 6481 12/03/99 OE SP-2

Id File: ID8PCB::G5
Title: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990930 11:58 Last Qcal Time: 991207 18:10

Operator ID: JEFF
Quant Time : 991208 09:01
Injected at: 991208 04:39

615

QUANT REPORT

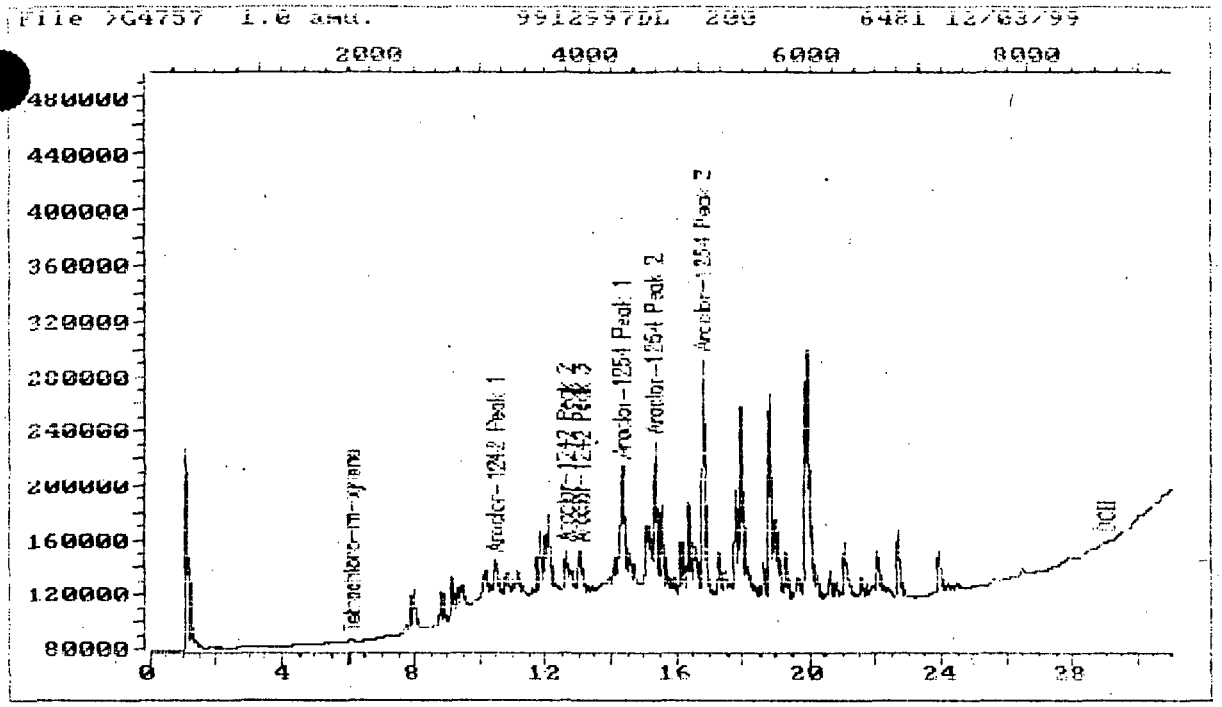
rator ID: JEFF Quant Rev: 7 Quant Time: 991208 16:18
put File: ^G4757::QT Injected at: 991208 15:44
ata File: >G4757::G4 Dilution Factor: 1.00000
me: 9912997DL 200 Instrument ID: G
sc: 6481 12/03/99 OE SP-2

D File: ID7PCB::G5
itle: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
ast Calibration: 990930 11:54 Last Qcal Time: 991207 17:33

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	6.08	1824	1946M	.00400	ug/L	
11)	#Aroclor-1242 Peak 1	10.47	3141	196375	7.06	ug/L	100
12)	#Aroclor-1242 Peak 2	12.57	3770	164707	21.39	ug/L	100
13)	#Aroclor-1242 Peak 3	13.04	3912	292821	30.27	ug/L	100
17)	#Aroclor-1254 Peak 1	14.30	4291	773610	65.41	ug/L	100
18)	#Aroclor-1254 Peak 2	15.27	4582	534934	44.84	ug/L	100
19)	#Aroclor-1254 Peak 3	16.76	5029	1116181	124.04	ug/L	100
3)	#DCB	29.01	8702	3754M	.00616	ug/L	

Compound uses ESTD

616

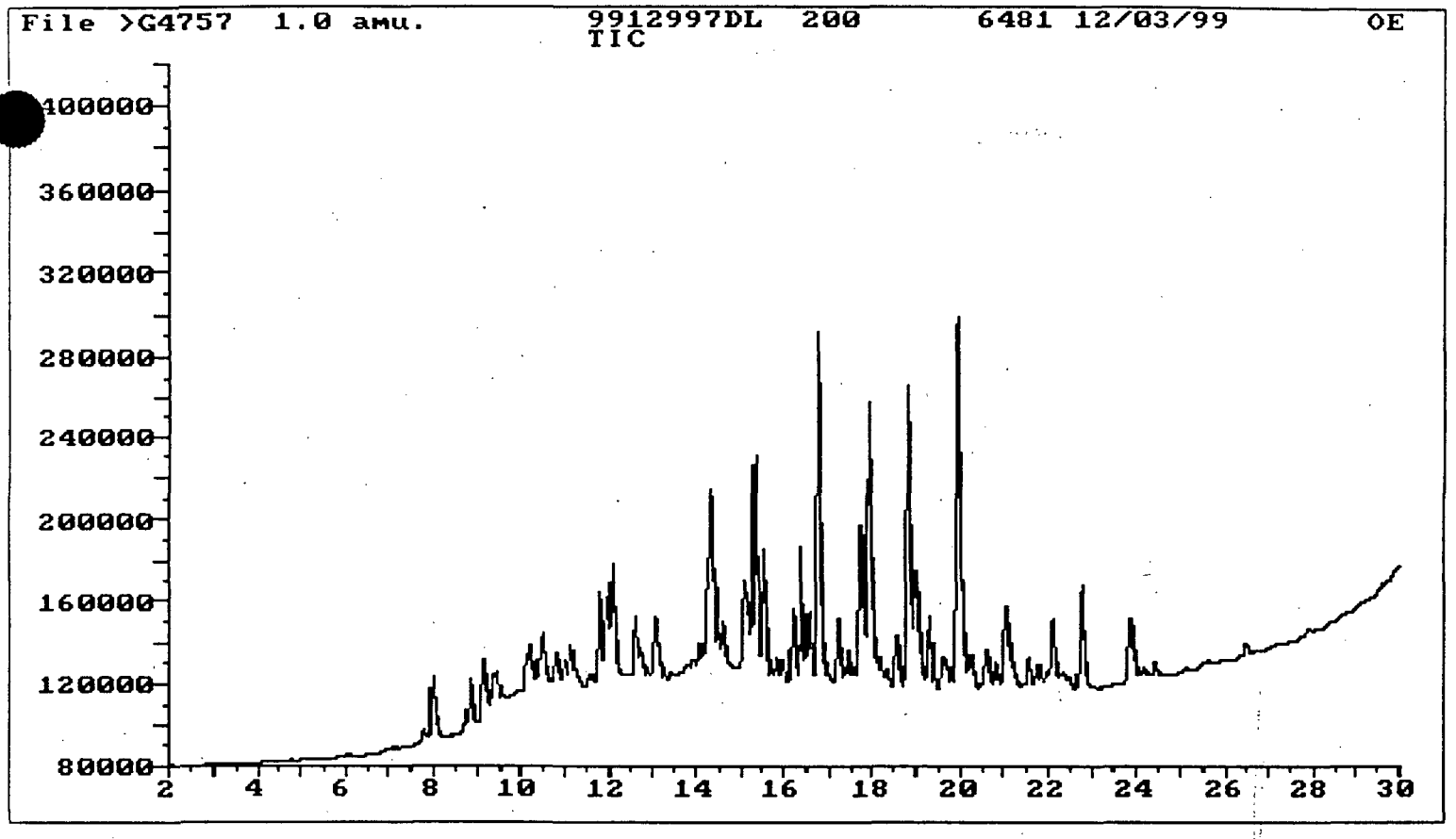


Data File: >G4757::G4 Quant Output File: ^G4757::QT
Name: 9912997DL 200 Instrument ID: G
Misc: 6481 12/03/99 OE SP-2

Id File: ID7PCB::G5
Title: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990930 11:54 Last Qcal Time: 991207 17:33

Operator ID: JEFF
Quant Time : 991208 16:18
Injected at: 991208 15:44

617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9912997DL 200
TIC
6481 12/03/99
OE
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240000
200000
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618

700716

QUANT REPORT

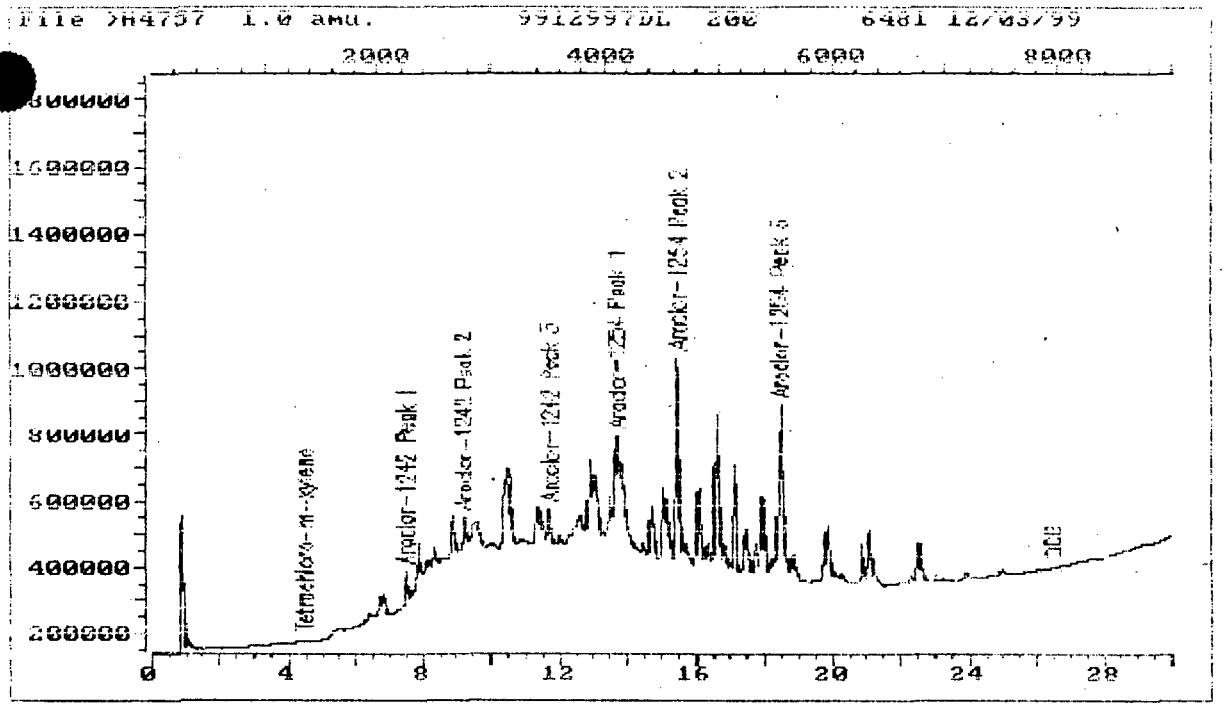
rator ID: JEFF Quant Rev: 7 Quant Time: 991208 16:54
put File: ^H4757::QT Injected at: 991208 16:21
ata File: >H4757::G4 Dilution Factor: 1.00000
ame: 9912997DL 200 Instrument ID: H
isc: 6481 12/03/99 OE SP-2

D File: ID8PCB::G5
itle: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
ast Calibration: 990930 11:58 Last Qcal Time: 991207 18:10

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	4.47	1341	7052M	.00500	ug/L	
11)	#Aroclor-1242 Peak 1	7.44	2232	925418	25.04	ug/L	100
12)	#Aroclor-1242 Peak 2	9.17	2752	609335	7.29	ug/L	100
13)	#Aroclor-1242 Peak 3	11.69	3507	612727	24.51	ug/L	100
17)	#Aroclor-1254 Peak 1	13.67	4102	1104892	34.69	ug/L	100
18)	#Aroclor-1254 Peak 2	15.46	4638	3648202	55.87	ug/L	100
19)	#Aroclor-1254 Peak 3	18.44	5531	3627613	25.27	ug/L	100
23)	#DCB	26.49	7948	8742M	.00496	ug/L	

Compound uses ESTD

619



Data File: >H4757::G4 Quant Output File: ^H4757::QT
Name: 9912997DL 200 Instrument ID: H
Misc: 6481 12/03/99 OE SP-2

Id File: ID8PCB::G5
Title: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990930 11:58 Last Qcal Time: 991207 18:10

Operator ID: JEFF
Quant Time : 991208 16:54
Injected at: 991208 16:21

620

QUANT REPORT

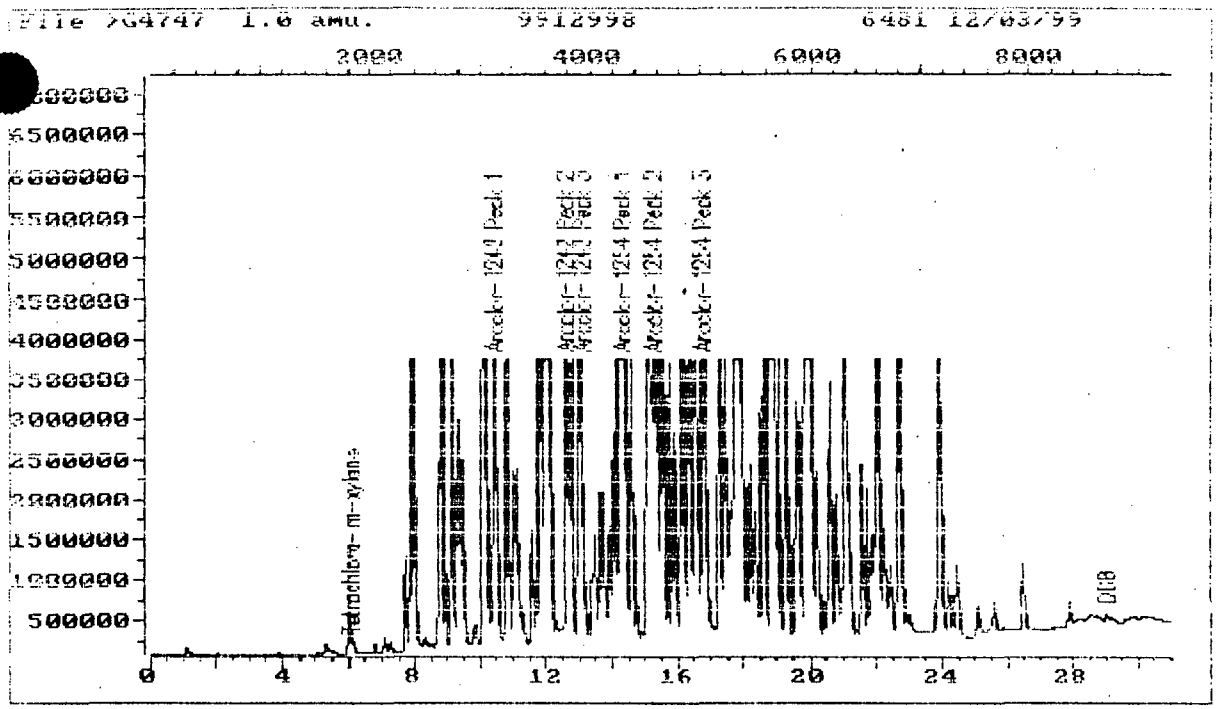
rator ID: JEFF Quant Rev: 7 Quant Time: 991208 07:54
Out File: ^G4747::QT Injected at: 991208 04:39
ata File: >G4747::G4 Dilution Factor: 1.00000
ame: 9912998 Instrument ID: G
isc: 6481 12/03/99 OE SP-3

D File: ID7PCB::G5
itle: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
ast Calibration: 990930 11:54 Last Qcal Time: 991207 17:33

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	6.07	1822	397886M	.818	ug/L	
11)	#Aroclor-1242 Peak 1	10.43	3128	30248264M	1087.57	ug/L	
12)	#Aroclor-1242 Peak 2	12.56	3769	22059440M	2864.25	ug/L	100
13)	#Aroclor-1242 Peak 3	13.07	3920	40604848M	4196.97	ug/L	
17)	#Aroclor-1254 Peak 1	14.28	4283	58575560M	4952.73	ug/L	
18)	#Aroclor-1254 Peak 2	15.22	4567	34750544M	2913.13	ug/L	
19)	#Aroclor-1254 Peak 3	16.73	5019	40173376M	4464.38	ug/L	
33)	#DCB	29.00	8699	656670	1.08	ug/L	100

Compound uses ESTD

621



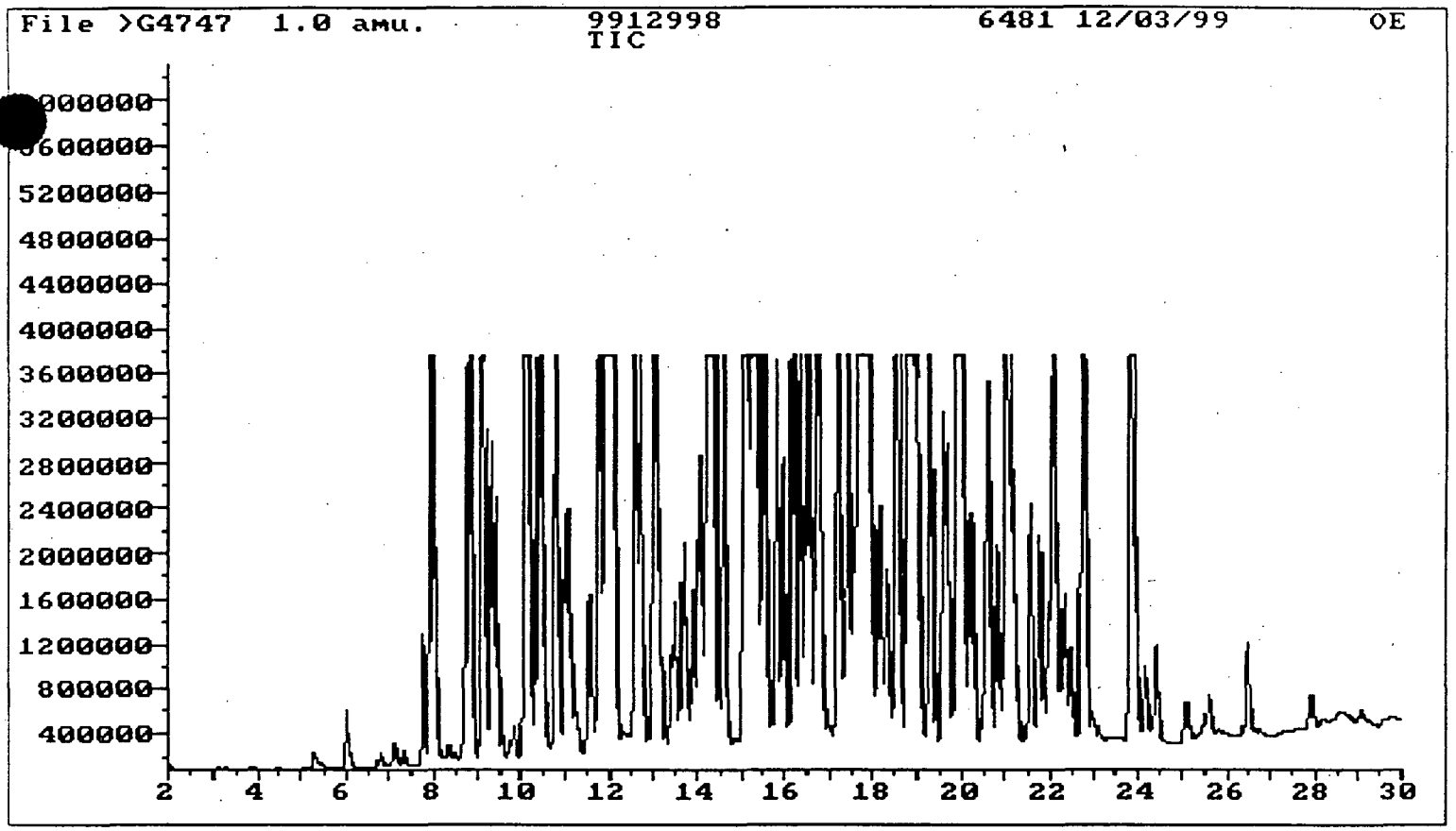
Data File: >G4747::G4 Quant Output File: ^G4747::QT
Name: 9912998 Instrument ID: G
Misc: 6481 12/03/99 OE SP-3

Id File: ID7PCB::G5
Title: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990930 11:54 Last Qcal Time: 991207 17:33

Operator ID: JEFF
Quant Time : 991208 07:54
Injected at: 991208 04:39

622

700720


File >G4747 1.0 amu.
9912998
TIC
6481 12/03/99
OE
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4400000
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3200000
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2400000
2000000
1600000
1200000
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623

700721

QUANT REPORT

rator ID: JEFF Quant Rev: 7 Quant Time: 991208 09:03
put File: ^H4747::QT Injected at: 991208 05:16
ata File: >H4747::G4 Dilution Factor: 1.00000
me: 9912998 Instrument ID: H
sc: 6481 12/03/99 OE SP-3

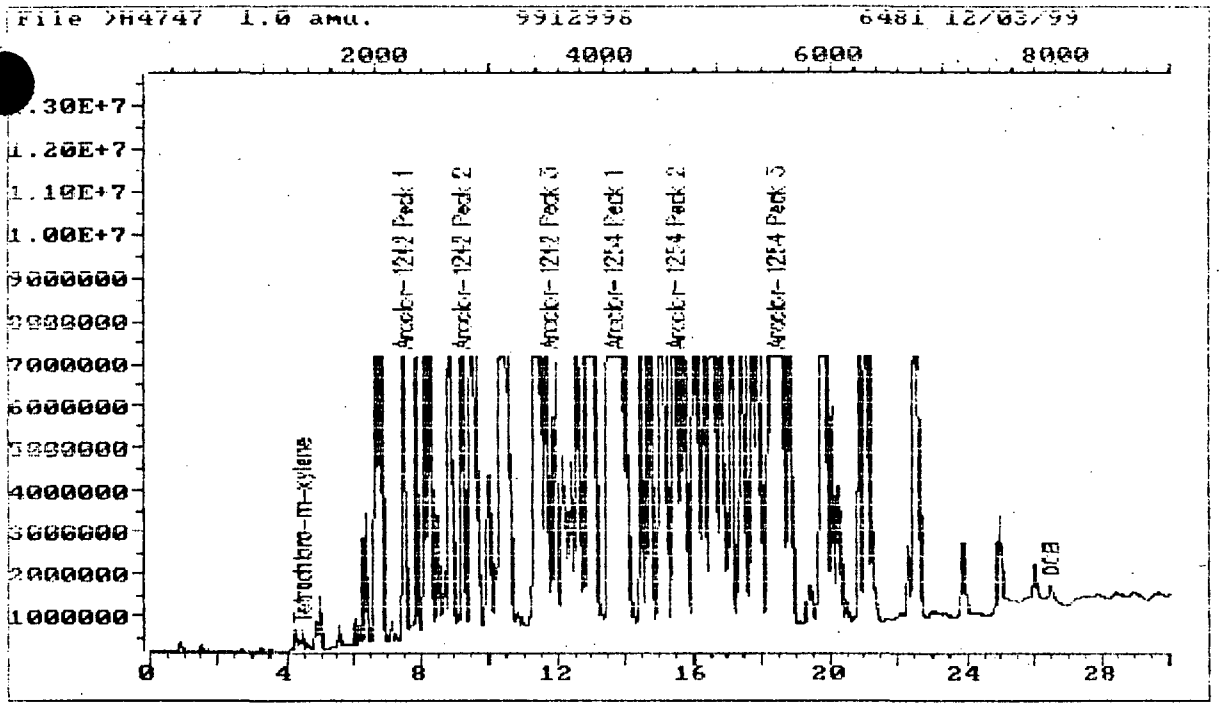
File: ID8PCB::G5
tle: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
st Calibration: 990930 11:58 Last Qcal Time: 991207 18:10

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	4.45	1336	1595702	1.13	ug/L	100
11)	#Aroclor-1242 Peak 1	7.47	2242	53533256M	1448.50	ug/L	100
12)	#Aroclor-1242 Peak 2	9.19	2756	53851424M	644.46	ug/L	100
13)	#Aroclor-1242 Peak 3	11.73	3520	53051624M	2122.48	ug/L	100
17)	#Aroclor-1254 Peak 1	13.64	4093	.222E+09M	6962.58	ug/L	
18)	#Aroclor-1254 Peak 2	15.48	4644	82126096M	1257.74	ug/L	100
19)	#Aroclor-1254 Peak 3	18.43	5528	.153E+09M	1066.05	ug/L	
23)	#DCB	26.48	7944	2576632M	1.46	ug/L	

Compound uses ESTD

624

700722



Data File: >H4747::G4 Quant Output File: ^H4747::QT
Name: 9912998 Instrument ID: H
Misc: 6481 12/03/99 OE SP-3

Id File: ID8PCB::G5
Title: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990930 11:58 Last Qcal Time: 991207 18:10

Operator ID: JEFF
Quant Time : 991208 09:03
Injected at: 991208 05:16

625

QUANT REPORT

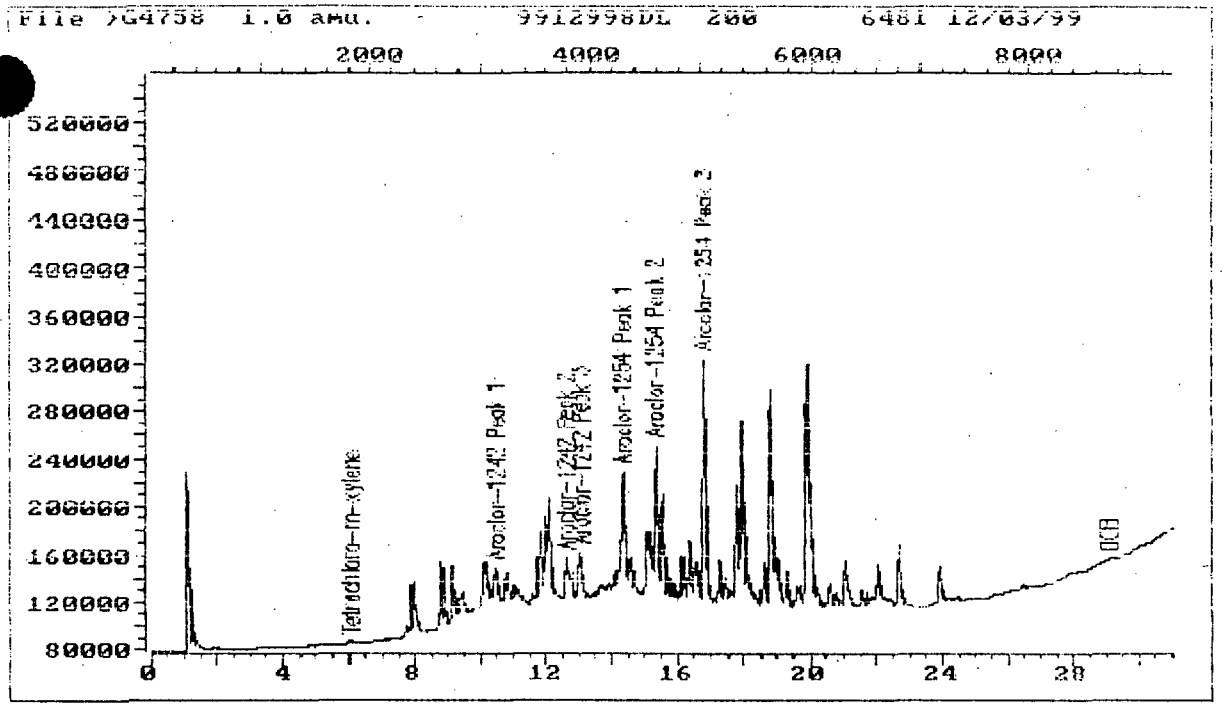
ator ID: JEFF Quant Rev: 7 Quant Time: 991208 16:56
ut File: ^G4758::QT Injected at: 991208 16:21
ta File: >G4758::G4 Dilution Factor: 1.00000
me: 9912998DL 200 Instrument ID: G
sc: 6481 12/03/99 OE SP-3

File: ID7PCB::G5
tle: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
st Calibration: 990930 11:54 Last Qcal Time: 991207 17:33

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	6.06	1818	2531M	.00520	ug/L	
1)	#Aroclor-1242 Peak 1	10.46	3139	242889	8.73	ug/L	100
2)	#Aroclor-1242 Peak 2	12.57	3770	182005	23.63	ug/L	100
3)	#Aroclor-1242 Peak 3	13.02	3906	381095	39.39	ug/L	100
7)	#Aroclor-1254 Peak 1	14.30	4291	840141	71.04	ug/L	100
8)	#Aroclor-1254 Peak 2	15.28	4583	616611	51.69	ug/L	100
9)	#Aroclor-1254 Peak 3	16.76	5029	1338140	148.70	ug/L	100
3)	#DCB	29.06	8718	2283M	.00375	ug/L	

Compound uses ESTD

626

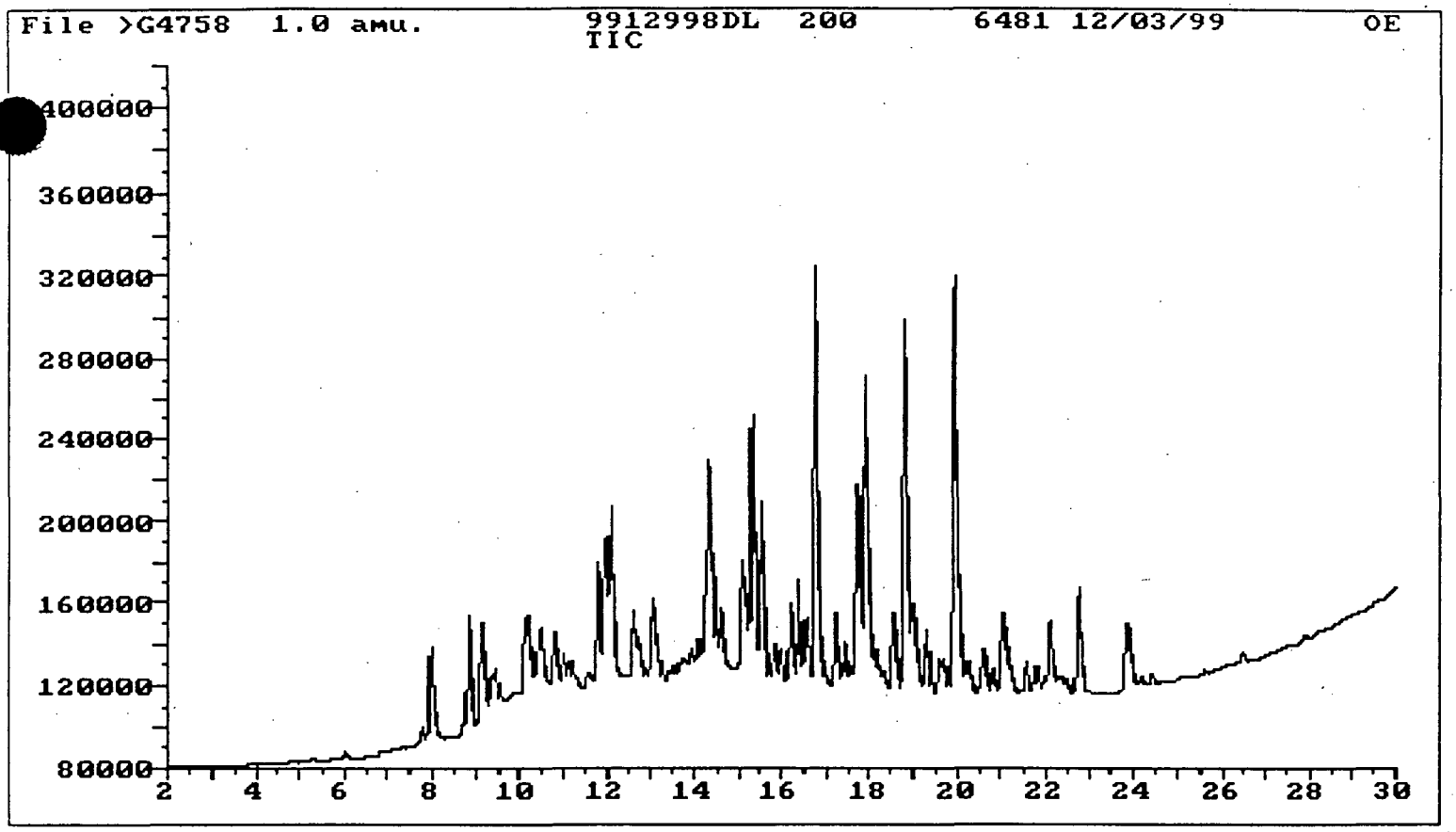


Data File: >G4758::G4 Quant Output File: ^G4758::QT
Name: 9912998DL 200 Instrument ID: G
Misc: 6481 12/03/99 OE SP-3

Id File: ID7PCB::G5
Title: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990930 11:54 Last Qcal Time: 991207 17:33

Operator ID: JEFF
Quant Time : 991208 16:56
Injected at: 991208 16:21

627


File >G4758 1.0 amu.
9912998DL 200
TIC
6481 12/03/99
OE
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360000
320000
280000
240000
200000
160000
120000
80000
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628

700726

QUANT REPORT

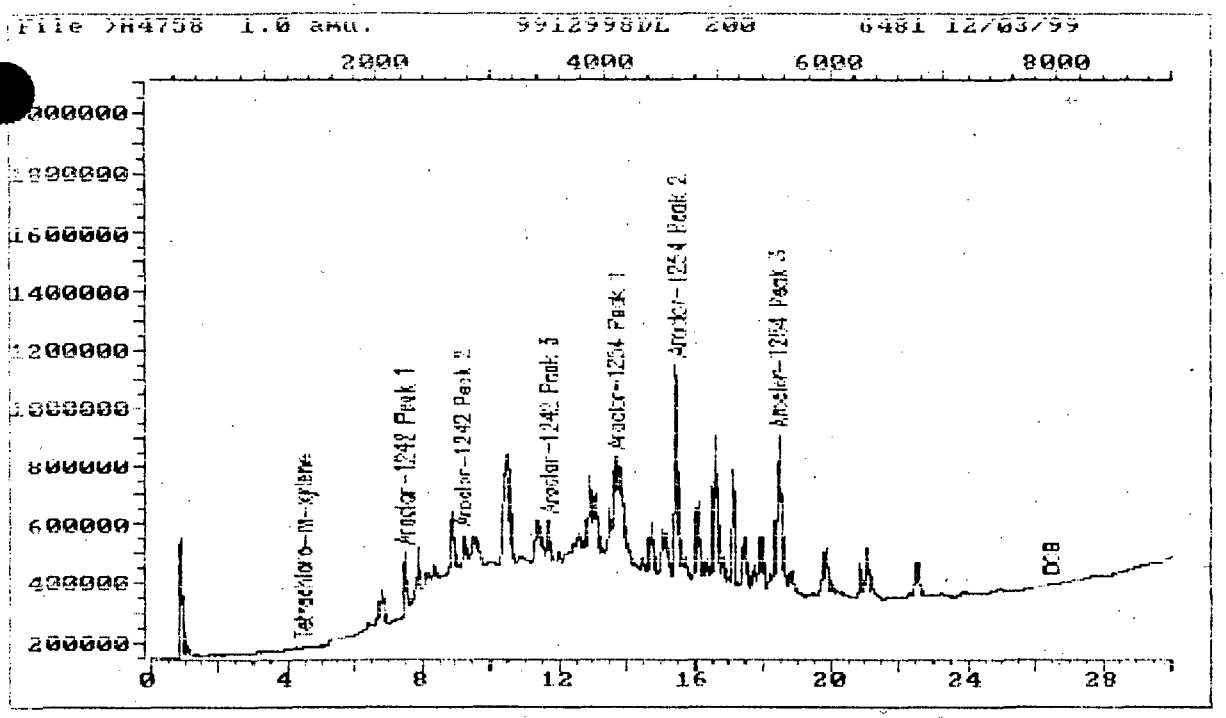
rator ID: JEFF Quant Rev: 7 Quant Time: 991208 17:31
put File: ^H4758::QT Injected at: 991208 16:58
ata File: >H4758::G4 Dilution Factor: 1.00000
ame: 9912998DL 200 Instrument ID: H
isc: 6481 12/03/99 OE SP-3

D File: ID8PCB::G5
itle: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
ast Calibration: 990930 11:58 Last Qcal Time: 991207 18:10

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	4.47	1340	8307M	.00589	ug/L	
11)	#Aroclor-1242 Peak 1	7.44	2232	1596718	43.20	ug/L	100
12)	#Aroclor-1242 Peak 2	9.17	2751	718698	8.60	ug/L	100
13)	#Aroclor-1242 Peak 3	11.69	3506	827348	33.10	ug/L	100
17)	#Aroclor-1254 Peak 1	13.67	4102	1083991	34.03	ug/L	100
18)	#Aroclor-1254 Peak 2	15.46	4638	4395155	67.31	ug/L	100
19)	#Aroclor-1254 Peak 3	18.44	5531	4038719	28.13	ug/L	100
23)	#DCB	26.48	7945	13219M	.00749	ug/L	

Compound uses ESTD

629



Data File: >H4758::G4 Quant Output File: ^H4758::QT
Name: 9912998DL 200 Instrument ID: H
Misc: 6481 12/03/99 OE SP-3

Id File: ID8PCB::G5
Title: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990930 11:58 Last Qcal Time: 991207 18:10

Operator ID: JEFF
Quant Time : 991208 17:31
Injected at: 991208 16:58

630

QUANT REPORT

rator ID: JEFF Quant Rev: 7 Quant Time: 991208 07:55
put File: ^G4748::QT Injected at: 991208 05:16
ata File: >G4748::G4 Dilution Factor: 1.00000
ame: 9912999 Instrument ID: G
isc: 6481 12/03/99 OE SP-4

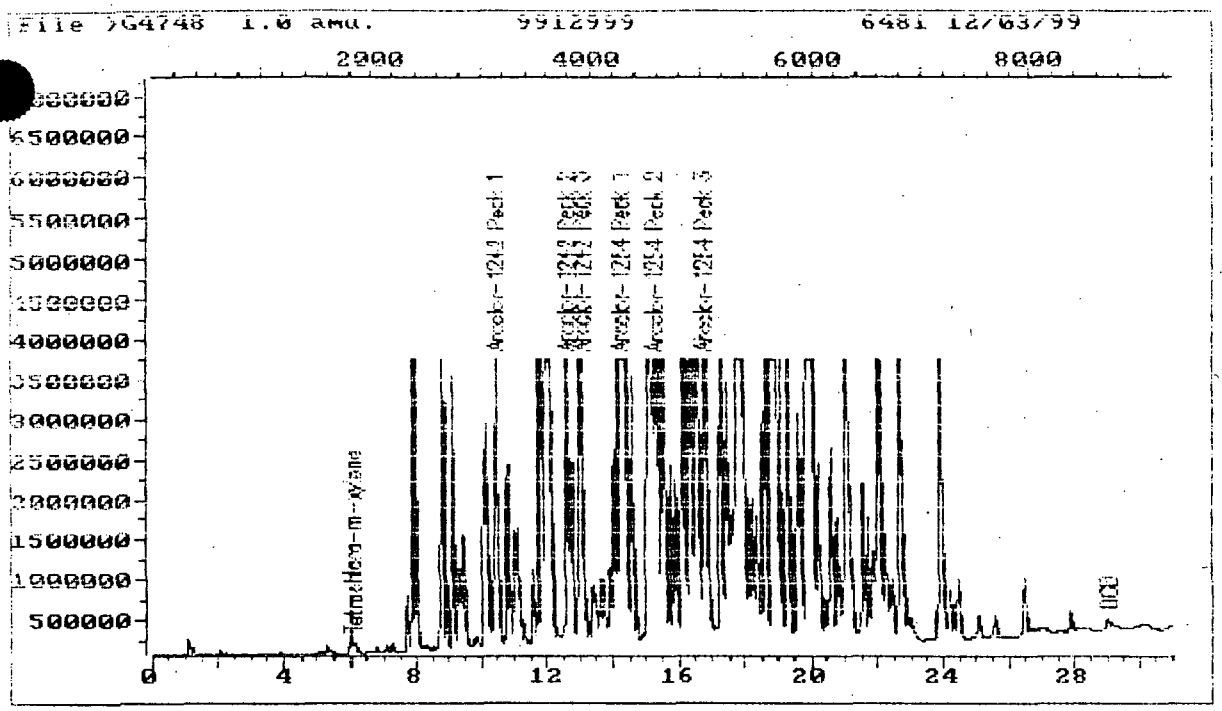
D File: ID7PCB::G5
itle: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
ast Calibration: 990930 11:54 Last Qcal Time: 991207 17:33

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	6.08	1823	471860M	.970	ug/L	
11)	#Aroclor-1242 Peak 1	10.45	3135	24602444	884.57	ug/L	100
12)	#Aroclor-1242 Peak 2	12.58	3773	21032336M	2730.89	ug/L	100
13)	#Aroclor-1242 Peak 3	13.02	3907	35346128M	3653.42	ug/L	
17)	#Aroclor-1254 Peak 1	14.22	4267	60018672M	5074.75	ug/L	
18)	#Aroclor-1254 Peak 2	15.23	4570	34268248M	2872.70	ug/L	
19)	#Aroclor-1254 Peak 3	16.72	5015	40625736M	4514.65	ug/L	
23)	#DCB	28.99	8698	710240M	1.17	ug/L	100

Compound uses ESTD

631

700729

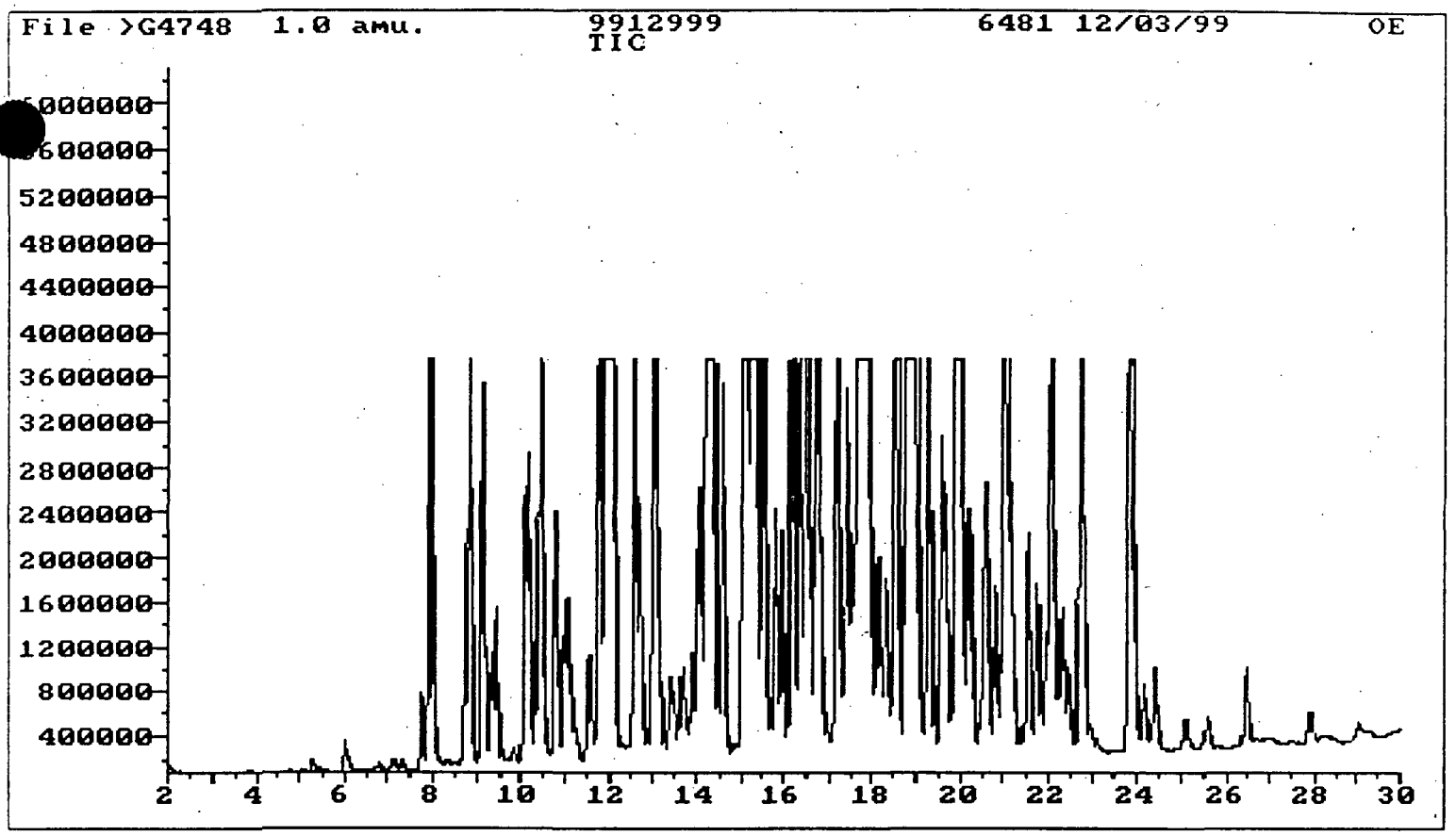


Data File: >G4748::G4 Quant Output File: ^G4748::QT
Name: 9912999 Instrument ID: G
Misc: 6481 12/03/99 OE SP-4

Id File: ID7PCB::G5
Title: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990930 11:54 Last Qcal Time: 991207 17:33

Operator ID: JEFF
Quant Time : 991208 07:55
Injected at: 991208 05:16

632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9912999
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6481 12/03/99
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4800000
4400000
4000000
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3200000
2800000
2400000
2000000
1600000
1200000
800000
400000
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633

700731

QUANT REPORT

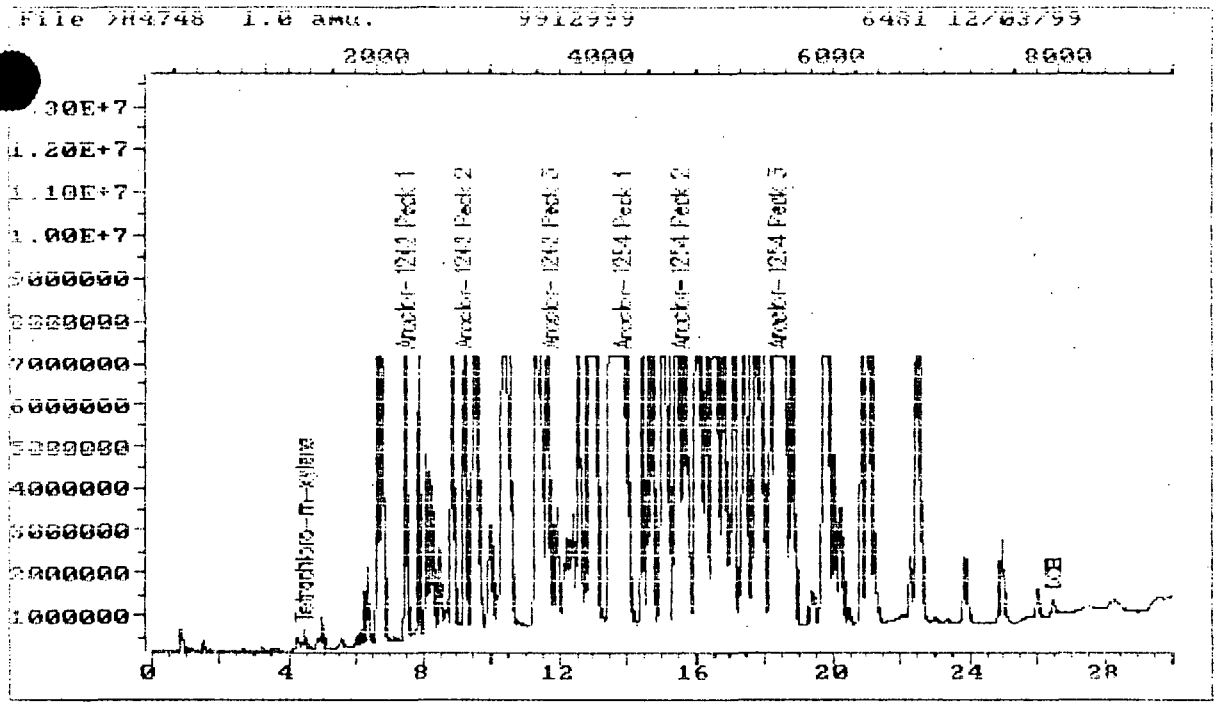
rator ID: JEFF Quant Rev: 7 Quant Time: 991208 09:05
put File: ^H4748::QT Injected at: 991208 05:53
ata File: >H4748::G4 Dilution Factor: 1.00000
ame: 9912999 Instrument ID: H
isc: 6481 12/03/99 OE SP-4

D File: ID8PCB::G5
itle: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
ast Calibration: 990930 11:58 Last Qcal Time: 991207 18:10

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	4.46	1337	1767996	1.25	ug/L	100
11)	#Aroclor-1242 Peak 1	7.46	2237	45631048M	1234.68	ug/L	100
12)	#Aroclor-1242 Peak 2	9.18	2753	48671136M	582.47	ug/L	100
13)	#Aroclor-1242 Peak 3	11.72	3515	55082888M	2203.75	ug/L	100
17)	#Aroclor-1254 Peak 1	13.87	4161	.224E+09M	7016.61	ug/L	
18)	#Aroclor-1254 Peak 2	15.53	4660	81496336M	1248.10	ug/L	100
19)	#Aroclor-1254 Peak 3	18.37	5512	.149E+09M	1037.44	ug/L	
23)	#DCB	26.48	7943	2371288M	1.34	ug/L	100

Compound uses ESTD

634



Data File: >H4748::G4 Quant Output File: ^H4748::QT
Name: 9912999 Instrument ID: H
Misc: 6481 12/03/99 OE SP-4

Id File: ID8PCB::G5
Title: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990930 11:58 Last Qcal Time: 991207 18:10

Operator ID: JEFF
Quant Time : 991208 09:05
Injected at: 991208 05:53

635

700733

QUANT REPORT

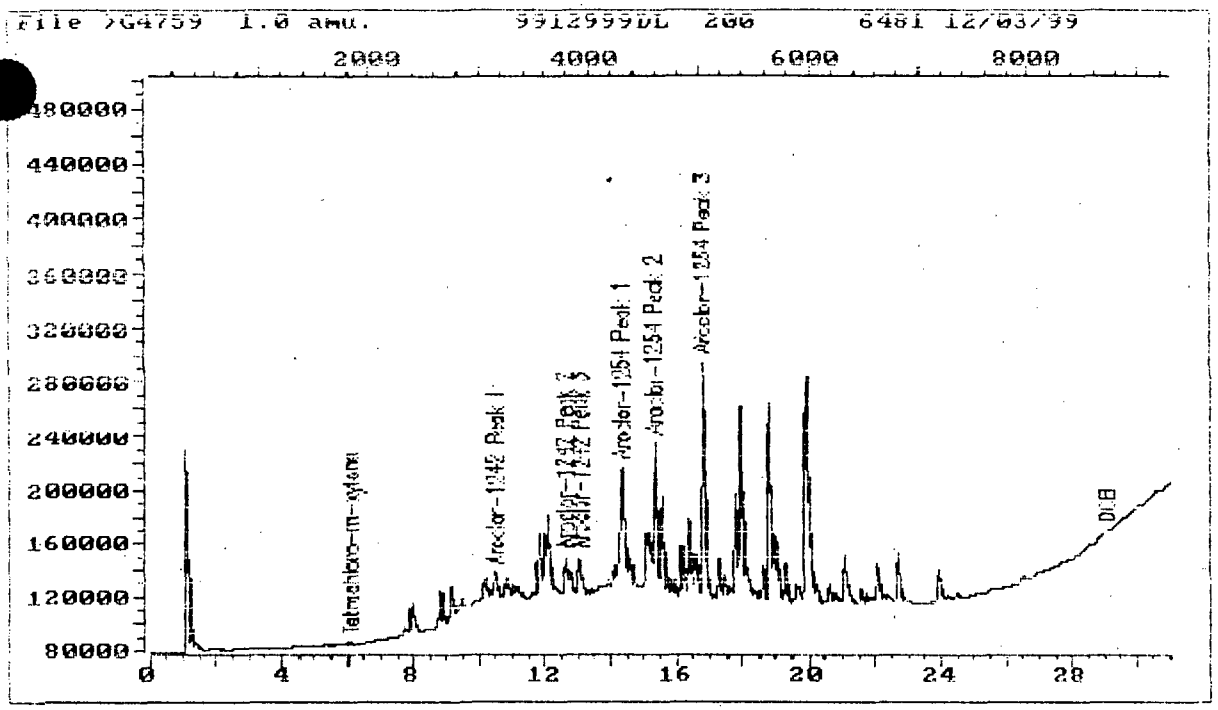
rator ID: JEFF Quant Rev: 7 Quant Time: 991208 17:33
put File: ^G4759::QT Injected at: 991208 16:58
ata File: >G4759::G4 Dilution Factor: 1.00000
ame: 9912999DL 200 Instrument ID: G
isc: 6481 12/03/99 OE SP-4

D File: ID7PCB::G5
itle: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
ast Calibration: 990930 11:54 Last Qcal Time: 991207 17:33

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	6.08	1825	2289M	.00471	ug/L	
11)	#Aroclor-1242 Peak 1	10.47	3142	139356	5.01	ug/L	100
12)	#Aroclor-1242 Peak 2	12.57	3771	155901	20.24	ug/L	100
13)	#Aroclor-1242 Peak 3	13.03	3908	271114	28.02	ug/L	100
17)	#Aroclor-1254 Peak 1	14.31	4292	801531	67.77	ug/L	100
18)	#Aroclor-1254 Peak 2	15.28	4584	557112	46.70	ug/L	100
19)	#Aroclor-1254 Peak 3	16.77	5030	1162159	129.15	ug/L	100
23)	#DCB	29.02	8706	972M	.00160	ug/L	

Compound uses ESTD

636

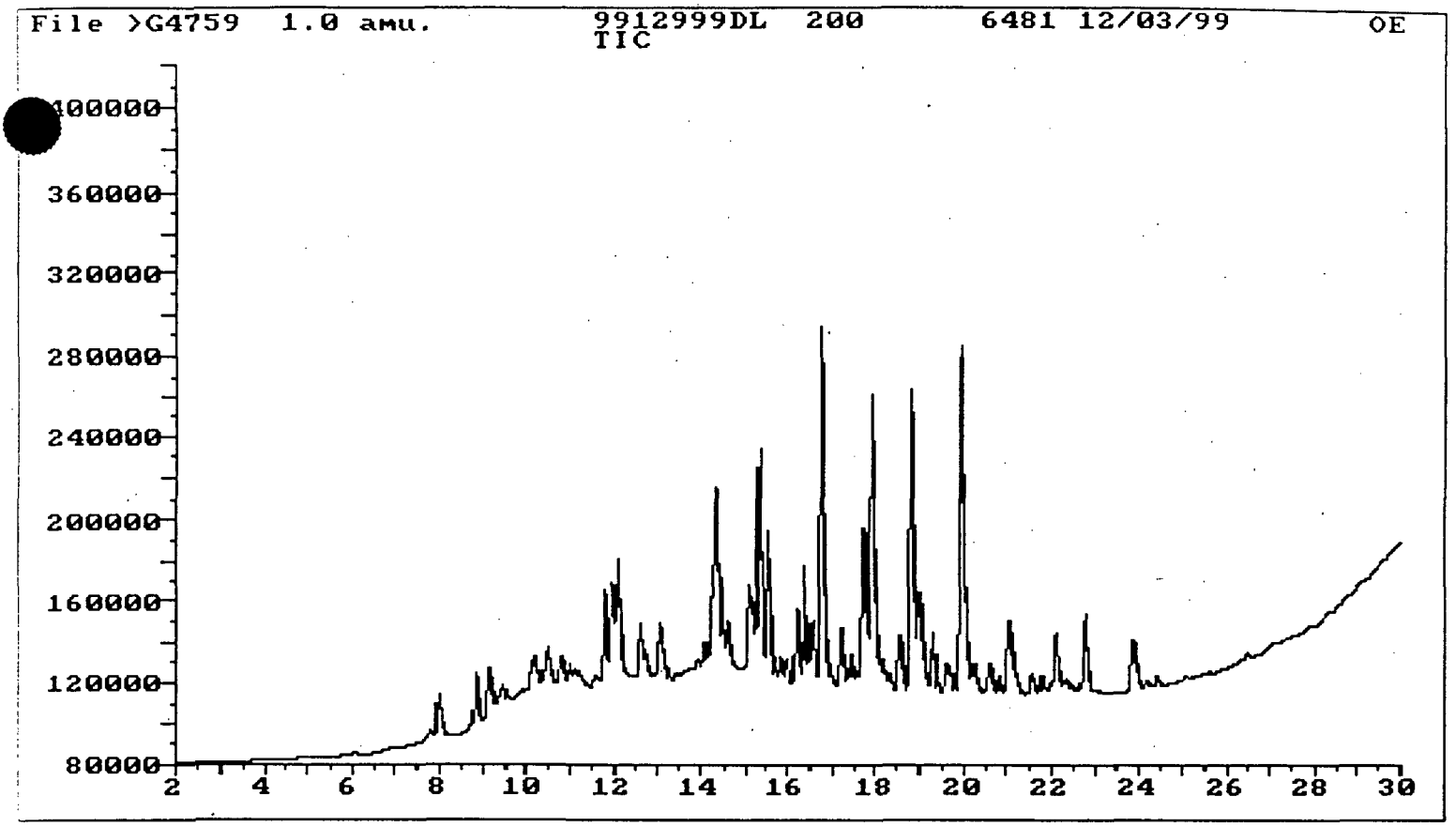


Data File: >G4759::G4 Quant Output File: ^G4759::QT
Name: 9912999DL 200 Instrument ID: G
Misc: 6481 12/03/99 OE SP-4

Id File: ID7PCB::G5
Title: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990930 11:54 Last Qcal Time: 991207 17:33

Operator ID: JEFF
Quant Time : 991208 17:33
Injected at: 991208 16:58

637


File >G4759 1.0 amu.
9912999DL 200
TIC
6481 12/03/99
OE
400000
360000
320000
280000
240000
200000
160000
120000
80000
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638

700736

QUANT REPORT

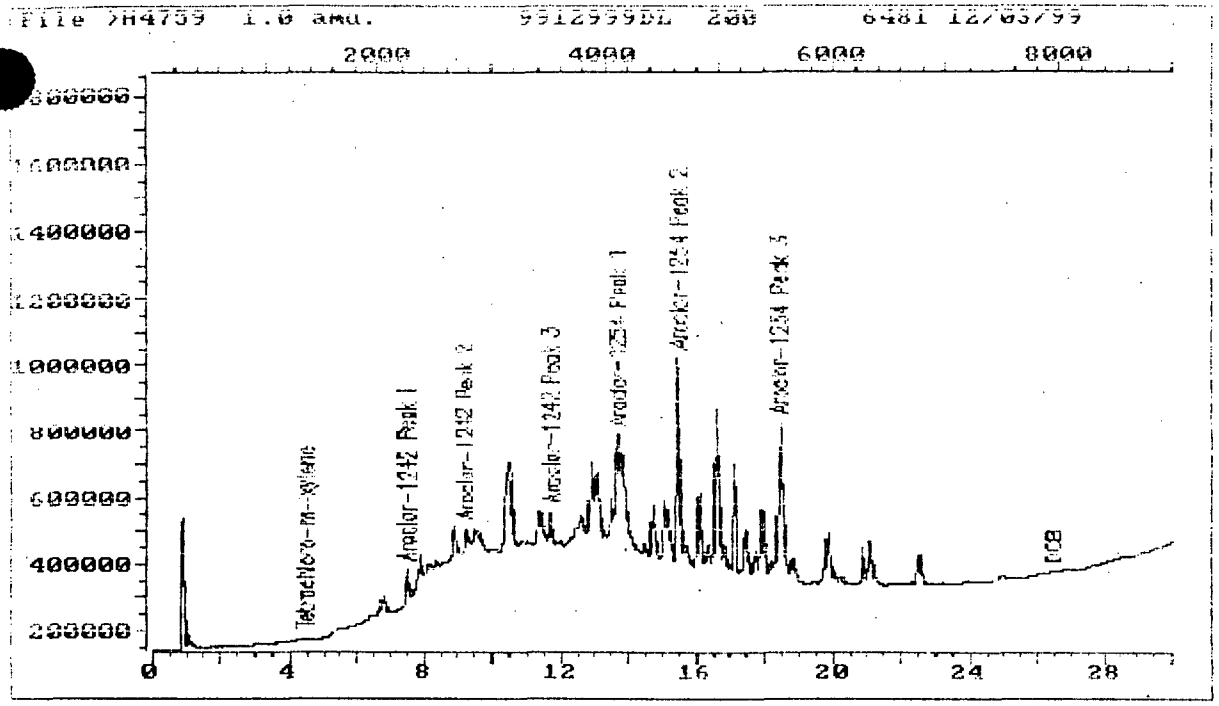
ator ID: JEFF Quant Rev: 7 Quant Time: 991208 18:09
ut File: ^H4759::QT Injected at: 991208 17:36
ta File: >H4759::G4 Dilution Factor: 1.00000
me: 9912999DL 200 Instrument ID: H
sc: 6481 12/03/99 OE SP-4

File: ID8PCB::G5
tle: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
st Calibration: 990930 11:58 Last Qcal Time: 991207 18:10

Compound	R.T.	Scan#	Area	Conc	Units	q
1) #Tetrachloro-m-xylene	4.47	1340	9196M	.00652	ug/L	
1) #Aroclor-1242 Peak 1	7.44	2232	935593	25.32	ug/L	100
2) #Aroclor-1242 Peak 2	9.18	2753	351249	4.20	ug/L	100
3) #Aroclor-1242 Peak 3	11.69	3506	610013	24.41	ug/L	100
7) #Aroclor-1254 Peak 1	13.67	4101	1113171	34.95	ug/L	100
8) #Aroclor-1254 Peak 2	15.46	4638	3724265	57.04	ug/L	100
9) #Aroclor-1254 Peak 3	18.44	5532	3935446	27.41	ug/L	100
3) #DCB	26.48	7944	8679M	.00492	ug/L	

Compound uses ESTD

639



Data File: >H4759::G4 Quant Output File: ^H4759::QT
Name: 9912999DL 200 Instrument ID: H
Misc: 6481 12/03/99 OE SP-4

Id File: ID8PCB::G5
Title: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990930 11:58 Last Qcal Time: 991207 18:10

Operator ID: JEFF
Quant Time : 991208 18:09
Injected at: 991208 17:36

640

QUANT REPORT

rator ID: JEFF Quant Rev: 7 Quant Time: 991208 08:00
ut File: ^G4751::QT Injected at: 991208 07:07
ata File: >G4751::G4 Dilution Factor: 1.00000
ame: 9913000 Instrument ID: G
isc: 6481 12/03/99 OE SP-5

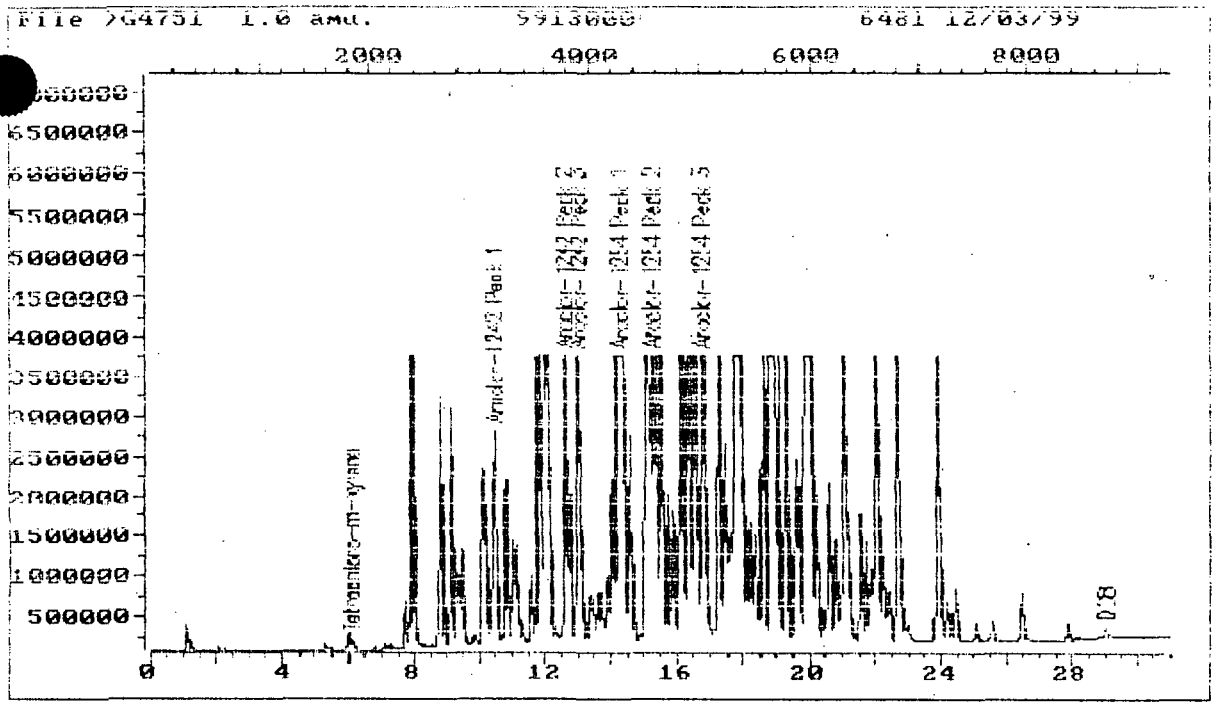
D File: ID7PCB::G5
itle: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
ast Calibration: 990930 11:54 Last Qcal Time: 991207 17:33

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	6.08	1824	442787M	.910	ug/L	
11)	#Aroclor-1242 Peak 1	10.44	3133	19965436	717.85	ug/L	100
12)	#Aroclor-1242 Peak 2	12.56	3769	17990348	2335.91	ug/L	100
13)	#Aroclor-1242 Peak 3	13.01	3903	32159232M	3324.02	ug/L	
17)	#Aroclor-1254 Peak 1	14.26	4277	59212128M	5006.56	ug/L	
18)	#Aroclor-1254 Peak 2	15.23	4568	33667504M	2822.34	ug/L	
19)	#Aroclor-1254 Peak 3	16.72	5017	40119208M	4458.36	ug/L	
23)	#DCB	28.99	8698	549779	.902	ug/L	100

Compound uses ESTD

641

700739

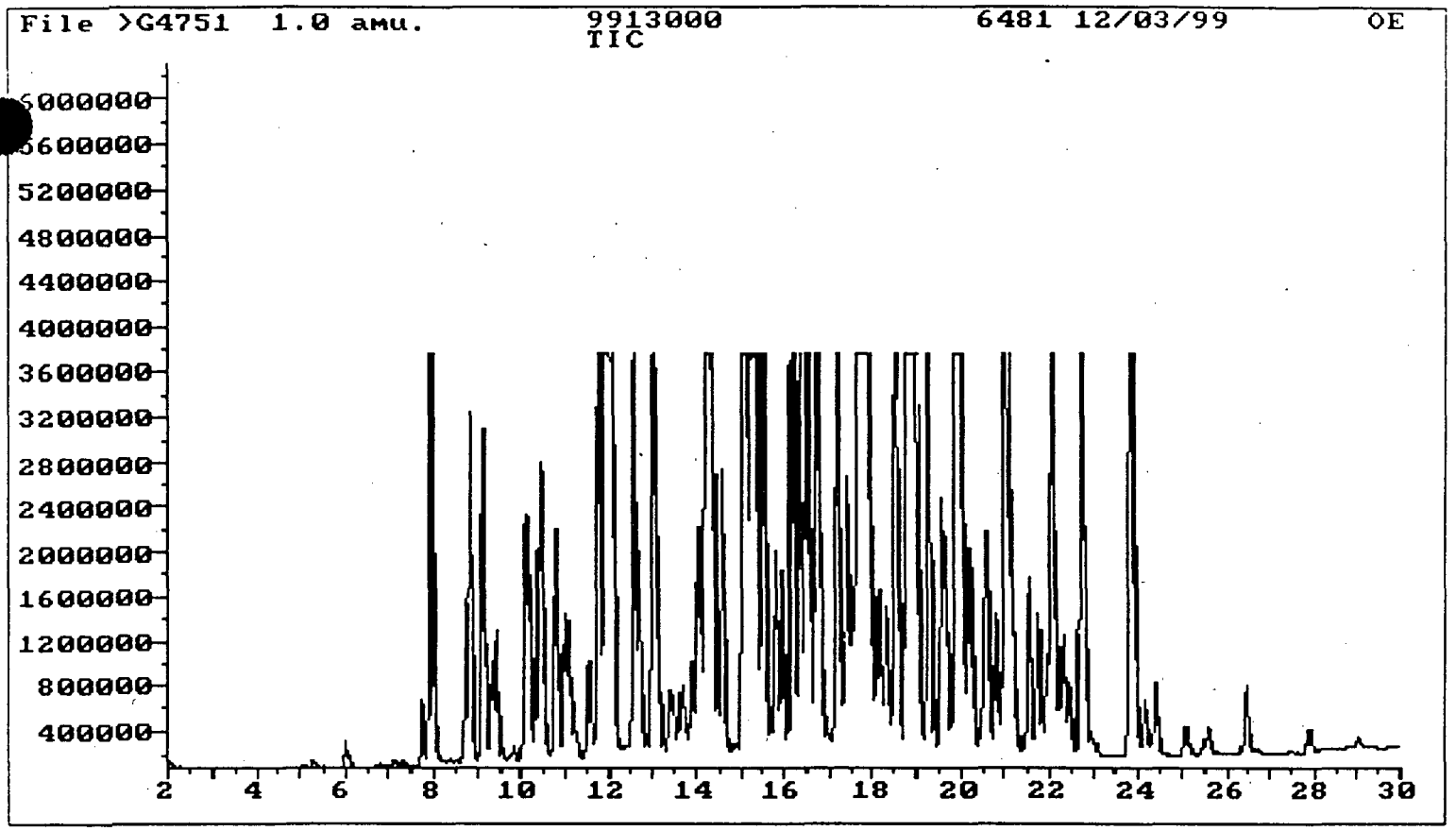


Data File: >G4751::G4 Quant Output File: ^G4751::QT
Name: 9913000 Instrument ID: G
Misc: 6481 12/03/99 OE SP-5

Id File: ID7PCB::G5
Title: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990930 11:54 Last Qcal Time: 991207 17:33

Operator ID: JEFF
Quant Time : 991208 08:00
Injected at: 991208 07:07

642


File >G4751 1.0 amu.
9913000
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6481 12/03/99
OE
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4800000
4400000
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2000000
1600000
1200000
800000
400000
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643

700741

QUANT REPORT

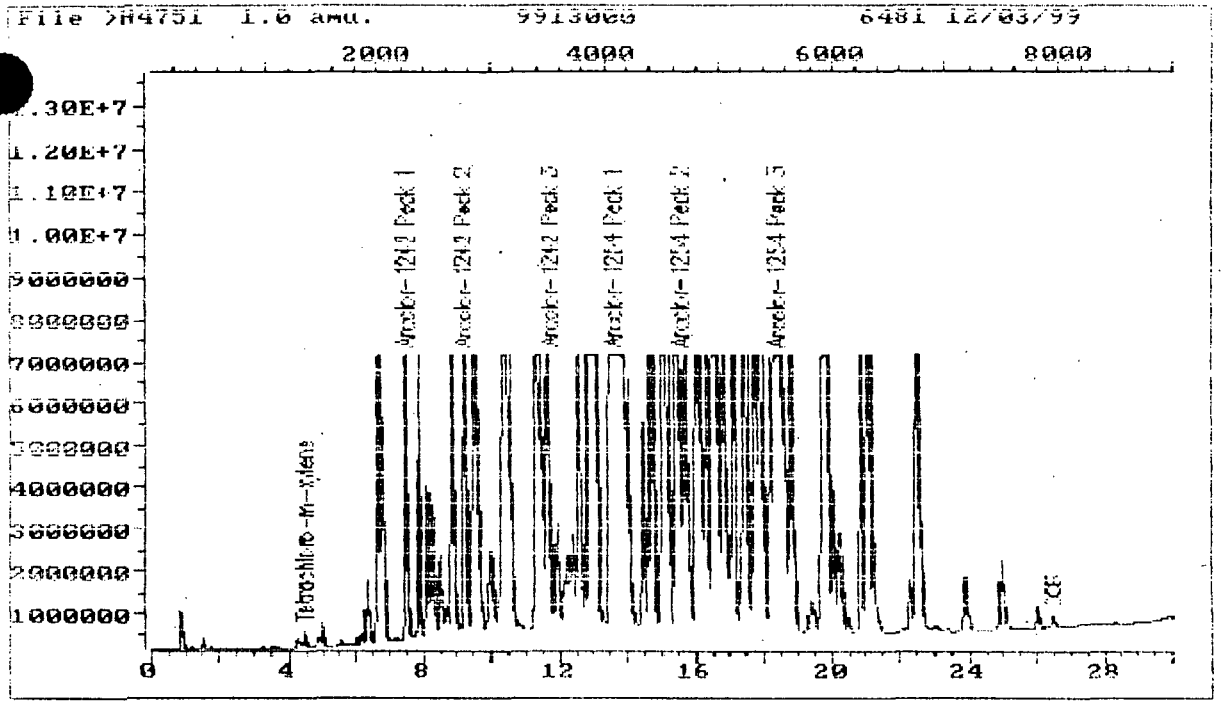
rator ID: JEFF Quant Rev: 7 Quant Time: 991208 09:10
Out File: ^H4751::QT Injected at: 991208 07:44
ata File: >H4751::G4 Dilution Factor: 1.00000
ame: 9913000 Instrument ID: H
isc: 6481 12/03/99 OE SP-5

D File: ID8PCB::G5
itle: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
ast Calibration: 990930 11:58 Last Qcal Time: 991207 18:10

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	4.46	1338	1407630	.998	ug/L	100
11)	#Aroclor-1242 Peak 1	7.46	2238	41860608M	1132.66	ug/L	100
12)	#Aroclor-1242 Peak 2	9.17	2751	46028264M	550.84	ug/L	100
13)	#Aroclor-1242 Peak 3	11.72	3515	55118192M	2205.16	ug/L	100
17)	#Aroclor-1254 Peak 1	13.56	4068	.226E+09M	7085.76	ug/L	
18)	#Aroclor-1254 Peak 2	15.53	4660	82687728M	1266.34	ug/L	100
19)	#Aroclor-1254 Peak 3	18.39	5518	.119E+09M	831.45	ug/L	
33)	#DCB	26.48	7944	1996401	1.13	ug/L	100

Compound uses ESTD

644



Data File: >H4751::G4 Quant Output File: ^H4751::QT
Name: 9913000 Instrument ID: H
Misc: 6481 12/03/99 OE SP-5

Id File: ID8PCB::G5
Title: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990930 11:58 Last Qcal Time: 991207 18:10

Operator ID: JEFF
Quant Time : 991208 09:10
Injected at: 991208 07:44

645

QUANT REPORT

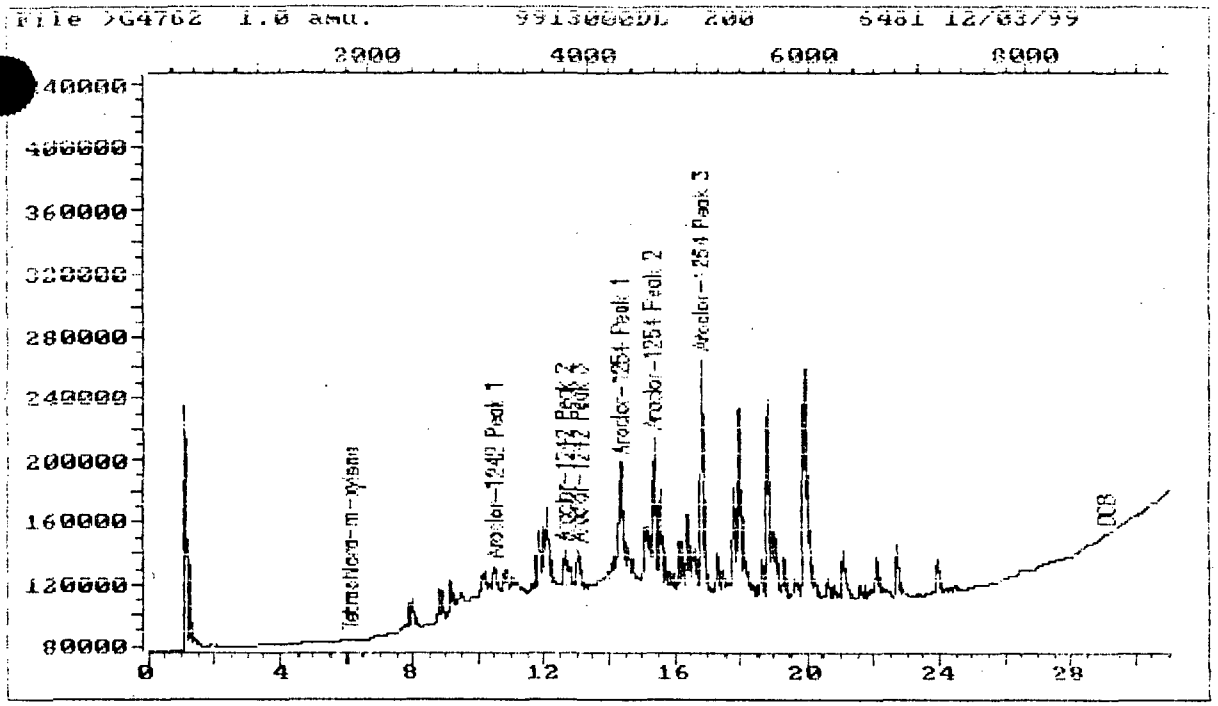
rator ID: JEFF Quant Rev: 7 Quant Time: 991208 19:24
put File: ^G4762::QT Injected at: 991208 18:51
ata File: >G4762::G4 Dilution Factor: 1.00000
me: 9913000DL 200 Instrument ID: G
isc: 6481 12/03/99 OE SP-5

D File: ID7PCB::G5
itle: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
ast Calibration: 990930 11:54 Last Qcal Time: 991207 17:33

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	6.08	1825	1270M	.00261	ug/L	
11)	#Aroclor-1242 Peak 1	10.47	3142	119232	4.29	ug/L	100
12)	#Aroclor-1242 Peak 2	12.57	3770	133331	17.31	ug/L	100
13)	#Aroclor-1242 Peak 3	13.02	3907	235761	24.37	ug/L	100
17)	#Aroclor-1254 Peak 1	14.30	4291	659098	55.73	ug/L	100
18)	#Aroclor-1254 Peak 2	15.28	4583	473947	39.73	ug/L	100
19)	#Aroclor-1254 Peak 3	16.77	5030	1003247	111.49	ug/L	100
20)	#DCB	29.04	8711	3230M	.00530	ug/L	

Compound uses ESTD

646

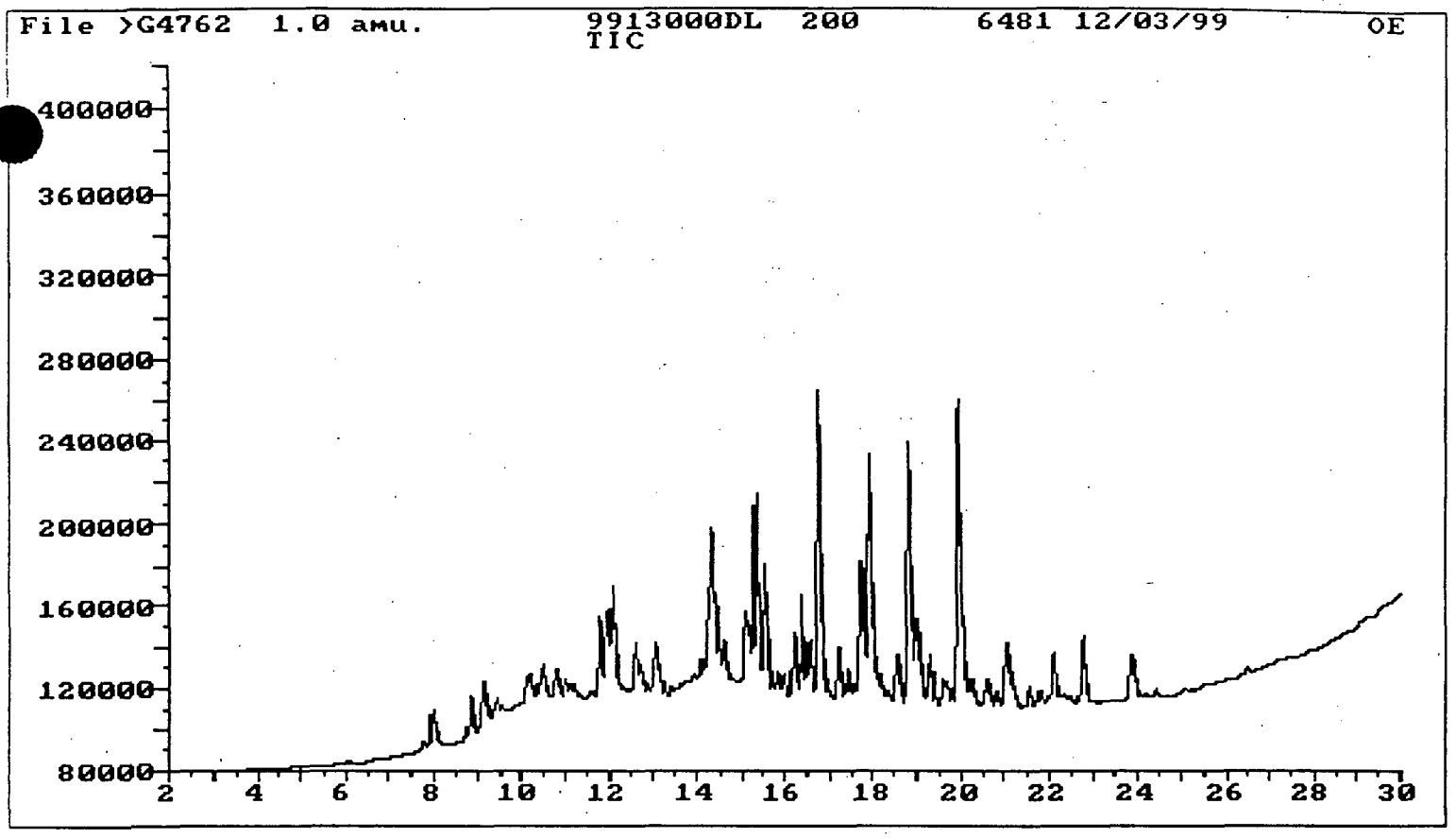


Data File: >G4762::G4 Quant Output File: ^G4762::QT
Name: 9913000DL 200 Instrument ID: G
Misc: 6481 12/03/99 OE SP-5

Id File: ID7PCB::G5
Title: PCB'S HP5890-G RTX-5 0.53mm 1.0uL
Last Calibration: 990930 11:54 Last Qcal Time: 991207 17:33

Operator ID: JEFF
Quant Time : 991208 19:24
Injected at: 991208 18:51

647


File >G4762 1.0 amu.
9913000DL 200
TIC
6481 12/03/99
OE
400000
360000
320000
280000
240000
200000
160000
120000
80000
2
4
6
8
10
12
14
16
18
20
22
24
26
28
30

648

700746

QUANT REPORT

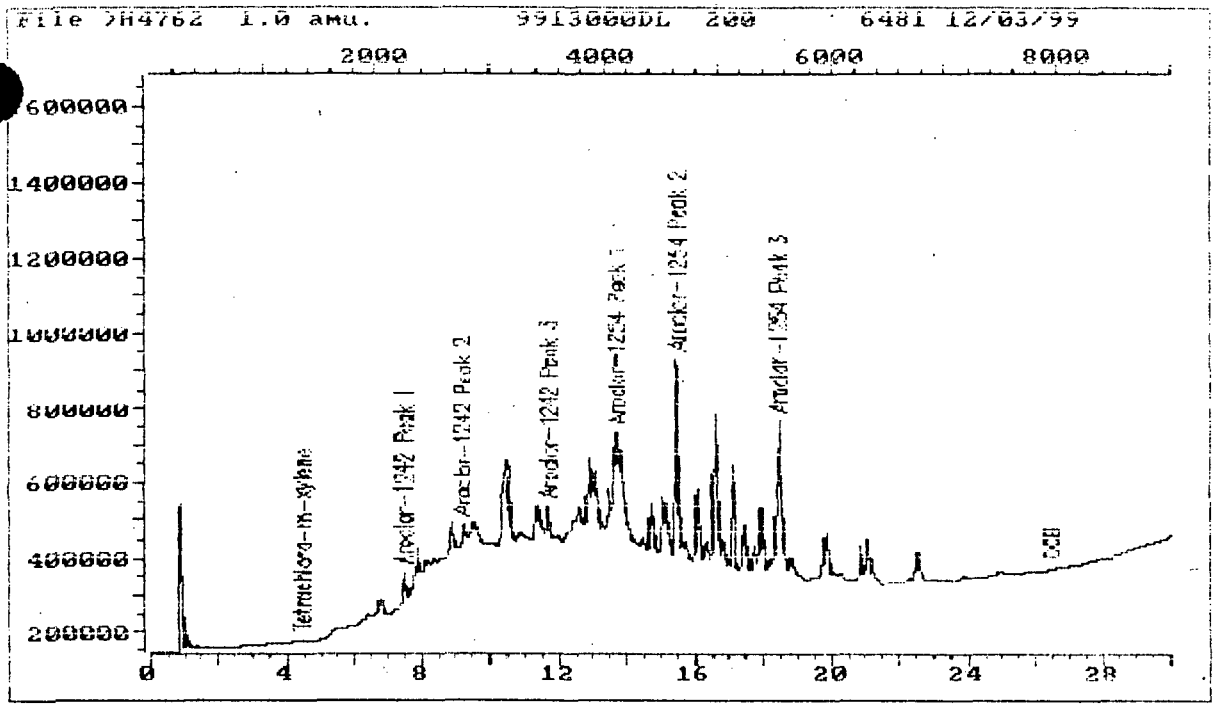
rator ID: JEFF Quant Rev: 7 Quant Time: 991208 20:01
put File: ^H4762::QT Injected at: 991208 19:28
ata File: >H4762::G4 Dilution Factor: 1.00000
ame: 9913000DL 200 Instrument ID: H
isc: 6481 12/03/99 OE SP-5

D File: ID8PCB::G5
itle: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
ast Calibration: 990930 11:58 Last Qcal Time: 991207 18:10

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Tetrachloro-m-xylene	4.47	1340	8256M	.00585	ug/L	
11)	#Aroclor-1242 Peak 1	7.44	2233	817778	22.13	ug/L	100
12)	#Aroclor-1242 Peak 2	9.18	2753	157356	1.88	ug/L	100
13)	#Aroclor-1242 Peak 3	11.69	3507	518750	20.75	ug/L	100
17)	#Aroclor-1254 Peak 1	13.67	4102	859580	26.98	ug/L	100
18)	#Aroclor-1254 Peak 2	15.46	4639	3196354	48.95	ug/L	100
19)	#Aroclor-1254 Peak 3	18.44	5533	3447659	24.01	ug/L	100
23)	#DCB	26.49	7948	9364M	.00531	ug/L	

Compound uses ESTD

649



Data File: >H4762::G4 Quant Output File: ^H4762::QT
Name: 9913000DL 200 Instrument ID: H
Misc: 6481 12/03/99 OE SP-5

Id File: ID8PCB::G5
Title: PCB'S HP5890-H RTX-1701 0.53mm 1.0uL
Last Calibration: 990930 11:58 Last Qcal Time: 991207 18:10

Operator ID: JEFF
Quant Time : 991208 20:01
Injected at: 991208 19:28

650

PROJECT ICP PREP. LOG

Notebook No.

Continued From Page

QC 991203 T

PBL 916 E 100-100

LCSW 916 E

CASE# 6481 9912996 E 50-100

2996 ~~E~~ DE

2996 ~~E~~ SAE

2996 ~~E~~ SBE

2994 E

6501 3076 E

6510 3116 E

6506 3088 E

6481 ~~2595~~ E 2995 E

12-07-99

PBL 917 E 100-100

LCSW 917 E

CASE# 6522 9913206 E 50-100

6523 3207 E

6524 3208 E

6525 3211 E

12-10-99

PBL 918 E 100-100

LCSW 918 E

CASE# 6574 99134456 50-100

Continued on Page 651

Read and Understood By

L.R 12-03-99

Signed Date Signed Date

Begin time / tempt 0800 / 90
Initial time / tempt 0830 / 95 °C
End time / tempt 1030 / 95 °C

PBL 915E	100 ml	991 3081T	0.250 - 100	PBL 916E	100
LCSW 915E	100	3081SA	0.250	LCSW 916E	100
991 3006E	50 - 100	3081SB	0.260	991 2996E	50 - 100
3007E		3081SC	0.250	2996DE	
3039E		3055	100 ml	2996SAE	
3040E		3056	1.18	2996SBE	
PBS 1533	0.250 - 100	3057	1.03	2994E	
LCSS 1533	0.250	3058	1.10	3076E	
991 2970	0.285	3059	0.300	3116E	
3005	0.300	3060	1.20	3088E	
PBW 1664	100 ml	3061	1.10	2995E	10 - 100
LCSW 1664		3062	1.20		
991 3012		3063	0.360		
3012D		3064	0.300		
3012SA		3065	0.250		
3012SB		3066	0.320		
3014		3067	1.20		
3016		3068	0.30		
PBS 1534	0.250 - 100	3039	0.29		
LCSS 1534	0.250				
991 3081	0.257				
3081D	0.250				

STANDARDS

ppb	ml Hg	ml DI H_2O
0	0	
0.5	0.5	
1.0	1.0	100 ml
2.0	2.0	100 ppb
4.0	4.0	
5.0	5.0	
10.0	10	

Read and Understood By

Continued on Page 652

Signed Date 12/03/99 Signed Date

700750

12/0991 - 990071

CCV/ICB/ICSA/ICSAB
PBL 916E
LCSW 916E
991 2996E
991 2996DE
991 2996SAE
991 2996SBE
991 2994E
WASH (2x)
CCV/ CCB 991 2995E
WASH (2x)
PBS 1542
LCSS 1542
991 3457
3458
PBL 918E
LCSW 918E
WASH
991 3456E
WASH (2x)
CCV/ CCB/ ICSA / ICSAB
PBW 1668
LCSW 1668
991 3488
3463
3465
3464
WASH
CCV/ CCB/ ICSA/ICSAB

Continued on Page 653

Read and Understood By

Signed 12/10/99 Date Signed Date

700751

:49:59 10 Dec 1999 Protocol: ROLLY Accredited Labs Inc.

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Standard: 1 Rep: 1				Seq: 538		13:18:12 10 Dec 1999 ICP		
Al3	.000	PPB	9545	8884	9527			
			Ave. Int. =	9319	S. D. =	377		
Sb1	.000	PPB	1146	1116	296			
			Ave. Int. =	853	S. D. =	482		
As2	.000	PPB	1344	1383	52			
			Ave. Int. =	926	S. D. =	757		
Ba1	.000	PPB	3101	3854	3746			
			Ave. Int. =	3567	S. D. =	407		
Be1	.000	PPB	8321	7639	7374			
			Ave. Int. =	7778	S. D. =	489		
Cd3	.000	PPB	-1140	-707	-930			
			Ave. Int. =	-926	S. D. =	217		
Ca3	.000	PPB	-3632	-3964	-4298			
			Ave. Int. =	-3965	S. D. =	333		
Cr5	.000	PPB	620	746	-680			
			Ave. Int. =	229	S. D. =	789		
Co1	.000	PPB	334	83	-723			
			Ave. Int. =	-102	S. D. =	552		
[illegible]1	.000	PPB	25829	28244	27265			
			Ave. Int. =	27113	S. D. =	1215		
Fe2	.000	PPB	5795	5721	5901			
			Ave. Int. =	5806	S. D. =	90		
Pb1	.000	PPB	-996	479	-1779			
			Ave. Int. =	-765	S. D. =	1147		
Mo4	.000	PPB	11966	6368	10051			
			Ave. Int. =	9462	S. D. =	2845		
Mn1	.000	PPB	4658	4124	3847			
			Ave. Int. =	4210	S. D. =	412		
Mo1	.000	PPB	-474	-495	1442			
			Ave. Int. =	158	S. D. =	1112		
Ni3	.000	PPB	-5035	-7019	-6252			
			Ave. Int. =	-6102	S. D. =	1000		
K 1	.000	PPB	-329	-420	-397			
			Ave. Int. =	-382	S. D. =	47		
Se1	.000	PPB	1158	2284	2008			
			Ave. Int. =	1817	S. D. =	587		
Ag1	.000	PPB	6897	6592	2667			
			Ave. Int. =	5385	S. D. =	2359		
Na1	.000	PPB	-63927	-62052	-64269			
			Ave. Int. =	-63416	S. D. =	1194		
Tl1	.000	PPB	-784	-1750	1296			
			Ave. Int. =	-413	S. D. =	1557		
Ti2	.000	PPB	25576	25976	24933			
			Ave. Int. =	25495	S. D. =	526		
[illegible]3	.000	PPB	11702	9312	5951			
			Ave. Int. =	8988	S. D. =	2889		

654

700752

me	Conc.	Units	SD/RSD	1	2	3	4	5

*** Standard: 1 Rep: 1 Seq: 538 13:18:18 10 Dec 1999 ICP

In1	.000	PPB	-429	-617	581	

Ave. Int. = -155 S. D. = 644

655

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Standard: 1 Rep: 2				Seq: 539		13:19:49 10 Dec 1999 IDF		
413	.000	PPB	9005	8865	9286			
			Ave. Int. =	9052	S. D. =	214		
Sb1	.000	PPB	716	517	1921			
			Ave. Int. =	1051	S. D. =	760		
As2	.000	PPB	2454	579	2084			
			Ave. Int. =	1706	S. D. =	993		
Ba1	.000	PPB	3368	4688	3979			
			Ave. Int. =	4011	S. D. =	661		
Be1	.000	PPB	6965	8761	7764			
			Ave. Int. =	7830	S. D. =	900		
Cd3	.000	PPB	-1034	-1068	-1106			
			Ave. Int. =	-1069	S. D. =	36		
Ca3	.000	PPB	-4997	-4699	-3300			
			Ave. Int. =	-4332	S. D. =	906		
Cr5	.000	PPB	358	458	530			
			Ave. Int. =	449	S. D. =	86		
Co1	.000	PPB	645	169	-223			
			Ave. Int. =	197	S. D. =	435		
Cu1	.000	PPB	28992	24760	24417			
			Ave. Int. =	26056	S. D. =	2548		
Fe2	.000	PPB	6409	4967	6303			
			Ave. Int. =	5893	S. D. =	804		
Pb1	.000	PPB	-1313	-2018	-1665			
			Ave. Int. =	-1665	S. D. =	353		
Mg4	.000	PPB	10006	11558	9001			
			Ave. Int. =	10188	S. D. =	1288		
Mn1	.000	PPB	3266	4406	3999			
			Ave. Int. =	3890	S. D. =	578		
Mo1	.000	PPB	325	-817	823			
			Ave. Int. =	110	S. D. =	841		
Ni3	.000	PPB	-4869	-2895	-6173			
			Ave. Int. =	-4646	S. D. =	1650		
K 1	.000	PPB	-42	-257	-364			
			Ave. Int. =	-221	S. D. =	164		
Se1	.000	PPB	1883	1439	1700			
			Ave. Int. =	1674	S. D. =	223		
Ag1	.000	PPB	5532	1346	-1164			
			Ave. Int. =	1905	S. D. =	3383		
Na1	.000	PPB	-65688	-65345	-60991			
			Ave. Int. =	-64008	S. D. =	2618		
Tl1	.000	PPB	-1282	-2130	-1205			
			Ave. Int. =	-1539	S. D. =	513		
Ti2	.000	PPB	24755	26552	24818			
			Ave. Int. =	25374	S. D. =	1021		
V 3	.000	PPB	9586	4311	7651			
			Ave. Int. =	7183	S. D. =	2669		

656

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Standard: 1 Rep: 2 Seq: 539 13:19:49 10 Dec 1999 ICP

Zn1	.000	PPB	751	2578	-33	

Ave. Int. = 1099 S. D. = 1340

657

Folder: DEC99
18:50:07 10 Dec 1999 Protocol: ROLLY Accredited Lab

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Standard: 1 Rep: 3				Seq: 540		13:21:21 10 Dec 1999		
Al3	.000	PPB	7938	9773	9277			
			Ave. Int. =	8996	S. D. =	949		
Sb1	.000	PPB	1477	1069	1477			
			Ave. Int. =	1341	S. D. =	236		
As2	.000	PPB	781	3535	374			
			Ave. Int. =	1563	S. D. =	1720		
Ba1	.000	PPB	3791	3582	4754			
			Ave. Int. =	4042	S. D. =	625		
Be1	.000	PPB	6106	7168	7562			
			Ave. Int. =	6945	S. D. =	753		
Cd3	.000	PPB	-564	-1520	-504			
			Ave. Int. =	-863	S. D. =	570		
Ca3	.000	PPB	-4306	-5438	-4350			
			Ave. Int. =	-4698	S. D. =	641		
Cr5	.000	PPB	323	1610	603			
			Ave. Int. =	845	S. D. =	677		
Co1	.000	PPB	-748	52	652			
			Ave. Int. =	-15	S. D. =	702		
Cu1	.000	PPB	21836	24824	25449			
			Ave. Int. =	24036	S. D. =	1931		
Fe2	.000	PPB	2455	6057	4265			
			Ave. Int. =	4259	S. D. =	1801		
Pb1	.000	PPB	-1063	-29	-1506			
			Ave. Int. =	-866	S. D. =	758		
Mg4	.000	PPB	8175	6891	5204			
			Ave. Int. =	6757	S. D. =	1490		
Mn1	.000	PPB	4462	5011	3639			
			Ave. Int. =	4371	S. D. =	691		
Mo1	.000	PPB	-274	-492	-162			
			Ave. Int. =	-309	S. D. =	168		
Ni3	.000	PPB	-3856	-5730	-6437			
			Ave. Int. =	-5341	S. D. =	1334		
K 1	.000	PPB	-199	-313	-671			
			Ave. Int. =	-394	S. D. =	246		
Se1	.000	PPB	1410	1347	1648			
			Ave. Int. =	1468	S. D. =	159		
Ag1	.000	PPB	822	5153	1934			
			Ave. Int. =	2636	S. D. =	2249		
Na1	.000	PPB	-63043	-63651	-64939			
			Ave. Int. =	-63878	S. D. =	968		
Tl1	.000	PPB	-829	-84	-1105			
			Ave. Int. =	-673	S. D. =	525		
Ti2	.000	PPB	24651	27169	24246			
			Ave. Int. =	25355	S. D. =	1584		
V 3	.000	PPB	10060	8710	2558			
			Ave. Int. =	7109	S. D. =	3999		

658

700756

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Standard: 1 Rep: 3				Seq: 540		13:21:21 10 Dec 1999 ICP		
Zn1	.000	PPB	879	1492	-182			
			Ave. Int. =	730	S. D. =	847		
*** Standard: 3 Rep: 1				Seq: 541		13:25:26 10 Dec 1999 ICP		
Sb1	5000	PPB	61428	65238	63501			
			Ave. Int. =	63389	S. D. =	1907		
As2	5000	PPB	110794	114211	113696			
			Ave. Int. =	112900	S. D. =	1842		
Ba1	5000	PPB	2894222	2921092	2940369			
			Ave. Int. =	2918561	S. D. =	23177		
Be1	5000	PPB	37790193	38216814	38825926			
			Ave. Int. =	38277644	S. D. =	520539		
Cd3	5000	PPB	253793	254580	256527			
			Ave. Int. =	254967	S. D. =	1407		
Co1	5000	PPB	504825	509781	518014			
			Ave. Int. =	510873	S. D. =	6662		
Cu1	5000	PPB	5611311	5687052	5749839			
			Ave. Int. =	5682734	S. D. =	69365		
Mn1	5000	PPB	55749	55969	56815			
			Ave. Int. =	56178	S. D. =	563		
Mo1	5000	PPB	3739934	3785784	3811480			
			Ave. Int. =	3779066	S. D. =	36243		
Ni3	5000	PPB	170936	175989	178873			
			Ave. Int. =	175266	S. D. =	4018		
Pb1	5000	PPB	747159	755851	761563			
			Ave. Int. =	754858	S. D. =	7253		
K 1	10000	PPB	5600	5513	5769			
			Ave. Int. =	5627	S. D. =	130		
Se1	5000	PPB	34176	35784	36629			
			Ave. Int. =	35530	S. D. =	1246		
Ag1	500.	PPB	269890	274662	279062			
			Ave. Int. =	274538	S. D. =	4587		
Na1	10000	PPB	82031	83452	84565			
			Ave. Int. =	83349	S. D. =	1270		
Tl1	5000	PPB	9370	7670	10229			
			Ave. Int. =	9090	S. D. =	1302		
Tl2	5000	PPB	6408918	6473617	6536419			
			Ave. Int. =	6472985	S. D. =	63753		
Zn1	5000	PPB	282460	284940	285837			
			Ave. Int. =	284412	S. D. =	1749		

659

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Standard: 3 Rep: 2 Seq: 542 13:26:58 10 Dec 1999 ICP

Sb1	5000	PPB	64755	64682	64764		
			Ave. Int. =	64734	S. D. =	45	
As2	5000	PPB	115611	108607	110019		
			Ave. Int. =	111412	S. D. =	3704	
Ba1	5000	PPB	2903239	2883437	2902777		
			Ave. Int. =	2896484	S. D. =	11302	
Be1	5000	PPB	38126264	37474525	37931748		
			Ave. Int. =	37844179	S. D. =	334578	
Cd3	5000	PPB	253130	254317	254666		
			Ave. Int. =	254038	S. D. =	805	
Co1	5000	PPB	516751	505028	513116		
			Ave. Int. =	511632	S. D. =	6001	
Cu1	5000	PPB	5658120	5574487	5623671		
			Ave. Int. =	5618759	S. D. =	42032	
Pb1	5000	PPB	55440	55041	56421		
			Ave. Int. =	55634	S. D. =	710	
Mn1	5000	PPB	3773954	3750601	3779841		
			Ave. Int. =	3768132	S. D. =	15465	
Mo1	5000	PPB	176155	178489	181531		
			Ave. Int. =	178725	S. D. =	2696	
Ni3	5000	PPB	752402	746625	755615		
			Ave. Int. =	751547	S. D. =	4556	
K 1	10000	PPB	5064	5168	5889		
			Ave. Int. =	5374	S. D. =	449	
Se1	5000	PPB	35576	34528	34716		
			Ave. Int. =	34940	S. D. =	559	
Ag1	500.	PPB	274922	268589	276338		
			Ave. Int. =	273283	S. D. =	4126	
Na1	10000	PPB	78685	73396	78972		
			Ave. Int. =	77018	S. D. =	3140	
Tl1	5000	PPB	9455	8367	10836		
			Ave. Int. =	9553	S. D. =	1237	
Ti2	5000	PPB	6458545	6382679	6454117		
			Ave. Int. =	6431780	S. D. =	42581	
In1	5000	PPB	283195	279467	280499		
			Ave. Int. =	281054	S. D. =	1925	

660

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Standard: 3 Rep: 3 Seq: 543 13:28:29 10 Dec 1999 ICP

Sb1	5000	PPB	64664	65770	66329		
			Ave. Int. =	65588	S. D. =	847	
As2	5000	PPB	113252	114060	114138		
			Ave. Int. =	113817	S. D. =	491	
Ba1	5000	PPB	2923488	2965953	2966894		
			Ave. Int. =	2952112	S. D. =	24793	
Be1	5000	PPB	38139315	38786856	38570362		
			Ave. Int. =	38498844	S. D. =	329641	
Cd3	5000	PPB	257024	254853	258891		
			Ave. Int. =	256923	S. D. =	2021	
Co1	5000	PPB	513629	517922	523081		
			Ave. Int. =	518211	S. D. =	4733	
Cu1	5000	PPB	5659937	5752324	5733435		
			Ave. Int. =	5715232	S. D. =	48809	
Pb1	5000	PPB	57004	56862	57674		
			Ave. Int. =	57180	S. D. =	434	
Mn1	5000	PPB	3806811	3846957	3868713		
			Ave. Int. =	3840827	S. D. =	31403	
Mo1	5000	PPB	178650	181601	181111		
			Ave. Int. =	180454	S. D. =	1581	
[illegible]3	5000	PPB	754205	772075	766136		
			Ave. Int. =	764139	S. D. =	9101	
K 1	10000	PPB	5510	5866	5598		
			Ave. Int. =	5658	S. D. =	185	
Se1	5000	PPB	36892	34235	36784		
			Ave. Int. =	35970	S. D. =	1504	
Ag1	500.	PPB	278900	279849	276641		
			Ave. Int. =	278463	S. D. =	1648	
Na1	10000	PPB	80369	82904	84722		
			Ave. Int. =	82665	S. D. =	2186	
Tl1	5000	PPB	8745	8431	8460		
			Ave. Int. =	8545	S. D. =	174	
Ti2	5000	PPB	6489375	6569100	6584645		
			Ave. Int. =	6547707	S. D. =	51111	
Zn1	5000	PPB	285131	288642	286666		
			Ave. Int. =	286813	S. D. =	1760	

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Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Standard: 4 Rep: 1 Seq: 544 13:32:34 10 Dec 1999 ICP

Sb1	10000	PPB	126287	128366	130418		
			Ave. Int. =	128357	S. D. =	2066	
As2	10000	PPB	221223	224602	225303		
			Ave. Int. =	223709	S. D. =	2182	
Ba1	10000	PPB	5810122	5926967	5905092		
			Ave. Int. =	5880727	S. D. =	62116	
Be1	10000	PPB	75389990	76790748	76553003		
			Ave. Int. =	76244580	S. D. =	749583	
Cd3	10000	PPB	511049	520961	521390		
			Ave. Int. =	517800	S. D. =	5850	
Co1	10000	PPB	1029766	1043187	1034614		
			Ave. Int. =	1035856	S. D. =	6796	
Cu1	10000	PPB	11225504	11439424	11395399		
			Ave. Int. =	11353442	S. D. =	112963	
Pb1	10000	PPB	115619	115086	114345		
			Ave. Int. =	115017	S. D. =	640	
Mn1	10000	PPB	7620651	7748470	7718828		
			Ave. Int. =	7695983	S. D. =	66902	
Mo1	10000	PPB	349793	358997	362344		
			Ave. Int. =	357045	S. D. =	6499	
[illegible]3	10000	PPB	1510970	1536668	1526677		
			Ave. Int. =	1524772	S. D. =	12955	
K 1	20000	PPB	11377	12088	11987		
			Ave. Int. =	11817	S. D. =	385	
Se1	10000	PPB	70598	72555	73552		
			Ave. Int. =	72235	S. D. =	1503	
Ag1	1000	PPB	518670	526409	524136		
			Ave. Int. =	523072	S. D. =	3978	
Na1	20000	PPB	220785	234071	230192		
			Ave. Int. =	228349	S. D. =	6832	
Tl1	10000	PPB	20414	21103	19912		
			Ave. Int. =	20476	S. D. =	598	
Ti2	10000	PPB	12789355	13033286	13005848		
			Ave. Int. =	12942830	S. D. =	133619	
Zn1	10000	PPB	557025	565382	565085		
			Ave. Int. =	562497	S. D. =	4742	

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Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Standard: 4 Rep: 2 Seq: 545 13:34:07 10 Dec 1999 ICP

Sb1	10000	PPB	132384	133374	137395		
			Ave. Int. =	134384	S. D. =	2654	
As2	10000	PPB	231892	233206	237686		
			Ave. Int. =	234261	S. D. =	3038	
Ba1	10000	PPB	6054830	6091467	6227560		
			Ave. Int. =	6124619	S. D. =	91012	
Be1	10000	PPB	79130704	79386614	80924003		
			Ave. Int. =	79813774	S. D. =	969964	
Cd3	10000	PPB	533476	536712	543929		
			Ave. Int. =	538039	S. D. =	5351	
Co1	10000	PPB	1065594	1069989	1095901		
			Ave. Int. =	1077161	S. D. =	16377	
Cu1	10000	PPB	11737107	11762256	12014976		
			Ave. Int. =	11838113	S. D. =	153683	
Pb1	10000	PPB	119006	118451	123388		
			Ave. Int. =	120282	S. D. =	2704	
Mn1	10000	PPB	7919230	7953736	8143145		
			Ave. Int. =	8005370	S. D. =	120557	
Mo1	10000	PPB	375635	372575	380681		
			Ave. Int. =	376297	S. D. =	4093	
[illegible]3	10000	PPB	1574725	1573048	1611287		
			Ave. Int. =	1586353	S. D. =	21609	
K 1	20000	PPB	11791	11817	11784		
			Ave. Int. =	11797	S. D. =	17	
Se1	10000	PPB	77618	76055	76602		
			Ave. Int. =	76758	S. D. =	793	
Ag1	1000	PPB	541278	539145	549552		
			Ave. Int. =	543325	S. D. =	5497	
Na1	20000	PPB	236509	239456	245355		
			Ave. Int. =	240440	S. D. =	4504	
Tl1	10000	PPB	21165	21252	22634		
			Ave. Int. =	21684	S. D. =	824	
Ti2	10000	PPB	13347906	13397678	13711366		
			Ave. Int. =	13485650	S. D. =	197054	
Zn1	10000	PPB	579526	581421	593140		
			Ave. Int. =	584696	S. D. =	7374	

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Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Standard: 4 Rep: 3 Seq: 546 13:35:37 10 Dec 1999 ICP

Sb1	10000	PPB	140110	139725	139152			
			Ave. Int. =	139662	S. D. =	482		
As2	10000	PPB	236908	246292	240378			
			Ave. Int. =	241193	S. D. =	4745		
Ba1	10000	PPB	6281381	6422565	6276602			
			Ave. Int. =	6326849	S. D. =	82927		
Be1	10000	PPB	81644454	84164681	81906690			
			Ave. Int. =	82571942	S. D. =	1385571		
Cd3	10000	PPB	549893	569215	553879			
			Ave. Int. =	557662	S. D. =	10201		
Co1	10000	PPB	1102757	1128550	1108233			
			Ave. Int. =	1113180	S. D. =	13589		
Cu1	10000	PPB	12115898	12470240	12127194			
			Ave. Int. =	12237777	S. D. =	201398		
Pb1	10000	PPB	121208	124077	120562			
			Ave. Int. =	121949	S. D. =	1871		
Mn1	10000	PPB	8211123	8386931	8230814			
			Ave. Int. =	8276289	S. D. =	96323		
Mo1	10000	PPB	383235	394559	387099			
			Ave. Int. =	388298	S. D. =	5756		
[illegible]3	10000	PPB	1620037	1665128	1632584			
			Ave. Int. =	1639250	S. D. =	23273		
K 1	20000	PPB	12565	12432	12992			
			Ave. Int. =	12663	S. D. =	293		
Se1	10000	PPB	78542	80118	77979			
			Ave. Int. =	78880	S. D. =	1109		
Ag1	1000	PPB	560238	573058	560402			
			Ave. Int. =	564566	S. D. =	7355		
Na1	20000	PPB	253337	251090	246423			
			Ave. Int. =	250283	S. D. =	3527		
Tl1	10000	PPB	21828	22798	24836			
			Ave. Int. =	23154	S. D. =	1535		
Ti2	10000	PPB	13829251	14161753	13846510			
			Ave. Int. =	13945838	S. D. =	187187		
Zn1	10000	PPB	603430	615741	603072			
			Ave. Int. =	607414	S. D. =	7213		

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700762

Ane	Conc.	Units	SD/RSD	1	2	3	4	5
*** Standard: 5 Rep: 1				Seq: 547		13:39:41 10 Dec 1999 ICP		
Al3	10000	PPB		342755	341971	345431		
			Ave. Int. =	343386	S. D. =		1814	
Ca3	10000	PPB		2716816	2705437	2714415		
			Ave. Int. =	2712223	S. D. =		5998	
Cr5	10000	PPB		878410	878174	881889		
			Ave. Int. =	879491	S. D. =		2080	
Fe2	10000	PPB		4260487	4269689	4260121		
			Ave. Int. =	4263432	S. D. =		5422	
Mo4	10000	PPB		1034017	1029464	1034497		
			Ave. Int. =	1032659	S. D. =		2778	
V 3	10000	PPB		8853509	8840317	8896445		
			Ave. Int. =	8863424	S. D. =		29348	
*** Standard: 5 Rep: 2				Seq: 548		13:41:10 10 Dec 1999 ICP		
Al3	10000	PPB		352657	354459	348692		
			Ave. Int. =	351936	S. D. =		2950	
Ca3	10000	PPB		2766208	2768979	2745622		
			Ave. Int. =	2760270	S. D. =		12761	
Cr5	10000	PPB		903749	902916	892598		
			Ave. Int. =	899754	S. D. =		6212	
Fe2	10000	PPB		4364648	4351023	4313065		
			Ave. Int. =	4342912	S. D. =		26731	
Mo4	10000	PPB		1056187	1055188	1046985		
			Ave. Int. =	1052787	S. D. =		5049	
V 3	10000	PPB		9107750	9074254	8991133		
			Ave. Int. =	9057712	S. D. =		60042	
*** Standard: 5 Rep: 3				Seq: 549		13:42:39 10 Dec 1999 ICP		
Al3	10000	PPB		351682	352017	348913		
			Ave. Int. =	350871	S. D. =		1704	
Ca3	10000	PPB		2748112	2770065	2741604		
			Ave. Int. =	2753260	S. D. =		14913	
Cr5	10000	PPB		902789	902002	887202		
			Ave. Int. =	897331	S. D. =		8731	
Fe2	10000	PPB		4345092	4361245	4312162		
			Ave. Int. =	4339500	S. D. =		25015	
Mo4	10000	PPB		1051000	1054148	1041676		
			Ave. Int. =	1048941	S. D. =		6486	
V 3	10000	PPB		9059383	9045756	8970101		
			Ave. Int. =	9025080	S. D. =		48098	

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Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Check Standard: 3 Ck3ICVAB Seq: 571 14:38:07 10 Dec 1999 ICP

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Al3		106.	7970	7500	PPB	98.2
Sb1		105.	7910	7500	PPB	57.2
As2		99.2	7440	7500	PPB	89.1
Ba1		105.	7880	7500	PPB	21.8
Be1		101.	7550	7500	PPB	15.2
Cd3		102.	7690	7500	PPB	47.3
Ca3		94.7	7100	7500	PPB	42.7
Cr5		95.9	7190	7500	PPB	39.9
Co1		97.0	7270	7500	PPB	36.0
Cu1		107.	8010	7500	PPB	23.8
Fe2		95.0	7130	7500	PPB	26.3
Pb1		97.7	7330	7500	PPB	5.99
Mo4		93.1	6980	7500	PPB	14.9
Mn1		93.3	6990	7500	PPB	20.1
Mo1		100.	7500	7500	PPB	77.6
Ni3		99.3	7450	7500	PPB	27.7
K 1		97.7	14700	15000	PPB	103.
Se1		103.	7740	7500	PPB	567.
Ag1		97.1	728.	750.	PPB	8.52
Na1		104.	15600	15000	PPB	208.
Tl1		94.3	7070	7500	PPB	450.
Ti2		99.0	7420	7500	PPB	7.68
V 3		94.9	7120	7500	PPB	20.2
Zn1		101.	7550	7500	PPB	45.2

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Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Check Standard: 1 Ck1ICB Seq: 572 14:42:16 10 Dec 1999 ICP

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Al3		62.6	200.	PPB	53.1
Sb1		49.0	100.	PPB	48.1
As2		69.7	1000	PPB	65.6
Ba1		1.09	30.0	PPB	.843
Be1		1.57	10.0	PPB	.925
Cd3		5.32	10.0	PPB	8.64
Ca3		30.7	1000	PPB	25.5
Cr5		10.0	30.0	PPB	5.01
Co1		-2.41	30.0	PPB	6.84
Cu1		5.84	25.0	PPB	1.74
Fe2		17.0	100.	PPB	8.00
Pb1		122.	250.	PPB	32.2
Mo4		14.3	1000	PPB	54.7
Mn1		.505	15.0	PPB	1.25
Mo1		40.6	100.	PPB	30.2
Ni3		.533	40.0	PPB	7.88
K 1		-72.8	2000	PPB	321.
Se1		22.4	500.	PPB	51.9
Ag1		-4.07	50.0	PPB	6.11
Na1		-7.64	1000	PPB	80.2
Tl1		-275.	300.	PPB	57.1
V 2		3.36	100.	PPB	.379
V 3		-.902	50.0	PPB	4.08
Zn1		-6.38	100.	PPB	11.6

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Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Check Standard: 5 Ck5ICSA Seq: 573 14:46:23 10 Dec 1999 ICP

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Al3		103.	517000	500000	PPB	6140
Sb1		163.	163.	100.	PPB	40.3
As2		8.03	80.3	1000	PPB	50.5
Ba1		-1.54	-.462	30.0	PPB	.394
Be1		355.	35.5	10.0	PPB	.357
Cd3		844.	84.4	10.0	PPB	9.90
Ca3		104.	520000	500000	PPB	5310
Cr5		-11.9	-3.57	30.0	PPB	4.42
Co1		-10.9	-5.43	50.0	PPB	6.66
Cu1		-6.58	-1.64	25.0	PPB	3.06
Fe2		106.	211000	200000	PPB	2280
Pb1		62.9	157.	250.	PPB	79.7
Mg4		110.	551000	500000	PPB	5350
Mn1		125.	18.7	15.0	PPB	1.62
Mo1		47.6	47.6	100.	PPB	3.62
Ni3		-3.71	-1.48	40.0	PPB	3.41
K 1		10.8	216.	2000	PPB	240.
Se1		15.3	76.7	500.	PPB	61.6
Ag1		25.0	12.5	50.0	PPB	2.22
Na1		40.4	404.	1000	PPB	93.2
Ti1		157.	470.	300.	PPB	308.
Tl2		2.46	2.46	100.	PPB	1.07
V 3		-10.4	-5.21	50.0	PPB	1.97
Zn1		19.1	19.1	100.	PPB	9.52

*** Check Standard: 6 Ck6ICSAB Seq: 574 14:50:32 10 Dec 1999 ICP

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Al3		94.4	472000	500000	PPB	2820
Ba1		107.	535.	500.	PPB	4.00
Be1		112.	560.	500.	PPB	4.16
Cd3		114.	1140	1000	PPB	11.3
Ca3		96.0	480000	500000	PPB	3170
Cr5		101.	507.	500.	PPB	3.92
Co1		104.	521.	500.	PPB	12.4
Cu1		104.	518.	500.	PPB	5.38
Fe2		97.1	194000	200000	PPB	1300
Pb1		115.	1150	1000	PPB	108.
Mg4		102.	508000	500000	PPB	3430
Mn1		111.	555.	500.	PPB	4.20
Ni3		105.	1050	1000	PPB	20.9
Ag1		97.5	975.	1000	PPB	11.1
V 3		96.9	484.	500.	PPB	3.37
Zn1		111.	1110	1000	PPB	15.2

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Name	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: PBL916E				Seq: 575		14:54:38 10 Dec 1999 ICP		
			L					
Al3	61.4	PPB	26.2	80.0	31.5	72.9		
Sb1	42.2	PPB	29.4	9.32	51.3	66.0		
As2	91.4	PPB	67.1	158.	93.2	23.5		
Ba1	-.104	PPB	1.48	.657	-1.81	.840		
Be1	.207	PPB	.082	.283	.119	.217		
Cd3	1.49	PPB	2.86	-1.10	1.00	4.57		
Ca3	74.8	PPB	9.92	83.6	76.8	64.1		
Cr5	1.95	PPB	6.06	8.90	-.839	-2.21		
Co1	-2.31	PPB	1.64	-.734	-2.21	-4.00		
Cu1	3.46	PPB	2.22	4.13	.988	5.27		
Fe2	41.4	PPB	5.17	46.4	41.5	36.1		
Pb1	104.	PPB	27.3	109.	74.2	128.		
Mg4	51.7	PPB	25.3	76.8	26.3	52.1		
Mn1	-.429	PPB	.630	-.341	-1.10	.153		
Mo1	11.0	PPB	18.8	-6.06	31.2	7.76		
Ni3	-7.87	PPB	5.44	-14.1	-4.34	-5.14		
K 1	-233.	PPB	918.	693.	-1140	-248.		
Se1	8.86	PPB	69.7	87.2	-41.2	-19.5		
Ag1	-1.60	PPB	6.32	-1.89	-7.78	4.86		
Na1	-25.4	PPB	82.7	-4.02	44.5	-117.		
Sr1	446.	PPB	550.	246.	1070	23.9		
Tl2	.769	PPB	.858	1.73	.487	.088		
V 3	-3.39	PPB	2.88	-3.61	-6.15	-.398		
Zn1	4.21	PPB	18.5	15.4	14.4	-17.2		

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Ane	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: LCSW916E				Seq: 576		14:58:45 10 Dec 1999 ICP		
Al3	2120	PPB	17.9	2100	2120	2140		
Sb1	447.	PPB	85.5	424.	375.	541.		
As2	2280	PPB	22.7	2270	2310	2270		
Ba1	2160	PPB	8.90	2150	2160	2170		
Be1	57.4	PPB	.161	57.2	57.5	57.4		
Cd3	64.8	PPB	.911	65.6	63.8	65.0		
Ca3	1160	PPB	10.7	1150	1150	1170		
Cr5	217.	PPB	9.55	206.	220.	224.		
Co1	549.	PPB	16.6	545.	534.	567.		
Cu1	259.	PPB	5.05	256.	256.	265.		
Fe2	1070	PPB	2.32	1080	1070	1070		
Pb1	682.	PPB	77.0	736.	594.	715.		
Mo4	2080	PPB	12.7	2080	2080	2100		
Mn1	535.	PPB	.580	535.	535.	536.		
Mo1	526.	PPB	50.5	472.	572.	534.		
Ni3	549.	PPB	13.2	536.	549.	563.		
K 1	10400	PPB	423.	9910	10500	10700		
Se1	2280	PPB	61.0	2210	2320	2320		
Ag1	71.3	PPB	7.29	63.0	76.8	74.0		
Na1	3360	PPB	15.9	3380	3360	3350		
[illegible]1	2360	PPB	463.	2630	2620	1830		
Tl2	552.	PPB	2.92	550.	550.	555.		
V 3	520.	PPB	3.44	517.	523.	522.		
Zn1	597.	PPB	20.9	586.	621.	583.		

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Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: 9912996E				Seq: 577		18:02:51 10 Dec 1999 ICP		
			L					
Al3	58.1	PPB	17.8	54.3	77.5	42.4		
Sb1	322.	PPB	21.1	307.	313.	346.		
As2	133.	PPB	4.73	138.	133.	129.		
Ba1	769.	PPB	28.6	739.	774.	795.		
Be1	7.88	PPB	.399	7.42	8.06	8.15		
Cd3	140.	PPB	10.7	128.	147.	146.		
Ca3	49200	PPB	2180	46900	49400	51300		
Cr5	.090	PPB	1.53	-1.15	1.79	-.370		
Co1	7.35	PPB	1.53	8.54	5.63	7.88		
Cu1	198.	PPB	10.3	187.	200.	207.		
Fe2	74.5	PPB	4.76	73.1	70.7	79.8		
Pb1	500.	PPB	51.9	463.	477.	559.		
Mo4	4220	PPB	192.	4010	4260	4390		
Mn1	1150	PPB	48.6	1100	1150	1200		
Mo1	.207	PPB	25.2	25.5	-25.0	.097		
Ni3	17.6	PPB	8.01	14.9	11.2	26.6		
K 1	2350	PPB	413.	1940	2770	2340		
Se1	-26.0	PPB	79.4	-64.3	-79.0	65.2		
Ag1	1.64	PPB	7.09	-6.27	3.74	7.43		
Na1	^^^^^^H	PPB	47500	^^^^^^	^^^^^^	^^^^^^		
Sr1	39.3	PPB	316.	316.	107.	-305.		
Ti2	-.090	PPB	.553	-.646	-.082	.460		
V 3	-2.23	PPB	2.44	-2.85	-4.30	.459		
Zn1	908.	PPB	32.2	871.	925.	928.		

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18:54:21 10 Dec 1999 Protocol: ROLLY Accredited Labs Inc.

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: 9912996LE				Seq: 578		15:06:58 10 Dec 1999 ICP		
			L					
Al3	33.3	PPB	24.6	60.1	11.8	27.8		
Sb1	131.	PPB	42.0	141.	85.5	168.		
As2	91.6	PPB	28.2	121.	88.1	65.3		
Ba1	165.	PPB	2.45	168.	163.	164.		
Be1	1.86	PPB	.110	1.73	1.91	1.92		
Cd3	36.1	PPB	5.74	42.4	34.6	31.2		
Ca3	12400	PPB	144.	12400	12500	12200		
Cr5	-9.08	PPB	7.10	-9.36	-16.0	-1.85		
Co1	-7.21	PPB	6.32	-13.0	-.480	-8.13		
Cu1	51.5	PPB	1.15	50.9	50.7	52.8		
Fe2	47.2	PPB	3.34	50.4	43.7	47.5		
Pb1	142.	PPB	86.9	130.	235.	62.1		
Mg4	1270	PPB	3.50	1270	1270	1260		
Mn1	248.	PPB	2.67	247.	250.	245.		
Mo1	-9.12	PPB	24.5	-13.9	17.5	-30.9		
Ni3	-6.33	PPB	12.2	-18.3	-6.91	6.19		
K 1	557.	PPB	995.	46.8	-78.7	1700		
Se1	37.6	PPB	73.8	-26.4	20.8	118.		
Ag1	-4.34	PPB	8.15	5.00	-9.96	-8.08		
Na1	259000H	PPB	3310	260000	261000	255000		
Tl1	65.1	PPB	328.	293.	-310.	213.		
Ti2	.785	PPB	.739	.011	.861	1.48		
V 3	-2.41	PPB	2.92	-1.34	-5.71	-.178		
Zn1	349.	PPB	13.4	363.	347.	336.		

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700770

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: 9912996DE				Seq: 579		15:11:05 10 Dec 1999 ICP		
			L					
Al3	43.9	PPB	16.9	56.6	24.9	50.1		
Sb1	284.	PPB	20.7	308.	274.	270.		
As2	126.	PPB	4.00	121.	126.	129.		
Ba1	774.	PPB	53.0	793.	814.	714.		
Be1	7.92	PPB	.479	8.10	8.28	7.37		
Cd3	151.	PPB	9.25	148.	161.	144.		
Ca3	49800	PPB	2750	50300	52300	46900		
Cr5	5.41	PPB	2.66	4.04	8.47	3.70		
Co1	3.34	PPB	11.3	12.0	-9.39	7.39		
Cu1	203.	PPB	12.1	204.	215.	191.		
Fe2	71.8	PPB	2.66	69.8	74.8	70.8		
Pb1	535.	PPB	76.3	617.	524.	465.		
Mg4	4260	PPB	204.	4290	4450	4040		
Mn1	1160	PPB	69.9	1180	1220	1090		
Mo1	30.9	PPB	21.1	24.9	54.3	13.4		
Ni3	16.7	PPB	2.40	13.9	18.2	17.9		
K 1	2120	PPB	109.	2180	2180	1990		
Se1	14.6	PPB	54.4	-36.2	72.0	8.03		
Ag1	2.07	PPB	7.02	-6.03	5.81	6.44		
Na1	^^^^^^H	PPB	83000	^^^^^^	^^^^^^	^^^^^^		
Tl1	-64.1	PPB	571.	-569.	556.	-180.		
V12	-1.00	PPB	1.49	.146	-2.68	-.467		
Y 3	-.326	PPB	1.58	.712	-2.14	.453		
Zn1	929.	PPB	84.1	954.	999.	836.		

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Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: 9912996SAE				Seq: 580		15:15:12 10 Dec 1999 ICP		
			L					
Al3	1990	PPB	66.0	1940	2070	1970		
Sb1	811.	PPB	45.9	794.	863.	775.		
As2	2200	PPB	128.	2190	2340	2080		
Ba1	2810	PPB	64.5	2790	2880	2750		
Be1	59.9	PPB	1.38	59.6	61.4	58.7		
Cd3	179.	PPB	15.0	180.	193.	163.		
Ca3	43200	PPB	961.	43000	44200	42300		
Cr5	204.	PPB	11.5	208.	213.	191.		
Co1	531.	PPB	9.96	522.	542.	530.		
Cu1	413.	PPB	13.0	408.	427.	403.		
Fe2	1100	PPB	23.2	1100	1120	1070		
Pb1	1020	PPB	90.2	997.	949.	1120		
Mg4	5650	PPB	149.	5650	5800	5500		
Mn1	1500	PPB	28.2	1500	1530	1470		
Mo1	546.	PPB	35.4	510.	581.	546.		
Ni3	567.	PPB	19.6	571.	584.	546.		
K 1	12100	PPB	450.	11700	12600	12100		
Se1	2230	PPB	112.	2360	2200	2150		
Ag1	121.	PPB	1.81	122.	122.	119.		
Na1	987000H	PPB	22500	983000	^^^^^^	967000		
Sr1	2980	PPB	28.0	2960	2960	3010		
Ti2	539.	PPB	13.9	537.	553.	526.		
V 3	503.	PPB	11.4	499.	516.	495.		
Zn1	1300	PPB	30.2	1300	1320	1260		

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18:55:10 10 Dec 1999 Protocol: RDLLY Accredited Labs Inc.

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: 9912996SBE				Seq: 581		15:19:19 10 Dec 1999 ICP		
			L					
Al3	2100	PPB	114.	1990	2220	2090		
Sb1	818.	PPB	59.2	750.	840.	862.		
As2	2250	PPB	141.	2100	2380	2270		
Ba1	2940	PPB	162.	2750	3050	3020		
Be1	63.3	PPB	3.75	59.0	66.0	64.8		
Cd3	202.	PPB	9.31	202.	211.	192.		
Ca3	45900	PPB	2020	43700	47700	46200		
Cr5	218.	PPB	10.6	208.	216.	229.		
Co1	573.	PPB	24.5	547.	596.	575.		
Cu1	437.	PPB	24.2	409.	453.	448.		
Fe2	1160	PPB	54.5	1100	1200	1180		
Pb1	1070	PPB	28.5	1040	1100	1060		
Mg4	6010	PPB	267.	5740	6270	6030		
Mn1	1590	PPB	77.7	1500	1660	1610		
Mo1	569.	PPB	52.4	520.	624.	562.		
Ni3	592.	PPB	44.2	541.	617.	618.		
K 1	12600	PPB	1140	11400	12600	13700		
Se1	2250	PPB	87.6	2160	2330	2260		
Ag1	123.	PPB	11.1	111.	131.	128.		
Na1	^^^^^^H	PPB	54100	976000	^^^^^^	^^^^^^		
Sr1	2360	PPB	389.	1950	2720	2420		
Ti2	567.	PPB	32.5	531.	594.	577.		
V 3	536.	PPB	23.6	510.	556.	542.		
Zn1	1400	PPB	68.3	1320	1450	1430		

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Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: 9912994E				Seq: 582		15:23:27 10 Dec 1999 ICP		
			L					
Al3	3220	PPB	101.	3150	3340	3170		
Sb1	240.	PPB	24.8	230.	222.	269.		
As2	72.4	PPB	38.4	42.0	59.7	115.		
Ba1	1870	PPB	39.8	1840	1920	1860		
Be1	8.41	PPB	.229	8.17	8.61	8.46		
Cd3	299.	PPB	7.68	292.	300.	307.		
Ca3	97000	PPB	2470	94300	99100	97500		
Cr5	7.99	PPB	4.73	10.3	11.1	2.54		
Co1	13.2	PPB	4.07	17.5	12.7	9.39		
Cu1	3380	PPB	65.6	3330	3450	3350		
Fe2	642.	PPB	9.17	633.	651.	643.		
Pb1	7370	PPB	97.7	7260	7410	7440		
Mo4	2750	PPB	98.4	2650	2850	2750		
Mn1	1230	PPB	31.5	1190	1260	1230		
Mo1	39.1	PPB	38.5	16.5	17.2	83.6		
Ni3	52.3	PPB	11.7	48.0	65.5	43.3		
K 1	1430	PPB	661.	2120	1350	807.		
Se1	13.5	PPB	97.8	126.	-35.9	-49.8		
Ag1	-4.32	PPB	4.00	.296	-6.49	-6.76		
Na1	^^^^^^H	PPB	20300	^^^^^^	^^^^^^	^^^^^^		
Sr1	485.	PPB	498.	842.	-83.9	698.		
Ti2	-1.70	PPB	1.01	-2.82	-.851	-1.43		
V 3	-7.55	PPB	5.53	-4.25	-13.9	-4.46		
Zn1	7000	PPB	155.	6850	7160	6990		

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Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Check Standard: 2 Ck2CCVAB Seq: 587 15:39:56 10 Dec 1999 ICP

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Al3		106.	5280	5000	PPB	64.8
Sb1		103.	5170	5000	PPB	159.
As2		107.	5350	5000	PPB	40.7
Ba1		104.	5210	5000	PPB	58.8
Be1		105.	5270	5000	PPB	62.4
Cd3		104.	5180	5000	PPB	55.0
Ca3		103.	5170	5000	PPB	61.2
Cr5		101.	5060	5000	PPB	44.0
Co1		103.	5170	5000	PPB	63.2
Cu1		103.	5170	5000	PPB	64.7
Fe2		102.	5100	5000	PPB	56.5
Pb1		103.	5130	5000	PPB	89.4
Mg4		105.	5240	5000	PPB	62.8
Mn1		103.	5170	5000	PPB	48.9
Mo1		101.	5040	5000	PPB	95.7
Ni3		105.	5230	5000	PPB	47.5
K 1		101.	10100	10000	PPB	326.
Se1		103.	5140	5000	PPB	169.
Ag1		103.	515.	500.	PPB	2.84
Na1		104.	10400	10000	PPB	115.
Tl1		91.2	4560	5000	PPB	463.
Ti2		103.	5150	5000	PPB	60.0
V 3		107.	5330	5000	PPB	61.0
Zn1		107.	5350	5000	PPB	54.8

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18:56:32 10 Dec 1999 Protocol: ROLLY Accredited Labs Inc.

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Check Standard: 1 Ck1CCB Seq: 588 15:44:05 10 Dec 1999 ICP

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Al3		51.8	200.	PPB	31.8
Sb1		39.5	100.	PPB	65.9
As2		41.4	1000	PPB	29.8
Be1		.810	30.0	PPB	.621
Be1		.514	10.0	PPB	.128
Cd3		9.49	10.0	PPB	7.60
Ca3		1.97	1000	PPB	1.49
Cr5		4.30	30.0	PPB	15.9
Co1		2.66	30.0	PPB	4.26
Cu1		3.44	25.0	PPB	2.23
Fe2		9.43	100.	PPB	1.52
Pb1		59.8	250.	PPB	47.0
Mo4		-14.6	1000	PPB	16.1
Mn1		1.38	15.0	PPB	.182
Mo1		15.4	100.	PPB	23.7
Ni3		.437	40.0	PPB	2.31
K 1		-460.	2000	PPB	527.
Se1		60.6	500.	PPB	71.4
Ag1		4.13	50.0	PPB	6.59
Na1		9.24	1000	PPB	60.4
[illegible]1		297.	300.	PPB	372.
Ti2		4.61	100.	PPB	1.42
V 3		.881	50.0	PPB	2.53
Zn1		-1.00	100.	PPB	26.5

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18:56:46 10 Dec 1999 Protocol: ROLLY Accredited Labs Inc.

Ane	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: 9912995E				Seq: 589		15:48:12 10 Dec 1999 ICP		
			L					
Al3	61.8	PPB	44.1	18.9	59.6	107.		
Sb1	42.1	PPB	26.6	20.1	71.7	34.5		
As2	37.9	PPB	26.6	54.8	51.7	7.19		
Ba1	77.7	PPB	.941	78.8	77.2	77.1		
Be1	.170	PPB	.043	.143	.148	.219		
Cd3	.593	PPB	3.89	-3.64	4.02	1.39		
Ca3	499.	PPB	1.21	499.	497.	499.		
Cr5	3.79	PPB	6.85	-.276	-.059	11.7		
Co1	2.18	PPB	3.62	2.90	-1.75	5.38		
Cu1	22.5	PPB	1.25	22.5	21.3	23.8		
Fe2	206.	PPB	2.05	206.	208.	204.		
Pb1	48.6	PPB	122.	126.	112.	-92.5		
Mo4	11.6	PPB	5.63	7.12	17.9	9.68		
Mn1	3.40	PPB	.391	3.47	3.75	2.98		
Mo1	16.8	PPB	11.0	16.2	6.07	28.0		
Ni3	-8.17	PPB	2.54	-8.36	-10.6	-5.53		
K 1	174.	PPB	540.	255.	669.	-401.		
Se1	65.6	PPB	58.2	129.	54.3	13.9		
Ag1	.678	PPB	.986	-.449	1.11	1.38		
Na1	3080	PPB	56.8	3120	3110	3020		
Sr1	189.	PPB	101.	300.	164.	102.		
Ti2	6.07	PPB	1.29	5.32	7.56	5.33		
V 3	1.44	PPB	1.30	2.39	1.98	-.035		
Zn1	-5.52	PPB	5.00	-.249	-6.12	-10.2		

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Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Check Standard: 2 Ck2CCVAB Seq: 593 16:04:42 10 Dec 1999 ICP

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Al3		103.	5150	5000	PPB	42.8
Sb1		104.	5210	5000	PPB	73.3
As2		103.	5140	5000	PPB	73.2
Ba1		104.	5190	5000	PPB	13.9
Be1		104.	5210	5000	PPB	28.7
Cd3		103.	5160	5000	PPB	19.9
Ca3		103.	5160	5000	PPB	14.7
Cr5		103.	5150	5000	PPB	22.6
Co1		104.	5200	5000	PPB	22.2
Cu1		104.	5210	5000	PPB	19.0
Fe2		103.	5170	5000	PPB	22.5
Pb1		101.	5040	5000	PPB	50.0
Mg4		104.	5180	5000	PPB	44.7
Mn1		103.	5170	5000	PPB	24.8
Mo1		103.	5170	5000	PPB	82.3
Ni3		104.	5180	5000	PPB	28.0
K 1		109.	10900	10000	PPB	150.
Se1		105.	5260	5000	PPB	64.4
Ag1		105.	523.	500.	PPB	8.40
Na1		102.	10200	10000	PPB	80.3
Tl1		90.5	4520	5000	PPB	352.
Ti2		104.	5180	5000	PPB	21.2
V 3		104.	5190	5000	PPB	27.7
Zn1		103.	5160	5000	PPB	22.3

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Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Check Standard: 1 Ck1CCB Seq: 594 16:06:51 10 Dec 1999 ICP

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Al3		32.2	200.	PPB	17.7
Sb1		69.1	100.	PPB	51.8
As2		22.9	1000	PPB	32.6
Ba1		1.31	30.0	PPB	1.59
Be1		1.12	10.0	PPB	.223
Cd3		3.29	10.0	PPB	5.40
Ca3		7.10	1000	PPB	1.10
Cr5		7.47	30.0	PPB	14.2
Co1		6.63	30.0	PPB	2.22
Cu1		2.89	25.0	PPB	5.84
Fe2		6.07	100.	PPB	3.47
Pb1		135.	250.	PPB	51.6
Mg4		-1.47	1000	PPB	12.3
Mn1		2.39	15.0	PPB	1.54
Mo1		8.61	100.	PPB	34.8
Ni3		-5.70	40.0	PPB	12.9
K 1		19.5	2000	PPB	635.
Se1		159.	500.	PPB	89.8
Ag1		1.32	50.0	PPB	4.56
Na1		4.58	1000	PPB	265.
Si1	H	377.	300.	PPB	266.
Ti2		4.48	100.	PPB	.926
V 3		-.364	50.0	PPB	2.21
Zn1		-24.6	100.	PPB	17.4

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Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Check Standard: 5 Ck5ICSA Seq: 595 16:12:59 10 Dec 1999 ICP

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Al3		95.9	480000	500000	PPB	3990
Sb1		155.	155.	100.	PPB	68.4
As2		5.99	59.9	1000	PPB	74.9
Ba1		-2.37	-.711	30.0	PPB	1.19
Be1		337.	33.7	10.0	PPB	.325
Cd3		655.	65.5	10.0	PPB	4.76
Ca3		99.6	498000	500000	PPB	4150
Cr5		-7.76	-2.33	30.0	PPB	9.69
Co1		-10.6	-5.30	50.0	PPB	6.58
Cu1		1.46	.365	25.0	PPB	3.24
Fe2		102.	203000	200000	PPB	1620
Pb1		21.5	53.7	250.	PPB	35.7
Mo4		106.	528000	500000	PPB	4690
Mn1		105.	15.7	15.0	PPB	1.31
Mg1		-4.12	-4.12	100.	PPB	23.5
Ni3		-5.40	-2.16	40.0	PPB	4.77
K 1		-7.78	-156.	2000	PPB	199.
Se1		5.08	25.4	500.	PPB	131.
Ag1		10.8	5.40	50.0	PPB	6.05
Na1		47.9	479.	1000	PPB	117.
Tl1		-13.6	-40.7	300.	PPB	454.
Ti2		4.92	4.92	100.	PPB	1.75
V 3		-11.7	-5.86	50.0	PPB	2.12
Zn1		15.9	15.9	100.	PPB	5.49

*** Check Standard: 6 Ck6ICSAB Seq: 596 16:17:08 10 Dec 1999 ICP

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Al3		96.0	480000	500000	PPB	2730
Ba1		109.	546.	500.	PPB	1.00
Be1		114.	568.	500.	PPB	3.36
Cd3		110.	1100	1000	PPB	13.0
Ca3		99.4	497000	500000	PPB	3100
Cr5		106.	529.	500.	PPB	18.8
Co1		103.	515.	500.	PPB	5.27
Cu1		106.	528.	500.	PPB	3.72
Fe2		101.	203000	200000	PPB	1170
Pb1		110.	1100	1000	PPB	48.5
Mo4		106.	530000	500000	PPB	2860
Mn1		110.	548.	500.	PPB	3.27
Ni3		102.	1020	1000	PPB	17.7
Ag1		99.7	997.	1000	PPB	9.89
V 3		102.	510.	500.	PPB	2.09
Zn1		110.	1100	1000	PPB	39.5

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PROJECT Hg Run

Notebook No. 939 - 34

Continued From Page

HG 1203 A

ICV, 1 ICB

PBL 915 E
LCSW 915 E
991 3006 E
3007 E
3039 E
3040 E
PBS 1533
LCSS 1533
991 2970
3005
CCV / CCB
PBW 1664
LCSW 1664
991 3012
3012 D
3012 SA
3012 SB
3014
3016
PBS 1534
LCSS 1534
CCV / CCB
991 3081
3081 D
3081 T
3081 SA
3081 SB
3081 SC
3055
3056
3057
3058
CCV / CCB

HG 1203 A

991 3059
3060
3061
3062
3063
3064
3065
3066
3067
3068
CCV / CCB
991 3039
CCV / CCB
PBL 916 E
LCSW 916 E
991 2996 E
2996 DE
2996 SAE
2996 SBE
2994 E
3076 E DE
~~3316 E~~ 3116 E
3088 E
CCV / CCB
991 2995 E 10X
3081 SA
3081 SB
3081 SC
LCSW 1664
CCV / CCB

Continued on Pa

Read and Understood By 683

Signed [signature] Date 12/03 Signed

700781

*** Standard: 1 Rep: 1 Seq: 170 10:59:10 03 Dec 1999 HG

Hg .000 ppb 504
Ave. Int. = 504 S. D. = 0

*** Standard: 1 Rep: 2 Seq: 171 11:02:03 03 Dec 1999 HG

Hg .000 ppb 49
Ave. Int. = 49 S. D. = 0

*** Standard: 1 Rep: 1 Seq: 172 11:04:56 03 Dec 1999 HG

Hg .000 ppb 25
Ave. Int. = 25 S. D. = 0

*** Standard: 1 Rep: 2 Seq: 173 11:07:49 03 Dec 1999 HG

Hg .000 ppb -52
Ave. Int. = -52 S. D. = 0

*** Standard: 2 Rep: 1 Seq: 174 11:10:43 03 Dec 1999 HG

Hg .500 ppb 3282
Ave. Int. = 3282 S. D. = 0

*** Standard: 2 Rep: 2 Seq: 175 11:13:37 03 Dec 1999 HG

Hg .500 ppb 3489
Ave. Int. = 3489 S. D. = 0

*** Standard: 3 Rep: 1 Seq: 176 11:16:31 03 Dec 1999 HG

Hg 1.00 ppb 7273
Ave. Int. = 7273 S. D. = 0

*** Standard: 3 Rep: 2 Seq: 177 11:19:25 03 Dec 1999 HG

Hg 1.00 ppb 7120
Ave. Int. = 7120 S. D. = 0

*** Standard: 4 Rep: 1 Seq: 178 11:22:19 03 Dec 1999 HG

Hg 2.00 ppb 15953
Ave. Int. = 15953 S. D. = 0

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Line  Wave.   Conc.  Units     SD/RSD      1        2        3        4        5
-----------------------------------------------------------------------------------

*** Standard: 4 Rep: 2                Seq:  179     11:25:14 03 Dec 1999 HG

Hg            2.00    ppb      15062
                       Ave. Int. =     15062 S. D. =          0

*** Standard: 5 Rep: 1                Seq:  180     11:28:09 03 Dec 1999 HG

Hg            5.00    ppb      60190
                       Ave. Int. =     60190 S. D. =          0

*** Standard: 5 Rep: 2                Seq:  181     11:31:11 03 Dec 1999 HG

Hg            5.00    ppb      59367
                       Ave. Int. =     59367 S. D. =          0

*** Standard: 6 Rep: 1                Seq:  182     11:34:21 03 Dec 1999 HG

Hg            10.0    ppb      133250
                       Ave. Int. =    133250 S. D. =          0

*** Standard: 6 Rep: 2                Seq:  183     11:37:50 03 Dec 1999 HG

Hg            10.0    ppb      125905
                       Ave. Int. =    125905 S. D. =          0

*** Check Standard: 3  Ck3ICV         Seq:  184     11:41:23 03 Dec 1999 HG
Line  Wave. Flag  %Rcv.   Found    True  Units      SD/RSD
Hg              87.8     3.51    4.00   ppb        .000

*** Check Standard: 1  Ck1ICB         Seq:  185     11:44:25 03 Dec 1999 HG
Line  Wave. Flag  Found Range(+/-) Units      SD/RSD
Hg              .117     .500     ppb        .000

*** Sample ID: LCSW1664                Seq:  215     13:12:09 03 Dec 1999 HG
                           A
Hg            1.44    ppb       .000      1.44

*** Sample ID: PBL916E                 Seq:  258     16:11:40 03 Dec 1999 HG
                           L
Hg            .382    ppb       .000      .382

*** Sample ID: LCSW916E                Seq:  259     16:14:28 03 Dec 1999 HG
                           L
Hg            2.16    ppb       .000      2.16

*** Sample ID: 9912996E                Seq:  260     16:17:41 03 Dec 1999 HG
                           L 2
Hg            .455    ppb       .000      .455
```

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Line	Wave.	Conc.	Units	SD/RSD	1	2	3	4	5

*** Sample ID: 9912996DE Seq: 261 16:20:29 03 Dec 1999 HG
L 2
Hg .444 ppb .000 .444

*** Sample ID: 9912996SAE Seq: 262 16:23:17 03 Dec 1999 HG
L 2
Hg 2.19 ppb .000 2.19

*** Sample ID: 9912996SBE Seq: 263 16:26:06 03 Dec 1999 HG
L 2
Hg 1.83 ppb .000 1.83

*** Sample ID: 9912994E Seq: 264 16:28:55 03 Dec 1999 HG
L 2
Hg .535 ppb .000 .535

*** Sample ID: 9913076E Seq: 265 16:31:44 03 Dec 1999 HG
L 2
Hg .368 ppb .000 .368

*** Sample ID: 9913316E Seq: 266 16:34:34 03 Dec 1999 HG
L 2
Hg .449 ppb .000 .449

*** Sample ID: 9913088E Seq: 267 16:37:23 03 Dec 1999 HG
L 2
Hg .512 ppb .000 .512

*** Check Standard: 2 Ck2CCV Seq: 268 16:40:13 03 Dec 1999 HG
Line Wave. Flag %Rcv. Found True Units SD/RSD
Hg 98.1 4.91 5.00 ppb .000

*** Check Standard: 1 Ck1CCB Seq: 269 16:43:14 03 Dec 1999 HG
Line Wave. Flag Found Range(+/-) Units SD/RSD
Hg .150 .500 ppb .000

*** Sample ID: 9912995E Seq: 270 16:46:04 03 Dec 1999 HG
L 10
Hg .765 ppb .000 .765

*** Sample ID: 9913081SA Seq: 271 16:48:53 03 Dec 1999 HG
S Dil. Weight 2.6000 Volume 1.0000
Hg 1.95 ppb .000 1.95

*** Sample ID: 9913081SB Seq: 272 16:51:51 03 Dec 1999 HG
S Dil. Weight 2.6000 Volume 1.0000
Hg 2.06 ppb .000 2.06

686

10:02:40 13 Dec 1999 PROGRAM: ROUTINE

Line	Wave.	Conc.	Units	SD/RSD	1	2	3	4	5

*** Sample ID: 991306151C Seq: 273 16:54:51 03 Dec 1999 HG
S Dil. Weight 2.0000 Volume 1.0000

Hg		.067	ppb	.000	.067

*** Sample ID: LCSW1664 Seq: 274 16:57:39 03 Dec 1999 HG
A

Hg		2.25	ppb	.000	2.25

*** Check Standard: 2 Ck2CCV Seq: 275 17:00:28 03 Dec 1999 HG

Line	Wave.	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg			109.	5.43	5.00	ppb	.000

*** Check Standard: 1 Ck1CCB Seq: 276 17:03:34 03 Dec 1999 HG

Line	Wave.	Flag	Found	Range(+/-)	Units	SD/RSD
Hg			.159	.500	ppb	.000

687

PERCENT SOLIDS DETERMINATION

ALI #	SAMPLE + PAN	PAN	SAMPLE	DRY WGT SAMPLE + PAN	TIME IN	TEMP	DATE	TIME OUT	TEMP	DATE	% SOLID	INIT
9912984												
9912985												
9912986												
9912987												
9912988												
9912989												
9912990												
9912991												
9912992												
9912993												
9912994	10.59	1.02	9.57	8.20	0920	105	12-02-99	1820	105	12.2	75.0	DM
9912995												
9912996	10.98	1.02	9.96	9.59	0920	105	12-02-99	1820	105	12.2	86.0	DM
9912997	11.02	1.02	10.00	9.65							96.3	
9912998	10.23	1.02	9.21	8.87							85.2	

REVIEWED BY _____

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% SOLIDS = ((DRY WT SAMPLE + PAN) - PAN) x 100 / INITIAL WEIGHT
NOTE: All weights are reported in grams.

700786

PERCENT SOLIDS DETERMINATION

ALI #	SAMPLE + PAN	PAN	SAMPLE	DRY WGT SAMPLE + PAN	TIME IN	TEMP	DATE	TIME OUT	TEMP	DATE	% SOLID	INIT
9912999	10.52	1.02	9.50	9.15	0920	105	12.02.99	1820	105	12.2	85.6	dm
9913000	11.47	1.02	10.45	10.01							86.0	
9913001	10.82	1.02	9.80	9.39							85.4	
9913002	10.85	1.02	9.83	9.39							85.1	
9913003	11.72	1.02	10.70	10.45							88.1	
9913004	12.02	1.02	11.00	10.58							86.9	
9913005	12.79	1.02	11.77	11.10							85.6	
9913006	12.93	1.02	11.91	11.03							84.0	
9913007	10.34	1.02	9.32	8.59							81.2	
9913008												
9913009												
9913010												
9913011												
9913012												
9913013												

REVIEWED BY _____

% SOLIDS = ((DRY WT SAMPLE + PAN) - PAN) x 100 / INITIAL WEIGHT
NOTE: All weights are reported in grams.

700788

PROJECT

Notebook No. 942

Continued From Page

Sample	FP	Matrix	Date	Initials
9912855	>200	S	11-29-99	JM
2883	>200	O		
9912978	>200	A	12/1/99	J
9912978(D)	>200			
9912965	>200	S	12-3-99	JM
2966	>200			
2994	>200			
2995	170	O		
2996	>200	S		
3006	>200			
3007	>200			
3040	>200			
3081	>200			
2995-D	160	O		

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Read and Understood By

Signed Date Signed Date

PROJECT

Continued From Page

Sample	PH	Date	Matrix	Initial
991 2662	7.01	11-23-99	A	dM
2663	6.49		A	
2664	4.86		S	
2665	7.56		S	
2681	8.83		S	
2682	6.47		O	
2764	6.60		S	
2765	7.99		S	
2764-D	6.70		S	
991 2855	4.17	11-29-99	S	dM
2883	6.79		O	
2928	7.10		S	
991 2978	6.72	12/1/99	A	
991 2977	2.76		A	
991 3007	7.37		S	
991 3006	7.54		S	
991 2965	6.18			
991 3081	7.45			
991 2996	6.74		S	
991 2994	6.45			
991 3040	7.40			
991 2995	6.86		O	
991 2995 (D)	6.79			
991 2996	7.41			
991 2996 (D)	7.48			
991 2978 (D)	6.74			

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Read and Understood By

Signed Date Signed Date

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PROJECT RCW

Notebook No. 934
Continued From Page

Sample	MLS or g	Final VOl
ICB	200ml	200ml
ICV	200ml	
9912965	10.20g	
2966	10.59g	
2994	10.08g	
2995	10.67g	
2996	10.46g	
2996-D	10.46g	
3006	10.25g	
3007	10.12g	
3040	10.47g	
3081	10.03g	

12-3-99

Sample	ABS	Conc	Final	%S	MDL
ICB	0.000	ND	ND	–	0.01
ICV	0.480	0.1923	0.19	–	0.01
9912965	0.000	ND	ND	82.8	0.24
2966	0.000			61.5	0.33
2994	0.000			75.0	0.27
2995	0.000			100	0.20
2996	0.000			86.0	0.23
2996-D	0.000			86.0	0.23
3006	0.000			84.0	0.24
3007	0.000			81.2	0.25
3040	0.000			90.2	0.22
3081	0.000			93.3	0.21
CCV	0.480	0.1923	0.19	–	0.01
CCB	0.000	ND	ND	–	0.01

Continued on Page

Read and Understood By

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Signed: [signature] Date: 12-2-99 Signed: Date:

RS 9

Sample	Aliq	MCS I_2	MCS PAO	Final	% s	MDL
ICB	50ml	5ml	5.0	ND	—	2.0
99 2965			5.1	~~5.1~~ ND	82.8	48.3
2966			5.2	5 ND	61.5	65.0
2994			5.3	ND	75.0	53.3
2995			5.3		100	40.0
2996			5.2		86.0	46.5
2996-D			5.1		86.0	46.5
3006			5.2		84.0	47.6
3007			5.2		81.2	49.3
3040			5.3		90.2	44.3
3081			5.1		93.3	42.9

Continued on Page 693

Read and Understood By

Signed | Date | Signed | Date

Operator ID: RHODERICK Quant Rev: 7 Quant Time: 980708 15:39
Output File: ^K7823::QT Injected at: 980708 14:56
Data File: >K7823::G2 Dilution Factor: 1.00000
Name: DRO COMP.STD 50PPM Instrument ID: I
Misc: B658 P83

ID File: I3DROA::G5
Title: DRO BY GC FID RTX-5 30m 0.53mm 1.5um
Last Calibration: 970519 08:49 Last Qcal Time: 980707 14:14

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Decane	8.46	1015	456758	38.20	MG/L	100
2)	#Dodecane	11.13	1336	459926	34.00	MG/L	100
3)	#Tetradecane	13.47	1616	448959	35.52	MG/L	100
4)	#Hexadecane	15.55	1866	499927	34.09	MG/L	100
5)	#Octadecane	17.42	2091	479962	34.09	MG/L	100
6)	#Ortho-terphenyl	18.60	2232	525357	39.25	MG/L	100
7)	#Eicosane	19.13	2296	477236	37.37	MG/L	100
8)	#Decosane	20.69	2483	476532	35.29	MG/L	100
9)	#Tetracosane	22.13	2655	468930	33.13	MG/L	100
10)	#Hexacosane	23.46	2815	466876	36.71	MG/L	100
11)	#Octacosane	24.82	2978	464774	35.50	MG/L	100

Compound uses ESTD

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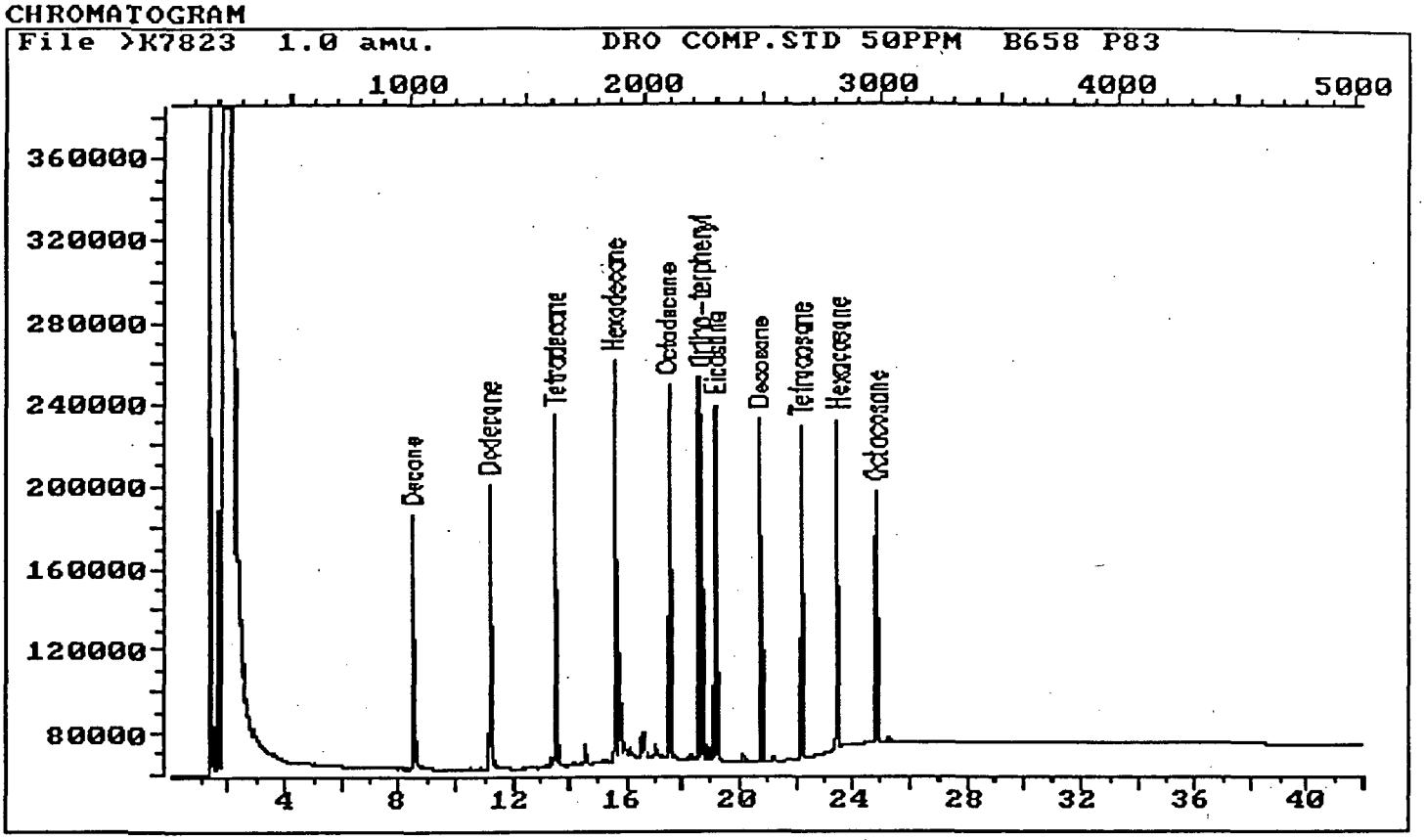
CHROMATOGRAM



Data File: >K7823::G2 Quant Output File: ^K7823::QT
Name: DRO COMP.STD 50PPM Instrument ID: I
Misc: B658 P83

Id File: I3DROA::G5
Title: DRO BY GC FID RTX-5 30m 0.53mm 1.5um
Last Calibration: 970519 08:49 Last Qcal Time: 980707 14:14

Operator ID: RHODERICK
Quant Time : 980708 15:39
Injected at: 980708 14:56

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Operator ID: RHODERICK Quant Rev: 7 Quant Time: 980708 16:32
Output File: ^K7824::QT Injected at: 980708 15:48
Data File: >K7824::G2 Dilution Factor: 1.00000
Name: DRO COMP.STD 20PPM Instrument ID: I
Misc: B658 P83

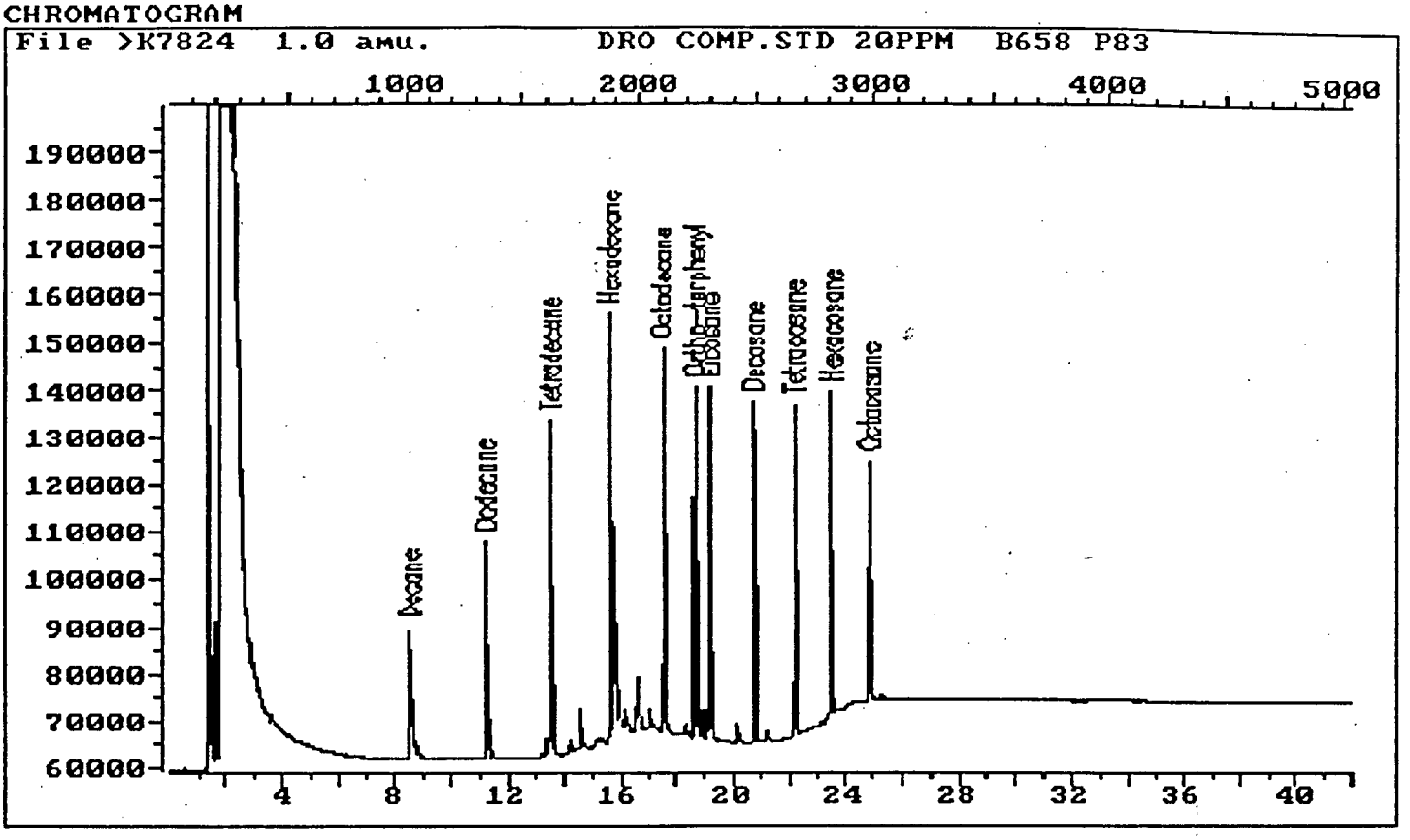
ID File: I3DROA::G5
Title: DRO BY GC FID RTX-5 30m 0.53mm 1.5um
Last Calibration: 970519 08:49 Last Qcal Time: 980707 14:14

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Decane	8.49	1019	190292	15.92	MG/L	100
2)	#Dodecane	11.17	1340	199468	14.74	MG/L	100
3)	#Tetradecane	13.48	1618	186359	14.74	MG/L	100
4)	#Hexadecane	15.56	1867	233699	15.94	MG/L	100
5)	#Octadecane	17.43	2092	216416	15.37	MG/L	100
6)	#Ortho-terphenyl	18.62	2234	226913	16.95	MG/L	100
7)	#Eicosane	19.14	2297	211038	16.52	MG/L	100
8)	#Decosane	20.70	2484	206964	15.33	MG/L	100
9)	#Tetracosane	22.13	2656	205708	14.53	MG/L	100
10)	#Hexacosane	23.47	2816	201324	15.83	MG/L	100
11)	#Octacosane	24.83	2979	200520	15.31	MG/L	100

Compound uses ESTD

696

CHROMATOGRAM



Data File: >K7824::G2 Quant Output File: ^K7824::QT
Name: DRO COMP.STD 20PPM Instrument ID: I
Misc: B658 P83

Id File: I3DROA::G5
Title: DRO BY GC FID RTX-5 30m 0.53mm 1.5um
Last Calibration: 970519 08:49 Last Qcal Time: 980707 14:14

Operator ID: RHODERICK
Quant Time : 980708 16:32
Injected at: 980708 15:48

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Operator ID: RHODERICK Quant Rev: 7 Quant Time: 980708 17:24
Output File: ^K7825::QT Injected at: 980708 16:41
Data File: >K7825::G2 Dilution Factor: 1.00000
Name: DRO COMP.STD 10PPM Instrument ID: I
Misc: B658 P83

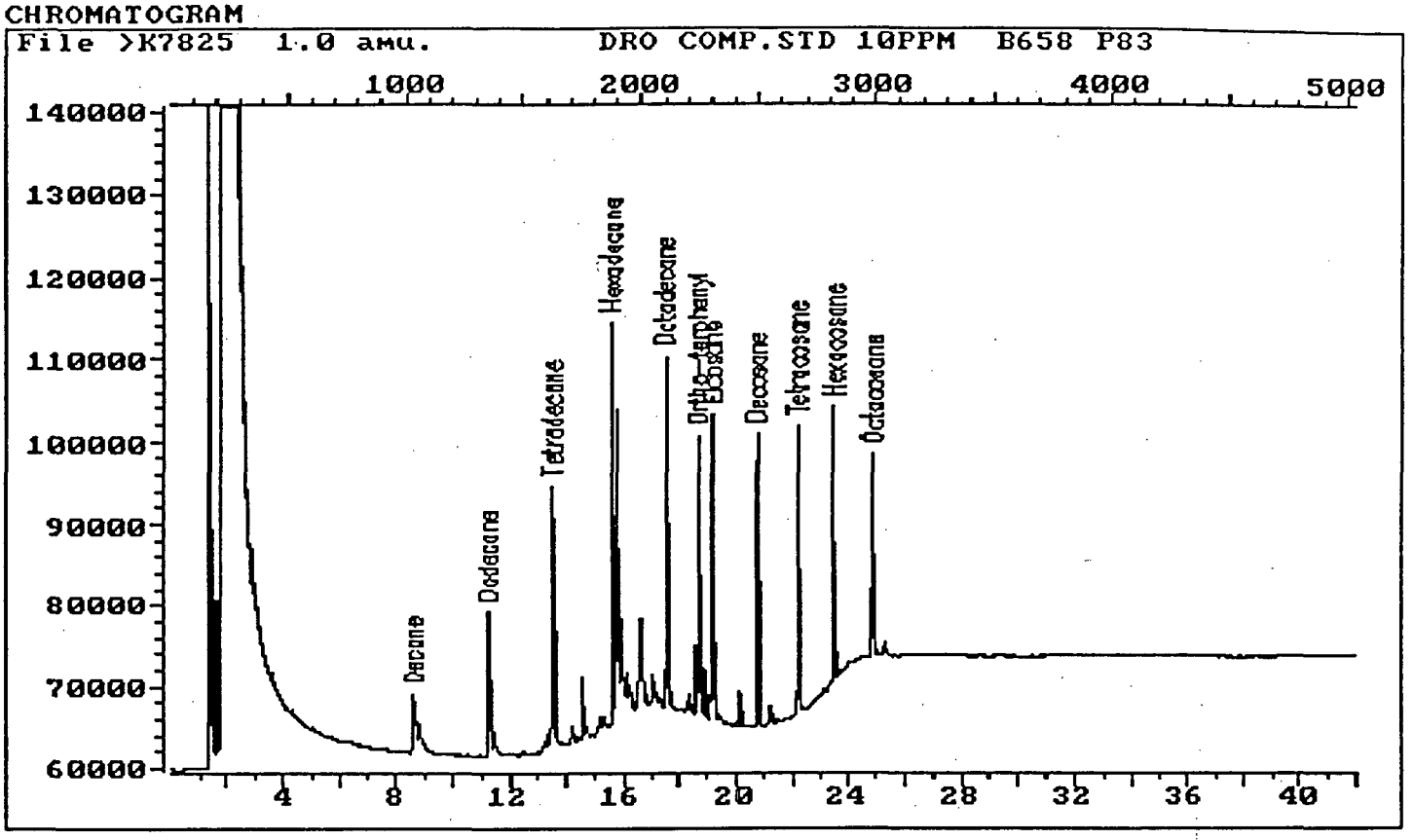
ID File: I3DROA::G5
Title: DRO BY GC FID RTX-5 30m 0.53mm 1.5um
Last Calibration: 970519 08:49 Last Qcal Time: 980707 14:14

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Decane	8.57	1028	89181M	7.46	MG/L	
2)	#Dodecane	11.21	1345	97228	7.19	MG/L	100
3)	#Tetradecane	13.50	1620	86572	6.85	MG/L	100
4)	#Hexadecane	15.57	1868	129975	8.86	MG/L	100
5)	#Octadecane	17.44	2093	116003	8.24	MG/L	100
6)	#Ortho-terphenyl	18.63	2236	114220	8.53	MG/L	100
7)	#Eicosane	19.15	2298	110131	8.62	MG/L	100
8)	#Decosane	20.71	2485	105144	7.79	MG/L	100
9)	#Tetracosane	22.14	2657	109545	7.74	MG/L	100
10)	#Hexacosane	23.47	2817	100264	7.88	MG/L	100
11)	#Octacosane	24.84	2981	100183	7.65	MG/L	100

Compound uses ESTD

698

CHROMATOGRAM



Data File: >K7825::G2 Quant Output File: ^K7825::QT
Name: DRO COMP.STD 10PPM Instrument ID: I
Misc: B658 P83

Id File: I3DROA::G5
Title: DRO BY GC FID RTX-5 30m 0.53mm 1.5um
Last Calibration: 970519 08:49 Last Qcal Time: 980707 14:14

Operator ID: RHODERICK
Quant Time : 980708 17:24
Injected at: 980708 16:41

699

Operator ID: RHODERICK
Output File: ^K7826::QT
Data File: >K7826::G2
Name: DRO COMP.STD 5PPM
Misc: B658 P83

Quant Rev: 7 Quant Time: 980708 18:17
Injected at: 980708 17:33
Dilution Factor: 1.00000
Instrument ID: I

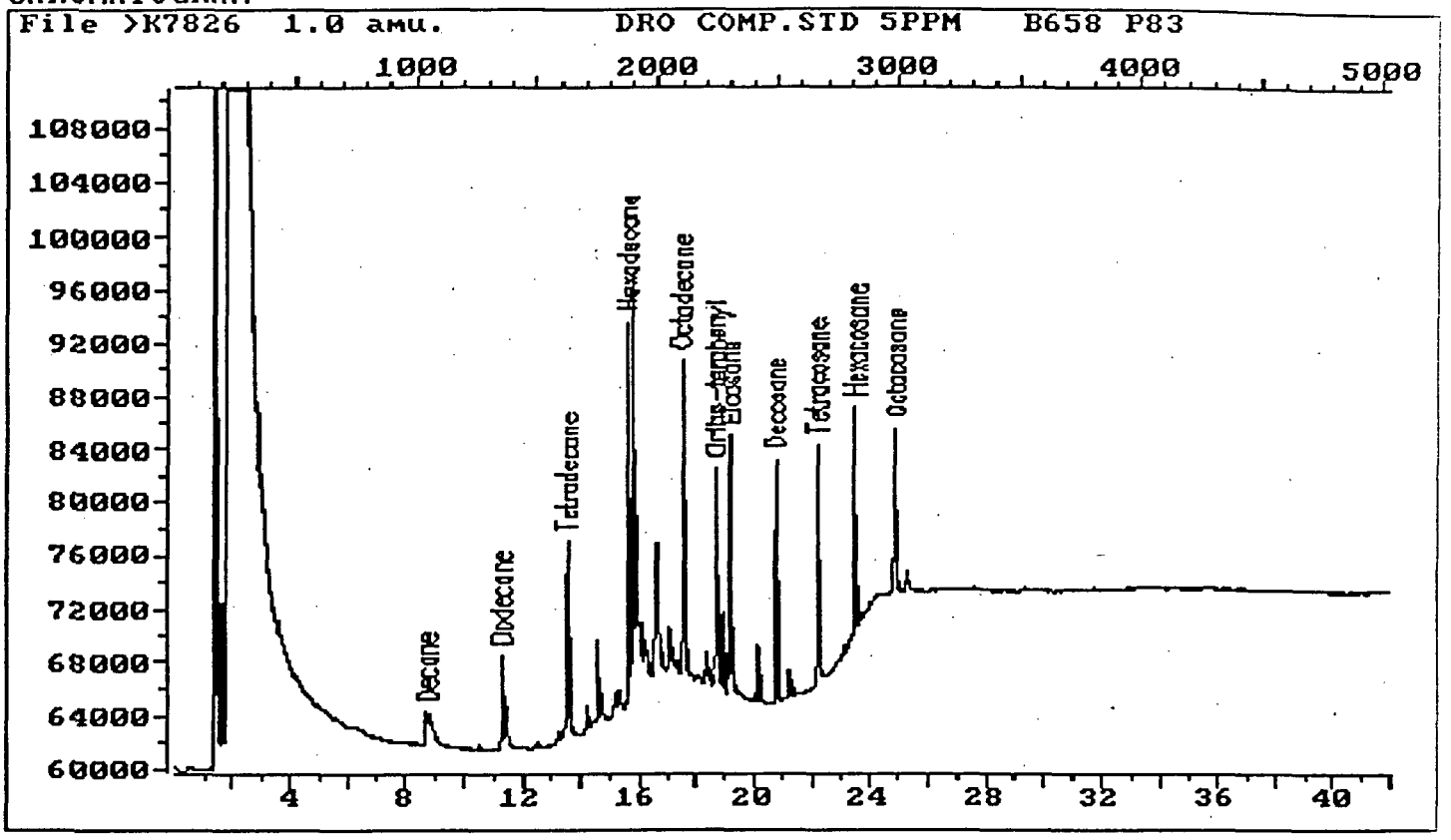
ID File: I3DROA::G5
Title: DRO BY GC FID RTX-5 30m 0.53mm 1.5um
Last Calibration: 970519 08:49 Last Qcal Time: 980707 14:14

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Decane	8.69	1043	42384M	3.54	MG/L	
2)	#Dodecane	11.25	1350	47192M	3.49	MG/L	
3)	#Tetradecane	13.52	1622	40749	3.22	MG/L	100
4)	#Hexadecane	15.58	1869	78019	5.32	MG/L	100
5)	#Octadecane	17.45	2094	65227	4.63	MG/L	100
6)	#Ortho-terphenyl	18.64	2237	58296	4.36	MG/L	100
7)	#Eicosane	19.16	2299	60159	4.71	MG/L	100
8)	#Decosane	20.72	2486	56067	4.15	MG/L	100
9)	#Tetracosane	22.15	2658	54814	3.87	MG/L	100
10)	#Hexacosane	23.48	2818	51280	4.03	MG/L	100
11)	#Octacosane	24.85	2982	51824	3.96	MG/L	100

Compound uses ESTD

700

CHROMATOGRAM



Data File: >K7826::G2 Quant Output File: ^K7826::QT
Name: DRO COMP.STD 5PPM Instrument ID: I
Misc: B658 P83

Id File: I3DROA::G5
Title: DRO BY GC FID RTX-5 30m 0.53mm 1.5um
Last Calibration: 970519 08:49 Last Qcal Time: 980707 14:14

Operator ID: RHODERICK
Quant Time : 980708 18:17
Injected at: 980708 17:33

901

Operator ID: RHODERICK Quant Rev: 7 Quant Time: 980708 19:09
Output File: ^K7827::QT Injected at: 980708 18:25
Data File: >K7827::G2 Dilution Factor: 1.00000
Name: DRO COMP.STD 1PPM Instrument ID: I
Misc: B658 P83

ID File: I3DROA::G5
Title: DRO BY GC FID RTX-5 30m 0.53mm 1.5um
Last Calibration: 970519 08:49 Last Qcal Time: 980707 14:14

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Decane	8.98	1077	12417M	1.04	MG/L	
2)	#Dodecane	11.35	1362	10227M	.756	MG/L	
3)	#Tetradecane	13.54	1625	8663M	.685	MG/L	100
4)	#Hexadecane	15.58	1870	18300M	1.25	MG/L	100
5)	#Octadecane	17.46	2095	16740M	1.19	MG/L	100
6)	#Ortho-terphenyl	18.67	2240	14663	1.10	MG/L	100
7)	#Eicosane	19.17	2301	13372M	1.05	MG/L	100
8)	#Decosane	20.73	2488	15799	1.17	MG/L	100
9)	#Tetracosane	22.17	2660	15905	1.12	MG/L	100
10)	#Hexacosane	23.50	2820	11875	.934	MG/L	100
11)	#Octacosane	24.86	2983	12967	.990	MG/L	100

Compound uses ESTD

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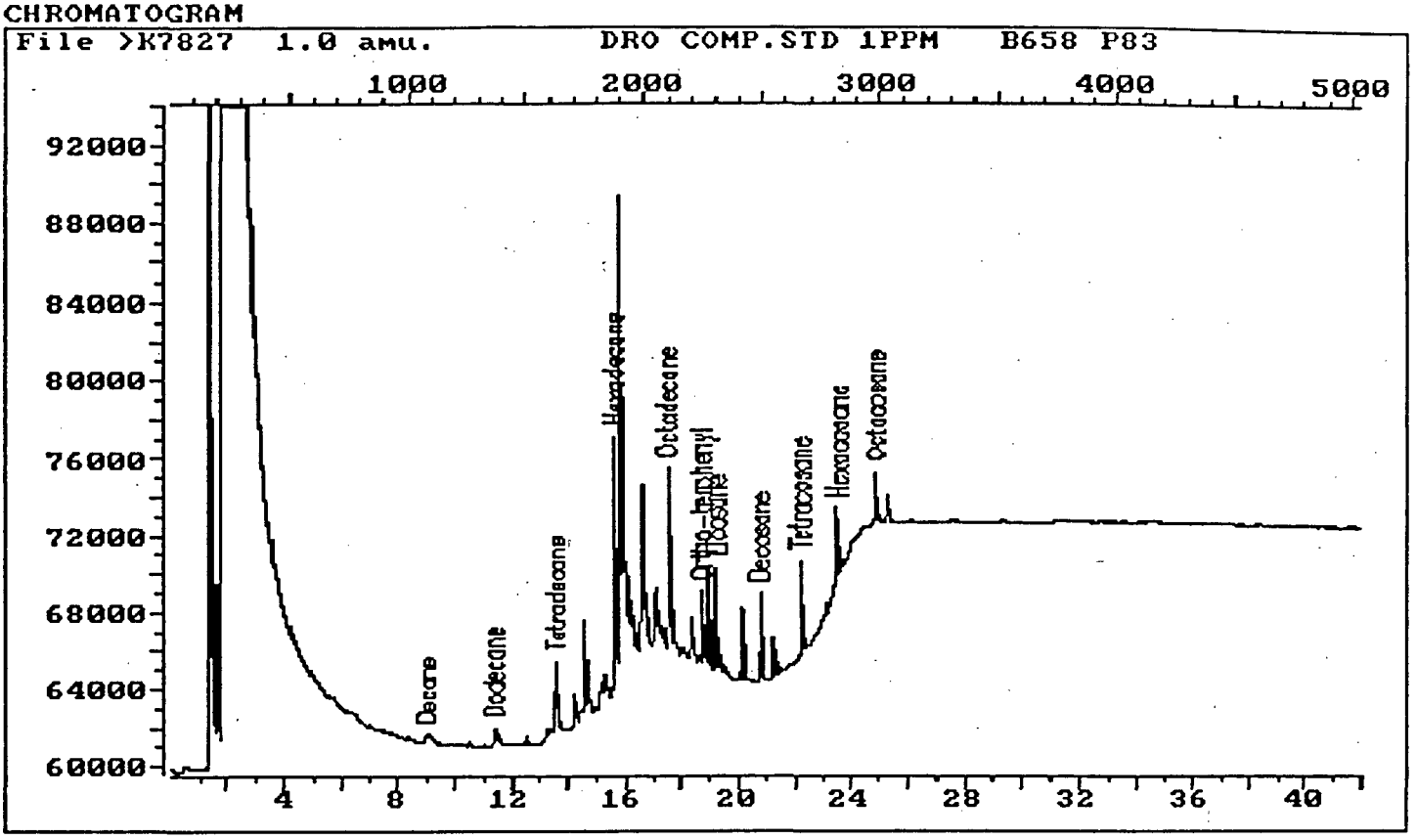
CHROMATOGRAM



Data File: >K7827::G2 Quant Output File: ^K7827::QT
Name: DRO COMP.STD 1PPM Instrument ID: I
Misc: B658 P83

Id File: I3DROA::G5
Title: DRO BY GC FID RTX-5 30m 0.53mm 1.5um
Last Calibration: 970519 08:49 Last Qcal Time: 980707 14:14

Operator ID: RHODERICK
Quant Time : 980708 19:09
Injected at: 980708 18:25

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QUANT REPORT

Operator ID: CLIFF
Output File: ^K8819::QT
Data File: >K8819::G1
Name: DRO COMP STD
Misc: 20PPM

Quant Rev: 7
Quant Time: 991208 13:21
Injected at: 991208 12:37
Dilution Factor: 1.00000
Instrument ID: I

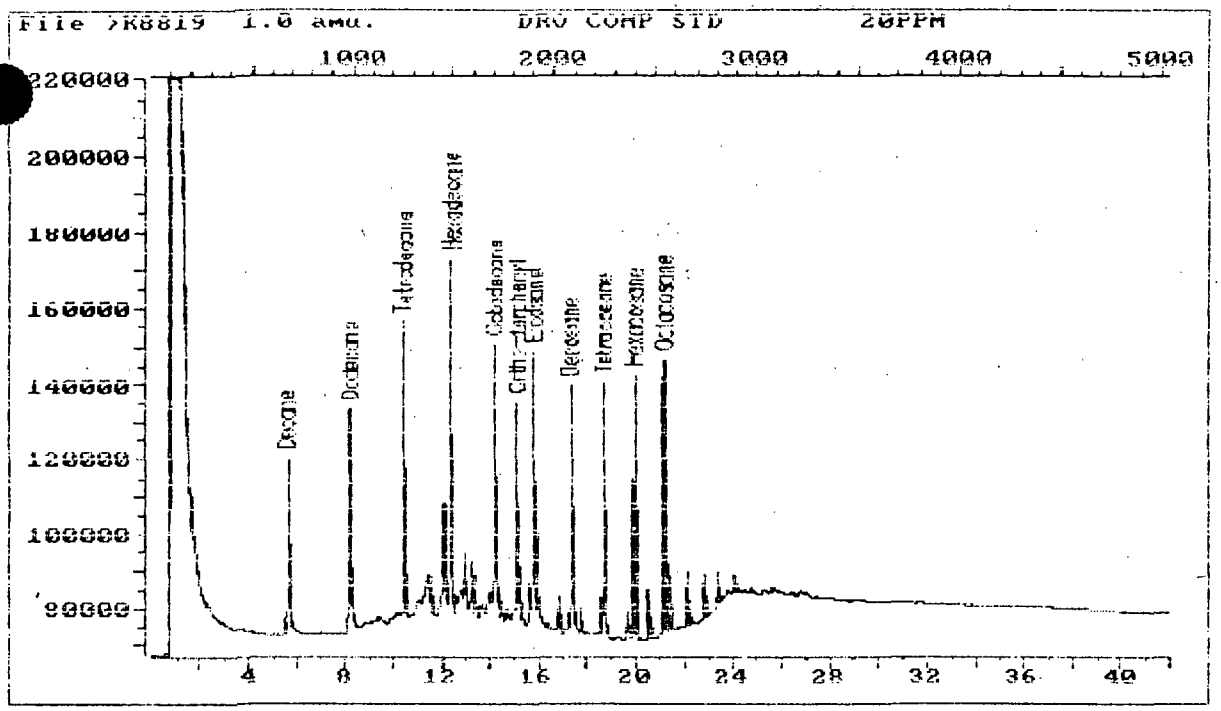
ID File: I3DROA::G5
Title: DRO BY GC FID RTX-5 30m 0.53mm 1.5um
Last Calibration: 980901 12:12
Last Qcal Time: 991118 10:00

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Decane	5.53	664	187311	21.41	MG/L	100
2)	#Dodecane	8.14	977	207079M	19.96	MG/L	100
3)	#Tetradecane	10.38	1245	209126M	19.63	MG/L	100
4)	#Hexadecane	12.36	1483	312834	27.61	MG/L	100
5)	#Octadecane	14.15	1698	227583	17.18	MG/L	100
6)	#Ortho-terphenyl	15.08	1809	274095	21.27	MG/L	100
7)	#Eicosane	15.77	1893	256613M	18.49	MG/L	100
8)	#Decosane	17.27	2072	253096	19.73	MG/L	100
9)	#Tetracosane	18.65	2238	225343	21.26	MG/L	100
10)	#Hexacosane	19.92	2390	237025	22.36	MG/L	100
11)	#Octacosane	21.11	2533	238109	20.92	MG/L	100

Compound uses ESTD

704

700802



Data File: >K8819::G1 Quant Output File: ^K8819::QT
Name: DRO COMP STD Instrument ID: I
Misc: 20PPM

Id File: I3DROA::G5
Title: DRO BY GC FID RTX-5 30m 0.53mm 1.5um
Last Calibration: 980901 12:12 Last Qcal Time: 991118 10:00

Operator ID: CLIFF
Quant Time : 991208 13:21
Injected at: 991208 12:37

705

QUANT REPORT

Operator ID: CLIFF
Input File: ^K8820::QT
Data File: >K8820::G1
Name: DIESEL FUEL #2
Misc: 500PPM

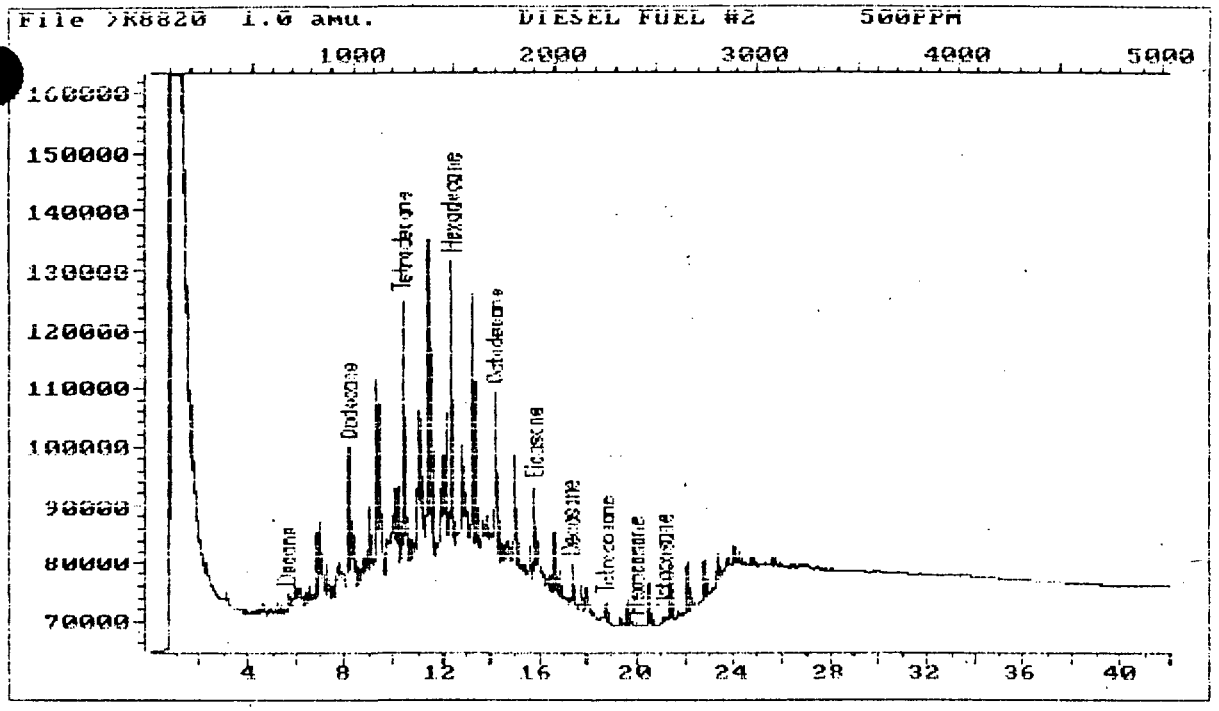
Quant Rev: 7
Quant Time: 991208 15:54
Injected at: 991208 14:11
Dilution Factor: 1.00000
Instrument ID: I

ID File: I3DROA::G5
Title: DRO BY GC FID RTX-5 30m 0.53mm 1.5um
Last Calibration: 980901 12:12
Last Qcal Time: 991208 12:37

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Decane	5.58	670	17348	1.85	MG/L	100
2)	#Dodecane	8.14	977	99643	9.62	MG/L	100
3)	#Tetradecane	10.38	1245	125908	12.04	MG/L	100
4)	#Hexadecane	12.36	1483	183233	11.71	MG/L	100
5)	#Octadecane	14.15	1698	87064	7.65	MG/L	100
7)	#Eicosane	15.77	1893	84384	6.58	MG/L	100
8)	#Decosane	17.27	2072	26052	2.06	MG/L	100
9)	#Tetracosane	18.72	2246	15735	1.40	MG/L	100
10)	#Hexacosane	19.93	2392	3423	.289	MG/L	100
11)	#Octacosane	21.12	2534	7115	.598	MG/L	100

Compound uses ESTD

706

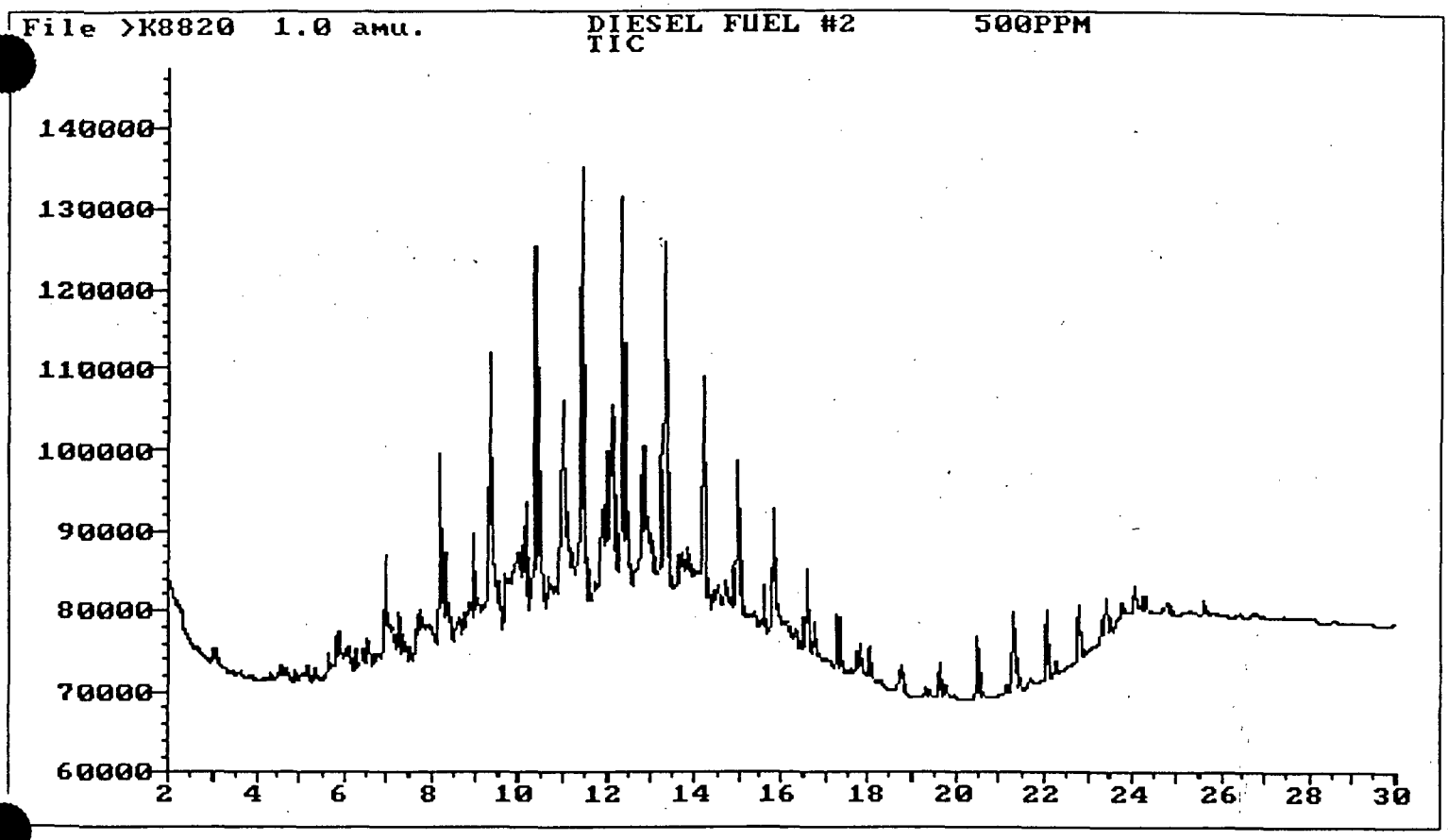


Data File: >K8820::G1 Quant Output File: ^K8820::QT
Name: DIESEL FUEL #2 Instrument ID: I
Misc: 500PPM

Id File: I3DROA::G5
Title: DRO BY GC FID RTX-5 30m 0.53mm 1.5um
Last Calibration: 980901 12:12 Last Qcal Time: 991208 12:37

Operator ID: CLIFF
Quant Time : 991208 15:54
Injected at: 991208 14:11

707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6
8
10
12
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26
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30

208

700806

QUANT REPORT

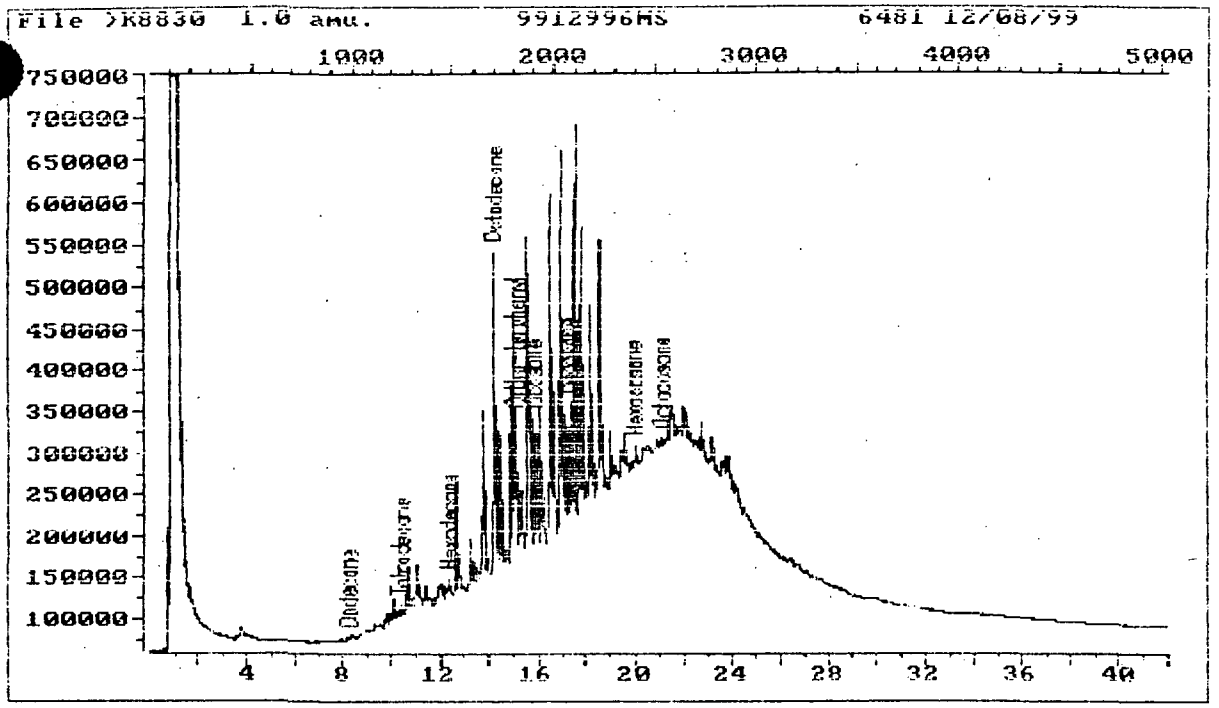
rator ID: CLIFF Quant Rev: 7 Quant Time: 991209 03:18
put File: ^K8830::QT Injected at: 991209 02:35
Data File: >K8830::G4 Dilution Factor: 1.00000
Name: 9912996MS Instrument ID: I
Misc: 6481 12/08/99 OE SP-1

ID File: I3DROA::G5
Title: DRO BY GC FID RTX-5 30m 0.53mm 1.5um
Last Calibration: 980901 12:12 Last Qcal Time: 991208 12:37

	Compound	R.T.	Scan#	Area	Conc	Units	q
2)	#Dodecane	8.19	983	12796	1.24	MG/L	100
3)	#Tetradecane	10.37	1244	49375	4.72	MG/L	100
4)	#Hexadecane	12.33	1480	55652	3.56	MG/L	100
5)	#Octadecane	14.15	1698	1644377	144.51	MG/L	100
6)	#Ortho-terphenyl	15.06	1807	558223	40.73	MG/L	100
7)	#Eicosane	15.80	1896	413284	32.21	MG/L	100
8)	#Decosane	17.25	2070	298987	23.63	MG/L	100
10)	#Hexacosane	19.97	2396	73363	6.19	MG/L	100
11)	#Octacosane	21.07	2528	47719	4.01	MG/L	100

Compound uses ESTD

209

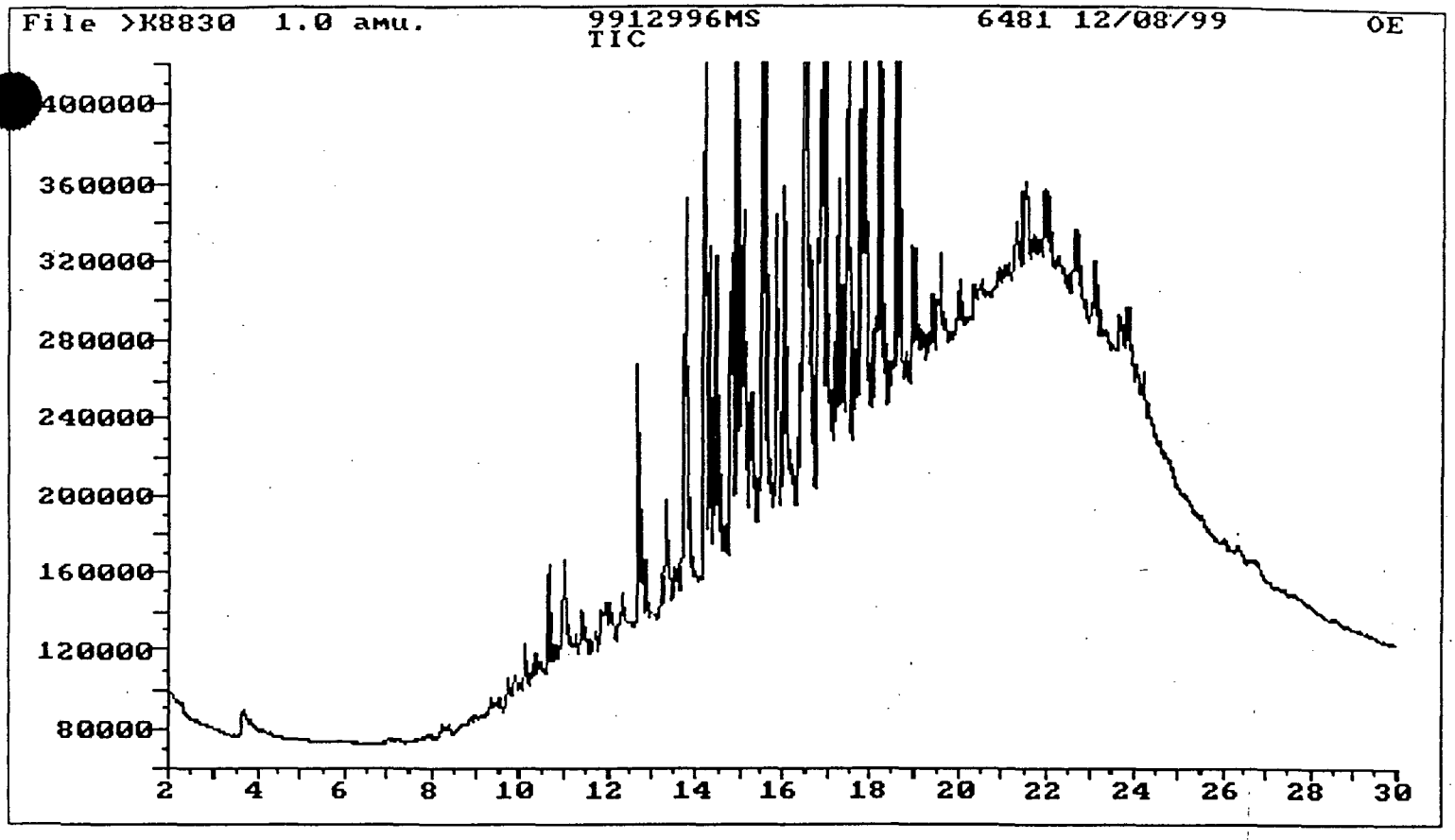


Data File: >K8830::G4 Quant Output File: ^K8830::QT
Name: 9912996MS Instrument ID: I
Misc: 6481 12/08/99 OE SP-1

Id File: I3DROA::G5
Title: DRO BY GC FID RTX-5 30m 0.53mm 1.5um
Last Calibration: 980901 12:12 Last Qcal Time: 991208 12:37

Operator ID: CLIFF
Quant Time : 991209 03:18
Injected at: 991209 02:35

710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6481 12/08/99
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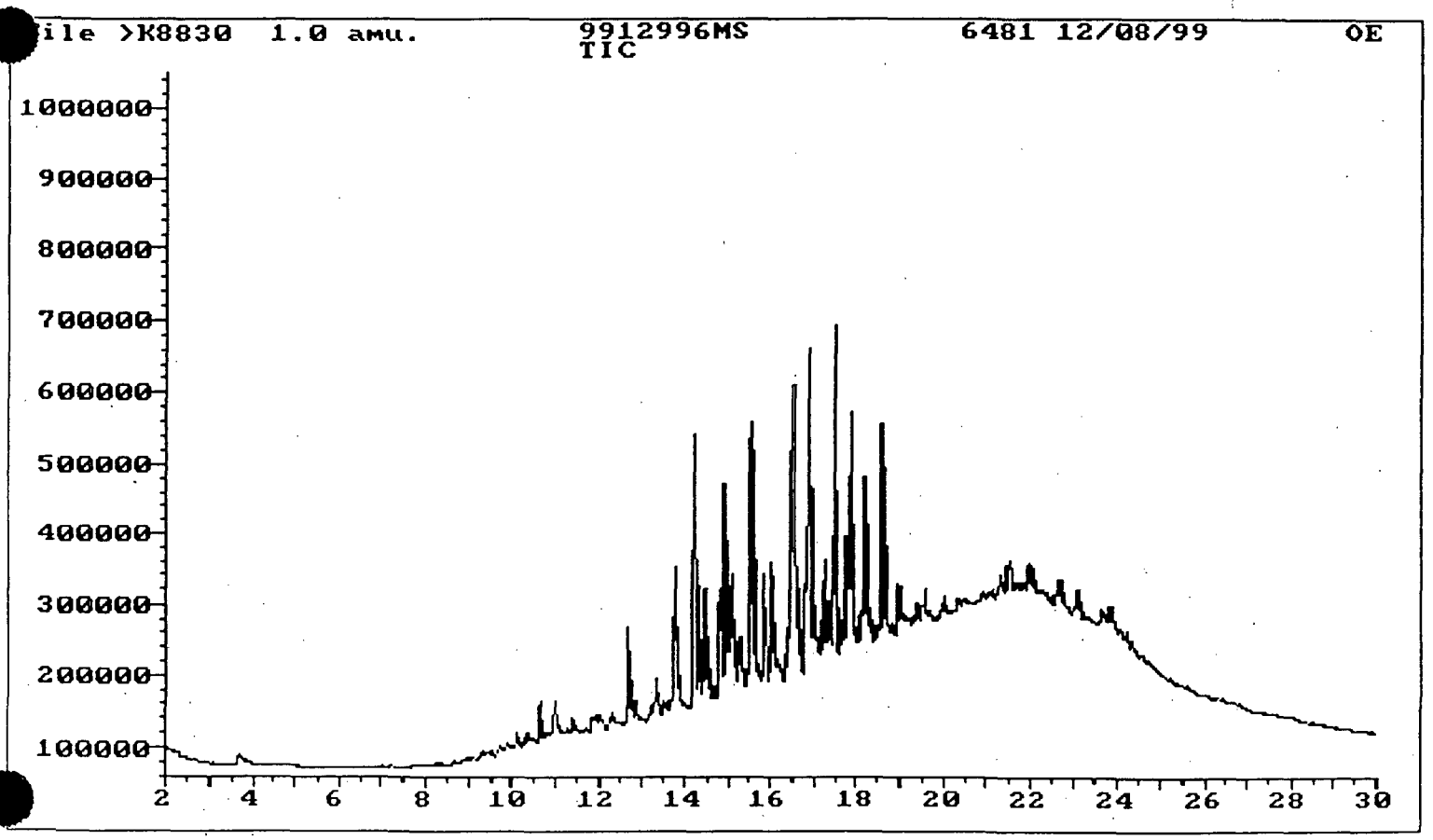
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911

700809

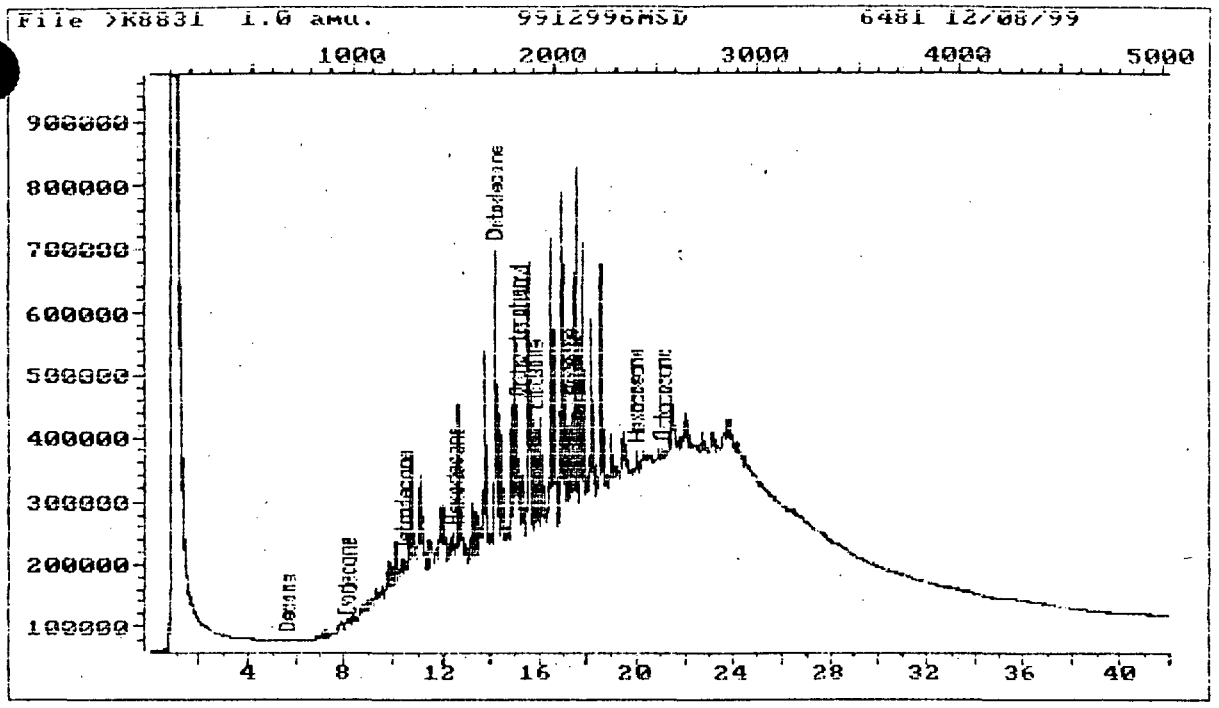
Operator ID: CLIFF Quant Rev: 7 Quant Time: 991209 04:12
Output File: ^K8831::QT Injected at: 991209 03:28
Data File: >K8831::G4 Dilution Factor: 1.00000
Name: 9912996MSD Instrument ID: I
Misc: 6481 12/08/99 OE SP-1

ID File: I3DROA::G5
Title: DRO BY GC FID RTX-5 30m 0.53mm 1.5um
Last Calibration: 980901 12:12 Last Qcal Time: 991208 12:37

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Decane	5.61	673	1719	.184	MG/L	100
2)	#Dodecane	8.08	969	26872	2.60	MG/L	100
3)	#Tetradecane	10.38	1246	119134	11.39	MG/L	100
4)	#Hexadecane	12.45	1494	165099	10.56	MG/L	100
5)	#Octadecane	14.16	1699	2128984	187.10	MG/L	100
6)	#Ortho-terphenyl	15.07	1808	621320	45.34	MG/L	100
7)	#Eicosane	15.80	1896	508741	39.65	MG/L	100
8)	#Decosane	17.25	2070	310782	24.56	MG/L	100
10)	#Hexacosane	19.97	2396	94174	7.95	MG/L	100
11)	#Octacosane	21.05	2526	39040	3.28	MG/L	100

Compound uses ESTD

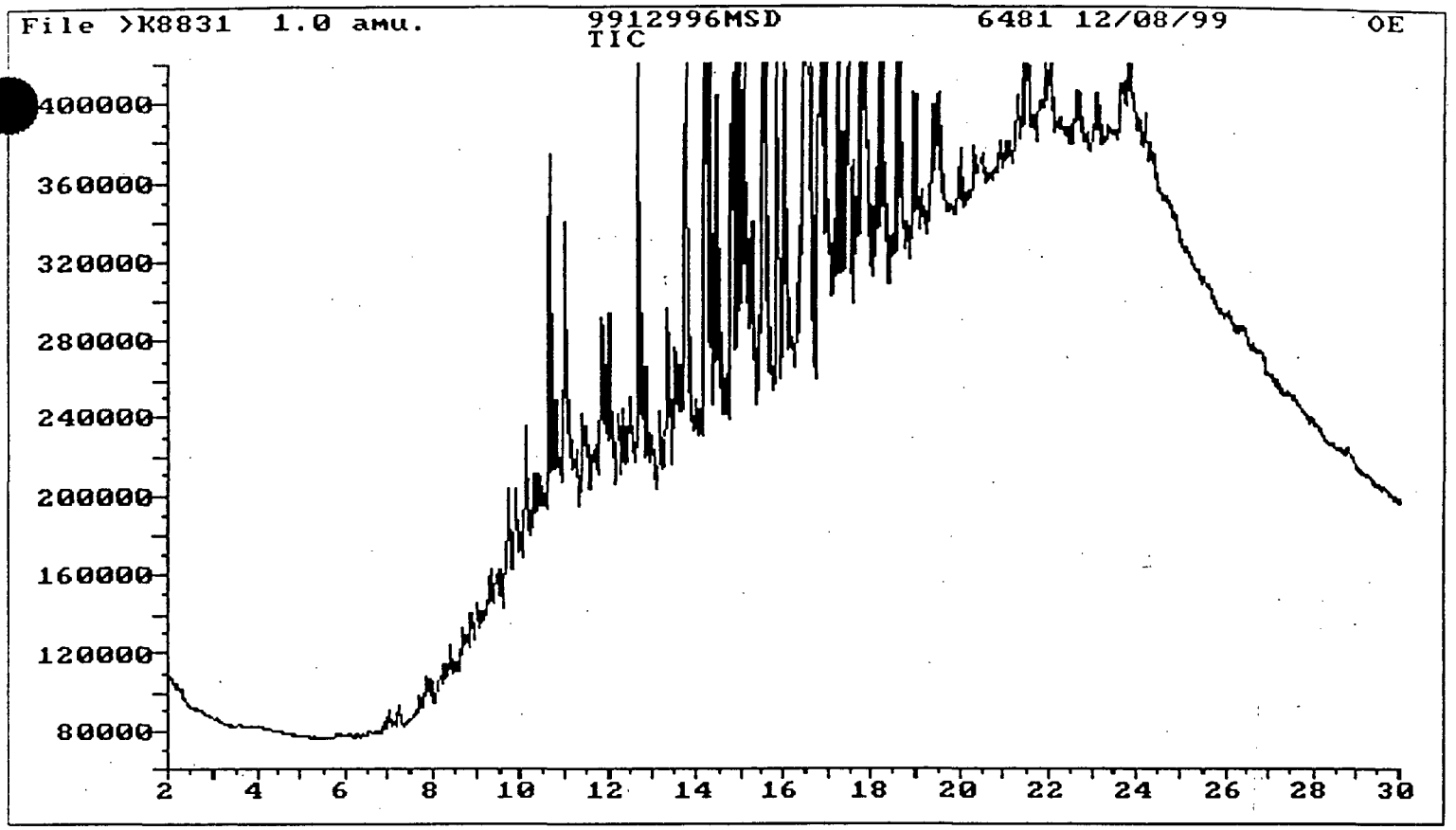
712



Data File: >K8831::G4 Quant Output File: ^K8831::QT
Name: 9912996MSD Instrument ID: I
Misc: 6481 12/08/99 OE SP-1

Id File: I3DROA::G5
Title: DRO BY GC FID RTX-5 30m 0.53mm 1.5um
Last Calibration: 980901 12:12 Last Qcal Time: 991208 12:37

Operator ID: CLIFF
Quant Time : 991209 04:12
Injected at: 991209 03:28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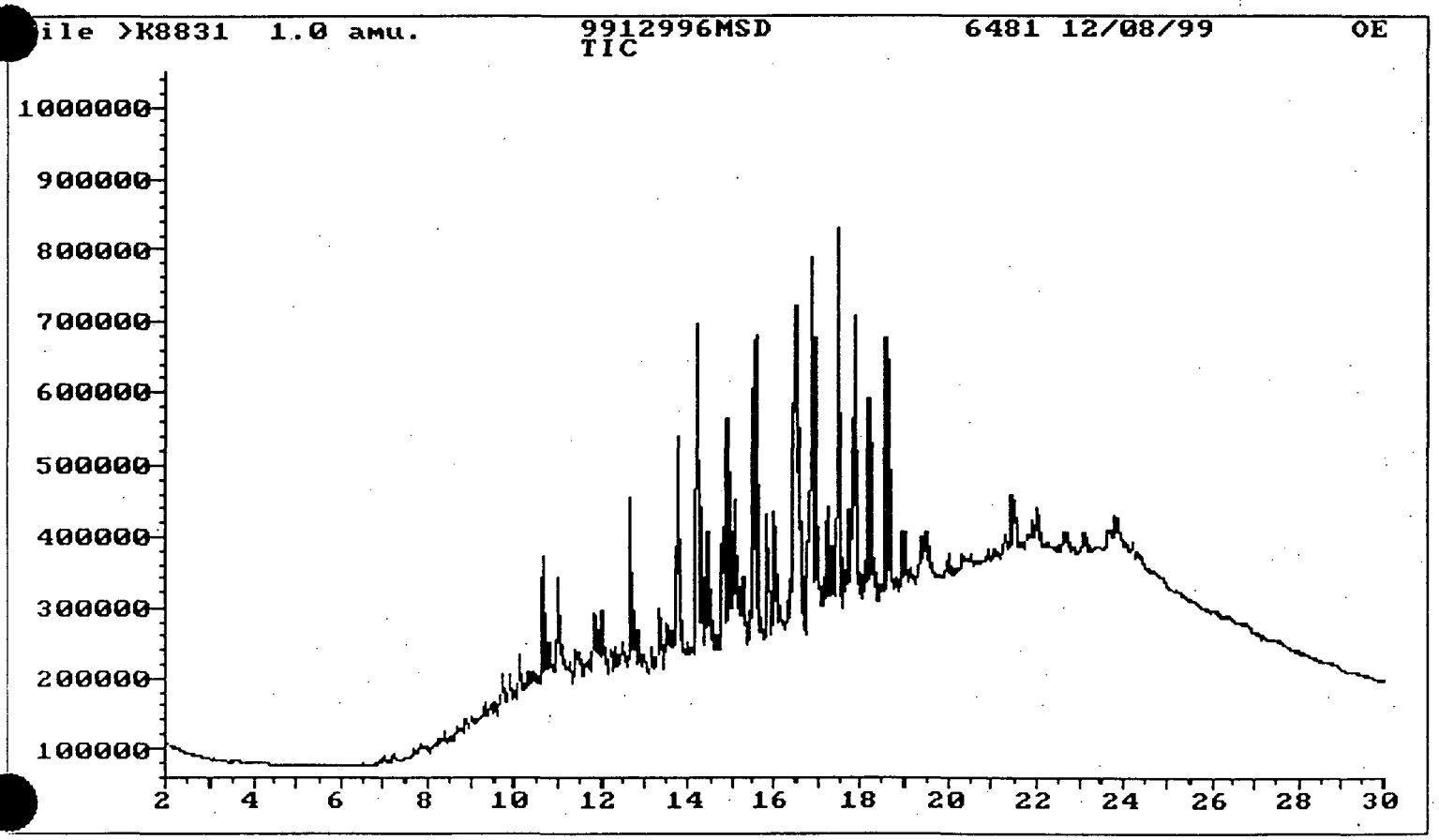
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714

700812

QUANT REPORT

Operator ID: CLIFF
Output File: ^K8823::QT
Data File: >K8823::G1
Name: DBLK49
Misc: 12/08/99

Quant Rev: 7
Quant Time: 991208 21:06
Injected at: 991208 20:23
Dilution Factor: 1.00000
Instrument ID: I

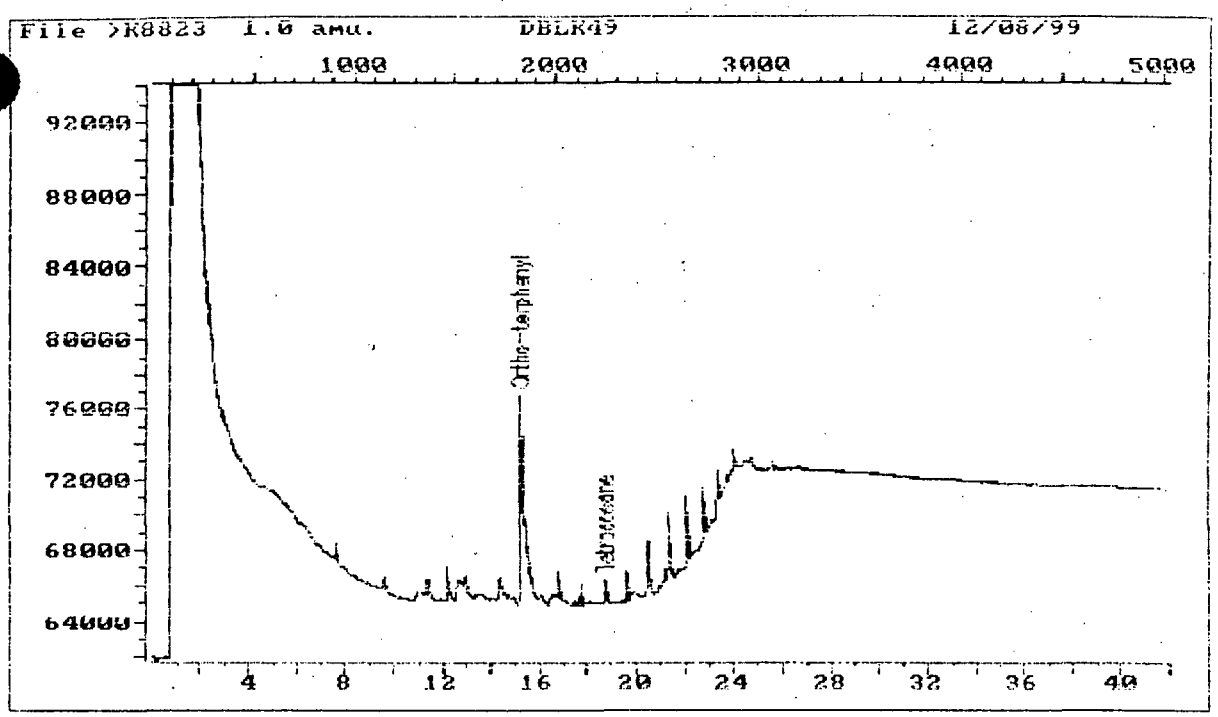
ID File: I3DROA::G5
Title: DRO BY GC FID RTX-5 30m 0.53mm 1.5um
Last Calibration: 980901 12:12
Last Qcal Time: 991208 12:37

	Compound	R.T.	Scan#	Area	Conc	Units	q
6)	#Ortho-terphenyl	15.17	1820	124515	9.09	MG/L	100
~~9)~~	~~#Tetracosane~~	18.70	2244	6208	.551	MG/L	100

Compound uses ESTD

CB 12/9/99

715



Data File: >K8823::G1 Quant Output File: ^K8823::QT
Name: DBLK49 Instrument ID: I
Misc: 12/08/99

Id File: I3DROA::G5
Title: DRO BY GC FID RTX-5 30m 0.53mm 1.5um
Last Calibration: 980901 12:12 Last Qcal Time: 991208 12:37

Operator ID: CLIFF
Quant Time : 991208 21:06
Injected at: 991208 20:23

716

QUANT REPORT

rator ID: CLIFF Quant Rev: 7 Quant Time: 991209 01:32
tput File: ^K8828::QT Injected at: 991209 00:48
ta File: >K8828::G1 Dilution Factor: 1.00000
me: 9912994 Instrument ID: I
sc: 6481 12/08/99 OE DCOMP-1

File: I3DROA::G5
tle: DRO BY GC FID RTX-5 30m 0.53mm 1.5um
st Calibration: 980901 12:12 Last Qcal Time: 991208 12:37

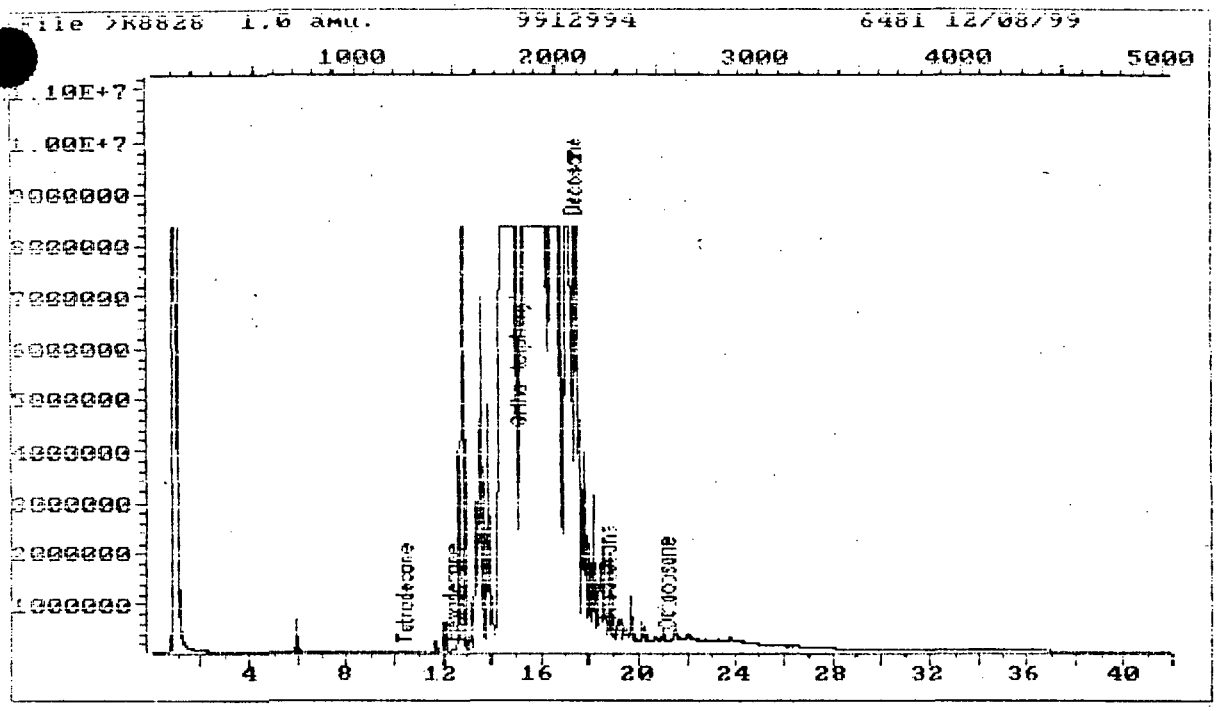
Compound	R.T.	Scan#	Area	Conc	Units	q
~~3) #Tetradecane~~	10.40	1248	6532	.625	MG/L	100
~~4) #Hexadecane~~	12.36	1483	17160	1.10	MG/L	100
6) #Ortho-terphenyl	15.08	1810	6208847	453.04	MG/L	100
~~8) #Docosane~~	17.36	2083	2886368	228.08	MG/L	100
~~9) #Tetracosane~~	18.67	2240	182014	16.15	MG/L	100
~~11) #Octacosane~~	21.12	2534	61411	5.16	MG/L	100

Compound uses ESTD

CG 12/9/99

019

700815

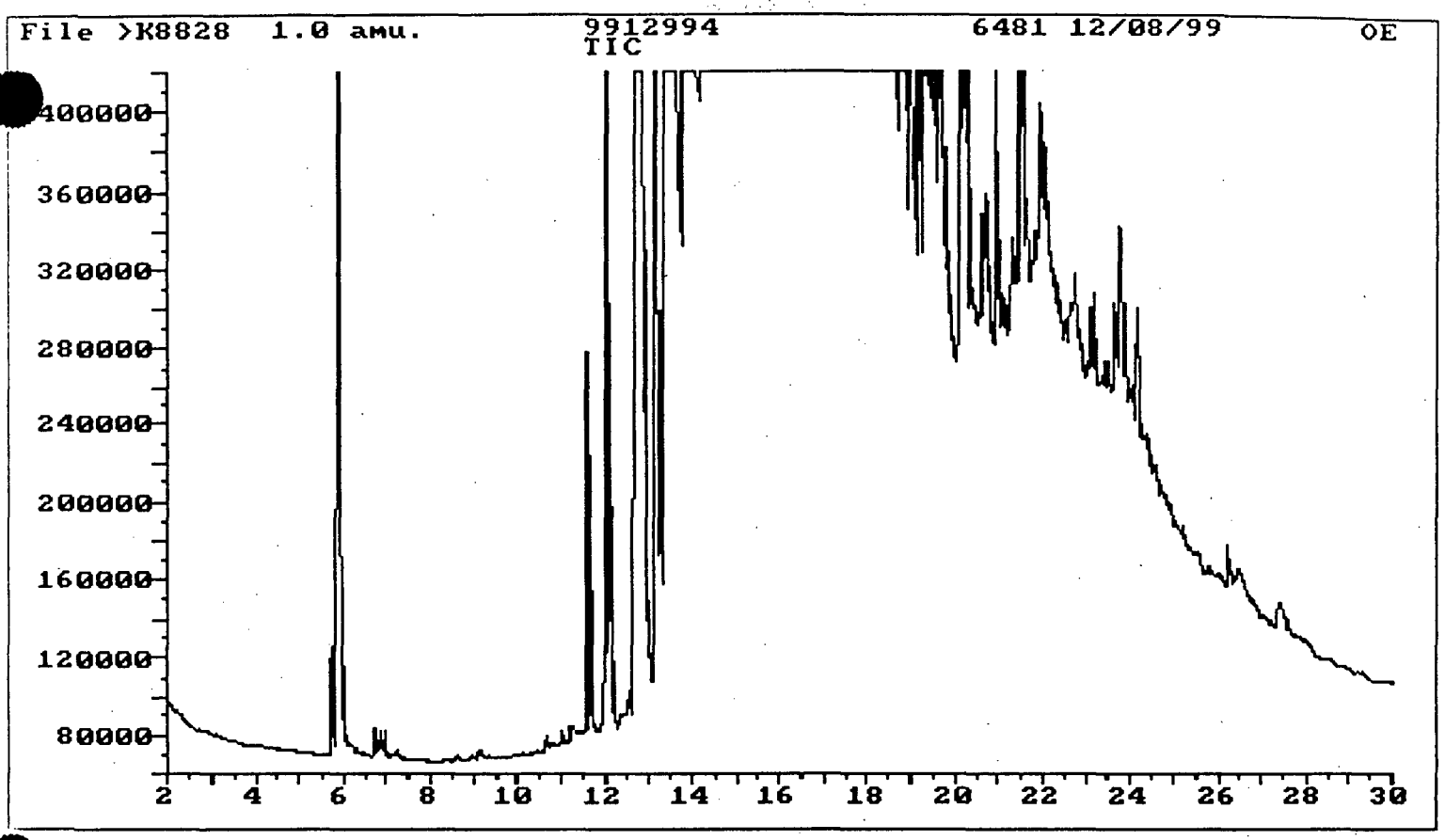


Data File: >K8828::G1 Quant Output File: ^K8828::QT
Name: 9912994 Instrument ID: I
Misc: 6481 12/08/99 OE DCOMP-1

Id File: I3DROA::G5
Title: DRO BY GC FID RTX-5 30m 0.53mm 1.5um
Last Calibration: 980901 12:12 Last Qcal Time: 991208 12:37

Operator ID: CLIFF
Quant Time : 991209 01:32
Injected at: 991209 00:48

718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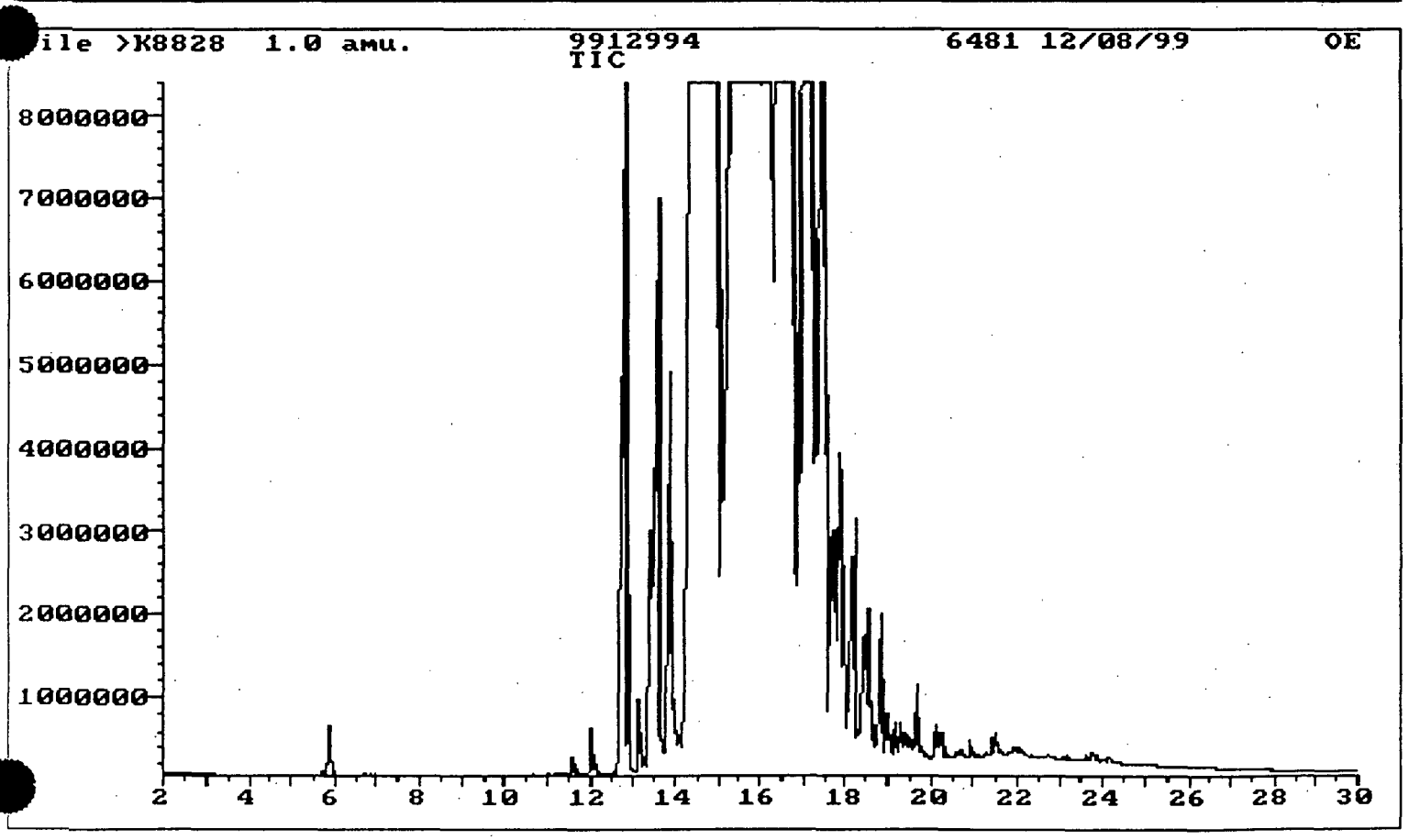
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719

700817

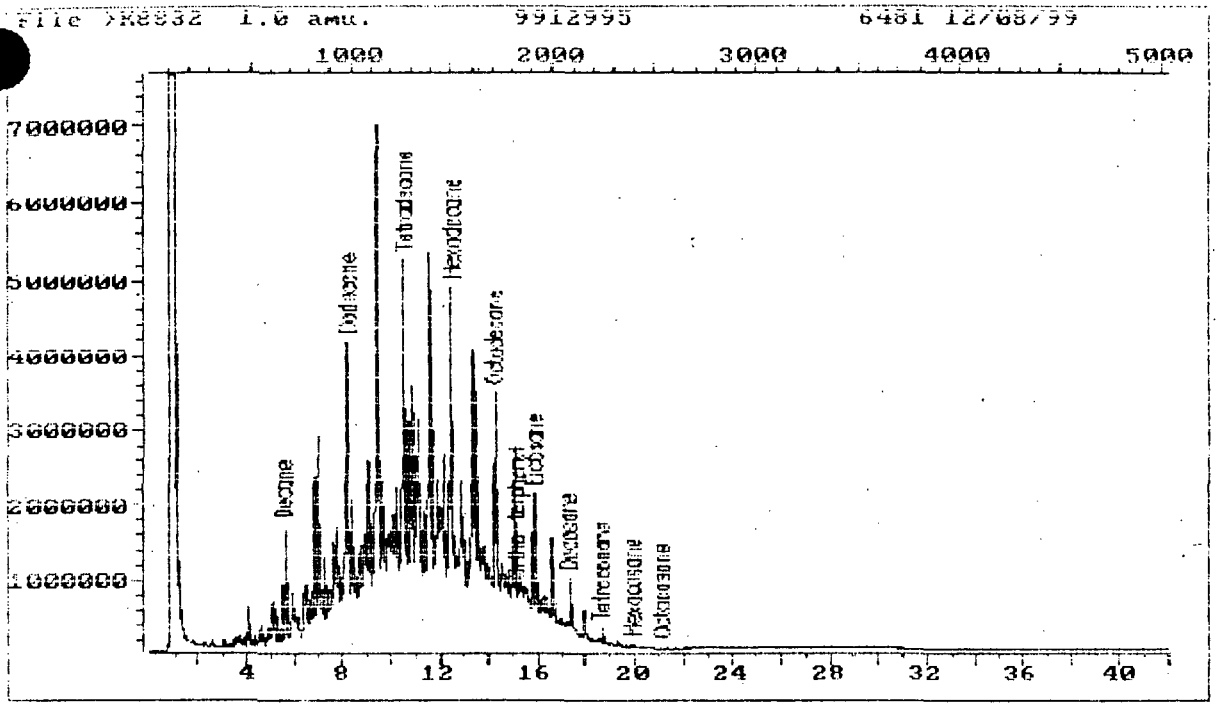
QUANT REPORT

rator ID: CLIFF Quant Rev: 7 Quant Time: 991209 05:05
utput File: ^K8832::QT Injected at: 991209 04:21
ata File: >K8832::G4 Dilution Factor: 1.00000
ame: 9912995 Instrument ID: I
isc: 6481 12/08/99 OE DCOMP-2

D File: I3DROA::G5
itle: DRO BY GC FID RTX-5 30m 0.53mm 1.5um
ast Calibration: 980901 12:12 Last Qcal Time: 991208 12:37

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	#Decane	5.53	664	4119564	439.86	MG/L	100
2)	#Dodecane	8.19	983	12829270	1239.07	MG/L	100
3)	#Tetradecane	10.48	1258	16329082M	1561.65	MG/L	
4)	#Hexadecane	12.46	1495	16134044	1031.48	MG/L	100
5)	#Octadecane	14.23	1707	9307704	817.96	MG/L	100
6)	#Ortho-terphenyl	15.09	1811	324963M	23.71	MG/L	100
7)	#Eicosane	15.83	1899	4872033	379.72	MG/L	100
8)	#Decosane	17.28	2073	1850571	146.23	MG/L	100
9)	#Tetracosane	18.63	2235	554784	49.24	MG/L	100
10)	#Hexacosane	19.89	2387	132601	11.19	MG/L	100
11)	#Octacosane	21.08	2530	25108	2.11	MG/L	100

Compound uses ESTD

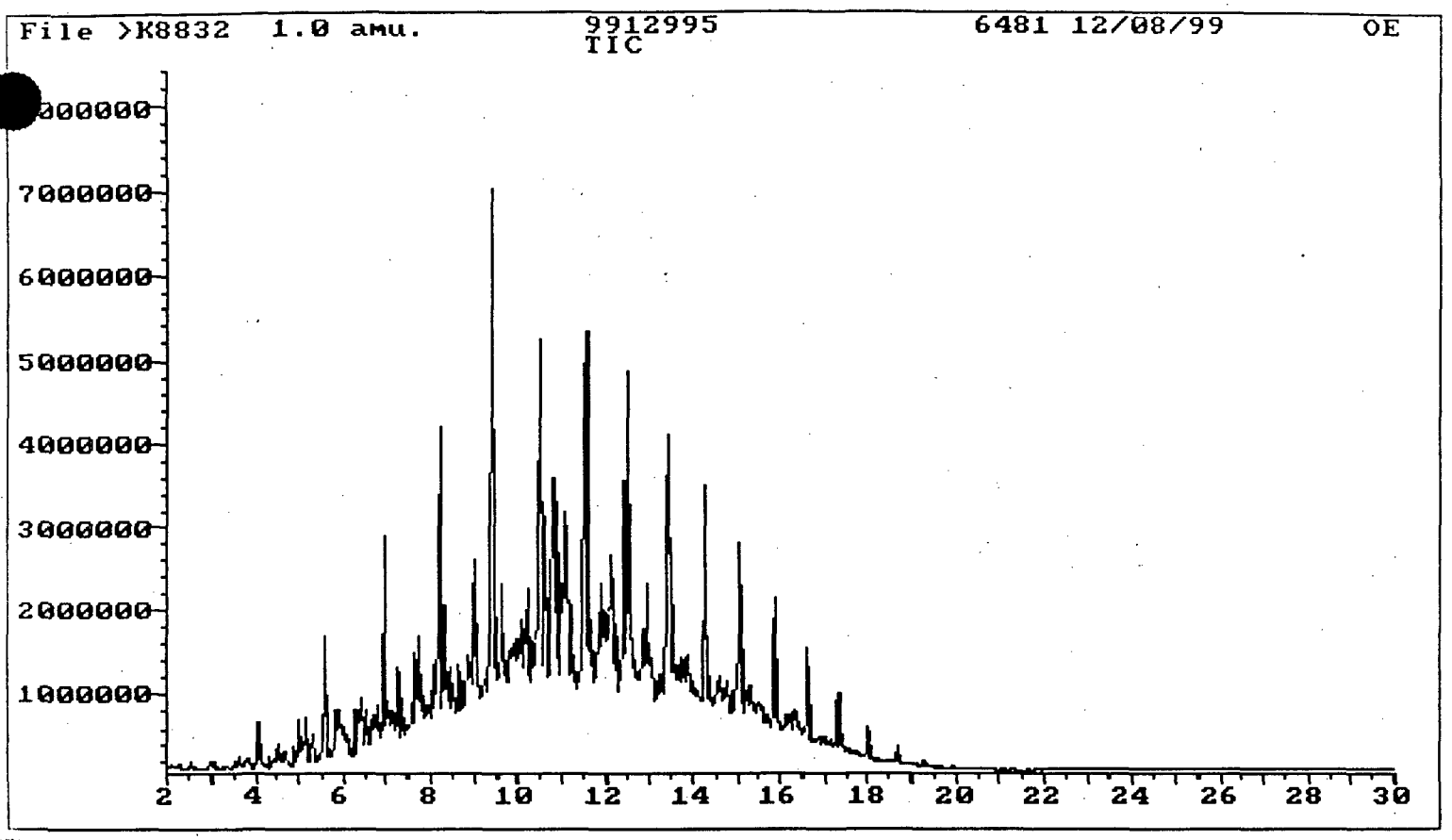


Data File: >K8832::G4 Quant Output File: ^K8832::QT
Name: 9912995 Instrument ID: I
Misc: 6481 12/08/99 OE DCOMP-2

Id File: I3DROA::G5
Title: DRO BY GC FID RTX-5 30m 0.53mm 1.5um
Last Calibration: 980901 12:12 Last Qcal Time: 991208 12:37

Operator ID: CLIFF
Quant Time : 991209 05:05
Injected at: 991209 04:21

721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700820

QUANT REPORT

ator ID: CLIFF
tput File: ^K8829::QT
ta File: >K8829::G1
me: 9912996
sc: 6481 12/08/99 OE

Quant Rev: 7
Quant Time: 991209 02:25
Injected at: 991209 01:42
Dilution Factor: 1.00000
Instrument ID: I
SP-1

File: I3DROA::G5
tle: DRO BY GC FID RTX-5 30m 0.53mm 1.5um
st Calibration: 980901 12:12
Last Qcal Time: 991208 12:37

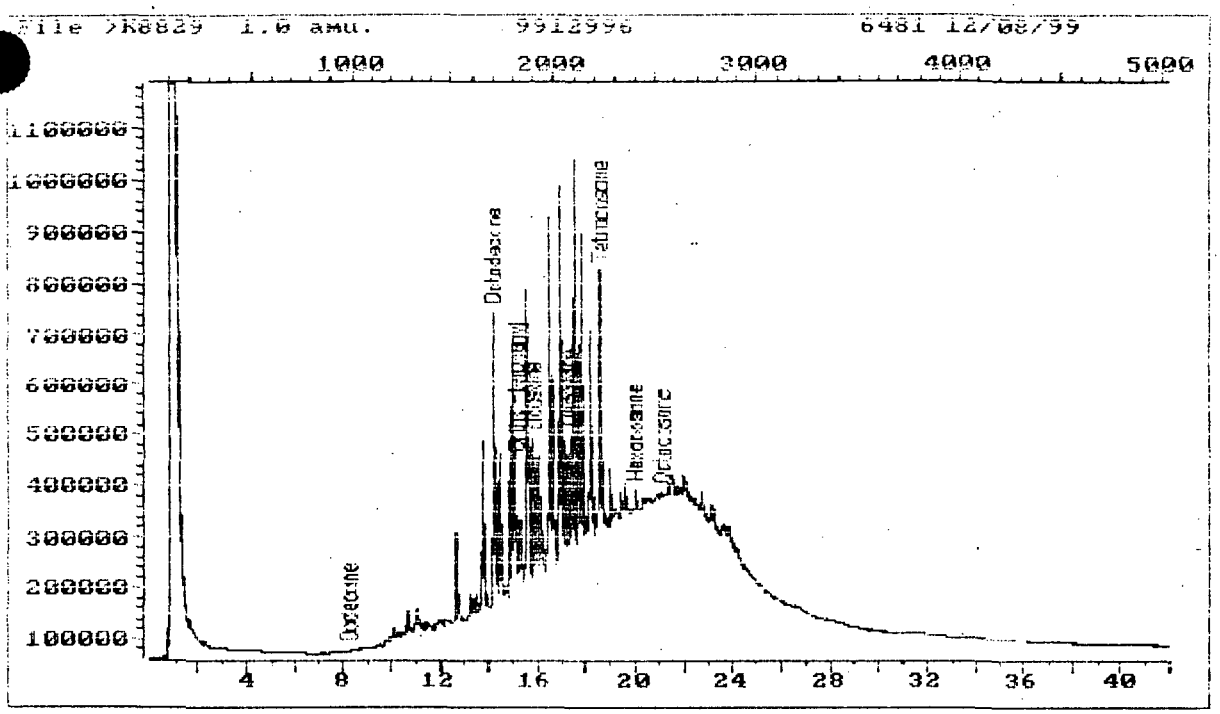
Compound	R.T.	Scan#	Area	Conc	Units	q
~~2) #Dodecane~~	8.19	983	3096	.299	MG/L	100
~~5) #Octadecane~~	14.15	1698	2430316	213.58	MG/L	100
6) #Ortho-terphenyl	15.07	1808	611334	44.61	MG/L	100
~~7) #Eicosane~~	15.80	1896	750696	58.51	MG/L	100
~~8) #Decosane~~	17.26	2071	494452	39.07	MG/L	100
~~9) #Tetracosane~~	18.56	2227	1575576	139.84	MG/L	100
~~10) #Hexacosane~~	19.97	2396	125848	10.62	MG/L	100
~~11) #Octacosane~~	21.05	2526	36576	3.07	MG/L	100

Compound uses ESTD

Ok 12/9/99

923

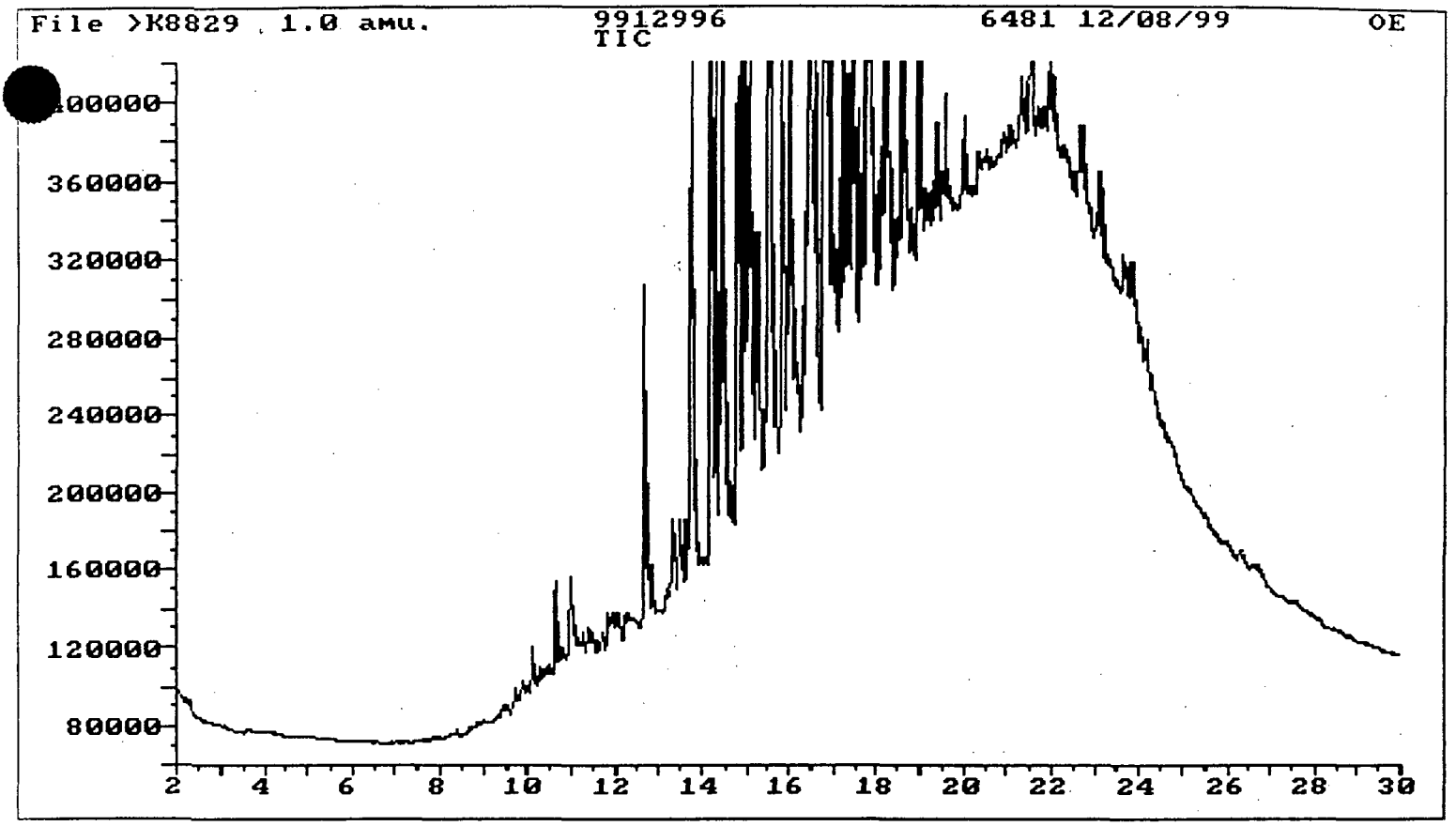
700821



Data File: >K8829::G1 Quant Output File: ^K8829::QT
Name: 9912996 Instrument ID: I
Misc: 6481 12/08/99 OE SP-1

Id File: I3DROA::G5
Title: DRO BY GC FID RTX-5 30m 0.53mm 1.5um
Last Calibration: 980901 12:12 Last Qcal Time: 991208 12:37

Operator ID: CLIFF
Quant Time : 991209 02:25
Injected at: 991209 01:42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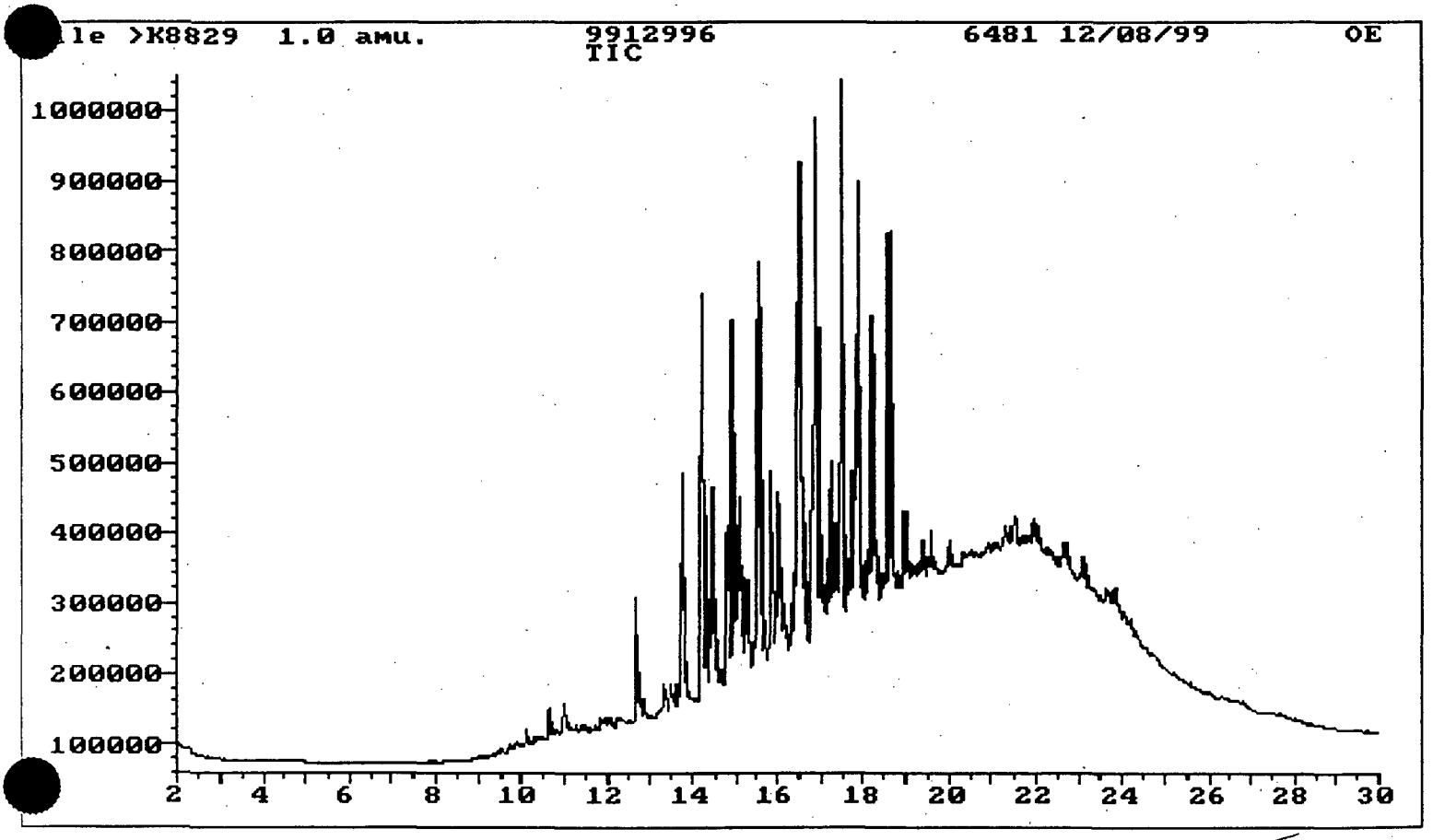
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725

700823

ACCREDITED LABORATORIES, INC.
Implementing Tomorrow's Technology, Today™...

Analytical Data Report

for

Oxford Environmental
43 Rt. 46 East
Pine Brook, NJ 07058

Project: Cornell Dubilier

Accredited Laboratories Case No.: 9536
Date Received: 09/25/00

Field ID	Laboratory Sample #
WC-1	200011861

Accredited Laboratories, Inc. New Jersey Certification Number 12007. This data has been reviewed and accepted by:

Theodore C. Gaydos
Technical Director

(732) 541-2025
CORPORATE OFFICES
20 Pershing Avenue
Carteret, New Jersey 07008
FAX (732) 541-1383

700824

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ACCREDITED LABORATORIES, INC.
20 PERSHING AVENUE
CARTERET, NEW JERSEY 07008
PHONE: (732) 541-2025 / (800) ALI-LABS

CHAIN OF CUSTODY FORM

PAGE 1 OF 1

CLIENT	Conn DSC Newark/Oxford	PROJECT	Cornell Publicer
ADDRESS	43 Rt 46 E, Suite 702	CONTACT	T. Francisco
CITY	Pine Brook	PHONE	973/244-0600
STATE	NJ ZIP 07058	FAX	973/244-0722

ALI SAMPLE #	FIELD ID	*C	**M	DATE / TIME SAMPLED	SAMPLE DESCRIPTION	ANALYSIS
0011861	WC-1	1	S	09/20/00 1430	Soil	TPH, Ignitability
						Reactivity, pH TOX
						PCB, TCLP
						Metals, TCLP
						Herbicides, TCLP
						Pesticides, ~~TCLP~~
	WC-1	1	S	"	Soil	TCLP Sem. Volatiles
						TCLP Volatiles
	WC-1	1	S	"	Soil	BTX

**M = MATRIX A=AQUEOUS S=SOIL G=SLUDGE P=POTABLE WATER O=OIL F=FILTER K=SOLID X=OTHER

*C = NO. CONTAINERS TURNAROUND: 2 Weeks (Std) (If Blank, Std. ~~3 weeks~~ 2)

DELIVERABLES (circle one) STD ~~2 weeks~~ REDUCED FULL NY-ASP CLP I CLP II

RELINQUISHED BY: PRINT	SIGN	RECEIVED BY: PRINT	SIGN	ORGANIZATION	DATE	TIME	REASON
J. Arulco	[signature]	K. Roberts	[signature]	ALI	9/25	12:45	TRANSPORT
K Roberts	[signature]	Jason Miller	[signature]	ALI	9/25/00		Analysis

PERSON(S) ASSUMING RESPONSIBILITY FOR SAMPLING: PRINT: SIGN:

COMMENTS		ALI QUOTE#	
		ALI CASE#	9536
		P.O.#	

700825

METHODOLOGY SUMMARY

BTEX - EPA 8260 (soil)

An inert gas is bubbled through a mixture of a 5 g sample and reagent water at elevated temperature. Alternatively the soil is extracted with methanol. A portion of extract is spiked into a purging vessel and purged by an inert gas. The vapor is swept through a sorbent column where the BTEX organics are trapped. When purging is completed, the sorbent column is heated and back-flushed with the inert gas to desorb the BTEX onto a GC column. The GC is temperature programmed to separate the BTEX which are then detected with a mass spectrometer.

Flash Point - EPA 1010

The sample is heated at a slow constant rate with continual stirring. A small flame is directed into the cup at regular intervals with simultaneous interruption of stirring. The flash point is the lowest temperature at which application of the test flame ignites the vapor above the sample. The method is followed according to EPA "Test Methods for Evaluating Solid Waste", SW-846, 3rd ed., 1986.

PCB's - EPA 8082 (soil/solid)

A 30 gram portion of solid is mixed with anhydrous sodium sulfate and is extracted with 1:1 methylene chloride and acetone using sonication technique. The extract is separated from the sample by either centrifugation or filtration. The extract is then solvent-exchanged to hexane in a K-D concentrator to a final volume of 10 ml. The extract is injected into a gas chromatograph and the compounds in the GC effluent are detected by an electron capture detector.

pH - EPA 9045 (soil)

The soil sample is mixed either with Type II water or with a calcium chloride solution. The pH of the mixed solution is then measured with a pH meter.

Reactive Sulfide - SW 846, 7.3.4.1 (solid)

An aliquot of the waste is acidified with 0.01 N sulfuric acid in a closed system. The gas generated is swept into a scrubber. The sulfide in the scrubber solution is first reacted with iodine. The excess iodine is then back-titrated with phenylarsine oxide. The concentration of sulfide is determined through the back calculation of iodine being consumed. The method is derived from EPA "Test Methods for Evaluating Solid Waste, SW846, 3rd ed., 1986".

Reactive Cyanide - SW 846, 7.3.3.2 (solid)

An aliquot of the waste is acidified with 0.01 N sulfuric acid in a closed system. The gas generated is swept into a scrubber. The analyte is quantified by manual colorimetric method. The method is derived from EPA "Test Methods for Evaluating Solid Waste, SW846, 3rd ed., 1986".

Toxic Characteristic Leaching Procedure - TCLP (EPA Method 1311)

Before the leaching procedure can be initiated, the information regarding the wet % and dry % solid of the solid sample as well as the utilization of extraction fluid, either #1 or #2, must be determined.

For Volatile Analysis, a special extractor called Zero Headspace Extractor (ZHE) must be used to generate the TCLP leachate. A maximum of 25 grams of sample is placed in the vessel as the liquid portion is pressed out and saved. A 20X of extraction fluid #1 is charged into the vessel. After 18 +/- 2 hours rotation at 30 +/- 2 rpm, the liquid is pressed out of the vessel. The leachate from ZHE is combined with the initial liquid portion, if any. This is referred as TCLP Leachate. The contaminants in the leachate is determined by EPA Method 8260.

For Non-Volatile Analysis, a minimum of 100 grams is filtered through 0.6 to 0.8 um glass fiber filter. The filtrate, if any, is saved. A 20X of extracted fluid, either #1 or #2, is charged in the glass extraction bottle and then rotated at 30 +/- 2 rpm for 18 +/- 2 hours. After rotation, the sample is filtered through 0.6 to 0.8 um glass fiber filter. The filtrate is combined with the initial liquid, if any. This is referred as TCLP Leachate. The contaminants of Base Neutrals/Acids (BNA), pesticides and herbicides in the leachate are determined by EPA Method 8270, EPA Method 8081 and 8150 respectively.

For the Metal Analysis, a minimum of 100 grams is filtered through 0.6 to 0.8 um glass fiber filter. The filtrate, if any, is saved. A 20X of extracted fluid, either #1 or #2, is charged in the glass or plastic extraction bottle and then rotated at 30 +/- rpm for 18 +/- 2 hours. After rotation, the sample is filtered through 0.6 to 0.8 um glass fiber filter. The filtrate is combined with the initial liquid, if any. This is referred as TCLP Leachate. The contaminants of Metals in the leachate is determined by EPA Method 7471 for mercury, Method 7060 for arsenic, Method 7740 for selenium and Method 6010 (ICAP) and/or Method 7000's (Flame-AA) for the rest of metals.

Petroleum Hydrocarbons - Modified EPA 418.1 (soil)

A 30 gram portion of soil is extracted with fluorocarbon 113. Interferences are removed with silica gel adsorbent. Infrared analysis of the extract is performed by direct comparison with standards.

Total Organic Halides - (solid)

Approximately 1.0 grams of sample is oxidized by combustion in a bomb containing oxygen under pressure. The chlorine thus liberated from organic matrix is absorbed in a sodium carbonate solution. The amount of chloride in the rinsate is determined by a standard mercuric nitrate solution titrimetrically. Then a 5 gram sample is extracted with deionized distilled water for four hours. The inorganic chloride concentration in the leachate is determined by standard mercuric nitrate solution titrimetrically. The total organic halides is determined by the differences between the total chloride amount generated from the bomb combustion procedure and the inorganic chloride generated from the leachating procedure.

ACCREDITED LABORATORIES, INC.
VOLATILE ORGANIC ANALYSIS DATA

CASE NUMBER	7536	MATRIX	Soil
SAMPLE NUMBER	0011861	DILUTION FACTOR	1.0
DATA FILE	VC2958	DATE EXTRACTED	
CLIENT NAME	BE	DATE ANALYZED	10/02/00
FIELD ID	WC-1	ANALYZED BY	WILLIAM

CAS #	COMPOUND	UG/KG	MDL
71432	Benzene	U	6
108883	Toluene	U	6
100414	Ethylbenzene	U	5
1330207	m,p-Xylene	U	12
95476	o-Xylene	U	6

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
1,2-Dichloroethane-d4	91 %	70-121	OK
Toluene-d8	88 %	81-117	OK
Bromofluorobenzene	75 %	74-121	OK

Percent solid of 84.5 is used for all target compounds.

J - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected.
D - Indicates result is based on a dilution.
I - Result exceeds industrial surface soil standards.*
B - Indicates compound found in associated blank.
E - Indicates result exceeds highest calibration standard
R - Result exceeds residential surface soil standards.*

* Flags are based on New Jersey Soil Cleanup Criteria from Site Remediation News Volume 06 Number 1.

700829

ACCREDITED LABORATORIES, INC
VOLATILE ORGANIC ANALYSIS DATA

CASE NUMBER		MATRIX	Soil
SAMPLE NUMBER	VBLKC03	DILUTION FACTOR	1.0
DATA FILE	>C2947	DATE EXTRACTED	
CLIENT NAME		DATE ANALYZED	10/01/00
FIELD ID		ANALYZED BY	WILLIAM

CAS #	COMPOUND	UG/KG	MDL
71432	Benzene	U	5
108883	Toluene	U	5
100414	Ethylbenzene	U	5
1330207	m,p-Xylene	U	10
95476	o-Xylene	U	5

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
1,2-Dichloroethane-d4	87 %	70-121	OK
Toluene-d8	99 %	81-117	OK
Bromofluorobenzene	101 %	74-121	OK

Percent solid of 100 is used for all target compounds.

J - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected.
D - Indicates result is based on a dilution.
I - Result exceeds industrial surface soil standards.*
B - Indicates compound found in associated blank.
E - Indicates result exceeds highest calibration standard
R - Result exceeds residential surface soil standards.*

* Flags are based on New Jersey Soil Cleanup Criteria from Site Remediation News Volume 06 Number 1

ACCREDITED LABORATORIES, INC.
TCLP VOLATILES ANALYSIS DATA

CASE NUMBER	9536	MATRIX	Leachate
SAMPLE NUMBER	0011861	DILUTION FACTOR	10
DATA FILE	>A8414	DATE EXTRACTED	
CLIENT NAME	OE	DATE ANALYZED	10/05/00
FIELD ID	WC-1	ANALYZED BY	ROBERT

CAS No.	Compound	Result (mg/l)	MDL (mg/l)	Regulatory Level (mg/l)
71432	Benzene	U	.050	0.5
78933	2-Butanone	U	.100	200.0
56235	Carbon Tetrachloride	U	.050	0.5
108907	Chlorobenzene	U	.050	100.0
67663	Chloroform	U	.050	6.0
75354	1,1-Dichloroethene	U	.050	0.7
107062	1,2-Dichloroethane	U	.050	0.5
127184	Tetrachloroethene	U	.050	0.7
79016	Trichloroethene	U	.050	0.5
75014	Vinyl Chloride	U	.100	0.2

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
1,2-Dichloroethane-d4	107 %	76 - 114	OK
Toluene-d8	109 %	88 - 110	OK
Bromofluorobenzene	106 %	86 - 115	OK

(U) Indicates compound was analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.

* 2-Butanone = Methyl ethyl ketone

ACCREDITED LABORATORIES, INC.
TCLP VOLATILES ANALYSIS DATA

CASE NUMBER		MATRIX	Leachate
SAMPLE NUMBER	VBLKA69	DILUTION FACTOR	1
DATA FILE	>A8413	DATE EXTRACTED	
CLIENT NAME		DATE ANALYZED	10/05/00
FIELD ID		ANALYZED BY	ROBERT

CAS No.	Compound	Result (mg/l)	MDL (mg/l)	Regulatory Level (mg/l)
71432	Benzene	U	.005	0.5
78933	2-Butanone	U	.010	200.0
56235	Carbon Tetrachloride	U	.005	0.5
108907	Chlorobenzene	U	.005	100.0
67663	Chloroform	U	.005	6.0
75354	1,1-Dichloroethene	U	.005	0.7
107062	1,2-Dichloroethane	U	.005	0.5
127184	Tetrachloroethene	U	.005	0.7
79016	Trichloroethene	U	.005	0.5
75014	Vinyl Chloride	U	.010	0.2

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
1,2-Dichloroethane-d4	105 %	76 - 114	OK
Toluene-d8	109 %	88 - 110	OK
Bromofluorobenzene	104 %	86 - 115	OK

(U) Indicates compound was analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.

* 2-Butanone = Methyl ethyl ketone

TCLP SEMIVOLATILES ANALYSIS DATA

CASE NUMBER	9536	MATRIX	[illegible]
SAMPLE NUMBER	0031861	DILUTION FACTOR	10
DATA FILE	>F2031	DATE EXTRACTED	10/01/90
CLIENT NAME	DF	DATE ANALYZED	10/08/90
FIELD ID	WC-1	ANALYZED BY	JABIEF

CAS No.	Compound	Result (mg/l)	MDL (mg/l)	Regulatory Level (mg/l)
110861	Pyridine	U	.10	5.0
106467	1,4-Dichlorobenzene	U	.10	7.5
95478	2-Methylphenol	U	.10	200.0
108394	3&4-Methylphenol	U	.10	200.0
67721	Hexachloroethane	U	.10	3.0
989103	Nitrobenzene	U	.10	2.0
87683	Hexachlorobutadiene	U	.10	0.5
88062	2,4,6-Trichlorophenol	U	.10	2.0
9109104	2,4,5-Trichlorophenol	U	.50	400.0
121142	2,4-Dinitrotoluene	U	.10	0.13
118741	Hexachlorobenzene	U	.10	0.13
878610	Pentachlorophenol	U	.10	100.0

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
2-Fluorophenol	84 %	21 - 100	OK
Phenol-d5	84 %	10 - 94	OK
Nitrobenzene-d5	121 %	35 - 114	OUT
2-Fluorobiphenyl	110 %	43 - 116	OK
2,4,6-Tribromophenol	91 %	10 - 123	OK
Terphenyl-d14	93 %	33 - 141	OK

U - Indicates compound was analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.

* 2-Methylphenol = o-cresol
* 3-Methylphenol = m-cresol
* 4-Methylphenol = p-cresol

** 3-Methylphenol and 4-Methylphenol can not be separated by the method applied.

ACCREDITED LABORATORIES, INC.
TCLP SEMIVOLATILES ANALYSIS DATA

CASE NUMBER		MATRIX	Leachate
SAMPLE NUMBER	SBLK95	DILUTION FACTOR	1
DATA FILE	>B1045	DATE EXTRACTED	10/03/00
CLIENT NAME		DATE ANALYZED	10/10/00
FIELD ID		ANALYZED BY	JANICE

CAS No.	Compound	Result (mg/l)	MDL (mg/l)	Regulatory Level (mg/l)
110861	Pyridine	U	.01	5.0
106467	1,4-Dichlorobenzene	U	.01	7.5
95478	2-Methylphenol	U	.01	200.0
108394	3&4-Methylphenol	U	.01	200.0
67721	Hexachloroethane	U	.01	3.0
989103	Nitrobenzene	U	.01	2.0
87683	Hexachlorobutadiene	U	.01	0.5
88062	2,4,6-Trichlorophenol	U	.01	2.0
9109104	2,4,5-Trichlorophenol	U	.05	400.0
121142	2,4-Dinitrotoluene	U	.01	0.13
118741	Hexachlorobenzene	U	.01	0.13
878610	Pentachlorophenol	U	.01	100.0

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
2-Fluorophenol	51 %	21 - 100	OK
Phenol-d5	46 %	10 - 94	OK
Nitrobenzene-d5	48 %	35 - 114	OK
2-Fluorobiphenyl	55 %	43 - 116	OK
2,4,6-Tribromophenol	62 %	10 - 123	OK
Terphenyl-d14	50 %	33 - 141	OK

U - Indicates compound was analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.

* 2-Methylphenol = o-cresol
* 3-Methylphenol = m-cresol
* 4-Methylphenol = p-cresol

** 3-Methylphenol and 4-Methylphenol can not be separated by the method applied.

ACCREDITED LABORATORIES, INC.
TCLP PESTICIDES ANALYSIS DATA

CASE NUMBER	9536	MATRIX	Leachate
SAMPLE NUMBER	0011861	DILUTION FACTOR	50
DATA FILE	>G7340	DATE EXTRACTED	10/02/00
CLIENT NAME	OE	DATE ANALYZED	10/03/00
FIELD ID	WC-1	ANALYZED BY	CLIFF

CAS No.	Compound	Result (mg/l)	MDL (mg/l)	Regulatory Level (mg/l)
58-89-9	G-BHC (Lindane)	U	.001	0.400
76-44-8	Heptachlor	U	.001	0.008
1024-57-3	Heptachlor Epoxide	U	.001	0.008
72-20-8	Endrin	U	.002	0.02
72-43-5	Methoxychlor	U	.010	10.0
5103-71-9	A-Chlordane	U	.001	0.03
5103-74-2	G-Chlordane	U	.001	0.03
8001-35-2	Toxaphene	U	.050	0.5

SURROGATE COMPOUNDS	RECOVERY	ADVISORY LIMITS	STATUS
DCB	98%	30 - 150	OK
Tetrachloro-m-xylene	59%	30 - 150	OK

U - Indicates compound was analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.

ACCREDITED LABORATORIES, INC.
TCLP PESTICIDES ANALYSIS DATA

CASE NUMBER		MATRIX	Leachate
SAMPLE NUMBER	PBLK65	DILUTION FACTOR	50
DATA FILE	>G7327	DATE EXTRACTED	10/02/00
CLIENT NAME		DATE ANALYZED	10/02/00
FIELD ID		ANALYZED BY	CLIFF

CAS No.	Compound	Result (mg/l)	MDL (mg/l)	Regulatory Level (mg/l)
58-89-9	G-BHC (Lindane)	U	.001	0.400
76-44-8	Heptachlor	U	.001	0.008
1024-57-3	Heptachlor Epoxide	U	.001	0.008
72-20-8	Endrin	U	.002	0.02
72-43-5	Methoxychlor	U	.010	10.0
5103-71-9	A-Chlordane	U	.001	0.03
5103-74-2	G-Chlordane	U	.001	0.03
8001-35-2	Toxaphene	U	.050	0.5

SURROGATE COMPOUNDS	RECOVERY	ADVISORY LIMITS	STATUS
DCB	147%	30 - 150	OK
Tetrachloro-m-xylene	120%	30 - 150	OK

U - Indicates compound was analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.

ACCREDITED LABORATORIES, INC
TCLP HERBICIDE ANALYSIS DATA

CASE NUMBER	9536	MATRIX	Leachate
SAMPLE NUMBER	0011861	DILUTION FACTOR	1
DATA FILE	>A2538	DATE EXTRACTED	10/03/00
CLIENT NAME	OE	DATE ANALYZED	10/03/00
FIELD ID	WC-1	ANALYZED BY	CLIFF

CAS No.	Compound	Result (mg/l)	MDL (mg/l)	Regulatory Level (mg/l)
94757	2,4'-D	U	.100	10.0
93721	SILVEX	U	.010	1.0

U - Indicates compound was analyzed for but not detected

ACCREDITED LABORATORIES, INC
TCLP HERBICIDE ANALYSIS DATA

CASE NUMBER		MATRIX	Leachate
SAMPLE NUMBER	HBLK95	DILUTION FACTOR	1
DATA FILE	>A2525	DATE EXTRACTED	10/03/00
CLIENT NAME		DATE ANALYZED	10/03/00
FIELD ID		ANALYZED BY	CLIFF

CAS No.	Compound	Result (mg/l)	MDL (mg/l)	Regulatory Level (mg/l)
94757	2,4'-D	U	.100	10.0
93721	SILVEX	U	.010	1.0

U - Indicates compound was analyzed for but not detected

ACCREDITED LABORATORIES, INC
PCB ORGANIC ANALYSIS DATA

CASE NUMBER	9536	MATRIX	Soil
SAMPLE NUMBER	0011861	DILUTION FACTOR	1
DATA FILE	>A2569	DATE EXTRACTED	10/04/00
CLIENT NAME	OE	DATE ANALYZED	10/05/00
FIELD ID	WC-1	ANALYZED BY	CLIFF

CAS#	COMPOUND	UG/KG	MDL
12674112	Aroclor-1016	U	19.8
11104282	Aroclor-1221	U	19.8
11141165	Aroclor-1232	U	19.8
53469219	Aroclor-1242	U	19.8
12672296	Aroclor-1248	U	19.8
11097691	Aroclor-1254	U	19.8
11096825	Aroclor-1260	U	19.8

Percent Solid of 84.3 is used for all target compounds.

B - Indicates compound found in associated blank.
J - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.
R - Result exceeds residential surface soil standards.*
I - Result exceeds industrial surface soil standards.*

* Flags are based on New Jersey Soil Cleanup from Site Remediation News Volume 06 Number 1.

ACCREDITED LABORATORIES, INC
PCB ORGANIC ANALYSIS DATA

CASE NUMBER		MATRIX	Soil
SAMPLE NUMBER	PBLK68	DILUTION FACTOR	1
DATA FILE	>A2542	DATE EXTRACTED	10/04/00
CLIENT NAME		DATE ANALYZED	10/04/00
FIELD ID		ANALYZED BY	CLIFF

CAS#	COMPOUND	UG/KG	MDL
12674112	Aroclor-1016	U	16.7
11104282	Aroclor-1221	U	16.7
11141165	Aroclor-1232	U	16.7
53469219	Aroclor-1242	U	16.7
12672296	Aroclor-1248	U	16.7
11097691	Aroclor-1254	U	16.7
11096825	Aroclor-1260	U	16.7

Percent Solid of 100. is used for all target compounds.

B - Indicates compound found in associated blank.
J - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.

ACCREDITED LABORATORIES, INC.
REGULATED TCLP METALS
INORGANIC ANALYSIS DATA SHEET

Case #: 9536
Sample #: 0011861
Field ID: WC-1
Client Name: OE

Matrix: Leachate
Date Received: 09/25/00

CAS No.	Element	Result MG/L	MDL MG/L	Dilution Factor	Regulatory Level	Method	Date Analyzed
7440-38-2	Arsenic	ND	1.00	1	5.00	P	10/02/00
7440-39-3	Barium	1.51	.500	1	100.00	P	10/02/00
7440-43-9	Cadmium	.102	.050	1	1.00	P	10/02/00
7440-47-3	Chromium	ND	.100	1	5.00	P	10/02/00
7439-92-1	Lead	ND	.500	1	5.00	P	10/02/00
7439-97-6	Mercury	ND	.002	2	.20	CV	10/02/00
7782-49-2	Selenium	ND	.500	1	1.00	P	10/02/00
7440-22-4	Silver	ND	.100	1	5.00	P	10/02/00

ND - Element analyzed for but not detected.
P - Analyzed by ICP
CV - Analyzed by Cold Vapor
F - Analyzed by GFA
A - Analyzed by flame AA

ACCREDITED LABORATORIES, INC.
REGULATED TCLP METALS
INORGANIC ANALYSIS DATA SHEET

Sample #: PBL064
Field ID: PREPBLANK
Matrix: Leachate
Date Prepared: 09/29/00

CAS No.	Element	Result MG/L	MDL MG/L	Dilution Factor	Regulatory Level	Method	Date Analyzed
7440-38-2	Arsenic	ND	.500	1	5.00	P	10/02/00
7440-39-3	Barium	ND	.250	1	100.00	P	10/02/00
7440-43-9	Cadmium	ND	.025	1	1.00	P	10/02/00
7440-47-3	Chromium	ND	.050	1	5.00	P	10/02/00
7439-92-1	Lead	ND	.250	1	5.00	P	10/02/00
7439-97-6	Mercury	ND	.001	1	.20	CV	10/02/00
7782-49-2	Selenium	ND	.250	1	1.00	P	10/02/00
7440-22-4	Silver	ND	.050	1	5.00	P	10/02/00

ND - Element analyzed for but not detected.
P - Analyzed by ICP
CV - Analyzed by Cold Vapor
F - Analyzed by GFA
A - Analyzed by flame AA

ACCREDITED LABORATORIES, INC.
GENERAL CHEMISTRY ANALYSIS DATA

Case #:	9536	Matrix:	Soil
Sample #:	0011861	Date Received:	09/25/00
Client Name:	OE	% Moisture:	15.7
Field Number:	WC-1		

ANALYTES	RESULTS	MDL	UNITS	DILUTION FACTOR	METHOD BLANK RESULTS	METHOD BLANK MDL	ANALYSIS DATE
Solids, Percent	84.3	0.10	%	1.			09/26/00
Flash Point	>200	80.	°F	1.			09/27/00
pH	4.93		S.U.	1.			09/28/00
Cyanide, Reactive	ND	0.24	mg/Kg	1.	ND	0.20	09/28/00
Sulfide, Reactive	ND	47.4	mg/Kg	1.	ND	40.0	09/28/00
Total Organic Halogen	ND	11.9	mg/Kg	1.	ND	10.0	09/27/00

Accredited Laboratories, Inc.
Total Petroleum Hydrocarbon Analysis

Client: OE
Case #: 9536
Analyst: RB

Matrix: Soil
Date Received: 09/25/00
Date Analyzed: 10/04/00

Field #	Sample #	Amount Used (g)	% S	DF	ABS	Result mg/Kg	MDL mg/Kg
WC-1	0011861	16.20	84.3	1	1	ND	44

Response Factor = .13383944

% S = Percent Solids
DF = Dilution Factor
ABS = Absorbance

Method Blank: < 20 mg/Kg

ACCREDITED LABORATORIES, INC.
20 PERSHING AVENUE
CARTERET, NEW JERSEY 07008
PHONE: (732) 541-2025 / (800) ALI-LABS

CHAIN OF CUSTODY FORM

PAGE 1 OF 1

CLIENT	Exxon DSC Newark Portland	PROJECT	Cornell Publishers
ADDRESS	43 Rt 46 E Suite 702	CONTACT	T. Francisco
CITY	Pine Brook	PHONE	973/244-0600
STATE	NJ ZIP 07058	FAX	973/244-0722

ALI SAMPLE #	FIELD ID	*C	**M	DATE / TIME SAMPLED	SAMPLE DESCRIPTION	ANALYSIS
	WC-1	1	S	09/20/00 1430	Soil	TPH, Ignitability
						Reactivity, pH, TOX
						PCB, TCLP
						Metals, TCLP
						Herbicides, TCLP
						Pesticides, ~~TCLP~~
	WC-1	1	S	"	Soil	TCLP Semi Volatiles
						TCLP Volatiles
	WC-1	1	S	"	Soil	BTX

**M = MATRIX A=AQUEOUS S=SOIL G=SLUDGE P=POTABLE WATER O=OIL F=FILTER K=SOLID X=OTHER

*C = NO. CONTAINERS TURNAROUND: 2 Weeks (Std) (If Blank, Std. ~~3 weeks~~ 2)

DELIVERABLES (circle one) STD ~~2 weeks~~ REDUCED FULL NY-ASP CLP I CLP II

RELINQUISHED BY: PRINT	SIGN	RECEIVED BY: PRINT	SIGN	ORGANIZATION	DATE	TIME	REASON
J. Arulco	[signature]	K. Roberts	Keith Robert	ALI	9/21	12:45	TRANSPORT

PERSON(S) ASSUMING RESPONSIBILITY FOR SAMPLING: PRINT: _____ SIGN: _____

COMMENTS		ALI QUOTE#	
		ALI CASE#	
		P.O.#	

700845

ACCREDITED LABORATORIES, INC.
Implementing Tomorrow's Technology, Today™...

Analytical Data Report

for

Oxford Environmental
43 Rt. 46 East
Pine Brook, NJ 07058

Project: Cornell - Dubilier Electronics

Accredited Laboratories Case No.: 9343
Date Received: 09/06/00

Field ID	Laboratory Sample #
A-4-C-3	200010868
A-4-C-2	200010869
A-3-C-1	200010870
0831-10	200010871

Accredited Laboratories, Inc. New Jersey Certification Number 12007. This data has been reviewed and accepted by:

Theodore C. Gaydos
Technical Director

(732) 541-2025
CORPORATE OFFICES
20 Pershing Avenue
Carteret, New Jersey 07008
FAX (732) 541-1383

700846

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ACCREDITED LABORATORIES, INC.
20 PERSHING AVENUE
CARTERET, NEW JERSEY 07008
PHONE: (732) 541-2025 / (800) ALI-LABS

CHAIN OF CUSTODY FORM

PAGE 1 OF 1

CLIENT	OXFORD ENVIRONMENTAL
ADDRESS	43 ROUTE 46 EAST, SUITE 702
CITY	PINE BROOK
STATE	NJ ZIP 07058

PROJECT	CORNELL-DUBILIER ELECTRONICS SITE
CONTACT	TIM FRANCISCO
PHONE	(973) 244-0600
FAX	(973) 244-0722

ALI SAMPLE #	FIELD ID	*C	**M	DATE / TIME SAMPLED	SAMPLE DESCRIPTION	ANALYSIS
0010868	A-4-C-3	1	K	1145	GRAB SAMPLE-TAR	PCB
0010869	A-4-C-2	1	K	1145	GRAB SAMPLE-TAR	PCB
0010870	A-3-C-1	3	K	1200	COMPOSITE-TAR	PCB
0010871	0831-10	1	A/G	1200	GRAB SAMPLE-OIL	PCB, Ignitability, TOX*
9/6/00	0831-10	matrix ~ sludge				

**M = MATRIX: A=AQUEOUS S=SOIL G=SLUDGE P=POTABLE WATER O=OIL F=FILTER K=SOLID X=OTHER

*C = NO. CONTAINERS

TURNAROUND: 1 WEEK (If Blank, Std. 3 weeks)

DELIVERABLES (circle one): STD REDUCED FULL NY-ASP CLP I CLP II

RELINQUISHED BY: PRINT	RELINQUISHED BY: SIGN	RECEIVED BY: PRINT	RECEIVED BY: SIGN	ORGANIZATION	DATE	TIME	REASON
T. FRANCISCO	[signature]	T. Cydoy	[signature]	ALI	9/6/00	1750	Analysis

PERSON(S) ASSUMING RESPONSIBILITY FOR SAMPLING: PRINT: T. FRANCISCO SIGN: [signature]

COMMENTS: * Analyze for TOX only if sample amount is sufficient.
A-3-C-1 Composite in lab.
Sample Temp = Ambient

ALI QUOTE#:
ALI CASE#: 9343
P.O.#:

700847

METHODOLOGY SUMMARY

PCB's - EPA 8082 (soil/solid)

A 30 gram portion of solid is mixed with anhydrous sodium sulfate and is extracted with 1:1 methylene chloride and acetone using sonication technique. The extract is separated from the sample by either centrifugation or filtration. The extract is then solvent-exchanged to hexane in a K-D concentrator to a final volume of 10 ml. The extract is injected into a gas chromatograph and the compounds in the GC effluent are detected by an electron capture detector.

Flash Point - EPA 1010

The sample is heated at a slow constant rate with continual stirring. A small flame is directed into the cup at regular intervals with simultaneous interruption of stirring. The flash point is the lowest temperature at which application of the test flame ignites the vapor above the sample. The method is followed according to EPA "Test Methods for Evaluating Solid Waste", SW-846, 3rd ed., 1986.

Total Organic Halides - (solid)

Approximately 1.0 grams of sample is oxidized by combustion in a bomb containing oxygen under pressure. The chlorine thus liberated from organic matrix is absorbed in a sodium carbonate solution. The amount of chloride in the rinsate is determined by a standard mercuric nitrate solution titrimetrically. Then a 5 gram sample is extracted with deionized distilled water for four hours. The inorganic chloride concentration in the leachate is determined by standard mercuric nitrate solution titrimetrically. The total organic halides is determined by the differences between the total chloride amount generated from the bomb combustion procedure and the inorganic chloride generated from the leachating procedure.

ACCREDITED LABORATORIES, INC
PCB ORGANIC ANALYSIS DATA

CASE NUMBER	9343	MATRIX	Solid
SAMPLE NUMBER	0010868	DILUTION FACTOR	10
DATA FILE	>G7016	DATE EXTRACTED	09/11/00
CLIENT NAME	OE	DATE ANALYZED	09/12/00
FIELD ID	A-4-C-3	ANALYZED BY	CLIFF

CAS#	COMPOUND	UG/KG	MDL
12674112	Aroclor-1016	U	173
11104282	Aroclor-1221	U	173
11141165	Aroclor-1232	U	173
53469219	Aroclor-1242	U	173
12672296	Aroclor-1248	U	173
11097691	Aroclor-1254	6690	173
11096825	Aroclor-1260	U	173

Percent Solid of 96.5 is used for all target compounds.

B - Indicates compound found in associated blank.
J - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.

ACCREDITED LABORATORIES, INC
PCB ORGANIC ANALYSIS DATA

CASE NUMBER	9343	MATRIX	Solid
SAMPLE NUMBER	0010869	DILUTION FACTOR	10
DATA FILE	>G7017	DATE EXTRACTED	09/11/00
CLIENT NAME	OE	DATE ANALYZED	09/12/00
FIELD ID	A-4-C-2	ANALYZED BY	CLIFF

CAS#	COMPOUND	UG/KG	MDL
12674112	Aroclor-1016	U	432
11104282	Aroclor-1221	U	432
11141165	Aroclor-1232	U	432
53469219	Aroclor-1242	U	432
12672296	Aroclor-1248	U	432
11097691	Aroclor-1254	26500	432
11096825	Aroclor-1260	U	432

Percent Solid of 38.6 is used for all target compounds.

B - Indicates compound found in associated blank.
J - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.

ACCREDITED LABORATORIES, INC
PCB ORGANIC ANALYSIS DATA

CASE NUMBER	9343	MATRIX	Solid
SAMPLE NUMBER	0010870	DILUTION FACTOR	20
DATA FILE	>G7018	DATE EXTRACTED	09/11/00
CLIENT NAME	OE	DATE ANALYZED	09/12/00
FIELD ID	A-3-C-1	ANALYZED BY	CLIFF

CAS#	COMPOUND	UG/KG	MDL
12674112	Aroclor-1016	U	333
11104282	Aroclor-1221	U	333
11141165	Aroclor-1232	U	333
53469219	Aroclor-1242	U	333
12672296	Aroclor-1248	U	333
11097691	Aroclor-1254	3070	333
11096825	Aroclor-1260	U	333

Percent Solid of 100. is used for all target compounds.

B - Indicates compound found in associated blank.
J - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.

ACCREDITED LABORATORIES, INC
PCB ORGANIC ANALYSIS DATA

CASE NUMBER	9343	MATRIX	Sludge
SAMPLE NUMBER	0010871	DILUTION FACTOR	20
DATA FILE	>G7019	DATE EXTRACTED	09/11/00
CLIENT NAME	OE	DATE ANALYZED	09/12/00
FIELD ID	0831-10	ANALYZED BY	CLIFF

CAS#	COMPOUND	UG/KG	MDL
12674112	Aroclor-1016	U	362
11104282	Aroclor-1221	U	362
11141165	Aroclor-1232	U	362
53469219	Aroclor-1242	U	362
12672296	Aroclor-1248	U	362
11097691	Aroclor-1254	4540	362
11096825	Aroclor-1260	U	362

Percent Solid of 92.1 is used for all target compounds.

B - Indicates compound found in associated blank.
J - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.

ACCREDITED LABORATORIES, INC
PCB ORGANIC ANALYSIS DATA

CASE NUMBER		MATRIX	Soil
SAMPLE NUMBER	PBLK43-A	DILUTION FACTOR	1
DATA FILE	>G7003	DATE EXTRACTED	09/11/00
CLIENT NAME		DATE ANALYZED	09/11/00
FIELD ID		ANALYZED BY	CLIFF

CAS#	COMPOUND	UG/KG	MDL
12674112	Aroclor-1016	U	16.7
11104282	Aroclor-1221	U	16.7
11141165	Aroclor-1232	U	16.7
53469219	Aroclor-1242	U	16.7
12672296	Aroclor-1248	U	16.7
11097691	Aroclor-1254	U	16.7
11096825	Aroclor-1260	U	16.7

Percent Solid of 100. is used for all target compounds.

B - Indicates compound found in associated blank.
J - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.

ACCREDITED LABORATORIES, INC.
GENERAL CHEMISTRY ANALYSIS DATA

Case #:	9343	Matrix:	Sludge
Sample #:	0010871	Date Received:	09/06/00
Client Name:	OE	% Moisture:	7.9
Field Number:	0831-10		

ANALYTES	RESULTS	MDL	UNITS	DILUTION FACTOR	METHOD BLANK RESULTS	METHOD BLANK MDL	ANALYSIS DATE
Solids, Percent	92.1	0.10	%	1.			09/12/00
Flash Point	>200	80.	°F	1.			09/11/00
Total Organic Halogen	1450.	10.9	mg/Kg	1.	ND	10.0	09/12/00

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OXFORD ENVIRONMENTAL, INC.

Analytical Data Report

for

Oxford Environmental
43 Rt. 46 East
Pine Brook, NJ 07058

Project: Cornell - Dublier Electronics

Accredited Laboratories Case No.: 9289
Date Received: 09/01/00

Field ID	Laboratory Sample #
A02-01	200010644
A02-02	200010645

Accredited Laboratories, Inc. New Jersey Certification Number 12007. This data has been reviewed and accepted by:

Theodore C. Gaydos
Technical Director

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CORPORATE OFFICES
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732 245-0010

CHAIN OF CUSTODY FORM

PAGE _____ OF _____

CLIENT	Oxford Environmental	PROJECT	Cornell-Dubilier Electronics
ADDRESS	43 Route 46 E. Suite 702	CONTACT	I. Francisco
CITY	Pine Brook	PHONE	973/244-0600
STATE	NJ ZIP 07058	FAX	973/244-0722

ALI SAMPLE #	FIELD ID	*C	**M	DATE / TIME SAMPLED	SAMPLE DESCRIPTION	ANALYSIS
0010644	A02-01	1	S	08/31/00 1400	Soil-Area #2 Comp	PCB, TCLP Metals
0010645	A02-02	1	X	08/31/00 1400	Tar-Area #2 Comp.	PCB
	~~W690-01~~	~~1~~	~~X~~	~~08/31/00~~	~~Hexane wipe T1~~	~~PCB~~ No sample JA
	~~W690-02~~	~~1~~	~~X~~	~~08/31/00 1600~~	~~Hexane wipe T2~~	~~PCB~~ No sample JA
	~~W690-03~~	~~1~~	~~X~~	~~08/31/00 1600~~	~~Hexane wipe B~~	~~PCB~~ No sample JA
	~~W690-04~~	~~1~~	~~X~~	~~08/31/00 1600~~	~~Hexane wipe C~~	~~PCB~~ No sample JA
	~~W690-05~~	~~1~~	~~X~~	~~08/31/00 1600~~	~~Hexane wipe~~	~~PCB~~ No sample JA
9/1/00 #0010645	matrix soil					

**M = MATRIX: A-AQUEOUS S-SOIL G-SLUDGE P-POTABLE WATER O-OIL F-FILTER K-SOLID X-OTHER

*C = NO. CONTAINERS

TURNAROUND: 48 Hours (If Blank, Std. 3 weeks)

DELIVERABLES (circle one): (STD) REDUCED FULL NY-ASP CLP I CLP II

RELINQUISHED BY PRINT	RELINQUISHED BY SIGN	RECEIVED BY PRINT	RECEIVED BY SIGN	ORGANIZATION	DATE	TIME	REASON
J. Arculeo		W.M. [illegible]		ALI	8/31/00	4:45	P.M.
W.M. [illegible]		[illegible]		ALI	9/1/00	1100	Analysis

PERSON(S) ASSUMING RESPONSIBILITY FOR SAMPLING: PRINT: J. Arculeo SIGN:

		ALI QUOTE#	9289
COMMENTS		ALI CASE#	
	Cooler Temp = 6°C	P.O.#	

700856

METHODOLOGY SUMMARY

PCB's - EPA 8082 (soil/solid)

A 30 gram portion of solid is mixed with anhydrous sodium sulfate and is extracted with 1:1 methylene chloride and acetone using sonication technique. The extract is separated from the sample by either centrifugation or filtration. The extract is then solvent-exchanged to hexane in a K-D concentrator to a final volume of 10 ml. The extract is injected into a gas chromatograph and the compounds in the GC effluent are detected by an electron capture detector.

Toxic Characteristic Leaching Procedure - TCLP (EPA Method (1311)

Before the leaching procedure can be initiated, the information regarding the wet % and dry % solid of the solid sample as well as the utilization of the extraction fluid, either #1 or #2, must be determined.

For the Metal Analysis, a mimimum of 100 grams is filtered through 0.6 to 0.8 um glass fiber filter. The filtrate, if any, is saved. A 20X of extracted fluid, either #1 or #2, is charged in the glass or plastic extraction bottle and then rotated at 30 +/- 2 rpm for 18 +/- 2 hours. After rotation, the sample is filtered through 0.6 to 0.8 um glass fiber filter. The filtrate is combined with the initial liquid, if any. This is referred as TCLP Leachate. The contaminants of Metals in the leachate is determined by EPA Method 7471 for mercury, Method 7060 for arsenic, Method 7740 for selenium and Method 6010 (ICAP) and/or Method 7000's (Flame-AA) for the rest of metals.

ACCREDITED LABORATORIES, INC
PCB ORGANIC ANALYSIS DATA

CASE NUMBER	9289	MATRIX	Soil
SAMPLE NUMBER	0010644	DILUTION FACTOR	10
DATA FILE	>G6978	DATE EXTRACTED	09/06/00
CLIENT NAME	OE	DATE ANALYZED	09/06/00
FIELD ID	A02-01	ANALYZED BY	JEFF

CAS#	COMPOUND	UG/KG		MDL
12674112	Aroclor-1016	U		275
11104282	Aroclor-1221	U		275
11141165	Aroclor-1232	U		275
53469219	Aroclor-1242	U		275
12672296	Aroclor-1248	U		275
11097691	Aroclor-1254	24200	I	275
11096825	Aroclor-1260	U		275

Percent Solid of 60.7 is used for all target compounds.

B - Indicates compound found in associated blank.
J - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.
R - Result exceeds residential surface soil standards.*
I - Result exceeds industrial surface soil standards.*

* Flags are based on New Jersey Soil Cleanup from Site Remediation News Volume 06 Number 1.

ACCREDITED LABORATORIES, INC
PCB ORGANIC ANALYSIS DATA

CASE NUMBER	9289	MATRIX	Soil
SAMPLE NUMBER	0010645	DILUTION FACTOR	10
DATA FILE	>G6979	DATE EXTRACTED	09/06/00
CLIENT NAME	OE	DATE ANALYZED	09/06/00
FIELD ID	A02-02	ANALYZED BY	JEFF

CAS#	COMPOUND	UG/KG		MDL
12674112	Aroclor-1016	U		213
11104282	Aroclor-1221	U		213
11141165	Aroclor-1232	U		213
53469219	Aroclor-1242	U		213
12672296	Aroclor-1248	U		213
11097691	Aroclor-1254	18700	I	213
11096825	Aroclor-1260	U		213

Percent Solid of 78.2 is used for all target compounds.

B - Indicates compound found in associated blank.
J - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.
R - Result exceeds residential surface soil standards.*
I - Result exceeds industrial surface soil standards.*

* Flags are based on New Jersey Soil Cleanup from Site Remediation News Volume 06 Number 1.

ACCREDITED LABORATORIES, INC
PCB ORGANIC ANALYSIS DATA

CASE NUMBER		MATRIX	Soil
SAMPLE NUMBER	PBLK38	DILUTION FACTOR	1
DATA FILE	>G6976	DATE EXTRACTED	09/06/00
CLIENT NAME		DATE ANALYZED	09/06/00
FIELD ID		ANALYZED BY	JEFF

CAS#	COMPOUND	UG/KG	MDL
12674112	Aroclor-1016	U	16.7
11104282	Aroclor-1221	U	16.7
11141165	Aroclor-1232	U	16.7
53469219	Aroclor-1242	U	16.7
12672296	Aroclor-1248	U	16.7
11097691	Aroclor-1254	U	16.7
11096825	Aroclor-1260	U	16.7

Percent Solid of 100. is used for all target compounds.

B - Indicates compound found in associated blank.
J - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.

ACCREDITED LABORATORIES, INC.
REGULATED TCLP METALS
INORGANIC ANALYSIS DATA SHEET

Case #: 9289
Sample #: 0010644
Field ID: A02-01
Client Name: OE

Matrix: Leachate
Date Received: 09/01/00

CAS No.	Element	Result MG/L	MDL MG/L	Dilution Factor	Regulatory Level	Method	Date Analyzed
7440-38-2	Arsenic	ND	1.00	1	5.00	P	09/07/00
7440-39-3	Barium	ND	.500	1	100.00	P	09/07/00
7440-43-9	Cadmium	ND	.100	1	1.00	P	09/07/00
7440-47-3	Chromium	ND	.100	1	5.00	P	09/07/00
7439-92-1	Lead	4.20	.500	1	5.00	P	09/07/00
7439-97-6	Mercury	ND	.002	2	.20	CV	09/08/00
7782-49-2	Selenium	ND	.500	1	1.00	P	09/07/00
7440-22-4	Silver	ND	.100	1	5.00	P	09/07/00

ND - Element analyzed for but not detected.
P - Analyzed by ICP
CV - Analyzed by Cold Vapor
F - Analyzed by GFA
A - Analyzed by flame AA

ACCREDITED LABORATORIES, INC.
REGULATED TCLP METALS
INORGANIC ANALYSIS DATA SHEET

Sample #: PBL050
Field ID: PREPBLANK
Matrix: Leachate
Date Prepared: 09/06/00

CAS No.	Element	Result MG/L	MDL MG/L	Dilution Factor	Regulatory Level	Method	Date Analyzed
7440-38-2	Arsenic	ND	.500	1	5.00	P	09/06/00
7440-39-3	Barium	ND	.250	1	100.00	P	09/06/00
7440-43-9	Cadmium	ND	.050	1	1.00	P	09/06/00
7440-47-3	Chromium	ND	.050	1	5.00	P	09/06/00
7439-92-1	Lead	ND	.250	1	5.00	P	09/06/00
7439-97-6	Mercury	ND	.001	1	.20	CV	09/08/00
7782-49-2	Selenium	ND	.250	1	1.00	P	09/06/00
7440-22-4	Silver	ND	.050	1	5.00	P	09/06/00

ND - Element analyzed for but not detected.
P - Analyzed by ICP
CV - Analyzed by Cold Vapor
F - Analyzed by GFA
A - Analyzed by flame AA

ACCREDITED LABORATORIES, INC.
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Analytical Data Report

for

Oxford Environmental
43 Rt. 46 East
Pine Brook, NJ 07058

Project: Cornell - Dublier

Accredited Laboratories Case No.: 9302
Date Received: 09/05/00

Field ID	Laboratory Sample #
W690-01	200010693
W690-02	200010694
W690-03	200010695
W690-04	200010696
W690-05	200010697
W580-01	200010698
W580-02	200010699
W580-03	200010700
W580-04	200010701

Accredited Laboratories, Inc. New Jersey Certification Number 12007. This data has been reviewed and accepted by:

Theodore C. Gaydos
Technical Director

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20 PERSHING AVENUE
CARTERET, NEW JERSEY 07008
PHONE: (732) 541-2025 / (800) ALI-LABS

CHAIN OF CUSTODY FORM

PAGE 1 OF 1

CLIENT	Oxford Environmental	PROJECT	Cornell - Dublier
ADDRESS	43 Route 46E, Suite 702	CONTACT	J. Fransicco
CITY	Pine Brook	PHONE	973/244-0600
STATE	NJ ZIP 07058	FAX	973/244-0722

ALI SAMPLE #	FIELD ID	*C	**M	DATE / TIME SAMPLED	SAMPLE DESCRIPTION	ANALYSIS
0010693	W690-01	1	X	09/01/00 1400	Hex Wipe - Track 1	PCB
0010694	W690-02	1	X	09/01/00 1400	Hex Wipe Track 2	PCB
0010695	W690-03	1	X	09/01/00 1400	Hex Wipe Cab	PCB
0010696	W690-04	1	X	09/01/00 1400	Hex Wipe Buk	PCB
0010697	W690-05	1	X	09/01/00 1400	Hex - F	PCB
0010698	W580-01	1	X	09/01/00 1500	Hex Wipe - UpBuck	PCB
0010699	W580-02	1	X	↓	Hex Wipe LowBuck	PCB
0010700	W580-03	1	X	↓	Hex Wipe Hoe	PCB
0010701	W580-04	1	X	↓	Hex Wipe Cab	PCB

**M = MATRIX A=AQUEOUS S=SOIL G=SLUDGE P=POTABLE WATER O=OIL F=FILTER K=SOLID X=OTHER

*C = NO. CONTAINERS TURNAROUND: 48 Hrs. (If Blank, Std. 3 weeks)

DELIVERABLES (circle one) STD REDUCED FULL NY-ASP CLP I CLP II

RELINQUISHED BY: PRINT	SIGN	RECEIVED BY: PRINT	SIGN	ORGANIZATION	DATE	TIME	REASON
[illegible]	[illegible]						
[illegible]	J. Arcolo	W. M. Urbinstrade	[illegible]	ALI	9/1/00	4:25 pm	pick-up
W. M. Urbinstrade		[illegible]	[illegible]	ALI	9/5/00	1000	Analyst

PERSON(S) ASSUMING RESPONSIBILITY FOR SAMPLING: PRINT: SIGN:

COMMENTS		ALI QUOTE#	
		ALI CASE#	9302
	Cooler Temp = 6°C	P.O.#	

700864

METHODOLOGY SUMMARY

PCB's - Modified 8082 (wipe)

The wipe is extracted with 50 ml of 1:1 methylene chloride and acetone three times. The extract is dried by filtering through anhydrous Na_2SO_4. The extract is then concentrated and solvent-exchanged to hexane in a K-D concentrator to a final volume of 10 ml. The extract is injected into a gas chromatograph and the compounds of interest are detected by an electron capture detector.

ACCREDITED LABORATORIES, INC
PCB ORGANIC ANALYSIS DATA

CASE NUMBER	9302	MATRIX	Wipe
SAMPLE NUMBER	0010693	DILUTION FACTOR	1
DATA FILE	>G6980	DATE EXTRACTED	09/06/00
CLIENT NAME	OE	DATE ANALYZED	09/06/00
FIELD ID	W690-01	ANALYZED BY	JEFF

CAS#	COMPOUND	UG	MDL
12674112	Aroclor-1016	U	.500
11104282	Aroclor-1221	U	.500
11141165	Aroclor-1232	U	.500
53469219	Aroclor-1242	U	.500
12672296	Aroclor-1248	U	.500
11097691	Aroclor-1254	1.37	.500
11096825	Aroclor-1260	U	.500

B - Indicates compound found in associated blank.
J - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.

ACCREDITED LABORATORIES, INC
PCB ORGANIC ANALYSIS DATA

CASE NUMBER	9302	MATRIX	Wipe
SAMPLE NUMBER	0010694	DILUTION FACTOR	1
DATA FILE	>G6981	DATE EXTRACTED	09/06/00
CLIENT NAME	OE	DATE ANALYZED	09/06/00
FIELD ID	W690-02	ANALYZED BY	JEFF

CAS#	COMPOUND	UG	MDL
12674112	Aroclor-1016	U	.500
11104282	Aroclor-1221	U	.500
11141165	Aroclor-1232	U	.500
53469219	Aroclor-1242	U	.500
12672296	Aroclor-1248	U	.500
11097691	Aroclor-1254	1.30	.500
11096825	Aroclor-1260	U	.500

B - Indicates compound found in associated blank.
J - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.

ACCREDITED LABORATORIES, INC
PCB ORGANIC ANALYSIS DATA

CASE NUMBER	9302	MATRIX	Wipe
SAMPLE NUMBER	0010695	DILUTION FACTOR	1
DATA FILE	>G6982	DATE EXTRACTED	09/06/00
CLIENT NAME	OE	DATE ANALYZED	09/06/00
FIELD ID	W690-03	ANALYZED BY	JEFF

CAS#	COMPOUND	UG	MDL
12674112	Aroclor-1016	U	.500
11104282	Aroclor-1221	U	.500
11141165	Aroclor-1232	U	.500
53469219	Aroclor-1242	U	.500
12672296	Aroclor-1248	U	.500
11097691	Aroclor-1254	U	.500
11096825	Aroclor-1260	U	.500

B - Indicates compound found in associated blank.
J - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.

ACCREDITED LABORATORIES, INC
PCB ORGANIC ANALYSIS DATA

CASE NUMBER	9302	MATRIX	Wipe
SAMPLE NUMBER	0010696	DILUTION FACTOR	1
DATA FILE	>G6983	DATE EXTRACTED	09/06/00
CLIENT NAME	OE	DATE ANALYZED	09/06/00
FIELD ID	W690-04	ANALYZED BY	JEFF

CAS#	COMPOUND	UG	MDL
12674112	Aroclor-1016	U	.500
11104282	Aroclor-1221	U	.500
11141165	Aroclor-1232	U	.500
53469219	Aroclor-1242	U	.500
12672296	Aroclor-1248	U	.500
11097691	Aroclor-1254	U	.500
11096825	Aroclor-1260	U	.500

B - Indicates compound found in associated blank.
J - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.

ACCREDITED LABORATORIES, INC
PCB ORGANIC ANALYSIS DATA

CASE NUMBER	9302	MATRIX	Wipe
SAMPLE NUMBER	0010697	DILUTION FACTOR	1
DATA FILE	>G6984	DATE EXTRACTED	09/06/00
CLIENT NAME	OE	DATE ANALYZED	09/06/00
FIELD ID	W690-05	ANALYZED BY	JEFF

CAS#	COMPOUND	UG	MDL
12674112	Aroclor-1016	U	.500
11104282	Aroclor-1221	U	.500
11141165	Aroclor-1232	U	.500
53469219	Aroclor-1242	U	.500
12672296	Aroclor-1248	U	.500
11097691	Aroclor-1254	U	.500
11096825	Aroclor-1260	U	.500

B - Indicates compound found in associated blank.
J - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.

ACCREDITED LABORATORIES, INC
PCB ORGANIC ANALYSIS DATA

CASE NUMBER	9302	MATRIX	Wipe
SAMPLE NUMBER	0010698	DILUTION FACTOR	1
DATA FILE	>G6985	DATE EXTRACTED	09/06/00
CLIENT NAME	OE	DATE ANALYZED	09/06/00
FIELD ID	W580-01	ANALYZED BY	JEFF

CAS#	COMPOUND	UG	MDL
12674112	Aroclor-1016	U	.500
11104282	Aroclor-1221	U	.500
11141165	Aroclor-1232	U	.500
53469219	Aroclor-1242	U	.500
12672296	Aroclor-1248	U	.500
11097691	Aroclor-1254	U	.500
11096825	Aroclor-1260	U	.500

B - Indicates compound found in associated blank.
J - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.

ACCREDITED LABORATORIES, INC
PCB ORGANIC ANALYSIS DATA

CASE NUMBER	9302	MATRIX	Wipe
SAMPLE NUMBER	0010699	DILUTION FACTOR	1
DATA FILE	>G6986	DATE EXTRACTED	09/06/00
CLIENT NAME	OE	DATE ANALYZED	09/06/00
FIELD ID	W580-02	ANALYZED BY	JEFF

CAS#	COMPOUND	UG	MDL
12674112	Aroclor-1016	U	.500
11104282	Aroclor-1221	U	.500
11141165	Aroclor-1232	U	.500
53469219	Aroclor-1242	U	.500
12672296	Aroclor-1248	U	.500
11097691	Aroclor-1254	1.49	.500
11096825	Aroclor-1260	U	.500

B - Indicates compound found in associated blank.
J - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.

ACCREDITED LABORATORIES, INC
PCB ORGANIC ANALYSIS DATA

CASE NUMBER	9302	MATRIX	Wipe
SAMPLE NUMBER	0010700	DILUTION FACTOR	1
DATA FILE	>G6987	DATE EXTRACTED	09/06/00
CLIENT NAME	OE	DATE ANALYZED	09/06/00
FIELD ID	W580-03	ANALYZED BY	JEFF

CAS#	COMPOUND	UG	MDL
12674112	Aroclor-1016	U	.500
11104282	Aroclor-1221	U	.500
11141165	Aroclor-1232	U	.500
53469219	Aroclor-1242	U	.500
12672296	Aroclor-1248	U	.500
11097691	Aroclor-1254	3.30	.500
11096825	Aroclor-1260	U	.500

B - Indicates compound found in associated blank.
J - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.

ACCREDITED LABORATORIES, INC
PCB ORGANIC ANALYSIS DATA

CASE NUMBER	9302	MATRIX	Wipe
SAMPLE NUMBER	0010701	DILUTION FACTOR	1
DATA FILE	>G6988	DATE EXTRACTED	09/06/00
CLIENT NAME	OE	DATE ANALYZED	09/06/00
FIELD ID	W580-04	ANALYZED BY	JEFF

CAS#	COMPOUND	UG	MDL
12674112	Aroclor-1016	U	.500
11104282	Aroclor-1221	U	.500
11141165	Aroclor-1232	U	.500
53469219	Aroclor-1242	U	.500
12672296	Aroclor-1248	U	.500
11097691	Aroclor-1254	1.38	.500
11096825	Aroclor-1260	U	.500

B - Indicates compound found in associated blank.
J - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.

ACCREDITED LABORATORIES, INC
PCB ORGANIC ANALYSIS DATA

CASE NUMBER		MATRIX	Soil
SAMPLE NUMBER	PBLK38	DILUTION FACTOR	1
DATA FILE	>G6976	DATE EXTRACTED	09/06/00
CLIENT NAME		DATE ANALYZED	09/06/00
FIELD ID		ANALYZED BY	JEFF

CAS#	COMPOUND	UG/KG	MDL
12674112	Aroclor-1016	U	16.7
11104282	Aroclor-1221	U	16.7
11141165	Aroclor-1232	U	16.7
53469219	Aroclor-1242	U	16.7
12672296	Aroclor-1248	U	16.7
11097691	Aroclor-1254	U	16.7
11096825	Aroclor-1260	U	16.7

Percent Solid of 100. is used for all target compounds.

B - Indicates compound found in associated blank.
J - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.

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June 2000

OE # 9703-003

REMOVAL ACTION WORK PLAN

Drum Stabilization and Characterization at Former New Brunswick Paving Area

Cornell-Dublier Electronics Site
South Plainfield, New Jersey
Administrative Order II-CERCLA-97-109

Prepared for:

DSC of Newark Enterprises
70 Blanchard Street
Newark, New Jersey 07105

Submitted to:

U.S. Environmental Protection Agency
Region II, Removal Action Branch
2890 Woodbridge Avenue
Edison, New Jersey 08837

Prepared by:

OXFORD ENVIRONMENTAL, INC.
43 Route 46 East, Suite 702,
Pine Brook, NJ 07058
973-244-0600 • fax 973-244-0722

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1.0 INTRODUCTION

This Drum Stabilization and Characterization Plan ("Plan") has been prepared in response to EPA's discovery of twelve drums and several small containers at the Cornell-Dubilier Electronics Site ("Site") on May 3rd, 2000 during site clearing in preparation for CERCLA Remedial Investigation activities.

According to EPA's notification letter, "five drums appear to have contents and one drum is bulging and appears to be under pressure." EPA has requested that a plan be prepared immediately to address these drums. This plan therefore responds to the above matter, and sets forth the proposed action to stabilize the subject drums and containers, contain drum contents released, and characterize the contents for appropriate waste management.

1.1 Project Organization

Table 1 - Project Directory identifies the organizations and key personnel involved in the removal action activities, as well as their respective contact information.

Table 1 - Project Directory

Project Team	Contact Information
Oxford Environmental, Inc. 43 Route 46 East, Suite 702, Pine Brook, NJ 07058	Main Office # (973) 244-0600 Fax # (973) 244-0600
▪ Facility Coordinator - responsible for overall coordination and oversight of project activities.	Timothy Francisco Pager # (973) 419-3658 Cell # (201) 988-6885
▪ Project Leader - responsible for on-site supervision and execution of field activities.	Bill Bilgeshouse Pager # (973) 561-0521
AWT Environmental Services, Inc. P.O. Box 128, Sayreville, NJ 08872	Main Office # (732) 613-1600
▪ HAZMAT Contractor - responsible for providing high hazard crew, including hazardous materials chemist.	Field Supervisor - TBD
Accredited Laboratories, Inc. Foot of Pershing Avenue, Carteret, NJ 07008	Lab Phone # (732) 541-2025
▪ Environmental Laboratory - responsible for providing sample containers, and analytical services.	

2.0 SCOPE OF WORK

Oxford will retain the services of AWT Environmental Services, Inc. of Sayreville, New Jersey, a HAZMAT subcontractor, to stabilize the drums for sampling and characterization. Field activities shall be accomplished in accordance with the work procedures described in this plan.

2.1 Existing Site Conditions

There are a total of twelve (12) drums located within the former New Brunswick Paving area. Several other small containers are present in the areas of drums. Seven drums are empty and five drums have contents, of which one appears to be under pressure as indicated by "bulging." This pressurized drum shall be opened carefully to slowly release the pressure.

2.2 Field Screening

The identified drums, containers and the immediate area shall be surveyed by a hazardous materials chemist using field screening instrumentation such as a photo-ionization (PID) detector, Draëger tubes, combustible gas monitor and a HAZSCAN to determine hazard characteristics (such as pH, cyanide and sulfide reactivity, water solubility, hexane solubility, oxidizing potential). The results of the field screening will provide sufficient information for sampling drum contents, staging compatible wastes and identify soil contamination (spills, leaks, staining).

Drum contents will be sampled using drum thieves (glass rods), and transferred into sample containers. Samples will be analyzed for:

1) Flashpoint
2) TCLP Metals
3) TCLP VOAs
4) PCBs
5) Total VOAs

In addition, samples shall be analyzed for other appropriate parameters based on information obtained field screening results, container labels or markings.

2.3 Drum Handling & Storage

The deteriorated drums shall be segregated from the intact drums and packaged into over-pack drums. Care shall be taken to ensure that drum contents do not spill or leak into the soil. This shall be accomplished by staging the drums on to polyethylene liners and into salvage containers.

Any drum that displays signs of physical inadequacy will be over-packed prior to shipment. Drums will be securely tightened to ensure that no waste materials will spill during loading or transportation activities. Drums will also be properly labeled prior to shipment. Drums will be loaded onto a box truck via a drum dolly or mechanical hoist. The box truck will remain on paved areas during all loading procedures. This will eliminate the need for vehicle decontamination prior to exiting the site. . All appropriate manifests / documentation will be provided to EPA upon receipt from the disposal facility.

2.4 Disposal Facility

Upon completion characterization of drum contents and receipt of analytical results, Oxford shall propose and identify the appropriate disposal facility(ies) licensed and approved to accept the specific waste stream.

3.0 FIELD OPERATING PROCEDURES

3.1 The Buddy System

Work in the Exclusion Zone shall be conducted using the buddy system. Each buddy in a work team will be responsible to:

1) Provide his of her partner with assistance.

2) Observe his or her partner for signs of chemical or heat exposure.

3) Periodically check the integrity of his or her partner's protective clothing.

4) Notify the Site Manager or others if emergency help is needed.

The buddy system alone may not be sufficient to ensure that help will be provided in an emergency. At all times, workers in the Exclusion zone will be in line-of –sight contact or communications contact with the Command Post Supervisor or backup person in the Support Zone.

3.2 Communication Systems

Two sets of communication systems will be established: internal communication among personnel on site, and external communication between onsite and offsite personnel. Internal communication shall be used to:

1) Alert team members to emergencies.

2) Pass along safety information, such as the amount of air time left before the next rest period, air change, heat stress check, etc.

3) Communicate changes in the work to be accomplished.

4) Maintain site control.

Note: Verbal communication at a site can be impeded by onsite background noise and the use of personal protective equipment. For example, speech transmission through a respirator can be poor, and hearing can be impaired by protective hoods and respirator air flow. For effective communication, commands must be pre-arranged. In addition, audio or visual cues can help convey the message. The most important thing is that signals are agreed to in advance.

All communication devices used in a potentially explosive atmosphere must be intrinsically safe and not capable of sparking, and will be checked daily to ensure that they are operating.

An external communication system between onsite and offsite personnel will be established to:

1) Coordinate emergency response.

2) Report to management.

3) Maintain contact with essential offsite personnel.

The primary means of external communication are cellular phone and radio (Nextel). If cellular phones and radios are not available, all team members should know the location of the nearest telephone, and the necessary telephone numbers posted in the Support Zone.

3.3 Work Site Preparation

Eliminate physical hazards from the work area as much as possible including:

1) Ignition sources and flammable hazard areas;

2) Exposed or underground electrical wiring, and low overhead wiring that may entangle equipment;

3) Sharp or protruding edges, such as glass, nails, and torn metal, which can puncture protective clothing and equipment and inflict puncture wounds;

4) Debris and weeds that obstruct visibility;

3.4 Standing Orders

For Personnel Entering the Contamination Reduction Zone:

- No smoking, eating, drinking, or application of cosmetics in this zone.
- No matches or lighters in this zone.
- Check in at the entrance Access Control Point before you enter this zone.
- Check out at the exit Access Control Point before you leave this zone.

For Personnel Entering the Exclusion Zone:

- No smoking, eating, drinking, or application of cosmetics in this zone.
- No matches or lighters in this zone.
- Check in at the entrance Access Control Point before you enter this zone.

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- Check out at the exit Access Control Point before you leave this zone.
- Always have your buddy with you in this zone.
- Wear an SCBA in this zone.
- If you discover any signs of radioactivity, explosively, or unusual conditions such as dead animals at the site, exit immediately and report this finding to your supervisor.

4.0 WORK ACTIVITY AND TEMPORARY WORK ZONES

The following table and section summarizes the identified work activity and work zones in which contaminated materials may or will be encountered during removal action operations.

Table 2 - Summary of Work Activity

Work Area Location	*Quantity*	*Activity*
Former New Brunswick Paving Area	12 Drums (7 empty) plus undetermined number of small containers	▪ Drum Stabilization ▪ Drum & Container Sampling ▪ Salvage Drum & Over-Packing ▪ Drum Loading ▪ Transportation & Disposal

Due to the likely presence of contaminants within the identified work areas above, work shall be performed in accordance with the existing Health and Safety Plan (HASP) as well as the below detailed. Accordingly, appropriate exclusion, decontamination and support zones shall be demarcated to prevent any contaminated media from migrating off-site.

4.1 Temporary Work Zones

Temporary work zones shall be established prior to working in any of the locations identified in Table 2 - Summary of Work Activity, to prevent the migration of contaminants off-site. This will be accomplished by creating three separate work zones within work area location. These three zones are:

1) Exclusion Zone

2) Decontamination Reduction Zone

3) Support Zone

Each of the above zones has task specific activities performed within them, which are discussed below. In addition, temporary facilities will be used in each work area location to support the requirements of the HASP.

The following sections briefly describe the activities to be performed within each work zone, as well as, the use of the temporary facilities.

4.1.1 Exclusion Zone

The exclusion zone or "hot zone" is the immediate area in a work location in which work performed will encounter contaminants. For the purpose of this project, the work area locations identified in Table 2 will be designated the exclusion zone. This area will be delineated with barricade tape and/or cones. The exclusion zone will have a single entrance / exit location so as to control access to the contaminated work zone. This access will also be utilized for equipment and material transportation into and from the exclusion zone and will directly transition into the decontamination zone. Due to the contaminants present within the exclusion zone, no temporary facilities are located within it.

The Exclusion Zone is the area where the drums and containers are located. The primary activities to will be performed in the Exclusion Zone include:

1) Drum/container stabilization (i.e. depressurizing);

2) Drum/container contents characterization and sampling; and

3) Drum movement, staging and materials bulking;

4) Soil sampling, excavation and stockpiling.

The outer boundary of the Exclusion zone, called the Hotline, shall be established as follows:

- Visually survey the immediate site environs.
- Determine the locations of :
  - Hazardous substances
  - Drainage
  - Leachate
  - Spilled material
  - Visible discolorations
- Evaluate data from the initial site survey indicating the presence of :
  - Combustible gases
  - Organic and inorganic gases, particulates, or vapors
  - Ionizing radiation
- Evaluate the results of soil and water sampling.
- Consider the distances needed to prevent an explosion or fire from affecting personnel outside the Exclusion Zone.
- Consider the distances that personnel must travel to and from the Exclusion Zone.
- Consider the physical area necessary for site operations.
- Consider meteorological conditions and the potential for contaminants to be blown from the area.

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- Secure or mark the Hotline.
- Modify its location, if necessary, as more information becomes available.

It should be clearly marked by lines, placards, hazard tape and /or signs; or enclosed by physical barriers, such as chains, fences, or ropes. Access Control Points shall be established at the periphery of the Exclusion Zone to regulate the flow of personnel and equipment into and out of the zone and to help verify that proper procedures for entering and exiting are followed. If feasible, separate entrances and exits shall be established to separate personnel and equipment movement into and out of the Exclusion Zone.

At the discretion of the Field Manager, the Exclusion Zone may be sub-divided into different areas of contamination based on the known or expected type and degree of hazard or on the incompatibility of waste streams. This allows more flexibility in safety requirements, operations, decontamination procedures, and use of resources.

The personnel working in the Exclusion Zone may include the Field Team Leader, the work parties, and specialized personnel such as heavy equipment operators. All personnel within the Exclusion Zone will wear the level of protection required by the Site Safety Plan. Within the zone, different levels of protection may be justified based on the degree of hazard presented. The level of personal protection required in each sub-area will be specified and marked.

The required level of protection in the Exclusion Zone will be LEVEL B personal protective protection. When appropriate, different levels of protection within the Exclusion zone shall be assigned to promote a more flexible, effective, and less costly operation, while still maintaining a high degree of safety.

4.1.2 Decontamination Zone

The decontamination zone or "contaminant reduction zone" acts as a buffer zone between the exclusion zone and the support zone. Personnel and equipment leaving the exclusion shall be required to pass through the decontamination pad to ensure that no loose contaminated soil is tracked out of the exclusion area into other portions of the Site. This can be achieved simply through the use of a boot wash and tire washing station. Decontamination liquid shall be added to the drums being disposed of off site.

Activities which will take place in the CRZ include:

1) Decontamination of equipment;

2) Decontamination of personnel;

3) Decontamination of sample containers;

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4) Emergency response: transport for injured personnel (safety harness, stretcher), first-aid equipment (such as bandages, blankets, eye wash, splints, and water), containment equipment (absorbent, fire extinguisher);

5) Equipment re-supply: air tank changes, personal protective clothing and equipment (such as booties and gloves), sampling equipment (such as bottles and glass rods), and tools;

6) Sample packaging and preparation for onsite or offsite laboratories;

7) Worker temporary rest area: toilet facilities, bench, chair, liquids, and shade. Water and other potable liquids shall be clearly marked and stored properly to ensure that all glasses and cups are clean. Wash facilities shall be located near drinking facilities to allow employees to wash before drinking. Drinking, washing, and toilet facilities shall be located in a safe area where protective clothing can be removed. Facilities shall be cleaned and inspected regularly. Appropriate protective measures shall be taken by maintenance workers.

8) Drainage of water and other liquids that are used during decontamination.

Personnel within the CRZ shall be required to maintain internal communications, line-of-sight contact with work parties, work party monitoring (e.g., for air time left, fatigue, heat stress, hypothermia), and site security.

The required level of protection in the Decontamination Zone will be LEVEL B personal protective protection. When appropriate, different levels of protection within the Exclusion zone shall be assigned to promote a more flexible, effective, and less costly operation, while still maintaining a high degree of safety.

4.1.3 Support Zone

The support zone or "clean zone" is designated as the area in which removal activities will not encounter contamination. The Site Manager will be present in the Support Zone. Other personnel present will depend on the functions being performed, and may include the Project Team Leader and field team members who are preparing to enter or who have returned from the Exclusion Zone. The support zone contains temporary facilities such as:

- Command Post
- Equipment and material storage
- Parking areas

Personnel may wear normal work clothes within this zone. Any potentially contaminated clothing, equipment, and samples must be retained in the CRZ until decontaminated.

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Support Zone activities include:

- Supervision of all field operations and field teams.
- Maintenance of communications, including emergency lines of communication.
- Recordkeeping, including accident reports, chain of custody records, daily logbooks, manifest directories and orders, medical records, personnel training records, site inventories, site safety map, up-to-date Site Safety Plans.
- Providing access to up-to-date safety and health manuals and other reference materials.
- Interfacing with the public: government agencies, local politicians, medical personnel, the media, and other interested parties.
- Monitoring work schedules and weather changes.
- Maintaining site security.
- Sanitary facilities.
- First-aid administration, medical emergency response and medical monitoring activities.
- Supply, maintenance, and repair of communications, respiratory, and sampling equipment.
- Replacement of expendable supplies.
- Storage of monitoring equipment and supplies.
- Sample shipment.
- Interface with home office.
- Maintenance of emergency telephone numbers, evacuation route maps, and vehicle keys.
- Coordination with transporters, disposal sites, and appropriate federal, state, and local regulatory agencies.

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- Coordination and processing of environmental and hazardous waste samples. Copies of the sampling plans and procedures should be available for quick reference in the laboratory.

- Packaging of materials for analysis following the decontamination of the outsides of the sample containers performed in the CRZ. Shipping papers and chain-of-custody files should be kept in the Support Zone.

- Maintenance and storage of laboratory notebooks in designated locations in the laboratory while in use, and in the Support Zone when not in use.

Support Zone personnel are responsible for alerting the proper agency in the event of an emergency. All emergency telephone numbers, change for the telephone (if necessary), evaluation route maps, and vehicle keys will be kept in the Support Zone.

Support facilities shall be located in the Support Zone. To place these facilities, consider factors such as:

- Accessibility, Topography, open space available, locations of highways and railroad tracks, ease of access for emergency vehicles.

- Resources, Adequate roads, power lines, telephones, shelter, and water.

- Visibility, line-of-sight to all activities in the Exclusion Zone.

- Wind direction, Upwind of the Exclusion Zone, if possible.

- Distance, As far from the Exclusion Zone as practicable.

The recommended level of protection in the Support Zone will be LEVEL D personal protective protection. When appropriate, different levels of protection within the Support Zone shall be assigned to promote a more flexible, effective, and less costly operation, while still maintaining a high degree of safety.

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5.0 POLLUTION PREVENTION AND CONTROL MEASURES

The following sections will detail the proper controls and procedures for management of contaminated materials generated in areas of contaminated soils and liquids, and to prevent non-permitted discharge of contaminants during removal operations.

5.1 Removal / Loading Operations

To prevent any contaminated soils from migrating off site the following procedures shall be followed:

Excavation equipment will remain within the exclusion zone in order to minimize possible transport of clinging soils and/or contaminated fluids. Dust suppression controls (water spraying) will be utilized during this activity. Upon completion of excavation activities, all heavy equipment will be decontaminated at the decontamination station.

If during the course of excavation, buried tanks and/or drums are encountered, the following procedures shall be implemented:

1) Stop work immediately and withdraw from the area.

2) Inform the EPA OSC of vessel location.

3) OSC and Facility Coordinator will visually inspect the area to determine the type of vessel (i.e. tank or drum), and document its condition.

4) Facility Coordinator will call the NJDEP Hotline at (877) WARN-DEP and report the incident.

5) The OSC, Facility Coordinator and HSO will then determine if work can safely continue within the vicinity of the vessel.

6) The Owner will then take necessary steps to remove the vessel and restore the area to its previous condition.

5.2 Dust Control

Due to the nature of the contaminants present at the Site, control of fugitive dust emissions during soil loading operations may be required. If the Field Manager or HSO deems it necessary to reduce the amount of airborne dust, the following control methods will be initiated.

- Wet excavation areas prior to and during excavation activities

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- Clean impermeable surfaces (i.e. roadways) whenever dirt or mud is observed

5.3 Decontamination Solids and Liquids

During the course of removal activities, solid wastes in the form of PPE and decontamination liquids will be generated. PPE will be added to either the soil stockpile or the parts / soil drum scheduled for incineration. Decontamination liquids will be added to the sludge drums that are also scheduled for incineration.

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6.0 DOCUMENTATION AND REPORTING

6.1 Daily Construction Log

In order to maintain accurate documentation of work activities, field sampling events, visitors, contaminated materials shipped for off-site disposal, a Daily Construction Log shall be maintained.

6.1.1 Soil Handling Activities

As part of the Daily Construction Log, detailed notes shall be kept of the soil handling activities performed at the site. Movement of contaminated disposed off-site shall be documented.

6.1.2 Manifests

Hazardous waste manifests will be completed which track the movement of stockpiled soils and drums from the Site to the selected disposal facility. Copies of these documents will be included in the Final Report.

6.1.3 Incident Log (If Any)

An incident log shall be kept to document discharges and spills within the Site. The incident log shall detail specific information relative to the nature of the discharge or spill, the type of substance discharged/spilled, the type of impact to the environment (air, water, or soil), any corrective actions taken, and any measures taken to prevent another incident from occurring.

6.2 Field Considerations

During the course of removal activities, field conditions may vary or change from anticipated or planned conditions. It is for these reasons that minor adaptations or slight modifications must be made in the field to ensure that effective pollution prevention and control measures are implemented.

For this project, a qualified field representative will be present during the handling of contaminated soils and liquids. This individual will be responsible for making the initial determination that current engineering controls are adequate.

If is determined that there is a possibility that existing control methods are ineffective, work shall cease until a revised control procedure can be implemented.

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OE # 9703-003

HEALTH & SAFETY PLAN:

Drum Stabilization and Characterization at the Former New Brunswick Paving Area

Cornell-Dubilier Electronics Site
333 Hamilton Boulevard
South Plainfield, New Jersey

Submitted to

U.S. Environmental Protection Agency, Region II
Removal Action Branch
2890 Woodbridge Avenue
Edison, New Jersey 08837

Prepared for

DSC of Newark Enterprises, Inc.
70 Blanchard Street
Newark, New Jersey 07105

Prepared by

700895

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1.0 SCOPE AND APPLICABILITY

The following Health and Safety Plan (HASP) is intended to serve as the minimum requirements for implementation of site activities. The information contained herein presents the health and safety procedures to be employed during the course of work activities at a regulated hazardous waste site, or where environmental contaminants may be encountered during the course of field operations. This HASP has been prepared to address health and safety issues specific to the Cornell-Dubilier Electronics site, as well as satisfy the requirements of OSHA's Standards for Hazardous Waste Operations and Emergency Response (29 CFR 1910.120) and EPA's Standard Operating Safety Guide, (OSWER Directive 9285.103, June 1992).

2.0 LIMITATIONS

This HASP provides the minimum health and safety requirements to be employed while performing site activities at the Cornell-Dubilier Electronic Site, hereinafter referred to as the "Site." This plan is not intended to be a comprehensive training manual nor does it detail all procedures that may be utilized on site, however, it is intended to be a guidance manual for specific site operations deemed appropriate. Detailed information and guidance on materials covered in this plan were adopted from general accepted industry standards and professional practices. All regulations of the Occupational Safety and Health Act (OSHA) are to be adhered to by Oxford Environmental, Inc., its employees, representatives and subcontractors, and shall be responsible for initiating, maintaining, and supervising all safety protocols and programs in connection with the work.

This HASP has been prepared based on information reviewed from previous studies prepared by third parties, consultants, and regulatory agencies, including but not limited to the U.S. Environmental Protection Agency, its subcontractors and other third parties. Oxford Environmental, Inc. makes no warranties, either expressed or implied, as to the accuracy or completeness of information contained in the documents reviewed to aid Oxford in the preparation of this HASP. As such, the procedures and requirements set forth herein are intended as minimum guidelines for the implementation of the site activities.

This HASP is a living document that will be subject to review and/or revision by the designated Site Health and Safety Officer (HSO) and Health and Safety Manager (HSM), as often as necessary to adapt to changing site conditions, or as site specific health and safety issues arise. The implementation of this HASP shall not relieve other parties from compliance with applicable federal, state, or local regulations or statutes.

3.0 STATEMENT OF WORK

The work to be performed for the implementation of this HASP consists of site stabilization measures to eliminate existing potentially *imminently dangerous* conditions at the Site. The potential conditions are a result of the identification of site materials at the site from site investigation activities conducted by the EPA and its contractors. Typical contaminants of concern found in subsurface soils consist primarily of polychlorinated biphenyls (PCBs), heavy metals (lead, cadmium, chromium), and some polynuclear aromatic hydrocarbons (PAHs).

In accordance with correspondence letter dated April 25, 2000, the EPA discovered twelve empty drums and several empty containers in the area formerly occupied by New Brunswick Paving during site preparation activities. Accordingly, EPA notified the DSC of Newark Enterprisies (the current owner) and Oxford Environmental, Inc. (facility coordinator) of the discovery, to conduct drum stabilization and characterization to determine the contents of the drums. This HASP addresses the requirements for conducting site activities in response to EPA's request.

4.0 SITE DESCRIPTION

Site Name:	Cornell-Dubilier Electronics Site
Location:	Hamilton Industrial Park 333 Hamilton Boulevard South Plainfield, New Jersey
Site Occupants:	Approximately fifteen business occupying on-site structures
Site Access:	Paved driveways from Hamilton Boulevard.
Known Hazards:	PCBs (specifically Aroclor-1254), lead, arsenic, cadmium, chromium, copper, mercury, silver and zinc in surface and subsurface soils throughout the site.
Areas of Concern:	Surface soil, subsurface soil throughout site, especially around fenced-in area and foot/bike path at the rear of site; stream sediment in the unnamed tributary of Bound Brook; impact to groundwater has not been determined.
Surrounding Population:	Approximately 540 persons reside within 0.5 miles of the Site, with the nearest residential homes being located on Spicer Avenue and on the opposite side of Hamilton Boulevard.

5.0 AREA OF CONCERN

According to the site investigation reports reviewed, the entire site is to be considered an area of concern. The primary area of concern is located towards the rear of the site where electrical components were identified in the surface and subsurface soils.

Analytical results for samples collected by the U.S. EPA indicate that PCBs, lead, and various heavy metals were found to exceed the acceptable federal and state standards. No determination or effort has been made to determine impact to groundwater. The table below presents the contaminants and their concentrations found at on site:

Area of Concern	*Contaminant Concentration*
Unpaved stone and gravel driveways, parking areas, and walkways	PCBs (340 mg/kg, roadway) Lead (340 mg/kg, roadway) Arsenic (09 mg/kg, roadway surface) Cadmium (373 mg/kg, beneath unpaved roadway)
Surface soil, various locations	PCBs (1,100 mg/kg to 51,000 mg/kg, fenced area) Lead (2,200 mg/kg, soil) Arsenic (25.7 mg/kg, soil) Cadmium (36.1 mg/kg, soil) Chromium (78.6 mg/kg, soil) Copper (3,020 mg/kg, soil) Mercury (2.9 mg/kg, soil) Silver (26.7 mg/kg, soil) Zinc (1,380 mg/kg, soil)
Subsurface soil, various locations	PCBs (22,000 mg/kg, subsurface soil) Lead (7,460 mg/kg)
Stream	Trichloroethene (120 ug/kg, sediment; 2 ug/l, surface water)
Foot/bike path	PCBs (3,000 mg/kg, soil) Lead (66,000 mg/kg, soil) Cadmium (271 mg/kg, soil)

According to the Work Plan, contaminated soil has been identified at unpaved, gravel driveways, parking areas and walkways. These areas will be paved over to eliminate potential imminent danger to the site occupants, the surrounding population, and the general public. The area for paving has been estimated

based on site plans, environmental reports, observation of existing conditions. Actual area shall be based on land survey and engineering design activities.

6.0 EXCLUSION ZONE

For the purpose of this Site Operations Plan, the Exclusion Zone is defined as the area where contaminated media may be encountered during the course of implementing the work plan. In addition to areas of known PCB contamination, areas where drainage controls will be installed shall be incorporated as part of the exclusion zone, including but not limited to detention ponds, stormwater retention basins, trenches and delay structures.

7.0 PROJECT ORGANIZATION

The following and organizations key personnel are critical to the planned activities at the Site. The organization structure will be reviewed and updated periodically by the facility coordinator.

- Lead Agency:
  U.S. Environmental Protection Agency, Region II
  Removal Action Branch
  2890 Woodbridge Avenue
  Edison, NJ 08837

- Owner/Respondent:
  DSC of Newark Enterprises, Inc.
  70 Blanchard Street
  Newark, NJ 07105

- Owner's Consultant:
  Oxford Environmental, Inc.
  43 Route 46 East
  Pine Brook, NJ 07058

- Subcontractor(s):
  AWT Environmental Services, Inc. (HAZMAT Contractor)
  Accredited Laboratories, Inc. (Environmental Laboratory)

8.0 KEY PROJECT PERSONNEL

The following organizational chart identifies key project personnel responsible for the oversight and implementation of the Site Operations Plan.

- On-Scene Coordinator (OSC):
  Eric Wilson, USEPA Region II

Phone: (732) 906-6991 Fax: (732) 906-6182

The OSC shall be the designated authority having jurisdiction over the performance of work on the site and shall ensure compliance with the Order.

- Facility Coordinator:
  Timothy Francisco, Oxford Environmental, Inc.
  Phone: (973) 244-0600 Fax: (973) 244-0722

  The facility coordinator, on behalf of the Respondent (DSC of Newark Enterprises, Inc.), is responsible for the overall management, coordination and implementation of the Site Operations Plan. All references to Site Manager in the HASP shall be understood to mean the Facility Coordinator or his designee. All references to Project Leader within the HASP shall be understood to mean the contractor's supervisor.

9.0 SITE HEALTH & SAFETY PERSONNEL

Oxford Environmental, Inc. will be responsible for overall site health and safety monitoring and oversight during the installation of the soil cap, paving activities and associated subsurface construction activities (e.g. soil erosion and drainage control).

The following Oxford personnel are assigned to implement and enforce this HASP:

- Site Health & Safety Officer (HSO): William H. Bilgeshouse
  The Site Health and Safety Officer (HSO) has total responsibility for ensuring that the provisions of this HASP are adequate and implemented in the field. The Site HSO will be responsible for ensuring compliance with the provisions of the HASP, including, but not limited to site control and security, air monitoring, evaluation of personal protective equipment, appropriateness of respiratory protection, assessment of hazards, emergency notification, and decontamination. It is also the responsibility of the HSO to conduct site inspections on a regular basis in order to ensure the effectiveness of this plan. Changing field conditions may require decisions to be made concerning adequate protection programs.

- Health & Safety Manager (HSM): Scott M. Donnenberg, CSP
  The HSM will be responsible for conducting health and safety audits and provide technical consultation on health and safety issues and concerns that arise during the course of the project.

10.0 SITE CONTROL

An on-site command post shall be established on-site. The HSO shall coordinate site access and security on site. A safe perimeter will be established in all directions of

the area of concern. No unauthorized persons shall be allowed within this area. The buddy system shall be employed during all field operations.

The prevailing wind conditions are variable and shall be assessed by the HSO on a daily basis prior to the performance of work activities. The Support Zone (clean area) and Contamination Reduction Zone (decontamination area) shall be located upwind from the Exclusion Zone (the contaminated area or Hot Zone.

Control boundaries shall be established and designated as follows:

Control Zone	*Control Boundary*	*Wind Direction*
Exclusion (Hot) Zone	Safety fencing / barricade (orange)	⇧
Contamination Reduction (Decontamination) Zone	Caution tape (yellow)	⇧
Support Zone (Field Office)	Traffic cones (safety orange)	⇧

All personnel arriving or departing the site shall log in and out with the record-keeper or HSO. All activities on site must be cleared through the Site Manager or EPA's OSC. All other visitors site shall check in with the Health and Safety Officer or Project Leader. Upon satisfactory presentation of credentials and training certifications, he/she shall log in and out with the record-keeper.

All activities of the visitor on site must be cleared through the Project Leader prior to commencing them. Any person found to be in violation of the HASP, poses a potential liability to the safety and welfare of personnel, the general public or the environmental, or as determined by the HSO/Site Manager shall be escorted off-site and shall not be allowed back on site under any circumstances.

11.0 WARNING SIGNS

The following warning sign shall be posted at all entrances to the site and at intervals along the proposed property boundary fence line.

DANGER
HAZARDOUS MATERIAL PRESENT
DO NOT ENTER
AUTHORIZED PERSONNEL ONLY

12.0 HAZARD ASSESSMENT

The following substance(s) are known or suspected to be present on site. The estimated concentration of contaminants to be encountered, the media in which those hazards exist, and the potential routes for exposure are also provided below:

Known or Suspected Contaminants Present On Site	*Route of Exposure, Health Hazard, Symptoms, and Exposure Limits*
Polychlorinated Biphenyls (PCBs, Chrolodiphenyl, Aroclor® 1254, Aroclor® 1248) CAS No. 11097-69-1	Hazard: Inhalation, Absorption (Skin), Ingestion, Contact (Skin and/or eye contact) Symptoms: Eye irritation, chloracne; liver damage; carcinogen NIOSH: 0.001 mg/m3 OSHA: 0.5 mg/m3
Lead (as Pb)	Hazard: Inhalation, Ingestion, Contact (Skin and/or eye contact) Symptoms: Weakness, fatigue insomnia, facial pallor, anorexia, malnutrition, constipation, abdominal pain, colic, anemia, gingival lead line, tremor, paralysis wrist/ankles, encelopathy, neoropathy, eye irritation, hypotension NIOSH: 0.100 mg/m3 OSHA: 0.05 mg/m3 IDLH: 1700 mg/m3
Arsenic (inorganic as As) CAS No. 7440-38-2	Hazard: Inhalation, Ingestion, Absorption (Skin), Contact (Skin and/or eye contact), carcinogen Symptoms: ulceration of nasal septum, dermatitis, gastrointestinal disturbances, peripheral neuropathy, respiratory irritation, hyper-pigmentation of skin NIOSH: 0.002 mg/m3 (15-min) OSHA: 0.010 mg/m3 IDLH: 100 mg/m3

Cadmium (dust) CAS No. 7440-43-9	Hazard: Inhalation, Ingestion, carcinogen Symptoms: pulmonary edema, dyspnea, cough, chest tightness, substernal pain, headaches, chills, muscle aches, nausea, vomiting, diarrhea, insomnia, emphysema, proteinuria, mild anemia NIOSH: lowest feasible conc. OSHA: 0.2 mg/m3, C 0.6 mg/m3 IDLH: 50 mg/m3
Chromium CAS No. 7440-47-3	Hazard: Inhalation, Ingestion Symptoms: histolilogic fibrosis of lungs NIOSH: 0.5 mg/m3 OSHA: 1.0 mg/m3 IDLH: not established
Copper CAS No. 7440-50-8	Hazard: Inhalation, Ingestion, Contact (Skin and/or eyes) Symptoms: irritation of nasal mucus membranes/pharynx, nasal perforation, eye irritation, metallic taste, dermatitis NIOSH/OSHA: 1.0 mg/m3 IDLH: not established
Mercury (metallic) CAS No. 7439-97-6	Hazard: Inhalation, Absorption (skin), Contact (Skin and/or eyes) Symptoms: cough, chest pain, dyspnea, bronchial pneuitis, tremor, insomnia, irritability, indecision, headaches, fatigue, weakness, stomatitis, salivation, gastrointestinal disturbance, anorexia, low weight, proteinuria, eye and skin irritation NIOSH/OSHA: 0.05 mg/m3 (skin) IDLH: 28 mg/m3

Silver (metal dust) CAS No. 7440-22-4	Hazard: Inhalation, Ingestion, Contact (Skin and/or eyes) Symptoms: blue-gray eyes, nasal septum, throat, skin; skin irritation, ulceration; gastrointestinal disturbance NIOSH/OSHA: 0.01 mg/m3 IDLH: not established
Zinc CAS No. 7440-66-6	Hazard: Inhalation Symptoms: sweet, metallic taste; dry throat, cough, chills, fever; tight chest, dyspnea, rales, reduced pulmonary function; headaches; blurred vision; muscle camps, low back pain; nausea,; vomiting; fatigue, malaise NIOSH/OSHA: 5 mg/m3; STEL 10 mg/m3 IDLH: not established
1,2-Dichloroethene CAS No. 156-60-5	Hazard: Inhalation, Ingestion, Contact (skin) Symptoms: irritation of eye, respiratory system; CNS depression NIOSH/OSHA: 200 ppm (790 mg/m3) IDLH: 4000 ppm
Trichloroethene CAS No. 79-01-6	Hazard: Inhalation, Ingestion, Contact (skin), carcinogen Symptoms: headaches, vertigo; visual disturbance, tremors, somnia, nausea, vomiting,; eye irritation; dermatitis; cardiac arryhthmias, paresthesia NIOSH: 25 ppm OSHA: 50 ppm (270 mg/m3), STEL 200 ppm (1080 mg/m3) IDLH: 1000 ppm

Source: NIOSH Pocket Guide to Chemical Hazards, 1990.

Additional hazards may be encountered on site, but have not been identified. When they are identified, a hazard assessment shall be performed for each

substance. Hazardous substance information form(s) for the identified substance(s) are attached.

13.0 EMPLOYEE TRAINING

All personnel involved with on-site operations shall meet the following minimum requirements for training: initial OSHA 40-hour and annual 8-hour refresher Hazardous Waste Operations and Emergency Response training in accordance with 29 CFR 1910.120(e).

13.1 Project Personnel

The following table summarizes the training of project personnel.

Name	*Title/Function*	*Training*
Timothy Francisco	Facility Coordinator Project Manager	40-hour HAZWOPER 8-hour Site Supervisor
Gary Boyer	Project Engineer	40-hour HAZWOPER 8-hour Site Supervisor
Scott M. Donnenberg, CSP	Health & Safety Manager	40-hour HAZWOPER Worker 8-hour Site Supervisor Emergency Medical Technician
William H. Bilgeshouse	Project Superintendent/ Health & Safety Officer	40-hour HAZWOPER Worker HAZMAT First Responder

13.2 Other Personnel

1. General site workers (such as equipment operators, general laborers and supervisory personnel) engaged in hazardous substance removal or other activities which expose or potentially expose workers to hazardous substances and health hazards shall receive a minimum of 40 hours of instruction off the site, and a minimum of three days actual field experience under the direct supervision of a trained, experienced supervisor.

2. Workers on site only occasionally for a specific limited task (such as, but not limited to, ground water monitoring, land surveying, or geo-physical surveying) and who are unlikely to be exposed over permissible exposure limits and published exposure limits shall receive a minimum of 24 hours of instruction off the site, and the minimum of one day actual field experience under the direct supervision of a trained, experienced supervisor.

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3. Workers regularly on site who work in areas which have been monitored and fully characterized indicating that exposures are under permissible exposure limits and published exposure limits where respirators are not necessary, and the characterization indicates that there are no health hazards or the possibility of an emergency developing, shall receive a minimum of 24 hours of instruction off the site and the minimum of one day actual field experience under the direct supervision of a trained, experienced supervisor.

4. Workers with 24 hours of training, and who become general site workers or who are required to wear respirators, shall have the additional 16 hours and two days of training necessary to total the training.

5. Management and supervisor training. On-site management and supervisors directly responsible for, or who supervise employees engaged in, hazardous waste operations shall receive 40 hours initial training, and three days of supervised field experience and at least eight additional hours of specialized training at the time of job assignment on such topics as, but not limited to, the employer's safety and health program and the associated employee training program, personal protective equipment program, spill containment program, and health hazard monitoring procedure and techniques.

6. Qualifications for trainers. Trainers shall be qualified to instruct employees about the subject matter that is being presented in training. Such trainers shall have satisfactorily completed a training program for teaching the subjects they are expected to teach, or they shall have the academic credentials and instructional experience necessary for teaching the subjects. Instructors shall demonstrate competent instructional skills and knowledge of the applicable subject matter.

7. Training certification. Employees and supervisors that have received and successfully completed the training and field experience shall be certified by their instructor or the head instructor and trained supervisor as having successfully completed the necessary training. A written certificate shall be given to each person so certified. Any person who has not been so certified or who does not meet the requirements shall be prohibited from engaging in hazardous waste operations.

8. Emergency response. Employees who are engaged in responding to hazardous emergency situations at hazardous waste clean-up sites that may expose them to hazardous substances shall be trained in how to respond to such expected emergencies.

9. Refresher training. Employees, managers and supervisors shall receive eight hours of refresher training annually, any critique of incidents that have occurred in the past year that can serve as training examples of related work, and other relevant topics.

10. Equivalent training. Employers who can show by documentation or certification that an employee's work experience and/or training has resulted in training equivalent to that training shall not be required to provide the initial training requirements of those paragraphs to such employees and shall provide a copy of the certification or documentation to the employee upon request. However, certified employees or employees with equivalent training new to a site shall receive appropriate, site specific training before site entry and have appropriate supervised field experience at the new site. Equivalent training includes any academic training or the training that existing employees might have already received from actual hazardous waste site work experience.

13.3 Subcontractors & Visitors

All subcontractors and their employees shall meet the minimum training requirements as set forth in 29 CFR 1010.120 (e), OSHA 40-hour Hazardous Waste Operations and Emergency Response. Authorized visitors shall also meet these training requirements. Evidence of training shall be submitted prior to commencement of site activities.

14.0 MEDICAL SURVEILLANCE

14.1 Applicability

Oxford Environmental, Inc. maintains a medical surveillance program in accordance with 29 CFR 1910.120 (f). The medical surveillance program has been instituted for:

1. All employees who are or may be exposed to hazardous substances or health hazards at or above the permissible exposure limits or, if there is no permissible exposure limit, above the published exposure levels for these substances, without regard to the use of respirators, for 30 days or more a year;

2. All employees who wear a respirator for 30 days or more a year or as required by 29 CFR 1910.134;

3. All employees who are injured, become ill or develop signs or symptoms due to possible overexposure involving hazardous substances or health hazards from an emergency response or hazardous waste operation; and

4. Members of HAZMAT teams.

Note: Organizations and entities involved in the project shall be responsible for maintaining medical surveillance program for their employees.

14.2 Frequency Of Medical Examinations

Medical examinations and consultations shall be made available to each employee covered under the medical surveillance program on the following schedules:

1. Prior to assignment;

2. At least once every twelve months for each employee covered unless the attending physician believes a longer interval (not greater than biennially) is appropriate;

3. At termination of employment or reassignment to an area where the employee would not be covered if the employee has not had an examination within the last six months;

4. As soon as possible upon notification by an employee that the employee has developed signs or symptoms indicating possible overexposure to hazardous substances or health hazards, or that the employee has been injured or exposed above the permissible exposure limits or published exposure levels in an emergency situation;

5. At more frequent times, if the examining physician determines that an increased frequency of examination is medically necessary.

14.3 Examinations For Injury Or Exposure

For employees who may have been injured, received a health impairment, developed signs or symptoms which may have resulted from exposure to hazardous substances resulting from an emergency incident, or exposed during an emergency incident to hazardous substances at concentrations above the permissible exposure limits or the published exposure levels without the necessary personal protective equipment being used:

1. As soon as possible following the emergency incident or development of signs or symptoms;

2. At additional times, if the examining physician determines that follow-up examinations or consultations are medically necessary.

14.4 Content Of Medical Examinations And Consultations.

1. Medical examinations include a medical and work history (or updated history if one is in the employee's file) with special emphasis on symptoms related to the handling of hazardous substances and health hazards, and to fitness for duty including the ability to wear any required PPE under conditions (i.e., temperature extremes) that may be expected at the work site.

2. The content of medical examinations or consultations made available to employees shall be determined by the attending physician. The guidelines in

the Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities shall be consulted.

3. All medical examinations and procedures shall be performed by or under the supervision of a licensed physician, preferably one knowledgeable in occupational medicine, and shall be provided without cost the employee, without loss of pay, and at a reasonable time and place.

4. Information provided to the physician. The employer shall provide one copy of the standard and its appendices to the attending physician, and in addition the following for each employee:

   (i) A description of the employee's duties as they relate to the employee's exposures.
   (ii) The employee's exposure levels or anticipated exposure levels.
   (iii) A description of any personal protective equipment used or to be used.
   (iv) Information from previous medical examinations of the employee which is not readily available to the examining physician.
   (v) Information required by 29 CFR 1910.134.

14.5 Physician's Written Opinion

Oxford shall obtain and furnish the employee with a copy of a written opinion from the attending physician containing the following:

1. The physician's opinion as to whether the employee has any detected medical conditions which would place the employee at increased risk of material impairment of the employee's health from work in hazardous waste operations or emergency response, or from respirator use.

2. The physician's recommended limitations upon the employee's assigned work.

3. The results of the medical examination and tests if requested by the employee.

4. A statement that the employee has been informed by the physician of the results of the medical examination and any medical conditions which require further examination or treatment.

The written opinion shall not reveal specific findings or diagnoses unrelated to occupational exposures.

14.6 Recordkeeping

An accurate record of the medical surveillance shall be retained. This record shall be retained for the period specified and meet the criteria of 29 CFR 1910.20. The records shall include at least the following information:

1. The name and social security number of the employee;

2. Physician's written opinions, recommended limitations, and results of examinations and tests;

3. Any employee medical complaints related to exposure to hazardous substances;

4. A copy of the information provided to the examining physician by the employer, with the exception of the standard and its appendices.

The records shall be retained for a period of employment and as specified in 29 CFR 1910.20.

15.0 PERSONAL PROTECTIVE EQUIPMENT

The type of protective equipment recommended for this project has been based on the preliminary evaluation of environmental studies and prior experience with projects of the same type. Any changes or revisions of the recommended personal protective measures shall be by Oxford's Certified Safety Professional (CSP), his designated representative or the Health & Safety Officer.

The following prescribes a personal protection plan when possible exposure to hazardous materials exists. Workers involved with hazardous materials shall be assigned personal protective equipment and proper instruction on its proper use and maintenance.

Personnel who handle material known to be hazardous, or of unknown toxicity are required to take sufficient precautions. It is the responsibility of the designated Health and Safety Officer (HSO) to specify the correct level of protective equipment to be used on the job. All field personnel shall receive training in the proper use and methods of wearing protective equipment. The level of protective equipment is determined by the types and levels of material present at the site. These levels are determined through specific knowledge of the hazardous materials and air monitoring as described in this Plan.

16.0 SITE SPECIFIC LEVEL OF PROTECTION

Based on evaluation of potential hazards, the following levels of personal protection have been designated for the applicable work areas or tasks:

Location	*Job Functions*	*Recommended Level of Protection*
Exclusion Zone	Drum Stabilization, Sampling, and Characterization.	Level A☐ Level B☒ Level C☐ Modified Level D☐ • For each specific task, conduct continuous monitoring and utilize recommended level of protection. • Once it is established that airborne concentrations of contaminants are undetectable or below the action level, downgrade PPE to Level C. • If real time air monitoring indicates any detectable airborne organic vapors, dust levels above the action level or IDLH conditions, upgrade PPE as directed by HSO.
Contamination Reduction Zone	Decontamination (Personnel and Equipment) Sample Management	Level A☐ Level B☐ Level C☒ Modified Level D☐ • Conduct real time monitoring as indicated in the monitoring schedule. • If airborne contaminant concentrations exceed the Action Levels, evaluate the scope of work, work procedures, and/or engineering controls to minimize airborne concentrations. • If airborne contaminant concentrations exceed the OSHA Permissible Exposure Limits (PELs), upgrade PPE as directed by HSO, in consultation with the HSM.

Support Zone	Mobilization Demobilization Deliveries Office Trailer Break Areas	Level A ☐ Level B☐ Level C☐ Modified Level D☒ • Conduct real-time monitoring as indicated in the monitoring schedule. • In the event, airborne contaminant concentrations are detectable, the HSO, in consultation with the HSM, take precautionary measures to evacuate the zone, isolate the area, determine the source, and take appropriate measures to eliminate the source. • Under no circumstances shall the Support Zone be occupied until cleared by the HSO.

16.1 Specified Protective Equipment

Based on the information gathered from previous site investigations and analytical data, the following site specific protective equipment is provided as the minimum recommended level of protection to be utilized on site.

Modified Level C	***Level C***
• Hard hat • Safety glasses/goggles • Nitrile gloves (outer) • Latex gloves (inner) • Tyvek or splash apron • Disposable booties (chemical resistant) • Splash aprons is recommended when handling contaminated water or equipment. • Full-face air purifying respirator (on-hand)	• Hard hat • Safety glasses/goggles • Nitrile gloves (outer) • Latex gloves (inner) • Full-face air purifying respirator • Tyvek or splash apron • Disposable booties (chemical resistant) • Splash aprons is recommended when handling contaminated water or equipment.

Important: Changes to the above levels of protection shall be made by the HSO and Project Leader.

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16.2 Changing Field Conditions

In the event of changing field conditions, including, but not limited to new work tasks, uncharacterized work areas, adverse weather conditions, or elevated airborne concentrations of contaminants from air monitoring data, continuous monitoring shall be implemented. If the action levels are reached or exceeded, Level B personal protective equipment shall be instituted. If the permissible exposure limits are reached or exceeded, reevaluate the situation and take appropriate measures to minimize airborne concentrations.

17.0 SITE MONITORING

17.1 Monitoring Objectives

Health and safety (H&S) monitoring will be conducted on the site during all field activities to accomplish the following objectives:

1. To ensure proper selection of personal protective equipment;
2. To delineate areas where personal protection is needed;
3. To evaluate the potential health effects of exposure to contaminants; and
4. To protect and safeguard the health and safety of the workers, the general public and the environment.

17.2 Exposure Monitoring

1. Monitoring shall be performed where there may be a question of employee exposure to hazardous concentrations of hazardous substances in order to assure proper selection of engineering controls, work practices and personal protective equipment so that employees are not exposed to levels which exceed permissible exposure limits, or published exposure levels if there are no permissible exposure limits, for hazardous substances.
2. Air monitoring shall be used to identify and quantify airborne levels of hazardous substances and safety and health hazards in order to determine the appropriate level of employee protection needed on site.

17.3 Initial Entry

Upon initial entry, representative air monitoring shall be conducted to identify and IDLH condition, exposure over permissible exposure limits or published exposure levels, exposure over a radioactive material's dose limits or other dangerous condition such as the presence of flammable atmospheres or oxygen-deficient environments.

17.4 Periodic Monitoring

Periodic monitoring shall be conducted when the possibility of an IDLH condition or flammable atmosphere has developed or when there is indication that exposures may have risen over permissible exposure limits or published exposure levels since prior monitoring. Situations where it shall be considered whether the possibility that exposures have risen are as follows:

(i) When work begins on a different portion of the site.
(ii) When contaminants other than those previously identified are being handled.
(iii) When a different type of operation is initiated (e.g., drum opening as opposed to exploratory well drilling).
(iv) When employees are handling leaking drums or containers or working in areas with obvious liquid contamination (e.g., a spill or lagoon).

17.5 Monitoring of High-Risk Employees

After the actual clean-up phase of any hazardous waste operation commences (for example, when soil, surface water or containers are moved or disturbed), Oxford will monitor those employees likely to have the highest exposures to hazardous substances and health hazards likely to be present above permissible exposure limits or published exposure levels by using personal sampling frequently enough to characterize employee exposures.

If the employees likely to have the highest exposure are over permissible exposure limits or published exposure limits, then monitoring shall continue to determine all employees likely to be above those limits.

Oxford may utilize a representative sampling approach by documenting that the employees and target chemicals chosen for monitoring are based on the criteria stated above.

18.0 MONITORING INSTRUMENTATION

Direct reading instruments will be used to give instantaneous information concerning levels of contaminants. These shall include but are not limited to:

1. Combustible gas/oxygen detector for detection of flammable or explosive atmospheres and oxygen deficiency;

2. Organic vapor meter (OVM) or photoionization detector (PID) for organic vapors, specifically *1,2-Dichloethene and Trichloroethene.*

3. Detector tubes for monitoring specific air contaminants; and

4. Respirable dust monitor for total nuisance and toxic dusts.

All field screening and monitoring devices shall be operated by a qualified individual knowledgeable about the instrument's operating principles and limitations.

19.0 MONITORING SCHEDULE

The above monitoring instruments shall be used on site at the specified intervals and locations:

Monitoring Instrument	*Exclusion Zone*	*Contamination Reduction Zone*	*Support Zone*
Combustible Gas Indicator/ Oxygen Monitor	Continuous	Continuous	Continuous
Detector Tubes	Daily	Daily	Daily
OVM/PID	Continuous	Continuous	Hourly
Respirable Dust Monitor	Continuous	Continuous	Hourly
Personal Air Sampling	Hourly	Hourly	Hourly

19.1 Action Levels

Exceeding the following Action Levels (AL) will require the re-evaluation of potential hazards, engineering controls, personal protective equipment, or work procedures by the HSO, and the appropriate response to be taken.

Hazard	*Action Level*	*Response*
Flammability Combustibility	10% of LEL	stop work, evacuate work area, determine source if possible; ventilate area, re-occupy as directed by HSO
Oxygen Deficiency	<19.5%	stop work, evacuate area; wait until oxygen content is greater than 19.5%
Organic Vapors (instrument calibrated to Methane)	0.1 ppm	stop work, determine source if possible; if detectable re-assess personal protective equipment
Total Nuisance Dust (incl. heavy metals)	2.5 mg/m^3	stop work, determine source if possible; if detectable re-assess PPE.

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20.0 DUST MONITORING

Dust monitoring shall be performed using direct-reading respirable dust monitor (GCA Miniram) and OSHA/NIOSH approved air sampling methods via air filter for laboratory analysis. Due to the presence of several contaminants, the following table of calculated exposure limits shall be utilized to determine exposure limits:

Site Contaminants	OSHA PEL (mg/m^3)	ACGIH TLV (mg/m^3)	Soil $Conc._{max}$ (ppm)	$Conc._n/El_n$ (ppm)
PCBs	0.5	0.001	22000	44000
Lead	0.05	0.1	340	6800
Cadmium	0.005	0.0025	19	3800
			Total	54600

Calculating the Exposure Limit of Mixture*:

Comment:

$$EL_{mix} = \frac{(10^6\ mg/kg)\ /\ Safety\ Factor)}{(conc_1/EL_1 + conc_2+EL_2+...conc_n/El_n)}$$

$$EL_{mix} = \frac{10^6\ mg/kg\ /\ 4}{54600} = 4.58\ mg/m^3$$

Therefore the site-specific exposure limit to contaminated soil/dust is ***5 mg/m³***

20.1 Action Levels

Due to the proximity of work areas to occupied businesses and residences, dust control measures will be implemented during all construction activities. If dust observed migrating from work areas to neighboring residential or commercial areas or to occupied buildings within the industrial park, work will stop and dust control measures will be implemented. Work will continue upon satisfactory implementation of dust control measures.

To ensure that dust control measures are implemented when required, dust monitoring shall be conducted continuously in the immediate areas of construction and at perimeter locations downwind of the work areas. When dust monitor readings reach or exceed **an action level of 2.5 mg/m³** for total nuisance dust, work shall immediately stop and the above dust control measures implemented. Work shall continue upon satisfactory implementation of dust control measures and dust monitor readings are below the action level.

* Establishing Exposure Limits and Selecting Levels of Protection for Hazardous Waste Projects. Marlowe, Christopher S. E., CD Federal Programs Corporation, Fairfax, Virginia.

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20.2 Corrective Measures

In the event that the dust monitor indicate readings equal to or greater than the action level, work shall immediately cease and the HSO shall reevaluate the work procedures, engineering controls, and implement dust control measures until dust readings are consistently below the action level.

21.0 UNKNOWN HAZARDS

In all situations where the types of potentially hazardous waste material is unknown, maximum protection levels are maintained until the hazards can be adequately assessed. A decision to downgrade or upgrade the level of personnel protection by the HSO will be based on:

1. Readings from real time monitoring instrumentation (i.e. explosimeter, organic vapor analyzer, toxic gas monitor)

2. Visual observations such as stressed vegetation, wind, dust, temperatures, discoloration of soils, evidence of leaking drums, product vessels.

3. Sensory observations such as odors and fumes

4. Specific information of the known chemical contaminants (i.e. low flash point, reactivity)

22.0 COMMUNICATIONS PROCEDURES

22.1 Buddy System

The buddy system shall be utilized when respiratory protection is in use. Line of sight will be established during all other operations.

22.2 Hand Signals

- thumbs up with motion ..... lift up
- thumbs down ..... no good, try again
- point left ..... move this way, follow me
- point right ..... move this way, follow me
- point up with circling motion ..... lift up
- one hand open ..... stop
- ..... both hands open with back up
- point down ..... wait here or pour here
- fore finger and index finger up ..... pause, wait a minute
- thumb and fore finger touching ..... okay

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22.3 Radio Communications

Channel (TBD) has been designated as the radio frequency for personnel in the Exclusion Zone. All other on-site communications will use channel (TBD).

Personal in the Exclusion Zone should remain in constant radio communication or within sight of the Project Leader. Any failure of radio communication requires an evaluation of whether personnel should leave the Exclusion Zone.

23.0 DECONTAMINATION

Decontamination procedures ensure that personnel or equipment in the contamination zone do not spread or carry hazardous materials into the decontamination zone. The procedures will be revised whenever the type of personal protective clothing or equipment changes, the site conditions change, or the site hazards are reassessed based on new information.

23.1 Designated Decontamination Area

Decontamination areas shall be established prior to the commencement of any site activities, without exception. All site personnel shall review and be oriented to site-specific safety, work practices, decontamination and emergency procedures prior to entering the Exclusion Zone. A designated area will be established for personnel decontamination and equipment decontamination. Personnel and equipment decontamination should be separated by no less than 25 feet or as designated by the HSO. The equipment decontamination area should be downwind of the personnel decontamination area.

23.2 Personnel Decontamination

All workers entering the exclusion, contamination reduction zones shall employ the correct procedures for decontamination and for changing from contaminated clothing to clean clothing as described below:

Station	*Type*	*Decontamination Procedure*
1	Plastic sheet placed on ground downwind of personnel decontamination stations.	Field Equipment - Drop field equipment (sampling equipment, instruments and samples) on sheet.
2	A wash tub equipped with large brush filled with a decontamination solution (soap and water).	Outer Garments - Use scrub brush to remove gross contamination.

3	A second wash tub filled with rinse solution ("clean" water).	Outer Garments - Rinse off decontamination solution.
4	A third wash tub equipped with large brush filled with decontamination solution (soap and water).	Outer Garments - Use scrub brush to remove gross contamination.
5	A fourth wash tub filled with rinse solution ("clean" water).	Outer Garments - Final rinse decontamination solution from outer garments with clean water.
6	Two buckets filled with decontamination solution (soap and water)	Boots and Gloves - Use scrub brush and decontamination solution to remove all gross contamination.
7	One bucket filled with rinse solution ("clean" water)	Boots and Gloves - Rinse decontamination from boots and gloves with clean water.
8	A trash can with plastic liner	Disposable Items - Remove disposable items such as gloves, boots, Tyvek suits in trash can.
9	Plastic sheet on ground	Respirators - Drop respiratory equipment on plastic sheet for decontamination.
10	Trash can with plastic liner	Clothing - Place any clothing items used under protective clothing in plastic lined trash can and don clean street clothing.

23.3 Equipment Decontamination

All equipment brought into the exclusion and contamination reduction zones shall be decontaminated using the following procedures:

Station	*Type*	*Decontamination Procedure*
1	Plastic sheet placed on ground downwind of personnel decontamination stations.	Field Equipment - Drop field equipment (sampling equipment, instruments and samples) on sheet.

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2	A wash tub equipped with large brush filled with a decontamination solution (soap and water).	Soap wash and rinse, solvent rinse, if necessary.
3	Decontamination pad equipped with water hose, brushes and steam cleaning equipment.	Vehicles - Steam clean heavy equipment, if necessary.

23.4 General Procedures

1. Decon wash water for the activities outlined in this plan will be collected for disposal.

2. Disposable clothing or other equipment that is permanently contaminated will be placed in drums for disposal.

3. Decontamination solutions may vary based on the exact constituents of the contaminants. Also, the extent to which the decontamination is carried out may be modified to address particular contaminants or situations.

4. Personnel assisting with decontamination will be in Level C protection unless air monitoring or other information requires a higher level of protection.

5. In extreme situations when there may be a question as to the degree of contamination known or substances of a highly toxic nature are suspected, protective clothing will be discarded after use of tested decontamination.

6. All decontamination methods are assessed by the HSO at the beginning of a program and reviewed periodically throughout the lifetime of the program for its effectiveness.

23.5 Decontamination Waste - Testing and Disposal

1. Wastes consisting of decontamination fluids, sediments and protective clothing shall be placed in approved containers and a representative sample collected for waste characterization (via TCLP).

2. Waste streams found to exceed the acceptable TCLP levels shall be disposed at an approved facility in accordance with EPA and NJDEP regulations.

3. Waste characterization shall include analysis for PCBs by USEPA SW846, Method 8080.

24.0 EMERGENCY RESPONSE PLAN

24.1 Emergency Notification List

In the event of an emergency, the designated HSO shall for direct and coordinate notification of the appropriate emergency entity listed in the table below.

Agency/Facility	Phone
Police	911
Fire / HAZMAT	911
EMS/Ambulance	911
Poison Control Center	800-764-7661
EPA Region II 24-Hour Hotline	908-548-8730
NJ Department of Environmental Protection Hotline	609-292-7172

The HSO will immediately inform the Project Leader of any emergency situations, health & safety recommendations, and any pertinent issues. If the HSO is not on-site, the above list shall be used to notify of the incident. The HSO shall then be notified at (800) 377-8218 after notifying the appropriate emergency entity.

24.2 Emergency Communications

In the event of an emergency and failure of radio communications, the following air horn signals shall be used:

three intermittent short blasts .....leave the exclusion zone
two short blasts ..... emergency, need help
one long blast .....all clear signal

25.0 CONTINGENCY PLAN

Every remedial/removal action project is posed with the threat of a possible spill of hazardous materials. For this reason, the following requirements are requisite during all operations:

1. In an emergency situation, the HSO or supervision personnel shall implement an emergency contingency plan by assessing the nature of the emergency, notifying appropriate emergency response agency above, and if possible, stabilizing the situation until help arrives.

2. The HSO will coordinate/designate an on-site emergency response team composed of qualified on-site personnel created for specific emergency purposes, such as decontamination, rescue, and entry.

3. Off-site rescue teams (i.e. local HAZMAT) shall be used during particularly dangerous emergency operations, and emergencies beyond the capability of the on-site emergency response team.

26.0 SPILL CONTROL PLAN

The best "emergency spill plan" is planning to avoid and prevent spills. All field procedures will be performed with spill prevention as a key factor. In the event of accidental spillage, the following spill response procedures shall be initiated by on-site personnel if is can be performed safely.

1. First Aid will be administered to injured/contaminated persons. Any employee observing a spill will act immediately to remove and/or protect injured/contaminated persons from any life-threatening situation. First Aid and/or decontamination procedures will be implemented as appropriate.

2. Warn unsuspecting persons/ vehicles of the hazard. Personnel will act to prevent any unsuspecting persons from coming in contact with spilled materials by alerting other nearby persons and by obtaining assistance of other personnel who are familiar with spill control and cleanup techniques.

3. Stop the spill at the source, if possible. Without taking unnecessary risks, personnel will attempt to stop the spill at the source. Personnel will not expend more than a brief effort prior to notifying the Engineer.

4. Utilizing available personal radio communications or other rapid communication procedures, the Engineer will be notified of the spill, including information on material spilled, quantity, personnel injuries, and immediate life-threatening hazards.

5. Spill assessment and primary containment. The Project Leader will make a rapid assessment of the spill and direct primary containment measures which may include, but are not limited to: (i) construction of a temporary containment berm utilizing on-site clay absorbent, earth or absorbent pads or booms; and (ii) digging a sump, installing a polyethylene liner and diverting the spilled material to the sump.

6. Spill clean-up. Personnel will cleanup all spills following the spill clean-up plan developed by the Project Leader. The Project Leader will supervise the spill clean-up. Most equipment, materials, and supplies necessary to clean up a spill will already be immediately available on site. Such items may include, but are not limited to: front-end loader, shovels, rakes, clay absorbent, polyethylene,

personal safety equipment (respirators, gloves, boots, protective coveralls, hard hats, eye shields), steel drums, pumps, and miscellaneous hand tools.

7. Spill clean-up inspection. The Project Leader will inspect the spill site to determine that the spill has been cleaned up. If necessary, soil water or air samples may be taken and analyzed to demonstrate the effectiveness of the spill clean up effort.

8. Identify the cause of the spill and remedial action to prevent recurrence. The Project Leader will determine the cause of the spill and will determine remedial steps to ensure that recurrence is prevented.

27.0 EMERGENCY MEDICAL CARE

First-aid equipment is available on site at the following locations:

First-aid kit..... Decontamination Zone
Emergency eye wash..... Decontamination Zone
Emergency shower ..... Decontamination Zone

28.0 STANDARD EMERGENCY PROCEDURES

The following standard emergency procedures (should be modified as required for incidents) will be used by on site personnel. The Site Safety Officer shall be notified of any on-site emergencies and shall be responsible for ensuring that the appropriate procedures are followed.

28.1 Personnel Injury In The Exclusion Zone

1. Upon notification of an injury in the Exclusion Zone, the designated emergency signal shall be sounded.

2. All site personnel shall assemble at the decontamination line.

3. The rescue team will enter the Exclusion Zone (if required) to remove the injured person to the hotline.

4. The Site HSO and Project Team Leader should evaluate the nature of the injury, and the affected person should be decontaminated to the extent possible prior to movement to the Support Zone.

5. The on-site First Aider shall initiate the appropriate first-aid; contact should be made for an ambulance and notify the designated medical facility (if required). No persons shall reenter the Exclusion Zone until the cause of the injury or symptoms is determined.

28.2 Personnel Injury In The Support/Decontamination Zone

1. Upon notification of an injury in the Support Zone, the Project Team Leader and Site HSO will assess the nature of the injury.

2. If the cause of the injury or loss of the injured person does not affect the performance of site personnel, operations may continue, with the on-site First Aider initiating the appropriate first-aid and necessary follow-up as stated above.

3. If the injury increases the risk to others, the designated emergency signal shall be sounded and all site personnel shall move to the decontamination line for further instructions. Activities on site will stop until the added risk is removed or minimized.

28.3 Fire/Explosion

1. Upon notification of a fire or explosion on site, the designated emergency signal shall be sounded and all site personnel shall be assembled at the decontamination line.

2. The fire department shall be alerted and all personnel moved to a safe distance from the involved area.

28.4 Equipment Failure

1. If any site worker experiences a failure or alteration of personal protective equipment that affects the protection factor, that person and his/her buddy shall immediately leave the Exclusion Zone. Reentry shall not be permitted until the equipment has been repaired or replaced.

2. If any other equipment on site fails to operate properly, the Project Leader and HSO shall be notified and than determine the effect of this failure on continuing operations on site.

3. If the failure affects the safety of personnel or prevents completion of the Work Plan tasks, all personnel shall leave the Exclusion Zone until the situation is evaluated and appropriate actions taken.

29.0 EMERGENCY EGRESS AND EVACUATION

The following emergency escape routes are designated for use in those situations where egress from the Exclusion Zone cannot occur through the decontamination line:

IMPORTANT: In the event of an emergency, the egress route shall be any area immediately and safely accessible by site personnel. Decontamination procedures may be circumvented in an emergency situation.

In all situations, when an on-site emergency results in evacuation of the Exclusion Zone, personnel shall not reenter until:

1. The conditions resulting in the emergency have been corrected.
2. The hazards have been reassessed.
3. The HASP has been reviewed.
4. Site personnel have been briefed on any changes in the HASP.

30.0 DEFINITIONS

"Buddy system" means a system of organizing employees into work groups in such a manner that each employee of the work group is designated to be observed by at least one other employee in the work group. The purpose of the buddy system is to provide rapid assistance to employees in the event of an emergency.

"Clean-up operation" means an operation where hazardous substances are removed, contained, incinerated, neutralized, stabilized, cleared-up, or in any other manner processed or handled with the ultimate goal of making the site safer for people or the environment.

"Decontamination" means the removal of hazardous substances from employees and their equipment to the extent necessary to preclude the occurrence of foreseeable adverse health affects.

"Emergency response" or "responding to emergencies" means a response effort by employees from outside the immediate release area or by other designated responders (i.e., mutual-aid groups, local fire departments, etc.) to an occurrence which results, or is likely to result, in an uncontrolled release of a hazardous substance. Responses to incidental releases of hazardous substances where the substance can be absorbed, neutralized, or otherwise controlled at the time of release by employees in the immediate release area, or by maintenance personnel are not considered to be emergency responses within the scope of this standard. Responses to releases of hazardous substances where there is no potential safety or health hazard (i.e., fire, explosion, or chemical exposure) are not considered to be emergency responses.

"Facility" means (A) any building, structure, installation, equipment ,pipe or pipeline (including any pipe into a sewer or publicly owned treatment works), well, pit, pond, lagoon, impoundment, ditch, storage container, motor vehicle, rolling stock, or aircraft, or (B) any site or area where a hazardous substance has been deposited, stored,

disposed of, or placed, or otherwise come to be located; but does not include any consumer product in consumer use or any water-borne vessel.

"Hazardous materials response (HAZMAT) team" means an organized group of employees, designated by the employer, who are expected to perform work to handle and control actual or potential leaks or spills of hazardous substances requiring possible close approach to the substance. The team members perform responses to releases or potential releases of hazardous substances for the purpose of control or stabilization of the incident. A HAZMAT team is not a fire brigade nor is a typical fire brigade a HAZMAT team. A HAZMAT team, however, may be a separate component of a fire brigade or fire department.

"Hazardous substance" means any substance designated or listed under paragraphs (A) through (D) of this definition, exposure to which results or may result in adverse affects on the health or safety of employees;

(A) Any substance defined under section 101(14) of CERCLA;

(B) Any biological agent and other disease-causing agent which after release into the environment and upon exposure, ingestion, inhalation, or assimilation into any person, either directly from the environment or indirectly by ingestion through food chains, will or may reasonably be anticipated to cause death, disease, behavioral abnormalities, cancer, genetic mutation, physiological malfunctions (including malfunctions in reproduction) or physical deformations in such persons or their offspring;

(C) Any substance listed by the U.S. Department of Transportation as hazardous materials under 49 CFR 172.101 and appendices; and

(D) Hazardous waste as herein defined.

"Hazardous waste" means

(A) A waste or combination of wastes as defined in 40 CFR 261.3, or

(B) Those substances defined as hazardous wastes in 49 CFR 171.8.

"Hazardous waste operation" means any operation conducted within the scope of this standard.

"Hazardous waste site" or "Site" means any facility or location within the scope of this standard at which hazardous waste operations take place.

"Health hazard" means a chemical, mixture of chemicals or a pathogen for which there is statistically significant evidence based on at least one study conducted in accordance with established scientific principles that acute or chronic health effects may occur in exposed employees. The term "health hazard" includes chemicals which are carcinogens, toxic or highly toxic agents, reproductive toxins, irritants, corrosives, sensitizers, heptatoxins, nephrotoxins, neurotoxins, agents which act on the hematopoietic system, and agents which damage the lungs, skin, eyes, or mucous

membranes. It also includes stress due to temperature extremes. Further definition of the terms used above can be found in Appendix A to 29 CFR 1910.1200.

"IDLH" or "Immediately dangerous to life or health" means an atmospheric concentration of any toxic, corrosive or asphyxiant substance that poses an immediate threat to life or would cause irreversible or delayed adverse health effects or would interfere with an individual's ability to escape from a dangerous atmosphere.

"Oxygen deficiency" means that concentration of oxygen by volume below which atmosphere supplying respiratory protection must be provided. It exists in atmospheres where the percentage of oxygen by volume is less than 19.5 percent oxygen.

"Permissible exposure limit" means the exposure, inhalation or dermal permissible exposure limit specified in 29 CFR Part 1910, Subparts G and Z.

"Published exposure level" means the exposure limits published in "NIOSH Recommendations for Occupational Health Standards" dated 1986 incorporated by reference, or if none is specified, the exposure limits published in the standards specified by the American Conference of Governmental Industrial Hygienists in their publication "Threshold Limit Values and Biological Exposure Indices for 1987-88" dated 1987 incorporated by reference.

"Post emergency response" means that portion of an emergency response performed after the immediate threat of a release has been stabilized or eliminated and clean-up of the site has begun. If post emergency response is performed by an employer's own employees who were part of the initial emergency response, it is considered to be part of the initial response and not post emergency response. However, if a group of an employer's own employees, separate from the group providing initial response, performs the clean-up operation, then the separate group of employees would be considered to be performing post-emergency response and subject to paragraph (q)(11) of this section.

"Qualified person" means a person with specific training, knowledge and experience in the area for which the person has the responsibility and the authority to control.

"Site safety and health supervisor (or official)" means the individual located on a hazardous waste site who is responsible to the employer and has the authority and knowledge necessary to implement the site safety and health plan and verify compliance with applicable safety and health requirements.

"Small quantity generator" means a generator of hazardous wastes who in any calendar month generates no more than 1,000 kilograms (2,205 pounds) of hazardous waste in that month.

"Uncontrolled hazardous waste site," means an area identified as an uncontrolled hazardous waste site by a governmental body, whether Federal, state, local or other where an accumulation of hazardous substances creates a threat to the health and safety of individuals or the environment or both. Some sites are found on public lands such as those created by former municipal, county or state landfills where illegal or

poorly managed waste disposal has taken place. Other sites are found on private property, often belonging to generators or former generators of hazardous substance wastes. Examples of such sites include, but are not limited to, surface impoundments, landfills, dumps, and tank or drum farms. Normal operations at TSD sites are not covered by this definition.

Table 1 - Personal Protective Equipment

Personal protective equipment to protect the body against contact with known or anticipated hazardous substances or chemicals is divided into four categories:

1. *Level A* protection will be worn when the highest level of respiratory skin, eye, and mucous membrane protection is needed.

    a. Pressure demand, self contained breathing apparatus.
    b. Fully-encapsulating chemical resistant suit.
    c. Gloves, inner, chemical resistant
    d. Gloves, outer, chemical resistant.
    e. Boots, chemical resistant depending on suit boot construction, worn over or under suit boot.
    f. Hard hat (under suit).
    g. Coveralls (under suit).
    h. Two-way radio communications (intrinsically safe).
    i. Protective footwear.

2. *Level B* protection will be selected when the highest level of respiratory protection is needed, but a lesser level of skin and eye protection. Level B protection is the minimum level recommended on the initial site entries until the hazards have been further identified and defined by monitoring, sampling, and other reliable methods of analysis, and personnel equipment corresponding with those findings utilized.

    a. Pressure-demand self contained breathing apparatus; Chemical resistant clothing (overalls and long sleeved.
    b. jacket, coveralls, hooded two piece splash suit, disposable chemical resistant coveralls).
    c. Coveralls (under splash suit).
    d. Gloves, outer, chemical resistant.
    e. Gloves, inner, chemical resistant.
    f. Boots, outer, chemical resistant.
    g. Two-way radio communications (intrinsically safe).
    h. Hard hat.
    i. Protective footwear.

3. *Level C* protection will be selected when the type of airborne substance is known, concentration measured, criteria for using air-purifying respirators met, and skin and eye exposure is unlikely. Periodic monitoring of the air must be performed.

    a. Full-face, air-purifying respirator (MSHA/NIOSH approved).
    b. Chemical resistant clothing (one piece coverall, hooded two piece chemical) splash suit, chemical resistant hood and apron, disposable chemical resistant coveralls.)
    c. Gloves, outer, chemical resistant. --Gloves, inner, chemical resistant. --Boots, chemical resistant.

d. Cloth coveralls (inside chemical protective clothing). --Two-way radio communications (intrinsically safe).
e. Hard hat.
f. Escape mask (optional).
g. Protective footwear.

4. *Level D* is primarily a work uniform. It will not be worn on any site where respiratory or skin hazards exist.

a. Gloves, outer, chemical resistant.
b. Gloves, inner, chemical resistant.
c. Boots, chemical resistant.
d. Safety glasses.
e. Hard Hat.
f. Protective footwear.

Table 2 - Respiratory Protection Guide

The respiratory protection guide has been prepared in accordance with OSHA 29 CFR Part 1910.134 which specifies that respirators be selected on the basis of the hazards to which workers may be exposed. The American National Standards Institute (ANSI) Z88.2-1980 standard on respiratory practice can be reference for further guidance.

The type of atmospheric concentration of substances need to be identified and may require different level of respiratory protection and skin protection. The following criteria is provided for each level of protection. Selection of the proper personal protection involves meeting one or more criteria.

Level B Protection

1. Atmospheric environments with IDLH concentrations of specific substances that do not represent a skin absorption hazard;
2. Atmospheric environments or airborne contaminant concentrations that do not meet the criteria for use of air-purifying respirators;
3. Atmospheres that contain less that 19.5 percent oxygen;
4. Atmospheric environments with the presence of unknown vapors or gases as indicated by direct-reading organic vapor detection instrument, but vapors and gases that are not suspected of containing high levels of chemicals harmful to skin or capable of being absorbed through intact skin.

Level C Protection

1. Airborne contaminants, liquid splashes, or other direct contact will not adversely affect any exposed skin;
2. Air contaminants have been identified, concentrations measured, and an appropriate respirator canister is available that can remove the contaminant;
3. All criteria for the use of air-purifying respirators are met.

Level D Protection

1. The atmosphere contains no known hazard;
2. Work, functions preclude splashes, immersion, or the potential unexpected inhalation of or contact with hazardous levels of any chemicals.
3. Hazard assessment which initially determines the level of protection to be worn by all personnel will be checked and documented by monitoring procedures.
4. The level of protection depends on the toxicity of chemicals onsite, their concentration in the air, potential for skin contact, flammability characteristics, and general waste site conditions (such as ambient temperature, topography, accessibility, etc.).

General Considerations

- Atmospheres that are oxygen deficient (less that 19.5% O_2)or immediately dangerous to life and health (IDLH)--producing an immediate irreversible or effect on health.
- Atmospheres that may contain high concentrations of unknown levels exceeding the Threshold Limit Values (TLV) for known airborne chemicals, (but are not considered to be Immediately Dangerous to Life and Health (IDLH) conditions).
- Atmospheres in which the airborne concentrations of all contaminants is known to be less than 50X the respective ACGIH TLVs and provide good warning properties (taste, smell, and irritation)
- Emergency escape.
- Potential splash of liquid irritant to chest or facial area (full-face respirator not otherwise specified).
- General eye protection while on waste site.
- Emergency rescue.

Respiratory Protection Selection

Final selection of respirators is based on the following criteria:

a. Nature of the situation encountered;
b. Activities of workers in the hazardous area;
c. Type of inhalation hazard including physical properties, physiological effects on the body, warning properties (e.g., small or irritation) air borne contaminant concentration, established TLVs for toxic materials and established IDLH concentration of toxic material;
d. Location of hazardous area in relation to nearest source of acceptable air supply;
e. Duration of respirator use.

Air-purifying respirators can be used in atmospheres that contain adequate oxygen (19.5% or more) contaminated with chemicals that have good warning properties (taste, smell, irritation) and are not immediately dangerous to life and health. When air purifying respirators are utilized the TLV of the contaminant and the protection factor of the mask are used to determine the maximum use limit of cartridge respirator. As a standard practice, cartridges are changed daily.

Fit-Testing

Oxford requires all employees who may use a respirator to go through qualitative fit-testing.

The following policies are also adhered to in the fitting and use of the respirators:

1. An employee must have passed the fit test.

2. Facial hair, such as beards, sideburns, or certain mustaches that may interfere with the fit test, are not allowed.
3. Persons requiring corrective lenses are provided with specially mounted lenses inside the full-face mask. Under no circumstances may contact lenses and/or glasses be worn while using full-face respirators.

Respirator training is conducted during annual or initial health and safety training. Instruction is given the proper cleaning of respirators, the respirators' capabilities and limitations.

END OF SECTION

31.0 ACKNOWLEDGEMENT

ALL SITE PERSONNEL HAVE READ THE ABOVE PLAN AND ATTACHED SAFETY AND HYGIENE RULES AND ARE FAMILIAR WITH ITS PROVISIONS.

I certify that I have read the Health & Safety Plan, its content, and limitations and agree to abide by the procedures discussed herein to ensure the health and safety of the project personnel and the general public. I further certify that I have received the proper training as set forth in 29 CFR 1910.120 and recognize that toxic and hazardous materials may exist on the site.

AFFILIATION	PRINT NAME	JOB FUNCTION	SIGNATURE	DATE

700939

SAFETY & HYGIENE RULES

The following list of standing orders shall be enforced in the Exclusion Zone and Contamination Reduction/Decontamination Zone.

1) No smoking, eating, or drinking in these zones.

2) No horseplay.

3) No matches or lighters in this zone.

4) Check-in on entering Exclusion zone.

5) Checkout on exiting Exclusion zone.

6) Implement the buddy and communications system.

7) Line of sight must be in position.

8) Wear appropriate level of protection as defined in this HASP.

5

700941

REMOVAL ACTION PLAN
DRUM & WASTE STABILIZATION OF DRUM CLUSTER DISCOVERED IN THE BOUND BROOK AND REAR EMBANKMENT CORNELL-DUBILIER ELECTRONICS SUPERFUND SITE SOUTH PLAINFIELD, NEW JERSEY

The following procedures have been developed to address the discovery of a cluster of approximately twelve (12) drums on the embankment and in the bound brook. These procedures shall be implemented to ensure personnel safety during drum and waste stabilization activities. Field procedures may be revised to fit actual site conditions.

PRELIMINARY ACTIVITIES:

- OE's HSO shall conduct a hazard assessment for each phase of the work (i.e. preliminary activities, water removal activities, and land removal activities).
- A site safety orientation shall be conducted following the completion of the hazard assessment.
- OE personnel (including subcontractor personnel) will conduct a preliminary site reconnaissance and physical inventory of drums and waste debris for stabilization.
- Drums shall be labeled and documented in a field log book with a unique identification number and photographed of its location.
- All drums and overpacks will be deemed as containing hazardous waste until proper characterization has been performed.

REMOVAL ACTIVITIES (WATER)

Water removal activities shall NOT take place if the following condition exist:

- Rapidly moving water (bobber moves at a rate of more than 6" per minute or as determined by HSO).
- Drum is completely submerged (i.e. less than 6" exposed).
- OE personnel will attach choker to top exposed section of drum is a stable bottom exists and water water around the drum does not exceed personnel's mid-calf level.

If water level exceeds employees' mid calf-level or footing is not solid, removal activities shall be performed using suitable flat bottom boat or platform.

REMOVAL ACTIVITIES (LAND)

- All drums identified for removal shall be over packed to ensure that its contents do not leak and pose a threat to worker health, safety and the environment.
- Visibly stained soils and contaminated waste debris materials will also be removed and placed into drums for characterization and disposal.
- All drum inventory information collected during preliminary activities shall be transferred to the outside of the over pack drum.

HEALTH & SAFETY

- All personnel within 15 feet of the shoreline or working on water must don a PFD (personal floatation device).
- All personnel entering or working in the water must be tied off to a attended tether line.
- In addition to the above requirements, personnel protective equipment used shall be in accordance with the HASP for Drum Stabilization.

Via Fax and Regular U.S. Mail

August 24, 2000

Mr. Nick Magriples
On-Scene Coordinator
United States Environmental Protection Agency
Removal Action Branch, Region 2
2890 Woodbridge Avenue
Edison, NJ 08837

Re: Response To Drum Cluster Discovery on Bank of Bound Brook
Cornell-Dubilier Electronics Superfund Site
Administrative Order II-CERCLA-97-109

Dear Mr. Magriples:

We are in receipt of your fax dated August 24, 2000 to our client DSC of Newark Enterprises, Inc. regarding the discovery of a cluster of to 12 drums and two capacitors on the bank of the Bound Brook at the above-referenced site.

Oxford Environmental, Inc. will address this discovery by stabilizing the drums, characterizing their contents, and subsequently disposing of the drums in accordance with procedures outlined in the Materials Handling and Disposal Plan, the Removal Action Work Plan, and the Health and Safety Plan approved by your office.

A Removal Action Addendum will be submitted on August 28, 2000 outlining the scope of work required.

If you have any questions, please do not hesitate to call me at (973) 244-0600.

Very truly yours,

Timothy Francisco
Project Coordinator

Cc: L. Coraci, DSC
D. Sheridan, Esq.

Via Fax and Regular U.S. Mail

August 24, 2000

Mr. Eric Wilson
United States Environmental Protection Agency
Removal Action Branch, Region 2
2890 Woodbridge Avenue
Edison, NJ 08837

Re: Materials Handling and Disposal Plan (Revised)
Cornell-Dubilier Electronics Superfund Site
Administrative Order II-CERCLA-97-109

Dear Mr. Wilson:

Oxford Environmental, Inc. respectfully submits the following revised Materials Handling and Disposal Plan for you review and approval. I have also enclosed a revised project schedule for implementation of removal action activities.

As discussed with Mr. Nick Magriples of your office, the drums and waste debris identified during EPA's site investigation activities will also be stabilized and addressed in accordance with the procedures outlined in the Materials Handling and Disposal Plan, the Removal Action Work Plan, and the Health and Safety Plan.

If the revised plan and project schedule meets with your approval, Oxford will initiate site mobilization and removal action activities as soon as practicable. Please do not hesitate to call me at (973) 244-0600 if you have any questions or concerns.

Very truly yours,

Timothy Francisco
Project Coordinator

Cc: L. Coraci, DSC

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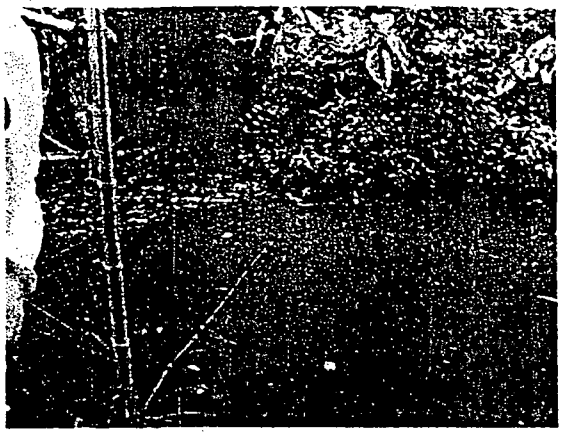
700946



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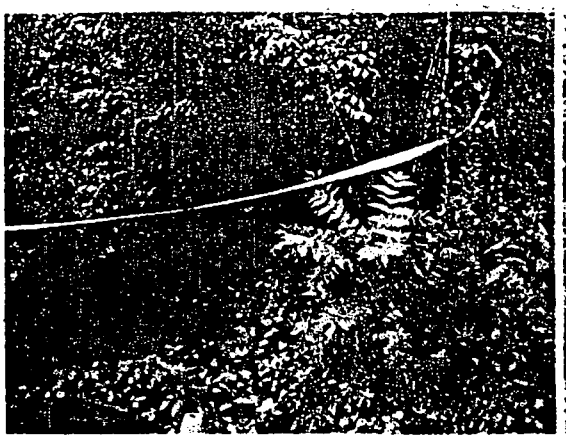
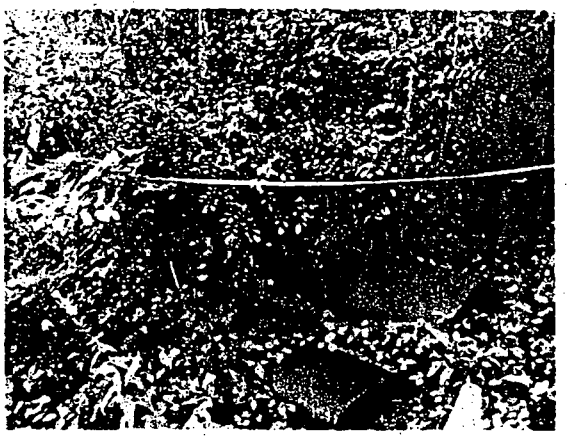
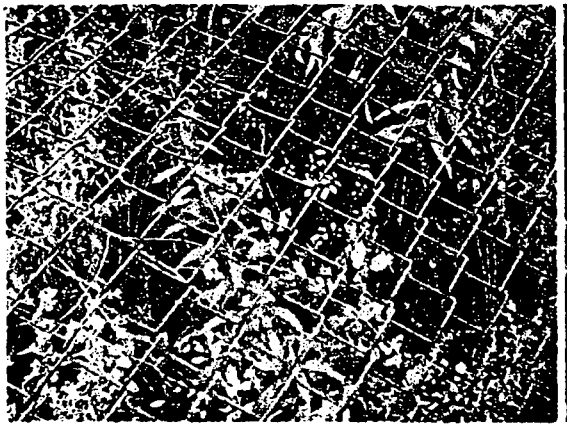
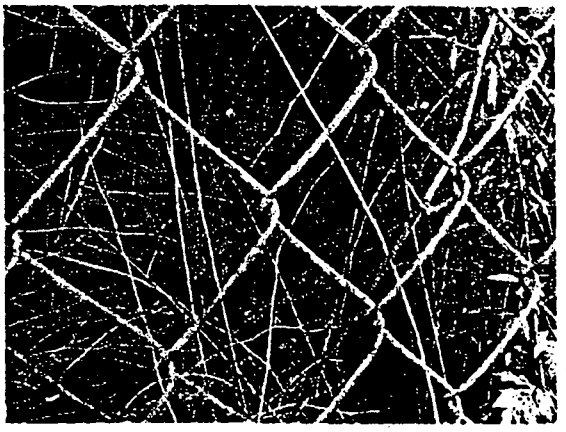
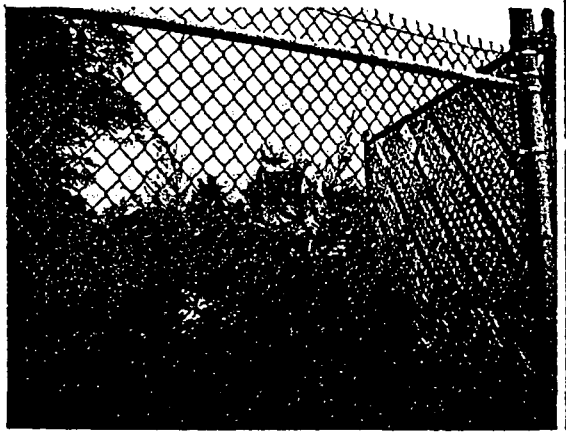
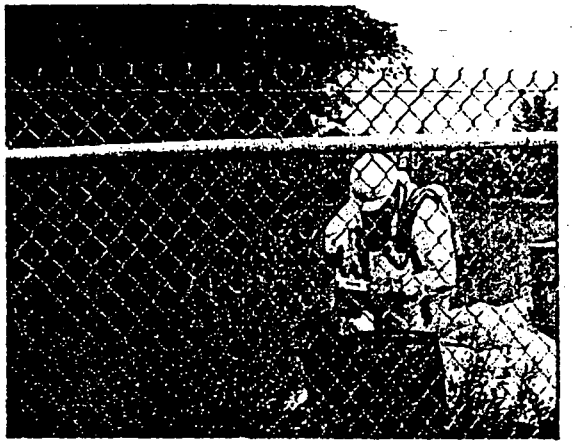

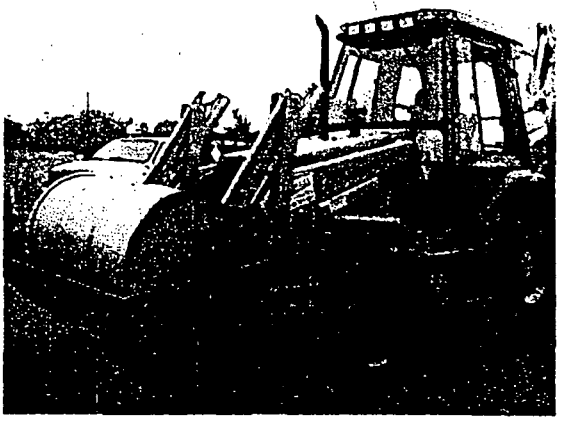

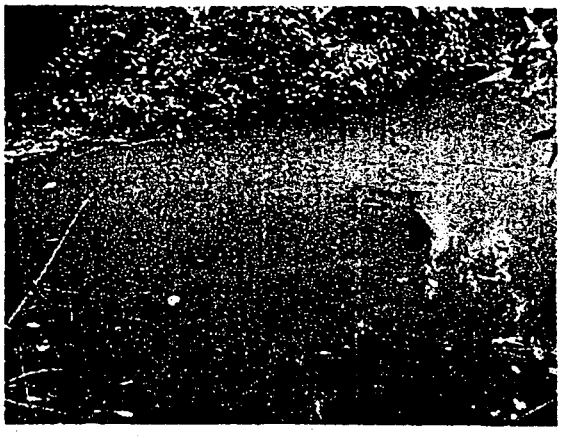

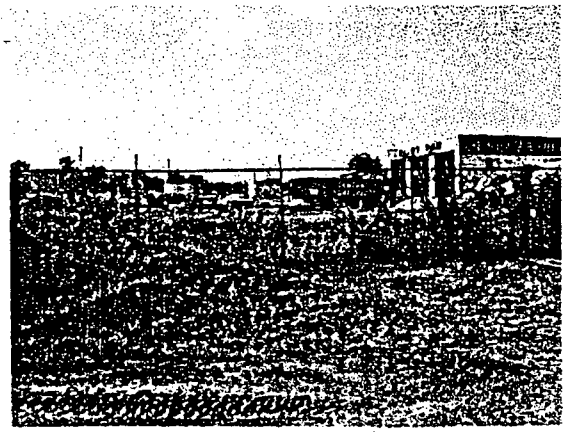

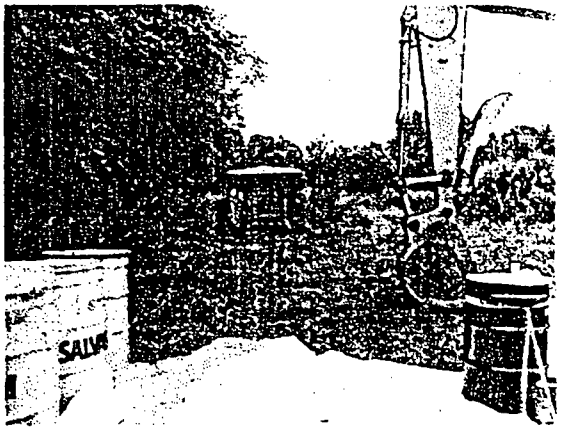

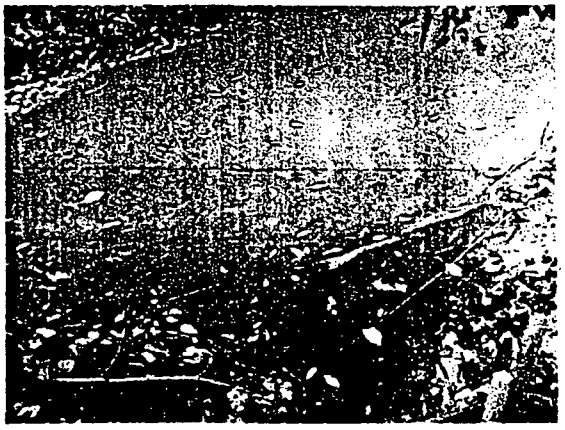

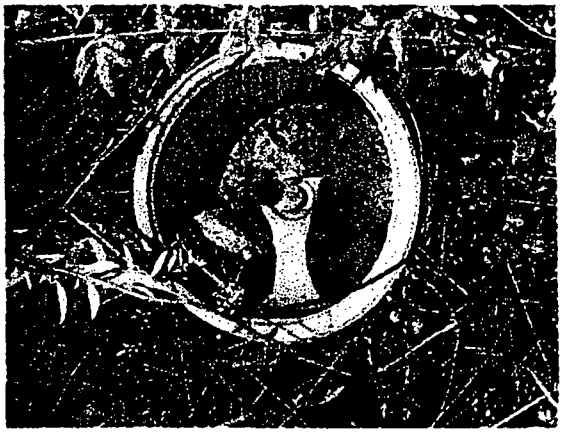

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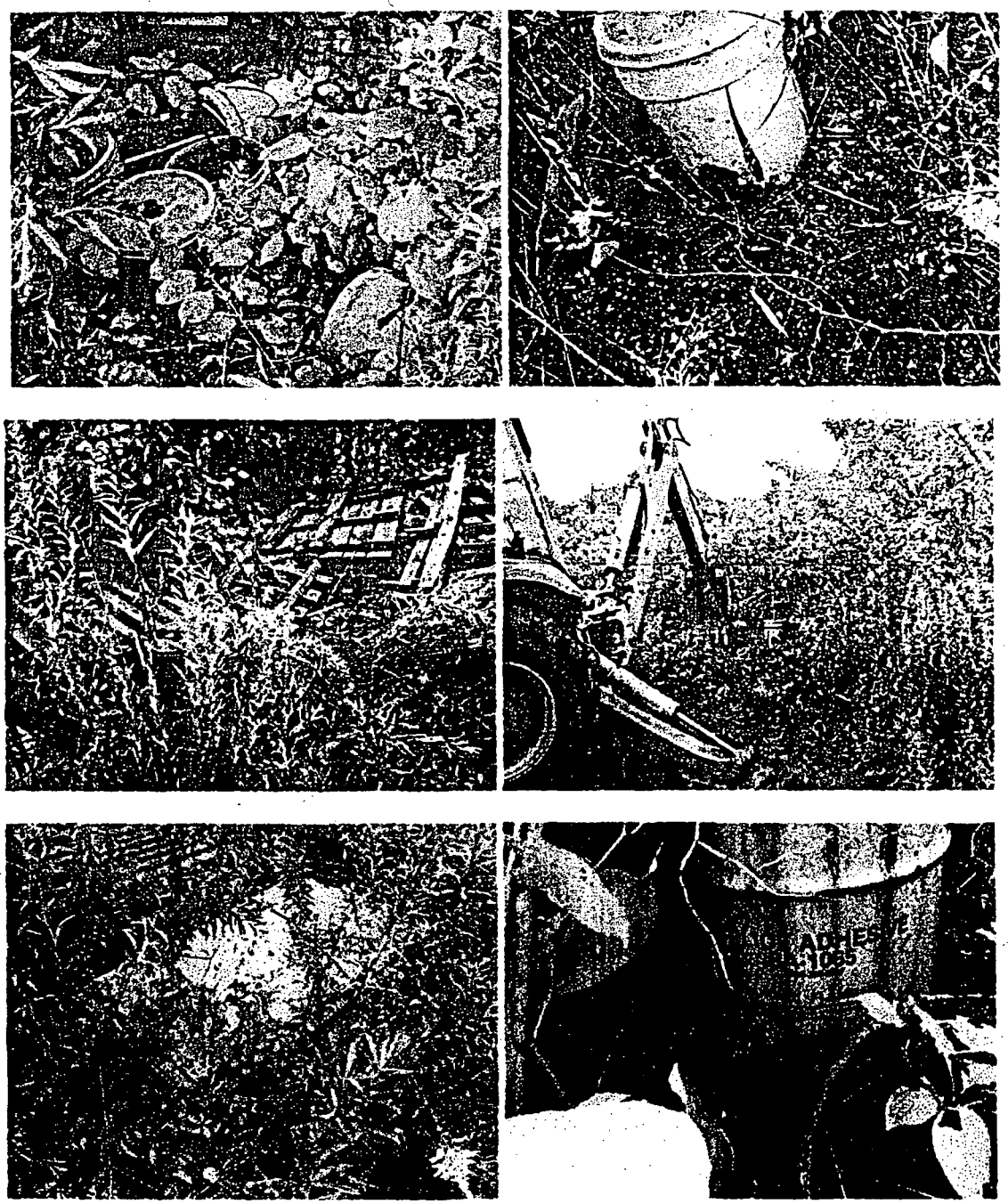

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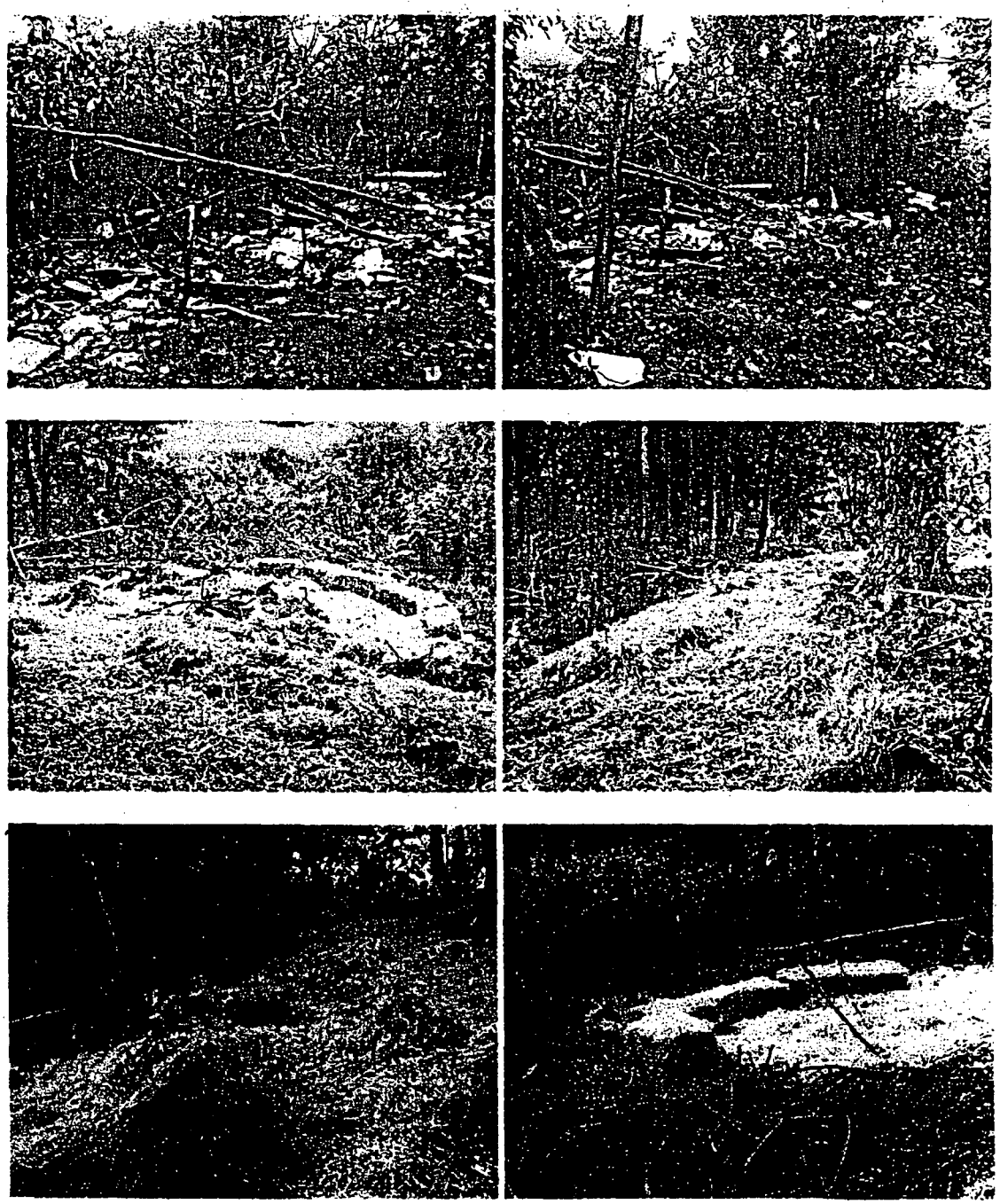

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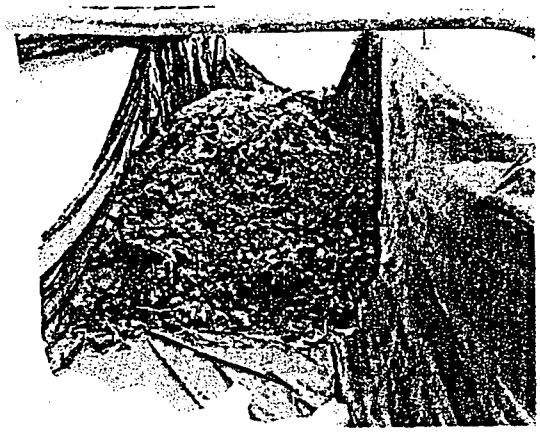

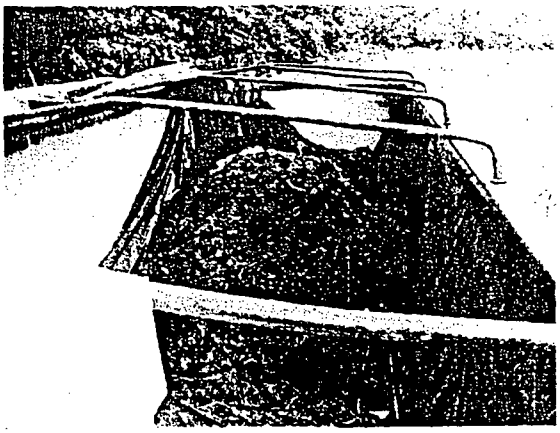

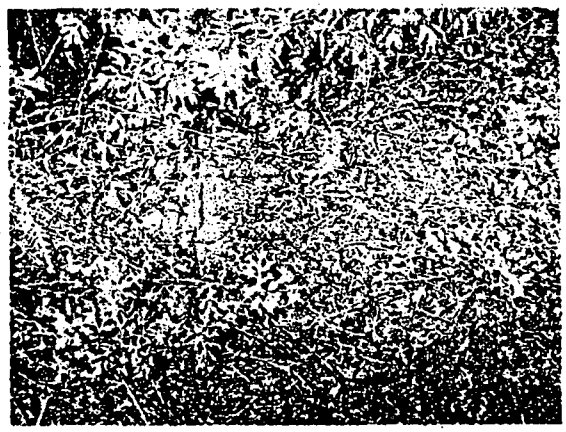

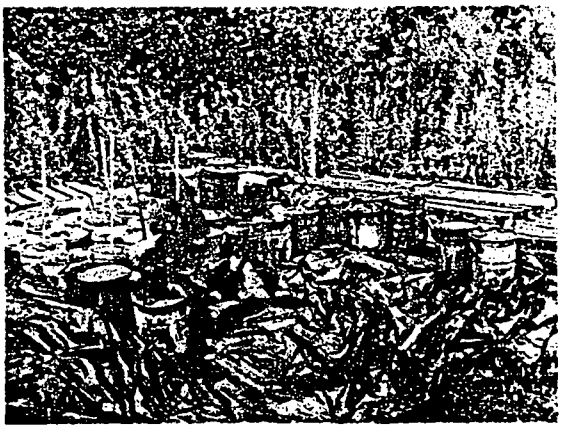

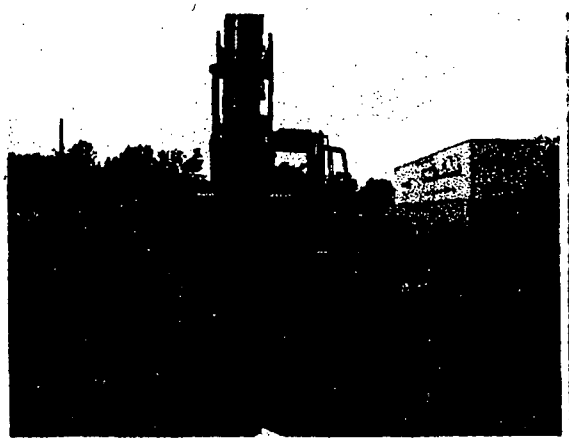

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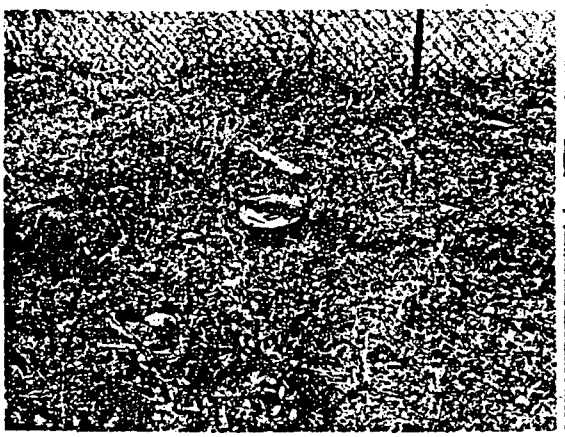

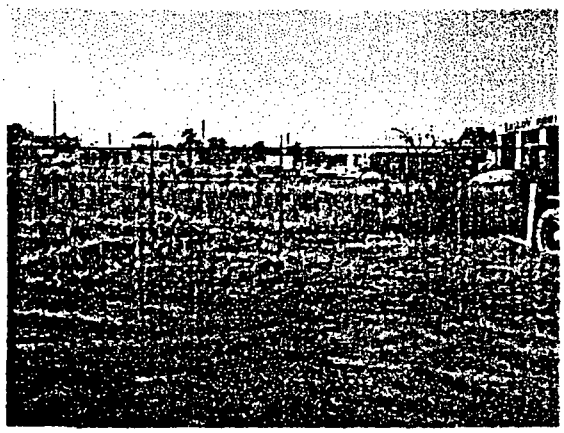

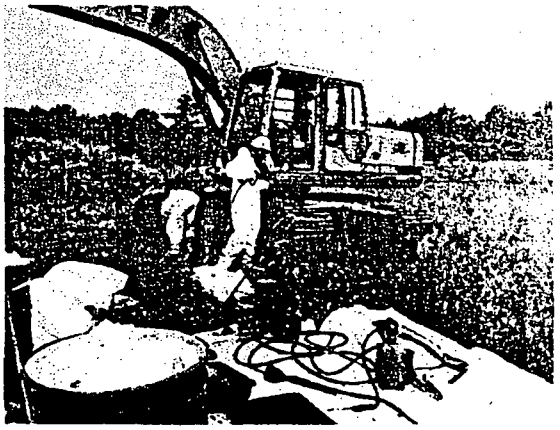

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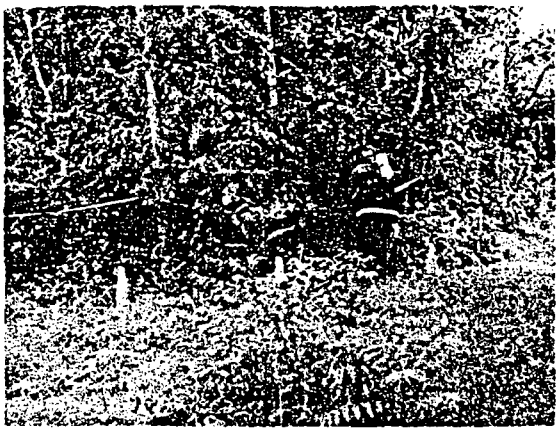

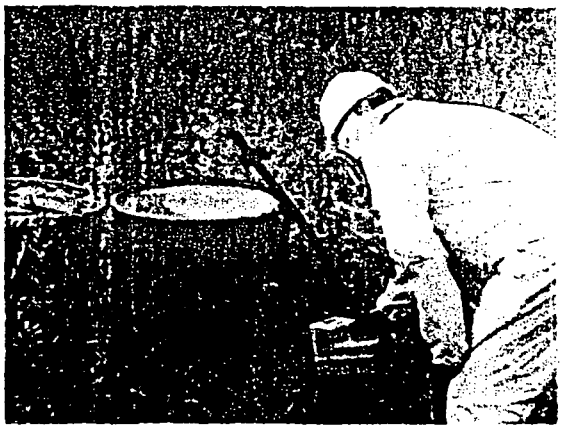

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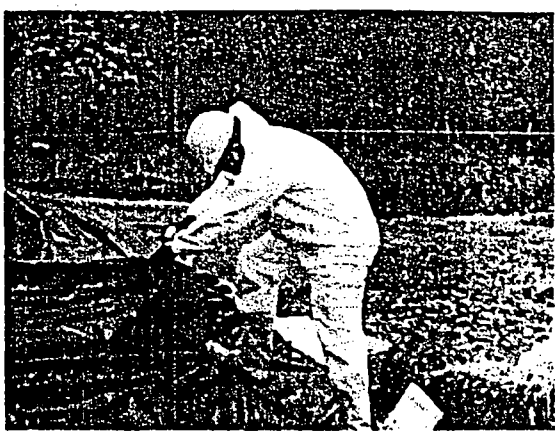

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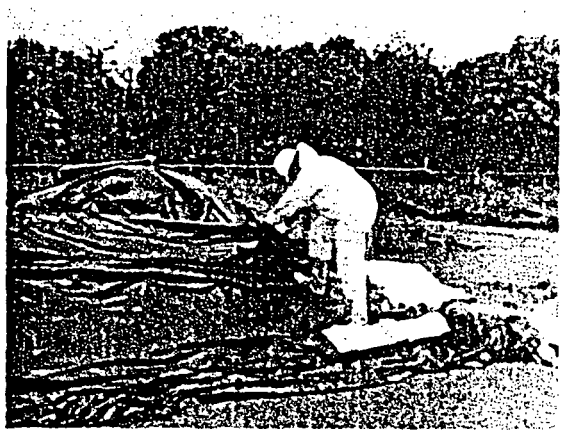

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DRUM ID	DATE	LOCATION	DESCRIPTION / CONTENTS	WASTE ID#	CLASSIFICATION	SAMPLE DATE & ID#	PCB RESULT (mg/kg)	COMMENTS
11-30-01	11/30/99	Fenced Lot	Waste Parts and Soil	CR9591	TSCA / RCRA Waste	11/30/99 DCOMP-1	Aroclor 1242 (160000) Aroclor 1254 (517000)	Lead (14.4 mg/l)
11-30-02	11/30/99	Fenced Lot	Waste Parts and Soil	CR9591		"		
11-30-03	11/30/99	Fenced Lot	Sludge - Tank Bottoms	CR9592	TSCA Regulated Waste	11/30/99 DCOMP-2	Aroclor 1242 (97.3) Aroclor 1254 (77.0)	
11-30-04	11/30/99	Fenced Lot	Sludge - Tank Bottoms	CR9592		"		
11-30-05	11/30/99	Fenced Lot	Sludge - Tank Bottoms	CR9592		"		
11-30-06	11/30/99	Fenced Lot	Sludge - Tank Bottoms	CR9592		"		
11-30-07	11/30/99	Fenced Lot	PPE	CR9593	PCB Waste, Solid			
08-29-01	08/29/00	Area #1	Drum parts from stream; two capacitors found on stream bank; one capacitor added on 09/04/00	CR9594	PCB Waste, Solid	09/06/00		
08-30-02	08/30/00	Access Gate	Empty drum		ID-27			
08-30-03	08/30/00	Area #3	Overpack drum with tar	NHD	*Non-PCB Waste*			
08-30-04	08/30/00	Decon	PPE	CR9593	PCB Waste, Solid			
08-30-05	08/30/00	Decon	PPE	CR9593	PCB Waste, Solid			
Roll-off	08/31/00	Area #2	30-yard roll-off, soil tar drum mixture	NHB	RCRA Non-Haz, Non-PCB Waste	A02-1, AO2-2	soil - Aroclor 1254 (24.2) tar - Aroclor 1254 (18.7)	
08-30-06	08/30/00	Area #3	Overpack drum with tar	NHD	*Non-PCB Waste*	9/6/00 A3-C-1	Aroclor 1254 (3.07)	
08-30-07	08/30/00	Area #3	Overpack drum with tar	NHD	*Non-PCB Waste*	9/6/00 A3-C-1		
08-30-08	08/30/00	Area #3	Overpack drum with tar	NHD	*Non-PCB Waste*	9/6/00 A3-C-1		
08-30-09	08/30/00	Area #3	Overpack drum empty + soil	NHD	*Non-PCB Waste*			
08-31-10	08/31/00	Area #4	Overpack drum with oily tar liquid	NHD	*Non-PCB Waste*	9/6/00 08-31-10	Aroclor 1254 (4.54)	
08-31-11	08/31/00	Area #4	Overpack drum with tar	NHD	*Non-PCB Waste*			
08-31-12	09/01/00	Area #4	Overpack drum with tar	NHD	*Non-PCB Waste*	9/6/00 A4-C-2	Aroclor 1254 (26.5)	
08-31-13	08/31/00	Area #4	Overpack drum with tar	NHD	*Non-PCB Waste*			
08-31-14	08/31/00	Area #4	Overpack drum with tar, partial	NHD	*Non-PCB Waste*	9/6/00 A4-C-3	Aroclor 1254 (6.69)	Residue material in drum
08-31-15	08/31/00	Area #4	Overpack drum with tar	NHD	*Non-PCB Waste*			
08-31-16	08/31/00	Area #4	Overpack drum with tar	NHD	*Non-PCB Waste*	9/6/00 A4-C-3		
08-31-17	08/31/00	Area #4	Overpack drum with tar	NHD	*Non-PCB Waste*	9/6/00 A4-C-2		
08-31-18	08/31/00	Area #4	Overpack drum, empty		*Non-PCB Waste*			
08-31-19	08/31/00	Area #4	Overpack drum, empty		*Non-PCB Waste*			
08-31-20	08/31/00	Area #4	Overpack drum, empty		*Non-PCB Waste*			
08-31-21	08/31/00	Area #4	Overpack drum, empty		*Non-PCB Waste*			
08-31-22	08/31/00	Area #4	Overpack drum with tar	NHD	*Non-PCB Waste*	9/6/00 A4-C-3		
09-01-13	09/01/00	Area #5	Overpack drum, empty		ID-27			
09-01-24	09/01/00	Area #5	Overpack, flammable liquid containers	FLLP	generator knowledge, MSDS			manufacturer's containers with butyl rubber adhesive residue mixture
09-01-25	09/02/00	Area #6	Overpack, flammable liquid containers	FLLP	generator knowledge, MSDS			manufacturer's containers with butyl rubber adhesive residue mixture
09-01-26	09/03/00	Area #7	Overpack, flammable liquid containers	FLLP	generator knowledge, MSDS			manufacturer's containers with butyl rubber adhesive residue mixture

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09-01-27	09/04/00	Area #8	Overpack, flammable liquid containers	FLLP	generator knowledge, MSDS			manufacturer's containers with butyl rubber adhesive residue mixture
09-01-28	09/05/00	Area #9	Overpack, flammable liquid containers	FLLP	generator knowledge, MSDS			manufacturer's containers with butyl rubber adhesive residue mixture
09-01-29	09/06/00	Area #10	Overpack, flammable liquid containers	FLLP	generator knowledge, MSDS			manufacturer's containers with butyl rubber adhesive residue mixture
09-01-30	09/07/00	Area #11	Overpack, flammable liquid containers	FLLP	generator knowledge, MSDS			manufacturer's containers with butyl rubber adhesive residue mixture
09-21-31	09/21/00	Decon	PPE & PCB contaiminated soil	CR9593	PCB Waste Solid			
		Access Gate	(1) 10"x5' Asbestos Cement Pipe, wrapped	ASB	Asbestos Waste			

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700963

State of New Jersey
Department of Environmental Protection
Hazardous Waste Regulation Program
Manifest Section
P.O. Box 421, Trenton, NJ 08625-0421

700964

BR007908

Please type or print in block letters. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: NJR000022152 — Manifest Document No.: 80816

2. Page 1 of 2

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address:
DSC Enterprises
70 Blanchard Street
Newark, NJ 07105

A. State Manifest Document Number: NJA3060816

B. State Generator's ID-(Gen. Site Address): 333 Hamilton Blvd. Site: South Plainfield, NJ

4. Generator's Phone (973) 589-4200

5. Transporter 1 Company Name: Maumee Express, Inc.

6. US EPA ID Number: NJD986607380

C. State Trans. ID-NJDEP: S 50059 — Decal No.:

7. Transporter 2 Company Name:

8. US EPA ID Number:

D. Transporter's Phone (732) 424-8441

E. State Trans. ID-NJDEP: — Decal No.:

9. Designated Facility Name and Site Address:
Cycle Chem, Inc.
217 S. First Street
Elizabeth, NJ 07206

10. US EPA ID Number: NJD002200046

F. Transporter's Phone ( )

G. State Facility's ID:

H. Facility's Phone (908) 355-5800

11. US DOT Description (Including Proper Shipping Name, Hazard Class or Division, ID Number and Packing Group)	HM		12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	X	Waste Flammable Liquid, N.O.S. Class 3, UN-1993, PG II (D001)	XX/	DM	XX/150	P	D001
b.	X	Waste Flammable Liquid, ~~NX~~ N.O.S. Class3, UN-1993, PG II (D001)	XX/	DM	XX/150	P	D001
c.	X	Waste Flammable Liquid, N.O.S. Class 3, UN-1993, ~~NN~~ PG II (D001)	XX/	DM	XX/150	P	D001
d.	X	Waste Flammable Liquid, N.O.S. Class 3, UN-1993, PG II (D001)	XX/	DM	XX/150	P	D001

J. Additional Descriptions for Materials Listed Above

a. LP# 09-01-24, L, I
c. LP# 09-01-26, L, I
b. LP# 09-01-25, L, I
d. LP# 09-01-27, L, I

K. Handling Codes for Wastes Listed Above

a. S01 c. S01
b. S01 d. S01

15. Special Handling Instructions and Additional Information

PCN# 924832
a. UIK
b. UIK
c. UIK
d. UIK

24 Hour Emergency # 732-613-1660
Plate # AA998B
Decal # 084137

PO# 7070-002

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: TIMOTHY FRANCISCO / OXFORD — Signature: [signature] — Month Day Year: 11 22 00

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: TOM CAMP Bell — Signature: [signature] — Month Day Year: 11 22 00

18. Transporter 2 Acknowledgement of 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: Helen Ellis — Signature: [signature] — Month Day Year: 11 22 00

GENERATOR — TRANSPORTER — FACILITY

EPA Form 8700-22 (Rev. 9/88) Previous editions are obsolete.

SIGNATURE AND INFORMATION *MUST* BE LEGIBLE ON ALL COPIES

3—TSD MAIL TO-GENERATOR

700965

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039. Expires 9-30-92

UNIFORM HAZARDOUS WASTE MANIFEST (Continuation Sheet)

21. Generator's US EPA ID No.: NJR000022152

Manifest Document No.: 60816

22. Page: 2 of 2

Information in the shaded areas is not required by Federal law.

23. Generator's Name: DSC Enterprises

L. State Manifest Document Number: NJA3060816

M. State Generator's ID: 333 Hamilton Blvd, South Plainfield

24. Transporter 1 Company Name: Maumee Express, Inc.

25. US EPA ID Number: NJD986607380

N. State Transporter's ID: NJDEP S50059

O. Transporter's Phone: 732-424-8441

26. Transporter ___ Company Name:

27. US EPA ID Number:

P. State Transporter's ID:

Q. Transporter's Phone:

	28. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	HM	29. Containers No.	Type	30. Total Quantity	31. Unit Wt/Vol	R. Waste No.
a.	Waste Flammable Liquid, N.O.S. Class 3, UN-1993, PG II (D001)	X	xx1	DM	xx150	P	D001
b.	Waste Flammable Liquid, N.O.S. Class 3, UN-1993, PG II	X	xx1	DM	xx150	P	D001
c.	Waste Flammable Liquid, N.O.S. Class3, UN-1993, PG II (D001)	X	xx1	DM	xx150	P	D001
d.	Chemical Process Solid, (X910) DOT Non Regulated, RCRA non Hazardous		14 x 12	DM	x5400 ~~x275~~	P	X910
e.	ASBESTOS CLASS 9 NA2212 PG III (X910)	X	xx1	BA	xxx50	P	X910
f.							
g.							
h.							
i.							

GENERATOR

S. Additional Descriptions for Materials Listed Above
a. LP# 09-01-28 L. T.
b. LP# 09-01-29 L. T.
c. LP# 09-01-30 L. T.
d. Tar 100% S

T. Handling Codes for Wastes Listed Above: SU1

32. Special Handling Instructions and Additional Information
PCN# 924832
a. UIK
b. UIK
c. UIK
d. GROY
E) SA 1

24 Hour Emergency # 732-613-1660

TRANSPORTER

33. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: TOM CAMPBELL

Signature:

Date: Month 11 Day 22 Year 90

34. Transporter ___ Acknowledgement of Receipt of Materials

Printed/Typed Name:

Signature:

Date: Month Day Year

FACILITY

35. Discrepancy Indication Space SE)S

Style F18 REV-6 LABELMASTER, An AMERICAN LABELMARK CO., CHICAGO, IL 60646 800-621-5808

EPA Form 8700-22A (Rev. 9-88) Previous editions are obsolete.

PRINTED ON RECYCLED PAPER USING SOYBEAN INK

700966

NON-HAZARDOUS WASTE MANIFEST

BUL 009458A

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: Not Required

Manifest Document No.: 07070

2. Page 1 of 1

3. Generator's Name and Mailing Address: DSC Enterprises, 70 Blanchard Street, Newark, NJ 07105

4. Generator's Phone (973) 589-4200

Same: 333 Hamilton Blvd. South Plainfiel NJ

5. Transporter 1 Company Name: Freehold Cartage, Inc.

6. US EPA ID Number: NJD054126164

A. State Transporter's ID: NJDEP 15939

B. Transporter 1 Phone: 732-462-1001

7. Transporter 2 Company Name:

8. US EPA ID Number:

C. State Transporter's ID:

D. Transporter 2 Phone:

9. Designated Facility Name and Site Address: Cycle Chem, Inc., 217 S. First Street, Elizabeth, NJ 07206

10. US EPA ID Number: NJD002200046

E. State Facility's ID:

F. Facility's Phone: 908-355-5800

11. WASTE DESCRIPTION	12. Containers No.	Type	13. Total Quantity	14. Unit Wt./Vol.
a. Chemical Process Solid, (X910) DoT Non Regulated, RCRA Non Hazardous	1	CM	10,000	P
b.				
c.				
d.				

G. Additional Descriptions for Materials Listed Above: a. (Crushed Drums) Tar 50-70%, Steel 30-50%, S

H. Handling Codes for Wastes Listed Above: S01

15. Special Handling Instructions and Additional Information

PO# 7070-004

PO# 92-4832

a. BF02

GR02-

24 Hour Emergency # 732-613-1660

Plate# AA 394 E Decal # 03242

16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name: TIMOTHY FRANCISCO/OXFORD — Signature — Date: Month 11 Day 22 Year 00

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: DENNIS HIGGINS — Signature — Date: Month 11 Day 22 Year 00

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name — Signature — Date: Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator; Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name: HERON ELLIS — Signature — Date: Month 11 Day 22 Year 00

GENERATOR — TRANSPORTER — FACILITY — NON-HAZARDOUS

700967

AWT Environmental Services, Inc.

P.O. Box 128, Sayreville, NJ 08872
(732) 613-1660 Fax (732) 613-1536

Material Profile Sheet
Product Code: _____
Generator No: _____

A. GENERATOR INFORMATION

GENERATOR USEPA ID: NJ R 000022152

GENERATOR NAME: DSC ENTERPRISES
MAILING ADDRESS: 70 BLANCHARD ST.
NEWARK NJ 07105
GENERATOR CONTACT: _____
GENERATOR PHONE #: _____
SITE ADDRESS: 333 HAMILTON BLVD S. PLAINFIELD
NAME OF WASTE: WRAPPED ASBESTOS PIPE

AWT COORDINATOR: P. POSTORINO
PROJECT #: 7070
WASTE ID #: _____
PROCESS GENERATING WASTE: ABATEMENT

B. PHYSICAL CHARACTERISTICS OF WASTE

Color/Physical Description: _____

STRONG INCIDENTAL ODOR PRESENT: __ YES ✓ No

PHYSICAL STATE @ 70°F: ✓ SOLID, __ LIQUID, __ POWDER, __ SEMI SOLID; ✓ SINGLE PHASE, __ BI-LAYERED, __ MULTI-LAYERED, __ SLUDGE

__ WASTEWATER
✓ NONWASTEWATER

SPECIFIC GRAVITY: N/A

FLASHPOINT: __ < 70° F, __ > 200° F, __ 70° F - 100° F, __ 101°F - 141°F, __ 142°F - 200°F, __ >200°F, __ NO FLASH, __ EXACT
Ignitable (if solid) __ Yes ✓ No
__ Closed Cup __ Open Cup

LIQUID/SOLID/SLUDGE: % Sludge ____, % Suspended Solids ____, % Solid/Debris ____, % Free Liquids 0

pH: __ ≤ 2.0, __ 2.01-5, __ 8.01-9, __ 9.01-12.4, __ ≥12.50, __ EXACT

Dumpable? ✓ Yes __ No
Pumpable? __ Yes ✓ No
Pourable? __ Yes ✓ No

C. CHEMICAL COMPOSITION

Is MSDS Attached? __ Yes | No
Is Analysis Attached? __ Yes | No

	RANGE MINIMUM	RANGE MAXIMUM
1 10'x5" CEMENT		
PIPE W/ASBESTOS		
INSULATION	100	100

D. REGULATORY INFORMATION

USEPA HAZARDOUS WASTE?: ☐ YES ☑ NO
USEPA CODE(S): _____
APPLICABLE SUBCATEGORIES: _____
STATE HAZARDOUS WASTE?: ☐ YES ☑ NO
STATE CODE(S): X910, S
D.O.T. HAZARDOUS WASTE?: ☑ YES ☐ NO
PROPER SHIPPING NAME: ASBESTOS
CLASS: 9 I.D. NO: NA 2212 P.G.: III R. Q.: _____

E. SHIPPING INFORMATION/SHIPMENT METHOD:

__ BULK LIQUID
__ BULK SOLID
__ DUMP TRAILER
__ ROLL-OFF
__ DRUM SIZE
__ PALLETS
__ CUBIC YARD BOX

ANTICIPATED VOLUME: _____
QUANTITY: 1 PIPE
UNITS: _____
PRICE: _____
FREQUENCY: _____

F. SPECIAL HANDLING CONSIDERATIONS

CERCLA FACILITIES _____
NO LANDFILL _____
PROJECT CODE _____
OTHER _____
INCINERATE ONLY _____
CCI SALES CODE _____

G. TRANSPORTATION ARRANGEMENTS

LTL PICK-UP ☑ DEDICATED LOAD ☐ AWT/MXI

H. OTHER HAZARDOUS CHARACTERSTICS

INDICATE IF THE WASTE IS:
__ RCRA REACTIVE
__ WATER REACTIVE
__ RADIOACTIVE
__ SUBJECT TO SUBPART FF BENZENE REGULATIONS
__ ETIOLOGICAL
__ TSCA REGULATED
__ OXIDIZING MATERIAL
__ PYROPHORIC
__ EXPLOSIVE/SHOC SENSITIVE
✓ NONE OF THE ABOVE

Indicate If This Waste Contains Any Of The Following:

	None	or Less Than	or Actual
PCB's	✓	__ < 50PPM	____ PPM
Cyanides	✓	__ < 250PPM	____ PPM
Phenolics	✓	__ < 50 PPM	____ PPM
Sulfides	✓	__ < 500 PPM	____ PPM
VOC's	✓	__ < 500 PPM	____ PPM

Is this waste characteristically hazardous for metals or organics (EPA Waste Codes D004-D043)? __ Yes ✓ No. If yes, please list the constituents and concentrations in Section D.

Does this waste contain underlying hazardous constituents as defined in 40 CFR 268 (2)(I) at concentrations exceeding the UTS treatment standards? __ Yes ✓ No. If yes, please list constituents and concentrations in Section D.

GENERATOR CERTIFICATION: I hereby certify that all information submitted in this and all attached documents is complete, contains true and accurate descriptions and is representative of the waste material, and that all relevant information regarding known or suspected hazards in the possession of the generator has been disclosed. If the TSDF discovers, after having taken delivery of the waste, that any waste does not conform to the identification and description on this MPS then the TSD shall provide notice of such condition to the Generator and coordinate the return of the nonconforming waste to the point of origin as set forth on the manifest or to such other locations designated in writing by the Generator. Generator agrees to reimburse AWT for all handling, packaging, clean-up and transportation costs or charges, damage to equipment, and costs associated with lost time incurred by the TSD during the receipt, handling, temporary storage and return of such nonconforming waste to point of origin or to such other location designated by Generator. I hereby authorize the TSD to amend/or correct any information on the MPS with the full understanding that if any amendment or correction is performed, I will be contacted prior to issuing any approval.

AUTHORIZED SIGNATURE [signature] TITLE: Proj coord. DATE 11-22-00

White = TSD Facility Yellow = Customer Pink = AWT Environmental Services, Inc.

AWT Environmental Services, Inc.

P.O. Box 128, Sayreville, NJ 08872
732-613-1660, Fax (732) 613-1536

LAND DISPOSAL RESTRICTION NOTIFICATION AND CERTIFICATION FORM

Generator Name: DSC ENTERPRISES

Generator EPA ID #: NJD 000072152

Manifest #: NJA 3060816

This land disposal restriction (LDR) notification must be submitted with the initial shipment of all new waste streams. Due to revised LDR notification requirements effective after August 23, 1998, previously approved waste streams will require re-notification on this form with the first shipment after that date. Subsequent notification is not required unless the waste stream changes.

(1) WASTE STREAM INFORMATION

Box A: ***Check this box if this LDR certification has been supplied with a previous shipment. Additional information and certification is not required on this form.***

Box B: ***Indicate if waste stream is a wastewater (WW) or non-wastewater (NWW) (aqueous waste streams containing < 1% total organic carbon (TOC) and < 1% total suspended solids (TSS) are wastewaters. All other streams are non-wastewaters).***

Box C: ***List all EPA waste codes and subcategory reference letters (if applicable). Alternatively, attach and reference additional pages (e.g. profiles or lab pack slips) containing required information.***

	A	B	C
Line #	Previously shipped LDR on file	NWW/WW	EPA Waste Codes and subcategory reference letter (if applicable)
A		NWW	D001, A
B			
C			
D			

2a, b, c

Subcategory Reference Letters (EPA codes not listed here do not have subcategories)

D001	A	Ignitable characteristic wastes, except high TOC ignitable liquids subcategory
D001	B	High TOC (> 10%) ignitable liquid subcategory
D003	A	Reactive sulfide subcategory
D003	B	Reactive cyanide subcategory
D003	C	Water reactive subcategory
D003	D	Other reactive subcategory
D006	A	Cadmium non-battery subcategory
D006	B	Cadmium containing batteries subcategory
D008	A	Lead non-battery subcategory
D008	B	Lead acid batteries subcategory
D009	A	High mercury organic subcategory (>260 PPM Total Mercury)
D009	B	High mercury inorganic subcategory (> 260 PPM Total Mercury)
D009	C	Low mercury subcategory (< 260 PPM Total Mercury)
D009	D	Mercury wastewater subcategory

700968

(2) ***SPENT SOLVENT WASTE CONSTITUENTS***

Circle applicable waste code(s) and constituent(s) for each manifest line item containing EPA spent solvent waste codes F001-F005.

A B C D_____F001 ***A B C D_____F002*** ***A B C D_____F003*** ***A B C D_____F004*** ***A B C D_____F005***

A B C D_____-acetone
A B C D_____-benzene
A B C D_____-n-butyl alcohol
A B C D_____-iso-butyl alcohol
A B C D_____-carbon disulfide
A B C D_____-carbon tetrachloride
A B C D_____-chlorobenzene
A B C D_____-m-cresol
A B C D_____-o-cresol
A B C D_____-p-cresol
A B C D_____-cresylic acid
A B C D_____-cyclohexanone
A B C D_____-o-dichlorobenzene
A B C D_____-ethyl acetate
A B C D_____-ethyl benzene
A B C D_____-ethyl ether
A B C D_____-methanol
A B C D_____-methylene chloride
A B C D_____-methyl ethyl ketone
A B C D_____-methyl isobutyl ketone
A B C D_____-nitrobenzene
A B C D_____-pyridine
A B C D_____-tetrachloroethylene
A B C D_____-toluene
A B C D_____-1,1,1,-trichloroethane
A B C D_____-1,1,2-trichloroethane
A B C D_____-trichloroethylene
A B C D_____-trichloromonofluoromethane
A B C D_____-1,1,2-trichloro-1,2,2,-trifluoroethane
A B C D_____-xylenes

(3) ***UNDERLYING HAZARDOUS CONSTITUENTS***

For characteristically hazardous waste streams (EPA codes D001-D043), please list all underlying hazardous constituents as defined in 40 CFR 268(2)(i) that are present at concentrations exceeding the universal treatment standards listed in 40 CFR 268.48 (F001-F005 constituents identified in section (2) and specific constituents for EPA U-, P-, and D004-D043 codes listed in Section (1) do not need to be listed in this section).

A._____ ✓None Present
B._____ ✓None Present
C._____ ✓None Present
D._____ ✓None Present

2abc ✓ none

HOW MUST THESE WASTE STREAMS BE MANAGED?

*For each manifest line item, **circle** applicable treatment/requirement. For contaminated soil, **circle** applicable choice as indicated.*

A B C D_____This waste is non-hazardous per 40 CFR 261, and is not restricted from land disposal under 40 CFR 268 subpart D.

A B C D +2abc This is an EPA hazardous waste that is not a contaminated soil or hazardous debris. Waste must be treated to the appropriate treatment standard set forth in 40 CFR subpart D prior to land disposal.

A B C D_____This is a hazardous debris and is subject to the alternative treatment standards of 40 CFR 268.45.

*A B C D_____This is a hazardous waste contaminated soil. This contaminated soil **does/does not** (circle one) contain listed hazardous wastes and **does/does not** (circle one) exhibit a characteristic of hazardous waste and **is subject to/complies with** (circle one) the soil treatment standards as provided by 268.49(c) or the universal treatment standards.*

A B C D_____This is an EPA hazardous waste that meets all applicable treatment standards set forth in 40 CFR 268 subpart D, and can be landfilled without further treatment. I certify under penalty of law that I have personally examined and am familiar with the waste through analysis and testing or thorough knowledge of the waste to support this certification that the waste complies with the treatment standards specified in 40 CFR Part 268 Subpart D and all applicable prohibitions set forth in 40 CFR 268.32 or RCRA Section 3004(d). I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of a fine and imprisonment.

(5) ***CERTIFICATION***

I certify that all information on this and all associated documents is complete and accurate to the best of my knowledge.

Signature: [signature] ***Title:*** PROJ. COORD.

Printed Name: TIMOTHY FRANKSO/ORFORD ***Date:*** 11-22-00

700969

WASTE MANAGEMENT, INC.
CWM Chemical Services, L.L.C.
1550 Balmer Rd.
P.O. Box 200
Model City, N.Y. 14107
716/754-8231

Federal EPA ID: NYD049836679

DSC OF NEWARK ENTERPRISES
ATTN: JOSEPH ARCOLEO
NJR000022152
70 BLANCHARD STREET
NEWARK, NJ 07105

CERTIFICATE OF DISPOSAL

CWM CHEMICAL SERVICES, L.L.C. has received waste material from DSC OF NEWARK ENTERPRISES on 11/30/00 as described on Hazardous Waste Manifest number NYG0700767 Sequence number 03. CWM CHEMICAL SERVICES, L.L.C. hereby certifies that the above described material was landfilled in accordance with the 40 CFR part 761 as it pertains to the land disposal of polychlorinated biphenyl contaminated materials.

Profile Number: CR9593
CWM Tracking ID: 8153698904
CWM Unit #: 1*0 thru 4*0
Disposal Date: 11/30/00

Under civil and criminal penalties of law for the making or submission of false or fraudulent statements or representations (18 U.S.C 1001 and 15 U.S.C. 2615) I certify that the information contained in or accompanying this document is true accurate and complete. As to the identified section(s) of this document for which I cannot personally verify truth and accuracy, I certify as the company official having supervisory responsibility for the persons who, acting under my direct instructions, made the verification that this information is true accurate and complete.

Donna Ames-Cassick

DONNA AMES-CASSICK
COMPLIANCE MANAGER
Certificate # 194107
12/05/00

For questions please call our Customer Service Dept. at (800) 843-3604

700970

WASTE MANAGEMENT, INC.
CWM Chemical Services, L.L.C.
1550 Balmer Rd.
P.O. Box 200
Model City, N.Y. 14107
716/754-8231

Federal EPA ID: NYD049836679

DSC OF NEWARK ENTERPRISES
ATTN: JOSEPH ARCOLEO
NJR000022152
70 BLANCHARD STREET
NEWARK, NJ 07105

CERTIFICATE OF DISPOSAL

CWM CHEMICAL SERVICES, L.L.C. has received waste material from DSC OF NEWARK ENTERPRISES on 11/30/00 as described on Hazardous Waste Manifest number NYG0700767 Sequence number 04. CWM CHEMICAL SERVICES, L.L.C. hereby certifies that the above described material was landfilled in accordance with the 40 CFR part 761 as it pertains to the land disposal of polychlorinated biphenyl contaminated materials.

Profile Number: CR9594
CWM Tracking ID: 8153698905
CWM Unit #: 1*0
Disposal Date: 11/30/00

Under civil and criminal penalties of law for the making or submission of false or fraudulent statements or representations (18 U.S.C 1001 and 15 U.S.C. 2615) I certify that the information contained in or accompanying this document is true accurate and complete. As to the identified section(s) of this document for which I cannot personally verify truth and accuracy, I certify as the company official having supervisory responsibility for the persons who, acting under my direct instructions, made the verification that this information is true accurate and complete.

Donna Ames-Cassick

DONNA AMES-CASSICK
COMPLIANCE MANAGER
Certificate # 194108
12/05/00

For questions please call
our Customer Service Dept.
at (800) 843-3604

700971

NYG0700767

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID & HAZARDOUS MATERIALS

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

2

BR007908

Please type or print. Do not staple. (Rev. 3/97)

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No.: NJR000022152 — Manifest Doc. No.: 07070
2. Page 1 of 1

Information within heavy bold line is not required by Federal Law.

3. Generator's Name and Mailing Address: DSC Enterprises, Inc.
70 Blanchard St. newark, NJ 07105

4. Generator's Telephone Number (973) 589-4200

5. Transporter 1 (Company Name): Maumee Express, Inc.
6. US EPA ID Number: NJD986607380

7. Transporter 2 (Company Name):
8. US EPA ID Number:

9. Designated Facility Name and Site Address: ~~CWM Model City~~ CWM Chemical Services, LLC
1550 Balmer Rd.
Model City, NY 14107
10. US EPA ID Number: NYD049836679

A. NYG0700767

B. Generator's ID: Site Address: 333 Hamilton Blvd. S.Plainfield, NJ

C. State Transporter's ID: JA 334 T402-Yx NJ

D. Transporter's Telephone (732) 424 8441

E. State Transporter's ID

F. Transporter's Telephone ( )

G. State Facility ID

H. Facility Telephone (716) 754-0451

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers Number	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ-Hazardous Waste, Solid, N.O.S. (lead, polychlorinated biphenyls), Class 9 NA3077 PGIII (d008,b007)	XX2	DM	x2200	KG	EPA D008 / STATE B007
b. RQ, Polychlorinated Biphenyls, Liquid ~~Mixture~~ Solution Class 9 UN 2315 PG III (B002,B007)	XX4	DM	x4400	KG	EPA None / STATE B002
c. RQ, Polychlorinated Biphenyls, Solid Mixutre Class 9 UN 2315 PG III (B007)	XX4	DM	x2200	KG	EPA None / STATE B007
d. RQ, Polychlorinated Biphenyls, Solid Mixture Class 9 UN 2315 PG III (B007)	XX1	DM	x1100	KG	EPA None / STATE B007

J. Additional Descriptions for Materials listed Above

a. Parts&Debris-70-90%,Soil 10-30%, ~~PCB-317000ppm, lead 15ppm~~ -02
Soil 10-100%, Debris 10-100% RPE 10-100%, PBC-50-500ppm -04

b. Sludge 100%, PCB-50-500 ppm -03
c. Small capacitors w/PCB 50-90
d. Other parts 50-90%, CB50-500ppm

K. Handling Codes for Wastes Listed Above

a. ☐ c. ☐
b. ☐ d. ☐

15. Special Handling Instructions and Additional Information
#576328
Emergency Contact Phone # 732-613-1660

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 and state laws and 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 generator, I have made a good faith effort to minimize my waste and select the best waste management method that is available to me and that I can afford.

GENERATOR — Printed/Typed Name: TIMOTHY FRANCISCO — Signature: [signature] — Mo. 11 Day 22 Year 00

17. Transporter 1 Acknowledgement of Receipt of Materials
TRANSPORTER — Printed/Typed Name: TOM CAMPBELL Glenn W Frank — Signature: [signature] — Mo. 11 Day 22 Year 00

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name: — Signature: — Mo. Day Year

19. Discrepancy Indication Space: 14 A-D=K 11/30/00 KA-B=B KC-D=L

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
FACILITY — Printed/Typed Name: Jennifer Pierce — Signature: [signature] — Mo. 11 Day 30 Year 00

In case of emergency or spill immediately call the National Response Center (800) 424-8802 and the NYS Department of Environmental Conservation (518) 457-7362

COPY 1 — Disposer State — Mailed by TSD Facility

700972

PCB MANIFEST CONTINUATION FORM

Please include on the manifest or on an attachment to the manifest: ~~NJ~~ NYG0700767

Unique ID # or Serial # of container	Profile of waste	Type of PCB Waste	Date of Removal From Service	Weight in Kg.
11-30-01	CR9591	PARTS & SOIL	11-30-99	1100
11-30-02	CR9591	PARTS & SOIL	11-30-99	1100
11-30-03	CR9592	SLUDGE	11-30-99	1100
11-30-04	CR9592	SLUDGE	11-30-99	1100
11-30-05	CR9592	SLUDGE	11-30-99	1100
11-30-06	CR9592	SLUDGE	11-30-99	1100
11-30-07	CR9593	PPE	11-30-99	550
08-29-01	CR9594	SM. CAPACITORS + DEBRIS	8-29-00	1100
08-30-04	CR9593	PPE	8-30-00	550
08-30-05	CR9593	PPE	8-30-00	550
09-21-31	CR9593	PPE & SOIL.	9-21-00	550

(Make additional copies if needed)

700973

OXFORD ENVIRONMENTAL INC.
43 Route 46 East, Suite 702 • Pine Brook, New Jersey 07058

STATE OF NEW YORK
DEPT. OF ENVIRON. CONSERVATION
DIV. OF SOLID & HAZARDOUS MATLS
P.O. BOX 12820
ALBANY NY 12212

700974

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID & HAZARDOUS MATERIALS

NYG0700767

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

Please type or print. Do not staple. (Rev. 3/97)

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No. NJR000022152 Manifest Doc. No. 07070

2. Page 1 of 1

Information within heavy bold line is not required by Federal Law.

3. Generator's Name and Mailing Address DSC Enterprises, Inc.
70 Blanchard St. newark, NJ 07105

4. Generator's Telephone Number 973) 589-4200

A. NYG0700767

B. Generator's ID Site Address:
333 Hamilton Blvd. S.Plainfield, NJ

5. Transporter 1 (Company Name) Maurice Express, Inc.

6. US EPA ID Number NJD986607380

C. State Transporter's ID JA 334

D. Transporter's Telephone (732) 424 8441

7. Transporter 2 (Company Name)

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Telephone ( )

9. Designated Facility Name and Site Address
CWM Model City
1550 Balmer Rd.
Model City, NY 14107

10. US EPA ID Number NYD049836679

G. State Facility ID

H. Facility Telephone (716) 754-0451

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers Number	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ-Hazardous Waste, Solid, N.O.S. (lead, polychlorinated biphenyls), Class 9 NA3077 PGIII (d008,b007)	xx2	DM	x2200	KG	EPA D008 STATE B007
b. RQ, Polychlorinated Biphenyls, Liquid Mixture Class 9 UN 2315 PG III (B002,B007)	xx4	DM	x4400	KG	EPA None STATE B002
c. RQ, Polychlorinated Biphenyls, Solid Mixutre Class 9 UN 2315 PG III (B007)	xx4	DM	x2200	KG	EPA None STATE B007
d. RQ, Polychlorinated Biphenyls, Solid Mixture Class 9 UN 2315 PG III (B007)	xx1	DM	x1100	KG	EPA None STATE B007

J. Additional Descriptions for Materials listed Above
Parts&Debris-70-90%,Soil 10-30%, PCB-31/000ppm, lead 15ppm
Sludge 100%, PCB-50-500 ppm
Soil 10-100%, Debris 10-100% PPE 10-100%, PBC-50-500ppm
Small capacitors w/PCB 50-90
Other parts 50-90%, PCB50-500ppm

K. Handling Codes for Wastes Listed Above
a
c
b
d

15. Special Handling Instructions and Additional Information
Emergency Contact Phone # 732-613-1660

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 and state laws and 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 generator, I have made a good faith effort to minimize my waste and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: TIMOTHY FRANCISCO Signature: Mo. 11 Day 22 Year 00

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: TOM CAMPBELL Signature: Mo. 11 Day 22 Year 00

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name Signature Mo. 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 Mo. Day Year

GENERATOR TRANSPORTER FACILITY

In case of emergency or spill immediately call the National Response Center (800) 424-8802 and the NYS Department of Environmental Conservation (518) 457-7362

700975

OXFORD ENVIRONMENTAL, INC.
43 Route 46 East, Suite 702, P.O. Box 667
Pine Brook, NJ 07058
Phone: (973) 244-0600
Fax: (973) 244-0722

LETTER OF TRANSMITTAL

DATE 1/3/01 JOB NO. 9703

ATTENTION

RE CORNELL-DUBILIER ELECTRONICS
333 HAMILTON BLVD.
S. PLAINFIELD NJ

TO NEW JERSEY DEPT. OF ENVIRON. PROT.
HAZARDOUS WASTE REGULATION PROGRAM
MANIFEST SECTION
TRENTON NJ 08625-0421

GENTLEMEN:

WE ARE SENDING YOU ☑ Attached ☐ Under separate cover via _____ the following items:

☐ Shop drawings ☐ Prints ☐ Plans ☐ Samples ☐ Specifications
☐ Copy of letter ☐ Change order Hazardous Waste Manifests

COPIES	DATE	NO.	DESCRIPTION
1			NYG0700767 Generator to State copy
1			NJA 3060816 Generator to State copy
1			NJA 3060816 Generator to TSDs State copy

THESE ARE TRANSMITTED as checked below:

☐ For approval ☐ Approved as submitted ☐ Resubmit _____ copies for approval
☑ For your use ☐ Approved as noted ☐ Submit _____ copies for distribution
☐ As requested ☐ Returned for corrections ☐ Return _____ corrected prints
☐ For review and comment ☐ _____
☐ FOR BIDS DUE _____ 19 _____ ☐ PRINTS RETURNED AFTER LOAN TO US

REMARKS _____

700976

COPY TO file

If enclosures are not as noted, kindly notify us at once.

SIGNED: [signature]

AN EQUAL OPPORTUNITY EMPLOYER

OXFORD ENVIRONMENTAL INC.

43 Route 46 East, Suite 702 • Pine Brook, New Jersey 07058

STATE OF NEW JERSEY
DEPT. OF ENVIRON. PROTECTION
HAZARDOUS WASTE REGULATION PROGRAM
MANIFEST SECTION
P.O. BOX 421
TRENTON, NJ 08625-0421

700977

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID & HAZARDOUS MATERIALS

NYG0700767

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

Please type or print. Do not staple. (Rev. 3/97)

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No.: NJR 000 022 152 — Manifest Doc. No.: 07070
2. Page 1 of 1

Information within heavy bold line is not required by Federal Law.

3. Generator's Name and Mailing Address: DSC Enterprises, Inc. 70 Blanchard St. newark, NJ 07105

4. Generator's Telephone Number (973) 589-4200

A. NYG 0700767

B. Generator's ID: Site Address: 333 Hamilton Blvd. S.Plainfield, NJ

5. Transporter 1 (Company Name): Maumee Express, Inc.

6. US EPA ID Number: NJD 98 6607380

C. State Transporter's ID: JA 334

D. Transporter's Telephone (732) 424 8441

7. Transporter 2 (Company Name):

8. US EPA ID Number:

E. State Transporter's ID:

F. Transporter's Telephone ( )

9. Designated Facility Name and Site Address: CWM Model City, 1550 Balmer Rd., Model City, NY 14107

10. US EPA ID Number: NYD049836679

G. State Facility ID:

H. Facility Telephone (716) 754-0451

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers Number	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ-Hazardous Waste, Solid, N.O.S. (lead, polychlorinated biphenyls), Class 9 NA3077 PGIII (d008,b007)	xx2	DM	x2200	KG	EPA D008 STATE B007
b. RQ, Polychlorinated Biphenyls, Liquid Mixture Class 9 UN 2315 PG III (B002,B007)	xx4	DM	x4400	KG	EPA None STATE B002
c. RQ, Polychlorinated Biphenyls, Solid Mixutre Class 9 UN 2315 PG III (B007)	xx4	DM	x2200	KG	EPA None STATE B007
d. RQ, Polychlorinated Biphenyls, Solid Mixture Class 9 UN 2315 PG III (B007)	xx1	DM	x1100	KG	EPA None STATE B007

J. Additional Descriptions for Materials listed Above

a. Parts&Debris-70-90%, Soil 10-30%, PCB-317000ppm, lead 15ppm
b. Sludge 100%, PCB-50-500 ppm
c. Soil 10-100%, Debris 10-100% PPE 10-100%, PBC-50-500ppm
d. Small capacitors w/PCB 50-90 Other parts 50-90%, PBB50-500ppm

K. Handling Codes for Wastes Listed Above

a ☐ c ☐ d ☐

15. Special Handling Instructions and Additional Information

Emergency Contact Phone # 732-613-1660

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 and state laws and regulations.
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Printed/Typed Name	Signature	Mo.	Day	Year
TIMOTHY CRAVISCO	[signature]	11	22	00

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Mo.	Day	Year
TOM CAMPBELL	[signature]	11	22	00

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Mo.	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	Mo.	Day	Year

GENERATOR

TRANSPORTER

FACILITY

In case of emergency or spill immediately call the National Response Center (800) 424-8... and the NYS Department of Environmental Conservation (518) 457-7362

700978

9

700979

NYG 1497528

Please type or print. Do not staple

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID & HAZARDOUS MATERIALS

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

(Hazardous Waste Manifest 1/28/98)

UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator's US EPA ID No:	Manifest Doc. No.	2. Page 1 of	Information within heavy bold line is not required by Federal Law.
	NJR000022152	97528	11	

3. Generator's Name and Mailing Address: DSC of Newark Enterprises, 70 Blanchard St, Newark NJ 07105

4. Generator's Telephone Number ( ): 973 589-4200

A. NYG 1497528

B. Generator's ID: SITE 333 Hamilton Ave S Plainfield NJ

5. Transporter 1 (Company Name): PACE, ETC INC

6. US EPA ID Number: NYD986969947

C. State Transporter's ID

D. Transporter's Telephone: (315) 834-[illegible]

7. Transporter 2 (Company Name)

8. US EPA ID Number

E. State Transporter's ID: 53141K NY

F. Transporter's Telephone ( )

9. Designated Facility Name and Site Address: Cam Chemical ~~Waste Management~~ ~~[illegible]~~ Balmer Rd Model City NY 14107

10. US EPA ID Number: SERVICES, LLC NYD049836679

G. State Facility ID

H. Facility Telephone ( ): 716 754 8231

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers Number	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ Environmentally Hazardous Substance, Solid Nos 4, ~~[illegible]~~ (Contains Polychlorinated Biphenyls) 9/21 3077	XX1	DT	20000 est	KG	EPA / STATE
b.					EPA / STATE
c.					EPA / STATE
d.					EPA / STATE

J. Additional Descriptions for Materials listed Above

a. App CS3509 CBC 171 [illegible]

b.

c.

d.

K. Handling Codes for Wastes Listed Above

a. ☐ c. ☐

b. ☐ d. ☐

15. Special Handling Instructions and Additional Information

Please mail COD to Capitol Env Services Wilmington, DE 81533727

Emergency Contact Capitol Env Services (302) [illegible] 8799

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 and state laws and regulations.
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Printed/Typed Name	Signature	Mo.	Day	Year
[illegible]	[signature]	09	20	00

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Mo.	Day	Year
Mike Montague	Mike Montague	09	20	00

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Mo.	Day	Year

19. Discrepancy Indication Space

actual Recvd 14461K Item 14-K Item I-B007 Item K-II

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	Mo.	Day	Year
EILEEN CARTON	Eileen Carton	09	21	00

GENERATOR

TRANSPORTER

In case of emergency or spill immediately call the National Response Center (800) 424-[illegible] and the NYS Department of Environmental Conservation (518) 457-7[illegible]

COPY 5—Generator—Mailed by TSD Facility

700980

NYG 1497528

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID & HAZARDOUS MATERIALS

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

Please type or print. Do not staple

(Hazardous Waste Manifest 1/28/98)

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: NJR000022152
Manifest Doc. No.: 97528
2. Page 1 of: 1

Information within heavy bold line is not required by Federal Law.

3. Generator's Name and Mailing Address: DSC of Newark Enterprises, 70 Blanchard St, Newark NJ 07105
4. Generator's Telephone Number ( ): 973 589 4200

A. NYG 1497528
B. Generator's ID: SITE 333 Hamilton Ave S Plainfield N.
C. State Transporter's ID
D. Transporter's Telephone ( ): 315 834 6681
E. State Transporter's ID
F. Transporter's Telephone ( )
G. State Facility ID
H. Facility Telephone ( ): 716 7548231

5. Transporter 1 (Company Name): PAGE ETC INC
6. US EPA ID Number: NYD986969947
7. Transporter 2 (Company Name)
8. US EPA ID Number
9. Designated Facility Name and Site Address: Chemical Waste Management, 1135 Balmer Rd, Model City NY 14107
10. US EPA ID Number: NYD094836679

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers Number	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ ENVIRONMENTALLY HAZARDOUS SUBSTANCE (CONTAINS POLY CHLORINATED BIPHENYLS) 3082, III 2355 JA 09/20/00	XX1	DT	est 20000	KG	EPA / STATE
b.					EPA / STATE
c					EPA / STATE
d.					EPA / STATE

J. Additional Descriptions for Materials Listed Above
a. APP CS 3507 OK 6171 Service request # 566921-5
b
c
d

K. Handling Codes for Wastes Listed Above
a
b
c
d

15. Special Handling Instructions and Additional Information

Please mail COD to CAPITOL ENV Services

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 and state laws and regulations.
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Printed/Typed Name | Signature | Mo. | Day | Year

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name | Signature | Mo. | Day | Year

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name | Signature | Mo. | 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 | Mo. | Day | Year

GENERATOR
TRANSPORTER
FACILITY

In case of emergency or spill immediately call the National Response Center (800) 424-[illegible] and the NYS Department of Environmental Conservation (518) 457-7[illegible]

700981

COPY 8—Generator—Retained by Generator

WASTE MANAGEMENT, INC.
CWM Chemical Services, L.L.C.
1550 Balmer Rd.
P.O. Box 200
Model City, N.Y. 14107
716/754-8231

Federal EPA ID: NYD049836679

DSC OF NEWARK ENTERPRISES
ATTN: JOSEPH ARCOLEO
NJR000022152
70 BLANCHARD STREET
NEWARK, NJ 07105

CERTIFICATE OF DISPOSAL

CWM CHEMICAL SERVICES, L.L.C. has received waste material from DSC OF NEWARK ENTERPRISES on 09/21/00 as described on Hazardous Waste Manifest number NYG1497528 Sequence number 01. CWM CHEMICAL SERVICES, L.L.C. hereby certifies that the above described material was landfilled in accordance with the 40 CFR part 761 as it pertains to the land disposal of polychlorinated biphenyl contaminated materials.

Profile Number: CS3509
Tracking ID: 8153372701
CWM Unit #: 1*0
Disposal Date: 09/21/00

Under civil and criminal penalties of law for the making or submission of false or fraudulent statements or representations (18 U.S.C 1001 and 15 U.S.C. 2615) I certify that the information contained in or accompanying this document is true accurate and complete. As to the identified section(s) of this document for which I cannot personally verify truth and accuracy, I certify as the company official having supervisory responsibility for the persons who, acting under my direct instructions, made the verification that this information is true accurate and complete.

Donna Ames-Cassick

DONNA AMES-CASSICK
COMPLIANCE MANAGER
Certificate # 189018
09/22/00

For questions please call
our Customer Service Dept.
at (800) 843-3604

700982

DISPOSAL STANDARDS FOR NEW YORK STATE REGULATED HAZARDOUS PCB WASTES

GENERATOR NAME: DSC OF NEWARK ENTERPRISES

MANIFEST # ~~NYG1760737~~ JH 09/20/00 NYG1497528 CWM PROFILE # CS3509

UNIQUE DRUM#_____ OUT OF SERVICE DATE:_____

The following New York State regulated and land restricted wastes are subject to 6 NYCRR Part 376. Refer to 6 NYCRR 376.4(f) for New York land disposal requirements. Check all that apply:

[ ] B001 [ ] B002 [ ] B003 [ ] B004 [ ] B005 [ ] B006 [X] B007

Certification - Waste Meets Treatment Standards

[ ] I am the generator of the waste as identified above, that is restricted under 6 NYCRR Part 376. I have determined that this waste meets all applicable treatment standards set forth in 6 NYCRR 376 and, therefore, it can be land disposed without further treatment. **Waste does not include solidified B002 material (liquid with PCBs 50-500 ppm).**

I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that waste complies with the treatment standards specified in Part 376, Section 376.4 and all applicable prohibitions set forth in subdivision 376.3(b) of Part 376 or RCRA Section 3004(d). I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification including the possibility of a fine or imprisonment.

Notification - Waste Does Not Meet Treatment Standards

[ ] I am the generator of a waste restricted under 6 NYCRR Part 376 as identified above. I notify that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this notification that the waste does not comply with the treatment standards specified in 6 NYCRR Part 376.4(f). This waste must be treated to the applicable standard set forth in 6 NYCRR 376.4(f) prior to land disposal.

GENERATOR'S SIGNATURE: [signature]

TITLE: Dir Soft DATE: 09/20/00

Updated 05/19/98

Generator Copy

700983

NYG 1768725

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID & HAZARDOUS MATERIALS

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

Please type or print. Do not staple

(Hazardous Waste Manifest 1/5/99)

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.	Manifest Doc. No.	2. Page 1 of	Information within heavy bold line is not required by Federal Law.
NJR000022152	68725	1	

3. Generator's Name and Mailing Address
DSC of Newark Enterprises
70 Blanchard St., Newark, NJ 07105

4. Generator's Telephone Number (973) 589-4200

A. NYG 1768725

B. Generator's ID Site: 333 Hamilton Ave, S. Plainfield, NJ

5. Transporter 1 (Company Name): Page ETC, Inc.

6. US EPA ID Number: NYD986969947

C. State Transporter's ID

D. Transporter's Telephone (315) 834-6681

7. Transporter 2 (Company Name)

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Telephone ( )

9. Designated Facility Name and Site Address
Chemical ~~Waste Management~~ SERVICES, LLC
~~1145~~ Balmer Road
Model City, NY 14107

10. US EPA ID Number: NYD0~~94~~49836679

G. State Facility ID

H. Facility Telephone (716) 754-8231

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers Number	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ Environmentally Hazardous Substance, Solid, N.O.S., 9. UN~~2002~~, III (Contains Polychlorinated Biphenyls) ~~2315~~ 3077					EPA / STATE
b.					EPA / STATE
c					EPA / STATE
d.					EPA / STATE

J. Additional Descriptions for Materials listed Above
App#CS3509 ERG171
~~Service Req#~~
b 566421-1

K. Handling Codes for Wastes Listed Above
a ☑ c ☐
b ☐ d ☐

15. Special Handling Instructions and Additional Information
Please mail CoD's to Capitol Environmental Svcs., Wilmington, DE
Emergency Contact: Capitol Environmental Services (302) 652-8999
81533726

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 and state laws and regulations.
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Printed/Typed Name	Signature	Mo.	Day	Year
[illegible]	[signature]	[illegible]	[illegible]	[illegible]

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Mo.	Day	Year
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Mo.	Day	Year

19. Discrepancy Indication Space
actual recd 26209K
Item I-13007
Item 14-K

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	Mo.	Day	Year
EILEEN CARTON	Eileen Carton	09	21	00

GENERATOR

TRANSPORTER

In case of emergency or spill immediately call the National Response Center (800) 424-[illegible] and the NYS Department of Environmental Conservation (518) 457-7[illegible]

COPY 5—Generator—Mailed by TSD Facility

700984

NYG1768725

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID & HAZARDOUS MATERIALS

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

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(Hazardous Waste Manifest 1/5/99)

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	NJR000022152	68725	1	

3. Generator's Name and Mailing Address
DSC of Newark Enterprises
70 Blanchard St., Newark, NJ 07105

4. Generator's Telephone Number (973) 589-4200

A. NYG1768725

B. Generator's ID Site: 333 Hamilton Ave, S.Plainfield, NJ

5. Transporter 1 (Company Name): Page ETC, Inc.

6. US EPA ID Number: NYD986969947

C. State Transporter's ID: 47154H NY

D. Transporter's Telephone (315) 834-6681

7. Transporter 2 (Company Name):

8. US EPA ID Number:

E. State Transporter's ID:

F. Transporter's Telephone (1 800) 230 5037

9. Designated Facility Name and Site Address
Chemical ~~Waste Management~~ SERVICES, LLC e9/21
~~1135~~ Balmer Road
Model City, NY 14107

10. US EPA ID Number: NYD0~~94~~49836679

G. State Facility ID:

H. Facility Telephone (716) 754-8231

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers Number	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ Environmentally Hazardous Substance, Solid, N.O.S., 9, UN[redacted], III (Contains Polychlorinated Biphenyls) ~~2315~~ 3077 e9/21	XX1	DT	20000 est	KG	EPA / STATE
b.					EPA / STATE
c					EPA / STATE
d.					EPA / STATE

J. Additional Descriptions for Materials listed Above
App#CS3509 ERG171
~~Service Req#~~
566921-1

K. Handling Codes for Wastes Listed Above
a. ☑ c. ☐
b. ☐ d. ☐

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Emergency Contact: Capitol Environmental Services (302) 652-8999
81533726

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 and state laws and 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	Signature	Mo. Day Year
Joseph Arnko	[signature]	09 20 00

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Mo. Day Year
JASON SAAM	Jason Saam	9 20 00

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Mo. Day Year

19. Discrepancy Indication Space
actual recvd 26209K
Item I-B007
Item 14-K

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	Mo. Day Year
EILEEN CARTON	Eileen Carton	09 21 00

GENERATOR

TRANSPORTER

FACILITY

In case of emergency or spill immediately call the National Response Center (800) 424-88[illegible] the NYS Department of Environmental Conservation (518) 457-7362

COPY 1—Disposer State—Mailed by TSD Facility

700985

WASTE MANAGEMENT, INC.
CWM Chemical Services, L.L.C.
1550 Balmer Rd.
P.O. Box 200
Model City, N.Y. 14107
716/754-8231

Federal EPA ID: NYD049836679

DSC OF NEWARK ENTERPRISES
ATTN: JOSEPH ARCOLEO
NJR000022152
70 BLANCHARD STREET
NEWARK, NJ 07105

CERTIFICATE OF DISPOSAL

CWM CHEMICAL SERVICES, L.L.C. has received waste material from DSC OF NEWARK ENTERPRISES on 09/21/00 as described on Hazardous Waste Manifest number NYG1768725 Sequence number 01. CWM CHEMICAL SERVICES, L.L.C. hereby certifies that the above described material was landfilled in accordance with the 40 CFR part 761 as it pertains to the land disposal of polychlorinated biphenyl contaminated materials.

Profile Number: CS3509
CWM Tracking ID: 8153372601
CWM Unit #: 1*0
Disposal Date: 09/21/00

Under civil and criminal penalties of law for the making or submission of false or fraudulent statements or representations (18 U.S.C 1001 and 15 U.S.C. 2615) I certify that the information contained in or accompanying this document is true accurate and complete. As to the identified section(s) of this document for which I cannot personally verify truth and accuracy, I certify as the company official having supervisory responsibility for the persons who, acting under my direct instructions, made the verification that this information is true accurate and complete.

Donna Ames-Cassick

DONNA AMES-CASSICK
COMPLIANCE MANAGER
Certificate # 189017
09/22/00

For questions please call
our Customer Service Dept.
at (800) 843-3604

700986

NYG1768725

Please type or print. Do not staple

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID & HAZARDOUS MATERIALS

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

(Hazardous Waste Manifest 1/5/99)

GENERATOR

UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator's US EPA ID No.	Manifest Doc. No.	2. Page 1 of	Information within heavy bold line is not required by Federal Law.
	NJP000022152	68725	1	

3. Generator's Name and Mailing Address
DSC of Newark Enterprises
70 Blanchard St., Newark, NJ 07105

4. Generator's Telephone Number (973) 589-4200

A. NYG1768725

B. Generator's ID
300 Hamilton Ave. S. Plainfield, NJ

5. Transporter 1 (Company Name)	6. US EPA ID Number	C. State Transporter's ID
Page ETC, Inc.	NYD986969947	D. Transporter's Telephone ( )
7. Transporter 2 (Company Name)	8. US EPA ID Number	E. State Transporter's ID
		F. Transporter's Telephone ( )
9. Designated Facility Name and Site Address Chemical Waste Management 1175 Balmer Road Model City, NY 14107	10. US EPA ID Number NYD091836679	G. State Facility ID
		H. Facility Telephone (716)

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers Number	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ Environmentally Hazardous Substance, Solid, N.O.S., 9, UN3082, III (Contains Polychlorinated Biphenyls) 2325 JM-09/20/00					EPA STATE
b.					EPA STATE
c					EPA STATE
d.					EPA STATE

J. Additional Descriptions for Materials listed Above		K. Handling Codes for Wastes Listed Above	
Approval 55309 EM171 Surplus Reqd	c	a	c
b	d	b	d

15. Special Handling Instructions and Additional Information
Please mail CoD's to Capital Environmental Serv., Wilmington, DE
Emergency Contact: Capital Environmental Services (302) 652-8779

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 and state laws and regulations.
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Printed/Typed Name	Signature	Mo.	Day	Year

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Mo.	Day	Year

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Mo.	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 19.

Printed/Typed Name	Signature	Mo.	Day	Year

In case of emergency or spill immediately call the National Response Center (800) 424-8802 and the NYS Department of Environmental Conservation (518) 457-7362

700987

DISPOSAL STANDARDS FOR NEW YORK STATE REGULATED HAZARDOUS PCB WASTES

GENERATOR NAME: DSC OF NEWARK ENTERPRISES

MANIFEST # NYG1768725 CWM PROFILE # CS3509

UNIQUE DRUM# _____ OUT OF SERVICE DATE: _____

The following New York State regulated and land restricted wastes are subject to 6 NYCRR Part 376. Refer to 6 NYCRR 376.4(f) for New York land disposal requirements. Check all that apply:

[ ] B001 [ ] B002 [ ] B003 [ ] B004 [ ] B005 [ ] B006 [X] B007

Certification - Waste Meets Treatment Standards

[ ] I am the generator of the waste as identified above, that is restricted under 6 NYCRR Part 376. I have determined that this waste meets all applicable treatment standards set forth in 6 NYCRR 376 and, therefore, it can be land disposed without further treatment. **Waste does not include solidified B002 material (liquid with PCBs 50-500 ppm).**

I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that waste complies with the treatment standards specified in Part 376, Section 376.4 and all applicable prohibitions set forth in subdivision 376.3(b) of Part 376 or RCRA Section 3004(d). I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification including the possibility of a fine or imprisonment.

Notification - Waste Does Not Meet Treatment Standards

[ ] I am the generator of a waste restricted under 6 NYCRR Part 376 as identified above. I notify that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this notification that the waste does not comply with the treatment standards specified in 6 NYCRR Part 376.4(f). This waste must be treated to the applicable standard set forth in 6 NYCRR 376.4(f) prior to land disposal.

GENERATOR'S SIGNATURE: _____

TITLE: Dir Safety & Health DATE: 09/20/00

Updated 05/19/98

Generator Copy

700988

WASTE MANAGEMENT, INC.
CWM Chemical Services, L.L.C.
1550 Balmer Rd.
P.O. Box 200
Model City, N.Y. 14107
716/754-8231

Federal EPA ID: NYD049836679

DSC OF NEWARK ENTERPRISES
ATTN: JOSEPH ARCOLEO
NJR000022152
70 BLANCHARD STREET
NEWARK, NJ 07105

CERTIFICATE OF DISPOSAL

CWM CHEMICAL SERVICES, L.L.C. has received waste material from DSC OF NEWARK ENTERPRISES on 09/21/00 as described on Hazardous Waste Manifest number NYG1768752 Sequence number 01. CWM CHEMICAL SERVICES, L.L.C. hereby certifies that the above described material was landfilled in accordance with the 40 CFR part 761 as it pertains to the land disposal of polychlorinated biphenyl contaminated materials.

Profile Number: CS3509
Tracking ID: 8153371901
CWM Unit #: 1*0
Disposal Date: 09/21/00

Under civil and criminal penalties of law for the making or submission of false or fraudulent statements or representations (18 U.S.C 1001 and 15 U.S.C. 2615) I certify that the information contained in or accompanying this document is true accurate and complete. As to the identified section(s) of this document for which I cannot personally verify truth and accuracy, I certify as the company official having supervisory responsibility for the persons who, acting under my direct instructions, made the verification that this information is true accurate and complete.

Donna Ames-Cassick

DONNA AMES-CASSICK
COMPLIANCE MANAGER
Certificate # 189010
09/22/00

For questions please call
our Customer Service Dept.
at (800) 843-3604

700989

NYG 1768752

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID & HAZARDOUS MATERIALS

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

- Please type or print. Do not staple

(Hazardous Waste Manifest 1/5/99)

In case of emergency or spill immediately call the National Response Center (800) 424-[illegible] and the NYS Department of Environmental Conservation (518) 457-7362

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.	Manifest Doc. No.	2. Page 1 of	Information within heavy bold line is not required by Federal Law.
NJR000022152	68752	1	

3. Generator's Name and Mailing Address
USC of Newark Enterprises
70 Blanchard St., Newark, NJ 07105

4. Generator's Telephone Number (973) 589-4200

A. NYG 1768752

B. Generator's ID
333 Hamilton Ave, S. Plainfield, NJ

5. Transporter 1 (Company Name): Page ETC, Inc.

6. US EPA ID Number: NYD986969947

C. State Transporter's ID

D. Transporter's Telephone ([illegible])

7. Transporter 2 (Company Name)

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Telephone ( )

9. Designated Facility Name and Site Address
Chemical Waste Management
1135 Balmer Road
Model City, NY 14107

10. US EPA ID Number: NYD094836679

G. State Facility ID

H. Facility Telephone (716 [illegible])

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers Number	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. NO Environmentally Hazardous Substance, Solid, N.O.S., 9, ~~[illegible]~~, III (Contains Polychlorinated Biphenyls) 2323 JA 09/20/00	X				EPA / STATE
b.					EPA / STATE
c					EPA / STATE
d.					EPA / STATE

J. Additional Descriptions for Materials listed Above
App#CS3509 ER6171
Service Req#
566921-4

K. Handling Codes for Wastes Listed Above
a ☐ c ☐
b ☐ d ☐

15. Special Handling Instructions and Additional Information
Please mail CoD's to Capitol Environmental Svcs., Wilmington, DE
Emergency Contact: Capitol Environmental Services (302) 632-8979

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 and state laws and regulations.
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Printed/Typed Name	Signature	Mo.	Day	Year

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Mo.	Day	Year

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Mo.	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	Mo.	Day	Year

GENERATOR

TRANSPORTER

FACILITY

700990

DISPOSAL STANDARDS FOR NEW YORK STATE REGULATED HAZARDOUS PCB WASTES

GENERATOR NAME: DSC OF NEWARK ENTERPRISES

MANIFEST # NYG1768752 CWM PROFILE # CS3509

UNIQUE DRUM# _____ OUT OF SERVICE DATE: _____

The following New York State regulated and land restricted wastes are subject to 6 NYCRR Part 376. Refer to 6 NYCRR 376.4(f) for New York land disposal requirements. Check all that apply:

[ ] B001 [ ] B002 [ ] B003 [ ] B004 [ ] B005 [ ] B006 [X] B007

Certification - Waste Meets Treatment Standards

[ ] I am the generator of the waste as identified above, that is restricted under 6 NYCRR Part 376. I have determined that this waste meets all applicable treatment standards set forth in 6 NYCRR 376 and, therefore, it can be land disposed without further treatment. **Waste does not include solidified B002 material (liquid with PCBs 50-500 ppm).**

I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that waste complies with the treatment standards specified in Part 376, Section 376.4 and all applicable prohibitions set forth in subdivision 376.3(b) of Part 376 or RCRA Section 3004(d). I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification including the possibility of a fine or imprisonment.

Notification - Waste Does Not Meet Treatment Standards

[ ] I am the generator of a waste restricted under 6 NYCRR Part 376 as identified above. I notify that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this notification that the waste does not comply with the treatment standards specified in 6 NYCRR Part 376.4(f). This waste must be treated to the applicable standard set forth in 6 NYCRR 376.4(f) prior to land disposal.

GENERATOR'S SIGNATURE: _____

TITLE: Dr. H&S DATE: 09/20/00

Updated 05/19/98

700991

NYG 1768752

Please type or print. Do not staple

DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID & HAZARDOUS MATERIALS

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

(Hazardous Waste Manifest 1/5/99)

UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator's US EPA ID No.	Manifest Doc. No.	2. Page 1 of	Information within heavy bold line is not required by Federal Law.
	NJR000022152	68752	1	

3. Generator's Name and Mailing Address
DSC of Newark Enterprises
70 Blanchard St., Newark, NJ 07105

4. Generator's Telephone Number (973) 589-4200

A. NYG 1768752

B. Generator's ID Site: 333 Hamilton Ave, S.Plainfield, NJ

5. Transporter 1 (Company Name): Page ETC, Inc.

6. US EPA ID Number: NYD986969947

C. State Transporter's ID

D. Transporter's Telephone (315 834-6681

7. Transporter 2 (Company Name)

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Telephone ( )

9. Designated Facility Name and Site Address
Chemical ~~Waste Management~~ SERVICES, LLC
~~1135~~ Balmer Road
Model City, NY 14107

10. US EPA ID Number: NYD044836679

G. State Facility ID

H. Facility Telephone (716 754-8231

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers Number	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ Environmentally Hazardous Substance, Solid, N.O.S., 9, ~~UN3082~~, III (Contains Polychlorinated Diphenyls)	XX1	DT	20000	KG	EPA / STATE
b.					EPA / STATE
c					EPA / STATE
d.					EPA / STATE

J. Additional Descriptions for Materials listed Above
App#CS3509 ERG171
~~Service Req#~~ 566927-4

K. Handling Codes for Wastes Listed Above
a c
b d

15. Special Handling Instructions and Additional Information
Please mail CoD's to Capitol Environmental Svcs., Wilmington, DE
Emergency Contact: Capitol Environmental Services (302) 652-8999

81533719

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 and state laws and regulations.
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Printed/Typed Name: [illegible] Signature: [signature] Mo. Day Year: 09 21 00

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: [illegible] Signature: Mo. Day Year

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name Signature Mo. Day Year

19. Discrepancy Indication Space
actual Recvd 23133K
Item I - B007
Item 14-K

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: EILEEN CARTER Signature: Eileen Carter Mo. Day Year: 09 21 00

GENERATOR

TRANSPORTER

FACILITY

In case of emergency or spill immediately call the National Response Center (800) 42[illegible] and the NYS Department of Environmental Conservation (518) 457-73[illegible]

COPY 5—Generator—Mailed by TSD Facility

700992

NYG 1768743

Please type or print. Do not staple

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID & HAZARDOUS MATERIALS

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

(Hazardous Waste Manifest 1/5/99)

UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator's US EPA ID No.	Manifest Doc. No.	2. Page 1 of	Information within heavy bold line is not required by Federal Law.
	NJR000022152	68743	1	

3. Generator's Name and Mailing Address
DSC of Newark Enterprises
70 Blanchard St., Newark, NJ 07105

4. Generator's Telephone Number (973) 589-4200

A. NYG 1768743

B. Generator's ID Site:
333 Hamilton Ave, S.Plainfield, NJ

5. Transporter 1 (Company Name): Page ETC, Inc.
6. US EPA ID Number: NYD986969947
C. State Transporter's ID: FT 77
D. Transporter's Telephone (315) 834-6681

7. Transporter 2 (Company Name):
8. US EPA ID Number:
E. State Transporter's ID:
F. Transporter's Telephone ( )

9. Designated Facility Name and Site Address
Chemical ~~Waste Management~~ Services, LLC
~~1135~~ Balmer Road
Model City, NY 14107

10. US EPA ID Number: NYD0~~94~~4836679
G. State Facility ID:
H. Facility Telephone (716) 754-8231

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers Number	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ Environmentally Hazardous Substance, Solid, N.O.S., 9, UN3082, CRE III (Contains Polychlorinated Biphenyls) ~~2315~~ 3077					EPA / STATE
b.					EPA / STATE
c					EPA / STATE
d.					EPA / STATE

J. Additional Descriptions for Materials listed Above
App#CS3509 ERG171
~~Service Req#~~
b 566921-3
c
d

K. Handling Codes for Wastes Listed Above
a ☑ c ☐
b ☐ d ☐

15. Special Handling Instructions and Additional Information
Please mail CoD's to Capitol Environmental Svcs., Wilmington, DE
Emergency Contact: Capitol Environmental Services (302) 652-8999
81533710

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 and state laws and regulations.
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Printed/Typed Name	Signature	Mo.	Day	Year
[illegible]	[signature]	[illegible]		[illegible]

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Mo.	Day	Year
[illegible]	[signature]	[illegible]		[illegible]

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Mo.	Day	Year

19. Discrepancy Indication Space
[illegible] 23950K
Item I - B007
~~[illegible]~~

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	Mo.	Day	Year
Eileen Carter	[signature]	[illegible]		[illegible]

GENERATOR

TRANSPORTER

FACILITY

In case of emergency or spill immediately call the National Response Center (800) 42[illegible] and the NYS Department of Environmental Conservation (518) 457-73[illegible]

COPY 5—Generator—Mailed by TSD Facility

700993

PRESS HARD—You Are Writing Through Eight Copies (See Reverse Side)

NYG1768743

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID & HAZARDOUS MATERIALS

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

Please type or print. Do not staple

(Hazardous Waste Manifest 1/5/99)

In case of emergency or spill immediately call the National Response Center (800) 424-8800 or the NYS Department of Environmental Conservation (518) 457-7362

GENERATOR

UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator's US EPA ID No.	Manifest Doc. No.	2. Page 1 of	Information within heavy bold line is not required by Federal Law.
	NJR000022152	68743	1	

3. Generator's Name and Mailing Address
DSC of Newark Enterprises
70 Blanchard St., Newark, NJ 07105

4. Generator's Telephone Number (973) 589-4200

A. NYG1768743

B. Generator's ID Site: 333 Hamilton Ave, S.Plainfield, NJ

5. Transporter 1 (Company Name): Page ETC, Inc.

6. US EPA ID Number: NYD986969947

C. State Transporter's ID: PT 7735C Pa

D. Transporter's Telephone (315) 834-6681

7. Transporter 2 (Company Name):

8. US EPA ID Number:

E. State Transporter's ID:

F. Transporter's Telephone ( )

9. Designated Facility Name and Site Address
CWM Chemical ~~Waste Management~~ SERVICES, LLC
550 ~~1135~~ Balmer Road
Model City, NY 14107

10. US EPA ID Number: NYD0~~94~~49836679 e 9/21

G. State Facility ID:

H. Facility Telephone (716) 754-8231

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers Number	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ Environmentally Hazardous Substance, Solid, N.O.S., 9, UN~~3082~~ 3077 e 9/21 III (Contains Polychlorinated Biphenyls)	XX1	DT	20000 est	K	EPA / STATE
b.					EPA / STATE
c					EPA / STATE
d.					EPA / STATE

J. Additional Descriptions for Materials listed Above
App#CS3509 ERG171
~~Service Req#~~
b 566921-3
c
d

K. Handling Codes for Wastes Listed Above
a [4]
b
c
d

15. Special Handling Instructions and Additional Information
Please mail CoD's to Capitol Environmental Svcs., Wilmington, DE
Emergency Contact: Capitol Environmental Services (302) 652-8999 81533710

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 and state laws and regulations.
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Printed/Typed Name: Joseph Arwleo
Signature: [signature]
Mo. Day Year: 09 20 00

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Charlie Ewins
Signature: Charlie Ewins
Mo. Day Year: 09 20 00

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name:
Signature:
Mo. Day Year:

FACILITY

19. Discrepancy Indication Space
actual Recvd 23950K
Item I - B007
~~PEB's less than 50 PPM~~ (es)

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: Eileen Carter
Signature: Eileen Carter
Mo. Day Year: 09 21 00

700994

COPY 1—Disposer State—Mailed by TSD Facility

WASTE MANAGEMENT, INC.
CWM Chemical Services, L.L.C.
1550 Balmer Rd.
P.O. Box 200
Model City, N.Y. 14107
716/754-8231

Federal EPA ID: NYD049836679

DSC OF NEWARK ENTERPRISES
ATTN: JOSEPH ARCOLEO
NJR000022152
70 BLANCHARD STREET
NEWARK, NJ 07105

CERTIFICATE OF DISPOSAL

CWM CHEMICAL SERVICES, L.L.C. has received waste material from DSC OF NEWARK ENTERPRISES on 09/21/00 as described on Hazardous Waste Manifest number NYG1768743 Sequence number 01. CWM CHEMICAL SERVICES, L.L.C. hereby certifies that the above described material was landfilled in accordance with the 40 CFR part 761 as it pertains to the land disposal of polychlorinated biphenyl contaminated materials.

Profile Number: CS3509
CWM Tracking ID: 8153371001
CWM Unit #: 1*0
Disposal Date: 09/21/00

Under civil and criminal penalties of law for the making or submission of false or fraudulent statements or representations (18 U.S.C 1001 and 15 U.S.C. 2615) I certify that the information contained in or accompanying this document is true accurate and complete. As to the identified section(s) of this document for which I cannot personally verify truth and accuracy, I certify as the company official having supervisory responsibility for the persons who, acting under my direct instructions, made the verification that this information is true accurate and complete.

Donna Ames-Cassick

DONNA AMES-CASSICK
COMPLIANCE MANAGER
Certificate # 189003
09/22/00

For questions please call
our Customer Service Dept.
at (800) 843-3604

700995

NYG 1768743

Please type or print. Do not staple

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID & HAZARDOUS MATERIALS

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

(Hazardous Waste Manifest 1/5/99)

In case of emergency or spill immediately call the National Response Center (800) 424-8802 and the NYS Department of Environmental Conservation (518) 457-7362

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: NJD000221952

Manifest Doc. No.: 5 2 7 4 3

2. Page 1 of: 1

Information within heavy bold line is not required by Federal Law.

A. NYG 1768743

3. Generator's Name and Mailing Address
GSC of Newark Enterprises
70 Blanchard St., Newark, NJ 07105

4. Generator's Telephone Number (973) 589-3300

B. Generator's ID
370 Hamilton Ave., Plainfield, NJ

5. Transporter 1 (Company Name): Page ETC, Inc.

6. US EPA ID Number: NYD986969997

C. State Transporter's ID

D. Transporter's Telephone ( )

7. Transporter 2 (Company Name)

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Telephone ( )

9. Designated Facility Name and Site Address
Chemical Waste Management
1135 Batten Road
Model City, NY 14107

10. US EPA ID Number: NYD991396679

G. State Facility ID

H. Facility Telephone ( )

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers Number	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. NA Environmentally Hazardous Substance, Solid, N.O.S., 9, UN3077, III (Contains Polychlorinated Biphenyls) 2325 TA 07/20/00					EPA / STATE
b.					EPA / STATE
c					EPA / STATE
d.					EPA / STATE

J. Additional Descriptions for Materials listed Above
App#CS1309 EM171
Service Req5

K. Handling Codes for Wastes Listed Above
a c
b d

15. Special Handling Instructions and Additional Information
Please mail CoB's to Capital Environmental Svcs., Wilmington, DE
Emergency Contact: Capital Environmental Services (302) 652-8999

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 and state laws and 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.

GENERATOR — Printed/Typed Name | Signature | Mo. | Day | Year

TRANSPORTER — 17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name | Signature | Mo. | Day | Year

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name | Signature | Mo. | Day | Year

FACILITY — 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 | Mo. | Day | Year

700996

700997

DISPOSAL STANDARDS FOR NEW YORK STATE REGULATED HAZARDOUS PCB WASTES

GENERATOR NAME: DSC OF NEWARK ENTERPRISES

MANIFEST # NYG1768743 CWM PROFILE # CS3509

UNIQUE DRUM#_____ OUT OF SERVICE DATE:_____

The following New York State regulated and land restricted wastes are subject to 6 NYCRR Part 376. Refer to 6 NYCRR 376.4(f) for New York land disposal requirements. Check all that apply:

[ ] B001 [ ] B002 [ ] B003 [ ] B004 [ ] B005 [ ] B006 [X] B007

Certification - Waste Meets Treatment Standards

[ ] I am the generator of the waste as identified above, that is restricted under 6 NYCRR Part 376. I have determined that this waste meets all applicable treatment standards set forth in 6 NYCRR 376 and, therefore, it can be land disposed without further treatment. **Waste does not include solidified B002 material (liquid with PCBs 50-500 ppm).**

I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that waste complies with the treatment standards specified in Part 376, Section 376.4 and all applicable prohibitions set forth in subdivision 376.3(b) of Part 376 or RCRA Section 3004(d). I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification including the possibility of a fine or imprisonment.

Notification - Waste Does Not Meet Treatment Standards

[ ] I am the generator of a waste restricted under 6 NYCRR Part 376 as identified above. I notify that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this notification that the waste does not comply with the treatment standards specified in 6 NYCRR Part 376.4(f). This waste must be treated to the applicable standard set forth in 6 NYCRR 376.4(f) prior to land disposal.

GENERATOR'S SIGNATURE:_____

TITLE: D.I S+H DATE: 09/20/00

Updated 05/19/98

Generator Copy

NYG 1768734

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID & HAZARDOUS MATERIALS

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

Please type or print. Do not staple

(Hazardous Waste Manifest 1/5/99)

In case of emergency or spill immediately call the National Response Center (800) 424-8802 and the NYS Department of Environmental Conservation (518) 457-7362

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: NJR000022152
Manifest Doc. No.: 68734
2. Page 1 of: 1
Information within heavy bold line is not required by Federal Law.

3. Generator's Name and Mailing Address
DSC of Newark Enterprises
70 Blanchard St., Newark, NJ 07105

4. Generator's Telephone Number (973) 589-4200

A. NYG 1768734

B. Generator's ID — Site: 333 Hamilton Ave, S.Plainfield, NJ

5. Transporter 1 (Company Name): Page ETC, Inc.
6. US EPA ID Number: NYD986969947

C. State Transporter's ID: 5-1136

D. Transporter's Telephone (315) 834-6681

7. Transporter 2 (Company Name):
8. US EPA ID Number:

E. State Transporter's ID:

F. Transporter's Telephone ( )

9. Designated Facility Name and Site Address
Chemical ~~Waste Management~~ SERVICES, LLC
~~1135~~ Balmer Road
Model City, NY 14107

10. US EPA ID Number: NYD094836679

G. State Facility ID:

H. Facility Telephone (716) 754-8231

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers Number	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ Environmentally Hazardous Substance, Solid, N.O.S., 9, ~~UN3082~~, III (Contains Polychlorinated Biphenyls) ~~1315~~ 3077 e 9/21					EPA / STATE
b.					EPA / STATE
c.					EPA / STATE
d.					EPA / STATE

J. Additional Descriptions for Materials listed Above
App#CS3509 ERG171
~~Service Req#~~
a. b. 511421-2 c. d.

K. Handling Codes for Wastes Listed Above
a. ☑ b. ☐ c. ☐ d. ☐

15. Special Handling Instructions and Additional Information
Please mail CoD's to Capitol Environmental Svcs., Wilmington, DE
Emergency Contact: Capitol Environmental Services (302) 652-8999
81533707

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 and state laws and regulations.
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Printed/Typed Name: [illegible] Signature: [signature] Mo. Day Year: 09 20 00

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Brian Presler Signature: [signature] Mo. Day Year: 09 20 00

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name: Signature: Mo. Day Year:

19. Discrepancy Indication Space
actual Recvd 23768 K
Item I - 6007
~~PCB's [illegible]~~

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: EILEEN CARTER Signature: [signature] Mo. Day Year: 09 21 00

GENERATOR / TRANSPORTER / FACILITY

COPY 5—Generator—Mailed by TSD Facility

700998

WASTE MANAGEMENT, INC.
CWM Chemical Services, L.L.C.
1550 Balmer Rd.
P.O. Box 200
Model City, N.Y. 14107
716/754-8231

Federal EPA ID: NYD049836679

DSC OF NEWARK ENTERPRISES
ATTN: JOSEPH ARCOLEO
NJR000022152
70 BLANCHARD STREET
NEWARK, NJ 07105

CERTIFICATE OF DISPOSAL

CWM CHEMICAL SERVICES, L.L.C. has received waste material from DSC OF NEWARK ENTERPRISES on 09/21/00 as described on Hazardous Waste Manifest number NYG1768734 Sequence number 01. CWM CHEMICAL SERVICES, L.L.C. hereby certifies that the above described material was landfilled in accordance with the 40 CFR part 761 as it pertains to the land disposal of polychlorinated biphenyl contaminated materials.

Profile Number: CS3509
Tracking ID: 8153370901
CWM Unit #: 1*0
Disposal Date: 09/21/00

Under civil and criminal penalties of law for the making or submission of false or fraudulent statements or representations (18 U.S.C 1001 and 15 U.S.C. 2615) I certify that the information contained in or accompanying this document is true accurate and complete. As to the identified section(s) of this document for which I cannot personally verify truth and accuracy, I certify as the company official having supervisory responsibility for the persons who, acting under my direct instructions, made the verification that this information is true accurate and complete.

Donna Ames-Cassick

DONNA AMES-CASSICK
COMPLIANCE MANAGER
Certificate # 189002
09/22/00

For questions please call
our Customer Service Dept.
at (800) 843-3604

700999

NYG 1768734

Please type or print. Do not staple

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID & HAZARDOUS MATERIALS

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

(Hazardous Waste Manifest 1/5/99)

In case of emergency or spill immediately call the National Response Center (800) 424-[illegible] and the NYS Department of Environmental Conservation (518) 457-73[illegible]

UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator's US EPA ID No.	Manifest Doc. No.	2. Page 1 of	Information within heavy bold line is not required by Federal Law.
	NJR000022152	68734	1	

GENERATOR

3. Generator's Name and Mailing Address
DSC of Newark Enterprises
70 Blanchard St., Newark, NJ 07105

4. Generator's Telephone Number (973) 589-4780

A. NYG 1768734

B. Generator's ID
[illegible] Hamilton Ave. [illegible]

5. Transporter 1 (Company Name): Page ETC, Inc.
6. US EPA ID Number: NYD986969947

C. State Transporter's ID

D. Transporter's Telephone ([illegible])

7. Transporter 2 (Company Name)
8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Telephone ( )

9. Designated Facility Name and Site Address
Chemical Waste Management
1135 Balmer Road
Model City, NY 14107

10. US EPA ID Number: NYD094836679

G. State Facility ID

H. Facility Telephone ([illegible])

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers Number	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. RQ Environmentally Hazardous Substance, Solid, N.O.S., 9, UN3082, III (Contains Polychlorinated Biphenyls) 2325 JA 09/20/00					EPA / STATE
b.					EPA / STATE
c					EPA / STATE
d.					EPA / STATE

J. Additional Descriptions for Materials listed Above
App#CS3509 ERD171
a. Service Req#
b.
c.
d.

K. Handling Codes for Wastes Listed Above
a. ☐ c. ☐
b. ☐ d. ☐

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Printed/Typed Name	Signature	Mo.	Day	Year

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Mo.	Day	Year
[illegible]	[illegible]			

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Mo.	Day	Year

FACILITY

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	Mo.	Day	Year

701000

DISPOSAL STANDARDS FOR NEW YORK STATE REGULATED HAZARDOUS PCB WASTES

GENERATOR NAME: DSC OF NEWARK ENTERPRISES

MANIFEST # NYG1768734 CWM PROFILE # CS 3509

UNIQUE DRUM# _____ OUT OF SERVICE DATE: _____

The following New York State regulated and land restricted wastes are subject to 6 NYCRR Part 376. Refer to 6 NYCRR 376.4(f) for New York land disposal requirements. Check all that apply:

[ ] B001 [ ] B002 [ ] B003 [ ] B004 [ ] B005 [ ] B006 [X] B007

Certification - Waste Meets Treatment Standards

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GENERATOR'S SIGNATURE: _____

TITLE: Dir Sol DATE: 09/20/00

Updated 05/19/98

Generator Copy

701001

701002

Summary of Actual Costs

ITEM	COST
Quarry Process Stone	$ 13,708.57
Stabilized Base Mix I-2	$ 92,690.54
1.5" Clean Stone	$ 554.74
Health & Safety	$ 2,744.00
Drum Sampling	$ 4,449.20
Drum Disposal	$ 4,603.34
Paving & Fencing	$ 185,422.39
Consulting	$ 49,865.00
Safety Signs	$ 216.15
Electricity	$ 220.04
Legal Fees	$ 8,292.86
Medical Testing	$ 328.00
Weldon Concrete	$ 28,140.52

Ending 2-19-98 **$ 391,235.35**

Consulting SSR (2-19-98)	$ 2,419.00
2/98-3/99 Legal Fess	$ 7,901.13
UST Closure	$ 12,719.31
2/00-5/01 Legal Fess	$ 31,209.97
Medical Testing	$ 80.00
Tanker & 5 Gal. Pail Disposal	$ 1,050.00
Stabilization & Stockpile Sampl	$ 9,233.09
Consulting, Drum Sampling, Soil & Drum Disposal	$ 126,412.34

Ending 2002 **$ 191,024.85**

$ 582,260.20

Note: Cost of labor and reporting for DSC of Newark and loss of rent revenue not included. Legal fees from 5/01 to date have not been included.